Appendix F

Vapor Intrusion Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: 320-16043-1
Client Project/Site: Ford Livonia Transmission Plant
Revision: 1

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Linda C. Laver

Authorized for release by:
12/15/2015 3:15:29 PM

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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 320-16043-1

Laboratory: TestAmerica Sacramento

Narrative

Job Narrative
320-16043-1 Rev (1)

Revision 1
Data was originally reported in ppb v/v units. Client requested units to be revised to ug/m3.

Receipt
The samples were received on 11/19/2015 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SSMP-10R-02(111515) — Lab Sample ID: 320-16043-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	23	J	140	13	ug/m3	6		TO-15 MOD	Total/NA
Chloroethane	470		63	24	ug/m3	6		TO-15 MOD	Total/NA
1,1-Dichloroethane	3000		36	8.7	ug/m3	6		TO-15 MOD	Total/NA
1,1-Dichloroethene	100		95	8.6	ug/m3	6		TO-15 MOD	Total/NA
Methylene Chloride	9.4	J	42	7.5	ug/m3	6		TO-15 MOD	Total/NA
Tetrachloroethene	18	J	81	10	ug/m3	6		TO-15 MOD	Total/NA
1,1,1-Trichloroethane	1000		49	11	ug/m3	6		TO-15 MOD	Total/NA
Trichloroethene	17	J	64	17	ug/m3	6		TO-15 MOD	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	85	J	92	37	ug/m3	6		TO-15 MOD	Total/NA
m,p-Xylene	17	J B	100	13	ug/m3	6		TO-15 MOD	Total/NA
o-Xylene	8.6	J B	52	7.0	ug/m3	6		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-01(111615 — Lab Sample ID: 320-16043-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24		24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Carbon disulfide	18		12	1.2	ug/m3	1		TO-15 MOD	Total/NA
Dichlorodifluoromethane	12		9.9	3.6	ug/m3	1		TO-15 MOD	Total/NA
1,1-Dichloroethane	4.0	J	6.1	1.5	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	19		8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
4-Ethyltoluene	8.7	J	9.8	4.6	ug/m3	1		TO-15 MOD	Total/NA
Tetrachloroethene	310		14	1.7	ug/m3	1		TO-15 MOD	Total/NA
Toluene	27		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,1,1-Trichloroethane	9.3		8.2	1.8	ug/m3	1		TO-15 MOD	Total/NA
Trichlorofluoromethane	68		11	5.5	ug/m3	1		TO-15 MOD	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	8.3	J	15	6.2	ug/m3	1		TO-15 MOD	Total/NA
1,2,4-Trimethylbenzene	13	J	20	4.0	ug/m3	1		TO-15 MOD	Total/NA
1,3,5-Trimethylbenzene	7.3	J	9.8	3.1	ug/m3	1		TO-15 MOD	Total/NA
m,p-Xylene	70	B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	21	B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-02 — Lab Sample ID: 320-16043-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	120	J	180	18	ug/m3	14.8		TO-15 MOD	Total/NA
Chloroethane	1800		160	60	ug/m3	14.8		TO-15 MOD	Total/NA
1,1-Dichloroethane	4700		90	22	ug/m3	14.8		TO-15 MOD	Total/NA
1,1-Dichloroethene	28	J	230	21	ug/m3	14.8		TO-15 MOD	Total/NA
cis-1,2-Dichloroethene	64	J	120	26	ug/m3	14.8		TO-15 MOD	Total/NA
1,1,1-Trichloroethane	12000		120	26	ug/m3	14.8		TO-15 MOD	Total/NA
Trichloroethene	240		160	42	ug/m3	14.8		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-03 — Lab Sample ID: 320-16043-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24		24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Benzene	1.7	J	6.4	1.3	ug/m3	1		TO-15 MOD	Total/NA
2-Butanone (MEK)	15		12	2.9	ug/m3	1		TO-15 MOD	Total/NA
Carbon disulfide	2.2	J	12	1.2	ug/m3	1		TO-15 MOD	Total/NA
Chloroform	4.6	J	7.3	2.3	ug/m3	1		TO-15 MOD	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SVMP-15-03 (Continued) — Lab Sample ID: 320-16043-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.1	J	6.1	1.5	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	3.2	J	8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
Tetrachloroethene	7.3	J	14	1.7	ug/m3	1		TO-15 MOD	Total/NA
Toluene	12		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,1,1-Trichloroethane	8.5		8.2	1.8	ug/m3	1		TO-15 MOD	Total/NA
m,p-Xylene	11	J B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	2.6	J B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-04 — Lab Sample ID: 320-16043-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21	J	24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Benzene	1.6	J	6.4	1.3	ug/m3	1		TO-15 MOD	Total/NA
2-Butanone (MEK)	5.1	J	12	2.9	ug/m3	1		TO-15 MOD	Total/NA
Chloroform	13		7.3	2.3	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	8.7		8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
4-Ethyltoluene	9.2	J	9.8	4.6	ug/m3	1		TO-15 MOD	Total/NA
Toluene	19		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,2,4-Trimethylbenzene	13	J	20	4.0	ug/m3	1		TO-15 MOD	Total/NA
m,p-Xylene	49	B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	12	B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-05 — Lab Sample ID: 320-16043-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	17	J	24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Benzene	1.4	J	6.4	1.3	ug/m3	1		TO-15 MOD	Total/NA
2-Butanone (MEK)	4.0	J	12	2.9	ug/m3	1		TO-15 MOD	Total/NA
Chloroform	16		7.3	2.3	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	7.0	J	8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
4-Ethyltoluene	6.8	J	9.8	4.6	ug/m3	1		TO-15 MOD	Total/NA
Tetrachloroethene	4.0	J	14	1.7	ug/m3	1		TO-15 MOD	Total/NA
Toluene	15		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,2,4-Trimethylbenzene	11	J	20	4.0	ug/m3	1		TO-15 MOD	Total/NA
m,p-Xylene	37	B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	9.4	B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-06 — Lab Sample ID: 320-16043-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	J	24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Benzene	2.1	J	6.4	1.3	ug/m3	1		TO-15 MOD	Total/NA
Chloroform	3.0	J	7.3	2.3	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	8.2	J	8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
4-Ethyltoluene	4.8	J	9.8	4.6	ug/m3	1		TO-15 MOD	Total/NA
Toluene	22		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,1,1-Trichloroethane	2.9	J	8.2	1.8	ug/m3	1		TO-15 MOD	Total/NA
Trichlorofluoromethane	7.7	J	11	5.5	ug/m3	1		TO-15 MOD	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	48		15	6.2	ug/m3	1		TO-15 MOD	Total/NA
1,2,4-Trimethylbenzene	7.8	J	20	4.0	ug/m3	1		TO-15 MOD	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SVMP-15-06 (Continued) — Lab Sample ID: 320-16043-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	41	B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	9.5	B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-07 — Lab Sample ID: 320-16043-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.9	J	24	2.1	ug/m3	1		TO-15 MOD	Total/NA
Benzene	1.7	J	6.4	1.3	ug/m3	1		TO-15 MOD	Total/NA
Ethylbenzene	8.6	J	8.7	1.4	ug/m3	1		TO-15 MOD	Total/NA
4-Ethyltoluene	5.5	J	9.8	4.6	ug/m3	1		TO-15 MOD	Total/NA
Toluene	25		7.5	0.96	ug/m3	1		TO-15 MOD	Total/NA
1,2,4-Trimethylbenzene	9.2	J	20	4.0	ug/m3	1		TO-15 MOD	Total/NA
m,p-Xylene	41	B	17	2.2	ug/m3	1		TO-15 MOD	Total/NA
o-Xylene	9.6	B	8.7	1.2	ug/m3	1		TO-15 MOD	Total/NA

Client Sample ID: SVMP-15-08 — Lab Sample ID: 320-16043-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	1300		770	190	ug/m3	97.1		TO-15 MOD	Total/NA
Trichloroethene	39000		1000	270	ug/m3	97.1		TO-15 MOD	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SSMP-10R-02(111515)
Date Collected: 11/16/15 10:51
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Lab Sample ID: 320-16043-1
Matrix: Air

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**23**	**J**	140	13	ug/m3			12/03/15 21:32	6
Benzene	ND		38	7.6	ug/m3			12/03/15 21:32	6
Benzyl chloride	ND		120	25	ug/m3			12/03/15 21:32	6
Bromodichloromethane	ND		60	13	ug/m3			12/03/15 21:32	6
Bromoform	ND		120	22	ug/m3			12/03/15 21:32	6
Bromomethane	ND		93	39	ug/m3			12/03/15 21:32	6
2-Butanone (MEK)	ND		71	18	ug/m3			12/03/15 21:32	6
Carbon disulfide	ND		75	7.3	ug/m3			12/03/15 21:32	6
Carbon tetrachloride	ND		150	12	ug/m3			12/03/15 21:32	6
Chlorobenzene	ND		41	8.8	ug/m3			12/03/15 21:32	6
Dibromochloromethane	ND		100	20	ug/m3			12/03/15 21:32	6
Chloroethane	**470**		63	24	ug/m3			12/03/15 21:32	6
Chloroform	ND		44	14	ug/m3			12/03/15 21:32	6
Chloromethane	ND		50	12	ug/m3			12/03/15 21:32	6
1,2-Dibromoethane (EDB)	ND		180	17	ug/m3			12/03/15 21:32	6
1,2-Dichlorobenzene	ND		72	23	ug/m3			12/03/15 21:32	6
1,3-Dichlorobenzene	ND		72	20	ug/m3			12/03/15 21:32	6
1,4-Dichlorobenzene	ND		72	27	ug/m3			12/03/15 21:32	6
Dichlorodifluoromethane	ND		59	22	ug/m3			12/03/15 21:32	6
1,1-Dichloroethane	**3000**		36	8.7	ug/m3			12/03/15 21:32	6
1,2-Dichloroethane	ND		97	11	ug/m3			12/03/15 21:32	6
1,1-Dichloroethene	**100**		95	8.6	ug/m3			12/03/15 21:32	6
cis-1,2-Dichloroethene	ND		48	11	ug/m3			12/03/15 21:32	6
trans-1,2-Dichloroethene	ND		48	12	ug/m3			12/03/15 21:32	6
1,2-Dichloropropane	ND		55	33	ug/m3			12/03/15 21:32	6
cis-1,3-Dichloropropene	ND		54	14	ug/m3			12/03/15 21:32	6
trans-1,3-Dichloropropene	ND		54	12	ug/m3			12/03/15 21:32	6
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		84	33	ug/m3			12/03/15 21:32	6
Ethylbenzene	ND		52	8.2	ug/m3			12/03/15 21:32	6
4-Ethyltoluene	ND		59	28	ug/m3			12/03/15 21:32	6
Hexachlorobutadiene	ND		640	140	ug/m3			12/03/15 21:32	6
2-Hexanone	ND		49	11	ug/m3			12/03/15 21:32	6
Methylene Chloride	**9.4**	**J**	42	7.5	ug/m3			12/03/15 21:32	6
4-Methyl-2-pentanone (MIBK)	ND		49	17	ug/m3			12/03/15 21:32	6
Styrene	ND		51	7.5	ug/m3			12/03/15 21:32	6
1,1,2,2-Tetrachloroethane	ND		82	14	ug/m3			12/03/15 21:32	6
Tetrachloroethene	**18**	**J**	81	10	ug/m3			12/03/15 21:32	6
Toluene	ND		45	5.8	ug/m3			12/03/15 21:32	6
1,2,4-Trichlorobenzene	ND		450	97	ug/m3			12/03/15 21:32	6
1,1,1-Trichloroethane	**1000**		49	11	ug/m3			12/03/15 21:32	6
1,1,2-Trichloroethane	ND		65	11	ug/m3			12/03/15 21:32	6
Trichloroethene	**17**	**J**	64	17	ug/m3			12/03/15 21:32	6
Trichlorofluoromethane	ND		67	33	ug/m3			12/03/15 21:32	6
1,1,2-Trichloro-1,2,2-trifluoroethane	**85**	**J**	92	37	ug/m3			12/03/15 21:32	6
1,2,4-Trimethylbenzene	ND		120	24	ug/m3			12/03/15 21:32	6
1,3,5-Trimethylbenzene	ND		59	18	ug/m3			12/03/15 21:32	6
Vinyl acetate	ND		85	15	ug/m3			12/03/15 21:32	6

Client Sample ID: SSMP-10R-02(111515)

Lab Sample ID: 320-16043-1
Matrix: Air
Date Collected: 11/16/15 10:51
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		31	9.2	ug/m3			12/03/15 21:32	6
m,p-Xylene	**17**	**J B**	100	13	ug/m3			12/03/15 21:32	6
o-Xylene	**8.6**	**J B**	52	7.0	ug/m3			12/03/15 21:32	6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*12/03/15 21:32*	*6*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*12/03/15 21:32*	*6*
Toluene-d8 (Surr)	*95*		*70 - 130*		*12/03/15 21:32*	*6*

Client Sample ID: SVMP-15-01(111615

Lab Sample ID: 320-16043-2
Matrix: Air
Date Collected: 11/16/15 16:12
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**		24	2.1	ug/m3			12/03/15 22:24	1
Benzene	ND		6.4	1.3	ug/m3			12/03/15 22:24	1
Benzyl chloride	ND		21	4.2	ug/m3			12/03/15 22:24	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/03/15 22:24	1
Bromoform	ND		21	3.6	ug/m3			12/03/15 22:24	1
Bromomethane	ND		16	6.5	ug/m3			12/03/15 22:24	1
2-Butanone (MEK)	ND		12	2.9	ug/m3			12/03/15 22:24	1
Carbon disulfide	**18**		12	1.2	ug/m3			12/03/15 22:24	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/03/15 22:24	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/03/15 22:24	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/03/15 22:24	1
Chloroethane	ND		11	4.1	ug/m3			12/03/15 22:24	1
Chloroform	ND		7.3	2.3	ug/m3			12/03/15 22:24	1
Chloromethane	ND		8.3	2.0	ug/m3			12/03/15 22:24	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/03/15 22:24	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/03/15 22:24	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/03/15 22:24	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/03/15 22:24	1
Dichlorodifluoromethane	**12**		9.9	3.6	ug/m3			12/03/15 22:24	1
1,1-Dichloroethane	**4.0**	**J**	6.1	1.5	ug/m3			12/03/15 22:24	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/03/15 22:24	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/03/15 22:24	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/03/15 22:24	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/03/15 22:24	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/03/15 22:24	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/03/15 22:24	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/03/15 22:24	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/03/15 22:24	1
Ethylbenzene	**19**		8.7	1.4	ug/m3			12/03/15 22:24	1
4-Ethyltoluene	**8.7**	**J**	9.8	4.6	ug/m3			12/03/15 22:24	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/03/15 22:24	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/03/15 22:24	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/03/15 22:24	1

Client Sample ID: SVMP-15-01(111615

Lab Sample ID: 320-16043-2

Date Collected: 11/16/15 16:12

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/03/15 22:24	1
Styrene	ND		8.5	1.3	ug/m3			12/03/15 22:24	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/03/15 22:24	1
Tetrachloroethene	**310**		14	1.7	ug/m3			12/03/15 22:24	1
Toluene	**27**		7.5	0.96	ug/m3			12/03/15 22:24	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/03/15 22:24	1
1,1,1-Trichloroethane	**9.3**		8.2	1.8	ug/m3			12/03/15 22:24	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/03/15 22:24	1
Trichloroethene	ND		11	2.8	ug/m3			12/03/15 22:24	1
Trichlorofluoromethane	**68**		11	5.5	ug/m3			12/03/15 22:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**8.3**	**J**	15	6.2	ug/m3			12/03/15 22:24	1
1,2,4-Trimethylbenzene	**13**	**J**	20	4.0	ug/m3			12/03/15 22:24	1
1,3,5-Trimethylbenzene	**7.3**	**J**	9.8	3.1	ug/m3			12/03/15 22:24	1
Vinyl acetate	ND		14	2.6	ug/m3			12/03/15 22:24	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/03/15 22:24	1
m,p-Xylene	**70**	**B**	17	2.2	ug/m3			12/03/15 22:24	1
o-Xylene	**21**	**B**	8.7	1.2	ug/m3			12/03/15 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*12/03/15 22:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*12/03/15 22:24*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*12/03/15 22:24*	*1*

Client Sample ID: SVMP-15-02

Lab Sample ID: 320-16043-3

Date Collected: 11/16/15 17:45

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		350	31	ug/m3			12/03/15 23:16	14.8
Benzene	ND		95	19	ug/m3			12/03/15 23:16	14.8
Benzyl chloride	ND		310	62	ug/m3			12/03/15 23:16	14.8
Bromodichloromethane	ND		150	33	ug/m3			12/03/15 23:16	14.8
Bromoform	ND		310	54	ug/m3			12/03/15 23:16	14.8
Bromomethane	ND		230	96	ug/m3			12/03/15 23:16	14.8
2-Butanone (MEK)	ND		170	43	ug/m3			12/03/15 23:16	14.8
Carbon disulfide	**120**	**J**	180	18	ug/m3			12/03/15 23:16	14.8
Carbon tetrachloride	ND		370	30	ug/m3			12/03/15 23:16	14.8
Chlorobenzene	ND		100	22	ug/m3			12/03/15 23:16	14.8
Dibromochloromethane	ND		250	50	ug/m3			12/03/15 23:16	14.8
Chloroethane	**1800**		160	60	ug/m3			12/03/15 23:16	14.8
Chloroform	ND		110	34	ug/m3			12/03/15 23:16	14.8
Chloromethane	ND		120	30	ug/m3			12/03/15 23:16	14.8
1,2-Dibromoethane (EDB)	ND		450	43	ug/m3			12/03/15 23:16	14.8
1,2-Dichlorobenzene	ND		180	58	ug/m3			12/03/15 23:16	14.8
1,3-Dichlorobenzene	ND		180	49	ug/m3			12/03/15 23:16	14.8
1,4-Dichlorobenzene	ND		180	66	ug/m3			12/03/15 23:16	14.8

Client Sample ID: SVMP-15-02

Lab Sample ID: 320-16043-3

Date Collected: 11/16/15 17:45

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		150	53	ug/m3			12/03/15 23:16	14.8
1,1-Dichloroethane	**4700**		90	22	ug/m3			12/03/15 23:16	14.8
1,2-Dichloroethane	ND		240	26	ug/m3			12/03/15 23:16	14.8
1,1-Dichloroethene	**28**	**J**	230	21	ug/m3			12/03/15 23:16	14.8
cis-1,2-Dichloroethene	**64**	**J**	120	26	ug/m3			12/03/15 23:16	14.8
trans-1,2-Dichloroethene	ND		120	29	ug/m3			12/03/15 23:16	14.8
1,2-Dichloropropane	ND		140	82	ug/m3			12/03/15 23:16	14.8
cis-1,3-Dichloropropene	ND		130	35	ug/m3			12/03/15 23:16	14.8
trans-1,3-Dichloropropene	ND		130	30	ug/m3			12/03/15 23:16	14.8
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		210	80	ug/m3			12/03/15 23:16	14.8
Ethylbenzene	ND		130	20	ug/m3			12/03/15 23:16	14.8
4-Ethyltoluene	ND		150	68	ug/m3			12/03/15 23:16	14.8
Hexachlorobutadiene	ND		1600	340	ug/m3			12/03/15 23:16	14.8
2-Hexanone	ND		120	26	ug/m3			12/03/15 23:16	14.8
Methylene Chloride	ND		100	19	ug/m3			12/03/15 23:16	14.8
4-Methyl-2-pentanone (MIBK)	ND		120	41	ug/m3			12/03/15 23:16	14.8
Styrene	ND		130	19	ug/m3			12/03/15 23:16	14.8
1,1,2,2-Tetrachloroethane	ND		200	35	ug/m3			12/03/15 23:16	14.8
Tetrachloroethene	ND		200	26	ug/m3			12/03/15 23:16	14.8
Toluene	ND		110	14	ug/m3			12/03/15 23:16	14.8
1,2,4-Trichlorobenzene	ND		1100	240	ug/m3			12/03/15 23:16	14.8
1,1,1-Trichloroethane	**12000**		120	26	ug/m3			12/03/15 23:16	14.8
1,1,2-Trichloroethane	ND		160	27	ug/m3			12/03/15 23:16	14.8
Trichloroethene	**240**		160	42	ug/m3			12/03/15 23:16	14.8
Trichlorofluoromethane	ND		170	81	ug/m3			12/03/15 23:16	14.8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		230	92	ug/m3			12/03/15 23:16	14.8
1,2,4-Trimethylbenzene	ND		290	59	ug/m3			12/03/15 23:16	14.8
1,3,5-Trimethylbenzene	ND		150	45	ug/m3			12/03/15 23:16	14.8
Vinyl acetate	ND		210	38	ug/m3			12/03/15 23:16	14.8
Vinyl chloride	ND		76	23	ug/m3			12/03/15 23:16	14.8
m,p-Xylene	ND		260	32	ug/m3			12/03/15 23:16	14.8
o-Xylene	ND		130	17	ug/m3			12/03/15 23:16	14.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*		*12/03/15 23:16*	*14.8*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*12/03/15 23:16*	*14.8*
Toluene-d8 (Surr)	*96*		*70 - 130*		*12/03/15 23:16*	*14.8*

Client Sample ID: SVMP-15-03

Lab Sample ID: 320-16043-4

Date Collected: 11/17/15 15:27

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**		24	2.1	ug/m3			12/04/15 00:08	1
Benzene	**1.7**	**J**	6.4	1.3	ug/m3			12/04/15 00:08	1
Benzyl chloride	ND		21	4.2	ug/m3			12/04/15 00:08	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/04/15 00:08	1

Client Sample ID: SVMP-15-03
Date Collected: 11/17/15 15:27
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Lab Sample ID: 320-16043-4
Matrix: Air

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		21	3.6	ug/m3			12/04/15 00:08	1
Bromomethane	ND		16	6.5	ug/m3			12/04/15 00:08	1
2-Butanone (MEK)	**15**		12	2.9	ug/m3			12/04/15 00:08	1
Carbon disulfide	**2.2**	**J**	12	1.2	ug/m3			12/04/15 00:08	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/04/15 00:08	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/04/15 00:08	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/04/15 00:08	1
Chloroethane	ND		11	4.1	ug/m3			12/04/15 00:08	1
Chloroform	**4.6**	**J**	7.3	2.3	ug/m3			12/04/15 00:08	1
Chloromethane	ND		8.3	2.0	ug/m3			12/04/15 00:08	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/04/15 00:08	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/04/15 00:08	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/04/15 00:08	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/04/15 00:08	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/04/15 00:08	1
1,1-Dichloroethane	**3.1**	**J**	6.1	1.5	ug/m3			12/04/15 00:08	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/04/15 00:08	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/04/15 00:08	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/04/15 00:08	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/04/15 00:08	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/04/15 00:08	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/04/15 00:08	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/04/15 00:08	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/04/15 00:08	1
Ethylbenzene	**3.2**	**J**	8.7	1.4	ug/m3			12/04/15 00:08	1
4-Ethyltoluene	ND		9.8	4.6	ug/m3			12/04/15 00:08	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/04/15 00:08	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/04/15 00:08	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/04/15 00:08	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/04/15 00:08	1
Styrene	ND		8.5	1.3	ug/m3			12/04/15 00:08	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/04/15 00:08	1
Tetrachloroethene	**7.3**	**J**	14	1.7	ug/m3			12/04/15 00:08	1
Toluene	**12**		7.5	0.96	ug/m3			12/04/15 00:08	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/04/15 00:08	1
1,1,1-Trichloroethane	**8.5**		8.2	1.8	ug/m3			12/04/15 00:08	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/04/15 00:08	1
Trichloroethene	ND		11	2.8	ug/m3			12/04/15 00:08	1
Trichlorofluoromethane	ND		11	5.5	ug/m3			12/04/15 00:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.2	ug/m3			12/04/15 00:08	1
1,2,4-Trimethylbenzene	ND		20	4.0	ug/m3			12/04/15 00:08	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/04/15 00:08	1
Vinyl acetate	ND		14	2.6	ug/m3			12/04/15 00:08	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/04/15 00:08	1
m,p-Xylene	**11**	**J B**	17	2.2	ug/m3			12/04/15 00:08	1
o-Xylene	**2.6**	**J B**	8.7	1.2	ug/m3			12/04/15 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*12/04/15 00:08*	*1*

Client Sample ID: SVMP-15-03

Lab Sample ID: 320-16043-4
Matrix: Air
Date Collected: 11/17/15 15:27
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*12/04/15 00:08*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/04/15 00:08*	*1*

Client Sample ID: SVMP-15-04

Lab Sample ID: 320-16043-5
Matrix: Air
Date Collected: 11/17/15 14:11
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**21**	**J**	24	2.1	ug/m3			12/04/15 01:00	1
Benzene	**1.6**	**J**	6.4	1.3	ug/m3			12/04/15 01:00	1
Benzyl chloride	ND		21	4.2	ug/m3			12/04/15 01:00	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/04/15 01:00	1
Bromoform	ND		21	3.6	ug/m3			12/04/15 01:00	1
Bromomethane	ND		16	6.5	ug/m3			12/04/15 01:00	1
2-Butanone (MEK)	**5.1**	**J**	12	2.9	ug/m3			12/04/15 01:00	1
Carbon disulfide	ND		12	1.2	ug/m3			12/04/15 01:00	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/04/15 01:00	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/04/15 01:00	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/04/15 01:00	1
Chloroethane	ND		11	4.1	ug/m3			12/04/15 01:00	1
Chloroform	**13**		7.3	2.3	ug/m3			12/04/15 01:00	1
Chloromethane	ND		8.3	2.0	ug/m3			12/04/15 01:00	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/04/15 01:00	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/04/15 01:00	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/04/15 01:00	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/04/15 01:00	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/04/15 01:00	1
1,1-Dichloroethane	ND		6.1	1.5	ug/m3			12/04/15 01:00	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/04/15 01:00	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/04/15 01:00	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/04/15 01:00	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/04/15 01:00	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/04/15 01:00	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/04/15 01:00	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/04/15 01:00	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/04/15 01:00	1
Ethylbenzene	**8.7**		8.7	1.4	ug/m3			12/04/15 01:00	1
4-Ethyltoluene	**9.2**	**J**	9.8	4.6	ug/m3			12/04/15 01:00	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/04/15 01:00	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/04/15 01:00	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/04/15 01:00	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/04/15 01:00	1
Styrene	ND		8.5	1.3	ug/m3			12/04/15 01:00	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/04/15 01:00	1
Tetrachloroethene	ND		14	1.7	ug/m3			12/04/15 01:00	1
Toluene	**19**		7.5	0.96	ug/m3			12/04/15 01:00	1

Client Sample ID: SVMP-15-04

Lab Sample ID: 320-16043-5
Matrix: Air
Date Collected: 11/17/15 14:11
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/04/15 01:00	1
1,1,1-Trichloroethane	ND		8.2	1.8	ug/m3			12/04/15 01:00	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/04/15 01:00	1
Trichloroethene	ND		11	2.8	ug/m3			12/04/15 01:00	1
Trichlorofluoromethane	ND		11	5.5	ug/m3			12/04/15 01:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.2	ug/m3			12/04/15 01:00	1
1,2,4-Trimethylbenzene	**13**	**J**	20	4.0	ug/m3			12/04/15 01:00	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/04/15 01:00	1
Vinyl acetate	ND		14	2.6	ug/m3			12/04/15 01:00	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/04/15 01:00	1
m,p-Xylene	**49**	**B**	17	2.2	ug/m3			12/04/15 01:00	1
o-Xylene	**12**	**B**	8.7	1.2	ug/m3			12/04/15 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*12/04/15 01:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*12/04/15 01:00*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/04/15 01:00*	*1*

Client Sample ID: SVMP-15-05

Lab Sample ID: 320-16043-6
Matrix: Air
Date Collected: 11/17/15 13:01
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**17**	**J**	24	2.1	ug/m3			12/04/15 01:52	1
Benzene	**1.4**	**J**	6.4	1.3	ug/m3			12/04/15 01:52	1
Benzyl chloride	ND		21	4.2	ug/m3			12/04/15 01:52	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/04/15 01:52	1
Bromoform	ND		21	3.6	ug/m3			12/04/15 01:52	1
Bromomethane	ND		16	6.5	ug/m3			12/04/15 01:52	1
2-Butanone (MEK)	**4.0**	**J**	12	2.9	ug/m3			12/04/15 01:52	1
Carbon disulfide	ND		12	1.2	ug/m3			12/04/15 01:52	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/04/15 01:52	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/04/15 01:52	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/04/15 01:52	1
Chloroethane	ND		11	4.1	ug/m3			12/04/15 01:52	1
Chloroform	**16**		7.3	2.3	ug/m3			12/04/15 01:52	1
Chloromethane	ND		8.3	2.0	ug/m3			12/04/15 01:52	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/04/15 01:52	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/04/15 01:52	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/04/15 01:52	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/04/15 01:52	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/04/15 01:52	1
1,1-Dichloroethane	ND		6.1	1.5	ug/m3			12/04/15 01:52	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/04/15 01:52	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/04/15 01:52	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/04/15 01:52	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/04/15 01:52	1

Client Sample ID: SVMP-15-05

Lab Sample ID: 320-16043-6

Date Collected: 11/17/15 13:01
Matrix: Air
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/04/15 01:52	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/04/15 01:52	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/04/15 01:52	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/04/15 01:52	1
Ethylbenzene	**7.0**	**J**	8.7	1.4	ug/m3			12/04/15 01:52	1
4-Ethyltoluene	**6.8**	**J**	9.8	4.6	ug/m3			12/04/15 01:52	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/04/15 01:52	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/04/15 01:52	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/04/15 01:52	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/04/15 01:52	1
Styrene	ND		8.5	1.3	ug/m3			12/04/15 01:52	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/04/15 01:52	1
Tetrachloroethene	**4.0**	**J**	14	1.7	ug/m3			12/04/15 01:52	1
Toluene	**15**		7.5	0.96	ug/m3			12/04/15 01:52	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/04/15 01:52	1
1,1,1-Trichloroethane	ND		8.2	1.8	ug/m3			12/04/15 01:52	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/04/15 01:52	1
Trichloroethene	ND		11	2.8	ug/m3			12/04/15 01:52	1
Trichlorofluoromethane	ND		11	5.5	ug/m3			12/04/15 01:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.2	ug/m3			12/04/15 01:52	1
1,2,4-Trimethylbenzene	**11**	**J**	20	4.0	ug/m3			12/04/15 01:52	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/04/15 01:52	1
Vinyl acetate	ND		14	2.6	ug/m3			12/04/15 01:52	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/04/15 01:52	1
m,p-Xylene	**37**	**B**	17	2.2	ug/m3			12/04/15 01:52	1
o-Xylene	**9.4**	**B**	8.7	1.2	ug/m3			12/04/15 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*12/04/15 01:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*12/04/15 01:52*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*12/04/15 01:52*	*1*

Client Sample ID: SVMP-15-06

Lab Sample ID: 320-16043-7

Date Collected: 11/17/15 11:54
Matrix: Air
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**16**	**J**	24	2.1	ug/m3			12/04/15 02:44	1
Benzene	**2.1**	**J**	6.4	1.3	ug/m3			12/04/15 02:44	1
Benzyl chloride	ND		21	4.2	ug/m3			12/04/15 02:44	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/04/15 02:44	1
Bromoform	ND		21	3.6	ug/m3			12/04/15 02:44	1
Bromomethane	ND		16	6.5	ug/m3			12/04/15 02:44	1
2-Butanone (MEK)	ND		12	2.9	ug/m3			12/04/15 02:44	1
Carbon disulfide	ND		12	1.2	ug/m3			12/04/15 02:44	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/04/15 02:44	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/04/15 02:44	1

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SVMP-15-06
Date Collected: 11/17/15 11:54
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Lab Sample ID: 320-16043-7
Matrix: Air

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		17	3.4	ug/m3			12/04/15 02:44	1
Chloroethane	ND		11	4.1	ug/m3			12/04/15 02:44	1
Chloroform	**3.0**	**J**	7.3	2.3	ug/m3			12/04/15 02:44	1
Chloromethane	ND		8.3	2.0	ug/m3			12/04/15 02:44	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/04/15 02:44	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/04/15 02:44	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/04/15 02:44	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/04/15 02:44	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/04/15 02:44	1
1,1-Dichloroethane	ND		6.1	1.5	ug/m3			12/04/15 02:44	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/04/15 02:44	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/04/15 02:44	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/04/15 02:44	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/04/15 02:44	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/04/15 02:44	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/04/15 02:44	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/04/15 02:44	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/04/15 02:44	1
Ethylbenzene	**8.2**	**J**	8.7	1.4	ug/m3			12/04/15 02:44	1
4-Ethyltoluene	**4.8**	**J**	9.8	4.6	ug/m3			12/04/15 02:44	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/04/15 02:44	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/04/15 02:44	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/04/15 02:44	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/04/15 02:44	1
Styrene	ND		8.5	1.3	ug/m3			12/04/15 02:44	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/04/15 02:44	1
Tetrachloroethene	ND		14	1.7	ug/m3			12/04/15 02:44	1
Toluene	**22**		7.5	0.96	ug/m3			12/04/15 02:44	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/04/15 02:44	1
1,1,1-Trichloroethane	**2.9**	**J**	8.2	1.8	ug/m3			12/04/15 02:44	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/04/15 02:44	1
Trichloroethene	ND		11	2.8	ug/m3			12/04/15 02:44	1
Trichlorofluoromethane	**7.7**	**J**	11	5.5	ug/m3			12/04/15 02:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**48**		15	6.2	ug/m3			12/04/15 02:44	1
1,2,4-Trimethylbenzene	**7.8**	**J**	20	4.0	ug/m3			12/04/15 02:44	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/04/15 02:44	1
Vinyl acetate	ND		14	2.6	ug/m3			12/04/15 02:44	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/04/15 02:44	1
m,p-Xylene	**41**	**B**	17	2.2	ug/m3			12/04/15 02:44	1
o-Xylene	**9.5**	**B**	8.7	1.2	ug/m3			12/04/15 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*12/04/15 02:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*12/04/15 02:44*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*12/04/15 02:44*	*1*

Client Sample ID: SVMP-15-07
Date Collected: 11/17/15 10:38
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Lab Sample ID: 320-16043-8
Matrix: Air

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.9**	**J**	24	2.1	ug/m3			12/04/15 03:36	1
Benzene	**1.7**	**J**	6.4	1.3	ug/m3			12/04/15 03:36	1
Benzyl chloride	ND		21	4.2	ug/m3			12/04/15 03:36	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/04/15 03:36	1
Bromoform	ND		21	3.6	ug/m3			12/04/15 03:36	1
Bromomethane	ND		16	6.5	ug/m3			12/04/15 03:36	1
2-Butanone (MEK)	ND		12	2.9	ug/m3			12/04/15 03:36	1
Carbon disulfide	ND		12	1.2	ug/m3			12/04/15 03:36	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/04/15 03:36	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/04/15 03:36	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/04/15 03:36	1
Chloroethane	ND		11	4.1	ug/m3			12/04/15 03:36	1
Chloroform	ND		7.3	2.3	ug/m3			12/04/15 03:36	1
Chloromethane	ND		8.3	2.0	ug/m3			12/04/15 03:36	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/04/15 03:36	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/04/15 03:36	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/04/15 03:36	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/04/15 03:36	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/04/15 03:36	1
1,1-Dichloroethane	ND		6.1	1.5	ug/m3			12/04/15 03:36	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/04/15 03:36	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/04/15 03:36	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/04/15 03:36	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/04/15 03:36	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/04/15 03:36	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/04/15 03:36	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/04/15 03:36	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/04/15 03:36	1
Ethylbenzene	**8.6**	**J**	8.7	1.4	ug/m3			12/04/15 03:36	1
4-Ethyltoluene	**5.5**	**J**	9.8	4.6	ug/m3			12/04/15 03:36	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/04/15 03:36	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/04/15 03:36	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/04/15 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/04/15 03:36	1
Styrene	ND		8.5	1.3	ug/m3			12/04/15 03:36	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/04/15 03:36	1
Tetrachloroethene	ND		14	1.7	ug/m3			12/04/15 03:36	1
Toluene	**25**		7.5	0.96	ug/m3			12/04/15 03:36	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/04/15 03:36	1
1,1,1-Trichloroethane	ND		8.2	1.8	ug/m3			12/04/15 03:36	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/04/15 03:36	1
Trichloroethene	ND		11	2.8	ug/m3			12/04/15 03:36	1
Trichlorofluoromethane	ND		11	5.5	ug/m3			12/04/15 03:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.2	ug/m3			12/04/15 03:36	1
1,2,4-Trimethylbenzene	**9.2**	**J**	20	4.0	ug/m3			12/04/15 03:36	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/04/15 03:36	1
Vinyl acetate	ND		14	2.6	ug/m3			12/04/15 03:36	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/04/15 03:36	1

Client Sample ID: SVMP-15-07

Lab Sample ID: 320-16043-8

Date Collected: 11/17/15 10:38

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	**41**	**B**	17	2.2	ug/m3			12/04/15 03:36	1
o-Xylene	**9.6**	**B**	8.7	1.2	ug/m3			12/04/15 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*12/04/15 03:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*12/04/15 03:36*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*12/04/15 03:36*	*1*

Client Sample ID: SVMP-15-08

Lab Sample ID: 320-16043-9

Date Collected: 11/17/15 09:25

Matrix: Air

Date Received: 11/19/15 10:10

Sample Container: Summa Canister 6L

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2300	210	ug/m3			12/04/15 04:28	97.1
Benzene	ND		620	120	ug/m3			12/04/15 04:28	97.1
Benzyl chloride	ND		2000	410	ug/m3			12/04/15 04:28	97.1
Bromodichloromethane	ND		980	210	ug/m3			12/04/15 04:28	97.1
Bromoform	ND		2000	350	ug/m3			12/04/15 04:28	97.1
Bromomethane	ND		1500	630	ug/m3			12/04/15 04:28	97.1
2-Butanone (MEK)	ND		1100	280	ug/m3			12/04/15 04:28	97.1
Carbon disulfide	ND		1200	120	ug/m3			12/04/15 04:28	97.1
Carbon tetrachloride	ND		2400	200	ug/m3			12/04/15 04:28	97.1
Chlorobenzene	ND		670	140	ug/m3			12/04/15 04:28	97.1
Dibromochloromethane	ND		1700	330	ug/m3			12/04/15 04:28	97.1
Chloroethane	ND		1000	390	ug/m3			12/04/15 04:28	97.1
Chloroform	ND		710	230	ug/m3			12/04/15 04:28	97.1
Chloromethane	ND		800	200	ug/m3			12/04/15 04:28	97.1
1,2-Dibromoethane (EDB)	ND		3000	280	ug/m3			12/04/15 04:28	97.1
1,2-Dichlorobenzene	ND		1200	380	ug/m3			12/04/15 04:28	97.1
1,3-Dichlorobenzene	ND		1200	320	ug/m3			12/04/15 04:28	97.1
1,4-Dichlorobenzene	ND		1200	430	ug/m3			12/04/15 04:28	97.1
Dichlorodifluoromethane	ND		960	350	ug/m3			12/04/15 04:28	97.1
1,1-Dichloroethane	ND		590	140	ug/m3			12/04/15 04:28	97.1
1,2-Dichloroethane	ND		1600	170	ug/m3			12/04/15 04:28	97.1
1,1-Dichloroethene	ND		1500	140	ug/m3			12/04/15 04:28	97.1
cis-1,2-Dichloroethene	ND		770	170	ug/m3			12/04/15 04:28	97.1
trans-1,2-Dichloroethene	**1300**		770	190	ug/m3			12/04/15 04:28	97.1
1,2-Dichloropropane	ND		900	540	ug/m3			12/04/15 04:28	97.1
cis-1,3-Dichloropropene	ND		880	230	ug/m3			12/04/15 04:28	97.1
trans-1,3-Dichloropropene	ND		880	190	ug/m3			12/04/15 04:28	97.1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1400	530	ug/m3			12/04/15 04:28	97.1
Ethylbenzene	ND		840	130	ug/m3			12/04/15 04:28	97.1
4-Ethyltoluene	ND		950	450	ug/m3			12/04/15 04:28	97.1
Hexachlorobutadiene	ND		10000	2200	ug/m3			12/04/15 04:28	97.1
2-Hexanone	ND		800	170	ug/m3			12/04/15 04:28	97.1
Methylene Chloride	ND		670	120	ug/m3			12/04/15 04:28	97.1
4-Methyl-2-pentanone (MIBK)	ND		800	270	ug/m3			12/04/15 04:28	97.1

Client Sample ID: SVMP-15-08
Date Collected: 11/17/15 09:25
Date Received: 11/19/15 10:10
Sample Container: Summa Canister 6L

Lab Sample ID: 320-16043-9
Matrix: Air

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		830	120	ug/m3			12/04/15 04:28	97.1
1,1,2,2-Tetrachloroethane	ND		1300	230	ug/m3			12/04/15 04:28	97.1
Tetrachloroethene	ND		1300	170	ug/m3			12/04/15 04:28	97.1
Toluene	ND		730	93	ug/m3			12/04/15 04:28	97.1
1,2,4-Trichlorobenzene	ND		7200	1600	ug/m3			12/04/15 04:28	97.1
1,1,1-Trichloroethane	ND		790	170	ug/m3			12/04/15 04:28	97.1
1,1,2-Trichloroethane	ND		1100	180	ug/m3			12/04/15 04:28	97.1
Trichloroethene	**39000**		1000	270	ug/m3			12/04/15 04:28	97.1
Trichlorofluoromethane	ND		1100	530	ug/m3			12/04/15 04:28	97.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1500	610	ug/m3			12/04/15 04:28	97.1
1,2,4-Trimethylbenzene	ND		1900	390	ug/m3			12/04/15 04:28	97.1
1,3,5-Trimethylbenzene	ND		950	300	ug/m3			12/04/15 04:28	97.1
Vinyl acetate	ND		1400	250	ug/m3			12/04/15 04:28	97.1
Vinyl chloride	ND		500	150	ug/m3			12/04/15 04:28	97.1
m,p-Xylene	ND		1700	210	ug/m3			12/04/15 04:28	97.1
o-Xylene	ND		840	110	ug/m3			12/04/15 04:28	97.1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*		*12/04/15 04:28*	*97.1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*12/04/15 04:28*	*97.1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/04/15 04:28*	*97.1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
320-16043-1	SSMP-10R-02(111515)	89	108	95
320-16043-2	SVMP-15-01(111615	93	105	93
320-16043-3	SVMP-15-02	84	107	96
320-16043-4	SVMP-15-03	90	104	99
320-16043-5	SVMP-15-04	95	110	98
320-16043-6	SVMP-15-05	96	106	94
320-16043-7	SVMP-15-06	96	109	95
320-16043-8	SVMP-15-07	95	108	96
320-16043-9	SVMP-15-08	72	108	98
LCS 320-94402/4	Lab Control Sample	109	113	95
MB 320-94402/7	Method Blank	90	105	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 320-94402/7
Matrix: Air
Analysis Batch: 94402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		24	2.1	ug/m3			12/03/15 20:40	1
Benzene	ND		6.4	1.3	ug/m3			12/03/15 20:40	1
Benzyl chloride	ND		21	4.2	ug/m3			12/03/15 20:40	1
Bromodichloromethane	ND		10	2.2	ug/m3			12/03/15 20:40	1
Bromoform	ND		21	3.6	ug/m3			12/03/15 20:40	1
Bromomethane	ND		16	6.5	ug/m3			12/03/15 20:40	1
2-Butanone (MEK)	ND		12	2.9	ug/m3			12/03/15 20:40	1
Carbon disulfide	ND		12	1.2	ug/m3			12/03/15 20:40	1
Carbon tetrachloride	ND		25	2.0	ug/m3			12/03/15 20:40	1
Chlorobenzene	ND		6.9	1.5	ug/m3			12/03/15 20:40	1
Dibromochloromethane	ND		17	3.4	ug/m3			12/03/15 20:40	1
Chloroethane	ND		11	4.1	ug/m3			12/03/15 20:40	1
Chloroform	ND		7.3	2.3	ug/m3			12/03/15 20:40	1
Chloromethane	ND		8.3	2.0	ug/m3			12/03/15 20:40	1
1,2-Dibromoethane (EDB)	ND		31	2.9	ug/m3			12/03/15 20:40	1
1,2-Dichlorobenzene	ND		12	3.9	ug/m3			12/03/15 20:40	1
1,3-Dichlorobenzene	ND		12	3.3	ug/m3			12/03/15 20:40	1
1,4-Dichlorobenzene	ND		12	4.5	ug/m3			12/03/15 20:40	1
Dichlorodifluoromethane	ND		9.9	3.6	ug/m3			12/03/15 20:40	1
1,1-Dichloroethane	ND		6.1	1.5	ug/m3			12/03/15 20:40	1
1,2-Dichloroethane	ND		16	1.8	ug/m3			12/03/15 20:40	1
1,1-Dichloroethene	ND		16	1.4	ug/m3			12/03/15 20:40	1
cis-1,2-Dichloroethene	ND		7.9	1.8	ug/m3			12/03/15 20:40	1
trans-1,2-Dichloroethene	ND		7.9	2.0	ug/m3			12/03/15 20:40	1
1,2-Dichloropropane	ND		9.2	5.5	ug/m3			12/03/15 20:40	1
cis-1,3-Dichloropropene	ND		9.1	2.4	ug/m3			12/03/15 20:40	1
trans-1,3-Dichloropropene	ND		9.1	2.0	ug/m3			12/03/15 20:40	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14	5.4	ug/m3			12/03/15 20:40	1
Ethylbenzene	ND		8.7	1.4	ug/m3			12/03/15 20:40	1
4-Ethyltoluene	ND		9.8	4.6	ug/m3			12/03/15 20:40	1
Hexachlorobutadiene	ND		110	23	ug/m3			12/03/15 20:40	1
2-Hexanone	ND		8.2	1.8	ug/m3			12/03/15 20:40	1
Methylene Chloride	ND		6.9	1.3	ug/m3			12/03/15 20:40	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	2.8	ug/m3			12/03/15 20:40	1
Styrene	ND		8.5	1.3	ug/m3			12/03/15 20:40	1
1,1,2,2-Tetrachloroethane	ND		14	2.4	ug/m3			12/03/15 20:40	1
Tetrachloroethene	ND		14	1.7	ug/m3			12/03/15 20:40	1
Toluene	ND		7.5	0.96	ug/m3			12/03/15 20:40	1
1,2,4-Trichlorobenzene	ND		74	16	ug/m3			12/03/15 20:40	1
1,1,1-Trichloroethane	ND		8.2	1.8	ug/m3			12/03/15 20:40	1
1,1,2-Trichloroethane	ND		11	1.8	ug/m3			12/03/15 20:40	1
Trichloroethene	ND		11	2.8	ug/m3			12/03/15 20:40	1
Trichlorofluoromethane	ND		11	5.5	ug/m3			12/03/15 20:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	6.2	ug/m3			12/03/15 20:40	1
1,2,4-Trimethylbenzene	ND		20	4.0	ug/m3			12/03/15 20:40	1
1,3,5-Trimethylbenzene	ND		9.8	3.1	ug/m3			12/03/15 20:40	1
Vinyl acetate	ND		14	2.6	ug/m3			12/03/15 20:40	1
Vinyl chloride	ND		5.1	1.5	ug/m3			12/03/15 20:40	1

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-94402/7
Matrix: Air
Analysis Batch: 94402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	2.38	J	17	2.2	ug/m3			12/03/15 20:40	1
o-Xylene	1.38	J	8.7	1.2	ug/m3			12/03/15 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*12/03/15 20:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*12/03/15 20:40*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*12/03/15 20:40*	*1*

Lab Sample ID: LCS 320-94402/4
Matrix: Air
Analysis Batch: 94402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	238	241		ug/m3		102	71 - 131
Benzene	319	261		ug/m3		82	68 - 128
Benzyl chloride	518	387		ug/m3		75	58 - 120
Bromodichloromethane	670	630		ug/m3		94	65 - 130
Bromoform	1030	1080		ug/m3		104	64 - 144
Bromomethane	388	358		ug/m3		92	70 - 131
2-Butanone (MEK)	295	279		ug/m3		95	71 - 131
Carbon disulfide	311	245		ug/m3		79	63 - 123
Carbon tetrachloride	629	678		ug/m3		108	67 - 127
Chlorobenzene	460	439		ug/m3		95	70 - 132
Dibromochloromethane	852	842		ug/m3		99	68 - 128
Chloroethane	264	248		ug/m3		94	70 - 131
Chloroform	488	456		ug/m3		93	69 - 129
Chloromethane	207	187		ug/m3		90	67 - 127
1,2-Dibromoethane (EDB)	768	715		ug/m3		93	68 - 131
1,2-Dichlorobenzene	601	663		ug/m3		110	73 - 143
1,3-Dichlorobenzene	601	698		ug/m3		116	77 - 136
1,4-Dichlorobenzene	601	766		ug/m3		127	73 - 143
Dichlorodifluoromethane	495	468		ug/m3		95	69 - 129
1,1-Dichloroethane	405	327		ug/m3		81	65 - 125
1,2-Dichloroethane	405	422		ug/m3		104	71 - 131
1,1-Dichloroethene	396	327		ug/m3		83	53 - 128
cis-1,2-Dichloroethene	396	337		ug/m3		85	68 - 128
trans-1,2-Dichloroethene	396	343		ug/m3		86	70 - 130
1,2-Dichloropropane	462	488		ug/m3		106	74 - 128
cis-1,3-Dichloropropene	454	434		ug/m3		96	78 - 132
trans-1,3-Dichloropropene	454	389		ug/m3		86	56 - 136
1,2-Dichloro-1,1,2,2-tetrafluoroethane	699	692		ug/m3		99	64 - 124
Ethylbenzene	434	416		ug/m3		96	76 - 136
4-Ethyltoluene	492	494		ug/m3		101	62 - 136
Hexachlorobutadiene	1070	956		ug/m3		90	42 - 150
2-Hexanone	410	426		ug/m3		104	70 - 128
Methylene Chloride	347	284		ug/m3		82	65 - 125
4-Methyl-2-pentanone (MIBK)	410	446		ug/m3		109	73 - 133

Method: TO-15 MOD - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-94402/4
Matrix: Air
Analysis Batch: 94402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	426	439		ug/m3		103	76 - 144
1,1,2,2-Tetrachloroethane	687	603		ug/m3		88	75 - 135
Tetrachloroethene	678	653		ug/m3		96	56 - 138
Toluene	377	343		ug/m3		91	71 - 132
1,2,4-Trichlorobenzene	742	827		ug/m3		111	59 - 150
1,1,1-Trichloroethane	546	527		ug/m3		97	65 - 124
1,1,2-Trichloroethane	546	506		ug/m3		93	71 - 131
Trichloroethene	537	507		ug/m3		94	64 - 127
Trichlorofluoromethane	562	585		ug/m3		104	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	766	633		ug/m3		83	50 - 132
1,2,4-Trimethylbenzene	492	617		ug/m3		125	61 - 145
1,3,5-Trimethylbenzene	492	507		ug/m3		103	65 - 136
Vinyl acetate	352	383		ug/m3		109	77 - 134
Vinyl chloride	256	236		ug/m3		92	69 - 129
m,p-Xylene	868	885		ug/m3		102	75 - 138
o-Xylene	434	445		ug/m3		102	77 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Air - GC/MS VOA

Analysis Batch: 94402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-16043-1	SSMP-10R-02(111515)	Total/NA	Air	TO-15 MOD	
320-16043-2	SVMP-15-01(111615	Total/NA	Air	TO-15 MOD	
320-16043-3	SVMP-15-02	Total/NA	Air	TO-15 MOD	
320-16043-4	SVMP-15-03	Total/NA	Air	TO-15 MOD	
320-16043-5	SVMP-15-04	Total/NA	Air	TO-15 MOD	
320-16043-6	SVMP-15-05	Total/NA	Air	TO-15 MOD	
320-16043-7	SVMP-15-06	Total/NA	Air	TO-15 MOD	
320-16043-8	SVMP-15-07	Total/NA	Air	TO-15 MOD	
320-16043-9	SVMP-15-08	Total/NA	Air	TO-15 MOD	
LCS 320-94402/4	Lab Control Sample	Total/NA	Air	TO-15 MOD	
MB 320-94402/7	Method Blank	Total/NA	Air	TO-15 MOD	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SSMP-10R-02(111515)
Date Collected: 11/16/15 10:51
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		6	50 mL	250 mL	94402	12/03/15 21:32	AP1	TAL SAC

Client Sample ID: SVMP-15-01(111615
Date Collected: 11/16/15 16:12
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/03/15 22:24	AP1	TAL SAC

Client Sample ID: SVMP-15-02
Date Collected: 11/16/15 17:45
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		14.8	50 mL	250 mL	94402	12/03/15 23:16	AP1	TAL SAC

Client Sample ID: SVMP-15-03
Date Collected: 11/17/15 15:27
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/04/15 00:08	AP1	TAL SAC

Client Sample ID: SVMP-15-04
Date Collected: 11/17/15 14:11
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/04/15 01:00	AP1	TAL SAC

Client Sample ID: SVMP-15-05
Date Collected: 11/17/15 13:01
Date Received: 11/19/15 10:10

Lab Sample ID: 320-16043-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/04/15 01:52	AP1	TAL SAC

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Client Sample ID: SVMP-15-06

Lab Sample ID: 320-16043-7

Date Collected: 11/17/15 11:54

Matrix: Air

Date Received: 11/19/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/04/15 02:44	AP1	TAL SAC

Client Sample ID: SVMP-15-07

Lab Sample ID: 320-16043-8

Date Collected: 11/17/15 10:38

Matrix: Air

Date Received: 11/19/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		1	50 mL	250 mL	94402	12/04/15 03:36	AP1	TAL SAC

Client Sample ID: SVMP-15-08

Lab Sample ID: 320-16043-9

Date Collected: 11/17/15 09:25

Matrix: Air

Date Received: 11/19/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 MOD		97.1	50 mL	250 mL	94402	12/04/15 04:28	AP1	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-16
Arizona	State Program	9	AZ0708	08-11-16
Arkansas DEQ	State Program	6	88-0691	06-17-16
California	State Program	9	2897	01-31-16
Colorado	State Program	8	N/A	08-31-16
Connecticut	State Program	1	PH-0691	06-30-17
Florida	NELAP	4	E87570	06-30-16
Hawaii	State Program	9	N/A	01-29-16
Illinois	NELAP	5	200060	03-17-16
Kansas	NELAP	7	E-10375	01-31-16
Louisiana	NELAP	6	30612	06-30-16
Michigan	State Program	5	9947	01-31-16
Nevada	State Program	9	CA44	07-31-16
New Jersey	NELAP	2	CA005	06-30-16
New York	NELAP	2	11666	04-01-16
Oregon	NELAP	10	CA200005	01-29-16
Pennsylvania	NELAP	3	9947	03-31-16
Texas	NELAP	6	T104704399-15-9	05-31-16
US Fish & Wildlife	Federal		LE148388-0	02-28-16
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-16
Virginia	NELAP Secondary AB	3	460278	03-14-16
Washington	State Program	10	C581	05-04-16
West Virginia (DW)	State Program	3	9930C	12-31-15
Wyoming	State Program	8	8TMS-Q	01-29-16

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Method	Method Description	Protocol	Laboratory
TO-15 MOD	Volatile Organic Compounds in Ambient Air	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford Livonia Transmission Plant

TestAmerica Job ID: 320-16043-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-16043-1	SSMP-10R-02(111515)	Air	11/16/15 10:51	11/19/15 10:10
320-16043-2	SVMP-15-01(111615	Air	11/16/15 16:12	11/19/15 10:10
320-16043-3	SVMP-15-02	Air	11/16/15 17:45	11/19/15 10:10
320-16043-4	SVMP-15-03	Air	11/17/15 15:27	11/19/15 10:10
320-16043-5	SVMP-15-04	Air	11/17/15 14:11	11/19/15 10:10
320-16043-6	SVMP-15-05	Air	11/17/15 13:01	11/19/15 10:10
320-16043-7	SVMP-15-06	Air	11/17/15 11:54	11/19/15 10:10
320-16043-8	SVMP-15-07	Air	11/17/15 10:38	11/19/15 10:10
320-16043-9	SVMP-15-08	Air	11/17/15 09:25	11/19/15 10:10

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467.7248

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	**Project Manager: Lori Lever**	**Samples Collected By: Kaitlyn Trestrail**
Company Name: Arcadis of Michigan	**Phone: 916-374-4362**	
Address 28550 Cabot Dr. Suite 500	**Email:**	
City/State/Zip Novi, MI 48377		
Phone: 248-994-2240	**Site Contact: Patrick Curry 734.355.2809**	
FAX 248-994-2241	**TA Contact: Kris Hinskey 269.832.7478**	
Project Name Ford LTP	**Anaylsis Turnaround Time**	
Site/Location Livonia, MI	Standard (Specific) Business Days	
P O # MI001304.0001 00003	Rush (Specify):	

COC No: 1 of 1 COCs

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.

(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SSMP-10R-02(111615)	11/16/2015	1012	1051	-30	-10	7502	NA	X											X			
SVMP-15-01(111615)	11/16/15	1510	1612	-30	-7	7445	12633	X											X			
SVMP-15-02	11/16/15	1650	1745	-30	-5	7375	6556	X											X			
SVMP-15-03	11/17/15	1431	1527	-29	-5	7214	1025	X											X			
SVMP-15-04	11/17/15	1321	1411	-29	-5	7233	1081C	X											X			
SVMP-15-05	11/17/15	1217	1301	-30	-5	7231	C8480	X											X			
SVMP-15-06	11/17/15	1102	1154	-29	-5	7128	C8359	X											X			
SVMP-15-07	11/17/15	0948	1038	-29	-5	7776	C8315	X											X			
SVMP-15-08	11/17/15	0825	925	-30	-6	7123	C8294	X											X			

320-16043 Chain of Custody

All samples collected in Michigan in Eastern Time Zone	Temperature (Fahrenheit)			
	Start	Interior	Ambient	
	Stop			
	Temperature (Fahrenheit)			
	Start	Interior	Ambient	
	Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by: TestAmerica - Brighton Service Center	**Date / Time:**	**Samples Received by:**
Samples Relinquished by: Angela DeGrandis (Arcadis)	**Date / Time:** 11/18/15 1315	**Received by:** 11/18/15 13:15
Relinquished by:	**Date / Time:** 11/19/15 14:00	**Received by:** 11/19/15 1010

Lab Use Only: **Shipper Name:** **Opened by:** **Condition:**

Form No. CA-C-WI-003, Rev. 1.5, dated 11/04/2015

12/15/2015

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 320-16043-1

Login Number: 16043
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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3/31/2016
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford Livonia Trans. Plant
Project #: MI001304.0002.00001
Workorder #: 1603554

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 3/30/2016 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1603554

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	
FAX:		**PROJECT #**	MI001304.0002.00001 Ford Livonia Trans. Plant
DATE RECEIVED:	03/30/2016	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/31/2016		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-16-01(03292016)	TO-15	4.9 "Hg	15.4 psi
02A	SVMP-16-02(03292016)	TO-15	4.3 "Hg	15.1 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/31/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1603554

Two 1 Liter Summa Canister samples were received on March 30, 2016. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-16-01(03292016)

Lab ID#: 1603554-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	1.2	2.4	4.6	9.1
Tetrachloroethene	1.2	2.3	8.3	15

Client Sample ID: SVMP-16-02(03292016)

Lab ID#: 1603554-02A

No Detections Were Found.

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Client Sample ID: SVMP-16-01(03292016)

Lab ID#: 1603554-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033015**	**Date of Collection:**	**3/29/16 9:59:00 AM**
Dil. Factor:	**2.45**	**Date of Analysis:**	**3/30/16 06:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Freon 114	1.2	Not Detected	8.6	Not Detected
Chloromethane	12	Not Detected UJ	25	Not Detected UJ
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
Bromomethane	12	Not Detected	48	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
Freon 11	1.2	Not Detected	6.9	Not Detected
Ethanol	4.9	Not Detected	9.2	Not Detected
Freon 113	1.2	Not Detected	9.4	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
2-Propanol	4.9	Not Detected	12	Not Detected
Carbon Disulfide	4.9	Not Detected	15	Not Detected
3-Chloropropene	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.6	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Cyclohexane	1.2	Not Detected	4.2	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Heptane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.7	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Bromodichloromethane	1.2	Not Detected	8.2	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	5.0	Not Detected
Toluene	1.2	2.4	4.6	9.1
trans-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	2.3	8.3	15
2-Hexanone	4.9	Not Detected	20	Not Detected

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Client Sample ID: SVMP-16-01(03292016)

Lab ID#: 1603554-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033015**	**Date of Collection: 3/29/16 9:59:00 AM**	
Dil. Factor:	**2.45**	**Date of Analysis: 3/30/16 06:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.4	Not Detected
Chlorobenzene	1.2	Not Detected	5.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected
Styrene	1.2	Not Detected	5.2	Not Detected
Bromoform	1.2	Not Detected	13	Not Detected
Cumene	1.2	Not Detected	6.0	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.4	Not Detected
Propylbenzene	1.2	Not Detected	6.0	Not Detected
4-Ethyltoluene	1.2	Not Detected	6.0	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.3	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,2,4-Trichlorobenzene	4.9	Not Detected	36	Not Detected
Hexachlorobutadiene	4.9	Not Detected	52	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	109	70-130

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Client Sample ID: SVMP-16-02(03292016)

Lab ID#: 1603554-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033016**	**Date of Collection:**	**3/29/16 10:44:00 AM**
Dil. Factor:	**2.37**	**Date of Analysis:**	**3/30/16 07:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	5.9	Not Detected
Freon 114	1.2	Not Detected	8.3	Not Detected
Chloromethane	12	Not Detected UJ	24	Not Detected UJ
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	12	Not Detected	46	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Freon 11	1.2	Not Detected	6.6	Not Detected
Ethanol	4.7	Not Detected	8.9	Not Detected
Freon 113	1.2	Not Detected	9.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Acetone	12	Not Detected	28	Not Detected
2-Propanol	4.7	Not Detected	12	Not Detected
Carbon Disulfide	4.7	Not Detected	15	Not Detected
3-Chloropropene	4.7	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.5	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Cyclohexane	1.2	Not Detected	4.1	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.4	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.5	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.5	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	7.9	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
2-Hexanone	4.7	Not Detected	19	Not Detected

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Client Sample ID: SVMP-16-02(03292016)

Lab ID#: 1603554-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033016**	**Date of Collection:**	**3/29/16 10:44:00 AM**
Dil. Factor:	**2.37**	**Date of Analysis:**	**3/30/16 07:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.1	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.1	Not Detected
Propylbenzene	1.2	Not Detected	5.8	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.8	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.1	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.1	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.1	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.1	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	35	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	108	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1603554-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033006**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 12:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected UJ	10	Not Detected UJ
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1603554-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033006**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 12:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	110	70-130

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Client Sample ID: CCV

Lab ID#: 1603554-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 10:40 AM**	

Compound	%Recovery
Freon 12	94
Freon 114	109
Chloromethane	62 Q
Vinyl Chloride	90
1,3-Butadiene	80
Bromomethane	101
Chloroethane	93
Freon 11	100
Ethanol	84
Freon 113	106
1,1-Dichloroethene	93
Acetone	100
2-Propanol	78
Carbon Disulfide	92
3-Chloropropene	91
Methylene Chloride	86
Methyl tert-butyl ether	91
trans-1,2-Dichloroethene	93
Hexane	84
1,1-Dichloroethane	88
2-Butanone (Methyl Ethyl Ketone)	90
cis-1,2-Dichloroethene	95
Tetrahydrofuran	83
Chloroform	93
1,1,1-Trichloroethane	94
Cyclohexane	90
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	84
Benzene	93
1,2-Dichloroethane	95
Heptane	89
Trichloroethene	95
1,2-Dichloropropane	89
1,4-Dioxane	92
Bromodichloromethane	95
cis-1,3-Dichloropropene	96
4-Methyl-2-pentanone	81
Toluene	96
trans-1,3-Dichloropropene	93
1,1,2-Trichloroethane	96
Tetrachloroethene	108
2-Hexanone	74

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Client Sample ID: CCV

Lab ID#: 1603554-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 10:40 AM**	

Compound	%Recovery
Dibromochloromethane	100
1,2-Dibromoethane (EDB)	99
Chlorobenzene	102
Ethyl Benzene	98
m,p-Xylene	99
o-Xylene	98
Styrene	86
Bromoform	110
Cumene	99
1,1,2,2-Tetrachloroethane	93
Propylbenzene	96
4-Ethyltoluene	98
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	94
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	89
1,2-Dichlorobenzene	106
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	108

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	111	70-130

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Client Sample ID: LCS

Lab ID#: 1603554-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 11:07 AM**	

Compound	%Recovery	Method Limits
Freon 12	94	70-130
Freon 114	110	70-130
Chloromethane	70	70-130
Vinyl Chloride	91	70-130
1,3-Butadiene	77	70-130
Bromomethane	100	70-130
Chloroethane	90	70-130
Freon 11	100	70-130
Ethanol	85	70-130
Freon 113	100	70-130
1,1-Dichloroethene	89	70-130
Acetone	84	70-130
2-Propanol	82	70-130
Carbon Disulfide	78	70-130
3-Chloropropene	83	70-130
Methylene Chloride	82	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	92	70-130
Hexane	82	70-130
1,1-Dichloroethane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
cis-1,2-Dichloroethene	88	70-130
Tetrahydrofuran	79	70-130
Chloroform	89	70-130
1,1,1-Trichloroethane	91	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	95	70-130
2,2,4-Trimethylpentane	82	70-130
Benzene	92	70-130
1,2-Dichloroethane	93	70-130
Heptane	88	70-130
Trichloroethene	105	70-130
1,2-Dichloropropane	88	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	96	70-130
cis-1,3-Dichloropropene	88	70-130
4-Methyl-2-pentanone	88	70-130
Toluene	97	70-130
trans-1,3-Dichloropropene	91	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	106	70-130
2-Hexanone	84	70-130

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Client Sample ID: LCS

Lab ID#: 1603554-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 11:07 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	98	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	99	70-130
o-Xylene	99	70-130
Styrene	94	70-130
Bromoform	112	70-130
Cumene	98	70-130
1,1,2,2-Tetrachloroethane	81	70-130
Propylbenzene	99	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	105	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	104	70-130
1,4-Dichlorobenzene	103	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	96	70-130
Hexachlorobutadiene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	110	70-130

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Client Sample ID: LCSD

Lab ID#: 1603554-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 11:33 AM**	

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	111	70-130
Chloromethane	69 Q	70-130
Vinyl Chloride	91	70-130
1,3-Butadiene	77	70-130
Bromomethane	102	70-130
Chloroethane	92	70-130
Freon 11	101	70-130
Ethanol	82	70-130
Freon 113	102	70-130
1,1-Dichloroethene	88	70-130
Acetone	82	70-130
2-Propanol	83	70-130
Carbon Disulfide	79	70-130
3-Chloropropene	84	70-130
Methylene Chloride	82	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	94	70-130
Hexane	82	70-130
1,1-Dichloroethane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	87	70-130
cis-1,2-Dichloroethene	88	70-130
Tetrahydrofuran	80	70-130
Chloroform	89	70-130
1,1,1-Trichloroethane	92	70-130
Cyclohexane	88	70-130
Carbon Tetrachloride	96	70-130
2,2,4-Trimethylpentane	83	70-130
Benzene	91	70-130
1,2-Dichloroethane	92	70-130
Heptane	88	70-130
Trichloroethene	105	70-130
1,2-Dichloropropane	87	70-130
1,4-Dioxane	93	70-130
Bromodichloromethane	94	70-130
cis-1,3-Dichloropropene	88	70-130
4-Methyl-2-pentanone	87	70-130
Toluene	95	70-130
trans-1,3-Dichloropropene	92	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	108	70-130
2-Hexanone	84	70-130

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Client Sample ID: LCSD

Lab ID#: 1603554-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17033004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/30/16 11:33 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	99	70-130
1,2-Dibromoethane (EDB)	96	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	98	70-130
o-Xylene	100	70-130
Styrene	94	70-130
Bromoform	113	70-130
Cumene	99	70-130
1,1,2,2-Tetrachloroethane	80	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	105	70-130
alpha-Chlorotoluene	98	70-130
1,2-Dichlorobenzene	106	70-130
1,2,4-Trichlorobenzene	112	70-130
Hexachlorobutadiene	120	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	111	70-130

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6/27/2016
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI1321.0001.00002
Workorder #: 1606243

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/11/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1606243

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001321.0001
FAX:		**PROJECT #**	MI1321.0001.00002 Ford LTP
DATE RECEIVED:	06/11/2016	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/27/2016		

FRACTION #	NAME	TEST
01A	SVMP-16-03_060916	Modified TO-17 VI
02A	SVMP-16-04_061016	Modified TO-17 VI
03A	SVMP-16-05_060916	Modified TO-17 VI
04A	SVMP-16-06_061016	Modified TO-17 VI
05A	SVMP-16-07_061016	Modified TO-17 VI
06A	SVMP-16-08_061016	Modified TO-17 VI
07A	SVMP-16-09_061016	Modified TO-17 VI
08A	Lab Blank	Modified TO-17 VI
08B	Lab Blank	Modified TO-17 VI
09A	CCV	Modified TO-17 VI
09B	CCV	Modified TO-17 VI
10A	LCS	Modified TO-17 VI
10AA	LCSD	Modified TO-17 VI
10B	LCS	Modified TO-17 VI
10BB	LCSD	Modified TO-17 VI

CERTIFIED BY: DATE: 06/27/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Arcadis U.S., Inc.
Workorder# 1606243

Seven TO-17 VI Tube samples were received on June 11, 2016. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Initial Calibration	%RSD</=30% with 2 allowed out up to 40%	VOC list: %RSD</=30% with 2 allowed out up to 40% SVOC list: %RSD</=30% with 2 allowed out up to 40%
Daily Calibration	%D for each target compound within +/-30%.	Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene within +/-40%D
Audit Accuracy	70-130%	Second source recovery limits for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene = 60-140%.
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.
Analytical Precision	</=20% RPD	<30% RPD for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Due to the Method Detection Limit study performed on the instrument, the reporting limit for Vinyl Chloride was raised from 2.6ng to 5.1ng.

Sampling volume was supplied by the client. A sampling volume of 0.120 L was used to convert ng to ug/m3 for the associated Lab Blank.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in CCV analyses have not been flagged.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in blank (subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SVMP-16-03_060916

Lab ID#: 1606243-01A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Trichloroethene	8.4	45	400	2200

Client Sample ID: SVMP-16-04_061016

Lab ID#: 1606243-02A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Tetrachloroethene	8.4	57	13	87

Client Sample ID: SVMP-16-05_060916

Lab ID#: 1606243-03A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Isopentane	17	49	230	680
trans-1,2-Dichloroethene	8.4	33	14	55
cis-1,2-Dichloroethene	8.4	33	41	160

Client Sample ID: SVMP-16-06_061016

Lab ID#: 1606243-04A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Benzene	17	53	22	70
Naphthalene	1.6	8.3	1.9	10

Client Sample ID: SVMP-16-07_061016

Lab ID#: 1606243-05A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Benzene	17	53	18	58
Trichloroethene	8.4	45	280	1500

Client Sample ID: SVMP-16-08_061016

Lab ID#: 1606243-06A

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SVMP-16-08_061016

Lab ID#: 1606243-06A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Trichloroethene	8.4	45	49	260
Naphthalene	1.6	8.3	0.87	4.5

Client Sample ID: SVMP-16-09_061016

Lab ID#: 1606243-07A

No Detections Were Found.

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Client Sample ID: SVMP-16-03_060916

Lab ID#: 1606243-01A

EPA METHOD TO-17

File Name:	**6061509**	**Date of Extraction: NA**	**Date of Collection: 6/9/16 2:31:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 04:59 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	400	2200
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-03_060916

Lab ID#: 1606243-01A

EPA METHOD TO-17

File Name:	**6061509**	**Date of Extraction: NA**	**Date of Collection: 6/9/16 2:31:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 04:59 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	78	50-150
Toluene-d8	87	50-150
Naphthalene-d8	96	50-150

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Client Sample ID: SVMP-16-04_061016

Lab ID#: 1606243-02A

EPA METHOD TO-17

File Name:	**6061510**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 9:46:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 05:41 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	13	87
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-04_061016

Lab ID#: 1606243-02A

EPA METHOD TO-17

File Name:	**6061510**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 9:46:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 05:41 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	77	50-150
Toluene-d8	88	50-150
Naphthalene-d8	98	50-150

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Client Sample ID: SVMP-16-05_060916

Lab ID#: 1606243-03A

EPA METHOD TO-17

File Name:	**6061511**	**Date of Extraction: NA**	**Date of Collection: 6/9/16 2:46:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 06:20 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	230	680
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	14	55
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	41	160
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-05_060916

Lab ID#: 1606243-03A

EPA METHOD TO-17

File Name:	**6061511**	**Date of Extraction: NA**	**Date of Collection: 6/9/16 2:46:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 06:20 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	77	50-150
Toluene-d8	90	50-150
Naphthalene-d8	99	50-150

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Client Sample ID: SVMP-16-06_061016

Lab ID#: 1606243-04A

EPA METHOD TO-17

File Name:	**6061706**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:01:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 02:40 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	22	70
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-06_061016

Lab ID#: 1606243-04A

EPA METHOD TO-17

File Name:	**6061706**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:01:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 02:40 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	1.9	10

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	73	50-150
Toluene-d8	89	50-150
Naphthalene-d8	93	50-150

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Client Sample ID: SVMP-16-07_061016

Lab ID#: 1606243-05A

EPA METHOD TO-17

File Name:	**6061513**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:11:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 07:40 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	18	58
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	280	1500
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-07_061016

Lab ID#: 1606243-05A

EPA METHOD TO-17

File Name:	**6061513**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:11:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 07:40 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	76	50-150
Toluene-d8	84	50-150
Naphthalene-d8	97	50-150

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Client Sample ID: SVMP-16-08_061016

Lab ID#: 1606243-06A

EPA METHOD TO-17

File Name:	**6061707**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:26:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 03:20 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	49	260
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-08_061016

Lab ID#: 1606243-06A

EPA METHOD TO-17

File Name:	**6061707**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:26:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 03:20 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	0.87	4.5

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	77	50-150
Toluene-d8	91	50-150
Naphthalene-d8	95	50-150

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Client Sample ID: SVMP-16-09_061016

Lab ID#: 1606243-07A

EPA METHOD TO-17

File Name:	**6061708**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:36:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 04:00 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: SVMP-16-09_061016

Lab ID#: 1606243-07A

EPA METHOD TO-17

File Name:	**6061708**	**Date of Extraction: NA**	**Date of Collection: 6/10/16 10:36:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 04:00 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	65	50-150
Toluene-d8	88	50-150
Naphthalene-d8	88	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1606243-08A

EPA METHOD TO-17

File Name:	**6061508**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:45 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1606243-08A

EPA METHOD TO-17

File Name:	**6061508**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:45 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	50-150
Toluene-d8	99	50-150
Naphthalene-d8	94	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1606243-08B

EPA METHOD TO-17

File Name:	**6061705**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 01:11 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 114	17	120	Not Detected	Not Detected
Vinyl Chloride	17	42	Not Detected	Not Detected
1,3-Butadiene	8.3	18	Not Detected	Not Detected
Isopentane	17	49	Not Detected	Not Detected
Freon 11	16	92	Not Detected	Not Detected
1,1-Dichloroethene	8.4	33	Not Detected	Not Detected
Methylene Chloride	50	180	Not Detected	Not Detected
Freon 113	8.4	64	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
1,1-Dichloroethane	8.2	33	Not Detected	Not Detected
cis-1,2-Dichloroethene	8.4	33	Not Detected	Not Detected
Hexane	83	290	Not Detected	Not Detected
Chloroform	8.4	41	Not Detected	Not Detected
1,2-Dichloroethane	8.2	33	Not Detected	Not Detected
1,1,1-Trichloroethane	8.2	45	Not Detected	Not Detected
Benzene	17	53	Not Detected	Not Detected
Carbon Tetrachloride	8.3	52	Not Detected	Not Detected
Cyclohexane	17	58	Not Detected	Not Detected
1,2-Dichloropropane	8.3	38	Not Detected	Not Detected
Trichloroethene	8.4	45	Not Detected	Not Detected
1,4-Dioxane	25	92	Not Detected	Not Detected
2,2,4-Trimethylpentane	17	78	Not Detected	Not Detected
Heptane	17	68	Not Detected	Not Detected
Methylcyclohexane	17	67	Not Detected	Not Detected
1,1,2-Trichloroethane	8.2	45	Not Detected	Not Detected
4-Methyl-2-pentanone	17	68	Not Detected	Not Detected
Toluene	16	62	Not Detected	Not Detected
2-Hexanone	17	68	Not Detected	Not Detected
Tetrachloroethene	8.4	57	Not Detected	Not Detected
Chlorobenzene	8.3	38	Not Detected	Not Detected
Ethyl Benzene	8.2	36	Not Detected	Not Detected
m,p-Xylene	17	72	Not Detected	Not Detected
o-Xylene	17	72	Not Detected	Not Detected
Styrene	17	71	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	8.4	58	Not Detected	Not Detected
Cumene	17	82	Not Detected	Not Detected
Propylbenzene	17	82	Not Detected	Not Detected
4-Ethyltoluene	17	82	Not Detected	Not Detected
1,3,5-Trimethylbenzene	17	82	Not Detected	Not Detected
1,2,4-Trimethylbenzene	49	240	Not Detected	Not Detected
1,3-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,4-Dichlorobenzene	8.3	50	Not Detected	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1606243-08B

EPA METHOD TO-17

File Name:	**6061705**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 01:11 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
1,2-Dichlorobenzene	8.3	50	Not Detected	Not Detected
1,2,4-Trichlorobenzene	17	120	Not Detected	Not Detected
Hexachlorobutadiene	16	180	Not Detected	Not Detected
Naphthalene	1.6	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.120
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	50-150
Toluene-d8	97	50-150
Naphthalene-d8	96	50-150

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Client Sample ID: CCV
Lab ID#: 1606243-09A
EPA METHOD TO-17

File Name:	**6061503**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 12:15 PM**

Compound	%Recovery
Freon 114	100
Vinyl Chloride	100
1,3-Butadiene	96
Isopentane	92
Freon 11	103
1,1-Dichloroethene	96
Methylene Chloride	90
Freon 113	103
trans-1,2-Dichloroethene	98
1,1-Dichloroethane	95
cis-1,2-Dichloroethene	95
Hexane	96
Chloroform	97
1,2-Dichloroethane	99
1,1,1-Trichloroethane	103
Benzene	89
Carbon Tetrachloride	106
Cyclohexane	96
1,2-Dichloropropane	102
Trichloroethene	93
1,4-Dioxane	99
2,2,4-Trimethylpentane	99
Heptane	96
Methylcyclohexane	100
1,1,2-Trichloroethane	103
4-Methyl-2-pentanone	101
Toluene	99
2-Hexanone	102
Tetrachloroethene	101
Chlorobenzene	101
Ethyl Benzene	102
m,p-Xylene	101
o-Xylene	103
Styrene	106
1,1,2,2-Tetrachloroethane	110
Cumene	103
Propylbenzene	102
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	105
1,4-Dichlorobenzene	104

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Client Sample ID: CCV
Lab ID#: 1606243-09A
EPA METHOD TO-17

File Name:	**6061503**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 12:15 PM**

Compound	%Recovery
1,2-Dichlorobenzene	104
1,2,4-Trichlorobenzene	110
Hexachlorobutadiene	108
Naphthalene	111

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	50-150
Toluene-d8	96	50-150
Naphthalene-d8	96	50-150

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Client Sample ID: CCV
Lab ID#: 1606243-09B
EPA METHOD TO-17

File Name:	**6061702**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 09:49 AM**

Compound	%Recovery
Freon 114	106
Vinyl Chloride	108
1,3-Butadiene	120
Isopentane	114
Freon 11	97
1,1-Dichloroethene	107
Methylene Chloride	122
Freon 113	100
trans-1,2-Dichloroethene	110
1,1-Dichloroethane	105
cis-1,2-Dichloroethene	107
Hexane	121
Chloroform	102
1,2-Dichloroethane	91
1,1,1-Trichloroethane	96
Benzene	85
Carbon Tetrachloride	89
Cyclohexane	100
1,2-Dichloropropane	120
Trichloroethene	98
1,4-Dioxane	109
2,2,4-Trimethylpentane	100
Heptane	108
Methylcyclohexane	109
1,1,2-Trichloroethane	93
4-Methyl-2-pentanone	122
Toluene	132 Q
2-Hexanone	137 Q
Tetrachloroethene	113
Chlorobenzene	102
Ethyl Benzene	104
m,p-Xylene	103
o-Xylene	106
Styrene	109
1,1,2,2-Tetrachloroethane	114
Cumene	106
Propylbenzene	104
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	103
1,3-Dichlorobenzene	101
1,4-Dichlorobenzene	101

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Client Sample ID: CCV

Lab ID#: 1606243-09B

EPA METHOD TO-17

File Name:	**6061702**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 09:49 AM**

Compound	%Recovery
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	97
Hexachlorobutadiene	96
Naphthalene	98

Air Sample Volume(L): 1.00

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	81	50-150
Toluene-d8	126	50-150
Naphthalene-d8	99	50-150

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Client Sample ID: LCS
Lab ID#: 1606243-10A
EPA METHOD TO-17

File Name:	**6061506**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 02:25 PM**

Compound	%Recovery	Method Limits
Freon 114	107	70-130
Vinyl Chloride	109	70-130
1,3-Butadiene	98	70-130
Isopentane	96	70-130
Freon 11	104	70-130
1,1-Dichloroethene	98	70-130
Methylene Chloride	93	70-130
Freon 113	102	70-130
trans-1,2-Dichloroethene	88	70-130
1,1-Dichloroethane	93	70-130
cis-1,2-Dichloroethene	109	70-130
Hexane	100	70-130
Chloroform	98	70-130
1,2-Dichloroethane	101	70-130
1,1,1-Trichloroethane	102	70-130
Benzene	91	70-130
Carbon Tetrachloride	104	70-130
Cyclohexane	99	70-130
1,2-Dichloropropane	110	70-130
Trichloroethene	95	70-130
1,4-Dioxane	104	70-130
2,2,4-Trimethylpentane	103	70-130
Heptane	98	70-130
Methylcyclohexane	105	70-130
1,1,2-Trichloroethane	106	70-130
4-Methyl-2-pentanone	107	70-130
Toluene	102	70-130
2-Hexanone	104	70-130
Tetrachloroethene	103	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	102	70-130
o-Xylene	104	70-130
Styrene	105	70-130
1,1,2,2-Tetrachloroethane	107	70-130
Cumene	101	70-130
Propylbenzene	102	70-130
4-Ethyltoluene	100	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	99	70-130
1,4-Dichlorobenzene	100	70-130

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Client Sample ID: LCS
Lab ID#: 1606243-10A
EPA METHOD TO-17

File Name:	**6061506**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 02:25 PM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	99	70-130
1,2,4-Trichlorobenzene	101	70-130
Hexachlorobutadiene	98	70-130
Naphthalene	108	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	50-150
Toluene-d8	99	50-150
Naphthalene-d8	94	50-150

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Client Sample ID: LCSD
Lab ID#: 1606243-10AA
EPA METHOD TO-17

File Name:	**6061507**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:05 PM**

Compound	%Recovery	Method Limits
Freon 114	110	70-130
Vinyl Chloride	114	70-130
1,3-Butadiene	100	70-130
Isopentane	103	70-130
Freon 11	106	70-130
1,1-Dichloroethene	105	70-130
Methylene Chloride	98	70-130
Freon 113	108	70-130
trans-1,2-Dichloroethene	92	70-130
1,1-Dichloroethane	93	70-130
cis-1,2-Dichloroethene	116	70-130
Hexane	105	70-130
Chloroform	103	70-130
1,2-Dichloroethane	98	70-130
1,1,1-Trichloroethane	98	70-130
Benzene	93	70-130
Carbon Tetrachloride	100	70-130
Cyclohexane	98	70-130
1,2-Dichloropropane	106	70-130
Trichloroethene	96	70-130
1,4-Dioxane	102	70-130
2,2,4-Trimethylpentane	102	70-130
Heptane	100	70-130
Methylcyclohexane	102	70-130
1,1,2-Trichloroethane	102	70-130
4-Methyl-2-pentanone	102	70-130
Toluene	102	70-130
2-Hexanone	101	70-130
Tetrachloroethene	103	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	102	70-130
o-Xylene	103	70-130
Styrene	103	70-130
1,1,2,2-Tetrachloroethane	107	70-130
Cumene	101	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	101	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	100	70-130
1,4-Dichlorobenzene	100	70-130

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Client Sample ID: LCSD
Lab ID#: 1606243-10AA
EPA METHOD TO-17

File Name:	**6061507**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:05 PM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	99	70-130
1,2,4-Trichlorobenzene	102	70-130
Hexachlorobutadiene	100	70-130
Naphthalene	107	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	50-150
Toluene-d8	98	50-150
Naphthalene-d8	94	50-150

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Client Sample ID: LCS
Lab ID#: 1606243-10B
EPA METHOD TO-17

File Name:	**6061703**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 11:37 AM**

Compound	%Recovery	Method Limits
Freon 114	105	70-130
Vinyl Chloride	125	70-130
1,3-Butadiene	118	70-130
Isopentane	113	70-130
Freon 11	103	70-130
1,1-Dichloroethene	106	70-130
Methylene Chloride	111	70-130
Freon 113	98	70-130
trans-1,2-Dichloroethene	92	70-130
1,1-Dichloroethane	101	70-130
cis-1,2-Dichloroethene	115	70-130
Hexane	116	70-130
Chloroform	100	70-130
1,2-Dichloroethane	102	70-130
1,1,1-Trichloroethane	94	70-130
Benzene	97	70-130
Carbon Tetrachloride	103	70-130
Cyclohexane	103	70-130
1,2-Dichloropropane	119	70-130
Trichloroethene	97	70-130
1,4-Dioxane	104	70-130
2,2,4-Trimethylpentane	117	70-130
Heptane	103	70-130
Methylcyclohexane	107	70-130
1,1,2-Trichloroethane	106	70-130
4-Methyl-2-pentanone	112	70-130
Toluene	110	70-130
2-Hexanone	118	70-130
Tetrachloroethene	102	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	109	70-130
o-Xylene	114	70-130
Styrene	116	70-130
1,1,2,2-Tetrachloroethane	121	70-130
Cumene	110	70-130
Propylbenzene	112	70-130
4-Ethyltoluene	107	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	101	70-130
1,4-Dichlorobenzene	101	70-130

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Client Sample ID: LCS
Lab ID#: 1606243-10B
EPA METHOD TO-17

File Name:	**6061703**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 11:37 AM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	97	70-130
Hexachlorobutadiene	92	70-130
Naphthalene	119	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	50-150
Toluene-d8	103	50-150
Naphthalene-d8	94	50-150

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Client Sample ID: LCSD
Lab ID#: 1606243-10BB
EPA METHOD TO-17

File Name:	**6061704**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 12:17 PM**

Compound	%Recovery	Method Limits
Freon 114	110	70-130
Vinyl Chloride	131 Q	70-130
1,3-Butadiene	120	70-130
Isopentane	118	70-130
Freon 11	102	70-130
1,1-Dichloroethene	110	70-130
Methylene Chloride	115	70-130
Freon 113	103	70-130
trans-1,2-Dichloroethene	95	70-130
1,1-Dichloroethane	96	70-130
cis-1,2-Dichloroethene	119	70-130
Hexane	122	70-130
Chloroform	105	70-130
1,2-Dichloroethane	102	70-130
1,1,1-Trichloroethane	89	70-130
Benzene	98	70-130
Carbon Tetrachloride	90	70-130
Cyclohexane	87	70-130
1,2-Dichloropropane	117	70-130
Trichloroethene	100	70-130
1,4-Dioxane	105	70-130
2,2,4-Trimethylpentane	118	70-130
Heptane	108	70-130
Methylcyclohexane	107	70-130
1,1,2-Trichloroethane	99	70-130
4-Methyl-2-pentanone	110	70-130
Toluene	106	70-130
2-Hexanone	93	70-130
Tetrachloroethene	87	70-130
Chlorobenzene	101	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	103	70-130
o-Xylene	113	70-130
Styrene	114	70-130
1,1,2,2-Tetrachloroethane	116	70-130
Cumene	110	70-130
Propylbenzene	113	70-130
4-Ethyltoluene	107	70-130
1,3,5-Trimethylbenzene	105	70-130
1,2,4-Trimethylbenzene	106	70-130
1,3-Dichlorobenzene	101	70-130
1,4-Dichlorobenzene	100	70-130

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Client Sample ID: LCSD

Lab ID#: 1606243-10BB

EPA METHOD TO-17

File Name:	**6061704**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 12:17 PM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	99	70-130
1,2,4-Trichlorobenzene	96	70-130
Hexachlorobutadiene	92	70-130
Naphthalene	116	70-130

Air Sample Volume(L): 1.00

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	50-150
Toluene-d8	98	50-150
Naphthalene-d8	92	50-150

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6/17/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706299

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/15/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706299

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/15/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/17/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-3-3.5(061217)	TO-15	4.3 "Hg	14.8 psi
02A	SVMP-3-7(061217)	TO-15	5.9 "Hg	15.2 psi
03A	SVMP-4-3.5(061217)	TO-15	3.3 "Hg	14.8 psi
04A	SVMP-5-4.5(061217)	TO-15	5.7 "Hg	14.9 psi
05A	SVMP-6-4.5(061317)	TO-15	3.1 "Hg	14.9 psi
06A	SVMP-7-3.5(061317)	TO-15	4.3 "Hg	14.7 psi
07A	SVMP-11-3.5(061317)	TO-15	4.1 "Hg	15.1 psi
08A	SVMP-12-3.5(061317)	TO-15	4.5 "Hg	15.1 psi
09A	SVMP-10-3(061317)	TO-15	5.5 "Hg	15.4 psi
10A	Lab Blank	TO-15	NA	NA
11A	CCV	TO-15	NA	NA
12A	LCS	TO-15	NA	NA
12AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/17/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706299

Nine 1 Liter Summa Canister samples were received on June 15, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-3-3.5(061217)

Lab ID#: 1706299-01A
No Detections Were Found.

Client Sample ID: SVMP-3-7(061217)

Lab ID#: 1706299-02A
No Detections Were Found.

Client Sample ID: SVMP-4-3.5(061217)

Lab ID#: 1706299-03A
No Detections Were Found.

Client Sample ID: SVMP-5-4.5(061217)

Lab ID#: 1706299-04A
No Detections Were Found.

Client Sample ID: SVMP-6-4.5(061317)

Lab ID#: 1706299-05A
No Detections Were Found.

Client Sample ID: SVMP-7-3.5(061317)

Lab ID#: 1706299-06A
No Detections Were Found.

Client Sample ID: SVMP-11-3.5(061317)

Lab ID#: 1706299-07A
No Detections Were Found.

Client Sample ID: SVMP-12-3.5(061317)

Lab ID#: 1706299-08A
No Detections Were Found.

Client Sample ID: SVMP-10-3(061317)

Lab ID#: 1706299-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-10-3(061317)

Lab ID#: 1706299-09A

No Detections Were Found.

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Client Sample ID: SVMP-3-3.5(061217)

Lab ID#: 1706299-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061617**	**Date of Collection: 6/12/17 1:40:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 6/17/17 12:06 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	100	70-130

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Client Sample ID: SVMP-3-7(061217)

Lab ID#: 1706299-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061618**	**Date of Collection: 6/12/17 2:36:00 PM**	
Dil. Factor:	**2.53**	**Date of Analysis: 6/17/17 12:33 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: SVMP-4-3.5(061217)

Lab ID#: 1706299-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061619**	**Date of Collection: 6/12/17 3:53:00 PM**	
Dil. Factor:	**2.25**	**Date of Analysis: 6/17/17 12:59 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: SVMP-5-4.5(061217)

Lab ID#: 1706299-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061620**	**Date of Collection: 6/12/17 5:05:00 PM**	
Dil. Factor:	**2.48**	**Date of Analysis: 6/17/17 01:25 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: SVMP-6-4.5(061317)

Lab ID#: 1706299-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061621**	**Date of Collection: 6/13/17 10:30:00 AM**	
Dil. Factor:	**2.24**	**Date of Analysis: 6/17/17 01:51 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-7-3.5(061317)

Lab ID#: 1706299-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061622**	**Date of Collection: 6/13/17 12:49:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 6/17/17 02:17 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: SVMP-11-3.5(061317)

Lab ID#: 1706299-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061623**	**Date of Collection: 6/13/17 1:57:00 PM**	
Dil. Factor:	**2.35**	**Date of Analysis: 6/17/17 02:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: SVMP-12-3.5(061317)

Lab ID#: 1706299-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061624**	**Date of Collection: 6/13/17 3:42:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/17/17 03:10 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: SVMP-10-3(061317)

Lab ID#: 1706299-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061625**	**Date of Collection: 6/13/17 4:57:00 PM**	
Dil. Factor:	**2.51**	**Date of Analysis: 6/17/17 03:36 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706299-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/16/17 11:35 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: CCV

Lab ID#: 1706299-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/16/17 08:25 AM**	

Compound	%Recovery
Vinyl Chloride	100
Trichloroethene	107

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	103	70-130
1,2-Dichloroethane-d4	91	70-130

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Client Sample ID: LCS

Lab ID#: 1706299-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/16/17 08:48 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	106	70-130
Trichloroethene	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130
1,2-Dichloroethane-d4	91	70-130

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Client Sample ID: LCSD

Lab ID#: 1706299-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3061604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/16/17 09:11 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	107	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130
1,2-Dichloroethane-d4	96	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706310

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/15/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706310

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/15/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/21/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-1-3.5 (060817)	TO-15	3.7 "Hg	15.1 psi
02A	SVMP-1-7 (060817)	TO-15	4.1 "Hg	14.8 psi
03A	SVMP-2-4.5 (060917)	TO-15	2.8 "Hg	14.9 psi
04A	SVMP-2-8.5 (060917)	TO-15	3.5 "Hg	14.9 psi
05A	Lab Blank	TO-15	NA	NA
06A	CCV	TO-15	NA	NA
07A	LCS	TO-15	NA	NA
07AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706310

Four 1 Liter Summa Canister samples were received on June 15, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-1-3.5 (060817)

Lab ID#: 1706310-01A

No Detections Were Found.

Client Sample ID: SVMP-1-7 (060817)

Lab ID#: 1706310-02A

No Detections Were Found.

Client Sample ID: SVMP-2-4.5 (060917)

Lab ID#: 1706310-03A

No Detections Were Found.

Client Sample ID: SVMP-2-8.5 (060917)

Lab ID#: 1706310-04A

No Detections Were Found.

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Client Sample ID: SVMP-1-3.5 (060817)

Lab ID#: 1706310-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061709**	**Date of Collection: 6/8/17 4:34:00 PM**	
Dil. Factor:	**2.31**	**Date of Analysis: 6/17/17 10:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: SVMP-1-7 (060817)

Lab ID#: 1706310-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061710**	**Date of Collection: 6/8/17 5:38:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 6/17/17 11:20 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: SVMP-2-4.5 (060917)

Lab ID#: 1706310-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061711**	**Date of Collection: 6/9/17 10:57:00 AM**	
Dil. Factor:	**2.22**	**Date of Analysis: 6/17/17 11:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	99	70-130
1,2-Dichloroethane-d4	99	70-130

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Client Sample ID: SVMP-2-8.5 (060917)

Lab ID#: 1706310-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061712**	**Date of Collection: 6/9/17 12:00:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 6/18/17 12:12 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130
1,2-Dichloroethane-d4	102	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706310-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061708**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 10:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: CCV

Lab ID#: 1706310-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 08:43 PM**	

Compound	%Recovery
Vinyl Chloride	97
Trichloroethene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	101	70-130

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Client Sample ID: LCS

Lab ID#: 1706310-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 08:10 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
Trichloroethene	87	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130
1,2-Dichloroethane-d4	105	70-130

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Client Sample ID: LCSD

Lab ID#: 1706310-07AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a061706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 09:18 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
Trichloroethene	88	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130
1,2-Dichloroethane-d4	103	70-130

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6/20/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706322

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706322

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/16/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-29-3.5 (061417)	TO-15	3.9 "Hg	15.4 psi
02A	SVMP-29-7.5 (061417)	TO-15	2.4 "Hg	15.3 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706322

Two 1 Liter Summa Canister samples were received on June 16, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-29-3.5 (061417)

Lab ID#: 1706322-01A

No Detections Were Found.

Client Sample ID: SVMP-29-7.5 (061417)

Lab ID#: 1706322-02A

No Detections Were Found.

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Client Sample ID: SVMP-29-3.5 (061417)

Lab ID#: 1706322-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061709**	**Date of Collection: 6/14/17 10:30:00 AM**	
Dil. Factor:	**2.35**	**Date of Analysis: 6/17/17 04:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: SVMP-29-7.5 (061417)

Lab ID#: 1706322-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061710**	**Date of Collection: 6/14/17 11:33:00 AM**	
Dil. Factor:	**2.22**	**Date of Analysis: 6/17/17 04:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706322-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 02:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: CCV

Lab ID#: 1706322-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 10:56 AM**	

Compound	%Recovery
Vinyl Chloride	105
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: LCS

Lab ID#: 1706322-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:21 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706322-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:45 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	105	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	94	70-130

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6/20/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706323

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706323

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/16/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-9-4 (061417)	TO-15	4.1 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706323

One 1 Liter Summa Canister sample was received on June 16, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-9-4 (061417)

Lab ID#: 1706323-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	1.3	6.3	6.9

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Client Sample ID: SVMP-9-4 (061417)

Lab ID#: 1706323-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061711**	**Date of Collection: 6/14/17 5:08:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 6/17/17 05:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	1.3	6.3	6.9

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706323-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 02:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: CCV

Lab ID#: 1706323-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 10:56 AM**	

Compound	%Recovery
Vinyl Chloride	105
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: LCS

Lab ID#: 1706323-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:21 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706323-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:45 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	105	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	94	70-130

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6/20/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706324

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706324

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/16/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-31-5.5 (061417)	TO-15	3.3 "Hg	14.9 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706324

One 1 Liter Summa Canister sample was received on June 16, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-31-5.5 (061417)

Lab ID#: 1706324-01A

No Detections Were Found.

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Client Sample ID: SVMP-31-5.5 (061417)

Lab ID#: 1706324-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061712**	**Date of Collection: 6/14/17 3:45:00 PM**	
Dil. Factor:	**2.26**	**Date of Analysis: 6/17/17 05:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	110	70-130
1,2-Dichloroethane-d4	91	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706324-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 02:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	92	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1706324-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 10:56 AM**	

Compound	%Recovery
Vinyl Chloride	105
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	96	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1706324-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:21 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1706324-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:45 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	105	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	94	70-130

eurofins | Air Toxics

6/20/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706325

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706325

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/16/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-30-4 (061417)	TO-15	3.7 "Hg	14.9 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706325

One 1 Liter Summa Canister sample was received on June 16, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-30-4 (061417)

Lab ID#: 1706325-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	5.8	6.2	31

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Client Sample ID: SVMP-30-4 (061417)

Lab ID#: 1706325-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061713**	**Date of Collection: 6/14/17 2:07:00 PM**	
Dil. Factor:	**2.30**	**Date of Analysis: 6/17/17 06:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	2.9	Not Detected
Trichloroethene	1.2	5.8	6.2	31

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	110	70-130
1,2-Dichloroethane-d4	90	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706325-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 02:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: CCV

Lab ID#: 1706325-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 10:56 AM**	

Compound	%Recovery
Vinyl Chloride	105
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: LCS

Lab ID#: 1706325-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:21 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706325-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p061704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/17/17 11:45 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	105	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	94	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706350

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706350

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/19/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/21/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-8-3.5	TO-15	5.0 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706350

One 1 Liter Summa Canister sample was received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample SVMP-8-3.5 did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-8-3.5

Lab ID#: 1706350-01A

No Detections Were Found.

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Client Sample ID: SVMP-8-3.5

Lab ID#: 1706350-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062017**	**Date of Collection: 6/15/17 3:21:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 6/20/17 09:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706350-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: CCV

Lab ID#: 1706350-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCS

Lab ID#: 1706350-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706350-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.00001.00002
Workorder #: 1706352

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706352

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.0002
FAX:		**PROJECT #**	MI001386.00001.00002 Ford LTP
DATE RECEIVED:	06/19/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/21/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-34-4 (061517)	TO-15	4.0 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706352

One 1 Liter Summa Canister sample was received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-34-4 (061517)

Lab ID#: 1706352-01A

No Detections Were Found.

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Client Sample ID: SVMP-34-4 (061517)

Lab ID#: 1706352-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062018**	**Date of Collection: 6/15/17 4:28:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 6/20/17 10:10 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706352-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1706352-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1706352-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1706352-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706353

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706353

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/19/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-33-4 (061517)	TO-15	5.0 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706353

One 1 Liter Summa Canister sample was received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-33-4 (061517)

Lab ID#: 1706353-01A

No Detections Were Found.

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Client Sample ID: SVMP-33-4 (061517)

Lab ID#: 1706353-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062013**	**Date of Collection: 6/15/17 3:09:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 6/20/17 05:55 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	92	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1706353-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1706353-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCS

Lab ID#: 1706353-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1706353-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706355

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706355

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/19/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-32-3(061517)	TO-15	4.5 "Hg	15 psi
02A	SVMP-32-6(061517)	TO-15	5.0 "Hg	15 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706355

Two 1 Liter Summa Canister samples were received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-32-3(061517)

Lab ID#: 1706355-01A

No Detections Were Found.

Client Sample ID: SVMP-32-6(061517)

Lab ID#: 1706355-02A

No Detections Were Found.

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Client Sample ID: SVMP-32-3(061517)

Lab ID#: 1706355-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062009**	**Date of Collection: 6/15/17 11:27:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/20/17 04:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	113	70-130
1,2-Dichloroethane-d4	95	70-130

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Client Sample ID: SVMP-32-6(061517)

Lab ID#: 1706355-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062010**	**Date of Collection:**	**6/15/17 12:26:00 PM**
Dil. Factor:	**2.42**	**Date of Analysis:**	**6/20/17 04:31 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706355-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: CCV

Lab ID#: 1706355-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCS

Lab ID#: 1706355-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706355-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706357

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706357

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/19/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-35-4	TO-15	6.5 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/20/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706357

One 1 Liter Summa Canister sample was received on June 19, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-35-4

Lab ID#: 1706357-01A

No Detections Were Found.

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Client Sample ID: SVMP-35-4

Lab ID#: 1706357-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062011**	**Date of Collection: 6/15/17 4:50:00 PM**	
Dil. Factor:	**2.58**	**Date of Analysis: 6/20/17 04:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	110	70-130
1,2-Dichloroethane-d4	95	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706357-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1706357-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1706357-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706357-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

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6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706377R1

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/20/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706377R1

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/20/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/20/2017		
DATE REISSUED:	06/21/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-37-2.5 (061617)	TO-15	3.5 "Hg	15.4 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706377R1

One 1 Liter Summa Canister sample was received on June 20, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The workorder was reissued on 6/21/17 to correct the dilution factor in sample SVMP-37-2.5 (061617) due to data entry error.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-37-2.5 (061617)

Lab ID#: 1706377R1-01A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: SVMP-37-2.5 (061617)

Lab ID#: 1706377R1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062012r1**	**Date of Collection: 6/16/17 12:05:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 6/20/17 05:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	92	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1706377R1-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1706377R1-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1706377R1-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1706377R1-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

eurofins | Air Toxics

6/21/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706378

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/20/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1706378

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/20/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/21/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-36-4 (061617)	TO-15	3.5 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706378

One 1 Liter Summa Canister sample was received on June 20, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-36-4 (061617)

Lab ID#: 1706378-01A

No Detections Were Found.

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Client Sample ID: SVMP-36-4 (061617)

Lab ID#: 1706378-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062008**	**Date of Collection: 6/16/17 10:32:00 AM**	
Dil. Factor:	**2.29**	**Date of Analysis: 6/20/17 03:38 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706378-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062007**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 12:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: CCV

Lab ID#: 1706378-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:29 AM**	

Compound	%Recovery
Vinyl Chloride	106
Trichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCS

Lab ID#: 1706378-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 08:53 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1706378-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/17 09:17 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	108	70-130
Trichloroethene	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
4-Bromofluorobenzene	116	70-130
1,2-Dichloroethane-d4	97	70-130

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6/22/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706379

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/20/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706379

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/20/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/22/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-17-2 (061617)	TO-15	4.5 "Hg	15 psi
02A	SVMP-18-3 (061617)	TO-15	5.5 "Hg	15 psi
03A	SVMP-19-3 (061617)	TO-15	4.5 "Hg	15 psi
04A	SVMP-16-2 (061617)	TO-15	4.5 "Hg	15 psi
05A	SVMP-13-2 (061617)	TO-15	5.5 "Hg	15 psi
06A	SVMP-15-2 (061617)	TO-15	4.0 "Hg	15 psi
07A	SVMP-14-2 (061617)	TO-15	4.5 "Hg	15 psi
08A	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/22/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706379

Seven 1 Liter Summa Canister samples were received on June 20, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-17-2 (061617)

Lab ID#: 1706379-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	3.4	6.4	18

Client Sample ID: SVMP-18-3 (061617)

Lab ID#: 1706379-02A

No Detections Were Found.

Client Sample ID: SVMP-19-3 (061617)

Lab ID#: 1706379-03A

No Detections Were Found.

Client Sample ID: SVMP-16-2 (061617)

Lab ID#: 1706379-04A

No Detections Were Found.

Client Sample ID: SVMP-13-2 (061617)

Lab ID#: 1706379-05A

No Detections Were Found.

Client Sample ID: SVMP-15-2 (061617)

Lab ID#: 1706379-06A

No Detections Were Found.

Client Sample ID: SVMP-14-2 (061617)

Lab ID#: 1706379-07A

No Detections Were Found.

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Client Sample ID: SVMP-17-2 (061617)

Lab ID#: 1706379-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062120**	**Date of Collection: 6/16/17 1:24:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/21/17 10:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	3.4	6.4	18

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	90	70-130

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Client Sample ID: SVMP-18-3 (061617)

Lab ID#: 1706379-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062110**	**Date of Collection: 6/16/17 3:07:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 6/21/17 04:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-19-3 (061617)

Lab ID#: 1706379-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062111**	**Date of Collection: 6/16/17 4:21:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/21/17 04:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	113	70-130
1,2-Dichloroethane-d4	89	70-130

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Client Sample ID: SVMP-16-2 (061617)

Lab ID#: 1706379-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062112**	**Date of Collection: 6/16/17 10:37:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/21/17 05:10 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: SVMP-13-2 (061617)

Lab ID#: 1706379-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062113**	**Date of Collection: 6/16/17 3:43:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 6/21/17 05:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	110	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-15-2 (061617)

Lab ID#: 1706379-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062114**	**Date of Collection: 6/16/17 12:30:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 6/21/17 06:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	86	70-130

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Client Sample ID: SVMP-14-2 (061617)

Lab ID#: 1706379-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062115**	**Date of Collection: 6/16/17 2:25:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/21/17 06:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706379-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062109**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 03:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: CCV

Lab ID#: 1706379-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:12 AM**	

Compound	%Recovery
Vinyl Chloride	97
Trichloroethene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	117	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: LCS

Lab ID#: 1706379-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 09:37 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	99	70-130
Trichloroethene	98	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCSD

Lab ID#: 1706379-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/17 10:02 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	99	70-130
Trichloroethene	98	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	96	70-130

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6/23/2017
Mr. Troy Stevens
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1706395

Dear Mr. Troy Stevens

The following report includes the data for the above referenced project for sample(s) received on 6/21/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1706395

Work Order Summary

CLIENT:	Mr. Troy Stevens Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-324-5050	**P.O. #**	MI001386.0001.00002
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	06/21/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/23/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-20-3(061917)	TO-15	2.2 "Hg	14.6 psi
02A	SVMP-21-2(061917)	TO-15	3.9 "Hg	15 psi
03A	SVMP-22-3(061917)	TO-15	4.7 "Hg	15.1 psi
04A	SVMP-23-3(061917)	TO-15	4.7 "Hg	15 psi
05A	SVMP-24-4(061917)	TO-15	3.7 "Hg	15.1 psi
06A	SVMP-25-3(061917)	TO-15	3.9 "Hg	15 psi
07A	SVMP-25-6(061917)	TO-15	4.3 "Hg	15.1 psi
08A	SVMP-26-4(061917)	TO-15	3.9 "Hg	15 psi
09A	SVMP-27-4.5(061917)	TO-15	3.7 "Hg	15.1 psi
10A	SVMP-28-3(061917)	TO-15	3.3 "Hg	15.2 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/23/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1706395

Ten 1 Liter Summa Canister samples were received on June 21, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample SVMP-23-3(061917) did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-20-3(061917)

Lab ID#: 1706395-01A
No Detections Were Found.

Client Sample ID: SVMP-21-2(061917)

Lab ID#: 1706395-02A
No Detections Were Found.

Client Sample ID: SVMP-22-3(061917)

Lab ID#: 1706395-03A
No Detections Were Found.

Client Sample ID: SVMP-23-3(061917)

Lab ID#: 1706395-04A
No Detections Were Found.

Client Sample ID: SVMP-24-4(061917)

Lab ID#: 1706395-05A
No Detections Were Found.

Client Sample ID: SVMP-25-3(061917)

Lab ID#: 1706395-06A
No Detections Were Found.

Client Sample ID: SVMP-25-6(061917)

Lab ID#: 1706395-07A
No Detections Were Found.

Client Sample ID: SVMP-26-4(061917)

Lab ID#: 1706395-08A
No Detections Were Found.

Client Sample ID: SVMP-27-4.5(061917)

Lab ID#: 1706395-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-27-4.5(061917)

Lab ID#: 1706395-09A

No Detections Were Found.

Client Sample ID: SVMP-28-3(061917)

Lab ID#: 1706395-10A

No Detections Were Found.

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Client Sample ID: SVMP-20-3(061917)

Lab ID#: 1706395-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062210**	**Date of Collection: 6/19/17 10:48:00 AM**	
Dil. Factor:	**2.15**	**Date of Analysis: 6/22/17 04:13 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	93	70-130

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Client Sample ID: SVMP-21-2(061917)

Lab ID#: 1706395-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062211**	**Date of Collection: 6/19/17 11:49:00 AM**	
Dil. Factor:	**2.32**	**Date of Analysis: 6/22/17 04:41 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	95	70-130

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Client Sample ID: SVMP-22-3(061917)

Lab ID#: 1706395-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062212**	**Date of Collection: 6/19/17 1:55:00 PM**	
Dil. Factor:	**2.40**	**Date of Analysis: 6/22/17 05:10 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	113	70-130
1,2-Dichloroethane-d4	92	70-130

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Client Sample ID: SVMP-23-3(061917)

Lab ID#: 1706395-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062213**	**Date of Collection: 6/19/17 3:18:00 PM**	
Dil. Factor:	**2.40**	**Date of Analysis: 6/22/17 05:38 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	109	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-24-4(061917)

Lab ID#: 1706395-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062214**	**Date of Collection: 6/19/17 4:25:00 PM**	
Dil. Factor:	**2.31**	**Date of Analysis: 6/22/17 06:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: SVMP-25-3(061917)

Lab ID#: 1706395-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062215**	**Date of Collection: 6/19/17 10:36:00 AM**	
Dil. Factor:	**2.32**	**Date of Analysis: 6/22/17 06:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130
1,2-Dichloroethane-d4	95	70-130

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Client Sample ID: SVMP-25-6(061917)

Lab ID#: 1706395-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062216**	**Date of Collection: 6/19/17 11:27:00 AM**	
Dil. Factor:	**2.37**	**Date of Analysis: 6/22/17 06:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
4-Bromofluorobenzene	118	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-26-4(061917)

Lab ID#: 1706395-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062218**	**Date of Collection: 6/19/17 1:49:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 6/22/17 09:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: SVMP-27-4.5(061917)

Lab ID#: 1706395-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062219**	**Date of Collection: 6/19/17 3:10:00 PM**	
Dil. Factor:	**2.31**	**Date of Analysis: 6/22/17 10:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	108	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: SVMP-28-3(061917)

Lab ID#: 1706395-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062220**	**Date of Collection: 6/19/17 4:16:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 6/22/17 10:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1706395-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/22/17 01:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
4-Bromofluorobenzene	111	70-130
1,2-Dichloroethane-d4	97	70-130

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Client Sample ID: CCV

Lab ID#: 1706395-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/22/17 09:32 AM**	

Compound	%Recovery
Vinyl Chloride	95
Trichloroethene	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	98	70-130

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Client Sample ID: LCS

Lab ID#: 1706395-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/22/17 09:57 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	98	70-130
Trichloroethene	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
4-Bromofluorobenzene	114	70-130
1,2-Dichloroethane-d4	96	70-130

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Client Sample ID: LCSD

Lab ID#: 1706395-13AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p062204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/22/17 10:22 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	97	70-130
Trichloroethene	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	115	70-130
1,2-Dichloroethane-d4	99	70-130

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9/27/2017
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1709439

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 9/21/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1709439

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	09/21/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/27/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-22-3(091817)	TO-15	5.0 "Hg	15 psi
02A	SVMP-23-3(091817)	TO-15	4.0 "Hg	15 psi
03A	SVMP-24-4(091817)	TO-15	4.0 "Hg	15 psi
04A	SVMP-18-3(091817)	TO-15	4.0 "Hg	15 psi
05A	SVMP-19-3(091817)	TO-15	6.5 "Hg	15 psi
06A	SVMP-20-3(091917)	TO-15	5.0 "Hg	15 psi
07A	SVMP-16-2(091917)	TO-15	3.5 "Hg	15 psi
08A	SVMP-14-2(091917)	TO-15	3.5 "Hg	15 psi
09A	SVMP-21-2(091917)	TO-15	4.0 "Hg	15 psi
10A	SVMP-17-2(091917)	TO-15	5.0 "Hg	15 psi
11A	SVMP-15-2(091917)	TO-15	4.5 "Hg	15 psi
12A	SVMP-13-2(091917)	TO-15	4.0 "Hg	15 psi
13A	SVMP-12-3.5(091917)	TO-15	5.0 "Hg	15 psi
14A	SVMP-10-3(092017)	TO-15	5.0 "Hg	15 psi
15A	SVMP-8-3.5(092017)	TO-15	4.5 "Hg	15 psi
16A	SVMP-6-4.5(092017)	TO-15	4.0 "Hg	15 psi
17A	SVMP-4-3.5(092017)	TO-15	5.5 "Hg	15 psi
18A	SVMP-1-7(092017)	TO-15	5.0 "Hg	15 psi
19A	SVMP-1-3.5(092017)	TO-15	6.0 "Hg	15 psi
20A	SVMP-9-4(092017)	TO-15	5.5 "Hg	15 psi
21A	SVMP-7-3.5(092017)	TO-15	5.0 "Hg	15 psi
22A	SVMP-5-4.5(092017)	TO-15	5.0 "Hg	15 psi
23A	SVMP-2-8.5(092017)	TO-15	7.0 "Hg	15 psi

Continued on next page

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WORK ORDER #: 1709439

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	09/21/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/27/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
24A	SVMP-2-4.5(092017)	TO-15	7.0 "Hg	15 psi
25A	Lab Blank	TO-15	NA	NA
25B	Lab Blank	TO-15	NA	NA
26A	CCV	TO-15	NA	NA
26B	CCV	TO-15	NA	NA
27A	LCS	TO-15	NA	NA
27AA	LCSD	TO-15	NA	NA
27B	LCS	TO-15	NA	NA
27BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 09/27/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1709439

Twenty-four 1 Liter Summa Canister samples were received on September 21, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-22-3(091817)

Lab ID#: 1709439-01A

No Detections Were Found.

Client Sample ID: SVMP-23-3(091817)

Lab ID#: 1709439-02A

No Detections Were Found.

Client Sample ID: SVMP-24-4(091817)

Lab ID#: 1709439-03A

No Detections Were Found.

Client Sample ID: SVMP-18-3(091817)

Lab ID#: 1709439-04A

No Detections Were Found.

Client Sample ID: SVMP-19-3(091817)

Lab ID#: 1709439-05A

No Detections Were Found.

Client Sample ID: SVMP-20-3(091917)

Lab ID#: 1709439-06A

No Detections Were Found.

Client Sample ID: SVMP-16-2(091917)

Lab ID#: 1709439-07A

No Detections Were Found.

Client Sample ID: SVMP-14-2(091917)

Lab ID#: 1709439-08A

No Detections Were Found.

Client Sample ID: SVMP-21-2(091917)

Lab ID#: 1709439-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-21-2(091917)

Lab ID#: 1709439-09A

No Detections Were Found.

Client Sample ID: SVMP-17-2(091917)

Lab ID#: 1709439-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	4.2	6.5	22

Client Sample ID: SVMP-15-2(091917)

Lab ID#: 1709439-11A

No Detections Were Found.

Client Sample ID: SVMP-13-2(091917)

Lab ID#: 1709439-12A

No Detections Were Found.

Client Sample ID: SVMP-12-3.5(091917)

Lab ID#: 1709439-13A

No Detections Were Found.

Client Sample ID: SVMP-10-3(092017)

Lab ID#: 1709439-14A

No Detections Were Found.

Client Sample ID: SVMP-8-3.5(092017)

Lab ID#: 1709439-15A

No Detections Were Found.

Client Sample ID: SVMP-6-4.5(092017)

Lab ID#: 1709439-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-6-4.5(092017)

Lab ID#: 1709439-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.2	2.0	4.6	8.0
Tetrachloroethene	1.2	3.6	7.9	24

Client Sample ID: SVMP-4-3.5(092017)

Lab ID#: 1709439-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.2 J	8.4	8.3 J

Client Sample ID: SVMP-1-7(092017)

Lab ID#: 1709439-18A

No Detections Were Found.

Client Sample ID: SVMP-1-3.5(092017)

Lab ID#: 1709439-19A

No Detections Were Found.

Client Sample ID: SVMP-9-4(092017)

Lab ID#: 1709439-20A

No Detections Were Found.

Client Sample ID: SVMP-7-3.5(092017)

Lab ID#: 1709439-21A

No Detections Were Found.

Client Sample ID: SVMP-5-4.5(092017)

Lab ID#: 1709439-22A

No Detections Were Found.

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-2-8.5(092017)

Lab ID#: 1709439-23A

No Detections Were Found.

Client Sample ID: SVMP-2-4.5(092017)

Lab ID#: 1709439-24A

No Detections Were Found.

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Client Sample ID: SVMP-22-3(091817)

Lab ID#: 1709439-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092509**	**Date of Collection: 9/18/17 9:39:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/25/17 08:18 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SVMP-23-3(091817)

Lab ID#: 1709439-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092510**	**Date of Collection: 9/18/17 12:58:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/25/17 08:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-24-4(091817)

Lab ID#: 1709439-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092511**	**Date of Collection: 9/18/17 2:04:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/25/17 09:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: SVMP-18-3(091817)

Lab ID#: 1709439-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092512**	**Date of Collection: 9/18/17 3:20:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/25/17 09:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: SVMP-19-3(091817)

Lab ID#: 1709439-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092513**	**Date of Collection: 9/18/17 4:26:00 PM**	
Dil. Factor:	**2.58**	**Date of Analysis: 9/25/17 10:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
1,4-Dioxane	5.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-20-3(091917)

Lab ID#: 1709439-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092514**	**Date of Collection: 9/19/17 9:14:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/25/17 11:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-16-2(091917)

Lab ID#: 1709439-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092515**	**Date of Collection: 9/19/17 10:33:00 AM**	
Dil. Factor:	**2.29**	**Date of Analysis: 9/25/17 11:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-14-2(091917)

Lab ID#: 1709439-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092516**	**Date of Collection: 9/19/17 11:41:00 AM**	
Dil. Factor:	**2.29**	**Date of Analysis: 9/26/17 12:18 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-21-2(091917)

Lab ID#: 1709439-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092517**	**Date of Collection: 9/19/17 9:20:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/26/17 12:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SVMP-17-2(091917)

Lab ID#: 1709439-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092518**	**Date of Collection: 9/19/17 10:13:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 01:10 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	4.2	6.5	22
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-15-2(091917)

Lab ID#: 1709439-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092519**	**Date of Collection: 9/19/17 11:07:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 9/26/17 01:36 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-13-2(091917)

Lab ID#: 1709439-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092520**	**Date of Collection: 9/19/17 12:23:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/26/17 02:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-12-3.5(091917)

Lab ID#: 1709439-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092521**	**Date of Collection: 9/19/17 1:13:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 02:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-10-3(092017)

Lab ID#: 1709439-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092522**	**Date of Collection: 9/20/17 8:55:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 02:54 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-8-3.5(092017)

Lab ID#: 1709439-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092523**	**Date of Collection: 9/20/17 9:55:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 9/26/17 03:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-6-4.5(092017)

Lab ID#: 1709439-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092524**	**Date of Collection: 9/20/17 10:48:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/26/17 03:47 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	2.0	4.6	8.0
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	3.6	7.9	24
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-4-3.5(092017)

Lab ID#: 1709439-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092519**	**Date of Collection: 9/20/17 12:08:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/25/17 11:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	1.2 J	8.4	8.3 J
1,4-Dioxane	4.9	Not Detected	18	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-1-7(092017)

Lab ID#: 1709439-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092520**	**Date of Collection: 9/20/17 1:05:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 12:11 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-1-3.5(092017)

Lab ID#: 1709439-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092521**	**Date of Collection: 9/20/17 1:48:00 PM**	
Dil. Factor:	**2.52**	**Date of Analysis: 9/26/17 12:37 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-9-4(092017)

Lab ID#: 1709439-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092522**	**Date of Collection: 9/20/17 8:50:00 AM**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/26/17 01:04 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-7-3.5(092017)

Lab ID#: 1709439-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092523**	**Date of Collection: 9/20/17 9:59:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 01:30 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-5-4.5(092017)

Lab ID#: 1709439-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092524**	**Date of Collection: 9/20/17 11:26:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 9/26/17 01:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-2-8.5(092017)

Lab ID#: 1709439-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092525**	**Date of Collection: 9/20/17 1:04:00 PM**	
Dil. Factor:	**2.64**	**Date of Analysis: 9/26/17 02:22 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
1,4-Dioxane	5.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: SVMP-2-4.5(092017)

Lab ID#: 1709439-24A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092526**	**Date of Collection: 9/20/17 1:47:00 PM**	
Dil. Factor:	**2.64**	**Date of Analysis: 9/26/17 02:48 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
1,4-Dioxane	5.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1709439-25A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092507**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 12:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1709439-25B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 09:53 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: CCV

Lab ID#: 1709439-26A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 08:07 AM**	

Compound	**%Recovery**
Vinyl Chloride	124
1,1-Dichloroethene	83
cis-1,2-Dichloroethene	88
Trichloroethene	98
trans-1,2-Dichloroethene	88
Tetrachloroethene	109
1,4-Dioxane	110

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: CCV

Lab ID#: 1709439-26B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 08:37 AM**	

Compound	**%Recovery**
Vinyl Chloride	85
1,1-Dichloroethene	84
cis-1,2-Dichloroethene	80
Trichloroethene	94
trans-1,2-Dichloroethene	98
Tetrachloroethene	96
1,4-Dioxane	92

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCS

Lab ID#: 1709439-27A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 08:32 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	118	70-130
1,1-Dichloroethene	85	70-130
cis-1,2-Dichloroethene	99	70-130
Trichloroethene	101	70-130
trans-1,2-Dichloroethene	80	70-130
Tetrachloroethene	112	70-130
1,4-Dioxane	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1709439-27AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p092504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 08:57 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	118	70-130
1,1-Dichloroethene	85	70-130
cis-1,2-Dichloroethene	100	70-130
Trichloroethene	100	70-130
trans-1,2-Dichloroethene	80	70-130
Tetrachloroethene	109	70-130
1,4-Dioxane	102	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: LCS

Lab ID#: 1709439-27B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 09:02 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	95	70-130
1,1-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	92	70-130
Trichloroethene	101	70-130
trans-1,2-Dichloroethene	92	70-130
Tetrachloroethene	101	70-130
1,4-Dioxane	96	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 1709439-27BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3092504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 09:27 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	92	70-130
1,1-Dichloroethene	89	70-130
cis-1,2-Dichloroethene	91	70-130
Trichloroethene	102	70-130
trans-1,2-Dichloroethene	88	70-130
Tetrachloroethene	101	70-130
1,4-Dioxane	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	102	70-130

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10/5/2017
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001386.0001.00002
Workorder #: 1709442

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 9/22/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1709442

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 Ford LTP
DATE RECEIVED:	09/22/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/04/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-3-7(092117)	TO-15	4.5 "Hg	15 psi
02A	SVMP-3-3.5(092117)	TO-15	5.0 "Hg	15.4 psi
03A	SVMP-26-4(092117)	TO-15	5.5 "Hg	15 psi
04A	SVMP-28-3(092117)	TO-15	5.0 "Hg	15 psi
05A	SVMP-25-6(092117)	TO-15	3.0 "Hg	15 psi
06A	SVMP-25-3(092117)	TO-15	4.5 "Hg	15 psi
07A	SVMP-27-4.5(092117)	TO-15	3.0 "Hg	15 psi
08A	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 10/05/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1709442

Seven 1 Liter Summa Canister samples were received on September 22, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample SVMP-26-4(092117) did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-3-7(092117)

Lab ID#: 1709442-01A

No Detections Were Found.

Client Sample ID: SVMP-3-3.5(092117)

Lab ID#: 1709442-02A

No Detections Were Found.

Client Sample ID: SVMP-26-4(092117)

Lab ID#: 1709442-03A

No Detections Were Found.

Client Sample ID: SVMP-28-3(092117)

Lab ID#: 1709442-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	3.6	8.2	25

Client Sample ID: SVMP-25-6(092117)

Lab ID#: 1709442-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.1	1.8	7.6	12

Client Sample ID: SVMP-25-3(092117)

Lab ID#: 1709442-06A

No Detections Were Found.

Client Sample ID: SVMP-27-4.5(092117)

Lab ID#: 1709442-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.1	2.8	4.4	11
Trichloroethene	1.1	1.3	6.0	7.2

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Client Sample ID: SVMP-3-7(092117)

Lab ID#: 1709442-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092510**	**Date of Collection: 9/21/17 9:42:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 9/25/17 05:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	90	70-130

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Client Sample ID: SVMP-3-3.5(092117)

Lab ID#: 1709442-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092511**	**Date of Collection:**	**9/21/17 10:33:00 AM**
Dil. Factor:	**2.46**	**Date of Analysis:**	**9/25/17 06:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SVMP-26-4(092117)

Lab ID#: 1709442-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092512**	**Date of Collection:**	**9/21/17 11:43:00 AM**
Dil. Factor:	**2.47**	**Date of Analysis:**	**9/25/17 06:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: SVMP-28-3(092117)

Lab ID#: 1709442-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092513**	**Date of Collection:**	**9/21/17 12:29:00 PM**
Dil. Factor:	**2.42**	**Date of Analysis:**	**9/25/17 07:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	3.6	8.2	25
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-25-6(092117)

Lab ID#: 1709442-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092514**	**Date of Collection:**	**9/21/17 10:01:00 AM**
Dil. Factor:	**2.24**	**Date of Analysis:**	**9/25/17 07:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	1.8	7.6	12
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: SVMP-25-3(092117)

Lab ID#: 1709442-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092515**	**Date of Collection:**	**9/21/17 10:53:00 AM**
Dil. Factor:	**2.38**	**Date of Analysis:**	**9/25/17 08:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	90	70-130

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Client Sample ID: SVMP-27-4.5(092117)

Lab ID#: 1709442-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092516**	**Date of Collection: 9/21/17 12:26:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 9/25/17 08:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	2.8	4.4	11
Trichloroethene	1.1	1.3	6.0	7.2
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	90	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1709442-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 12:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	85	70-130

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Client Sample ID: CCV

Lab ID#: 1709442-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 09:58 AM**	

Compound	%Recovery
Vinyl Chloride	103
1,1-Dichloroethene	98
cis-1,2-Dichloroethene	104
Trichloroethene	102
trans-1,2-Dichloroethene	104
Tetrachloroethene	94
1,4-Dioxane	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: LCS

Lab ID#: 1709442-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 10:24 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	113	70-130
1,1-Dichloroethene	102	70-130
cis-1,2-Dichloroethene	123	70-130
Trichloroethene	109	70-130
trans-1,2-Dichloroethene	95	70-130
Tetrachloroethene	100	70-130
1,4-Dioxane	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1709442-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17092504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/17 10:51 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	112	70-130
1,1-Dichloroethene	100	70-130
cis-1,2-Dichloroethene	120	70-130
Trichloroethene	108	70-130
trans-1,2-Dichloroethene	94	70-130
Tetrachloroethene	100	70-130
1,4-Dioxane	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	111	70-130
4-Bromofluorobenzene	95	70-130

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12/4/2017
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001386.0001.00002
Workorder #: 1711413R1

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 11/22/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1711413R1

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 FORD LTP
DATE RECEIVED:	11/22/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/02/2017		
DATE REISSUED:	12/04/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-22-3(111717)	TO-15	5.3 "Hg	15.3 psi
02A	SVMP-23-3(111717)	TO-15	2.4 "Hg	14.6 psi
03A	SVMP-24-4(111717)	TO-15	2.4 "Hg	15.2 psi
04A	SVMP-19-3(111717)	TO-15	2.4 "Hg	14.9 psi
05A	SVMP-18-3(111717)	TO-15	2.2 "Hg	14.8 psi
06A	SVMP-1S-3.5(111717)	TO-15	1 "Hg	15.1 psi
07A	SVMP-1D-7(111717)	TO-15	4.9 "Hg	15 psi
08A	SVMP-2S-4.5(111717)	TO-15	3.5 "Hg	15 psi
09A	SVMP-2D-8.5(111717)	TO-15	4.1 "Hg	15 psi
10A	SVMP-3S-3.5(111717)	TO-15	0.6 "Hg	14.7 psi
11A	SVMP-3D-7(111717)	TO-15	2 "Hg	15.2 psi
12A	SVMP-21-2(112017)	TO-15	3.7 "Hg	15.2 psi
13A	SVMP-16-2(112017)	TO-15	2 "Hg	15.3 psi
14A	SVMP-4-3.5(112017)	TO-15	5.5 "Hg	15.1 psi
15A	SVMP-5-4.5(112017)	TO-15	3.7 "Hg	15 psi
16A	SVMP-6-4.5(112017)	TO-15	3.3 "Hg	14.9 psi
17A	SVMP-7-3.5(112017)	TO-15	4.5 "Hg	15 psi
18A	SVMP-8-3.5(112017)	TO-15	3.7 "Hg	15.2 psi
19A	SVMP-9-4(112017)	TO-15	3.3 "Hg	15.1 psi
20A	Lab Blank	TO-15	NA	NA
20B	Lab Blank	TO-15	NA	NA
21A	CCV	TO-15	NA	NA
21B	CCV	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 1711413R1

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 FORD LTP
DATE RECEIVED:	11/22/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/02/2017		
DATE REISSUED:	12/04/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
22A	LCS	TO-15	NA	NA
22AA	LCSD	TO-15	NA	NA
22B	LCS	TO-15	NA	NA
22BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/04/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1711413R1

Nineteen 1 Liter Summa Canister samples were received on November 22, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for samples SVMP-3D-7(111717), SVMP-8- (112017) and SVMP-9- (112017) did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

The work order was reissued on December 4, 2017 to change identification of sample SVMP-8-3.5(112017) and SVMP-9-4(112017) per the revised Chain of Custody (COC) provided by the client.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-22-3(111717)

Lab ID#: 1711413R1-01A
No Detections Were Found.

Client Sample ID: SVMP-23-3(111717)

Lab ID#: 1711413R1-02A
No Detections Were Found.

Client Sample ID: SVMP-24-4(111717)

Lab ID#: 1711413R1-03A
No Detections Were Found.

Client Sample ID: SVMP-19-3(111717)

Lab ID#: 1711413R1-04A
No Detections Were Found.

Client Sample ID: SVMP-18-3(111717)

Lab ID#: 1711413R1-05A
No Detections Were Found.

Client Sample ID: SVMP-1S-3.5(111717)

Lab ID#: 1711413R1-06A
No Detections Were Found.

Client Sample ID: SVMP-1D-7(111717)

Lab ID#: 1711413R1-07A
No Detections Were Found.

Client Sample ID: SVMP-2S-4.5(111717)

Lab ID#: 1711413R1-08A
No Detections Were Found.

Client Sample ID: SVMP-2D-8.5(111717)

Lab ID#: 1711413R1-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-2D-8.5(111717)

Lab ID#: 1711413R1-09A

No Detections Were Found.

Client Sample ID: SVMP-3S-3.5(111717)

Lab ID#: 1711413R1-10A

No Detections Were Found.

Client Sample ID: SVMP-3D-7(111717)

Lab ID#: 1711413R1-11A

No Detections Were Found.

Client Sample ID: SVMP-21-2(112017)

Lab ID#: 1711413R1-12A

No Detections Were Found.

Client Sample ID: SVMP-16-2(112017)

Lab ID#: 1711413R1-13A

No Detections Were Found.

Client Sample ID: SVMP-4-3.5(112017)

Lab ID#: 1711413R1-14A

No Detections Were Found.

Client Sample ID: SVMP-5-4.5(112017)

Lab ID#: 1711413R1-15A

No Detections Were Found.

Client Sample ID: SVMP-6-4.5(112017)

Lab ID#: 1711413R1-16A

No Detections Were Found.

Client Sample ID: SVMP-7-3.5(112017)

Lab ID#: 1711413R1-17A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-7-3.5(112017)

Lab ID#: 1711413R1-17A

No Detections Were Found.

Client Sample ID: SVMP-8-3.5(112017)

Lab ID#: 1711413R1-18A

No Detections Were Found.

Client Sample ID: SVMP-9-4(112017)

Lab ID#: 1711413R1-19A

No Detections Were Found.

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Client Sample ID: SVMP-22-3(111717)

Lab ID#: 1711413R1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112722**	**Date of Collection: 11/17/17 11:24:00 A**	
Dil. Factor:	**2.48**	**Date of Analysis: 11/28/17 12:52 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: SVMP-23-3(111717)

Lab ID#: 1711413R1-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112723**	**Date of Collection: 11/17/17 12:18:00 P**	
Dil. Factor:	**2.17**	**Date of Analysis: 11/28/17 01:21 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-24-4(111717)

Lab ID#: 1711413R1-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112724**	**Date of Collection: 11/17/17 1:37:00 PM**	
Dil. Factor:	**2.21**	**Date of Analysis: 11/28/17 01:57 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: SVMP-19-3(111717)

Lab ID#: 1711413R1-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112725**	**Date of Collection: 11/17/17 3:03:00 PM**	
Dil. Factor:	**2.19**	**Date of Analysis: 11/28/17 02:29 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SVMP-18-3(111717)

Lab ID#: 1711413R1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112726**	**Date of Collection: 11/17/17 4:00:00 PM**	
Dil. Factor:	**2.16**	**Date of Analysis: 11/28/17 03:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.3	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-1S-3.5(111717)

Lab ID#: 1711413R1-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112727**	**Date of Collection: 11/17/17 10:15:00 A**	
Dil. Factor:	**2.10**	**Date of Analysis: 11/28/17 03:31 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrachloroethene	1.0	Not Detected	7.1	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-1D-7(111717)

Lab ID#: 1711413R1-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112728**	**Date of Collection: 11/17/17 11:15:00 A**	
Dil. Factor:	**2.41**	**Date of Analysis: 11/28/17 04:00 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-2S-4.5(111717)

Lab ID#: 1711413R1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112806**	**Date of Collection:**	**11/17/17 12:10:00 P**
Dil. Factor:	**2.29**	**Date of Analysis:**	**11/28/17 02:29 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: SVMP-2D-8.5(111717)

Lab ID#: 1711413R1-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112807**	**Date of Collection: 11/17/17 1:10:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 11/28/17 02:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: SVMP-3S-3.5(111717)

Lab ID#: 1711413R1-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112808**	**Date of Collection: 11/17/17 3:50:00 PM**	
Dil. Factor:	**2.04**	**Date of Analysis: 11/28/17 03:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrachloroethene	1.0	Not Detected	6.9	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-3D-7(111717)

Lab ID#: 1711413R1-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112809**	**Date of Collection: 11/17/17 4:40:00 PM**	
Dil. Factor:	**2.18**	**Date of Analysis: 11/28/17 03:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: SVMP-21-2(112017)

Lab ID#: 1711413R1-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112810**	**Date of Collection: 11/20/17 11:32:00 A**	
Dil. Factor:	**2.32**	**Date of Analysis: 11/28/17 04:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: SVMP-16-2(112017)

Lab ID#: 1711413R1-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112811**	**Date of Collection: 11/20/17 2:02:00 PM**	
Dil. Factor:	**2.19**	**Date of Analysis: 11/28/17 05:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	90	70-130

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Client Sample ID: SVMP-4-3.5(112017)

Lab ID#: 1711413R1-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112812**	**Date of Collection: 11/20/17 10:55:00 A**	
Dil. Factor:	**2.48**	**Date of Analysis: 11/28/17 05:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: SVMP-5-4.5(112017)

Lab ID#: 1711413R1-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112813**	**Date of Collection: 11/20/17 11:55:00 A**	
Dil. Factor:	**2.30**	**Date of Analysis: 11/28/17 06:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	88	70-130

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Client Sample ID: SVMP-6-4.5(112017)

Lab ID#: 1711413R1-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112814**	**Date of Collection: 11/20/17 1:05:00 PM**	
Dil. Factor:	**2.26**	**Date of Analysis: 11/28/17 06:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-7-3.5(112017)

Lab ID#: 1711413R1-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112815**	**Date of Collection: 11/20/17 2:20:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 11/28/17 09:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SVMP-8-3.5(112017)

Lab ID#: 1711413R1-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112816**	**Date of Collection: 11/20/17 3:20:00 PM**	
Dil. Factor:	**2.32**	**Date of Analysis: 11/28/17 09:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-9-4(112017)

Lab ID#: 1711413R1-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112817**	**Date of Collection: 11/20/17 4:10:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 11/28/17 10:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1711413R1-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/17 01:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1711413R1-20B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 12:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: CCV

Lab ID#: 1711413R1-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/17 11:23 AM**	

Compound	%Recovery
Vinyl Chloride	103
1,1-Dichloroethene	100
cis-1,2-Dichloroethene	99
Trichloroethene	97
trans-1,2-Dichloroethene	100
Tetrachloroethene	98
1,4-Dioxane	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: CCV

Lab ID#: 1711413R1-21B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 11:16 AM**	

Compound	%Recovery
Vinyl Chloride	111
1,1-Dichloroethene	101
cis-1,2-Dichloroethene	103
Trichloroethene	96
trans-1,2-Dichloroethene	102
Tetrachloroethene	99
1,4-Dioxane	98

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCS

Lab ID#: 1711413R1-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/17 11:50 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	95	70-130
1,1-Dichloroethene	90	70-130
cis-1,2-Dichloroethene	99	70-130
Trichloroethene	84	70-130
trans-1,2-Dichloroethene	78	70-130
Tetrachloroethene	88	70-130
1,4-Dioxane	88	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCSD

Lab ID#: 1711413R1-22AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/27/17 12:17 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	96	70-130
1,1-Dichloroethene	94	70-130
cis-1,2-Dichloroethene	106	70-130
Trichloroethene	89	70-130
trans-1,2-Dichloroethene	81	70-130
Tetrachloroethene	92	70-130
1,4-Dioxane	92	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCS

Lab ID#: 1711413R1-22B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 11:43 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	102	70-130
1,1-Dichloroethene	88	70-130
cis-1,2-Dichloroethene	97	70-130
Trichloroethene	87	70-130
trans-1,2-Dichloroethene	76	70-130
Tetrachloroethene	92	70-130
1,4-Dioxane	88	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCSD

Lab ID#: 1711413R1-22BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17112804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 12:10 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	99	70-130
1,1-Dichloroethene	87	70-130
cis-1,2-Dichloroethene	97	70-130
Trichloroethene	87	70-130
trans-1,2-Dichloroethene	76	70-130
Tetrachloroethene	90	70-130
1,4-Dioxane	90	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	100	70-130

December 03, 2017

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001386.0001.00002
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1711413
Sample date: 2017-11-17
Report received by CADENA: 2017-12-02
Initial Data Verification completed by CADENA: 2017-12-03

19 Soil vapor samples were analyzed for TO-15 paramters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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12/2/2017
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001386.0001.00002
Workorder #: 1711414

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 11/22/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1711414

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 FORD LTP
DATE RECEIVED:	11/22/2017	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/02/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-25S-3(112117)	TO-15	3.5 "Hg	14.9 psi
02A	SVMP-25D-6(112117)	TO-15	4.7 "Hg	14.9 psi
03A	SVMP-14-2(112117)	TO-15	0.8 "Hg	15.1 psi
04A	SVMP-13-2(112117)	TO-15	3.7 "Hg	15 psi
05A	SVMP-12-3.5(112117)	TO-15	4.1 "Hg	15.3 psi
06A	SVMP-10-3(112117)	TO-15	2.6 "Hg	14.8 psi
07A	SVMP-26-4(112117)	TO-15	2.8 "Hg	15.2 psi
08A	SVMP-27-4.5(112117)	TO-15	2.4 "Hg	15 psi
09A	SVMP-28-3(112117)	TO-15	4.1 "Hg	15 psi
10A	SVMP-15-2(112017)	TO-15	2.8 "Hg	15.1 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/02/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1711414

Nine 1 Liter Summa Canister samples were received on November 22, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for samples SVMP-25S-3(112117) and SVMP-25D-6(112117) did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

The number of samples received did not match the information on the Chain of Custody (COC). Sample SVMP-15-2(112017) was added to the analytical request.

Sample identification for sample SVMP-28-3(112117) was not provided on the sample tag. Therefore the information on the Chain of Custody was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-25S-3(112117)

Lab ID#: 1711414-01A

No Detections Were Found.

Client Sample ID: SVMP-25D-6(112117)

Lab ID#: 1711414-02A

No Detections Were Found.

Client Sample ID: SVMP-14-2(112117)

Lab ID#: 1711414-03A

No Detections Were Found.

Client Sample ID: SVMP-13-2(112117)

Lab ID#: 1711414-04A

No Detections Were Found.

Client Sample ID: SVMP-12-3.5(112117)

Lab ID#: 1711414-05A

No Detections Were Found.

Client Sample ID: SVMP-10-3(112117)

Lab ID#: 1711414-06A

No Detections Were Found.

Client Sample ID: SVMP-26-4(112117)

Lab ID#: 1711414-07A

No Detections Were Found.

Client Sample ID: SVMP-27-4.5(112117)

Lab ID#: 1711414-08A

No Detections Were Found.

Client Sample ID: SVMP-28-3(112117)

Lab ID#: 1711414-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-28-3(112117)

Lab ID#: 1711414-09A

No Detections Were Found.

Client Sample ID: SVMP-15-2(112017)

Lab ID#: 1711414-10A

No Detections Were Found.

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Client Sample ID: SVMP-25S-3(112117)

Lab ID#: 1711414-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112810**	**Date of Collection:**	**11/21/17 8:55:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**11/28/17 03:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-25D-6(112117)

Lab ID#: 1711414-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112811**	**Date of Collection:**	**11/21/17 9:50:00 AM**
Dil. Factor:	**2.39**	**Date of Analysis:**	**11/28/17 04:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-14-2(112117)

Lab ID#: 1711414-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112812**	**Date of Collection:**	**11/21/17 9:02:00 AM**
Dil. Factor:	**2.08**	**Date of Analysis:**	**11/28/17 04:34 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrachloroethene	1.0	Not Detected	7.0	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	108	70-130

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Client Sample ID: SVMP-13-2(112117)

Lab ID#: 1711414-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112813**	**Date of Collection: 11/21/17 10:30:00 A**	
Dil. Factor:	**2.30**	**Date of Analysis: 11/28/17 05:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SVMP-12-3.5(112117)

Lab ID#: 1711414-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112814**	**Date of Collection:**	**11/21/17 1:34:00 PM**
Dil. Factor:	**2.36**	**Date of Analysis:**	**11/28/17 05:27 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-10-3(112117)

Lab ID#: 1711414-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112815**	**Date of Collection:**	**11/21/17 11:45:00 A**
Dil. Factor:	**2.20**	**Date of Analysis:**	**11/28/17 05:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SVMP-26-4(112117)

Lab ID#: 1711414-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112816**	**Date of Collection:**	**11/21/17 11:40:00 A**
Dil. Factor:	**2.24**	**Date of Analysis:**	**11/28/17 06:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SVMP-27-4.5(112117)

Lab ID#: 1711414-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112817**	**Date of Collection: 11/21/17 1:00:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 11/28/17 06:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SVMP-28-3(112117)

Lab ID#: 1711414-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112818**	**Date of Collection: 11/21/17 2:55:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 11/28/17 07:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: SVMP-15-2(112017)

Lab ID#: 1711414-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112819**	**Date of Collection: 11/20/17 3:11:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 11/28/17 09:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1711414-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112809**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 02:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1711414-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 10:42 AM**	

Compound	%Recovery
Vinyl Chloride	80
1,1-Dichloroethene	79
cis-1,2-Dichloroethene	81
Trichloroethene	99
trans-1,2-Dichloroethene	97
Tetrachloroethene	102
1,4-Dioxane	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: LCS

Lab ID#: 1711414-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 11:05 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	84	70-130
1,1-Dichloroethene	81	70-130
cis-1,2-Dichloroethene	91	70-130
Trichloroethene	99	70-130
trans-1,2-Dichloroethene	84	70-130
Tetrachloroethene	100	70-130
1,4-Dioxane	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	80	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1711414-13AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3112804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/28/17 11:28 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	83	70-130
1,1-Dichloroethene	82	70-130
cis-1,2-Dichloroethene	89	70-130
Trichloroethene	100	70-130
trans-1,2-Dichloroethene	86	70-130
Tetrachloroethene	103	70-130
1,4-Dioxane	96	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	82	70-130
4-Bromofluorobenzene	106	70-130

December 03, 2017

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001386.0001.00002
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1711414
Sample date: 2017-11-21
Report received by CADENA: 2017-12-02
Initial Data Verification completed by CADENA: 2017-12-03

9 Soil vapor samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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3/5/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name:
Project #: MII001386.0001.00002
Workorder #: 1802458

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 2/22/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1802458

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MII001386.0001.00002
DATE RECEIVED:	02/22/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/05/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-01S-3.5 (021918)	TO-15	3.5 "Hg	15.2 psi
02A	SVMP-01D-7.0 (021918)	TO-15	3.3 "Hg	14.8 psi
03A	SVMP-07-3.5 (021918)	TO-15	3.5 "Hg	14.7 psi
04A	SVMP-19-3 (022018)	TO-15	0.6 "Hg	15.4 psi
05A	SVMP-18-3 (022018)	TO-15	3.5 "Hg	15.1 psi
06A	SVMP-23-3 (022018)	TO-15	1.6 "Hg	14.8 psi
07A	SVMP-24-4 (022118)	TO-15	5.3 "Hg	14.2 psi
08A	SVMP-06-4.5 (022118)	TO-15	3.9 "Hg	14.8 psi
09A	SVMP-05-4.5 (022118)	TO-15	1.4 "Hg	14.9 psi
10A	SVMP-04-3.5 (022118)	TO-15	4.9 "Hg	14.7 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/05/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1802458

Ten 1 Liter Summa Canister samples were received on February 22, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There was a difference (greater than or equal to 5.0" Hg) between the measured canister receipt vacuum and that which was reported on the Chain of Custody (COC) for sample SVMP-19-3 (022018). A leak test indicated that the valve was functioning properly.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-01S-3.5 (021918)

Lab ID#: 1802458-01A

No Detections Were Found.

Client Sample ID: SVMP-01D-7.0 (021918)

Lab ID#: 1802458-02A

No Detections Were Found.

Client Sample ID: SVMP-07-3.5 (021918)

Lab ID#: 1802458-03A

No Detections Were Found.

Client Sample ID: SVMP-19-3 (022018)

Lab ID#: 1802458-04A

No Detections Were Found.

Client Sample ID: SVMP-18-3 (022018)

Lab ID#: 1802458-05A

No Detections Were Found.

Client Sample ID: SVMP-23-3 (022018)

Lab ID#: 1802458-06A

No Detections Were Found.

Client Sample ID: SVMP-24-4 (022118)

Lab ID#: 1802458-07A

No Detections Were Found.

Client Sample ID: SVMP-06-4.5 (022118)

Lab ID#: 1802458-08A

No Detections Were Found.

Client Sample ID: SVMP-05-4.5 (022118)

Lab ID#: 1802458-09A

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-05-4.5 (022118)

Lab ID#: 1802458-09A

No Detections Were Found.

Client Sample ID: SVMP-04-3.5 (022118)

Lab ID#: 1802458-10A

No Detections Were Found.

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Client Sample ID: SVMP-01S-3.5 (021918)

Lab ID#: 1802458-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022317**	**Date of Collection: 2/19/18 9:40:00 AM**	
Dil. Factor:	**2.30**	**Date of Analysis: 2/23/18 09:57 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-01D-7.0 (021918)

Lab ID#: 1802458-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022318**	**Date of Collection: 2/19/18 10:32:00 AM**	
Dil. Factor:	**2.25**	**Date of Analysis: 2/23/18 10:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SVMP-07-3.5 (021918)

Lab ID#: 1802458-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022319**	**Date of Collection: 2/19/18 12:25:00 PM**	
Dil. Factor:	**2.26**	**Date of Analysis: 2/23/18 10:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-19-3 (022018)

Lab ID#: 1802458-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022320**	**Date of Collection: 2/20/18 9:16:00 AM**	
Dil. Factor:	**2.09**	**Date of Analysis: 2/23/18 11:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Tetrachloroethene	1.0	Not Detected	7.1	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: SVMP-18-3 (022018)

Lab ID#: 1802458-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022321**	**Date of Collection: 2/20/18 10:52:00 AM**	
Dil. Factor:	**2.29**	**Date of Analysis: 2/23/18 11:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SVMP-23-3 (022018)

Lab ID#: 1802458-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022322**	**Date of Collection: 2/20/18 2:26:00 PM**	
Dil. Factor:	**2.12**	**Date of Analysis: 2/24/18 12:08 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.2	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Trichloroethene	1.1	Not Detected	5.7	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.2	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SVMP-24-4 (022118)

Lab ID#: 1802458-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022323**	**Date of Collection: 2/21/18 8:52:00 AM**	
Dil. Factor:	**2.39**	**Date of Analysis: 2/24/18 12:35 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: SVMP-06-4.5 (022118)

Lab ID#: 1802458-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022324**	**Date of Collection: 2/21/18 11:10:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 2/24/18 01:01 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: SVMP-05-4.5 (022118)

Lab ID#: 1802458-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022325**	**Date of Collection: 2/21/18 12:11:00 PM**	
Dil. Factor:	**2.11**	**Date of Analysis: 2/24/18 01:27 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.7	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.2	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.7	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.2	Not Detected
Tetrachloroethene	1.0	Not Detected	7.2	Not Detected
1,4-Dioxane	4.2	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-04-3.5 (022118)

Lab ID#: 1802458-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022326**	**Date of Collection: 2/21/18 1:29:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 2/24/18 01:53 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1802458-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022306**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/23/18 01:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: CCV

Lab ID#: 1802458-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022302**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/23/18 09:57 AM**	

Compound	**%Recovery**
Vinyl Chloride	127
1,1-Dichloroethene	100
cis-1,2-Dichloroethene	91
Trichloroethene	108
trans-1,2-Dichloroethene	96
Tetrachloroethene	107
1,4-Dioxane	99

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCS

Lab ID#: 1802458-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022303**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/23/18 10:21 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	125	70-130
1,1-Dichloroethene	103	70-130
cis-1,2-Dichloroethene	101	70-130
Trichloroethene	110	70-130
trans-1,2-Dichloroethene	85	70-130
Tetrachloroethene	107	70-130
1,4-Dioxane	103	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCSD

Lab ID#: 1802458-13AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022304**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/23/18 10:47 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	130	70-130
1,1-Dichloroethene	103	70-130
cis-1,2-Dichloroethene	102	70-130
Trichloroethene	108	70-130
trans-1,2-Dichloroethene	85	70-130
Tetrachloroethene	107	70-130
1,4-Dioxane	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	99	70-130

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3/7/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001386.0001.00002
Workorder #: 1802456

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 2/22/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1802456

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001386.0001.00002 FORD LTP
DATE RECEIVED:	02/22/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/07/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-2S-4.5 (021918)	TO-15	1 "Hg	15 psi
02A	SVMP-2D-8.5 (021918)	TO-15	1 "Hg	15 psi
03A	SVMP-3S-3.5 (021918)	TO-15	2 "Hg	15 psi
04A	SVMP-3D-7.0 (021918)	TO-15	4 "Hg	15 psi
05A	SVMP-08-3.5 (022018)	TO-15	4 "Hg	15 psi
06A	SVMP-09-4.0 (022018)	TO-15	5 "Hg	15 psi
07A	SVMP-10-3.0 (022018)	TO-15	4.5 "Hg	15 psi
08A	SVMP-12-3.5 (022018)	TO-15	4.5 "Hg	15 psi
09A	SVMP-22-3.0 (022018)	TO-15	4.5 "Hg	15 psi
10A	SVMP-25S-3.0 (022118)	TO-15	3 "Hg	15 psi
11A	SVMP-25D-6.0 (022118)	TO-15	3 "Hg	15 psi
12A	SVMP-26-4.0 (022118)	TO-15	2.5 "Hg	15 psi
13A	SVMP-28-3.0 (022118)	TO-15	2 "Hg	15 psi
14A	SVMP-27-4.5 (022118)	TO-15	3 "Hg	15 psi
15A	Lab Blank	TO-15	NA	NA
15B	Lab Blank	TO-15	NA	NA
16A	CCV	TO-15	NA	NA
16B	CCV	TO-15	NA	NA
17A	LCS	TO-15	NA	NA
17AA	LCSD	TO-15	NA	NA
17B	LCS	TO-15	NA	NA
17BB	LCSD	TO-15	NA	NA

CERTIFIED BY: DATE: 03/07/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1802456

Fourteen 1 Liter Summa Canister samples were received on February 22, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There was a difference (greater than or equal to 5.0" Hg) between the measured canister receipt vacuum and that which was reported on the Chain of Custody (COC) for sample SVMP-2D-8.5 (021918). A leak test indicated that the valve was functioning properly.

Analytical Notes

Dilution was performed on samples SVMP-2S-4.5 (021918) and SVMP-2D-8.5 (021918) due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-2S-4.5 (021918)

Lab ID#: 1802456-01A
No Detections Were Found.

Client Sample ID: SVMP-2D-8.5 (021918)

Lab ID#: 1802456-02A
No Detections Were Found.

Client Sample ID: SVMP-3S-3.5 (021918)

Lab ID#: 1802456-03A
No Detections Were Found.

Client Sample ID: SVMP-3D-7.0 (021918)

Lab ID#: 1802456-04A
No Detections Were Found.

Client Sample ID: SVMP-08-3.5 (022018)

Lab ID#: 1802456-05A
No Detections Were Found.

Client Sample ID: SVMP-09-4.0 (022018)

Lab ID#: 1802456-06A
No Detections Were Found.

Client Sample ID: SVMP-10-3.0 (022018)

Lab ID#: 1802456-07A
No Detections Were Found.

Client Sample ID: SVMP-12-3.5 (022018)

Lab ID#: 1802456-08A
No Detections Were Found.

Client Sample ID: SVMP-22-3.0 (022018)

Lab ID#: 1802456-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-22-3.0 (022018)

Lab ID#: 1802456-09A
No Detections Were Found.

Client Sample ID: SVMP-25S-3.0 (022118)

Lab ID#: 1802456-10A
No Detections Were Found.

Client Sample ID: SVMP-25D-6.0 (022118)

Lab ID#: 1802456-11A
No Detections Were Found.

Client Sample ID: SVMP-26-4.0 (022118)

Lab ID#: 1802456-12A
No Detections Were Found.

Client Sample ID: SVMP-28-3.0 (022118)

Lab ID#: 1802456-13A
No Detections Were Found.

Client Sample ID: SVMP-27-4.5 (022118)

Lab ID#: 1802456-14A
No Detections Were Found.

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Client Sample ID: SVMP-2S-4.5 (021918)

Lab ID#: 1802456-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022620**	**Date of Collection: 2/19/18 9:45:00 AM**	
Dil. Factor:	**4.18**	**Date of Analysis: 2/26/18 10:20 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2.1	Not Detected	5.3	Not Detected
1,1-Dichloroethene	2.1	Not Detected	8.3	Not Detected
cis-1,2-Dichloroethene	2.1	Not Detected	8.3	Not Detected
Trichloroethene	2.1	Not Detected	11	Not Detected
trans-1,2-Dichloroethene	2.1	Not Detected	8.3	Not Detected
Tetrachloroethene	2.1	Not Detected	14	Not Detected
1,4-Dioxane	8.4	Not Detected	30	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	84	70-130

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Client Sample ID: SVMP-2D-8.5 (021918)

Lab ID#: 1802456-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022614**	**Date of Collection: 2/19/18 11:00:00 AM**	
Dil. Factor:	**4.18**	**Date of Analysis: 2/26/18 05:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2.1	Not Detected	5.3	Not Detected
1,1-Dichloroethene	2.1	Not Detected	8.3	Not Detected
cis-1,2-Dichloroethene	2.1	Not Detected	8.3	Not Detected
Trichloroethene	2.1	Not Detected	11	Not Detected
trans-1,2-Dichloroethene	2.1	Not Detected	8.3	Not Detected
Tetrachloroethene	2.1	Not Detected	14	Not Detected
1,4-Dioxane	8.4	Not Detected	30	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: SVMP-3S-3.5 (021918)

Lab ID#: 1802456-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022621**	**Date of Collection: 2/19/18 12:14:00 PM**	
Dil. Factor:	**2.16**	**Date of Analysis: 2/26/18 10:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.3	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SVMP-3D-7.0 (021918)

Lab ID#: 1802456-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022622**	**Date of Collection: 2/19/18 2:47:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 2/26/18 11:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SVMP-08-3.5 (022018)

Lab ID#: 1802456-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022623**	**Date of Collection: 2/20/18 9:28:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 2/26/18 11:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	90	70-130

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Client Sample ID: SVMP-09-4.0 (022018)

Lab ID#: 1802456-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022521**	**Date of Collection: 2/20/18 10:34:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 2/26/18 12:10 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: SVMP-10-3.0 (022018)

Lab ID#: 1802456-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022520**	**Date of Collection: 2/20/18 11:37:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 2/25/18 11:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-12-3.5 (022018)

Lab ID#: 1802456-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022519**	**Date of Collection: 2/20/18 1:04:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 2/25/18 11:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-22-3.0 (022018)

Lab ID#: 1802456-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022518**	**Date of Collection: 2/20/18 4:14:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 2/25/18 10:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-25S-3.0 (022118)

Lab ID#: 1802456-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022517**	**Date of Collection: 2/21/18 9:11:00 AM**	
Dil. Factor:	**2.24**	**Date of Analysis: 2/25/18 10:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-25D-6.0 (022118)

Lab ID#: 1802456-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022516**	**Date of Collection: 2/21/18 10:05:00 AM**	
Dil. Factor:	**2.24**	**Date of Analysis: 2/25/18 09:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SVMP-26-4.0 (022118)

Lab ID#: 1802456-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022514**	**Date of Collection: 2/21/18 11:11:00 AM**	
Dil. Factor:	**2.20**	**Date of Analysis: 2/25/18 08:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-28-3.0 (022118)

Lab ID#: 1802456-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022512**	**Date of Collection: 2/21/18 12:41:00 PM**	
Dil. Factor:	**2.16**	**Date of Analysis: 2/25/18 07:55 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.3	Not Detected
1,4-Dioxane	4.3	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: SVMP-27-4.5 (022118)

Lab ID#: 1802456-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022511**	**Date of Collection: 2/21/18 1:53:00 PM**	
Dil. Factor:	**2.24**	**Date of Analysis: 2/25/18 07:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1802456-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022507**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/25/18 05:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1802456-15B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022607**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/26/18 01:06 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: CCV

Lab ID#: 1802456-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/25/18 02:33 PM**	

Compound	%Recovery
Vinyl Chloride	129
1,1-Dichloroethene	103
cis-1,2-Dichloroethene	93
Trichloroethene	109
trans-1,2-Dichloroethene	100
Tetrachloroethene	105
1,4-Dioxane	98

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: CCV

Lab ID#: 1802456-16B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/26/18 09:07 AM**	

Compound	%Recovery
Vinyl Chloride	117
1,1-Dichloroethene	97
cis-1,2-Dichloroethene	101
Trichloroethene	116
trans-1,2-Dichloroethene	100
Tetrachloroethene	106
1,4-Dioxane	114

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	120	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCS

Lab ID#: 1802456-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/25/18 02:57 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	127	70-130
1,1-Dichloroethene	101	70-130
cis-1,2-Dichloroethene	98	70-130
Trichloroethene	105	70-130
trans-1,2-Dichloroethene	82	70-130
Tetrachloroethene	101	70-130
1,4-Dioxane	99	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: LCSD

Lab ID#: 1802456-17AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p022504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/25/18 03:22 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	130	70-130
1,1-Dichloroethene	103	70-130
cis-1,2-Dichloroethene	101	70-130
Trichloroethene	106	70-130
trans-1,2-Dichloroethene	85	70-130
Tetrachloroethene	102	70-130
1,4-Dioxane	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: LCS

Lab ID#: 1802456-17B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/26/18 09:34 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	103	70-130
1,1-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	103	70-130
Trichloroethene	112	70-130
trans-1,2-Dichloroethene	82	70-130
Tetrachloroethene	104	70-130
1,4-Dioxane	108	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: LCSD

Lab ID#: 1802456-17BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17022604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/26/18 10:00 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	107	70-130
1,1-Dichloroethene	94	70-130
cis-1,2-Dichloroethene	107	70-130
Trichloroethene	111	70-130
trans-1,2-Dichloroethene	84	70-130
Tetrachloroethene	107	70-130
1,4-Dioxane	109	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	106	70-130

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6/6/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001454.0004.00003
Workorder #: 1806042

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 6/1/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1806042

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	06/01/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/06/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-25D-6(052918)	TO-15	6.1 "Hg	15.6 psi
02A	SVMP-26-4(052918)	TO-15	5.7 "Hg	14.9 psi
03A	SVMP-25S-3(052918)	TO-15	5.5 "Hg	15.3 psi
04A	SVMP-27-4.5(052918)	TO-15	6.1 "Hg	14.5 psi
05A	SVMP-28-3(052918)	TO-15	7.1 "Hg	14.8 psi
06A	SVMP-12-3.5(052918)	TO-15	5.3 "Hg	14.7 psi
07A	SVMP-08-3.5(052918)	TO-15	6.3 "Hg	14.7 psi
08A	SVMP-09-4(053018)	TO-15	4.1 "Hg	14.2 psi
09A	SVMP-07-3.5(053018)	TO-15	5.5 "Hg	15.1 psi
10A	DUP-01(052918)	TO-15	5.9 "Hg	14.4 psi
11A	SVMP-06-4.5(053018)	TO-15	4.3 "Hg	15.3 psi
12A	SVMP-05-4.5(053018)	TO-15	4.7 "Hg	14.5 psi
13A	SVMP-04-3.5(053018)	TO-15	5.5 "Hg	14.3 psi
14A	SVMP-17-2(053018)	TO-15	5.3 "Hg	14.4 psi
15A	DUP-02(053018)	TO-15	5.5 "Hg	14.9 psi
16A	Lab Blank	TO-15	NA	NA
17A	CCV	TO-15	NA	NA
18A	LCS	TO-15	NA	NA
18AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/06/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1806042

Fifteen 1 Liter Summa Canister samples were received on June 01, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample SVMP-25S-3(052918) did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Sample collection date was not provided on the Chain of Custody (COC) for samples DUP-02(053018). The sampling date was taken from the tag.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-25D-6(052918)

Lab ID#: 1806042-01A

No Detections Were Found.

Client Sample ID: SVMP-26-4(052918)

Lab ID#: 1806042-02A

No Detections Were Found.

Client Sample ID: SVMP-25S-3(052918)

Lab ID#: 1806042-03A

No Detections Were Found.

Client Sample ID: SVMP-27-4.5(052918)

Lab ID#: 1806042-04A

No Detections Were Found.

Client Sample ID: SVMP-28-3(052918)

Lab ID#: 1806042-05A

No Detections Were Found.

Client Sample ID: SVMP-12-3.5(052918)

Lab ID#: 1806042-06A

No Detections Were Found.

Client Sample ID: SVMP-08-3.5(052918)

Lab ID#: 1806042-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.3	2.0	6.8	11

Client Sample ID: SVMP-09-4(053018)

Lab ID#: 1806042-08A

No Detections Were Found.

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-07-3.5(053018)

Lab ID#: 1806042-09A

No Detections Were Found.

Client Sample ID: DUP-01(052918)

Lab ID#: 1806042-10A

No Detections Were Found.

Client Sample ID: SVMP-06-4.5(053018)

Lab ID#: 1806042-11A

No Detections Were Found.

Client Sample ID: SVMP-05-4.5(053018)

Lab ID#: 1806042-12A

No Detections Were Found.

Client Sample ID: SVMP-04-3.5(053018)

Lab ID#: 1806042-13A

No Detections Were Found.

Client Sample ID: SVMP-17-2(053018)

Lab ID#: 1806042-14A

No Detections Were Found.

Client Sample ID: DUP-02(053018)

Lab ID#: 1806042-15A

No Detections Were Found.

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Client Sample ID: SVMP-25D-6(052918)

Lab ID#: 1806042-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060512**	**Date of Collection:**	**5/29/18 11:13:00 AM**
Dil. Factor:	**2.59**	**Date of Analysis:**	**6/5/18 03:58 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	7.0	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
1,4-Dioxane	5.2	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	116	70-130

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Client Sample ID: SVMP-26-4(052918)

Lab ID#: 1806042-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060513**	**Date of Collection:**	**5/29/18 1:15:00 PM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**6/5/18 04:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	113	70-130

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Client Sample ID: SVMP-25S-3(052918)

Lab ID#: 1806042-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060514**	**Date of Collection:**	**5/29/18 11:50:00 AM**
Dil. Factor:	**2.50**	**Date of Analysis:**	**6/5/18 04:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Tetrachloroethene	1.2	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	114	70-130

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Client Sample ID: SVMP-27-4.5(052918)

Lab ID#: 1806042-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060517**	**Date of Collection:**	**5/29/18 2:11:00 PM**
Dil. Factor:	**2.49**	**Date of Analysis:**	**6/5/18 06:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	126	70-130

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Client Sample ID: SVMP-28-3(052918)

Lab ID#: 1806042-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060516**	**Date of Collection:**	**5/29/18 3:03:00 PM**
Dil. Factor:	**2.63**	**Date of Analysis:**	**6/5/18 05:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrachloroethene	1.3	Not Detected	8.9	Not Detected
1,4-Dioxane	5.3	Not Detected	19	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	112	70-130

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Client Sample ID: SVMP-12-3.5(052918)

Lab ID#: 1806042-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060515**	**Date of Collection:**	**5/29/18 3:55:00 PM**
Dil. Factor:	**2.43**	**Date of Analysis:**	**6/5/18 05:23 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	115	70-130

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Client Sample ID: SVMP-08-3.5(052918)

Lab ID#: 1806042-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060518**	**Date of Collection:**	**5/29/18 4:36:00 PM**
Dil. Factor:	**2.53**	**Date of Analysis:**	**6/5/18 08:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Trichloroethene	1.3	2.0	6.8	11
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.6	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	115	70-130

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Client Sample ID: SVMP-09-4(053018)

Lab ID#: 1806042-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060521**	**Date of Collection: 5/30/18 6:43:00 AM**	
Dil. Factor:	**2.28**	**Date of Analysis: 6/5/18 10:18 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	114	70-130

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Client Sample ID: SVMP-07-3.5(053018)

Lab ID#: 1806042-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060522**	**Date of Collection: 5/30/18 8:03:00 AM**	
Dil. Factor:	**2.48**	**Date of Analysis: 6/5/18 10:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	113	70-130

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Client Sample ID: DUP-01(052918)

Lab ID#: 1806042-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060519**	**Date of Collection: 5/29/18**	
Dil. Factor:	**2.46**	**Date of Analysis: 6/5/18 09:21 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	114	70-130

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Client Sample ID: SVMP-06-4.5(053018)

Lab ID#: 1806042-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060523**	**Date of Collection: 5/30/18 9:03:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 6/5/18 11:14 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	114	70-130

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Client Sample ID: SVMP-05-4.5(053018)

Lab ID#: 1806042-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060524**	**Date of Collection: 5/30/18 9:53:00 AM**	
Dil. Factor:	**2.36**	**Date of Analysis: 6/5/18 11:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	113	70-130

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Client Sample ID: SVMP-04-3.5(053018)

Lab ID#: 1806042-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060520**	**Date of Collection:**	**5/30/18 11:38:00 AM**
Dil. Factor:	**2.42**	**Date of Analysis:**	**6/5/18 09:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	114	70-130

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Client Sample ID: SVMP-17-2(053018)

Lab ID#: 1806042-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060525**	**Date of Collection: 5/30/18 2:28:00 PM**	
Dil. Factor:	**2.40**	**Date of Analysis: 6/6/18 12:11 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	117	70-130

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Client Sample ID: DUP-02(053018)

Lab ID#: 1806042-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060526**	**Date of Collection: 5/30/18**	
Dil. Factor:	**2.46**	**Date of Analysis: 6/6/18 12:39 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	110	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1806042-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060511**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/5/18 02:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	110	70-130

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Client Sample ID: CCV

Lab ID#: 1806042-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060508**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/5/18 01:21 PM**	

Compound	%Recovery
Vinyl Chloride	74
1,1-Dichloroethene	91
cis-1,2-Dichloroethene	98
Trichloroethene	97
trans-1,2-Dichloroethene	96
Tetrachloroethene	110
1,4-Dioxane	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	113	70-130

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Client Sample ID: LCS

Lab ID#: 1806042-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060509**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/5/18 01:48 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	77	70-130
1,1-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	88	70-130
Trichloroethene	102	70-130
trans-1,2-Dichloroethene	104	70-130
Tetrachloroethene	110	70-130
1,4-Dioxane	106	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	113	70-130

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Client Sample ID: LCSD

Lab ID#: 1806042-18AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060510**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/5/18 02:15 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	77	70-130
1,1-Dichloroethene	92	70-130
cis-1,2-Dichloroethene	86	70-130
Trichloroethene	98	70-130
trans-1,2-Dichloroethene	102	70-130
Tetrachloroethene	114	70-130
1,4-Dioxane	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	114	70-130

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6/7/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001454.0004.00003
Workorder #: 1806043

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 6/1/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1806043

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001386.0001_AT_WA08
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	06/01/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/07/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-01D-7(052918)	TO-15	6.7 "Hg	14.6 psi
02A	SVMP-01S-3.5(052918)	TO-15	5.3 "Hg	14.8 psi
03A	SVMP-02D-8.5(052918)	TO-15	5.9 "Hg	15.6 psi
04A	SVMP-02S-3.5(052918)	TO-15	5.5 "Hg	15.2 psi
05A	SVMP-03D-7(052918)	TO-15	5.9 "Hg	14.8 psi
06A	SVMP-03S-3.5(052918)	TO-15	8.2 "Hg	14.9 psi
07A	SVMP-18-3(053018)	TO-15	4.5 "Hg	15 psi
08A	SVMP-24-4(053018)	TO-15	4.1 "Hg	15 psi
09A	SVMP-21-2(053018)	TO-15	4.9 "Hg	15.4 psi
10A	Lab Blank	TO-15	NA	NA
11A	CCV	TO-15	NA	NA
12A	LCS	TO-15	NA	NA
12AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/07/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1806043

Nine 1 Liter Summa Canister samples were received on June 01, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-01D-7(052918)

Lab ID#: 1806043-01A

No Detections Were Found.

Client Sample ID: SVMP-01S-3.5(052918)

Lab ID#: 1806043-02A

No Detections Were Found.

Client Sample ID: SVMP-02D-8.5(052918)

Lab ID#: 1806043-03A

No Detections Were Found.

Client Sample ID: SVMP-02S-3.5(052918)

Lab ID#: 1806043-04A

No Detections Were Found.

Client Sample ID: SVMP-03D-7(052918)

Lab ID#: 1806043-05A

No Detections Were Found.

Client Sample ID: SVMP-03S-3.5(052918)

Lab ID#: 1806043-06A

No Detections Were Found.

Client Sample ID: SVMP-18-3(053018)

Lab ID#: 1806043-07A

No Detections Were Found.

Client Sample ID: SVMP-24-4(053018)

Lab ID#: 1806043-08A

No Detections Were Found.

Client Sample ID: SVMP-21-2(053018)

Lab ID#: 1806043-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-21-2(053018)

Lab ID#: 1806043-09A

No Detections Were Found.

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Client Sample ID: SVMP-01D-7(052918)

Lab ID#: 1806043-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060612**	**Date of Collection:**	**5/29/18 12:40:00 PM**
Dil. Factor:	**2.57**	**Date of Analysis:**	**6/6/18 03:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.7	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-01S-3.5(052918)

Lab ID#: 1806043-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060615**	**Date of Collection: 5/29/18 1:20:00 PM**	
Dil. Factor:	**2.44**	**Date of Analysis: 6/6/18 06:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: SVMP-02D-8.5(052918)

Lab ID#: 1806043-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060616**	**Date of Collection: 5/29/18 2:40:00 PM**	
Dil. Factor:	**2.56**	**Date of Analysis: 6/6/18 07:14 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.7	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-02S-3.5(052918)

Lab ID#: 1806043-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060617**	**Date of Collection: 5/29/18 3:20:00 PM**	
Dil. Factor:	**2.49**	**Date of Analysis: 6/6/18 07:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: SVMP-03D-7(052918)

Lab ID#: 1806043-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060618**	**Date of Collection:**	**5/29/18 4:36:00 PM**
Dil. Factor:	**2.50**	**Date of Analysis:**	**6/6/18 08:06 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Tetrachloroethene	1.2	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-03S-3.5(052918)

Lab ID#: 1806043-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060619**	**Date of Collection: 5/29/18 5:05:00 PM**	
Dil. Factor:	**2.77**	**Date of Analysis: 6/6/18 08:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.5	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.5	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Trichloroethene	1.4	Not Detected	7.4	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Tetrachloroethene	1.4	Not Detected	9.4	Not Detected
1,4-Dioxane	5.5	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-18-3(053018)

Lab ID#: 1806043-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060620**	**Date of Collection:**	**5/30/18 10:00:00 AM**
Dil. Factor:	**2.38**	**Date of Analysis:**	**6/6/18 08:59 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: SVMP-24-4(053018)

Lab ID#: 1806043-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060621**	**Date of Collection: 5/30/18 11:00:00 AM**	
Dil. Factor:	**2.34**	**Date of Analysis: 6/6/18 09:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: SVMP-21-2(053018)

Lab ID#: 1806043-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060622**	**Date of Collection: 5/30/18 12:18:00 PM**	
Dil. Factor:	**2.45**	**Date of Analysis: 6/6/18 09:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1806043-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060605**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/18 11:53 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1806043-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/18 10:06 AM**	

Compound	%Recovery
Vinyl Chloride	92
1,1-Dichloroethene	98
cis-1,2-Dichloroethene	101
Trichloroethene	100
trans-1,2-Dichloroethene	100
Tetrachloroethene	107
1,4-Dioxane	88

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	108	70-130

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Client Sample ID: LCS

Lab ID#: 1806043-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/18 10:31 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	91	70-130
1,1-Dichloroethene	94	70-130
cis-1,2-Dichloroethene	88	70-130
Trichloroethene	105	70-130
trans-1,2-Dichloroethene	108	70-130
Tetrachloroethene	106	70-130
1,4-Dioxane	89	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: LCSD

Lab ID#: 1806043-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a060604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/6/18 10:55 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	92	70-130
1,1-Dichloroethene	93	70-130
cis-1,2-Dichloroethene	89	70-130
Trichloroethene	103	70-130
trans-1,2-Dichloroethene	106	70-130
Tetrachloroethene	105	70-130
1,4-Dioxane	85	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	105	70-130

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9/1/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001454.0004.00003
Workorder #: 1808626

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 8/27/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1808626

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	08/27/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/01/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-4-3.5(082318)	TO-15	5.5 "Hg	15 psi
02A	SVMP-8-3.5(082318)	TO-15	5.0 "Hg	15 psi
03A	SVMP-9-4(082318)	TO-15	5.5 "Hg	15 psi
04A	SVMP-10-3(082318)	TO-15	5.5 "Hg	15 psi
05A	SVMP-21-2(082418)	TO-15	5.0 "Hg	15 psi
06A	SVMP-14-2(082418)	TO-15	4.5 "Hg	15 psi
07A	SVMP-13-2(082418)	TO-15	5.0 "Hg	15 psi
08A	SVMP-15-2(082418)	TO-15	5.0 "Hg	15 psi
09A	SVMP-16-2(082418)	TO-15	6.0 "Hg	15 psi
10A	SVMP-17-2(082418)	TO-15	5.5 "Hg	15 psi
11A	SVMP-22-3(082118)	TO-15	4.5 "Hg	14.8 psi
12A	SVMP-23-3(082218)	TO-15	3.9 "Hg	15.1 psi
13A	SVMP-24-4(082218)	TO-15	4.5 "Hg	15.1 psi
14A	SVMP-18-3(082218)	TO-15	6.9 "Hg	14.5 psi
15A	SVMP-19-3(082218)	TO-15	3.3 "Hg	14.9 psi
16A	SVMP-20-3(082218)	TO-15	4.5 "Hg	14.8 psi
17A	SVMP-7-3.5(082318)	TO-15	4.3 "Hg	15.4 psi
18A	SVMP-6-4.5(082318)	TO-15	3.7 "Hg	14.9 psi
19A	DUP-1(082318)	TO-15	8.4 "Hg	14.9 psi
20A	SVMP-5-4.5(082318)	TO-15	3.9 "Hg	14.8 psi
21A	Lab Blank	TO-15	NA	NA
22A	CCV	TO-15	NA	NA
23A	LCS	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 1808626

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	08/27/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/01/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
23AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 09/01/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1808626

Twenty 1 Liter Summa Canister samples were received on August 27, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for samples SVMP-23-3(082218) and SVMP-24-4(082218) did not match the entries on the sample tags with regard to sample identification. Therefore the information on the sample tags was used to process and report the samples.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-4-3.5(082318)

Lab ID#: 1808626-01A

No Detections Were Found.

Client Sample ID: SVMP-8-3.5(082318)

Lab ID#: 1808626-02A

No Detections Were Found.

Client Sample ID: SVMP-9-4(082318)

Lab ID#: 1808626-03A

No Detections Were Found.

Client Sample ID: SVMP-10-3(082318)

Lab ID#: 1808626-04A

No Detections Were Found.

Client Sample ID: SVMP-21-2(082418)

Lab ID#: 1808626-05A

No Detections Were Found.

Client Sample ID: SVMP-14-2(082418)

Lab ID#: 1808626-06A

No Detections Were Found.

Client Sample ID: SVMP-13-2(082418)

Lab ID#: 1808626-07A

No Detections Were Found.

Client Sample ID: SVMP-15-2(082418)

Lab ID#: 1808626-08A

No Detections Were Found.

Client Sample ID: SVMP-16-2(082418)

Lab ID#: 1808626-09A

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-16-2(082418)

Lab ID#: 1808626-09A

No Detections Were Found.

Client Sample ID: SVMP-17-2(082418)

Lab ID#: 1808626-10A

No Detections Were Found.

Client Sample ID: SVMP-22-3(082118)

Lab ID#: 1808626-11A

No Detections Were Found.

Client Sample ID: SVMP-23-3(082218)

Lab ID#: 1808626-12A

No Detections Were Found.

Client Sample ID: SVMP-24-4(082218)

Lab ID#: 1808626-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	1.3	6.4	6.9

Client Sample ID: SVMP-18-3(082218)

Lab ID#: 1808626-14A

No Detections Were Found.

Client Sample ID: SVMP-19-3(082218)

Lab ID#: 1808626-15A

No Detections Were Found.

Client Sample ID: SVMP-20-3(082218)

Lab ID#: 1808626-16A

No Detections Were Found.

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-7-3.5(082318)

Lab ID#: 1808626-17A

No Detections Were Found.

Client Sample ID: SVMP-6-4.5(082318)

Lab ID#: 1808626-18A

No Detections Were Found.

Client Sample ID: DUP-1(082318)

Lab ID#: 1808626-19A

No Detections Were Found.

Client Sample ID: SVMP-5-4.5(082318)

Lab ID#: 1808626-20A

No Detections Were Found.

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Client Sample ID: SVMP-4-3.5(082318)

Lab ID#: 1808626-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083006**	**Date of Collection: 8/23/18 12:15:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 8/30/18 03:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-8-3.5(082318)

Lab ID#: 1808626-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083007**	**Date of Collection: 8/23/18 1:22:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 8/30/18 03:38 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-9-4(082318)

Lab ID#: 1808626-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083008**	**Date of Collection: 8/23/18 2:35:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 8/30/18 04:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-10-3(082318)

Lab ID#: 1808626-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083009**	**Date of Collection: 8/23/18 3:35:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 8/30/18 04:31 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-21-2(082418)

Lab ID#: 1808626-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083010**	**Date of Collection: 8/24/18 9:12:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 8/30/18 04:57 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-14-2(082418)

Lab ID#: 1808626-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083011**	**Date of Collection: 8/24/18 10:16:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 8/30/18 05:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-13-2(082418)

Lab ID#: 1808626-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083012**	**Date of Collection: 8/24/18 10:53:00 AM**	
Dil. Factor:	**2.42**	**Date of Analysis: 8/30/18 05:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-15-2(082418)

Lab ID#: 1808626-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083013**	**Date of Collection: 8/24/18 12:20:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 8/30/18 06:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-16-2(082418)

Lab ID#: 1808626-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083014**	**Date of Collection: 8/24/18 2:16:00 PM**	
Dil. Factor:	**2.52**	**Date of Analysis: 8/30/18 06:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-17-2(082418)

Lab ID#: 1808626-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083015**	**Date of Collection: 8/24/18 2:50:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 8/30/18 07:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-22-3(082118)

Lab ID#: 1808626-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083016**	**Date of Collection: 8/21/18 10:59:00 AM**	
Dil. Factor:	**2.36**	**Date of Analysis: 8/30/18 09:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-23-3(082218)

Lab ID#: 1808626-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083017**	**Date of Collection: 8/22/18 1:12:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/30/18 09:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-24-4(082218)

Lab ID#: 1808626-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083018**	**Date of Collection: 8/22/18 2:10:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 8/30/18 10:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	1.3	6.4	6.9
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-18-3(082218)

Lab ID#: 1808626-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083019**	**Date of Collection: 8/22/18 3:10:00 PM**	
Dil. Factor:	**2.58**	**Date of Analysis: 8/30/18 10:35 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
1,4-Dioxane	5.2	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-19-3(082218)

Lab ID#: 1808626-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083020**	**Date of Collection: 8/22/18 4:10:00 PM**	
Dil. Factor:	**2.26**	**Date of Analysis: 8/30/18 11:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-20-3(082218)

Lab ID#: 1808626-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083021**	**Date of Collection: 8/22/18 5:10:00 PM**	
Dil. Factor:	**2.36**	**Date of Analysis: 8/30/18 11:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-7-3.5(082318)

Lab ID#: 1808626-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083022**	**Date of Collection: 8/23/18 9:12:00 AM**	
Dil. Factor:	**2.39**	**Date of Analysis: 8/30/18 11:54 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-6-4.5(082318)

Lab ID#: 1808626-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083023**	**Date of Collection:**	**8/23/18 10:30:00 AM**
Dil. Factor:	**2.30**	**Date of Analysis:**	**8/31/18 12:20 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: DUP-1(082318)

Lab ID#: 1808626-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083024**	**Date of Collection: 8/23/18**	
Dil. Factor:	**2.80**	**Date of Analysis: 8/31/18 12:47 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.6	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Trichloroethene	1.4	Not Detected	7.5	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Tetrachloroethene	1.4	Not Detected	9.5	Not Detected
1,4-Dioxane	5.6	Not Detected	20	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-5-4.5(082318)

Lab ID#: 1808626-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083025**	**Date of Collection: 8/23/18 10:55:00 AM**	
Dil. Factor:	**2.31**	**Date of Analysis: 8/31/18 01:13 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1808626-21A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083005**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 12:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1808626-22A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 10:55 AM**	

Compound	%Recovery
Vinyl Chloride	113
1,1-Dichloroethene	113
cis-1,2-Dichloroethene	112
Trichloroethene	108
trans-1,2-Dichloroethene	110
Tetrachloroethene	104
1,4-Dioxane	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: LCS

Lab ID#: 1808626-23A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 11:31 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	113	70-130
1,1-Dichloroethene	108	70-130
cis-1,2-Dichloroethene	101	70-130
Trichloroethene	107	70-130
trans-1,2-Dichloroethene	119	70-130
Tetrachloroethene	101	70-130
1,4-Dioxane	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1808626-23AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a083004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 11:55 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	116	70-130
1,1-Dichloroethene	111	70-130
cis-1,2-Dichloroethene	103	70-130
Trichloroethene	106	70-130
trans-1,2-Dichloroethene	122	70-130
Tetrachloroethene	104	70-130
1,4-Dioxane	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	107	70-130

September 04, 2018

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002.00002/2B, .0003, .0004.00002/2B, .0004.00003/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1808626
Sample date: 2018-08-21, 08-22, 08-23, 08-24
Report received by CADENA: 2018-09-01
Initial Data Verification completed by CADENA: 2018-09-04

20 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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9/1/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001454.0004.00003
Workorder #: 1808627

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 8/27/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1808627

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	08/27/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/01/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-01D-7(082218)	TO-15	4.3 "Hg	15.3 psi
02A	SVMP-01S-3.5(082218)	TO-15	5.5 "Hg	14.6 psi
03A	SVMP-02S-4.5(082218)	TO-15	5.9 "Hg	15.1 psi
04A	SVMP-02D-8.5(082218)	TO-15	5.1 "Hg	15.4 psi
05A	SVMP-03S-3.5(082218)	TO-15	3.9 "Hg	14.8 psi
06A	SVMP-03D-7(082218)	TO-15	4.1 "Hg	14.6 psi
07A	SVMP-25S-3(082318)	TO-15	5.9 "Hg	14.9 psi
08A	SVMP-25D-6(082318)	TO-15	4.5 "Hg	15.1 psi
09A	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 09/01/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1808627

Eight 1 Liter Summa Canister samples were received on August 27, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. A signature, date and time were not provided by the field sampler.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-01D-7(082218)

Lab ID#: 1808627-01A

No Detections Were Found.

Client Sample ID: SVMP-01S-3.5(082218)

Lab ID#: 1808627-02A

No Detections Were Found.

Client Sample ID: SVMP-02S-4.5(082218)

Lab ID#: 1808627-03A

No Detections Were Found.

Client Sample ID: SVMP-02D-8.5(082218)

Lab ID#: 1808627-04A

No Detections Were Found.

Client Sample ID: SVMP-03S-3.5(082218)

Lab ID#: 1808627-05A

No Detections Were Found.

Client Sample ID: SVMP-03D-7(082218)

Lab ID#: 1808627-06A

No Detections Were Found.

Client Sample ID: SVMP-25S-3(082318)

Lab ID#: 1808627-07A

No Detections Were Found.

Client Sample ID: SVMP-25D-6(082318)

Lab ID#: 1808627-08A

No Detections Were Found.

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Client Sample ID: SVMP-01D-7(082218)

Lab ID#: 1808627-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082920**	**Date of Collection: 8/22/18 2:19:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 8/29/18 11:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-01S-3.5(082218)

Lab ID#: 1808627-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082921**	**Date of Collection: 8/22/18 3:04:00 PM**	
Dil. Factor:	**2.44**	**Date of Analysis: 8/30/18 12:24 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-02S-4.5(082218)

Lab ID#: 1808627-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082922**	**Date of Collection: 8/22/18 3:47:00 PM**	
Dil. Factor:	**2.52**	**Date of Analysis: 8/30/18 12:50 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-02D-8.5(082218)

Lab ID#: 1808627-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082923**	**Date of Collection: 8/22/18 3:52:00 PM**	
Dil. Factor:	**2.47**	**Date of Analysis: 8/30/18 01:16 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
1,4-Dioxane	4.9	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-03S-3.5(082218)

Lab ID#: 1808627-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082924**	**Date of Collection: 8/22/18 4:44:00 PM**	
Dil. Factor:	**2.31**	**Date of Analysis: 8/30/18 01:43 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: SVMP-03D-7(082218)

Lab ID#: 1808627-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082925**	**Date of Collection: 8/22/18 4:46:00 PM**	
Dil. Factor:	**2.31**	**Date of Analysis: 8/30/18 02:09 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	7.8	Not Detected
1,4-Dioxane	4.6	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-25S-3(082318)

Lab ID#: 1808627-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082927**	**Date of Collection: 8/23/18 9:02:00 AM**	
Dil. Factor:	**2.51**	**Date of Analysis: 8/30/18 03:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Tetrachloroethene	1.2	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SVMP-25D-6(082318)

Lab ID#: 1808627-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082926**	**Date of Collection: 8/23/18 9:11:00 AM**	
Dil. Factor:	**2.38**	**Date of Analysis: 8/30/18 02:36 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1808627-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082905**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 12:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: CCV

Lab ID#: 1808627-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 09:50 AM**	

Compound	%Recovery
Vinyl Chloride	112
1,1-Dichloroethene	111
cis-1,2-Dichloroethene	111
Trichloroethene	107
trans-1,2-Dichloroethene	113
Tetrachloroethene	103
1,4-Dioxane	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: LCS

Lab ID#: 1808627-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 10:43 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
1,1-Dichloroethene	105	70-130
cis-1,2-Dichloroethene	100	70-130
Trichloroethene	107	70-130
trans-1,2-Dichloroethene	119	70-130
Tetrachloroethene	100	70-130
1,4-Dioxane	93	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: LCSD

Lab ID#: 1808627-11AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a082904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 11:10 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	110	70-130
1,1-Dichloroethene	107	70-130
cis-1,2-Dichloroethene	100	70-130
Trichloroethene	107	70-130
trans-1,2-Dichloroethene	117	70-130
Tetrachloroethene	101	70-130
1,4-Dioxane	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	106	70-130

September 04, 2018

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002.00002/2B, .0003, .0004.00002/2B, .0004.00003/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1808627
Sample date: 2018-08-22
Report received by CADENA: 2018-09-01
Initial Data Verification completed by CADENA: 2018-09-04

8 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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9/4/2018
Mr. Gustan Taylor
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: FORD LTP
Project #: MI001454.0004.00003
Workorder #: 1808628

Dear Mr. Gustan Taylor

The following report includes the data for the above referenced project for sample(s) received on 8/27/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1808628

Work Order Summary

CLIENT:	Mr. Gustan Taylor Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	248.994.2294	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 FORD LTP
DATE RECEIVED:	08/27/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/04/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-26-4(082318)	TO-15	3.9 "Hg	15.4 psi
02A	SVMP-27-4.5(082318)	TO-15	6.3 "Hg	14.4 psi
03A	SVMP-28-3.0(082318)	TO-15	4.7 "Hg	14.6 psi
04A	SVMP-12.3.5(082318)	TO-15	4.7 "Hg	14.7 psi
05A	DUP-02(082318)	TO-15	4.1 "Hg	14.9 psi
06A	Lab Blank	TO-15	NA	NA
06B	Lab Blank	TO-15	NA	NA
07A	CCV	TO-15	NA	NA
07B	CCV	TO-15	NA	NA
08A	LCS	TO-15	NA	NA
08AA	LCSD	TO-15	NA	NA
08B	LCS	TO-15	NA	NA
08BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 09/04/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1808628

Five 1 Liter Summa Canister samples were received on August 27, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SVMP-26-4(082318)

Lab ID#: 1808628-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.2	3.4	4.6	14
Trichloroethene	1.2	4.4	6.3	24

Client Sample ID: SVMP-27-4.5(082318)

Lab ID#: 1808628-02A

No Detections Were Found.

Client Sample ID: SVMP-28-3.0(082318)

Lab ID#: 1808628-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.3	8.0	8.9

Client Sample ID: SVMP-12.3.5(082318)

Lab ID#: 1808628-04A

No Detections Were Found.

Client Sample ID: DUP-02(082318)

Lab ID#: 1808628-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.7	7.9	12

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Client Sample ID: SVMP-26-4(082318)

Lab ID#: 1808628-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083010**	**Date of Collection:**	**8/23/18 10:55:00 AM**
Dil. Factor:	**2.35**	**Date of Analysis:**	**8/30/18 08:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	3.4	4.6	14
Trichloroethene	1.2	4.4	6.3	24
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SVMP-27-4.5(082318)

Lab ID#: 1808628-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082924**	**Date of Collection:**	**8/23/18 11:49:00 AM**
Dil. Factor:	**2.50**	**Date of Analysis:**	**8/30/18 01:47 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Tetrachloroethene	1.2	Not Detected	8.5	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-28-3.0(082318)

Lab ID#: 1808628-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082925**	**Date of Collection:**	**8/23/18 1:27:00 PM**
Dil. Factor:	**2.36**	**Date of Analysis:**	**8/30/18 02:14 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	1.3	8.0	8.9
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SVMP-12.3.5(082318)

Lab ID#: 1808628-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082926**	**Date of Collection:**	**8/23/18 3:22:00 PM**
Dil. Factor:	**2.37**	**Date of Analysis:**	**8/30/18 02:40 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: DUP-02(082318)

Lab ID#: 1808628-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083011**	**Date of Collection: 8/23/18**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/30/18 08:54 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrachloroethene	1.2	1.7	7.9	12
1,4-Dioxane	4.7	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1808628-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082906**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 11:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1808628-06B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083008**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 05:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: CCV

Lab ID#: 1808628-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 09:50 AM**	

Compound	%Recovery
Vinyl Chloride	98
1,1-Dichloroethene	98
cis-1,2-Dichloroethene	103
Trichloroethene	104
trans-1,2-Dichloroethene	102
Tetrachloroethene	101
1,4-Dioxane	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1808628-07B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 12:27 PM**	

Compound	%Recovery
Vinyl Chloride	102
1,1-Dichloroethene	100
cis-1,2-Dichloroethene	103
Trichloroethene	104
trans-1,2-Dichloroethene	103
Tetrachloroethene	99
1,4-Dioxane	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCS

Lab ID#: 1808628-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 10:15 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	99	70-130
1,1-Dichloroethene	93	70-130
cis-1,2-Dichloroethene	90	70-130
Trichloroethene	101	70-130
trans-1,2-Dichloroethene	105	70-130
Tetrachloroethene	97	70-130
1,4-Dioxane	99	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 1808628-08AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/29/18 10:40 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	98	70-130
1,1-Dichloroethene	95	70-130
cis-1,2-Dichloroethene	87	70-130
Trichloroethene	104	70-130
trans-1,2-Dichloroethene	108	70-130
Tetrachloroethene	98	70-130
1,4-Dioxane	102	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCS

Lab ID#: 1808628-08B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 12:52 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	98	70-130
1,1-Dichloroethene	97	70-130
cis-1,2-Dichloroethene	92	70-130
Trichloroethene	105	70-130
trans-1,2-Dichloroethene	111	70-130
Tetrachloroethene	99	70-130
1,4-Dioxane	102	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 1808628-08BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3083004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/30/18 01:17 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	101	70-130
1,1-Dichloroethene	98	70-130
cis-1,2-Dichloroethene	94	70-130
Trichloroethene	101	70-130
trans-1,2-Dichloroethene	114	70-130
Tetrachloroethene	98	70-130
1,4-Dioxane	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	102	70-130

September 04, 2018

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0004.00003
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1808628
Sample date: 2018-08-23
Report received by CADENA: 2018-09-04
Initial Data Verification completed by CADENA: 2018-09-04

5 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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11/15/2018
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0004.00003
Workorder #: 1811197

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 11/9/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1811197

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 Ford LTP
DATE RECEIVED:	11/09/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	11/15/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-22-3(110518)	TO-15	4.7 "Hg	14.9 psi
02A	SVMP-23-3(110518)	TO-15	3.1 "Hg	15.2 psi
03A	SVMP-24-4(110518)	TO-15	3.9 "Hg	14.6 psi
04A	SVMP-07-3.5(110518)	TO-15	4.3 "Hg	15.5 psi
05A	SVMP-06-4.5(110518)	TO-15	3.1 "Hg	14.8 psi
06A	SVMP-05-4.5(110518)	TO-15	3.7 "Hg	14.9 psi
07A	SVMP-04-3.5(110518)	TO-15	6.1 "Hg	15.3 psi
08A	SVMP-08-3.5(110518)	TO-15	4.3 "Hg	14.8 psi
09A	SVMP-09-4(110518)	TO-15	2.8 "Hg	14.7 psi
10A	SVMP-10-3(110518)	TO-15	4.7 "Hg	14.8 psi
11A	SVMP-25D-6(110618)	TO-15	4.5 "Hg	15 psi
12A	SVMP-25S-3(110618)	TO-15	3.9 "Hg	14.9 psi
13A	SVMP-26-4(110618)	TO-15	5.9 "Hg	14.7 psi
14A	SVMP-27-4.5(110618)	TO-15	3.3 "Hg	14.8 psi
15A	SVMP-28-3(110618)	TO-15	4.5 "Hg	15 psi
16A	DUP-01(110618)	TO-15	2.8 "Hg	15.1 psi
17A	Lab Blank	TO-15	NA	NA
18A	CCV	TO-15	NA	NA
19A	LCS	TO-15	NA	NA
19AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/15/18

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1811197

Sixteen 1 Liter Summa Canister samples were received on November 09, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-22-3(110518)		
Lab ID:	1811197-01A	**Date/Time Analyzed:**	11/14/18 07:48 PM
Date/Time Collected:	11/5/18 08:50 AM	**Dilution Factor:**	2.39
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111406

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.4	6.5	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-23-3(110518)		
Lab ID:	1811197-02A	**Date/Time Analyzed:**	11/14/18 08:14 PM
Date/Time Collected:	11/5/18 09:30 AM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111407

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.3	8.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.1	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-24-4(110518)		
Lab ID:	1811197-03A	**Date/Time Analyzed:**	11/14/18 08:41 PM
Date/Time Collected:	11/5/18 10:19 AM	**Dilution Factor:**	2.29
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111408

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.3	8.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.2	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-07-3.5(110518)		
Lab ID:	1811197-04A	**Date/Time Analyzed:**	11/14/18 09:07 PM
Date/Time Collected:	11/5/18 10:58 AM	**Dilution Factor:**	2.40
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111409

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.5	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.2	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-06-4.5(110518)		
Lab ID:	1811197-05A	**Date/Time Analyzed:**	11/14/18 09:33 PM
Date/Time Collected:	11/5/18 11:38 AM	**Dilution Factor:**	2.24
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111410

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.4	Not Detected
1,4-Dioxane	123-91-1	3.2	8.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.6	4.4	Not Detected
Tetrachloroethene	127-18-4	1.4	6.1	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.6	4.4	Not Detected
Trichloroethene	79-01-6	1.9	4.8	6.0	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-05-4.5(110518)		
Lab ID:	1811197-06A	**Date/Time Analyzed:**	11/14/18 11:41 PM
Date/Time Collected:	11/5/18 12:18 PM	**Dilution Factor:**	2.30
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111411

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.6	Not Detected
1,4-Dioxane	123-91-1	3.3	8.3	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.6	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.2	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-04-3.5(110518)		
Lab ID:	1811197-07A	**Date/Time Analyzed:**	11/15/18 12:08 AM
Date/Time Collected:	11/5/18 01:54 PM	**Dilution Factor:**	2.56
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111412

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	4.1	5.1	Not Detected
1,4-Dioxane	123-91-1	3.7	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.0	5.1	Not Detected
Tetrachloroethene	127-18-4	1.6	6.9	8.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	4.0	5.1	Not Detected
Trichloroethene	79-01-6	2.2	5.5	6.9	Not Detected
Vinyl Chloride	75-01-4	1.2	2.6	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-08-3.5(110518)		
Lab ID:	1811197-08A	**Date/Time Analyzed:**	11/15/18 12:40 AM
Date/Time Collected:	11/5/18 02:35 PM	**Dilution Factor:**	2.34
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111413

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.4	8.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.3	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.3	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-09-4(110518)		
Lab ID:	1811197-09A	**Date/Time Analyzed:**	11/15/18 01:07 AM
Date/Time Collected:	11/5/18 03:02 PM	**Dilution Factor:**	2.20
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111414

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	3.5	4.4	Not Detected
1,4-Dioxane	123-91-1	3.2	7.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.5	4.4	Not Detected
Tetrachloroethene	127-18-4	1.3	6.0	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	4.4	Not Detected
Trichloroethene	79-01-6	1.9	4.7	5.9	Not Detected
Vinyl Chloride	75-01-4	1.1	2.2	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-10-3(110518)		
Lab ID:	1811197-10A	**Date/Time Analyzed:**	11/15/18 01:43 AM
Date/Time Collected:	11/5/18 03:45 PM	**Dilution Factor:**	2.38
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111415

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.4	6.4	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25D-6(110618)		
Lab ID:	1811197-11A	**Date/Time Analyzed:**	11/15/18 02:36 AM
Date/Time Collected:	11/6/18 08:50 AM	**Dilution Factor:**	2.38
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111417

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.4	6.4	8.1	2.5 J
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25S-3(110618)		
Lab ID:	1811197-12A	**Date/Time Analyzed:**	11/15/18 03:03 AM
Date/Time Collected:	11/6/18 08:57 AM	**Dilution Factor:**	2.31
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111418

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.3	8.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.3	7.8	1.6 J
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.2	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-26-4(110618)		
Lab ID:	1811197-13A	**Date/Time Analyzed:**	11/15/18 03:29 AM
Date/Time Collected:	11/6/18 09:37 AM	**Dilution Factor:**	2.49
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	3.6	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.5	6.8	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.9	4.9	Not Detected
Trichloroethene	79-01-6	2.1	5.4	6.7	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-27-4.5(110618)		
Lab ID:	1811197-14A	**Date/Time Analyzed:**	11/15/18 03:55 AM
Date/Time Collected:	11/6/18 10:28 AM	**Dilution Factor:**	2.25
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111420

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.2	8.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.1	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.6	4.5	Not Detected
Trichloroethene	79-01-6	1.9	4.8	6.0	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-28-3(110618)		
Lab ID:	1811197-15A	**Date/Time Analyzed:**	11/15/18 04:22 AM
Date/Time Collected:	11/6/18 12:38 PM	**Dilution Factor:**	2.38
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111421

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.4	6.4	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01(110618)		
Lab ID:	1811197-16A	**Date/Time Analyzed:**	11/15/18 02:10 AM
Date/Time Collected:	11/6/18 12:00 AM	**Dilution Factor:**	2.24
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111416

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.4	Not Detected
1,4-Dioxane	123-91-1	3.2	8.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.6	4.4	Not Detected
Tetrachloroethene	127-18-4	1.4	6.1	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.6	4.4	Not Detected
Trichloroethene	79-01-6	1.9	4.8	6.0	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1811197-17A	**Date/Time Analyzed:**	11/14/18 06:40 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111405

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1811197-18A	**Date/Time Analyzed:**	11/14/18 05:09 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111402

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	112
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	110
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	110
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	113

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1811197-19A	**Date/Time Analyzed:**	11/14/18 05:36 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111403

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	103
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	98
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	113
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	105

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1811197-19AA	**Date/Time Analyzed:**	11/14/18 06:02 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111404

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	102
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	98
trans-1,2-Dichloroethene	156-60-5	114
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	107

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

November 15, 2018

Kris Hinskey
Arcadis Inc
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Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1811197
Sample date: 2018-11-05 andn 2018-11-06
Report received by CADENA: 2018-11-15
Initial Data Verification completed by CADENA: 2018-11-15

16 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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11/18/2018
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0004.00003
Workorder #: 1811277

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 11/13/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1811277

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004.00003 Ford LTP
DATE RECEIVED:	11/13/2018	**CONTACT:**	Ausha Scott
DATE COMPLETED:	11/18/2018		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-12-3.5(110618)	TO-15	4.9 "Hg	15.2 psi
02A	SVMP-01D-7(110618)	TO-15	2.8 "Hg	15.6 psi
03A	SVMP-01S-3.5(110618)	TO-15	3.7 "Hg	15.5 psi
04A	SVMP-02S-4.5(110718)	TO-15	3.1 "Hg	15.7 psi
05A	SVMP-02D-8.5(110718)	TO-15	3.3 "Hg	15.8 psi
06A	SVMP-03S-3.5(110718)	TO-15	3.1 "Hg	15.4 psi
07A	SVMP-03D-7(110718)	TO-15	3.1 "Hg	14.5 psi
08A	SVMP-18-3(110718)	TO-15	3.3 "Hg	15.4 psi
09A	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/18/18

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1811277

Eight 1 Liter Summa Canister samples were received on November 13, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-12-3.5(110618)		
Lab ID:	1811277-01A	**Date/Time Analyzed:**	11/16/18 10:31 PM
Date/Time Collected:	11/6/18 02:25 PM	**Dilution Factor:**	2.43
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111617

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	3.5	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.6	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.2	6.5	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01D-7(110618)		
Lab ID:	1811277-02A	**Date/Time Analyzed:**	11/16/18 10:57 PM
Date/Time Collected:	11/6/18 03:19 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111618

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.3	8.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.1	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01S-3.5(110618)		
Lab ID:	1811277-03A	**Date/Time Analyzed:**	11/16/18 11:24 PM
Date/Time Collected:	11/6/18 03:26 PM	**Dilution Factor:**	2.34
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111619

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.4	8.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.3	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.3	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02S-4.5(110718)		
Lab ID:	1811277-04A	**Date/Time Analyzed:**	11/16/18 11:50 PM
Date/Time Collected:	11/7/18 08:26 AM	**Dilution Factor:**	2.31
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111620

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.3	8.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.3	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.2	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02D-8.5(110718)		
Lab ID:	1811277-05A	**Date/Time Analyzed:**	11/17/18 12:17 AM
Date/Time Collected:	11/7/18 08:26 AM	**Dilution Factor:**	2.33
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111621

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.4	8.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.3	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.3	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-03S-3.5(110718)		
Lab ID:	1811277-06A	**Date/Time Analyzed:**	11/17/18 12:43 AM
Date/Time Collected:	11/7/18 09:12 AM	**Dilution Factor:**	2.28
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111622

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.3	8.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.1	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-03D-7(110718)		
Lab ID:	1811277-07A	**Date/Time Analyzed:**	11/17/18 01:09 AM
Date/Time Collected:	11/7/18 09:16 AM	**Dilution Factor:**	2.22
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111623

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.5	4.4	Not Detected
1,4-Dioxane	123-91-1	3.2	8.0	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.5	4.4	Not Detected
Tetrachloroethene	127-18-4	1.4	6.0	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	4.4	Not Detected
Trichloroethene	79-01-6	1.9	4.8	6.0	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-18-3(110718)		
Lab ID:	1811277-08A	**Date/Time Analyzed:**	11/17/18 01:36 AM
Date/Time Collected:	11/7/18 11:12 AM	**Dilution Factor:**	2.30
Media:	1 Liter Summa Canister	**Instrument/Filename:**	msda.i / a111624

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.6	Not Detected
1,4-Dioxane	123-91-1	3.3	8.3	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.6	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.2	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1811277-09A	**Date/Time Analyzed:**	11/16/18 01:25 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111605c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1811277-10A	**Date/Time Analyzed:**	11/16/18 11:32 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111602

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	101
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	90

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1811277-11A	**Date/Time Analyzed:**	11/16/18 12:11 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111603

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	111
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	92

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1811277-11AA	**Date/Time Analyzed:**	11/16/18 12:37 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a111604

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	101
1,4-Dioxane	123-91-1	94
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	110
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	113
Toluene-d8	2037-26-5	70-130	99

* % Recovery is calculated using unrounded analytical results.

November 19, 2018

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1811277
Sample date: 2018-11-07
Report received by CADENA: 2018-11-18
Initial Data Verification completed by CADENA: 2018-11-19

8 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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3/13/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903163

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/7/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1903163

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/07/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/13/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-21-2_030519	TO-15	6.9 "Hg	14.8 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/13/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903163

One 1 Liter Summa Canister (100% Certified) sample was received on March 07, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-21-2_030519		
Lab ID:	1903163-01A	**Date/Time Analyzed:**	3/12/19 07:56 PM
Date/Time Collected:	3/5/19 03:40 PM	**Dilution Factor:**	2.61
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031214

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	4.1	5.2	Not Detected
1,4-Dioxane	123-91-1	3.8	9.4	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	4.1	5.2	Not Detected
Tetrachloroethene	127-18-4	1.6	7.1	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	4.1	5.2	Not Detected
Trichloroethene	79-01-6	2.2	5.6	7.0	Not Detected
Vinyl Chloride	75-01-4	1.3	2.7	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903163-02A	**Date/Time Analyzed:**	3/12/19 12:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031206c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903163-03A	**Date/Time Analyzed:**	3/12/19 09:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	104
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903163-04A	**Date/Time Analyzed:**	3/12/19 11:07 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	112
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	93
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	107

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903163-04AA	**Date/Time Analyzed:**	3/12/19 12:02 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031205

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	111
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	121
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

March 13, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903163
Sample date: 2019-03-05
Report received by CADENA: 2019-03-13
Initial Data Verification completed by CADENA: 2019-03-13

1 Air sample was analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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3/13/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903164

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/7/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1903164

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/07/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/13/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-01S-3.5_030419	TO-15	3.1 "Hg	15.4 psi
02A	SVMP-01D-7_030419	TO-15	3.7 "Hg	15.6 psi
03A	SVMP-22-3_030519	TO-15	4.5 "Hg	15.8 psi
04A	SVMP-08-3.5_030519	TO-15	4.9 "Hg	15.1 psi
05A(cancelled)	SVMP-02S-4.5_030519	TO-15	4.1 "Hg	15.5 psi
06A	SVMP-02D-8.5_030519	TO-15	4.3 "Hg	15.5 psi
07A(cancelled)	SVMP-03S-3.5_030519	TO-15	5.5 "Hg	15.1 psi
08A(cancelled)	SVMP-03D-7_030519	TO-15	4.3 "Hg	16 psi
09A	SVMP-14-2_030519	TO-15	6.5 "Hg	16 psi
10A	SVMP-17-2_030519	TO-15	4.9 "Hg	15.5 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/13/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903164

Ten 1 Liter Summa Canister (100% Certified) samples were received on March 07, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Samples SVMP-02S-4.5_030519, SVMP-03S-3.5_030519 and SVMP-03D-7_030519 were cancelled on 3/11/2019 per client's request.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01S-3.5_030419		
Lab ID:	1903164-01A	**Date/Time Analyzed:**	3/12/19 08:22 PM
Date/Time Collected:	3/4/19 09:11 AM	**Dilution Factor:**	2.28
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031215

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.3	8.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.2	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.0	4.9	6.1	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01D-7_030419		
Lab ID:	1903164-02A	**Date/Time Analyzed:**	3/12/19 08:49 PM
Date/Time Collected:	3/4/19 10:46 AM	**Dilution Factor:**	2.35
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031216

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.7	4.6	Not Detected
1,4-Dioxane	123-91-1	3.4	8.5	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.4	6.4	8.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.7	4.6	Not Detected
Trichloroethene	79-01-6	2.0	5.0	6.3	Not Detected
Vinyl Chloride	75-01-4	1.1	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-22-3_030519		
Lab ID:	1903164-03A	**Date/Time Analyzed:**	3/12/19 09:15 PM
Date/Time Collected:	3/5/19 07:49 AM	**Dilution Factor:**	2.44
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031217

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.9	4.8	Not Detected
1,4-Dioxane	123-91-1	3.5	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.6	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.9	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.2	6.6	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-08-3.5_030519		
Lab ID:	1903164-04A	**Date/Time Analyzed:**	3/13/19 12:26 AM
Date/Time Collected:	3/5/19 09:45 AM	**Dilution Factor:**	2.42
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031221

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	3.5	8.7	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.6	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.2	6.5	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02D-8.5_030519		
Lab ID:	1903164-06A	**Date/Time Analyzed:**	3/13/19 12:53 AM
Date/Time Collected:	3/5/19 12:20 PM	**Dilution Factor:**	2.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031222

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.5	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.2	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-14-2_030519		
Lab ID:	1903164-09A	**Date/Time Analyzed:**	3/13/19 01:19 AM
Date/Time Collected:	3/5/19 02:05 PM	**Dilution Factor:**	2.67
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031223

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	4.2	5.3	Not Detected
1,4-Dioxane	123-91-1	3.8	9.6	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	4.2	5.3	Not Detected
Tetrachloroethene	127-18-4	1.6	7.2	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.2	5.3	Not Detected
Trichloroethene	79-01-6	2.3	5.7	7.2	Not Detected
Vinyl Chloride	75-01-4	1.3	2.7	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-17-2_030519		
Lab ID:	1903164-10A	**Date/Time Analyzed:**	3/13/19 01:46 AM
Date/Time Collected:	3/5/19 03:02 PM	**Dilution Factor:**	2.46
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031224

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	3.5	8.9	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.5	6.7	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.9	4.9	Not Detected
Trichloroethene	79-01-6	2.1	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903164-11A	**Date/Time Analyzed:**	3/12/19 12:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031206c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903164-12A	**Date/Time Analyzed:**	3/12/19 09:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	104
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903164-13A	**Date/Time Analyzed:**	3/12/19 11:07 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	112
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	93
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	107

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903164-13AA	**Date/Time Analyzed:**	3/12/19 12:02 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031205

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	111
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	121
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

March 13, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903164
Sample date: 2019-03-04, 03-05
Report received by CADENA: 2019-03-13
Initial Data Verification completed by CADENA: 2019-03-13

7 Air sample was analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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3/14/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903165

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/7/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1903165

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/07/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/14/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-09-4_030519	TO-15	4.1 "Hg	15.6 psi
02A	SVMP-04-3.5_030519	TO-15	9.2 "Hg	15.9 psi
03A	SVMP-18-3_030519	TO-15	7.8 "Hg	16 psi
04A	SVMP-19-3_030519	TO-15	5.5 "Hg	14.7 psi
05A	DUP-01	TO-15	6.7 "Hg	16.2 psi
06A	Lab Blank	TO-15	NA	NA
06B	Lab Blank	TO-15	NA	NA
07A	CCV	TO-15	NA	NA
07B	CCV	TO-15	NA	NA
08A	LCS	TO-15	NA	NA
08AA	LCSD	TO-15	NA	NA
08B	LCS	TO-15	NA	NA
08BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/14/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903165

Five 1 Liter Summa Canister (100% Certified) samples were received on March 07, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. All The canisters used for this project have been certified to the Reporting Limit for the target analytes included in this workorder. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-09-4_030519		
Lab ID:	1903165-01A	**Date/Time Analyzed:**	3/13/19 03:31 AM
Date/Time Collected:	3/5/19 10:46 AM	**Dilution Factor:**	2.39
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031228

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	3.4	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.4	6.5	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-04-3.5_030519		
Lab ID:	1903165-02A	**Date/Time Analyzed:**	3/13/19 03:58 AM
Date/Time Collected:	3/5/19 12:23 PM	**Dilution Factor:**	3.00
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031229

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	4.8	5.9	Not Detected
1,4-Dioxane	123-91-1	4.3	11	22	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	4.8	5.9	Not Detected
Tetrachloroethene	127-18-4	1.8	8.1	10	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	4.8	5.9	Not Detected
Trichloroethene	79-01-6	2.6	6.4	8.1	Not Detected
Vinyl Chloride	75-01-4	1.4	3.1	3.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-18-3_030519		
Lab ID:	1903165-03A	**Date/Time Analyzed:**	3/13/19 04:24 AM
Date/Time Collected:	3/5/19 02:06 PM	**Dilution Factor:**	2.82
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031230

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	4.5	5.6	Not Detected
1,4-Dioxane	123-91-1	4.1	10	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	4.5	5.6	Not Detected
Tetrachloroethene	127-18-4	1.7	7.6	9.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.5	5.6	Not Detected
Trichloroethene	79-01-6	2.4	6.1	7.6	Not Detected
Vinyl Chloride	75-01-4	1.4	2.9	3.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-19-3_030519		
Lab ID:	1903165-04A	**Date/Time Analyzed:**	3/13/19 12:00 AM
Date/Time Collected:	3/5/19 03:26 PM	**Dilution Factor:**	2.45
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031220

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.9	4.8	Not Detected
1,4-Dioxane	123-91-1	3.5	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.5	6.6	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.9	4.8	Not Detected
Trichloroethene	79-01-6	2.1	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	1.2	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	1903165-05A	**Date/Time Analyzed:**	3/13/19 04:02 PM
Date/Time Collected:	3/5/19 12:00 AM	**Dilution Factor:**	2.71
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3031307

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	4.3	5.4	Not Detected
1,4-Dioxane	123-91-1	1.8	9.8	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	4.3	5.4	Not Detected
Tetrachloroethene	127-18-4	1.8	7.4	9.2	2.3 J
trans-1,2-Dichloroethene	156-60-5	1.6	4.3	5.4	Not Detected
Trichloroethene	79-01-6	1.2	5.8	7.3	3.7 J
Vinyl Chloride	75-01-4	1.9	2.8	3.5	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903165-06A	**Date/Time Analyzed:**	3/12/19 12:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031206c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903165-06B	**Date/Time Analyzed:**	3/13/19 12:29 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3031306a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	0.65	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.44	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.68	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.43	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.72	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903165-07A	**Date/Time Analyzed:**	3/12/19 09:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	104
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903165-07B	**Date/Time Analyzed:**	3/13/19 10:25 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3031302

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	91
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	85
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	91
Trichloroethene	79-01-6	96
Vinyl Chloride	75-01-4	91

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	82
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903165-08A	**Date/Time Analyzed:**	3/12/19 11:07 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	112
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	93
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	107

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903165-08AA	**Date/Time Analyzed:**	3/12/19 12:02 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031205

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	111
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	121
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903165-08B	**Date/Time Analyzed:**	3/13/19 10:49 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3031303

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	101
Tetrachloroethene	127-18-4	106
trans-1,2-Dichloroethene	156-60-5	84
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903165-08BB	**Date/Time Analyzed:**	3/13/19 11:11 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3031304

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	99
cis-1,2-Dichloroethene	156-59-2	103
Tetrachloroethene	127-18-4	106
trans-1,2-Dichloroethene	156-60-5	86
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	101

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	80
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

March 14, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903165
Sample date: 2019-03-05
Report received by CADENA: 2019-03-14
Initial Data Verification completed by CADENA: 2019-03-14

5 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

eurofins | Air Toxics

3/14/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903166

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/7/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1903166

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/07/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/14/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-07-3.5_030419	TO-15	2.8 "Hg	15.5 psi
02A(cancelled)	SVMP-06-4.5_030419	TO-15	0.4 "Hg	15.4 psi
03A(cancelled)	SVMP-05-4.5_030519	TO-15	1.7 psi	15.1 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/14/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903166

Three 1 Liter Summa Canister (100% Certified) samples were received on March 07, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Despite the use of flow controllers for sample collection, the final canister vacuum for samples SVMP-06-4.5_030419 and SVMP-05-4.5_030519 was measured at ambient pressure at the laboratory. Per client instructions, the analysis was cancelled.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-07-3.5_030419		
Lab ID:	1903166-01A	**Date/Time Analyzed:**	3/13/19 02:12 AM
Date/Time Collected:	3/4/19 09:59 AM	**Dilution Factor:**	2.26
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a031225

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	3.2	8.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	1.4	6.1	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.6	4.5	Not Detected
Trichloroethene	79-01-6	1.9	4.8	6.1	Not Detected
Vinyl Chloride	75-01-4	1.1	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903166-04A	**Date/Time Analyzed:**	3/12/19 12:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031206c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.75	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.4	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.59	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.61	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.56	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.86	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.48	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903166-05A	**Date/Time Analyzed:**	3/12/19 09:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	104
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903166-06A	**Date/Time Analyzed:**	3/12/19 11:07 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	112
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	93
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	107

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903166-06AA	**Date/Time Analyzed:**	3/12/19 12:02 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a031205

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	111
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	121
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

March 14, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903166
Sample date: 2019-03-04
Report received by CADENA: 2019-03-14
Initial Data Verification completed by CADENA: 2019-03-14

1 Air samples was analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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4/2/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903632

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/26/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1903632

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/26/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	04/02/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-05-4.5_032119	TO-15	5.5 "Hg	15.5 psi
02A	SVMP-27-4.5_032119	TO-15	5.5 "Hg	15.4 psi
03A	SVMP-28-3_032119	TO-15	5.3 "Hg	15.6 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/02/19

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903632

Three 1 Liter Summa Canister (100% Certified) samples were received on March 26, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-05-4.5_032119		
Lab ID:	1903632-01A	**Date/Time Analyzed:**	3/28/19 11:35 PM
Date/Time Collected:	3/21/19 12:26 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032821

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	1.6	9.1	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.7	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	1.1	5.4	6.8	Not Detected
Vinyl Chloride	75-01-4	1.8	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-27-4.5_032119		
Lab ID:	1903632-02A	**Date/Time Analyzed:**	3/29/19 12:01 AM
Date/Time Collected:	3/21/19 04:34 PM	**Dilution Factor:**	2.51
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032822

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	1.6	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.7	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	1.1	5.4	6.7	Not Detected
Vinyl Chloride	75-01-4	1.8	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-28-3_032119		
Lab ID:	1903632-03A	**Date/Time Analyzed:**	3/29/19 12:27 AM
Date/Time Collected:	3/21/19 05:19 PM	**Dilution Factor:**	2.50
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032823

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	1.6	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.7	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	1.1	5.4	6.7	Not Detected
Vinyl Chloride	75-01-4	1.8	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903632-04A	**Date/Time Analyzed:**	3/28/19 01:31 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032805c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	0.65	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.44	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.68	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.43	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.72	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903632-05A	**Date/Time Analyzed:**	3/28/19 10:32 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032802

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	108
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	103
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	105
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903632-06A	**Date/Time Analyzed:**	3/28/19 11:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032803

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	104
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	111
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903632-06AA	**Date/Time Analyzed:**	3/28/19 01:04 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032804

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	111
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

April 02, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903632
Sample date: 2019-03-21
Report received by CADENA: 2019-04-02
Initial Data Verification completed by CADENA: 2019-04-02

3 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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4/11/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0006
Workorder #: 1903633R1

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/26/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1903633R1

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0006 Ford LTP
DATE RECEIVED:	03/26/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/30/2019		
DATE REISSUED:	04/11/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A(cancelled)	SVMP-3S-3.5_032119	TO-15	1.8 "Hg	15.5 psi
02A	SVMP-3D-7_032119	TO-15	4.7 "Hg	15.6 psi
03A	SVMP-02S-4.5_032119	TO-15	3.9 "Hg	15.9 psi
04A	DUP-01	TO-15	4.5 "Hg	16 psi
05A	SVMP-06-4.5_032119	TO-15	4.9 "Hg	15.8 psi
06A	SVMP-12-3.5_032119	TO-15	4.1 "Hg	16 psi
07A	SVMP-24-4_032119	TO-15	4.5 "Hg	15.7 psi
08A	SVMP-25D-6_032119	TO-15	6.7 "Hg	15.1 psi
09A	SVMP-25S-3_032119	TO-15	4.9 "Hg	16 psi
10A	SVMP-26-4_032119	TO-15	5.1 "Hg	16.1 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/11/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1903633R1

Ten 1 Liter Summa Canister (100% Certified) samples were received on March 26, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Sample SVMP-35-3.5_032119 was cancelled on 03/28/2019 per client's request.

The work order was reissued on 4/11/2019 to correct identification of samples SVMP-3S-3.5_032119 and SVMP-3D-7_032119 due to laboratory transcription error.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-3D-7_032119		
Lab ID:	1903633R1-02A	**Date/Time Analyzed:**	3/28/19 03:51 PM
Date/Time Collected:	3/21/19 11:35 AM	**Dilution Factor:**	2.44
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032808

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.9	4.8	Not Detected
1,4-Dioxane	123-91-1	1.6	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	3.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.6	6.6	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.9	4.8	Not Detected
Trichloroethene	79-01-6	1.0	5.2	6.6	Not Detected
Vinyl Chloride	75-01-4	1.7	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02S-4.5_032119		
Lab ID:	1903633R1-03A	**Date/Time Analyzed:**	3/28/19 04:17 PM
Date/Time Collected:	3/21/19 10:53 AM	**Dilution Factor:**	2.39
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032809

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	1.6	8.6	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	1.6	6.5	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.8	4.7	Not Detected
Trichloroethene	79-01-6	1.0	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.7	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	1903633R1-04A	**Date/Time Analyzed:**	3/28/19 04:43 PM
Date/Time Collected:	3/21/19 12:00 AM	**Dilution Factor:**	2.46
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032810

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	1.6	8.9	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.7	6.7	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	3.9	4.9	Not Detected
Trichloroethene	79-01-6	1.0	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	1.8	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-06-4.5_032119		
Lab ID:	1903633R1-05A	**Date/Time Analyzed:**	3/28/19 05:10 PM
Date/Time Collected:	3/21/19 12:21 PM	**Dilution Factor:**	2.48
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032811

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	1.6	8.9	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.7	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	3.9	4.9	Not Detected
Trichloroethene	79-01-6	1.1	5.3	6.7	Not Detected
Vinyl Chloride	75-01-4	1.8	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-12-3.5_032119		
Lab ID:	1903633R1-06A	**Date/Time Analyzed:**	3/28/19 02:58 PM
Date/Time Collected:	3/21/19 01:52 PM	**Dilution Factor:**	2.42
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032806

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	1.6	8.7	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.6	6.6	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.8	4.8	Not Detected
Trichloroethene	79-01-6	1.0	5.2	6.5	Not Detected
Vinyl Chloride	75-01-4	1.7	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-24-4_032119		
Lab ID:	1903633R1-07A	**Date/Time Analyzed:**	3/28/19 05:36 PM
Date/Time Collected:	3/21/19 02:47 PM	**Dilution Factor:**	2.43
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032812

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.8	4.8	Not Detected
1,4-Dioxane	123-91-1	1.6	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	3.8	4.8	Not Detected
Tetrachloroethene	127-18-4	1.6	6.6	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.8	4.8	Not Detected
Trichloroethene	79-01-6	1.0	5.2	6.5	Not Detected
Vinyl Chloride	75-01-4	1.7	2.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25D-6_032119		
Lab ID:	1903633R1-08A	**Date/Time Analyzed:**	3/28/19 06:02 PM
Date/Time Collected:	3/21/19 03:36 PM	**Dilution Factor:**	2.61
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032813

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	4.1	5.2	Not Detected
1,4-Dioxane	123-91-1	1.7	9.4	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.1	5.2	Not Detected
Tetrachloroethene	127-18-4	1.8	7.1	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.1	5.2	Not Detected
Trichloroethene	79-01-6	1.1	5.6	7.0	Not Detected
Vinyl Chloride	75-01-4	1.9	2.7	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	104
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25S-3_032119		
Lab ID:	1903633R1-09A	**Date/Time Analyzed:**	3/28/19 09:23 PM
Date/Time Collected:	3/21/19 03:36 PM	**Dilution Factor:**	2.50
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032816

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	1.6	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.7	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	1.1	5.4	6.7	Not Detected
Vinyl Chloride	75-01-4	1.8	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-26-4_032119		
Lab ID:	1903633R1-10A	**Date/Time Analyzed:**	3/28/19 09:49 PM
Date/Time Collected:	3/21/19 04:23 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3032817

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	1.6	9.1	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.7	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	1.1	5.4	6.8	Not Detected
Vinyl Chloride	75-01-4	1.8	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1903633R1-11A	**Date/Time Analyzed:**	3/28/19 01:31 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032805c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	0.65	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.44	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.68	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.43	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.72	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1903633R1-12A	**Date/Time Analyzed:**	3/28/19 10:32 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032802

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	108
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	103
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	105
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1903633R1-13A	**Date/Time Analyzed:**	3/28/19 11:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032803

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	104
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	111
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1903633R1-13AA	**Date/Time Analyzed:**	3/28/19 01:04 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3032804

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	111
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

REVISED REPORT: April 11, 2019
REVISION SUMMARY: Lab report sample ID's for samples SVMP-3S-3.5_032119 and SVMP-3D-7_032119 were updated to match the COC.

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1903633
Sample date: 2019-03-21
Report received by CADENA: 2019-03-30
Initial Data Verification completed by CADENA: 2019-03-30

9 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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7/8/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: MI001454.0004
Workorder #: 1906588

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/27/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1906588

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004.0001B
FAX:		**PROJECT #**	MI001454.0004 Ford LTP
DATE RECEIVED:	06/27/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	07/03/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-27-4.5_062419	TO-15	5.5 "Hg	15 psi
02A	SVMP-12-3.5_062419	TO-15	6.0 "Hg	15 psi
03A	SVMP-22-3.0_062519	TO-15	5.5 "Hg	15 psi
04A	SVMP-23-3.0_062519	TO-15	3.5 "Hg	15 psi
05A	SVMP-24-4.0_062519	TO-15	4.5 "Hg	15 psi
06A	Lab Blank	TO-15	NA	NA
07A	CCV	TO-15	NA	NA
08A	LCS	TO-15	NA	NA
08AA	LCSD	TO-15	NA	NA

CERTIFIED BY: DATE: 07/03/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1906588

Five 1 Liter Summa Canister (100% Certified) samples were received on June 27, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-27-4.5_062419		
Lab ID:	1906588-01A	**Date/Time Analyzed:**	7/1/19 07:55 PM
Date/Time Collected:	6/24/19 11:57 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070113

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	9.4	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	3.4	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	3.9	4.9	Not Detected
Trichloroethene	79-01-6	2.4	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	1.3	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-12-3.5_062419		
Lab ID:	1906588-02A	**Date/Time Analyzed:**	7/1/19 06:03 PM
Date/Time Collected:	6/24/19 03:08 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070111

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	9.6	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	3.4	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	2.4	5.4	6.8	Not Detected
Vinyl Chloride	75-01-4	1.3	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-22-3.0_062519		
Lab ID:	1906588-03A	**Date/Time Analyzed:**	7/1/19 05:35 PM
Date/Time Collected:	6/25/19 10:28 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070110

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	9.4	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	3.4	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	3.9	4.9	Not Detected
Trichloroethene	79-01-6	2.4	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	1.3	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-23-3.0_062519		
Lab ID:	1906588-04A	**Date/Time Analyzed:**	7/1/19 05:07 PM
Date/Time Collected:	6/25/19 11:38 AM	**Dilution Factor:**	2.29
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070109

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.6	4.5	Not Detected
1,4-Dioxane	123-91-1	8.7	12	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.6	4.5	Not Detected
Tetrachloroethene	127-18-4	3.1	6.2	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.6	4.5	Not Detected
Trichloroethene	79-01-6	2.2	4.9	6.2	Not Detected
Vinyl Chloride	75-01-4	1.2	2.3	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-24-4.0_062519		
Lab ID:	1906588-05A	**Date/Time Analyzed:**	7/1/19 04:38 PM
Date/Time Collected:	6/25/19 01:30 PM	**Dilution Factor:**	2.38
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070108

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.8	4.7	Not Detected
1,4-Dioxane	123-91-1	9.1	13	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.8	4.7	Not Detected
Tetrachloroethene	127-18-4	3.2	6.4	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	3.8	4.7	Not Detected
Trichloroethene	79-01-6	2.3	5.1	6.4	Not Detected
Vinyl Chloride	75-01-4	1.2	2.4	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1906588-06A	**Date/Time Analyzed:**	7/1/19 02:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070106a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.87	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	3.8	5.4	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.56	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	1.4	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.97	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.51	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1906588-07A	**Date/Time Analyzed:**	7/1/19 10:01 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	101
1,4-Dioxane	123-91-1	106
cis-1,2-Dichloroethene	156-59-2	116
Tetrachloroethene	127-18-4	97
trans-1,2-Dichloroethene	156-60-5	108
Trichloroethene	79-01-6	105
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1906588-08A	**Date/Time Analyzed:**	7/1/19 10:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	122
Tetrachloroethene	127-18-4	98
trans-1,2-Dichloroethene	156-60-5	91
Trichloroethene	79-01-6	107
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	107

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1906588-08AA	**Date/Time Analyzed:**	7/1/19 10:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	90
1,4-Dioxane	123-91-1	104
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	88
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	104

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

REVISED REPORT: July 09, 2019
REVISION SUMMARY: Lab report revised to include cover page and page 2. Analytical data not affected by revision.

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1906588
Sample date: 2019-06-24
Report received by CADENA: 2019-07-08
Initial Data Verification completed by CADENA: 2019-07-03

5 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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7/3/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 1906589

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/27/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1906589

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	06/27/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	07/03/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-28-3.0_062419	TO-15	6.5 "Hg	15 psi
02A	SVMP-25D-6.0_062419	TO-15	5.5 "Hg	15 psi
03A	SVMP-25S-3.0_062419	TO-15	6.5 "Hg	15 psi
04A	SVMP-17-2.0_062419	TO-15	6.5 "Hg	15 psi
05A	SVMP-04-3.5_062519	TO-15	5.5 "Hg	15 psi
06A	SVMP-01D-7.0_062519	TO-15	6.0 "Hg	15 psi
07A	SVMP-01S-3.5_062519	TO-15	5.5 "Hg	15 psi
08A	SVMP-02D-8.5_062519	TO-15	7.0 "Hg	15 psi
09A	DUP-01_062419	TO-15	5.5 "Hg	15 psi
10A	DUP-02_062519	TO-15	5.5 "Hg	15 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/03/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1906589

Ten 1 Liter Summa Canister (100% Certified) samples were received on June 27, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-28-3.0_062419		
Lab ID:	1906589-01A	**Date/Time Analyzed:**	7/1/19 06:48 PM
Date/Time Collected:	6/24/19 10:45 AM	**Dilution Factor:**	2.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070110

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	4.1	5.1	Not Detected
1,4-Dioxane	123-91-1	2.7	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.1	5.1	Not Detected
Tetrachloroethene	127-18-4	1.0	7.0	8.8	1.3 J
trans-1,2-Dichloroethene	156-60-5	1.9	4.1	5.1	Not Detected
Trichloroethene	79-01-6	0.69	5.5	6.9	Not Detected
Vinyl Chloride	75-01-4	0.66	2.6	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25D-6.0_062419		
Lab ID:	1906589-02A	**Date/Time Analyzed:**	7/1/19 07:15 PM
Date/Time Collected:	6/24/19 01:25 PM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070111

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.98	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	6.7	8.4	1.4 J
trans-1,2-Dichloroethene	156-60-5	1.9	3.9	4.9	Not Detected
Trichloroethene	79-01-6	0.66	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.63	2.5	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-25S-3.0_062419		
Lab ID:	1906589-03A	**Date/Time Analyzed:**	7/1/19 07:41 PM
Date/Time Collected:	6/24/19 01:26 PM	**Dilution Factor:**	2.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070112

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	4.1	5.1	Not Detected
1,4-Dioxane	123-91-1	2.7	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.1	5.1	Not Detected
Tetrachloroethene	127-18-4	1.0	7.0	8.8	4.1 J
trans-1,2-Dichloroethene	156-60-5	1.9	4.1	5.1	Not Detected
Trichloroethene	79-01-6	0.69	5.5	6.9	1.3 J
Vinyl Chloride	75-01-4	0.66	2.6	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-17-2.0_062419		
Lab ID:	1906589-04A	**Date/Time Analyzed:**	7/1/19 08:08 PM
Date/Time Collected:	6/24/19 04:13 PM	**Dilution Factor:**	2.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070113

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	4.1	5.1	Not Detected
1,4-Dioxane	123-91-1	2.7	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.1	5.1	Not Detected
Tetrachloroethene	127-18-4	1.0	7.0	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	4.1	5.1	Not Detected
Trichloroethene	79-01-6	0.69	5.5	6.9	Not Detected
Vinyl Chloride	75-01-4	0.66	2.6	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-04-3.5_062519		
Lab ID:	1906589-05A	**Date/Time Analyzed:**	7/1/19 08:35 PM
Date/Time Collected:	6/25/19 10:14 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.98	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.9	4.9	Not Detected
Trichloroethene	79-01-6	0.66	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.63	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01D-7.0_062519		
Lab ID:	1906589-06A	**Date/Time Analyzed:**	7/1/19 09:01 PM
Date/Time Collected:	6/25/19 11:31 AM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.6	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.0	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	4.0	5.0	Not Detected
Trichloroethene	79-01-6	0.68	5.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.64	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-01S-3.5_062519		
Lab ID:	1906589-07A	**Date/Time Analyzed:**	7/1/19 09:28 PM
Date/Time Collected:	6/25/19 11:32 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.98	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.9	4.9	Not Detected
Trichloroethene	79-01-6	0.66	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.63	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02D-8.5_062519		
Lab ID:	1906589-08A	**Date/Time Analyzed:**	7/1/19 09:54 PM
Date/Time Collected:	6/25/19 12:34 PM	**Dilution Factor:**	2.64
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	4.2	5.2	Not Detected
1,4-Dioxane	123-91-1	2.8	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.2	5.2	Not Detected
Tetrachloroethene	127-18-4	1.1	7.2	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	4.2	5.2	Not Detected
Trichloroethene	79-01-6	0.71	5.7	7.1	Not Detected
Vinyl Chloride	75-01-4	0.67	2.7	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01_062419		
Lab ID:	1906589-09A	**Date/Time Analyzed:**	7/1/19 11:14 PM
Date/Time Collected:	6/24/19 12:00 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.98	3.9	4.9	7.4
Tetrachloroethene	127-18-4	1.0	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.9	4.9	Not Detected
Trichloroethene	79-01-6	0.66	5.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.63	2.5	3.2	0.70 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-02_062519		
Lab ID:	1906589-10A	**Date/Time Analyzed:**	7/1/19 11:41 PM
Date/Time Collected:	6/25/19 12:00 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070119

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	3.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	13	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.98	3.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	6.7	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.9	4.9	Not Detected
Trichloroethene	79-01-6	0.66	5.3	6.6	9.7
Vinyl Chloride	75-01-4	0.63	2.5	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1906589-11A	**Date/Time Analyzed:**	7/1/19 12:22 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070106a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.59	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.0	5.4	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.40	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.41	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.75	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.27	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.26	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1906589-12A	**Date/Time Analyzed:**	7/1/19 08:58 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	88
cis-1,2-Dichloroethene	156-59-2	91
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	90
Trichloroethene	79-01-6	94
Vinyl Chloride	75-01-4	90

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1906589-13A	**Date/Time Analyzed:**	7/1/19 09:24 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	69 Q
cis-1,2-Dichloroethene	156-59-2	95
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	77
Trichloroethene	79-01-6	90
Vinyl Chloride	75-01-4	92

Q = Exceeds Quality Control limits.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1906589-13AA	**Date/Time Analyzed:**	7/1/19 09:49 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	78
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	77
Trichloroethene	79-01-6	93
Vinyl Chloride	75-01-4	92

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

July 04, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1906589
Sample date: 2019-06-24 and 6-25
Report received by CADENA: 2019-07-03
Initial Data Verification completed by CADENA: 2019-07-04

10 Air samples were analyzed for TO-15 parameters.

TO-15 QC batch LCS recovery was outside of laboratory control limits biased low for 1,4-dioxane. The LCSduplicate recovery and LCS/LCSD RPD were acceptable for this analyte so qualification was not applied based on this QC outlier alone.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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7/3/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 1906590

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/27/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1906590

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	06/27/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	07/03/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A(cancelled)	SVMP-26-4.0_062419	TO-15	10.5 "Hg	15 psi
02A	SVMP-08-3.5_062419	TO-15	8.0 "Hg	15 psi
03A	SVMP-09-4.0_062419	TO-15	7.5 "Hg	15 psi
04A	SVMP-07-3.5_062419	TO-15	7.0 "Hg	15 psi
05A	SVMP-06-4.5_062419	TO-15	6.5 "Hg	15 psi
06A	SVMP-05-4.5_062519	TO-15	7.0 "Hg	15 psi
07A	SVMP-21-2.0_062519	TO-15	6.0 "Hg	15 psi
08A	SVMP-18-3.0_062519	TO-15	7.0 "Hg	15 psi
09A	Lab Blank	TO-15	NA	NA
09B	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
10B	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA
11B	LCS	TO-15	NA	NA
11BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/03/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1906590

Eight 1 Liter Summa Canister (100% Certified) samples were received on June 27, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Sample SVMP-26-4.0_062419 was cancelled on 7/1/2019 per client's request.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-08-3.5_062419		
Lab ID:	1906590-02A	**Date/Time Analyzed:**	7/1/19 10:47 PM
Date/Time Collected:	6/24/19 01:40 PM	**Dilution Factor:**	2.76
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.4	4.4	5.5	Not Detected
1,4-Dioxane	123-91-1	10	15	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.4	5.5	Not Detected
Tetrachloroethene	127-18-4	3.7	7.5	9.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.4	5.5	Not Detected
Trichloroethene	79-01-6	2.7	5.9	7.4	Not Detected
Vinyl Chloride	75-01-4	1.4	2.8	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-09-4.0_062419		
Lab ID:	1906590-03A	**Date/Time Analyzed:**	7/1/19 11:15 PM
Date/Time Collected:	6/24/19 02:23 PM	**Dilution Factor:**	2.69
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	4.3	5.3	Not Detected
1,4-Dioxane	123-91-1	10	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.3	5.3	Not Detected
Tetrachloroethene	127-18-4	3.6	7.3	9.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.3	5.3	Not Detected
Trichloroethene	79-01-6	2.6	5.8	7.2	Not Detected
Vinyl Chloride	75-01-4	1.4	2.8	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-07-3.5_062419		
Lab ID:	1906590-04A	**Date/Time Analyzed:**	7/1/19 11:44 PM
Date/Time Collected:	6/24/19 04:14 PM	**Dilution Factor:**	2.64
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	4.2	5.2	Not Detected
1,4-Dioxane	123-91-1	10	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.2	5.2	Not Detected
Tetrachloroethene	127-18-4	3.6	7.2	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.2	5.2	Not Detected
Trichloroethene	79-01-6	2.6	5.7	7.1	Not Detected
Vinyl Chloride	75-01-4	1.3	2.7	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-06-4.5_062419		
Lab ID:	1906590-05A	**Date/Time Analyzed:**	7/2/19 12:12 AM
Date/Time Collected:	6/24/19 04:59 PM	**Dilution Factor:**	2.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	4.1	5.1	Not Detected
1,4-Dioxane	123-91-1	9.8	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	4.1	5.1	Not Detected
Tetrachloroethene	127-18-4	3.5	7.0	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.1	5.1	Not Detected
Trichloroethene	79-01-6	2.5	5.5	6.9	Not Detected
Vinyl Chloride	75-01-4	1.3	2.6	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-05-4.5_062519		
Lab ID:	1906590-06A	**Date/Time Analyzed:**	7/2/19 12:40 AM
Date/Time Collected:	6/25/19 10:03 AM	**Dilution Factor:**	2.64
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	4.2	5.2	Not Detected
1,4-Dioxane	123-91-1	10	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.2	5.2	Not Detected
Tetrachloroethene	127-18-4	3.6	7.2	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.2	5.2	Not Detected
Trichloroethene	79-01-6	2.6	5.7	7.1	Not Detected
Vinyl Chloride	75-01-4	1.3	2.7	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-21-2.0_062519		
Lab ID:	1906590-07A	**Date/Time Analyzed:**	7/2/19 01:08 AM
Date/Time Collected:	6/25/19 11:52 AM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070119

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	4.0	5.0	Not Detected
1,4-Dioxane	123-91-1	9.6	14	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	4.0	5.0	Not Detected
Tetrachloroethene	127-18-4	3.4	6.8	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	4.0	5.0	Not Detected
Trichloroethene	79-01-6	2.4	5.4	6.8	Not Detected
Vinyl Chloride	75-01-4	1.3	2.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-18-3.0_062519		
Lab ID:	1906590-08A	**Date/Time Analyzed:**	7/2/19 03:41 PM
Date/Time Collected:	6/25/19 12:50 PM	**Dilution Factor:**	2.64
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd17.i / 17070208

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	4.2	5.2	Not Detected
1,4-Dioxane	123-91-1	10	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	4.2	5.2	Not Detected
Tetrachloroethene	127-18-4	3.6	7.2	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	4.2	5.2	Not Detected
Trichloroethene	79-01-6	2.6	5.7	7.1	Not Detected
Vinyl Chloride	75-01-4	1.3	2.7	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1906590-09A	**Date/Time Analyzed:**	7/1/19 02:50 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070106a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.87	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	3.8	5.4	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.56	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	1.4	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.97	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.51	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1906590-09B	**Date/Time Analyzed:**	7/2/19 01:12 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070207a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.87	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	3.8	5.4	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.56	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	1.4	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.59	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.97	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.51	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1906590-10A	**Date/Time Analyzed:**	7/1/19 10:01 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	101
1,4-Dioxane	123-91-1	106
cis-1,2-Dichloroethene	156-59-2	116
Tetrachloroethene	127-18-4	97
trans-1,2-Dichloroethene	156-60-5	108
Trichloroethene	79-01-6	105
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1906590-10B	**Date/Time Analyzed:**	7/2/19 11:22 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070203

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	107
1,4-Dioxane	123-91-1	107
cis-1,2-Dichloroethene	156-59-2	114
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	113
Trichloroethene	79-01-6	106
Vinyl Chloride	75-01-4	112

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1906590-11A	**Date/Time Analyzed:**	7/1/19 10:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	122
Tetrachloroethene	127-18-4	98
trans-1,2-Dichloroethene	156-60-5	91
Trichloroethene	79-01-6	107
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	107

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1906590-11AA	**Date/Time Analyzed:**	7/1/19 10:55 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	90
1,4-Dioxane	123-91-1	104
cis-1,2-Dichloroethene	156-59-2	119
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	88
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	104

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1906590-11B	**Date/Time Analyzed:**	7/2/19 11:49 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	102
1,4-Dioxane	123-91-1	106
cis-1,2-Dichloroethene	156-59-2	123
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	95
Trichloroethene	79-01-6	107
Vinyl Chloride	75-01-4	114

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	102

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1906590-11BB	**Date/Time Analyzed:**	7/2/19 12:15 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd17.i / 17070205

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	100
1,4-Dioxane	123-91-1	105
cis-1,2-Dichloroethene	156-59-2	121
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	96
Trichloroethene	79-01-6	106
Vinyl Chloride	75-01-4	110

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

July 04, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1906590
Sample date: 2019-06-24 and 6-25
Report received by CADENA: 2019-07-03
Initial Data Verification completed by CADENA: 2019-07-04

8 Air samples were analyzed for TO-15 parameters.

There were no significant QC anomalies or exceptions to report.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

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7/3/2019
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 1906591

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/27/2019 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 1906591

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	MI001454.0004
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	06/27/2019	**CONTACT:**	Ausha Scott
DATE COMPLETED:	07/03/2019		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SVMP-02S-4.5_062519	TO-15	6.7 "Hg	15.1 psi
02A	SVMP-03D-7.0_062519	TO-15	8 "Hg	14.9 psi
03A	SVMP-03S-3.5_062519	TO-15	7.1 "Hg	16.3 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/03/19

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP - E8 , LA NELAP - 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP CA009332018-10, VA NELAP - 9505, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2018, Expiration date: 10/17/2019.
Eurofins Air Toxics LLC. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1906591

Three 1 Liter Summa Canister (100% Certified) samples were received on June 27, 2019. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-02S-4.5_062519		
Lab ID:	1906591-01A	**Date/Time Analyzed:**	7/1/19 02:20 PM
Date/Time Collected:	6/25/19 12:38 PM	**Dilution Factor:**	2.61
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070107

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	4.1	5.2	Not Detected
1,4-Dioxane	123-91-1	2.7	14	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	4.1	5.2	Not Detected
Tetrachloroethene	127-18-4	1.1	7.1	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	4.1	5.2	Not Detected
Trichloroethene	79-01-6	0.70	5.6	7.0	Not Detected
Vinyl Chloride	75-01-4	0.67	2.7	3.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-03D-7.0_062519		
Lab ID:	1906591-02A	**Date/Time Analyzed:**	7/1/19 02:46 PM
Date/Time Collected:	6/25/19 01:25 PM	**Dilution Factor:**	2.74
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070108

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	4.3	5.4	Not Detected
1,4-Dioxane	123-91-1	2.9	15	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.3	5.4	Not Detected
Tetrachloroethene	127-18-4	1.1	7.4	9.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.1	4.3	5.4	Not Detected
Trichloroethene	79-01-6	0.74	5.9	7.4	Not Detected
Vinyl Chloride	75-01-4	0.70	2.8	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SVMP-03S-3.5_062519		
Lab ID:	1906591-03A	**Date/Time Analyzed:**	7/1/19 03:13 PM
Date/Time Collected:	6/25/19 01:21 PM	**Dilution Factor:**	2.76
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a070109

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	4.4	5.5	Not Detected
1,4-Dioxane	123-91-1	2.9	15	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	4.4	5.5	Not Detected
Tetrachloroethene	127-18-4	1.1	7.5	9.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.1	4.4	5.5	Not Detected
Trichloroethene	79-01-6	0.74	5.9	7.4	Not Detected
Vinyl Chloride	75-01-4	0.70	2.8	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	1906591-04A	**Date/Time Analyzed:**	7/1/19 12:22 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070106a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.59	1.6	2.0	Not Detected
1,4-Dioxane	123-91-1	1.0	5.4	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.40	1.6	2.0	Not Detected
Tetrachloroethene	127-18-4	0.41	2.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.75	1.6	2.0	Not Detected
Trichloroethene	79-01-6	0.27	2.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.26	1.0	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	1906591-05A	**Date/Time Analyzed:**	7/1/19 08:58 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	88
cis-1,2-Dichloroethene	156-59-2	91
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	90
Trichloroethene	79-01-6	94
Vinyl Chloride	75-01-4	90

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	1906591-06A	**Date/Time Analyzed:**	7/1/19 09:24 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	69 Q
cis-1,2-Dichloroethene	156-59-2	95
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	77
Trichloroethene	79-01-6	90
Vinyl Chloride	75-01-4	92

Q = Exceeds Quality Control limits.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	1906591-06AA	**Date/Time Analyzed:**	7/1/19 09:49 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a070104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	78
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	77
Trichloroethene	79-01-6	93
Vinyl Chloride	75-01-4	92

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

July 04, 2019

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: MI001454.0002/3/4.00002/2B/3B
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics - Folsom
Laboratory submittal: 1906591
Sample date: 2019-06-25
Report received by CADENA: 2019-07-03
Initial Data Verification completed by CADENA: 2019-07-04

3 Air samples were analyzed for TO-15 parameters.

TO-15 QC batch LCS recovery was outside of laboratory control limits biased low for 1,4-dioxane. The LCSduplicate recovery and LCS/LCSD RPD were acceptable for this analyte so qualification was not applied based on this QC outlier alone.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Soil-Gas Sample Collection Log

Sample ID: SVMP-15-03

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	Overcast
Location:	Livonia, MI	**Temperature:**	58F
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	SE 13 mph
Samplers:	K. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See daily log (pg.1)
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	8.0	**Approximate Purge Volume:**	1000 mL
Time of Collection:	1431 - 1527	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1 L) ~~6 L~~
Canister ID: 1025

Flow Controller ID: 7214

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-29	-5

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
—	—	—

General Observations/Notes:

GEM	CH4: 0.0	**PID:** 0.0	**GEM**	CH4: 0.0	
(Pre-sample)	CO2: 4.1		(Pre-sample)	CO2: 4.0	
	O2: 11.9			O2: 12.2	
	CH4 (LEL): 0.0			CH4 (LEL): 0.0	

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil-Gas Sample Collection Log

Sample ID: SVMP-15-04

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	M. Cloudy
Location:	Livonia, MI	**Temperature:**	54
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	SE 13mph
Samplers:	K. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See daily log (pg. 1)
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	8.0	**Approximate Purge Volume:**	1000 mL
Time of Collection:	1321 - 1411	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1 L) ~~6 L~~
Canister ID: 1081C

Flow Controller ID: 7233

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-29	-5

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
—	—	—

General Observations/Notes:

GEM	CH4: 0.0	**PID:** 0.0	**GEM**	CH4: 0.0
(Pre-sample)	CO2: 3.1		(Pre-sample)	CO2: 3.4
	O2: 15.6		Post	O2: 15.5
	CH4 (LEL): 0.0			CH4 (LEL): 0.0

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil-Gas Sample Collection Log

Sample ID: SVMP-15-05

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	Overcast
Location:	Livonia, MI	**Temperature:**	51 F
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	E 14 mph
Samplers:	K. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See Daily log (pg 1)
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) Moist
Sampling Depth:	8.0	**Approximate Purge Volume:**	1000 mL
Time of Collection:	1217 - 1301	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1 L) ~~6 L~~
Canister ID: ~~6297~~ C8480

Flow Controller ID: ~~7502~~ 7231

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-30	-5

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
—	—	—

General Observations/Notes:

GEM	CH4: 0.0	**PID:** 0.0	**GEM**	CH4: 0.0
(Pre-sample)	CO2: 1.9		(Pre-sample)	CO2: 1.8
	O2: 17.6			O2: 17.5
	CH4 (LEL): 0.0			CH4 (LEL): 0.0

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil-Gas Sample Collection Log

Sample ID: SVMP-15-06

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	Overcast
Location:	Livonia, MI	**Temperature:**	51 F
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	E. 14 mph
Samplers:	~~K~~. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See daily log
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	10.0	**Approximate Purge Volume:**	1000 mL
Time of Collection:	1102 - 1154	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1L) ~~6L~~
Canister ID: CB359

Flow Controller ID: 7128

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-29	-5

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
—	—	—

General Observations/Notes:

GEM	CH4: 0.0	**PID:** 0.0	**GEM**	CH4: 0.0	
(Pre-sample)	CO2: 4.0		(Pre-sample)	CO2: 3.8	
	O2: 15.3			O2: 15.2	
	CH4 (LEL): 0.0			CH4 (LEL): 0.0	

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS Soil-Gas Sample Collection Log

Sample ID: SVMP-15-07

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	M. Cloudy
Location:	Livonia, MI	**Temperature:**	50 F
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	E 8 mph
Samplers:	K. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See Daily log
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	10.0	**Approximate Purge Volume:**	1000 mL @ 100 mL/min
Time of Collection:	0948 - 1038	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1 L) ~~6 L~~
Canister ID: C8315
Flow Controller ID: 7776

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-29	-5

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
—	—	—

General Observations/Notes:

GEM	CH4: 0.0	PID: 1.9	**GEM**	CH4: 0.0	
(Pre-sample)	CO2: 0.7		(Pre-sample)	CO2: 0.6	
	O2: 19.8			O2: 19.9	
	CH4 (LEL): 0.0			CH4 (LEL): 0.0	

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS Soil-Gas Sample Collection Log

Sample ID: SVMP-15-08

Client:	Ford	**Date/Day:**	11/17/15
Project:	Ford LTP	**Weather:**	M. Cloudy
Location:	Livonia, MI	**Temperature:**	~~60 F~~ 47 F
Project #:	MI001304.0001.0003	**Wind Speed/Direction:**	E 8 mph
Samplers:	K. Trestrail	**Subcontractor:**	NA
Logged By:	—	**Equipment:**	See Daily log
Coordinates:	—	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	13.5 ft	**Approximate Purge Volume:**	1000 mL @ 100mL/min
Time of Collection:	0825-0925	**Background PID Ambient Air Reading:**	0.0

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (ft)
NA	NA

SUMMA Canister Information:

Size (circle one): (1 L) ~~6 L~~
Canister ID: C8294

Flow Controller ID: 7123

Tracer Gas Information (if applicable)

Tracer Gas: High-purity Helium

:

Canister Pressure (inches Hg):		
Reported By Laboratory	**Measured Prior to Sample Collection**	**Measured Following Sample Collection**
-30	-30	-6

Tracer Gas Concentration (if applicable):		
Measured in Purge Effluent	**Measured in 'Concentrated' Area Prior to Sample Collection**	**Measured in 'Concentrated' Area Following Sample Collection**
NA	NA	NA

General Observations/Notes:

GEM	CH4: 0.0	**PID:** 10.3	**GEM**	CH4: 0.0
(Pre-sample)	CO2: 3.3		~~(Pre-sample)~~	CO2: 1.4
	O2: 13.7		Post	O2: 14.2
	CH4 (LEL): 0.0			CH4 (LEL): 0.0

Approximating One-Well Volume (for purging): When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS

Air/Vapor Sampling Form

Client: Ford

Location: Livonia, MI

Project No.: MI001304.0002.00001

Sample ID	Location	Start Date	Lab	Canister					Flow Controller			Purging		Tedlar Bag		Leak/Tracer Test		Start Time	End Time
				No.	Size	Type	Pressure (in Hg)		No.	Type	Flow Rate (±5%)	Purge Rate	Purge Volume	Size	Fill Rate	Initial Reading	End Reading		
							Intial	Final											
SVMP-16-01 (03292016)	SVMP-16-01	3/29/16	ATL	37320	1 L	Summa	-29	-5	6571	BB	80 ml/min	200 ml/min	2 L	1 L	200 ml/min	0 ppm (pass)	0 ppm (pass)	0948	0959
SVMP-16-02 (03292016)	SVMP-16-02	3/29/16	ATL	A9805	1 L	Summa	-30	-5	248	BB	80 ml/min	200 ml/min	2 L	1 L	200 ml/min	0 ppm (pass)	0 ppm (pass)	1031	1044

Meteorological Data

Date	Time	Temp. (ºF)		Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
		Indoor	Outdoor				
3/29/2016	0912	NA	29	69	10	30.34	0
3/29/2016	1022	NA	39	64	9	30.38	0

Notes

SVMP-16-01: CH4: 0.0%; CO2: 0.6%; O2: 20.2%; CH4 LEL: 0%; PID: 0.9 ppm. Shut in test on sample train passed prior to sampling.

SVMP-16-02: CH4: 0.0%; CO2: 0.1%; O2: 20.6%; CH4 LEL: 0%; PID: 0.1 ppm. Shut in test on sample train passed prior to sampling.

BB = Blue Body ATL = AirToxics, Ltd., Folsom, CA

ARCADIS Design & Consultancy for natural and built assets

Air/Vapor Sampling Form

Client: FORD

Location: Livonia Transmission Plant

Project No.: MI001321.0001.00002

Sample ID	Location	Start Date	Lab	Tenax Tube Information		Purging		Leak/Tracer Test			GEM Readings (Pre-sample)				PID (ppm)	GEM Readings (Post-sample)				Time
				Tube ID	Volume of Air Drawn Through	Purge Rate	Purge Volume	Shroud Reading	Initial Reading	End Reading	CH4 (%)	CO2 (%)	O2 (%)	CH4 (LEL) (%)		CH4 (%)	CO2 (%)	O2 (%)	CH4 (LEL) (%)	
SVMP-16-03	ATNPC building	6/9	ATL	G0152248	120 ~~60 mL~~	100 mL/min	1,100 mL	34.2%	0.0	0.0					0.9	0.0	7.0	7.3	0.0%	1430
SVMP-16-05	ATNPC building	6/9	ATL	G0143404	~~60 mL~~	100 mL/min	950 mL	43.8%	0.0	0.0					0.0	1.3	5.2	0.1	26%	1445
SVMP-16-04	ATNPC building	6/10	ATL	G0143780	~~60 mL~~	100 mL/min	50 mL	38.3%	0.0	0.0					0.0	0.0	7.5	5.2	0.0%	0945
SVMP-16-06	ATNPC building	6/10	ATL	G0160972	~~60 mL~~	100 mL/min	110 mL	33.4%	0.0	0.0					0.2	0.0	8.1	0.0	0.0	1000
SVMP-16-07	ATNPC building	6/10	ATL	G0149175	~~60 mL~~	100 mL/min	100 mL	55.6%	0.0	0.0					0.7	0.0	9.7	6.9	0.0	1010
SVMP-16-08	ATNPC building	6/10	ATL	G0153856	~~60 mL~~	100 mL/min	110 mL	48.1%	0.0	0.0					0.2	0.0	7.9	7.0	0.0	1025
SVMP-16-09	ATNPC building	6/10	ATL	G0132057	120 ~~60 mL~~	100 mL/min	110 mL	31.0	0.0	0.0					0.1	0.0	2.5	17.1	0.0	1035

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
6/9	1430	NA	70F	39%	VRB(4)	30.07	0"
6/10	0900	NA	65 F	73%	E(5)	30.06	0"

General Notes:

M. Cloudy

P. Cloudy

ATL = AirToxics, Ltd., Folsom, CA; FT= Fibertec

ARCADIS

Air/Vapor Sampling Form

Client: Ford

Location: Livonia, MI

Project No.: ~~M1001321.0001.00003~~ M100138C.0001.00002

Sample ID	Location	Start Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial(−)	Pressure (in Hg) Final(−)	Flow Controller No.	Flow Controller Type	Flow Rate (±5%) mL/min	Purging Purge Rate ±5%	Purging Purge Volume	Tedlar Bag Size mL	Tedlar Bag Fill Rate mL/min	Leak/Tracer Test (ppm) Initial Reading	Leak/Tracer Test (ppm) End Reading	Start Time	End Time
SVMP-1-3.5	34965 Standish	6/8/17	ATL	1L2769	1L	Summa	30	5	21dde	BB	40	50	1L	500	50	0	0	1607	1634
SVMP-1-7	" "	"	ATL	1L2571	"	"	-29	5	22323	BB	"	"	"	"	"	0	0	1712	1738
SVMP-2-4.5	34963 Standish	6/9/17	ATL	1L1660	"	"	-29.5	5	21502	BB	"	"	"	"	"	0	0	1026	1057
SVMP-2-8.5	" "	"	ATL	1L2624	"	"	28	5	22324	BB	"	"	"	"	"	0	0	1132	1200
SVMP-3-3.5	34851 Standish	6/12/17	ATL	1L1789	"	"	-30	5	21042	BB	"	"	"	"	"	50	75	1306	1340
SVMP-3-7	" "	"	ATL	1L2623	"	"	-29.5	5	21987	BB	"	"	"	"	"	0	0	1410	1436
SVMP-4-3.5	11850 Boston Post	"	ATL	1L2323	"	"	-30	5	21163	BB	"	"	"	"	"	0	0	1515	1553
SVMP-5-4.5	34851 Wadsworth	"	ATL	1L2301	"	"	-30	5	22791	BB	"	"	"	"	"	0	0	1634	1705
SVMP-6-4.5	34935 Wadsworth	6/13/17	ATL	1L3016	"	"	-30	5	21631	BB	"	"	"	"	"	0	0	0954	1030
SVMP-7-3.5	34965 Wadsworth	"	ATL	1L1999	"	"	-30	5	21140	BB	"	"	"	"	"	0	0	1214	1249
SVMP-11-3.5	12124 Boston Post	"	ATL	1L2981	"	"	-30	5	22771	BB	"	"	"	"	"	0	0	1328	1357
SVMP-12-3.5	12100 Boston Post	"	ATL	1L2860	"	"	-29.5	5	21250	BB	"	"	"	"	"	0	0	1509	1542
SVMP-10-3	34851 Beacon	"	ATL	1L2788	"	"	-29	5	20691	BB	"	"	"	"	"	0	1475	1027	11057
SVMP-29-3.5	34996 Standish	6/14/17	ATL	1L2710	"	"	-29	5	21715	BB	"	"	"	"	"	0	0	1001	1030
SVMP-29-7.5	" "	"	ATL	1L2705	"	"	-30	5	21310	BB	"	"	"	"	"	0	0	1056	1133
			ATL							BB									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity %	Wind (mph)	Press. (in.)	Precip. (in.)
6/8/17	1624	—	80.3	29.1	1.0	29.19	0
6/12/17	1322	—	97.4	35.1	1.8	29.28	0
6/13/17	1401	—	96.3	37.2	1.4-3.3	29.26	0

Notes

BB = Blue Body

ATL = AirToxics, Ltd., Folsom, CA

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SVMP-1-3.5	0.0	0.0	1.3	19.7	0	—	P
SVMP-1-7	0.0	0.0	0.9	19.4	0	—	P
SVMP-2-4.5	0.0	0.0	4.8	17.4	0	—	P
SVMP-2-8.5	0.0	0.0	6.7	16.3	0	—	P
SVMP-3-3.5	0.0	0.0	0.3	20.6	0	—	P
SVMP-3-7	0.0	0.0	0.4	21.2	0	—	P
SVMP-4-3.5	0.0	0.0	0.6	20.1	0	—	P
SVMP-5-4.5	0.0	0.0	0.2	22.0	0	—	P
SVMP-6-4.5	0.0	0.0	0.5	20.8	0	—	P
SVMP-7-3.5	0.0	0.0	1.2	20.5	0	—	P
SVMP-11-3.5	0.0	0.0	0.3	21.1	0	—	P
SVMP-12-3.5	0.0	0.0	0.2	21.2	0	—	P
SVMP-10-3	0.0	0.0	0.2	20.1	0	—	P
SVMP-29-3.5	0.0	0.0	0.6	20.5	0	—	P
SVMP-29-7.5	0.0	0.0	0.9	20.8	0	—	P

ARCADIS

Air/Vapor Sampling Form

Client: Ford

Location: Livonia, MI

Project No.: ~~MI001321.0001.00003~~ MI001386.0001.00002

Sample ID	Location	Start Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial (-)	Pressure (in Hg) Final (-)	Flow Controller No.	Flow Controller Type	Flow Rate (±5%) mL/min	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate mL/min	Leak/Tracer Test (ppm) Initial Reading	Leak/Tracer Test (ppm) End Reading	Start Time	End Time
SUMP-30-4	11775 Boston	6/14/17	ATL	1L3010	1L	Summa	30	5	21723	BB	40	50	1L	500	50	0	0	1336	1407
SUMP-31-5.5	34935 Woodworth		ATL	1L1504	"	"	30	5	22755	BB	"	"	"	"	"	0	0	1514	1545
SUMP-9-4	34921 Beacon	↓	ATL	1L1620	"	"	27	5	21732	BB	"	"	"	"	"	0	0	1639	1708
SUMP-32-3	34990 Beacon	6/15/17	ATL	1L2407	"	"	29	5	20680	BB	"	"	"	"	"	0	0	1101	1127
SUMP-32-6	" "	"	ATL	14822	"	"	28.5	5	22763	BB	"	"	"	"	"	0	0	1159	1226
SUMP-33-4	34940 Beacon	"	ATL	1L2387	"	"	29	5	21914	BB	"	"	"	"	"	0	0	1442	1509
SUMP-34-4	12089 Boston	"	ATL	1L2679	"	"	-28	5	24985	BB	"	"	"	"	"	0	0	1557	1628
SUMP-36-4	34380 Capitol	6/16/17	ATL	1L1650	"	"	-25	5	21075	BB	"	"	"	"	"	0	0	0958	1032
SUMP-37-2.5	34424 Beacon	"	ATL	1L1730	"	"	-30	5	21694	BB	"	"	"	"	"	0	0	1133	1205
SUMP-17-2	34424 Beacon	"	ATL	1L2412	"	"	-29.5	5	21621	BB	"	"	"	"	"	4075	2925	1253	1324
SUMP-18-3	34367 Capitol	"	ATL	1L1518	"	"	-29	5	22760	BB	"	"	"	"	"	0	0	1438	1507
SUMP-19-3	34450 Capitol	"	ATL	1L1933	"	"	-29	5	21504	BB	"	"	"	"	"	0	0	1553	1621
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
6/15/17	1231	—	95.6	38.1	0.9	29.21	0
6/16/17							

Notes

BB = Blue Body

ATL = AirToxics, Ltd., Folsom, CA

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SUMP-30-4	0.0	0.0	0.4	20.9	0	—	P
SUMP-31-5.5	0.0	0.0	1.2	19.7	0	—	P
SUMP-9-4	0.0	0.0	0.3	21.2	0	—	P
SUMP-32-3	0.0	0.0	1.6	19.5	0	0.0	P
SUMP-32-6	0.0	0.0	1.3	19.7	0	0.4	P
SUMP-33-4	0.0	0.0	5.7	16.9	0	—	P
SUMP-34-4	0.0	0.0	0.9	20.3	0	—	P
SUMP-36-4	0.0	0.0	1.4	19.5	0	—	P
SUMP-37-2.5	0.0	0.0	7.2	15.8	0	—	P
SUMP-17-2	0.0	0.0	1.3	19.5	0	—	P
SUMP-18-3	0.0	0.0	2.6	18.6	0	—	P
SUMP-19-3	0.0	0.0	6.4	14.8	0	—	P

ARCADIS

Air/Vapor Sampling Form

Client: Ford

Location: Livonia, MI

Project No.: ~~MI001321.0001.00003~~ MI001386.0001.00002

Sample ID	Location	Start Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%) mL/min	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate mL/min	Leak/Tracer Test Initial Reading	Leak/Tracer Test End Reading	Start Time	End Time
SUMP-20-3	12088 Brewster	6/19/17	ATL	IL2351	1L	Sum	-30	-5	21683	BB	40	50	1L	500	50	0	850	1014	1048
SUMP-21-2	Brewster/Beacon	"	ATL	IL2402	"	"	-30	-5	21713	BB	"	"	"	"	"	0	0	1119	1149
SUMP-22-3	N. on Rosati	"	ATL	IL2508	"	"	-29.5	-5	20d04	BB	"	"	"	"	"	0	0	1323	1355
SUMP-23-3	middle Rosati	"	ATL	IL3051	"	"	-28	-5	21802	BB	"	"	"	"	"	0	0	1453	1518
SUMP-24-4	E. on Rosati	"	ATL	IL1981	"	"	-27	-5	21110	BB	"	"	"	"	"	0	0	1557	1625
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									
			ATL							BB									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
6/19/17	1350	—	86.1	39.9	1.3	29.09	0

Notes

BB = Blue Body

ATL = AirToxics, Ltd., Folsom, CA

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SUMP-20-3	0.0	0.0	6.3	15.7	0	—	P
SUMP-21-2	0.0	0.0	2.5	19.8	0	—	P
SUMP-22-3	0.0	0.0	0.9	20.3	0	—	P
SUMP-23-3	0.0	0.0	1.4	20.2	0	—	P
SUMP-24-4	0.0	0.0	28	14.4	0	—	P

ARCADIS

Air/Vapor Sampling Form

Client: Ford
Location: Livonia, MI
Project No.: ~~MI001321.0001.00003~~ M10013B6.0001.00002

Sample ID (s)	Location	Start Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial (-)	Pressure (in Hg) Final (-)	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test End Reading	Start Time	End Time
SVMP-25-3(0619?)	12499 Belden Ct	6/19/17	ATL	IL2446	1L	Summa	30	5	20705	BB	40	50	1L	500	50	0	0	1005	1036
SVMP-25-6	12499 Belden Ct	6/19/17	ATL	IL2430	1L	Summa	28	5	22758	BB	↓	↓	↓	↓	↓	0	0	1100	1127
SVMP-26-4	11895 Belden Ct	6/19/17	ATL	IL1552	1L	Summa	30	5	20840	BB	↓	↓	↓	↓	↓	0	0	1325	1349
SVMP-27-4.5	11873 Belden Ct	6/19/17	ATL	3358	1L	Summa	28	5	22081	BB	↓	↓	↓	↓	↓	0	0	1443	1510
SVMP-28-3	11771 Belden Ct	6/19/17	ATL	IL3078	1L	Summa	30	←	21718	BB	↓	↓	↓	↓	↓	0	0	1550	1616
SVMP-8-3.5	34969 Beacon	6/15/17	ATL	IL2530	1L	Summa	29	4	21281	BB	40	50	1L	500	50	0	0	1450	1521
SVMP-35-4	34965 Wadsworth	6/15/17	ATL	IL2926	1L	Summa	30	5	21055	BB	↓	↓	↓	~~500~~	~~50~~	0	0	1631	1658
SVMP-16-2	34550 Beacon	6/16/17	ATL	3043	1L	Summa	30	5	21162	BB	↓	↓	↓	↓	↓	450ppm	1725ppm	1003	1037
SVMP-15-2	34591 Beacon		ATL	IL1848	1L	Summa	30	5	21903	BB	↓	↓	↓	↓	↓	245ppm	3800ppm	1157	230
SVMP-14-2	34669 Beacon		ATL	IL2897	1L	Summa	30	5	20637	BB	↓	↓	↓	↓	↓	225ppm	0ppm	1354	1425
SVMP-13-2	-	↓	ATL	IL2671	1L	Summa	28	5		BB	↓	↓	↓	↓	↓	250ppm	470ppm	1517	1543
			ATL							BB	↓	↓	↓	↓	↓				
			ATL							BB	↓	↓	↓	↓	↓				
			ATL							BB	↓	↓	↓	↓	↓				
			ATL							BB	↓	↓	↓	↓	↓				
			ATL							BB	↓	↓	↓	↓	↓				

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
6/19/17	1104		74.8	39.2	1.6		
6/15/17	1428		162.3	49.6	0.0		
6/16/17	1230		86.8	32.6	3.9		

Notes

BB = Blue Body

ATL = AirToxics, Ltd., Folsom, CA

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SVMP-25-3	0.0	0.0	3.2	18.0	0	0.0	P
SVMP-25-6	0.0	0.0	2.4	18.4	0	0.0	P
SVMP-26-4	0.0	0.0	3.6	17.0	0	0.0	P
SVMP-27-4.5	0.0	0.0	3.8	20.3	0	0.0	P
SVMP-28-3	0.0	0.0	1.8	21.0	0	0.0	P
SVMP-8-3.5	0.0	0.0	2.5	19.8	0	0.0	P
SVMP-35-4	0.0	0.0	1.1	21.4	0	0.0	P
SVMP-16-2	0.0	0.0	0.9	20.8	0	0.0	P
SVMP-15-2	0.0	0.0	0.8	21.4	0	0.0	P
SVMP-14-2	0.0	0.0	0.9	19.5	0	0.0	P
SVMP-13-2	0.0	0.0	0.6	20.0	0	0.0	P

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.00002

Sample ID	Location	Start Date	Lab	Canister					Flow Controller			Purging		Tedlar Bag		Leak/Tracer Test		Start Time	End Time
				No.	Size	Type	Pressure (in Hg) Intial	Final	No.	Type	Flow Rate (±5%)	Purge Rate	Purge Volume	Size	Fill Rate	Initial Reading	End Reading		
SVMP-22	Rosati	9/18/17	ATL	IL30601	1L	Summa	-28.0	-5.0	22700	BB	40	50	1L	500	50	[illegible]0	0	9:19	9:39
SVMP-23	Rosati	9/18/17	ATL	IL2996	1L	Summa	-30.0	-5.0	21978	"	40	50	1L	500	50	0	0	1230	1258
SVMP-24	Rosati	9/18/17	ATL	IL2482	1L	Summa	-30.0	-5.0	20664	"	40	50	1L	500	50	0	0	1336	1404
SVMP-18	34367 Capitol	9/18/17	ATL	IL2318	1L	Summa	-30.0	-5.0	21035	"	"	" "	" "	"	"	0	0	1450	1520
SVMP-19	34401 Capitol	9/18/17	ATL	IL2849	1L	Summa	-27.0	-5.0	23265	"	"	" "	" "	"	"	0	0	1604	1626
SVMP-20	12088 Capitol	9/19/17	ATL	IL2710	1L	Summa	-29.0	-5.0	23279	"	40	50	1L	500	50	0	0	0849	0914
SVMP-16	34550 Beacon	9/19/17	ATL	1360	1L	Summa	-30.0	-5.0	23194	"	"	"	"	"	"	0	0	1005	1033
SVMP-14	34669 Beacon	9/19/17	ATL	IL2709	1L	Summa	-30.0	-5.0	20693	"	"	"	"	"	"	0	0	1110	1141
SVMP-9	34921 Beacon	9/20/17	ATL	IL3015	1L	Summa	-27.0	-5.0	23206	"	"	"	"	"	"	0	0	0820	0850
SVMP-7	34965 Wadsworth	9/20/17	ATL	IL2705	1L	Summa	-29.0	-5.0	22708	"	"	"	"	"	"	0	0	0930	0959
SVMP-5	34851 Wadsworth	9/20/17	ATL	IL1754	1L	Summa	-28.0	-5.0	21985	"	"	"	"	"	"	0	0	1053	1126
SVMP-2D	34963 Standish	9/20/17	ATL	IL2303	1L	Summa	-28.0	-5.0	20782	"	"	"	"	"	"	0	0	1241	1304
SVMP-2S	34963 Standish	9/20/17	ATL	IL2596	1L	Summa	-28.0	-5.0	21072	"	"	"	"	"	"	0	0	1321	1347
SVMP-25D	12555 Belden	9/21/17	ATL	IL2741	1L	Summa	-30.0	-5.0	23792	"	"	"	"	"	"	0	0	0930	1001
SVMP-25S	12555 Belden	9/21/17	ATL	373163	1L	Summa	-29.0	-4.0	21297	"	"	"	"	"	"	0	0	1023	1053
SVMP-27	11873 Belden	9/21/17	ATL	IL1944	1L	Summa	-30.0	-5.0	23260	"	"	"	"	"	"	0	0	1147	1220

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)
9/18/17	1100	—	68°F	—	0	—	—
9/19/17	1100	—	72°F	—	3	—	—
9/21/17	1220	—	83°F	—	6	—	—

Notes

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SVMP-22	0.0	0.0	1.8	19.8	0	0.5	Y
SVMP-23	0.0	0.0	0.1	15.8	0	0.4	Y
SVMP-24	0.0	0.0	2.5	18.9	0	0.7	Y
SVMP-18	0.0	0.0	5.2	16.8	0	0.4	Y
SVMP-19	0.0	0.0	6.4	16.3	0	0.4	Y
SVMP-20	0.0	0.0	6.0	16.1	0	0.1	Y
SVMP-16	0.0	0.0	1.2	19.8	0	0.1	Y
SVMP-14	0.0	0.0	1.5	19.5	0	0.0	Y
SVMP-9	0.0	0.0	0.0	20.8	0	0.0	Y
SVMP-7	0.0	0.0	0.0	20.8	0	0.0	Y
SVMP-5	0.0	0.0	0.2	20.7	0	0.0	Y
SVMP-2D	0.0	0.0	1.7	19.3	0	0.0	Y
SVMP-2S	0.0	0.0	0.9	20.1	0	0.0	Y
SVMP-25D	0.0	0.0	5.4	14.0	0	0.0	Y
SVMP-25S	0.0	0.0	4.0	15.5	0	0.0	Y
SVMP-27	0.0	0.0	1.1	19.2	0	0.0	Y

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.00002

Sample ID	Location	Start Date	Lab	Canister					Flow Controller			Purging		Tedlar Bag		Leak/Tracer Test		Start Time	End Time
				No.	Size	Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	No.	Type	Flow Rate (±5%)	Purge Rate	Purge Volume	Size	Fill Rate	Initial Reading	End Reading		
SUMP-21	Brewster St	9-19-17	ATL	IL1849	1L	Summa	-30	-5	21656	BB	40 ml/min	50	1L	500	50	0	0	855	920
SUMP-17	Beacon St	9-19-17	ATL	IL2798	"	"	-28	-5	23226	"	"	"	"	"	"	0	0	948	1013
SUMP-15	34591 Beacon St	9-19-17	ATL	IL2890	"	"	-30	-5	23227	"	"	"	"	"	"	0	0	1040	1107
SUMP-13	34787 Beacon St	9-19-17	ATL	IL2658	"	"	-30	-5	21113	"	"	"	"	"	"	0	0	1155	1223
SUMP-12	12100 Boston Post	9-19-17	ATL	IL1769	"	"	-29	-5	21488	"	"	"	"	"	"	0	0	1248	1313
SUMP-10	34851 Beacon St	9-20-17	ATL	IL1928	"	"	-29	-5	23241	"	"	"	"	"	"	0	0	827	855
SUMP-8	34969 Beacon St	9-20-17	ATL	IL1763	"	"	-27	-5	22081	"	"	"	"	"	"	0	0	925	955
SUMP-6	34935 Woodsworth	9-20-17	ATL	IL1710	"	"	-30	-5	21146	"	"	"	"	"	"	0	0	1020	1048
SUMP-4	11866 Boston Post	9-20-17	ATL	IL1762	"	"	-28	-5	21649	"	"	"	"	"	"	0	0	1143	1208
SUMP-1-7	34965 Standish	9-20-17	ATL	IL2757	"	"	-29	-5	21508	"	"	"	"	"	"	0	0	1235	1305
SUMP-1-3.5	34965 Standish	9-20-17	ATL	IL3029	"	"	-27	-5	21910	"	"	"	"	"	"	0	0	1320	1348
SUMP-3-7	34851 Standish	9-20-17	ATL	~~IL3002~~ IL2978 SUP 9-21-17	"	"	-29	-5	~~23209~~ 23220 SUP 9-21-17	"	"	"	"	"	"	0	0	915	942
SUMP-3-3.5	34851 Standish	9-20-17	ATL	IL2922	"	"	-30	-5	23248	"	"	"	"	"	"	0	0	1002	1033
SUMP-26	11895 Baldwin	9-21-17	ATL	IL2484	"	"	-29	-5	23234	"	"	"	"	"	"	0	0	1117	1143
SUMP-28	11723 Baldwin	9-21-17	ATL	IL2612	"	"	-30	-5	23872	"	"	"	"	"	"	0	0	1203	1229
			ATL																

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Press. (in.)	Precip. (in.)

Notes

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	CH4 LEL %	PID (ppm)	Shut in test pass?
SUMP-21	0.0	0.0	1.8	19.3	0.0	0.0	Yes
SUMP-17	0.0	0.0	4.9	16.8	0.0	0.0	Yes
SUMP-15	0.0	0.0	0.7	20.3	0.0	0.0	Yes
SUMP-13	0.0	0.0	1.2	18.6	0.0	0.0	Yes
SUMP-12	0.0	0.0	1.2	19.9	0.0	0.0	Yes
SUMP-10	0.0	0.0	0.4	19.9	0.0	0.0	Yes
SUMP-8	0.0	0.0	1.4	19.6	0.0	0.0	Yes
SUMP-6	0.0	0.0	0.9	20.1	0.0	0.0	Yes
SUMP-4	0.0	0.0	1.0	20.0	0.0	0.0	Yes
SUMP-1-7	0.0	0.0	1.7	19.2	0.0	0.0	Yes
SUMP-1-3.5	0.0	0.0	1.2	19.3	0.0	0.0	Yes
SUMP-3-7	0.0	0.0	0.8	19.9	0.0	0.0	Yes
SUMP-3-3.5	0.0	0.0	0.6	20.4	0.0	0.0	Yes
SUMP-26	0.0	0.0	11.4	8.6	0.0	0.0	Yes
SUMP-28	0.0	0.0	3.4	16.7	0.0	0.0	Yes

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.20000

Sample ID	Location	Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test Shroud Reading	Leak/Tracer Test End Reading	Shut In Test Passed?	Sample Start Time	Sample End Time
SVMP-22-3(111717)	Rosati	11/17/17	ATL	1L2741	1L	Summa	-27	-5	21274	BB	40	50	1L			30.3	0	0	Y	1056	1124
SVMP-23-3(111717)	Rosati	11/17/17	ATL	1L1642	1L	Summa	-29	-5	21157	BB	40	50	1L			0	30.2	0	Y	1155	1218
SVMP-24-4(111717)	Rosati	11/17/17	ATL	1L2972	1L	Summa	-30	-5	21658	BB	40	50	1L			800ppm	30.6	0	Y	1310	1337
SVMP-19-3(111717)	34401 Capitol	11/17/17	ATL	1L2457	1L	Summa	-28	-5	23252	BB	40	50	1L			0	30.1	0	Y	1438	1503
SVMP-18-3(111717)	34367 Capitol	11/17/17	ATL	1L3049	1L	Summa	-28	-5	23170	BB	40	50	1L			0	31.5	0	Y	1532	1600
			ATL																		
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Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Barometric Press. (in.)	Precip. (in.)
4/17/17	1056	—	37°F	73%	9 ESE	30.24	—
11/17/17	1401	—	38°F	80%	11 SE	30.10	0.00

Notes

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	LEL %
SVMP-22-3	—	0.0	1.3	20.2	0
SVMP-23-3	—	0.0	1.1	20.6	0
SVMP-24-4	—	0.0	2.6	19.5	0
SVMP-19-3	—	0.0	7.0	15.0	0
SVMP-18-3	—	0.0	4.3	17.6	0

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.20000

Sample ID	Location	Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test Shroud Reading	Leak/Tracer Test End Reading	Shut In Test Passed?	Sample Start Time	Sample End Time
~~SVMP-20-3~~	~~12008 Capitol~~	~~11/20/17~~	ATL	~~1161~~	~~1L~~	~~Summa~~											~~40.2~~		~~Y~~		
SVMP-21-2	Capitol & Beacon	11/20/17	ATL	1161	1L	Summa	-28	-5	21175	BB	40	100ml/m	1L			0	31.6	0	Y	1112	1132
SVMP-17-2	34424 Beacon	11/20/17	ATL	IL1701	1L	Summa	-30	-25	21570	BB	40	100ml/min	1L			0	41.8	—	Y	1247	1252
SVMP-16-2	34550 Beacon	11/20/17	ATL	IL1537	1L	Summa	-25	-5	20616	BB	40	100ml/min	1L			0	37.6	0	Y	1341	1402
SVMP-15-2	34591 Beacon	11/20/17	ATL	IL2556	1L	Summa	-28	-5	2311	BB	40	100ml/min	1L			0	30.1	0	Y	1441	1501
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			ATL																		

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Barometric Press. (in.)	Precip. (in.)
11/20/17	1006	—	36°F	67%	SW5	30.01	0.00
11/20/17	1227	—	43°F	55%	W18	29.94	0.01

Notes

SVMP-20 Saturated, water came out during purging.
SVMP-17 Saturated

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	%
SVMP-21-2	—	0.0	0.8	19.9	0.0%
SVMP-17-2	—	—	—	—	—
SVMP-16-2	—	0.0	0.3	20.5	0.0%
SVMP-15-2	—	0.0	0.1	20.1	0.0%

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.20000

Sample ID	Location	Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test Shroud Reading	Leak/Tracer Test End Reading	Shut In Test Passed?	Sample Start Time	Sample End Time
SVMP-14-2(112117)	34669 Beacon	11/21/17	ATL	IL2426	1L	Summa	-30	-5	23326	BB	40	100ml/min	1L			0	32.3	0	Y	0829	0902
SVMP-13-2(112117)	Beacon+Boston Post	11/21/17	ATL	IL2875	1L	Summa	-27	-5	23154	BB	40	100ml/min	1L			0	30.6	0	Y	0956	1030
SVMP-10-3(112117)	34851 Beacon	11/21/17	ATL	IL2509	1L	Summa	-26.5	-4.5	23355	BB	40	100 ml/min	1L			0	31.2	0	Y	1120	1145
SVMP-12-3.5(112117)	12100 Boston Post	11/21/17	ATL	IL1735	1L	Summa	-28	-5	22758	BB	40	100ml/min	1L			0	32.6	0	Y	1310	1334
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Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Barometric Press. (in.)	Precip. (in.)
11/21/17	0830	—	41°F	63%	4SW	29.72	0.00
11/21/17	1315	—	48°F	57%	8W	29.74	0.00

Notes

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	%
SVMP-14-2	—	0.0	1.4	19.1	001
SVMP-13-2	—	0.0	2.6	11.8	001
SVMP-10-3	—	0.0	0.5	19.8	000
SVMP-12-3.5	—	0.0	1.0	19.9	000

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.20000

Sample ID	Location	Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test Shroud Reading	Leak/Tracer Test End Reading	Shut In Test Passed?	Sample Start Time	Sample End Time
SVMP-1S-3.5	34965 Stand.	11/17/17	ATL	2985	1L	~~SUMA~~ 20 min	-30	-5	~~23790~~ ~~1025~~ 1 day	20 min	40 mL/m	100 mL	225			0.0	30.2	0.0	Y	~~0945~~	1015
SVMP-1D-7	34965 Stand.	11/17/17	ATL	2976	1L	SUMA	-27	-5	21995	20 min	40 mL	100 mL	330			0.0	36.8	0.0	Y	1055	1115
SVMP-2S-4.5	34963 Stand.	11/17/17	ATL	1708	1L	SUMA	-30	-5	23805	20 min	40 mL	100 mL	270			0.0	34.5	0.0	Y	1145	1210
SVMP-2D-8.5	34963 Stand	11/17/17	ATL	2415	1L	SUMA	-30	-5	~~21267~~	20 min	40 mL	100 mL	360			0.0	31.5	0.0	Y	1245	1310
SVMP-3S-3.5	34851 Stand	11/17/17	ATL	2610	1L	SUMA	-30	-1	~~21606~~	20 min	40 mL	100 mL	210			0.0	30.1	0.0	Y	1510	1550
SVMP-3D-7	34851 Stand	11/17/17	ATL	2904	1L	SUMA	-27	-5.5	23118	20 min	40 mL	100 mL	360			0.0	51.3	0.0	Y	1615	1640
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Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Barometric Press. (in.)	Precip. (in.)
11/17/17	0830	NA	36	~~78~~ %	1 (ESE)	30.25	0.0
11/17/17	1700	NA	41	~~82~~ %	~~6 (ESE)~~	29.99	0.0

Notes

overcast
overcast

Air Parameters

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	LEL %
SVMP-1S		0.0	1.7	21.1	~~76.9~~ 0 (VB) 3-27-18
SVMP-1D		0.0	2.4	20.0	~~77.3~~ 0 (VB) 3-27-18
SVMP-2S		0.0	9.3	7.7	~~83.1~~ 0 (VB) 3-27-18
SVMP-2D		0.0	10.5	5.4	~~83.8~~ 0 (VB) 3-27-18
SVMP-3S		0.0	0.7	21.4	~~77.8~~ 0 (VB) 3-27-18
SVMP-3D		0.0	0.9	21.1	~~77.9~~ 0 (VB)

NOTE: PREVIOUS NUMBERS WROTE IN ERROR, PREVIOUSLY REFERENCED BAL 0/0

ARCADIS

Air/Vapor Sampling Form

Client: Ford LTP
Location: Livonia, Michigan
Project No.: MI001386.0001.20000

Sample ID	Location	Date	Lab	Canister No.	Canister Size	Canister Type	Pressure (in Hg) Intial	Pressure (in Hg) Final	Flow Controller No.	Flow Controller Type	Flow Rate (±5%)	Purging Purge Rate	Purging Purge Volume	Tedlar Bag Size	Tedlar Bag Fill Rate	Leak/Tracer Test Initial Reading	Leak/Tracer Test Shroud Reading	Leak/Tracer Test End Reading	Shut In Test Passed?	Sample Start Time	Sample End Time
SVMP-4-3.5	11850 Boston Post	11/20/17	ATL	2978	1 L	Suma	-30	-5	21508	20 min	40 mL	100 mL	210			0.0	32.5	0.0	✓	10:30	10:55
SVMP-5-4.5	34851 Wadsworth	11/20/17	ATL	1819	1 L	Suma	-30	-5	21080	20 min	40 mL	100 mL	270			0.0	31.9	0.0	✓	11:30	11:55
SVMP-6-4.5	34935 Wads	11/20/17	ATL	2977	1 L	Suma	-30	-5.5	23179	20 min	40 mL	100 mL	240			0.0	30.0	0.0	✓	12:25	13:05
SVMP-7-3.5	34965 Wads	11/20/17	ATL	1780	1 L	Suma	-30	-6	21109	20 min	40 mL	100 mL	180			0.0	32.1	0.0	✓	13:55	14:20
SVMP-8-3.5	34969 Beacon	11/20/17	ATL	1530	1 L	Suma	-30	-6	22719	20 min	40 mL	100 mL	180			0.0	31.2	0.0	✓	14:45	15:20
SVMP-9-4	34921 Beacon	11/20/17	ATL	2406	1 L	Suma	-29	-5.5	23211	20 min	40 mL	100 mL	210			0.0	38.2	0.0	✓	15:45	16:10
SVMP-255-3	12555 Belden	11/21/17	ATL	2442	1 L	SUMA	-23	-5	21295	20 min	40 mL	100 mL	180			0.0	30.9	0.0	✓	8:25	8:55
SVMP-25D-6	12555 Belden	11/21/17	ATL	3014	1 L	Suma	-26	-5	21072	20 min	40 mL	100 mL	270			0.0	31.2	0.0	✓	9:25	9:50
SVMP-26-4	11895 Belden	11/21/17	ATL	2604	1 L	SUMA	-26	-5	23115	20 min	40 mL	100 mL	210			0.0	33.2	0.0	✓	11:15	11:40
SVMP-27-4.5	11873 Belden	11/21/17	ATL	1544	1 L	SUMA	-28	-5	23140	20 min	40 mL	100 mL	225			0.0	35.8	0.0	✓	12:25	1300
SVMP-28-3	11771 Belden	11/21/17	ATL	1042	1 L	SUMA	-26.5	-5	22811	20 min	40 mL	100 mL	180			0.0	33.0	0.0	✓	1335	1355
			ATL																		
			ATL																		
			ATL																		
			ATL																		

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Humidity	Wind (mph)	Barometric Press. (in.)	Precip. (in.)
11/20/17	830	NA	29	78	SW(12)	30.65	0
11/20/17	1630	NA	48	46	SW(20)	29.41	0
11/21/17	830	NA	39	65	SW(11)	29.73	0
11/21/17	1400	NA	46	57	SW(12)	~~29.76~~ 29.76"	0

Notes

Sunny
Sunny
Partly Sunny
Cloudy

Air Parameters

~~TEL~~ KB 3-27-18

Location ID	CH4 % before	CH4 % after	CO2 %	O2 %	%	LEL %
SVMP-4		0.0	0.8	19.1	80.0	0
SVMP-5		0.0	0.5	20.9	78.5	0
SVMP-6		0.0	0.7	21.0	78.1	0
SVMP-7		0.0	1.3	19.7	79.1	0
SVMP-8		0.0	0.9	21.6	77.5	0
SVMP-9		0.0	0.7	21.6	77.5	0
SVMP-255-3		0.0	4.0	18.0	77.9	0
SVMP-25D-6		0.0	4.6	17.4	77.9	0
SVMP-26-4		0.0	12.0	5.6	82.4	0
SVMP-27-4.5		0.0	1.5	20.4	78.1	0
SVMP-28-4		0.0	2.3	16.2	81.3	0
					BAL	

NOTE: PREVIOUS NUMBERS WROTE IN ERROR, PREVIOUSLY REFERENCED BAL %

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001386.0001.20000**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used / Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** / Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-01S(021918)	34965 Standish	02/19/18	Pass	0	32.0%	0	Pass	200	50	IL1849	0940	-29	1005	-5	23346	
SVMP-01D(021918)	34965 Standish	2/19/18	Pass	0	31.8%	0	Pass	200	50	IL2956	1032	-27	1055	-5	23496	
SVMP-07-3.5(021918)	34965 Wadsworth	2/19/18	Pass	0	30.8%	0	Pass	200	50	IL2721	1225	-27	1250	-5	23120	
SVMP-19-3(022018)	34401 Capitol	2/20/18	Pass	0	31.2%	—*1	Pass	200	50	IL3086	0946	-30	0955	-7	23820	water in vault
SVMP-18-3(022018)	34367 Capitol	2/20/18	Pass	0	30.0%	0	Pass	200	50	IL3020	1052	-26	1125	-5	23145	
SVMP-23-3(022018)	Rosati	2/20/18	Pass	0	30.0%	0	Pass	200	50	IL1938	1426	-30	1503	-5	23261	

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
2/19/18	0929	—	34	86%	
2/20/18	1430	—	59	93%	

General Notes or Observations

Rain expected @ 1300

Rain began @ 1200 2/19/18

Total of 1.07" rain 2/20 @ 1430

*1 During 2nd helium trace testwater filled sample train.

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %	
SVMP-22-3(091817)	0.3	15.6	
SVMP-01S	1.8	18.5	
SVMP-01D	1.9	18.9	
SVMP-07	1.0	20.4	
SVMP-19	—	—	*1
SVMP-18	2.7	16.6	
SVMP-23			

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377	Project Name: Ford LTP - Residential VI Sampling
	Project Number: MI001386.0001.20000
Project Manager: Kris Hinskey Task Manager: Angela DeGrandis	Site Address: 36200 Plymouth Road Livonia, MI
Phone: 248-994-2240 Fax: 248-994-2241 Special Instructions:	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).
Helium Detector Used: Helium Leak Test Method: Bucket shroud	Summa Canister Size (1L, 2.7 L, 6L): 1 L with a 20-minute flow controller Lab: Eurofins

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-24-4(22118)	Rosati	2/21/18	P	0	33.3	0	Pass	200	80	2272	852	-29	917	-5	23110	
SVMP-06-4.5	34935 Wadsworth	2/21/18	P	0	31.2	0	Pass	200	80	1595	1110	-29	1132	-5	23187	
SVMP-05-4.5	34851 Wadsworth	2/21/18	P	0	30.0	0	Pass	200	80	2855	1211	-30	1241	-5	23430	
SVMP-04-3.5	18916 B.Post	2/21/18	P	0	36.6	0	Pass	200	80	2498	1329	-29	1353	-5	23462	

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure ~~in~~ mb
Example - 12/1/2017	0800	73	22	38	30.10
2/21/18	855	-	36	98	1025.7
2/21/18	1213	-	36	96	1301.5

General Notes or Observations

Raining during sample collection SVMP-24
Rain stopped @ 1080
Total Rain accumulation 0.50" 2/21/18

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-24	2.0	19.2
SVMP-06	0.4	20.8
SVMP-05	1.2	19.6
SVMP-04	1.6	16.2

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Project Number: **MI001386.0001.20000**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Site Address: **36200 Plymouth Road, Livonia, MI**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used / Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** / Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
~~SVMP-25(091817)~~	~~34963 STANDISH~~	~~9/14/18~~	~~PASS~~	~~0~~	~~30~~	~~0~~	~~PASS~~	~~180~~	~~200~~	~~IL2547~~	~~0945~~	~~-30~~				2-19-18
SVMP-25(021918)	34963 STANDISH	2/19/18	PASS	0	30	0	PASS	180	200	IL2547	0945	-30	1010	-5	~~17095~~ 23241	
SVMP-20(021918)	34963 STANDISH	2/19/18	PASS	0	30	0	PASS	240	40	IL2975	1100	-30	1130	-7	~~17294~~ 23299	2-19-18
SVMP-35(021918)	34851 STANDISH	2/19/18	PASS	0	30	0	PASS	240	40	TL625	1214	-30	1246	-6	23497	
SVMP-30(021918)	34851 STANDISH	2/19/18	PASS	0	30	0	PASS	240	40	IL1583	1447	-28	1511	-6	23494	

KRS 2-19-18

-8.5 -8.5 -7.5 -7.0

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
2/19/2018	1000	—	35°F	84	30.02

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-25	0.1	21.6
SVMP-20	0.0	21.6
SVMP-35	0.0	21.4
SVMP-30	0.0	21.2

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001386.0001.20000**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L) **1 L with a 20-minute flow controller** Lab **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-08-3.5(022018)	34969 CLARK	02/20/18	PASS	0	18	0	PASS	240	40	1L1684	928	-30	956	-6	23486	
SVMP-09-4.0(022018)	34921 CLARK	02/20/18	PASS	0	30	0	PASS	240	40	1L2615	1034	-29	1056	-5	23141	
SVMP-10-3.0(022018)	34851 CLARK	02/20/18	PASS	0	30	0	PASS	240	40	1L1820	1137	-27.5	1205	-5	23817	
SVMP-12-3.5(022018)	12100 BEACON	02/20/18	PASS	0	30	0	PASS	240	40	1L1660	1304	-30	1328	-5	23493	
SVMP-22-3.0(022018)	ROSATI	02/20/18	PASS	0	30	0	PASS	240	40	1L2801	1614	-29	1642	-6.5	23311	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
02/20/2018	920	-	52°F	97	29.99
02/20/2018	1617	—	59	94	30.00

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-08(022018)	0.3	20.8
SVMP-09-4.0(022018)	0.0	21.0
SVMP-10-3.0(022018)	0.1	20.9
SVMP-12-3.5(022018)	0.0	20.9
SVMP-22-3.0(022018)	0.0	21.0

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001386.0001.20000**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-25S-3.0(022118)	12555 BELDEN CT.	2-21-18	PASS	0	30	6	PASS	240	40	0000003049	0911	-29	0939	-5	23499	
SVMP-25D-6.0(022118)	12555 BELDEN CT.	2-21-18	PASS	0	30	0	PASS	240	40	IL1565	1005	-28.5	1031	-5	23502	
SVMP-26-4.0(022118)	11897 BELDEN CT	2-21-18	PASS	0	30	0	PASS	240	40	IL2301	1111	-30	1143	-5	23244	
SVMP-28-3.0(022118)	11771 BELDEN CT.	2-21-18	PASS	0	30	0	PASS	240	40	IL2831	1241	-30	1314	-6	23298	
SVMP-27-4.5(022118)	11875 BELDEN CT.	2-21-18	PASS	0	30	0	PASS	240	40	IL1902	1353	-30	1420	-5	23498	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
02/21/2018	0830	–	36	93	30.33
02/21/2018	1247	–	37	93	30.46

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-25S-3.0(022118)	0.2	20.9
SVMP-25D-6.0(022118)	0.0	21.0
SVMP-26-4.0(022118)	0.6	20.7
SVMP-28-3.0(022118)	0.1	21.1
SVMP-27-4.5(022118)	0.1	21.3

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** — Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used — Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** — Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-18-3(053018)	34367 Cap. Rd	5/30/18	Pass	0	36.6	0	Pass	120	60	2304	0930	-29.5	1000	-5	23436	
SVMP-24-4(053018)	Rosati	5/30/18	Pass	0	38.2	0	Pass	120	60	1681	1035	-29	~~1100~~ 1035	-4	23333	
SVMP-21-2(053018)	Beacon + Brewster	5/30/18	Pass	0	46.7	0	Pass	120	60	2672	1150	-30	1218	-5	23327	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5/30/18	0930	—	75°F	662	30.0

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-18-3	5.5	15.6
SVMP-24-4	3.1	17.5
SVMP-21-2	8.8	14.0

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L) **1 L with a 20-minute flow controller** Lab **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-22-3(052918)	ROSATI	5/29/18	——	SATURATED									1240			
SVMP-01D-7	34965 Standish	5/29/18	Pass	47.8 ↔ 0.0		0.0	Pass	120	60	2434	1215	-30	~~1245~~	-5	23130	
SVMP-01S-3.5	34965 Standish	5/29/18	Pass	0.0	42.3	0.0	Pass	120	60	1815	1252	-29	1320	-5	23827	
SVMP-02D-8.5	34901 Standish	5/29/18	Pass	0.0	39.8	0.0	Pass	120	60	2657	1415	-27	1440	-5	23724	
SVMP-02S-3.5	34901 Standish	5/29/18	Pass	0.0	37.6	0.0	Pass	120	60	3003	1452	-30	~~1459~~	-4	23530	
SVMP-03D-7	34851 Standish	5/29/18	Pass	0.0	36.2	0.0	Pass	120	60	2626	1608	-30	1636	-5	23483	
SVMP-03S-3.5	34851 Standish	5/29/18	Pass	0.0	34.7	0.0	Pass	120	60	1788	1642	-30	1705	-5	23574	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5/29/18	0945	—	81.1	57.8	29.27

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-01D-7	1.2	16.2
SVMP-01S-3.5	1.7	17.9
SVMP-02D-8.5	7.2	14.5
SVMP-02S-3.5	6.7	16.1
SVMP-03D-7	0.7	19.6
SVMP-03S-3.5	0.9	17.2

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used: MGD-2002 #8195 — Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** — Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-25N-6(052918)	12555 BELDEN CT	5/29/18	PASS	0	30	0	PASS	180	60	1L1693	1046	-28	1113	-5	23311	
SVMP-25S-3(052918)	12555 BELDEN CT	↓	PASS	0	30	0	PASS	180	60	2020	1123	-30+	1150	-5	23428	
SVMP-26-4(052918)	11895 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2861	1252	-29	1315	-5	23521	DUP-01(052918) COLLECTED
DUP-01(052918)	SVMP-26-4(052918)		PASS	0	30	0	PASS	180	60	1L1930	1252	-30+	1319	-5	23725	
SVMP-27-4.5(052918)	11873 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2985	1346	-29	1411	-5	23194	
SVMP-28-3(052918)	11723 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2503	1438	-29	1503	-5	23480	
SVMP-12-3.5(052918)	12100 BOSTON POST ST		PASS	0	30	0	PASS	180	60	1L1530	1529	-30+	1555	-5	23714	
SVMP-08-3.5(052918)	34969 CLARK	↓	PASS	0	30	0	PASS	180	60	1L2992	1617	-30+	1636	-5	23371	

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
5-29-18	1053	-	83	51	29.98↑
5-29-18	1530	-	91	36	29.95↓

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-25N-6(052918)	2.1	17.6
SVMP-25S-3(052918)	2.9	17.4
SVMP-26-4(052918)	6.1	10.2
SVMP-27-4.5(052918)	1.1	18.4
SVMP-28-3(052918)	2.4	16.6
SVMP-12-3.5(052918)	0.9	16.5
SVMP-08-3.5(052918)	1.7	17.8

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** / Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used: MGD-2002 #8195 Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-09-4 (053018)	34921 BEACON ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L2400	617	-29	643	-5	23542	
SVMP-07-3.5(053018)	34965 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L1554	737	-28	803	-5	23196	
SVMP-06-4.5(053018)	34935 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L2746	837	-30+	903	-5	23488	DUP-02 (053018) COLLECTED
DUP-02 (053018)	SVMP-06	5-30-18	PASS	0	30	0	PASS	180	60	1L2696	837	-30+	903	-5	23175	
SVMP-05-4.5(053018)	34851 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L2767	927	-30	953	-5	23632	
SVMP-04-3.5(053018)	11866 BOSTON POST ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L3014	1115	-30+	1138	-5	23625	
SVMP-17-2.0(053018)	34924 BEACON ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L1752	1354	-30+	1428	-5	23528	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5-30-18	620	—	68	78	29.86↓
5-30-18	1120	—	79	65	29.83↓

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-09-4 (053018)	0.7	20.5
SVMP-07-3.5(053018)	2.2	19.9
SVMP-06-4.5(053018)	1.0	19.8
SVMP-05-4.5(053018)	0.6	20.0
SVMP-04-3.5(053018)	0.8	18.4
SVMP-17-2.0(053018)	2.8	16.9

Soil Vapor Collection Log Sheet

ARCADIS

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address: **36200 Plymouth Road, Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576);** CAITLIN O'NEILL – (m: 248-722-2411)
Helium Detector Used: GEOTECH GASCHECK #3065 Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
~~SVMP-01S-3.5(082118)~~	~~34965 STANDISH~~	~~8-21-18~~	~~PASS~~	~~0~~	~~30~~	—	—	~~200~~	~~120~~	~~IL3113~~	—	—	—	—	~~23337~~	
SVMP-26-4(082318)	11895 BELDEN CT.	08-23-18	PASS	0	30	5	PASS	200	120	IL3301	1024	-30	1055	-5	23558	
SVMP-27-4.5(082318)	11873 BELDEN CT.	08-23-18	PASS	0	30	5	PASS	200	120	20773	1125	-29	1149	-5	23733	
SVMP-28-3(082318)	11771 BELDEN CT.	08-23-18	PASS	0	30	5	PASS	200	120	IL2797	1301	-27	1327	-5	23291	
DUP-02(082318)	11771 BELDEN CT.	08-23-18	PASS	0	30	5	PASS	200	120	IL2682	1301	-29.5	1333	-5	23742	
SVMP-12-3.5(082318)	12070 BOSTON POST ST.	08-23-18	PASS	0	30	5	PASS	200	120	IL2360	1453	-30	1522	-5	23106	

TRIKEOUT ALSE RECORD PD 08/23/18

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
08/23/2018	1130	—	76	47	30.10
08/23/2018	1500	—	81	33	30.07

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-26	15.3	2.2
SVMP-27	2.5	17.7
SVMP-28	4.6	11.3
DUP-02	4.7	11.2
SVMP-12	1.6	18.5

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Helium Detector Used / Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** / Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)						Purge Rate (mL/min)	Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)								
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-7-3.5(082318)	34965 Wadsworth	8/23/18	Pass	0	32.3	0	Pass	200	60	2683	0846	-30	0912	-4	23705	
SVMP-6-4.5(082318)	34935 Wadsworth	8/23/18	Pass	0	32.1	0	Pass	200	60	2378	0956	-28	1030	-5	23587	
DUP-01 SVMP-5-4.5(082318)	Wadsworth	8/23/18	Pass	0	30.6	0	Pass	200	60	3110 2675	1055	-30/-29	1120	-5	/	SVMP-5/DUP-01; Sand filled vault ants may have compromised
SVMP-4-3.5(082318)	11845 Bottom Post	8/23/18	Pass	0	32.1	1750	Pass	200	60	3850	1152	-29.5	1215	-5	23708	points due to Gem Reading
SVMP-8-3.5(082318)	Beacon	8/23/18	Pass	0	33.6	0	Pass	200	60	2436	1255	-26.5	1322	-5	23608	
SVMP-9-4(082318)	Beacon	8/23/18	Pass	0	38.2	0	Pass	200	60	2378	1404	-30	1435	-5	23683	
SVMP-10-3(082318)	Beacon	8/23/18	Pass	0	32.1	0	Pass	200	60	1957	1505	-30	1535	-5	23610	
SVMP-21-2(082418)	Capitol/Brewster	8/24/18	Pass	0	32.6	0	Pass	200	60	1561	0845	-30	0912	-5	23784	
SVMP-14-2(082418)	Beacon	8/24/18	Pass	0	33.7	0	Pass	200	60	2856	0952	-30	1016	-5	23612	
SVMP-13-2(082418)	Beacon/Brewster	8/24/18	Pass	0	38.2	0	Pass	200	60	2607	1035	-28	1053	-5	24234	Vault full of water.

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
8/23/18	858	~~0~~ 72	63	82%	30.09

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-7	4.0	18.5
SVMP-6	3.8	17.6
SVMP-5	1.0	20.1
SVMP-4	2.3	19.0
SVMP-8	2.6	18.9
SVMP-9	3.2	17.8
SVMP-10	2.2	18.9
SVMP-21	3.0	19.8
SVMP-14	4.2	16.9
SVMP-13	3.8	17.5

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L) **1 L with a 20-minute flow controller** Lab **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-22-3(082118)	Rosati	8/21/18	Pass	0	30.1	0	Pass	200	60	3039	-30	1034	1059	-5	24316	
SVMP-23-3(082218)	"	8/22/18	Pass	0	31.2	0	Pass	200	60	1029	-30	1242	1312	-5	23706	
SVMP-24-4(082218)	"	"	Pass	0	30.6	0	Pass	200	60	2926	-30	1340	1410	-5	24324	
SVMP-18-3(082218)	34367 Capitol	"	Pass	0	32.8	0	Pass	200	60	1808	-28	1448	1518	-5	23772	
SVMP-19-3(082218)	Capitol + Brewster	"	Pass	0	30.1	0	pass	200	60	2559	-30	1535	1610	-5	23242	
SVMP-20-3(082218)	12088 Brewster	"	Pass	0	31.2	0	Pass	200	60	2133	-30	1639	1710	-5	23298	
SVMP-15-2(082418)	Beacon	8/24/18	Pass	0	32.6	0	Pass	200	60	2976	-30	1150	1220	-5	23312	
SVMP-16-2(082418)	Beacon	8/24/18	Pass	0	31.0	0	Pass	200	60	2340	-30	1353	1416	-5	23407	
SVMP-17-2(082418)	Beacon	8/24/18	Pass	0	32.6	0	Pass	200	60	2687	-30	1435	1450	-5	24212	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
8/21/18	1035	—	73	—	—
8/22/18	0955	—	62	88	29.95

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-22	9.2	11.2
SVMP-23	9.7	11.1
SVMP-24	9.6	10.9
SVMP-18	6.3	12.4
SVMP-19	10.3	10.6
SVMP-20	10.3	7.9
SVMP-15	11.2	6.1
SVMP-16		
SVMP-17		

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L) **1 L with a 20-minute flow controller** Lab **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-01D-7(082218)	34965 STANDISH	08-22-18	PASS	0	30	0	PASS	180	~~180~~ 60 (8/22/18)	1L3112	1350	-30	1419	-5	23337	
SVMP-01S-3.5(082218)	34965 STANDISH	08-22-18	PASS	0	30	0	PASS	180	60	1L2809	1435	-30	1504	-5	23826	
SVMP-02S-4.5(082218)	34963 STANDISH	08-22-18	PASS	0	30	0	PASS	180	60	1L3100	1527	-29	~~1527~~ 1547 (8/22/18)	-5	23116	
SVMP-02D-8.5(082218)	34963 STANDISH	08-22-18	PASS	0	30	0	PASS	180	60	1L2344	1527	-28.5	~~1527~~ 1552 (8/22/18)	-5	24227	
SVMP-03S-3.5(082218)	34851 STANDISH	08-22-18	PASS	0	30	0	PASS	180	120	1L2917	1613	-29	1644	-5	23766	
SVMP-03D-7(082218)	34851 STANDISH	08-22-18	PASS	0	30	0	PASS	180	120	1L3111	1613	-30	1646	-5	23313	
SVMP-25S-3(082318)	12555 BELDEN CT.	08-23-18	PASS	0	30	0	PASS	180	120	1L2823	840	-30	902	-5	23739	
SVMP-25D-6(082318)	12555 BELDEN CT.	08-23-18	PASS	0	30	0	PASS	180	120	1L1786	843	-26	911	-5	23177	

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	% Humidity	Barometric Pressure (in.)
Example - 12/1/2017	0800	73	22	38	30.10
08-22-18	1530	-	74	35	29.99
08-22-18	1620	—	75	32	29.99

General Notes or Observations

DATE	TIME	TEMP (°F) INDOOR	TEMP (°F) OUTDOOR	% HUMIDITY	BAROMETRIC PRESSURE (in.)
8-23-18	850	—	63	35	30.129

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-01D	3.1	16.2
SVMP-01S	3.2	17.3
SVMP-02S	3.7	17.4
SVMP-02D	4.5	16.7
SVMP-03S	1.0	19.0
SVMP-03D	1.0	18.8
SVMP-25S	3.5	17.9
SVMP-25D	4.0	17.2

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number: ~~**Ashley Reibel – (m: 565-792-0630);**~~ **Kalan Briggs – (m: 248-635-4576).** KB 11-5-18
Helium Detector Used: MGD # 430-0144 — Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** — Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-22-3(110518)	1ST TURN @ ROSATI	11-5-18	PASS	0	30	0	PASS	180	120	1L2905	829	-27	850	-5	23185	
SVMP-23-3(110518)	ACROSS FROM VACANT LOT; UNDER TREE	11-5-18	PASS	0	30	0	PASS	180	120	1L3101	907	-29	930	-5	23206	
SVMP-24-4(110518)	ACROSS FROM MITTEN RUTG	11-5-18	PASS	0	30	0	PASS	180	120	1L3133	KB 11-5-18 ~~924~~ 959	-27	1019	-5	23791	
SVMP-07-3.5(110518)	34965 WADSWORTH	11-5-18	PASS	0	30	0	PASS	180	120	1L1902	1038	-30	1058	-5	23319	
SVMP-06-4.5(110518	34935 WADSWORTH	11-5-18	PASS	0	30	0	PASS	180	120	1L2388	1113	-28	1138	-5	23168	
SVMP-05-4.5(110518)	34851 WADSWORTH	11-5-18	PASS	0	30	0	PASS	180	120	1L1575	1154	-29	1218	-5	23519	
SVMP-04-3.5(110518)	11850 BOSTON POST	11-5-18	PASS	0	30	0	PASS	180	120	1L2504	1335	-27	1354	-5	23234	
SVMP-08-3.5(110518)	34969 BEACON	11-5-18	PASS	0	30	0	PASS	180	120	1L2482	1410	-30	1435	-5	23604	
SVMP-09-~~4~~ 4.5(110518)	34921 BEACON	11-5-18	PASS	0	30	0	PASS	180	120	1L2881	1449	-29	1502	-5	23552	
SVMP-10-3(110518	34851 BEACON	11-5-18	PASS	0	30	0	PASS	180	120	1L2767	1518	-29	1545	-5	23128	

KB 11-5-18

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
11-5-18	830	–	49	91	29.99

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-22-3	1.1	19.6
SVMP-23-3	1.1	19.9
SVMP-24-4	3.0	17.8
SVMP-07-3.5	1.3	19.7
SVMP-06-4.5	0.6	20.6
SVMP-05-4.5	2.4	19.1
SVMP-04-3.5	0.6	19.9
SVMP-08-3.5	1.1	20.3
SVMP-09-4	0.4	20.4
SVMP-10-3	0.6	20.5

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: ~~**Ashley Reibel - (m: 586-792-9630)**~~; **Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	(EB) 11-6-18
Helium Detector Used: MGD #430-0144 Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-25S-3(110618)	12555 BELDEN CT	11-6-18	PASS	0	30	0	PASS	180	120	1L2343	827	-29	857	-5	23366	
SVMP-25D-6(110618)	12555 BELDEN CT	11-6-18	PASS	0	30	0	PASS	180	120	1L3072	825	-28	850	-5	23321	
SVMP-26-4(110618)	11895 BELDEN CT	11-6-18	PASS	0	30	0	PASS	180	120	1L1508	915	-26.5	937	-5	23196	
DUP-01 (110618)	SVMP-26-4	11-6-18	PASS	0	30	6	PASS	180	120	1L1758	915	-29	940	-5	23436	
SVMP-27-4.5(110618)	11873 BELDEN CT	11-6-18	PASS	0	30	0	PASS	180	120	1L1681	1002	-30	1028	-5	23228	
SVMP-28-3(110618)	ACROSS FROM 11770 BELDEN CT	11-6-18	PASS	0	30	0	PASS	180	120	1L2346	1210	-28	1238	-5	23542	
SVMP-12-3.5(110618)	12100 BOSTON POST	11-6-18	PASS	0	30	0	PASS	180	120	37851	1406	-27.5	1425	-5	23811	
SVMP-01D-7(110618)	34965 STANDISH	11-6-18	PASS	0	30	0	PASS	180	120	1L3825	1505	-29	1519	-5	23181	
SVMP-01S-3.5(110618)	34965 STANDISH	11-6-18	PASS	0	30	0	PASS	180	120	1L2626	1505	-29.5	1526	-5	23236	
SVMP-02S-4.5(110718)	34963 STANDISH	11-7-18	PASS	0	30	0	PASS	180	120	1L1684	802	-29	826	-5	23506	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)	General Notes or Observations
		Indoor	Outdoor			
Example - 12/1/2017	0800	73	22	38	30.10	
11-6-18	835	--	57	83	29.50↑	NOTE: HIGH WIND GUSTS
11-7-18	805	--	41	56	29.96	NOTE: HIGH WIND GUSTS

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-25S-3	1.9	18.5
SVMP-25D-6	2.1	18.3
SVMP-26-4	11.1	8.2
SVMP-27-4.5	1.2	19.7
SVMP-28-3	2.4	18.1
SVMP-12-3.5	0.6	20.1
SVMP-01D-7	1.6	19.6
SVMP-01S-7.5	1.1	19.9
SVMP-02S-4.5	2.3	17.5

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Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: ~~**Ashley Reibel – (m: 586-792-9639),**~~ **Kalan Briggs – (m: 248-635-4576).** KB 11-7-18
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com Helium Detector Used: MGD #430-0144 Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-02D-8.5(110718)	34963 STANDISH	11-7-18	PASS	0	30	0	PASS	180	120	00868 1356	802	-29	826	-5	23510	
SVMP-035-3.5(110718)	34851 STANDISH	11-7-18	PASS	0	30	0	PASS	180	120	1L2494	850	-29.5	912	-5	23467	
SVMP-03D-7(110718)	34851 STANDISH	11-7-18	PASS	0	30	0	PASS	180	120	1L2396	850	-29	916	-5	24314	
SVMP-18-3(110718)	34367 ~~STANDISH~~ CAPITOL ST.	11-7-18	PASS	0	30	0	PASS	180	120	1L1582	1045	-28	1112	-5	24246	
	KB 11-7-18															

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
11-7-18	1055	—	40	61	30.037

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-02D-8.5	2.8	17.1
SVMP-035-3.5	0.4	20.5
SVMP-03D-7	0.5	20.4
SVMP-18-3	2.8	16.8

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): Arcadis of Michigan, LLC 28550 Cabot Drive, Suite 500, Novi, MI 48377	Project Name: Ford LTP Off-site Routine SVMP Sampling
	Project Number: MI001454.0006
Field Manager: Angela Paulson	Site Address:
Phone Number: 248.994.2240 — Special Instructions:	
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number, Email:
Helium Detector Model Used: Dielectric MGD-2002 — Helium Leak Test Method: Bucket Shroud	Summa Canister Size (1L, 2.7 L, 6L): 1 Liter — Lab: Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-07-3.5_030419	SVMP-07	03/04/19	PASS	40.8	0	PASS	100 mL	100 ml/min	1L1593	1829	09:33	-28	09:59	-5	0.9	17.6	
SVMP-06-4.5-030419	SVMP-06		PASS	41.5	0	PASS	100 mL	100 ml/min	1L2613	1816	10:42	-28	11:08	-5	0.5	18.6	
SVMP-05-4.5_030519	SVMP-05		PASS	42.6	0	PASS	100 mL	100 ml/min	1L2370	1331	08:29	-29.36	08:49	-5	0.3	22.2	
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
03/04/2019	09:40	—	15°F	62%	30.13	weather.com app
~~03/04/2019~~ 03/04/19						weather.com app
						weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below.
For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.85" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.
For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): Arcadis of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377	Project Name: Ford LTP Off-site Routine SVMP Sampling
	Project Number: MI001454.0006
Field Manager: Angela Paulson	Site Address: VARIOUS
Phone Number: 248.994.2240	Special Instructions: —
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number, Email: KALAN BRIGGS / 2486354576 / KALAN.BRIGGS@ARCADIS.COM
Helium Detector Model Used: Dielectric MGD-2002	Helium Leak Test Method: Bucket Shroud
	Summa Canister Size (1L, 2.7 L, 6L): 1 Liter
	Lab: Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-01S-3.5_030419	34965 STANDISH	3-4-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-4-19	100 ml/min	1L3088	21966	850	-28	911	-5	1.6	19.6	—
SVMP-01D-7_030419	34965 STANDISH	3-4-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-4-19	100 ml/min	1L2544	23685	1026	-28	1046	-5	1.5	19.5	—
SVMP-22-3_030519	WEST ON ROSATI	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L1505	23448	726	-29.05	749	-5	0.3	20.0	—
SVMP-08-3.5_030519	34964 BEACON	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L1751	23719	928	-29.03	945	-5	0.6	20.0	—
SVMP-02S-4.5_030519	34963 STANDISH	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L3880	24357	1200	-29.17	1220	-5	~~KB 3-5-19 3.6~~ 0.0	~~KB 3-5-19 15.4~~ 20.0	—
SVMP-02D-8.5_030519	34963 STANDISH	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L2829	24355	1200	-29.03	1220	-5	3.6	15.4	—
SVMP-03S-3.5_030519	34851 STANDISH	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L2878	23449	1247	-29.33	1316	-5	0.4	19.9	—
SVMP-03D-7_030519	34851 STANDISH	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L3102	23572	1247	-29.36	1308	-5	0.4	20.0	—
SVMP-14-2_030519	34664 BEACON	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L2640	24278	1314	-29.45	1405	-5	0.8	18.6	—
SVMP-17-2_030519	ACROSS FROM 34424 BEACON ST.	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ KB 3-5-19	100 ml/min	1L3120	23805	1439	-29.29	1502	-5	0.5	19.9	—

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
3-4-19	900	—	13	70	30.12	weather.com app
3-5-19	730	-	8	52	30.04 ↓	weather.com app
3-5-19	1300	-	14	61	30.03	weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:
The purge volume for each sample has been pre-calculated using the information below.
For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.85" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.
For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations

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ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): Arcadis of Michigan, LLC 28550 Cabot Drive, Suite 500, Novi, MI 48377	Project Name: Ford LTP Off-site Routine SVMP Sampling Project Number: MI001454.0006
Field Manager: Angela Paulson	Site Address: VARIOUS
Phone Number: 248.994.2240 Special Instructions: —	Sampler Name, Phone Number, Email: KALAN BRIGGS, 2486354576, KALAN.BRIGGS@ARCADIS.COM
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Model Used: Dielectric MGD-2002 Helium Leak Test Method: Bucket Shroud	Summa Canister Size (1L, 2.7 L, 6L): 1 Liter Lab: Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-21-Z_030519	NORTH OF BREWSTER AND BEACON INTERSECTION	3-5-19	PASS	40	0	PASS	180 mL ~~100 mL~~ (R2) 3-5-19	100 ml/min	IL1766	23782	1524	-29.33	1540	-5	0.9	19.7	—
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
3-5-19	1530	—	19	41	30.00 ↓	weather.com app
						weather.com app
						weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below.

For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".

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To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations

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ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information):
Arcadis of Michigan, LLC
39572 Caber Drive, Suite 500, Novi, MI 48377

Project Manager:
Angela Paulson

Phone Number:
248.994.2240

Email Address for Result Reporting:
Kristoffer.Hinsley@arcadis.com

Helium Detector Model Used:
Dielsonic MGD-2002

Special Instructions:

Helium Leak Test Method:
Bucket Shroud

Project Name: Ford LTP Off-site Routine SVMP Sampling

Project Number: MI001454.0006

Site Address:

Sampler Name, Phone Number, Email:

Summa Canister Size (1L, 2.7 L, 6L):
1 Liter

Lab:
Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (pt. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-09-4_030519	34921 Beacon	3/5/19	Pass	40	0	Pass	180 mL GR 100 mL 3-5-19	100 ml/min	1L2523	23576	1029	-29.24	1046	-5	0	20.9	—
SVMP-04-3.5_030519	11850 Boston Post	3/5/19	Pass	40	0	Pass	180 mL GR 100 mL 3-5-19	100 ml/min	1L3114	23741 ~~1845~~ ER	1205	-29.12	1223	-5	0.6	19.5	—
SVMP-18-3_030519	34367 Capitol	3/5/19	Pass	40	0	Pass	180 mL GR 100 mL 3-5-19	100 ml/min	1L2764	23665	1351	-28.96	1406	-5	2.8	16.6	—
SVMP-19-3_030519	12088 Brewster	3/5/19	Pass	40	0	Pass	180 mL GR 100 mL 3-5-19	100 ml/min	1L2733	23109	1507	-29.43	1526	-5	5.3	11.1	—
DUP-01	12088 Brewster	3/5/19	Pass	40	0	Pass	180 mL ~~100 mL~~ ER 3-5-19	100 ml/min	1L2133	23540	1507	-28.84	1522	-5	5.3	11.1	—
~~SVMP-20~~ ER 3-5-19							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									
							100 mL	100 ml/min									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
3/5/19	1030		13°F	41	30.03	weather.com app
3/5/19	1510		20°F	55	30.05	weather.com app
						weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:
The purge volume for each sample has been pre-calculated using the information below.
For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
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Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information):
Arcadis of Michigan, LLC
28550 Cabot Drive, Suite 500, Novi, MI 48377

Field Manager:
Adam Richmond

Phone Number:
248 994 2240

Email Address for Result Reporting:
Kristoffer.Hinskey@arcadis.com

Helium Detector Model Used:
Dielectric MGD-2002

Special Instructions: None
—

Helium Leak Test Method:
Bucket Shroud

Project Name: Ford LTP Off-site Sampling

Project Number: MI001454.0006.00003

Site Address: Ford off-site sump sampling, Livonia

Sampler Name, Phone Number, Email:
Hilary S. Turner

Summa Canister Size (1L, 2.7 L, 6L):
1 Liter

Lab:
Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge: Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?	Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
SVMP-05-4.5_032119	Near 34851 Wolworth driveway	3-21-19	Pass	46.7	0	Pass	180 mL	100 ml/min	112926	23646	1204	-29	1226	-6.5	.3	21.0	—
SVMP-27-4.5_032119	Near 11873 Belden mailbox	3-21-19	Pass	41.5	0	Pass	180 mL	100 ml/min	112778	23703	1613	-29.5	1634	-7	1.1	19.3	—
svmp-28-3 -032119	near 11771 Belden flag poles	3/21/19	Pass	46.1	0	Pass	180 mL	100 ml/min	112801	24210	1659	-29	1714	-6.5	1.8	18.3	—
							180 mL	100 ml/min									
							180 mL	100 ml/min									
							180 mL	100 ml/min									
							180 mL	100 ml/min									
							180 mL	100 ml/min									
							180 mL	100 ml/min									
							180 mL	100 ml/min									

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
3-21-19	0900	NA	40	85	29.91	weather.com app
3/21/19	1300	NA	43	75	29.91	weather.com app
3/21/19	1630	NA	42	68	29.88	weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below.

For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): Arcadis of Michigan, LLC 28550 Cabot Drive, Suite 500, Novi, MI 48377	Project Name: Ford LTP Off-site Sampling
	Project Number: MI001454.0006.00003
Field Manager: Adam Richmond	Site Address: Livonia, Ford
Phone Number: 248.994.2240	Special Instructions: None
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	Sampler Name, Phone Number, Email: S Turner/H Ladd
Helium Detector Model Used: Dielectric MGD-2002	Helium Leak Test Method: Bucket Shroud
	Summa Canister Size (1L, 2.7 L, 6L): 1 Liter
	Lab: Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-35-3.5_032119		3/21/19	Pass	47.4	0	Pass	180 mL	100 ml/min	IL2717	23412	1025	-29	1054	-5	.5	20.7	—
SVMP-30-7_032119		3/21/19	Pass	44.7	0	Pass	180 mL	100 ml/min	IL2465	23795	1113	-29	1135	-6	.4	19.4	—
SVMP-025-4.5_032119		3/21/19	Pass	46.6	0	Pass	180 mL	100 ml/min	IL1593	23755	1029	-28.5	1053	-5	3.1	16.6	—
Dup-01		3/21/19	Pass	44.7	0	Pass	180 mL	100 ml/min	IL2937	23106	1113	-29	1135	-6	.4	19.4	—
SVMP-06-4.5_032119		3/21/19	Pass	43.0	0	Pass	180 mL	100 ml/min	IL3190	23205	1205	-29	1221	-6	.5	20.5	—
SVMP-12-3.5_032119		3/21/19	Pass	47.0	0	Pass	180 mL	100 ml/min	IL2629	23644	1337	-29	1352	-6	.5	21.2	—
SVMP-24-4_032119		3/21/19	Pass	46.0	0	Pass	180 mL	100 ml/min	IL2527	23683	1427	-29	1447	-6	2.0	19.2	—
SVMP-250-6_032119		3/21/19	Pass	45.6	0	Pass	180 mL	100 ml/min	IL3851	24237	1516	-29	1536	-7.5	1.6	20.0	—
SVMP-255-3_032119		3/21/19	Pass	52.1	0	Pass	180 mL	100 ml/min	IL2322	24263	1516	-29	1536	-6	1.5	20.2	—
SVMP-26-4_032119		3/21/19	Pass	43.3	0	Pass	180 mL	100 ml/min	IL2419	23781	1602	-29	1623	-6	7.3	9.4	—

Meteorological Data

Date	Time	Temp. (°F) Indoor	Temp. (°F) Outdoor	Relative Humidity (%)	Barometric Pressure (in. Hg)	Source of Weather Information
3/21/19	0900	N/A	40	85	29.91	weather.com app
3/21/19	1300	N/A	43	75	29.91	weather.com app
3/21/19	1630	N/A	42	68	29.88	weather.com app
						weather.com app
						weather.com app
						weather.com app

Purge Volume Calculations:
The purge volume for each sample has been pre-calculated using the information below.
For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.
For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
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To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations: Dup-01 Taken with SVMP-30-7_032119

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0006
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neill		**Site Address:** 34730–34998 Wadsworth St Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Caitlin ONeill 248-722-2411 Caitlin.Oneill@arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-28-3.0_062419	Belden	6/24/2019	Pass	20.9	0	Pass	180	60	1L1804	1910/23369	10:22	-28.5	10:45	-5.13	3.3	15.9	--
SVMP-25D-6.0_062419	Belden	6/24/2019	Pass	32.1	0	Pass	180	60	1L2319	1845/23801	13:01	-28.5	13:25	-3.83	3.4	16.2	--
SVMP-25S-3.0_062419	Belden	6/24/2019	Pass	32.1	0	Pass	180	60	1L2413	1910/23421	13:01	-28.5	13:26	-4.91	3.6	16.1	--
SVMP-17-2.0_062419	Beacon	6/24/2019	Pass	40.6	0	Pass	180	60	1L1707	1831/23346	15:44	-28.53	16:13	-5.39	5.4	16.3	--
DUP-01_062419	Beacon	6/24/2019	Pass	40.6	0	Pass	180	60	1L2630	1910/23437	15:44	-28.48	16:13	-4.65	5.4	16.3	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/24/2019	11:00:00 AM	--	75	78	29.67	W at 19	National Weather Service
6/24/2019	4:30:00 PM	--	82	59	29.63	W at 17	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

* For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

* For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations:

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0006
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neill		**Site Address:** 34730–34998 Wadsworth St Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Caitlin ONeill 248-722-2411 Caitlin.Oneill@arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-04-3.5_062519	11850 Boston Post	6/25/2019	Pass	24.8	0	Pass	180	60	1L2513	24104	9:45	-28.22	10:14	-4.74	2.1	18.8	--
DUP-02-062519	11850 Boston Post	6/25/2019	Pass	24.8	0	Pass	180	60	1L2884	23660	9:45	-28.36	10:18	-5.1	2.1	18.8	--
SVMP-01S-3.5_062519	34965 Standish	6/25/2019	Pass	26.8	0	Pass	180	60	1L2434	24265	11:05	-28.22	11:31	-5.1	2	18.9	--
SVMP-01D-7.0_062519	34965 Standish	6/25/2019	Pass	26.8	0	Pass	180	60	1L3100	24127	11:03	-28.43	11:32	-4.55	1.9	18.6	--
SVMP-02D-8.5_062519	34963 Standish	6/25/2019	Pass	22.7	0	Pass	180	60	1L2423	23407	12:15	-28.43	12:34	-5.27	4	16.8	--
SVMP-02S-4.5_062519	34963 Standish	6/25/2019	Pass	22.7	0	Pass	180	60	1L3024	24305	12:15	-28.26	12:38	-5.03	3.6	17.1	--
SVMP-03D-7.0_062519	34851 Standish	6/25/2019	Pass	24.3	0	Pass	180	60	000003009	23573	12:57	-28.41	13:25	-6.23	1	19.1	--
SVMP-03S-3.5_062519	34851 Standish	6/25/2019	Pass	24.3	0	Pass	180	60	1L1611	24386	12:57	-28.29	13:21	-5.44	1.1	19.2	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/25/2019	9:45:00 AM	--	71	64	28.93	W at 17	National Weather Service
6/25/2019	12:19:00 PM	--	77	47	29.86	W at 19	National Weather Service
6/25/2019	1:30:00 PM	--	81	41	29.88	W at 18	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

* For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

* For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations:

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0004
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neill		**Site Address:** 11771 Belden Ct Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Julia McClafferty 734-972-8627 Julia.mcclafferty@arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-27-4.5_062419	In front of building, right next to curb	6/25/2019	Pass	25.8	0	Pass	180	60	1L1737	24216	11:33	-28.58	11:57	-4.43	2.2	17.9	--
SVMP-12-3.5_062419	To the left of white house	6/25/2019	Pass	26.5	0	Pass	180	60	1L3883	23481	14:45	-28.58	15:08	-4.62	2	18.1	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/24/2019	8:53:00 AM	--	74	79	30	NM	National Weather Service
6/24/2019	1:23:00 PM	--	79	67	30	NM	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

* For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

* For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations:

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Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0004
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neil		**Site Address:** 34409 Rosati Ave Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Julia McClafferty 734-972-8627 Julia.mcclafferty@arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-23-3.0_062519	Across from field, underneath berry tree, by telephone pole	6/25/2019	Pass	21.5	0	Pass	180	60	1L3039	23379	11:07	-28.5	11:38	-2.11	3.3	17.7	--
SVMP-22-3.0_062519	To the left of the nature trail	6/25/2019	Pass	22.3	0	Pass	180	60	1L1687	24284	10:06	-28.53	10:28	-4.13	1.6	18.6	--
SVMP-24-4.0_062519	Across from West end of Mitten Automotive building	6/25/2019	Pass	20.9	0	Pass	180	60	1L2795	23637	13:04	-28.14	13:30	-3.35	3.7	16.8	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/25/2019	5:53:00 AM	--	63	90	30	SW at 10	National Weather Service
6/25/2019	9:53:00 AM	--	72	64	29.85	undefined at 20	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

* For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

* For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
Each additional foot of sub-grade tubing account for approximately 13 ml.
To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations:

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0004
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neill		**Site Address:** 36200 Plymouth Road Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Rachel Bielak 248-946-6331 Rachel.Bielak@Arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-26-4.0_062419	11895 Belden	6/24/2019	Pass	21.3	0	Pass	180	60	1L1791	23171	12:10	-28.5	12:23	-9.75	8.1	2.4	--
SVMP-08-3.5_062419	34969 Beacon	6/24/2019	Pass	21.1	0	Pass	180	60	1L1706	23171	13:18	-28.58	13:40	-5	2.8	16.3	--
SVMP-09-4.0_062419	34921 Beacon	6/24/2019	Pass	22	0	Pass	180	60	1L3169	23582	14:03	-28.55	14:23	-5	0.6	19.7	--
SVMP-07-3.5_062419	34965 Wadsworth	6/24/2019	Pass	20.9	0	Pass	180	60	1L2869	24236	15:58	-28.55	16:14	-5	1.8	18	--
SVMP-06-4.5_062419	34935 Wadsworth	6/24/2019	Pass	22.2	0	Pass	180	60	1L1576	23308	16:37	-28.58	16:59	-5.5	1.2	19.3	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/24/2019	12:09:00 PM	--	77	73	29.66	NM	National Weather Service
6/24/2019	4:52:00 PM	--	77	73	29.66	NM	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

* For sub-slab soil vapor samples the sample train tubing length is ~54 inches and the interior tubing radius is 0.085".
Three volumes of the sample train is 60 milliliters using the equation for volume of a cylinder (volume = pi * radius^2 * height) where Volume = 60 ml, radius = 0.085" and height = 54".
To have sufficient volume to conduct helium leak testing 100 milliliters should be purged from each sample point.

* For exterior soil vapor sampling 60 milliliters should be used for the above ground sample train.
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General Notes or Observations:

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): ARCADIS of Michigan LLC, 28550 Cabot Dr Suite 500, Novi, MI, 48377			**Project Name:** Ford LTP **Project Number:** MI001454.0004
Project Manager: Kris Hinskey	**Field Manager:** Caitlin O'Neill		**Site Address:** 36200 Plymouth Rd Livonia Wayne MI 48150 US
Phone Number: 248-722-2411	**Special Instructions:**		
Email Address for Result Reporting: Kristoffer.Hinskey@Arcadis.com			**Sampler Info (Name, Phone Number, Email):** Rachel Bielak 248-946-6331 Rachel.Bielak@Arcadis.com
Helium Detector Model Used: MGD-2002	**Helium Leak Test Method:** Bucket shroud	**Summa Canister Size (1L, 2.7 L, 6L):** 1 L	**Lab:** Eurofins

Sample ID	Sample Location Description	Date	Pre-Sampling Shut-In / Leak-Down Test Pass/Fail?	Helium Tracer Test - Performed During Sample Point Purge			Purge Volume (mL)	Purge Rate (mL/min)	Canister Number	Flow Controller Number	Sample Collection Start Time	Starting Canister Pressure (in. Hg)	Sample Collection End Time	Ending Canister Pressure (in. Hg)	Post-Sampling CO_2 Reading from GEM (%)	Post-Sampling O_2 Reading from GEM (%)	Micromanometer Reading (in. WC)
				Shroud Helium Concentration During Purge (% Helium)	Helium Reading in Purged Vapor (% Helium)	Helium Test Pass/Fail (Purge contains <5% of shroud to pass)?											
SVMP-05-4.5_062519	34851 Wadsworth	6/25/2019	Pass	20.8	0	Pass	180	60	1L2910	23676	9:41	-28.05	10:03	-6.35	0.4	19.3	--
SVMP-21-2.0_062519	34450 Beacon, on Brewster side near driveway	6/25/2019	Pass	23.5	0	Pass	180	60	1L3829	23521	11:30	-28.12	11:52	-5.53	5.9	12.1	--
SVMP-18-3.0_062518	34367 Capitol, west of driveway	6/25/2019	Pass	20.7	0	Pass	180	60	1L2736	23191	12:29	-28.19	12:50	-6.34	5.8	11.8	--
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Meteorological Data

Date	Time	Temp. (ºF)		Relative Humidity (%)	Barometric Pressure (in. Hg)	Air Speed (mph)	Source of Weather Information
		Indoor	Outdoor				
6/25/2019	9:00:00 AM	--	63	90	30	SW at 10	National Weather Service
6/25/2019	11:00:00 AM	--	66	81	30	16	National Weather Service
6/25/2019	12:49:00 PM	--	69	70	29.83	16	National Weather Service
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Purge Volume Calculations:

The purge volume for each sample has been pre-calculated using the information below:

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To have sufficient volume to conduct helium leak testing at least 100 milliliters should be purged from each sample point.

General Notes or Observations:

Appendix H

Utility Corridor Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
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Laboratory Job ID: 240-131805-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
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Attn: Kristoffer Hinskey

Authorized for release by:
6/26/2020 3:36:22 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-131805-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-131805-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/12/2020 11:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-131805-1), MH-1088_060920 (240-131805-2), MH-1066_060920 (240-131805-3) and MH-1041_060920 (240-131805-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/19/2020 and 06/20/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples TRIP BLANK (240-131805-1), MH-1088_060920 (240-131805-2), MH-1066_060920 (240-131805-3) and MH-1041_060920 (240-131805-4) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1088_060920 (240-131805-2), MH-1066_060920 (240-131805-3) and MH-1041_060920 (240-131805-4) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/16/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-131805-1	TRIP BLANK	Water	06/09/20 00:00	06/12/20 11:10	
240-131805-2	MH-1088_060920	Water	06/09/20 16:50	06/12/20 11:10	
240-131805-3	MH-1066_060920	Water	06/09/20 17:47	06/12/20 11:10	
240-131805-4	MH-1041_060920	Water	06/09/20 18:26	06/12/20 11:10	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-131805-1

No Detections.

Client Sample ID: MH-1088_060920 — Lab Sample ID: 240-131805-2

No Detections.

Client Sample ID: MH-1066_060920 — Lab Sample ID: 240-131805-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.34	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	0.73	J	1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1041_060920 — Lab Sample ID: 240-131805-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Client Sample ID: TRIP BLANK

Date Collected: 06/09/20 00:00
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131805-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/19/20 23:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/19/20 23:44	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/19/20 23:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/19/20 23:44	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/19/20 23:44	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/19/20 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/19/20 23:44*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*06/19/20 23:44*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*06/19/20 23:44*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*06/19/20 23:44*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Client Sample ID: MH-1088_060920
Date Collected: 06/09/20 16:50
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131805-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/16/20 17:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/20/20 00:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/20/20 00:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:09	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/20/20 00:09	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/20/20 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 130*		*06/20/20 00:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*06/20/20 00:09*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/20/20 00:09*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 129*		*06/20/20 00:09*	*1*

Client Sample ID: MH-1066_060920

Date Collected: 06/09/20 17:47
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131805-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 133*		*06/16/20 17:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:34	1
cis-1,2-Dichloroethene	**0.34**	**J**	1.0	0.16	ug/L			06/20/20 00:34	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/20/20 00:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:34	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/20/20 00:34	1
Vinyl chloride	**0.73**	**J**	1.0	0.20	ug/L			06/20/20 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*		*06/20/20 00:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*06/20/20 00:34*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*06/20/20 00:34*	*1*
Dibromofluoromethane (Surr)	*94*		*78 - 129*		*06/20/20 00:34*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Client Sample ID: MH-1041_060920

Date Collected: 06/09/20 18:26
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131805-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/16/20 17:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/20/20 00:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/20/20 00:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/20 00:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/20/20 00:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/20/20 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 130*		*06/20/20 00:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*47 - 134*		*06/20/20 00:59*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*06/20/20 00:59*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*06/20/20 00:59*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-131805-1	TRIP BLANK	89	94	91	98
240-131805-2	MH-1088_060920	90	98	88	99
240-131805-3	MH-1066_060920	92	98	91	94
240-131805-4	MH-1041_060920	83	99	91	100
LCS 240-439180/4	Lab Control Sample	87	104	93	97
MB 240-439180/7	Method Blank	92	95	91	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-131782-A-6 MS	Matrix Spike	96
240-131782-A-6 MSD	Matrix Spike Duplicate	98
240-131805-2	MH-1088_060920	97
240-131805-3	MH-1066_060920	99
240-131805-4	MH-1041_060920	97
LCS 240-438565/4	Lab Control Sample	92
MB 240-438565/5	Method Blank	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439180/7
Matrix: Water
Analysis Batch: 439180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/19/20 15:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/19/20 15:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/19/20 15:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/19/20 15:49	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/19/20 15:49	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/19/20 15:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*		*06/19/20 15:49*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*06/19/20 15:49*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*06/19/20 15:49*	*1*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*06/19/20 15:49*	*1*

Lab Sample ID: LCS 240-439180/4
Matrix: Water
Analysis Batch: 439180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.9		ug/L		109	73 - 129
cis-1,2-Dichloroethene	10.0	9.81		ug/L		98	75 - 124
Tetrachloroethene	10.0	12.4		ug/L		124	70 - 125
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	74 - 130
Trichloroethene	10.0	9.97		ug/L		100	71 - 121
Vinyl chloride	10.0	12.9		ug/L		129	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*
4-Bromofluorobenzene (Surr)	*104*		*47 - 134*
Toluene-d8 (Surr)	*93*		*69 - 122*
Dibromofluoromethane (Surr)	*97*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-438565/5
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 12:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*		*06/16/20 12:18*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-438565/4
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	11.0		ug/L		110	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*

Lab Sample ID: 240-131782-A-6 MS
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	49		10.0	55.6	4	ug/L		65	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*

Lab Sample ID: 240-131782-A-6 MSD
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	49		10.0	54.7	4	ug/L		55	46 - 170	2	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

GC/MS VOA

Analysis Batch: 438565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-131805-2	MH-1088_060920	Total/NA	Water	8260B SIM	
240-131805-3	MH-1066_060920	Total/NA	Water	8260B SIM	
240-131805-4	MH-1041_060920	Total/NA	Water	8260B SIM	
MB 240-438565/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-438565/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-131782-A-6 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-131782-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 439180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-131805-1	TRIP BLANK	Total/NA	Water	8260B	
240-131805-2	MH-1088_060920	Total/NA	Water	8260B	
240-131805-3	MH-1066_060920	Total/NA	Water	8260B	
240-131805-4	MH-1041_060920	Total/NA	Water	8260B	
MB 240-439180/7	Method Blank	Total/NA	Water	8260B	
LCS 240-439180/4	Lab Control Sample	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-131805-1
Date Collected: 06/09/20 00:00
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439180	06/19/20 23:44	LRW	TAL CAN

Client Sample ID: MH-1088_060920
Lab Sample ID: 240-131805-2
Date Collected: 06/09/20 16:50
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439180	06/20/20 00:09	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 17:01	SAM	TAL CAN

Client Sample ID: MH-1066_060920
Lab Sample ID: 240-131805-3
Date Collected: 06/09/20 17:47
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439180	06/20/20 00:34	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 17:27	SAM	TAL CAN

Client Sample ID: MH-1041_060920
Lab Sample ID: 240-131805-4
Date Collected: 06/09/20 18:26
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439180	06/20/20 00:59	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 17:53	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131805-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN 190 1.6/2.5

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		1 of 1 COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: RACHEL BIELAK / JULIA MCCLAFFERTY	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day; 10 day		For lab use only: Walk-in client; Lab sampling; Job/SDG No:
Phone: 248-994-2240	Method of Shipment/Carrier:			
Project Name: Ford LTP ~~Onsite~~	Shipping/Tracking No:			
Project Number: 30050315.~~401/03~~ 701				
PO # 30050315.~~401/03~~ 701				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1																				1 TRIP BLANK
MH-1088_060920	6/9/20	1650		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B; 3 VOAs for 8260B SIM
MH-1066_060920	6/9/20	1747		6						6					N	G	X	X	X	X	X	X	X	
MH-1041_060920	6/9/20	1826		6						6					N	G	X	X	X	X	X	X	X	

240-131805 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

☐ Return to Client ☑ Disposal By Lab | Archive For ☐ Months (longer than 1 month)

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/9/20 1930	NOVI COLD STORAGE	ARCADIS	6/9/20 1930
	Arcadis	6/11/20 1425		ETA	6-11-20 1427
	ETA	6-11-20 1428	Received in Laboratory by:	ETA	6/12/20 1110

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 131805

Client Arcadis Site Name

Cooler Received on 6/12/20 Opened on 6/12/20

Cooler unpacked by: [signature]

FedEx: 1st (Grd) Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap (Foam) Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C

IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 2.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels be reconciled with the COC?	(Yes)	No
9. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
10. Sufficient quantity received to perform indicated analyses?	(Yes)	No
11. Are these work share samples?	Yes	(No)
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# HC902937
13. Were VOAs on the COC?	(Yes)	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	(No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 011770IE	(Yes)	No
16. Was a LL Hg or Me Hg trip blank present? ____	Yes	(No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AMM

18. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.

Sample(s) ____ were received in a broken container.

Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.

Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

WI-NC-099

DATA VERIFICATION REPORT

June 26, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E203728
Project: Ford Livonia Transmission Plant - ON-SITE -Soil Gas, Ground water and Soil
Project number: 30050315.401.03 - onsite groundwater
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 131805-1
Sample date: 2020-06-09
Report received by CADENA: 2020-06-26
Initial Data Verification completed by CADENA: 2020-06-26
Number of Samples:4
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

The following minor QC exceptions or missing information were noted:

> GCMS VOC QC batch MS/MSD issues as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E203728
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 131805-1

		Sample Name:	TRIP BLANK				MH-1088_060920				MH-1066_060920				MH-1041_060920			
		Lab Sample ID:	2401318051				2401318052				2401318053				2401318054			
		Sample Date:	6/9/2020				6/9/2020				6/9/2020				6/9/2020			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																		
	OSW-8260B																	
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.34	1.0	ug/l	J	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.73	1.0	ug/l	J	ND	1.0	ug/l	---
	OSW-8260BBSim																	
	1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-131807-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
6/26/2020 3:37:53 PM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-131807-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-131807-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/12/2020 11:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-131807-1), MH-1171_061020 (240-131807-2), MH-1001_060920 (240-131807-3), MH-1210_060920 (240-131807-4) and DUP-01 (240-131807-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/22/2020.

Vinyl chloride failed the recovery criteria high for LCS 240-439410/4. Refer to the QC report for details.

The laboratory control sample (LCS) for analytical batch 240-439410 recovered outside control limits for the following analyte: Vinyl chloride. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported: TRIP BLANK (240-131807-1), MH-1171_061020 (240-131807-2), MH-1001_060920 (240-131807-3), MH-1210_060920 (240-131807-4), DUP-01 (240-131807-5) and (LCS 240-439410/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1171_061020 (240-131807-2), MH-1001_060920 (240-131807-3), MH-1210_060920 (240-131807-4) and DUP-01

Job ID: 240-131807-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

(240-131807-5) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/16/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-131807-1	TRIP BLANK	Water	06/10/20 00:00	06/12/20 11:10	
240-131807-2	MH-1171_061020	Water	06/10/20 10:57	06/12/20 11:10	
240-131807-3	MH-1001_060920	Water	06/10/20 12:00	06/12/20 11:10	
240-131807-4	MH-1210_060920	Water	06/10/20 12:52	06/12/20 11:10	
240-131807-5	DUP-01	Water	06/10/20 00:00	06/12/20 11:10	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-131807-1

No Detections.

Client Sample ID: MH-1171_061020 — Lab Sample ID: 240-131807-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.22	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1001_060920 — Lab Sample ID: 240-131807-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1210_060920 — Lab Sample ID: 240-131807-4

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 240-131807-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: TRIP BLANK

Date Collected: 06/10/20 00:00
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131807-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 19:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/22/20 19:32	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 19:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 19:32	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 19:32	1
Vinyl chloride	1.0	U *	1.0	0.20	ug/L			06/22/20 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 130*		*06/22/20 19:32*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*06/22/20 19:32*	*1*
Toluene-d8 (Surr)	*90*		*69 - 122*		*06/22/20 19:32*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*06/22/20 19:32*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: MH-1171_061020

Date Collected: 06/10/20 10:57
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131807-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*		*06/16/20 18:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 19:57	1
cis-1,2-Dichloroethene	**0.22**	**J**	1.0	0.16	ug/L			06/22/20 19:57	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 19:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 19:57	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 19:57	1
Vinyl chloride	1.0	U *	1.0	0.20	ug/L			06/22/20 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*06/22/20 19:57*	*1*
4-Bromofluorobenzene (Surr)	*109*		*47 - 134*		*06/22/20 19:57*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*06/22/20 19:57*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*06/22/20 19:57*	*1*

Client Sample ID: MH-1001_060920

Date Collected: 06/10/20 12:00
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131807-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1	J	2.0	0.86	ug/L			06/16/20 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*06/16/20 18:44*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 20:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/22/20 20:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 20:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 20:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 20:22	1
Vinyl chloride	1.0	U *	1.0	0.20	ug/L			06/22/20 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*06/22/20 20:22*	*1*
4-Bromofluorobenzene (Surr)	*104*		*47 - 134*		*06/22/20 20:22*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*06/22/20 20:22*	*1*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/22/20 20:22*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: MH-1210_060920

Date Collected: 06/10/20 12:52
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131807-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*		*06/16/20 19:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 20:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/22/20 20:47	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 20:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 20:47	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 20:47	1
Vinyl chloride	1.0	U *	1.0	0.20	ug/L			06/22/20 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*06/22/20 20:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*06/22/20 20:47*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/22/20 20:47*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*06/22/20 20:47*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: DUP-01

Date Collected: 06/10/20 00:00
Date Received: 06/12/20 11:10

Lab Sample ID: 240-131807-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*		*06/16/20 19:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 21:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/22/20 21:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 21:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 21:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 21:12	1
Vinyl chloride	1.0	U *	1.0	0.20	ug/L			06/22/20 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*06/22/20 21:12*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*06/22/20 21:12*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*06/22/20 21:12*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*06/22/20 21:12*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-131807-1	TRIP BLANK	90	97	90	100
240-131807-2	MH-1171_061020	93	109	92	100
240-131807-3	MH-1001_060920	93	104	92	96
240-131807-4	MH-1210_060920	93	93	88	103
240-131807-5	DUP-01	93	98	94	100
240-131839-E-1 MS	Matrix Spike	98	97	92	98
240-131839-F-1 MSD	Matrix Spike Duplicate	92	102	91	103
LCS 240-439410/4	Lab Control Sample	95	105	93	102
MB 240-439410/7	Method Blank	99	95	91	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-131782-A-6 MS	Matrix Spike	96
240-131782-A-6 MSD	Matrix Spike Duplicate	98
240-131807-2	MH-1171_061020	96
240-131807-3	MH-1001_060920	98
240-131807-4	MH-1210_060920	96
240-131807-5	DUP-01	96
LCS 240-438565/4	Lab Control Sample	92
MB 240-438565/5	Method Blank	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439410/7
Matrix: Water
Analysis Batch: 439410

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/22/20 16:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/22/20 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/22/20 16:09	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/22/20 16:09	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/22/20 16:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 130*		*06/22/20 16:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*06/22/20 16:09*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*06/22/20 16:09*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*06/22/20 16:09*	*1*

Lab Sample ID: LCS 240-439410/4
Matrix: Water
Analysis Batch: 439410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.8		ug/L		108	73 - 129
cis-1,2-Dichloroethene	10.0	9.53		ug/L		95	75 - 124
Tetrachloroethene	10.0	11.6		ug/L		116	70 - 125
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	74 - 130
Trichloroethene	10.0	9.77		ug/L		98	71 - 121
Vinyl chloride	10.0	14.1	*	ug/L		141	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*105*		*47 - 134*
Toluene-d8 (Surr)	*93*		*69 - 122*
Dibromofluoromethane (Surr)	*102*		*78 - 129*

Lab Sample ID: 240-131839-E-1 MS
Matrix: Water
Analysis Batch: 439410

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	3.0		10.0	13.5		ug/L		105	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	68 - 121
Tetrachloroethene	8.7		10.0	19.2		ug/L		104	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	10.1		ug/L		101	69 - 126
Trichloroethene	12		10.0	20.8		ug/L		91	56 - 124
Vinyl chloride	1.0	U *	10.0	12.5		ug/L		125	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-131839-E-1 MS
Matrix: Water
Analysis Batch: 439410

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*98*		*78 - 129*

Lab Sample ID: 240-131839-F-1 MSD
Matrix: Water
Analysis Batch: 439410

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	3.0		10.0	14.2		ug/L		112	64 - 132	5	35
cis-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	68 - 121	0	35
Tetrachloroethene	8.7		10.0	20.2		ug/L		115	52 - 129	5	35
trans-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	69 - 126	3	35
Trichloroethene	12		10.0	21.9		ug/L		102	56 - 124	5	35
Vinyl chloride	1.0	U *	10.0	12.9		ug/L		129	49 - 136	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*
Toluene-d8 (Surr)	*91*		*69 - 122*
Dibromofluoromethane (Surr)	*103*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-438565/5
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/16/20 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*		*06/16/20 12:18*	*1*

Lab Sample ID: LCS 240-438565/4
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	11.0		ug/L		110	80 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*

Lab Sample ID: 240-131782-A-6 MS
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	49		10.0	55.6	4	ug/L		65	46 - 170

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*

Lab Sample ID: 240-131782-A-6 MSD
Matrix: Water
Analysis Batch: 438565

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	49		10.0	54.7	4	ug/L		55	46 - 170	2	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

GC/MS VOA

Analysis Batch: 438565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-131807-2	MH-1171_061020	Total/NA	Water	8260B SIM	
240-131807-3	MH-1001_060920	Total/NA	Water	8260B SIM	
240-131807-4	MH-1210_060920	Total/NA	Water	8260B SIM	
240-131807-5	DUP-01	Total/NA	Water	8260B SIM	
MB 240-438565/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-438565/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-131782-A-6 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-131782-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 439410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-131807-1	TRIP BLANK	Total/NA	Water	8260B	
240-131807-2	MH-1171_061020	Total/NA	Water	8260B	
240-131807-3	MH-1001_060920	Total/NA	Water	8260B	
240-131807-4	MH-1210_060920	Total/NA	Water	8260B	
240-131807-5	DUP-01	Total/NA	Water	8260B	
MB 240-439410/7	Method Blank	Total/NA	Water	8260B	
LCS 240-439410/4	Lab Control Sample	Total/NA	Water	8260B	
240-131839-E-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-131839-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-131807-1
Date Collected: 06/10/20 00:00
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439410	06/22/20 19:32	LRW	TAL CAN

Client Sample ID: MH-1171_061020
Lab Sample ID: 240-131807-2
Date Collected: 06/10/20 10:57
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439410	06/22/20 19:57	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 18:19	SAM	TAL CAN

Client Sample ID: MH-1001_060920
Lab Sample ID: 240-131807-3
Date Collected: 06/10/20 12:00
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439410	06/22/20 20:22	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 18:44	SAM	TAL CAN

Client Sample ID: MH-1210_060920
Lab Sample ID: 240-131807-4
Date Collected: 06/10/20 12:52
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439410	06/22/20 20:47	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 19:10	SAM	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-131807-5
Date Collected: 06/10/20 00:00
Matrix: Water
Date Received: 06/12/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439410	06/22/20 21:12	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	438565	06/16/20 19:36	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-131807-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

1-6125 MICHIGAN

MICHIGAN 190 **Chain of Custody Record**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	of COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: RACHEL BIELAK / JULIA MCCLAFFERTY	TAT if different from below: 10 day; ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP ~~GW Site~~	Shipping/Tracking No:			Job/SDG No:
Project Number: 30050315.~~402.04~~ 701				
PO # 30050315.~~402.04~~ 701				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1																				1 TRIP BLANK
MH-1171_061020	6/10/20	1057		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1001_061020	6/10/20	1200		6						6					N	G	X	X	X	X	X	X	X	
MH-1210_061020	6/10/20	1252		6						6					N	G	X	X	X	X	X	X	X	
DUP-01	6/10/20	—		6						6					N	G	X	X	X	X	X	X	X	

240-131807 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631
Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/10/20 1430	NOVI COLD STORAGE	ARCADIS	6/10/20 1430
	Arcadis	6/11/20 1425		ETA	6-11-20 1427
	ETA	6-11-20 1428		ETA	6/12/20 1110

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 131807

Client Arcadis Site Name

Cooler Received on 6/12/20 Opened on 6/12/20

Cooler unpacked by: [signature]

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
   IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 2.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC902937
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 011770IE	Yes	No
16. Was a LL Hg or Me Hg trip blank present? ____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AMM

18. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

WI-NC-099

DATA VERIFICATION REPORT

June 27, 2020

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: 30050315.0402.04 off site
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 131807-1
Sample date: 2020-06-10
Report received by CADENA: 2020-06-27
Initial Data Verification completed by CADENA: 2020-06-27
Number of Samples:5
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch 439410 LCS recovery was outlying biased high for the following analyte: VINYL CHLORIDE. Associated client sample results were non-detect so qualification was not required based on this high bias QC outlier.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E203631
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 131807-1

		Sample Name:	TRIP BLANK				MH-1171_061020				MH-1001_060920				MH-1210_060920				DUP-01			
		Lab Sample ID:	2401318071				2401318072				2401318073				2401318074				2401318075			
		Sample Date:	6/10/2020				6/10/2020				6/10/2020				6/10/2020				6/10/2020			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																					
OSW-8260B																					
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	0.22	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim																					
1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	1.1	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-132011-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
6/30/2020 11:46:17 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-132011-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-132011-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/17/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MH-1181_061520 (240-132011-1), MH-1096_061520 (240-132011-2), MH-1082_061520 (240-132011-3) and TRIP BLANK (240-132011-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/25/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1181_061520 (240-132011-1), MH-1096_061520 (240-132011-2) and MH-1082_061520 (240-132011-3) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/26/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-132011-1	MH-1181_061520	Water	06/15/20 10:30	06/17/20 09:30	
240-132011-2	MH-1096_061520	Water	06/15/20 11:42	06/17/20 09:30	
240-132011-3	MH-1082_061520	Water	06/15/20 12:20	06/17/20 09:30	
240-132011-4	TRIP BLANK	Water	06/15/20 00:00	06/17/20 09:30	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Client Sample ID: MH-1181_061520 — Lab Sample ID: 240-132011-1

No Detections.

Client Sample ID: MH-1096_061520 — Lab Sample ID: 240-132011-2

No Detections.

Client Sample ID: MH-1082_061520 — Lab Sample ID: 240-132011-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-132011-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Client Sample ID: MH-1181_061520
Date Collected: 06/15/20 10:30
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132011-1
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 133*		*06/26/20 08:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 02:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 02:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 02:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 02:39	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 02:39	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*		*06/25/20 02:39*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*06/25/20 02:39*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 02:39*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 129*		*06/25/20 02:39*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Client Sample ID: MH-1096_061520
Date Collected: 06/15/20 11:42
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132011-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 133*		*06/26/20 09:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 03:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 03:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:03	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 03:03	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 03:03*	*1*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*06/25/20 03:03*	*1*
Toluene-d8 (Surr)	*85*		*69 - 122*		*06/25/20 03:03*	*1*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*06/25/20 03:03*	*1*

Client Sample ID: MH-1082_061520

Date Collected: 06/15/20 12:20
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132011-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2	J	2.0	0.86	ug/L			06/26/20 09:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 133*		*06/26/20 09:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 03:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 03:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:26	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 03:26	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 130*		*06/25/20 03:26*	*1*
4-Bromofluorobenzene (Surr)	*77*		*47 - 134*		*06/25/20 03:26*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 03:26*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*06/25/20 03:26*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Client Sample ID: TRIP BLANK
Date Collected: 06/15/20 00:00
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132011-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 03:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 03:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 03:49	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 03:49	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 03:49*	*1*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*		*06/25/20 03:49*	*1*
Toluene-d8 (Surr)	*83*		*69 - 122*		*06/25/20 03:49*	*1*
Dibromofluoromethane (Surr)	*94*		*78 - 129*		*06/25/20 03:49*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-132011-1	MH-1181_061520	92	73	86	99
240-132011-2	MH-1096_061520	89	76	85	97
240-132011-3	MH-1082_061520	88	77	86	98
240-132011-4	TRIP BLANK	89	89	83	94
240-132049-E-1 MS	Matrix Spike	79	89	92	91
240-132049-F-1 MSD	Matrix Spike Duplicate	80	87	91	91
LCS 240-439903/4	Lab Control Sample	80	87	91	92
MB 240-439903/7	Method Blank	87	77	88	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-132011-1	MH-1181_061520	94
240-132011-2	MH-1096_061520	94
240-132011-3	MH-1082_061520	100
240-132112-A-9 MS	Matrix Spike	101
240-132112-A-9 MSD	Matrix Spike Duplicate	102
LCS 240-440164/4	Lab Control Sample	96
MB 240-440164/5	Method Blank	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439903/7
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 01:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 01:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 01:53	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 01:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 01:53*	*1*
4-Bromofluorobenzene (Surr)	*77*		*47 - 134*		*06/25/20 01:53*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/25/20 01:53*	*1*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/25/20 01:53*	*1*

Lab Sample ID: LCS 240-439903/4
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.29		ug/L		93	73 - 129
cis-1,2-Dichloroethene	10.0	9.83		ug/L		98	75 - 124
Tetrachloroethene	10.0	11.0		ug/L		110	70 - 125
trans-1,2-Dichloroethene	10.0	9.50		ug/L		95	74 - 130
Trichloroethene	10.0	10.1		ug/L		101	71 - 121
Vinyl chloride	10.0	9.48		ug/L		95	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*
4-Bromofluorobenzene (Surr)	*87*		*47 - 134*
Toluene-d8 (Surr)	*91*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.83	J	10.0	9.22		ug/L		84	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.31		ug/L		93	68 - 121
Tetrachloroethene	1.0	U	10.0	9.71		ug/L		97	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	8.98		ug/L		90	69 - 126
Trichloroethene	1.0	U	10.0	8.81		ug/L		88	56 - 124
Vinyl chloride	0.86	J	10.0	8.90		ug/L		80	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 130*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Lab Sample ID: 240-132049-F-1 MSD
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.83	J	10.0	9.96		ug/L		91	64 - 132	8	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.60		ug/L		96	68 - 121	3	35
Tetrachloroethene	1.0	U	10.0	10.5		ug/L		105	52 - 129	8	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.47		ug/L		95	69 - 126	5	35
Trichloroethene	1.0	U	10.0	9.53		ug/L		95	56 - 124	8	35
Vinyl chloride	0.86	J	10.0	9.55		ug/L		87	49 - 136	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*
4-Bromofluorobenzene (Surr)	*87*		*47 - 134*
Toluene-d8 (Surr)	*91*		*69 - 122*
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-440164/5
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 07:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/26/20 07:43*	*1*

Lab Sample ID: LCS 240-440164/4
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	9.95		ug/L		99	80 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MS
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.0	U	10.0	9.11		ug/L		91	46 - 170

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MSD
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	46 - 170	13	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

GC/MS VOA

Analysis Batch: 439903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132011-1	MH-1181_061520	Total/NA	Water	8260B	
240-132011-2	MH-1096_061520	Total/NA	Water	8260B	
240-132011-3	MH-1082_061520	Total/NA	Water	8260B	
240-132011-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-439903/7	Method Blank	Total/NA	Water	8260B	
LCS 240-439903/4	Lab Control Sample	Total/NA	Water	8260B	
240-132049-E-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-132049-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 440164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132011-1	MH-1181_061520	Total/NA	Water	8260B SIM	
240-132011-2	MH-1096_061520	Total/NA	Water	8260B SIM	
240-132011-3	MH-1082_061520	Total/NA	Water	8260B SIM	
MB 240-440164/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-440164/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-132112-A-9 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-132112-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Client Sample ID: MH-1181_061520
Lab Sample ID: 240-132011-1
Date Collected: 06/15/20 10:30
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 02:39	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 08:35	TJL2	TAL CAN

Client Sample ID: MH-1096_061520
Lab Sample ID: 240-132011-2
Date Collected: 06/15/20 11:42
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 03:03	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 09:01	TJL2	TAL CAN

Client Sample ID: MH-1082_061520
Lab Sample ID: 240-132011-3
Date Collected: 06/15/20 12:20
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 03:26	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 09:27	TJL2	TAL CAN

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-132011-4
Date Collected: 06/15/20 00:00
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 03:49	LRW	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132011-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN 190

Chain of Custody Record

361220

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: KRIS HANSKEY	Site Contact: RACHEL BIELAK	Date: 6/15/20	COC No: 361220
Company Name: ARCADIS	Tel/Email: 248-994-2240	Lab Contact: MIKE DELMONICO	Carrier:	___ of ___ COCs
Address: 28550 CABOT DR. #500	Analysis Turnaround Time			Sampler: RACHEL BIELAK/EMMA WI
City/State/Zip: NOVI, MI 48377	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 248-994-2240	TAT if different from Below _____			Walk-in Client:
Fax: _____	☒ 2 weeks			Lab Sampling:
Project Name: FORD LTP	☐ 1 week			Job / SDG No.:
Site: FORD LTP	☐ 2 days			
PO# 30050315.701	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1,1-DCE 8260B	cis-1,2-DCE 8260B	PCE 8260B	TCE 8260B	VC 8260B	1,4-Dioxane 8260B SIM	trans-1,2-DCE 8260B	Sample Specific Notes:
MH-1181_061520	6/15/20	1030	G	W	6	N	N	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260 RSIM
MH-1096_061520	6/15/20	1142	G	W	6	N	N	X	X	X	X	X	X	X	
MH-1082_061520	6/15/20	1220	G	W	6	N	N	X	X	X	X	X	X	X	
TRIP BLANK	—	—	—	W	1										1 TRIP BLANK

240-132011 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2

½ ½ ½ ½ ½ ½ ½

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/15/20 1520	NOVI COLD STORAGE	ARCADIS	6/15/20 1520
Relinquished by: RACHEL BIELAK	Company: ARCADIS	Date/Time: 6/16/20 1625	Received by:	Company: ETA	Date/Time: 6/16/20 1625
Relinquished by:	Company: ETA	Date/Time: 6/16/20 1629	Received in Laboratory by:	Company: ETA Can	Date/Time: 6/17/20 0930

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 132011

Client Accadis Site Name _____

Cooler Received on 6/17/20 Opened on 6/17/20

Cooler unpacked by: Assistant

FedEx: 1st (Grd) Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap (Foam) Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF **+0.7** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN #IR-11 (CF **+0.9**°C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 4.1 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels be reconciled with the COC?	(Yes)	No
9. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
10. Sufficient quantity received to perform indicated analyses?	(Yes)	No
11. Are these work share samples?	Yes	(No)
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC902937**
13. Were VOAs on the COC?	(Yes)	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	(No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0117701E	(Yes)	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

DATA VERIFICATION REPORT

June 30, 2020

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: 30050315.0402.04 off site
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 132011-1
Sample date: 2020-06-15
Report received by CADENA: 2020-06-30
Initial Data Verification completed by CADENA: 2020-06-30
Number of Samples:4
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E203631
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 132011-1

		Sample Name:	MH-1181_061520				MH-1096_061520				MH-1082_061520				TRIP BLANK			
		Lab Sample ID:	2401320111				2401320112				2401320113				2401320114			
		Sample Date:	6/15/2020				6/15/2020				6/15/2020				6/15/2020			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																		
	OSW-8260B																	
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	OSW-8260BBSim																	
	1,4-Dioxane	123-91-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	1.2	2.0	ug/l	J				

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ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-132013-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
6/30/2020 11:58:51 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-132013-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-132013-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/17/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-132013-1), MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3), MH-1020_061620 (240-132013-4) and MH-1219_061620 (240-132013-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/25/2020.

Samples MH-1043_061620 (240-132013-2)[5X], MH-1067_061620 (240-132013-3)[5X] and MH-1020_061620 (240-132013-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3) and MH-1020_061620 (240-132013-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS

Sample MH-1020_061620 (240-132013-7) was analyzed for volatile organic compounds in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/26/2020.

Job ID: 240-132013-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3), MH-1020_061620 (240-132013-4) and MH-1219_061620 (240-132013-6) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/26/2020.

Sample MH-1020_061620 (240-132013-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MH-1020_061620 (240-132013-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Sample MH-1020_061620 (240-132013-7) was analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 06/23/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-132013-1	TRIP BLANK	Water	06/16/20 00:00	06/17/20 09:30	
240-132013-2	MH-1043_061620	Water	06/16/20 08:30	06/17/20 09:30	
240-132013-3	MH-1067_061620	Water	06/16/20 09:00	06/17/20 09:30	
240-132013-4	MH-1020_061620	Water	06/16/20 09:38	06/17/20 09:30	
240-132013-6	MH-1219_061620	Water	06/16/20 14:22	06/17/20 09:30	
240-132013-7	MH-1020_061620	Solid	06/16/20 09:45	06/17/20 09:30	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-132013-1

No Detections.

Client Sample ID: MH-1043_061620 — Lab Sample ID: 240-132013-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1067_061620 — Lab Sample ID: 240-132013-3

No Detections.

Client Sample ID: MH-1020_061620 — Lab Sample ID: 240-132013-4

No Detections.

Client Sample ID: MH-1219_061620 — Lab Sample ID: 240-132013-6

No Detections.

Client Sample ID: MH-1020_061620 — Lab Sample ID: 240-132013-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK

Date Collected: 06/16/20 00:00
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 04:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 04:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 04:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 04:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 04:12	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 130*		*06/25/20 04:12*	*1*
4-Bromofluorobenzene (Surr)	*84*		*47 - 134*		*06/25/20 04:12*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*06/25/20 04:12*	*1*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 04:12*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1043_061620
Date Collected: 06/16/20 08:30
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2	J	2.0	0.86	ug/L			06/26/20 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*06/26/20 12:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:35	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 04:35	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 04:35	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:35	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 04:35	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 04:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 04:35*	*5*
4-Bromofluorobenzene (Surr)	*78*		*47 - 134*		*06/25/20 04:35*	*5*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 04:35*	*5*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 04:35*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1067_061620
Date Collected: 06/16/20 09:00
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/26/20 13:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:58	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 04:58	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 04:58	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:58	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 04:58	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 04:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 04:58*	*5*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*06/25/20 04:58*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/25/20 04:58*	*5*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/25/20 04:58*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620
Date Collected: 06/16/20 09:38
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	10	U	10	4.3	ug/L			06/26/20 13:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 133*		*06/26/20 13:50*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 05:21	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 05:21	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 05:21	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 05:21	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 05:21	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 05:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 05:21*	*5*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*06/25/20 05:21*	*5*
Toluene-d8 (Surr)	*87*		*69 - 122*		*06/25/20 05:21*	*5*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 05:21*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1219_061620

Date Collected: 06/16/20 14:22
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-6

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*06/26/20 14:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 05:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 05:45	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 05:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 05:45	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 05:45	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 05:45*	*1*
4-Bromofluorobenzene (Surr)	*78*		*47 - 134*		*06/25/20 05:45*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 05:45*	*1*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*06/25/20 05:45*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620
Date Collected: 06/16/20 09:45
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-7
Matrix: Solid
Percent Solids: 63.9

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	83	U	83	33	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
1,4-Dioxane	26000	U	26000	2300	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
cis-1,2-Dichloroethene	83	U	83	19	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Tetrachloroethene	83	U	83	37	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
trans-1,2-Dichloroethene	83	U	83	21	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Trichloroethene	83	U	83	23	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Vinyl chloride	66	U	66	25	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*47 - 136*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
Dibromofluoromethane (Surr)	*86*		*49 - 122*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
Toluene-d8 (Surr)	*91*		*55 - 123*	*06/22/20 21:58*	*06/26/20 19:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**63.9**		0.1	0.1	%			06/23/20 15:14	1
Percent Moisture	**36.1**		0.1	0.1	%			06/23/20 15:14	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-132013-1	TRIP BLANK	88	84	87	95
240-132013-2	MH-1043_061620	87	78	86	95
240-132013-3	MH-1067_061620	89	80	88	96
240-132013-4	MH-1020_061620	87	80	87	95
240-132013-6	MH-1219_061620	89	78	86	97
240-132049-E-1 MS	Matrix Spike	79	89	92	91
240-132049-F-1 MSD	Matrix Spike Duplicate	80	87	91	91
LCS 240-439903/4	Lab Control Sample	80	87	91	92
MB 240-439903/7	Method Blank	87	77	88	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(47-136)	(51-124)	(49-122)	(55-123)
240-132013-7	MH-1020_061620	103	83	86	91
240-132013-7 MS	MH-1020_061620	99	83	89	88
240-132013-7 MSD	MH-1020_061620	97	82	87	87
LCS 240-439507/2-A	Lab Control Sample	97	83	89	89
MB 240-439507/1-A	Method Blank	95	79	81	87

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-132013-2	MH-1043_061620	98
240-132013-3	MH-1067_061620	97
240-132013-4	MH-1020_061620	94
240-132013-6	MH-1219_061620	98
240-132112-A-9 MS	Matrix Spike	101
240-132112-A-9 MSD	Matrix Spike Duplicate	102
LCS 240-440164/4	Lab Control Sample	96
MB 240-440164/5	Method Blank	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439903/7
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 01:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 01:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 01:53	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 01:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 01:53*	*1*
4-Bromofluorobenzene (Surr)	*77*		*47 - 134*		*06/25/20 01:53*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/25/20 01:53*	*1*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/25/20 01:53*	*1*

Lab Sample ID: LCS 240-439903/4
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.29		ug/L		93	73 - 129		
cis-1,2-Dichloroethene			10.0	9.83		ug/L		98	75 - 124		
Tetrachloroethene			10.0	11.0		ug/L		110	70 - 125		
trans-1,2-Dichloroethene			10.0	9.50		ug/L		95	74 - 130		
Trichloroethene			10.0	10.1		ug/L		101	71 - 121		
Vinyl chloride			10.0	9.48		ug/L		95	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*
4-Bromofluorobenzene (Surr)	*87*		*47 - 134*
Toluene-d8 (Surr)	*91*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	0.83	J	10.0	9.22		ug/L		84	64 - 132		
cis-1,2-Dichloroethene	1.0	U	10.0	9.31		ug/L		93	68 - 121		
Tetrachloroethene	1.0	U	10.0	9.71		ug/L		97	52 - 129		
trans-1,2-Dichloroethene	1.0	U	10.0	8.98		ug/L		90	69 - 126		
Trichloroethene	1.0	U	10.0	8.81		ug/L		88	56 - 124		
Vinyl chloride	0.86	J	10.0	8.90		ug/L		80	49 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 130*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	91		78 - 129

Lab Sample ID: 240-132049-F-1 MSD
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.83	J	10.0	9.96		ug/L		91	64 - 132	8	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.60		ug/L		96	68 - 121	3	35
Tetrachloroethene	1.0	U	10.0	10.5		ug/L		105	52 - 129	8	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.47		ug/L		95	69 - 126	5	35
Trichloroethene	1.0	U	10.0	9.53		ug/L		95	56 - 124	8	35
Vinyl chloride	0.86	J	10.0	9.55		ug/L		87	49 - 136	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	80		75 - 130
4-Bromofluorobenzene (Surr)	87		47 - 134
Toluene-d8 (Surr)	91		69 - 122
Dibromofluoromethane (Surr)	91		78 - 129

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439507/1-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	40	U	40	16	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
1,4-Dioxane	13000	U	13000	1100	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Tetrachloroethene	40	U	40	18	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Trichloroethene	40	U	40	11	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Vinyl chloride	32	U	32	12	ug/Kg		06/22/20 21:58	06/26/20 18:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		47 - 136	06/22/20 21:58	06/26/20 18:39	1
4-Bromofluorobenzene (Surr)	79		51 - 124	06/22/20 21:58	06/26/20 18:39	1
Dibromofluoromethane (Surr)	81		49 - 122	06/22/20 21:58	06/26/20 18:39	1
Toluene-d8 (Surr)	87		55 - 123	06/22/20 21:58	06/26/20 18:39	1

Lab Sample ID: LCS 240-439507/2-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1000	1190		ug/Kg		119	48 - 140
1,4-Dioxane	20000	21800		ug/Kg		109	44 - 154

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-439507/2-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	1000	964		ug/Kg		96	76 - 120
Tetrachloroethene	1000	970		ug/Kg		97	75 - 124
trans-1,2-Dichloroethene	1000	1050		ug/Kg		105	74 - 125
Trichloroethene	1000	976		ug/Kg		98	75 - 123
Vinyl chloride	1000	880		ug/Kg		88	39 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*47 - 136*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*
Dibromofluoromethane (Surr)	*89*		*49 - 122*
Toluene-d8 (Surr)	*89*		*55 - 123*

Lab Sample ID: 240-132013-7 MS
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	83	U	1540	1670		ug/Kg	☼	108	20 - 150
1,4-Dioxane	26000	U	30700	32800		ug/Kg	☼	107	48 - 149
cis-1,2-Dichloroethene	83	U	1540	1470		ug/Kg	☼	95	35 - 130
Tetrachloroethene	83	U	1540	1370		ug/Kg	☼	89	13 - 144
trans-1,2-Dichloroethene	83	U	1540	1510		ug/Kg	☼	99	31 - 138
Trichloroethene	83	U	1540	1420		ug/Kg	☼	93	10 - 162
Vinyl chloride	66	U	1540	1240		ug/Kg	☼	81	15 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*47 - 136*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*
Dibromofluoromethane (Surr)	*89*		*49 - 122*
Toluene-d8 (Surr)	*88*		*55 - 123*

Lab Sample ID: 240-132013-7 MSD
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	83	U	1500	1590		ug/Kg	☼	106	20 - 150	5	40
1,4-Dioxane	26000	U	29900	32400		ug/Kg	☼	108	48 - 149	1	40
cis-1,2-Dichloroethene	83	U	1500	1420		ug/Kg	☼	95	35 - 130	3	40
Tetrachloroethene	83	U	1500	1370		ug/Kg	☼	92	13 - 144	0	40
trans-1,2-Dichloroethene	83	U	1500	1470		ug/Kg	☼	99	31 - 138	3	40
Trichloroethene	83	U	1500	1380		ug/Kg	☼	92	10 - 162	3	40
Vinyl chloride	66	U	1500	1210		ug/Kg	☼	81	15 - 150	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*47 - 136*
4-Bromofluorobenzene (Surr)	*82*		*51 - 124*
Dibromofluoromethane (Surr)	*87*		*49 - 122*

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-132013-7 MSD
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*87*		*55 - 123*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-440164/5
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 07:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/26/20 07:43*	*1*

Lab Sample ID: LCS 240-440164/4
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.95		ug/L		99	80 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MS
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	9.11		ug/L		91	46 - 170		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MSD
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	46 - 170	13	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 133*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method: Moisture - Percent Moisture

Lab Sample ID: 240-132218-A-3 DU
Matrix: Solid
Analysis Batch: 439665

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	97.3			97.4		%				0.2	20
Percent Moisture	2.7			2.6		%				6	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

GC/MS VOA

Prep Batch: 439507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	5030B	
MB 240-439507/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 240-439507/2-A	Lab Control Sample	Total/NA	Solid	5030B	
240-132013-7 MS	MH-1020_061620	Total/NA	Solid	5030B	
240-132013-7 MSD	MH-1020_061620	Total/NA	Solid	5030B	

Analysis Batch: 439903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-1	TRIP BLANK	Total/NA	Water	8260B	
240-132013-2	MH-1043_061620	Total/NA	Water	8260B	
240-132013-3	MH-1067_061620	Total/NA	Water	8260B	
240-132013-4	MH-1020_061620	Total/NA	Water	8260B	
240-132013-6	MH-1219_061620	Total/NA	Water	8260B	
MB 240-439903/7	Method Blank	Total/NA	Water	8260B	
LCS 240-439903/4	Lab Control Sample	Total/NA	Water	8260B	
240-132049-E-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-132049-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 440164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-2	MH-1043_061620	Total/NA	Water	8260B SIM	
240-132013-3	MH-1067_061620	Total/NA	Water	8260B SIM	
240-132013-4	MH-1020_061620	Total/NA	Water	8260B SIM	
240-132013-6	MH-1219_061620	Total/NA	Water	8260B SIM	
MB 240-440164/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-440164/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-132112-A-9 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-132112-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 440287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	8260B MI	439507
MB 240-439507/1-A	Method Blank	Total/NA	Solid	8260B MI	439507
LCS 240-439507/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	439507
240-132013-7 MS	MH-1020_061620	Total/NA	Solid	8260B MI	439507
240-132013-7 MSD	MH-1020_061620	Total/NA	Solid	8260B MI	439507

General Chemistry

Analysis Batch: 439665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	Moisture	
240-132218-A-3 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-132013-1
Date Collected: 06/16/20 00:00
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 04:12	LRW	TAL CAN

Client Sample ID: MH-1043_061620
Lab Sample ID: 240-132013-2
Date Collected: 06/16/20 08:30
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 04:35	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 12:57	TJL2	TAL CAN

Client Sample ID: MH-1067_061620
Lab Sample ID: 240-132013-3
Date Collected: 06/16/20 09:00
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 04:58	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 13:23	TJL2	TAL CAN

Client Sample ID: MH-1020_061620
Lab Sample ID: 240-132013-4
Date Collected: 06/16/20 09:38
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 05:21	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		5	440164	06/26/20 13:50	TJL2	TAL CAN

Client Sample ID: MH-1219_061620
Lab Sample ID: 240-132013-6
Date Collected: 06/16/20 14:22
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 05:45	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 14:16	TJL2	TAL CAN

Client Sample ID: MH-1020_061620
Lab Sample ID: 240-132013-7
Date Collected: 06/16/20 09:45
Matrix: Solid
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	439665	06/23/20 15:14	BLW	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620
Date Collected: 06/16/20 09:45
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-7
Matrix: Solid
Percent Solids: 63.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			439507	06/22/20 21:58	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	440287	06/26/20 19:47	TJL1	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

3.2/4.1

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	} of } COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: RACHEL BIELAK/EMMA WITHERSPOON	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client: Lab sampling:
Project Name: Ford LTP ~~Off Site~~	Method of Shipment/Carrier:			Job/SDG No:
Project Number: 30050315.~~402.04~~ 701	Shipping/Tracking No:			
PO # 30050315.~~402.04~~ 701				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1																				1 TRIP BLANK
MH-1043_06/16/20	6/16/20	0830		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1067_06/16/20	6/16/20	0900		6						6					N	G	X	X	X	X	X	X	X	
MH-1020_06/16/20	6/16/20	0938		6						6					N	G	X	X	X	X	X	X	X	
MH-1020_06/16/20	6/16/20	0945			2								2		N	G	X	X	X	X	X	X	X	2 jars, 1 for 8260B 1 for 8260B SIM
MH-1219_06/16/20	6/16/20	1422		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM

240-132013 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For [ ] Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631
Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/16/20 1625		ETA	6/16/20 1625
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	6/16/20 1629		ETA Can	6/17/20 0930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 132013

Client Accadis Site Name

Cooler unpacked by: Anonymous

Cooler Received on 6/17/20 Opened on 6/17/20

FedEx: 1st (Grd) Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap (Foam) Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF **+0.7** °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN #IR-11 (CF **+0.9**°C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 4.1 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC902937**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0117701E (Yes) No
16. Was a LL Hg or Me Hg trip blank present? Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

WI-NC-099

DATA VERIFICATION REPORT

June 30, 2020

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E203631
Project: Ford Livonia Transmission Project - OFF-SITE - Soil Gas and Groundwater
Project number: 30050315.0402.04 off site
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 132013-1
Sample date: 2020-06-16
Report received by CADENA: 2020-06-30
Initial Data Verification completed by CADENA: 2020-06-30
Number of Samples:5
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E203631
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 132013-1

	Sample Name:	TRIP BLANK				MH-1043_061620				MH-1067_061620				MH-1020_061620				MH-1219_061620				MH-1020_061620			
	Lab Sample ID:	2401320131				2401320132				2401320133				2401320134				2401320136				2401320137			
	Sample Date:	6/16/2020				6/16/2020				6/16/2020				6/16/2020				6/16/2020				6/16/2020			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																									
OSW-8260B																									
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	83	ug/kg	---
1,4-Dioxane	123-91-1																					ND	26000	ug/kg	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	83	ug/kg	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	83	ug/kg	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	83	ug/kg	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	83	ug/kg	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	66	ug/kg	---
OSW-8260BBSim																									
1,4-Dioxane	123-91-1					1.2	2.0	ug/l	J	ND	2.0	ug/l	---	ND	10	ug/l	---	ND	2.0	ug/l	---				

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-136902-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
10/5/2020 3:48:40 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-136902-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-136902-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 9/22/2020 9:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MH-1001_091520 (240-136902-1) and TRIP BLANK (240-136902-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/29/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples MH-1001_091520 (240-136902-1) and TRIP BLANK (240-136902-2) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Sample MH-1001_091520 (240-136902-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 09/28/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-136902-1	MH-1001_091520	Water	09/15/20 14:05	09/22/20 09:20	
240-136902-2	TRIP BLANK	Water	09/15/20 00:00	09/22/20 09:20	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: MH-1001_091520 — Lab Sample ID: 240-136902-1

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-136902-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: MH-1001_091520

Date Collected: 09/15/20 14:05
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136902-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/28/20 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*		*09/28/20 14:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 12:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 12:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*		*09/29/20 12:10*	*1*
4-Bromofluorobenzene (Surr)	*85*		*47 - 134*		*09/29/20 12:10*	*1*
Toluene-d8 (Surr)	*83*		*69 - 122*		*09/29/20 12:10*	*1*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*09/29/20 12:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: TRIP BLANK

Date Collected: 09/15/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136902-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 12:33	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:33	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 12:33	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 130*		*09/29/20 12:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*09/29/20 12:33*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*09/29/20 12:33*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*09/29/20 12:33*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-136902-1	MH-1001_091520	91	85	83	90
240-136902-2	TRIP BLANK	101	93	92	98
LCS 240-453474/5	Lab Control Sample	106	97	96	106
MB 240-453474/8	Method Blank	106	99	97	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-136765-C-5 MS	Matrix Spike	87
240-136765-C-5 MSD	Matrix Spike Duplicate	89
240-136902-1	MH-1001_091520	87
LCS 240-453310/4	Lab Control Sample	85
MB 240-453310/5	Method Blank	84

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453474/8
Matrix: Water
Analysis Batch: 453474

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 11:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 11:23	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 11:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 11:23	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 11:23	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*09/29/20 11:23*	*1*
4-Bromofluorobenzene (Surr)	*99*		*47 - 134*		*09/29/20 11:23*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*09/29/20 11:23*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*09/29/20 11:23*	*1*

Lab Sample ID: LCS 240-453474/5
Matrix: Water
Analysis Batch: 453474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	20.5		ug/L		103	73 - 129
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	75 - 124
Tetrachloroethene	20.0	19.0		ug/L		95	70 - 125
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	74 - 130
Trichloroethene	20.0	20.4		ug/L		102	71 - 121
Vinyl chloride	20.0	22.6		ug/L		113	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*
Toluene-d8 (Surr)	*96*		*69 - 122*
Dibromofluoromethane (Surr)	*106*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453310/5
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/28/20 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*09/28/20 13:37*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-453310/4
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.6		ug/L		106	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

Lab Sample ID: 240-136765-C-5 MS
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	4.1		10.0	13.9		ug/L		97	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*

Lab Sample ID: 240-136765-C-5 MSD
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	4.1		10.0	14.3		ug/L		101	46 - 170	3	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

GC/MS VOA

Analysis Batch: 453310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136902-1	MH-1001_091520	Total/NA	Water	8260B SIM	
MB 240-453310/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-453310/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-136765-C-5 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-136765-C-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 453474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136902-1	MH-1001_091520	Total/NA	Water	8260B	
240-136902-2	TRIP BLANK	Total/NA	Water	8260B	
MB 240-453474/8	Method Blank	Total/NA	Water	8260B	
LCS 240-453474/5	Lab Control Sample	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: MH-1001_091520

Lab Sample ID: 240-136902-1

Date Collected: 09/15/20 14:05

Matrix: Water

Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453474	09/29/20 12:10	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	453310	09/28/20 14:52	SAM	TAL CAN

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-136902-2

Date Collected: 09/15/20 00:00

Matrix: Water

Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453474	09/29/20 12:33	HMB	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20 *
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record 491411

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Kris Hinskey	Site Contact: Julia M Glatfelty	Date: 9/15/20	COC No:
Company Name: Arcadis	Tel/Email:	Lab Contact: Mike DelMonico	Carrier:	1 of 1 COCs
Address: 28550 Cabot Dr. Suite 500	Analysis Turnaround Time			Sampler: Julia M Glatfelty
City/State/Zip: Novi, MI 48377	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-994-2240	TAT if different from Below _____			Walk-in Client:
Fax: 248-994-2241	☒ 10 day ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Ford LTP				Job / SDG No.:
Site: Ford LTP				
PO# 30050315.701.01				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	VC	1,4-Dioxane	Sample Specific Notes:
MH-1001_091520	9/15/20	1405	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
TRIP BLANK	9/15/20	—	G	GW	1	N	N	X	X	X	X	X	X	X	1 TRIP BLANK

240-136902 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2 2 2 2 2 2 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Submit all results through cadena at Jim.tomalia@cadena.com. Cadena #E205162 Level IV reporting.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Julia M Glatfelty	Arcadis	9/15/2020 1605	Christa Ulm	ARCADIS	9/15/2020 / 1605
Christa Ulm	ARCADIS	9/15/2020 1700	NOVI COLD STORAGE	ARCADIS	9/15/2020 / 1700
Julia M Glatfelty	Arcadis	9/21/2020 1550	Received in Laboratory by:	Eurofins	9/21/20 1550
	Eurofins	9/21/20 1600	Matthew Lee	TEM	9-22-20 920

10/5/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 136902

Client Arcadis Site Name

Cooler Received on 9-22-20 Opened on 9-22-20

Cooler unpacked by: Matt Snyder

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.0 °C Corrected Cooler Temp. 1.9 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC907861**
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # (Yes) No
17. Was a LL Hg or Me Hg trip blank present? Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

DATA VERIFICATION REPORT

October 06, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.01
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 136902-1
Sample date: 2020-09-15
Report received by CADENA: 2020-10-05
Initial Data Verification completed by CADENA: 2020-10-06
Number of Samples: 1 Water and 1 trip blank
Sample Matrices: Water
Test Categories: GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 136902-1

		Sample Name:	MH-1001_091520			TRIP BLANK			
		Lab Sample ID:	2401369021			2401369022			
		Sample Date:	9/15/2020			9/15/2020			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC									
OSW-8260B									
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim									
1,4-Dioxane	123-91-1	ND	2.0	ug/l	---				

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

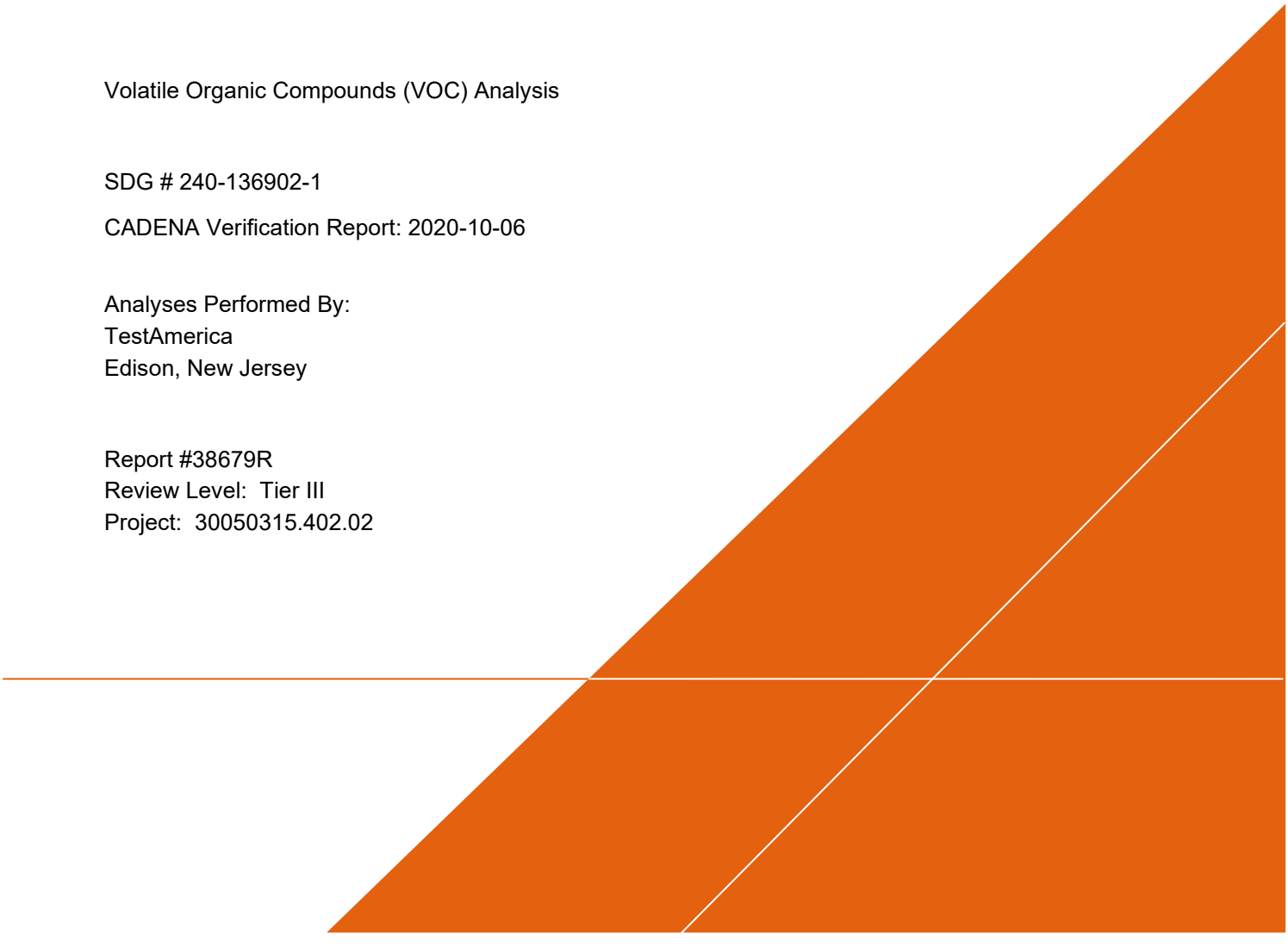
Volatile Organic Compounds (VOC) Analysis

SDG # 240-136902-1

CADENA Verification Report: 2020-10-06

Analyses Performed By:
TestAmerica
Edison, New Jersey

Report #38679R
Review Level: Tier III
Project: 30050315.402.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-136902-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						VOC (Full Scan)	VOC (SIM)	MISC
240-136902-1	MH-1001_091520	240-136902-1	Water	9/15/2020		X	X	
	TRIP BLANK	240-136902-2	Water	9/15/2020		X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and 8260B SIM. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B/8260B-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not performed on a sample within this SDG.

6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260B/8260B-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Field Duplicate RPD	X				X
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE:

DATE: October 15, 2020

PEER REVIEW: Joseph C. Houser

DATE: October 16, 2020

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

MICHIGAN 190

Chain of Custody Record 491411

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Kris Hinskey	Site Contact: Julia M Glatfelty	Date: 9/15/20	COC No:
Company Name: Arcadis	Tel/Email:	Lab Contact: Mike DelMonico	Carrier:	1 of 1 COCs
Address: 28550 Cabot Dr. Suite 500	Analysis Turnaround Time			Sampler: Julia M Glatfelty
City/State/Zip: Novi, MI 48377	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 248-994-2240	TAT if different from Below _____			Walk-in Client:
Fax: 248-994-2241	☒ 10 day ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Ford LTP				Job / SDG No.:
Site: Ford LTP				
PO# 30050315.701.01				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	VC	1,4-Dioxane	Sample Specific Notes:
MH-1001_091520	9/15/20	1405	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
TRIP BLANK	9/15/20	—	G	GW	1	N	N	X	X	X	X	X	X	X	1 TRIP BLANK

240-136902 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2 2 2 2 2 2 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Submit all results through cadena at Jim.tomalia@cadena.com. Cadena #E205162 Level IV reporting.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Julia M Glatfelty	Arcadis	9/15/2020 1605	Christa Ulm	ARCADIS	9/15/2020 / 1605
Christa Ulm	ARCADIS	9/15/2020 1700	NOVI COLD STORAGE	ARCADIS	9/15/2020 / 1700
Julia M Glatfelty	Arcadis	9/21/2020 1550	Received in Laboratory by:	Eurofins	9/21/20 1550
	Eurofins	9/21/20 1600	Matthew Lee	TEM	9-22-20 920

10/5/2020

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: MH-1001_091520

Date Collected: 09/15/20 14:05
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136902-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/28/20 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*		*09/28/20 14:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 12:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 12:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*		*09/29/20 12:10*	*1*
4-Bromofluorobenzene (Surr)	*85*		*47 - 134*		*09/29/20 12:10*	*1*
Toluene-d8 (Surr)	*83*		*69 - 122*		*09/29/20 12:10*	*1*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*09/29/20 12:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136902-1

Client Sample ID: TRIP BLANK

Date Collected: 09/15/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136902-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 12:33	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 12:33	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 12:33	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 130*		*09/29/20 12:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*09/29/20 12:33*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*09/29/20 12:33*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*09/29/20 12:33*	*1*

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ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-136903-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
10/5/2020 3:52:15 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-136903-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-136903-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 9/22/2020 9:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MH-1066_091620 (240-136903-1), MH-1171_091620 (240-136903-2), MH-1219_091620 (240-136903-3), TRIP BLANK (240-136903-4) and DUP-01 (240-136903-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/29/2020 and 09/30/2020.

Sample MH-1219_091620 (240-136903-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample was diluted due to the nature of the sample matrix: MH-1219_091620 (240-136903-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1066_091620 (240-136903-1), MH-1171_091620 (240-136903-2), MH-1219_091620 (240-136903-3) and DUP-01 (240-136903-5) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/28/2020 and 09/29/2020.

Job ID: 240-136903-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-136903-1	MH-1066_091620	Water	09/16/20 09:15	09/22/20 09:20	
240-136903-2	MH-1171_091620	Water	09/16/20 10:57	09/22/20 09:20	
240-136903-3	MH-1219_091620	Water	09/16/20 11:40	09/22/20 09:20	
240-136903-4	TRIP BLANK	Water	09/16/20 00:00	09/22/20 09:20	
240-136903-5	DUP-01	Water	09/16/20 00:00	09/22/20 09:20	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1066_091620 — Lab Sample ID: 240-136903-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.17	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1171_091620 — Lab Sample ID: 240-136903-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.89	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1219_091620 — Lab Sample ID: 240-136903-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.92	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-136903-4

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 240-136903-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1066_091620

Date Collected: 09/16/20 09:15
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 18:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:12	1
cis-1,2-Dichloroethene	**0.17**	**J**	1.0	0.16	ug/L			09/29/20 19:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:12	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 130*		*09/29/20 19:12*	*1*
4-Bromofluorobenzene (Surr)	*66*		*47 - 134*		*09/29/20 19:12*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*09/29/20 19:12*	*1*
Dibromofluoromethane (Surr)	*111*		*78 - 129*		*09/29/20 19:12*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1171_091620

Date Collected: 09/16/20 10:57
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.89	J	2.0	0.86	ug/L			09/28/20 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/28/20 22:47*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 19:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*		*09/29/20 19:36*	*1*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/29/20 19:36*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*09/29/20 19:36*	*1*
Dibromofluoromethane (Surr)	*109*		*78 - 129*		*09/29/20 19:36*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1219_091620

Date Collected: 09/16/20 11:40
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.92	J	2.0	0.86	ug/L			09/28/20 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/28/20 23:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			09/30/20 15:47	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			09/30/20 15:47	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			09/30/20 15:47	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			09/30/20 15:47	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			09/30/20 15:47	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			09/30/20 15:47	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 130*		*09/30/20 15:47*	*5*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/30/20 15:47*	*5*
Toluene-d8 (Surr)	*89*		*69 - 122*		*09/30/20 15:47*	*5*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/30/20 15:47*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: TRIP BLANK

Date Collected: 09/16/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 19:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*09/29/20 19:59*	*1*
4-Bromofluorobenzene (Surr)	*65*		*47 - 134*		*09/29/20 19:59*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*09/29/20 19:59*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/29/20 19:59*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: DUP-01

Date Collected: 09/16/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*09/29/20 12:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 16:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/30/20 16:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/30/20 16:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 16:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/30/20 16:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/30/20 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 130*		*09/30/20 16:10*	*1*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/30/20 16:10*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*09/30/20 16:10*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/30/20 16:10*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-136708-B-14 MS	Matrix Spike	95	91	102	89
240-136708-B-14 MSD	Matrix Spike Duplicate	94	93	103	92
240-136903-1	MH-1066_091620	119	66	92	111
240-136903-2	MH-1171_091620	120	69	94	109
240-136903-3	MH-1219_091620	115	69	89	107
240-136903-4	TRIP BLANK	117	65	87	107
240-136903-5	DUP-01	115	69	91	107
240-137084-D-1 MS	Matrix Spike	96	94	102	90
240-137084-E-1 MSD	Matrix Spike Duplicate	93	90	98	89
LCS 240-453514/4	Lab Control Sample	91	92	99	90
LCS 240-453691/4	Lab Control Sample	89	94	98	88
MB 240-453514/7	Method Blank	112	64	89	103
MB 240-453691/7	Method Blank	110	69	89	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-136765-C-5 MS	Matrix Spike	87
240-136765-C-5 MSD	Matrix Spike Duplicate	89
240-136837-A-2 MS	Matrix Spike	95
240-136837-A-2 MSD	Matrix Spike Duplicate	93
240-136903-1	MH-1066_091620	91
240-136903-2	MH-1171_091620	90
240-136903-3	MH-1219_091620	90
240-136903-5	DUP-01	89
LCS 240-453310/4	Lab Control Sample	85
LCS 240-453472/4	Lab Control Sample	86
MB 240-453310/5	Method Blank	84
MB 240-453472/5	Method Blank	86

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453514/7
Matrix: Water
Analysis Batch: 453514

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 13:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 13:38	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 13:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 13:38	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 13:38	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 130*		*09/29/20 13:38*	*1*
4-Bromofluorobenzene (Surr)	*64*		*47 - 134*		*09/29/20 13:38*	*1*
Toluene-d8 (Surr)	*89*		*69 - 122*		*09/29/20 13:38*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*09/29/20 13:38*	*1*

Lab Sample ID: LCS 240-453514/4
Matrix: Water
Analysis Batch: 453514

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.32		ug/L		93	73 - 129
cis-1,2-Dichloroethene	10.0	9.41		ug/L		94	75 - 124
Tetrachloroethene	10.0	10.2		ug/L		102	70 - 125
trans-1,2-Dichloroethene	10.0	9.90		ug/L		99	74 - 130
Trichloroethene	10.0	8.72		ug/L		87	71 - 121
Vinyl chloride	10.0	9.10		ug/L		91	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*
Toluene-d8 (Surr)	*99*		*69 - 122*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Lab Sample ID: 240-136708-B-14 MS
Matrix: Water
Analysis Batch: 453514

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	270		667	875		ug/L		90	64 - 132
cis-1,2-Dichloroethene	240		667	892		ug/L		98	68 - 121
Tetrachloroethene	330		667	1030		ug/L		105	52 - 129
Trichloroethene	280		667	887		ug/L		92	56 - 124
Vinyl chloride	67	U	667	612		ug/L		92	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*91*		*47 - 134*
Toluene-d8 (Surr)	*102*		*69 - 122*
Dibromofluoromethane (Surr)	*89*		*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-136708-B-14 MSD
Matrix: Water
Analysis Batch: 453514

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	270		667	864		ug/L		89	64 - 132	1	35
cis-1,2-Dichloroethene	240		667	887		ug/L		97	68 - 121	1	35
Tetrachloroethene	330		667	1050		ug/L		108	52 - 129	2	35
Trichloroethene	280		667	882		ug/L		91	56 - 124	1	35
Vinyl chloride	67	U	667	604		ug/L		91	49 - 136	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 130*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*
Toluene-d8 (Surr)	*103*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: MB 240-453691/7
Matrix: Water
Analysis Batch: 453691

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 14:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/30/20 14:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/30/20 14:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 14:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/30/20 14:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/30/20 14:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*09/30/20 14:59*	*1*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/30/20 14:59*	*1*
Toluene-d8 (Surr)	*89*		*69 - 122*		*09/30/20 14:59*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 129*		*09/30/20 14:59*	*1*

Lab Sample ID: LCS 240-453691/4
Matrix: Water
Analysis Batch: 453691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.90		ug/L		99	73 - 129		
cis-1,2-Dichloroethene			10.0	9.58		ug/L		96	75 - 124		
Tetrachloroethene			10.0	11.0		ug/L		110	70 - 125		
trans-1,2-Dichloroethene			10.0	10.4		ug/L		104	74 - 130		
Trichloroethene			10.0	9.48		ug/L		95	71 - 121		
Vinyl chloride			10.0	9.91		ug/L		99	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*
Toluene-d8 (Surr)	*98*		*69 - 122*
Dibromofluoromethane (Surr)	*88*		*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-137084-D-1 MS
Matrix: Water
Analysis Batch: 453691

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.1		10.0	10.5		ug/L		94	64 - 132
cis-1,2-Dichloroethene	0.29	J	10.0	9.92		ug/L		96	68 - 121
Tetrachloroethene	1.1		10.0	11.4		ug/L		103	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	69 - 126
Trichloroethene	0.79	J	10.0	9.57		ug/L		88	56 - 124
Vinyl chloride	1.0	U	10.0	9.34		ug/L		93	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 130*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*
Toluene-d8 (Surr)	*102*		*69 - 122*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Lab Sample ID: 240-137084-E-1 MSD
Matrix: Water
Analysis Batch: 453691

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.1		10.0	10.8		ug/L		97	64 - 132	3	35
cis-1,2-Dichloroethene	0.29	J	10.0	9.82		ug/L		95	68 - 121	1	35
Tetrachloroethene	1.1		10.0	11.2		ug/L		101	52 - 129	1	35
trans-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	69 - 126	1	35
Trichloroethene	0.79	J	10.0	9.45		ug/L		87	56 - 124	1	35
Vinyl chloride	1.0	U	10.0	9.00		ug/L		90	49 - 136	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*
Toluene-d8 (Surr)	*98*		*69 - 122*
Dibromofluoromethane (Surr)	*89*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453310/5
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/28/20 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*09/28/20 13:37*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-453310/4
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.6		ug/L		106	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

Lab Sample ID: 240-136765-C-5 MS
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	4.1		10.0	13.9		ug/L		97	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*

Lab Sample ID: 240-136765-C-5 MSD
Matrix: Water
Analysis Batch: 453310

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	4.1		10.0	14.3		ug/L		101	46 - 170	3	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*

Lab Sample ID: MB 240-453472/5
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*09/29/20 11:06*	*1*

Lab Sample ID: LCS 240-453472/4
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.0		ug/L		100	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-136837-A-2 MS
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	13		10.0	23.9		ug/L		110	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 133*

Lab Sample ID: 240-136837-A-2 MSD
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	13		10.0	22.5		ug/L		97	46 - 170	6	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

GC/MS VOA

Analysis Batch: 453310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136903-2	MH-1171_091620	Total/NA	Water	8260B SIM	
240-136903-3	MH-1219_091620	Total/NA	Water	8260B SIM	
MB 240-453310/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-453310/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-136765-C-5 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-136765-C-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 453472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136903-1	MH-1066_091620	Total/NA	Water	8260B SIM	
240-136903-5	DUP-01	Total/NA	Water	8260B SIM	
MB 240-453472/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-453472/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-136837-A-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-136837-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 453514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136903-1	MH-1066_091620	Total/NA	Water	8260B	
240-136903-2	MH-1171_091620	Total/NA	Water	8260B	
240-136903-4	TRIP BLANK	Total/NA	Water	8260B	
MB 240-453514/7	Method Blank	Total/NA	Water	8260B	
LCS 240-453514/4	Lab Control Sample	Total/NA	Water	8260B	
240-136708-B-14 MS	Matrix Spike	Total/NA	Water	8260B	
240-136708-B-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 453691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136903-3	MH-1219_091620	Total/NA	Water	8260B	
240-136903-5	DUP-01	Total/NA	Water	8260B	
MB 240-453691/7	Method Blank	Total/NA	Water	8260B	
LCS 240-453691/4	Lab Control Sample	Total/NA	Water	8260B	
240-137084-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-137084-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1066_091620
Lab Sample ID: 240-136903-1
Date Collected: 09/16/20 09:15
Matrix: Water
Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453514	09/29/20 19:12	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	453472	09/29/20 18:06	SAM	TAL CAN

Client Sample ID: MH-1171_091620
Lab Sample ID: 240-136903-2
Date Collected: 09/16/20 10:57
Matrix: Water
Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453514	09/29/20 19:36	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	453310	09/28/20 22:47	SAM	TAL CAN

Client Sample ID: MH-1219_091620
Lab Sample ID: 240-136903-3
Date Collected: 09/16/20 11:40
Matrix: Water
Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	453691	09/30/20 15:47	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	453310	09/28/20 23:12	SAM	TAL CAN

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-136903-4
Date Collected: 09/16/20 00:00
Matrix: Water
Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453514	09/29/20 19:59	LRW	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-136903-5
Date Collected: 09/16/20 00:00
Matrix: Water
Date Received: 09/22/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453691	09/30/20 16:10	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	453472	09/29/20 12:20	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20 *
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190 1.0 / 1.9

Chain of Custody Record 491409

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Julia McClafferty

TAL-8210

Client Contact	Project Manager: K. HINSKEY	Site Contact: ~~ADAM RICHMOND~~ Date: 9/16/20	COC No:
Company Name: ARCADIS	Tel/Email: 248-994-2240	Lab Contact: 248-M. DEMARCO Carrier:	1 of 1 COCs
Address: 28550 CABOT DRIVE	Analysis Turnaround Time		Sampler:
City/State/Zip: NOVI / MI / 48377	☐ CALENDAR DAYS ☑ WORKING DAYS		For Lab Use Only:
Phone: 248-994-2240	TAT if different from Below		Walk-in Client:
Fax: 248-994-2241	☑ 2 weeks 10 DAYS		Lab Sampling:
Project Name: FORD LTP	☐ 1 week		Job / SDG No.:
Site: LIVONIA	☐ 2 days		
PO# 30050315.701.01	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	PCE	TCE	Vinyl Chloride	Sample Specific Notes:
MH-1066_091620	9/16/20	0915	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAS FOR METHOD 8260B 3 VOAS FOR METHOD 8260B SIM
MH-1171_091620	9/16/20	1057	G	GW	6	N	N	X	X	X	X	X	X	X	" "
MH-12M_091620	9/16/20	1140	G	GW	6	N	N	X	X	X	X	X	X	X	" "
TRIP BLANK	9/16/20	—	G	GW	6	N	N	X	X	X	X	X	X	X	1 TRIP BLANK
DUP-01	9/16/20	—	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAS FOR METHOD 8260B 3 VOAS FOR METHOD 8260B SIM
								2	2	2	2	2	2	2	

240-136903 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: SUBMIT ALL RESULTS THROUGH CADENA AT JIM.TOMALIA@CADENA.COM. CADENA #E205162 LEVEL IV REPORTING.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ARCADIS	9/16/2020 1720	NOVI COLD STORAGE	ARCADIS	9/16/2020 1720
Julia McClafferty	Arcadis	9/21/2020 1550	[signature]	EUROFINS	9/21/20 1550
[signature]	EUROFINS	9/21/20 15:58	Received in Laboratory by: [signature]	ETA 920	9-22-20 9-22-20

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 136903**
Canton Facility

Client Arcadis Site Name

Cooler Received on 9-22-20 Opened on 9-22-20

Cooler unpacked by: MattSnyder

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.0 °C Corrected Cooler Temp. 1.9 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? (Yes) No
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC907861**
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # (Yes) No
17. Was a LL Hg or Me Hg trip blank present? Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

Only one trip blanks

19. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

DATA VERIFICATION REPORT

October 06, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.01
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 136903-1
Sample date: 2020-09-16
Report received by CADENA: 2020-10-05
Initial Data Verification completed by CADENA: 2020-10-06
Number of Samples: 4 Water and 1 trip blank
Sample Matrices: Water
Test Categories: GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 136903-1

		Sample Name:	MH-1066_091620				MH-1171_091620				MH-1219_091620				TRIP BLANK				DUP-01			
		Lab Sample ID:	2401369031				2401369032				2401369033				2401369034				2401369035			
		Sample Date:	9/16/2020				9/16/2020				9/16/2020				9/16/2020				9/16/2020			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260B																						
1,1-Dichloroethene	75-35-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2		0.17	1.0	ug/l	J	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim																						
1,4-Dioxane	123-91-1		ND	2.0	ug/l	---	0.89	2.0	ug/l	J	0.92	2.0	ug/l	J					ND	2.0	ug/l	---

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

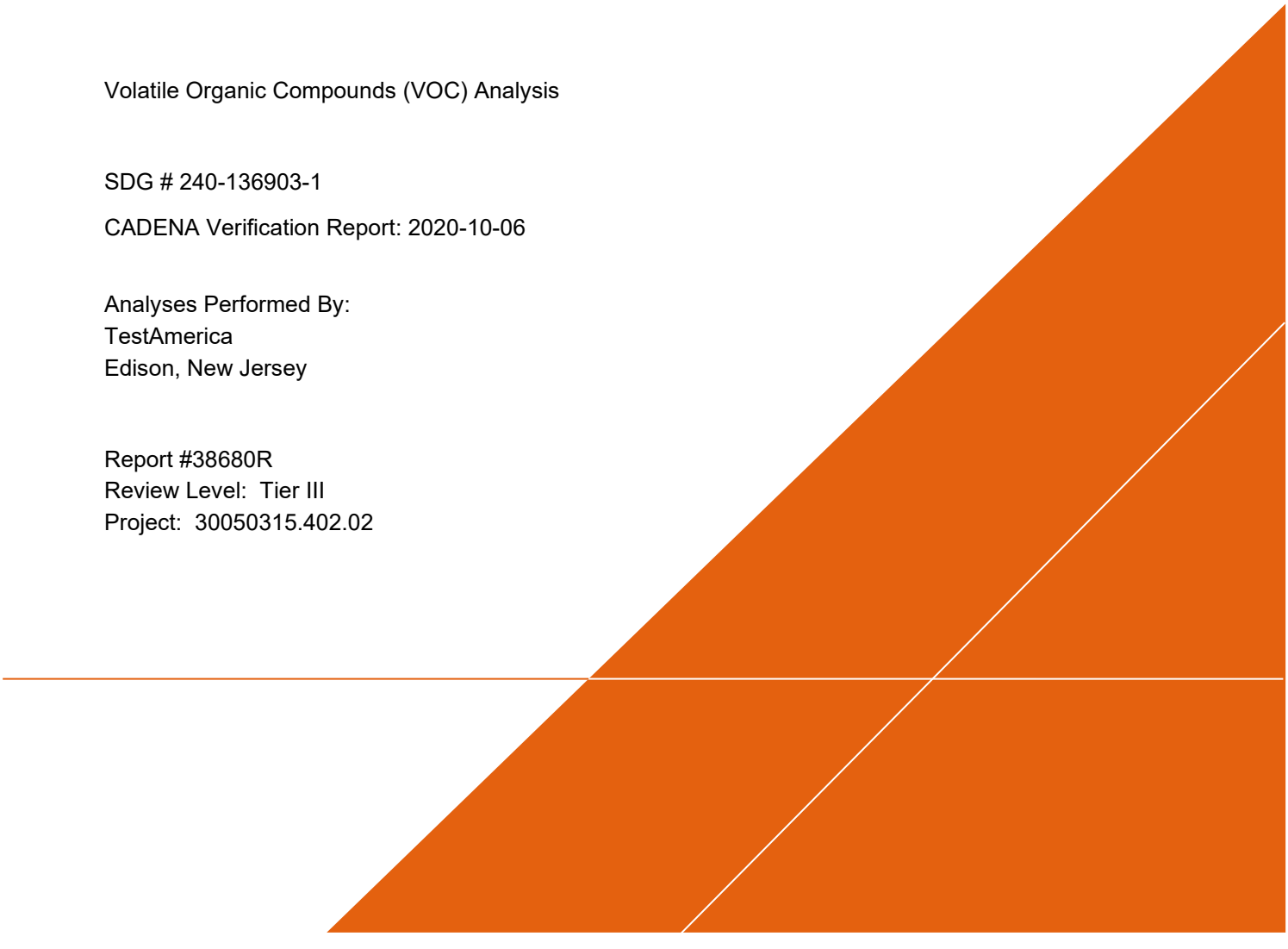
Volatile Organic Compounds (VOC) Analysis

SDG # 240-136903-1

CADENA Verification Report: 2020-10-06

Analyses Performed By:
TestAmerica
Edison, New Jersey

Report #38680R
Review Level: Tier III
Project: 30050315.402.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-136903-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						VOC (Full Scan)	VOC (SIM)	MISC
240-136903-1	MH-1066_091620	2401369031	Water	9/16/2020		X	X	
	MH-1171_091620	2401369032	Water	9/16/2020		X	X	
	MH-1219_091620	2401369033	Water	9/16/2020		X	X	
	TRIP BLANK_20200916	2401369034	Water	9/16/2020		X		
	DUP-01_091620	2401369035	Water	9/16/2020	MH-1171_091620	X	X	

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and 8260B SIM. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B/8260B-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MH-1171_091620/ DUP-01_091620	1,4-Dioxane	0.89 J	2 U	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260B/8260B-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Field Duplicate RPD		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE:

DATE: October 15, 2020

PEER REVIEW: Joseph C. Houser

DATE: October 16, 2020

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

MICHIGAN 190 1.0 / 1.9

Chain of Custody Record 491409

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Julia McClafferty

TAL-8210

Client Contact	Project Manager: K. HINSKEY	Site Contact: ~~ADAM RICHMOND~~ Date: 9/16/20	COC No:
Company Name: ARCADIS	Tel/Email: 248-994-2240	Lab Contact: 248-M. DEMARCO Carrier:	1 of 1 COCs
Address: 28550 CABOT DRIVE	Analysis Turnaround Time		Sampler:
City/State/Zip: NOVI / MI / 48377	☐ CALENDAR DAYS ☑ WORKING DAYS		For Lab Use Only:
Phone: 248-994-2240	TAT if different from Below		Walk-in Client:
Fax: 248-994-2241	☑ 2 weeks 10 DAYS		Lab Sampling:
Project Name: FORD LTP	☐ 1 week		Job / SDG No.:
Site: LIVONIA	☐ 2 days		
PO# 30050315.701.01	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	PCE	TCE	Vinyl Chloride	Sample Specific Notes:
MH-1066_091620	9/16/20	0915	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAS FOR METHOD 8260B 3 VOAS FOR METHOD 8260B SIM
MH-1171_091620	9/16/20	1057	G	GW	6	N	N	X	X	X	X	X	X	X	" "
MH-12M_091620	9/16/20	1140	G	GW	6	N	N	X	X	X	X	X	X	X	" "
TRIP BLANK	9/16/20	—	G	GW	6	N	N	X	X	X	X	X	X	X	1 TRIP BLANK
DUP-01	9/16/20	—	G	GW	6	N	N	X	X	X	X	X	X	X	3 VOAS FOR METHOD 8260B 3 VOAS FOR METHOD 8260B SIM
								2	2	2	2	2	2	2	

240-136903 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: SUBMIT ALL RESULTS THROUGH CADENA AT JIM.TOMALIA@CADENA.COM. CADENA #E205162 LEVEL IV REPORTING.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ARCADIS	9/16/2020 1720	NOVI COLD STORAGE	ARCADIS	9/16/2020 1720
Julia McClafferty	Arcadis	9/21/2020 1550	[signature]	EUROFINS	9/21/20 1550
[signature]	EUROFINS	9/21/20 15:58	Received in Laboratory by: [signature]	ETA 920	9-22-20 9-22-20

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1066_091620

Date Collected: 09/16/20 09:15
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 18:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:12	1
cis-1,2-Dichloroethene	**0.17**	**J**	1.0	0.16	ug/L			09/29/20 19:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:12	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 130*		*09/29/20 19:12*	*1*
4-Bromofluorobenzene (Surr)	*66*		*47 - 134*		*09/29/20 19:12*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*09/29/20 19:12*	*1*
Dibromofluoromethane (Surr)	*111*		*78 - 129*		*09/29/20 19:12*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1171_091620

Date Collected: 09/16/20 10:57
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.89	J	2.0	0.86	ug/L			09/28/20 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/28/20 22:47*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 19:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*		*09/29/20 19:36*	*1*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/29/20 19:36*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*09/29/20 19:36*	*1*
Dibromofluoromethane (Surr)	*109*		*78 - 129*		*09/29/20 19:36*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: MH-1219_091620

Date Collected: 09/16/20 11:40
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.92	J	2.0	0.86	ug/L			09/28/20 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/28/20 23:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			09/30/20 15:47	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			09/30/20 15:47	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			09/30/20 15:47	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			09/30/20 15:47	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			09/30/20 15:47	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			09/30/20 15:47	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 130*		*09/30/20 15:47*	*5*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/30/20 15:47*	*5*
Toluene-d8 (Surr)	*89*		*69 - 122*		*09/30/20 15:47*	*5*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/30/20 15:47*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: TRIP BLANK

Date Collected: 09/16/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/29/20 19:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/29/20 19:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/29/20 19:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/29/20 19:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/29/20 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*09/29/20 19:59*	*1*
4-Bromofluorobenzene (Surr)	*65*		*47 - 134*		*09/29/20 19:59*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*09/29/20 19:59*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/29/20 19:59*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136903-1

Client Sample ID: DUP-01

Date Collected: 09/16/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136903-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*09/29/20 12:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 16:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/30/20 16:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/30/20 16:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/30/20 16:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/30/20 16:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/30/20 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 130*		*09/30/20 16:10*	*1*
4-Bromofluorobenzene (Surr)	*69*		*47 - 134*		*09/30/20 16:10*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*09/30/20 16:10*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*09/30/20 16:10*	*1*

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-136904-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
10/6/2020 3:17:18 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-136904-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-136904-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 9/22/2020 9:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-136904-1), MH-1020_091820 (240-136904-2), MH-1043_091820 (240-136904-3), MH-1181_091820 (240-136904-4) and MH-1096_091820 (240-136904-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/01/2020 and 10/02/2020.

Samples MH-1020_091820 (240-136904-2)[3.33X] and MH-1043_091820 (240-136904-3)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 8260B: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MH-1020_091820 (240-136904-2) and MH-1043_091820 (240-136904-3). Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1020_091820 (240-136904-2), MH-1043_091820 (240-136904-3), MH-1181_091820 (240-136904-4) and MH-1096_091820 (240-136904-5) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method

Job ID: 240-136904-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

8260B SIM. The samples were analyzed on 09/29/2020.

Sample MH-1020_091820 (240-136904-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MH-1020_091820 (240-136904-2). Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-136904-1	TRIP BLANK	Water	09/18/20 00:00	09/22/20 09:20	
240-136904-2	MH-1020_091820	Water	09/18/20 10:05	09/22/20 09:20	
240-136904-3	MH-1043_091820	Water	09/18/20 08:32	09/22/20 09:20	
240-136904-4	MH-1181_091820	Water	09/18/20 11:00	09/22/20 09:20	
240-136904-5	MH-1096_091820	Water	09/18/20 11:30	09/22/20 09:20	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-136904-1

No Detections.

Client Sample ID: MH-1020_091820 — Lab Sample ID: 240-136904-2

No Detections.

Client Sample ID: MH-1043_091820 — Lab Sample ID: 240-136904-3

No Detections.

Client Sample ID: MH-1181_091820 — Lab Sample ID: 240-136904-4

No Detections.

Client Sample ID: MH-1096_091820 — Lab Sample ID: 240-136904-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.89	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: TRIP BLANK

Date Collected: 09/18/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 18:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 18:51	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 18:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 18:51	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 18:51	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*10/01/20 18:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*10/01/20 18:51*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*10/01/20 18:51*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*10/01/20 18:51*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1020_091820

Date Collected: 09/18/20 10:05
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	10	U	10	4.3	ug/L			09/29/20 16:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*		*09/29/20 16:02*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/01/20 13:54	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.53	ug/L			10/01/20 13:54	3.33
Tetrachloroethene	3.3	U	3.3	0.50	ug/L			10/01/20 13:54	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/01/20 13:54	3.33
Trichloroethene	3.3	U	3.3	0.33	ug/L			10/01/20 13:54	3.33
Vinyl chloride	3.3	U	3.3	0.67	ug/L			10/01/20 13:54	3.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*10/01/20 13:54*	*3.33*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*10/01/20 13:54*	*3.33*
Toluene-d8 (Surr)	*93*		*69 - 122*		*10/01/20 13:54*	*3.33*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*10/01/20 13:54*	*3.33*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1043_091820

Date Collected: 09/18/20 08:32
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 16:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.38	ug/L			10/02/20 11:36	2
cis-1,2-Dichloroethene	2.0	U	2.0	0.32	ug/L			10/02/20 11:36	2
Tetrachloroethene	2.0	U	2.0	0.30	ug/L			10/02/20 11:36	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.38	ug/L			10/02/20 11:36	2
Trichloroethene	2.0	U	2.0	0.20	ug/L			10/02/20 11:36	2
Vinyl chloride	2.0	U	2.0	0.40	ug/L			10/02/20 11:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*10/02/20 11:36*	*2*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/02/20 11:36*	*2*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/02/20 11:36*	*2*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*10/02/20 11:36*	*2*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1181_091820

Date Collected: 09/18/20 11:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 16:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 19:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 19:41	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 19:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 19:41	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 19:41	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*10/01/20 19:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/01/20 19:41*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/01/20 19:41*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 129*		*10/01/20 19:41*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1096_091820

Date Collected: 09/18/20 11:30
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.89	J	2.0	0.86	ug/L			09/29/20 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/29/20 17:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 20:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 20:06	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 20:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 20:06	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 20:06	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*10/01/20 20:06*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/01/20 20:06*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/01/20 20:06*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*10/01/20 20:06*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-136771-C-14 MS	Matrix Spike	96	100	95	90
240-136771-C-14 MSD	Matrix Spike Duplicate	95	101	96	91
240-136904-1	TRIP BLANK	110	98	97	100
240-136904-2	MH-1020_091820	106	97	93	100
240-136904-3	MH-1043_091820	107	96	94	102
240-136904-4	MH-1181_091820	106	96	94	101
240-136904-5	MH-1096_091820	105	96	94	98
240-137087-B-45 MS	Matrix Spike	99	103	98	92
240-137087-B-45 MSD	Matrix Spike Duplicate	98	101	97	91
LCS 240-453870/6	Lab Control Sample	98	103	99	93
LCS 240-454065/6	Lab Control Sample	96	100	96	92
MB 240-453870/9	Method Blank	102	98	93	97
MB 240-454065/9	Method Blank	104	97	93	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-136837-A-2 MS	Matrix Spike	95
240-136837-A-2 MSD	Matrix Spike Duplicate	93
240-136904-2	MH-1020_091820	92
240-136904-3	MH-1043_091820	91
240-136904-4	MH-1181_091820	91
240-136904-5	MH-1096_091820	90
LCS 240-453472/4	Lab Control Sample	86
MB 240-453472/5	Method Blank	86

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453870/9
Matrix: Water
Analysis Batch: 453870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 11:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 11:01	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 11:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 11:01	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 11:01	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*10/01/20 11:01*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*10/01/20 11:01*	*1*
Toluene-d8 (Surr)	*93*		*69 - 122*		*10/01/20 11:01*	*1*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*10/01/20 11:01*	*1*

Lab Sample ID: LCS 240-453870/6
Matrix: Water
Analysis Batch: 453870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	19.7		ug/L		99	73 - 129
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	75 - 124
Tetrachloroethene	20.0	19.8		ug/L		99	70 - 125
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	74 - 130
Trichloroethene	20.0	18.2		ug/L		91	71 - 121
Vinyl chloride	20.0	19.8		ug/L		99	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*99*		*69 - 122*
Dibromofluoromethane (Surr)	*93*		*78 - 129*

Lab Sample ID: 240-136771-C-14 MS
Matrix: Water
Analysis Batch: 453870

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	4.0	U	80.0	77.7		ug/L		97	64 - 132
cis-1,2-Dichloroethene	4.0	U	80.0	76.9		ug/L		96	68 - 121
Tetrachloroethene	4.0	U	80.0	75.2		ug/L		94	52 - 129
trans-1,2-Dichloroethene	4.0	U	80.0	77.1		ug/L		96	69 - 126
Trichloroethene	10		80.0	81.4		ug/L		89	56 - 124
Vinyl chloride	4.0	U	80.0	83.3		ug/L		104	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*95*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-136771-C-14 MS
Matrix: Water
Analysis Batch: 453870

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Lab Sample ID: 240-136771-C-14 MSD
Matrix: Water
Analysis Batch: 453870

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	4.0	U	80.0	83.8		ug/L		105	64 - 132	8	35
cis-1,2-Dichloroethene	4.0	U	80.0	84.9		ug/L		106	68 - 121	10	35
Tetrachloroethene	4.0	U	80.0	82.4		ug/L		103	52 - 129	9	35
trans-1,2-Dichloroethene	4.0	U	80.0	83.2		ug/L		104	69 - 126	8	35
Trichloroethene	10		80.0	88.8		ug/L		98	56 - 124	9	35
Vinyl chloride	4.0	U	80.0	80.7		ug/L		101	49 - 136	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*101*		*47 - 134*
Toluene-d8 (Surr)	*96*		*69 - 122*
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Lab Sample ID: MB 240-454065/9
Matrix: Water
Analysis Batch: 454065

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/02/20 11:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/02/20 11:11	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/02/20 11:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/02/20 11:11	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/02/20 11:11	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/02/20 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*10/02/20 11:11*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*10/02/20 11:11*	*1*
Toluene-d8 (Surr)	*93*		*69 - 122*		*10/02/20 11:11*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 129*		*10/02/20 11:11*	*1*

Lab Sample ID: LCS 240-454065/6
Matrix: Water
Analysis Batch: 454065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	19.3		ug/L		97	73 - 129
cis-1,2-Dichloroethene	20.0	18.9		ug/L		95	75 - 124
Tetrachloroethene	20.0	18.6		ug/L		93	70 - 125
trans-1,2-Dichloroethene	20.0	19.1		ug/L		95	74 - 130
Trichloroethene	20.0	17.9		ug/L		89	71 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-454065/6
Matrix: Water
Analysis Batch: 454065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			20.0	18.8		ug/L		94	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*96*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: 240-137087-B-45 MS
Matrix: Water
Analysis Batch: 454065

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	25	U	500	514		ug/L		103	64 - 132		
cis-1,2-Dichloroethene	25	U	500	508		ug/L		102	68 - 121		
Tetrachloroethene	14	J	500	493		ug/L		96	52 - 129		
trans-1,2-Dichloroethene	25	U	500	501		ug/L		100	69 - 126		
Trichloroethene	13	J	500	481		ug/L		94	56 - 124		
Vinyl chloride	25	U	500	474		ug/L		95	49 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*98*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: 240-137087-B-45 MSD
Matrix: Water
Analysis Batch: 454065

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25	U	500	517		ug/L		103	64 - 132	1	35
cis-1,2-Dichloroethene	25	U	500	523		ug/L		105	68 - 121	3	35
Tetrachloroethene	14	J	500	485		ug/L		94	52 - 129	2	35
trans-1,2-Dichloroethene	25	U	500	507		ug/L		101	69 - 126	1	35
Trichloroethene	13	J	500	484		ug/L		94	56 - 124	1	35
Vinyl chloride	25	U	500	484		ug/L		97	49 - 136	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*101*		*47 - 134*
Toluene-d8 (Surr)	*97*		*69 - 122*
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-453472/5
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*09/29/20 11:06*	*1*

Lab Sample ID: LCS 240-453472/4
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.0		ug/L		100	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*

Lab Sample ID: 240-136837-A-2 MS
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	13		10.0	23.9		ug/L		110	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 133*

Lab Sample ID: 240-136837-A-2 MSD
Matrix: Water
Analysis Batch: 453472

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	13		10.0	22.5		ug/L		97	46 - 170	6	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

GC/MS VOA

Analysis Batch: 453472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136904-2	MH-1020_091820	Total/NA	Water	8260B SIM	
240-136904-3	MH-1043_091820	Total/NA	Water	8260B SIM	
240-136904-4	MH-1181_091820	Total/NA	Water	8260B SIM	
240-136904-5	MH-1096_091820	Total/NA	Water	8260B SIM	
MB 240-453472/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-453472/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-136837-A-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-136837-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 453870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136904-1	TRIP BLANK	Total/NA	Water	8260B	
240-136904-2	MH-1020_091820	Total/NA	Water	8260B	
240-136904-4	MH-1181_091820	Total/NA	Water	8260B	
240-136904-5	MH-1096_091820	Total/NA	Water	8260B	
MB 240-453870/9	Method Blank	Total/NA	Water	8260B	
LCS 240-453870/6	Lab Control Sample	Total/NA	Water	8260B	
240-136771-C-14 MS	Matrix Spike	Total/NA	Water	8260B	
240-136771-C-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 454065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136904-3	MH-1043_091820	Total/NA	Water	8260B	
MB 240-454065/9	Method Blank	Total/NA	Water	8260B	
LCS 240-454065/6	Lab Control Sample	Total/NA	Water	8260B	
240-137087-B-45 MS	Matrix Spike	Total/NA	Water	8260B	
240-137087-B-45 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: TRIP BLANK
Date Collected: 09/18/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453870	10/01/20 18:51	HMB	TAL CAN

Client Sample ID: MH-1020_091820
Date Collected: 09/18/20 10:05
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	453870	10/01/20 13:54	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		5	453472	09/29/20 16:02	SAM	TAL CAN

Client Sample ID: MH-1043_091820
Date Collected: 09/18/20 08:32
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	454065	10/02/20 11:36	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	453472	09/29/20 16:26	SAM	TAL CAN

Client Sample ID: MH-1181_091820
Date Collected: 09/18/20 11:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453870	10/01/20 19:41	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	453472	09/29/20 16:51	SAM	TAL CAN

Client Sample ID: MH-1096_091820
Date Collected: 09/18/20 11:30
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	453870	10/01/20 20:06	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	453472	09/29/20 17:16	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20 *
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	/ of / COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: RACHEL BIELAK / JULIA MCCLAFFERTY	TAT if different from below		Walk-in client
Project Name: Ford LTP ~~On-Site~~	Method of Shipment/Carrier:	10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab sampling
Project Number: ~~30050315.401.03~~ RCB 9/18/2020 30050315.701.01	Shipping/Tracking No:			Job/SDG No:
PO # ~~30050315.401.03~~ RCB 9/18/2020 30050315.701.01				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		X						X					-	-	X	X	X	X	X	X	X	1 TRIP BLANK
MH-1020 - 091820	9/18/20	1005		X						X					N	G	X	X	X	X	X	X	X	3 VOAs * run 8260B first
MH-1043 - 091820	9/18/20	0832		X						X					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1181 - 091820	9/18/20	1100		X						X					N	G	X	X	X	X	X	X	X	
MH-1090 - 091820	9/18/20	1130		X						X					N	G	X	X	X	X	X	X	X	

240-136904 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E~~203728~~ 205162 RCB 9/18/20

* All samples collected from sanitary sewers (contain sanitary waste).

* MH-1020_091820 limited volume Run 8260B first, then 8260BSIM if possible

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Julia McClafferty	Arcadis	9/18/2020 1345	Novi Cold Storage	Arcadis	9/18/2020 1345
Julia McClafferty	Arcadis	9/21/20 1550		EUROFINS	9/21/20 1550
	EUROFINS	9/21/20 1600	Received in Laboratory by:	ETA	9-22-20 920

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 136904

Client Arcadis Site Name

Cooler Received on 9-22-20 Opened on 9-22-20

Cooler unpacked by: MattSnyder

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.0 °C Corrected Cooler Temp. 1.9 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11. Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No	(NA) pH Strip Lot# HC907861
14. Were VOAs on the COC?	(Yes)	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	(No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	(Yes)	No
17. Was a LL Hg or Me Hg trip blank present?	Yes	(No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

DATA VERIFICATION REPORT

October 07, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.01
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 136904-1
Sample date: 2020-09-18
Report received by CADENA: 2020-10-06
Initial Data Verification completed by CADENA: 2020-10-07
Number of Samples: 4 Water and 1 trip blank
Sample Matrices: Water
Test Categories: GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 136904-1

		Sample Name:	TRIP BLANK				MH-1020_091820				MH-1043_091820				MH-1181_091820				MH-1096_091820			
		Lab Sample ID:	2401369041				2401369042				2401369043				2401369044				2401369045			
		Sample Date:	9/18/2020				9/18/2020				9/18/2020				9/18/2020				9/18/2020			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260B																						
1,1-Dichloroethene	75-35-4		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4		ND	1.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim																						
1,4-Dioxane	123-91-1						ND	10	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.89	2.0	ug/l	J

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

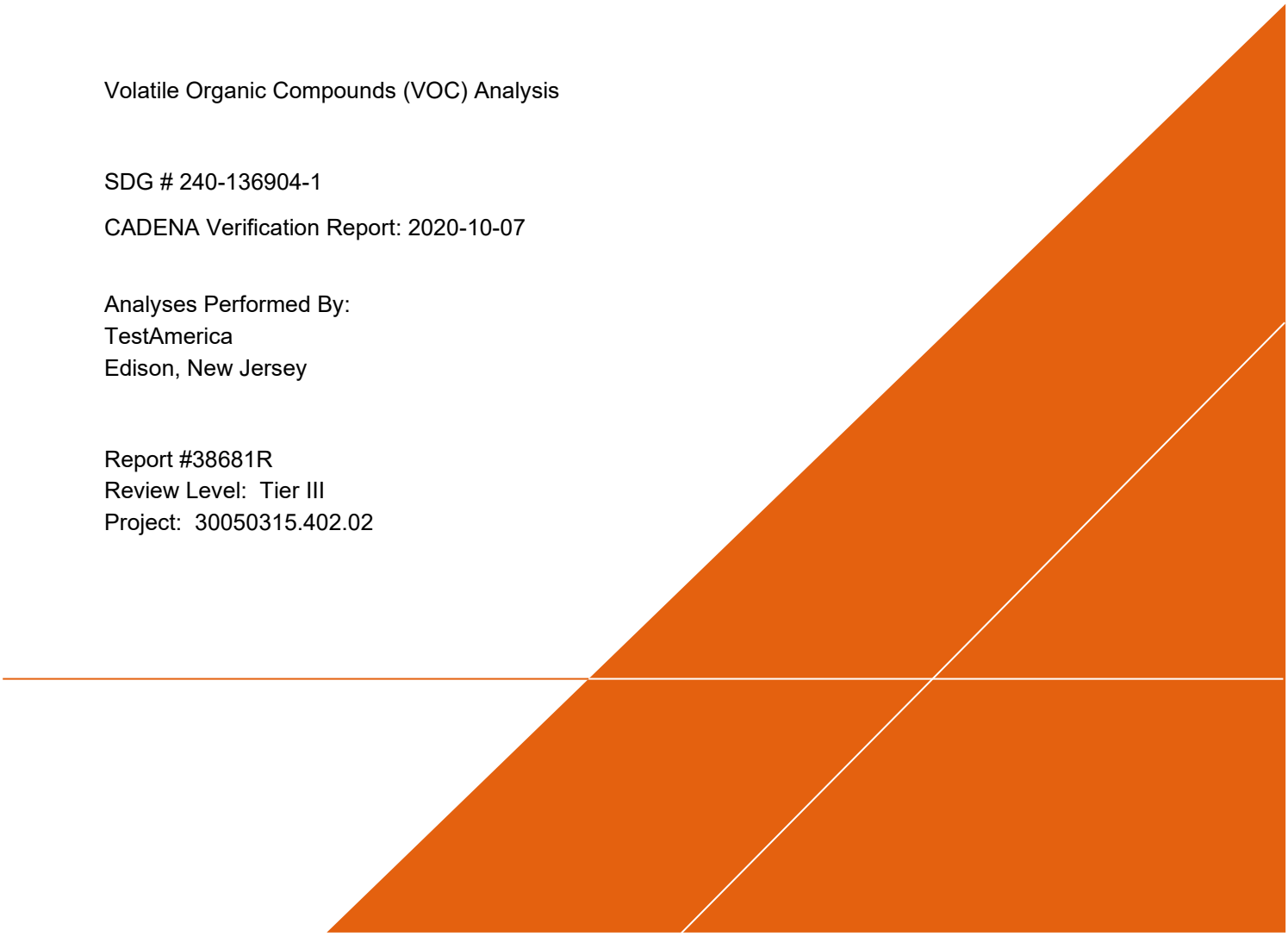
Volatile Organic Compounds (VOC) Analysis

SDG # 240-136904-1

CADENA Verification Report: 2020-10-07

Analyses Performed By:
TestAmerica
Edison, New Jersey

Report #38681R
Review Level: Tier III
Project: 30050315.402.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-136904-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						VOC (Full Scan)	VOC (SIM)	MISC
240-136904-1	TRIP BLANK_20200918	2401369041	Water	9/18/2020		X		
	MH-1020_091820	2401369042	Water	9/18/2020		X	X	
	MH-1043_091820	2401369043	Water	9/18/2020		X	X	
	MH-1181_091820	2401369044	Water	9/18/2020		X	X	
	MH-1096_091820	2401369045	Water	9/18/2020		X	X	

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and 8260B SIM. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B/8260B-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl

All samples were analyzed within the specified holding time criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not performed on a sample within this SDG.

6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260B/8260B-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Field Duplicate RPD	X				X
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE:

DATE: October 15, 2020

PEER REVIEW: Joseph C. Houser

DATE: October 16, 2020

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

MICHIGAN 190

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	/ of / COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: RACHEL BIELAK / JULIA MCCLAFFERTY	TAT if different from below		Walk-in client
Project Name: Ford LTP ~~On-Site~~	Method of Shipment/Carrier:	10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab sampling
Project Number: ~~30050315.401.03~~ RCB 9/18/2020 30050315.701.01	Shipping/Tracking No:			Job/SDG No:
PO # ~~30050315.401.03~~ RCB 9/18/2020 30050315.701.01				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		X						X					-	-	X	X	X	X	X	X	X	1 TRIP BLANK
MH-1020 - 091820	9/18/20	1005		X						X					N	G	X	X	X	X	X	X	X	3 VOAs * run 8260B first
MH-1043 - 091820	9/18/20	0832		X						X					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1181 - 091820	9/18/20	1100		X						X					N	G	X	X	X	X	X	X	X	
MH-1090 - 091820	9/18/20	1130		X						X					N	G	X	X	X	X	X	X	X	

240-136904 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E~~203728~~ 205162 RCB 9/18/20

* All samples collected from sanitary sewers (contain sanitary waste).

* MH-1020_091820 limited volume Run 8260B first, then 8260BSIM if possible

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Julia McClafferty	Arcadis	9/18/2020 1345	Novi Cold Storage	Arcadis	9/18/2020 1345
Julia McClafferty	Arcadis	9/21/20 1550		EUROFINS	9/21/20 1550
	EUROFINS	9/21/20 1600	Received in Laboratory by:	ETA	9-22-20 920

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Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: TRIP BLANK

Date Collected: 09/18/20 00:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 18:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 18:51	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 18:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 18:51	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 18:51	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*10/01/20 18:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*10/01/20 18:51*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*10/01/20 18:51*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*10/01/20 18:51*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1020_091820

Date Collected: 09/18/20 10:05
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	10	U	10	4.3	ug/L			09/29/20 16:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*		*09/29/20 16:02*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/01/20 13:54	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.53	ug/L			10/01/20 13:54	3.33
Tetrachloroethene	3.3	U	3.3	0.50	ug/L			10/01/20 13:54	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/01/20 13:54	3.33
Trichloroethene	3.3	U	3.3	0.33	ug/L			10/01/20 13:54	3.33
Vinyl chloride	3.3	U	3.3	0.67	ug/L			10/01/20 13:54	3.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*10/01/20 13:54*	*3.33*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*10/01/20 13:54*	*3.33*
Toluene-d8 (Surr)	*93*		*69 - 122*		*10/01/20 13:54*	*3.33*
Dibromofluoromethane (Surr)	*100*		*78 - 129*		*10/01/20 13:54*	*3.33*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1043_091820

Date Collected: 09/18/20 08:32
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 16:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.38	ug/L			10/02/20 11:36	2
cis-1,2-Dichloroethene	2.0	U	2.0	0.32	ug/L			10/02/20 11:36	2
Tetrachloroethene	2.0	U	2.0	0.30	ug/L			10/02/20 11:36	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.38	ug/L			10/02/20 11:36	2
Trichloroethene	2.0	U	2.0	0.20	ug/L			10/02/20 11:36	2
Vinyl chloride	2.0	U	2.0	0.40	ug/L			10/02/20 11:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*10/02/20 11:36*	*2*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/02/20 11:36*	*2*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/02/20 11:36*	*2*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*10/02/20 11:36*	*2*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1181_091820

Date Collected: 09/18/20 11:00
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			09/29/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*09/29/20 16:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 19:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 19:41	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 19:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 19:41	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 19:41	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*10/01/20 19:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/01/20 19:41*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/01/20 19:41*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 129*		*10/01/20 19:41*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-136904-1

Client Sample ID: MH-1096_091820

Date Collected: 09/18/20 11:30
Date Received: 09/22/20 09:20

Lab Sample ID: 240-136904-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.89	J	2.0	0.86	ug/L			09/29/20 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*		*09/29/20 17:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 20:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			10/01/20 20:06	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			10/01/20 20:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/01/20 20:06	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			10/01/20 20:06	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			10/01/20 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*10/01/20 20:06*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*10/01/20 20:06*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*10/01/20 20:06*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*10/01/20 20:06*	*1*

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-142242-1
Client Project/Site: Ford LTP - Off Site

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
12/30/2020 1:50:54 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-142242-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP - Off Site

Report Number: 240-142242-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 12/19/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MH-1171_121520 (240-142242-1), MH-1041_121520 (240-142242-2) and MH-1066_121520 (240-142242-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/24/2020.

1,2-Dichloroethane-d4 (Surr) and Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for MH-1041_121520 (240-142242-2).

1,2-Dichloroethane-d4 (Surr) and Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for MH-1066_121520 (240-142242-3). Refer to the QC report for details.

Surrogate recovery for the following samples were outside the upper control limit: MH-1041_121520 (240-142242-2) and MH-1066_121520 (240-142242-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-142242-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1171_121520 (240-142242-1), MH-1041_121520 (240-142242-2) and MH-1066_121520 (240-142242-3) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 12/22/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-142242-1	MH-1171_121520	Water	12/15/20 15:20	12/19/20 08:00	
240-142242-2	MH-1041_121520	Water	12/15/20 13:00	12/19/20 08:00	
240-142242-3	MH-1066_121520	Water	12/15/20 13:30	12/19/20 08:00	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Client Sample ID: MH-1171_121520 — Lab Sample ID: 240-142242-1

No Detections.

Client Sample ID: MH-1041_121520 — Lab Sample ID: 240-142242-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1066_121520 — Lab Sample ID: 240-142242-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Client Sample ID: MH-1171_121520
Date Collected: 12/15/20 15:20
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-1
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*		*12/22/20 17:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 18:01	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 18:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:01	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 18:01	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*75 - 130*		*12/24/20 18:01*	*1*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*		*12/24/20 18:01*	*1*
Toluene-d8 (Surr)	*102*		*69 - 122*		*12/24/20 18:01*	*1*
Dibromofluoromethane (Surr)	*126*		*78 - 129*		*12/24/20 18:01*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Client Sample ID: MH-1041_121520
Date Collected: 12/15/20 13:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.4	J	2.0	0.86	ug/L			12/22/20 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*12/22/20 17:29*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 18:24	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 18:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:24	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 18:24	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*	*S1+*	*75 - 130*		*12/24/20 18:24*	*1*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*		*12/24/20 18:24*	*1*
Toluene-d8 (Surr)	*107*		*69 - 122*		*12/24/20 18:24*	*1*
Dibromofluoromethane (Surr)	*131*	*S1+*	*78 - 129*		*12/24/20 18:24*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Client Sample ID: MH-1066_121520
Date Collected: 12/15/20 13:30
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*		*12/22/20 17:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 18:46	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 18:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 18:46	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 18:46	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*131*	*S1+*	*75 - 130*		*12/24/20 18:46*	*1*
4-Bromofluorobenzene (Surr)	*98*		*47 - 134*		*12/24/20 18:46*	*1*
Toluene-d8 (Surr)	*104*		*69 - 122*		*12/24/20 18:46*	*1*
Dibromofluoromethane (Surr)	*132*	*S1+*	*78 - 129*		*12/24/20 18:46*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-141832-C-7 MS	Matrix Spike	141 S1+	100	69	134 S1+
240-141832-C-7 MSD	Matrix Spike Duplicate	129	112	109	126
240-142242-1	MH-1171_121520	126	100	102	126
240-142242-2	MH-1041_121520	134 S1+	100	107	131 S1+
240-142242-3	MH-1066_121520	131 S1+	98	104	132 S1+
LCS 240-466994/4	Lab Control Sample	120	103	101	128
MB 240-466994/6	Method Blank	117	97	97	118

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-142242-1	MH-1171_121520	88
240-142242-2	MH-1041_121520	89
240-142242-3	MH-1066_121520	88
240-142242-3 MS	MH-1066_121520	87
240-142242-3 MSD	MH-1066_121520	85
LCS 240-466610/4	Lab Control Sample	88
MB 240-466610/5	Method Blank	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466994/6
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 13:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 13:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 13:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 13:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*12/24/20 13:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*12/24/20 13:36*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*12/24/20 13:36*	*1*
Dibromofluoromethane (Surr)	*118*		*78 - 129*		*12/24/20 13:36*	*1*

Lab Sample ID: LCS 240-466994/4
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.5		ug/L		105	73 - 129
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	75 - 124
Tetrachloroethene	10.0	9.00		ug/L		90	70 - 125
trans-1,2-Dichloroethene	10.0	9.76		ug/L		98	74 - 130
Trichloroethene	10.0	9.05		ug/L		91	71 - 121
Vinyl chloride	10.0	9.04		ug/L		90	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*101*		*69 - 122*
Dibromofluoromethane (Surr)	*128*		*78 - 129*

Lab Sample ID: 240-141832-C-7 MS
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	2200	F1	2000	3970		ug/L		88	68 - 121
trans-1,2-Dichloroethene	200	U F1	2000	3010	F1	ug/L		150	69 - 126
Trichloroethene	200	U	2000	1970		ug/L		98	56 - 124
Vinyl chloride	4200	F1	2000	7940	F1	ug/L		185	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*141*	*S1+*	*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*69*		*69 - 122*
Dibromofluoromethane (Surr)	*134*	*S1+*	*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-141832-C-7 MSD
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	2200	F1	2000	4690	F1	ug/L		124	68 - 121	17	35
trans-1,2-Dichloroethene	200	U F1	2000	3120	F1	ug/L		156	69 - 126	4	35
Trichloroethene	200	U	2000	2080		ug/L		104	56 - 124	6	35
Vinyl chloride	4200	F1	2000	8640	E F1	ug/L		220	49 - 136	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*129*		*75 - 130*
4-Bromofluorobenzene (Surr)	*112*		*47 - 134*
Toluene-d8 (Surr)	*109*		*69 - 122*
Dibromofluoromethane (Surr)	*126*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466610/5
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 14:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*12/22/20 14:07*	*1*

Lab Sample ID: LCS 240-466610/4
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.5		ug/L		105	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*

Lab Sample ID: 240-142242-3 MS
Matrix: Water
Analysis Batch: 466610

Client Sample ID: MH-1066_121520
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-142242-3 MSD
Matrix: Water
Analysis Batch: 466610

Client Sample ID: MH-1066_121520
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	46 - 170	3	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

GC/MS VOA

Analysis Batch: 466610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142242-1	MH-1171_121520	Total/NA	Water	8260B SIM	
240-142242-2	MH-1041_121520	Total/NA	Water	8260B SIM	
240-142242-3	MH-1066_121520	Total/NA	Water	8260B SIM	
MB 240-466610/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-466610/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-142242-3 MS	MH-1066_121520	Total/NA	Water	8260B SIM	
240-142242-3 MSD	MH-1066_121520	Total/NA	Water	8260B SIM	

Analysis Batch: 466994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142242-1	MH-1171_121520	Total/NA	Water	8260B	
240-142242-2	MH-1041_121520	Total/NA	Water	8260B	
240-142242-3	MH-1066_121520	Total/NA	Water	8260B	
MB 240-466994/6	Method Blank	Total/NA	Water	8260B	
LCS 240-466994/4	Lab Control Sample	Total/NA	Water	8260B	
240-141832-C-7 MS	Matrix Spike	Total/NA	Water	8260B	
240-141832-C-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Client Sample ID: MH-1171_121520
Date Collected: 12/15/20 15:20
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 18:01	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 17:04	SAM	TAL CAN

Client Sample ID: MH-1041_121520
Date Collected: 12/15/20 13:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 18:24	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 17:29	SAM	TAL CAN

Client Sample ID: MH-1066_121520
Date Collected: 12/15/20 13:30
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142242-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 18:46	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 17:55	SAM	TAL CAN

Laboratory References:
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142242-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	of COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day (10 day)		Walk-in client: Lab sampling:
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			
Project Number: 30050315.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30050315.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1						1					N	G	X	X	X	X	X	X	X	1 Trip blank
MH-1171_121520	12/15/20	1520		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1041_121520	12/15/20	1300		6						6					N	G	X	X	X	X	X	X	X	
MH-1066_121520	12/15/20	1330		6						6					N	G	X	X	X	X	X	X	X	

240-142242 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. CADENA # E205162

Level IV Reporting requested.

ALL SAMPLES COLLECTED FROM SANITARY SEWERS (CONTAIN SANITARY WASTE)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
E Witherspoon	Arcadis	12/15/20 / 1700	Novi cold Storage	Arcadis	12/15/20 / 1700
E Witherspoon Novi cold Storage	Arcadis	12/18/20 / 1500	E Witherspoon	Arcadis	12/18/ 1500
E Witherspoon	Arcadis	12/18/20 / 1530	Received in Laboratory by:	Company:	Date/Time:
Amanda Battershell ETA		12/18/20 1532	Amanda Battershell ETA		12/18/20 1532
			Tammy Boyer ETA		12-19-20 800

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12/30/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 142242**
Canton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: Tammy Rupe

Cooler Received on 12-19-20 Opened on 12-21-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.9 °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 1.3 °C
   IR GUN #IR-12 (CF +0.5°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? TR. 12-21-20	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N) and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC907861
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

NO Trip blank recd for this job

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

DATA VERIFICATION REPORT

December 30, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 142242-1
Sample date: 2020-12-15
Report received by CADENA: 2020-12-30
Initial Data Verification completed by CADENA: 2020-12-30
Number of Samples:3
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

The following minor QC exceptions or missing information were noted:

GCMS VOC sample -002 and -003 surrogate recovery outliers did not result in qualification of client sample data.

GCMS VOC QC batch MS/MSD and surrogate recovery outliers were not determined using a client sample so qualification was not required based on these sample-specific QC outliers.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 142242-1

		Sample Name:	MH-1171_121520				MH-1041_121520				MH-1066_121520			
		Lab Sample ID:	2401422421				2401422422				2401422423			
		Sample Date:	12/15/2020				12/15/2020				12/15/2020			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260B													
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim													
1,4-Dioxane	123-91-1	ND	2.0	ug/l	---	1.4	2.0	ug/l	J	ND	2.0	ug/l	---

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ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-142244-1
Client Project/Site: Ford LTP - Off Site
Revision: 2

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
1/19/2021 4:12:23 PM

Michael DelMonico, Project Manager I
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-142244-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP - Off Site

Report Number: 240-142244-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 12/19/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-142244-1), DUP-01 (240-142244-2), MH-1096_121620 (240-142244-3), MH-1210_121620 (240-142244-4), MH-1219_121620 (240-142244-5) and MH-1001_121620 (240-142244-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/28/2020 and 12/29/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples TRIP BLANK (240-142244-1), DUP-01 (240-142244-2), MH-1096_121620 (240-142244-3), MH-1210_121620 (240-142244-4) and MH-1001_121620 (240-142244-6) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples DUP-01 (240-142244-2), MH-1096_121620 (240-142244-3), MH-1210_121620 (240-142244-4) and MH-1219_121620 (240-142244-5) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 12/22/2020.

Job ID: 240-142244-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-142244-1	TRIP BLANK	Water	12/16/20 00:00	12/19/20 08:00	
240-142244-2	DUP-01	Water	12/16/20 00:00	12/19/20 08:00	
240-142244-3	MH-1096_121620	Water	12/16/20 14:15	12/19/20 08:00	
240-142244-4	MH-1210_121620	Water	12/16/20 09:15	12/19/20 08:00	
240-142244-5	MH-1219_121620	Water	12/16/20 09:45	12/19/20 08:00	
240-142244-6	MH-1001_121620	Water	12/16/20 08:40	12/19/20 08:00	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-142244-1

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 240-142244-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1096_121620 — Lab Sample ID: 240-142244-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1210_121620 — Lab Sample ID: 240-142244-4

No Detections.

Client Sample ID: MH-1219_121620 — Lab Sample ID: 240-142244-5

No Detections.

Client Sample ID: MH-1001_121620 — Lab Sample ID: 240-142244-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: TRIP BLANK

Date Collected: 12/16/20 00:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 21:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 21:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 21:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 21:15	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 21:15	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*		*12/28/20 21:15*	*1*
4-Bromofluorobenzene (Surr)	*72*		*47 - 134*		*12/28/20 21:15*	*1*
Toluene-d8 (Surr)	*85*		*69 - 122*		*12/28/20 21:15*	*1*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*12/28/20 21:15*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: DUP-01
Date Collected: 12/16/20 00:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.2		2.0	0.86	ug/L			12/22/20 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*		*12/22/20 19:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 21:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 21:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 21:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 21:39	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 21:39	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*12/28/20 21:39*	*1*
4-Bromofluorobenzene (Surr)	*82*		*47 - 134*		*12/28/20 21:39*	*1*
Toluene-d8 (Surr)	*85*		*69 - 122*		*12/28/20 21:39*	*1*
Dibromofluoromethane (Surr)	*92*		*78 - 129*		*12/28/20 21:39*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: MH-1096_121620
Date Collected: 12/16/20 14:15
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.2		2.0	0.86	ug/L			12/22/20 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*12/22/20 19:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 22:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 22:02	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 22:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 22:02	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 22:02	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 130*		*12/28/20 22:02*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*12/28/20 22:02*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*12/28/20 22:02*	*1*
Dibromofluoromethane (Surr)	*91*		*78 - 129*		*12/28/20 22:02*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: MH-1210_121620
Date Collected: 12/16/20 09:15
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*12/22/20 20:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 22:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 22:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 22:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 22:26	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 22:26	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*		*12/28/20 22:26*	*1*
4-Bromofluorobenzene (Surr)	*79*		*47 - 134*		*12/28/20 22:26*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*12/28/20 22:26*	*1*
Dibromofluoromethane (Surr)	*91*		*78 - 129*		*12/28/20 22:26*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: MH-1219_121620
Date Collected: 12/16/20 09:45
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-5
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*12/22/20 20:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 16:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/29/20 16:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/29/20 16:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 16:03	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/29/20 16:03	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/29/20 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*		*12/29/20 16:03*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*12/29/20 16:03*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*12/29/20 16:03*	*1*
Dibromofluoromethane (Surr)	*91*		*78 - 129*		*12/29/20 16:03*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: MH-1001_121620
Date Collected: 12/16/20 08:40
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142244-6
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U H	2.0	0.86	ug/L			01/19/21 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*		*01/19/21 13:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 23:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 23:14	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 23:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 23:14	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 23:14	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*		*12/28/20 23:14*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*12/28/20 23:14*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*12/28/20 23:14*	*1*
Dibromofluoromethane (Surr)	*93*		*78 - 129*		*12/28/20 23:14*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-142244-1	TRIP BLANK	98	72	85	96
240-142244-2	DUP-01	93	82	85	92
240-142244-3	MH-1096_121620	90	97	87	91
240-142244-4	MH-1210_121620	91	79	87	91
240-142244-5	MH-1219_121620	91	73	86	91
240-142244-6	MH-1001_121620	95	75	87	93
240-142355-A-2 MS	Matrix Spike	84	95	95	88
240-142355-D-2 MSD	Matrix Spike Duplicate	78	93	92	88
LCS 240-467184/4	Lab Control Sample	81	95	94	87
LCS 240-467346/4	Lab Control Sample	82	95	92	84
MB 240-467184/7	Method Blank	98	70	87	101
MB 240-467346/7	Method Blank	92	75	90	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-142242-A-3 MS	Matrix Spike	87
240-142242-A-3 MSD	Matrix Spike Duplicate	85
240-142244-2	DUP-01	96
240-142244-3	MH-1096_121620	91
240-142244-4	MH-1210_121620	86
240-142244-5	MH-1219_121620	84
240-142244-6	MH-1001_121620	82
240-143272-C-1 MS	Matrix Spike	91
240-143272-C-1 MSD	Matrix Spike Duplicate	89
LCS 240-466610/4	Lab Control Sample	88
LCS 240-469681/4	Lab Control Sample	78
MB 240-466610/5	Method Blank	89
MB 240-469681/5	Method Blank	80

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-467184/7
Matrix: Water
Analysis Batch: 467184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 15:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/28/20 15:13	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/28/20 15:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/28/20 15:13	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/28/20 15:13	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/28/20 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*		*12/28/20 15:13*	*1*
4-Bromofluorobenzene (Surr)	*70*		*47 - 134*		*12/28/20 15:13*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*12/28/20 15:13*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 129*		*12/28/20 15:13*	*1*

Lab Sample ID: LCS 240-467184/4
Matrix: Water
Analysis Batch: 467184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.68		ug/L		97	73 - 129
cis-1,2-Dichloroethene	10.0	9.55		ug/L		95	75 - 124
Tetrachloroethene	10.0	10.5		ug/L		105	70 - 125
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	74 - 130
Trichloroethene	10.0	9.01		ug/L		90	71 - 121
Vinyl chloride	10.0	8.97		ug/L		90	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 130*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*
Toluene-d8 (Surr)	*94*		*69 - 122*
Dibromofluoromethane (Surr)	*87*		*78 - 129*

Lab Sample ID: MB 240-467346/7
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 14:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/29/20 14:27	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/29/20 14:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 14:27	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/29/20 14:27	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/29/20 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*		*12/29/20 14:27*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*12/29/20 14:27*	*1*
Toluene-d8 (Surr)	*90*		*69 - 122*		*12/29/20 14:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-467346/7
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		78 - 129		12/29/20 14:27	1

Lab Sample ID: LCS 240-467346/4
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.72		ug/L		97	73 - 129		
cis-1,2-Dichloroethene			10.0	9.83		ug/L		98	75 - 124		
Tetrachloroethene			10.0	10.3		ug/L		103	70 - 125		
trans-1,2-Dichloroethene			10.0	10.3		ug/L		103	74 - 130		
Trichloroethene			10.0	9.21		ug/L		92	71 - 121		
Vinyl chloride			10.0	9.16		ug/L		92	61 - 134		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		75 - 130
4-Bromofluorobenzene (Surr)	95		47 - 134
Toluene-d8 (Surr)	92		69 - 122
Dibromofluoromethane (Surr)	84		78 - 129

Lab Sample ID: 240-142355-A-2 MS
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	1.0	U	10.0	9.46		ug/L		95	64 - 132		
cis-1,2-Dichloroethene	1.0	U	10.0	9.76		ug/L		98	68 - 121		
Tetrachloroethene	1.0	U	10.0	11.1		ug/L		111	52 - 129		
trans-1,2-Dichloroethene	1.0	U	10.0	9.98		ug/L		100	69 - 126		
Trichloroethene	1.9		10.0	10.8		ug/L		89	56 - 124		
Vinyl chloride	1.0	U	10.0	9.11		ug/L		91	49 - 136		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		75 - 130
4-Bromofluorobenzene (Surr)	95		47 - 134
Toluene-d8 (Surr)	95		69 - 122
Dibromofluoromethane (Surr)	88		78 - 129

Lab Sample ID: 240-142355-D-2 MSD
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	9.77		ug/L		98	64 - 132	3	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.64		ug/L		96	68 - 121	1	35
Tetrachloroethene	1.0	U	10.0	10.1		ug/L		101	52 - 129	9	35
trans-1,2-Dichloroethene	1.0	U	10.0	10.1		ug/L		101	69 - 126	2	35
Trichloroethene	1.9		10.0	10.6		ug/L		87	56 - 124	2	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-142355-D-2 MSD
Matrix: Water
Analysis Batch: 467346

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	1.0	U	10.0	9.10		ug/L		91	49 - 136	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 130*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*
Dibromofluoromethane (Surr)	*88*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466610/5
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/22/20 14:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*12/22/20 14:07*	*1*

Lab Sample ID: LCS 240-466610/4
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.5		ug/L		105	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*

Lab Sample ID: 240-142242-A-3 MS
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*

Lab Sample ID: 240-142242-A-3 MSD
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	46 - 170	3	26

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-142242-A-3 MSD
Matrix: Water
Analysis Batch: 466610

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

Lab Sample ID: MB 240-469681/5
Matrix: Water
Analysis Batch: 469681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/19/21 12:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*01/19/21 12:34*	*1*

Lab Sample ID: LCS 240-469681/4
Matrix: Water
Analysis Batch: 469681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.62		ug/L		96	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 133*

Lab Sample ID: 240-143272-C-1 MS
Matrix: Water
Analysis Batch: 469681

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	9.36		ug/L		94	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*

Lab Sample ID: 240-143272-C-1 MSD
Matrix: Water
Analysis Batch: 469681

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	9.90		ug/L		99	46 - 170	6	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

GC/MS VOA

Analysis Batch: 466610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142244-2	DUP-01	Total/NA	Water	8260B SIM	
240-142244-3	MH-1096_121620	Total/NA	Water	8260B SIM	
240-142244-4	MH-1210_121620	Total/NA	Water	8260B SIM	
240-142244-5	MH-1219_121620	Total/NA	Water	8260B SIM	
MB 240-466610/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-466610/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-142242-A-3 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-142242-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 467184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142244-1	TRIP BLANK	Total/NA	Water	8260B	
240-142244-2	DUP-01	Total/NA	Water	8260B	
240-142244-3	MH-1096_121620	Total/NA	Water	8260B	
240-142244-4	MH-1210_121620	Total/NA	Water	8260B	
240-142244-6	MH-1001_121620	Total/NA	Water	8260B	
MB 240-467184/7	Method Blank	Total/NA	Water	8260B	
LCS 240-467184/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 467346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142244-5	MH-1219_121620	Total/NA	Water	8260B	
MB 240-467346/7	Method Blank	Total/NA	Water	8260B	
LCS 240-467346/4	Lab Control Sample	Total/NA	Water	8260B	
240-142355-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
240-142355-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 469681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142244-6	MH-1001_121620	Total/NA	Water	8260B SIM	
MB 240-469681/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-469681/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-143272-C-1 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-143272-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-142244-1
Date Collected: 12/16/20 00:00
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467184	12/28/20 21:15	LRW	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-142244-2
Date Collected: 12/16/20 00:00
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467184	12/28/20 21:39	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 19:10	SAM	TAL CAN

Client Sample ID: MH-1096_121620
Lab Sample ID: 240-142244-3
Date Collected: 12/16/20 14:15
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467184	12/28/20 22:02	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 19:35	SAM	TAL CAN

Client Sample ID: MH-1210_121620
Lab Sample ID: 240-142244-4
Date Collected: 12/16/20 09:15
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467184	12/28/20 22:26	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 20:01	SAM	TAL CAN

Client Sample ID: MH-1219_121620
Lab Sample ID: 240-142244-5
Date Collected: 12/16/20 09:45
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467346	12/29/20 16:03	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466610	12/22/20 20:26	SAM	TAL CAN

Client Sample ID: MH-1001_121620
Lab Sample ID: 240-142244-6
Date Collected: 12/16/20 08:40
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	467184	12/28/20 23:14	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	469681	01/19/21 13:24	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142244-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20 *
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21 *
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN
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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	of COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Emma Witherspoon	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Off-Site	Shipping/Tracking No:			Job/SDG No:
Project Number: 30050315.701.04				
PO # 30050315.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1						1					N	G	X	X	X	X	X	X	X	1 TRIP BLANK
DUP-01_121620	12/16/20	—		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1096_121620	12/16/20	1415		6						6					N	G	X	X	X	X	X	X	X	
MH-1210_121620	12/16/20	915		6						6					N	G	X	X	X	X	X	X	X	
MH-1219_121620	12/16/20	945		6						6					N	G	X	X	X	X	X	X	X	
MH-1001_121620	12/16/20	840		6						6					N	G	X	X	X	X	X	X	X	

240-142244 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disp: ☐ Return ... Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. CADENA# E205162

Level IV Reporting requested.

ALL SAMPLES COLLECTED FROM SANITARY SEWERS (CONTAIN SANITARY WASTE)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
E Witherspoon	Arcadis	12/16/20 14:50	Andrew Bartt	Arcadis	12/16/20 1450
Relinquished by: Andrew Bartt	Company: Arcadis	Date/Time: 12/16/20 1730	Received by: Novi Cold Storage	Company: Arcadis	Date/Time: 12/16/20 1730
Relinquished by: ~~E Witherspoon~~ Novi cold storage	Company: Arcadis	Date/Time: 12/18/20 1500	Received in Laboratory by: E Witherspoon	Company: Arcadis	Date/Time: 12/18/20 1500

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E Witherspoon — Arcadis — 12/18/20 1530

Amanda Battershell — ETA — 12/18/20 1532

Amanda Battershell — ETA — 12/18/20 1532

Tammy Dever — ETA — 12-19-20 800

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 142244

Client ARCADIS Site Name

Cooler unpacked by: Tammy Ruge

Cooler Received on 12-19-20 Opened on 12-21-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.9 °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 1.3 °C
   IR GUN #IR-12 (CF +0.5°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N) and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC907861**
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 950912	Yes	No
17. Was a LL Hg or Me Hg trip blank present? ____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

WI-NC-099

DATA VERIFICATION REPORT

January 19, 2021

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 142244-1
Sample date: 2020-12-16
Report received by CADENA: 2020-12-31
Initial Data Verification completed by CADENA: 2020-12-31
Number of Samples:6
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

This report was revised to change a sample name. It was revised a second time to add 1,4-dioxane to sample 6.

HTQ - GCMS VOC SIM sample -006 analyses were performed outside of reference holding time so all associated results should be considered to be estimated and qualified with UJ flags if non-detect.

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch MS/MSD issues as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Qualified Results Summary

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 142244-1

Sample Name: MH-1001_121620
Lab Sample ID: 2401422446
Sample Date: 12/16/2020

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260BBSim					
1,4-Dioxane	123-91-1	ND	2.0	ug/l	UJ

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 142244-1

	Sample Name:	TRIP BLANK				DUP-01				MH-1096_121620				MH-1210_121620				MH-1219_121620				MH-1001_121620			
	Lab Sample ID:	2401422441				2401422442				2401422443				2401422444				2401422445				2401422446			
	Sample Date:	12/16/2020				12/16/2020				12/16/2020				12/16/2020				12/16/2020				12/16/2020			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																									
OSW-8260B																									
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BBSim																									
1,4-Dioxane	123-91-1					5.2	2.0	ug/l	---	5.2	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	UJ

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ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-142243-1
Client Project/Site: Ford LTP - Off Site

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
12/31/2020 10:20:04 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-142243-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP - Off Site

Report Number: 240-142243-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 12/19/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-142243-1), MH-1181_121720 (240-142243-2), MH-1067_121720 (240-142243-3), MH-1020_121720 (240-142243-4) and MH-1043_121720 (240-142243-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/24/2020 and 12/29/2020.

Samples MH-1067_121720 (240-142243-3)[5X], MH-1020_121720 (240-142243-4)[3.33X] and MH-1043_121720 (240-142243-5)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1067_121720 (240-142243-3), MH-1020_121720 (240-142243-4) and MH-1043_121720 (240-142243-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1181_121720 (240-142243-2), MH-1067_121720 (240-142243-3), MH-1020_121720 (240-142243-4) and MH-1043_121720 (240-142243-5) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method

Job ID: 240-142243-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

8260B SIM. The samples were analyzed on 12/23/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-142243-1	TRIP BLANK	Water	12/17/20 00:00	12/19/20 08:00	
240-142243-2	MH-1181_121720	Water	12/17/20 11:00	12/19/20 08:00	
240-142243-3	MH-1067_121720	Water	12/17/20 14:05	12/19/20 08:00	
240-142243-4	MH-1020_121720	Water	12/17/20 11:35	12/19/20 08:00	
240-142243-5	MH-1043_121720	Water	12/17/20 12:20	12/19/20 08:00	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-142243-1

No Detections.

Client Sample ID: MH-1181_121720 — Lab Sample ID: 240-142243-2

No Detections.

Client Sample ID: MH-1067_121720 — Lab Sample ID: 240-142243-3

No Detections.

Client Sample ID: MH-1020_121720 — Lab Sample ID: 240-142243-4

No Detections.

Client Sample ID: MH-1043_121720 — Lab Sample ID: 240-142243-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: TRIP BLANK
Date Collected: 12/17/20 00:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142243-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 19:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 19:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 19:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 19:08	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 19:08	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*		*12/24/20 19:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*12/24/20 19:08*	*1*
Toluene-d8 (Surr)	*99*		*69 - 122*		*12/24/20 19:08*	*1*
Dibromofluoromethane (Surr)	*124*		*78 - 129*		*12/24/20 19:08*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: MH-1181_121720
Date Collected: 12/17/20 11:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142243-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/23/20 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*12/23/20 13:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 19:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 19:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 19:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 19:31	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 19:31	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*75 - 130*		*12/24/20 19:31*	*1*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*		*12/24/20 19:31*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*12/24/20 19:31*	*1*
Dibromofluoromethane (Surr)	*126*		*78 - 129*		*12/24/20 19:31*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: MH-1067_121720
Date Collected: 12/17/20 14:05
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142243-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/23/20 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*12/23/20 14:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			12/29/20 18:49	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			12/29/20 18:49	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			12/29/20 18:49	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			12/29/20 18:49	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			12/29/20 18:49	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			12/29/20 18:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*12/29/20 18:49*	*5*
4-Bromofluorobenzene (Surr)	*104*		*47 - 134*		*12/29/20 18:49*	*5*
Toluene-d8 (Surr)	*82*		*69 - 122*		*12/29/20 18:49*	*5*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*12/29/20 18:49*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: MH-1020_121720
Date Collected: 12/17/20 11:35
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142243-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/23/20 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 133*		*12/23/20 16:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			12/29/20 19:14	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.53	ug/L			12/29/20 19:14	3.33
Tetrachloroethene	3.3	U	3.3	0.50	ug/L			12/29/20 19:14	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			12/29/20 19:14	3.33
Trichloroethene	3.3	U	3.3	0.33	ug/L			12/29/20 19:14	3.33
Vinyl chloride	3.3	U	3.3	0.67	ug/L			12/29/20 19:14	3.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 130*		*12/29/20 19:14*	*3.33*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*		*12/29/20 19:14*	*3.33*
Toluene-d8 (Surr)	*83*		*69 - 122*		*12/29/20 19:14*	*3.33*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*12/29/20 19:14*	*3.33*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: MH-1043_121720
Date Collected: 12/17/20 12:20
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142243-5
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/23/20 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 133*		*12/23/20 15:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.38	ug/L			12/29/20 19:39	2
cis-1,2-Dichloroethene	2.0	U	2.0	0.32	ug/L			12/29/20 19:39	2
Tetrachloroethene	2.0	U	2.0	0.30	ug/L			12/29/20 19:39	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.38	ug/L			12/29/20 19:39	2
Trichloroethene	2.0	U	2.0	0.20	ug/L			12/29/20 19:39	2
Vinyl chloride	2.0	U	2.0	0.40	ug/L			12/29/20 19:39	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*12/29/20 19:39*	*2*
4-Bromofluorobenzene (Surr)	*104*		*47 - 134*		*12/29/20 19:39*	*2*
Toluene-d8 (Surr)	*82*		*69 - 122*		*12/29/20 19:39*	*2*
Dibromofluoromethane (Surr)	*87*		*78 - 129*		*12/29/20 19:39*	*2*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-141832-C-7 MS	Matrix Spike	141 S1+	100	69	134 S1+
240-141832-C-7 MSD	Matrix Spike Duplicate	129	112	109	126
240-142243-1	TRIP BLANK	120	96	99	124
240-142243-2	MH-1181_121720	126	102	103	126
240-142243-3	MH-1067_121720	93	104	82	95
240-142243-4	MH-1020_121720	91	103	83	90
240-142243-5	MH-1043_121720	89	104	82	87
240-142387-D-2 MS	Matrix Spike	93	111	82	88
240-142387-E-2 MSD	Matrix Spike Duplicate	89	112	79	86
LCS 240-466994/4	Lab Control Sample	120	103	101	128
LCS 240-467344/4	Lab Control Sample	89	117	82	89
MB 240-466994/6	Method Blank	117	97	97	118
MB 240-467344/7	Method Blank	95	102	78	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-142243-2	MH-1181_121720	91
240-142243-3	MH-1067_121720	86
240-142243-3 MS	MH-1067_121720	90
240-142243-3 MSD	MH-1067_121720	92
240-142243-4	MH-1020_121720	89
240-142243-5	MH-1043_121720	91
LCS 240-466760/4	Lab Control Sample	90
MB 240-466760/5	Method Blank	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466994/6
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 13:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 13:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 13:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 13:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*12/24/20 13:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*12/24/20 13:36*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*12/24/20 13:36*	*1*
Dibromofluoromethane (Surr)	*118*		*78 - 129*		*12/24/20 13:36*	*1*

Lab Sample ID: LCS 240-466994/4
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.5		ug/L		105	73 - 129
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	75 - 124
Tetrachloroethene	10.0	9.00		ug/L		90	70 - 125
trans-1,2-Dichloroethene	10.0	9.76		ug/L		98	74 - 130
Trichloroethene	10.0	9.05		ug/L		91	71 - 121
Vinyl chloride	10.0	9.04		ug/L		90	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*101*		*69 - 122*
Dibromofluoromethane (Surr)	*128*		*78 - 129*

Lab Sample ID: 240-141832-C-7 MS
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	2200	F1	2000	3970		ug/L		88	68 - 121
trans-1,2-Dichloroethene	200	U F1	2000	3010	F1	ug/L		150	69 - 126
Trichloroethene	200	U	2000	1970		ug/L		98	56 - 124
Vinyl chloride	4200	F1	2000	7940	F1	ug/L		185	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*141*	*S1+*	*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*69*		*69 - 122*
Dibromofluoromethane (Surr)	*134*	*S1+*	*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-141832-C-7 MSD
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	2200	F1	2000	4690	F1	ug/L		124	68 - 121	17	35
trans-1,2-Dichloroethene	200	U F1	2000	3120	F1	ug/L		156	69 - 126	4	35
Trichloroethene	200	U	2000	2080		ug/L		104	56 - 124	6	35
Vinyl chloride	4200	F1	2000	8640	E F1	ug/L		220	49 - 136	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*129*		*75 - 130*
4-Bromofluorobenzene (Surr)	*112*		*47 - 134*
Toluene-d8 (Surr)	*109*		*69 - 122*
Dibromofluoromethane (Surr)	*126*		*78 - 129*

Lab Sample ID: MB 240-467344/7
Matrix: Water
Analysis Batch: 467344

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 14:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/29/20 14:14	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/29/20 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/29/20 14:14	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/29/20 14:14	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/29/20 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*		*12/29/20 14:14*	*1*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*		*12/29/20 14:14*	*1*
Toluene-d8 (Surr)	*78*		*69 - 122*		*12/29/20 14:14*	*1*
Dibromofluoromethane (Surr)	*91*		*78 - 129*		*12/29/20 14:14*	*1*

Lab Sample ID: LCS 240-467344/4
Matrix: Water
Analysis Batch: 467344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.08		ug/L		91	73 - 129
cis-1,2-Dichloroethene	10.0	9.50		ug/L		95	75 - 124
Tetrachloroethene	10.0	9.75		ug/L		98	70 - 125
trans-1,2-Dichloroethene	10.0	9.02		ug/L		90	74 - 130
Trichloroethene	10.0	9.62		ug/L		96	71 - 121
Vinyl chloride	10.0	9.39		ug/L		94	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*
4-Bromofluorobenzene (Surr)	*117*		*47 - 134*
Toluene-d8 (Surr)	*82*		*69 - 122*
Dibromofluoromethane (Surr)	*89*		*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-142387-D-2 MS
Matrix: Water
Analysis Batch: 467344

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	10.0	9.09		ug/L		91	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.35		ug/L		94	68 - 121
Tetrachloroethene	1.0	U	10.0	8.69		ug/L		87	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	8.89		ug/L		89	69 - 126
Trichloroethene	1.0	U	10.0	9.34		ug/L		93	56 - 124
Vinyl chloride	1.0	U	10.0	8.86		ug/L		89	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*
4-Bromofluorobenzene (Surr)	*111*		*47 - 134*
Toluene-d8 (Surr)	*82*		*69 - 122*
Dibromofluoromethane (Surr)	*88*		*78 - 129*

Lab Sample ID: 240-142387-E-2 MSD
Matrix: Water
Analysis Batch: 467344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	8.99		ug/L		90	64 - 132	1	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.60		ug/L		96	68 - 121	3	35
Tetrachloroethene	1.0	U	10.0	8.50		ug/L		85	52 - 129	2	35
trans-1,2-Dichloroethene	1.0	U	10.0	8.64		ug/L		86	69 - 126	3	35
Trichloroethene	1.0	U	10.0	9.02		ug/L		90	56 - 124	3	35
Vinyl chloride	1.0	U	10.0	9.65		ug/L		96	49 - 136	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*
4-Bromofluorobenzene (Surr)	*112*		*47 - 134*
Toluene-d8 (Surr)	*79*		*69 - 122*
Dibromofluoromethane (Surr)	*86*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466760/5
Matrix: Water
Analysis Batch: 466760

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/23/20 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*		*12/23/20 11:09*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-466760/4
Matrix: Water
Analysis Batch: 466760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.5		ug/L		105	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*

Lab Sample ID: 240-142243-3 MS
Matrix: Water
Analysis Batch: 466760

Client Sample ID: MH-1067_121720
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 133*

Lab Sample ID: 240-142243-3 MSD
Matrix: Water
Analysis Batch: 466760

Client Sample ID: MH-1067_121720
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.3		ug/L		103	46 - 170	4	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

GC/MS VOA

Analysis Batch: 466760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142243-2	MH-1181_121720	Total/NA	Water	8260B SIM	
240-142243-3	MH-1067_121720	Total/NA	Water	8260B SIM	
240-142243-4	MH-1020_121720	Total/NA	Water	8260B SIM	
240-142243-5	MH-1043_121720	Total/NA	Water	8260B SIM	
MB 240-466760/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-466760/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-142243-3 MS	MH-1067_121720	Total/NA	Water	8260B SIM	
240-142243-3 MSD	MH-1067_121720	Total/NA	Water	8260B SIM	

Analysis Batch: 466994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142243-1	TRIP BLANK	Total/NA	Water	8260B	
240-142243-2	MH-1181_121720	Total/NA	Water	8260B	
MB 240-466994/6	Method Blank	Total/NA	Water	8260B	
LCS 240-466994/4	Lab Control Sample	Total/NA	Water	8260B	
240-141832-C-7 MS	Matrix Spike	Total/NA	Water	8260B	
240-141832-C-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 467344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142243-3	MH-1067_121720	Total/NA	Water	8260B	
240-142243-4	MH-1020_121720	Total/NA	Water	8260B	
240-142243-5	MH-1043_121720	Total/NA	Water	8260B	
MB 240-467344/7	Method Blank	Total/NA	Water	8260B	
LCS 240-467344/4	Lab Control Sample	Total/NA	Water	8260B	
240-142387-D-2 MS	Matrix Spike	Total/NA	Water	8260B	
240-142387-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-142243-1
Date Collected: 12/17/20 00:00
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 19:08	LEE	TAL CAN

Client Sample ID: MH-1181_121720
Lab Sample ID: 240-142243-2
Date Collected: 12/17/20 11:00
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 19:31	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	466760	12/23/20 13:40	SAM	TAL CAN

Client Sample ID: MH-1067_121720
Lab Sample ID: 240-142243-3
Date Collected: 12/17/20 14:05
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	467344	12/29/20 18:49	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466760	12/23/20 14:05	SAM	TAL CAN

Client Sample ID: MH-1020_121720
Lab Sample ID: 240-142243-4
Date Collected: 12/17/20 11:35
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	467344	12/29/20 19:14	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466760	12/23/20 16:37	SAM	TAL CAN

Client Sample ID: MH-1043_121720
Lab Sample ID: 240-142243-5
Date Collected: 12/17/20 12:20
Matrix: Water
Date Received: 12/19/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	467344	12/29/20 19:39	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	466760	12/23/20 15:46	SAM	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142243-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	of COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Emma Witherspoon	TAT if different from below: 10 day; ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Off-Site	Shipping/Tracking No:			Job/SDG No:
Project Number: 30050315.701.04				
PO # 30050315.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1						1					N	G	X	X	X	X	X	X	X	1 TRIP BLANK
MH-1181_121720	12/17/20	1100		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1067_121720	12/17/20	1405		6						6					N	G	X	X	X	X	X	X	X	
MH-1020_121720	12/17/20	1135		6						6					N	G	X	X	X	X	X	X	X	
MH-1043_121720	12/17/20	1220		6						6					N	G	X	X	X	X	X	X	X	

240-142243 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. CADENA # E205162

Level IV Reporting requested.

ALL SAMPLES COLLECTED FROM SANITARY SEWERS (CONTAIN SANITARY WASTE)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
E Witherspoon	Arcadis	12/17/20 1600	Andrew Bratt	Arcadis	12/17/20 1600
Andrew Bratt	Arcadis	12/17/20 1635	Novi Cold Storage	Arcadis	12/17/20 1635
E Witherspoon Novi Cold Storage	Arcadis	12/18/20 1500	E Witherspoon	Arcadis	12/18/20 1500
E Witherspoon	Arcadis	12/18/20 1530	Anand Battenhill	ETA	12/18/12 1532
Anand Battenhill	ETA	12/18/20 1532	Danny Reyes	ETA	12-19-20 800

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 142243
Canton Facility

Client ARCADIS Site Name

Cooler unpacked by: Tammy Berge

Cooler Received on 12-19-20 Opened on 12-21-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.9 °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 1.3 °C
   IR GUN #IR-12 (CF +0.5°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC907861**
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 59072	Yes	No
17. Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

WI-NC-099

DATA VERIFICATION REPORT

December 31, 2020

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evalyation Vapor Testing
Project number: 30050315.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 142243-1
Sample date: 2020-12-17
Report received by CADENA: 2020-12-31
Initial Data Verification completed by CADENA: 2020-12-31
Number of Samples:5
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

The following minor QC exceptions or missing information were noted:

GCMS VOC QC batch MS/MSD and surrogate outliers were not determined using a client sample so qualification was not required based on these sample-specific QC outliers.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 142243-1

	Sample Name:	TRIP BLANK				MH-1181_121720				MH-1067_121720				MH-1020_121720				MH-1043_121720			
	Lab Sample ID:	2401422431				2401422432				2401422433				2401422434				2401422435			
	Sample Date:	12/17/2020				12/17/2020				12/17/2020				12/17/2020				12/17/2020			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																					
OSW-8260B																					
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	5.0	ug/l	---	ND	3.3	ug/l	---	ND	2.0	ug/l	---
OSW-8260BBSim																					
1,4-Dioxane	123-91-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-146606-1
Client Project/Site: Ford LTP Off-Site

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
4/9/2021 2:28:45 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-146606-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-146606-1

Comments
No additional comments.

Receipt
The samples were received on 3/26/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
Method 8260B: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1096_032221 (240-146606-2), DUP-01 (240-146606-3), MH-1041_032321 (240-146606-4), MH-1043_032421 (240-146606-12) and MH-1020_032421 (240-146606-13). Elevated reporting limits (RLs) are provided.

Method 8260B SIM: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1096_032221 (240-146606-2), MH-1041_032321 (240-146606-4), MH-1043_032421 (240-146606-12) and MH-1020_032421 (240-146606-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-146606-1	TRIP BLANK	Water	03/22/21 00:00	03/26/21 08:00	
240-146606-2	MH-1096_032221	Water	03/22/21 16:30	03/26/21 08:00	
240-146606-3	DUP-01	Water	03/22/21 00:00	03/26/21 08:00	
240-146606-4	MH-1041_032321	Water	03/23/21 11:30	03/26/21 08:00	
240-146606-5	MH-1210_032321	Water	03/23/21 13:30	03/26/21 08:00	
240-146606-6	MH-1219_032321	Water	03/23/21 14:30	03/26/21 08:00	
240-146606-7	MH-1066_032321	Water	03/23/21 12:00	03/26/21 08:00	
240-146606-8	MH-1181_032321	Water	03/23/21 15:30	03/26/21 08:00	
240-146606-9	MH-1171_032321	Water	03/23/21 15:00	03/26/21 08:00	
240-146606-10	MH-1001_032321	Water	03/23/21 10:55	03/26/21 08:00	
240-146606-11	MH-1067_032421	Water	03/24/21 10:30	03/26/21 08:00	
240-146606-12	MH-1043_032421	Water	03/24/21 09:50	03/26/21 08:00	
240-146606-13	MH-1020_032421	Water	03/24/21 09:15	03/26/21 08:00	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-146606-1

No Detections.

Client Sample ID: MH-1096_032221 — Lab Sample ID: 240-146606-2

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 240-146606-3

No Detections.

Client Sample ID: MH-1041_032321 — Lab Sample ID: 240-146606-4

No Detections.

Client Sample ID: MH-1210_032321 — Lab Sample ID: 240-146606-5

No Detections.

Client Sample ID: MH-1219_032321 — Lab Sample ID: 240-146606-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.29	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1066_032321 — Lab Sample ID: 240-146606-7

No Detections.

Client Sample ID: MH-1181_032321 — Lab Sample ID: 240-146606-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.42	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1171_032321 — Lab Sample ID: 240-146606-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.39	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1001_032321 — Lab Sample ID: 240-146606-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.40	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1067_032421 — Lab Sample ID: 240-146606-11

No Detections.

Client Sample ID: MH-1043_032421 — Lab Sample ID: 240-146606-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8	J	6.0	2.6	ug/L	3		8260B SIM	Total/NA

Client Sample ID: MH-1020_032421 — Lab Sample ID: 240-146606-13

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: TRIP BLANK
Date Collected: 03/22/21 00:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 11:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 11:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:42	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 11:42	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*04/02/21 11:42*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 11:42*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 11:42*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 11:42*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1096_032221
Date Collected: 03/22/21 16:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/01/21 13:59	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*70 - 133*		*04/01/21 13:59*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:04	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:04	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:04	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:04	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:04	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*04/02/21 12:04*	*5*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*04/02/21 12:04*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 12:04*	*5*
Dibromofluoromethane (Surr)	*84*		*78 - 129*		*04/02/21 12:04*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: DUP-01
Date Collected: 03/22/21 00:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*		*70 - 133*		*04/01/21 11:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:26	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:26	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:26	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:26	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:26	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:26	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 130*		*04/02/21 12:26*	*5*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/02/21 12:26*	*5*
Toluene-d8 (Surr)	*90*		*69 - 122*		*04/02/21 12:26*	*5*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*04/02/21 12:26*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1041_032321
Date Collected: 03/23/21 11:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/01/21 12:45	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*04/01/21 12:45*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:48	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:48	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:48	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:48	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:48	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 130*		*04/02/21 12:48*	*5*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 12:48*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 12:48*	*5*
Dibromofluoromethane (Surr)	*83*		*78 - 129*		*04/02/21 12:48*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1210_032321
Date Collected: 03/23/21 13:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-5
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/01/21 13:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 13:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:10*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/02/21 13:10*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 13:10*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 13:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1219_032321
Date Collected: 03/23/21 14:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-6
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*		*04/01/21 13:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:31	1
cis-1,2-Dichloroethene	**0.29**	**J**	1.0	0.16	ug/L			04/02/21 13:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:31	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:31	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:31*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 13:31*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*04/02/21 13:31*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 13:31*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1066_032321
Date Collected: 03/23/21 12:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-7
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*04/01/21 14:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 13:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:53	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:53*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*04/02/21 13:53*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 13:53*	*1*
Dibromofluoromethane (Surr)	*81*		*78 - 129*		*04/02/21 13:53*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1181_032321
Date Collected: 03/23/21 15:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-8
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*04/01/21 14:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 14:15	1
cis-1,2-Dichloroethene	**0.42**	**J**	1.0	0.16	ug/L			04/02/21 14:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 14:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 14:15	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 14:15	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 130*		*04/02/21 14:15*	*1*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*04/02/21 14:15*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 14:15*	*1*
Dibromofluoromethane (Surr)	*87*		*78 - 129*		*04/02/21 14:15*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1171_032321
Date Collected: 03/23/21 15:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-9
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*		*04/01/21 15:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:50	1
cis-1,2-Dichloroethene	**0.39**	**J**	1.0	0.16	ug/L			04/06/21 12:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/06/21 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/06/21 12:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/06/21 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*04/06/21 12:50*	*1*
4-Bromofluorobenzene (Surr)	*68*		*47 - 134*		*04/06/21 12:50*	*1*
Toluene-d8 (Surr)	*80*		*69 - 122*		*04/06/21 12:50*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*04/06/21 12:50*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1001_032321
Date Collected: 03/23/21 10:55
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-10
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			04/01/21 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 133*		*04/01/21 16:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 17:36	1
cis-1,2-Dichloroethene	**0.40**	**J**	1.0	0.16	ug/L			04/05/21 17:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/05/21 17:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 17:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/05/21 17:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/05/21 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 130*		*04/05/21 17:36*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/05/21 17:36*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/05/21 17:36*	*1*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*04/05/21 17:36*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1067_032421
Date Collected: 03/24/21 10:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-11
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*04/01/21 16:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 12:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/07/21 12:21	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/07/21 12:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 12:21	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/07/21 12:21	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/07/21 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*04/07/21 12:21*	*1*
4-Bromofluorobenzene (Surr)	*72*		*47 - 134*		*04/07/21 12:21*	*1*
Toluene-d8 (Surr)	*85*		*69 - 122*		*04/07/21 12:21*	*1*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*04/07/21 12:21*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1043_032421
Date Collected: 03/24/21 09:50
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-12
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.8	J	6.0	2.6	ug/L			04/02/21 13:01	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/02/21 13:01*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.0	U	8.0	1.5	ug/L			04/06/21 14:40	8
cis-1,2-Dichloroethene	8.0	U	8.0	1.3	ug/L			04/06/21 14:40	8
Tetrachloroethene	8.0	U	8.0	1.2	ug/L			04/06/21 14:40	8
trans-1,2-Dichloroethene	8.0	U	8.0	1.5	ug/L			04/06/21 14:40	8
Trichloroethene	8.0	U	8.0	0.80	ug/L			04/06/21 14:40	8
Vinyl chloride	8.0	U	8.0	1.6	ug/L			04/06/21 14:40	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*04/06/21 14:40*	*8*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/06/21 14:40*	*8*
Toluene-d8 (Surr)	*84*		*69 - 122*		*04/06/21 14:40*	*8*
Dibromofluoromethane (Surr)	*84*		*78 - 129*		*04/06/21 14:40*	*8*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1020_032421
Date Collected: 03/24/21 09:15
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-13
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/02/21 13:26	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*04/02/21 13:26*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			04/06/21 15:02	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.53	ug/L			04/06/21 15:02	3.33
Tetrachloroethene	3.3	U	3.3	0.50	ug/L			04/06/21 15:02	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			04/06/21 15:02	3.33
Trichloroethene	3.3	U	3.3	0.33	ug/L			04/06/21 15:02	3.33
Vinyl chloride	3.3	U	3.3	0.67	ug/L			04/06/21 15:02	3.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*04/06/21 15:02*	*3.33*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*04/06/21 15:02*	*3.33*
Toluene-d8 (Surr)	*84*		*69 - 122*		*04/06/21 15:02*	*3.33*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*04/06/21 15:02*	*3.33*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-146439-B-11 MS	Matrix Spike	98	90	92	85
240-146439-B-11 MSD	Matrix Spike Duplicate	97	92	91	85
240-146556-B-7 MS	Matrix Spike	98	88	90	88
240-146556-B-7 MSD	Matrix Spike Duplicate	97	92	90	87
240-146606-1	TRIP BLANK	107	73	87	82
240-146606-2	MH-1096_032221	110	76	88	84
240-146606-3	DUP-01	112	74	90	86
240-146606-4	MH-1041_032321	108	73	88	83
240-146606-5	MH-1210_032321	109	74	87	82
240-146606-6	MH-1219_032321	109	73	86	82
240-146606-7	MH-1066_032321	109	75	87	81
240-146606-8	MH-1181_032321	114	80	88	87
240-146606-9	MH-1171_032321	105	68	80	86
240-146606-10	MH-1001_032321	112	74	87	85
240-146606-11	MH-1067_032421	106	72	85	89
240-146606-12	MH-1043_032421	110	73	84	84
240-146606-13	MH-1020_032421	107	76	84	85
240-146768-B-10 MS	Matrix Spike	95	95	92	94
240-146768-B-10 MSD	Matrix Spike Duplicate	92	93	89	92
LCS 240-479438/4	Lab Control Sample	106	93	89	91
LCS 240-479644/4	Lab Control Sample	95	89	89	86
LCS 240-479863/4	Lab Control Sample	97	90	90	85
LCS 240-480068/4	Lab Control Sample	95	90	89	87
MB 240-479438/7	Method Blank	108	76	88	81
MB 240-479644/7	Method Blank	102	75	87	83
MB 240-479863/7	Method Blank	106	75	86	81
MB 240-480068/7	Method Blank	104	73	86	85

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-146606-2	MH-1096_032221	74
240-146606-3	DUP-01	73
240-146606-4	MH-1041_032321	85
240-146606-5	MH-1210_032321	80
240-146606-6	MH-1219_032321	82
240-146606-7	MH-1066_032321	83
240-146606-8	MH-1181_032321	84
240-146606-9	MH-1171_032321	82
240-146606-9 MS	MH-1171_032321	79
240-146606-9 MSD	MH-1171_032321	75

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCA (70-133)							
240-146606-10	MH-1001_032321	78							
240-146606-11	MH-1067_032421	83							
240-146606-12	MH-1043_032421	80							
240-146606-13	MH-1020_032421	85							
240-146812-C-1 MS	Matrix Spike	78							
240-146812-C-1 MSD	Matrix Spike Duplicate	85							
LCS 240-479226/4	Lab Control Sample	82							
LCS 240-479445/4	Lab Control Sample	85							
MB 240-479226/5	Method Blank	80							
MB 240-479445/5	Method Blank	80							

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-479438/7
Matrix: Water
Analysis Batch: 479438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 11:20	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 11:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:20	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 11:20	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 130*		*04/02/21 11:20*	*1*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*04/02/21 11:20*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 11:20*	*1*
Dibromofluoromethane (Surr)	*81*		*78 - 129*		*04/02/21 11:20*	*1*

Lab Sample ID: LCS 240-479438/4
Matrix: Water
Analysis Batch: 479438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	11.4		ug/L		114	73 - 129
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	75 - 124
Tetrachloroethene	10.0	9.54		ug/L		95	70 - 125
trans-1,2-Dichloroethene	10.0	9.72		ug/L		97	74 - 130
Trichloroethene	10.0	10.2		ug/L		102	71 - 121
Vinyl chloride	10.0	10.1		ug/L		101	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*
Toluene-d8 (Surr)	*89*		*69 - 122*
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Lab Sample ID: 240-146439-B-11 MS
Matrix: Water
Analysis Batch: 479438

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	9.6	J	250	192		ug/L		73	64 - 132
cis-1,2-Dichloroethene	690		250	870		ug/L		73	68 - 121
Tetrachloroethene	25	U	250	189		ug/L		76	52 - 129
trans-1,2-Dichloroethene	25	U	250	204		ug/L		81	69 - 126
Trichloroethene	4.7	J	250	200		ug/L		78	56 - 124
Vinyl chloride	76		250	291		ug/L		86	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-146439-B-11 MS
Matrix: Water
Analysis Batch: 479438

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	85		78 - 129

Lab Sample ID: 240-146439-B-11 MSD
Matrix: Water
Analysis Batch: 479438

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	9.6	J	250	202		ug/L		77	64 - 132	5	35
cis-1,2-Dichloroethene	690		250	869		ug/L		73	68 - 121	0	35
Tetrachloroethene	25	U	250	220		ug/L		88	52 - 129	15	35
trans-1,2-Dichloroethene	25	U	250	214		ug/L		86	69 - 126	5	35
Trichloroethene	4.7	J	250	218		ug/L		85	56 - 124	9	35
Vinyl chloride	76		250	302		ug/L		90	49 - 136	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		75 - 130
4-Bromofluorobenzene (Surr)	92		47 - 134
Toluene-d8 (Surr)	91		69 - 122
Dibromofluoromethane (Surr)	85		78 - 129

Lab Sample ID: MB 240-479644/7
Matrix: Water
Analysis Batch: 479644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 12:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/05/21 12:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/05/21 12:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 12:08	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/05/21 12:08	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/05/21 12:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 130		04/05/21 12:08	1
4-Bromofluorobenzene (Surr)	75		47 - 134		04/05/21 12:08	1
Toluene-d8 (Surr)	87		69 - 122		04/05/21 12:08	1
Dibromofluoromethane (Surr)	83		78 - 129		04/05/21 12:08	1

Lab Sample ID: LCS 240-479644/4
Matrix: Water
Analysis Batch: 479644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	8.09		ug/L		81	73 - 129
cis-1,2-Dichloroethene	10.0	9.69		ug/L		97	75 - 124
Tetrachloroethene	10.0	10.0		ug/L		100	70 - 125
trans-1,2-Dichloroethene	10.0	9.33		ug/L		93	74 - 130
Trichloroethene	10.0	9.65		ug/L		97	71 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-479644/4
Matrix: Water
Analysis Batch: 479644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	10.1		ug/L		101	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*
Toluene-d8 (Surr)	*89*		*69 - 122*
Dibromofluoromethane (Surr)	*86*		*78 - 129*

Lab Sample ID: MB 240-479863/7
Matrix: Water
Analysis Batch: 479863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/06/21 12:29	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/06/21 12:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:29	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/06/21 12:29	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/06/21 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*04/06/21 12:29*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*04/06/21 12:29*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*04/06/21 12:29*	*1*
Dibromofluoromethane (Surr)	*81*		*78 - 129*		*04/06/21 12:29*	*1*

Lab Sample ID: LCS 240-479863/4
Matrix: Water
Analysis Batch: 479863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	7.97		ug/L		80	73 - 129		
cis-1,2-Dichloroethene			10.0	9.63		ug/L		96	75 - 124		
Tetrachloroethene			10.0	9.61		ug/L		96	70 - 125		
trans-1,2-Dichloroethene			10.0	9.29		ug/L		93	74 - 130		
Trichloroethene			10.0	9.20		ug/L		92	71 - 121		
Vinyl chloride			10.0	10.6		ug/L		106	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 130*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*
Toluene-d8 (Surr)	*90*		*69 - 122*
Dibromofluoromethane (Surr)	*85*		*78 - 129*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-146556-B-7 MS
Matrix: Water
Analysis Batch: 479863

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	310		167	456		ug/L		89	68 - 121
Tetrachloroethene	38		167	179		ug/L		85	52 - 129
trans-1,2-Dichloroethene	17	U	167	148		ug/L		89	69 - 126
Trichloroethene	6.5	J	167	148		ug/L		85	56 - 124
Vinyl chloride	64		167	236		ug/L		103	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*88*		*47 - 134*
Toluene-d8 (Surr)	*90*		*69 - 122*
Dibromofluoromethane (Surr)	*88*		*78 - 129*

Lab Sample ID: 240-146556-B-7 MSD
Matrix: Water
Analysis Batch: 479863

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	310		167	439		ug/L		78	68 - 121	4	35
Tetrachloroethene	38		167	191		ug/L		91	52 - 129	6	35
trans-1,2-Dichloroethene	17	U	167	149		ug/L		90	69 - 126	1	35
Trichloroethene	6.5	J	167	150		ug/L		86	56 - 124	1	35
Vinyl chloride	64		167	221		ug/L		94	49 - 136	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 130*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*
Toluene-d8 (Surr)	*90*		*69 - 122*
Dibromofluoromethane (Surr)	*87*		*78 - 129*

Lab Sample ID: MB 240-480068/7
Matrix: Water
Analysis Batch: 480068

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 11:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/07/21 11:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/07/21 11:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 11:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/07/21 11:59	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/07/21 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*04/07/21 11:59*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/07/21 11:59*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*04/07/21 11:59*	*1*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*04/07/21 11:59*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-480068/4
Matrix: Water
Analysis Batch: 480068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	10.4		ug/L		104	73 - 129		
cis-1,2-Dichloroethene			10.0	9.50		ug/L		95	75 - 124		
Tetrachloroethene			10.0	9.86		ug/L		99	70 - 125		
trans-1,2-Dichloroethene			10.0	9.39		ug/L		94	74 - 130		
Trichloroethene			10.0	9.50		ug/L		95	71 - 121		
Vinyl chloride			10.0	11.1		ug/L		111	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*
Toluene-d8 (Surr)	*89*		*69 - 122*
Dibromofluoromethane (Surr)	*87*		*78 - 129*

Lab Sample ID: 240-146768-B-10 MS
Matrix: Water
Analysis Batch: 480068

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
cis-1,2-Dichloroethene	1000		500	1460		ug/L		88	68 - 121		
Tetrachloroethene	87		500	520		ug/L		87	52 - 129		
trans-1,2-Dichloroethene	50	U	500	462		ug/L		92	69 - 126		
Trichloroethene	30	J	500	472		ug/L		88	56 - 124		
Vinyl chloride	390		500	748		ug/L		72	49 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*
Dibromofluoromethane (Surr)	*94*		*78 - 129*

Lab Sample ID: 240-146768-B-10 MSD
Matrix: Water
Analysis Batch: 480068

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1000		500	1410		ug/L		78	68 - 121	3	35
Tetrachloroethene	87		500	519		ug/L		86	52 - 129	0	35
trans-1,2-Dichloroethene	50	U	500	450		ug/L		90	69 - 126	3	35
Trichloroethene	30	J	500	465		ug/L		87	56 - 124	1	35
Vinyl chloride	390		500	761		ug/L		75	49 - 136	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 130*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*
Toluene-d8 (Surr)	*89*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-479226/5
Matrix: Water
Analysis Batch: 479226

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/01/21 11:07*	*1*

Lab Sample ID: LCS 240-479226/4
Matrix: Water
Analysis Batch: 479226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.5		ug/L		105	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*

Lab Sample ID: 240-146606-9 MS
Matrix: Water
Analysis Batch: 479226

Client Sample ID: MH-1171_032321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.3		ug/L		103	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 133*

Lab Sample ID: 240-146606-9 MSD
Matrix: Water
Analysis Batch: 479226

Client Sample ID: MH-1171_032321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.2		ug/L		102	46 - 170	1	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*70 - 133*

Lab Sample ID: MB 240-479445/5
Matrix: Water
Analysis Batch: 479445

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/02/21 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/02/21 12:11*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-479445/4
Matrix: Water
Analysis Batch: 479445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.8		ug/L		108	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

Lab Sample ID: 240-146812-C-1 MS
Matrix: Water
Analysis Batch: 479445

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	33		10.0	44.1		ug/L		112	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 133*

Lab Sample ID: 240-146812-C-1 MSD
Matrix: Water
Analysis Batch: 479445

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	33		10.0	43.2		ug/L		102	46 - 170	2	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*

GC/MS VOA

Analysis Batch: 479226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-2	MH-1096_032221	Total/NA	Water	8260B SIM	
240-146606-3	DUP-01	Total/NA	Water	8260B SIM	
240-146606-4	MH-1041_032321	Total/NA	Water	8260B SIM	
240-146606-5	MH-1210_032321	Total/NA	Water	8260B SIM	
240-146606-6	MH-1219_032321	Total/NA	Water	8260B SIM	
240-146606-7	MH-1066_032321	Total/NA	Water	8260B SIM	
240-146606-8	MH-1181_032321	Total/NA	Water	8260B SIM	
240-146606-9	MH-1171_032321	Total/NA	Water	8260B SIM	
240-146606-10	MH-1001_032321	Total/NA	Water	8260B SIM	
240-146606-11	MH-1067_032421	Total/NA	Water	8260B SIM	
MB 240-479226/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-479226/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-146606-9 MS	MH-1171_032321	Total/NA	Water	8260B SIM	
240-146606-9 MSD	MH-1171_032321	Total/NA	Water	8260B SIM	

Analysis Batch: 479438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-1	TRIP BLANK	Total/NA	Water	8260B	
240-146606-2	MH-1096_032221	Total/NA	Water	8260B	
240-146606-3	DUP-01	Total/NA	Water	8260B	
240-146606-4	MH-1041_032321	Total/NA	Water	8260B	
240-146606-5	MH-1210_032321	Total/NA	Water	8260B	
240-146606-6	MH-1219_032321	Total/NA	Water	8260B	
240-146606-7	MH-1066_032321	Total/NA	Water	8260B	
240-146606-8	MH-1181_032321	Total/NA	Water	8260B	
MB 240-479438/7	Method Blank	Total/NA	Water	8260B	
LCS 240-479438/4	Lab Control Sample	Total/NA	Water	8260B	
240-146439-B-11 MS	Matrix Spike	Total/NA	Water	8260B	
240-146439-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 479445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-12	MH-1043_032421	Total/NA	Water	8260B SIM	
240-146606-13	MH-1020_032421	Total/NA	Water	8260B SIM	
MB 240-479445/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-479445/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-146812-C-1 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-146812-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 479644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-10	MH-1001_032321	Total/NA	Water	8260B	
MB 240-479644/7	Method Blank	Total/NA	Water	8260B	
LCS 240-479644/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 479863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-9	MH-1171_032321	Total/NA	Water	8260B	
240-146606-12	MH-1043_032421	Total/NA	Water	8260B	
240-146606-13	MH-1020_032421	Total/NA	Water	8260B	
MB 240-479863/7	Method Blank	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 479863 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-479863/4	Lab Control Sample	Total/NA	Water	8260B	
240-146556-B-7 MS	Matrix Spike	Total/NA	Water	8260B	
240-146556-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 480068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-146606-11	MH-1067_032421	Total/NA	Water	8260B	
MB 240-480068/7	Method Blank	Total/NA	Water	8260B	
LCS 240-480068/4	Lab Control Sample	Total/NA	Water	8260B	
240-146768-B-10 MS	Matrix Spike	Total/NA	Water	8260B	
240-146768-B-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-146606-1
Date Collected: 03/22/21 00:00
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479438	04/02/21 11:42	LEE	TAL CAN

Client Sample ID: MH-1096_032221
Lab Sample ID: 240-146606-2
Date Collected: 03/22/21 16:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	479438	04/02/21 12:04	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		3	479226	04/01/21 13:59	CS	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-146606-3
Date Collected: 03/22/21 00:00
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	479438	04/02/21 12:26	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 11:56	CS	TAL CAN

Client Sample ID: MH-1041_032321
Lab Sample ID: 240-146606-4
Date Collected: 03/23/21 11:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	479438	04/02/21 12:48	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		3	479226	04/01/21 12:45	CS	TAL CAN

Client Sample ID: MH-1210_032321
Lab Sample ID: 240-146606-5
Date Collected: 03/23/21 13:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479438	04/02/21 13:10	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 13:10	CS	TAL CAN

Client Sample ID: MH-1219_032321
Lab Sample ID: 240-146606-6
Date Collected: 03/23/21 14:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479438	04/02/21 13:31	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 13:35	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1066_032321
Lab Sample ID: 240-146606-7
Date Collected: 03/23/21 12:00
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479438	04/02/21 13:53	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 14:24	CS	TAL CAN

Client Sample ID: MH-1181_032321
Lab Sample ID: 240-146606-8
Date Collected: 03/23/21 15:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479438	04/02/21 14:15	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 14:49	CS	TAL CAN

Client Sample ID: MH-1171_032321
Lab Sample ID: 240-146606-9
Date Collected: 03/23/21 15:00
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479863	04/06/21 12:50	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 15:15	CS	TAL CAN

Client Sample ID: MH-1001_032321
Lab Sample ID: 240-146606-10
Date Collected: 03/23/21 10:55
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	479644	04/05/21 17:36	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 16:31	CS	TAL CAN

Client Sample ID: MH-1067_032421
Lab Sample ID: 240-146606-11
Date Collected: 03/24/21 10:30
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	480068	04/07/21 12:21	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	479226	04/01/21 16:54	CS	TAL CAN

Client Sample ID: MH-1043_032421
Lab Sample ID: 240-146606-12
Date Collected: 03/24/21 09:50
Matrix: Water
Date Received: 03/26/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8	479863	04/06/21 14:40	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		3	479445	04/02/21 13:01	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1020_032421

Date Collected: 03/24/21 09:15
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	479863	04/06/21 15:02	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		3	479445	04/02/21 13:26	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

21/22

Chain of Custody Record

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2762

MICHIGAN 190

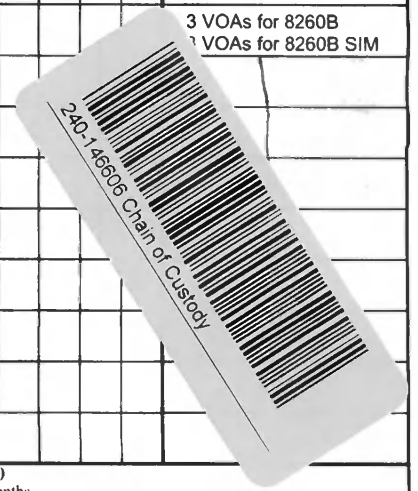
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon, Andrew Barritt	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client: Lab sampling:
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1096_032221	3/22/21	1630		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B
DUP-01	3/22/21	-		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B SIM
MH-1041_032321	3/23/21	1130		X						6					N	G	X	X	X	X	X	X	X	
MH-1210_032321	3/23/21	1330		X						6					N	G	X	X	X	X	X	X	X	
MH-1219_032321	3/23/21	1430		X						6					N	G	X	X	X	X	X	X	X	
MH-1066_032321	3/23/21	1200		X						6					N	G	X	X	X	X	X	X	X	
MH-1181_032321	3/23/21	1530		X						6					N	G	X	X	X	X	X	X	X	
MH-1171_032321	3/23/21	1500		X						6					N	G	X	X	X	X	X	X	X	
MH-1001_032321	3/23/21	1055		X						6					N	G	X	X	X	X	X	X	X	



Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	3/24/21 1700	Nov: Cold Storage	Arcadis	3/24/21 1700
	Arcadis	3/25/21 0945		ETA	3/25/21 946
	ETA	3/25/21 1402	MJS ETA CANTON	MAR 26 2021	800

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Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon, Andrew Barnitt	TAT if different from below 10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client Lab sampling
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite-C / Grab-G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
MH-1067_032421	3/24/21	1030		X						6					2	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1043_032421	3/24/21	0950		X						6					2	G	X	X	X	X	X	X	X	
MH-1020_032421	3/24/21	0915		X						6					2	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Andrew Barnitt	Arcadis	3/24/21 1700	Novi Cold Storage	Arcadis	3/24/21 1700
Andrew Barnitt	Arcadis	3/25/21 0945	Amanda Battista	ETA	3/25/21 946
Amanda Battista	ETA	3/25/21 1406	Received in Laboratory by: MJS ETA CANTON	Company: MAR 26 2021	Date/Time: 800

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 240-146606**
Canton Facility

Client Arcadis Site Name

Cooler Received on MAR 26 2021 Opened on MAR 27 2021

Cooler unpacked by: MJS ETA CANTON

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp. 2.1 °C Corrected Cooler Temp. 2.2 °C
   IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC022887**
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # NA Yes No
17. Was a LL Hg or Me Hg trip blank present? ____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

WI-NC-099

DATA VERIFICATION REPORT

April 09, 2021

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2021 Utility Corridor Evalyation Vapor Testing
Project number: 30080642.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: TestAmerica - North Canton
Laboratory submittal: 146606-1
Sample date: 2021-03-23 2021-03-24 2021-03-22
Report received by CADENA: 2021-04-09
Initial Data Verification completed by CADENA: 2021-04-09
Number of Samples:13
Sample Matrices:Water
Test Categories:GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 146606-1

		Sample Name:	TRIP BLANK				MH-1001_032321				MH-1067_032421				MH-1043_032421				MH-1020_032421				MH-1096_032221				DUP-01			
		Lab Sample ID:	2401466061				24014660610				24014660611				24014660612				24014660613				2401466062				2401466063			
		Sample Date:	3/22/2021				3/23/2021				3/24/2021				3/24/2021				3/24/2021				3/22/2021				3/22/2021			
				Report		Valid		Report		Valid		Report		Valid		Report		Valid		Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC																													
OSW-8260B																													
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	0.40	1.0	ug/l	J	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	8.0	ug/l	---	ND	3.3	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
OSW-8260BSim																													
1,4-Dioxane	123-91-1					1.1	2.0	ug/l	J	ND	2.0	ug/l	---	2.8	6.0	ug/l	J	ND	6.0	ug/l	---	ND	6.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

Reportable Results Only

CADENA Project ID: E205162
Laboratory: TestAmerica - North Canton
Laboratory Submittal: 146606-1

		Sample Name:	MH-1041_032321				MH-1210_032321				MH-1219_032321				MH-1066_032321				MH-1181_032321				MH-1171_032321			
		Lab Sample ID:	2401466064				2401466065				2401466066				2401466067				2401466068				2401466069			
		Sample Date:	3/23/2021				3/23/2021				3/23/2021				3/23/2021				3/23/2021				3/23/2021			
			Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Analyte	**Cas No.**																									
GC/MS VOC																										
OSW-8260B																										
1,1-Dichloroethene	75-35-4		ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2		ND	5.0	ug/l	---	ND	1.0	ug/l	---	0.29	1.0	ug/l	J	ND	1.0	ug/l	---	0.42	1.0	ug/l	J	0.39	1.0	ug/l	J
Tetrachloroethene	127-18-4		ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5		ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6		ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4		ND	5.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
OSW-8260BSim																										
1,4-Dioxane	123-91-1		ND	6.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

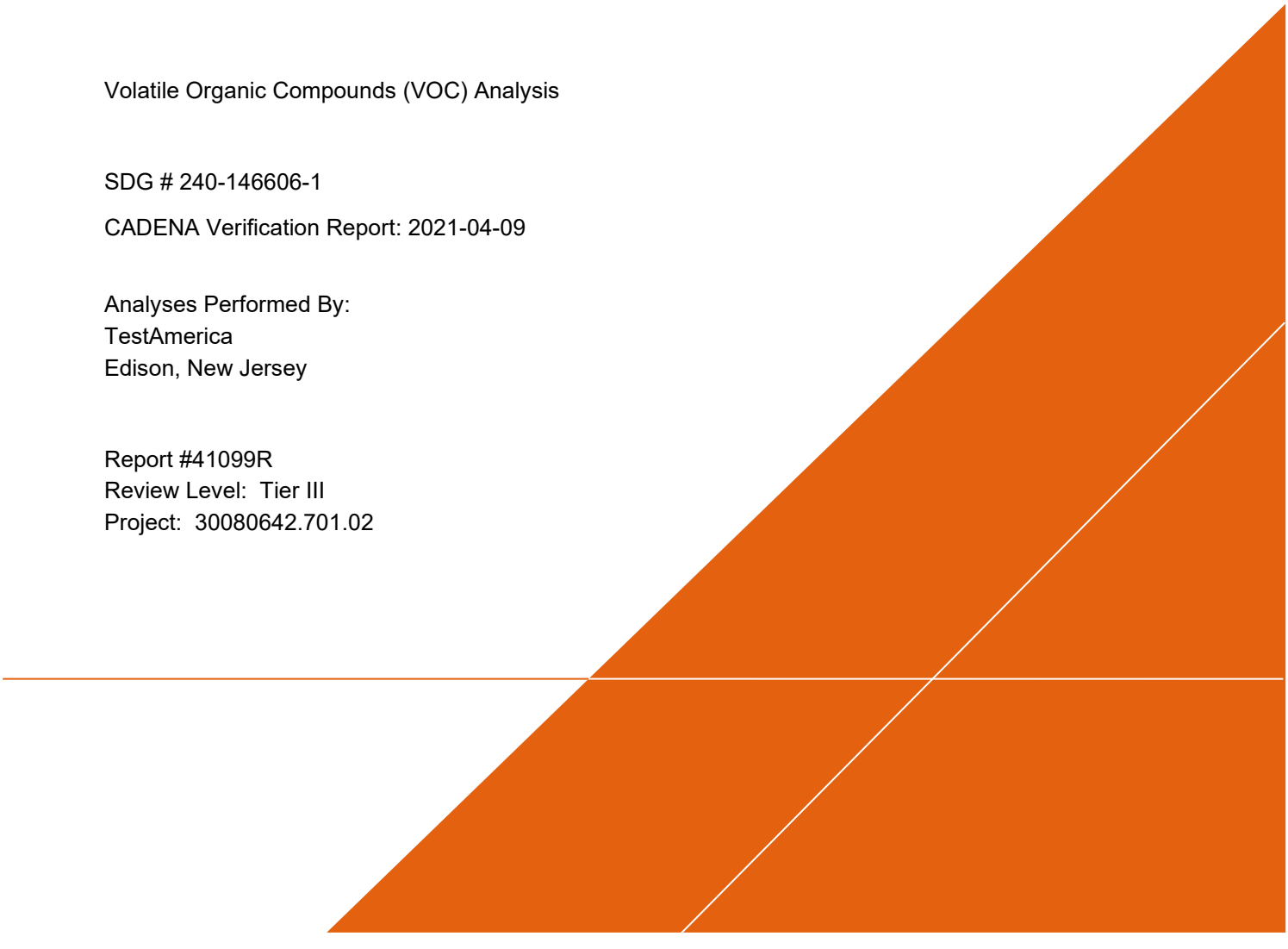
Volatile Organic Compounds (VOC) Analysis

SDG # 240-146606-1

CADENA Verification Report: 2021-04-09

Analyses Performed By:
TestAmerica
Edison, New Jersey

Report #41099R
Review Level: Tier III
Project: 30080642.701.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 240-146606-1 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III) includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						VOC (Full Scan)	VOC (SIM)	MISC
240-146606-1	TRIP BLANK	240-146606-1	Water	3/22/2021		X		
	MH-1096_032221	240-146606-2	Water	3/22/2021		X	X	
	DUP-01	240-146606-3	Water	3/22/2021	MH-1096_032221	X	X	
	MH-1041_032321	240-146606-4	Water	3/23/2021		X	X	
	MH-1210_032321	240-146606-5	Water	3/23/2021		X	X	
	MH-1219_032321	240-146606-6	Water	3/23/2021		X	X	
	MH-1066_032321	240-146606-7	Water	3/23/2021		X	X	
	MH-1181_032321	240-146606-8	Water	3/23/2021		X	X	
	MH-1171_032321	240-146606-9	Water	3/23/2021		X	X	
	MH-1001_032321	240-146606-10	Water	3/23/2021		X	X	
	MH-1067_032421	240-146606-11	Water	3/24/2021		X	X	
	MH-1043_032421	240-146606-12	Water	3/24/2021		X	X	
	MH-1020_032421	240-146606-13	Water	3/24/2021		X	X	

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1096_032221 (240-146606-2), DUP-01 (240-146606-3), MH-1041_032321 (240-146606-4), MH-1043_032421 (240-146606-12) and MH-1020_032421 (240-146606-13). Elevated reporting limits (RLs) are provided.

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260B and 8260B SIM. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260B/8260B-SIM	Water	14 days from collection to analysis	Cool to < 6 °C; pH < 2 with HCl
	Soil	14 days from collection to analysis	Cool to < 6 °C

All samples were analyzed within the specified holding time criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Field Duplicate Analysis

DATA REVIEW

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MH-1096_032221/ DUP-01	All compounds	U	U	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: 8260B/8260B-SIM	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Field Duplicate RPD		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE:

DATE: April 23, 2021

PEER REVIEW: Joseph C. Houser

DATE: April 23, 2021

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

21/22

Chain of Custody Record

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2762

MICHIGAN 190

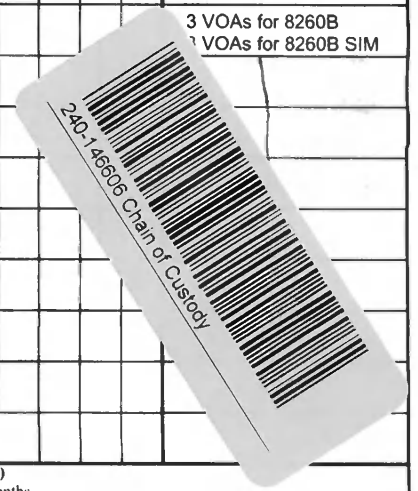
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon, Andrew Barritt	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client: Lab sampling:
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1096_032221	3/22/21	1630		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B
DUP-01	3/22/21	-		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B SIM
MH-1041_032321	3/23/21	1130		X						6					N	G	X	X	X	X	X	X	X	
MH-1210_032321	3/23/21	1330		X						6					N	G	X	X	X	X	X	X	X	
MH-1219_032321	3/23/21	1430		X						6					N	G	X	X	X	X	X	X	X	
MH-1066_032321	3/23/21	1200		X						6					N	G	X	X	X	X	X	X	X	
MH-1181_032321	3/23/21	1530		X						6					N	G	X	X	X	X	X	X	X	
MH-1171_032321	3/23/21	1500		X						6					N	G	X	X	X	X	X	X	X	
MH-1001_032321	3/23/21	1055		X						6					N	G	X	X	X	X	X	X	X	



Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	3/24/21 1700	Nov: Cold Storage	Arcadis	3/24/21 1700
	Arcadis	3/25/21 0945		ETA	3/25/21 946
	ETA	3/25/21 1402	MJS ETA CANTON	MAR 26 2021	800

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Chain of Custody Record

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon, Andrew Barnitt	TAT if different from below 10 day ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client Lab sampling
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite-C / Grab-G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
MH-1067_032421	3/24/21	1030		X						6					2	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1043_032421	3/24/21	0950		X						6					2	G	X	X	X	X	X	X	X	
MH-1020_032421	3/24/21	0915		X						6					2	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Andrew Barnitt	Arcadis	3/24/21 1700	Novi Cold Storage	Arcadis	3/24/21 1700
Andrew Barnitt	Arcadis	3/25/21 0945	Amanda Battista	ETA	3/25/21 946
Amanda Battista	ETA	3/25/21 1406	Received in Laboratory by: MJS ETA CANTON	Company: MAR 26 2021	Date/Time: 800

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Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: TRIP BLANK
Date Collected: 03/22/21 00:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 11:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 11:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 11:42	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 11:42	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*04/02/21 11:42*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 11:42*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 11:42*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 11:42*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1096_032221
Date Collected: 03/22/21 16:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/01/21 13:59	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*70 - 133*		*04/01/21 13:59*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:04	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:04	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:04	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:04	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:04	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*04/02/21 12:04*	*5*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*04/02/21 12:04*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 12:04*	*5*
Dibromofluoromethane (Surr)	*84*		*78 - 129*		*04/02/21 12:04*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: DUP-01
Date Collected: 03/22/21 00:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*		*70 - 133*		*04/01/21 11:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:26	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:26	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:26	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:26	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:26	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:26	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 130*		*04/02/21 12:26*	*5*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/02/21 12:26*	*5*
Toluene-d8 (Surr)	*90*		*69 - 122*		*04/02/21 12:26*	*5*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*04/02/21 12:26*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1041_032321
Date Collected: 03/23/21 11:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/01/21 12:45	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*04/01/21 12:45*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:48	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			04/02/21 12:48	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			04/02/21 12:48	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			04/02/21 12:48	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			04/02/21 12:48	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			04/02/21 12:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 130*		*04/02/21 12:48*	*5*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 12:48*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 12:48*	*5*
Dibromofluoromethane (Surr)	*83*		*78 - 129*		*04/02/21 12:48*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1210_032321
Date Collected: 03/23/21 13:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-5
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/01/21 13:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 13:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:10	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:10	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:10*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/02/21 13:10*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 13:10*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 13:10*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1219_032321
Date Collected: 03/23/21 14:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-6
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*		*04/01/21 13:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:31	1
cis-1,2-Dichloroethene	**0.29**	**J**	1.0	0.16	ug/L			04/02/21 13:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:31	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:31	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:31*	*1*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/02/21 13:31*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*04/02/21 13:31*	*1*
Dibromofluoromethane (Surr)	*82*		*78 - 129*		*04/02/21 13:31*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1066_032321
Date Collected: 03/23/21 12:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-7
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*04/01/21 14:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/02/21 13:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 13:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 13:53	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*04/02/21 13:53*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*04/02/21 13:53*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/02/21 13:53*	*1*
Dibromofluoromethane (Surr)	*81*		*78 - 129*		*04/02/21 13:53*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1181_032321
Date Collected: 03/23/21 15:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-8
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*04/01/21 14:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 14:15	1
cis-1,2-Dichloroethene	**0.42**	**J**	1.0	0.16	ug/L			04/02/21 14:15	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/02/21 14:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/02/21 14:15	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/02/21 14:15	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/02/21 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 130*		*04/02/21 14:15*	*1*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*04/02/21 14:15*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*04/02/21 14:15*	*1*
Dibromofluoromethane (Surr)	*87*		*78 - 129*		*04/02/21 14:15*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1171_032321
Date Collected: 03/23/21 15:00
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-9
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 133*		*04/01/21 15:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:50	1
cis-1,2-Dichloroethene	**0.39**	**J**	1.0	0.16	ug/L			04/06/21 12:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/06/21 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/06/21 12:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/06/21 12:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/06/21 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*04/06/21 12:50*	*1*
4-Bromofluorobenzene (Surr)	*68*		*47 - 134*		*04/06/21 12:50*	*1*
Toluene-d8 (Surr)	*80*		*69 - 122*		*04/06/21 12:50*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*04/06/21 12:50*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1001_032321
Date Collected: 03/23/21 10:55
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-10
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			04/01/21 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 133*		*04/01/21 16:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 17:36	1
cis-1,2-Dichloroethene	**0.40**	**J**	1.0	0.16	ug/L			04/05/21 17:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/05/21 17:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/05/21 17:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/05/21 17:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/05/21 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 130*		*04/05/21 17:36*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*04/05/21 17:36*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*04/05/21 17:36*	*1*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*04/05/21 17:36*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1067_032421
Date Collected: 03/24/21 10:30
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-11
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*04/01/21 16:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 12:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			04/07/21 12:21	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/07/21 12:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/07/21 12:21	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			04/07/21 12:21	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			04/07/21 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*04/07/21 12:21*	*1*
4-Bromofluorobenzene (Surr)	*72*		*47 - 134*		*04/07/21 12:21*	*1*
Toluene-d8 (Surr)	*85*		*69 - 122*		*04/07/21 12:21*	*1*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*04/07/21 12:21*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1043_032421
Date Collected: 03/24/21 09:50
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-12
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.8	J	6.0	2.6	ug/L			04/02/21 13:01	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*04/02/21 13:01*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.0	U	8.0	1.5	ug/L			04/06/21 14:40	8
cis-1,2-Dichloroethene	8.0	U	8.0	1.3	ug/L			04/06/21 14:40	8
Tetrachloroethene	8.0	U	8.0	1.2	ug/L			04/06/21 14:40	8
trans-1,2-Dichloroethene	8.0	U	8.0	1.5	ug/L			04/06/21 14:40	8
Trichloroethene	8.0	U	8.0	0.80	ug/L			04/06/21 14:40	8
Vinyl chloride	8.0	U	8.0	1.6	ug/L			04/06/21 14:40	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*04/06/21 14:40*	*8*
4-Bromofluorobenzene (Surr)	*73*		*47 - 134*		*04/06/21 14:40*	*8*
Toluene-d8 (Surr)	*84*		*69 - 122*		*04/06/21 14:40*	*8*
Dibromofluoromethane (Surr)	*84*		*78 - 129*		*04/06/21 14:40*	*8*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Off-Site

Job ID: 240-146606-1

Client Sample ID: MH-1020_032421
Date Collected: 03/24/21 09:15
Date Received: 03/26/21 08:00

Lab Sample ID: 240-146606-13
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.0	U	6.0	2.6	ug/L			04/02/21 13:26	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*04/02/21 13:26*	*3*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			04/06/21 15:02	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.53	ug/L			04/06/21 15:02	3.33
Tetrachloroethene	3.3	U	3.3	0.50	ug/L			04/06/21 15:02	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			04/06/21 15:02	3.33
Trichloroethene	3.3	U	3.3	0.33	ug/L			04/06/21 15:02	3.33
Vinyl chloride	3.3	U	3.3	0.67	ug/L			04/06/21 15:02	3.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*04/06/21 15:02*	*3.33*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*04/06/21 15:02*	*3.33*
Toluene-d8 (Surr)	*84*		*69 - 122*		*04/06/21 15:02*	*3.33*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*04/06/21 15:02*	*3.33*

ANALYTICAL REPORT

Job Number: 240-151104-1

Job Description: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
6/16/2021 3:29 PM

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06/16/2021

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-151104-1

Comments
No additional comments.

Receipt
The samples were received on 6/12/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-151104-1

No Detections.

Client Sample ID: SL-5_061021 — Lab Sample ID: 240-151104-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	110		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	27		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	14		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: SL-6_061021 — Lab Sample ID: 240-151104-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	0.73	J	1.0	0.44	ug/L	1		8260B	Total/NA

Client Sample ID: SL-7_061021 — Lab Sample ID: 240-151104-4

No Detections.

Client Sample ID: SL-8_061021 — Lab Sample ID: 240-151104-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.4		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	180		8.0	3.7	ug/L	8		8260B	Total/NA
Trichloroethene	47		8.0	3.5	ug/L	8		8260B	Total/NA
Vinyl chloride	26		8.0	3.6	ug/L	8		8260B	Total/NA

Client Sample ID: SL-9_061021 — Lab Sample ID: 240-151104-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	110		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	26		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	12		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-151104-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	140		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	33		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	17		5.0	2.3	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-151104-1

Date Collected: 06/10/21 00:00 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/15/21 20:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/15/21 20:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 20:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/15/21 20:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 20:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/15/21 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 130*		*06/15/21 20:25*	*1*
4-Bromofluorobenzene (Surr)	*118*		*47 - 134*		*06/15/21 20:25*	*1*
Toluene-d8 (Surr)	*107*		*69 - 122*		*06/15/21 20:25*	*1*
Dibromofluoromethane (Surr)	*88*		*78 - 129*		*06/15/21 20:25*	*1*

Client Sample ID: SL-5_061021 — Lab Sample ID: 240-151104-2

Date Collected: 06/10/21 10:00 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			06/14/21 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*		*06/14/21 20:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			06/15/21 20:49	5
cis-1,2-Dichloroethene	**110**		5.0	2.3	ug/L			06/15/21 20:49	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			06/15/21 20:49	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			06/15/21 20:49	5
Trichloroethene	**27**		5.0	2.2	ug/L			06/15/21 20:49	5
Vinyl chloride	**14**		5.0	2.3	ug/L			06/15/21 20:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*		*06/15/21 20:49*	*5*
4-Bromofluorobenzene (Surr)	*119*		*47 - 134*		*06/15/21 20:49*	*5*
Toluene-d8 (Surr)	*107*		*69 - 122*		*06/15/21 20:49*	*5*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*06/15/21 20:49*	*5*

Client Sample ID: SL-6_061021 — Lab Sample ID: 240-151104-3

Date Collected: 06/10/21 09:35 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/14/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 133*		*06/14/21 20:37*	*1*

Client Sample ID: SL-6_061021 — Lab Sample ID: 240-151104-3

Date Collected: 06/10/21 09:35 **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/15/21 21:13	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			06/15/21 21:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 21:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/15/21 21:13	1
Trichloroethene	**0.73**	**J**	1.0	0.44	ug/L			06/15/21 21:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/15/21 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*		*06/15/21 21:13*	*1*
4-Bromofluorobenzene (Surr)	*119*		*47 - 134*		*06/15/21 21:13*	*1*
Toluene-d8 (Surr)	*108*		*69 - 122*		*06/15/21 21:13*	*1*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*06/15/21 21:13*	*1*

Client Sample ID: SL-7_061021 — Lab Sample ID: 240-151104-4

Date Collected: 06/10/21 09:05 **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/14/21 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*06/14/21 21:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/15/21 21:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/15/21 21:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 21:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/15/21 21:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 21:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/15/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*75 - 130*		*06/15/21 21:36*	*1*
4-Bromofluorobenzene (Surr)	*126*		*47 - 134*		*06/15/21 21:36*	*1*
Toluene-d8 (Surr)	*108*		*69 - 122*		*06/15/21 21:36*	*1*
Dibromofluoromethane (Surr)	*92*		*78 - 129*		*06/15/21 21:36*	*1*

Client Sample ID: SL-8_061021 — Lab Sample ID: 240-151104-5

Date Collected: 06/10/21 10:25 **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.4**		2.0	0.86	ug/L			06/14/21 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*06/14/21 21:27*	*1*

Client Sample ID: SL-8_061021 — Lab Sample ID: 240-151104-5

Date Collected: 06/10/21 10:25 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.0	U	8.0	3.9	ug/L			06/15/21 22:00	8
cis-1,2-Dichloroethene	**180**		8.0	3.7	ug/L			06/15/21 22:00	8
Tetrachloroethene	8.0	U	8.0	3.5	ug/L			06/15/21 22:00	8
trans-1,2-Dichloroethene	8.0	U	8.0	4.1	ug/L			06/15/21 22:00	8
Trichloroethene	**47**		8.0	3.5	ug/L			06/15/21 22:00	8
Vinyl chloride	**26**		8.0	3.6	ug/L			06/15/21 22:00	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*75 - 130*		*06/15/21 22:00*	*8*
4-Bromofluorobenzene (Surr)	*120*		*47 - 134*		*06/15/21 22:00*	*8*
Toluene-d8 (Surr)	*107*		*69 - 122*		*06/15/21 22:00*	*8*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*06/15/21 22:00*	*8*

Client Sample ID: SL-9_061021 — Lab Sample ID: 240-151104-6

Date Collected: 06/10/21 10:45 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			06/14/21 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*06/14/21 21:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			06/15/21 22:24	5
cis-1,2-Dichloroethene	**110**		5.0	2.3	ug/L			06/15/21 22:24	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			06/15/21 22:24	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			06/15/21 22:24	5
Trichloroethene	**26**		5.0	2.2	ug/L			06/15/21 22:24	5
Vinyl chloride	**12**		5.0	2.3	ug/L			06/15/21 22:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 130*		*06/15/21 22:24*	*5*
4-Bromofluorobenzene (Surr)	*119*		*47 - 134*		*06/15/21 22:24*	*5*
Toluene-d8 (Surr)	*106*		*69 - 122*		*06/15/21 22:24*	*5*
Dibromofluoromethane (Surr)	*90*		*78 - 129*		*06/15/21 22:24*	*5*

Client Sample ID: DUP-01 — Lab Sample ID: 240-151104-7

Date Collected: 06/10/21 00:00 — **Matrix: Water**
Date Received: 06/12/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.1**		2.0	0.86	ug/L			06/14/21 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 133*		*06/14/21 22:17*	*1*

Client Sample ID: DUP-01
Date Collected: 06/10/21 00:00
Date Received: 06/12/21 08:00

Lab Sample ID: 240-151104-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			06/15/21 22:47	5
cis-1,2-Dichloroethene	**140**		5.0	2.3	ug/L			06/15/21 22:47	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			06/15/21 22:47	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			06/15/21 22:47	5
Trichloroethene	**33**		5.0	2.2	ug/L			06/15/21 22:47	5
Vinyl chloride	**17**		5.0	2.3	ug/L			06/15/21 22:47	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*		*06/15/21 22:47*	*5*
4-Bromofluorobenzene (Surr)	*122*		*47 - 134*		*06/15/21 22:47*	*5*
Toluene-d8 (Surr)	*110*		*69 - 122*		*06/15/21 22:47*	*5*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*06/15/21 22:47*	*5*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-151103-E-4 MS	Matrix Spike	82	123	107	93
240-151103-F-4 MSD	Matrix Spike Duplicate	82	124	111	94
240-151104-1	TRIP BLANK	81	118	107	88
240-151104-2	SL-5_061021	80	119	107	89
240-151104-3	SL-6_061021	80	119	108	90
240-151104-4	SL-7_061021	82	126	108	92
240-151104-5	SL-8_061021	82	120	107	90
240-151104-6	SL-9_061021	81	119	106	90
240-151104-7	DUP-01	80	122	110	89
LCS 240-490711/4	Lab Control Sample	78	117	105	90
MB 240-490711/7	Method Blank	80	121	106	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-150917-H-3 MS	Matrix Spike	80
240-150917-N-3 MSD	Matrix Spike Duplicate	82
240-151104-2	SL-5_061021	87
240-151104-3	SL-6_061021	81
240-151104-4	SL-7_061021	84
240-151104-5	SL-8_061021	84
240-151104-6	SL-9_061021	84
240-151104-7	DUP-01	88
LCS 240-490579/4	Lab Control Sample	77
MB 240-490579/5	Method Blank	78

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-490711/7 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 490711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/15/21 14:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/15/21 14:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 14:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/15/21 14:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/15/21 14:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/15/21 14:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*		*06/15/21 14:30*	*1*
4-Bromofluorobenzene (Surr)	*121*		*47 - 134*		*06/15/21 14:30*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*06/15/21 14:30*	*1*
Dibromofluoromethane (Surr)	*88*		*78 - 129*		*06/15/21 14:30*	*1*

Lab Sample ID: LCS 240-490711/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 490711

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	10.2		ug/L		102	73 - 129		
cis-1,2-Dichloroethene			10.0	9.94		ug/L		99	75 - 124		
Tetrachloroethene			10.0	10.8		ug/L		108	70 - 125		
trans-1,2-Dichloroethene			10.0	10.1		ug/L		101	74 - 130		
Trichloroethene			10.0	9.77		ug/L		98	71 - 121		
Vinyl chloride			10.0	9.40		ug/L		94	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 130*
4-Bromofluorobenzene (Surr)	*117*		*47 - 134*
Toluene-d8 (Surr)	*105*		*69 - 122*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-490579/5 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 490579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/14/21 18:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 133*		*06/14/21 18:34*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-490579/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 490579

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.6		ug/L		106	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 133*

QC Association Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

GC/MS VOA

Analysis Batch: 490579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151104-2	SL-5_061021	Total/NA	Water	8260B SIM	
240-151104-3	SL-6_061021	Total/NA	Water	8260B SIM	
240-151104-4	SL-7_061021	Total/NA	Water	8260B SIM	
240-151104-5	SL-8_061021	Total/NA	Water	8260B SIM	
240-151104-6	SL-9_061021	Total/NA	Water	8260B SIM	
240-151104-7	DUP-01	Total/NA	Water	8260B SIM	
MB 240-490579/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-490579/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 490711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-151104-1	TRIP BLANK	Total/NA	Water	8260B	
240-151104-2	SL-5_061021	Total/NA	Water	8260B	
240-151104-3	SL-6_061021	Total/NA	Water	8260B	
240-151104-4	SL-7_061021	Total/NA	Water	8260B	
240-151104-5	SL-8_061021	Total/NA	Water	8260B	
240-151104-6	SL-9_061021	Total/NA	Water	8260B	
240-151104-7	DUP-01	Total/NA	Water	8260B	
MB 240-490711/7	Method Blank	Total/NA	Water	8260B	
LCS 240-490711/4	Lab Control Sample	Total/NA	Water	8260B	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-151104-1

Date Collected: 06/10/21 00:00 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	490711	06/15/21 20:25	LRW	TAL CAN

Client Sample ID: SL-5_061021 — Lab Sample ID: 240-151104-2

Date Collected: 06/10/21 10:00 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	490711	06/15/21 20:49	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 20:13	CS	TAL CAN

Client Sample ID: SL-6_061021 — Lab Sample ID: 240-151104-3

Date Collected: 06/10/21 09:35 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	490711	06/15/21 21:13	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 20:37	CS	TAL CAN

Client Sample ID: SL-7_061021 — Lab Sample ID: 240-151104-4

Date Collected: 06/10/21 09:05 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	490711	06/15/21 21:36	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 21:02	CS	TAL CAN

Client Sample ID: SL-8_061021 — Lab Sample ID: 240-151104-5

Date Collected: 06/10/21 10:25 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8	490711	06/15/21 22:00	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 21:27	CS	TAL CAN

Client Sample ID: SL-9_061021 — Lab Sample ID: 240-151104-6

Date Collected: 06/10/21 10:45 — **Matrix: Water**
Date Received: 06/12/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	490711	06/15/21 22:24	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 21:52	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01
Date Collected: 06/10/21 00:00
Date Received: 06/12/21 08:00

Lab Sample ID: 240-151104-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	490711	06/15/21 22:47	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	490579	06/14/21 22:17	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-21
Iowa	State	421	06-01-21 *
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc. Job ID: 240-151104-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-151104-1	TRIP BLANK	Water	06/10/21 00:00	06/12/21 08:00	
240-151104-2	SL-5_061021	Water	06/10/21 10:00	06/12/21 08:00	
240-151104-3	SL-6_061021	Water	06/10/21 09:35	06/12/21 08:00	
240-151104-4	SL-7_061021	Water	06/10/21 09:05	06/12/21 08:00	
240-151104-5	SL-8_061021	Water	06/10/21 10:25	06/12/21 08:00	
240-151104-6	SL-9_061021	Water	06/10/21 10:45	06/12/21 08:00	
240-151104-7	DUP-01	Water	06/10/21 00:00	06/12/21 08:00	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm25UX18IS_00002	05/02/21	02/02/21	MEOH, Lot +230910000258810JD	50 mL	VM568718_00019	5 mL	Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene	25 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm25UX18IS_00003	10/29/21	04/29/21	MEOH, Lot +232960000273166JL	100 mL	VM568718_00021	10 mL	Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene	25 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm25UX18SS_00002	05/02/21	02/02/21	MEOH, Lot +230910000258810JD	50 mL	VM567650_00035	0.5 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm25UX18SS_00003	07/29/21	04/29/21	MEOH, Lot +232960000273166JL	100 mL	VM567650_00035	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50IS_00087	07/07/21	01/07/21	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00443	06/09/21	06/02/21	MEOH, Lot na	5 mL	vm50ss_stk_00087	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00087	09/08/21	03/08/21	MEOH, Lot 0000258810	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00087	09/08/21	03/08/21	MEOH, Lot 0000258810	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00394	06/03/21	05/27/21	MEOH, Lot na	5 mL	VMACROLSTD_00095	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00095	06/11/21	05/11/21	MEOH, Lot 0000273166	20 mL	VM568720_00040	0.25 mL	Acrolein	250 ug/mL
..VM568720_00040	07/31/21		restek, Lot A0161364		(Purchased Reagent)		Acrolein	20000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vmbfb_00026							Tentatively Identified Compound	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmdiox_spike_00258	04/19/21	04/12/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00023	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00023	05/31/21	03/30/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00009	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00009	05/31/21		NSI Soln, Inc., Lot 200527		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00265	06/17/21	06/10/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00024	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00024	09/01/21	06/01/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00246	04/19/21	04/12/21	MEOH, Lot na	1 mL	vmdioxane_00031	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00031	06/30/21	03/30/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00253	06/17/21	06/10/21	MEOH, Lot na	1 mL	vmdioxane_00031	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00031	06/30/21	03/30/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00409	06/05/21	05/29/21	MEOH, Lot NA	5 mL	VMFASG_00106	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00106	06/13/21	05/13/21	MEOH, Lot 0000273166	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00412	06/21/21	06/14/21	MEOH, Lot NA	5 mL	VMFASG_00107	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00107	07/12/21	06/12/21	MEOH, Lot 0000273166	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00400	06/03/21	05/27/21	MEOH, Lot n/a	5 mL	VMRFASP_00074	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00074	06/30/21	04/18/21	MEOH, Lot 0000273166	100 mL	VM571992S_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM571992S_00007	1 mL	1,1-Dichloroethene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00005	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00402	06/17/21	06/10/21	MEOH, Lot n/a	5 mL	VMRFASP_00075	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00075	06/30/21	06/10/21	MEOH, Lot 0000273166	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00387	06/10/21	06/03/21	MEOH, Lot 0000273166	10 mL	vm569722_00018	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00018	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00388	06/16/21	06/09/21	MEOH, Lot 0000273166	10 mL	vm569722_00018	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00018	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Vinyl chloride	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMRPRIMW_00438	06/08/21	06/01/21	MEOH, Lot NA	5 mL	VMRPRIM_00050	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00050	06/30/21	06/01/21	MEOH, Lot +232960000273166JL	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00009	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00025	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00009	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00025	10/31/21		Restek, Lot A0160321		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00439	06/16/21	06/09/21	MEOH, Lot NA	5 mL	VMRPRIM_00050	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	50 ug/mL
.VMRPRIM_00050	06/30/21	06/01/21	MEOH, Lot +232960000273166JL	50 mL	VM571992_00004	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00004	06/30/21	Restek, Lot A0143774			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00019

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,002.2 µg/mL		+/- 29.0815 µg/mL		Gravimetric
	CAS # 25725-11-5	(Lot CD-107)			+/- 107.0965 µg/mL		Unstressed
	Purity 98%				+/- 110.2100 µg/mL		Stressed
2	2-Butanone-d5		1,252.7 µg/mL		+/- 7.2833 µg/mL		Gravimetric
	CAS # 24313-50-6	(Lot M-276)			+/- 26.8205 µg/mL		Unstressed
	Purity 99%				+/- 27.6002 µg/mL		Stressed
3	Fluorobenzene		251.8 µg/mL		+/- 1.4674 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)			+/- 5.3920 µg/mL		Unstressed
	Purity 99%				+/- 5.5487 µg/mL		Stressed
4	1,4-Dioxane-d8		5,003.8 µg/mL		+/- 29.0907 µg/mL		Gravimetric
	CAS # 17647-74-4	(Lot I-19942)			+/- 107.1305 µg/mL		Unstressed
	Purity 99%				+/- 110.2450 µg/mL		Stressed
5	Chlorobenzene-d5		250.8 µg/mL		+/- 1.4613 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)			+/- 5.3695 µg/mL		Unstressed
	Purity 99%				+/- 5.5256 µg/mL		Stressed
6	1,4-Dichlorobenzene-d4		250.5 µg/mL		+/- 1.4595 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/- 5.3631 µg/mL		Unstressed
	Purity 99%				+/- 5.5189 µg/mL		Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

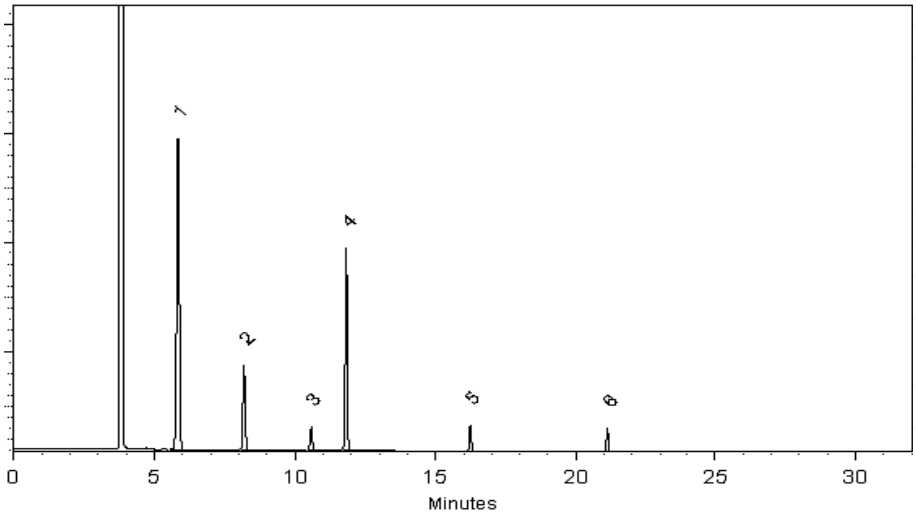
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%			+/- 110.3919 µg/mL	Stressed
2	2-Butanone-d5		1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%			+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene		250.8 µg/mL	+/- 1.4615 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)		+/- 5.3706 µg/mL	Unstressed
	Purity 99%			+/- 5.5267 µg/mL	Stressed
4	1,4-Dioxane-d8		5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I19942-0122JM)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%			+/- 110.3919 µg/mL	Stressed
5	Chlorobenzene-d5		250.0 µg/mL	+/- 1.4569 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3534 µg/mL	Unstressed
	Purity 99%			+/- 5.5090 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		252.4 µg/mL	+/- 1.4709 µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.4048 µg/mL	Unstressed
	Purity 99%			+/- 5.5619 µg/mL	Stressed

Reagent

VM568720_00040

Rc'd 9/17/20 VM 568720_ 00040

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156859

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,830.0 µg/mL	+/- 116.1090 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 396.1504 µg/mL	Unstressed
	Purity 99%		+/- 888.7531 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00018

Rec: 12/2/20
VM569722-00018

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,502.3 µg/mL	+/- 16.4178 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5076 µg/mL	Unstressed
	Purity 99%		+/- 143.7858 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.6 µg/mL	+/- 16.3299 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.4038 µg/mL	Unstressed
	Purity 99%		+/- 143.6799 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 17.2154 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4890 µg/mL	Unstressed
	Purity 99%		+/- 143.7623 µg/mL	Stressed
4	1,3-Butadiene	2,500.7 µg/mL	+/- 17.6652 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.5681 µg/mL	Unstressed
	Purity 99%		+/- 143.8406 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.2 µg/mL	+/- 16.4034 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4450 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/- 17.7279 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5555 µg/mL	Unstressed
	Purity 99%		+/- 143.8274 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 8582700)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

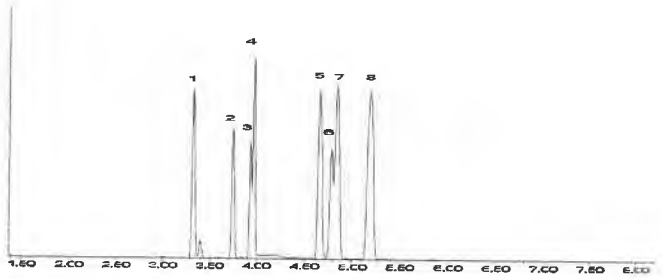
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

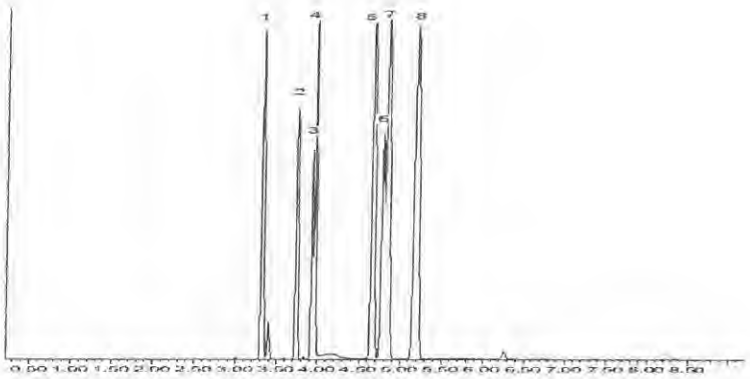
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00009

Rec: 2-21-20

VM569723_00009

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Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 53.5253 +/- 55.0814	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00025

Rec: 12/2/20
VM569724_00025

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Catalog No. : 569724 **Lot No.:** A0160321

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

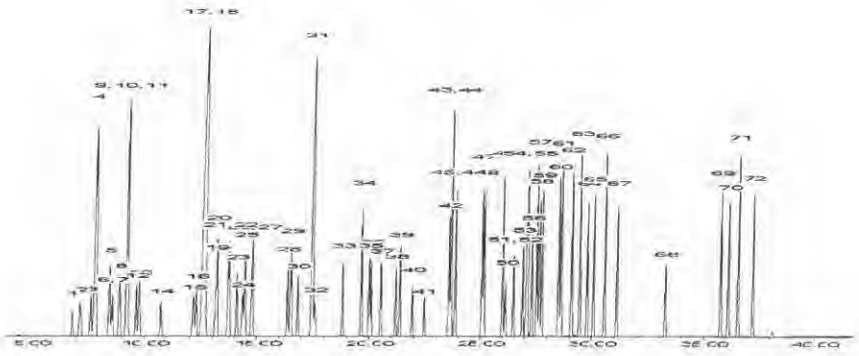
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00005

Rec: 5/31/19
VM571992S-00005

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3227.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3227.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7	µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7	µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2	µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3	µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2	µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2	µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0	µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3	µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0	µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7	µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7	µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0	µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4	µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FG101-OICH)	2,509.5	µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4	µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7	µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7	µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7	µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2	µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2	µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,505.2	µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3	µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7	µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2	µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7	µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,506.2	µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot FGH02-CMLN)	2,510.0	µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,504.7	µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,509.2	µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot D6OHC)	2,505.8	µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot JMIYD)	2,508.7	µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01-IMA)	2,504.7	µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 99%	(Lot 6628200)	2,500.3	µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD)	2,506.3	µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot 4Y5DC)	2,509.8	µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot MMPGA)	2,513.7	µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot R6QDM)	2,501.8	µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 98%	(Lot LC00408V)	2,508.5	µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot 3LYYC)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 97%	(Lot 5526800)	2,504.4	µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot 4KW3H-OO)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

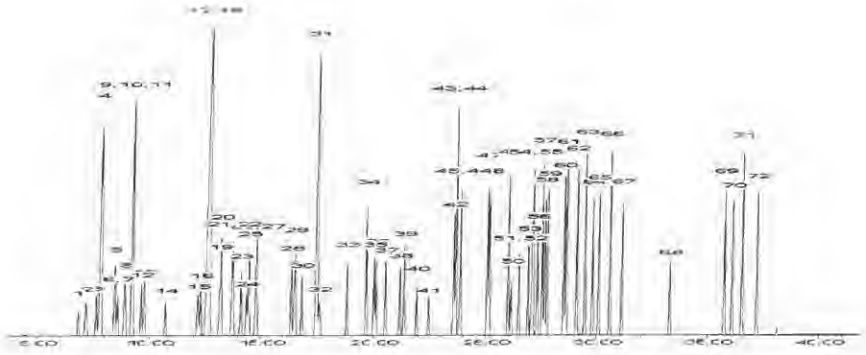
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00007

VMS71992S-00007 Rec; 2-21-20

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4 µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7 µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2 µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7 µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2 µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7 µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

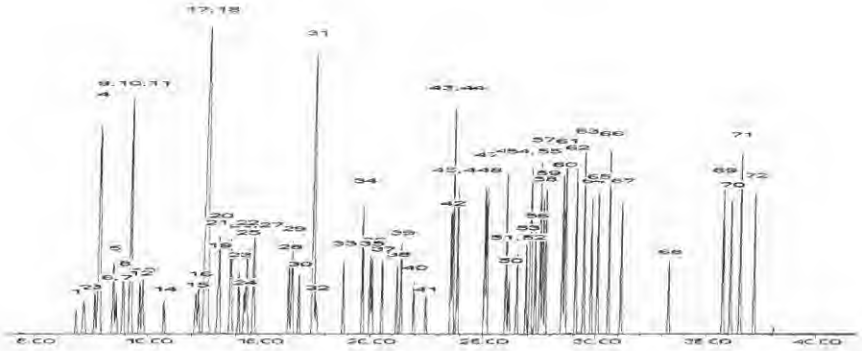
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VMNSIMIX2_00009

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 200527
Manufacture Date: 05/27/2020
Expiration: 05/31/2021
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.0%	24900.0 ± 231.8

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2015 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 200527

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-151104-1	88	81	107	118
SL-5_061021	240-151104-2	89	80	107	119
SL-6_061021	240-151104-3	90	80	108	119
SL-7_061021	240-151104-4	92	82	108	126
SL-8_061021	240-151104-5	90	82	107	120
SL-9_061021	240-151104-6	90	81	106	119
DUP-01	240-151104-7	89	80	110	122
	MB 240-490711/7	88	80	106	121
	LCS 240-490711/4	90	78	105	117
	240-151103-E-4 MS	93	82	107	123
	240-151103-F-4 MSD	94	82	111	124

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4794.D

Lab ID: LCS 240-490711/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.2	102	73-129	
cis-1,2-Dichloroethene	10.0	9.94	99	75-124	
Tetrachloroethene	10.0	10.8	108	70-125	
trans-1,2-Dichloroethene	10.0	10.1	101	74-130	
Trichloroethene	10.0	9.77	98	71-121	
Vinyl chloride	10.0	9.40	94	61-134	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4802.D

Lab ID: 240-151103-E-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	9.76	98	64-132	
cis-1,2-Dichloroethene	10.0	0.87 J	10.3	94	68-121	
Tetrachloroethene	10.0	1.0 U	10.1	101	52-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.38	94	69-126	
Trichloroethene	10.0	28	41.6	135	56-124	E F1
Vinyl chloride	10.0	1.0 U	9.17	92	49-136	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4803.D

Lab ID: 240-151103-F-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.1	101	3	35	64-132	
cis-1,2-Dichloroethene	10.0	10.3	95	1	35	68-121	
Tetrachloroethene	10.0	10.5	105	3	35	52-129	
trans-1,2-Dichloroethene	10.0	9.65	96	3	35	69-126	
Trichloroethene	10.0	40.2	121	3	35	56-124	E
Vinyl chloride	10.0	9.24	92	1	35	49-136	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: UXR4797.D Lab Sample ID: MB 240-490711/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 06/15/2021 14:30

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-490711/4	UXR4794.D	06/15/2021 13:19
	240-151103-E-4 MS	UXR4802.D	06/15/2021 16:28
	240-151103-F-4 MSD	UXR4803.D	06/15/2021 16:52
TRIP BLANK	240-151104-1	UXR4812.D	06/15/2021 20:25
SL-5_061021	240-151104-2	UXR4813.D	06/15/2021 20:49
SL-6_061021	240-151104-3	UXR4814.D	06/15/2021 21:13
SL-7_061021	240-151104-4	UXR4815.D	06/15/2021 21:36
SL-8_061021	240-151104-5	UXR4816.D	06/15/2021 22:00
SL-9_061021	240-151104-6	UXR4817.D	06/15/2021 22:24
DUP-01	240-151104-7	UXR4818.D	06/15/2021 22:47

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: BFB4002.D BFB Injection Date: 06/03/2021

Instrument ID: A3UX17 BFB Injection Time: 17:50

Analysis Batch No.: 488921

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	49.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	Greater than 50% of mass 95	71.6	
175	5.0 - 9.0 % of mass 174	5.1	(7.1) 1
176	95.0 - 101.0 % of mass 174	69.2	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-488921/2	UXR4575.D	06/03/2021	18:28
	STD8260 240-488921/3	UXR4576.D	06/03/2021	18:52
	STD8260 240-488921/4	UXR4577.D	06/03/2021	19:16
	STD8260 240-488921/5	UXR4578.D	06/03/2021	19:39
	STD8260 240-488921/6	UXR4579.D	06/03/2021	20:03
	STD8260 240-488921/7	UXR4580.D	06/03/2021	20:27
	STD8260 240-488921/8	UXR4581.D	06/03/2021	20:50
	ICV 240-488921/9	UXR4582.D	06/03/2021	21:14
	ICV 240-488921/17	UXR4590.D	06/04/2021	0:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: BFB4011.D BFB Injection Date: 06/15/2021

Instrument ID: A3UX17 BFB Injection Time: 12:03

Analysis Batch No.: 490711

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.3	
75	30.0 - 60.0 % of mass 95	49.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	71.7	
175	5.0 - 9.0 % of mass 174	5.7	(7.9) 1
176	95.0 - 101.0 % of mass 174	68.9	(96.1) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-490711/2	UXR4792.D	06/15/2021	12:32
	CCV 240-490711/3	UXR4793.D	06/15/2021	12:55
	LCS 240-490711/4	UXR4794.D	06/15/2021	13:19
	MB 240-490711/7	UXR4797.D	06/15/2021	14:30
	240-151103-E-4 MS	UXR4802.D	06/15/2021	16:28
	240-151103-F-4 MSD	UXR4803.D	06/15/2021	16:52
TRIP BLANK	240-151104-1	UXR4812.D	06/15/2021	20:25
SL-5_061021	240-151104-2	UXR4813.D	06/15/2021	20:49
SL-6_061021	240-151104-3	UXR4814.D	06/15/2021	21:13
SL-7_061021	240-151104-4	UXR4815.D	06/15/2021	21:36
SL-8_061021	240-151104-5	UXR4816.D	06/15/2021	22:00
SL-9_061021	240-151104-6	UXR4817.D	06/15/2021	22:24
DUP-01	240-151104-7	UXR4818.D	06/15/2021	22:47

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Sample No.: STD8260 240-488921/4 Date Analyzed: 06/03/2021 19:16

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR4577.D Heated Purge: (Y/N) N

Calibration ID: 61585

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1154679	5.74	948084	8.44	431199	10.69
UPPER LIMIT		2309358	6.24	1896168	8.94	862398	11.19
LOWER LIMIT		577340	5.24	474042	7.94	215600	10.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-488921/9		1159985	5.74	939006	8.44	424101	10.69
ICV 240-488921/17		1147369	5.74	933275	8.44	419518	10.69
CCVIS 240-490711/2		1176655	5.74	886372	8.44	400044	10.69

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Sample No.: CCVIS 240-490711/2 Date Analyzed: 06/15/2021 12:32

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR4792.D Heated Purge: (Y/N) N

Calibration ID: 61587

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1176655	5.74	886372	8.44	400044	10.69
UPPER LIMIT		2353310	6.24	1772744	8.94	800088	11.19
LOWER LIMIT		588328	5.24	443186	7.94	200022	10.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-490711/3		1197577	5.74	894154	8.44	392835	10.69
LCS 240-490711/4		1162978	5.74	859062	8.44	379297	10.68
MB 240-490711/7		1155946	5.75	836843	8.44	368958	10.69
240-151103-E-4 MS		1179852	5.74	866469	8.44	383205	10.69
240-151103-F-4 MSD		1175130	5.74	858210	8.44	371714	10.69
240-151104-1	TRIP BLANK	1148636	5.75	843650	8.44	366600	10.68
240-151104-2	SL-5_061021	1094436	5.74	807699	8.44	363317	10.69
240-151104-3	SL-6_061021	1122759	5.75	817174	8.44	359597	10.69
240-151104-4	SL-7_061021	1132057	5.74	845288	8.44	383389	10.69
240-151104-5	SL-8_061021	1116239	5.74	819990	8.44	362856	10.68
240-151104-6	SL-9_061021	1154418	5.75	852854	8.44	374393	10.68
240-151104-7	DUP-01	1117882	5.74	805974	8.44	357785	10.68

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-151104-1

Matrix: Water Lab File ID: UXR4812.D

Analysis Method: 8260B Date Collected: 06/10/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 20:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		75-130
460-00-4	4-Bromofluorobenzene (Surr)	118		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	88		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4812.D
Lims ID: 240-151104-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 15-Jun-2021 20:25:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-022
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.751	5.740	0.011	99	1148636	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	87	843650	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	97	366600	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	209537	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	287855	16.2	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1106770	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	436611	23.6	
11 Vinyl chloride	62		1.957				ND	
19 1,1-Dichloroethene	96		3.178				ND	
31 trans-1,2-Dichloroethene	96		3.878				ND	
39 cis-1,2-Dichloroethene	96		4.755				ND	
57 Trichloroethene	130		6.060				ND	
73 Tetrachloroethene	164		7.673				ND	

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

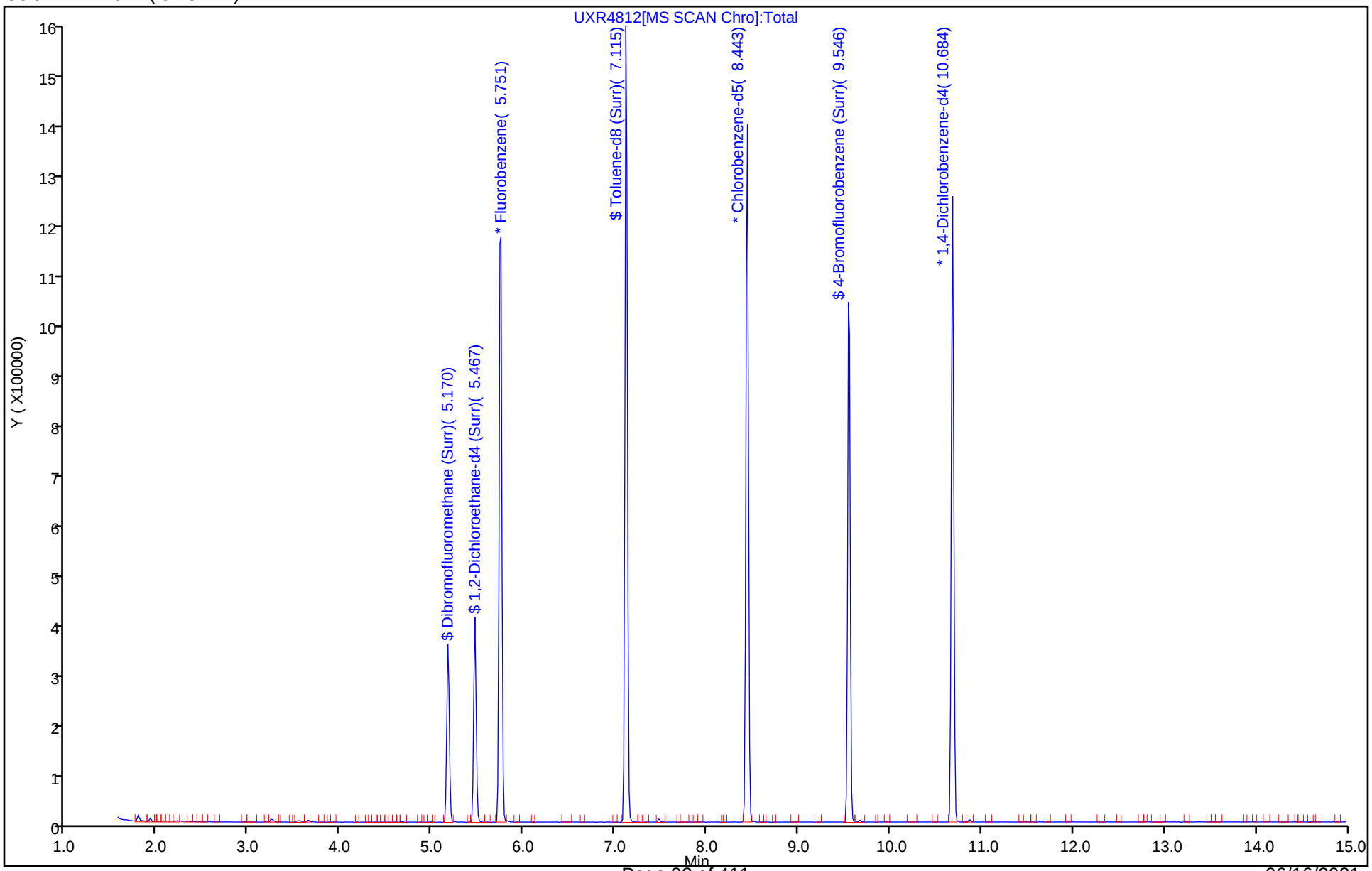
Report Date: 16-Jun-2021 10:43:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4812.D

Injection Date:	15-Jun-2021 20:25:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-A-1	Lab Sample ID:	240-151104-1	Worklist Smp#:	22
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4812.D
Lims ID: 240-151104-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 15-Jun-2021 20:25:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-022
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.26
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.2	81.18
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.59
$ 7 4-Bromofluorobenzene (Surr)	20.0	23.6	117.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-5_061021 Lab Sample ID: 240-151104-2

Matrix: Water Lab File ID: UXR4813.D

Analysis Method: 8260B Date Collected: 06/10/2021 10:00

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 20:49

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	110		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	27		5.0	2.2
75-01-4	Vinyl chloride	14		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		75-130
460-00-4	4-Bromofluorobenzene (Surr)	119		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D
Lims ID: 240-151104-E-2
Client ID: SL-5_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 20:49:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0110279-023
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:41:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1094436	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	807699	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	96	363317	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	201098	17.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	271844	16.1	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1059502	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	421857	23.8	
11 Vinyl chloride	62	1.957	1.957	0.000	97	48574	2.76	
19 1,1-Dichloroethene	96		3.178				ND	
31 trans-1,2-Dichloroethene	96		3.878				ND	
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	81	356118	22.9	
57 Trichloroethene	130	6.060	6.060	0.000	97	81277	5.31	
73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

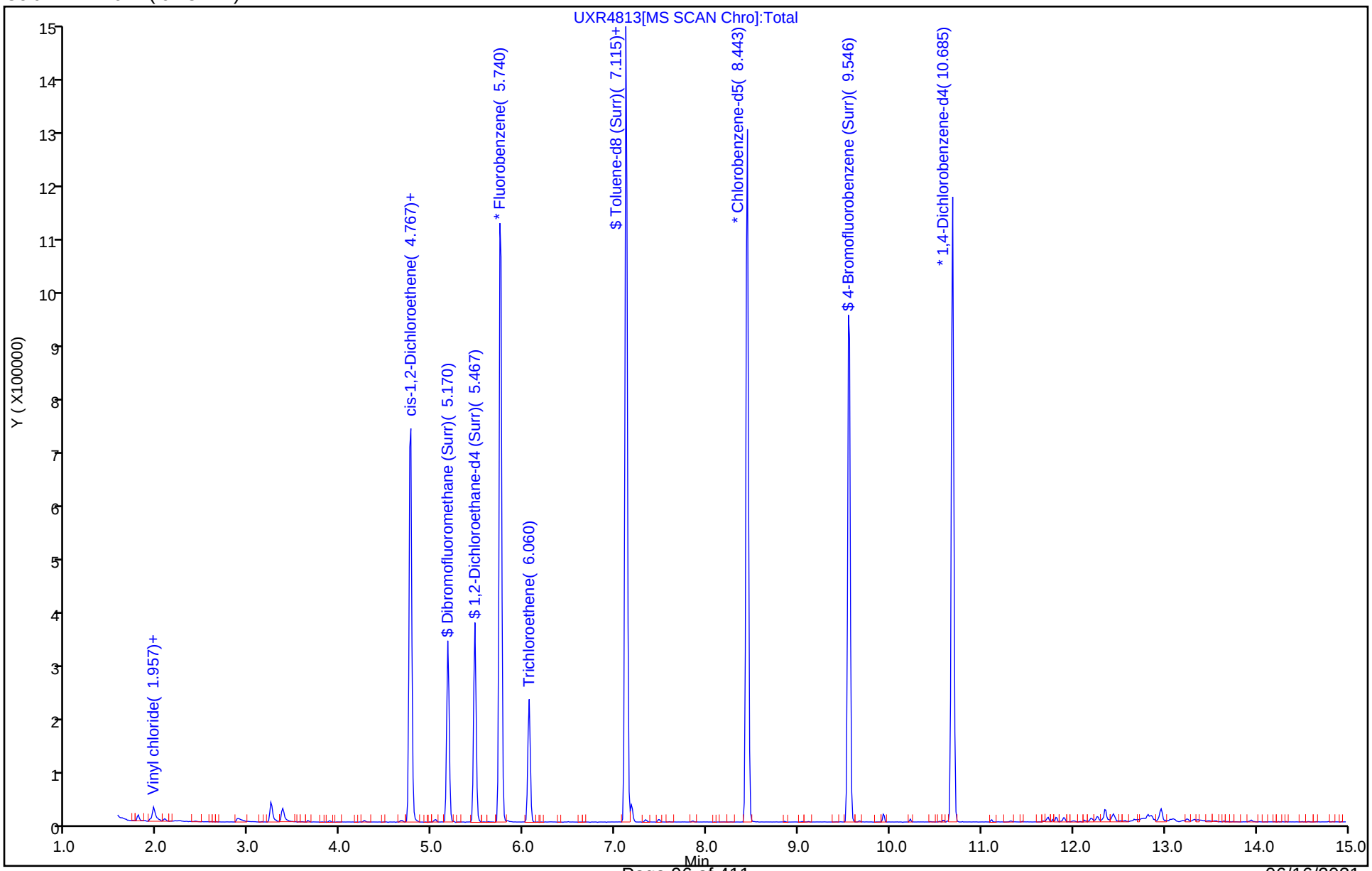
Report Date: 16-Jun-2021 10:43:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D

Injection Date:	15-Jun-2021 20:49:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-2	Lab Sample ID:	240-151104-2	Worklist Smp#:	23
Client ID:	SL-5_061021				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	22
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D
Lims ID: 240-151104-E-2
Client ID: SL-5_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 20:49:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0110279-023
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

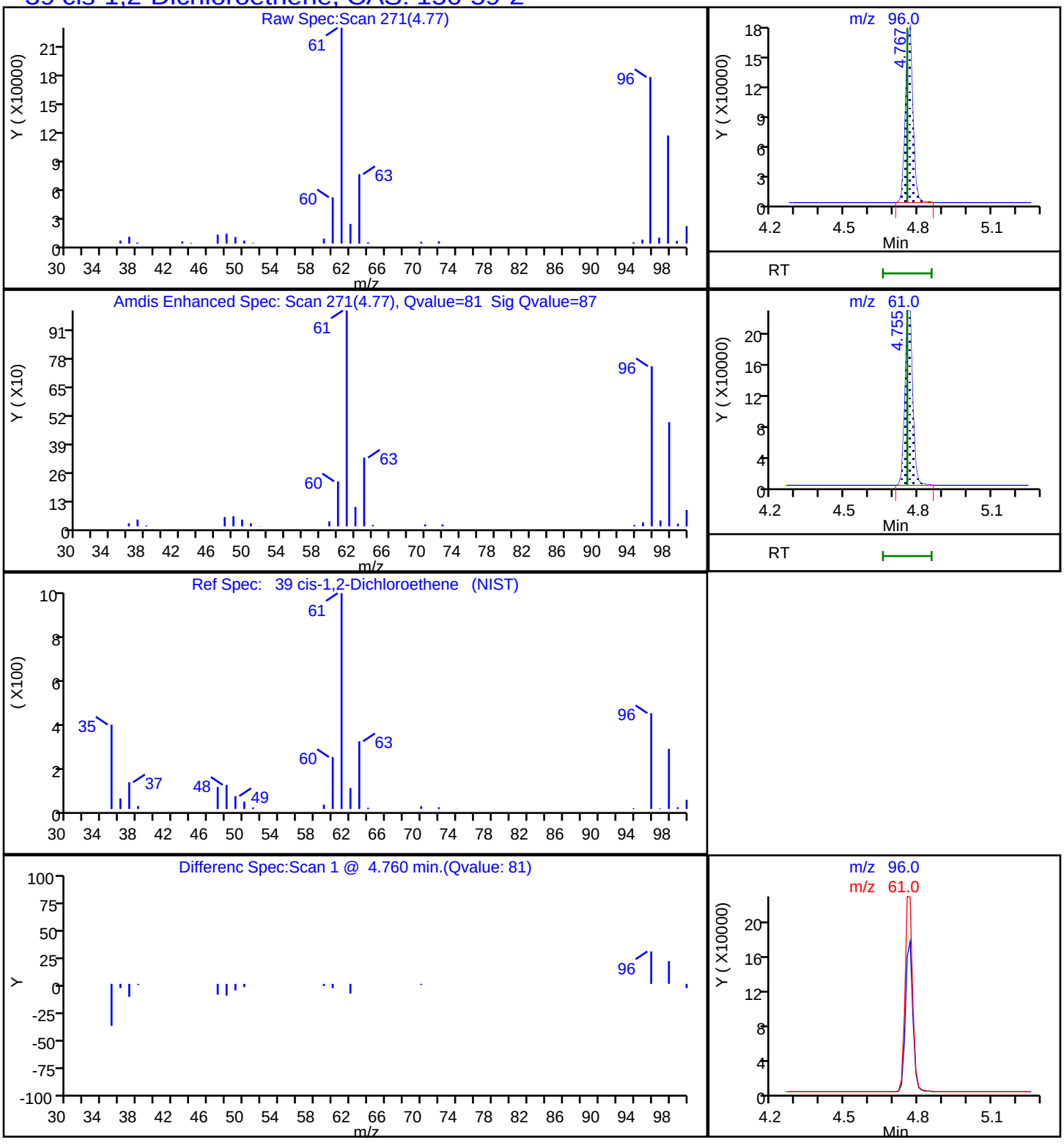
First Level Reviewer: williamsla Date: 16-Jun-2021 10:41:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	88.90
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.1	80.46
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.58
$ 7 4-Bromofluorobenzene (Surr)	20.0	23.8	118.97

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D				
Injection Date:	15-Jun-2021 20:49:30	Instrument ID:	A3UX17		
Lims ID:	240-151104-E-2	Lab Sample ID:	240-151104-2		
Client ID:	SL-5_061021				
Operator ID:	001644	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

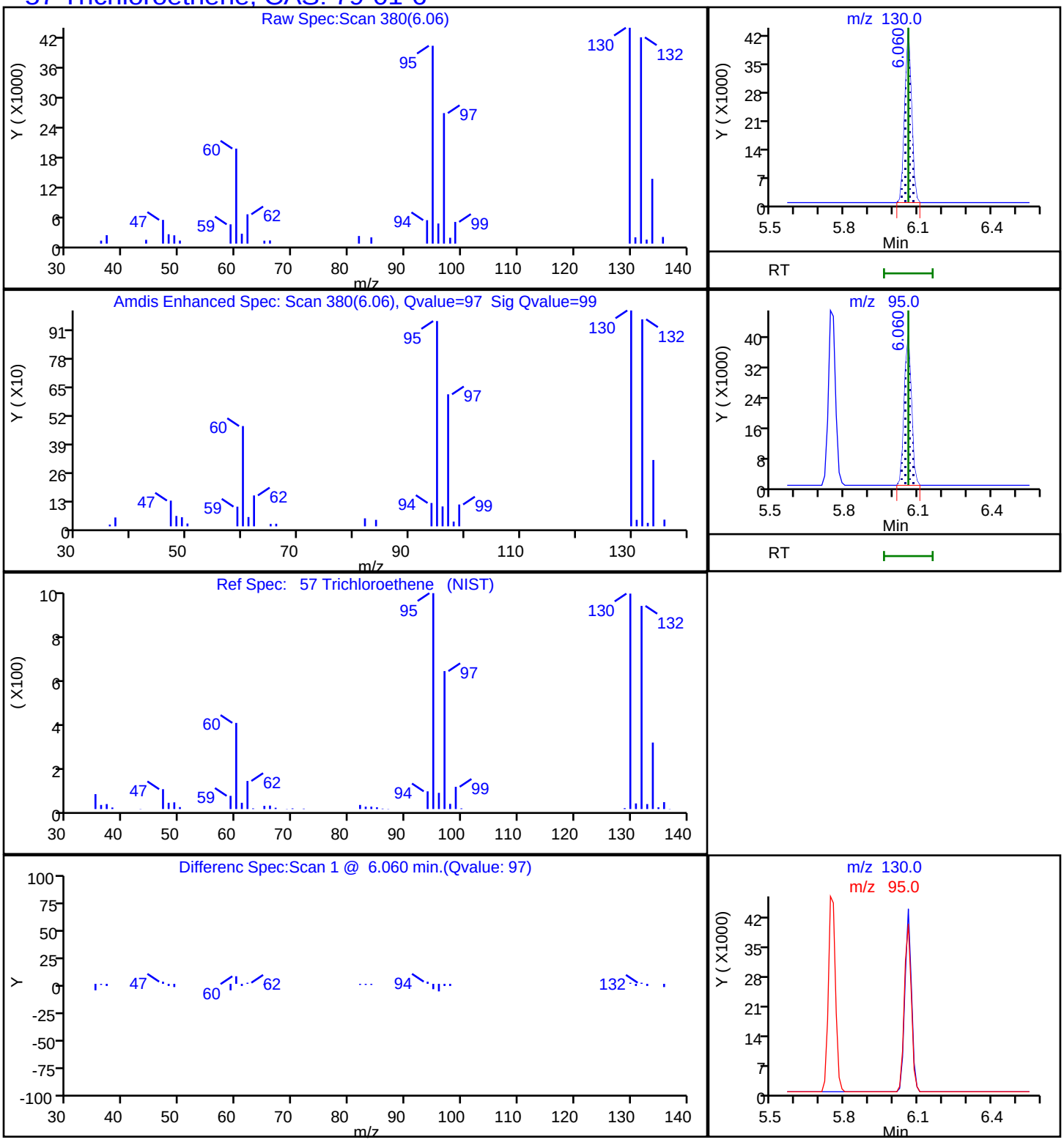
39 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D				
Injection Date:	15-Jun-2021 20:49:30	Instrument ID:	A3UX17		
Lims ID:	240-151104-E-2	Lab Sample ID:	240-151104-2		
Client ID:	SL-5_061021				
Operator ID:	001644	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Trichloroethene, CAS: 79-01-6



Report Date: 16-Jun-2021 10:43:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4813.D

Injection Date: 15-Jun-2021 20:49:30 Instrument ID: A3UX17

Lims ID: 240-151104-E-2 Lab Sample ID: 240-151104-2

Client ID: SL-5_061021

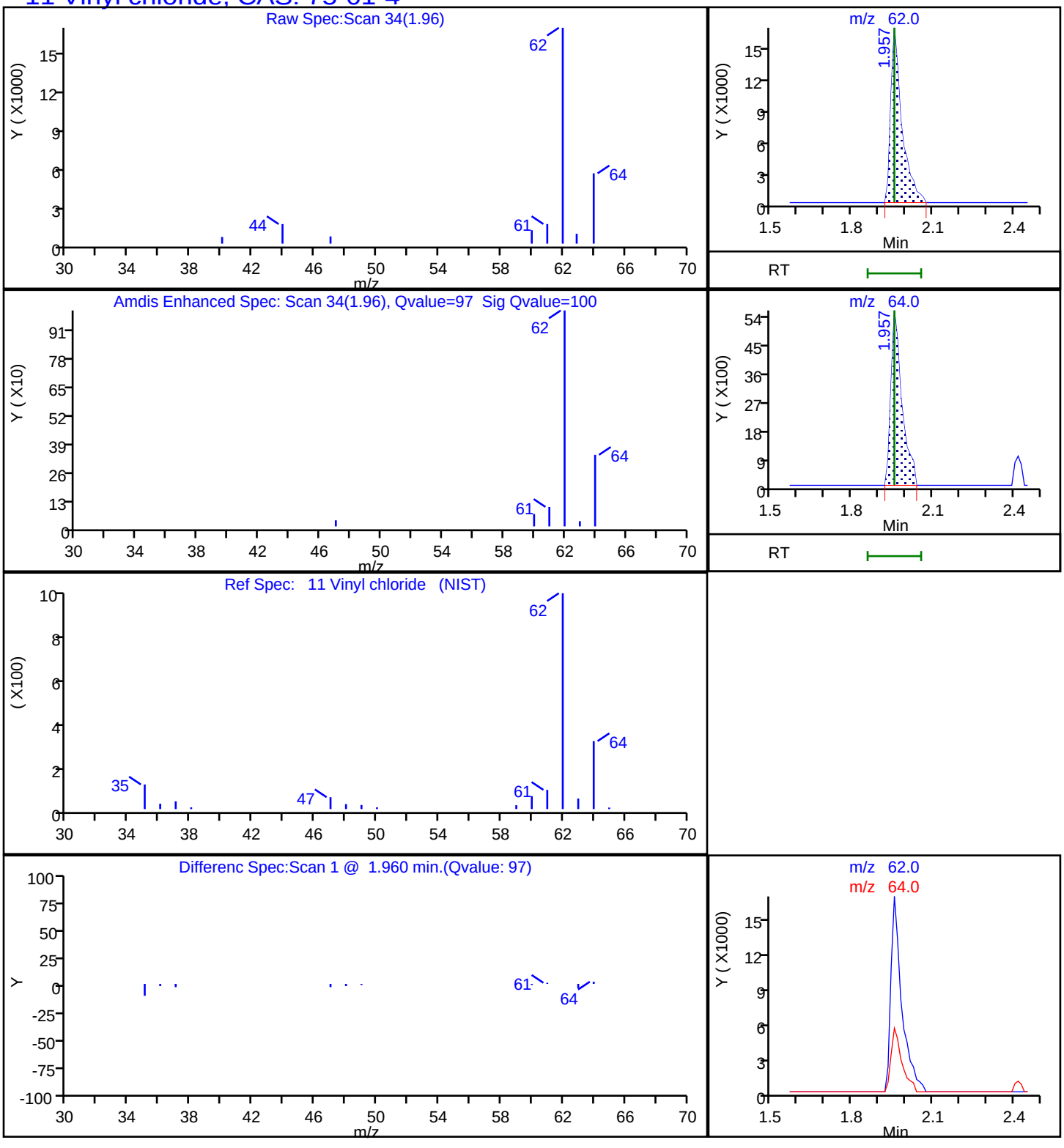
Operator ID: 001644 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 5.0000

Method: 8260_17 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-6_061021 Lab Sample ID: 240-151104-3

Matrix: Water Lab File ID: UXR4814.D

Analysis Method: 8260B Date Collected: 06/10/2021 09:35

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 21:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.3		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.73	J	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		75-130
460-00-4	4-Bromofluorobenzene (Surr)	119		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	90		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4814.D
Lims ID: 240-151104-E-3
Client ID: SL-6_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 21:13:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-024
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.751	5.740	0.011	99	1122759	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	817174	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	359597	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	209294	18.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	277232	16.0	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1084195	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	427730	23.8	
11 Vinyl chloride	62		1.957				ND	7
19 1,1-Dichloroethene	96		3.178				ND	
31 trans-1,2-Dichloroethene	96		3.878				ND	
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	81	21254	1.33	
57 Trichloroethene	130	6.060	6.060	0.000	96	11491	0.7312	
73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

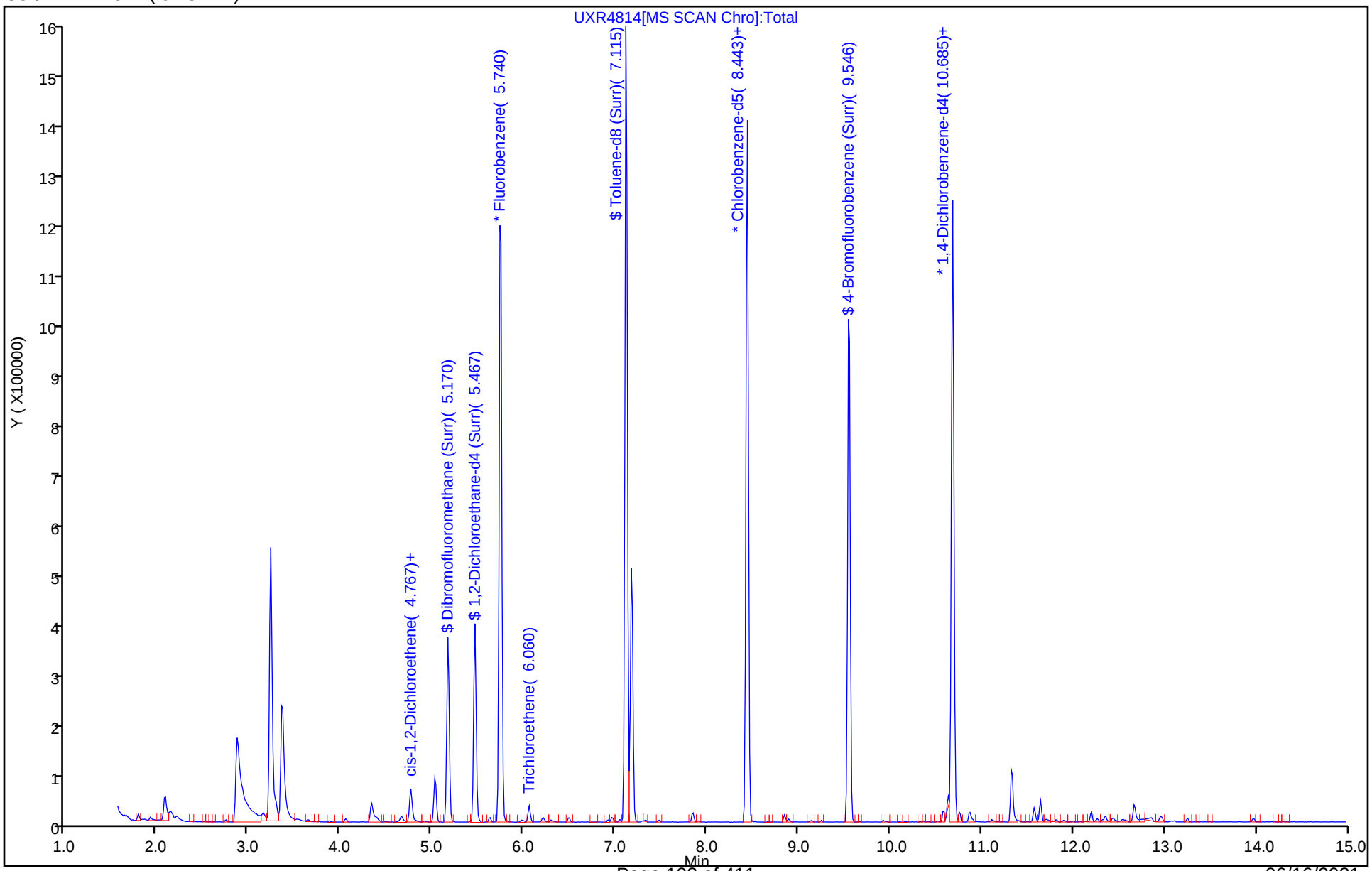
Report Date: 16-Jun-2021 10:43:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4814.D

Injection Date:	15-Jun-2021 21:13:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-3	Lab Sample ID:	240-151104-3	Worklist Smp#:	24
Client ID:	SL-6_061021				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4814.D
Lims ID: 240-151104-E-3
Client ID: SL-6_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 21:13:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-024
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

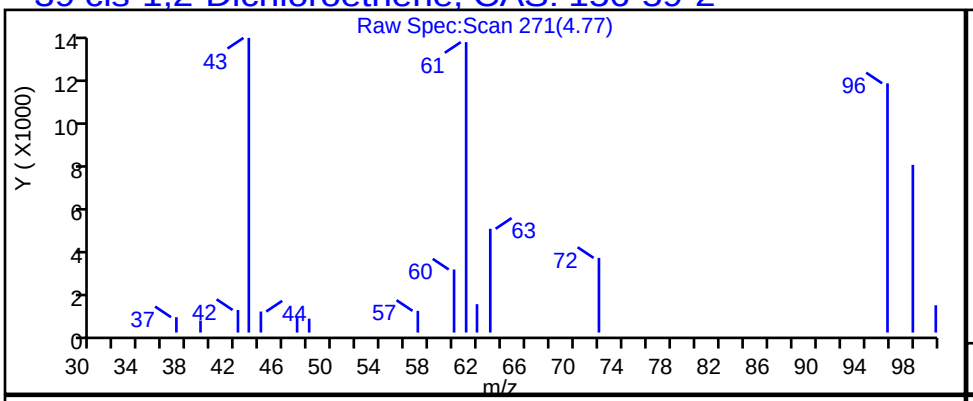
First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:00

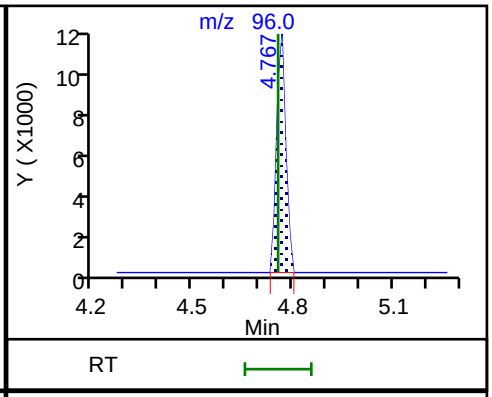
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	90.19
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.0	79.98
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.80
$ 7 4-Bromofluorobenzene (Surr)	20.0	23.8	119.23

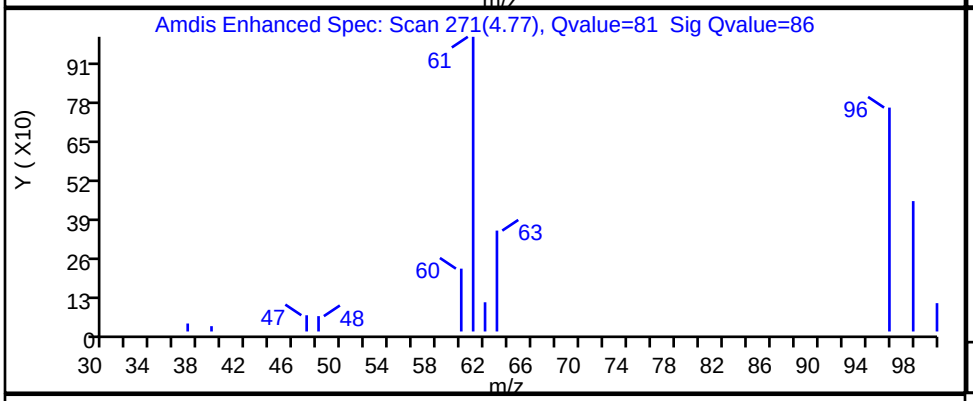
Eurofins TestAmerica, Canton

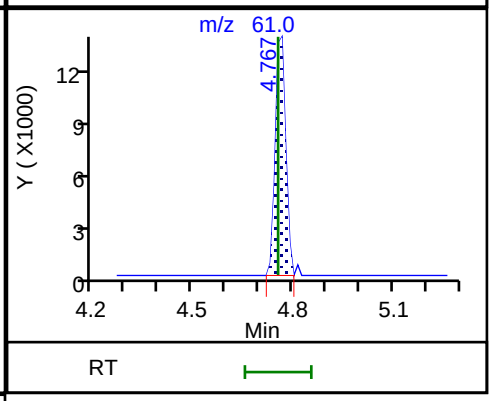
Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4814.D		
Injection Date:	15-Jun-2021 21:13:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-3	Lab Sample ID:	240-151104-3
Client ID:	SL-6_061021		
Operator ID:	001644	ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

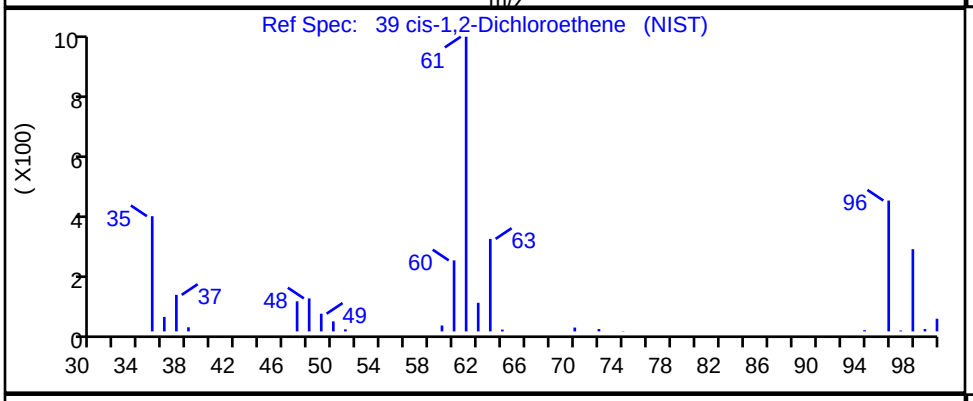
39 cis-1,2-Dichloroethene, CAS: 156-59-2

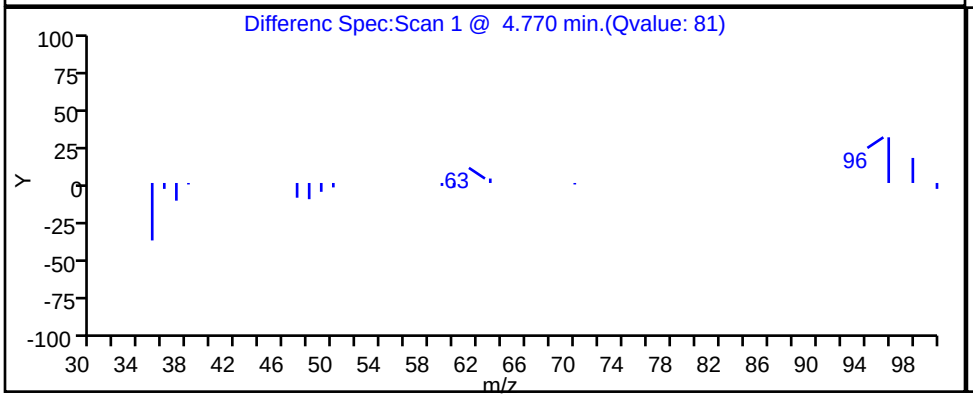


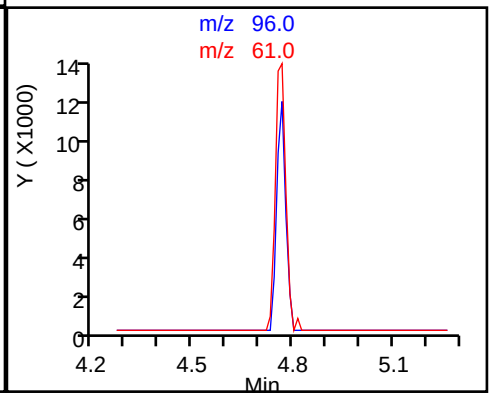








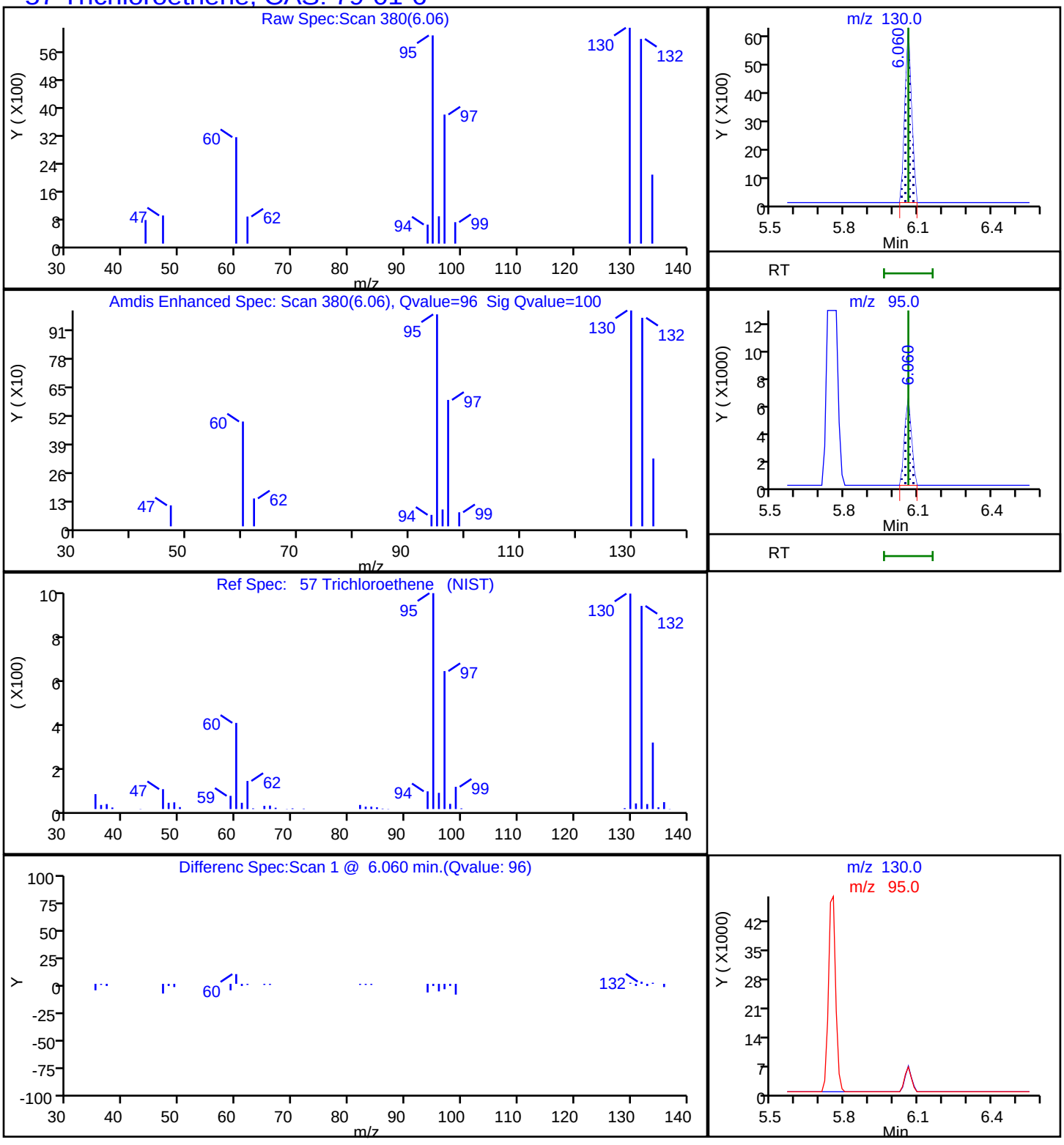




Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4814.D		
Injection Date:	15-Jun-2021 21:13:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-3	Lab Sample ID:	240-151104-3
Client ID:	SL-6_061021		
Operator ID:	001644	ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

57 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-7_061021 Lab Sample ID: 240-151104-4

Matrix: Water Lab File ID: UXR4815.D

Analysis Method: 8260B Date Collected: 06/10/2021 09:05

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 21:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		75-130
460-00-4	4-Bromofluorobenzene (Surr)	126		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	92		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4815.D
Lims ID: 240-151104-E-4
Client ID: SL-7_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 21:36:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-025
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.740	5.740	0.000	99	1132057	20.0	
*	2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	845288	20.0	
*	3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	383389	20.0	
$	4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	214559	18.3	
$	5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	287198	16.4	
$	6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1122955	21.6	
$	7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	466582	25.1	
	11 Vinyl chloride	62		1.957				ND	
	19 1,1-Dichloroethene	96		3.178				ND	
	31 trans-1,2-Dichloroethene	96		3.878				ND	
	39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	76	4660	0.2891	
	57 Trichloroethene	130	6.060	6.060	0.000	88	1679	0.1060	
	73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

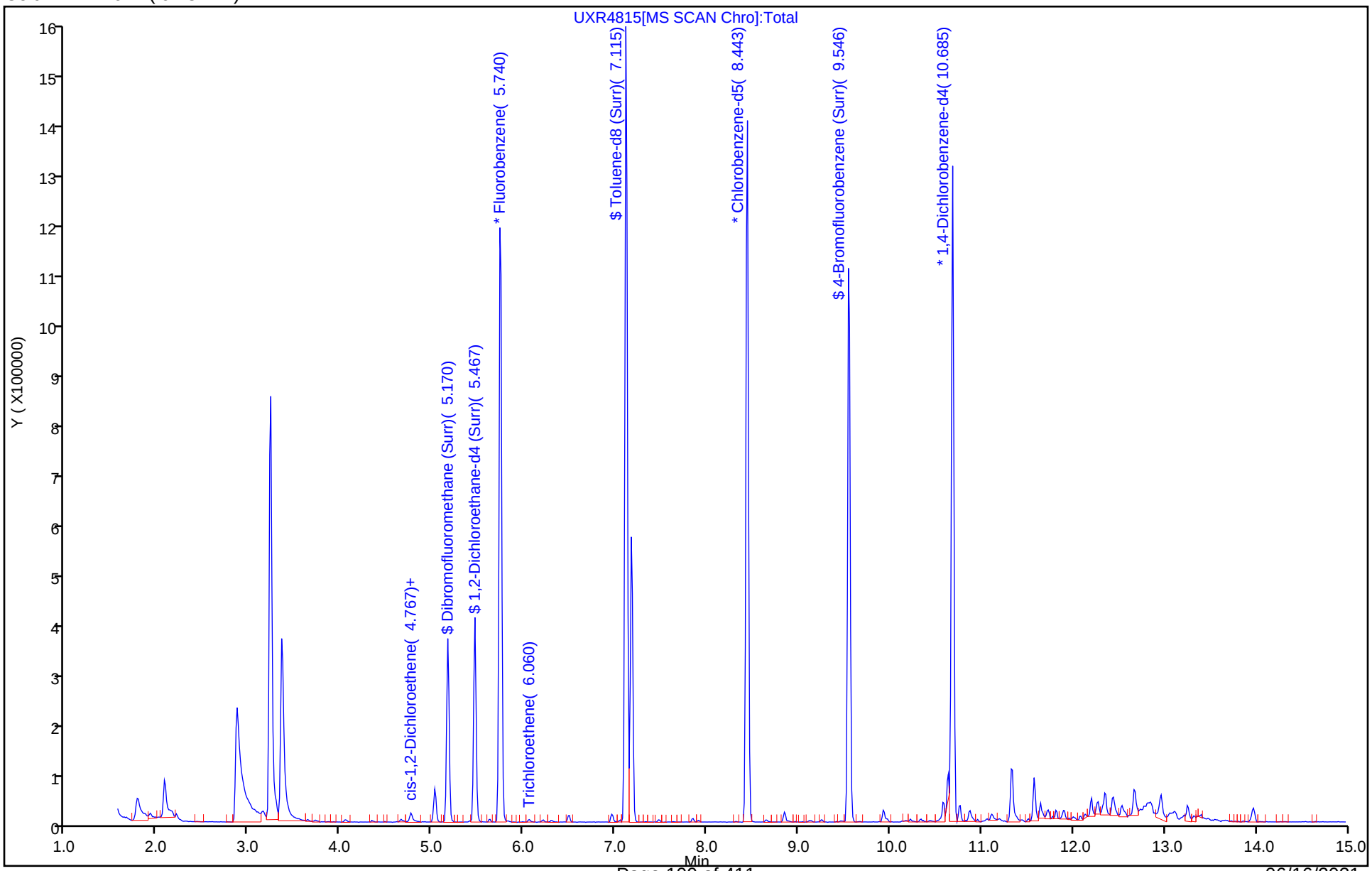
Report Date: 16-Jun-2021 10:44:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4815.D

Injection Date:	15-Jun-2021 21:36:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-4	Lab Sample ID:	240-151104-4	Worklist Smp#:	25
Client ID:	SL-7_061021				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4815.D
Lims ID: 240-151104-E-4
Client ID: SL-7_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 21:36:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-025
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.70
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.4	82.18
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.94
$ 7 4-Bromofluorobenzene (Surr)	20.0	25.1	125.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-8_061021 Lab Sample ID: 240-151104-5

Matrix: Water Lab File ID: UXR4816.D

Analysis Method: 8260B Date Collected: 06/10/2021 10:25

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 22:00

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.0	U	8.0	3.9
156-59-2	cis-1,2-Dichloroethene	180		8.0	3.7
127-18-4	Tetrachloroethene	8.0	U	8.0	3.5
156-60-5	trans-1,2-Dichloroethene	8.0	U	8.0	4.1
79-01-6	Trichloroethene	47		8.0	3.5
75-01-4	Vinyl chloride	26		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		75-130
460-00-4	4-Bromofluorobenzene (Surr)	120		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	90		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D
Lims ID: 240-151104-E-5
Client ID: SL-8_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 22:00:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0110279-026
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:25

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.739	5.740	-0.001	99	1116239	20.0	
*	2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	819990	20.0	
*	3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	96	362856	20.0	
$	4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	207416	18.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	281886	16.4	
$	6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1075495	21.3	
$	7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	432196	24.0	
	11 Vinyl chloride	62	1.957	1.957	0.000	97	57347	3.20	
	19 1,1-Dichloroethene	96		3.178				ND	
	31 trans-1,2-Dichloroethene	96		3.878				ND	
	39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	81	367386	23.1	
	57 Trichloroethene	130	6.060	6.060	0.000	97	92665	5.93	
	73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

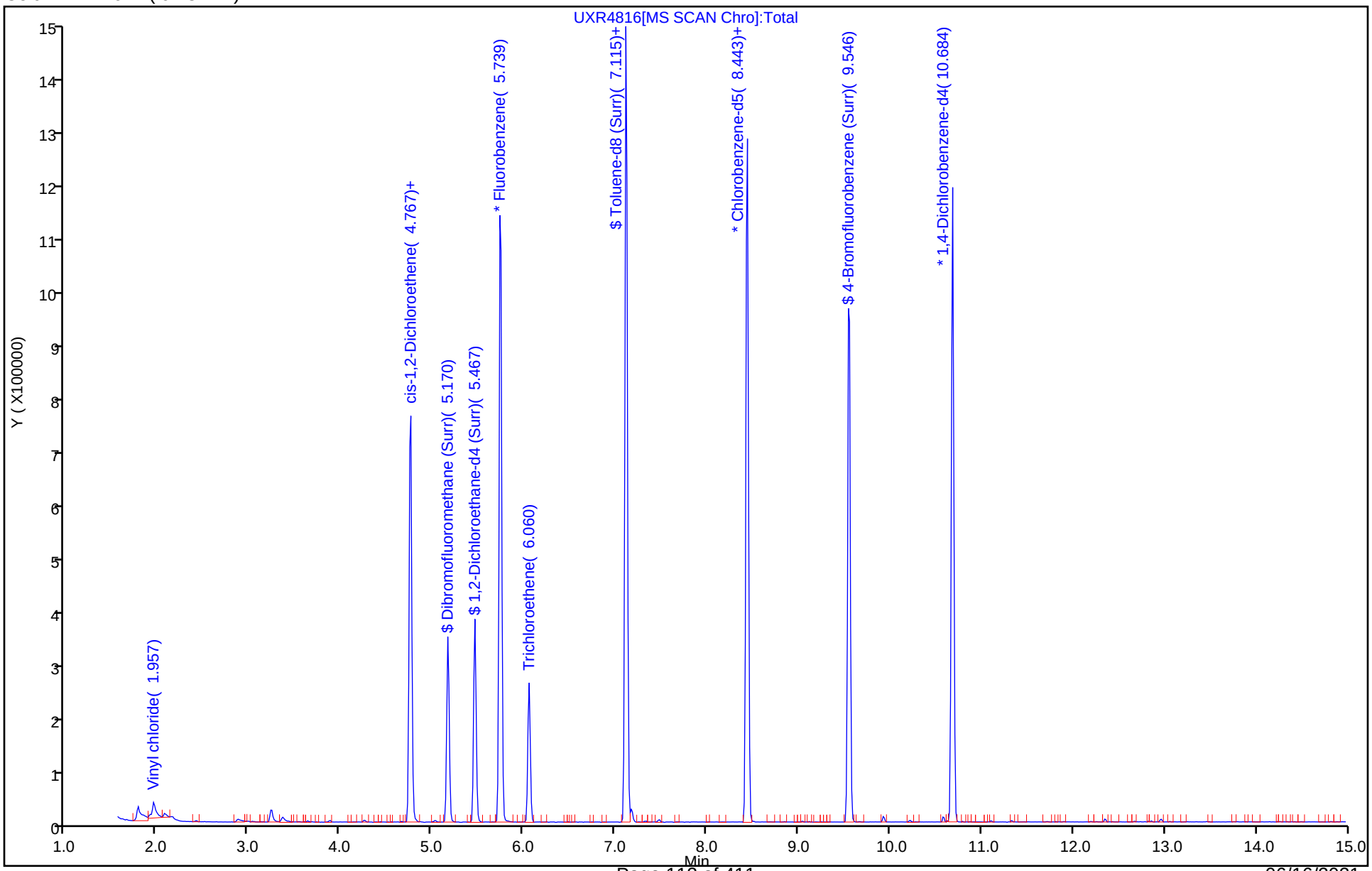
Report Date: 16-Jun-2021 10:44:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D

Injection Date:	15-Jun-2021 22:00:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-5	Lab Sample ID:	240-151104-5	Worklist Smp#:	26
Client ID:	SL-8_061021				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	25
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D
Lims ID: 240-151104-E-5
Client ID: SL-8_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 22:00:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0110279-026
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:25

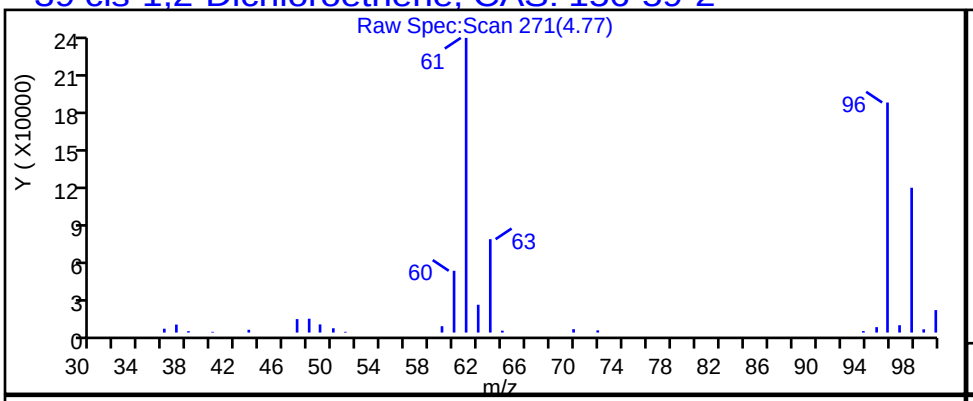
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	89.90
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.4	81.80
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.57
$ 7 4-Bromofluorobenzene (Surr)	20.0	24.0	120.06

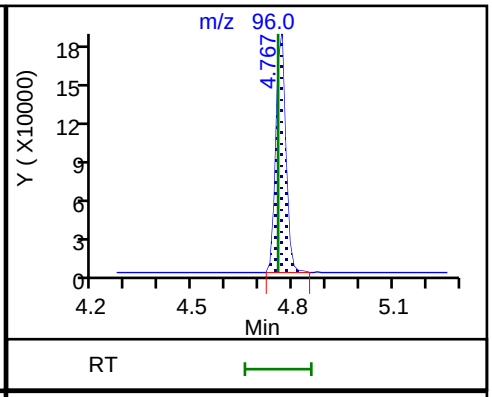
Eurofins TestAmerica, Canton

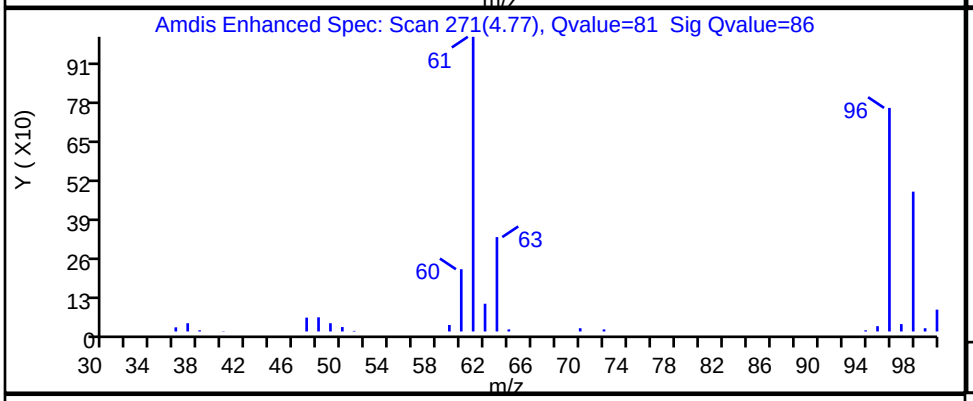
Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D

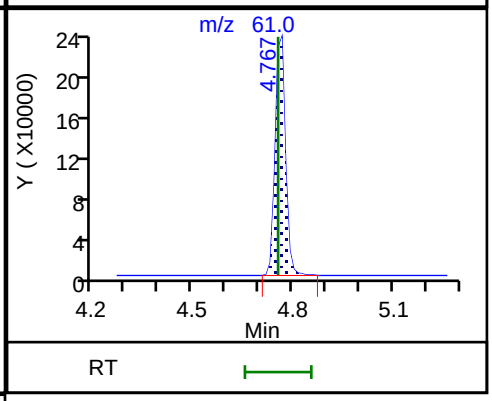
Injection Date:	15-Jun-2021 22:00:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-5	Lab Sample ID:	240-151104-5
Client ID:	SL-8_061021		
Operator ID:	001644	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

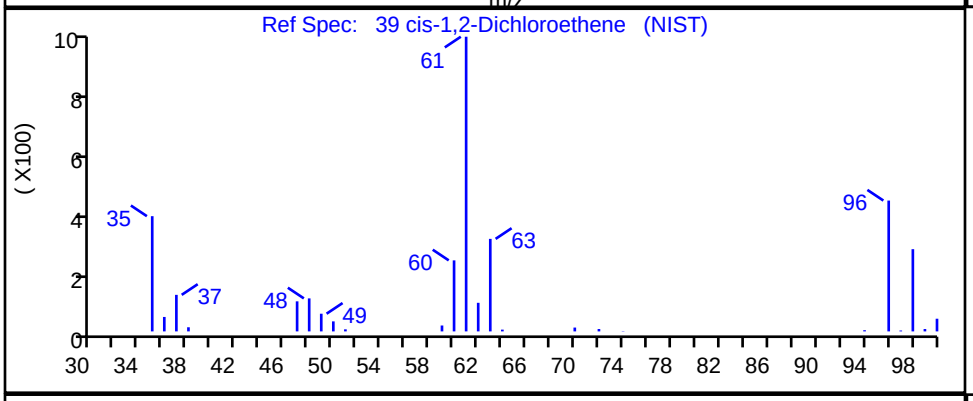
39 cis-1,2-Dichloroethene, CAS: 156-59-2

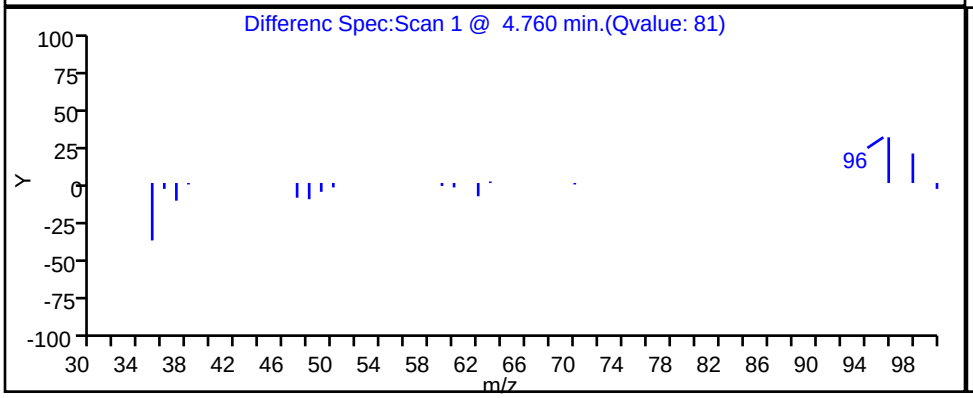


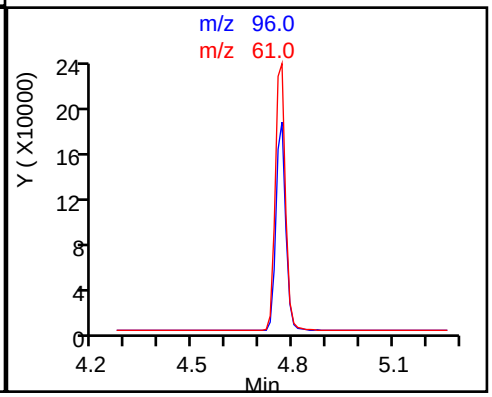










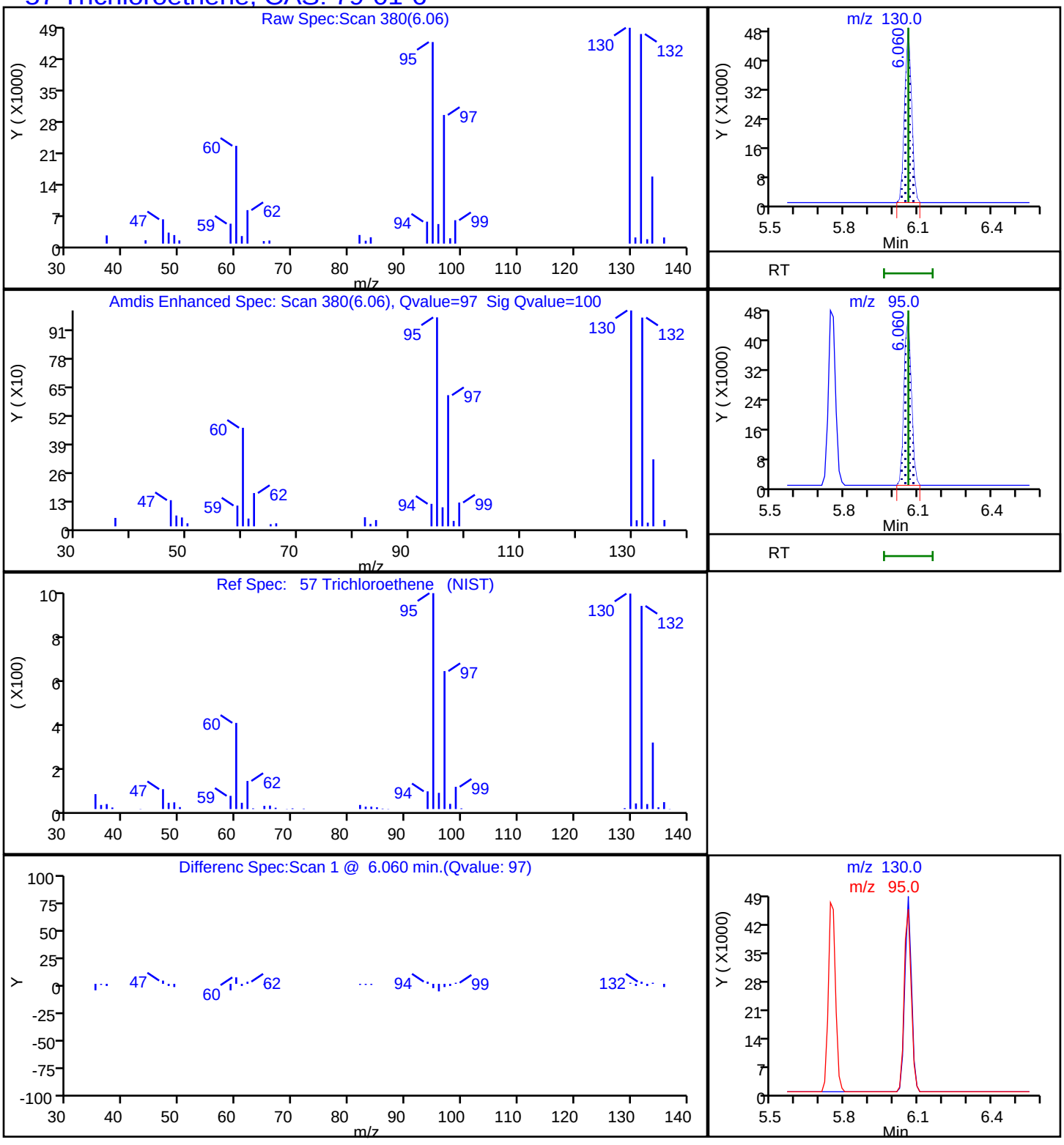


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D

Injection Date:	15-Jun-2021 22:00:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-5	Lab Sample ID:	240-151104-5
Client ID:	SL-8_061021		
Operator ID:	001644	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

57 Trichloroethene, CAS: 79-01-6

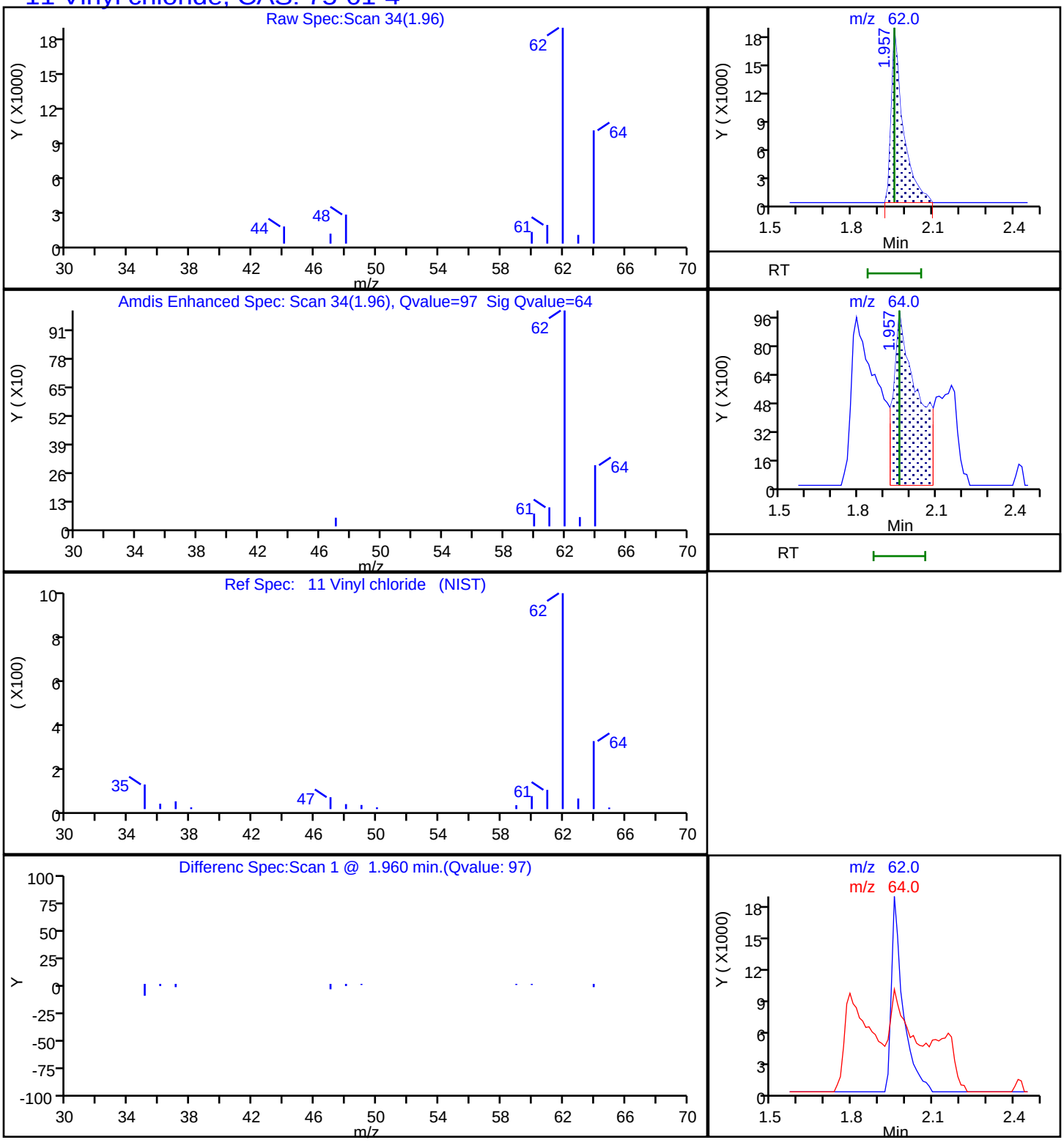


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4816.D

Injection Date:	15-Jun-2021 22:00:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-5	Lab Sample ID:	240-151104-5
Client ID:	SL-8_061021		
Operator ID:	001644	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-9_061021 Lab Sample ID: 240-151104-6

Matrix: Water Lab File ID: UXR4817.D

Analysis Method: 8260B Date Collected: 06/10/2021 10:45

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 22:24

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	110		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	26		5.0	2.2
75-01-4	Vinyl chloride	12		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		75-130
460-00-4	4-Bromofluorobenzene (Surr)	119		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	90		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D				
Lims ID:	240-151104-E-6				
Client ID:	SL-9_061021				
Sample Type:	Client				
Inject. Date:	15-Jun-2021 22:24:30	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Sample Info:	240-0110279-027				
Operator ID:	001644	Instrument ID:	A3UX17		
Method:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	16-Jun-2021 10:43:35	Calib Date:	04-Jun-2021 00:00:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1621				
First Level Reviewer: williamsla		Date:	16-Jun-2021 10:42:44		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.751	5.740	0.011	99	1154418	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	852854	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	96	374393	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	215074	18.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	288080	16.2	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1108063	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	444213	23.7	
11 Vinyl chloride	62	1.957	1.957	0.000	98	45606	2.46	
19 1,1-Dichloroethene	96		3.178				ND	
31 trans-1,2-Dichloroethene	96		3.878				ND	7
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	81	357714	21.8	
57 Trichloroethene	130	6.060	6.060	0.000	98	84299	5.22	
73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

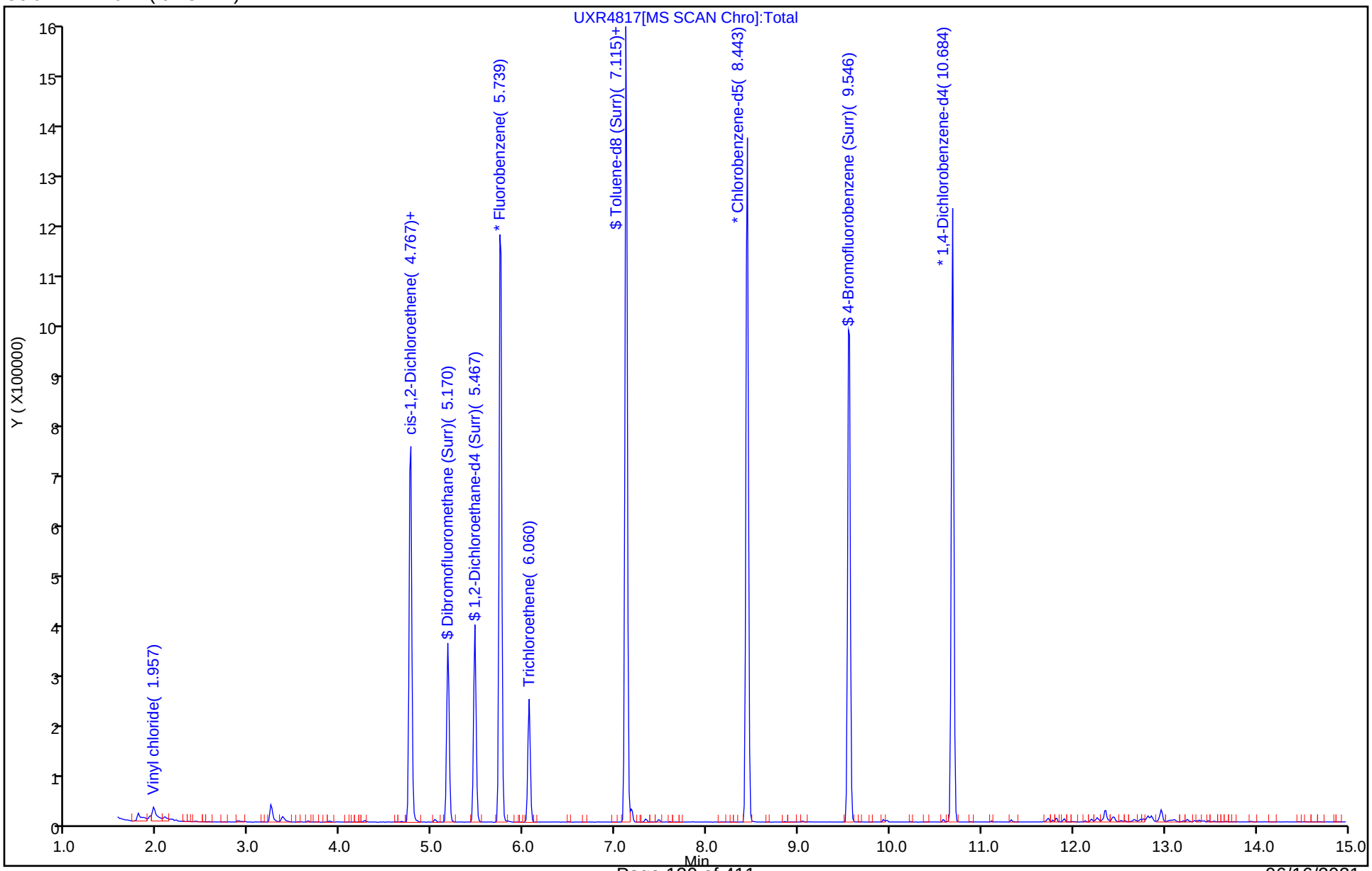
Report Date: 16-Jun-2021 10:44:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D

Injection Date:	15-Jun-2021 22:24:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-6	Lab Sample ID:	240-151104-6	Worklist Smp#:	27
Client ID:	SL-9_061021				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	26
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D
Lims ID: 240-151104-E-6
Client ID: SL-9_061021
Sample Type: Client
Inject. Date: 15-Jun-2021 22:24:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0110279-027
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

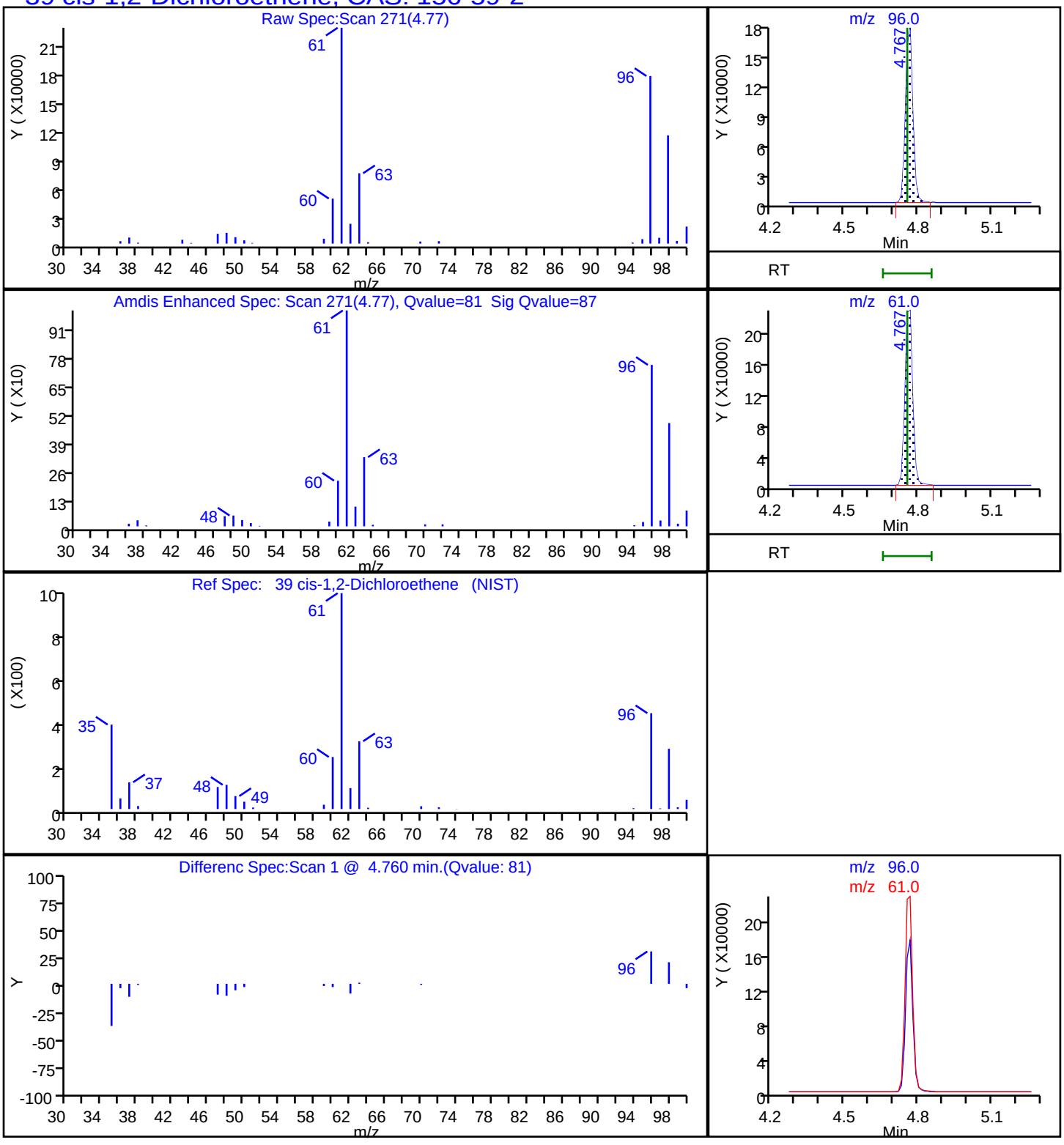
First Level Reviewer: williamsla Date: 16-Jun-2021 10:42:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	90.14
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.2	80.83
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.56
$ 7 4-Bromofluorobenzene (Surr)	20.0	23.7	118.64

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D				
Injection Date:	15-Jun-2021 22:24:30	Instrument ID:	A3UX17		
Lims ID:	240-151104-E-6	Lab Sample ID:	240-151104-6		
Client ID:	SL-9_061021				
Operator ID:	001644	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2

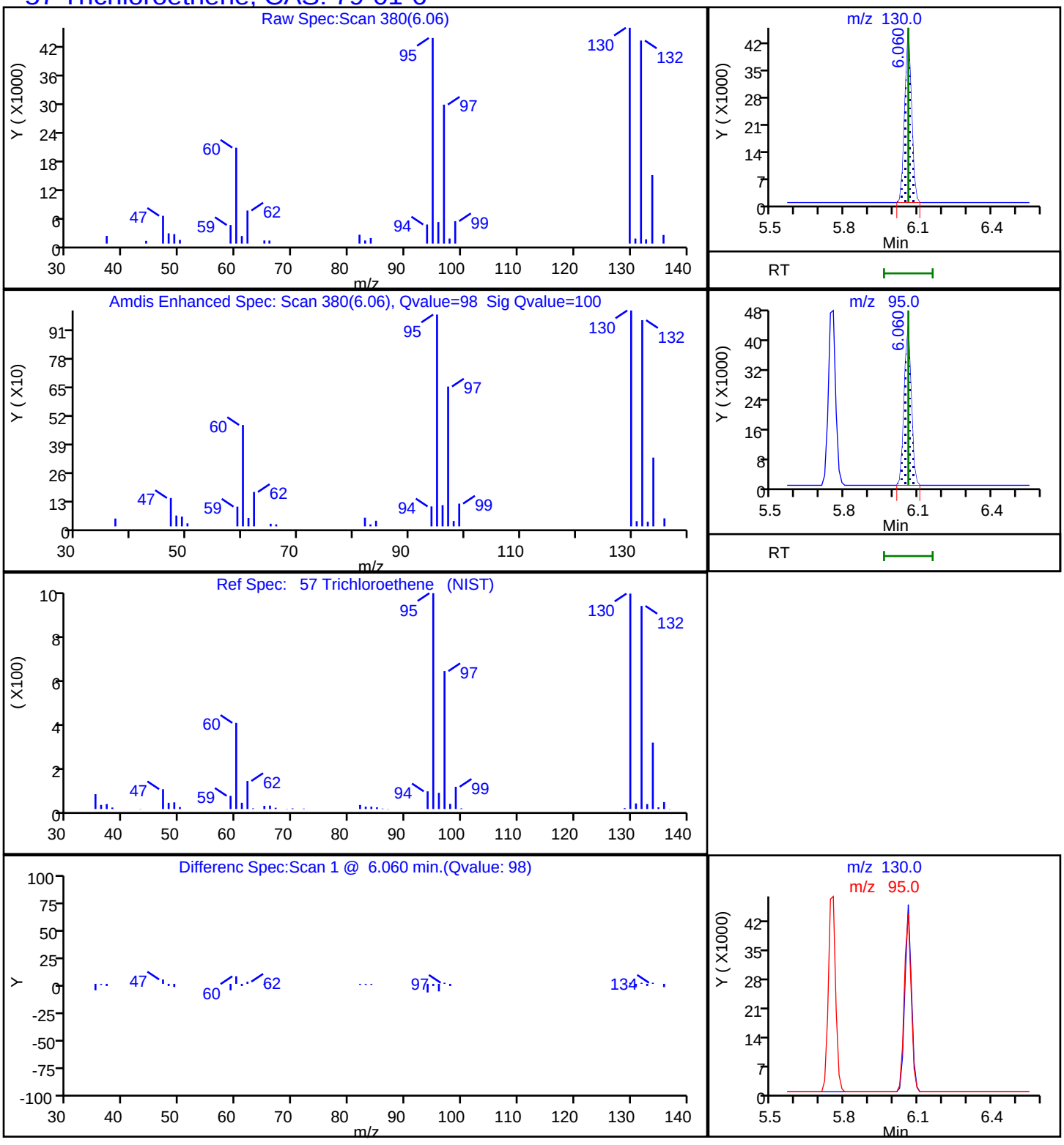


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D

Injection Date:	15-Jun-2021 22:24:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-6	Lab Sample ID:	240-151104-6
Client ID:	SL-9_061021		
Operator ID:	001644	ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

57 Trichloroethene, CAS: 79-01-6

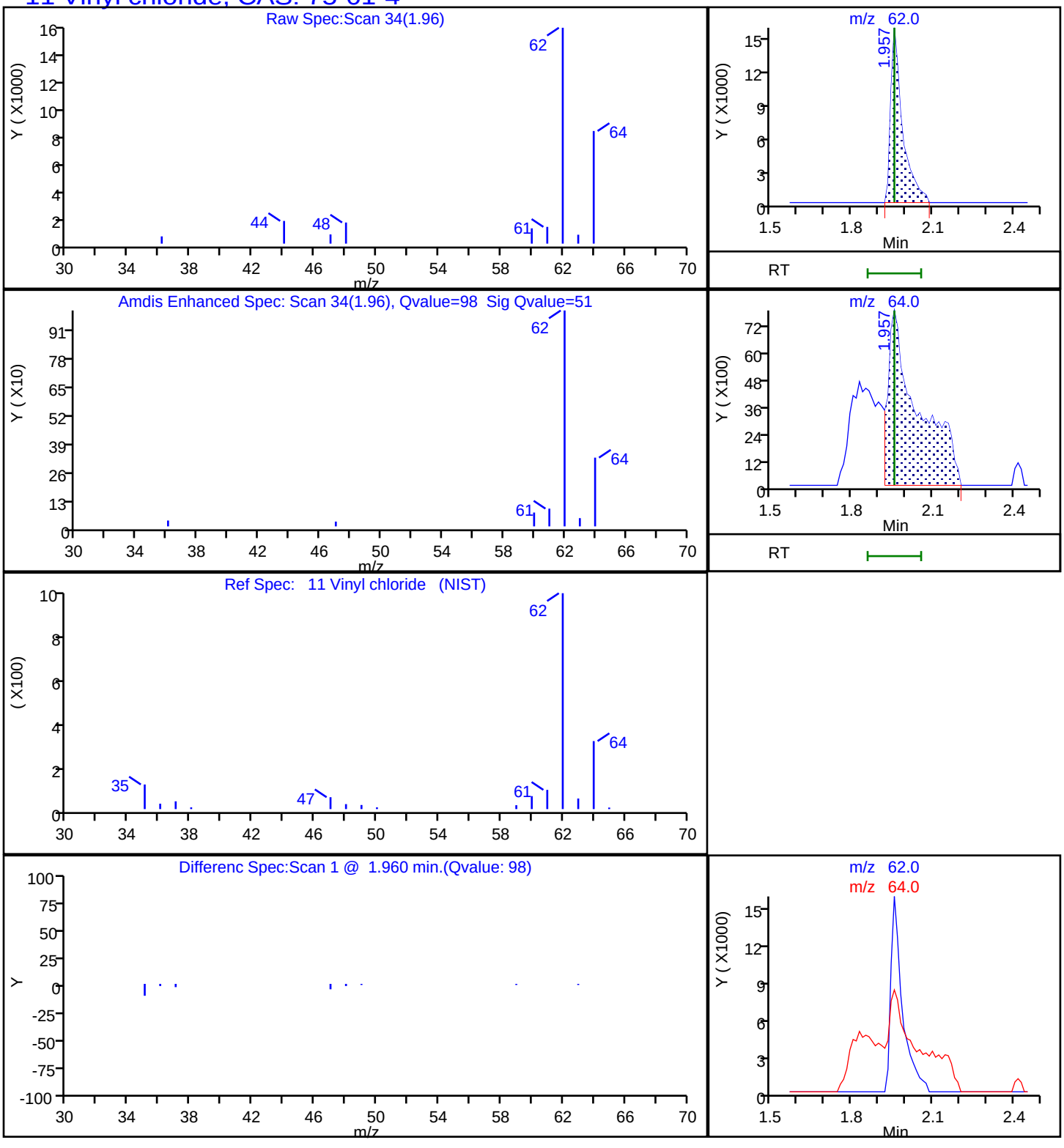


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4817.D

Injection Date:	15-Jun-2021 22:24:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-6	Lab Sample ID:	240-151104-6
Client ID:	SL-9_061021		
Operator ID:	001644	ALS Bottle#:	26 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-151104-7

Matrix: Water Lab File ID: UXR4818.D

Analysis Method: 8260B Date Collected: 06/10/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 22:47

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	140		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	33		5.0	2.2
75-01-4	Vinyl chloride	17		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		75-130
460-00-4	4-Bromofluorobenzene (Surr)	122		47-134
2037-26-5	Toluene-d8 (Surr)	110		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D
Lims ID: 240-151104-E-7
Client ID: DUP-01
Sample Type: Client
Inject. Date: 15-Jun-2021 22:47:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0110279-028
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

First Level Reviewer: williamsla Date: 16-Jun-2021 10:43:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.739	5.740	-0.001	99	1117882	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	805974	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	97	357785	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	206089	17.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	277530	16.1	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	94	1086923	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	84	431873	24.4	
11 Vinyl chloride	62	1.957	1.957	0.000	97	60552	3.37	
19 1,1-Dichloroethene	96		3.178				ND	
31 trans-1,2-Dichloroethene	96		3.878				ND	
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	81	435463	27.4	
57 Trichloroethene	130	6.060	6.060	0.000	98	102092	6.52	
73 Tetrachloroethene	164		7.673				ND	

QC Flag Legend

Processing Flags

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

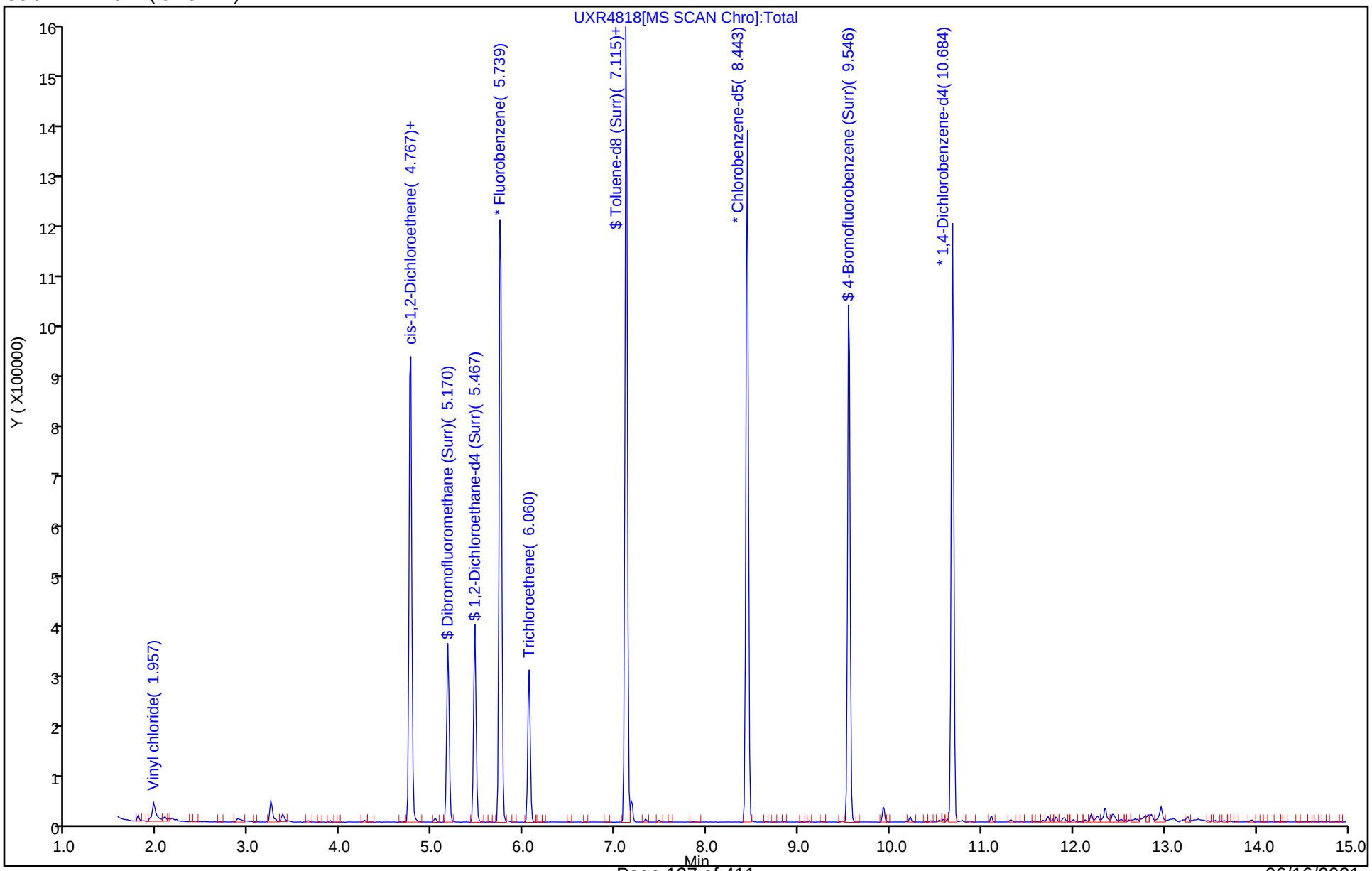
Report Date: 16-Jun-2021 10:44:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D

Injection Date:	15-Jun-2021 22:47:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151104-E-7	Lab Sample ID:	240-151104-7	Worklist Smp#:	28
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	27
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D
Lims ID: 240-151104-E-7
Client ID: DUP-01
Sample Type: Client
Inject. Date: 15-Jun-2021 22:47:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0110279-028
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

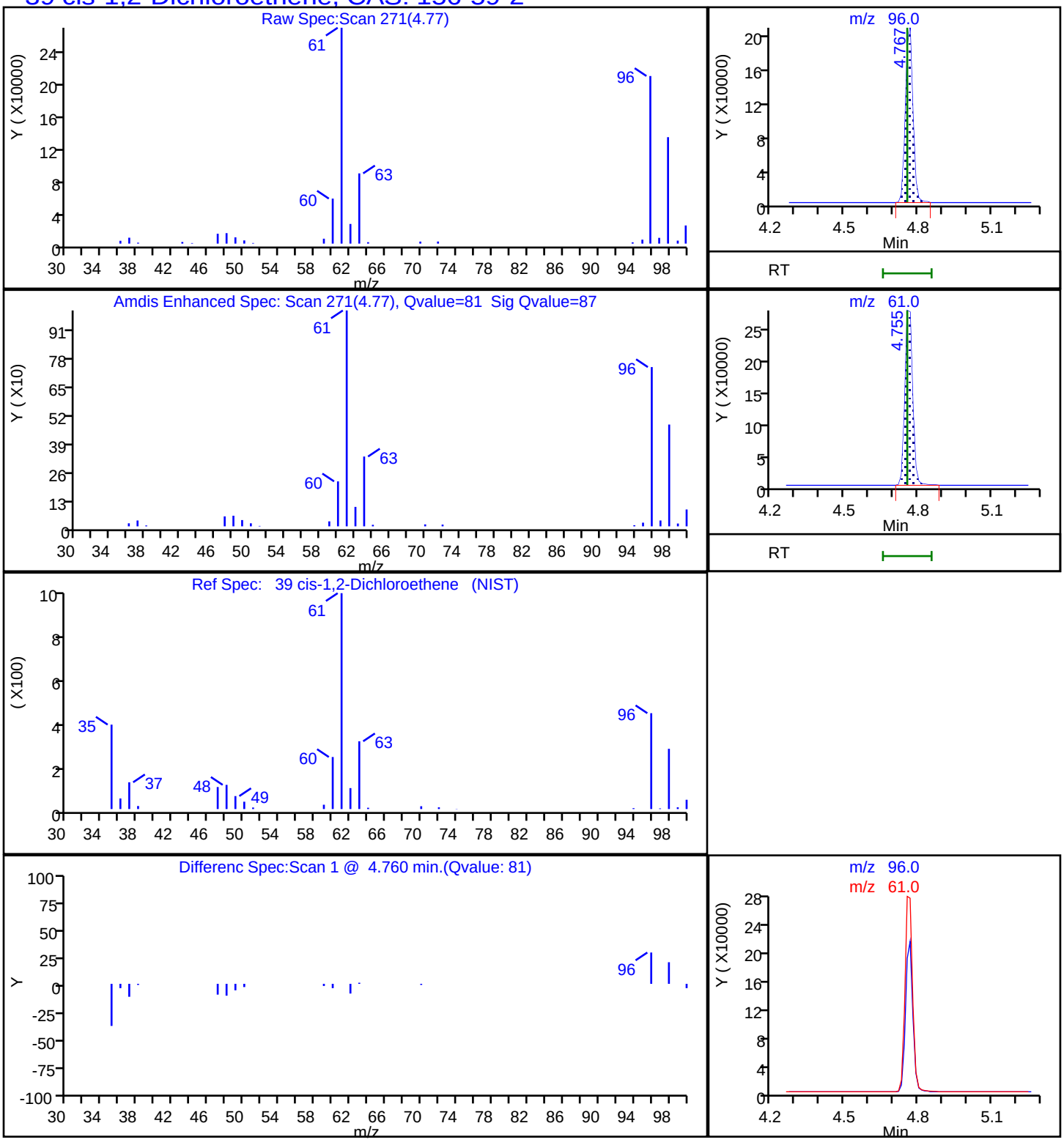
First Level Reviewer: williamsla Date: 16-Jun-2021 10:43:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	89.20
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.1	80.42
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.57
$ 7 4-Bromofluorobenzene (Surr)	20.0	24.4	122.06

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D				
Injection Date:	15-Jun-2021 22:47:30	Instrument ID:	A3UX17		
Lims ID:	240-151104-E-7	Lab Sample ID:	240-151104-7		
Client ID:	DUP-01				
Operator ID:	001644	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2

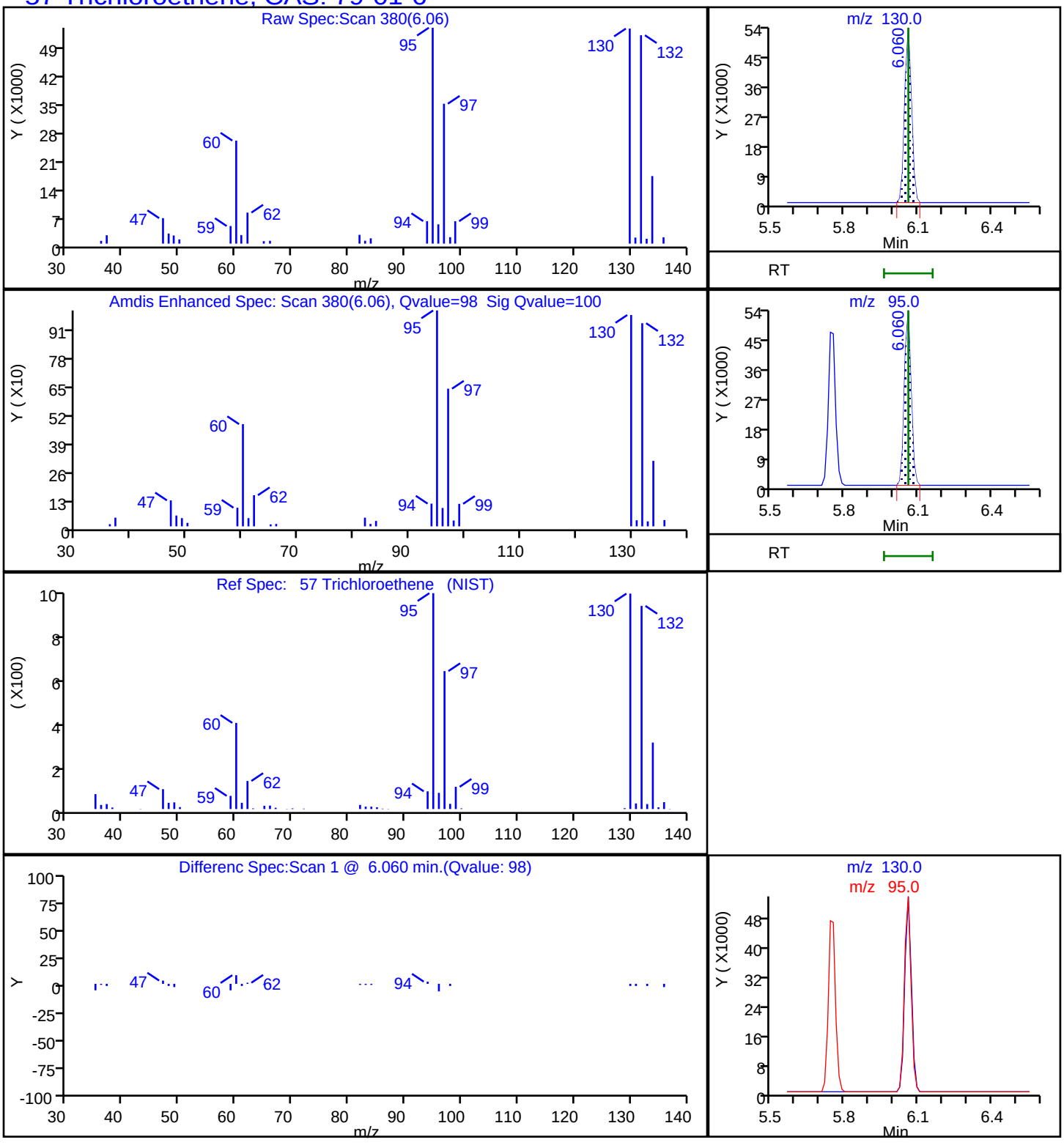


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D

Injection Date:	15-Jun-2021 22:47:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-7	Lab Sample ID:	240-151104-7
Client ID:	DUP-01		
Operator ID:	001644	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

57 Trichloroethene, CAS: 79-01-6

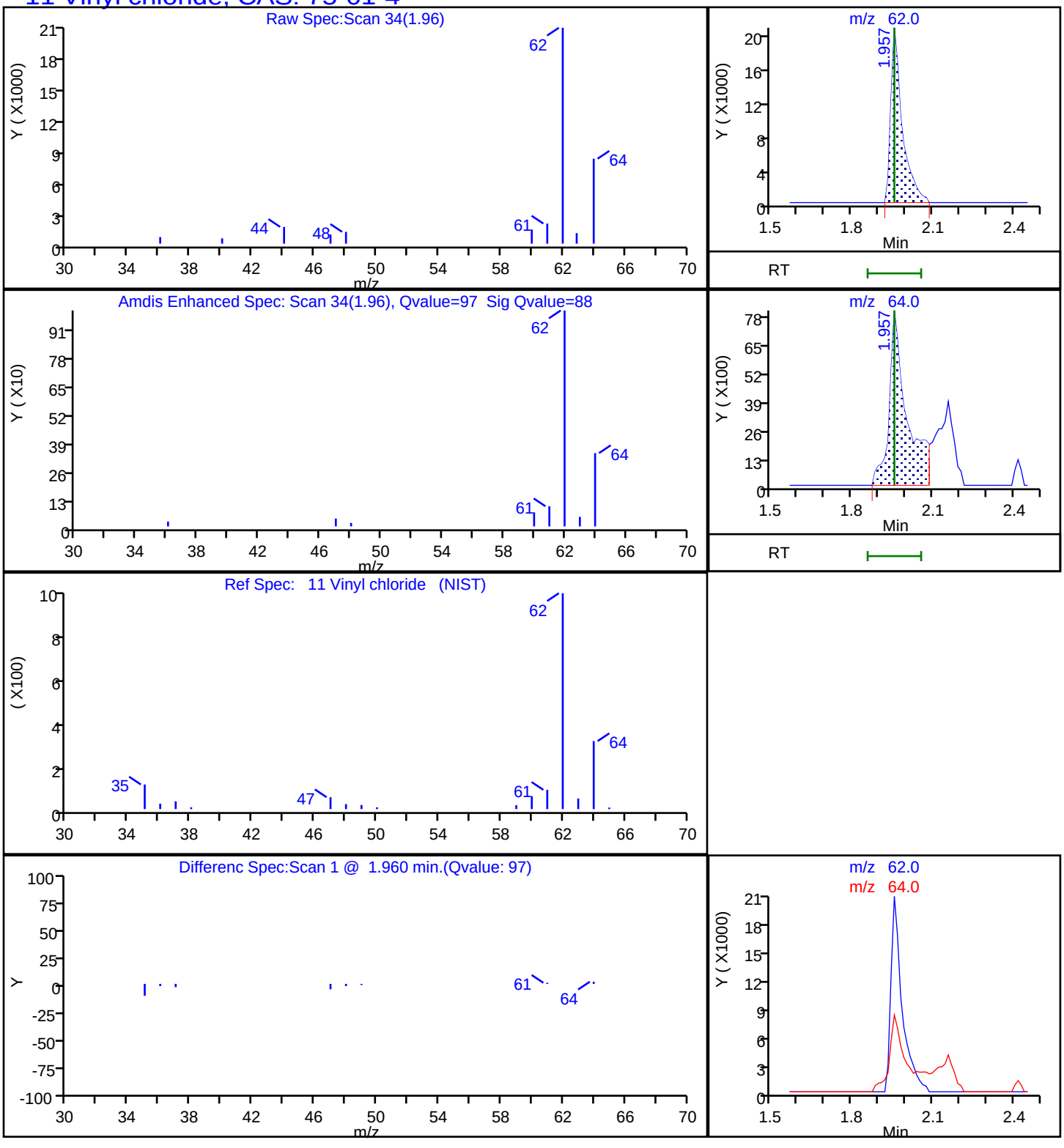


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4818.D

Injection Date:	15-Jun-2021 22:47:30	Instrument ID:	A3UX17
Lims ID:	240-151104-E-7	Lab Sample ID:	240-151104-7
Client ID:	DUP-01		
Operator ID:	001644	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-488921/8	UXR4581.D
Level 2	STD8260 240-488921/7	UXR4580.D
Level 3	STD8260 240-488921/6	UXR4579.D
Level 4	STD8260 240-488921/5	UXR4578.D
Level 5	STD8260 240-488921/4	UXR4577.D
Level 6	STD8260 240-488921/3	UXR4576.D
Level 7	STD8260 240-488921/2	UXR4575.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2913 0.3480	0.3460 0.3489	0.3559	0.3676	0.3629	Ave		0.3458				7.3		15.0			
Chloromethane	0.3172 0.3103	0.3118 0.3007	0.3301	0.3566	0.3223	Ave		0.3213			0.1000	5.6		15.0			
Vinyl chloride	0.3099 0.3127	0.3180 0.3090	0.3300	0.3396	0.3317	Ave		0.3216				3.8		15.0			
Butadiene	0.2989 0.3352	0.3436 0.3404	0.3438	0.3480	0.3559	Ave		0.3380				5.4		15.0			
Bromomethane	0.1695 0.1501	0.1570 0.1444	0.1757	0.1756	0.1660	Ave		0.1626				7.6		15.0			
Chloroethane	0.1878 0.1977	0.1886 0.1950	0.2100	0.2163	0.2039	Ave		0.1999				5.4		15.0			
Dichlorofluoromethane	0.4225 0.4281	0.4355 0.4238	0.4570	0.4771	0.4448	Ave		0.4412				4.5		15.0			
Trichlorofluoromethane	0.4148 0.4593	0.4531 0.4761	0.4760	0.4721	0.4851	Ave		0.4624				5.1		15.0			
Ethyl ether	0.2192 0.2195	0.2189 0.2233	0.2236	0.2328	0.2411	Ave		0.2255				3.7		15.0			
Acrolein	0.0073 0.0099	0.0081 0.0081	0.0091	0.0094	0.0102	Ave		0.0089				11.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1595 0.1944	0.1800 0.2069	0.1976	0.2059	0.2071	Ave		0.1931				9.2		15.0			
1,1-Dichloroethene	0.2195 0.2235	0.2255 0.2341	0.2354	0.2393	0.2394	Ave		0.2310				3.5		15.0			
Acetone	0.1840 0.1021	0.1370 0.0840	0.1288	0.1185	0.1139	Qua	0.1107	0.1159	-0.000415						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Iodomethane	0.2381 0.2592	0.2510 0.2511	0.2542	0.2647	0.2633	Ave		0.2545				3.6		15.0			
Carbon disulfide	0.5145 0.5619	0.5440 0.5705	0.5800	0.5955	0.6262	Ave		0.5704				6.3		15.0			
3-Chloro-1-propene	0.1242 0.1634	0.1301 0.1895	0.1425	0.1429	0.1513	Ave		0.1491				14.8		15.0			
Methyl acetate	0.2155 0.2224	0.2204 0.1970	0.2353	0.2399	0.2329	Ave		0.2234				6.5		15.0			
Methylene Chloride	0.2436 0.2292	0.2260 0.2327	0.2491	0.2491	0.2494	Ave		0.2399				4.3		15.0			
2-Methyl-2-propanol	0.0305 0.0324	0.0301 0.0234	0.0329	0.0317	0.0326	Ave		0.0305				10.8		15.0			
Acrylonitrile	0.1196 0.1211	0.1251 0.1064	0.1297	0.1305	0.1307	Ave		0.1233				7.1		15.0			
Methyl tert-butyl ether	0.7396 0.7916	0.7478 0.7988	0.8063	0.8290	0.8427	Ave		0.7937				4.8		15.0			
trans-1,2-Dichloroethene	0.2553 0.2496	0.2601 0.2628	0.2650	0.2726	0.2696	Ave		0.2622				3.0		15.0			
Hexane	0.0653 0.0824	0.0770 0.0880	0.0827	0.0838	0.0879	Ave		0.0810				9.7		15.0			
1,1-Dichloroethane	0.4948 0.4695	0.4670 0.4853	0.4962	0.4937	0.5068	Ave		0.4876			0.1000	3.0		15.0			
Vinyl acetate	0.1994 0.4350	0.2553 0.4291	0.3125	0.3340	0.4057	Lin1	-0.323	0.4367							0.9980		0.9900
2,2-Dichloropropane	0.0663 0.0795	0.0756 0.0863	0.0815	0.0808	0.0846	Ave		0.0792				8.4		15.0			
cis-1,2-Dichloroethene	0.2943 0.2727	0.2773 0.2817	0.2869	0.2884	0.2920	Ave		0.2848				2.8		15.0			
2-Butanone (MEK)	0.1585 0.1519	0.1502 0.1253	0.1584	0.1566	0.1615	Ave		0.1518				8.1		15.0			
Chlorobromomethane	0.1229 0.1271	0.1226 0.1281	0.1302	0.1318	0.1315	Ave		0.1277				3.0		15.0			
Tetrahydrofuran	0.0888 0.0993	0.0959 0.0834	0.1012	0.1001	0.1047	Ave		0.0962				7.8		15.0			
Chloroform	0.4578 0.4425	0.4599 0.4673	0.4677	0.4743	0.4833	Ave		0.4647				2.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	0.3736 0.4094	0.3849 0.4407	0.4199	0.4250	0.4334	Ave		0.4124				6.0		15.0			
Cyclohexane	0.4120 0.5021	0.4516 0.5309	0.5069	0.5248	0.5331	Ave		0.4945				9.3		15.0			
1,1-Dichloropropene	0.3592 0.3826	0.3733 0.4064	0.3966	0.4050	0.4160	Ave		0.3913				5.2		15.0			
Carbon tetrachloride	0.2788 0.3387	0.3086 0.3712	0.3381	0.3460	0.3521	Ave		0.3334				9.1		15.0			
Isobutyl alcohol	0.0109 0.0131	0.0118 0.0099	0.0137	0.0127	0.0134	Ave		0.0122				11.5		15.0			
Benzene	1.1221 1.0830	1.1209 1.1368	1.1464	1.1707	1.1717	Ave		1.1359				2.7		15.0			
1,2-Dichloroethane	0.4093 0.3830	0.3942 0.4024	0.4001	0.4186	0.4162	Ave		0.4034				3.1		15.0			
n-Heptane	0.0572 0.0844	0.0730 0.0890	0.0803	0.0819	0.0883	Ave		0.0792				14.0		15.0			
Trichloroethene	0.2726 0.2697	0.2736 0.2808	0.2835	0.2887	0.2907	Ave		0.2799				2.9		15.0			
Methylcyclohexane	0.4049 0.5007	0.4487 0.5251	0.4981	0.5234	0.5367	Ave		0.4911				9.7		15.0			
1,2-Dichloropropane	0.2427 0.2575	0.2529 0.2707	0.2788	0.2715	0.2779	Ave		0.2646				5.2		15.0			
1,4-Dioxane	0.0036 0.0037	0.0033 0.0029	0.0036	0.0037	0.0036	Ave		0.0035				8.6		15.0			
Dibromomethane	0.1416 0.1501	0.1474 0.1519	0.1553	0.1543	0.1604	Ave		0.1516				4.0		15.0			
Dichlorobromomethane	0.2668 0.3124	0.2796 0.3328	0.2993	0.3109	0.3230	Ave		0.3035				7.7		15.0			
2-Chloroethyl vinyl ether	0.1637 0.1915	0.1776 0.1874	0.1873	0.1938	0.2010	Ave		0.1860				6.5		15.0			
cis-1,3-Dichloropropene	0.3036 0.3896	0.3261 0.4204	0.3690	0.3850	0.3994	Ave		0.3704				11.2		15.0			
4-Methyl-2-pentanone (MIBK)	0.2618 0.3033	0.2850 0.2616	0.3056	0.3154	0.3178	Ave		0.2929				8.1		15.0			
Toluene	1.4493 1.4381	1.4665 1.5716	1.5507	1.5382	1.5611	Ave		1.5108				3.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	0.3440 0.4479	0.3535 0.4986	0.4048	0.4243	0.4538	Ave		0.4181				13.3		15.0			
Ethyl methacrylate	0.3239 0.4407	0.3661 0.4369	0.4106	0.4182	0.4508	Ave		0.4068				11.3		15.0			
1,1,2-Trichloroethane	0.2810 0.2777	0.2892 0.2924	0.2937	0.2954	0.2969	Ave		0.2895				2.6		15.0			
Tetrachloroethene	0.2760 0.2705	0.2709 0.2846	0.2895	0.2875	0.2841	Ave		0.2804				2.8		15.0			
1,3-Dichloropropane	0.5166 0.5221	0.5451 0.5457	0.5609	0.5549	0.5575	Ave		0.5432				3.2		15.0			
2-Hexanone	0.2190 0.2741	0.2410 0.2306	0.2735	0.2726	0.2817	Ave		0.2561				9.8		15.0			
Chlorodibromomethane	0.2081 0.2765	0.2302 0.3008	0.2514	0.2570	0.2789	Ave		0.2576				12.2		15.0			
Ethylene Dibromide	0.2737 0.2933	0.2762 0.3015	0.3068	0.2939	0.3100	Ave		0.2936				4.8		15.0			
Chlorobenzene	0.9262 0.8894	0.8977 0.9210	0.9717	0.9616	0.9612	Ave		0.9327			0.3000	3.5		15.0			
1,1,1,2-Tetrachloroethane	0.2491 0.2802	0.2487 0.2991	0.2855	0.2829	0.3001	Ave		0.2779				7.7		15.0			
Ethylbenzene	0.5068 0.5196	0.5091 0.5380	0.5536	0.5556	0.5530	Ave		0.5337				4.0		15.0			
m-Xylene & p-Xylene	0.6133 0.6378	0.6176 0.6675	0.6855	0.6858	0.6787	Ave		0.6552				4.8		15.0			
o-Xylene	0.6007 0.5959	0.5938 0.6125	0.6411	0.6571	0.6364	Ave		0.6197				4.1		15.0			
Styrene	0.7432 0.8875	0.7913 0.9338	0.8829	0.9189	0.9444	Ave		0.8717				8.7		15.0			
Bromoform	0.0994 0.1666	0.1142 0.1747	0.1475	0.1480	0.1589	Lin1	-0.098	0.1738			0.1000				0.9990		0.9900
Isopropylbenzene	1.4855 1.6056	1.5285 1.6429	1.7368	1.7401	1.7127	Ave		1.6360				6.2		15.0			
1,1,2,2-Tetrachloroethane	0.7643 0.8506	0.7605 0.7695	0.8515	0.8137	0.8822	Ave		0.8132			0.3000	6.1		15.0			
Bromobenzene	0.6983 0.7510	0.7202 0.7415	0.7806	0.7547	0.7698	Ave		0.7451				3.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichloropropane	0.2615 0.3071	0.3047 0.2766	0.3237	0.3027	0.3228	Ave		0.2999				7.7		15.0			
trans-1,4-Dichloro-2-butene	0.2053 0.2826	0.2255 0.2627	0.2787	0.2642	0.2800	Ave		0.2570				11.7		15.0			
N-Propylbenzene	0.7912 0.9185	0.8481 0.9122	0.9055	0.9232	0.9656	Ave		0.8949				6.4		15.0			
2-Chlorotoluene	0.7056 0.7432	0.7159 0.7335	0.7843	0.7490	0.7788	Ave		0.7443				4.0		15.0			
1,3,5-Trimethylbenzene	2.4000 2.7180	2.4716 2.7554	2.7640	2.7975	2.8847	Ave		2.6844				6.7		15.0			
4-Chlorotoluene	0.7084 0.7467	0.7259 0.7490	0.7794	0.7610	0.7800	Ave		0.7501				3.5		15.0			
tert-Butylbenzene	2.1539 2.3704	2.3126 2.3772	2.5118	2.5084	2.5256	Ave		2.3943				5.6		15.0			
1,2,4-Trimethylbenzene	2.3214 2.6656	2.4467 2.7261	2.7272	2.7708	2.7862	Ave		2.6349				6.8		15.0			
sec-Butylbenzene	2.9148 3.2968	3.0572 3.3742	3.3708	3.4208	3.4782	Ave		3.2733				6.3		15.0			
1,3-Dichlorobenzene	1.2714 1.3049	1.2881 1.3302	1.3613	1.3464	1.3424	Ave		1.3206				2.5		15.0			
4-Isopropyltoluene	2.2479 2.6558	2.4435 2.7489	2.6873	2.7595	2.7942	Ave		2.6196				7.7		15.0			
1,4-Dichlorobenzene	1.3310 1.3190	1.3655 1.3529	1.4036	1.3865	1.3874	Ave		1.3637				2.3		15.0			
n-Butylbenzene	1.6869 2.2117	1.9109 2.3110	2.1690	2.1970	2.2659	Ave		2.1075				10.7		15.0			
1,2-Dichlorobenzene	1.2233 1.2231	1.2030 1.2604	1.2857	1.2503	1.2801	Ave		1.2465				2.5		15.0			
1,2-Dibromo-3-Chloropropane	0.0613 0.1382	0.1002 0.1322	0.1077	0.1131	0.1317	Lin1	-0.0800	0.1364							0.9990		0.9900
1,2,4-Trichlorobenzene	0.5717 0.6539	0.6469 0.6903	0.6686	0.6528	0.6860	Ave		0.6529				6.1		15.0			
Hexachlorobutadiene	0.2076 0.2529	0.2322 0.2689	0.2553	0.2601	0.2674	Ave		0.2492				8.8		15.0			
Naphthalene	1.7138 2.1938	1.8426 2.1058	2.1031	2.0529	2.2357	Ave		2.0354				9.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.5833 0.5770	0.5774 0.5591	0.6217	0.5900	0.6064	Ave		0.5878				3.5		15.0			
Dibromofluoromethane (Surr)	0.1847 0.2059	0.2056 0.2143	0.2015	0.2139	0.2209	Ave		0.2067				5.7		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2977 0.2981	0.3060 0.3046	0.3113	0.3239	0.3194	Ave		0.3087				3.3		15.0			
Toluene-d8 (Surr)	1.1771 1.1853	1.2436 1.2580	1.2351	1.2641	1.2522	Ave		1.2308				2.9		15.0			
4-Bromofluorobenzene (Surr)	0.4231 0.4236	0.4408 0.4276	0.4297	0.4793	0.4490	Ave		0.4390				4.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-488921/8	UXR4581.D
Level 2	STD8260 240-488921/7	UXR4580.D
Level 3	STD8260 240-488921/6	UXR4579.D
Level 4	STD8260 240-488921/5	UXR4578.D
Level 5	STD8260 240-488921/4	UXR4577.D
Level 6	STD8260 240-488921/3	UXR4576.D
Level 7	STD8260 240-488921/2	UXR4575.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	16439 413256	39993 805562	82841	104117	209504	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloromethane	FB	Ave	17905 368509	36040 694391	76842	100995	186051	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl chloride	FB	Ave	17492 371336	36756 713569	76817	96193	191489	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Butadiene	FB	Ave	16871 398138	39710 786045	80021	98558	205467	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromomethane	FB	Ave	9565 178290	18144 333422	40900	49740	95833	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloroethane	FB	Ave	10601 234841	21797 450324	48885	61266	117698	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	23844 508455	50335 978688	106365	135133	256785	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	23412 545547	52367 1099329	110792	133722	280087	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl ether	FB	Ave	12369 260640	25300 515677	52058	65946	139193	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acrolein	FB	Ave	2074 58566	4670 93215	10567	13295	29358	5.00 100	10.0 200	20.0	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9003 230873	20802 477798	46003	58317	119580	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloroethene	FB	Ave	12388 265408	26068 540686	54788	67791	138221	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acetone	FB	Qua	20767 242475	31667 388151	59982	67129	131475	2.00 40.0	4.00 80.0	8.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	13437 307791	29017 579945	59158	74969	152038	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon disulfide	FB	Ave	29038 667363	62881 1317487	135011	168659	361546	1.00 20.0	2.00 40.0	4.00	5.00	10.0
3-Chloro-1-propene	FB	Ave	7009 194043	15033 437618	33176	40474	87342	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methyl acetate	FB	Ave	24325 528298	50951 909628	109559	135911	268978	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Methylene Chloride	FB	Ave	13751 272190	26120 537417	57982	70549	144001	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Methyl-2-propanol	FB	Ave	17235 384477	34753 540384	76479	89838	188092	10.0 200	20.0 400	40.0	50.0	100
Acrylonitrile	FB	Ave	67484 1438214	144555 2456860	301876	369687	754762	10.0 200	20.0 400	40.0	50.0	100
Methyl tert-butyl ether	FB	Ave	41741 940146	86439 1844475	187681	234804	486507	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	14411 296447	30067 606829	61688	77203	155663	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexane	FB	Ave	3688 97898	8904 203170	19255	23729	50765	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	27924 557554	53980 1120730	115494	139819	292571	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl acetate	FB	Lin1	11253 516587	29507 990855	72732	94597	234202	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	3744 94424	8736 199309	18965	22872	48865	1.00 20.0	2.00 40.0	4.00	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	16609 323850	32050 650521	66785	81680	168600	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	17896 360713	34725 578843	73746	88728	186532	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorobromomethane	FB	Ave	6937 150898	14175 295830	30299	37326	75933	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrahydrofuran	FB	Ave	10026 235901	22180 385217	47089	56680	120907	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chloroform	FB	Ave	25838 525559	53154 1078968	108862	134324	279045	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	21087 486255	44494 1017582	97735	120382	250239	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Cyclohexane	FB	Ave	23254 596327	52202 1226033	117996	148638	307808	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	20273 454371	43150 938368	92316	114712	240147	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon tetrachloride	FB	Ave	15738 402221	35664 857054	78700	98005	203304	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isobutyl alcohol	CBNZ d5	Ave	12512 318540	27322 450104	63311	73693	158685	25.0 500	50.0 1000	100	125	250
Benzene	FB	Ave	63329 1286179	129553 2625150	266847	331583	676486	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	23101 454896	45564 929130	93124	118564	240307	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Heptane	FB	Ave	3228 100218	8432 205587	18702	23196	50990	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichloroethene	FB	Ave	15383 320351	31623 648317	65983	81773	167848	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methylcyclohexane	FB	Ave	22854 594668	51857 1212642	115945	148249	309886	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	13699 305794	29228 625016	64888	76888	160438	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,4-Dioxane	FB	Ave	4071 86874	7726 131718	16658	21065	41300	20.0 400	40.0 800	80.0	100	200
Dibromomethane	FB	Ave	7992 178301	17040 350785	36154	43701	92629	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dichlorobromomethane	FB	Ave	15058 371049	32312 768438	69672	88043	186452	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	18473 454953	41051 865671	87210	109760	232082	2.00 40.0	4.00 80.0	8.00	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	17136 462680	37694 970833	85891	109032	230594	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	29546 720390	65891 1208351	142264	178670	366932	2.00 40.0	4.00 80.0	8.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Toluene	CBNZ d5	Ave	66611 1395030	135539 2855855	287558	358093	740030	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	15810 434478	32669 905951	75054	98768	215133	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	14887 427488	33835 793975	76147	97352	213710	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	12913 269404	26730 531375	54456	68769	140726	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	12685 262357	25040 517191	53688	66919	134671	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	23743 506433	50378 991559	104012	129181	264283	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Hexanone	CBNZ d5	Ave	20133 531807	44543 838092	101443	126898	267050	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorodibromomethane	CBNZ d5	Ave	9565 268240	21275 546515	46627	59839	132194	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	12578 284492	25524 547931	56882	68411	146948	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	42568 862777	82970 1673506	180176	223850	455632	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	11447 271826	22983 543597	52937	65857	142274	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	23292 504053	47051 977640	102648	129348	262153	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	28190 618712	57077 1212928	127117	159654	321715	1.00 20.0	2.00 40.0	4.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	27609 578050	54882 1113008	118889	152982	301677	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Styrene	CBNZ d5	Ave	34159 860927	73134 1696886	163711	213914	447666	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromoform	CBNZ d5	Lin1	4567 161577	10559 317546	27353	34448	75348	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isopropylbenzene	CBNZ d5	Ave	68278 1557557	141266 2985405	322063	405092	811876	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	16442 371057	31888 633570	72912	94150	190202	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	15021 327598	30195 610527	66835	87320	165962	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	5626 133973	12777 227776	27719	35022	69598	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4416 123281	9456 216281	23866	30572	60371	1.00 20.0	2.00 40.0	4.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	17020 400672	35558 751074	77535	106820	208180	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	15178 324198	30018 603990	67157	86659	167916	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	51629 1185604	103627 2268767	236660	323676	621933	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	15238 325733	30437 616708	66737	88049	168157	1.00 20.0	2.00 40.0	4.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	46334 1033972	96962 1957375	215065	290227	544515	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	49937 1162744	102584 2244664	233509	320586	600703	1.00 20.0	2.00 40.0	4.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	62704 1438077	128181 2778321	288617	395788	749890	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	27350 569185	54005 1095257	116560	155774	289410	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	48356 1158497	102450 2263428	230098	319274	602426	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	28633 575373	57253 1113929	120183	160422	299117	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	36289 964770	80118 1902868	185718	254193	488526	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	26316 533511	50438 1037791	110083	144658	275990	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	1319 60291	4201 108828	9218	13084	28391	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	12299 285228	27122 568418	57245	75525	147909	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	4465 110324	9737 221380	21861	30099	57654	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 488921

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2021 18:28 Calibration End Date: 06/03/2021 20:50 Calibration ID: 61585

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	36867 956940	77254 1733869	180071	237526	482008	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	12547 251691	24211 460335	53228	68266	130736	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	10423 244571	23762 494934	46893	60585	127531	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	16801 354030	35369 703442	72463	91734	184417	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	54101 1149843	114936 2285961	229022	294269	593582	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	19447 410894	40737 777019	79680	111580	212858	1.00 20.0	2.00 40.0	4.00	5.00	10.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4575.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Jun-2021 18:28:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:40:49 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

First Level Reviewer: williamsla Date: 04-Jun-2021 11:17:01

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.739	5.740	-0.001	98	1154590	20.0	20.0	
*	2 Chlorobenzene-d5	117	8.443	8.443	0.000	87	908575	20.0	20.0	
*	3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	96	411696	20.0	20.0	
$	4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	494934	40.0	41.5	
$	5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	703442	40.0	39.5	
$	6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	2285961	40.0	40.9	
$	7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	777019	40.0	39.0	
	9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	805562	40.0	40.4	
	10 Chloromethane	50	1.850	1.862	-0.012	99	694391	40.0	37.4	
	11 Vinyl chloride	62	1.957	1.945	0.012	98	713569	40.0	38.4	
	119 Butadiene	54	1.992	1.980	0.012	90	786045	40.0	40.3	
	12 Bromomethane	94	2.300	2.312	-0.012	91	333422	40.0	35.5	
	13 Chloroethane	64	2.407	2.407	0.000	99	450324	40.0	39.0	
	14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	978688	40.0	38.4	
	15 Trichlorofluoromethane	101	2.656	2.668	-0.012	98	1099329	40.0	41.2	
	16 Ethyl ether	59	2.953	2.953	0.000	91	515677	40.0	39.6	
	18 Acrolein	56	3.095	3.095	0.000	99	93215	200.0	182.3	
	20 112TCTFE	151	3.166	3.178	-0.012	97	477798	40.0	42.9	
	19 1,1-Dichloroethene	96	3.178	3.178	0.000	96	540686	40.0	40.6	
	21 Acetone	43	3.237	3.237	0.000	99	388151	80.0	80.0	
	22 Iodomethane	142	3.332	3.332	0.000	99	579945	40.0	39.5	
	23 Carbon disulfide	76	3.380	3.392	-0.012	99	1317487	40.0	40.0	
	25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	437618	40.0	50.8	
	26 Methyl acetate	43	3.534	3.534	0.000	97	909628	80.0	70.5	
	27 Methylene Chloride	84	3.640	3.641	-0.001	93	537417	40.0	38.8	
	28 2-Methyl-2-propanol	59	3.723	3.724	-0.001	95	540384	400.0	306.9	
	29 Acrylonitrile	53	3.866	3.866	0.000	98	2456860	400.0	345.2	
	30 Methyl tert-butyl ether	73	3.866	3.866	0.000	93	1844475	40.0	40.3	
	31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	606829	40.0	40.1	
	32 Hexane	86	4.103	4.103	0.000	91	203170	40.0	43.4	
	33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	1120730	40.0	39.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.281	4.293	-0.012	97	990855	40.0	40.0	
38 2,2-Dichloropropane	97	4.755	4.755	0.000	77	199309	40.0	43.6	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	87	650521	40.0	39.6	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	99	578843	80.0	66.1	
44 Chlorobromomethane	128	4.969	4.969	0.000	98	295830	40.0	40.1	
45 Tetrahydrofuran	42	5.004	5.004	0.000	98	385217	80.0	69.4	
46 Chloroform	83	5.028	5.028	0.000	93	1078968	40.0	40.2	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	1017582	40.0	42.7	
48 Cyclohexane	56	5.229	5.230	-0.001	90	1226033	40.0	42.9	
49 1,1-Dichloropropene	75	5.324	5.324	0.000	94	938368	40.0	41.5	
50 Carbon tetrachloride	117	5.336	5.336	0.000	95	857054	40.0	44.5	
51 Isobutyl alcohol	41	5.396	5.396	0.000	93	450104	1000.0	811.5	
52 Benzene	78	5.514	5.514	0.000	96	2625150	40.0	40.0	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	929130	40.0	39.9	
55 n-Heptane	100	5.704	5.704	0.000	92	205587	40.0	45.0	
57 Trichloroethene	130	6.060	6.060	0.000	98	648317	40.0	40.1	
59 Methylcyclohexane	83	6.214	6.214	0.000	90	1212642	40.0	42.8	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	625016	40.0	40.9	
62 Dibromomethane	93	6.368	6.368	0.000	96	350785	40.0	40.1	
63 1,4-Dioxane	88	6.368	6.368	0.000	43	131718	800.0	656.4	
64 Dichlorobromomethane	83	6.486	6.487	-0.001	99	768438	40.0	43.9	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	92	865671	80.0	80.6	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	970833	40.0	45.4	
68 4-Methyl-2-pentanone (MIBK)	43	6.996	7.008	-0.012	97	1208351	80.0	71.5	
69 Toluene	91	7.174	7.174	0.000	98	2855855	40.0	41.6	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	94	905951	40.0	47.7	
71 Ethyl methacrylate	69	7.423	7.423	0.000	90	793975	40.0	43.0	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	92	531375	40.0	40.4	
73 Tetrachloroethene	164	7.672	7.672	0.000	95	517191	40.0	40.6	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	991559	40.0	40.2	
76 2-Hexanone	43	7.743	7.744	-0.001	96	838092	80.0	72.0	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	546515	40.0	46.7	
79 Ethylene Dibromide	107	8.028	8.028	0.000	99	547931	40.0	41.1	
81 Chlorobenzene	112	8.467	8.467	0.000	93	1673506	40.0	39.5	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	94	543597	40.0	43.1	
83 Ethylbenzene	106	8.562	8.550	0.012	99	977640	40.0	40.3	
84 m-Xylene & p-Xylene	106	8.668	8.669	-0.001	100	1212928	40.0	40.8	
85 o-Xylene	106	9.048	9.048	0.000	97	1113008	40.0	39.5	
86 Styrene	104	9.060	9.060	0.000	94	1696886	40.0	42.9	
87 Bromoform	173	9.250	9.250	0.000	95	317546	40.0	40.8	
89 Isopropylbenzene	105	9.392	9.392	0.000	95	2985405	40.0	40.2	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.688	0.000	94	633570	40.0	37.8	
92 Bromobenzene	156	9.712	9.712	0.000	96	610527	40.0	39.8	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	86	227776	40.0	36.9	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	75	216281	40.0	40.9	
95 N-Propylbenzene	120	9.795	9.795	0.000	99	751074	40.0	40.8	
96 2-Chlorotoluene	126	9.890	9.890	0.000	95	603990	40.0	39.4	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	2268767	40.0	41.1	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	616708	40.0	39.9	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	1957375	40.0	39.7	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	94	2244664	40.0	41.4	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	2778321	40.0	41.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	1095257	40.0	40.3	
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	2263428	40.0	42.0	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	93	1113929	40.0	39.7	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	1902868	40.0	43.9	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	1037791	40.0	40.4	
111 1,2-Dibromo-3-Chloropropane	157	11.870	11.859	0.012	94	108828	40.0	39.3	
113 1,2,4-Trichlorobenzene	180	12.688	12.689	-0.001	94	568418	40.0	42.3	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	221380	40.0	43.2	
115 Naphthalene	128	12.949	12.949	0.000	100	1733869	40.0	41.4	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	96	460335	40.0	38.0	
S 128 1,2-Dichloroethene, Total	96				0			79.7	
S 129 1,3-Dichloropropene, Total	75				0			93.1	
S 130 Xylenes, Total	106				0		80.0	80.3	
S 158 Total BTEX	1				0		200.0	202.3	
S 131 Trihalomethanes, Total	1				0		160.0	171.6	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00394	Amount Added:	32.00	Units: uL
VMRPRIMW_00438	Amount Added:	32.00	Units: uL
VMRGAS_00387	Amount Added:	32.00	Units: uL
vm50ss_00443	Amount Added:	32.00	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

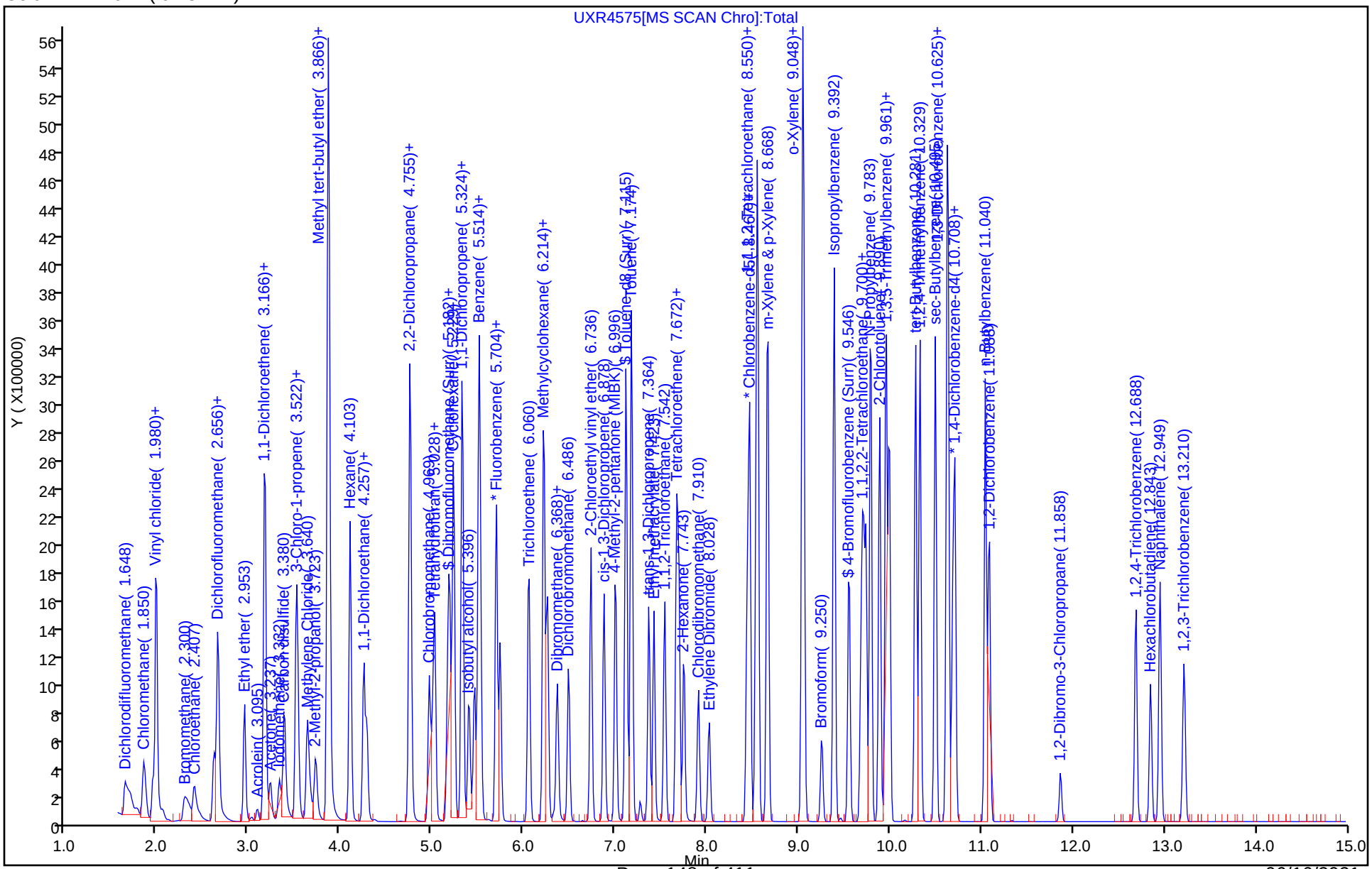
Report Date: 04-Jun-2021 11:40:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4575.D

Injection Date:	03-Jun-2021 18:28:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L7			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4576.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Jun-2021 18:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-003
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:40:52 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1187654	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	93	970068	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	96	436206	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	244571	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	99	354030	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1149843	20.0	19.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	410894	20.0	19.3	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	413256	20.0	20.1	
10 Chloromethane	50	1.862	1.862	0.000	99	368509	20.0	19.3	
11 Vinyl chloride	62	1.957	1.945	0.012	98	371336	20.0	19.4	
119 Butadiene	54	1.992	1.980	0.012	89	398138	20.0	19.8	
12 Bromomethane	94	2.313	2.312	0.000	91	178290	20.0	18.5	
13 Chloroethane	64	2.407	2.407	0.000	100	234841	20.0	19.8	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	95	508455	20.0	19.4	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	545547	20.0	19.9	
16 Ethyl ether	59	2.953	2.953	0.000	91	260640	20.0	19.5	
18 Acrolein	56	3.095	3.095	0.000	98	58566	100.0	111.3	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	96	265408	20.0	19.4	
20 112TCTFE	151	3.178	3.178	0.000	75	230873	20.0	20.1	
21 Acetone	43	3.237	3.237	0.000	99	242475	40.0	40.0	
22 Iodomethane	142	3.332	3.332	0.000	99	307791	20.0	20.4	
23 Carbon disulfide	76	3.392	3.392	0.000	99	667363	20.0	19.7	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	91	194043	20.0	21.9	
26 Methyl acetate	43	3.534	3.534	0.000	97	528298	40.0	39.8	
27 Methylene Chloride	84	3.641	3.641	0.000	92	272190	20.0	19.1	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	95	384477	200.0	212.2	
29 Acrylonitrile	53	3.866	3.866	0.000	99	1438214	200.0	196.4	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	95	940146	20.0	19.9	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	296447	20.0	19.0	
32 Hexane	86	4.103	4.103	0.000	92	97898	20.0	20.3	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	97	557554	20.0	19.3	
34 Vinyl acetate	43	4.293	4.293	0.000	97	516587	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	76	94424	20.0	20.1	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	84	323850	20.0	19.2	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	99	360713	40.0	40.0	
44 Chlorobromomethane	128	4.969	4.969	0.000	98	150898	20.0	19.9	
45 Tetrahydrofuran	42	5.004	5.004	0.000	98	235901	40.0	41.3	
46 Chloroform	83	5.028	5.028	0.000	94	525559	20.0	19.0	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	486255	20.0	19.9	
48 Cyclohexane	56	5.230	5.230	0.000	90	596327	20.0	20.3	
49 1,1-Dichloropropene	75	5.325	5.324	0.001	94	454371	20.0	19.6	
50 Carbon tetrachloride	117	5.336	5.336	0.000	89	402221	20.0	20.3	
51 Isobutyl alcohol	41	5.408	5.396	0.012	93	318540	500.0	537.9	
52 Benzene	78	5.514	5.514	0.000	96	1286179	20.0	19.1	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	454896	20.0	19.0	
55 n-Heptane	100	5.704	5.704	0.000	92	100218	20.0	21.3	
57 Trichloroethene	130	6.060	6.060	0.000	98	320351	20.0	19.3	
59 Methylcyclohexane	83	6.214	6.214	0.000	90	594668	20.0	20.4	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	305794	20.0	19.5	
62 Dibromomethane	93	6.368	6.368	0.000	96	178301	20.0	19.8	
63 1,4-Dioxane	88	6.368	6.368	0.000	50	86874	400.0	420.9	
64 Dichlorobromomethane	83	6.487	6.487	0.000	99	371049	20.0	20.6	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	93	454953	40.0	41.2	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	462680	20.0	21.0	
68 4-Methyl-2-pentanone (MIBK)	43	6.997	7.008	-0.011	97	720390	40.0	41.4	
69 Toluene	91	7.175	7.174	0.000	98	1395030	20.0	19.0	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	434478	20.0	21.4	
71 Ethyl methacrylate	69	7.424	7.423	0.001	89	427488	20.0	21.7	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	269404	20.0	19.2	
73 Tetrachloroethene	164	7.673	7.672	0.001	95	262357	20.0	19.3	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	506433	20.0	19.2	
76 2-Hexanone	43	7.744	7.744	0.000	96	531807	40.0	42.8	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	268240	20.0	21.5	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	284492	20.0	20.0	
81 Chlorobenzene	112	8.467	8.467	0.000	95	862777	20.0	19.1	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	94	271826	20.0	20.2	
83 Ethylbenzene	106	8.562	8.550	0.012	99	504053	20.0	19.5	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	618712	20.0	19.5	
85 o-Xylene	106	9.048	9.048	0.000	95	578050	20.0	19.2	
86 Styrene	104	9.060	9.060	0.000	93	860927	20.0	20.4	
87 Bromoform	173	9.250	9.250	0.000	95	161577	20.0	19.7	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	1557557	20.0	19.6	
91 1,1,2,2-Tetrachloroethane	83	9.677	9.688	-0.011	94	371057	20.0	20.9	
92 Bromobenzene	156	9.712	9.712	0.000	96	327598	20.0	20.2	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	85	133973	20.0	20.5	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	80	123281	20.0	22.0	
95 N-Propylbenzene	120	9.783	9.795	-0.012	99	400672	20.0	20.5	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	324198	20.0	20.0	
97 1,3,5-Trimethylbenzene	105	9.949	9.961	-0.012	93	1185604	20.0	20.2	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	325733	20.0	19.9	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	1033972	20.0	19.8	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	1162744	20.0	20.2	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	1438077	20.0	20.1	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	96	569185	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	1158497	20.0	20.3	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	94	575373	20.0	19.3	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	964770	20.0	21.0	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	533511	20.0	19.6	
111 1,2-Dibromo-3-Chloropropane	157	11.859	11.859	0.001	80	60291	20.0	20.8	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	285228	20.0	20.0	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	110324	20.0	20.3	
115 Naphthalene	128	12.950	12.949	0.001	100	956940	20.0	21.6	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	96	251691	20.0	19.6	
S 128 1,2-Dichloroethene, Total	96				0			38.2	
S 129 1,3-Dichloropropene, Total	75				0			42.5	
S 130 Xylenes, Total	106				0		40.0	38.7	
S 158 Total BTEX	1				0		100.0	96.3	
S 131 Trihalomethanes, Total	1				0		80.0	80.8	

Reagents:

VMAROLISTDW_00394	Amount Added:	16.00	Units: uL
VMRPRIMW_00438	Amount Added:	16.00	Units: uL
VMRGAS_00387	Amount Added:	16.00	Units: uL
vm50ss_00443	Amount Added:	16.00	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

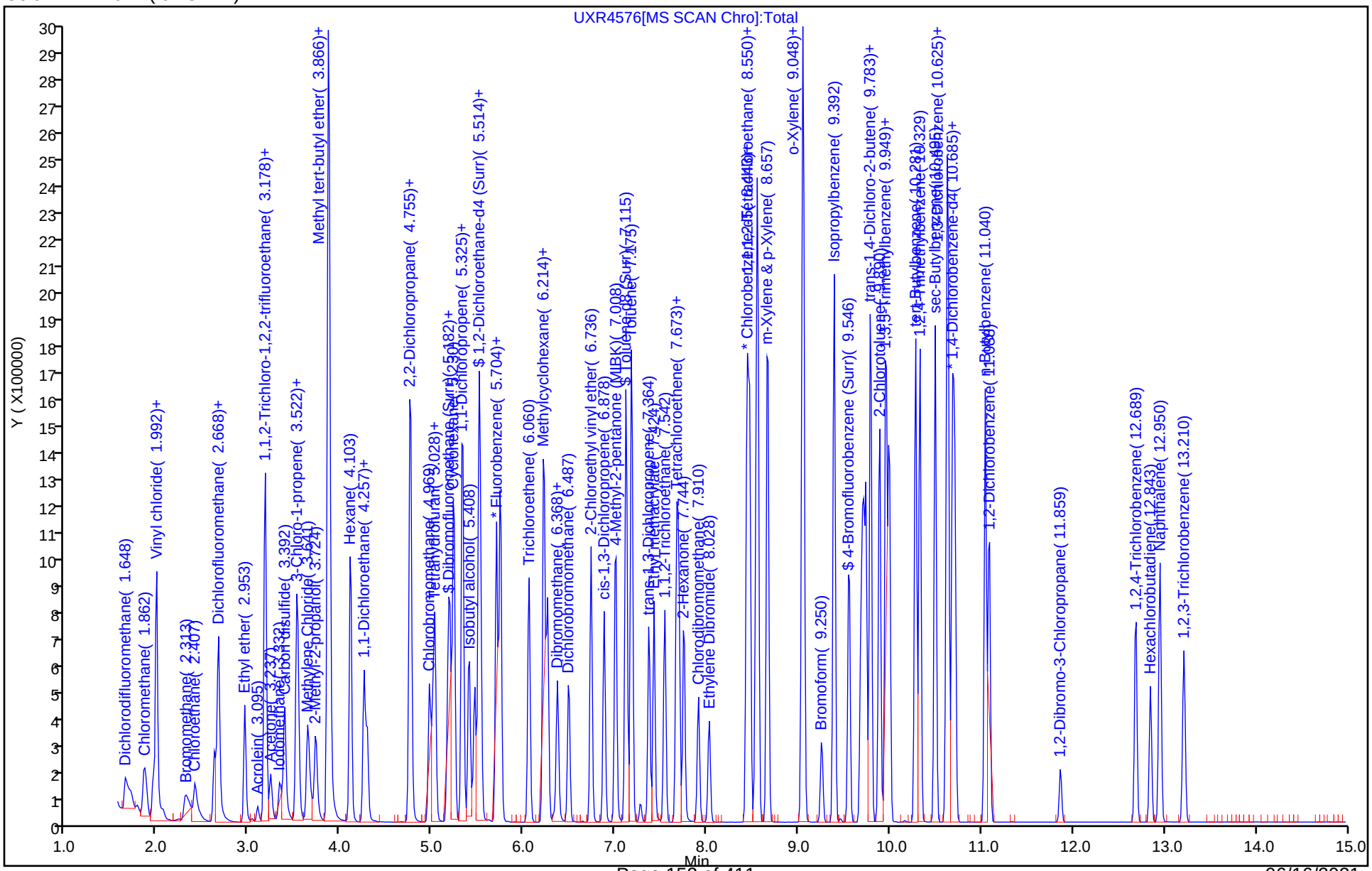
Report Date: 04-Jun-2021 11:40:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4576.D

Injection Date:	03-Jun-2021 18:52:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L6			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4577.D
Lims ID: STD8260 L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 03-Jun-2021 19:16:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-004
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:40:56 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1154679	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	948084	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	431199	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	127531	10.0	10.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	184417	10.0	10.3	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	593582	10.0	10.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	212858	10.0	10.2	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	209504	10.0	10.5	
10 Chloromethane	50	1.862	1.862	0.000	99	186051	10.0	10.0	
11 Vinyl chloride	62	1.945	1.945	0.000	98	191489	10.0	10.3	
119 Butadiene	54	1.980	1.980	0.000	90	205467	10.0	10.5	
12 Bromomethane	94	2.312	2.312	0.000	92	95833	10.0	10.2	
13 Chloroethane	64	2.407	2.407	0.000	100	117698	10.0	10.2	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	95	256785	10.0	10.1	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	280087	10.0	10.5	
16 Ethyl ether	59	2.953	2.953	0.000	90	139193	10.0	10.7	
18 Acrolein	56	3.095	3.095	0.000	98	29358	50.0	57.4	
20 112TCTFE	151	3.178	3.178	0.000	75	119580	10.0	10.7	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	138221	10.0	10.4	
21 Acetone	43	3.237	3.237	0.000	99	131475	20.0	20.2	
22 Iodomethane	142	3.332	3.332	0.000	99	152038	10.0	10.3	
23 Carbon disulfide	76	3.380	3.380	0.000	100	361546	10.0	11.0	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	87342	10.0	10.1	
26 Methyl acetate	43	3.534	3.534	0.000	97	268978	20.0	20.9	
27 Methylene Chloride	84	3.641	3.641	0.000	93	144001	10.0	10.4	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	95	188092	100.0	106.8	
29 Acrylonitrile	53	3.866	3.866	0.000	98	754762	100.0	106.0	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	95	486507	10.0	10.6	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	97	155663	10.0	10.3	
32 Hexane	86	4.103	4.103	0.000	91	50765	10.0	10.9	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	97	292571	10.0	10.4	
34 Vinyl acetate	43	4.293	4.293	0.000	97	234202	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	83	48865	10.0	10.7	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	84	168600	10.0	10.3	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	100	186532	20.0	21.3	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	75933	10.0	10.3	
45 Tetrahydrofuran	42	5.004	5.004	0.000	97	120907	20.0	21.8	
46 Chloroform	83	5.028	5.028	0.000	93	279045	10.0	10.4	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	250239	10.0	10.5	
48 Cyclohexane	56	5.230	5.230	0.000	90	307808	10.0	10.8	
49 1,1-Dichloropropene	75	5.325	5.325	0.000	95	240147	10.0	10.6	
50 Carbon tetrachloride	117	5.336	5.336	0.000	95	203304	10.0	10.6	
51 Isobutyl alcohol	41	5.396	5.396	0.000	94	158685	250.0	274.2	
52 Benzene	78	5.514	5.514	0.000	96	676486	10.0	10.3	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	240307	10.0	10.3	
55 n-Heptane	100	5.704	5.704	0.000	91	50990	10.0	11.2	
57 Trichloroethene	130	6.060	6.060	0.000	98	167848	10.0	10.4	
59 Methylcyclohexane	83	6.214	6.214	0.000	90	309886	10.0	10.9	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	160438	10.0	10.5	
62 Dibromomethane	93	6.368	6.368	0.000	96	92629	10.0	10.6	
63 1,4-Dioxane	88	6.368	6.368	0.000	50	41300	200.0	205.8	
64 Dichlorobromomethane	83	6.487	6.487	0.000	99	186452	10.0	10.6	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	92	232082	20.0	21.6	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	230594	10.0	10.8	
68 4-Methyl-2-pentanone (MIBK)	43	6.997	6.997	0.000	96	366932	20.0	21.7	
69 Toluene	91	7.174	7.174	0.000	98	740030	10.0	10.3	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	94	215133	10.0	10.9	
71 Ethyl methacrylate	69	7.424	7.424	0.000	89	213710	10.0	11.1	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	92	140726	10.0	10.3	
73 Tetrachloroethene	164	7.673	7.673	0.000	95	134671	10.0	10.1	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	264283	10.0	10.3	
76 2-Hexanone	43	7.744	7.744	0.000	96	267050	20.0	22.0	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	132194	10.0	10.8	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	146948	10.0	10.6	
81 Chlorobenzene	112	8.467	8.467	0.000	93	455632	10.0	10.3	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	92	142274	10.0	10.8	
83 Ethylbenzene	106	8.562	8.562	0.000	98	262153	10.0	10.4	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	321715	10.0	10.4	
85 o-Xylene	106	9.048	9.048	0.000	97	301677	10.0	10.3	
86 Styrene	104	9.060	9.060	0.000	94	447666	10.0	10.8	
87 Bromoform	173	9.262	9.262	0.000	96	75348	10.0	9.71	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	811876	10.0	10.5	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.688	0.000	95	190202	10.0	10.8	
92 Bromobenzene	156	9.712	9.712	0.000	94	165962	10.0	10.3	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	88	69598	10.0	10.8	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	76	60371	10.0	10.9	
95 N-Propylbenzene	120	9.783	9.783	0.000	99	208180	10.0	10.8	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	167916	10.0	10.5	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	621933	10.0	10.7	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	168157	10.0	10.4	
99 tert-Butylbenzene	119	10.281	10.281	0.000	92	544515	10.0	10.5	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	600703	10.0	10.6	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	749890	10.0	10.6	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	289410	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	602426	10.0	10.7	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	94	299117	10.0	10.2	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	488526	10.0	10.8	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	275990	10.0	10.3	
111 1,2-Dibromo-3-Chloropropane	157	11.870	11.870	0.000	88	28391	10.0	10.2	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	147909	10.0	10.5	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	96	57654	10.0	10.7	
115 Naphthalene	128	12.950	12.950	0.000	99	482008	10.0	11.0	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	96	130736	10.0	10.3	
S 130 Xylenes, Total	106				0		20.0	20.6	
S 158 Total BTEX	1				0		50.0	51.6	
S 131 Trihalomethanes, Total	1				0		40.0	41.6	

Reagents:

VMAROLISTDW_00394	Amount Added:	8.00	Units: uL
VMRPRIMW_00438	Amount Added:	8.00	Units: uL
VMRGAS_00387	Amount Added:	8.00	Units: uL
vm50ss_00443	Amount Added:	8.00	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

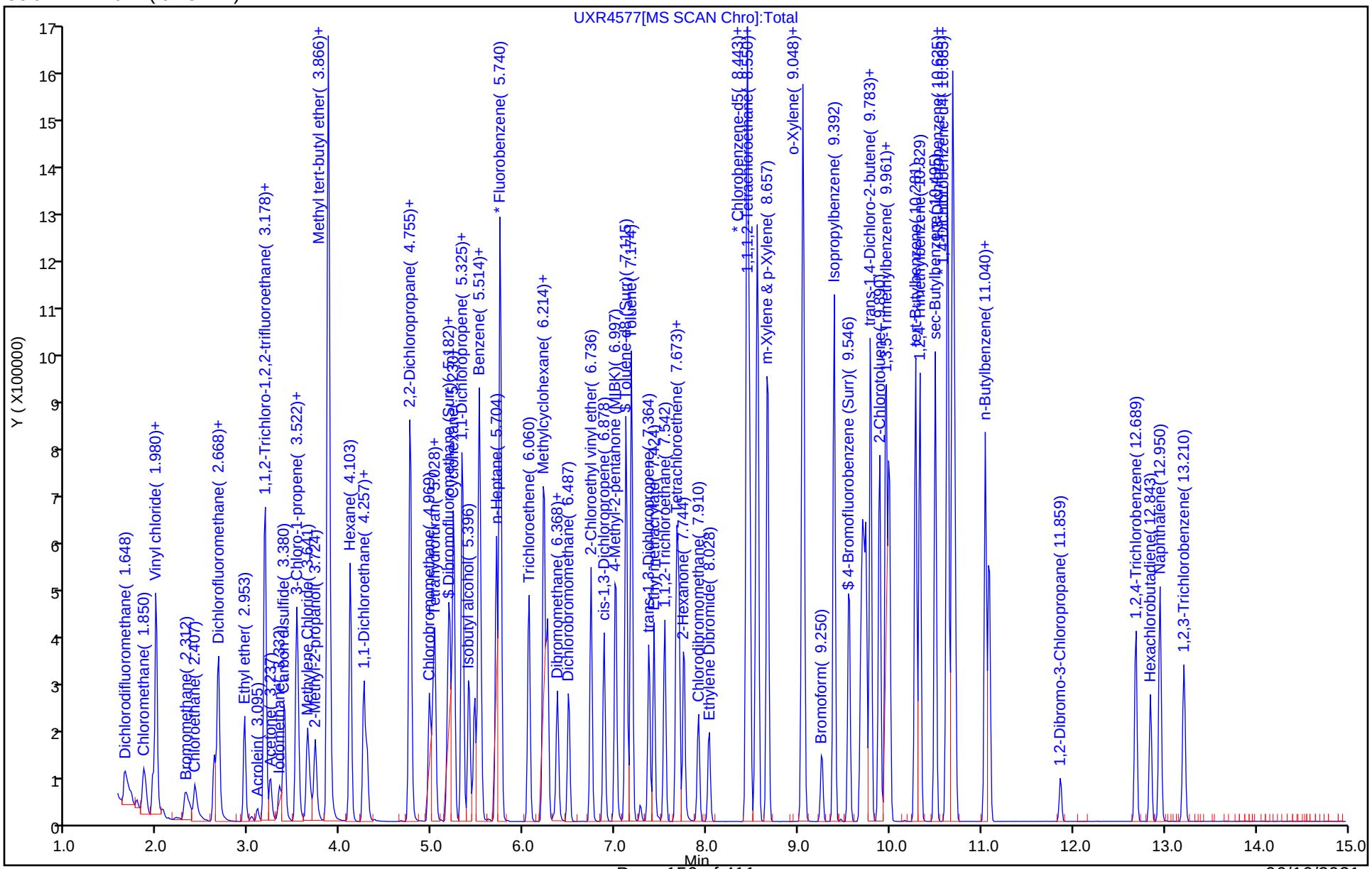
Report Date: 04-Jun-2021 11:40:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4577.D

Injection Date:	03-Jun-2021 19:16:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4578.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Jun-2021 19:39:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-005
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:41:00 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1132931	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	931189	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	462801	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	60585	5.00	5.17	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	98	91734	5.00	5.25	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	294269	5.00	5.14	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	84	111580	5.00	5.46	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	104117	5.00	5.32	
10 Chloromethane	50	1.862	1.862	0.000	99	100995	5.00	5.55	
11 Vinyl chloride	62	1.945	1.945	0.000	98	96193	5.00	5.28	
119 Butadiene	54	1.980	1.980	0.000	91	98558	5.00	5.15	
12 Bromomethane	94	2.312	2.312	0.000	93	49740	5.00	5.40	
13 Chloroethane	64	2.407	2.407	0.000	99	61266	5.00	5.41	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	135133	5.00	5.41	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	133722	5.00	5.11	
16 Ethyl ether	59	2.953	2.953	0.000	91	65946	5.00	5.16	
18 Acrolein	56	3.095	3.095	0.000	97	13295	25.0	26.5	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	94	67791	5.00	5.18	
20 112TCTFE	151	3.178	3.178	0.000	73	58317	5.00	5.33	
21 Acetone	43	3.237	3.237	0.000	100	67129	10.0	9.60	
22 Iodomethane	142	3.332	3.332	0.000	100	74969	5.00	5.20	
23 Carbon disulfide	76	3.392	3.392	0.000	99	168659	5.00	5.22	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	40474	5.00	4.79	
26 Methyl acetate	43	3.534	3.534	0.000	98	135911	10.0	10.7	
27 Methylene Chloride	84	3.641	3.641	0.000	93	70549	5.00	5.19	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	94	89838	50.0	52.0	
29 Acrylonitrile	53	3.866	3.866	0.000	98	369687	50.0	52.9	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	78	234804	5.00	5.22	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	77203	5.00	5.20	
32 Hexane	86	4.103	4.103	0.000	93	23729	5.00	5.17	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	139819	5.00	5.06	
34 Vinyl acetate	43	4.293	4.293	0.000	97	94597	5.00	4.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	72	22872	5.00	5.10	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	85	81680	5.00	5.06	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	100	88728	10.0	10.3	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	37326	5.00	5.16	
45 Tetrahydrofuran	42	5.004	5.004	0.000	97	56680	10.0	10.4	
46 Chloroform	83	5.028	5.028	0.000	93	134324	5.00	5.10	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	120382	5.00	5.15	
48 Cyclohexane	56	5.230	5.230	0.000	90	148638	5.00	5.31	
49 1,1-Dichloropropene	75	5.324	5.324	0.000	94	114712	5.00	5.18	
50 Carbon tetrachloride	117	5.336	5.336	0.000	96	98005	5.00	5.19	
51 Isobutyl alcohol	41	5.396	5.396	0.000	93	73693	125.0	129.6	
52 Benzene	78	5.514	5.514	0.000	96	331583	5.00	5.15	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	118564	5.00	5.19	
55 n-Heptane	100	5.704	5.704	0.000	92	23196	5.00	5.17	
57 Trichloroethene	130	6.060	6.060	0.000	98	81773	5.00	5.16	
59 Methylcyclohexane	83	6.214	6.214	0.000	89	148249	5.00	5.33	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	76888	5.00	5.13	
62 Dibromomethane	93	6.368	6.368	0.000	95	43701	5.00	5.09	
63 1,4-Dioxane	88	6.368	6.368	0.000	48	21065	100.0	107.0	
64 Dichlorobromomethane	83	6.487	6.487	0.000	98	88043	5.00	5.12	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	93	109760	10.0	10.4	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	94	109032	5.00	5.20	
68 4-Methyl-2-pentanone (MIBK)	43	7.008	7.008	0.000	96	178670	10.0	10.8	
69 Toluene	91	7.174	7.174	0.000	98	358093	5.00	5.09	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	94	98768	5.00	5.07	
71 Ethyl methacrylate	69	7.423	7.423	0.000	90	97352	5.00	5.14	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	68769	5.00	5.10	
73 Tetrachloroethene	164	7.672	7.672	0.000	95	66919	5.00	5.13	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	129181	5.00	5.11	
76 2-Hexanone	43	7.744	7.744	0.000	95	126898	10.0	10.6	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	59839	5.00	4.99	
79 Ethylene Dibromide	107	8.028	8.028	0.000	100	68411	5.00	5.00	
81 Chlorobenzene	112	8.467	8.467	0.000	93	223850	5.00	5.15	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	92	65857	5.00	5.09	
83 Ethylbenzene	106	8.550	8.550	0.000	99	129348	5.00	5.21	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	159654	5.00	5.23	
85 o-Xylene	106	9.048	9.048	0.000	96	152982	5.00	5.30	
86 Styrene	104	9.060	9.060	0.000	94	213914	5.00	5.27	
87 Bromoform	173	9.250	9.250	0.000	95	34448	5.00	4.82	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	405092	5.00	5.32	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.688	0.000	95	94150	5.00	5.00	
92 Bromobenzene	156	9.712	9.712	0.000	95	87320	5.00	5.06	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	87	35022	5.00	5.05	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	73	30572	5.00	5.14	
95 N-Propylbenzene	120	9.795	9.795	0.000	99	106820	5.00	5.16	
96 2-Chlorotoluene	126	9.890	9.890	0.000	95	86659	5.00	5.03	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	323676	5.00	5.21	
98 4-Chlorotoluene	126	9.997	9.997	0.000	98	88049	5.00	5.07	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	290227	5.00	5.24	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	320586	5.00	5.26	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	395788	5.00	5.23	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	155774	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	319274	5.00	5.27	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	95	160422	5.00	5.08	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	254193	5.00	5.21	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	96	144658	5.00	5.01	
111 1,2-Dibromo-3-Chloropropane	157	11.859	11.859	0.000	79	13084	5.00	4.73	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	75525	5.00	5.00	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	30099	5.00	5.22	
115 Naphthalene	128	12.949	12.949	0.000	100	237526	5.00	5.04	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	95	68266	5.00	5.02	
S 128 1,2-Dichloroethene, Total	96				0			10.3	
S 129 1,3-Dichloropropene, Total	75				0			10.3	
S 130 Xylenes, Total	106				0		10.0	10.5	
S 158 Total BTEX	1				0		25.0	26.0	
S 131 Trihalomethanes, Total	1				0		20.0	20.0	

Reagents:

VMAROLISTDW_00394	Amount Added:	4.00	Units: uL
VMRPRIMW_00438	Amount Added:	4.00	Units: uL
VMRGAS_00387	Amount Added:	4.00	Units: uL
vm50ss_00443	Amount Added:	4.00	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

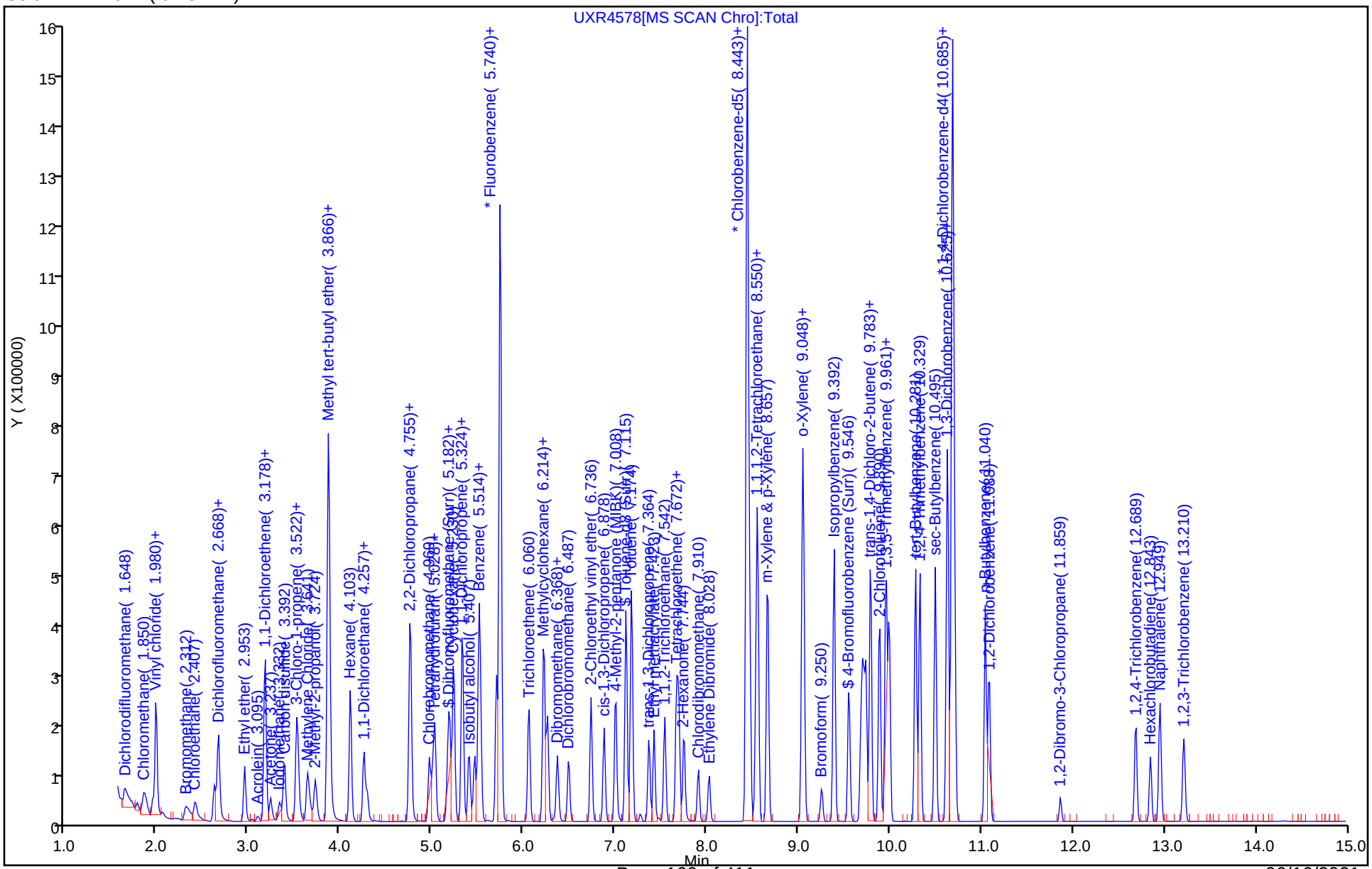
Report Date: 04-Jun-2021 11:41:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4578.D

Injection Date:	03-Jun-2021 19:39:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4579.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Jun-2021 20:03:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-006
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:41:04 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1163839	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	927163	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.001	96	428116	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	46893	4.00	3.90	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	98	72463	4.00	4.03	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	94	229022	4.00	4.01	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	79680	4.00	3.92	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	82841	4.00	4.12	
10 Chloromethane	50	1.862	1.862	0.000	99	76842	4.00	4.11	
11 Vinyl chloride	62	1.957	1.945	0.012	98	76817	4.00	4.11	
119 Butadiene	54	1.992	1.980	0.012	89	80021	4.00	4.07	
12 Bromomethane	94	2.313	2.312	0.001	90	40900	4.00	4.32	
13 Chloroethane	64	2.419	2.407	0.012	99	48885	4.00	4.20	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	106365	4.00	4.14	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	110792	4.00	4.12	
16 Ethyl ether	59	2.953	2.953	0.000	89	52058	4.00	3.97	
18 Acrolein	56	3.095	3.095	0.000	95	10567	20.0	20.5	
20 112TCTFE	151	3.178	3.178	0.000	73	46003	4.00	4.09	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	54788	4.00	4.08	
21 Acetone	43	3.238	3.237	0.001	99	59982	8.00	8.18	
22 Iodomethane	142	3.332	3.332	0.000	99	59158	4.00	3.99	
23 Carbon disulfide	76	3.392	3.392	0.000	99	135011	4.00	4.07	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	33176	4.00	3.82	
26 Methyl acetate	43	3.534	3.534	0.000	97	109559	8.00	8.43	
27 Methylene Chloride	84	3.641	3.641	0.000	94	57982	4.00	4.15	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	94	76479	40.0	43.1	
29 Acrylonitrile	53	3.866	3.866	0.000	98	301876	40.0	42.1	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	75	187681	4.00	4.06	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	97	61688	4.00	4.04	
32 Hexane	86	4.115	4.103	0.012	90	19255	4.00	4.08	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	115494	4.00	4.07	
34 Vinyl acetate	43	4.293	4.293	0.000	97	72732	4.00	3.60	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	73	18965	4.00	4.11	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	84	66785	4.00	4.03	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	100	73746	8.00	8.35	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	30299	4.00	4.08	
45 Tetrahydrofuran	42	5.004	5.004	0.000	97	47089	8.00	8.41	
46 Chloroform	83	5.028	5.028	0.000	93	108862	4.00	4.03	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	97735	4.00	4.07	
48 Cyclohexane	56	5.230	5.230	0.000	90	117996	4.00	4.10	
49 1,1-Dichloropropene	75	5.325	5.324	0.001	94	92316	4.00	4.05	
50 Carbon tetrachloride	117	5.336	5.336	0.000	87	78700	4.00	4.06	
51 Isobutyl alcohol	41	5.408	5.396	0.012	94	63311	100.0	111.9	
52 Benzene	78	5.514	5.514	0.000	96	266847	4.00	4.04	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	93124	4.00	3.97	
55 n-Heptane	100	5.704	5.704	0.000	89	18702	4.00	4.06	
57 Trichloroethene	130	6.060	6.060	0.000	96	65983	4.00	4.05	
59 Methylcyclohexane	83	6.226	6.214	0.012	89	115945	4.00	4.06	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	94	64888	4.00	4.21	
62 Dibromomethane	93	6.368	6.368	0.000	97	36154	4.00	4.10	
63 1,4-Dioxane	88	6.368	6.368	0.000	50	16658	80.0	82.4	
64 Dichlorobromomethane	83	6.487	6.487	0.000	98	69672	4.00	3.94	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	93	87210	8.00	8.06	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	85891	4.00	3.98	
68 4-Methyl-2-pentanone (MIBK)	43	7.009	7.008	0.001	96	142264	8.00	8.35	
69 Toluene	91	7.175	7.174	0.001	98	287558	4.00	4.11	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	95	75054	4.00	3.87	
71 Ethyl methacrylate	69	7.424	7.423	0.001	90	76147	4.00	4.04	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	54456	4.00	4.06	
73 Tetrachloroethene	164	7.673	7.672	0.001	96	53688	4.00	4.13	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	92	104012	4.00	4.13	
76 2-Hexanone	43	7.744	7.744	0.000	96	101443	8.00	8.55	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	46627	4.00	3.91	
79 Ethylene Dibromide	107	8.028	8.028	0.000	99	56882	4.00	4.18	
81 Chlorobenzene	112	8.467	8.467	0.000	94	180176	4.00	4.17	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	93	52937	4.00	4.11	
83 Ethylbenzene	106	8.550	8.550	0.000	99	102648	4.00	4.15	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	99	127117	4.00	4.19	
85 o-Xylene	106	9.048	9.048	0.000	97	118889	4.00	4.14	
86 Styrene	104	9.060	9.060	0.000	93	163711	4.00	4.05	
87 Bromoform	173	9.250	9.250	0.000	95	27353	4.00	3.96	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	322063	4.00	4.25	
91 1,1,2,2-Tetrachloroethane	83	9.689	9.688	0.001	96	72912	4.00	4.19	
92 Bromobenzene	156	9.712	9.712	0.000	95	66835	4.00	4.19	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	84	27719	4.00	4.32	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	67	23866	4.00	4.34	
95 N-Propylbenzene	120	9.783	9.795	-0.012	99	77535	4.00	4.05	
96 2-Chlorotoluene	126	9.890	9.890	0.000	95	67157	4.00	4.21	
97 1,3,5-Trimethylbenzene	105	9.949	9.961	-0.012	93	236660	4.00	4.12	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	66737	4.00	4.16	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	215065	4.00	4.20	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	233509	4.00	4.14	
102 sec-Butylbenzene	105	10.495	10.495	0.000	95	288617	4.00	4.12	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	96	116560	4.00	4.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	230098	4.00	4.10	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	93	120183	4.00	4.12	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	185718	4.00	4.12	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	96	110083	4.00	4.13	
111 1,2-Dibromo-3-Chloropropane	157	11.859	11.859	0.001	74	9218	4.00	3.75	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	57245	4.00	4.10	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	94	21861	4.00	4.10	
115 Naphthalene	128	12.950	12.949	0.001	99	180071	4.00	4.13	
116 1,2,3-Trichlorobenzene	180	13.211	13.210	0.001	95	53228	4.00	4.23	
S 128 1,2-Dichloroethene, Total	96				0			8.07	
S 129 1,3-Dichloropropene, Total	75				0			7.86	
S 130 Xylenes, Total	106				0		8.00	8.32	
S 158 Total BTEX	1				0		20.0	20.6	
S 131 Trihalomethanes, Total	1				0		16.0	15.8	

Reagents:

VMAROLISTDW_00394	Amount Added:	3.20	Units: uL
VMRPRIMW_00438	Amount Added:	3.20	Units: uL
VMRGAS_00387	Amount Added:	3.20	Units: uL
vm50ss_00443	Amount Added:	3.20	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

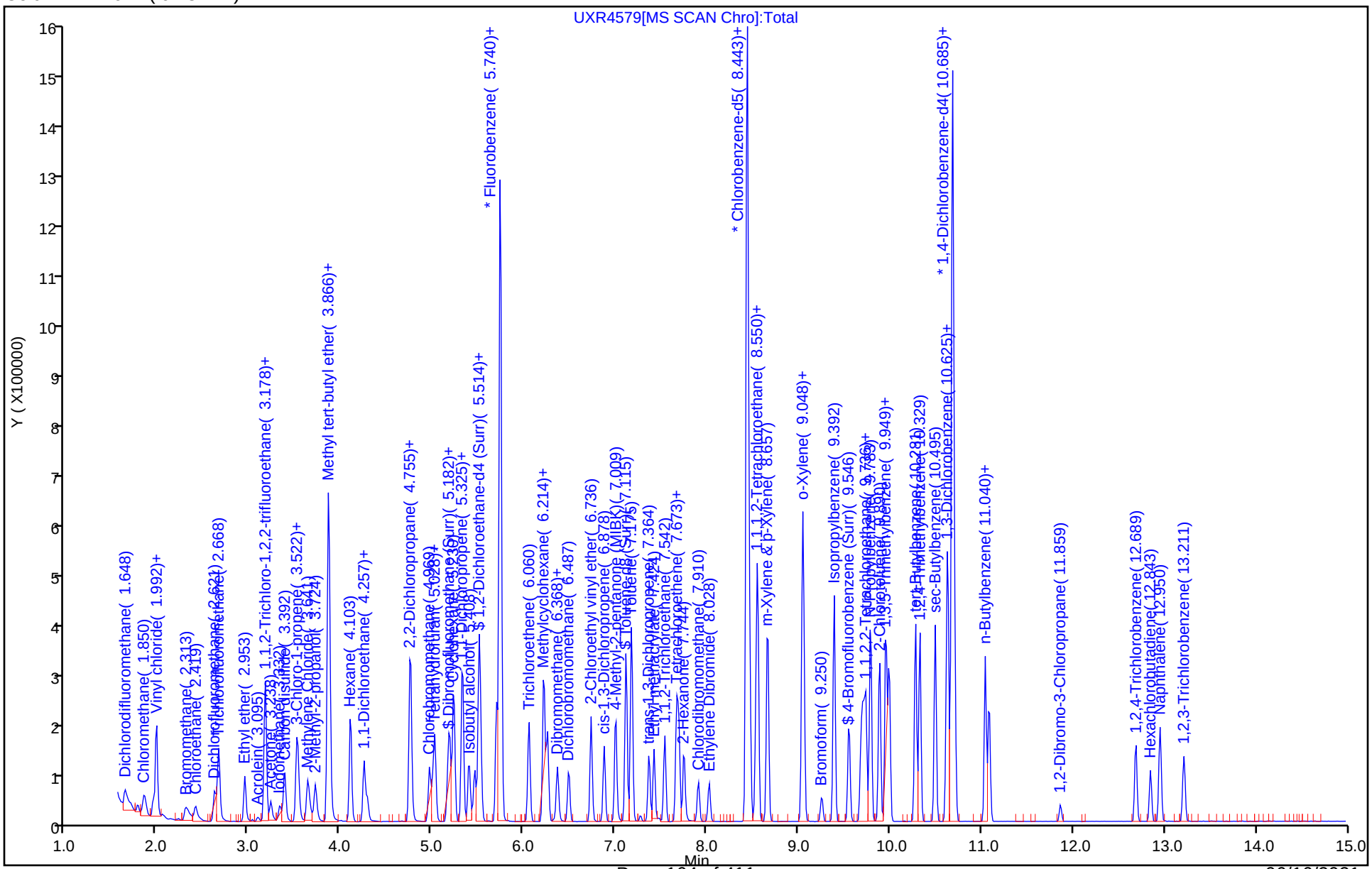
Report Date: 04-Jun-2021 11:41:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4579.D

Injection Date:	03-Jun-2021 20:03:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L3			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4580.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Jun-2021 20:27:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-007
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:41:07 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1155843	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	924219	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.001	97	419277	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	92	23762	2.00	1.99	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	35369	2.00	1.98	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	114936	2.00	2.02	
$ 7 4-Bromofluorobenzene (Surr)	95	9.558	9.546	0.012	85	40737	2.00	2.01	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	98	39993	2.00	2.00	
10 Chloromethane	50	1.862	1.862	0.000	98	36040	2.00	1.94	
11 Vinyl chloride	62	1.957	1.945	0.012	96	36756	2.00	1.98	
119 Butadiene	54	1.992	1.980	0.012	89	39710	2.00	2.03	
12 Bromomethane	94	2.312	2.312	0.000	90	18144	2.00	1.93	
13 Chloroethane	64	2.419	2.407	0.012	98	21797	2.00	1.89	
14 Dichlorofluoromethane	67	2.633	2.621	0.012	97	50335	2.00	1.97	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	52367	2.00	1.96	
16 Ethyl ether	59	2.965	2.953	0.012	90	25300	2.00	1.94	
18 Acrolein	56	3.107	3.095	0.012	96	4670	10.0	9.12	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	97	26068	2.00	1.95	
20 112TCTFE	151	3.178	3.178	0.000	92	20802	2.00	1.86	
21 Acetone	43	3.237	3.237	0.000	99	31667	4.00	3.83	
22 Iodomethane	142	3.332	3.332	0.000	98	29017	2.00	1.97	
23 Carbon disulfide	76	3.392	3.392	0.000	99	62881	2.00	1.91	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	92	15033	2.00	1.74	
26 Methyl acetate	43	3.546	3.534	0.012	97	50951	4.00	3.95	
27 Methylene Chloride	84	3.641	3.641	0.000	94	26120	2.00	1.88	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	92	34753	20.0	19.7	
29 Acrylonitrile	53	3.866	3.866	0.000	98	144555	20.0	20.3	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	75	86439	2.00	1.88	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	30067	2.00	1.98	
32 Hexane	86	4.115	4.103	0.012	91	8904	2.00	1.90	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	53980	2.00	1.92	
34 Vinyl acetate	43	4.293	4.293	0.000	96	29507	2.00	1.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	73	8736	2.00	1.91	
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	84	32050	2.00	1.95	
40 2-Butanone (MEK)	43	4.779	4.767	0.012	98	34725	4.00	3.96	
44 Chlorobromomethane	128	4.969	4.969	0.000	98	14175	2.00	1.92	
45 Tetrahydrofuran	42	5.004	5.004	0.000	97	22180	4.00	3.99	
46 Chloroform	83	5.028	5.028	0.000	92	53154	2.00	1.98	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	97	44494	2.00	1.87	
48 Cyclohexane	56	5.242	5.230	0.012	90	52202	2.00	1.83	
49 1,1-Dichloropropene	75	5.336	5.324	0.012	92	43150	2.00	1.91	
50 Carbon tetrachloride	117	5.336	5.336	0.000	86	35664	2.00	1.85	
51 Isobutyl alcohol	41	5.408	5.396	0.012	93	27322	50.0	48.4	
52 Benzene	78	5.514	5.514	0.000	96	129553	2.00	1.97	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	97	45564	2.00	1.95	
55 n-Heptane	100	5.704	5.704	0.000	86	8432	2.00	1.84	
57 Trichloroethene	130	6.060	6.060	0.000	96	31623	2.00	1.95	
59 Methylcyclohexane	83	6.226	6.214	0.012	88	51857	2.00	1.83	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	94	29228	2.00	1.91	
62 Dibromomethane	93	6.368	6.368	0.000	96	17040	2.00	1.95	
63 1,4-Dioxane	88	6.368	6.368	0.000	57	7726	40.0	38.5	
64 Dichlorobromomethane	83	6.487	6.487	0.000	98	32312	2.00	1.84	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	92	41051	4.00	3.82	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	94	37694	2.00	1.76	
68 4-Methyl-2-pentanone (MIBK)	43	7.008	7.008	0.000	95	65891	4.00	3.89	
69 Toluene	91	7.174	7.174	0.000	98	135539	2.00	1.94	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	32669	2.00	1.69	
71 Ethyl methacrylate	69	7.423	7.423	0.000	88	33835	2.00	1.80	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	92	26730	2.00	2.00	
73 Tetrachloroethene	164	7.672	7.672	0.000	96	25040	2.00	1.93	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	50378	2.00	2.01	
76 2-Hexanone	43	7.756	7.744	0.012	96	44543	4.00	3.76	
78 Chlorodibromomethane	129	7.910	7.910	0.000	87	21275	2.00	1.79	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	25524	2.00	1.88	
81 Chlorobenzene	112	8.467	8.467	0.000	93	82970	2.00	1.93	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	89	22983	2.00	1.79	
83 Ethylbenzene	106	8.562	8.550	0.012	99	47051	2.00	1.91	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	57077	2.00	1.89	
85 o-Xylene	106	9.048	9.048	0.000	97	54882	2.00	1.92	
86 Styrene	104	9.060	9.060	0.000	94	73134	2.00	1.82	
87 Bromoform	173	9.250	9.250	0.000	91	10559	2.00	1.88	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	141266	2.00	1.87	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.688	0.000	96	31888	2.00	1.87	
92 Bromobenzene	156	9.712	9.712	0.000	95	30195	2.00	1.93	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	89	12777	2.00	2.03	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	68	9456	2.00	1.76	
95 N-Propylbenzene	120	9.795	9.795	0.000	99	35558	2.00	1.90	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	30018	2.00	1.92	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	103627	2.00	1.84	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	30437	2.00	1.94	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	96962	2.00	1.93	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	102584	2.00	1.86	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	128181	2.00	1.87	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	96	54005	2.00	1.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	102450	2.00	1.87	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	94	57253	2.00	2.00	
108 n-Butylbenzene	91	11.040	11.040	0.000	97	80118	2.00	1.81	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	96	50438	2.00	1.93	
111 1,2-Dibromo-3-Chloropropane	157	11.870	11.859	0.012	74	4201	2.00	2.06	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	93	27122	2.00	1.98	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	94	9737	2.00	1.86	
115 Naphthalene	128	12.950	12.949	0.001	99	77254	2.00	1.81	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	95	24211	2.00	1.96	
S 128 1,2-Dichloroethene, Total	96				0			3.93	
S 129 1,3-Dichloropropene, Total	75				0			3.45	
S 130 Xylenes, Total	106				0		4.00	3.80	
S 158 Total BTEX	1				0		10.0	9.62	
S 131 Trihalomethanes, Total	1				0		8.00	7.48	

Reagents:

VMAROLISTDW_00394	Amount Added:	1.60	Units: uL
VMRPRIMW_00438	Amount Added:	1.60	Units: uL
VMRGAS_00387	Amount Added:	1.60	Units: uL
vm50ss_00443	Amount Added:	1.60	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

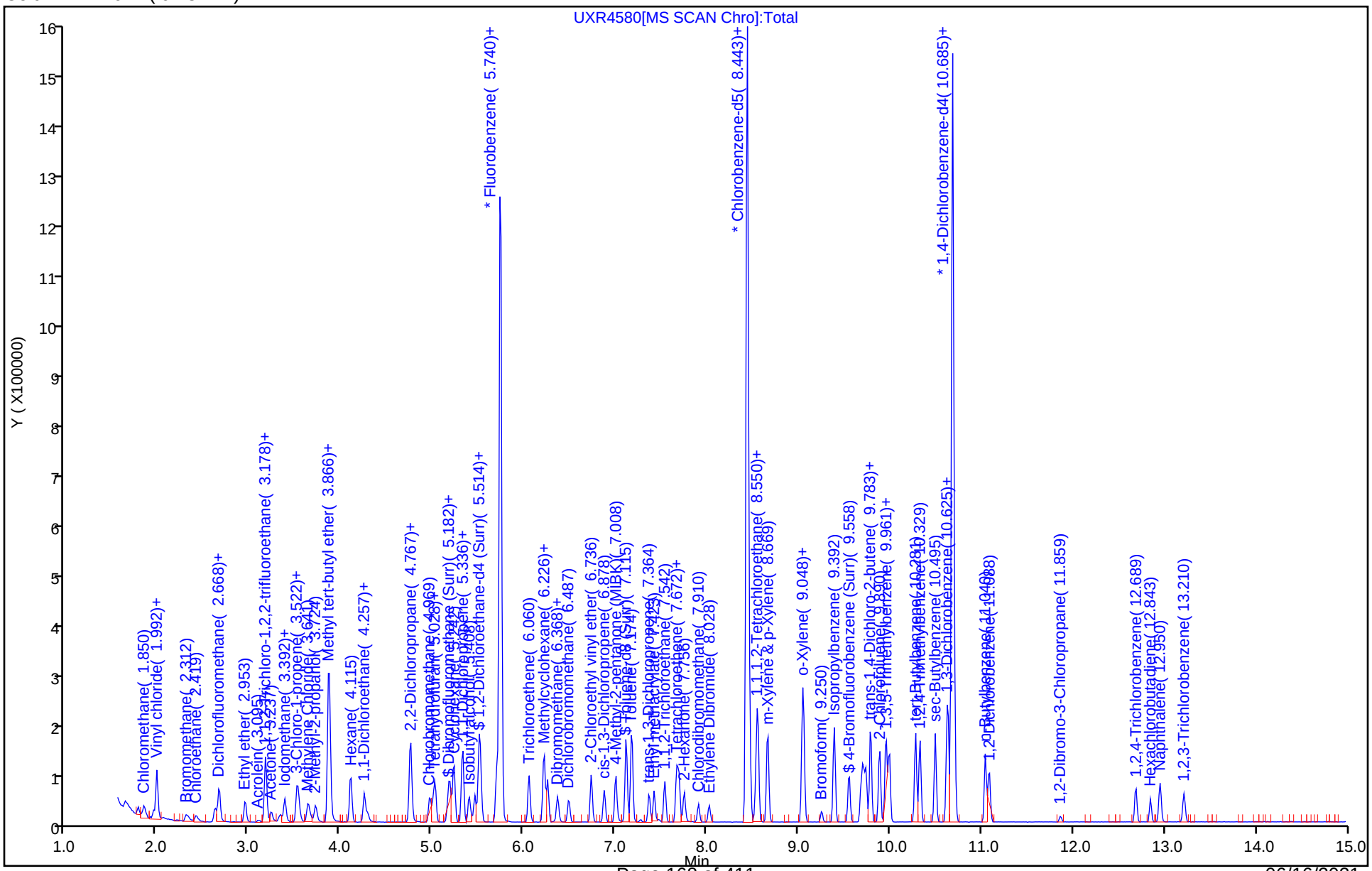
Report Date: 04-Jun-2021 11:41:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4580.D

Injection Date:	03-Jun-2021 20:27:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4581.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Jun-2021 20:50:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-008
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 11:41:11 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1128779	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	919235	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.001	97	430239	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	90	10423	1.00	0.8935	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	16801	1.00	0.9643	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	94	54101	1.00	0.9564	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	90	19447	1.00	0.9638	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	97	16439	1.00	0.8424	
10 Chloromethane	50	1.862	1.862	0.000	96	17905	1.00	0.9874	
11 Vinyl chloride	62	1.957	1.945	0.012	96	17492	1.00	0.9638	
119 Butadiene	54	1.992	1.980	0.012	90	16871	1.00	0.8845	
12 Bromomethane	94	2.324	2.312	0.012	82	9565	1.00	1.04	
13 Chloroethane	64	2.419	2.407	0.012	97	10601	1.00	0.9396	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	96	23844	1.00	0.9575	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	23412	1.00	0.8972	
16 Ethyl ether	59	2.953	2.953	0.000	87	12369	1.00	0.9719	
18 Acrolein	56	3.095	3.095	0.000	97	2074	5.00	4.15	
20 112TCTFE	151	3.178	3.178	0.000	69	9003	1.00	0.8262	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	96	12388	1.00	0.9503	
21 Acetone	43	3.237	3.237	0.000	100	20767	2.00	2.24	
22 Iodomethane	142	3.332	3.332	0.000	96	13437	1.00	0.9354	
23 Carbon disulfide	76	3.392	3.392	0.000	99	29038	1.00	0.9020	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	89	7009	1.00	0.8328	
26 Methyl acetate	43	3.546	3.534	0.012	97	24325	2.00	1.93	
27 Methylene Chloride	84	3.641	3.641	0.000	93	13751	1.00	1.02	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	94	17235	10.0	10.0	
29 Acrylonitrile	53	3.866	3.866	0.000	98	67484	10.0	9.70	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	78	41741	1.00	0.9318	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	14411	1.00	0.9740	
32 Hexane	86	4.103	4.103	0.000	92	3688	1.00	0.8064	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	95	27924	1.00	1.01	
34 Vinyl acetate	43	4.293	4.293	0.000	95	11253	1.00	1.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	88	3744	1.00	0.8373	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	82	16609	1.00	1.03	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	98	17896	2.00	2.09	
44 Chlorobromomethane	128	4.969	4.969	0.000	94	6937	1.00	0.9622	
45 Tetrahydrofuran	42	5.004	5.004	0.000	94	10026	2.00	1.85	
46 Chloroform	83	5.028	5.028	0.000	93	25838	1.00	0.9852	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	96	21087	1.00	0.9059	
48 Cyclohexane	56	5.230	5.230	0.000	90	23254	1.00	0.8332	
49 1,1-Dichloropropene	75	5.325	5.324	0.001	91	20273	1.00	0.9180	
50 Carbon tetrachloride	117	5.336	5.336	0.000	86	15738	1.00	0.8365	
51 Isobutyl alcohol	41	5.408	5.396	0.012	93	12512	25.0	22.3	
52 Benzene	78	5.514	5.514	0.000	96	63329	1.00	0.9878	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	97	23101	1.00	1.01	
55 n-Heptane	100	5.704	5.704	0.000	82	3228	1.00	0.7225	
57 Trichloroethene	130	6.060	6.060	0.000	95	15383	1.00	0.9736	
59 Methylcyclohexane	83	6.214	6.214	0.000	84	22854	1.00	0.8245	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	92	13699	1.00	0.9175	
62 Dibromomethane	93	6.368	6.368	0.000	96	7992	1.00	0.9341	
63 1,4-Dioxane	88	6.368	6.368	0.000	47	4071	20.0	20.8	
64 Dichlorobromomethane	83	6.487	6.487	0.000	97	15058	1.00	0.8790	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	94	18473	2.00	1.76	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	93	17136	1.00	0.8196	
68 4-Methyl-2-pentanone (MIBK)	43	7.008	7.008	0.000	94	29546	2.00	1.79	
69 Toluene	91	7.174	7.174	0.000	98	66611	1.00	0.9593	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	15810	1.00	0.8227	
71 Ethyl methacrylate	69	7.424	7.423	0.001	90	14887	1.00	0.7963	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	88	12913	1.00	0.9706	
73 Tetrachloroethene	164	7.673	7.672	0.001	96	12685	1.00	0.9841	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	23743	1.00	0.9509	
76 2-Hexanone	43	7.756	7.744	0.012	95	20133	2.00	1.71	
78 Chlorodibromomethane	129	7.910	7.910	0.000	87	9565	1.00	0.8080	
79 Ethylene Dibromide	107	8.028	8.028	0.000	96	12578	1.00	0.9321	
81 Chlorobenzene	112	8.467	8.467	0.000	93	42568	1.00	0.99	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	87	11447	1.00	0.8961	
83 Ethylbenzene	106	8.550	8.550	0.000	98	23292	1.00	0.9496	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	28190	1.00	0.9361	
85 o-Xylene	106	9.048	9.048	0.000	95	27609	1.00	0.9694	
86 Styrene	104	9.060	9.060	0.000	94	34159	1.00	0.8526	
87 Bromoform	173	9.250	9.250	0.000	92	4567	1.00	1.13	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	68278	1.00	0.9080	
91 1,1,2,2-Tetrachloroethane	83	9.677	9.688	-0.011	95	16442	1.00	0.9399	
92 Bromobenzene	156	9.712	9.712	0.000	94	15021	1.00	0.9371	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	84	5626	1.00	0.8721	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	66	4416	1.00	0.7987	
95 N-Propylbenzene	120	9.783	9.795	-0.012	98	17020	1.00	0.8841	
96 2-Chlorotoluene	126	9.890	9.890	0.000	95	15178	1.00	0.9479	
97 1,3,5-Trimethylbenzene	105	9.949	9.961	-0.012	93	51629	1.00	0.8940	
98 4-Chlorotoluene	126	9.997	9.997	0.000	99	15238	1.00	0.9444	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	46334	1.00	0.8996	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	49937	1.00	0.8810	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	62704	1.00	0.8905	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	96	27350	1.00	0.9627	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	96	48356	1.00	0.8581	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	93	28633	1.00	0.9760	
108 n-Butylbenzene	91	11.040	11.040	0.000	97	36289	1.00	0.8004	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	95	26316	1.00	0.9814	
111 1,2-Dibromo-3-Chloropropane	157	11.859	11.859	0.001	72	1319	1.00	1.04	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	92	12299	1.00	0.8757	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	91	4465	1.00	0.8329	
115 Naphthalene	128	12.950	12.949	0.001	100	36867	1.00	0.8420	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	94	12547	1.00	0.99	
S 128 1,2-Dichloroethene, Total	96				0			2.01	
S 129 1,3-Dichloropropene, Total	75				0			1.64	
S 130 Xylenes, Total	106				0		2.00	1.91	
S 158 Total BTEX	1				0		5.00	4.80	
S 131 Trihalomethanes, Total	1				0		4.00	3.80	

Reagents:

VMRPRIMW_00438	Amount Added:	0.80	Units: uL
VMAROLISTDW_00394	Amount Added:	0.80	Units: uL
VMRGAS_00387	Amount Added:	0.80	Units: uL
vm50ss_00443	Amount Added:	0.80	Units: uL
VM50IS_00087	Amount Added:	2.00	Units: uL

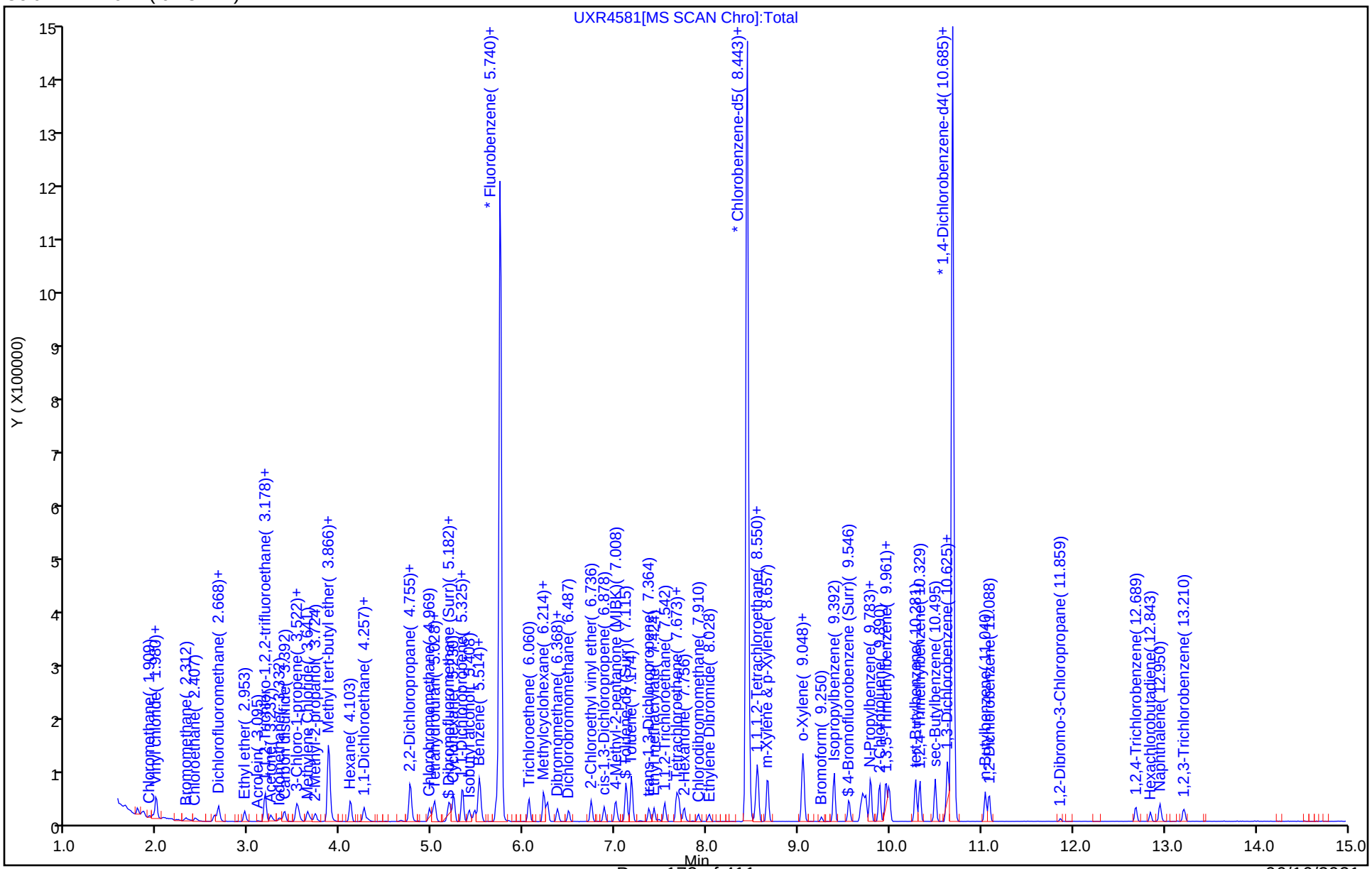
Report Date: 04-Jun-2021 11:41:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4581.D

Injection Date:	03-Jun-2021 20:50:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

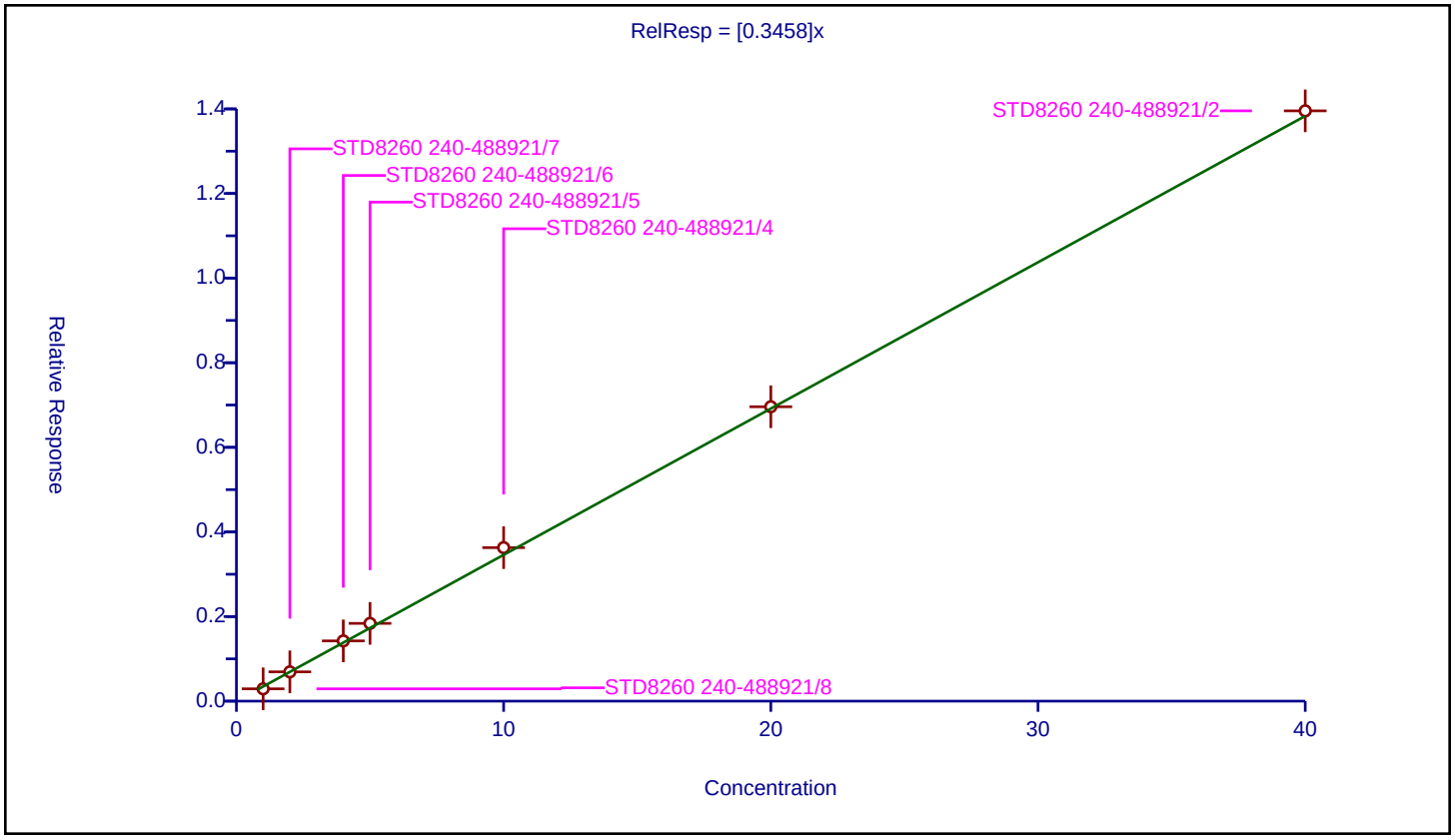
Curve Coefficients

Intercept:	0
Slope:	0.3458

Error Coefficients

Standard Error:	384000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.29127	20.0	1128779.0	0.29127	Y
2	STD8260 240-488921/7	2.0	0.692014	20.0	1155843.0	0.346007	Y
3	STD8260 240-488921/6	4.0	1.423582	20.0	1163839.0	0.355895	Y
4	STD8260 240-488921/5	5.0	1.838011	20.0	1132931.0	0.367602	Y
5	STD8260 240-488921/4	10.0	3.628783	20.0	1154679.0	0.362878	Y
6	STD8260 240-488921/3	20.0	6.959199	20.0	1187654.0	0.34796	Y
7	STD8260 240-488921/2	40.0	13.954079	20.0	1154590.0	0.348852	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

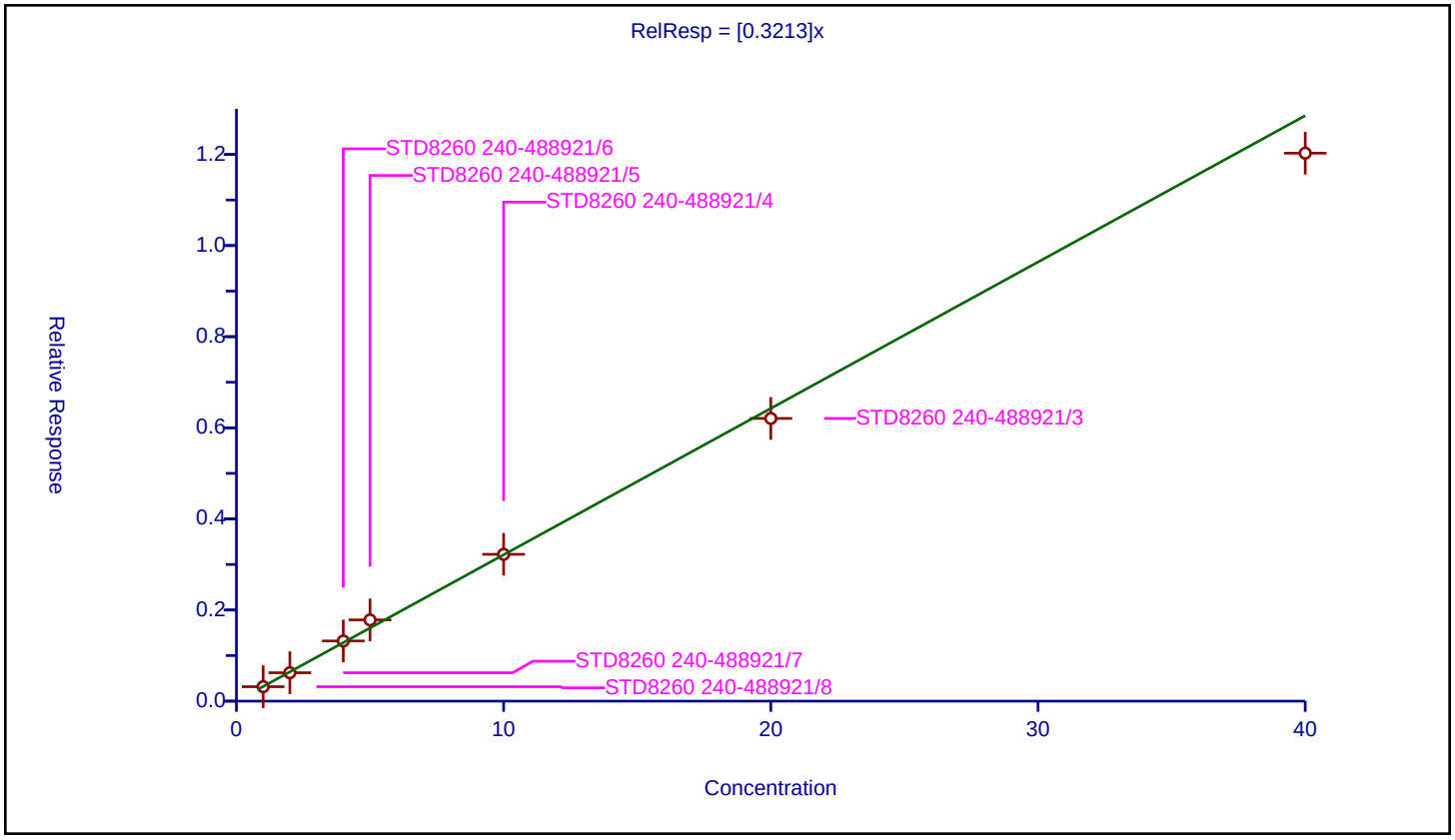
Curve Coefficients

Intercept:	0
Slope:	0.3213

Error Coefficients

Standard Error:	334000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.317245	20.0	1128779.0	0.317245	Y
2	STD8260 240-488921/7	2.0	0.623614	20.0	1155843.0	0.311807	Y
3	STD8260 240-488921/6	4.0	1.320492	20.0	1163839.0	0.330123	Y
4	STD8260 240-488921/5	5.0	1.782898	20.0	1132931.0	0.35658	Y
5	STD8260 240-488921/4	10.0	3.222558	20.0	1154679.0	0.322256	Y
6	STD8260 240-488921/3	20.0	6.205663	20.0	1187654.0	0.310283	Y
7	STD8260 240-488921/2	40.0	12.028356	20.0	1154590.0	0.300709	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

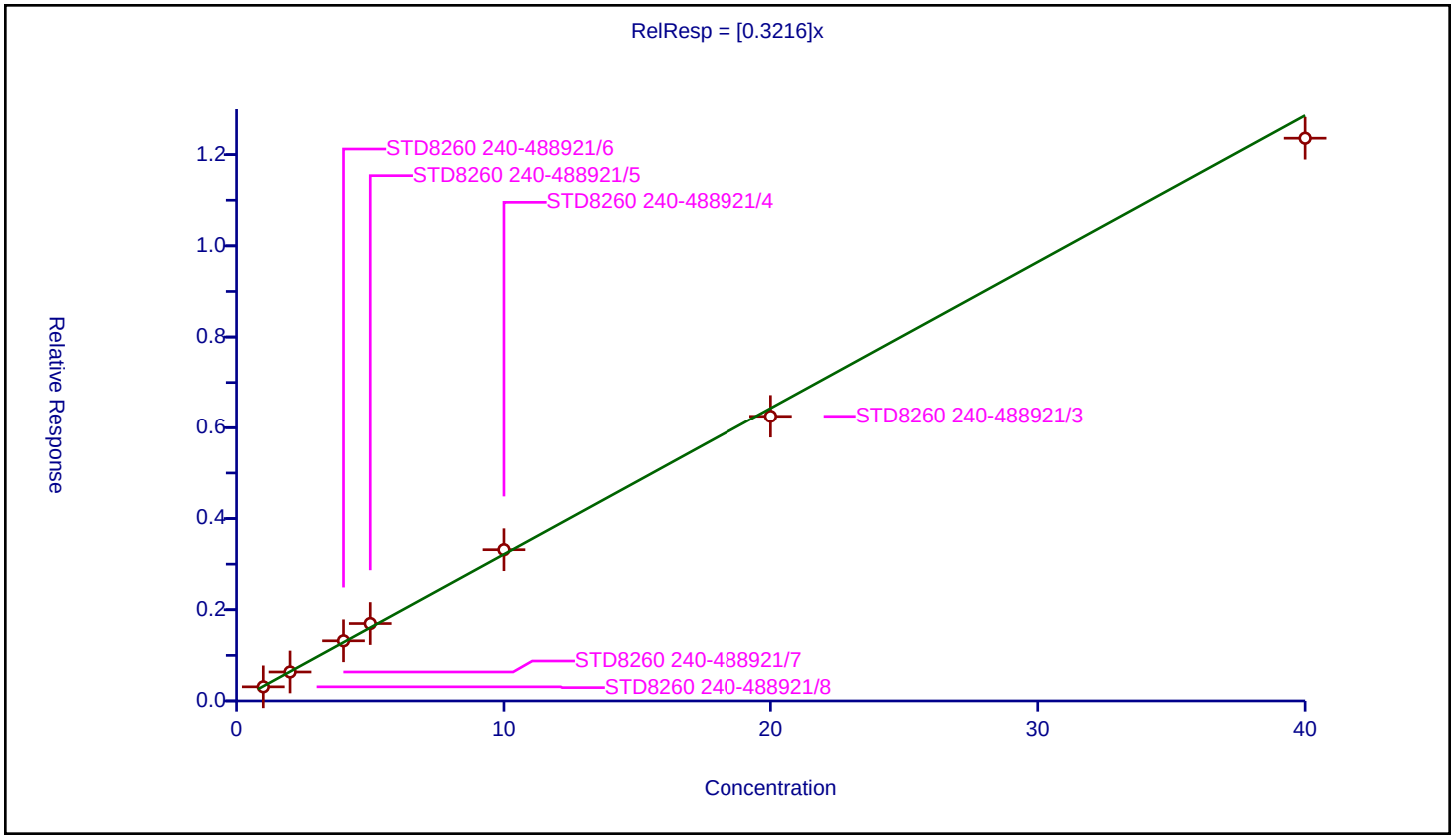
Curve Coefficients

Intercept:	0
Slope:	0.3216

Error Coefficients

Standard Error:	342000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.309928	20.0	1128779.0	0.309928	Y
2	STD8260 240-488921/7	2.0	0.636003	20.0	1155843.0	0.318002	Y
3	STD8260 240-488921/6	4.0	1.320062	20.0	1163839.0	0.330016	Y
4	STD8260 240-488921/5	5.0	1.698126	20.0	1132931.0	0.339625	Y
5	STD8260 240-488921/4	10.0	3.316749	20.0	1154679.0	0.331675	Y
6	STD8260 240-488921/3	20.0	6.253269	20.0	1187654.0	0.312663	Y
7	STD8260 240-488921/2	40.0	12.360561	20.0	1154590.0	0.309014	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

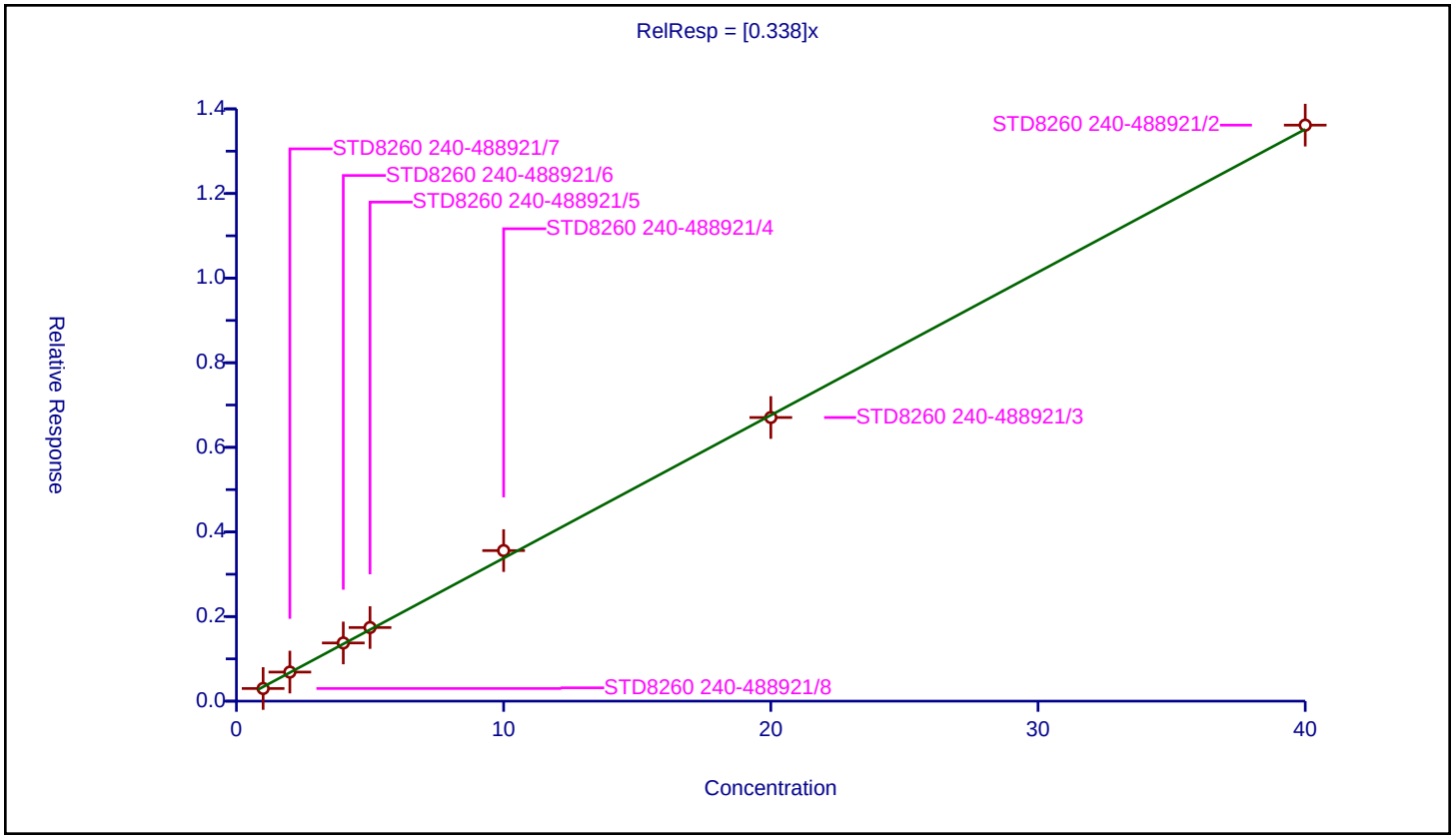
Curve Coefficients

Intercept:	0
Slope:	0.338

Error Coefficients

Standard Error:	373000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.298925	20.0	1128779.0	0.298925	Y
2	STD8260 240-488921/7	2.0	0.687118	20.0	1155843.0	0.343559	Y
3	STD8260 240-488921/6	4.0	1.375121	20.0	1163839.0	0.34378	Y
4	STD8260 240-488921/5	5.0	1.739876	20.0	1132931.0	0.347975	Y
5	STD8260 240-488921/4	10.0	3.558859	20.0	1154679.0	0.355886	Y
6	STD8260 240-488921/3	20.0	6.704613	20.0	1187654.0	0.335231	Y
7	STD8260 240-488921/2	40.0	13.616002	20.0	1154590.0	0.3404	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

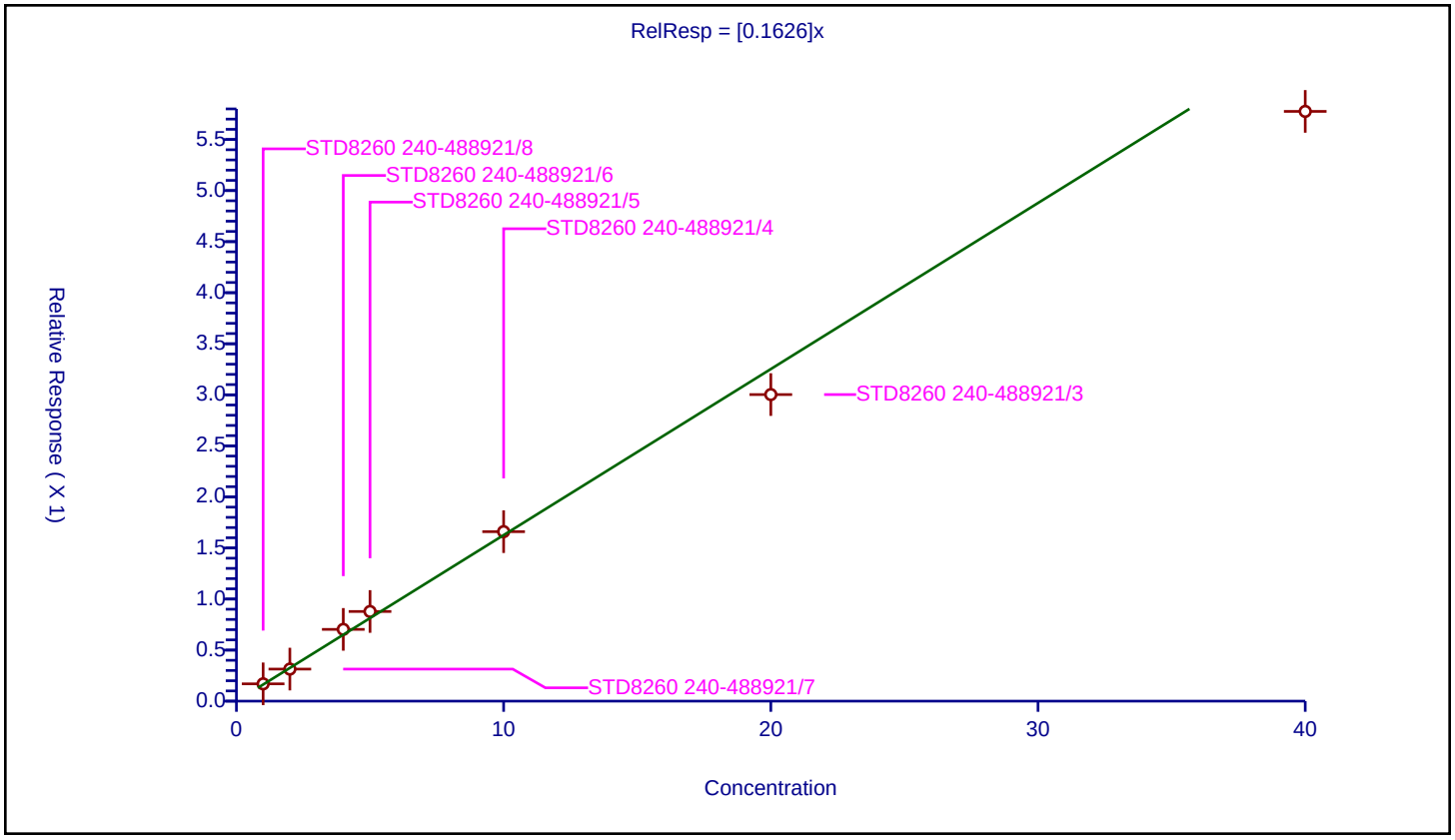
Curve Coefficients

Intercept:	0
Slope:	0.1626

Error Coefficients

Standard Error:	162000
Relative Standard Error:	7.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.169475	20.0	1128779.0	0.169475	Y
2	STD8260 240-488921/7	2.0	0.313953	20.0	1155843.0	0.156976	Y
3	STD8260 240-488921/6	4.0	0.702846	20.0	1163839.0	0.175712	Y
4	STD8260 240-488921/5	5.0	0.878076	20.0	1132931.0	0.175615	Y
5	STD8260 240-488921/4	10.0	1.659907	20.0	1154679.0	0.165991	Y
6	STD8260 240-488921/3	20.0	3.00239	20.0	1187654.0	0.150119	Y
7	STD8260 240-488921/2	40.0	5.775591	20.0	1154590.0	0.14439	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

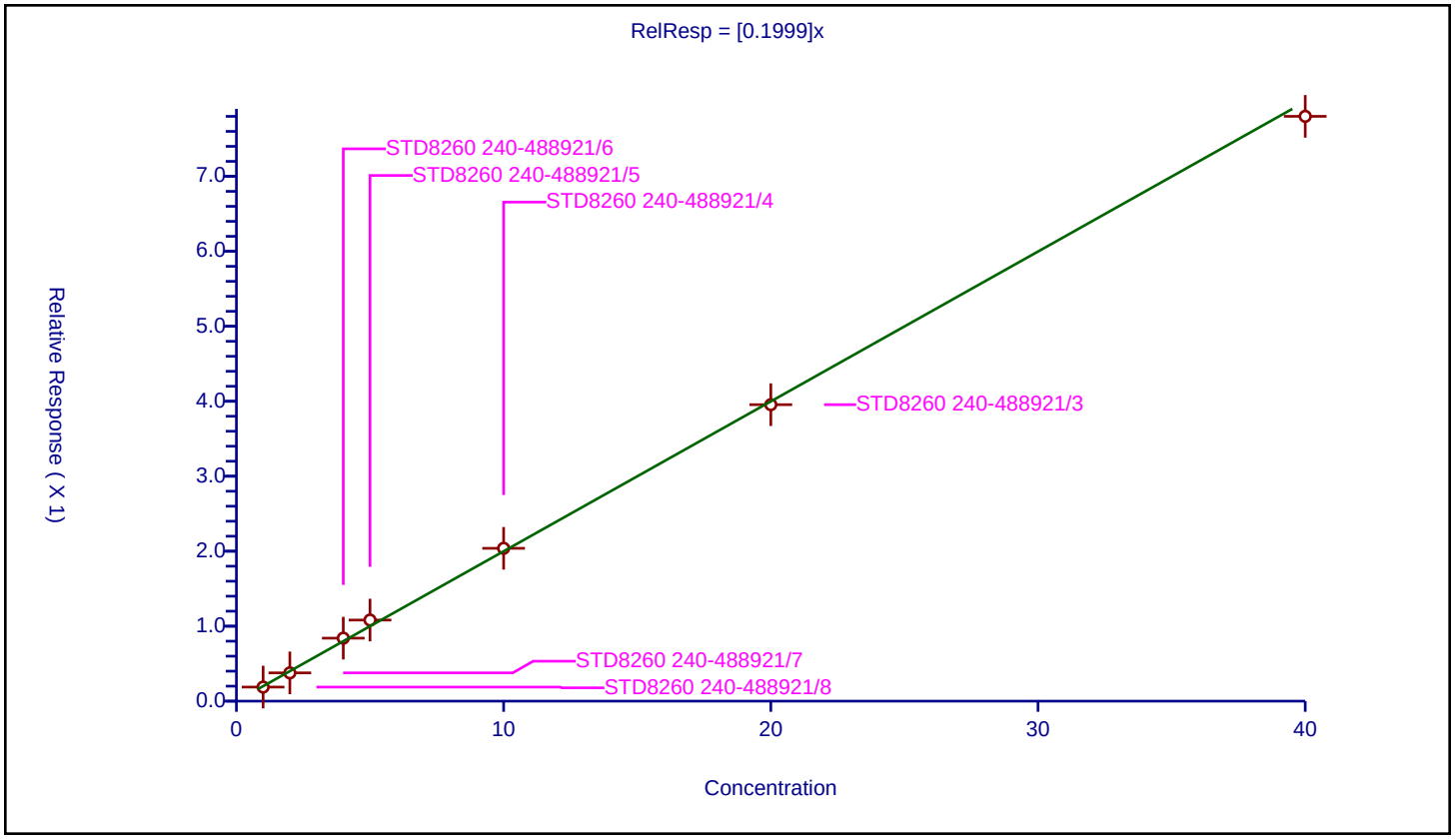
Curve Coefficients

Intercept:	0
Slope:	0.1999

Error Coefficients

Standard Error:	215000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.187831	20.0	1128779.0	0.187831	Y
2	STD8260 240-488921/7	2.0	0.377162	20.0	1155843.0	0.188581	Y
3	STD8260 240-488921/6	4.0	0.840065	20.0	1163839.0	0.210016	Y
4	STD8260 240-488921/5	5.0	1.081549	20.0	1132931.0	0.21631	Y
5	STD8260 240-488921/4	10.0	2.038627	20.0	1154679.0	0.203863	Y
6	STD8260 240-488921/3	20.0	3.954704	20.0	1187654.0	0.197735	Y
7	STD8260 240-488921/2	40.0	7.800587	20.0	1154590.0	0.195015	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

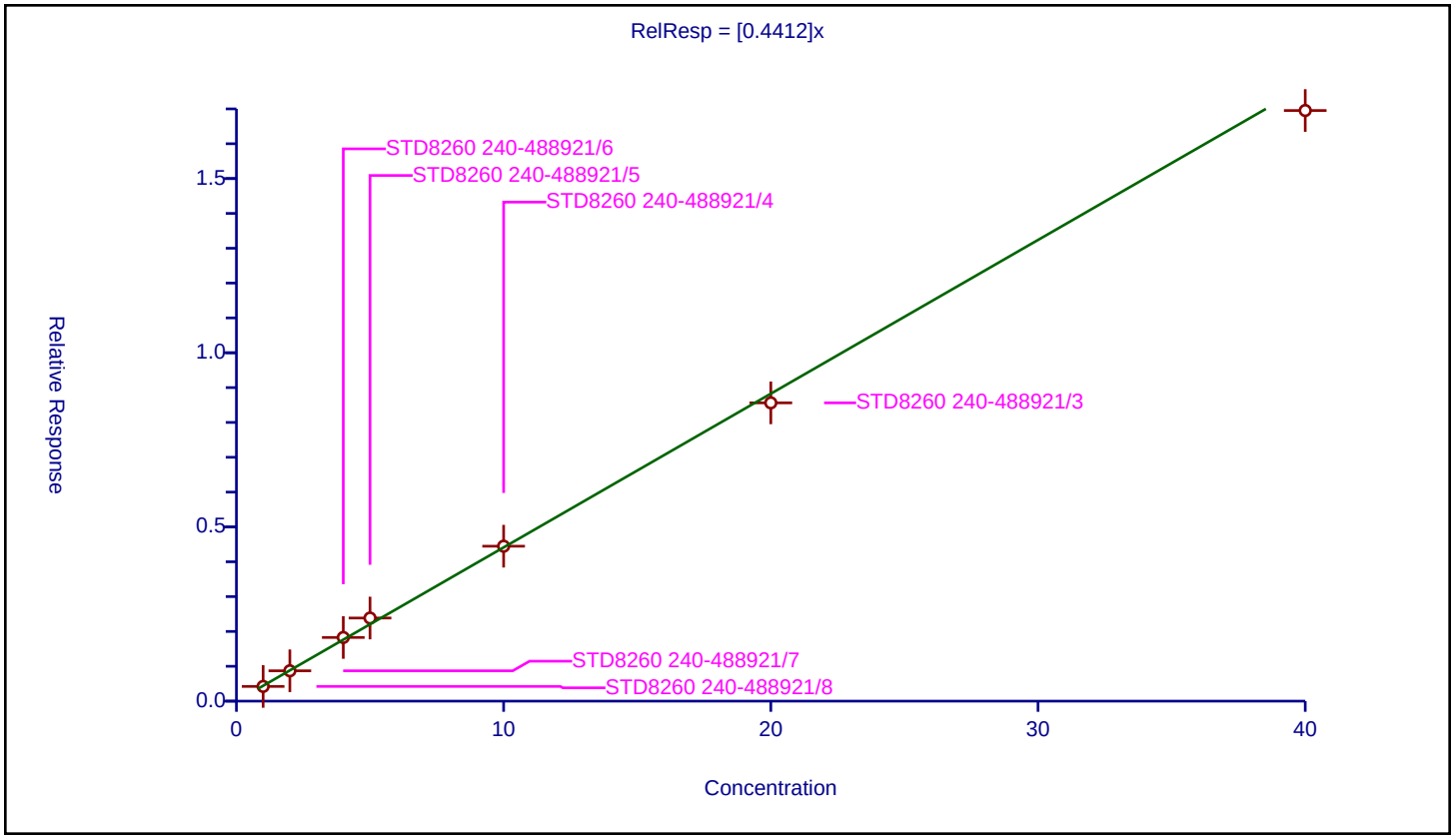
Curve Coefficients

Intercept:	0
Slope:	0.4412

Error Coefficients

Standard Error:	468000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.422474	20.0	1128779.0	0.422474	Y
2	STD8260 240-488921/7	2.0	0.870966	20.0	1155843.0	0.435483	Y
3	STD8260 240-488921/6	4.0	1.82783	20.0	1163839.0	0.456958	Y
4	STD8260 240-488921/5	5.0	2.385547	20.0	1132931.0	0.477109	Y
5	STD8260 240-488921/4	10.0	4.44773	20.0	1154679.0	0.444773	Y
6	STD8260 240-488921/3	20.0	8.562342	20.0	1187654.0	0.428117	Y
7	STD8260 240-488921/2	40.0	16.952996	20.0	1154590.0	0.423825	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

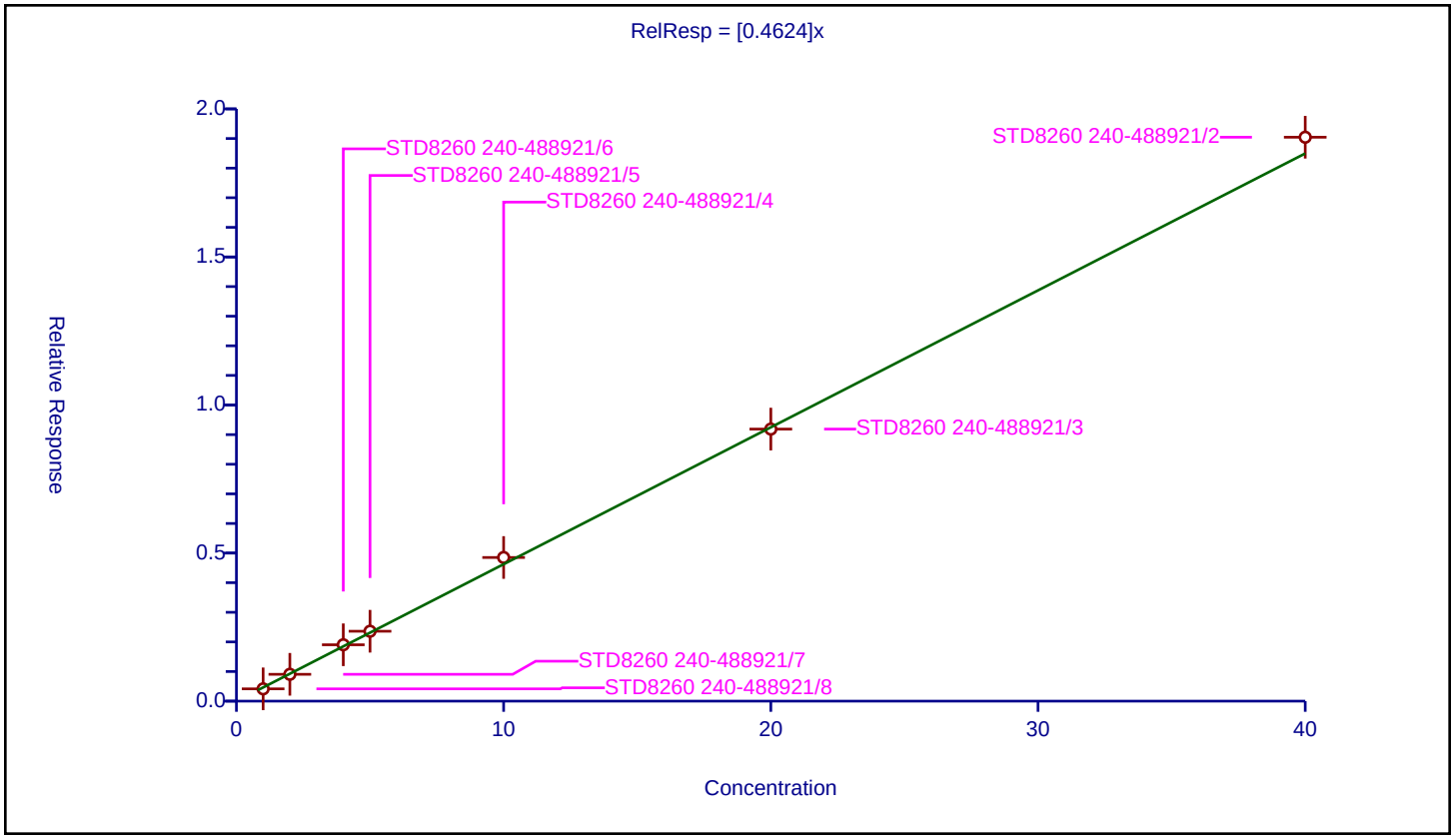
Curve Coefficients

Intercept:	0
Slope:	0.4624

Error Coefficients

Standard Error:	519000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.41482	20.0	1128779.0	0.41482	Y
2	STD8260 240-488921/7	2.0	0.906127	20.0	1155843.0	0.453063	Y
3	STD8260 240-488921/6	4.0	1.903906	20.0	1163839.0	0.475976	Y
4	STD8260 240-488921/5	5.0	2.360638	20.0	1132931.0	0.472128	Y
5	STD8260 240-488921/4	10.0	4.85134	20.0	1154679.0	0.485134	Y
6	STD8260 240-488921/3	20.0	9.186969	20.0	1187654.0	0.459348	Y
7	STD8260 240-488921/2	40.0	19.04276	20.0	1154590.0	0.476069	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

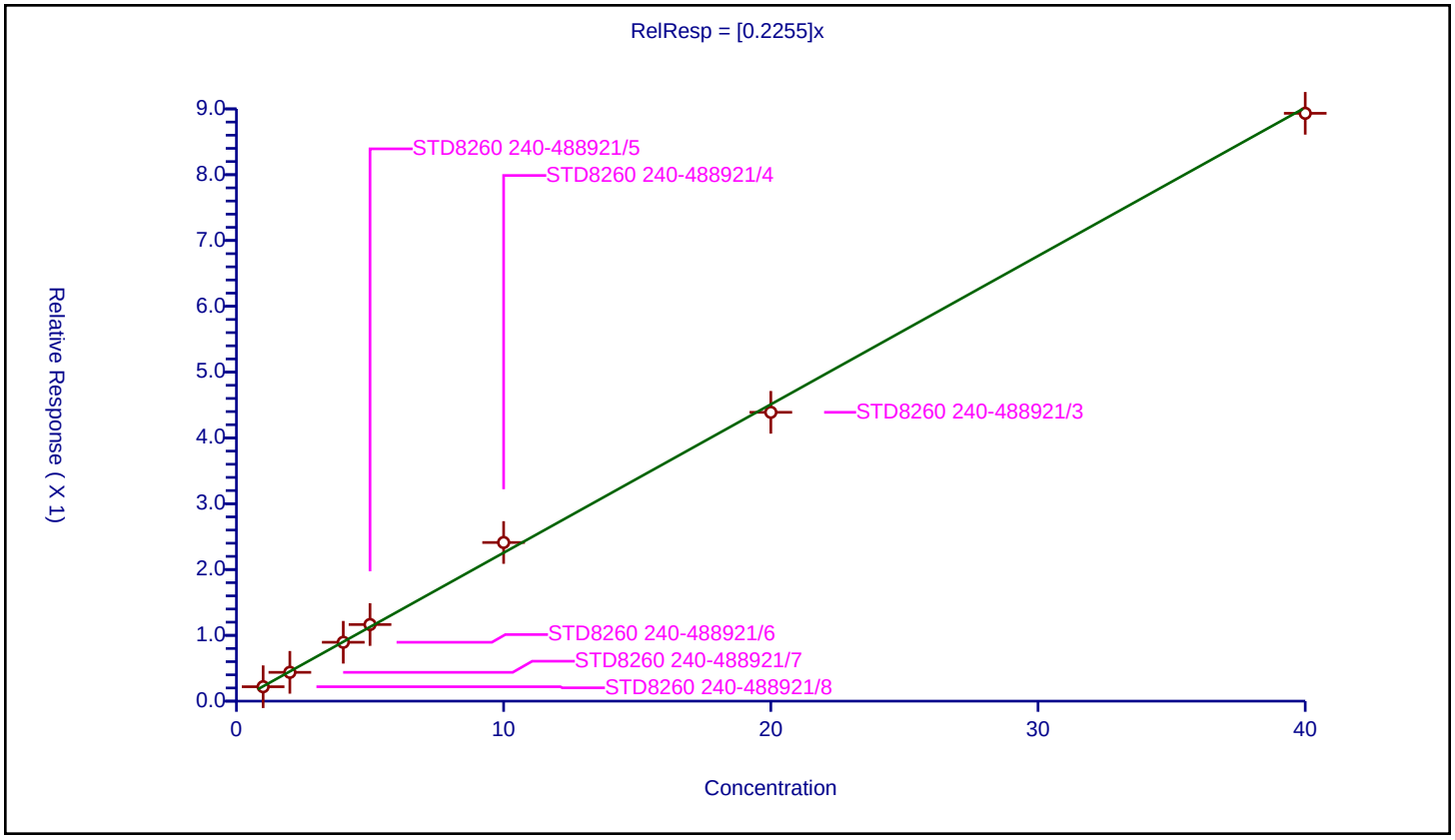
Curve Coefficients

Intercept:	0
Slope:	0.2255

Error Coefficients

Standard Error:	245000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.219157	20.0	1128779.0	0.219157	Y
2	STD8260 240-488921/7	2.0	0.437776	20.0	1155843.0	0.218888	Y
3	STD8260 240-488921/6	4.0	0.894591	20.0	1163839.0	0.223648	Y
4	STD8260 240-488921/5	5.0	1.164166	20.0	1132931.0	0.232833	Y
5	STD8260 240-488921/4	10.0	2.410938	20.0	1154679.0	0.241094	Y
6	STD8260 240-488921/3	20.0	4.389157	20.0	1187654.0	0.219458	Y
7	STD8260 240-488921/2	40.0	8.932643	20.0	1154590.0	0.223316	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

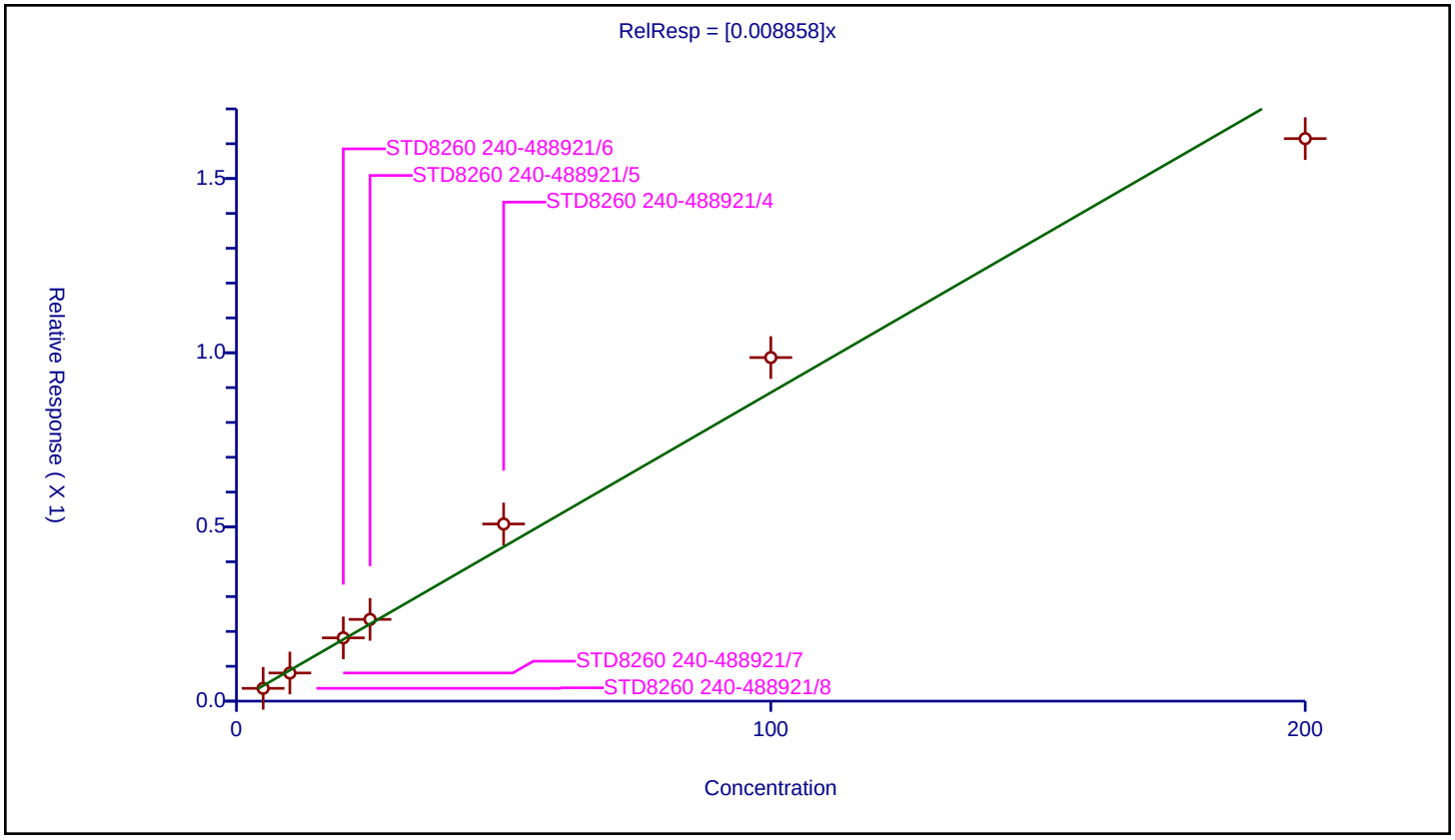
Curve Coefficients

Intercept:	0
Slope:	0.008858

Error Coefficients

Standard Error:	47100
Relative Standard Error:	11.8
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	5.0	0.036748	20.0	1128779.0	0.00735	Y
2	STD8260 240-488921/7	10.0	0.080807	20.0	1155843.0	0.008081	Y
3	STD8260 240-488921/6	20.0	0.181589	20.0	1163839.0	0.009079	Y
4	STD8260 240-488921/5	25.0	0.234701	20.0	1132931.0	0.009388	Y
5	STD8260 240-488921/4	50.0	0.508505	20.0	1154679.0	0.01017	Y
6	STD8260 240-488921/3	100.0	0.986247	20.0	1187654.0	0.009862	Y
7	STD8260 240-488921/2	200.0	1.614686	20.0	1154590.0	0.008073	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

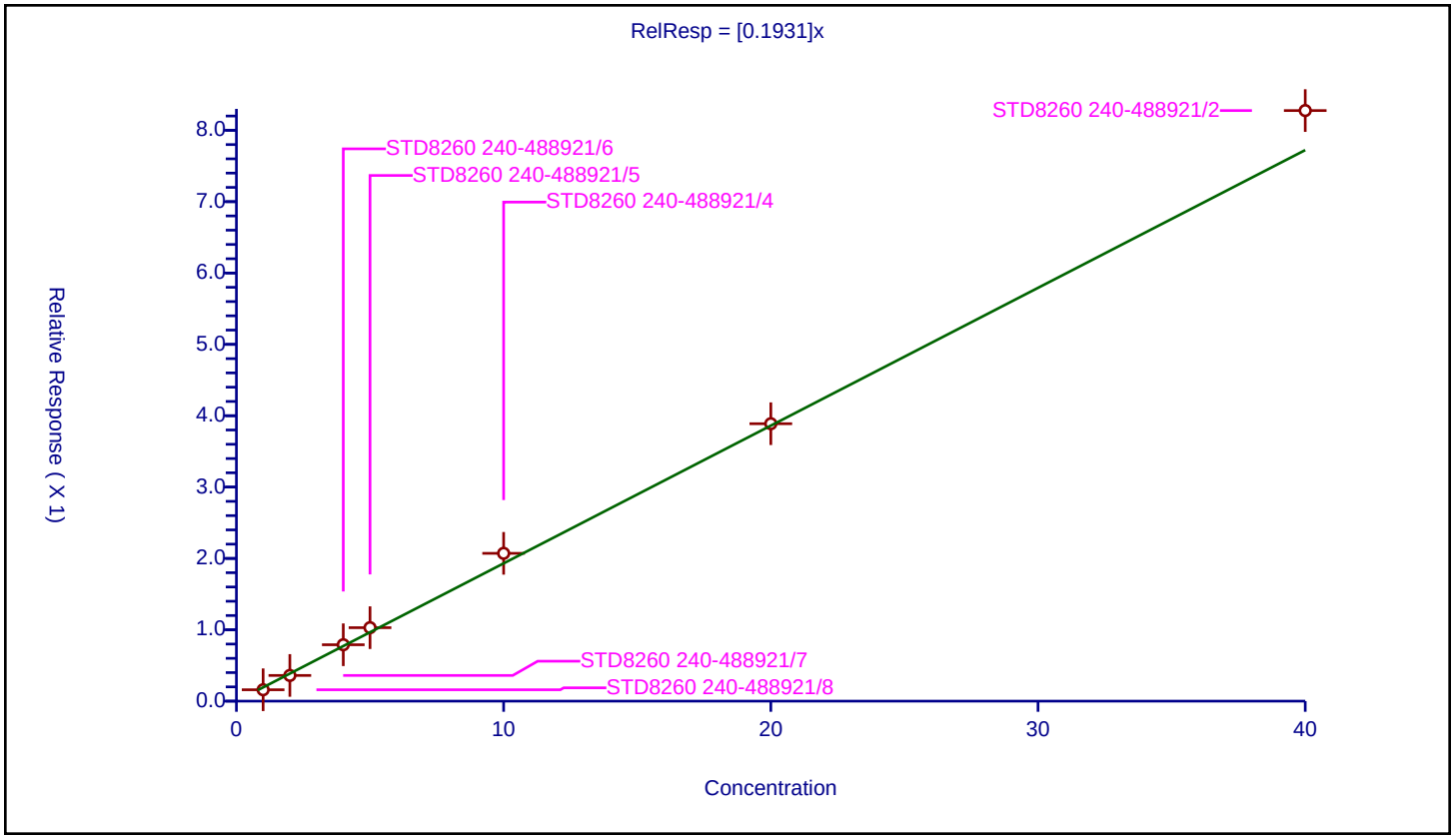
Curve Coefficients

Intercept:	0
Slope:	0.1931

Error Coefficients

Standard Error:	224000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.159517	20.0	1128779.0	0.159517	Y
2	STD8260 240-488921/7	2.0	0.359945	20.0	1155843.0	0.179973	Y
3	STD8260 240-488921/6	4.0	0.790539	20.0	1163839.0	0.197635	Y
4	STD8260 240-488921/5	5.0	1.029489	20.0	1132931.0	0.205898	Y
5	STD8260 240-488921/4	10.0	2.071225	20.0	1154679.0	0.207122	Y
6	STD8260 240-488921/3	20.0	3.887883	20.0	1187654.0	0.194394	Y
7	STD8260 240-488921/2	40.0	8.276496	20.0	1154590.0	0.206912	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

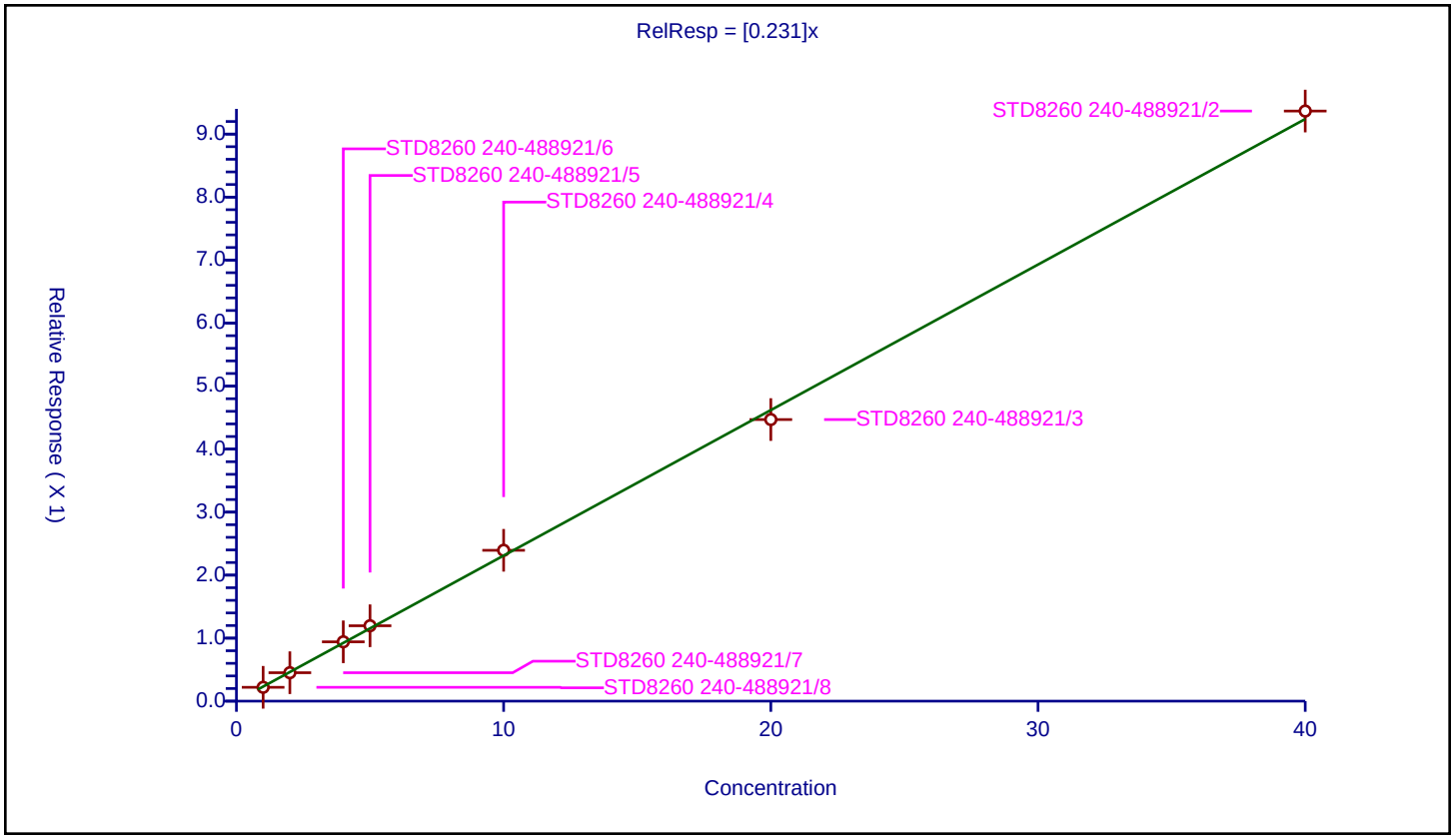
Curve Coefficients

Intercept:	0
Slope:	0.231

Error Coefficients

Standard Error:	255000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.219494	20.0	1128779.0	0.219494	Y
2	STD8260 240-488921/7	2.0	0.451065	20.0	1155843.0	0.225532	Y
3	STD8260 240-488921/6	4.0	0.941505	20.0	1163839.0	0.235376	Y
4	STD8260 240-488921/5	5.0	1.196737	20.0	1132931.0	0.239347	Y
5	STD8260 240-488921/4	10.0	2.394103	20.0	1154679.0	0.23941	Y
6	STD8260 240-488921/3	20.0	4.46945	20.0	1187654.0	0.223472	Y
7	STD8260 240-488921/2	40.0	9.365853	20.0	1154590.0	0.234146	Y



Calibration / Acetone

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

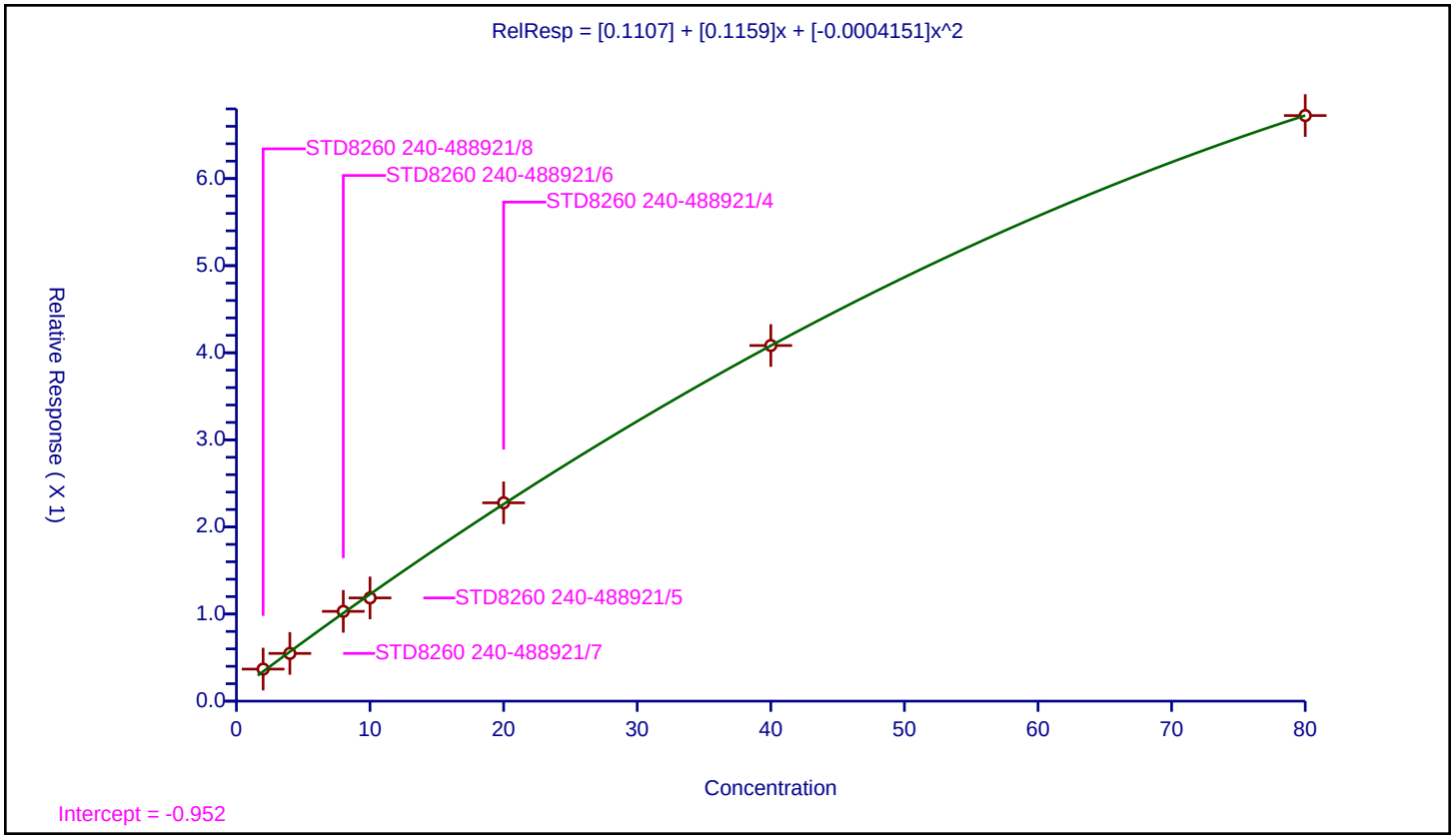
Curve Coefficients

Intercept:	0.1107
Slope:	0.1159
Second Order:	-0.0004151

Error Coefficients

Standard Error:	243000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.367955	20.0	1128779.0	0.183978	Y
2	STD8260 240-488921/7	4.0	0.547946	20.0	1155843.0	0.136987	Y
3	STD8260 240-488921/6	8.0	1.030761	20.0	1163839.0	0.128845	Y
4	STD8260 240-488921/5	10.0	1.18505	20.0	1132931.0	0.118505	Y
5	STD8260 240-488921/4	20.0	2.277256	20.0	1154679.0	0.113863	Y
6	STD8260 240-488921/3	40.0	4.08326	20.0	1187654.0	0.102081	Y
7	STD8260 240-488921/2	80.0	6.723616	20.0	1154590.0	0.084045	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

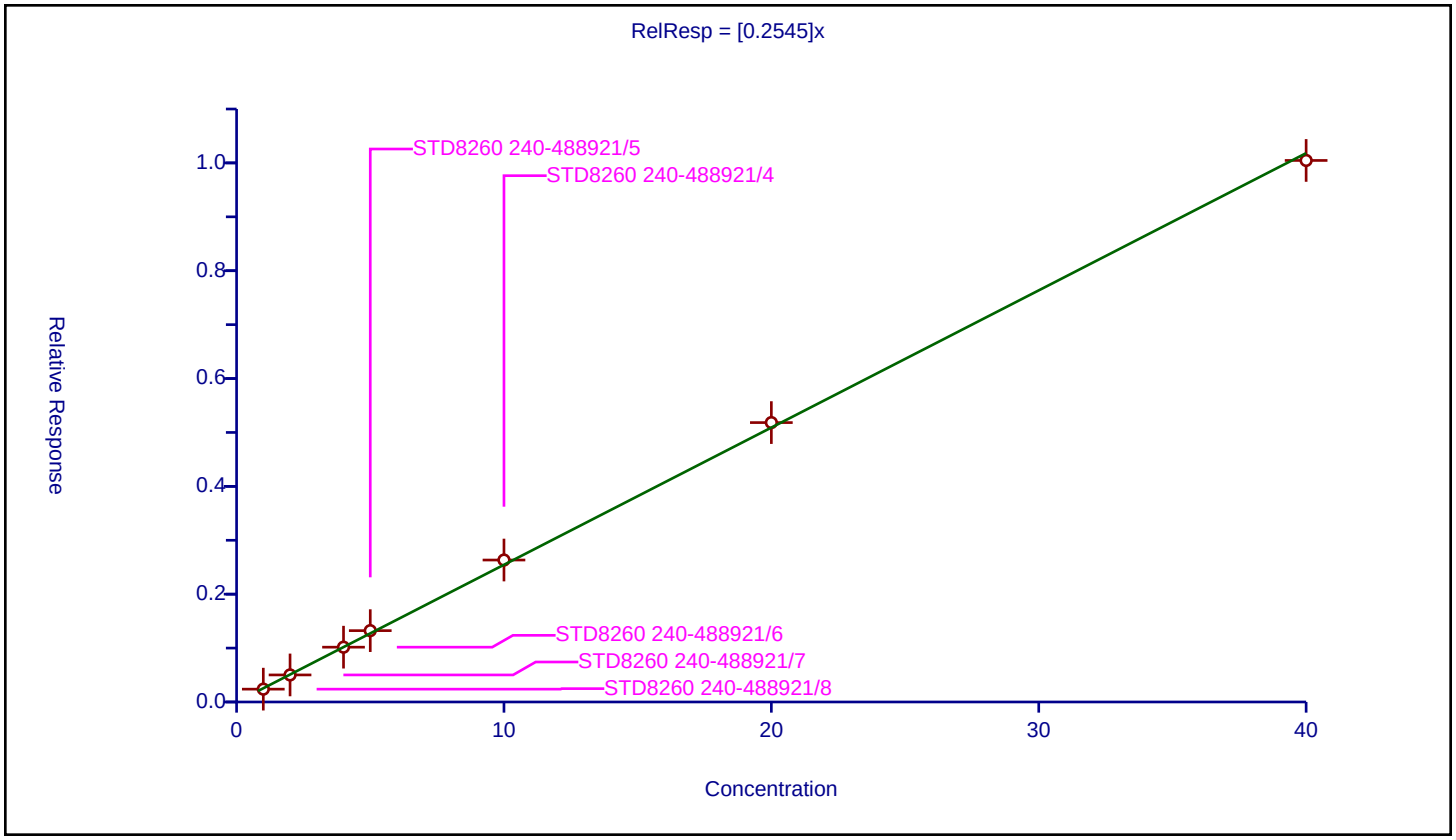
Curve Coefficients

Intercept:	0
Slope:	0.2545

Error Coefficients

Standard Error:	278000
Relative Standard Error:	3.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.23808	20.0	1128779.0	0.23808	Y
2	STD8260 240-488921/7	2.0	0.502092	20.0	1155843.0	0.251046	Y
3	STD8260 240-488921/6	4.0	1.016601	20.0	1163839.0	0.25415	Y
4	STD8260 240-488921/5	5.0	1.323452	20.0	1132931.0	0.26469	Y
5	STD8260 240-488921/4	10.0	2.633425	20.0	1154679.0	0.263342	Y
6	STD8260 240-488921/3	20.0	5.183176	20.0	1187654.0	0.259159	Y
7	STD8260 240-488921/2	40.0	10.045904	20.0	1154590.0	0.251148	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

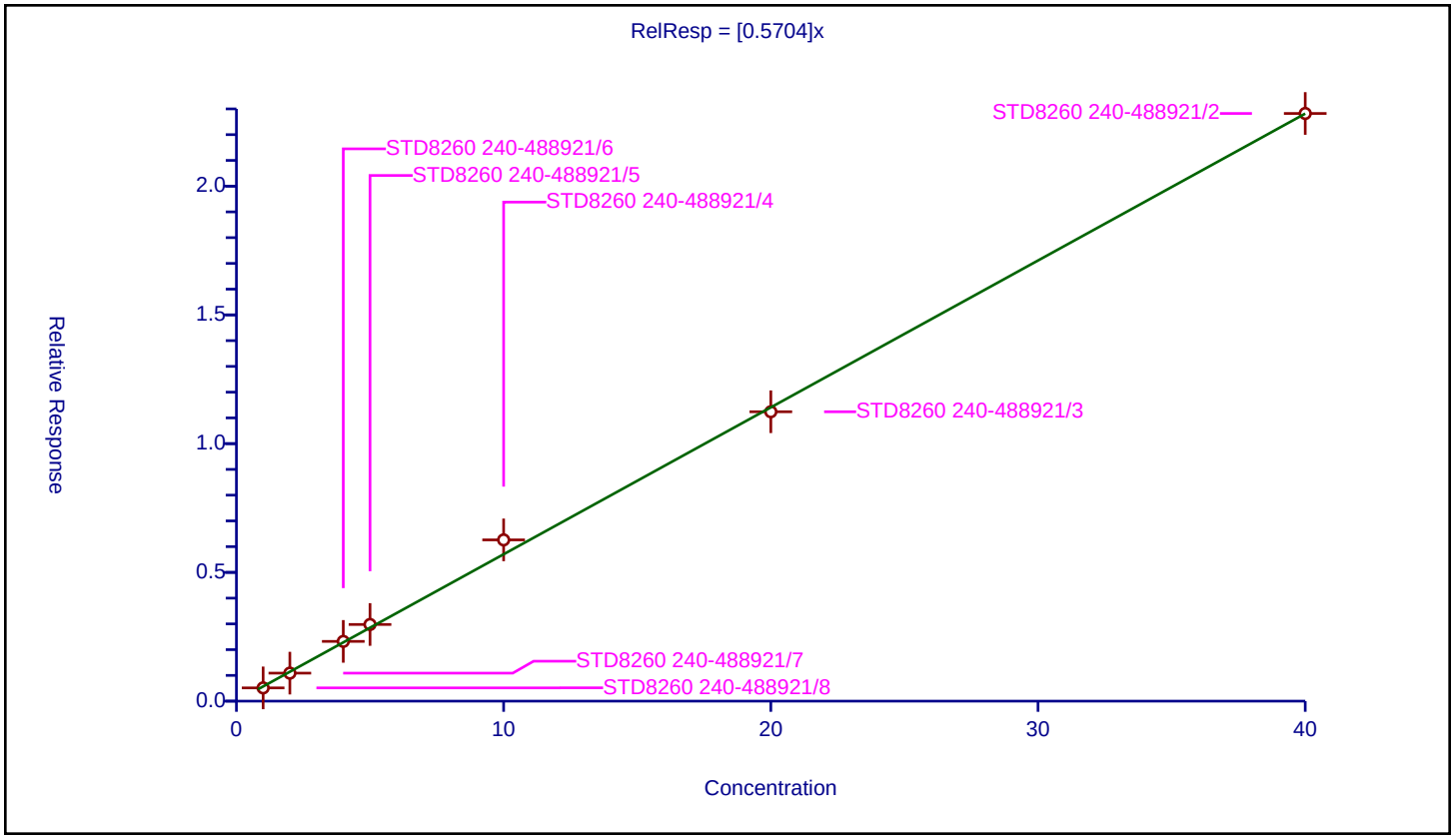
Curve Coefficients

Intercept:	0
Slope:	0.5704

Error Coefficients

Standard Error:	628000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.514503	20.0	1128779.0	0.514503	Y
2	STD8260 240-488921/7	2.0	1.088054	20.0	1155843.0	0.544027	Y
3	STD8260 240-488921/6	4.0	2.320098	20.0	1163839.0	0.580024	Y
4	STD8260 240-488921/5	5.0	2.977392	20.0	1132931.0	0.595478	Y
5	STD8260 240-488921/4	10.0	6.262277	20.0	1154679.0	0.626228	Y
6	STD8260 240-488921/3	20.0	11.23834	20.0	1187654.0	0.561917	Y
7	STD8260 240-488921/2	40.0	22.821729	20.0	1154590.0	0.570543	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

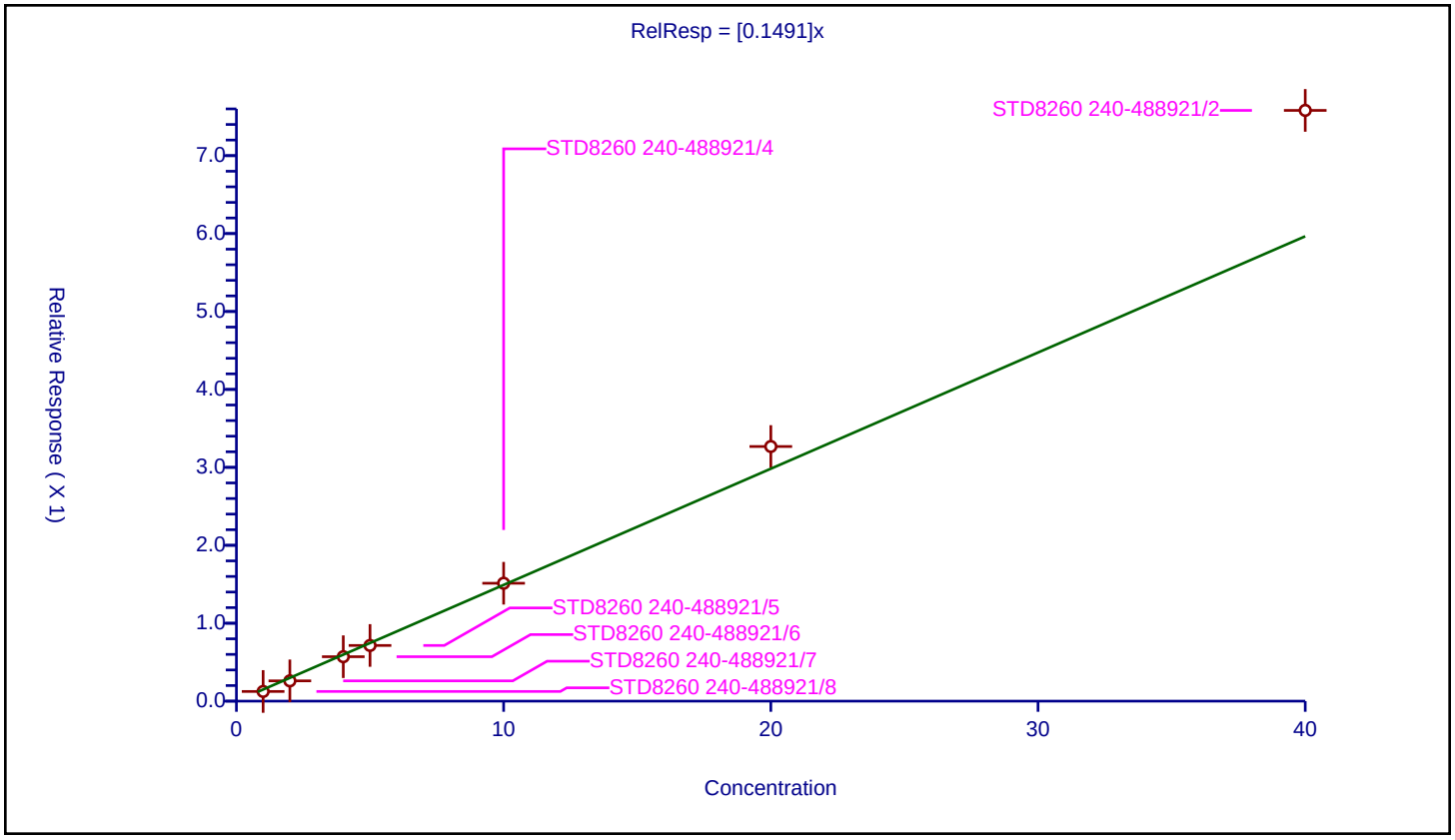
Curve Coefficients

Intercept:	0
Slope:	0.1491

Error Coefficients

Standard Error:	200000
Relative Standard Error:	14.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.124187	20.0	1128779.0	0.124187	Y
2	STD8260 240-488921/7	2.0	0.260122	20.0	1155843.0	0.130061	Y
3	STD8260 240-488921/6	4.0	0.570113	20.0	1163839.0	0.142528	Y
4	STD8260 240-488921/5	5.0	0.714501	20.0	1132931.0	0.1429	Y
5	STD8260 240-488921/4	10.0	1.512836	20.0	1154679.0	0.151284	Y
6	STD8260 240-488921/3	20.0	3.267669	20.0	1187654.0	0.163383	Y
7	STD8260 240-488921/2	40.0	7.580492	20.0	1154590.0	0.189512	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

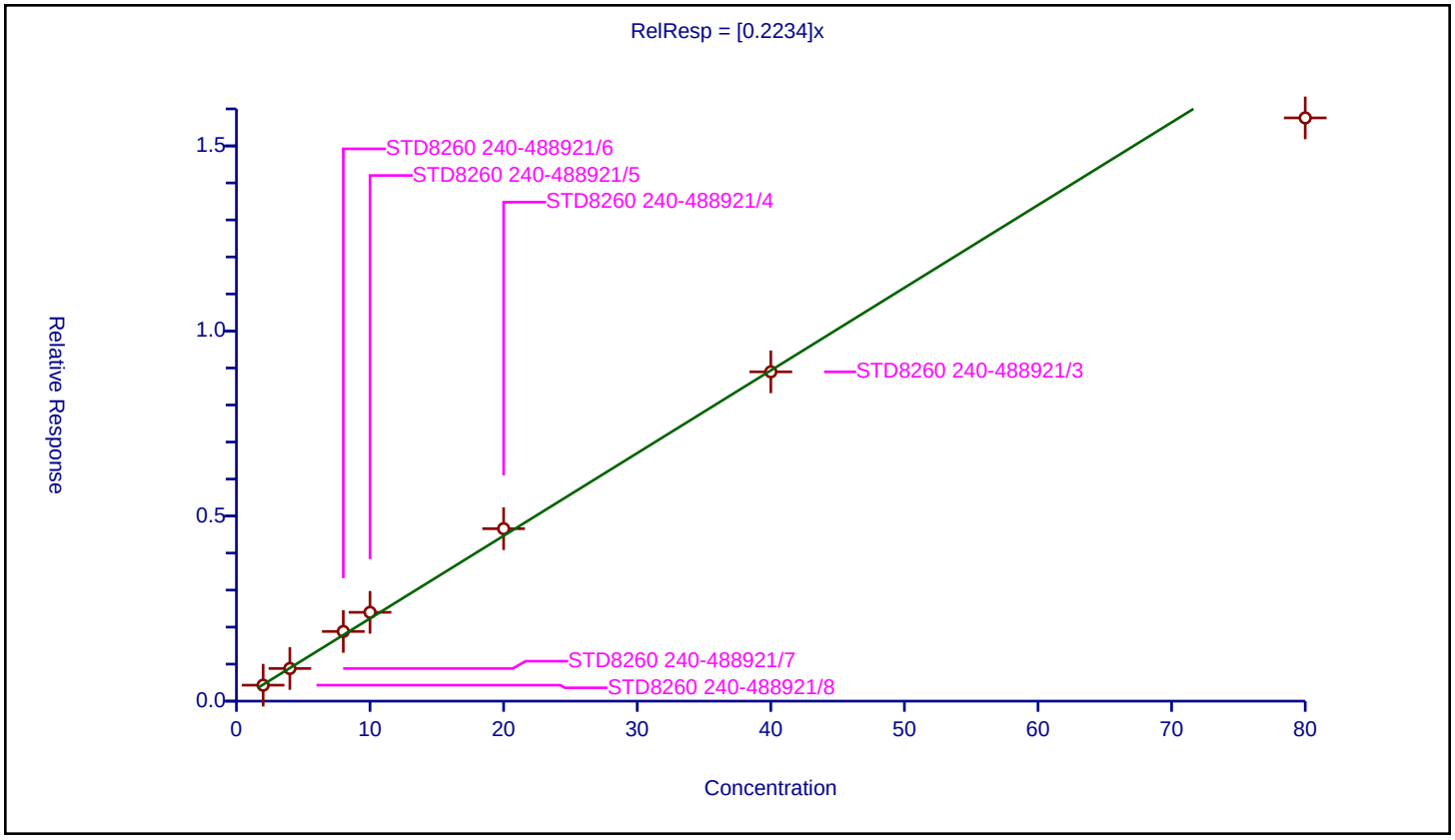
Curve Coefficients

Intercept:	0
Slope:	0.2234

Error Coefficients

Standard Error:	450000
Relative Standard Error:	6.5
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.430997	20.0	1128779.0	0.215498	Y
2	STD8260 240-488921/7	4.0	0.881625	20.0	1155843.0	0.220406	Y
3	STD8260 240-488921/6	8.0	1.882717	20.0	1163839.0	0.23534	Y
4	STD8260 240-488921/5	10.0	2.399281	20.0	1132931.0	0.239928	Y
5	STD8260 240-488921/4	20.0	4.658923	20.0	1154679.0	0.232946	Y
6	STD8260 240-488921/3	40.0	8.896497	20.0	1187654.0	0.222412	Y
7	STD8260 240-488921/2	80.0	15.756727	20.0	1154590.0	0.196959	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

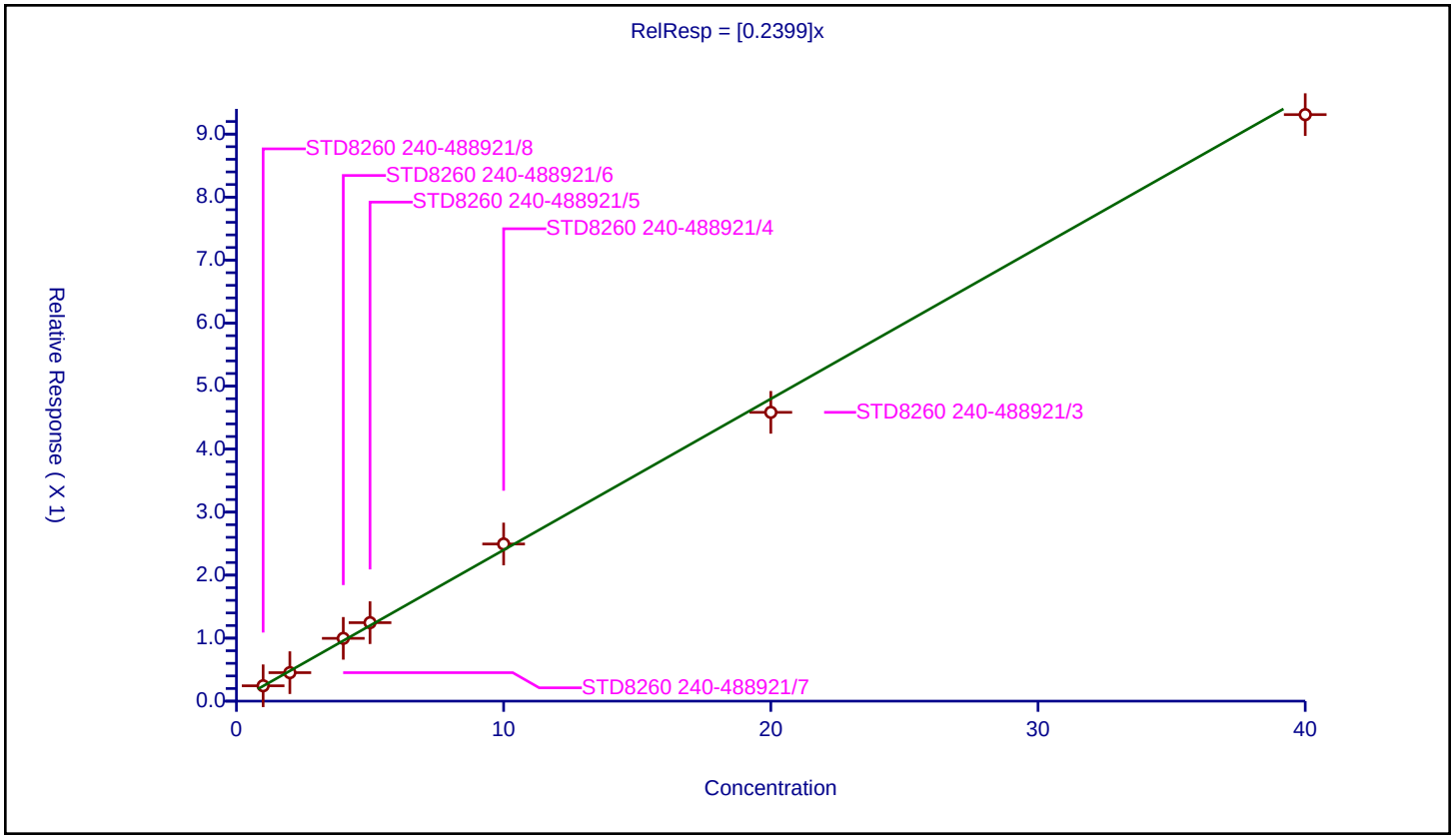
Curve Coefficients

Intercept:	0
Slope:	0.2399

Error Coefficients

Standard Error:	256000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.243644	20.0	1128779.0	0.243644	Y
2	STD8260 240-488921/7	2.0	0.451964	20.0	1155843.0	0.225982	Y
3	STD8260 240-488921/6	4.0	0.996392	20.0	1163839.0	0.249098	Y
4	STD8260 240-488921/5	5.0	1.245424	20.0	1132931.0	0.249085	Y
5	STD8260 240-488921/4	10.0	2.494217	20.0	1154679.0	0.249422	Y
6	STD8260 240-488921/3	20.0	4.583658	20.0	1187654.0	0.229183	Y
7	STD8260 240-488921/2	40.0	9.309227	20.0	1154590.0	0.232731	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

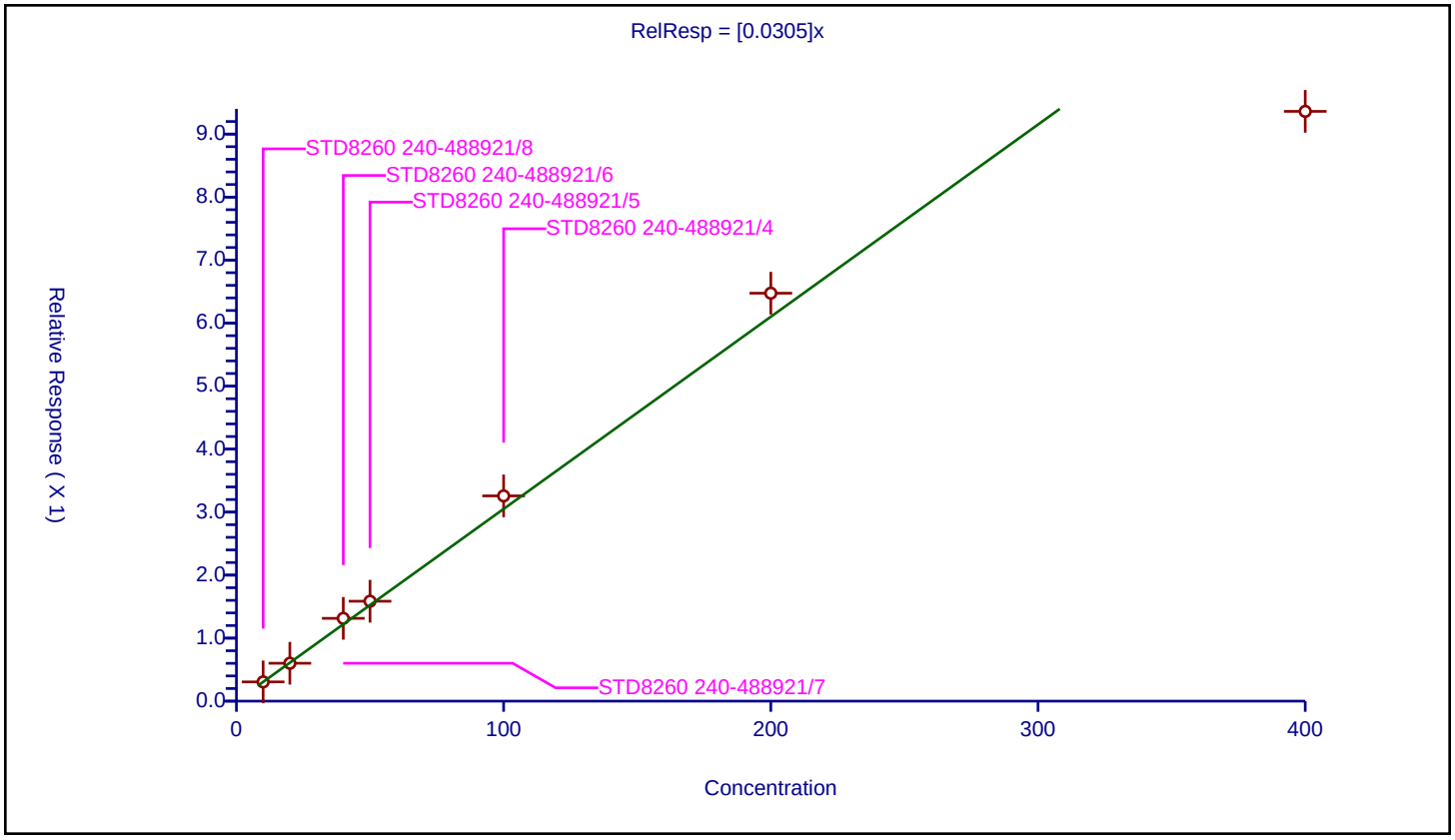
Curve Coefficients

Intercept:	0
Slope:	0.0305

Error Coefficients

Standard Error:	286000
Relative Standard Error:	10.8
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	10.0	0.305374	20.0	1128779.0	0.030537	Y
2	STD8260 240-488921/7	20.0	0.601345	20.0	1155843.0	0.030067	Y
3	STD8260 240-488921/6	40.0	1.314254	20.0	1163839.0	0.032856	Y
4	STD8260 240-488921/5	50.0	1.585939	20.0	1132931.0	0.031719	Y
5	STD8260 240-488921/4	100.0	3.25791	20.0	1154679.0	0.032579	Y
6	STD8260 240-488921/3	200.0	6.474562	20.0	1187654.0	0.032373	Y
7	STD8260 240-488921/2	400.0	9.360622	20.0	1154590.0	0.023402	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

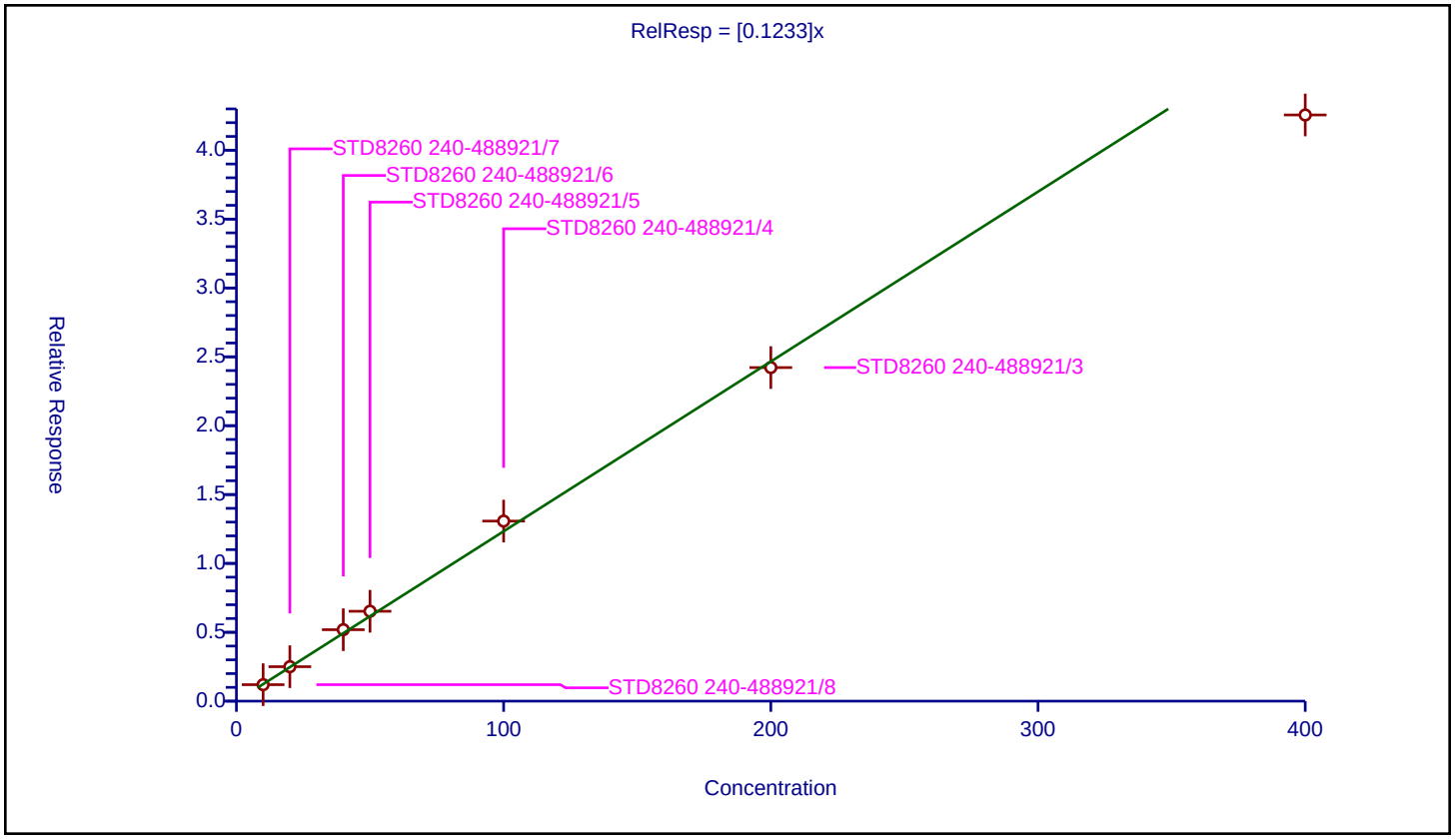
Curve Coefficients

Intercept:	0
Slope:	0.1233

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	7.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	10.0	1.195699	20.0	1128779.0	0.11957	Y
2	STD8260 240-488921/7	20.0	2.501291	20.0	1155843.0	0.125065	Y
3	STD8260 240-488921/6	40.0	5.18759	20.0	1163839.0	0.12969	Y
4	STD8260 240-488921/5	50.0	6.526205	20.0	1132931.0	0.130524	Y
5	STD8260 240-488921/4	100.0	13.073105	20.0	1154679.0	0.130731	Y
6	STD8260 240-488921/3	200.0	24.219411	20.0	1187654.0	0.121097	Y
7	STD8260 240-488921/2	400.0	42.558138	20.0	1154590.0	0.106395	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

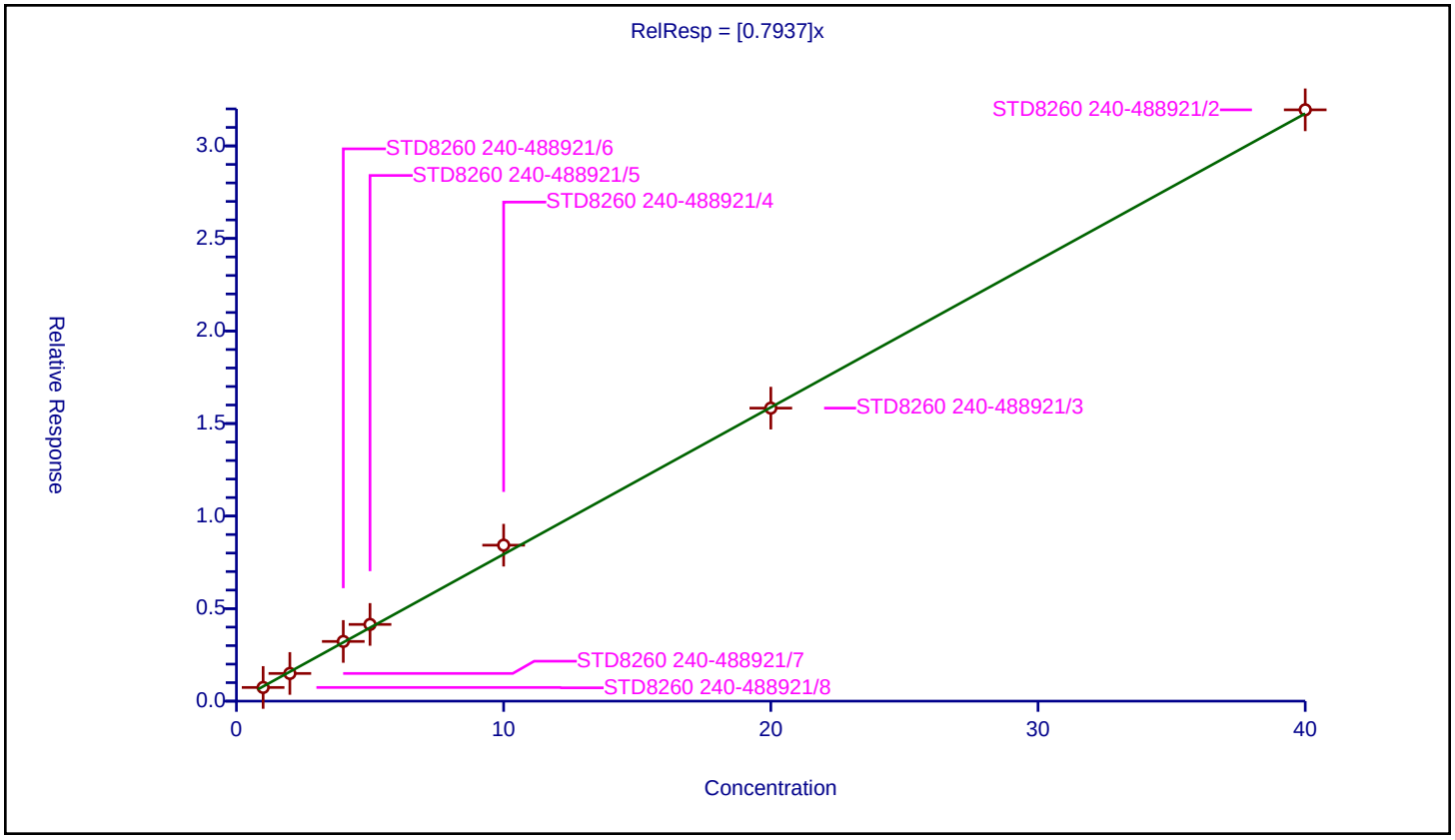
Curve Coefficients

Intercept:	0
Slope:	0.7937

Error Coefficients

Standard Error:	878000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.739578	20.0	1128779.0	0.739578	Y
2	STD8260 240-488921/7	2.0	1.495688	20.0	1155843.0	0.747844	Y
3	STD8260 240-488921/6	4.0	3.225206	20.0	1163839.0	0.806301	Y
4	STD8260 240-488921/5	5.0	4.145072	20.0	1132931.0	0.829014	Y
5	STD8260 240-488921/4	10.0	8.426706	20.0	1154679.0	0.842671	Y
6	STD8260 240-488921/3	20.0	15.831985	20.0	1187654.0	0.791599	Y
7	STD8260 240-488921/2	40.0	31.950303	20.0	1154590.0	0.798758	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

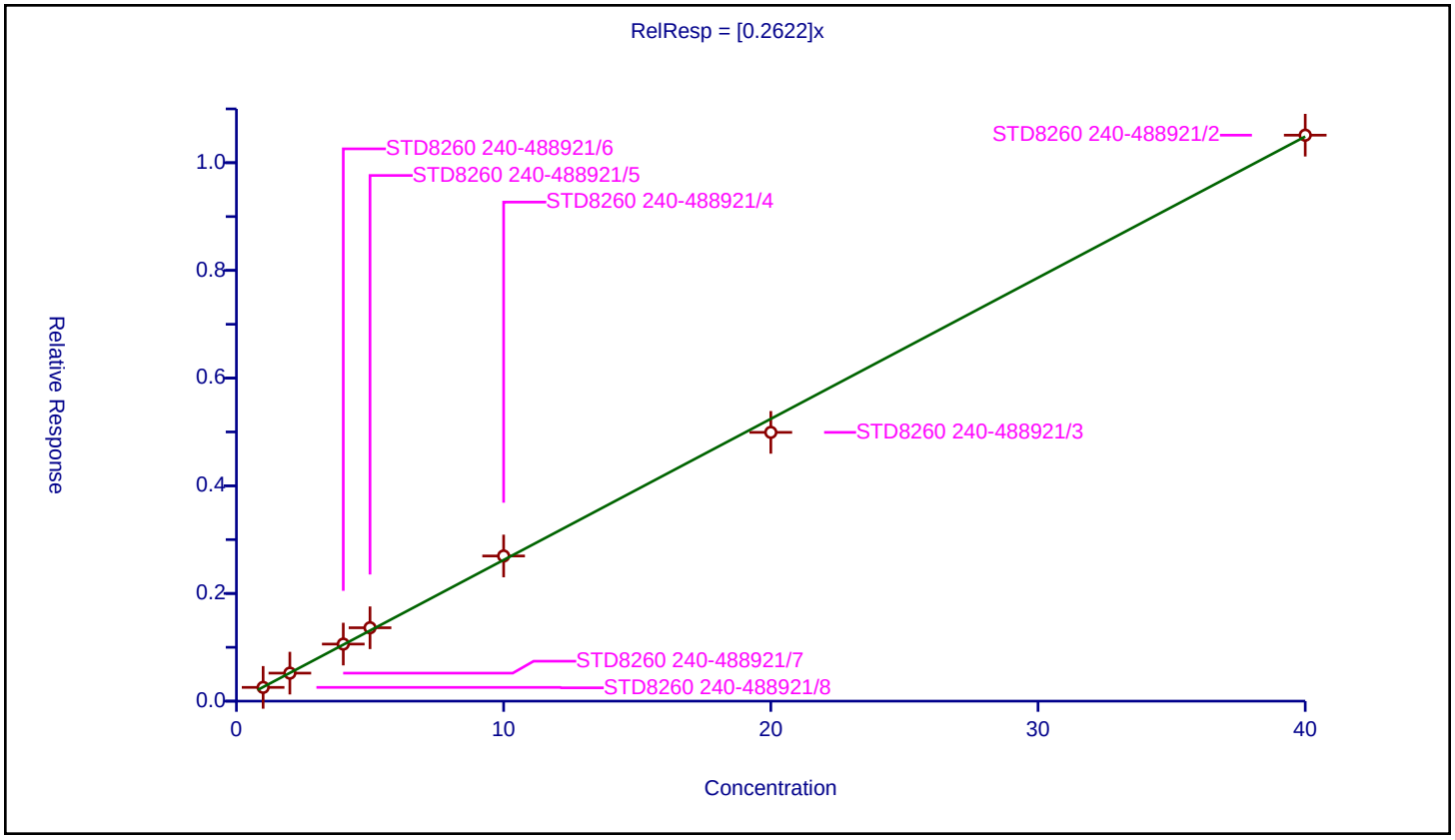
Curve Coefficients

Intercept:	0
Slope:	0.2622

Error Coefficients

Standard Error:	286000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.255338	20.0	1128779.0	0.255338	Y
2	STD8260 240-488921/7	2.0	0.520261	20.0	1155843.0	0.26013	Y
3	STD8260 240-488921/6	4.0	1.060078	20.0	1163839.0	0.265019	Y
4	STD8260 240-488921/5	5.0	1.36289	20.0	1132931.0	0.272578	Y
5	STD8260 240-488921/4	10.0	2.696213	20.0	1154679.0	0.269621	Y
6	STD8260 240-488921/3	20.0	4.992144	20.0	1187654.0	0.249607	Y
7	STD8260 240-488921/2	40.0	10.511593	20.0	1154590.0	0.26279	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

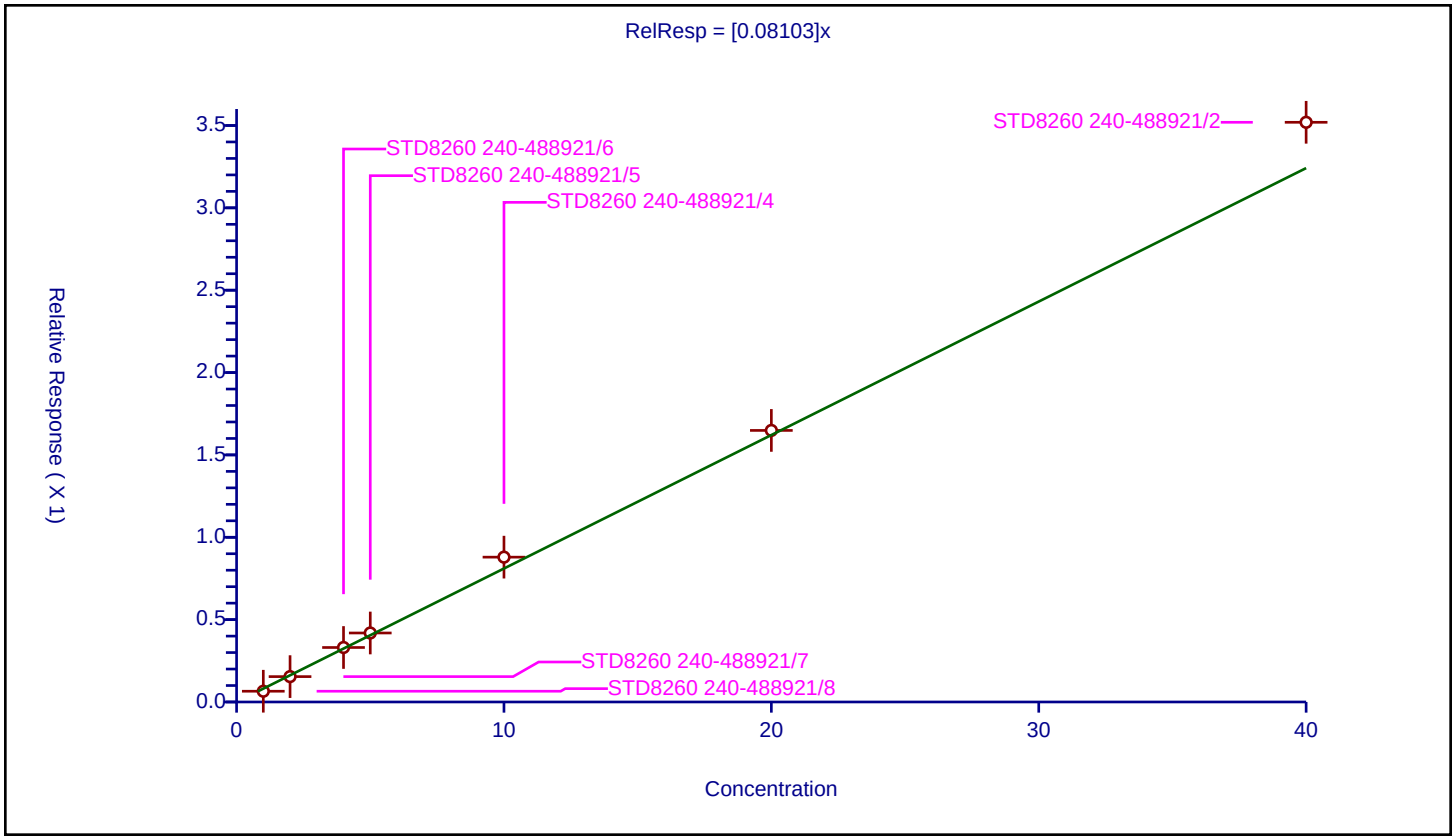
Curve Coefficients

Intercept:	0
Slope:	0.08103

Error Coefficients

Standard Error:	95300
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.065345	20.0	1128779.0	0.065345	Y
2	STD8260 240-488921/7	2.0	0.154069	20.0	1155843.0	0.077035	Y
3	STD8260 240-488921/6	4.0	0.330888	20.0	1163839.0	0.082722	Y
4	STD8260 240-488921/5	5.0	0.418896	20.0	1132931.0	0.083779	Y
5	STD8260 240-488921/4	10.0	0.879292	20.0	1154679.0	0.087929	Y
6	STD8260 240-488921/3	20.0	1.648595	20.0	1187654.0	0.08243	Y
7	STD8260 240-488921/2	40.0	3.519345	20.0	1154590.0	0.087984	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

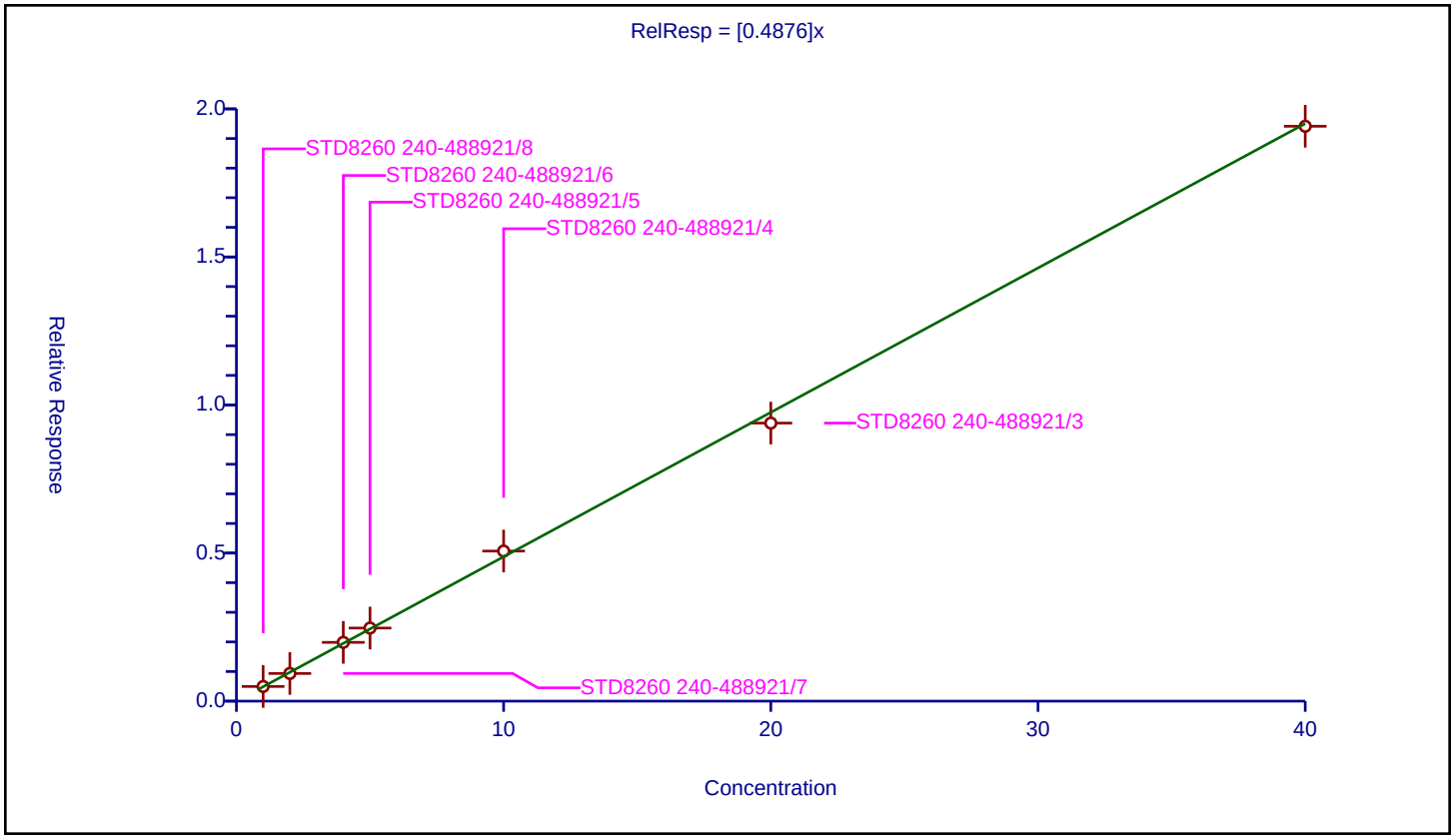
Curve Coefficients

Intercept:	0
Slope:	0.4876

Error Coefficients

Standard Error:	531000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.494765	20.0	1128779.0	0.494765	Y
2	STD8260 240-488921/7	2.0	0.934037	20.0	1155843.0	0.467018	Y
3	STD8260 240-488921/6	4.0	1.984708	20.0	1163839.0	0.496177	Y
4	STD8260 240-488921/5	5.0	2.46827	20.0	1132931.0	0.493654	Y
5	STD8260 240-488921/4	10.0	5.067573	20.0	1154679.0	0.506757	Y
6	STD8260 240-488921/3	20.0	9.389166	20.0	1187654.0	0.469458	Y
7	STD8260 240-488921/2	40.0	19.413471	20.0	1154590.0	0.485337	Y



Calibration / Vinyl acetate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

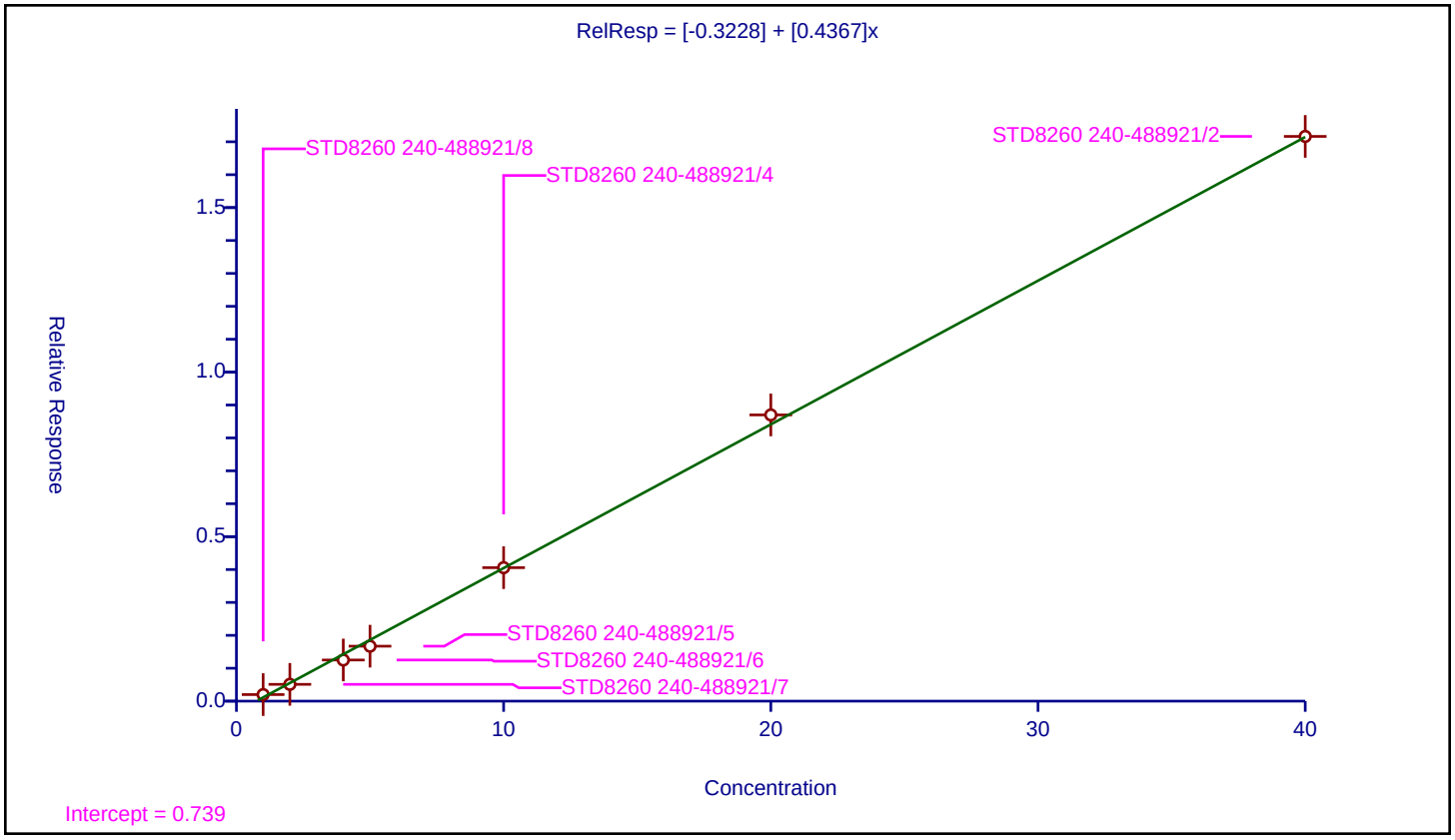
Curve Coefficients

Intercept:	-0.3228
Slope:	0.4367

Error Coefficients

Standard Error:	514000
Relative Standard Error:	10.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.199384	20.0	1128779.0	0.199384	Y
2	STD8260 240-488921/7	2.0	0.510571	20.0	1155843.0	0.255286	Y
3	STD8260 240-488921/6	4.0	1.249864	20.0	1163839.0	0.312466	Y
4	STD8260 240-488921/5	5.0	1.669952	20.0	1132931.0	0.33399	Y
5	STD8260 240-488921/4	10.0	4.056573	20.0	1154679.0	0.405657	Y
6	STD8260 240-488921/3	20.0	8.699284	20.0	1187654.0	0.434964	Y
7	STD8260 240-488921/2	40.0	17.163755	20.0	1154590.0	0.429094	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

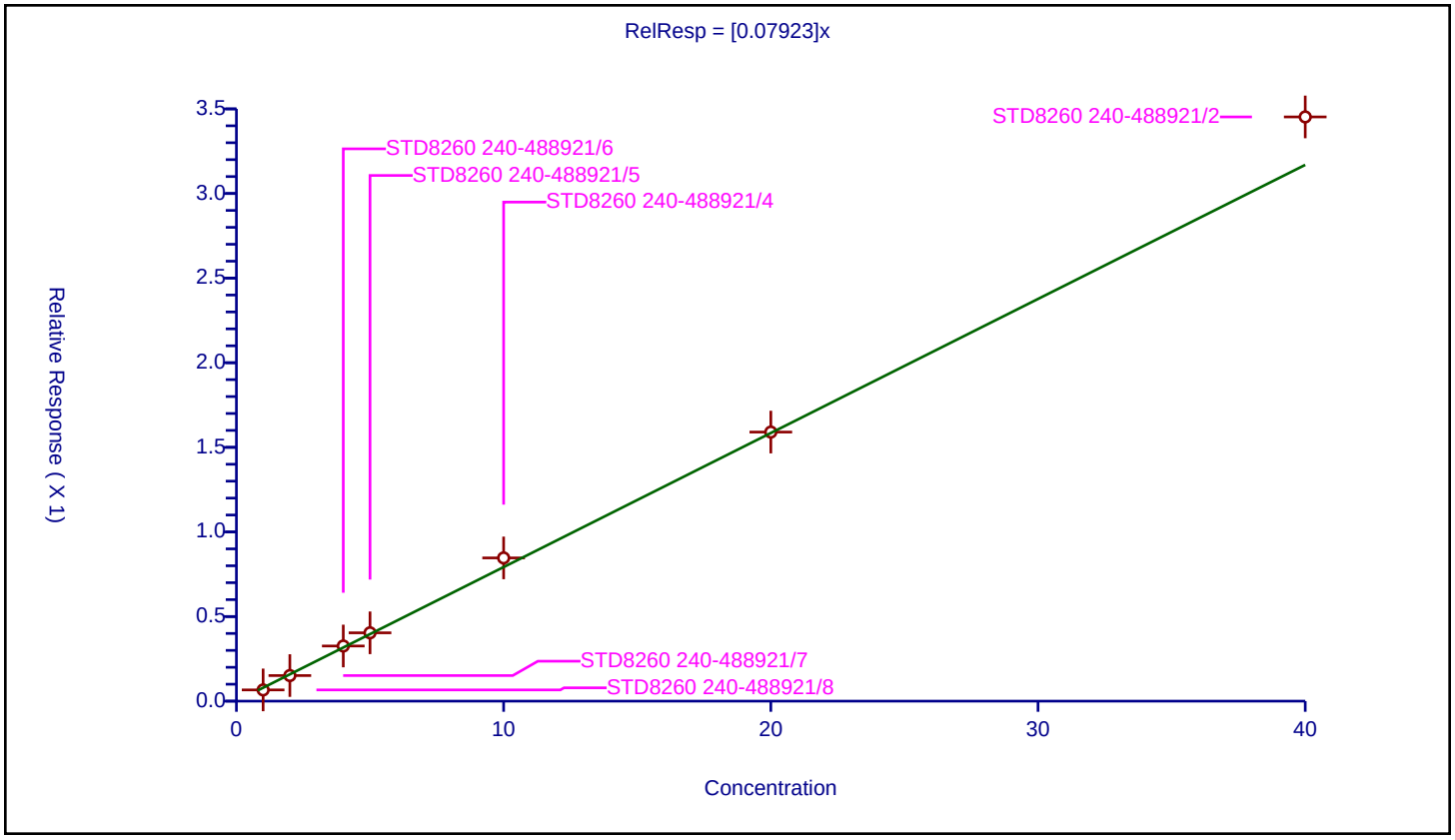
Curve Coefficients

Intercept:	0
Slope:	0.07923

Error Coefficients

Standard Error:	93100
Relative Standard Error:	8.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.066337	20.0	1128779.0	0.066337	Y
2	STD8260 240-488921/7	2.0	0.151162	20.0	1155843.0	0.075581	Y
3	STD8260 240-488921/6	4.0	0.325904	20.0	1163839.0	0.081476	Y
4	STD8260 240-488921/5	5.0	0.403767	20.0	1132931.0	0.080753	Y
5	STD8260 240-488921/4	10.0	0.846382	20.0	1154679.0	0.084638	Y
6	STD8260 240-488921/3	20.0	1.590093	20.0	1187654.0	0.079505	Y
7	STD8260 240-488921/2	40.0	3.452464	20.0	1154590.0	0.086312	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

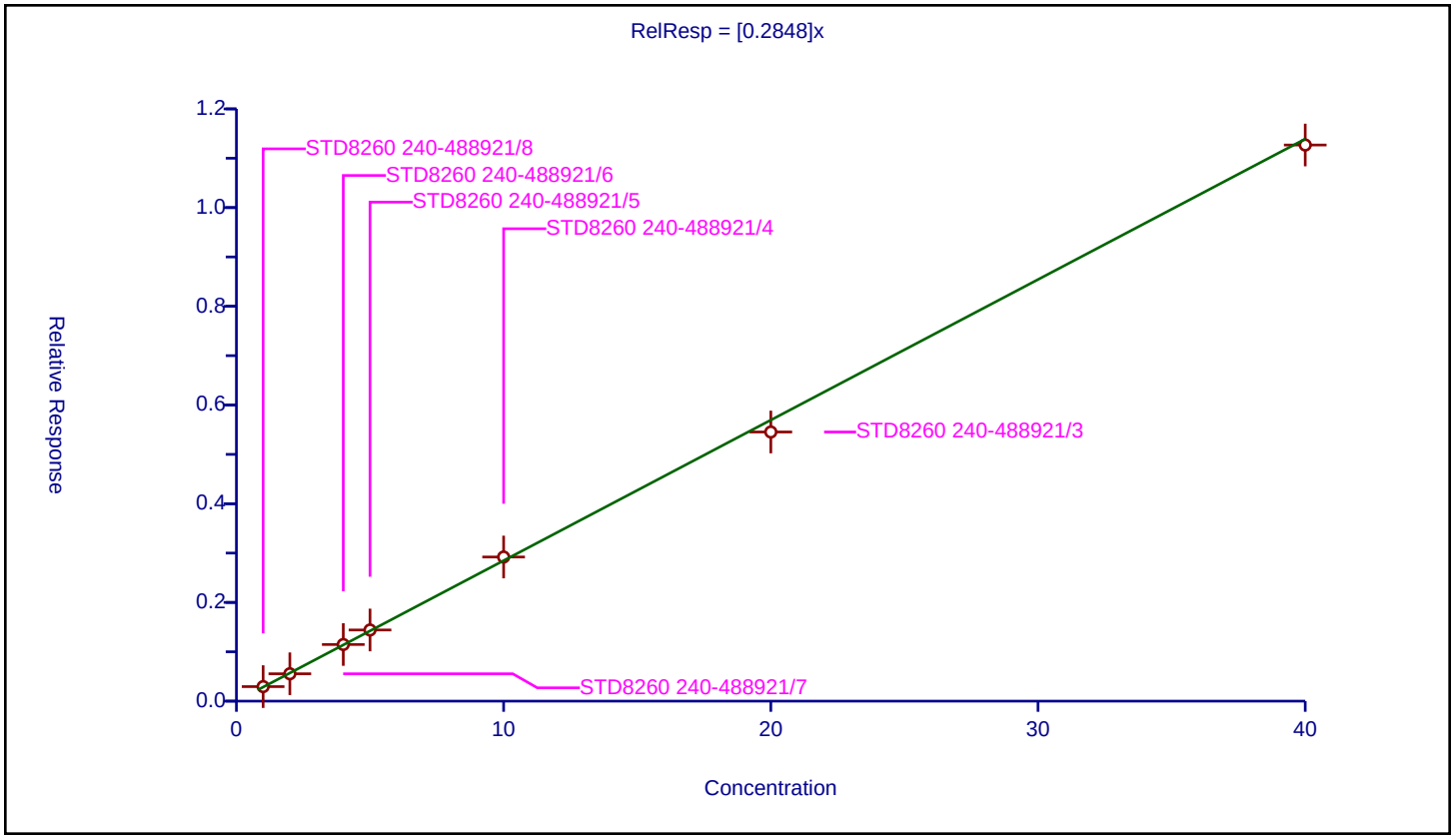
Curve Coefficients

Intercept:	0
Slope:	0.2848

Error Coefficients

Standard Error:	308000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.294283	20.0	1128779.0	0.294283	Y
2	STD8260 240-488921/7	2.0	0.554574	20.0	1155843.0	0.277287	Y
3	STD8260 240-488921/6	4.0	1.147667	20.0	1163839.0	0.286917	Y
4	STD8260 240-488921/5	5.0	1.441924	20.0	1132931.0	0.288385	Y
5	STD8260 240-488921/4	10.0	2.920292	20.0	1154679.0	0.292029	Y
6	STD8260 240-488921/3	20.0	5.453609	20.0	1187654.0	0.27268	Y
7	STD8260 240-488921/2	40.0	11.268433	20.0	1154590.0	0.281711	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

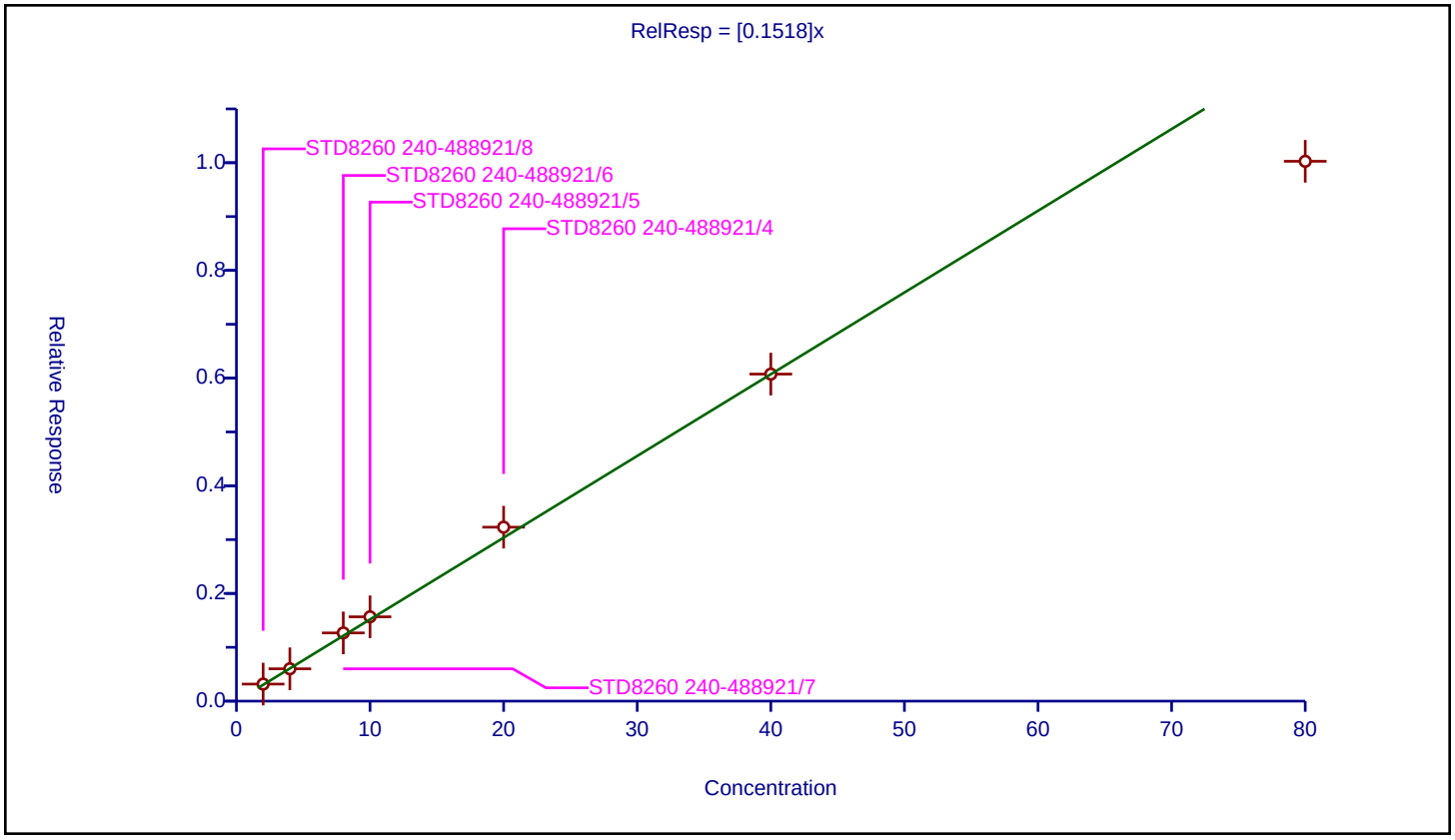
Curve Coefficients

Intercept:	0
Slope:	0.1518

Error Coefficients

Standard Error:	293000
Relative Standard Error:	8.1
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.317086	20.0	1128779.0	0.158543	Y
2	STD8260 240-488921/7	4.0	0.60086	20.0	1155843.0	0.150215	Y
3	STD8260 240-488921/6	8.0	1.267289	20.0	1163839.0	0.158411	Y
4	STD8260 240-488921/5	10.0	1.566344	20.0	1132931.0	0.156634	Y
5	STD8260 240-488921/4	20.0	3.230889	20.0	1154679.0	0.161544	Y
6	STD8260 240-488921/3	40.0	6.074379	20.0	1187654.0	0.151859	Y
7	STD8260 240-488921/2	80.0	10.026815	20.0	1154590.0	0.125335	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

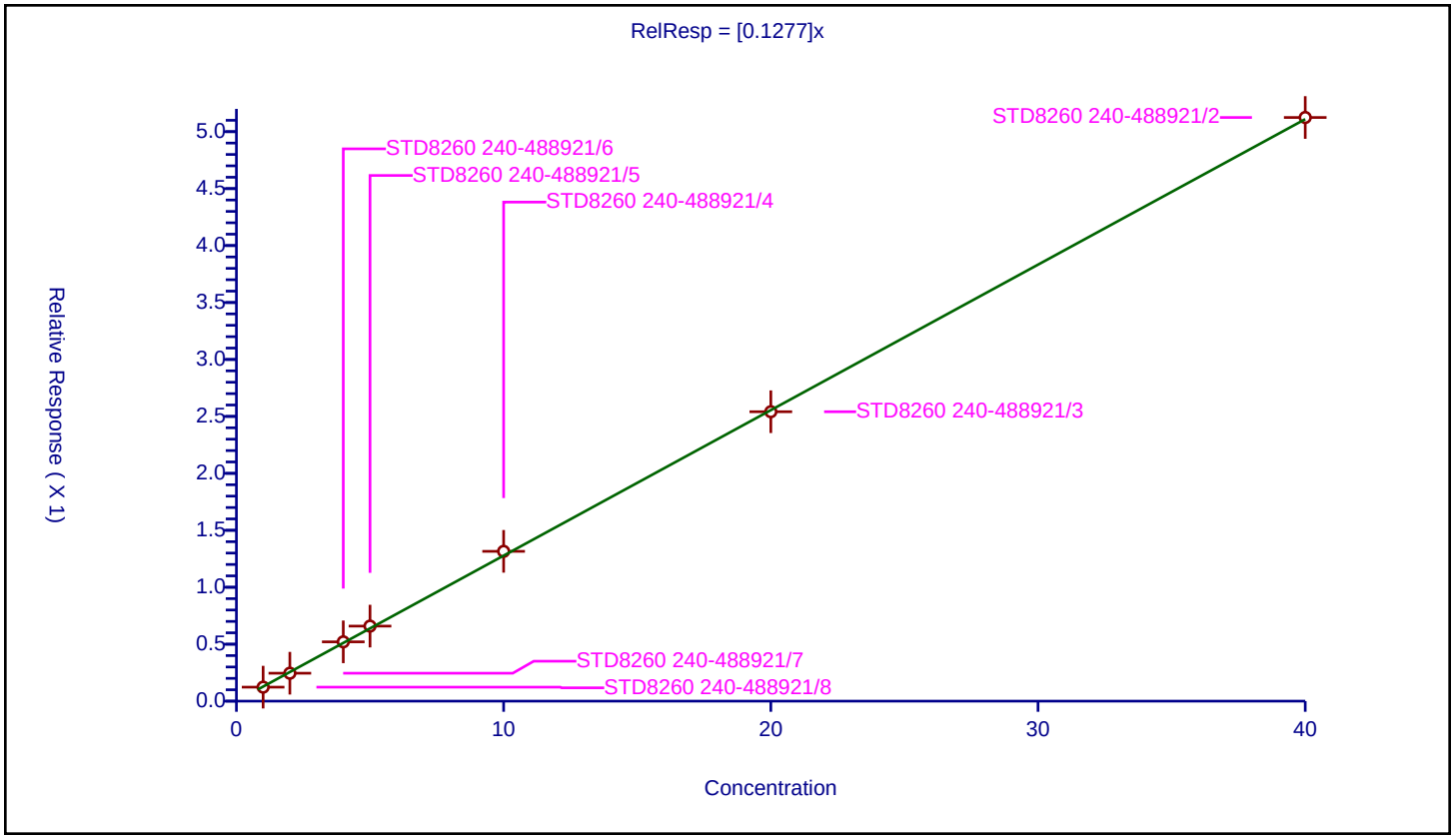
Curve Coefficients

Intercept:	0
Slope:	0.1277

Error Coefficients

Standard Error:	141000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.122912	20.0	1128779.0	0.122912	Y
2	STD8260 240-488921/7	2.0	0.245276	20.0	1155843.0	0.122638	Y
3	STD8260 240-488921/6	4.0	0.520673	20.0	1163839.0	0.130168	Y
4	STD8260 240-488921/5	5.0	0.658928	20.0	1132931.0	0.131786	Y
5	STD8260 240-488921/4	10.0	1.315223	20.0	1154679.0	0.131522	Y
6	STD8260 240-488921/3	20.0	2.54111	20.0	1187654.0	0.127056	Y
7	STD8260 240-488921/2	40.0	5.124416	20.0	1154590.0	0.12811	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

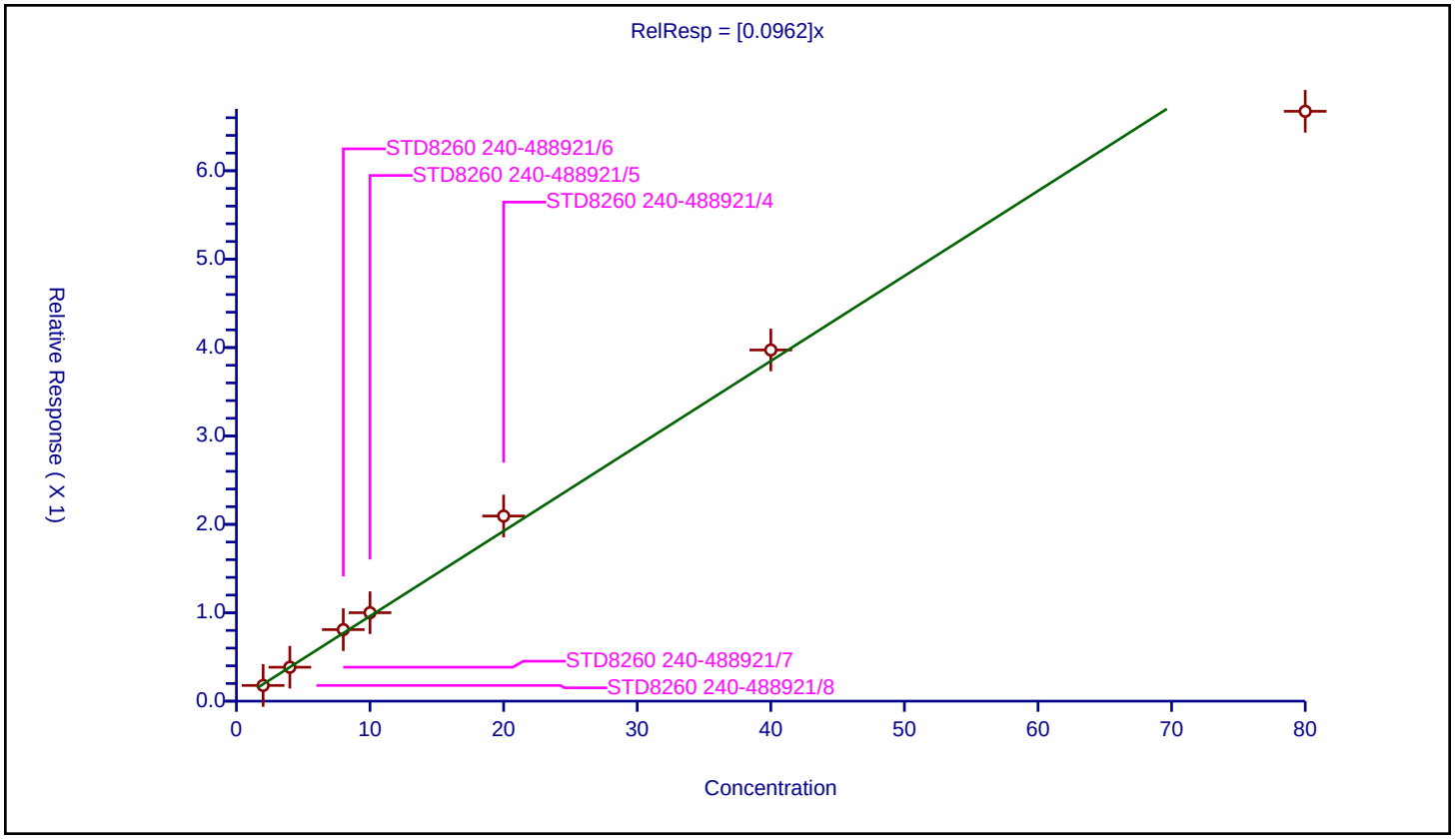
Curve Coefficients

Intercept:	0
Slope:	0.0962

Error Coefficients

Standard Error:	194000
Relative Standard Error:	7.8
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.177643	20.0	1128779.0	0.088822	Y
2	STD8260 240-488921/7	4.0	0.383789	20.0	1155843.0	0.095947	Y
3	STD8260 240-488921/6	8.0	0.809201	20.0	1163839.0	0.10115	Y
4	STD8260 240-488921/5	10.0	1.000591	20.0	1132931.0	0.100059	Y
5	STD8260 240-488921/4	20.0	2.09421	20.0	1154679.0	0.10471	Y
6	STD8260 240-488921/3	40.0	3.972554	20.0	1187654.0	0.099314	Y
7	STD8260 240-488921/2	80.0	6.672793	20.0	1154590.0	0.08341	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

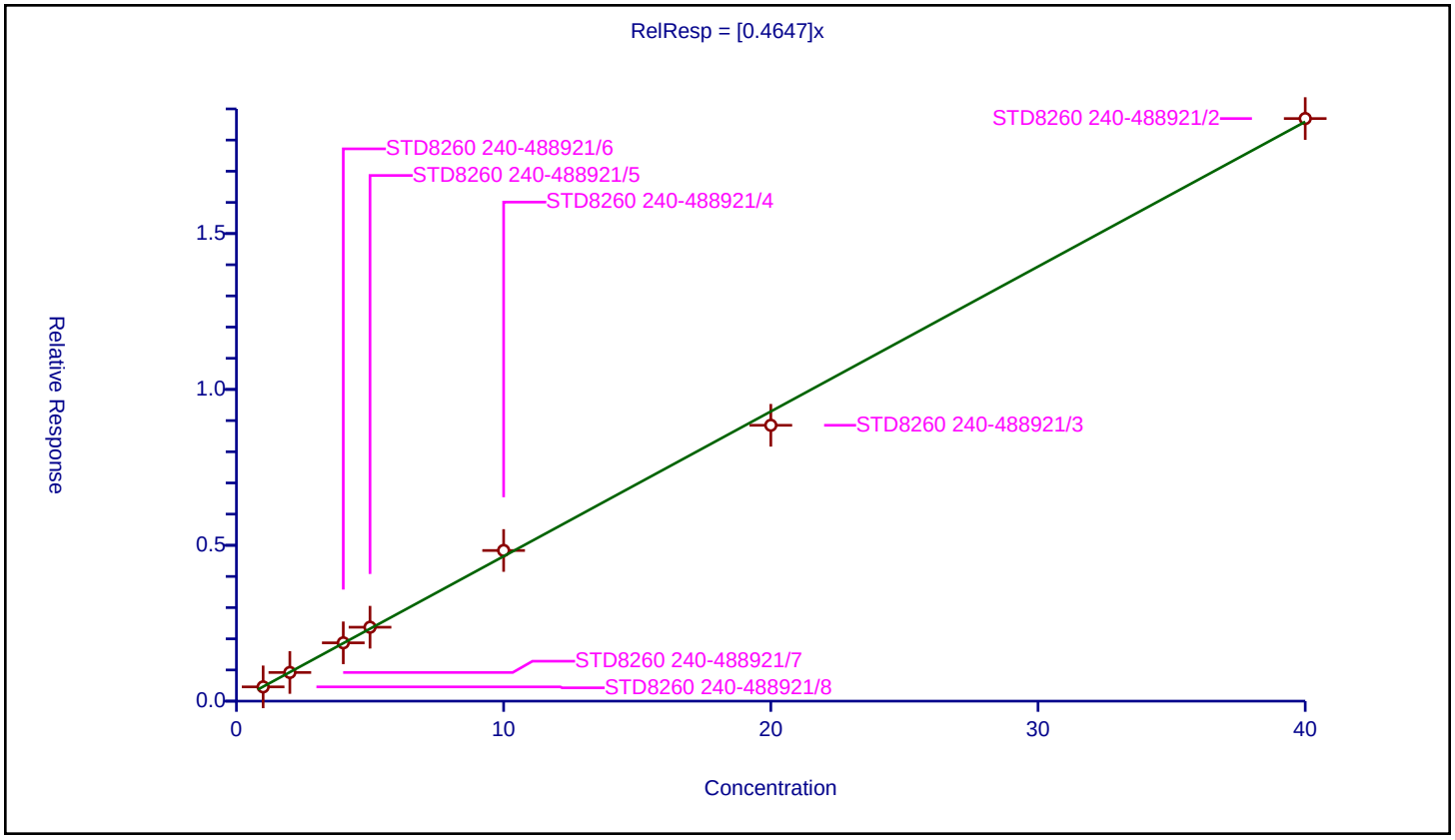
Curve Coefficients

Intercept:	0
Slope:	0.4647

Error Coefficients

Standard Error:	509000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.457804	20.0	1128779.0	0.457804	Y
2	STD8260 240-488921/7	2.0	0.919744	20.0	1155843.0	0.459872	Y
3	STD8260 240-488921/6	4.0	1.87074	20.0	1163839.0	0.467685	Y
4	STD8260 240-488921/5	5.0	2.371265	20.0	1132931.0	0.474253	Y
5	STD8260 240-488921/4	10.0	4.833291	20.0	1154679.0	0.483329	Y
6	STD8260 240-488921/3	20.0	8.850372	20.0	1187654.0	0.442519	Y
7	STD8260 240-488921/2	40.0	18.690063	20.0	1154590.0	0.467252	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

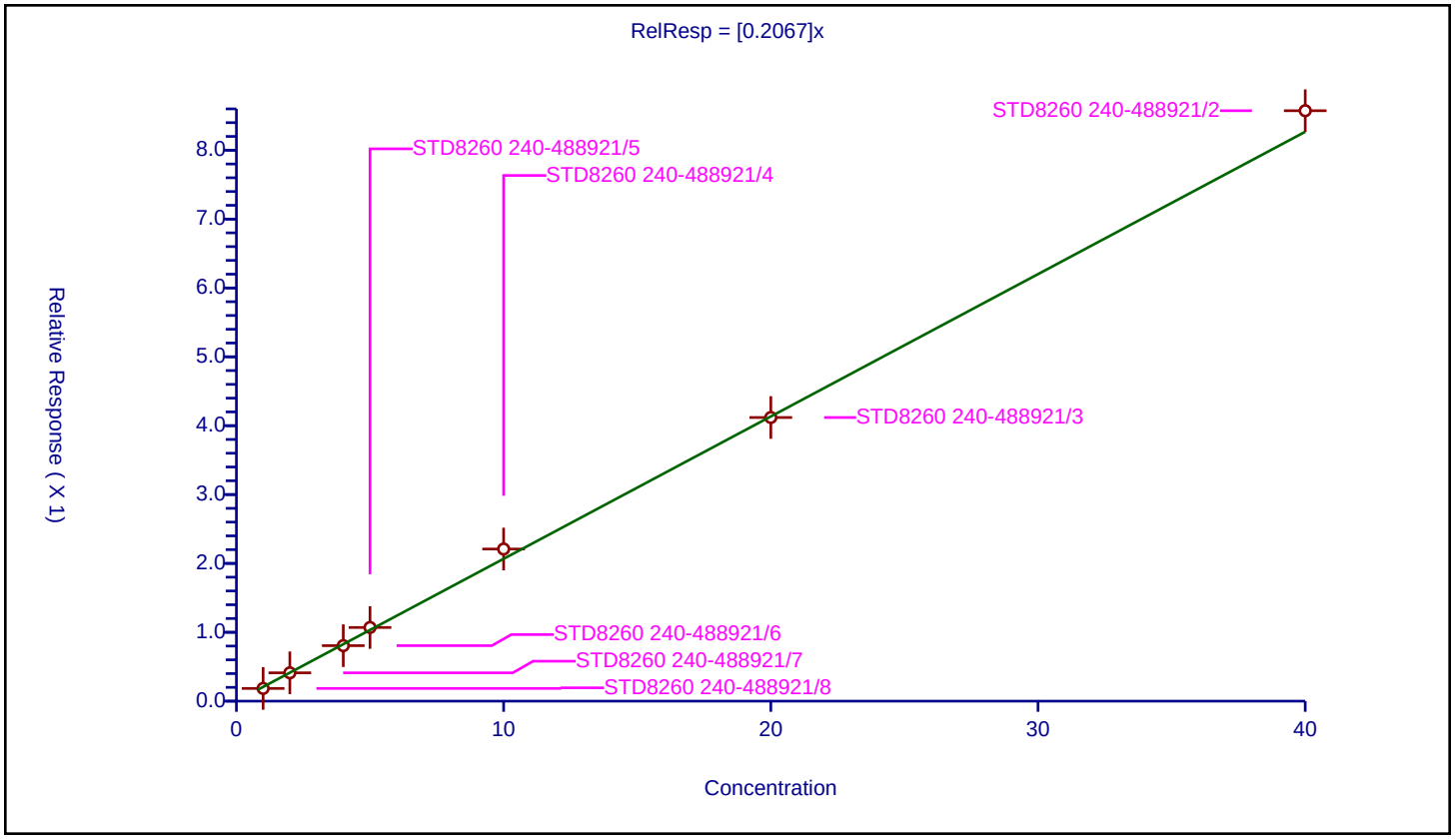
Curve Coefficients

Intercept:	0
Slope:	0.2067

Error Coefficients

Standard Error:	234000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.184677	20.0	1128779.0	0.184677	Y
2	STD8260 240-488921/7	2.0	0.411163	20.0	1155843.0	0.205582	Y
3	STD8260 240-488921/6	4.0	0.805833	20.0	1163839.0	0.201458	Y
4	STD8260 240-488921/5	5.0	1.069527	20.0	1132931.0	0.213905	Y
5	STD8260 240-488921/4	10.0	2.208943	20.0	1154679.0	0.220894	Y
6	STD8260 240-488921/3	20.0	4.118556	20.0	1187654.0	0.205928	Y
7	STD8260 240-488921/2	40.0	8.573329	20.0	1154590.0	0.214333	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

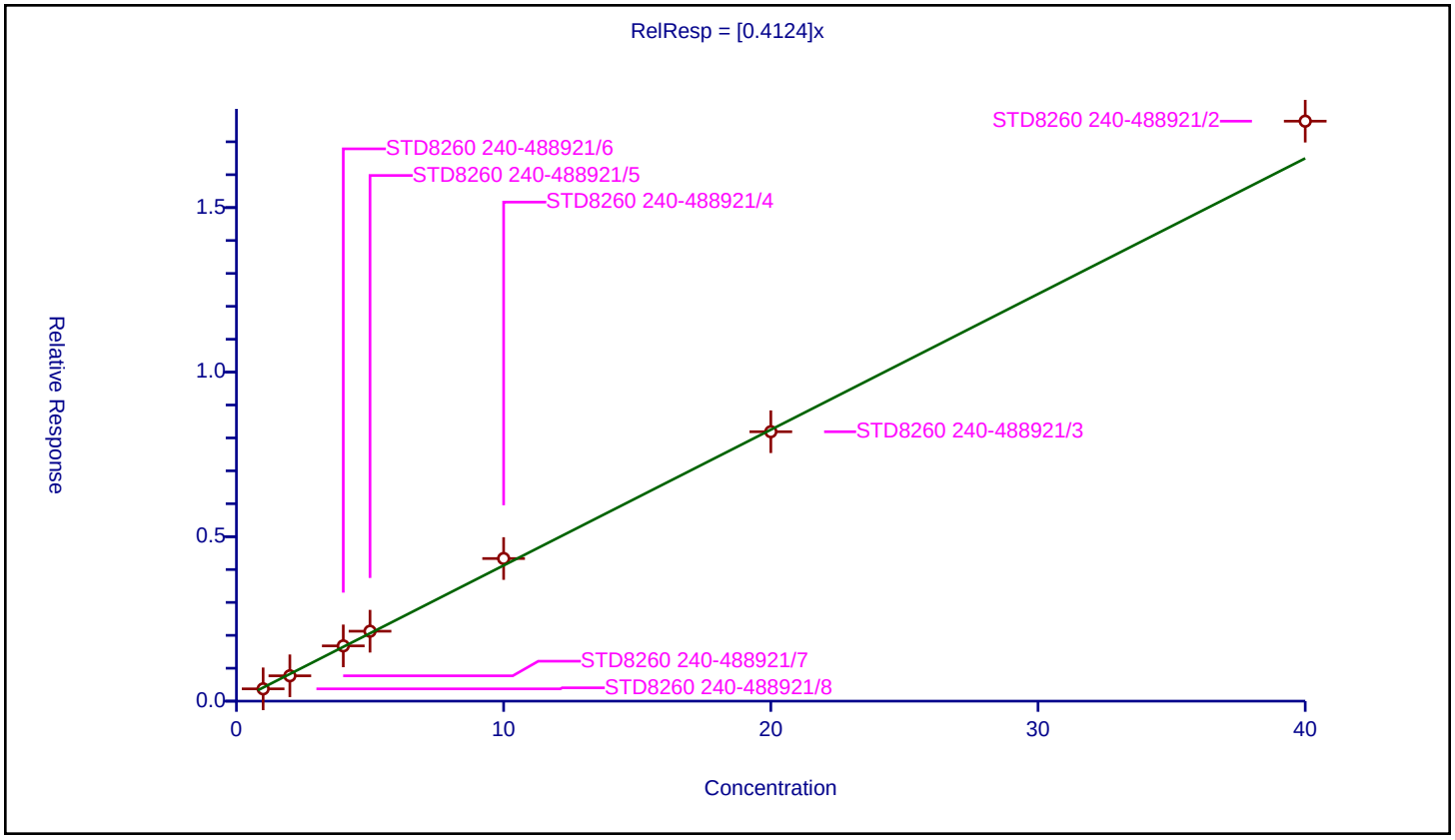
Curve Coefficients

Intercept:	0
Slope:	0.4124

Error Coefficients

Standard Error:	476000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.373625	20.0	1128779.0	0.373625	Y
2	STD8260 240-488921/7	2.0	0.769897	20.0	1155843.0	0.384948	Y
3	STD8260 240-488921/6	4.0	1.679528	20.0	1163839.0	0.419882	Y
4	STD8260 240-488921/5	5.0	2.125143	20.0	1132931.0	0.425029	Y
5	STD8260 240-488921/4	10.0	4.334347	20.0	1154679.0	0.433435	Y
6	STD8260 240-488921/3	20.0	8.188496	20.0	1187654.0	0.409425	Y
7	STD8260 240-488921/2	40.0	17.626725	20.0	1154590.0	0.440668	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

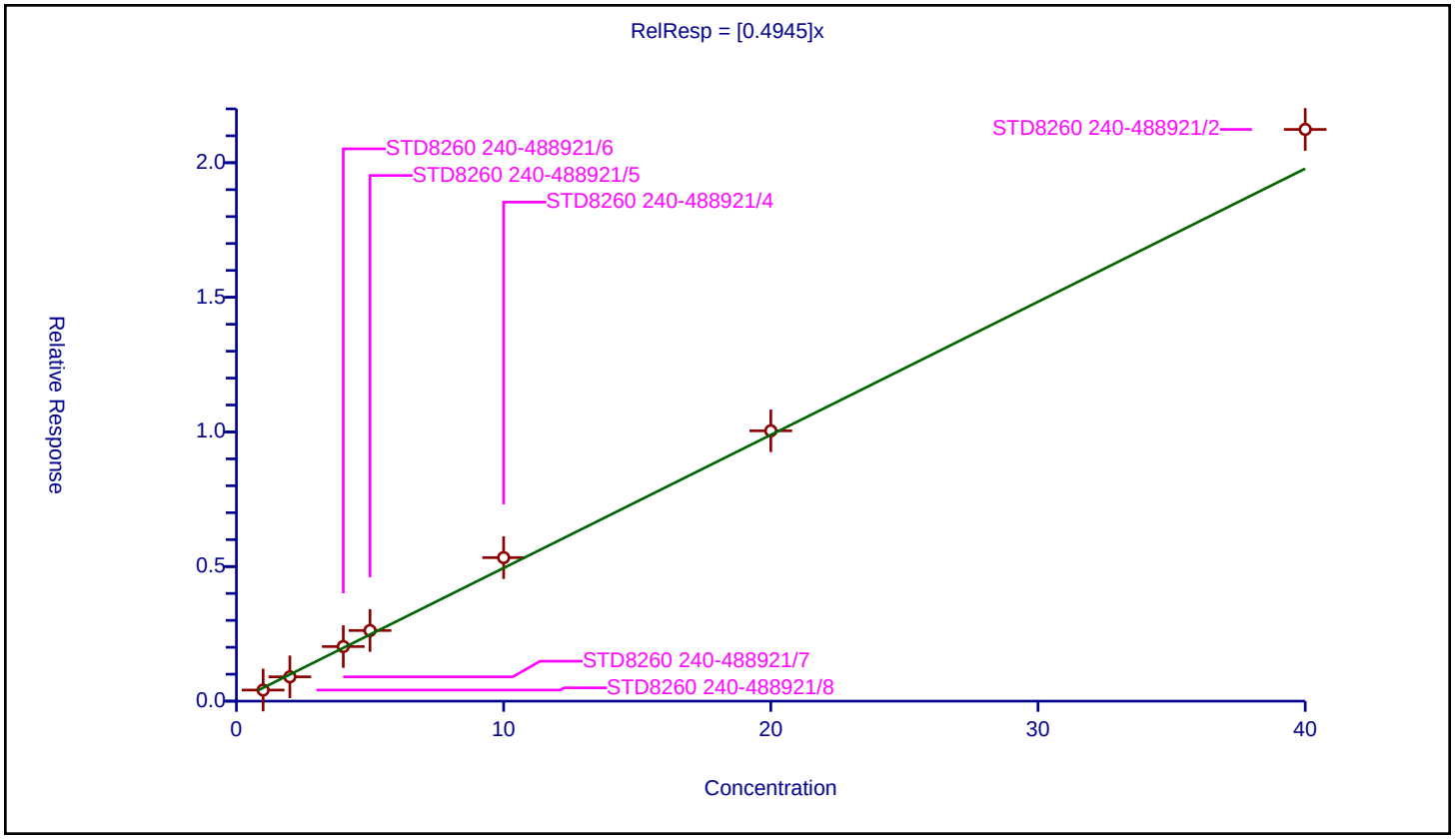
Curve Coefficients

Intercept:	0
Slope:	0.4945

Error Coefficients

Standard Error:	576000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.41202	20.0	1128779.0	0.41202	Y
2	STD8260 240-488921/7	2.0	0.903271	20.0	1155843.0	0.451636	Y
3	STD8260 240-488921/6	4.0	2.027703	20.0	1163839.0	0.506926	Y
4	STD8260 240-488921/5	5.0	2.623955	20.0	1132931.0	0.524791	Y
5	STD8260 240-488921/4	10.0	5.33149	20.0	1154679.0	0.533149	Y
6	STD8260 240-488921/3	20.0	10.0421	20.0	1187654.0	0.502105	Y
7	STD8260 240-488921/2	40.0	21.237548	20.0	1154590.0	0.530939	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

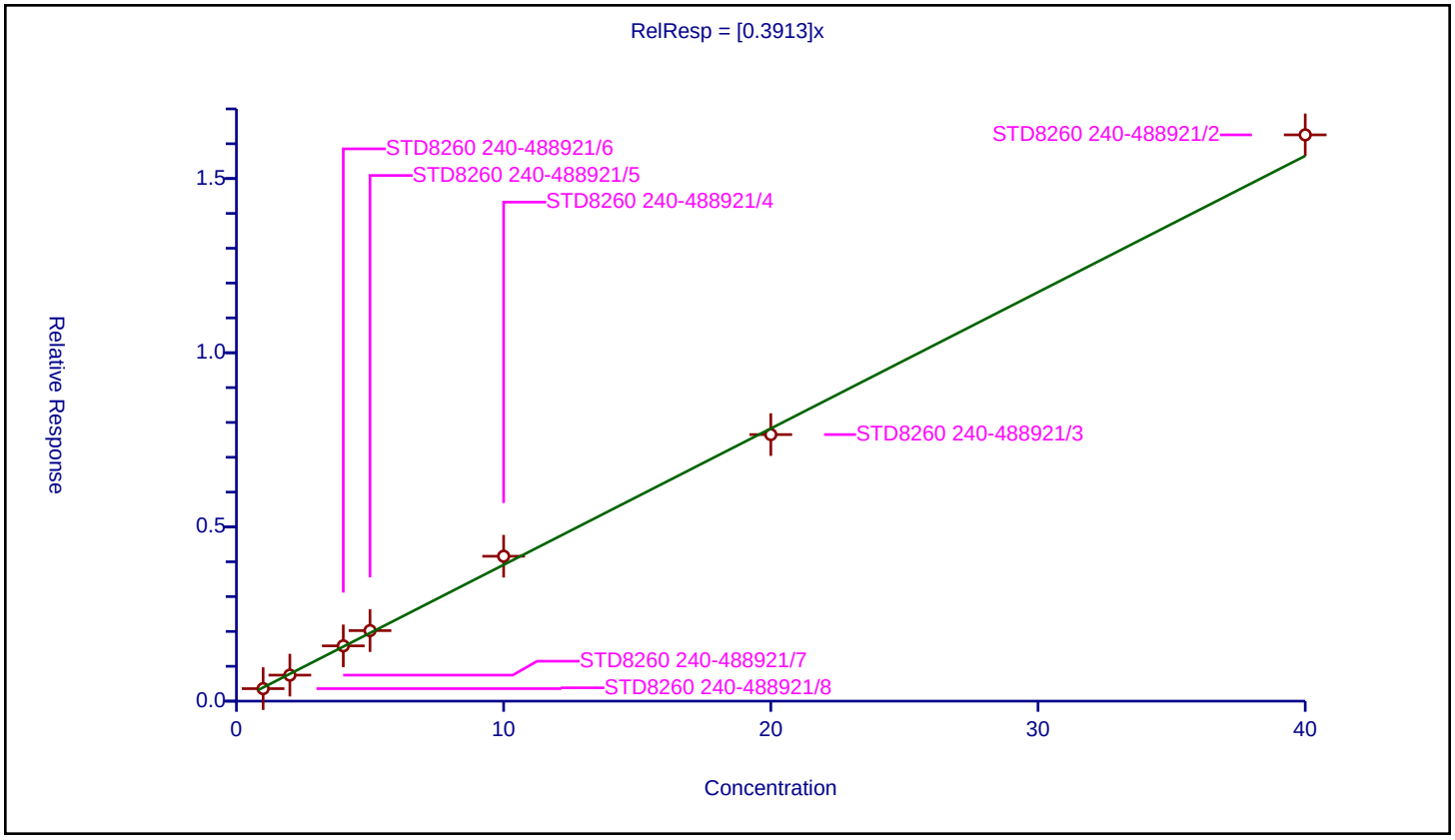
Curve Coefficients

Intercept:	0
Slope:	0.3913

Error Coefficients

Standard Error:	441000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.359202	20.0	1128779.0	0.359202	Y
2	STD8260 240-488921/7	2.0	0.746641	20.0	1155843.0	0.373321	Y
3	STD8260 240-488921/6	4.0	1.586405	20.0	1163839.0	0.396601	Y
4	STD8260 240-488921/5	5.0	2.025048	20.0	1132931.0	0.40501	Y
5	STD8260 240-488921/4	10.0	4.159546	20.0	1154679.0	0.415955	Y
6	STD8260 240-488921/3	20.0	7.651572	20.0	1187654.0	0.382579	Y
7	STD8260 240-488921/2	40.0	16.254567	20.0	1154590.0	0.406364	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

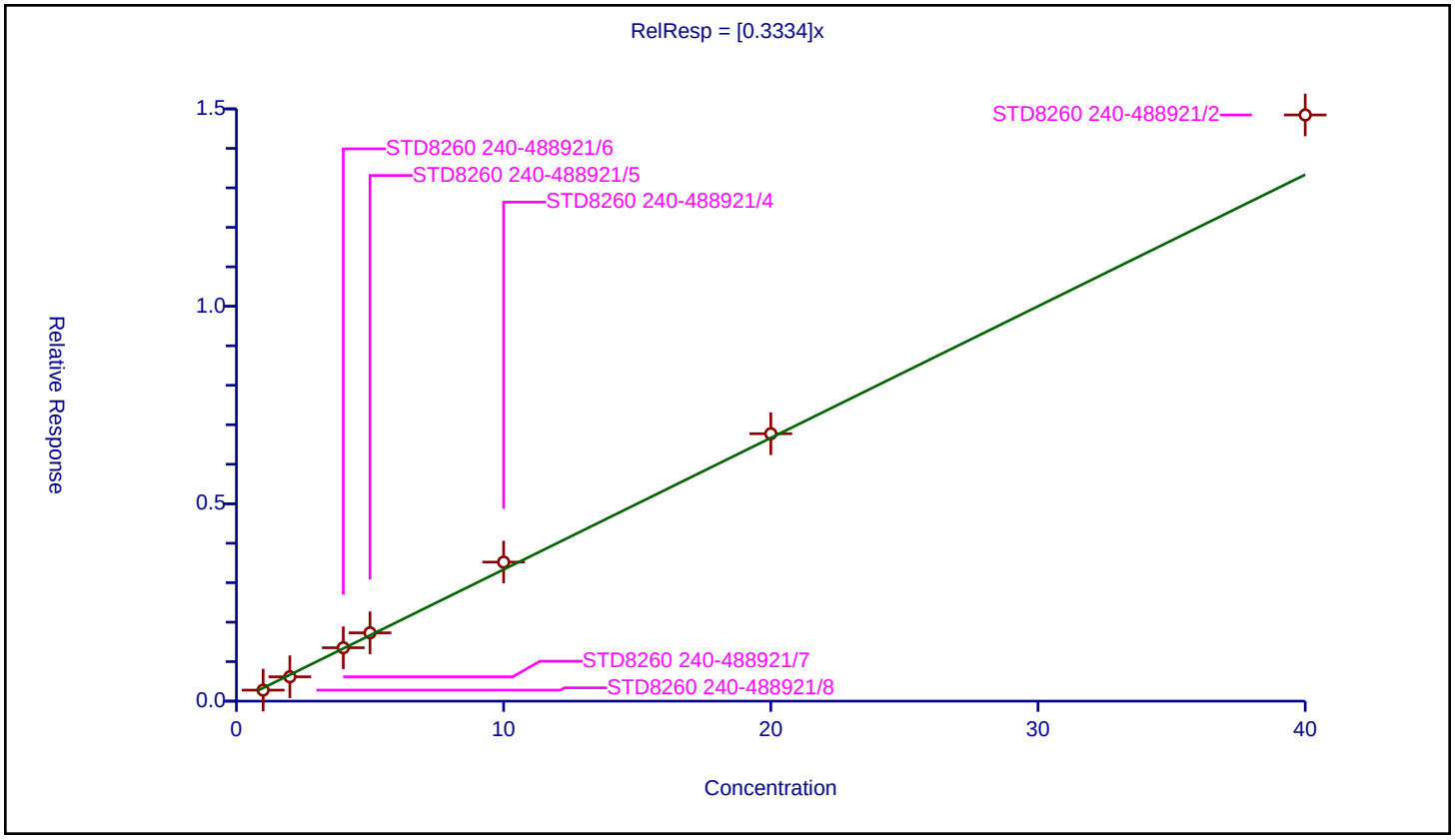
Curve Coefficients

Intercept:	0
Slope:	0.3334

Error Coefficients

Standard Error:	399000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.27885	20.0	1128779.0	0.27885	Y
2	STD8260 240-488921/7	2.0	0.617108	20.0	1155843.0	0.308554	Y
3	STD8260 240-488921/6	4.0	1.352421	20.0	1163839.0	0.338105	Y
4	STD8260 240-488921/5	5.0	1.730114	20.0	1132931.0	0.346023	Y
5	STD8260 240-488921/4	10.0	3.521394	20.0	1154679.0	0.352139	Y
6	STD8260 240-488921/3	20.0	6.77337	20.0	1187654.0	0.338669	Y
7	STD8260 240-488921/2	40.0	14.846032	20.0	1154590.0	0.371151	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

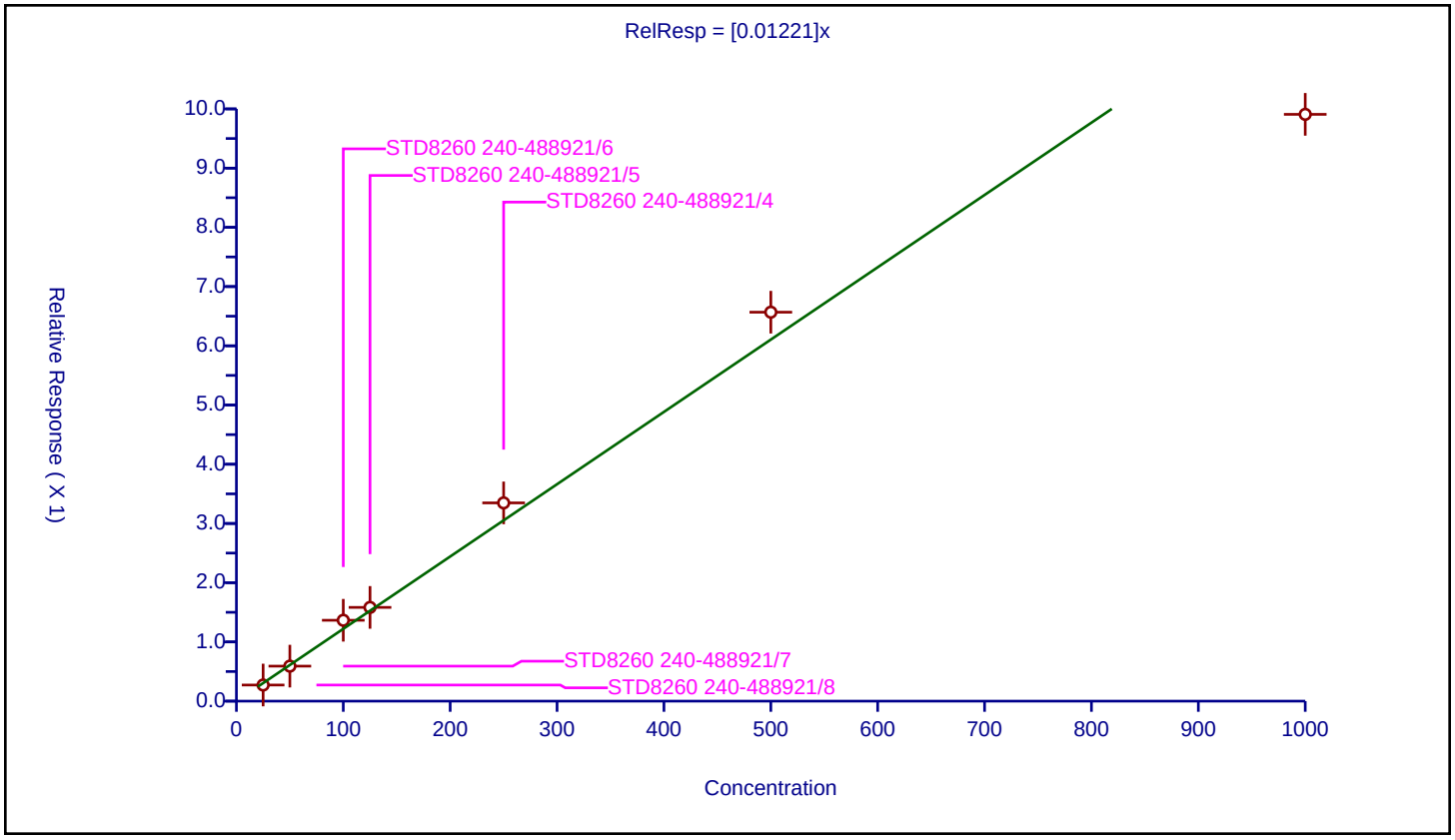
Curve Coefficients

Intercept:	0
Slope:	0.01221

Error Coefficients

Standard Error:	238000
Relative Standard Error:	11.5
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	25.0	0.272226	20.0	919235.0	0.010889	Y
2	STD8260 240-488921/7	50.0	0.591245	20.0	924219.0	0.011825	Y
3	STD8260 240-488921/6	100.0	1.365693	20.0	927163.0	0.013657	Y
4	STD8260 240-488921/5	125.0	1.582772	20.0	931189.0	0.012662	Y
5	STD8260 240-488921/4	250.0	3.347488	20.0	948084.0	0.01339	Y
6	STD8260 240-488921/3	500.0	6.567375	20.0	970068.0	0.013135	Y
7	STD8260 240-488921/2	1000.0	9.907911	20.0	908575.0	0.009908	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

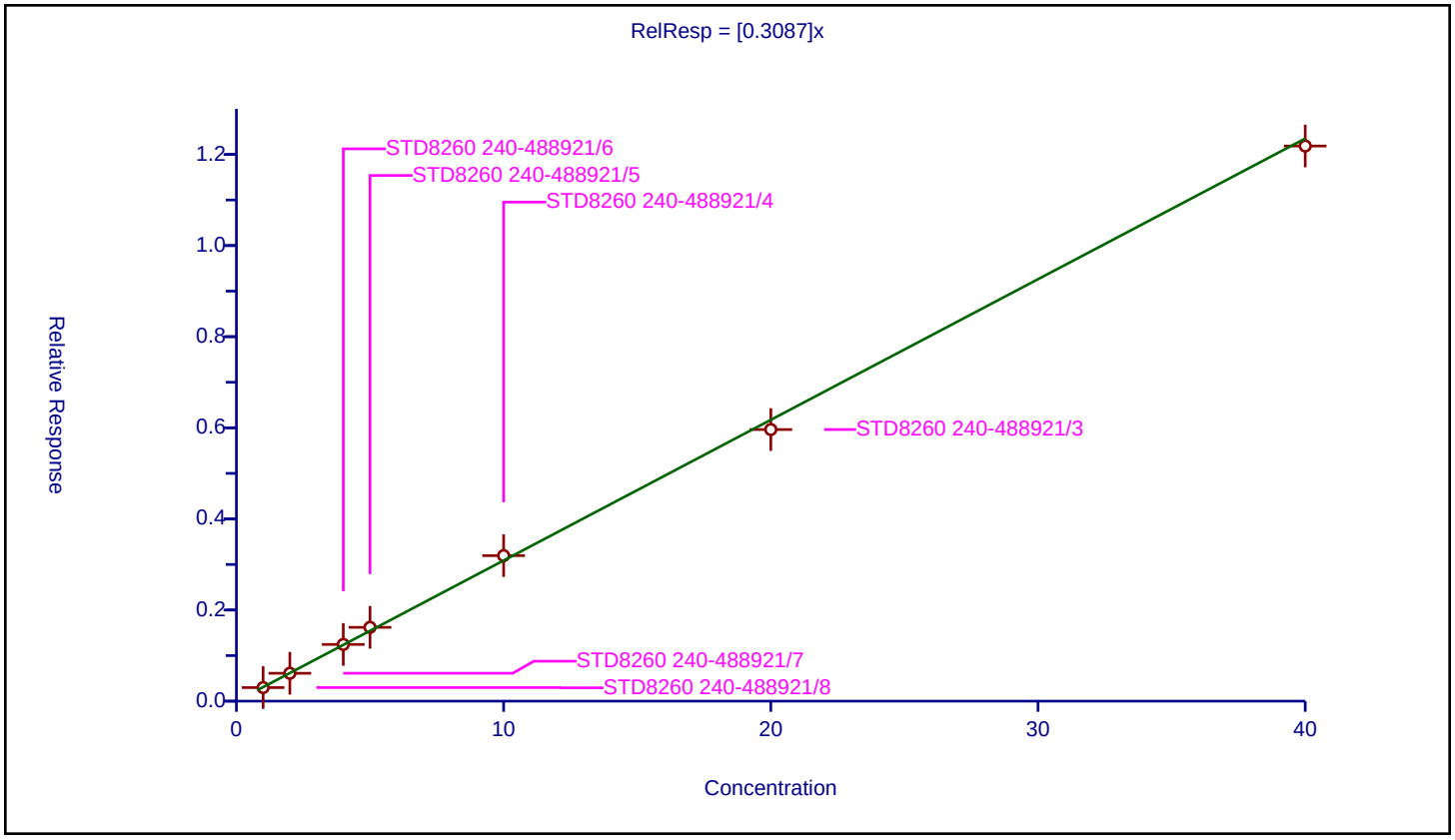
Curve Coefficients

Intercept:	0
Slope:	0.3087

Error Coefficients

Standard Error:	334000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.297684	20.0	1128779.0	0.297684	Y
2	STD8260 240-488921/7	2.0	0.612004	20.0	1155843.0	0.306002	Y
3	STD8260 240-488921/6	4.0	1.245241	20.0	1163839.0	0.31131	Y
4	STD8260 240-488921/5	5.0	1.61941	20.0	1132931.0	0.323882	Y
5	STD8260 240-488921/4	10.0	3.194256	20.0	1154679.0	0.319426	Y
6	STD8260 240-488921/3	20.0	5.961837	20.0	1187654.0	0.298092	Y
7	STD8260 240-488921/2	40.0	12.185139	20.0	1154590.0	0.304628	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

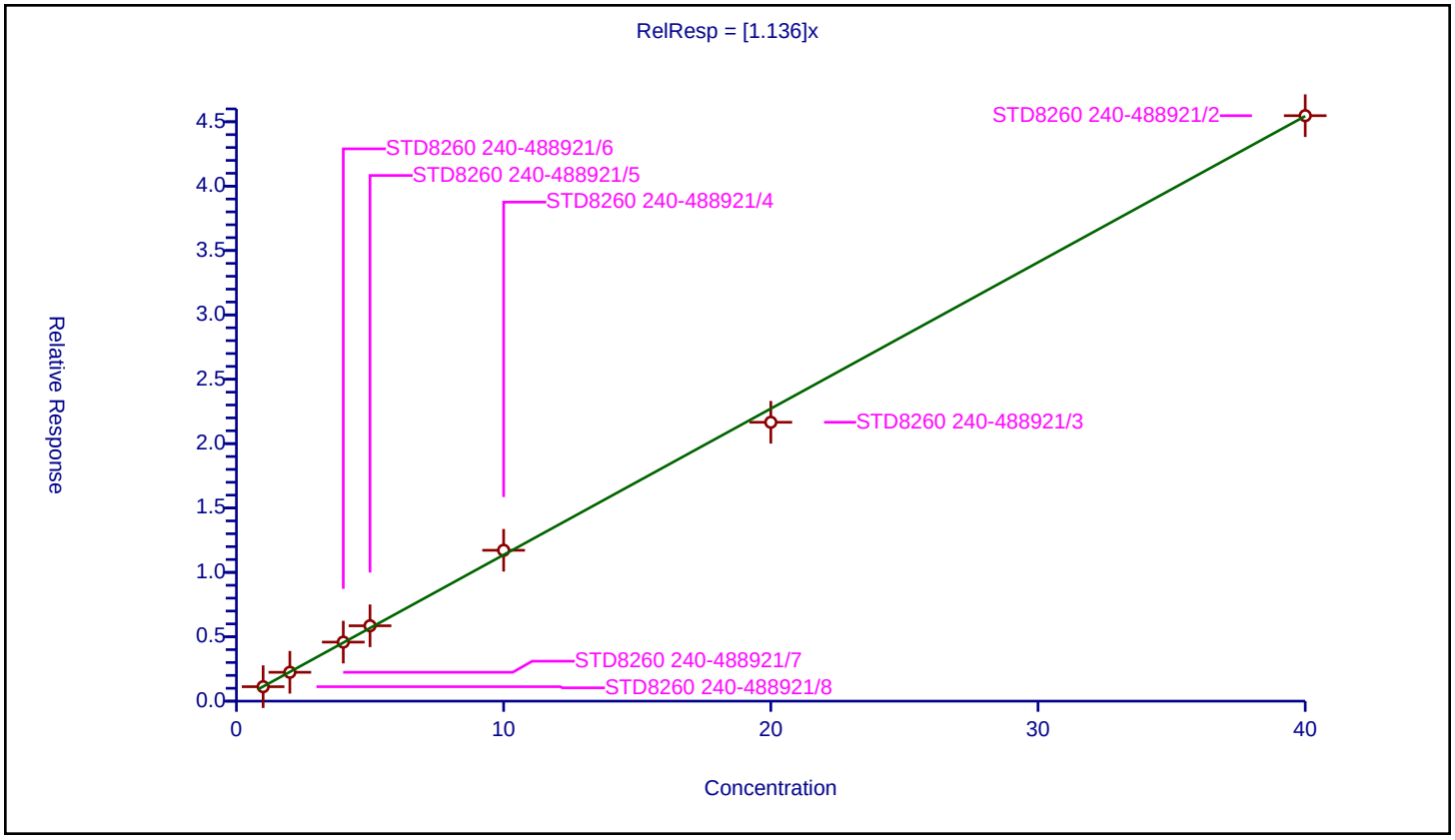
Curve Coefficients

Intercept:	0
Slope:	1.136

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.12208	20.0	1128779.0	1.12208	Y
2	STD8260 240-488921/7	2.0	2.241706	20.0	1155843.0	1.120853	Y
3	STD8260 240-488921/6	4.0	4.585634	20.0	1163839.0	1.146409	Y
4	STD8260 240-488921/5	5.0	5.853543	20.0	1132931.0	1.170709	Y
5	STD8260 240-488921/4	10.0	11.7173	20.0	1154679.0	1.17173	Y
6	STD8260 240-488921/3	20.0	21.659153	20.0	1187654.0	1.082958	Y
7	STD8260 240-488921/2	40.0	45.473285	20.0	1154590.0	1.136832	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

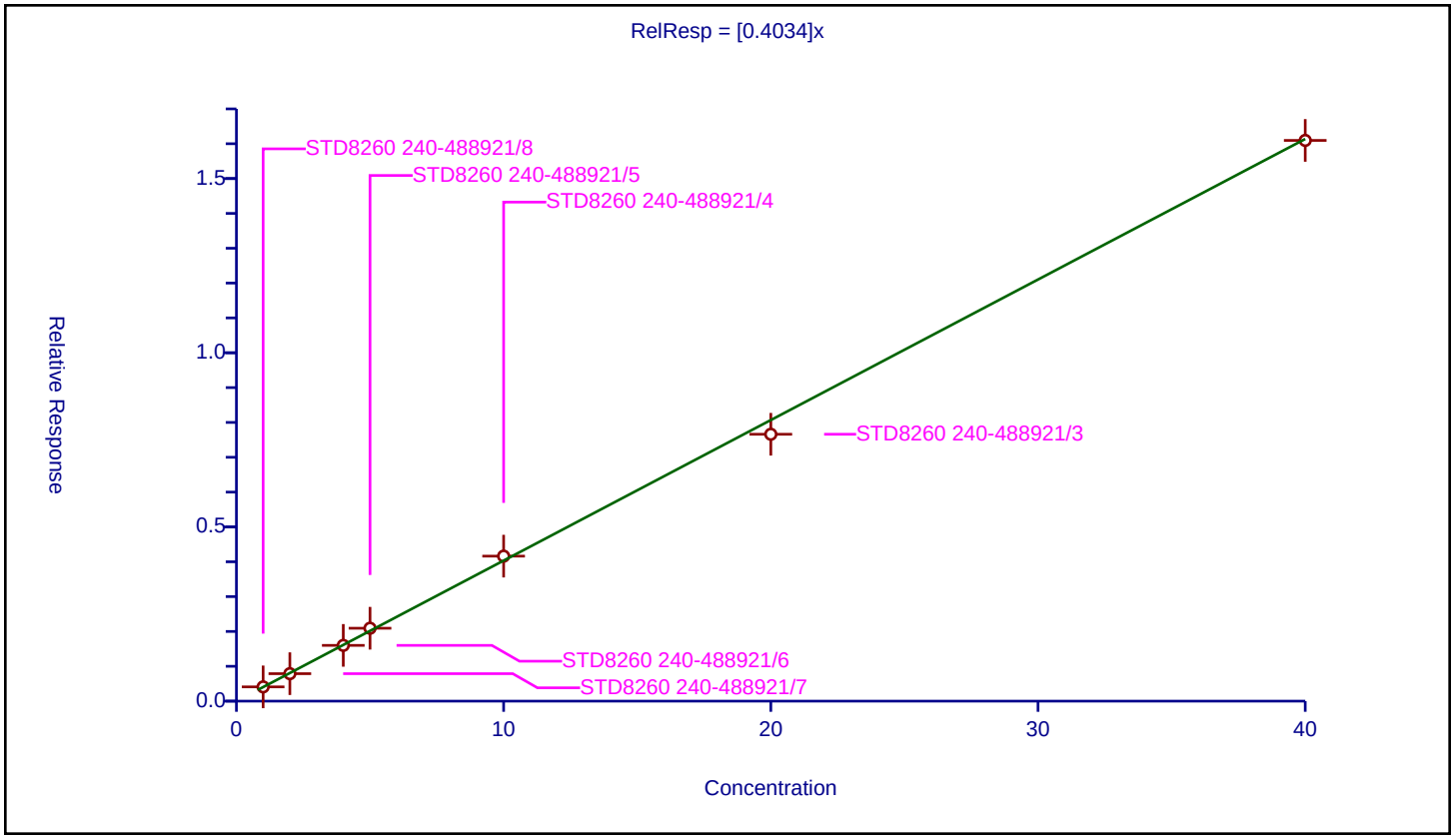
Curve Coefficients

Intercept:	0
Slope:	0.4034

Error Coefficients

Standard Error:	438000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.40931	20.0	1128779.0	0.40931	Y
2	STD8260 240-488921/7	2.0	0.788412	20.0	1155843.0	0.394206	Y
3	STD8260 240-488921/6	4.0	1.60029	20.0	1163839.0	0.400073	Y
4	STD8260 240-488921/5	5.0	2.093049	20.0	1132931.0	0.41861	Y
5	STD8260 240-488921/4	10.0	4.162317	20.0	1154679.0	0.416232	Y
6	STD8260 240-488921/3	20.0	7.660413	20.0	1187654.0	0.383021	Y
7	STD8260 240-488921/2	40.0	16.094544	20.0	1154590.0	0.402364	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

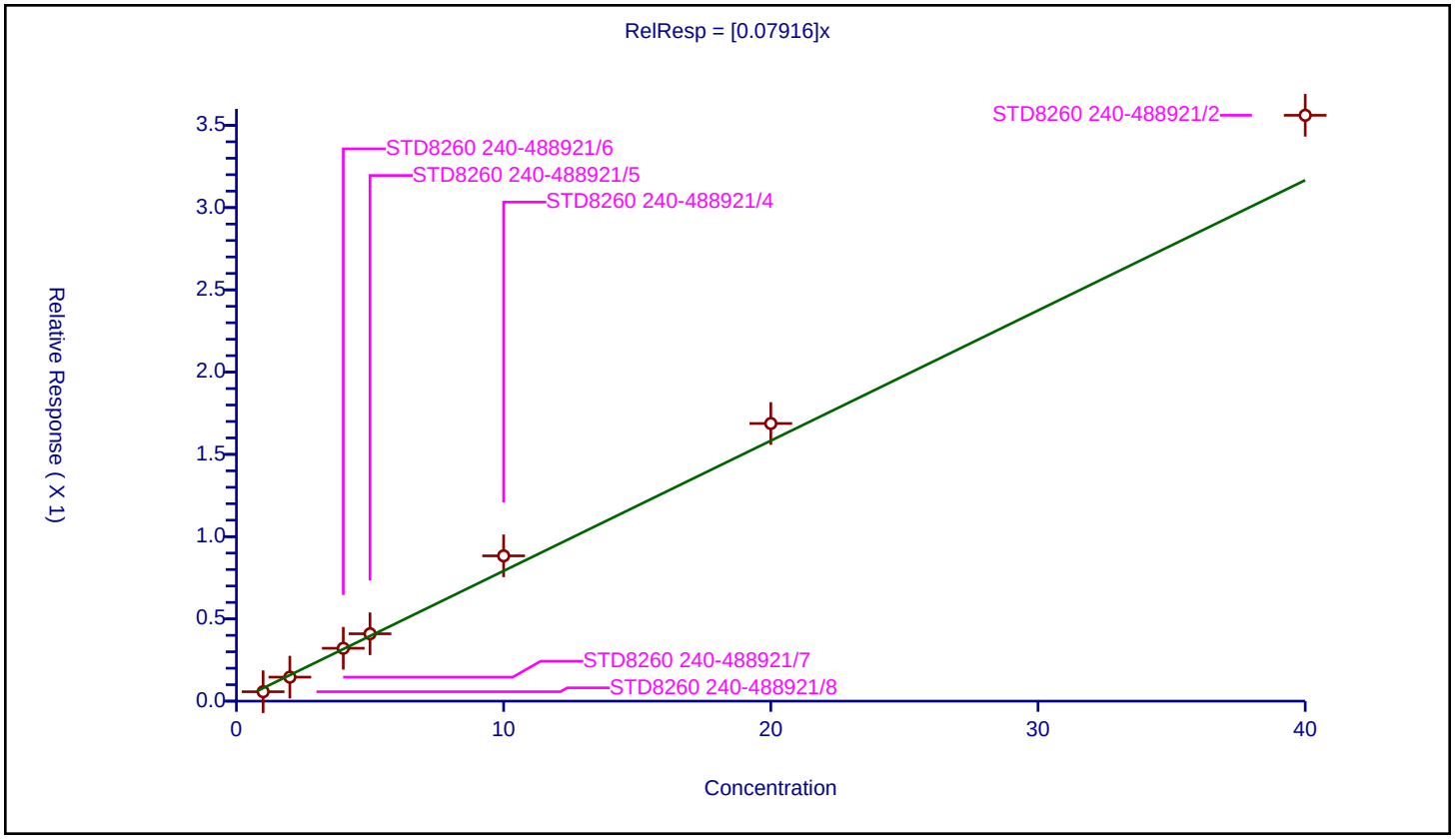
Curve Coefficients

Intercept:	0
Slope:	0.07916

Error Coefficients

Standard Error:	96500
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.057195	20.0	1128779.0	0.057195	Y
2	STD8260 240-488921/7	2.0	0.145902	20.0	1155843.0	0.072951	Y
3	STD8260 240-488921/6	4.0	0.321385	20.0	1163839.0	0.080346	Y
4	STD8260 240-488921/5	5.0	0.409487	20.0	1132931.0	0.081897	Y
5	STD8260 240-488921/4	10.0	0.883189	20.0	1154679.0	0.088319	Y
6	STD8260 240-488921/3	20.0	1.687663	20.0	1187654.0	0.084383	Y
7	STD8260 240-488921/2	40.0	3.561212	20.0	1154590.0	0.08903	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

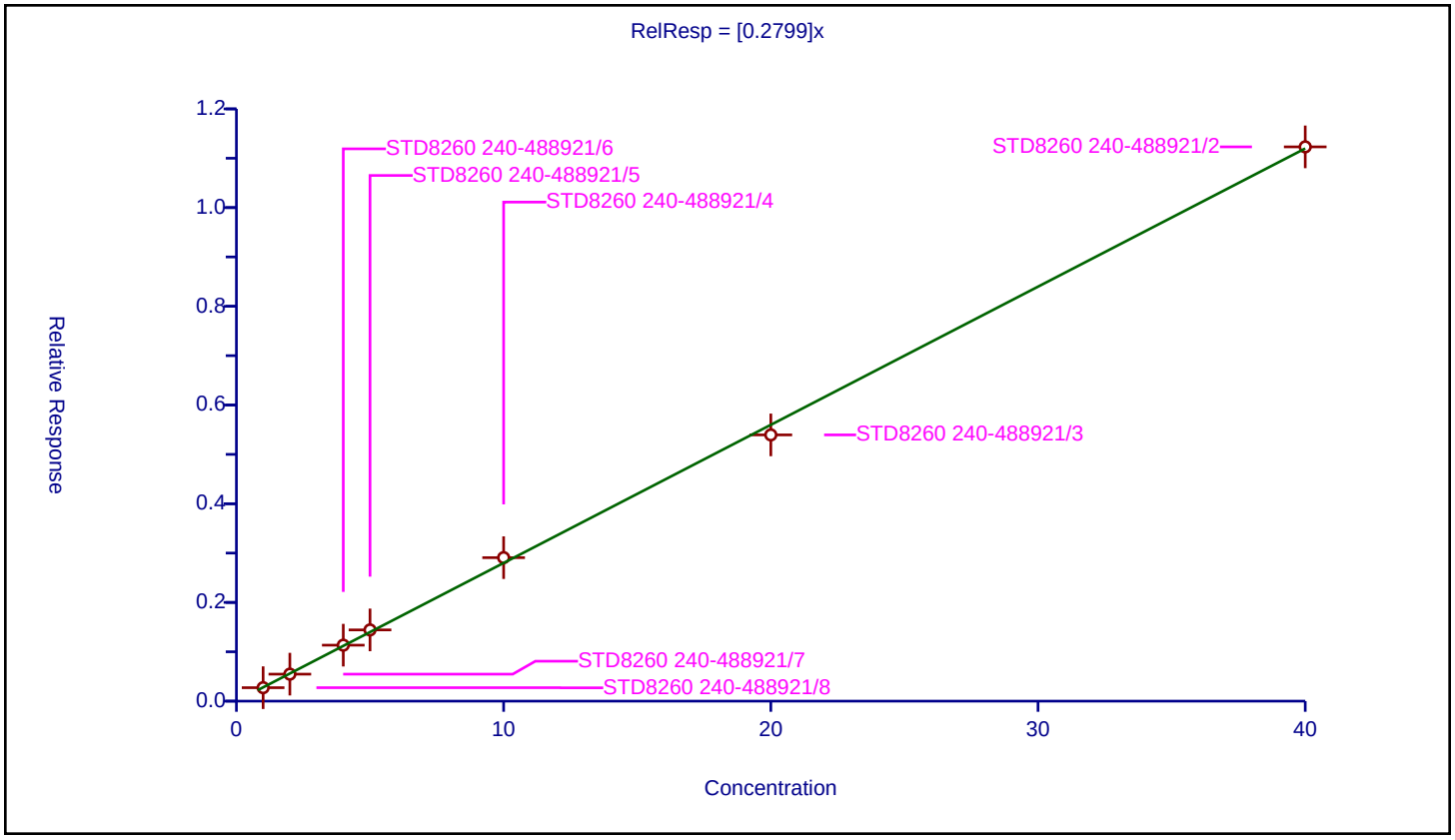
Curve Coefficients

Intercept:	0
Slope:	0.2799

Error Coefficients

Standard Error:	306000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.27256	20.0	1128779.0	0.27256	Y
2	STD8260 240-488921/7	2.0	0.547185	20.0	1155843.0	0.273593	Y
3	STD8260 240-488921/6	4.0	1.133885	20.0	1163839.0	0.283471	Y
4	STD8260 240-488921/5	5.0	1.443565	20.0	1132931.0	0.288713	Y
5	STD8260 240-488921/4	10.0	2.907267	20.0	1154679.0	0.290727	Y
6	STD8260 240-488921/3	20.0	5.394686	20.0	1187654.0	0.269734	Y
7	STD8260 240-488921/2	40.0	11.230255	20.0	1154590.0	0.280756	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

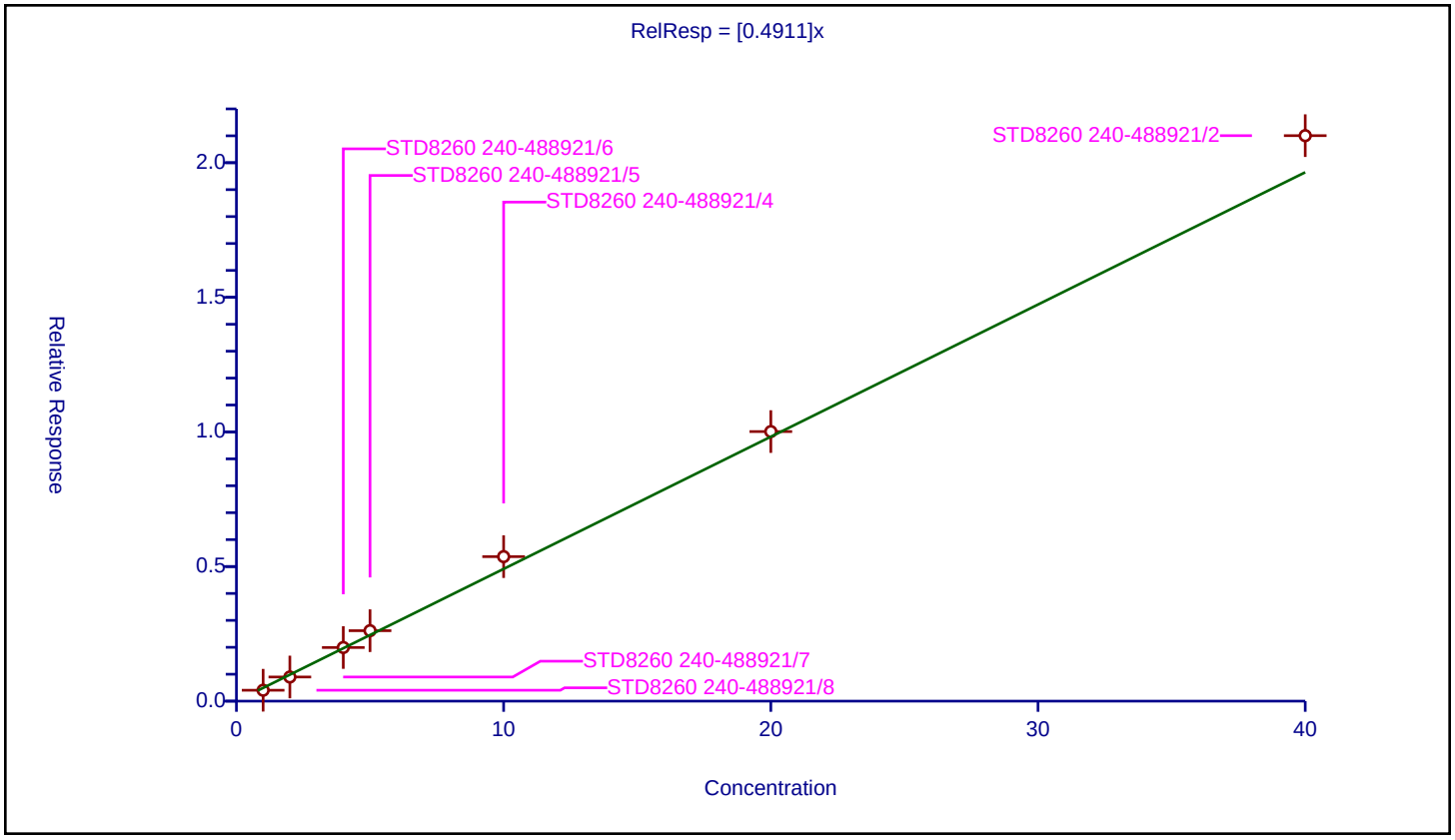
Curve Coefficients

Intercept:	0
Slope:	0.4911

Error Coefficients

Standard Error:	571000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.404933	20.0	1128779.0	0.404933	Y
2	STD8260 240-488921/7	2.0	0.897302	20.0	1155843.0	0.448651	Y
3	STD8260 240-488921/6	4.0	1.992458	20.0	1163839.0	0.498114	Y
4	STD8260 240-488921/5	5.0	2.617088	20.0	1132931.0	0.523418	Y
5	STD8260 240-488921/4	10.0	5.367483	20.0	1154679.0	0.536748	Y
6	STD8260 240-488921/3	20.0	10.014162	20.0	1187654.0	0.500708	Y
7	STD8260 240-488921/2	40.0	21.005586	20.0	1154590.0	0.52514	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

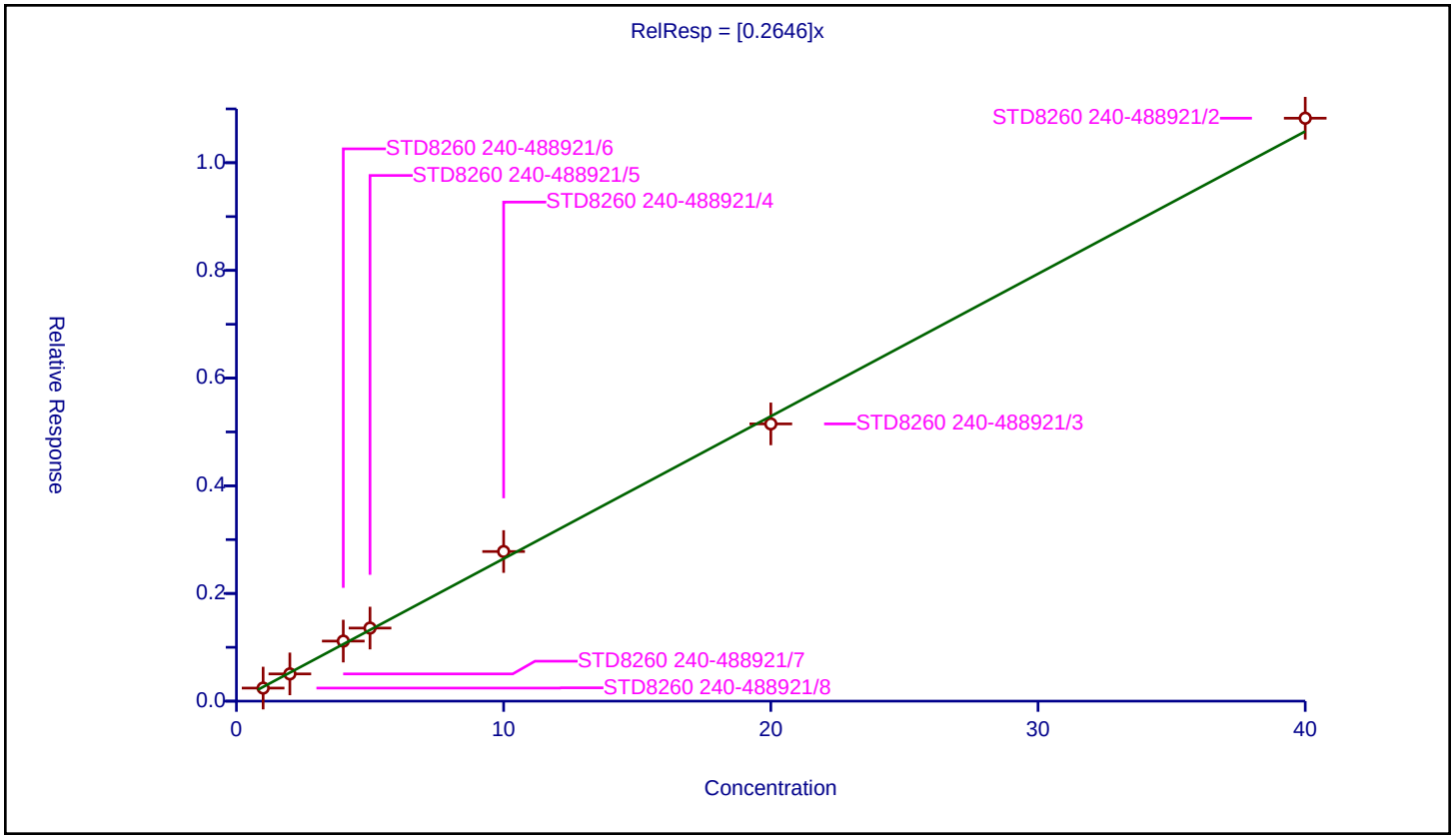
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	295000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.242722	20.0	1128779.0	0.242722	Y
2	STD8260 240-488921/7	2.0	0.505743	20.0	1155843.0	0.252872	Y
3	STD8260 240-488921/6	4.0	1.115068	20.0	1163839.0	0.278767	Y
4	STD8260 240-488921/5	5.0	1.357329	20.0	1132931.0	0.271466	Y
5	STD8260 240-488921/4	10.0	2.77892	20.0	1154679.0	0.277892	Y
6	STD8260 240-488921/3	20.0	5.149547	20.0	1187654.0	0.257477	Y
7	STD8260 240-488921/2	40.0	10.826631	20.0	1154590.0	0.270666	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

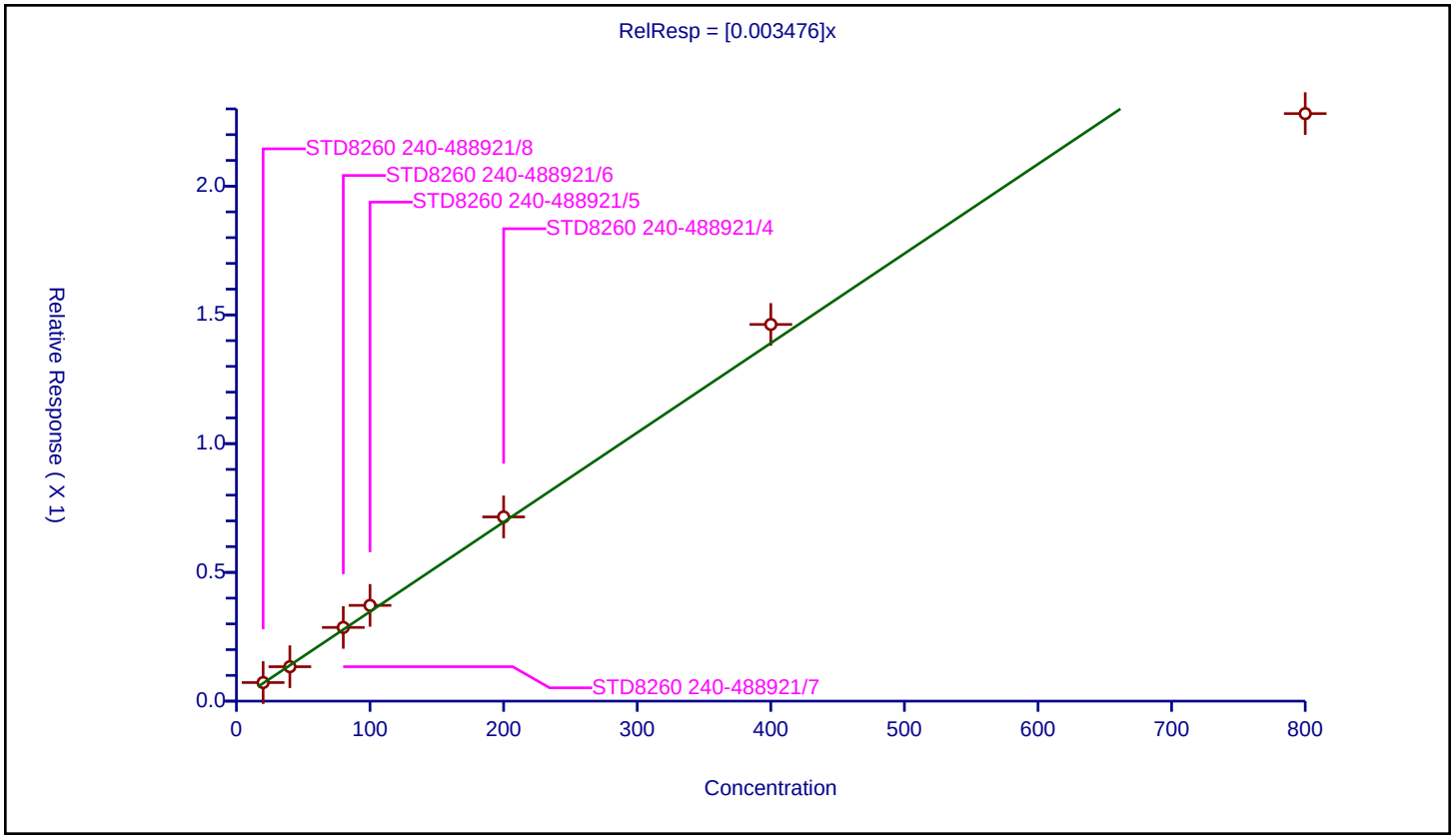
Curve Coefficients

Intercept:	0
Slope:	0.003476

Error Coefficients

Standard Error:	67600
Relative Standard Error:	8.6
Correlation Coefficient:	0.977
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	20.0	0.072131	20.0	1128779.0	0.003607	Y
2	STD8260 240-488921/7	40.0	0.133686	20.0	1155843.0	0.003342	Y
3	STD8260 240-488921/6	80.0	0.28626	20.0	1163839.0	0.003578	Y
4	STD8260 240-488921/5	100.0	0.371867	20.0	1132931.0	0.003719	Y
5	STD8260 240-488921/4	200.0	0.71535	20.0	1154679.0	0.003577	Y
6	STD8260 240-488921/3	400.0	1.462951	20.0	1187654.0	0.003657	Y
7	STD8260 240-488921/2	800.0	2.281641	20.0	1154590.0	0.002852	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

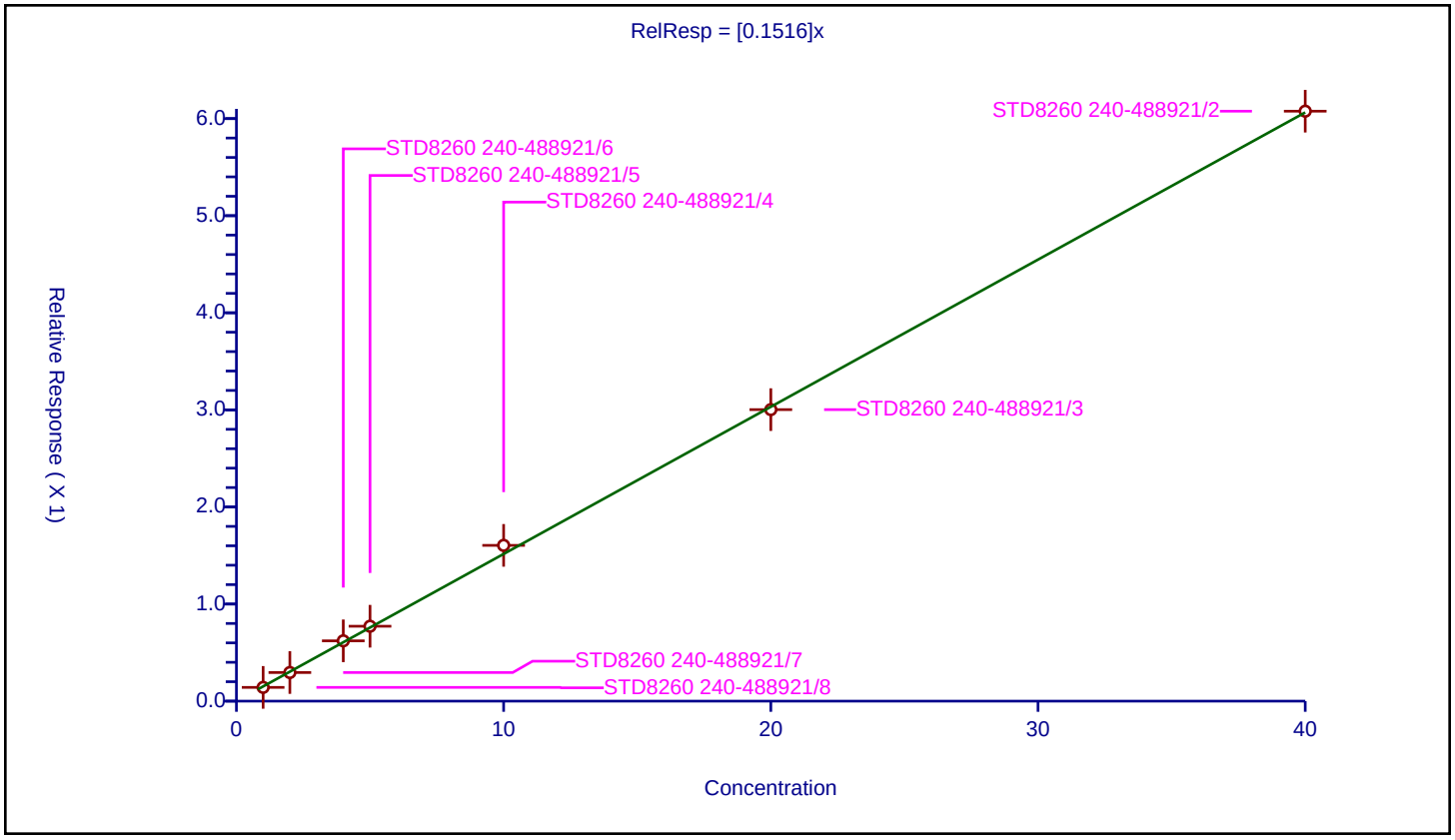
Curve Coefficients

Intercept:	0
Slope:	0.1516

Error Coefficients

Standard Error:	167000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.141604	20.0	1128779.0	0.141604	Y
2	STD8260 240-488921/7	2.0	0.29485	20.0	1155843.0	0.147425	Y
3	STD8260 240-488921/6	4.0	0.621289	20.0	1163839.0	0.155322	Y
4	STD8260 240-488921/5	5.0	0.771468	20.0	1132931.0	0.154294	Y
5	STD8260 240-488921/4	10.0	1.604411	20.0	1154679.0	0.160441	Y
6	STD8260 240-488921/3	20.0	3.002575	20.0	1187654.0	0.150129	Y
7	STD8260 240-488921/2	40.0	6.076356	20.0	1154590.0	0.151909	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

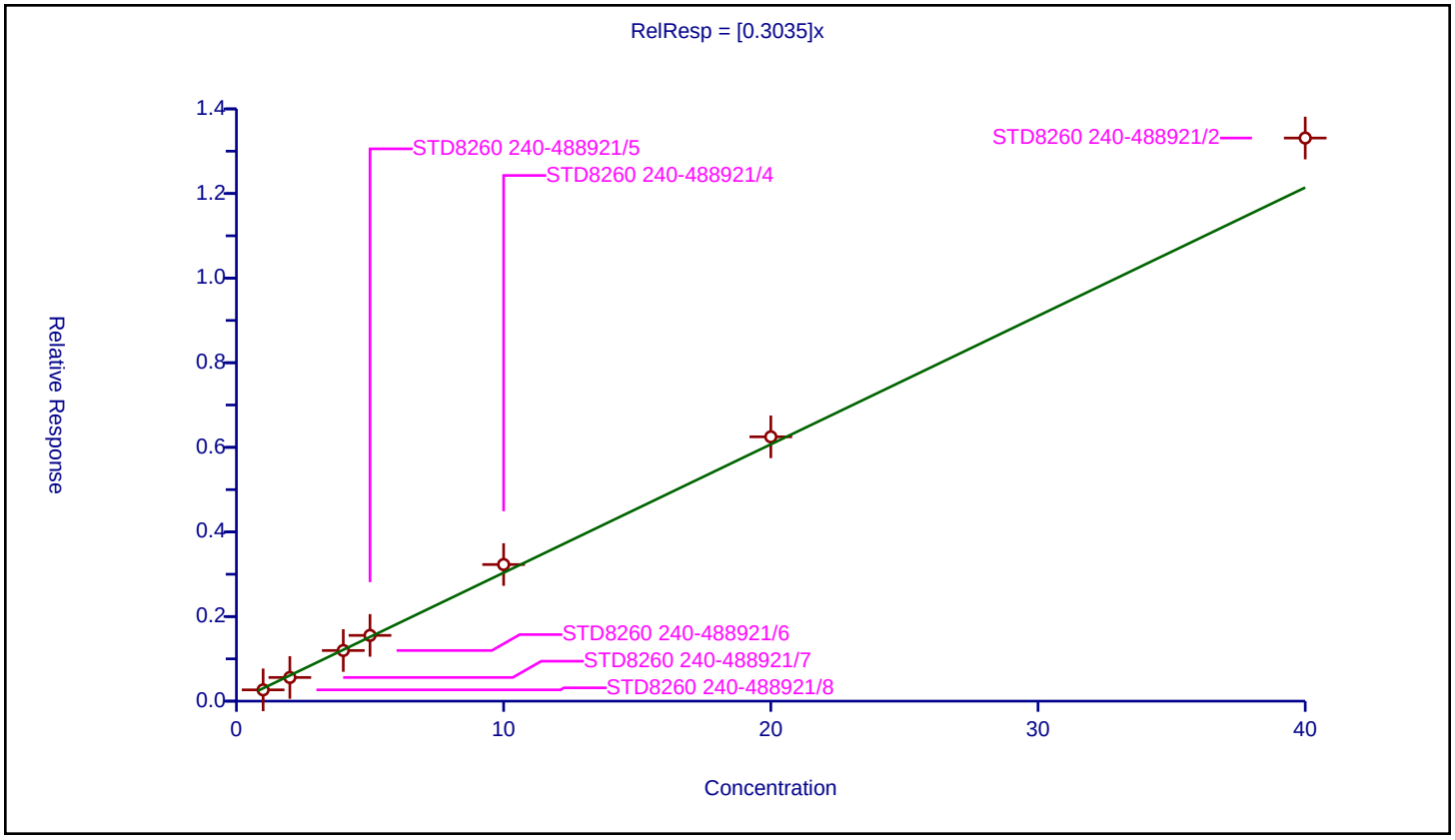
Curve Coefficients

Intercept:	0
Slope:	0.3035

Error Coefficients

Standard Error:	360000
Relative Standard Error:	7.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.266802	20.0	1128779.0	0.266802	Y
2	STD8260 240-488921/7	2.0	0.559107	20.0	1155843.0	0.279554	Y
3	STD8260 240-488921/6	4.0	1.197279	20.0	1163839.0	0.29932	Y
4	STD8260 240-488921/5	5.0	1.554252	20.0	1132931.0	0.31085	Y
5	STD8260 240-488921/4	10.0	3.229504	20.0	1154679.0	0.32295	Y
6	STD8260 240-488921/3	20.0	6.248436	20.0	1187654.0	0.312422	Y
7	STD8260 240-488921/2	40.0	13.311011	20.0	1154590.0	0.332775	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

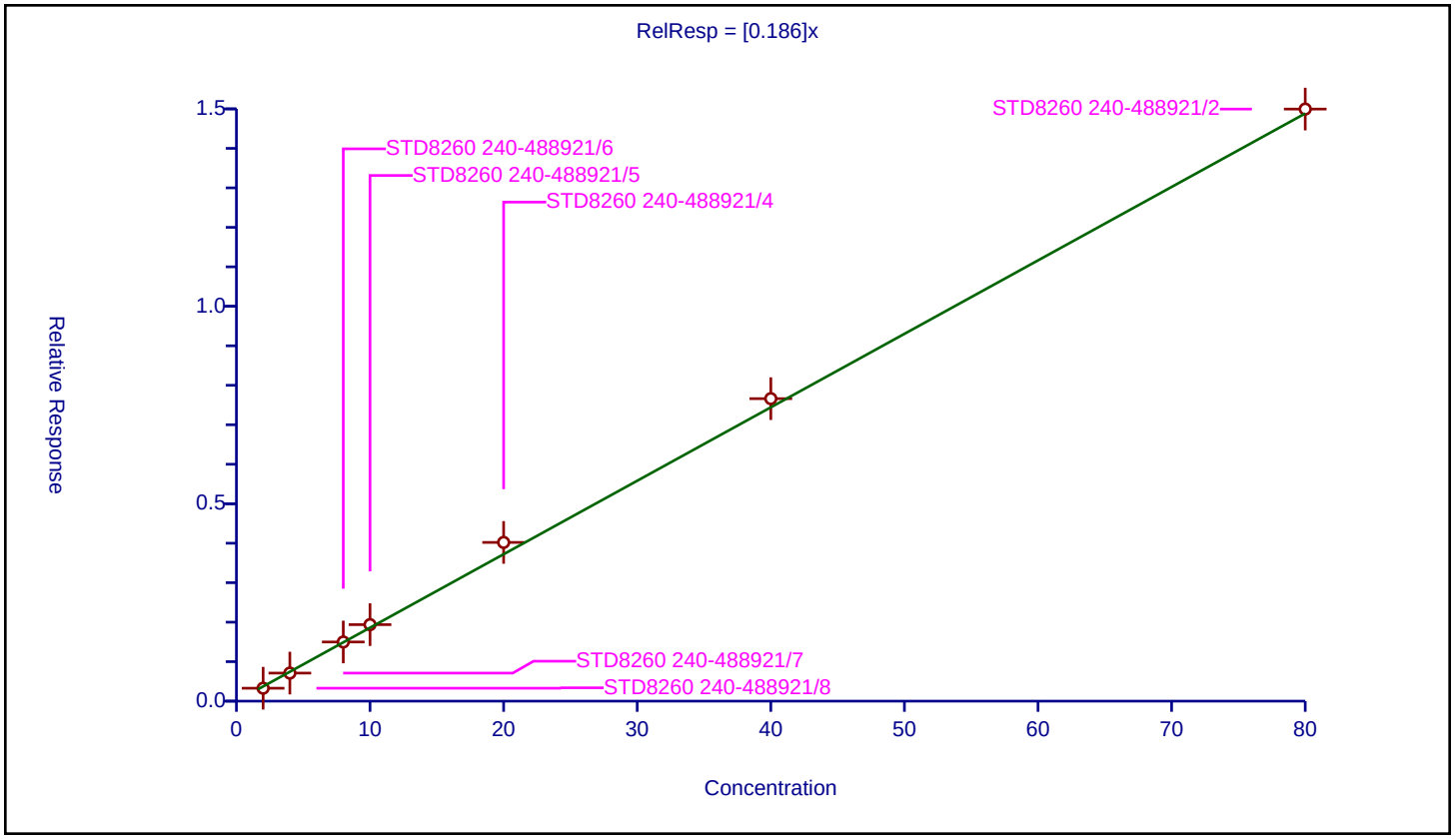
Curve Coefficients

Intercept:	0
Slope:	0.186

Error Coefficients

Standard Error:	415000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.327309	20.0	1128779.0	0.163655	Y
2	STD8260 240-488921/7	4.0	0.710321	20.0	1155843.0	0.17758	Y
3	STD8260 240-488921/6	8.0	1.498661	20.0	1163839.0	0.187333	Y
4	STD8260 240-488921/5	10.0	1.937629	20.0	1132931.0	0.193763	Y
5	STD8260 240-488921/4	20.0	4.019853	20.0	1154679.0	0.200993	Y
6	STD8260 240-488921/3	40.0	7.661373	20.0	1187654.0	0.191534	Y
7	STD8260 240-488921/2	80.0	14.995297	20.0	1154590.0	0.187441	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

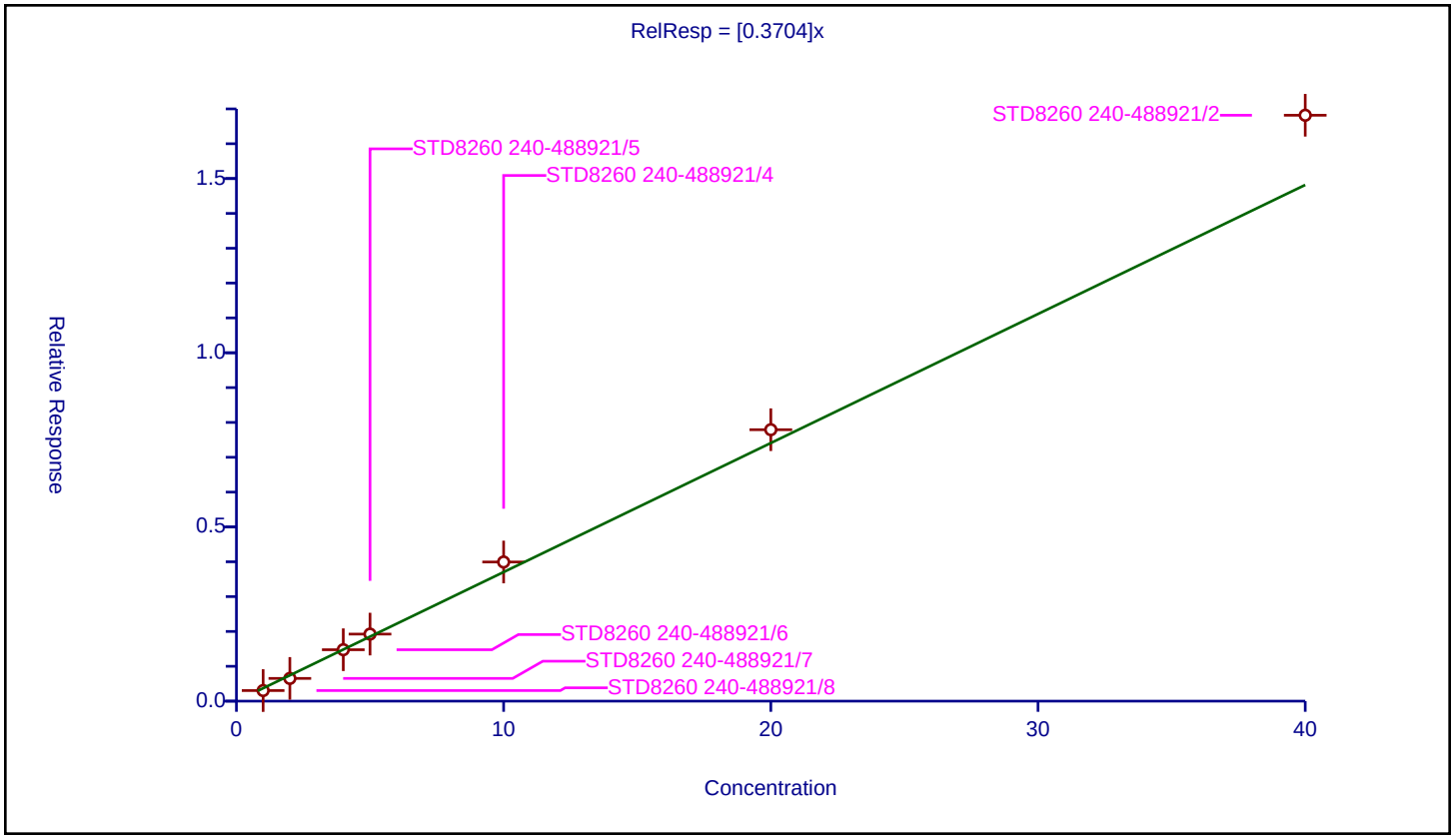
Curve Coefficients

Intercept:	0
Slope:	0.3704

Error Coefficients

Standard Error:	453000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.30362	20.0	1128779.0	0.30362	Y
2	STD8260 240-488921/7	2.0	0.652234	20.0	1155843.0	0.326117	Y
3	STD8260 240-488921/6	4.0	1.475995	20.0	1163839.0	0.368999	Y
4	STD8260 240-488921/5	5.0	1.924777	20.0	1132931.0	0.384955	Y
5	STD8260 240-488921/4	10.0	3.99408	20.0	1154679.0	0.399408	Y
6	STD8260 240-488921/3	20.0	7.791495	20.0	1187654.0	0.389575	Y
7	STD8260 240-488921/2	40.0	16.816931	20.0	1154590.0	0.420423	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

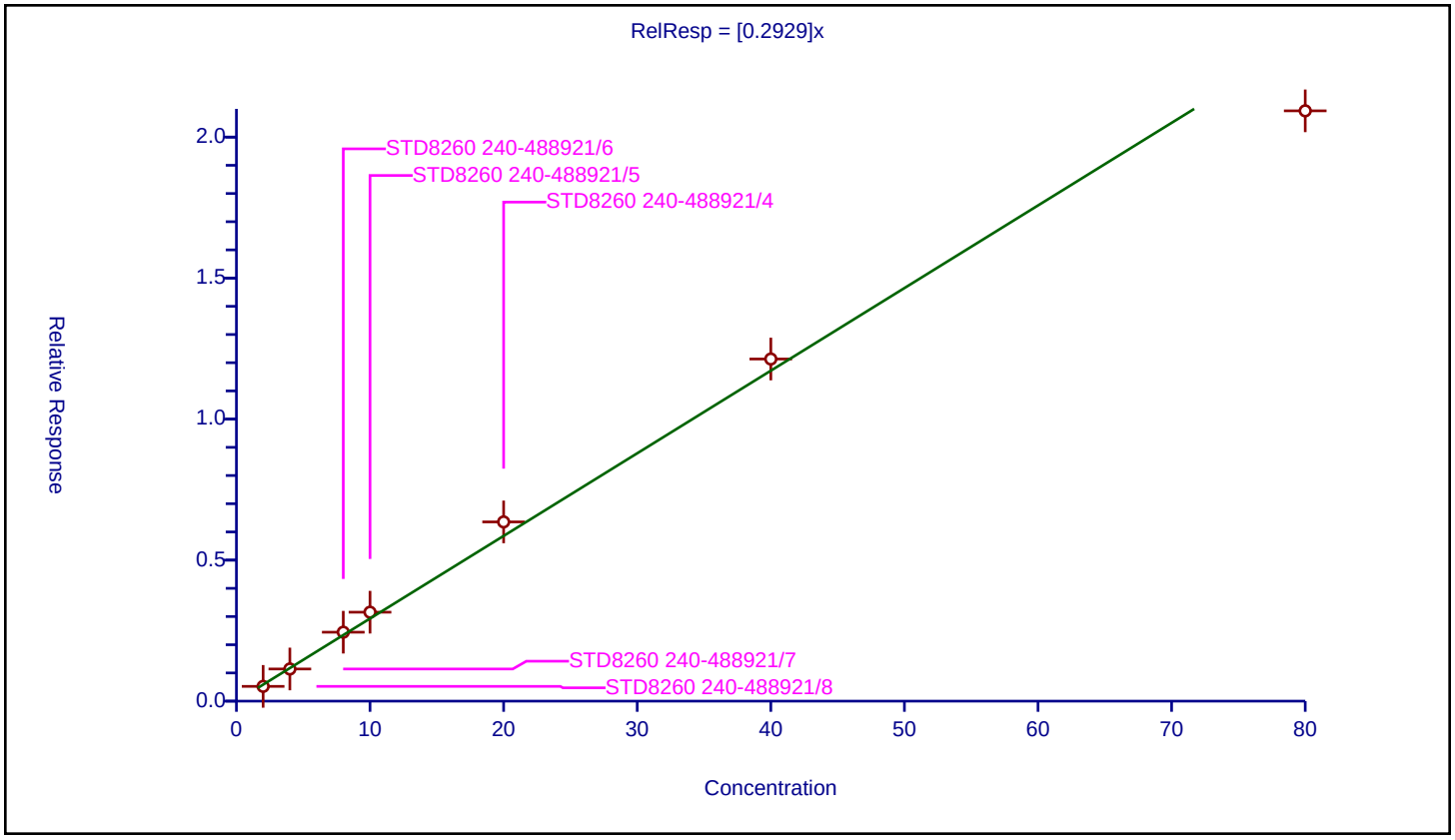
Curve Coefficients

Intercept:	0
Slope:	0.2929

Error Coefficients

Standard Error:	602000
Relative Standard Error:	8.1
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.523504	20.0	1128779.0	0.261752	Y
2	STD8260 240-488921/7	4.0	1.140138	20.0	1155843.0	0.285034	Y
3	STD8260 240-488921/6	8.0	2.444737	20.0	1163839.0	0.305592	Y
4	STD8260 240-488921/5	10.0	3.15412	20.0	1132931.0	0.315412	Y
5	STD8260 240-488921/4	20.0	6.355567	20.0	1154679.0	0.317778	Y
6	STD8260 240-488921/3	40.0	12.131311	20.0	1187654.0	0.303283	Y
7	STD8260 240-488921/2	80.0	20.931257	20.0	1154590.0	0.261641	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

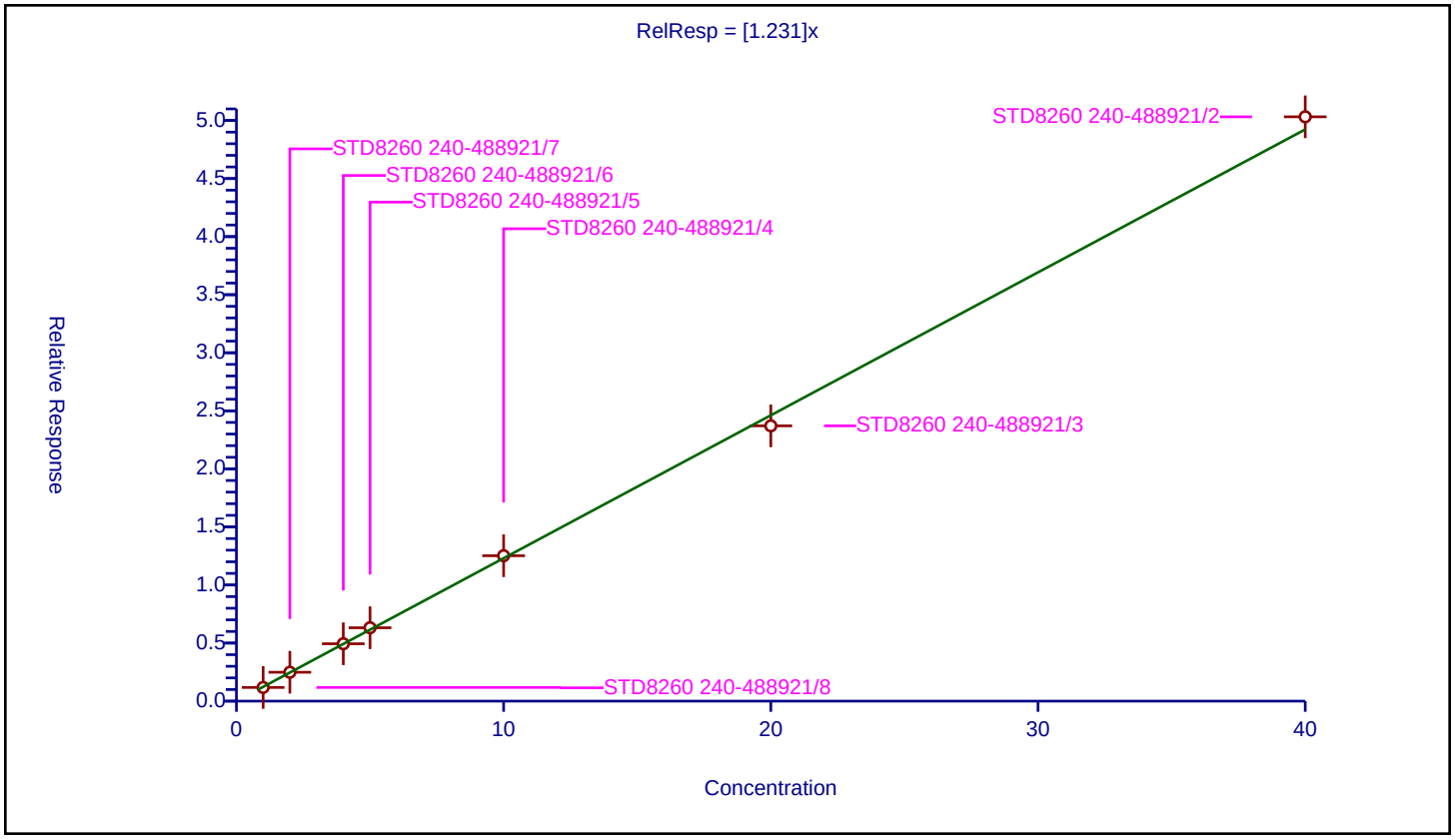
Curve Coefficients

Intercept:	0
Slope:	1.231

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.177087	20.0	919235.0	1.177087	Y
2	STD8260 240-488921/7	2.0	2.487203	20.0	924219.0	1.243601	Y
3	STD8260 240-488921/6	4.0	4.940275	20.0	927163.0	1.235069	Y
4	STD8260 240-488921/5	5.0	6.320285	20.0	931189.0	1.264057	Y
5	STD8260 240-488921/4	10.0	12.521717	20.0	948084.0	1.252172	Y
6	STD8260 240-488921/3	20.0	23.706441	20.0	970068.0	1.185322	Y
7	STD8260 240-488921/2	40.0	50.319698	20.0	908575.0	1.257992	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

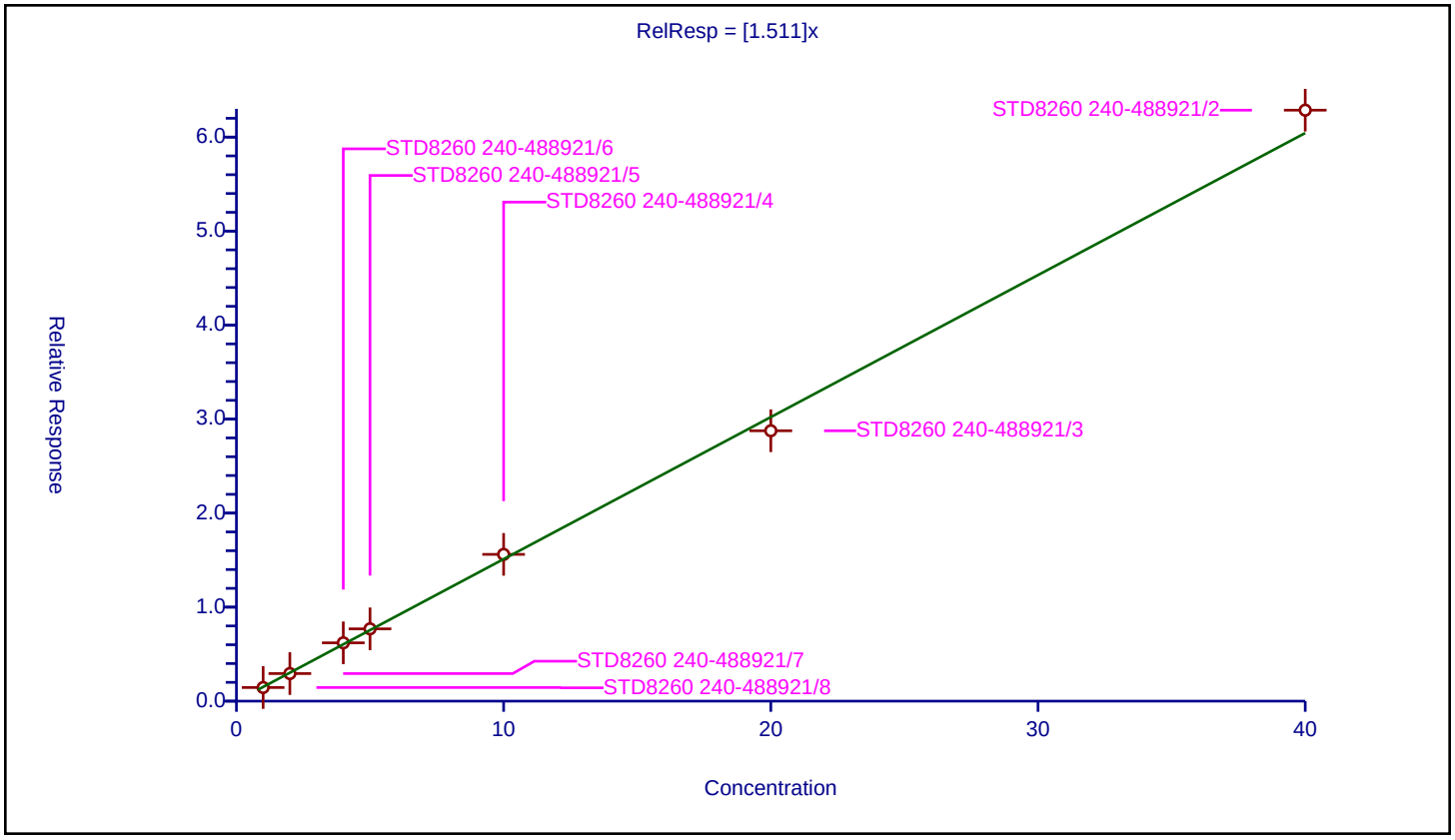
Curve Coefficients

Intercept:	0
Slope:	1.511

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.44927	20.0	919235.0	1.44927	Y
2	STD8260 240-488921/7	2.0	2.933049	20.0	924219.0	1.466525	Y
3	STD8260 240-488921/6	4.0	6.202965	20.0	927163.0	1.550741	Y
4	STD8260 240-488921/5	5.0	7.691092	20.0	931189.0	1.538218	Y
5	STD8260 240-488921/4	10.0	15.611064	20.0	948084.0	1.561106	Y
6	STD8260 240-488921/3	20.0	28.761489	20.0	970068.0	1.438074	Y
7	STD8260 240-488921/2	40.0	62.864486	20.0	908575.0	1.571612	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

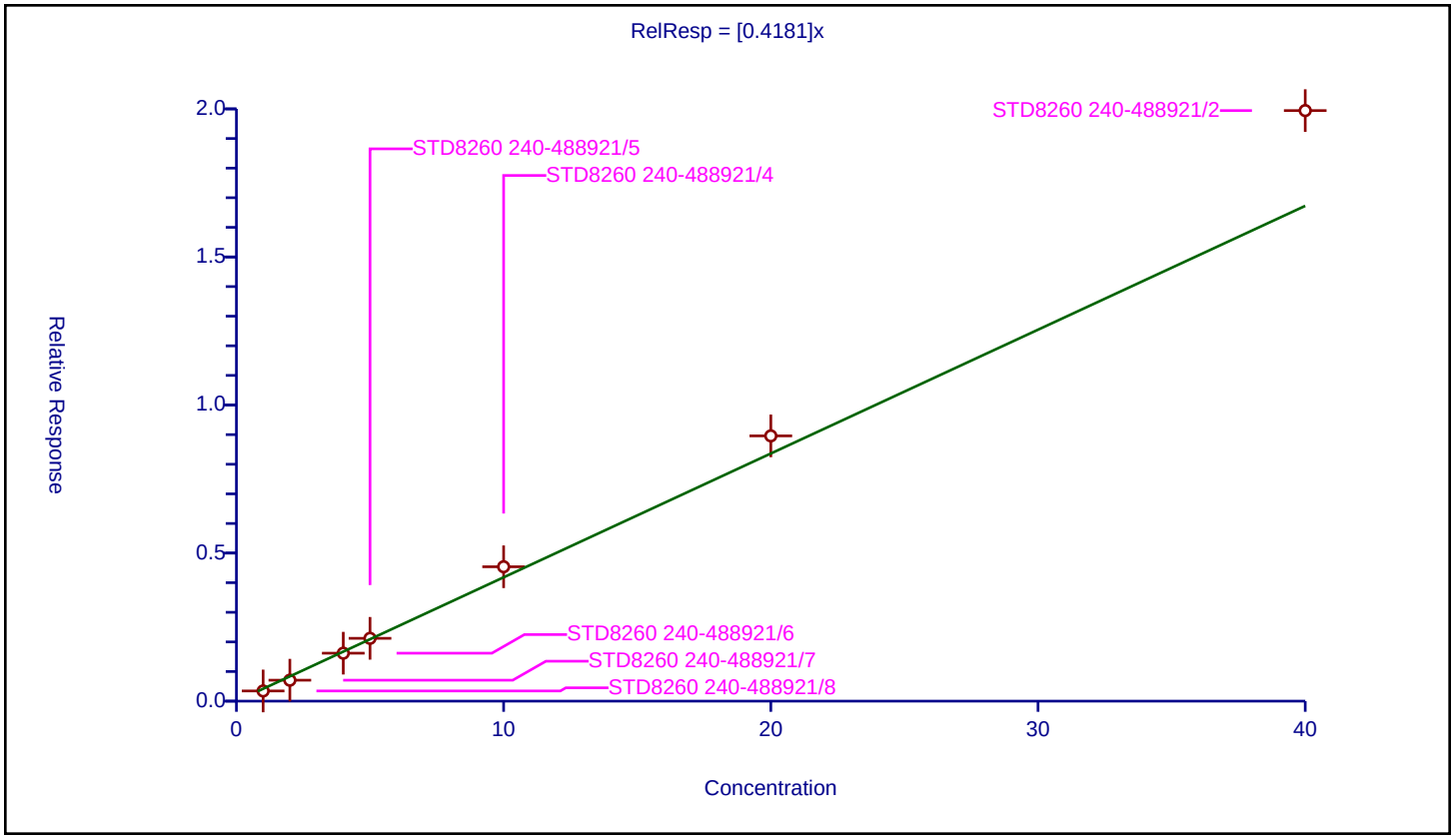
Curve Coefficients

Intercept:	0
Slope:	0.4181

Error Coefficients

Standard Error:	423000
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.343982	20.0	919235.0	0.343982	Y
2	STD8260 240-488921/7	2.0	0.706954	20.0	924219.0	0.353477	Y
3	STD8260 240-488921/6	4.0	1.619003	20.0	927163.0	0.404751	Y
4	STD8260 240-488921/5	5.0	2.121331	20.0	931189.0	0.424266	Y
5	STD8260 240-488921/4	10.0	4.538269	20.0	948084.0	0.453827	Y
6	STD8260 240-488921/3	20.0	8.957681	20.0	970068.0	0.447884	Y
7	STD8260 240-488921/2	40.0	19.942239	20.0	908575.0	0.498556	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

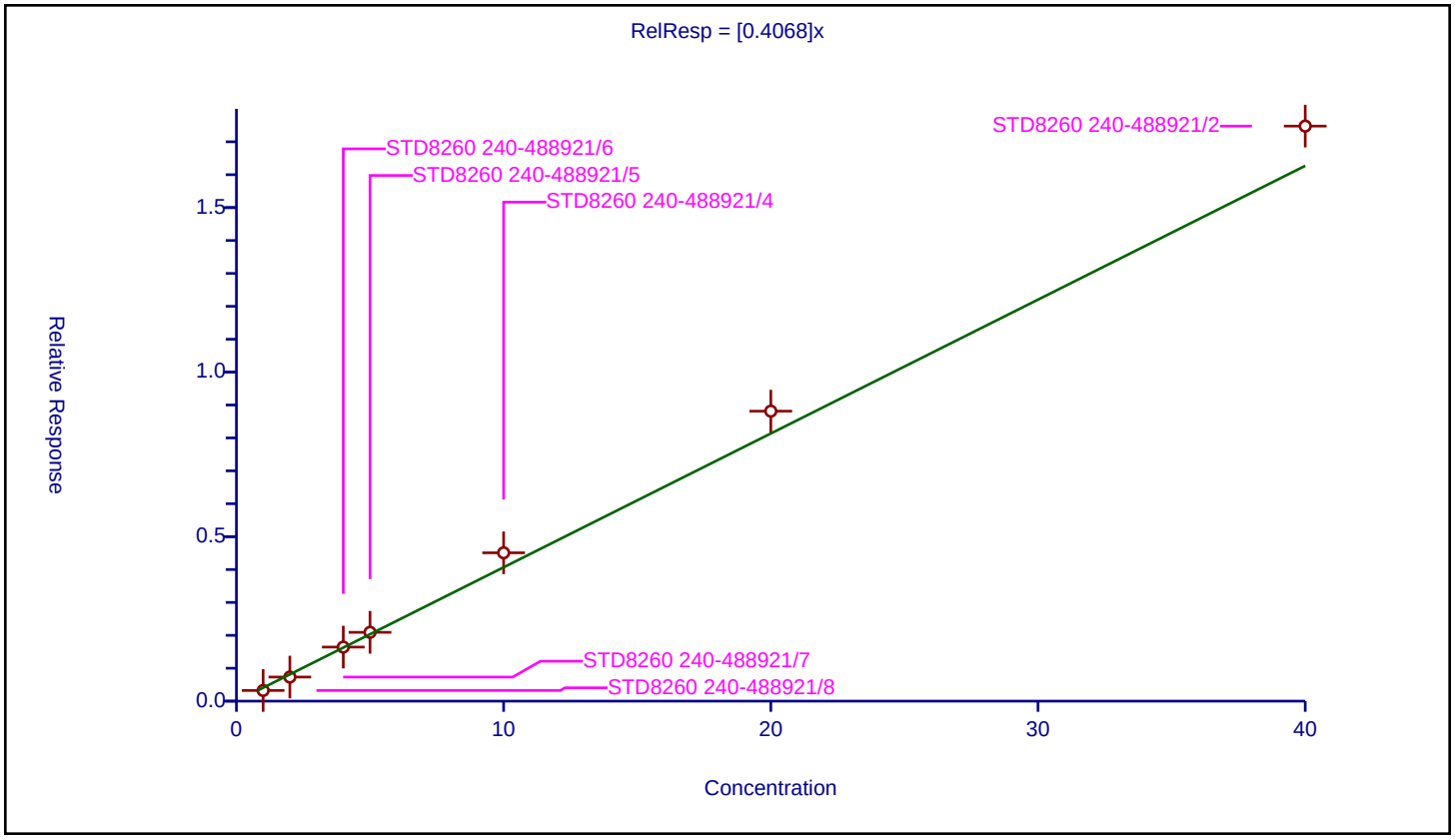
Curve Coefficients

Intercept:	0
Slope:	0.4068

Error Coefficients

Standard Error:	382000
Relative Standard Error:	11.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.3239	20.0	919235.0	0.3239	Y
2	STD8260 240-488921/7	2.0	0.732186	20.0	924219.0	0.366093	Y
3	STD8260 240-488921/6	4.0	1.642581	20.0	927163.0	0.410645	Y
4	STD8260 240-488921/5	5.0	2.090918	20.0	931189.0	0.418184	Y
5	STD8260 240-488921/4	10.0	4.50825	20.0	948084.0	0.450825	Y
6	STD8260 240-488921/3	20.0	8.813568	20.0	970068.0	0.440678	Y
7	STD8260 240-488921/2	40.0	17.477368	20.0	908575.0	0.436934	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

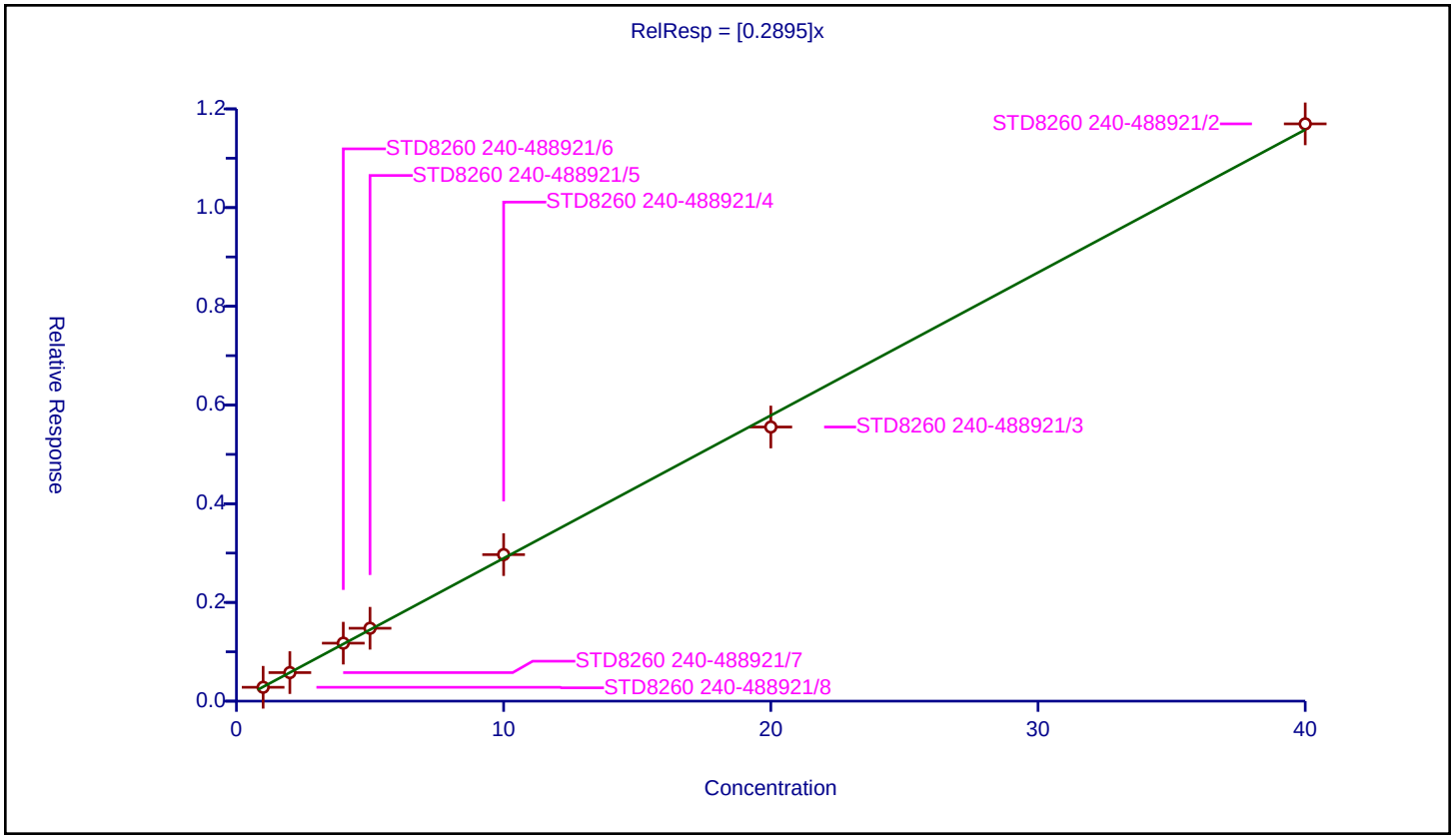
Curve Coefficients

Intercept:	0
Slope:	0.2895

Error Coefficients

Standard Error:	253000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.280951	20.0	919235.0	0.280951	Y
2	STD8260 240-488921/7	2.0	0.578434	20.0	924219.0	0.289217	Y
3	STD8260 240-488921/6	4.0	1.17468	20.0	927163.0	0.29367	Y
4	STD8260 240-488921/5	5.0	1.477015	20.0	931189.0	0.295403	Y
5	STD8260 240-488921/4	10.0	2.96864	20.0	948084.0	0.296864	Y
6	STD8260 240-488921/3	20.0	5.554332	20.0	970068.0	0.277717	Y
7	STD8260 240-488921/2	40.0	11.696888	20.0	908575.0	0.292422	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

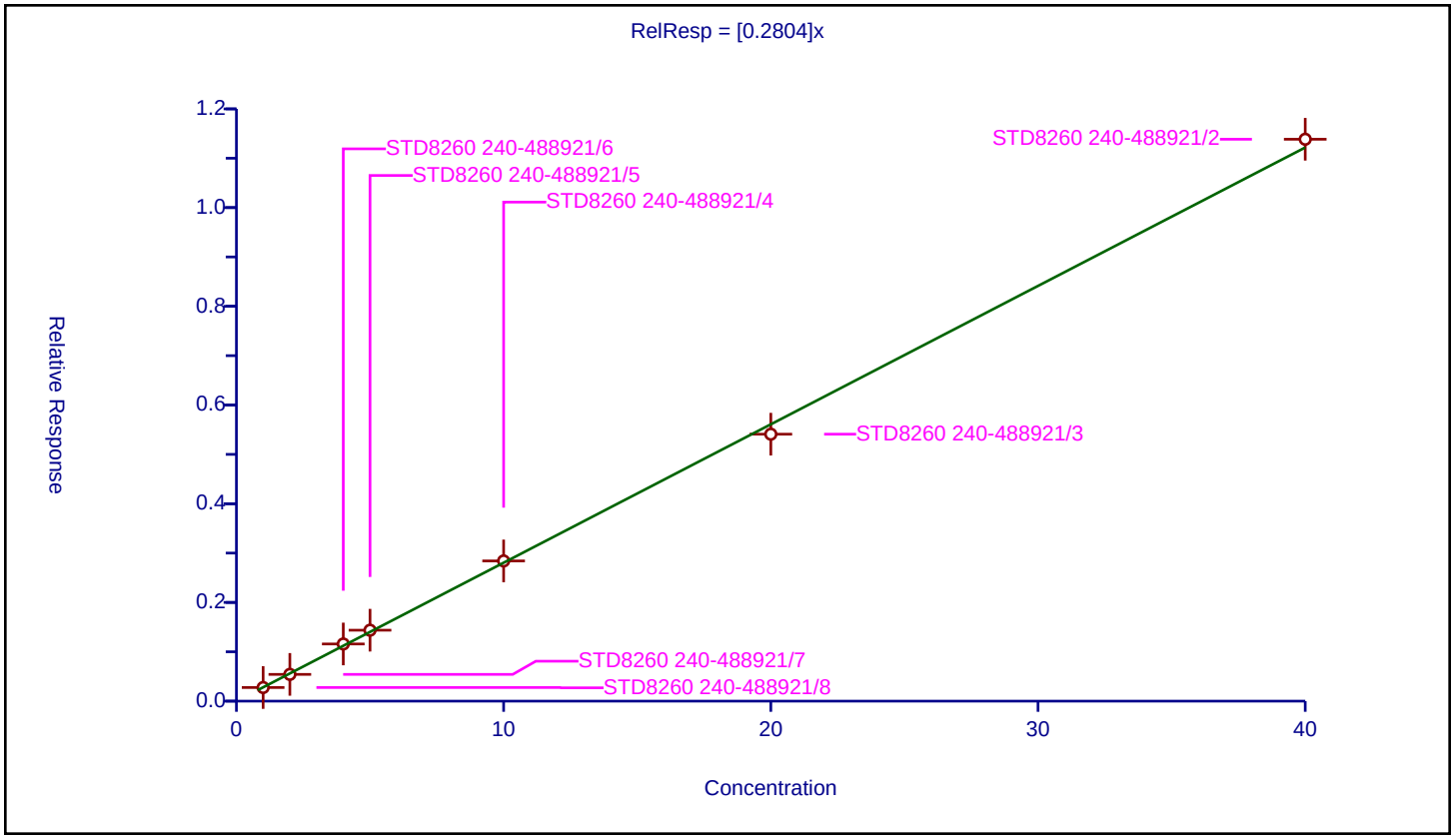
Curve Coefficients

Intercept:	0
Slope:	0.2804

Error Coefficients

Standard Error:	246000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.27599	20.0	919235.0	0.27599	Y
2	STD8260 240-488921/7	2.0	0.541863	20.0	924219.0	0.270931	Y
3	STD8260 240-488921/6	4.0	1.158114	20.0	927163.0	0.289528	Y
4	STD8260 240-488921/5	5.0	1.437281	20.0	931189.0	0.287456	Y
5	STD8260 240-488921/4	10.0	2.840909	20.0	948084.0	0.284091	Y
6	STD8260 240-488921/3	20.0	5.409043	20.0	970068.0	0.270452	Y
7	STD8260 240-488921/2	40.0	11.384663	20.0	908575.0	0.284617	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

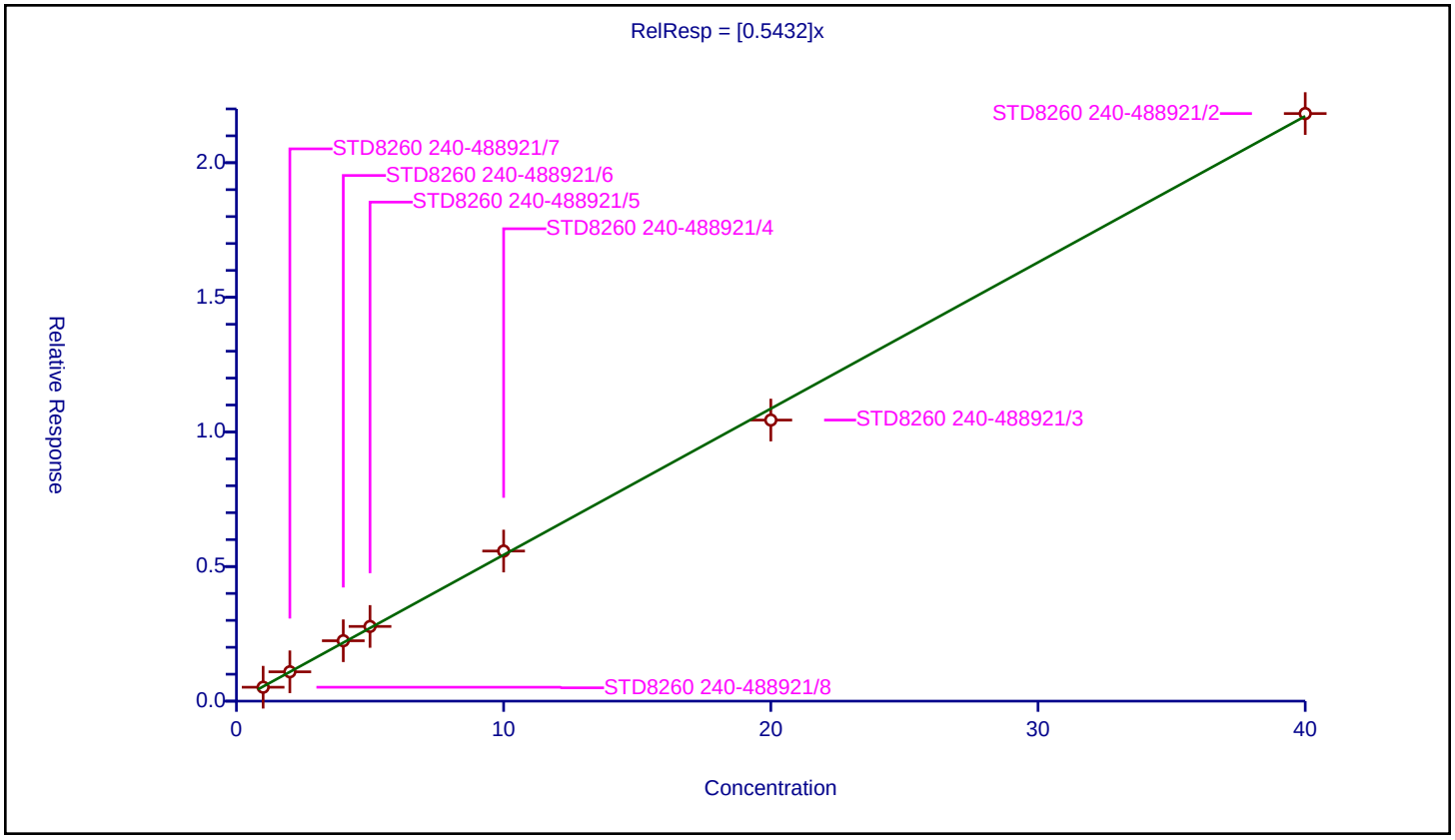
Curve Coefficients

Intercept:	0
Slope:	0.5432

Error Coefficients

Standard Error:	473000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.516582	20.0	919235.0	0.516582	Y
2	STD8260 240-488921/7	2.0	1.090175	20.0	924219.0	0.545087	Y
3	STD8260 240-488921/6	4.0	2.243662	20.0	927163.0	0.560915	Y
4	STD8260 240-488921/5	5.0	2.774539	20.0	931189.0	0.554908	Y
5	STD8260 240-488921/4	10.0	5.575097	20.0	948084.0	0.55751	Y
6	STD8260 240-488921/3	20.0	10.441186	20.0	970068.0	0.522059	Y
7	STD8260 240-488921/2	40.0	21.826685	20.0	908575.0	0.545667	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

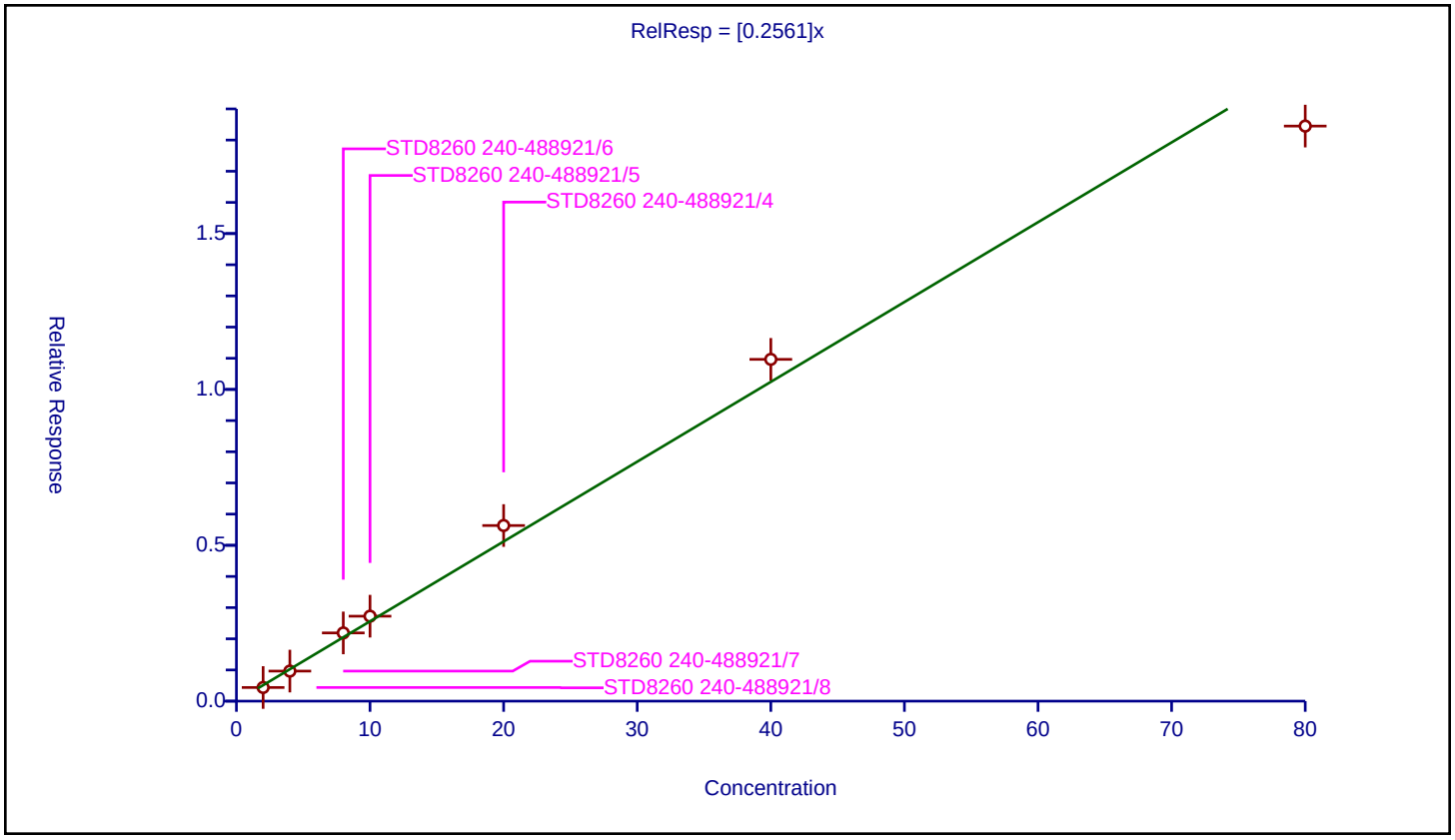
Curve Coefficients

Intercept:	0
Slope:	0.2561

Error Coefficients

Standard Error:	425000
Relative Standard Error:	9.8
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	2.0	0.438038	20.0	919235.0	0.219019	Y
2	STD8260 240-488921/7	4.0	0.963906	20.0	924219.0	0.240976	Y
3	STD8260 240-488921/6	8.0	2.188245	20.0	927163.0	0.273531	Y
4	STD8260 240-488921/5	10.0	2.725505	20.0	931189.0	0.27255	Y
5	STD8260 240-488921/4	20.0	5.633467	20.0	948084.0	0.281673	Y
6	STD8260 240-488921/3	40.0	10.964324	20.0	970068.0	0.274108	Y
7	STD8260 240-488921/2	80.0	18.448494	20.0	908575.0	0.230606	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

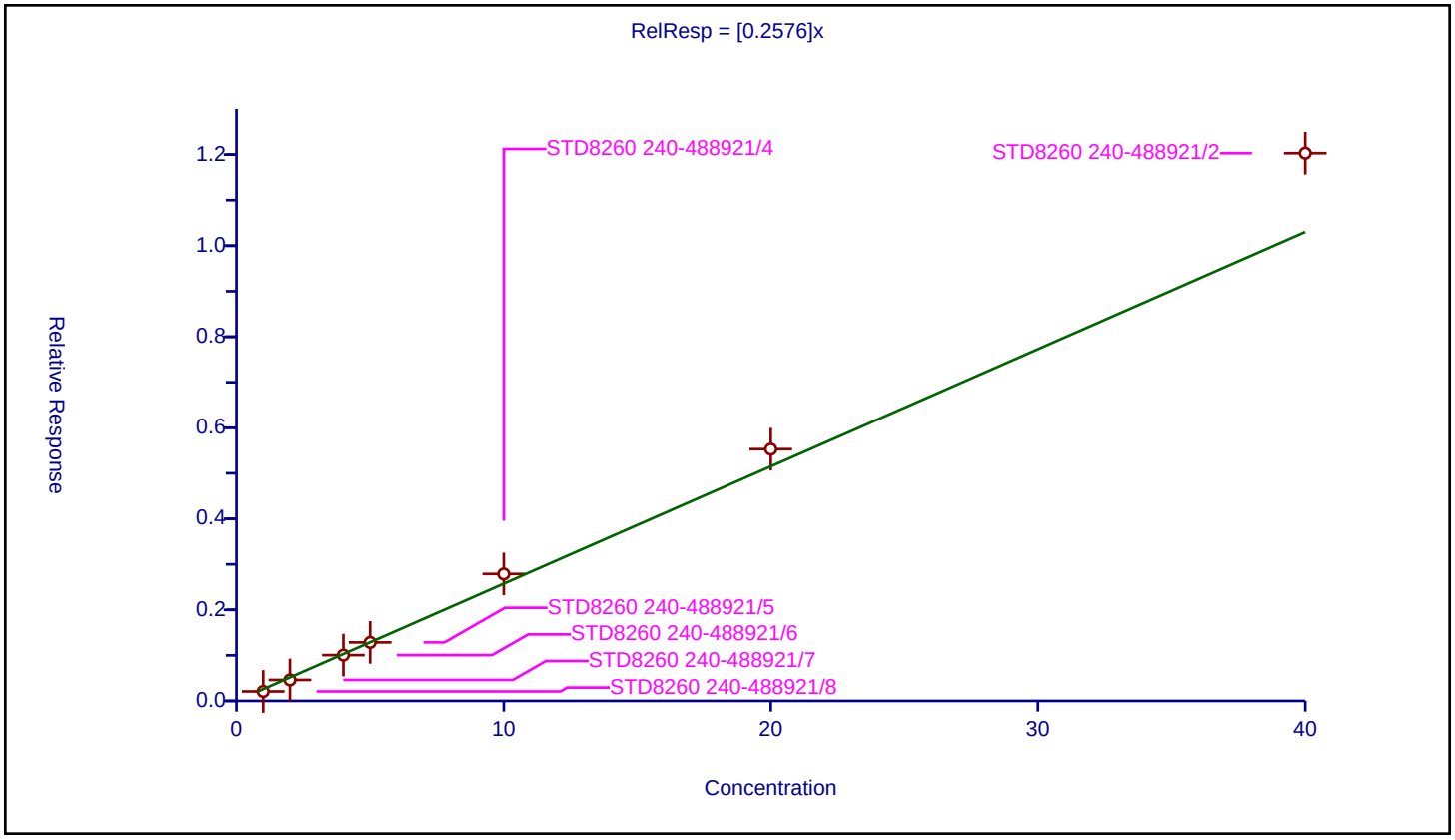
Curve Coefficients

Intercept:	0
Slope:	0.2576

Error Coefficients

Standard Error:	256000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.208108	20.0	919235.0	0.208108	Y
2	STD8260 240-488921/7	2.0	0.460389	20.0	924219.0	0.230194	Y
3	STD8260 240-488921/6	4.0	1.005799	20.0	927163.0	0.25145	Y
4	STD8260 240-488921/5	5.0	1.285217	20.0	931189.0	0.257043	Y
5	STD8260 240-488921/4	10.0	2.788656	20.0	948084.0	0.278866	Y
6	STD8260 240-488921/3	20.0	5.530334	20.0	970068.0	0.276517	Y
7	STD8260 240-488921/2	40.0	12.030157	20.0	908575.0	0.300754	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

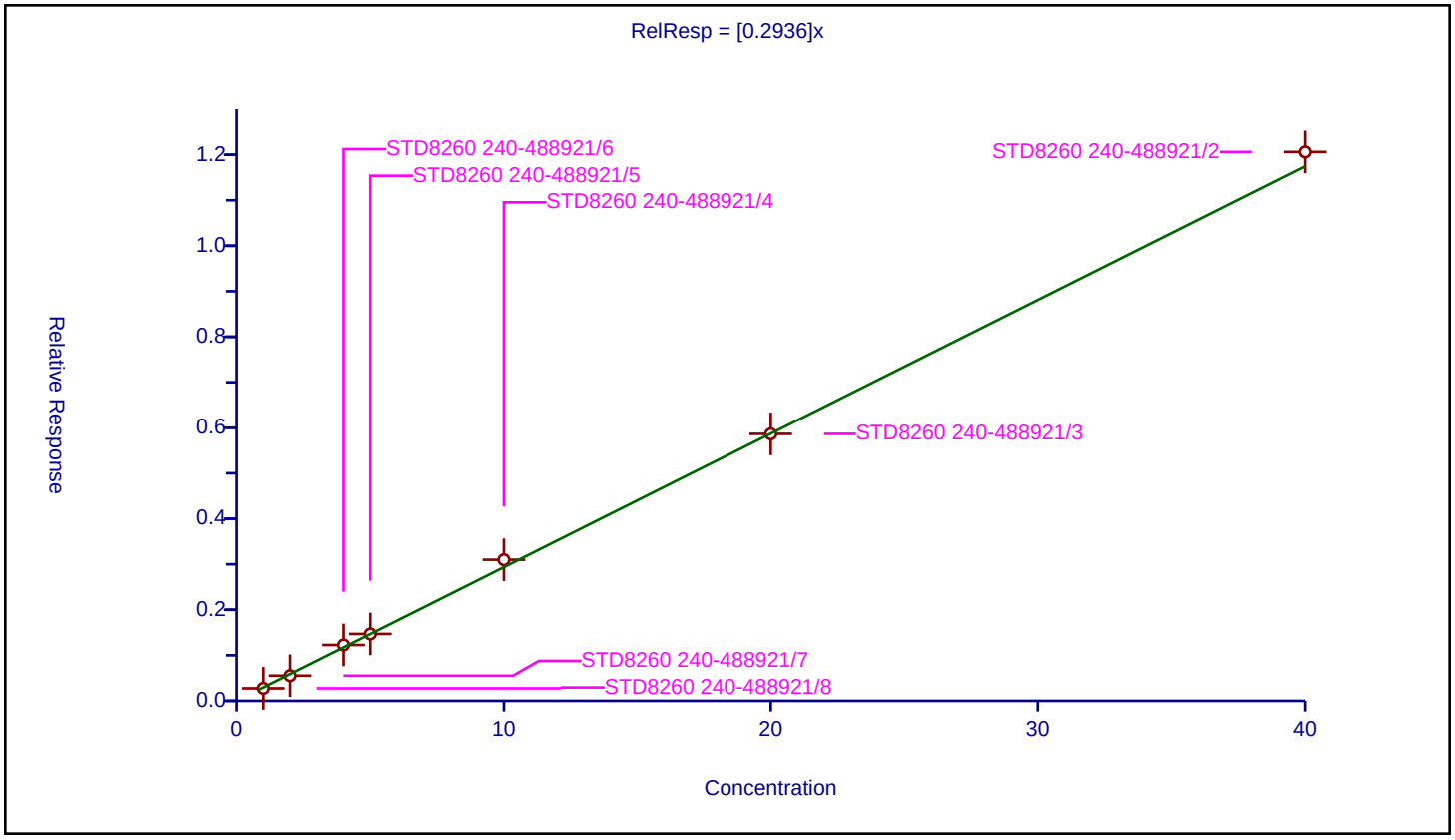
Curve Coefficients

Intercept:	0
Slope:	0.2936

Error Coefficients

Standard Error:	262000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.273662	20.0	919235.0	0.273662	Y
2	STD8260 240-488921/7	2.0	0.552337	20.0	924219.0	0.276168	Y
3	STD8260 240-488921/6	4.0	1.227012	20.0	927163.0	0.306753	Y
4	STD8260 240-488921/5	5.0	1.469326	20.0	931189.0	0.293865	Y
5	STD8260 240-488921/4	10.0	3.099894	20.0	948084.0	0.309989	Y
6	STD8260 240-488921/3	20.0	5.865403	20.0	970068.0	0.29327	Y
7	STD8260 240-488921/2	40.0	12.061327	20.0	908575.0	0.301533	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

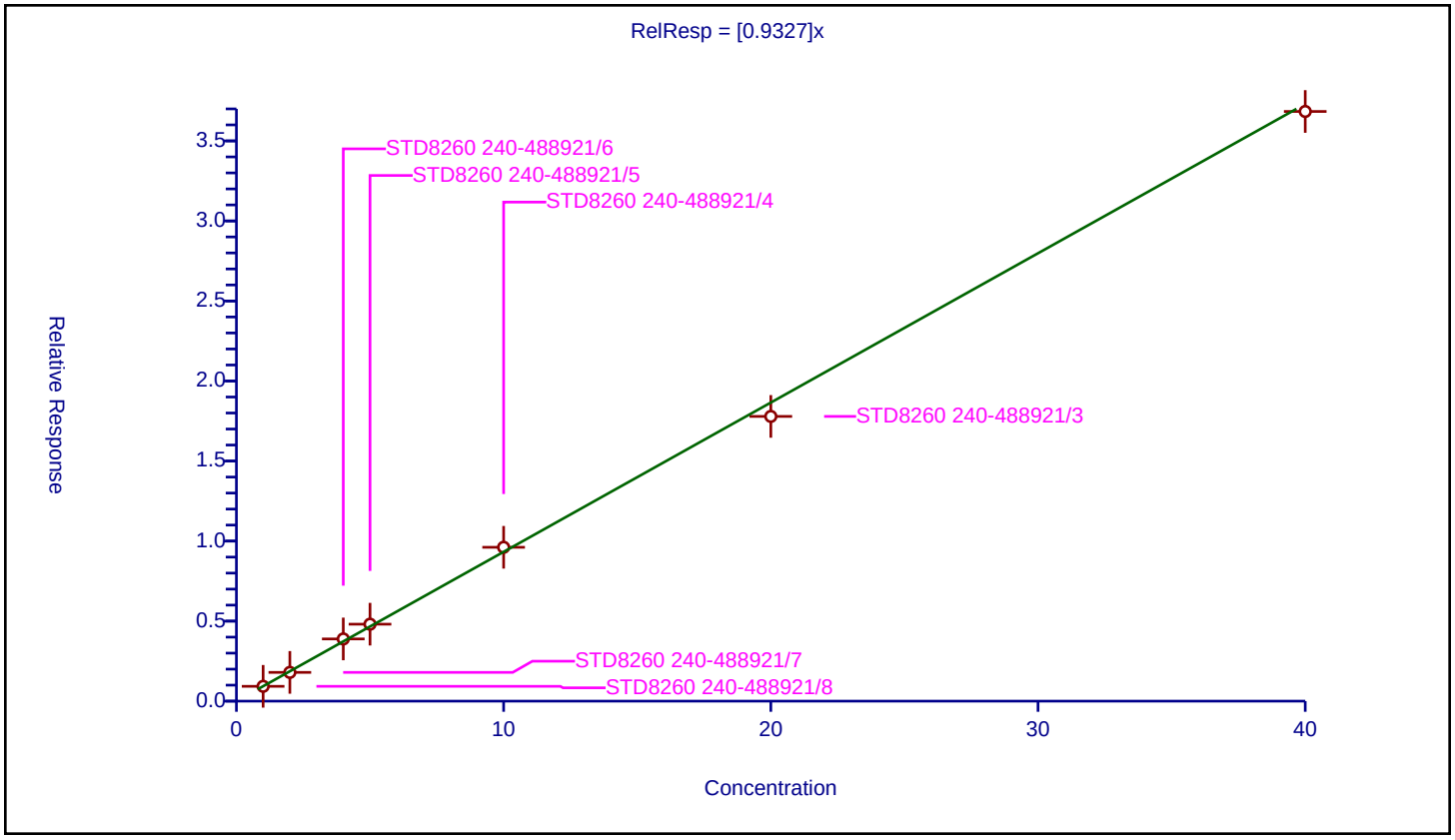
Curve Coefficients

Intercept:	0
Slope:	0.9327

Error Coefficients

Standard Error:	800000
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.926161	20.0	919235.0	0.926161	Y
2	STD8260 240-488921/7	2.0	1.795462	20.0	924219.0	0.897731	Y
3	STD8260 240-488921/6	4.0	3.886609	20.0	927163.0	0.971652	Y
4	STD8260 240-488921/5	5.0	4.807832	20.0	931189.0	0.961566	Y
5	STD8260 240-488921/4	10.0	9.611638	20.0	948084.0	0.961164	Y
6	STD8260 240-488921/3	20.0	17.78797	20.0	970068.0	0.889398	Y
7	STD8260 240-488921/2	40.0	36.838038	20.0	908575.0	0.920951	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

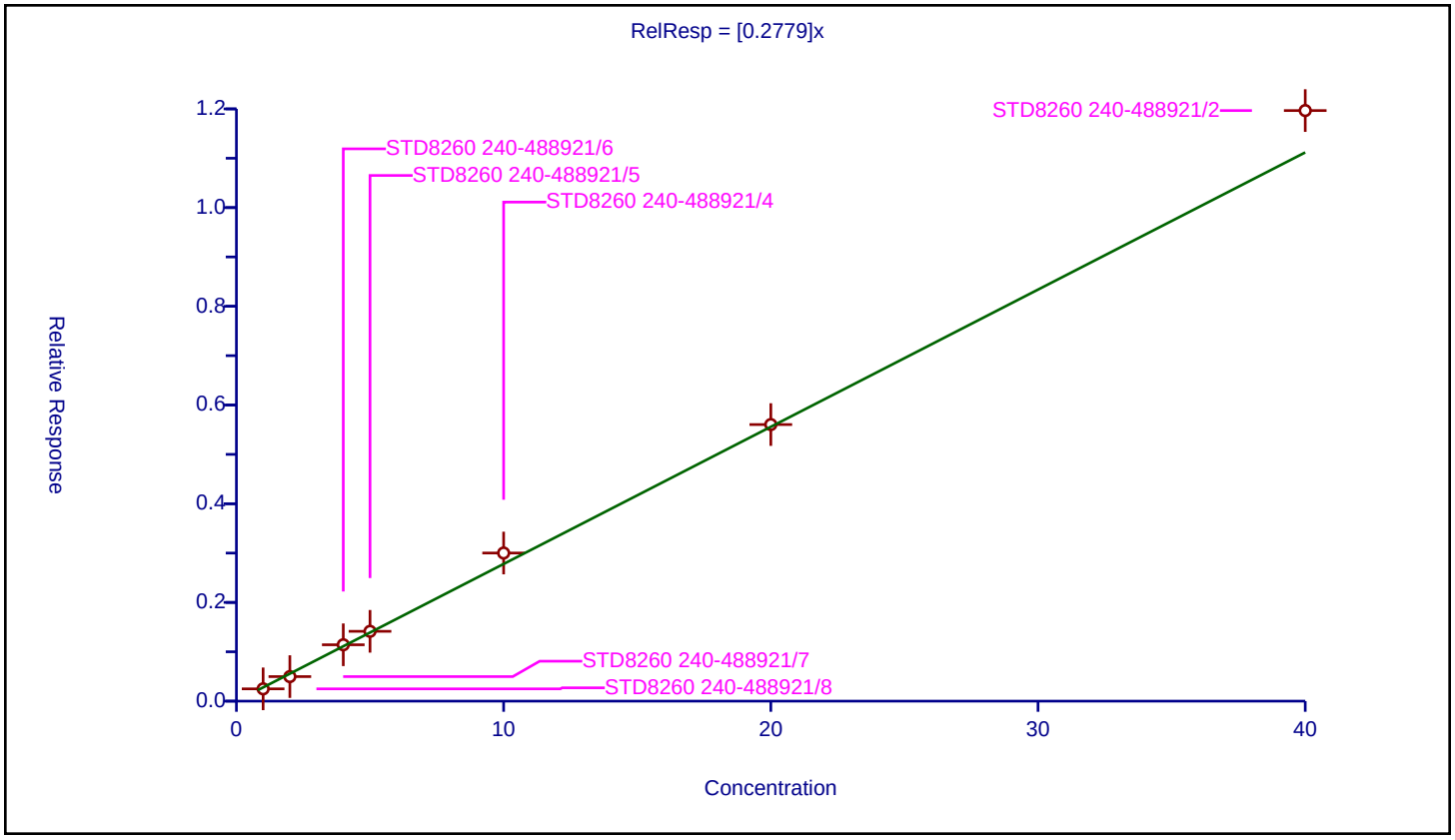
Curve Coefficients

Intercept:	0
Slope:	0.2779

Error Coefficients

Standard Error:	257000
Relative Standard Error:	7.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.249055	20.0	919235.0	0.249055	Y
2	STD8260 240-488921/7	2.0	0.49735	20.0	924219.0	0.248675	Y
3	STD8260 240-488921/6	4.0	1.141914	20.0	927163.0	0.285478	Y
4	STD8260 240-488921/5	5.0	1.414471	20.0	931189.0	0.282894	Y
5	STD8260 240-488921/4	10.0	3.001295	20.0	948084.0	0.30013	Y
6	STD8260 240-488921/3	20.0	5.604267	20.0	970068.0	0.280213	Y
7	STD8260 240-488921/2	40.0	11.965925	20.0	908575.0	0.299148	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

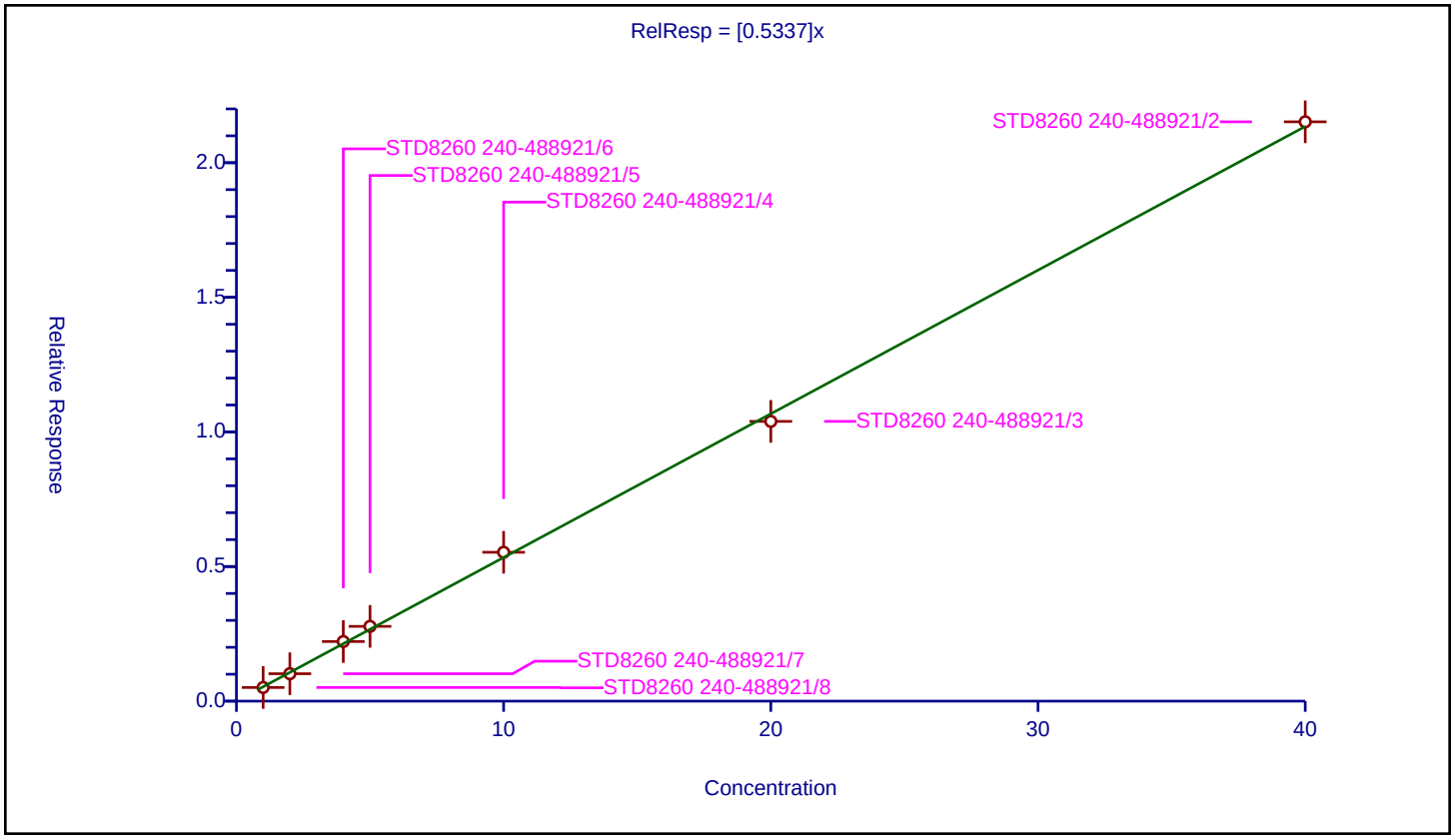
Curve Coefficients

Intercept:	0
Slope:	0.5337

Error Coefficients

Standard Error:	467000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.506769	20.0	919235.0	0.506769	Y
2	STD8260 240-488921/7	2.0	1.018179	20.0	924219.0	0.509089	Y
3	STD8260 240-488921/6	4.0	2.214238	20.0	927163.0	0.55356	Y
4	STD8260 240-488921/5	5.0	2.778126	20.0	931189.0	0.555625	Y
5	STD8260 240-488921/4	10.0	5.530164	20.0	948084.0	0.553016	Y
6	STD8260 240-488921/3	20.0	10.392117	20.0	970068.0	0.519606	Y
7	STD8260 240-488921/2	40.0	21.520293	20.0	908575.0	0.538007	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

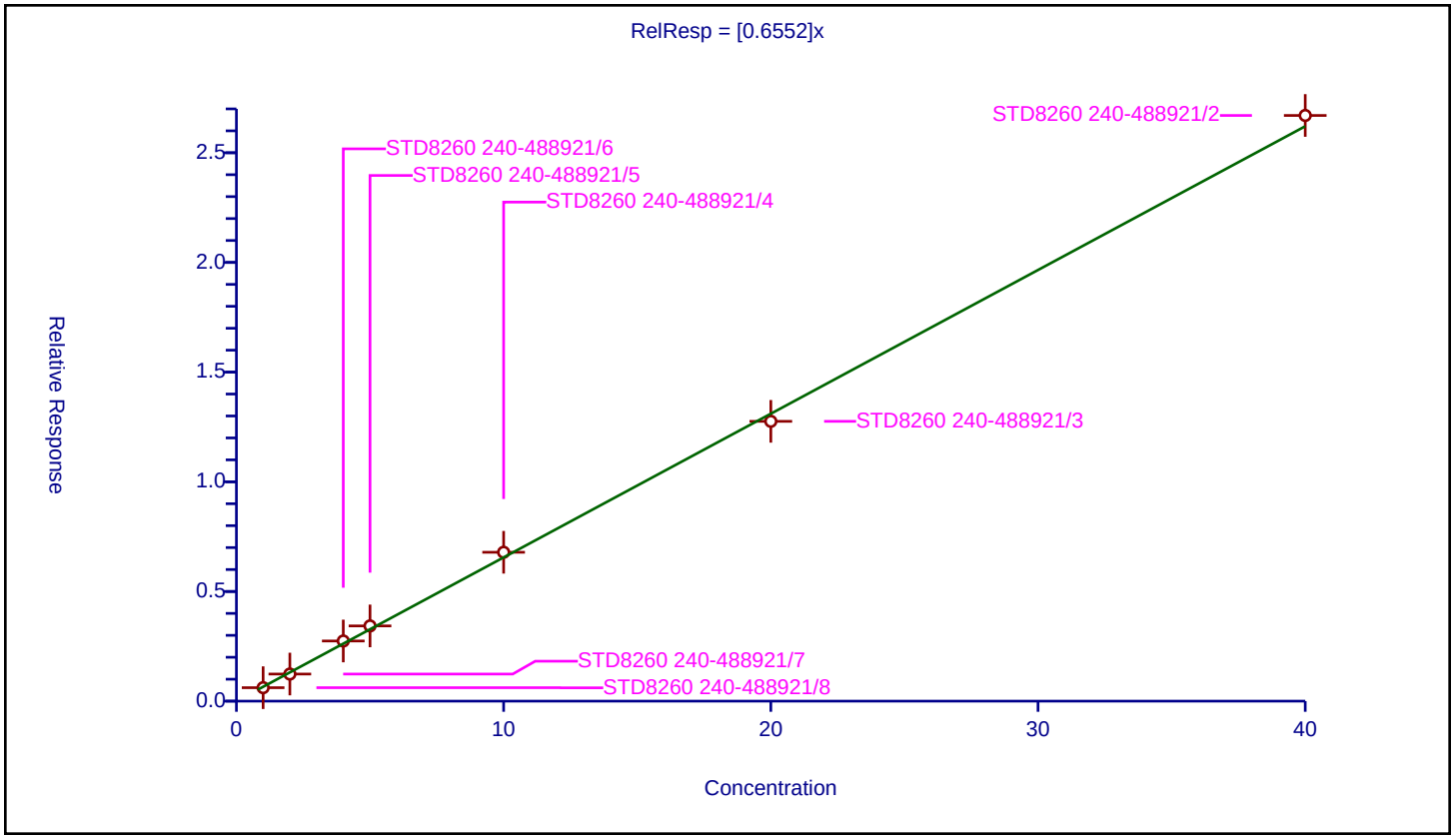
Curve Coefficients

Intercept:	0
Slope:	0.6552

Error Coefficients

Standard Error:	578000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.613336	20.0	919235.0	0.613336	Y
2	STD8260 240-488921/7	2.0	1.23514	20.0	924219.0	0.61757	Y
3	STD8260 240-488921/6	4.0	2.742064	20.0	927163.0	0.685516	Y
4	STD8260 240-488921/5	5.0	3.429035	20.0	931189.0	0.685807	Y
5	STD8260 240-488921/4	10.0	6.786635	20.0	948084.0	0.678663	Y
6	STD8260 240-488921/3	20.0	12.756054	20.0	970068.0	0.637803	Y
7	STD8260 240-488921/2	40.0	26.699568	20.0	908575.0	0.667489	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

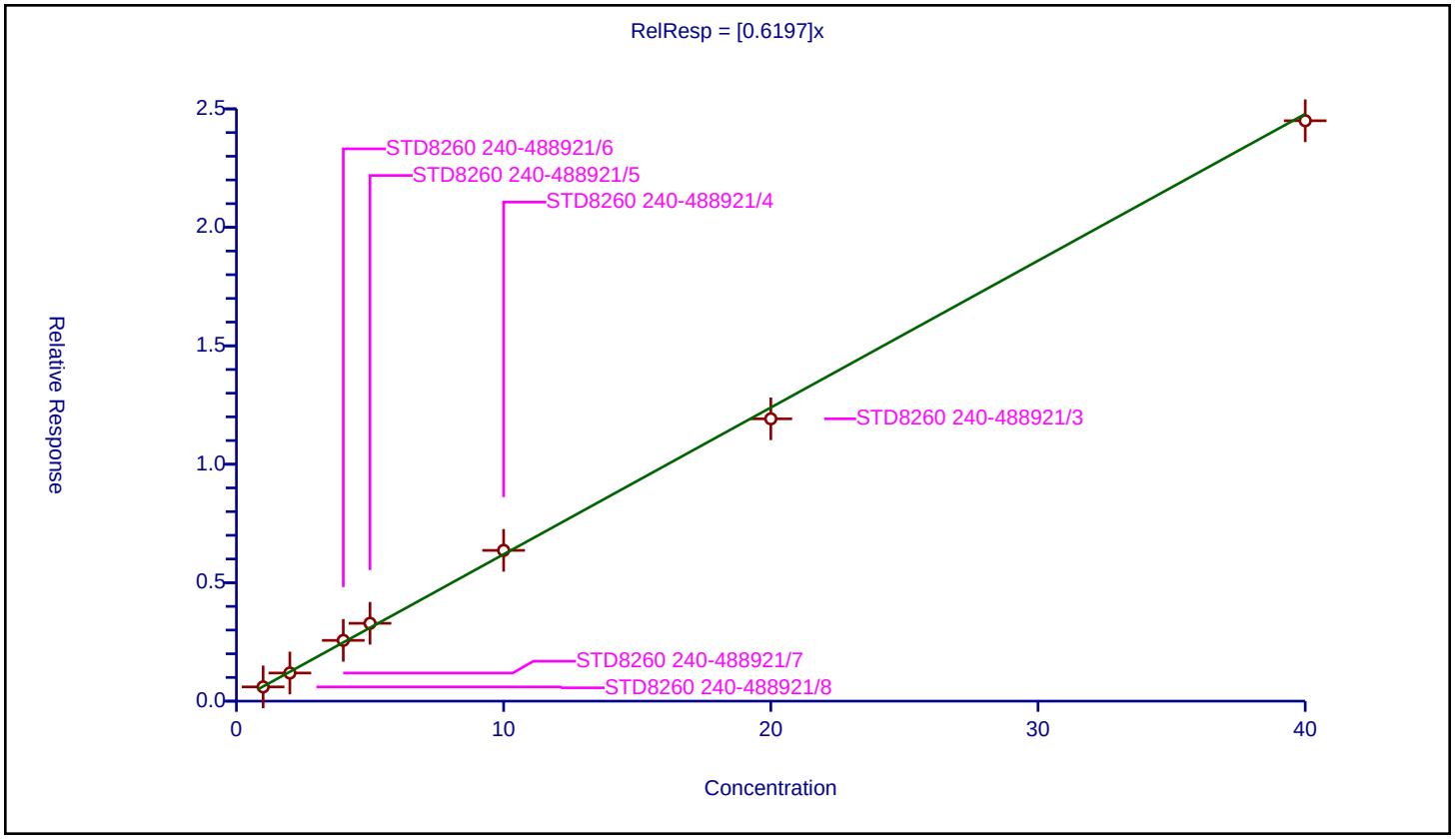
Curve Coefficients

Intercept:	0
Slope:	0.6197

Error Coefficients

Standard Error:	533000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.600695	20.0	919235.0	0.600695	Y
2	STD8260 240-488921/7	2.0	1.187641	20.0	924219.0	0.59382	Y
3	STD8260 240-488921/6	4.0	2.564576	20.0	927163.0	0.641144	Y
4	STD8260 240-488921/5	5.0	3.285735	20.0	931189.0	0.657147	Y
5	STD8260 240-488921/4	10.0	6.36393	20.0	948084.0	0.636393	Y
6	STD8260 240-488921/3	20.0	11.917721	20.0	970068.0	0.595886	Y
7	STD8260 240-488921/2	40.0	24.50008	20.0	908575.0	0.612502	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

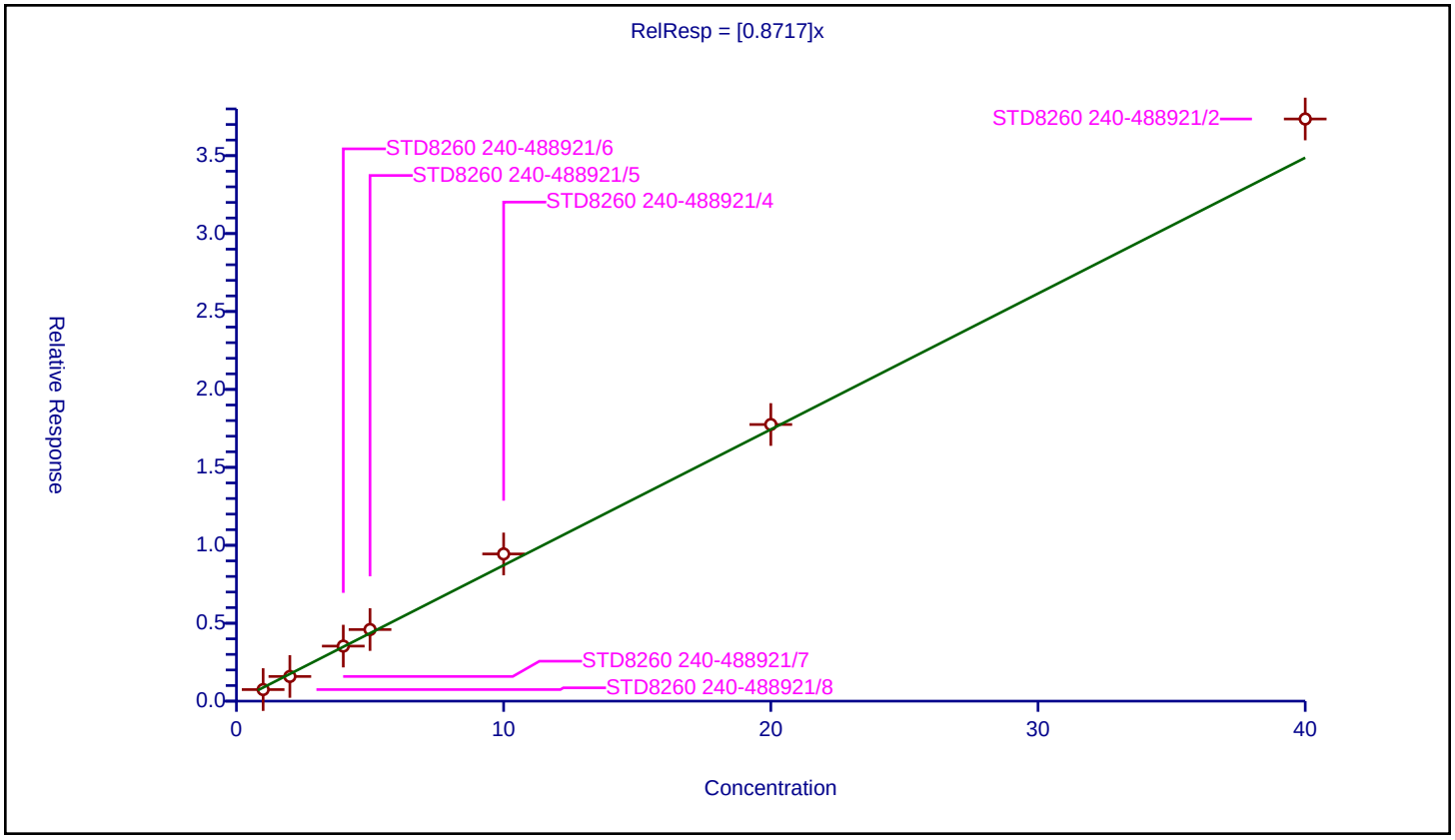
Curve Coefficients

Intercept:	0
Slope:	0.8717

Error Coefficients

Standard Error:	806000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.743205	20.0	919235.0	0.743205	Y
2	STD8260 240-488921/7	2.0	1.582612	20.0	924219.0	0.791306	Y
3	STD8260 240-488921/6	4.0	3.531439	20.0	927163.0	0.88286	Y
4	STD8260 240-488921/5	5.0	4.594427	20.0	931189.0	0.918885	Y
5	STD8260 240-488921/4	10.0	9.443594	20.0	948084.0	0.944359	Y
6	STD8260 240-488921/3	20.0	17.749828	20.0	970068.0	0.887491	Y
7	STD8260 240-488921/2	40.0	37.35269	20.0	908575.0	0.933817	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

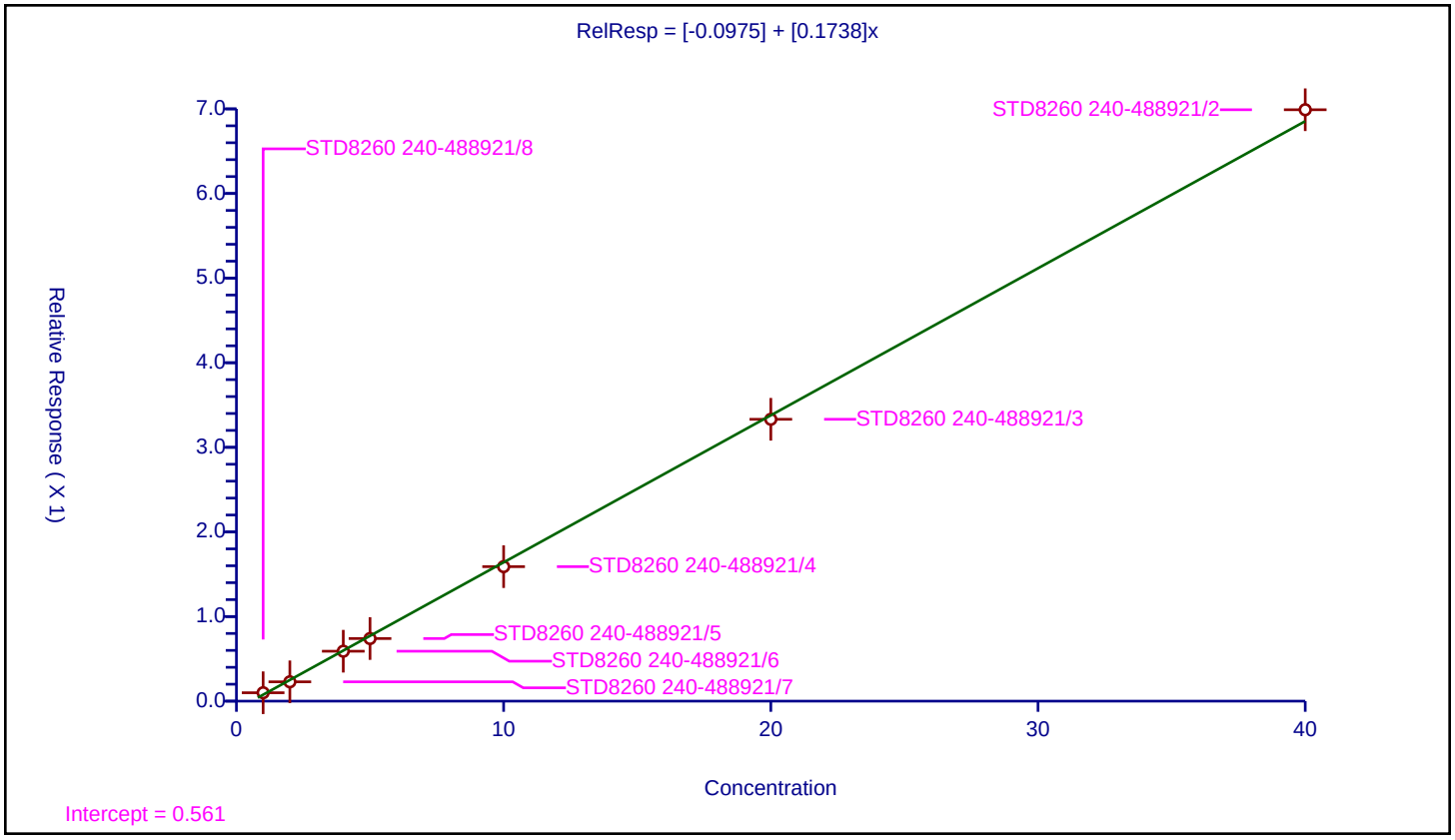
Curve Coefficients

Intercept:	-0.0975
Slope:	0.1738

Error Coefficients

Standard Error:	164000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.099365	20.0	919235.0	0.099365	Y
2	STD8260 240-488921/7	2.0	0.228496	20.0	924219.0	0.114248	Y
3	STD8260 240-488921/6	4.0	0.590036	20.0	927163.0	0.147509	Y
4	STD8260 240-488921/5	5.0	0.739871	20.0	931189.0	0.147974	Y
5	STD8260 240-488921/4	10.0	1.589479	20.0	948084.0	0.158948	Y
6	STD8260 240-488921/3	20.0	3.331251	20.0	970068.0	0.166563	Y
7	STD8260 240-488921/2	40.0	6.989979	20.0	908575.0	0.174749	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

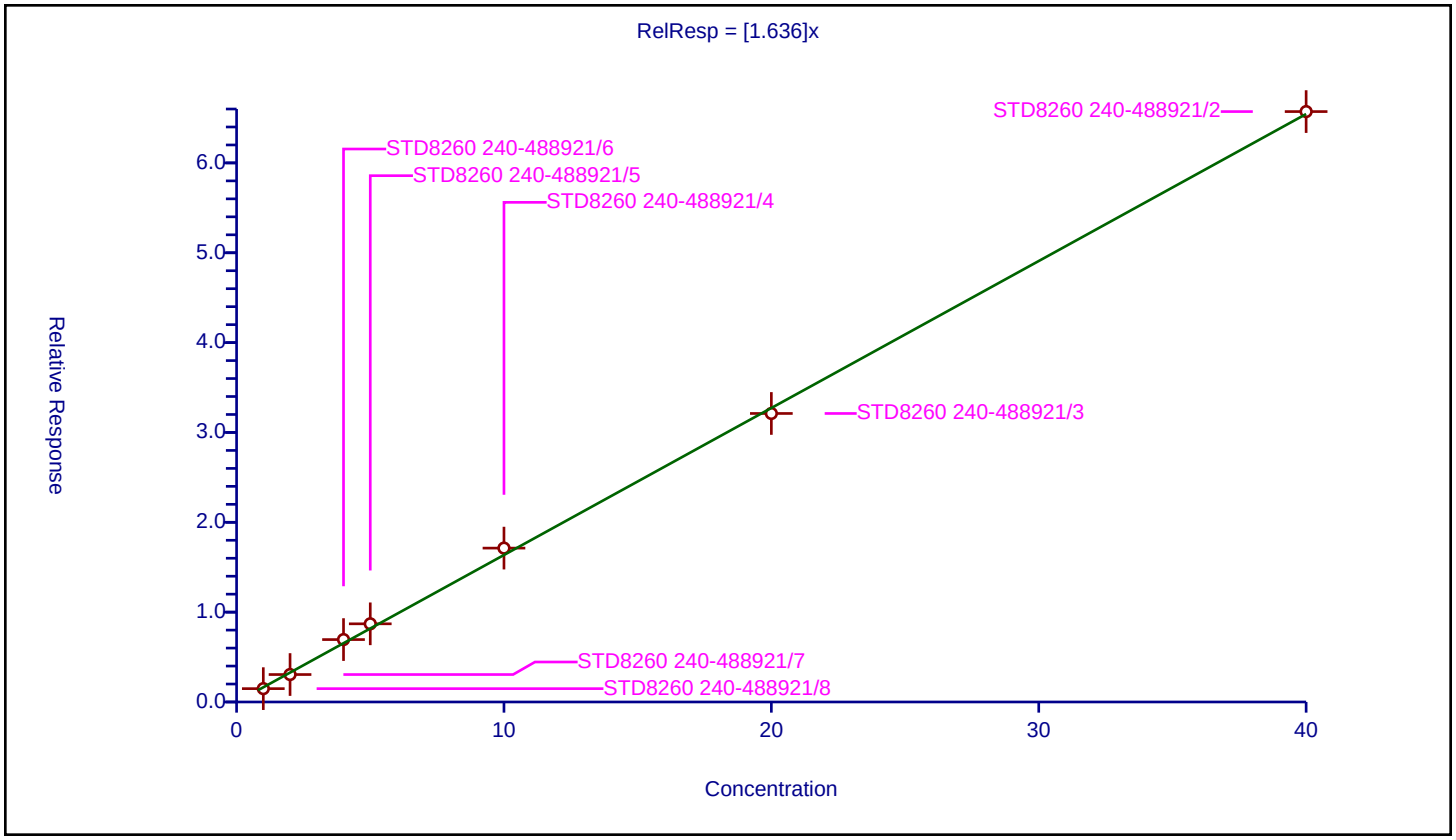
Curve Coefficients

Intercept:	0
Slope:	1.636

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.48554	20.0	919235.0	1.48554	Y
2	STD8260 240-488921/7	2.0	3.056981	20.0	924219.0	1.528491	Y
3	STD8260 240-488921/6	4.0	6.947279	20.0	927163.0	1.73682	Y
4	STD8260 240-488921/5	5.0	8.700532	20.0	931189.0	1.740106	Y
5	STD8260 240-488921/4	10.0	17.126668	20.0	948084.0	1.712667	Y
6	STD8260 240-488921/3	20.0	32.112326	20.0	970068.0	1.605616	Y
7	STD8260 240-488921/2	40.0	65.716204	20.0	908575.0	1.642905	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

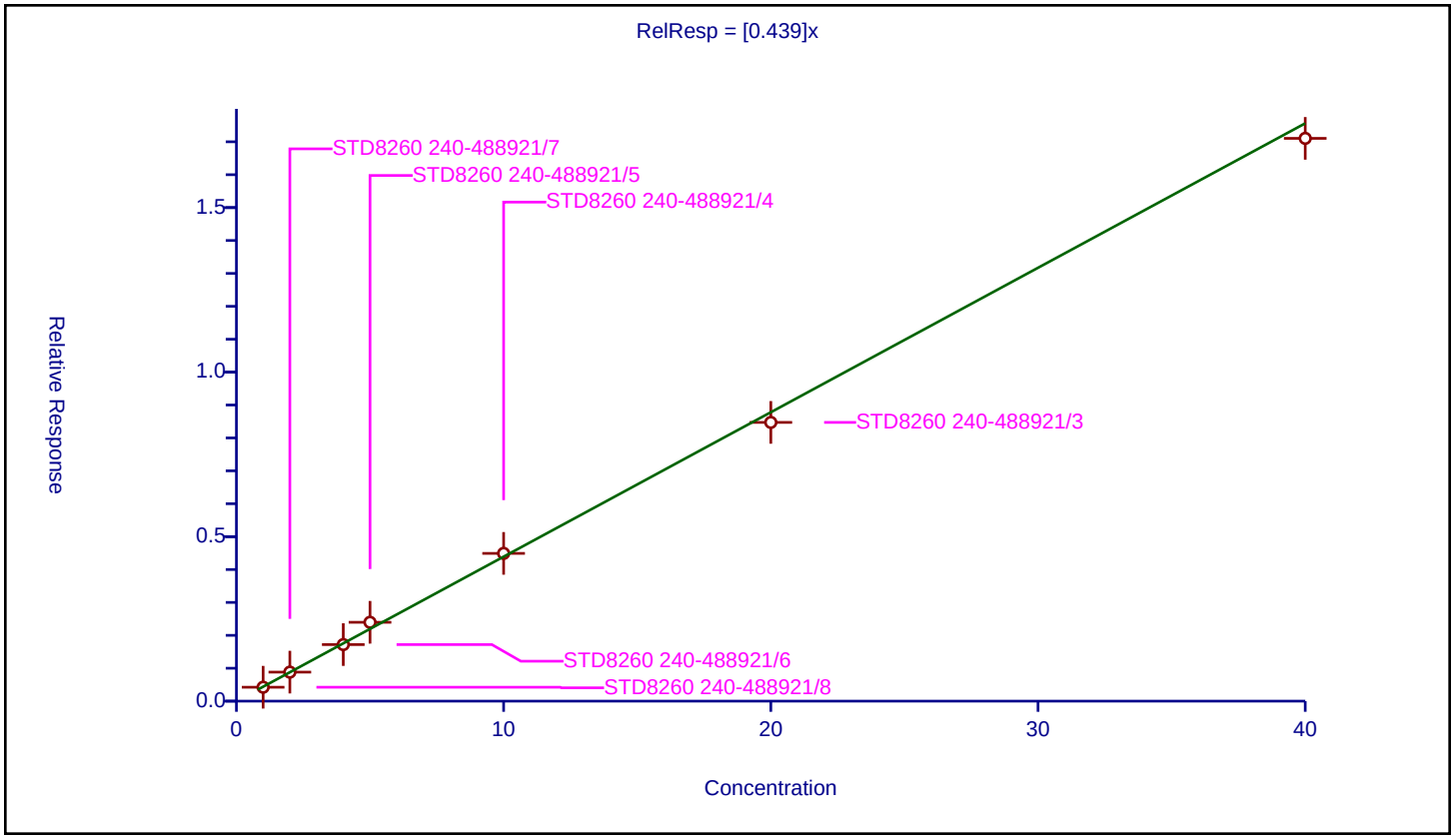
Curve Coefficients

Intercept:	0
Slope:	0.439

Error Coefficients

Standard Error:	374000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.423113	20.0	919235.0	0.423113	Y
2	STD8260 240-488921/7	2.0	0.881544	20.0	924219.0	0.440772	Y
3	STD8260 240-488921/6	4.0	1.718792	20.0	927163.0	0.429698	Y
4	STD8260 240-488921/5	5.0	2.396506	20.0	931189.0	0.479301	Y
5	STD8260 240-488921/4	10.0	4.490277	20.0	948084.0	0.449028	Y
6	STD8260 240-488921/3	20.0	8.471447	20.0	970068.0	0.423572	Y
7	STD8260 240-488921/2	40.0	17.104125	20.0	908575.0	0.427603	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

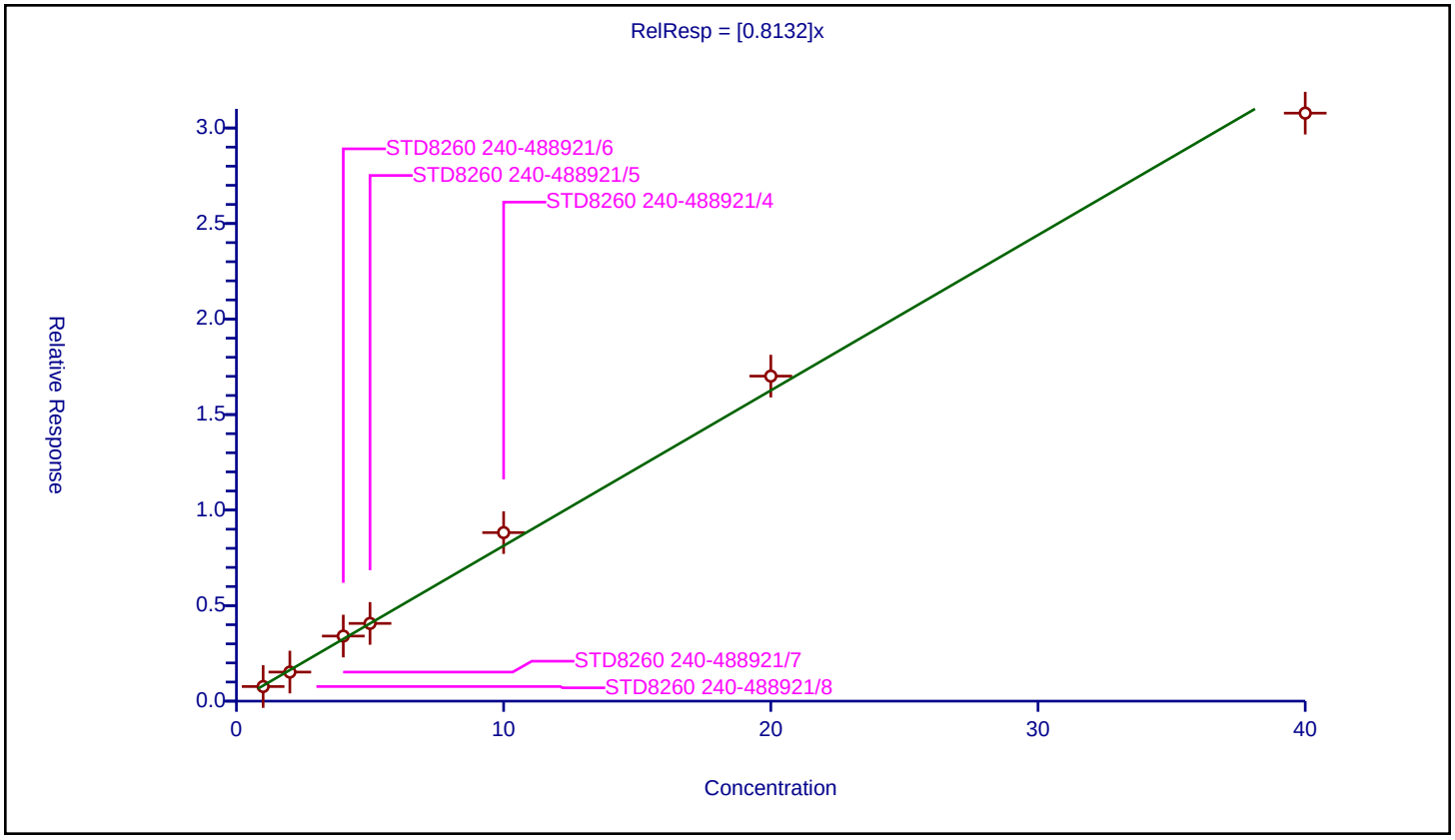
Curve Coefficients

Intercept:	0
Slope:	0.8132

Error Coefficients

Standard Error:	314000
Relative Standard Error:	6.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.764319	20.0	430239.0	0.764319	Y
2	STD8260 240-488921/7	2.0	1.521095	20.0	419277.0	0.760547	Y
3	STD8260 240-488921/6	4.0	3.40618	20.0	428116.0	0.851545	Y
4	STD8260 240-488921/5	5.0	4.068703	20.0	462801.0	0.813741	Y
5	STD8260 240-488921/4	10.0	8.822006	20.0	431199.0	0.882201	Y
6	STD8260 240-488921/3	20.0	17.012925	20.0	436206.0	0.850646	Y
7	STD8260 240-488921/2	40.0	30.778536	20.0	411696.0	0.769463	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

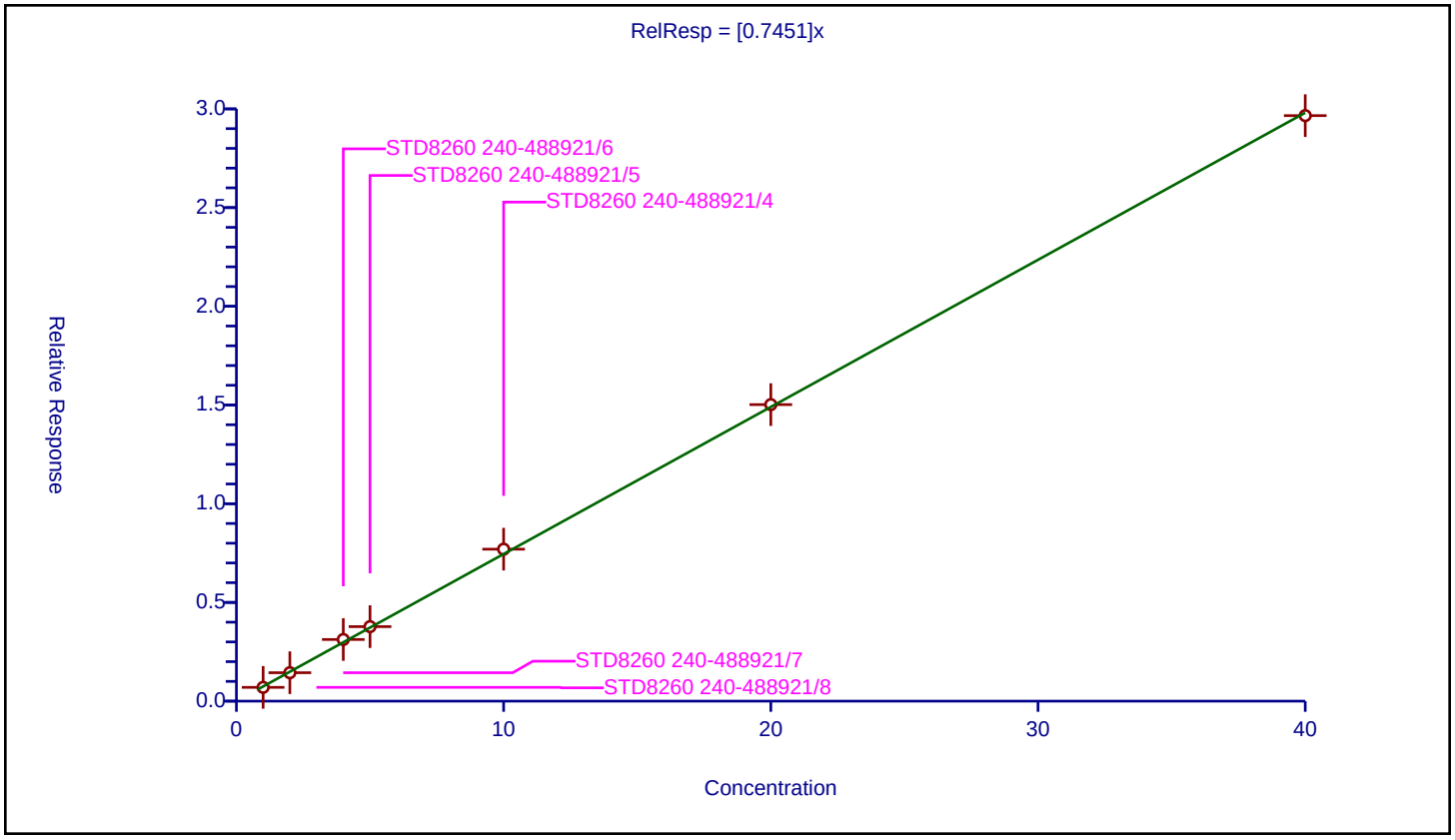
Curve Coefficients

Intercept:	0
Slope:	0.7451

Error Coefficients

Standard Error:	295000
Relative Standard Error:	3.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.698263	20.0	430239.0	0.698263	Y
2	STD8260 240-488921/7	2.0	1.440337	20.0	419277.0	0.720168	Y
3	STD8260 240-488921/6	4.0	3.122285	20.0	428116.0	0.780571	Y
4	STD8260 240-488921/5	5.0	3.773544	20.0	462801.0	0.754709	Y
5	STD8260 240-488921/4	10.0	7.697699	20.0	431199.0	0.76977	Y
6	STD8260 240-488921/3	20.0	15.020334	20.0	436206.0	0.751017	Y
7	STD8260 240-488921/2	40.0	29.659117	20.0	411696.0	0.741478	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

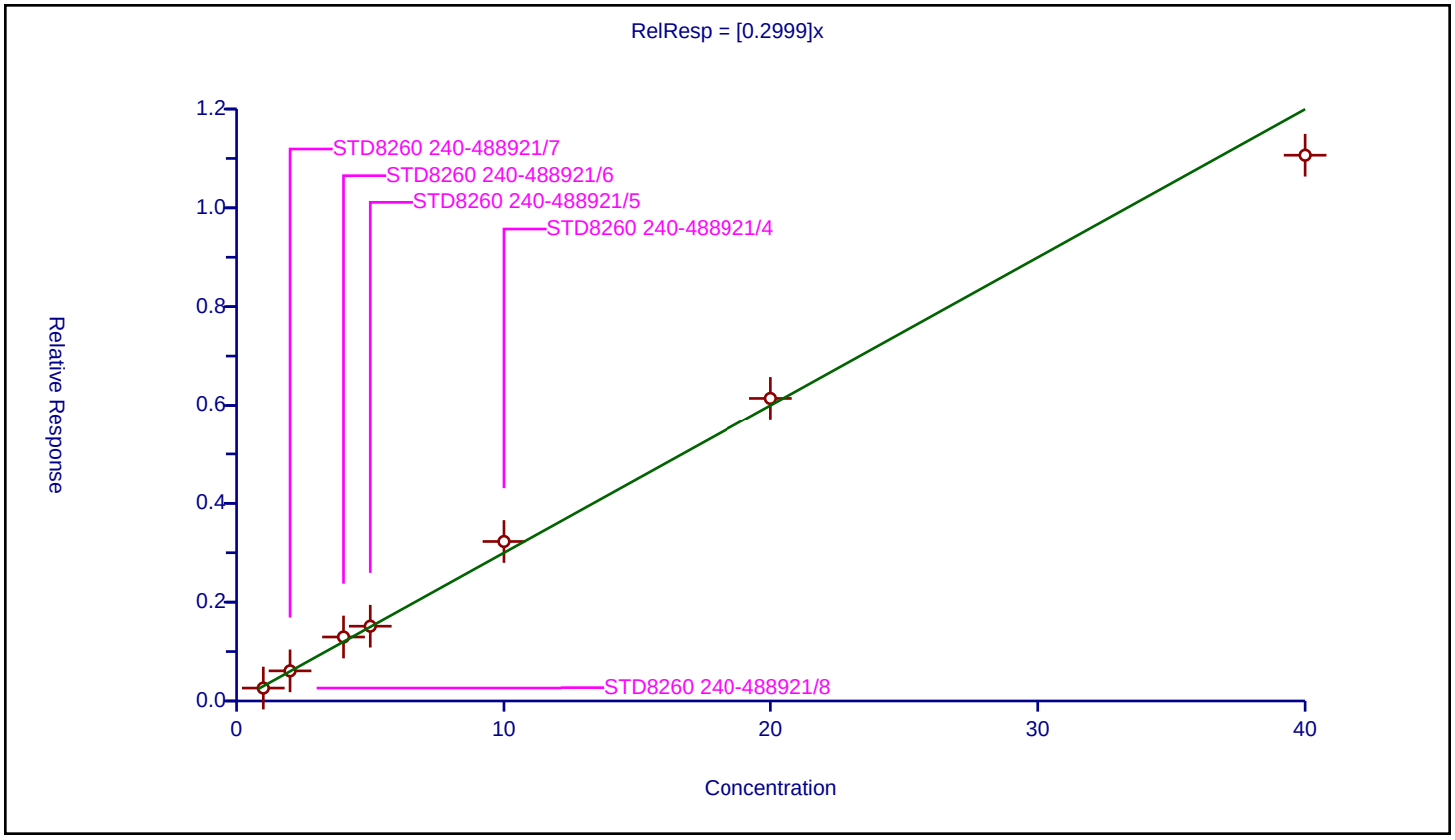
Curve Coefficients

Intercept:	0
Slope:	0.2999

Error Coefficients

Standard Error:	113000
Relative Standard Error:	7.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.261529	20.0	430239.0	0.261529	Y
2	STD8260 240-488921/7	2.0	0.609478	20.0	419277.0	0.304739	Y
3	STD8260 240-488921/6	4.0	1.294929	20.0	428116.0	0.323732	Y
4	STD8260 240-488921/5	5.0	1.51348	20.0	462801.0	0.302696	Y
5	STD8260 240-488921/4	10.0	3.228115	20.0	431199.0	0.322812	Y
6	STD8260 240-488921/3	20.0	6.142648	20.0	436206.0	0.307132	Y
7	STD8260 240-488921/2	40.0	11.065252	20.0	411696.0	0.276631	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

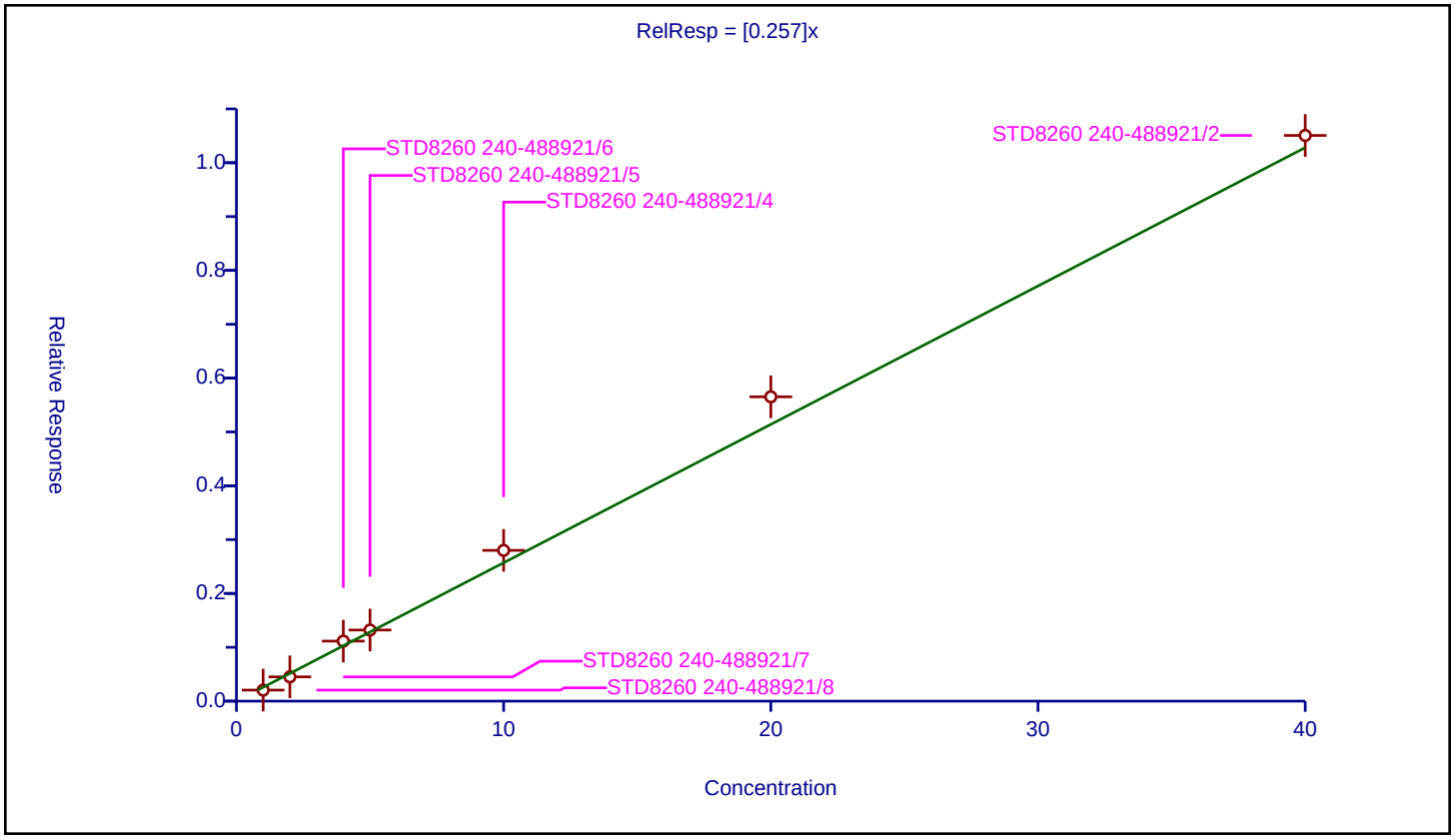
Curve Coefficients

Intercept:	0
Slope:	0.257

Error Coefficients

Standard Error:	106000
Relative Standard Error:	11.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.205281	20.0	430239.0	0.205281	Y
2	STD8260 240-488921/7	2.0	0.451062	20.0	419277.0	0.225531	Y
3	STD8260 240-488921/6	4.0	1.114931	20.0	428116.0	0.278733	Y
4	STD8260 240-488921/5	5.0	1.321173	20.0	462801.0	0.264235	Y
5	STD8260 240-488921/4	10.0	2.800146	20.0	431199.0	0.280015	Y
6	STD8260 240-488921/3	20.0	5.652421	20.0	436206.0	0.282621	Y
7	STD8260 240-488921/2	40.0	10.50683	20.0	411696.0	0.262671	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

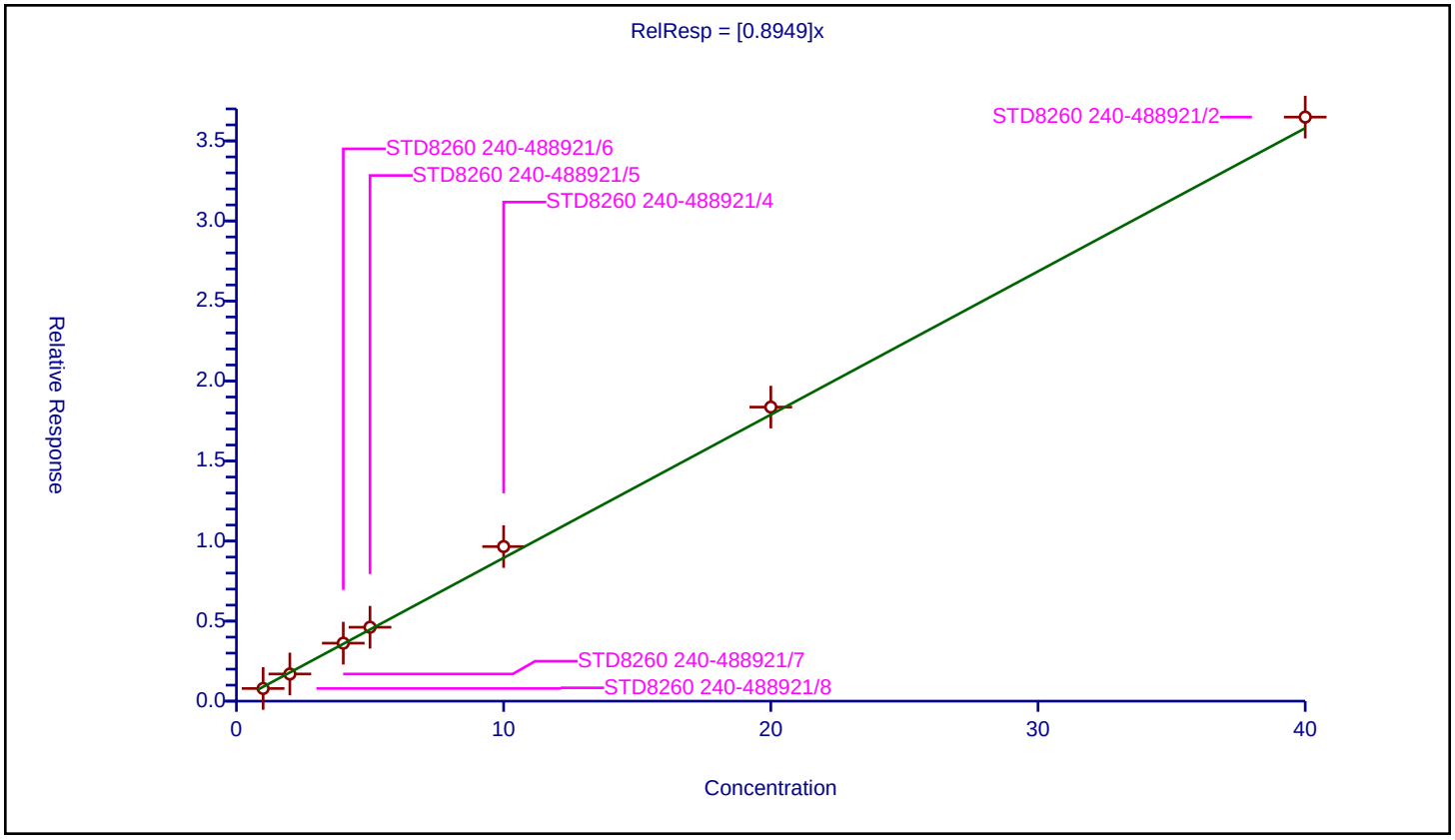
Curve Coefficients

Intercept:	0
Slope:	0.8949

Error Coefficients

Standard Error:	362000
Relative Standard Error:	6.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.791188	20.0	430239.0	0.791188	Y
2	STD8260 240-488921/7	2.0	1.696158	20.0	419277.0	0.848079	Y
3	STD8260 240-488921/6	4.0	3.622149	20.0	428116.0	0.905537	Y
4	STD8260 240-488921/5	5.0	4.616239	20.0	462801.0	0.923248	Y
5	STD8260 240-488921/4	10.0	9.655867	20.0	431199.0	0.965587	Y
6	STD8260 240-488921/3	20.0	18.37077	20.0	436206.0	0.918538	Y
7	STD8260 240-488921/2	40.0	36.486825	20.0	411696.0	0.912171	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

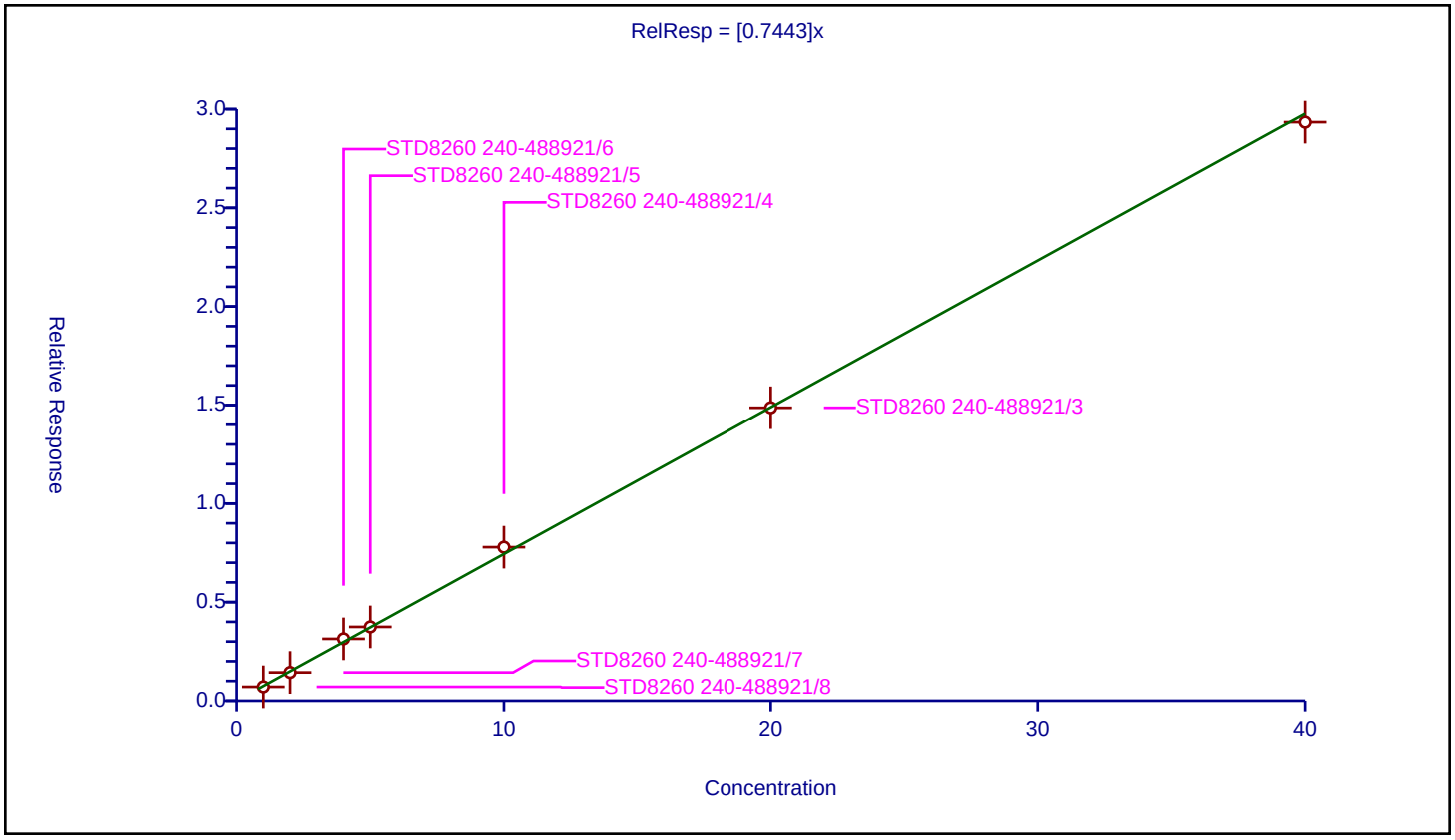
Curve Coefficients

Intercept:	0
Slope:	0.7443

Error Coefficients

Standard Error:	292000
Relative Standard Error:	4.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.705561	20.0	430239.0	0.705561	Y
2	STD8260 240-488921/7	2.0	1.431893	20.0	419277.0	0.715947	Y
3	STD8260 240-488921/6	4.0	3.137327	20.0	428116.0	0.784332	Y
4	STD8260 240-488921/5	5.0	3.744979	20.0	462801.0	0.748996	Y
5	STD8260 240-488921/4	10.0	7.78833	20.0	431199.0	0.778833	Y
6	STD8260 240-488921/3	20.0	14.864445	20.0	436206.0	0.743222	Y
7	STD8260 240-488921/2	40.0	29.341553	20.0	411696.0	0.733539	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

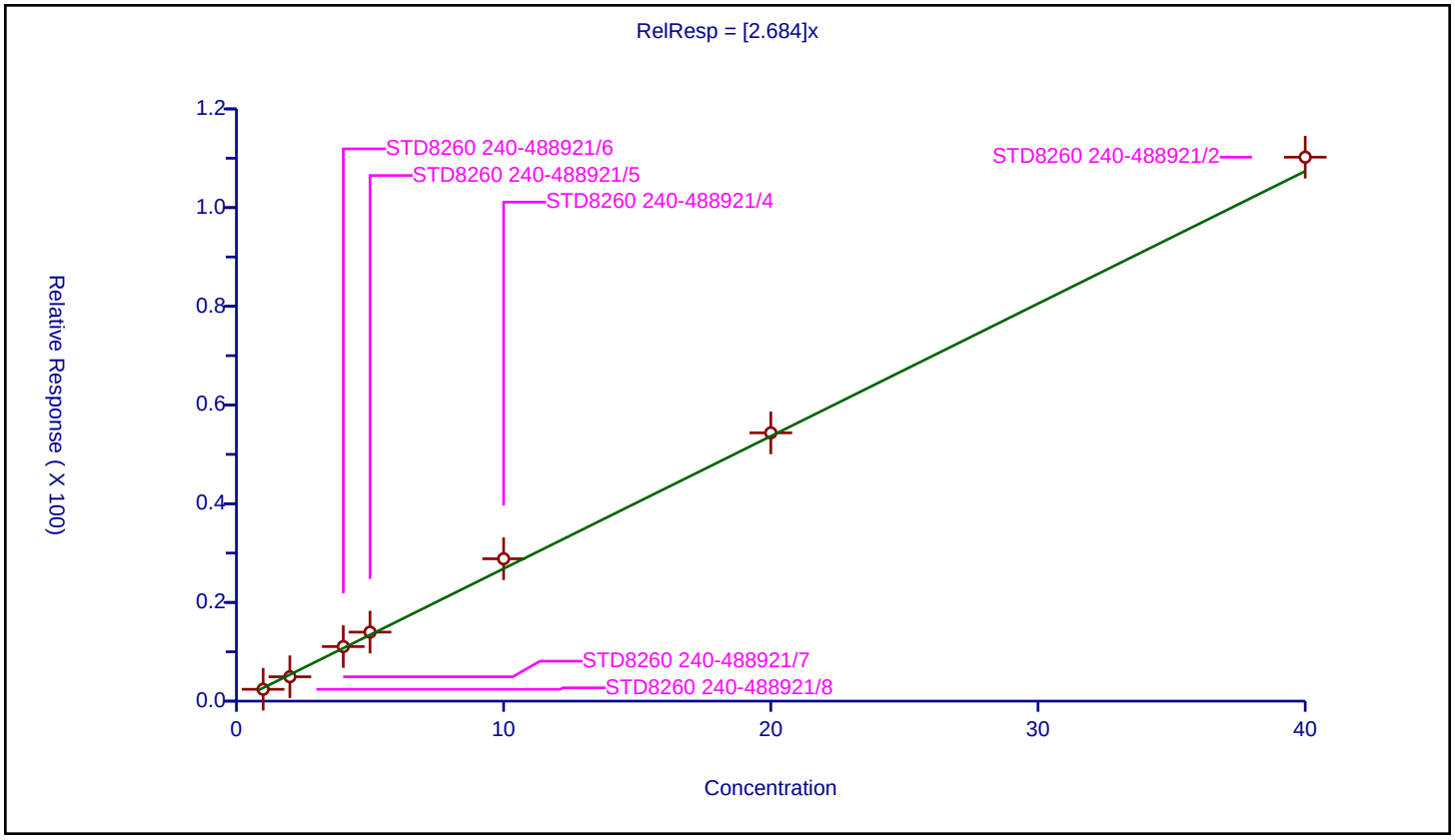
Curve Coefficients

Intercept:	0
Slope:	2.684

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	6.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	2.400015	20.0	430239.0	2.400015	Y
2	STD8260 240-488921/7	2.0	4.943128	20.0	419277.0	2.471564	Y
3	STD8260 240-488921/6	4.0	11.055882	20.0	428116.0	2.763971	Y
4	STD8260 240-488921/5	5.0	13.987697	20.0	462801.0	2.797539	Y
5	STD8260 240-488921/4	10.0	28.846681	20.0	431199.0	2.884668	Y
6	STD8260 240-488921/3	20.0	54.359821	20.0	436206.0	2.717991	Y
7	STD8260 240-488921/2	40.0	110.215645	20.0	411696.0	2.755391	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

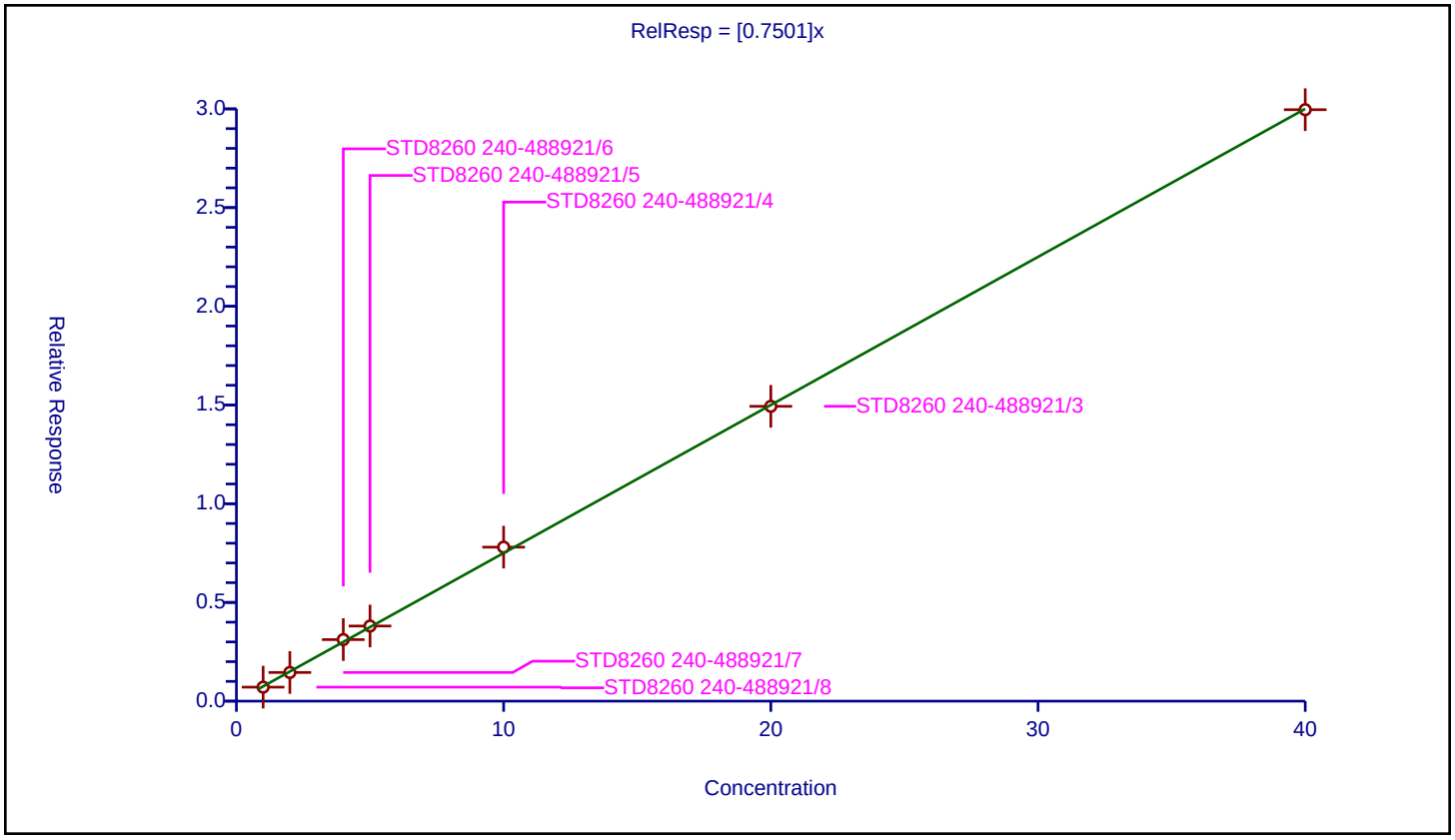
Curve Coefficients

Intercept:	0
Slope:	0.7501

Error Coefficients

Standard Error:	297000
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.70835	20.0	430239.0	0.70835	Y
2	STD8260 240-488921/7	2.0	1.45188	20.0	419277.0	0.72594	Y
3	STD8260 240-488921/6	4.0	3.117706	20.0	428116.0	0.779427	Y
4	STD8260 240-488921/5	5.0	3.805048	20.0	462801.0	0.76101	Y
5	STD8260 240-488921/4	10.0	7.799508	20.0	431199.0	0.779951	Y
6	STD8260 240-488921/3	20.0	14.934824	20.0	436206.0	0.746741	Y
7	STD8260 240-488921/2	40.0	29.959388	20.0	411696.0	0.748985	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

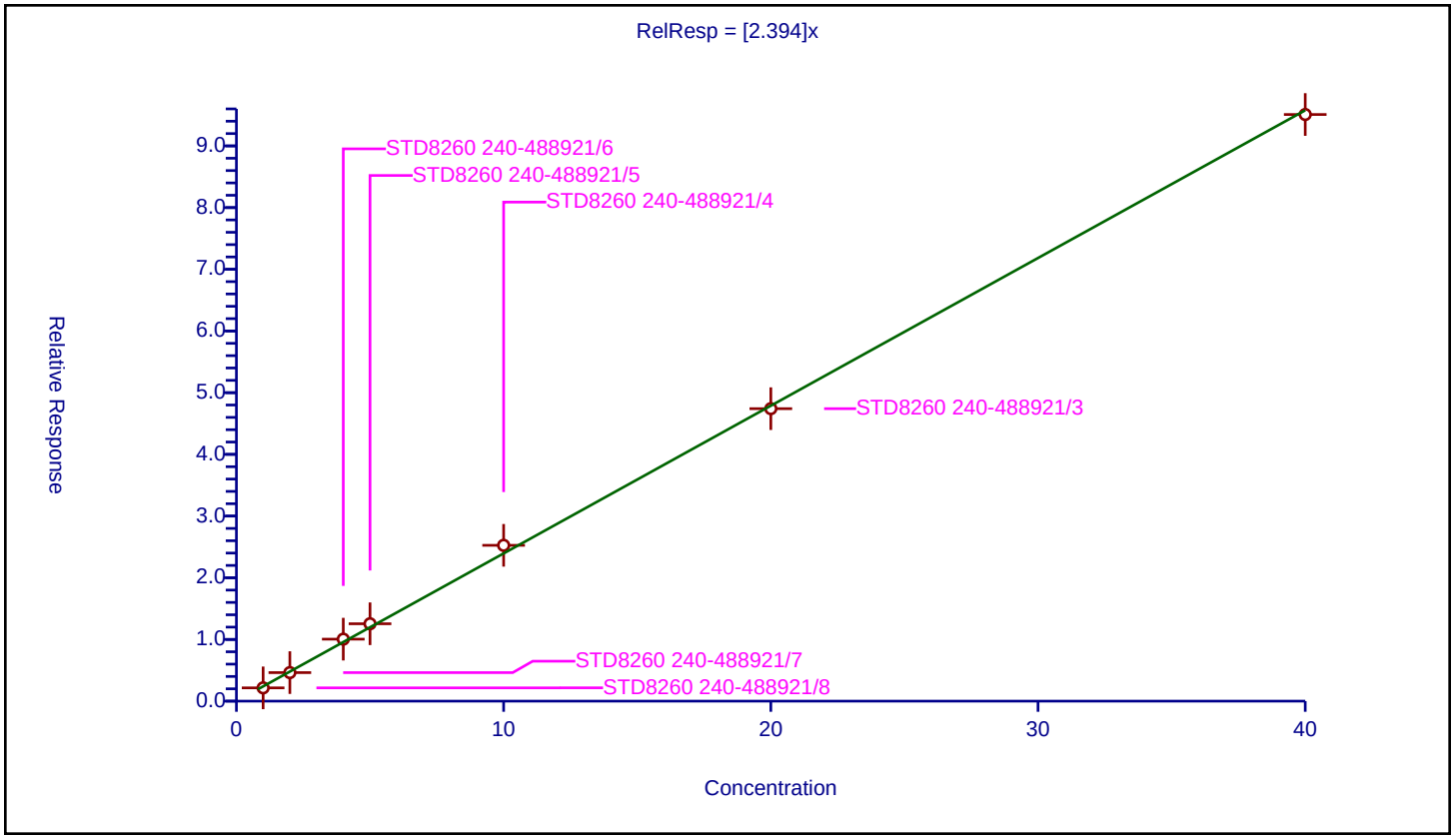
Curve Coefficients

Intercept:	0
Slope:	2.394

Error Coefficients

Standard Error:	943000
Relative Standard Error:	5.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	2.153873	20.0	430239.0	2.153873	Y
2	STD8260 240-488921/7	2.0	4.6252	20.0	419277.0	2.3126	Y
3	STD8260 240-488921/6	4.0	10.047043	20.0	428116.0	2.511761	Y
4	STD8260 240-488921/5	5.0	12.542194	20.0	462801.0	2.508439	Y
5	STD8260 240-488921/4	10.0	25.255856	20.0	431199.0	2.525586	Y
6	STD8260 240-488921/3	20.0	47.407509	20.0	436206.0	2.370375	Y
7	STD8260 240-488921/2	40.0	95.088366	20.0	411696.0	2.377209	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

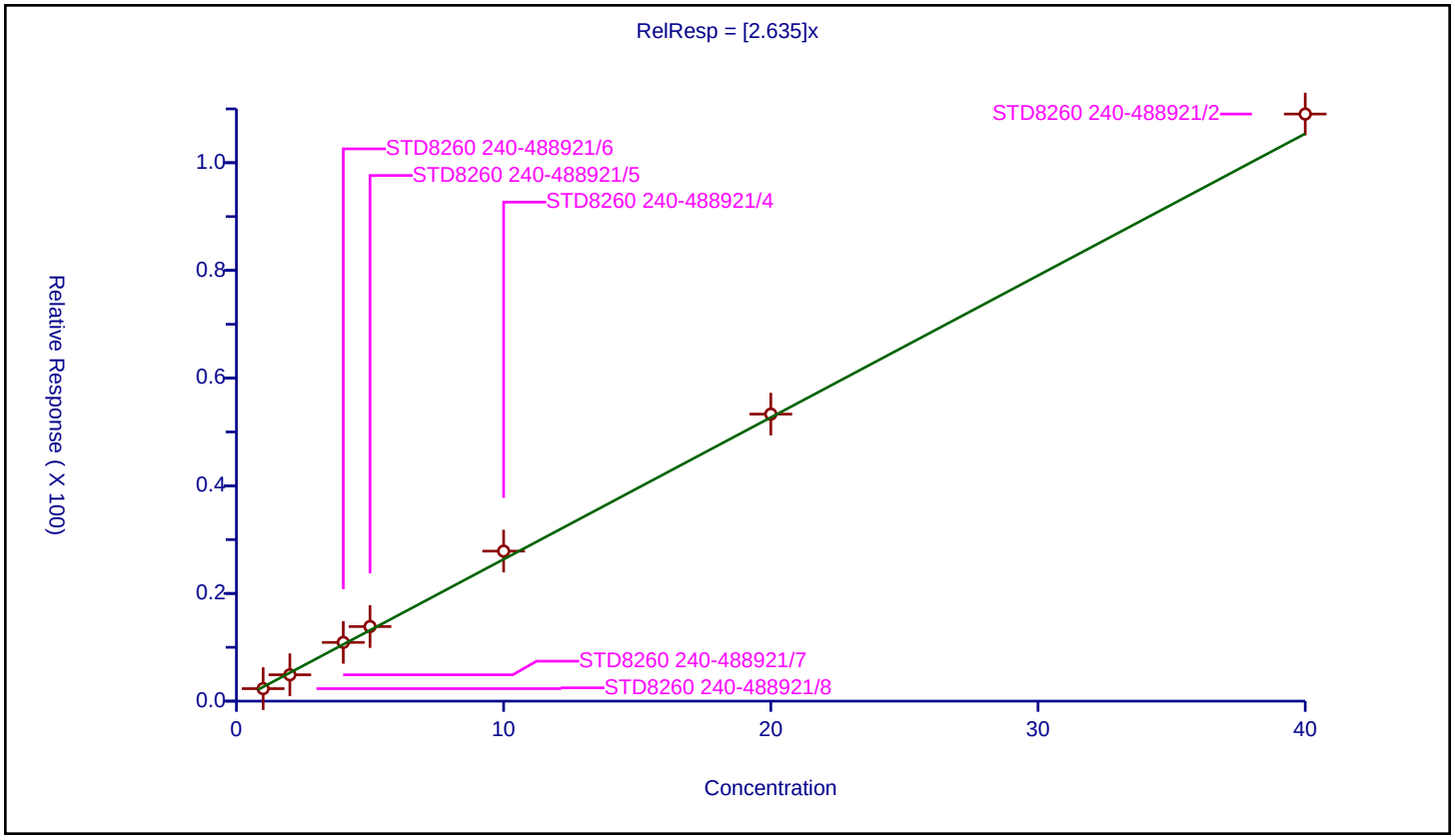
Curve Coefficients

Intercept:	0
Slope:	2.635

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	2.321361	20.0	430239.0	2.321361	Y
2	STD8260 240-488921/7	2.0	4.893376	20.0	419277.0	2.446688	Y
3	STD8260 240-488921/6	4.0	10.908679	20.0	428116.0	2.72717	Y
4	STD8260 240-488921/5	5.0	13.854162	20.0	462801.0	2.770832	Y
5	STD8260 240-488921/4	10.0	27.861985	20.0	431199.0	2.786198	Y
6	STD8260 240-488921/3	20.0	53.311692	20.0	436206.0	2.665585	Y
7	STD8260 240-488921/2	40.0	109.044732	20.0	411696.0	2.726118	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

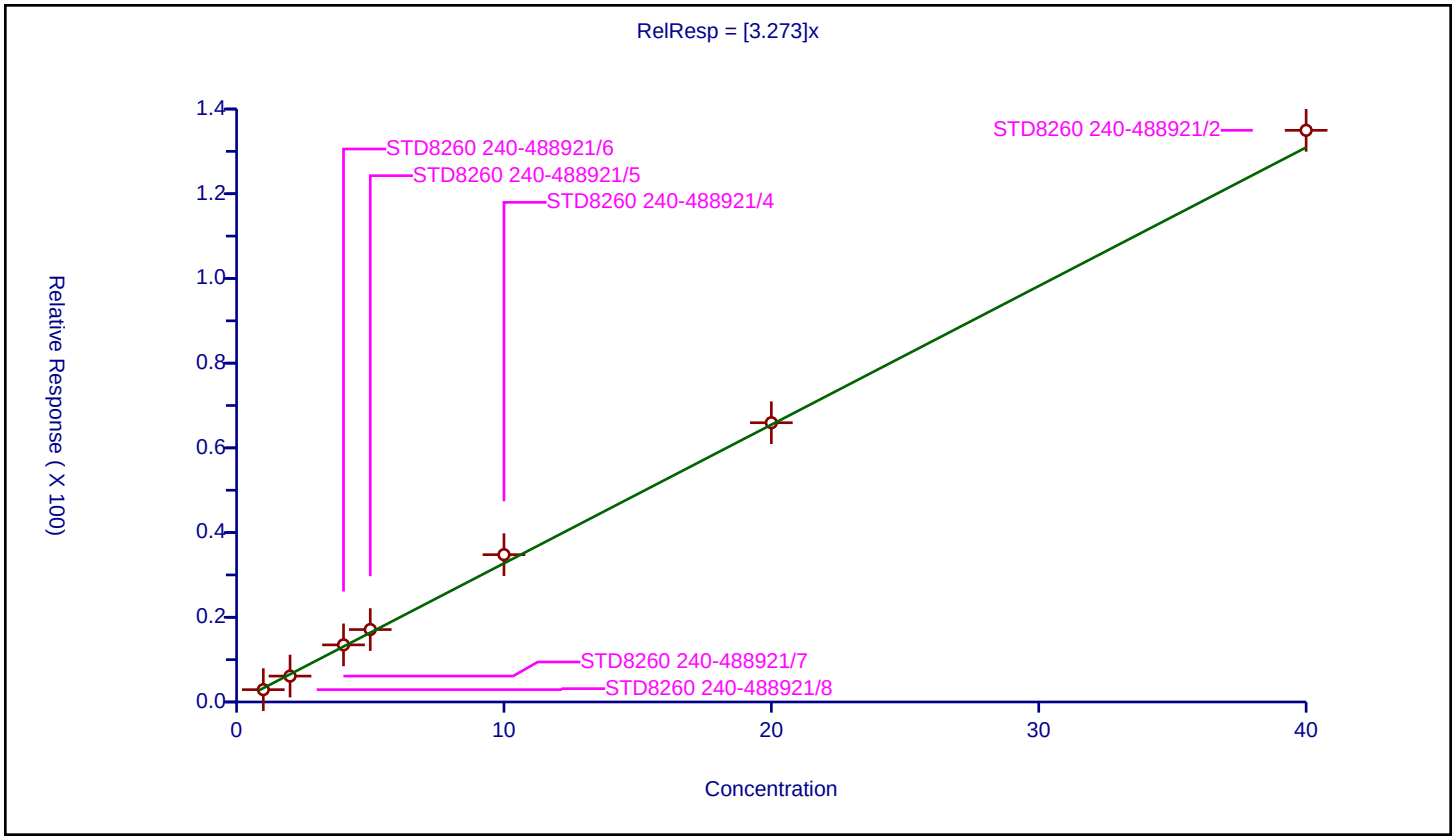
Curve Coefficients

Intercept:	0
Slope:	3.273

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	2.914845	20.0	430239.0	2.914845	Y
2	STD8260 240-488921/7	2.0	6.114383	20.0	419277.0	3.057191	Y
3	STD8260 240-488921/6	4.0	13.483121	20.0	428116.0	3.37078	Y
4	STD8260 240-488921/5	5.0	17.104025	20.0	462801.0	3.420805	Y
5	STD8260 240-488921/4	10.0	34.781621	20.0	431199.0	3.478162	Y
6	STD8260 240-488921/3	20.0	65.935682	20.0	436206.0	3.296784	Y
7	STD8260 240-488921/2	40.0	134.969541	20.0	411696.0	3.374239	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

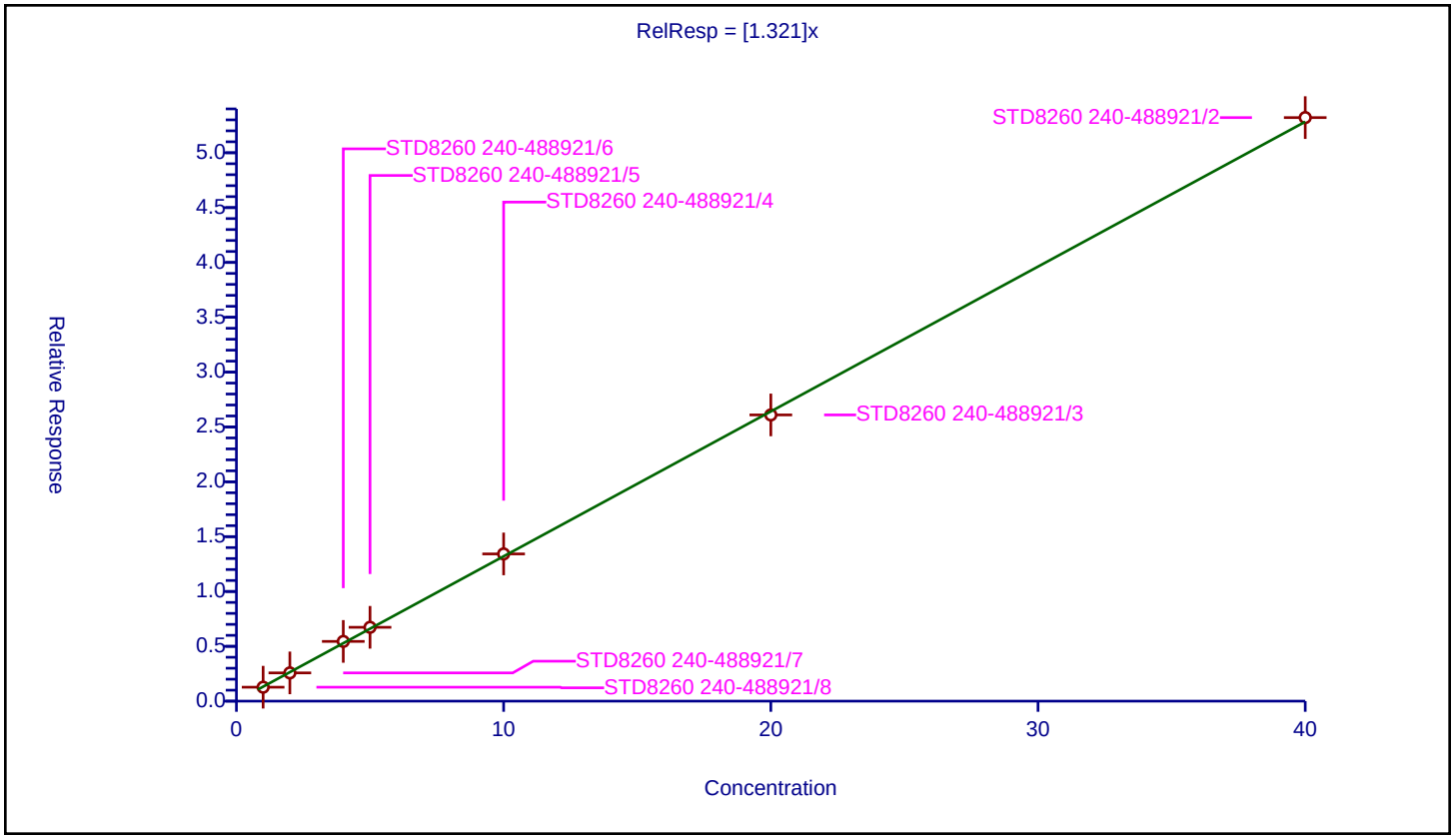
Curve Coefficients

Intercept:	0
Slope:	1.321

Error Coefficients

Standard Error:	524000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.271386	20.0	430239.0	1.271386	Y
2	STD8260 240-488921/7	2.0	2.576101	20.0	419277.0	1.288051	Y
3	STD8260 240-488921/6	4.0	5.445253	20.0	428116.0	1.361313	Y
4	STD8260 240-488921/5	5.0	6.731792	20.0	462801.0	1.346358	Y
5	STD8260 240-488921/4	10.0	13.423501	20.0	431199.0	1.34235	Y
6	STD8260 240-488921/3	20.0	26.097073	20.0	436206.0	1.304854	Y
7	STD8260 240-488921/2	40.0	53.207075	20.0	411696.0	1.330177	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

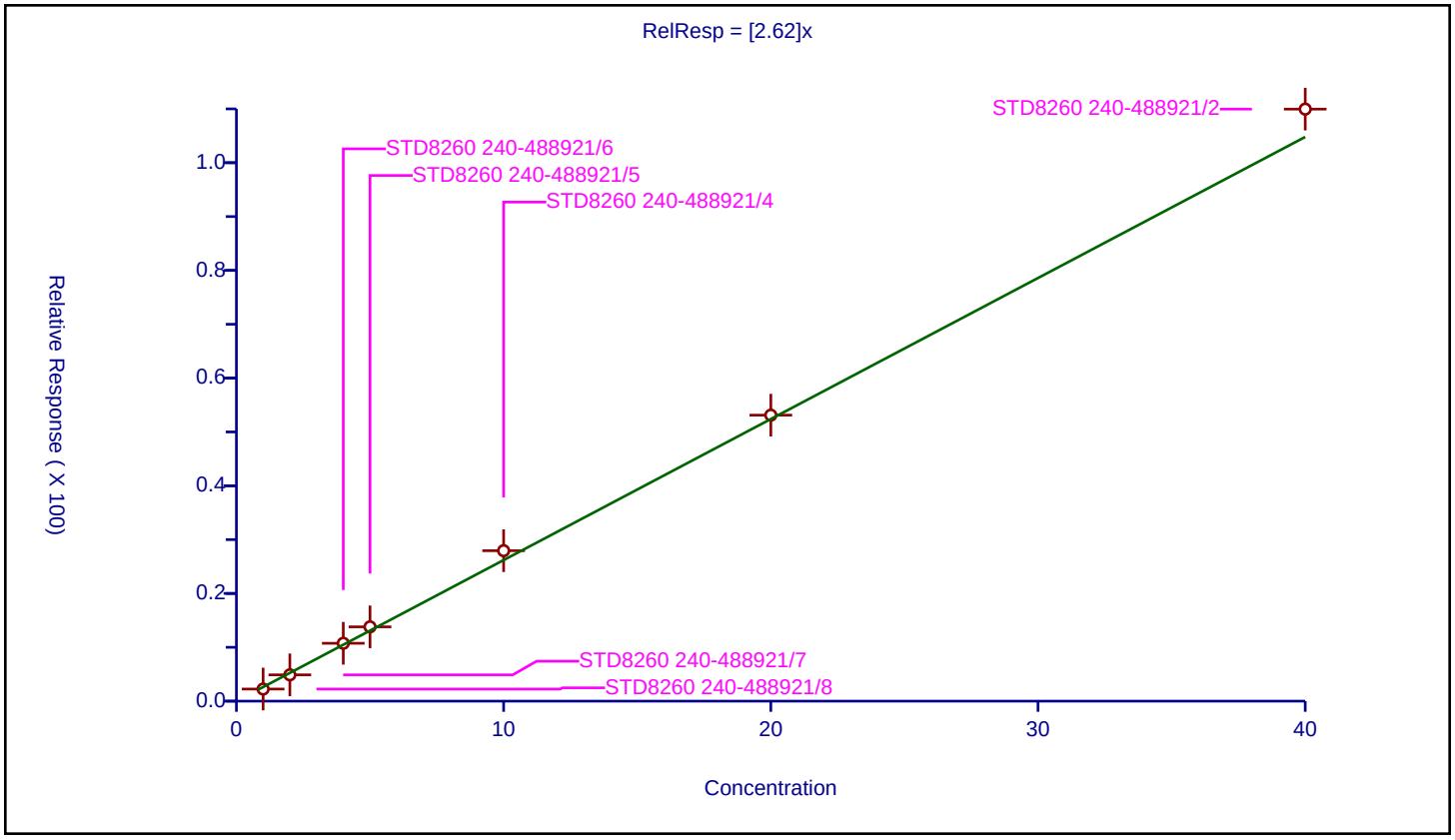
Curve Coefficients

Intercept:	0
Slope:	2.62

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	2.247867	20.0	430239.0	2.247867	Y
2	STD8260 240-488921/7	2.0	4.886984	20.0	419277.0	2.443492	Y
3	STD8260 240-488921/6	4.0	10.74933	20.0	428116.0	2.687332	Y
4	STD8260 240-488921/5	5.0	13.797464	20.0	462801.0	2.759493	Y
5	STD8260 240-488921/4	10.0	27.941902	20.0	431199.0	2.79419	Y
6	STD8260 240-488921/3	20.0	53.116968	20.0	436206.0	2.655848	Y
7	STD8260 240-488921/2	40.0	109.956278	20.0	411696.0	2.748907	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

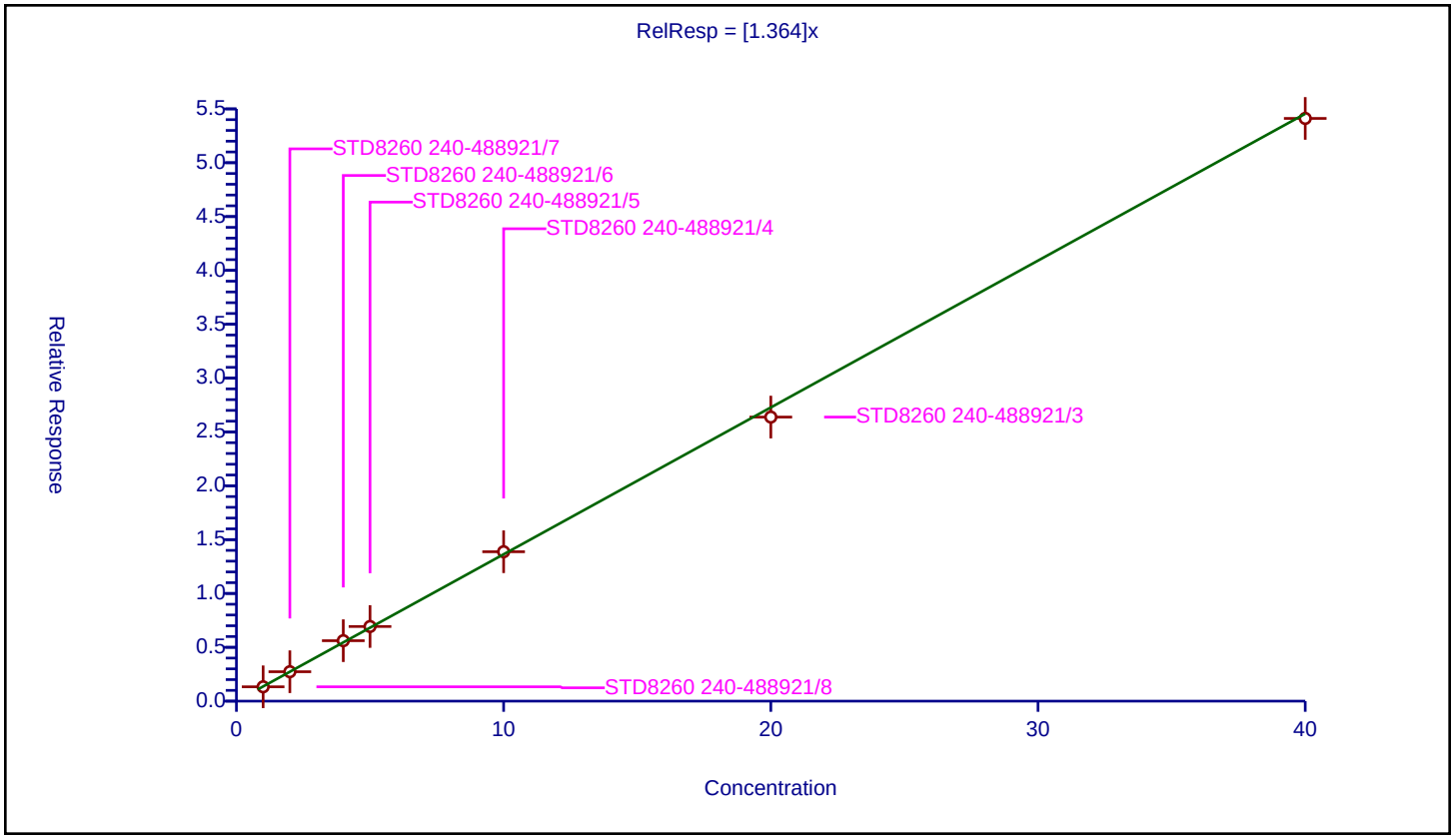
Curve Coefficients

Intercept:	0
Slope:	1.364

Error Coefficients

Standard Error:	533000
Relative Standard Error:	2.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.331028	20.0	430239.0	1.331028	Y
2	STD8260 240-488921/7	2.0	2.731035	20.0	419277.0	1.365517	Y
3	STD8260 240-488921/6	4.0	5.614506	20.0	428116.0	1.403627	Y
4	STD8260 240-488921/5	5.0	6.932656	20.0	462801.0	1.386531	Y
5	STD8260 240-488921/4	10.0	13.873733	20.0	431199.0	1.387373	Y
6	STD8260 240-488921/3	20.0	26.380793	20.0	436206.0	1.31904	Y
7	STD8260 240-488921/2	40.0	54.114152	20.0	411696.0	1.352854	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

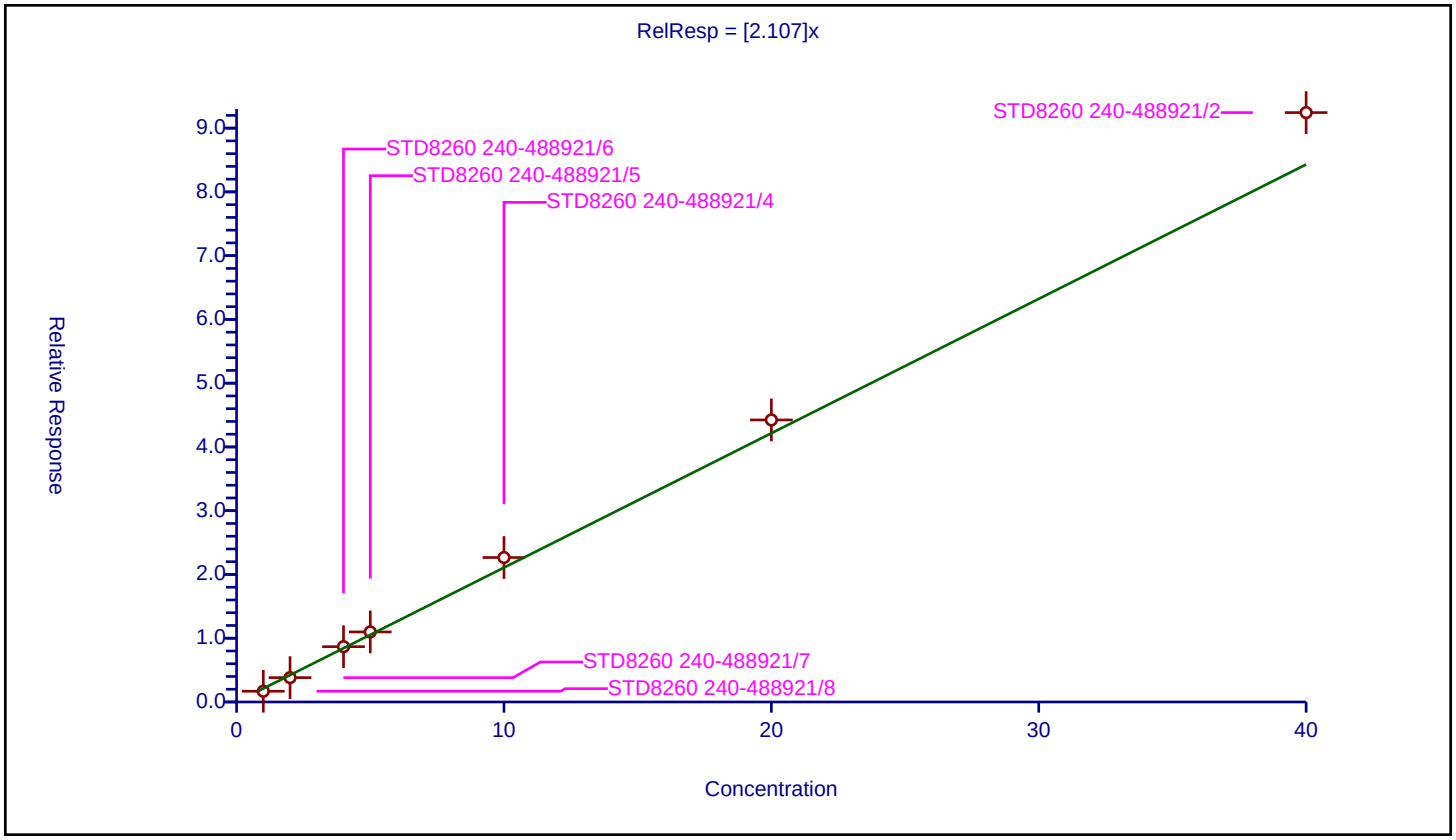
Curve Coefficients

Intercept:	0
Slope:	2.107

Error Coefficients

Standard Error:	903000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.686923	20.0	430239.0	1.686923	Y
2	STD8260 240-488921/7	2.0	3.821722	20.0	419277.0	1.910861	Y
3	STD8260 240-488921/6	4.0	8.67606	20.0	428116.0	2.169015	Y
4	STD8260 240-488921/5	5.0	10.984981	20.0	462801.0	2.196996	Y
5	STD8260 240-488921/4	10.0	22.658958	20.0	431199.0	2.265896	Y
6	STD8260 240-488921/3	20.0	44.234605	20.0	436206.0	2.21173	Y
7	STD8260 240-488921/2	40.0	92.440441	20.0	411696.0	2.311011	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

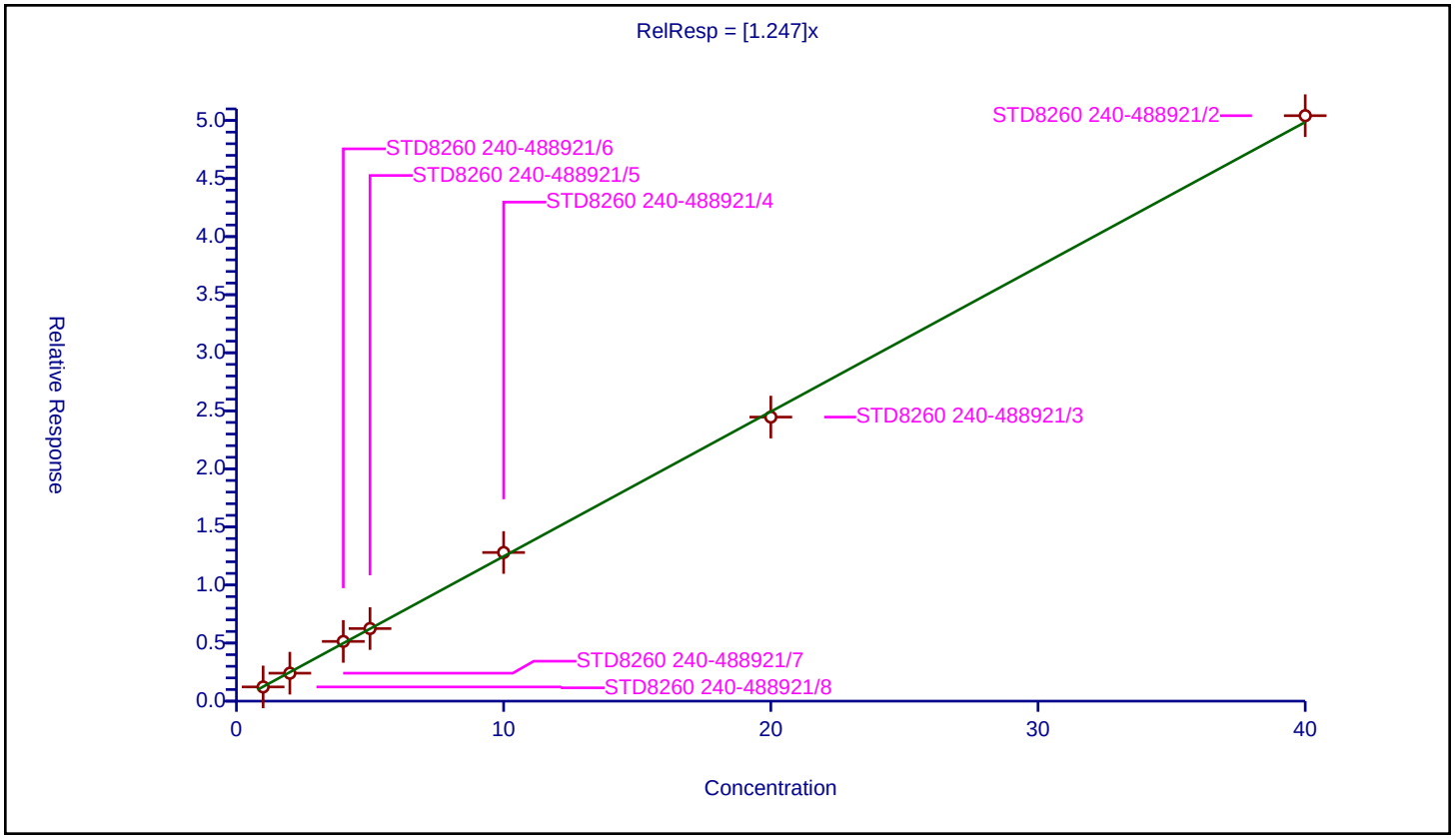
Curve Coefficients

Intercept:	0
Slope:	1.247

Error Coefficients

Standard Error:	496000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.22332	20.0	430239.0	1.22332	Y
2	STD8260 240-488921/7	2.0	2.405951	20.0	419277.0	1.202976	Y
3	STD8260 240-488921/6	4.0	5.142672	20.0	428116.0	1.285668	Y
4	STD8260 240-488921/5	5.0	6.251413	20.0	462801.0	1.250283	Y
5	STD8260 240-488921/4	10.0	12.80105	20.0	431199.0	1.280105	Y
6	STD8260 240-488921/3	20.0	24.461424	20.0	436206.0	1.223071	Y
7	STD8260 240-488921/2	40.0	50.415404	20.0	411696.0	1.260385	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

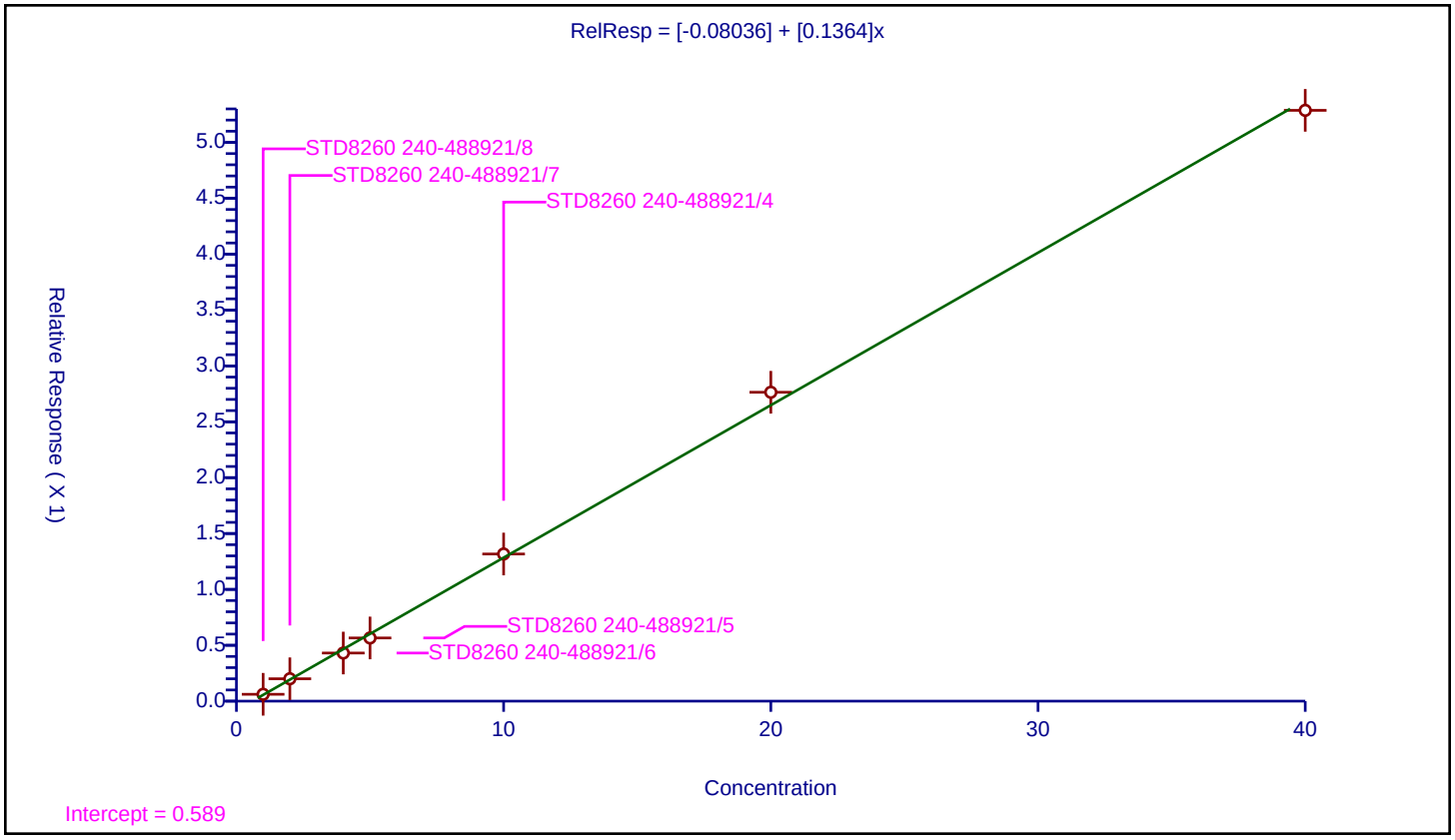
Curve Coefficients

Intercept:	-0.08036
Slope:	0.1364

Error Coefficients

Standard Error:	57500
Relative Standard Error:	4.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.061315	20.0	430239.0	0.061315	Y
2	STD8260 240-488921/7	2.0	0.200393	20.0	419277.0	0.100196	Y
3	STD8260 240-488921/6	4.0	0.430631	20.0	428116.0	0.107658	Y
4	STD8260 240-488921/5	5.0	0.565427	20.0	462801.0	0.113085	Y
5	STD8260 240-488921/4	10.0	1.31684	20.0	431199.0	0.131684	Y
6	STD8260 240-488921/3	20.0	2.764336	20.0	436206.0	0.138217	Y
7	STD8260 240-488921/2	40.0	5.286814	20.0	411696.0	0.13217	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

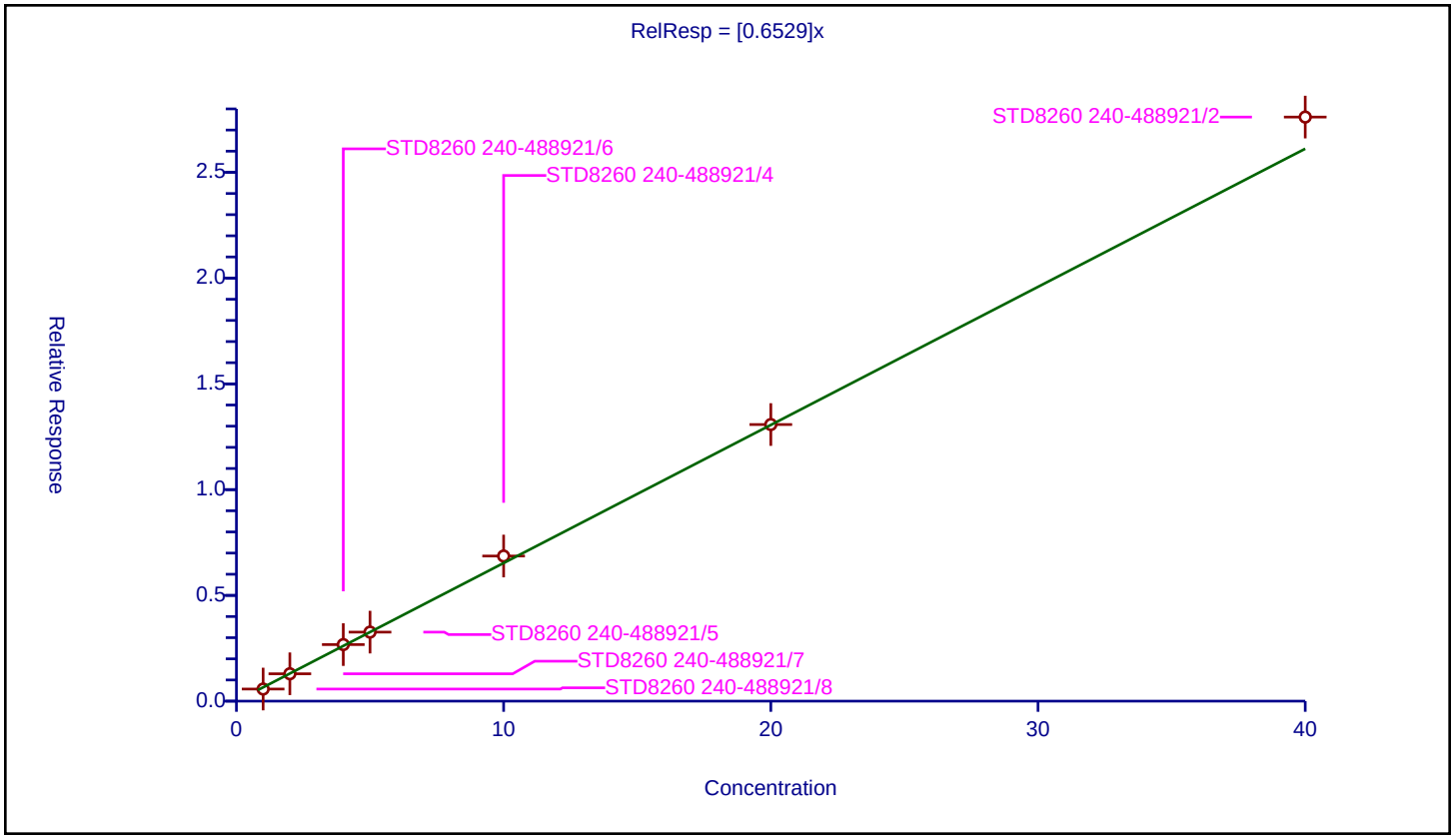
Curve Coefficients

Intercept:	0
Slope:	0.6529

Error Coefficients

Standard Error:	270000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.571729	20.0	430239.0	0.571729	Y
2	STD8260 240-488921/7	2.0	1.293751	20.0	419277.0	0.646875	Y
3	STD8260 240-488921/6	4.0	2.674275	20.0	428116.0	0.668569	Y
4	STD8260 240-488921/5	5.0	3.263822	20.0	462801.0	0.652764	Y
5	STD8260 240-488921/4	10.0	6.860359	20.0	431199.0	0.686036	Y
6	STD8260 240-488921/3	20.0	13.077674	20.0	436206.0	0.653884	Y
7	STD8260 240-488921/2	40.0	27.613482	20.0	411696.0	0.690337	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

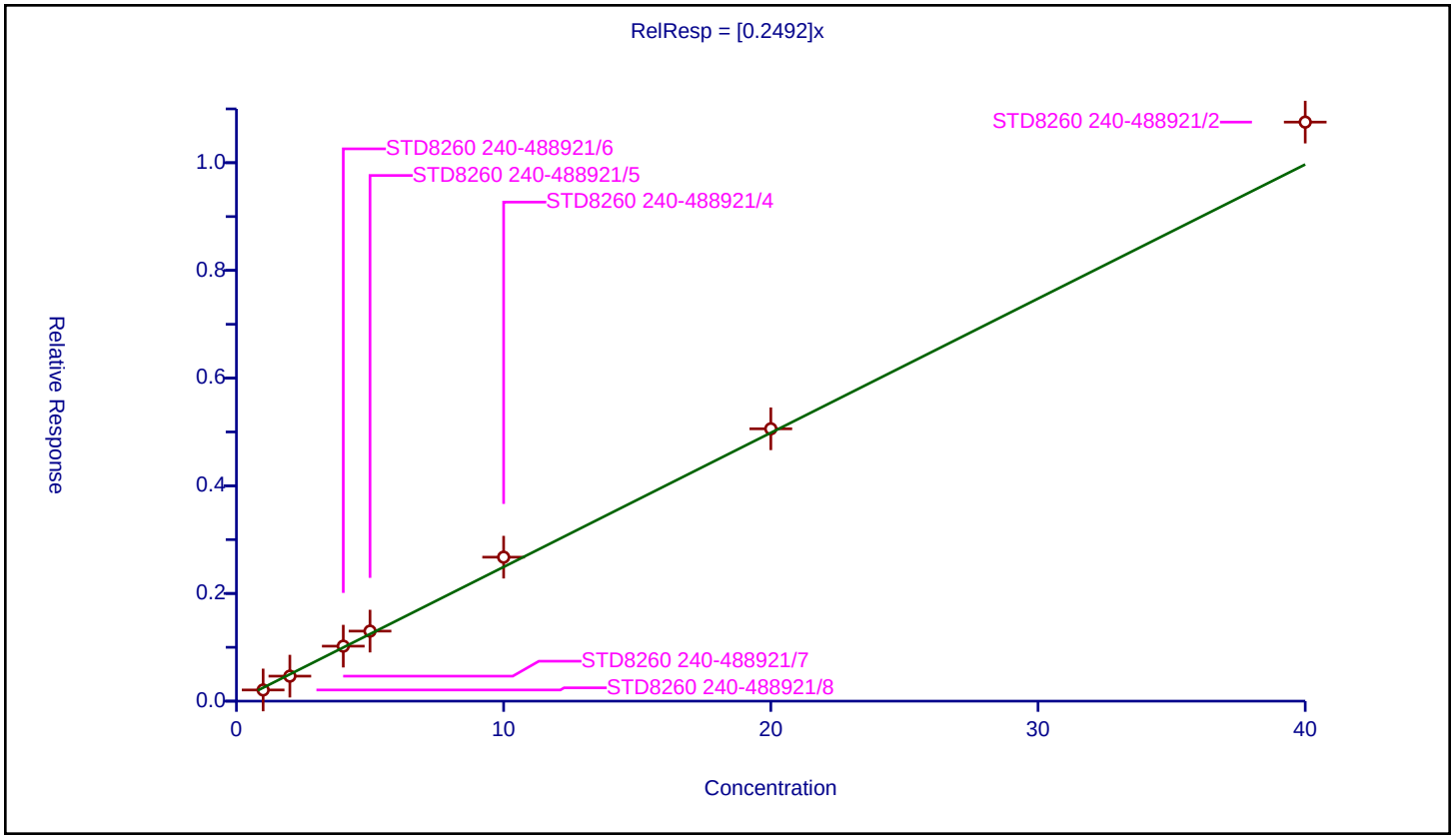
Curve Coefficients

Intercept:	0
Slope:	0.2492

Error Coefficients

Standard Error:	105000
Relative Standard Error:	8.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.207559	20.0	430239.0	0.207559	Y
2	STD8260 240-488921/7	2.0	0.464466	20.0	419277.0	0.232233	Y
3	STD8260 240-488921/6	4.0	1.021265	20.0	428116.0	0.255316	Y
4	STD8260 240-488921/5	5.0	1.300732	20.0	462801.0	0.260146	Y
5	STD8260 240-488921/4	10.0	2.674125	20.0	431199.0	0.267412	Y
6	STD8260 240-488921/3	20.0	5.058344	20.0	436206.0	0.252917	Y
7	STD8260 240-488921/2	40.0	10.754537	20.0	411696.0	0.268863	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

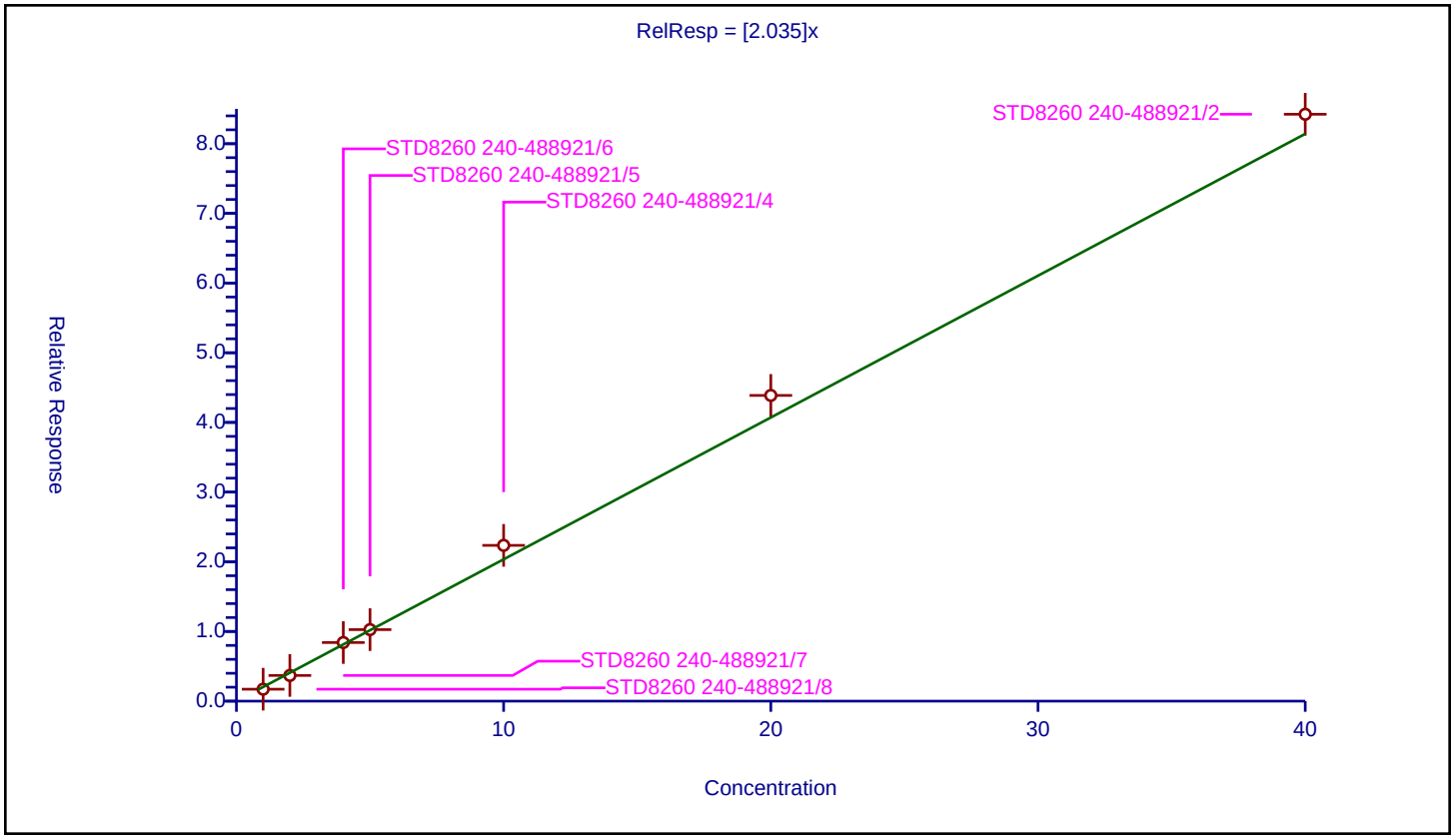
Curve Coefficients

Intercept:	0
Slope:	2.035

Error Coefficients

Standard Error:	842000
Relative Standard Error:	9.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	1.713792	20.0	430239.0	1.713792	Y
2	STD8260 240-488921/7	2.0	3.685106	20.0	419277.0	1.842553	Y
3	STD8260 240-488921/6	4.0	8.412253	20.0	428116.0	2.103063	Y
4	STD8260 240-488921/5	5.0	10.264714	20.0	462801.0	2.052943	Y
5	STD8260 240-488921/4	10.0	22.356638	20.0	431199.0	2.235664	Y
6	STD8260 240-488921/3	20.0	43.8756	20.0	436206.0	2.19378	Y
7	STD8260 240-488921/2	40.0	84.230549	20.0	411696.0	2.105764	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

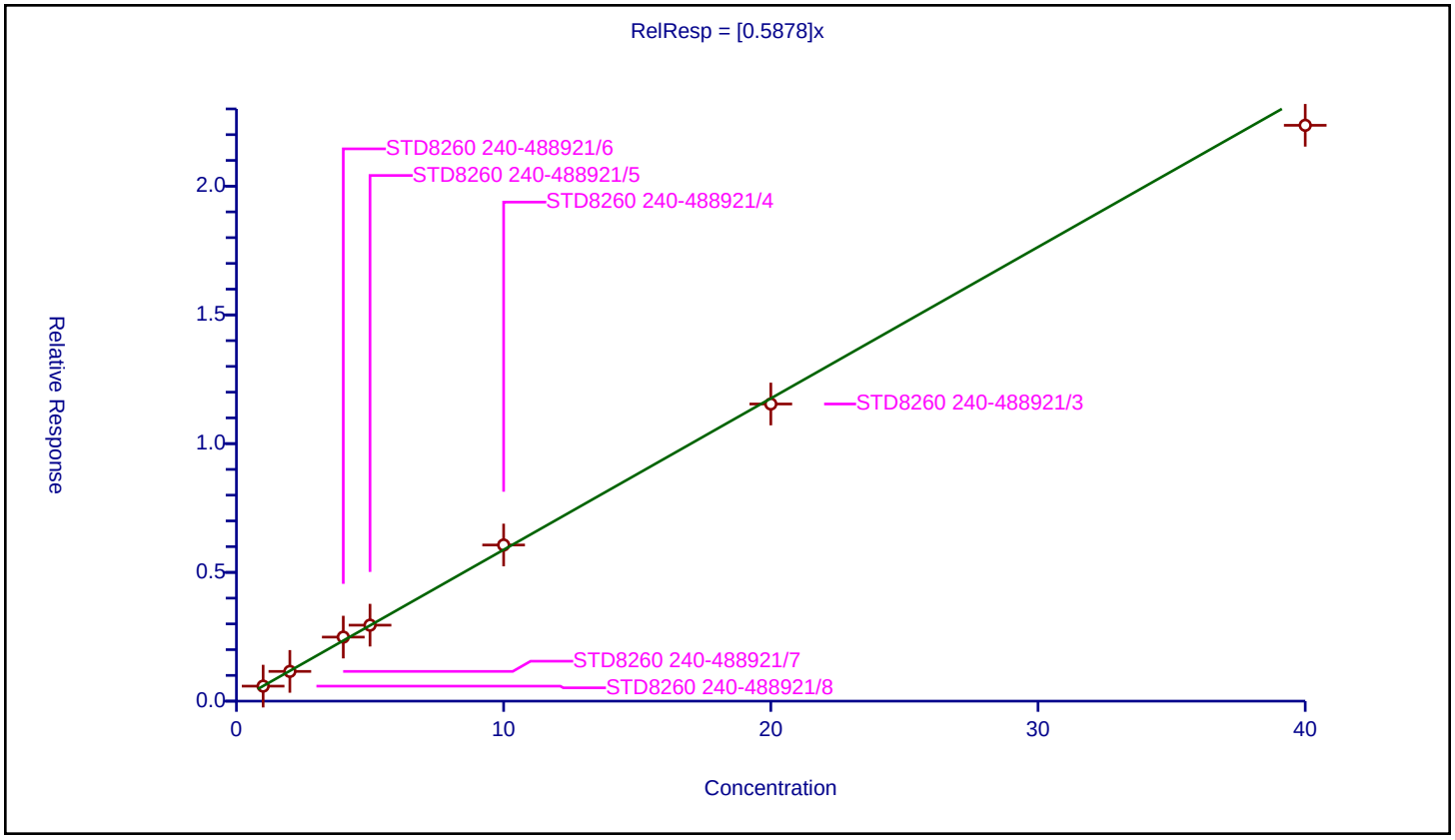
Curve Coefficients

Intercept:	0
Slope:	0.5878

Error Coefficients

Standard Error:	224000
Relative Standard Error:	3.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-488921/8	1.0	0.583257	20.0	430239.0	0.583257	Y
2	STD8260 240-488921/7	2.0	1.154893	20.0	419277.0	0.577446	Y
3	STD8260 240-488921/6	4.0	2.486616	20.0	428116.0	0.621654	Y
4	STD8260 240-488921/5	5.0	2.950123	20.0	462801.0	0.590025	Y
5	STD8260 240-488921/4	10.0	6.063836	20.0	431199.0	0.606384	Y
6	STD8260 240-488921/3	20.0	11.540006	20.0	436206.0	0.577	Y
7	STD8260 240-488921/2	40.0	22.36286	20.0	411696.0	0.559071	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: ICV 240-488921/9 Calibration Date: 06/03/2021 21:14

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4582.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3458	0.3092		0.00894	0.0100	-10.6	50.0
Chloromethane	Ave	0.3213	0.2839	0.1000	0.00884	0.0100	-11.6	50.0
Vinyl chloride	Ave	0.3216	0.3008		0.00935	0.0100	-6.5	20.0
Butadiene	Ave	0.3380	0.2967		0.00878	0.0100	-12.2	50.0
Bromomethane	Ave	0.1626	0.1506		0.00926	0.0100	-7.4	50.0
Chloroethane	Ave	0.1999	0.1885		0.00943	0.0100	-5.7	50.0
Dichlorofluoromethane	Ave	0.4412	0.4283		0.00971	0.0100	-2.9	50.0
Trichlorofluoromethane	Ave	0.4624	0.4395		0.00950	0.0100	-5.0	50.0
Ethyl ether	Ave	0.2255	0.2261		0.0100	0.0100	0.3	50.0
Acrolein	Ave	0.0089	0.0199		0.112	0.0500	124.3*	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1931	0.1886		0.00977	0.0100	-2.3	50.0
1,1-Dichloroethene	Ave	0.2310	0.2283		0.00989	0.0100	-1.1	20.0
Acetone	Qua		0.1077		0.0189	0.0200	-5.4	50.0
Iodomethane	Ave	0.2545	0.2420		0.00951	0.0100	-4.9	50.0
Carbon disulfide	Ave	0.5704	0.5474		0.00960	0.0100	-4.0	50.0
3-Chloro-1-propene	Ave	0.1491	0.1393		0.00934	0.0100	-6.6	50.0
Methyl acetate	Ave	0.2234	0.2343		0.0210	0.0200	4.9	50.0
Methylene Chloride	Ave	0.2399	0.2280		0.00950	0.0100	-5.0	50.0
2-Methyl-2-propanol	Ave	0.0305	0.0317		0.104	0.100	3.9	50.0
Acrylonitrile	Ave	0.1233	0.1243		0.101	0.100	0.8	50.0
Methyl tert-butyl ether	Ave	0.7937	0.7754		0.00977	0.0100	-2.3	50.0
trans-1,2-Dichloroethene	Ave	0.2622	0.2598		0.00991	0.0100	-0.9	50.0
Hexane	Ave	0.0810	0.0828		0.0102	0.0100	2.2	20.0
1,1-Dichloroethane	Ave	0.4876	0.4714	0.1000	0.00967	0.0100	-3.3	50.0
Vinyl acetate	Lin1		0.3097		0.00783	0.0100	-21.7	50.0
2,2-Dichloropropane	Ave	0.0792	0.0771		0.00973	0.0100	-2.7	50.0
2-Butanone (MEK)	Ave	0.1518	0.1619		0.0213	0.0200	6.6	50.0
cis-1,2-Dichloroethene	Ave	0.2848	0.2815		0.00989	0.0100	-1.1	50.0
Chlorobromomethane	Ave	0.1277	0.1225		0.00959	0.0100	-4.1	50.0
Tetrahydrofuran	Ave	0.0962	0.1000		0.0208	0.0200	3.9	50.0
Chloroform	Ave	0.4647	0.4521		0.00973	0.0100	-2.7	20.0
1,1,1-Trichloroethane	Ave	0.4124	0.4148		0.0101	0.0100	0.6	50.0
Cyclohexane	Ave	0.4945	0.4996		0.0101	0.0100	1.0	50.0
1,1-Dichloropropene	Ave	0.3913	0.3744		0.00957	0.0100	-4.3	50.0
Carbon tetrachloride	Ave	0.3334	0.3350		0.0101	0.0100	0.5	50.0
Isobutyl alcohol	Ave	0.0122	0.0133		0.272	0.250	8.9	50.0
Benzene	Ave	1.136	1.094		0.00963	0.0100	-3.7	50.0
1,2-Dichloroethane	Ave	0.4034	0.3936		0.00976	0.0100	-2.4	50.0
n-Heptane	Ave	0.0792	0.0819		0.0103	0.0100	3.5	50.0
Trichloroethene	Ave	0.2799	0.2791		0.00997	0.0100	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: ICV 240-488921/9 Calibration Date: 06/03/2021 21:14

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4582.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4911	0.4872		0.00992	0.0100	-0.8	50.0
1,2-Dichloropropane	Ave	0.2646	0.2642		0.00998	0.0100	-0.2	20.0
1,4-Dioxane	Ave	0.0035	0.0036		0.208	0.200	3.8	50.0
Dibromomethane	Ave	0.1516	0.1495		0.00987	0.0100	-1.3	50.0
Dichlorobromomethane	Ave	0.3035	0.3100		0.0102	0.0100	2.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1860	0.1875		0.0101	0.0100	0.8	50.0
cis-1,3-Dichloropropene	Ave	0.3704	0.3684		0.00994	0.0100	-0.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2929	0.3079		0.0210	0.0200	5.1	50.0
Toluene	Ave	1.511	1.464		0.00969	0.0100	-3.1	20.0
trans-1,3-Dichloropropene	Ave	0.4181	0.4054		0.00970	0.0100	-3.0	50.0
Ethyl methacrylate	Ave	0.4068	0.4307		0.0106	0.0100	5.9	50.0
1,1,2-Trichloroethane	Ave	0.2895	0.2848		0.00984	0.0100	-1.6	50.0
Tetrachloroethene	Ave	0.2804	0.2827		0.0101	0.0100	0.8	50.0
1,3-Dichloropropane	Ave	0.5432	0.5193		0.00956	0.0100	-4.4	50.0
2-Hexanone	Ave	0.2561	0.2778		0.0217	0.0200	8.5	50.0
Chlorodibromomethane	Ave	0.2576	0.2629		0.0102	0.0100	2.1	50.0
Ethylene Dibromide	Ave	0.2936	0.2921		0.00995	0.0100	-0.5	50.0
Chlorobenzene	Ave	0.9327	0.8983	0.3000	0.00963	0.0100	-3.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2779	0.2757		0.00992	0.0100	-0.8	50.0
Ethylbenzene	Ave	0.5337	0.5200		0.00974	0.0100	-2.6	20.0
m-Xylene & p-Xylene	Ave	0.6552	0.6302		0.00962	0.0100	-3.8	50.0
o-Xylene	Ave	0.6197	0.5977		0.00965	0.0100	-3.5	50.0
Styrene	Ave	0.8717	0.9383		0.0108	0.0100	7.6	50.0
Bromoform	Lin1		0.1496	0.1000	0.00917	0.0100	-8.3	50.0
Isopropylbenzene	Ave	1.636	1.623		0.00992	0.0100	-0.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8132	0.8075	0.3000	0.00993	0.0100	-0.7	50.0
Bromobenzene	Ave	0.7451	0.7298		0.00979	0.0100	-2.1	50.0
1,2,3-Trichloropropane	Ave	0.2999	0.3096		0.0103	0.0100	3.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2570	0.2719		0.0106	0.0100	5.8	50.0
N-Propylbenzene	Ave	0.8949	0.8907		0.00995	0.0100	-0.5	50.0
2-Chlorotoluene	Ave	0.7443	0.7392		0.00993	0.0100	-0.7	50.0
1,3,5-Trimethylbenzene	Ave	2.684	2.706		0.0101	0.0100	0.8	50.0
4-Chlorotoluene	Ave	0.7501	0.7500		0.0100	0.0100	-0.0	50.0
tert-Butylbenzene	Ave	2.394	2.390		0.00998	0.0100	-0.2	50.0
1,2,4-Trimethylbenzene	Ave	2.635	2.655		0.0101	0.0100	0.8	50.0
sec-Butylbenzene	Ave	3.273	3.304		0.0101	0.0100	0.9	50.0
1,3-Dichlorobenzene	Ave	1.321	1.289		0.00976	0.0100	-2.4	50.0
4-Isopropyltoluene	Ave	2.620	2.631		0.0100	0.0100	0.4	50.0
1,4-Dichlorobenzene	Ave	1.364	1.310		0.00960	0.0100	-4.0	50.0
n-Butylbenzene	Ave	2.107	2.143		0.0102	0.0100	1.7	50.0
1,2-Dichlorobenzene	Ave	1.247	1.198		0.00961	0.0100	-3.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: ICV 240-488921/9 Calibration Date: 06/03/2021 21:14

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4582.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1249		0.00974	0.0100	-2.6	50.0
1,2,4-Trichlorobenzene	Ave	0.6529	0.6531		0.0100	0.0100	0.0	50.0
Hexachlorobutadiene	Ave	0.2492	0.2591		0.0104	0.0100	4.0	50.0
Naphthalene	Ave	2.035	2.154		0.0106	0.0100	5.8	50.0
1,2,3-Trichlorobenzene	Ave	0.5878	0.6122		0.0104	0.0100	4.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2067	0.1901		0.0209	0.0227	-8.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3087	0.2528		0.0186	0.0227	-18.1	50.0
Toluene-d8 (Surr)	Ave	1.231	1.153		0.0213	0.0227	-6.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4390	0.4520		0.0234	0.0227	3.0	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4582.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Jun-2021 21:14:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0109864-009
Operator ID: 001644 Instrument ID: A3UX17
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 04-Jun-2021 12:22:42 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

First Level Reviewer: williamsla Date: 04-Jun-2021 17:19:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1159985	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	939006	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	424101	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	250558	22.7	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	333262	22.7	18.6	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	94	1230252	22.7	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	84	482364	22.7	23.4	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	179351	10.0	8.94	
10 Chloromethane	50	1.862	1.862	0.000	99	164637	10.0	8.84	
11 Vinyl chloride	62	1.957	1.945	0.012	97	174444	10.0	9.35	
119 Butadiene	54	1.992	1.980	0.012	90	172093	10.0	8.78	
12 Bromomethane	94	2.312	2.312	0.000	91	87363	10.0	9.26	
13 Chloroethane	64	2.419	2.407	0.012	99	109351	10.0	9.43	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	248412	10.0	9.71	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	99	254889	10.0	9.50	
16 Ethyl ether	59	2.953	2.953	0.000	91	131138	10.0	10.0	
18 Acrolein	56	3.095	3.095	0.000	99	57605	50.0	112.1	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	132438	10.0	9.89	
20 112TCTFE	151	3.178	3.178	0.000	73	109377	10.0	9.77	
21 Acetone	43	3.237	3.237	0.000	99	124920	20.0	18.9	
22 Iodomethane	142	3.332	3.332	0.000	99	140353	10.0	9.51	
23 Carbon disulfide	76	3.392	3.392	0.000	99	317474	10.0	9.60	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	80791	10.0	9.34	
26 Methyl acetate	43	3.534	3.534	0.000	97	271767	20.0	21.0	
27 Methylene Chloride	84	3.641	3.641	0.000	93	132219	10.0	9.50	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	97	183839	100.0	103.9	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	96	449737	10.0	9.77	
29 Acrylonitrile	53	3.866	3.866	0.000	98	720865	100.0	100.8	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	97	150688	10.0	9.91	
32 Hexane	86	4.103	4.103	0.000	92	48013	10.0	10.2	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	273385	10.0	9.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.293	4.293	0.000	97	179614	10.0	7.83	
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	84	163286	10.0	9.89	
38 2,2-Dichloropropane	97	4.755	4.755	0.000	73	44699	10.0	9.73	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	100	187750	20.0	21.3	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	71031	10.0	9.59	
45 Tetrahydrofuran	42	5.004	5.004	0.000	94	115997	20.0	20.8	
46 Chloroform	83	5.028	5.028	0.000	93	262190	10.0	9.73	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	240585	10.0	10.1	
48 Cyclohexane	56	5.230	5.230	0.000	90	289775	10.0	10.1	
49 1,1-Dichloropropene	75	5.325	5.324	0.000	94	217148	10.0	9.57	
50 Carbon tetrachloride	117	5.336	5.336	0.000	90	194311	10.0	10.1	
51 Isobutyl alcohol	41	5.408	5.396	0.012	93	156021	250.0	272.2	
52 Benzene	78	5.514	5.514	0.000	96	634756	10.0	9.63	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	228270	10.0	9.76	
55 n-Heptane	100	5.704	5.704	0.000	92	47501	10.0	10.3	
57 Trichloroethene	130	6.060	6.060	0.000	98	161900	10.0	9.97	
59 Methylcyclohexane	83	6.214	6.214	0.000	90	282555	10.0	9.92	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	153206	10.0	9.98	
62 Dibromomethane	93	6.368	6.368	0.000	96	86734	10.0	9.87	
63 1,4-Dioxane	88	6.368	6.368	0.000	50	41862	200.0	207.6	
64 Dichlorobromomethane	83	6.487	6.487	0.000	99	179790	10.0	10.2	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	93	108770	10.0	10.1	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	94	213663	10.0	9.94	
68 4-Methyl-2-pentanone (MIBK)	43	6.997	7.008	-0.011	96	357191	20.0	21.0	
69 Toluene	91	7.174	7.174	0.000	98	687276	10.0	9.69	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	94	190343	10.0	9.70	
71 Ethyl methacrylate	69	7.423	7.423	0.000	90	202215	10.0	10.6	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	92	133699	10.0	9.84	
73 Tetrachloroethene	164	7.672	7.672	0.000	95	132745	10.0	10.1	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	243831	10.0	9.56	
76 2-Hexanone	43	7.744	7.744	0.000	96	260840	20.0	21.7	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	123427	10.0	10.2	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	137138	10.0	9.95	
81 Chlorobenzene	112	8.467	8.467	0.000	92	421738	10.0	9.63	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	93	129464	10.0	9.92	
83 Ethylbenzene	106	8.550	8.550	0.000	99	244123	10.0	9.74	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	295879	10.0	9.62	
85 o-Xylene	106	9.048	9.048	0.000	97	280608	10.0	9.65	
86 Styrene	104	9.060	9.060	0.000	93	440514	10.0	10.8	
87 Bromoform	173	9.250	9.250	0.000	95	70257	10.0	9.17	
89 Isopropylbenzene	105	9.392	9.392	0.000	95	761836	10.0	9.92	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.688	0.000	95	171239	10.0	9.93	
92 Bromobenzene	156	9.712	9.712	0.000	95	154759	10.0	9.79	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	87	65658	10.0	10.3	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	77	57662	10.0	10.6	
95 N-Propylbenzene	120	9.783	9.795	-0.012	99	188880	10.0	9.95	
96 2-Chlorotoluene	126	9.890	9.890	0.000	95	156749	10.0	9.93	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	573764	10.0	10.1	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	159042	10.0	10.0	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	506736	10.0	9.98	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	563042	10.0	10.1	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	700615	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	273294	10.0	9.76	
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	557799	10.0	10.0	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	93	277735	10.0	9.60	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	454381	10.0	10.2	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	254023	10.0	9.61	
111 1,2-Dibromo-3-Chloropropane	157	11.859	11.859	0.001	78	26475	10.0	9.74	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	95	138498	10.0	10.0	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	54946	10.0	10.4	
115 Naphthalene	128	12.950	12.949	0.001	100	456698	10.0	10.6	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	96	129820	10.0	10.4	
S 130 Xylenes, Total	106				0		20.0	19.3	
S 158 Total BTEX	1				0		50.0	48.3	
S 131 Trihalomethanes, Total	1				0		40.0	39.3	

QC Flag Legend

Processing Flags

Reagents:

VMFASAW_00376	Amount Added:	8.00	Units: uL	
VMFASPW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00409	Amount Added:	8.00	Units: uL	
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.27	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00194	Amount Added:	0.00	Units:	Run Reagent

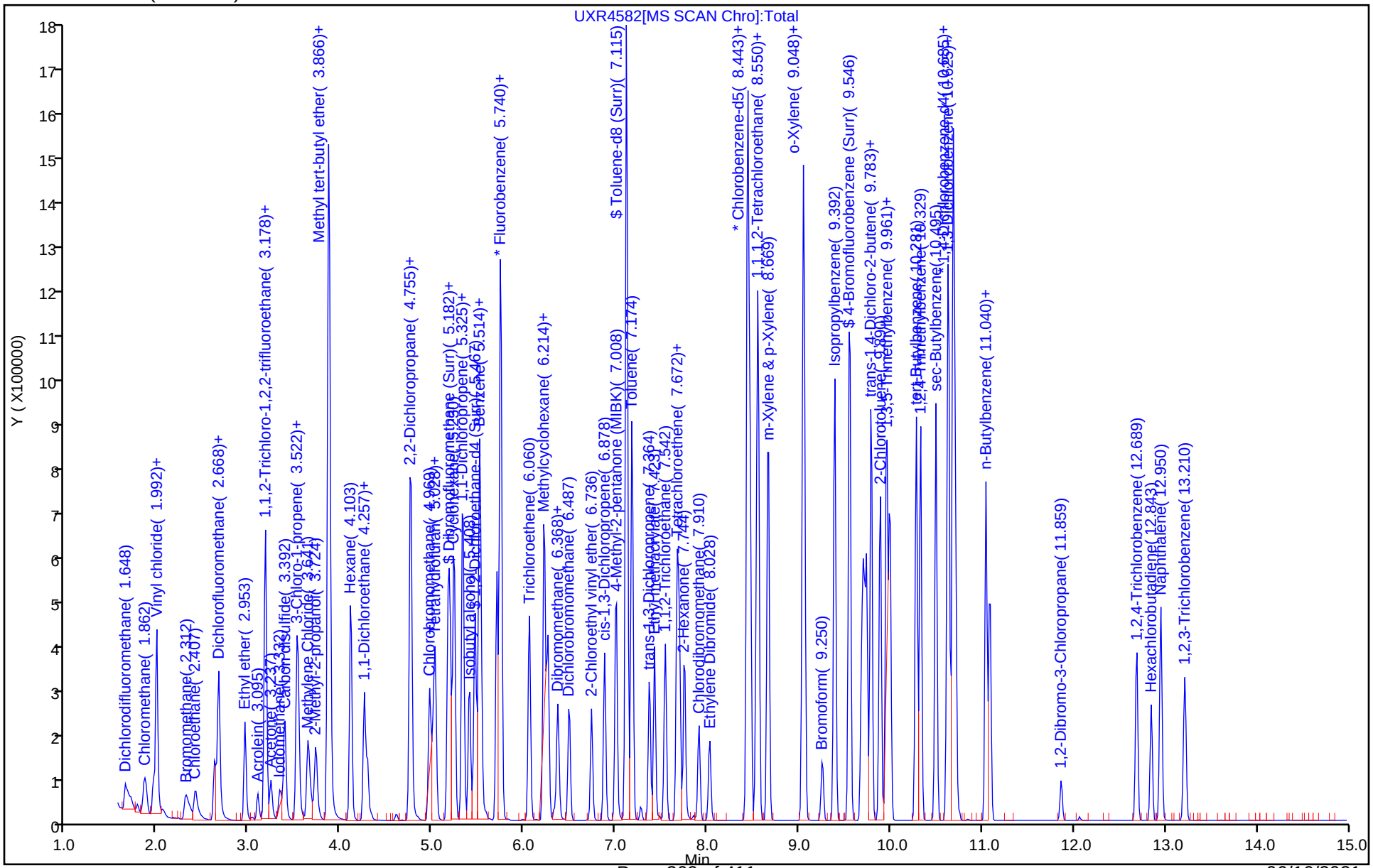
Report Date: 04-Jun-2021 17:19:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4582.D

Injection Date:	03-Jun-2021 21:14:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	ICV			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: CCVIS 240-490711/2 Calibration Date: 06/15/2021 12:32

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4792.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3458	0.2669		0.00772	0.0100	-22.8	50.0
Chloromethane	Ave	0.3213	0.2690	0.1000	0.00837	0.0100	-16.3	50.0
Vinyl chloride	Ave	0.3216	0.2822		0.00878	0.0100	-12.2	20.0
Butadiene	Ave	0.3380	0.3025		0.00895	0.0100	-10.5	50.0
Bromomethane	Ave	0.1626	0.1384		0.00851	0.0100	-14.9	50.0
Chloroethane	Ave	0.1999	0.1795		0.00898	0.0100	-10.2	50.0
Dichlorofluoromethane	Ave	0.4412	0.4076		0.00924	0.0100	-7.6	50.0
Trichlorofluoromethane	Ave	0.4624	0.4339		0.00938	0.0100	-6.2	50.0
Ethyl ether	Ave	0.2255	0.2035		0.00903	0.0100	-9.7	50.0
Acrolein	Ave	0.0089	0.0079		0.0446	0.0500	-10.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1931	0.1892		0.00980	0.0100	-2.0	50.0
1,1-Dichloroethene	Ave	0.2310	0.2153		0.00932	0.0100	-6.8	20.0
Acetone	Qua		0.0871		0.0149	0.0200	-25.7	50.0
Iodomethane	Ave	0.2545	0.1583		0.00622	0.0100	-37.8	50.0
Carbon disulfide	Ave	0.5704	0.5358		0.00939	0.0100	-6.1	50.0
3-Chloro-1-propene	Ave	0.1491	0.1327		0.00890	0.0100	-11.0	50.0
Methyl acetate	Ave	0.2234	0.2033		0.0182	0.0200	-9.0	50.0
Methylene Chloride	Ave	0.2399	0.2227		0.00929	0.0100	-7.1	50.0
2-Methyl-2-propanol	Ave	0.0305	0.0246		0.0805	0.100	-19.5	50.0
Acrylonitrile	Ave	0.1233	0.1083		0.0878	0.100	-12.2	50.0
Methyl tert-butyl ether	Ave	0.7937	0.7130		0.00898	0.0100	-10.2	50.0
trans-1,2-Dichloroethene	Ave	0.2622	0.2430		0.00927	0.0100	-7.3	50.0
Hexane	Ave	0.0810	0.0794		0.00980	0.0100	-2.0	20.0
1,1-Dichloroethane	Ave	0.4876	0.4425	0.1000	0.00907	0.0100	-9.3	50.0
Vinyl acetate	Lin1		0.4705		0.0115	0.0100	15.1	50.0
2,2-Dichloropropane	Ave	0.0792	0.0770		0.00972	0.0100	-2.8	50.0
cis-1,2-Dichloroethene	Ave	0.2848	0.2551		0.00896	0.0100	-10.4	50.0
2-Butanone (MEK)	Ave	0.1518	0.1264		0.0167	0.0200	-16.7	50.0
Chlorobromomethane	Ave	0.1277	0.1177		0.00921	0.0100	-7.9	50.0
Tetrahydrofuran	Ave	0.0962	0.0825		0.0171	0.0200	-14.3	50.0
Chloroform	Ave	0.4647	0.4272		0.00919	0.0100	-8.1	20.0
1,1,1-Trichloroethane	Ave	0.4124	0.3925		0.00952	0.0100	-4.8	50.0
Cyclohexane	Ave	0.4945	0.4831		0.00977	0.0100	-2.3	50.0
1,1-Dichloropropene	Ave	0.3913	0.3682		0.00941	0.0100	-5.9	50.0
Carbon tetrachloride	Ave	0.3334	0.3206		0.00962	0.0100	-3.8	50.0
Isobutyl alcohol	Ave	0.0122	0.0115		0.235	0.250	-6.1	50.0
Benzene	Ave	1.136	1.038		0.00914	0.0100	-8.6	50.0
1,2-Dichloroethane	Ave	0.4034	0.3610		0.00895	0.0100	-10.5	50.0
n-Heptane	Ave	0.0792	0.0805		0.0102	0.0100	1.7	50.0
Trichloroethene	Ave	0.2799	0.2601		0.00929	0.0100	-7.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: CCVIS 240-490711/2 Calibration Date: 06/15/2021 12:32

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4792.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4911	0.4810		0.00979	0.0100	-2.1	50.0
1,2-Dichloropropane	Ave	0.2646	0.2494		0.00943	0.0100	-5.7	20.0
1,4-Dioxane	Ave	0.0035	0.0030		0.175	0.200	-12.6	50.0
Dibromomethane	Ave	0.1516	0.1374		0.00906	0.0100	-9.4	50.0
Dichlorobromomethane	Ave	0.3035	0.2865		0.00944	0.0100	-5.6	50.0
2-Chloroethyl vinyl ether	Ave	0.1860	0.1650		0.0177	0.0200	-11.3	50.0
cis-1,3-Dichloropropene	Ave	0.3704	0.3622		0.00978	0.0100	-2.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2929	0.2493		0.0170	0.0200	-14.9	50.0
Toluene	Ave	1.511	1.508		0.00998	0.0100	-0.2	20.0
trans-1,3-Dichloropropene	Ave	0.4181	0.4388		0.0105	0.0100	5.0	50.0
Ethyl methacrylate	Ave	0.4068	0.4073		0.0100	0.0100	0.1	50.0
1,1,2-Trichloroethane	Ave	0.2895	0.2829		0.00977	0.0100	-2.3	50.0
Tetrachloroethene	Ave	0.2804	0.2849		0.0102	0.0100	1.6	50.0
1,3-Dichloropropane	Ave	0.5432	0.5239		0.00964	0.0100	-3.6	50.0
2-Hexanone	Ave	0.2561	0.2326		0.0182	0.0200	-9.1	50.0
Chlorodibromomethane	Ave	0.2576	0.2641		0.0103	0.0100	2.6	50.0
Ethylene Dibromide	Ave	0.2936	0.2870		0.00978	0.0100	-2.2	50.0
Chlorobenzene	Ave	0.9327	0.9188	0.3000	0.00985	0.0100	-1.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2779	0.2805		0.0101	0.0100	0.9	50.0
Ethylbenzene	Ave	0.5337	0.5343		0.0100	0.0100	0.1	20.0
m-Xylene & p-Xylene	Ave	0.6552	0.6495		0.00991	0.0100	-0.9	50.0
o-Xylene	Ave	0.6197	0.6133		0.00990	0.0100	-1.0	50.0
Styrene	Ave	0.8717	0.8870		0.0102	0.0100	1.8	50.0
Bromoform	Lin1		0.1539	0.1000	0.00942	0.0100	-5.8	50.0
Isopropylbenzene	Ave	1.636	1.649		0.0101	0.0100	0.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8132	0.7992	0.3000	0.00983	0.0100	-1.7	50.0
Bromobenzene	Ave	0.7451	0.7503		0.0101	0.0100	0.7	50.0
1,2,3-Trichloropropane	Ave	0.2999	0.2929		0.00977	0.0100	-2.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2570	0.2739		0.0107	0.0100	6.6	50.0
N-Propylbenzene	Ave	0.8949	0.9383		0.0105	0.0100	4.8	50.0
2-Chlorotoluene	Ave	0.7443	0.7584		0.0102	0.0100	1.9	50.0
1,3,5-Trimethylbenzene	Ave	2.684	2.830		0.0105	0.0100	5.4	50.0
4-Chlorotoluene	Ave	0.7501	0.7705		0.0103	0.0100	2.7	50.0
tert-Butylbenzene	Ave	2.394	2.486		0.0104	0.0100	3.8	50.0
1,2,4-Trimethylbenzene	Ave	2.635	2.736		0.0104	0.0100	3.8	50.0
sec-Butylbenzene	Ave	3.273	3.441		0.0105	0.0100	5.1	50.0
1,3-Dichlorobenzene	Ave	1.321	1.359		0.0103	0.0100	2.9	50.0
4-Isopropyltoluene	Ave	2.620	2.783		0.0106	0.0100	6.2	50.0
1,4-Dichlorobenzene	Ave	1.364	1.356		0.00994	0.0100	-0.6	50.0
n-Butylbenzene	Ave	2.107	2.274		0.0108	0.0100	7.9	50.0
1,2-Dichlorobenzene	Ave	1.247	1.250		0.0100	0.0100	0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: CCVIS 240-490711/2 Calibration Date: 06/15/2021 12:32

Instrument ID: A3UX17 Calib Start Date: 06/03/2021 18:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2021 20:50

Lab File ID: UXR4792.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1175		0.00920	0.0100	-8.0	50.0
1,2,4-Trichlorobenzene	Ave	0.6529	0.6808		0.0104	0.0100	4.3	50.0
Hexachlorobutadiene	Ave	0.2492	0.2797		0.0112	0.0100	12.2	50.0
Naphthalene	Ave	2.035	2.035		0.0100	0.0100	-0.0	50.0
1,2,3-Trichlorobenzene	Ave	0.5878	0.6305		0.0107	0.0100	7.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2067	0.1911		0.0185	0.0200	-7.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3087	0.2489		0.0161	0.0200	-19.4	50.0
Toluene-d8 (Surr)	Ave	1.231	1.279		0.0208	0.0200	3.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4390	0.5273		0.0240	0.0200	20.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4792.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 15-Jun-2021 12:32:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub45

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:33 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.740	5.740	0.000	99	1176655	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	886372	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	96	400044	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	224902	20.0	18.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	99	292861	20.0	16.1	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1133975	20.0	20.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	467356	20.0	24.0	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	157013	10.0	7.72	
10 Chloromethane	50	1.862	1.862	0.000	99	158249	10.0	8.37	
11 Vinyl chloride	62	1.957	1.957	0.000	98	166053	10.0	8.78	
119 Butadiene	54	1.980	1.980	0.000	89	177972	10.0	8.95	
12 Bromomethane	94	2.312	2.312	0.000	92	81453	10.0	8.51	
13 Chloroethane	64	2.407	2.407	0.000	100	105630	10.0	8.98	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	239788	10.0	9.24	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	255261	10.0	9.38	
16 Ethyl ether	59	2.953	2.953	0.000	90	119736	10.0	9.03	
18 Acrolein	56	3.095	3.095	0.000	98	23225	50.0	44.6	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	126692	10.0	9.32	
20 112TCTFE	151	3.178	3.178	0.000	76	111305	10.0	9.80	
21 Acetone	43	3.237	3.237	0.000	99	102463	20.0	14.9	
22 Iodomethane	142	3.332	3.332	0.000	99	93139	10.0	6.22	
23 Carbon disulfide	76	3.380	3.380	0.000	99	315200	10.0	9.39	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	90	78094	10.0	8.90	
26 Methyl acetate	43	3.534	3.534	0.000	98	239224	20.0	18.2	
27 Methylene Chloride	84	3.641	3.641	0.000	93	131044	10.0	9.29	
28 2-Methyl-2-propanol	59	3.724	3.724	0.000	99	144492	100.0	80.5	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	79	419456	10.0	8.98	
29 Acrylonitrile	53	3.866	3.866	0.000	98	636914	100.0	87.8	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	142959	10.0	9.27	
32 Hexane	86	4.103	4.103	0.000	91	46736	10.0	9.80	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	97	260327	10.0	9.07	
34 Vinyl acetate	43	4.293	4.293	0.000	97	276802	10.0	11.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.755	4.755	0.000	76	45309	10.0	9.72	
39 cis-1,2-Dichloroethene	96	4.755	4.755	0.000	84	150081	10.0	8.96	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	100	148765	20.0	16.7	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	69219	10.0	9.21	
45 Tetrahydrofuran	42	5.004	5.004	0.000	97	97064	20.0	17.1	
46 Chloroform	83	5.028	5.028	0.000	93	251307	10.0	9.19	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	230935	10.0	9.52	
48 Cyclohexane	56	5.230	5.230	0.000	90	284236	10.0	9.77	
49 1,1-Dichloropropene	75	5.325	5.325	0.000	95	216620	10.0	9.41	
50 Carbon tetrachloride	117	5.336	5.336	0.000	95	188634	10.0	9.62	
51 Isobutyl alcohol	41	5.396	5.396	0.000	95	127042	250.0	234.8	
52 Benzene	78	5.514	5.514	0.000	96	610851	10.0	9.14	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	212368	10.0	8.95	
55 n-Heptane	100	5.704	5.704	0.000	91	47379	10.0	10.2	
57 Trichloroethene	130	6.060	6.060	0.000	98	153028	10.0	9.29	
59 Methylcyclohexane	83	6.214	6.214	0.000	90	282958	10.0	9.79	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	146725	10.0	9.43	
62 Dibromomethane	93	6.368	6.368	0.000	96	80818	10.0	9.06	
63 1,4-Dioxane	88	6.368	6.368	0.000	48	35728	200.0	174.7	
64 Dichlorobromomethane	83	6.487	6.487	0.000	99	168540	10.0	9.44	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	92	194159	20.0	17.7	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	213067	10.0	9.78	
68 4-Methyl-2-pentanone (MIBK)	43	6.997	6.997	0.000	96	293336	20.0	17.0	
69 Toluene	91	7.174	7.174	0.000	98	668330	10.0	9.98	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	194474	10.0	10.5	
71 Ethyl methacrylate	69	7.423	7.423	0.000	90	180520	10.0	10.0	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	92	125381	10.0	9.77	
73 Tetrachloroethene	164	7.673	7.673	0.000	95	126266	10.0	10.2	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	232180	10.0	9.64	
76 2-Hexanone	43	7.744	7.744	0.000	95	206210	20.0	18.2	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	117066	10.0	10.3	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	127199	10.0	9.78	
81 Chlorobenzene	112	8.467	8.467	0.000	96	407191	10.0	9.85	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	93	124333	10.0	10.1	
83 Ethylbenzene	106	8.550	8.550	0.000	99	236789	10.0	10.0	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	99	287869	10.0	9.91	
85 o-Xylene	106	9.048	9.048	0.000	95	271794	10.0	9.90	
86 Styrene	104	9.060	9.060	0.000	94	393104	10.0	10.2	
87 Bromoform	173	9.250	9.250	0.000	95	68210	10.0	9.42	
89 Isopropylbenzene	105	9.392	9.392	0.000	95	730776	10.0	10.1	
91 1,1,2,2-Tetrachloroethane	83	9.677	9.677	0.000	94	159854	10.0	9.83	
92 Bromobenzene	156	9.712	9.712	0.000	95	150079	10.0	10.1	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	82	58586	10.0	9.77	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	68	54785	10.0	10.7	
95 N-Propylbenzene	120	9.783	9.783	0.000	99	187675	10.0	10.5	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	151702	10.0	10.2	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	565999	10.0	10.5	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	154125	10.0	10.3	
99 tert-Butylbenzene	119	10.281	10.281	0.000	92	497329	10.0	10.4	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	547176	10.0	10.4	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	688274	10.0	10.5	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	271778	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	556652	10.0	10.6	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	97	271147	10.0	9.94	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	454882	10.0	10.8	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	96	250018	10.0	10.0	
111 1,2-Dibromo-3-Chloropropane	157	11.870	11.870	0.000	76	23499	10.0	9.20	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	136172	10.0	10.4	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	96	55937	10.0	11.2	
115 Naphthalene	128	12.950	12.950	0.000	99	407045	10.0	10.0	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	96	126111	10.0	10.7	
S 130 Xylenes, Total	106				0		20.0	19.8	
S 158 Total BTEX	1				0		50.0	48.9	
S 131 Trihalomethanes, Total	1				0		40.0	38.3	

Reagents:

VMRPRIMW_00439	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00396	Amount Added:	8.00	Units: uL	
VMRGAS_00388	Amount Added:	8.00	Units: uL	
VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

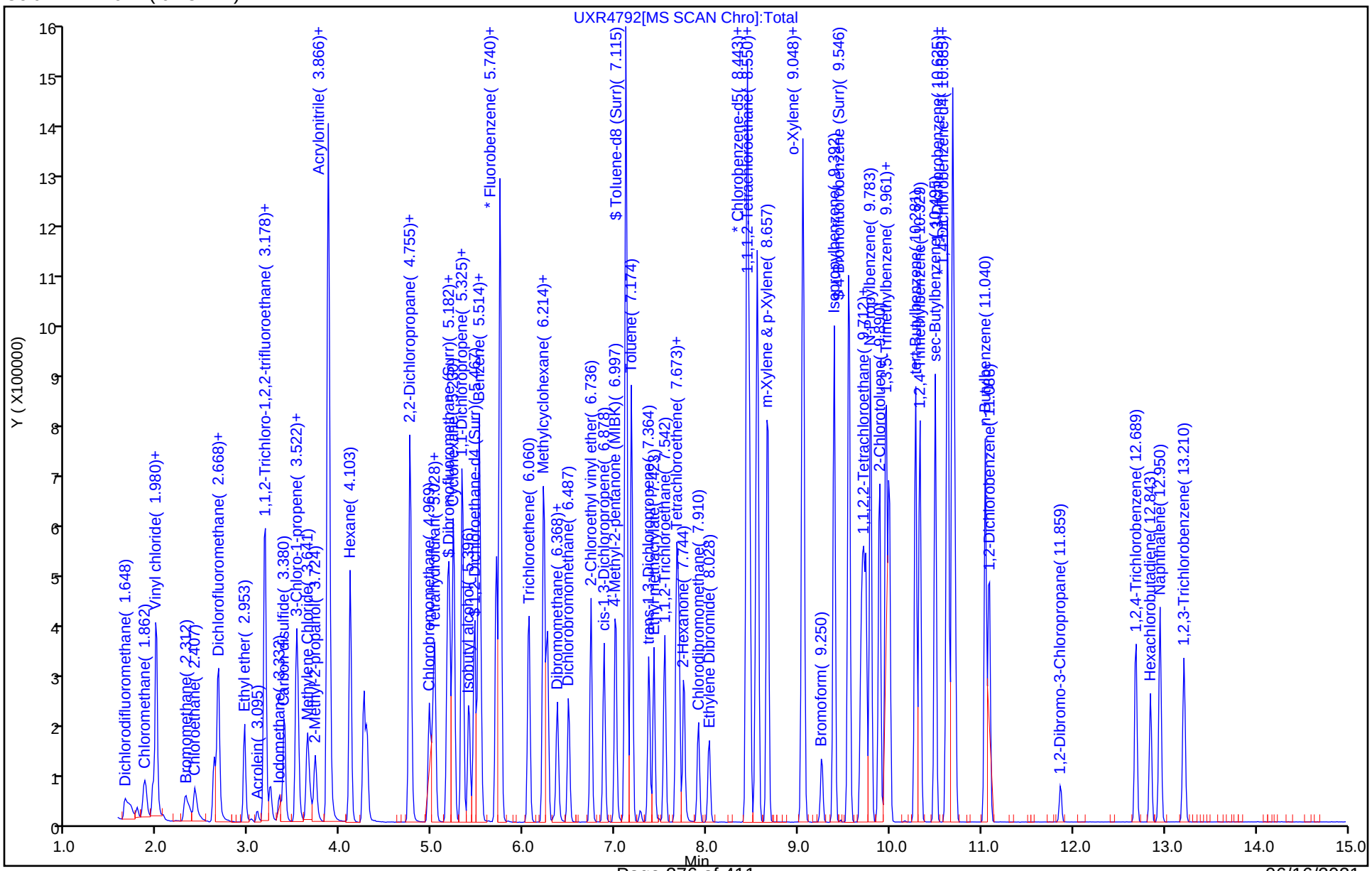
Report Date: 16-Jun-2021 10:43:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4792.D

Injection Date:	15-Jun-2021 12:32:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\BFB4002.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Jun-2021 17:50:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0109864-001				
Operator ID:	001644	Instrument ID:	A3UX17		
Method:	\\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\8260_17.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	04-Jun-2021 12:22:42	Calib Date:	04-Jun-2021 00:00:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1669				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.869	3.869	0.000	0	205885	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

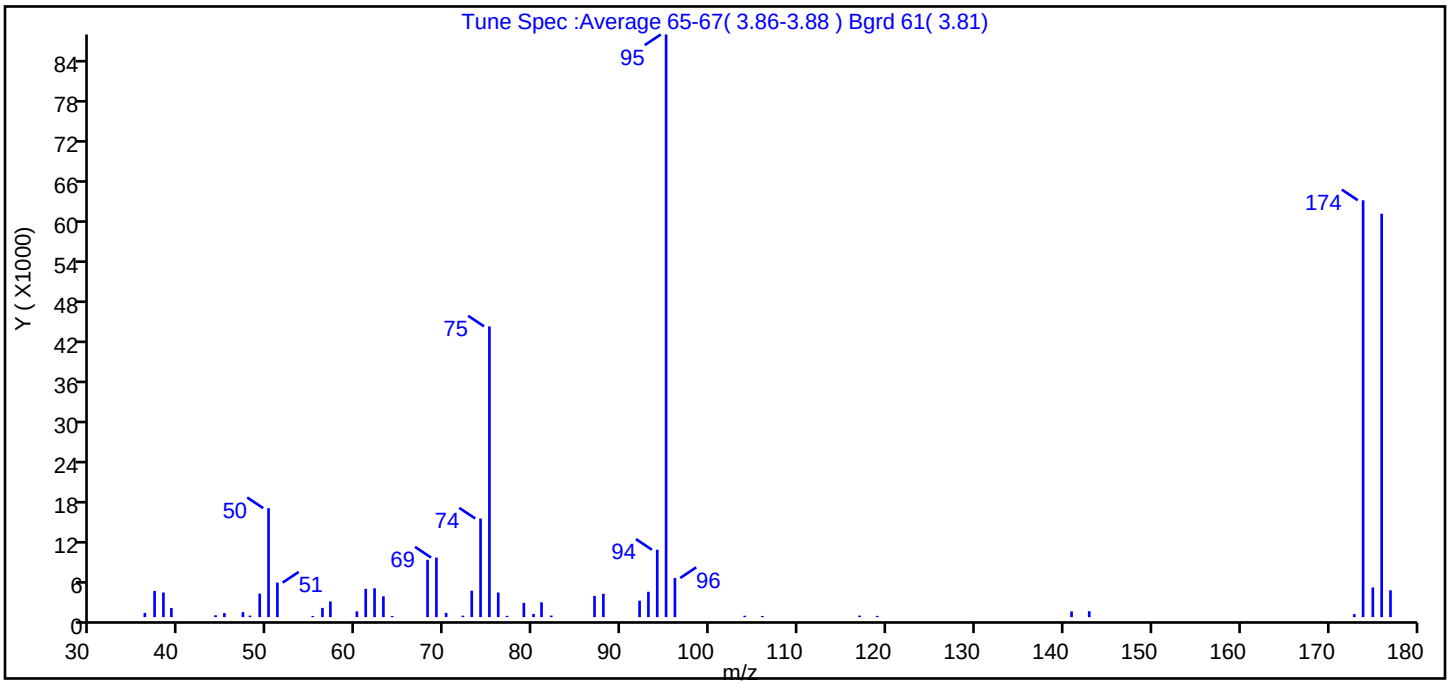
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\BFB4002.D
Injection Date: 03-Jun-2021 17:50:30 Instrument ID: A3UX17
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.7
75	30 to 60% of m/z 95	49.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	71.6
175	5 to 9% of m/z 174	5.1 (7.1)
176	Greater than 95% but less than 101% of m/z 174	69.2 (96.8)
177	5 to 9% of m/z 176	4.6 (6.7)

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\BFB4002.D\8260_17.rslt\spectra.d
Injection Date: 03-Jun-2021 17:50:30
Spectrum: Tune Spec :Average 65-67(3.86-3.88) Bgrd 61(3.81)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	635	57.00	2357	76.00	3692	104.00	207
37.00	3933	60.00	860	77.00	199	106.00	175
38.00	3694	61.00	4244	79.00	2143	117.00	231
39.00	1362	62.00	4327	80.00	477	119.00	192
44.00	281	63.00	3121	81.00	2227	141.00	861
45.00	603	64.00	183	82.00	235	143.00	885
47.00	752	68.00	8589	87.00	3189	173.00	451
48.00	228	69.00	8926	88.00	3497	174.00	62472
49.00	3520	70.00	633	92.00	2468	175.00	4451
50.00	16331	72.00	224	93.00	3800	176.00	60448
51.00	5179	73.00	3966	94.00	10101	177.00	4027
55.00	179	74.00	14778	95.00	87312		
56.00	1384	75.00	43568	96.00	5868		

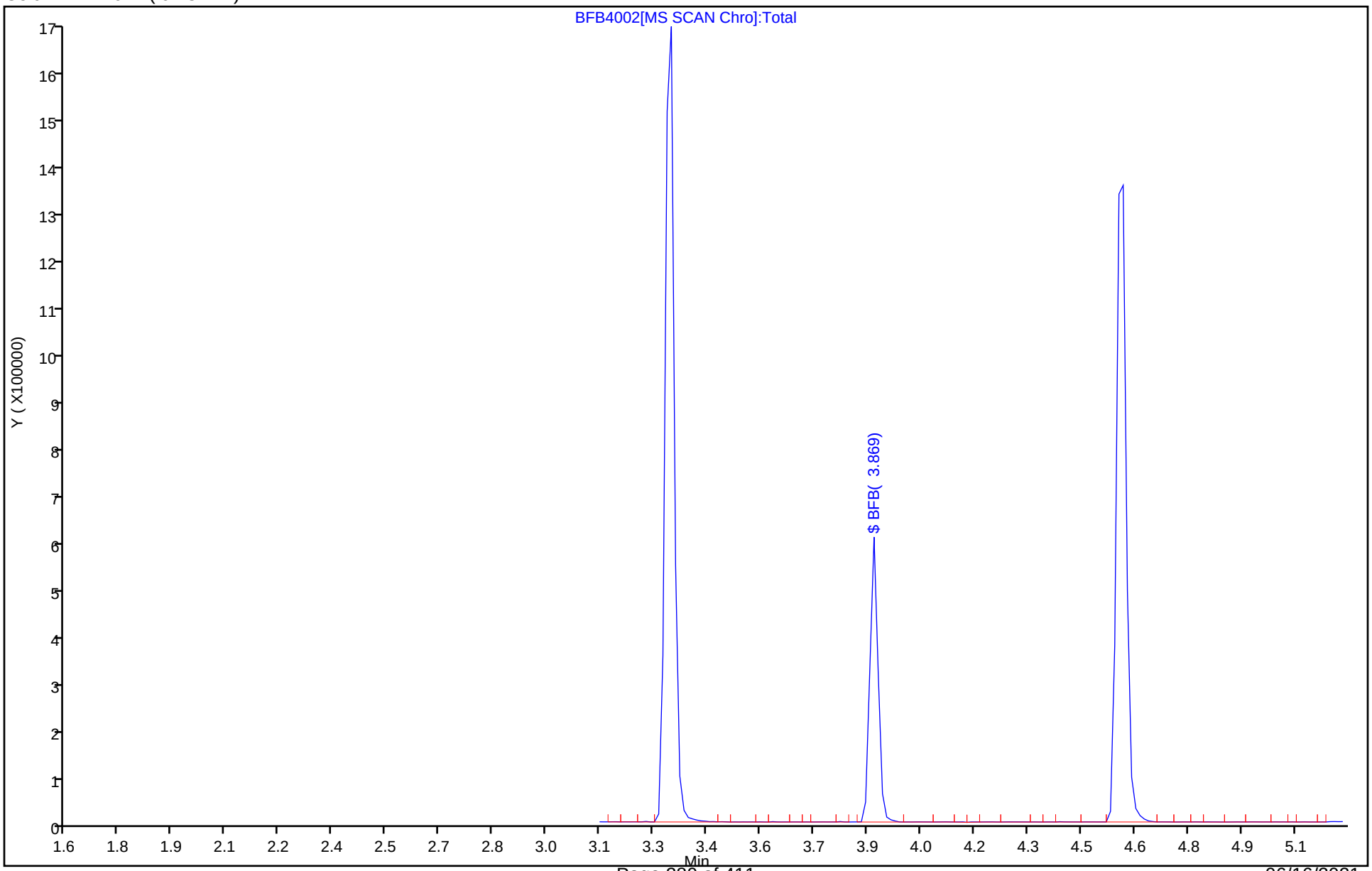
Report Date: 04-Jun-2021 12:22:42 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\BFB4002.D

Injection Date:	03-Jun-2021 17:50:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\BFB4011.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jun-2021 12:03:30	ALS Bottle#:	30	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110279-001				
Operator ID:	001644	Instrument ID:	A3UX17		
Method:	\\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	16-Jun-2021 10:43:32	Calib Date:	04-Jun-2021 00:00:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1621				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.869	3.869	0.000	0	198903	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

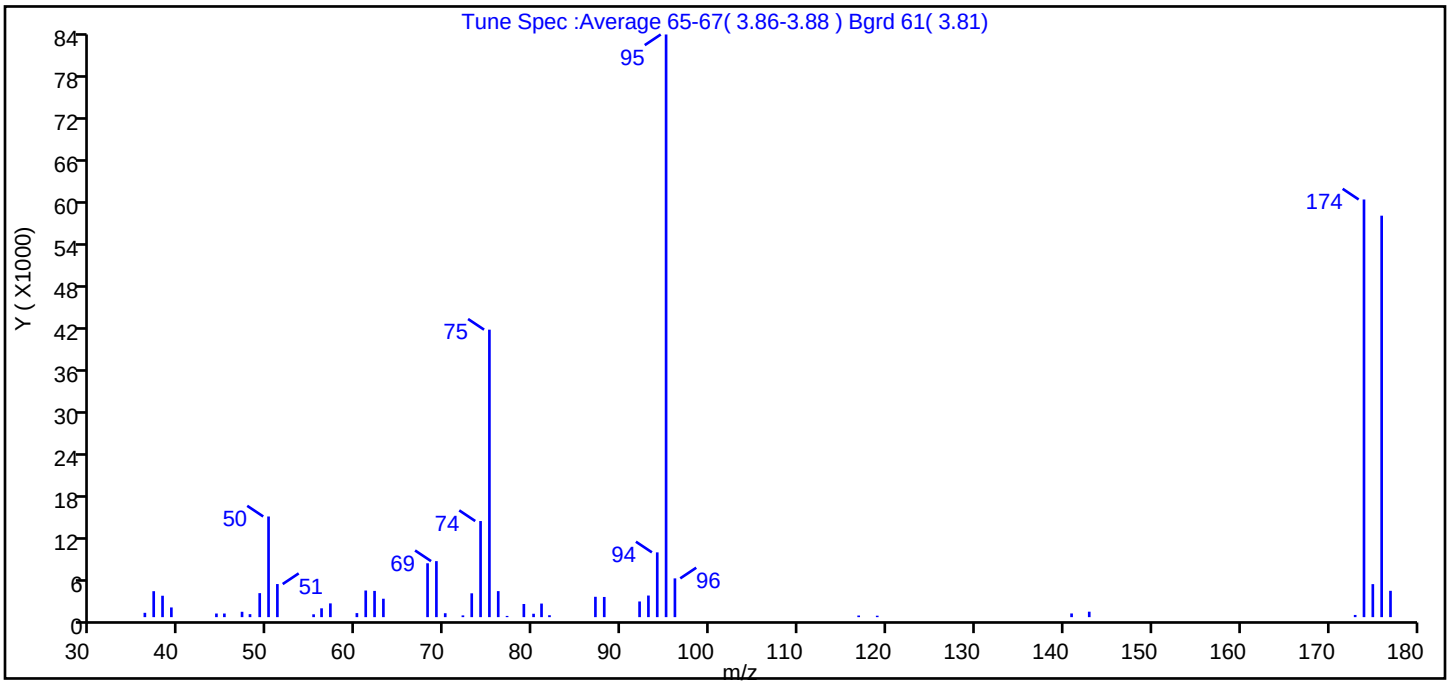
vmbfb_00027 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\BFB4011.D
Injection Date: 15-Jun-2021 12:03:30 Instrument ID: A3UX17
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.3
75	30 to 60% of m/z 95	49.3
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	71.7
175	5 to 9% of m/z 174	5.7 (7.9)
176	Greater than 95% but less than 101% of m/z 174	68.9 (96.1)
177	5 to 9% of m/z 176	4.5 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\BFB4011.D\8260_17.rslt\spectra.d
Injection Date: 15-Jun-2021 12:03:30
Spectrum: Tune Spec :Average 65-67(3.86-3.88) Bgrd 61(3.81)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 47

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	620	56.00	1264	75.00	41160	95.00	83424
37.00	3717	57.00	1970	76.00	3725	96.00	5550
38.00	3065	60.00	579	77.00	176	117.00	230
39.00	1389	61.00	3813	79.00	1883	119.00	206
44.00	520	62.00	3757	80.00	486	141.00	529
45.00	519	63.00	2637	81.00	1945	143.00	781
47.00	770	68.00	7714	82.00	275	173.00	314
48.00	428	69.00	8019	87.00	2914	174.00	59800
49.00	3436	70.00	560	88.00	2890	175.00	4727
50.00	14412	72.00	250	92.00	2244	176.00	57480
51.00	4738	73.00	3412	93.00	3094	177.00	3770
55.00	406	74.00	13759	94.00	9275		

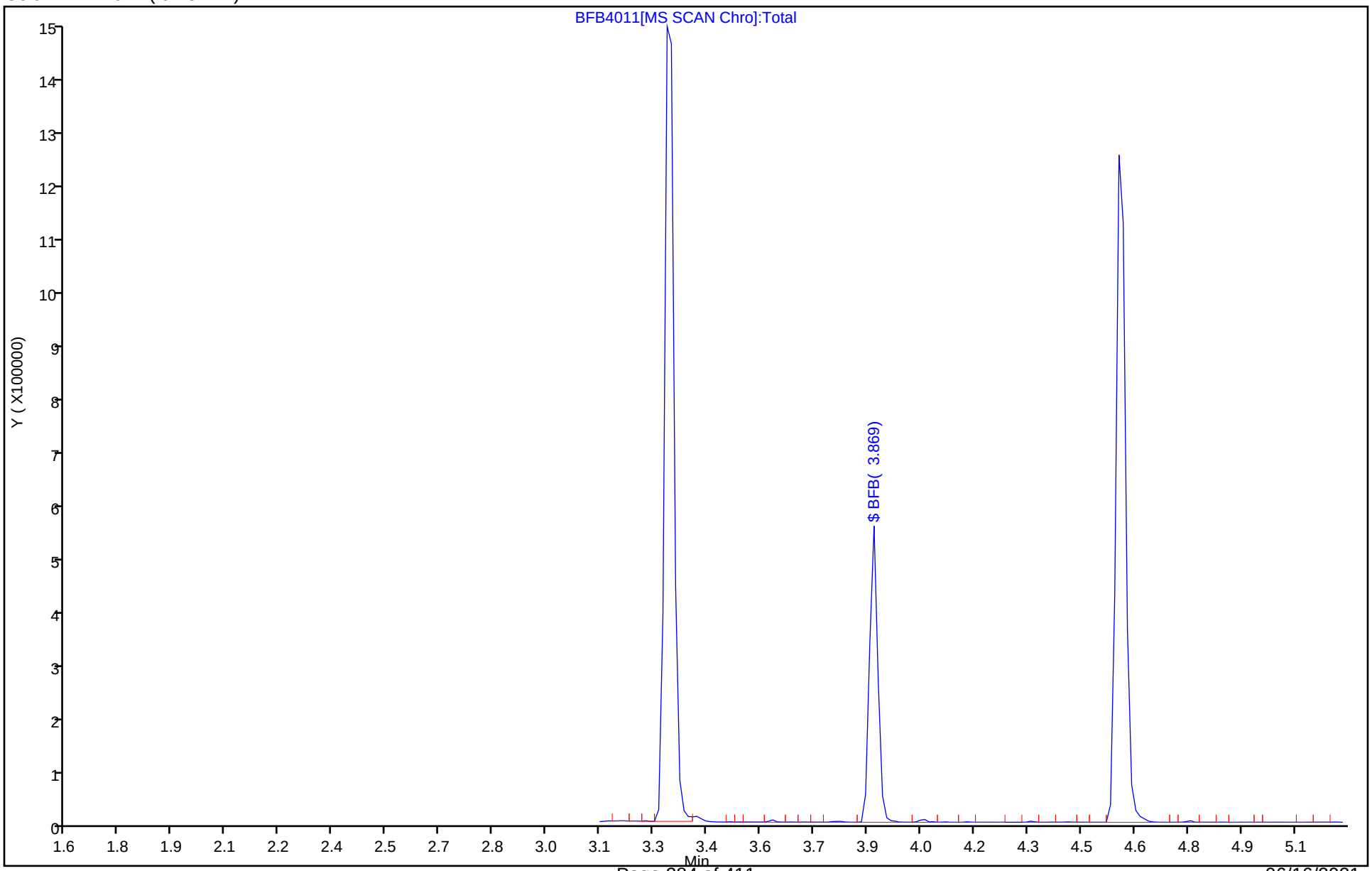
Report Date: 16-Jun-2021 10:43:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\BFB4011.D

Injection Date:	15-Jun-2021 12:03:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-490711/7

Matrix: Water Lab File ID: UXR4797.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 14:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		75-130
460-00-4	4-Bromofluorobenzene (Surr)	121		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	88		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4797.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2021 14:30:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-007
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.751	5.740	0.011	99	1155946	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	836843	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	368958	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	209222	20.0	17.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	96	285682	20.0	16.0	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1089628	20.0	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	85	442960	20.0	24.1	
9 Dichlorodifluoromethane	85		1.648					ND	
10 Chloromethane	50		1.862					ND	
11 Vinyl chloride	62		1.957					ND	
119 Butadiene	54		1.980					ND	
12 Bromomethane	94		2.312					ND	
13 Chloroethane	64		2.407					ND	
14 Dichlorofluoromethane	67		2.621					ND	
15 Trichlorofluoromethane	101		2.668					ND	
16 Ethyl ether	59		2.953					ND	
18 Acrolein	56		3.095					ND	
19 1,1-Dichloroethene	96		3.178					ND	
20 112TCTFE	151		3.178					ND	
17 Methylal	45		3.226					ND	
21 Acetone	43		3.237					ND	7
22 Iodomethane	142		3.332					ND	
23 Carbon disulfide	76		3.380					ND	
25 3-Chloro-1-propene	76		3.522					ND	
24 Acetonitrile	41		3.522					ND	
26 Methyl acetate	43		3.534					ND	
27 Methylene Chloride	84		3.641					ND	
28 2-Methyl-2-propanol	59		3.724					ND	
30 Methyl tert-butyl ether	73		3.866					ND	
29 Acrylonitrile	53		3.866					ND	
31 trans-1,2-Dichloroethene	96		3.878					ND	
32 Hexane	86		4.103					ND	
33 1,1-Dichloroethane	63		4.257					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43		4.293					ND	
35 Isopropyl ether	87		4.293					ND	
36 2-Chloro-1,3-butadiene	53		4.328					ND	
37 Tert-butyl ethyl ether	59		4.601					ND	
38 2,2-Dichloropropane	97		4.755					ND	
39 cis-1,2-Dichloroethene	96		4.755					ND	
40 2-Butanone (MEK)	43		4.767					ND	
41 Ethyl acetate	43		4.803					ND	
42 Propionitrile	54		4.838					ND	
43 Methacrylonitrile	41		4.957					ND	
44 Chlorobromomethane	128		4.969					ND	
45 Tetrahydrofuran	42		5.004					ND	
46 Chloroform	83		5.028					ND	
47 1,1,1-Trichloroethane	97		5.194					ND	
48 Cyclohexane	56		5.230					ND	
49 1,1-Dichloropropene	75		5.325					ND	
50 Carbon tetrachloride	117		5.336					ND	
51 Isobutyl alcohol	41		5.396					ND	
52 Benzene	78		5.514					ND	
53 1,2-Dichloroethane	62		5.526					ND	
160 Isooctane	57		5.550					ND	
54 Tert-amyl methyl ether	73		5.585					ND	
55 n-Heptane	100		5.704					ND	
56 n-Butanol	56		5.965					ND	
57 Trichloroethene	130		6.060					ND	
58 Ethyl acrylate	55		6.131					ND	
59 Methylcyclohexane	83		6.214					ND	
60 1,2-Dichloropropane	63		6.261					ND	
61 Methyl methacrylate	41		6.321					ND	
62 Dibromomethane	93		6.368					ND	
63 1,4-Dioxane	88		6.368					ND	
64 Dichlorobromomethane	83		6.487					ND	
65 2-Nitropropane	41		6.700					ND	
66 2-Chloroethyl vinyl ether	63		6.736					ND	
67 cis-1,3-Dichloropropene	75		6.878					ND	
68 4-Methyl-2-pentanone (MIBK)	43		6.997					ND	
69 Toluene	91		7.174					ND	
70 trans-1,3-Dichloropropene	75		7.364					ND	
71 Ethyl methacrylate	69		7.423					ND	
72 1,1,2-Trichloroethane	97		7.542					ND	
73 Tetrachloroethene	164		7.673					ND	
75 1,3-Dichloropropane	76		7.696					ND	
76 2-Hexanone	43		7.744					ND	
77 n-Butyl acetate	56		7.850					ND	
78 Chlorodibromomethane	129		7.910					ND	
74 Tetrahydrothiophene	60		7.933					ND	
79 Ethylene Dibromide	107		8.028					ND	
80 1-Chlorohexane	91		8.420					ND	
81 Chlorobenzene	112		8.467					ND	
82 1,1,1,2-Tetrachloroethane	131		8.538					ND	
83 Ethylbenzene	106		8.550					ND	
84 m-Xylene & p-Xylene	106		8.669					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 o-Xylene	106		9.048					ND	
86 Styrene	104		9.060					ND	
87 Bromoform	173		9.250					ND	
89 Isopropylbenzene	105		9.392					ND	
90 Cyclohexanone	55		9.511					ND	
88 1,4-Dichlorobutane	55		9.534					ND	
91 1,1,2,2-Tetrachloroethane	83		9.677					ND	
92 Bromobenzene	156		9.712					ND	
94 1,2,3-Trichloropropane	110		9.736					ND	
93 trans-1,4-Dichloro-2-butene	53		9.736					ND	
95 N-Propylbenzene	120		9.783					ND	
126 3-Ethyltoluene	105		9.850					ND	
96 2-Chlorotoluene	126		9.890					ND	
97 1,3,5-Trimethylbenzene	105		9.961					ND	
98 4-Chlorotoluene	126		9.997					ND	
120 2-Ethyltoluene	105		10.140					ND	
99 tert-Butylbenzene	119		10.281					ND	
100 Pentachloroethane	167		10.317					ND	
101 1,2,4-Trimethylbenzene	105		10.329					ND	
102 sec-Butylbenzene	105		10.495					ND	
103 1,3-Dichlorobenzene	146		10.625					ND	
104 4-Isopropyltoluene	119		10.637					ND	
105 1,4-Dichlorobenzene	146		10.708					ND	
106 1,2,3-Trimethylbenzene	105		10.756					ND	
107 Benzyl chloride	126		10.851					ND	
108 n-Butylbenzene	91		11.040					ND	
109 1,2-Dichlorobenzene	146		11.088					ND	
110 1,3-Diethylbenzene TIC	1		11.200					ND	
111 1,2-Dibromo-3-Chloropropane	157		11.870					ND	
112 1,3,5-Trichlorobenzene	180		12.060					ND	
113 1,2,4-Trichlorobenzene	180		12.689					ND	
114 Hexachlorobutadiene	225		12.843					ND	
115 Naphthalene	128		12.950					ND	
116 1,2,3-Trichlorobenzene	180		13.210					ND	
117 2-Methylnaphthalene	142		14.337					ND	
159 1-Methylnaphthalene	142		14.610					ND	
125 Ethylene oxide	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
122 Epichlorohydrin	1		0.000					ND	
S 128 1,2-Dichloroethene, Total	96		1.140					ND	7
S 129 1,3-Dichloropropene, Total	75		6.760					ND	7
S 130 Xylenes, Total	106		16.530					ND	7
S 158 Total BTEX	1		0.000					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

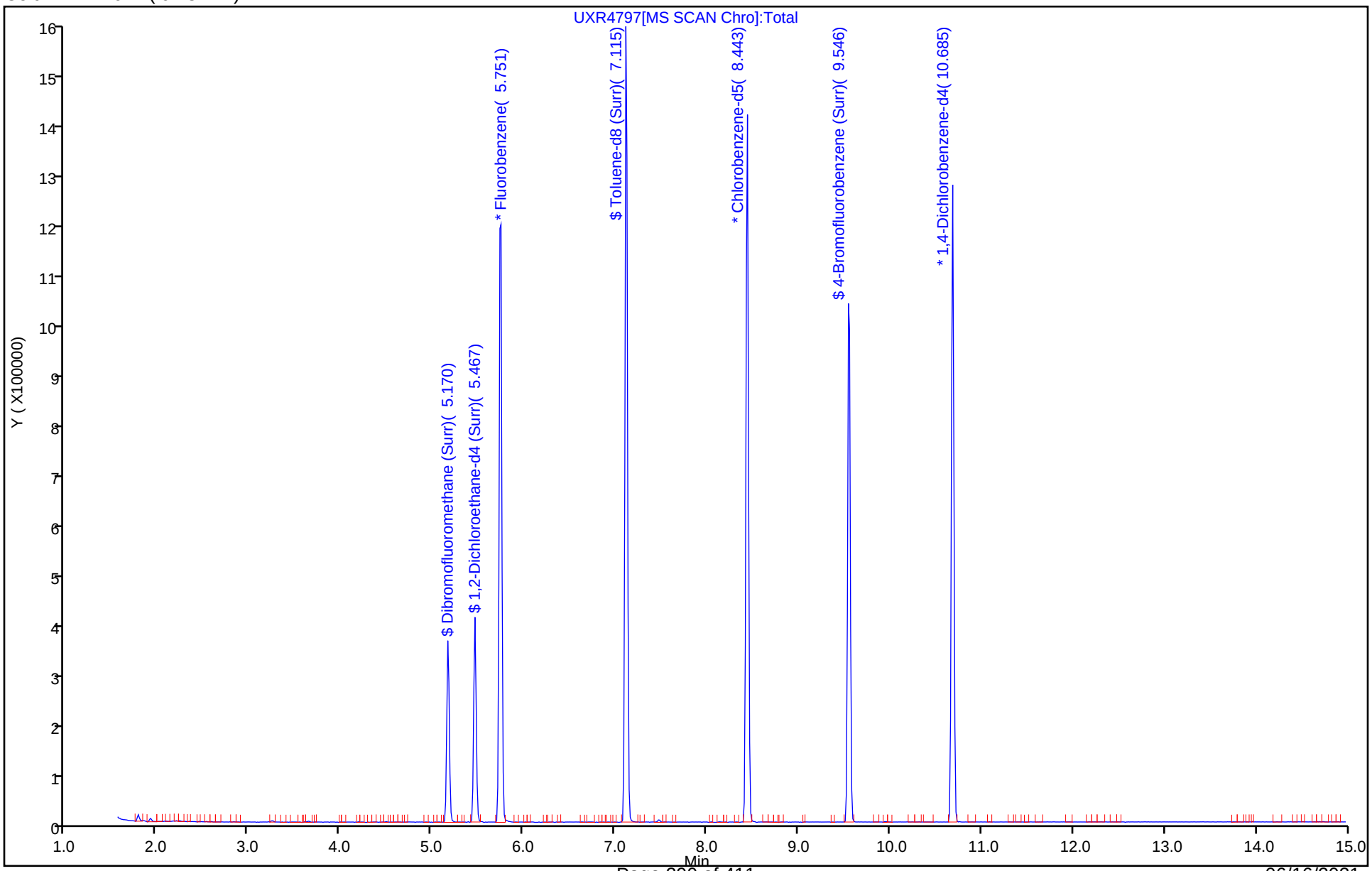
Report Date: 16-Jun-2021 10:43:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4797.D

Injection Date:	15-Jun-2021 14:30:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4797.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2021 14:30:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-007
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.5	87.57
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.0	80.05
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.79
$ 7 4-Bromofluorobenzene (Surr)	20.0	24.1	120.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-490711/4

Matrix: Water Lab File ID: UXR4794.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 13:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.2		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.94		1.0	0.46
127-18-4	Tetrachloroethene	10.8		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.1		1.0	0.51
79-01-6	Trichloroethene	9.77		1.0	0.44
75-01-4	Vinyl chloride	9.40		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		75-130
460-00-4	4-Bromofluorobenzene (Surr)	117		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	90		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4794.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2021 13:19:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-004
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.739	5.740	-0.001	99	1162978	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.443	8.443	0.000	87	859062	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.684	10.685	-0.001	96	379297	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	216411	20.0	18.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	280793	20.0	15.6	
$ 6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1111126	20.0	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	440398	20.0	23.4	
9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	181682	10.0	9.04	
10 Chloromethane	50	1.862	1.862	0.000	99	169604	10.0	9.08	
11 Vinyl chloride	62	1.957	1.957	0.000	98	175808	10.0	9.40	
119 Butadiene	54	1.992	1.980	0.012	90	178706	10.0	9.09	
12 Bromomethane	94	2.312	2.312	0.000	91	88095	10.0	9.32	
13 Chloroethane	64	2.419	2.407	0.012	100	109014	10.0	9.38	
14 Dichlorofluoromethane	67	2.621	2.621	0.000	97	237443	10.0	9.25	
15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	258019	10.0	9.60	
16 Ethyl ether	59	2.953	2.953	0.000	90	133452	10.0	10.2	
18 Acrolein	56	3.095	3.095	0.000	98	49141	50.0	95.4	
19 1,1-Dichloroethene	96	3.178	3.178	0.000	94	137019	10.0	10.2	
20 112TCTFE	151	3.178	3.178	0.000	75	120372	10.0	10.7	
21 Acetone	43	3.237	3.237	0.000	100	115245	20.0	17.2	
22 Iodomethane	142	3.332	3.332	0.000	99	101351	10.0	6.85	
23 Carbon disulfide	76	3.391	3.380	0.011	99	322836	10.0	9.73	
25 3-Chloro-1-propene	76	3.522	3.522	0.000	91	82374	10.0	9.50	
26 Methyl acetate	43	3.534	3.534	0.000	97	274250	20.0	21.1	
27 Methylene Chloride	84	3.640	3.641	-0.001	94	134714	10.0	9.66	
28 2-Methyl-2-propanol	59	3.723	3.724	-0.001	93	174513	100.0	98.4	
30 Methyl tert-butyl ether	73	3.866	3.866	0.000	95	451470	10.0	9.78	
29 Acrylonitrile	53	3.866	3.866	0.000	98	720722	100.0	100.5	
31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	153257	10.0	10.1	
32 Hexane	86	4.115	4.103	0.012	91	51932	10.0	11.0	
33 1,1-Dichloroethane	63	4.257	4.257	0.000	96	273068	10.0	9.63	
34 Vinyl acetate	43	4.293	4.293	0.000	97	284780	10.0	12.0	
38 2,2-Dichloropropane	97	4.755	4.755	0.000	77	47172	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	86	164618	10.0	9.94	
40 2-Butanone (MEK)	43	4.767	4.767	0.000	99	178835	20.0	20.3	
44 Chlorobromomethane	128	4.969	4.969	0.000	97	69394	10.0	9.34	
45 Tetrahydrofuran	42	5.004	5.004	0.000	95	110246	20.0	19.7	
46 Chloroform	83	5.028	5.028	0.000	93	263586	10.0	9.76	
47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	244173	10.0	10.2	
48 Cyclohexane	56	5.229	5.230	-0.001	90	306095	10.0	10.6	
49 1,1-Dichloropropene	75	5.324	5.325	-0.001	95	225789	10.0	9.92	
50 Carbon tetrachloride	117	5.336	5.336	0.000	97	199095	10.0	10.3	
51 Isobutyl alcohol	41	5.407	5.396	0.011	93	147173	250.0	280.6	
52 Benzene	78	5.514	5.514	0.000	96	645666	10.0	9.77	
53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	220539	10.0	9.40	
55 n-Heptane	100	5.704	5.704	0.000	92	51050	10.0	11.1	
57 Trichloroethene	130	6.060	6.060	0.000	98	159067	10.0	9.77	
59 Methylcyclohexane	83	6.226	6.214	0.012	87	300870	10.0	10.5	
60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	153751	10.0	10.0	
62 Dibromomethane	93	6.368	6.368	0.000	95	83867	10.0	9.51	
63 1,4-Dioxane	88	6.368	6.368	0.000	50	41601	200.0	205.8	
64 Dichlorobromomethane	83	6.487	6.487	-0.001	99	177297	10.0	10.0	
66 2-Chloroethyl vinyl ether	63	6.736	6.736	0.000	92	104542	10.0	9.66	
67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	96	214160	10.0	9.94	
68 4-Methyl-2-pentanone (MIBK)	43	7.008	6.997	0.011	96	337134	20.0	19.8	
69 Toluene	91	7.174	7.174	0.000	98	695730	10.0	10.7	
70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	184509	10.0	10.3	
71 Ethyl methacrylate	69	7.423	7.423	0.000	89	187240	10.0	10.7	
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	129234	10.0	10.4	
73 Tetrachloroethene	164	7.672	7.673	0.000	96	130446	10.0	10.8	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	91	243889	10.0	10.5	
76 2-Hexanone	43	7.744	7.744	0.000	95	244939	20.0	22.3	
78 Chlorodibromomethane	129	7.910	7.910	0.000	91	118766	10.0	10.7	
79 Ethylene Dibromide	107	8.028	8.028	0.000	99	134257	10.0	10.6	
81 Chlorobenzene	112	8.467	8.467	0.000	93	415060	10.0	10.4	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	92	125309	10.0	10.5	
83 Ethylbenzene	106	8.562	8.550	0.012	99	240784	10.0	10.5	
84 m-Xylene & p-Xylene	106	8.668	8.669	-0.001	99	298515	10.0	10.6	
85 o-Xylene	106	9.048	9.048	0.000	97	282356	10.0	10.6	
86 Styrene	104	9.060	9.060	0.000	94	413504	10.0	11.0	
87 Bromoform	173	9.250	9.250	0.000	95	67328	10.0	9.58	
89 Isopropylbenzene	105	9.392	9.392	0.000	95	753188	10.0	10.7	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.677	0.011	95	171332	10.0	11.1	
92 Bromobenzene	156	9.712	9.712	0.000	96	153732	10.0	10.9	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	83	63647	10.0	11.2	
93 trans-1,4-Dichloro-2-butene	53	9.736	9.736	0.000	68	55429	10.0	11.4	
95 N-Propylbenzene	120	9.783	9.783	0.000	99	190607	10.0	11.2	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	152331	10.0	10.8	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	572540	10.0	11.2	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	156268	10.0	11.0	
99 tert-Butylbenzene	119	10.281	10.281	0.000	92	499710	10.0	11.0	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	563358	10.0	11.3	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	710594	10.0	11.4	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	272210	10.0	10.9	
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	569082	10.0	11.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	94	281225	10.0	10.9	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	469971	10.0	11.8	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	251113	10.0	10.6	
111 1,2-Dibromo-3-Chloropropane	157	11.870	11.870	0.000	85	25444	10.0	10.4	
113 1,2,4-Trichlorobenzene	180	12.688	12.689	-0.001	94	143682	10.0	11.6	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	60612	10.0	12.8	
115 Naphthalene	128	12.949	12.950	-0.001	100	448593	10.0	11.6	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	95	130599	10.0	11.7	
S 130 Xylenes, Total	106				0		20.0	21.2	
S 158 Total BTEX	1				0		50.0	52.2	
S 131 Trihalomethanes, Total	1				0		40.0	40.1	

Reagents:

VMFASPW_00402	Amount Added:	8.00	Units: uL	
VMFASAW_00377	Amount Added:	8.00	Units: uL	
VMFASGW_00412	Amount Added:	8.00	Units: uL	
VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

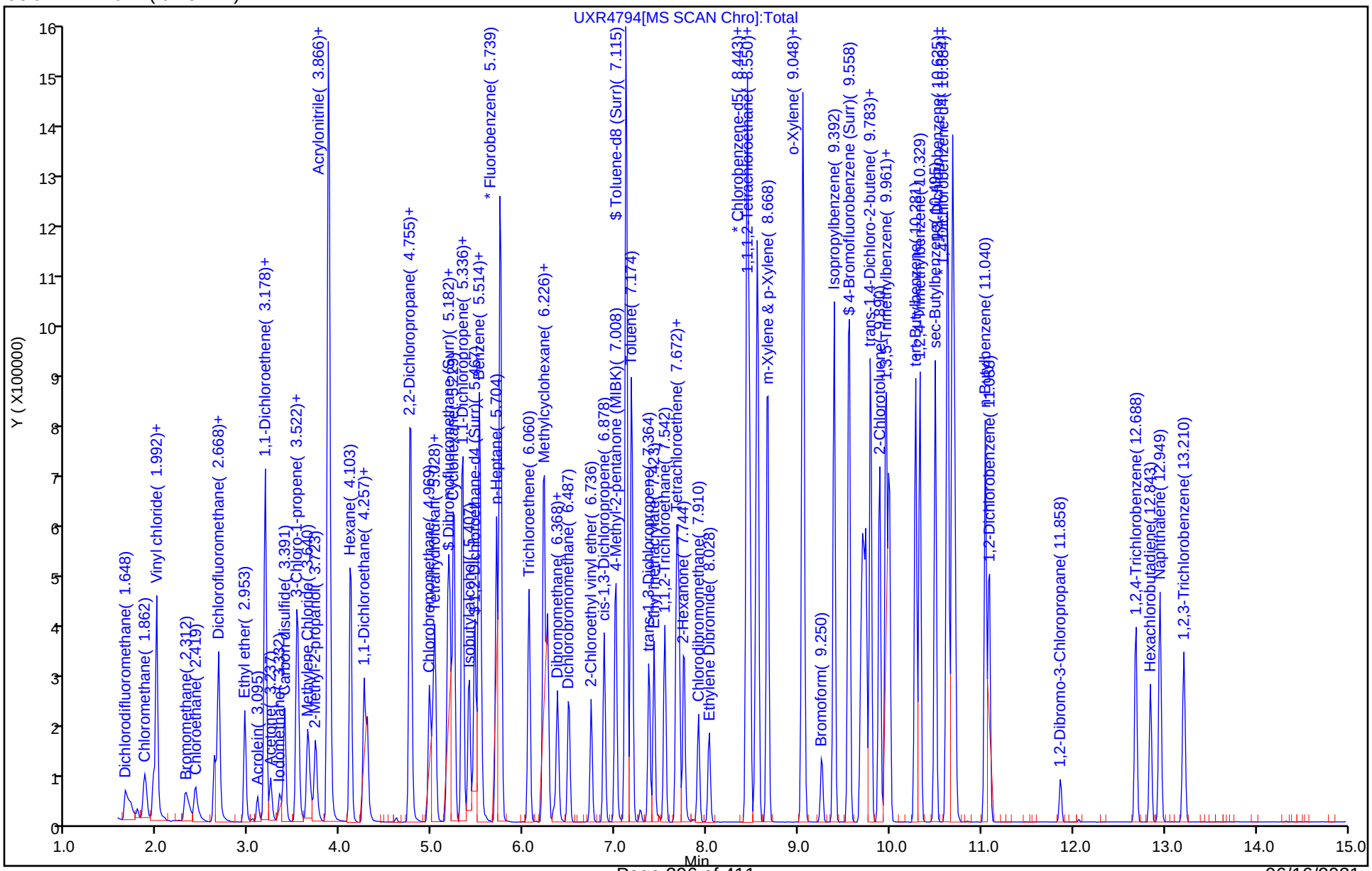
Report Date: 16-Jun-2021 10:43:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4794.D

Injection Date:	15-Jun-2021 13:19:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4794.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2021 13:19:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-004
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	90.03
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	15.6	78.21
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.09
$ 7 4-Bromofluorobenzene (Surr)	20.0	23.4	116.77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-151103-E-4 MS

Matrix: Water Lab File ID: UXR4802.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 16:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.76		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.3		1.0	0.46
127-18-4	Tetrachloroethene	10.1		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.38		1.0	0.51
79-01-6	Trichloroethene	41.6		1.0	0.44
75-01-4	Vinyl chloride	9.17		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		75-130
460-00-4	4-Bromofluorobenzene (Surr)	123		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	93		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4802.D
Lims ID: 240-151103-E-4 MS
Client ID: COS-2 (060821)
Sample Type: MS
Inject. Date: 15-Jun-2021 16:28:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-012
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.740	5.740	0.000	99	1179852	20.0	20.0	
*	2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	866469	20.0	20.0	
*	3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	383205	20.0	20.0	
$	4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	226708	20.0	18.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	98	297319	20.0	16.3	
$	6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1137519	20.0	21.3	
$	7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	466077	20.0	24.5	
	9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	176812	10.0	8.67	
	10 Chloromethane	50	1.862	1.862	0.000	99	169333	10.0	8.93	
	11 Vinyl chloride	62	1.957	1.957	0.000	98	173977	10.0	9.17	
	12 Bromomethane	94	2.312	2.312	0.000	91	80690	10.0	8.41	
	13 Chloroethane	64	2.419	2.407	0.012	99	108549	10.0	9.20	
	15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	268431	10.0	9.84	
	19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	132922	10.0	9.76	
	27 Methylene Chloride	84	3.641	3.641	0.000	92	129635	10.0	9.16	
	31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	145119	10.0	9.38	
	33 1,1-Dichloroethane	63	4.257	4.257	0.000	97	261025	10.0	9.07	
	38 2,2-Dichloropropane	97	4.755	4.755	0.000	71	43988	10.0	9.41	
	39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	85	172566	10.0	10.3	
	44 Chlorobromomethane	128	4.981	4.969	0.012	96	64731	10.0	8.59	
	46 Chloroform	83	5.028	5.028	0.000	93	246468	10.0	8.99	
	47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	226090	10.0	9.29	
	49 1,1-Dichloropropene	75	5.325	5.325	0.000	95	210457	10.0	9.12	
	50 Carbon tetrachloride	117	5.336	5.336	0.000	87	184432	10.0	9.38	
	52 Benzene	78	5.514	5.514	0.000	96	606293	10.0	9.05	
	53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	211961	10.0	8.91	
	57 Trichloroethene	130	6.060	6.060	0.000	98	686818	10.0	41.6	E
	60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	144445	10.0	9.26	
	62 Dibromomethane	93	6.368	6.368	0.000	96	79632	10.0	8.90	
	64 Dichlorobromomethane	83	6.487	6.487	0.000	99	163797	10.0	9.15	
	67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	189965	10.0	8.69	
	69 Toluene	91	7.174	7.174	0.000	98	649735	10.0	9.93	
	70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	93	165695	10.0	9.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	124855	10.0	9.96	
73 Tetrachloroethene	164	7.673	7.673	0.001	96	122705	10.0	10.1	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	90	228813	10.0	9.72	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	109308	10.0	9.80	
79 Ethylene Dibromide	107	8.028	8.028	0.000	100	124718	10.0	9.80	
81 Chlorobenzene	112	8.467	8.467	0.000	93	399327	10.0	9.88	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	93	116460	10.0	9.67	
83 Ethylbenzene	106	8.562	8.550	0.012	98	231681	10.0	10.0	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	99	280144	10.0	9.87	
85 o-Xylene	106	9.048	9.048	0.000	97	261351	10.0	9.74	
86 Styrene	104	9.060	9.060	0.000	93	389245	10.0	10.3	
87 Bromoform	173	9.250	9.250	0.000	95	61963	10.0	8.79	
89 Isopropylbenzene	105	9.392	9.392	0.000	96	711878	10.0	10.0	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.677	0.011	94	160107	10.0	10.3	
92 Bromobenzene	156	9.712	9.712	0.000	95	150321	10.0	10.5	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	84	60200	10.0	10.5	
95 N-Propylbenzene	120	9.795	9.783	0.012	99	183591	10.0	10.7	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	144298	10.0	10.1	
97 1,3,5-Trimethylbenzene	105	9.961	9.961	0.000	93	541302	10.0	10.5	
98 4-Chlorotoluene	126	9.997	9.997	0.000	97	149992	10.0	10.4	
99 tert-Butylbenzene	119	10.281	10.281	0.000	92	473768	10.0	10.3	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	530978	10.0	10.5	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	659935	10.0	10.5	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	260275	10.0	10.3	
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	531980	10.0	10.6	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	97	262902	10.0	10.1	
108 n-Butylbenzene	91	11.040	11.040	0.000	97	428664	10.0	10.6	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	237758	10.0	9.95	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	94	134254	10.0	10.7	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	56150	10.0	11.8	
115 Naphthalene	128	12.950	12.950	0.000	99	419473	10.0	10.8	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	95	125416	10.0	11.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASPW_00402	Amount Added:	8.00	Units: uL	
VMFASAW_00377	Amount Added:	8.00	Units: uL	
VMFASGW_00412	Amount Added:	8.00	Units: uL	
VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

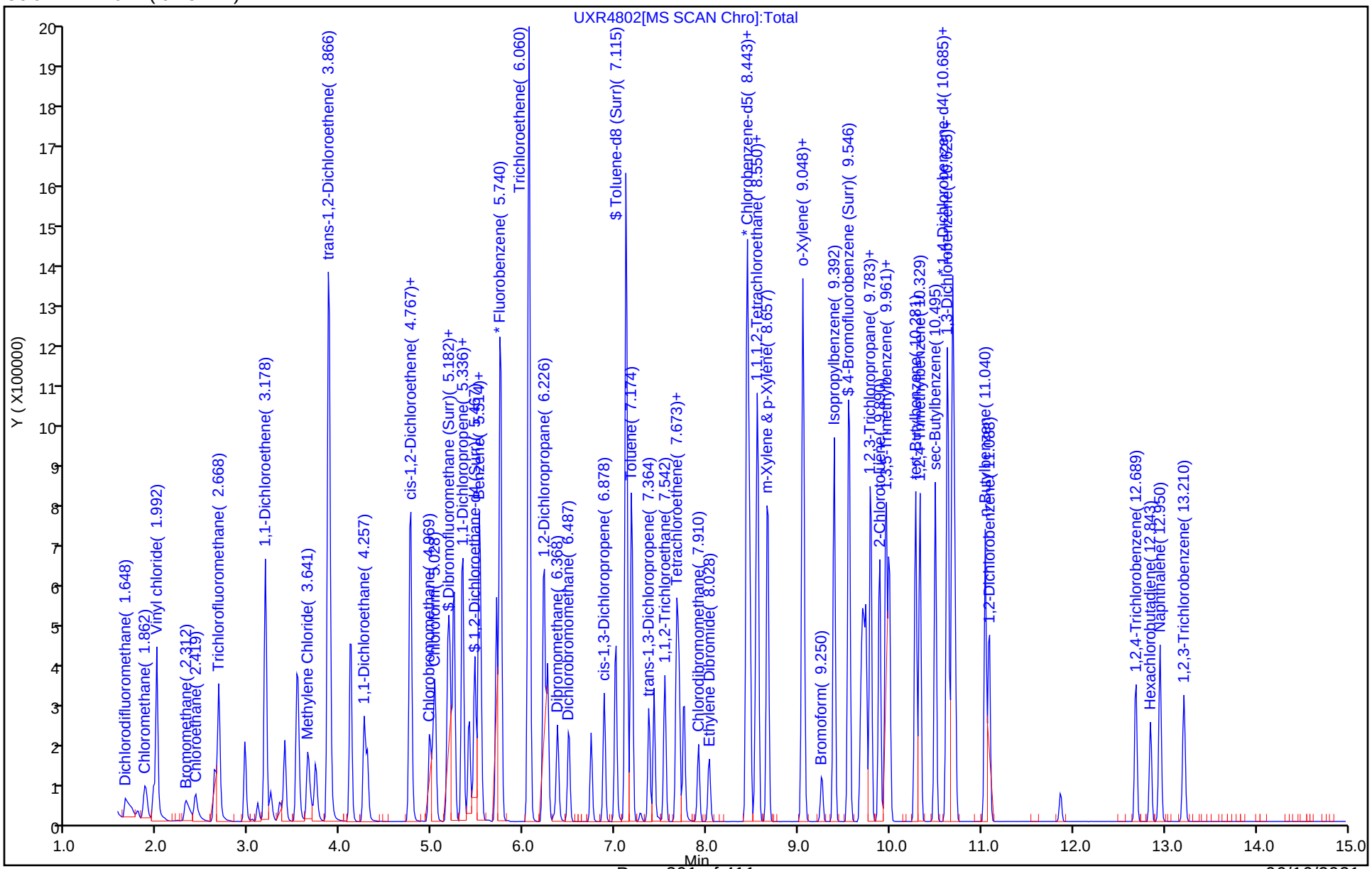
Report Date: 16-Jun-2021 10:43:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4802.D

Injection Date:	15-Jun-2021 16:28:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151103-E-4 MS			Worklist Smp#:	12
Client ID:	COS-2 (060821)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4802.D
Lims ID: 240-151103-E-4 MS
Client ID: COS-2 (060821)
Sample Type: MS
Inject. Date: 15-Jun-2021 16:28:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-012
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	92.97
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.3	81.63
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.67
$ 7 4-Bromofluorobenzene (Surr)	20.0	24.5	122.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-151103-F-4 MSD

Matrix: Water Lab File ID: UXR4803.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/15/2021 16:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490711 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.1		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.3		1.0	0.46
127-18-4	Tetrachloroethene	10.5		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.65		1.0	0.51
79-01-6	Trichloroethene	40.2		1.0	0.44
75-01-4	Vinyl chloride	9.24		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		75-130
460-00-4	4-Bromofluorobenzene (Surr)	124		47-134
2037-26-5	Toluene-d8 (Surr)	111		69-122
1868-53-7	Dibromofluoromethane (Surr)	94		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4803.D
Lims ID: 240-151103-F-4 MSD
Client ID: COS-2 (060821)
Sample Type: MSD
Inject. Date: 15-Jun-2021 16:52:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-013
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.740	5.740	0.000	99	1175130	20.0	20.0	
*	2 Chlorobenzene-d5	117	8.443	8.443	0.000	88	858210	20.0	20.0	
*	3 1,4-Dichlorobenzene-d4	152	10.685	10.685	0.000	97	371714	20.0	20.0	
$	4 Dibromofluoromethane (Surr)	113	5.170	5.170	0.000	93	227619	20.0	18.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	5.467	5.467	0.000	97	297925	20.0	16.4	
$	6 Toluene-d8 (Surr)	98	7.115	7.115	0.000	93	1175118	20.0	22.3	
$	7 4-Bromofluorobenzene (Surr)	95	9.546	9.546	0.000	86	466615	20.0	24.8	
	9 Dichlorodifluoromethane	85	1.648	1.648	0.000	99	169144	10.0	8.33	
	10 Chloromethane	50	1.862	1.862	0.000	99	167387	10.0	8.87	
	11 Vinyl chloride	62	1.957	1.957	0.000	98	174552	10.0	9.24	
	12 Bromomethane	94	2.313	2.312	0.000	91	82397	10.0	8.62	
	13 Chloroethane	64	2.419	2.407	0.012	99	106443	10.0	9.06	
	15 Trichlorofluoromethane	101	2.668	2.668	0.000	98	258284	10.0	9.51	
	19 1,1-Dichloroethene	96	3.178	3.178	0.000	95	137017	10.0	10.1	
	27 Methylene Chloride	84	3.641	3.641	0.000	93	133869	10.0	9.50	
	31 trans-1,2-Dichloroethene	96	3.878	3.878	0.000	98	148575	10.0	9.65	
	33 1,1-Dichloroethane	63	4.257	4.257	0.000	97	264304	10.0	9.23	
	38 2,2-Dichloropropane	97	4.755	4.755	0.000	71	46830	10.0	10.1	
	39 cis-1,2-Dichloroethene	96	4.767	4.755	0.012	85	172911	10.0	10.3	
	44 Chlorobromomethane	128	4.969	4.969	0.000	97	66791	10.0	8.90	
	46 Chloroform	83	5.028	5.028	0.000	93	253863	10.0	9.30	
	47 1,1,1-Trichloroethane	97	5.194	5.194	0.000	98	234113	10.0	9.66	
	49 1,1-Dichloropropene	75	5.336	5.325	0.011	95	213770	10.0	9.30	
	50 Carbon tetrachloride	117	5.336	5.336	0.000	89	189762	10.0	9.69	
	52 Benzene	78	5.514	5.514	0.000	96	620787	10.0	9.30	
	53 1,2-Dichloroethane	62	5.526	5.526	0.000	98	215763	10.0	9.10	
	57 Trichloroethene	130	6.060	6.060	0.000	98	661098	10.0	40.2	E
	60 1,2-Dichloropropane	63	6.261	6.261	0.000	95	150345	10.0	9.67	
	62 Dibromomethane	93	6.368	6.368	0.000	95	84147	10.0	9.45	
	64 Dichlorobromomethane	83	6.487	6.487	0.000	99	166640	10.0	9.34	
	67 cis-1,3-Dichloropropene	75	6.878	6.878	0.000	95	198848	10.0	9.14	
	69 Toluene	91	7.174	7.174	0.000	99	663916	10.0	10.2	
	70 trans-1,3-Dichloropropene	75	7.364	7.364	0.000	94	173786	10.0	9.69	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
72 1,1,2-Trichloroethane	97	7.542	7.542	0.000	93	126200	10.0	10.2	
73 Tetrachloroethene	164	7.673	7.673	0.001	96	125821	10.0	10.5	
75 1,3-Dichloropropane	76	7.696	7.696	0.000	90	237158	10.0	10.2	
78 Chlorodibromomethane	129	7.910	7.910	0.000	90	112226	10.0	10.2	
79 Ethylene Dibromide	107	8.028	8.028	0.000	98	129299	10.0	10.3	
81 Chlorobenzene	112	8.467	8.467	0.000	93	404157	10.0	10.1	
82 1,1,1,2-Tetrachloroethane	131	8.538	8.538	0.000	93	121228	10.0	10.2	
83 Ethylbenzene	106	8.550	8.550	0.000	98	236137	10.0	10.3	
84 m-Xylene & p-Xylene	106	8.669	8.669	0.000	100	288605	10.0	10.3	
85 o-Xylene	106	9.048	9.048	0.000	96	272497	10.0	10.2	
86 Styrene	104	9.060	9.060	0.000	94	405865	10.0	10.9	
87 Bromoform	173	9.262	9.250	0.012	97	65003	10.0	9.28	
89 Isopropylbenzene	105	9.392	9.392	0.000	95	733750	10.0	10.5	
91 1,1,2,2-Tetrachloroethane	83	9.688	9.677	0.011	95	166422	10.0	11.0	
92 Bromobenzene	156	9.712	9.712	0.000	94	148800	10.0	10.7	
94 1,2,3-Trichloropropane	110	9.736	9.736	0.000	83	61753	10.0	11.1	
95 N-Propylbenzene	120	9.783	9.783	0.000	99	182516	10.0	11.0	
96 2-Chlorotoluene	126	9.890	9.890	0.000	96	149659	10.0	10.8	
97 1,3,5-Trimethylbenzene	105	9.949	9.961	-0.012	93	553451	10.0	11.1	
98 4-Chlorotoluene	126	9.997	9.997	0.000	98	152814	10.0	11.0	
99 tert-Butylbenzene	119	10.281	10.281	0.000	93	484121	10.0	10.9	
101 1,2,4-Trimethylbenzene	105	10.329	10.329	0.000	95	545935	10.0	11.1	
102 sec-Butylbenzene	105	10.495	10.495	0.000	94	667696	10.0	11.0	
103 1,3-Dichlorobenzene	146	10.625	10.625	0.000	97	259597	10.0	10.6	
104 4-Isopropyltoluene	119	10.637	10.637	0.000	97	541310	10.0	11.1	
105 1,4-Dichlorobenzene	146	10.708	10.708	0.000	94	273342	10.0	10.8	
108 n-Butylbenzene	91	11.040	11.040	0.000	98	442016	10.0	11.3	
109 1,2-Dichlorobenzene	146	11.088	11.088	0.000	97	246141	10.0	10.6	
113 1,2,4-Trichlorobenzene	180	12.689	12.689	0.000	95	135612	10.0	11.2	
114 Hexachlorobutadiene	225	12.843	12.843	0.000	97	55179	10.0	11.9	
115 Naphthalene	128	12.950	12.950	0.000	100	431941	10.0	11.4	
116 1,2,3-Trichlorobenzene	180	13.210	13.210	0.000	95	124850	10.0	11.4	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASAW_00377	Amount Added:	8.00	Units: uL	
VMFASGW_00412	Amount Added:	8.00	Units: uL	
VMFASPW_00402	Amount Added:	8.00	Units: uL	
VM40ML_VIALS_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00087	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00087	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent

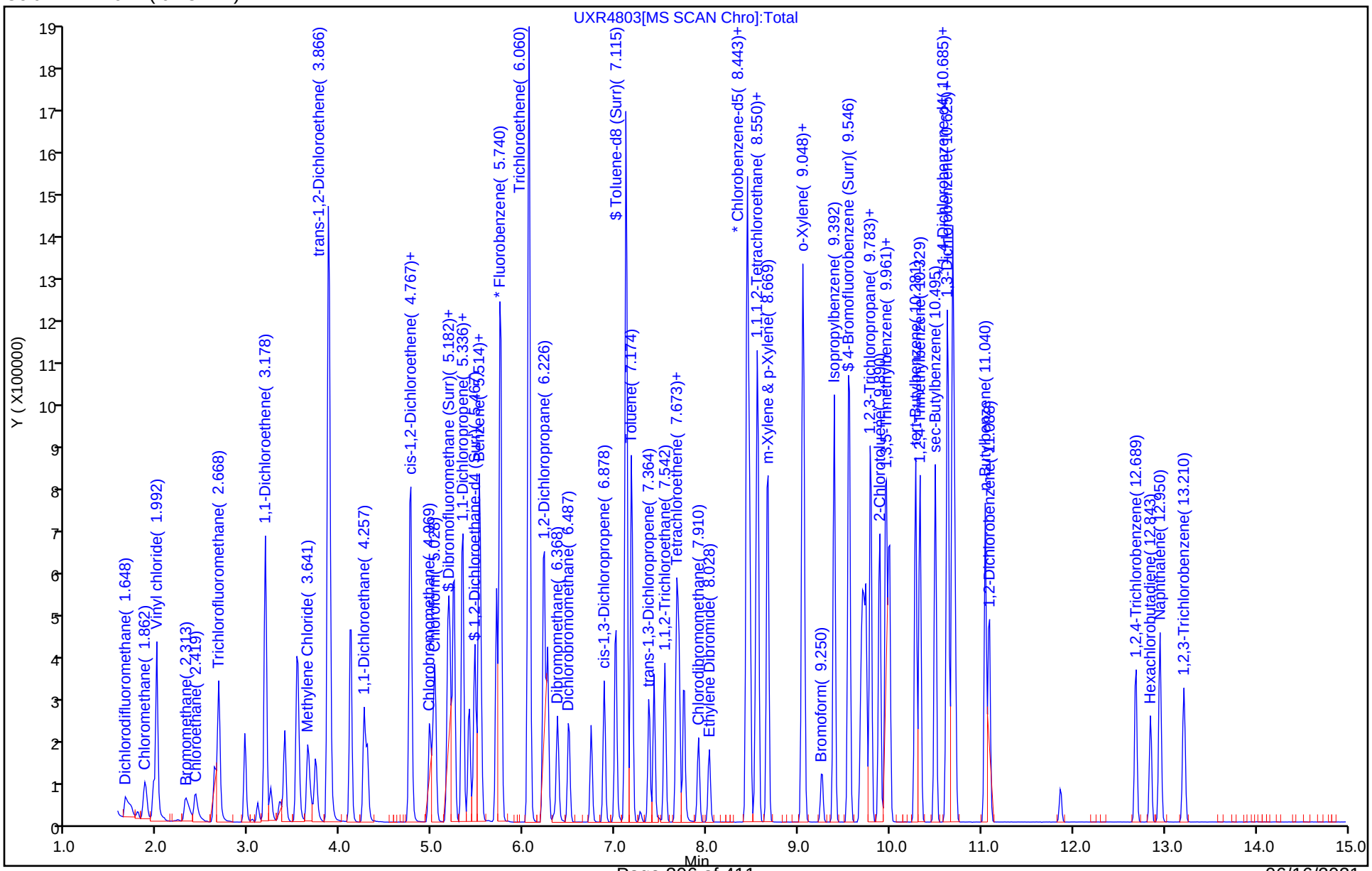
Report Date: 16-Jun-2021 10:43:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4803.D

Injection Date:	15-Jun-2021 16:52:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-151103-F-4 MSD			Worklist Smp#:	13
Client ID:	COS-2 (060821)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\UXR4803.D
Lims ID: 240-151103-F-4 MSD
Client ID: COS-2 (060821)
Sample Type: MSD
Inject. Date: 15-Jun-2021 16:52:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110279-013
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromfs\Canton\ChromData\A3UX17\20210615-110279.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 16-Jun-2021 10:43:35 Calib Date: 04-Jun-2021 00:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX17\20210603-109864.b\UXR4589.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1621

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.72
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.4	82.12
$ 6 Toluene-d8 (Surr)	20.0	22.3	111.25
$ 7 4-Bromofluorobenzene (Surr)	20.0	24.8	123.85

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Instrument ID: A3UX17 Start Date: 06/03/2021 17:50

Analysis Batch Number: 488921 End Date: 06/04/2021 00:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-488921/1		06/03/2021 17:50	1	BFB4002.D	DB-624 0.18(mm)
STD8260 240-488921/2 IC		06/03/2021 18:28	1	UXR4575.D	DB-624 0.18(mm)
STD8260 240-488921/3 IC		06/03/2021 18:52	1	UXR4576.D	DB-624 0.18(mm)
STD8260 240-488921/4 ICIS		06/03/2021 19:16	1	UXR4577.D	DB-624 0.18(mm)
STD8260 240-488921/5 IC		06/03/2021 19:39	1	UXR4578.D	DB-624 0.18(mm)
STD8260 240-488921/6 IC		06/03/2021 20:03	1	UXR4579.D	DB-624 0.18(mm)
STD8260 240-488921/7 IC		06/03/2021 20:27	1	UXR4580.D	DB-624 0.18(mm)
STD8260 240-488921/8 IC		06/03/2021 20:50	1	UXR4581.D	DB-624 0.18(mm)
ICV 240-488921/9		06/03/2021 21:14	1	UXR4582.D	DB-624 0.18(mm)
STDA9 240-488921/10 IC		06/03/2021 21:38	1		DB-624 0.18(mm)
STDA9 240-488921/11 IC		06/03/2021 22:02	1		DB-624 0.18(mm)
STDA9 240-488921/12 IC		06/03/2021 22:25	1		DB-624 0.18(mm)
STDA9 240-488921/13 IC		06/03/2021 22:49	1		DB-624 0.18(mm)
STDA9 240-488921/14 IC		06/03/2021 23:12	1		DB-624 0.18(mm)
STDA9 240-488921/15 IC		06/03/2021 23:36	1		DB-624 0.18(mm)
STDA9 240-488921/16 IC		06/04/2021 00:00	1		DB-624 0.18(mm)
ICV 240-488921/17		06/04/2021 00:24	1	UXR4590.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Instrument ID: A3UX17 Start Date: 06/15/2021 12:03

Analysis Batch Number: 490711 End Date: 06/15/2021 22:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-490711/1		06/15/2021 12:03	1	BFB4011.D	DB-624 0.18(mm)
CCVIS 240-490711/2		06/15/2021 12:32	1	UXR4792.D	DB-624 0.18(mm)
CCV 240-490711/3		06/15/2021 12:55	1	UXR4793.D	DB-624 0.18(mm)
LCS 240-490711/4		06/15/2021 13:19	1	UXR4794.D	DB-624 0.18(mm)
MRL 240-490711/5 MDLV		06/15/2021 13:43	1		DB-624 0.18(mm)
MRL 240-490711/6 MDLV		06/15/2021 14:06	1		DB-624 0.18(mm)
MB 240-490711/7		06/15/2021 14:30	1	UXR4797.D	DB-624 0.18(mm)
ZZZZZ		06/15/2021 14:54	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 15:17	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 15:41	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 16:05	1		DB-624 0.18(mm)
240-151103-E-4 MS		06/15/2021 16:28	1	UXR4802.D	DB-624 0.18(mm)
240-151103-F-4 MSD		06/15/2021 16:52	1	UXR4803.D	DB-624 0.18(mm)
ZZZZZ		06/15/2021 17:16	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 17:39	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 18:03	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 18:27	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 18:50	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 19:14	2		DB-624 0.18(mm)
ZZZZZ		06/15/2021 19:38	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 20:02	1		DB-624 0.18(mm)
240-151104-1	TRIP BLANK	06/15/2021 20:25	1	UXR4812.D	DB-624 0.18(mm)
240-151104-2	SL-5_061021	06/15/2021 20:49	5	UXR4813.D	DB-624 0.18(mm)
240-151104-3	SL-6_061021	06/15/2021 21:13	1	UXR4814.D	DB-624 0.18(mm)
240-151104-4	SL-7_061021	06/15/2021 21:36	1	UXR4815.D	DB-624 0.18(mm)
240-151104-5	SL-8_061021	06/15/2021 22:00	8	UXR4816.D	DB-624 0.18(mm)
240-151104-6	SL-9_061021	06/15/2021 22:24	5	UXR4817.D	DB-624 0.18(mm)
240-151104-7	DUP-01	06/15/2021 22:47	5	UXR4818.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 488921 Batch Start Date: 06/03/21 17:50 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00087	vm50ss 00443	vm50ss_stk 00087	VMAROLISTDW 00394
BFB 240-488921/1		8260B		5 mL	5 mL				
STD8260 240-488921/2 IC		8260B		5 mL	5 mL	2 uL	32 uL		32 uL
STD8260 240-488921/3 IC		8260B		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-488921/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-488921/5 IC		8260B		5 mL	5 mL	2 uL	4 uL		4 uL
STD8260 240-488921/6 IC		8260B		5 mL	5 mL	2 uL	3.2 uL		3.2 uL
STD8260 240-488921/7 IC		8260B		5 mL	5 mL	2 uL	1.6 uL		1.6 uL
STD8260 240-488921/8 IC		8260B		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
ICV 240-488921/9		8260B		5 mL	5 mL	2 uL		2.273 uL	
ICV 240-488921/17		8260B		5 mL	5 mL	2 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00027	VMFASA9W 00321	VMFASAW 00376	VMFASGW 00409	VMFASPW 00400	VMRGAS 00387
BFB 240-488921/1		8260B		1 uL					
STD8260 240-488921/2 IC		8260B							32 uL
STD8260 240-488921/3 IC		8260B							16 uL
STD8260 240-488921/4 ICIS		8260B							8 uL
STD8260 240-488921/5 IC		8260B							4 uL
STD8260 240-488921/6 IC		8260B							3.2 uL
STD8260 240-488921/7 IC		8260B							1.6 uL
STD8260 240-488921/8 IC		8260B							0.8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 488921 Batch Start Date: 06/03/21 17:50 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00027	VMFASA9W 00321	VMFASAW 00376	VMFASGW 00409	VMFASPW 00400	VMRGAS 00387
ICV 240-488921/9		8260B				8 uL	8 uL	8 uL	
ICV 240-488921/17		8260B			8 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00438					
BFB 240-488921/1		8260B							
STD8260 240-488921/2 IC		8260B		32 uL					
STD8260 240-488921/3 IC		8260B		16 uL					
STD8260 240-488921/4 ICIS		8260B		8 uL					
STD8260 240-488921/5 IC		8260B		4 uL					
STD8260 240-488921/6 IC		8260B		3.2 uL					
STD8260 240-488921/7 IC		8260B		1.6 uL					
STD8260 240-488921/8 IC		8260B		0.8 uL					
ICV 240-488921/9		8260B							
ICV 240-488921/17		8260B							

Batch Notes	
pH Indicator ID	HC034840

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 490711 Batch Start Date: 06/15/21 12:03 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00087	vm50ss_stk 00087	VMAROLISTDW 00396
BFB 240-490711/1		8260B		5 mL	5 mL				
CCVIS 240-490711/2		8260B		5 mL	5 mL		2 uL	2 uL	8 uL
CCV 240-490711/3		8260B		5 mL	5 mL		2 uL		
LCS 240-490711/4		8260B		5 mL	5 mL		2 uL	2 uL	
MB 240-490711/7		8260B		5 mL	5 mL		2 uL	2 uL	
240-151103-E-4 MS	COS-2 (060821)	8260B	T	5 mL	5 mL	7 SU	2 uL	2 uL	
240-151103-F-4 MSD	COS-2 (060821)	8260B	T	5 mL	5 mL	7 SU	2 uL	2 uL	
240-151104-A-1	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-2	SL-5_061021	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-3	SL-6_061021	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-4	SL-7_061021	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-5	SL-8_061021	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-6	SL-9_061021	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-151104-E-7	DUP-01	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00027	VMFASAW 00377	VMFASGW 00412	VMFASPW 00402	VMRA9W 00394	VMRGAS 00388
BFB 240-490711/1		8260B		2 uL					
CCVIS 240-490711/2		8260B							8 uL
CCV 240-490711/3		8260B						8 uL	
LCS 240-490711/4		8260B			8 uL	8 uL	8 uL		
MB 240-490711/7		8260B							
240-151103-E-4 MS	COS-2 (060821)	8260B	T		8 uL	8 uL	8 uL		
240-151103-F-4 MSD	COS-2 (060821)	8260B	T		8 uL	8 uL	8 uL		
240-151104-A-1	TRIP BLANK	8260B	T						
240-151104-E-2	SL-5_061021	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 490711 Batch Start Date: 06/15/21 12:03 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00027	VMFASAW 00377	VMFASGW 00412	VMFASPW 00402	VMRA9W 00394	VMRGAS 00388
240-151104-E-3	SL-6_061021	8260B	T						
240-151104-E-4	SL-7_061021	8260B	T						
240-151104-E-5	SL-8_061021	8260B	T						
240-151104-E-6	SL-9_061021	8260B	T						
240-151104-E-7	DUP-01	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00439					
BFB 240-490711/1		8260B							
CCVIS 240-490711/2		8260B		8 uL					
CCV 240-490711/3		8260B							
LCS 240-490711/4		8260B							
MB 240-490711/7		8260B							
240-151103-E-4 MS	COS-2 (060821)	8260B	T						
240-151103-F-4 MSD	COS-2 (060821)	8260B	T						
240-151104-A-1	TRIP BLANK	8260B	T						
240-151104-E-2	SL-5_061021	8260B	T						
240-151104-E-3	SL-6_061021	8260B	T						
240-151104-E-4	SL-7_061021	8260B	T						
240-151104-E-5	SL-8_061021	8260B	T						
240-151104-E-6	SL-9_061021	8260B	T						
240-151104-E-7	DUP-01	8260B	T						

Batch Notes	
pH Indicator ID	HC034840

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-5_061021	240-151104-2	87
SL-6_061021	240-151104-3	81
SL-7_061021	240-151104-4	84
SL-8_061021	240-151104-5	84
SL-9_061021	240-151104-6	84
DUP-01	240-151104-7	88
	MB 240-490579/5	78
	LCS 240-490579/4	77
	240-150917-H-3 MS	80
	240-150917-N-3 MSD	82

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	70-133

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 189059.D

Lab ID: LCS 240-490579/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	10.6	106	80-135	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 189072.D

Lab ID: 240-150917-H-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	11.1	111	46-170	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 189073.D

Lab ID: 240-150917-N-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	10.7	107	3	26	46-170	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: 189060.D Lab Sample ID: MB 240-490579/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX18 Date Analyzed: 06/14/2021 18:34

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-490579/4	189059.D	06/14/2021 18:09
SL-5_061021	240-151104-2	189064.D	06/14/2021 20:13
SL-6_061021	240-151104-3	189065.D	06/14/2021 20:37
SL-7_061021	240-151104-4	189066.D	06/14/2021 21:02
SL-8_061021	240-151104-5	189067.D	06/14/2021 21:27
SL-9_061021	240-151104-6	189068.D	06/14/2021 21:52
DUP-01	240-151104-7	189069.D	06/14/2021 22:17
	240-150917-H-3 MS	189072.D	06/14/2021 23:31
	240-150917-N-3 MSD	189073.D	06/14/2021 23:56

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: BFB18981.D BFB Injection Date: 04/14/2021

Instrument ID: A3UX18 BFB Injection Time: 09:05

Analysis Batch No.: 481075

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.9	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	71.7	
175	5.0 - 9.0 % of mass 174	5.2	(7.3) 1
176	95.0 - 101.0 % of mass 174	69.1	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-481075/3	188196.D	04/14/2021	9:51
	IC 240-481075/4	188197.D	04/14/2021	10:16
	IC 240-481075/5	188198.D	04/14/2021	10:40
	IC 240-481075/6	188199.D	04/14/2021	11:05
	ICIS 240-481075/7	188200.D	04/14/2021	11:30
	IC 240-481075/8	188201.D	04/14/2021	11:55
	IC 240-481075/9	188202.D	04/14/2021	12:20
	IC 240-481075/10	188203.D	04/14/2021	12:45
	ICV 240-481075/12	188205.D	04/14/2021	13:35

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab File ID: BFB19020.D BFB Injection Date: 06/14/2021

Instrument ID: A3UX18 BFB Injection Time: 17:05

Analysis Batch No.: 490579

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	72.9	
175	5.0 - 9.0 % of mass 174	5.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	71.2	(97.6) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-490579/3	189058.D	06/14/2021	17:45
	LCS 240-490579/4	189059.D	06/14/2021	18:09
	MB 240-490579/5	189060.D	06/14/2021	18:34
SL-5_061021	240-151104-2	189064.D	06/14/2021	20:13
SL-6_061021	240-151104-3	189065.D	06/14/2021	20:37
SL-7_061021	240-151104-4	189066.D	06/14/2021	21:02
SL-8_061021	240-151104-5	189067.D	06/14/2021	21:27
SL-9_061021	240-151104-6	189068.D	06/14/2021	21:52
DUP-01	240-151104-7	189069.D	06/14/2021	22:17
	240-150917-H-3 MS	189072.D	06/14/2021	23:31
	240-150917-N-3 MSD	189073.D	06/14/2021	23:56

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Sample No.: ICIS 240-481075/7 Date Analyzed: 04/14/2021 11:30

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 188200.D Heated Purge: (Y/N) Y

Calibration ID: 61064

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3589881	6.58	101751	7.23		
UPPER LIMIT		7179762	7.08	203502	7.73		
LOWER LIMIT		1794941	6.08	50876	6.73		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-481075/12		3872221	6.58	115275	7.24		
CCVIS 240-490579/3		3203978	6.58	91344	7.24		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Sample No.: CCVIS 240-490579/3 Date Analyzed: 06/14/2021 17:45

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 189058.D Heated Purge: (Y/N) Y

Calibration ID: 61064

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		3203978	6.58	91344	7.24		
UPPER LIMIT		6407956	7.08	182688	7.74		
LOWER LIMIT		1601989	6.08	45672	6.74		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-490579/4		3179464	6.58	88894	7.24		
MB 240-490579/5		3069870	6.58	87763	7.23		
240-151104-2	SL-5_061021	2616573	6.58	83780	7.24		
240-151104-3	SL-6_061021	3004585	6.58	95930	7.23		
240-151104-4	SL-7_061021	2979479	6.58	101618	7.24		
240-151104-5	SL-8_061021	3087138	6.58	93036	7.24		
240-151104-6	SL-9_061021	2908597	6.58	88919	7.24		
240-151104-7	DUP-01	2868171	6.58	88866	7.23		
240-150917-H-3 MS		3145874	6.58	86439	7.23		
240-150917-N-3 MSD		3240670	6.58	104237	7.24		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-5_061021 Lab Sample ID: 240-151104-2

Matrix: Water Lab File ID: 189064.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 10:00

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189064.D				
Lims ID:	240-151104-B-2				
Client ID:	SL-5_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 20:13:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-009				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:18		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	679118	10.5	
* 7 Fluorobenzene	96	6.580	6.578	0.002	100	2616573	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.235	0.000	97	83780	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	50	2738	4.72	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

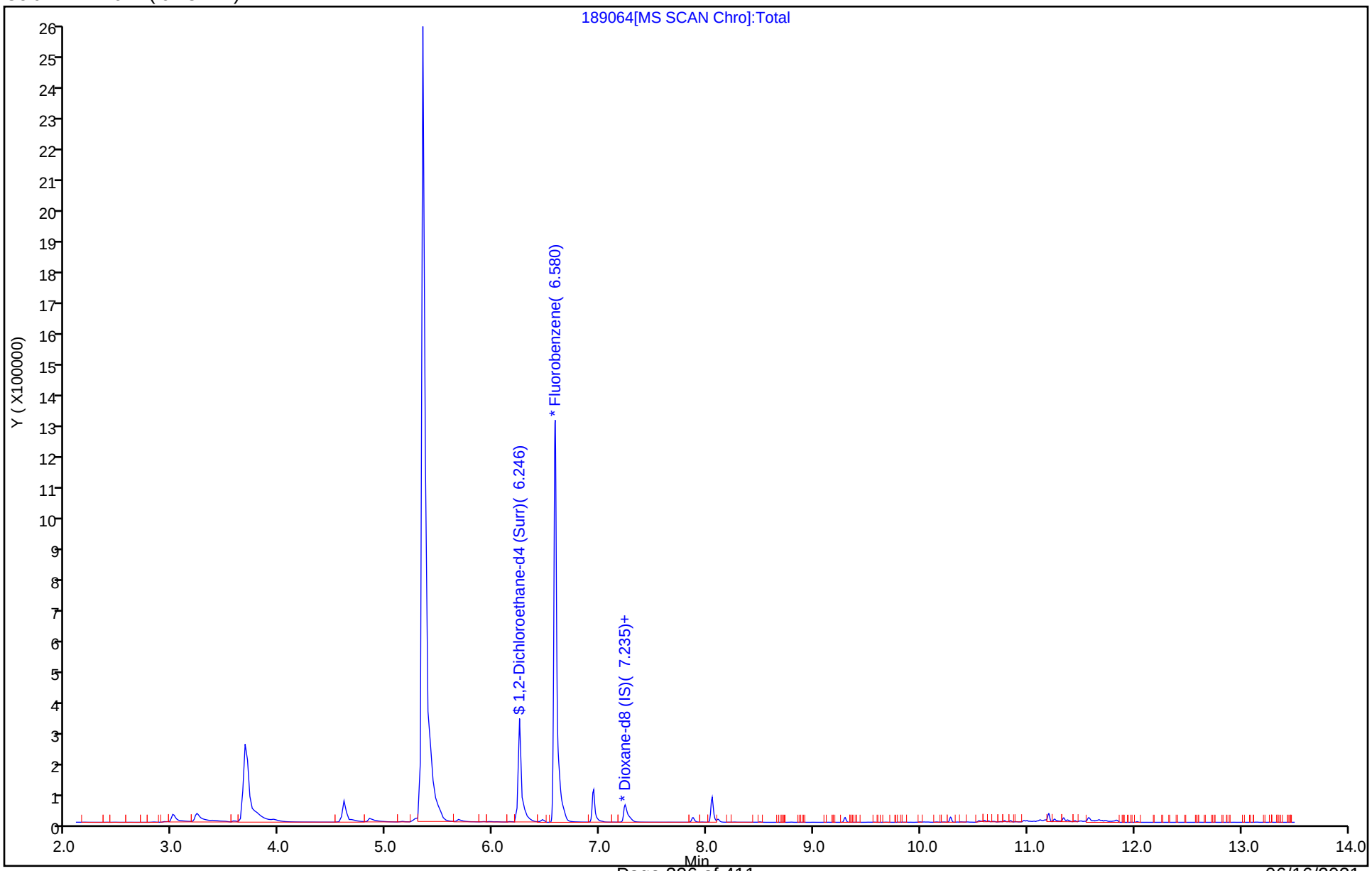
Report Date: 15-Jun-2021 11:59:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189064.D

Injection Date:	14-Jun-2021 20:13:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-2	Lab Sample ID:	240-151104-2	Worklist Smp#:	9
Client ID:	SL-5_061021				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189064.D				
Lims ID:	240-151104-B-2				
Client ID:	SL-5_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 20:13:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-009				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:18

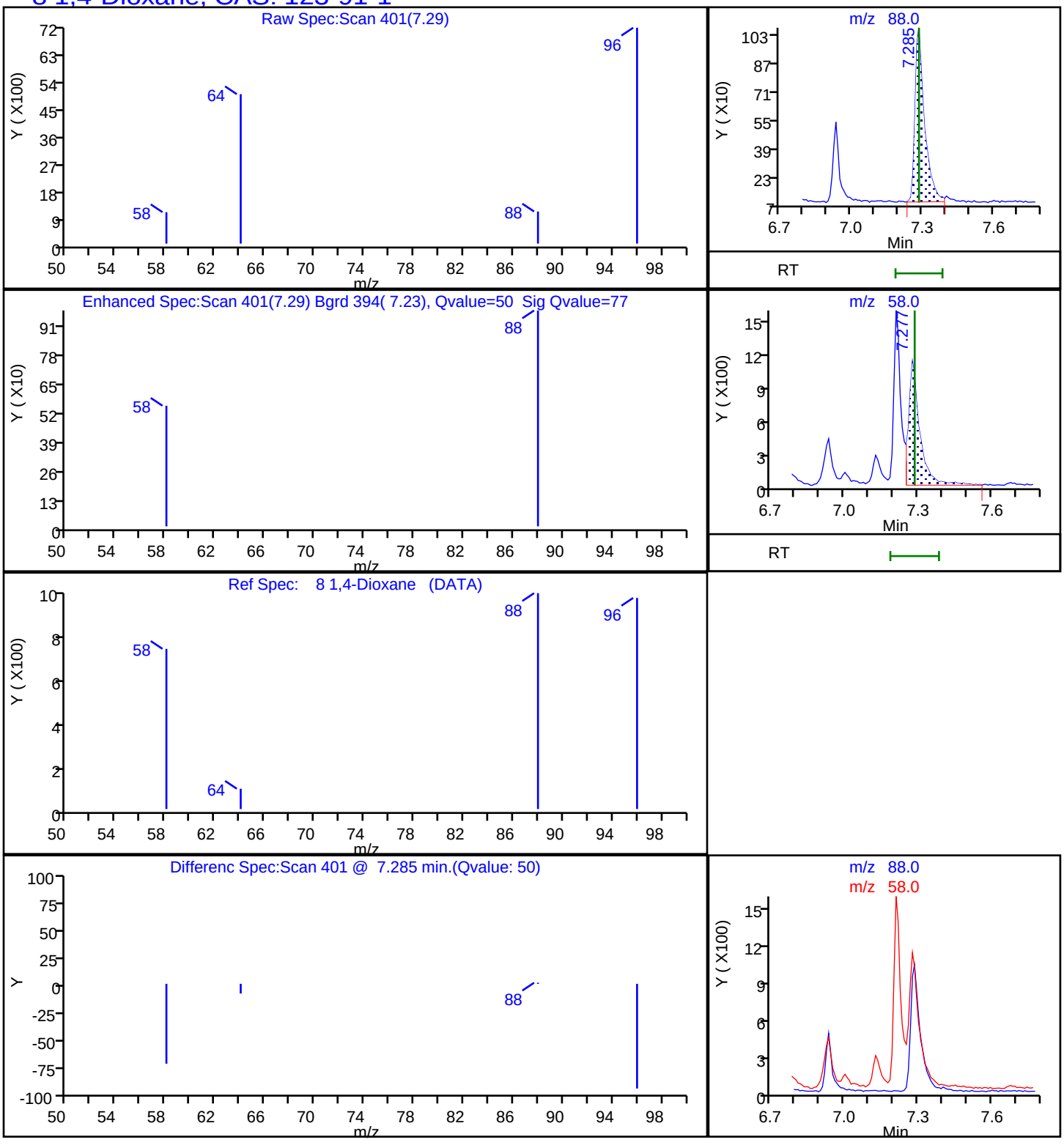
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.5	86.79

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189064.D

Injection Date:	14-Jun-2021 20:13:30	Instrument ID:	A3UX18		
Lims ID:	240-151104-B-2	Lab Sample ID:	240-151104-2		
Client ID:	SL-5_061021				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-6_061021 Lab Sample ID: 240-151104-3

Matrix: Water Lab File ID: 189065.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 09:35

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 20:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189065.D				
Lims ID:	240-151104-B-3				
Client ID:	SL-6_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 20:37:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-010				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:25		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	724417	9.78	
* 7 Fluorobenzene	96	6.580	6.578	0.002	100	3004585	12.1	
* 9 Dioxane-d8 (IS)	96	7.234	7.235	-0.001	97	95930	242.7	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

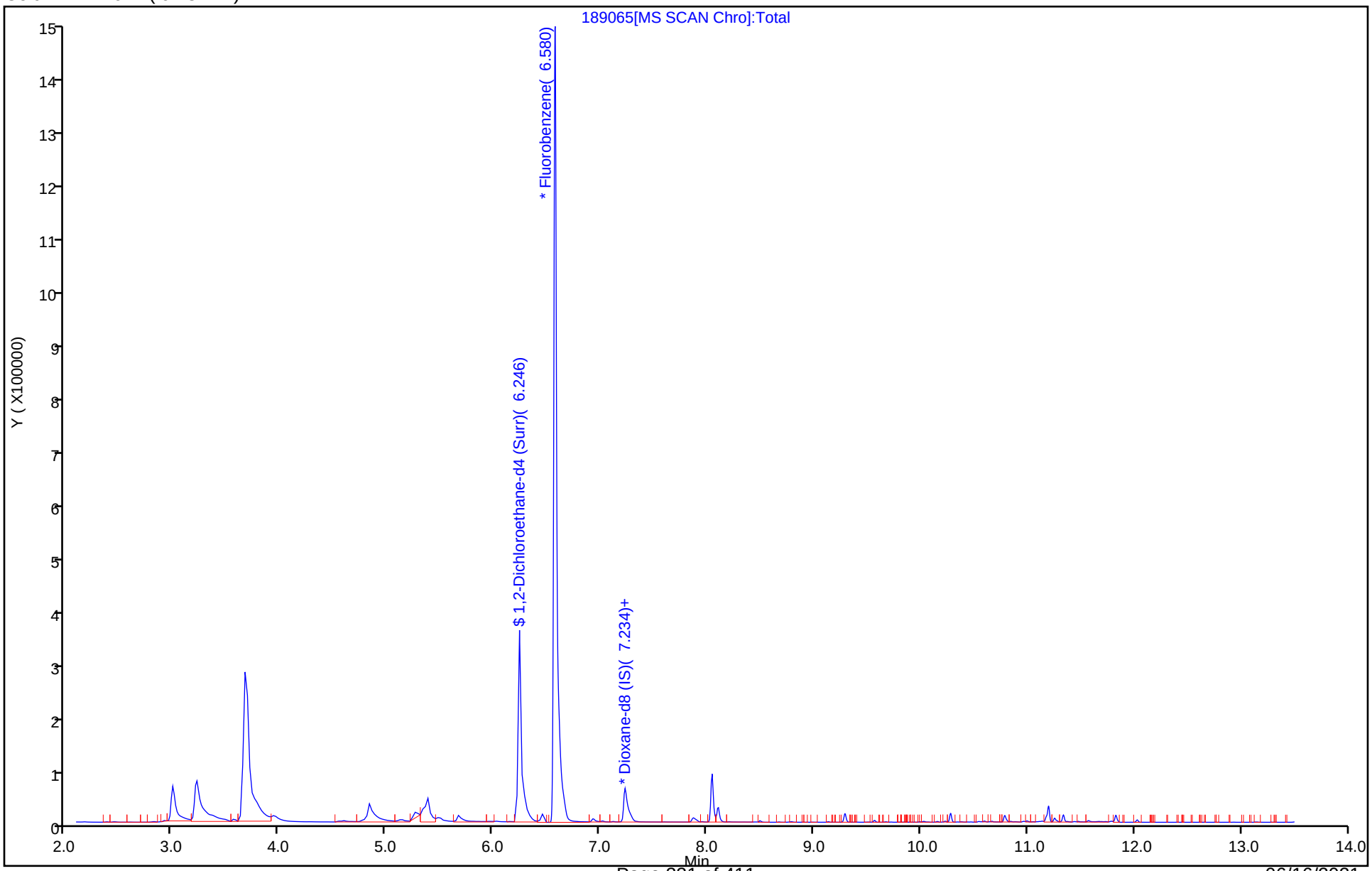
Report Date: 15-Jun-2021 11:59:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189065.D

Injection Date:	14-Jun-2021 20:37:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-3	Lab Sample ID:	240-151104-3	Worklist Smp#:	10
Client ID:	SL-6_061021				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189065.D				
Lims ID:	240-151104-B-3				
Client ID:	SL-6_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 20:37:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-010				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	9.78	80.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-7_061021 Lab Sample ID: 240-151104-4

Matrix: Water Lab File ID: 189066.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 09:05

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 21:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189066.D				
Lims ID:	240-151104-B-4				
Client ID:	SL-7_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:02:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-011				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:29		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	749026	10.2	
* 7 Fluorobenzene	96	6.579	6.578	0.001	100	2979479	12.1	
* 9 Dioxane-d8 (IS)	96	7.236	7.235	0.001	99	101618	242.7	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

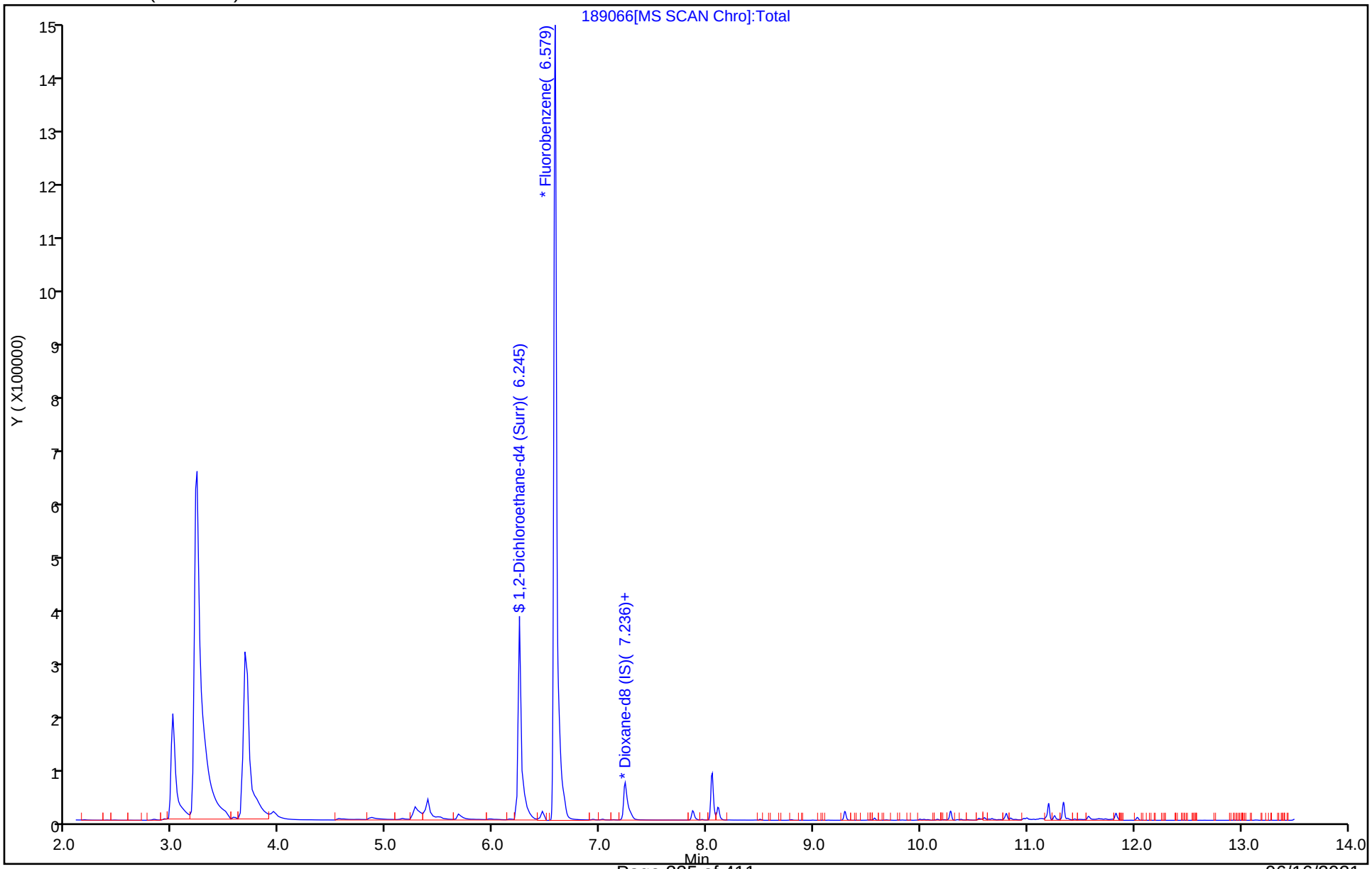
Report Date: 15-Jun-2021 11:59:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189066.D

Injection Date:	14-Jun-2021 21:02:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-4	Lab Sample ID:	240-151104-4	Worklist Smp#:	11
Client ID:	SL-7_061021				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189066.D				
Lims ID:	240-151104-B-4				
Client ID:	SL-7_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:02:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-011				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.2	84.06

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-8_061021 Lab Sample ID: 240-151104-5

Matrix: Water Lab File ID: 189067.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 10:25

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 21:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189067.D				
Lims ID:	240-151104-B-5				
Client ID:	SL-8_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:27:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-012				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	779023	10.2	
* 7 Fluorobenzene	96	6.579	6.578	0.001	100	3087138	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.235	0.000	97	93036	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	56	3401	5.35	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

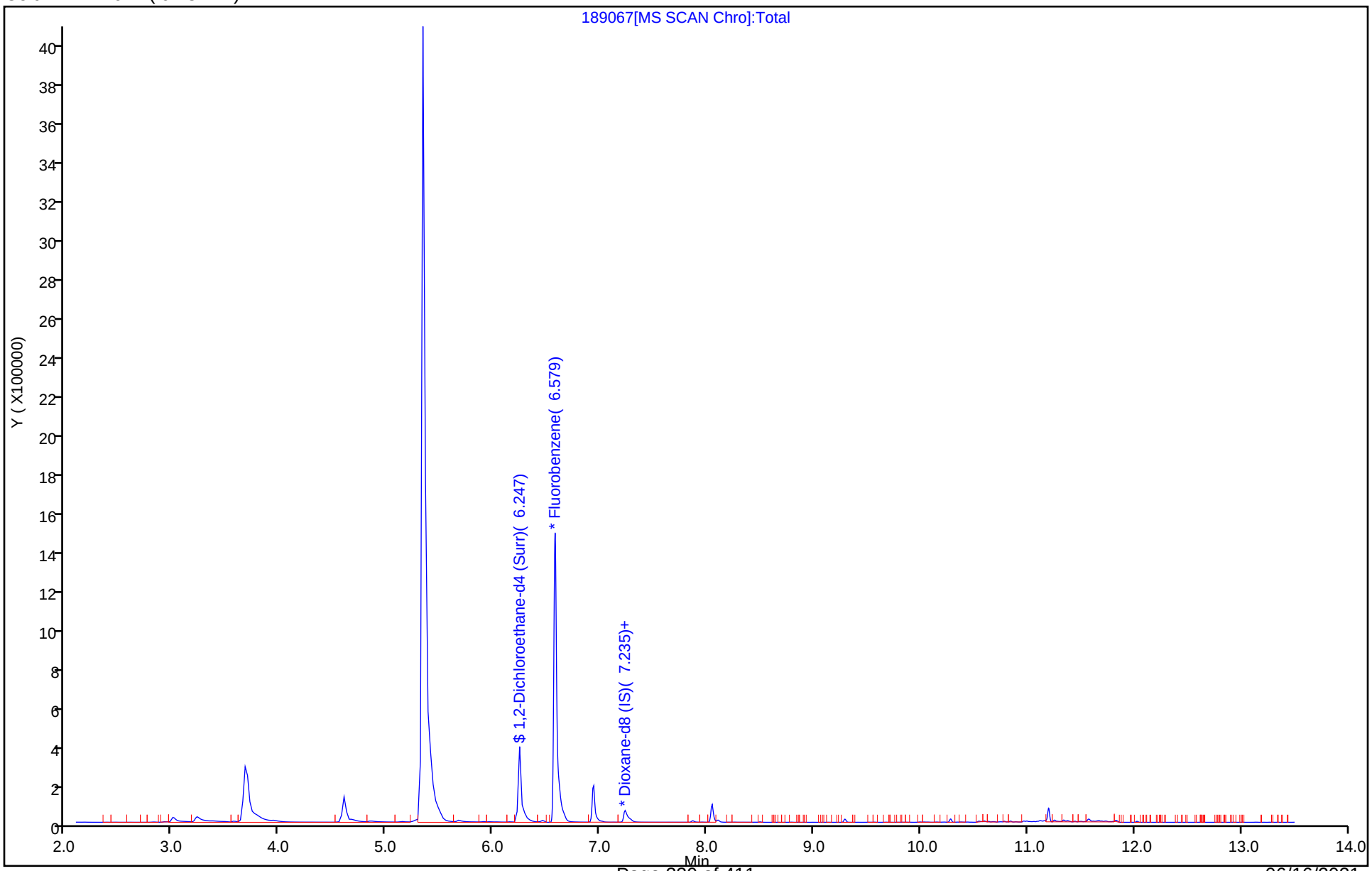
Report Date: 15-Jun-2021 11:59:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189067.D

Injection Date:	14-Jun-2021 21:27:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-5	Lab Sample ID:	240-151104-5	Worklist Smp#:	12
Client ID:	SL-8_061021				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189067.D				
Lims ID:	240-151104-B-5				
Client ID:	SL-8_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:27:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-012				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:32

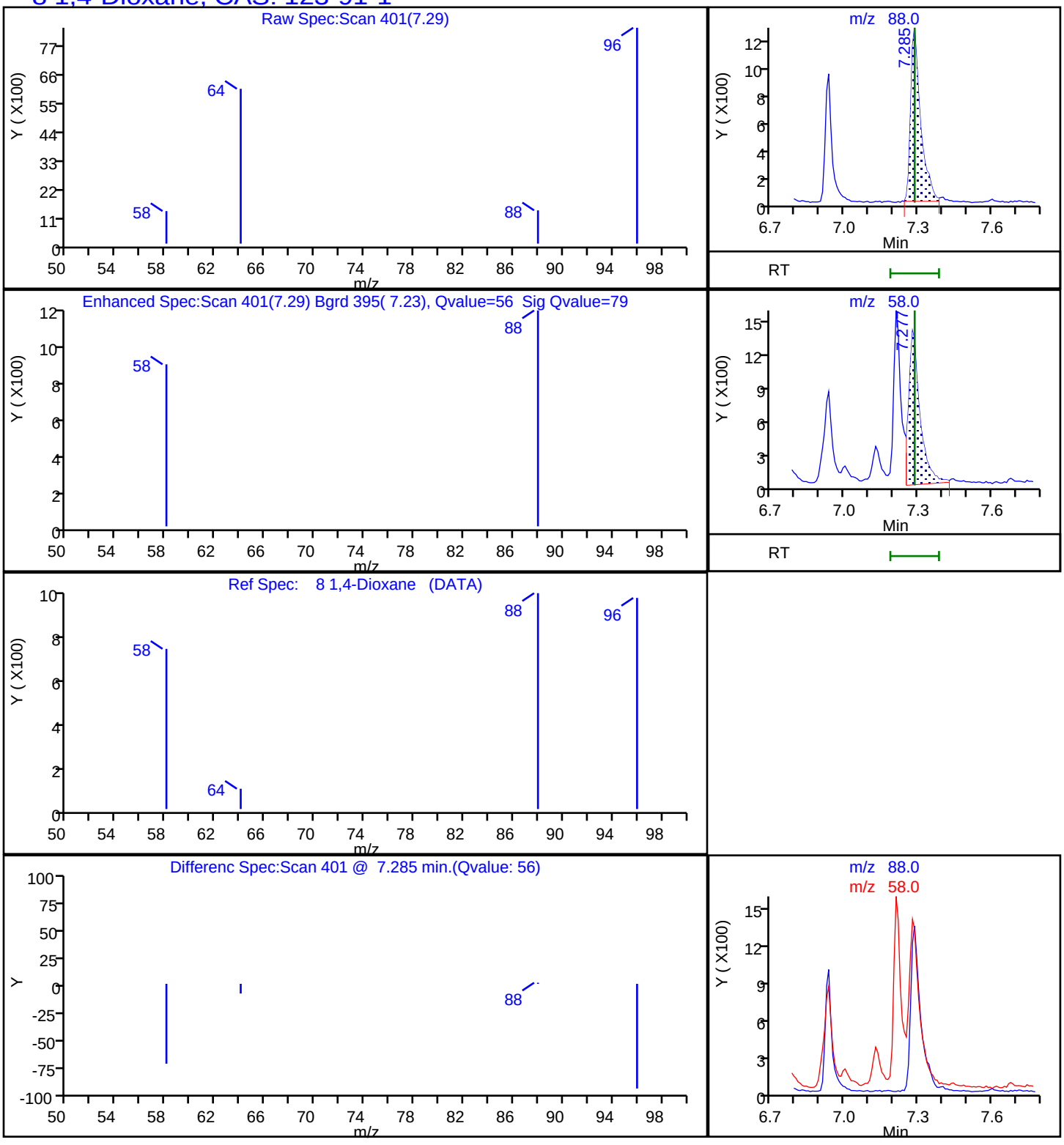
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.2	84.38

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189067.D

Injection Date:	14-Jun-2021 21:27:30	Instrument ID:	A3UX18		
Lims ID:	240-151104-B-5	Lab Sample ID:	240-151104-5		
Client ID:	SL-8_061021				
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: SL-9_061021 Lab Sample ID: 240-151104-6

Matrix: Water Lab File ID: 189068.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 10:45

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 21:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.8		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189068.D				
Lims ID:	240-151104-B-6				
Client ID:	SL-9_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:52:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-013				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:35		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	727544	10.1	
* 7 Fluorobenzene	96	6.579	6.578	0.001	100	2908597	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.235	0.000	98	88919	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	47	1834	2.77	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

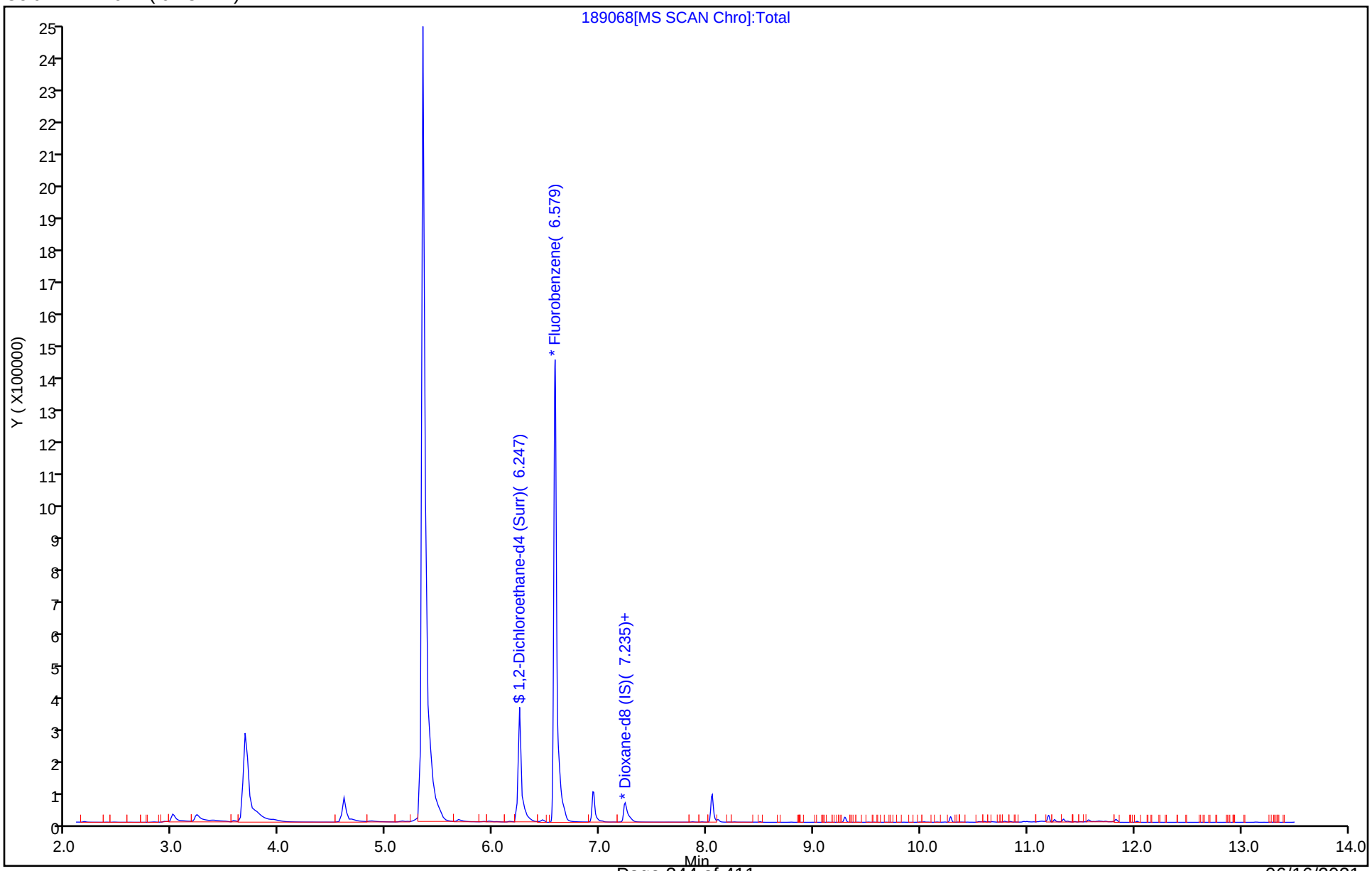
Report Date: 15-Jun-2021 11:59:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189068.D

Injection Date:	14-Jun-2021 21:52:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-6	Lab Sample ID:	240-151104-6	Worklist Smp#:	13
Client ID:	SL-9_061021				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189068.D				
Lims ID:	240-151104-B-6				
Client ID:	SL-9_061021				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 21:52:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-013				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:35

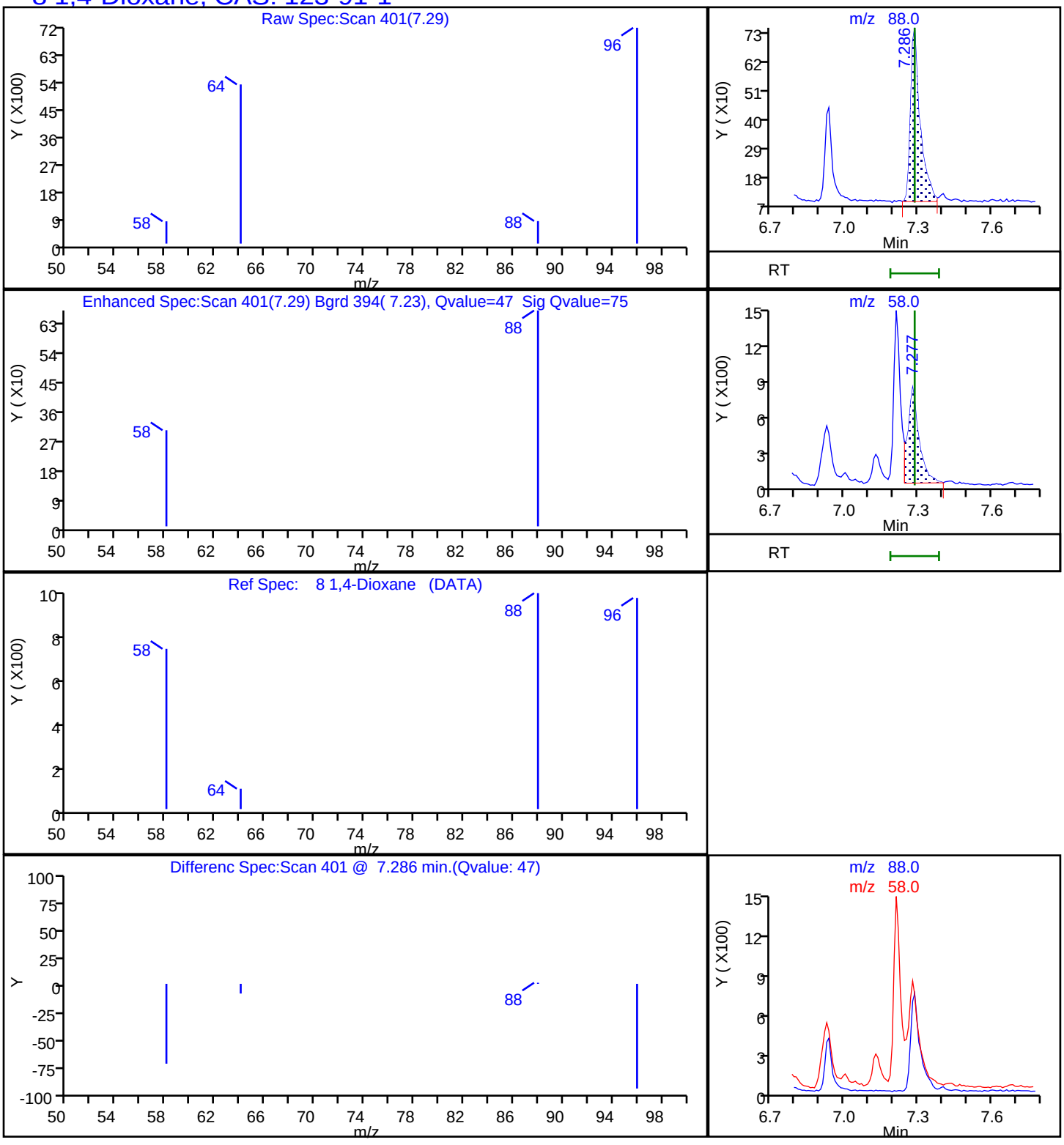
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.1	83.64

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189068.D

Injection Date:	14-Jun-2021 21:52:30	Instrument ID:	A3UX18		
Lims ID:	240-151104-B-6	Lab Sample ID:	240-151104-6		
Client ID:	SL-9_061021				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-151104-7

Matrix: Water Lab File ID: 189069.D

Analysis Method: 8260B SIM Date Collected: 06/10/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 22:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189069.D				
Lims ID:	240-151104-B-7				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 22:17:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-014				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:39		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	756734	10.7	
* 7 Fluorobenzene	96	6.577	6.578	-0.001	100	2868171	12.1	
* 9 Dioxane-d8 (IS)	96	7.234	7.235	-0.001	97	88866	242.7	
8 1,4-Dioxane	88	7.284	7.286	-0.002	50	3101	5.08	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

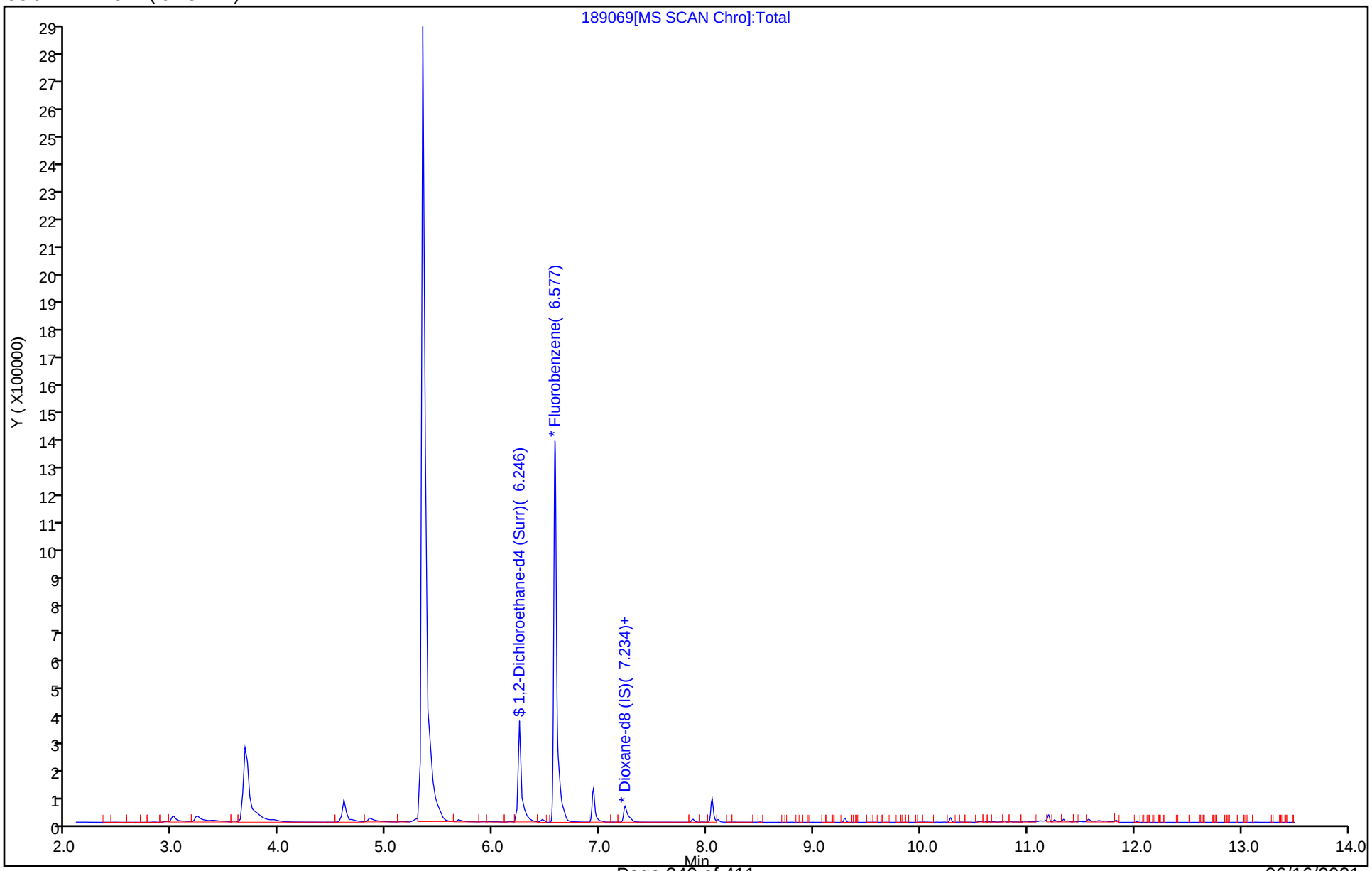
Report Date: 15-Jun-2021 11:59:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189069.D

Injection Date:	14-Jun-2021 22:17:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-151104-B-7	Lab Sample ID:	240-151104-7	Worklist Smp#:	14
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189069.D				
Lims ID:	240-151104-B-7				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	14-Jun-2021 22:17:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-014				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:39

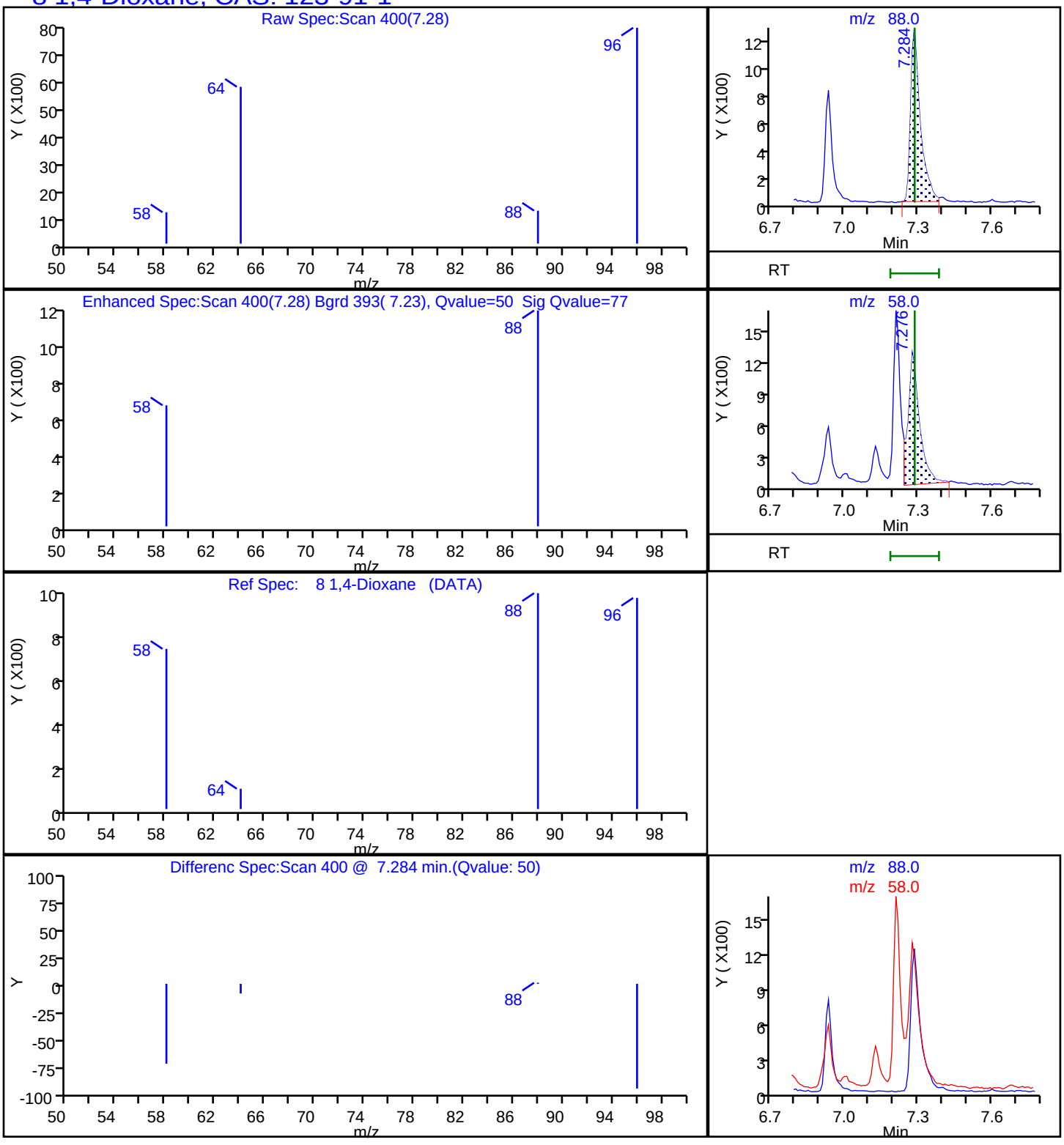
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.7	88.22

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189069.D

Injection Date:	14-Jun-2021 22:17:30	Instrument ID:	A3UX18		
Lims ID:	240-151104-B-7	Lab Sample ID:	240-151104-7		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 481075

SDG No.:

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/14/2021 09:51 Calibration End Date: 04/14/2021 12:45 Calibration ID: 61064

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-481075/3	188196.D
Level 2	IC 240-481075/4	188197.D
Level 3	IC 240-481075/5	188198.D
Level 4	IC 240-481075/6	188199.D
Level 5	ICIS 240-481075/7	188200.D
Level 6	IC 240-481075/8	188201.D
Level 7	IC 240-481075/9	188202.D
Level 8	IC 240-481075/10	188203.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	2.5156 1.5308	1.8504 1.5151	1.6195 1.5003	1.5487	1.5112	Lin1	0.8519	1.4982							1.0000		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3023	0.3112 0.2870	0.2919 0.3033	0.3011	0.2967	Ave		0.2991				2.7		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1 Analy Batch No.: 481075

SDG No.:

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/14/2021 09:51 Calibration End Date: 04/14/2021 12:45 Calibration ID: 61064

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-481075/3	188196.D
Level 2	IC 240-481075/4	188197.D
Level 3	IC 240-481075/5	188198.D
Level 4	IC 240-481075/6	188199.D
Level 5	ICIS 240-481075/7	188200.D
Level 6	IC 240-481075/8	188201.D
Level 7	IC 240-481075/9	188202.D
Level 8	IC 240-481075/10	188203.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Lin1	1133 33757	1739 75065	3787 144898	7158	12673	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 1136964	49404 2509385	110603 5224656	231025	438977	+++++ 12.5	0.500 25.0	1.25 50.0	2.50	5.00

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188196.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Apr-2021 09:51:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-003
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:30 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 10:15:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.246	0.000	100	26514	0.2500	0.2863	
* 7 Fluorobenzene	96	6.579	6.577	0.002	100	3757285	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.236	7.234	0.002	97	109294	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.285	0.001	54	1133	1.00	1.11	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246 Amount Added: 0.15 Units: uL
vm25UX18SS_00002 Amount Added: 0.15 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

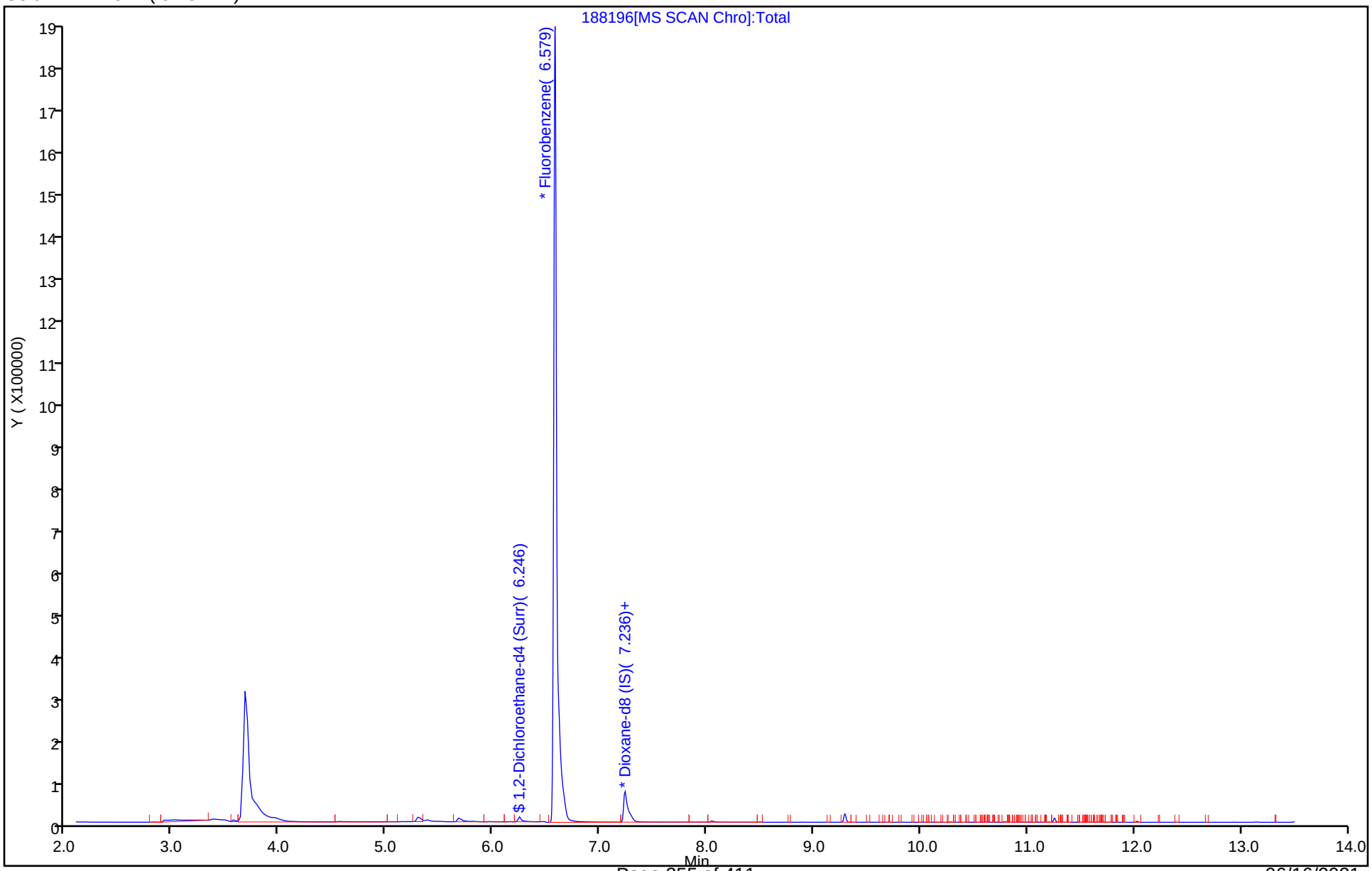
Report Date: 15-Apr-2021 09:30:30 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188196.D

Injection Date:	14-Apr-2021 09:51:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188197.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Apr-2021 10:16:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-004
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:31 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 10:34:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.246	0.000	100	49404	0.5000	0.5202	
* 7 Fluorobenzene	96	6.577	6.577	0.000	100	3852917	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.236	7.234	0.002	98	114030	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.285	0.001	56	1739	2.00	1.90	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246 Amount Added: 0.30 Units: uL
vm25UX18SS_00002 Amount Added: 0.30 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

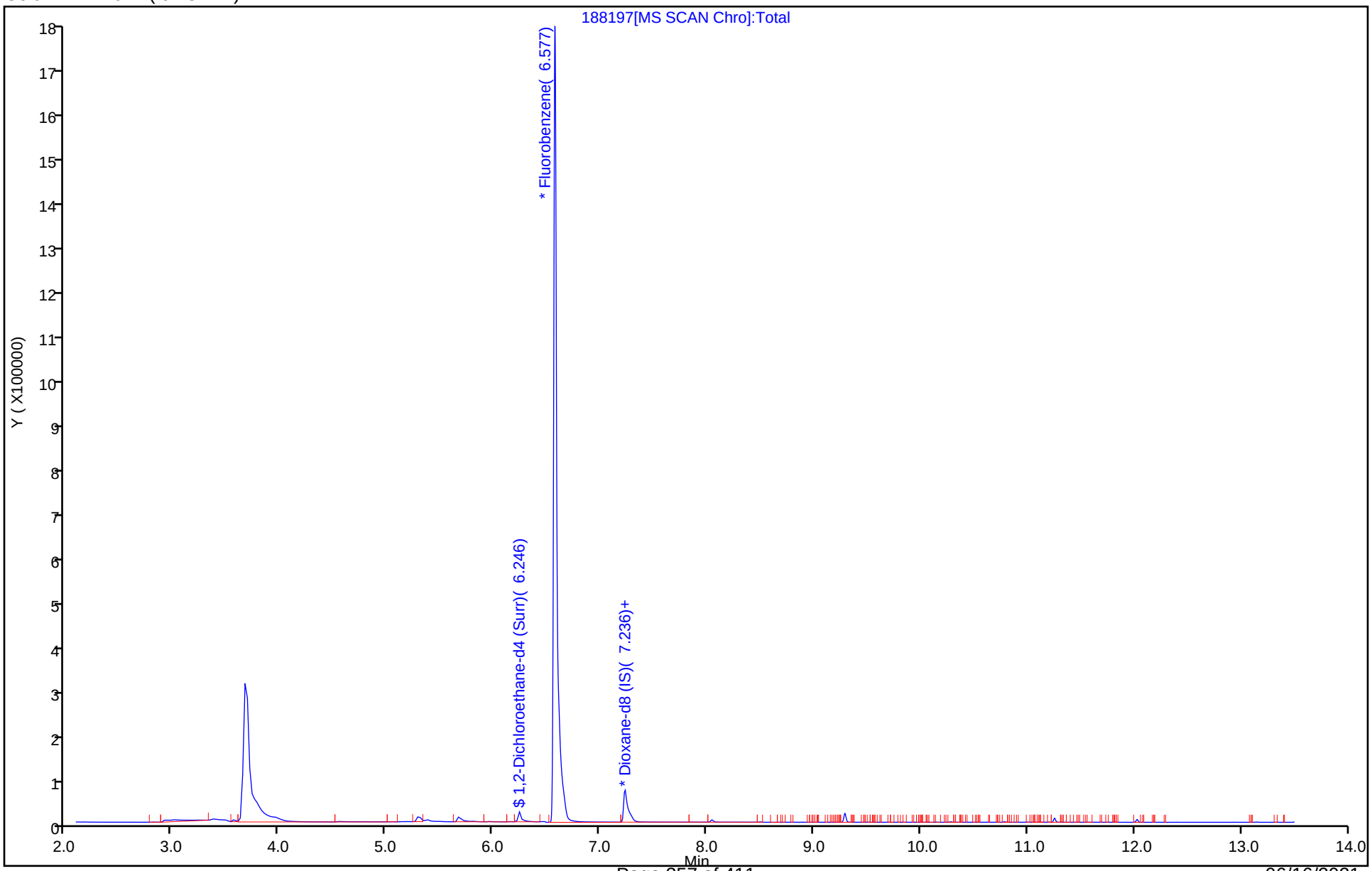
Report Date: 15-Apr-2021 09:30:31 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188197.D

Injection Date:	14-Apr-2021 10:16:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188198.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Apr-2021 10:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-005
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:31 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 11:08:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.246	0.001	100	110603	1.25	1.22	
* 7 Fluorobenzene	96	6.580	6.577	0.003	100	3677535	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.234	0.001	96	113488	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	54	3787	5.00	4.84	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246 Amount Added: 0.75 Units: uL
vm25UX18SS_00002 Amount Added: 0.75 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

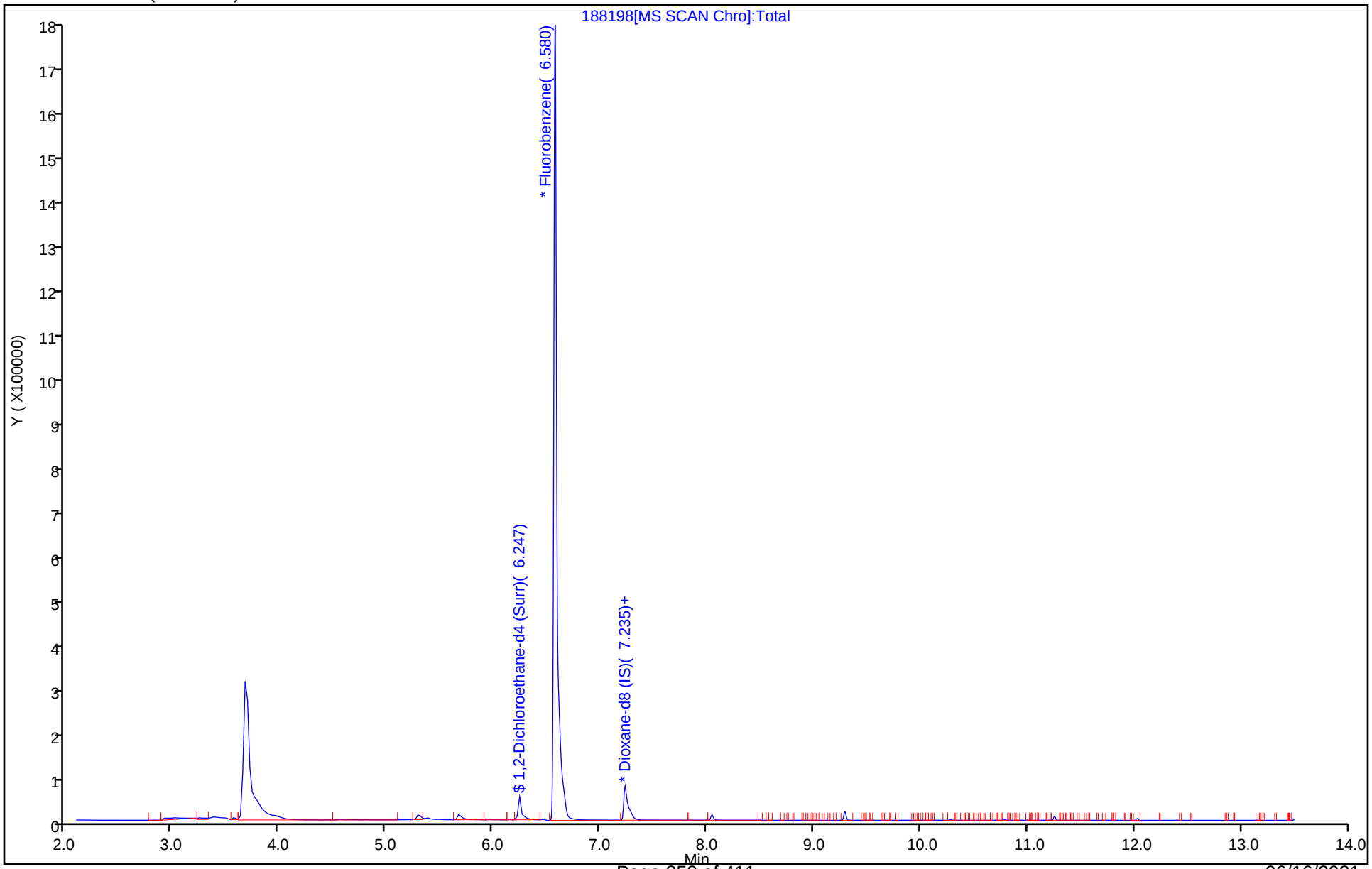
Report Date: 15-Apr-2021 09:30:31 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188198.D

Injection Date:	14-Apr-2021 10:40:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



06/16/2021

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188199.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Apr-2021 11:05:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-006
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:32 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 11:22:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.246	0.000	100	231025	2.50	2.52	
* 7 Fluorobenzene	96	6.578	6.577	0.001	100	3724301	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.234	7.234	0.000	97	112162	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	53	7158	10.0	9.77	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246 Amount Added: 1.50 Units: uL
vm25UX18SS_00002 Amount Added: 1.50 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

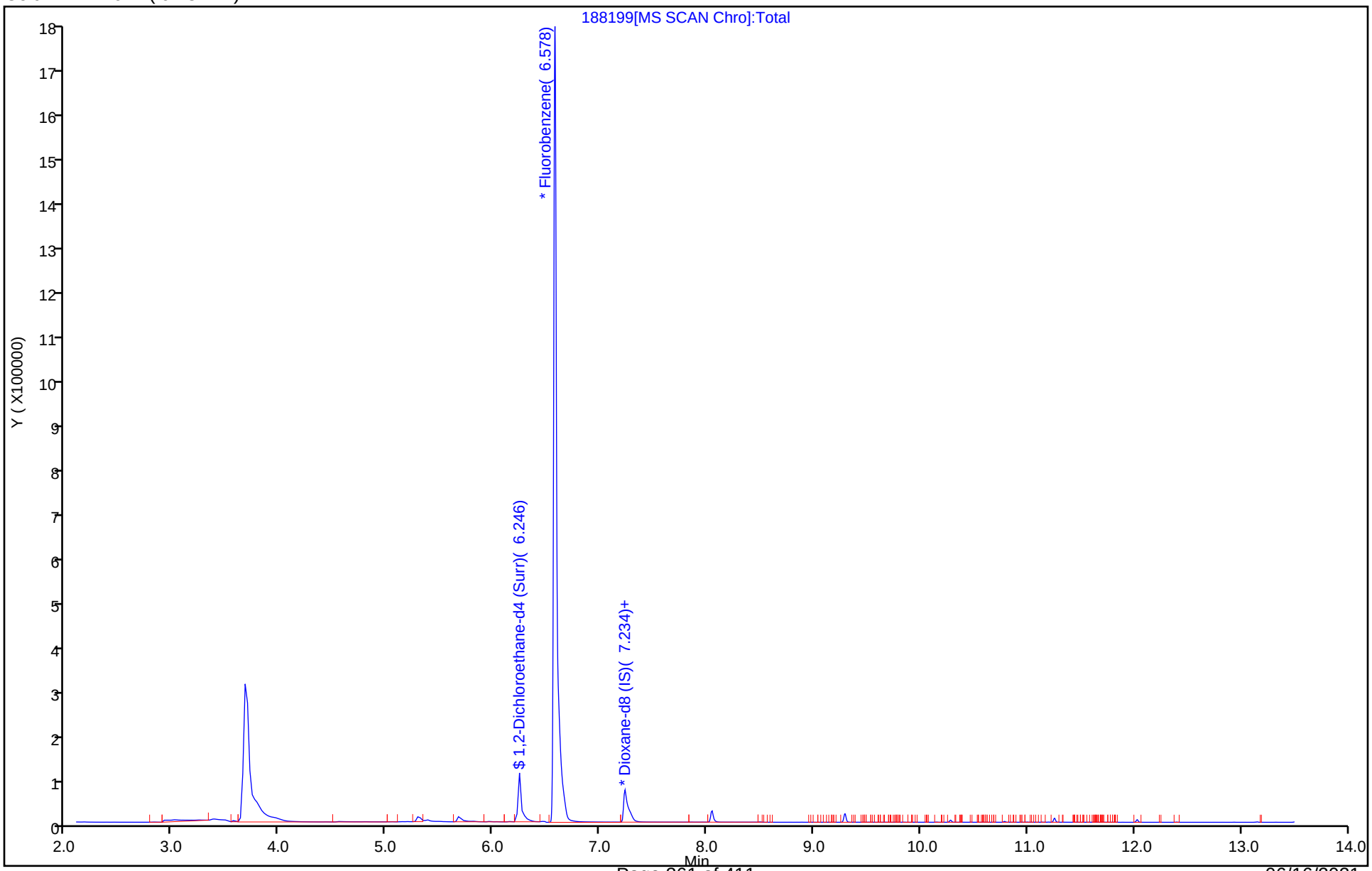
Report Date: 15-Apr-2021 09:30:32 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188199.D

Injection Date:	14-Apr-2021 11:05:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188200.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 14-Apr-2021 11:30:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-007
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:32 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 11:52:03

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.246	0.000	100	438977	5.00	4.96	
*	7 Fluorobenzene	96	6.577	6.577	0.000	100	3589881	12.1	12.1	
*	9 Dioxane-d8 (IS)	96	7.234	7.234	0.000	96	101751	242.7	242.7	
	8 1,4-Dioxane	88	7.285	7.285	0.000	53	12673	20.0	19.6	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00002 Amount Added: 3.00 Units: uL
vmdioxanew_00246 Amount Added: 3.00 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

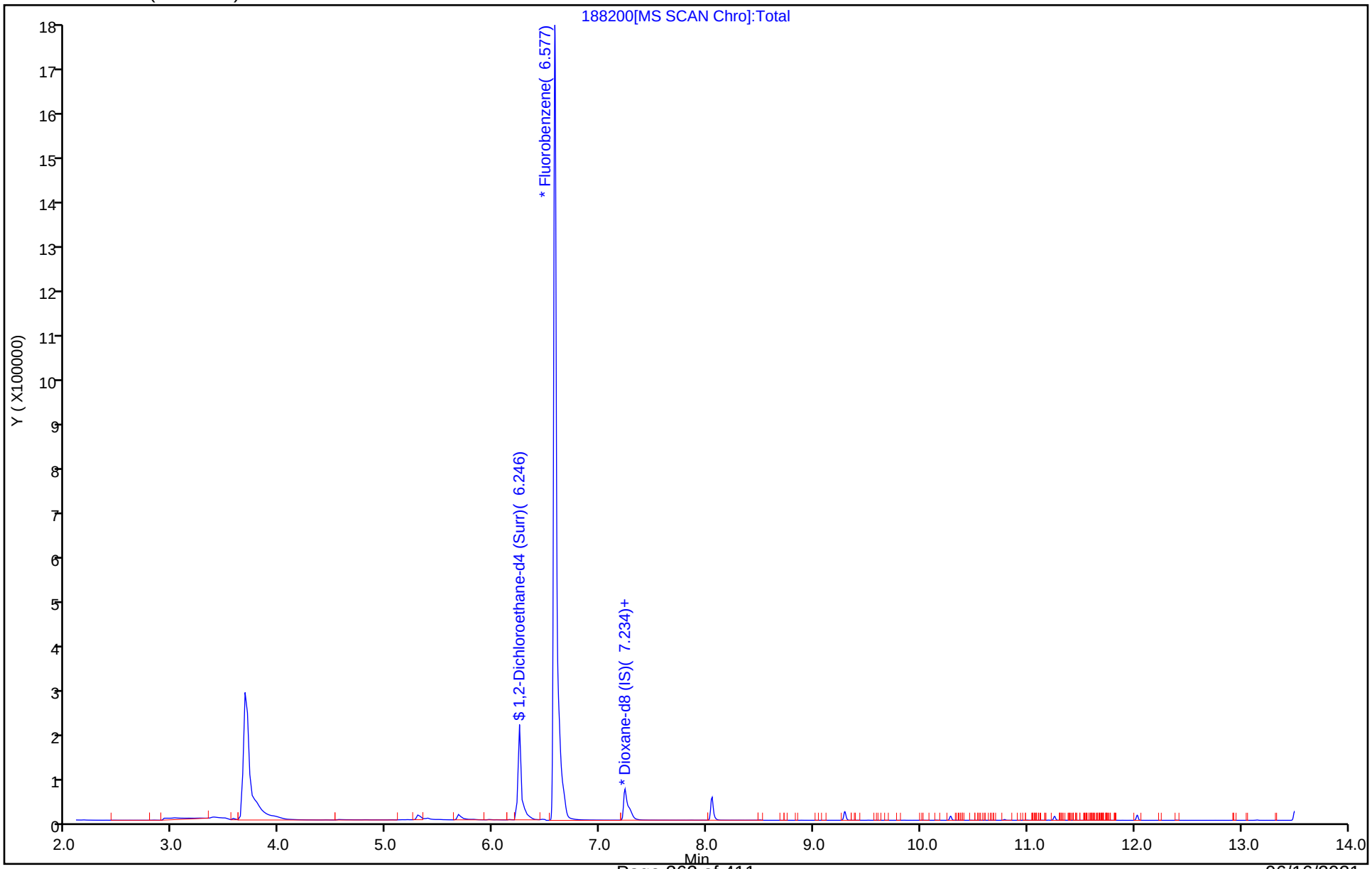
Report Date: 15-Apr-2021 09:30:32 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188200.D

Injection Date:	14-Apr-2021 11:30:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	icis			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Apr-2021 11:55:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-008
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:33 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 12:47:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.246	0.001	100	1136964	12.5	12.6	
*	7 Fluorobenzene	96	6.578	6.577	0.001	100	3651004	12.1	12.1	
*	9 Dioxane-d8 (IS)	96	7.235	7.234	0.001	96	107026	242.7	242.7	
	8 1,4-Dioxane	88	7.286	7.285	0.001	52	33757	50.0	50.5	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246 Amount Added: 7.50 Units: uL
vm25UX18SS_00002 Amount Added: 7.50 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

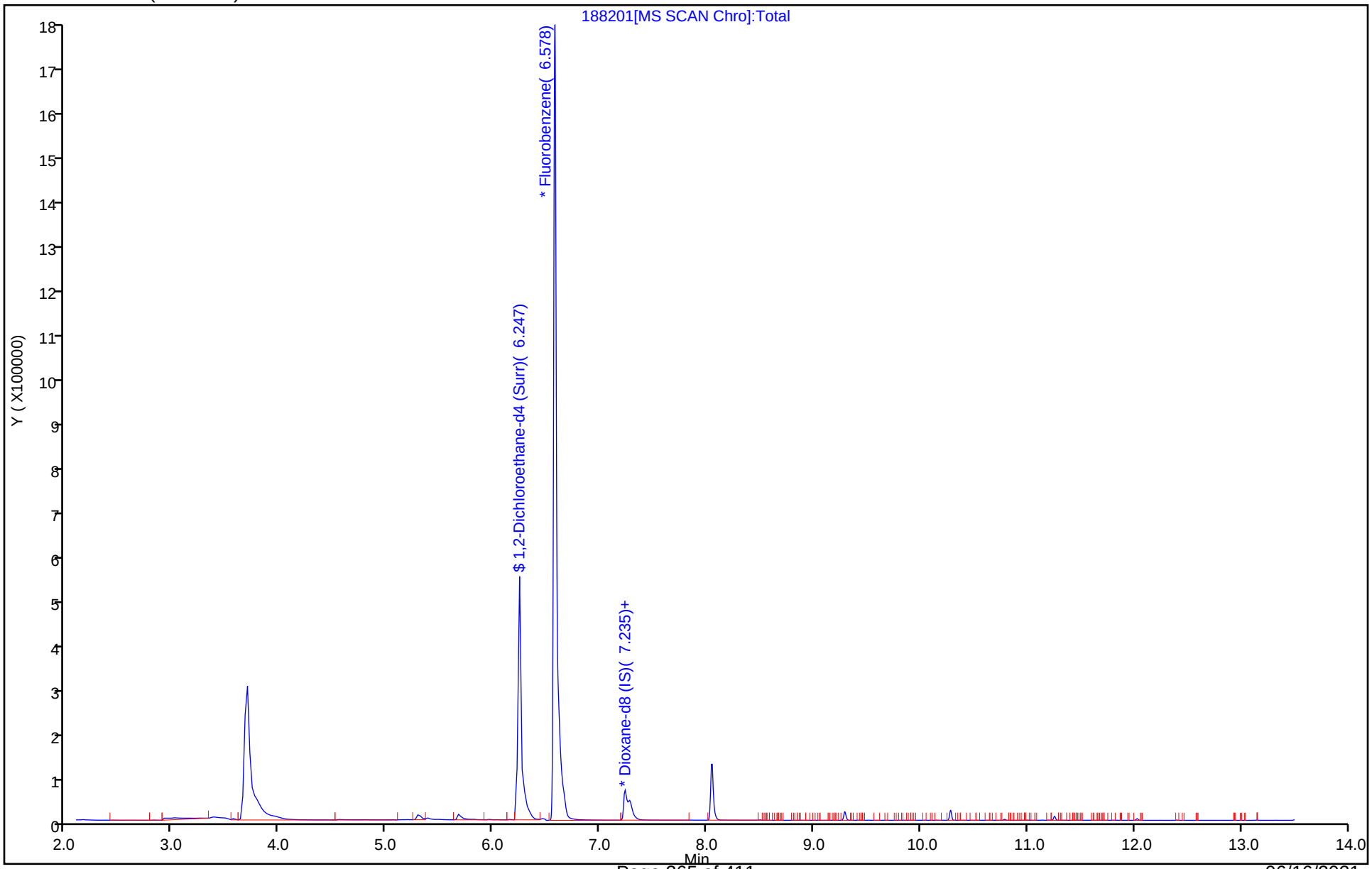
Report Date: 15-Apr-2021 09:30:33 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188201.D

Injection Date:	14-Apr-2021 11:55:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188202.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-Apr-2021 12:20:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-009
Operator ID: 002808 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:30:33 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 12:48:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.246	0.001	100	2509385	25.0	24.0	
* 7 Fluorobenzene	96	6.579	6.577	0.001	100	4243567	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.234	0.001	96	120229	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.285	0.001	54	75065	100.0	100.6	

QC Flag Legend

Processing Flags

Reagents:

vm25UX18SS_00002 Amount Added: 15.00 Units: uL
vmdioxanew_00246 Amount Added: 15.00 Units: uL
vm25UX18IS_00002 Amount Added: 7.28 Units: uL

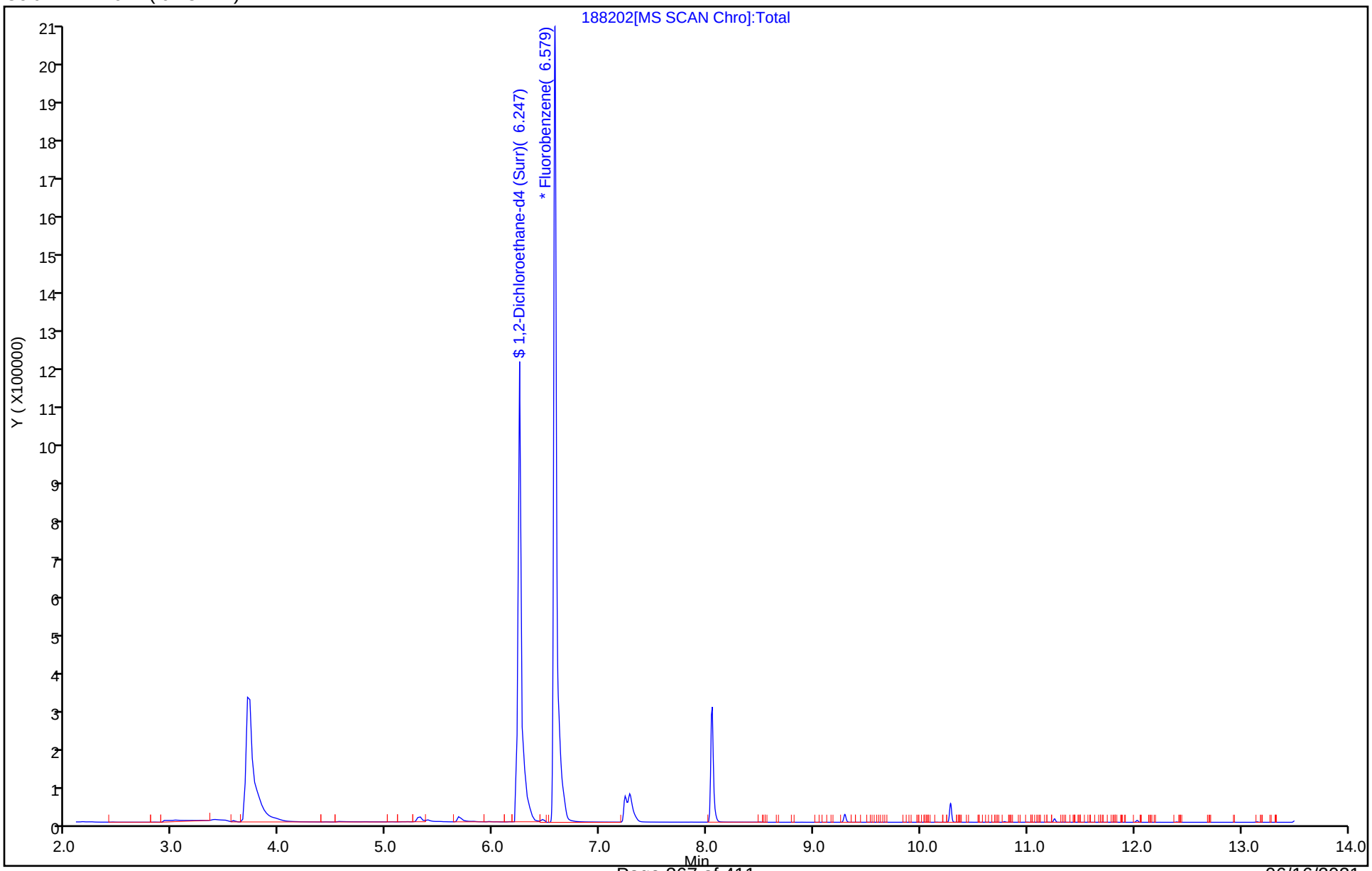
Report Date: 15-Apr-2021 09:30:33 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188202.D

Injection Date:	14-Apr-2021 12:20:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



06/16/2021

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	14-Apr-2021 12:45:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0108204-010				
Operator ID:	002808	Instrument ID:	A3UX18		
Sublist:	chrom-8260SIM_18*sub6				
Method:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Apr-2021 09:30:34	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1630				
First Level Reviewer: macenczaks		Date:	14-Apr-2021 13:19:46		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.246	-0.001	100	5224656	50.0	50.7	
* 7 Fluorobenzene	96	6.577	6.577	0.000	100	4180381	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.234	0.001	95	117187	242.7	242.7	
8 1,4-Dioxane	88	7.277	7.285	-0.008	53	144898	200.0	199.7	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00246	Amount Added:	30.00	Units: uL
vm25UX18SS_00002	Amount Added:	30.00	Units: uL
vm25UX18IS_00002	Amount Added:	7.28	Units: uL

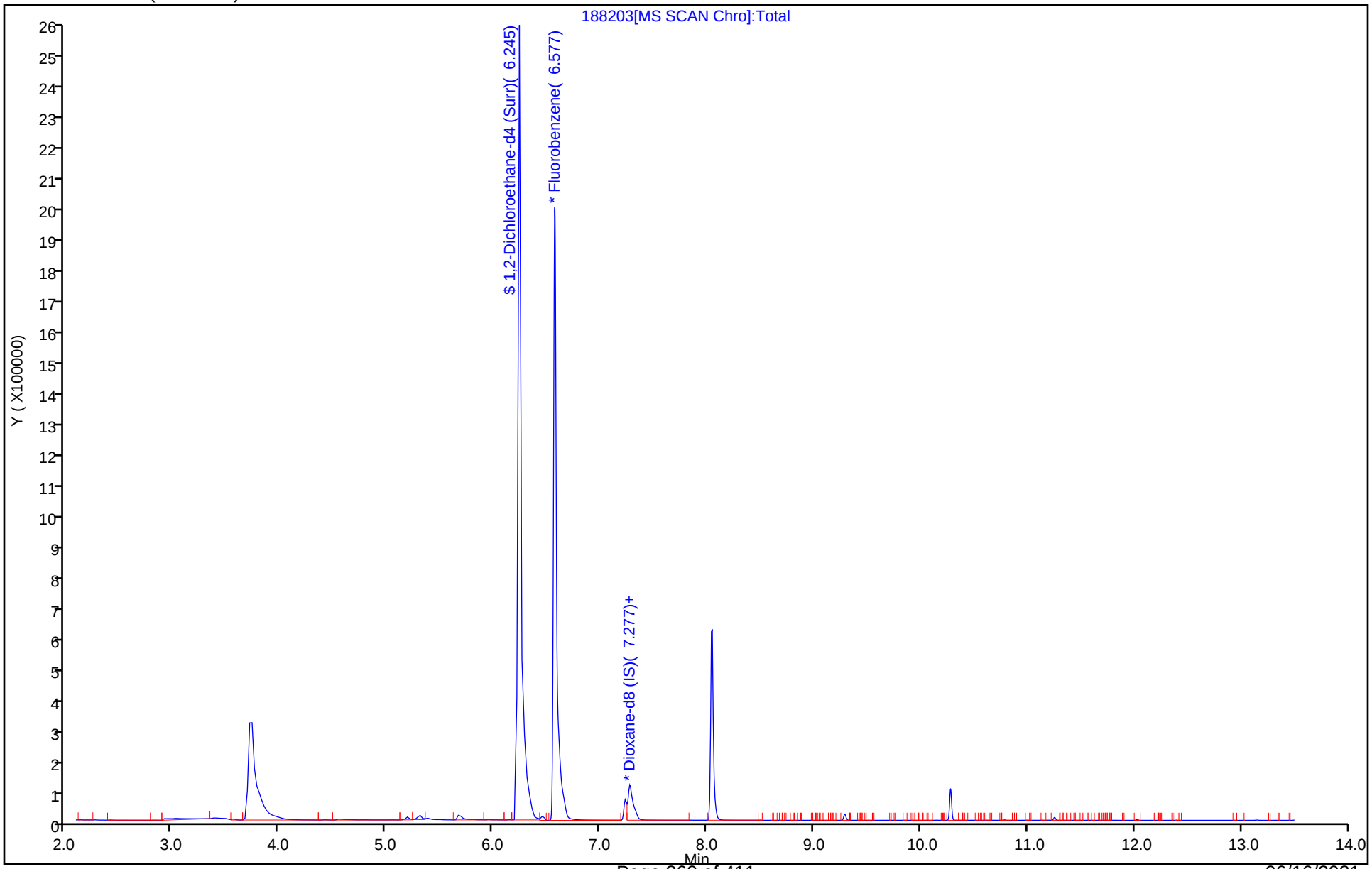
Report Date: 15-Apr-2021 09:30:34 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Injection Date:	14-Apr-2021 12:45:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



06/16/2021

Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

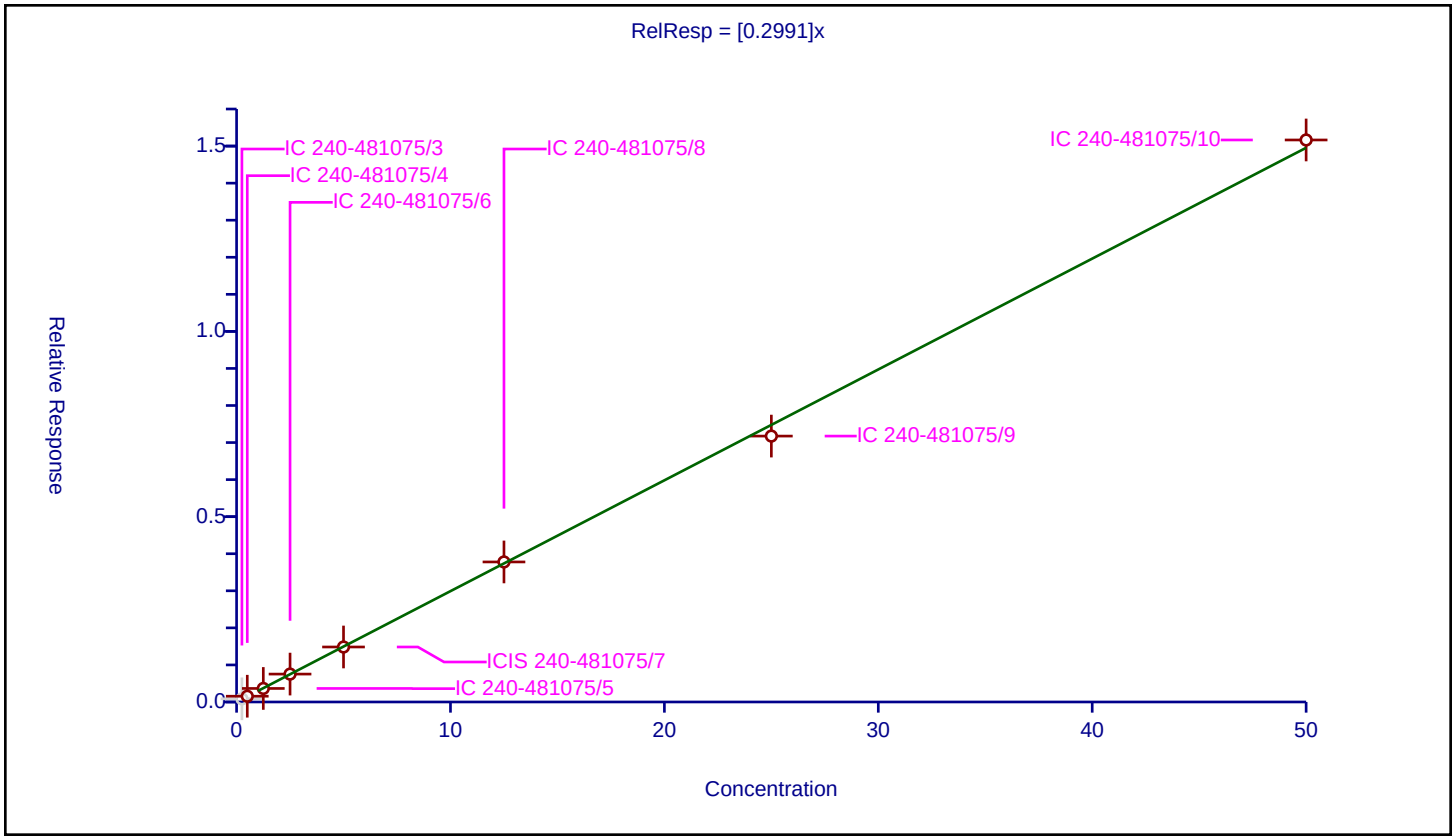
Curve Coefficients

Intercept:	0
Slope:	0.2991

Error Coefficients

Standard Error:	2420000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-481075/3	0.25	0.085621	12.133333	3757285.0	0.342485	N
2	IC 240-481075/4	0.5	0.15558	12.133333	3852917.0	0.311159	Y
3	IC 240-481075/5	1.25	0.364914	12.133333	3677535.0	0.291931	Y
4	IC 240-481075/6	2.5	0.752652	12.133333	3724301.0	0.301061	Y
5	ICIS 240-481075/7	5.0	1.483685	12.133333	3589881.0	0.296737	Y
6	IC 240-481075/8	12.5	3.778457	12.133333	3651004.0	0.302277	Y
7	IC 240-481075/9	25.0	7.174908	12.133333	4243567.0	0.286996	Y
8	IC 240-481075/10	50.0	15.164286	12.133333	4180381.0	0.303286	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

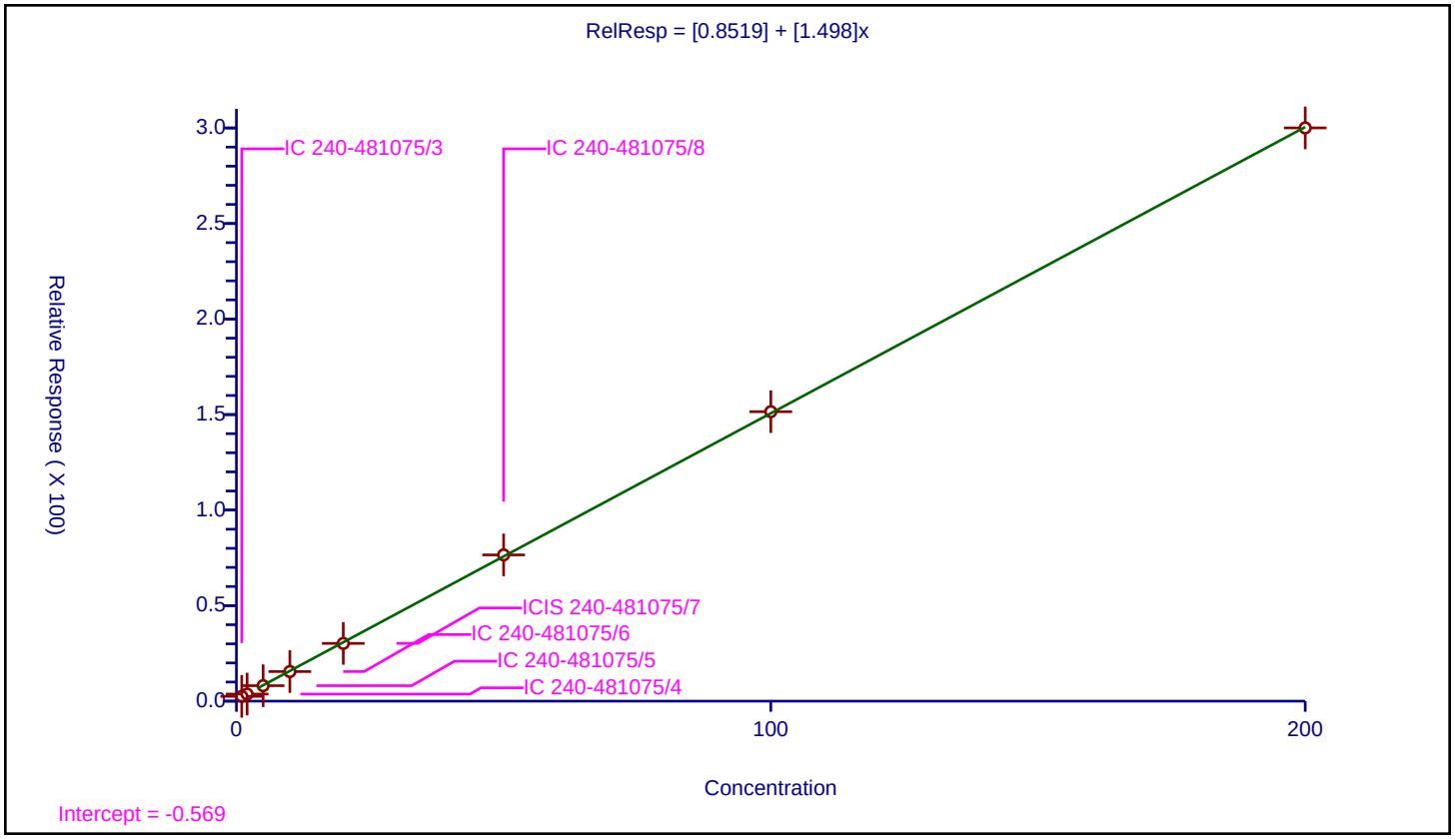
Curve Coefficients

Intercept:	0.8519
Slope:	1.498

Error Coefficients

Standard Error:	68200
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-481075/3	1.0	2.515612	242.666667	109294.0	2.515612	Y
2	IC 240-481075/4	2.0	3.700757	242.666667	114030.0	1.850379	Y
3	IC 240-481075/5	5.0	8.097584	242.666667	113488.0	1.619517	Y
4	IC 240-481075/6	10.0	15.4866	242.666667	112162.0	1.54866	Y
5	ICIS 240-481075/7	20.0	30.223926	242.666667	101751.0	1.511196	Y
6	IC 240-481075/8	50.0	76.539333	242.666667	107026.0	1.530787	Y
7	IC 240-481075/9	100.0	151.508981	242.666667	120229.0	1.51509	Y
8	IC 240-481075/10	200.0	300.049619	242.666667	117187.0	1.500248	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: ICV 240-481075/12 Calibration Date: 04/14/2021 13:35

Instrument ID: A3UX18 Calib Start Date: 04/14/2021 09:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/14/2021 12:45

Lab File ID: 188205.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		1.594		0.0101	0.0100	0.7	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2991	0.2497		0.0101	0.0121	-16.5	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188205.D				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	14-Apr-2021 13:35:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0108204-012				
Operator ID:	002808	Instrument ID:	A3UX18		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Apr-2021 09:38:45	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1630				
First Level Reviewer: macenczaks		Date:	14-Apr-2021 13:53:51		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.246	0.000	100	966811	12.1	10.1	
* 7 Fluorobenzene	96	6.579	6.577	0.002	100	3872221	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.234	0.001	96	115275	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	53	7570	10.0	10.1	

QC Flag Legend

Processing Flags

Reagents:

vmdiox_spike_00258	Amount Added:	3.00	Units: uL	
vm25UX18SS_00002	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00002	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

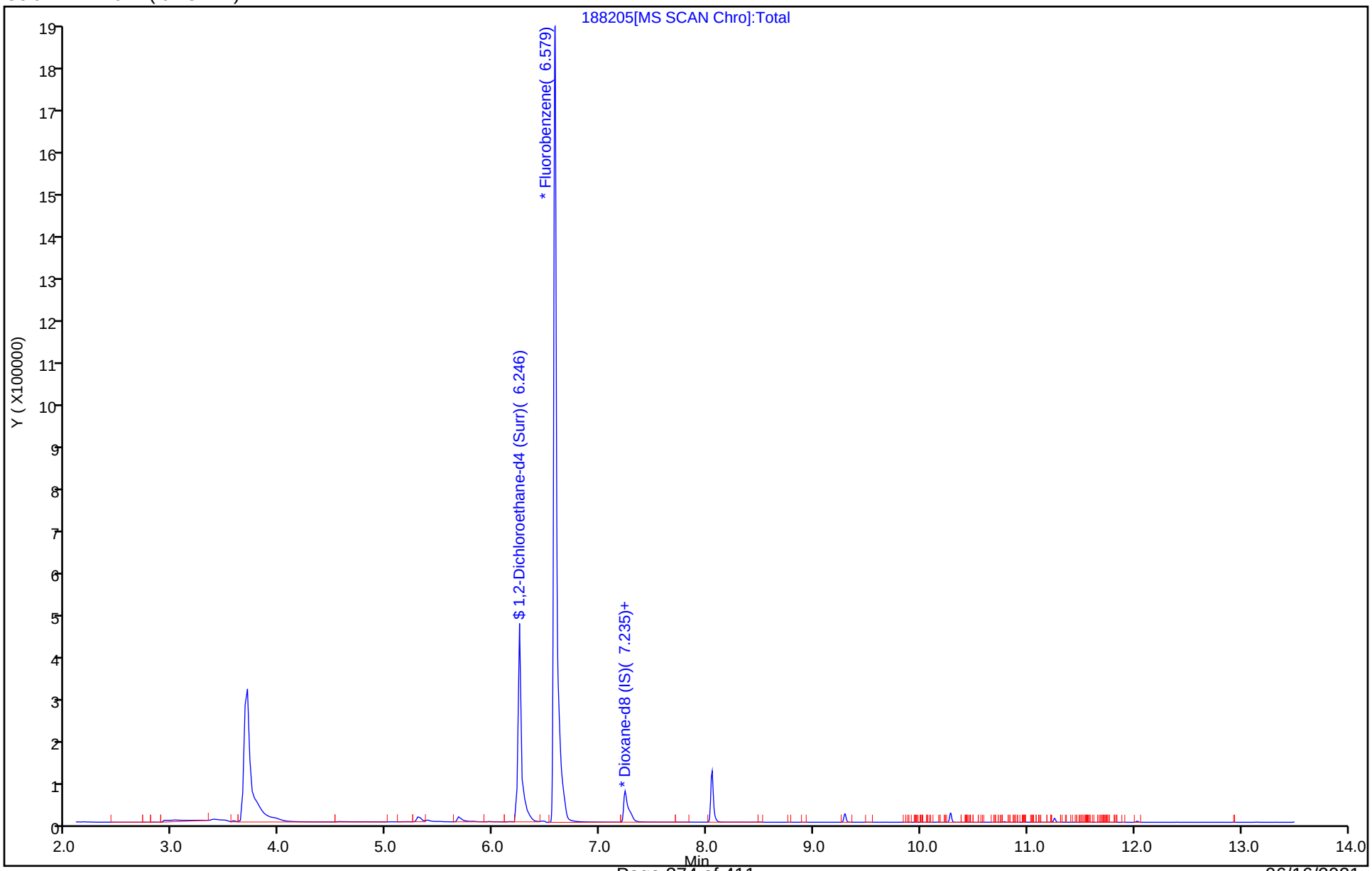
Report Date: 15-Apr-2021 09:38:46 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188205.D

Injection Date:	14-Apr-2021 13:35:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	icv			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Lab Sample ID: CCVIS 240-490579/3 Calibration Date: 06/14/2021 17:45

Instrument ID: A3UX18 Calib Start Date: 04/14/2021 09:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/14/2021 12:45

Lab File ID: 189058.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		1.552		0.0202	0.0200	0.8	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2991	0.2324		0.00943	0.0121	-22.3	35.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189058.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Jun-2021 17:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110246-003
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Jun-2021 11:59:12 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	744526	12.1	9.43	
*	7 Fluorobenzene	96	6.578	6.578	0.000	100	3203978	12.1	12.1	
*	9 Dioxane-d8 (IS)	96	7.235	7.235	0.000	100	91344	242.7	242.7	
	8 1,4-Dioxane	88	7.286	7.286	0.000	55	11687	20.0	20.2	

Reagents:

vmdioxanew_00253	Amount Added: 3.00	Units: uL	
vm25UX18SS_00003	Amount Added: 7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added: 7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added: 0.00	Units:	Run Reagent

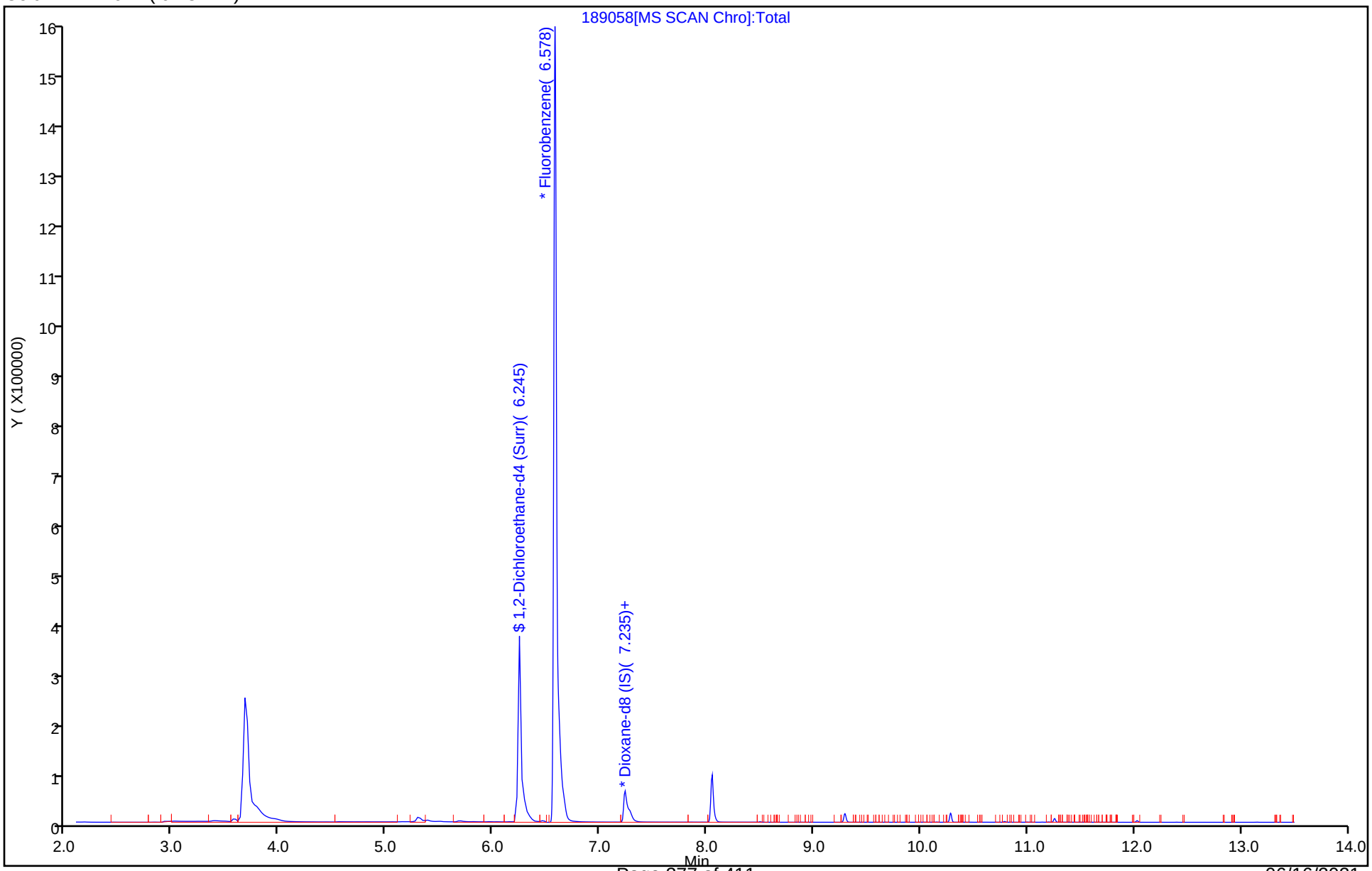
Report Date: 15-Jun-2021 11:59:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189058.D

Injection Date:	14-Jun-2021 17:45:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ccvis			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\BFB18981.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 14-Apr-2021 09:05:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0108204-001
Operator ID: 002808 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Apr-2021 09:38:45 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1630

First Level Reviewer: macenczaks Date: 14-Apr-2021 13:19:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.616	3.616	0.000	0	1117506	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

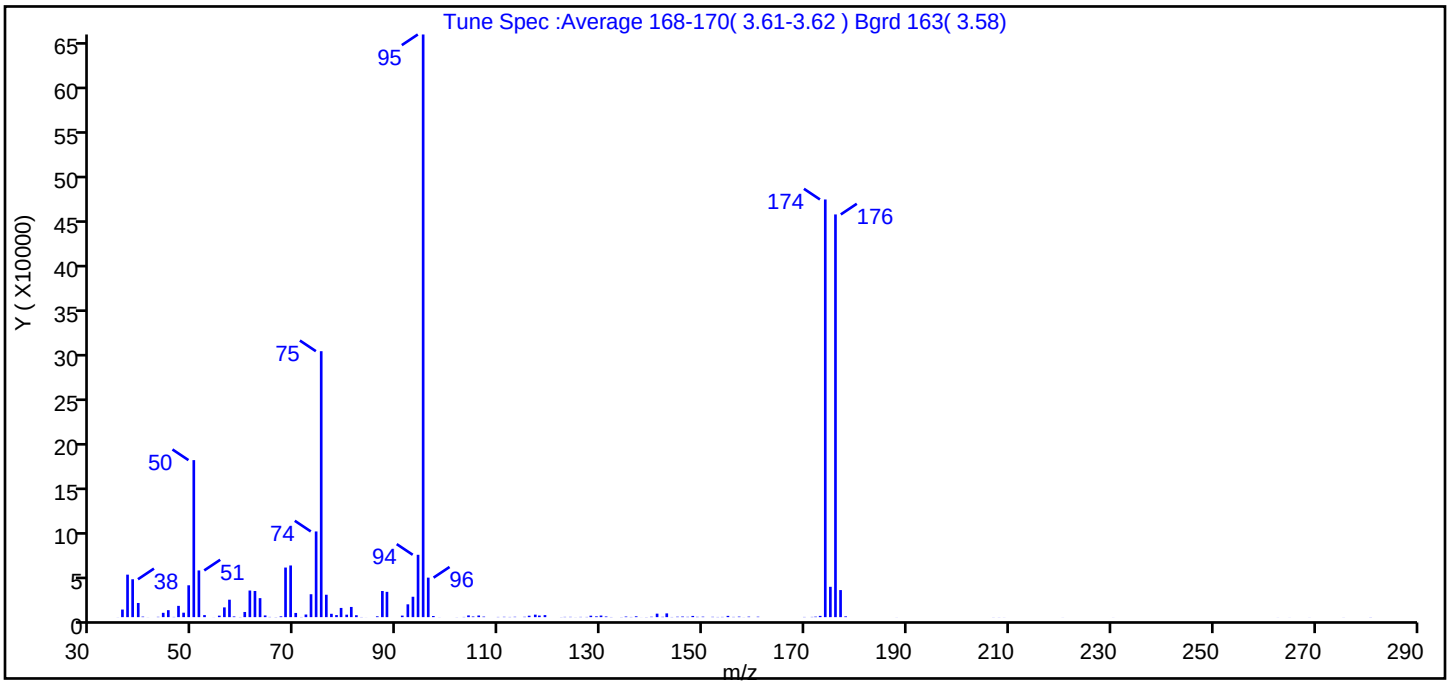
vmbfb_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\BFB18981.D
Injection Date: 14-Apr-2021 09:05:30 Instrument ID: A3UX18
Lims ID: bfb
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_18 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.9
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	71.7
175	5 to 9% of m/z 174	5.2 (7.3)
176	Greater than 95% but less than 101% of m/z 174	69.1 (96.4)
177	5 to 9% of m/z 176	4.6 (6.7)

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\BFB18981.D\8260SIM_18.rslt\spectra.d
Injection Date: 14-Apr-2021 09:05:30
Spectrum: Tune Spec :Average 168-170(3.61-3.62) Bgrd 163(3.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	76	70.00	4726	111.00	377	148.00	1366
36.00	8547	71.00	188	112.00	232	149.00	351
37.00	47792	72.00	2955	113.00	405	150.00	538
38.00	42608	73.00	25768	115.00	403	152.00	356
39.00	15933	74.00	96376	116.00	1616	153.00	209
40.00	598	75.00	299072	117.00	2787	154.00	267
41.00	74	76.00	25192	118.00	1772	155.00	1427
43.00	349	77.00	3767	119.00	2279	156.00	274
44.00	4871	78.00	2315	122.00	120	157.00	598
45.00	7841	79.00	10351	123.00	289	158.00	75
46.00	251	80.00	2767	124.00	316	159.00	582
47.00	12680	81.00	11462	125.00	84	161.00	508
48.00	5003	82.00	2157	126.00	273	170.00	226
49.00	35816	83.00	172	127.00	230	171.00	278
50.00	176576	84.00	52	128.00	1638	172.00	561
51.00	52528	86.00	948	129.00	893	173.00	1410
52.00	2292	87.00	29392	130.00	1796	174.00	469696
54.00	61	88.00	28448	131.00	751	175.00	34104
55.00	1661	91.00	1721	132.00	174	176.00	452864
56.00	10966	92.00	14419	134.00	141	177.00	30440
57.00	19616	93.00	22928	135.00	682	178.00	858
58.00	783	94.00	70120	136.00	209	188.00	63
59.00	185	95.00	655232	137.00	970	207.00	97
60.00	5811	96.00	44424	138.00	50	208.00	98
61.00	29936	97.00	1259	139.00	154	209.00	66
62.00	29432	98.00	75	140.00	462	220.00	60
63.00	21368	102.00	97	141.00	3945	230.00	56
64.00	1917	103.00	229	142.00	368	263.00	54
65.00	245	104.00	1919	143.00	4229	265.00	53
66.00	156	105.00	738	144.00	187	269.00	61
67.00	896	106.00	1827	145.00	474	276.00	73
68.00	55768	107.00	621	146.00	683	281.00	136
69.00	58104	110.00	240	147.00	360		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	76	70.00	4726	111.00	377	148.00	1366
36.00	8547	71.00	188	112.00	232	149.00	351
37.00	47792	72.00	2955	113.00	405	150.00	538
38.00	42608	73.00	25768	115.00	403	152.00	356
39.00	15933	74.00	96376	116.00	1616	153.00	209
40.00	598	75.00	299072	117.00	2787	154.00	267
41.00	74	76.00	25192	118.00	1772	155.00	1427
43.00	349	77.00	3767	119.00	2279	156.00	274
44.00	4871	78.00	2315	122.00	120	157.00	598
45.00	7841	79.00	10351	123.00	289	158.00	75
46.00	251	80.00	2767	124.00	316	159.00	582
47.00	12680	81.00	11462	125.00	84	161.00	508
48.00	5003	82.00	2157	126.00	273	170.00	226
49.00	35816	83.00	172	127.00	230	171.00	278
50.00	176576	84.00	52	128.00	1638	172.00	561
51.00	52528	86.00	948	129.00	893	173.00	1410
52.00	2292	87.00	29392	130.00	1796	174.00	469696
54.00	61	88.00	28448	131.00	751	175.00	34104
55.00	1661	91.00	1721	132.00	174	176.00	452864
56.00	10966	92.00	14419	134.00	141	177.00	30440
57.00	19616	93.00	22928	135.00	682	178.00	858
58.00	783	94.00	70120	136.00	209	188.00	63
59.00	185	95.00	655232	137.00	970	207.00	97
60.00	5811	96.00	44424	138.00	50	208.00	98
61.00	29936	97.00	1259	139.00	154	209.00	66
62.00	29432	98.00	75	140.00	462	220.00	60
63.00	21368	102.00	97	141.00	3945	230.00	56
64.00	1917	103.00	229	142.00	368	263.00	54
65.00	245	104.00	1919	143.00	4229	265.00	53
66.00	156	105.00	738	144.00	187	269.00	61
67.00	896	106.00	1827	145.00	474	276.00	73
68.00	55768	107.00	621	146.00	683	281.00	136
69.00	58104	110.00	240	147.00	360		

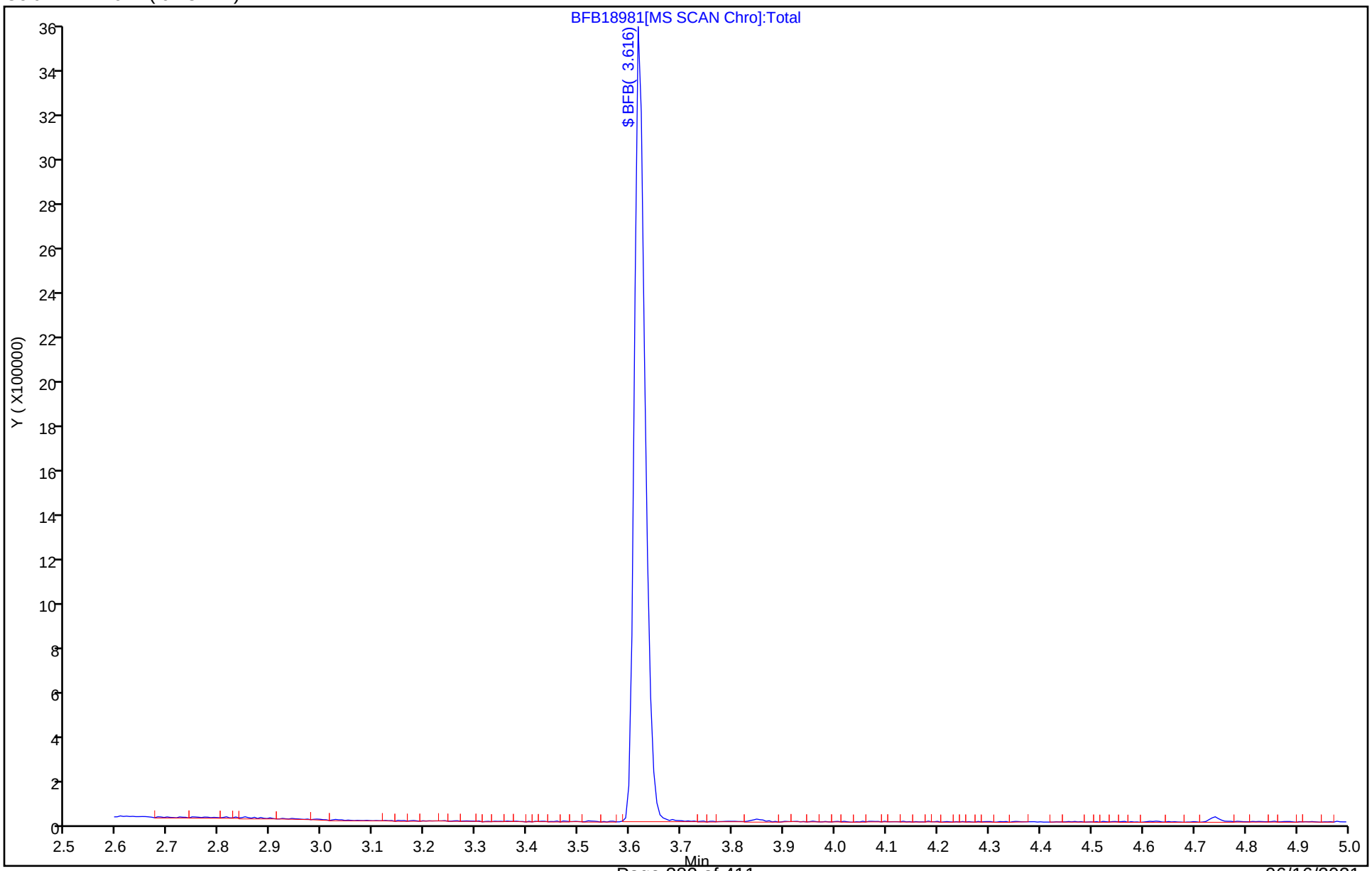
Report Date: 15-Apr-2021 09:38:45 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\BFB18981.D

Injection Date:	14-Apr-2021 09:05:30	Instrument ID:	A3UX18	Operator ID:	002808
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\BFB19020.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	14-Jun-2021 17:05:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-001				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:26	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.616	3.616	0.000	0	871213	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

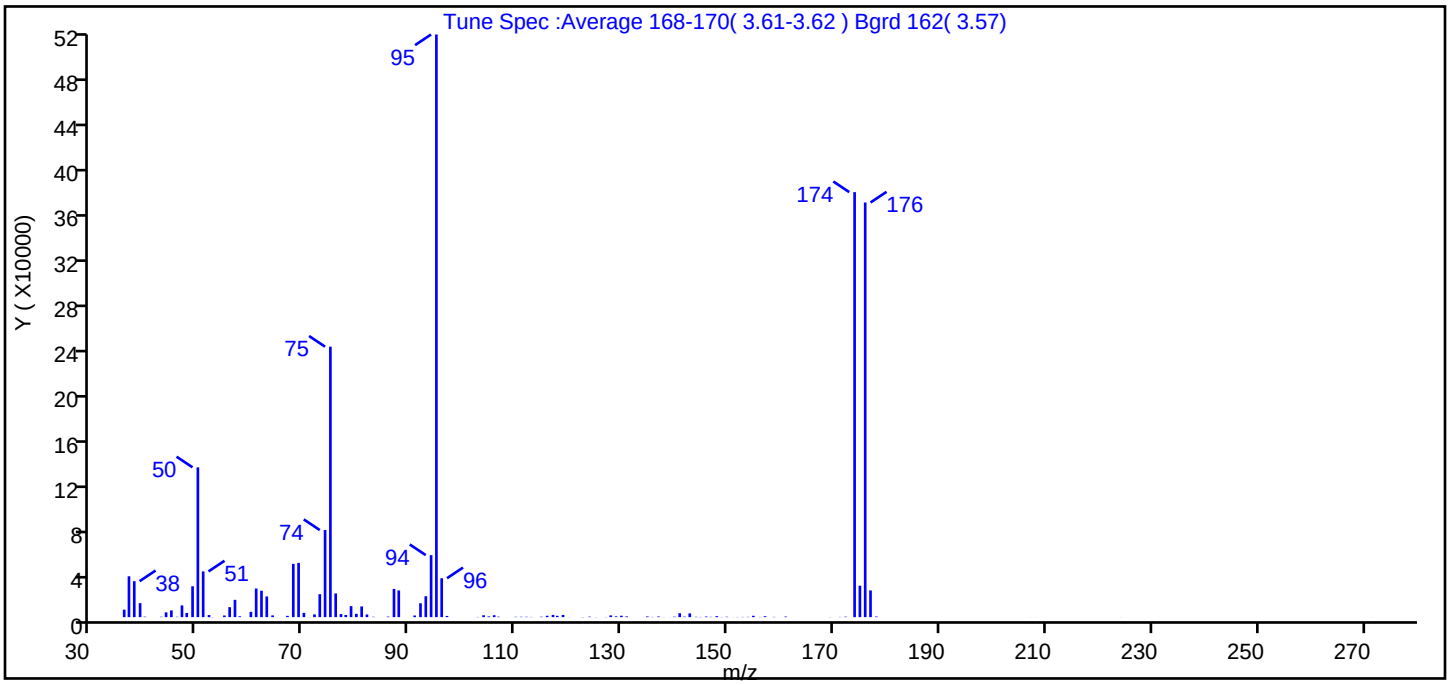
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\BFB19020.D
Injection Date: 14-Jun-2021 17:05:30 Instrument ID: A3UX18
Lims ID: bfb
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_18 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.7
75	30 to 60% of m/z 95	46.4
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	72.9
175	5 to 9% of m/z 174	5.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	71.2 (97.6)
177	5 to 9% of m/z 176	4.6 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\BFB19020.D\8260SIM_18.rslt\spectra.d
Injection Date: 14-Jun-2021 17:05:30
Spectrum: Tune Spec :Average 168-170(3.61-3.62) Bgrd 162(3.57)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6653	69.00	48256	107.00	406	144.00	303
37.00	36360	70.00	3799	110.00	285	145.00	185
38.00	31984	71.00	110	111.00	329	146.00	542
39.00	12478	72.00	2438	112.00	334	147.00	249
40.00	402	73.00	20416	113.00	173	148.00	905
41.00	2	74.00	77472	115.00	375	149.00	162
43.00	337	75.00	240576	116.00	1226	150.00	363
44.00	4261	76.00	21096	117.00	1998	151.00	55
45.00	6001	77.00	2760	118.00	1201	152.00	150
46.00	318	78.00	1908	119.00	1972	153.00	180
47.00	10439	79.00	9813	120.00	71	154.00	247
48.00	3741	80.00	2963	123.00	108	155.00	1209
49.00	27480	81.00	9521	123.00	66	156.00	201
50.00	133248	82.00	2354	124.00	454	157.00	807
51.00	40664	83.00	313	125.00	116	159.00	222
52.00	1864	86.00	491	127.00	118	161.00	524
53.00	133	87.00	25088	128.00	1549	169.00	118
55.00	1469	88.00	23728	129.00	701	171.00	192
56.00	8865	91.00	1464	130.00	1278	172.00	419
57.00	15388	92.00	12353	131.00	652	174.00	378048
58.00	726	93.00	18600	135.00	633	175.00	27984
60.00	4728	94.00	55168	136.00	184	176.00	368832
61.00	25440	95.00	518272	137.00	563	177.00	23768
62.00	23504	96.00	34616	138.00	85	178.00	533
63.00	18392	97.00	1076	139.00	63	207.00	61
64.00	1549	103.00	174	140.00	407	208.00	56
65.00	62	104.00	1677	141.00	3481	224.00	51
67.00	1148	105.00	637	142.00	448	271.00	57
68.00	47416	106.00	1717	143.00	3333		

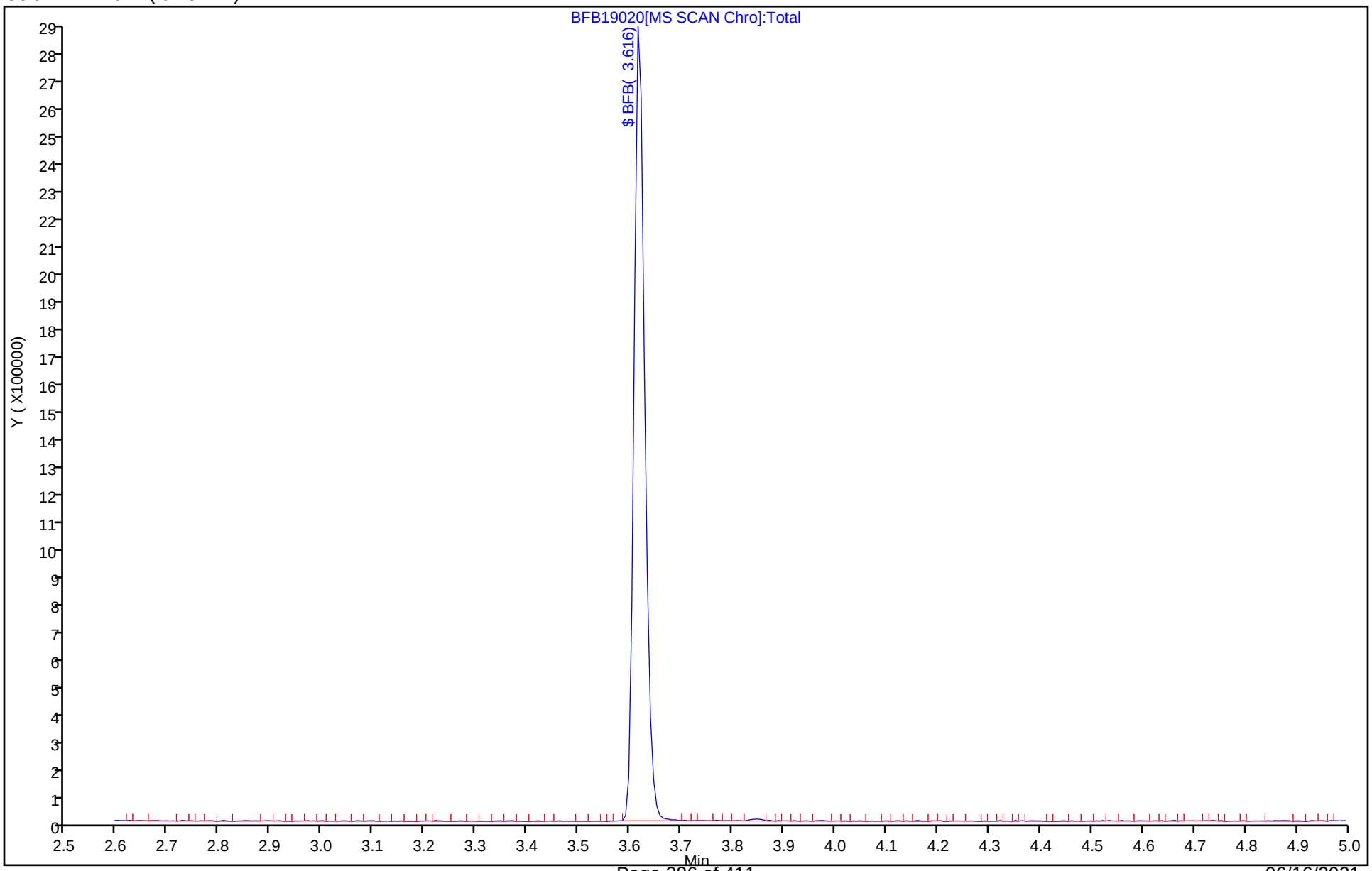
Report Date: 15-Jun-2021 11:59:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\BFB19020.D

Injection Date:	14-Jun-2021 17:05:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-490579/5

Matrix: Water Lab File ID: 189060.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 18:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189060.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Jun-2021 18:34:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110246-005
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Jun-2021 11:59:12 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: seymourc Date: 15-Jun-2021 11:39:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	719904	12.1	9.51	
* 7 Fluorobenzene	96	6.579	6.578	0.001	100	3069870	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.234	7.235	-0.001	98	87763	242.7	242.7	
18 Ethylene Dibromide	107	8.925	8.910	0.015	75	21		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.272	12.260	0.012	50	10		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

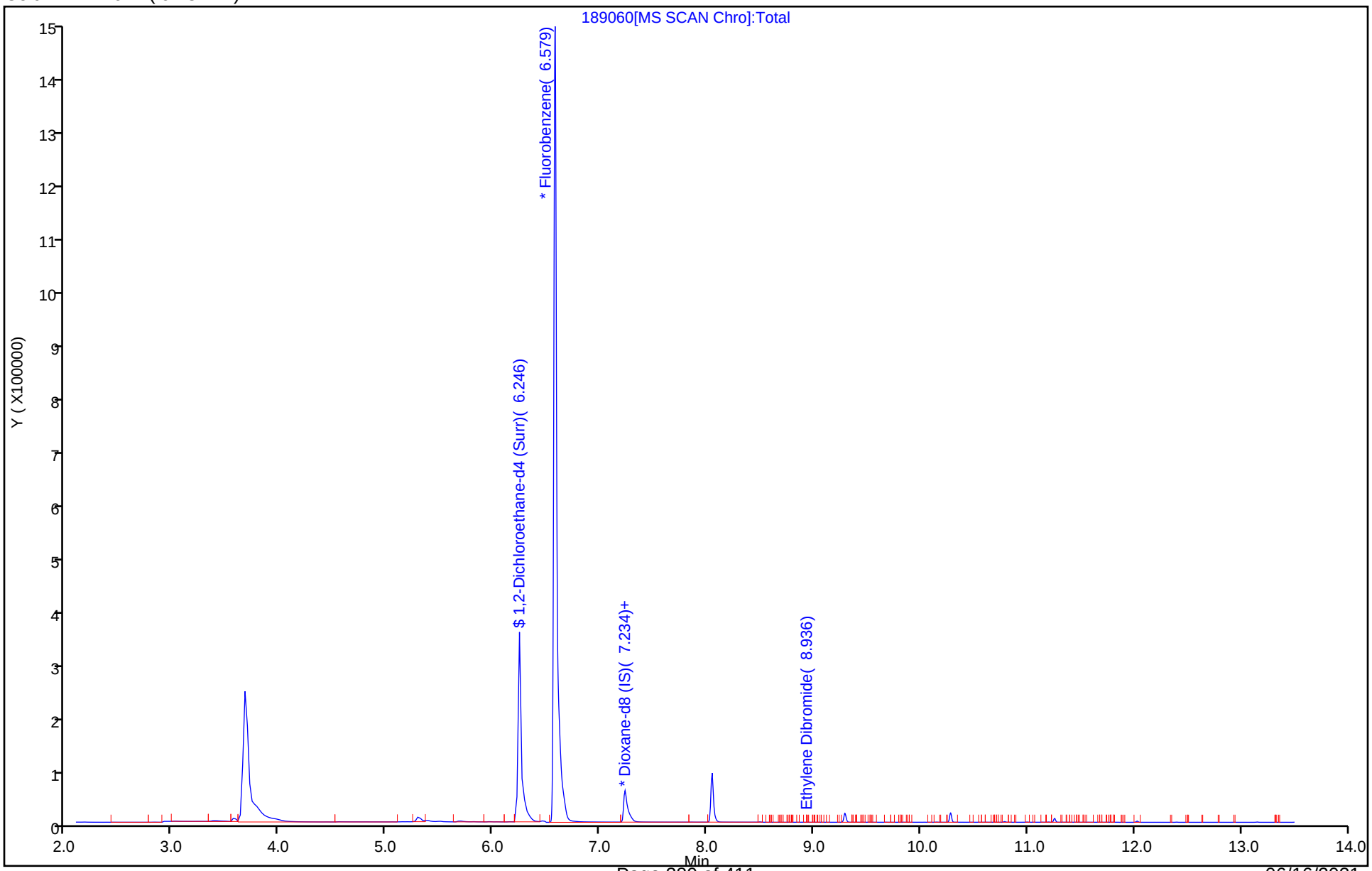
Report Date: 15-Jun-2021 11:59:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189060.D

Injection Date:	14-Jun-2021 18:34:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189060.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	14-Jun-2021 18:34:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-005				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:39:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	9.51	78.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-490579/4

Matrix: Water Lab File ID: 189059.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 18:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189059.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	14-Jun-2021 18:09:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-004				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:39:13		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	731174	12.1	9.33	
* 7 Fluorobenzene	96	6.578	6.578	0.000	100	3179464	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.235	7.235	0.000	99	88894	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	54	6120	10.0	10.6	

QC Flag Legend

Processing Flags

Reagents:

vmdiox_spike_00265	Amount Added:	3.00	Units: uL	
vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

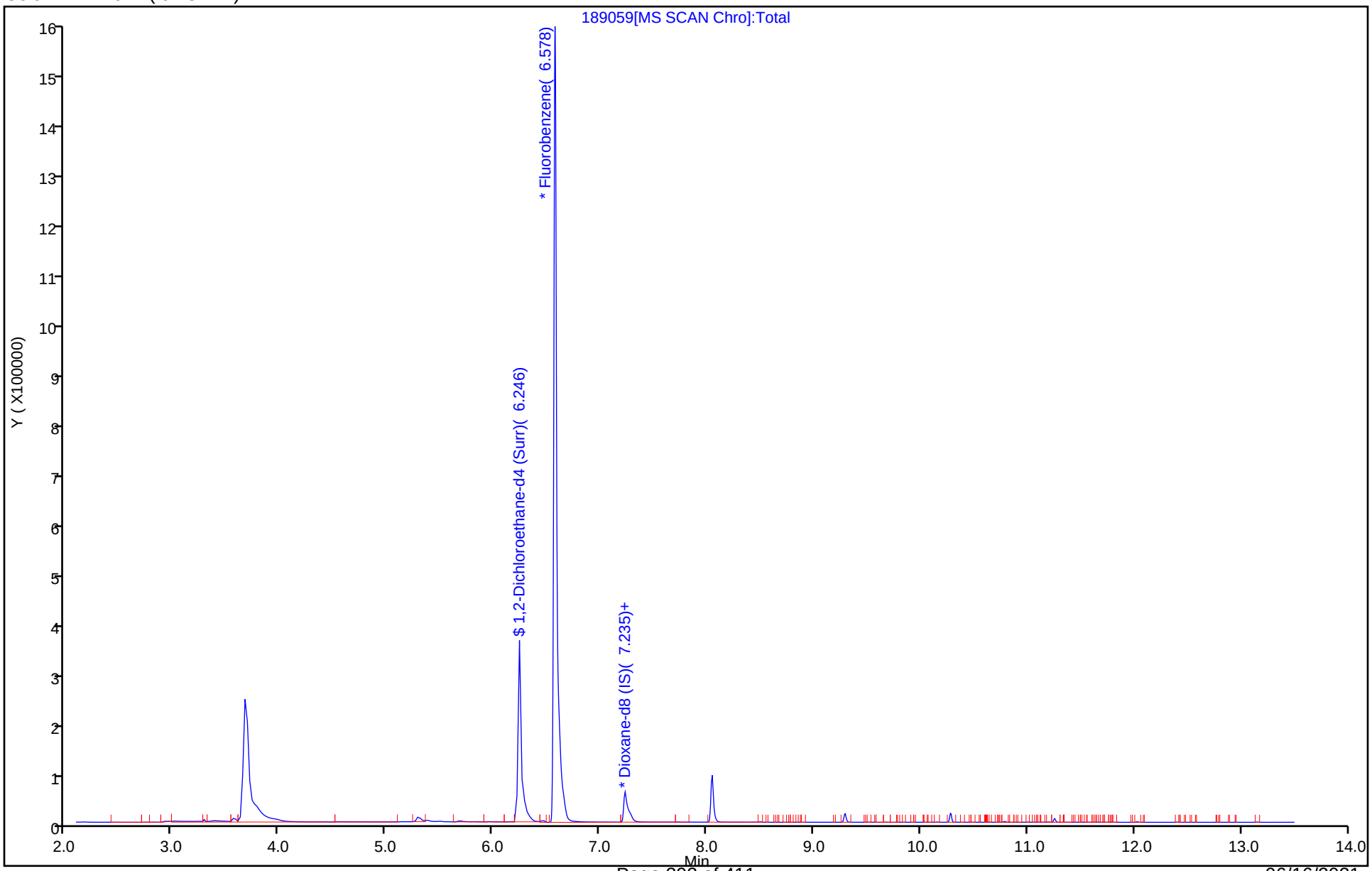
Report Date: 15-Jun-2021 11:59:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189059.D

Injection Date:	14-Jun-2021 18:09:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189059.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Jun-2021 18:09:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0110246-004
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 15-Jun-2021 11:59:12 Calib Date: 14-Apr-2021 12:45:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: seymourc Date: 15-Jun-2021 11:39:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	9.33	76.90

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-150917-H-3 MS

Matrix: Water Lab File ID: 189072.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	11.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189072.D				
Lims ID:	240-150917-H-3 MS				
Client ID:	GW-11218110-060821-BW-040				
Sample Type:	MS				
Inject. Date:	14-Jun-2021 23:31:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-017				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:55		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	751265	12.1	9.69	
* 7 Fluorobenzene	96	6.578	6.578	0.000	100	3145874	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.234	7.235	-0.001	97	86439	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	55	6210	10.0	11.1	
18 Ethylene Dibromide	107	8.889	8.910	-0.021	73	63		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.279	12.260	0.019	50	12		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vmdiox_spike_00265	Amount Added:	3.00	Units: uL	
vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

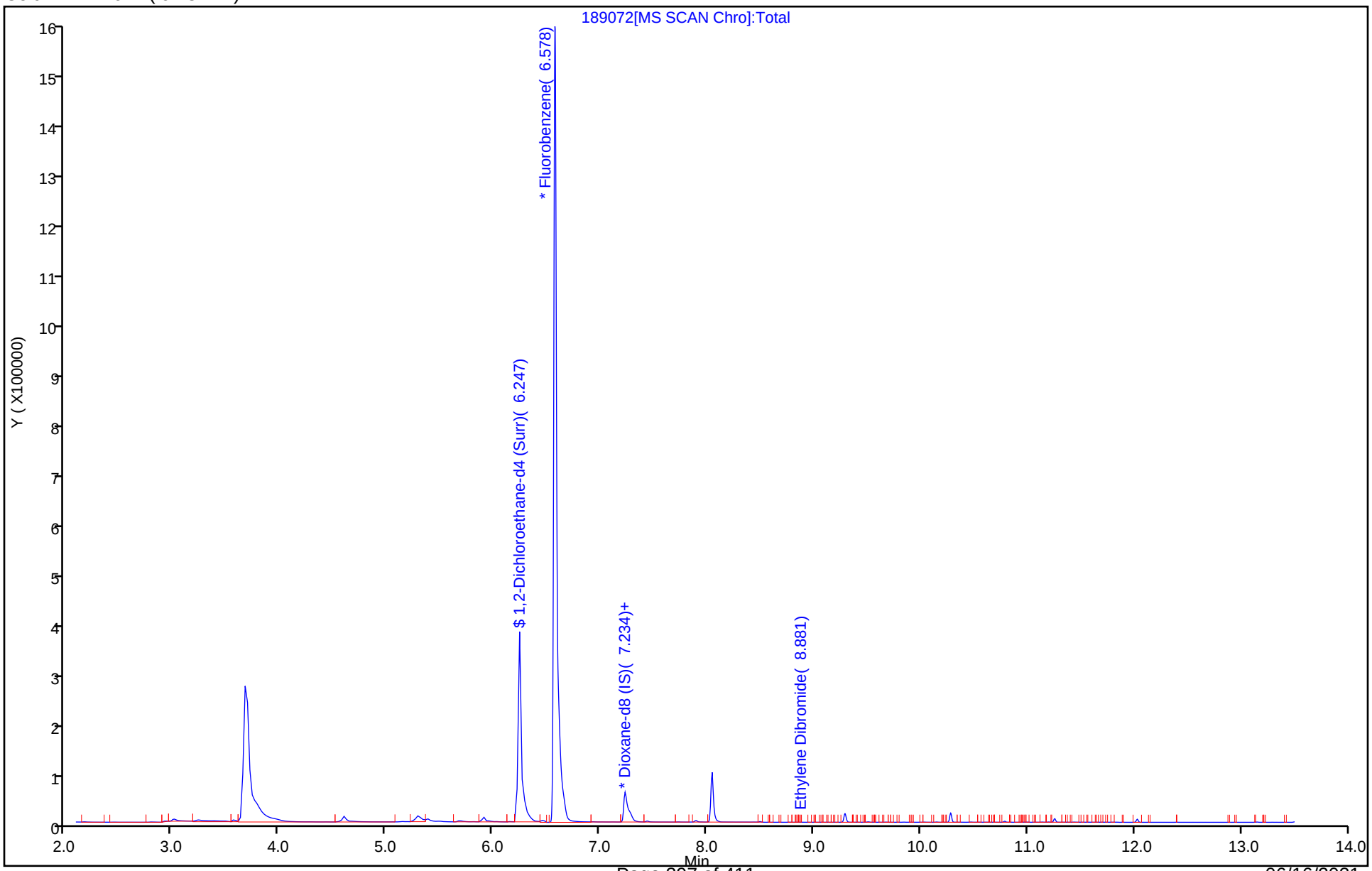
Report Date: 15-Jun-2021 11:59:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189072.D

Injection Date:	14-Jun-2021 23:31:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-150917-H-3 MS			Worklist Smp#:	17
Client ID:	GW-11218110-060821-BW-040				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189072.D				
Lims ID:	240-150917-H-3 MS				
Client ID:	GW-11218110-060821-BW-040				
Sample Type:	MS				
Inject. Date:	14-Jun-2021 23:31:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-017				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	9.69	79.85

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-150917-N-3 MSD

Matrix: Water Lab File ID: 189073.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 06/14/2021 23:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189073.D				
Lims ID:	240-150917-N-3 MSD				
Client ID:	GW-11218110-060821-BW-040				
Sample Type:	MSD				
Inject. Date:	14-Jun-2021 23:56:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-018				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: seymourc		Date:	15-Jun-2021 11:54:58		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	799322	12.1	10.0	
* 7 Fluorobenzene	96	6.579	6.578	0.001	100	3240670	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.236	7.235	0.001	98	104237	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	48	7255	10.0	10.7	
18 Ethylene Dibromide	107	8.888	8.910	-0.022	76	36		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.182	12.260	-0.078	50	16		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vmdiox_spike_00265	Amount Added:	3.00	Units: uL	
vm25UX18SS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00190	Amount Added:	0.00	Units:	Run Reagent

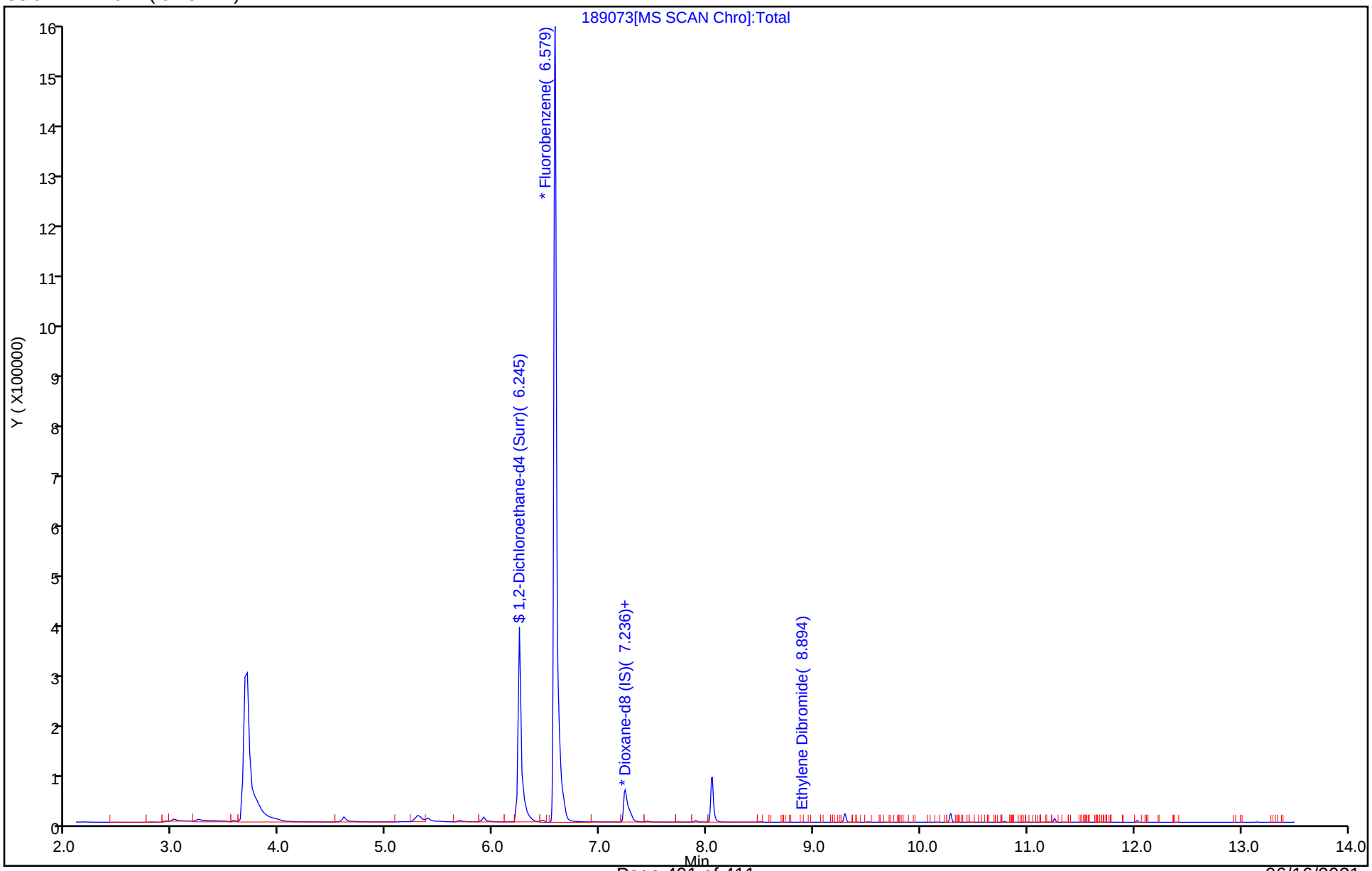
Report Date: 15-Jun-2021 11:59:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189073.D

Injection Date:	14-Jun-2021 23:56:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-150917-N-3 MSD			Worklist Smp#:	18
Client ID:	GW-11218110-060821-BW-040				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\189073.D				
Lims ID:	240-150917-N-3 MSD				
Client ID:	GW-11218110-060821-BW-040				
Sample Type:	MSD				
Inject. Date:	14-Jun-2021 23:56:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0110246-018				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20210614-110246.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	15-Jun-2021 11:59:12	Calib Date:	14-Apr-2021 12:45:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20210414-108204.b\188203.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: seymourc Date: 15-Jun-2021 11:54:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.0	82.48

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Instrument ID: A3UX18 Start Date: 04/14/2021 09:05

Analysis Batch Number: 481075 End Date: 04/14/2021 20:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-481075/1		04/14/2021 09:05	1	BFB18981.D	DB-624 0.18(mm)
IC 240-481075/3		04/14/2021 09:51	1	188196.D	DB-624 0.18(mm)
IC 240-481075/4		04/14/2021 10:16	1	188197.D	DB-624 0.18(mm)
IC 240-481075/5		04/14/2021 10:40	1	188198.D	DB-624 0.18(mm)
IC 240-481075/6		04/14/2021 11:05	1	188199.D	DB-624 0.18(mm)
ICIS 240-481075/7		04/14/2021 11:30	1	188200.D	DB-624 0.18(mm)
IC 240-481075/8		04/14/2021 11:55	1	188201.D	DB-624 0.18(mm)
IC 240-481075/9		04/14/2021 12:20	1	188202.D	DB-624 0.18(mm)
IC 240-481075/10		04/14/2021 12:45	1	188203.D	DB-624 0.18(mm)
ICV 240-481075/12		04/14/2021 13:35	1	188205.D	DB-624 0.18(mm)
ZZZZZ		04/14/2021 14:00	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 14:25	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 14:50	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 15:15	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 15:40	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 16:04	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 16:29	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 16:54	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 17:19	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 17:44	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 18:09	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 18:34	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 18:59	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 19:24	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 19:49	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 20:14	1		DB-624 0.18(mm)
ZZZZZ		04/14/2021 20:39	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Instrument ID: A3UX18 Start Date: 06/14/2021 17:05

Analysis Batch Number: 490579 End Date: 06/15/2021 04:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-490579/1		06/14/2021 17:05	1	BFB19020.D	DB-624 0.18(mm)
CCVIS 240-490579/3		06/14/2021 17:45	1	189058.D	DB-624 0.18(mm)
LCS 240-490579/4		06/14/2021 18:09	1	189059.D	DB-624 0.18(mm)
MB 240-490579/5		06/14/2021 18:34	1	189060.D	DB-624 0.18(mm)
ZZZZZ		06/14/2021 18:59	1		DB-624 0.18(mm)
ZZZZZ		06/14/2021 19:23	1		DB-624 0.18(mm)
ZZZZZ		06/14/2021 19:48	1		DB-624 0.18(mm)
240-151104-2	SL-5_061021	06/14/2021 20:13	1	189064.D	DB-624 0.18(mm)
240-151104-3	SL-6_061021	06/14/2021 20:37	1	189065.D	DB-624 0.18(mm)
240-151104-4	SL-7_061021	06/14/2021 21:02	1	189066.D	DB-624 0.18(mm)
240-151104-5	SL-8_061021	06/14/2021 21:27	1	189067.D	DB-624 0.18(mm)
240-151104-6	SL-9_061021	06/14/2021 21:52	1	189068.D	DB-624 0.18(mm)
240-151104-7	DUP-01	06/14/2021 22:17	1	189069.D	DB-624 0.18(mm)
ZZZZZ		06/14/2021 22:41	1		DB-624 0.18(mm)
ZZZZZ		06/14/2021 23:06	1		DB-624 0.18(mm)
240-150917-H-3 MS		06/14/2021 23:31	1	189072.D	DB-624 0.18(mm)
240-150917-N-3 MSD		06/14/2021 23:56	1	189073.D	DB-624 0.18(mm)
ZZZZZ		06/15/2021 00:21	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 00:45	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 01:35	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 02:00	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 02:25	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 02:49	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 03:14	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 03:39	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 04:04	1		DB-624 0.18(mm)
ZZZZZ		06/15/2021 04:29	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 481075 Batch Start Date: 04/14/21 09:05 Batch Analyst: Macenczak, Steven

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm25UX18IS 00002	vm25UX18SS 00002	vmbfb 00026	vmdiox_spike 00258
BFB 240-481075/1		8260B SIM		5 mL	5 mL			1 uL	
IC 240-481075/3		8260B SIM		15 mL	15 mL	7.28 uL	0.15 uL		
IC 240-481075/4		8260B SIM		15 mL	15 mL	7.28 uL	0.3 uL		
IC 240-481075/5		8260B SIM		15 mL	15 mL	7.28 uL	0.75 uL		
IC 240-481075/6		8260B SIM		15 mL	15 mL	7.28 uL	1.5 uL		
ICIS 240-481075/7		8260B SIM		15 mL	15 mL	7.28 uL	3 uL		
IC 240-481075/8		8260B SIM		15 mL	15 mL	7.28 uL	7.5 uL		
IC 240-481075/9		8260B SIM		15 mL	15 mL	7.28 uL	15 uL		
IC 240-481075/10		8260B SIM		15 mL	15 mL	7.28 uL	30 uL		
ICV 240-481075/12		8260B SIM		15 mL	15 mL	7.28 uL	7.28 uL		3 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdioxanew 00246					
BFB 240-481075/1		8260B SIM							
IC 240-481075/3		8260B SIM		0.15 uL					
IC 240-481075/4		8260B SIM		0.3 uL					
IC 240-481075/5		8260B SIM		0.75 uL					
IC 240-481075/6		8260B SIM		1.5 uL					
ICIS 240-481075/7		8260B SIM		3 uL					
IC 240-481075/8		8260B SIM		7.5 uL					
IC 240-481075/9		8260B SIM		15 uL					
IC 240-481075/10		8260B SIM		30 uL					
ICV 240-481075/12		8260B SIM							

Batch Notes	
pH Indicator ID	HC034840

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 481075 Batch Start Date: 04/14/21 09:05 Batch Analyst: Macenczak, Steven

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 490579 Batch Start Date: 06/14/21 17:05 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm25UX18IS 00003	vm25UX18SS 00003	vmbfb 00027
BFB 240-490579/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-490579/3		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
LCS 240-490579/4		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
MB 240-490579/5		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
240-151104-B-2	SL-5_061021	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-151104-B-3	SL-6_061021	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-151104-B-4	SL-7_061021	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-151104-B-5	SL-8_061021	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-151104-B-6	SL-9_061021	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-151104-B-7	DUP-01	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-150917-H-3 MS	GW-11218110-060821-BW-040	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-150917-N-3 MSD	GW-11218110-060821-BW-040	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00265	vmdioxanew 00253				
BFB 240-490579/1		8260B SIM							
CCVIS 240-490579/3		8260B SIM			3 uL				
LCS 240-490579/4		8260B SIM		3 uL					
MB 240-490579/5		8260B SIM							
240-151104-B-2	SL-5_061021	8260B SIM	T						
240-151104-B-3	SL-6_061021	8260B SIM	T						
240-151104-B-4	SL-7_061021	8260B SIM	T						
240-151104-B-5	SL-8_061021	8260B SIM	T						
240-151104-B-6	SL-9_061021	8260B SIM	T						
240-151104-B-7	DUP-01	8260B SIM	T						
240-150917-H-3 MS	GW-11218110-060821-BW-040	8260B SIM	T	3 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-151104-1

SDG No.:

Batch Number: 490579 Batch Start Date: 06/14/21 17:05 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00265	vmdioxanew 00253				
240-150917-N-3 MSD	GW-11218110-060821-BW-040	8260B SIM	T	3 uL					

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

2.6/2.7

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program:	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	☐ DW ☐ NPDES ☐ RCRA ☐ Other	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 1 COCs
Address: 28550 Cabot Drive, Suite 500		Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377		Sampler Name: Emma Witherspoon, Andrew Banitt	TAT if different from below		Walk-in client
Phone: 248-994-2240		Method of Shipment/Carrier:	1 day		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling		Shipping/Tracking No:	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day		Job/SDG No:
Project Number: 30080642.701.04					
PO # 30080642.701.04					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-5_061021	6/10/21	1000		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-6_061021	6/10/21	0935		X						6					N	G	X	X	X	X	X	X	X	
SL-7_061021	6/10/21	0905		X						6					N	G	X	X	X	X	X	X	X	
SL-8_061021	6/10/21	1025		X						6					N	G	X	X	X	X	X	X	X	
SL-9_061021	6/10/21	1045		X						6					N	G	X	X	X	X	X	X	X	
DUP-01	6/10/21	--		X						6					N	G	X	X	X	X	X	X	X	

240-151104 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 n.
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Andrew Banitt	Arcadis	6/11/21 1125	Jeri Harli	ETA	6/11/2021 1129
Relinquished by: Jeri Harli	Company: ETA	Date/Time: 6/11/21 1130	Received by:	Company: ETA	Date/Time: 6-12-21 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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06/16/2021

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 151104**
Canton Facility

Client Arcadis Site Name Ford LTP

Cooler unpacked by: DMR

Cooler Received on 6-12-21 Opened on 6-12-21

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF **+0.1** °C) Observed Cooler Temp. 2.6 °C Corrected Cooler Temp. 2.7 °C
   IR GUN #IR-12 (CF **+0.2**°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity ____ (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC022887**
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered (Yes) No
17. Was a LL Hg or Me Hg trip blank present? ____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

ANALYTICAL REPORT

Job Number: 240-152869-1

Job Description: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
7/30/2021 4:03 PM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
07/30/2021

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-152869-1

Comments
No additional comments.

Receipt
The samples were received on 7/15/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 240-495964 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SL-15_071321 (240-152869-2) and SL-14_071321 (240-152869-3).

Method 8260B: No MS/MSD in batch 496148 due to an instrument fault: SL-13_071321 (240-152869-4), SL-10_071321 (240-152869-10), SL-11_071321 (240-152869-11), SL-12_071321 (240-152869-12) and DUP-01 (240-152869-13).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-152869-1

No Detections.

Client Sample ID: SL-15_071321 — Lab Sample ID: 240-152869-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-14_071321 — Lab Sample ID: 240-152869-3

No Detections.

Client Sample ID: SL-13_071321 — Lab Sample ID: 240-152869-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-7_071321 — Lab Sample ID: 240-152869-5

No Detections.

Client Sample ID: SL-6_071321 — Lab Sample ID: 240-152869-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.2		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	0.96	J	1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	0.80	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-5_071321 — Lab Sample ID: 240-152869-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.91	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	81		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	20		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	10		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: SL-8_071321 — Lab Sample ID: 240-152869-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	63		8.0	3.7	ug/L	8		8260B	Total/NA
Trichloroethene	18		8.0	3.5	ug/L	8		8260B	Total/NA
Vinyl chloride	8.8		8.0	3.6	ug/L	8		8260B	Total/NA

Client Sample ID: SL-9_071321 — Lab Sample ID: 240-152869-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	48		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	15		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	6.7		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: SL-10_071321 — Lab Sample ID: 240-152869-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	35		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	12		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	6.0		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-11_071321
Lab Sample ID: 240-152869-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	28		1.7	0.77	ug/L	1.67		8260B	Total/NA
Trichloroethene	10		1.7	0.73	ug/L	1.67		8260B	Total/NA
Vinyl chloride	4.0		1.7	0.75	ug/L	1.67		8260B	Total/NA

Client Sample ID: SL-12_071321
Lab Sample ID: 240-152869-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	26		2.0	0.92	ug/L	2		8260B	Total/NA
Trichloroethene	9.0		2.0	0.88	ug/L	2		8260B	Total/NA
Vinyl chloride	3.9		2.0	0.90	ug/L	2		8260B	Total/NA

Client Sample ID: DUP-01
Lab Sample ID: 240-152869-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	110		4.0	1.8	ug/L	4		8260B	Total/NA
Trichloroethene	26		4.0	1.8	ug/L	4		8260B	Total/NA
Vinyl chloride	18		4.0	1.8	ug/L	4		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-152869-1

Date Collected: 07/13/21 00:00 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/20/21 13:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/20/21 13:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 13:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/20/21 13:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 13:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/20/21 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 130*		*07/20/21 13:30*	*1*
4-Bromofluorobenzene (Surr)	*75*		*47 - 134*		*07/20/21 13:30*	*1*
Toluene-d8 (Surr)	*89*		*69 - 122*		*07/20/21 13:30*	*1*
Dibromofluoromethane (Surr)	*111*		*78 - 129*		*07/20/21 13:30*	*1*

Client Sample ID: SL-15_071321 — Lab Sample ID: 240-152869-2

Date Collected: 07/13/21 09:10 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			07/20/21 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 133*		*07/20/21 21:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/21/21 16:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/21/21 16:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/21/21 16:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 16:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/21/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 130*		*07/21/21 16:54*	*1*
4-Bromofluorobenzene (Surr)	*87*		*47 - 134*		*07/21/21 16:54*	*1*
Toluene-d8 (Surr)	*94*		*69 - 122*		*07/21/21 16:54*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*07/21/21 16:54*	*1*

Client Sample ID: SL-14_071321 — Lab Sample ID: 240-152869-3

Date Collected: 07/13/21 09:40 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 133*		*07/20/21 21:41*	*1*

Client Sample ID: SL-14_071321 — Lab Sample ID: 240-152869-3

Date Collected: 07/13/21 09:40 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/21/21 17:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/21/21 17:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 17:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/21/21 17:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 17:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/21/21 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*07/21/21 17:16*	*1*
4-Bromofluorobenzene (Surr)	*77*		*47 - 134*		*07/21/21 17:16*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*07/21/21 17:16*	*1*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*07/21/21 17:16*	*1*

Client Sample ID: SL-13_071321 — Lab Sample ID: 240-152869-4

Date Collected: 07/13/21 10:05 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*07/20/21 22:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/22/21 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/22/21 12:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/22/21 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/22/21 12:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/22/21 12:10	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			07/22/21 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 130*		*07/22/21 12:10*	*1*
4-Bromofluorobenzene (Surr)	*85*		*47 - 134*		*07/22/21 12:10*	*1*
Toluene-d8 (Surr)	*90*		*69 - 122*		*07/22/21 12:10*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 129*		*07/22/21 12:10*	*1*

Client Sample ID: SL-7_071321 — Lab Sample ID: 240-152869-5

Date Collected: 07/13/21 10:30 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*07/20/21 22:36*	*1*

Client Sample ID: SL-7_071321 — Lab Sample ID: 240-152869-5

Date Collected: 07/13/21 10:30 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/20/21 13:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/20/21 13:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 13:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/20/21 13:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 13:52	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/20/21 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 130*		*07/20/21 13:52*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*07/20/21 13:52*	*1*
Toluene-d8 (Surr)	*91*		*69 - 122*		*07/20/21 13:52*	*1*
Dibromofluoromethane (Surr)	*112*		*78 - 129*		*07/20/21 13:52*	*1*

Client Sample ID: SL-6_071321 — Lab Sample ID: 240-152869-6

Date Collected: 07/13/21 10:55 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*07/20/21 23:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/20/21 14:14	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.46	ug/L			07/20/21 14:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/20/21 14:14	1
Trichloroethene	**0.96**	**J**	1.0	0.44	ug/L			07/20/21 14:14	1
Vinyl chloride	**0.80**	**J**	1.0	0.45	ug/L			07/20/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*75 - 130*		*07/20/21 14:14*	*1*
4-Bromofluorobenzene (Surr)	*74*		*47 - 134*		*07/20/21 14:14*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*07/20/21 14:14*	*1*
Dibromofluoromethane (Surr)	*117*		*78 - 129*		*07/20/21 14:14*	*1*

Client Sample ID: SL-5_071321 — Lab Sample ID: 240-152869-7

Date Collected: 07/13/21 12:10 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.91**	**J**	2.0	0.86	ug/L			07/20/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*07/20/21 23:31*	*1*

Client Sample ID: SL-5_071321 — Lab Sample ID: 240-152869-7

Date Collected: 07/13/21 12:10 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			07/20/21 14:35	5
cis-1,2-Dichloroethene	**81**		5.0	2.3	ug/L			07/20/21 14:35	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			07/20/21 14:35	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			07/20/21 14:35	5
Trichloroethene	**20**		5.0	2.2	ug/L			07/20/21 14:35	5
Vinyl chloride	**10**		5.0	2.3	ug/L			07/20/21 14:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 130*		*07/20/21 14:35*	*5*
4-Bromofluorobenzene (Surr)	*70*		*47 - 134*		*07/20/21 14:35*	*5*
Toluene-d8 (Surr)	*89*		*69 - 122*		*07/20/21 14:35*	*5*
Dibromofluoromethane (Surr)	*113*		*78 - 129*		*07/20/21 14:35*	*5*

Client Sample ID: SL-8_071321 — Lab Sample ID: 240-152869-8

Date Collected: 07/13/21 12:40 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 133*		*07/20/21 23:59*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.0	U	8.0	3.9	ug/L			07/20/21 14:57	8
cis-1,2-Dichloroethene	**63**		8.0	3.7	ug/L			07/20/21 14:57	8
Tetrachloroethene	8.0	U	8.0	3.5	ug/L			07/20/21 14:57	8
trans-1,2-Dichloroethene	8.0	U	8.0	4.1	ug/L			07/20/21 14:57	8
Trichloroethene	**18**		8.0	3.5	ug/L			07/20/21 14:57	8
Vinyl chloride	**8.8**		8.0	3.6	ug/L			07/20/21 14:57	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*		*07/20/21 14:57*	*8*
4-Bromofluorobenzene (Surr)	*76*		*47 - 134*		*07/20/21 14:57*	*8*
Toluene-d8 (Surr)	*89*		*69 - 122*		*07/20/21 14:57*	*8*
Dibromofluoromethane (Surr)	*112*		*78 - 129*		*07/20/21 14:57*	*8*

Client Sample ID: SL-9_071321 — Lab Sample ID: 240-152869-9

Date Collected: 07/13/21 13:00 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			07/21/21 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*07/21/21 00:26*	*1*

Client Sample ID: SL-9_071321 — Lab Sample ID: 240-152869-9

Date Collected: 07/13/21 13:00 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			07/20/21 15:19	5
cis-1,2-Dichloroethene	**48**		5.0	2.3	ug/L			07/20/21 15:19	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			07/20/21 15:19	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			07/20/21 15:19	5
Trichloroethene	**15**		5.0	2.2	ug/L			07/20/21 15:19	5
Vinyl chloride	**6.7**		5.0	2.3	ug/L			07/20/21 15:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 130*		*07/20/21 15:19*	*5*
4-Bromofluorobenzene (Surr)	*79*		*47 - 134*		*07/20/21 15:19*	*5*
Toluene-d8 (Surr)	*89*		*69 - 122*		*07/20/21 15:19*	*5*
Dibromofluoromethane (Surr)	*110*		*78 - 129*		*07/20/21 15:19*	*5*

Client Sample ID: SL-10_071321 — Lab Sample ID: 240-152869-10

Date Collected: 07/13/21 13:30 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/21/21 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*07/21/21 00:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/22/21 12:31	1
cis-1,2-Dichloroethene	**35**		1.0	0.46	ug/L			07/22/21 12:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/22/21 12:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/22/21 12:31	1
Trichloroethene	**12**		1.0	0.44	ug/L			07/22/21 12:31	1
Vinyl chloride	**6.0**		1.0	0.45	ug/L			07/22/21 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*07/22/21 12:31*	*1*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*		*07/22/21 12:31*	*1*
Toluene-d8 (Surr)	*90*		*69 - 122*		*07/22/21 12:31*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*07/22/21 12:31*	*1*

Client Sample ID: SL-11_071321 — Lab Sample ID: 240-152869-11

Date Collected: 07/13/21 13:50 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/21/21 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 133*		*07/21/21 01:21*	*1*

Client Sample ID: SL-11_071321 — Lab Sample ID: 240-152869-11

Date Collected: 07/13/21 13:50 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.7	U	1.7	0.82	ug/L			07/22/21 12:53	1.67
cis-1,2-Dichloroethene	**28**		1.7	0.77	ug/L			07/22/21 12:53	1.67
Tetrachloroethene	1.7	U	1.7	0.73	ug/L			07/22/21 12:53	1.67
trans-1,2-Dichloroethene	1.7	U	1.7	0.85	ug/L			07/22/21 12:53	1.67
Trichloroethene	**10**		1.7	0.73	ug/L			07/22/21 12:53	1.67
Vinyl chloride	**4.0**		1.7	0.75	ug/L			07/22/21 12:53	1.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*07/22/21 12:53*	*1.67*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*07/22/21 12:53*	*1.67*
Toluene-d8 (Surr)	*94*		*69 - 122*		*07/22/21 12:53*	*1.67*
Dibromofluoromethane (Surr)	*101*		*78 - 129*		*07/22/21 12:53*	*1.67*

Client Sample ID: SL-12_071321 — Lab Sample ID: 240-152869-12

Date Collected: 07/13/21 14:05 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/21/21 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 133*		*07/21/21 01:48*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			07/22/21 13:15	2
cis-1,2-Dichloroethene	**26**		2.0	0.92	ug/L			07/22/21 13:15	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			07/22/21 13:15	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			07/22/21 13:15	2
Trichloroethene	**9.0**		2.0	0.88	ug/L			07/22/21 13:15	2
Vinyl chloride	**3.9**		2.0	0.90	ug/L			07/22/21 13:15	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*07/22/21 13:15*	*2*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*07/22/21 13:15*	*2*
Toluene-d8 (Surr)	*91*		*69 - 122*		*07/22/21 13:15*	*2*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*07/22/21 13:15*	*2*

Client Sample ID: DUP-01 — Lab Sample ID: 240-152869-13

Date Collected: 07/13/21 00:00 — **Matrix: Water**
Date Received: 07/15/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			07/21/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*		*07/21/21 02:16*	*1*

Client Sample ID: DUP-01
Date Collected: 07/13/21 00:00
Date Received: 07/15/21 08:00

Lab Sample ID: 240-152869-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	4.0	U	4.0	2.0	ug/L			07/22/21 13:37	4
cis-1,2-Dichloroethene	**110**		4.0	1.8	ug/L			07/22/21 13:37	4
Tetrachloroethene	4.0	U	4.0	1.8	ug/L			07/22/21 13:37	4
trans-1,2-Dichloroethene	4.0	U	4.0	2.0	ug/L			07/22/21 13:37	4
Trichloroethene	**26**		4.0	1.8	ug/L			07/22/21 13:37	4
Vinyl chloride	**18**		4.0	1.8	ug/L			07/22/21 13:37	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*07/22/21 13:37*	*4*
4-Bromofluorobenzene (Surr)	*91*		*47 - 134*		*07/22/21 13:37*	*4*
Toluene-d8 (Surr)	*90*		*69 - 122*		*07/22/21 13:37*	*4*
Dibromofluoromethane (Surr)	*92*		*78 - 129*		*07/22/21 13:37*	*4*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-152869-1	TRIP BLANK	121	75	89	111
240-152869-2	SL-15_071321	119	87	94	104
240-152869-3	SL-14_071321	117	77	92	102
240-152869-4	SL-13_071321	110	85	90	99
240-152869-5	SL-7_071321	122	74	91	112
240-152869-6	SL-6_071321	124	74	92	117
240-152869-7	SL-5_071321	122	70	89	113
240-152869-8	SL-8_071321	120	76	89	112
240-152869-8 MS	SL-8_071321	95	99	100	91
240-152869-8 MSD	SL-8_071321	97	100	99	92
240-152869-9	SL-9_071321	119	79	89	110
240-152869-10	SL-10_071321	107	90	90	98
240-152869-11	SL-11_071321	109	94	94	101
240-152869-12	SL-12_071321	107	95	91	97
240-152869-13	DUP-01	105	91	90	92
240-152897-G-7 MS	Matrix Spike	103	99	99	94
240-152897-I-7 MSD	Matrix Spike Duplicate	99	97	98	92
LCS 240-495759/4	Lab Control Sample	104	102	105	97
LCS 240-495964/4	Lab Control Sample	102	99	100	94
LCS 240-496148/4	Lab Control Sample	98	100	97	91
MB 240-495759/7	Method Blank	123	70	89	109
MB 240-495964/7	Method Blank	115	81	93	102
MB 240-496148/7	Method Blank	111	80	92	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-152869-2	SL-15_071321	81
240-152869-3	SL-14_071321	87
240-152869-4	SL-13_071321	84
240-152869-5	SL-7_071321	83
240-152869-6	SL-6_071321	86
240-152869-7	SL-5_071321	86
240-152869-8	SL-8_071321	84
240-152869-9	SL-9_071321	85
240-152869-10	SL-10_071321	85
240-152869-11	SL-11_071321	86
240-152869-12	SL-12_071321	85
240-152869-13	DUP-01	83
500-202418-B-11 MS	Matrix Spike	79
500-202418-C-11 MSD	Matrix Spike Duplicate	78

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA								
Lab Sample ID	Client Sample ID	(70-133)								
LCS 240-495864/4	Lab Control Sample	83								
MB 240-495864/5	Method Blank	80								

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-495759/7 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/20/21 11:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/20/21 11:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 11:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/20/21 11:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/20/21 11:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/20/21 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 130*		*07/20/21 11:37*	*1*
4-Bromofluorobenzene (Surr)	*70*		*47 - 134*		*07/20/21 11:37*	*1*
Toluene-d8 (Surr)	*89*		*69 - 122*		*07/20/21 11:37*	*1*
Dibromofluoromethane (Surr)	*109*		*78 - 129*		*07/20/21 11:37*	*1*

Lab Sample ID: LCS 240-495759/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495759

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.59		ug/L		96	73 - 129		
cis-1,2-Dichloroethene			10.0	10.6		ug/L		106	75 - 124		
Tetrachloroethene			10.0	9.93		ug/L		99	70 - 125		
trans-1,2-Dichloroethene			10.0	10.9		ug/L		109	74 - 130		
Trichloroethene			10.0	9.74		ug/L		97	71 - 121		
Vinyl chloride			10.0	11.6		ug/L		116	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*
Toluene-d8 (Surr)	*105*		*69 - 122*
Dibromofluoromethane (Surr)	*97*		*78 - 129*

Lab Sample ID: 240-152869-8 MS **Client Sample ID: SL-8_071321**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	8.0	U	80.0	63.5		ug/L		79	64 - 132		
cis-1,2-Dichloroethene	63		80.0	138		ug/L		93	68 - 121		
Tetrachloroethene	8.0	U	80.0	67.1		ug/L		84	52 - 129		
trans-1,2-Dichloroethene	8.0	U	80.0	81.5		ug/L		102	69 - 126		
Trichloroethene	18		80.0	89.7		ug/L		89	56 - 124		
Vinyl chloride	8.8		80.0	84.1		ug/L		94	49 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*99*		*47 - 134*
Toluene-d8 (Surr)	*100*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-152869-8 MS **Client Sample ID: SL-8_071321**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495759

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Lab Sample ID: 240-152869-8 MSD **Client Sample ID: SL-8_071321**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495759

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	8.0	U	80.0	64.9		ug/L		81	64 - 132	2	35
cis-1,2-Dichloroethene	63		80.0	142		ug/L		99	68 - 121	3	35
Tetrachloroethene	8.0	U	80.0	68.2		ug/L		85	52 - 129	2	35
trans-1,2-Dichloroethene	8.0	U	80.0	83.9		ug/L		105	69 - 126	3	35
Trichloroethene	18		80.0	90.9		ug/L		91	56 - 124	1	35
Vinyl chloride	8.8		80.0	88.3		ug/L		99	49 - 136	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*99*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: MB 240-495964/7 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495964

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/21/21 15:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/21/21 15:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 15:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/21/21 15:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/21/21 15:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/21/21 15:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 130*		*07/21/21 15:29*	*1*
4-Bromofluorobenzene (Surr)	*81*		*47 - 134*		*07/21/21 15:29*	*1*
Toluene-d8 (Surr)	*93*		*69 - 122*		*07/21/21 15:29*	*1*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*07/21/21 15:29*	*1*

Lab Sample ID: LCS 240-495964/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495964

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.37		ug/L		94	73 - 129		
cis-1,2-Dichloroethene			10.0	11.1		ug/L		111	75 - 124		
Tetrachloroethene			10.0	9.50		ug/L		95	70 - 125		
trans-1,2-Dichloroethene			10.0	10.9		ug/L		109	74 - 130		
Trichloroethene			10.0	10.1		ug/L		101	71 - 121		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-495964/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 495964

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	11.3		ug/L		113	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*
4-Bromofluorobenzene (Surr)	*99*		*47 - 134*
Toluene-d8 (Surr)	*100*		*69 - 122*
Dibromofluoromethane (Surr)	*94*		*78 - 129*

Lab Sample ID: MB 240-496148/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			07/22/21 11:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			07/22/21 11:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			07/22/21 11:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			07/22/21 11:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			07/22/21 11:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			07/22/21 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*75 - 130*		*07/22/21 11:15*	*1*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*07/22/21 11:15*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*07/22/21 11:15*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 129*		*07/22/21 11:15*	*1*

Lab Sample ID: LCS 240-496148/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496148

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.04		ug/L		90	73 - 129		
cis-1,2-Dichloroethene			10.0	10.5		ug/L		105	75 - 124		
Tetrachloroethene			10.0	8.64		ug/L		86	70 - 125		
trans-1,2-Dichloroethene			10.0	10.5		ug/L		105	74 - 130		
Trichloroethene			10.0	9.72		ug/L		97	71 - 121		
Vinyl chloride			10.0	10.1		ug/L		101	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*97*		*69 - 122*
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-495864/5 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495864

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			07/20/21 20:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 133*		*07/20/21 20:19*	*1*

Lab Sample ID: LCS 240-495864/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 495864

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	8.35		ug/L		83	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 133*

GC/MS VOA

Analysis Batch: 495759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-152869-1	TRIP BLANK	Total/NA	Water	8260B	
240-152869-5	SL-7_071321	Total/NA	Water	8260B	
240-152869-6	SL-6_071321	Total/NA	Water	8260B	
240-152869-7	SL-5_071321	Total/NA	Water	8260B	
240-152869-8	SL-8_071321	Total/NA	Water	8260B	
240-152869-9	SL-9_071321	Total/NA	Water	8260B	
MB 240-495759/7	Method Blank	Total/NA	Water	8260B	
LCS 240-495759/4	Lab Control Sample	Total/NA	Water	8260B	
240-152869-8 MS	SL-8_071321	Total/NA	Water	8260B	
240-152869-8 MSD	SL-8_071321	Total/NA	Water	8260B	

Analysis Batch: 495864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-152869-2	SL-15_071321	Total/NA	Water	8260B SIM	
240-152869-3	SL-14_071321	Total/NA	Water	8260B SIM	
240-152869-4	SL-13_071321	Total/NA	Water	8260B SIM	
240-152869-5	SL-7_071321	Total/NA	Water	8260B SIM	
240-152869-6	SL-6_071321	Total/NA	Water	8260B SIM	
240-152869-7	SL-5_071321	Total/NA	Water	8260B SIM	
240-152869-8	SL-8_071321	Total/NA	Water	8260B SIM	
240-152869-9	SL-9_071321	Total/NA	Water	8260B SIM	
240-152869-10	SL-10_071321	Total/NA	Water	8260B SIM	
240-152869-11	SL-11_071321	Total/NA	Water	8260B SIM	
240-152869-12	SL-12_071321	Total/NA	Water	8260B SIM	
240-152869-13	DUP-01	Total/NA	Water	8260B SIM	
MB 240-495864/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-495864/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 495964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-152869-2	SL-15_071321	Total/NA	Water	8260B	
240-152869-3	SL-14_071321	Total/NA	Water	8260B	
MB 240-495964/7	Method Blank	Total/NA	Water	8260B	
LCS 240-495964/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 496148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-152869-4	SL-13_071321	Total/NA	Water	8260B	
240-152869-10	SL-10_071321	Total/NA	Water	8260B	
240-152869-11	SL-11_071321	Total/NA	Water	8260B	
240-152869-12	SL-12_071321	Total/NA	Water	8260B	
240-152869-13	DUP-01	Total/NA	Water	8260B	
MB 240-496148/7	Method Blank	Total/NA	Water	8260B	
LCS 240-496148/4	Lab Control Sample	Total/NA	Water	8260B	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-152869-1

Date Collected: 07/13/21 00:00 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	495759	07/20/21 13:30	LEE	TAL CAN

Client Sample ID: SL-15_071321 — Lab Sample ID: 240-152869-2

Date Collected: 07/13/21 09:10 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	495964	07/21/21 16:54	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 21:14	CS	TAL CAN

Client Sample ID: SL-14_071321 — Lab Sample ID: 240-152869-3

Date Collected: 07/13/21 09:40 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	495964	07/21/21 17:16	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 21:41	CS	TAL CAN

Client Sample ID: SL-13_071321 — Lab Sample ID: 240-152869-4

Date Collected: 07/13/21 10:05 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	496148	07/22/21 12:10	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 22:09	CS	TAL CAN

Client Sample ID: SL-7_071321 — Lab Sample ID: 240-152869-5

Date Collected: 07/13/21 10:30 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	495759	07/20/21 13:52	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 22:36	CS	TAL CAN

Client Sample ID: SL-6_071321 — Lab Sample ID: 240-152869-6

Date Collected: 07/13/21 10:55 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	495759	07/20/21 14:14	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 23:04	CS	TAL CAN

Client Sample ID: SL-5_071321 — Lab Sample ID: 240-152869-7

Date Collected: 07/13/21 12:10 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	495759	07/20/21 14:35	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 23:31	CS	TAL CAN

Client Sample ID: SL-8_071321 — Lab Sample ID: 240-152869-8

Date Collected: 07/13/21 12:40 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8	495759	07/20/21 14:57	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/20/21 23:59	CS	TAL CAN

Client Sample ID: SL-9_071321 — Lab Sample ID: 240-152869-9

Date Collected: 07/13/21 13:00 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	495759	07/20/21 15:19	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/21/21 00:26	CS	TAL CAN

Client Sample ID: SL-10_071321 — Lab Sample ID: 240-152869-10

Date Collected: 07/13/21 13:30 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	496148	07/22/21 12:31	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/21/21 00:53	CS	TAL CAN

Client Sample ID: SL-11_071321 — Lab Sample ID: 240-152869-11

Date Collected: 07/13/21 13:50 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.67	496148	07/22/21 12:53	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/21/21 01:21	CS	TAL CAN

Client Sample ID: SL-12_071321 — Lab Sample ID: 240-152869-12

Date Collected: 07/13/21 14:05 — **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	496148	07/22/21 13:15	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/21/21 01:48	CS	TAL CAN

Client Sample ID: DUP-01 Lab Sample ID: 240-152869-13

Date Collected: 07/13/21 00:00 **Matrix: Water**
Date Received: 07/15/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	496148	07/22/21 13:37	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	495864	07/21/21 02:16	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-21
Iowa	State	421	06-01-21 *
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc. Job ID: 240-152869-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-152869-1	TRIP BLANK	Water	07/13/21 00:00	07/15/21 08:00
240-152869-2	SL-15_071321	Water	07/13/21 09:10	07/15/21 08:00
240-152869-3	SL-14_071321	Water	07/13/21 09:40	07/15/21 08:00
240-152869-4	SL-13_071321	Water	07/13/21 10:05	07/15/21 08:00
240-152869-5	SL-7_071321	Water	07/13/21 10:30	07/15/21 08:00
240-152869-6	SL-6_071321	Water	07/13/21 10:55	07/15/21 08:00
240-152869-7	SL-5_071321	Water	07/13/21 12:10	07/15/21 08:00
240-152869-8	SL-8_071321	Water	07/13/21 12:40	07/15/21 08:00
240-152869-9	SL-9_071321	Water	07/13/21 13:00	07/15/21 08:00
240-152869-10	SL-10_071321	Water	07/13/21 13:30	07/15/21 08:00
240-152869-11	SL-11_071321	Water	07/13/21 13:50	07/15/21 08:00
240-152869-12	SL-12_071321	Water	07/13/21 14:05	07/15/21 08:00
240-152869-13	DUP-01	Water	07/13/21 00:00	07/15/21 08:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 495247

Lab Sample ID: IC 240-495247/3 Client Sample ID:

Date Analyzed: 07/15/21 15:44 Lab File ID: 201231.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.10	Poor chromatography	seymourc	07/20/21 15:44
1,4-Dioxane	8.25	Poor chromatography	seymourc	07/20/21 15:43

Lab Sample ID: IC 240-495247/4 Client Sample ID:

Date Analyzed: 07/15/21 16:12 Lab File ID: 201232.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.10	Poor chromatography	seymourc	07/20/21 15:44
1,4-Dioxane	8.25	Poor chromatography	seymourc	07/20/21 15:44

Lab Sample ID: IC 240-495247/5 Client Sample ID:

Date Analyzed: 07/15/21 16:39 Lab File ID: 201233.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.10	Poor chromatography	seymourc	07/20/21 15:45
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/20/21 15:45

Lab Sample ID: IC 240-495247/6 Client Sample ID:

Date Analyzed: 07/15/21 17:06 Lab File ID: 201234.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.10	Poor chromatography	seymourc	07/20/21 15:47
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/20/21 15:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 495247

Lab Sample ID: ICIS 240-495247/7 Client Sample ID:

Date Analyzed: 07/15/21 17:33 Lab File ID: 201235.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/20/21 15:47

Lab Sample ID: IC 240-495247/9 Client Sample ID:

Date Analyzed: 07/15/21 18:28 Lab File ID: 201237.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.25	Poor chromatography	seymourc	07/20/21 15:48

Lab Sample ID: IC 240-495247/10 Client Sample ID:

Date Analyzed: 07/15/21 18:55 Lab File ID: 201238.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/20/21 15:49

Lab Sample ID: ICV 240-495247/12 Client Sample ID:

Date Analyzed: 07/15/21 19:50 Lab File ID: 201240.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/16/21 17:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 495864

Lab Sample ID: CCVIS 240-495864/3 Client Sample ID:

Date Analyzed: 07/20/21 19:24 Lab File ID: 201254.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/21/21 20:09

Lab Sample ID: LCS 240-495864/4 Client Sample ID:

Date Analyzed: 07/20/21 19:52 Lab File ID: 201255.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/21/21 20:10

Lab Sample ID: 240-152869-8 Client Sample ID: SL-8_071321

Date Analyzed: 07/20/21 23:59 Lab File ID: 201264.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.25	Poor chromatography	seymourc	07/21/21 20:11

Lab Sample ID: 240-152869-13 Client Sample ID: DUP-01

Date Analyzed: 07/21/21 02:16 Lab File ID: 201269.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/21/21 20:11

Lab Sample ID: 500-202418-B-11 MS Client Sample ID:

Date Analyzed: 07/21/21 03:38 Lab File ID: 201272.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/21/21 20:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 495864

Lab Sample ID: 500-202418-C-11 MSD Client Sample ID:

Date Analyzed: 07/21/21 04:05 Lab File ID: 201273.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	07/21/21 20:13

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm150IS20_00006	08/04/21	05/04/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000 ug/mL
							Fluorobenzene	150 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150IS20_00008	09/01/21	06/01/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000 ug/mL
							Fluorobenzene	150 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150SS20_00002	08/24/21	05/24/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50IS_00086	05/27/21	11/27/20	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_00088	10/01/21	03/31/21	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00089	12/28/21	06/28/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00448	07/21/21	07/14/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm50ss_stk_00086	03/28/21	09/28/20	MEOH, Lot 0000230446	200 mL	VM567650_00033	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00033	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00384	03/23/21	03/16/21	MEOH, Lot na	5 mL	VMACROLSTD_00093	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00093	04/09/21	03/09/21	MEOH, Lot +230910000258810JD	20 mL	VM568720_00040	0.25 mL	Acrolein	250 ug/mL
..VM568720_00040	07/31/21		restek, Lot A0161364		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00026							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmdiox_spike_00268	07/19/21	07/12/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00024	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00024	09/01/21	06/01/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00269	07/27/21	07/20/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00024	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00024	09/01/21	06/01/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00257	07/19/21	07/12/21	MEOH, Lot na	1 mL	vmdioxane_00032	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00032	08/31/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00258	07/27/21	07/20/21	MEOH, Lot na	1 mL	vmdioxane_00032	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00032	08/31/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00399	03/17/21	03/10/21	MEOH, Lot NA	5 mL	VMFASG_00104	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00104	04/10/21	03/10/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMFASGW_00416	07/20/21	07/13/21	MEOH, Lot NA	5 mL	VMFASG_00108	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00108	08/13/21	07/13/21	MEOH, Lot 0000273166	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00417	07/28/21	07/21/21	MEOH, Lot NA	5 mL	VMFASG_00108	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00108	08/13/21	07/13/21	MEOH, Lot 0000273166	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00390	03/23/21	03/16/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00407	07/25/21	07/18/21	MEOH, Lot n/a	5 mL	VMRFASP_00076	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00076	09/30/21	07/01/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00377	03/21/21	03/14/21	MEOH, Lot 0000258810	10 mL	vm569722_00015	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00015	11/30/22		Restek, Lot A0154679		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00393	07/27/21	07/20/21	MEOH, Lot 0000273166	10 mL	vm569722_00019	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00019	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRPRIMW_00427	03/23/21	03/16/21	MEOH, Lot NA	5 mL	VMRPRIM_00049	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00049	06/01/21	03/01/21	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00444	07/23/21	07/16/21	MEOH, Lot NA	5 mL	VMRPRIM_00051	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00051	07/31/21	07/01/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22		Restek, Lot A0159680		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00033

VM567650_00033 Rec: 4/9/19

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 +/- 140.5314 +/- 143.8196	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 +/- 140.3828 +/- 143.6676	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 +/- 140.8538 +/- 144.1496	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 +/- 140.2734 +/- 143.5557	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00019

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,002.2 µg/mL	+/- 29.0815 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.0965 µg/mL	Unstressed
	Purity 98%		+/- 110.2100 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	251.8 µg/mL	+/- 1.4674 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3920 µg/mL	Unstressed
	Purity 99%		+/- 5.5487 µg/mL	Stressed
4	1,4-Dioxane-d8	5,003.8 µg/mL	+/- 29.0907 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19942)		+/- 107.1305 µg/mL	Unstressed
	Purity 99%		+/- 110.2450 µg/mL	Stressed
5	Chlorobenzene-d5	250.8 µg/mL	+/- 1.4613 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/- 5.3695 µg/mL	Unstressed
	Purity 99%		+/- 5.5256 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	250.5 µg/mL	+/- 1.4595 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.3631 µg/mL	Unstressed
	Purity 99%		+/- 5.5189 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

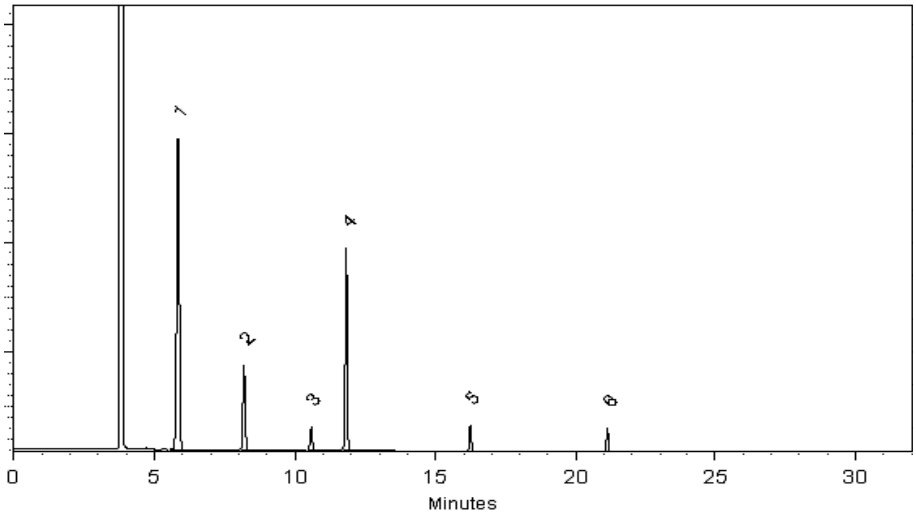
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot CD-107) **Purity** 99%	5,010.4 µg/mL	+/- 29.1309 µg/mL +/- 107.2733 µg/mL +/- 110.3919 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,252.7 µg/mL	+/- 7.2833 µg/mL +/- 26.8205 µg/mL +/- 27.6002 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBZ5549) **Purity** 99%	250.8 µg/mL	+/- 1.4615 µg/mL +/- 5.3706 µg/mL +/- 5.5267 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I19942-0122JM) **Purity** 99%	5,010.4 µg/mL	+/- 29.1309 µg/mL +/- 107.2733 µg/mL +/- 110.3919 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.0 µg/mL	+/- 1.4569 µg/mL +/- 5.3534 µg/mL +/- 5.5090 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	252.4 µg/mL	+/- 1.4709 µg/mL +/- 5.4048 µg/mL +/- 5.5619 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568720_00040

Rc'd 9/17/20 VM 568720_ 00040

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156859

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,830.0 µg/mL	+/- 116.1090	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 396.1504	µg/mL	Unstressed
	Purity 99%		+/- 888.7531	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721-00007

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Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00015

Rec: 4/14/20
VM569722_0005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0154679

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.7 µg/mL	+/- 18.2705 +/- 140.7566 +/- 144.0300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 18.7547 +/- 140.6865 +/- 143.9553	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.1 µg/mL	+/- 18.5858 +/- 140.7083 +/- 143.9787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,497.1 µg/mL	+/- 17.5808 +/- 140.3628 +/- 143.6309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 23.3138 +/- 141.3956 +/- 144.6498	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,499.0 µg/mL	+/- 21.4252 +/- 140.9973 +/- 144.2558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane -(CFC-11)		2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%			+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

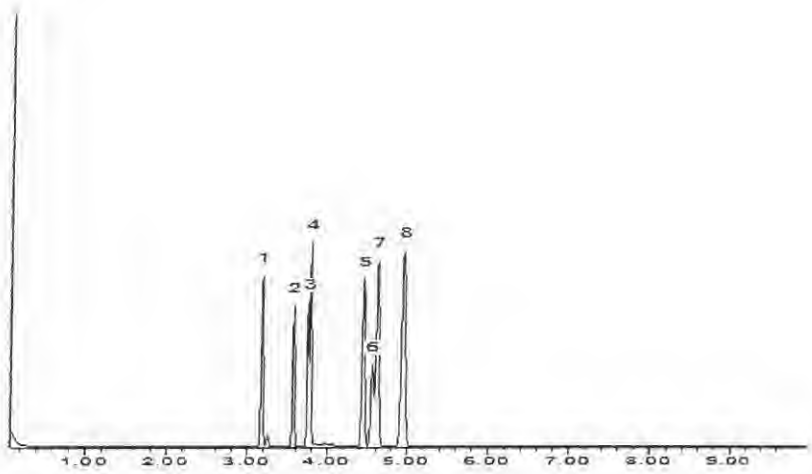
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 **Balance:** B707717271

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

vm569722_00019

Rec: 1/20/21
VMS69722_00019

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,502.3 µg/mL	+/- 16.4178 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5076 µg/mL	Unstressed
	Purity 99%		+/- 143.7858 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.6 µg/mL	+/- 16.3299 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.4038 µg/mL	Unstressed
	Purity 99%		+/- 143.6799 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 17.2154 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4890 µg/mL	Unstressed
	Purity 99%		+/- 143.7623 µg/mL	Stressed
4	1,3-Butadiene	2,500.7 µg/mL	+/- 17.6652 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.5681 µg/mL	Unstressed
	Purity 99%		+/- 143.8406 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.2 µg/mL	+/- 16.4034 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4450 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/- 17.7279 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5555 µg/mL	Unstressed
	Purity 99%		+/- 143.8274 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 8582700)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

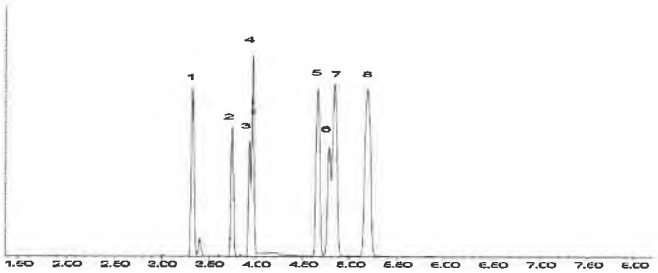
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Mar-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

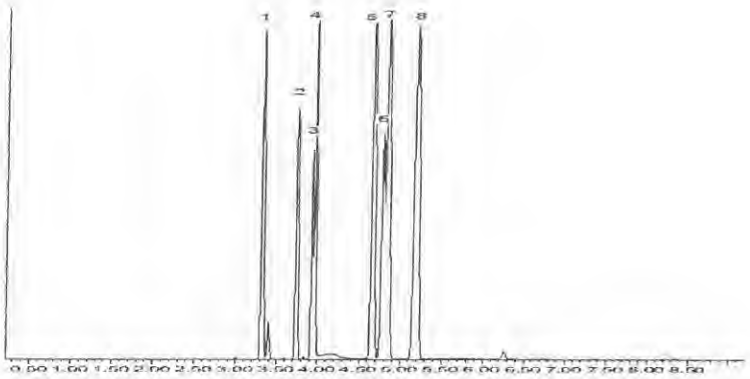
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 53.5253 µg/mL +/- 55.0814 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4 µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5 µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1 µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0 µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

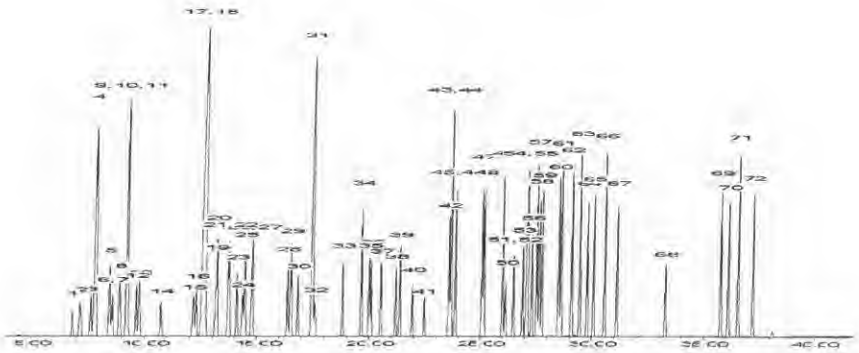
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00005

Rc'd 4/19/21 VM571992_00005

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Certificate #3122.01

Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3122.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571992S_00007

VMS71992S-00007 Rec; 2-21-20

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3 µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8 µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3 µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5 µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0 µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5 µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4 µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7 µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2 µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-lH)	2,505.2 µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7 µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2 µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7 µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

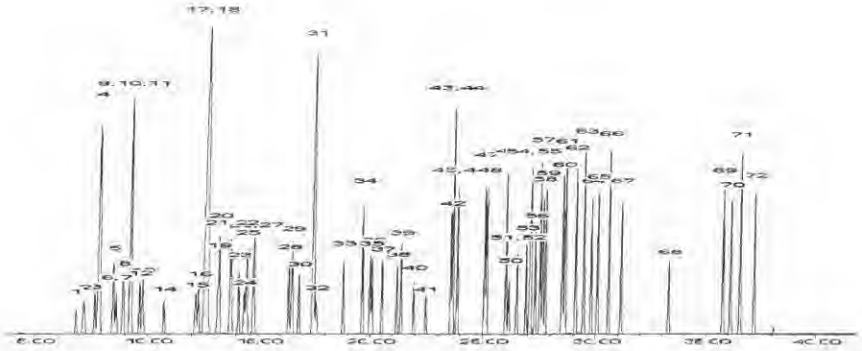
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00008

Rec'd 6/10/21 VM571992 00008

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Solution Order	Compound	Nominal Concentration (weight/volume)	Expanded Uncertainty (95% CL, k=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99% (Lot F23X068)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99% (Lot 18342)	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99% (Lot 7692300)	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99% (Lot HGCHN)	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99% (Lot UCNEL)	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 99% (Lot Y25A027)	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 99% (Lot H3HGC)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00010

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 210419
Manufacture Date: 04/19/2021
Expiration: 04/30/2022
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100.0%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.5%	25016.8 ± 232.9

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 210419

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-152869-1	111	121	89	75
SL-15_071321	240-152869-2	104	119	94	87
SL-14_071321	240-152869-3	102	117	92	77
SL-13_071321	240-152869-4	99	110	90	85
SL-7_071321	240-152869-5	112	122	91	74
SL-6_071321	240-152869-6	117	124	92	74
SL-5_071321	240-152869-7	113	122	89	70
SL-8_071321	240-152869-8	112	120	89	76
SL-9_071321	240-152869-9	110	119	89	79
SL-10_071321	240-152869-10	98	107	90	90
SL-11_071321	240-152869-11	101	109	94	94
SL-12_071321	240-152869-12	97	107	91	95
DUP-01	240-152869-13	92	105	90	91
	MB 240-495759/7	109	123	89	70
	MB 240-495964/7	102	115	93	81
	MB 240-496148/7	98	111	92	80
	LCS 240-495759/4	97	104	105	102
	LCS 240-495964/4	94	102	100	99
	LCS 240-496148/4	91	98	97	100
SL-8_071321 MS	240-152869-8 MS	91	95	100	99
	240-152897-G-7 MS	94	103	99	99
SL-8_071321 MSD	240-152869-8 MSD	92	97	99	100
	240-152897-I-7 MSD	92	99	98	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8332.D

Lab ID: LCS 240-495759/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.59	96	73-129	
cis-1,2-Dichloroethene	10.0	10.6	106	75-124	
Tetrachloroethene	10.0	9.93	99	70-125	
trans-1,2-Dichloroethene	10.0	10.9	109	74-130	
Trichloroethene	10.0	9.74	97	71-121	
Vinyl chloride	10.0	11.6	116	61-134	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8393.D

Lab ID: LCS 240-495964/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.37	94	73-129	
cis-1,2-Dichloroethene	10.0	11.1	111	75-124	
Tetrachloroethene	10.0	9.50	95	70-125	
trans-1,2-Dichloroethene	10.0	10.9	109	74-130	
Trichloroethene	10.0	10.1	101	71-121	
Vinyl chloride	10.0	11.3	113	61-134	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8423.D

Lab ID: LCS 240-496148/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.04	90	73-129	
cis-1,2-Dichloroethene	10.0	10.5	105	75-124	
Tetrachloroethene	10.0	8.64	86	70-125	
trans-1,2-Dichloroethene	10.0	10.5	105	74-130	
Trichloroethene	10.0	9.72	97	71-121	
Vinyl chloride	10.0	10.1	101	61-134	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8357.D

Lab ID: 240-152869-8 MS Client ID: SL-8_071321 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	80.0	8.0 U	63.5	79	64-132	
cis-1,2-Dichloroethene	80.0	63	138	93	68-121	
Tetrachloroethene	80.0	8.0 U	67.1	84	52-129	
trans-1,2-Dichloroethene	80.0	8.0 U	81.5	102	69-126	
Trichloroethene	80.0	18	89.7	89	56-124	
Vinyl chloride	80.0	8.8	84.1	94	49-136	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC8358.D

Lab ID: 240-152869-8 MSD Client ID: SL-8_071321 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	80.0	64.9	81	2	35	64-132	
cis-1,2-Dichloroethene	80.0	142	99	3	35	68-121	
Tetrachloroethene	80.0	68.2	85	2	35	52-129	
trans-1,2-Dichloroethene	80.0	83.9	105	3	35	69-126	
Trichloroethene	80.0	90.9	91	1	35	56-124	
Vinyl chloride	80.0	88.3	99	5	35	49-136	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: UXC8336.D Lab Sample ID: MB 240-495759/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 07/20/2021 11:37

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-495759/4	UXC8332.D	07/20/2021 10:09
TRIP BLANK	240-152869-1	UXC8341.D	07/20/2021 13:30
SL-7_071321	240-152869-5	UXC8342.D	07/20/2021 13:52
SL-6_071321	240-152869-6	UXC8343.D	07/20/2021 14:14
SL-5_071321	240-152869-7	UXC8344.D	07/20/2021 14:35
SL-8_071321	240-152869-8	UXC8345.D	07/20/2021 14:57
SL-9_071321	240-152869-9	UXC8346.D	07/20/2021 15:19
SL-8_071321 MS	240-152869-8 MS	UXC8357.D	07/20/2021 19:17
SL-8_071321 MSD	240-152869-8 MSD	UXC8358.D	07/20/2021 19:38

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: UXC8397.D Lab Sample ID: MB 240-495964/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 07/21/2021 15:29

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-495964/4	UXC8393.D	07/21/2021 14:01
SL-15_071321	240-152869-2	UXC8401.D	07/21/2021 16:54
SL-14_071321	240-152869-3	UXC8402.D	07/21/2021 17:16
	240-152897-G-7 MS	UXC8419.D	07/21/2021 23:27
	240-152897-I-7 MSD	UXC8420.D	07/21/2021 23:49

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: UXC8427.D Lab Sample ID: MB 240-496148/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 07/22/2021 11:15

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-496148/4	UXC8423.D	07/22/2021 09:48
SL-13_071321	240-152869-4	UXC8429.D	07/22/2021 12:10
SL-10_071321	240-152869-10	UXC8430.D	07/22/2021 12:31
SL-11_071321	240-152869-11	UXC8431.D	07/22/2021 12:53
SL-12_071321	240-152869-12	UXC8432.D	07/22/2021 13:15
DUP-01	240-152869-13	UXC8433.D	07/22/2021 13:37

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: BFB210316.D BFB Injection Date: 03/16/2021

Instrument ID: A3UX15 BFB Injection Time: 07:33

Analysis Batch No.: 476941

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	49.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	Greater than 50% of mass 95	92.8	
175	5.0 - 9.0 % of mass 174	6.1	(6.6) 1
176	95.0 - 101.0 % of mass 174	90.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-476941/2	UXC5644.D	03/16/2021	8:36
	STD8260 240-476941/3	UXC5645.D	03/16/2021	8:58
	STD8260 240-476941/4	UXC5646.D	03/16/2021	9:20
	STD8260 240-476941/5	UXC5647.D	03/16/2021	9:42
	STD8260 240-476941/6	UXC5648.D	03/16/2021	10:17
	STD8260 240-476941/7	UXC5649.D	03/16/2021	10:39
	ICV 240-476941/14	UXC5650.D	03/16/2021	11:01
	ICV 240-476941/15	UXC5657.D	03/16/2021	13:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: BFB720A.D BFB Injection Date: 07/20/2021

Instrument ID: A3UX15 BFB Injection Time: 09:23

Analysis Batch No.: 495759

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	74.6	
175	5.0 - 9.0 % of mass 174	5.2	(7.0) 1
176	95.0 - 101.0 % of mass 174	71.6	(96.0) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-495759/2	UXC8331.D	07/20/2021	9:47
	LCS 240-495759/4	UXC8332.D	07/20/2021	10:09
	CCV 240-495759/3	UXC8333.D	07/20/2021	10:31
	MB 240-495759/7	UXC8336.D	07/20/2021	11:37
TRIP BLANK	240-152869-1	UXC8341.D	07/20/2021	13:30
SL-7_071321	240-152869-5	UXC8342.D	07/20/2021	13:52
SL-6_071321	240-152869-6	UXC8343.D	07/20/2021	14:14
SL-5_071321	240-152869-7	UXC8344.D	07/20/2021	14:35
SL-8_071321	240-152869-8	UXC8345.D	07/20/2021	14:57
SL-9_071321	240-152869-9	UXC8346.D	07/20/2021	15:19
SL-8_071321 MS	240-152869-8 MS	UXC8357.D	07/20/2021	19:17
SL-8_071321 MSD	240-152869-8 MSD	UXC8358.D	07/20/2021	19:38

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: BFB721D.D BFB Injection Date: 07/21/2021

Instrument ID: A3UX15 BFB Injection Time: 13:10

Analysis Batch No.: 495964

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.2	
75	30.0 - 60.0 % of mass 95	45.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	78.2	
175	5.0 - 9.0 % of mass 174	5.3	(6.7) 1
176	95.0 - 101.0 % of mass 174	74.8	(95.7) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-495964/2	UXC8392.D	07/21/2021	13:39
	LCS 240-495964/4	UXC8393.D	07/21/2021	14:01
	CCV 240-495964/3	UXC8394.D	07/21/2021	14:23
	MB 240-495964/7	UXC8397.D	07/21/2021	15:29
SL-15_071321	240-152869-2	UXC8401.D	07/21/2021	16:54
SL-14_071321	240-152869-3	UXC8402.D	07/21/2021	17:16
	240-152897-G-7 MS	UXC8419.D	07/21/2021	23:27
	240-152897-I-7 MSD	UXC8420.D	07/21/2021	23:49

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: BFB722.D BFB Injection Date: 07/22/2021

Instrument ID: A3UX15 BFB Injection Time: 08:52

Analysis Batch No.: 496148

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	71.6	
175	5.0 - 9.0 % of mass 174	5.0	(6.9) 1
176	95.0 - 101.0 % of mass 174	68.5	(95.7) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-496148/2	UXC8422.D	07/22/2021	9:26
	LCS 240-496148/4	UXC8423.D	07/22/2021	9:48
	CCV 240-496148/3	UXC8424.D	07/22/2021	10:10
	MB 240-496148/7	UXC8427.D	07/22/2021	11:15
SL-13_071321	240-152869-4	UXC8429.D	07/22/2021	12:10
SL-10_071321	240-152869-10	UXC8430.D	07/22/2021	12:31
SL-11_071321	240-152869-11	UXC8431.D	07/22/2021	12:53
SL-12_071321	240-152869-12	UXC8432.D	07/22/2021	13:15
DUP-01	240-152869-13	UXC8433.D	07/22/2021	13:37

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: STD8260 240-476941/4 Date Analyzed: 03/16/2021 09:20

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC5646.D Heated Purge: (Y/N) N

Calibration ID: 60823

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1635381	5.00	1083691	7.66	639882	9.90
UPPER LIMIT		3270762	5.50	2167382	8.16	1279764	10.40
LOWER LIMIT		817691	4.50	541846	7.16	319941	9.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-476941/14		1567389	5.00	1054688	7.66	623148	9.90
ICV 240-476941/15		1522004	5.00	1034257	7.66	604775	9.90
CCVIS 240-495759/2		2542669	5.00	1982756	7.66	1173273	9.89
CCVIS 240-495964/2		2356550	5.00	1854867	7.66	997803	9.89
CCVIS 240-496148/2		2546306	5.00	2048000	7.66	1043210	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: CCVIS 240-495759/2 Date Analyzed: 07/20/2021 09:47

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC8331.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2542669	5.00	1982756	7.66	1173273	9.89
UPPER LIMIT		5085338	5.50	3965512	8.16	2346546	10.39
LOWER LIMIT		1271335	4.50	991378	7.16	586637	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-495759/4		2431162	5.00	1820435	7.66	1033483	9.89
CCV 240-495759/3		2314533	5.00	1966782	7.66	753904	9.89
MB 240-495759/7		2013449	5.00	1592888	7.66	647738	9.89
240-152869-1	TRIP BLANK	2029419	5.00	1626103	7.66	666723	9.89
240-152869-5	SL-7_071321	2038884	5.00	1600598	7.66	712056	9.89
240-152869-6	SL-6_071321	1978246	5.00	1587072	7.66	695947	9.89
240-152869-7	SL-5_071321	1966502	5.00	1533206	7.66	629067	9.89
240-152869-8	SL-8_071321	2019649	5.00	1587239	7.66	703991	9.89
240-152869-9	SL-9_071321	2018917	5.00	1606659	7.66	739034	9.89
240-152869-8 MS	SL-8_071321 MS	2570162	5.00	1925876	7.66	1050484	9.89
240-152869-8 MSD	SL-8_071321 MSD	2533313	5.00	1954557	7.66	1064615	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: CCVIS 240-495964/2 Date Analyzed: 07/21/2021 13:39

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC8392.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2356550	5.00	1854867	7.66	997803	9.89
UPPER LIMIT		4713100	5.50	3709734	8.16	1995606	10.39
LOWER LIMIT		1178275	4.50	927434	7.16	498902	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-495964/4		2405434	5.00	1860987	7.66	1003816	9.89
CCV 240-495964/3		2270632	5.00	1893333	7.66	779770	9.89
MB 240-495964/7		2026491	5.00	1629979	7.66	732464	9.89
240-152869-2	SL-15_071321	2032336	5.00	1602774	7.66	915977	9.89
240-152869-3	SL-14_071321	1979300	5.00	1550760	7.66	834575	9.89
240-152897-G-7 MS		2466664	5.00	1933872	7.66	1081468	9.89
240-152897-I-7 MSD		2520161	5.00	1969379	7.66	1055131	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: CCVIS 240-496148/2 Date Analyzed: 07/22/2021 09:26

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC8422.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2546306	5.00	2048000	7.66	1043210	9.89
UPPER LIMIT		5092612	5.50	4096000	8.16	2086420	10.39
LOWER LIMIT		1273153	4.50	1024000	7.16	521605	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-496148/4		2483350	5.00	1991289	7.66	1070211	9.89
CCV 240-496148/3		2355155	5.00	1962419	7.66	837272	9.89
MB 240-496148/7		2099468	5.00	1661574	7.66	730077	9.89
240-152869-4	SL-13_071321	2233070	5.00	1802131	7.66	961244	9.89
240-152869-10	SL-10_071321	2114341	5.00	1725080	7.66	925978	9.89
240-152869-11	SL-11_071321	2101898	5.00	1741905	7.66	899063	9.89
240-152869-12	SL-12_071321	2189305	5.00	1827818	7.66	957396	9.89
240-152869-13	DUP-01	1896687	5.00	1513040	7.66	778804	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-152869-1

Matrix: Water Lab File ID: UXC8341.D

Analysis Method: 8260B Date Collected: 07/13/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		75-130
460-00-4	4-Bromofluorobenzene (Surr)	75		47-134
2037-26-5	Toluene-d8 (Surr)	89		69-122
1868-53-7	Dibromofluoromethane (Surr)	111		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8341.D				
Lims ID:	240-152869-A-1				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 13:30:30	ALS Bottle#:	11	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111391-042				
Misc. Info.:	C210720A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Jul-2021 09:06:29	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1610				
First Level Reviewer: evansle		Date:	21-Jul-2021 08:49:55		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	2029419	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1626103	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	666723	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	525187	11.1	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	647727	12.1	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1781094	8.94	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	93	502240	7.45	
	11 Vinyl chloride	62		1.657				ND	
	19 1,1-Dichloroethene	96		2.618				ND	
	32 trans-1,2-Dichloroethene	96		3.234				ND	
	41 cis-1,2-Dichloroethene	96		4.052				ND	
	60 Trichloroethene	130		5.309				ND	7
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

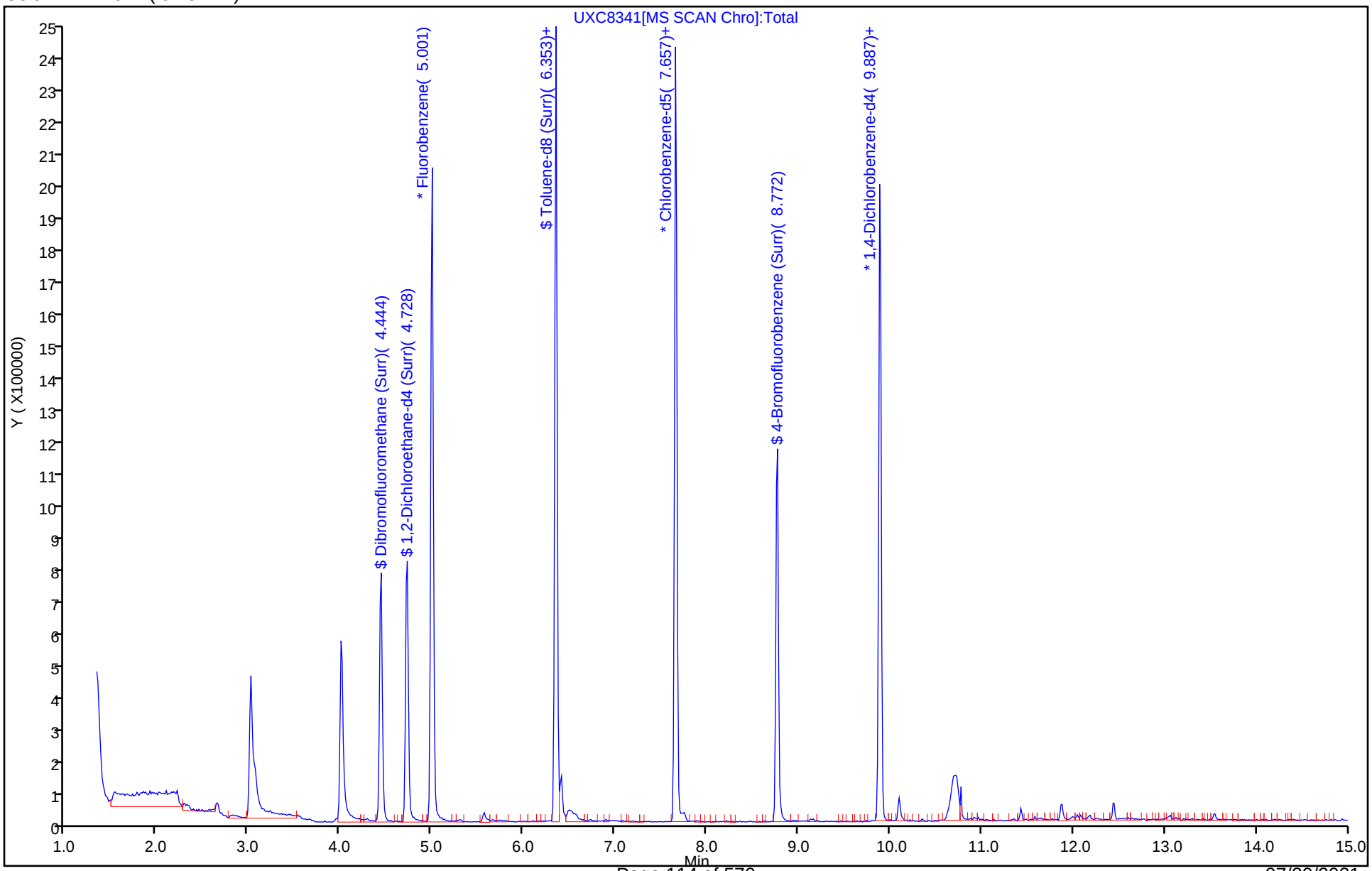
Report Date: 21-Jul-2021 09:06:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8341.D

Injection Date:	20-Jul-2021 13:30:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-A-1	Lab Sample ID:	240-152869-1	Worklist Smp#:	42
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8341.D
Lims ID: 240-152869-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 20-Jul-2021 13:30:30 ALS Bottle#: 11 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-042
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:49:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.1	110.72
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.1	121.21
$ 6 Toluene-d8 (Surr)	10.0	8.94	89.38
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.45	74.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-15_071321 Lab Sample ID: 240-152869-2

Matrix: Water Lab File ID: UXC8401.D

Analysis Method: 8260B Date Collected: 07/13/2021 09:10

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 16:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		75-130
460-00-4	4-Bromofluorobenzene (Surr)	87		47-134
2037-26-5	Toluene-d8 (Surr)	94		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8401.D				
Lims ID:	240-152869-E-2				
Client ID:	SL-15_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 16:54:30	ALS Bottle#:	10	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111428-042				
Misc. Info.:	C210721A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	22-Jul-2021 08:06:38	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1646				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2032336	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1602774	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	915977	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	493218	10.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	639181	11.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1844426	9.39	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	93	576575	8.68	
11 Vinyl chloride	62		1.657				ND	
19 1,1-Dichloroethene	96		2.618				ND	
32 trans-1,2-Dichloroethene	96		3.234				ND	
41 cis-1,2-Dichloroethene	96		4.053				ND	
60 Trichloroethene	130		5.310				ND	
76 Tetrachloroethene	164		6.899				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

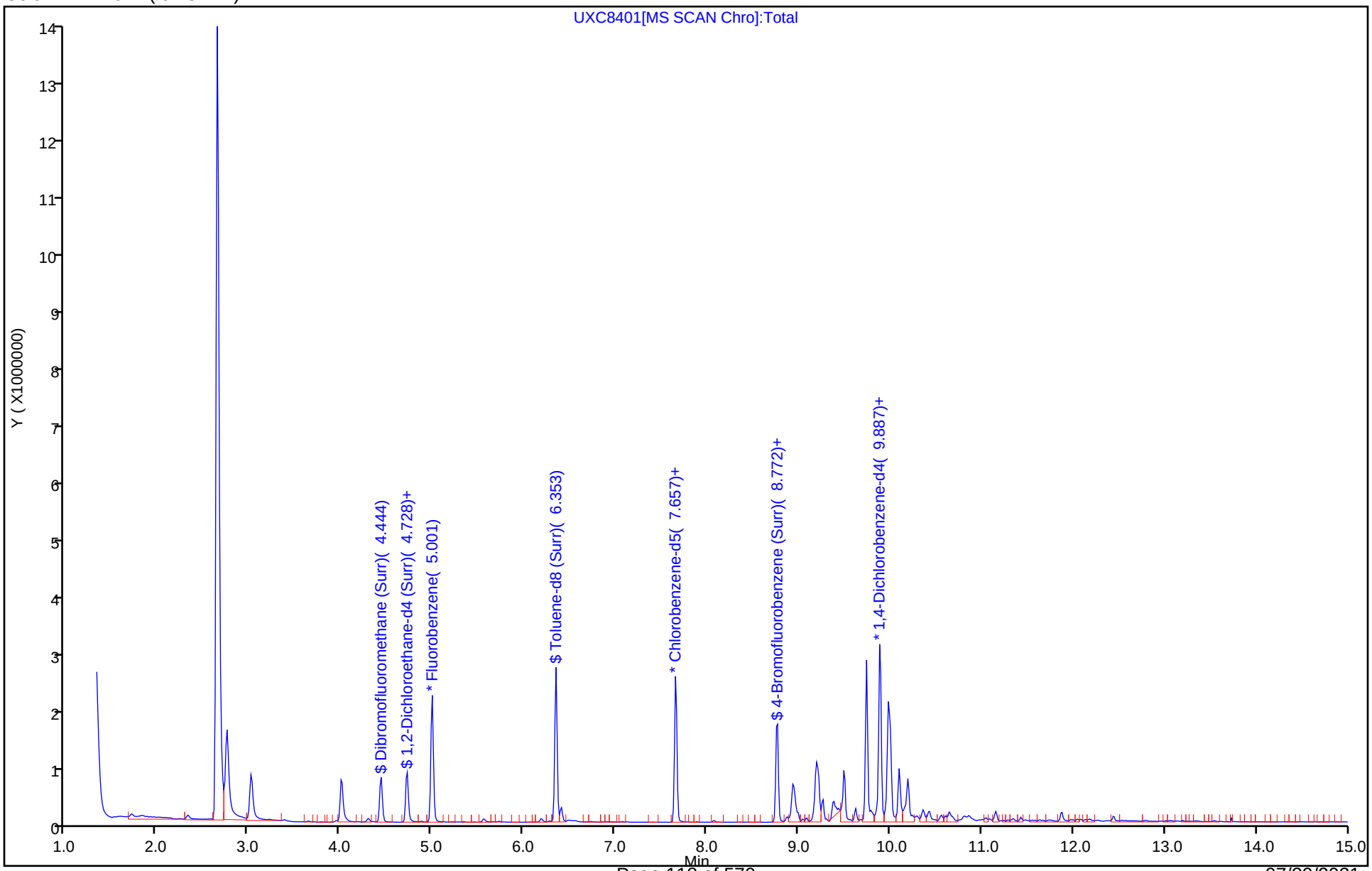
Report Date: 22-Jul-2021 08:06:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8401.D

Injection Date:	21-Jul-2021 16:54:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-2	Lab Sample ID:	240-152869-2	Worklist Smp#:	42
Client ID:	SL-15_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8401.D
Lims ID: 240-152869-E-2
Client ID: SL-15_071321
Sample Type: Client
Inject. Date: 21-Jul-2021 16:54:30 ALS Bottle#: 10 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-042
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:38 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.4	103.83
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.9	119.44
$ 6 Toluene-d8 (Surr)	10.0	9.39	93.90
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.68	86.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-14_071321 Lab Sample ID: 240-152869-3

Matrix: Water Lab File ID: UXC8402.D

Analysis Method: 8260B Date Collected: 07/13/2021 09:40

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		75-130
460-00-4	4-Bromofluorobenzene (Surr)	77		47-134
2037-26-5	Toluene-d8 (Surr)	92		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8402.D				
Lims ID:	240-152869-E-3				
Client ID:	SL-14_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 17:16:30	ALS Bottle#:	11	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111428-043				
Misc. Info.:	C210721A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	22-Jul-2021 08:06:38	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1646				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1979300	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	85	1550760	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	834575	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	472602	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	100	611021	11.7	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1747823	9.20	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	93	497987	7.75	
11 Vinyl chloride	62		1.657				ND	
19 1,1-Dichloroethene	96		2.618				ND	
32 trans-1,2-Dichloroethene	96		3.234				ND	
41 cis-1,2-Dichloroethene	96		4.053				ND	
60 Trichloroethene	130		5.310				ND	
76 Tetrachloroethene	164		6.899				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

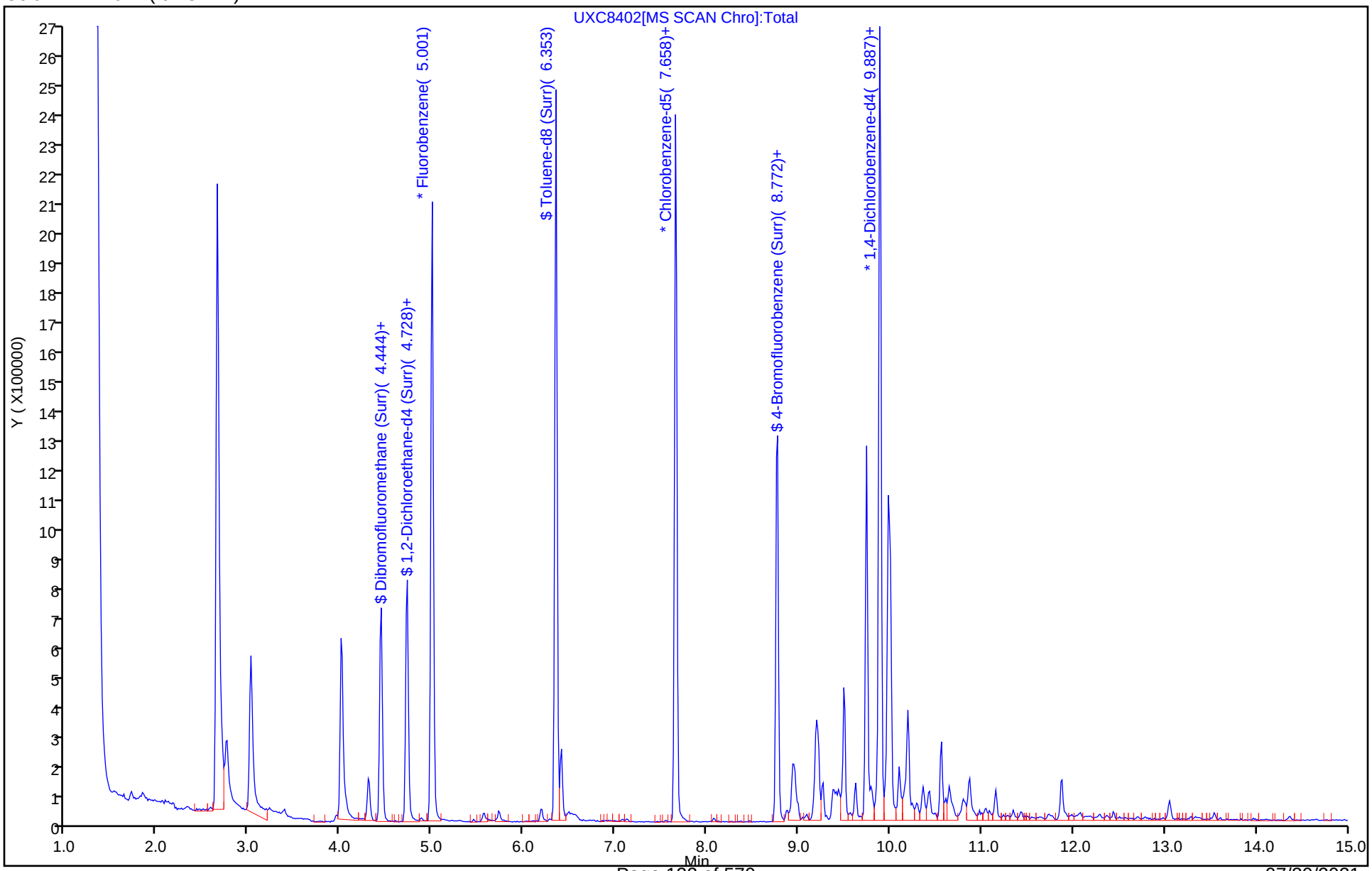
Report Date: 22-Jul-2021 08:06:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8402.D

Injection Date:	21-Jul-2021 17:16:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-3	Lab Sample ID:	240-152869-3	Worklist Smp#:	43
Client ID:	SL-14_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8402.D
Lims ID: 240-152869-E-3
Client ID: SL-14_071321
Sample Type: Client
Inject. Date: 21-Jul-2021 17:16:30 ALS Bottle#: 11 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-043
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:38 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.2	102.15
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.7	117.24
$ 6 Toluene-d8 (Surr)	10.0	9.20	91.97
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.75	77.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-13_071321 Lab Sample ID: 240-152869-4

Matrix: Water Lab File ID: UXC8429.D

Analysis Method: 8260B Date Collected: 07/13/2021 10:05

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 12:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		75-130
460-00-4	4-Bromofluorobenzene (Surr)	85		47-134
2037-26-5	Toluene-d8 (Surr)	90		69-122
1868-53-7	Dibromofluoromethane (Surr)	99		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8429.D
Lims ID: 240-152869-E-4
Client ID: SL-13_071321
Sample Type: Client
Inject. Date: 22-Jul-2021 12:10:30 ALS Bottle#: 8 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-037
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 12:59:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2233070	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1802131	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	961244	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	514965	9.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	648635	11.0	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1990165	9.01	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	633759	8.48	
11 Vinyl chloride	62	1.657	1.657	0.000	96	80125	1.22	
19 1,1-Dichloroethene	96		2.617				ND	
32 trans-1,2-Dichloroethene	96		3.234				ND	7
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	76	29392	0.4317	
60 Trichloroethene	130	5.309	5.309	0.000	95	24340	0.3697	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

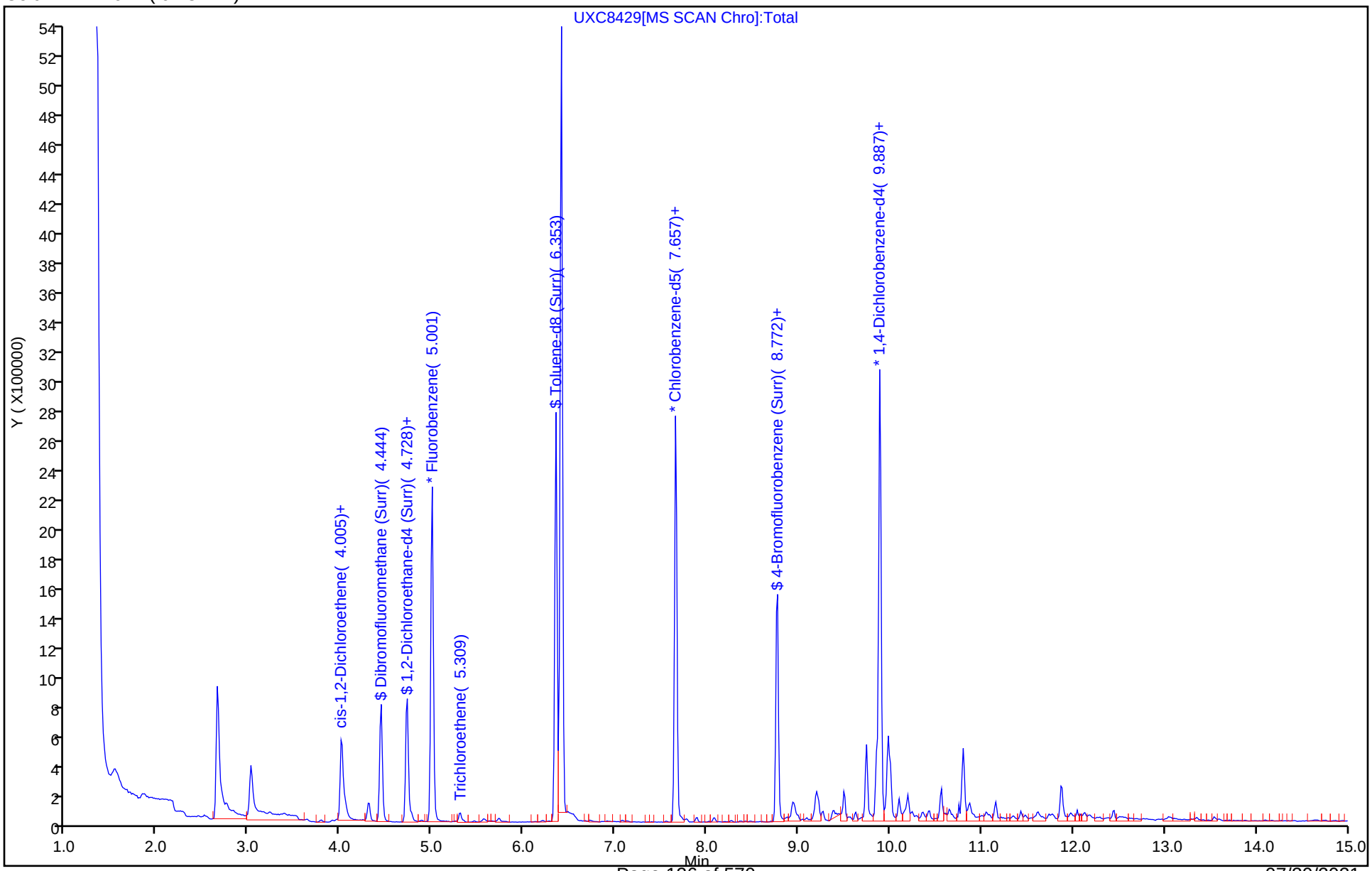
Report Date: 23-Jul-2021 08:13:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8429.D

Injection Date:	22-Jul-2021 12:10:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-4	Lab Sample ID:	240-152869-4	Worklist Smp#:	37
Client ID:	SL-13_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8429.D
Lims ID: 240-152869-E-4
Client ID: SL-13_071321
Sample Type: Client
Inject. Date: 22-Jul-2021 12:10:30 ALS Bottle#: 8 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-037
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 12:59:58

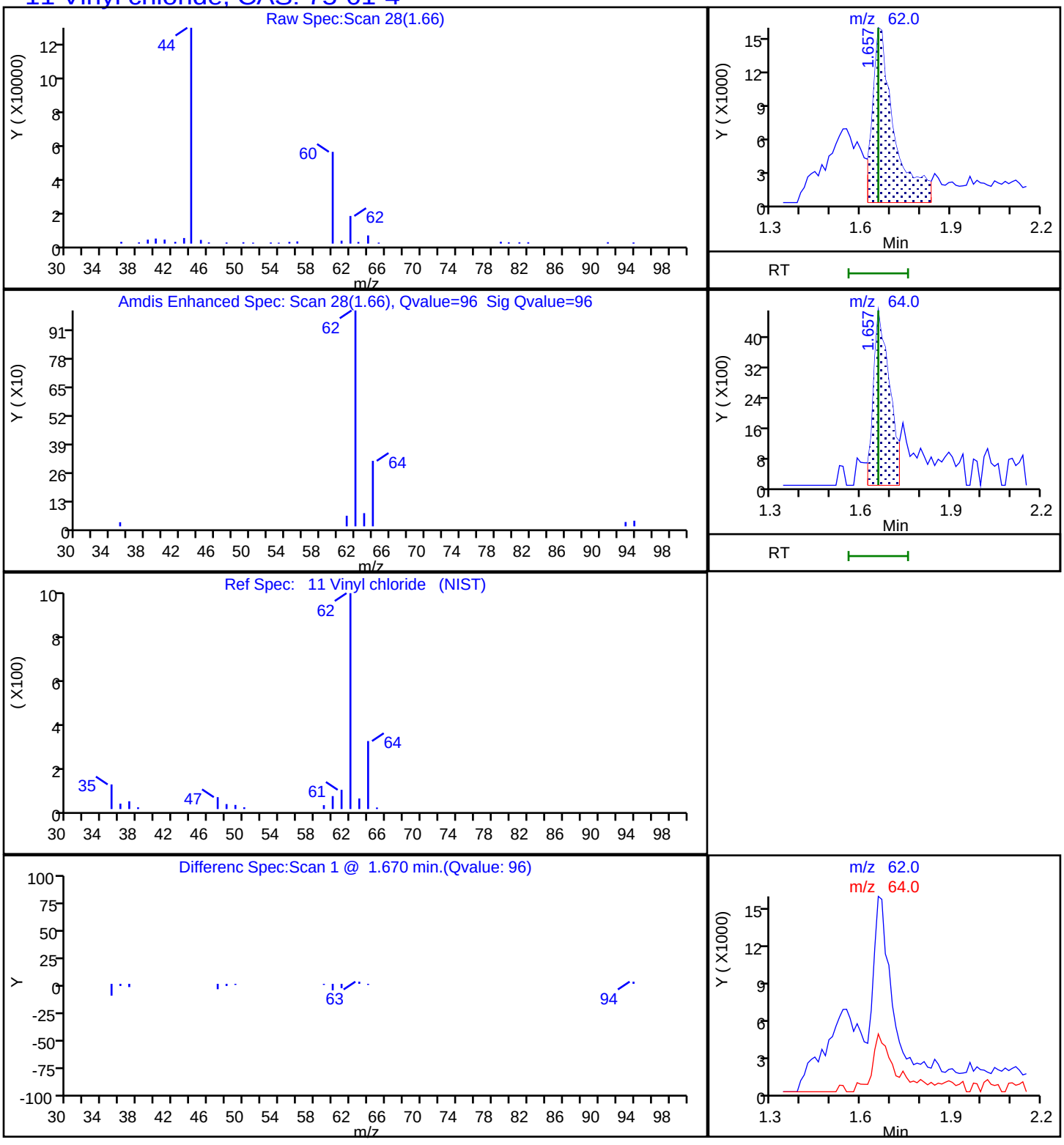
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.87	98.66
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.31
$ 6 Toluene-d8 (Surr)	10.0	9.01	90.11
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.48	84.83

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8429.D

Injection Date:	22-Jul-2021 12:10:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-4	Lab Sample ID:	240-152869-4		
Client ID:	SL-13_071321				
Operator ID:	43582	ALS Bottle#:	8	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-7_071321 Lab Sample ID: 240-152869-5

Matrix: Water Lab File ID: UXC8342.D

Analysis Method: 8260B Date Collected: 07/13/2021 10:30

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		75-130
460-00-4	4-Bromofluorobenzene (Surr)	74		47-134
2037-26-5	Toluene-d8 (Surr)	91		69-122
1868-53-7	Dibromofluoromethane (Surr)	112		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8342.D
Lims ID: 240-152869-E-5
Client ID: SL-7_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 13:52:30 ALS Bottle#: 12 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-043
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2038884	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1600598	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	712056	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	532477	11.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	655245	12.2	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1783462	9.09	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	94	492888	7.43	
11 Vinyl chloride	62		1.657				ND	
19 1,1-Dichloroethene	96		2.618				ND	
32 trans-1,2-Dichloroethene	96		3.234				ND	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	78	27964	0.4499	
60 Trichloroethene	130	5.309	5.309	0.000	88	6925	0.1152	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

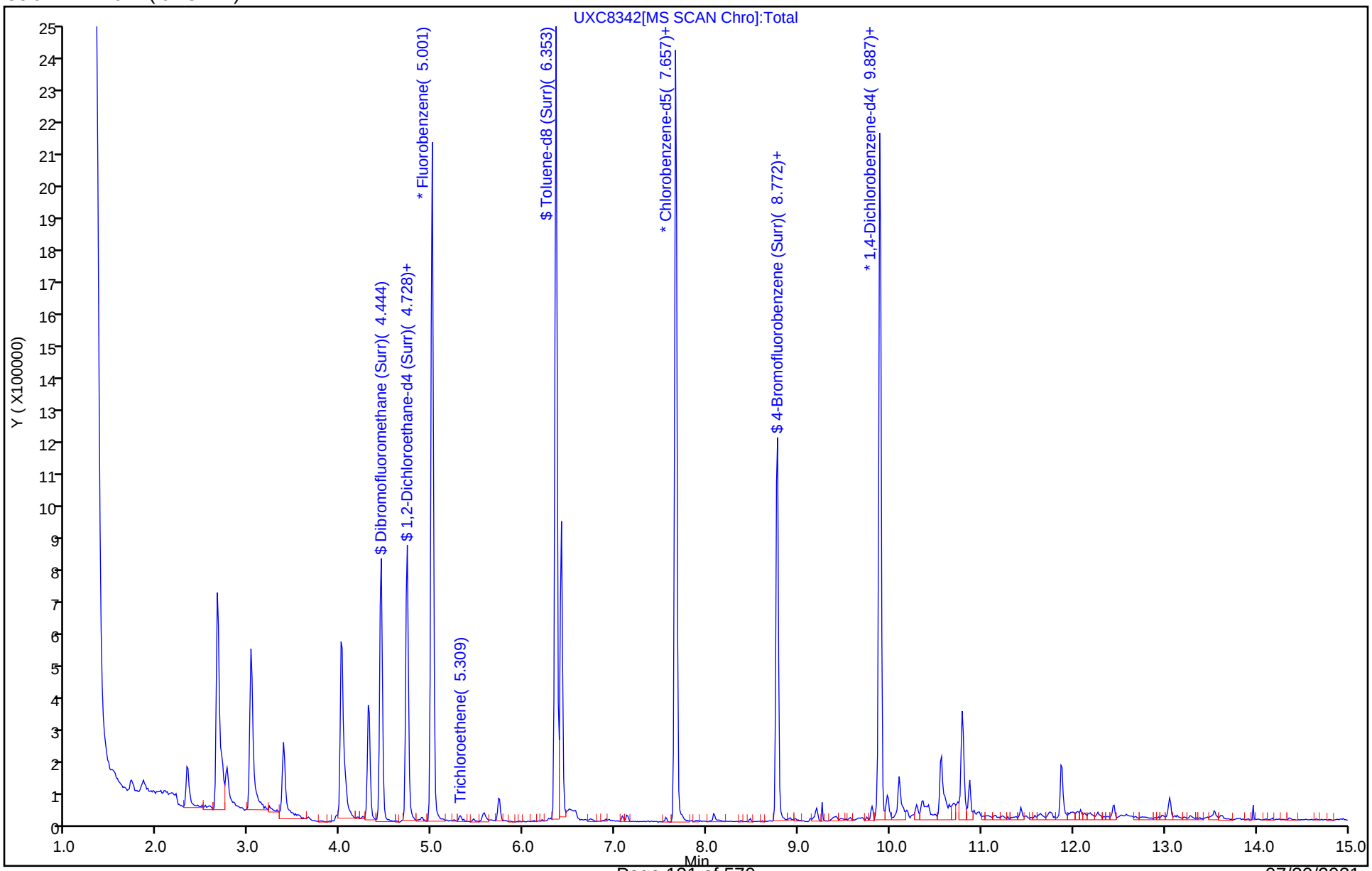
Report Date: 21-Jul-2021 09:06:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8342.D

Injection Date:	20-Jul-2021 13:52:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-5	Lab Sample ID:	240-152869-5	Worklist Smp#:	43
Client ID:	SL-7_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8342.D
Lims ID: 240-152869-E-5
Client ID: SL-7_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 13:52:30 ALS Bottle#: 12 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-043
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.2	111.73
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.2	122.05
$ 6 Toluene-d8 (Surr)	10.0	9.09	90.92
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.43	74.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-6_071321 Lab Sample ID: 240-152869-6

Matrix: Water Lab File ID: UXC8343.D

Analysis Method: 8260B Date Collected: 07/13/2021 10:55

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 14:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.96	J	1.0	0.44
75-01-4	Vinyl chloride	0.80	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	124		75-130
460-00-4	4-Bromofluorobenzene (Surr)	74		47-134
2037-26-5	Toluene-d8 (Surr)	92		69-122
1868-53-7	Dibromofluoromethane (Surr)	117		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D
Lims ID: 240-152869-E-6
Client ID: SL-6_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 14:14:30 ALS Bottle#: 13 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-044
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:22

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1978246	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1587072	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	695947	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	541834	11.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	645495	12.4	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1794075	9.22	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	94	486954	7.40	
	11 Vinyl chloride	62	1.657	1.657	0.000	95	46510	0.8007	
	19 1,1-Dichloroethene	96		2.618				ND	
	32 trans-1,2-Dichloroethene	96		3.234				ND	7
	41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	77	313916	5.20	
	60 Trichloroethene	130	5.309	5.309	0.000	98	56246	0.9645	
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

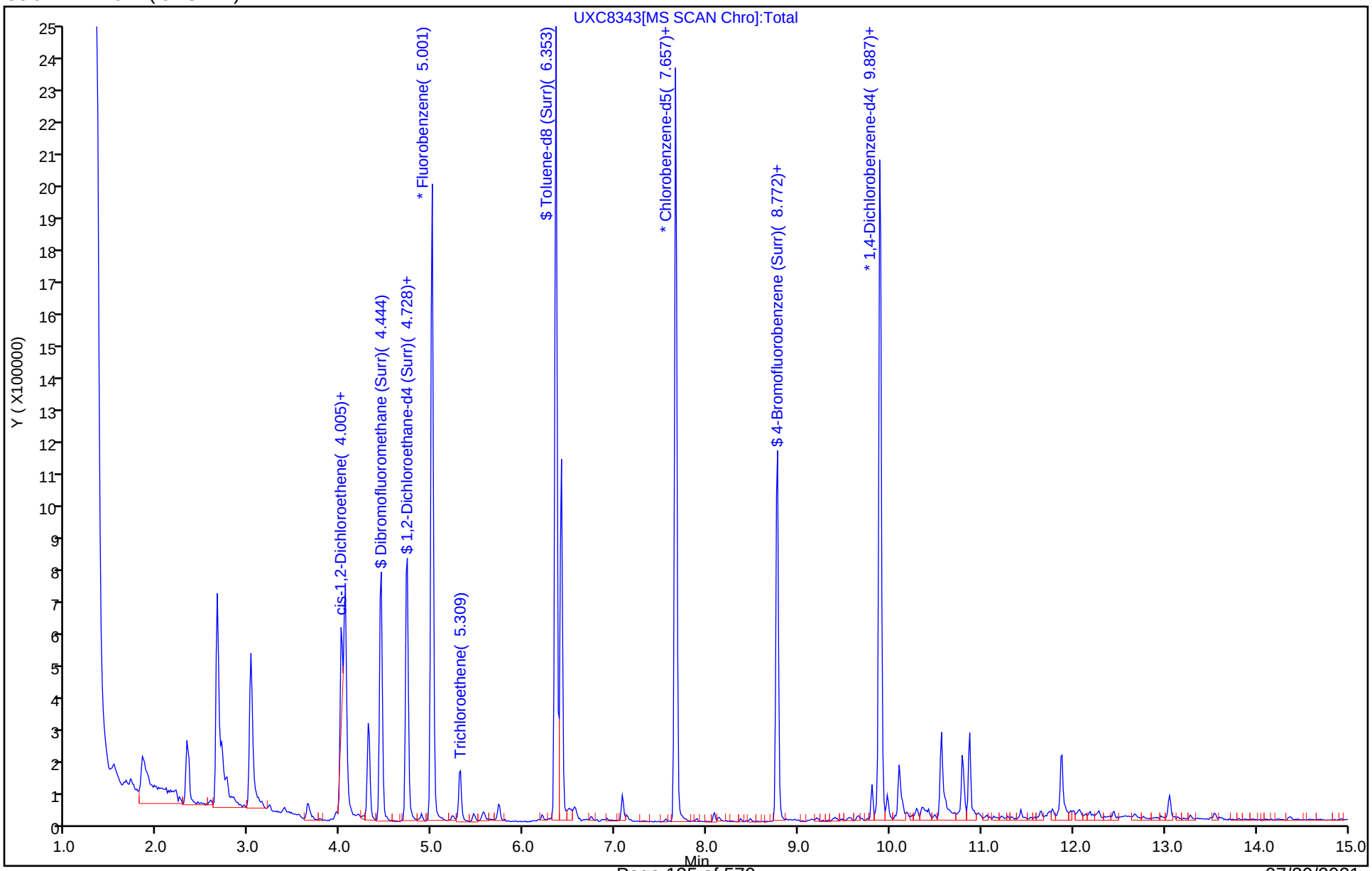
Report Date: 21-Jul-2021 09:06:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D

Injection Date:	20-Jul-2021 14:14:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-6	Lab Sample ID:	240-152869-6	Worklist Smp#:	44
Client ID:	SL-6_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D
Lims ID: 240-152869-E-6
Client ID: SL-6_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 14:14:30 ALS Bottle#: 13 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-044
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:22

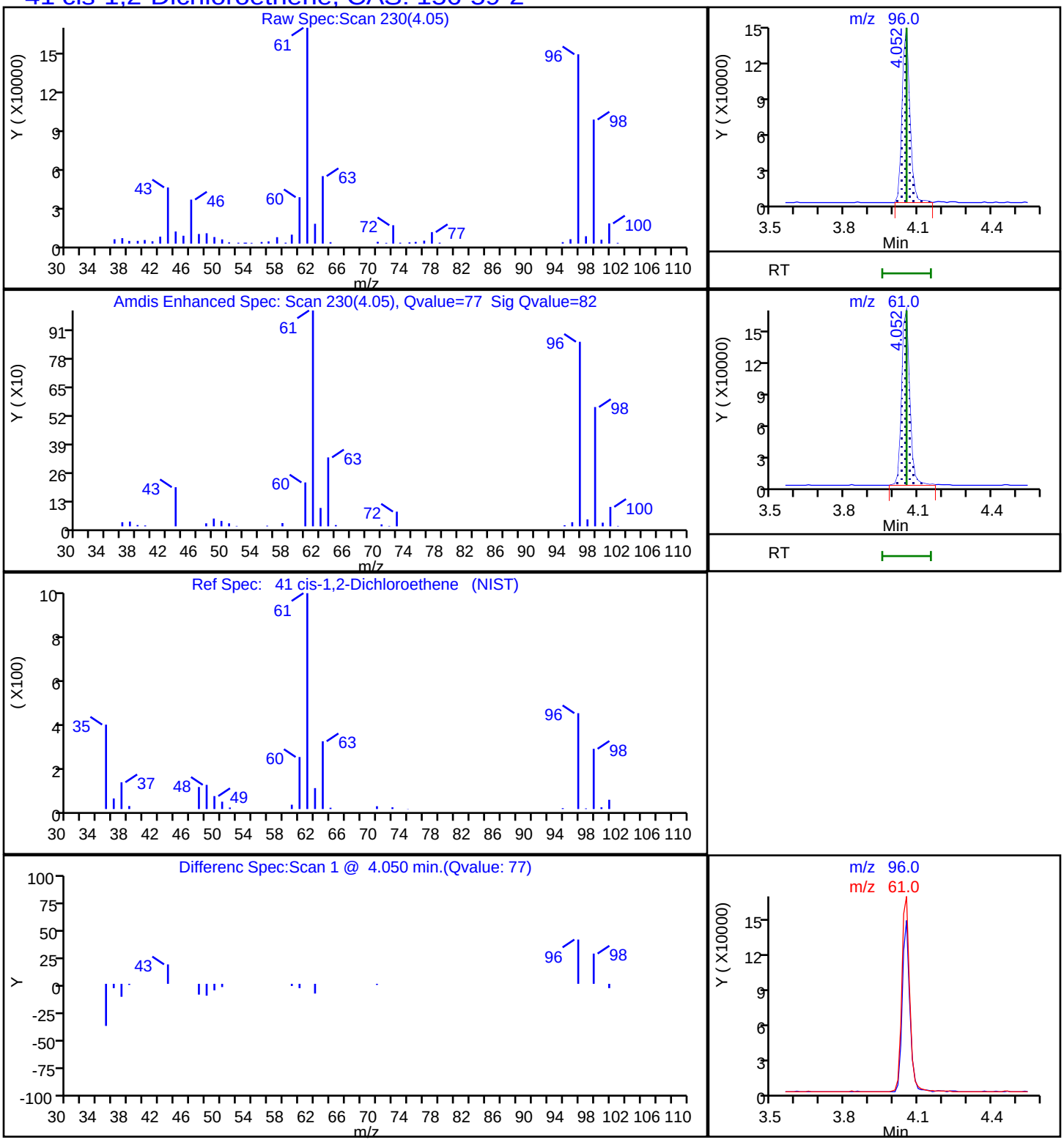
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.7	117.18
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.4	123.92
$ 6 Toluene-d8 (Surr)	10.0	9.22	92.24
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.40	74.02

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D

Injection Date:	20-Jul-2021 14:14:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-6	Lab Sample ID:	240-152869-6		
Client ID:	SL-6_071321				
Operator ID:	43582	ALS Bottle#:	13	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

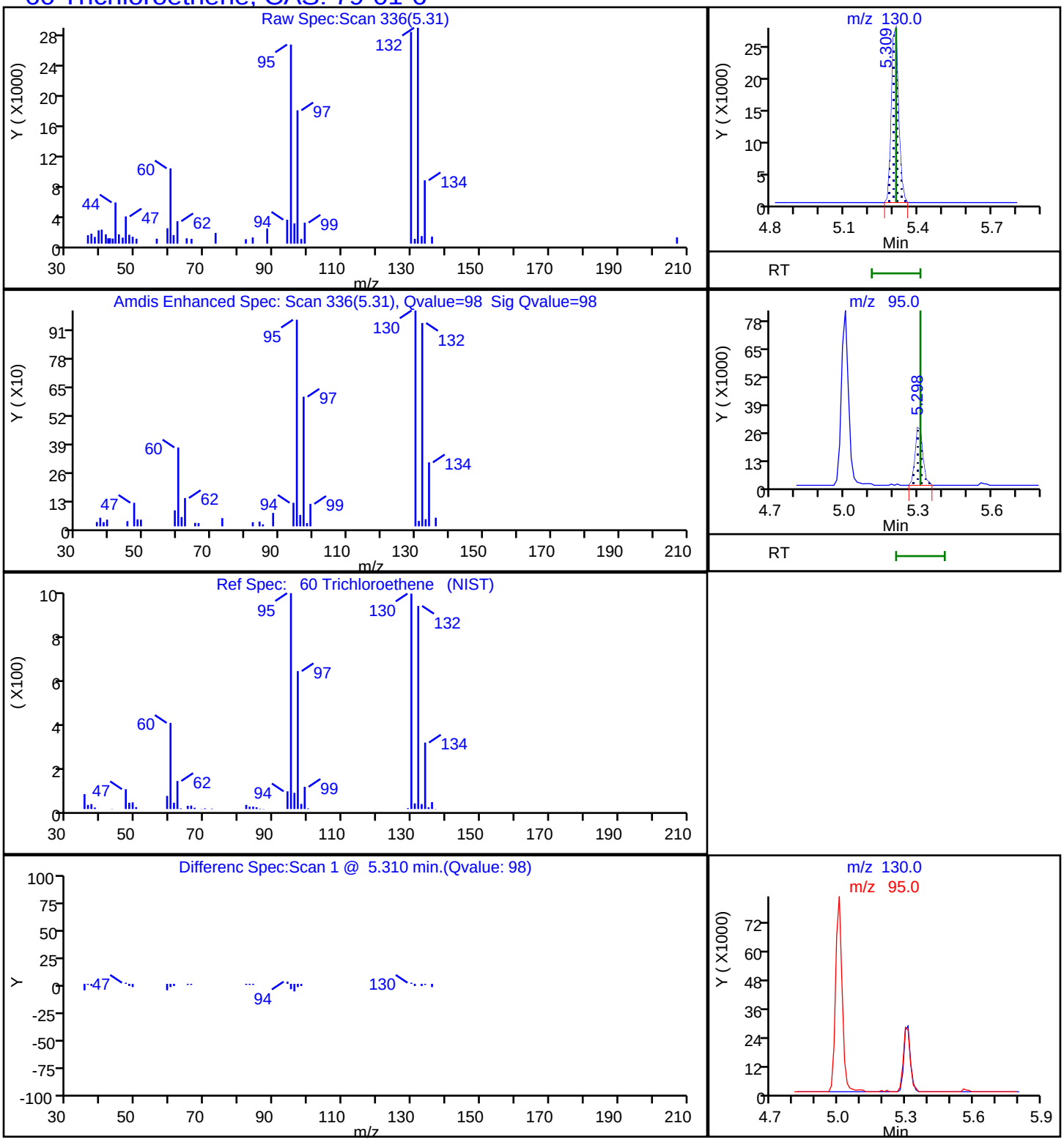


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D

Injection Date:	20-Jul-2021 14:14:30	Instrument ID:	A3UX15
Lims ID:	240-152869-E-6	Lab Sample ID:	240-152869-6
Client ID:	SL-6_071321		
Operator ID:	43582	ALS Bottle#:	13 Worklist Smp#: 44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

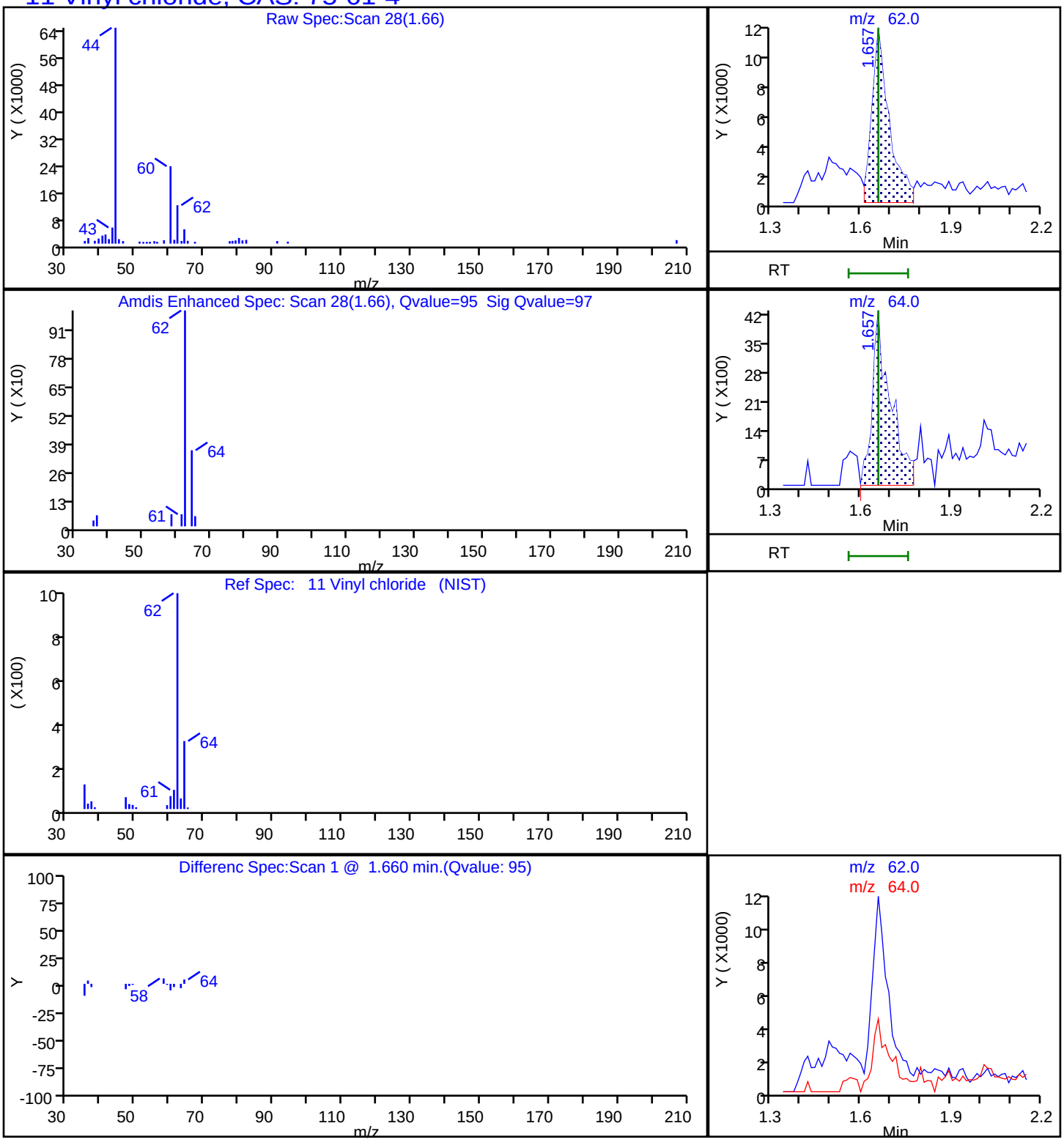


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8343.D

Injection Date:	20-Jul-2021 14:14:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-6	Lab Sample ID:	240-152869-6		
Client ID:	SL-6_071321				
Operator ID:	43582	ALS Bottle#:	13	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-5_071321 Lab Sample ID: 240-152869-7

Matrix: Water Lab File ID: UXC8344.D

Analysis Method: 8260B Date Collected: 07/13/2021 12:10

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 14:35

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	81		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	20		5.0	2.2
75-01-4	Vinyl chloride	10		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		75-130
460-00-4	4-Bromofluorobenzene (Surr)	70		47-134
2037-26-5	Toluene-d8 (Surr)	89		69-122
1868-53-7	Dibromofluoromethane (Surr)	113		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D
Lims ID: 240-152869-E-7
Client ID: SL-5_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 14:35:30 ALS Bottle#: 14 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0111391-045
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:45

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1966502	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1533206	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	629067	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	517186	11.3	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	631938	12.2	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1669382	8.88	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	94	446939	7.03	
	11 Vinyl chloride	62	1.657	1.657	0.000	98	121168	2.10	
	19 1,1-Dichloroethene	96		2.618				ND	
	32 trans-1,2-Dichloroethene	96		3.234				ND	7
	41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	77	970623	16.2	
	60 Trichloroethene	130	5.309	5.309	0.000	97	228694	3.95	
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

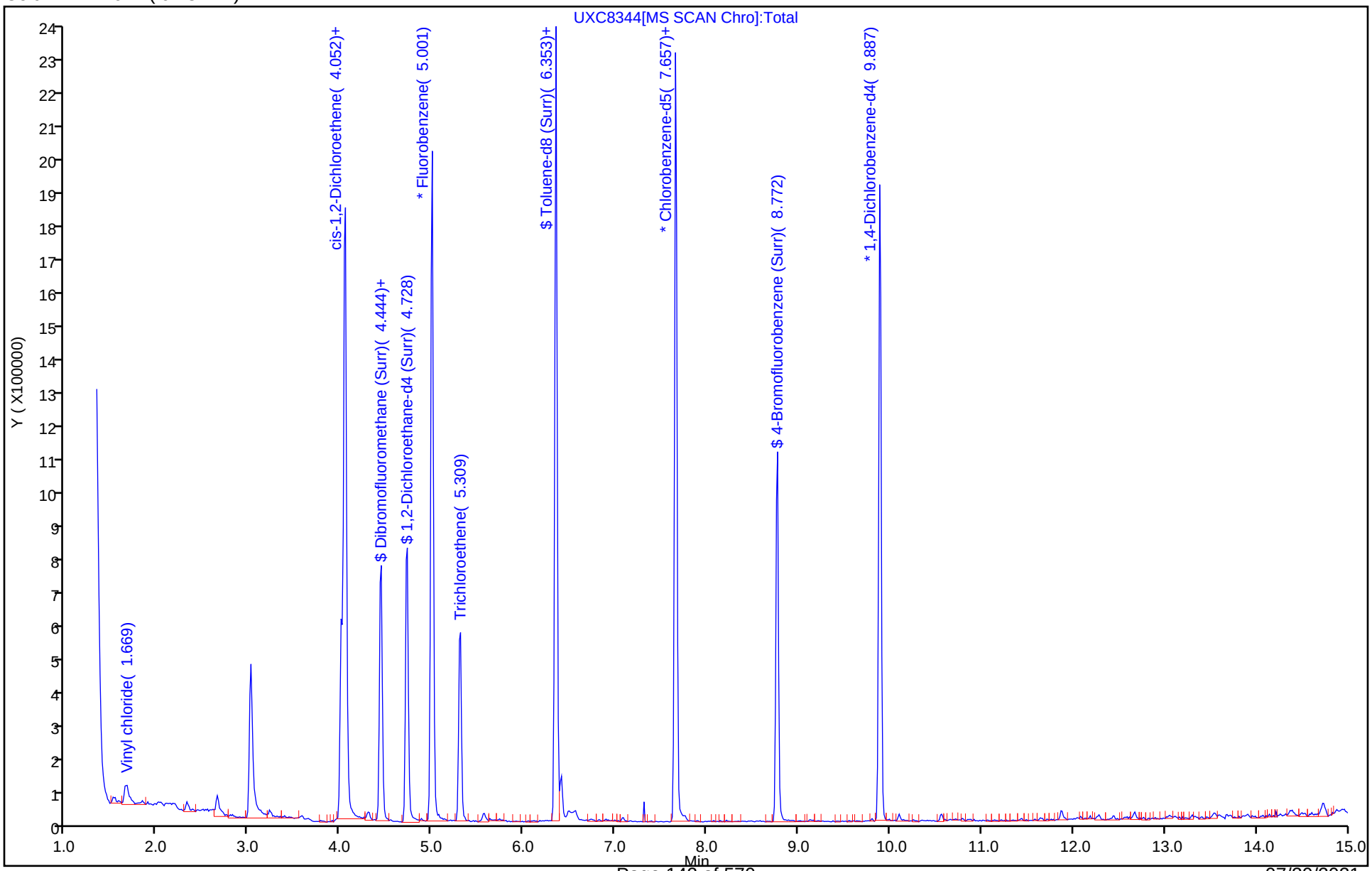
Report Date: 21-Jul-2021 09:06:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D

Injection Date:	20-Jul-2021 14:35:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-7	Lab Sample ID:	240-152869-7	Worklist Smp#:	45
Client ID:	SL-5_071321				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D
Lims ID: 240-152869-E-7
Client ID: SL-5_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 14:35:30 ALS Bottle#: 14 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0111391-045
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:45

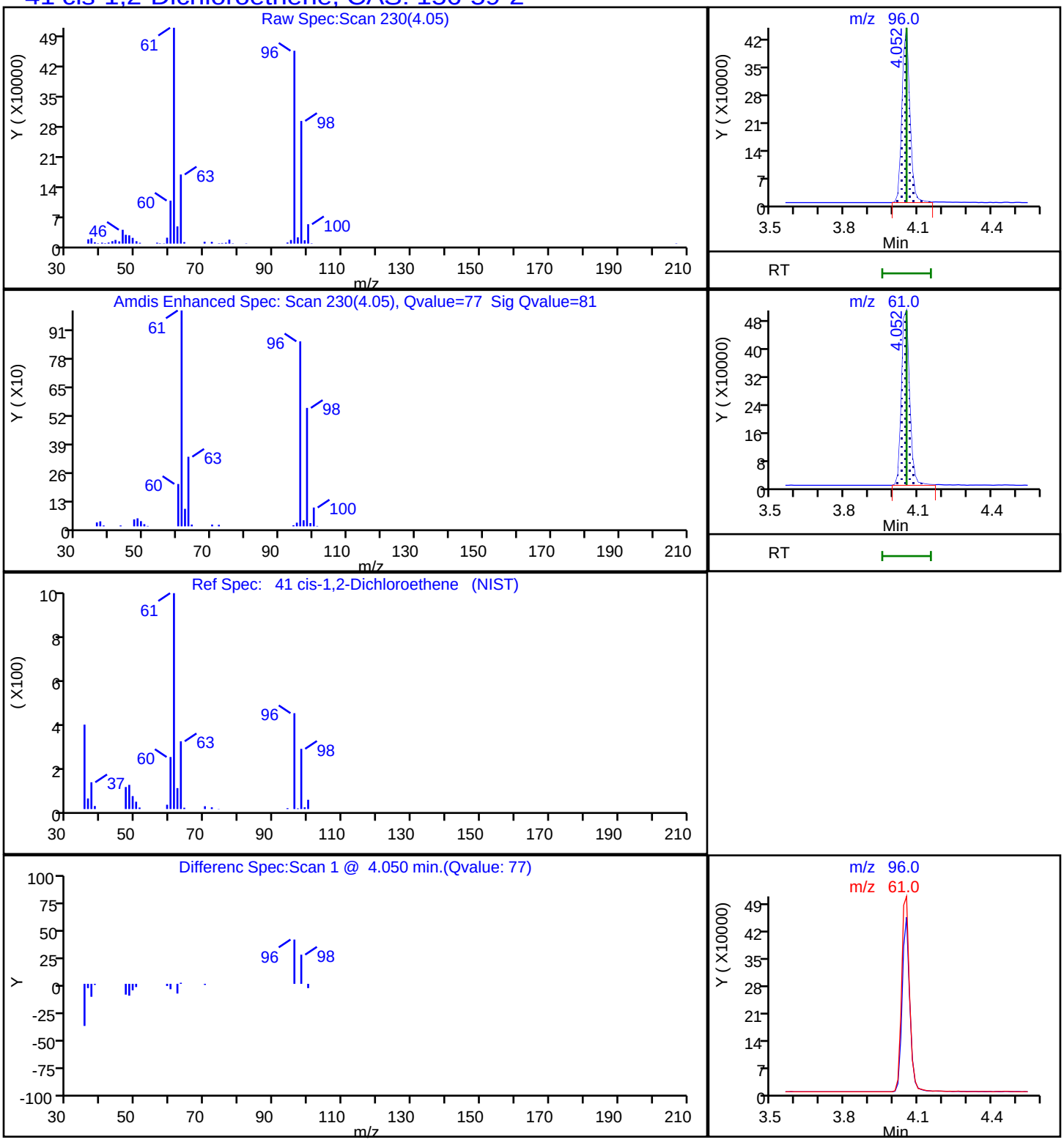
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.3	112.52
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.2	122.04
$ 6 Toluene-d8 (Surr)	10.0	8.88	88.85
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.03	70.32

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D

Injection Date:	20-Jul-2021 14:35:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-7	Lab Sample ID:	240-152869-7		
Client ID:	SL-5_071321				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	45
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



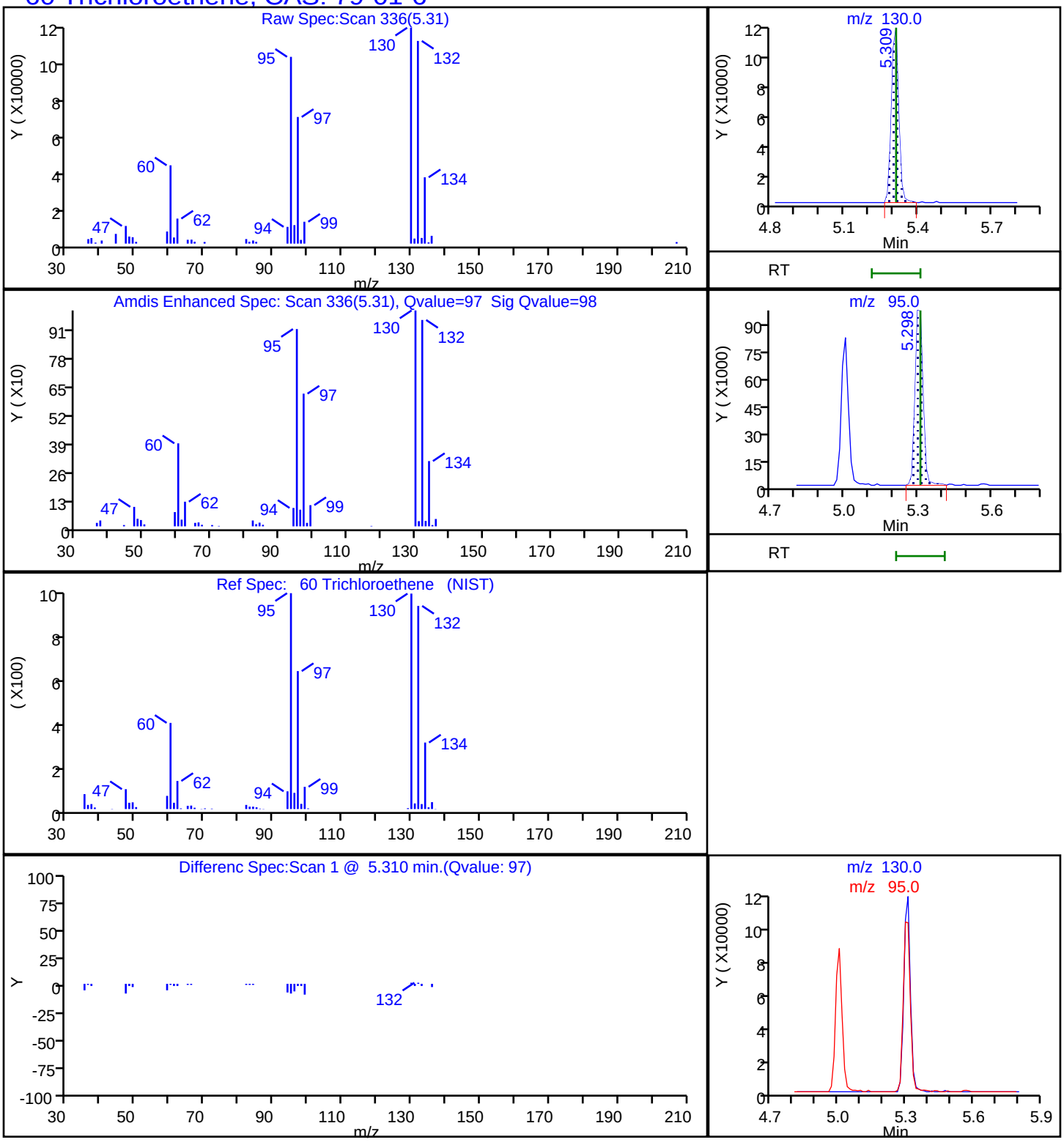
Report Date: 21-Jul-2021 09:06:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D

Injection Date:	20-Jul-2021 14:35:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-7	Lab Sample ID:	240-152869-7		
Client ID:	SL-5_071321				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	45
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

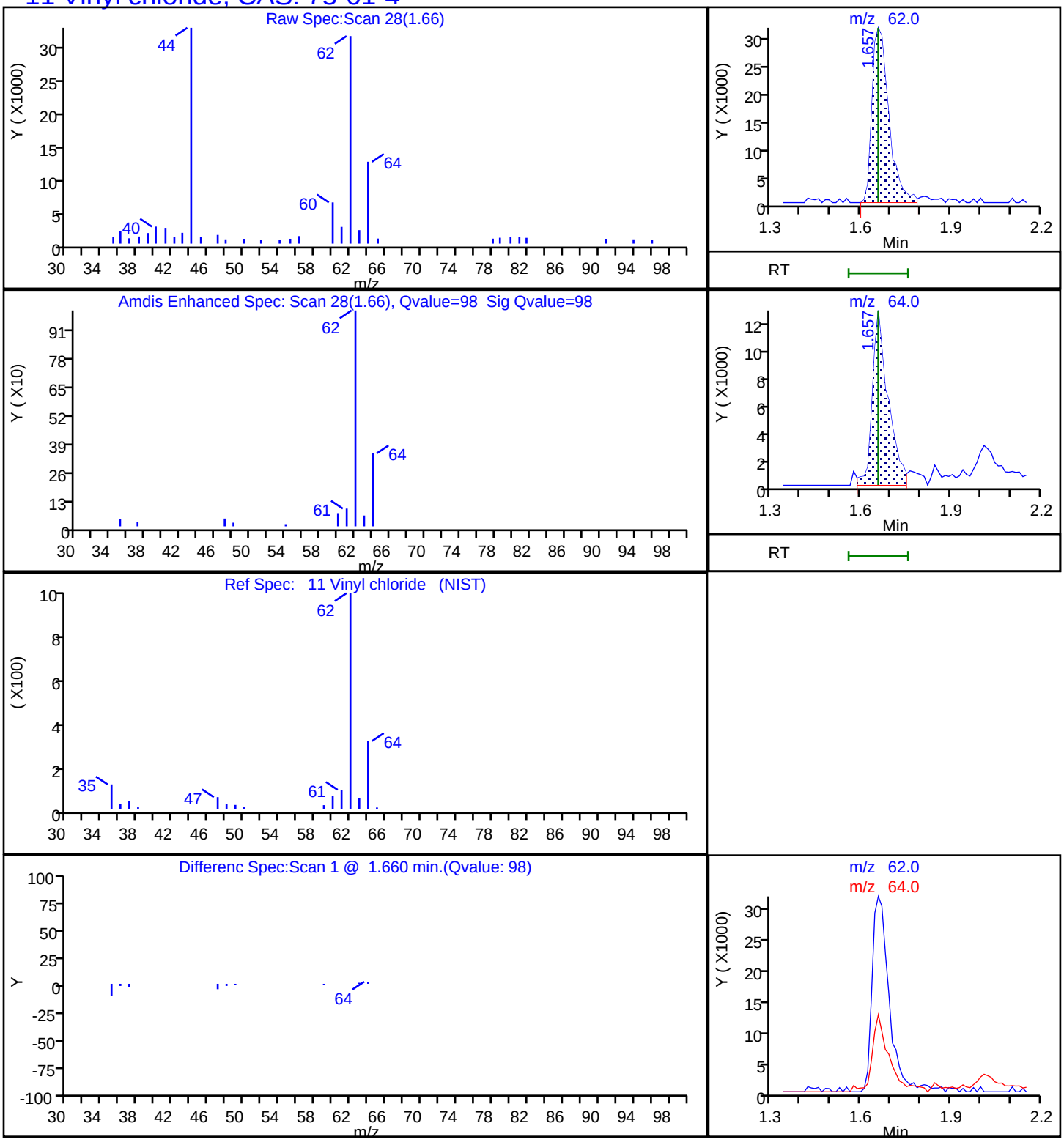


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8344.D

Injection Date:	20-Jul-2021 14:35:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-7	Lab Sample ID:	240-152869-7		
Client ID:	SL-5_071321				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	45
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-8_071321 Lab Sample ID: 240-152869-8

Matrix: Water Lab File ID: UXC8345.D

Analysis Method: 8260B Date Collected: 07/13/2021 12:40

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 14:57

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.0	U	8.0	3.9
156-59-2	cis-1,2-Dichloroethene	63		8.0	3.7
127-18-4	Tetrachloroethene	8.0	U	8.0	3.5
156-60-5	trans-1,2-Dichloroethene	8.0	U	8.0	4.1
79-01-6	Trichloroethene	18		8.0	3.5
75-01-4	Vinyl chloride	8.8		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		75-130
460-00-4	4-Bromofluorobenzene (Surr)	76		47-134
2037-26-5	Toluene-d8 (Surr)	89		69-122
1868-53-7	Dibromofluoromethane (Surr)	112		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D				
Lims ID:	240-152869-B-8				
Client ID:	SL-8_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 14:57:30	ALS Bottle#:	15	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Sample Info:	240-0111391-046				
Misc. Info.:	C210720A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Jul-2021 09:06:29	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1610				
First Level Reviewer: evansle		Date:	21-Jul-2021 08:50:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2019649	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	85	1587239	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	703991	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	528681	11.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	638869	12.0	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1732013	8.90	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	94	501735	7.63	
11 Vinyl chloride	62	1.657	1.657	0.000	97	65097	1.10	
19 1,1-Dichloroethene	96		2.618				ND	
32 trans-1,2-Dichloroethene	96		3.234				ND	7
41 cis-1,2-Dichloroethene	96	4.053	4.052	0.001	76	483716	7.86	
60 Trichloroethene	130	5.310	5.309	0.001	97	135520	2.28	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

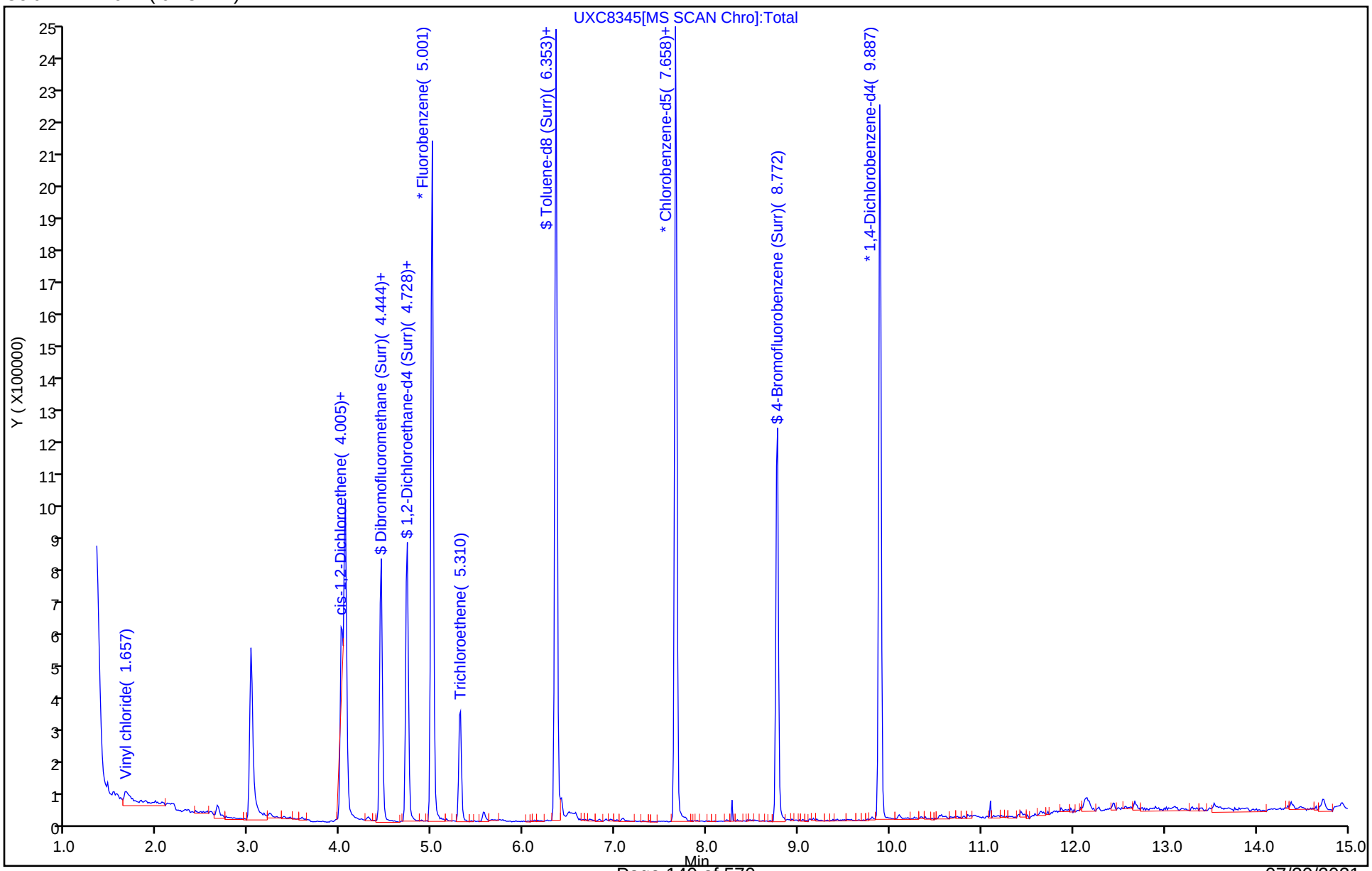
Report Date: 21-Jul-2021 09:06:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D

Injection Date:	20-Jul-2021 14:57:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-B-8	Lab Sample ID:	240-152869-8	Worklist Smp#:	46
Client ID:	SL-8_071321				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	15
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D
Lims ID: 240-152869-B-8
Client ID: SL-8_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 14:57:30 ALS Bottle#: 15 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0111391-046
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:50:53

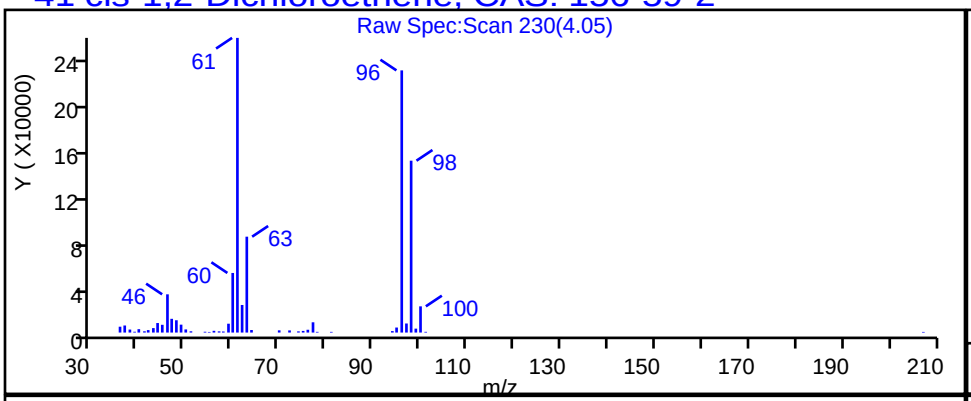
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.2	111.99
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.0	120.13
$ 6 Toluene-d8 (Surr)	10.0	8.90	89.04
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.63	76.25

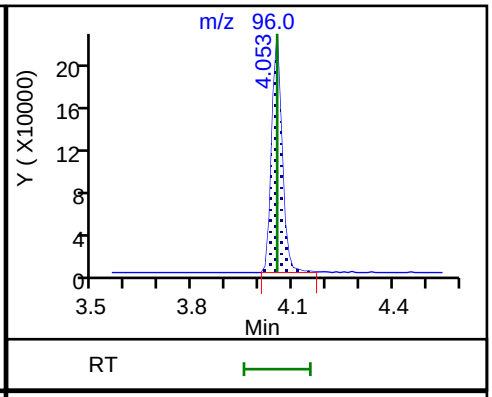
Eurofins TestAmerica, Canton

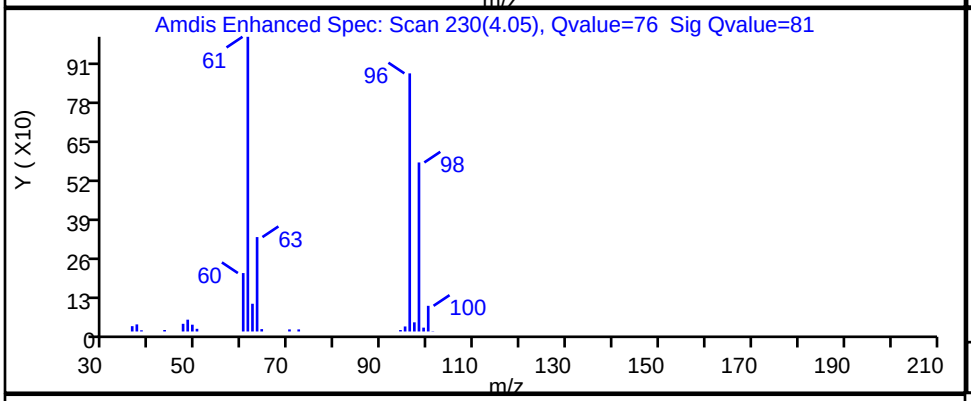
Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D

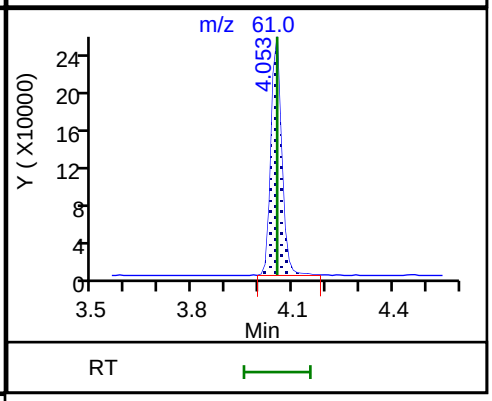
Injection Date:	20-Jul-2021 14:57:30	Instrument ID:	A3UX15
Lims ID:	240-152869-B-8	Lab Sample ID:	240-152869-8
Client ID:	SL-8_071321		
Operator ID:	43582	ALS Bottle#:	15 Worklist Smp#: 46
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

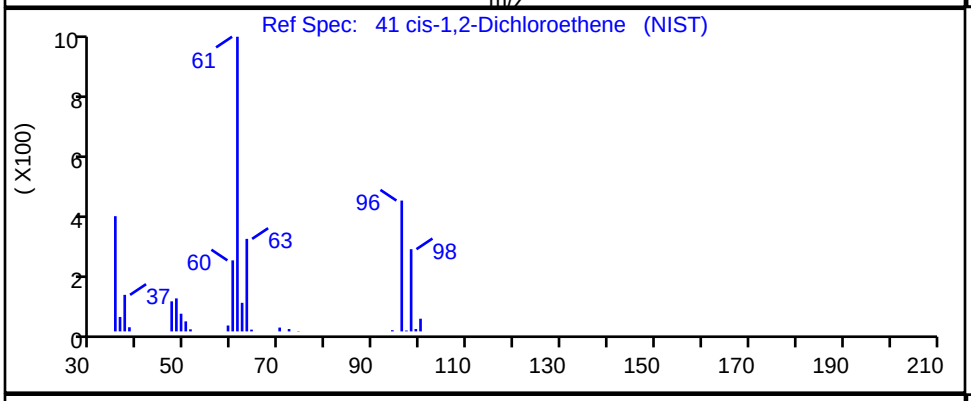
41 cis-1,2-Dichloroethene, CAS: 156-59-2

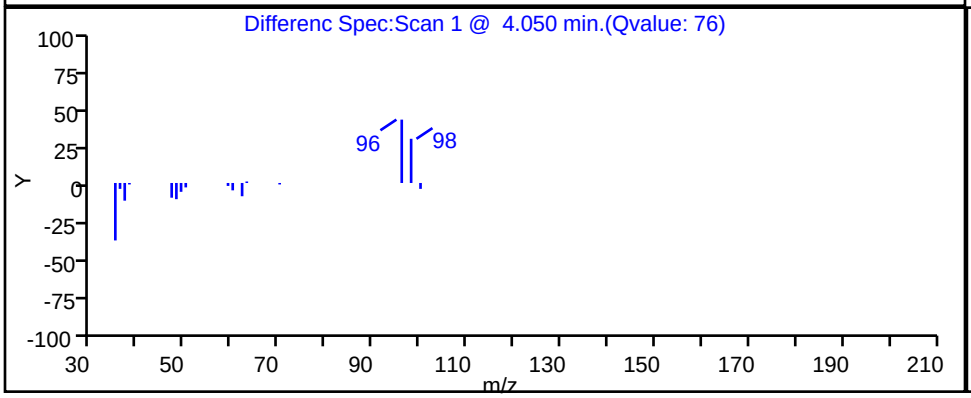


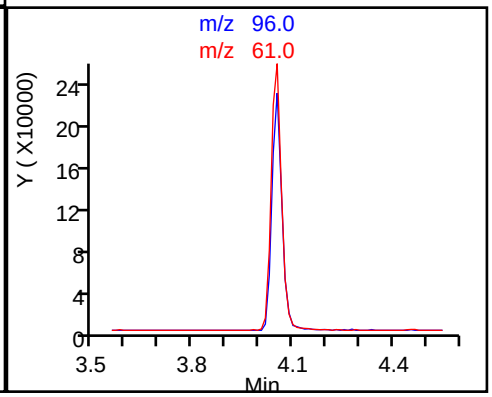












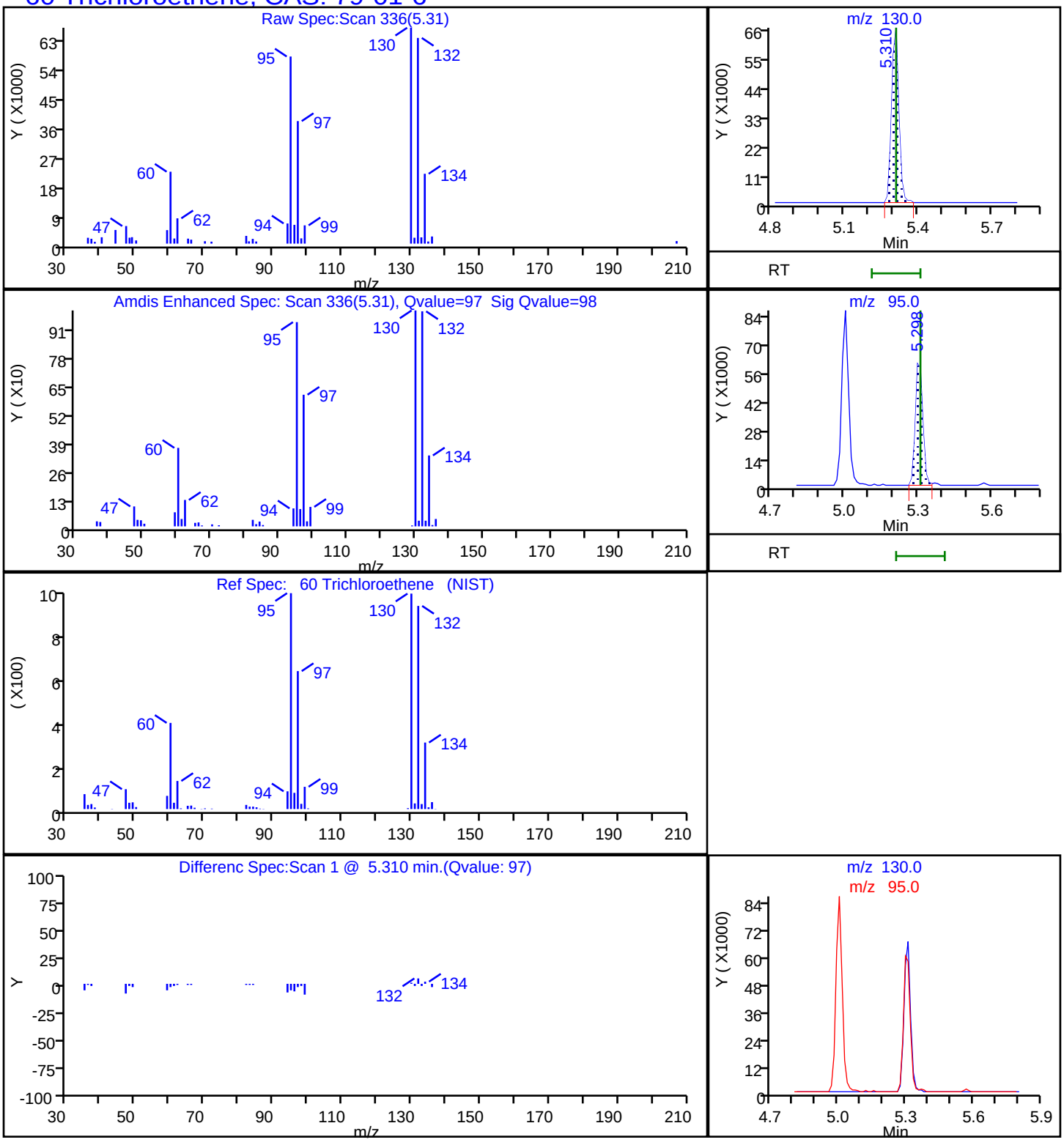
Report Date: 21-Jul-2021 09:06:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D

Injection Date:	20-Jul-2021 14:57:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-B-8	Lab Sample ID:	240-152869-8		
Client ID:	SL-8_071321				
Operator ID:	43582	ALS Bottle#:	15	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

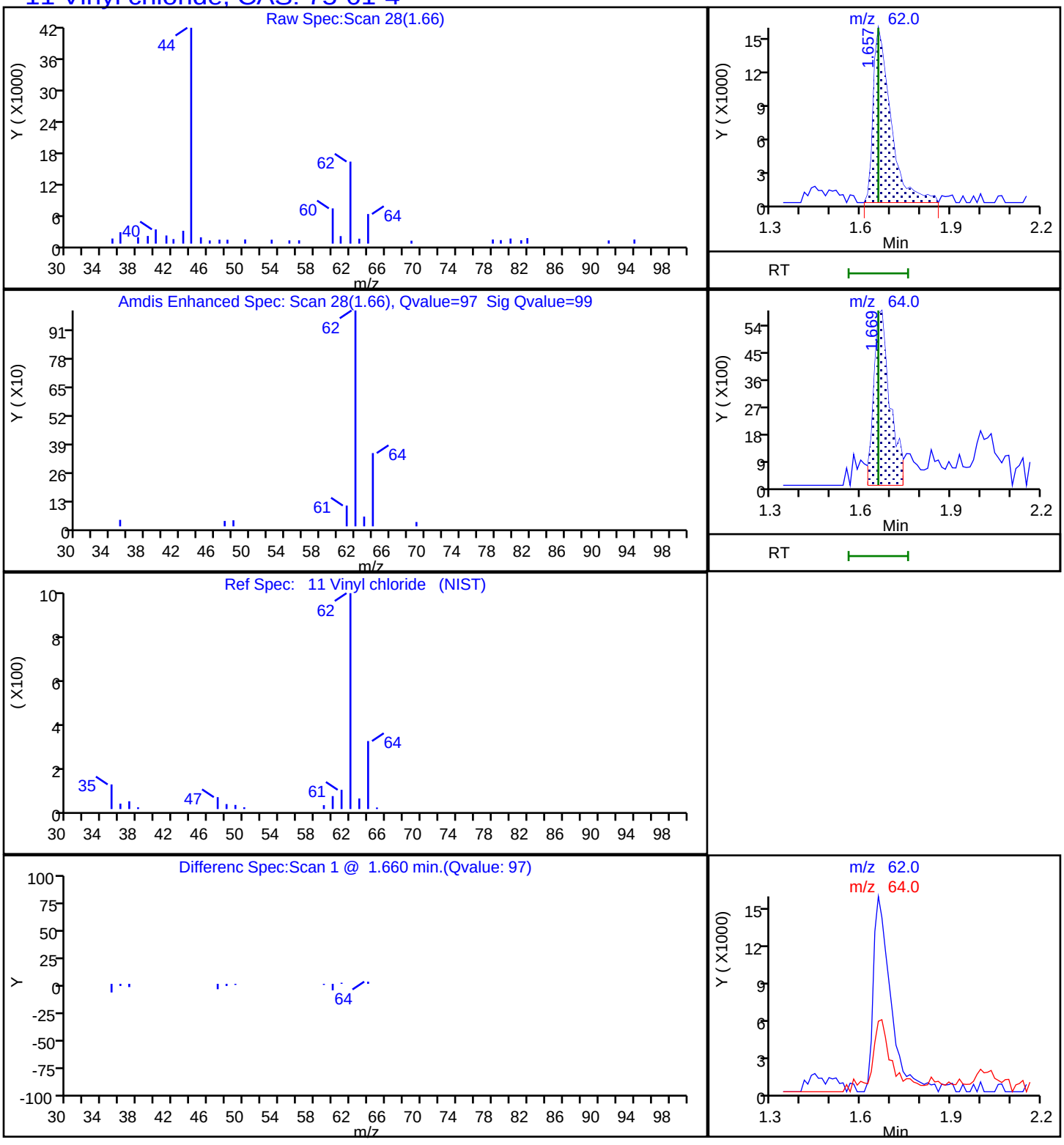


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8345.D

Injection Date:	20-Jul-2021 14:57:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-B-8	Lab Sample ID:	240-152869-8		
Client ID:	SL-8_071321				
Operator ID:	43582	ALS Bottle#:	15	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-9_071321 Lab Sample ID: 240-152869-9

Matrix: Water Lab File ID: UXC8346.D

Analysis Method: 8260B Date Collected: 07/13/2021 13:00

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 15:19

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	48		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	15		5.0	2.2
75-01-4	Vinyl chloride	6.7		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		75-130
460-00-4	4-Bromofluorobenzene (Surr)	79		47-134
2037-26-5	Toluene-d8 (Surr)	89		69-122
1868-53-7	Dibromofluoromethane (Surr)	110		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D				
Lims ID:	240-152869-B-9				
Client ID:	SL-9_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 15:19:30	ALS Bottle#:	16	Worklist Smp#:	47
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Sample Info:	240-0111391-047				
Misc. Info.:	C210720A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Jul-2021 09:06:29	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1610				
First Level Reviewer: evansle		Date:	21-Jul-2021 08:51:06		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2018917	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1606659	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	739034	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	517279	11.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	632297	11.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1761745	8.95	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	94	524417	7.87	
11 Vinyl chloride	62	1.669	1.657	0.012	97	79239	1.34	
19 1,1-Dichloroethene	96		2.618				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	87	6396	0.1097	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	77	594831	9.66	
60 Trichloroethene	130	5.309	5.309	0.000	96	178804	3.00	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

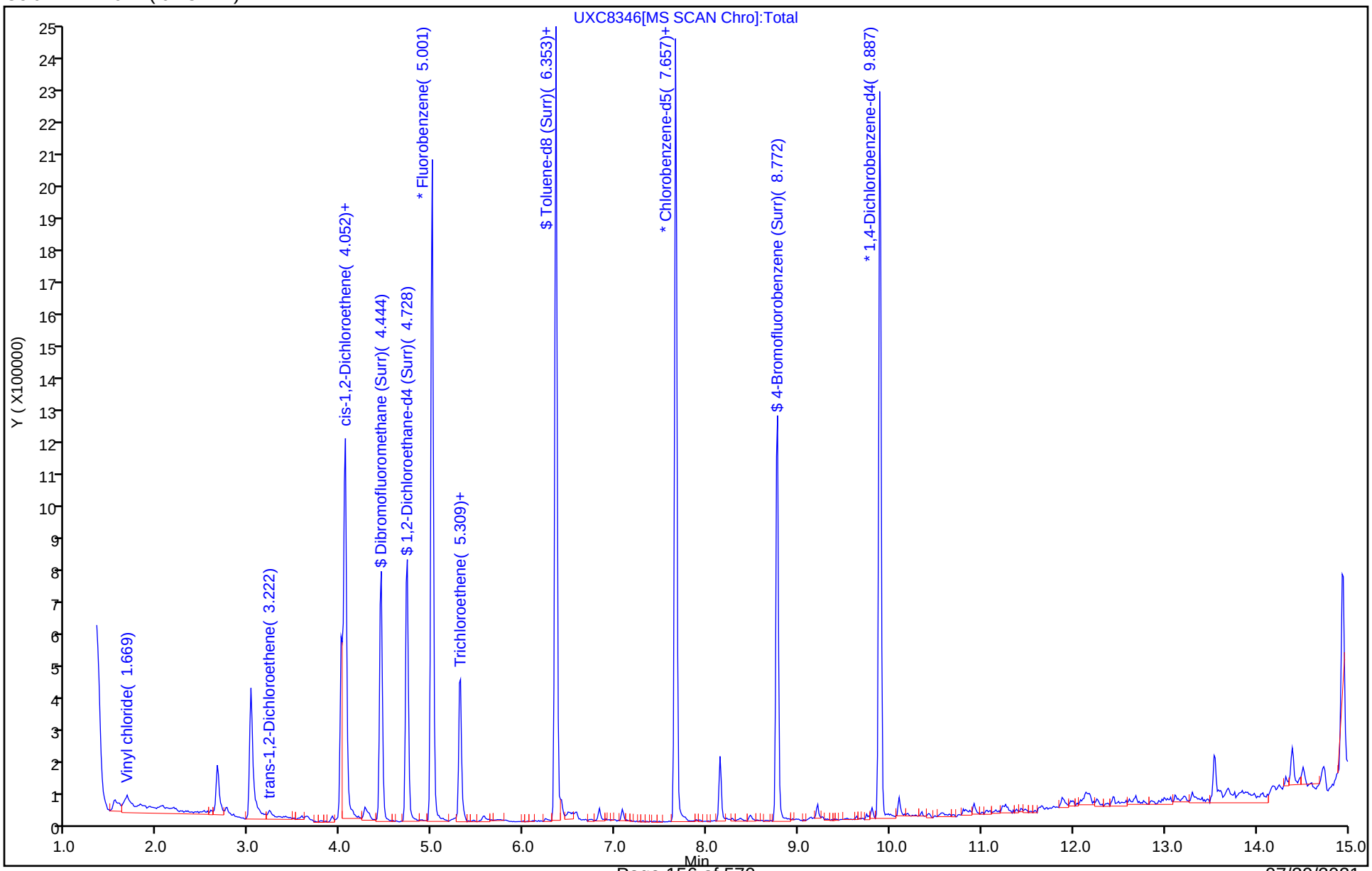
Report Date: 21-Jul-2021 09:06:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D

Injection Date:	20-Jul-2021 15:19:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-B-9	Lab Sample ID:	240-152869-9	Worklist Smp#:	47
Client ID:	SL-9_071321				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	16
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D
Lims ID: 240-152869-B-9
Client ID: SL-9_071321
Sample Type: Client
Inject. Date: 20-Jul-2021 15:19:30 ALS Bottle#: 16 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0111391-047
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 21-Jul-2021 08:51:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.0	109.62
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.9	118.94
$ 6 Toluene-d8 (Surr)	10.0	8.95	89.47
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.87	78.74

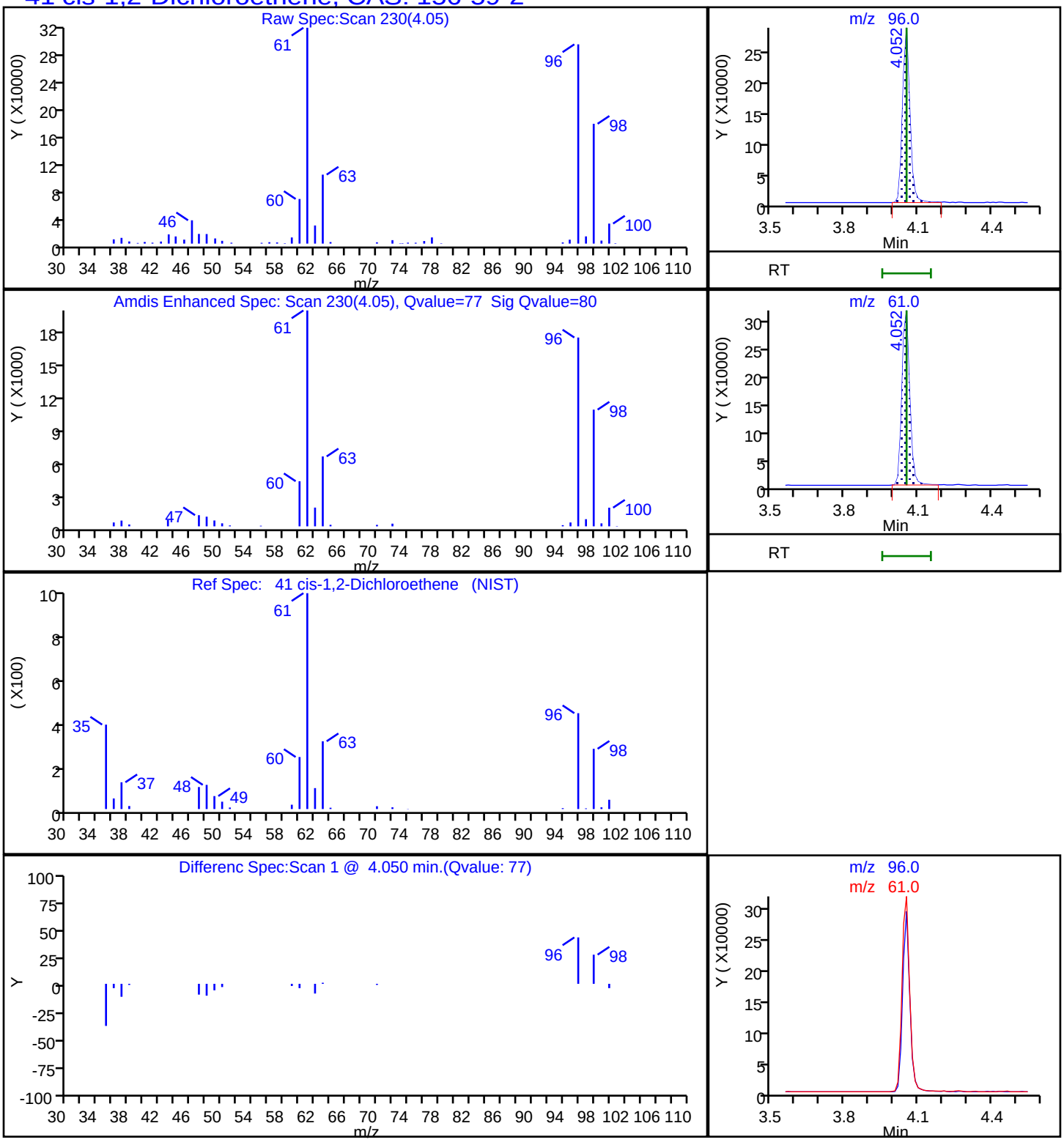
Report Date: 21-Jul-2021 09:06:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D

Injection Date:	20-Jul-2021 15:19:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-B-9	Lab Sample ID:	240-152869-9		
Client ID:	SL-9_071321				
Operator ID:	43582	ALS Bottle#:	16	Worklist Smp#:	47
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

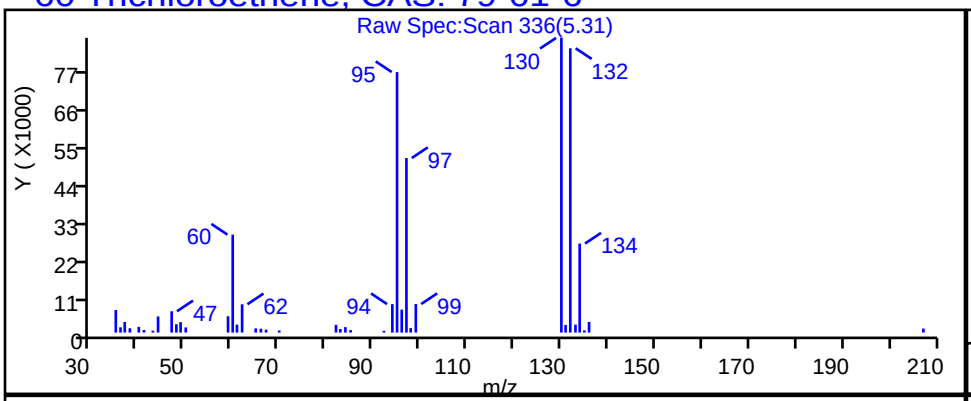


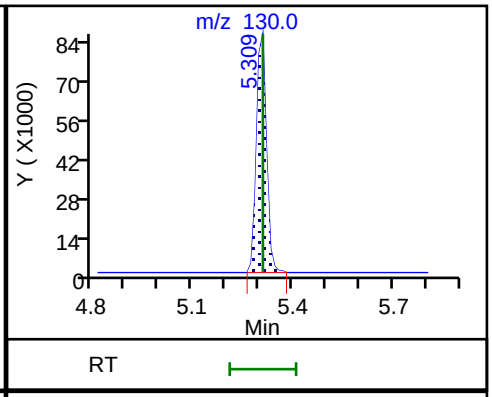
Eurofins TestAmerica, Canton

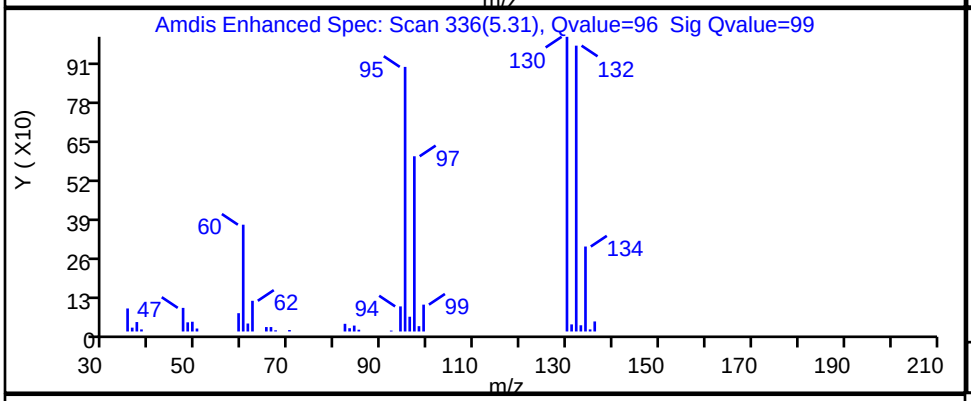
Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D

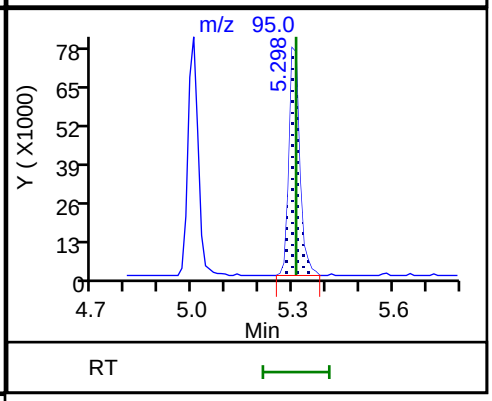
Injection Date:	20-Jul-2021 15:19:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-B-9	Lab Sample ID:	240-152869-9		
Client ID:	SL-9_071321				
Operator ID:	43582	ALS Bottle#:	16	Worklist Smp#:	47
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

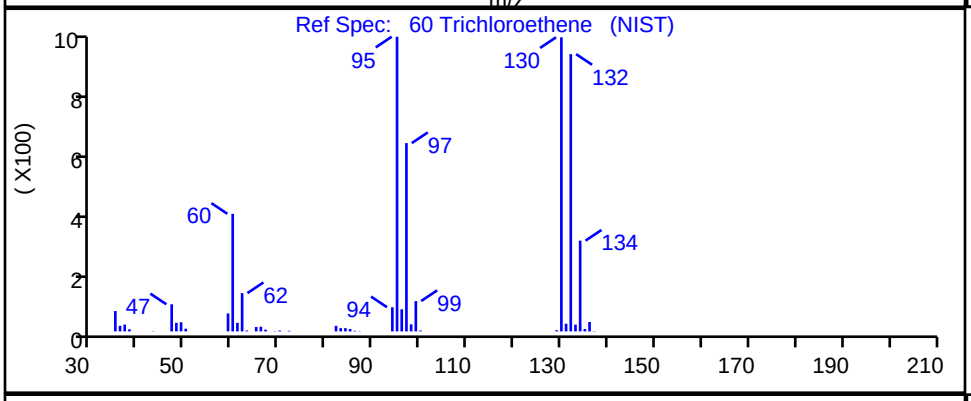
60 Trichloroethene, CAS: 79-01-6

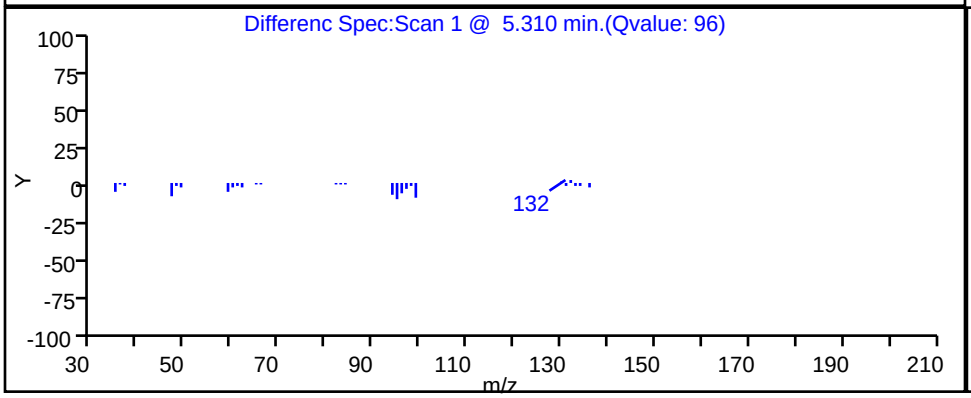


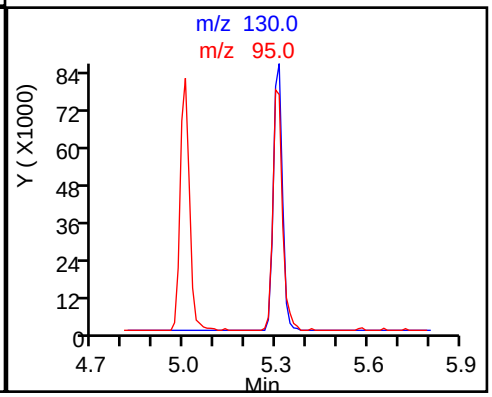








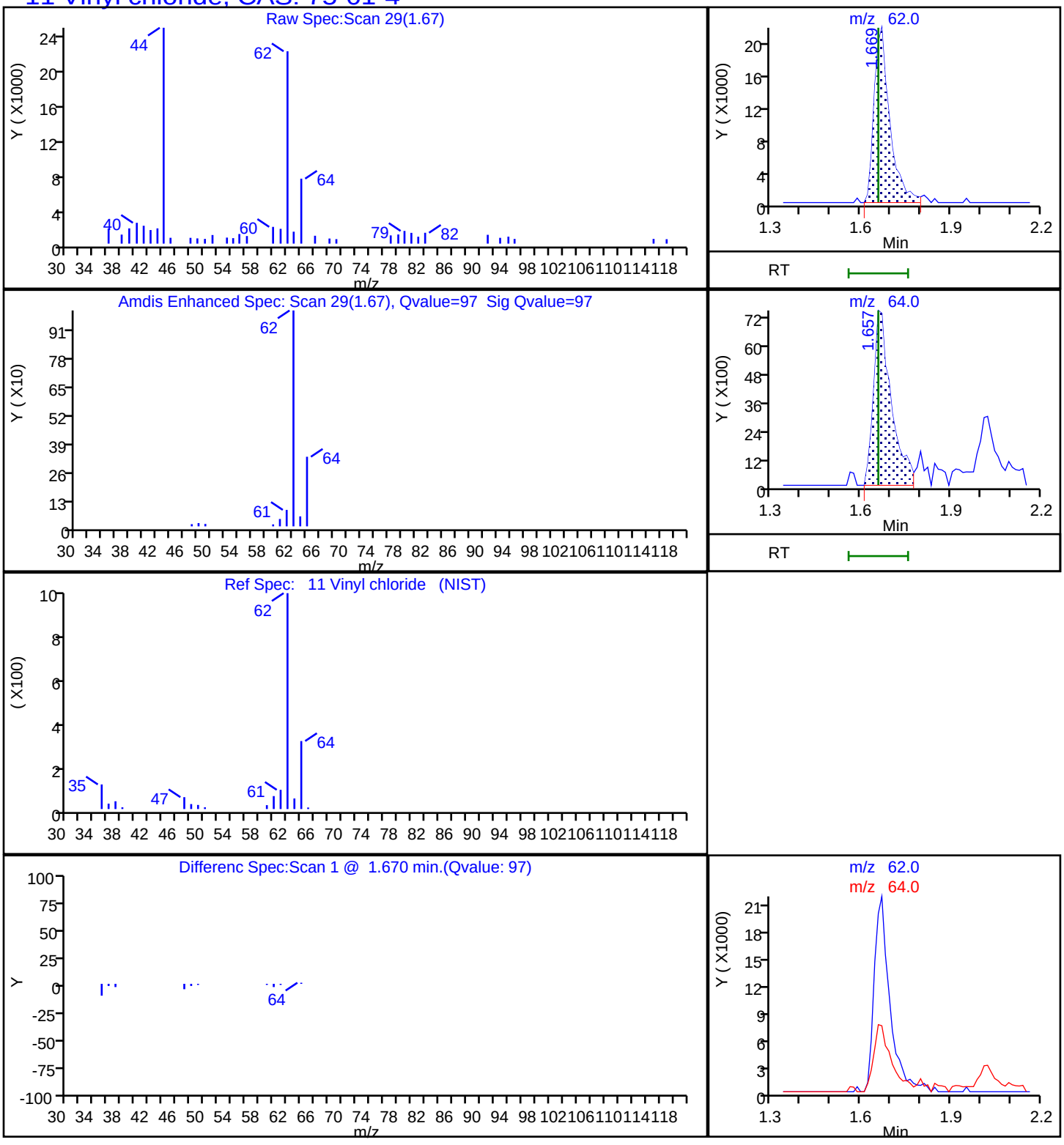




Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8346.D				
Injection Date:	20-Jul-2021 15:19:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-B-9	Lab Sample ID:	240-152869-9		
Client ID:	SL-9_071321				
Operator ID:	43582	ALS Bottle#:	16	Worklist Smp#:	47
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-10_071321 Lab Sample ID: 240-152869-10

Matrix: Water Lab File ID: UXC8430.D

Analysis Method: 8260B Date Collected: 07/13/2021 13:30

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 12:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	35		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	12		1.0	0.44
75-01-4	Vinyl chloride	6.0		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	90		69-122
1868-53-7	Dibromofluoromethane (Surr)	98		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D
Lims ID: 240-152869-E-10
Client ID: SL-10_071321
Sample Type: Client
Inject. Date: 22-Jul-2021 12:31:30 ALS Bottle#: 9 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-038
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 13:03:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2114341	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1725080	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	925978	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	486338	9.84	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	594787	10.7	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1901129	8.99	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	646275	9.04	
11 Vinyl chloride	62	1.657	1.657	0.000	98	371950	5.99	
19 1,1-Dichloroethene	96		2.617				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	95	24303	0.3981	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	78	2264719	35.1	
60 Trichloroethene	130	5.309	5.309	0.000	97	775131	12.4	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

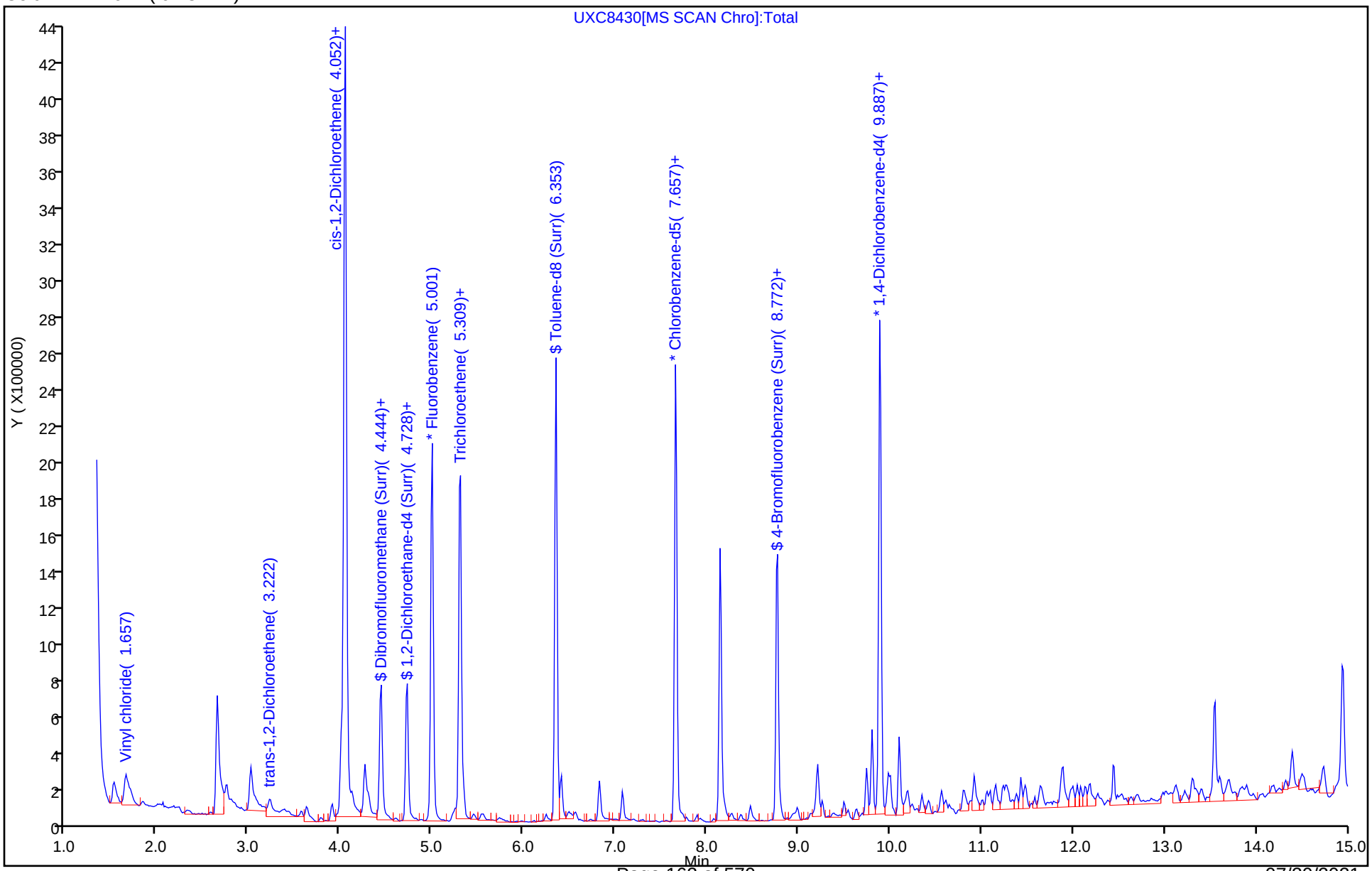
Report Date: 23-Jul-2021 08:13:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D

Injection Date:	22-Jul-2021 12:31:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-10	Lab Sample ID:	240-152869-10	Worklist Smp#:	38
Client ID:	SL-10_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D
Lims ID: 240-152869-E-10
Client ID: SL-10_071321
Sample Type: Client
Inject. Date: 22-Jul-2021 12:31:30 ALS Bottle#: 9 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-038
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 13:03:20

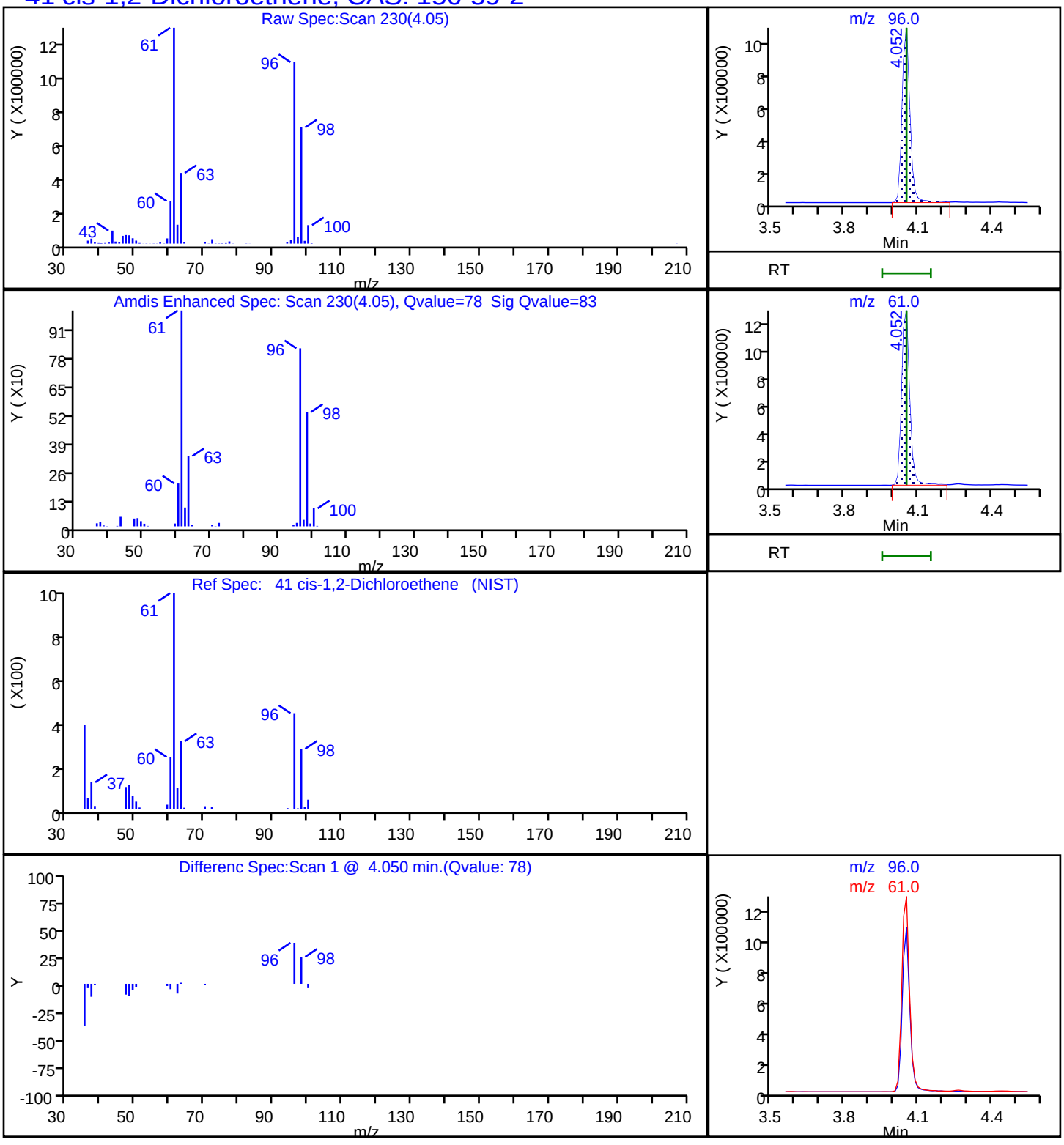
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.84	98.41
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.83
$ 6 Toluene-d8 (Surr)	10.0	8.99	89.93
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.04	90.37

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D

Injection Date:	22-Jul-2021 12:31:30	Instrument ID:	A3UX15
Lims ID:	240-152869-E-10	Lab Sample ID:	240-152869-10
Client ID:	SL-10_071321		
Operator ID:	43582	ALS Bottle#:	9 Worklist Smp#: 38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

41 cis-1,2-Dichloroethene, CAS: 156-59-2

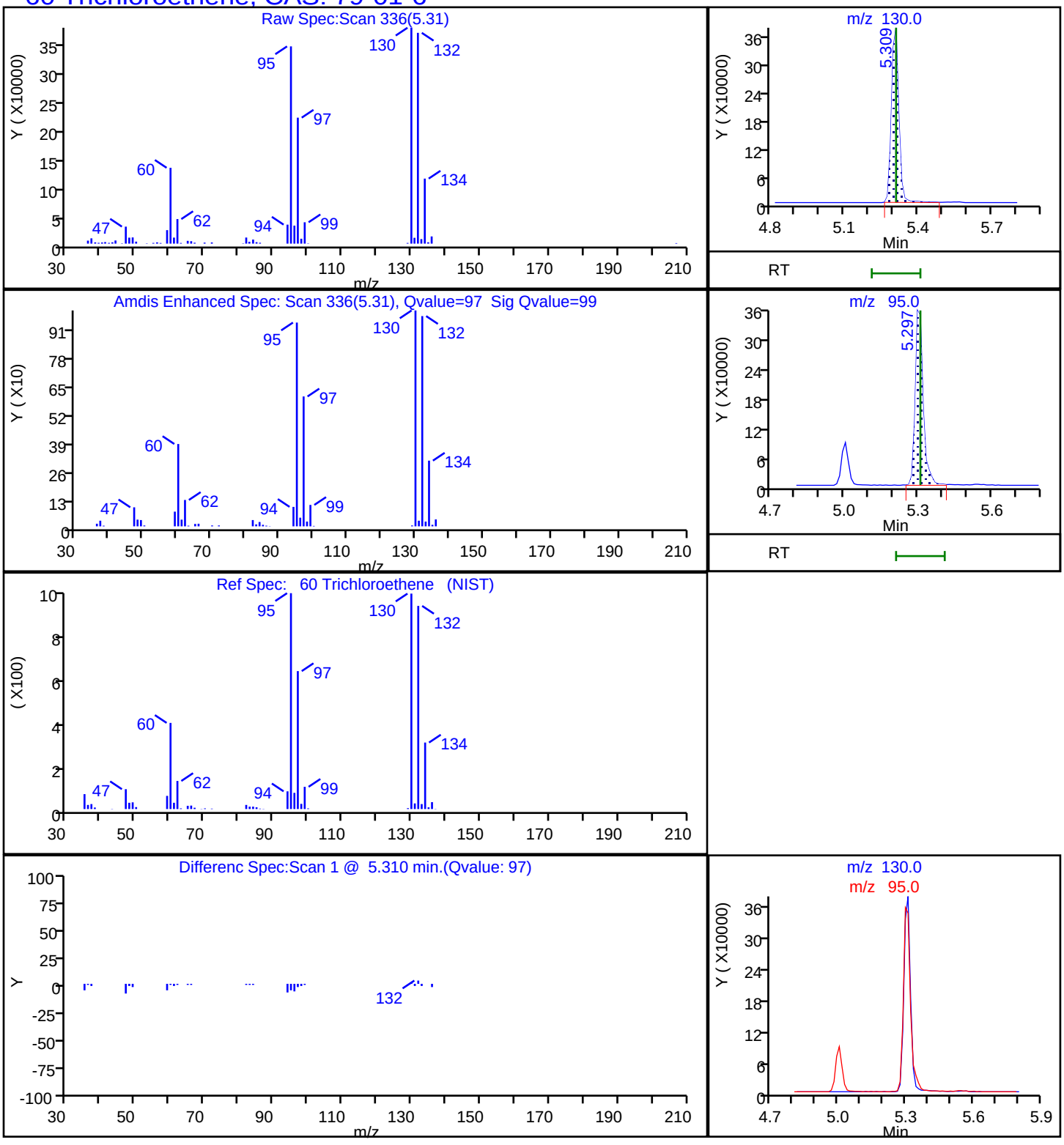


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D

Injection Date:	22-Jul-2021 12:31:30	Instrument ID:	A3UX15
Lims ID:	240-152869-E-10	Lab Sample ID:	240-152869-10
Client ID:	SL-10_071321		
Operator ID:	43582	ALS Bottle#:	9 Worklist Smp#: 38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

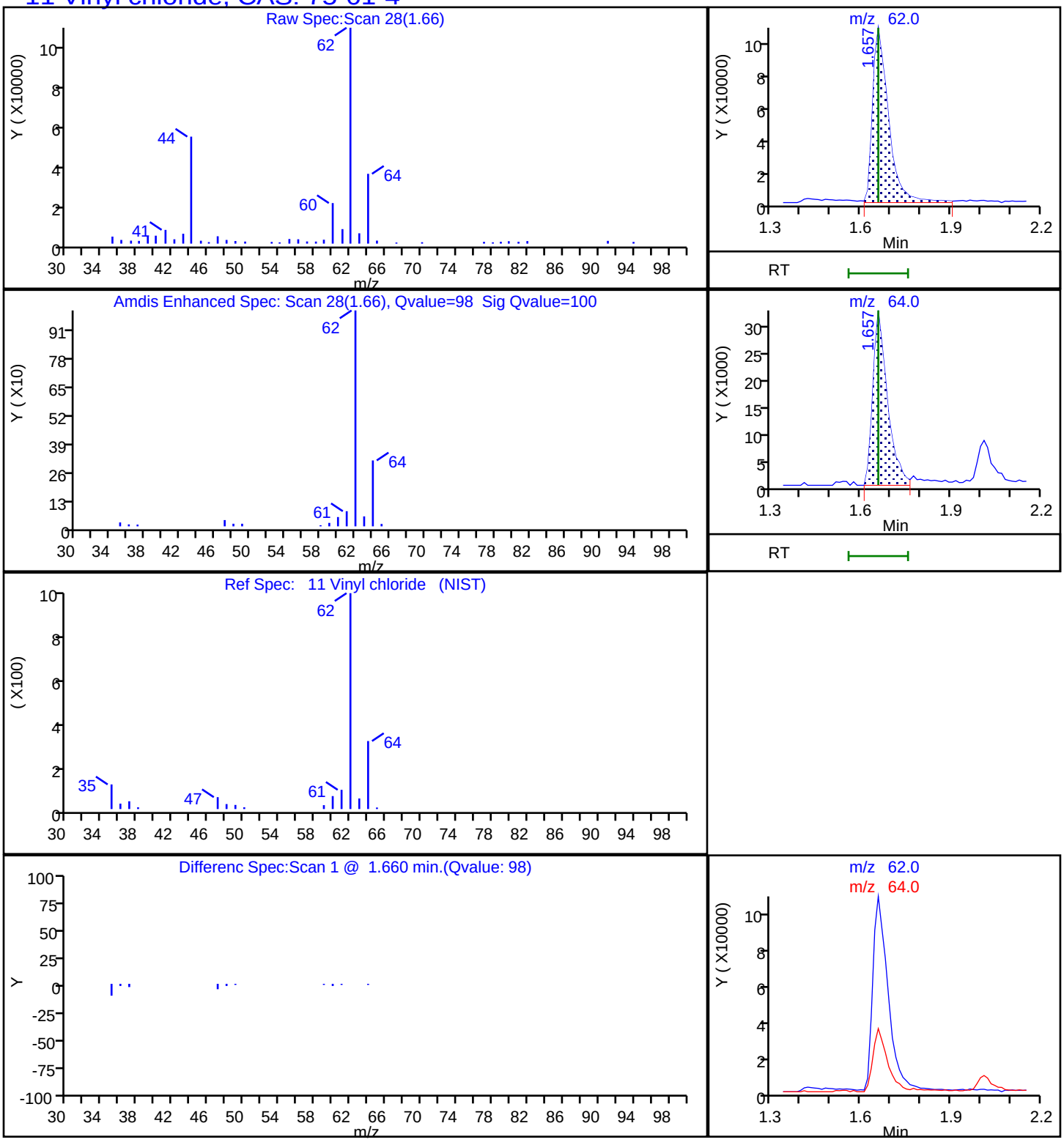


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8430.D

Injection Date:	22-Jul-2021 12:31:30	Instrument ID:	A3UX15
Lims ID:	240-152869-E-10	Lab Sample ID:	240-152869-10
Client ID:	SL-10_071321		
Operator ID:	43582	ALS Bottle#:	9 Worklist Smp#: 38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-11_071321 Lab Sample ID: 240-152869-11

Matrix: Water Lab File ID: UXC8431.D

Analysis Method: 8260B Date Collected: 07/13/2021 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 12:53

Soil Aliquot Vol: Dilution Factor: 1.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.7	U	1.7	0.82
156-59-2	cis-1,2-Dichloroethene	28		1.7	0.77
127-18-4	Tetrachloroethene	1.7	U	1.7	0.73
156-60-5	trans-1,2-Dichloroethene	1.7	U	1.7	0.85
79-01-6	Trichloroethene	10		1.7	0.73
75-01-4	Vinyl chloride	4.0		1.7	0.75

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	94		69-122
1868-53-7	Dibromofluoromethane (Surr)	101		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D				
Lims ID:	240-152869-E-11				
Client ID:	SL-11_071321				
Sample Type:	Client				
Inject. Date:	22-Jul-2021 12:53:30	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.6700		
Sample Info:	240-0111469-039				
Misc. Info.:	C210722A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	23-Jul-2021 08:13:42	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1659				
First Level Reviewer: evansle		Date:	22-Jul-2021 13:29:18		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2101898	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1741905	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	899063	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	496571	10.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	600901	10.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2007421	9.40	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	679096	9.40	
11 Vinyl chloride	62	1.657	1.657	0.000	98	148769	2.41	
19 1,1-Dichloroethene	96		2.617				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	98	15068	0.2483	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	77	1083513	16.9	
60 Trichloroethene	130	5.309	5.309	0.000	98	374165	6.04	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

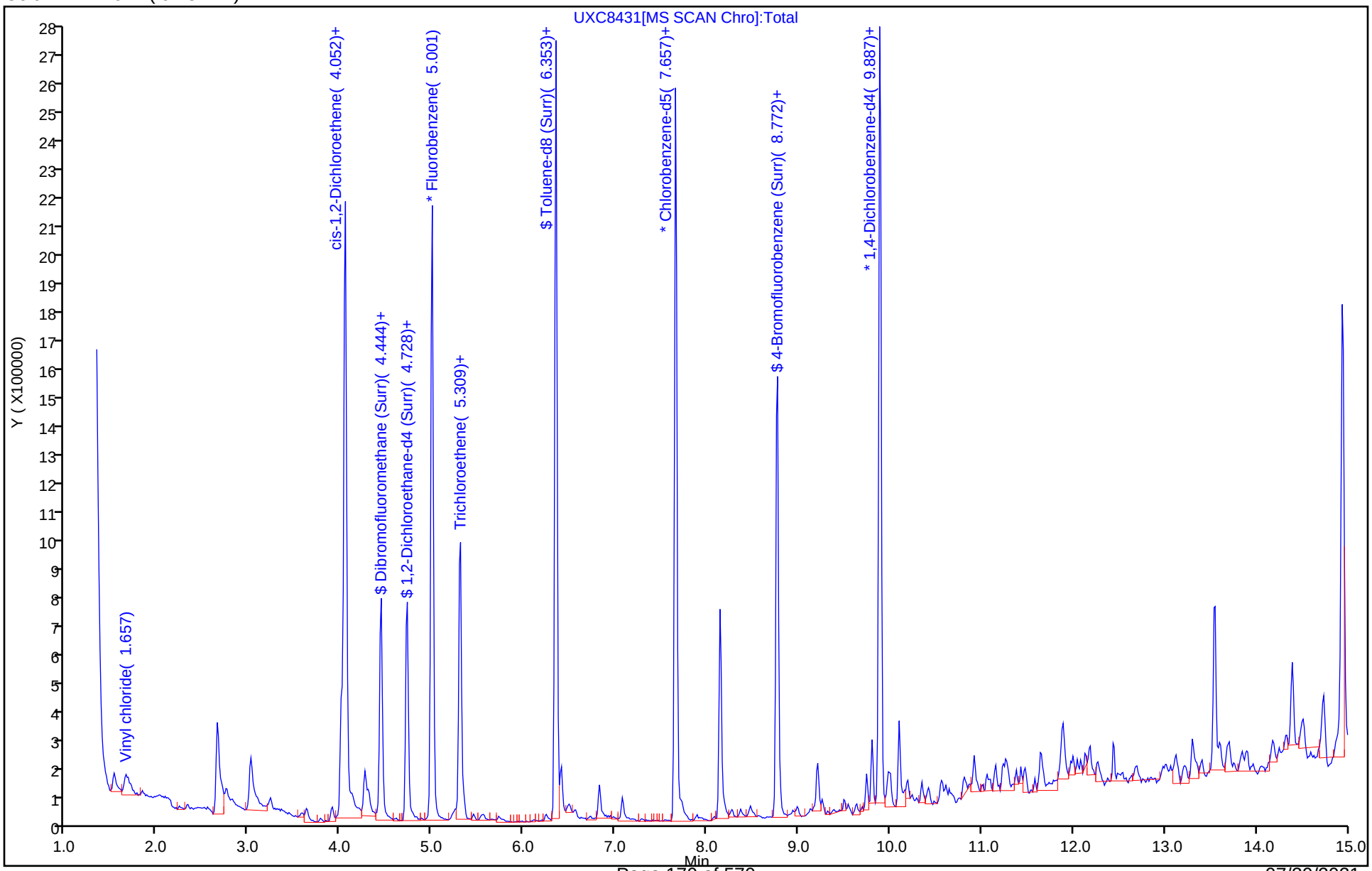
Report Date: 23-Jul-2021 08:13:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D

Injection Date:	22-Jul-2021 12:53:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-11	Lab Sample ID:	240-152869-11	Worklist Smp#:	39
Client ID:	SL-11_071321				
Purge Vol:	5.000 mL	Dil. Factor:	1.6700	ALS Bottle#:	10
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D				
Lims ID:	240-152869-E-11				
Client ID:	SL-11_071321				
Sample Type:	Client				
Inject. Date:	22-Jul-2021 12:53:30	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.6700		
Sample Info:	240-0111469-039				
Misc. Info.:	C210722A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	23-Jul-2021 08:13:42	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1659				

First Level Reviewer: evansle Date: 22-Jul-2021 13:29:18

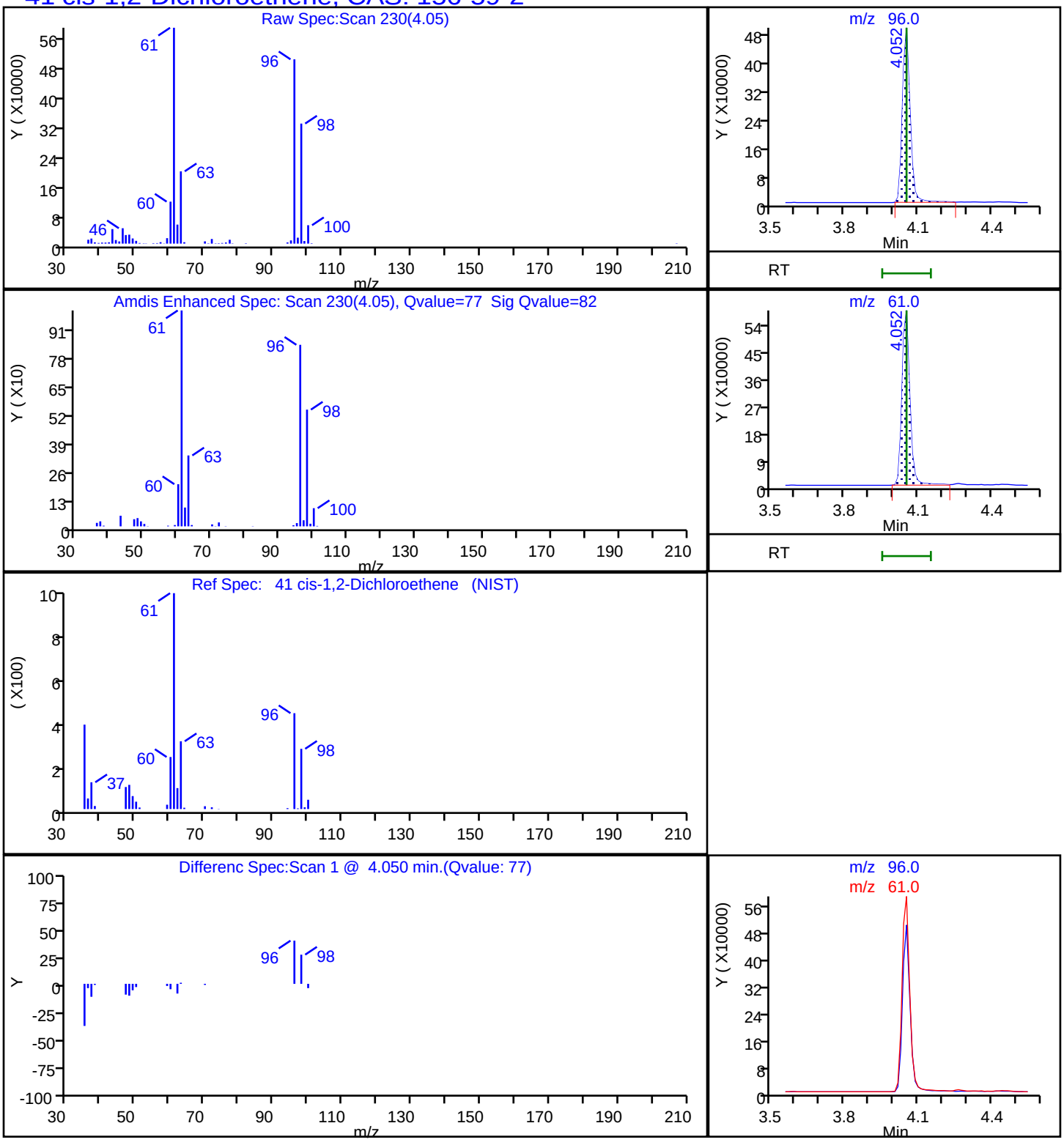
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.1	101.07
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	108.57
$ 6 Toluene-d8 (Surr)	10.0	9.40	94.04
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.40	94.05

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D

Injection Date:	22-Jul-2021 12:53:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-11	Lab Sample ID:	240-152869-11		
Client ID:	SL-11_071321				
Operator ID:	43582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.6700		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



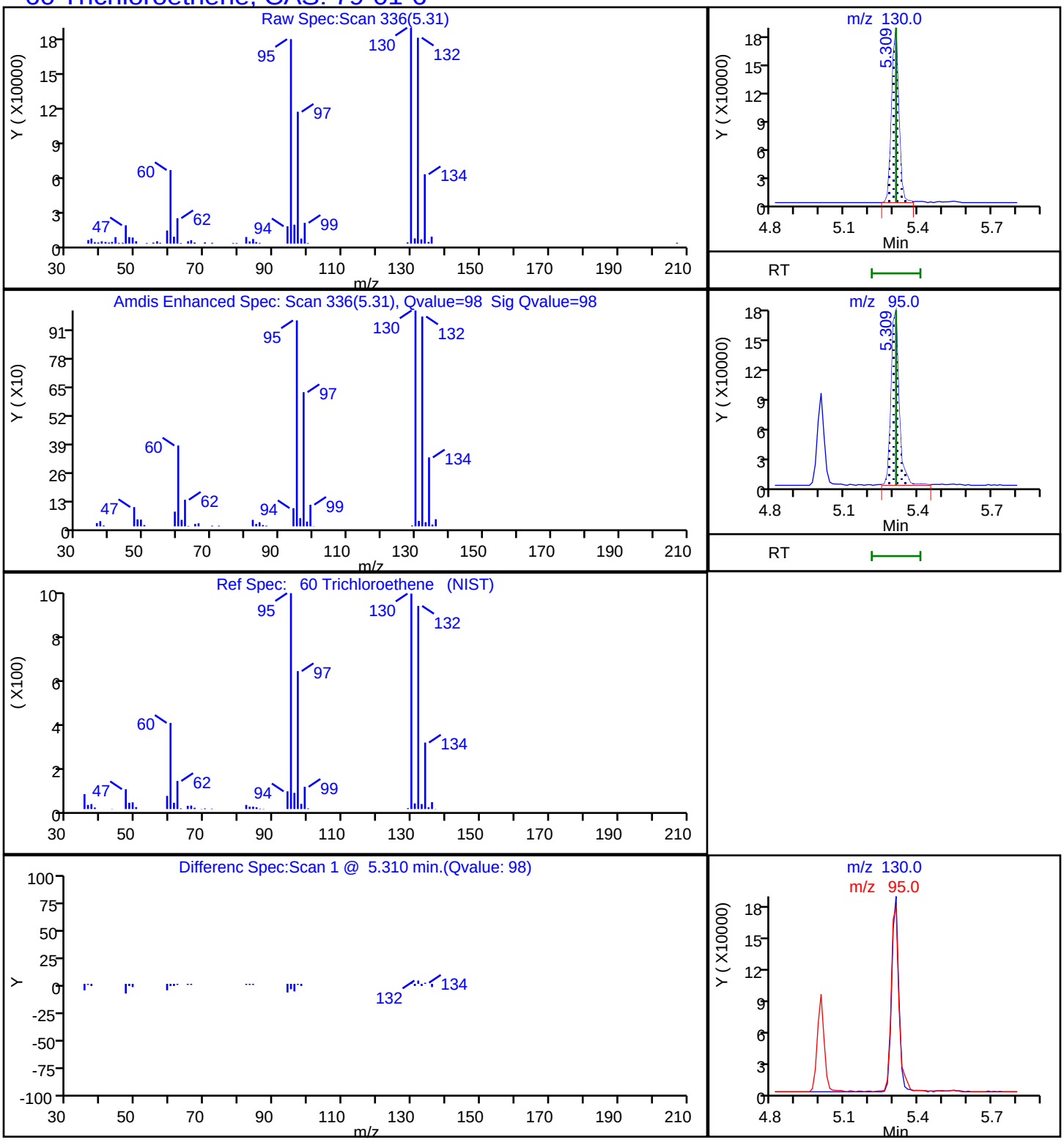
Report Date: 23-Jul-2021 08:13:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D

Injection Date:	22-Jul-2021 12:53:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-11	Lab Sample ID:	240-152869-11		
Client ID:	SL-11_071321				
Operator ID:	43582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.6700		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

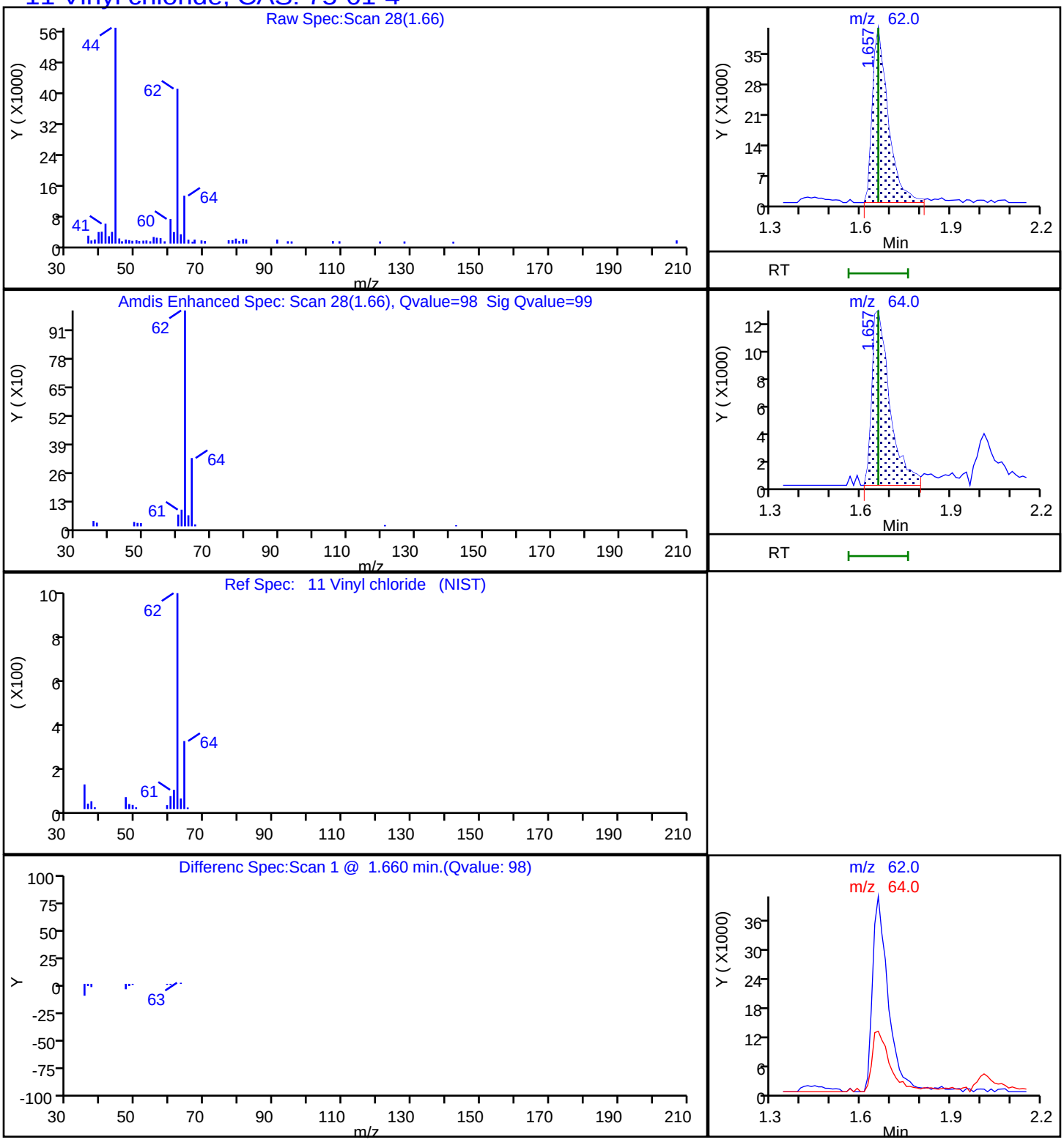


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8431.D

Injection Date:	22-Jul-2021 12:53:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-11	Lab Sample ID:	240-152869-11		
Client ID:	SL-11_071321				
Operator ID:	43582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.6700		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-12_071321 Lab Sample ID: 240-152869-12

Matrix: Water Lab File ID: UXC8432.D

Analysis Method: 8260B Date Collected: 07/13/2021 14:05

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 13:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.98
156-59-2	cis-1,2-Dichloroethene	26		2.0	0.92
127-18-4	Tetrachloroethene	2.0	U	2.0	0.88
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.0
79-01-6	Trichloroethene	9.0		2.0	0.88
75-01-4	Vinyl chloride	3.9		2.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	91		69-122
1868-53-7	Dibromofluoromethane (Surr)	97		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D				
Lims ID:	240-152869-E-12				
Client ID:	SL-12_071321				
Sample Type:	Client				
Inject. Date:	22-Jul-2021 13:15:30	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	240-0111469-040				
Misc. Info.:	C210722A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	23-Jul-2021 08:13:42	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1659				
First Level Reviewer: evansle		Date:	22-Jul-2021 13:38:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2189305	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1827818	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	957396	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	498068	9.73	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	617867	10.7	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2032544	9.07	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	93	718459	9.48	
11 Vinyl chloride	62	1.657	1.657	0.000	97	124801	1.94	
19 1,1-Dichloroethene	96		2.617				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	97	9132	0.1445	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	78	883853	13.2	
60 Trichloroethene	130	5.309	5.309	0.000	97	291433	4.52	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

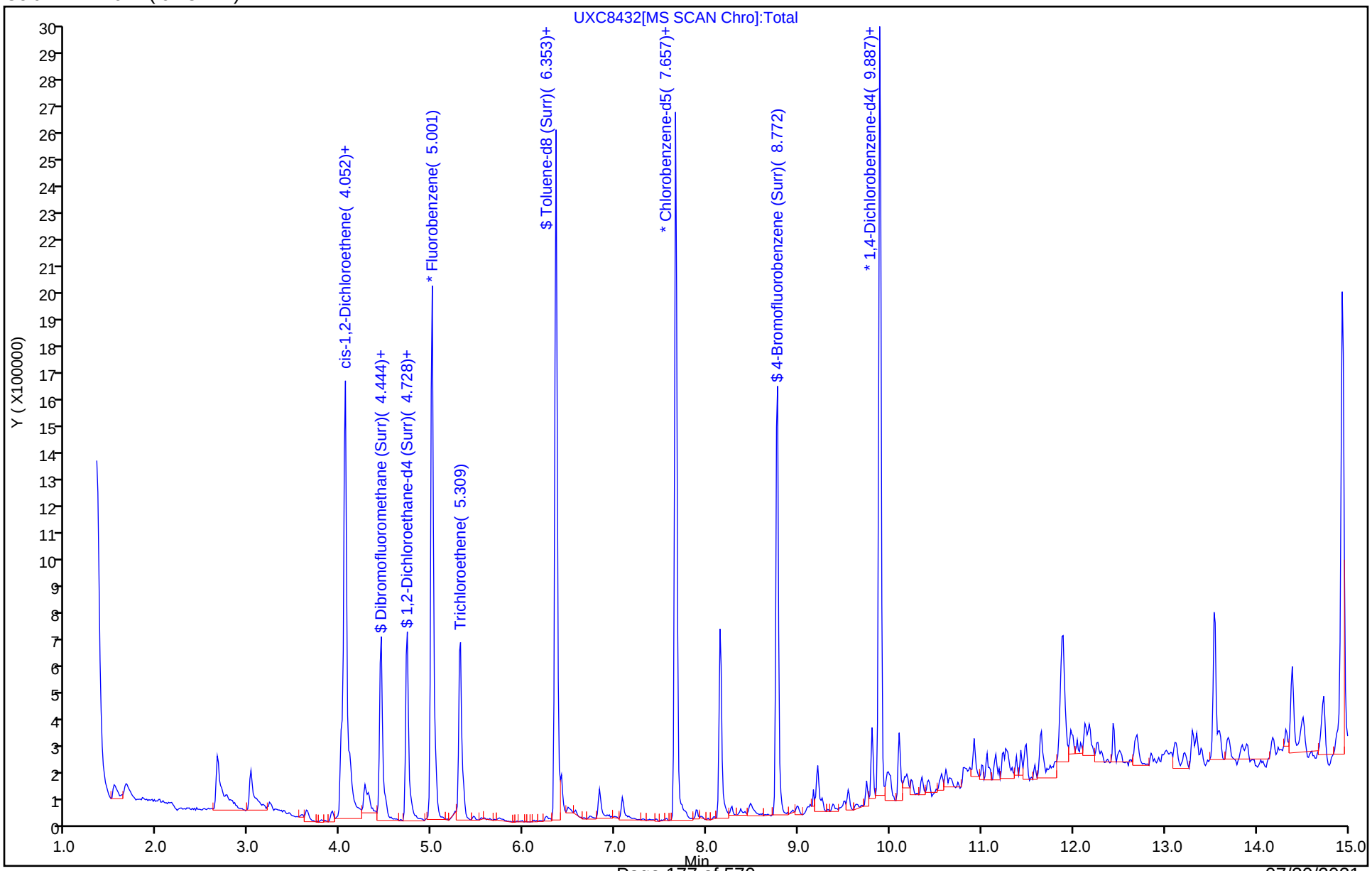
Report Date: 23-Jul-2021 08:13:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D

Injection Date:	22-Jul-2021 13:15:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-12	Lab Sample ID:	240-152869-12	Worklist Smp#:	40
Client ID:	SL-12_071321				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D
Lims ID: 240-152869-E-12
Client ID: SL-12_071321
Sample Type: Client
Inject. Date: 22-Jul-2021 13:15:30 ALS Bottle#: 11 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0111469-040
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

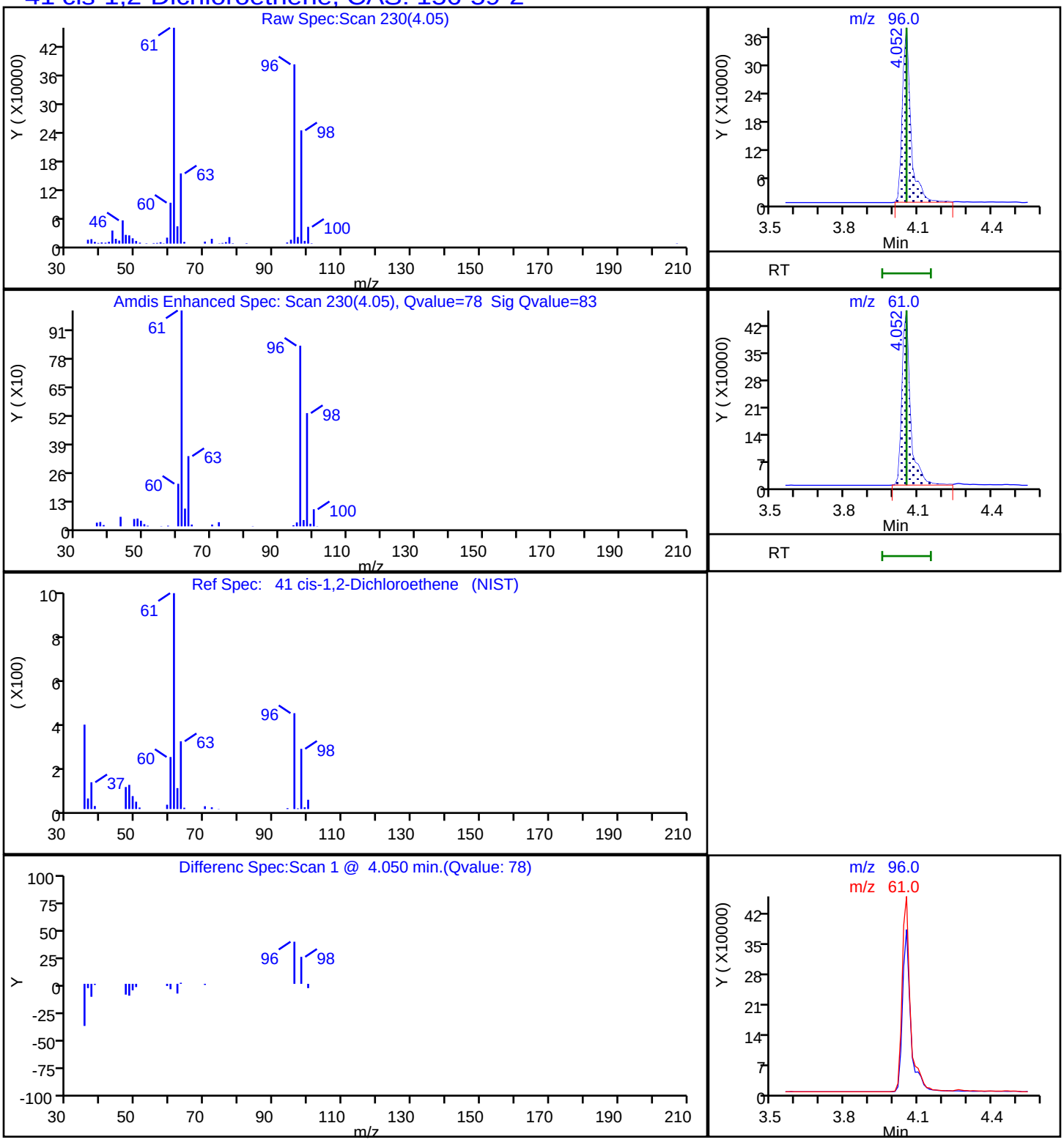
First Level Reviewer: evansle Date: 22-Jul-2021 13:38:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.73	97.33
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.18
$ 6 Toluene-d8 (Surr)	10.0	9.07	90.74
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.48	94.82

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D				
Injection Date:	22-Jul-2021 13:15:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-12	Lab Sample ID:	240-152869-12		
Client ID:	SL-12_071321				
Operator ID:	43582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



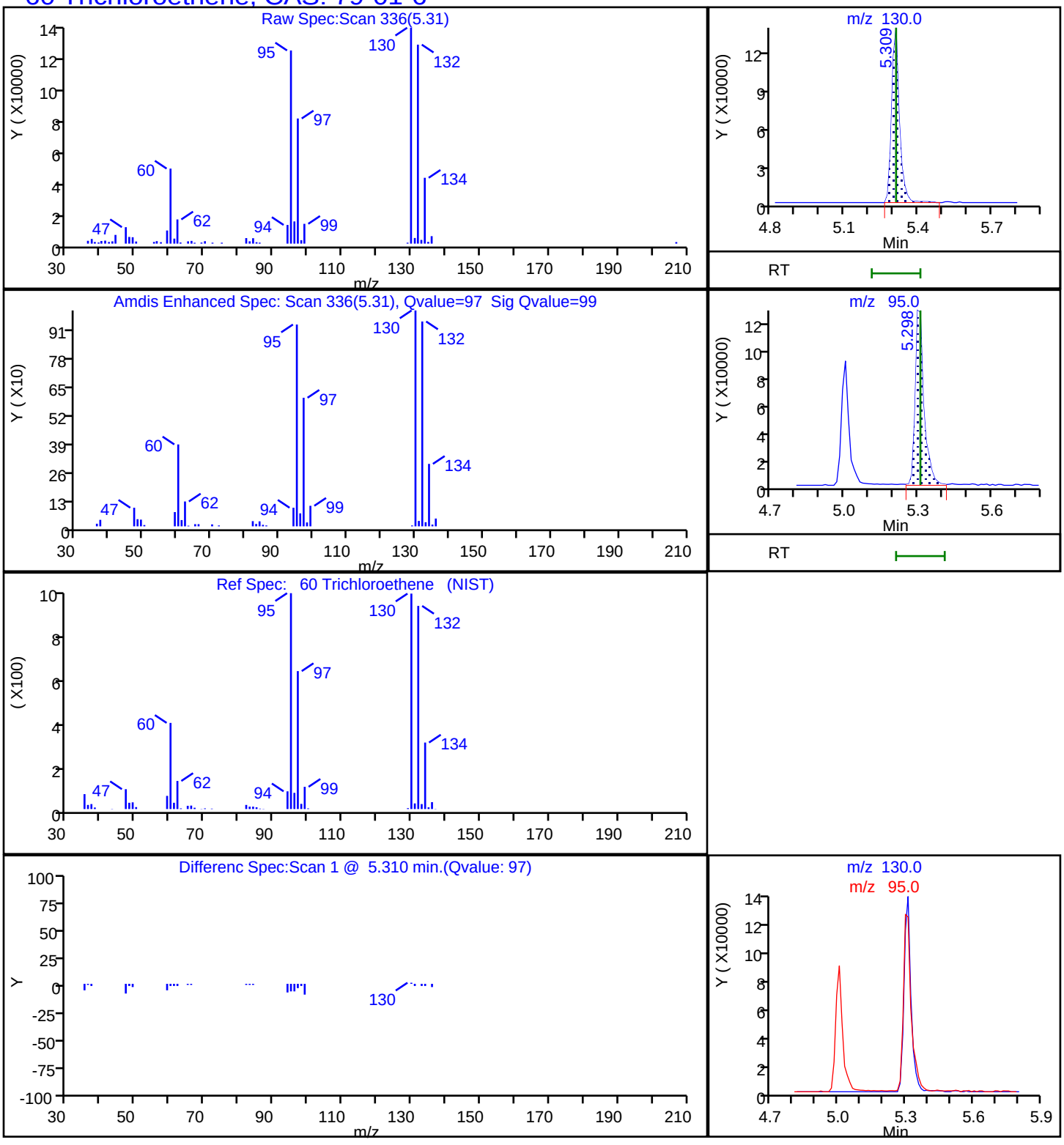
Report Date: 23-Jul-2021 08:13:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D

Injection Date:	22-Jul-2021 13:15:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-12	Lab Sample ID:	240-152869-12		
Client ID:	SL-12_071321				
Operator ID:	43582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

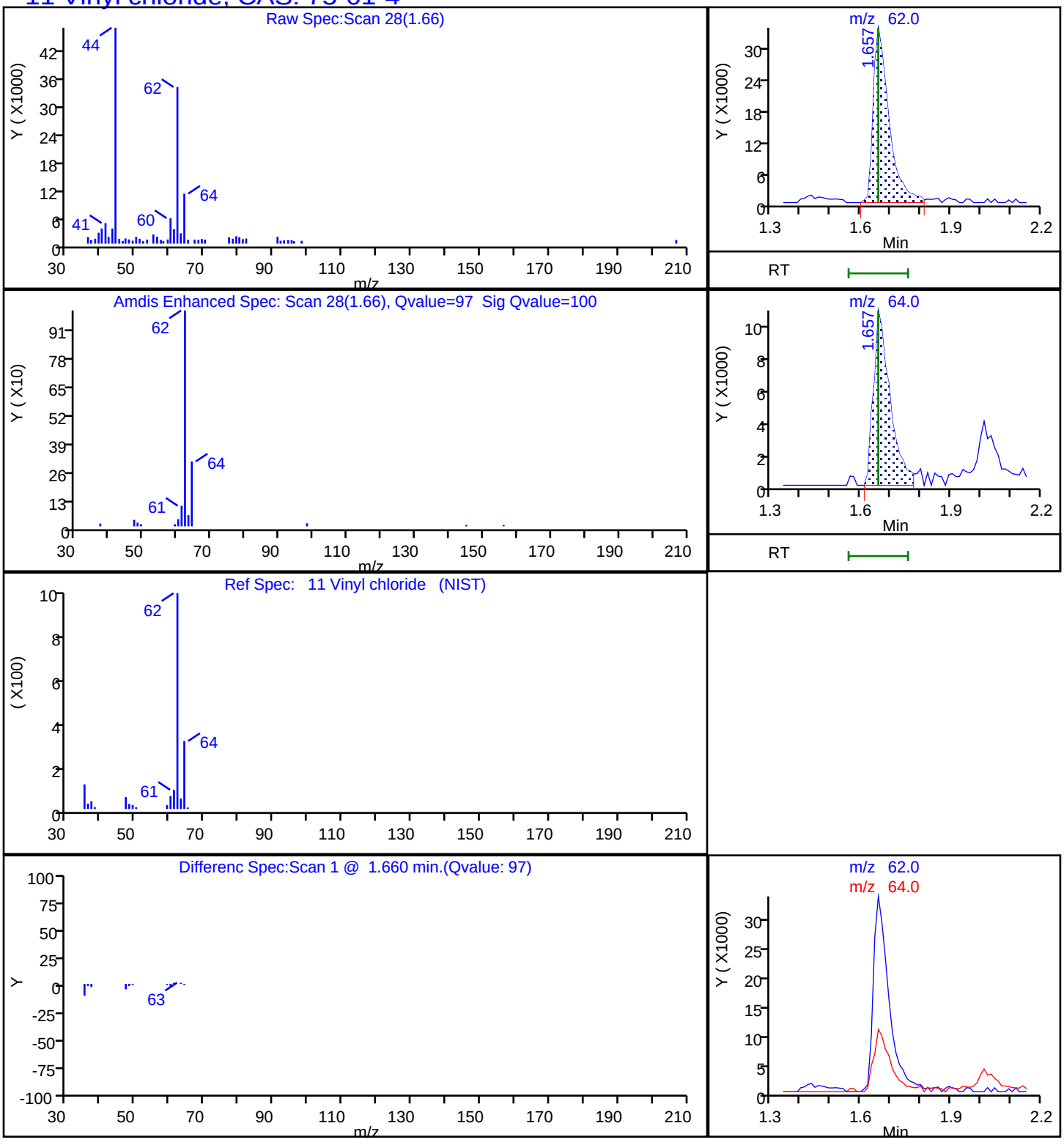


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8432.D

Injection Date:	22-Jul-2021 13:15:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-12	Lab Sample ID:	240-152869-12		
Client ID:	SL-12_071321				
Operator ID:	43582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-152869-13

Matrix: Water Lab File ID: UXC8433.D

Analysis Method: 8260B Date Collected: 07/13/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 13:37

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	4.0	U	4.0	2.0
156-59-2	cis-1,2-Dichloroethene	110		4.0	1.8
127-18-4	Tetrachloroethene	4.0	U	4.0	1.8
156-60-5	trans-1,2-Dichloroethene	4.0	U	4.0	2.0
79-01-6	Trichloroethene	26		4.0	1.8
75-01-4	Vinyl chloride	18		4.0	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	91		47-134
2037-26-5	Toluene-d8 (Surr)	90		69-122
1868-53-7	Dibromofluoromethane (Surr)	92		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D				
Lims ID:	240-152869-E-13				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	22-Jul-2021 13:37:30	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Sample Info:	240-0111469-041				
Misc. Info.:	C210722A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	23-Jul-2021 08:13:42	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1659				
First Level Reviewer: evansle		Date:	23-Jul-2021 08:06:52		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1896687	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1513040	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	778804	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	407992	9.20	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	524521	10.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1673507	9.03	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	569876	9.09	
11 Vinyl chloride	62	1.657	1.657	0.000	98	252397	4.53	
19 1,1-Dichloroethene	96		2.617				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	94	9010	0.1645	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	78	1567549	27.1	
60 Trichloroethene	130	5.309	5.309	0.000	98	362748	6.49	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

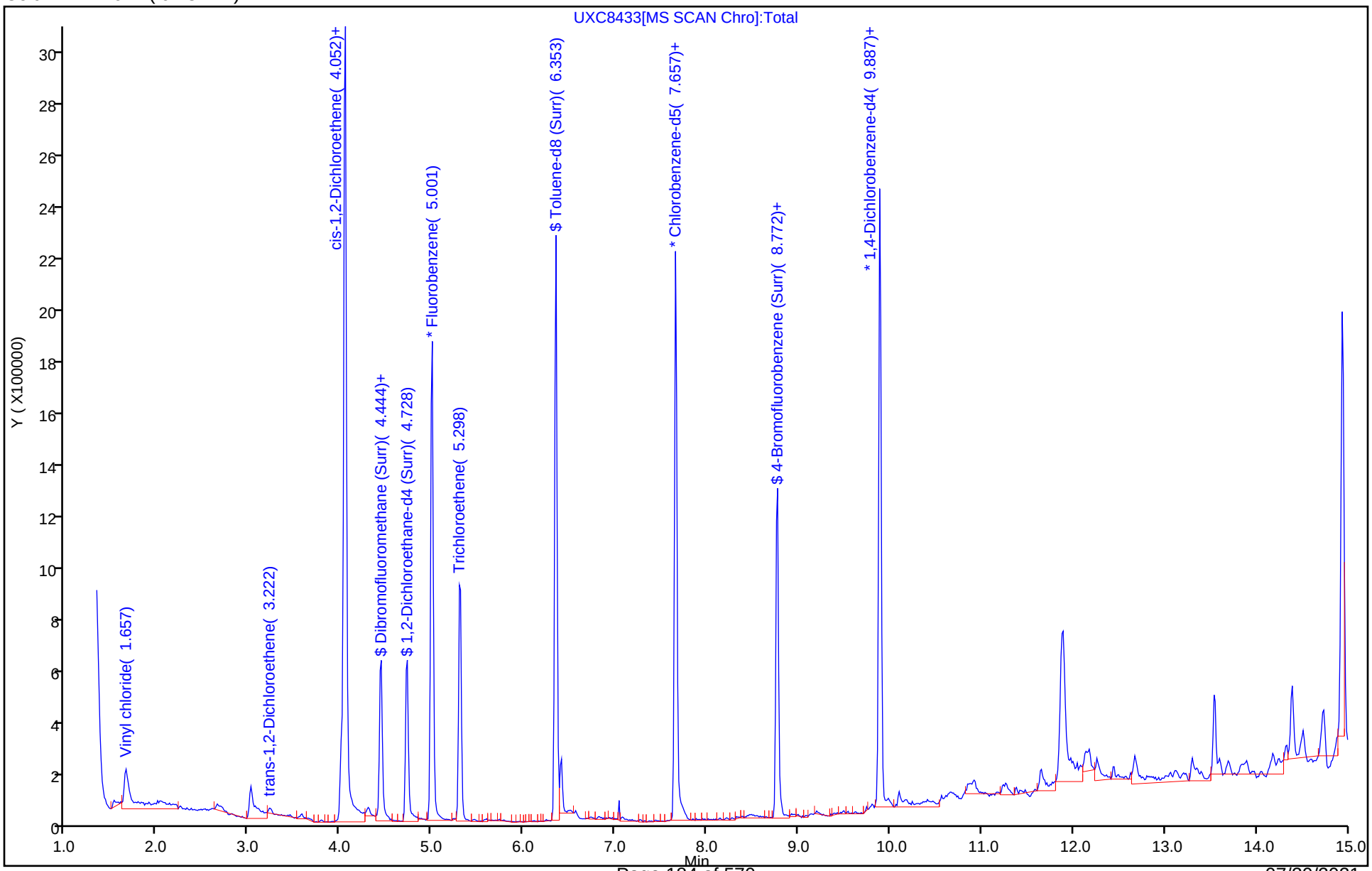
Report Date: 23-Jul-2021 08:13:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D

Injection Date:	22-Jul-2021 13:37:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-E-13	Lab Sample ID:	240-152869-13	Worklist Smp#:	41
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D
Lims ID: 240-152869-E-13
Client ID: DUP-01
Sample Type: Client
Inject. Date: 22-Jul-2021 13:37:30 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Sample Info: 240-0111469-041
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 23-Jul-2021 08:06:52

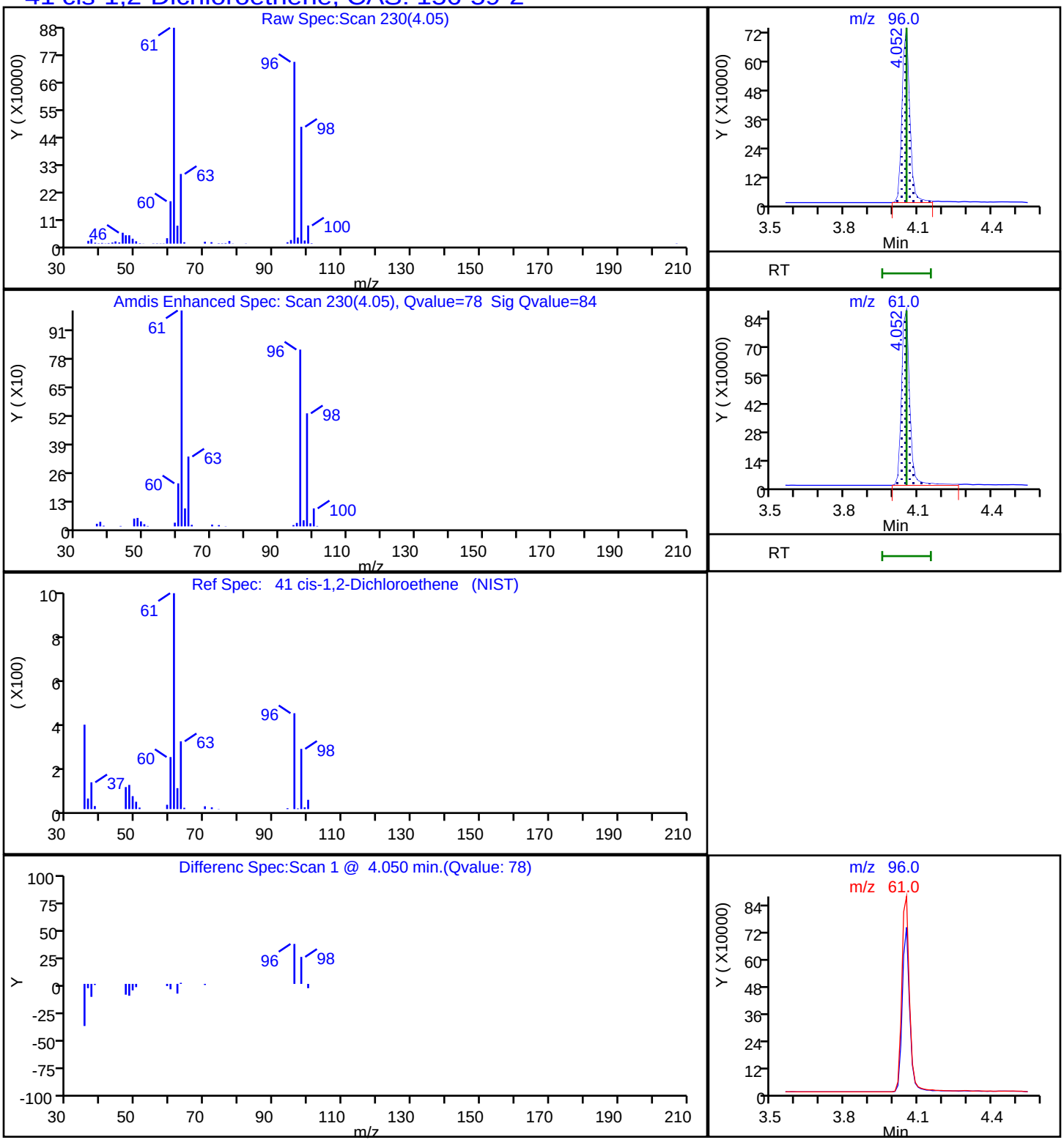
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.20	92.03
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.02
$ 6 Toluene-d8 (Surr)	10.0	9.03	90.25
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.09	90.86

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D

Injection Date:	22-Jul-2021 13:37:30	Instrument ID:	A3UX15
Lims ID:	240-152869-E-13	Lab Sample ID:	240-152869-13
Client ID:	DUP-01		
Operator ID:	43582	ALS Bottle#:	12 Worklist Smp#: 41
Purge Vol:	5.000 mL	Dil. Factor:	4.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

41 cis-1,2-Dichloroethene, CAS: 156-59-2



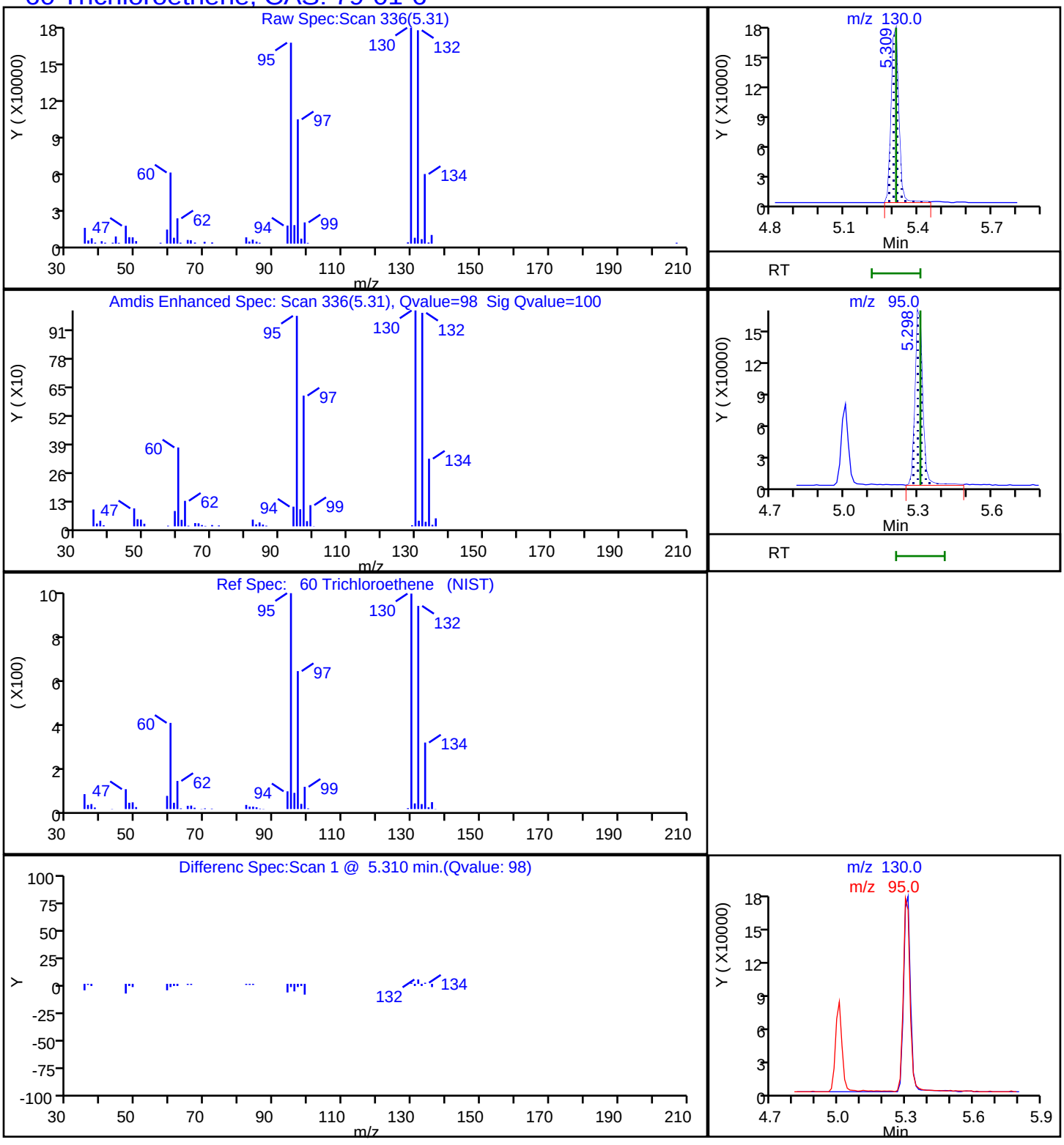
Report Date: 23-Jul-2021 08:13:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D

Injection Date:	22-Jul-2021 13:37:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-13	Lab Sample ID:	240-152869-13		
Client ID:	DUP-01				
Operator ID:	43582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



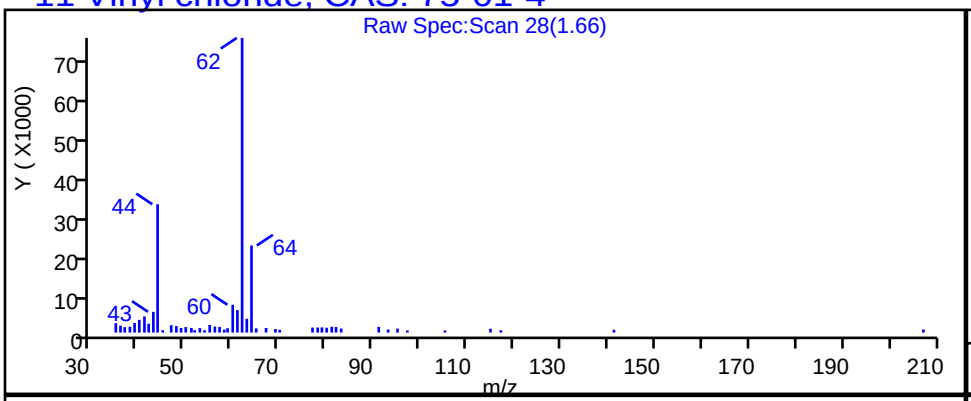
Report Date: 23-Jul-2021 08:13:54 Chrom Revision: 2.3 13-May-2021 07:57:40

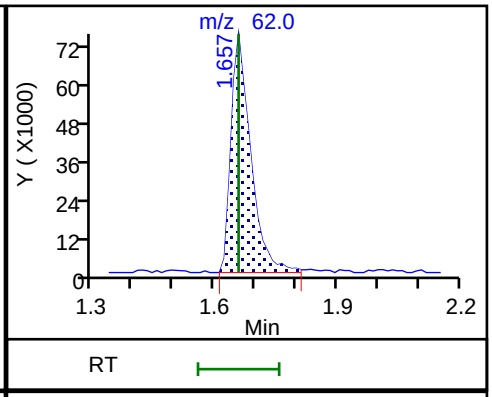
Eurofins TestAmerica, Canton

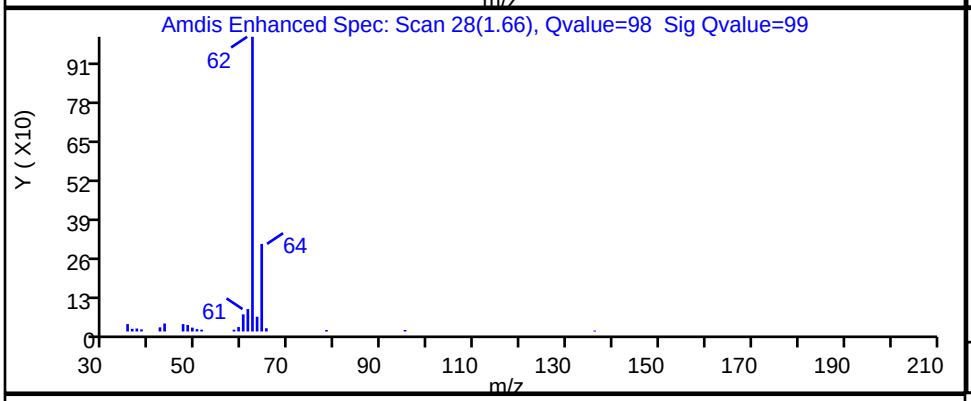
Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8433.D

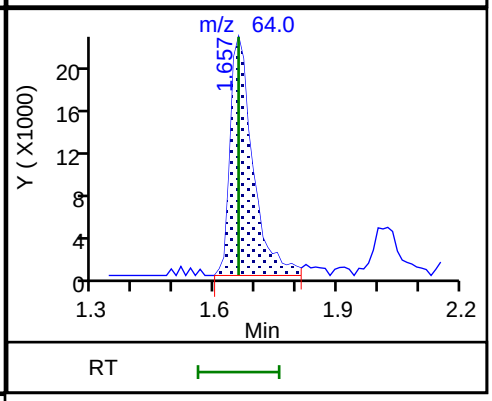
Injection Date:	22-Jul-2021 13:37:30	Instrument ID:	A3UX15		
Lims ID:	240-152869-E-13	Lab Sample ID:	240-152869-13		
Client ID:	DUP-01				
Operator ID:	43582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

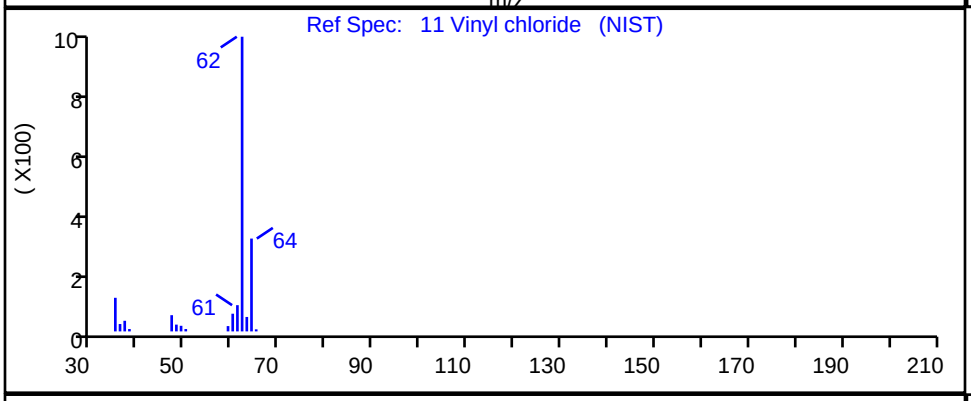
11 Vinyl chloride, CAS: 75-01-4

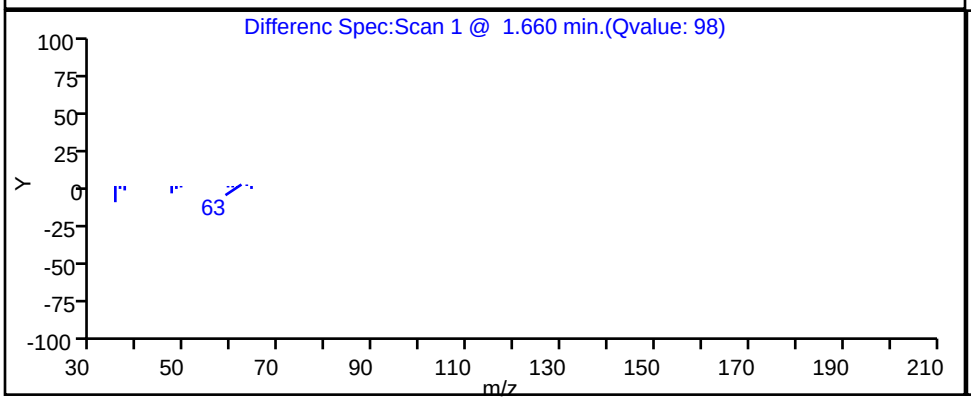


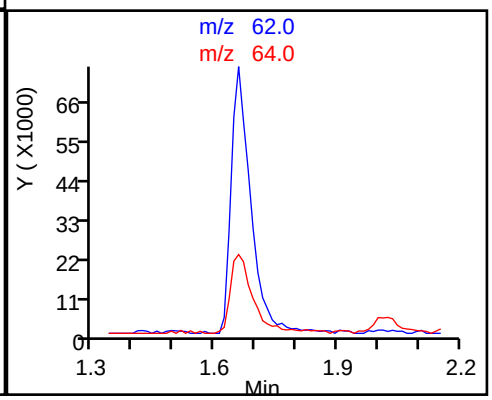












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3179 0.2856	0.3024	0.2990	0.3093	0.2937	Ave		0.3013				3.8		15.0			
Chloromethane	0.3871 0.3075	0.3410	0.3529	0.3559	0.3114	Ave		0.3426			0.1000	8.7		15.0			
Vinyl chloride	0.3105 0.2686	0.3356	0.2760	0.2664	0.3046	Ave		0.2936				9.5		15.0			
Butadiene	0.4584 0.3354	0.3649	0.3794	0.3693	0.3400	Ave		0.3746				11.9		15.0			
Bromomethane	0.2768 0.2260	0.2769	0.2353	0.2197	0.2414	Ave		0.2460				10.2		15.0			
Chloroethane	0.2500 0.1946	0.2244	0.2174	0.2026	0.2094	Ave		0.2164				9.0		15.0			
Dichlorofluoromethane	0.6535 0.5185	0.6173	0.5751	0.5610	0.5287	Ave		0.5757				9.0		15.0			
Trichlorofluoromethane	0.5721 0.4983	0.5300	0.5049	0.5023	0.5195	Ave		0.5212				5.3		15.0			
Ethyl ether	0.2699 0.2372	0.2623	0.2530	0.2461	0.2385	Ave		0.2512				5.2		15.0			
Acrolein	0.0123 0.0151	0.0265	0.0166	0.0157	0.0144	Lin	0.0400	0.0147							0.9980		0.9900
1,1-Dichloroethene	0.2595 0.2858	0.3045	0.2995	0.2904	0.2951	Ave		0.2891				5.5		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2193 0.2523	0.2341	0.2455	0.2413	0.2535	Ave		0.2410				5.3		15.0			
Acetone	0.0236 0.0187	0.0236	0.0180	0.0187	0.0188	Ave		0.0202				13.0		15.0			
Iodomethane	0.4069 0.4206	0.4383	0.4410	0.4405	0.5097	Ave		0.4428				8.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7748 0.7495	0.8943	0.7779	0.7790	0.8588	Ave		0.8057				7.1		15.0			
3-Chloro-1-propene	0.1523 0.1727	0.1717	0.1742	0.1728	0.1753	Ave		0.1698				5.1		15.0			
Methyl acetate	0.1303 0.1267	0.1239	0.1291	0.1258	0.1258	Ave		0.1269				1.9		15.0			
Methylene Chloride	0.2754 0.2543	0.2829	0.2711	0.2630	0.2675	Ave		0.2691				3.7		15.0			
2-Methyl-2-propanol	0.0139 0.0139	0.0139	0.0149	0.0145	0.0137	Ave		0.0141				3.2		15.0			
Acrylonitrile	0.0679 0.0681	0.0675	0.0685	0.0682	0.0670	Ave		0.0679				0.8		15.0			
Methyl tert-butyl ether	0.6990 0.7045	0.6881	0.7075	0.7039	0.7051	Ave		0.7014				1.0		15.0			
trans-1,2-Dichloroethene	0.3026 0.2717	0.2966	0.2890	0.2898	0.2827	Ave		0.2887				3.7		15.0			
Hexane	0.0635 0.0565	0.0591	0.0530	0.0577	0.0571	Ave		0.0578				6.0		15.0			
1,1-Dichloroethane	0.4664 0.4434	0.4651	0.4613	0.4568	0.4509	Ave		0.4573			0.1000	1.9		15.0			
Vinyl acetate	0.3496 0.4336	0.3537	0.3849	0.3975	0.4151	Ave		0.3891				8.6		15.0			
cis-1,2-Dichloroethene	0.3175 0.2885	0.3169	0.3097	0.2994	0.2972	Ave		0.3049				3.8		15.0			
2,2-Dichloropropane	0.0915 0.0867	0.0884	0.0888	0.0884	0.0896	Ave		0.0889				1.8		15.0			
2-Butanone (MEK)	0.0250 0.0203	0.0207	0.0206	0.0202	0.0199	Ave		0.0211				9.1		15.0			
Chlorobromomethane	0.1490 0.1374	0.1449	0.1452	0.1451	0.1425	Ave		0.1440				2.7		15.0			
Tetrahydrofuran	0.0654 0.0486	0.0574	0.0475	0.0490	0.0474	Ave		0.0526				14.0		15.0			
Chloroform	0.4702 0.4401	0.4549	0.4601	0.4542	0.4522	Ave		0.4553				2.2		15.0			
1,1,1-Trichloroethane	0.4008 0.4063	0.4114	0.4159	0.4099	0.4153	Ave		0.4100				1.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.4370 0.4135	0.4233	0.4223	0.4167	0.4262	Ave		0.4232				1.9		15.0			
1,1-Dichloropropene	0.3743 0.3536	0.3795	0.3718	0.3710	0.3626	Ave		0.3688				2.5		15.0			
Carbon tetrachloride	0.3477 0.3720	0.3559	0.3693	0.3681	0.3752	Ave		0.3647				2.9		15.0			
Isobutyl alcohol	0.0049 0.0043	0.0044	0.0045	0.0046	0.0042	Ave		0.0045				5.3		15.0			
Benzene	1.2010 1.0461	1.1411	1.0798	1.0653	1.0477	Ave		1.0968				5.6		15.0			
1,2-Dichloroethane	0.3411 0.3175	0.3231	0.3274	0.3265	0.3220	Ave		0.3263				2.5		15.0			
n-Heptane	0.0498 0.0480	0.0560	0.0483	0.0455	0.0492	Ave		0.0495				7.1		15.0			
Trichloroethene	0.3118 0.2826	0.3021	0.2966	0.2911	0.2845	Ave		0.2948				3.8		15.0			
Methylcyclohexane	0.3833 0.3620	0.3762	0.3566	0.3621	0.3694	Ave		0.3683				2.7		15.0			
1,2-Dichloropropane	0.2360 0.2274	0.2187	0.2263	0.2276	0.2272	Ave		0.2272				2.4		15.0			
Dibromomethane	0.1384 0.1274	0.1289	0.1310	0.1317	0.1301	Ave		0.1312				2.9		15.0			
1,4-Dioxane	0.0018 0.0009	0.0021	0.0018	0.0018	0.0016	Qua	-0.016	0.0023	-0.000002						0.9980		0.9900
Dichlorobromomethane	0.2759 0.3033	0.2804	0.2834	0.2964	0.2965	Ave		0.2893				3.8		15.0			
2-Chloroethyl vinyl ether	0.0711 0.0876	0.0746	0.0752	0.0804	0.0825	Ave		0.0786				7.7		15.0			
cis-1,3-Dichloropropene	0.2804 0.3428	0.2988	0.3091	0.3239	0.3343	Ave		0.3149				7.4		15.0			
4-Methyl-2-pentanone (MIBK)	0.1544 0.1523	0.1447	0.1540	0.1535	0.1510	Ave		0.1517				2.4		15.0			
Toluene	1.4749 1.4887	1.5001	1.4604	1.4518	1.4917	Ave		1.4780				1.3		15.0			
trans-1,3-Dichloropropene	0.3347 0.4117	0.3596	0.3694	0.3885	0.4080	Ave		0.3786				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.2809 0.2972	0.2641	0.2863	0.2828	0.3017	Ave		0.2855				4.7		15.0			
1,1,2-Trichloroethane	0.2563 0.2365	0.2382	0.2409	0.2401	0.2429	Ave		0.2425				2.9		15.0			
Tetrachloroethene	0.3037 0.3079	0.3201	0.3113	0.3119	0.3130	Ave		0.3113				1.8		15.0			
1,3-Dichloropropane	0.4197 0.4167	0.4153	0.4127	0.4196	0.4177	Ave		0.4170				0.7		15.0			
2-Hexanone	0.1501 0.1200	0.1443	0.1446	0.1397	0.1337	Ave		0.1387				7.7		15.0			
Chlorodibromomethane	0.2323 0.2923	0.2465	0.2649	0.2741	0.2887	Ave		0.2665				8.9		15.0			
Ethylene Dibromide	0.2344 0.2310	0.2379	0.2318	0.2314	0.2384	Ave		0.2342				1.4		15.0			
Chlorobenzene	0.9136 0.8959	0.8886	0.9073	0.8926	0.9138	Ave		0.9020			0.3000	1.2		15.0			
1,1,1,2-Tetrachloroethane	0.3709 0.3850	0.3637	0.3673	0.3752	0.3934	Ave		0.3759				3.0		15.0			
Ethylbenzene	0.4869 0.4992	0.4811	0.4884	0.4972	0.5040	Ave		0.4928				1.8		15.0			
m-Xylene & p-Xylene	1.1891 1.2048	1.1647	1.1868	1.1935	1.2334	Ave		1.1954				1.9		15.0			
o-Xylene	0.6311 0.6468	0.6392	0.6438	0.6364	0.6572	Ave		0.6424				1.4		15.0			
Styrene	0.7794 0.8791	0.7890	0.8297	0.8434	0.8787	Ave		0.8332				5.1		15.0			
Bromoform	0.1330 0.1936	0.1599	0.1548	0.1634	0.1838	Ave		0.1647			0.1000	13.1		15.0			
Isopropylbenzene	1.5146 1.6219	1.5392	1.5891	1.5922	1.6570	Ave		1.5857				3.3		15.0			
1,1,2,2-Tetrachloroethane	0.4957 0.5275	0.4849	0.5173	0.5132	0.5314	Ave		0.5117			0.3000	3.5		15.0			
Bromobenzene	0.7097 0.7040	0.7113	0.6942	0.7071	0.6981	Ave		0.7041				1.0		15.0			
1,2,3-Trichloropropane	0.1614 0.1668	0.1728	0.1633	0.1647	0.1668	Ave		0.1660				2.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.0847 0.1203	0.1398	0.0974	0.1090	0.1210	Lin1	-0.024	0.1194							0.9950		0.9900
N-Propylbenzene	0.6653 0.7317	0.6810	0.6868	0.6968	0.7241	Ave		0.6976				3.7		15.0			
2-Chlorotoluene	0.6141 0.6675	0.6391	0.6443	0.6600	0.6600	Ave		0.6475				3.0		15.0			
1,3,5-Trimethylbenzene	2.0712 2.3194	2.1346	2.1473	2.2049	2.2987	Ave		2.1960				4.4		15.0			
4-Chlorotoluene	2.0606 2.0977	2.0703	2.0407	2.0504	2.0938	Ave		2.0689				1.1		15.0			
tert-Butylbenzene	1.7730 1.9620	1.8289	1.8362	1.8968	1.9663	Ave		1.8772				4.2		15.0			
1,2,4-Trimethylbenzene	2.0752 2.3637	2.2175	2.2267	2.2798	2.3497	Ave		2.2521				4.7		15.0			
sec-Butylbenzene	2.3353 2.5702	2.4193	2.4140	2.5090	2.5980	Ave		2.4743				4.1		15.0			
1,3-Dichlorobenzene	1.3198 1.2859	1.3553	1.3336	1.3113	1.3072	Ave		1.3189				1.8		15.0			
4-Isopropyltoluene	2.0713 2.3030	2.2050	2.1642	2.2210	2.3142	Ave		2.2131				4.1		15.0			
1,4-Dichlorobenzene	1.4231 1.3122	1.4118	1.3771	1.3493	1.3452	Ave		1.3698				3.1		15.0			
n-Butylbenzene	1.7422 1.7773	1.8664	1.7621	1.7842	1.8219	Ave		1.7923				2.5		15.0			
1,2-Dichlorobenzene	1.3707 1.3458	1.3830	1.3899	1.3753	1.3705	Ave		1.3725				1.1		15.0			
1,2-Dibromo-3-Chloropropane	0.0946 0.1206	0.1171	0.1126	0.1149	0.1172	Ave		0.1128				8.3		15.0			
1,2,4-Trichlorobenzene	1.0114 0.9190	1.1387	1.0099	0.9964	0.9699	Ave		1.0075				7.2		15.0			
Hexachlorobutadiene	0.5947 0.3863	0.5965	0.4754	0.4514	0.4287	Lin1	0.2952	0.3966							0.9960		0.9900
Naphthalene	2.0025 2.1634	2.1584	2.1858	2.1964	2.1872	Ave		2.1490				3.4		15.0			
1,2,3-Trichlorobenzene	0.9724 0.8555	1.1085	0.9556	0.9345	0.9096	Ave		0.9560				8.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2421 0.2237	0.2290	0.2413	0.2339	0.2324	Ave		0.2337				3.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2760 0.2495	0.2670	0.2708	0.2600	0.2566	Ave		0.2633				3.7		15.0			
Toluene-d8 (Surr)	1.2309 1.2106	1.2019	1.2453	1.2250	1.2394	Ave		1.2255				1.4		15.0			
4-Bromofluorobenzene (Surr)	0.4300 0.3945	0.4096	0.4208	0.4175	0.4149	Ave		0.4145				2.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	47955 1985876	96788	236340	505763	1015755	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	58389 2137858	109132	278892	581954	1076987	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	46845 1867423	107404	218141	435655	1053493	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	69152 2331823	116788	299854	603954	1175768	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	41750 1571689	88628	185985	359282	834840	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	37706 1352876	71803	171841	331296	724185	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	98585 3604788	197535	454576	917387	1828501	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	86296 3464762	169605	399090	821375	1796517	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	40718 1648971	83944	199967	402519	824901	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Lin	9294 523416	42337	65464	127991	249680	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	39151 1987280	97460	236738	474847	1020497	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	33084 1754372	74912	194077	394578	876594	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	7111 259443	15117	28520	61024	129995	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	61380 2924204	140257	348537	720329	1762805	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	116874 5211254	286182	614828	1273944	2970031	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	22980 1200557	54960	137672	282597	606147	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	39316 1761410	79302	204142	411585	869993	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	41550 1768190	90541	214303	430176	925140	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	20999 966491	44457	117539	237680	475246	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	102496 4734494	216160	541571	1114638	2316749	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	105442 4898428	220217	559170	1151185	2438583	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	45650 1888831	94914	228419	473854	977825	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	9581 392577	18928	41895	94360	197372	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	70364 3082713	148843	364589	747006	1559420	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	52739 3014699	113199	304236	650063	1435718	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	47902 2005786	101403	244751	489671	1027988	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	13807 603120	28276	70219	144526	309943	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	7540 281791	13268	32640	66059	137808	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	22476 955220	46356	114745	237215	492922	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	19738 676139	36744	75127	160132	327685	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	70935 3059766	145589	363680	742858	1563762	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	60467 2825060	131645	328759	670415	1436238	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	65918 2874773	135465	333807	681490	1474122	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	56469 2458560	121447	293864	606744	1253974	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	52456 2586568	113888	291902	601989	1297566	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	18341 742762	35137	89469	186811	364589	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	181175 7273390	365182	853447	1742135	3623322	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	51453 2207739	103413	258800	533877	1113535	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	7518 334066	17934	38208	74441	170034	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	47038 1964997	96690	234414	476021	983943	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	57824 2517271	120389	281838	592186	1277610	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	35608 1581278	69979	178849	372280	785821	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	20875 885521	41243	103540	215335	449938	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	5574 120475	13582	28764	59463	110747	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	41626 2108837	89718	224007	484704	1025475	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	21442 1217878	47750	118901	263000	570636	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	42305 2383514	95626	244291	529695	1156157	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	46573 2117506	92610	243498	502124	1044731	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	148278	307593	756651	1573355	3370989	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			7004750					40.0				
trans-1,3-Dichloropropene	CBNZ d5	Ave	33643 1937105	73739	191368	420983	922042	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	28235 1398285	54155	148354	306515	681749	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	25770 1112850	48837	124819	260222	549002	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	30533 1448870	65641	161314	338041	707318	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	42197 1960760	85147	213808	454762	943985	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	30177 1128839	59188	149884	302863	604348	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	23357 1375317	50550	137225	297016	652498	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	23568 1087018	48784	120100	250735	538641	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	91842 4215604	182215	470075	967329	2065080	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	37283 1811750	74581	190281	406561	888983	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	48952 2348653	98654	253063	538828	1138861	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	119546	238816	614921	1293431	2787248	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5668949					40.0				
o-Xylene	CBNZ d5	Ave	63450 3043471	131067	333576	689690	1485220	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	78354 4136534	161777	429902	913969	1985697	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	13367 910703	32788	80220	177112	415352	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	152266 7631521	315606	823347	1725432	3744436	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	30042 1413960	58976	160683	328387	704816	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	43010 1887184	86512	215609	452432	925930	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	9782 447188	21011	50734	105370	221278	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	5133 322478	17008	30267	69740	160485	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	40320 1961209	82831	213311	445896	960393	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	37216 1789216	77726	200124	422328	875326	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	125526 6217268	259616	666934	1410902	3048822	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	124885	251801	633815	1311993	2777057	1.00	2.00	5.00	10.0	20.0

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5622899					40.0				
tert-Butylbenzene	DCBd 4	Ave	107456 5259257	222437	570303	1213704	2608022	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	125769 6336062	269709	691594	1458830	3116448	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	141534 6889593	294251	749769	1605451	3445811	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	79988 3446839	164834	414203	839103	1733837	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	125533 6173286	268187	672177	1421147	3069390	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	86247 3517407	171714	427734	863405	1784216	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	105585 4764027	226998	547299	1141647	2416429	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	83074 3607534	168210	431687	880005	1817774	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5731 323157	14241	34964	73534	155451	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	61295 2463296	138494	313669	637594	1286481	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Lin1	36040 1035440	72546	147661	288855	568587	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	121361	262519	678882	1405465	2900947	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5799160					40.0				
1,2,3-Trichlorobenzene	DCBd 4	Ave	58935 2293306	134820	296808	597963	1206461	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	36526 1555302	73272	190756	382556	803605	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	41633 1734501	85434	214048	425239	887545	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	123741 5696194	246447	645215	1327515	2800914	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	43228 1856230	83987	218006	452465	937497	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2021 08:36:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-002
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:38 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:13:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1738218	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1176310	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	87	670129	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	1555302	40.0	38.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	1734501	40.0	37.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	5696194	40.0	39.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	1856230	40.0	38.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1985876	40.0	37.9	
10 Chloromethane	50	1.574	1.574	0.000	99	2137858	40.0	35.9	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1867423	40.0	36.6	
12 Butadiene	54	1.669	1.681	-0.012	99	2331823	40.0	35.8	
13 Bromomethane	94	1.918	1.918	0.000	91	1571689	40.0	36.8	
14 Chloroethane	64	2.001	2.001	0.000	100	1352876	40.0	36.0	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	3604788	40.0	36.0	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	3464762	40.0	38.2	
17 Ethyl ether	59	2.404	2.416	-0.012	91	1648971	40.0	37.8	
18 Acrolein	56	2.523	2.523	0.000	99	523416	200.0	201.9	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1987280	40.0	39.5	
20 112TCTFE	151	2.629	2.629	0.000	95	1754372	40.0	41.9	
21 Acetone	58	2.653	2.653	0.000	100	259443	80.0	73.8	
22 Iodomethane	142	2.736	2.748	-0.012	98	2924204	40.0	38.0	
24 Carbon disulfide	76	2.796	2.796	0.000	100	5211254	40.0	37.2	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	1200557	40.0	40.7	
27 Methyl acetate	43	2.914	2.914	0.000	97	1761410	80.0	79.8	
28 Methylene Chloride	84	2.997	3.009	-0.012	92	1768190	40.0	37.8	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	99	966491	400.0	393.1	
30 Acrylonitrile	53	3.211	3.211	0.000	99	4734494	400.0	401.3	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	4898428	40.0	40.2	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	1888831	40.0	37.6	
34 Hexane	86	3.436	3.436	0.000	92	392577	40.0	39.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	3082713	40.0	38.8	
36 Vinyl acetate	43	3.602	3.602	0.000	97	3014699	40.0	44.6	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	99	281791	80.0	76.7	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	82	603120	40.0	39.0	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.011	82	2005786	40.0	37.8	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	955220	40.0	38.2	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	676139	80.0	74.0	
48 Chloroform	83	4.302	4.302	0.000	93	3059766	40.0	38.7	
49 1,1,1-Trichloroethane	97	4.456	4.468	-0.012	98	2825060	40.0	39.6	
50 Cyclohexane	56	4.503	4.503	0.000	90	2874773	40.0	39.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	95	2586568	40.0	40.8	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	2458560	40.0	38.4	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	742762	1000.0	955.2	
55 Benzene	78	4.764	4.776	-0.012	95	7273390	40.0	38.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	2207739	40.0	38.9	
58 n-Heptane	100	4.966	4.966	0.000	91	334066	40.0	38.8	
60 Trichloroethene	130	5.298	5.298	0.000	96	1964997	40.0	38.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	2517271	40.0	39.3	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	1581278	40.0	40.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	89	120475	800.0	492.5	
65 Dibromomethane	93	5.606	5.606	0.000	90	885521	40.0	38.8	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	2108837	40.0	41.9	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	93	1217878	80.0	89.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	96	2383514	40.0	43.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	2117506	80.0	80.3	
72 Toluene	91	6.412	6.412	0.000	98	7004750	40.0	40.3	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	1937105	40.0	43.5	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	1398285	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	1112850	40.0	39.0	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	1448870	40.0	39.6	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	1960760	40.0	40.0	
78 2-Hexanone	43	6.982	6.982	0.000	96	1128839	80.0	69.2	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	1375317	40.0	43.9	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	1087018	40.0	39.5	
84 Chlorobenzene	112	7.681	7.681	0.000	95	4215604	40.0	39.7	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	1811750	40.0	41.0	
86 Ethylbenzene	106	7.776	7.776	0.000	98	2348653	40.0	40.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	92	5668949	40.0	40.3	
88 o-Xylene	106	8.262	8.262	0.000	97	3043471	40.0	40.3	
89 Styrene	104	8.274	8.274	0.000	93	4136534	40.0	42.2	
90 Bromoform	173	8.464	8.464	0.000	98	910703	40.0	47.0	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	7631521	40.0	40.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	1413960	40.0	41.2	
95 Bromobenzene	156	8.914	8.914	0.000	91	1887184	40.0	40.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	447188	40.0	40.2	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	92	322478	40.0	40.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	1961209	40.0	42.0	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	1789216	40.0	41.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	6217268	40.0	42.2	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	5622899	40.0	40.6	
104 tert-Butylbenzene	119	9.507	9.496	0.011	91	5259257	40.0	41.8	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	6336062	40.0	42.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	6889593	40.0	41.6	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	3446839	40.0	39.0	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	6173286	40.0	41.6	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	3517407	40.0	38.3	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	4764027	40.0	39.7	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	3607534	40.0	39.2	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	323157	40.0	42.7	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	2463296	40.0	36.5	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	1035440	40.0	38.2	
119 Naphthalene	128	12.128	12.128	0.000	96	5799160	40.0	40.3	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	2293306	40.0	35.8	
S 127 1,2-Dichloroethene, Total	96				0			75.5	
S 128 1,3-Dichloropropene, Total	75				0			87.0	
S 129 Xylenes, Total	106				0		80.0	80.6	
S 130 Total BTEX	1				0		200.0	199.5	
S 131 Trihalomethanes, Total	1				0		160.0	171.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_stk_00086	Amount Added:	32.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	32.00	Units: uL
VMAROLISTDW_00384	Amount Added:	32.00	Units: uL
VMRGAS_00377	Amount Added:	32.00	Units: uL

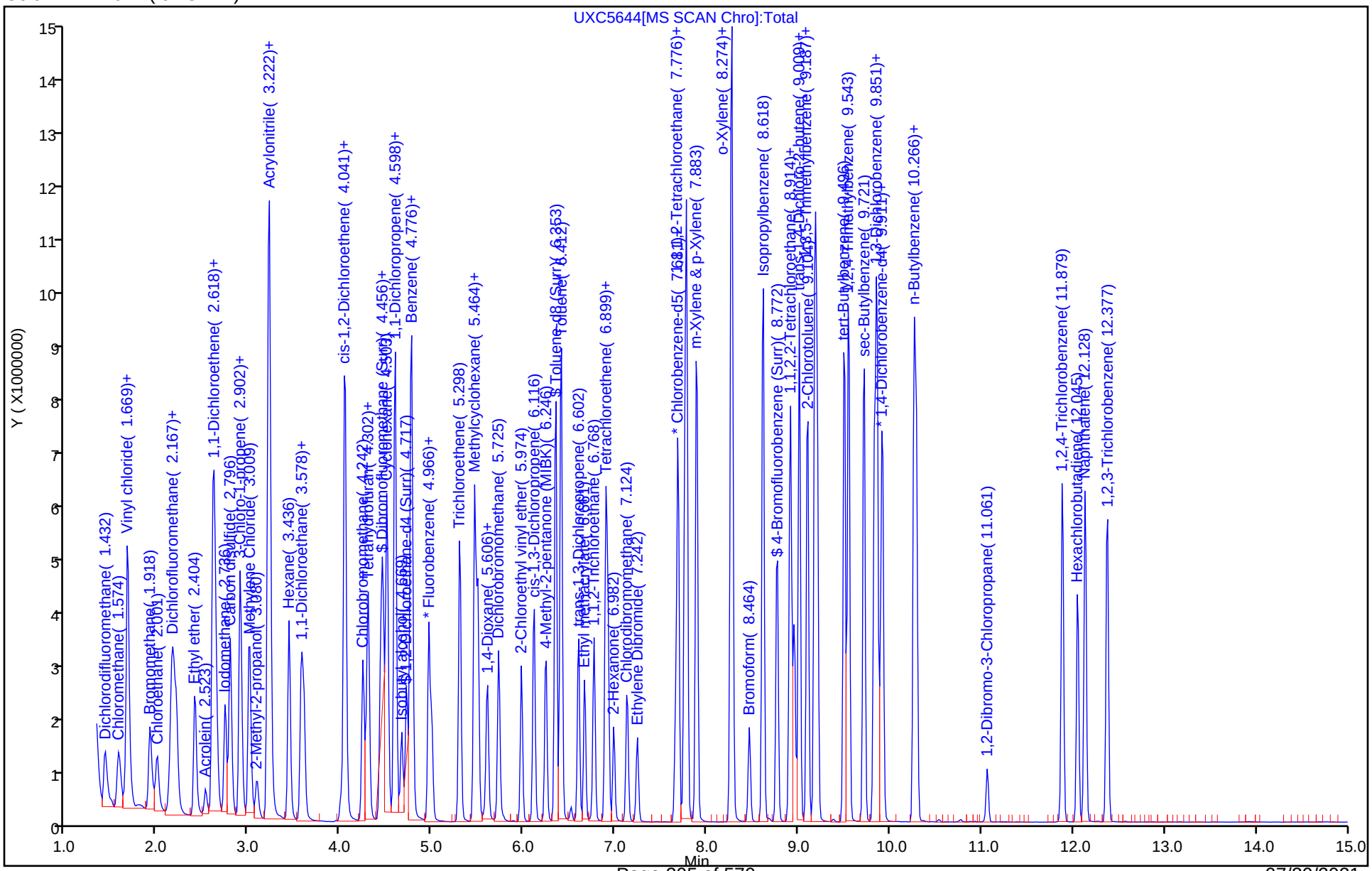
Report Date: 18-Mar-2021 09:00:39 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D

Injection Date:	16-Mar-2021 08:36:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2021 08:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-003
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:45 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:18:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1729200	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1129906	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	663171	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	803605	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	887545	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2800914	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	937497	20.0	20.0	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1015755	20.0	19.5	
10 Chloromethane	50	1.574	1.574	0.000	99	1076987	20.0	18.2	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1053493	20.0	20.7	
12 Butadiene	54	1.669	1.681	-0.012	99	1175768	20.0	18.2	
13 Bromomethane	94	1.918	1.918	0.000	90	834840	20.0	19.6	
14 Chloroethane	64	1.989	2.001	-0.012	100	724185	20.0	19.4	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	1828501	20.0	18.4	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	1796517	20.0	19.9	
17 Ethyl ether	59	2.404	2.416	-0.012	91	824901	20.0	19.0	
18 Acrolein	56	2.523	2.523	0.000	100	249680	100.0	95.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1020497	20.0	20.4	
20 112TCTFE	151	2.629	2.629	0.000	92	876594	20.0	21.0	
21 Acetone	58	2.653	2.653	0.000	100	129995	40.0	37.2	
22 Iodomethane	142	2.736	2.748	-0.012	99	1762805	20.0	23.0	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	2970031	20.0	21.3	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	606147	20.0	20.6	
27 Methyl acetate	43	2.914	2.914	0.000	97	869993	40.0	39.6	
28 Methylene Chloride	84	3.009	3.009	0.000	92	925140	20.0	19.9	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	98	475246	200.0	194.3	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	2316749	200.0	197.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	2438583	20.0	20.1	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	977825	20.0	19.6	
34 Hexane	86	3.436	3.436	0.000	93	197372	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	1559420	20.0	19.7	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1435718	20.0	21.3	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	1027988	20.0	19.5	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	137808	40.0	37.7	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	83	309943	20.0	20.2	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	492922	20.0	19.8	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	327685	40.0	36.1	
48 Chloroform	83	4.301	4.302	-0.001	93	1563762	20.0	19.9	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	1436238	20.0	20.3	
50 Cyclohexane	56	4.503	4.503	0.000	90	1474122	20.0	20.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	1297566	20.0	20.6	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	1253974	20.0	19.7	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	364589	500.0	471.3	
55 Benzene	78	4.764	4.776	-0.012	95	3623322	20.0	19.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	1113535	20.0	19.7	
58 n-Heptane	100	4.966	4.966	0.000	90	170034	20.0	19.9	
60 Trichloroethene	130	5.298	5.298	0.000	96	983943	20.0	19.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	1277610	20.0	20.1	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	785821	20.0	20.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	37	110747	400.0	416.6	
65 Dibromomethane	93	5.606	5.606	0.000	91	449938	20.0	19.8	
67 Dichlorobromomethane	83	5.725	5.725	-0.001	99	1025475	20.0	20.5	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	570636	40.0	42.0	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	1156157	20.0	21.2	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	1044731	40.0	39.8	
72 Toluene	91	6.412	6.412	0.000	98	3370989	20.0	20.2	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	922042	20.0	21.6	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	681749	20.0	21.1	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	549002	20.0	20.0	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	707318	20.0	20.1	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	943985	20.0	20.0	
78 2-Hexanone	43	6.982	6.982	0.000	97	604348	40.0	38.6	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	652498	20.0	21.7	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	538641	20.0	20.4	
84 Chlorobenzene	112	7.681	7.681	0.000	95	2065080	20.0	20.3	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	888983	20.0	20.9	
86 Ethylbenzene	106	7.776	7.776	0.000	98	1138861	20.0	20.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	2787248	20.0	20.6	
88 o-Xylene	106	8.262	8.262	0.000	95	1485220	20.0	20.5	
89 Styrene	104	8.274	8.274	0.000	90	1985697	20.0	21.1	
90 Bromoform	173	8.464	8.464	0.000	98	415352	20.0	22.3	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	3744436	20.0	20.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	704816	20.0	20.8	
95 Bromobenzene	156	8.914	8.914	0.000	91	925930	20.0	19.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	221278	20.0	20.1	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	87	160485	20.0	20.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	960393	20.0	20.8	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	875326	20.0	20.4	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	3048822	20.0	20.9	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2777057	20.0	20.2	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	2608022	20.0	20.9	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	3116448	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	3445811	20.0	21.0	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	1733837	20.0	19.8	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	3069390	20.0	20.9	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	97	1784216	20.0	19.6	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	2416429	20.0	20.3	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	1817774	20.0	20.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	155451	20.0	20.8	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	1286481	20.0	19.3	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	568587	20.0	20.9	
119 Naphthalene	128	12.128	12.128	0.000	97	2900947	20.0	20.4	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	1206461	20.0	19.0	
S 127 1,2-Dichloroethene, Total	96				0			39.1	
S 128 1,3-Dichloropropene, Total	75				0			42.8	
S 129 Xylenes, Total	106				0		40.0	41.1	
S 130 Total BTEX	1				0		100.0	100.8	
S 131 Trihalomethanes, Total	1				0		80.0	84.3	

Reagents:

vm50ss_stk_00086	Amount Added:	16.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	16.00	Units: uL
VMAROLISTDW_00384	Amount Added:	16.00	Units: uL
VMRGAS_00377	Amount Added:	16.00	Units: uL

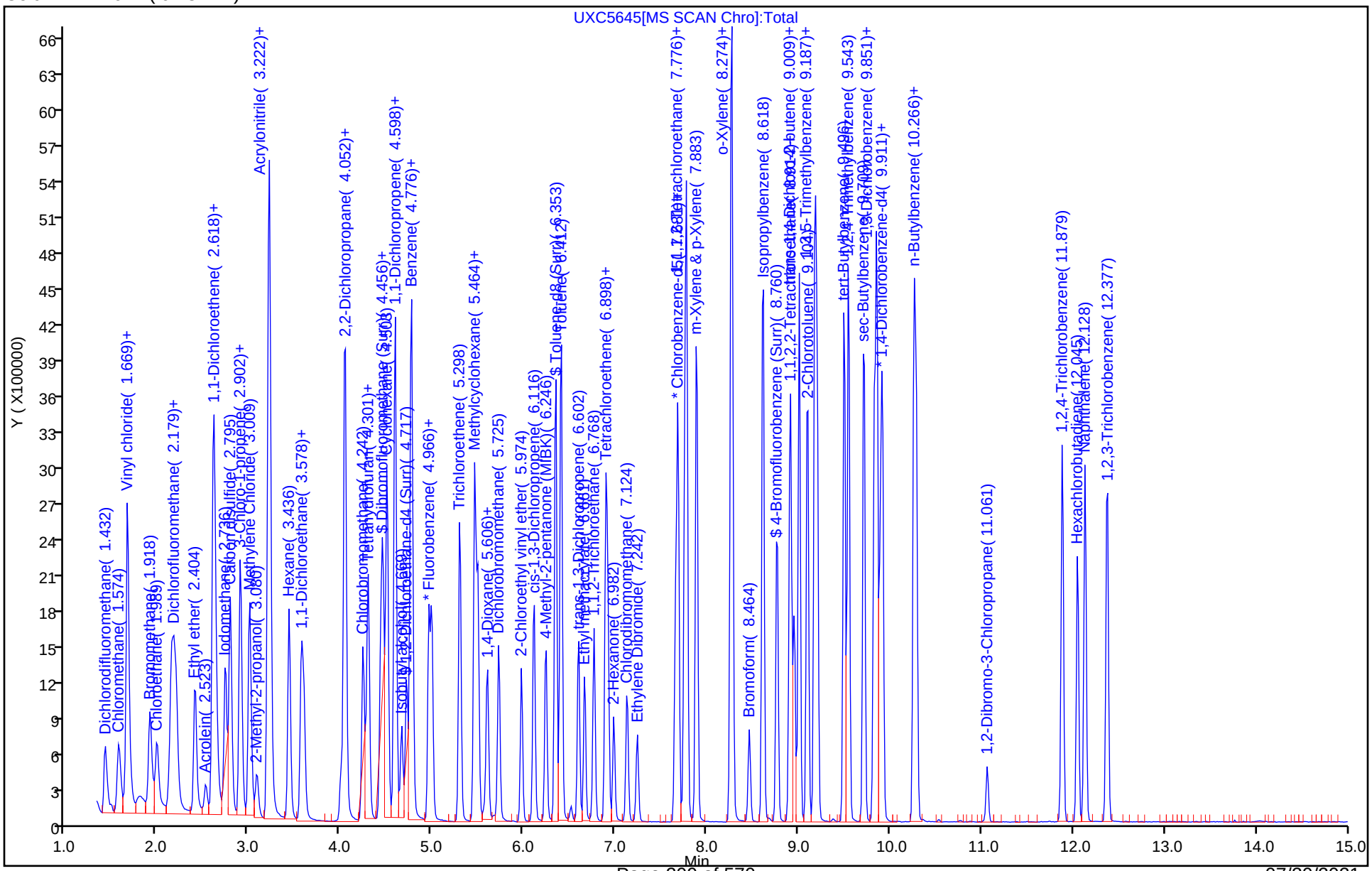
Report Date: 18-Mar-2021 09:00:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D

Injection Date:	16-Mar-2021 08:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Mar-2021 09:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-004
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:51 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1635381	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1083691	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	639882	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	382556	10.0	10.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	425239	10.0	9.88	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1327515	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	452465	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	505763	10.0	10.3	
10 Chloromethane	50	1.574	1.574	0.000	99	581954	10.0	10.4	
11 Vinyl chloride	62	1.669	1.669	0.000	97	435655	10.0	9.07	
12 Butadiene	54	1.681	1.681	0.000	99	603954	10.0	9.86	
13 Bromomethane	94	1.918	1.918	0.000	91	359282	10.0	8.93	
14 Chloroethane	64	2.001	2.001	0.000	100	331296	10.0	9.36	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	917387	10.0	9.74	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	97	821375	10.0	9.64	
17 Ethyl ether	59	2.416	2.416	0.000	90	402519	10.0	9.80	
18 Acrolein	56	2.523	2.523	0.000	99	127991	50.0	50.5	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	474847	10.0	10.0	
20 112TCTFE	151	2.629	2.629	0.000	93	394578	10.0	10.0	
21 Acetone	58	2.653	2.653	0.000	100	61024	20.0	18.5	
22 Iodomethane	142	2.748	2.748	0.000	98	720329	10.0	9.95	
24 Carbon disulfide	76	2.796	2.796	0.000	100	1273944	10.0	9.67	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	282597	10.0	10.2	
27 Methyl acetate	43	2.914	2.914	0.000	98	411585	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	430176	10.0	9.78	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	237680	100.0	102.8	
30 Acrylonitrile	53	3.211	3.211	0.000	99	1114638	100.0	100.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	97	1151185	10.0	10.0	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	473854	10.0	10.0	
34 Hexane	86	3.436	3.436	0.000	92	94360	10.0	9.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	747006	10.0	9.99	
36 Vinyl acetate	43	3.602	3.602	0.000	97	650063	10.0	10.2	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	80	144526	10.0	9.94	
41 cis-1,2-Dichloroethene	96	4.053	4.053	0.000	82	489671	10.0	9.82	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	100	66059	20.0	19.1	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	237215	10.0	10.1	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	160132	20.0	18.6	
48 Chloroform	83	4.302	4.302	0.000	93	742858	10.0	9.98	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	670415	10.0	10.0	
50 Cyclohexane	56	4.503	4.503	0.000	90	681490	10.0	9.85	
52 Carbon tetrachloride	117	4.598	4.598	0.000	93	601989	10.0	10.1	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	606744	10.0	10.1	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	186811	250.0	255.3	
55 Benzene	78	4.776	4.776	0.000	95	1742135	10.0	9.71	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	533877	10.0	10.0	
58 n-Heptane	100	4.966	4.966	0.000	91	74441	10.0	9.20	
60 Trichloroethene	130	5.298	5.298	0.000	97	476021	10.0	9.87	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	592186	10.0	9.83	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	372280	10.0	10.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	85	59463	200.0	191.9	
65 Dibromomethane	93	5.606	5.606	0.000	91	215335	10.0	10.0	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	484704	10.0	10.2	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	263000	20.0	20.5	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	529695	10.0	10.3	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	502124	20.0	20.2	
72 Toluene	91	6.412	6.412	0.000	98	1573355	10.0	9.82	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	420983	10.0	10.3	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	306515	10.0	9.91	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	260222	10.0	9.90	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	338041	10.0	10.0	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	454762	10.0	10.1	
78 2-Hexanone	43	6.982	6.982	0.000	97	302863	20.0	20.1	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	297016	10.0	10.3	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	250735	10.0	9.88	
84 Chlorobenzene	112	7.681	7.681	0.000	95	967329	10.0	9.90	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	406561	10.0	9.98	
86 Ethylbenzene	106	7.776	7.776	0.000	98	538828	10.0	10.1	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1293431	10.0	9.98	
88 o-Xylene	106	8.262	8.262	0.000	96	689690	10.0	9.91	
89 Styrene	104	8.274	8.274	0.000	93	913969	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	98	177112	10.0	9.92	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1725432	10.0	10.0	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	328387	10.0	10.0	
95 Bromobenzene	156	8.914	8.914	0.000	90	452432	10.0	10.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	105370	10.0	9.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	73	69740	10.0	9.32	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	445896	10.0	9.99	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	422328	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	1410902	10.0	10.0	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1311993	10.0	9.91	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	1213704	10.0	10.1	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1458830	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	1605451	10.0	10.1	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	839103	10.0	9.94	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1421147	10.0	10.0	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	863405	10.0	9.85	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1141647	10.0	9.95	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	880005	10.0	10.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	87	73534	10.0	10.2	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	637594	10.0	9.89	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	288855	10.0	10.6	
119 Naphthalene	128	12.128	12.128	0.000	96	1405465	10.0	10.2	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	597963	10.0	9.77	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.5	
S 131 Trihalomethanes, Total	1				0		40.0	40.4	

QC Flag Legend

Processing Flags

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	8.00	Units: uL
VMAROLISTDW_00384	Amount Added:	8.00	Units: uL
VMRPRIMW_00427	Amount Added:	8.00	Units: uL
VMRGAS_00377	Amount Added:	8.00	Units: uL

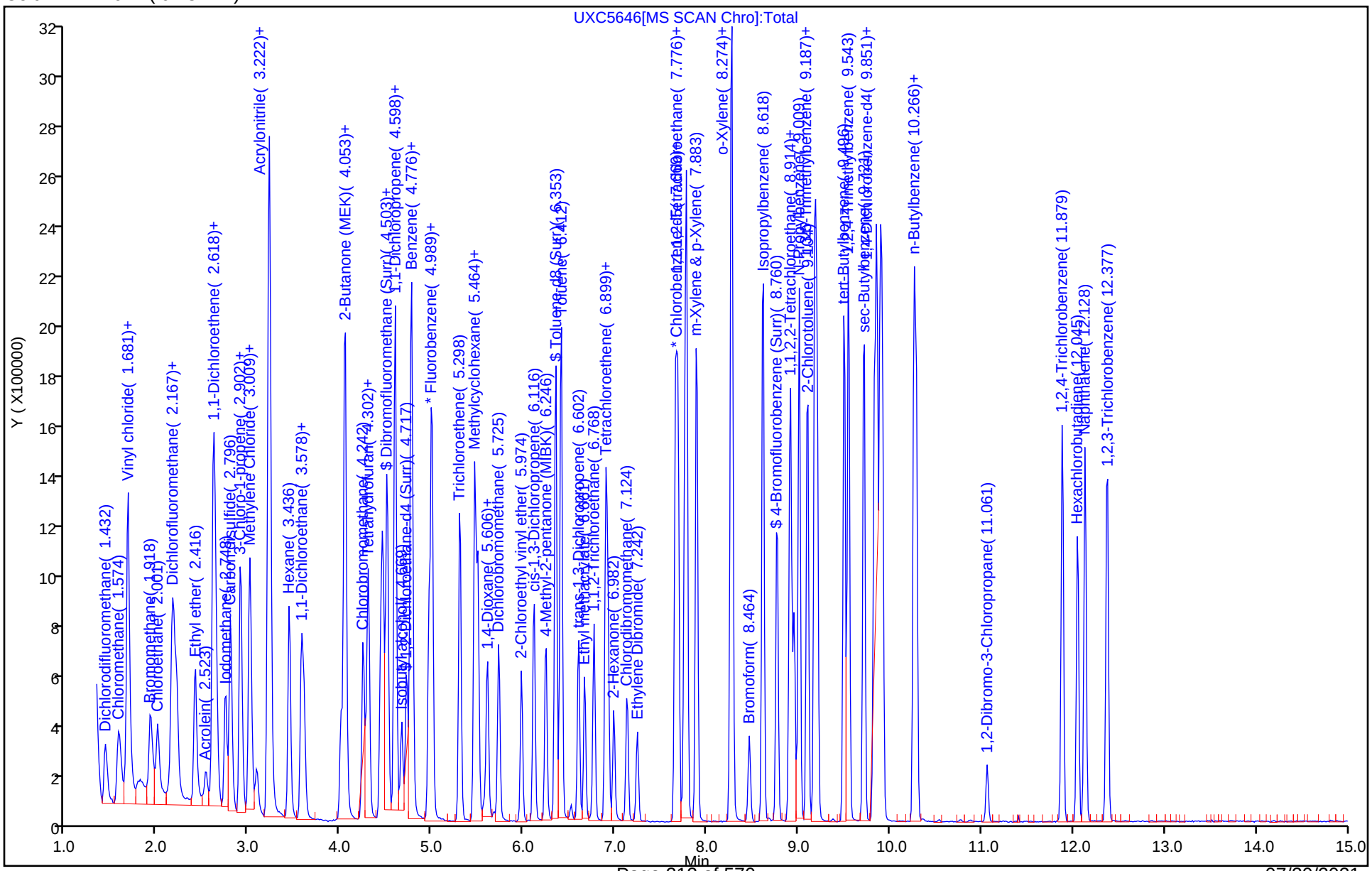
Report Date: 18-Mar-2021 09:00:52 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D

Injection Date:	16-Mar-2021 09:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Mar-2021 09:42:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-005
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:57 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	100	1580769	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1036230	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	621189	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	190756	5.00	5.16	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	214048	5.00	5.14	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	645215	5.00	5.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	218006	5.00	5.08	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	236340	5.00	4.96	
10 Chloromethane	50	1.574	1.574	0.000	99	278892	5.00	5.15	
11 Vinyl chloride	62	1.669	1.669	0.000	98	218141	5.00	4.70	
12 Butadiene	54	1.681	1.681	0.000	99	299854	5.00	5.06	
13 Bromomethane	94	1.918	1.918	0.000	90	185985	5.00	4.78	
14 Chloroethane	64	2.001	2.001	0.000	100	171841	5.00	5.02	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	454576	5.00	5.00	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	399090	5.00	4.84	
17 Ethyl ether	59	2.416	2.416	0.000	90	199967	5.00	5.04	
18 Acrolein	56	2.523	2.523	0.000	98	65464	25.0	25.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	236738	5.00	5.18	
20 112TCTFE	151	2.629	2.629	0.000	93	194077	5.00	5.09	
21 Acetone	58	2.653	2.653	0.000	98	28520	10.0	8.92	
22 Iodomethane	142	2.736	2.748	-0.012	99	348537	5.00	4.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	614828	5.00	4.83	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	137672	5.00	5.13	
27 Methyl acetate	43	2.914	2.914	0.000	98	204142	10.0	10.2	
28 Methylene Chloride	84	3.009	3.009	0.000	92	214303	5.00	5.04	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	117539	50.0	52.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	98	541571	50.0	50.5	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	559170	5.00	5.04	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	228419	5.00	5.00	
34 Hexane	86	3.436	3.436	0.000	92	41895	5.00	4.58	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	364589	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	97	304236	5.00	4.95	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	99	32640	10.0	9.77	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	81	70219	5.00	5.00	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	85	244751	5.00	5.08	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	114745	5.00	5.04	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	75127	10.0	9.04	
48 Chloroform	83	4.301	4.302	-0.001	94	363680	5.00	5.05	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	328759	5.00	5.07	
50 Cyclohexane	56	4.503	4.503	0.000	90	333807	5.00	4.99	
52 Carbon tetrachloride	117	4.598	4.598	0.000	94	291902	5.00	5.06	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	293864	5.00	5.04	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	89469	125.0	126.5	
55 Benzene	78	4.776	4.776	0.000	95	853447	5.00	4.92	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	258800	5.00	5.02	
58 n-Heptane	100	4.966	4.966	0.000	91	38208	5.00	4.88	
60 Trichloroethene	130	5.298	5.298	0.000	96	234414	5.00	5.03	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	281838	5.00	4.84	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	178849	5.00	4.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	38	28764	100.0	91.7	
65 Dibromomethane	93	5.606	5.606	0.000	90	103540	5.00	4.99	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	224007	5.00	4.90	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	93	118901	10.0	9.57	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	244291	5.00	4.91	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	243498	10.0	10.2	
72 Toluene	91	6.412	6.412	0.000	98	756651	5.00	4.94	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	191368	5.00	4.88	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	148354	5.00	5.01	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	92	124819	5.00	4.97	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	161314	5.00	5.00	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	213808	5.00	4.95	
78 2-Hexanone	43	6.981	6.982	-0.001	97	149884	10.0	10.4	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	137225	5.00	4.97	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	120100	5.00	4.95	
84 Chlorobenzene	112	7.681	7.681	0.000	97	470075	5.00	5.03	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	190281	5.00	4.88	
86 Ethylbenzene	106	7.776	7.776	0.000	98	253063	5.00	4.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	614921	5.00	4.96	
88 o-Xylene	106	8.262	8.262	0.000	96	333576	5.00	5.01	
89 Styrene	104	8.274	8.274	0.000	93	429902	5.00	4.98	
90 Bromoform	173	8.464	8.464	0.000	98	80220	5.00	4.70	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	823347	5.00	5.01	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	160683	5.00	5.06	
95 Bromobenzene	156	8.914	8.914	0.000	90	215609	5.00	4.93	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	85	50734	5.00	4.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	70	30267	5.00	4.28	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	213311	5.00	4.92	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	200124	5.00	4.98	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	666934	5.00	4.89	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	633815	5.00	4.93	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	570303	5.00	4.89	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	691594	5.00	4.94	
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	749769	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	414203	5.00	5.06	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	96	672177	5.00	4.89	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	427734	5.00	5.03	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	547299	5.00	4.92	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	431687	5.00	5.06	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	34964	5.00	4.99	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	313669	5.00	5.01	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	147661	5.00	5.25	
119 Naphthalene	128	12.128	12.128	0.000	96	678882	5.00	5.09	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	296808	5.00	5.00	
S 127 1,2-Dichloroethene, Total	96				0			10.1	
S 128 1,3-Dichloropropene, Total	75				0			9.79	
S 129 Xylenes, Total	106				0		10.0	9.97	
S 130 Total BTEX	1				0		25.0	24.8	
S 131 Trihalomethanes, Total	1				0		20.0	19.6	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	4.00	Units: uL
VMRPRIMW_00427	Amount Added:	4.00	Units: uL
VMRGAS_00377	Amount Added:	4.00	Units: uL
VMAROLISTDW_00384	Amount Added:	4.00	Units: uL

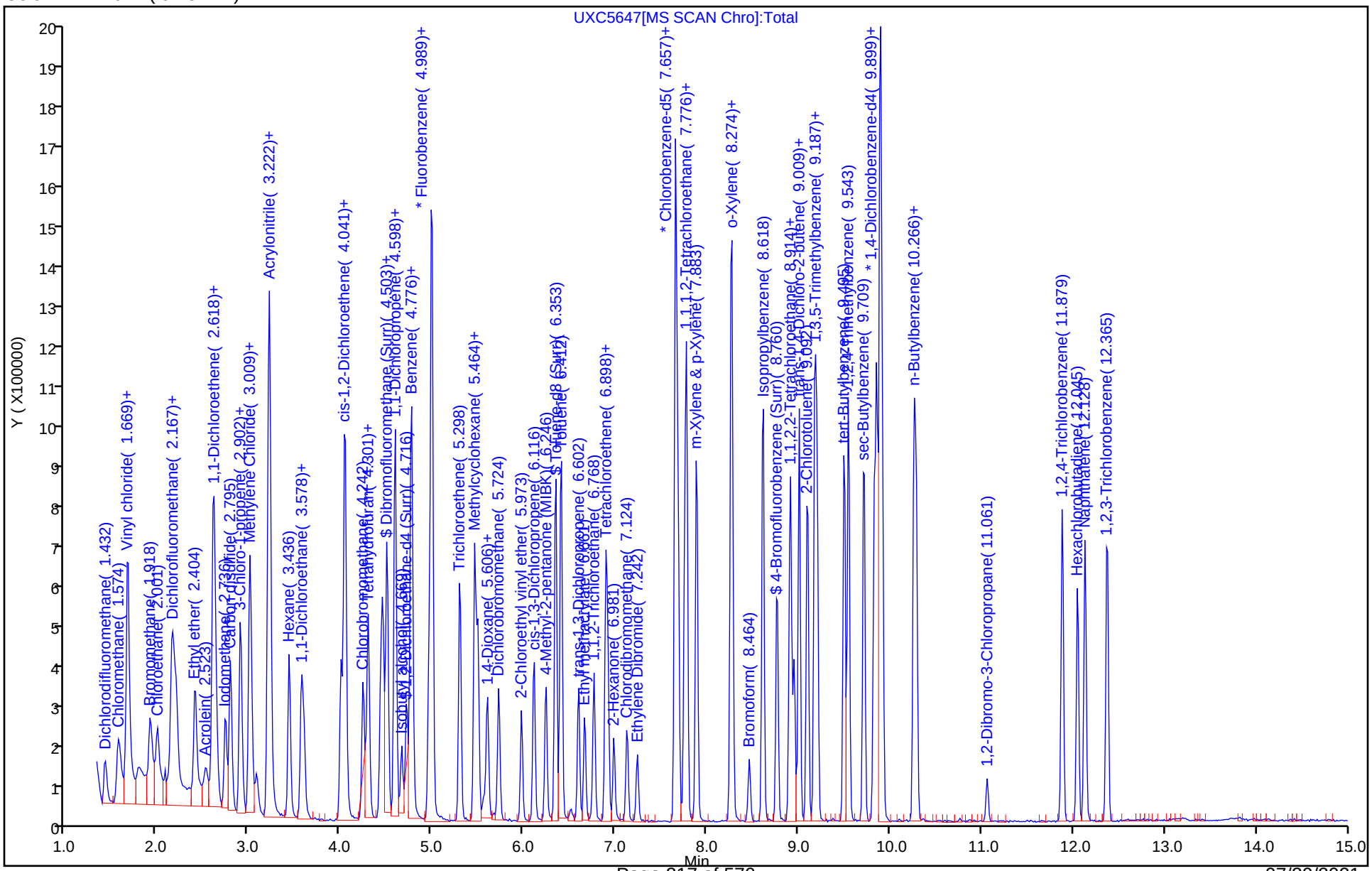
Report Date: 18-Mar-2021 09:00:58 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D

Injection Date:	16-Mar-2021 09:42:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2021 10:17:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-006
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:02 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 11:41:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1600104	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1025239	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	608128	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	73272	2.00	1.96	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	85434	2.00	2.03	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	246447	2.00	1.96	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	83987	2.00	1.98	
9 Dichlorodifluoromethane	85	1.420	1.432	-0.012	99	96788	2.00	2.01	
10 Chloromethane	50	1.574	1.574	0.000	99	109132	2.00	1.99	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	107404	2.00	2.29	
12 Butadiene	54	1.669	1.681	-0.012	99	116788	2.00	1.95	
13 Bromomethane	94	1.918	1.918	0.000	91	88628	2.00	2.25	
14 Chloroethane	64	1.989	2.001	-0.012	99	71803	2.00	2.07	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	197535	2.00	2.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	169605	2.00	2.03	
17 Ethyl ether	59	2.404	2.416	-0.012	89	83944	2.00	2.09	
18 Acrolein	56	2.523	2.523	0.000	97	42337	10.0	15.3	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	99	97460	2.00	2.11	
20 112TCTFE	151	2.617	2.629	-0.012	90	74912	2.00	1.94	
21 Acetone	58	2.653	2.653	0.000	97	15117	4.00	4.67	
22 Iodomethane	142	2.736	2.748	-0.012	99	140257	2.00	1.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	286182	2.00	2.22	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	87	54960	2.00	2.02	
27 Methyl acetate	43	2.914	2.914	0.000	97	79302	4.00	3.90	
28 Methylene Chloride	84	3.009	3.009	0.000	91	90541	2.00	2.10	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	97	44457	20.0	19.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	216160	20.0	19.9	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	220217	2.00	1.96	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	94914	2.00	2.05	
34 Hexane	86	3.436	3.436	0.000	93	18928	2.00	2.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	97	148843	2.00	2.03	
36 Vinyl acetate	43	3.602	3.602	0.000	97	113199	2.00	1.82	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.012	81	101403	2.00	2.08	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	45	13268	4.00	3.93	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	76	28276	2.00	1.99	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	46356	2.00	2.01	
47 Tetrahydrofuran	42	4.290	4.278	0.012	87	36744	4.00	4.37	
48 Chloroform	83	4.301	4.302	-0.001	93	145589	2.00	2.00	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	131645	2.00	2.01	
50 Cyclohexane	56	4.503	4.503	0.000	90	135465	2.00	2.00	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	113888	2.00	1.95	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	121447	2.00	2.06	
53 Isobutyl alcohol	41	4.669	4.669	0.000	91	35137	50.0	49.1	
55 Benzene	78	4.764	4.776	-0.012	95	365182	2.00	2.08	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	103413	2.00	1.98	
58 n-Heptane	100	4.965	4.966	-0.001	91	17934	2.00	2.26	
60 Trichloroethene	130	5.298	5.298	0.000	94	96690	2.00	2.05	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	120389	2.00	2.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	69979	2.00	1.92	
66 1,4-Dioxane	88	5.606	5.606	0.000	41	13582	40.0	44.9	
65 Dibromomethane	93	5.594	5.606	-0.012	89	41243	2.00	1.96	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	89718	2.00	1.94	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	91	47750	4.00	3.80	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	95626	2.00	1.90	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	92610	4.00	3.82	
72 Toluene	91	6.412	6.412	0.000	98	307593	2.00	2.03	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	73739	2.00	1.90	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	54155	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	48837	2.00	1.96	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	65641	2.00	2.06	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	85147	2.00	1.99	
78 2-Hexanone	43	6.981	6.982	-0.001	97	59188	4.00	4.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	50550	2.00	1.85	
82 Ethylene Dibromide	107	7.242	7.242	0.000	97	48784	2.00	2.03	
84 Chlorobenzene	112	7.681	7.681	0.000	95	182215	2.00	1.97	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	74581	2.00	1.94	
86 Ethylbenzene	106	7.776	7.776	0.000	98	98654	2.00	1.95	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	238816	2.00	1.95	
88 o-Xylene	106	8.262	8.262	0.000	96	131067	2.00	1.99	
89 Styrene	104	8.274	8.274	0.000	91	161777	2.00	1.89	
90 Bromoform	173	8.464	8.464	0.000	96	32788	2.00	1.94	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	315606	2.00	1.94	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	58976	2.00	1.90	
95 Bromobenzene	156	8.914	8.914	0.000	90	86512	2.00	2.02	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	87	21011	2.00	2.08	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	77	17008	2.00	2.54	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	82831	2.00	1.95	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	77726	2.00	1.97	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	259616	2.00	1.94	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	251801	2.00	2.00	
104 tert-Butylbenzene	119	9.507	9.496	0.011	90	222437	2.00	1.95	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	269709	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	294251	2.00	1.96	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	164834	2.00	2.06	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	268187	2.00	1.99	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	171714	2.00	2.06	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	226998	2.00	2.08	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	168210	2.00	2.02	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	82	14241	2.00	2.08	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	138494	2.00	2.26	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	72546	2.00	2.26	
119 Naphthalene	128	12.128	12.128	0.000	96	262519	2.00	2.01	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	134820	2.00	2.32	
S 127 1,2-Dichloroethene, Total	96				0			4.13	
S 128 1,3-Dichloropropene, Total	75				0			3.80	
S 129 Xylenes, Total	106				0		4.00	3.94	
S 130 Total BTEX	1				0		10.0	10.0	
S 131 Trihalomethanes, Total	1				0		8.00	7.73	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	1.60	Units: uL
VMRPRIMW_00427	Amount Added:	1.60	Units: uL
VMAROLISTDW_00384	Amount Added:	1.60	Units: uL
VMRGAS_00377	Amount Added:	1.60	Units: uL

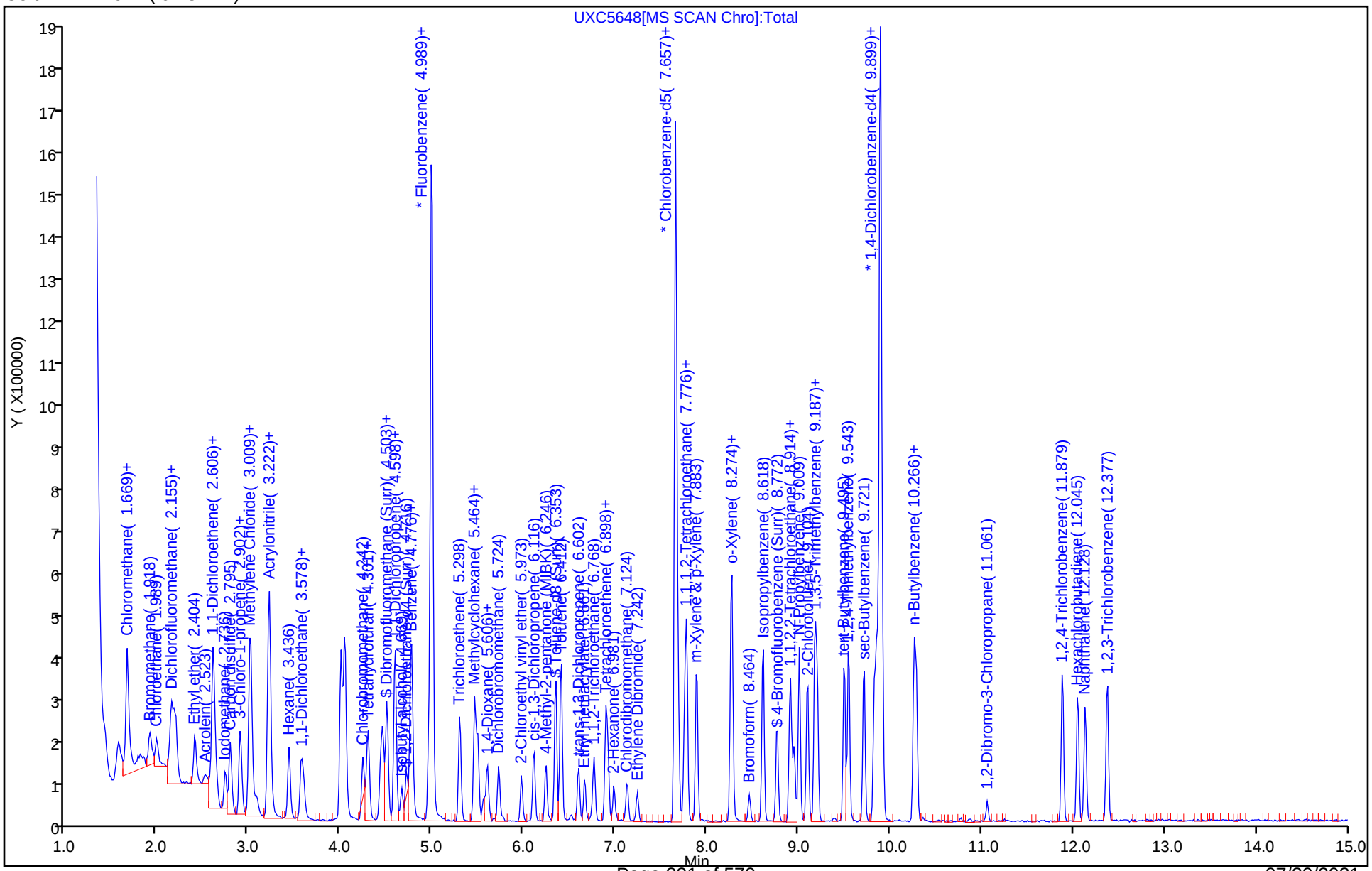
Report Date: 18-Mar-2021 09:01:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D

Injection Date:	16-Mar-2021 10:17:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Mar-2021 10:39:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-007
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:07 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 12:42:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1508502	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1005314	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	606056	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	36526	1.00	1.04	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	41633	1.00	1.05	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	123741	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	95	43228	1.00	1.04	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	98	47955	1.00	1.06	
10 Chloromethane	50	1.574	1.574	0.000	98	58389	1.00	1.13	
11 Vinyl chloride	62	1.657	1.669	-0.012	78	46845	1.00	1.06	
12 Butadiene	54	1.669	1.681	-0.012	96	69152	1.00	1.22	
13 Bromomethane	94	1.918	1.918	0.000	91	41750	1.00	1.12	
14 Chloroethane	64	2.001	2.001	0.000	99	37706	1.00	1.16	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	98585	1.00	1.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	86296	1.00	1.10	
17 Ethyl ether	59	2.404	2.416	-0.012	88	40718	1.00	1.07	
18 Acrolein	56	2.534	2.523	0.011	96	9294	5.00	1.47	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	39151	1.00	0.8976	
20 112TCTFE	151	2.629	2.629	0.000	91	33084	1.00	0.9100	
21 Acetone	58	2.653	2.653	0.000	99	7111	2.00	2.33	
22 Iodomethane	142	2.736	2.748	-0.012	99	61380	1.00	0.9189	
24 Carbon disulfide	76	2.795	2.796	-0.001	99	116874	1.00	0.9616	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	22980	1.00	0.8970	
27 Methyl acetate	43	2.914	2.914	0.000	97	39316	2.00	2.05	
28 Methylene Chloride	84	3.009	3.009	0.000	89	41550	1.00	1.02	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	96	20999	10.0	9.84	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	102496	10.0	10.0	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	105442	1.00	1.00	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	45650	1.00	1.05	
34 Hexane	86	3.436	3.436	0.000	91	9581	1.00	1.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	70364	1.00	1.02	
36 Vinyl acetate	43	3.602	3.602	0.000	97	52739	1.00	0.8986	
42 2,2-Dichloropropane	97	4.041	4.053	-0.011	78	13807	1.00	1.03	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	81	47902	1.00	1.04	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	48	7540	2.00	2.37	
46 Chlorobromomethane	128	4.242	4.242	0.000	87	22476	1.00	1.03	
47 Tetrahydrofuran	42	4.290	4.278	0.012	85	19738	2.00	2.49	
48 Chloroform	83	4.301	4.302	-0.001	93	70935	1.00	1.03	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	60467	1.00	0.9778	
50 Cyclohexane	56	4.503	4.503	0.000	90	65918	1.00	1.03	
52 Carbon tetrachloride	117	4.598	4.598	0.000	92	52456	1.00	0.9535	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	56469	1.00	1.02	
53 Isobutyl alcohol	41	4.669	4.669	0.000	93	18341	25.0	27.2	
55 Benzene	78	4.764	4.776	-0.012	96	181175	1.00	1.09	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	96	51453	1.00	1.05	
58 n-Heptane	100	4.965	4.966	-0.001	92	7518	1.00	1.01	
60 Trichloroethene	130	5.298	5.298	0.000	95	47038	1.00	1.06	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	57824	1.00	1.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	35608	1.00	1.04	
66 1,4-Dioxane	88	5.606	5.606	0.000	39	5574	20.0	23.1	
65 Dibromomethane	93	5.606	5.606	0.000	89	20875	1.00	1.05	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	41626	1.00	0.9538	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	21442	2.00	1.81	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	42305	1.00	0.8906	
71 4-Methyl-2-pentanone (MIBK)	43	6.234	6.246	-0.012	96	46573	2.00	2.04	
72 Toluene	91	6.412	6.412	0.000	98	148278	1.00	1.00	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	33643	1.00	0.8838	
74 Ethyl methacrylate	69	6.673	6.661	0.012	88	28235	1.00	0.9837	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	25770	1.00	1.06	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	30533	1.00	0.9755	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	42197	1.00	1.01	
78 2-Hexanone	43	6.981	6.982	-0.001	95	30177	2.00	2.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	89	23357	1.00	0.8719	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	23568	1.00	1.00	
84 Chlorobenzene	112	7.681	7.681	0.000	95	91842	1.00	1.01	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.764	-0.012	92	37283	1.00	0.9866	
86 Ethylbenzene	106	7.776	7.776	0.000	98	48952	1.00	0.9881	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	95	119546	1.00	0.99	
88 o-Xylene	106	8.262	8.262	0.000	96	63450	1.00	0.9824	
89 Styrene	104	8.274	8.274	0.000	93	78354	1.00	0.9354	
90 Bromoform	173	8.464	8.464	0.000	96	13367	1.00	0.8071	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	152266	1.00	0.9552	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	-0.001	97	30042	1.00	0.9688	
95 Bromobenzene	156	8.914	8.914	0.000	90	43010	1.00	1.01	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	9782	1.00	0.9725	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	66	5133	1.00	0.9070	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	40320	1.00	0.9537	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	37216	1.00	0.9484	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	125526	1.00	0.9432	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	124885	1.00	1.00	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	107456	1.00	0.9445	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	125769	1.00	0.9214	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	141534	1.00	0.9438	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	96	79988	1.00	1.00	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	96	125533	1.00	0.9359	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	86247	1.00	1.04	
113 n-Butylbenzene	91	10.266	10.266	0.000	96	105585	1.00	0.9720	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	83074	1.00	1.00	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	79	5731	1.00	0.8382	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	61295	1.00	1.00	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	36040	1.00	0.7551	
119 Naphthalene	128	12.128	12.128	0.000	97	121361	1.00	0.9318	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	58935	1.00	1.02	
S 127 1,2-Dichloroethene, Total	96				0			2.09	
S 128 1,3-Dichloropropene, Total	75				0			1.77	
S 129 Xylenes, Total	106				0		2.00	1.98	
S 130 Total BTEX	1				0		5.00	5.06	
S 131 Trihalomethanes, Total	1				0		4.00	3.67	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	0.80	Units: uL
VMRPRIMW_00427	Amount Added:	0.80	Units: uL
VMAROLISTDW_00384	Amount Added:	0.80	Units: uL
VMRGAS_00377	Amount Added:	0.80	Units: uL

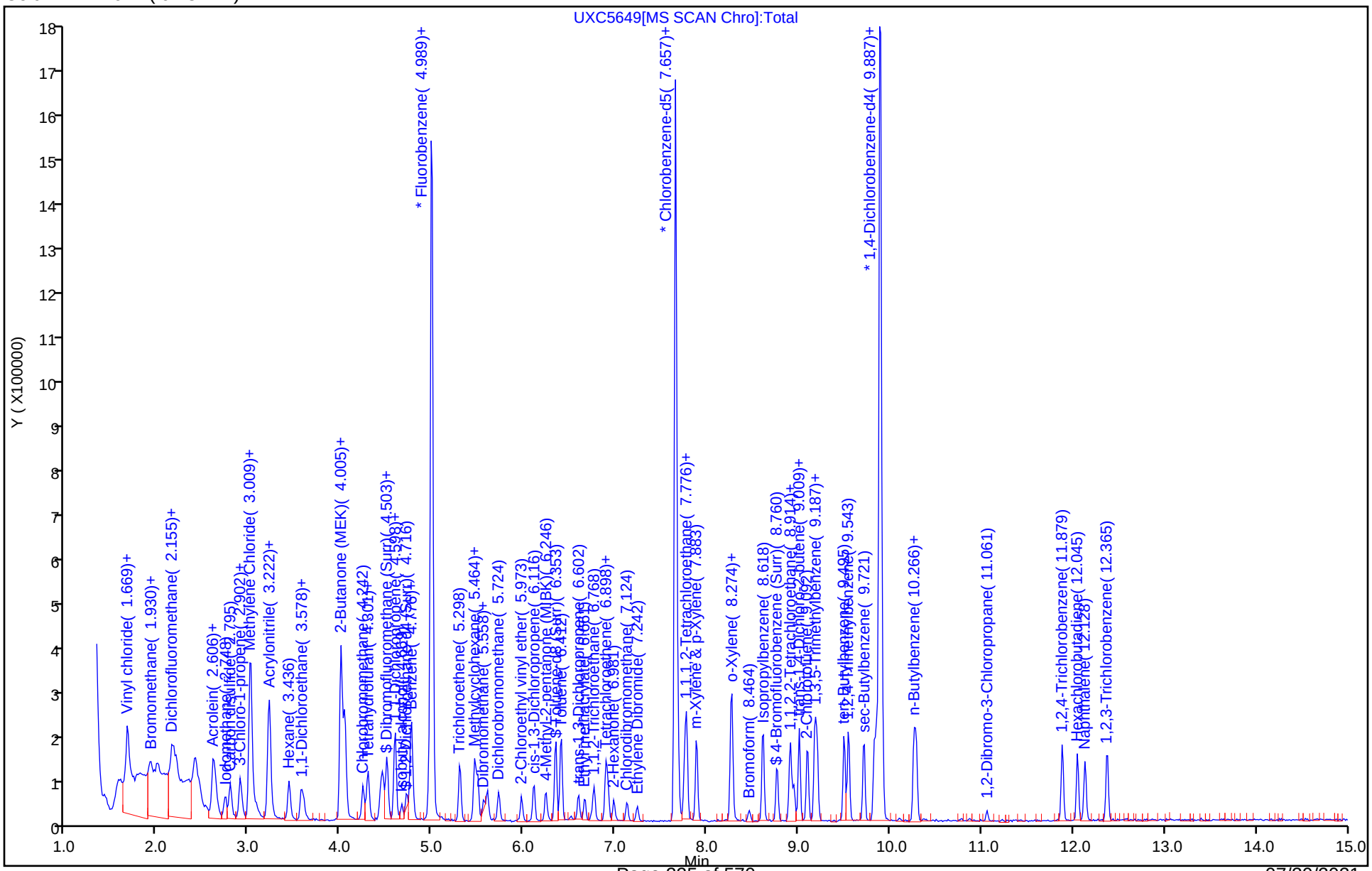
Report Date: 18-Mar-2021 09:01:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D

Injection Date:	16-Mar-2021 10:39:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

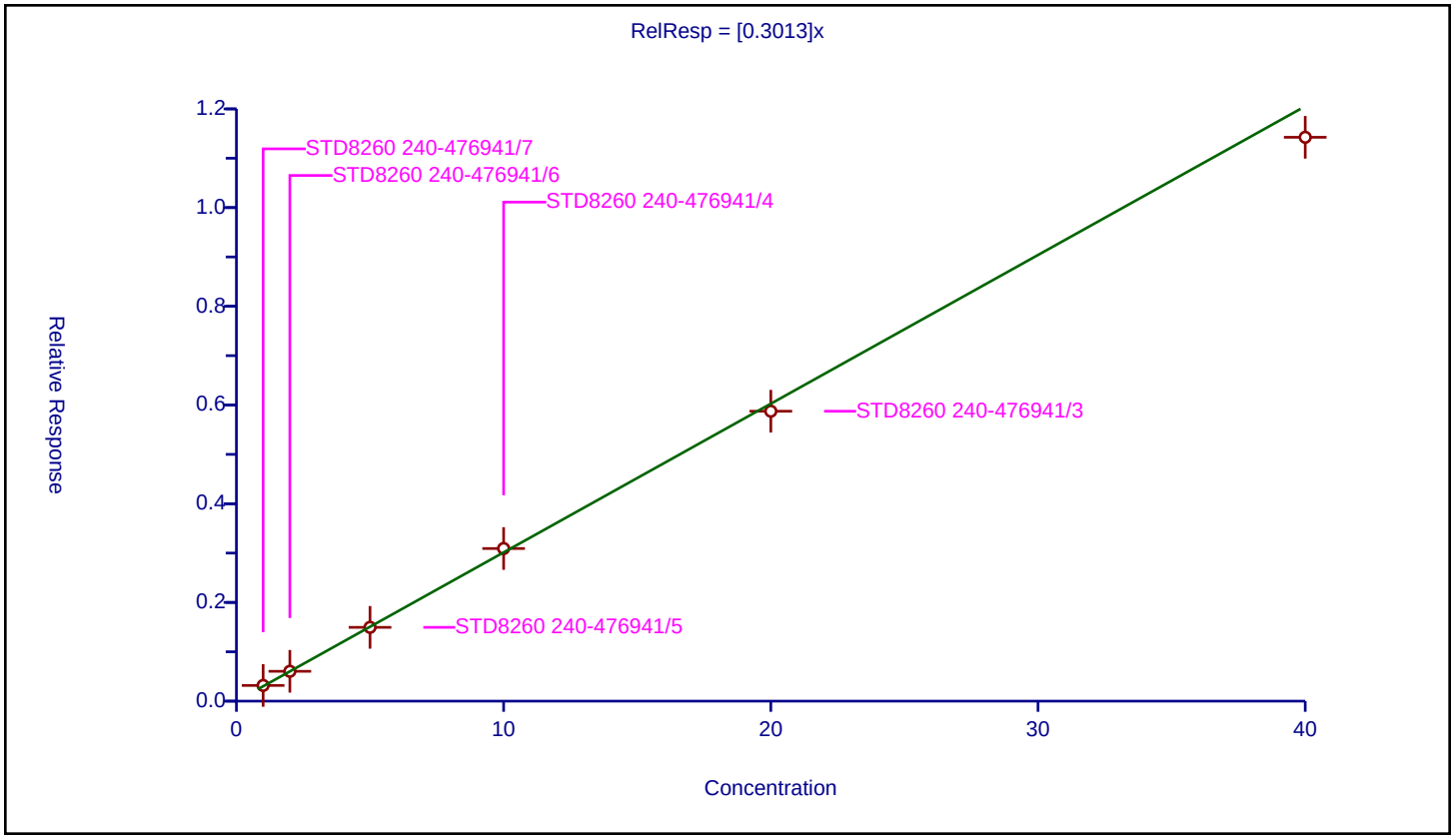
Curve Coefficients

Intercept:	0
Slope:	0.3013

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317898	10.0	1508502.0	0.317898	Y
2	STD8260 240-476941/6	2.0	0.604886	10.0	1600104.0	0.302443	Y
3	STD8260 240-476941/5	5.0	1.495095	10.0	1580769.0	0.299019	Y
4	STD8260 240-476941/4	10.0	3.092631	10.0	1635381.0	0.309263	Y
5	STD8260 240-476941/3	20.0	5.874133	10.0	1729200.0	0.293707	Y
6	STD8260 240-476941/2	40.0	11.424781	10.0	1738218.0	0.28562	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

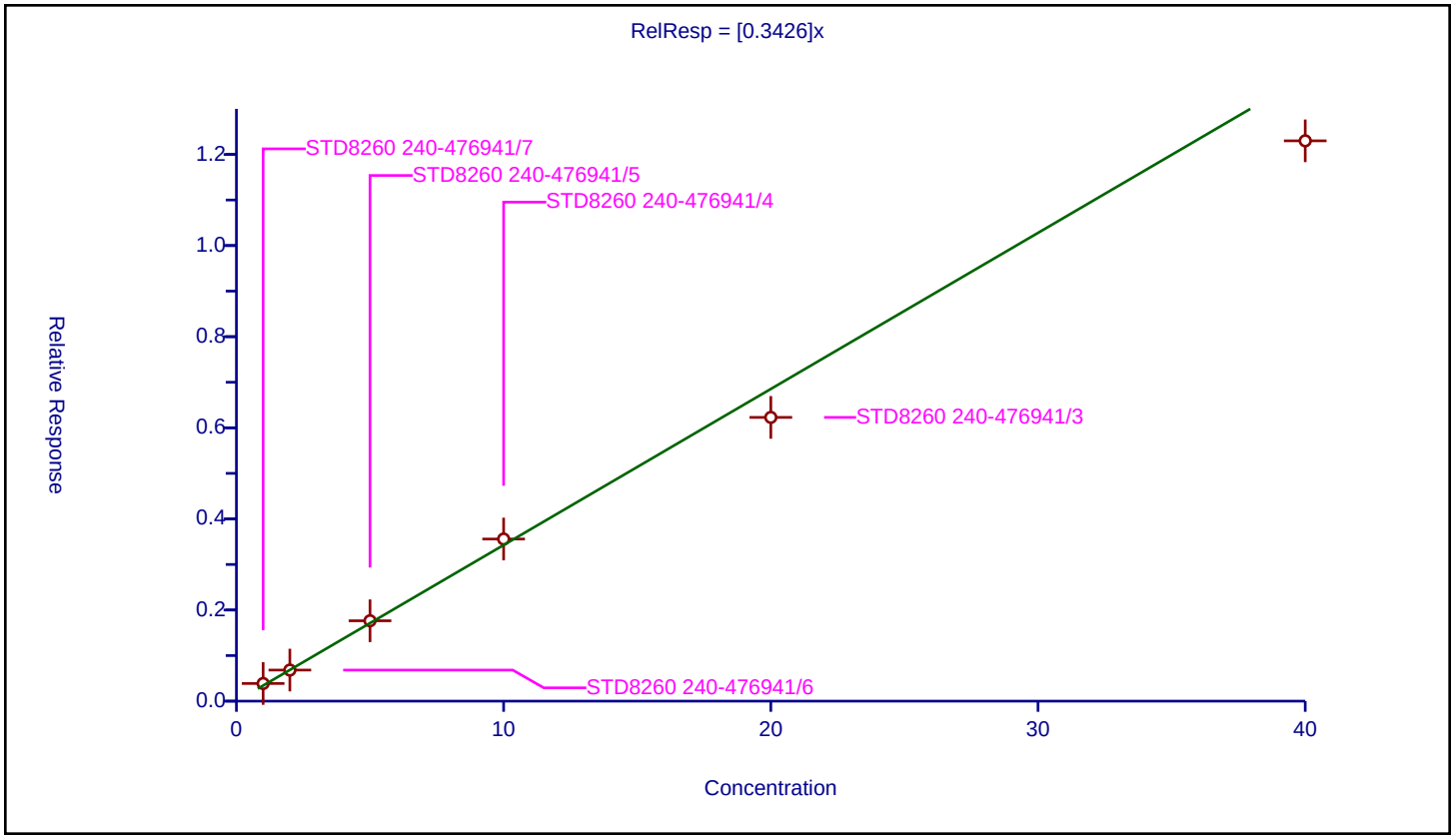
Curve Coefficients

Intercept:	0
Slope:	0.3426

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.387066	10.0	1508502.0	0.387066	Y
2	STD8260 240-476941/6	2.0	0.682031	10.0	1600104.0	0.341015	Y
3	STD8260 240-476941/5	5.0	1.764281	10.0	1580769.0	0.352856	Y
4	STD8260 240-476941/4	10.0	3.558522	10.0	1635381.0	0.355852	Y
5	STD8260 240-476941/3	20.0	6.228238	10.0	1729200.0	0.311412	Y
6	STD8260 240-476941/2	40.0	12.299136	10.0	1738218.0	0.307478	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

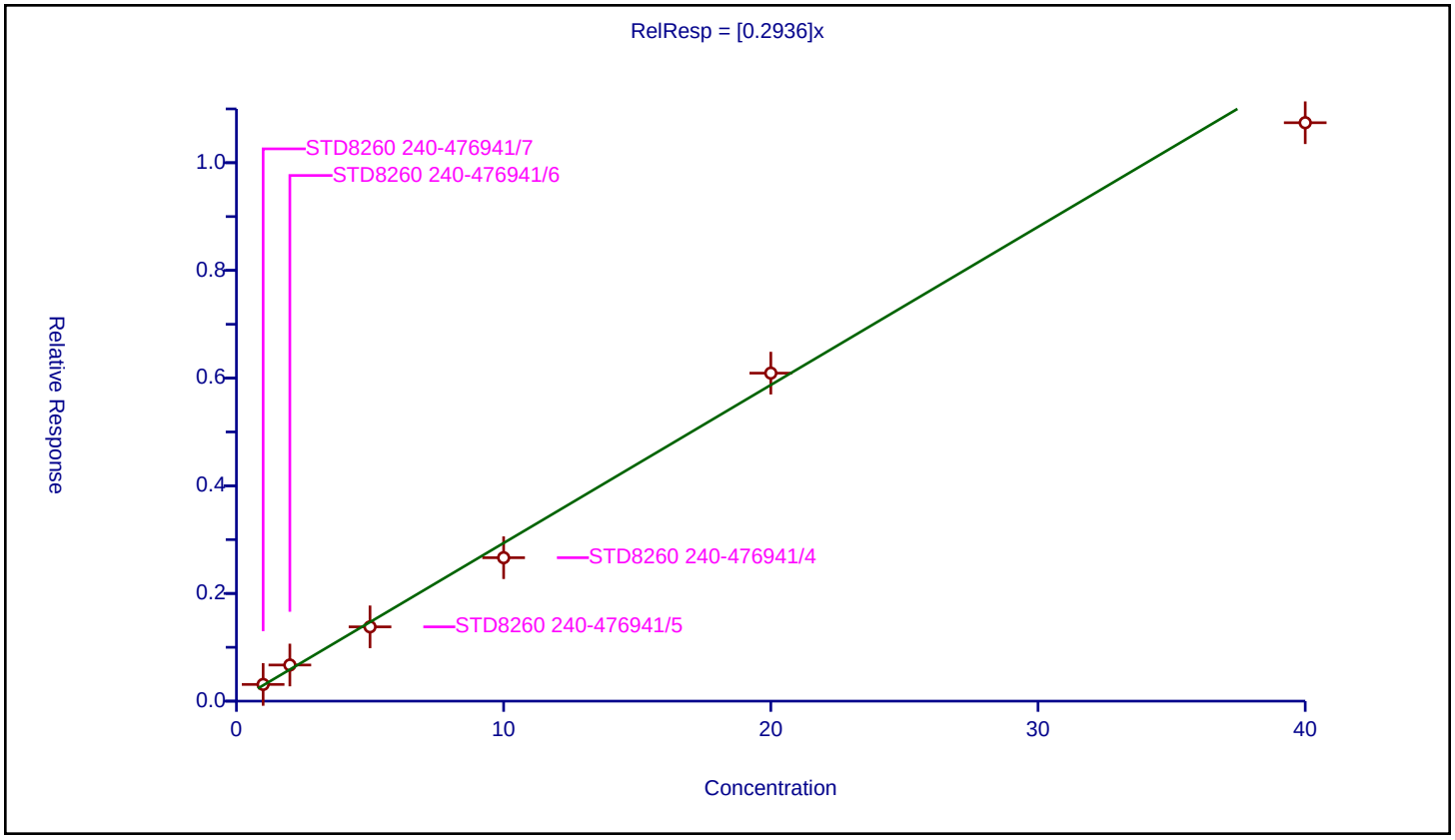
Curve Coefficients

Intercept:	0
Slope:	0.2936

Error Coefficients

Standard Error:	985000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.31054	10.0	1508502.0	0.31054	Y
2	STD8260 240-476941/6	2.0	0.671231	10.0	1600104.0	0.335616	Y
3	STD8260 240-476941/5	5.0	1.379968	10.0	1580769.0	0.275994	Y
4	STD8260 240-476941/4	10.0	2.663936	10.0	1635381.0	0.266394	Y
5	STD8260 240-476941/3	20.0	6.092372	10.0	1729200.0	0.304619	Y
6	STD8260 240-476941/2	40.0	10.743319	10.0	1738218.0	0.268583	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

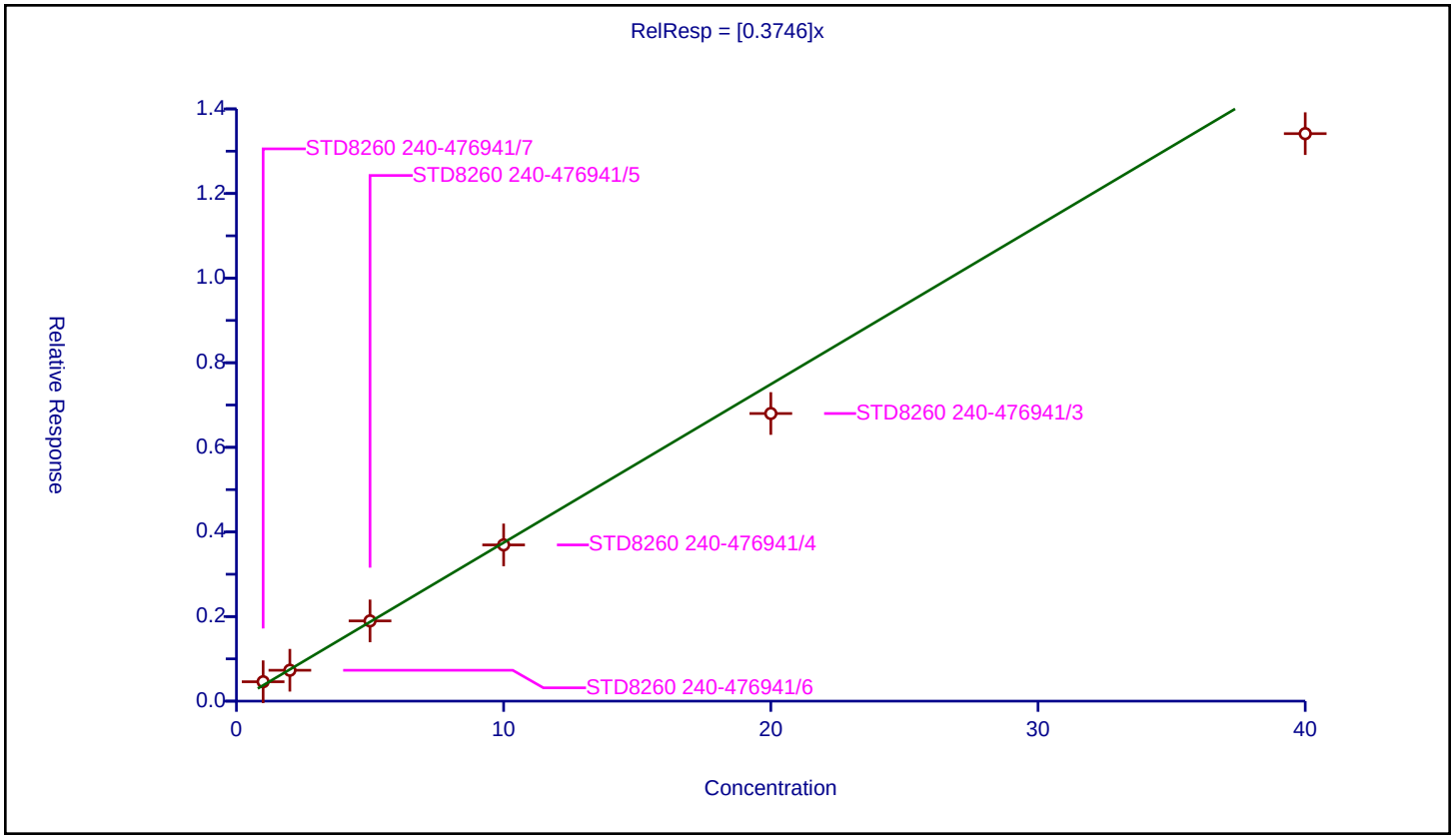
Curve Coefficients

Intercept:	0
Slope:	0.3746

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	11.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.458415	10.0	1508502.0	0.458415	Y
2	STD8260 240-476941/6	2.0	0.729878	10.0	1600104.0	0.364939	Y
3	STD8260 240-476941/5	5.0	1.896887	10.0	1580769.0	0.379377	Y
4	STD8260 240-476941/4	10.0	3.693048	10.0	1635381.0	0.369305	Y
5	STD8260 240-476941/3	20.0	6.799491	10.0	1729200.0	0.339975	Y
6	STD8260 240-476941/2	40.0	13.41502	10.0	1738218.0	0.335376	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

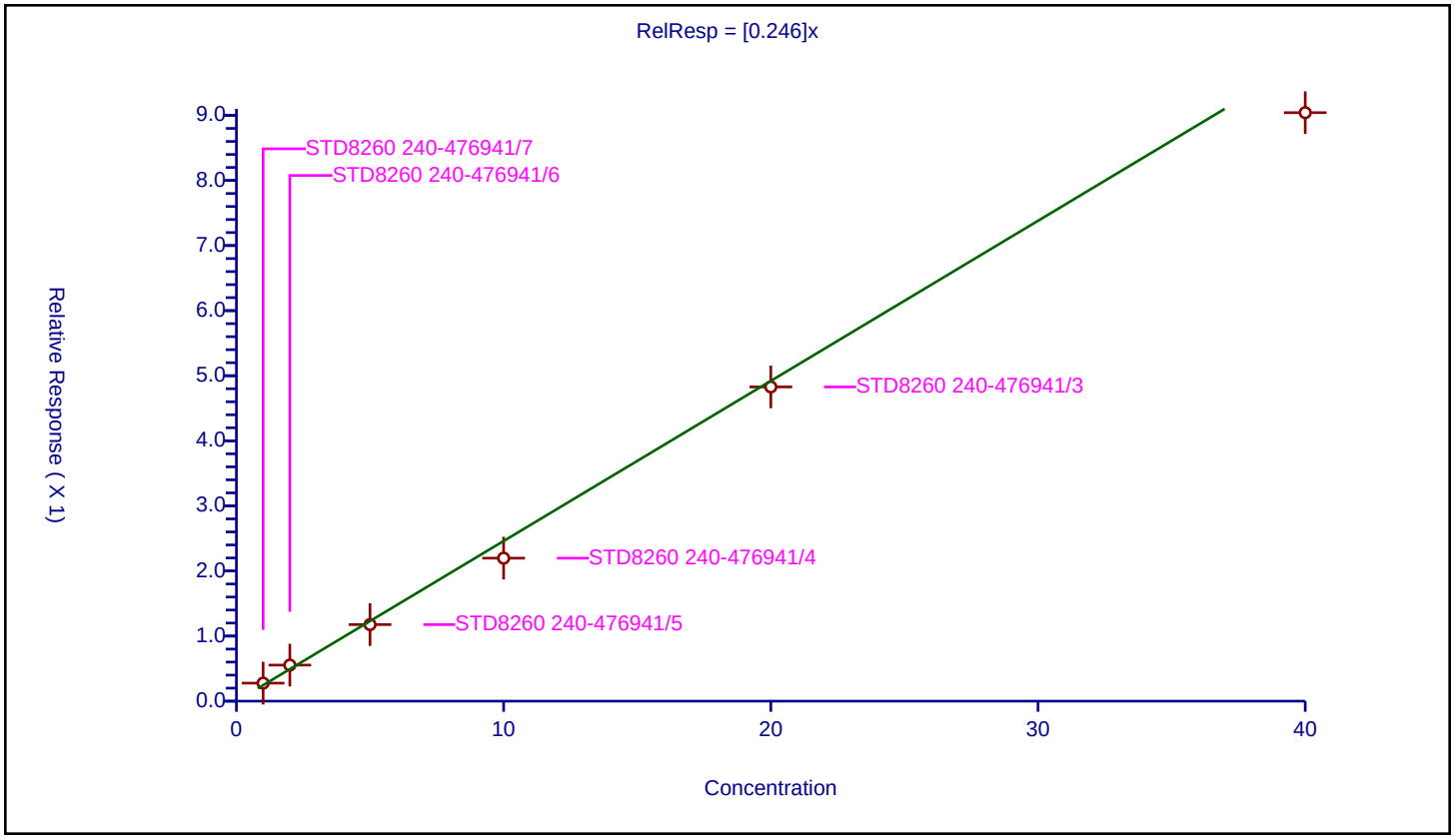
Curve Coefficients

Intercept:	0
Slope:	0.246

Error Coefficients

Standard Error:	817000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.276765	10.0	1508502.0	0.276765	Y
2	STD8260 240-476941/6	2.0	0.553889	10.0	1600104.0	0.276944	Y
3	STD8260 240-476941/5	5.0	1.176548	10.0	1580769.0	0.23531	Y
4	STD8260 240-476941/4	10.0	2.196931	10.0	1635381.0	0.219693	Y
5	STD8260 240-476941/3	20.0	4.827897	10.0	1729200.0	0.241395	Y
6	STD8260 240-476941/2	40.0	9.041956	10.0	1738218.0	0.226049	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

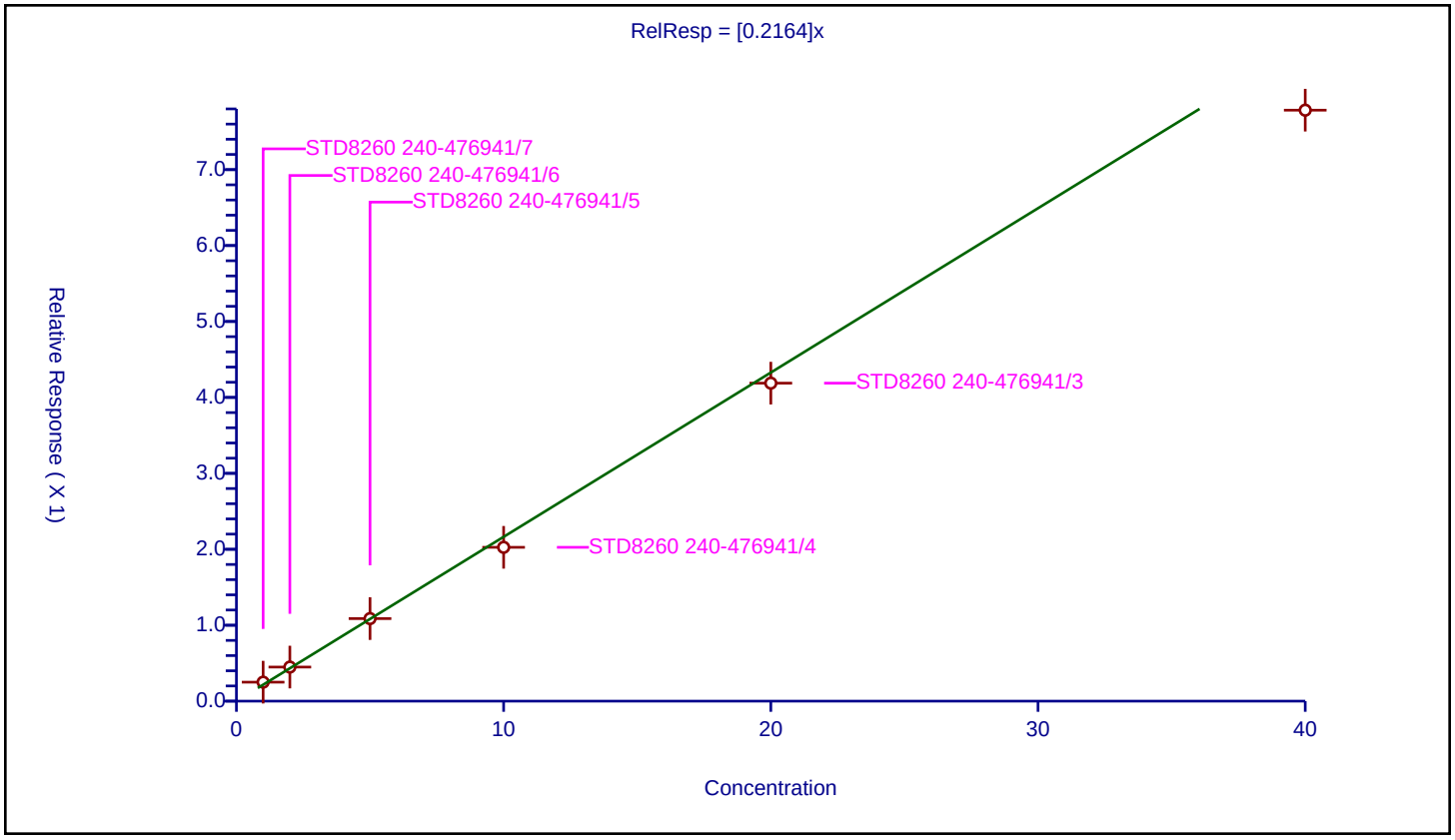
Curve Coefficients

Intercept:	0
Slope:	0.2164

Error Coefficients

Standard Error:	707000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.249957	10.0	1508502.0	0.249957	Y
2	STD8260 240-476941/6	2.0	0.44874	10.0	1600104.0	0.22437	Y
3	STD8260 240-476941/5	5.0	1.087072	10.0	1580769.0	0.217414	Y
4	STD8260 240-476941/4	10.0	2.025803	10.0	1635381.0	0.20258	Y
5	STD8260 240-476941/3	20.0	4.187977	10.0	1729200.0	0.209399	Y
6	STD8260 240-476941/2	40.0	7.78312	10.0	1738218.0	0.194578	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

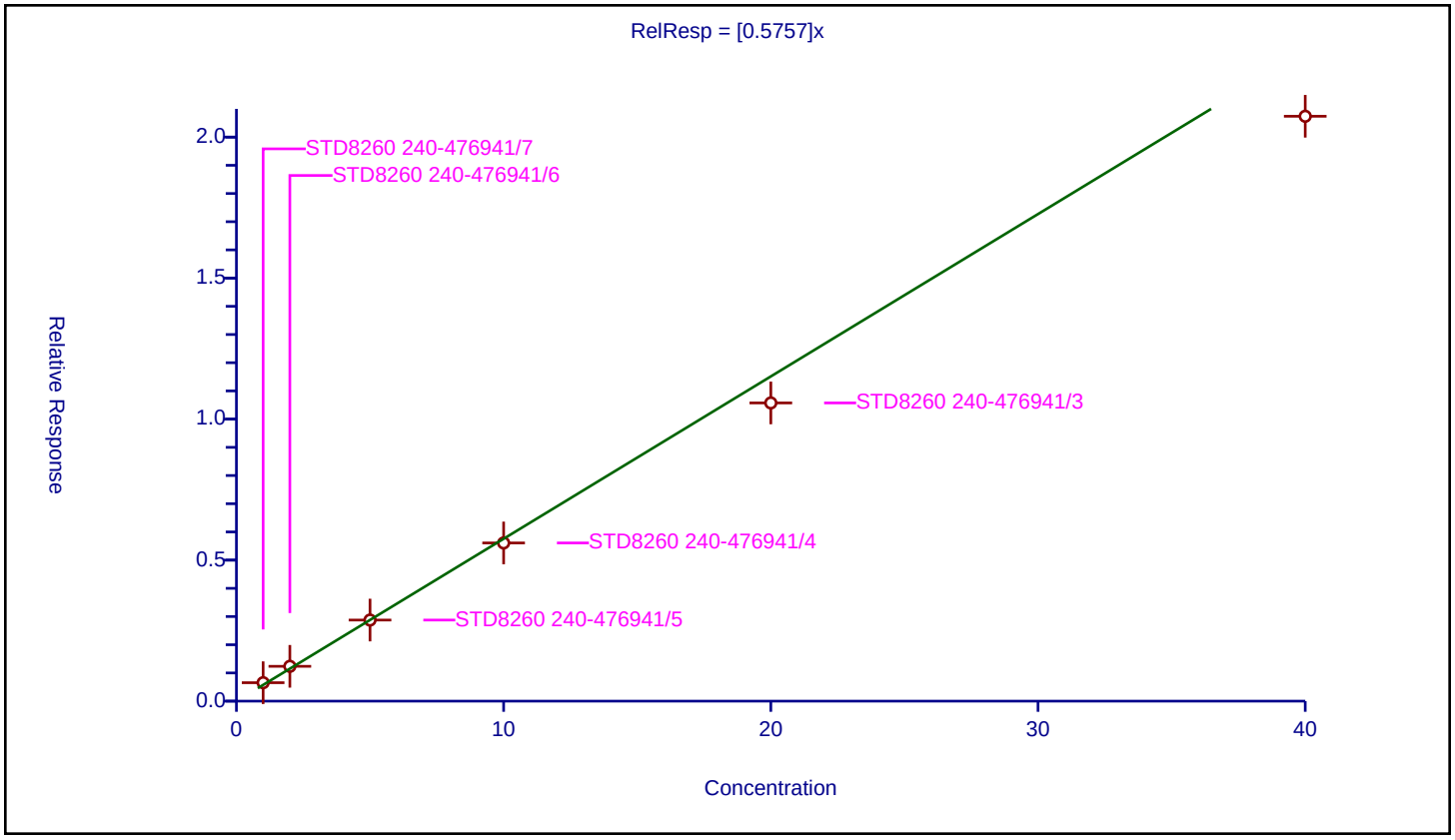
Curve Coefficients

Intercept:	0
Slope:	0.5757

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.653529	10.0	1508502.0	0.653529	Y
2	STD8260 240-476941/6	2.0	1.234514	10.0	1600104.0	0.617257	Y
3	STD8260 240-476941/5	5.0	2.875664	10.0	1580769.0	0.575133	Y
4	STD8260 240-476941/4	10.0	5.609622	10.0	1635381.0	0.560962	Y
5	STD8260 240-476941/3	20.0	10.57426	10.0	1729200.0	0.528713	Y
6	STD8260 240-476941/2	40.0	20.738411	10.0	1738218.0	0.51846	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

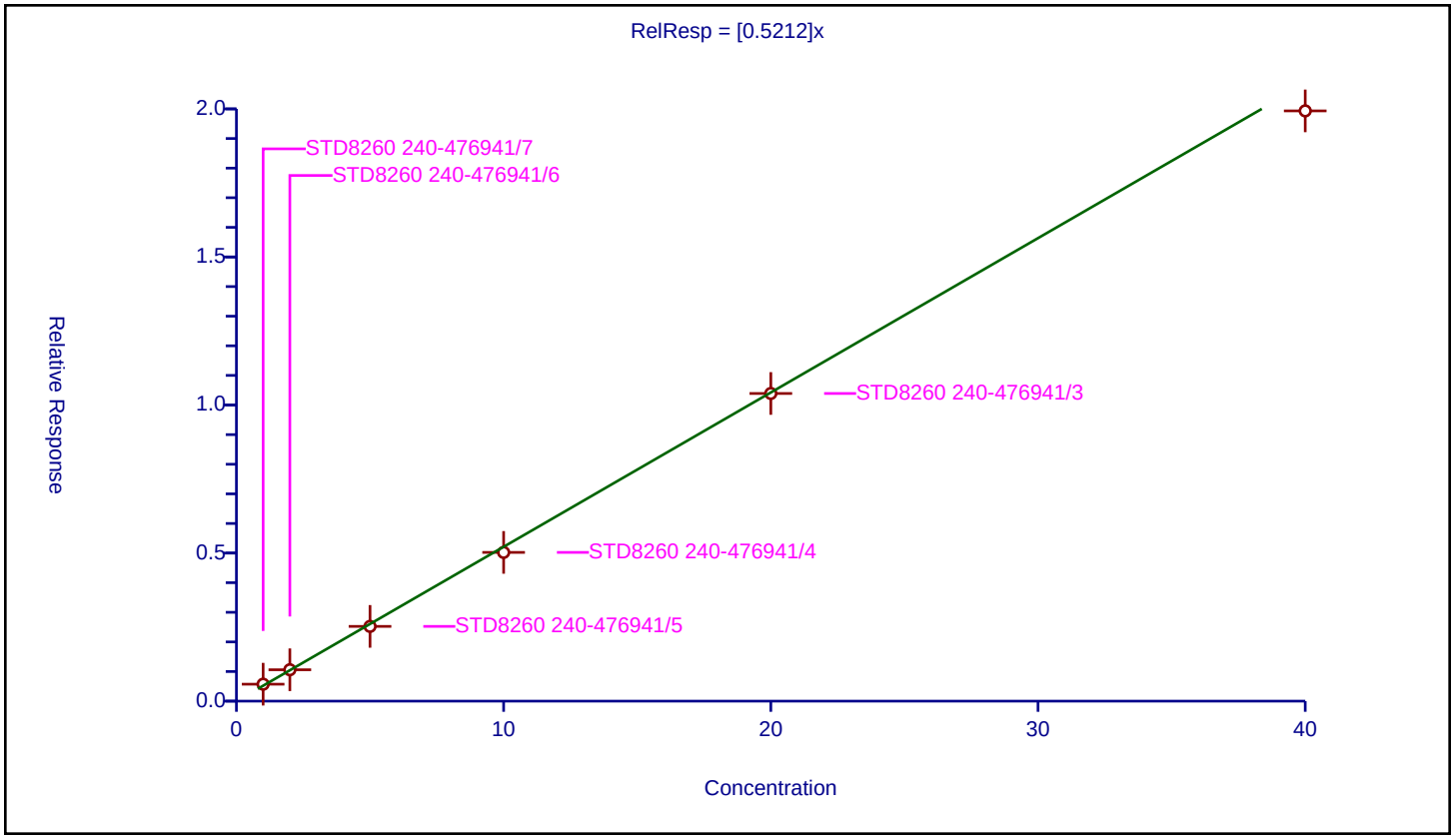
Curve Coefficients

Intercept:	0
Slope:	0.5212

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.572064	10.0	1508502.0	0.572064	Y
2	STD8260 240-476941/6	2.0	1.059962	10.0	1600104.0	0.529981	Y
3	STD8260 240-476941/5	5.0	2.524657	10.0	1580769.0	0.504931	Y
4	STD8260 240-476941/4	10.0	5.02253	10.0	1635381.0	0.502253	Y
5	STD8260 240-476941/3	20.0	10.389296	10.0	1729200.0	0.519465	Y
6	STD8260 240-476941/2	40.0	19.932839	10.0	1738218.0	0.498321	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

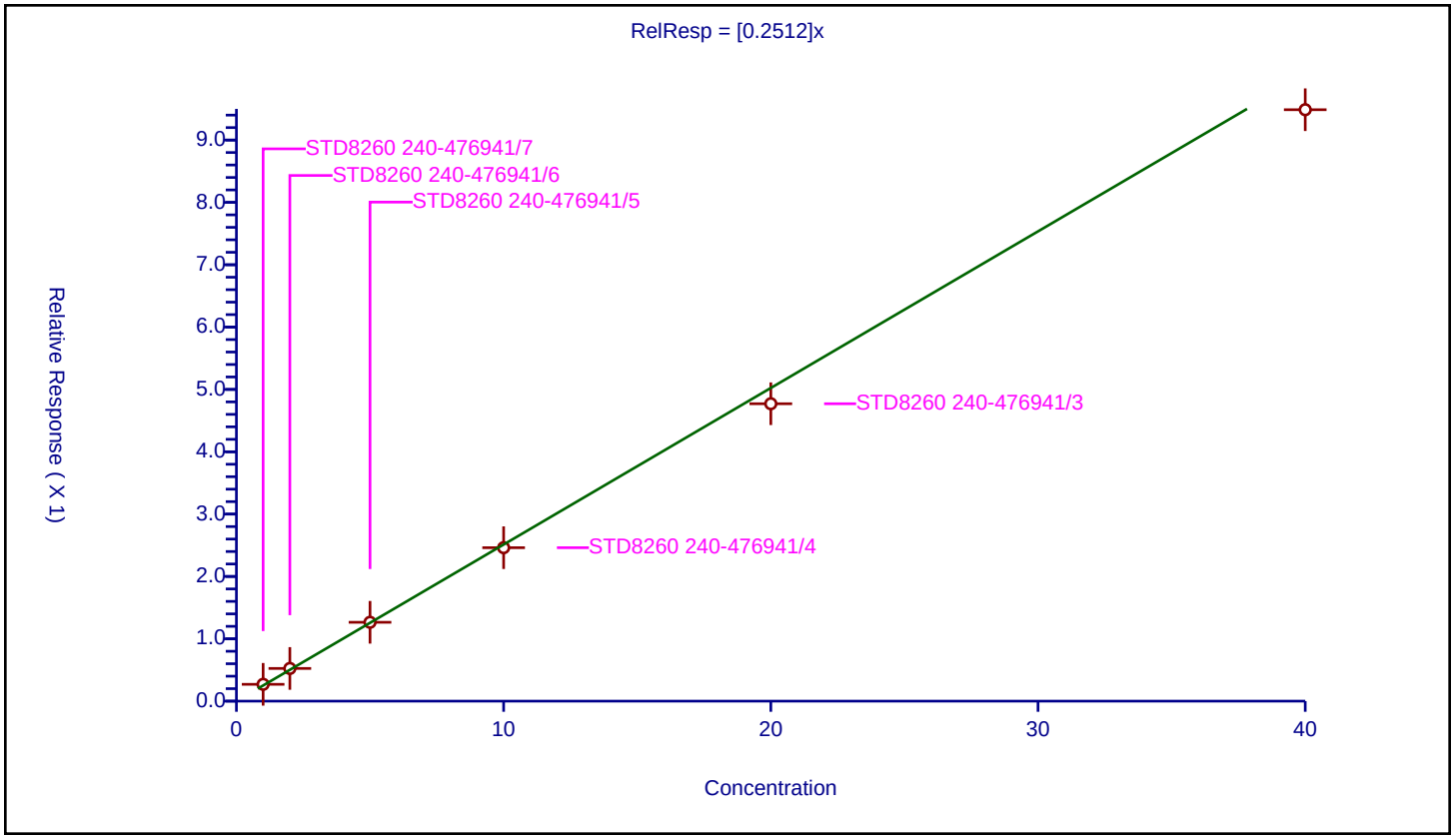
Curve Coefficients

Intercept:	0
Slope:	0.2512

Error Coefficients

Standard Error:	850000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.269923	10.0	1508502.0	0.269923	Y
2	STD8260 240-476941/6	2.0	0.524616	10.0	1600104.0	0.262308	Y
3	STD8260 240-476941/5	5.0	1.264998	10.0	1580769.0	0.253	Y
4	STD8260 240-476941/4	10.0	2.461316	10.0	1635381.0	0.246132	Y
5	STD8260 240-476941/3	20.0	4.77042	10.0	1729200.0	0.238521	Y
6	STD8260 240-476941/2	40.0	9.48656	10.0	1738218.0	0.237164	Y



Calibration / Acrolein

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

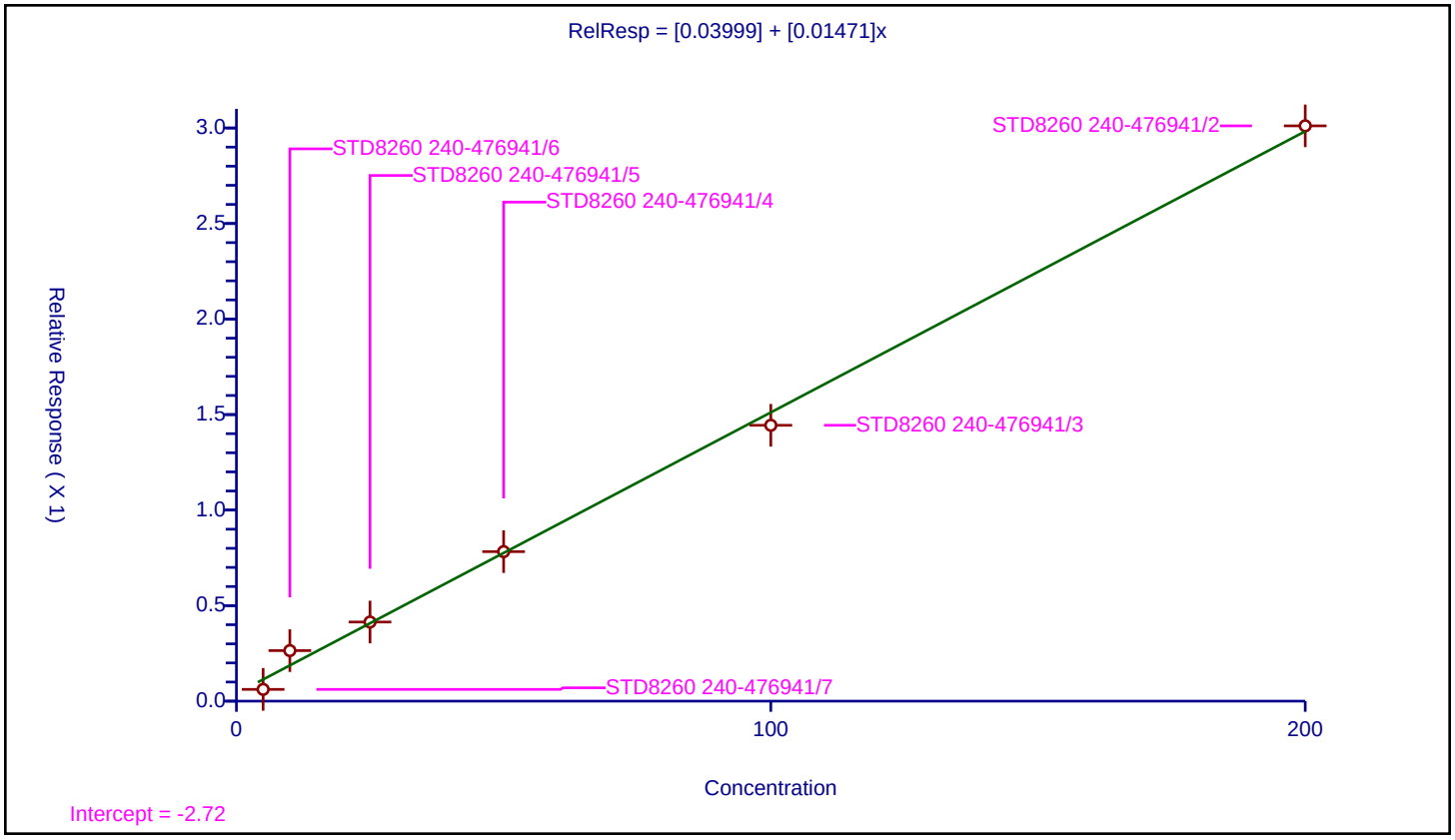
Curve Coefficients

Intercept:	0.03999
Slope:	0.01471

Error Coefficients

Standard Error:	300000
Relative Standard Error:	44.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	5.0	0.061611	10.0	1508502.0	0.012322	Y
2	STD8260 240-476941/6	10.0	0.264589	10.0	1600104.0	0.026459	Y
3	STD8260 240-476941/5	25.0	0.414128	10.0	1580769.0	0.016565	Y
4	STD8260 240-476941/4	50.0	0.782637	10.0	1635381.0	0.015653	Y
5	STD8260 240-476941/3	100.0	1.443905	10.0	1729200.0	0.014439	Y
6	STD8260 240-476941/2	200.0	3.011222	10.0	1738218.0	0.015056	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

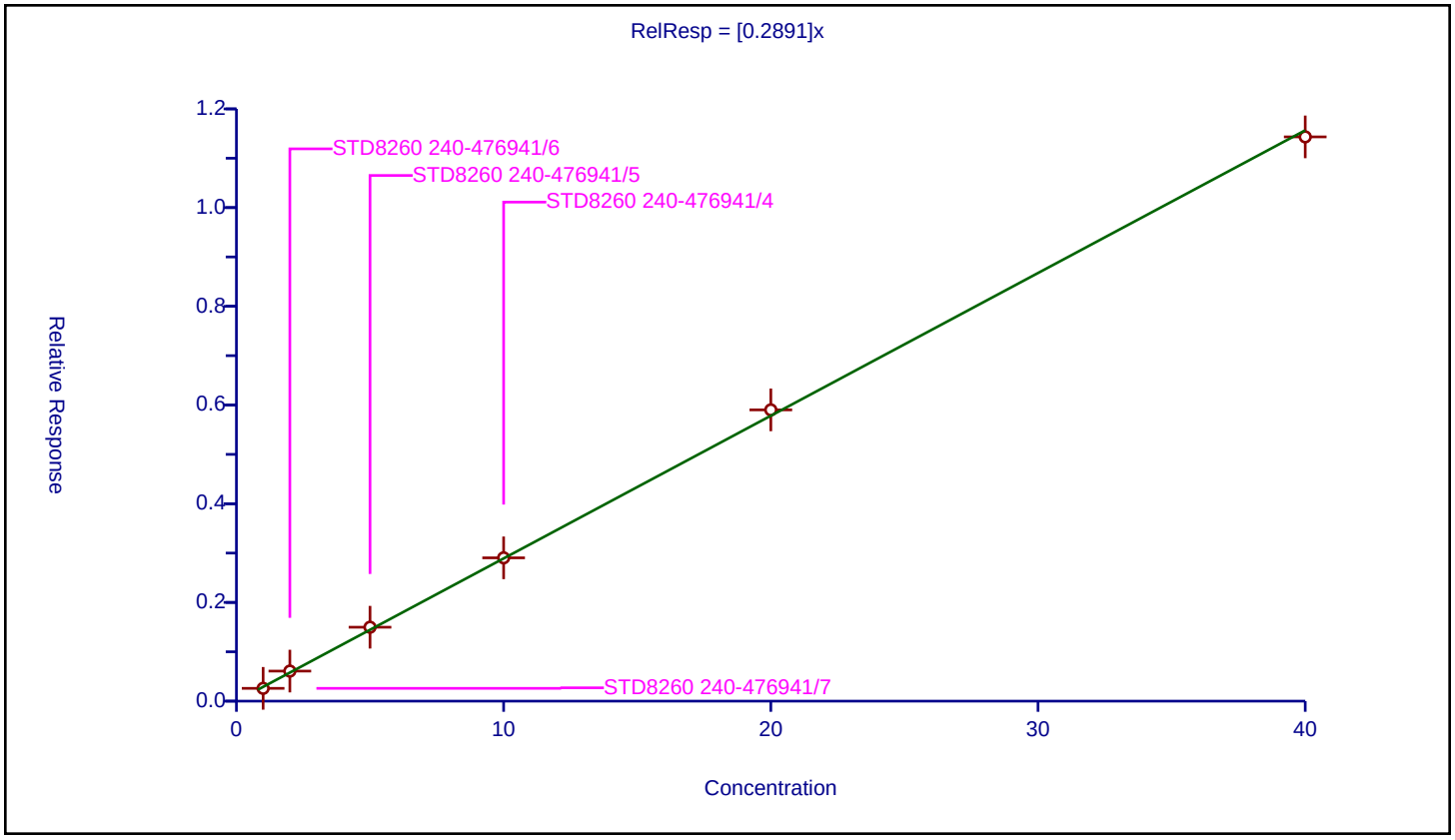
Curve Coefficients

Intercept:	0
Slope:	0.2891

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.259536	10.0	1508502.0	0.259536	Y
2	STD8260 240-476941/6	2.0	0.609085	10.0	1600104.0	0.304543	Y
3	STD8260 240-476941/5	5.0	1.497613	10.0	1580769.0	0.299523	Y
4	STD8260 240-476941/4	10.0	2.903586	10.0	1635381.0	0.290359	Y
5	STD8260 240-476941/3	20.0	5.901556	10.0	1729200.0	0.295078	Y
6	STD8260 240-476941/2	40.0	11.432858	10.0	1738218.0	0.285821	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

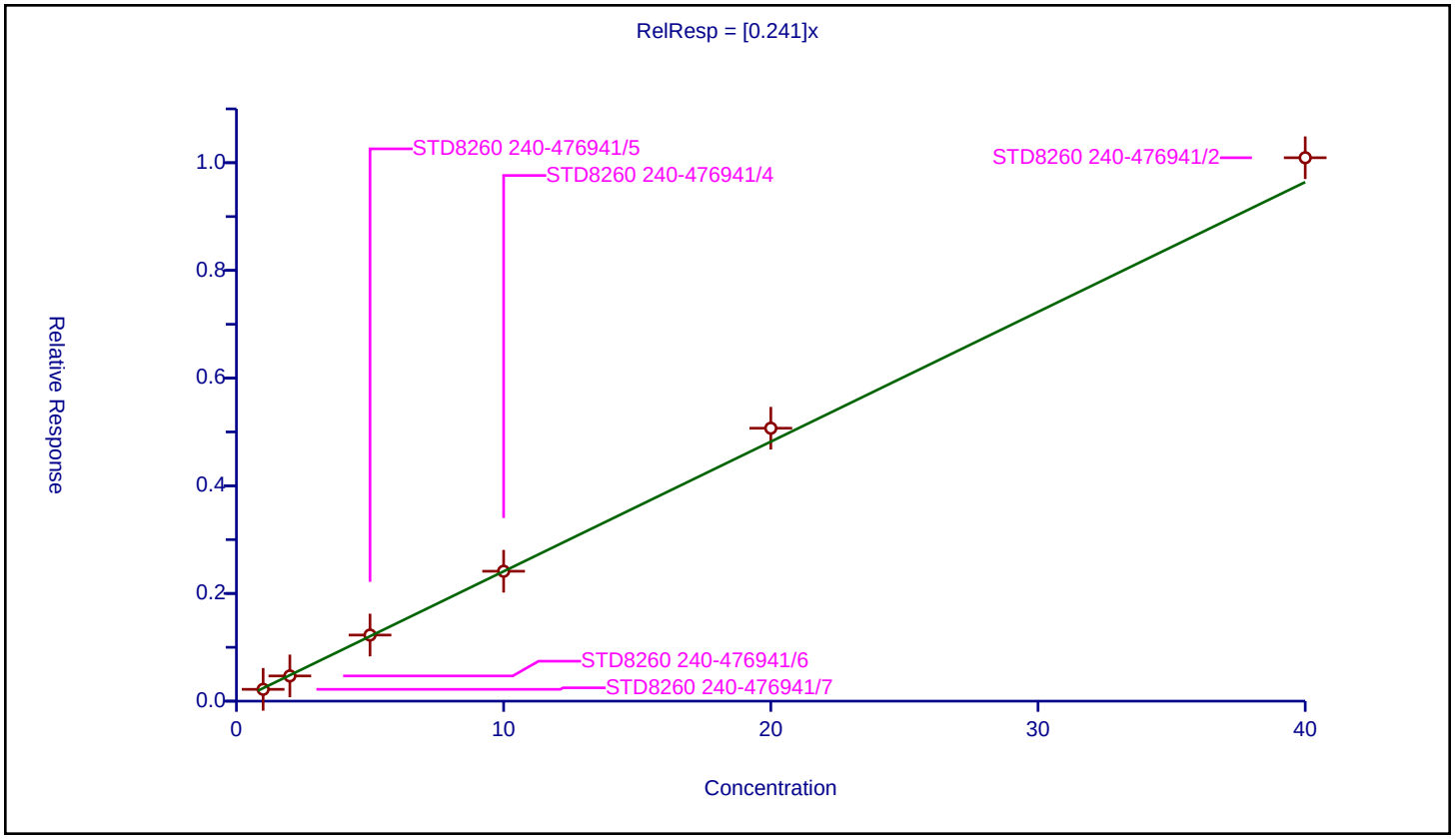
Curve Coefficients

Intercept:	0
Slope:	0.241

Error Coefficients

Standard Error:	900000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.219317	10.0	1508502.0	0.219317	Y
2	STD8260 240-476941/6	2.0	0.46817	10.0	1600104.0	0.234085	Y
3	STD8260 240-476941/5	5.0	1.227738	10.0	1580769.0	0.245548	Y
4	STD8260 240-476941/4	10.0	2.412759	10.0	1635381.0	0.241276	Y
5	STD8260 240-476941/3	20.0	5.069362	10.0	1729200.0	0.253468	Y
6	STD8260 240-476941/2	40.0	10.092934	10.0	1738218.0	0.252323	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

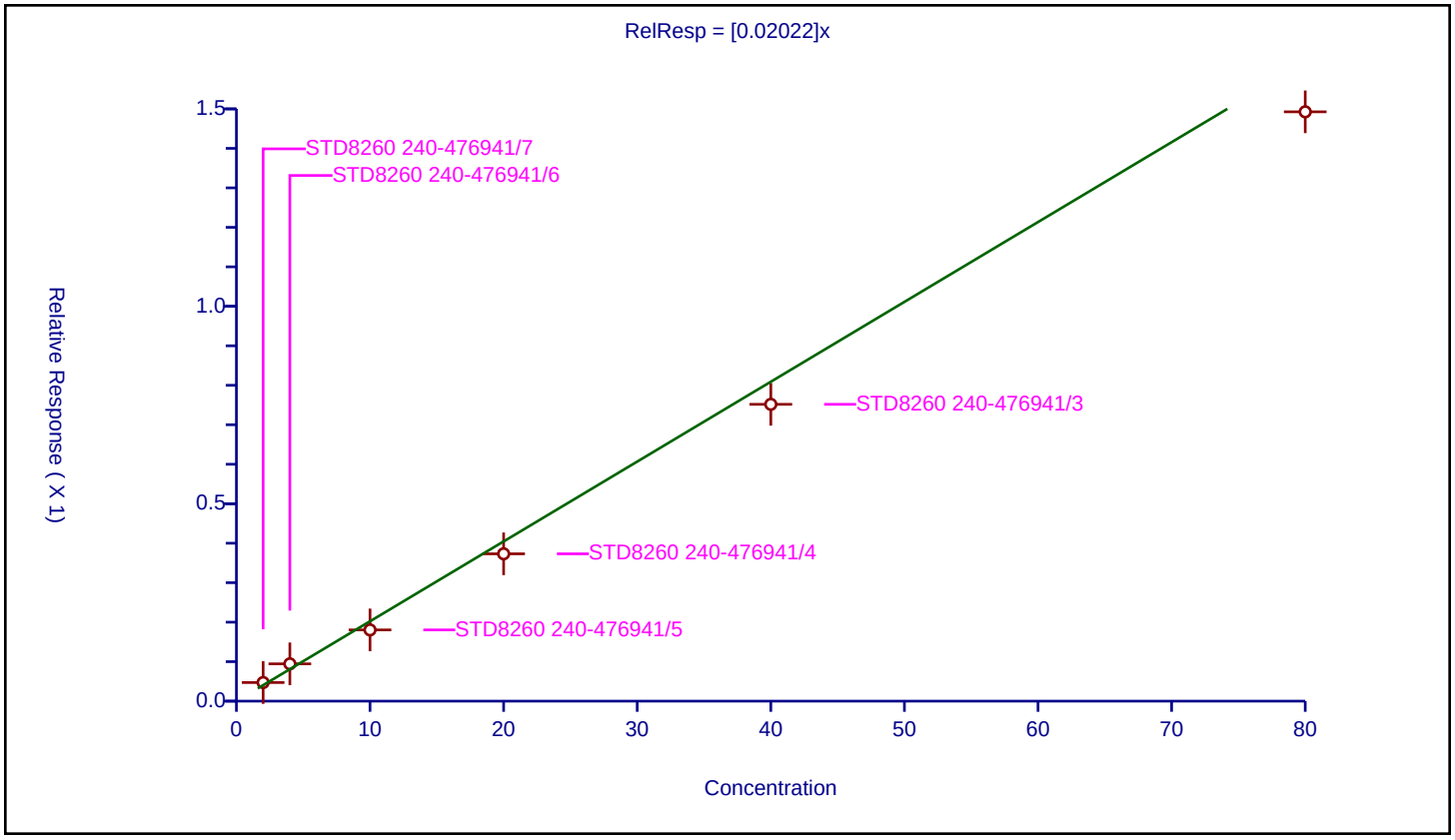
Curve Coefficients

Intercept:	0
Slope:	0.02022

Error Coefficients

Standard Error:	133000
Relative Standard Error:	13.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.047139	10.0	1508502.0	0.02357	Y
2	STD8260 240-476941/6	4.0	0.094475	10.0	1600104.0	0.023619	Y
3	STD8260 240-476941/5	10.0	0.180419	10.0	1580769.0	0.018042	Y
4	STD8260 240-476941/4	20.0	0.373149	10.0	1635381.0	0.018657	Y
5	STD8260 240-476941/3	40.0	0.751764	10.0	1729200.0	0.018794	Y
6	STD8260 240-476941/2	80.0	1.49258	10.0	1738218.0	0.018657	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

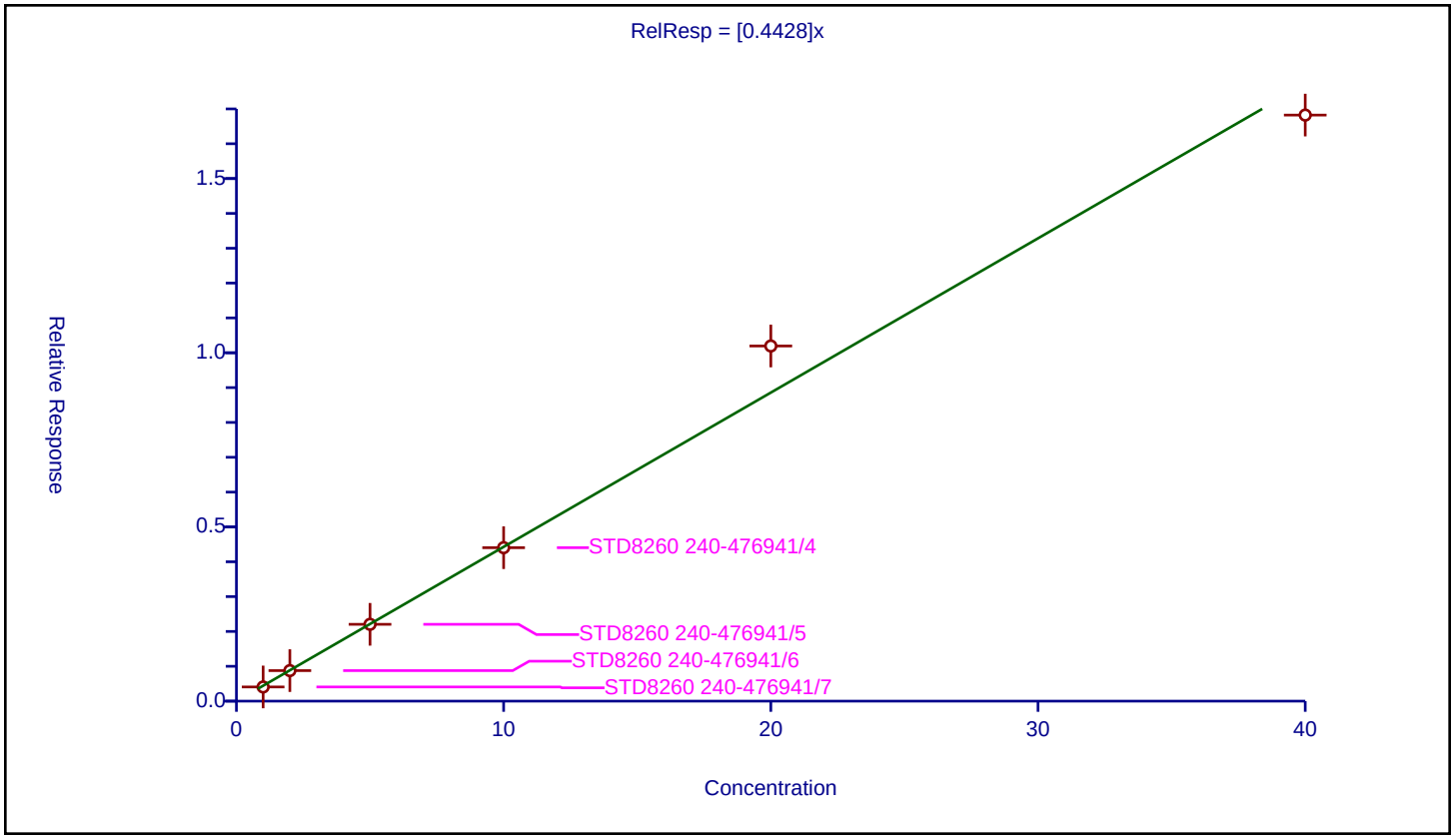
Curve Coefficients

Intercept:	0
Slope:	0.4428

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	8.0
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.406894	10.0	1508502.0	0.406894	Y
2	STD8260 240-476941/6	2.0	0.876549	10.0	1600104.0	0.438275	Y
3	STD8260 240-476941/5	5.0	2.204857	10.0	1580769.0	0.440971	Y
4	STD8260 240-476941/4	10.0	4.404656	10.0	1635381.0	0.440466	Y
5	STD8260 240-476941/3	20.0	10.194338	10.0	1729200.0	0.509717	Y
6	STD8260 240-476941/2	40.0	16.822999	10.0	1738218.0	0.420575	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

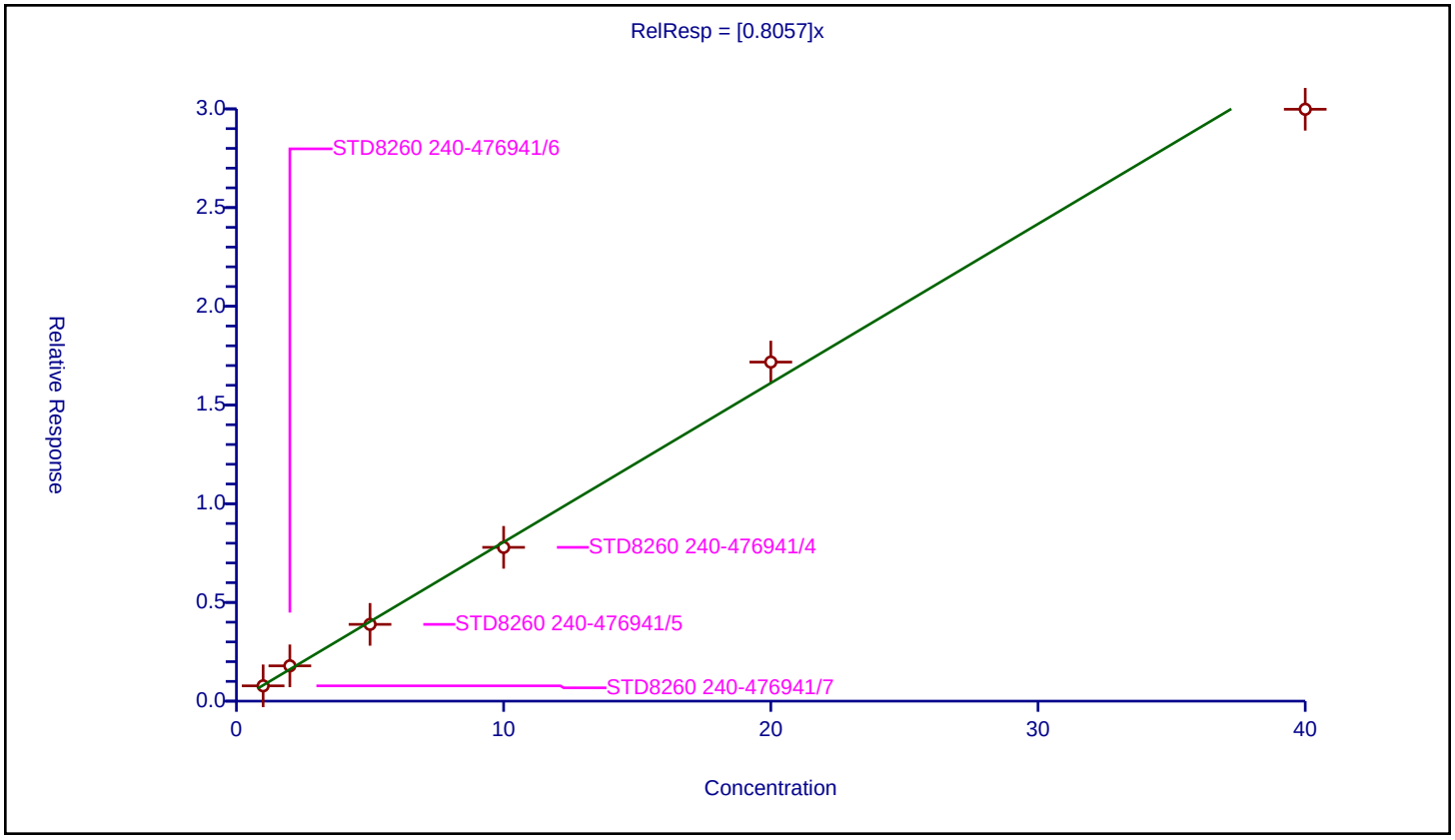
Curve Coefficients

Intercept:	0
Slope:	0.8057

Error Coefficients

Standard Error:	2760000
Relative Standard Error:	7.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.774769	10.0	1508502.0	0.774769	Y
2	STD8260 240-476941/6	2.0	1.788521	10.0	1600104.0	0.894261	Y
3	STD8260 240-476941/5	5.0	3.889423	10.0	1580769.0	0.777885	Y
4	STD8260 240-476941/4	10.0	7.789891	10.0	1635381.0	0.778989	Y
5	STD8260 240-476941/3	20.0	17.175752	10.0	1729200.0	0.858788	Y
6	STD8260 240-476941/2	40.0	29.98044	10.0	1738218.0	0.749511	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

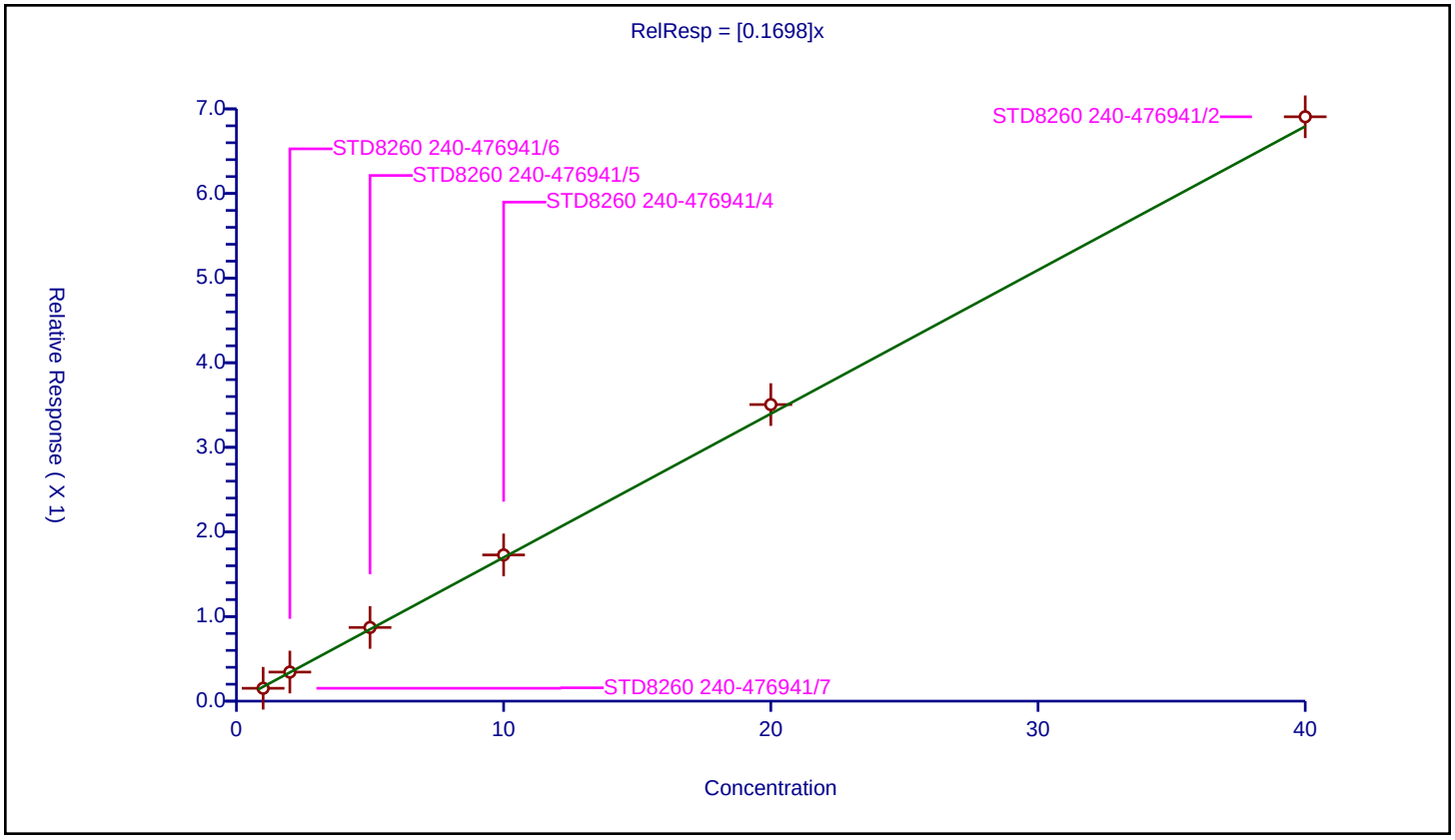
Curve Coefficients

Intercept:	0
Slope:	0.1698

Error Coefficients

Standard Error:	618000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.152337	10.0	1508502.0	0.152337	Y
2	STD8260 240-476941/6	2.0	0.343478	10.0	1600104.0	0.171739	Y
3	STD8260 240-476941/5	5.0	0.870918	10.0	1580769.0	0.174184	Y
4	STD8260 240-476941/4	10.0	1.728019	10.0	1635381.0	0.172802	Y
5	STD8260 240-476941/3	20.0	3.505361	10.0	1729200.0	0.175268	Y
6	STD8260 240-476941/2	40.0	6.906826	10.0	1738218.0	0.172671	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

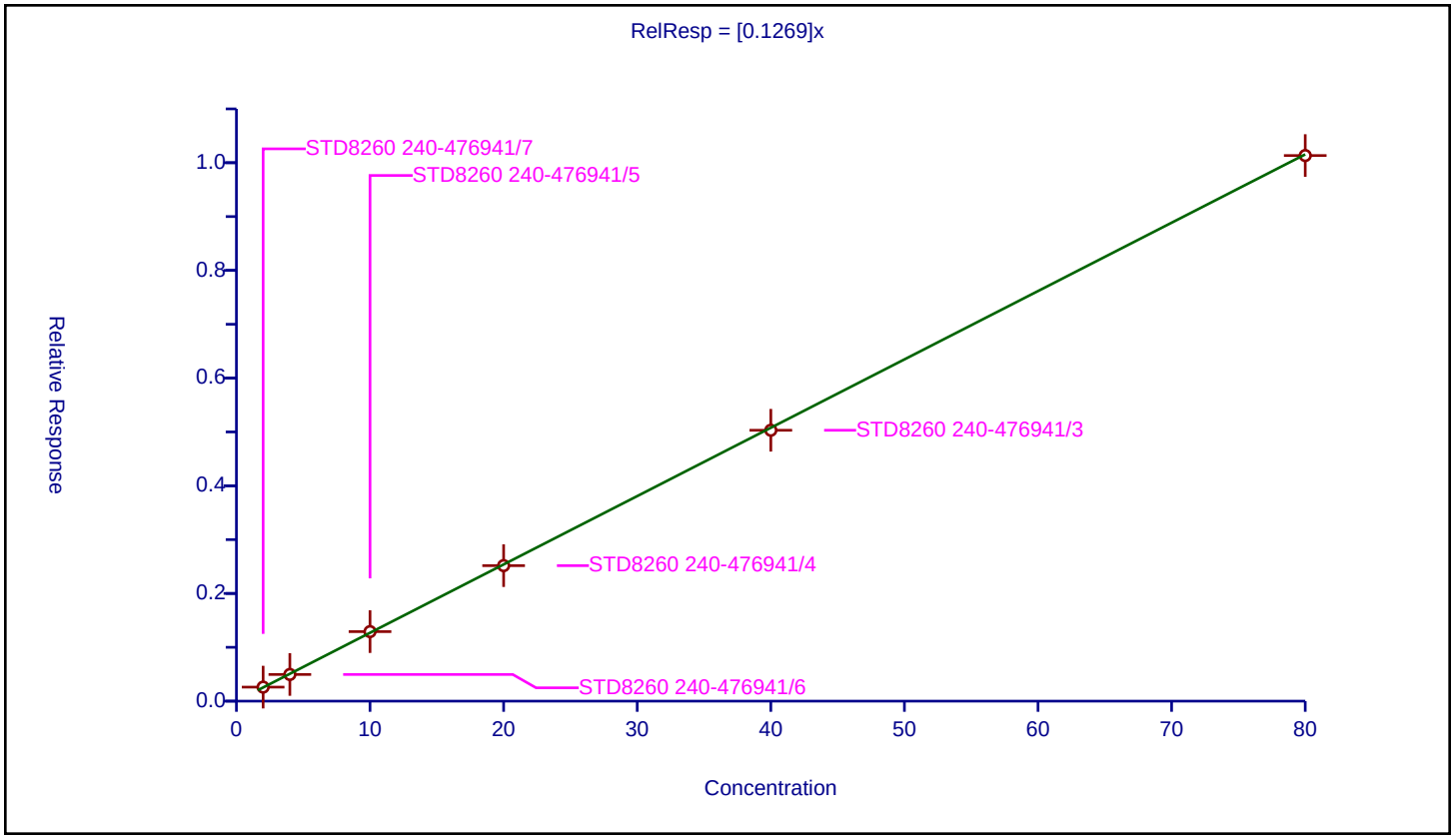
Curve Coefficients

Intercept:	0
Slope:	0.1269

Error Coefficients

Standard Error:	903000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.260629	10.0	1508502.0	0.130315	Y
2	STD8260 240-476941/6	4.0	0.495605	10.0	1600104.0	0.123901	Y
3	STD8260 240-476941/5	10.0	1.291409	10.0	1580769.0	0.129141	Y
4	STD8260 240-476941/4	20.0	2.516753	10.0	1635381.0	0.125838	Y
5	STD8260 240-476941/3	40.0	5.031188	10.0	1729200.0	0.12578	Y
6	STD8260 240-476941/2	80.0	10.133424	10.0	1738218.0	0.126668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

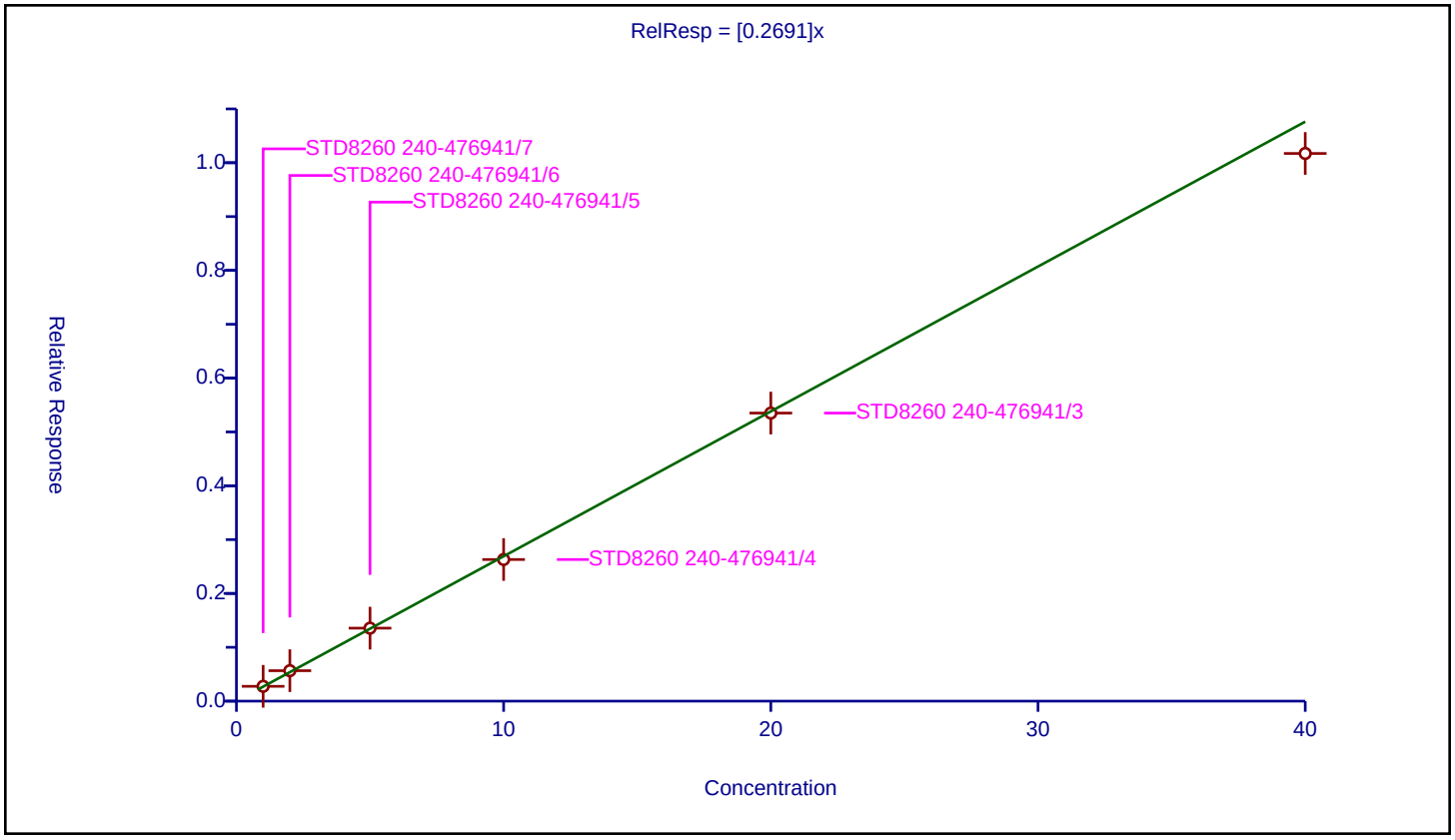
Curve Coefficients

Intercept:	0
Slope:	0.2691

Error Coefficients

Standard Error:	919000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275439	10.0	1508502.0	0.275439	Y
2	STD8260 240-476941/6	2.0	0.565844	10.0	1600104.0	0.282922	Y
3	STD8260 240-476941/5	5.0	1.355688	10.0	1580769.0	0.271138	Y
4	STD8260 240-476941/4	10.0	2.630433	10.0	1635381.0	0.263043	Y
5	STD8260 240-476941/3	20.0	5.350104	10.0	1729200.0	0.267505	Y
6	STD8260 240-476941/2	40.0	10.172429	10.0	1738218.0	0.254311	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

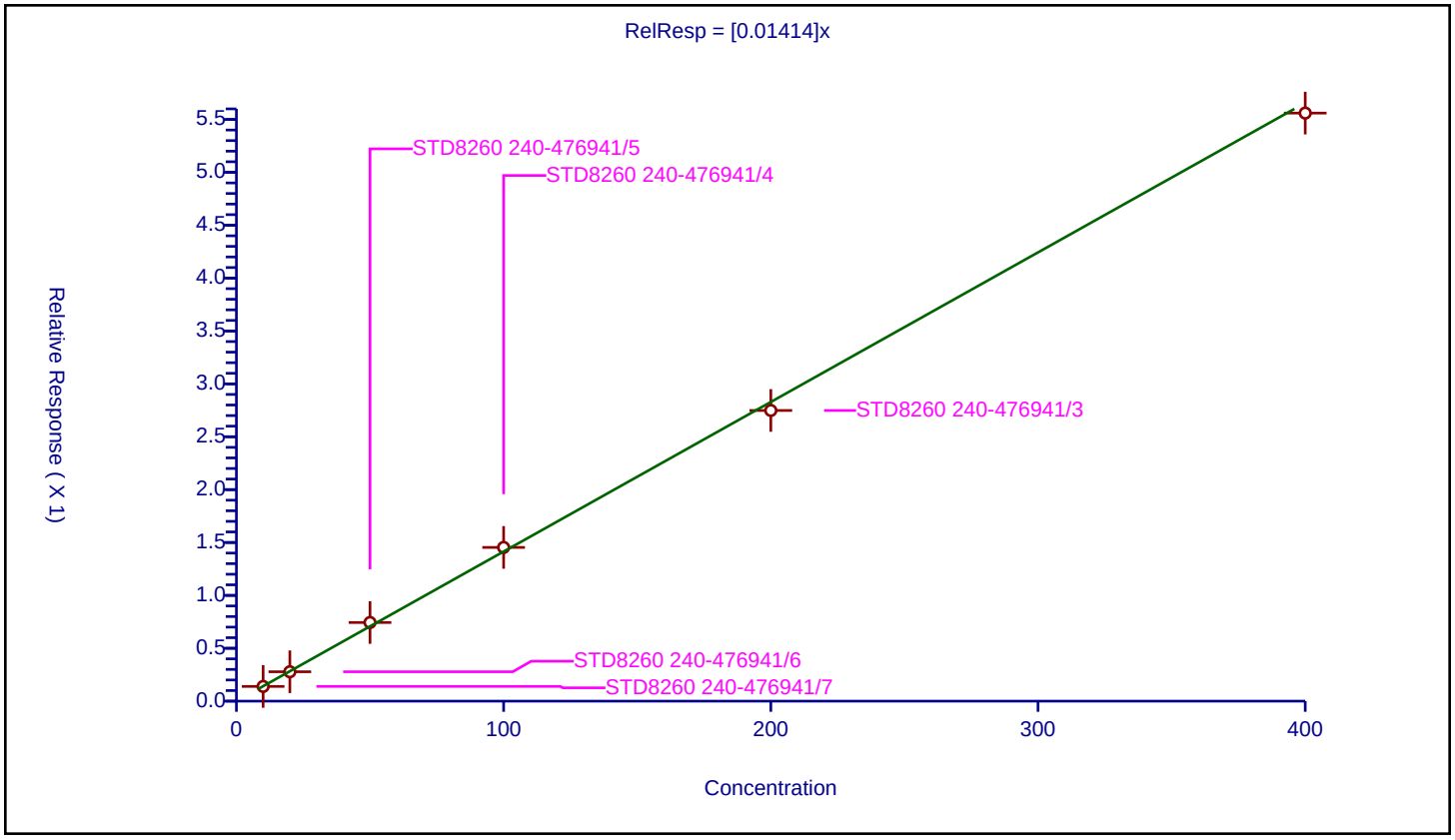
Curve Coefficients

Intercept:	0
Slope:	0.01414

Error Coefficients

Standard Error:	497000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.139204	10.0	1508502.0	0.01392	Y
2	STD8260 240-476941/6	20.0	0.277838	10.0	1600104.0	0.013892	Y
3	STD8260 240-476941/5	50.0	0.743556	10.0	1580769.0	0.014871	Y
4	STD8260 240-476941/4	100.0	1.453362	10.0	1635381.0	0.014534	Y
5	STD8260 240-476941/3	200.0	2.748358	10.0	1729200.0	0.013742	Y
6	STD8260 240-476941/2	400.0	5.56024	10.0	1738218.0	0.013901	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

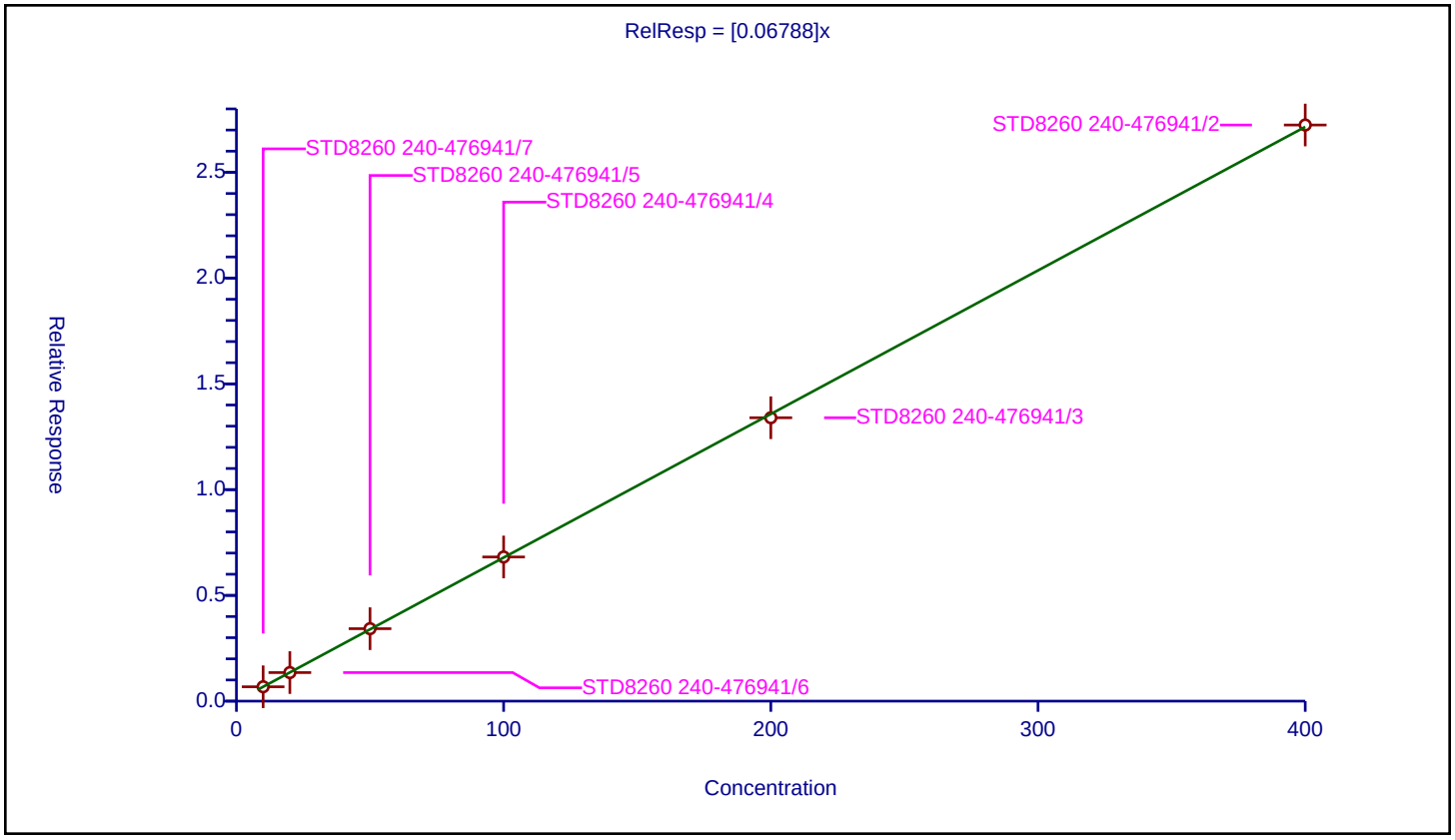
Curve Coefficients

Intercept:	0
Slope:	0.06788

Error Coefficients

Standard Error:	2420000
Relative Standard Error:	0.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.679456	10.0	1508502.0	0.067946	Y
2	STD8260 240-476941/6	20.0	1.350912	10.0	1600104.0	0.067546	Y
3	STD8260 240-476941/5	50.0	3.425997	10.0	1580769.0	0.06852	Y
4	STD8260 240-476941/4	100.0	6.81577	10.0	1635381.0	0.068158	Y
5	STD8260 240-476941/3	200.0	13.397808	10.0	1729200.0	0.066989	Y
6	STD8260 240-476941/2	400.0	27.237631	10.0	1738218.0	0.068094	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

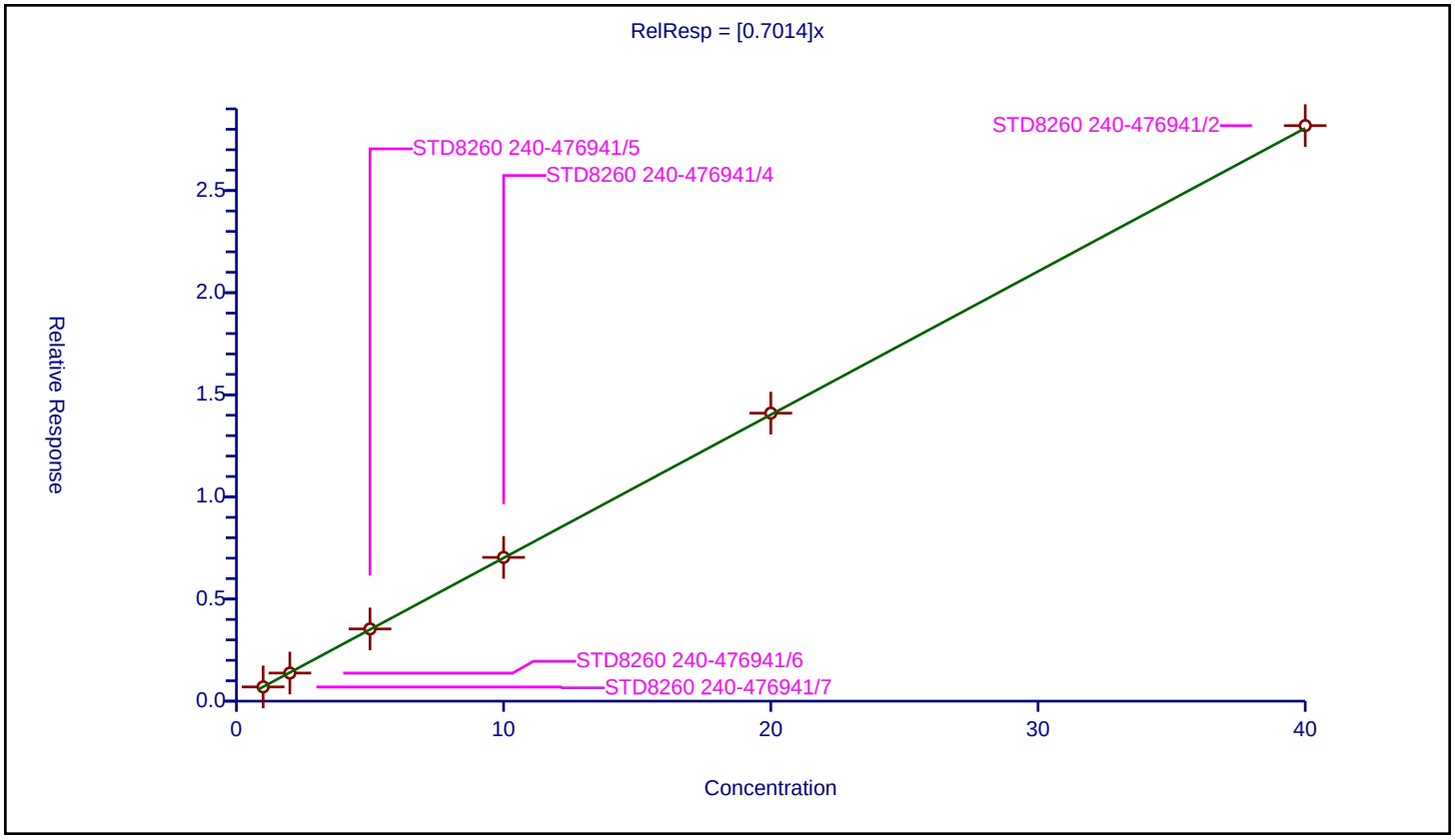
Curve Coefficients

Intercept:	0
Slope:	0.7014

Error Coefficients

Standard Error:	2520000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.698985	10.0	1508502.0	0.698985	Y
2	STD8260 240-476941/6	2.0	1.376267	10.0	1600104.0	0.688133	Y
3	STD8260 240-476941/5	5.0	3.537329	10.0	1580769.0	0.707466	Y
4	STD8260 240-476941/4	10.0	7.039247	10.0	1635381.0	0.703925	Y
5	STD8260 240-476941/3	20.0	14.102377	10.0	1729200.0	0.705119	Y
6	STD8260 240-476941/2	40.0	28.180746	10.0	1738218.0	0.704519	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

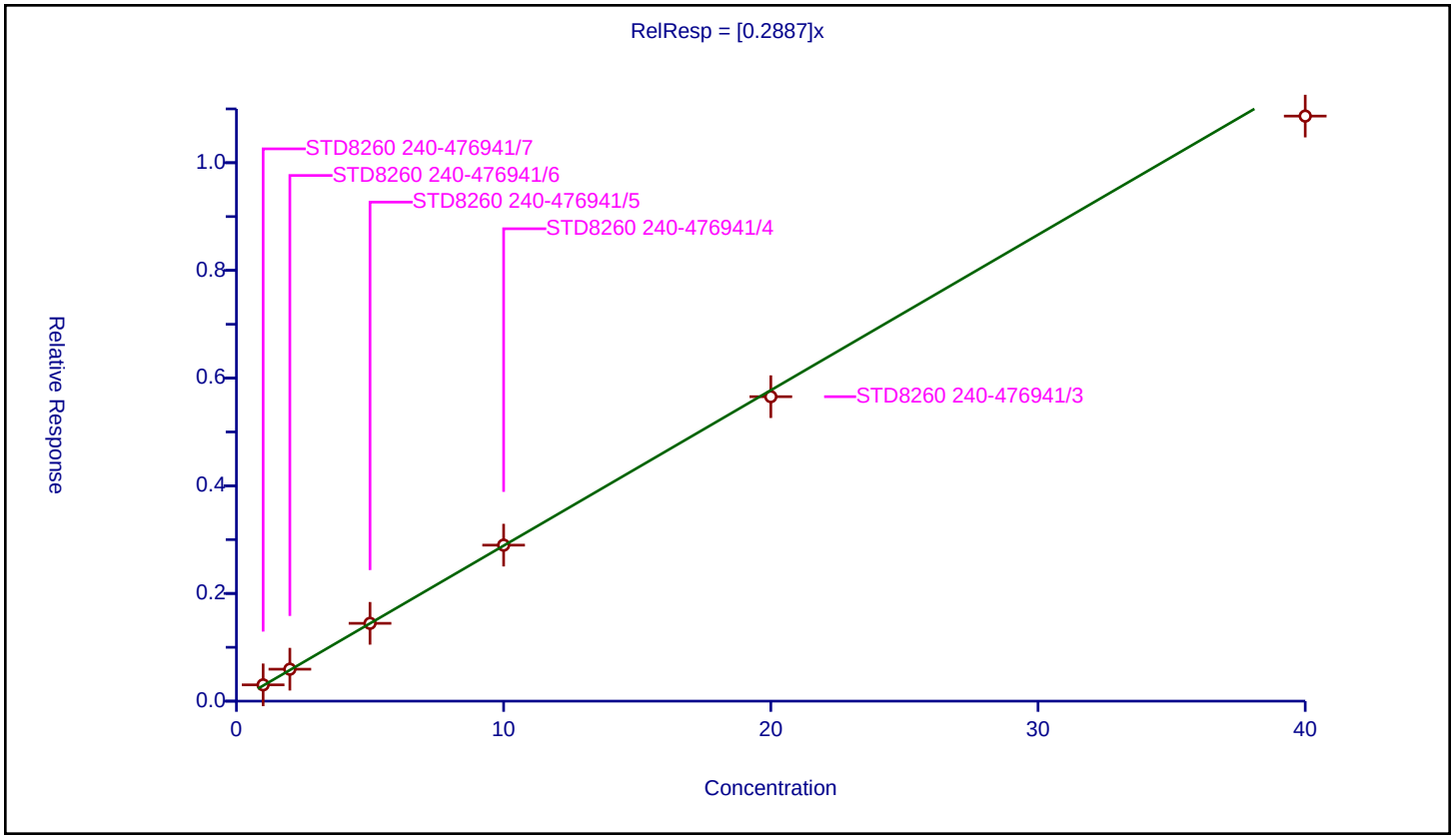
Curve Coefficients

Intercept:	0
Slope:	0.2887

Error Coefficients

Standard Error:	981000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.302618	10.0	1508502.0	0.302618	Y
2	STD8260 240-476941/6	2.0	0.593174	10.0	1600104.0	0.296587	Y
3	STD8260 240-476941/5	5.0	1.444987	10.0	1580769.0	0.288997	Y
4	STD8260 240-476941/4	10.0	2.897514	10.0	1635381.0	0.289751	Y
5	STD8260 240-476941/3	20.0	5.654783	10.0	1729200.0	0.282739	Y
6	STD8260 240-476941/2	40.0	10.866479	10.0	1738218.0	0.271662	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

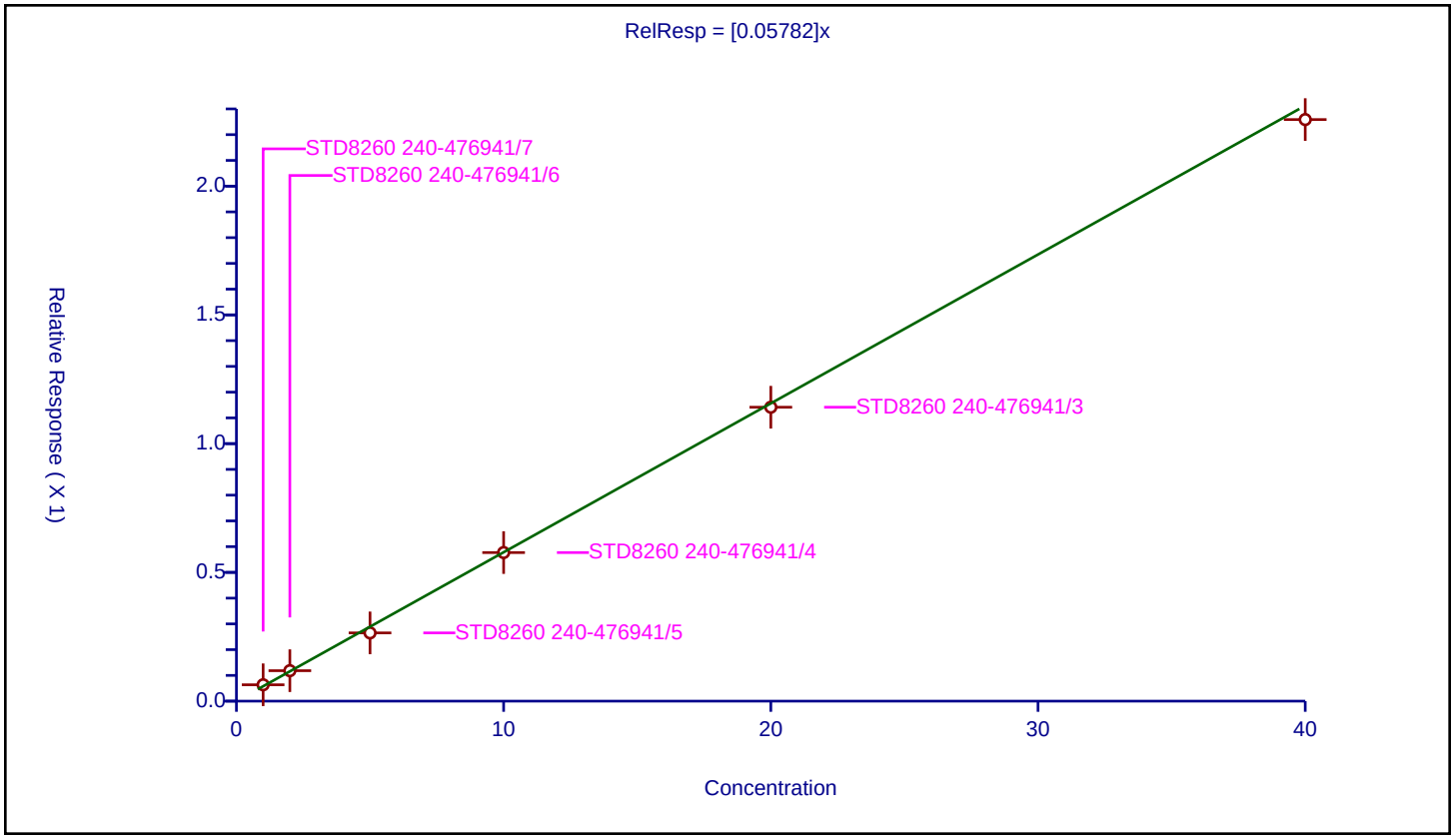
Curve Coefficients

Intercept:	0
Slope:	0.05782

Error Coefficients

Standard Error:	202000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.063513	10.0	1508502.0	0.063513	Y
2	STD8260 240-476941/6	2.0	0.118292	10.0	1600104.0	0.059146	Y
3	STD8260 240-476941/5	5.0	0.265029	10.0	1580769.0	0.053006	Y
4	STD8260 240-476941/4	10.0	0.576991	10.0	1635381.0	0.057699	Y
5	STD8260 240-476941/3	20.0	1.141406	10.0	1729200.0	0.05707	Y
6	STD8260 240-476941/2	40.0	2.258503	10.0	1738218.0	0.056463	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

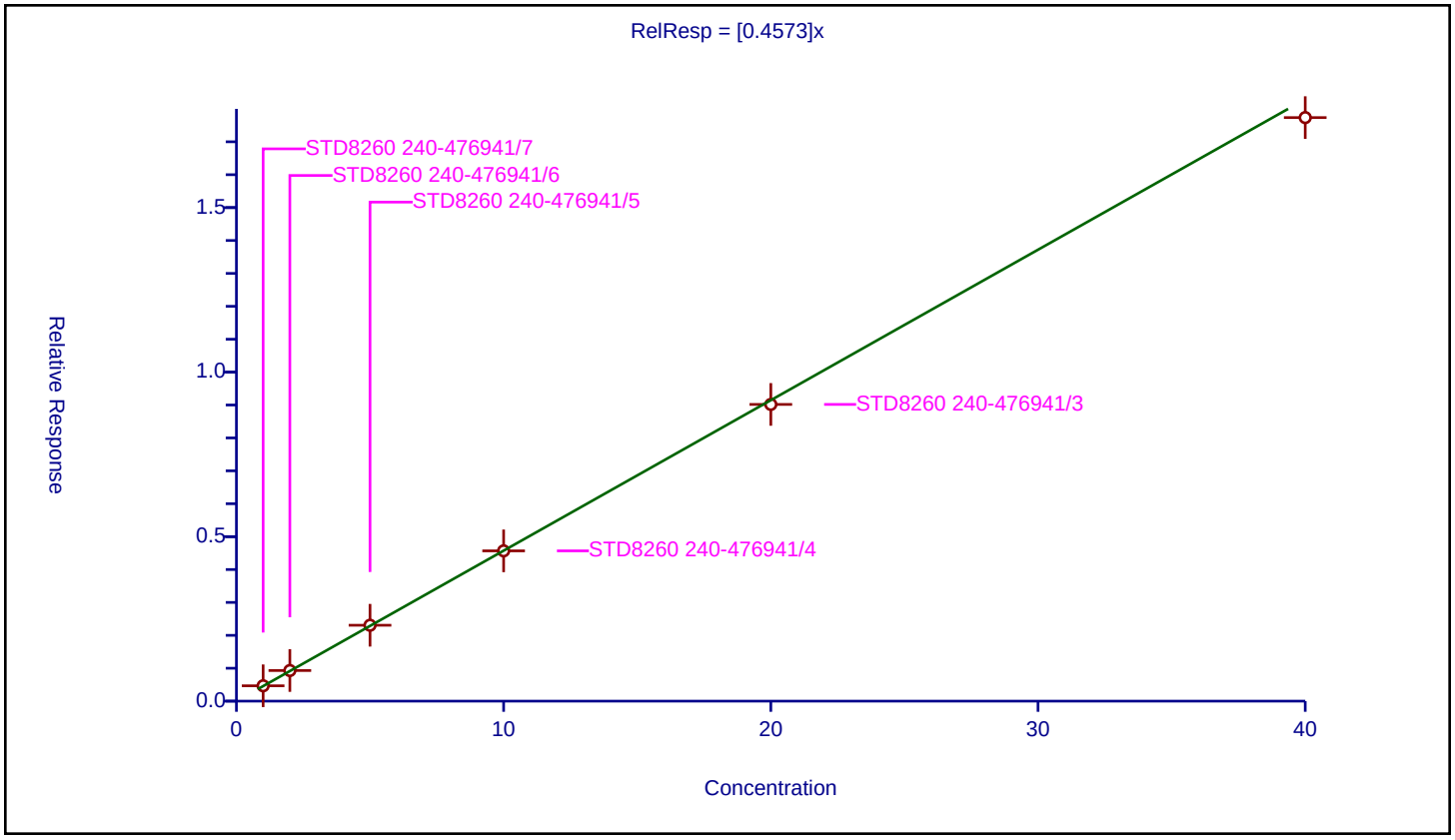
Curve Coefficients

Intercept:	0
Slope:	0.4573

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.466449	10.0	1508502.0	0.466449	Y
2	STD8260 240-476941/6	2.0	0.930208	10.0	1600104.0	0.465104	Y
3	STD8260 240-476941/5	5.0	2.306403	10.0	1580769.0	0.461281	Y
4	STD8260 240-476941/4	10.0	4.56778	10.0	1635381.0	0.456778	Y
5	STD8260 240-476941/3	20.0	9.018159	10.0	1729200.0	0.450908	Y
6	STD8260 240-476941/2	40.0	17.734904	10.0	1738218.0	0.443373	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

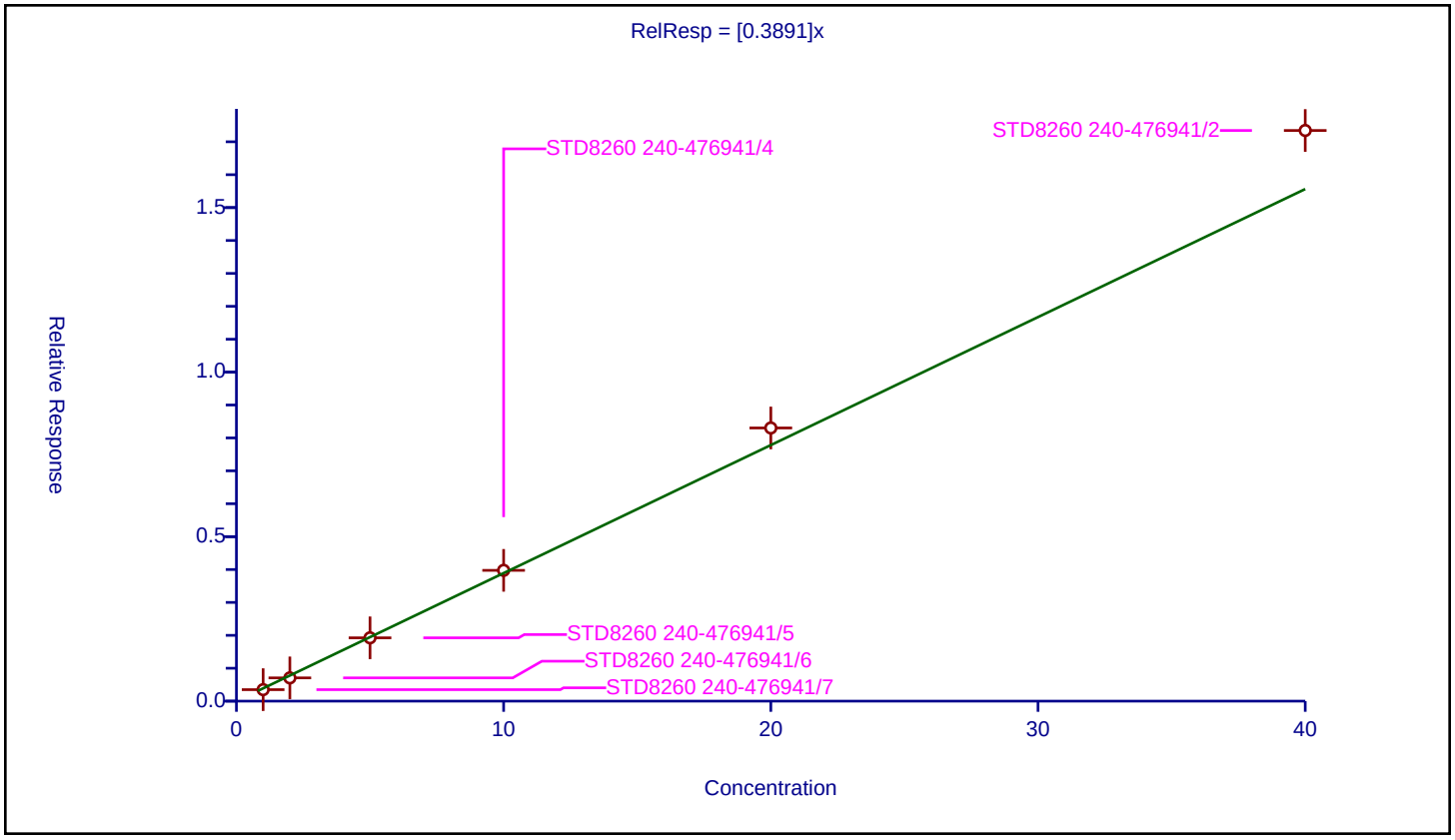
Curve Coefficients

Intercept:	0
Slope:	0.3891

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.349612	10.0	1508502.0	0.349612	Y
2	STD8260 240-476941/6	2.0	0.707448	10.0	1600104.0	0.353724	Y
3	STD8260 240-476941/5	5.0	1.924608	10.0	1580769.0	0.384922	Y
4	STD8260 240-476941/4	10.0	3.974994	10.0	1635381.0	0.397499	Y
5	STD8260 240-476941/3	20.0	8.302787	10.0	1729200.0	0.415139	Y
6	STD8260 240-476941/2	40.0	17.343619	10.0	1738218.0	0.43359	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

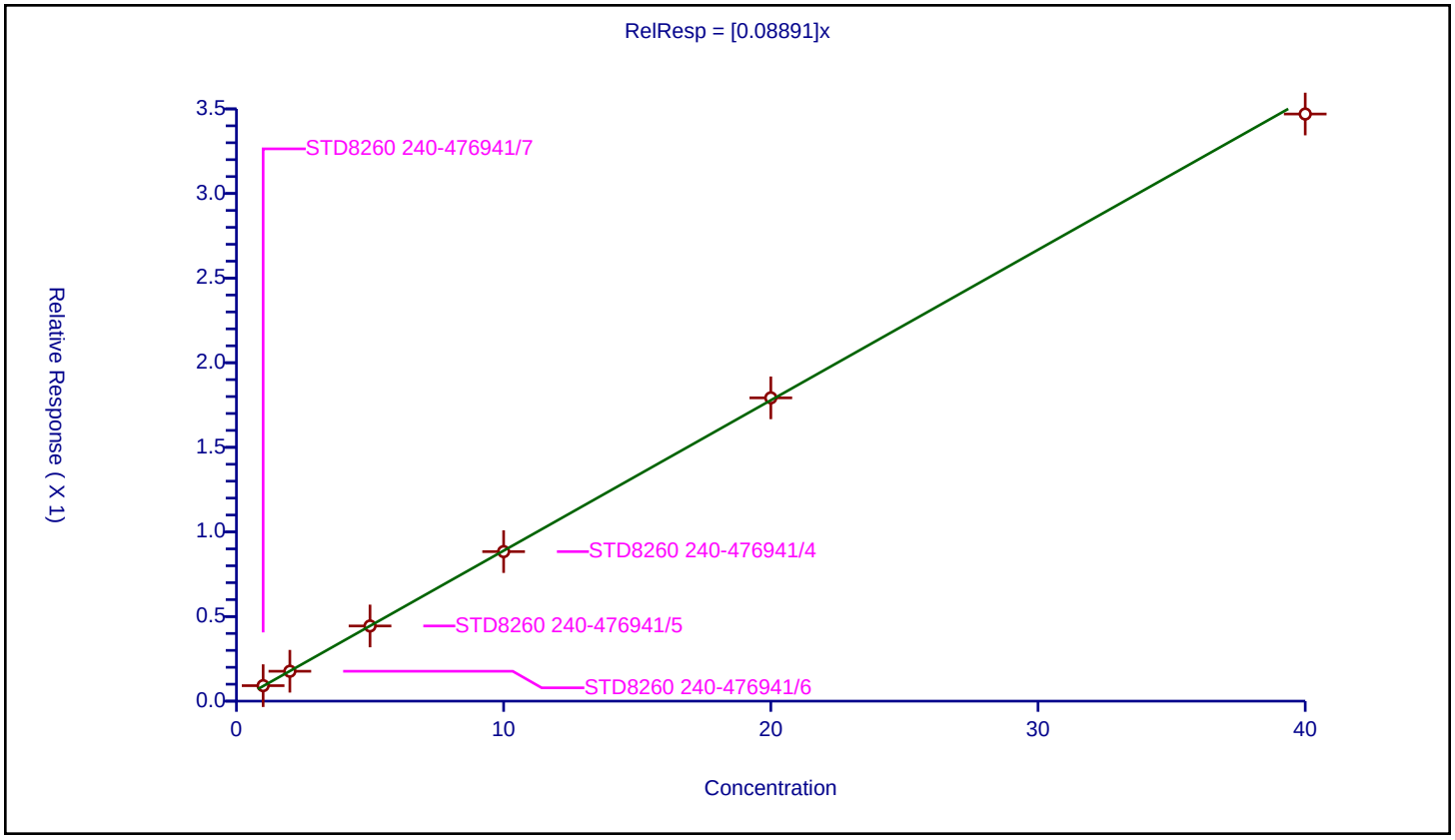
Curve Coefficients

Intercept:	0
Slope:	0.08891

Error Coefficients

Standard Error:	312000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.091528	10.0	1508502.0	0.091528	Y
2	STD8260 240-476941/6	2.0	0.176714	10.0	1600104.0	0.088357	Y
3	STD8260 240-476941/5	5.0	0.444208	10.0	1580769.0	0.088842	Y
4	STD8260 240-476941/4	10.0	0.883745	10.0	1635381.0	0.088375	Y
5	STD8260 240-476941/3	20.0	1.792407	10.0	1729200.0	0.08962	Y
6	STD8260 240-476941/2	40.0	3.46976	10.0	1738218.0	0.086744	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

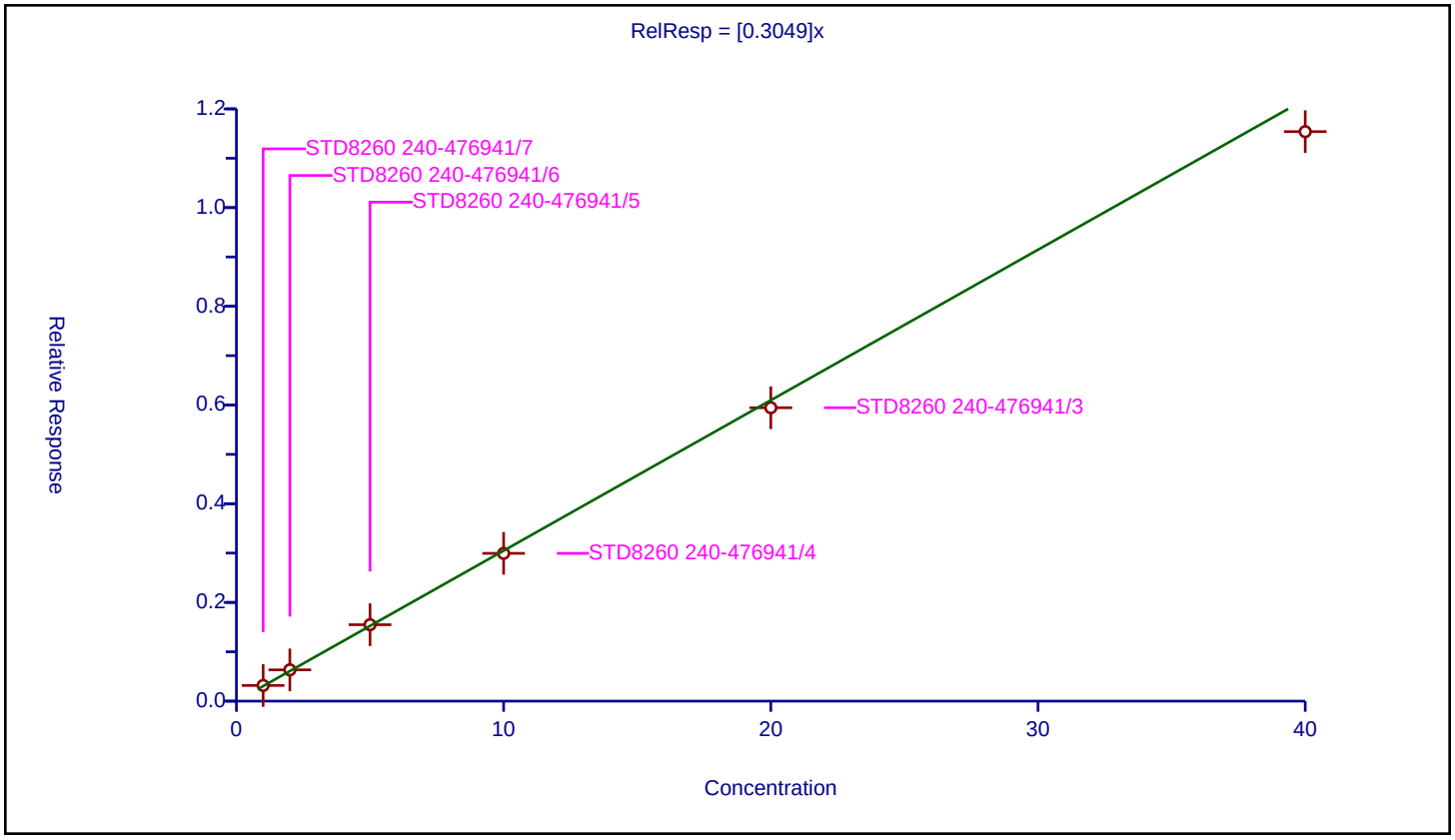
Curve Coefficients

Intercept:	0
Slope:	0.3049

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317547	10.0	1508502.0	0.317547	Y
2	STD8260 240-476941/6	2.0	0.633728	10.0	1600104.0	0.316864	Y
3	STD8260 240-476941/5	5.0	1.548303	10.0	1580769.0	0.309661	Y
4	STD8260 240-476941/4	10.0	2.994232	10.0	1635381.0	0.299423	Y
5	STD8260 240-476941/3	20.0	5.944876	10.0	1729200.0	0.297244	Y
6	STD8260 240-476941/2	40.0	11.539324	10.0	1738218.0	0.288483	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

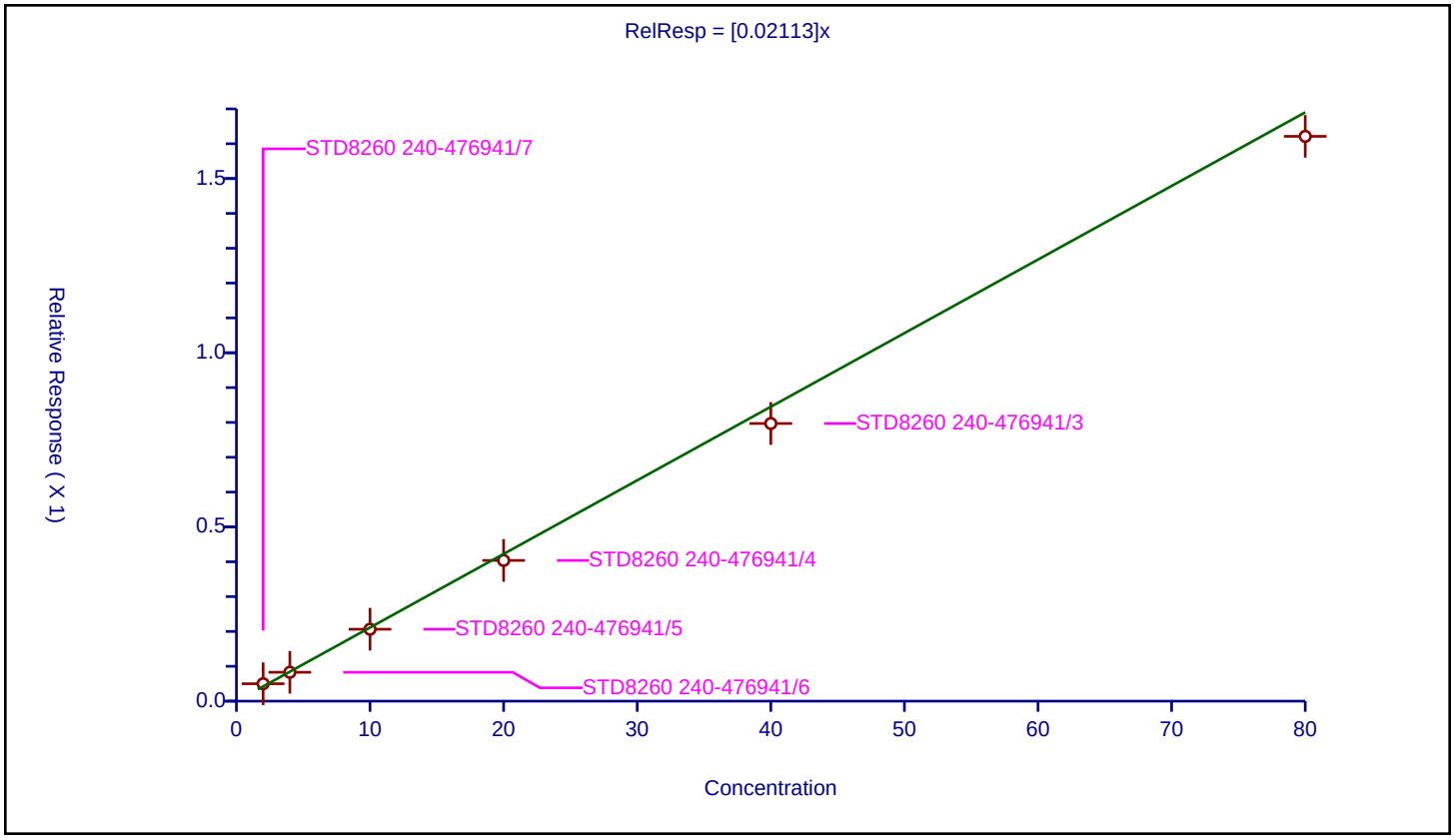
Curve Coefficients

Intercept:	0
Slope:	0.02113

Error Coefficients

Standard Error:	144000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.049983	10.0	1508502.0	0.024992	Y
2	STD8260 240-476941/6	4.0	0.08292	10.0	1600104.0	0.02073	Y
3	STD8260 240-476941/5	10.0	0.206482	10.0	1580769.0	0.020648	Y
4	STD8260 240-476941/4	20.0	0.403936	10.0	1635381.0	0.020197	Y
5	STD8260 240-476941/3	40.0	0.796947	10.0	1729200.0	0.019924	Y
6	STD8260 240-476941/2	80.0	1.621149	10.0	1738218.0	0.020264	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

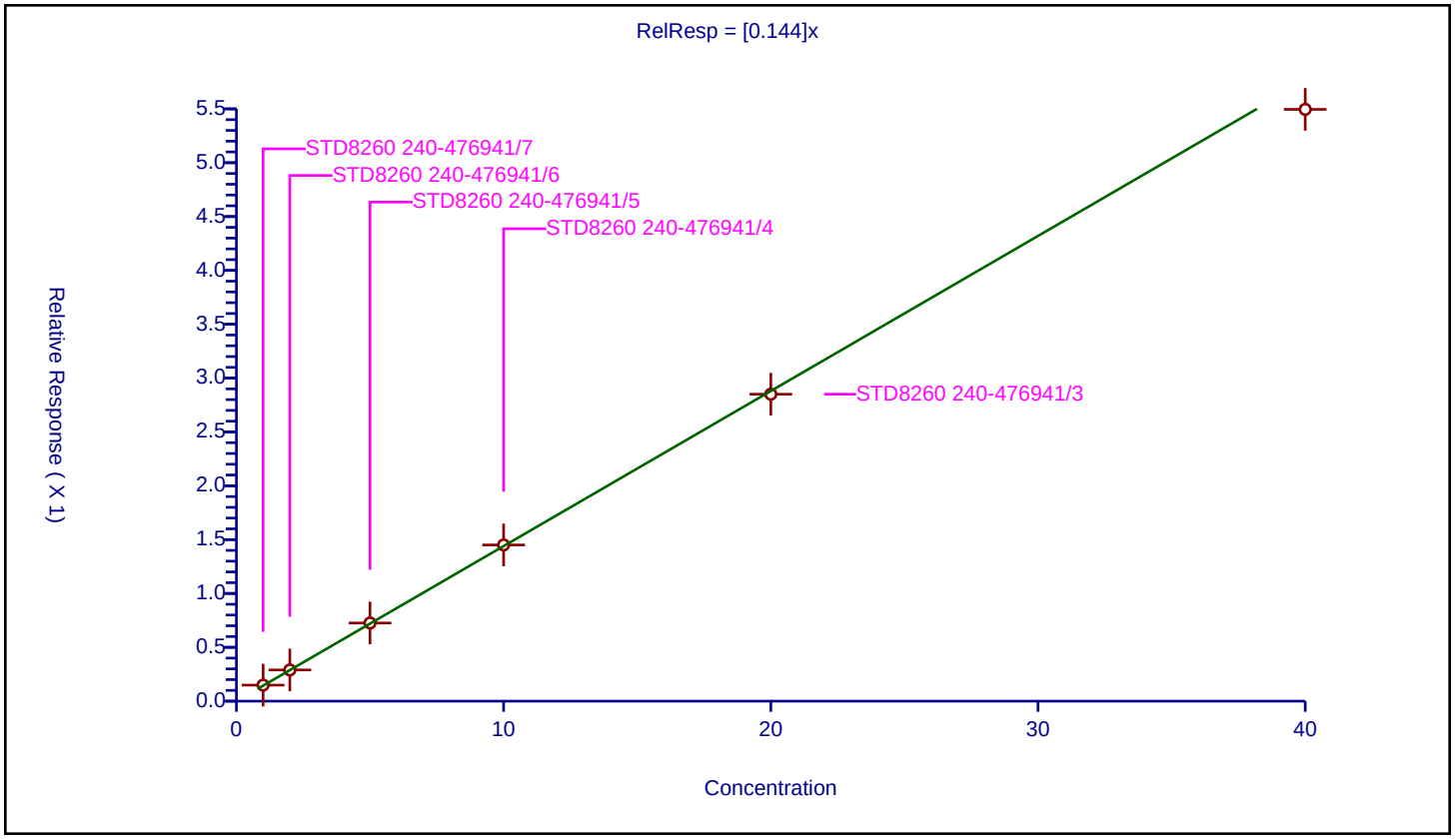
Curve Coefficients

Intercept:	0
Slope:	0.144

Error Coefficients

Standard Error:	495000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.148995	10.0	1508502.0	0.148995	Y
2	STD8260 240-476941/6	2.0	0.289706	10.0	1600104.0	0.144853	Y
3	STD8260 240-476941/5	5.0	0.725881	10.0	1580769.0	0.145176	Y
4	STD8260 240-476941/4	10.0	1.450518	10.0	1635381.0	0.145052	Y
5	STD8260 240-476941/3	20.0	2.850578	10.0	1729200.0	0.142529	Y
6	STD8260 240-476941/2	40.0	5.495398	10.0	1738218.0	0.137385	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

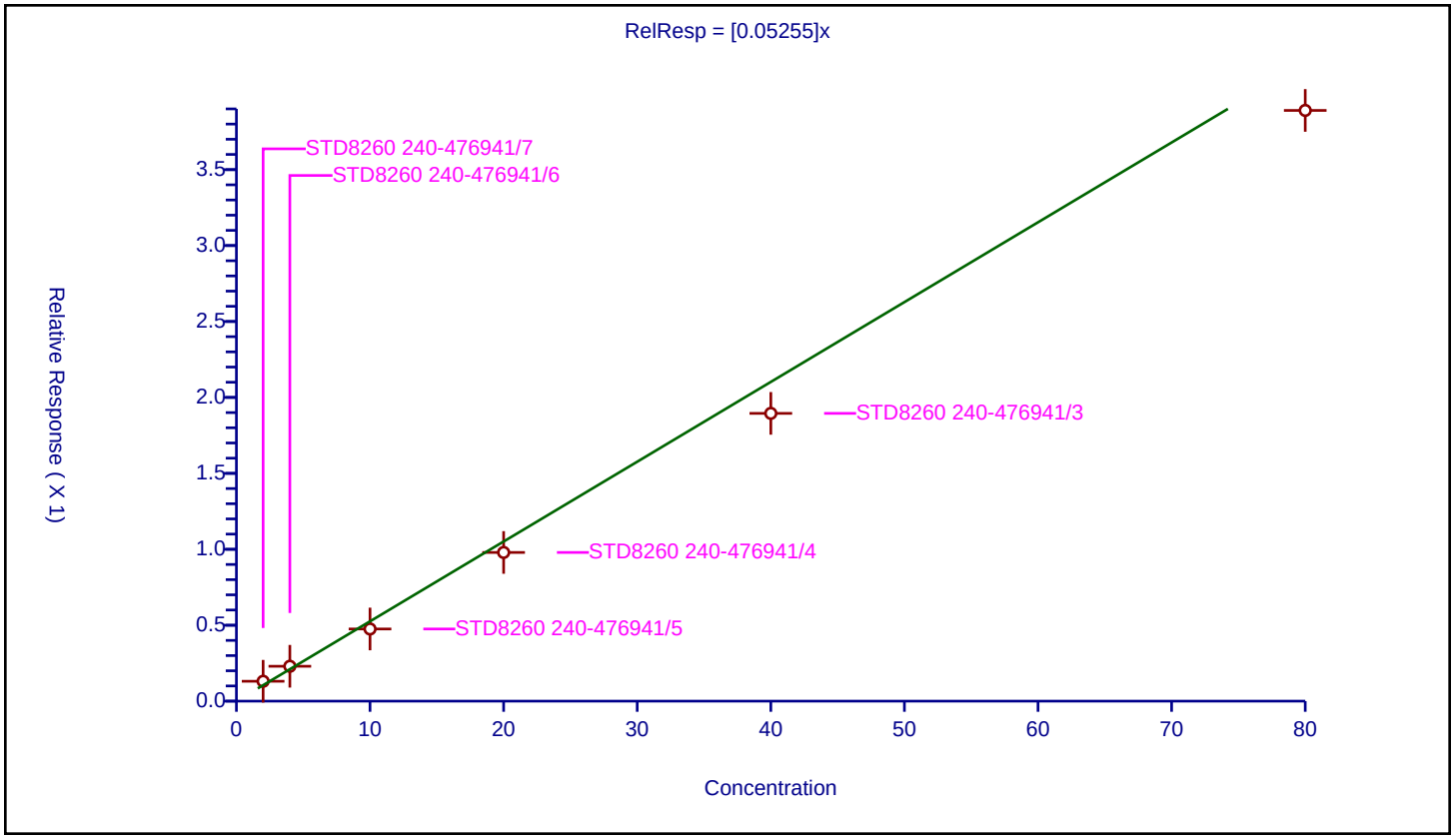
Curve Coefficients

Intercept:	0
Slope:	0.05255

Error Coefficients

Standard Error:	346000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.130845	10.0	1508502.0	0.065423	Y
2	STD8260 240-476941/6	4.0	0.229635	10.0	1600104.0	0.057409	Y
3	STD8260 240-476941/5	10.0	0.475256	10.0	1580769.0	0.047526	Y
4	STD8260 240-476941/4	20.0	0.979172	10.0	1635381.0	0.048959	Y
5	STD8260 240-476941/3	40.0	1.895009	10.0	1729200.0	0.047375	Y
6	STD8260 240-476941/2	80.0	3.88984	10.0	1738218.0	0.048623	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

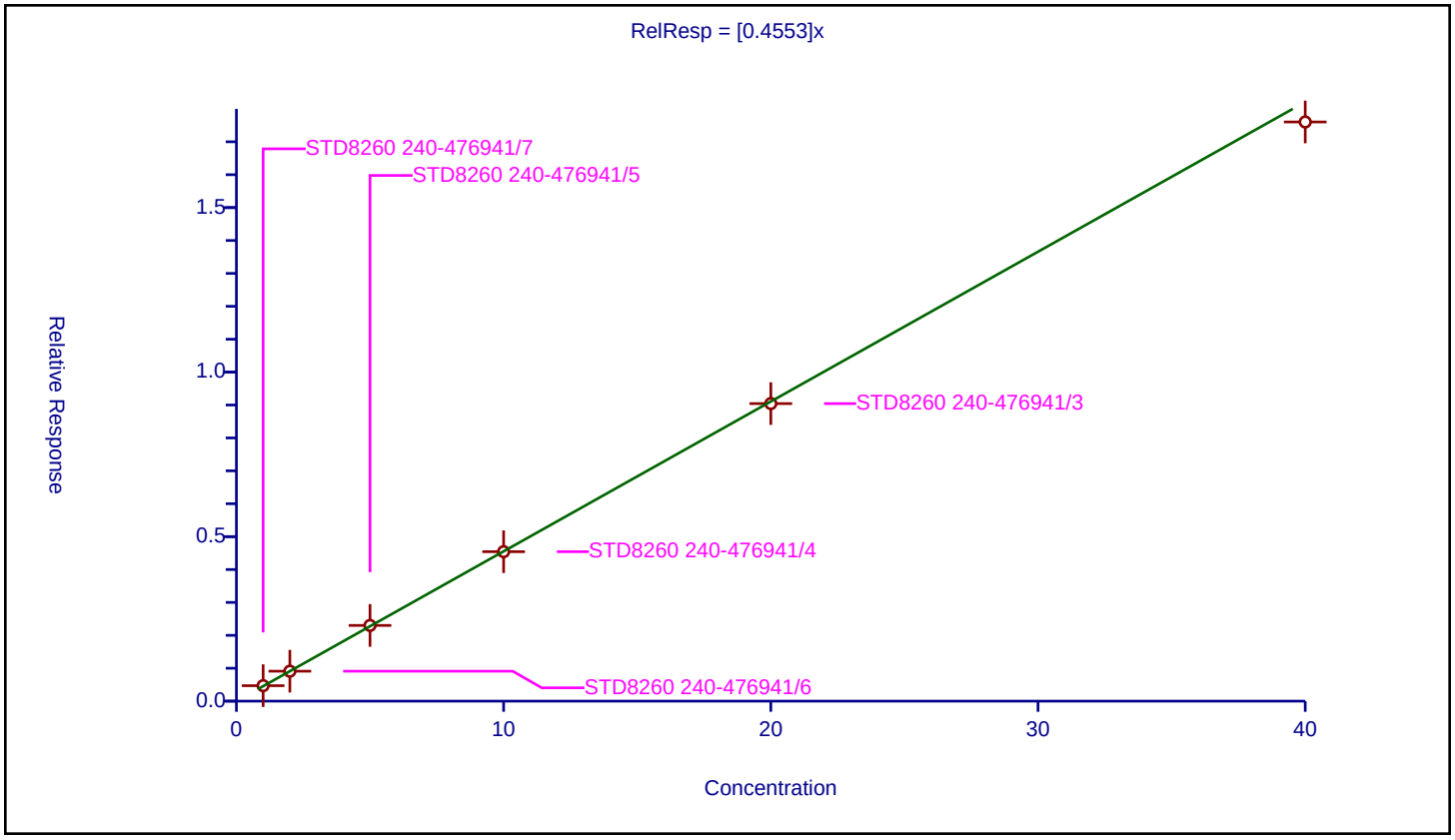
Curve Coefficients

Intercept:	0
Slope:	0.4553

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.470235	10.0	1508502.0	0.470235	Y
2	STD8260 240-476941/6	2.0	0.909872	10.0	1600104.0	0.454936	Y
3	STD8260 240-476941/5	5.0	2.300652	10.0	1580769.0	0.46013	Y
4	STD8260 240-476941/4	10.0	4.542415	10.0	1635381.0	0.454242	Y
5	STD8260 240-476941/3	20.0	9.043269	10.0	1729200.0	0.452163	Y
6	STD8260 240-476941/2	40.0	17.60289	10.0	1738218.0	0.440072	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

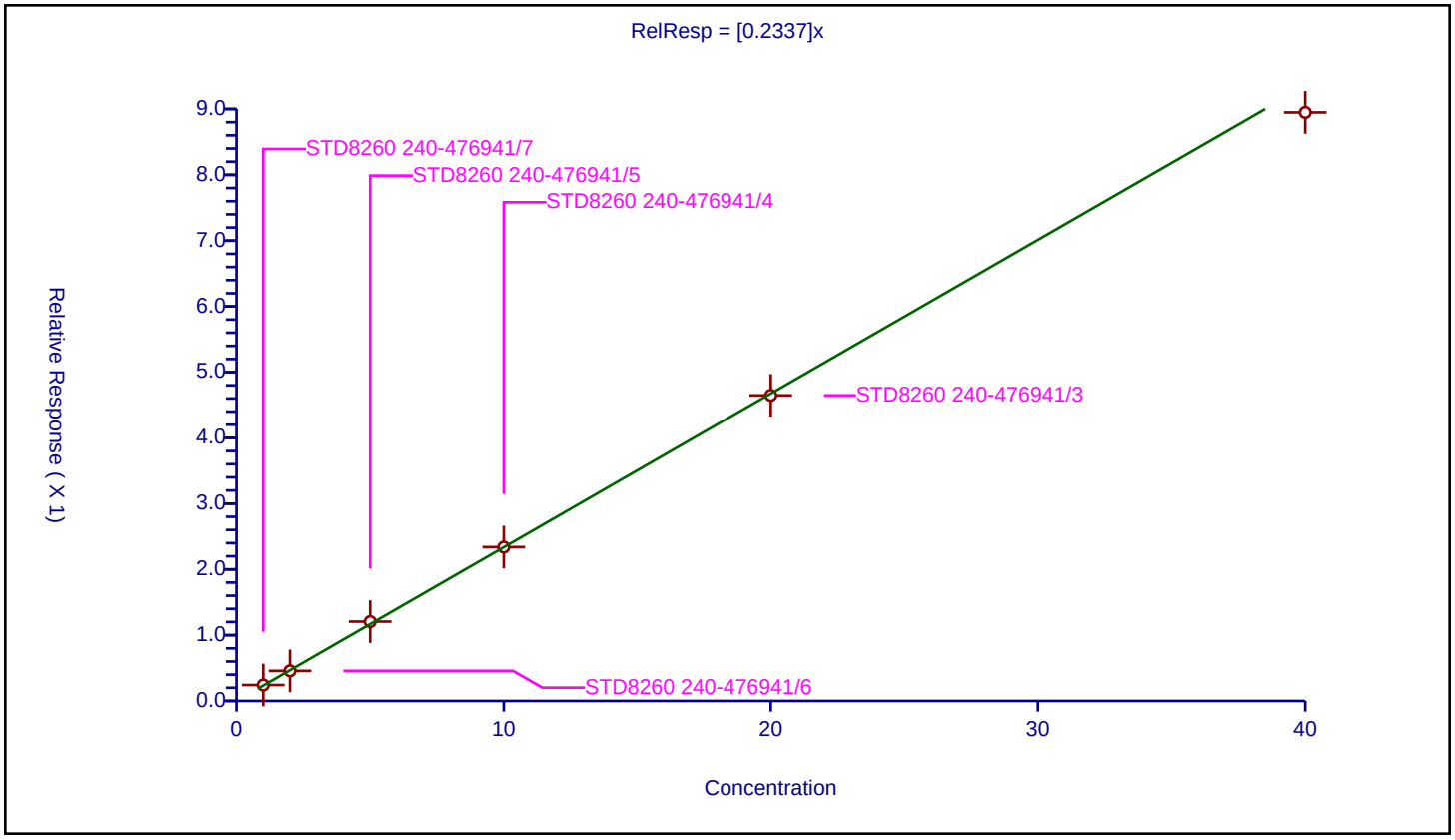
Curve Coefficients

Intercept:	0
Slope:	0.2337

Error Coefficients

Standard Error:	807000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.242134	10.0	1508502.0	0.242134	Y
2	STD8260 240-476941/6	2.0	0.45792	10.0	1600104.0	0.22896	Y
3	STD8260 240-476941/5	5.0	1.206729	10.0	1580769.0	0.241346	Y
4	STD8260 240-476941/4	10.0	2.339247	10.0	1635381.0	0.233925	Y
5	STD8260 240-476941/3	20.0	4.647265	10.0	1729200.0	0.232363	Y
6	STD8260 240-476941/2	40.0	8.947681	10.0	1738218.0	0.223692	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

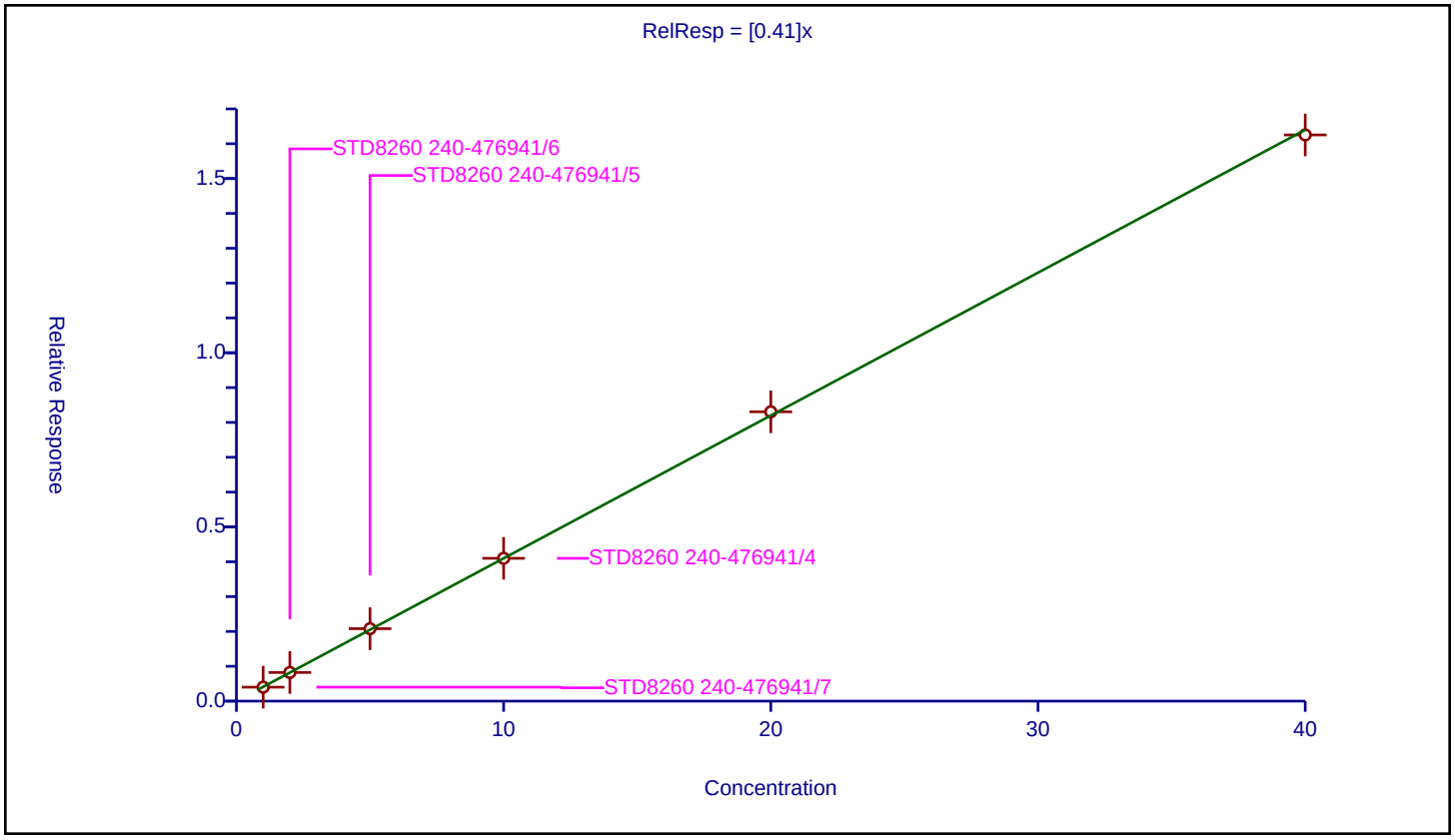
Curve Coefficients

Intercept:	0
Slope:	0.41

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.400841	10.0	1508502.0	0.400841	Y
2	STD8260 240-476941/6	2.0	0.822728	10.0	1600104.0	0.411364	Y
3	STD8260 240-476941/5	5.0	2.079741	10.0	1580769.0	0.415948	Y
4	STD8260 240-476941/4	10.0	4.099442	10.0	1635381.0	0.409944	Y
5	STD8260 240-476941/3	20.0	8.305795	10.0	1729200.0	0.41529	Y
6	STD8260 240-476941/2	40.0	16.252622	10.0	1738218.0	0.406316	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

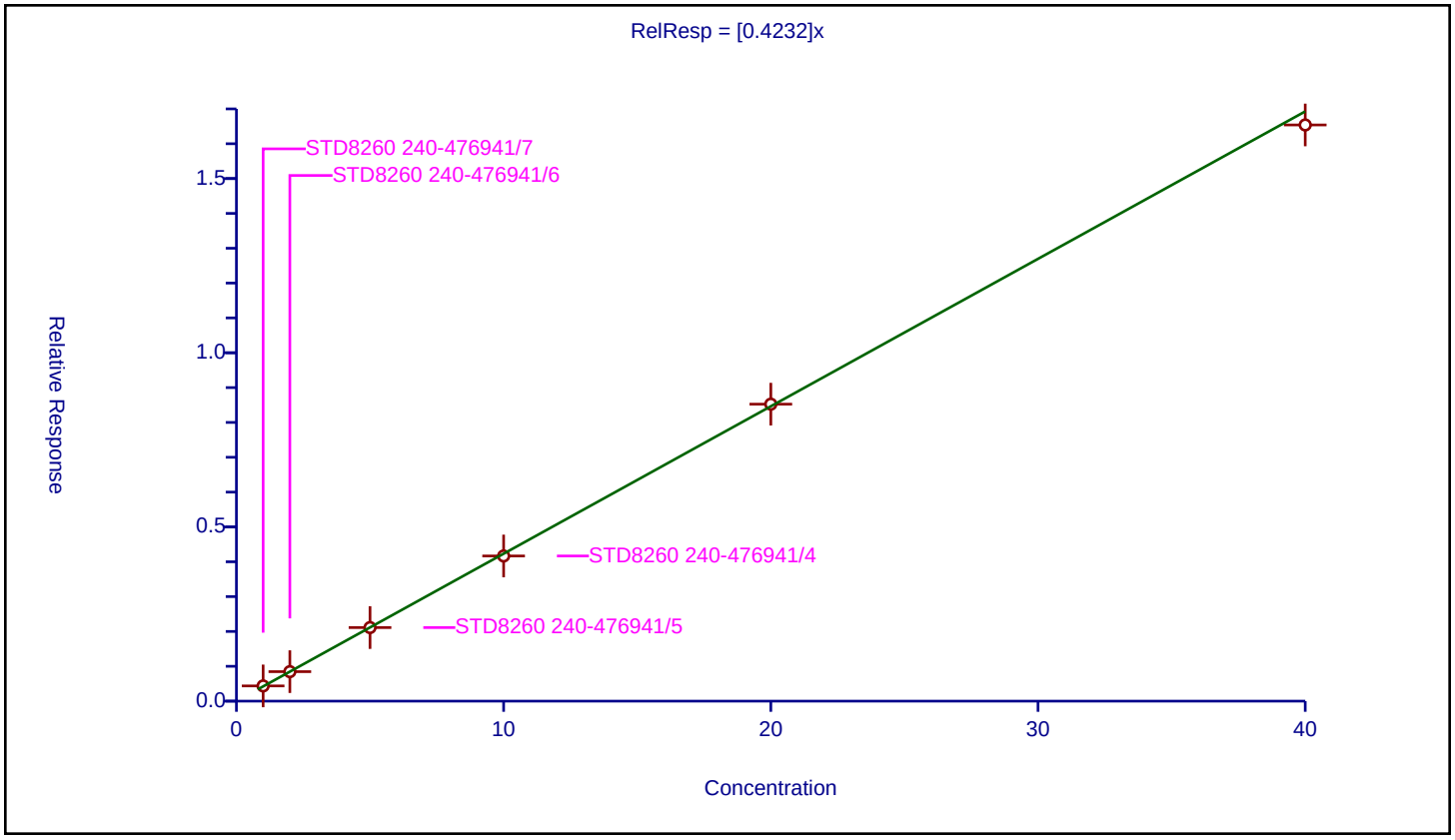
Curve Coefficients

Intercept:	0
Slope:	0.4232

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.436977	10.0	1508502.0	0.436977	Y
2	STD8260 240-476941/6	2.0	0.846601	10.0	1600104.0	0.423301	Y
3	STD8260 240-476941/5	5.0	2.111675	10.0	1580769.0	0.422335	Y
4	STD8260 240-476941/4	10.0	4.167163	10.0	1635381.0	0.416716	Y
5	STD8260 240-476941/3	20.0	8.524879	10.0	1729200.0	0.426244	Y
6	STD8260 240-476941/2	40.0	16.538622	10.0	1738218.0	0.413466	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

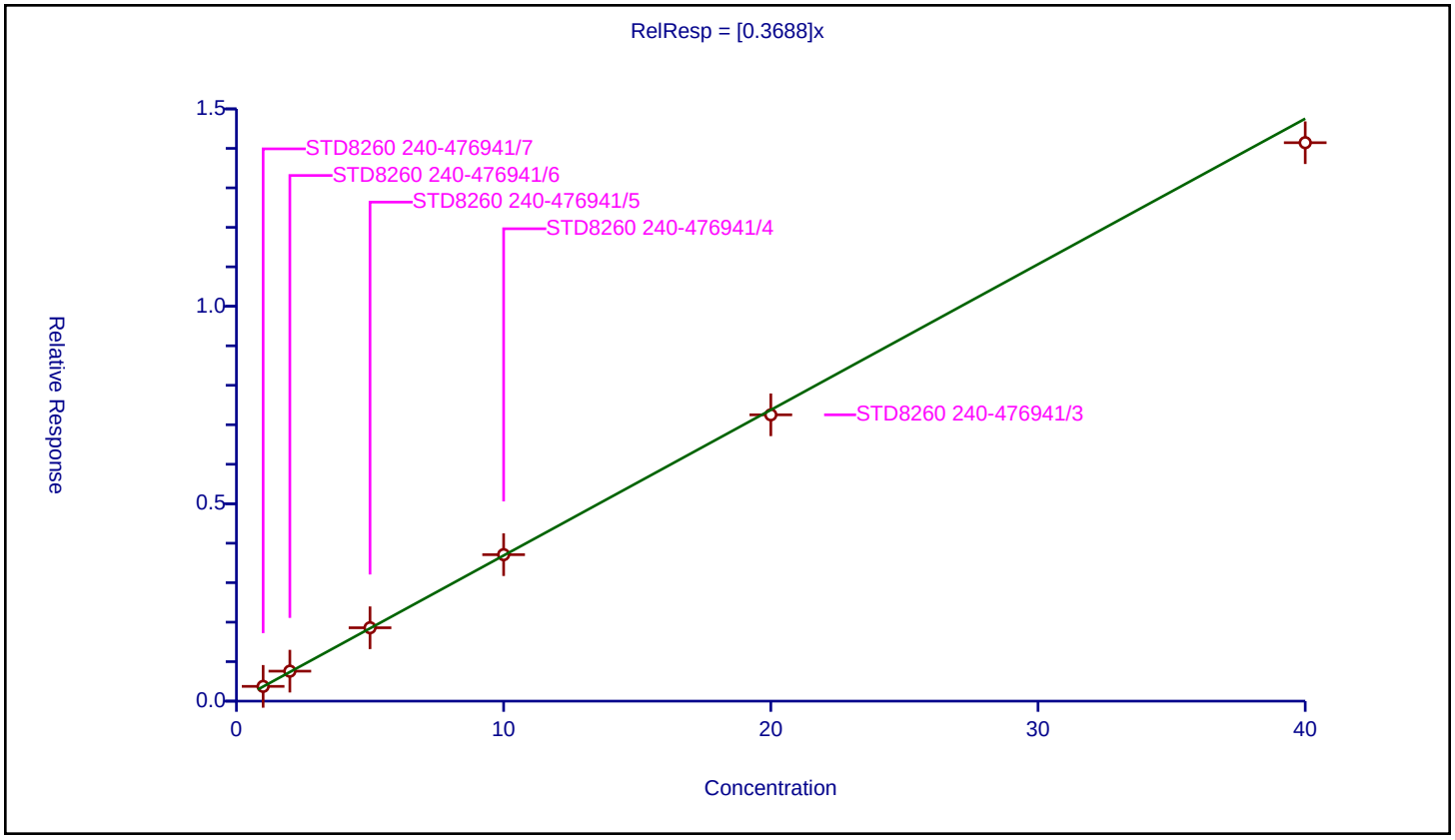
Curve Coefficients

Intercept:	0
Slope:	0.3688

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.374338	10.0	1508502.0	0.374338	Y
2	STD8260 240-476941/6	2.0	0.758994	10.0	1600104.0	0.379497	Y
3	STD8260 240-476941/5	5.0	1.858994	10.0	1580769.0	0.371799	Y
4	STD8260 240-476941/4	10.0	3.710108	10.0	1635381.0	0.371011	Y
5	STD8260 240-476941/3	20.0	7.251758	10.0	1729200.0	0.362588	Y
6	STD8260 240-476941/2	40.0	14.144141	10.0	1738218.0	0.353604	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

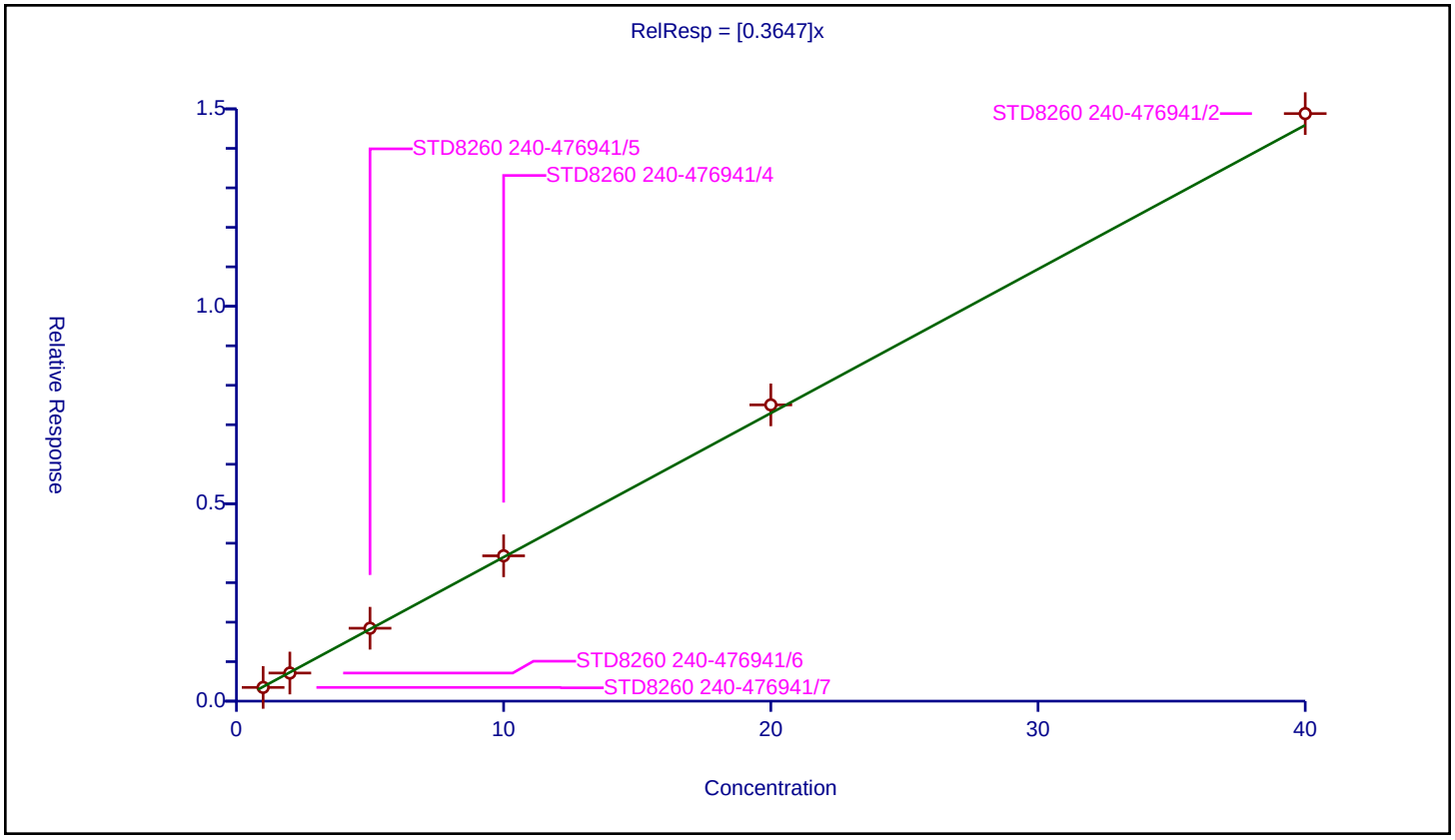
Curve Coefficients

Intercept:	0
Slope:	0.3647

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.347736	10.0	1508502.0	0.347736	Y
2	STD8260 240-476941/6	2.0	0.711754	10.0	1600104.0	0.355877	Y
3	STD8260 240-476941/5	5.0	1.846582	10.0	1580769.0	0.369316	Y
4	STD8260 240-476941/4	10.0	3.681032	10.0	1635381.0	0.368103	Y
5	STD8260 240-476941/3	20.0	7.503851	10.0	1729200.0	0.375193	Y
6	STD8260 240-476941/2	40.0	14.880573	10.0	1738218.0	0.372014	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

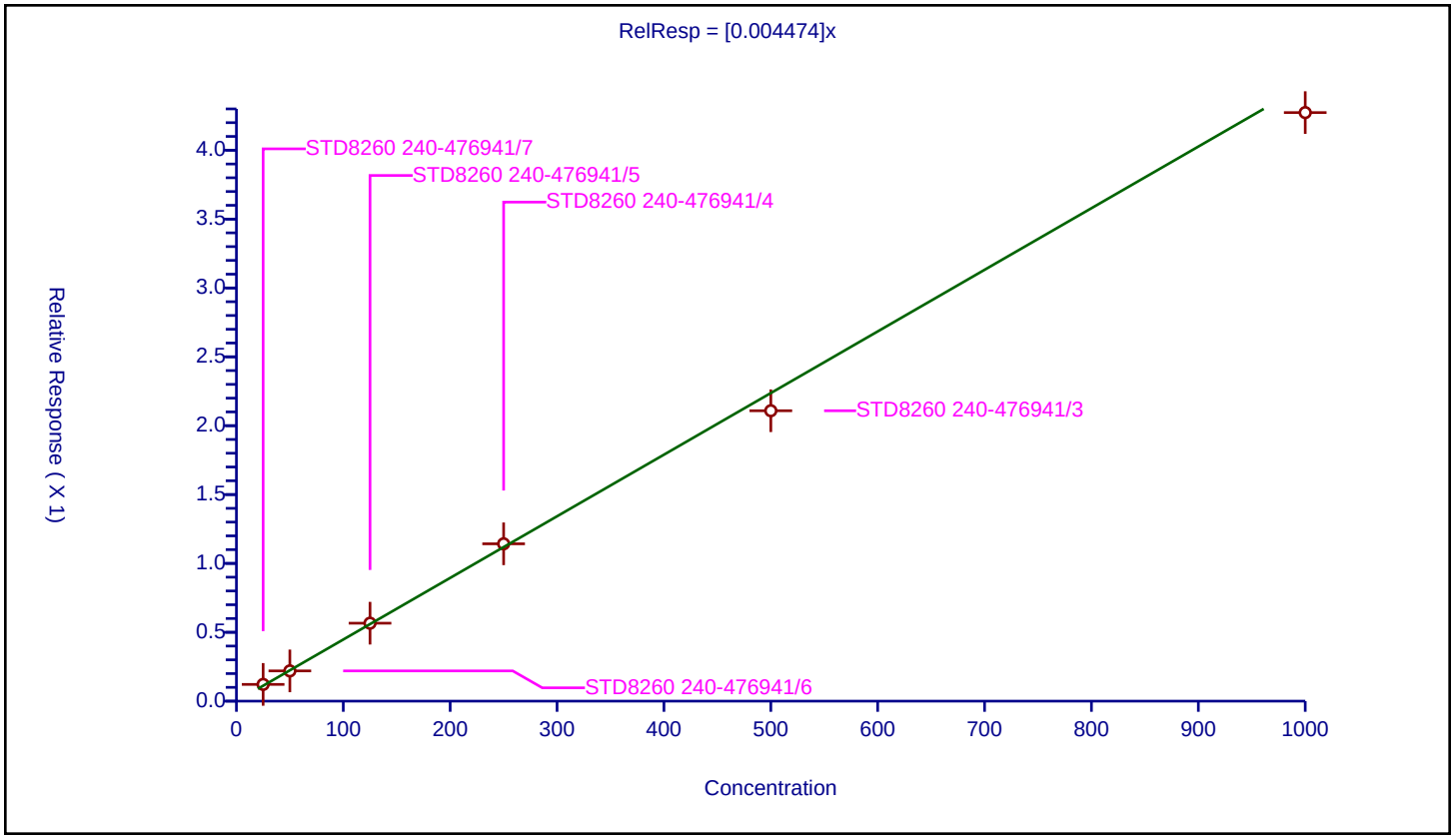
Curve Coefficients

Intercept:	0
Slope:	0.004474

Error Coefficients

Standard Error:	382000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	25.0	0.121584	10.0	1508502.0	0.004863	Y
2	STD8260 240-476941/6	50.0	0.219592	10.0	1600104.0	0.004392	Y
3	STD8260 240-476941/5	125.0	0.565984	10.0	1580769.0	0.004528	Y
4	STD8260 240-476941/4	250.0	1.142309	10.0	1635381.0	0.004569	Y
5	STD8260 240-476941/3	500.0	2.108426	10.0	1729200.0	0.004217	Y
6	STD8260 240-476941/2	1000.0	4.273123	10.0	1738218.0	0.004273	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

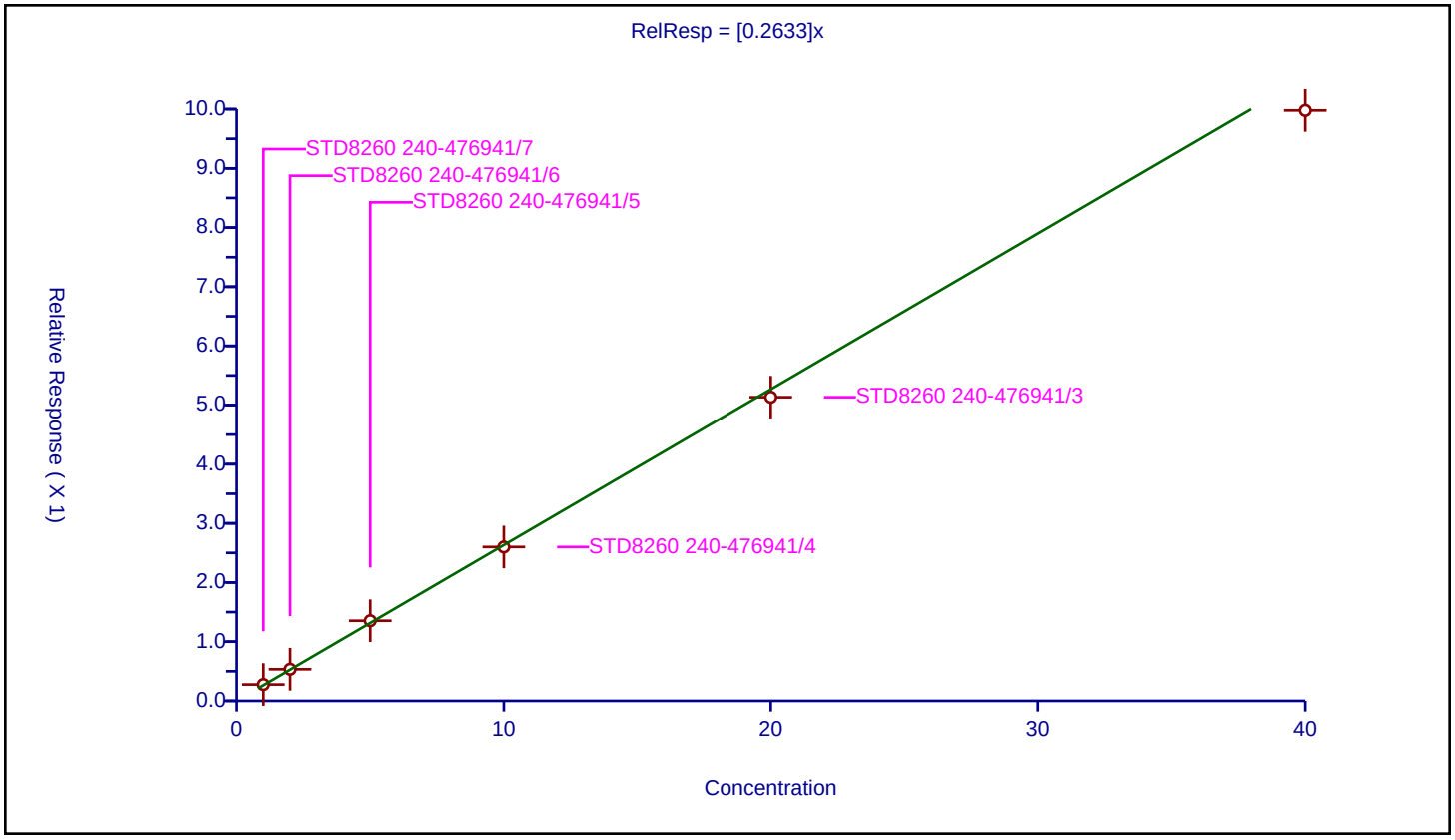
Curve Coefficients

Intercept:	0
Slope:	0.2633

Error Coefficients

Standard Error:	898000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275989	10.0	1508502.0	0.275989	Y
2	STD8260 240-476941/6	2.0	0.533928	10.0	1600104.0	0.266964	Y
3	STD8260 240-476941/5	5.0	1.354075	10.0	1580769.0	0.270815	Y
4	STD8260 240-476941/4	10.0	2.600244	10.0	1635381.0	0.260024	Y
5	STD8260 240-476941/3	20.0	5.132691	10.0	1729200.0	0.256635	Y
6	STD8260 240-476941/2	40.0	9.978616	10.0	1738218.0	0.249465	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

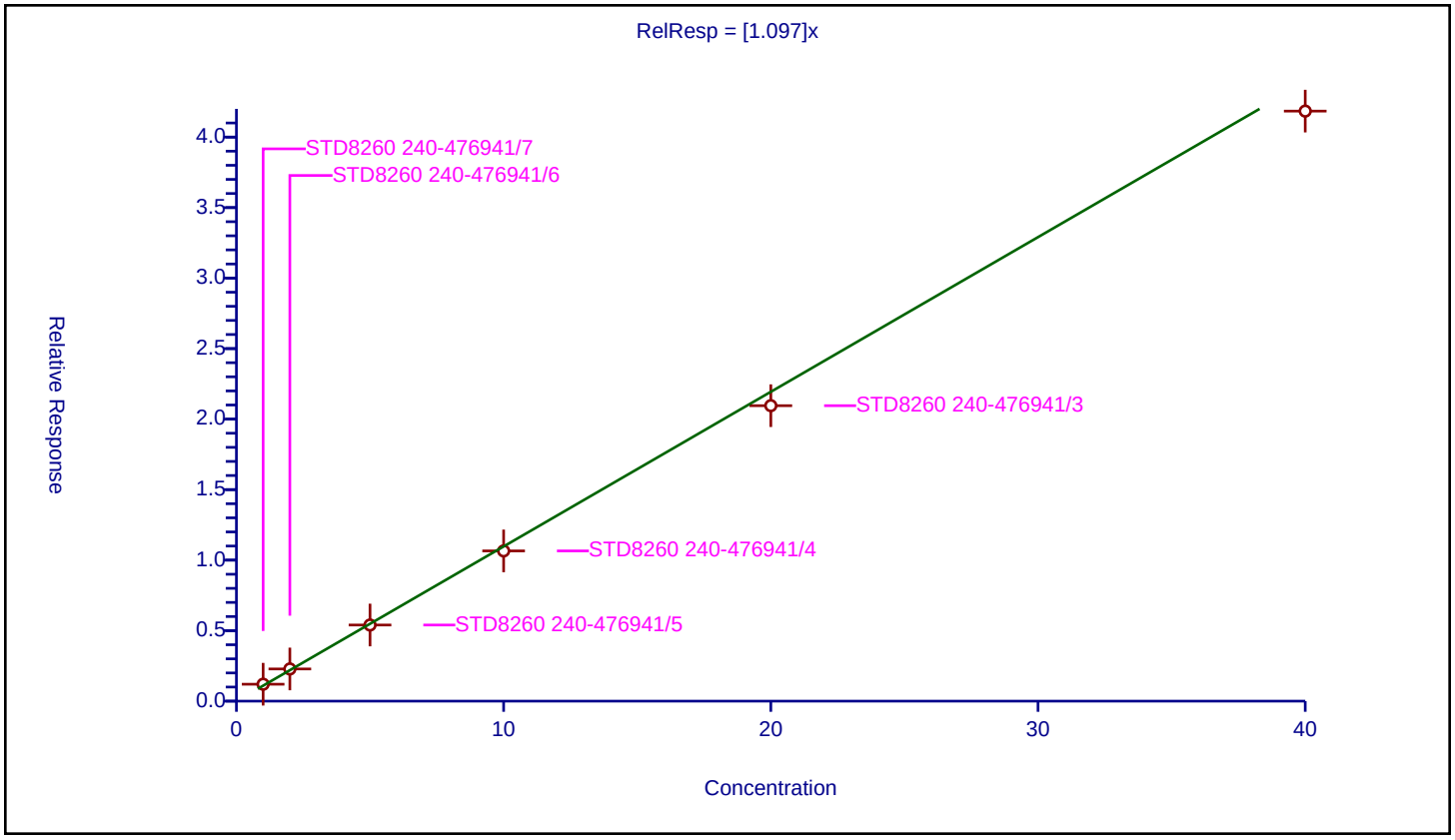
Curve Coefficients

Intercept:	0
Slope:	1.097

Error Coefficients

Standard Error:	3740000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.201026	10.0	1508502.0	1.201026	Y
2	STD8260 240-476941/6	2.0	2.282239	10.0	1600104.0	1.14112	Y
3	STD8260 240-476941/5	5.0	5.398936	10.0	1580769.0	1.079787	Y
4	STD8260 240-476941/4	10.0	10.652778	10.0	1635381.0	1.065278	Y
5	STD8260 240-476941/3	20.0	20.953747	10.0	1729200.0	1.047687	Y
6	STD8260 240-476941/2	40.0	41.843946	10.0	1738218.0	1.046099	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

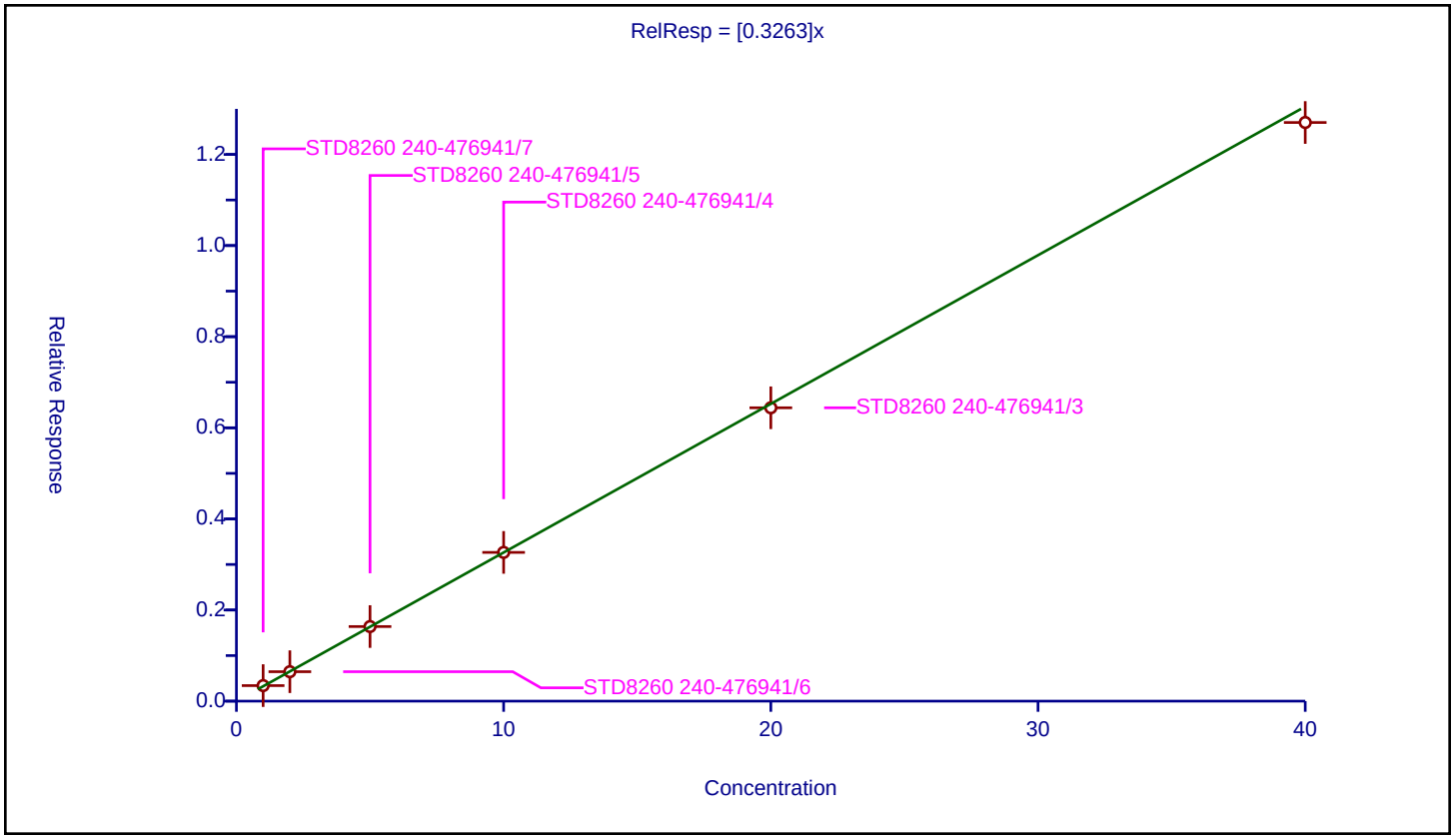
Curve Coefficients

Intercept:	0
Slope:	0.3263

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.341087	10.0	1508502.0	0.341087	Y
2	STD8260 240-476941/6	2.0	0.646289	10.0	1600104.0	0.323145	Y
3	STD8260 240-476941/5	5.0	1.637178	10.0	1580769.0	0.327436	Y
4	STD8260 240-476941/4	10.0	3.264542	10.0	1635381.0	0.326454	Y
5	STD8260 240-476941/3	20.0	6.439596	10.0	1729200.0	0.32198	Y
6	STD8260 240-476941/2	40.0	12.701163	10.0	1738218.0	0.317529	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

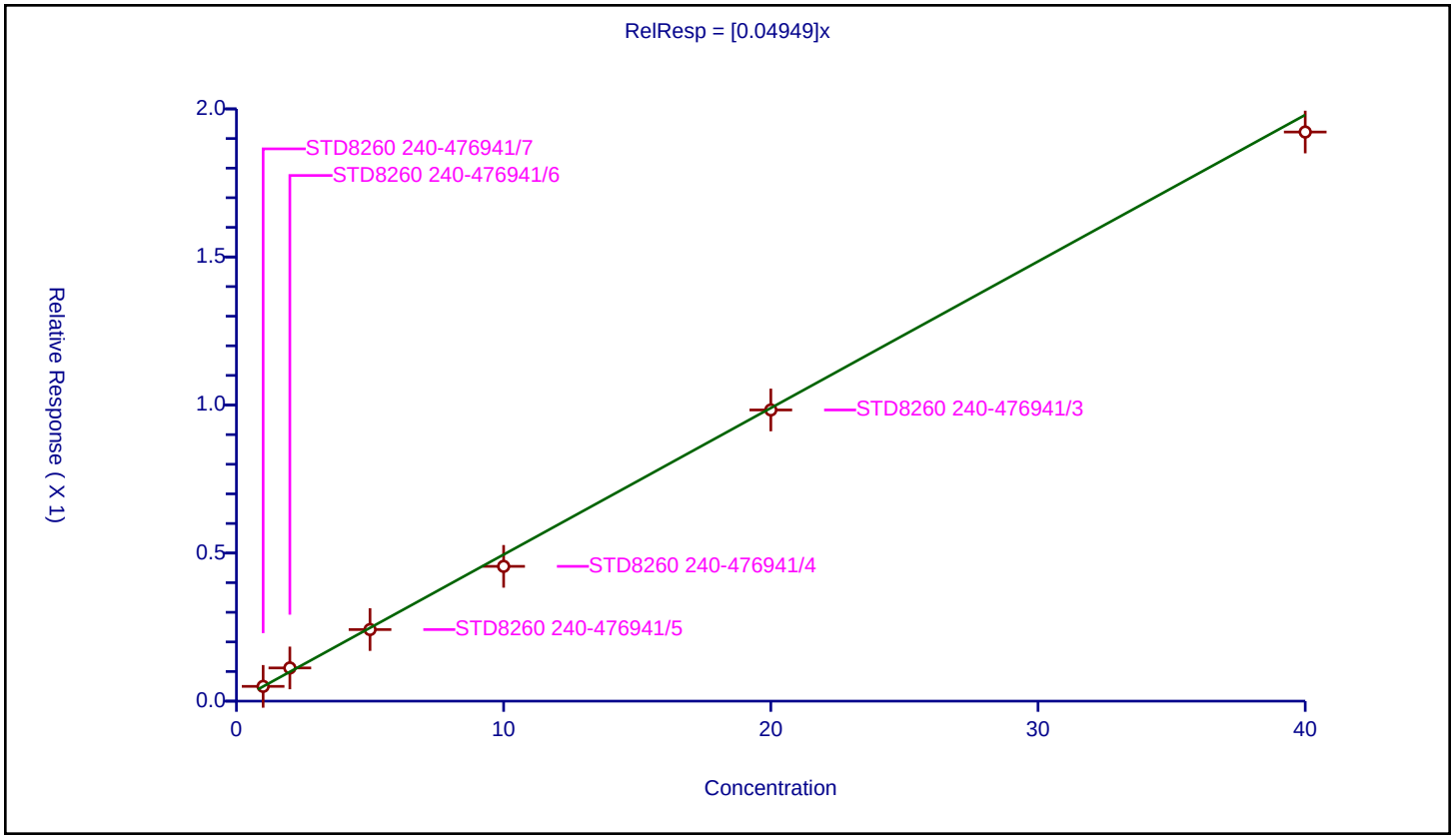
Curve Coefficients

Intercept:	0
Slope:	0.04949

Error Coefficients

Standard Error:	172000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.049838	10.0	1508502.0	0.049838	Y
2	STD8260 240-476941/6	2.0	0.11208	10.0	1600104.0	0.05604	Y
3	STD8260 240-476941/5	5.0	0.241705	10.0	1580769.0	0.048341	Y
4	STD8260 240-476941/4	10.0	0.455191	10.0	1635381.0	0.045519	Y
5	STD8260 240-476941/3	20.0	0.98331	10.0	1729200.0	0.049166	Y
6	STD8260 240-476941/2	40.0	1.921888	10.0	1738218.0	0.048047	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

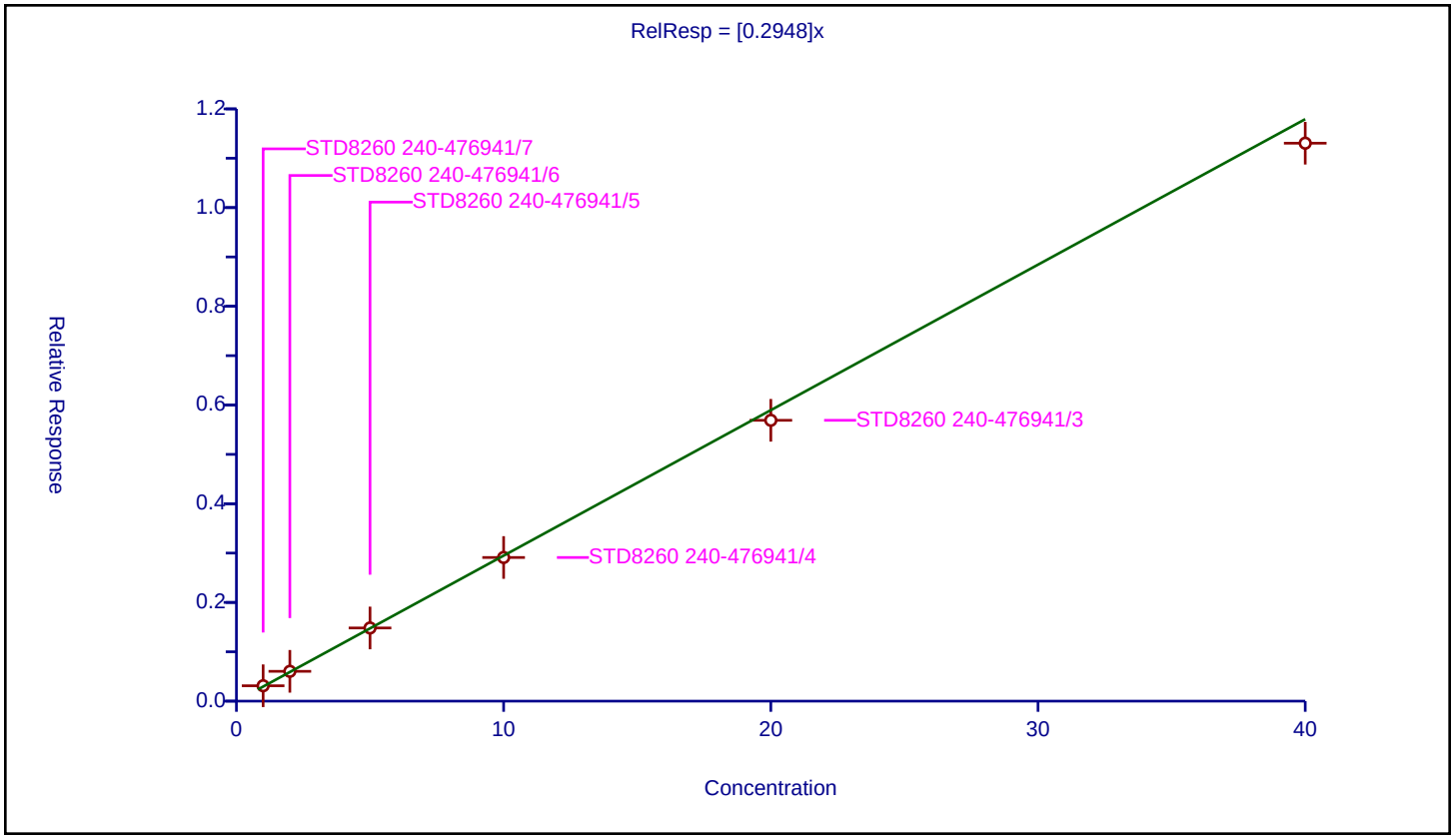
Curve Coefficients

Intercept:	0
Slope:	0.2948

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.311819	10.0	1508502.0	0.311819	Y
2	STD8260 240-476941/6	2.0	0.604273	10.0	1600104.0	0.302137	Y
3	STD8260 240-476941/5	5.0	1.482911	10.0	1580769.0	0.296582	Y
4	STD8260 240-476941/4	10.0	2.910765	10.0	1635381.0	0.291077	Y
5	STD8260 240-476941/3	20.0	5.690163	10.0	1729200.0	0.284508	Y
6	STD8260 240-476941/2	40.0	11.304664	10.0	1738218.0	0.282617	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

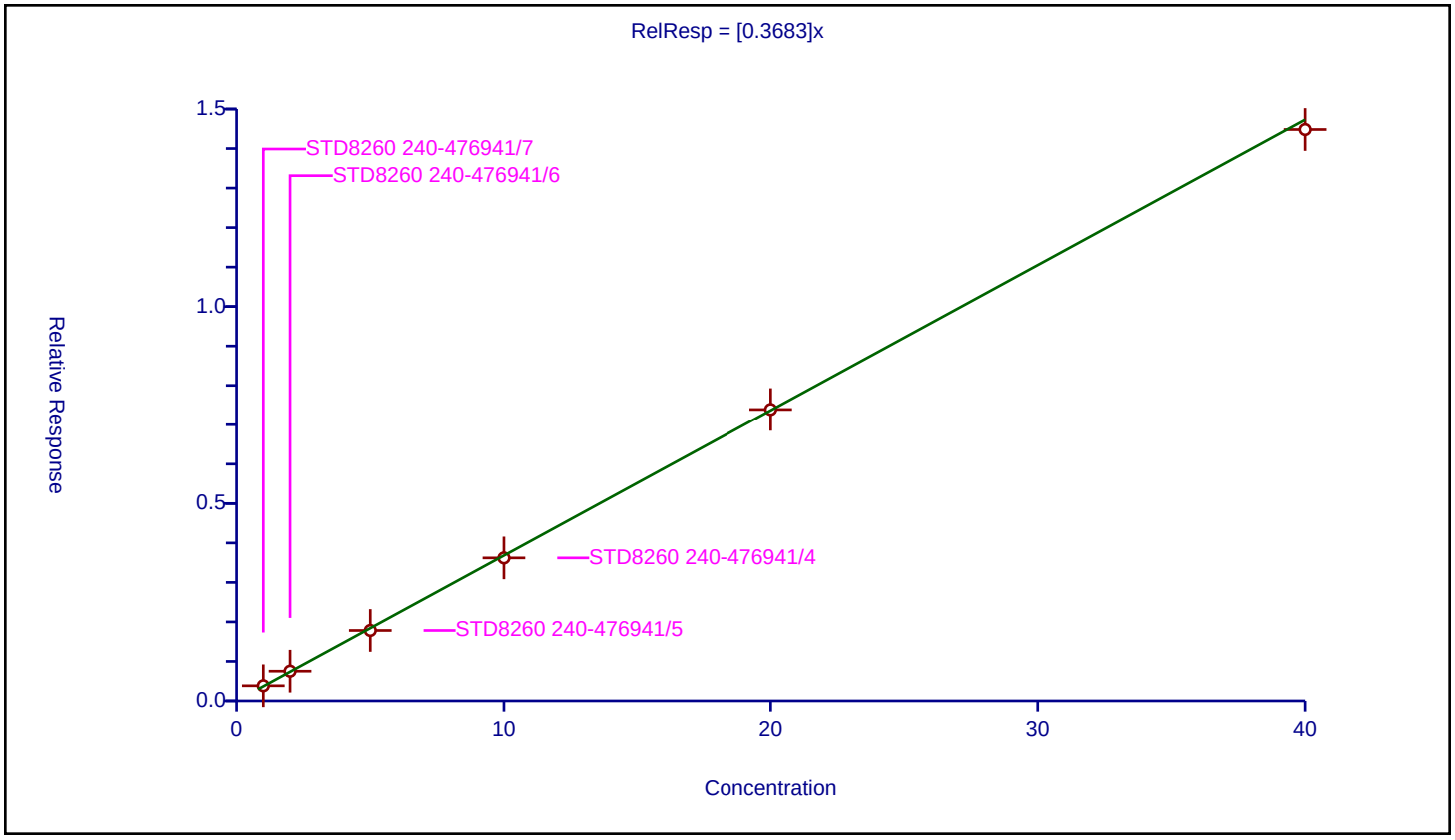
Curve Coefficients

Intercept:	0
Slope:	0.3683

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.383321	10.0	1508502.0	0.383321	Y
2	STD8260 240-476941/6	2.0	0.752382	10.0	1600104.0	0.376191	Y
3	STD8260 240-476941/5	5.0	1.782917	10.0	1580769.0	0.356583	Y
4	STD8260 240-476941/4	10.0	3.621089	10.0	1635381.0	0.362109	Y
5	STD8260 240-476941/3	20.0	7.388446	10.0	1729200.0	0.369422	Y
6	STD8260 240-476941/2	40.0	14.481906	10.0	1738218.0	0.362048	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

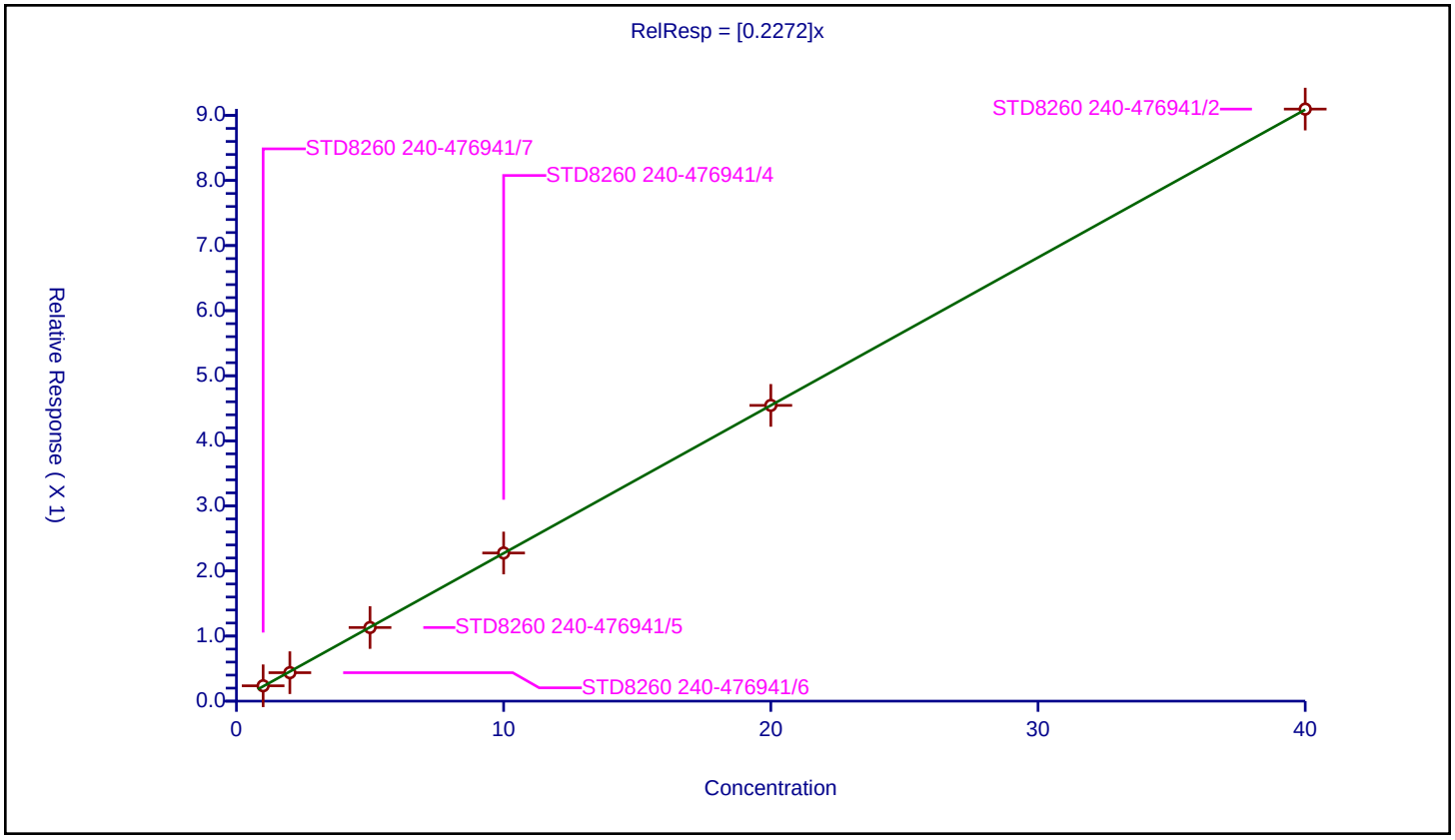
Curve Coefficients

Intercept:	0
Slope:	0.2272

Error Coefficients

Standard Error:	812000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.236049	10.0	1508502.0	0.236049	Y
2	STD8260 240-476941/6	2.0	0.43734	10.0	1600104.0	0.21867	Y
3	STD8260 240-476941/5	5.0	1.131405	10.0	1580769.0	0.226281	Y
4	STD8260 240-476941/4	10.0	2.276411	10.0	1635381.0	0.227641	Y
5	STD8260 240-476941/3	20.0	4.544419	10.0	1729200.0	0.227221	Y
6	STD8260 240-476941/2	40.0	9.097121	10.0	1738218.0	0.227428	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

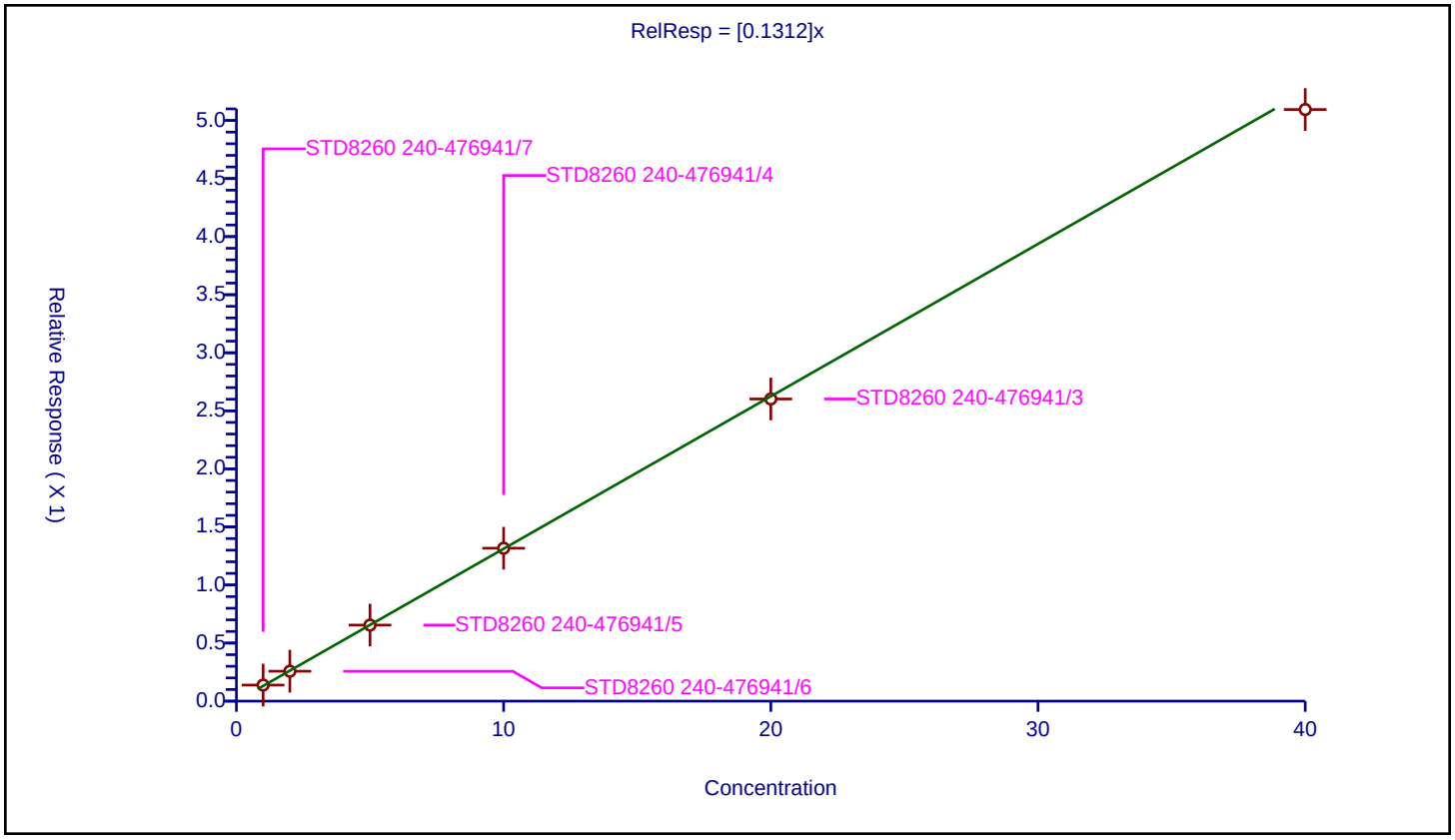
Curve Coefficients

Intercept:	0
Slope:	0.1312

Error Coefficients

Standard Error:	457000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.138382	10.0	1508502.0	0.138382	Y
2	STD8260 240-476941/6	2.0	0.257752	10.0	1600104.0	0.128876	Y
3	STD8260 240-476941/5	5.0	0.654998	10.0	1580769.0	0.131	Y
4	STD8260 240-476941/4	10.0	1.316727	10.0	1635381.0	0.131673	Y
5	STD8260 240-476941/3	20.0	2.602001	10.0	1729200.0	0.1301	Y
6	STD8260 240-476941/2	40.0	5.094419	10.0	1738218.0	0.12736	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

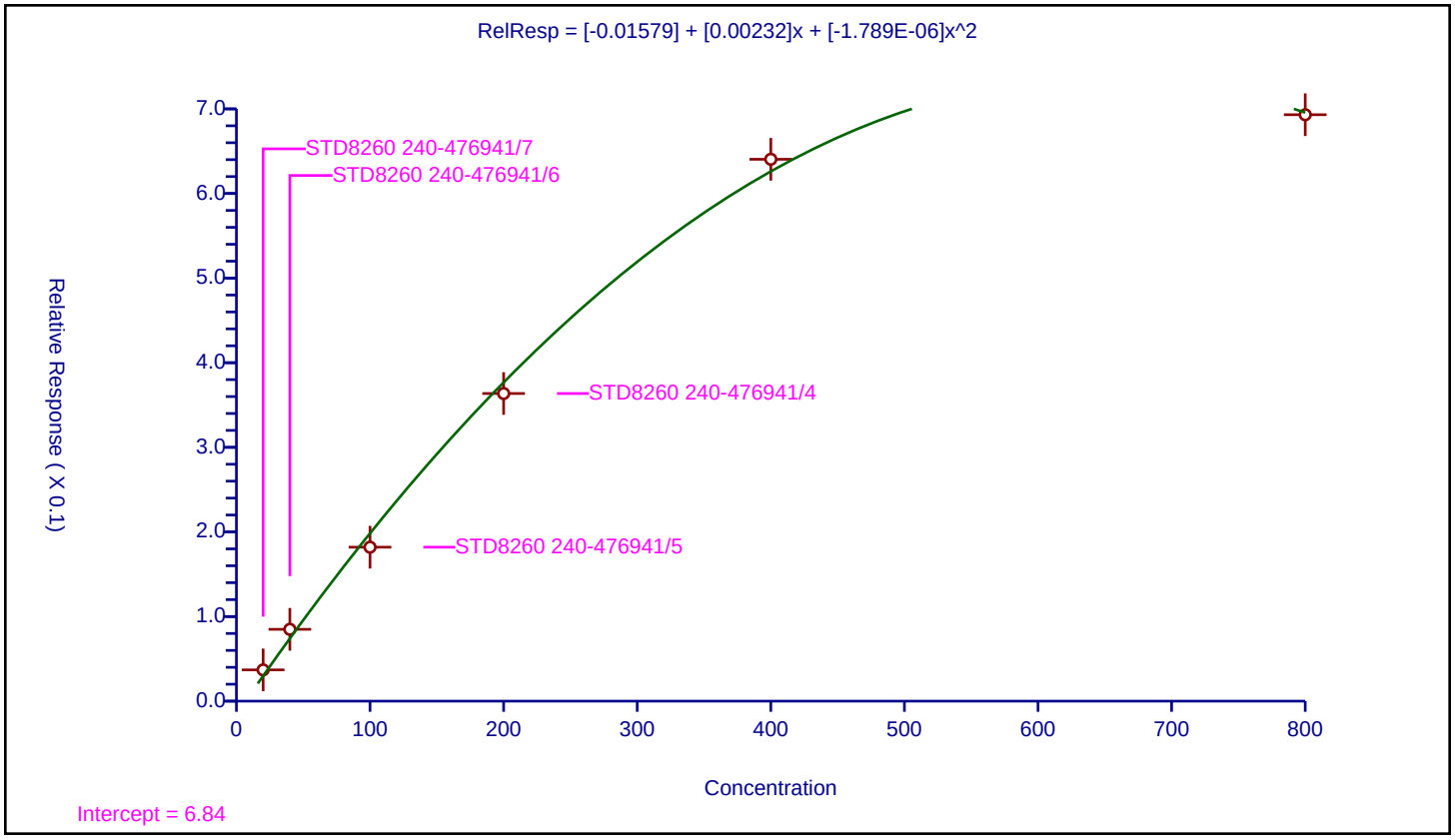
Curve Coefficients

Intercept:	-0.01579
Slope:	0.00232
Second Order:	-1.789E-06

Error Coefficients

Standard Error:	102000
Relative Standard Error:	25.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	20.0	0.036951	10.0	1508502.0	0.001848	Y
2	STD8260 240-476941/6	40.0	0.084882	10.0	1600104.0	0.002122	Y
3	STD8260 240-476941/5	100.0	0.181962	10.0	1580769.0	0.00182	Y
4	STD8260 240-476941/4	200.0	0.363603	10.0	1635381.0	0.001818	Y
5	STD8260 240-476941/3	400.0	0.640452	10.0	1729200.0	0.001601	Y
6	STD8260 240-476941/2	800.0	0.693095	10.0	1738218.0	0.000866	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

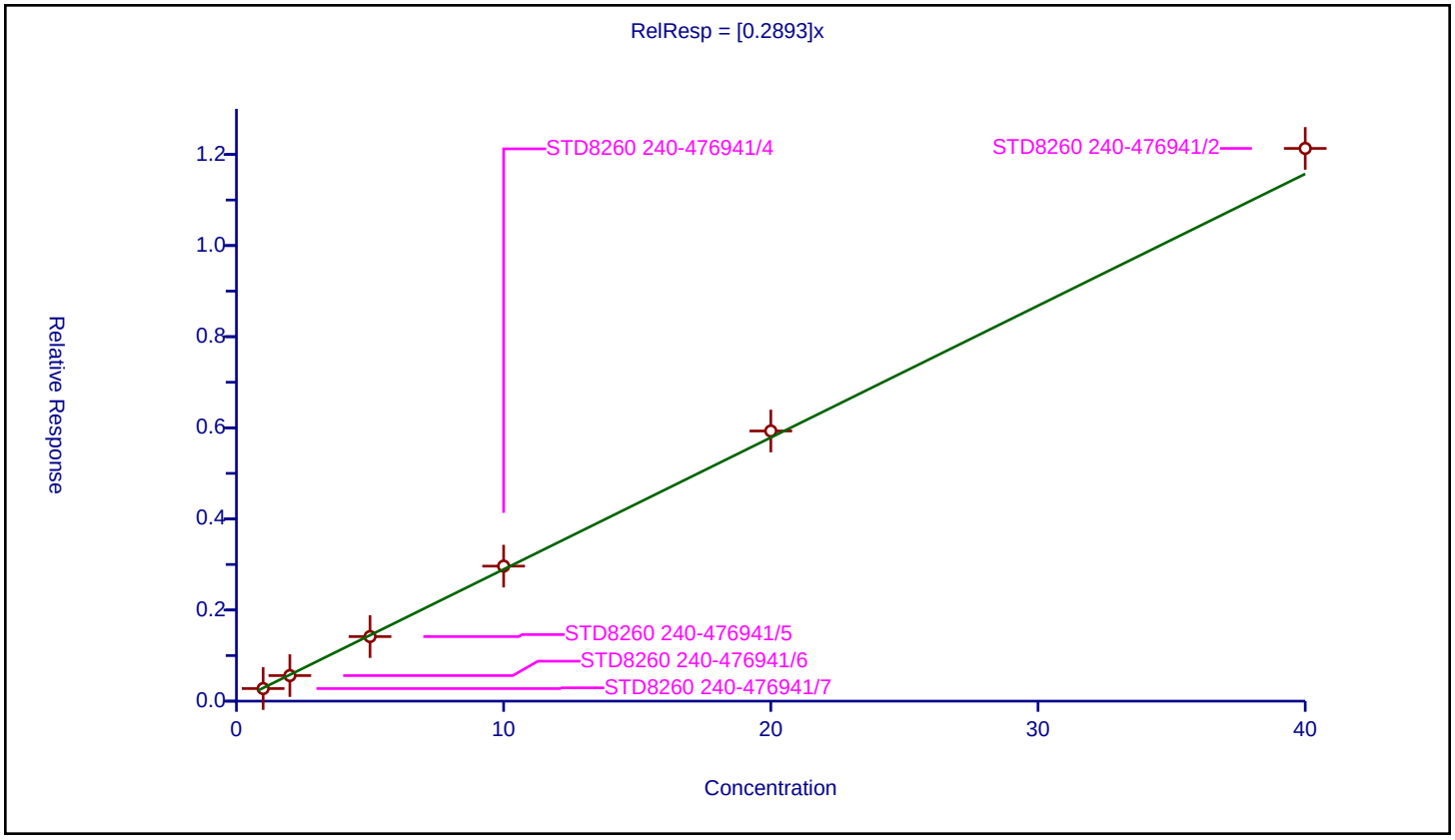
Curve Coefficients

Intercept:	0
Slope:	0.2893

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275943	10.0	1508502.0	0.275943	Y
2	STD8260 240-476941/6	2.0	0.560701	10.0	1600104.0	0.280351	Y
3	STD8260 240-476941/5	5.0	1.417076	10.0	1580769.0	0.283415	Y
4	STD8260 240-476941/4	10.0	2.96386	10.0	1635381.0	0.296386	Y
5	STD8260 240-476941/3	20.0	5.930344	10.0	1729200.0	0.296517	Y
6	STD8260 240-476941/2	40.0	12.132178	10.0	1738218.0	0.303304	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

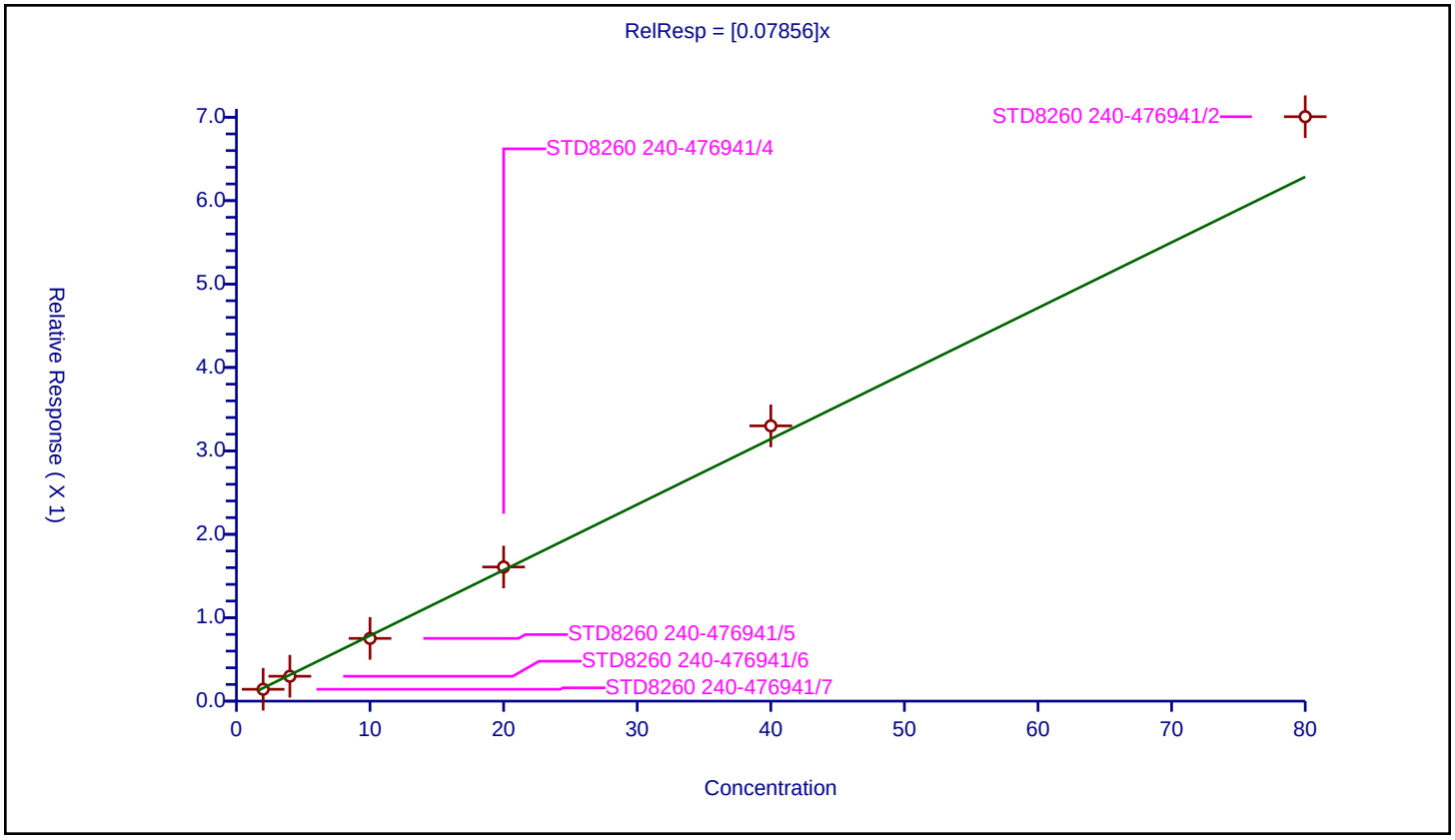
Curve Coefficients

Intercept:	0
Slope:	0.07856

Error Coefficients

Standard Error:	616000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.142141	10.0	1508502.0	0.071071	Y
2	STD8260 240-476941/6	4.0	0.298418	10.0	1600104.0	0.074605	Y
3	STD8260 240-476941/5	10.0	0.752172	10.0	1580769.0	0.075217	Y
4	STD8260 240-476941/4	20.0	1.608188	10.0	1635381.0	0.080409	Y
5	STD8260 240-476941/3	40.0	3.3	10.0	1729200.0	0.0825	Y
6	STD8260 240-476941/2	80.0	7.006474	10.0	1738218.0	0.087581	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

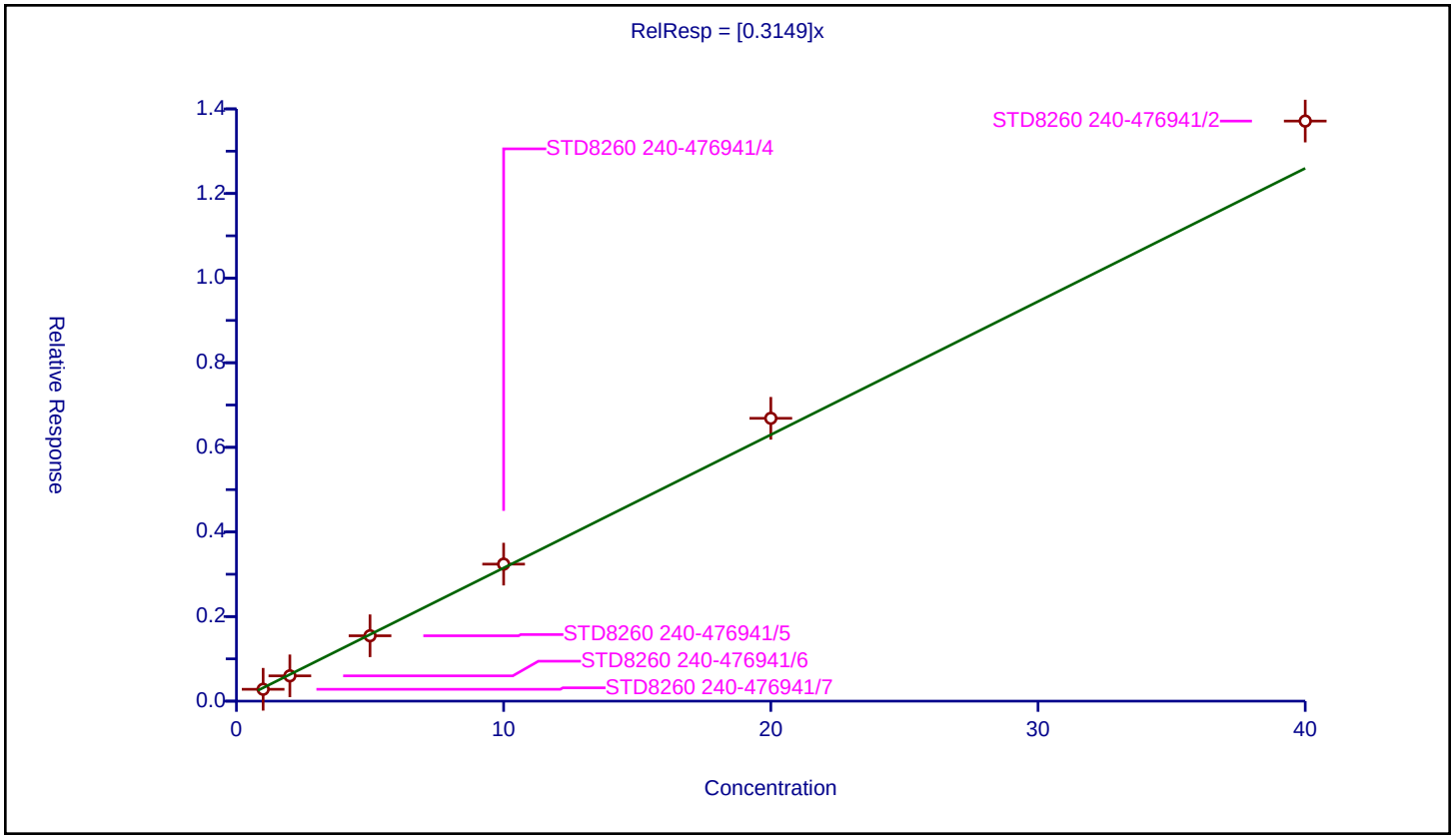
Curve Coefficients

Intercept:	0
Slope:	0.3149

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280444	10.0	1508502.0	0.280444	Y
2	STD8260 240-476941/6	2.0	0.597624	10.0	1600104.0	0.298812	Y
3	STD8260 240-476941/5	5.0	1.545393	10.0	1580769.0	0.309079	Y
4	STD8260 240-476941/4	10.0	3.23897	10.0	1635381.0	0.323897	Y
5	STD8260 240-476941/3	20.0	6.68608	10.0	1729200.0	0.334304	Y
6	STD8260 240-476941/2	40.0	13.7124	10.0	1738218.0	0.34281	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

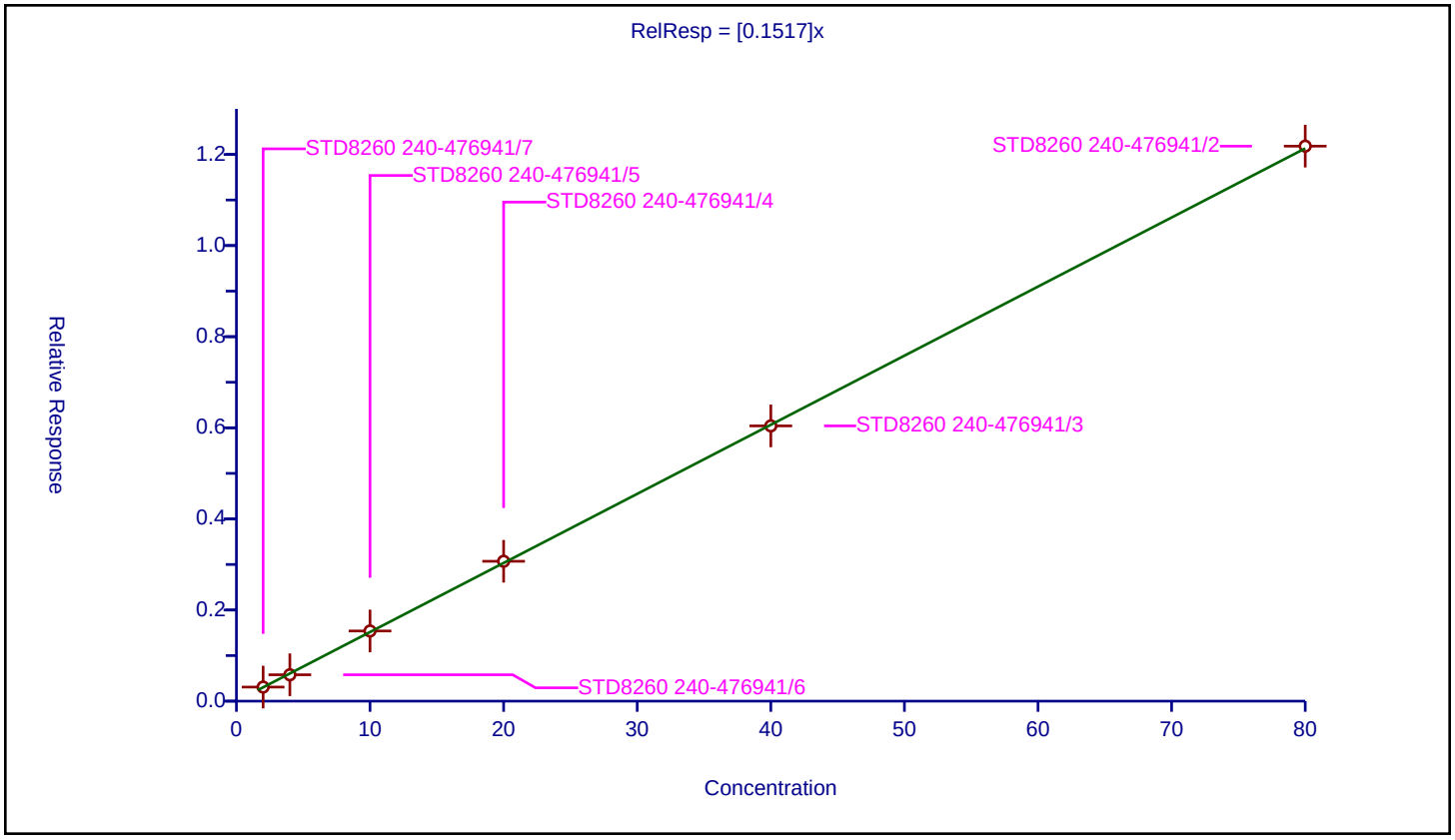
Curve Coefficients

Intercept:	0
Slope:	0.1517

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.308737	10.0	1508502.0	0.154368	Y
2	STD8260 240-476941/6	4.0	0.578775	10.0	1600104.0	0.144694	Y
3	STD8260 240-476941/5	10.0	1.540377	10.0	1580769.0	0.154038	Y
4	STD8260 240-476941/4	20.0	3.070379	10.0	1635381.0	0.153519	Y
5	STD8260 240-476941/3	40.0	6.041701	10.0	1729200.0	0.151043	Y
6	STD8260 240-476941/2	80.0	12.182051	10.0	1738218.0	0.152276	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

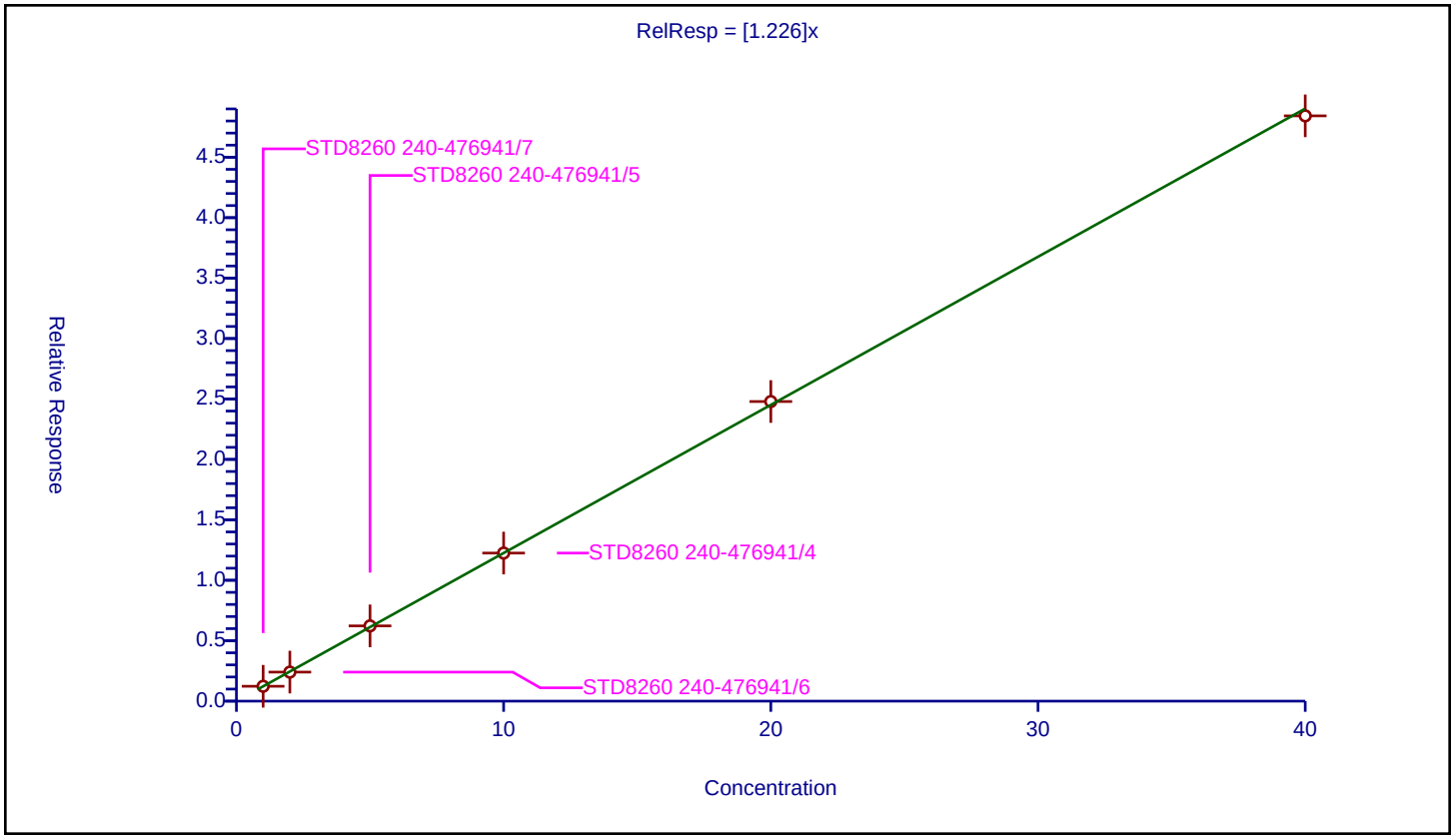
Curve Coefficients

Intercept:	0
Slope:	1.226

Error Coefficients

Standard Error:	2920000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.230869	10.0	1005314.0	1.230869	Y
2	STD8260 240-476941/6	2.0	2.4038	10.0	1025239.0	1.2019	Y
3	STD8260 240-476941/5	5.0	6.226562	10.0	1036230.0	1.245312	Y
4	STD8260 240-476941/4	10.0	12.24994	10.0	1083691.0	1.224994	Y
5	STD8260 240-476941/3	20.0	24.788912	10.0	1129906.0	1.239446	Y
6	STD8260 240-476941/2	40.0	48.424259	10.0	1176310.0	1.210606	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

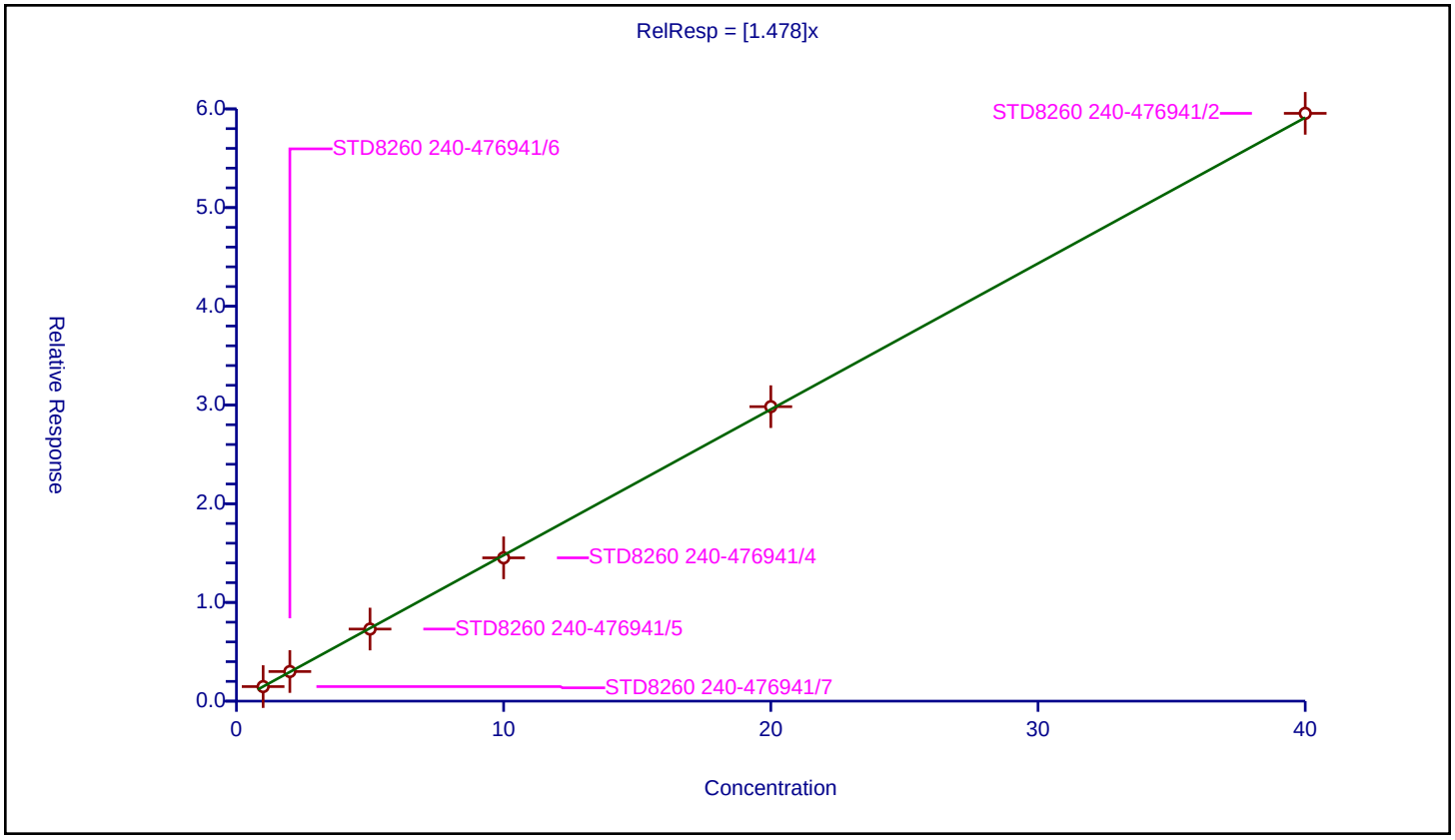
Curve Coefficients

Intercept:	0
Slope:	1.478

Error Coefficients

Standard Error:	3570000
Relative Standard Error:	1.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.474942	10.0	1005314.0	1.474942	Y
2	STD8260 240-476941/6	2.0	3.000208	10.0	1025239.0	1.500104	Y
3	STD8260 240-476941/5	5.0	7.30196	10.0	1036230.0	1.460392	Y
4	STD8260 240-476941/4	10.0	14.518484	10.0	1083691.0	1.451848	Y
5	STD8260 240-476941/3	20.0	29.834243	10.0	1129906.0	1.491712	Y
6	STD8260 240-476941/2	40.0	59.548503	10.0	1176310.0	1.488713	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

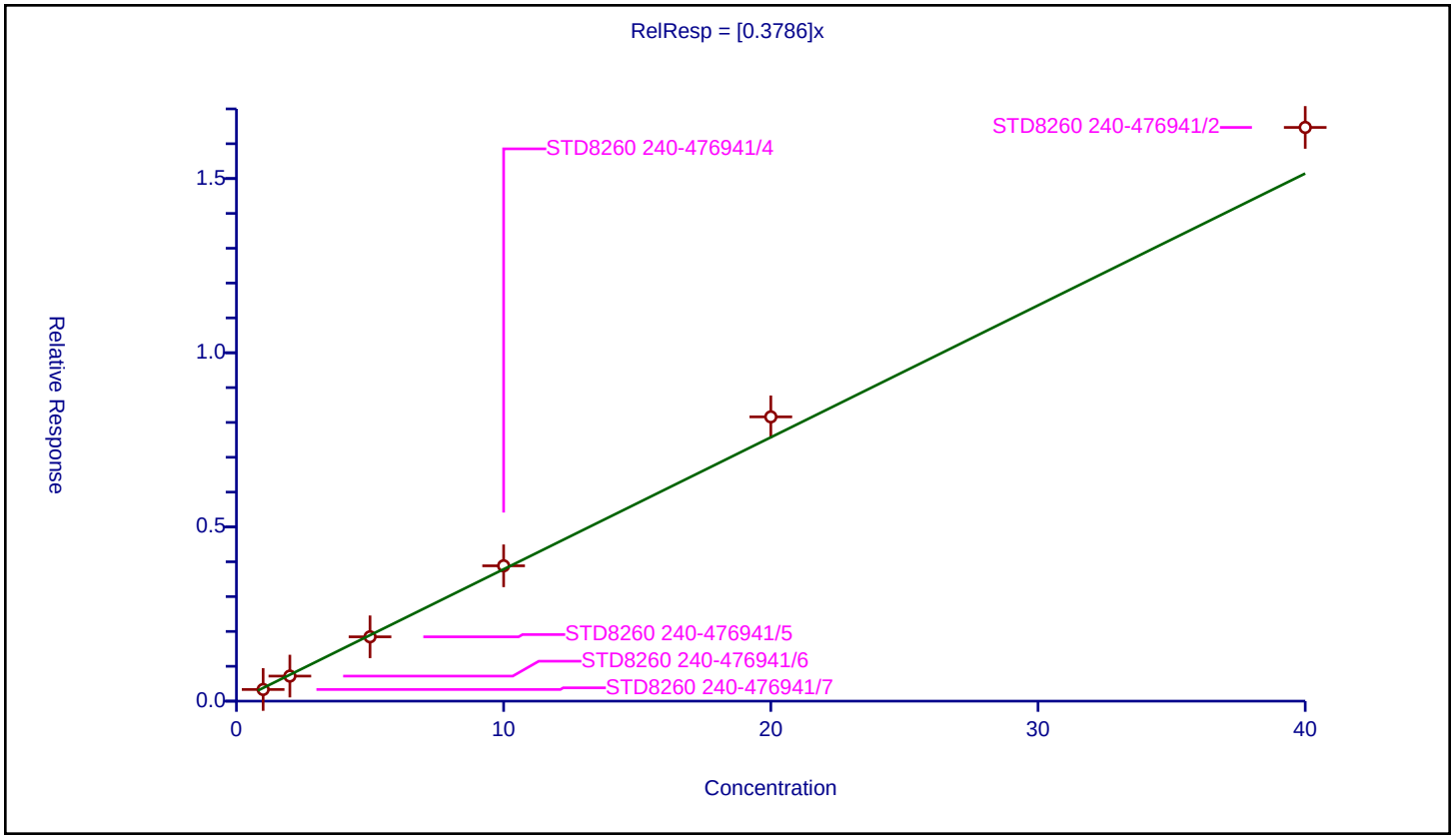
Curve Coefficients

Intercept:	0
Slope:	0.3786

Error Coefficients

Standard Error:	982000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.334652	10.0	1005314.0	0.334652	Y
2	STD8260 240-476941/6	2.0	0.719237	10.0	1025239.0	0.359619	Y
3	STD8260 240-476941/5	5.0	1.846771	10.0	1036230.0	0.369354	Y
4	STD8260 240-476941/4	10.0	3.884714	10.0	1083691.0	0.388471	Y
5	STD8260 240-476941/3	20.0	8.160343	10.0	1129906.0	0.408017	Y
6	STD8260 240-476941/2	40.0	16.46764	10.0	1176310.0	0.411691	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

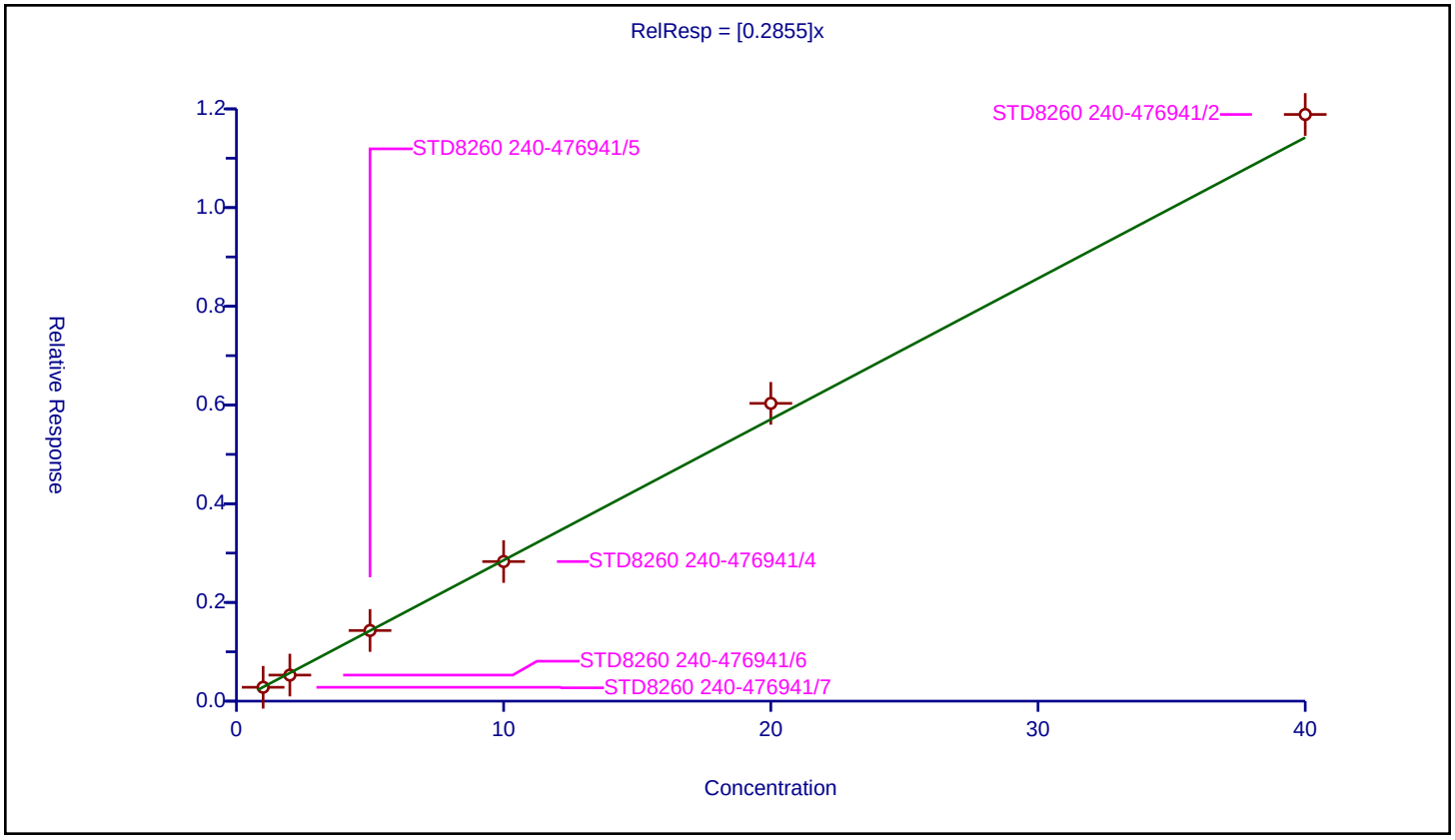
Curve Coefficients

Intercept:	0
Slope:	0.2855

Error Coefficients

Standard Error:	713000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280858	10.0	1005314.0	0.280858	Y
2	STD8260 240-476941/6	2.0	0.528218	10.0	1025239.0	0.264109	Y
3	STD8260 240-476941/5	5.0	1.431671	10.0	1036230.0	0.286334	Y
4	STD8260 240-476941/4	10.0	2.828435	10.0	1083691.0	0.282844	Y
5	STD8260 240-476941/3	20.0	6.033679	10.0	1129906.0	0.301684	Y
6	STD8260 240-476941/2	40.0	11.887045	10.0	1176310.0	0.297176	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

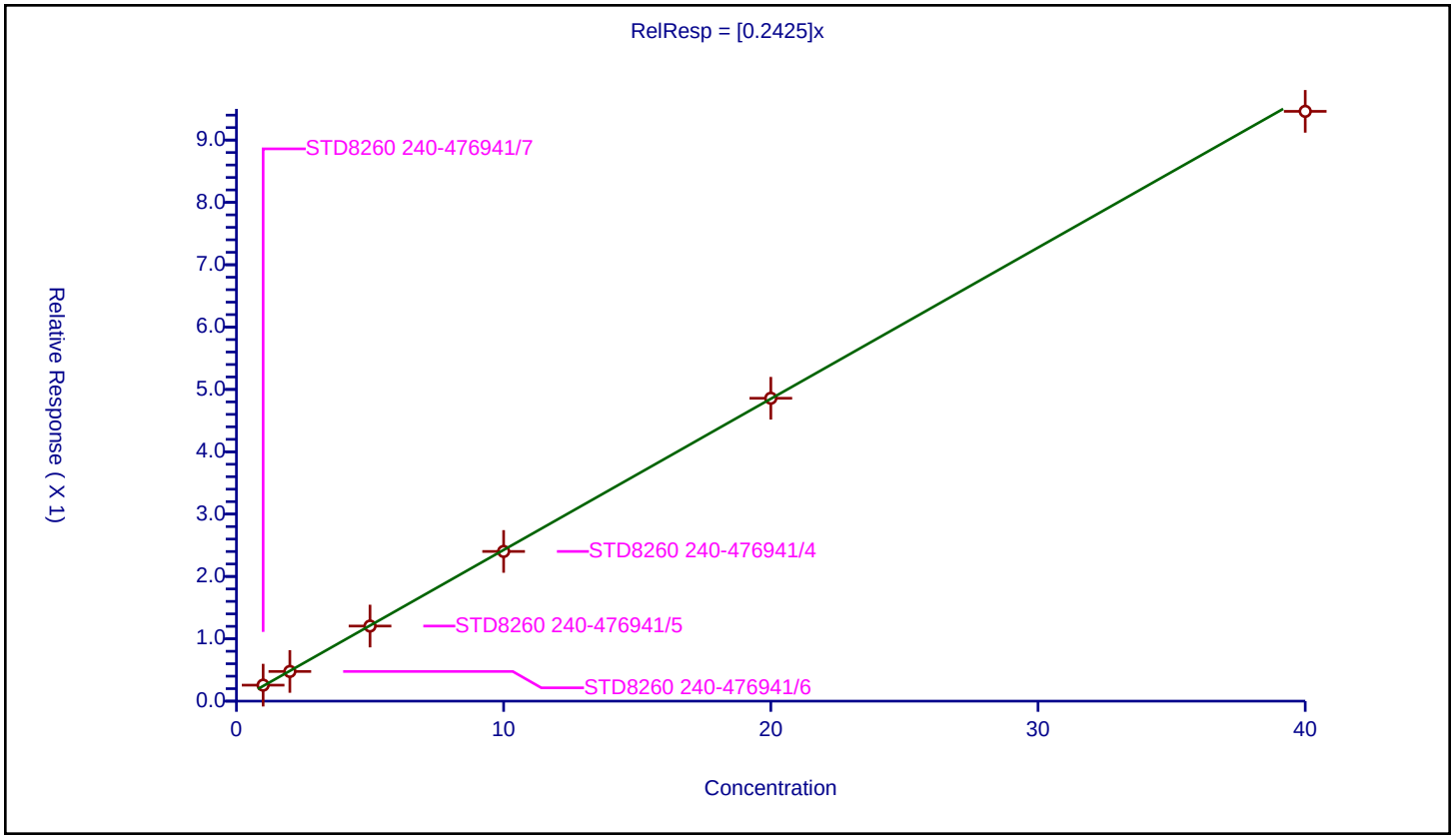
Curve Coefficients

Intercept:	0
Slope:	0.2425

Error Coefficients

Standard Error:	570000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.256338	10.0	1005314.0	0.256338	Y
2	STD8260 240-476941/6	2.0	0.476347	10.0	1025239.0	0.238174	Y
3	STD8260 240-476941/5	5.0	1.204549	10.0	1036230.0	0.24091	Y
4	STD8260 240-476941/4	10.0	2.401256	10.0	1083691.0	0.240126	Y
5	STD8260 240-476941/3	20.0	4.858829	10.0	1129906.0	0.242941	Y
6	STD8260 240-476941/2	40.0	9.460516	10.0	1176310.0	0.236513	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

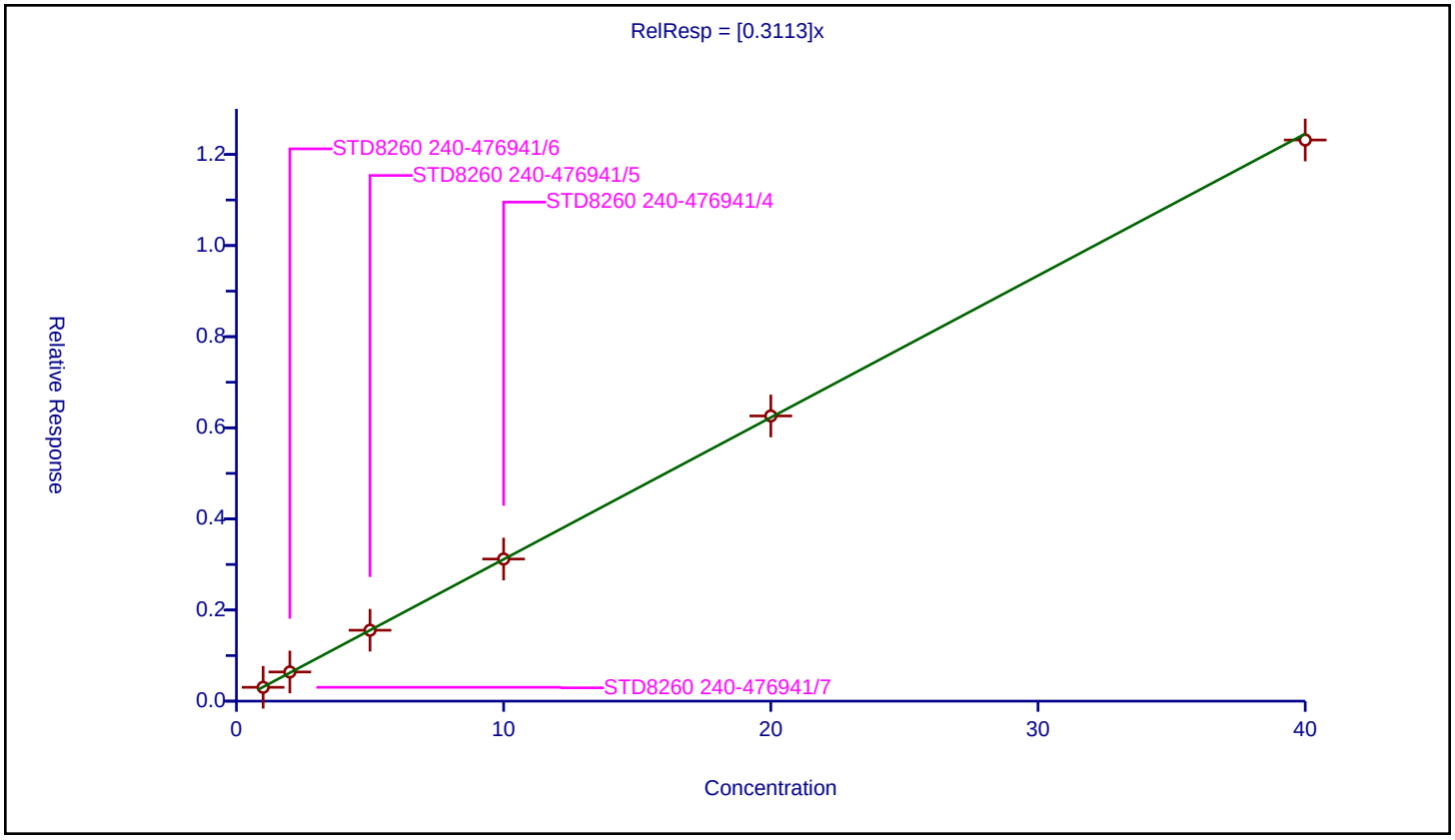
Curve Coefficients

Intercept:	0
Slope:	0.3113

Error Coefficients

Standard Error:	741000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.303716	10.0	1005314.0	0.303716	Y
2	STD8260 240-476941/6	2.0	0.640251	10.0	1025239.0	0.320125	Y
3	STD8260 240-476941/5	5.0	1.556739	10.0	1036230.0	0.311348	Y
4	STD8260 240-476941/4	10.0	3.119349	10.0	1083691.0	0.311935	Y
5	STD8260 240-476941/3	20.0	6.259972	10.0	1129906.0	0.312999	Y
6	STD8260 240-476941/2	40.0	12.317076	10.0	1176310.0	0.307927	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

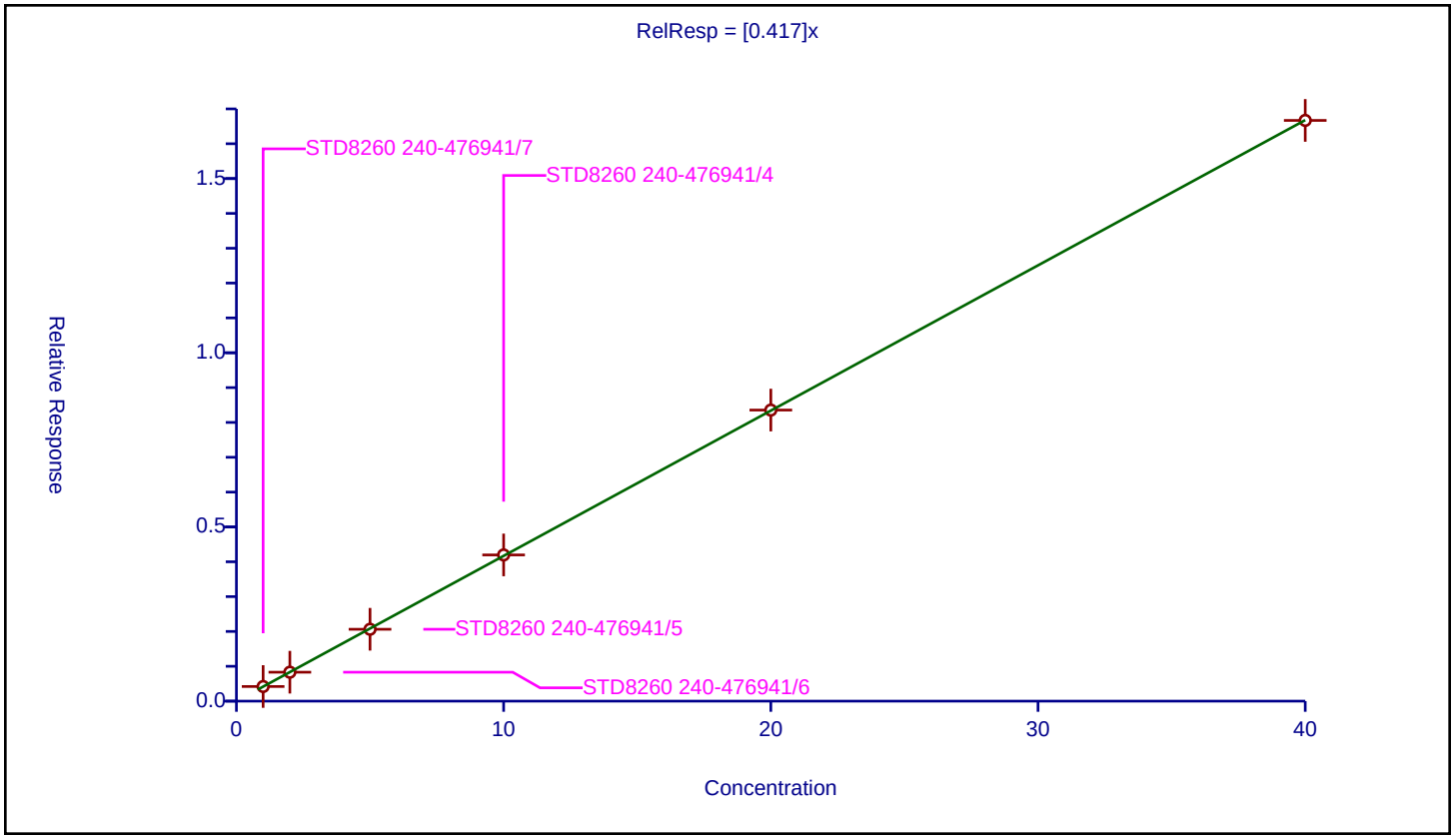
Curve Coefficients

Intercept:	0
Slope:	0.417

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	0.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.41974	10.0	1005314.0	0.41974	Y
2	STD8260 240-476941/6	2.0	0.830509	10.0	1025239.0	0.415254	Y
3	STD8260 240-476941/5	5.0	2.063326	10.0	1036230.0	0.412665	Y
4	STD8260 240-476941/4	10.0	4.196418	10.0	1083691.0	0.419642	Y
5	STD8260 240-476941/3	20.0	8.354545	10.0	1129906.0	0.417727	Y
6	STD8260 240-476941/2	40.0	16.668735	10.0	1176310.0	0.416718	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

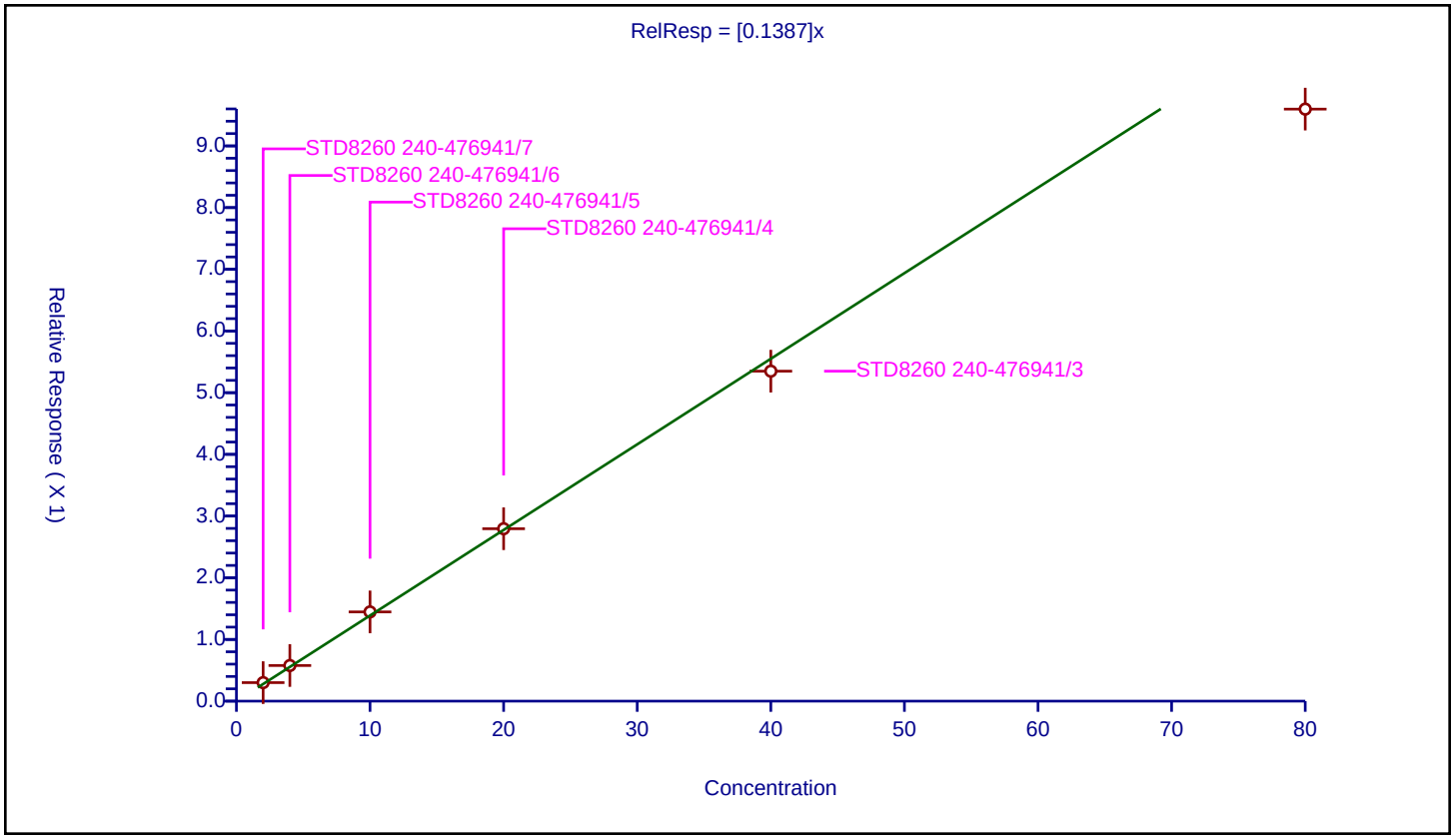
Curve Coefficients

Intercept:	0
Slope:	0.1387

Error Coefficients

Standard Error:	593000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.300175	10.0	1005314.0	0.150087	Y
2	STD8260 240-476941/6	4.0	0.577309	10.0	1025239.0	0.144327	Y
3	STD8260 240-476941/5	10.0	1.446436	10.0	1036230.0	0.144644	Y
4	STD8260 240-476941/4	20.0	2.794736	10.0	1083691.0	0.139737	Y
5	STD8260 240-476941/3	40.0	5.348657	10.0	1129906.0	0.133716	Y
6	STD8260 240-476941/2	80.0	9.596441	10.0	1176310.0	0.119956	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

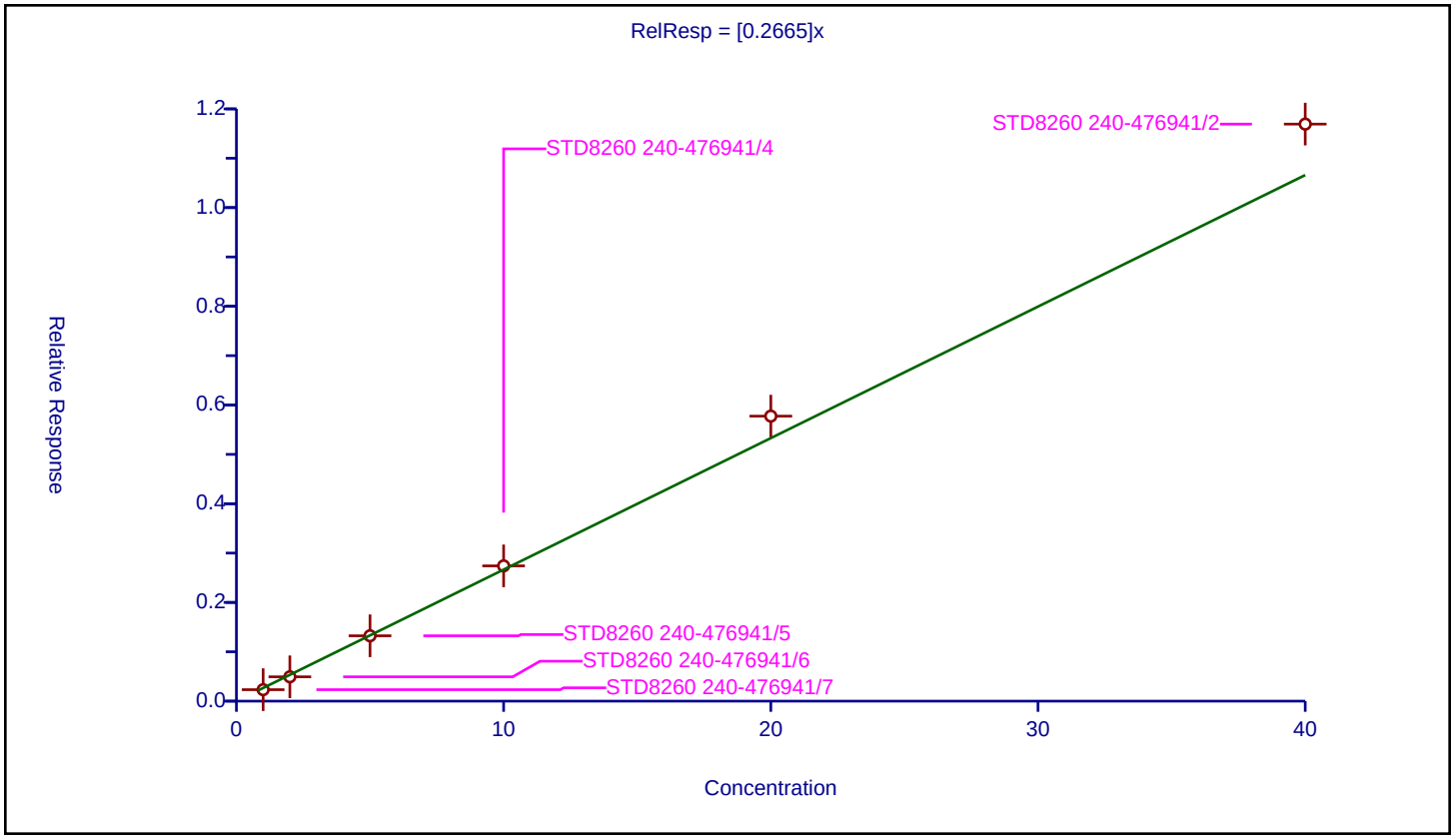
Curve Coefficients

Intercept:	0
Slope:	0.2665

Error Coefficients

Standard Error:	697000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.232335	10.0	1005314.0	0.232335	Y
2	STD8260 240-476941/6	2.0	0.493056	10.0	1025239.0	0.246528	Y
3	STD8260 240-476941/5	5.0	1.324272	10.0	1036230.0	0.264854	Y
4	STD8260 240-476941/4	10.0	2.740781	10.0	1083691.0	0.274078	Y
5	STD8260 240-476941/3	20.0	5.774799	10.0	1129906.0	0.28874	Y
6	STD8260 240-476941/2	40.0	11.69179	10.0	1176310.0	0.292295	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

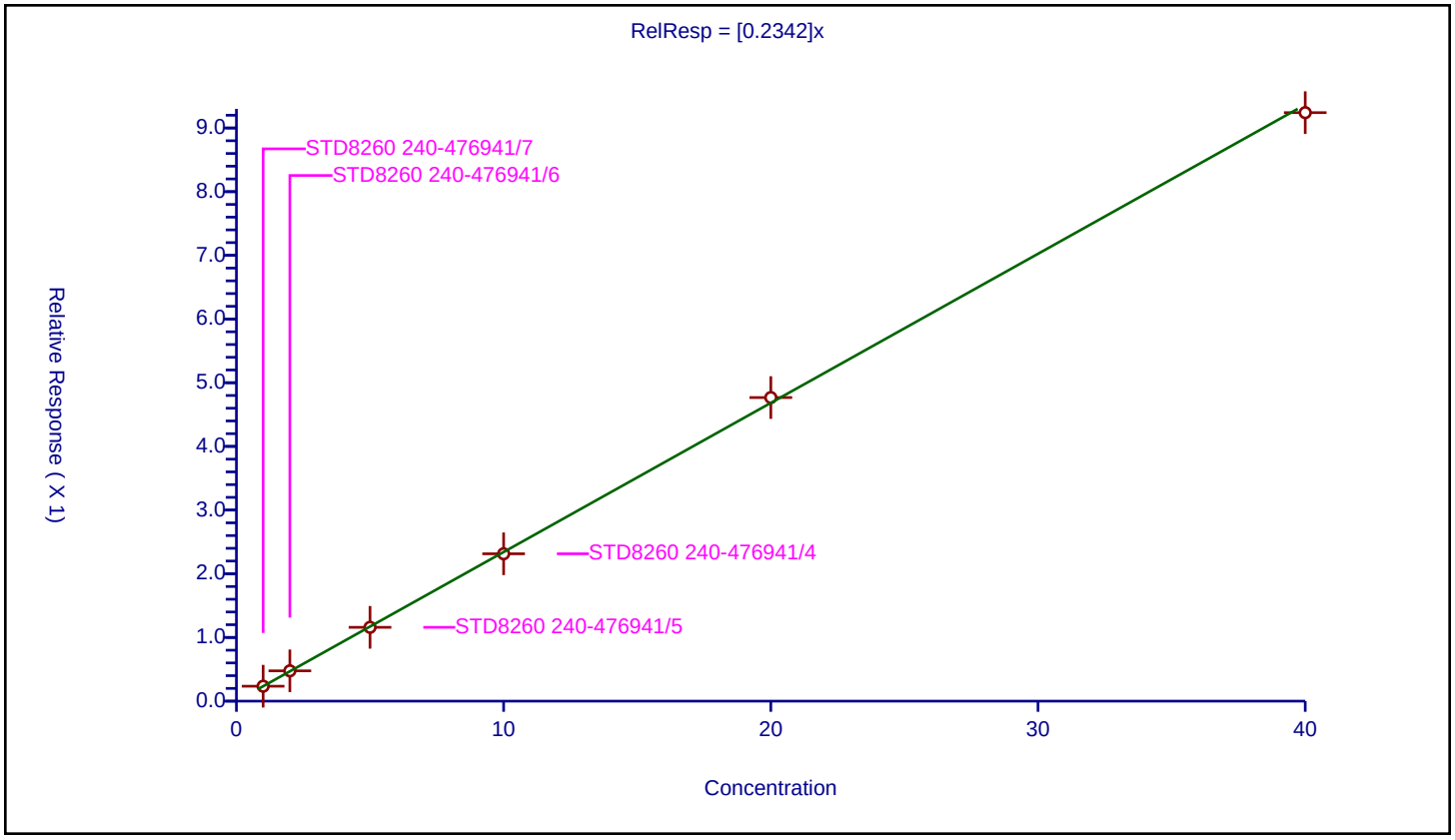
Curve Coefficients

Intercept:	0
Slope:	0.2342

Error Coefficients

Standard Error:	557000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.234434	10.0	1005314.0	0.234434	Y
2	STD8260 240-476941/6	2.0	0.475831	10.0	1025239.0	0.237915	Y
3	STD8260 240-476941/5	5.0	1.159009	10.0	1036230.0	0.231802	Y
4	STD8260 240-476941/4	10.0	2.313713	10.0	1083691.0	0.231371	Y
5	STD8260 240-476941/3	20.0	4.767131	10.0	1129906.0	0.238357	Y
6	STD8260 240-476941/2	40.0	9.240914	10.0	1176310.0	0.231023	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

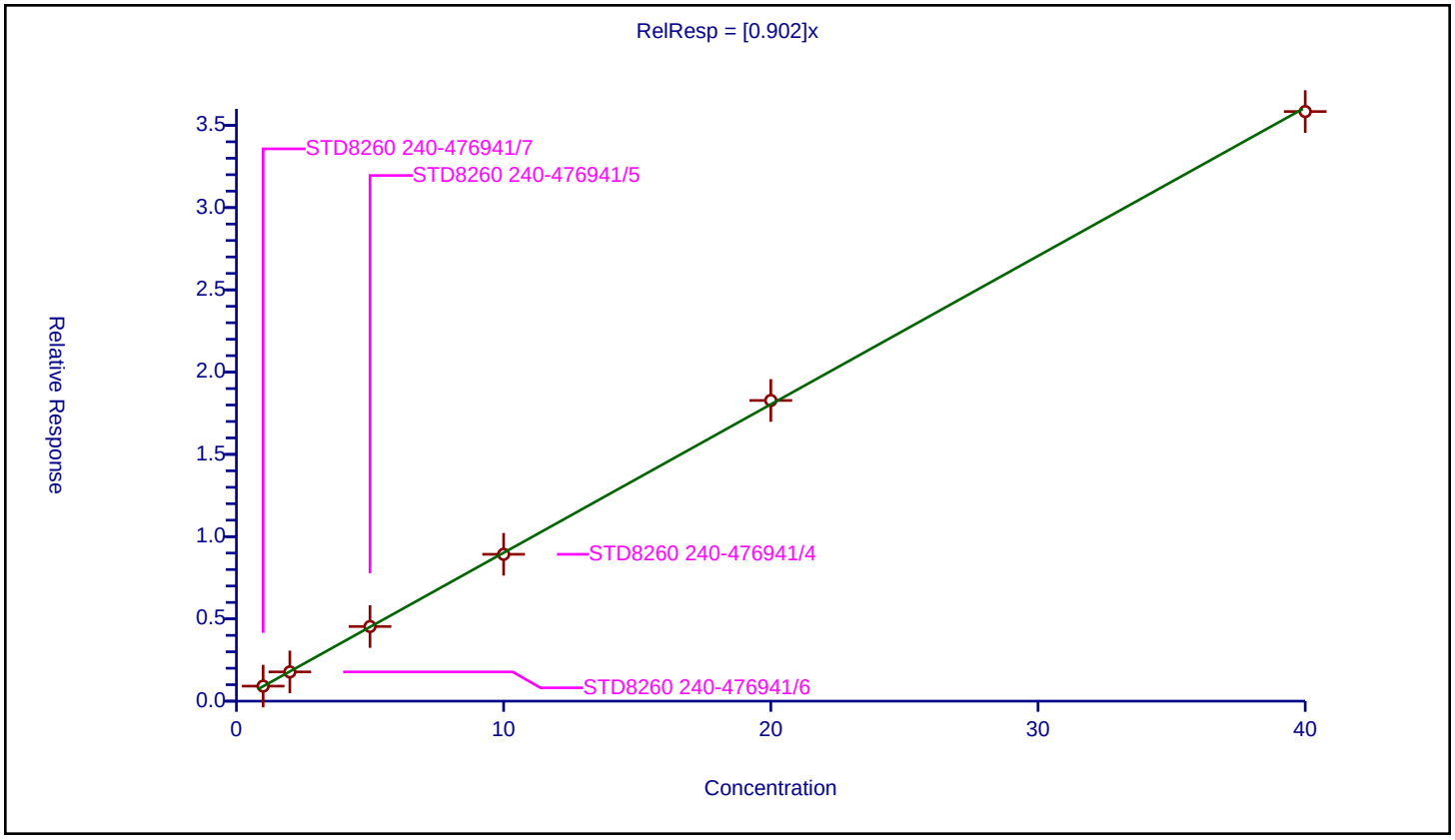
Curve Coefficients

Intercept:	0
Slope:	0.902

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.913565	10.0	1005314.0	0.913565	Y
2	STD8260 240-476941/6	2.0	1.777293	10.0	1025239.0	0.888646	Y
3	STD8260 240-476941/5	5.0	4.536396	10.0	1036230.0	0.907279	Y
4	STD8260 240-476941/4	10.0	8.926244	10.0	1083691.0	0.892624	Y
5	STD8260 240-476941/3	20.0	18.276565	10.0	1129906.0	0.913828	Y
6	STD8260 240-476941/2	40.0	35.837526	10.0	1176310.0	0.895938	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

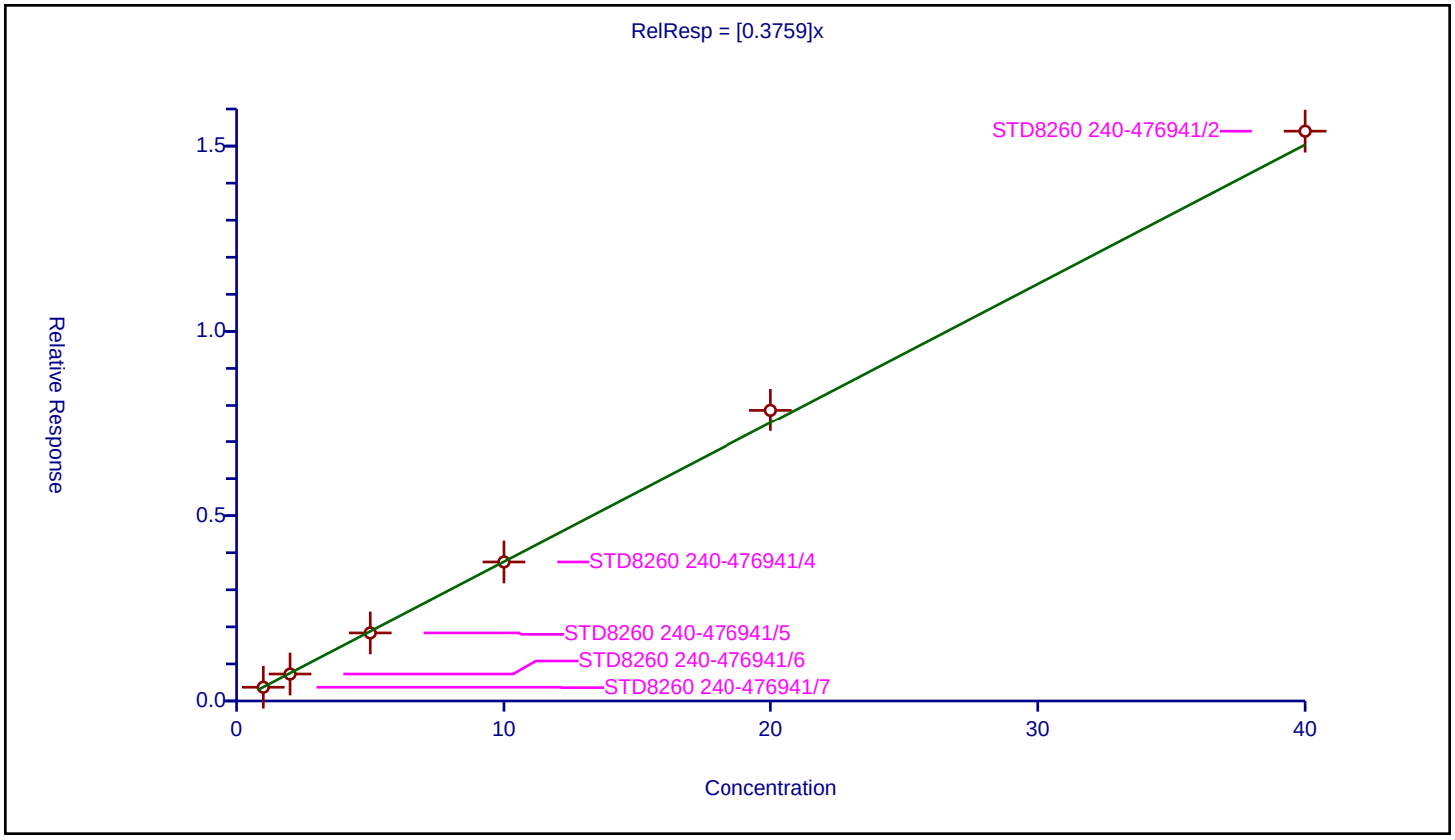
Curve Coefficients

Intercept:	0
Slope:	0.3759

Error Coefficients

Standard Error:	925000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.370859	10.0	1005314.0	0.370859	Y
2	STD8260 240-476941/6	2.0	0.72745	10.0	1025239.0	0.363725	Y
3	STD8260 240-476941/5	5.0	1.836282	10.0	1036230.0	0.367256	Y
4	STD8260 240-476941/4	10.0	3.751632	10.0	1083691.0	0.375163	Y
5	STD8260 240-476941/3	20.0	7.867761	10.0	1129906.0	0.393388	Y
6	STD8260 240-476941/2	40.0	15.401977	10.0	1176310.0	0.385049	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

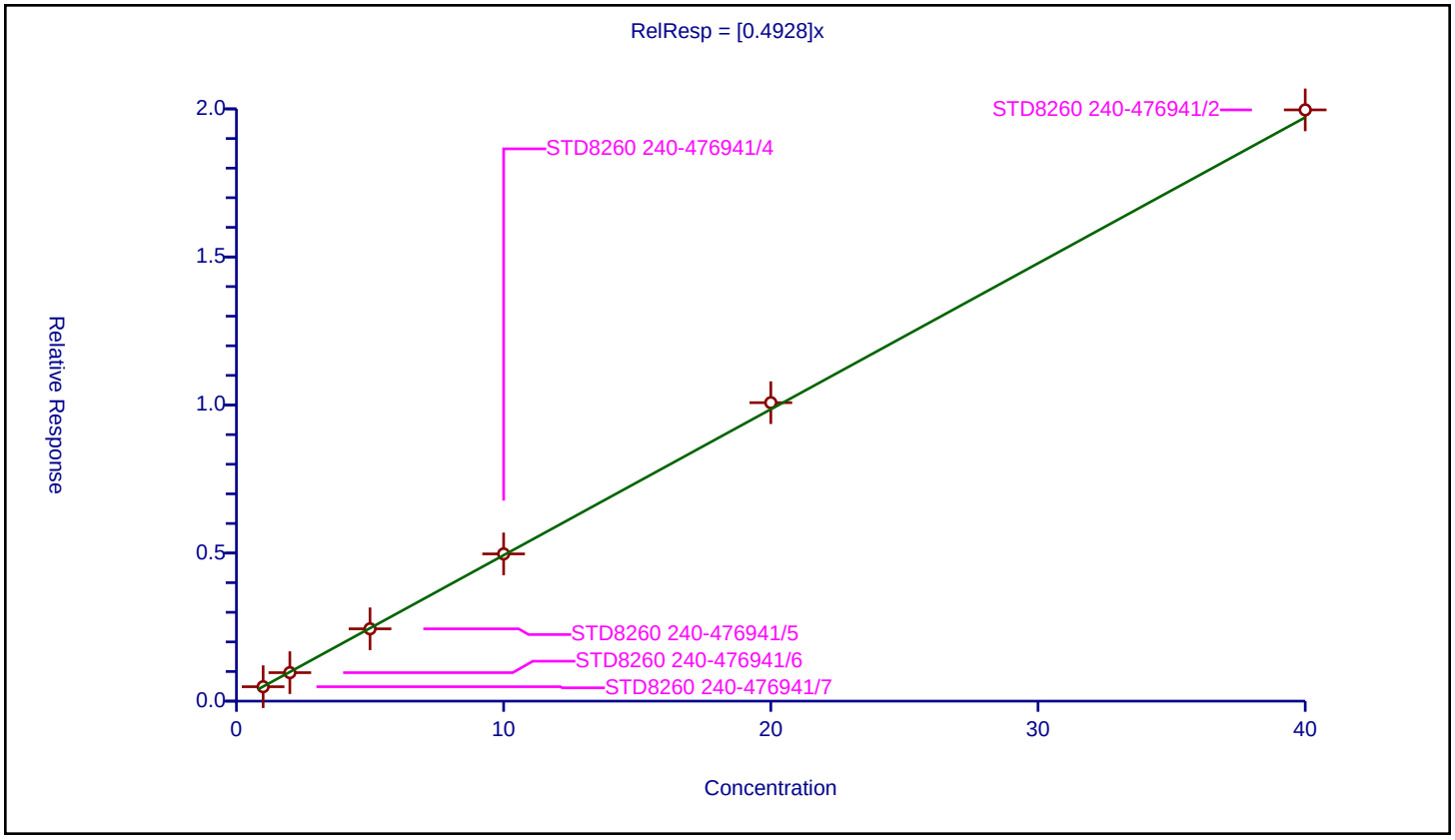
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.486932	10.0	1005314.0	0.486932	Y
2	STD8260 240-476941/6	2.0	0.962254	10.0	1025239.0	0.481127	Y
3	STD8260 240-476941/5	5.0	2.442151	10.0	1036230.0	0.48843	Y
4	STD8260 240-476941/4	10.0	4.972155	10.0	1083691.0	0.497216	Y
5	STD8260 240-476941/3	20.0	10.079254	10.0	1129906.0	0.503963	Y
6	STD8260 240-476941/2	40.0	19.966276	10.0	1176310.0	0.499157	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

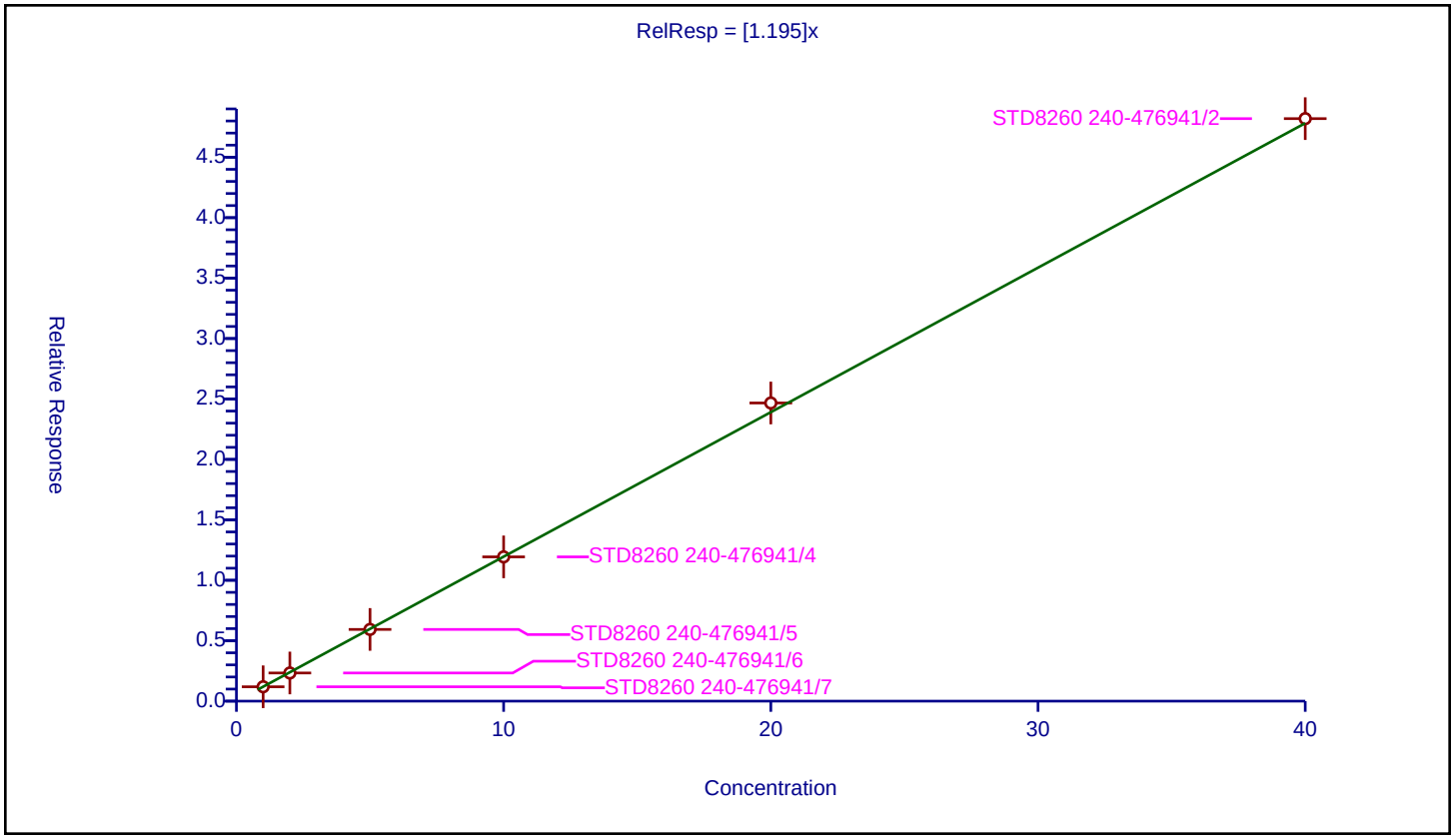
Curve Coefficients

Intercept:	0
Slope:	1.195

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.189141	10.0	1005314.0	1.189141	Y
2	STD8260 240-476941/6	2.0	2.329369	10.0	1025239.0	1.164685	Y
3	STD8260 240-476941/5	5.0	5.934213	10.0	1036230.0	1.186843	Y
4	STD8260 240-476941/4	10.0	11.935423	10.0	1083691.0	1.193542	Y
5	STD8260 240-476941/3	20.0	24.667964	10.0	1129906.0	1.233398	Y
6	STD8260 240-476941/2	40.0	48.192645	10.0	1176310.0	1.204816	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

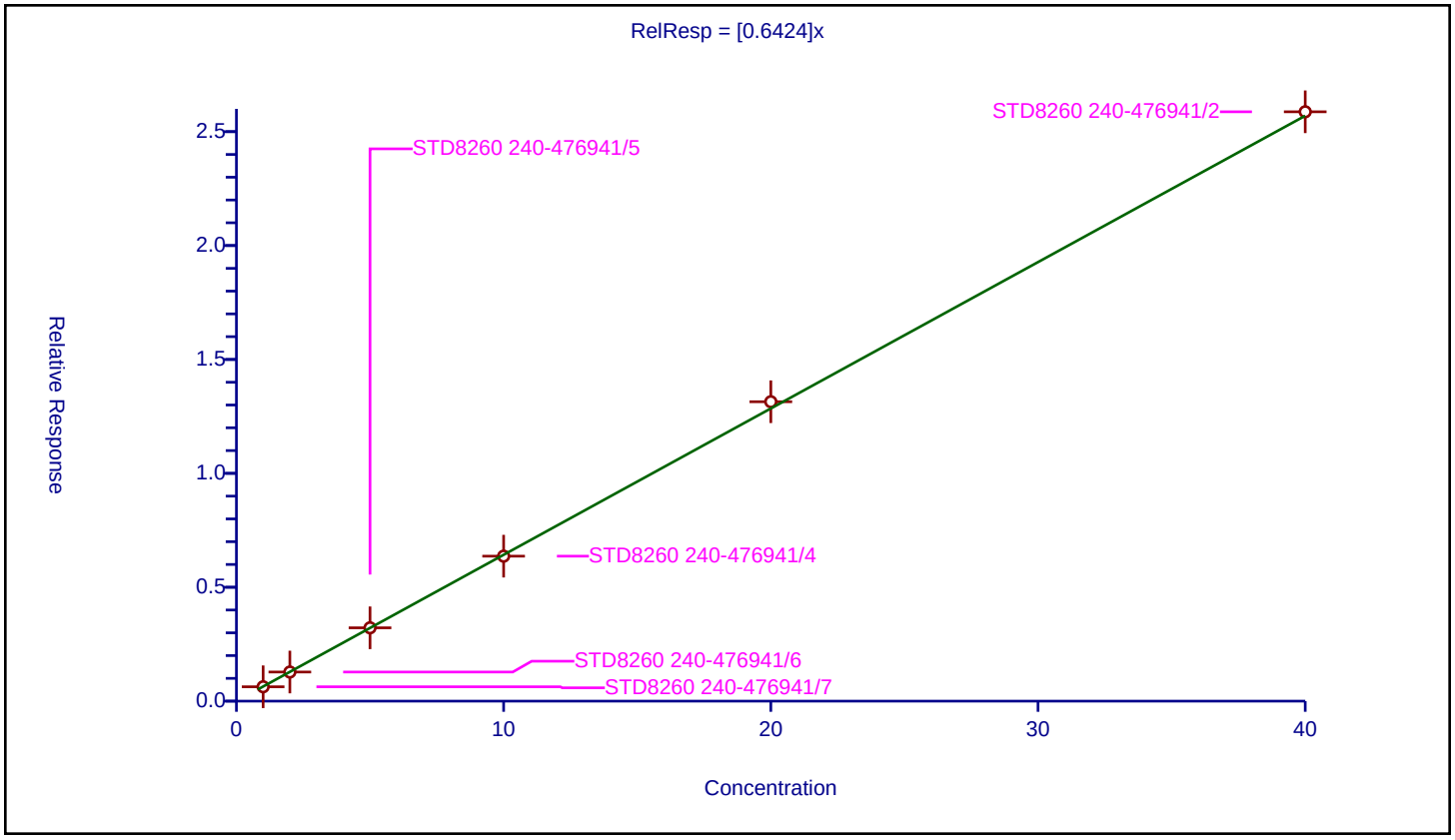
Curve Coefficients

Intercept:	0
Slope:	0.6424

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.631146	10.0	1005314.0	0.631146	Y
2	STD8260 240-476941/6	2.0	1.278404	10.0	1025239.0	0.639202	Y
3	STD8260 240-476941/5	5.0	3.219131	10.0	1036230.0	0.643826	Y
4	STD8260 240-476941/4	10.0	6.364268	10.0	1083691.0	0.636427	Y
5	STD8260 240-476941/3	20.0	13.144633	10.0	1129906.0	0.657232	Y
6	STD8260 240-476941/2	40.0	25.873035	10.0	1176310.0	0.646826	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

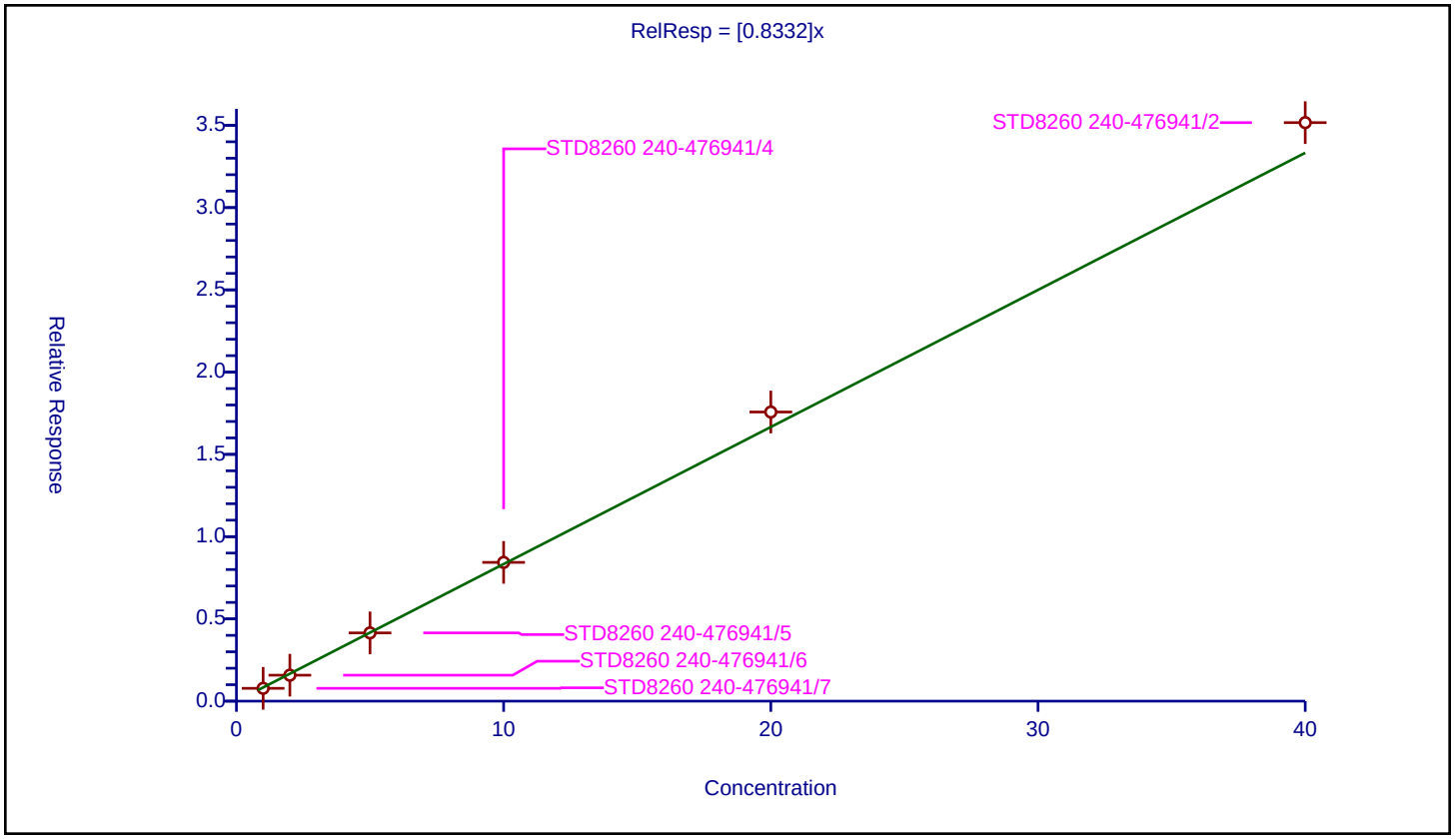
Curve Coefficients

Intercept:	0
Slope:	0.8332

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.779398	10.0	1005314.0	0.779398	Y
2	STD8260 240-476941/6	2.0	1.577944	10.0	1025239.0	0.788972	Y
3	STD8260 240-476941/5	5.0	4.148712	10.0	1036230.0	0.829742	Y
4	STD8260 240-476941/4	10.0	8.433852	10.0	1083691.0	0.843385	Y
5	STD8260 240-476941/3	20.0	17.574002	10.0	1129906.0	0.8787	Y
6	STD8260 240-476941/2	40.0	35.165339	10.0	1176310.0	0.879133	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

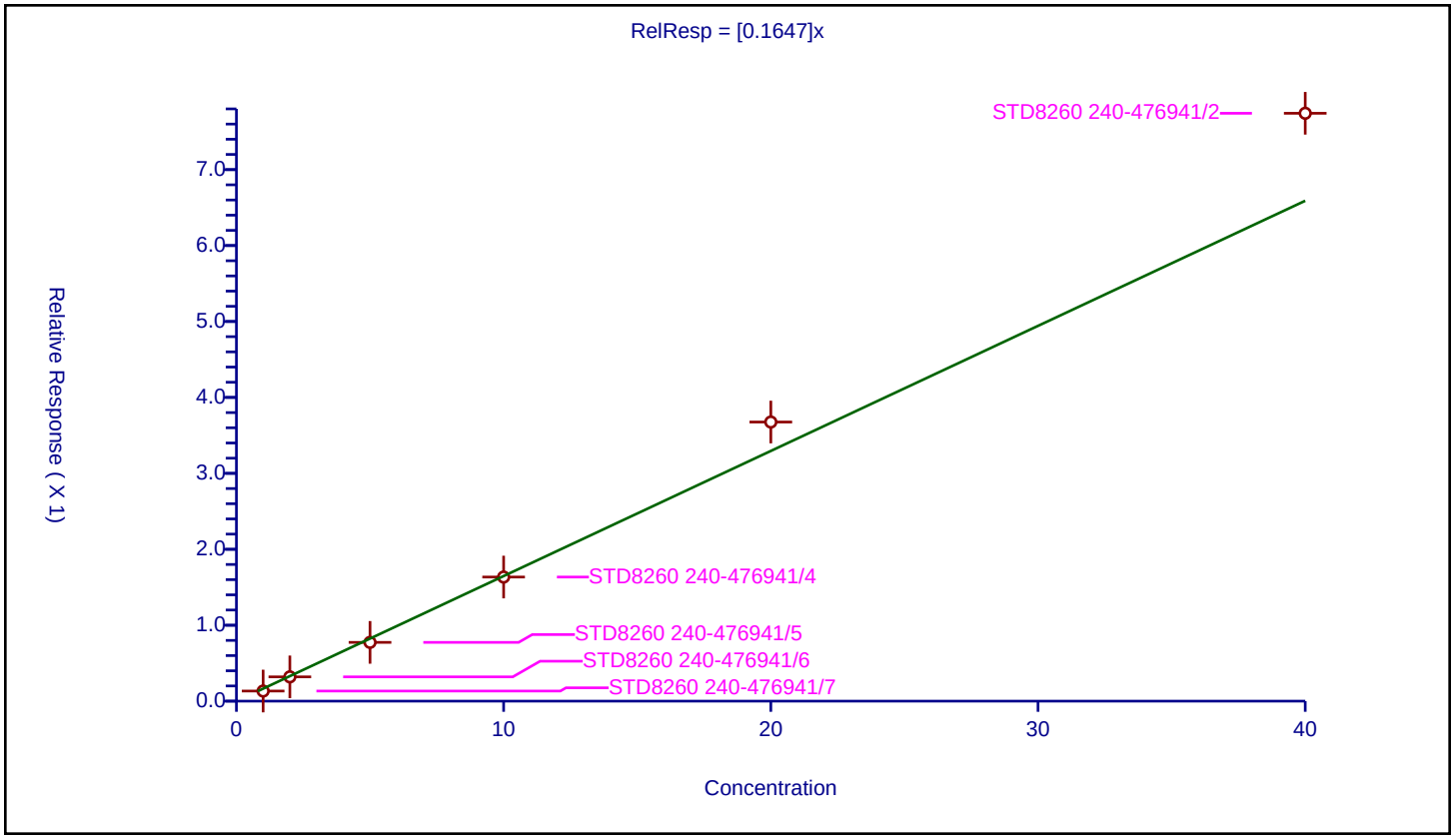
Curve Coefficients

Intercept:	0
Slope:	0.1647

Error Coefficients

Standard Error:	456000
Relative Standard Error:	13.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.132963	10.0	1005314.0	0.132963	Y
2	STD8260 240-476941/6	2.0	0.319808	10.0	1025239.0	0.159904	Y
3	STD8260 240-476941/5	5.0	0.774152	10.0	1036230.0	0.15483	Y
4	STD8260 240-476941/4	10.0	1.63434	10.0	1083691.0	0.163434	Y
5	STD8260 240-476941/3	20.0	3.675987	10.0	1129906.0	0.183799	Y
6	STD8260 240-476941/2	40.0	7.742032	10.0	1176310.0	0.193551	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

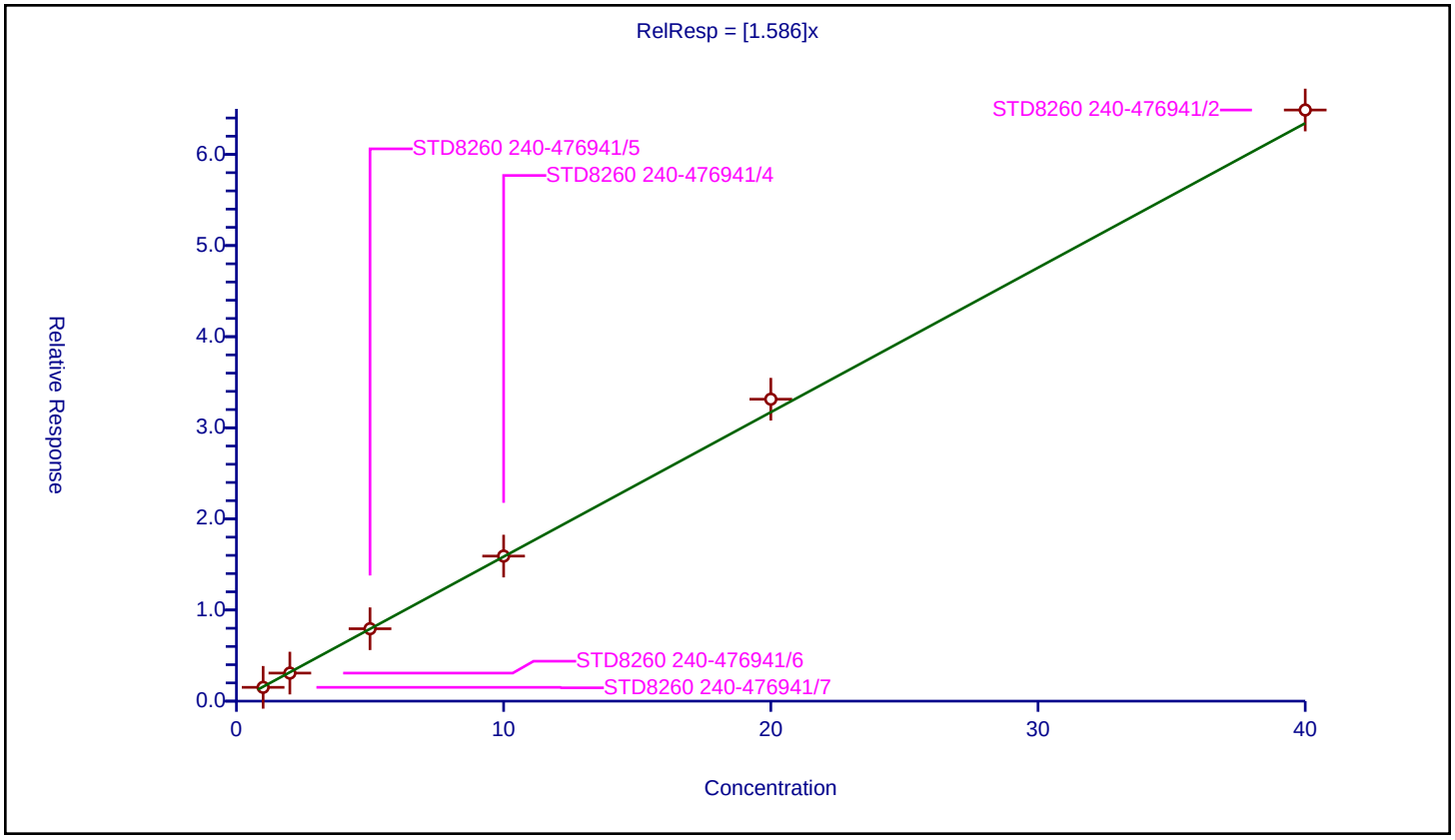
Curve Coefficients

Intercept:	0
Slope:	1.586

Error Coefficients

Standard Error:	3900000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.514611	10.0	1005314.0	1.514611	Y
2	STD8260 240-476941/6	2.0	3.078365	10.0	1025239.0	1.539183	Y
3	STD8260 240-476941/5	5.0	7.945601	10.0	1036230.0	1.58912	Y
4	STD8260 240-476941/4	10.0	15.921808	10.0	1083691.0	1.592181	Y
5	STD8260 240-476941/3	20.0	33.139358	10.0	1129906.0	1.656968	Y
6	STD8260 240-476941/2	40.0	64.876784	10.0	1176310.0	1.62192	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

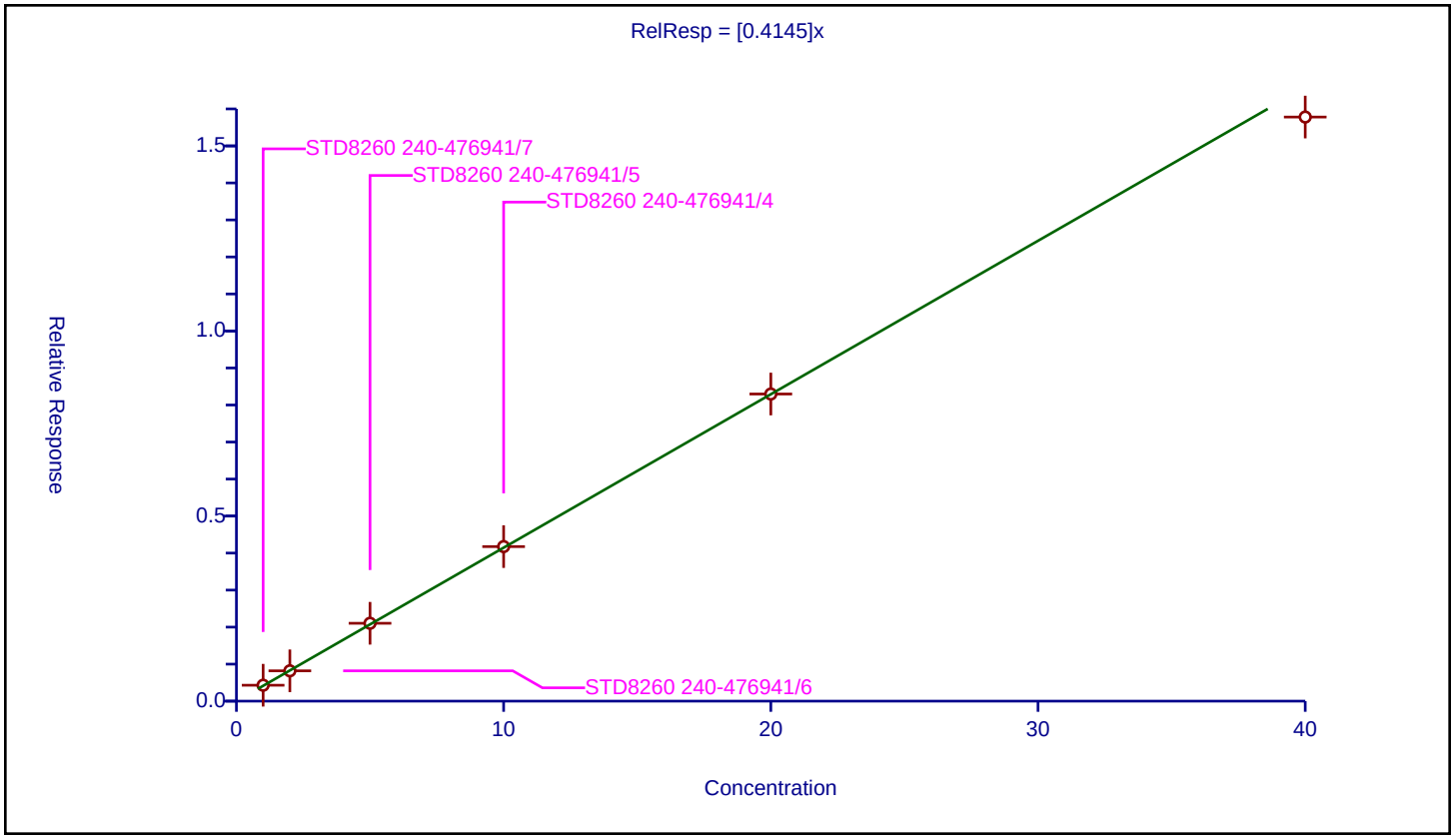
Curve Coefficients

Intercept:	0
Slope:	0.4145

Error Coefficients

Standard Error:	958000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.429995	10.0	1005314.0	0.429995	Y
2	STD8260 240-476941/6	2.0	0.819194	10.0	1025239.0	0.409597	Y
3	STD8260 240-476941/5	5.0	2.103838	10.0	1036230.0	0.420768	Y
4	STD8260 240-476941/4	10.0	4.175222	10.0	1083691.0	0.417522	Y
5	STD8260 240-476941/3	20.0	8.297124	10.0	1129906.0	0.414856	Y
6	STD8260 240-476941/2	40.0	15.780109	10.0	1176310.0	0.394503	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

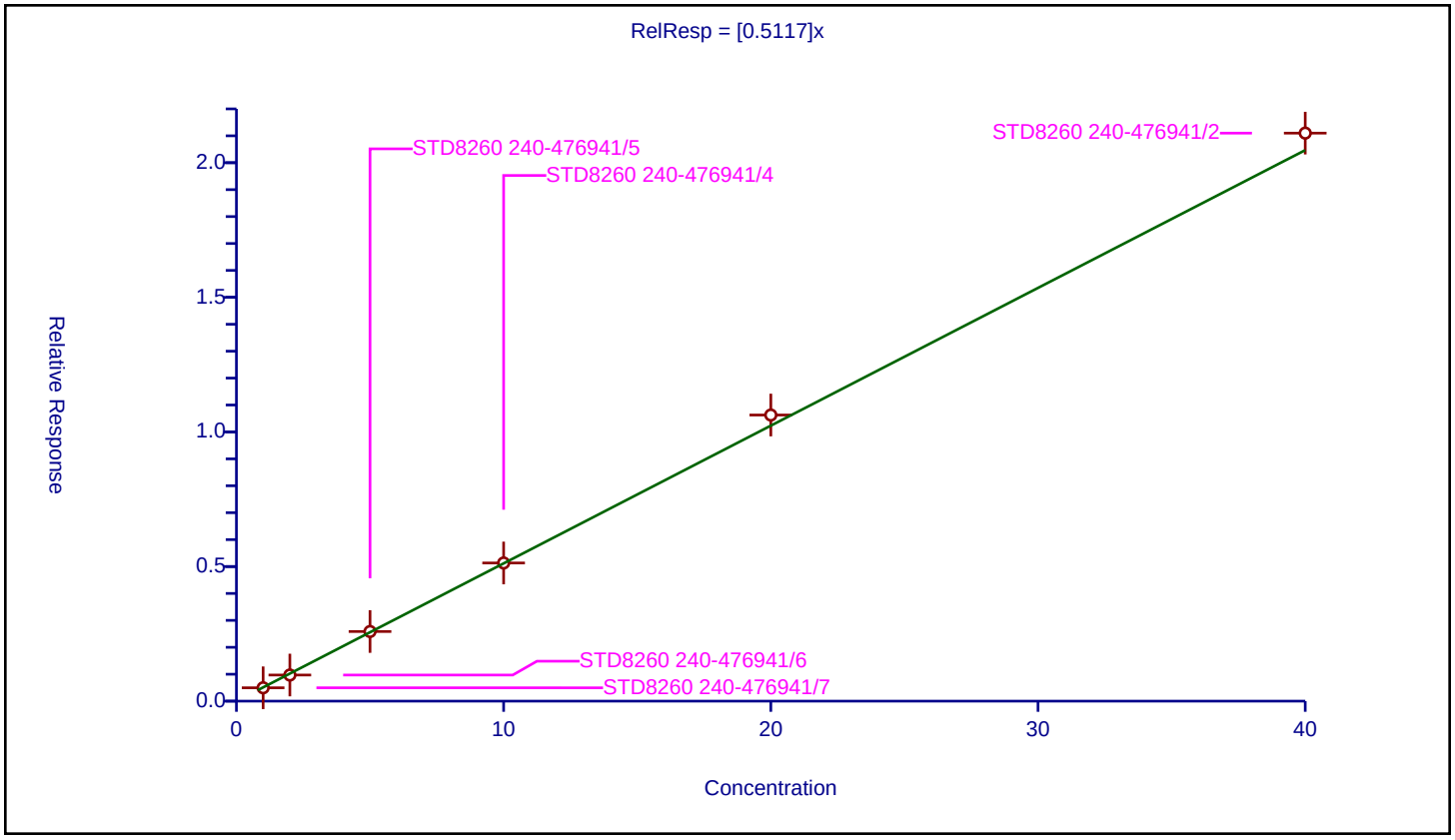
Curve Coefficients

Intercept:	0
Slope:	0.5117

Error Coefficients

Standard Error:	726000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.495697	10.0	606056.0	0.495697	Y
2	STD8260 240-476941/6	2.0	0.969796	10.0	608128.0	0.484898	Y
3	STD8260 240-476941/5	5.0	2.586701	10.0	621189.0	0.51734	Y
4	STD8260 240-476941/4	10.0	5.131993	10.0	639882.0	0.513199	Y
5	STD8260 240-476941/3	20.0	10.627968	10.0	663171.0	0.531398	Y
6	STD8260 240-476941/2	40.0	21.099818	10.0	670129.0	0.527495	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

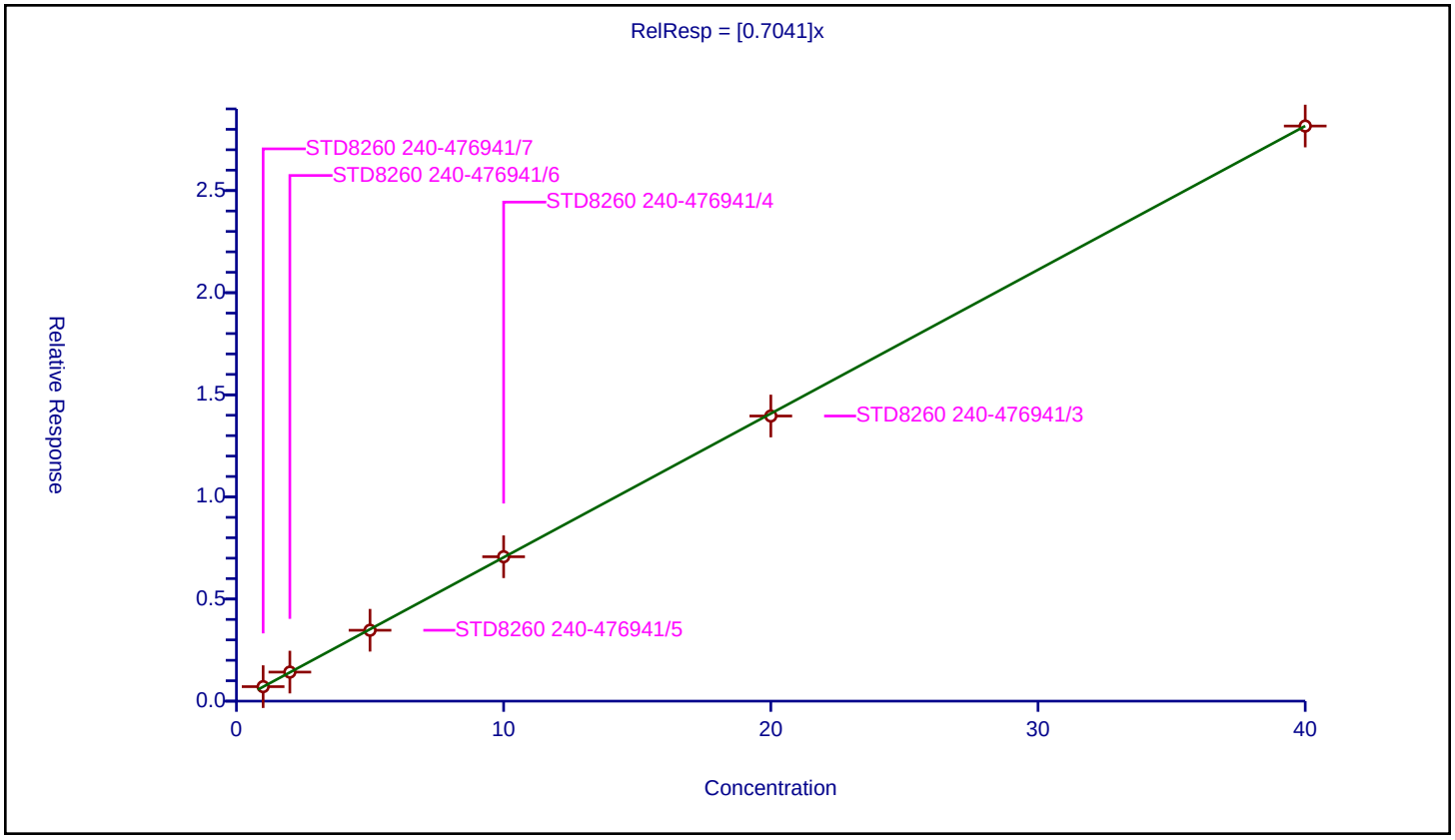
Curve Coefficients

Intercept:	0
Slope:	0.7041

Error Coefficients

Standard Error:	967000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.70967	10.0	606056.0	0.70967	Y
2	STD8260 240-476941/6	2.0	1.422595	10.0	608128.0	0.711298	Y
3	STD8260 240-476941/5	5.0	3.470908	10.0	621189.0	0.694182	Y
4	STD8260 240-476941/4	10.0	7.070554	10.0	639882.0	0.707055	Y
5	STD8260 240-476941/3	20.0	13.962161	10.0	663171.0	0.698108	Y
6	STD8260 240-476941/2	40.0	28.161503	10.0	670129.0	0.704038	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

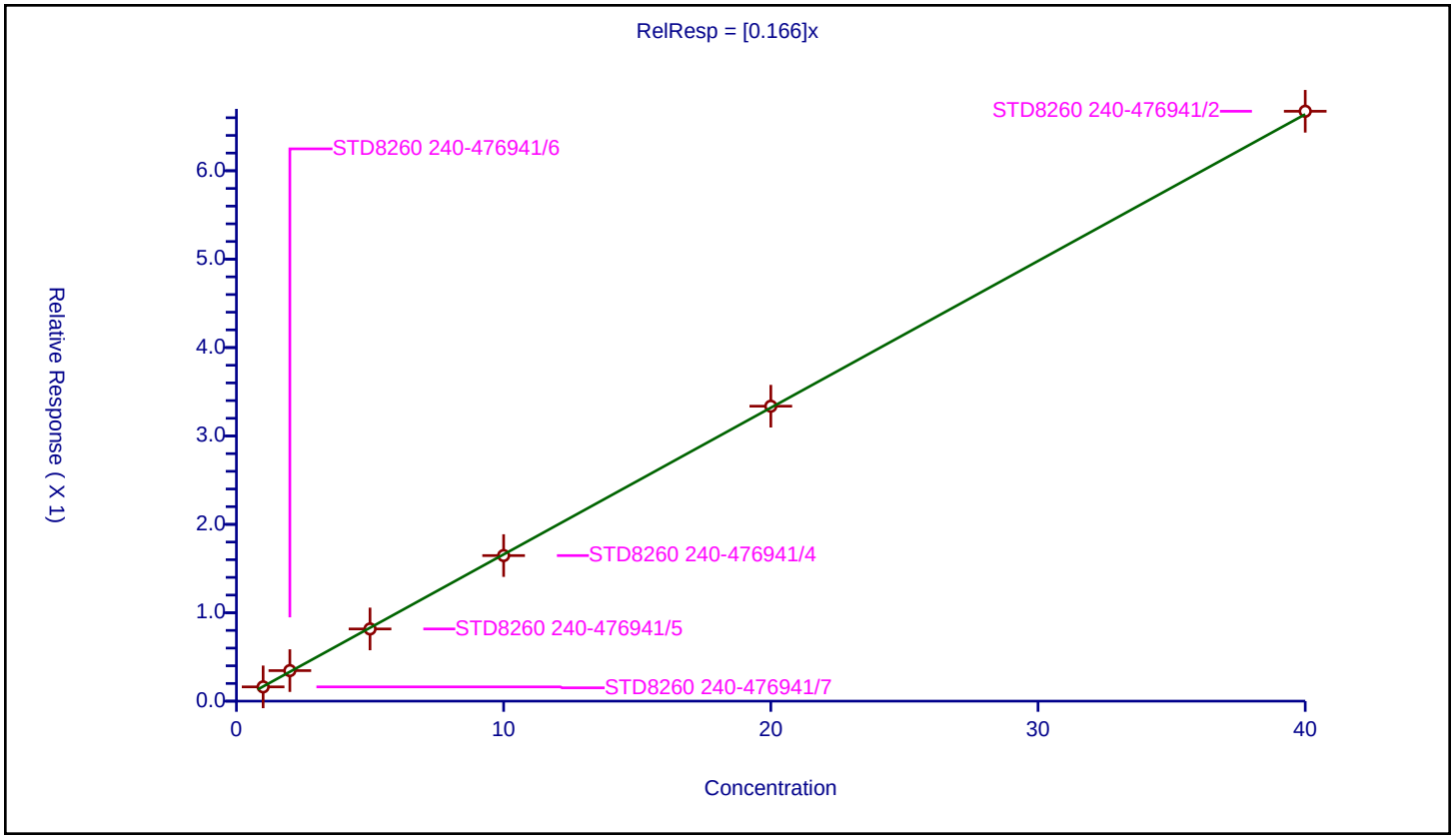
Curve Coefficients

Intercept:	0
Slope:	0.166

Error Coefficients

Standard Error:	229000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.161404	10.0	606056.0	0.161404	Y
2	STD8260 240-476941/6	2.0	0.345503	10.0	608128.0	0.172751	Y
3	STD8260 240-476941/5	5.0	0.816724	10.0	621189.0	0.163345	Y
4	STD8260 240-476941/4	10.0	1.64671	10.0	639882.0	0.164671	Y
5	STD8260 240-476941/3	20.0	3.336666	10.0	663171.0	0.166833	Y
6	STD8260 240-476941/2	40.0	6.673163	10.0	670129.0	0.166829	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

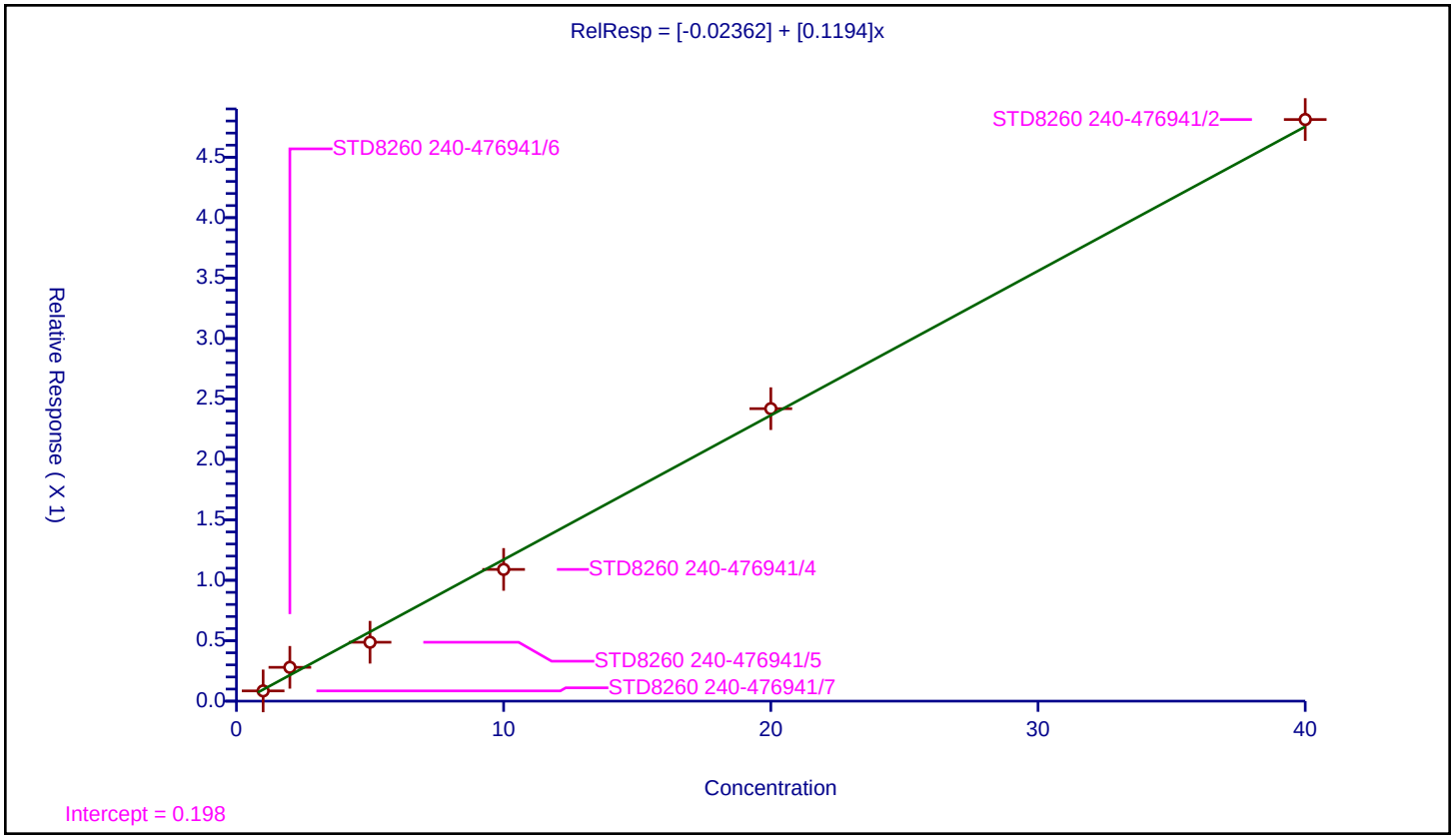
Curve Coefficients

Intercept:	-0.02362
Slope:	0.1194

Error Coefficients

Standard Error:	184000
Relative Standard Error:	16.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.084695	10.0	606056.0	0.084695	Y
2	STD8260 240-476941/6	2.0	0.279678	10.0	608128.0	0.139839	Y
3	STD8260 240-476941/5	5.0	0.487243	10.0	621189.0	0.097449	Y
4	STD8260 240-476941/4	10.0	1.089888	10.0	639882.0	0.108989	Y
5	STD8260 240-476941/3	20.0	2.419964	10.0	663171.0	0.120998	Y
6	STD8260 240-476941/2	40.0	4.812178	10.0	670129.0	0.120304	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

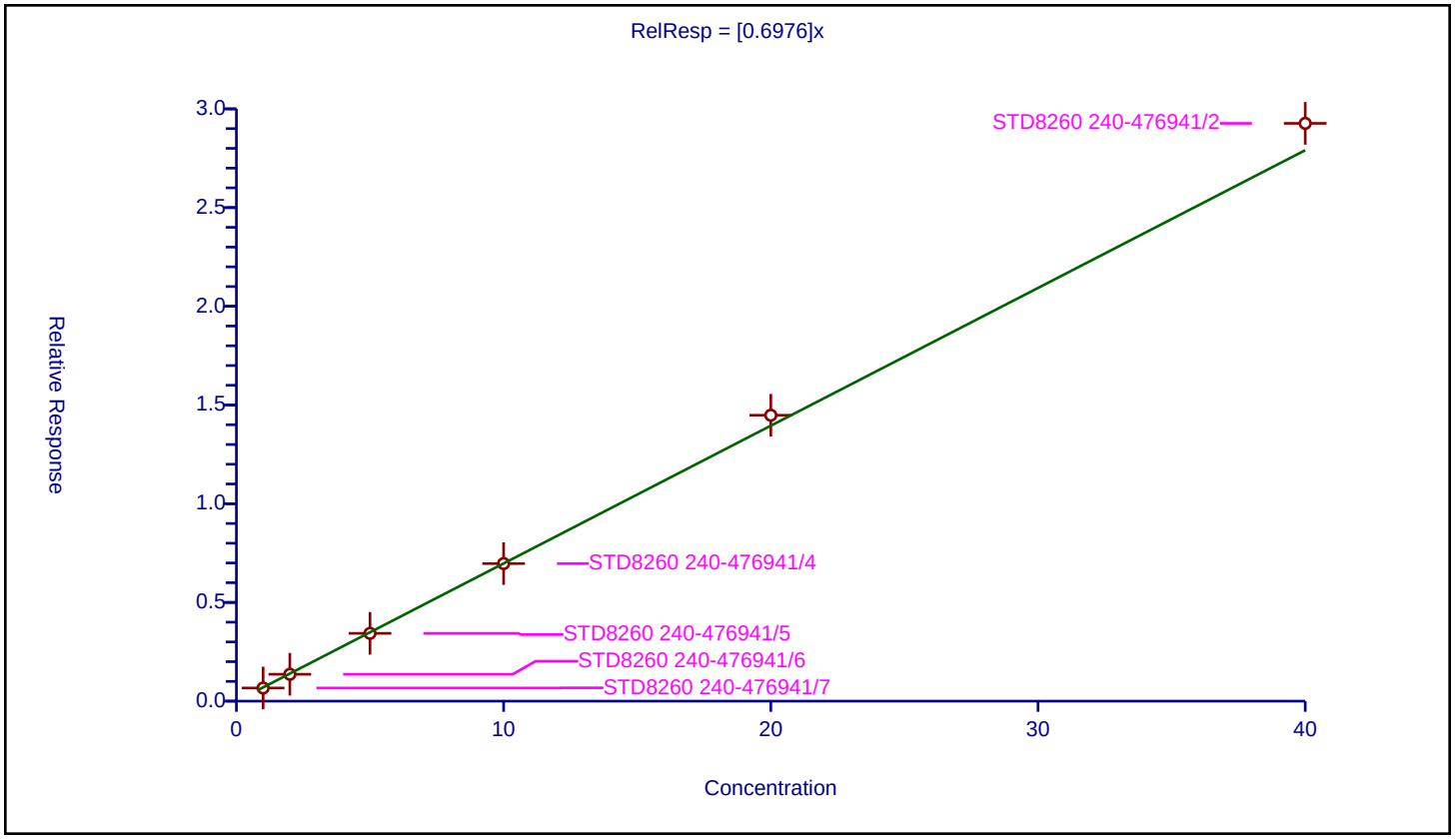
Curve Coefficients

Intercept:	0
Slope:	0.6976

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.665285	10.0	606056.0	0.665285	Y
2	STD8260 240-476941/6	2.0	1.362065	10.0	608128.0	0.681033	Y
3	STD8260 240-476941/5	5.0	3.433915	10.0	621189.0	0.686783	Y
4	STD8260 240-476941/4	10.0	6.96841	10.0	639882.0	0.696841	Y
5	STD8260 240-476941/3	20.0	14.48183	10.0	663171.0	0.724092	Y
6	STD8260 240-476941/2	40.0	29.266141	10.0	670129.0	0.731654	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

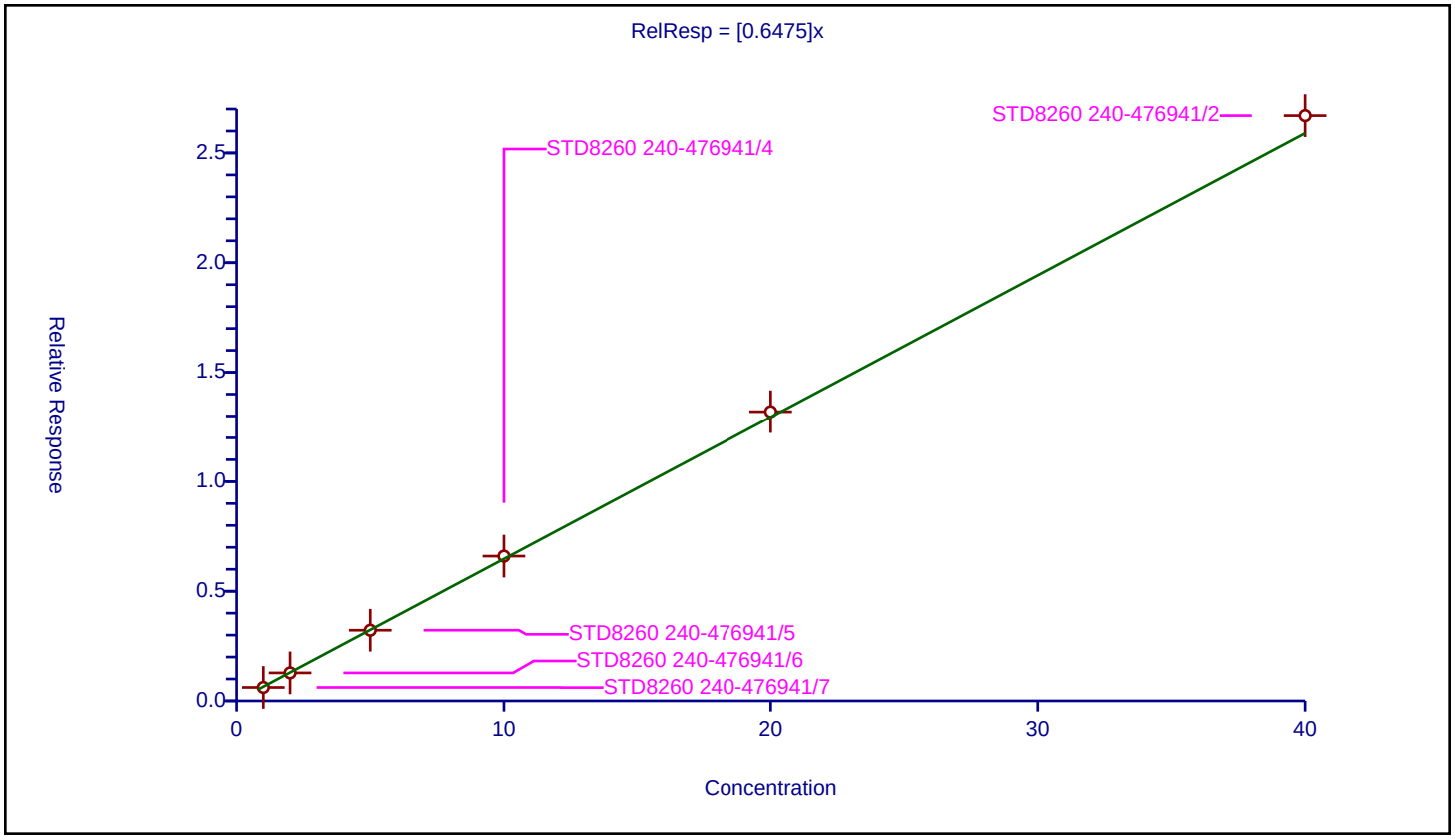
Curve Coefficients

Intercept:	0
Slope:	0.6475

Error Coefficients

Standard Error:	916000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.614069	10.0	606056.0	0.614069	Y
2	STD8260 240-476941/6	2.0	1.278119	10.0	608128.0	0.63906	Y
3	STD8260 240-476941/5	5.0	3.221628	10.0	621189.0	0.644326	Y
4	STD8260 240-476941/4	10.0	6.600092	10.0	639882.0	0.660009	Y
5	STD8260 240-476941/3	20.0	13.199099	10.0	663171.0	0.659955	Y
6	STD8260 240-476941/2	40.0	26.699576	10.0	670129.0	0.667489	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

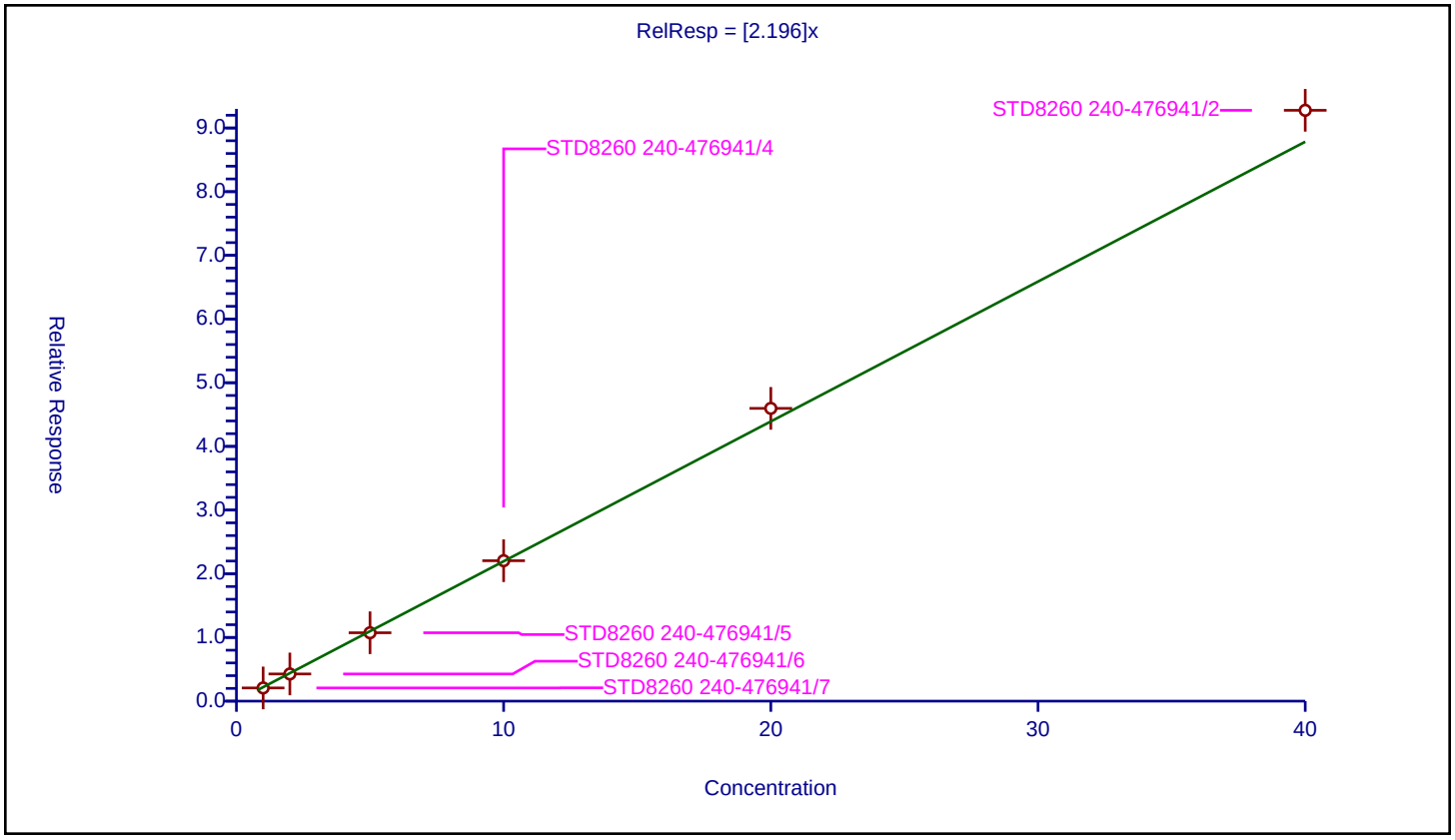
Curve Coefficients

Intercept:	0
Slope:	2.196

Error Coefficients

Standard Error:	3180000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.071195	10.0	606056.0	2.071195	Y
2	STD8260 240-476941/6	2.0	4.269101	10.0	608128.0	2.134551	Y
3	STD8260 240-476941/5	5.0	10.73641	10.0	621189.0	2.147282	Y
4	STD8260 240-476941/4	10.0	22.049409	10.0	639882.0	2.204941	Y
5	STD8260 240-476941/3	20.0	45.973391	10.0	663171.0	2.29867	Y
6	STD8260 240-476941/2	40.0	92.777182	10.0	670129.0	2.31943	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

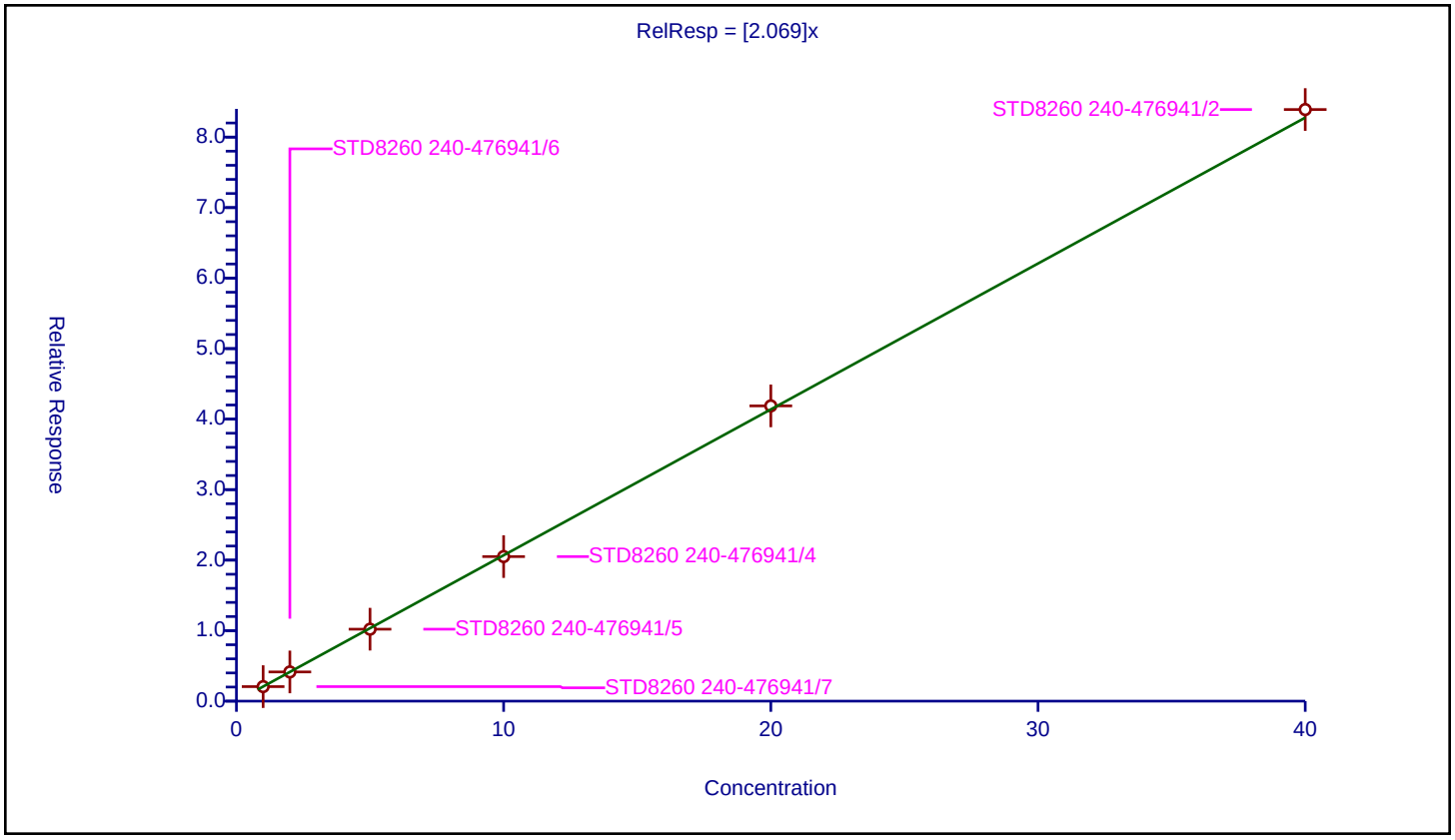
Curve Coefficients

Intercept:	0
Slope:	2.069

Error Coefficients

Standard Error:	2880000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.060618	10.0	606056.0	2.060618	Y
2	STD8260 240-476941/6	2.0	4.140592	10.0	608128.0	2.070296	Y
3	STD8260 240-476941/5	5.0	10.203255	10.0	621189.0	2.040651	Y
4	STD8260 240-476941/4	10.0	20.503671	10.0	639882.0	2.050367	Y
5	STD8260 240-476941/3	20.0	41.875429	10.0	663171.0	2.093771	Y
6	STD8260 240-476941/2	40.0	83.90771	10.0	670129.0	2.097693	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

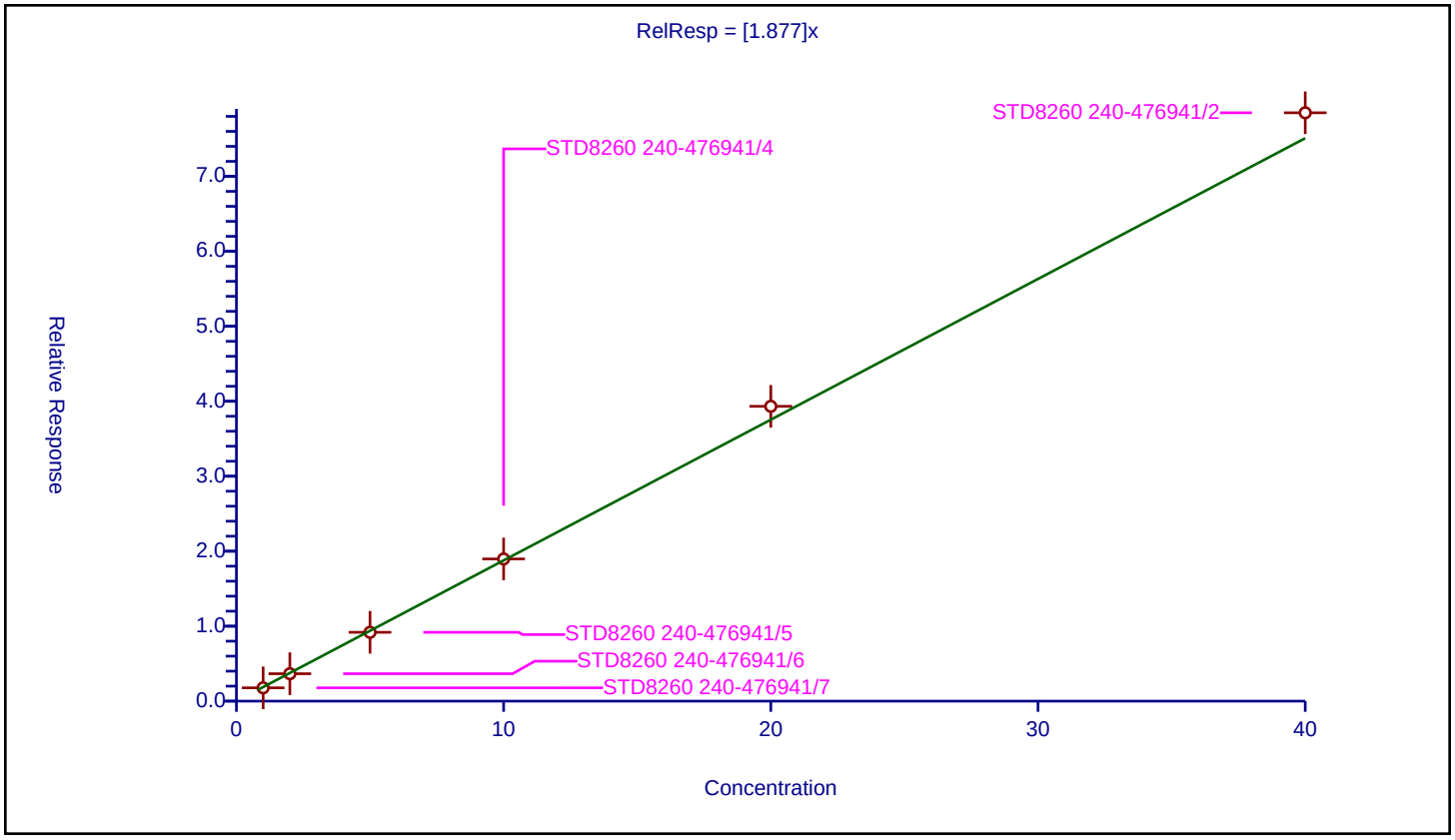
Curve Coefficients

Intercept:	0
Slope:	1.877

Error Coefficients

Standard Error:	2700000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.773037	10.0	606056.0	1.773037	Y
2	STD8260 240-476941/6	2.0	3.657733	10.0	608128.0	1.828867	Y
3	STD8260 240-476941/5	5.0	9.180829	10.0	621189.0	1.836166	Y
4	STD8260 240-476941/4	10.0	18.967622	10.0	639882.0	1.896762	Y
5	STD8260 240-476941/3	20.0	39.326539	10.0	663171.0	1.966327	Y
6	STD8260 240-476941/2	40.0	78.481263	10.0	670129.0	1.962032	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

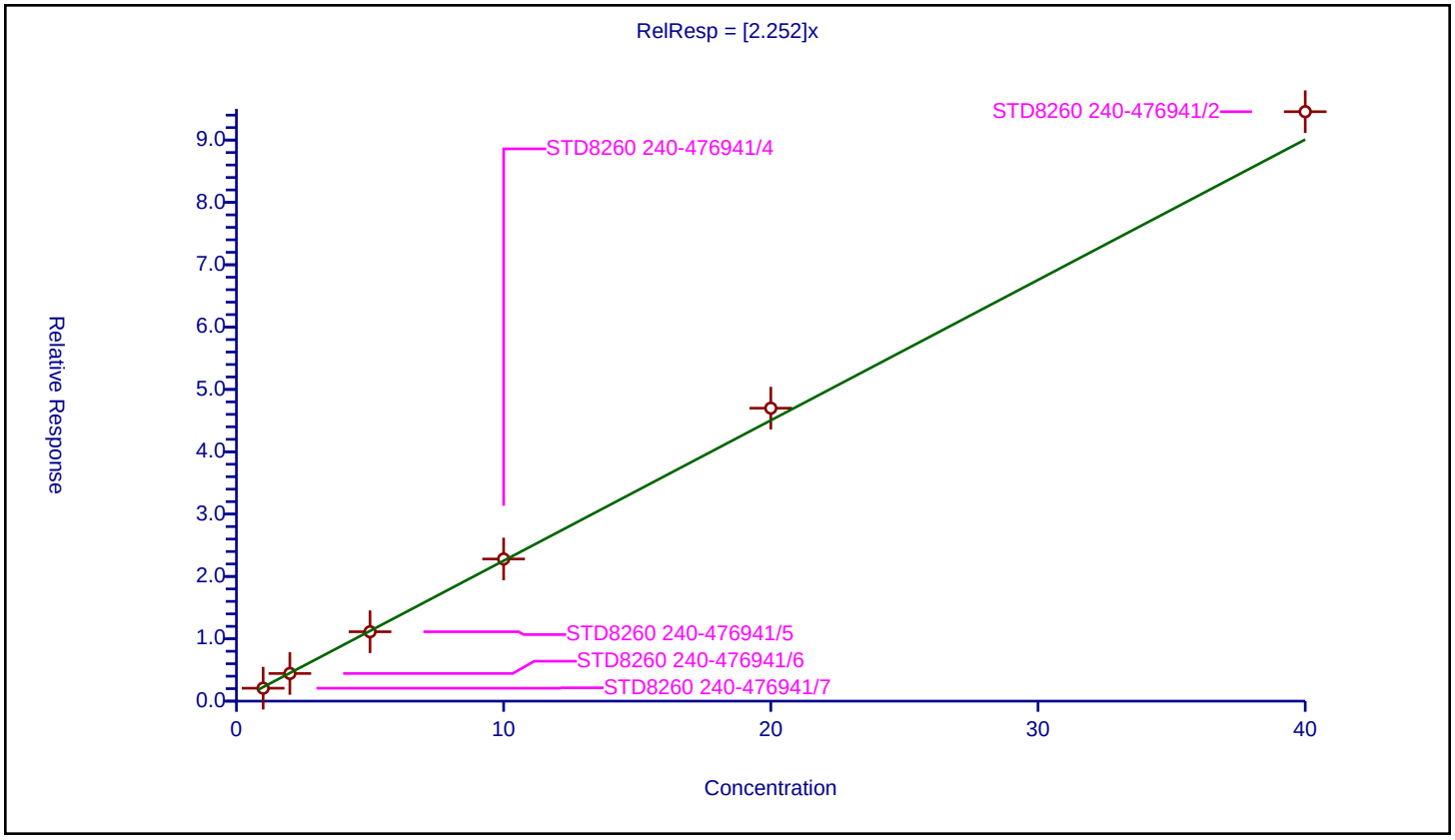
Curve Coefficients

Intercept:	0
Slope:	2.252

Error Coefficients

Standard Error:	3240000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.075204	10.0	606056.0	2.075204	Y
2	STD8260 240-476941/6	2.0	4.43507	10.0	608128.0	2.217535	Y
3	STD8260 240-476941/5	5.0	11.133391	10.0	621189.0	2.226678	Y
4	STD8260 240-476941/4	10.0	22.798422	10.0	639882.0	2.279842	Y
5	STD8260 240-476941/3	20.0	46.993128	10.0	663171.0	2.349656	Y
6	STD8260 240-476941/2	40.0	94.549885	10.0	670129.0	2.363747	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

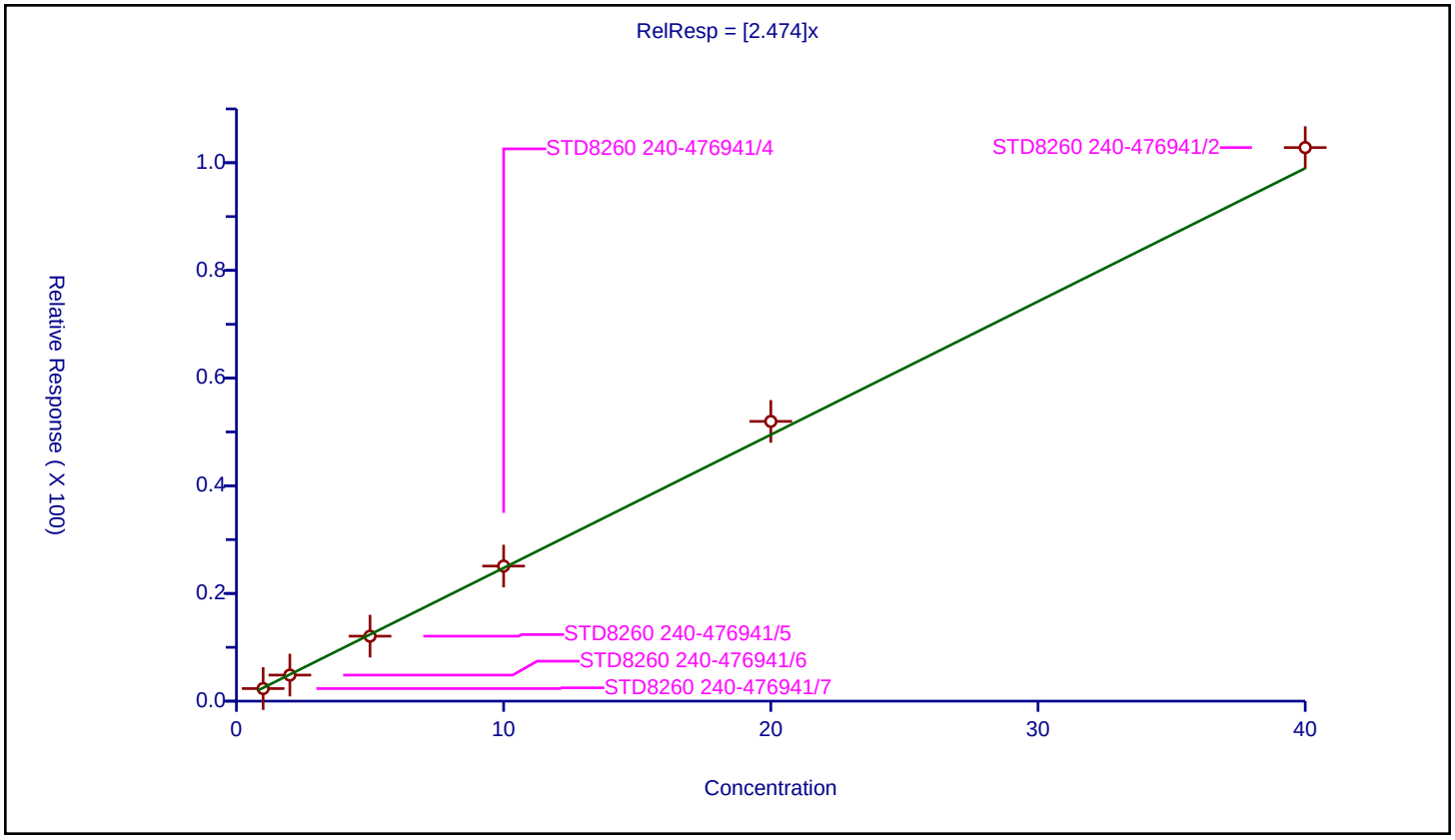
Curve Coefficients

Intercept:	0
Slope:	2.474

Error Coefficients

Standard Error:	3540000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.335329	10.0	606056.0	2.335329	Y
2	STD8260 240-476941/6	2.0	4.838636	10.0	608128.0	2.419318	Y
3	STD8260 240-476941/5	5.0	12.069901	10.0	621189.0	2.41398	Y
4	STD8260 240-476941/4	10.0	25.089798	10.0	639882.0	2.50898	Y
5	STD8260 240-476941/3	20.0	51.959615	10.0	663171.0	2.597981	Y
6	STD8260 240-476941/2	40.0	102.809952	10.0	670129.0	2.570249	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

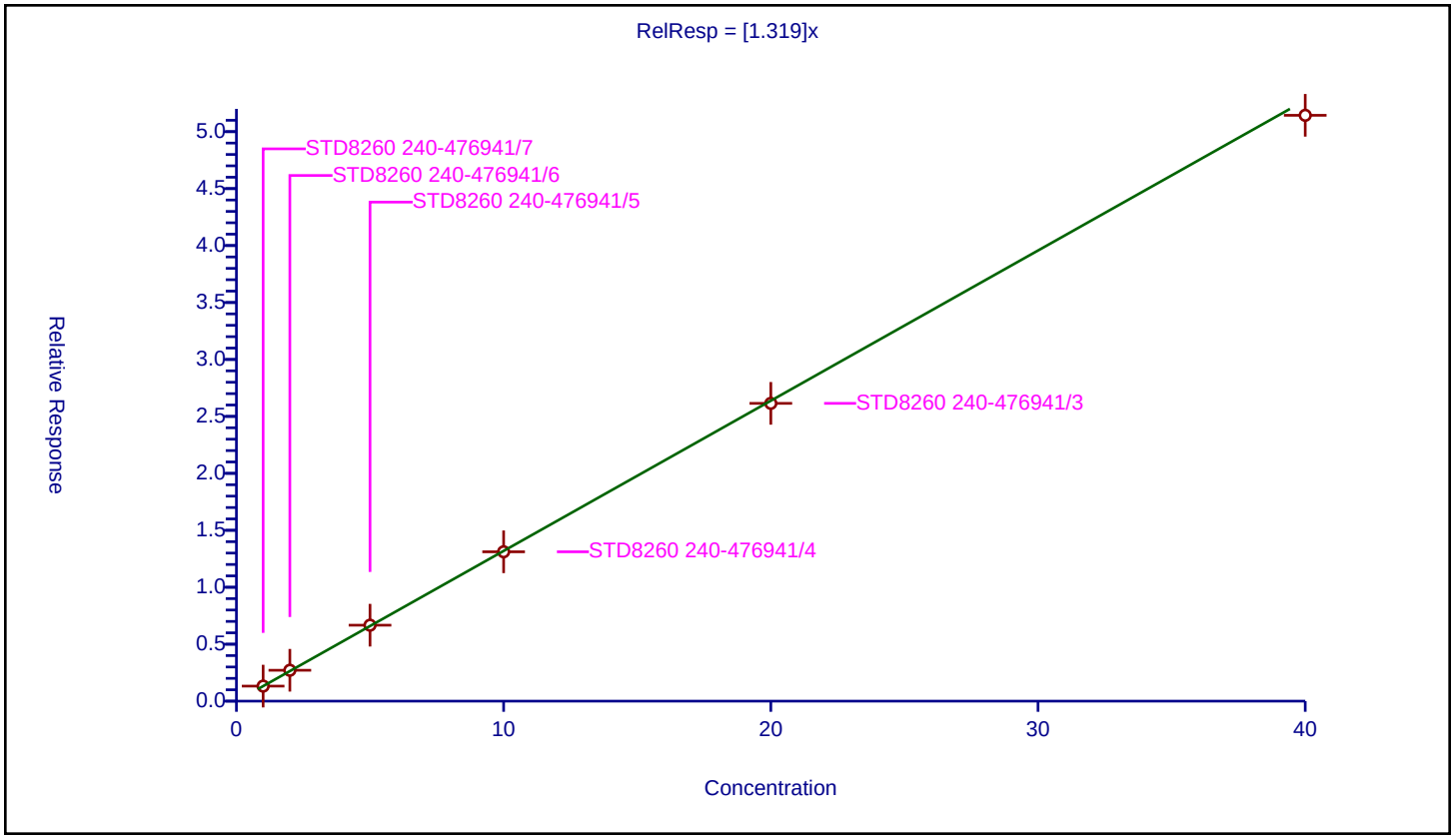
Curve Coefficients

Intercept:	0
Slope:	1.319

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.319812	10.0	606056.0	1.319812	Y
2	STD8260 240-476941/6	2.0	2.710515	10.0	608128.0	1.355257	Y
3	STD8260 240-476941/5	5.0	6.667906	10.0	621189.0	1.333581	Y
4	STD8260 240-476941/4	10.0	13.113402	10.0	639882.0	1.31134	Y
5	STD8260 240-476941/3	20.0	26.144644	10.0	663171.0	1.307232	Y
6	STD8260 240-476941/2	40.0	51.435455	10.0	670129.0	1.285886	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

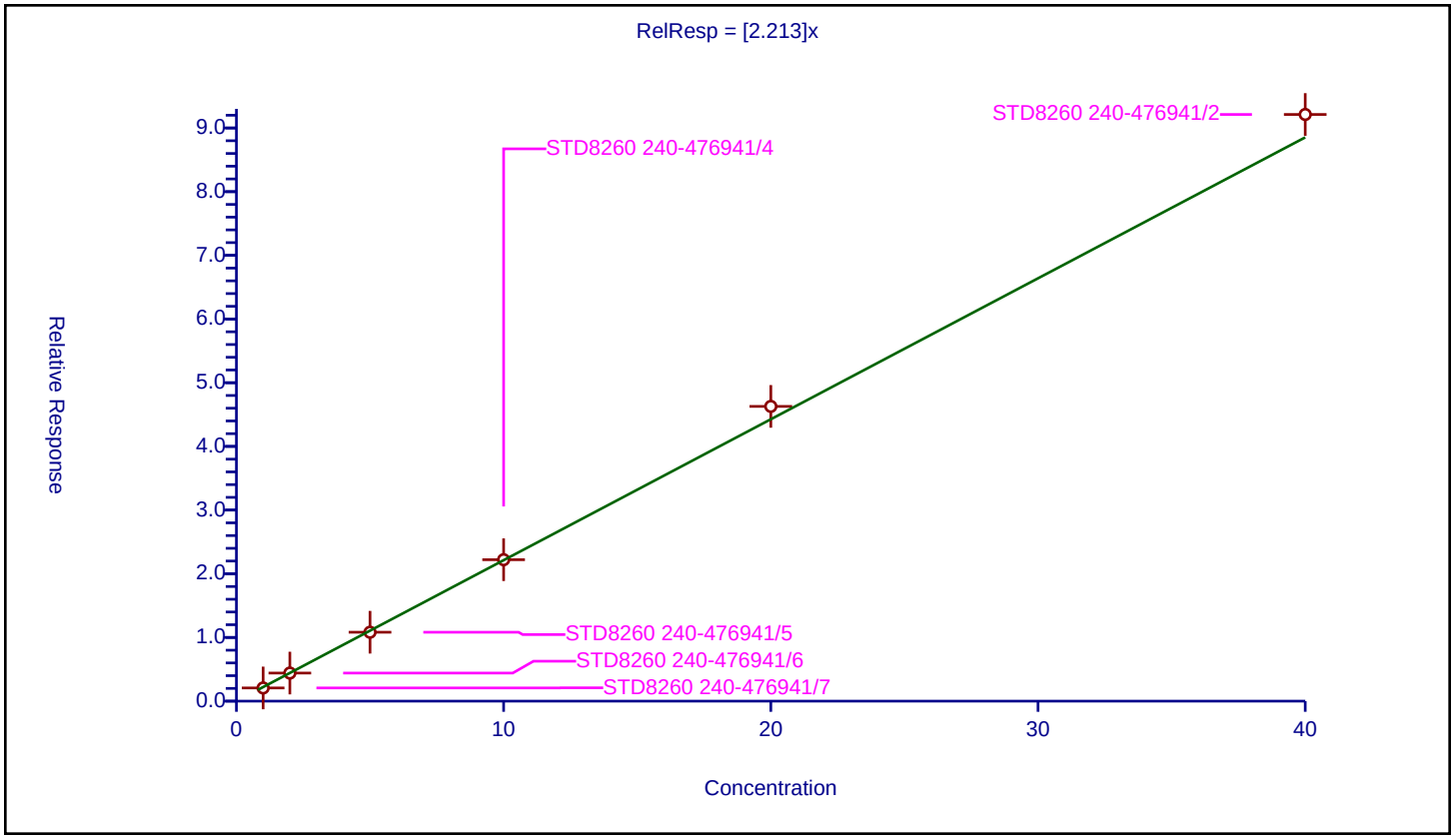
Curve Coefficients

Intercept:	0
Slope:	2.213

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.07131	10.0	606056.0	2.07131	Y
2	STD8260 240-476941/6	2.0	4.410042	10.0	608128.0	2.205021	Y
3	STD8260 240-476941/5	5.0	10.820813	10.0	621189.0	2.164163	Y
4	STD8260 240-476941/4	10.0	22.209517	10.0	639882.0	2.220952	Y
5	STD8260 240-476941/3	20.0	46.283538	10.0	663171.0	2.314177	Y
6	STD8260 240-476941/2	40.0	92.12086	10.0	670129.0	2.303022	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

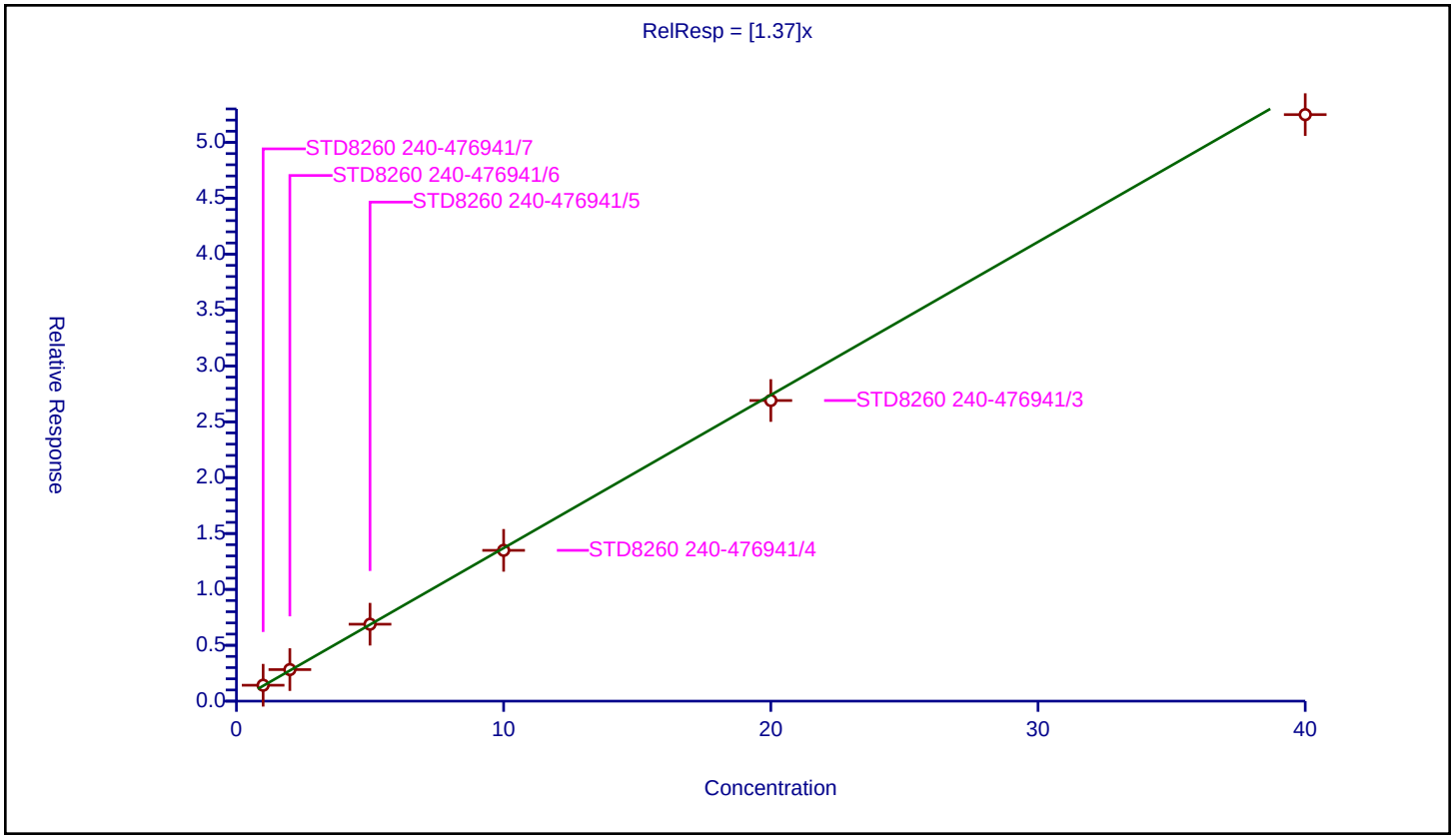
Curve Coefficients

Intercept:	0
Slope:	1.37

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.423086	10.0	606056.0	1.423086	Y
2	STD8260 240-476941/6	2.0	2.823649	10.0	608128.0	1.411824	Y
3	STD8260 240-476941/5	5.0	6.88573	10.0	621189.0	1.377146	Y
4	STD8260 240-476941/4	10.0	13.493191	10.0	639882.0	1.349319	Y
5	STD8260 240-476941/3	20.0	26.904313	10.0	663171.0	1.345216	Y
6	STD8260 240-476941/2	40.0	52.488506	10.0	670129.0	1.312213	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

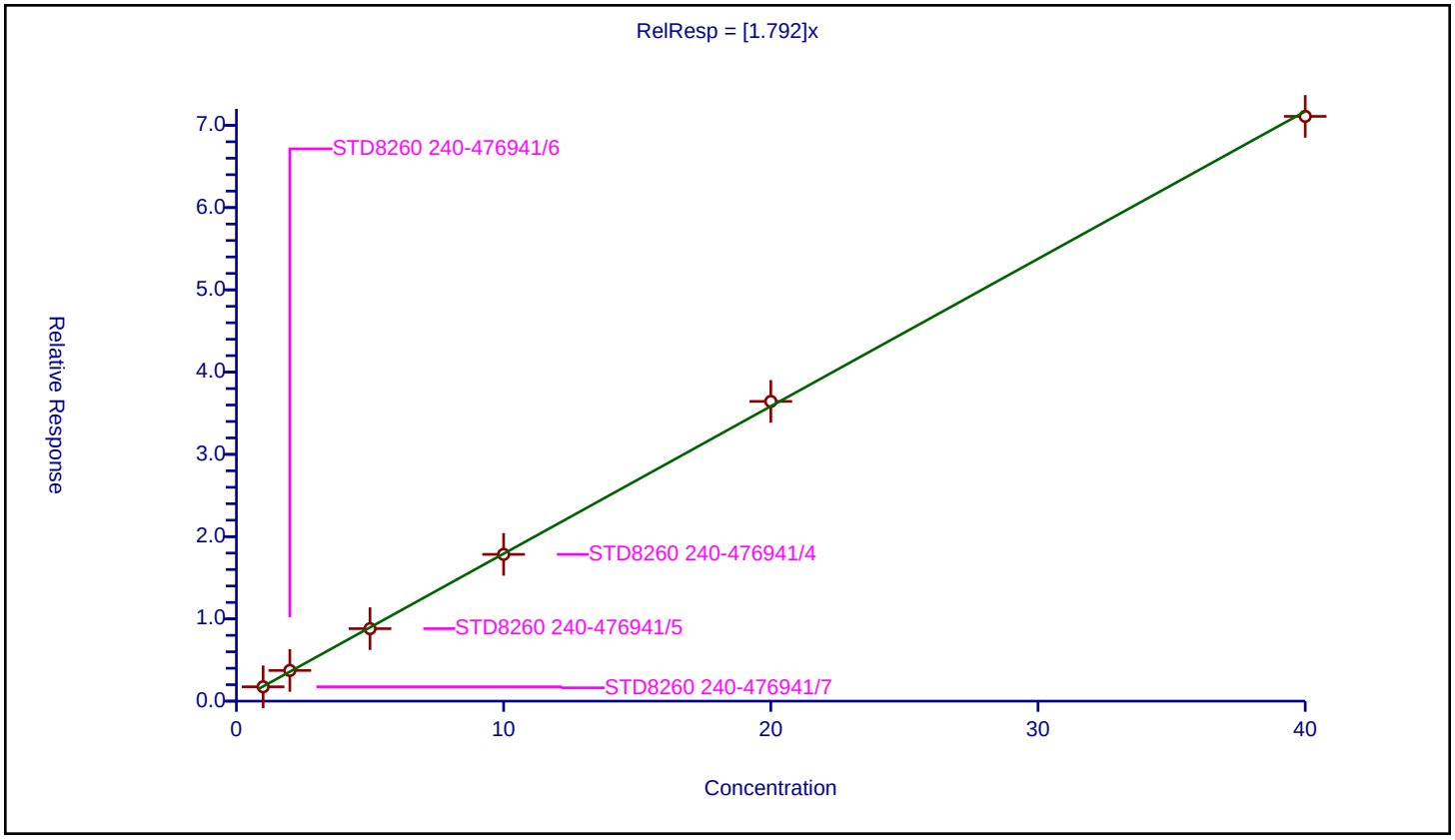
Curve Coefficients

Intercept:	0
Slope:	1.792

Error Coefficients

Standard Error:	2460000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.742166	10.0	606056.0	1.742166	Y
2	STD8260 240-476941/6	2.0	3.732734	10.0	608128.0	1.866367	Y
3	STD8260 240-476941/5	5.0	8.810507	10.0	621189.0	1.762101	Y
4	STD8260 240-476941/4	10.0	17.841524	10.0	639882.0	1.784152	Y
5	STD8260 240-476941/3	20.0	36.437495	10.0	663171.0	1.821875	Y
6	STD8260 240-476941/2	40.0	71.091193	10.0	670129.0	1.77728	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

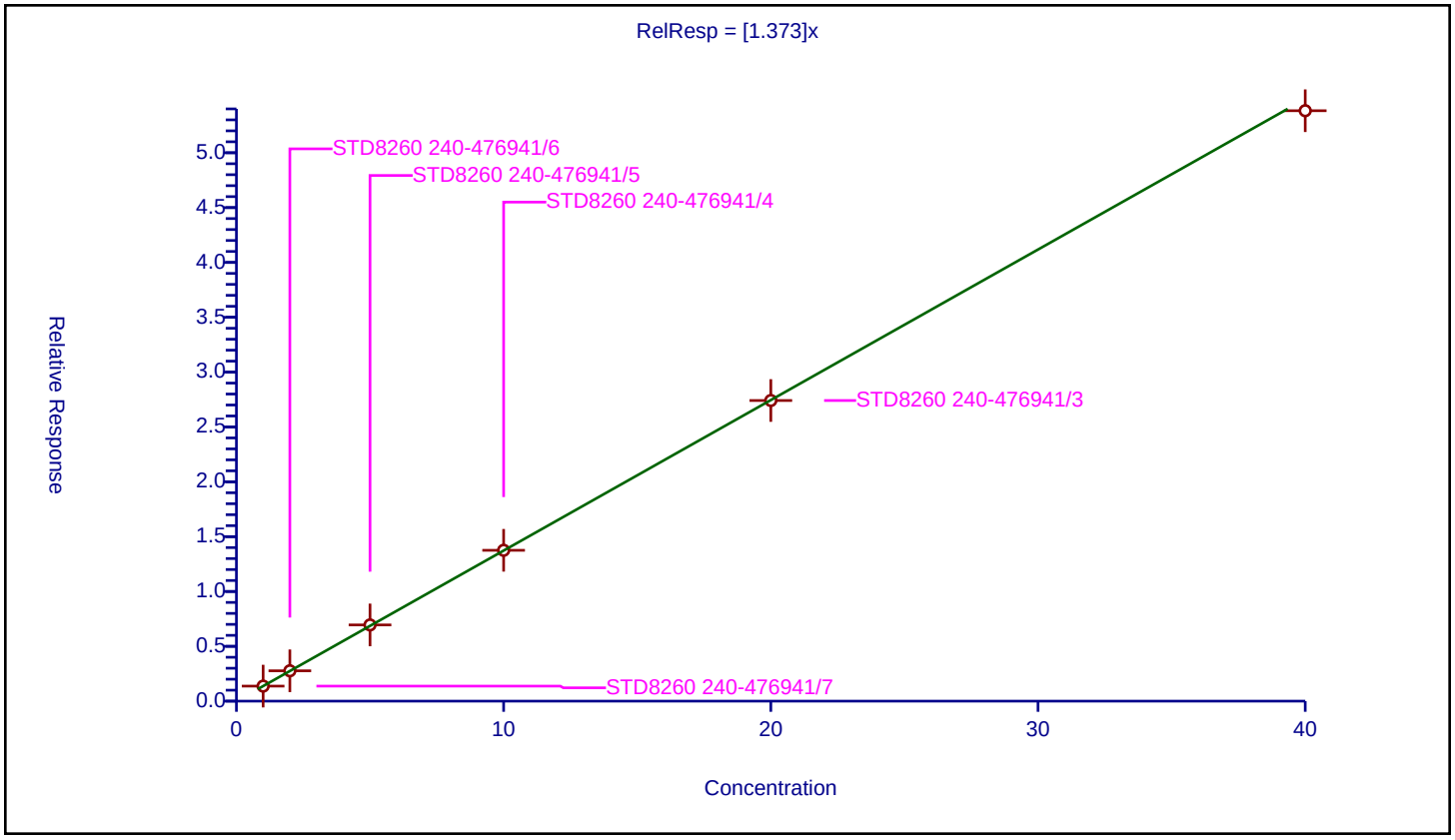
Curve Coefficients

Intercept:	0
Slope:	1.373

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.370731	10.0	606056.0	1.370731	Y
2	STD8260 240-476941/6	2.0	2.76603	10.0	608128.0	1.383015	Y
3	STD8260 240-476941/5	5.0	6.949366	10.0	621189.0	1.389873	Y
4	STD8260 240-476941/4	10.0	13.752614	10.0	639882.0	1.375261	Y
5	STD8260 240-476941/3	20.0	27.410336	10.0	663171.0	1.370517	Y
6	STD8260 240-476941/2	40.0	53.833426	10.0	670129.0	1.345836	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

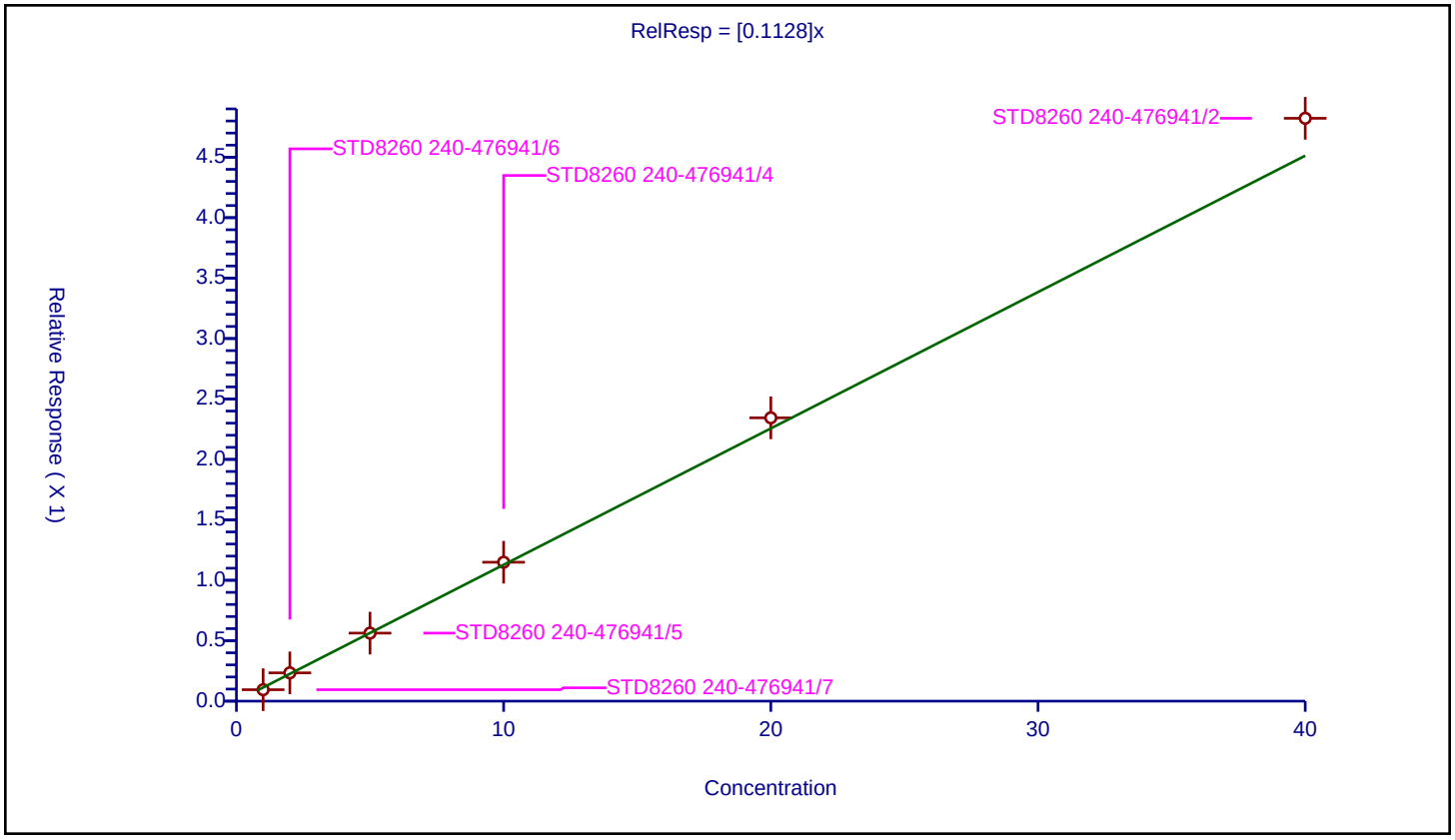
Curve Coefficients

Intercept:	0
Slope:	0.1128

Error Coefficients

Standard Error:	165000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.094562	10.0	606056.0	0.094562	Y
2	STD8260 240-476941/6	2.0	0.234178	10.0	608128.0	0.117089	Y
3	STD8260 240-476941/5	5.0	0.562856	10.0	621189.0	0.112571	Y
4	STD8260 240-476941/4	10.0	1.149181	10.0	639882.0	0.114918	Y
5	STD8260 240-476941/3	20.0	2.344056	10.0	663171.0	0.117203	Y
6	STD8260 240-476941/2	40.0	4.82231	10.0	670129.0	0.120558	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

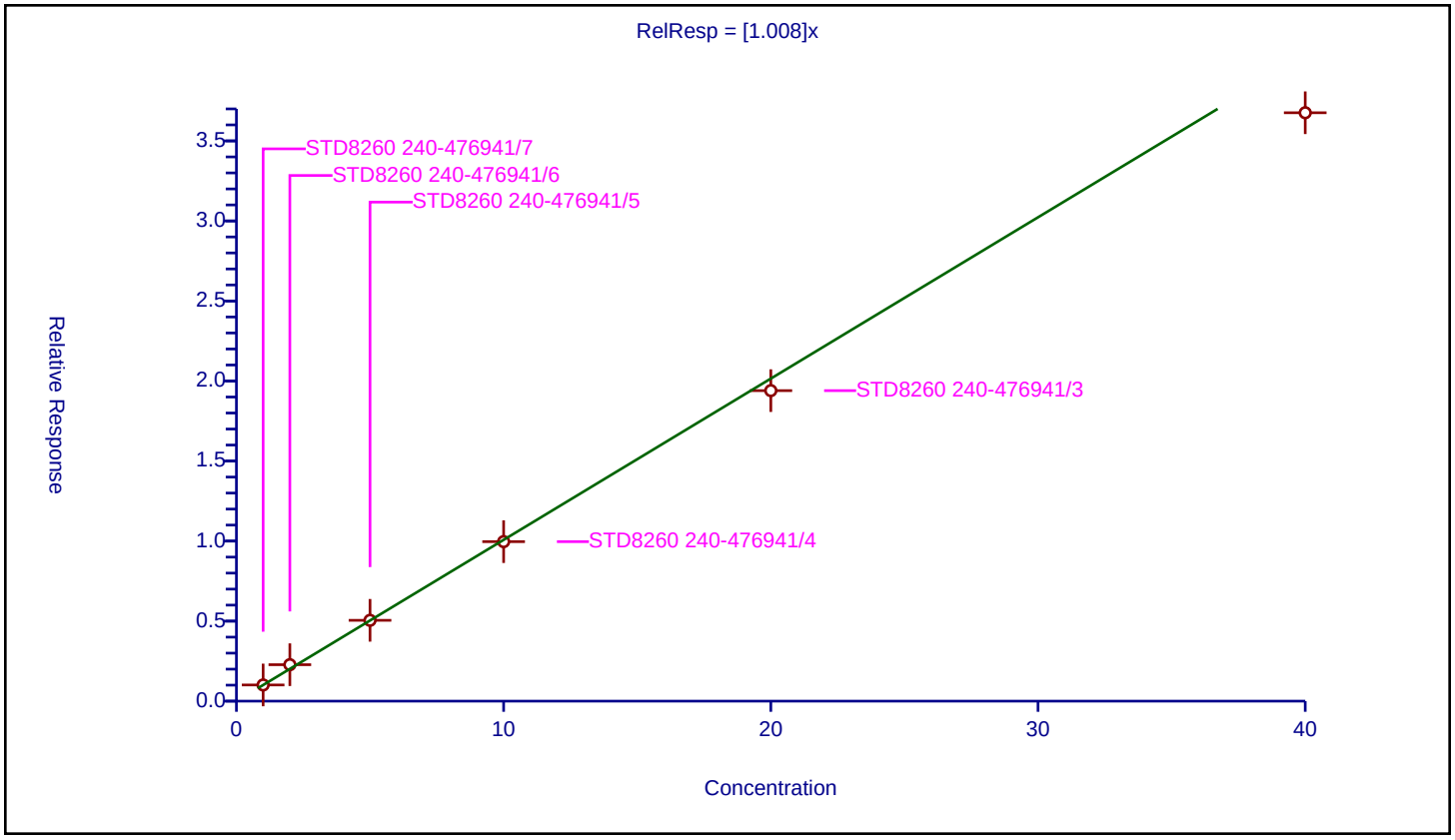
Curve Coefficients

Intercept:	0
Slope:	1.008

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.011375	10.0	606056.0	1.011375	Y
2	STD8260 240-476941/6	2.0	2.277382	10.0	608128.0	1.138691	Y
3	STD8260 240-476941/5	5.0	5.049494	10.0	621189.0	1.009899	Y
4	STD8260 240-476941/4	10.0	9.964243	10.0	639882.0	0.996424	Y
5	STD8260 240-476941/3	20.0	19.398933	10.0	663171.0	0.969947	Y
6	STD8260 240-476941/2	40.0	36.758535	10.0	670129.0	0.918963	Y



Calibration / Hexachlorobutadiene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

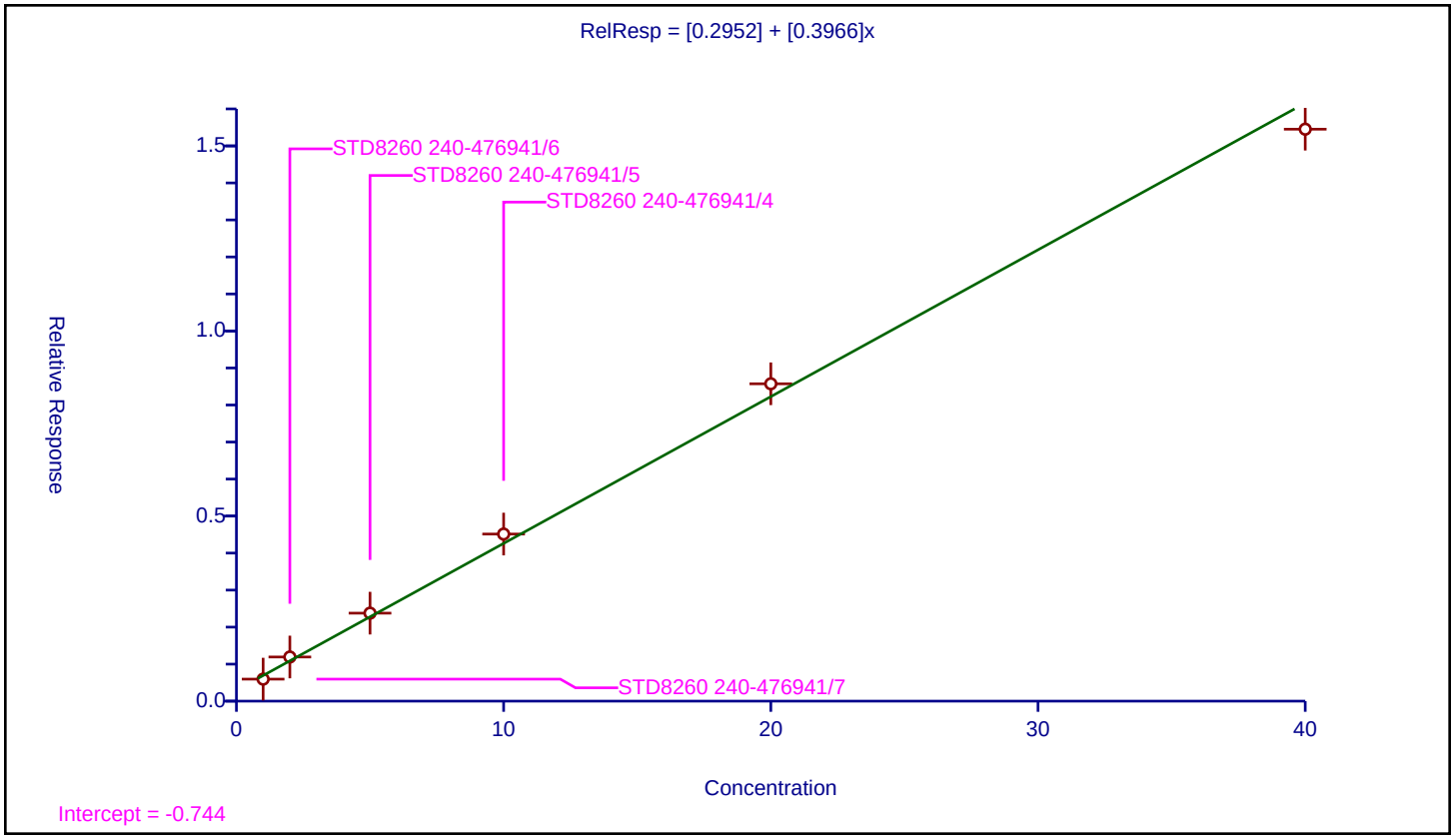
Curve Coefficients

Intercept:	0.2952
Slope:	0.3966

Error Coefficients

Standard Error:	614000
Relative Standard Error:	14.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.594665	10.0	606056.0	0.594665	Y
2	STD8260 240-476941/6	2.0	1.19294	10.0	608128.0	0.59647	Y
3	STD8260 240-476941/5	5.0	2.37707	10.0	621189.0	0.475414	Y
4	STD8260 240-476941/4	10.0	4.514192	10.0	639882.0	0.451419	Y
5	STD8260 240-476941/3	20.0	8.573762	10.0	663171.0	0.428688	Y
6	STD8260 240-476941/2	40.0	15.451353	10.0	670129.0	0.386284	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

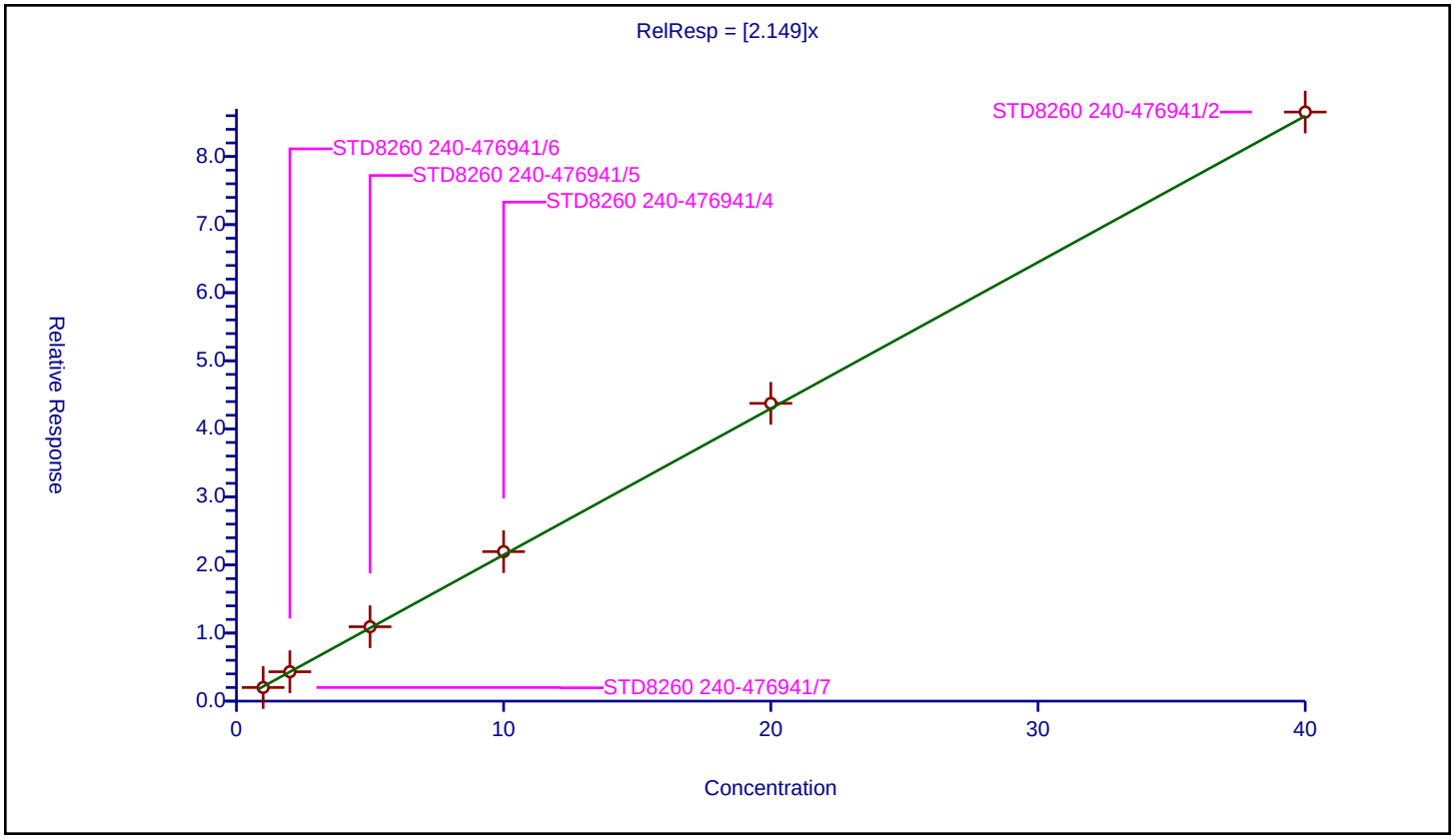
Curve Coefficients

Intercept:	0
Slope:	2.149

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.002472	10.0	606056.0	2.002472	Y
2	STD8260 240-476941/6	2.0	4.316838	10.0	608128.0	2.158419	Y
3	STD8260 240-476941/5	5.0	10.928751	10.0	621189.0	2.18575	Y
4	STD8260 240-476941/4	10.0	21.96444	10.0	639882.0	2.196444	Y
5	STD8260 240-476941/3	20.0	43.743574	10.0	663171.0	2.187179	Y
6	STD8260 240-476941/2	40.0	86.537965	10.0	670129.0	2.163449	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

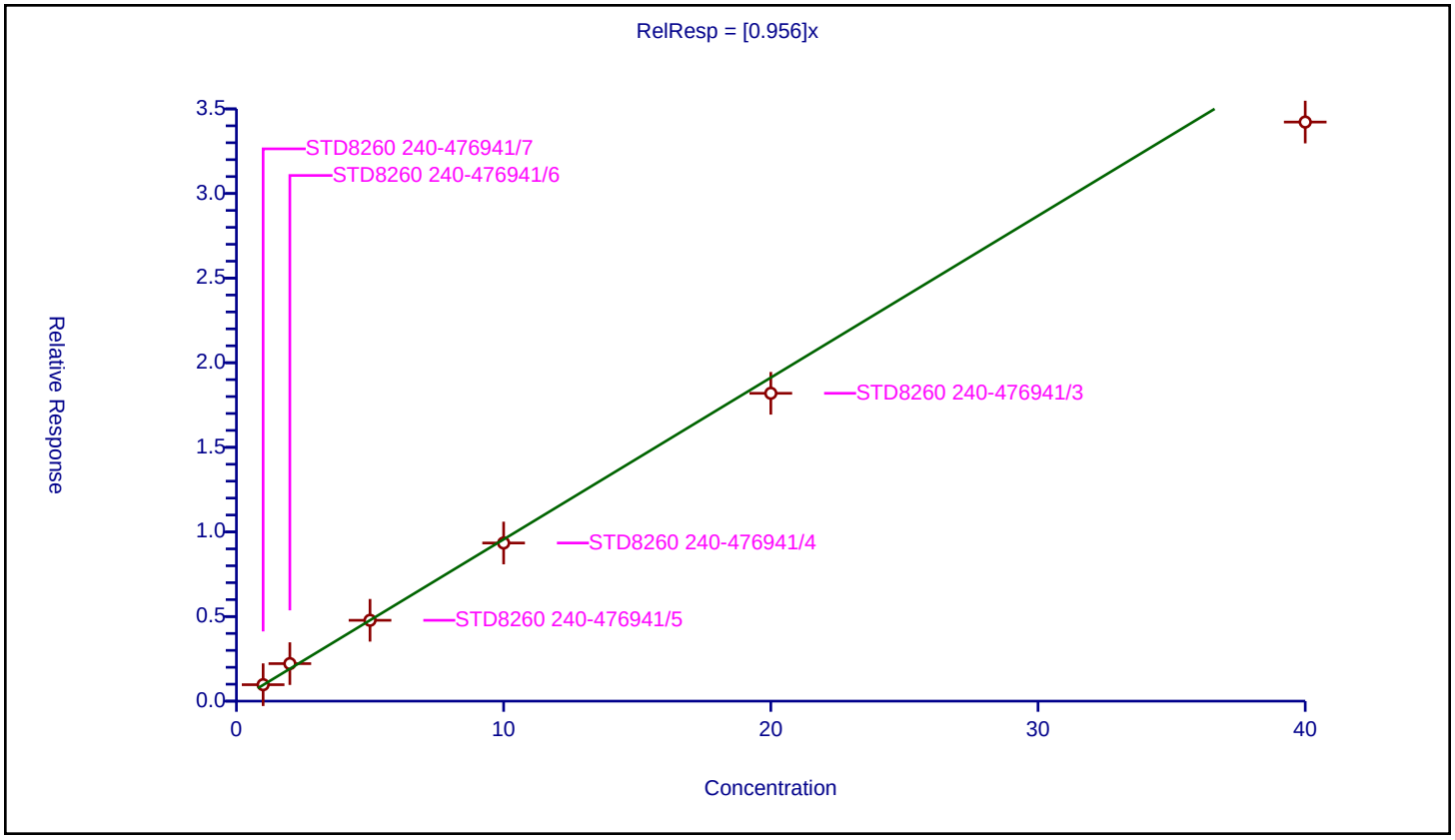
Curve Coefficients

Intercept:	0
Slope:	0.956

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.972435	10.0	606056.0	0.972435	Y
2	STD8260 240-476941/6	2.0	2.216967	10.0	608128.0	1.108484	Y
3	STD8260 240-476941/5	5.0	4.778063	10.0	621189.0	0.955613	Y
4	STD8260 240-476941/4	10.0	9.344895	10.0	639882.0	0.934489	Y
5	STD8260 240-476941/3	20.0	18.192306	10.0	663171.0	0.909615	Y
6	STD8260 240-476941/2	40.0	34.221859	10.0	670129.0	0.855546	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3162		0.0105	0.0100	4.9	50.0
Chloromethane	Ave	0.3426	0.3320	0.1000	0.00969	0.0100	-3.1	50.0
Vinyl chloride	Ave	0.2936	0.2920		0.00994	0.0100	-0.6	20.0
Butadiene	Ave	0.3746	0.3489		0.00932	0.0100	-6.8	50.0
Bromomethane	Ave	0.2460	0.2290		0.00931	0.0100	-6.9	50.0
Chloroethane	Ave	0.2164	0.2012		0.00930	0.0100	-7.0	50.0
Dichlorofluoromethane	Ave	0.5757	0.5490		0.00954	0.0100	-4.6	50.0
Trichlorofluoromethane	Ave	0.5212	0.5235		0.0100	0.0100	0.5	50.0
Ethyl ether	Ave	0.2512	0.2446		0.00974	0.0100	-2.6	50.0
Acrolein	Lin		0.0072		0.0217	0.0500	-56.5*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2948		0.0102	0.0100	2.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2477		0.0103	0.0100	2.8	50.0
Acetone	Ave	0.0202	0.0217		0.0215	0.0200	7.4	50.0
Iodomethane	Ave	0.4428	0.4952		0.0112	0.0100	11.8	50.0
Carbon disulfide	Ave	0.8057	0.7778		0.00965	0.0100	-3.5	50.0
3-Chloro-1-propene	Ave	0.1698	0.1619		0.00953	0.0100	-4.7	50.0
Methyl acetate	Ave	0.1269	0.1257		0.0198	0.0200	-1.0	50.0
Methylene Chloride	Ave	0.2691	0.2551		0.00948	0.0100	-5.2	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0135		0.0952	0.100	-4.8	50.0
Acrylonitrile	Ave	0.0679	0.0654		0.0964	0.100	-3.6	50.0
Methyl tert-butyl ether	Ave	0.7014	0.6922		0.00987	0.0100	-1.3	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2782		0.00964	0.0100	-3.6	50.0
Hexane	Ave	0.0578	0.0516		0.00893	0.0100	-10.7	20.0
1,1-Dichloroethane	Ave	0.4573	0.4471	0.1000	0.00978	0.0100	-2.2	50.0
Vinyl acetate	Ave	0.3891	0.3568		0.00917	0.0100	-8.3	50.0
2,2-Dichloropropane	Ave	0.0889	0.0893		0.0100	0.0100	0.5	50.0
2-Butanone (MEK)	Ave	0.0211	0.0211		0.0200	0.0200	0.0	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3083		0.0101	0.0100	1.1	50.0
Chlorobromomethane	Ave	0.1440	0.1399		0.00971	0.0100	-2.9	50.0
Tetrahydrofuran	Ave	0.0526	0.0498		0.0189	0.0200	-5.3	50.0
Chloroform	Ave	0.4553	0.4511		0.00991	0.0100	-0.9	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.4200		0.0102	0.0100	2.4	50.0
Cyclohexane	Ave	0.4232	0.4079		0.00964	0.0100	-3.6	50.0
1,1-Dichloropropene	Ave	0.3688	0.3540		0.00960	0.0100	-4.0	50.0
Carbon tetrachloride	Ave	0.3647	0.3645		0.00999	0.0100	-0.0	50.0
Isobutyl alcohol	Ave	0.0045	0.0045		0.250	0.250	-0.0	50.0
Benzene	Ave	1.097	1.041		0.00949	0.0100	-5.1	50.0
1,2-Dichloroethane	Ave	0.3263	0.3199		0.00981	0.0100	-1.9	50.0
n-Heptane	Ave	0.0495	0.0427		0.00864	0.0100	-13.6	50.0
Trichloroethene	Ave	0.2948	0.2849		0.00966	0.0100	-3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3434		0.00933	0.0100	-6.7	50.0
1,2-Dichloropropane	Ave	0.2272	0.2268		0.00998	0.0100	-0.2	20.0
1,4-Dioxane	Qua		0.0008		0.0759	0.200	-62.0*	50.0
Dibromomethane	Ave	0.1312	0.1315		0.0100	0.0100	0.2	50.0
Dichlorobromomethane	Ave	0.2893	0.2932		0.0101	0.0100	1.4	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.0771		0.00982	0.0100	-1.8	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3147		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1567		0.0207	0.0200	3.4	50.0
Toluene	Ave	1.478	1.427		0.00966	0.0100	-3.4	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.3485		0.00920	0.0100	-8.0	50.0
Ethyl methacrylate	Ave	0.2855	0.2734		0.00958	0.0100	-4.2	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.2384		0.00983	0.0100	-1.7	50.0
Tetrachloroethene	Ave	0.3113	0.3026		0.00972	0.0100	-2.8	50.0
1,3-Dichloropropane	Ave	0.4170	0.4070		0.00976	0.0100	-2.4	50.0
2-Hexanone	Ave	0.1387	0.1422		0.0205	0.0200	2.5	50.0
Chlorodibromomethane	Ave	0.2665	0.2652		0.00995	0.0100	-0.5	50.0
Ethylene Dibromide	Ave	0.2342	0.2240		0.00957	0.0100	-4.3	50.0
Chlorobenzene	Ave	0.9020	0.8871	0.3000	0.00983	0.0100	-1.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3822		0.0102	0.0100	1.7	50.0
Ethylbenzene	Ave	0.4928	0.4906		0.00996	0.0100	-0.4	20.0
m-Xylene & p-Xylene	Ave	1.195	1.180		0.00987	0.0100	-1.3	50.0
o-Xylene	Ave	0.6424	0.6426		0.0100	0.0100	0.0	50.0
Styrene	Ave	0.8332	0.8410		0.0101	0.0100	0.9	50.0
Bromoform	Ave	0.1647	0.1612	0.1000	0.00979	0.0100	-2.1	50.0
Isopropylbenzene	Ave	1.586	1.602		0.0101	0.0100	1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.5091	0.3000	0.00995	0.0100	-0.5	50.0
Bromobenzene	Ave	0.7041	0.7006		0.00995	0.0100	-0.5	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.1703		0.0103	0.0100	2.6	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1015		0.00870	0.0100	-13.0	50.0
N-Propylbenzene	Ave	0.6976	0.6962		0.00998	0.0100	-0.2	50.0
2-Chlorotoluene	Ave	0.6475	0.6591		0.0102	0.0100	1.8	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.185		0.00995	0.0100	-0.5	50.0
4-Chlorotoluene	Ave	2.069	2.053		0.00992	0.0100	-0.8	50.0
tert-Butylbenzene	Ave	1.877	1.840		0.00980	0.0100	-2.0	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.297		0.0102	0.0100	2.0	50.0
sec-Butylbenzene	Ave	2.474	2.409		0.00974	0.0100	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.319	1.302		0.00987	0.0100	-1.3	50.0
4-Isopropyltoluene	Ave	2.213	2.161		0.00977	0.0100	-2.3	50.0
1,4-Dichlorobenzene	Ave	1.370	1.339		0.00978	0.0100	-2.2	50.0
n-Butylbenzene	Ave	1.792	1.672		0.00933	0.0100	-6.7	50.0
1,2-Dichlorobenzene	Ave	1.373	1.340		0.00976	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1117		0.00990	0.0100	-1.0	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.9456		0.00939	0.0100	-6.1	50.0
Hexachlorobutadiene	Lin1		0.3990		0.00932	0.0100	-6.8	50.0
Naphthalene	Ave	2.149	2.141		0.00996	0.0100	-0.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.8985		0.00940	0.0100	-6.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2236		0.00957	0.0100	-4.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2484		0.00943	0.0100	-5.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.185		0.00967	0.0100	-3.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4194		0.0101	0.0100	1.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 11:01:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-014
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 13:17:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1567389	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1054688	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.898	9.899	-0.001	92	623148	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	350444	10.0	9.57	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	389325	10.0	9.43	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1249416	10.0	9.67	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	442373	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	495659	10.0	10.5	
10 Chloromethane	50	1.574	1.574	0.000	99	520359	10.0	9.69	
11 Vinyl chloride	62	1.669	1.669	0.000	98	457630	10.0	9.94	
12 Butadiene	54	1.681	1.681	0.000	99	546882	10.0	9.32	
13 Bromomethane	94	1.930	1.918	0.012	91	358879	10.0	9.31	
14 Chloroethane	64	2.001	2.001	0.000	100	315290	10.0	9.30	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	860500	10.0	9.54	
16 Trichlorofluoromethane	101	2.190	2.191	-0.001	98	820589	10.0	10.0	
17 Ethyl ether	59	2.416	2.416	0.000	90	383408	10.0	9.74	
18 Acrolein	56	2.534	2.523	0.011	96	56412	50.0	21.7	
19 1,1-Dichloroethene	96	2.617	2.606	0.011	98	462079	10.0	10.2	
20 112TCTFE	151	2.629	2.629	0.000	93	388305	10.0	10.3	
21 Acetone	58	2.653	2.653	0.000	98	68104	20.0	21.5	
22 Iodomethane	142	2.748	2.748	0.000	99	776173	10.0	11.2	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	1219081	10.0	9.65	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	253795	10.0	9.53	
27 Methyl acetate	43	2.914	2.914	0.000	97	394009	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	399883	10.0	9.48	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	97	211021	100.0	95.2	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	1025302	100.0	96.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1084905	10.0	9.87	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	436028	10.0	9.64	
34 Hexane	86	3.436	3.436	0.000	93	80909	10.0	8.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	700751	10.0	9.78	
36 Vinyl acetate	43	3.602	3.602	0.000	97	559271	10.0	9.17	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	82	140009	10.0	10.0	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	483248	10.0	10.1	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	66266	20.0	20.0	
46 Chlorobromomethane	128	4.242	4.242	0.000	92	219218	10.0	9.71	
47 Tetrahydrofuran	42	4.278	4.278	0.000	89	156037	20.0	18.9	
48 Chloroform	83	4.301	4.302	-0.001	93	707088	10.0	9.91	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	658226	10.0	10.2	
50 Cyclohexane	56	4.503	4.503	0.000	90	639283	10.0	9.64	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	571263	10.0	10.0	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	95	554900	10.0	9.60	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	175205	250.0	249.9	
55 Benzene	78	4.776	4.776	0.000	95	1630870	10.0	9.49	
56 1,2-Dichloroethane	62	4.787	4.788	-0.001	98	501437	10.0	9.81	
58 n-Heptane	100	4.965	4.966	-0.001	89	67003	10.0	8.64	
60 Trichloroethene	130	5.309	5.298	0.011	96	446561	10.0	9.66	
62 Methylcyclohexane	83	5.463	5.464	-0.001	87	538310	10.0	9.33	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	355502	10.0	9.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	23519	200.0	75.9	
65 Dibromomethane	93	5.606	5.606	0.000	89	206169	10.0	10.0	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	459603	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	120867	10.0	9.82	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	493282	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	491361	20.0	20.7	
72 Toluene	91	6.412	6.412	0.000	98	1505186	10.0	9.66	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	367547	10.0	9.20	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	288347	10.0	9.58	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	251484	10.0	9.83	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	319194	10.0	9.72	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	429296	10.0	9.76	
78 2-Hexanone	43	6.981	6.982	-0.001	96	299921	20.0	20.5	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	279748	10.0	9.95	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	236269	10.0	9.57	
84 Chlorobenzene	112	7.681	7.681	0.000	99	935597	10.0	9.83	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	403079	10.0	10.2	
86 Ethylbenzene	106	7.776	7.776	0.000	98	517466	10.0	9.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1244371	10.0	9.87	
88 o-Xylene	106	8.262	8.262	0.000	97	677724	10.0	10.0	
89 Styrene	104	8.274	8.274	0.000	94	887028	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	97	170025	10.0	9.79	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1690078	10.0	10.1	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	317225	10.0	9.95	
95 Bromobenzene	156	8.914	8.914	0.000	89	436574	10.0	9.95	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	106115	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	81	63245	10.0	8.70	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	433860	10.0	9.98	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	410722	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1361735	10.0	9.95	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1279373	10.0	9.92	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	91	1146514	10.0	9.80	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1431299	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	1501320	10.0	9.74	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	811165	10.0	9.87	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	1346833	10.0	9.77	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	834590	10.0	9.78	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1041656	10.0	9.33	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	834752	10.0	9.76	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	69628	10.0	9.90	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	589242	10.0	9.39	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	248610	10.0	9.32	
119 Naphthalene	128	12.128	12.128	0.000	97	1333933	10.0	9.96	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	559905	10.0	9.40	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.0	
S 131 Trihalomethanes, Total	1				0		40.0	39.8	

QC Flag Legend

Processing Flags

Reagents:

VMFASAW_00366	Amount Added:	8.00	Units: uL	
VMFASGW_00399	Amount Added:	8.00	Units: uL	
VMFASPW_00390	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

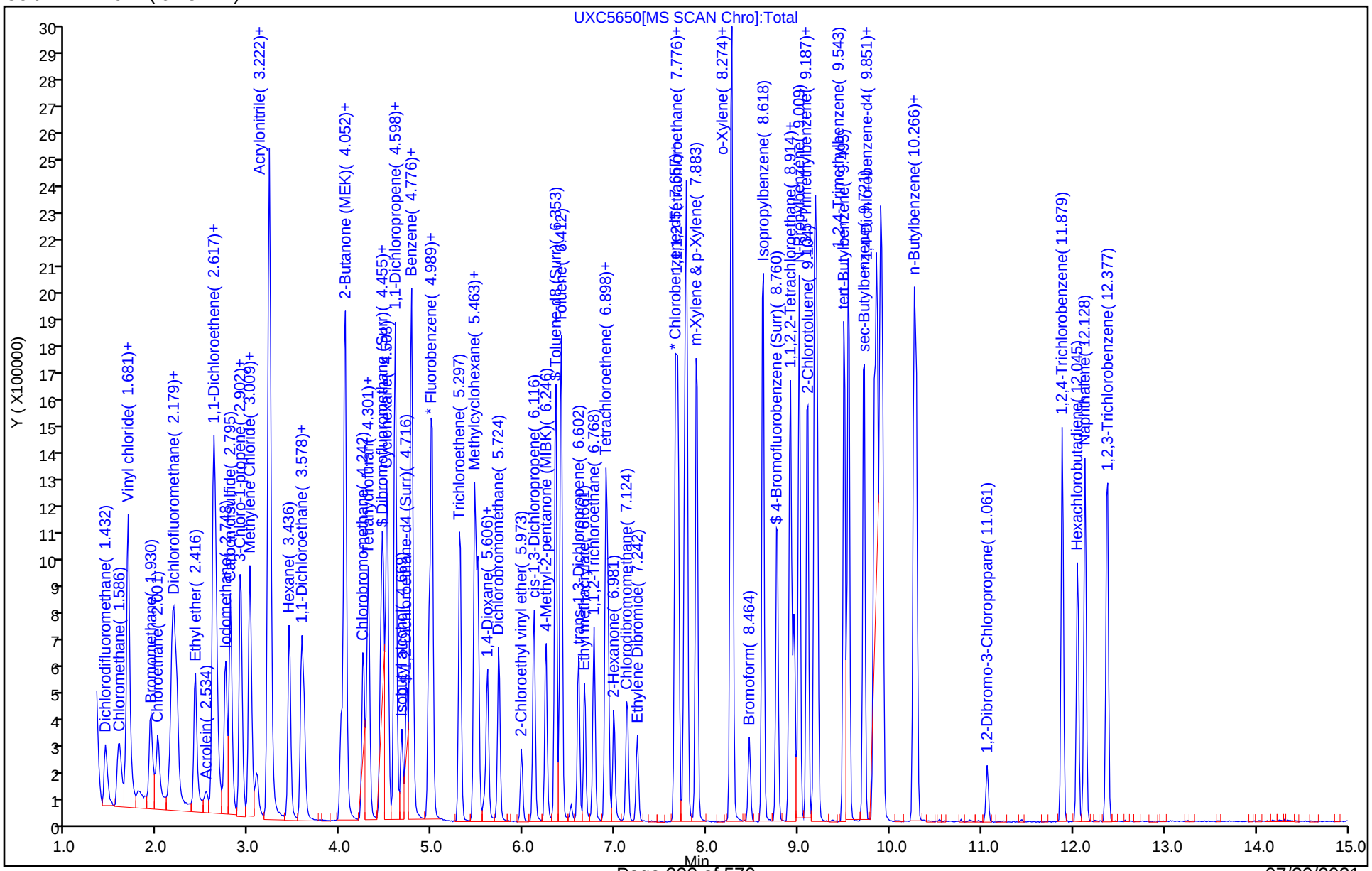
Report Date: 18-Mar-2021 09:02:21 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D

Injection Date:	16-Mar-2021 11:01:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2337	0.2225		0.00952	0.0100	-4.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2492		0.00946	0.0100	-5.4	50.0
Toluene-d8 (Surr)	Ave	1.226	1.118		0.00912	0.0100	-8.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3942		0.00951	0.0100	-4.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

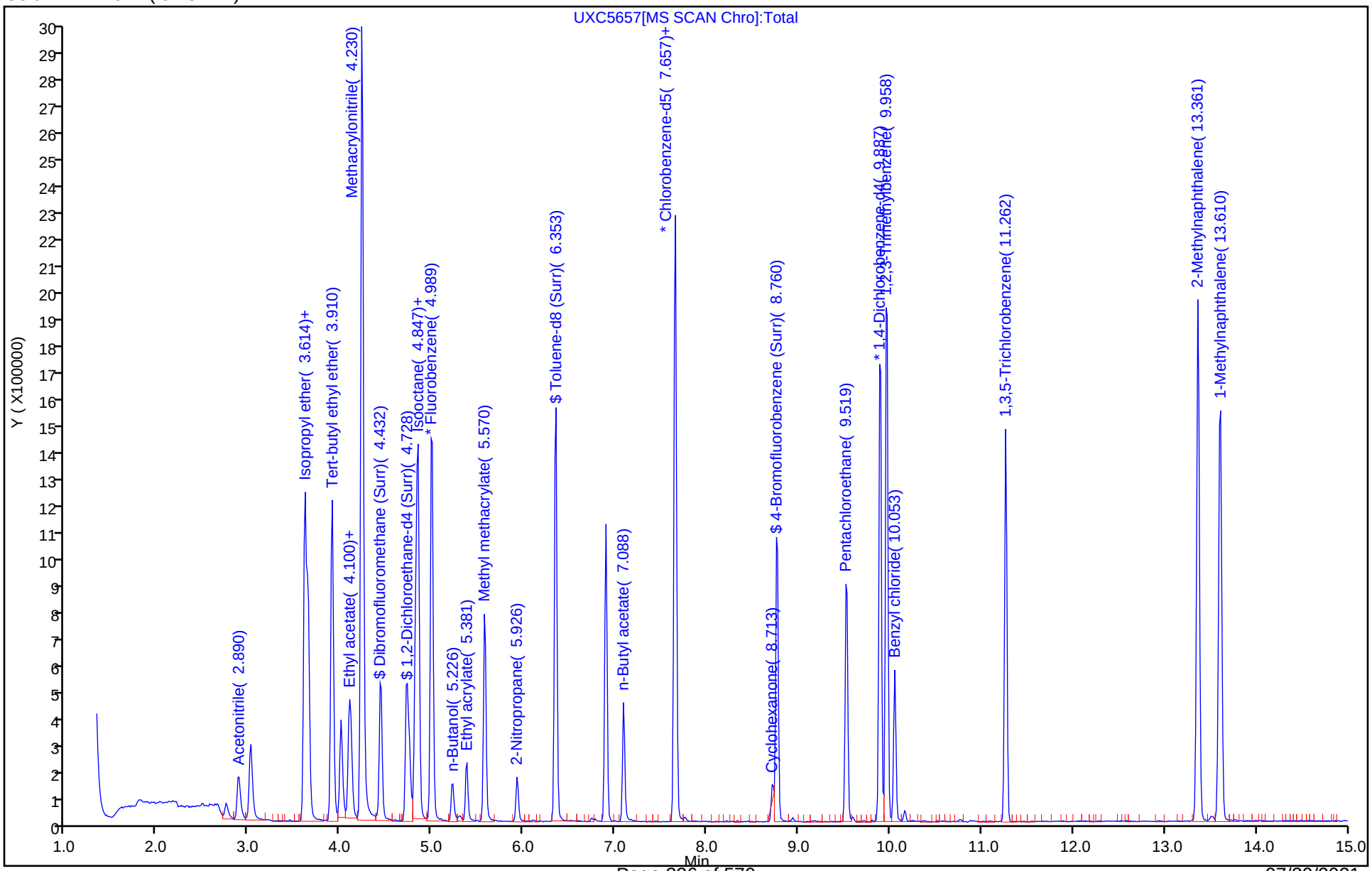
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 11:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 13:12

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0180	0.0164		0.0909	0.100	-9.1	50.0
Isopropyl ether	Ave	0.2240	0.2138		0.00955	0.0100	-4.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4022	0.3508		0.00872	0.0100	-12.8	50.0
Tert-butyl ethyl ether	Ave	0.7237	0.6928		0.00957	0.0100	-4.3	50.0
Ethyl acetate	Ave	0.1508	0.1399		0.0186	0.0200	-7.2	50.0
Propionitrile	Ave	0.0231	0.0223		0.0965	0.100	-3.5	50.0
Methacrylonitrile	Ave	0.1091	0.1079		0.0989	0.100	-1.1	50.0
Tert-amyl methyl ether	Ave	0.6734	0.6581		0.00977	0.0100	-2.3	50.0
n-Butanol	Ave	0.0032	0.0027		0.210	0.250	-16.0	50.0
Ethyl acrylate	Ave	0.1660	0.1646		0.00992	0.0100	-0.8	50.0
Methyl methacrylate	Ave	0.1247	0.1254		0.0201	0.0200	0.6	50.0
2-Nitropropane	Ave	0.0367	0.0371		0.0202	0.0200	1.2	50.0
n-Butyl acetate	Ave	0.2211	0.2201		0.00995	0.0100	-0.5	50.0
1-Chlorohexane	Ave	0.3516	0.3290		0.00936	0.0100	-6.4	50.0
Cyclohexanone	Ave	0.0139	0.0129		0.0928	0.100	-7.2	50.0
Pentachloroethane	Qua		0.1025		0.0113	0.0200	-43.3	50.0
1,2,3-Trimethylbenzene	Ave	2.318	2.339		0.0101	0.0100	0.9	50.0
Benzyl chloride	Lin1		0.1676		0.00810	0.0100	-19.0	50.0
1,3,5-Trichlorobenzene	Ave	1.033	0.9570		0.00926	0.0100	-7.4	50.0
2-Methylnaphthalene	Ave	1.199	1.114		0.0186	0.0200	-7.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

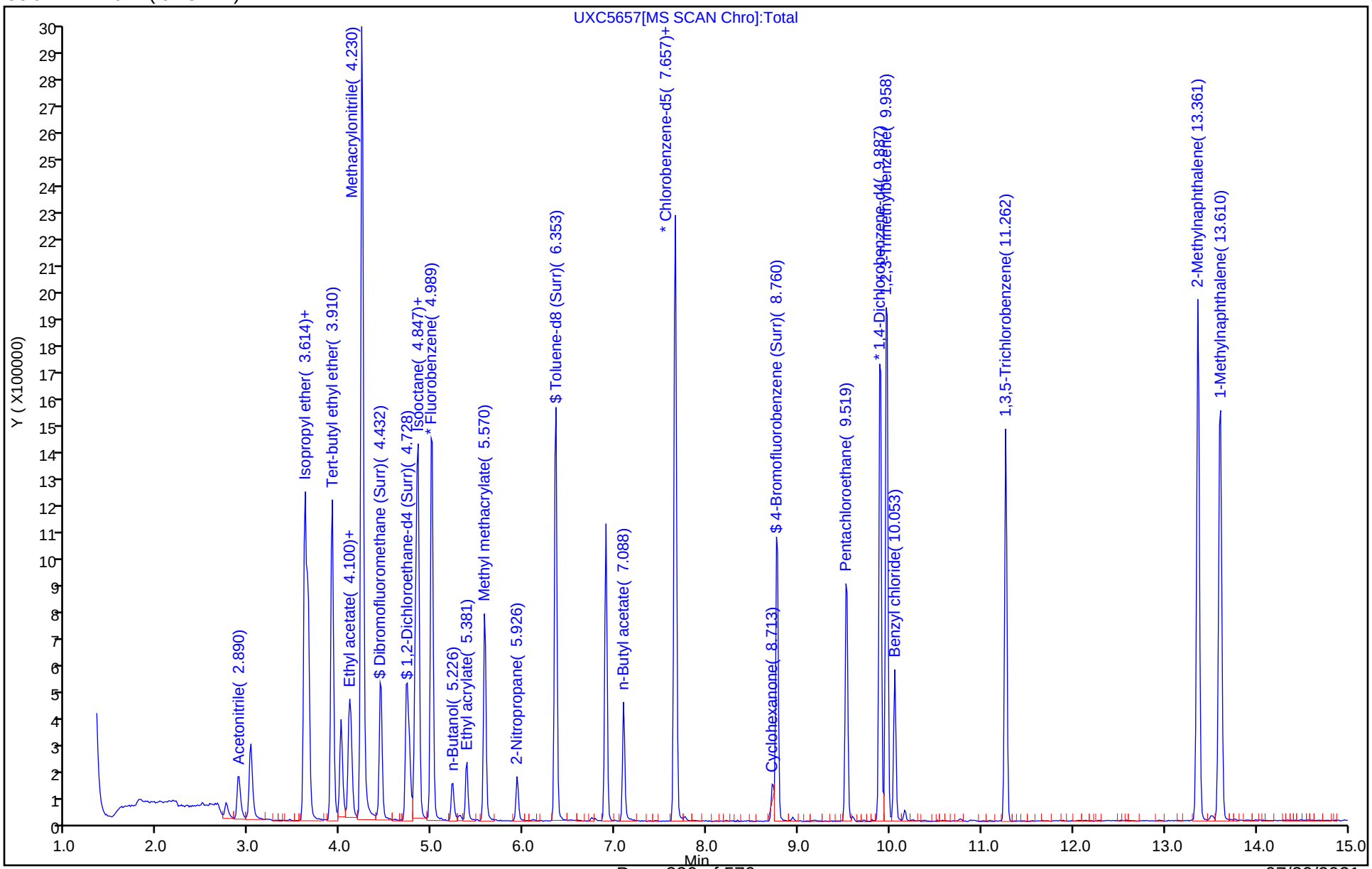
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495759/2 Calibration Date: 07/20/2021 09:47

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8331.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3856		0.0128	0.0100	28.0	50.0
Chloromethane	Ave	0.3426	0.3630	0.1000	0.0106	0.0100	6.0	50.0
Vinyl chloride	Ave	0.2936	0.3158		0.0108	0.0100	7.6	20.0
Butadiene	Ave	0.3746	0.1355		0.00362	0.0100	-63.8*	50.0
Bromomethane	Ave	0.2460	0.1731		0.00703	0.0100	-29.7	50.0
Chloroethane	Ave	0.2164	0.2005		0.00927	0.0100	-7.3	50.0
Dichlorofluoromethane	Ave	0.5757	0.4491		0.00780	0.0100	-22.0	50.0
Trichlorofluoromethane	Ave	0.5212	0.3706		0.00711	0.0100	-28.9	50.0
Ethyl ether	Ave	0.2512	0.2100		0.00836	0.0100	-16.4	50.0
Acrolein	Lin		0.0063		0.0186	0.0500	-62.9*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2602		0.00900	0.0100	-10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.1938		0.00804	0.0100	-19.6	50.0
Acetone	Ave	0.0202	0.0262		0.0259	0.0200	29.5	50.0
Iodomethane	Ave	0.4428	0.3407		0.00769	0.0100	-23.1	50.0
Carbon disulfide	Ave	0.8057	0.6444		0.00800	0.0100	-20.0	50.0
3-Chloro-1-propene	Ave	0.1698	0.2387		0.0141	0.0100	40.5	50.0
Methyl acetate	Ave	0.1269	0.1980		0.0312	0.0200	56.0*	50.0
Methylene Chloride	Ave	0.2691	0.3258		0.0121	0.0100	21.1	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0149		0.106	0.100	5.5	50.0
Acrylonitrile	Ave	0.0679	0.1116		0.164	0.100	64.4*	50.0
Methyl tert-butyl ether	Ave	0.7014	0.7137		0.0102	0.0100	1.8	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.3135		0.0109	0.0100	8.6	50.0
Hexane	Ave	0.0578	0.0560		0.00969	0.0100	-3.1	20.0
1,1-Dichloroethane	Ave	0.4573	0.5049	0.1000	0.0110	0.0100	10.4	50.0
Vinyl acetate	Ave	0.3891	0.4122		0.0106	0.0100	5.9	50.0
2,2-Dichloropropane	Ave	0.0889	0.0597		0.00672	0.0100	-32.8	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3214		0.0105	0.0100	5.4	50.0
2-Butanone (MEK)	Ave	0.0211	0.0326		0.0309	0.0200	54.3*	50.0
Chlorobromomethane	Ave	0.1440	0.1582		0.0110	0.0100	9.8	50.0
Tetrahydrofuran	Ave	0.0526	0.0778		0.0296	0.0200	48.0	50.0
Chloroform	Ave	0.4553	0.5025		0.0110	0.0100	10.4	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.3663		0.00894	0.0100	-10.6	50.0
Cyclohexane	Ave	0.4232	0.3454		0.00816	0.0100	-18.4	50.0
1,1-Dichloropropene	Ave	0.3688	0.3782		0.0103	0.0100	2.5	50.0
Carbon tetrachloride	Ave	0.3647	0.2775		0.00761	0.0100	-23.9	50.0
Isobutyl alcohol	Ave	0.0045	0.0073		0.406	0.250	62.6*	50.0
Benzene	Ave	1.097	1.286		0.0117	0.0100	17.2	50.0
1,2-Dichloroethane	Ave	0.3263	0.3843		0.0118	0.0100	17.8	50.0
n-Heptane	Ave	0.0495	0.0462		0.00933	0.0100	-6.7	50.0
Trichloroethene	Ave	0.2948	0.3022		0.0103	0.0100	2.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495759/2 Calibration Date: 07/20/2021 09:47

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8331.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3135		0.00851	0.0100	-14.9	50.0
1,2-Dichloropropane	Ave	0.2272	0.2853		0.0126	0.0100	25.6*	20.0
1,4-Dioxane	Qua		0.0013		0.136	0.200	-32.1	50.0
Dibromomethane	Ave	0.1312	0.1633		0.0124	0.0100	24.4	50.0
Dichlorobromomethane	Ave	0.2893	0.3029		0.0105	0.0100	4.7	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1298		0.0331	0.0200	65.3*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3687		0.0117	0.0100	17.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1927		0.0254	0.0200	27.1	50.0
Toluene	Ave	1.478	1.672		0.0113	0.0100	13.1	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.4202		0.0111	0.0100	11.0	50.0
Ethyl methacrylate	Ave	0.2855	0.3529		0.0124	0.0100	23.6	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.3342		0.0138	0.0100	37.8	50.0
Tetrachloroethene	Ave	0.3113	0.3068		0.00985	0.0100	-1.5	50.0
1,3-Dichloropropane	Ave	0.4170	0.5863		0.0141	0.0100	40.6	50.0
2-Hexanone	Ave	0.1387	0.1603		0.0231	0.0200	15.5	50.0
Chlorodibromomethane	Ave	0.2665	0.2708		0.0102	0.0100	1.6	50.0
Ethylene Dibromide	Ave	0.2342	0.3125		0.0133	0.0100	33.5	50.0
Chlorobenzene	Ave	0.9020	1.031	0.3000	0.0114	0.0100	14.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3252		0.00865	0.0100	-13.5	50.0
Ethylbenzene	Ave	0.4928	0.5088		0.0103	0.0100	3.3	20.0
m-Xylene & p-Xylene	Ave	1.195	1.260		0.0105	0.0100	5.4	50.0
o-Xylene	Ave	0.6424	0.6027		0.00938	0.0100	-6.2	50.0
Styrene	Ave	0.8332	1.034		0.0124	0.0100	24.0	50.0
Bromoform	Ave	0.1647	0.1626	0.1000	0.00987	0.0100	-1.3	50.0
Isopropylbenzene	Ave	1.586	1.354		0.00854	0.0100	-14.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.7413	0.3000	0.0145	0.0100	44.9	50.0
Bromobenzene	Ave	0.7041	0.6986		0.00992	0.0100	-0.8	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2477		0.0149	0.0100	49.2	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1651		0.0140	0.0100	40.2	50.0
N-Propylbenzene	Ave	0.6976	0.6760		0.00969	0.0100	-3.1	50.0
2-Chlorotoluene	Ave	0.6475	0.6158		0.00951	0.0100	-4.9	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.026		0.00923	0.0100	-7.7	50.0
4-Chlorotoluene	Ave	2.069	2.295		0.0111	0.0100	10.9	50.0
tert-Butylbenzene	Ave	1.877	1.462		0.00779	0.0100	-22.1	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.191		0.00973	0.0100	-2.7	50.0
sec-Butylbenzene	Ave	2.474	2.022		0.00817	0.0100	-18.3	50.0
1,3-Dichlorobenzene	Ave	1.319	1.331		0.0101	0.0100	0.9	50.0
4-Isopropyltoluene	Ave	2.213	1.869		0.00845	0.0100	-15.5	50.0
1,4-Dichlorobenzene	Ave	1.370	1.395		0.0102	0.0100	1.9	50.0
n-Butylbenzene	Ave	1.792	1.348		0.00752	0.0100	-24.8	50.0
1,2-Dichlorobenzene	Ave	1.373	1.355		0.00987	0.0100	-1.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495759/2 Calibration Date: 07/20/2021 09:47

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8331.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1052		0.00932	0.0100	-6.8	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.5733		0.00569	0.0100	-43.1	50.0
Hexachlorobutadiene	Lin1		0.2402		0.00531	0.0100	-46.9	50.0
Naphthalene	Ave	2.149	1.616		0.00752	0.0100	-24.8	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.5791		0.00606	0.0100	-39.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2135		0.00914	0.0100	-8.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2588		0.00983	0.0100	-1.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.203		0.00982	0.0100	-1.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4098		0.00989	0.0100	-1.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8331.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Jul-2021 09:47:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-002
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:05 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 20-Jul-2021 10:21:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2542669	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1982756	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1173273	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	542945	10.0	9.14	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	97	658078	10.0	9.83	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2385449	10.0	9.82	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	91	812596	10.0	9.89	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	980338	10.0	12.8	
10 Chloromethane	50	1.574	1.574	0.000	99	923032	10.0	10.6	
11 Vinyl chloride	62	1.657	1.657	0.000	97	803097	10.0	10.8	
12 Butadiene	54	1.681	1.681	0.000	91	344570	10.0	3.62	
13 Bromomethane	94	1.930	1.930	0.000	89	440066	10.0	7.03	
14 Chloroethane	64	2.013	2.013	0.000	99	509849	10.0	9.27	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1141975	10.0	7.80	
16 Trichlorofluoromethane	101	2.203	2.203	0.000	98	942282	10.0	7.11	
17 Ethyl ether	59	2.416	2.416	0.000	86	534063	10.0	8.36	
18 Acrolein	56	2.535	2.535	0.000	98	79603	50.0	18.6	
19 1,1-Dichloroethene	96	2.618	2.618	0.000	97	661573	10.0	9.00	
20 112TCTFE	151	2.641	2.641	0.000	92	492871	10.0	8.04	
21 Acetone	58	2.653	2.653	0.000	100	133222	20.0	25.9	
22 Iodomethane	142	2.760	2.760	0.000	97	866352	10.0	7.69	
24 Carbon disulfide	76	2.831	2.831	0.000	99	1638409	10.0	8.00	
26 3-Chloro-1-propene	76	2.914	2.914	0.000	91	606893	10.0	14.1	
27 Methyl acetate	43	2.926	2.926	0.000	96	1006889	20.0	31.2	
28 Methylene Chloride	84	3.009	3.009	0.000	88	828432	10.0	12.1	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	93	379493	100.0	105.5	
30 Acrylonitrile	53	3.211	3.211	0.000	100	2837868	100.0	164.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1814617	10.0	10.2	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	97	797013	10.0	10.9	
34 Hexane	86	3.448	3.448	0.000	90	142410	10.0	9.69	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	97	1283768	10.0	11.0	
36 Vinyl acetate	43	3.614	3.614	0.000	97	1048085	10.0	10.6	
42 2,2-Dichloropropane	97	4.052	4.052	0.000	71	151868	10.0	6.72	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	82	817247	10.0	10.5	
40 2-Butanone (MEK)	72	4.064	4.064	0.000	98	165748	20.0	30.9	
46 Chlorobromomethane	128	4.254	4.254	0.000	89	402175	10.0	11.0	
47 Tetrahydrofuran	42	4.290	4.290	0.000	84	395431	20.0	29.6	
48 Chloroform	83	4.302	4.302	0.000	91	1277691	10.0	11.0	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	931486	10.0	8.94	
50 Cyclohexane	56	4.515	4.515	0.000	86	878295	10.0	8.16	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	705571	10.0	7.61	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	98	961544	10.0	10.3	
53 Isobutyl alcohol	41	4.669	4.669	0.000	89	462366	250.0	406.5	
55 Benzene	78	4.776	4.776	0.000	94	3269317	10.0	11.7	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	96	977028	10.0	11.8	
58 n-Heptane	100	4.966	4.966	0.000	83	117375	10.0	9.33	
60 Trichloroethene	130	5.309	5.309	0.000	97	768318	10.0	10.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	797034	10.0	8.51	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	725435	10.0	12.6	
66 1,4-Dioxane	88	5.606	5.606	0.000	90	67735	200.0	135.8	
65 Dibromomethane	93	5.606	5.606	0.000	94	415229	10.0	12.4	
67 Dichlorobromomethane	83	5.725	5.725	0.000	100	770272	10.0	10.5	
69 2-Chloroethyl vinyl ether	63	5.985	5.985	0.000	92	660300	20.0	33.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	937377	10.0	11.7	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	94	979960	20.0	25.4	
72 Toluene	91	6.412	6.412	0.000	98	3314276	10.0	11.3	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	833203	10.0	11.1	
74 Ethyl methacrylate	69	6.673	6.673	0.000	87	699619	10.0	12.4	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	92	662585	10.0	13.8	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	608316	10.0	9.85	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	87	1162442	10.0	14.1	
78 2-Hexanone	43	6.982	6.982	0.000	94	635540	20.0	23.1	
80 Chlorodibromomethane	129	7.136	7.136	0.000	89	536854	10.0	10.2	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	619641	10.0	13.3	
84 Chlorobenzene	112	7.693	7.693	0.000	97	2043554	10.0	11.4	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	644714	10.0	8.65	
86 Ethylbenzene	106	7.776	7.776	0.000	98	1008875	10.0	10.3	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	92	2499248	10.0	10.5	
88 o-Xylene	106	8.262	8.262	0.000	95	1194951	10.0	9.38	
89 Styrene	104	8.274	8.274	0.000	94	2049375	10.0	12.4	
90 Bromoform	173	8.464	8.464	0.000	97	322313	10.0	9.87	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2684413	10.0	8.54	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	869716	10.0	14.5	
95 Bromobenzene	156	8.914	8.914	0.000	92	819653	10.0	9.92	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	83	290572	10.0	14.9	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	89	193650	10.0	14.0	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	793129	10.0	9.69	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	722453	10.0	9.51	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	2377412	10.0	9.23	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2692934	10.0	11.1	
104 tert-Butylbenzene	119	9.496	9.496	0.000	93	1715909	10.0	7.79	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2571078	10.0	9.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2371824	10.0	8.17	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	97	1561580	10.0	10.1	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	2193237	10.0	8.45	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	95	1637138	10.0	10.2	
113 n-Butylbenzene	91	10.254	10.254	0.000	97	1581491	10.0	7.52	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1589678	10.0	9.87	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	85	123412	10.0	9.32	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	95	672632	10.0	5.69	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	281823	10.0	5.31	
119 Naphthalene	128	12.128	12.128	0.000	96	1895705	10.0	7.52	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	679474	10.0	6.06	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	53.3	
S 131 Trihalomethanes, Total	1				0		40.0	41.5	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00401	Amount Added:	8.00	Units: uL	
VMRGAS_00393	Amount Added:	8.00	Units: uL	
VMRPRIMW_00444	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

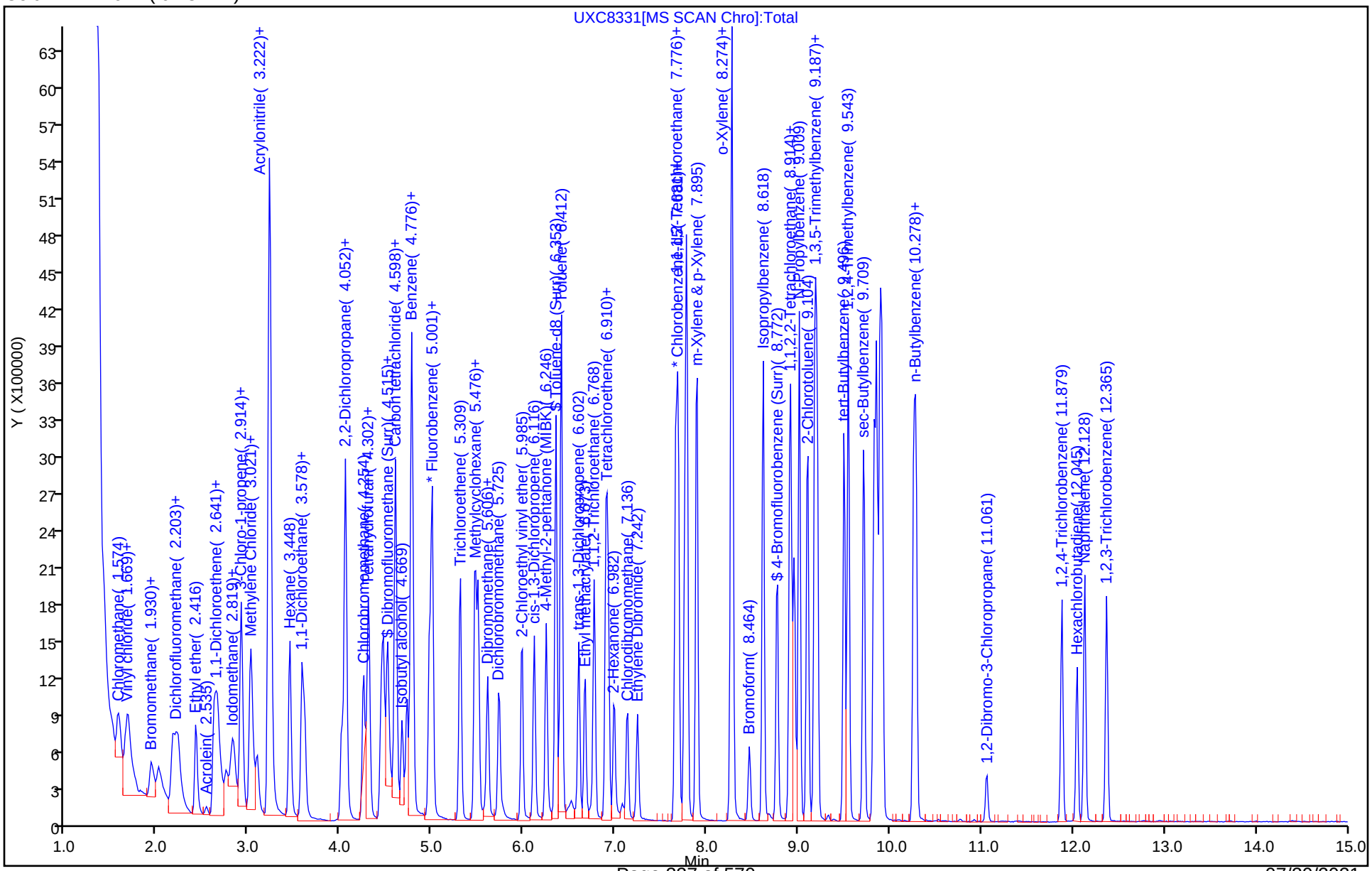
Report Date: 21-Jul-2021 09:06:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8331.D

Injection Date:	20-Jul-2021 09:47:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495964/2 Calibration Date: 07/21/2021 13:39

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8392.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.4146		0.0138	0.0100	37.6	50.0
Chloromethane	Ave	0.3426	0.3750	0.1000	0.0109	0.0100	9.5	50.0
Vinyl chloride	Ave	0.2936	0.3525		0.0120	0.0100	20.1*	20.0
Butadiene	Ave	0.3746	0.2102		0.00561	0.0100	-43.9	50.0
Bromomethane	Ave	0.2460	0.1899		0.00772	0.0100	-22.8	50.0
Chloroethane	Ave	0.2164	0.2234		0.0103	0.0100	3.2	50.0
Dichlorofluoromethane	Ave	0.5757	0.4796		0.00833	0.0100	-16.7	50.0
Trichlorofluoromethane	Ave	0.5212	0.4070		0.00781	0.0100	-21.9	50.0
Ethyl ether	Ave	0.2512	0.2297		0.00915	0.0100	-8.5	50.0
Acrolein	Lin		0.0069		0.0208	0.0500	-58.3*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2686		0.00929	0.0100	-7.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2007		0.00833	0.0100	-16.7	50.0
Acetone	Ave	0.0202	0.0323		0.0319	0.0200	59.7*	50.0
Iodomethane	Ave	0.4428	0.3721		0.00840	0.0100	-16.0	50.0
Carbon disulfide	Ave	0.8057	0.6576		0.00816	0.0100	-18.4	50.0
3-Chloro-1-propene	Ave	0.1698	0.2570		0.0151	0.0100	51.3*	50.0
Methyl acetate	Ave	0.1269	0.2208		0.0348	0.0200	73.9*	50.0
Methylene Chloride	Ave	0.2691	0.3287		0.0122	0.0100	22.2	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0190		0.134	0.100	34.0	50.0
Acrylonitrile	Ave	0.0679	0.1241		0.183	0.100	82.8*	50.0
Methyl tert-butyl ether	Ave	0.7014	0.8074		0.0115	0.0100	15.1	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.3174		0.0110	0.0100	9.9	50.0
Hexane	Ave	0.0578	0.0608		0.0105	0.0100	5.2	20.0
1,1-Dichloroethane	Ave	0.4573	0.5291	0.1000	0.0116	0.0100	15.7	50.0
Vinyl acetate	Ave	0.3891	0.4877		0.0125	0.0100	25.4	50.0
2,2-Dichloropropane	Ave	0.0889	0.0655		0.00736	0.0100	-26.4	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3424		0.0112	0.0100	12.3	50.0
2-Butanone (MEK)	Ave	0.0211	0.0376		0.0356	0.0200	77.8*	50.0
Chlorobromomethane	Ave	0.1440	0.1640		0.0114	0.0100	13.9	50.0
Tetrahydrofuran	Ave	0.0526	0.0770		0.0293	0.0200	46.5	50.0
Chloroform	Ave	0.4553	0.5216		0.0115	0.0100	14.6	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.3918		0.00956	0.0100	-4.4	50.0
Cyclohexane	Ave	0.4232	0.4038		0.00954	0.0100	-4.6	50.0
1,1-Dichloropropene	Ave	0.3688	0.4053		0.0110	0.0100	9.9	50.0
Carbon tetrachloride	Ave	0.3647	0.3088		0.00847	0.0100	-15.3	50.0
Isobutyl alcohol	Ave	0.0045	0.0084		0.471	0.250	88.3*	50.0
Benzene	Ave	1.097	1.311		0.0120	0.0100	19.5	50.0
1,2-Dichloroethane	Ave	0.3263	0.3897		0.0119	0.0100	19.4	50.0
n-Heptane	Ave	0.0495	0.0479		0.00968	0.0100	-3.2	50.0
Trichloroethene	Ave	0.2948	0.3061		0.0104	0.0100	3.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495964/2 Calibration Date: 07/21/2021 13:39

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8392.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3510		0.00953	0.0100	-4.7	50.0
1,2-Dichloropropane	Ave	0.2272	0.2951		0.0130	0.0100	29.9*	20.0
1,4-Dioxane	Qua		0.0022		0.240	0.200	20.0	50.0
Dibromomethane	Ave	0.1312	0.1699		0.0129	0.0100	29.5	50.0
Dichlorobromomethane	Ave	0.2893	0.3117		0.0108	0.0100	7.7	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1618		0.0412	0.0200	105.9*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.4045		0.0128	0.0100	28.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.2265		0.0299	0.0200	49.3	50.0
Toluene	Ave	1.478	1.684		0.0114	0.0100	13.9	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.4525		0.0120	0.0100	19.5	50.0
Ethyl methacrylate	Ave	0.2855	0.3946		0.0138	0.0100	38.2	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.3381		0.0139	0.0100	39.4	50.0
Tetrachloroethene	Ave	0.3113	0.2978		0.00956	0.0100	-4.4	50.0
1,3-Dichloropropane	Ave	0.4170	0.6036		0.0145	0.0100	44.8	50.0
2-Hexanone	Ave	0.1387	0.1858		0.0268	0.0200	34.0	50.0
Chlorodibromomethane	Ave	0.2665	0.2715		0.0102	0.0100	1.9	50.0
Ethylene Dibromide	Ave	0.2342	0.3179		0.0136	0.0100	35.8	50.0
Chlorobenzene	Ave	0.9020	1.039	0.3000	0.0115	0.0100	15.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3251		0.00865	0.0100	-13.5	50.0
Ethylbenzene	Ave	0.4928	0.5340		0.0108	0.0100	8.4	20.0
m-Xylene & p-Xylene	Ave	1.195	1.279		0.0107	0.0100	7.0	50.0
o-Xylene	Ave	0.6424	0.6327		0.00985	0.0100	-1.5	50.0
Styrene	Ave	0.8332	1.034		0.0124	0.0100	24.1	50.0
Bromoform	Ave	0.1647	0.1578	0.1000	0.00958	0.0100	-4.2	50.0
Isopropylbenzene	Ave	1.586	1.434		0.00904	0.0100	-9.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.8222	0.3000	0.0161	0.0100	60.7*	50.0
Bromobenzene	Ave	0.7041	0.7577		0.0108	0.0100	7.6	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2707		0.0163	0.0100	63.1*	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1702		0.0144	0.0100	44.5	50.0
N-Propylbenzene	Ave	0.6976	0.7352		0.0105	0.0100	5.4	50.0
2-Chlorotoluene	Ave	0.6475	0.6802		0.0105	0.0100	5.0	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.243		0.0102	0.0100	2.1	50.0
4-Chlorotoluene	Ave	2.069	2.467		0.0119	0.0100	19.3	50.0
tert-Butylbenzene	Ave	1.877	1.664		0.00886	0.0100	-11.4	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.350		0.0104	0.0100	4.3	50.0
sec-Butylbenzene	Ave	2.474	2.278		0.00921	0.0100	-7.9	50.0
1,3-Dichlorobenzene	Ave	1.319	1.382		0.0105	0.0100	4.8	50.0
4-Isopropyltoluene	Ave	2.213	2.038		0.00921	0.0100	-7.9	50.0
1,4-Dichlorobenzene	Ave	1.370	1.428		0.0104	0.0100	4.3	50.0
n-Butylbenzene	Ave	1.792	1.484		0.00828	0.0100	-17.2	50.0
1,2-Dichlorobenzene	Ave	1.373	1.392		0.0101	0.0100	1.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495964/2 Calibration Date: 07/21/2021 13:39

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8392.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1157		0.0103	0.0100	2.5	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.6269		0.00622	0.0100	-37.8	50.0
Hexachlorobutadiene	Lin1		0.2383		0.00527	0.0100	-47.3	50.0
Naphthalene	Ave	2.149	1.833		0.00853	0.0100	-14.7	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.6056		0.00633	0.0100	-36.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2108		0.00902	0.0100	-9.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2641		0.0100	0.0100	0.3	50.0
Toluene-d8 (Surr)	Ave	1.226	1.181		0.00964	0.0100	-3.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4044		0.00976	0.0100	-2.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8392.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Jul-2021 13:39:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-002
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:11 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2356550	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.658	0.000	84	1854867	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	997803	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	496702	10.0	9.02	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	622250	10.0	10.0	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2190789	10.0	9.64	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	750136	10.0	9.76	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	977069	10.0	13.8	
10 Chloromethane	50	1.574	1.574	0.000	98	883796	10.0	10.9	
11 Vinyl chloride	62	1.657	1.657	0.000	98	830795	10.0	12.0	
12 Butadiene	54	1.681	1.681	0.000	94	495371	10.0	5.61	
13 Bromomethane	94	1.930	1.930	0.000	90	447612	10.0	7.72	
14 Chloroethane	64	2.013	2.013	0.000	98	526445	10.0	10.3	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1130122	10.0	8.33	
16 Trichlorofluoromethane	101	2.203	2.203	0.000	98	959179	10.0	7.81	
17 Ethyl ether	59	2.416	2.416	0.000	87	541376	10.0	9.15	
18 Acrolein	56	2.535	2.535	0.000	99	81645	50.0	20.8	
19 1,1-Dichloroethene	96	2.618	2.618	0.000	97	633067	10.0	9.29	
20 112TCTFE	151	2.641	2.641	0.000	92	472916	10.0	8.33	
21 Acetone	58	2.653	2.653	0.000	99	152189	20.0	31.9	
22 Iodomethane	142	2.748	2.748	0.000	97	876828	10.0	8.40	
24 Carbon disulfide	76	2.819	2.819	0.000	98	1549761	10.0	8.16	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	92	605696	10.0	15.1	
27 Methyl acetate	43	2.914	2.914	0.000	97	1040470	20.0	34.8	
28 Methylene Chloride	84	3.009	3.009	0.000	90	774681	10.0	12.2	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	95	446714	100.0	134.0	
30 Acrylonitrile	53	3.211	3.211	0.000	100	2924446	100.0	182.8	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	1902576	10.0	11.5	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	99	748080	10.0	11.0	
34 Hexane	86	3.448	3.448	0.000	90	143338	10.0	10.5	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	1246878	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	97	1149338	10.0	12.5	
40 2-Butanone (MEK)	72	4.064	4.053	0.011	97	177071	20.0	35.6	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	57	154285	10.0	7.36	
41 cis-1,2-Dichloroethene	96	4.053	4.053	0.000	80	806950	10.0	11.2	
46 Chlorobromomethane	128	4.254	4.254	0.000	89	386422	10.0	11.4	
47 Tetrahydrofuran	42	4.290	4.290	0.000	86	362957	20.0	29.3	
48 Chloroform	83	4.302	4.302	0.000	92	1229085	10.0	11.5	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	923228	10.0	9.56	
50 Cyclohexane	56	4.515	4.515	0.000	87	951646	10.0	9.54	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	727696	10.0	8.47	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	98	955015	10.0	11.0	
53 Isobutyl alcohol	41	4.669	4.669	0.000	93	496232	250.0	470.7	
55 Benzene	78	4.776	4.776	0.000	94	3089604	10.0	12.0	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	918248	10.0	11.9	
58 n-Heptane	100	4.966	4.966	0.000	87	112917	10.0	9.68	
60 Trichloroethene	130	5.310	5.310	0.000	98	721429	10.0	10.4	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	827122	10.0	9.53	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	96	695527	10.0	13.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	33	103214	200.0	239.9	
65 Dibromomethane	93	5.606	5.606	0.000	94	400358	10.0	12.9	
67 Dichlorobromomethane	83	5.725	5.725	0.000	100	734545	10.0	10.8	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	762543	20.0	41.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	953212	10.0	12.8	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	94	1067286	20.0	29.9	
72 Toluene	91	6.412	6.412	0.000	98	3123517	10.0	11.4	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	839330	10.0	12.0	
74 Ethyl methacrylate	69	6.673	6.673	0.000	87	731979	10.0	13.8	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	627160	10.0	13.9	
76 Tetrachloroethene	164	6.899	6.899	0.000	98	552325	10.0	9.56	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	89	1119587	10.0	14.5	
78 2-Hexanone	43	6.982	6.982	0.000	94	689448	20.0	26.8	
80 Chlorodibromomethane	129	7.136	7.136	0.000	89	503682	10.0	10.2	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	589597	10.0	13.6	
84 Chlorobenzene	112	7.681	7.681	0.000	95	1927335	10.0	11.5	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	602983	10.0	8.65	
86 Ethylbenzene	106	7.788	7.788	0.000	98	990482	10.0	10.8	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	93	2372971	10.0	10.7	
88 o-Xylene	106	8.262	8.262	0.000	95	1173649	10.0	9.85	
89 Styrene	104	8.274	8.274	0.000	94	1918668	10.0	12.4	
90 Bromoform	173	8.464	8.464	0.000	97	292692	10.0	9.58	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2659948	10.0	9.04	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	820432	10.0	16.1	
95 Bromobenzene	156	8.915	8.915	0.000	92	756031	10.0	10.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	84	270150	10.0	16.3	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	80	169826	10.0	14.4	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	733546	10.0	10.5	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	678660	10.0	10.5	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	2237730	10.0	10.2	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2462043	10.0	11.9	
104 tert-Butylbenzene	119	9.496	9.496	0.000	93	1660126	10.0	8.86	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2344582	10.0	10.4	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2272998	10.0	9.21	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	97	1378727	10.0	10.5	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	2033207	10.0	9.21	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	94	1425322	10.0	10.4	
113 n-Butylbenzene	91	10.255	10.255	0.000	98	1481175	10.0	8.28	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1388918	10.0	10.1	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	96	115407	10.0	10.3	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	625557	10.0	6.22	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	237803	10.0	5.27	
119 Naphthalene	128	12.128	12.128	0.000	96	1828772	10.0	8.53	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	97	604242	10.0	6.33	
S 129 Xylenes, Total	106				0		20.0	20.6	
S 130 Total BTEX	1				0		50.0	54.7	
S 131 Trihalomethanes, Total	1				0		40.0	42.0	

Reagents:

VMAROLISTDW_00401	Amount Added:	8.00	Units: uL	
VMRGAS_00393	Amount Added:	8.00	Units: uL	
VMRPRIMW_00444	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

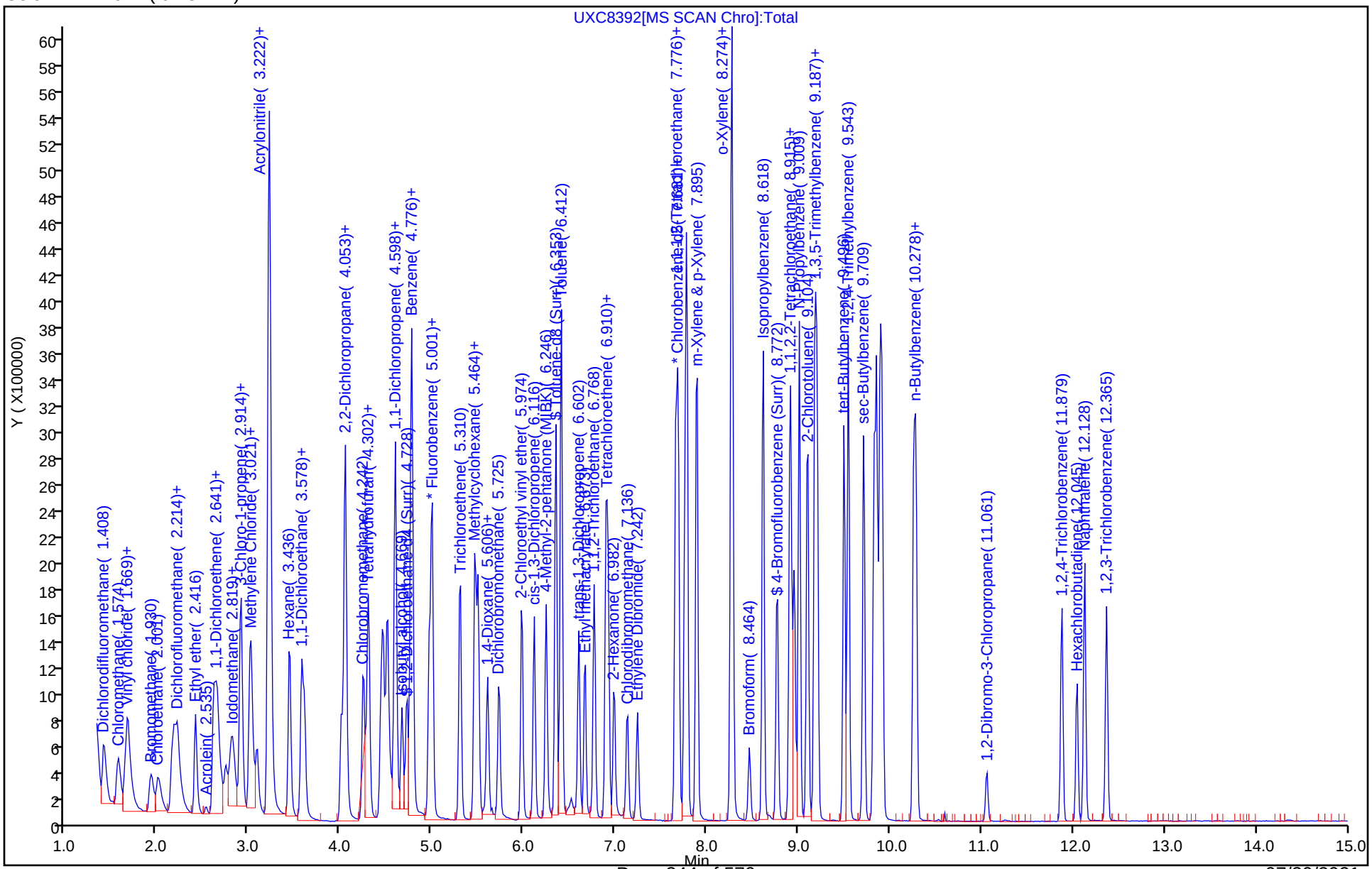
Report Date: 22-Jul-2021 08:06:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8392.D

Injection Date:	21-Jul-2021 13:39:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-496148/2 Calibration Date: 07/22/2021 09:26

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8422.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3810		0.0126	0.0100	26.4	50.0
Chloromethane	Ave	0.3426	0.3410	0.1000	0.00995	0.0100	-0.5	50.0
Vinyl chloride	Ave	0.2936	0.3234		0.0110	0.0100	10.1	20.0
Butadiene	Ave	0.3746	0.1845		0.00493	0.0100	-50.7*	50.0
Bromomethane	Ave	0.2460	0.1567		0.00637	0.0100	-36.3	50.0
Chloroethane	Ave	0.2164	0.2030		0.00938	0.0100	-6.2	50.0
Dichlorofluoromethane	Ave	0.5757	0.4362		0.00758	0.0100	-24.2	50.0
Trichlorofluoromethane	Ave	0.5212	0.3720		0.00714	0.0100	-28.6	50.0
Ethyl ether	Ave	0.2512	0.2162		0.00861	0.0100	-13.9	50.0
Acrolein	Lin		0.0050		0.0142	0.0500	-71.6*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2410		0.00834	0.0100	-16.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.1699		0.00705	0.0100	-29.5	50.0
Acetone	Ave	0.0202	0.0253		0.0250	0.0200	25.2	50.0
Iodomethane	Ave	0.4428	0.3297		0.00745	0.0100	-25.5	50.0
Carbon disulfide	Ave	0.8057	0.6248		0.00776	0.0100	-22.4	50.0
3-Chloro-1-propene	Ave	0.1698	0.2400		0.0141	0.0100	41.3	50.0
Methyl acetate	Ave	0.1269	0.1928		0.0304	0.0200	51.9*	50.0
Methylene Chloride	Ave	0.2691	0.3038		0.0113	0.0100	12.9	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0115		0.0815	0.100	-18.5	50.0
Acrylonitrile	Ave	0.0679	0.1064		0.157	0.100	56.8*	50.0
Methyl tert-butyl ether	Ave	0.7014	0.7452		0.0106	0.0100	6.3	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2934		0.0102	0.0100	1.6	50.0
Hexane	Ave	0.0578	0.0547		0.00946	0.0100	-5.4	20.0
1,1-Dichloroethane	Ave	0.4573	0.4931	0.1000	0.0108	0.0100	7.8	50.0
Vinyl acetate	Ave	0.3891	0.4514		0.0116	0.0100	16.0	50.0
2,2-Dichloropropane	Ave	0.0889	0.0606		0.00682	0.0100	-31.8	50.0
2-Butanone (MEK)	Ave	0.0211	0.0307		0.0291	0.0200	45.4	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3178		0.0104	0.0100	4.2	50.0
Chlorobromomethane	Ave	0.1440	0.1535		0.0107	0.0100	6.6	50.0
Tetrahydrofuran	Ave	0.0526	0.0659		0.0251	0.0200	25.3	50.0
Chloroform	Ave	0.4553	0.4802		0.0105	0.0100	5.5	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.3502		0.00854	0.0100	-14.6	50.0
Cyclohexane	Ave	0.4232	0.3728		0.00881	0.0100	-11.9	50.0
1,1-Dichloropropene	Ave	0.3688	0.3713		0.0101	0.0100	0.7	50.0
Carbon tetrachloride	Ave	0.3647	0.2755		0.00755	0.0100	-24.5	50.0
Isobutyl alcohol	Ave	0.0045	0.0060		0.335	0.250	34.2	50.0
Benzene	Ave	1.097	1.227		0.0112	0.0100	11.9	50.0
1,2-Dichloroethane	Ave	0.3263	0.3648		0.0112	0.0100	11.8	50.0
n-Heptane	Ave	0.0495	0.0442		0.00893	0.0100	-10.7	50.0
Trichloroethene	Ave	0.2948	0.2836		0.00962	0.0100	-3.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-496148/2 Calibration Date: 07/22/2021 09:26

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8422.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3128		0.00849	0.0100	-15.1	50.0
1,2-Dichloropropane	Ave	0.2272	0.2738		0.0121	0.0100	20.5*	20.0
1,4-Dioxane	Qua		0.0015		0.157	0.200	-21.4	50.0
Dibromomethane	Ave	0.1312	0.1591		0.0121	0.0100	21.2	50.0
Dichlorobromomethane	Ave	0.2893	0.2899		0.0100	0.0100	0.2	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1490		0.0379	0.0200	89.6*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3825		0.0121	0.0100	21.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.2123		0.0280	0.0200	40.0	50.0
Toluene	Ave	1.478	1.548		0.0105	0.0100	4.7	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.4122		0.0109	0.0100	8.9	50.0
Ethyl methacrylate	Ave	0.2855	0.3728		0.0131	0.0100	30.6	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.3057		0.0126	0.0100	26.1	50.0
Tetrachloroethene	Ave	0.3113	0.2652		0.00852	0.0100	-14.8	50.0
1,3-Dichloropropane	Ave	0.4170	0.5441		0.0131	0.0100	30.5	50.0
2-Hexanone	Ave	0.1387	0.1690		0.0244	0.0200	21.8	50.0
Chlorodibromomethane	Ave	0.2665	0.2562		0.00962	0.0100	-3.8	50.0
Ethylene Dibromide	Ave	0.2342	0.2962		0.0127	0.0100	26.5	50.0
Chlorobenzene	Ave	0.9020	0.9557	0.3000	0.0106	0.0100	6.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.2986		0.00794	0.0100	-20.6	50.0
Ethylbenzene	Ave	0.4928	0.4802		0.00974	0.0100	-2.6	20.0
m-Xylene & p-Xylene	Ave	1.195	1.144		0.00957	0.0100	-4.3	50.0
o-Xylene	Ave	0.6424	0.5808		0.00904	0.0100	-9.6	50.0
Styrene	Ave	0.8332	0.9602		0.0115	0.0100	15.2	50.0
Bromoform	Ave	0.1647	0.1474	0.1000	0.00895	0.0100	-10.5	50.0
Isopropylbenzene	Ave	1.586	1.301		0.00821	0.0100	-17.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.7920	0.3000	0.0155	0.0100	54.8*	50.0
Bromobenzene	Ave	0.7041	0.7285		0.0103	0.0100	3.5	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2568		0.0155	0.0100	54.7*	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1599		0.0136	0.0100	35.9	50.0
N-Propylbenzene	Ave	0.6976	0.6808		0.00976	0.0100	-2.4	50.0
2-Chlorotoluene	Ave	0.6475	0.6526		0.0101	0.0100	0.8	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.081		0.00948	0.0100	-5.2	50.0
4-Chlorotoluene	Ave	2.069	2.333		0.0113	0.0100	12.8	50.0
tert-Butylbenzene	Ave	1.877	1.555		0.00828	0.0100	-17.2	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.204		0.00979	0.0100	-2.1	50.0
sec-Butylbenzene	Ave	2.474	2.074		0.00838	0.0100	-16.2	50.0
1,3-Dichlorobenzene	Ave	1.319	1.302		0.00987	0.0100	-1.3	50.0
4-Isopropyltoluene	Ave	2.213	1.835		0.00829	0.0100	-17.1	50.0
1,4-Dichlorobenzene	Ave	1.370	1.366		0.00997	0.0100	-0.3	50.0
n-Butylbenzene	Ave	1.792	1.354		0.00755	0.0100	-24.5	50.0
1,2-Dichlorobenzene	Ave	1.373	1.316		0.00959	0.0100	-4.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-496148/2 Calibration Date: 07/22/2021 09:26

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC8422.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1137		0.0101	0.0100	0.8	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.5610		0.00557	0.0100	-44.3	50.0
Hexachlorobutadiene	Lin1		0.1999		0.00430	0.0100	-57.0*	50.0
Naphthalene	Ave	2.149	1.667		0.00776	0.0100	-22.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.5270		0.00551	0.0100	-44.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2098		0.00898	0.0100	-10.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2576		0.00978	0.0100	-2.2	50.0
Toluene-d8 (Surr)	Ave	1.226	1.156		0.00943	0.0100	-5.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3977		0.00959	0.0100	-4.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8422.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 22-Jul-2021 09:26:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-002
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:40 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 10:32:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2546306	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	2048000	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1043210	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	534312	10.0	8.98	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	655933	10.0	9.78	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	92	2366530	10.0	9.43	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	814453	10.0	9.59	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	970124	10.0	12.6	
10 Chloromethane	50	1.574	1.574	0.000	98	868226	10.0	9.95	
11 Vinyl chloride	62	1.657	1.657	0.000	98	823509	10.0	11.0	
12 Butadiene	54	1.681	1.681	0.000	93	469913	10.0	4.93	
13 Bromomethane	94	1.930	1.930	0.000	90	398924	10.0	6.37	
14 Chloroethane	64	2.013	2.013	0.000	99	517005	10.0	9.38	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1110681	10.0	7.58	
16 Trichlorofluoromethane	101	2.214	2.214	0.000	99	947315	10.0	7.14	
17 Ethyl ether	59	2.416	2.416	0.000	87	550389	10.0	8.61	
18 Acrolein	56	2.534	2.534	0.000	98	63358	50.0	14.2	
19 1,1-Dichloroethene	96	2.617	2.617	0.000	97	613749	10.0	8.34	
20 112TCTFE	151	2.641	2.641	0.000	92	432502	10.0	7.05	
21 Acetone	58	2.653	2.653	0.000	100	128986	20.0	25.0	
22 Iodomethane	142	2.748	2.748	0.000	97	839551	10.0	7.45	
24 Carbon disulfide	76	2.819	2.819	0.000	98	1591037	10.0	7.76	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	91	611023	10.0	14.1	
27 Methyl acetate	43	2.914	2.914	0.000	96	981739	20.0	30.4	
28 Methylene Chloride	84	3.009	3.009	0.000	90	773448	10.0	11.3	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	95	293416	100.0	81.5	
30 Acrylonitrile	53	3.210	3.210	0.000	100	2709940	100.0	156.8	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	1897543	10.0	10.6	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	96	747131	10.0	10.2	
34 Hexane	86	3.448	3.448	0.000	90	139257	10.0	9.46	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	1255589	10.0	10.8	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1149395	10.0	11.6	
40 2-Butanone (MEK)	72	4.052	4.052	0.000	98	156425	20.0	29.1	
42 2,2-Dichloropropane	97	4.052	4.052	0.000	59	154304	10.0	6.82	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	80	809094	10.0	10.4	
46 Chlorobromomethane	128	4.254	4.254	0.000	91	390883	10.0	10.7	
47 Tetrahydrofuran	42	4.290	4.290	0.000	85	335352	20.0	25.1	
48 Chloroform	83	4.301	4.301	0.000	91	1222629	10.0	10.5	
49 1,1,1-Trichloroethane	97	4.467	4.467	0.000	98	891657	10.0	8.54	
50 Cyclohexane	56	4.515	4.515	0.000	87	949328	10.0	8.81	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	701390	10.0	7.55	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	98	945467	10.0	10.1	
53 Isobutyl alcohol	41	4.669	4.669	0.000	92	382061	250.0	335.4	
55 Benzene	78	4.776	4.776	0.000	94	3124496	10.0	11.2	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	928781	10.0	11.2	
58 n-Heptane	100	4.965	4.965	0.000	88	112590	10.0	8.93	
60 Trichloroethene	130	5.309	5.309	0.000	98	722152	10.0	9.62	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	796441	10.0	8.49	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	697171	10.0	12.1	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	77599	200.0	157.2	
65 Dibromomethane	93	5.606	5.606	0.000	94	405080	10.0	12.1	
67 Dichlorobromomethane	83	5.724	5.724	0.000	99	738057	10.0	10.0	
69 2-Chloroethyl vinyl ether	63	5.973	5.973	0.000	92	758701	20.0	37.9	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	973908	10.0	12.1	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	94	1081198	20.0	28.0	
72 Toluene	91	6.412	6.412	0.000	98	3169765	10.0	10.5	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	844136	10.0	10.9	
74 Ethyl methacrylate	69	6.673	6.673	0.000	87	763533	10.0	13.1	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	626163	10.0	12.6	
76 Tetrachloroethene	164	6.898	6.898	0.000	97	543083	10.0	8.52	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	87	1114409	10.0	13.1	
78 2-Hexanone	43	6.981	6.981	0.000	94	692148	20.0	24.4	
80 Chlorodibromomethane	129	7.136	7.136	0.000	89	524766	10.0	9.62	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	606718	10.0	12.7	
84 Chlorobenzene	112	7.681	7.681	0.000	95	1957180	10.0	10.6	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	611445	10.0	7.94	
86 Ethylbenzene	106	7.776	7.776	0.000	98	983505	10.0	9.74	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	93	2342786	10.0	9.57	
88 o-Xylene	106	8.262	8.262	0.000	96	1189465	10.0	9.04	
89 Styrene	104	8.274	8.274	0.000	93	1966520	10.0	11.5	
90 Bromoform	173	8.464	8.464	0.000	97	301880	10.0	8.95	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2664969	10.0	8.21	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.902	0.000	95	826184	10.0	15.5	
95 Bromobenzene	156	8.914	8.914	0.000	93	759956	10.0	10.3	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	84	267878	10.0	15.5	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	76	166818	10.0	13.6	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	710237	10.0	9.76	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	680789	10.0	10.1	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	2171236	10.0	9.48	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2434159	10.0	11.3	
104 tert-Butylbenzene	119	9.495	9.495	0.000	92	1622372	10.0	8.28	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2299058	10.0	9.79	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2163472	10.0	8.38	
108 1,3-Dichlorobenzene	146	9.827	9.827	0.000	98	1357841	10.0	9.87	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1914709	10.0	8.29	
110 1,4-Dichlorobenzene	146	9.910	9.910	0.000	96	1424705	10.0	9.97	
113 n-Butylbenzene	91	10.254	10.254	0.000	97	1412342	10.0	7.55	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1372600	10.0	9.59	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	84	118594	10.0	10.1	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	585202	10.0	5.57	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	208554	10.0	4.30	
119 Naphthalene	128	12.128	12.128	0.000	96	1738625	10.0	7.76	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	549758	10.0	5.51	
S 129 Xylenes, Total	106				0		20.0	18.6	
S 130 Total BTEX	1				0		50.0	50.0	
S 131 Trihalomethanes, Total	1				0		40.0	39.1	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00401	Amount Added:	8.00	Units: uL	
VMRGAS_00393	Amount Added:	8.00	Units: uL	
VMRPRIMW_00444	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

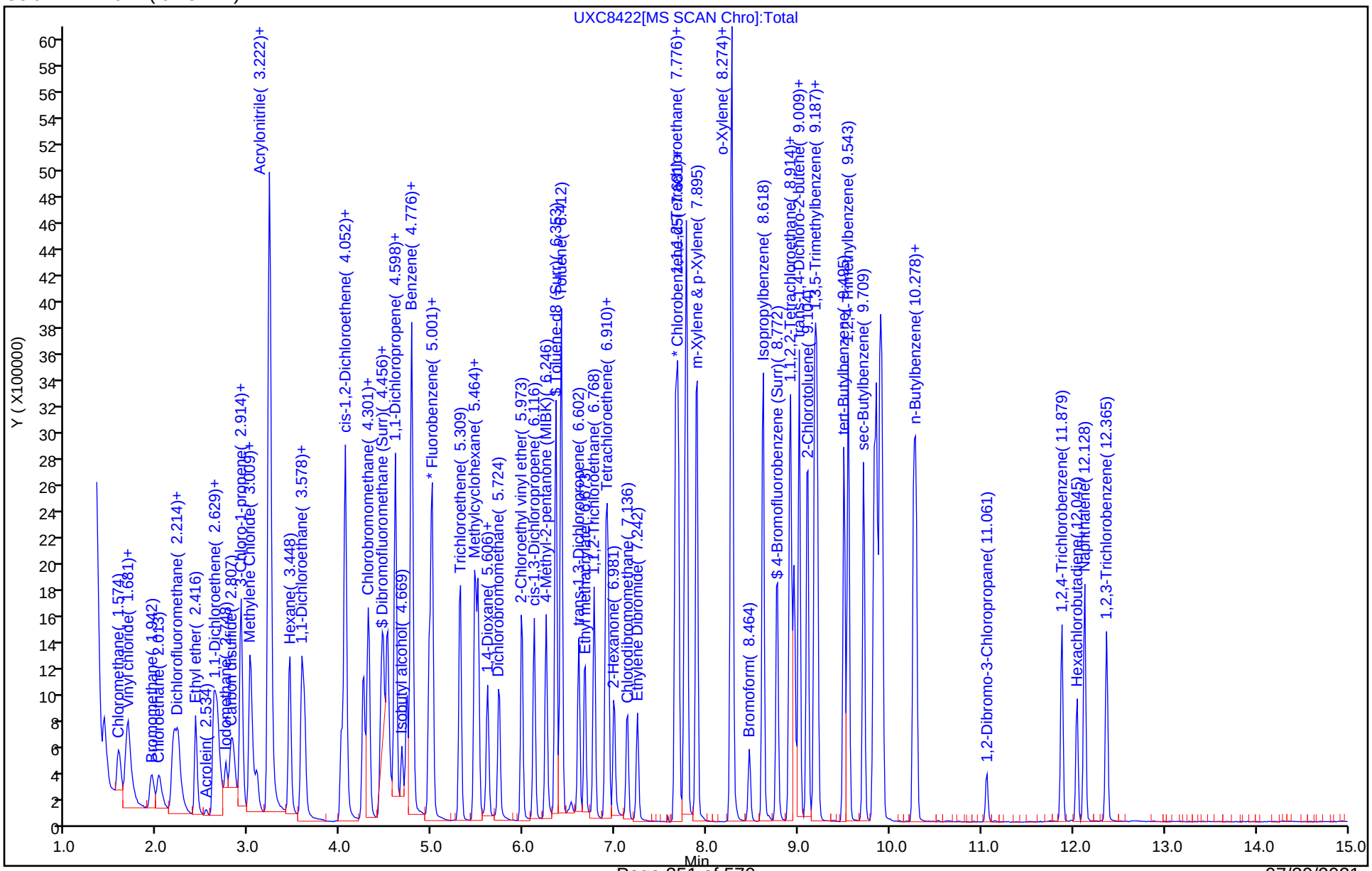
Report Date: 23-Jul-2021 08:13:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8422.D

Injection Date:	22-Jul-2021 09:26:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Mar-2021 07:33:30 ALS Bottle#: 22 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C210316A-IC,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:03 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 09:13:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	12980962	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

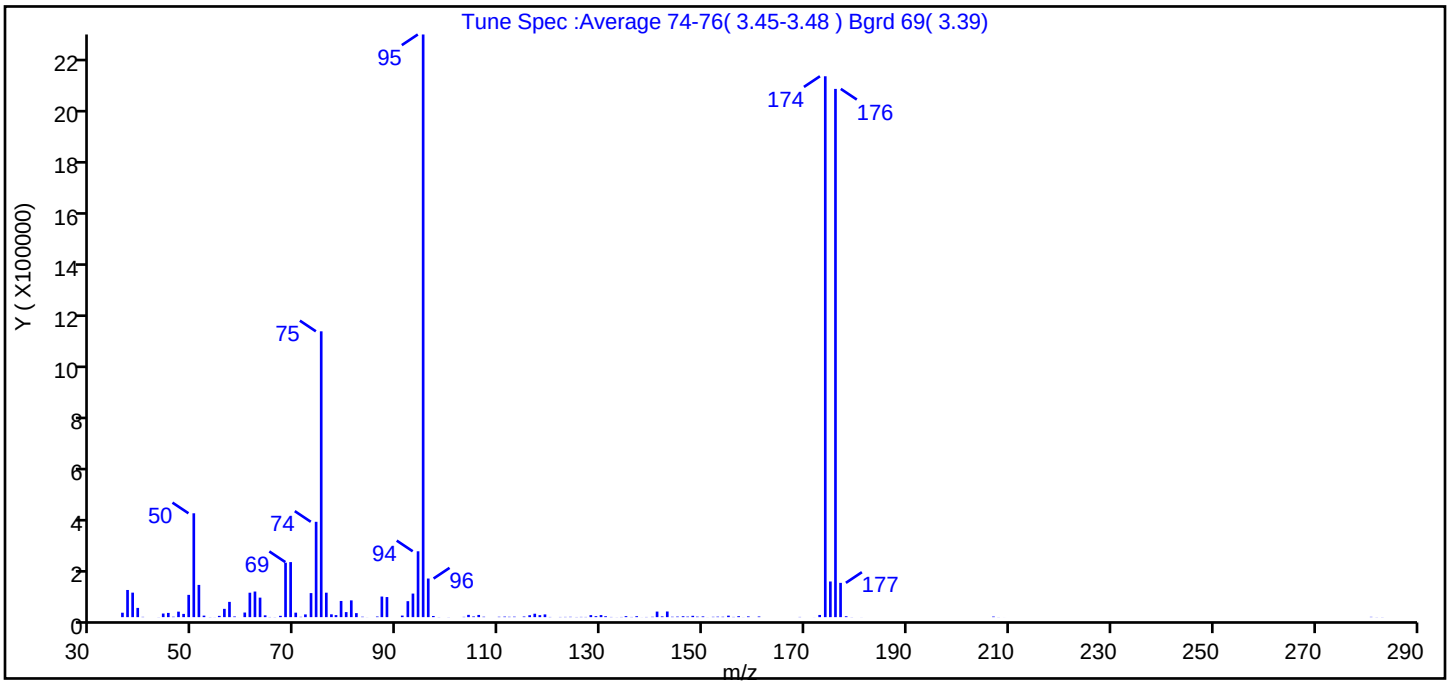
vmbfb_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D
Injection Date: 16-Mar-2021 07:33:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 22 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	92.8
175	5 to 9% of m/z 174	6.1 (6.6)
176	Greater than 95% but less than 101% of m/z 174	90.7 (97.7)
177	5 to 9% of m/z 176	5.9 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D\8260_15.rslt\spectra.d
Injection Date: 16-Mar-2021 07:33:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 69(3.39)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

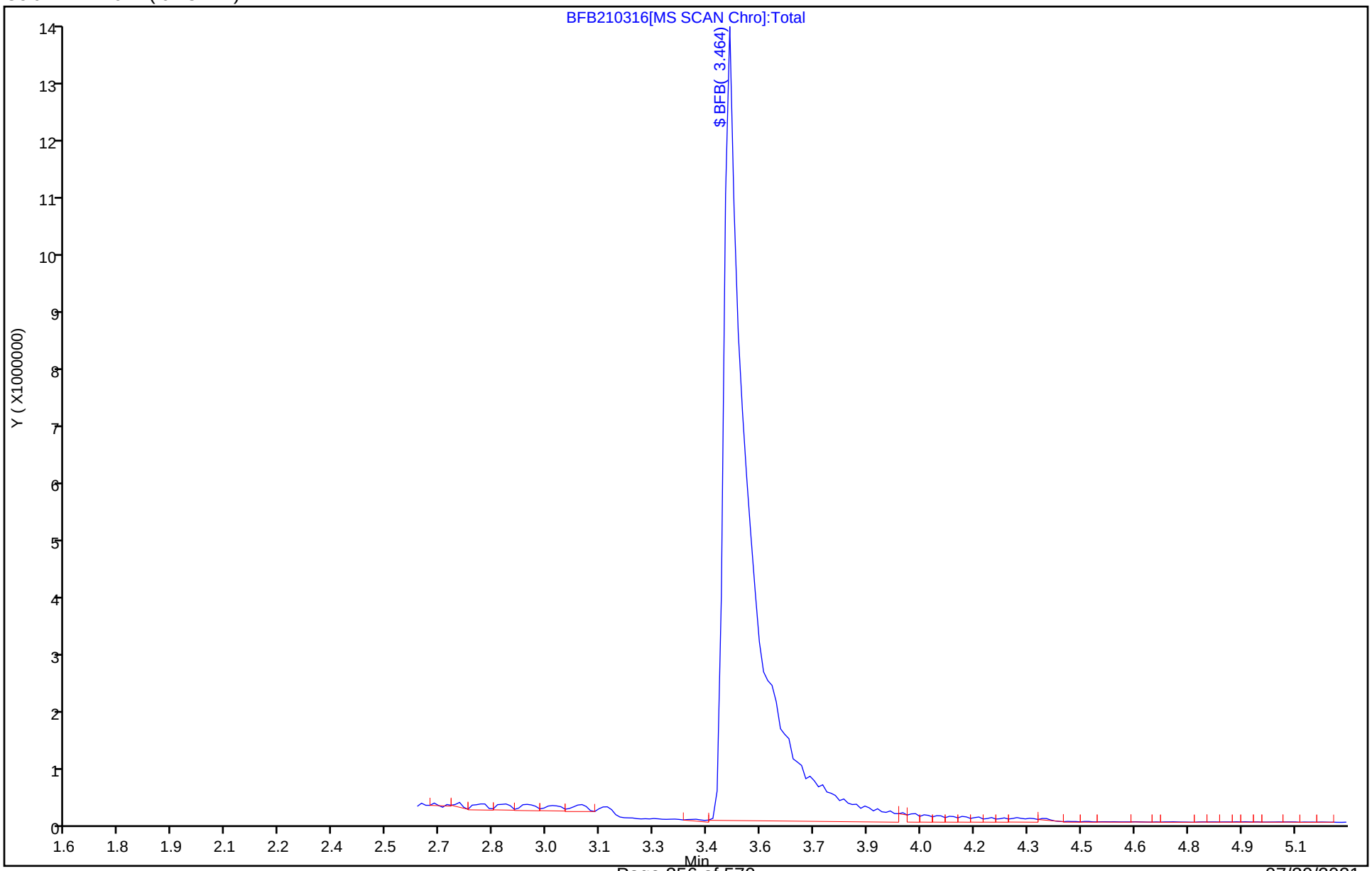
Report Date: 18-Mar-2021 09:02:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D

Injection Date:	16-Mar-2021 07:33:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\BFB720A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Jul-2021 09:23:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C210720A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Jul-2021 09:06:04	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1610				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.476	3.476	0.000	0	14201156	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

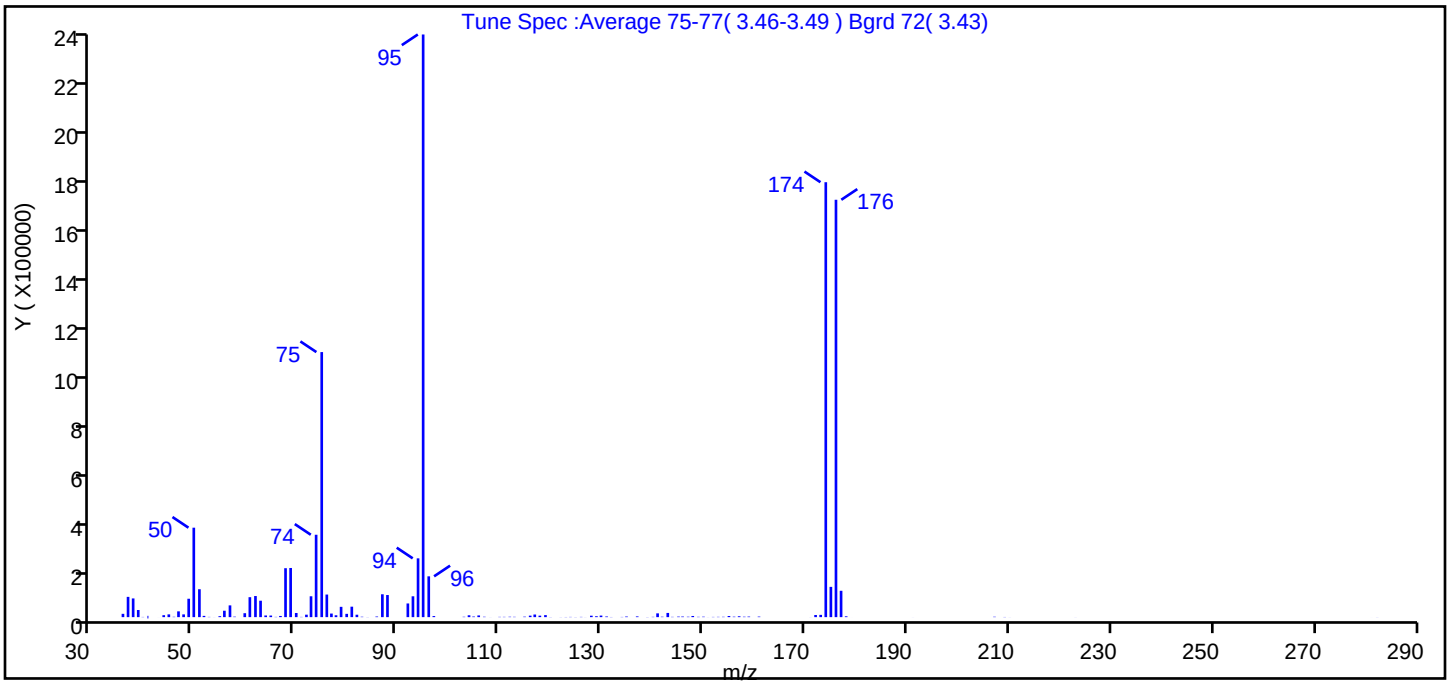
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\BFB720A.D
Injection Date: 20-Jul-2021 09:23:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	45.5
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	74.6
175	5 to 9% of m/z 174	5.2 (7.0)
176	Greater than 95% but less than 101% of m/z 174	71.6 (96.0)
177	5 to 9% of m/z 176	4.5 (6.3)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\BFB720A.D\8260_15.rslt\spectra.d
Injection Date: 20-Jul-2021 09:23:30
Spectrum: Tune Spec :Average 75-77(3.46-3.49) Bgrd 72(3.43)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	13353	70.00	16712	112.00	1616	149.00	1245
37.00	81584	71.00	935	113.00	1269	150.00	1814
38.00	75280	72.00	9907	115.00	1948	151.00	207
39.00	28696	73.00	83984	116.00	6029	152.00	924
40.00	793	74.00	331520	117.00	10553	153.00	1173
41.00	4	75.00	1066496	118.00	5970	154.00	1371
43.00	92	76.00	90920	119.00	8136	155.00	4572
44.00	7864	77.00	14461	120.00	460	156.00	1882
45.00	11145	78.00	7569	122.00	349	157.00	3542
46.00	1383	79.00	41456	123.00	627	158.00	1745
47.00	23296	80.00	13271	124.00	920	159.00	2299
48.00	11106	81.00	42104	125.00	462	161.00	2221
49.00	74040	82.00	9759	126.00	1004	163.00	18
50.00	359936	83.00	1607	127.00	213	171.00	214
51.00	112336	84.00	392	128.00	5799	172.00	8574
52.00	5068	86.00	2509	129.00	3617	173.00	9145
53.00	966	87.00	92000	130.00	6291	174.00	1750016
54.00	185	88.00	88960	131.00	2666	175.00	121792
55.00	3796	92.00	55040	132.00	632	176.00	1679360
56.00	25800	93.00	83904	134.00	834	177.00	106064
57.00	47336	94.00	236608	135.00	2489	178.00	3312
58.00	1937	95.00	2344448	137.00	3001	179.00	39
60.00	15873	96.00	164224	139.00	492	191.00	116
61.00	80304	97.00	4302	140.00	1190	207.00	1566
62.00	84944	103.00	1469	141.00	15242	209.00	690
63.00	66088	104.00	7520	142.00	1693	210.00	188
64.00	6710	105.00	2403	143.00	16912	223.00	175
65.00	6407	106.00	6883	144.00	1128	281.00	57
66.00	949	107.00	1568	145.00	2167	282.00	252
67.00	4763	108.00	179	146.00	2395		
68.00	196928	110.00	1099	147.00	1679		
69.00	197824	111.00	1132	148.00	4651		

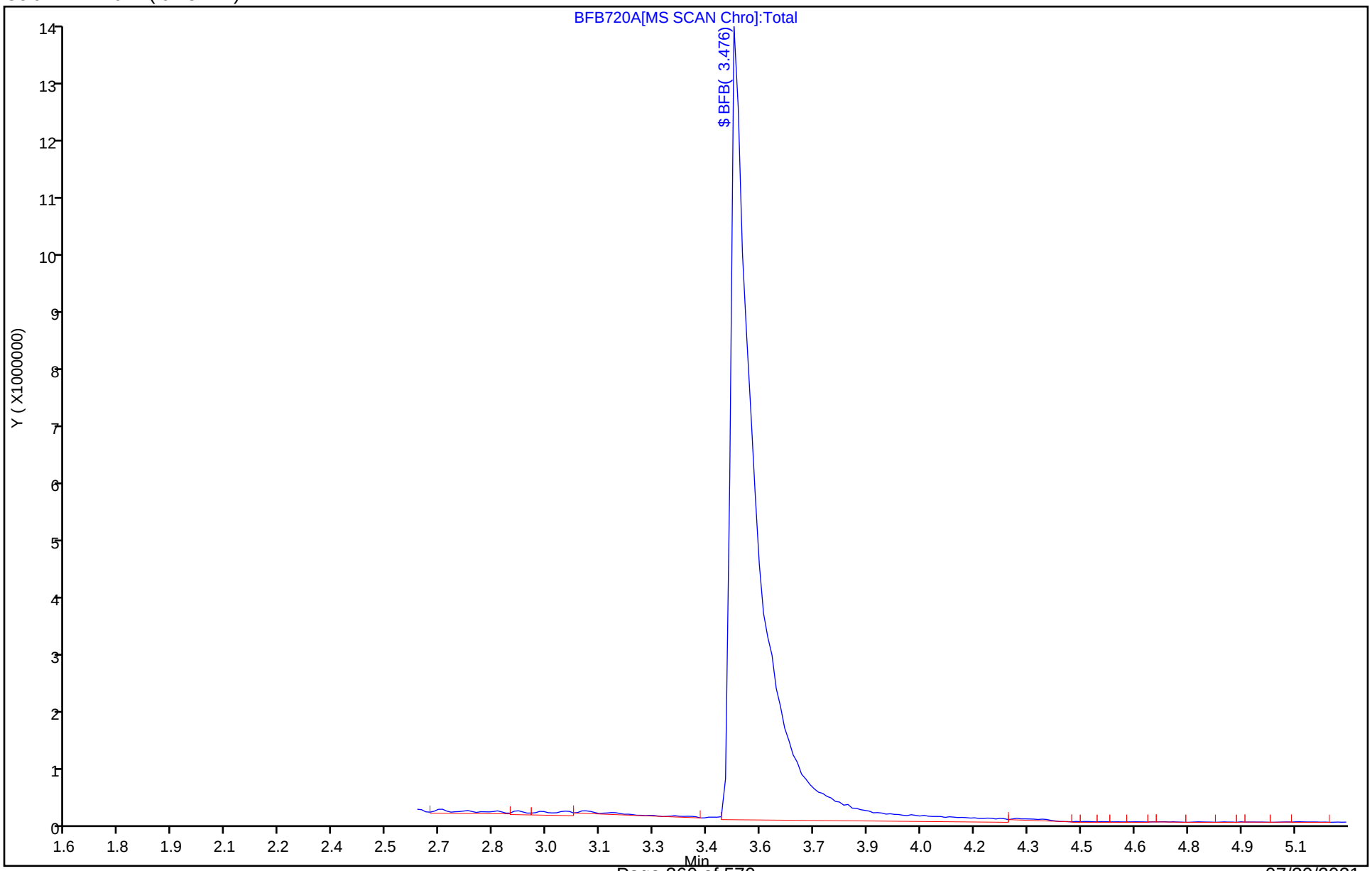
Report Date: 21-Jul-2021 09:06:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\BFB720A.D

Injection Date:	20-Jul-2021 09:23:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\BFB721D.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	21-Jul-2021 13:10:30	ALS Bottle#:	8	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C210721A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	22-Jul-2021 08:06:10	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1646				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.476	3.476	0.000	0	14971315	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

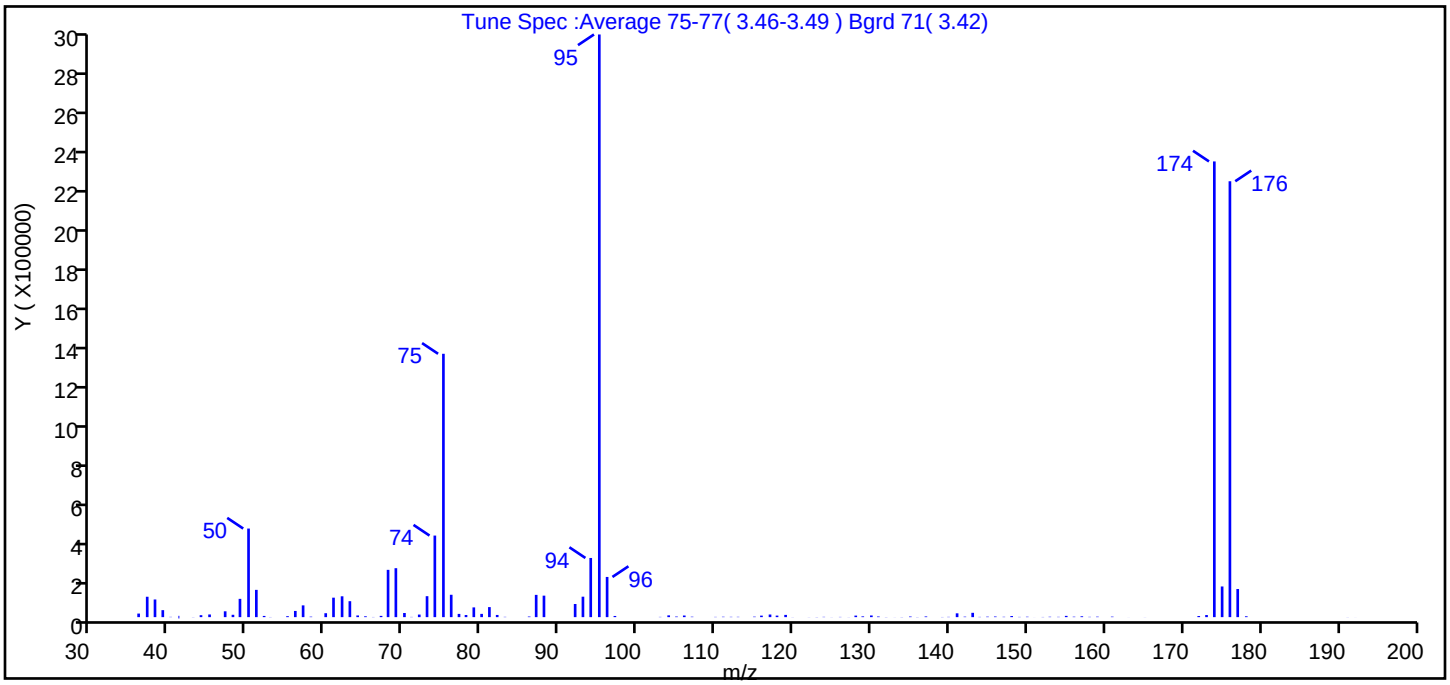
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\BFB721D.D
Injection Date: 21-Jul-2021 13:10:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.2
75	30 to 60% of m/z 95	45.2
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	78.2
175	5 to 9% of m/z 174	5.3 (6.7)
176	Greater than 95% but less than 101% of m/z 174	74.8 (95.7)
177	5 to 9% of m/z 176	4.8 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\BFB721D.D\8260_15.rslt\spectra.d
Injection Date: 21-Jul-2021 13:10:30
Spectrum: Tune Spec :Average 75-77(3.46-3.49) Bgrd 71(3.42)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	18208	70.00	21080	112.00	1574	145.00	2423
37.00	103792	71.00	1111	113.00	1610	146.00	3220
38.00	89912	72.00	13122	115.00	2480	147.00	1737
39.00	35584	73.00	106696	116.00	7760	148.00	5481
40.00	1361	74.00	415168	117.00	13366	149.00	1187
41.00	7	75.00	1340416	118.00	7866	150.00	2105
43.00	632	76.00	113856	119.00	11418	151.00	194
44.00	9958	77.00	16512	120.00	445	152.00	930
45.00	13611	78.00	10776	122.00	433	153.00	1981
47.00	29744	79.00	49600	123.00	724	154.00	1478
48.00	12006	80.00	16640	124.00	1476	155.00	6436
49.00	93088	81.00	51136	125.00	401	156.00	2282
50.00	450880	82.00	11146	126.00	1142	157.00	4305
51.00	138816	83.00	1476	127.00	427	158.00	1480
52.00	6152	86.00	3106	128.00	7859	159.00	2414
53.00	793	87.00	113304	129.00	3884	161.00	2547
55.00	4847	88.00	109400	130.00	8501	163.00	180
56.00	31520	92.00	66920	131.00	3156	165.00	297
57.00	59880	93.00	104096	132.00	702	172.00	5609
58.00	2457	94.00	301184	133.00	301	173.00	10655
60.00	20008	95.00	2965504	134.00	725	174.00	2319360
61.00	99112	96.00	204608	135.00	3070	175.00	156096
62.00	106128	97.00	6004	136.00	680	176.00	2218496
63.00	81184	103.00	1241	137.00	3539	177.00	143104
64.00	8519	104.00	9021	139.00	818	178.00	4402
65.00	4323	105.00	3029	140.00	1374	191.00	389
66.00	867	106.00	8279	141.00	19448	192.00	171
67.00	6430	107.00	2216	142.00	2436		
68.00	240704	110.00	1300	143.00	22024		
69.00	249152	111.00	2018	144.00	1256		

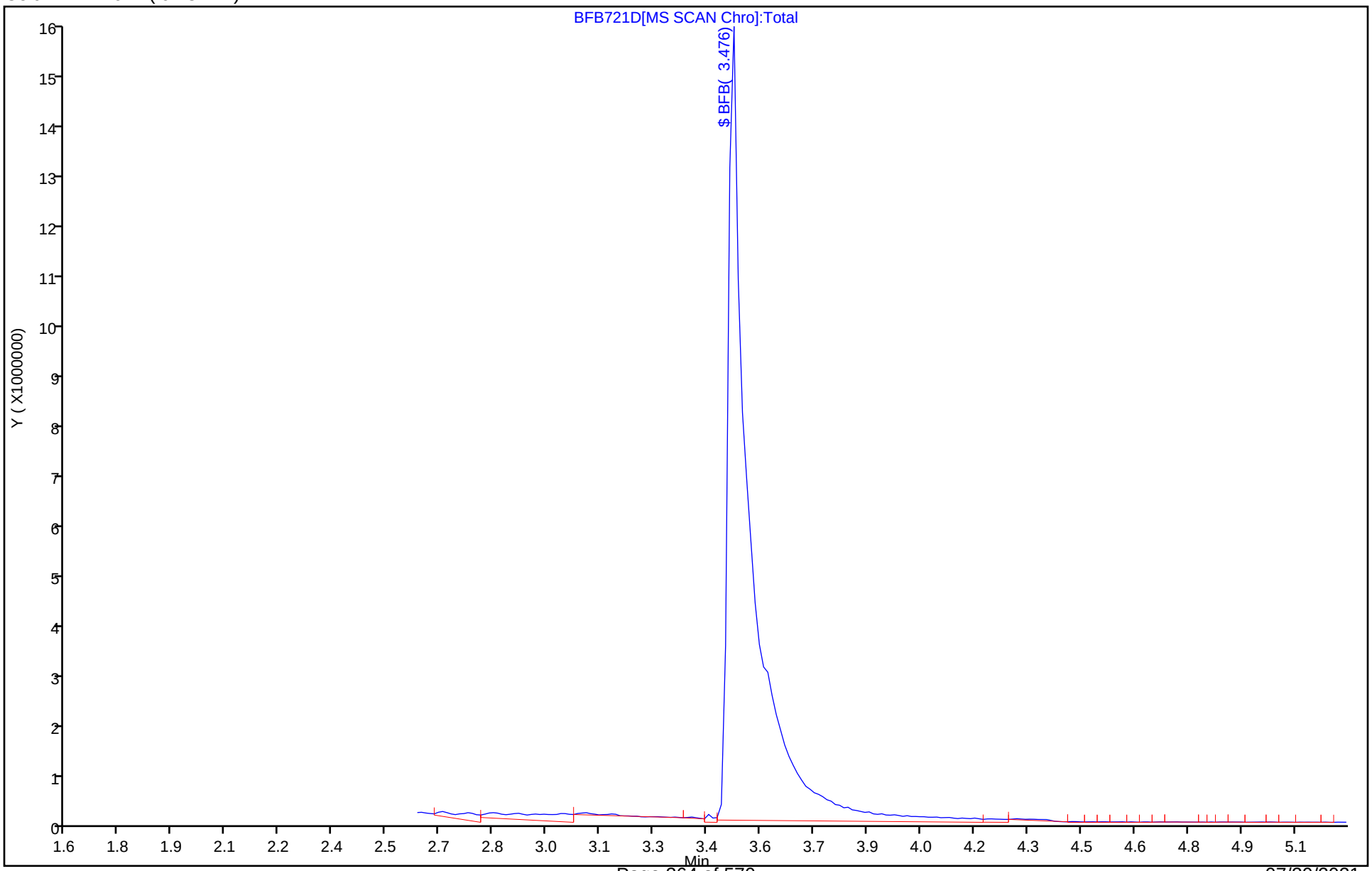
Report Date: 22-Jul-2021 08:06:10 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\BFB721D.D

Injection Date:	21-Jul-2021 13:10:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\BFB722.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 22-Jul-2021 08:52:30 ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C210722A,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:39 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	15831734	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

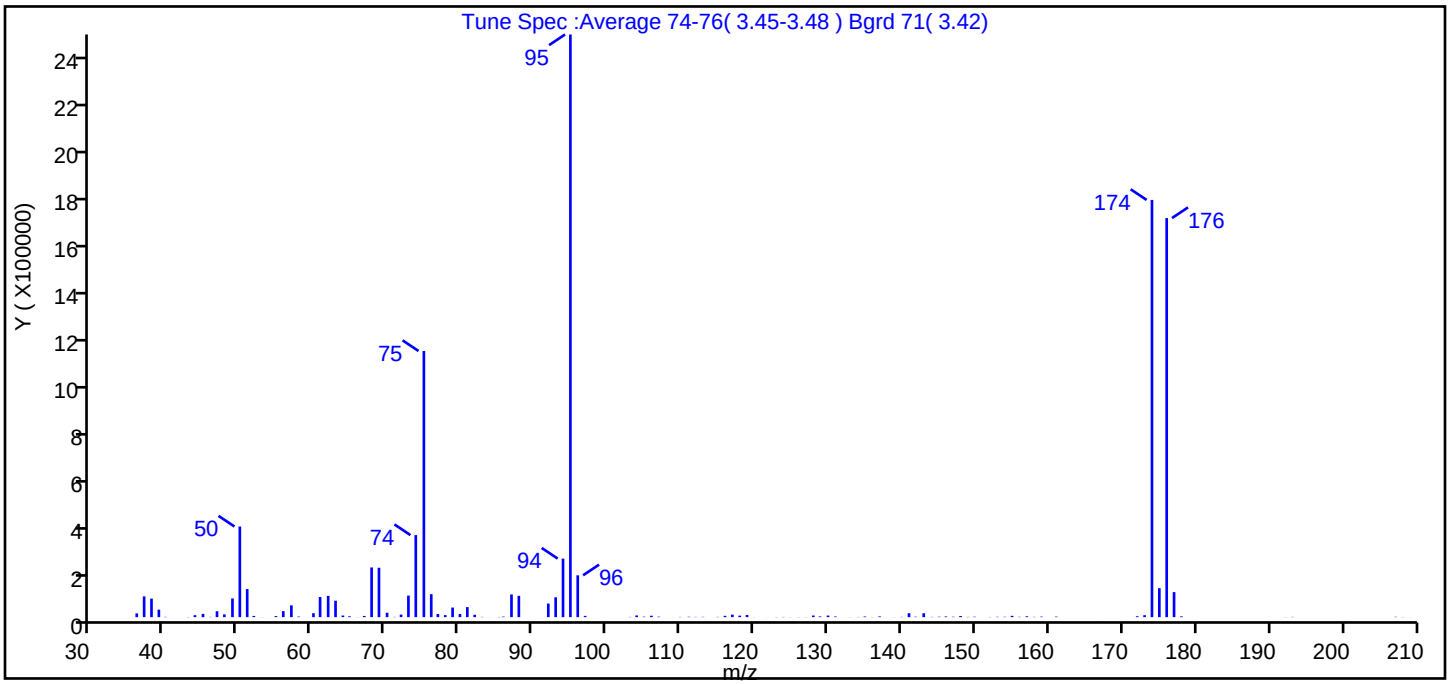
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\BFB722.D
Injection Date: 22-Jul-2021 08:52:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	45.7
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	71.6
175	5 to 9% of m/z 174	5.0 (6.9)
176	Greater than 95% but less than 101% of m/z 174	68.5 (95.7)
177	5 to 9% of m/z 176	4.3 (6.3)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\BFB722.D\8260_15.rslt\spectra.d
Injection Date: 22-Jul-2021 08:52:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 71(3.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16007	71.00	1025	111.00	1687	145.00	1743
37.00	88656	72.00	10989	112.00	1065	146.00	2891
38.00	79120	73.00	91976	113.00	1280	147.00	1607
39.00	31960	74.00	350144	115.00	1086	148.00	4682
40.00	1249	75.00	1135616	116.00	5596	149.00	1069
43.00	713	76.00	98064	117.00	10565	150.00	1751
44.00	8384	77.00	13614	118.00	6450	151.00	167
45.00	14099	78.00	8635	119.00	9269	152.00	802
46.00	1051	79.00	40896	120.00	372	153.00	1473
47.00	25192	80.00	13515	122.00	231	154.00	1471
48.00	11761	81.00	42808	123.00	730	155.00	5552
49.00	79672	82.00	9989	124.00	912	156.00	1405
50.00	386624	83.00	1097	125.00	521	157.00	3580
51.00	119832	84.00	218	126.00	583	158.00	1144
52.00	5243	85.00	767	127.00	510	159.00	2181
53.00	488	86.00	2306	128.00	6879	161.00	2225
55.00	4428	87.00	96776	129.00	3041	167.00	168
56.00	25656	88.00	90976	130.00	6778	172.00	3865
57.00	50296	92.00	58040	131.00	2686	173.00	8292
58.00	2333	93.00	84664	132.00	203	174.00	1780224
60.00	16776	94.00	249792	133.00	482	175.00	123512
61.00	85888	95.00	2486272	134.00	712	176.00	1702912
62.00	90712	96.00	178560	135.00	2816	177.00	106856
63.00	70024	97.00	5422	136.00	551	178.00	3358
64.00	6873	103.00	1004	137.00	3011	179.00	168
65.00	3575	104.00	7321	139.00	424	191.00	79
66.00	463	105.00	1953	140.00	1059	192.00	599
67.00	5093	106.00	6061	141.00	16712	193.00	1054
68.00	212096	107.00	2039	142.00	1795	207.00	1409
69.00	210752	109.00	216	143.00	16584	208.00	627
70.00	18872	110.00	946	144.00	1080	209.00	277

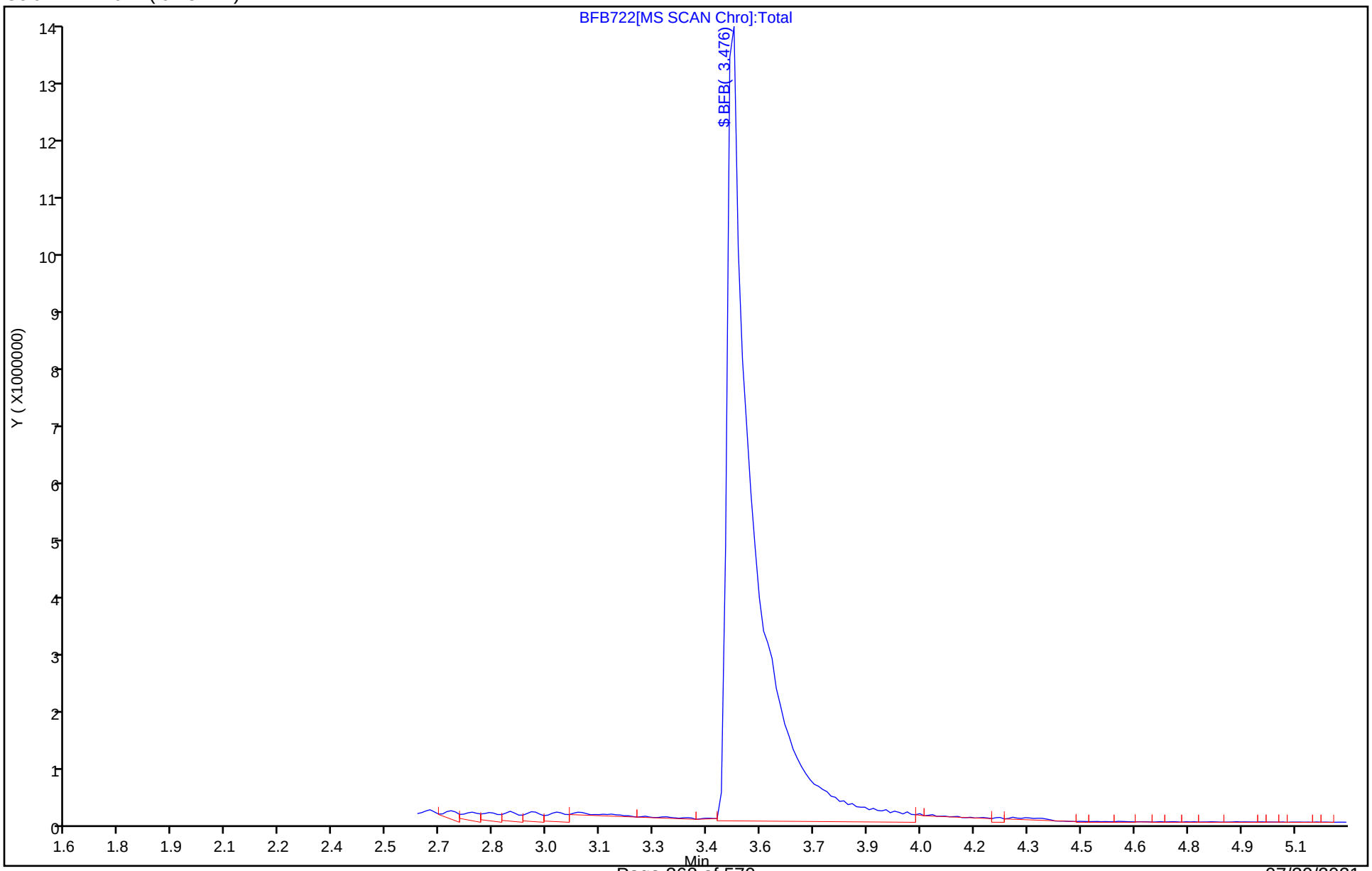
Report Date: 23-Jul-2021 08:13:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\BFB722.D

Injection Date:	22-Jul-2021 08:52:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-495759/7

Matrix: Water Lab File ID: UXC8336.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 11:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		75-130
460-00-4	4-Bromofluorobenzene (Surr)	70		47-134
2037-26-5	Toluene-d8 (Surr)	89		69-122
1868-53-7	Dibromofluoromethane (Surr)	109		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8336.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Jul-2021 11:37:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-007
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:08 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 20-Jul-2021 11:55:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2013449	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	84	1592888	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	647738	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	511867	10.0	10.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	653077	10.0	12.3	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1737180	10.0	8.90	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	465238	10.0	7.05	
9 Dichlorodifluoromethane	85		1.420					ND	
10 Chloromethane	50		1.574					ND	
11 Vinyl chloride	62		1.657					ND	
12 Butadiene	54		1.681					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		2.013					ND	
15 Dichlorofluoromethane	67		2.167					ND	
16 Trichlorofluoromethane	101		2.203					ND	
17 Ethyl ether	59		2.416					ND	
18 Acrolein	56		2.535					ND	7
19 1,1-Dichloroethene	96		2.618					ND	
20 112TCTFE	151		2.641					ND	
21 Acetone	58	2.653	2.653	0.000	96	3813		0.9364	
22 Iodomethane	142		2.760					ND	
24 Carbon disulfide	76		2.831					ND	7
23 Methylal	45		2.872					ND	
25 Acetonitrile	41		2.890					ND	U
26 3-Chloro-1-propene	76		2.914					ND	
27 Methyl acetate	43		2.926					ND	
28 Methylene Chloride	84		3.009					ND	
29 2-Methyl-2-propanol	59		3.092					ND	
30 Acrylonitrile	53		3.211					ND	
31 Methyl tert-butyl ether	73		3.222					ND	
32 trans-1,2-Dichloroethene	96		3.234					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Chlorodifluoromethane TIC	51		3.441					ND	
34 Hexane	86		3.448					ND	
35 1,1-Dichloroethane	63		3.578					ND	
37 Isopropyl ether	87		3.614					ND	
36 Vinyl acetate	43		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.649					ND	
39 Tert-butyl ethyl ether	59		3.910					ND	
42 2,2-Dichloropropane	97		4.052					ND	
41 cis-1,2-Dichloroethene	96		4.052					ND	
40 2-Butanone (MEK)	72		4.064					ND	
43 Ethyl acetate	43		4.100					ND	
44 Propionitrile	54		4.112					ND	U
45 Methacrylonitrile	41		4.242					ND	
46 Chlorobromomethane	128		4.254					ND	
47 Tetrahydrofuran	42		4.290					ND	
48 Chloroform	83		4.302					ND	
49 1,1,1-Trichloroethane	97		4.468					ND	
50 Cyclohexane	56		4.515					ND	
52 Carbon tetrachloride	117		4.598					ND	
51 1,1-Dichloropropene	75		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78	4.788	4.776	0.012	92	25578		0.1158	
56 1,2-Dichloroethane	62		4.788					ND	7
54 Isooctane	57		4.823					ND	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.966					ND	
59 n-Butanol	56		5.226					ND	
60 Trichloroethene	130		5.309					ND	
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.582					ND	
66 1,4-Dioxane	88		5.606					ND	
65 Dibromomethane	93		5.606					ND	
67 Dichlorobromomethane	83		5.725					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.985					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.412					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.673					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.899					ND	
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.982					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.136					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.657					ND	7
84 Chlorobenzene	112		7.693					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.764					ND	
86 Ethylbenzene	106		7.776					ND	
87 m-Xylene & p-Xylene	91		7.895					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.618					ND	
92 Cyclohexanone	55		8.713					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.903					ND	
95 Bromobenzene	156		8.914					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.962					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.104					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.496					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.828					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.911					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.254					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	
117 1,2,4-Trichlorobenzene	180		11.879					ND	
118 Hexachlorobutadiene	225		12.045					ND	
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142		13.361					ND	7
122 1-Methylnaphthalene	142		13.599					ND	7
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1				0			0.1158	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

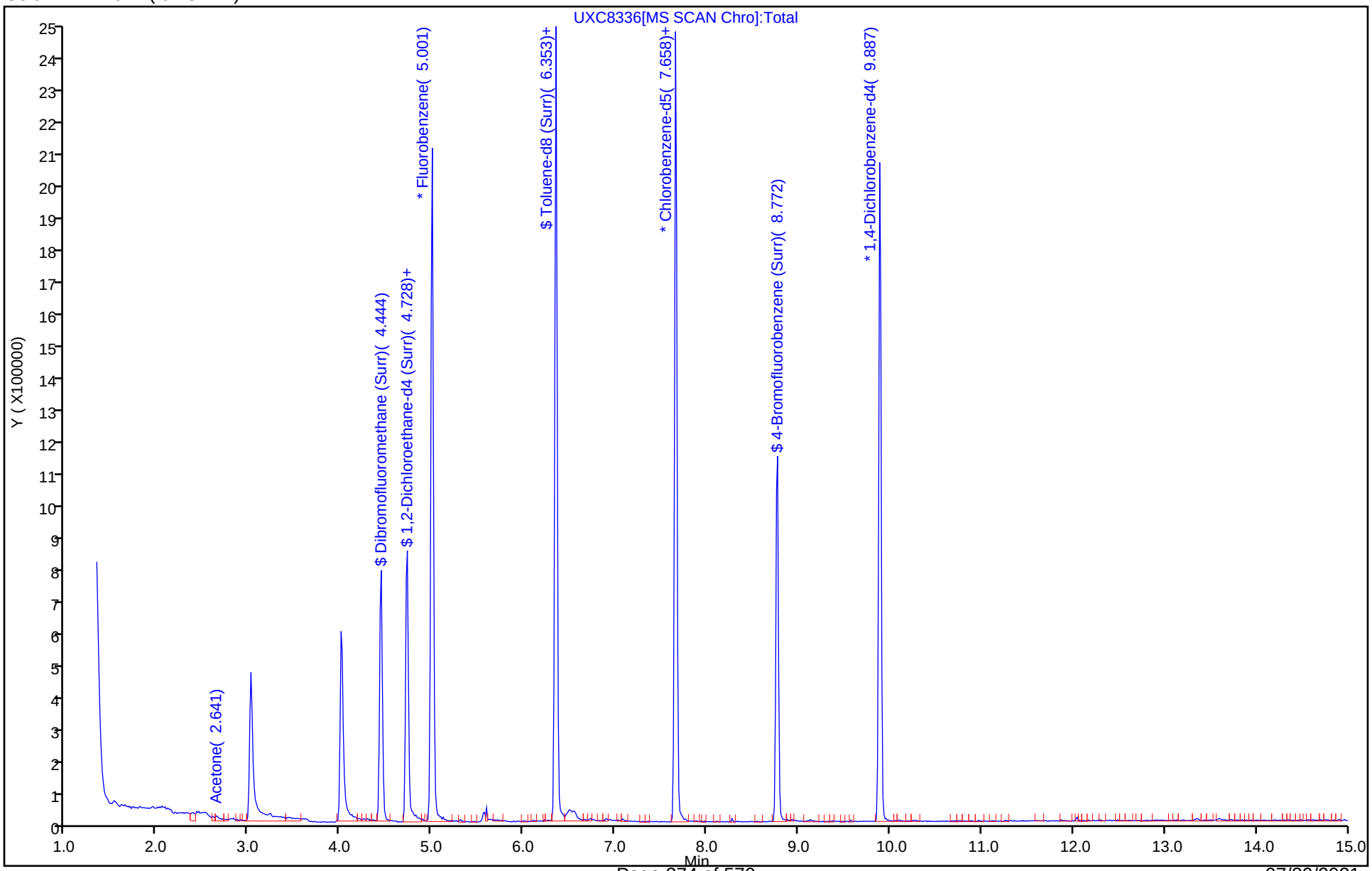
Report Date: 21-Jul-2021 09:06:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8336.D

Injection Date:	20-Jul-2021 11:37:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8336.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Jul-2021 11:37:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-007
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:08 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 20-Jul-2021 11:55:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.9	108.77
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.3	123.18
$ 6 Toluene-d8 (Surr)	10.0	8.90	88.99
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.05	70.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-495964/7

Matrix: Water Lab File ID: UXC8397.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 15:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		75-130
460-00-4	4-Bromofluorobenzene (Surr)	81		47-134
2037-26-5	Toluene-d8 (Surr)	93		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8397.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Jul-2021 15:29:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-007
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:13 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

First Level Reviewer: evansle Date: 21-Jul-2021 15:52:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2026491	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1629979	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	732464	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	482168	10.0	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	611525	10.0	11.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1852009	10.0	9.27	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	92	545720	10.0	8.08	
9 Dichlorodifluoromethane	85		1.420					ND	
10 Chloromethane	50		1.574					ND	
11 Vinyl chloride	62		1.657					ND	
12 Butadiene	54		1.681					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		2.013					ND	
15 Dichlorofluoromethane	67		2.167					ND	
16 Trichlorofluoromethane	101		2.203					ND	
17 Ethyl ether	59		2.416					ND	
18 Acrolein	56		2.535					ND	7
19 1,1-Dichloroethene	96		2.618					ND	
20 112TCTFE	151		2.641					ND	
21 Acetone	58	2.653	2.653	0.000	96	4935		1.20	
22 Iodomethane	142		2.748					ND	
24 Carbon disulfide	76	2.807	2.819	-0.012	95	18670		0.1143	
23 Methylal	45		2.872					ND	
25 Acetonitrile	41	2.890	2.890	0.000	81	4706		1.29	
26 3-Chloro-1-propene	76		2.902					ND	
27 Methyl acetate	43		2.914					ND	
28 Methylene Chloride	84		3.009					ND	
29 2-Methyl-2-propanol	59		3.092					ND	
30 Acrylonitrile	53		3.211					ND	
31 Methyl tert-butyl ether	73		3.222					ND	
32 trans-1,2-Dichloroethene	96		3.234					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Chlorodifluoromethane TIC	51		3.441					ND	
34 Hexane	86		3.448					ND	
35 1,1-Dichloroethane	63		3.578					ND	
36 Vinyl acetate	43		3.602					ND	
37 Isopropyl ether	87		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.649					ND	
39 Tert-butyl ethyl ether	59		3.910					ND	
42 2,2-Dichloropropane	97		4.053					ND	
41 cis-1,2-Dichloroethene	96		4.053					ND	
40 2-Butanone (MEK)	72		4.053					ND	
43 Ethyl acetate	43		4.100					ND	
44 Propionitrile	54		4.112					ND	
45 Methacrylonitrile	41		4.242					ND	
46 Chlorobromomethane	128		4.254					ND	
47 Tetrahydrofuran	42		4.290					ND	
48 Chloroform	83		4.302					ND	
49 1,1,1-Trichloroethane	97		4.468					ND	
50 Cyclohexane	56		4.515					ND	
52 Carbon tetrachloride	117		4.598					ND	
51 1,1-Dichloropropene	75		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78	4.788	4.776	0.012	90	27825		0.1252	
56 1,2-Dichloroethane	62		4.788					ND	
54 Isooctane	57	4.811	4.823	-0.012	42	3249		0.0284	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.966					ND	
59 n-Butanol	56		5.226					ND	
60 Trichloroethene	130		5.310					ND	
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.582					ND	
66 1,4-Dioxane	88		5.606					ND	
65 Dibromomethane	93		5.606					ND	
67 Dichlorobromomethane	83		5.725					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.974					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.412					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.673					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.899					ND	
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.982					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.136					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.657					ND	7
84 Chlorobenzene	112		7.681					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.764					ND	
86 Ethylbenzene	106		7.788					ND	
87 m-Xylene & p-Xylene	91		7.895					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.618					ND	
92 Cyclohexanone	55		8.713					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.903					ND	
95 Bromobenzene	156		8.915					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.962					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.104					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.496					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.828					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.911					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.255					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	7
117 1,2,4-Trichlorobenzene	180		11.879					ND	
118 Hexachlorobutadiene	225		12.045					ND	7
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142	13.349	13.361	-0.012	91	9003		0.1025	
122 1-Methylnaphthalene	142	13.598	13.599	-0.001	89	8629		0.1102	
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1				0			0.1252	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

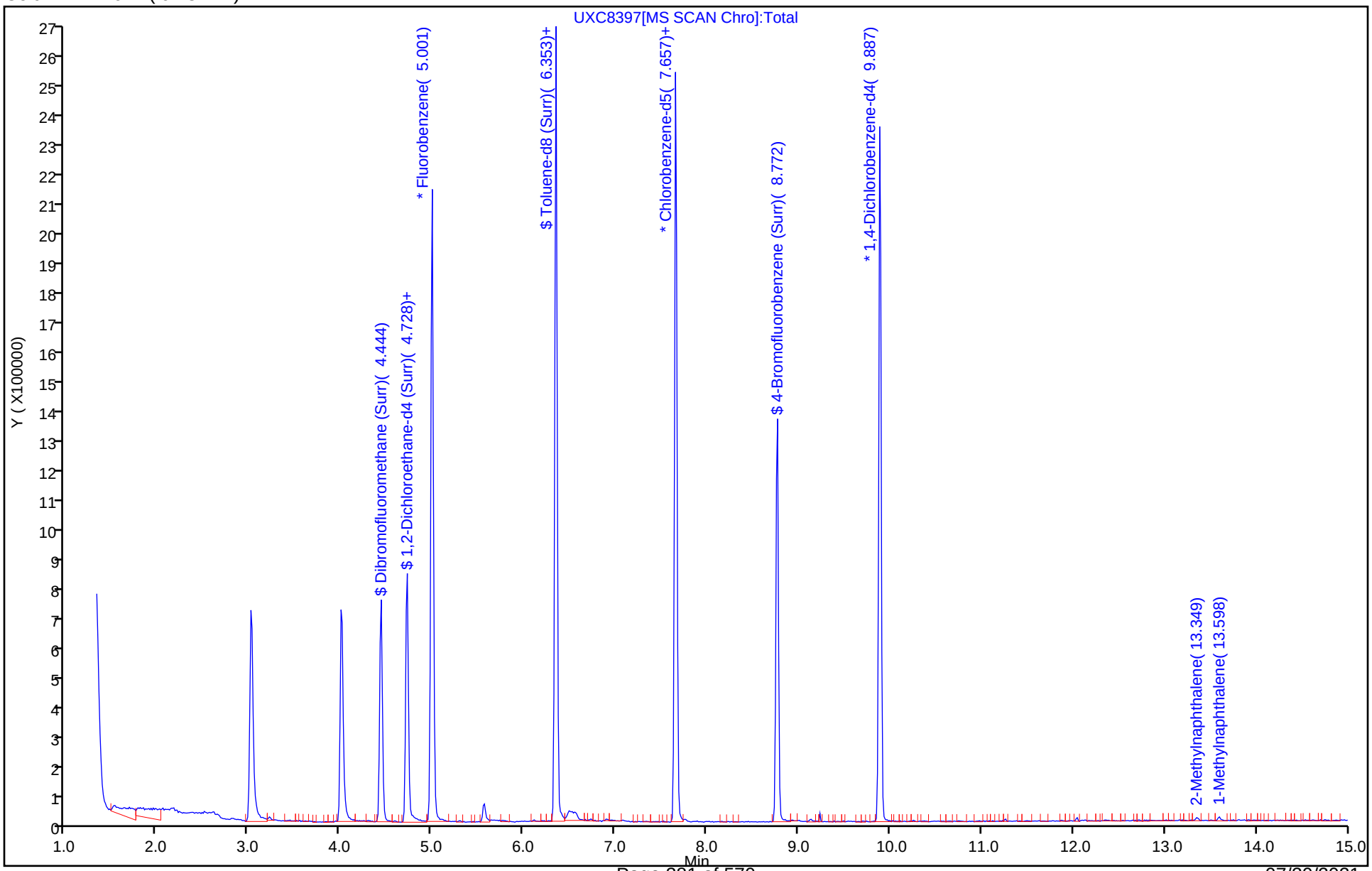
Report Date: 22-Jul-2021 08:06:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8397.D

Injection Date:	21-Jul-2021 15:29:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8397.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Jul-2021 15:29:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-007
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:13 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

First Level Reviewer: evansle Date: 21-Jul-2021 15:52:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.2	101.80
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.5	114.60
$ 6 Toluene-d8 (Surr)	10.0	9.27	92.71
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.08	80.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-496148/7

Matrix: Water Lab File ID: UXC8427.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 11:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		75-130
460-00-4	4-Bromofluorobenzene (Surr)	80		47-134
2037-26-5	Toluene-d8 (Surr)	92		69-122
1868-53-7	Dibromofluoromethane (Surr)	98		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8427.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Jul-2021 11:15:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-007
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 11:38:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2099468	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1661574	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	730077	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	478528	10.0	9.75	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	611122	10.0	11.1	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1871112	10.0	9.19	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	549192	10.0	7.97	
9 Dichlorodifluoromethane	85		1.420					ND	
10 Chloromethane	50		1.574					ND	
11 Vinyl chloride	62		1.657					ND	
12 Butadiene	54		1.681					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		2.013					ND	
15 Dichlorofluoromethane	67		2.167					ND	
16 Trichlorofluoromethane	101		2.214					ND	
17 Ethyl ether	59		2.416					ND	
18 Acrolein	56		2.534					ND	7
19 1,1-Dichloroethene	96		2.617					ND	
20 112TCTFE	151		2.641					ND	
21 Acetone	58	2.653	2.653	0.000	97	7183		1.69	
22 Iodomethane	142		2.748					ND	
24 Carbon disulfide	76	2.807	2.819	-0.012	96	18222		0.1077	
23 Methylal	45		2.872					ND	
25 Acetonitrile	41		2.890					ND	
26 3-Chloro-1-propene	76		2.902					ND	
27 Methyl acetate	43		2.914					ND	
28 Methylene Chloride	84		3.009					ND	
29 2-Methyl-2-propanol	59		3.092					ND	
30 Acrylonitrile	53		3.210					ND	
31 Methyl tert-butyl ether	73		3.222					ND	
32 trans-1,2-Dichloroethene	96		3.234					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Chlorodifluoromethane TIC	51		3.441					ND	
34 Hexane	86		3.448					ND	
35 1,1-Dichloroethane	63		3.578					ND	
36 Vinyl acetate	43		3.602					ND	
37 Isopropyl ether	87		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.649					ND	
39 Tert-butyl ethyl ether	59		3.910					ND	
42 2,2-Dichloropropane	97		4.052					ND	
41 cis-1,2-Dichloroethene	96		4.052					ND	
40 2-Butanone (MEK)	72		4.052					ND	
43 Ethyl acetate	43		4.100					ND	
44 Propionitrile	54		4.112					ND	U
45 Methacrylonitrile	41		4.242					ND	
46 Chlorobromomethane	128		4.254					ND	
47 Tetrahydrofuran	42		4.290					ND	
48 Chloroform	83		4.301					ND	
49 1,1,1-Trichloroethane	97		4.467					ND	
50 Cyclohexane	56		4.515					ND	
52 Carbon tetrachloride	117		4.598					ND	
51 1,1-Dichloropropene	75		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78		4.776					ND	7
56 1,2-Dichloroethane	62		4.788					ND	7
54 Isooctane	57	4.811	4.823	-0.012	74	3449		0.0291	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.965					ND	
59 n-Butanol	56		5.226					ND	
60 Trichloroethene	130		5.309					ND	
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.582					ND	
66 1,4-Dioxane	88		5.606					ND	
65 Dibromomethane	93		5.606					ND	
67 Dichlorobromomethane	83		5.724					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.973					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.412					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.673					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.898					ND	
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.981					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.136					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.646					ND	7
84 Chlorobenzene	112		7.681					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.764					ND	
86 Ethylbenzene	106		7.776					ND	
87 m-Xylene & p-Xylene	91		7.895					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.618					ND	
92 Cyclohexanone	55		8.713					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.902					ND	
95 Bromobenzene	156		8.914					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.962					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.104					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.495					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.827					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.910					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.254					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	7
117 1,2,4-Trichlorobenzene	180		11.879					ND	7
118 Hexachlorobutadiene	225		12.045					ND	7
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142	13.349	13.361	-0.012	90	12067		0.1378	
122 1-Methylnaphthalene	142	13.587	13.599	-0.012	91	11704		0.1500	
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1		0.000					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

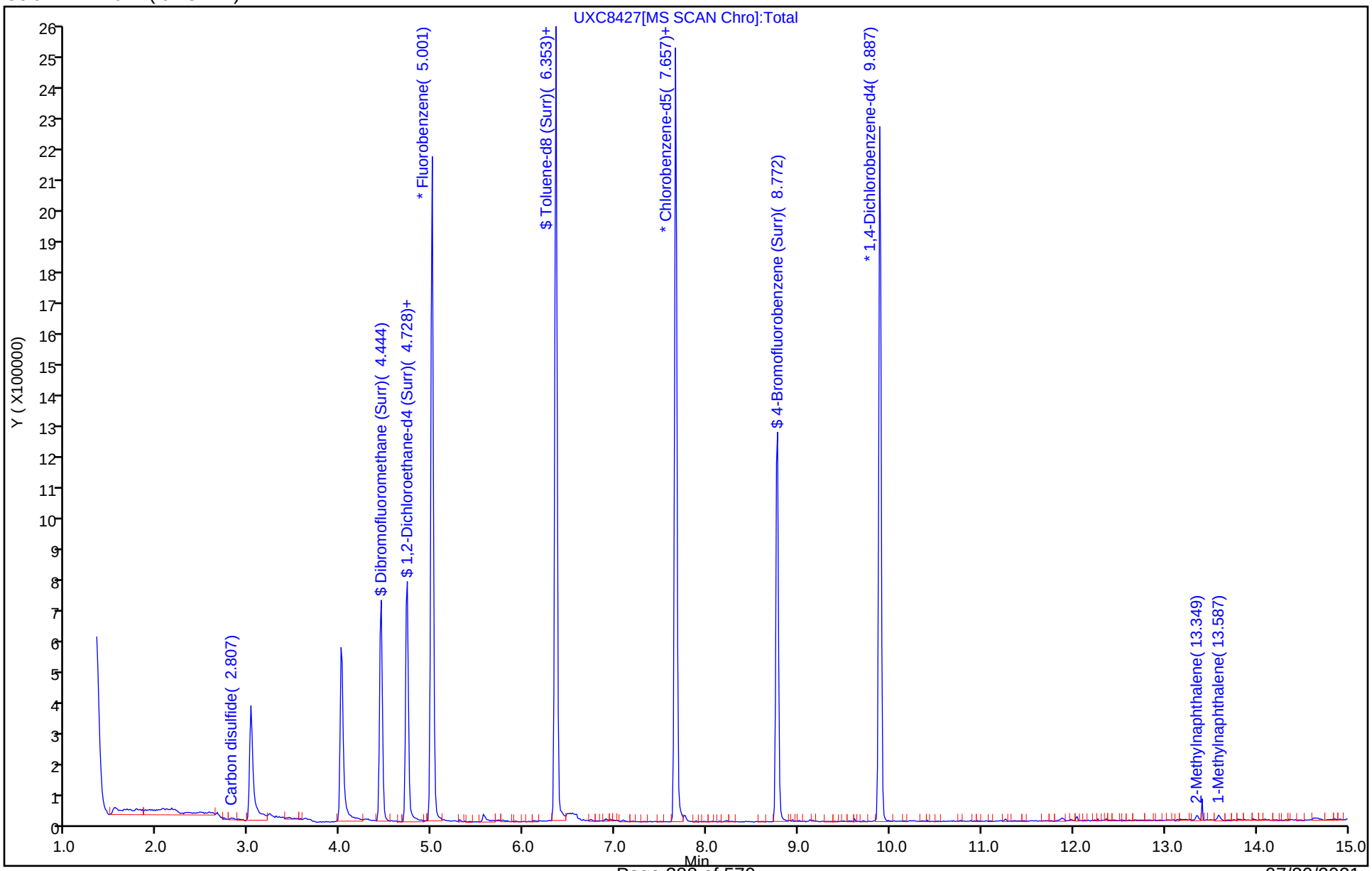
Report Date: 23-Jul-2021 08:13:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8427.D

Injection Date:	22-Jul-2021 11:15:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8427.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Jul-2021 11:15:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-007
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

First Level Reviewer: evansle Date: 22-Jul-2021 11:38:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.75	97.51
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.55
$ 6 Toluene-d8 (Surr)	10.0	9.19	91.89
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.97	79.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-495759/4

Matrix: Water Lab File ID: UXC8332.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 10:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.59		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.6		1.0	0.46
127-18-4	Tetrachloroethene	9.93		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.9		1.0	0.51
79-01-6	Trichloroethene	9.74		1.0	0.44
75-01-4	Vinyl chloride	11.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	102		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	97		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8332.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Jul-2021 10:09:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-004
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:08 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 20-Jul-2021 10:37:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2431162	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1820435	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1033483	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	549944	10.0	9.68	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	663502	10.0	10.4	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2332195	10.0	10.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	767862	10.0	10.2	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	802313	10.0	11.0	
10 Chloromethane	50	1.574	1.574	0.000	99	829684	10.0	9.96	
11 Vinyl chloride	62	1.657	1.657	0.000	98	826365	10.0	11.6	
12 Butadiene	54	1.681	1.681	0.000	92	490021	10.0	5.38	
13 Bromomethane	94	1.930	1.930	0.000	90	469575	10.0	7.85	
14 Chloroethane	64	2.013	2.013	0.000	98	503100	10.0	9.56	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1128845	10.0	8.07	
16 Trichlorofluoromethane	101	2.214	2.203	0.011	98	921504	10.0	7.27	
17 Ethyl ether	59	2.416	2.416	0.000	86	513456	10.0	8.41	
18 Acrolein	56	2.534	2.535	-0.001	98	124144	50.0	32.0	
19 1,1-Dichloroethene	96	2.617	2.618	-0.001	97	674449	10.0	9.59	
20 112TCTFE	151	2.641	2.641	0.000	92	542050	10.0	9.25	
21 Acetone	58	2.653	2.653	0.000	99	125805	20.0	25.6	
22 Iodomethane	142	2.748	2.760	-0.012	97	1005966	10.0	9.34	
24 Carbon disulfide	76	2.819	2.831	-0.012	98	1705554	10.0	8.71	
26 3-Chloro-1-propene	76	2.914	2.914	0.000	91	612431	10.0	14.8	
27 Methyl acetate	43	2.914	2.926	-0.012	97	955124	20.0	30.9	
28 Methylene Chloride	84	3.009	3.009	0.000	90	798157	10.0	12.2	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	93	318066	100.0	92.5	
30 Acrylonitrile	53	3.210	3.211	-0.001	100	2610584	100.0	158.2	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1711384	10.0	10.0	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	97	767449	10.0	10.9	
34 Hexane	86	3.448	3.448	0.000	90	140895	10.0	10.0	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	97	1225913	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.614	-0.012	97	858652	10.0	9.08	
42 2,2-Dichloropropane	97	4.052	4.052	0.000	75	157433	10.0	7.28	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	79	788230	10.0	10.6	
40 2-Butanone (MEK)	72	4.064	4.064	0.000	98	152948	20.0	29.8	
46 Chlorobromomethane	128	4.254	4.254	0.000	89	386773	10.0	11.0	
47 Tetrahydrofuran	42	4.289	4.290	-0.001	81	274205	20.0	21.5	
48 Chloroform	83	4.301	4.302	-0.001	92	1234100	10.0	11.1	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	99	945012	10.0	9.48	
50 Cyclohexane	56	4.515	4.515	0.000	88	979871	10.0	9.52	
52 Carbon tetrachloride	117	4.598	4.598	0.000	83	786753	10.0	8.87	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	97	903337	10.0	10.1	
53 Isobutyl alcohol	41	4.669	4.669	0.000	90	393912	250.0	362.2	
55 Benzene	78	4.776	4.776	0.000	94	3081674	10.0	11.6	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	911983	10.0	11.5	
58 n-Heptane	100	4.965	4.966	-0.001	84	105847	10.0	8.80	
60 Trichloroethene	130	5.309	5.309	0.000	98	697775	10.0	9.74	
62 Methylcyclohexane	83	5.463	5.464	-0.001	88	803328	10.0	8.97	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	97	672391	10.0	12.2	
66 1,4-Dioxane	88	5.606	5.606	0.000	32	77638	200.0	165.6	
65 Dibromomethane	93	5.606	5.606	0.000	95	390104	10.0	12.2	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	100	721085	10.0	10.3	
69 2-Chloroethyl vinyl ether	63	5.985	5.985	0.000	94	288893	10.0	15.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	832237	10.0	10.9	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	94	847437	20.0	23.0	
72 Toluene	91	6.412	6.412	0.000	98	3018001	10.0	11.2	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	762657	10.0	11.1	
74 Ethyl methacrylate	69	6.673	6.673	0.000	86	623905	10.0	12.0	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	632013	10.0	14.3	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	562999	10.0	9.93	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	88	1066752	10.0	14.1	
78 2-Hexanone	43	6.981	6.982	-0.001	94	583016	20.0	23.1	
80 Chlorodibromomethane	129	7.136	7.136	0.000	90	500300	10.0	10.3	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	563894	10.0	13.2	
84 Chlorobenzene	112	7.681	7.693	-0.012	97	1852620	10.0	11.3	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	608061	10.0	8.89	
86 Ethylbenzene	106	7.776	7.776	0.000	98	925205	10.0	10.3	
87 m-Xylene & p-Xylene	91	7.894	7.895	-0.001	92	2240247	10.0	10.3	
88 o-Xylene	106	8.262	8.262	0.000	95	1063705	10.0	9.10	
89 Styrene	104	8.274	8.274	0.000	93	1782944	10.0	11.8	
90 Bromoform	173	8.464	8.464	0.000	97	280641	10.0	9.36	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2394095	10.0	8.29	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	95	783137	10.0	14.8	
95 Bromobenzene	156	8.914	8.914	0.000	92	734822	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	84	248146	10.0	14.5	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	77	139797	10.0	11.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	706639	10.0	9.80	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	657404	10.0	9.82	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	93	2120719	10.0	9.34	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2439353	10.0	11.4	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	1514718	10.0	7.81	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2261222	10.0	9.72	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2155025	10.0	8.43	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	1359086	10.0	9.97	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1923555	10.0	8.41	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	95	1454617	10.0	10.3	
113 n-Butylbenzene	91	10.254	10.254	0.000	97	1355255	10.0	7.32	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1390622	10.0	9.80	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	85	101032	10.0	8.67	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	566826	10.0	5.44	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	253507	10.0	5.44	
119 Naphthalene	128	12.128	12.128	0.000	96	1441852	10.0	6.49	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	570572	10.0	5.77	
S 129 Xylenes, Total	106				0		20.0	19.4	
S 130 Total BTEX	1				0		50.0	52.5	
S 131 Trihalomethanes, Total	1				0		40.0	41.1	

QC Flag Legend

Processing Flags

Reagents:

VMFASGW_00416	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

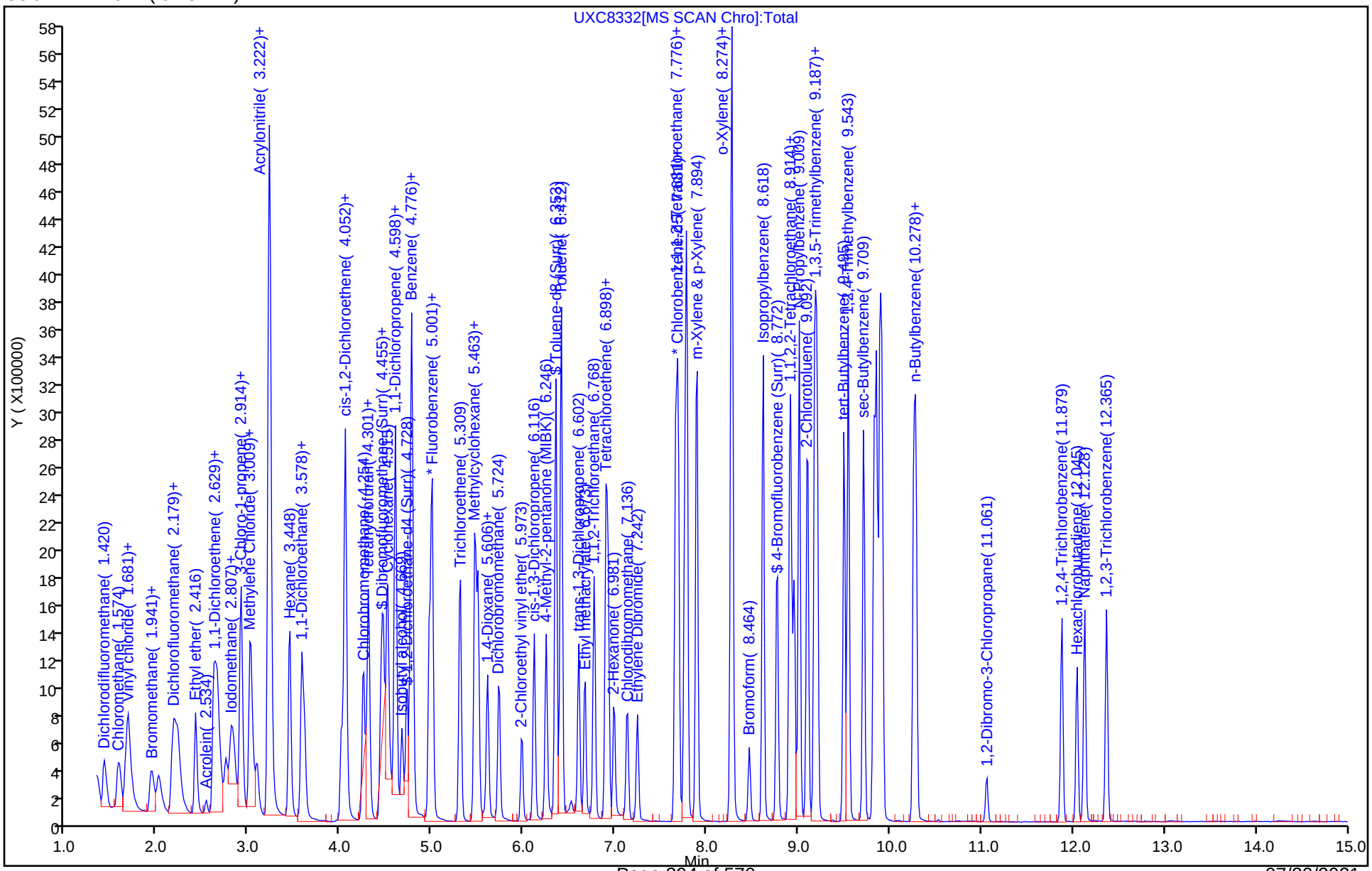
Report Date: 21-Jul-2021 09:06:10 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8332.D

Injection Date:	20-Jul-2021 10:09:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8332.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Jul-2021 10:09:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111391-004
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:08 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: evansle Date: 20-Jul-2021 10:37:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.68	96.78
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.65
$ 6 Toluene-d8 (Surr)	10.0	10.5	104.54
$ 7 4-Bromofluorobenzene (Surr)	10.0	10.2	101.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-495964/4

Matrix: Water Lab File ID: UXC8393.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 14:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.37		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11.1		1.0	0.46
127-18-4	Tetrachloroethene	9.50		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.9		1.0	0.51
79-01-6	Trichloroethene	10.1		1.0	0.44
75-01-4	Vinyl chloride	11.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	99		47-134
2037-26-5	Toluene-d8 (Surr)	100		69-122
1868-53-7	Dibromofluoromethane (Surr)	94		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8393.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Jul-2021 14:01:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-004
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:13 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2405434	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1860987	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1003816	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	527012	10.0	9.37	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	98	647883	10.0	10.2	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2287090	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	767473	10.0	9.95	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	814310	10.0	11.2	
10 Chloromethane	50	1.574	1.574	0.000	98	808992	10.0	9.82	
11 Vinyl chloride	62	1.657	1.657	0.000	98	798873	10.0	11.3	
12 Butadiene	54	1.681	1.681	0.000	93	418351	10.0	4.64	
13 Bromomethane	94	1.930	1.930	0.000	90	427854	10.0	7.23	
14 Chloroethane	64	2.013	2.013	0.000	99	498249	10.0	9.57	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1134537	10.0	8.19	
16 Trichlorofluoromethane	101	2.214	2.203	0.011	99	938343	10.0	7.48	
17 Ethyl ether	59	2.416	2.416	0.000	89	589599	10.0	9.76	
18 Acrolein	56	2.535	2.535	0.000	99	152868	50.0	40.5	
19 1,1-Dichloroethene	96	2.618	2.618	0.000	97	651454	10.0	9.37	
20 112TCTFE	151	2.641	2.641	0.000	90	487888	10.0	8.42	
21 Acetone	58	2.653	2.653	0.000	100	141693	20.0	29.1	
22 Iodomethane	142	2.748	2.748	0.000	96	945716	10.0	8.88	
24 Carbon disulfide	76	2.819	2.819	0.000	99	1689700	10.0	8.72	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	91	654190	10.0	16.0	
27 Methyl acetate	43	2.914	2.914	0.000	97	1068665	20.0	35.0	
28 Methylene Chloride	84	3.009	3.009	0.000	89	792216	10.0	12.2	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	94	488413	100.0	143.6	
30 Acrylonitrile	53	3.211	3.211	0.000	99	2894266	100.0	177.3	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	1927300	10.0	11.4	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	97	759961	10.0	10.9	
34 Hexane	86	3.448	3.448	0.000	90	139238	10.0	10.0	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	1244343	10.0	11.3	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1006117	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	4.052	4.053	-0.001	72	163631	10.0	7.65	
41 cis-1,2-Dichloroethene	96	4.052	4.053	-0.001	80	810806	10.0	11.1	
40 2-Butanone (MEK)	72	4.052	4.053	-0.001	98	175548	20.0	34.5	
46 Chlorobromomethane	128	4.254	4.254	0.000	91	385478	10.0	11.1	
47 Tetrahydrofuran	42	4.290	4.290	0.000	86	350413	20.0	27.7	
48 Chloroform	83	4.302	4.302	0.000	92	1241550	10.0	11.3	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	939618	10.0	9.53	
50 Cyclohexane	56	4.515	4.515	0.000	87	996405	10.0	9.79	
52 Carbon tetrachloride	117	4.598	4.598	0.000	80	756618	10.0	8.62	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	97	935612	10.0	10.5	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	481438	250.0	447.4	
55 Benzene	78	4.776	4.776	0.000	94	3114514	10.0	11.8	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	935510	10.0	11.9	
58 n-Heptane	100	4.966	4.966	0.000	87	109114	10.0	9.17	
60 Trichloroethene	130	5.309	5.310	-0.001	98	713780	10.0	10.1	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	848836	10.0	9.58	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	697646	10.0	12.8	
66 1,4-Dioxane	88	5.606	5.606	0.000	95	91929	200.0	203.4	
65 Dibromomethane	93	5.606	5.606	0.000	96	401795	10.0	12.7	
67 Dichlorobromomethane	83	5.725	5.725	0.000	100	751564	10.0	10.8	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	338085	10.0	17.9	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	921141	10.0	12.2	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	95	1044637	20.0	28.6	
72 Toluene	91	6.412	6.412	0.000	98	3099490	10.0	11.3	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	833115	10.0	11.8	
74 Ethyl methacrylate	69	6.673	6.673	0.000	87	736859	10.0	13.9	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	641232	10.0	14.2	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	550250	10.0	9.50	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	88	1105304	10.0	14.2	
78 2-Hexanone	43	6.982	6.982	0.000	94	684964	20.0	26.5	
80 Chlorodibromomethane	129	7.136	7.136	0.000	90	513014	10.0	10.3	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	589983	10.0	13.5	
84 Chlorobenzene	112	7.681	7.681	0.000	96	1925219	10.0	11.5	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	615921	10.0	8.80	
86 Ethylbenzene	106	7.776	7.788	-0.012	98	972342	10.0	10.6	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	92	2393563	10.0	10.8	
88 o-Xylene	106	8.262	8.262	0.000	96	1166490	10.0	9.76	
89 Styrene	104	8.274	8.274	0.000	93	1882639	10.0	12.1	
90 Bromoform	173	8.464	8.464	0.000	97	294613	10.0	9.61	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2635804	10.0	8.93	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	94	841103	10.0	16.4	
95 Bromobenzene	156	8.914	8.915	0.000	92	762563	10.0	10.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	83	263035	10.0	15.8	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	80	155303	10.0	13.2	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	724234	10.0	10.3	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	678988	10.0	10.4	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	93	2234675	10.0	10.1	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2466212	10.0	11.9	
104 tert-Butylbenzene	119	9.496	9.496	0.000	93	1664852	10.0	8.84	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2396163	10.0	10.6	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2305574	10.0	9.28	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	1358280	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	2047194	10.0	9.22	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	95	1435007	10.0	10.4	
113 n-Butylbenzene	91	10.254	10.255	-0.001	98	1462461	10.0	8.13	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1417554	10.0	10.3	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	84	111678	10.0	9.86	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	95	600529	10.0	5.94	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	248634	10.0	5.50	
119 Naphthalene	128	12.128	12.128	0.000	96	1762977	10.0	8.17	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	622997	10.0	6.49	
S 129 Xylenes, Total	106				0		20.0	20.5	
S 130 Total BTEX	1				0		50.0	54.2	
S 131 Trihalomethanes, Total	1				0		40.0	42.1	

Reagents:

VMFASGW_00417	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

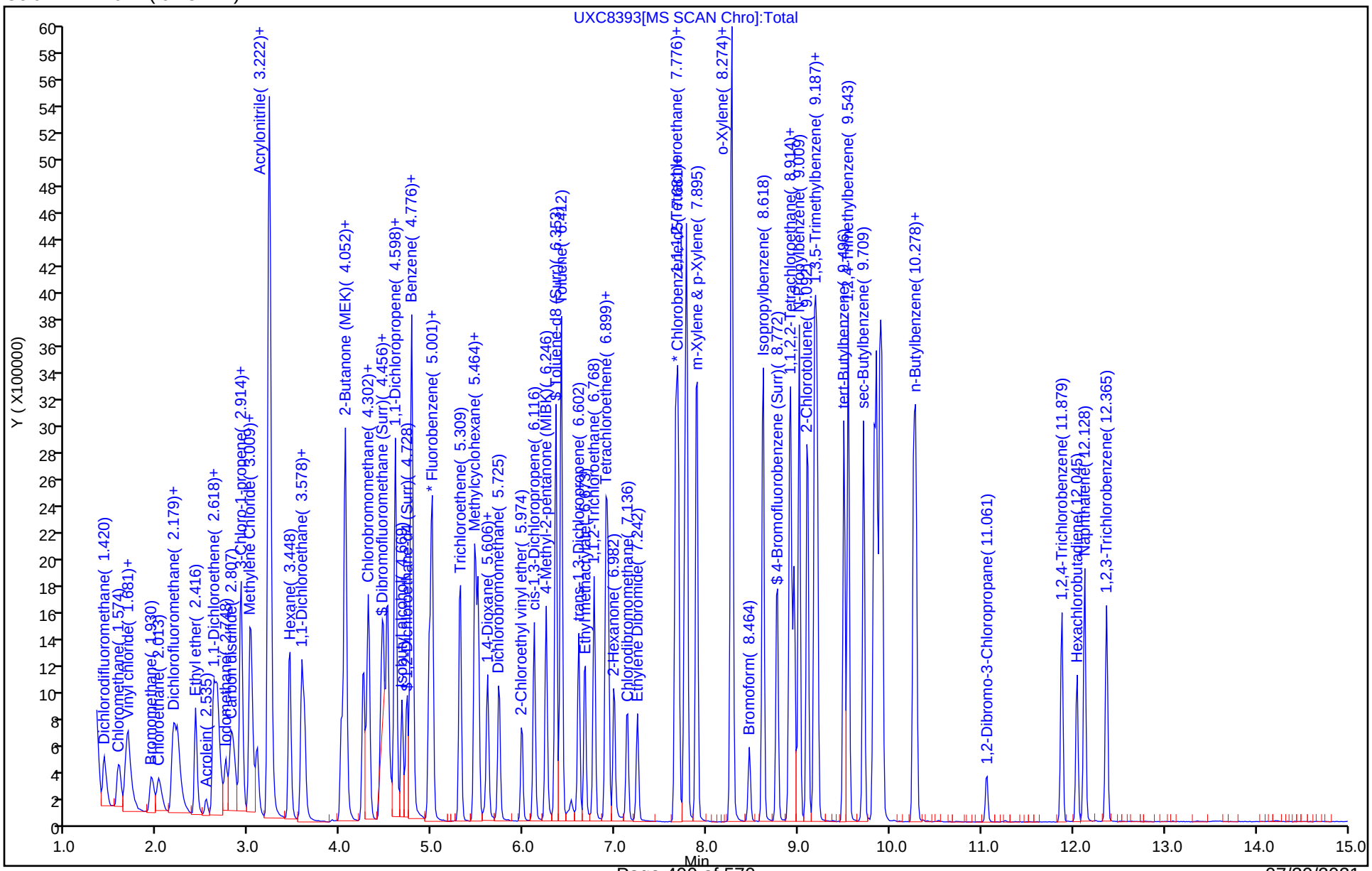
Report Date: 22-Jul-2021 08:06:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8393.D

Injection Date:	21-Jul-2021 14:01:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8393.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Jul-2021 14:01:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-004
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:13 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.37	93.73
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.29
$ 6 Toluene-d8 (Surr)	10.0	10.0	100.28
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.95	99.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-496148/4

Matrix: Water Lab File ID: UXC8423.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/22/2021 09:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.04		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.46
127-18-4	Tetrachloroethene	8.64		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.5		1.0	0.51
79-01-6	Trichloroethene	9.72		1.0	0.44
75-01-4	Vinyl chloride	10.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		75-130
460-00-4	4-Bromofluorobenzene (Surr)	100		47-134
2037-26-5	Toluene-d8 (Surr)	97		69-122
1868-53-7	Dibromofluoromethane (Surr)	91		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8423.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Jul-2021 09:48:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-004
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2483350	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1991289	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1070211	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	529836	10.0	9.13	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	97	638986	10.0	9.77	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	92	2368228	10.0	9.70	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	823307	10.0	9.97	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	735642	10.0	9.83	
10 Chloromethane	50	1.574	1.574	0.000	98	808403	10.0	9.50	
11 Vinyl chloride	62	1.657	1.657	0.000	98	738090	10.0	10.1	
12 Butadiene	54	1.681	1.681	0.000	89	411576	10.0	4.42	
13 Bromomethane	94	1.942	1.930	0.012	90	398948	10.0	6.53	
14 Chloroethane	64	2.013	2.013	0.000	99	476072	10.0	8.86	
15 Dichlorofluoromethane	67	2.167	2.167	0.000	97	1068419	10.0	7.47	
16 Trichlorofluoromethane	101	2.203	2.214	-0.011	99	818617	10.0	6.33	
17 Ethyl ether	59	2.416	2.416	0.000	87	530916	10.0	8.51	
18 Acrolein	56	2.535	2.534	0.001	98	120221	50.0	30.2	
19 1,1-Dichloroethene	96	2.618	2.617	0.001	98	648928	10.0	9.04	
20 112TCTFE	151	2.653	2.641	0.012	94	462840	10.0	7.73	
21 Acetone	58	2.653	2.653	0.000	100	113066	20.0	22.5	
22 Iodomethane	142	2.748	2.748	0.000	98	816621	10.0	7.43	
24 Carbon disulfide	76	2.831	2.819	0.012	99	1566982	10.0	7.83	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	91	732942	10.0	17.4	
27 Methyl acetate	43	2.926	2.914	0.012	96	982254	20.0	31.2	
28 Methylene Chloride	84	3.009	3.009	0.000	91	765911	10.0	11.5	
29 2-Methyl-2-propanol	59	3.092	3.092	0.000	95	305160	100.0	86.9	
30 Acrylonitrile	53	3.211	3.210	0.000	100	2573658	100.0	152.7	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	1860843	10.0	10.7	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	98	752527	10.0	10.5	
34 Hexane	86	3.448	3.448	0.000	89	133053	10.0	9.27	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	97	1205875	10.0	10.6	
36 Vinyl acetate	43	3.602	3.602	0.000	97	981917	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	4.052	4.052	0.000	68	147363	10.0	6.67	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	80	795404	10.0	10.5	
40 2-Butanone (MEK)	72	4.064	4.052	0.012	99	154243	20.0	29.4	
46 Chlorobromomethane	128	4.254	4.254	0.000	90	376577	10.0	10.5	
47 Tetrahydrofuran	42	4.290	4.290	0.000	84	317962	20.0	24.4	
48 Chloroform	83	4.301	4.301	0.000	92	1204086	10.0	10.6	
49 1,1,1-Trichloroethane	97	4.468	4.467	0.001	99	873911	10.0	8.58	
50 Cyclohexane	56	4.515	4.515	0.000	86	950329	10.0	9.04	
52 Carbon tetrachloride	117	4.598	4.598	0.000	95	679114	10.0	7.50	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	98	932762	10.0	10.2	
53 Isobutyl alcohol	41	4.669	4.669	0.000	93	394692	250.0	355.3	
55 Benzene	78	4.776	4.776	0.000	94	3074337	10.0	11.3	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	914723	10.0	11.3	
58 n-Heptane	100	4.966	4.965	0.001	88	108214	10.0	8.80	
60 Trichloroethene	130	5.309	5.309	0.000	98	711301	10.0	9.72	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	784962	10.0	8.58	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	97	691173	10.0	12.2	
66 1,4-Dioxane	88	5.606	5.606	0.000	33	86717	200.0	183.2	
65 Dibromomethane	93	5.606	5.606	0.000	94	389270	10.0	11.9	
67 Dichlorobromomethane	83	5.725	5.724	0.000	99	746941	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	5.974	5.973	0.001	91	352678	10.0	18.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	97	926753	10.0	11.9	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	95	1007805	20.0	26.8	
72 Toluene	91	6.412	6.412	0.000	99	3077320	10.0	10.5	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	91	827741	10.0	11.0	
74 Ethyl methacrylate	69	6.673	6.673	0.000	87	762531	10.0	13.4	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	635082	10.0	13.2	
76 Tetrachloroethene	164	6.899	6.898	0.000	97	535730	10.0	8.64	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	88	1120993	10.0	13.5	
78 2-Hexanone	43	6.982	6.981	0.001	94	693955	20.0	25.1	
80 Chlorodibromomethane	129	7.136	7.136	0.000	90	517462	10.0	9.75	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	590312	10.0	12.7	
84 Chlorobenzene	112	7.681	7.681	0.000	96	1939528	10.0	10.8	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	602983	10.0	8.06	
86 Ethylbenzene	106	7.776	7.776	0.000	98	961967	10.0	9.80	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.001	92	2337060	10.0	9.82	
88 o-Xylene	106	8.262	8.262	0.000	97	1173351	10.0	9.17	
89 Styrene	104	8.274	8.274	0.000	94	1935267	10.0	11.7	
90 Bromoform	173	8.464	8.464	0.000	97	286923	10.0	8.75	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	2611910	10.0	8.27	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.902	0.001	95	815731	10.0	14.9	
95 Bromobenzene	156	8.914	8.914	0.000	93	765354	10.0	10.2	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	83	260827	10.0	14.7	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	74	113876	10.0	9.11	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	708272	10.0	9.49	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	679973	10.0	9.81	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	2162285	10.0	9.20	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2470925	10.0	11.2	
104 tert-Butylbenzene	119	9.496	9.495	0.001	93	1627391	10.0	8.10	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2334626	10.0	9.69	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	2214192	10.0	8.36	
108 1,3-Dichlorobenzene	146	9.828	9.827	0.001	97	1368697	10.0	9.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1950959	10.0	8.24	
110 1,4-Dichlorobenzene	146	9.911	9.910	0.001	95	1456265	10.0	9.93	
113 n-Butylbenzene	91	10.254	10.254	0.000	98	1437514	10.0	7.49	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	98	1400098	10.0	9.53	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	85	106904	10.0	8.85	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	616289	10.0	5.72	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	238140	10.0	4.87	
119 Naphthalene	128	12.128	12.128	0.000	96	1804868	10.0	7.85	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	595149	10.0	5.82	
S 129 Xylenes, Total	106				0		20.0	19.0	
S 130 Total BTEX	1				0		50.0	50.5	
S 131 Trihalomethanes, Total	1				0		40.0	39.5	

Reagents:

VMFASGW_00417	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

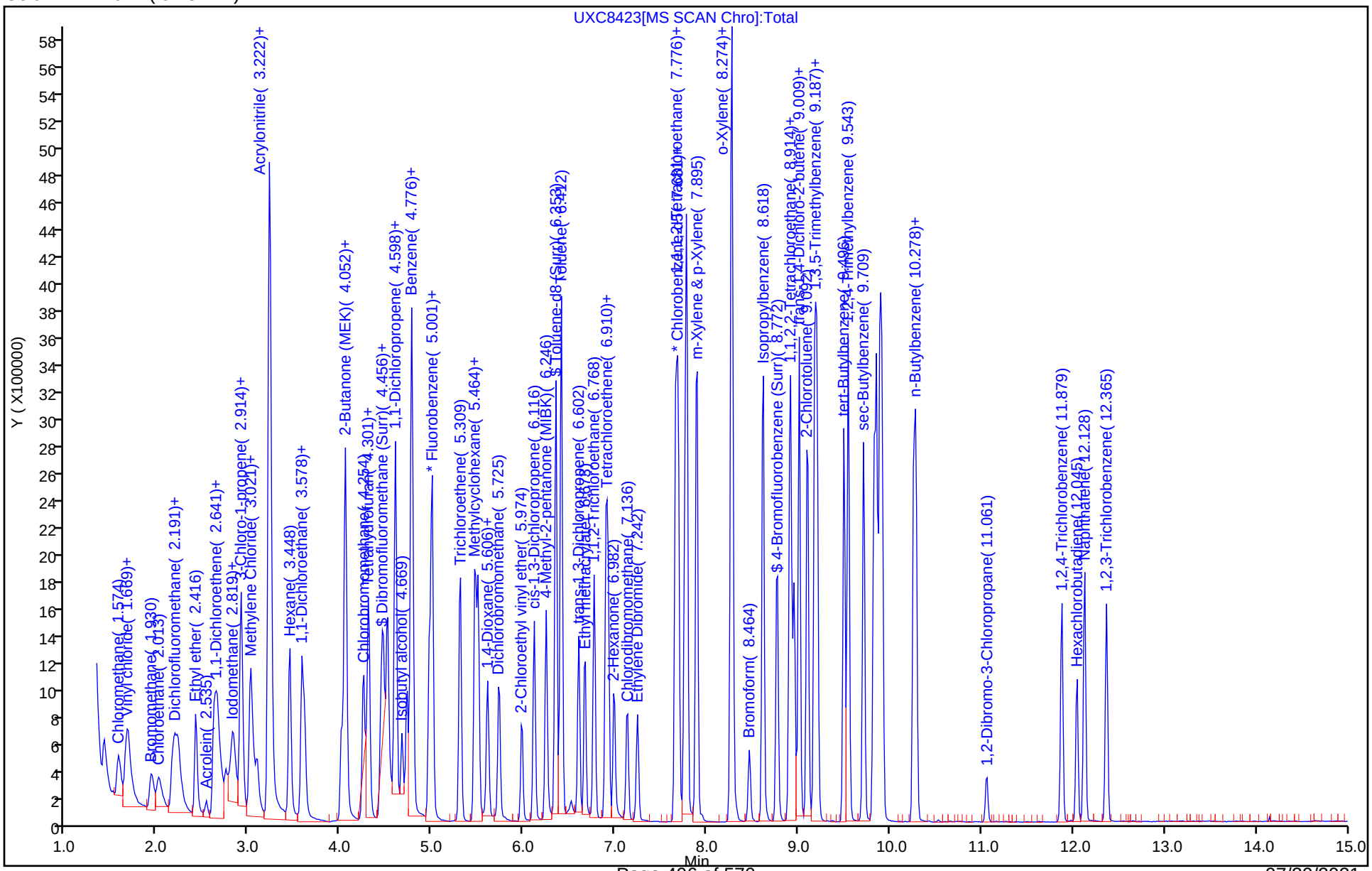
Report Date: 23-Jul-2021 08:13:44 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8423.D

Injection Date:	22-Jul-2021 09:48:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\UXC8423.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Jul-2021 09:48:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111469-004
Misc. Info.: C210722A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210722-111469.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 23-Jul-2021 08:13:42 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1659

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.13	91.28
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.77	97.72
$ 6 Toluene-d8 (Surr)	10.0	9.70	97.04
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.97	99.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-8_071321 MS Lab Sample ID: 240-152869-8 MS

Matrix: Water Lab File ID: UXC8357.D

Analysis Method: 8260B Date Collected: 07/13/2021 12:40

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 19:17

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	63.5		8.0	3.9
156-59-2	cis-1,2-Dichloroethene	138		8.0	3.7
127-18-4	Tetrachloroethene	67.1		8.0	3.5
156-60-5	trans-1,2-Dichloroethene	81.5		8.0	4.1
79-01-6	Trichloroethene	89.7		8.0	3.5
75-01-4	Vinyl chloride	84.1		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		75-130
460-00-4	4-Bromofluorobenzene (Surr)	99		47-134
2037-26-5	Toluene-d8 (Surr)	100		69-122
1868-53-7	Dibromofluoromethane (Surr)	91		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8357.D
Lims ID: 240-152869-B-8 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Jul-2021 19:17:30 ALS Bottle#: 27 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0111391-058
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2570162	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1925876	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1050484	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	544079	10.0	9.06	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	643635	10.0	9.51	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2361148	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	91	788442	10.0	9.88	
11 Vinyl chloride	62	1.657	1.657	0.000	98	793279	10.0	10.5	
19 1,1-Dichloroethene	96	2.618	2.618	0.000	97	589421	10.0	7.93	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	99	755582	10.0	10.2	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	85	1347059	10.0	17.2	
60 Trichloroethene	130	5.309	5.309	0.000	97	849900	10.0	11.2	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	502874	10.0	8.39	

Reagents:

VMFASGW_00416	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

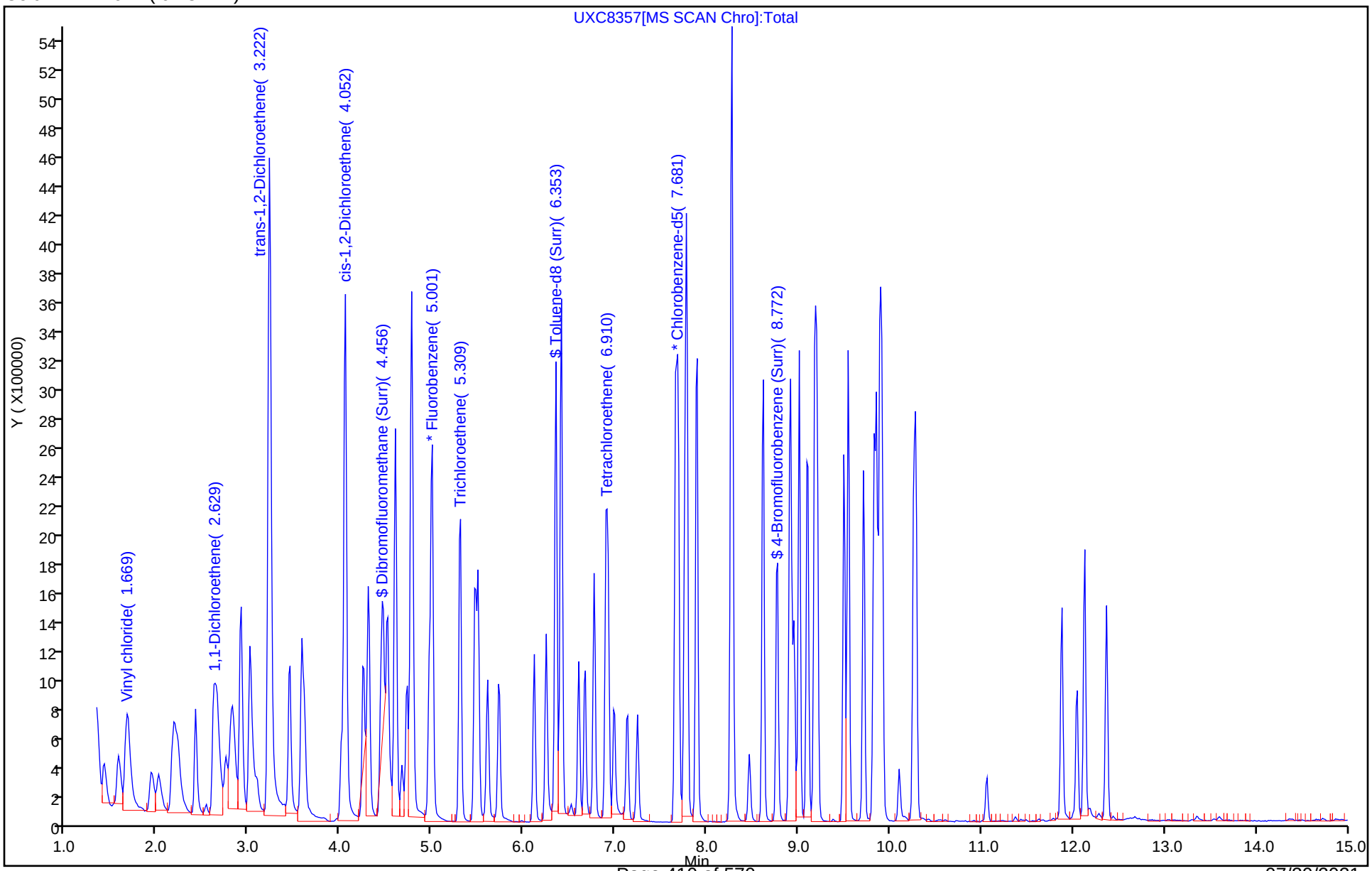
Report Date: 21-Jul-2021 09:06:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8357.D

Injection Date:	20-Jul-2021 19:17:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-B-8 MS			Worklist Smp#:	58
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	27
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8357.D
Lims ID: 240-152869-B-8 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Jul-2021 19:17:30 ALS Bottle#: 27 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0111391-058
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.06	90.57
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.51	95.10
$ 6 Toluene-d8 (Surr)	10.0	10.0	100.04
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.88	98.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-152897-G-7 MS

Matrix: Water Lab File ID: UXC8419.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 23:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	99		47-134
2037-26-5	Toluene-d8 (Surr)	99		69-122
1868-53-7	Dibromofluoromethane (Surr)	94		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8419.D
Lims ID: 240-152897-G-7 MS
Client ID:
Sample Type: MS
Inject. Date: 21-Jul-2021 23:27:30 ALS Bottle#: 28 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-060
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:56 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2466664	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1933872	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1081468	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	93	539707	10.0	9.36	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	666059	10.0	10.3	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2344498	10.0	9.89	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	793429	10.0	9.90	
55 Benzene	78	4.776	4.776	0.000	94	2903604	10.0	10.7	
72 Toluene	91	6.412	6.412	0.000	98	2836153	10.0	9.92	
86 Ethylbenzene	106	7.788	7.788	0.000	98	839849	10.0	8.81	
87 m-Xylene & p-Xylene	91	7.894	7.895	-0.001	92	2069709	10.0	8.95	
88 o-Xylene	106	8.262	8.262	0.000	96	1020966	10.0	8.22	
S 129 Xylenes, Total	106				0		20.0	17.2	

Reagents:

VMFASGW_00417	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

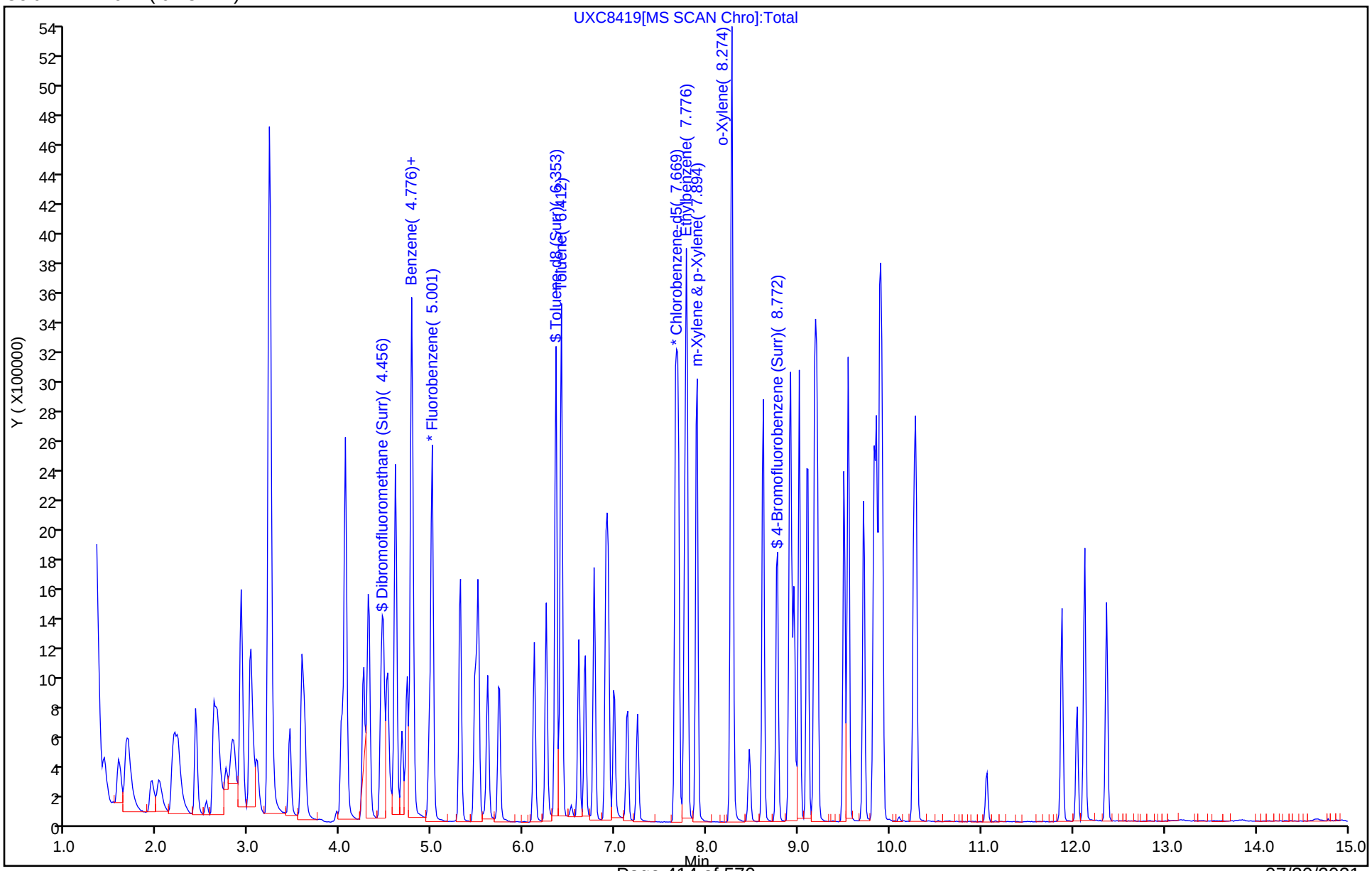
Report Date: 22-Jul-2021 08:07:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8419.D

Injection Date:	21-Jul-2021 23:27:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152897-G-7 MS			Worklist Smp#:	60
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8419.D
Lims ID: 240-152897-G-7 MS
Client ID:
Sample Type: MS
Inject. Date: 21-Jul-2021 23:27:30 ALS Bottle#: 28 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-060
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:56 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.36	93.61
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.55
$ 6 Toluene-d8 (Surr)	10.0	9.89	98.92
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.90	98.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-8_071321 MSD Lab Sample ID: 240-152869-8 MSD

Matrix: Water Lab File ID: UXC8358.D

Analysis Method: 8260B Date Collected: 07/13/2021 12:40

Sample wt/vol: 5(mL) Date Analyzed: 07/20/2021 19:38

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495759 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	64.9		8.0	3.9
156-59-2	cis-1,2-Dichloroethene	142		8.0	3.7
127-18-4	Tetrachloroethene	68.2		8.0	3.5
156-60-5	trans-1,2-Dichloroethene	83.9		8.0	4.1
79-01-6	Trichloroethene	90.9		8.0	3.5
75-01-4	Vinyl chloride	88.3		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		75-130
460-00-4	4-Bromofluorobenzene (Surr)	100		47-134
2037-26-5	Toluene-d8 (Surr)	99		69-122
1868-53-7	Dibromofluoromethane (Surr)	92		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8358.D
Lims ID: 240-152869-B-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Jul-2021 19:38:30 ALS Bottle#: 28 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0111391-059
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2533313	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1954557	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	1064615	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	545835	10.0	9.22	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	650120	10.0	9.75	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2359584	10.0	9.85	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	811292	10.0	10.0	
11 Vinyl chloride	62	1.657	1.657	0.000	98	821378	10.0	11.0	
19 1,1-Dichloroethene	96	2.618	2.618	0.000	97	594274	10.0	8.11	
32 trans-1,2-Dichloroethene	96	3.234	3.234	0.000	97	767422	10.0	10.5	
41 cis-1,2-Dichloroethene	96	4.052	4.052	0.000	79	1374751	10.0	17.8	
60 Trichloroethene	130	5.309	5.309	0.000	98	848658	10.0	11.4	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	518627	10.0	8.52	

Reagents:

VMFASGW_00416	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

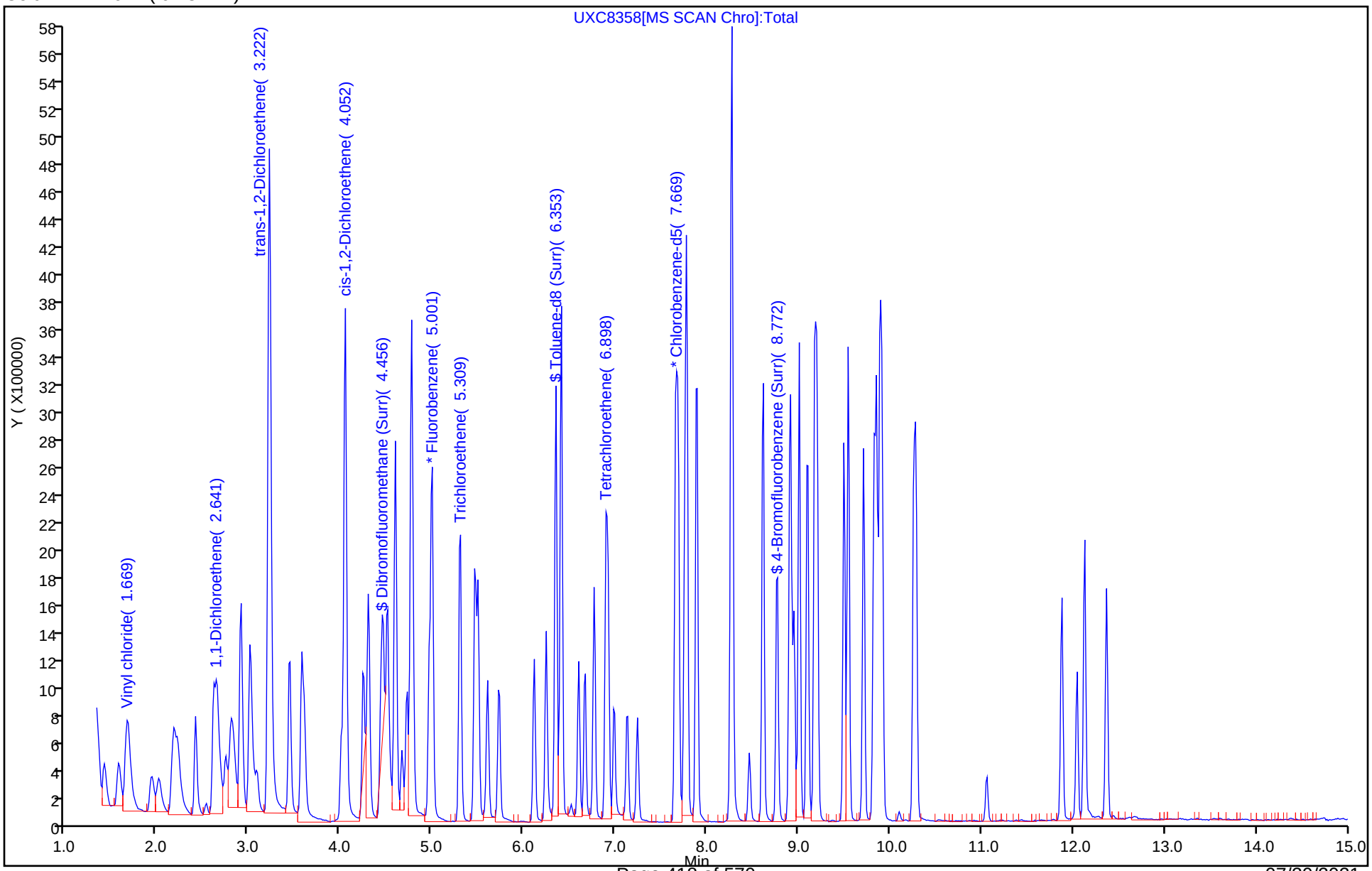
Report Date: 21-Jul-2021 09:06:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8358.D

Injection Date:	20-Jul-2021 19:38:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152869-B-8 MSD			Worklist Smp#:	59
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	28
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\UXC8358.D
Lims ID: 240-152869-B-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Jul-2021 19:38:30 ALS Bottle#: 28 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0111391-059
Misc. Info.: C210720A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210720-111391.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Jul-2021 09:06:29 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1610

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.22	92.18
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.75	97.46
$ 6 Toluene-d8 (Surr)	10.0	9.85	98.51
$ 7 4-Bromofluorobenzene (Surr)	10.0	10.0	100.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-152897-I-7 MSD

Matrix: Water Lab File ID: UXC8420.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/21/2021 23:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495964 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		75-130
460-00-4	4-Bromofluorobenzene (Surr)	97		47-134
2037-26-5	Toluene-d8 (Surr)	98		69-122
1868-53-7	Dibromofluoromethane (Surr)	92		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8420.D
Lims ID: 240-152897-I-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 21-Jul-2021 23:49:30 ALS Bottle#: 29 Worklist Smp#: 61
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-061
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:56 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

First Level Reviewer: evansle Date: 22-Jul-2021 08:08:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2520161	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	90	1969379	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	1055131	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.444	0.000	94	542700	10.0	9.21	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.728	4.728	0.000	99	655103	10.0	9.87	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2356989	10.0	9.77	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	788844	10.0	9.66	
55 Benzene	78	4.776	4.776	0.000	94	2908427	10.0	10.5	
72 Toluene	91	6.412	6.412	0.000	98	2817524	10.0	9.68	
86 Ethylbenzene	106	7.788	7.788	0.000	98	850256	10.0	8.76	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	92	2123482	10.0	9.02	
88 o-Xylene	106	8.262	8.262	0.000	95	1025252	10.0	8.10	
S 129 Xylenes, Total	106				0		20.0	17.1	

QC Flag Legend

Processing Flags

Reagents:

VMFASGW_00417	Amount Added:	8.00	Units: uL	
VMFASAW_00382	Amount Added:	8.00	Units: uL	
VMFASPW_00407	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00089	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00198	Amount Added:	0.00	Units:	Run Reagent

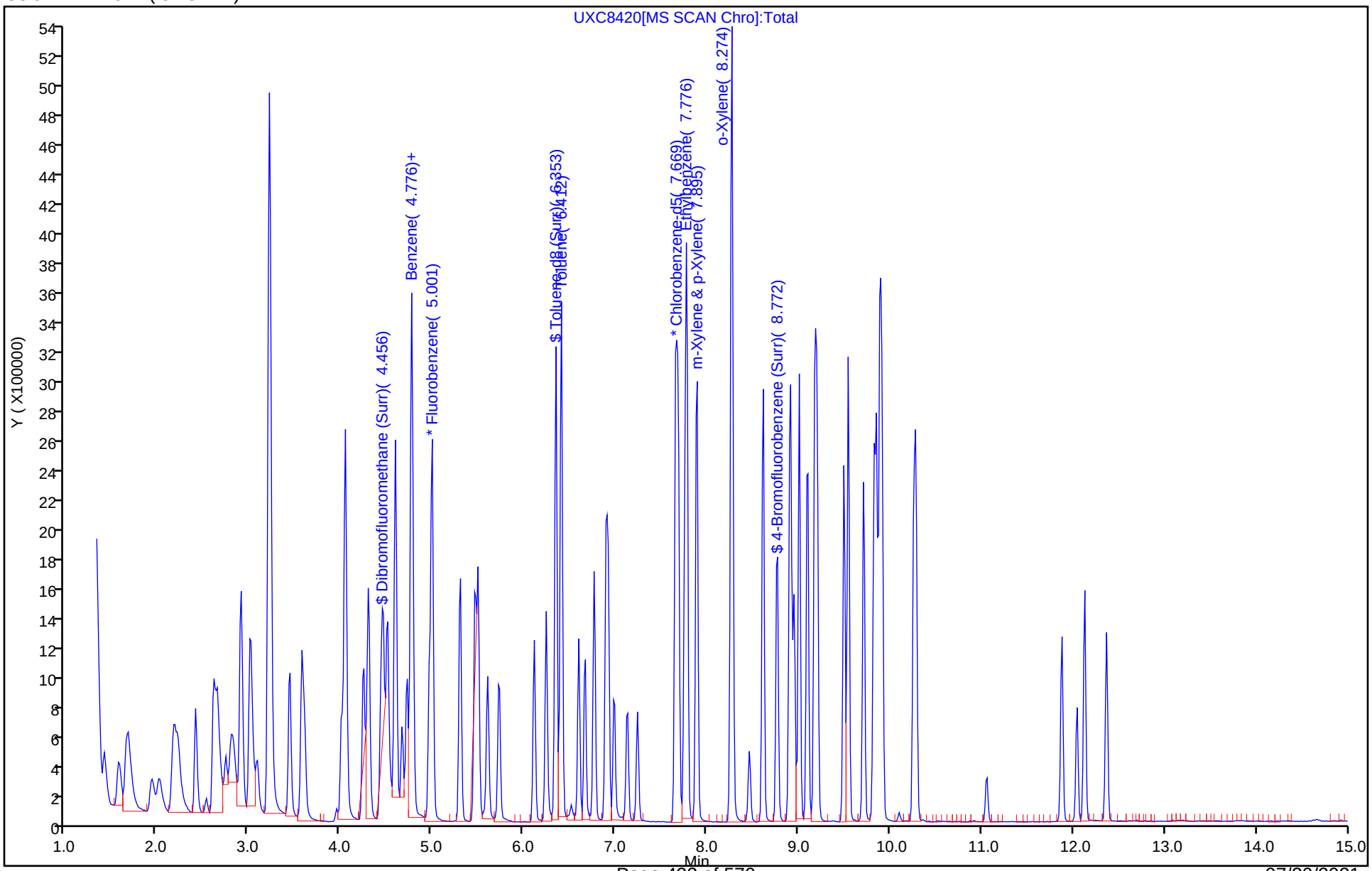
Report Date: 22-Jul-2021 08:08:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8420.D

Injection Date:	21-Jul-2021 23:49:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-152897-I-7 MSD			Worklist Smp#:	61
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\UXC8420.D
Lims ID: 240-152897-I-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 21-Jul-2021 23:49:30 ALS Bottle#: 29 Worklist Smp#: 61
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111428-061
Misc. Info.: C210721A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20210721-111428.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 22-Jul-2021 08:06:56 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1646

First Level Reviewer: evansle Date: 22-Jul-2021 08:08:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.21	92.13
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.87	98.72
$ 6 Toluene-d8 (Surr)	10.0	9.77	97.66
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.66	96.63

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX15 Start Date: 03/16/2021 07:33

Analysis Batch Number: 476941 End Date: 03/16/2021 13:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-476941/1		03/16/2021 07:33	1	BFB210316.D	DB-624 0.18(mm)
STD8260 240-476941/2 IC		03/16/2021 08:36	1	UXC5644.D	DB-624 0.18(mm)
STD8260 240-476941/3 IC		03/16/2021 08:58	1	UXC5645.D	DB-624 0.18(mm)
STD8260 240-476941/4 ICIS		03/16/2021 09:20	1	UXC5646.D	DB-624 0.18(mm)
STD8260 240-476941/5 IC		03/16/2021 09:42	1	UXC5647.D	DB-624 0.18(mm)
STD8260 240-476941/6 IC		03/16/2021 10:17	1	UXC5648.D	DB-624 0.18(mm)
STD8260 240-476941/7 IC		03/16/2021 10:39	1	UXC5649.D	DB-624 0.18(mm)
ICV 240-476941/14		03/16/2021 11:01	1	UXC5650.D	DB-624 0.18(mm)
STD 240-476941/8 IC		03/16/2021 11:23	1		DB-624 0.18(mm)
STD 240-476941/9 IC		03/16/2021 11:45	1		DB-624 0.18(mm)
STD 240-476941/10 IC		03/16/2021 12:06	1		DB-624 0.18(mm)
STD 240-476941/11 IC		03/16/2021 12:28	1		DB-624 0.18(mm)
STD 240-476941/12 IC		03/16/2021 12:50	1		DB-624 0.18(mm)
STD 240-476941/13 IC		03/16/2021 13:12	1		DB-624 0.18(mm)
ICV 240-476941/15		03/16/2021 13:34	1	UXC5657.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX15 Start Date: 07/20/2021 09:23

Analysis Batch Number: 495759 End Date: 07/20/2021 19:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-495759/1		07/20/2021 09:23	1	BFB720A.D	DB-624 0.18(mm)
CCVIS 240-495759/2		07/20/2021 09:47	1	UXC8331.D	DB-624 0.18(mm)
LCS 240-495759/4		07/20/2021 10:09	1	UXC8332.D	DB-624 0.18(mm)
CCV 240-495759/3		07/20/2021 10:31	1	UXC8333.D	DB-624 0.18(mm)
MRL 240-495759/5 MDLV		07/20/2021 10:53	1		DB-624 0.18(mm)
MRL 240-495759/6 MDLV		07/20/2021 11:15	1		DB-624 0.18(mm)
MB 240-495759/7		07/20/2021 11:37	1	UXC8336.D	DB-624 0.18(mm)
ZZZZZ		07/20/2021 12:02	2.5		DB-624 0.18(mm)
ZZZZZ		07/20/2021 12:24	16.67		DB-624 0.18(mm)
ZZZZZ		07/20/2021 12:46	1		DB-624 0.18(mm)
240-152869-1	TRIP BLANK	07/20/2021 13:30	1	UXC8341.D	DB-624 0.18(mm)
240-152869-5	SL-7_071321	07/20/2021 13:52	1	UXC8342.D	DB-624 0.18(mm)
240-152869-6	SL-6_071321	07/20/2021 14:14	1	UXC8343.D	DB-624 0.18(mm)
240-152869-7	SL-5_071321	07/20/2021 14:35	5	UXC8344.D	DB-624 0.18(mm)
240-152869-8	SL-8_071321	07/20/2021 14:57	8	UXC8345.D	DB-624 0.18(mm)
240-152869-9	SL-9_071321	07/20/2021 15:19	5	UXC8346.D	DB-624 0.18(mm)
ZZZZZ		07/20/2021 15:41	1		DB-624 0.18(mm)
ZZZZZ		07/20/2021 16:03	1		DB-624 0.18(mm)
ZZZZZ		07/20/2021 16:25	20		DB-624 0.18(mm)
ZZZZZ		07/20/2021 16:46	1000		DB-624 0.18(mm)
ZZZZZ		07/20/2021 17:08	66.67		DB-624 0.18(mm)
ZZZZZ		07/20/2021 17:30	1		DB-624 0.18(mm)
ZZZZZ		07/20/2021 17:52	1		DB-624 0.18(mm)
ZZZZZ		07/20/2021 18:13	1		DB-624 0.18(mm)
ZZZZZ		07/20/2021 18:55	1		DB-624 0.18(mm)
240-152869-8 MS	SL-8_071321 MS	07/20/2021 19:17	8	UXC8357.D	DB-624 0.18(mm)
240-152869-8 MSD	SL-8_071321 MSD	07/20/2021 19:38	8	UXC8358.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX15 Start Date: 07/21/2021 13:10

Analysis Batch Number: 495964 End Date: 07/21/2021 23:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-495964/1		07/21/2021 13:10	1	BFB721D.D	DB-624 0.18(mm)
CCVIS 240-495964/2		07/21/2021 13:39	1	UXC8392.D	DB-624 0.18(mm)
LCS 240-495964/4		07/21/2021 14:01	1	UXC8393.D	DB-624 0.18(mm)
CCV 240-495964/3		07/21/2021 14:23	1	UXC8394.D	DB-624 0.18(mm)
MRL 240-495964/5 MDLV		07/21/2021 14:45	1		DB-624 0.18(mm)
MRL 240-495964/6 MDLV		07/21/2021 15:07	1		DB-624 0.18(mm)
MB 240-495964/7		07/21/2021 15:29	1	UXC8397.D	DB-624 0.18(mm)
ZZZZZ		07/21/2021 16:13	8		DB-624 0.18(mm)
240-152869-2	SL-15_071321	07/21/2021 16:54	1	UXC8401.D	DB-624 0.18(mm)
240-152869-3	SL-14_071321	07/21/2021 17:16	1	UXC8402.D	DB-624 0.18(mm)
ZZZZZ		07/21/2021 19:27	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 19:49	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 20:11	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 20:33	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 20:54	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 21:16	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 21:38	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 22:00	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 22:21	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 22:43	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 23:05	1		DB-624 0.18(mm)
240-152897-G-7 MS		07/21/2021 23:27	1	UXC8419.D	DB-624 0.18(mm)
240-152897-I-7 MSD		07/21/2021 23:49	1	UXC8420.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX15 Start Date: 07/22/2021 08:52

Analysis Batch Number: 496148 End Date: 07/22/2021 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-496148/1		07/22/2021 08:52	1	BFB722.D	DB-624 0.18(mm)
CCVIS 240-496148/2		07/22/2021 09:26	1	UXC8422.D	DB-624 0.18(mm)
LCS 240-496148/4		07/22/2021 09:48	1	UXC8423.D	DB-624 0.18(mm)
CCV 240-496148/3		07/22/2021 10:10	1	UXC8424.D	DB-624 0.18(mm)
MRL 240-496148/5 MDLV		07/22/2021 10:31	1		DB-624 0.18(mm)
MRL 240-496148/6 MDLV		07/22/2021 10:53	1		DB-624 0.18(mm)
MB 240-496148/7		07/22/2021 11:15	1	UXC8427.D	DB-624 0.18(mm)
ZZZZZ		07/22/2021 11:48	5000		DB-624 0.18(mm)
240-152869-4	SL-13_071321	07/22/2021 12:10	1	UXC8429.D	DB-624 0.18(mm)
240-152869-10	SL-10_071321	07/22/2021 12:31	1	UXC8430.D	DB-624 0.18(mm)
240-152869-11	SL-11_071321	07/22/2021 12:53	1.67	UXC8431.D	DB-624 0.18(mm)
240-152869-12	SL-12_071321	07/22/2021 13:15	2	UXC8432.D	DB-624 0.18(mm)
240-152869-13	DUP-01	07/22/2021 13:37	4	UXC8433.D	DB-624 0.18(mm)
ZZZZZ		07/22/2021 14:05	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 14:27	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 14:49	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 15:11	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 15:33	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 18:27	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 18:49	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 19:11	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 19:32	100		DB-624 0.18(mm)
ZZZZZ		07/22/2021 19:54	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 20:16	1		DB-624 0.18(mm)
ZZZZZ		07/22/2021 20:38	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50is 00086	vm50ss_stk 00086	VMAROLISTDW 00384	vmbfb 00026
BFB 240-476941/1		8260B		5 mL	5 mL				1 uL
STD8260 240-476941/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-476941/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-476941/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-476941/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-476941/6 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-476941/7 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-476941/14		8260B		5 mL	5 mL	1 uL	1 uL		
ICV 240-476941/15		8260B		5 mL	5 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00312	VMFASAW 00366	VMFASGW 00399	VMFASPW 00390	VMRGAS 00377	VMRPRIMW 00427
BFB 240-476941/1		8260B							
STD8260 240-476941/2 IC		8260B						32 uL	32 uL
STD8260 240-476941/3 IC		8260B						16 uL	16 uL
STD8260 240-476941/4 ICIS		8260B						8 uL	8 uL
STD8260 240-476941/5 IC		8260B						4 uL	4 uL
STD8260 240-476941/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-476941/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-476941/14		8260B			8 uL	8 uL	8 uL		
ICV 240-476941/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495759 Batch Start Date: 07/20/21 09:23 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00088	VM50IS 00089	vm50ss_stk 00088
BFB 240-495759/1		8260B		5 mL	5 mL				
CCVIS 240-495759/2		8260B		5 mL	5 mL			1 uL	1 uL
CCV 240-495759/3		8260B		5 mL	5 mL		1 uL		
LCS 240-495759/4		8260B		5 mL	5 mL			1 uL	1 uL
MB 240-495759/7		8260B		5 mL	5 mL			1 uL	1 uL
240-152869-A-1	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-5	SL-7_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-6	SL-6_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-7	SL-5_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-B-8	SL-8_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-B-9	SL-9_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-B-8 MS	SL-8_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-B-8 MSD	SL-8_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00401	vmbfb 00027	VMFASAW 00382	VMFASGW 00416	VMFASPW 00407	VMRA9W 00399
BFB 240-495759/1		8260B			1 uL				
CCVIS 240-495759/2		8260B		8 uL					
CCV 240-495759/3		8260B							8 uL
LCS 240-495759/4		8260B				8 uL	8 uL	8 uL	
MB 240-495759/7		8260B							
240-152869-A-1	TRIP BLANK	8260B	T						
240-152869-E-5	SL-7_071321	8260B	T						
240-152869-E-6	SL-6_071321	8260B	T						
240-152869-E-7	SL-5_071321	8260B	T						
240-152869-B-8	SL-8_071321	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495759 Batch Start Date: 07/20/21 09:23 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00401	vmbfb 00027	VMFASAW 00382	VMFASGW 00416	VMFASPW 00407	VMRA9W 00399
240-152869-B-9	SL-9_071321	8260B	T						
240-152869-B-8 MS	SL-8_071321	8260B	T			8 uL	8 uL	8 uL	
240-152869-B-8 MSD	SL-8_071321	8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00393	VMRPRIMW 00444				
BFB 240-495759/1		8260B							
CCVIS 240-495759/2		8260B		8 uL	8 uL				
CCV 240-495759/3		8260B							
LCS 240-495759/4		8260B							
MB 240-495759/7		8260B							
240-152869-A-1	TRIP BLANK	8260B	T						
240-152869-E-5	SL-7_071321	8260B	T						
240-152869-E-6	SL-6_071321	8260B	T						
240-152869-E-7	SL-5_071321	8260B	T						
240-152869-B-8	SL-8_071321	8260B	T						
240-152869-B-9	SL-9_071321	8260B	T						
240-152869-B-8 MS	SL-8_071321	8260B	T						
240-152869-B-8 MSD	SL-8_071321	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495964 Batch Start Date: 07/21/21 13:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00088	VM50IS 00089	vm50ss_stk 00088
BFB 240-495964/1		8260B		5 mL	5 mL				
CCVIS 240-495964/2		8260B		5 mL	5 mL			1 uL	1 uL
CCV 240-495964/3		8260B		5 mL	5 mL		1 uL		
LCS 240-495964/4		8260B		5 mL	5 mL			1 uL	1 uL
MB 240-495964/7		8260B		5 mL	5 mL			1 uL	1 uL
240-152869-E-2	SL-15_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-3	SL-14_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152897-G-7 MS		8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152897-I-7 MSD		8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00401	vmbfb 00027	VMFASAW 00382	VMFASGW 00417	VMFASPW 00407	VMRA9W 00399
BFB 240-495964/1		8260B			1 uL				
CCVIS 240-495964/2		8260B		8 uL					
CCV 240-495964/3		8260B							8 uL
LCS 240-495964/4		8260B				8 uL	8 uL	8 uL	
MB 240-495964/7		8260B							
240-152869-E-2	SL-15_071321	8260B	T						
240-152869-E-3	SL-14_071321	8260B	T						
240-152897-G-7 MS		8260B	T			8 uL	8 uL	8 uL	
240-152897-I-7 MSD		8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00393	VMRPRIMW 00444				
BFB 240-495964/1		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495964 Batch Start Date: 07/21/21 13:10 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00393	VMRPRIMW 00444				
CCVIS 240-495964/2		8260B		8 uL	8 uL				
CCV 240-495964/3		8260B							
LCS 240-495964/4		8260B							
MB 240-495964/7		8260B							
240-152869-E-2	SL-15_071321	8260B	T						
240-152869-E-3	SL-14_071321	8260B	T						
240-152897-G-7 MS		8260B	T						
240-152897-I-7 MSD		8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 496148 Batch Start Date: 07/22/21 08:52 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00088	VM50IS 00089	vm50ss_stk 00088
BFB 240-496148/1		8260B		5 mL	5 mL				
CCVIS 240-496148/2		8260B		5 mL	5 mL			1 uL	1 uL
CCV 240-496148/3		8260B		5 mL	5 mL		1 uL		
LCS 240-496148/4		8260B		5 mL	5 mL			1 uL	1 uL
MB 240-496148/7		8260B		5 mL	5 mL			1 uL	1 uL
240-152869-E-4	SL-13_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-10	SL-10_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-11	SL-11_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-12	SL-12_071321	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-152869-E-13	DUP-01	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00401	vmbfb 00027	VMFASAW 00382	VMFASGW 00417	VMFASPW 00407	VMRA9W 00399
BFB 240-496148/1		8260B			1 uL				
CCVIS 240-496148/2		8260B		8 uL					
CCV 240-496148/3		8260B							8 uL
LCS 240-496148/4		8260B				8 uL	8 uL	8 uL	
MB 240-496148/7		8260B							
240-152869-E-4	SL-13_071321	8260B	T						
240-152869-E-10	SL-10_071321	8260B	T						
240-152869-E-11	SL-11_071321	8260B	T						
240-152869-E-12	SL-12_071321	8260B	T						
240-152869-E-13	DUP-01	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00393	VMRPRIMW 00444				
BFB 240-496148/1		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 496148 Batch Start Date: 07/22/21 08:52 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00393	VMRPRIMW 00444				
CCVIS 240-496148/2		8260B		8 uL	8 uL				
CCV 240-496148/3		8260B							
LCS 240-496148/4		8260B							
MB 240-496148/7		8260B							
240-152869-E-4	SL-13_071321	8260B	T						
240-152869-E-10	SL-10_071321	8260B	T						
240-152869-E-11	SL-11_071321	8260B	T						
240-152869-E-12	SL-12_071321	8260B	T						
240-152869-E-13	DUP-01	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-15_071321	240-152869-2	81
SL-14_071321	240-152869-3	87
SL-13_071321	240-152869-4	84
SL-7_071321	240-152869-5	83
SL-6_071321	240-152869-6	86
SL-5_071321	240-152869-7	86
SL-8_071321	240-152869-8	84
SL-9_071321	240-152869-9	85
SL-10_071321	240-152869-10	85
SL-11_071321	240-152869-11	86
SL-12_071321	240-152869-12	85
DUP-01	240-152869-13	83
	MB 240-495864/5	80
	LCS 240-495864/4	83
	500-202418-B-11 MS	79
	500-202418-C-11 MSD	78

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	70-133

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201255.D

Lab ID: LCS 240-495864/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	8.35	83	80-135	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201272.D

Lab ID: 500-202418-B-11 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	180	180	-35	46-170	4

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201273.D

Lab ID: 500-202418-C-11 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	185	19	3	26	46-170	4

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: 201256.D Lab Sample ID: MB 240-495864/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 07/20/2021 20:19

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-495864/4	201255.D	07/20/2021 19:52
SL-15_071321	240-152869-2	201258.D	07/20/2021 21:14
SL-14_071321	240-152869-3	201259.D	07/20/2021 21:41
SL-13_071321	240-152869-4	201260.D	07/20/2021 22:09
SL-7_071321	240-152869-5	201261.D	07/20/2021 22:36
SL-6_071321	240-152869-6	201262.D	07/20/2021 23:04
SL-5_071321	240-152869-7	201263.D	07/20/2021 23:31
SL-8_071321	240-152869-8	201264.D	07/20/2021 23:59
SL-9_071321	240-152869-9	201265.D	07/21/2021 00:26
SL-10_071321	240-152869-10	201266.D	07/21/2021 00:53
SL-11_071321	240-152869-11	201267.D	07/21/2021 01:21
SL-12_071321	240-152869-12	201268.D	07/21/2021 01:48
DUP-01	240-152869-13	201269.D	07/21/2021 02:16
	500-202418-B-11 MS	201272.D	07/21/2021 03:38
	500-202418-C-11 MSD	201273.D	07/21/2021 04:05

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab File ID: BFB20088.D BFB Injection Date: 07/20/2021

Instrument ID: A3UX20 BFB Injection Time: 18:39

Analysis Batch No.: 495864

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	31.8	
75	30.0 - 60.0 % of mass 95	51.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	63.1	
175	5.0 - 9.0 % of mass 174	4.7	(7.4) 1
176	95.0 - 101.0 % of mass 174	61.4	(97.4) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-495864/3	201254.D	07/20/2021	19:24
	LCS 240-495864/4	201255.D	07/20/2021	19:52
	MB 240-495864/5	201256.D	07/20/2021	20:19
SL-15_071321	240-152869-2	201258.D	07/20/2021	21:14
SL-14_071321	240-152869-3	201259.D	07/20/2021	21:41
SL-13_071321	240-152869-4	201260.D	07/20/2021	22:09
SL-7_071321	240-152869-5	201261.D	07/20/2021	22:36
SL-6_071321	240-152869-6	201262.D	07/20/2021	23:04
SL-5_071321	240-152869-7	201263.D	07/20/2021	23:31
SL-8_071321	240-152869-8	201264.D	07/20/2021	23:59
SL-9_071321	240-152869-9	201265.D	07/21/2021	0:26
SL-10_071321	240-152869-10	201266.D	07/21/2021	0:53
SL-11_071321	240-152869-11	201267.D	07/21/2021	1:21
SL-12_071321	240-152869-12	201268.D	07/21/2021	1:48
DUP-01	240-152869-13	201269.D	07/21/2021	2:16
	500-202418-B-11 MS	201272.D	07/21/2021	3:38
	500-202418-C-11 MSD	201273.D	07/21/2021	4:05

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: ICIS 240-495247/7 Date Analyzed: 07/15/2021 17:33

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201235.D Heated Purge: (Y/N) Y

Calibration ID: 62019

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3332707	7.44	122047	8.20		
UPPER LIMIT		6665414	7.94	244094	8.70		
LOWER LIMIT		1666354	6.94	61024	7.70		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-495864/3		3482673	7.44	125646	8.20		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Sample No.: CCVIS 240-495864/3 Date Analyzed: 07/20/2021 19:24

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201254.D Heated Purge: (Y/N) Y

Calibration ID: 62019

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		3482673	7.44	125646	8.20		
UPPER LIMIT		6965346	7.94	251292	8.70		
LOWER LIMIT		1741337	6.94	62823	7.70		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-495864/4		3500992	7.44	122945	8.20		
MB 240-495864/5		3439900	7.44	111860	8.20		
240-152869-2	SL-15_071321	3446810	7.44	113859	8.20		
240-152869-3	SL-14_071321	3402222	7.44	121329	8.20		
240-152869-4	SL-13_071321	3497022	7.44	129359	8.20		
240-152869-5	SL-7_071321	3417593	7.44	113185	8.20		
240-152869-6	SL-6_071321	3347822	7.44	115831	8.20		
240-152869-7	SL-5_071321	3446183	7.44	119871	8.20		
240-152869-8	SL-8_071321	3472755	7.44	114479	8.20		
240-152869-9	SL-9_071321	3235447	7.44	112356	8.20		
240-152869-10	SL-10_071321	3178631	7.44	118769	8.20		
240-152869-11	SL-11_071321	3186014	7.44	119743	8.20		
240-152869-12	SL-12_071321	3236005	7.44	123303	8.20		
240-152869-13	DUP-01	3553552	7.44	117263	8.20		
500-202418-B-11 MS		3924785	7.42	131537	8.20		
500-202418-C-11 MSD		3876035	7.42	118758	8.20		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-15_071321 Lab Sample ID: 240-152869-2

Matrix: Water Lab File ID: 201258.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 09:10

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 21:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.7	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201258.D				
Lims ID:	240-152869-B-2				
Client ID:	SL-15_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 21:14:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1016242	8.14	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3446810	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	91	113859	200.0	
8 1,4-Dioxane	88	8.250	8.243	0.007	45	1645	1.70	

QC Flag Legend

Processing Flags

Reagents:

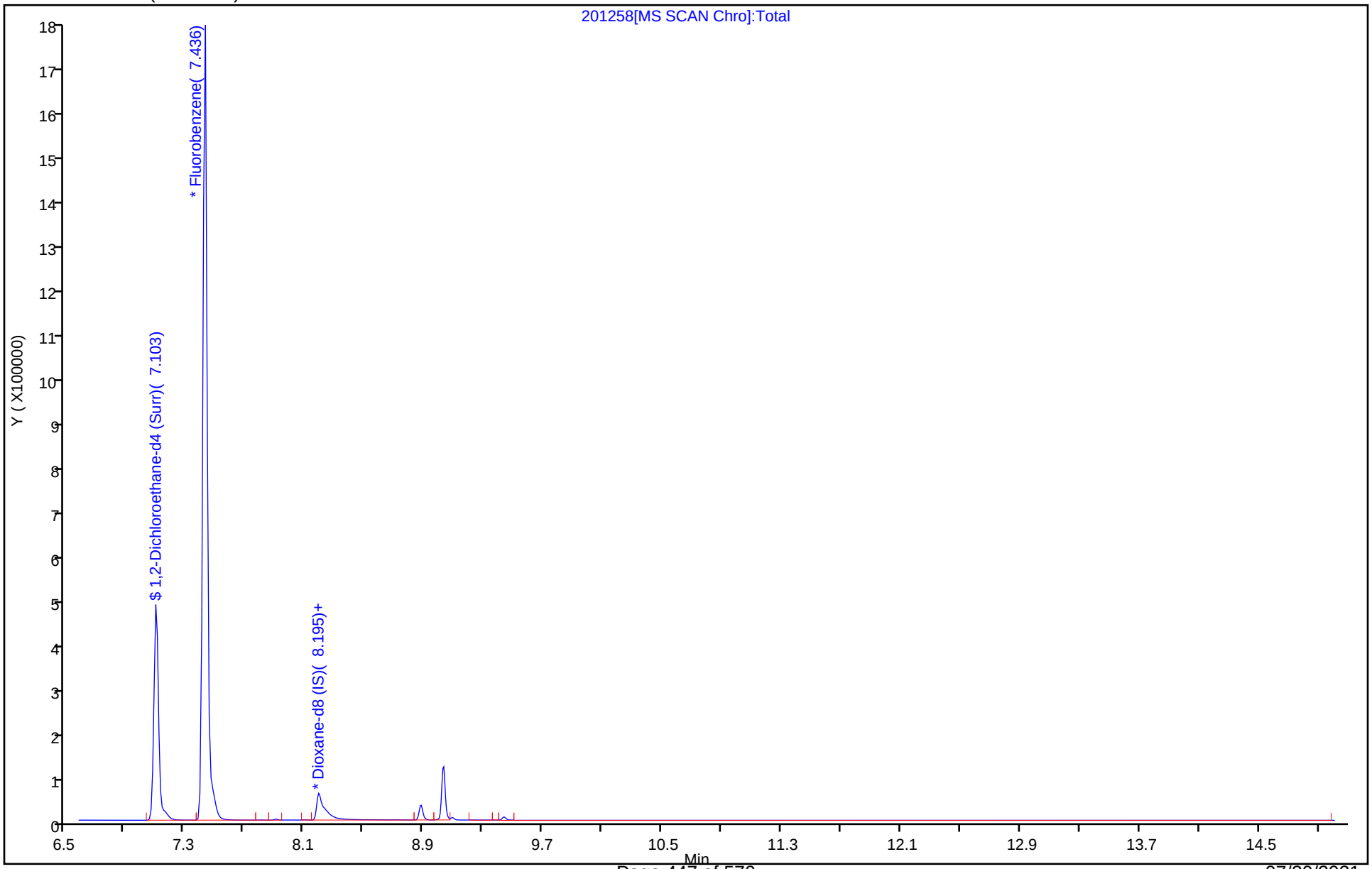
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:10:38 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201258.D				
Injection Date:	20-Jul-2021 21:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-2	Lab Sample ID:	240-152869-2	Worklist Smp#:	7
Client ID:	SL-15_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201258.D				
Lims ID:	240-152869-B-2				
Client ID:	SL-15_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 21:14:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

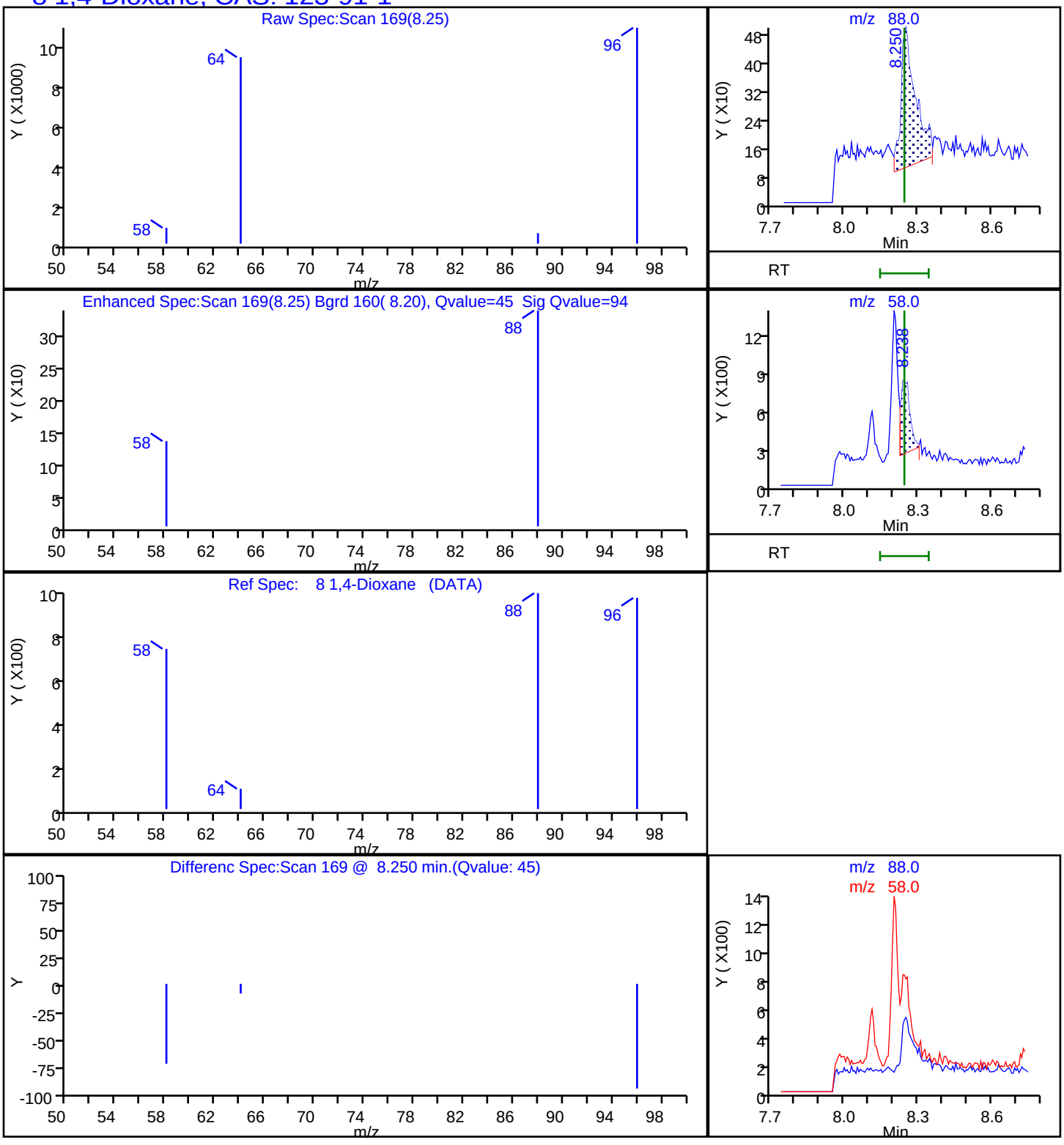
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.14	81.41

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201258.D

Injection Date:	20-Jul-2021 21:14:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-B-2	Lab Sample ID:	240-152869-2		
Client ID:	SL-15_071321				
Operator ID:	434006	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-14_071321 Lab Sample ID: 240-152869-3

Matrix: Water Lab File ID: 201259.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 09:40

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 21:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201259.D				
Lims ID:	240-152869-B-3				
Client ID:	SL-14_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 21:41:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1067862	8.67	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3402222	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	121329	200.0	

QC Flag Legend

Processing Flags

Reagents:

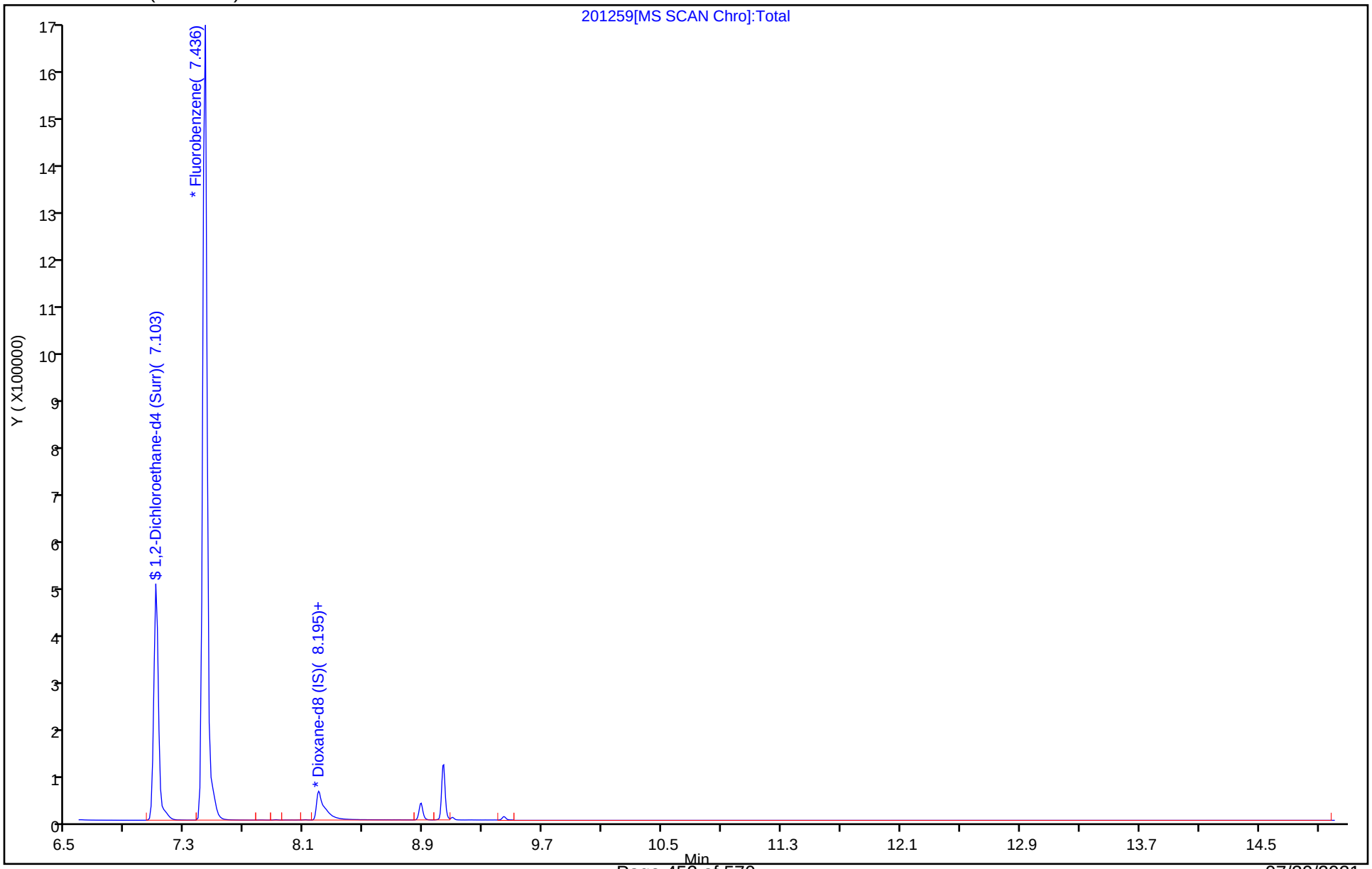
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:10:41 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201259.D				
Injection Date:	20-Jul-2021 21:41:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-3	Lab Sample ID:	240-152869-3	Worklist Smp#:	8
Client ID:	SL-14_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201259.D				
Lims ID:	240-152869-B-3				
Client ID:	SL-14_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 21:41:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.67	86.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-13_071321 Lab Sample ID: 240-152869-4

Matrix: Water Lab File ID: 201260.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 10:05

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 22:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201260.D				
Lims ID:	240-152869-B-4				
Client ID:	SL-13_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 22:09:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1066754	8.42	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3497022	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	129359	200.0	

QC Flag Legend

Processing Flags

Reagents:

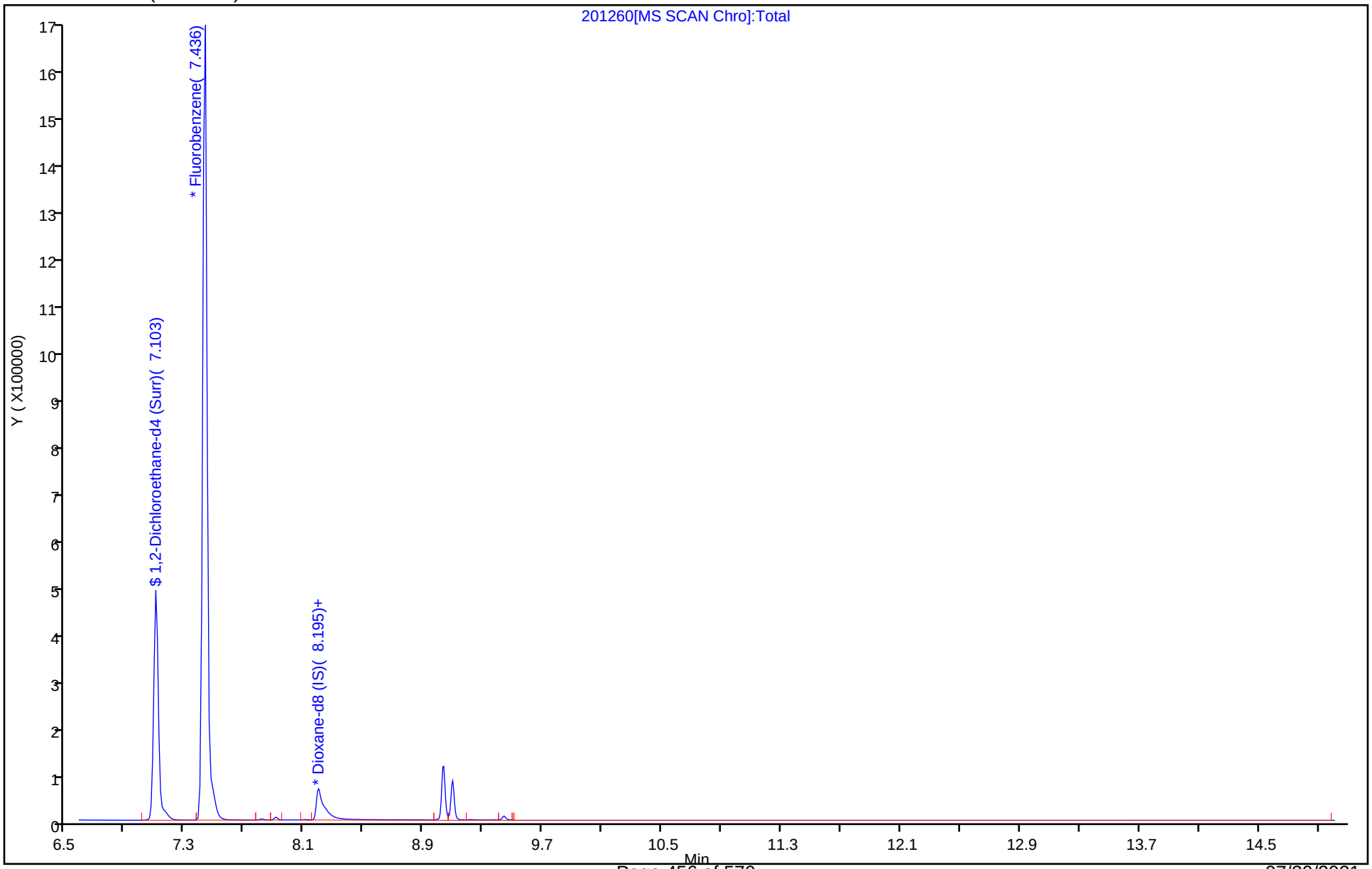
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:10:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201260.D				
Injection Date:	20-Jul-2021 22:09:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-4	Lab Sample ID:	240-152869-4	Worklist Smp#:	9
Client ID:	SL-13_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201260.D				
Lims ID:	240-152869-B-4				
Client ID:	SL-13_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 22:09:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.42	84.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-7_071321 Lab Sample ID: 240-152869-5

Matrix: Water Lab File ID: 201261.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 10:30

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 22:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201261.D				
Lims ID:	240-152869-B-5				
Client ID:	SL-7_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 22:36:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1031511	8.33	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3417593	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	113185	200.0	

QC Flag Legend

Processing Flags

Reagents:

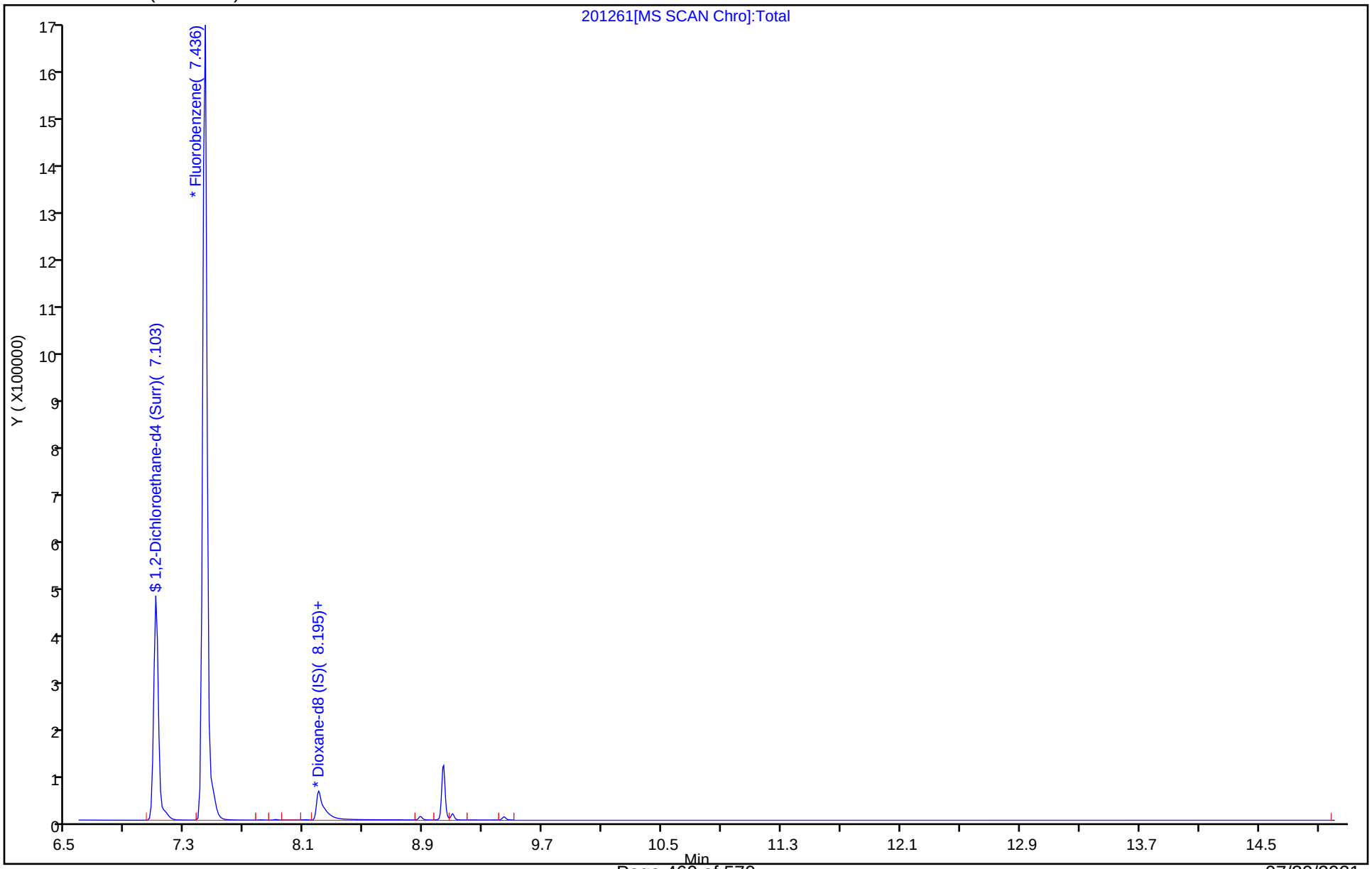
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:10:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201261.D				
Injection Date:	20-Jul-2021 22:36:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-5	Lab Sample ID:	240-152869-5	Worklist Smp#:	10
Client ID:	SL-7_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201261.D				
Lims ID:	240-152869-B-5				
Client ID:	SL-7_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 22:36:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.33	83.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-6_071321 Lab Sample ID: 240-152869-6

Matrix: Water Lab File ID: 201262.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 10:55

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 23:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201262.D				
Lims ID:	240-152869-B-6				
Client ID:	SL-6_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:04:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1043837	8.61	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3347822	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	115831	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

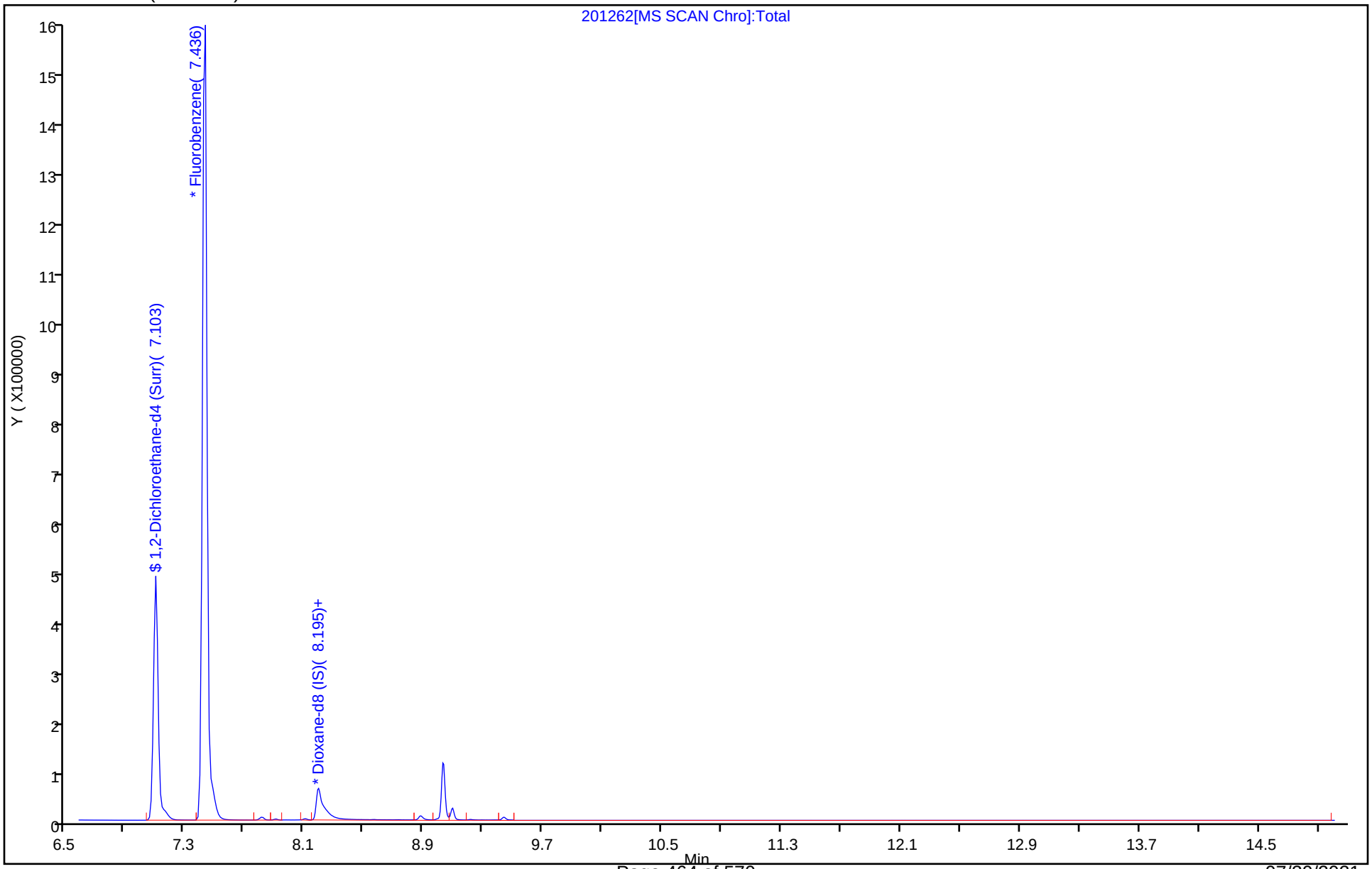
Report Date: 21-Jul-2021 20:10:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201262.D

Injection Date:	20-Jul-2021 23:04:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-6	Lab Sample ID:	240-152869-6	Worklist Smp#:	11
Client ID:	SL-6_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201262.D				
Lims ID:	240-152869-B-6				
Client ID:	SL-6_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:04:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.61	86.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-5_071321 Lab Sample ID: 240-152869-7

Matrix: Water Lab File ID: 201263.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 12:10

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.91	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201263.D				
Lims ID:	240-152869-B-7				
Client ID:	SL-5_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:31:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1076023	8.62	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3446183	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	119871	200.0	
8 1,4-Dioxane	88	8.250	8.243	0.007	25	992	0.9144	

QC Flag Legend

Processing Flags

Reagents:

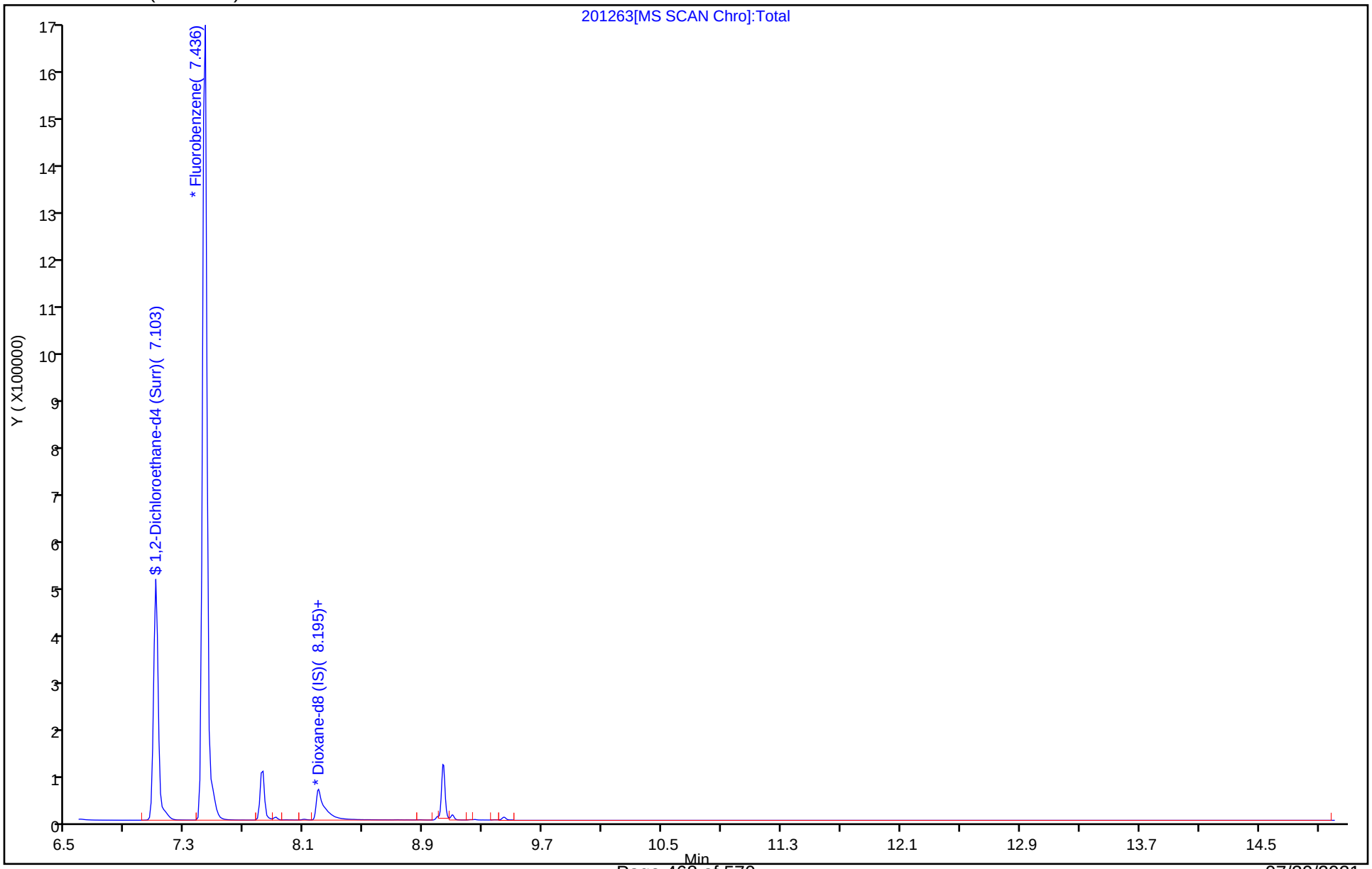
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:10:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201263.D				
Injection Date:	20-Jul-2021 23:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-7	Lab Sample ID:	240-152869-7	Worklist Smp#:	12
Client ID:	SL-5_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201263.D				
Lims ID:	240-152869-B-7				
Client ID:	SL-5_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:31:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:32	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

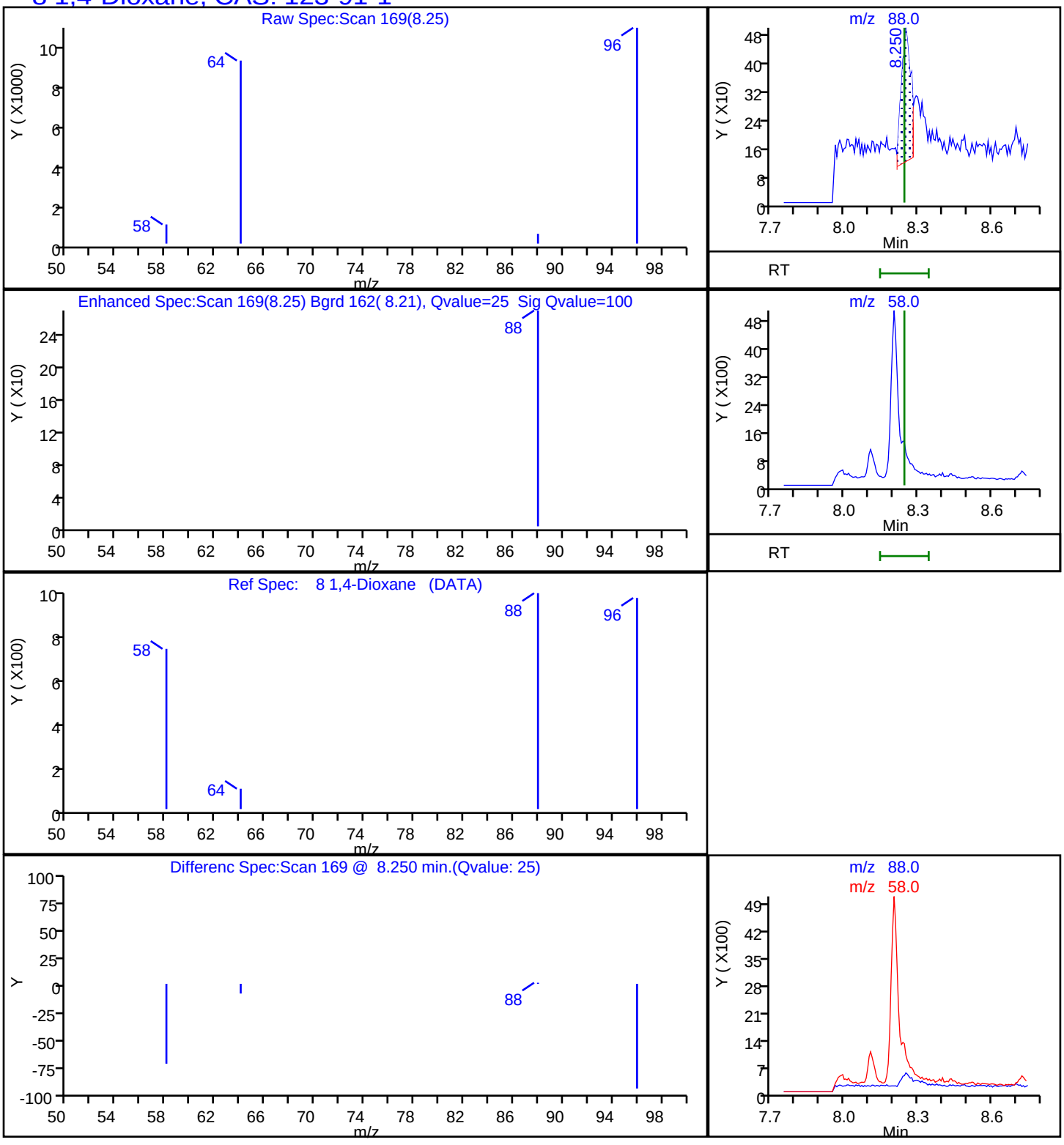
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.62	86.21

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201263.D

Injection Date:	20-Jul-2021 23:31:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-B-7	Lab Sample ID:	240-152869-7		
Client ID:	SL-5_071321				
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-8_071321 Lab Sample ID: 240-152869-8

Matrix: Water Lab File ID: 201264.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 12:40

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 23:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201264.D				
Lims ID:	240-152869-C-8				
Client ID:	SL-8_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:59:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1053968	8.38	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3472755	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	114479	200.0	
8 1,4-Dioxane	88	8.250	8.243	0.007	25	847	0.8035	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

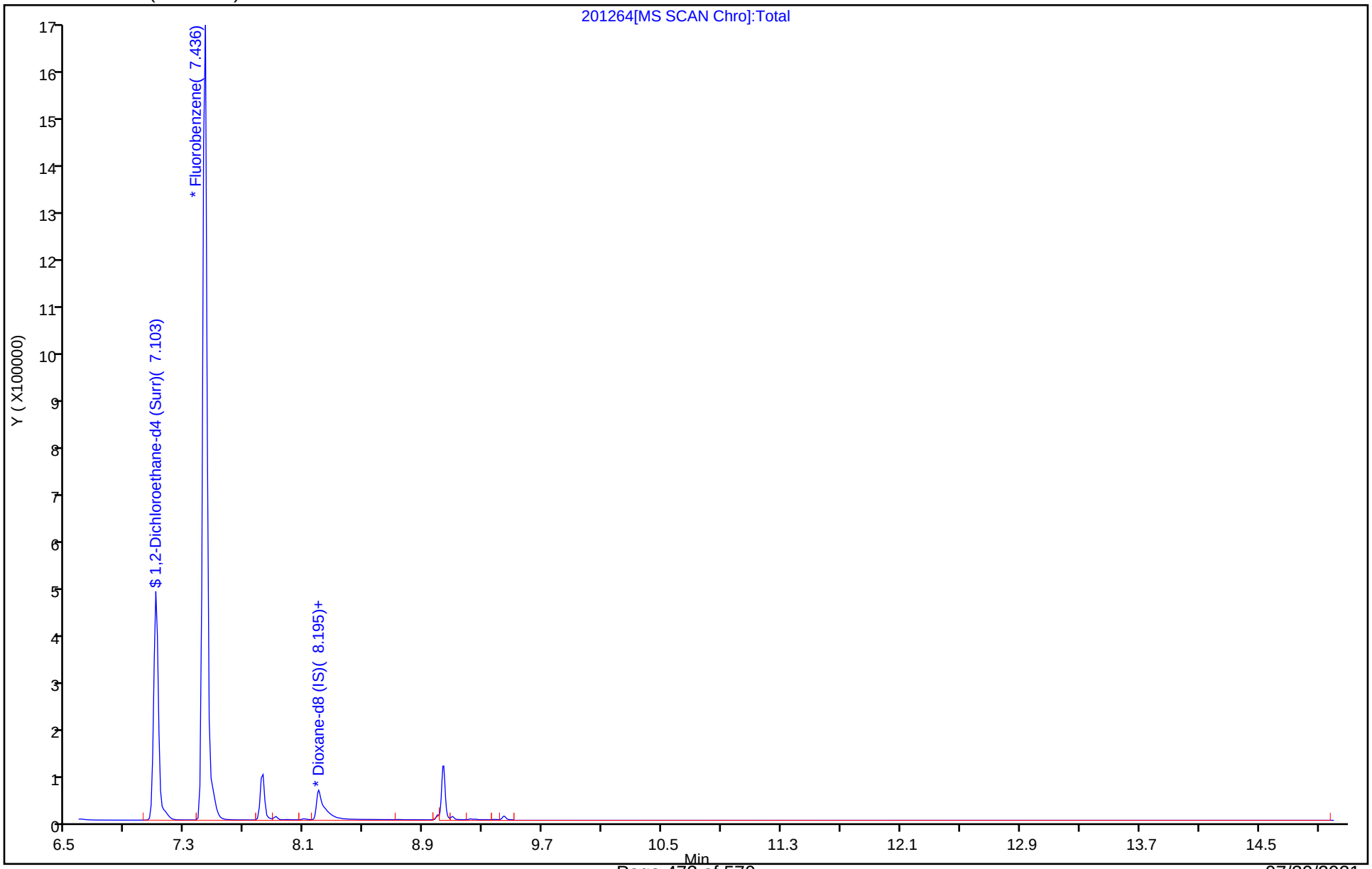
Report Date: 21-Jul-2021 20:11:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201264.D

Injection Date:	20-Jul-2021 23:59:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-C-8	Lab Sample ID:	240-152869-8	Worklist Smp#:	13
Client ID:	SL-8_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201264.D				
Lims ID:	240-152869-C-8				
Client ID:	SL-8_071321				
Sample Type:	Client				
Inject. Date:	20-Jul-2021 23:59:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.38	83.80

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

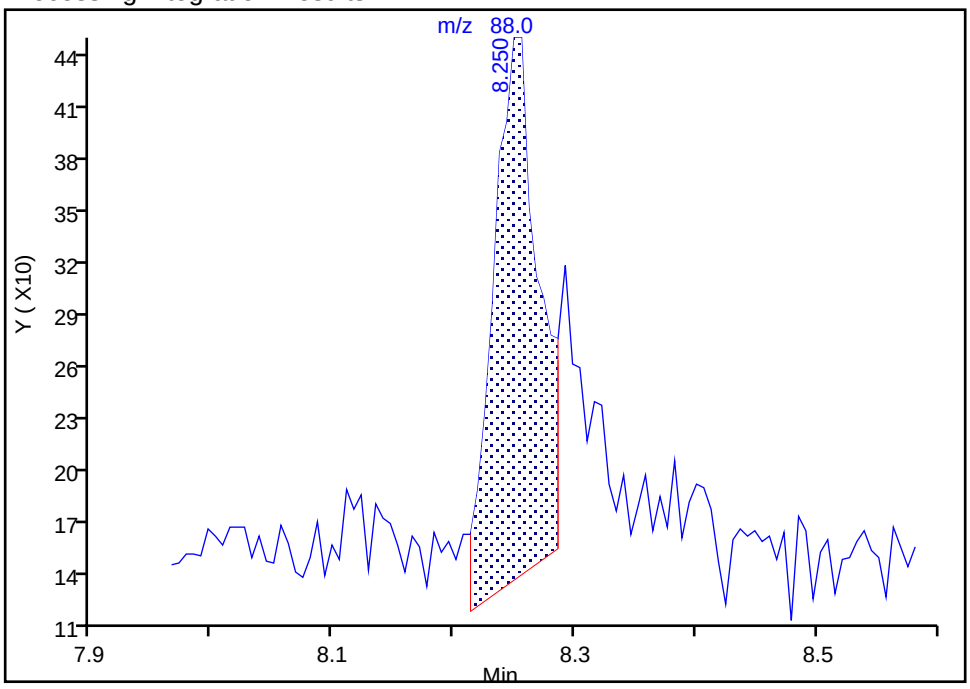
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201264.D				
Injection Date:	20-Jul-2021 23:59:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-C-8	Lab Sample ID:	240-152869-8		
Client ID:	SL-8_071321				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

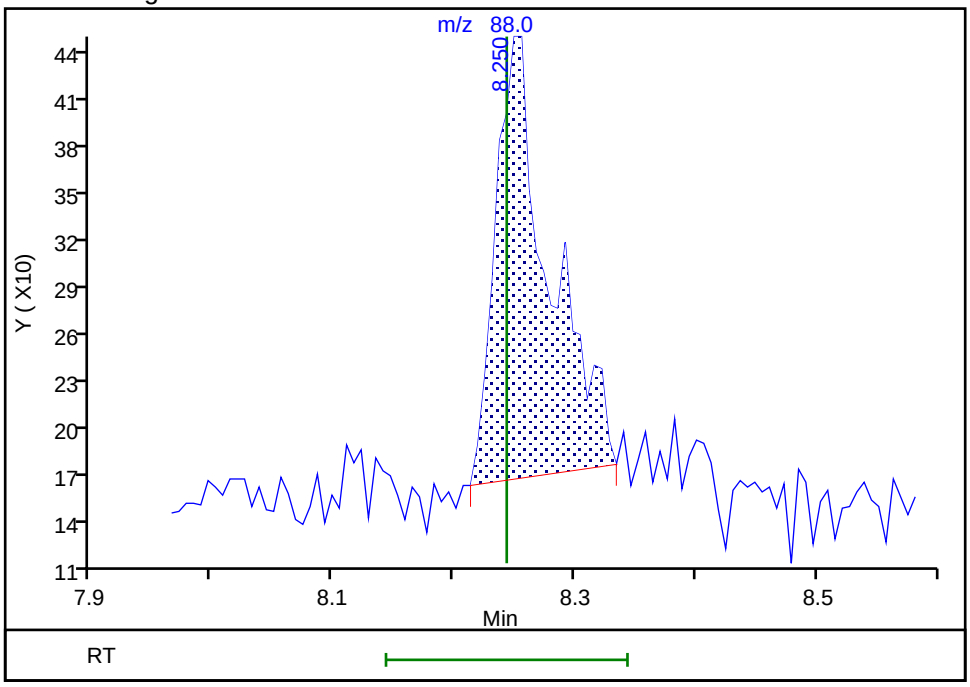
Processing Integration Results

RT: 8.25
Area: 807
Amount: 0.759321
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 847
Amount: 0.803520
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:11:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-9_071321 Lab Sample ID: 240-152869-9

Matrix: Water Lab File ID: 201265.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 13:00

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 00:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.1	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201265.D				
Lims ID:	240-152869-C-9				
Client ID:	SL-9_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 00:26:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	995659	8.50	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3235447	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	91	112356	200.0	
8 1,4-Dioxane	88	8.250	8.243	0.007	25	1063	1.06	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

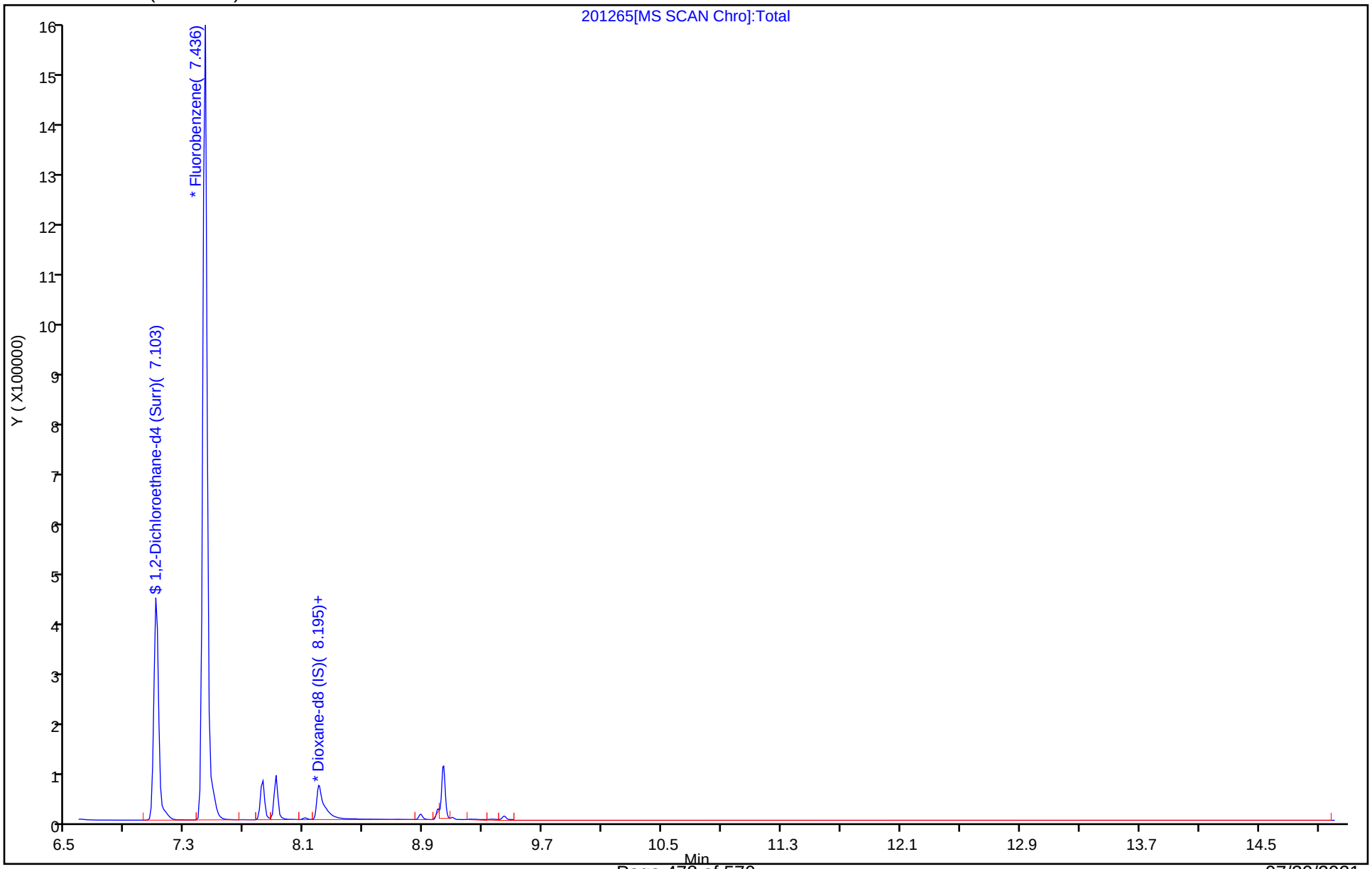
Report Date: 21-Jul-2021 20:11:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201265.D

Injection Date:	21-Jul-2021 00:26:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-C-9	Lab Sample ID:	240-152869-9	Worklist Smp#:	14
Client ID:	SL-9_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

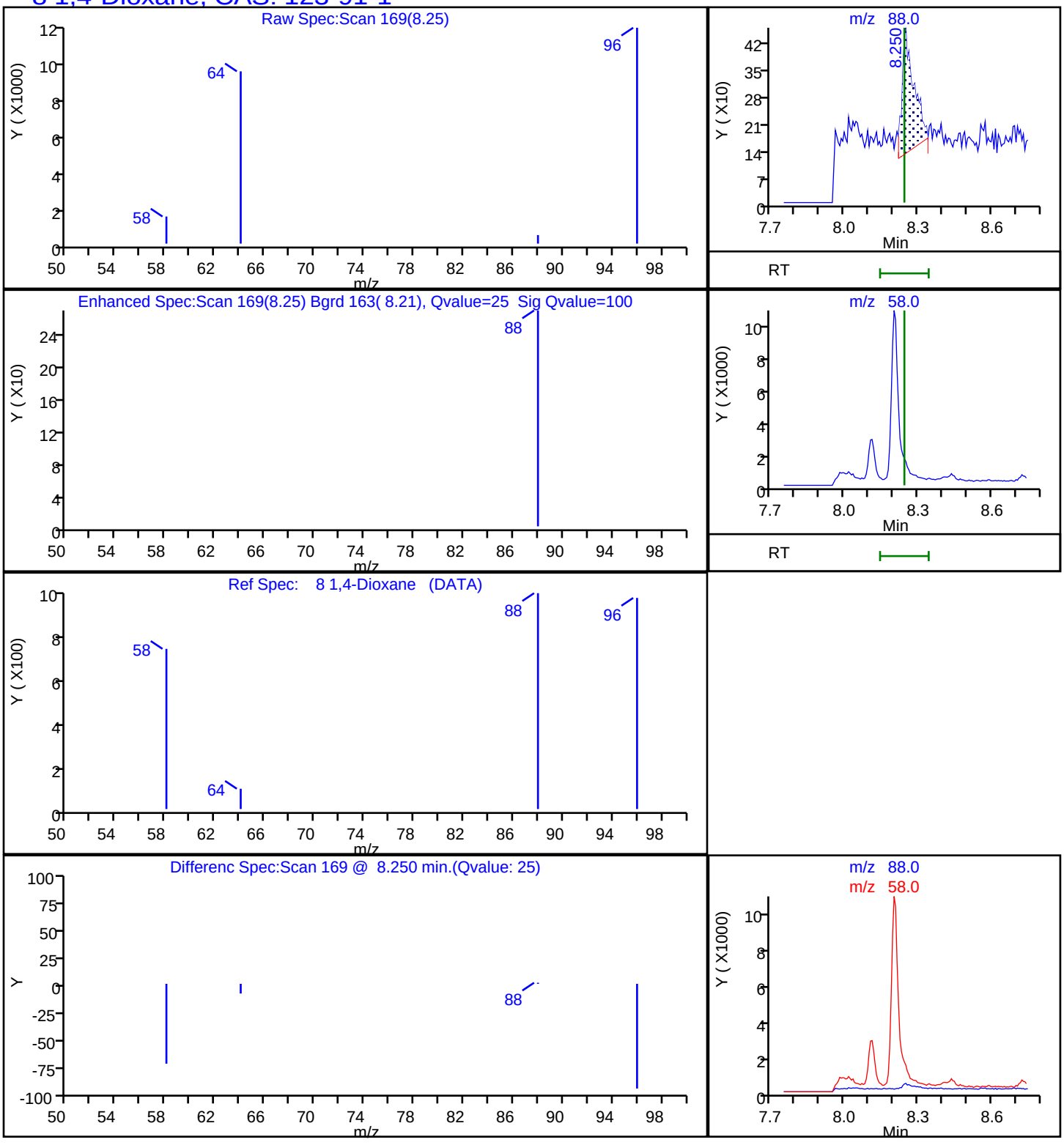
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201265.D				
Lims ID:	240-152869-C-9				
Client ID:	SL-9_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 00:26:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.50	84.97

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201265.D				
Injection Date:	21-Jul-2021 00:26:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-C-9	Lab Sample ID:	240-152869-9		
Client ID:	SL-9_071321				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-10_071321 Lab Sample ID: 240-152869-10

Matrix: Water Lab File ID: 201266.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 13:30

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 00:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201266.D				
Lims ID:	240-152869-B-10				
Client ID:	SL-10_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 00:53:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	977549	8.49	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3178631	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	118769	200.0	
8 1,4-Dioxane	88	8.244	8.243	0.001	25	583	0.4885	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

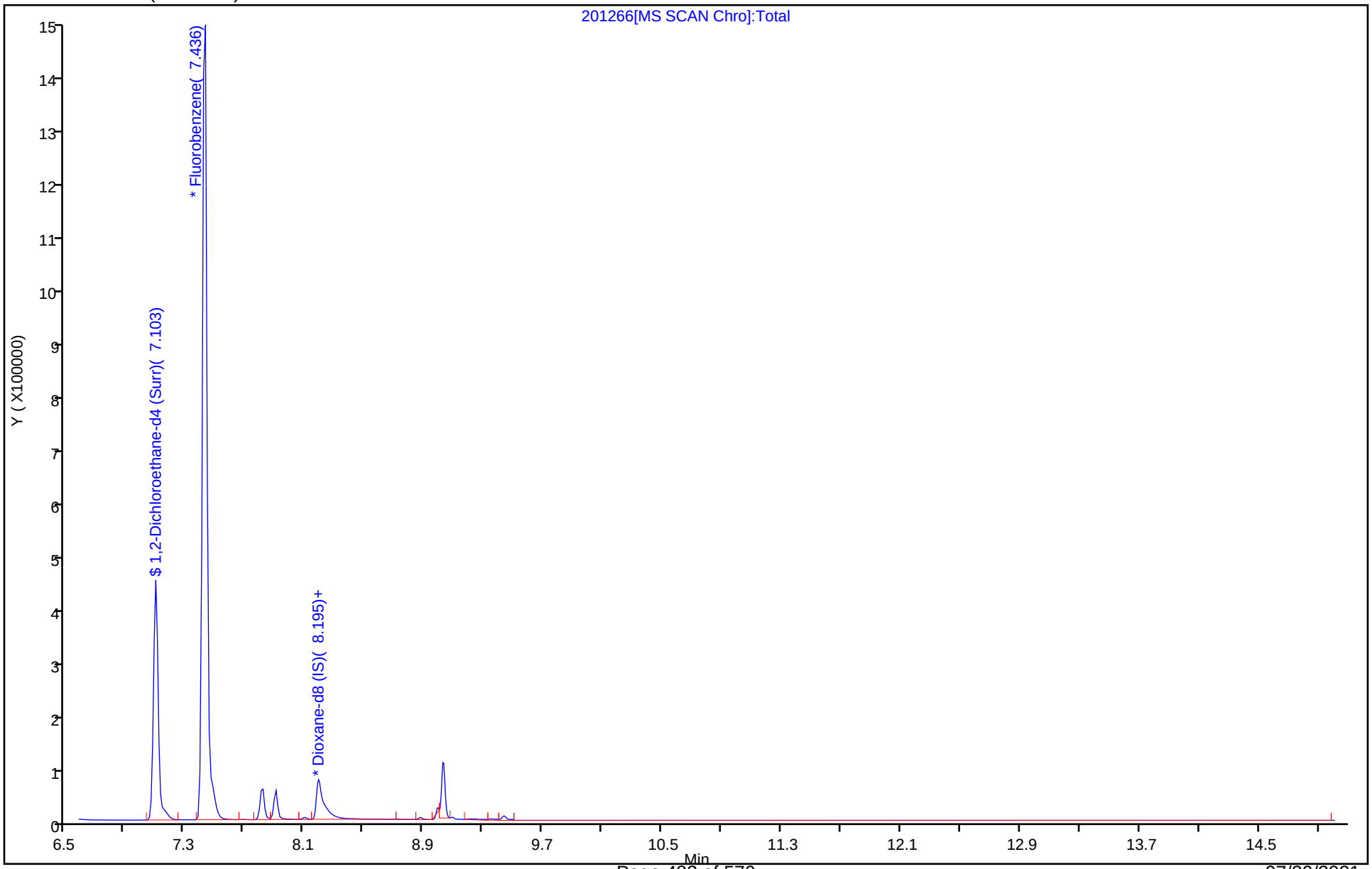
Report Date: 21-Jul-2021 20:11:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201266.D

Injection Date:	21-Jul-2021 00:53:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-10	Lab Sample ID:	240-152869-10	Worklist Smp#:	15
Client ID:	SL-10_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201266.D				
Lims ID:	240-152869-B-10				
Client ID:	SL-10_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 00:53:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.49	84.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-11_071321 Lab Sample ID: 240-152869-11

Matrix: Water Lab File ID: 201267.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 13:50

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 01:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201267.D				
Lims ID:	240-152869-B-11				
Client ID:	SL-11_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 01:21:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	992981	8.61	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3186014	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	119743	200.0	
8 1,4-Dioxane	88	8.243	8.243	0.000	25	599	0.5004	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

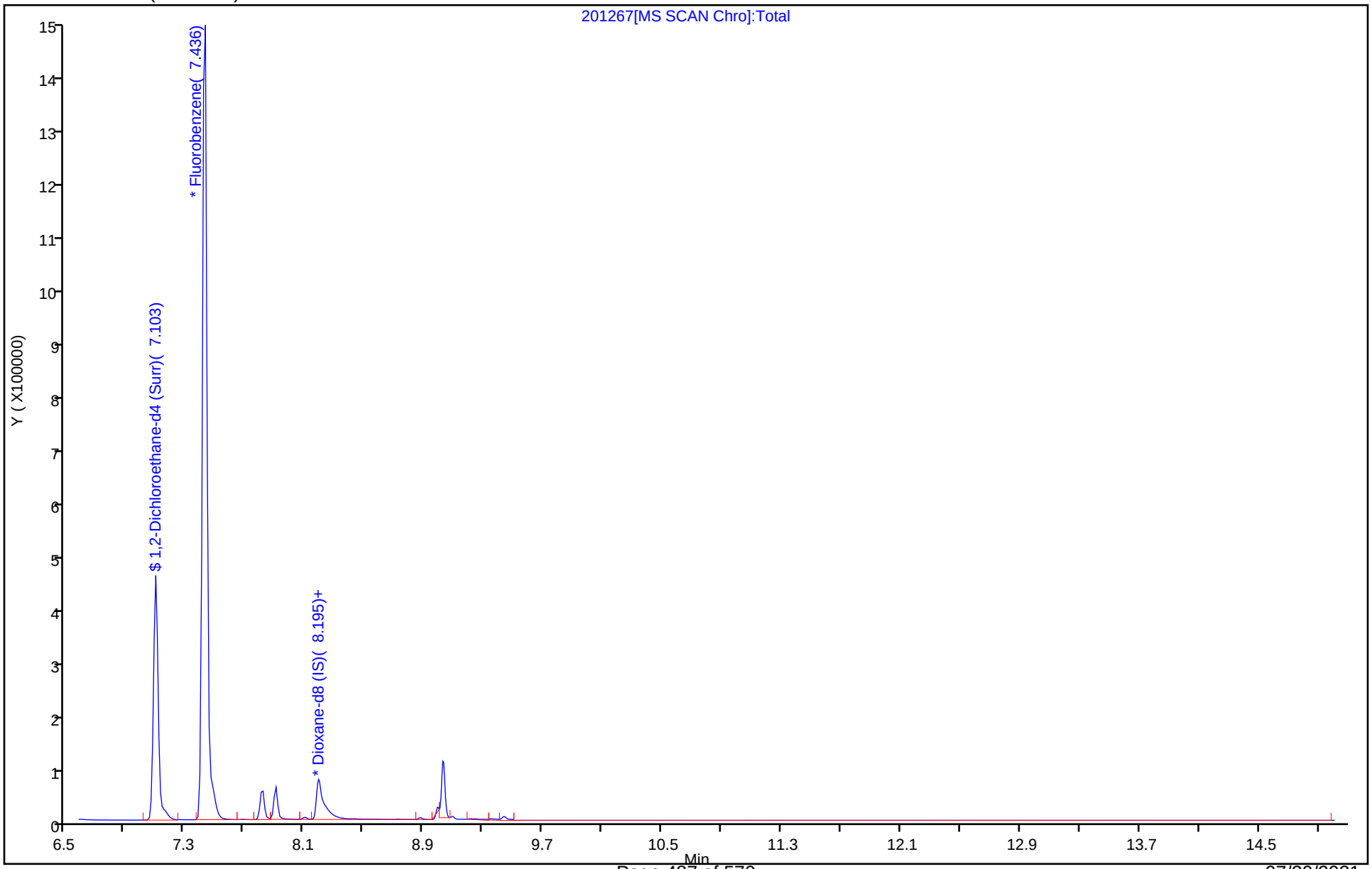
Report Date: 21-Jul-2021 20:11:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201267.D

Injection Date:	21-Jul-2021 01:21:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-11	Lab Sample ID:	240-152869-11	Worklist Smp#:	16
Client ID:	SL-11_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201267.D				
Lims ID:	240-152869-B-11				
Client ID:	SL-11_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 01:21:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.61	86.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: SL-12_071321 Lab Sample ID: 240-152869-12

Matrix: Water Lab File ID: 201268.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 14:05

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 01:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201268.D				
Lims ID:	240-152869-B-12				
Client ID:	SL-12_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 01:48:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	993902	8.48	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3236005	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	123303	200.0	
8 1,4-Dioxane	88	8.244	8.243	0.001	25	714	0.6001	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

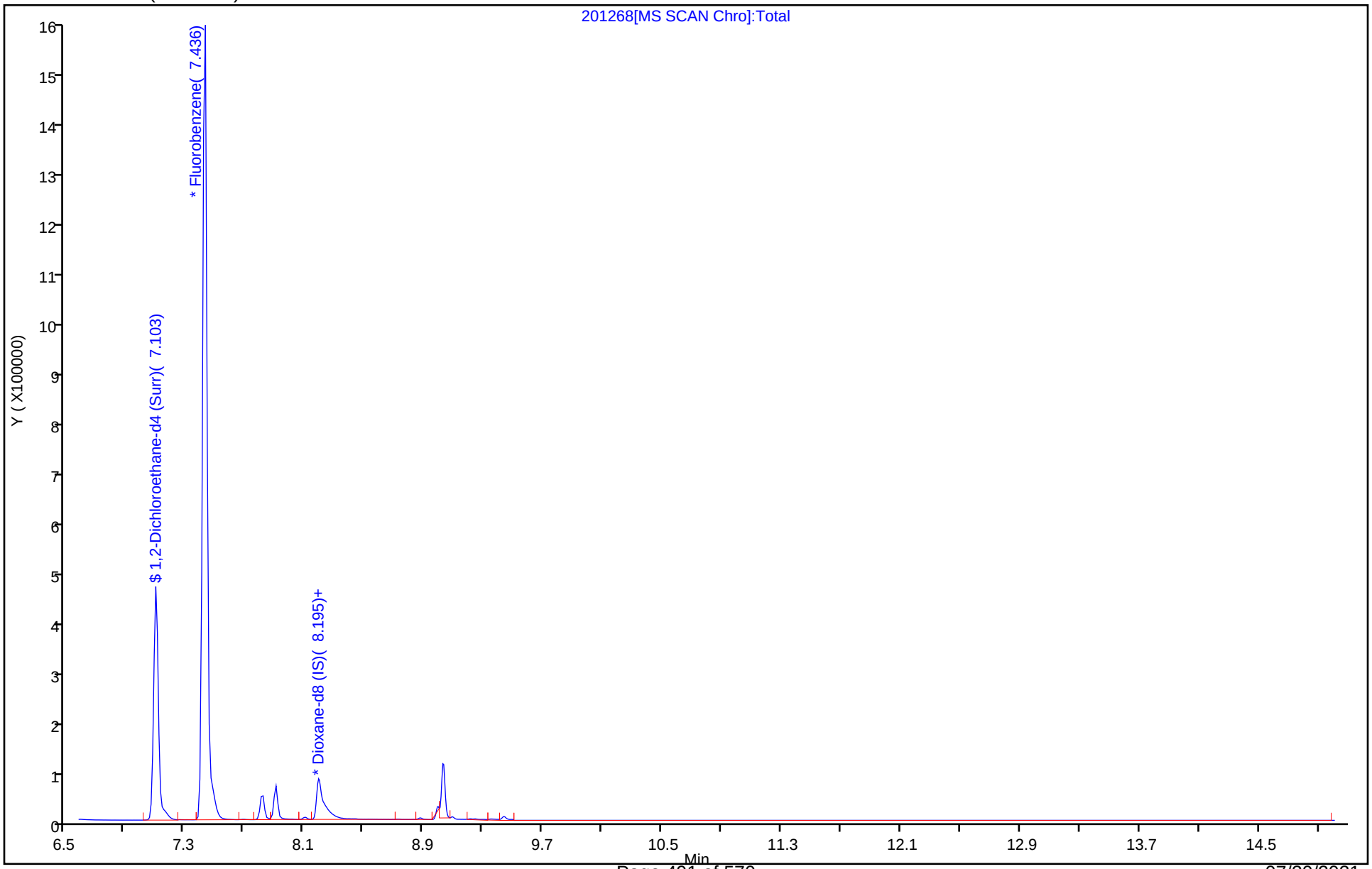
Report Date: 21-Jul-2021 20:11:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201268.D

Injection Date:	21-Jul-2021 01:48:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-12	Lab Sample ID:	240-152869-12	Worklist Smp#:	17
Client ID:	SL-12_071321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201268.D				
Lims ID:	240-152869-B-12				
Client ID:	SL-12_071321				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 01:48:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.48	84.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-152869-13

Matrix: Water Lab File ID: 201269.D

Analysis Method: 8260B SIM Date Collected: 07/13/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 02:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.6	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201269.D				
Lims ID:	240-152869-B-13				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 02:16:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:45	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1064167	8.27	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3553552	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	91	117263	200.0	
8 1,4-Dioxane	88	8.244	8.243	0.001	33	1593	1.59	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

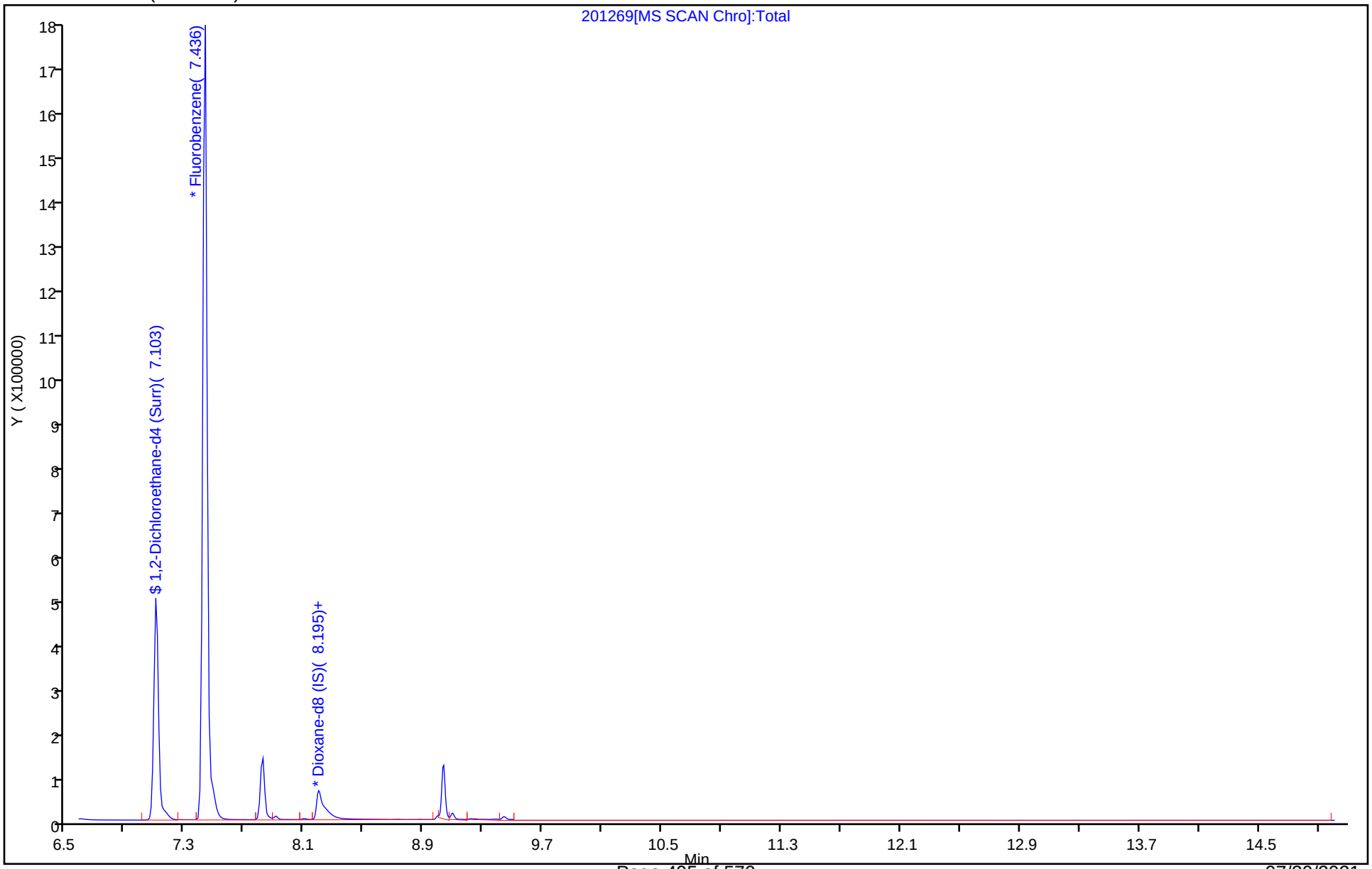
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 21-Jul-2021 20:11:45 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201269.D				
Injection Date:	21-Jul-2021 02:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-152869-B-13	Lab Sample ID:	240-152869-13	Worklist Smp#:	18
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201269.D				
Lims ID:	240-152869-B-13				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	21-Jul-2021 02:16:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:11:45	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

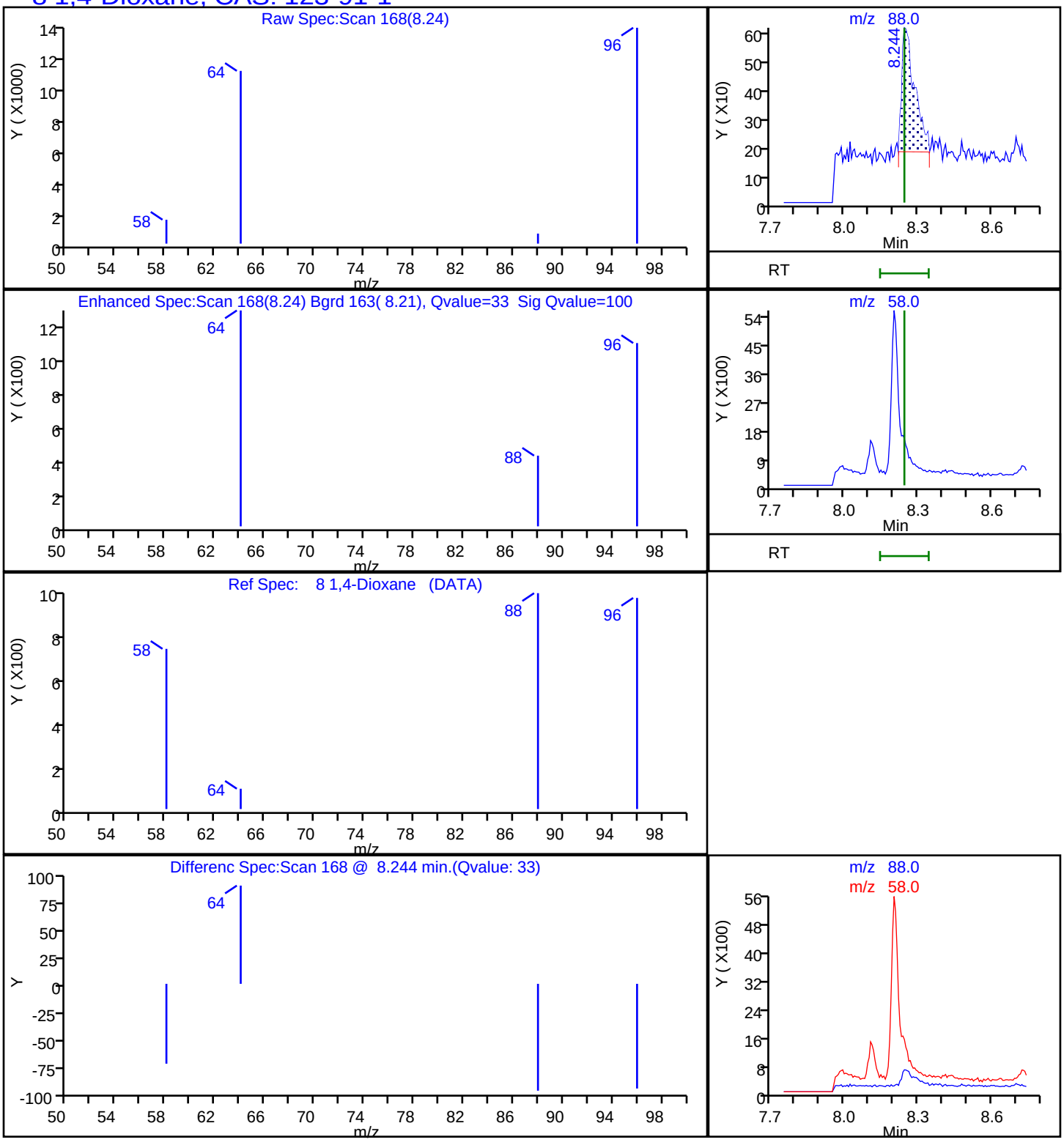
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.27	82.69

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201269.D

Injection Date:	21-Jul-2021 02:16:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-B-13	Lab Sample ID:	240-152869-13		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

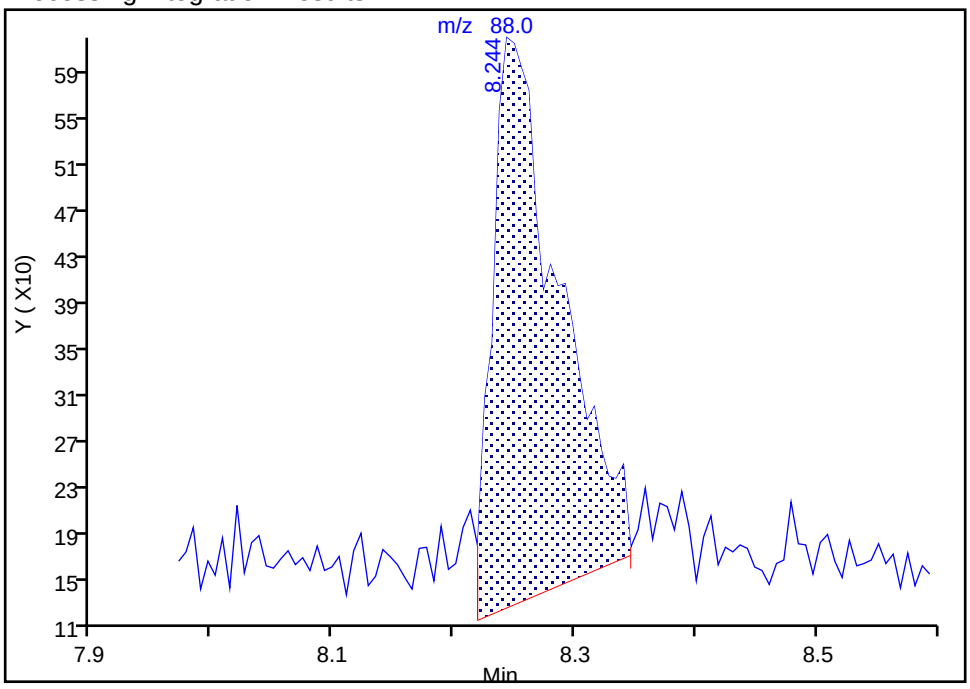
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201269.D				
Injection Date:	21-Jul-2021 02:16:30	Instrument ID:	A3UX20		
Lims ID:	240-152869-B-13	Lab Sample ID:	240-152869-13		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

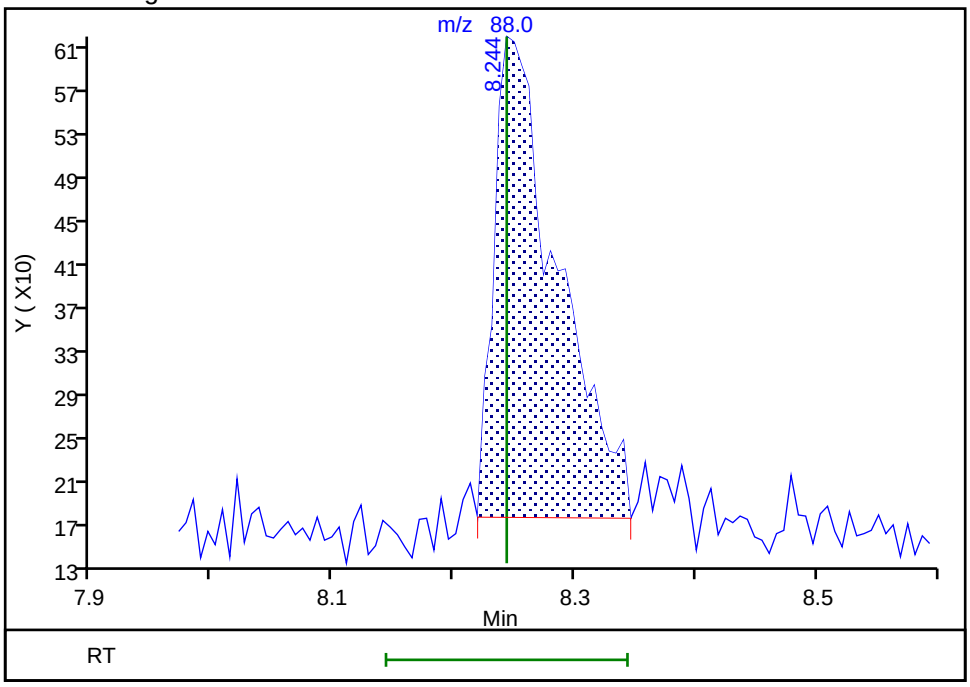
Processing Integration Results

RT: 8.24
Area: 1876
Amount: 1.891342
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1593
Amount: 1.586054
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:11:41

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 495247

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/15/2021 15:44 Calibration End Date: 07/15/2021 18:55 Calibration ID: 62019

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-495247/3	201231.D
Level 2	IC 240-495247/4	201232.D
Level 3	IC 240-495247/5	201233.D
Level 4	IC 240-495247/6	201234.D
Level 5	ICIS 240-495247/7	201235.D
Level 6	IC 240-495247/8	201236.D
Level 7	IC 240-495247/9	201237.D
Level 8	IC 240-495247/10	201238.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	1.8200 1.6122	1.7242 1.5127	1.6099 1.6155	1.6148	1.5336	Lin1	0.2093	1.5810							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3605	0.3637 0.3716	0.3341 0.3862	0.3579	0.3613	Ave		0.3622				4.3		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1 Analy Batch No.: 495247

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/15/2021 15:44 Calibration End Date: 07/15/2021 18:55 Calibration ID: 62019

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-495247/3	201231.D
Level 2	IC 240-495247/4	201232.D
Level 3	IC 240-495247/5	201233.D
Level 4	IC 240-495247/6	201234.D
Level 5	ICIS 240-495247/7	201235.D
Level 6	IC 240-495247/8	201236.D
Level 7	IC 240-495247/9	201237.D
Level 8	IC 240-495247/10	201238.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Lin1	1153 44736	2207 102247	4347 188173	9089	18717	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 3018872	119633 6351568	268516 13398543	585823	1203966	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201231.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	15-Jul-2021 15:44:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:06	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: latat		Date:	16-Jul-2021 05:18:26		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	64926	0.5000	0.5464	M
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3280920	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	126702	200.0	200.0	
8 1,4-Dioxane	88	8.250	8.244	0.006	45	1153	1.00	1.02	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00257	Amount Added:	0.15	Units: uL
vm50ss_00448	Amount Added:	0.15	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

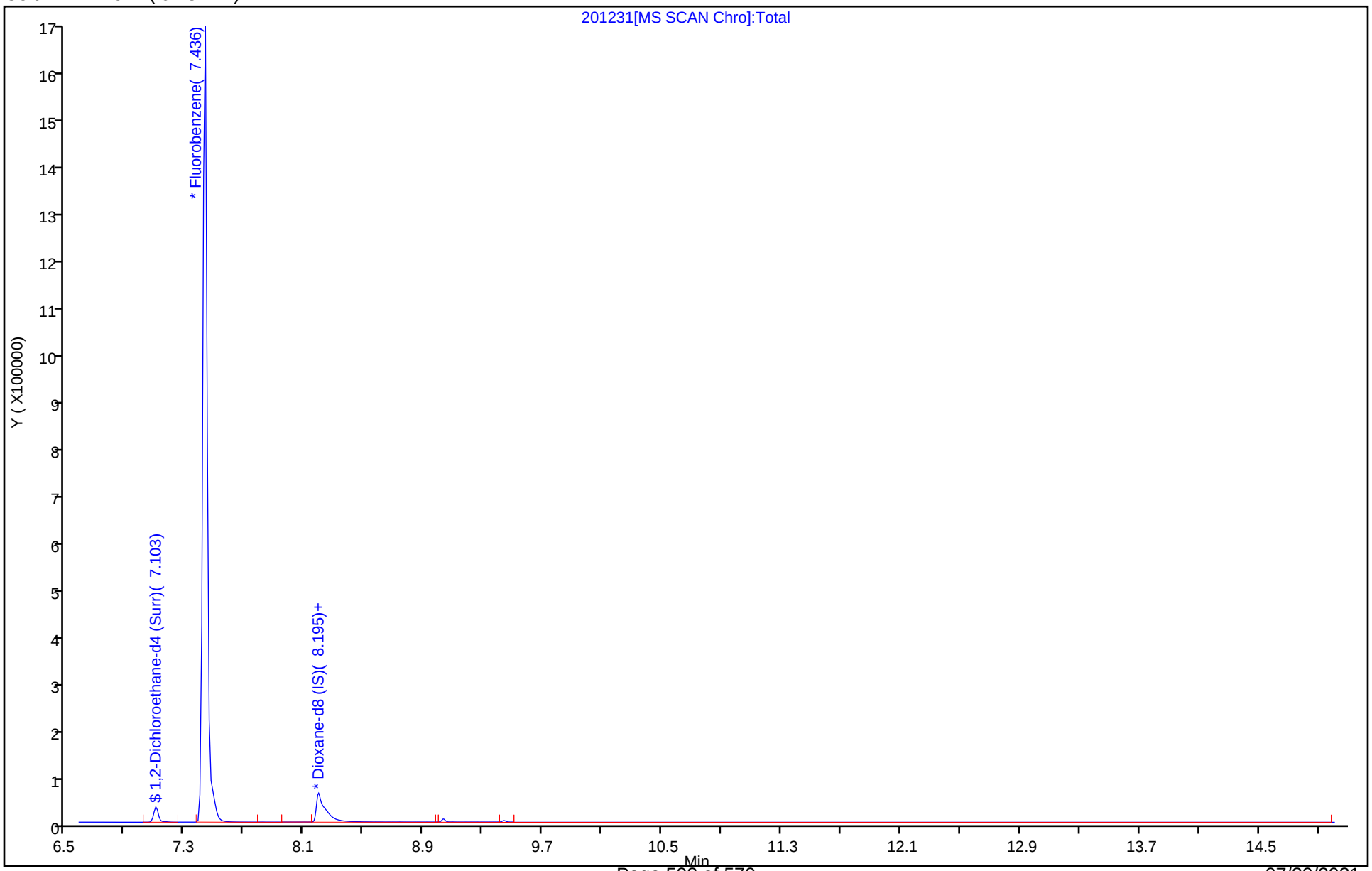
Report Date: 21-Jul-2021 20:00:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201231.D

Injection Date:	15-Jul-2021 15:44:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

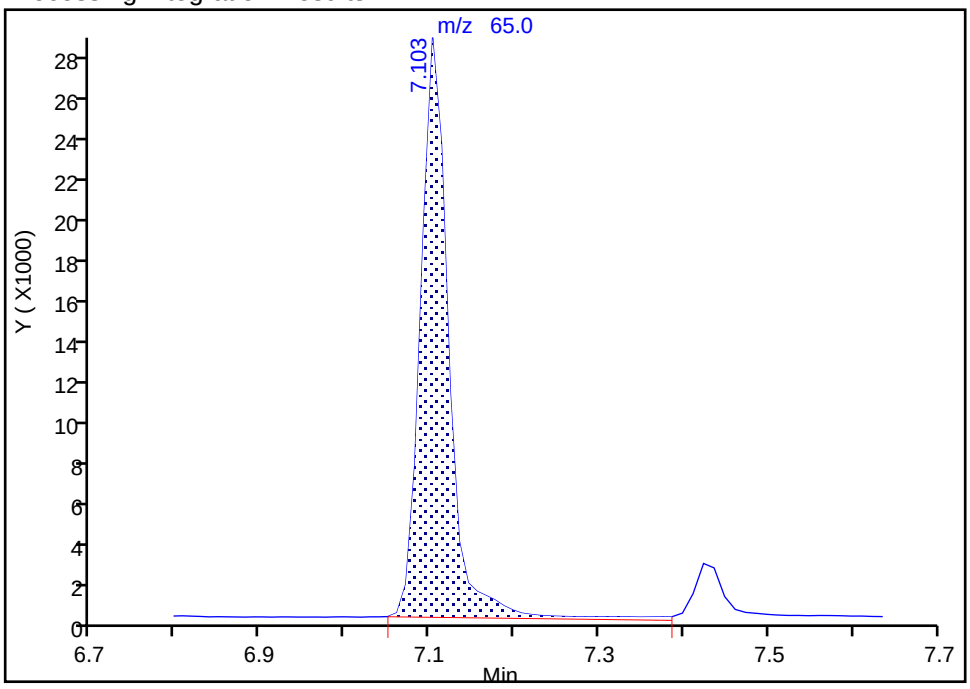
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201231.D				
Injection Date:	15-Jul-2021 15:44:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

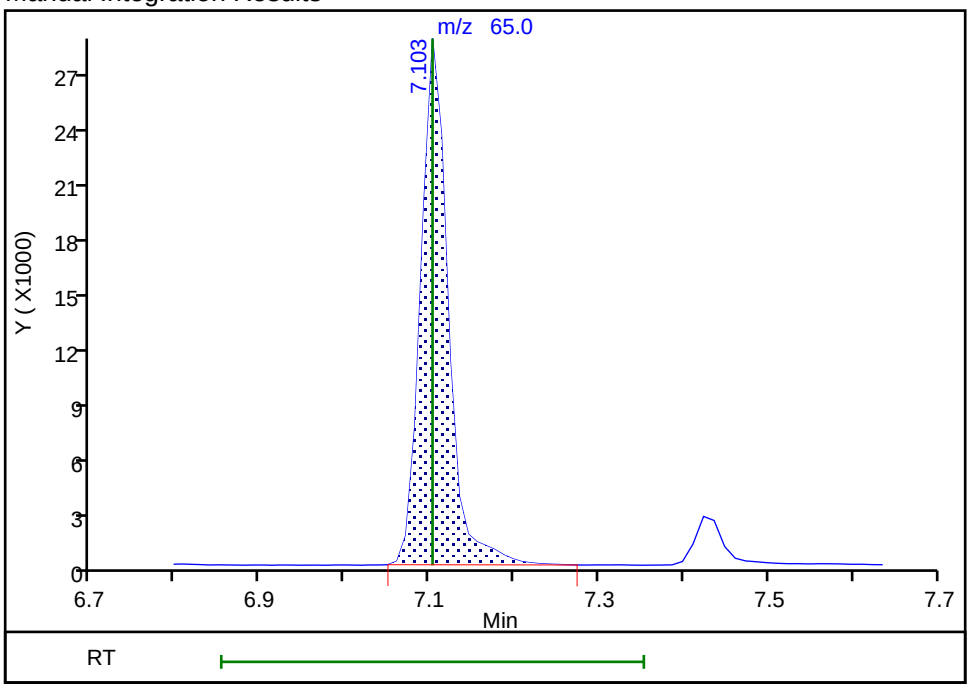
Processing Integration Results

RT: 7.10
Area: 70090
Amount: 0.576525
Amount Units: ug/l



Manual Integration Results

RT: 7.10
Area: 64926
Amount: 0.546392
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:44:06

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

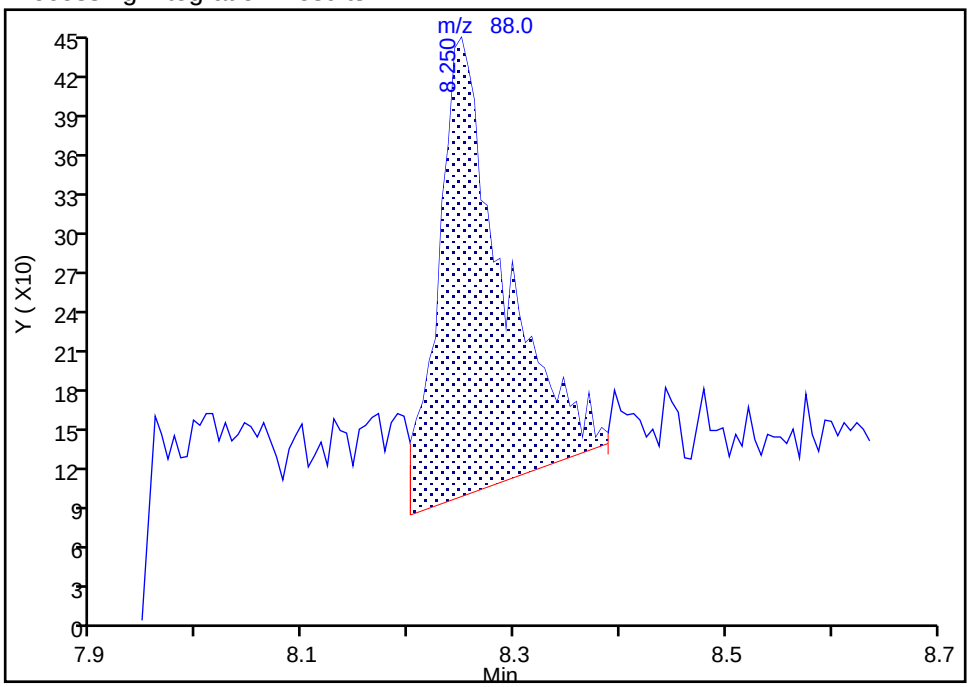
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201231.D
Injection Date: 15-Jul-2021 15:44:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

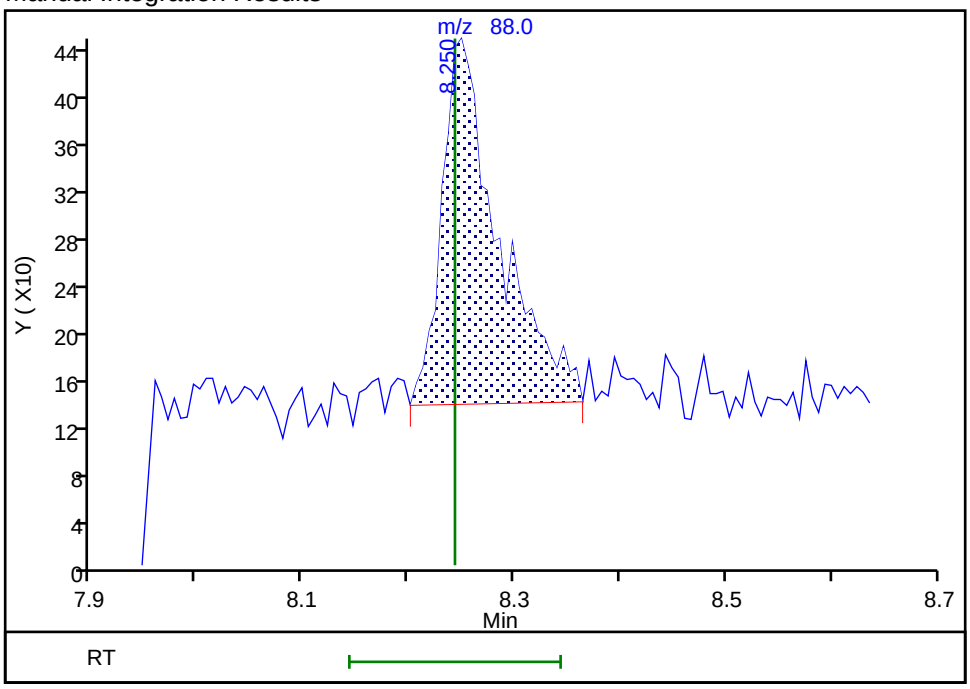
Processing Integration Results

RT: 8.25
Area: 1510
Amount: 0.950907
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 1153
Amount: 1.018739
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:43:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201232.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	15-Jul-2021 16:12:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:07	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	20-Jul-2021 15:55:17		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	119633	1.00	1.00	M
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3289302	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	127998	200.0	200.0	
8 1,4-Dioxane	88	8.250	8.244	0.006	51	2207	2.00	2.05	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00257	Amount Added:	0.30	Units: uL
vm50ss_00448	Amount Added:	0.30	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

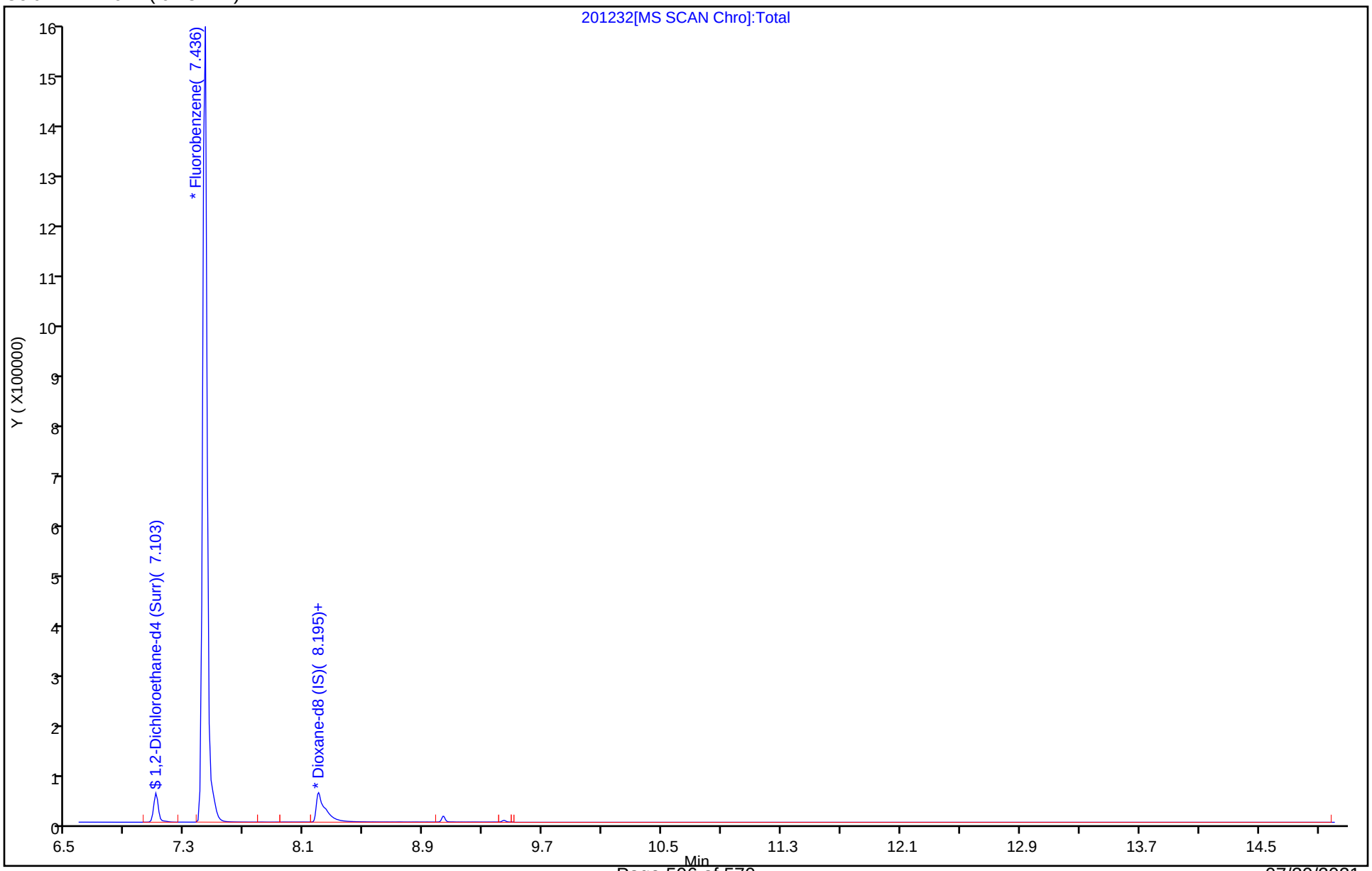
Report Date: 21-Jul-2021 20:00:07 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201232.D

Injection Date:	15-Jul-2021 16:12:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



07/30/2021

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

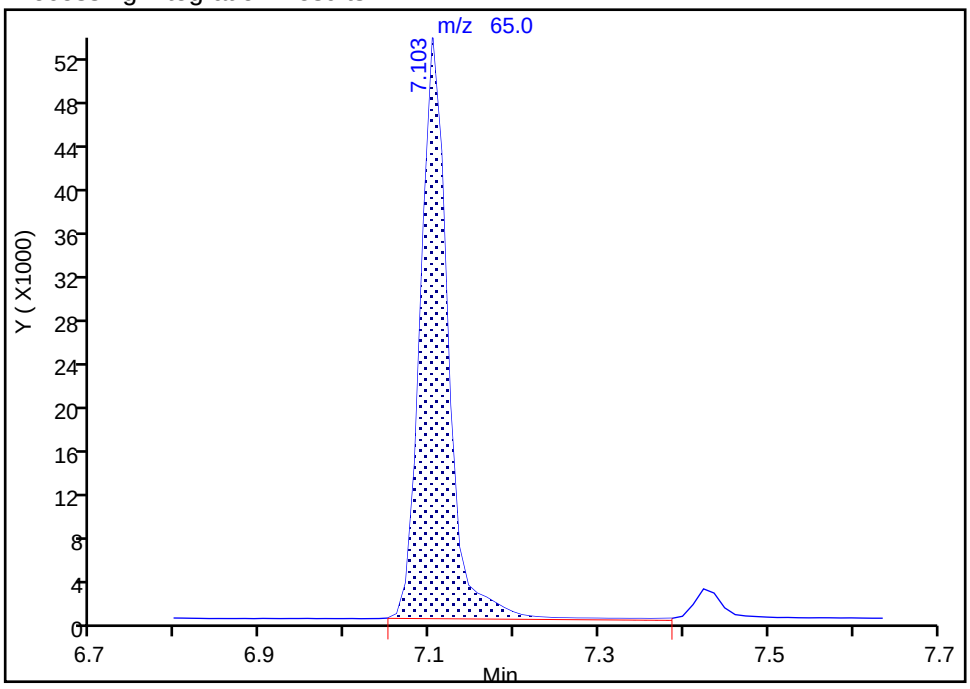
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201232.D				
Injection Date:	15-Jul-2021 16:12:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

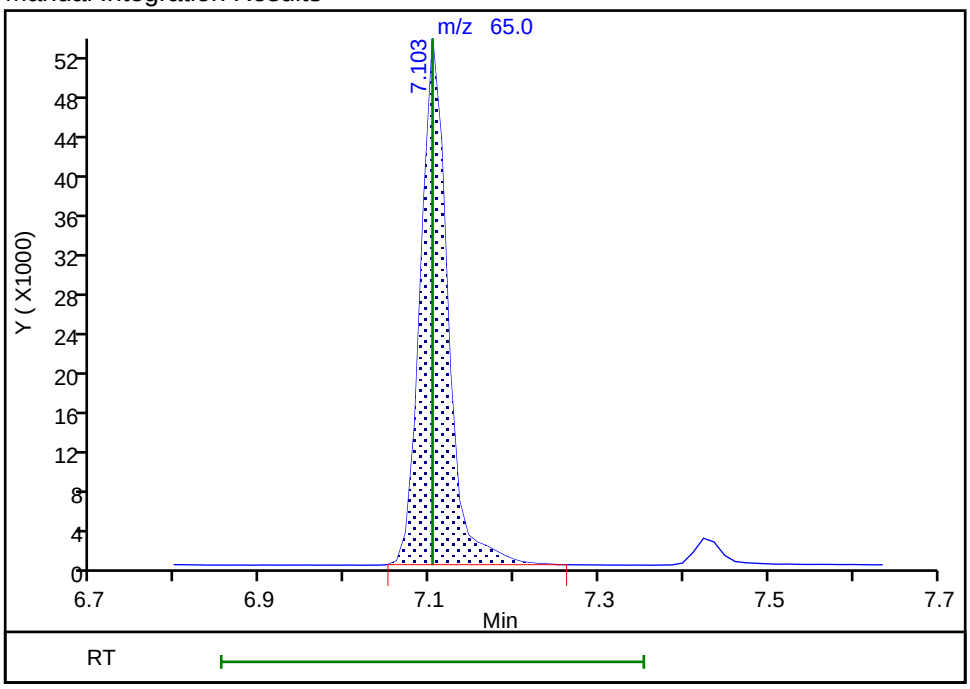
Processing Integration Results

RT: 7.10
Area: 129055
Amount: 1.058836
Amount Units: ug/l



Manual Integration Results

RT: 7.10
Area: 119633
Amount: 1.004219
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:44:27

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

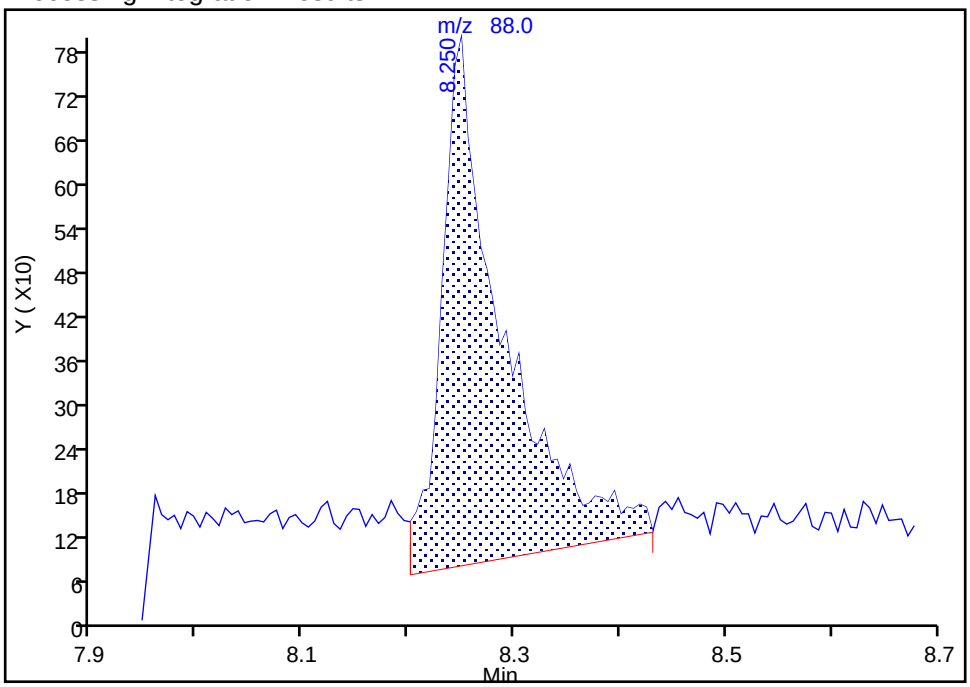
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201232.D
Injection Date: 15-Jul-2021 16:12:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

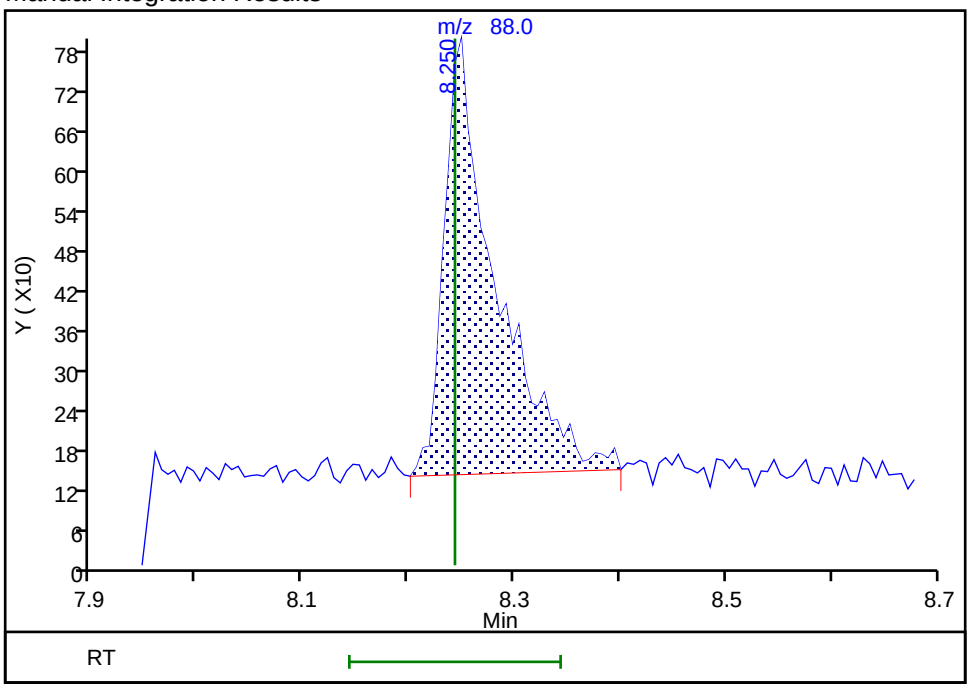
Processing Integration Results

RT: 8.25
Area: 2901
Amount: 2.494966
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 2207
Amount: 2.048736
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:44:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201233.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	15-Jul-2021 16:39:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:07	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:05:38		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	268516	2.50	2.31	M
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3214950	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	108005	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.244	0.000	46	4347	5.00	4.96	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00257	Amount Added:	0.75	Units: uL
vm50ss_00448	Amount Added:	0.75	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

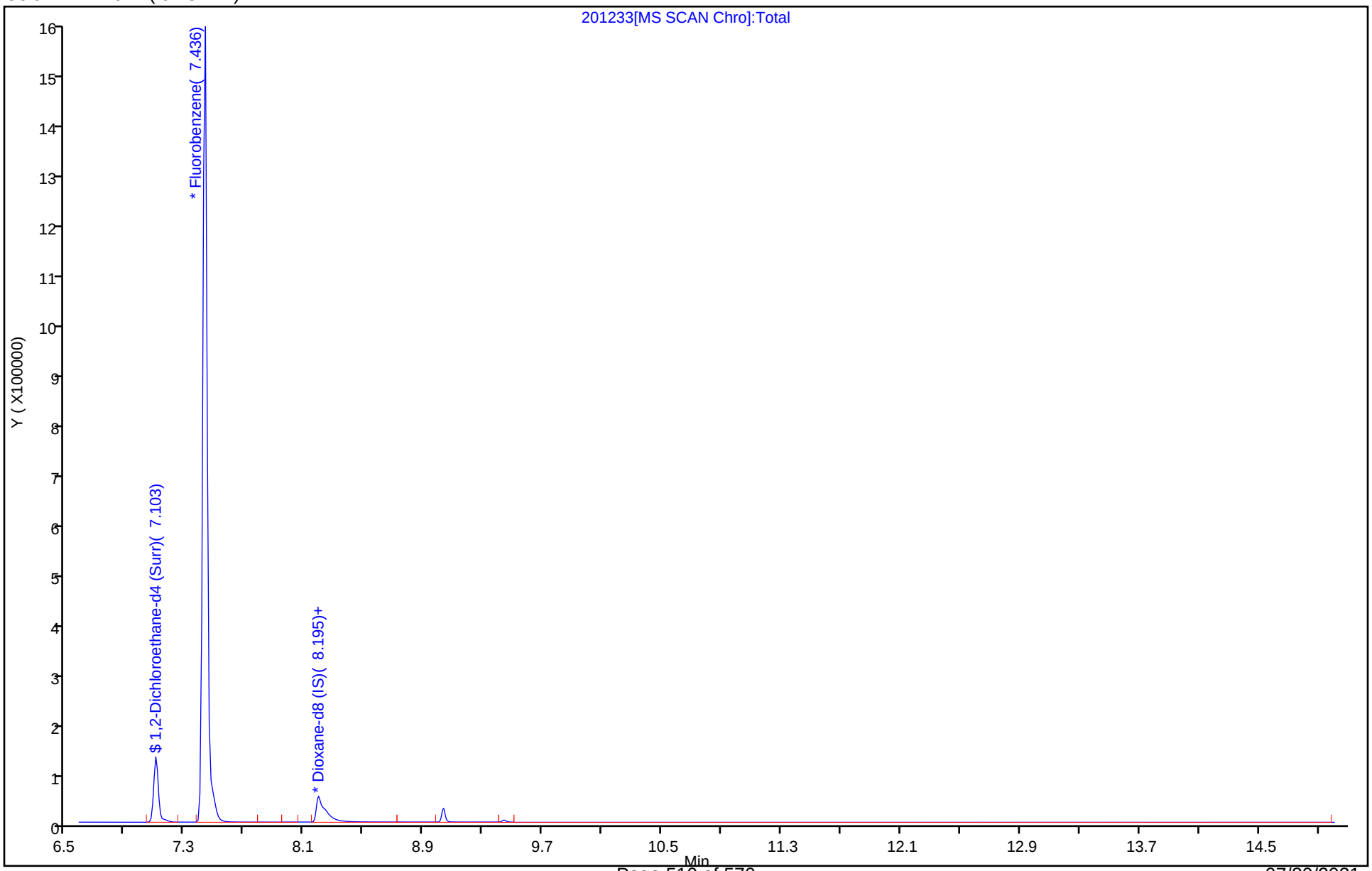
Report Date: 21-Jul-2021 20:00:07 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201233.D

Injection Date:	15-Jul-2021 16:39:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

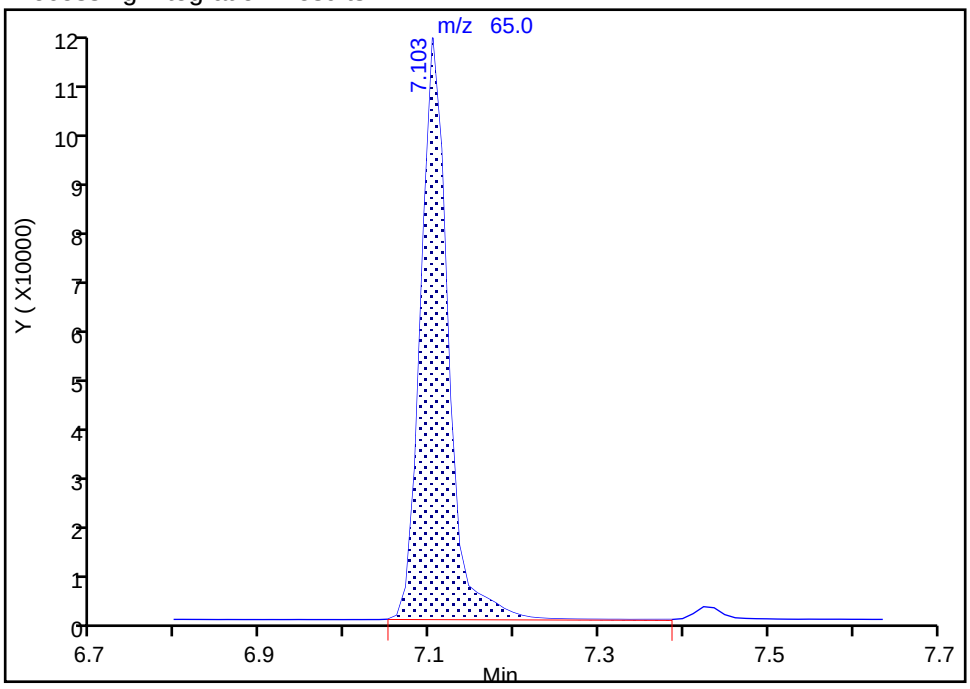
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201233.D
Injection Date: 15-Jul-2021 16:39:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

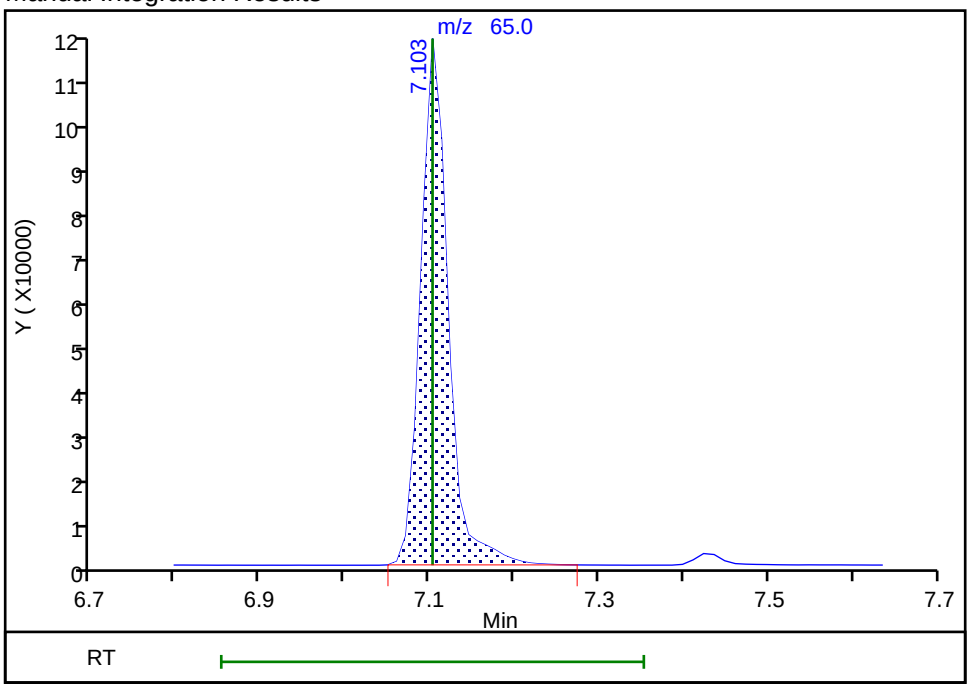
Processing Integration Results

RT: 7.10
Area: 284918
Amount: 2.418387
Amount Units: ug/l



Manual Integration Results

RT: 7.10
Area: 268516
Amount: 2.306096
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:45:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

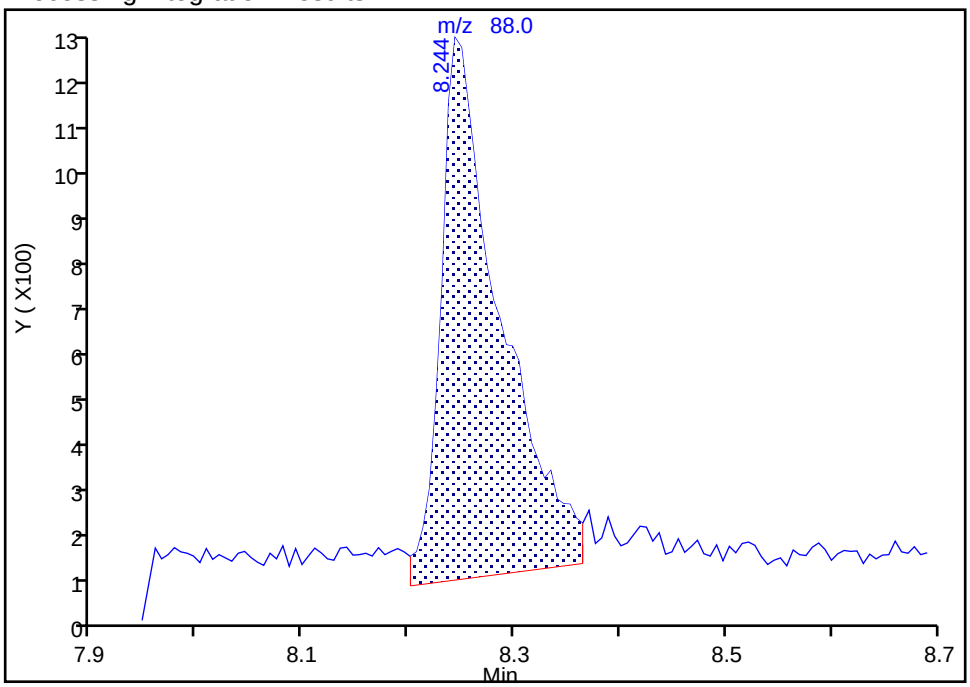
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201233.D				
Injection Date:	15-Jul-2021 16:39:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

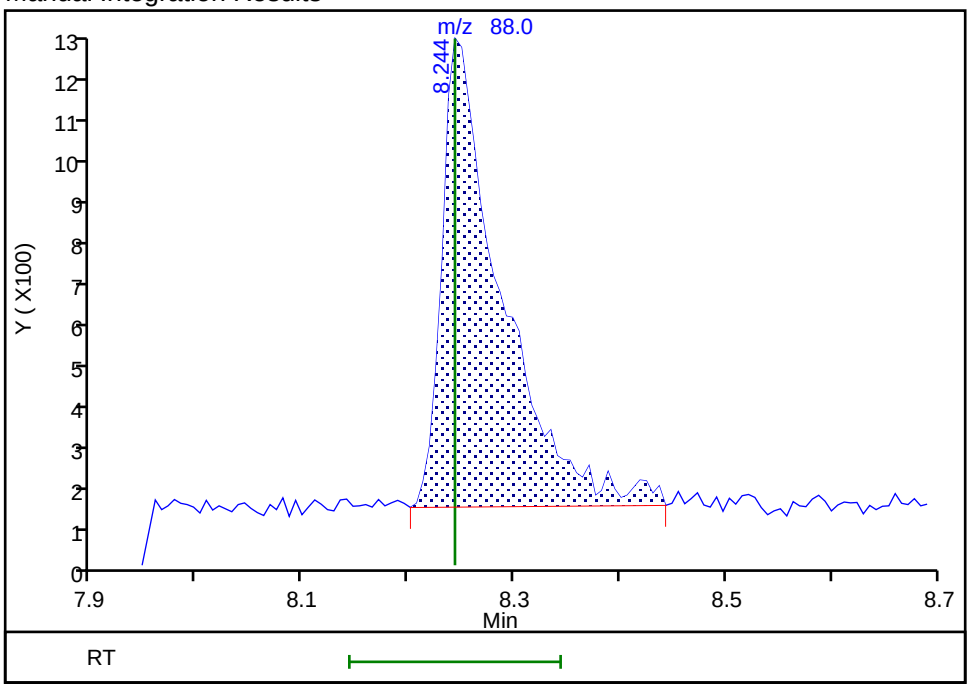
Processing Integration Results

RT: 8.24
Area: 4558
Amount: 5.120550
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4347
Amount: 4.958918
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:45:49

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201234.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	15-Jul-2021 17:06:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-006				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:08	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:06:29		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	585823	5.00	4.94	M
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3273885	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	112568	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.244	0.000	46	9089	10.0	10.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00448	Amount Added:	1.50	Units: uL
vmdioxanew_00257	Amount Added:	1.50	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

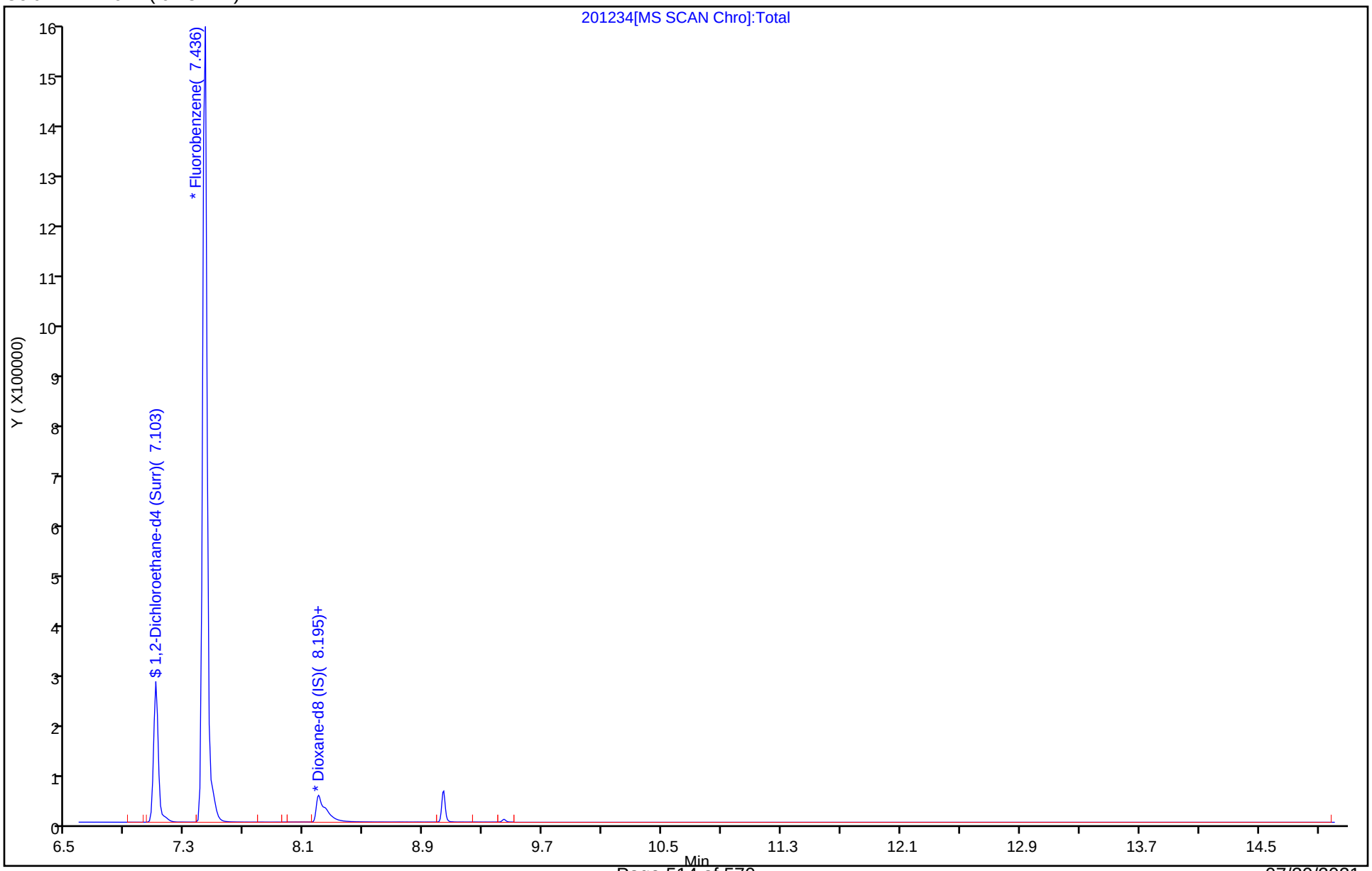
Report Date: 21-Jul-2021 20:00:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201234.D

Injection Date:	15-Jul-2021 17:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

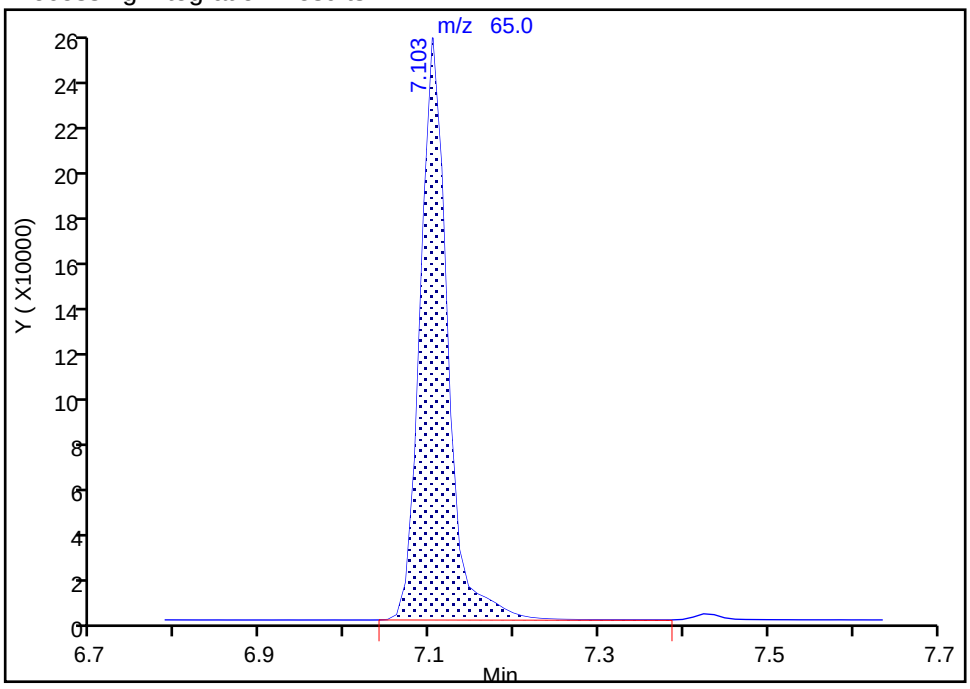
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201234.D
Injection Date: 15-Jul-2021 17:06:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

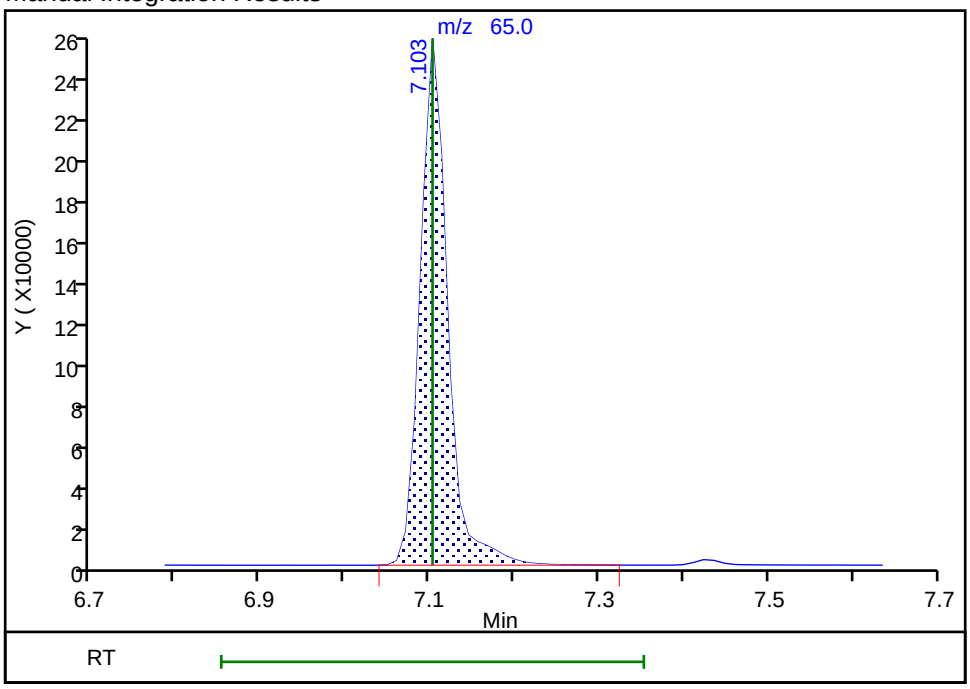
Processing Integration Results

RT: 7.10
Area: 601451
Amount: 5.053425
Amount Units: ug/l



Manual Integration Results

RT: 7.10
Area: 585823
Amount: 4.940653
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:47:23
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton

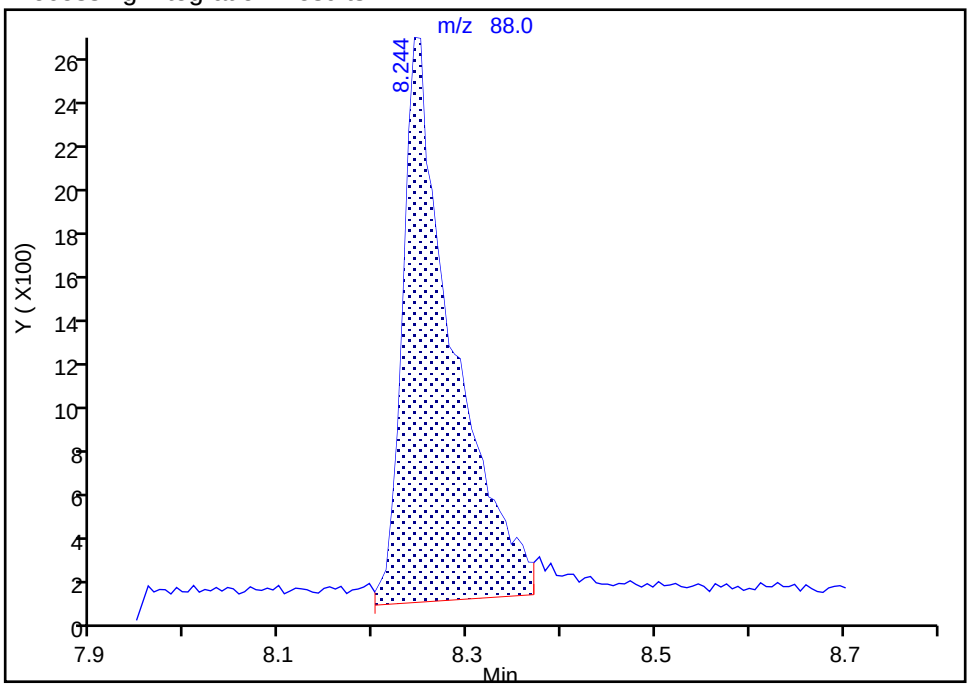
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201234.D
Injection Date: 15-Jul-2021 17:06:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

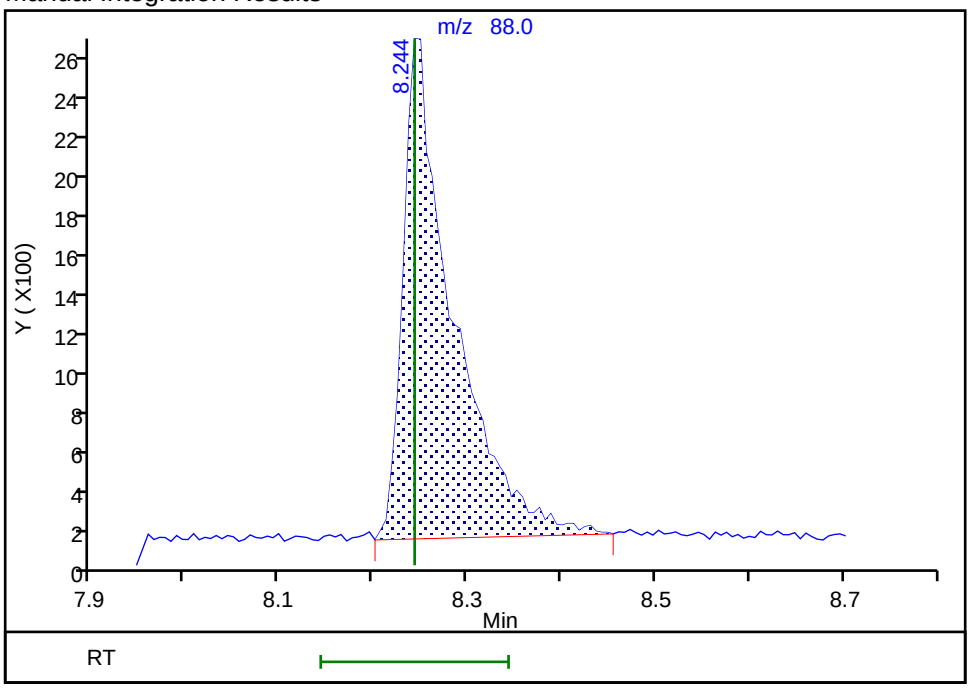
Processing Integration Results

RT: 8.24
Area: 9303
Amount: 10.202066
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 9089
Amount: 10.081368
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:46:54
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201235.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 15-Jul-2021 17:33:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111275-007
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Jul-2021 20:00:08 Calib Date: 15-Jul-2021 18:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: seymourc Date: 21-Jul-2021 19:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1203966	10.0	9.97	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3332707	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	122047	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.244	0.000	69	18717	20.0	19.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00257 Amount Added: 3.00 Units: uL
vm50ss_00448 Amount Added: 3.00 Units: uL
vm150IS20_00008 Amount Added: 1.00 Units: uL

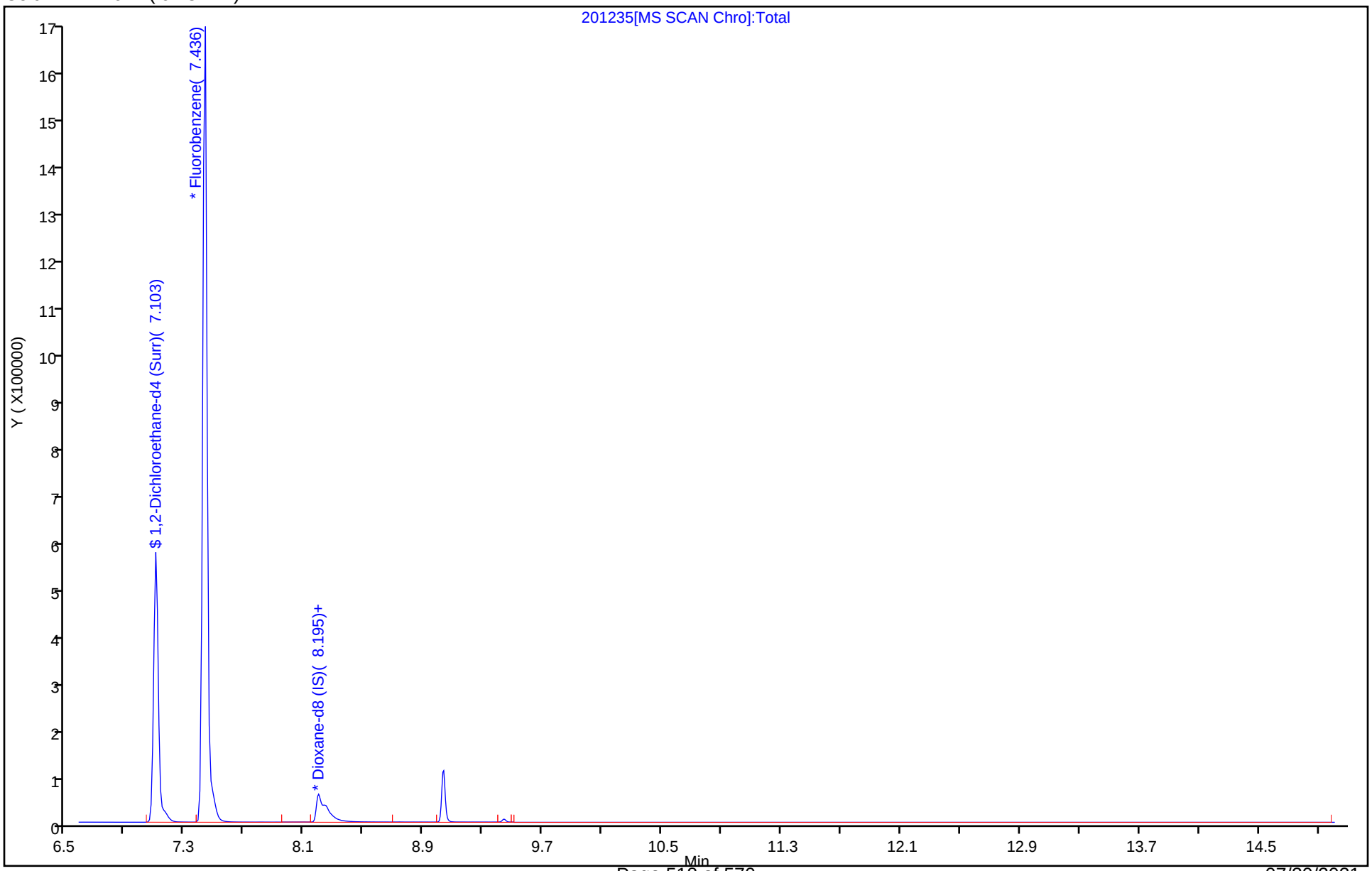
Report Date: 21-Jul-2021 20:00:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201235.D

Injection Date:	15-Jul-2021 17:33:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



07/30/2021

Eurofins TestAmerica, Canton

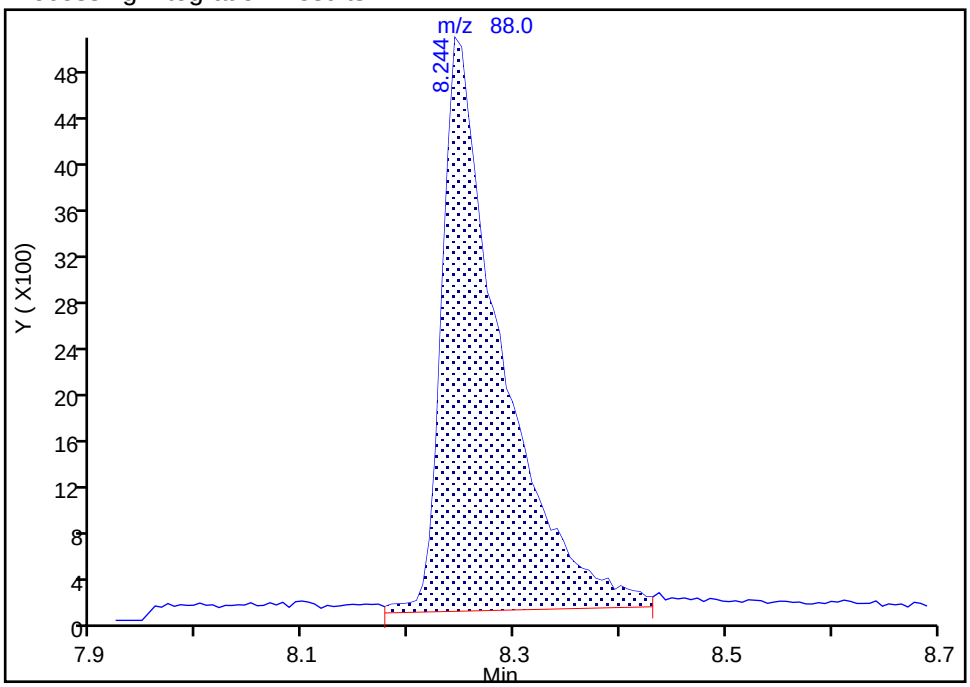
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201235.D
Injection Date: 15-Jul-2021 17:33:30 Instrument ID: A3UX20
Lims ID: ICIS
Client ID:
Operator ID: 434006 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

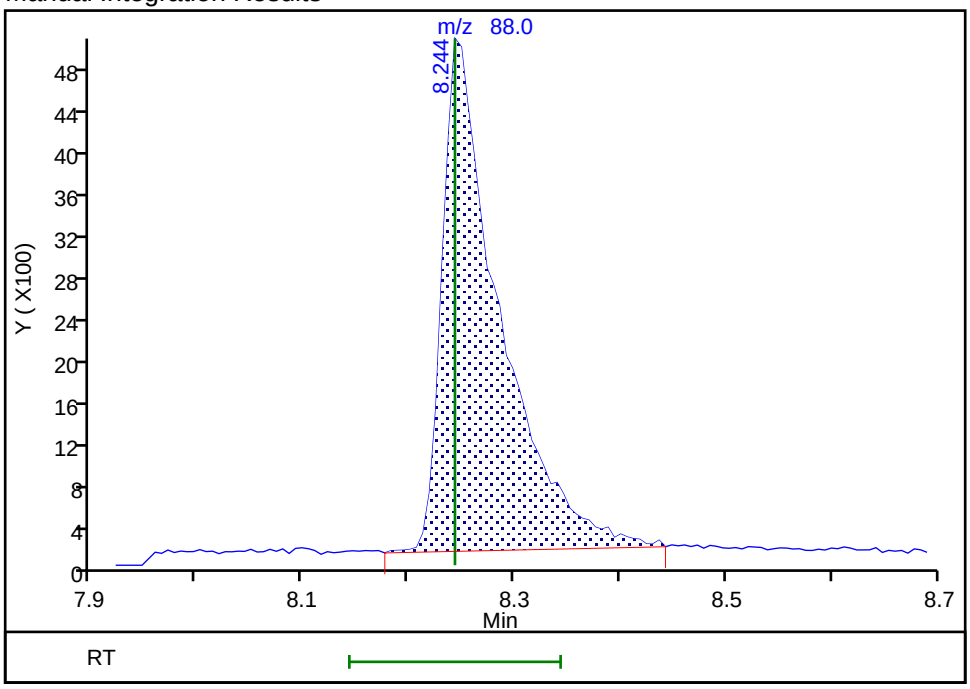
Processing Integration Results

RT: 8.24
Area: 19560
Amount: 19.924169
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 18717
Amount: 19.267260
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:47:50
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201236.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	15-Jul-2021 18:01:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:08	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:07:45		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	3018872	25.0	24.9	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3349308	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	110997	200.0	200.0	
8 1,4-Dioxane	88	8.250	8.244	0.006	49	44736	50.0	50.9	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_00448	Amount Added:	7.50	Units: uL
vmdioxanew_00257	Amount Added:	7.50	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

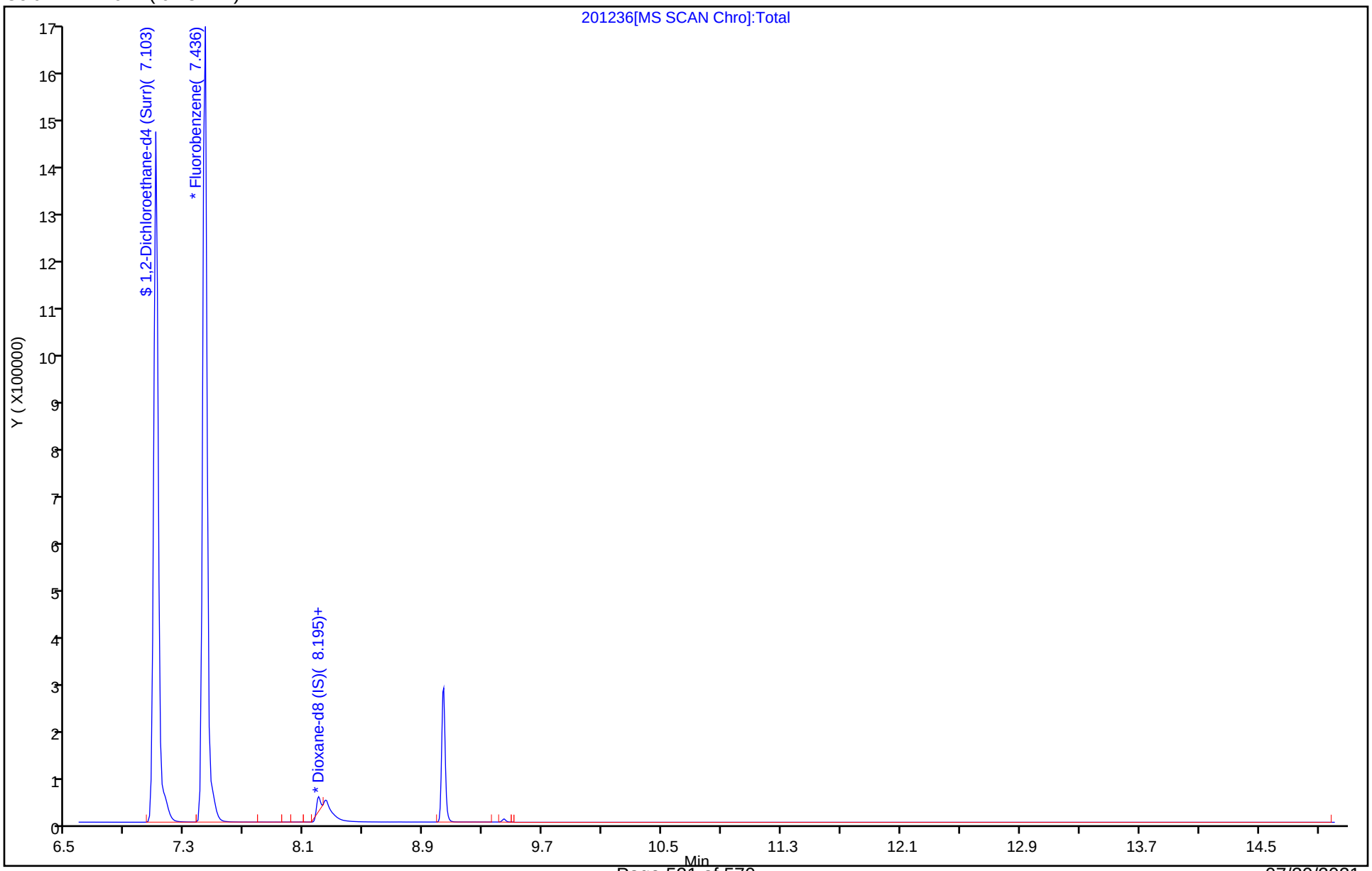
Report Date: 21-Jul-2021 20:00:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201236.D

Injection Date:	15-Jul-2021 18:01:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201237.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	15-Jul-2021 18:28:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:08:26		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	6351568	50.0	51.3	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3418495	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	135187	200.0	200.0	
8 1,4-Dioxane	88	8.250	8.244	0.006	49	102247	100.0	95.5	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00257	Amount Added:	15.00	Units: uL
vm50ss_00448	Amount Added:	15.00	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

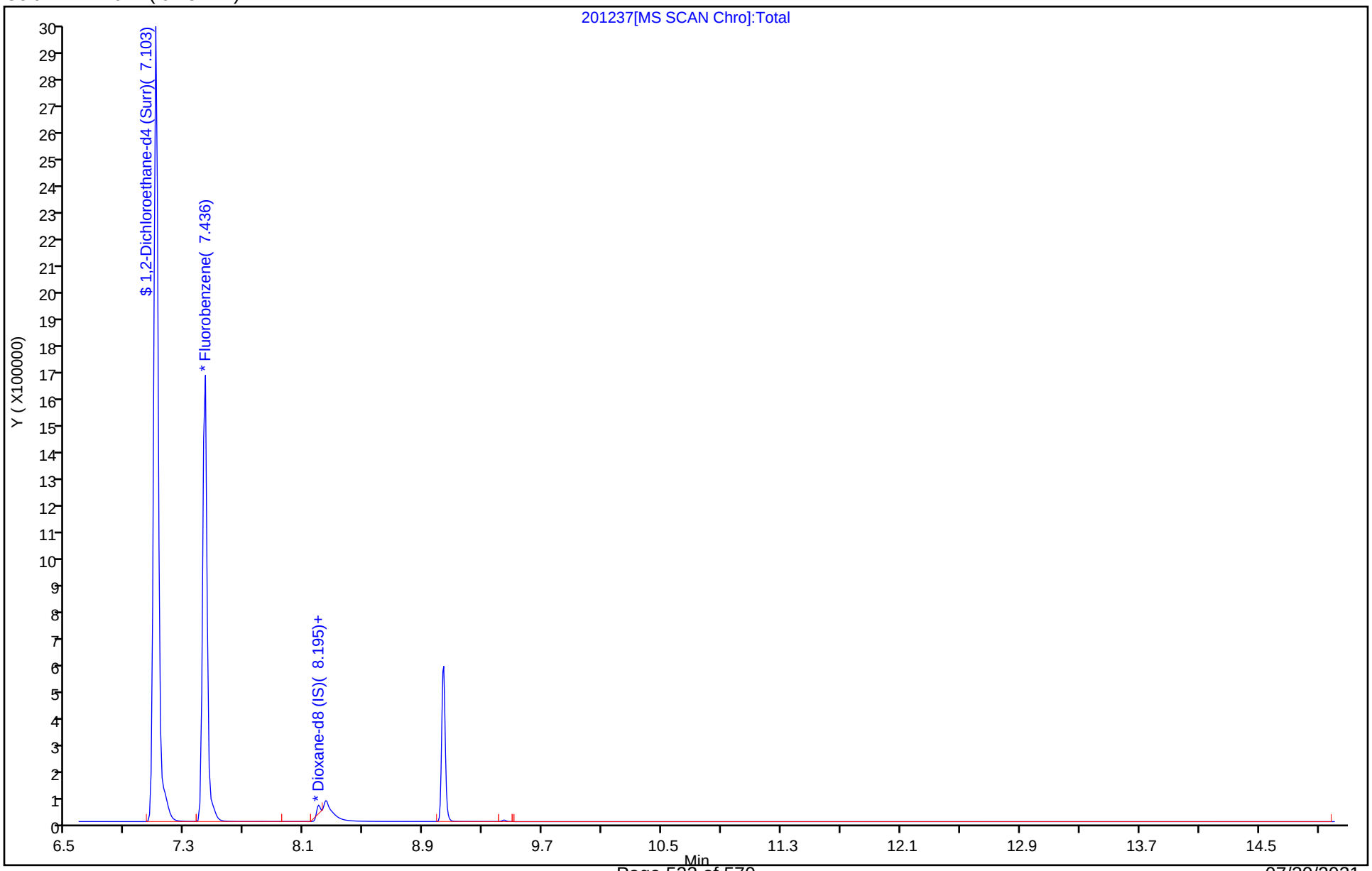
Report Date: 21-Jul-2021 20:00:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201237.D

Injection Date:	15-Jul-2021 18:28:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



07/30/2021

Eurofins TestAmerica, Canton

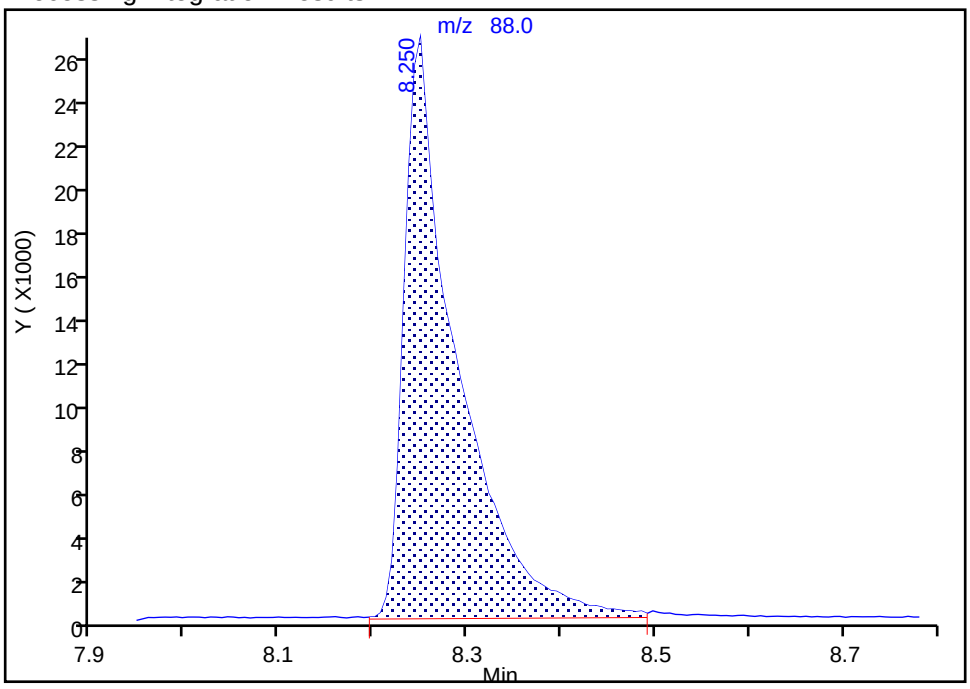
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201237.D
Injection Date: 15-Jul-2021 18:28:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

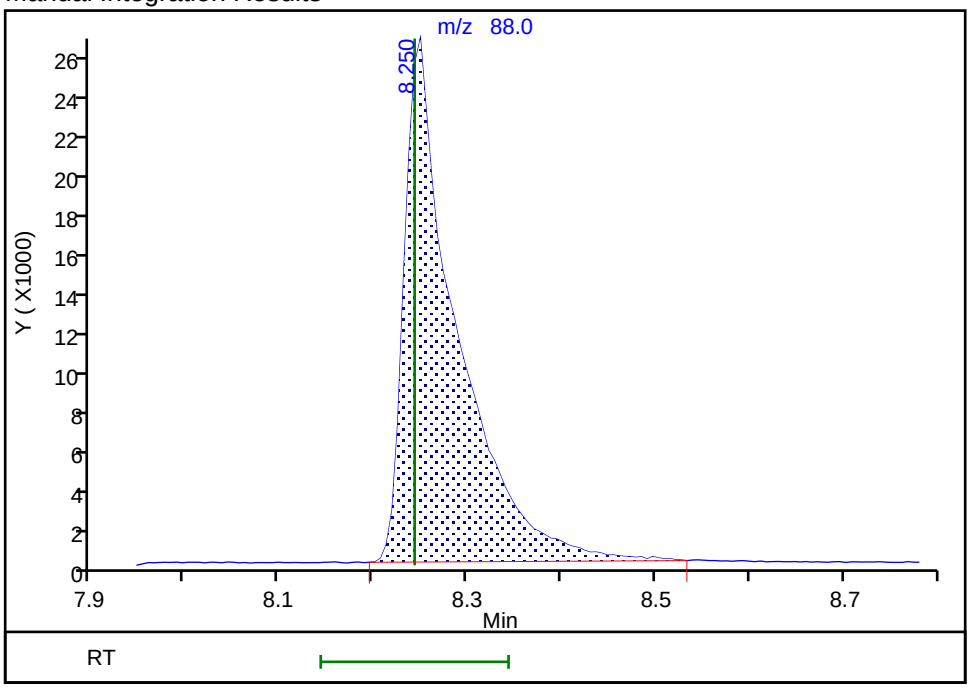
Processing Integration Results

RT: 8.25
Area: 103665
Amount: 95.977412
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 102247
Amount: 95.543109
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:48:46
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	15-Jul-2021 18:55:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:00:09	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:09:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	13398543	100.0	106.6	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3469620	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	116477	200.0	200.0	
8 1,4-Dioxane	88	8.243	8.244	-0.001	47	188173	200.0	204.2	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00448	Amount Added:	30.00	Units: uL
vmdioxanew_00257	Amount Added:	30.00	Units: uL
vm150IS20_00008	Amount Added:	1.00	Units: uL

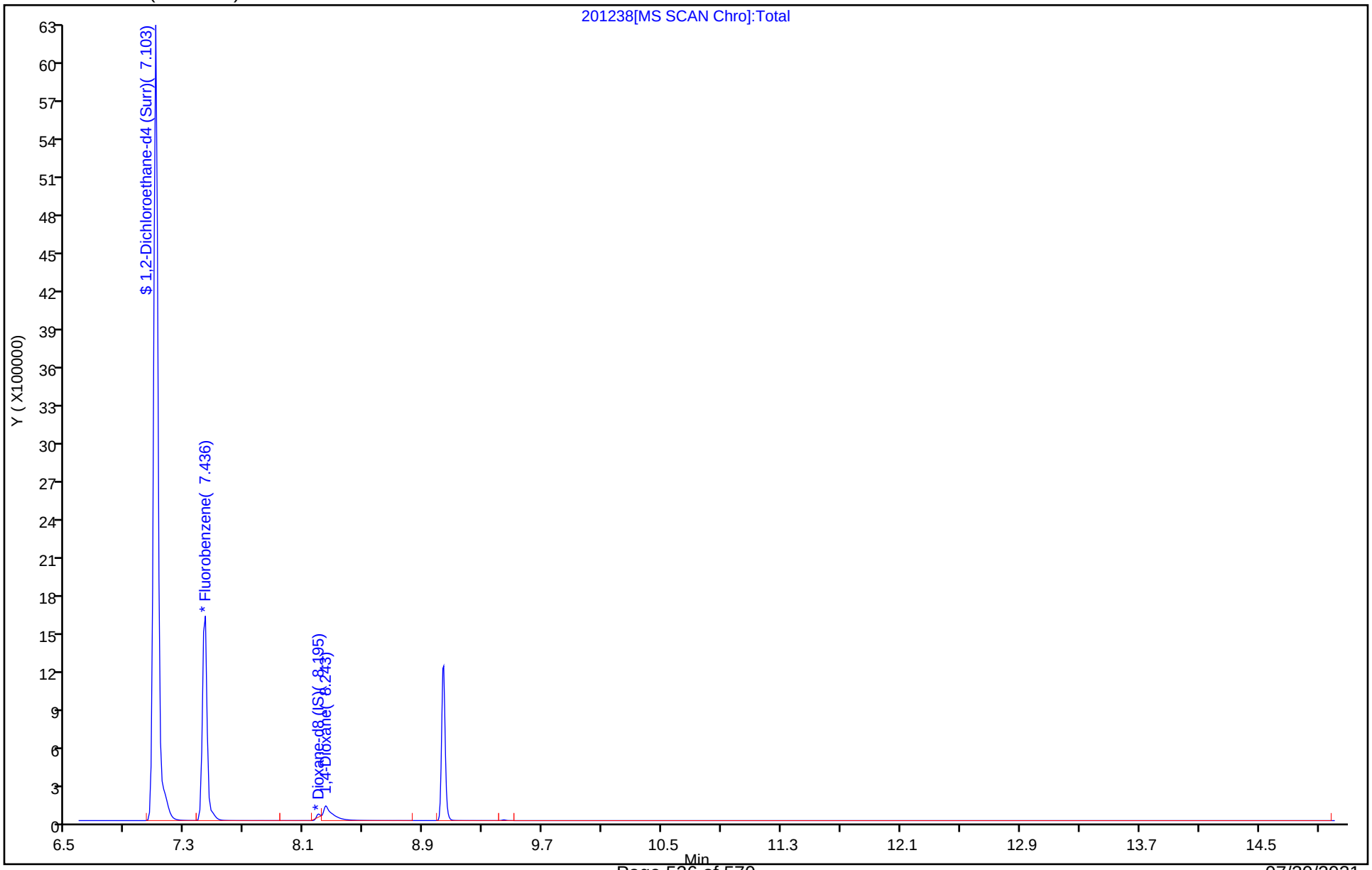
Report Date: 21-Jul-2021 20:00:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D

Injection Date:	15-Jul-2021 18:55:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

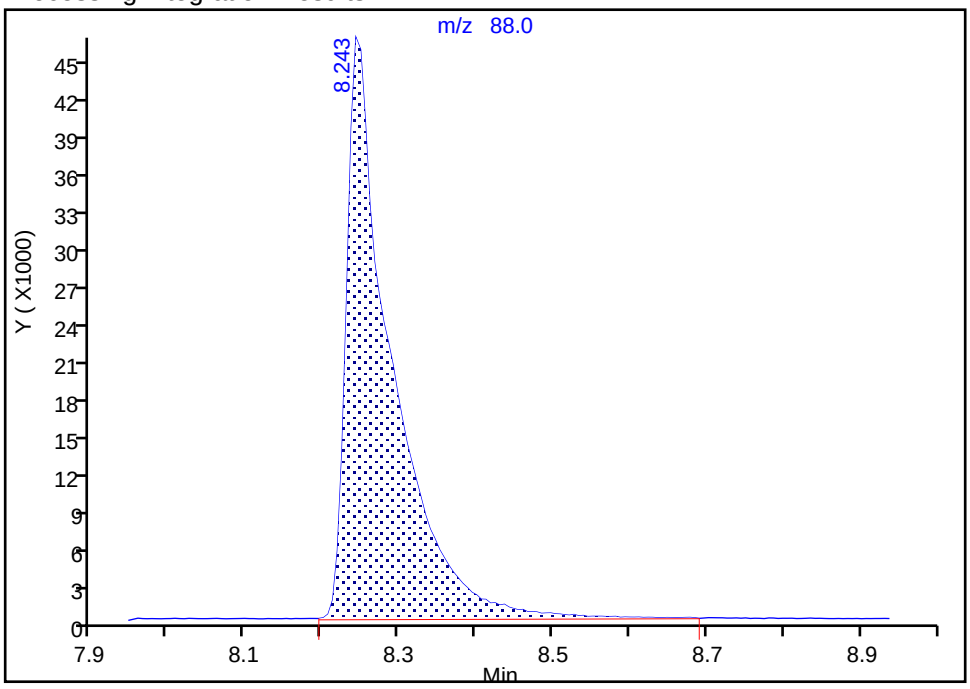
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Injection Date:	15-Jul-2021 18:55:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

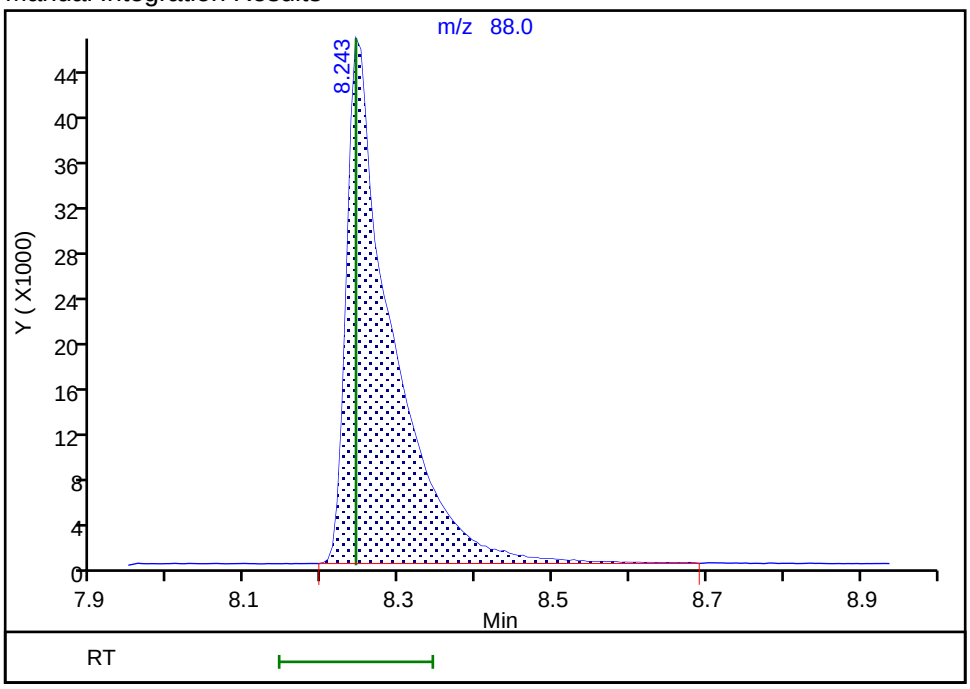
Processing Integration Results

RT: 8.24
Area: 190172
Amount: 205.1898
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 188173
Amount: 204.2306
Amount Units: ug/l



Reviewer: seymourc, 20-Jul-2021 15:49:15

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

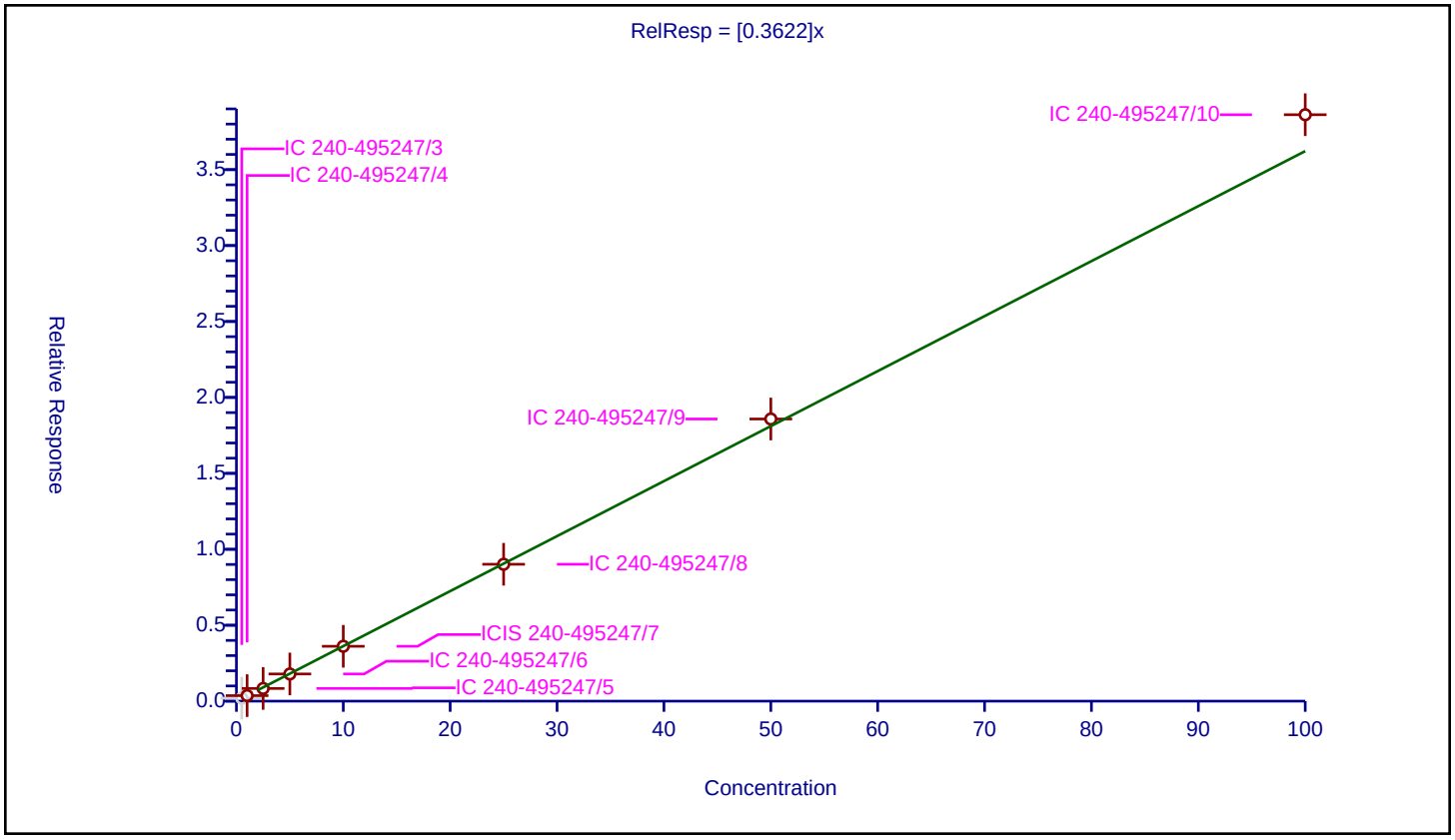
Curve Coefficients

Intercept:	0
Slope:	0.3622

Error Coefficients

Standard Error:	6200000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-495247/3	0.5	0.19789	10.0	3280920.0	0.395779	N
2	IC 240-495247/4	1.0	0.363703	10.0	3289302.0	0.363703	Y
3	IC 240-495247/5	2.5	0.835211	10.0	3214950.0	0.334084	Y
4	IC 240-495247/6	5.0	1.789382	10.0	3273885.0	0.357876	Y
5	ICIS 240-495247/7	10.0	3.612577	10.0	3332707.0	0.361258	Y
6	IC 240-495247/8	25.0	9.01342	10.0	3349308.0	0.360537	Y
7	IC 240-495247/9	50.0	18.580013	10.0	3418495.0	0.3716	Y
8	IC 240-495247/10	100.0	38.616745	10.0	3469620.0	0.386167	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

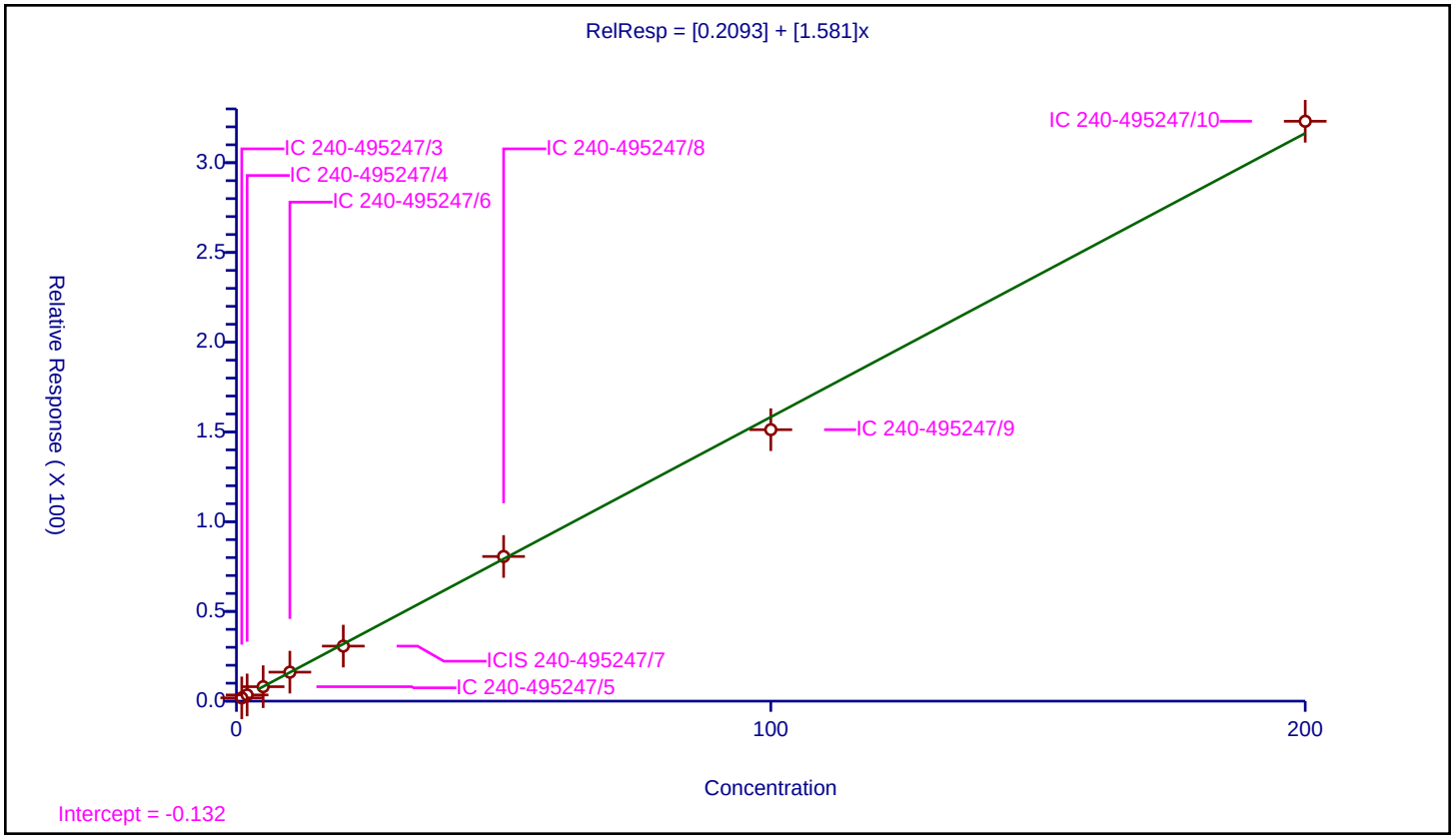
Curve Coefficients

Intercept:	0.2093
Slope:	1.581

Error Coefficients

Standard Error:	89600
Relative Standard Error:	2.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-495247/3	1.0	1.820019	200.0	126702.0	1.820019	Y
2	IC 240-495247/4	2.0	3.448491	200.0	127998.0	1.724246	Y
3	IC 240-495247/5	5.0	8.049627	200.0	108005.0	1.609925	Y
4	IC 240-495247/6	10.0	16.148461	200.0	112568.0	1.614846	Y
5	ICIS 240-495247/7	20.0	30.67179	200.0	122047.0	1.53359	Y
6	IC 240-495247/8	50.0	80.607584	200.0	110997.0	1.612152	Y
7	IC 240-495247/9	100.0	151.267504	200.0	135187.0	1.512675	Y
8	IC 240-495247/10	200.0	323.107566	200.0	116477.0	1.615538	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: ICV 240-495247/12 Calibration Date: 07/15/2021 19:50

Instrument ID: A3UX20 Calib Start Date: 07/15/2021 15:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/15/2021 18:55

Lab File ID: 201240.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		1.440		0.00890	0.0100	-11.0	
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2629		0.00697	0.0100	-30.3	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201240.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	15-Jul-2021 19:50:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111275-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	16-Jul-2021 17:17:47	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1637				
First Level Reviewer: seymourc		Date:	16-Jul-2021 17:10:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	897092	10.0	6.97	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3411735	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	115418	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.244	0.000	47	8308	10.0	8.90	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00268	Amount Added:	3.00	Units: uL	
vm150IS20_00008	Amount Added:	1.00	Units: uL	Run Reagent
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent

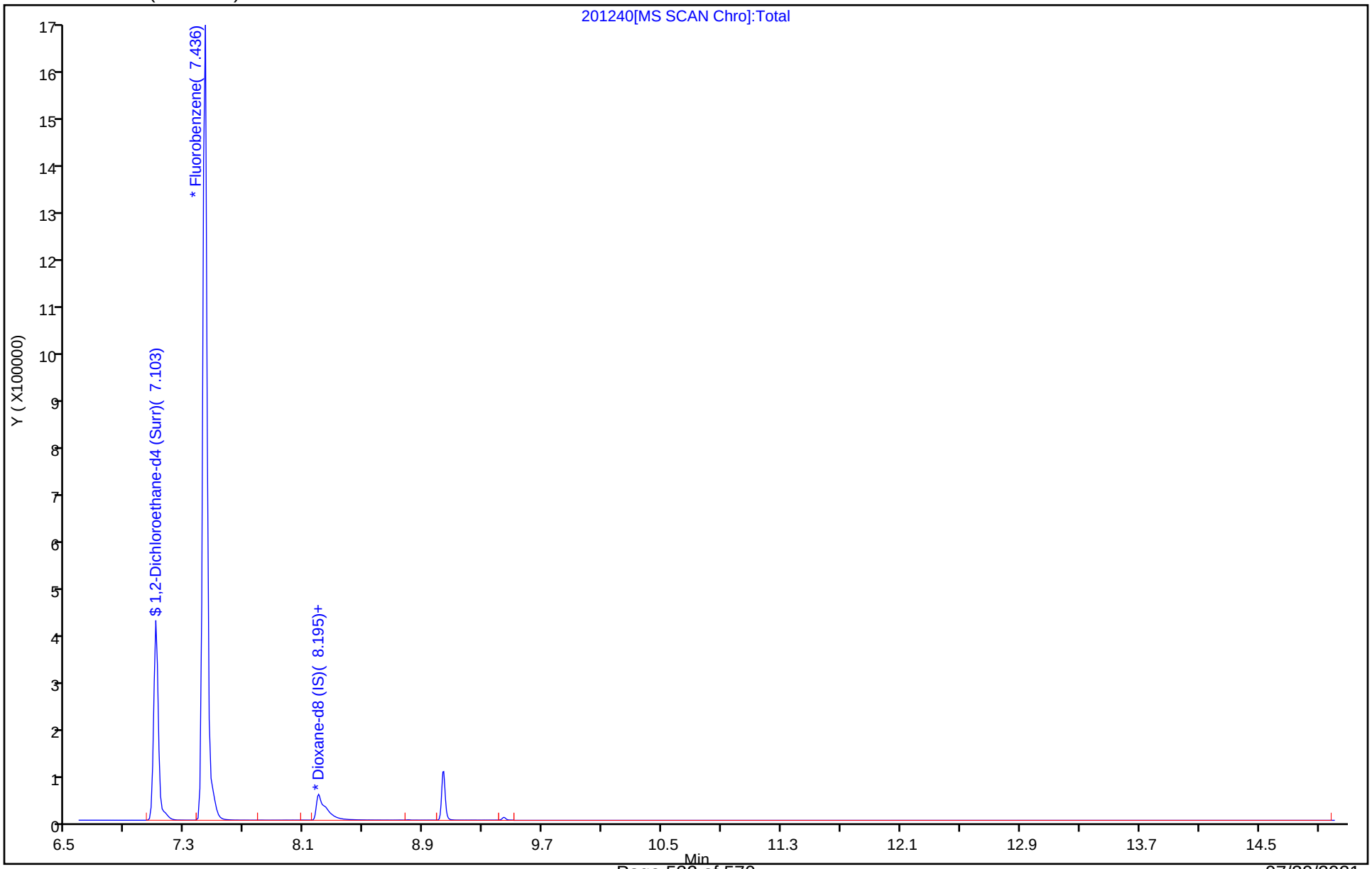
Report Date: 16-Jul-2021 17:18:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201240.D

Injection Date:	15-Jul-2021 19:50:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

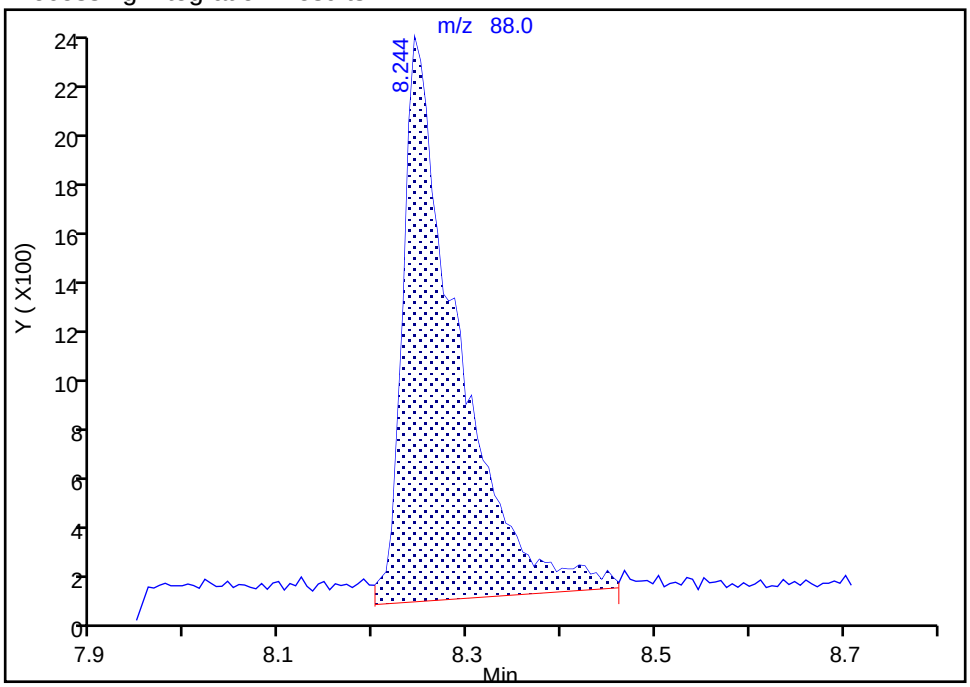
Data File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201240.D
Injection Date: 15-Jul-2021 19:50:30 Instrument ID: A3UX20
Lims ID: ICV
Client ID:
Operator ID: 434006 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

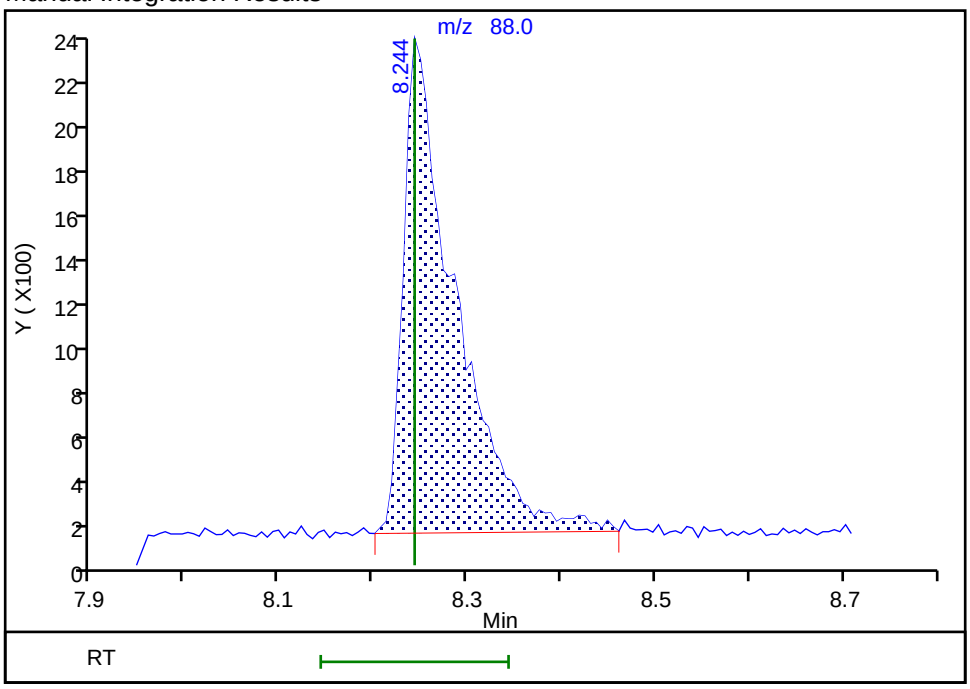
Processing Integration Results

RT: 8.24
Area: 9081
Amount: 9.737493
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8308
Amount: 8.895733
Amount Units: ug/l



Reviewer: seymourc, 16-Jul-2021 17:10:08
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Lab Sample ID: CCVIS 240-495864/3 Calibration Date: 07/20/2021 19:24

Instrument ID: A3UX20 Calib Start Date: 07/15/2021 15:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/15/2021 18:55

Lab File ID: 201254.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		1.558		0.0196	0.0200	-2.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3622	0.3012		0.00832	0.0100	-16.8	35.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201254.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Jul-2021 19:24:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111406-003
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Jul-2021 20:10:00 Calib Date: 15-Jul-2021 18:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1682

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1048951	10.0	8.32	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3482673	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	125646	200.0	200.0	
	8 1,4-Dioxane	88	8.243	8.243	0.000	47	19581	20.0	19.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00258	Amount Added:	3.00	Units: uL	
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

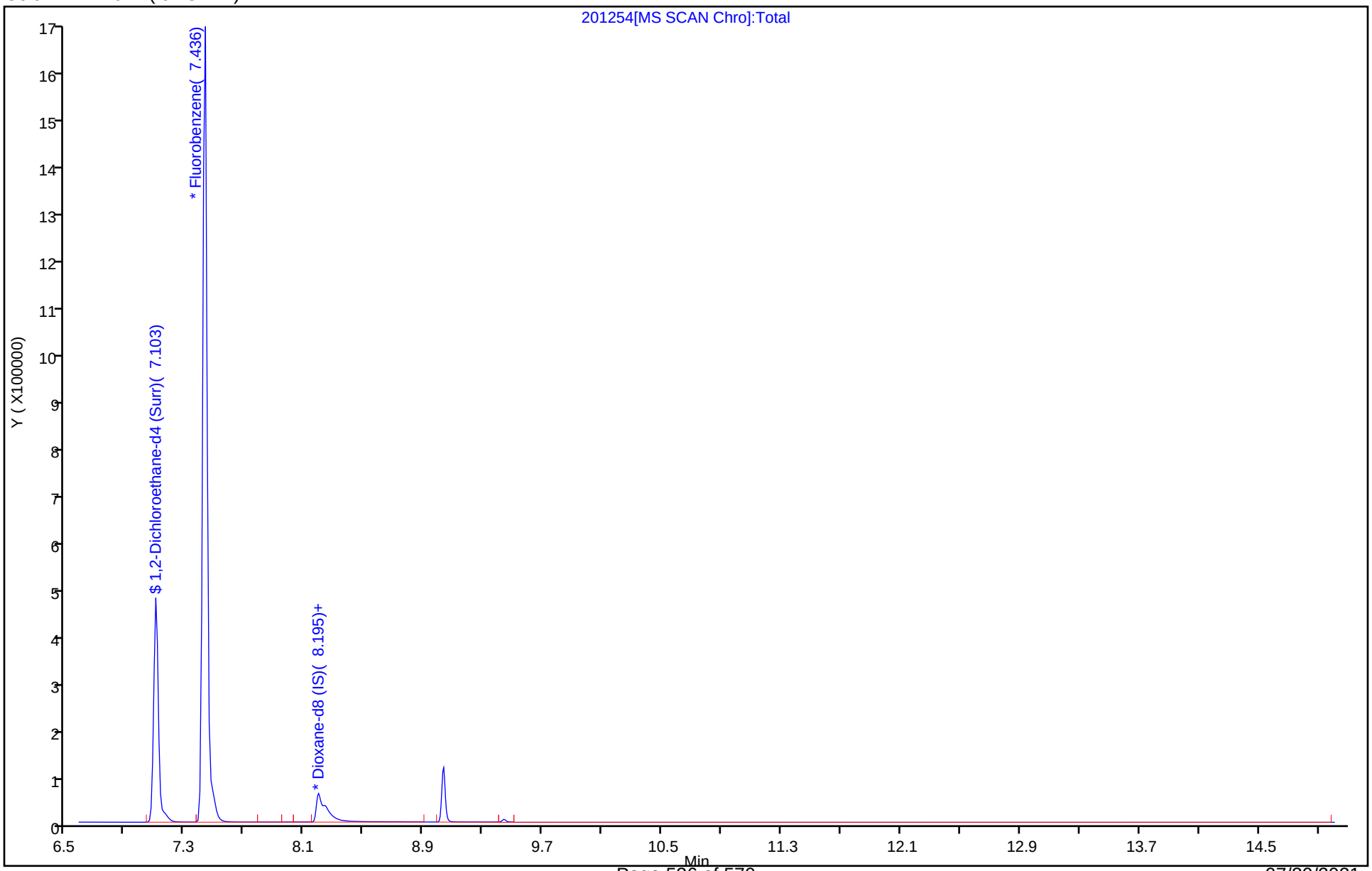
Report Date: 21-Jul-2021 20:10:00 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201254.D

Injection Date:	20-Jul-2021 19:24:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

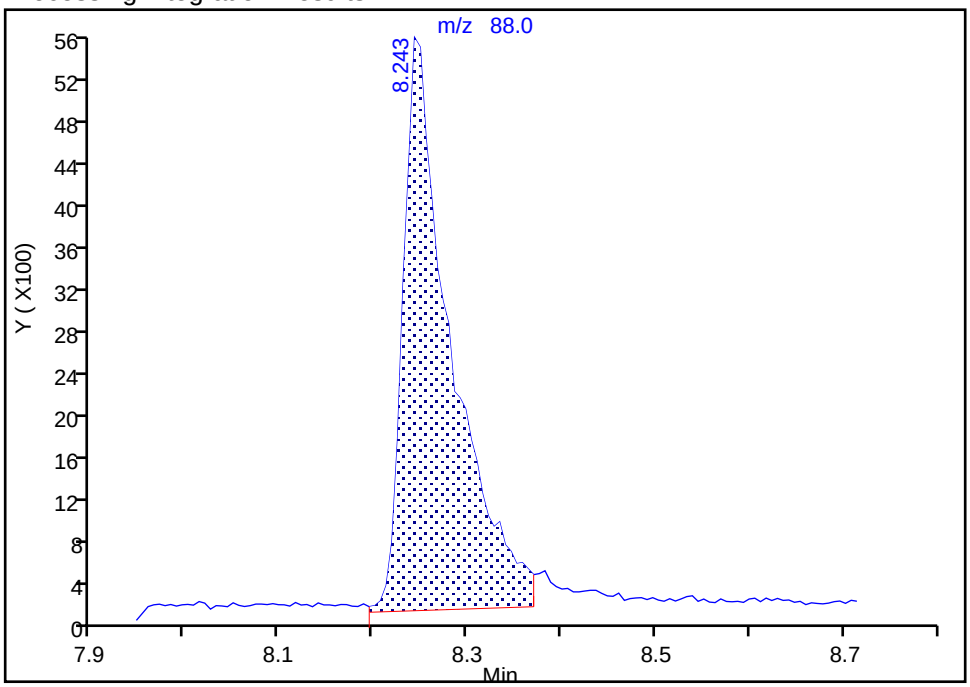
Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201254.D
Injection Date: 20-Jul-2021 19:24:30 Instrument ID: A3UX20
Lims ID: CCVIS
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

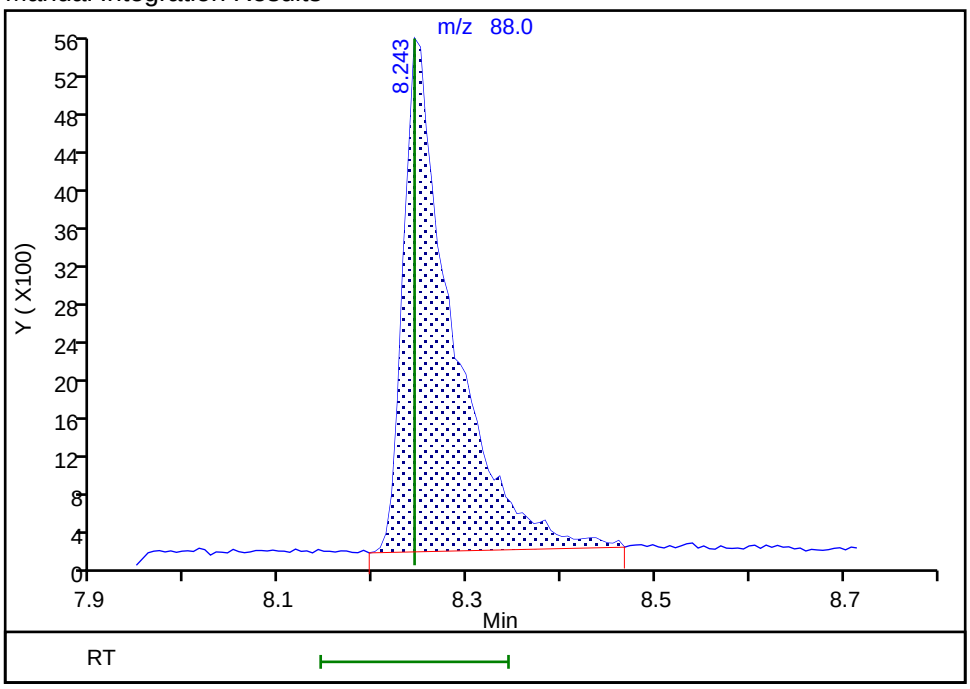
Processing Integration Results

RT: 8.24
Area: 19396
Amount: 19.395183
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 19581
Amount: 19.581438
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:09:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\BFB20088.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Jul-2021 18:39:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0111406-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Jul-2021 20:05:21 Calib Date: 15-Jul-2021 18:55:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1682

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.927	3.927	0.000	0	2765372	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

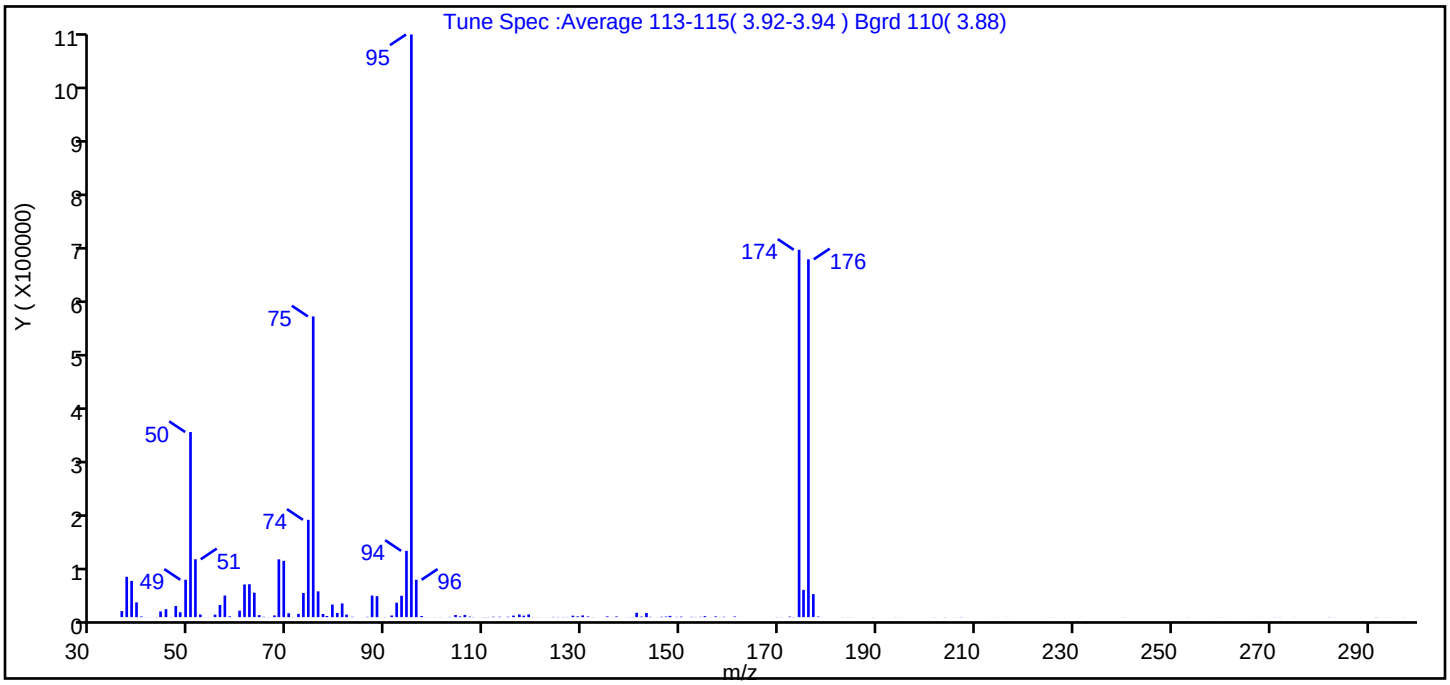
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\BFB20088.D
Injection Date: 20-Jul-2021 18:39:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	31.8
75	30 to 60% of m/z 95	51.6
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	63.1
175	5 to 9% of m/z 174	4.7 (7.4)
176	Greater than 95% but less than 101% of m/z 174	61.4 (97.4)
177	5 to 9% of m/z 176	4.0 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\BFB20088.D\8260SIM_20.rslt\spectra.d
Injection Date: 20-Jul-2021 18:39:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 190

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11338	86.00	577	137.00	1289	206.00	81
37.00	75672	87.00	40528	139.00	206	206.00	109
38.00	68024	88.00	39320	140.00	277	207.00	376
39.00	27696	89.00	68	141.00	8155	208.00	98
40.00	1190	90.00	303	142.00	1004	210.00	53
41.00	222	91.00	3095	143.00	7785	213.00	134
42.00	90	92.00	27000	144.00	530	214.00	81
43.00	329	93.00	40072	145.00	153	216.00	116
44.00	10735	94.00	124360	146.00	743	217.00	54
45.00	14926	95.00	1093120	147.00	1072	218.00	51
46.00	367	96.00	70144	148.00	2397	223.00	55
47.00	20848	97.00	2241	149.00	475	225.00	121
48.00	9212	98.00	165	150.00	912	226.00	114
49.00	70136	100.00	149	152.00	553	228.00	69
50.00	347264	101.00	198	153.00	376	229.00	53
51.00	108568	102.00	19	154.00	542	231.00	52
52.00	4935	103.00	449	155.00	1865	232.00	115
53.00	157	104.00	3987	156.00	147	239.00	69
54.00	168	105.00	1348	157.00	1316	240.00	198
55.00	4702	106.00	4192	158.00	247	242.00	65
56.00	22832	107.00	917	159.00	735	246.00	21
57.00	40568	108.00	331	161.00	1181	250.00	94
58.00	1456	109.00	126	162.00	83	251.00	59
60.00	12092	110.00	282	170.00	326	252.00	82
61.00	61232	111.00	298	171.00	156	253.00	150
62.00	61672	112.00	796	171.00	32	254.00	59
63.00	45856	113.00	741	172.00	1023	259.00	132
64.00	3767	115.00	730	173.00	303	260.00	160
65.00	694	116.00	2905	174.00	689216	262.00	83
66.00	226	117.00	4892	175.00	51144	263.00	61
67.00	3149	118.00	2806	176.00	671296	265.00	12
68.00	108432	119.00	5059	177.00	43232	267.00	103
69.00	105640	120.00	228	178.00	1002	268.00	89

Report Date: 21-Jul-2021 20:05:21 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\BFB20088.D\8260SIM_20.rslt\spectra.d
Injection Date: 20-Jul-2021 18:39:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 190

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	7297	121.00	190	179.00	188	271.00	196
71.00	148	122.00	56	183.00	99	272.00	236
72.00	6141	123.00	183	184.00	225	275.00	127
73.00	45264	124.00	457	185.00	124	280.00	60
74.00	182592	125.00	350	187.00	73	282.00	322
75.00	564160	126.00	383	189.00	193	283.00	126
76.00	48368	127.00	342	190.00	71	284.00	34
77.00	5903	128.00	2728	192.00	31	292.00	118
78.00	2132	129.00	1410	194.00	177	292.00	191
79.00	23576	130.00	3274	195.00	113	294.00	121
80.00	7866	131.00	1195	197.00	80	294.00	51
81.00	25752	132.00	273	201.00	184	295.00	92
82.00	4815	134.00	84	202.00	155	298.00	143
83.00	600	135.00	1373	204.00	76		
85.00	99	136.00	86	204.00	218		

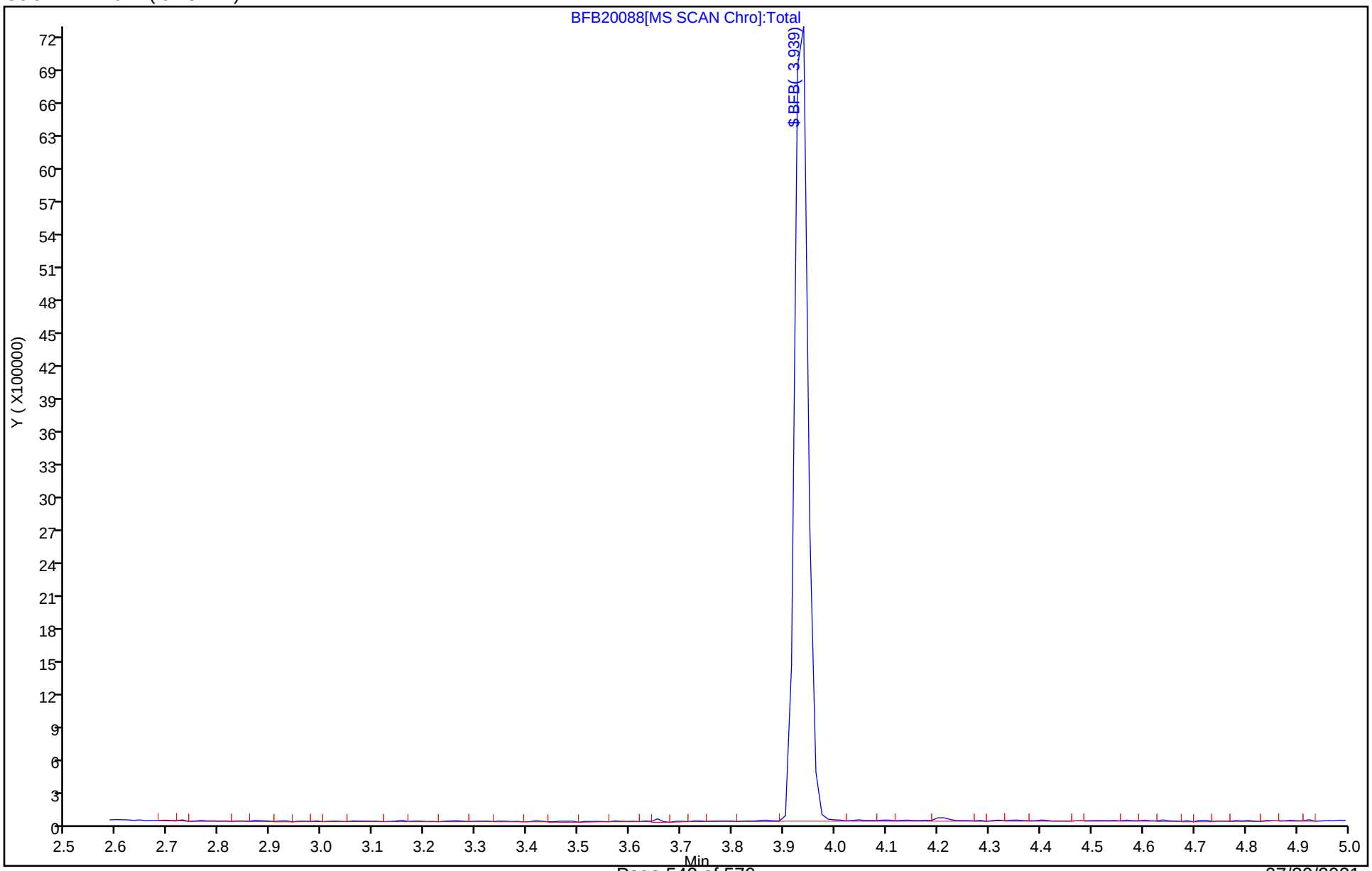
Report Date: 21-Jul-2021 20:05:21 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\BFB20088.D

Injection Date:	20-Jul-2021 18:39:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-495864/5

Matrix: Water Lab File ID: 201256.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 20:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201256.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	20-Jul-2021 20:19:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:16	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1000167	10.0	8.03	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3439900	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	111860	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

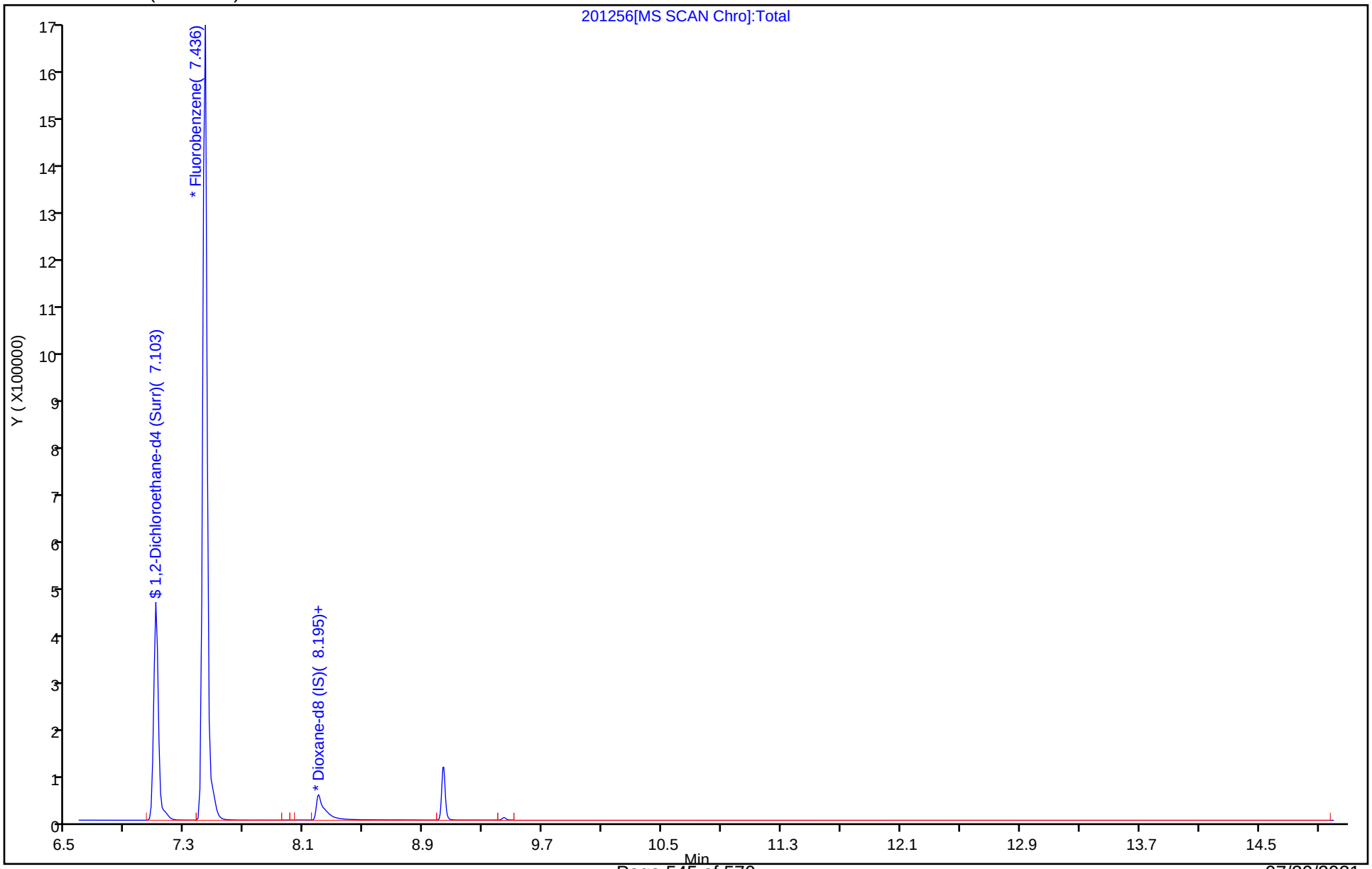
Report Date: 21-Jul-2021 20:10:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201256.D

Injection Date:	20-Jul-2021 20:19:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201256.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	20-Jul-2021 20:19:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:16	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.03	80.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-495864/4

Matrix: Water Lab File ID: 201255.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 07/20/2021 19:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	8.35		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201255.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Jul-2021 19:52:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111406-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Jul-2021 20:10:16 Calib Date: 15-Jul-2021 18:55:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1682

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1048727	10.0	8.27	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3500992	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	92	122945	200.0	200.0	
	8 1,4-Dioxane	88	8.244	8.243	0.001	47	8243	10.0	8.35	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00269	Amount Added:	3.00	Units: uL	
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

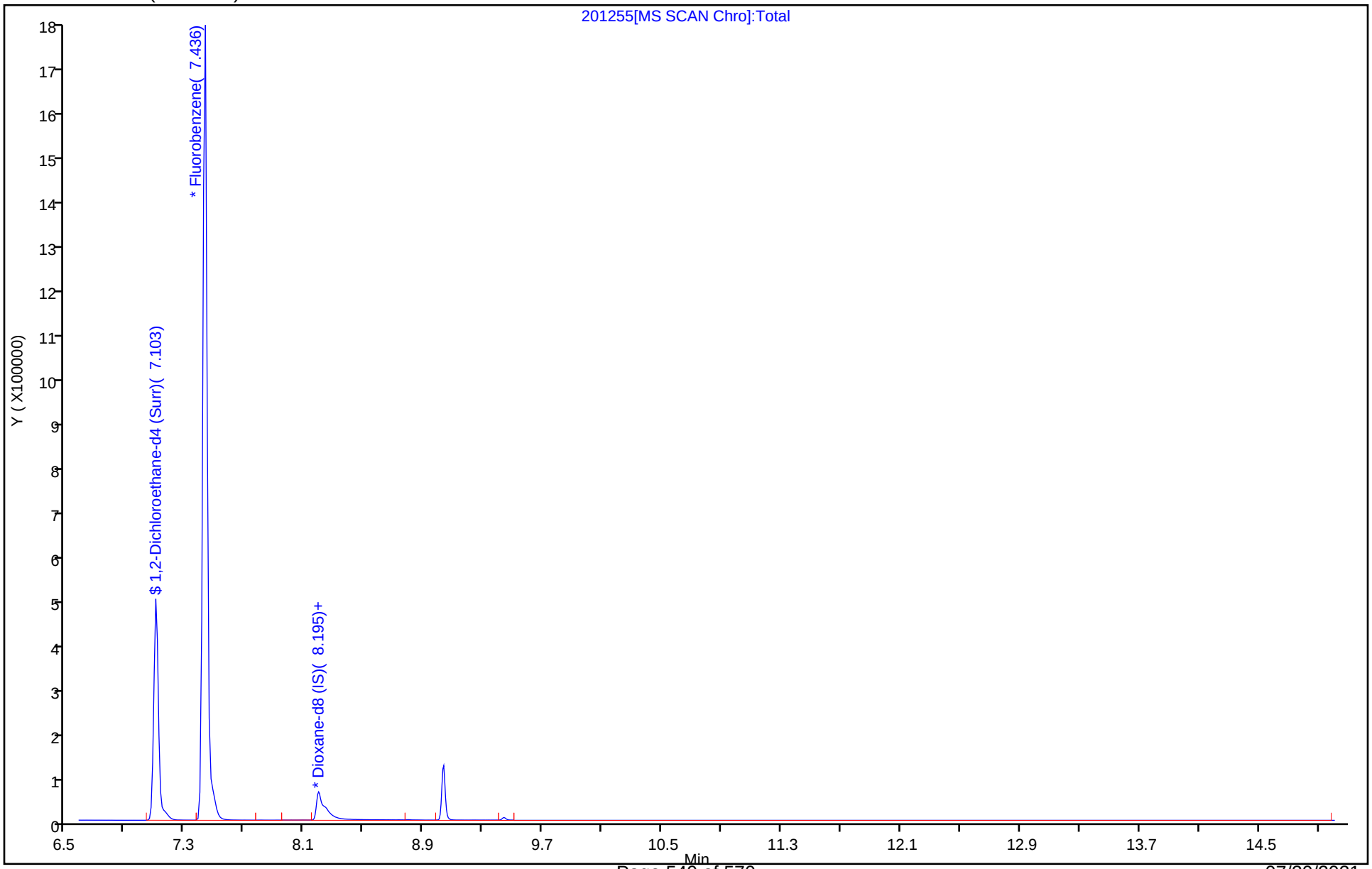
Report Date: 21-Jul-2021 20:10:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201255.D

Injection Date:	20-Jul-2021 19:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



07/30/2021

Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201255.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-Jul-2021 19:52:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:10:16	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.27	82.71

Eurofins TestAmerica, Canton

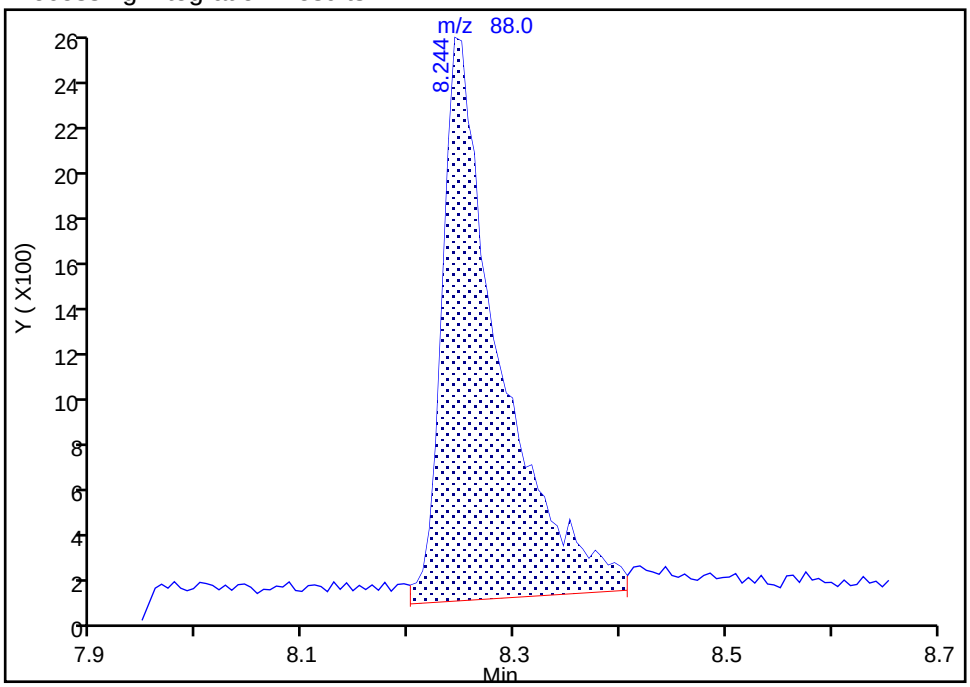
Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201255.D
Injection Date: 20-Jul-2021 19:52:30 Instrument ID: A3UX20
Lims ID: LCS
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

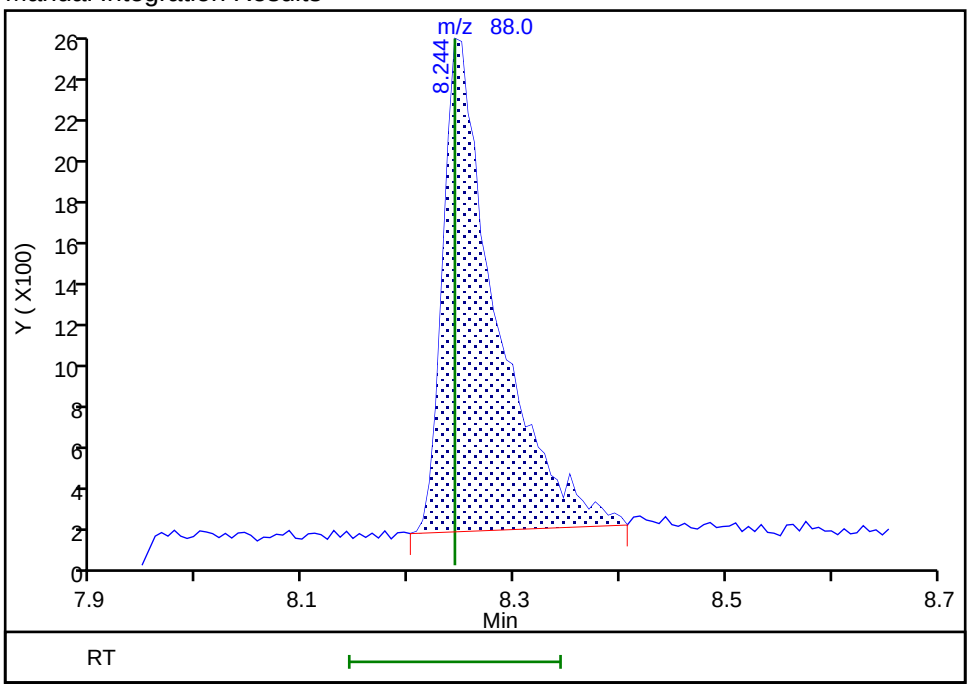
Processing Integration Results

RT: 8.24
Area: 9144
Amount: 9.275878
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8243
Amount: 8.348837
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:10:11
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: 500-202418-B-11 MS

Matrix: Water Lab File ID: 201272.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 03:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	180		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201272.D				
Lims ID:	500-202418-B-11 MS				
Client ID:	GW-071521-DS-09				
Sample Type:	MS				
Inject. Date:	21-Jul-2021 03:38:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:13:20	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1121204	10.0	7.89	
* 7 Fluorobenzene	96	7.423	7.436	-0.013	100	3924785	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	93	131537	200.0	200.0	
8 1,4-Dioxane	88	8.243	8.243	0.000	48	187401	10.0	180.1	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vmdiox_spike_00269	Amount Added:	3.00	Units: uL	
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

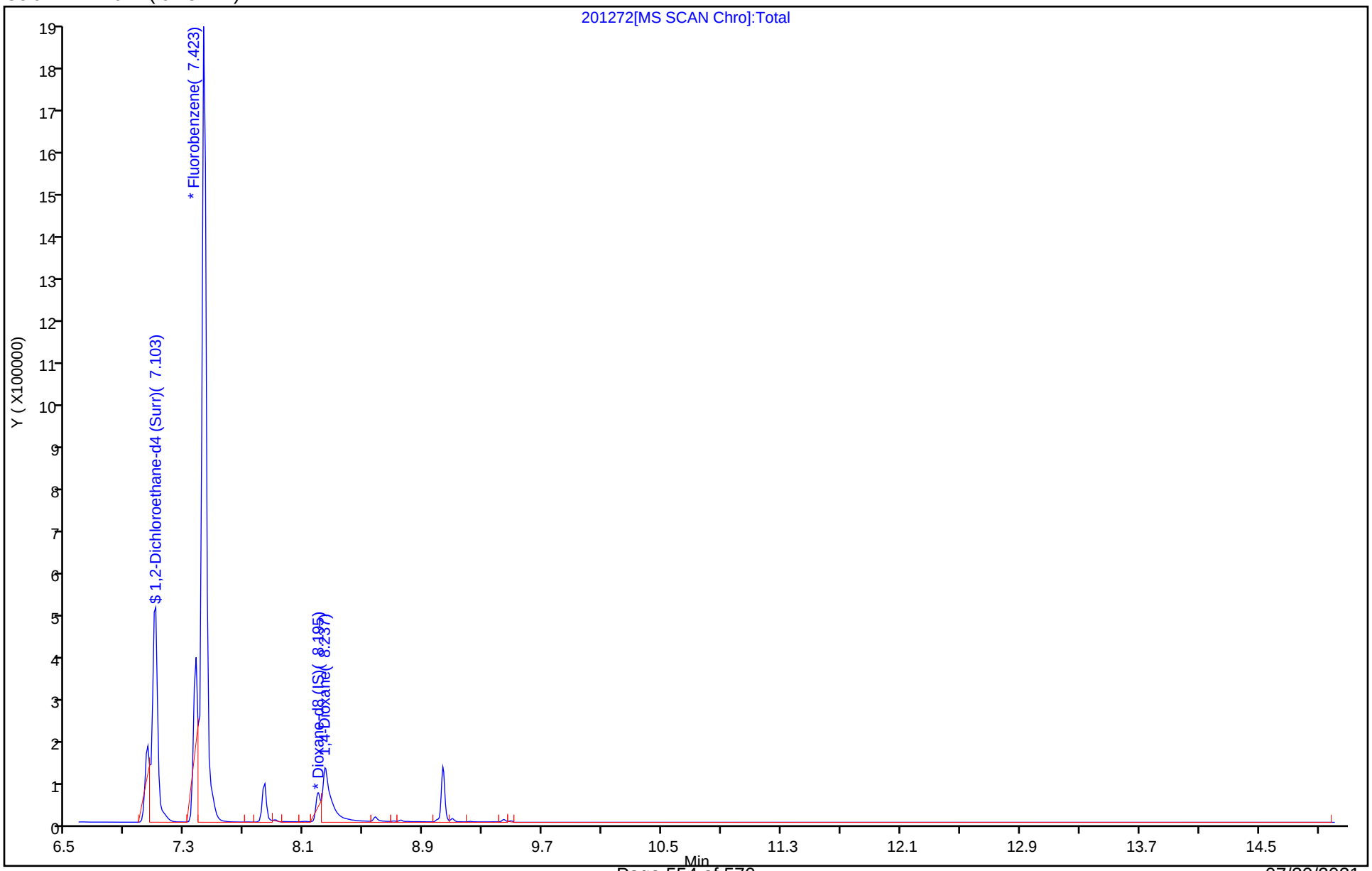
Report Date: 21-Jul-2021 20:13:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201272.D

Injection Date:	21-Jul-2021 03:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	500-202418-B-11 MS			Worklist Smp#:	21
Client ID:	GW-071521-DS-09				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



07/30/2021

Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201272.D				
Lims ID:	500-202418-B-11 MS				
Client ID:	GW-071521-DS-09				
Sample Type:	MS				
Inject. Date:	21-Jul-2021 03:38:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:13:20	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.89	78.88

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

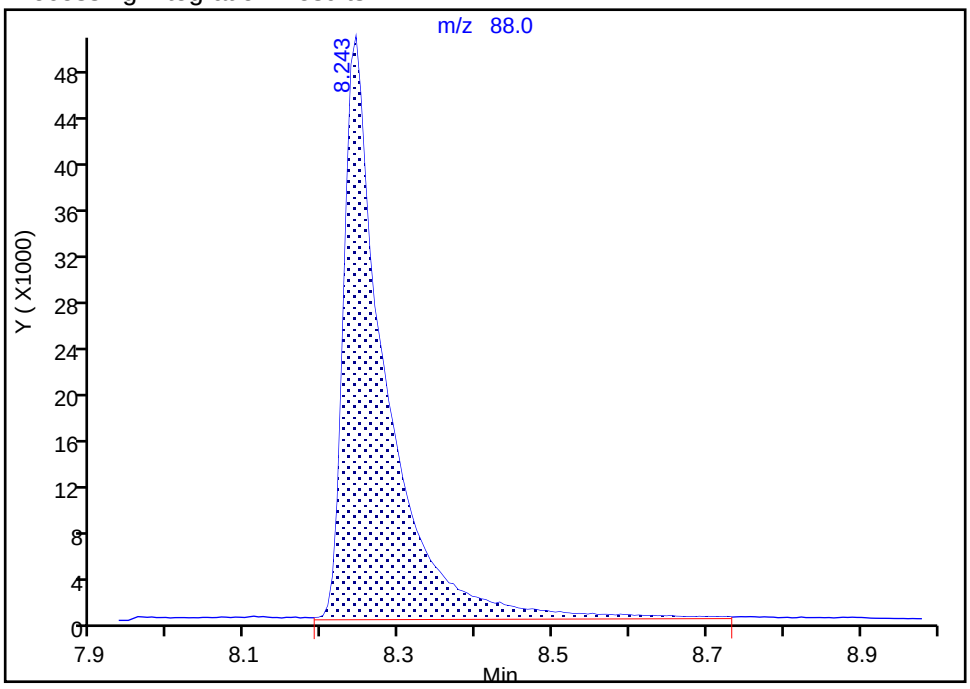
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201272.D				
Injection Date:	21-Jul-2021 03:38:30	Instrument ID:	A3UX20		
Lims ID:	500-202418-B-11 MS				
Client ID:	GW-071521-DS-09				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

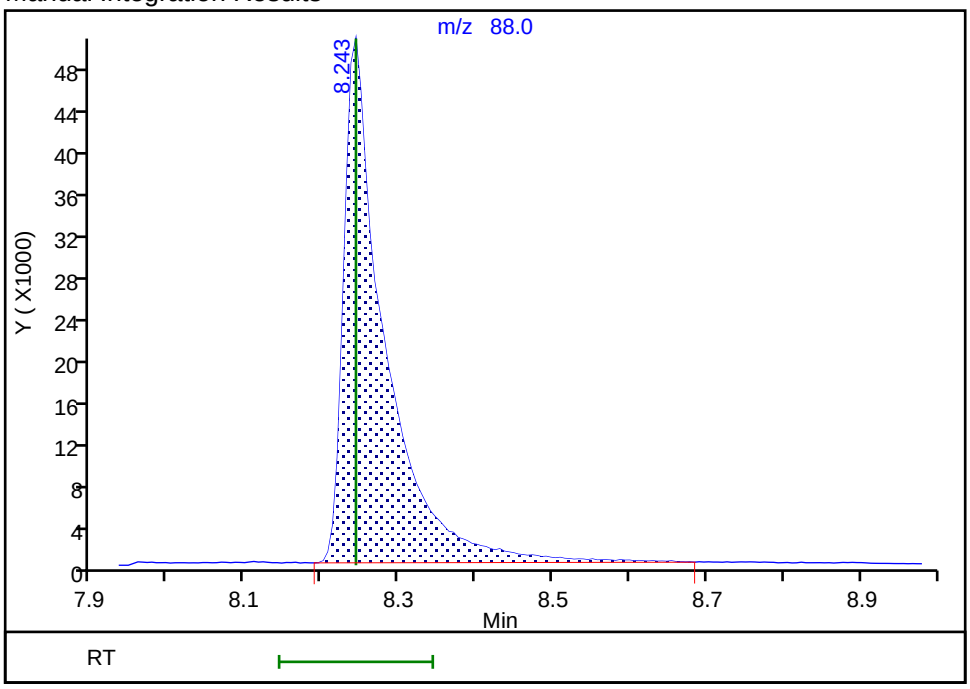
Processing Integration Results

RT: 8.24
Area: 192810
Amount: 185.2920
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 187401
Amount: 180.0901
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:13:12

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Client Sample ID: Lab Sample ID: 500-202418-C-11 MSD

Matrix: Water Lab File ID: 201273.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 07/21/2021 04:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 495864 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	185		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		70-133

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201273.D				
Lims ID:	500-202418-C-11 MSD				
Client ID:	GW-071521-DS-09				
Sample Type:	MSD				
Inject. Date:	21-Jul-2021 04:05:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:14:03	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1090360	10.0	7.77	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	3876035	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.195	8.195	0.000	94	118758	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.243	0.001	48	174253	10.0	185.5	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00269	Amount Added:	3.00	Units: uL	
vm150SS20_00002	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00188	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00006	Amount Added:	1.00	Units: uL	Run Reagent

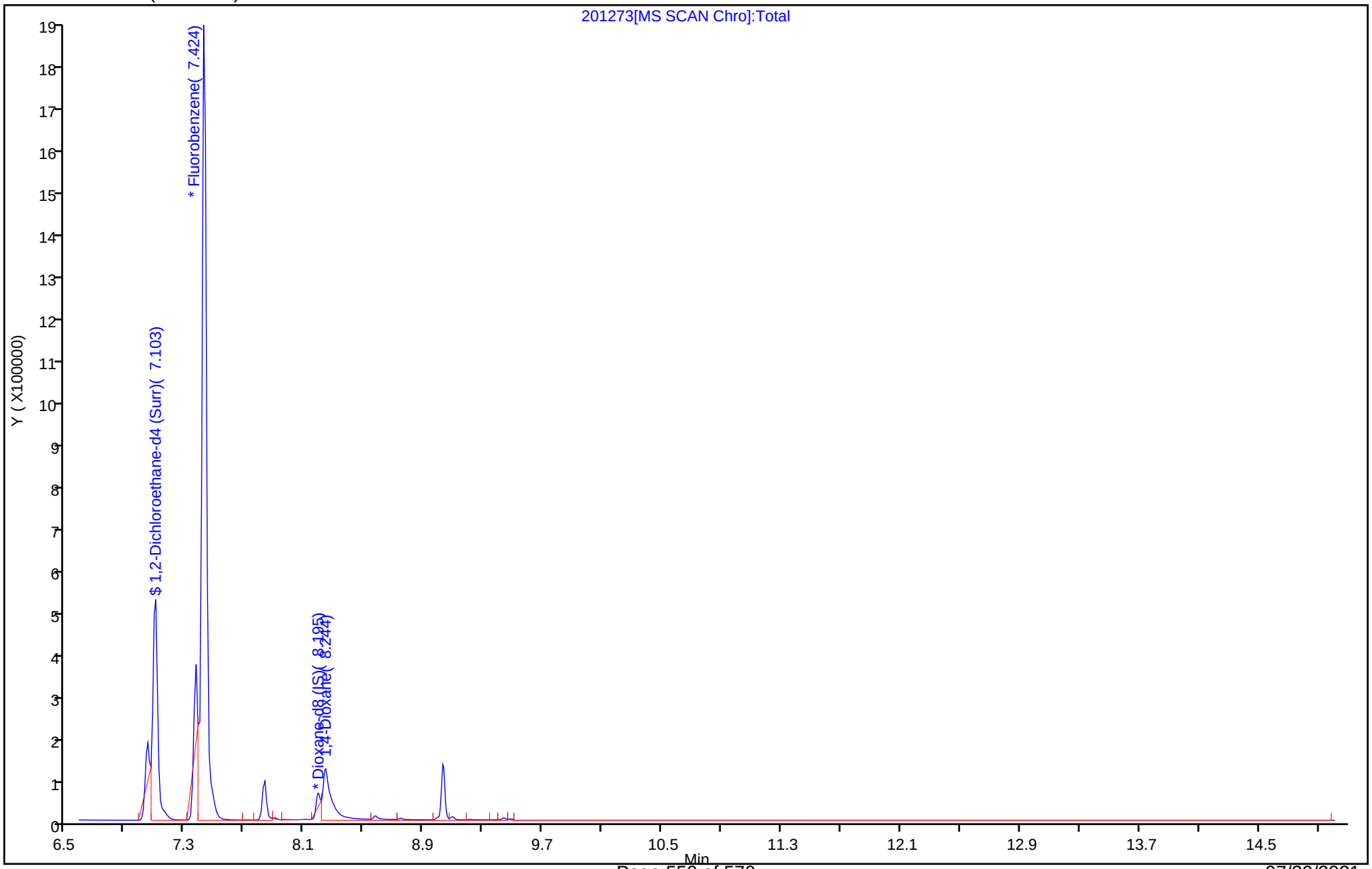
Report Date: 21-Jul-2021 20:14:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201273.D

Injection Date:	21-Jul-2021 04:05:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	500-202418-C-11 MSD			Worklist Smp#:	22
Client ID:	GW-071521-DS-09				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201273.D				
Lims ID:	500-202418-C-11 MSD				
Client ID:	GW-071521-DS-09				
Sample Type:	MSD				
Inject. Date:	21-Jul-2021 04:05:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0111406-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Jul-2021 20:14:03	Calib Date:	15-Jul-2021 18:55:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210715-111275.b\201238.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1682				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.77	77.67

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

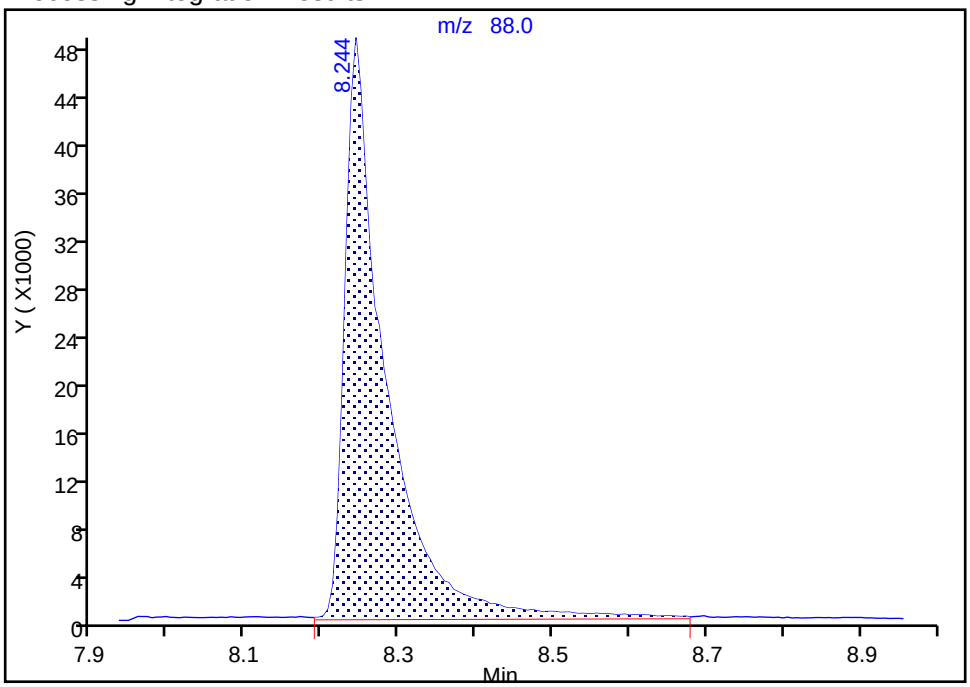
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210720-111406.b\201273.D				
Injection Date:	21-Jul-2021 04:05:30	Instrument ID:	A3UX20		
Lims ID:	500-202418-C-11 MSD				
Client ID:	GW-071521-DS-09				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

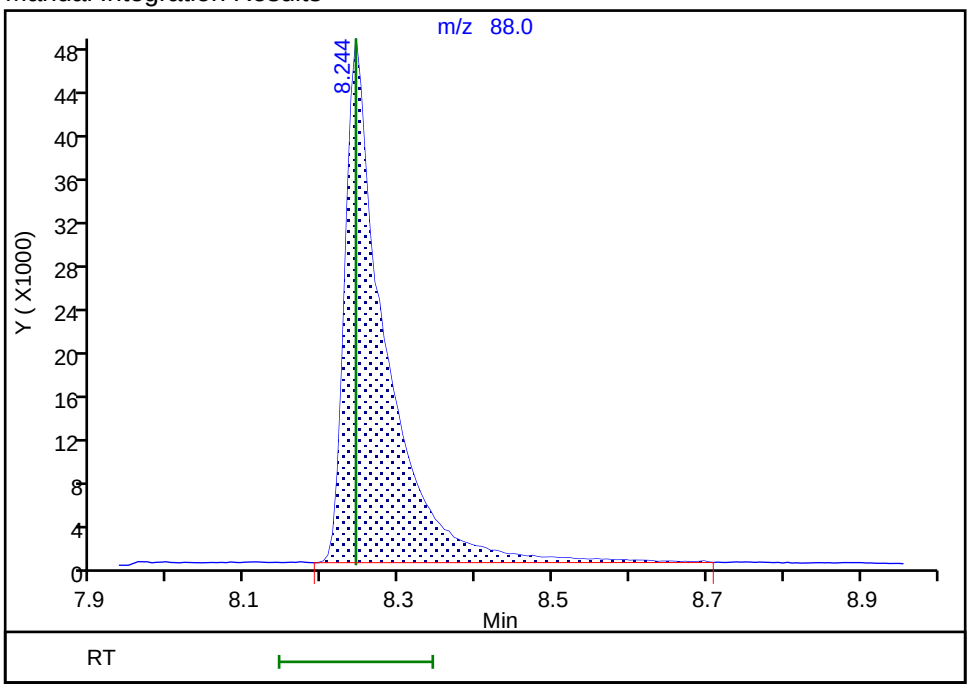
Processing Integration Results

RT: 8.24
Area: 178646
Amount: 190.1574
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 174253
Amount: 185.4781
Amount Units: ug/l



Reviewer: seymourc, 21-Jul-2021 20:13:51

Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Start Date: 07/15/2021 14:54

Analysis Batch Number: 495247 End Date: 07/15/2021 19:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-495247/1		07/15/2021 14:54	1		DB-624 0.18(mm)
IC 240-495247/3		07/15/2021 15:44	1	201231.D	DB-624 0.18(mm)
IC 240-495247/4		07/15/2021 16:12	1	201232.D	DB-624 0.18(mm)
IC 240-495247/5		07/15/2021 16:39	1	201233.D	DB-624 0.18(mm)
IC 240-495247/6		07/15/2021 17:06	1	201234.D	DB-624 0.18(mm)
ICIS 240-495247/7		07/15/2021 17:33	1	201235.D	DB-624 0.18(mm)
IC 240-495247/8		07/15/2021 18:01	1	201236.D	DB-624 0.18(mm)
IC 240-495247/9		07/15/2021 18:28	1	201237.D	DB-624 0.18(mm)
IC 240-495247/10		07/15/2021 18:55	1	201238.D	DB-624 0.18(mm)
ICV 240-495247/12		07/15/2021 19:50	1	201240.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Instrument ID: A3UX20 Start Date: 07/20/2021 18:39

Analysis Batch Number: 495864 End Date: 07/21/2021 04:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-495864/1		07/20/2021 18:39	1	BFB20088.D	DB-624 0.18(mm)
CCVIS 240-495864/3		07/20/2021 19:24	1	201254.D	DB-624 0.18(mm)
LCS 240-495864/4		07/20/2021 19:52	1	201255.D	DB-624 0.18(mm)
MB 240-495864/5		07/20/2021 20:19	1	201256.D	DB-624 0.18(mm)
240-152379-A-1 MDLV		07/20/2021 20:46	1		DB-624 0.18(mm)
240-152869-2	SL-15_071321	07/20/2021 21:14	1	201258.D	DB-624 0.18(mm)
240-152869-3	SL-14_071321	07/20/2021 21:41	1	201259.D	DB-624 0.18(mm)
240-152869-4	SL-13_071321	07/20/2021 22:09	1	201260.D	DB-624 0.18(mm)
240-152869-5	SL-7_071321	07/20/2021 22:36	1	201261.D	DB-624 0.18(mm)
240-152869-6	SL-6_071321	07/20/2021 23:04	1	201262.D	DB-624 0.18(mm)
240-152869-7	SL-5_071321	07/20/2021 23:31	1	201263.D	DB-624 0.18(mm)
240-152869-8	SL-8_071321	07/20/2021 23:59	1	201264.D	DB-624 0.18(mm)
240-152869-9	SL-9_071321	07/21/2021 00:26	1	201265.D	DB-624 0.18(mm)
240-152869-10	SL-10_071321	07/21/2021 00:53	1	201266.D	DB-624 0.18(mm)
240-152869-11	SL-11_071321	07/21/2021 01:21	1	201267.D	DB-624 0.18(mm)
240-152869-12	SL-12_071321	07/21/2021 01:48	1	201268.D	DB-624 0.18(mm)
240-152869-13	DUP-01	07/21/2021 02:16	1	201269.D	DB-624 0.18(mm)
ZZZZZ		07/21/2021 02:43	1		DB-624 0.18(mm)
ZZZZZ		07/21/2021 03:11	1		DB-624 0.18(mm)
500-202418-B-11 MS		07/21/2021 03:38	1	201272.D	DB-624 0.18(mm)
500-202418-C-11 MSD		07/21/2021 04:05	1	201273.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495247 Batch Start Date: 07/15/21 14:54 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00008	vm150SS20 00002	vm50ss 00448	vmdiox_spike 00268
IC 240-495247/3		8260B SIM		15 mL	15 mL	1 uL		0.15 uL	
IC 240-495247/4		8260B SIM		15 mL	15 mL	1 uL		0.3 uL	
IC 240-495247/5		8260B SIM		15 mL	15 mL	1 uL		0.75 uL	
IC 240-495247/6		8260B SIM		15 mL	15 mL	1 uL		1.5 uL	
ICIS 240-495247/7		8260B SIM		15 mL	15 mL	1 uL		3 uL	
IC 240-495247/8		8260B SIM		15 mL	15 mL	1 uL		7.5 uL	
IC 240-495247/9		8260B SIM		15 mL	15 mL	1 uL		15 uL	
IC 240-495247/10		8260B SIM		15 mL	15 mL	1 uL		30 uL	
ICV 240-495247/12		8260B SIM		15 mL	15 mL		1 uL		3 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdioxanew 00257					
IC 240-495247/3		8260B SIM		0.15 uL					
IC 240-495247/4		8260B SIM		0.3 uL					
IC 240-495247/5		8260B SIM		0.75 uL					
IC 240-495247/6		8260B SIM		1.5 uL					
ICIS 240-495247/7		8260B SIM		3 uL					
IC 240-495247/8		8260B SIM		7.5 uL					
IC 240-495247/9		8260B SIM		15 uL					
IC 240-495247/10		8260B SIM		30 uL					
ICV 240-495247/12		8260B SIM							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495864 Batch Start Date: 07/20/21 18:39 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00006	vm150SS20 00002	vmbfb 00027	vmdiox_spike 00269
BFB 240-495864/1		8260B SIM		5 mL	5 mL			1 uL	
CCVIS 240-495864/3		8260B SIM		15 mL	15 mL	1 uL	1 uL		
LCS 240-495864/4		8260B SIM		15 mL	15 mL	1 uL	1 uL		3 uL
MB 240-495864/5		8260B SIM		15 mL	15 mL	1 uL	1 uL		
240-152869-B-2	SL-15_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-3	SL-14_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-4	SL-13_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-5	SL-7_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-6	SL-6_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-7	SL-5_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-C-8	SL-8_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-C-9	SL-9_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-10	SL-10_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-11	SL-11_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-12	SL-12_071321	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
240-152869-B-13	DUP-01	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		
500-202418-B-11 MS	GW-071521-DS-09	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		3 uL
500-202418-C-11 MSD	GW-071521-DS-09	8260B SIM	T	15 mL	15 mL	1 uL	1 uL		3 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdioxanew 00258					
BFB 240-495864/1		8260B SIM							
CCVIS 240-495864/3		8260B SIM		3 uL					
LCS 240-495864/4		8260B SIM							
MB 240-495864/5		8260B SIM							
240-152869-B-2	SL-15_071321	8260B SIM	T						
240-152869-B-3	SL-14_071321	8260B SIM	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-152869-1

SDG No.:

Batch Number: 495864 Batch Start Date: 07/20/21 18:39 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdioxanew 00258					
240-152869-B-4	SL-13_071321	8260B SIM	T						
240-152869-B-5	SL-7_071321	8260B SIM	T						
240-152869-B-6	SL-6_071321	8260B SIM	T						
240-152869-B-7	SL-5_071321	8260B SIM	T						
240-152869-C-8	SL-8_071321	8260B SIM	T						
240-152869-C-9	SL-9_071321	8260B SIM	T						
240-152869-B-10	SL-10_071321	8260B SIM	T						
240-152869-B-11	SL-11_071321	8260B SIM	T						
240-152869-B-12	SL-12_071321	8260B SIM	T						
240-152869-B-13	DUP-01	8260B SIM	T						
500-202418-B-11 MS	GW-071521-DS-09	8260B SIM	T						
500-202418-C-11 MSD	GW-071521-DS-09	8260B SIM	T						

Batch Notes	
pH Indicator ID	HC025487

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

MICHIGAN 190

Chain of Custody Record

10/1.1

TestAmerica INC

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 2 COC
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Andrew Banitt, Korey Pearson	TAT different from below: 3 weeks, 2 weeks, 1 week, 2 days, 1 day; 10 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL 15_071321	7/13/21	0910		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL 14_071321	7/13/21	0940		X						6					N	G	X	X	X	X	X	X	X					
SL 13_071321	7/13/21	1005		X						6					N	G	X	X	X	X	X	X	X					
SL 7_071321	7/13/21	1030		X						6					N	G	X	X	X	X	X	X	X					
SL-6_071321	7/13/21	1055		X						6					N	G	X	X	X	X	X	X	X					
SL-5_071321	7/13/21	1210		X						6					N	G	X	X	X	X	X	X	X					
SL-8_071321	7/13/21	1240		X						6					N	G	X	X	X	X	X	X	X					
SL-9_071321	7/13/21	1300		X						6					N	G	X	X	X	X	X	X	X					
SL 10_071321	7/13/21	1330		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard Flammable Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client ☑ Disposal By Lab Archive For ___ Month

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Andrew Banitt	Arcadis	7/14/21 1230	Jen Hall	ETA	7/14/21 1235
Jen Hall	ETA	7/14/21 1237		ETA	7/15/21 0800
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time:

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240-152869 Chain of Custody

07/30/2021

MICHIGAN 190

Chain of Custody Record

1.0 | 1.1

TestAmerica

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 2 COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Andrew Banitt, Korey Pearson	TAT ent from be w: 10 day; 3 weeks, 2 weeks, 1 week, 2 days, 1 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions.
SL 11_071321	7/13/21	1350		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL 12_071321	7/13/21	1405		X						6					N	G	X	X	X	X	X	X	X	
DUP-01	7/13/21			X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard Flammable Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client ☑ Disposal By Lab Archive For [ ] Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	7/14/21 1230	[signature]	ETA	7/14/21 1235
Relinquished by: [signature]	Company: ETA	Date/Time: 7/14/21 1237	Received by: [signature]	Company: ETA	Date/Time: 7/15/21 0800
Relinquished by:	Company	Date/Time	Received in Laboratory by:	Company:	Date/Time:

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07/30/2021

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # .** 152869
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by JUSTIN H

Cooler Received on 7 15 21 Opened on 7-15 21

FedEx 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp 1.0 °C Corrected Cooler Temp 1.1 °C

IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4 Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	(No) JMH 7-16-21
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12 Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC022887**
14 Were VOAs on the COC?	(Yes)	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	(No) NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0303101F	(Yes)	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s). _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

ANALYTICAL REPORT

Job Number: 240-157760-1

Job Description: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
10/14/2021 3:43 PM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
10/14/2021

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-157760-1

Comments
No additional comments.

Receipt
The samples were received on 10/9/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

GC/MS VOA
Method 8260B: Surrogate recovery for the following sample was outside the upper control limit: SL-6_100721 (240-157760-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260B: The continuing calibration verification (CCV) associated with batch 508017 recovered above the upper control limit for 1,1-Dichloroethene and/or Toluene. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SL-5_100721 (240-157760-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-157760-1

No Detections.

Client Sample ID: SL-15_100721 — Lab Sample ID: 240-157760-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-14_100721 — Lab Sample ID: 240-157760-3

No Detections.

Client Sample ID: SL-13_100721 — Lab Sample ID: 240-157760-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-7_100721 — Lab Sample ID: 240-157760-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.95	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-6_100721 — Lab Sample ID: 240-157760-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.92	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-5_100721 — Lab Sample ID: 240-157760-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	44		2.0	0.92	ug/L	2		8260B	Total/NA
Trichloroethene	7.4		2.0	0.88	ug/L	2		8260B	Total/NA
Vinyl chloride	4.1		2.0	0.90	ug/L	2		8260B	Total/NA

Client Sample ID: SL-8_100721 — Lab Sample ID: 240-157760-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.8		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	38		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	8.9		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	8.8		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-9_100721 — Lab Sample ID: 240-157760-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	18		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	4.7		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-10_100721 — Lab Sample ID: 240-157760-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.7		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	34		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	7.5		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	4.6		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_100721 — Lab Sample ID: 240-157760-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	31		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	6.5		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-12_100721 — Lab Sample ID: 240-157760-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	4.0		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1231_100721 — Lab Sample ID: 240-157760-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	11		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	260		10	4.6	ug/L	10		8260B	Total/NA
Trichloroethene	51		10	4.4	ug/L	10		8260B	Total/NA
Vinyl chloride	38		10	4.5	ug/L	10		8260B	Total/NA

Client Sample ID: SL-2_100721 — Lab Sample ID: 240-157760-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.4		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	91		2.5	1.2	ug/L	2.5		8260B	Total/NA
Trichloroethene	20		2.5	1.1	ug/L	2.5		8260B	Total/NA
Vinyl chloride	14		2.5	1.1	ug/L	2.5		8260B	Total/NA

Client Sample ID: SL-3_100721 — Lab Sample ID: 240-157760-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.3		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	140		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	25		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	17		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: SL-4_100721 — Lab Sample ID: 240-157760-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.7		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	97		2.5	1.2	ug/L	2.5		8260B	Total/NA
Trichloroethene	17		2.5	1.1	ug/L	2.5		8260B	Total/NA
Vinyl chloride	11		2.5	1.1	ug/L	2.5		8260B	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-157760-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.0		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	40		2.0	0.92	ug/L	2		8260B	Total/NA
Trichloroethene	7.2		2.0	0.88	ug/L	2		8260B	Total/NA
Vinyl chloride	4.6		2.0	0.90	ug/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-157760-1

Date Collected: 10/07/21 00:00 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 09:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 09:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 09:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 09:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 09:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 09:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*10/12/21 09:46*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*10/12/21 09:46*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*10/12/21 09:46*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*10/12/21 09:46*	*1*

Client Sample ID: SL-15_100721 — Lab Sample ID: 240-157760-2

Date Collected: 10/07/21 09:55 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			10/11/21 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*10/11/21 21:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 10:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 10:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 10:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*10/12/21 10:09*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*10/12/21 10:09*	*1*
Toluene-d8 (Surr)	*115*		*78 - 122*		*10/12/21 10:09*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*10/12/21 10:09*	*1*

Client Sample ID: SL-14_100721 — Lab Sample ID: 240-157760-3

Date Collected: 10/07/21 10:10 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			10/11/21 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*10/11/21 21:55*	*1*

Client Sample ID: SL-14_100721 — Lab Sample ID: 240-157760-3

Date Collected: 10/07/21 10:10 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 10:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 10:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 10:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*62 - 137*		*10/12/21 10:31*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*10/12/21 10:31*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*10/12/21 10:31*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 120*		*10/12/21 10:31*	*1*

Client Sample ID: SL-13_100721 — Lab Sample ID: 240-157760-4

Date Collected: 10/07/21 10:30 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			10/11/21 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*10/11/21 22:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 10:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 10:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 10:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*10/12/21 10:54*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*10/12/21 10:54*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*10/12/21 10:54*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*10/12/21 10:54*	*1*

Client Sample ID: SL-7_100721 — Lab Sample ID: 240-157760-5

Date Collected: 10/07/21 10:50 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.95**	**J**	2.0	0.86	ug/L			10/11/21 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*10/11/21 22:42*	*1*

Client Sample ID: SL-7_100721 — Lab Sample ID: 240-157760-5

Date Collected: 10/07/21 10:50 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 15:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 15:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 15:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 15:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 15:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*10/12/21 15:47*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*10/12/21 15:47*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*10/12/21 15:47*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*10/12/21 15:47*	*1*

Client Sample ID: SL-6_100721 — Lab Sample ID: 240-157760-6

Date Collected: 10/07/21 11:05 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.92**	**J**	2.0	0.86	ug/L			10/11/21 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*10/11/21 23:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 16:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 16:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 16:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*10/12/21 16:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*10/12/21 16:09*	*1*
Toluene-d8 (Surr)	*126*	*S1+*	*78 - 122*		*10/12/21 16:09*	*1*
Dibromofluoromethane (Surr)	*118*		*73 - 120*		*10/12/21 16:09*	*1*

Client Sample ID: SL-5_100721 — Lab Sample ID: 240-157760-7

Date Collected: 10/07/21 12:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			10/12/21 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*10/12/21 00:42*	*1*

Client Sample ID: SL-5_100721 — Lab Sample ID: 240-157760-7

Date Collected: 10/07/21 12:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			10/13/21 11:16	2
cis-1,2-Dichloroethene	**44**		2.0	0.92	ug/L			10/13/21 11:16	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			10/13/21 11:16	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			10/13/21 11:16	2
Trichloroethene	**7.4**		2.0	0.88	ug/L			10/13/21 11:16	2
Vinyl chloride	**4.1**		2.0	0.90	ug/L			10/13/21 11:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*10/13/21 11:16*	*2*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*10/13/21 11:16*	*2*
Toluene-d8 (Surr)	*110*		*78 - 122*		*10/13/21 11:16*	*2*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*10/13/21 11:16*	*2*

Client Sample ID: SL-8_100721 — Lab Sample ID: 240-157760-8

Date Collected: 10/07/21 12:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.8**		2.0	0.86	ug/L			10/12/21 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*10/12/21 01:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 16:54	1
cis-1,2-Dichloroethene	**38**		1.0	0.46	ug/L			10/12/21 16:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 16:54	1
Trichloroethene	**8.9**		1.0	0.44	ug/L			10/12/21 16:54	1
Vinyl chloride	**8.8**		1.0	0.45	ug/L			10/12/21 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*62 - 137*		*10/12/21 16:54*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*10/12/21 16:54*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*10/12/21 16:54*	*1*
Dibromofluoromethane (Surr)	*86*		*73 - 120*		*10/12/21 16:54*	*1*

Client Sample ID: SL-9_100721 — Lab Sample ID: 240-157760-9

Date Collected: 10/07/21 13:00 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			10/12/21 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*66 - 120*		*10/12/21 01:29*	*1*

Client Sample ID: SL-9_100721 — Lab Sample ID: 240-157760-9

Date Collected: 10/07/21 13:00 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 12:23	1
cis-1,2-Dichloroethene	**18**		1.0	0.46	ug/L			10/12/21 12:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 12:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 12:23	1
Trichloroethene	**4.7**		1.0	0.44	ug/L			10/12/21 12:23	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			10/12/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*62 - 137*		*10/12/21 12:23*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*10/12/21 12:23*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*10/12/21 12:23*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*10/12/21 12:23*	*1*

Client Sample ID: SL-10_100721 — Lab Sample ID: 240-157760-10

Date Collected: 10/07/21 13:25 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.7**		2.0	0.86	ug/L			10/12/21 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*10/12/21 01:53*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 11:13	1
cis-1,2-Dichloroethene	**34**		1.0	0.46	ug/L			10/12/21 11:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 11:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 11:13	1
Trichloroethene	**7.5**		1.0	0.44	ug/L			10/12/21 11:13	1
Vinyl chloride	**4.6**		1.0	0.45	ug/L			10/12/21 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*62 - 137*		*10/12/21 11:13*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*10/12/21 11:13*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*10/12/21 11:13*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*10/12/21 11:13*	*1*

Client Sample ID: SL-11_100721 — Lab Sample ID: 240-157760-11

Date Collected: 10/07/21 13:45 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.1**		2.0	0.86	ug/L			10/12/21 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*10/12/21 02:17*	*1*

Client Sample ID: SL-11_100721 — Lab Sample ID: 240-157760-11

Date Collected: 10/07/21 13:45 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 11:35	1
cis-1,2-Dichloroethene	**31**		1.0	0.46	ug/L			10/12/21 11:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 11:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 11:35	1
Trichloroethene	**6.5**		1.0	0.44	ug/L			10/12/21 11:35	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			10/12/21 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*62 - 137*		*10/12/21 11:35*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*10/12/21 11:35*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*10/12/21 11:35*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*10/12/21 11:35*	*1*

Client Sample ID: SL-12_100721 — Lab Sample ID: 240-157760-12

Date Collected: 10/07/21 14:05 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			10/12/21 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*10/12/21 02:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 11:57	1
cis-1,2-Dichloroethene	**19**		1.0	0.46	ug/L			10/12/21 11:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 11:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 11:57	1
Trichloroethene	**4.0**		1.0	0.44	ug/L			10/12/21 11:57	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			10/12/21 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*62 - 137*		*10/12/21 11:57*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*10/12/21 11:57*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*10/12/21 11:57*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*10/12/21 11:57*	*1*

Client Sample ID: MH-1231_100721 — Lab Sample ID: 240-157760-13

Date Collected: 10/07/21 14:45 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		2.0	0.86	ug/L			10/12/21 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*10/12/21 03:04*	*1*

Client Sample ID: MH-1231_100721 — Lab Sample ID: 240-157760-13

Date Collected: 10/07/21 14:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	10	U	10	4.9	ug/L			10/12/21 12:45	10
cis-1,2-Dichloroethene	**260**		10	4.6	ug/L			10/12/21 12:45	10
Tetrachloroethene	10	U	10	4.4	ug/L			10/12/21 12:45	10
trans-1,2-Dichloroethene	10	U	10	5.1	ug/L			10/12/21 12:45	10
Trichloroethene	**51**		10	4.4	ug/L			10/12/21 12:45	10
Vinyl chloride	**38**		10	4.5	ug/L			10/12/21 12:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*62 - 137*		*10/12/21 12:45*	*10*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*10/12/21 12:45*	*10*
Toluene-d8 (Surr)	*92*		*78 - 122*		*10/12/21 12:45*	*10*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*10/12/21 12:45*	*10*

Client Sample ID: SL-2_100721 — Lab Sample ID: 240-157760-14

Date Collected: 10/07/21 15:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.4**		2.0	0.86	ug/L			10/12/21 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*10/12/21 03:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.5	U	2.5	1.2	ug/L			10/12/21 13:07	2.5
cis-1,2-Dichloroethene	**91**		2.5	1.2	ug/L			10/12/21 13:07	2.5
Tetrachloroethene	2.5	U	2.5	1.1	ug/L			10/12/21 13:07	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	1.3	ug/L			10/12/21 13:07	2.5
Trichloroethene	**20**		2.5	1.1	ug/L			10/12/21 13:07	2.5
Vinyl chloride	**14**		2.5	1.1	ug/L			10/12/21 13:07	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*10/12/21 13:07*	*2.5*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*10/12/21 13:07*	*2.5*
Toluene-d8 (Surr)	*92*		*78 - 122*		*10/12/21 13:07*	*2.5*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*10/12/21 13:07*	*2.5*

Client Sample ID: SL-3_100721 — Lab Sample ID: 240-157760-15

Date Collected: 10/07/21 15:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.3**		2.0	0.86	ug/L			10/12/21 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*10/12/21 03:52*	*1*

Client Sample ID: SL-3_100721 — Lab Sample ID: 240-157760-15

Date Collected: 10/07/21 15:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			10/12/21 13:29	5
cis-1,2-Dichloroethene	**140**		5.0	2.3	ug/L			10/12/21 13:29	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			10/12/21 13:29	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			10/12/21 13:29	5
Trichloroethene	**25**		5.0	2.2	ug/L			10/12/21 13:29	5
Vinyl chloride	**17**		5.0	2.3	ug/L			10/12/21 13:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*62 - 137*		*10/12/21 13:29*	*5*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*10/12/21 13:29*	*5*
Toluene-d8 (Surr)	*93*		*78 - 122*		*10/12/21 13:29*	*5*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*10/12/21 13:29*	*5*

Client Sample ID: SL-4_100721 — Lab Sample ID: 240-157760-16

Date Collected: 10/07/21 16:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.7**		2.0	0.86	ug/L			10/12/21 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*10/12/21 04:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.5	U	2.5	1.2	ug/L			10/12/21 13:51	2.5
cis-1,2-Dichloroethene	**97**		2.5	1.2	ug/L			10/12/21 13:51	2.5
Tetrachloroethene	2.5	U	2.5	1.1	ug/L			10/12/21 13:51	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	1.3	ug/L			10/12/21 13:51	2.5
Trichloroethene	**17**		2.5	1.1	ug/L			10/12/21 13:51	2.5
Vinyl chloride	**11**		2.5	1.1	ug/L			10/12/21 13:51	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*62 - 137*		*10/12/21 13:51*	*2.5*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*10/12/21 13:51*	*2.5*
Toluene-d8 (Surr)	*94*		*78 - 122*		*10/12/21 13:51*	*2.5*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*10/12/21 13:51*	*2.5*

Client Sample ID: DUP-01 — Lab Sample ID: 240-157760-17

Date Collected: 10/07/21 00:00 — **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.0**		2.0	0.86	ug/L			10/12/21 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*10/12/21 04:40*	*1*

Client Sample ID: DUP-01 **Lab Sample ID: 240-157760-17**
Date Collected: 10/07/21 00:00 **Matrix: Water**
Date Received: 10/09/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			10/13/21 12:09	2
cis-1,2-Dichloroethene	**40**		2.0	0.92	ug/L			10/13/21 12:09	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			10/13/21 12:09	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			10/13/21 12:09	2
Trichloroethene	**7.2**		2.0	0.88	ug/L			10/13/21 12:09	2
Vinyl chloride	**4.6**		2.0	0.90	ug/L			10/13/21 12:09	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*62 - 137*		*10/13/21 12:09*	*2*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*10/13/21 12:09*	*2*
Toluene-d8 (Surr)	*96*		*78 - 122*		*10/13/21 12:09*	*2*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*10/13/21 12:09*	*2*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-157588-F-1 MSD	Matrix Spike Duplicate	91	83	108	102
240-157588-G-1 MS	Matrix Spike	88	85	101	98
240-157641-B-1 MS	Matrix Spike	108	99	101	92
240-157641-B-1 MSD	Matrix Spike Duplicate	108	96	98	91
240-157641-E-4 MSD	Matrix Spike Duplicate	108	98	100	90
240-157641-H-4 MS	Matrix Spike	108	98	101	91
240-157760-1	TRIP BLANK	94	78	107	106
240-157760-2	SL-15_100721	105	94	115	112
240-157760-3	SL-14_100721	107	84	108	117
240-157760-4	SL-13_100721	100	81	110	106
240-157760-5	SL-7_100721	95	78	107	98
240-157760-6	SL-6_100721	106	95	126 S1+	118
240-157760-7	SL-5_100721	90	78	110	98
240-157760-8	SL-8_100721	75	81	94	86
240-157760-9	SL-9_100721	109	92	90	88
240-157760-10	SL-10_100721	114	95	93	89
240-157760-11	SL-11_100721	111	95	94	90
240-157760-12	SL-12_100721	118	94	95	92
240-157760-13	MH-1231_100721	118	94	92	91
240-157760-14	SL-2_100721	115	93	92	92
240-157760-15	SL-3_100721	118	95	93	93
240-157760-16	SL-4_100721	118	94	94	92
240-157760-17	DUP-01	117	95	96	94
240-157764-A-11 MS	Matrix Spike	100	90	119	110
240-157764-C-11 MSD	Matrix Spike Duplicate	94	87	119	109
LCS 240-507762/4	Lab Control Sample	94	89	115	104
LCS 240-507764/4	Lab Control Sample	109	98	98	88
LCS 240-508017/4	Lab Control Sample	89	77	113	99
LCS 240-508019/4	Lab Control Sample	106	98	100	89
MB 240-507762/6	Method Blank	100	78	110	111
MB 240-507764/7	Method Blank	118	77	92	89
MB 240-508017/6	Method Blank	89	68	102	102
MB 240-508019/7	Method Blank	119	79	94	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-157760-2	SL-15_100721	81
240-157760-3	SL-14_100721	81
240-157760-4	SL-13_100721	81
240-157760-5	SL-7_100721	80

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-157760-6	SL-6_100721	80						
240-157760-7	SL-5_100721	81						
240-157760-8	SL-8_100721	82						
240-157760-9	SL-9_100721	78						
240-157760-10	SL-10_100721	84						
240-157760-11	SL-11_100721	82						
240-157760-12	SL-12_100721	83						
240-157760-13	MH-1231_100721	84						
240-157760-14	SL-2_100721	84						
240-157760-15	SL-3_100721	83						
240-157760-16	SL-4_100721	83						
240-157760-17	DUP-01	80						
500-206406-A-2 MS	Matrix Spike	81						
500-206406-A-2 MSD	Matrix Spike Duplicate	82						
LCS 240-507716/4	Lab Control Sample	83						
MB 240-507716/5	Method Blank	83						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-507762/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 507762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 09:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 09:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 09:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 09:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 09:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 09:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*10/12/21 09:24*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*10/12/21 09:24*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*10/12/21 09:24*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*10/12/21 09:24*	*1*

Lab Sample ID: LCS 240-507762/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 507762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.3		ug/L		103	63 - 134
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	77 - 123
Tetrachloroethene	10.0	10.2		ug/L		102	76 - 123
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	75 - 124
Trichloroethene	10.0	9.12		ug/L		91	70 - 122
Vinyl chloride	10.0	11.2		ug/L		112	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*
Toluene-d8 (Surr)	*115*		*78 - 122*
Dibromofluoromethane (Surr)	*104*		*73 - 120*

Lab Sample ID: MB 240-507764/7 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 507764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/12/21 10:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/12/21 10:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/12/21 10:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/12/21 10:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/12/21 10:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*62 - 137*		*10/12/21 10:51*	*1*
4-Bromofluorobenzene (Surr)	*77*		*56 - 136*		*10/12/21 10:51*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*10/12/21 10:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-507764/7
Matrix: Water
Analysis Batch: 507764

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*10/12/21 10:51*	*1*

Lab Sample ID: LCS 240-507764/4
Matrix: Water
Analysis Batch: 507764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.34		ug/L		93	63 - 134		
cis-1,2-Dichloroethene			10.0	9.93		ug/L		99	77 - 123		
Tetrachloroethene			10.0	9.50		ug/L		95	76 - 123		
trans-1,2-Dichloroethene			10.0	10.2		ug/L		102	75 - 124		
Trichloroethene			10.0	9.44		ug/L		94	70 - 122		
Vinyl chloride			10.0	10.3		ug/L		103	60 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*109*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*
Dibromofluoromethane (Surr)	*88*		*73 - 120*

Lab Sample ID: MB 240-508017/6
Matrix: Water
Analysis Batch: 508017

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/13/21 10:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/13/21 10:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/13/21 10:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/13/21 10:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/13/21 10:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/13/21 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*10/13/21 10:53*	*1*
4-Bromofluorobenzene (Surr)	*68*		*56 - 136*		*10/13/21 10:53*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*10/13/21 10:53*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*10/13/21 10:53*	*1*

Lab Sample ID: LCS 240-508017/4
Matrix: Water
Analysis Batch: 508017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.64		ug/L		96	63 - 134		
cis-1,2-Dichloroethene			10.0	11.4		ug/L		114	77 - 123		
Tetrachloroethene			10.0	9.88		ug/L		99	76 - 123		
trans-1,2-Dichloroethene			10.0	11.0		ug/L		110	75 - 124		
Trichloroethene			10.0	9.20		ug/L		92	70 - 122		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-508017/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 508017

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	9.65		ug/L		97	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*77*		*56 - 136*
Toluene-d8 (Surr)	*113*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Lab Sample ID: MB 240-508019/7 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 508019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			10/13/21 11:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			10/13/21 11:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			10/13/21 11:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			10/13/21 11:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			10/13/21 11:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			10/13/21 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*62 - 137*		*10/13/21 11:47*	*1*
4-Bromofluorobenzene (Surr)	*79*		*56 - 136*		*10/13/21 11:47*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*10/13/21 11:47*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*10/13/21 11:47*	*1*

Lab Sample ID: LCS 240-508019/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 508019

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.15		ug/L		92	63 - 134		
cis-1,2-Dichloroethene			10.0	10.4		ug/L		104	77 - 123		
Tetrachloroethene			10.0	9.15		ug/L		92	76 - 123		
trans-1,2-Dichloroethene			10.0	10.2		ug/L		102	75 - 124		
Trichloroethene			10.0	9.59		ug/L		96	70 - 122		
Vinyl chloride			10.0	9.74		ug/L		97	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*100*		*78 - 122*
Dibromofluoromethane (Surr)	*89*		*73 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-507716/5 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 507716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			10/11/21 20:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*10/11/21 20:19*	*1*

Lab Sample ID: LCS 240-507716/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 507716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.49		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

GC/MS VOA

Analysis Batch: 507716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-157760-2	SL-15_100721	Total/NA	Water	8260B SIM	
240-157760-3	SL-14_100721	Total/NA	Water	8260B SIM	
240-157760-4	SL-13_100721	Total/NA	Water	8260B SIM	
240-157760-5	SL-7_100721	Total/NA	Water	8260B SIM	
240-157760-6	SL-6_100721	Total/NA	Water	8260B SIM	
240-157760-7	SL-5_100721	Total/NA	Water	8260B SIM	
240-157760-8	SL-8_100721	Total/NA	Water	8260B SIM	
240-157760-9	SL-9_100721	Total/NA	Water	8260B SIM	
240-157760-10	SL-10_100721	Total/NA	Water	8260B SIM	
240-157760-11	SL-11_100721	Total/NA	Water	8260B SIM	
240-157760-12	SL-12_100721	Total/NA	Water	8260B SIM	
240-157760-13	MH-1231_100721	Total/NA	Water	8260B SIM	
240-157760-14	SL-2_100721	Total/NA	Water	8260B SIM	
240-157760-15	SL-3_100721	Total/NA	Water	8260B SIM	
240-157760-16	SL-4_100721	Total/NA	Water	8260B SIM	
240-157760-17	DUP-01	Total/NA	Water	8260B SIM	
MB 240-507716/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-507716/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 507762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-157760-1	TRIP BLANK	Total/NA	Water	8260B	
240-157760-2	SL-15_100721	Total/NA	Water	8260B	
240-157760-3	SL-14_100721	Total/NA	Water	8260B	
240-157760-4	SL-13_100721	Total/NA	Water	8260B	
240-157760-5	SL-7_100721	Total/NA	Water	8260B	
240-157760-6	SL-6_100721	Total/NA	Water	8260B	
240-157760-8	SL-8_100721	Total/NA	Water	8260B	
MB 240-507762/6	Method Blank	Total/NA	Water	8260B	
LCS 240-507762/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 507764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-157760-9	SL-9_100721	Total/NA	Water	8260B	
240-157760-10	SL-10_100721	Total/NA	Water	8260B	
240-157760-11	SL-11_100721	Total/NA	Water	8260B	
240-157760-12	SL-12_100721	Total/NA	Water	8260B	
240-157760-13	MH-1231_100721	Total/NA	Water	8260B	
240-157760-14	SL-2_100721	Total/NA	Water	8260B	
240-157760-15	SL-3_100721	Total/NA	Water	8260B	
240-157760-16	SL-4_100721	Total/NA	Water	8260B	
MB 240-507764/7	Method Blank	Total/NA	Water	8260B	
LCS 240-507764/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 508017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-157760-7	SL-5_100721	Total/NA	Water	8260B	
MB 240-508017/6	Method Blank	Total/NA	Water	8260B	
LCS 240-508017/4	Lab Control Sample	Total/NA	Water	8260B	

QC Association Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

GC/MS VOA

Analysis Batch: 508019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-157760-17	DUP-01	Total/NA	Water	8260B	
MB 240-508019/7	Method Blank	Total/NA	Water	8260B	
LCS 240-508019/4	Lab Control Sample	Total/NA	Water	8260B	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-157760-1

Date Collected: 10/07/21 00:00 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 09:46	LEE	TAL CAN

Client Sample ID: SL-15_100721 — Lab Sample ID: 240-157760-2

Date Collected: 10/07/21 09:55 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 10:09	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/11/21 21:31	CS	TAL CAN

Client Sample ID: SL-14_100721 — Lab Sample ID: 240-157760-3

Date Collected: 10/07/21 10:10 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 10:31	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/11/21 21:55	CS	TAL CAN

Client Sample ID: SL-13_100721 — Lab Sample ID: 240-157760-4

Date Collected: 10/07/21 10:30 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 10:54	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/11/21 22:18	CS	TAL CAN

Client Sample ID: SL-7_100721 — Lab Sample ID: 240-157760-5

Date Collected: 10/07/21 10:50 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 15:47	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/11/21 22:42	CS	TAL CAN

Client Sample ID: SL-6_100721 — Lab Sample ID: 240-157760-6

Date Collected: 10/07/21 11:05 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 16:09	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/11/21 23:06	CS	TAL CAN

Client Sample ID: SL-5_100721 — Lab Sample ID: 240-157760-7

Date Collected: 10/07/21 12:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	508017	10/13/21 11:16	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 00:42	CS	TAL CAN

Client Sample ID: SL-8_100721 — Lab Sample ID: 240-157760-8

Date Collected: 10/07/21 12:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507762	10/12/21 16:54	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 01:05	CS	TAL CAN

Client Sample ID: SL-9_100721 — Lab Sample ID: 240-157760-9

Date Collected: 10/07/21 13:00 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507764	10/12/21 12:23	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 01:29	CS	TAL CAN

Client Sample ID: SL-10_100721 — Lab Sample ID: 240-157760-10

Date Collected: 10/07/21 13:25 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507764	10/12/21 11:13	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 01:53	CS	TAL CAN

Client Sample ID: SL-11_100721 — Lab Sample ID: 240-157760-11

Date Collected: 10/07/21 13:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507764	10/12/21 11:35	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 02:17	CS	TAL CAN

Client Sample ID: SL-12_100721 — Lab Sample ID: 240-157760-12

Date Collected: 10/07/21 14:05 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	507764	10/12/21 11:57	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 02:41	CS	TAL CAN

Client Sample ID: MH-1231_100721 — Lab Sample ID: 240-157760-13

Date Collected: 10/07/21 14:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	507764	10/12/21 12:45	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 03:04	CS	TAL CAN

Client Sample ID: SL-2_100721 — Lab Sample ID: 240-157760-14

Date Collected: 10/07/21 15:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	507764	10/12/21 13:07	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 03:28	CS	TAL CAN

Client Sample ID: SL-3_100721 — Lab Sample ID: 240-157760-15

Date Collected: 10/07/21 15:45 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	507764	10/12/21 13:29	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 03:52	CS	TAL CAN

Client Sample ID: SL-4_100721 — Lab Sample ID: 240-157760-16

Date Collected: 10/07/21 16:15 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	507764	10/12/21 13:51	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 04:16	CS	TAL CAN

Client Sample ID: DUP-01 — Lab Sample ID: 240-157760-17

Date Collected: 10/07/21 00:00 — **Matrix: Water**
Date Received: 10/09/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	508019	10/13/21 12:09	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	507716	10/12/21 04:40	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-18-10	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-157760-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-157760-1	TRIP BLANK	Water	10/07/21 00:00	10/09/21 08:00
240-157760-2	SL-15_100721	Water	10/07/21 09:55	10/09/21 08:00
240-157760-3	SL-14_100721	Water	10/07/21 10:10	10/09/21 08:00
240-157760-4	SL-13_100721	Water	10/07/21 10:30	10/09/21 08:00
240-157760-5	SL-7_100721	Water	10/07/21 10:50	10/09/21 08:00
240-157760-6	SL-6_100721	Water	10/07/21 11:05	10/09/21 08:00
240-157760-7	SL-5_100721	Water	10/07/21 12:15	10/09/21 08:00
240-157760-8	SL-8_100721	Water	10/07/21 12:45	10/09/21 08:00
240-157760-9	SL-9_100721	Water	10/07/21 13:00	10/09/21 08:00
240-157760-10	SL-10_100721	Water	10/07/21 13:25	10/09/21 08:00
240-157760-11	SL-11_100721	Water	10/07/21 13:45	10/09/21 08:00
240-157760-12	SL-12_100721	Water	10/07/21 14:05	10/09/21 08:00
240-157760-13	MH-1231_100721	Water	10/07/21 14:45	10/09/21 08:00
240-157760-14	SL-2_100721	Water	10/07/21 15:15	10/09/21 08:00
240-157760-15	SL-3_100721	Water	10/07/21 15:45	10/09/21 08:00
240-157760-16	SL-4_100721	Water	10/07/21 16:15	10/09/21 08:00
240-157760-17	DUP-01	Water	10/07/21 00:00	10/09/21 08:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 469338

Lab Sample ID: STD8260 240-469338/7 IC Client Sample ID:

Date Analyzed: 01/15/21 12:58 Lab File ID: UXJ5273.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.84	Split Peak	evansle	01/18/21 08:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/3 Client Sample ID:

Date Analyzed: 09/09/21 14:25 Lab File ID: 201661.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:10

Lab Sample ID: IC 240-503003/4 Client Sample ID:

Date Analyzed: 09/09/21 14:49 Lab File ID: 201662.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:11

Lab Sample ID: IC 240-503003/5 Client Sample ID:

Date Analyzed: 09/09/21 15:14 Lab File ID: 201663.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:51

Lab Sample ID: IC 240-503003/6 Client Sample ID:

Date Analyzed: 09/09/21 15:38 Lab File ID: 201664.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:52

Lab Sample ID: ICIS 240-503003/7 Client Sample ID:

Date Analyzed: 09/09/21 16:03 Lab File ID: 201665.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/8 Client Sample ID:

Date Analyzed: 09/09/21 16:27 Lab File ID: 201666.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

Lab Sample ID: IC 240-503003/9 Client Sample ID:

Date Analyzed: 09/09/21 16:52 Lab File ID: 201667.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 17:41

Lab Sample ID: ICV 240-503003/12 Client Sample ID:

Date Analyzed: 09/09/21 18:06 Lab File ID: 201670.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 18:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 507716

Lab Sample ID: CCVIS 240-507716/3 Client Sample ID:

Date Analyzed: 10/11/21 19:31 Lab File ID: 201901.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/11/21 20:34

Lab Sample ID: LCS 240-507716/4 Client Sample ID:

Date Analyzed: 10/11/21 19:55 Lab File ID: 201902.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/11/21 20:34

Lab Sample ID: 240-157760-2 Client Sample ID: SL-15_100721

Date Analyzed: 10/11/21 21:31 Lab File ID: 201906.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:55

Lab Sample ID: 500-206406-A-2 MS Client Sample ID:

Date Analyzed: 10/11/21 23:54 Lab File ID: 201912.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:55

Lab Sample ID: 500-206406-A-2 MSD Client Sample ID:

Date Analyzed: 10/12/21 00:18 Lab File ID: 201913.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:56

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 507716

Lab Sample ID: 240-157760-7 Client Sample ID: SL-5_100721

Date Analyzed: 10/12/21 00:42 Lab File ID: 201914.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:56

Lab Sample ID: 240-157760-8 Client Sample ID: SL-8_100721

Date Analyzed: 10/12/21 01:05 Lab File ID: 201915.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:57

Lab Sample ID: 240-157760-10 Client Sample ID: SL-10_100721

Date Analyzed: 10/12/21 01:53 Lab File ID: 201917.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:57

Lab Sample ID: 240-157760-11 Client Sample ID: SL-11_100721

Date Analyzed: 10/12/21 02:17 Lab File ID: 201918.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:58

Lab Sample ID: 240-157760-12 Client Sample ID: SL-12_100721

Date Analyzed: 10/12/21 02:41 Lab File ID: 201919.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:59

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 507716

Lab Sample ID: 240-157760-13 Client Sample ID: MH-1231_100721

Date Analyzed: 10/12/21 03:04 Lab File ID: 201920.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:59

Lab Sample ID: 240-157760-14 Client Sample ID: SL-2_100721

Date Analyzed: 10/12/21 03:28 Lab File ID: 201921.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 11:59

Lab Sample ID: 240-157760-15 Client Sample ID: SL-3_100721

Date Analyzed: 10/12/21 03:52 Lab File ID: 201922.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 12:00

Lab Sample ID: 240-157760-16 Client Sample ID: SL-4_100721

Date Analyzed: 10/12/21 04:16 Lab File ID: 201923.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 12:00

Lab Sample ID: 240-157760-17 Client Sample ID: DUP-01

Date Analyzed: 10/12/21 04:40 Lab File ID: 201924.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	10/12/21 12:00

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm150IS20_00012	11/24/21	08/24/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150IS20_00014	12/23/21	09/23/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150SS20_00003	11/25/21	08/25/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm150SS20_00004	11/30/21	08/30/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50is_00086	05/27/21	11/27/20	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_00089	12/28/21	06/28/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00090	03/22/22	09/22/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00453	09/10/21	09/03/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50SS_STK_00086	03/28/21	09/28/20	MEOH, Lot 0000230446	200 mL	VM567650_00033	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00033	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00376	01/21/21	01/14/21	MEOH, Lot na	5 mL	VMACROLSTD_00091	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00091	02/07/21	01/07/21	MEOH, Lot 0000258810	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00384	03/23/21	03/16/21	MEOH, Lot na	5 mL	VMACROLSTD_00093	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00093	04/09/21	03/09/21	MEOH, Lot +230910000258810JD	20 mL	VM568720_00040	0.25 mL	Acrolein	250 ug/mL
..VM568720_00040	07/31/21		restek, Lot A0161364		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00026							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmdiox_spike_00275	09/10/21	09/03/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00279	10/13/21	10/06/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00264	09/14/21	09/07/21	MEOH, Lot na	1 mL	vmdioxane_00033	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00033	10/01/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00267	10/13/21	10/06/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00391	01/15/21	01/08/21	MEOH, Lot NA	5 mL	VMFASG_00102	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00102	02/08/21	01/08/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00399	03/17/21	03/10/21	MEOH, Lot NA	5 mL	VMFASG_00104	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00104	04/10/21	03/10/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00428	10/15/21	10/09/21	MEOH, Lot NA	5 mL	VMFASG_00110	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00110	10/15/21	09/15/21	MEOH, Lot 0000273166	100 mL	vm569722S_00009	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00009	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00382	01/18/21	01/11/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00390	03/23/21	03/16/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00417	10/12/21	10/05/21	MEOH, Lot n/a	5 mL	VMRFASP_00077	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00077	10/31/21	08/31/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00418	10/20/21	10/13/21	MEOH, Lot n/a	5 mL	VMRFASP_00077	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00077	10/31/21	08/31/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00369	01/15/21	01/08/21	MEOH, Lot 0000258810	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00377	03/21/21	03/14/21	MEOH, Lot 0000258810	10 mL	vm569722_00015	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00015	11/30/22		Restek, Lot A0154679		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00403	10/16/21	10/09/21	MEOH, Lot 0000273166	10 mL	vm569722_00019	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00019	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRPRIMW_00419	01/21/21	01/14/21	MEOH, Lot NA	5 mL	VMRPRIM_00048	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00048	02/28/21	11/28/20	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00427	03/23/21	03/16/21	MEOH, Lot NA	5 mL	VMRPRIM_00049	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00049	06/01/21	03/01/21	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00455	10/19/21	10/12/21	MEOH, Lot NA	5 mL	VMRPRIM_00052	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00052	10/31/21	08/02/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22	Restek, Lot A0159680			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

---

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00033

VM567650_00033 Rec: 4/9/19

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00019

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,002.2 µg/mL		+/- 29.0815 µg/mL		Gravimetric
	CAS # 25725-11-5	(Lot CD-107)			+/- 107.0965 µg/mL		Unstressed
	Purity 98%				+/- 110.2100 µg/mL		Stressed
2	2-Butanone-d5		1,252.7 µg/mL		+/- 7.2833 µg/mL		Gravimetric
	CAS # 24313-50-6	(Lot M-276)			+/- 26.8205 µg/mL		Unstressed
	Purity 99%				+/- 27.6002 µg/mL		Stressed
3	Fluorobenzene		251.8 µg/mL		+/- 1.4674 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)			+/- 5.3920 µg/mL		Unstressed
	Purity 99%				+/- 5.5487 µg/mL		Stressed
4	1,4-Dioxane-d8		5,003.8 µg/mL		+/- 29.0907 µg/mL		Gravimetric
	CAS # 17647-74-4	(Lot I-19942)			+/- 107.1305 µg/mL		Unstressed
	Purity 99%				+/- 110.2450 µg/mL		Stressed
5	Chlorobenzene-d5		250.8 µg/mL		+/- 1.4613 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)			+/- 5.3695 µg/mL		Unstressed
	Purity 99%				+/- 5.5256 µg/mL		Stressed
6	1,4-Dichlorobenzene-d4		250.5 µg/mL		+/- 1.4595 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/- 5.3631 µg/mL		Unstressed
	Purity 99%				+/- 5.5189 µg/mL		Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

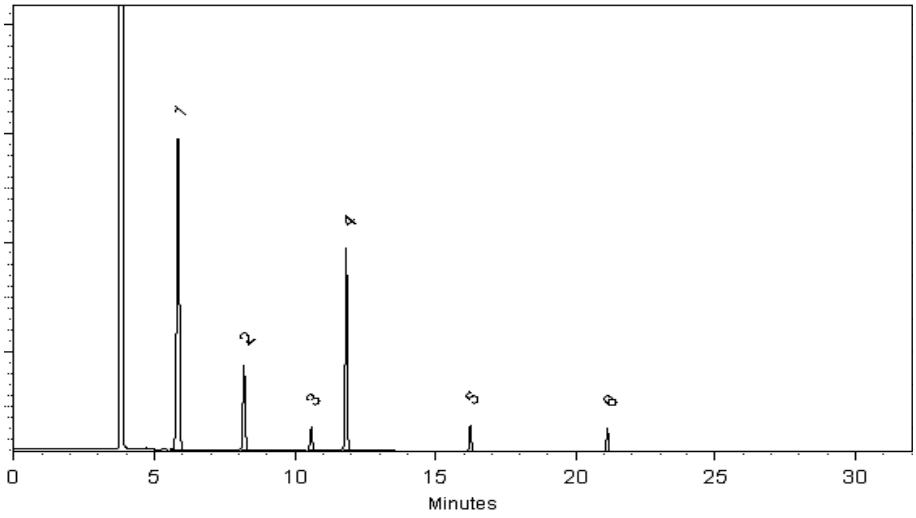
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot CD-107) **Purity** 99%	5,010.4 µg/mL	+/- 29.1309 µg/mL +/- 107.2733 µg/mL +/- 110.3919 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,252.7 µg/mL	+/- 7.2833 µg/mL +/- 26.8205 µg/mL +/- 27.6002 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBZ5549) **Purity** 99%	250.8 µg/mL	+/- 1.4615 µg/mL +/- 5.3706 µg/mL +/- 5.5267 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I19942-0122JM) **Purity** 99%	5,010.4 µg/mL	+/- 29.1309 µg/mL +/- 107.2733 µg/mL +/- 110.3919 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.0 µg/mL	+/- 1.4569 µg/mL +/- 5.3534 µg/mL +/- 5.5090 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	252.4 µg/mL	+/- 1.4709 µg/mL +/- 5.4048 µg/mL +/- 5.5619 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568720_00039

Rec: 4/7/20
VM568720_00039

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156861

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,752.0 µg/mL	+/- 115.6523	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot D0012019-1219)		+/- 394.5922	µg/mL	Unstressed
	Purity 99%			+/- 885.2572	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00040

Rc'd 9/17/21 VM 568720_ 00040

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156859

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,830.0 µg/mL	+/- 116.1090	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 396.1504	µg/mL	Unstressed
	Purity 99%		+/- 888.7531	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00015

Rec: 4/14/20
VM569722_0005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0154679

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.7 µg/mL	+/- 18.2705 +/- 140.7566 +/- 144.0300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 18.7547 +/- 140.6865 +/- 143.9553	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.1 µg/mL	+/- 18.5858 +/- 140.7083 +/- 143.9787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,497.1 µg/mL	+/- 17.5808 +/- 140.3628 +/- 143.6309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 23.3138 +/- 141.3956 +/- 144.6498	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,499.0 µg/mL	+/- 21.4252 +/- 140.9973 +/- 144.2558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane -(CFC-11)		2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%			+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

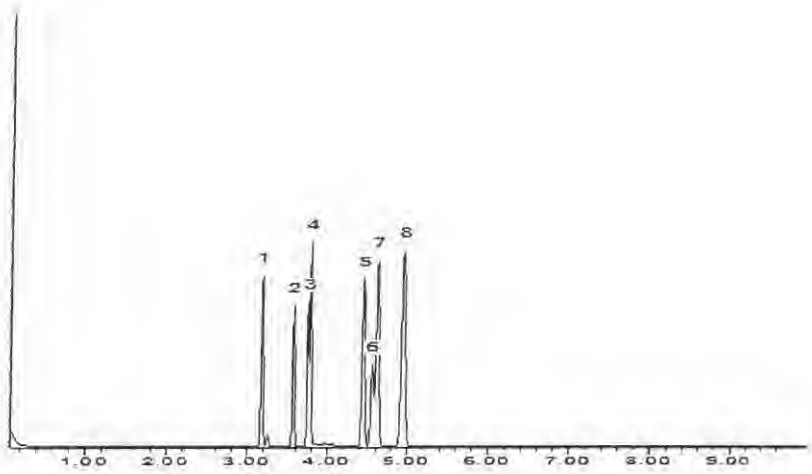
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 **Balance:** B707717271

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
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Certificate #FM 80397

Reagent

vm569722_00017

Rec: 6/29/20
VM569722-00017

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 +/- 140.5076 +/- 143.7858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 +/- 140.4038 +/- 143.6799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 +/- 140.4890 +/- 143.7623	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 +/- 140.5681 +/- 143.8406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 +/- 140.4450 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 +/- 140.5555 +/- 143.8274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4 µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)		+/-	140.4203	µg/mL	Unstressed
	Purity 99%			+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

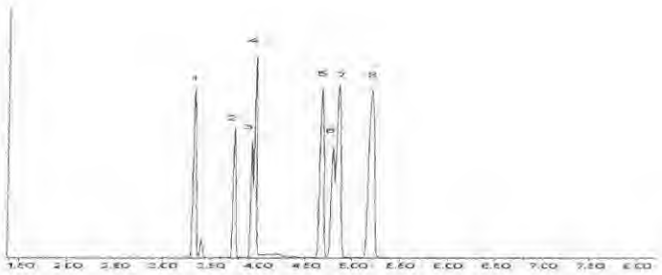
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

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vm569722_00019

Rec: 1/20/21
VMS69722_00019

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,502.3 µg/mL	+/- 16.4178 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5076 µg/mL	Unstressed
	Purity 99%		+/- 143.7858 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.6 µg/mL	+/- 16.3299 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.4038 µg/mL	Unstressed
	Purity 99%		+/- 143.6799 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 17.2154 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4890 µg/mL	Unstressed
	Purity 99%		+/- 143.7623 µg/mL	Stressed
4	1,3-Butadiene	2,500.7 µg/mL	+/- 17.6652 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.5681 µg/mL	Unstressed
	Purity 99%		+/- 143.8406 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.2 µg/mL	+/- 16.4034 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4450 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/- 17.7279 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5555 µg/mL	Unstressed
	Purity 99%		+/- 143.8274 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 8582700)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

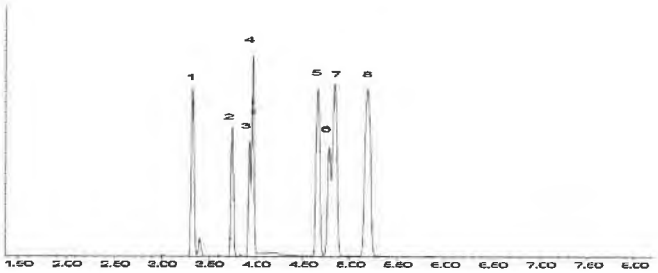
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Mar-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

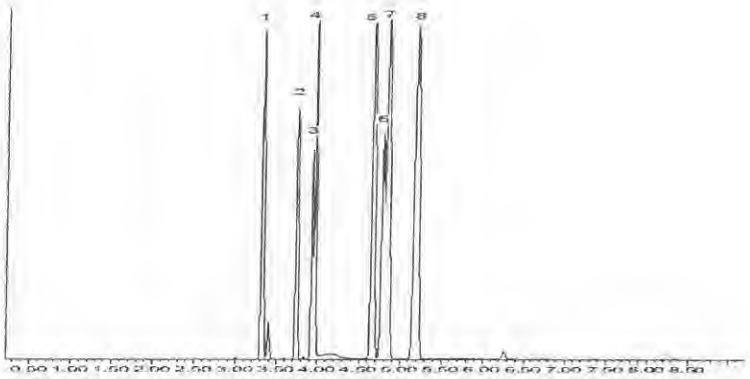
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00009

Rec: 12/2/20

VM569722S-00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,501.8 µg/mL	+/- 19.9803 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/- 140.9385 µg/mL	Unstressed
	Purity 99%		+/- 144.2054 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,510.1 µg/mL	+/- 18.7758 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.2337 µg/mL	Unstressed
	Purity 99%		+/- 144.5155 µg/mL	Stressed
3	Vinyl chloride	2,518.3 µg/mL	+/- 19.4159 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 141.7727 µg/mL	Unstressed
	Purity 99%		+/- 145.0634 µg/mL	Stressed
4	1,3-Butadiene	2,510.8 µg/mL	+/- 17.5328 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/- 141.1137 µg/mL	Unstressed
	Purity 99%		+/- 144.4001 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,506.4 µg/mL	+/- 23.4232 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 141.7223 µg/mL	Unstressed
	Purity 99%		+/- 144.9835 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,523.5 µg/mL	+/- 21.4589 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 142.3524 µg/mL	Unstressed
	Purity 99%		+/- 145.6434 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 4938100)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5	µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	140.3462	µg/mL	Unstressed
	Purity 99%				+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

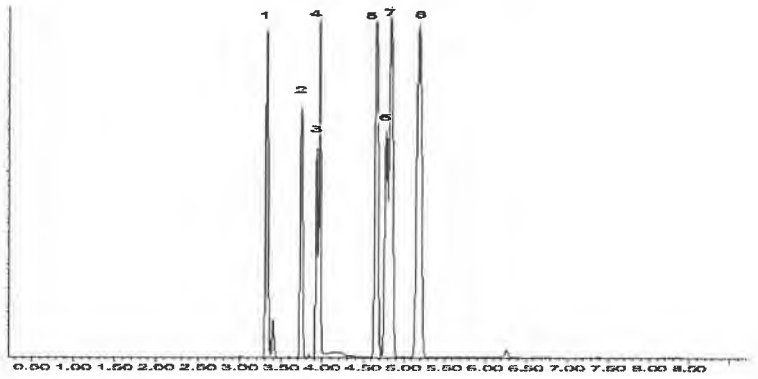
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Feng-Yun Lo - QC Analyst

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 53.5253 +/- 55.0814	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

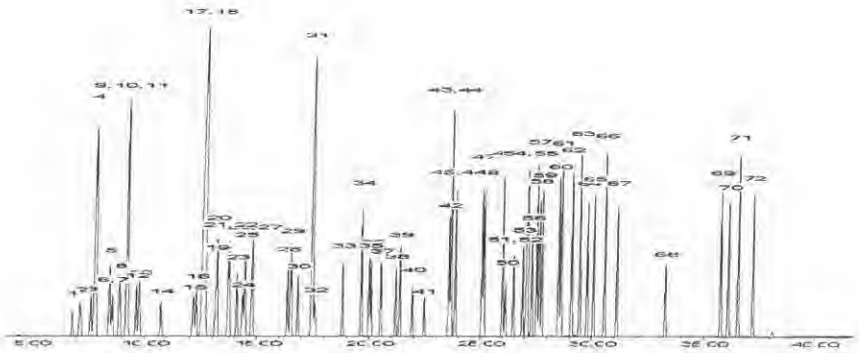
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00005

Rec'd 4/19/21 VM571992_00005

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3122.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571992S_00007

VMS71992S-00007 Rec; 2-21-20

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4	µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7	µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7	µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7	µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2	µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2	µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,505.2	µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3	µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7	µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2	µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7	µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

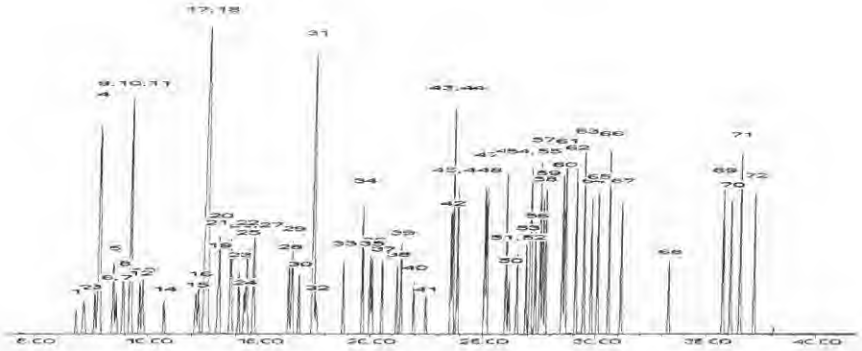
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00008

Rec'd 6/10/21 VM571992 00008

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Solution Order	Compound	Nominal Concentration (weight/volume)	Expanded Uncertainty (95% CL, k=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	(Lot F23X068)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	(Lot 18342)	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	(Lot 7692300)	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	(Lot HGCHN)	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	(Lot UCNEL)	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 99%	(Lot Y25A027)	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 99%	(Lot H3HGC)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00010

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 210419
Manufacture Date: 04/19/2021
Expiration: 04/30/2022
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100.0%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.5%	25016.8 ± 232.9

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 210419

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-157760-1	106	94	107	78
SL-15_100721	240-157760-2	112	105	115	94
SL-14_100721	240-157760-3	117	107	108	84
SL-13_100721	240-157760-4	106	100	110	81
SL-7_100721	240-157760-5	98	95	107	78
SL-6_100721	240-157760-6	118	106	126 S1+	95
SL-5_100721	240-157760-7	98	90	110	78
SL-8_100721	240-157760-8	86	75	94	81
SL-9_100721	240-157760-9	88	109	90	92
SL-10_100721	240-157760-10	89	114	93	95
SL-11_100721	240-157760-11	90	111	94	95
SL-12_100721	240-157760-12	92	118	95	94
MH-1231_100721	240-157760-13	91	118	92	94
SL-2_100721	240-157760-14	92	115	92	93
SL-3_100721	240-157760-15	93	118	93	95
SL-4_100721	240-157760-16	92	118	94	94
DUP-01	240-157760-17	94	117	96	95
	MB 240-507762/6	111	100	110	78
	MB 240-507764/7	89	118	92	77
	MB 240-508017/6	102	89	102	68
	MB 240-508019/7	92	119	94	79
	LCS 240-507762/4	104	94	115	89
	LCS 240-507764/4	88	109	98	98
	LCS 240-508017/4	99	89	113	77
	LCS 240-508019/4	89	106	100	98
	240-157588-G-1 MS	98	88	101	85
	240-157641-H-4 MS	91	108	101	98
	240-157764-A-11 MS	110	100	119	90
	240-157641-B-1 MS	92	108	101	99
	240-157588-F-1 MSD	102	91	108	83
	240-157641-E-4 MSD	90	108	100	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	240-157764-C-11 MSD	109	94	119	87
	240-157641-B-1 MSD	91	108	98	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1285.D

Lab ID: LCS 240-507762/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.3	103	63-134	
cis-1,2-Dichloroethene	10.0	11.6	116	77-123	
Tetrachloroethene	10.0	10.2	102	76-123	
trans-1,2-Dichloroethene	10.0	11.2	112	75-124	
Trichloroethene	10.0	9.12	91	70-122	
Vinyl chloride	10.0	11.2	112	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9976.D

Lab ID: LCS 240-507764/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.34	93	63-134	
cis-1,2-Dichloroethene	10.0	9.93	99	77-123	
Tetrachloroethene	10.0	9.50	95	76-123	
trans-1,2-Dichloroethene	10.0	10.2	102	75-124	
Trichloroethene	10.0	9.44	94	70-122	
Vinyl chloride	10.0	10.3	103	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1318.D

Lab ID: LCS 240-508017/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.64	96	63-134	
cis-1,2-Dichloroethene	10.0	11.4	114	77-123	
Tetrachloroethene	10.0	9.88	99	76-123	
trans-1,2-Dichloroethene	10.0	11.0	110	75-124	
Trichloroethene	10.0	9.20	92	70-122	
Vinyl chloride	10.0	9.65	97	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC0005.D

Lab ID: LCS 240-508019/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.15	92	63-134	
cis-1,2-Dichloroethene	10.0	10.4	104	77-123	
Tetrachloroethene	10.0	9.15	92	76-123	
trans-1,2-Dichloroethene	10.0	10.2	102	75-124	
Trichloroethene	10.0	9.59	96	70-122	
Vinyl chloride	10.0	9.74	97	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1312.D

Lab ID: 240-157588-G-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	10.7	107	56-135	
cis-1,2-Dichloroethene	10.0	6.0	15.1	91	66-128	
Tetrachloroethene	10.0	1.0 U	9.20	92	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	11.3	113	56-136	
Trichloroethene	10.0	1.0 U	9.30	93	61-124	
Vinyl chloride	10.0	4.9	15.6	107	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9994.D

Lab ID: 240-157641-H-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	8.67	87	56-135	
cis-1,2-Dichloroethene	10.0	1.0 U	9.89	99	66-128	
Tetrachloroethene	10.0	1.0 U	8.68	87	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	9.91	99	56-136	
Trichloroethene	10.0	1.0 U	8.90	89	61-124	
Vinyl chloride	10.0	1.0 U	8.98	90	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1339.D

Lab ID: 240-157764-A-11 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	11.7	117	56-135	
cis-1,2-Dichloroethene	10.0	1.0 U	11.6	116	66-128	
Tetrachloroethene	10.0	22	33.0	108	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	11.6	116	56-136	
Trichloroethene	10.0	1.8	11.4	96	61-124	
Vinyl chloride	10.0	1.0 U	10.8	108	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC0014.D

Lab ID: 240-157641-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	33.3	3.3 U	30.7	92	56-135	
cis-1,2-Dichloroethene	33.3	37	65.1	85	66-128	
Tetrachloroethene	33.3	3.3 U	29.0	87	62-131	
trans-1,2-Dichloroethene	33.3	68	92.1	73	56-136	
Trichloroethene	33.3	54	79.3	75	61-124	
Vinyl chloride	33.3	3.3 U	36.2	109	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1313.D

Lab ID: 240-157588-F-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	11.8	118	10	26	56-135	
cis-1,2-Dichloroethene	10.0	15.7	97	4	14	66-128	
Tetrachloroethene	10.0	9.82	98	7	20	62-131	
trans-1,2-Dichloroethene	10.0	11.5	115	1	15	56-136	
Trichloroethene	10.0	9.11	91	2	15	61-124	
Vinyl chloride	10.0	16.7	118	7	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9995.D

Lab ID: 240-157641-E-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.64	96	11	26	56-135	
cis-1,2-Dichloroethene	10.0	9.87	99	0	14	66-128	
Tetrachloroethene	10.0	9.10	91	5	20	62-131	
trans-1,2-Dichloroethene	10.0	10.1	101	2	15	56-136	
Trichloroethene	10.0	9.26	93	4	15	61-124	
Vinyl chloride	10.0	11.1	111	22	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1340.D

Lab ID: 240-157764-C-11 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	11.9	119	2	26	56-135	
cis-1,2-Dichloroethene	10.0	11.2	112	4	14	66-128	
Tetrachloroethene	10.0	30.8	86	7	20	62-131	
trans-1,2-Dichloroethene	10.0	11.5	115	1	15	56-136	
Trichloroethene	10.0	10.9	91	5	15	61-124	
Vinyl chloride	10.0	11.4	114	6	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC0015.D

Lab ID: 240-157641-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	33.3	31.8	96	4	26	56-135	
cis-1,2-Dichloroethene	33.3	63.7	81	2	14	66-128	
Tetrachloroethene	33.3	30.9	93	6	20	62-131	
trans-1,2-Dichloroethene	33.3	91.8	72	0	15	56-136	
Trichloroethene	33.3	78.5	72	1	15	61-124	
Vinyl chloride	33.3	40.9	123	12	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: UXJ1289.D Lab Sample ID: MB 240-507762/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 10/12/2021 09:24

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-507762/4	UXJ1285.D	10/12/2021 07:54
TRIP BLANK	240-157760-1	UXJ1290.D	10/12/2021 09:46
SL-15_100721	240-157760-2	UXJ1291.D	10/12/2021 10:09
SL-14_100721	240-157760-3	UXJ1292.D	10/12/2021 10:31
SL-13_100721	240-157760-4	UXJ1293.D	10/12/2021 10:54
SL-7_100721	240-157760-5	UXJ1306.D	10/12/2021 15:47
SL-6_100721	240-157760-6	UXJ1307.D	10/12/2021 16:09
SL-8_100721	240-157760-8	UXJ1309.D	10/12/2021 16:54
	240-157588-G-1 MS	UXJ1312.D	10/12/2021 18:02
	240-157588-F-1 MSD	UXJ1313.D	10/12/2021 18:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: UXC9980.D Lab Sample ID: MB 240-507764/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/12/2021 10:51

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-507764/4	UXC9976.D	10/12/2021 08:42
SL-10_100721	240-157760-10	UXC9981.D	10/12/2021 11:13
SL-11_100721	240-157760-11	UXC9982.D	10/12/2021 11:35
SL-12_100721	240-157760-12	UXC9983.D	10/12/2021 11:57
SL-9_100721	240-157760-9	UXC9984.D	10/12/2021 12:23
MH-1231_100721	240-157760-13	UXC9985.D	10/12/2021 12:45
SL-2_100721	240-157760-14	UXC9986.D	10/12/2021 13:07
SL-3_100721	240-157760-15	UXC9987.D	10/12/2021 13:29
SL-4_100721	240-157760-16	UXC9988.D	10/12/2021 13:51
	240-157641-H-4 MS	UXC9994.D	10/12/2021 16:02
	240-157641-E-4 MSD	UXC9995.D	10/12/2021 16:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: UXJ1322.D Lab Sample ID: MB 240-508017/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 10/13/2021 10:53

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-508017/4	UXJ1318.D	10/13/2021 09:23
SL-5_100721	240-157760-7	UXJ1323.D	10/13/2021 11:16
	240-157764-A-11 MS	UXJ1339.D	10/13/2021 17:16
	240-157764-C-11 MSD	UXJ1340.D	10/13/2021 17:38

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: UXC0009.D Lab Sample ID: MB 240-508019/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/13/2021 11:47

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-508019/4	UXC0005.D	10/13/2021 10:19
DUP-01	240-157760-17	UXC0010.D	10/13/2021 12:09
	240-157641-B-1 MS	UXC0014.D	10/13/2021 13:36
	240-157641-B-1 MSD	UXC0015.D	10/13/2021 13:58

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB1115A.D BFB Injection Date: 01/15/2021

Instrument ID: A3UX11 BFB Injection Time: 10:36

Analysis Batch No.: 469338

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	82.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.9) 1
176	95.0 - 101.0 % of mass 174	81.5	(98.9) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-469338/2	UXJ5268.D	01/15/2021	11:06
	STD8260 240-469338/3	UXJ5269.D	01/15/2021	11:29
	STD8260 240-469338/4	UXJ5270.D	01/15/2021	11:51
	STD8260 240-469338/5	UXJ5271.D	01/15/2021	12:13
	STD8260 240-469338/6	UXJ5272.D	01/15/2021	12:36
	STD8260 240-469338/7	UXJ5273.D	01/15/2021	12:58
	ICV 240-469338/14	UXJ5274.D	01/15/2021	13:20
	ICV 240-469338/15	UXJ5281.D	01/15/2021	15:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB1012A.D BFB Injection Date: 10/12/2021

Instrument ID: A3UX11 BFB Injection Time: 07:03

Analysis Batch No.: 507762

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.7	
75	30.0 - 60.0 % of mass 95	53.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	Greater than 50% of mass 95	84.0	
175	5.0 - 9.0 % of mass 174	6.2	(7.4) 1
176	95.0 - 101.0 % of mass 174	81.5	(97.0) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-507762/2	UXJ1284.D	10/12/2021	7:31
	LCS 240-507762/4	UXJ1285.D	10/12/2021	7:54
	CCV 240-507762/3	UXJ1286.D	10/12/2021	8:16
	MB 240-507762/6	UXJ1289.D	10/12/2021	9:24
TRIP BLANK	240-157760-1	UXJ1290.D	10/12/2021	9:46
SL-15_100721	240-157760-2	UXJ1291.D	10/12/2021	10:09
SL-14_100721	240-157760-3	UXJ1292.D	10/12/2021	10:31
SL-13_100721	240-157760-4	UXJ1293.D	10/12/2021	10:54
SL-7_100721	240-157760-5	UXJ1306.D	10/12/2021	15:47
SL-6_100721	240-157760-6	UXJ1307.D	10/12/2021	16:09
SL-8_100721	240-157760-8	UXJ1309.D	10/12/2021	16:54
	240-157588-G-1 MS	UXJ1312.D	10/12/2021	18:02
	240-157588-F-1 MSD	UXJ1313.D	10/12/2021	18:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB1013.D BFB Injection Date: 10/13/2021

Instrument ID: A3UX11 BFB Injection Time: 08:31

Analysis Batch No.: 508017

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	50.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	Greater than 50% of mass 95	84.1	
175	5.0 - 9.0 % of mass 174	6.4	(7.7) 1
176	95.0 - 101.0 % of mass 174	80.5	(95.8) 1
177	5.0 - 9.0 % of mass 176	4.6	(5.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-508017/2	UXJ1317.D	10/13/2021	9:00
	LCS 240-508017/4	UXJ1318.D	10/13/2021	9:23
	CCV 240-508017/3	UXJ1319.D	10/13/2021	9:45
	MB 240-508017/6	UXJ1322.D	10/13/2021	10:53
SL-5_100721	240-157760-7	UXJ1323.D	10/13/2021	11:16
	240-157764-A-11 MS	UXJ1339.D	10/13/2021	17:16
	240-157764-C-11 MSD	UXJ1340.D	10/13/2021	17:38

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB210316.D BFB Injection Date: 03/16/2021

Instrument ID: A3UX15 BFB Injection Time: 07:33

Analysis Batch No.: 476941

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	49.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	Greater than 50% of mass 95	92.8	
175	5.0 - 9.0 % of mass 174	6.1	(6.6) 1
176	95.0 - 101.0 % of mass 174	90.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-476941/2	UXC5644.D	03/16/2021	8:36
	STD8260 240-476941/3	UXC5645.D	03/16/2021	8:58
	STD8260 240-476941/4	UXC5646.D	03/16/2021	9:20
	STD8260 240-476941/5	UXC5647.D	03/16/2021	9:42
	STD8260 240-476941/6	UXC5648.D	03/16/2021	10:17
	STD8260 240-476941/7	UXC5649.D	03/16/2021	10:39
	ICV 240-476941/14	UXC5650.D	03/16/2021	11:01
	ICV 240-476941/15	UXC5657.D	03/16/2021	13:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB1012.D BFB Injection Date: 10/12/2021

Instrument ID: A3UX15 BFB Injection Time: 07:54

Analysis Batch No.: 507764

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.5	
75	30.0 - 60.0 % of mass 95	51.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.0	(6.8) 1
176	95.0 - 101.0 % of mass 174	70.7	(95.9) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-507764/2	UXC9975.D	10/12/2021	8:20
	LCS 240-507764/4	UXC9976.D	10/12/2021	8:42
	CCV 240-507764/3	UXC9977.D	10/12/2021	9:04
	MB 240-507764/7	UXC9980.D	10/12/2021	10:51
SL-10_100721	240-157760-10	UXC9981.D	10/12/2021	11:13
SL-11_100721	240-157760-11	UXC9982.D	10/12/2021	11:35
SL-12_100721	240-157760-12	UXC9983.D	10/12/2021	11:57
SL-9_100721	240-157760-9	UXC9984.D	10/12/2021	12:23
MH-1231_100721	240-157760-13	UXC9985.D	10/12/2021	12:45
SL-2_100721	240-157760-14	UXC9986.D	10/12/2021	13:07
SL-3_100721	240-157760-15	UXC9987.D	10/12/2021	13:29
SL-4_100721	240-157760-16	UXC9988.D	10/12/2021	13:51
	240-157641-H-4 MS	UXC9994.D	10/12/2021	16:02
	240-157641-E-4 MSD	UXC9995.D	10/12/2021	16:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB1013.D BFB Injection Date: 10/13/2021

Instrument ID: A3UX15 BFB Injection Time: 09:22

Analysis Batch No.: 508019

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.6	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	79.3	
175	5.0 - 9.0 % of mass 174	5.4	(6.9) 1
176	95.0 - 101.0 % of mass 174	76.3	(96.3) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-508019/2	UXC0004.D	10/13/2021	9:57
	LCS 240-508019/4	UXC0005.D	10/13/2021	10:19
	CCV 240-508019/3	UXC0006.D	10/13/2021	10:41
	MB 240-508019/7	UXC0009.D	10/13/2021	11:47
DUP-01	240-157760-17	UXC0010.D	10/13/2021	12:09
	240-157641-B-1 MS	UXC0014.D	10/13/2021	13:36
	240-157641-B-1 MSD	UXC0015.D	10/13/2021	13:58

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: STD8260 240-469338/4 Date Analyzed: 01/15/2021 11:51

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5270.D Heated Purge: (Y/N) N

Calibration ID: 60081

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1164516	4.68	833065	7.33	399775	9.55
UPPER LIMIT		2329032	5.18	1666130	7.83	799550	10.05
LOWER LIMIT		582258	4.18	416533	6.83	199888	9.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-469338/14		1139518	4.68	814816	7.33	388972	9.55
ICV 240-469338/15		1208129	4.68	881966	7.33	428396	9.54
CCVIS 240-507762/2		929880	4.68	531501	7.33	323663	9.54
CCVIS 240-508017/2		1085074	4.68	575097	7.33	301848	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: CCVIS 240-507762/2 Date Analyzed: 10/12/2021 07:31

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ1284.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		929880	4.68	531501	7.33	323663	9.54
UPPER LIMIT		1859760	5.18	1063002	7.83	647326	10.04
LOWER LIMIT		464940	4.18	265751	6.83	161832	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-507762/4		780078	4.68	425892	7.33	250104	9.54
CCV 240-507762/3		757233	4.68	413442	7.33	210030	9.54
MB 240-507762/6		687719	4.68	396525	7.33	198801	9.54
240-157760-1	TRIP BLANK	701494	4.68	407088	7.33	206768	9.54
240-157760-2	SL-15_100721	675345	4.68	408059	7.33	205117	9.54
240-157760-3	SL-14_100721	627156	4.68	398784	7.33	206015	9.54
240-157760-4	SL-13_100721	716762	4.68	445314	7.33	232306	9.54
240-157760-5	SL-7_100721	686678	4.68	417261	7.33	244839	9.54
240-157760-6	SL-6_100721	595786	4.68	347348	7.33	193521	9.54
240-157760-8	SL-8_100721	667199	4.68	438676	7.33	250211	9.54
240-157588-G-1 MS		895117	4.68	546376	7.33	320688	9.54
240-157588-F-1 MSD		873485	4.68	508330	7.33	291907	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: CCVIS 240-508017/2 Date Analyzed: 10/13/2021 09:00

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ1317.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1085074	4.68	575097	7.33	301848	9.54
UPPER LIMIT		2170148	5.18	1150194	7.83	603696	10.04
LOWER LIMIT		542537	4.18	287549	6.83	150924	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-508017/4		985110	4.68	551084	7.33	287369	9.54
CCV 240-508017/3		977033	4.68	558603	7.33	290404	9.54
MB 240-508017/6		900705	4.68	519372	7.33	251870	9.54
240-157760-7	SL-5_100721	879471	4.68	492609	7.33	256525	9.54
240-157764-A-11 MS		768948	4.68	453811	7.33	255795	9.54
240-157764-C-11 MSD		821577	4.68	465290	7.33	240190	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: STD8260 240-476941/4 Date Analyzed: 03/16/2021 09:20

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC5646.D Heated Purge: (Y/N) N

Calibration ID: 60823

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1635381	5.00	1083691	7.66	639882	9.90
UPPER LIMIT		3270762	5.50	2167382	8.16	1279764	10.40
LOWER LIMIT		817691	4.50	541846	7.16	319941	9.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-476941/14		1567389	5.00	1054688	7.66	623148	9.90
ICV 240-476941/15		1522004	5.00	1034257	7.66	604775	9.90
CCVIS 240-507764/2		1868411	4.99	1377291	7.66	768703	9.89
CCVIS 240-508019/2		1935640	4.99	1451673	7.66	823449	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: CCVIS 240-507764/2 Date Analyzed: 10/12/2021 08:20

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC9975.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1868411	4.99	1377291	7.66	768703	9.89
UPPER LIMIT		3736822	5.49	2754582	8.16	1537406	10.39
LOWER LIMIT		934206	4.49	688646	7.16	384352	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-507764/4		1861670	4.99	1362324	7.66	766187	9.89
CCV 240-507764/3		1870121	4.99	1457585	7.66	669580	9.89
MB 240-507764/7		1617587	4.99	1210836	7.66	571986	9.89
240-157760-10	SL-10_100721	1666669	4.99	1200823	7.66	642433	9.89
240-157760-11	SL-11_100721	1710472	4.99	1242431	7.66	649583	9.89
240-157760-12	SL-12_100721	1606793	4.99	1176347	7.66	619138	9.89
240-157760-9	SL-9_100721	1588459	4.99	1156513	7.66	598760	9.89
240-157760-13	MH-1231_100721	1617344	4.99	1192607	7.66	609068	9.89
240-157760-14	SL-2_100721	1563961	4.99	1149070	7.66	593897	9.89
240-157760-15	SL-3_100721	1566236	4.99	1142345	7.66	573650	9.89
240-157760-16	SL-4_100721	1554916	4.99	1152543	7.66	602548	9.89
240-157641-H-4 MS		1719754	4.99	1229758	7.66	706794	9.89
240-157641-E-4 MSD		1764686	4.99	1277836	7.66	728523	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: CCVIS 240-508019/2 Date Analyzed: 10/13/2021 09:57

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC0004.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1935640	4.99	1451673	7.66	823449	9.89
UPPER LIMIT		3871280	5.49	2903346	8.16	1646898	10.39
LOWER LIMIT		967820	4.49	725837	7.16	411725	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-508019/4		1874234	4.99	1386991	7.66	775387	9.89
CCV 240-508019/3		1776443	4.99	1375998	7.66	631250	9.89
MB 240-508019/7		1548161	4.99	1128216	7.66	533754	9.89
240-157760-17	DUP-01	1594907	4.99	1159939	7.66	587133	9.89
240-157641-B-1 MS		1746958	4.99	1259668	7.66	725407	9.89
240-157641-B-1 MSD		1800582	4.99	1314299	7.66	740705	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-157760-1

Matrix: Water Lab File ID: UXJ1290.D

Analysis Method: 8260B Date Collected: 10/07/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 09:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1290.D
Lims ID: 240-157760-B-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 12-Oct-2021 09:46:30 ALS Bottle#: 7 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-039
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	701494	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	407088	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	206768	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	189890	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	190005	18.7	
$ 6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	621082	21.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	158061	15.6	
14 Vinyl chloride	62		1.363				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.706				ND	
60 Trichloroethene	130		4.984				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

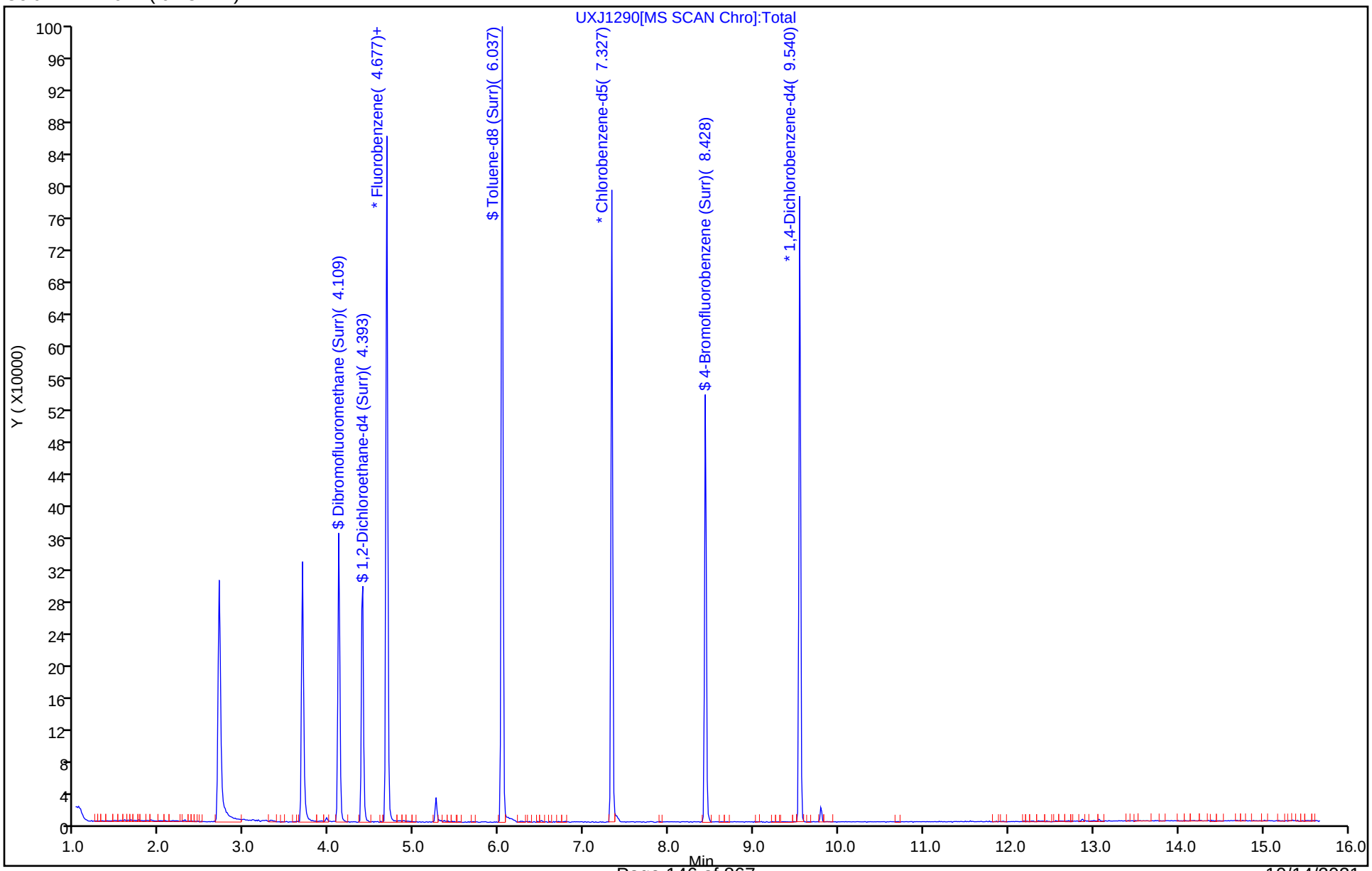
Report Date: 13-Oct-2021 08:35:32 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1290.D

Injection Date:	12-Oct-2021 09:46:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-B-1	Lab Sample ID:	240-157760-1	Worklist Smp#:	39
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1290.D
Lims ID: 240-157760-B-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 12-Oct-2021 09:46:30 ALS Bottle#: 7 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-039
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	106.25
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.71
$ 6 Toluene-d8 (Surr)	20.0	21.4	107.25
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.6	77.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-15_100721 Lab Sample ID: 240-157760-2

Matrix: Water Lab File ID: UXJ1291.D

Analysis Method: 8260B Date Collected: 10/07/2021 09:55

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 10:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	115		78-122
1868-53-7	Dibromofluoromethane (Surr)	112		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1291.D				
Lims ID:	240-157760-E-2				
Client ID:	SL-15_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 10:09:30	ALS Bottle#:	8	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114013-040				
Misc. Info.:	J211012A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:35:25	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	100	675345	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	408059	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	205117	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	192540	22.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	205603	21.1	
$	6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	666537	23.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	190412	18.7	
	14 Vinyl chloride	62		1.363				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.706				ND	
	60 Trichloroethene	130		4.984				ND	
	76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

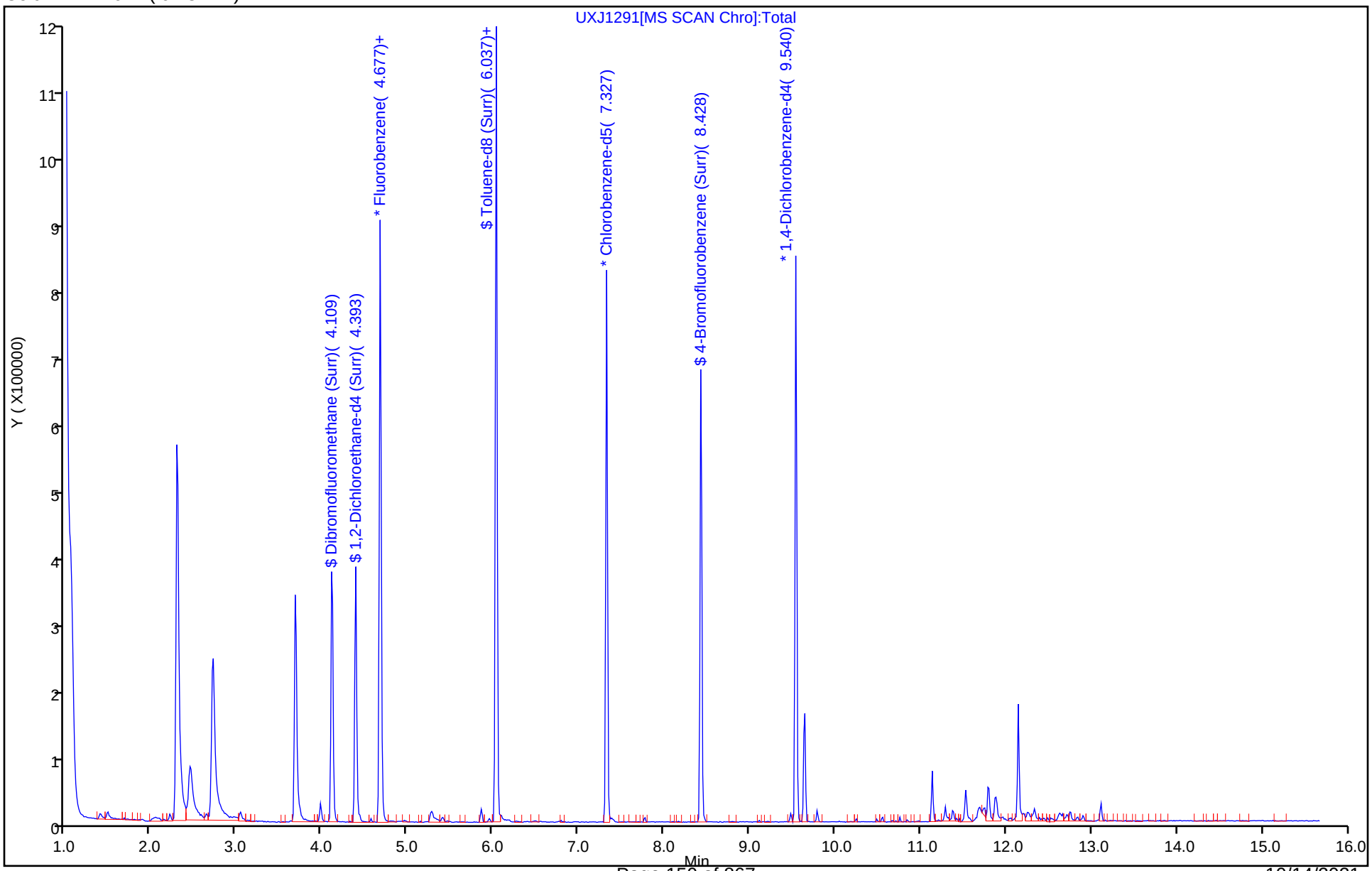
Report Date: 13-Oct-2021 08:35:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1291.D

Injection Date:	12-Oct-2021 10:09:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-2	Lab Sample ID:	240-157760-2	Worklist Smp#:	40
Client ID:	SL-15_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1291.D
Lims ID: 240-157760-E-2
Client ID: SL-15_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 10:09:30 ALS Bottle#: 8 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-040
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	22.4	111.90
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.1	105.33
$ 6 Toluene-d8 (Surr)	20.0	23.0	114.82
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-14_100721 Lab Sample ID: 240-157760-3

Matrix: Water Lab File ID: UXJ1292.D

Analysis Method: 8260B Date Collected: 10/07/2021 10:10

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 10:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	117		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1292.D				
Lims ID:	240-157760-E-3				
Client ID:	SL-14_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 10:31:30	ALS Bottle#:	9	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114013-041				
Misc. Info.:	J211012A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:35:25	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	100	627156	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	398784	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	206015	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	187267	23.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	193873	21.4	
$	6 Toluene-d8 (Surr)	98	6.038	6.037	0.001	93	610069	21.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	166695	16.8	
	14 Vinyl chloride	62		1.363				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.706				ND	
	60 Trichloroethene	130		4.984				ND	
	76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

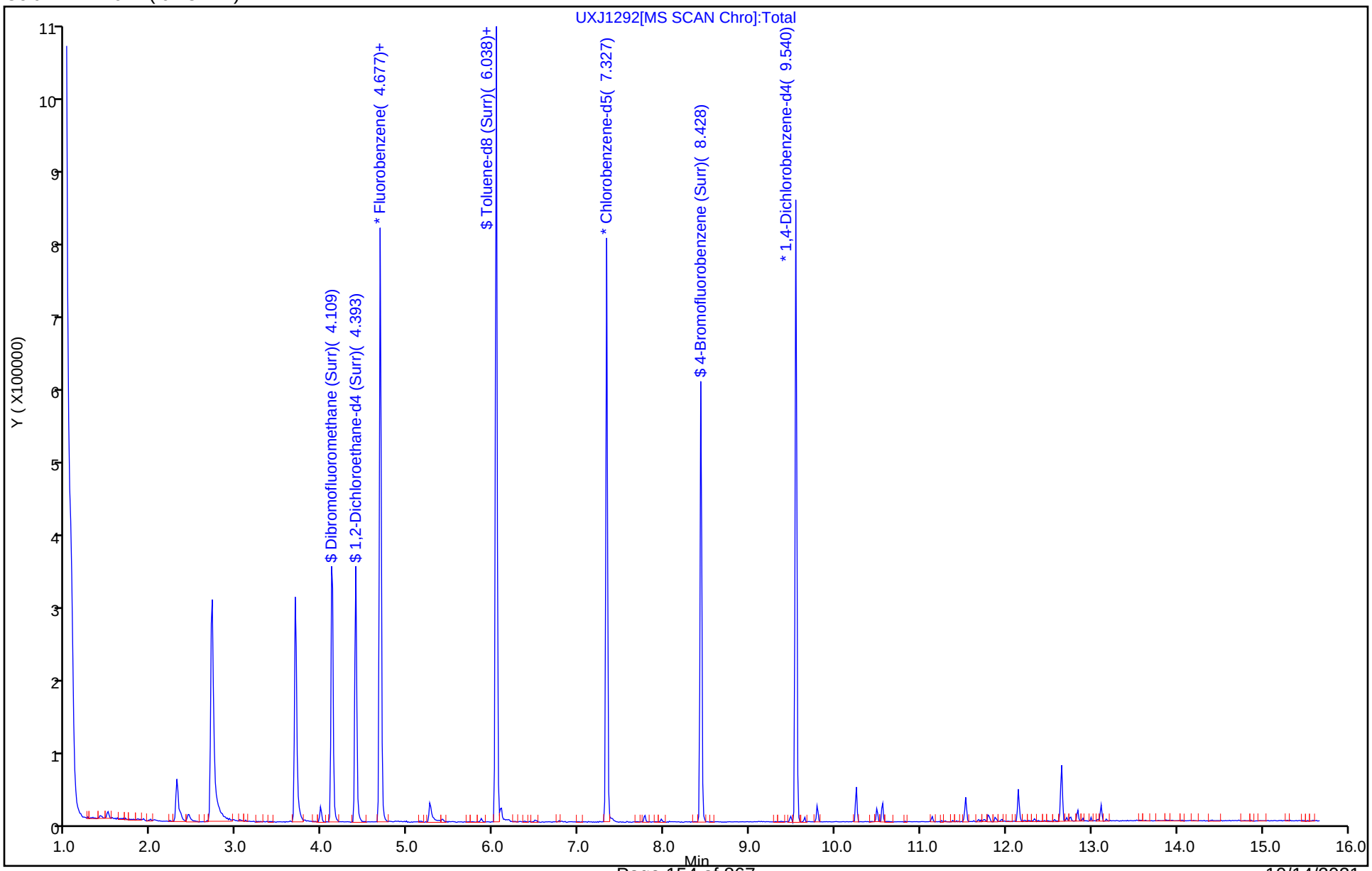
Report Date: 13-Oct-2021 08:35:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1292.D

Injection Date:	12-Oct-2021 10:31:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-3	Lab Sample ID:	240-157760-3	Worklist Smp#:	41
Client ID:	SL-14_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1292.D
Lims ID: 240-157760-E-3
Client ID: SL-14_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 10:31:30 ALS Bottle#: 9 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-041
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	23.4	117.20
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.4	106.96
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.54
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.8	83.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-13_100721 Lab Sample ID: 240-157760-4

Matrix: Water Lab File ID: UXJ1293.D

Analysis Method: 8260B Date Collected: 10/07/2021 10:30

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1293.D
Lims ID: 240-157760-E-4
Client ID: SL-13_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 10:54:30 ALS Bottle#: 10 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-042
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	716762	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	445314	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	232306	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.120	4.109	0.011	96	193016	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	206505	19.9	
$ 6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	693844	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	179784	16.2	
14 Vinyl chloride	62		1.363				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.706				ND	
60 Trichloroethene	130		4.984				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added: 2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added: 0.00	Units:	Run Reagent

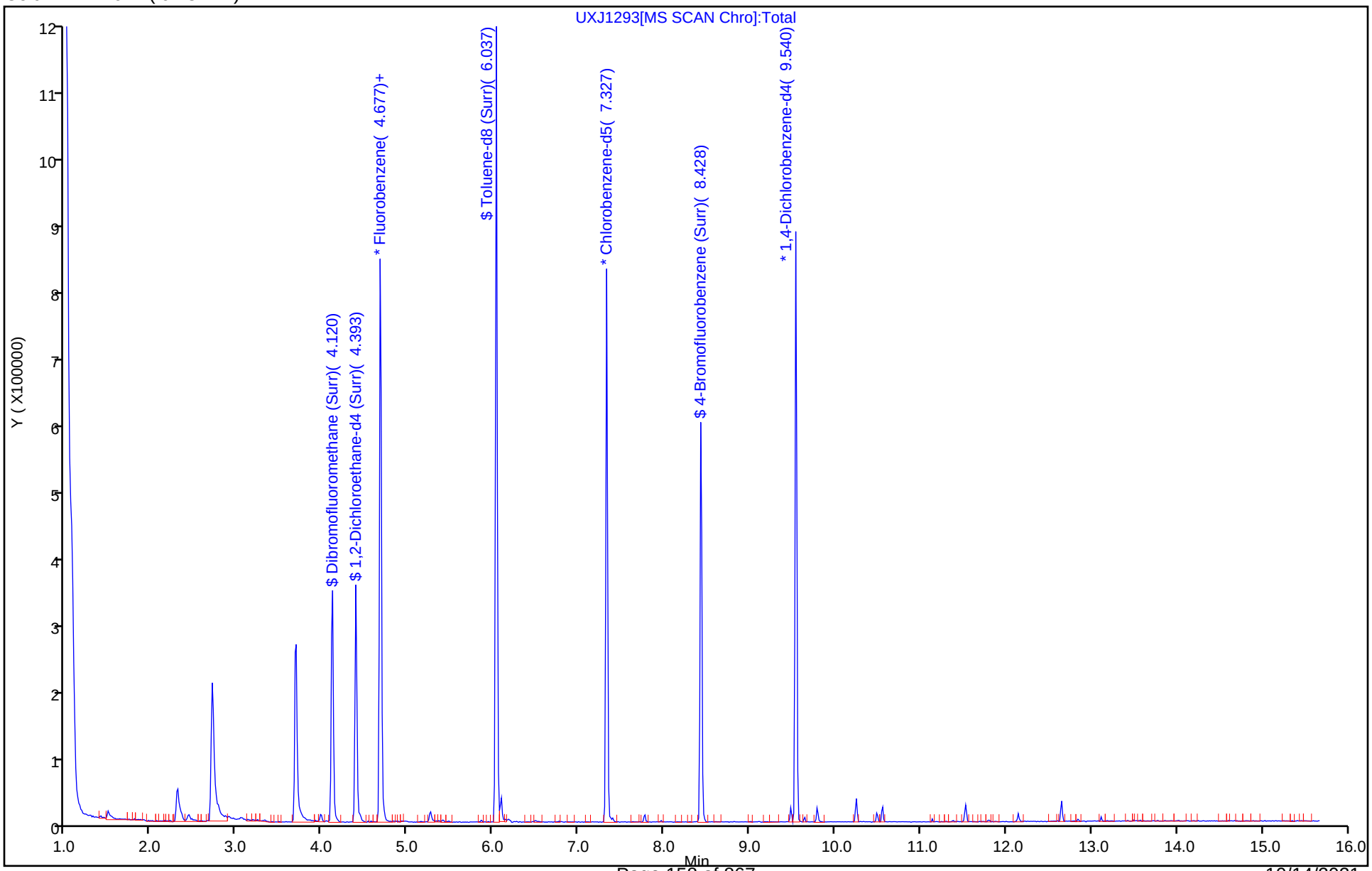
Report Date: 13-Oct-2021 08:35:34 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1293.D

Injection Date:	12-Oct-2021 10:54:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-4	Lab Sample ID:	240-157760-4	Worklist Smp#:	42
Client ID:	SL-13_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1293.D
Lims ID: 240-157760-E-4
Client ID: SL-13_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 10:54:30 ALS Bottle#: 10 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-042
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.70
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.9	99.68
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.53
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.2	81.01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-7_100721 Lab Sample ID: 240-157760-5

Matrix: Water Lab File ID: UXJ1306.D

Analysis Method: 8260B Date Collected: 10/07/2021 10:50

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1306.D				
Lims ID:	240-157760-E-5				
Client ID:	SL-7_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 15:47:30	ALS Bottle#:	23	Worklist Smp#:	55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114013-055				
Misc. Info.:	J211012A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:35:25	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	686678	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	417261	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	244839	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	171075	19.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	189069	19.1	
$	6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	634000	21.4	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	162133	15.6	
	14 Vinyl chloride	62		1.363				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.706				ND	
	60 Trichloroethene	130		4.984				ND	
	76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

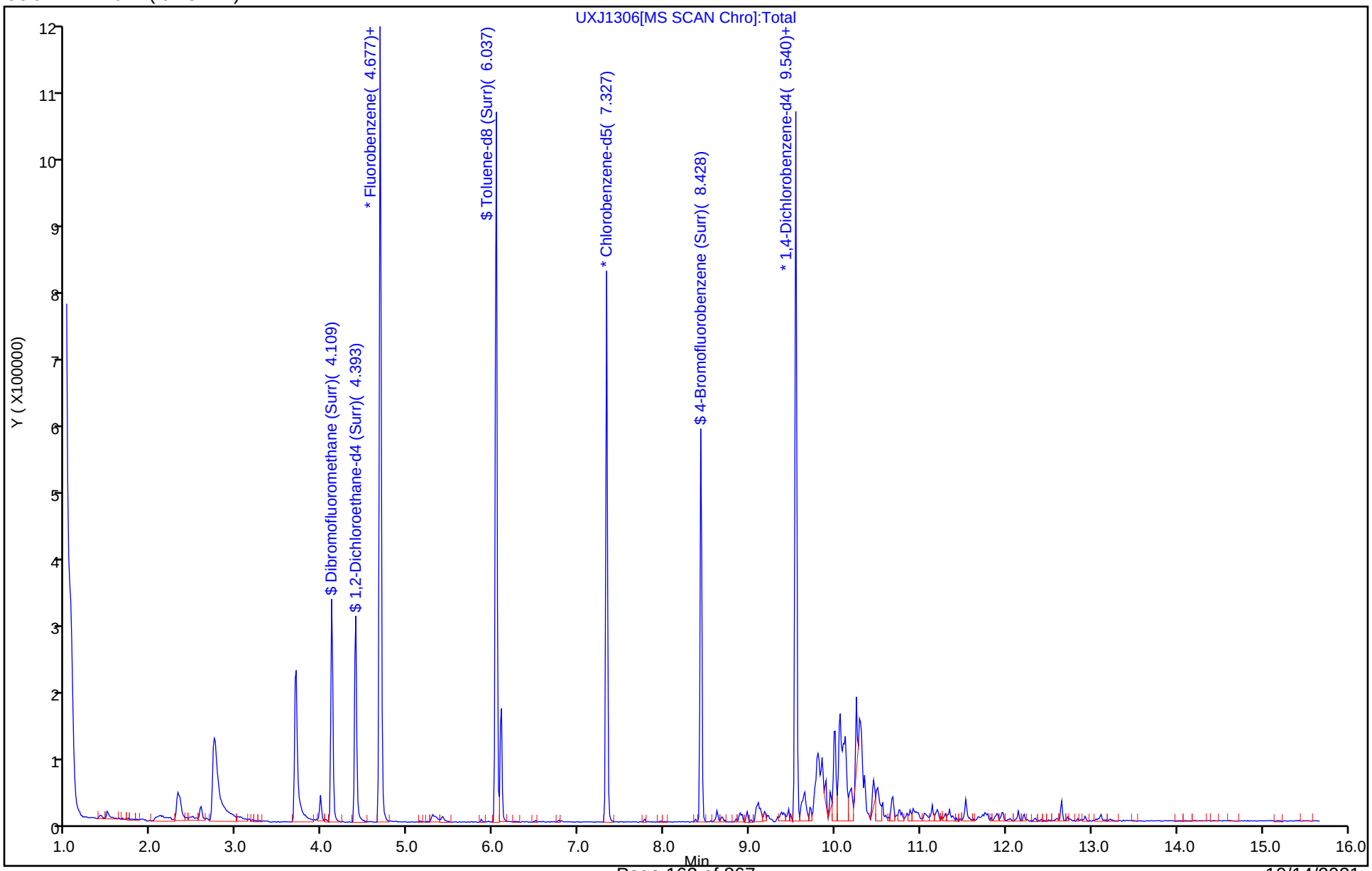
Report Date: 13-Oct-2021 08:35:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1306.D

Injection Date:	12-Oct-2021 15:47:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-5	Lab Sample ID:	240-157760-5	Worklist Smp#:	55
Client ID:	SL-7_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1306.D
Lims ID: 240-157760-E-5
Client ID: SL-7_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 15:47:30 ALS Bottle#: 23 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-055
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.6	97.79
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.1	95.27
$ 6 Toluene-d8 (Surr)	20.0	21.4	106.81
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.6	77.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-6_100721 Lab Sample ID: 240-157760-6

Matrix: Water Lab File ID: UXJ1307.D

Analysis Method: 8260B Date Collected: 10/07/2021 11:05

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 16:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	126	S1+	78-122
1868-53-7	Dibromofluoromethane (Surr)	118		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1307.D
Lims ID: 240-157760-E-6
Client ID: SL-6_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 16:09:30 ALS Bottle#: 24 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-056
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 13-Oct-2021 08:13:12

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	595786	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	347348	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	193521	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.011	97	179592	23.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	182156	21.2	
$	6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	621627	25.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	97	165155	19.1	
	14 Vinyl chloride	62		1.363				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.706				ND	
	60 Trichloroethene	130		4.984				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

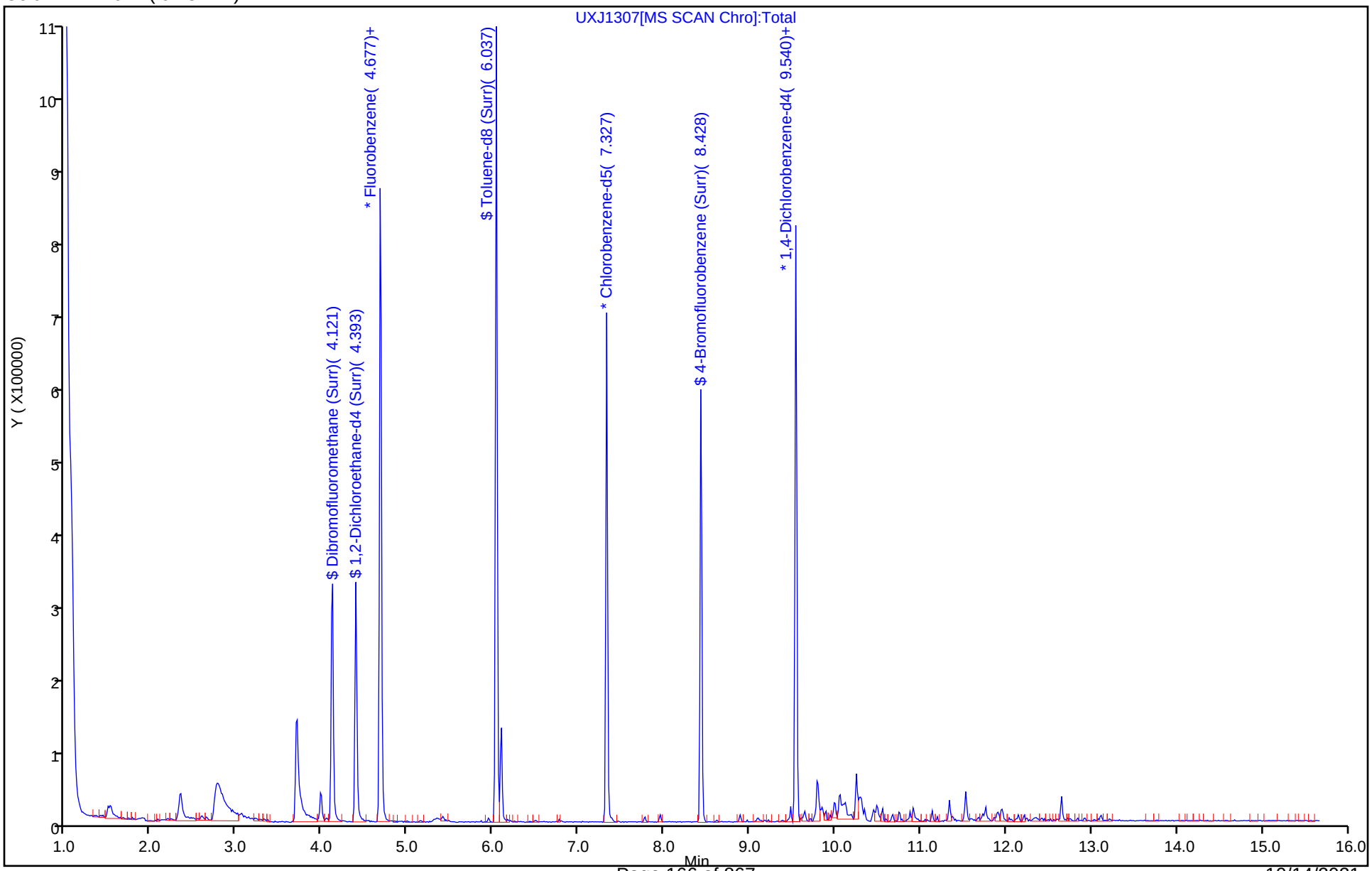
Report Date: 13-Oct-2021 08:35:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1307.D

Injection Date:	12-Oct-2021 16:09:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-6	Lab Sample ID:	240-157760-6	Worklist Smp#:	56
Client ID:	SL-6_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1307.D
Lims ID: 240-157760-E-6
Client ID: SL-6_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 16:09:30 ALS Bottle#: 24 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-056
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 13-Oct-2021 08:13:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	23.7	118.31
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	105.78
$ 6 Toluene-d8 (Surr)	20.0	25.2	125.81
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.1	95.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-5_100721 Lab Sample ID: 240-157760-7

Matrix: Water Lab File ID: UXJ1323.D

Analysis Method: 8260B Date Collected: 10/07/2021 12:15

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 11:16

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508017 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.98
156-59-2	cis-1,2-Dichloroethene	44		2.0	0.92
127-18-4	Tetrachloroethene	2.0	U	2.0	0.88
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.0
79-01-6	Trichloroethene	7.4		2.0	0.88
75-01-4	Vinyl chloride	4.1		2.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D
Lims ID: 240-157760-C-7
Client ID: SL-5_100721
Sample Type: Client
Inject. Date: 13-Oct-2021 11:16:30 ALS Bottle#: 7 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0114058-042
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:10:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	879471	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	492609	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	256525	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	98	219824	19.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	229265	18.0	
$ 6 Toluene-d8 (Surr)	98	6.037	6.038	-0.001	92	768779	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	192707	15.7	
14 Vinyl chloride	62	1.387	1.375	0.012	96	22305	2.04	
21 1,1-Dichloroethene	96		2.251				ND	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	26	1819	0.1467	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	75	283631	22.2	
60 Trichloroethene	130	4.996	4.984	0.012	94	50868	3.70	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

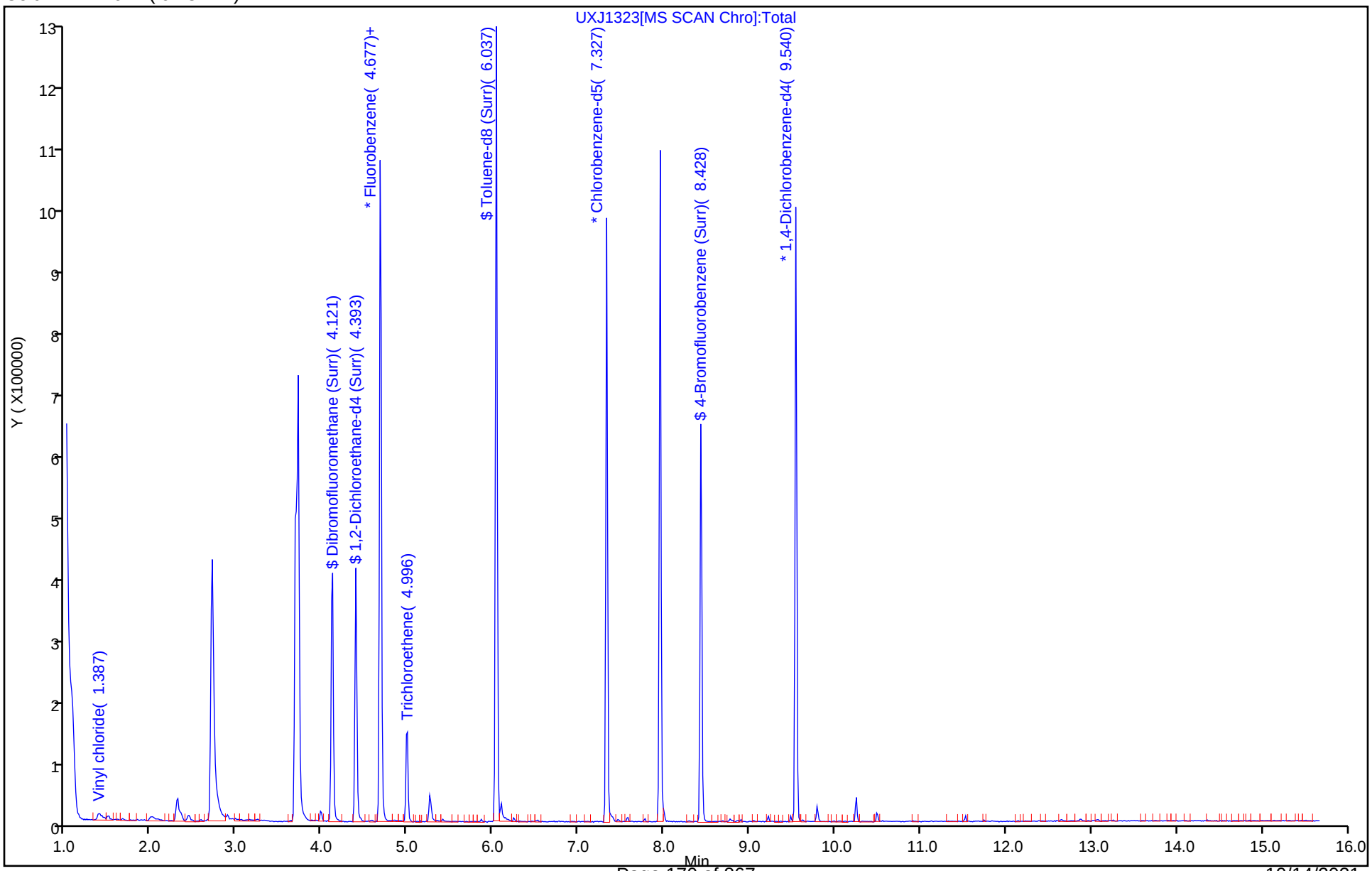
Report Date: 14-Oct-2021 05:29:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D

Injection Date:	13-Oct-2021 11:16:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-C-7	Lab Sample ID:	240-157760-7	Worklist Smp#:	42
Client ID:	SL-5_100721				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D
Lims ID: 240-157760-C-7
Client ID: SL-5_100721
Sample Type: Client
Inject. Date: 13-Oct-2021 11:16:30 ALS Bottle#: 7 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0114058-042
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:10:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.6	98.11
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.0	90.20
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.71
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.7	78.49

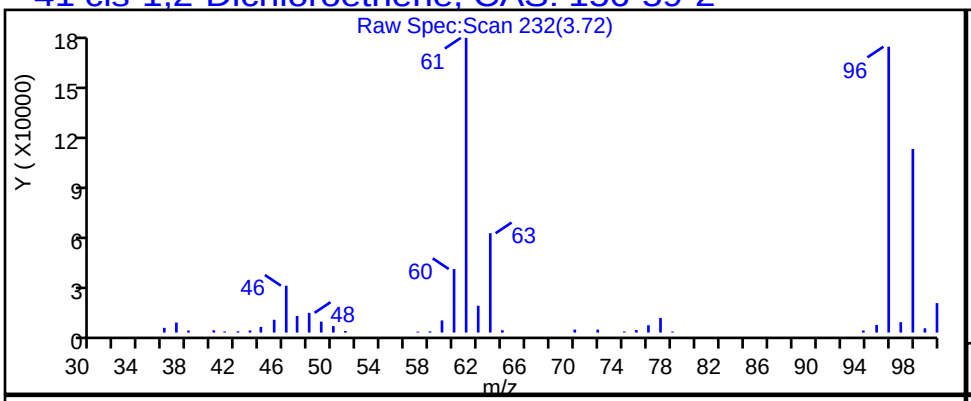
Report Date: 14-Oct-2021 05:29:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

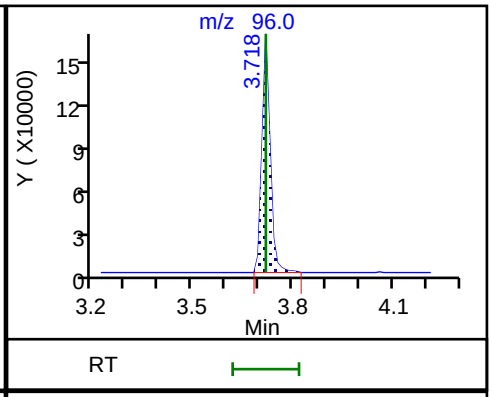
Eurofins TestAmerica, Canton

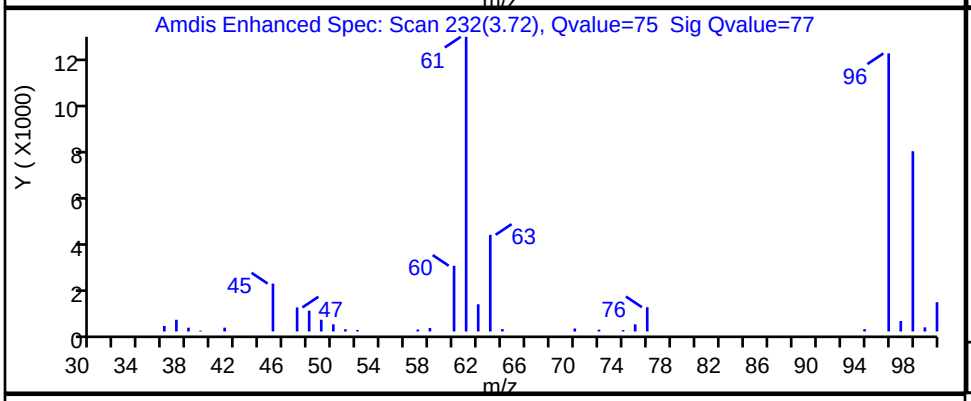
Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D

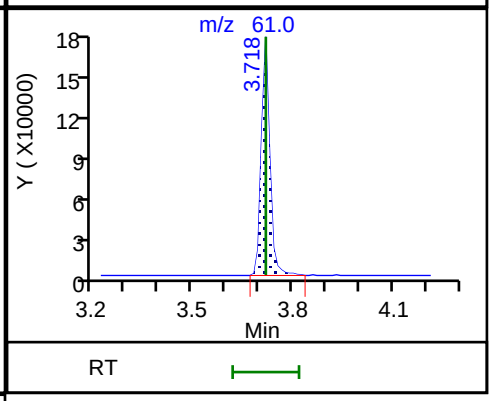
Injection Date:	13-Oct-2021 11:16:30	Instrument ID:	A3UX11		
Lims ID:	240-157760-C-7	Lab Sample ID:	240-157760-7		
Client ID:	SL-5_100721				
Operator ID:	043582	ALS Bottle#:	7	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

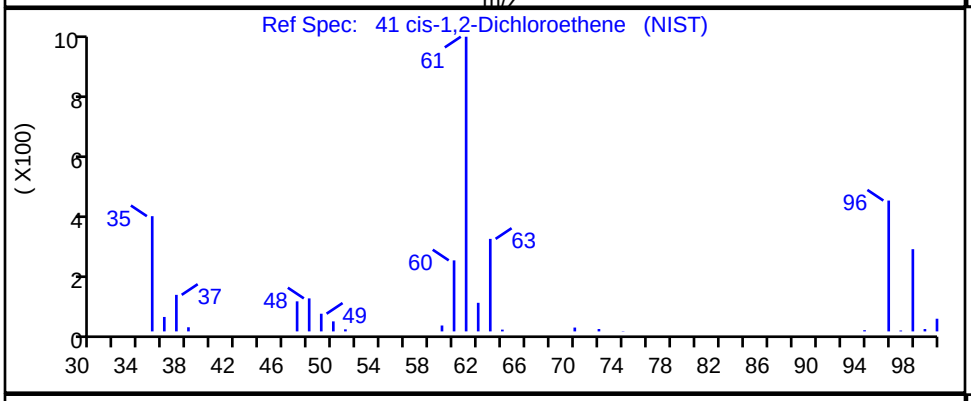
41 cis-1,2-Dichloroethene, CAS: 156-59-2

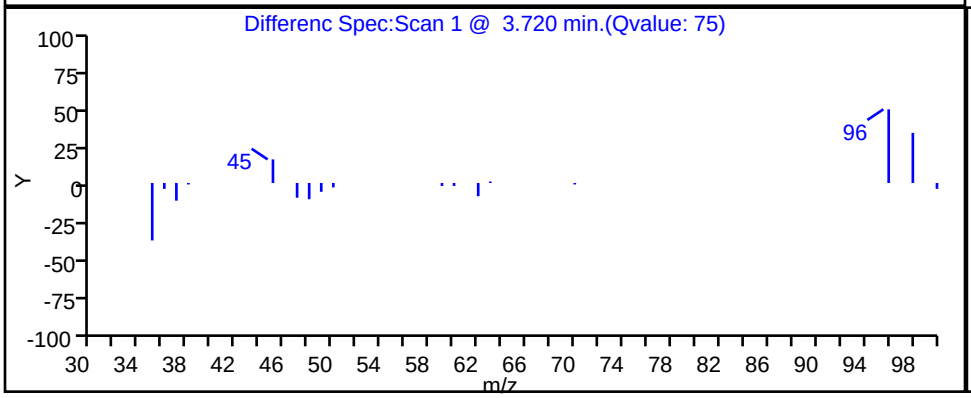


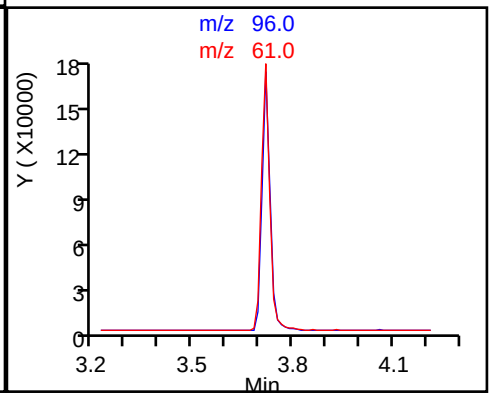












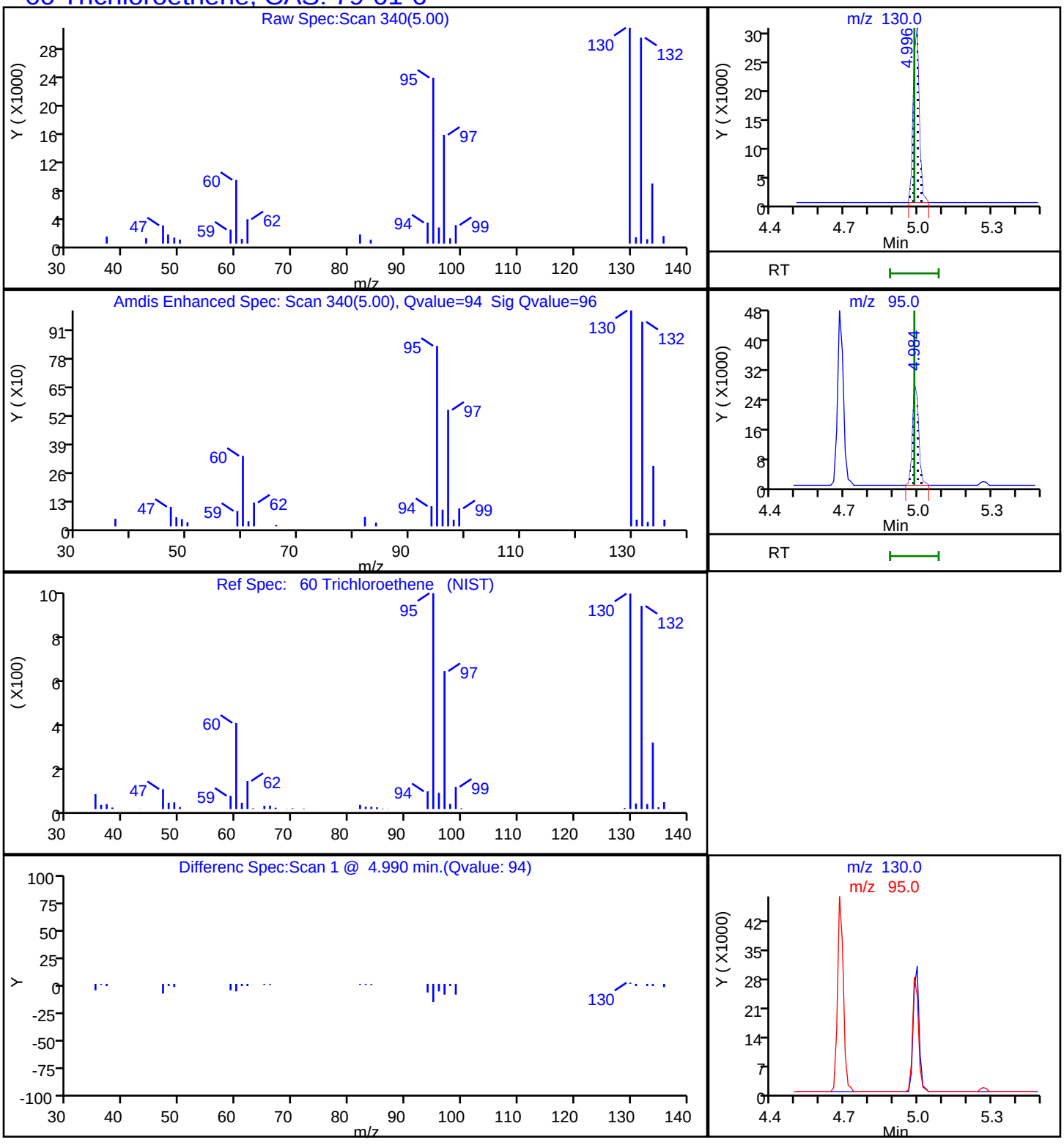
Report Date: 14-Oct-2021 05:29:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D

Injection Date:	13-Oct-2021 11:16:30	Instrument ID:	A3UX11		
Lims ID:	240-157760-C-7	Lab Sample ID:	240-157760-7		
Client ID:	SL-5_100721				
Operator ID:	043582	ALS Bottle#:	7	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

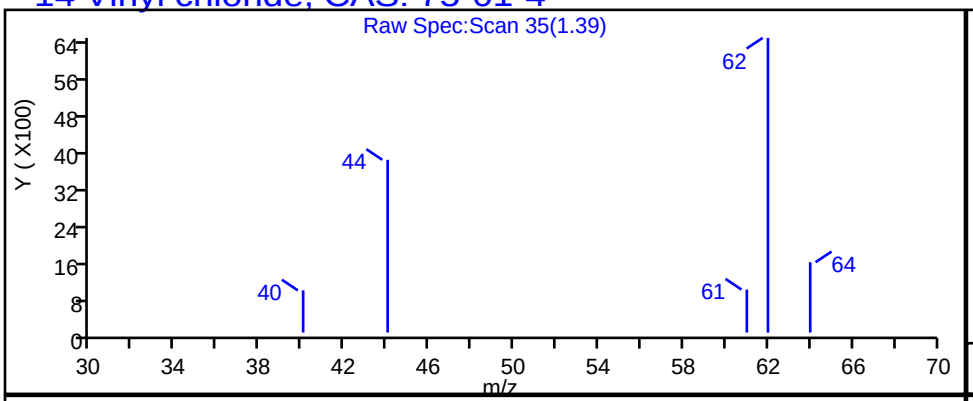


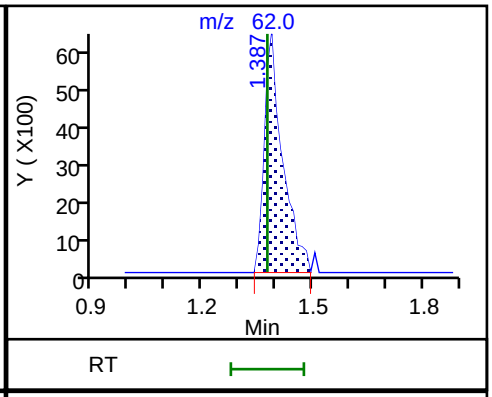
Eurofins TestAmerica, Canton

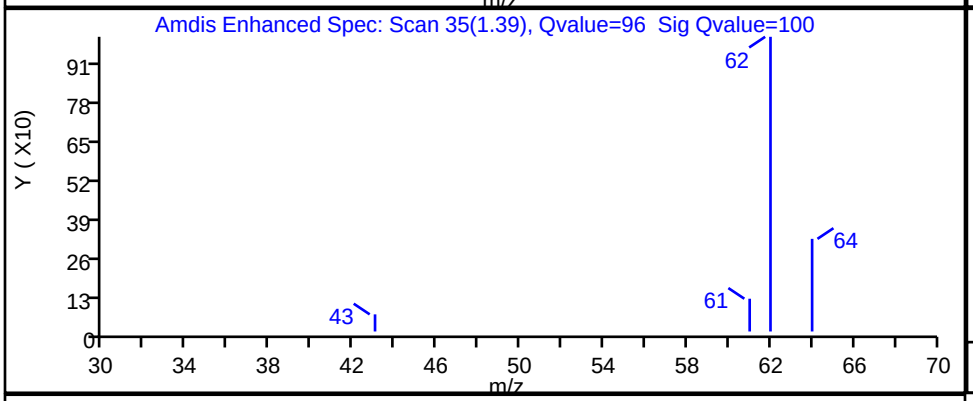
Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1323.D

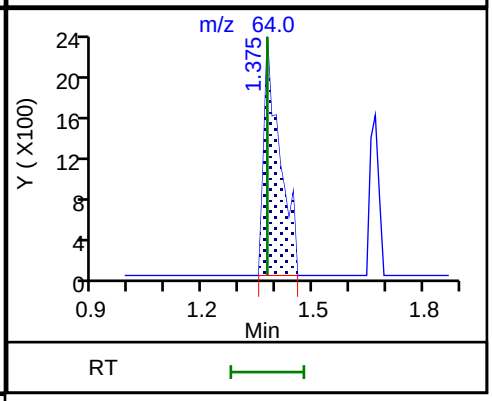
Injection Date:	13-Oct-2021 11:16:30	Instrument ID:	A3UX11
Lims ID:	240-157760-C-7	Lab Sample ID:	240-157760-7
Client ID:	SL-5_100721		
Operator ID:	043582	ALS Bottle#:	7 Worklist Smp#: 42
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

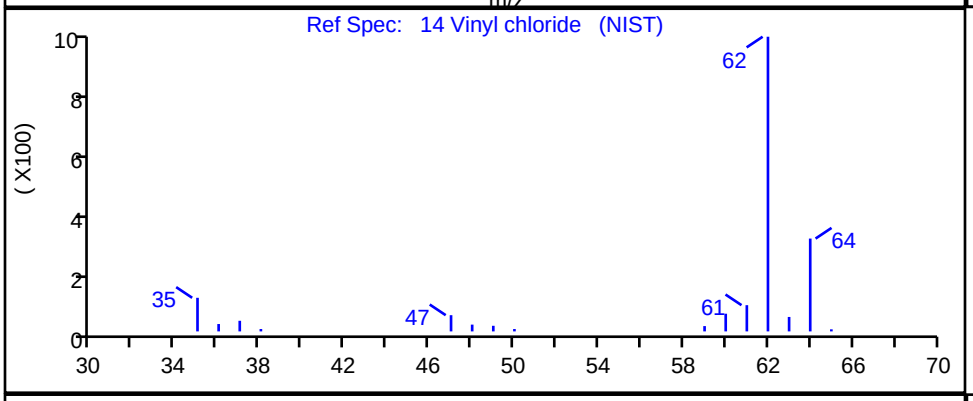
14 Vinyl chloride, CAS: 75-01-4

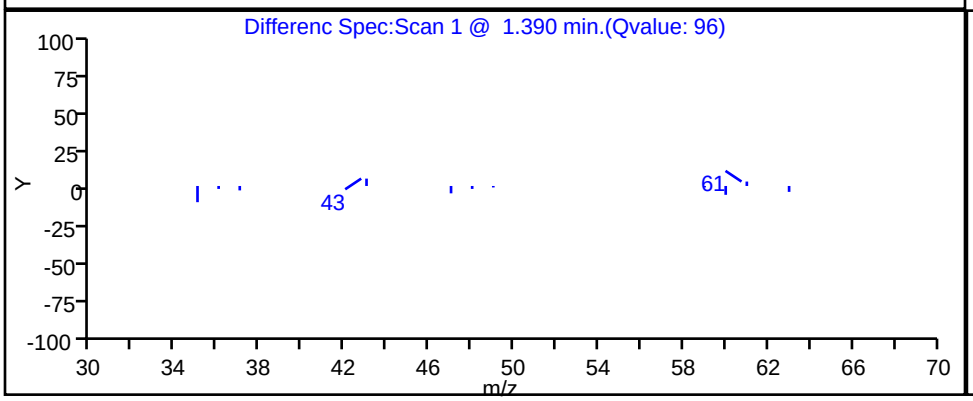


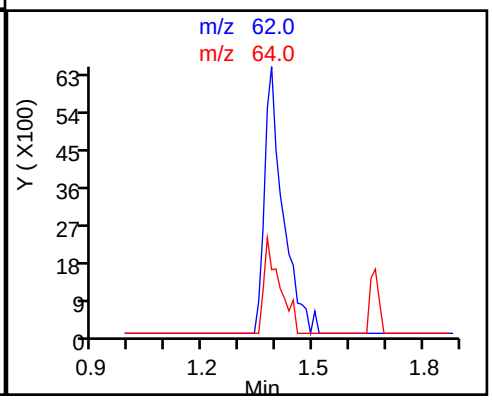












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-8_100721 Lab Sample ID: 240-157760-8

Matrix: Water Lab File ID: UXJ1309.D

Analysis Method: 8260B Date Collected: 10/07/2021 12:45

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 16:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	38		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	8.9		1.0	0.44
75-01-4	Vinyl chloride	8.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	75		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	94		78-122
1868-53-7	Dibromofluoromethane (Surr)	86		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D
Lims ID: 240-157760-E-8
Client ID: SL-8_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 16:54:30 ALS Bottle#: 26 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-058
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 13-Oct-2021 08:14:33

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	667199	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	438676	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	250211	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	145420	17.1	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	145143	15.1	
$	6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	93	584943	18.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	177247	16.2	
	14 Vinyl chloride	62	1.375	1.363	0.012	98	72643	8.77	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	53	3090	0.3285	
	41 cis-1,2-Dichloroethene	96	3.718	3.706	0.012	74	372232	38.4	
	60 Trichloroethene	130	4.984	4.984	0.000	95	92536	8.88	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

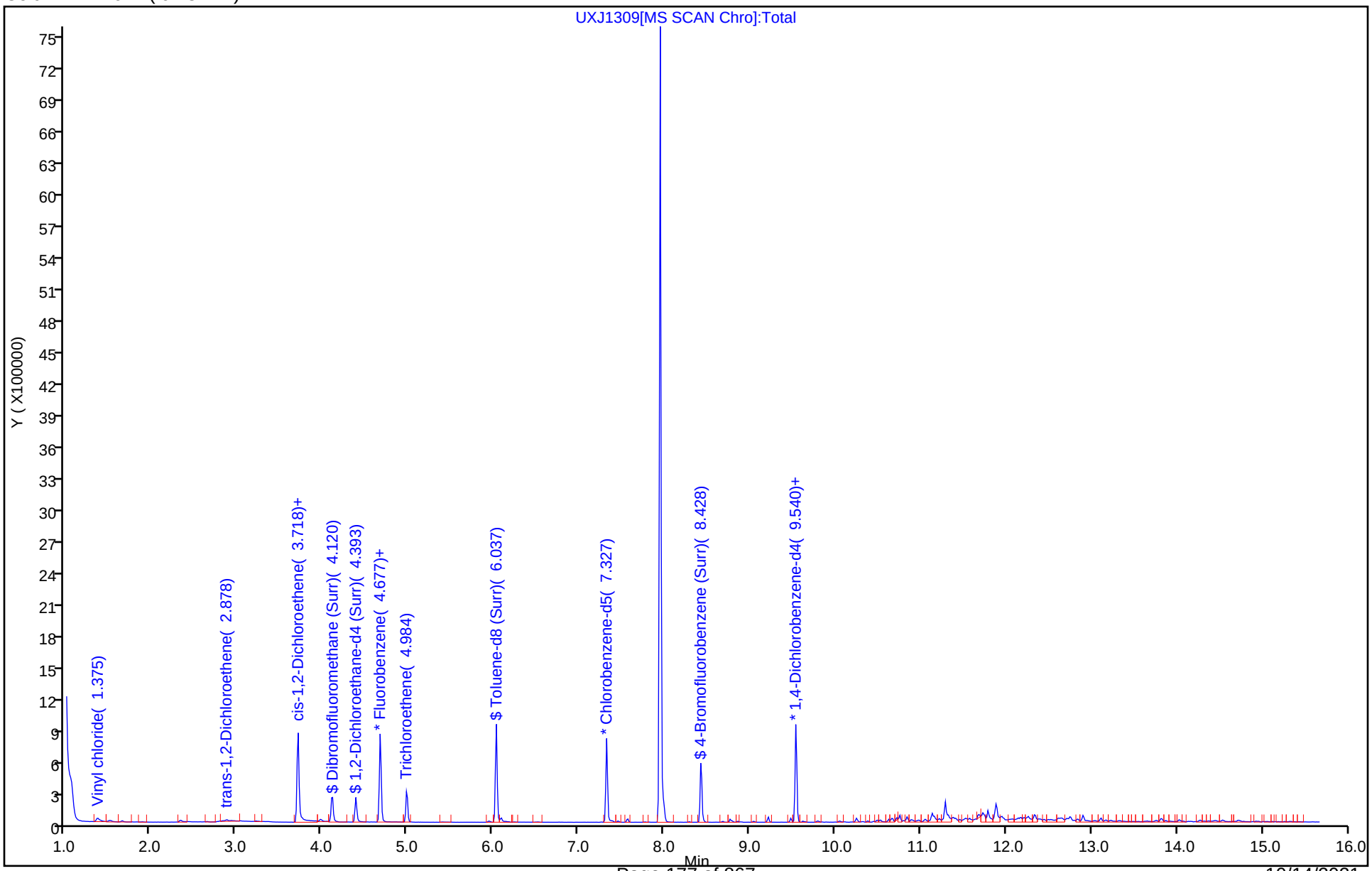
Report Date: 13-Oct-2021 08:35:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D

Injection Date:	12-Oct-2021 16:54:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157760-E-8	Lab Sample ID:	240-157760-8	Worklist Smp#:	58
Client ID:	SL-8_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D
Lims ID: 240-157760-E-8
Client ID: SL-8_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 16:54:30 ALS Bottle#: 26 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-058
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 13-Oct-2021 08:14:33

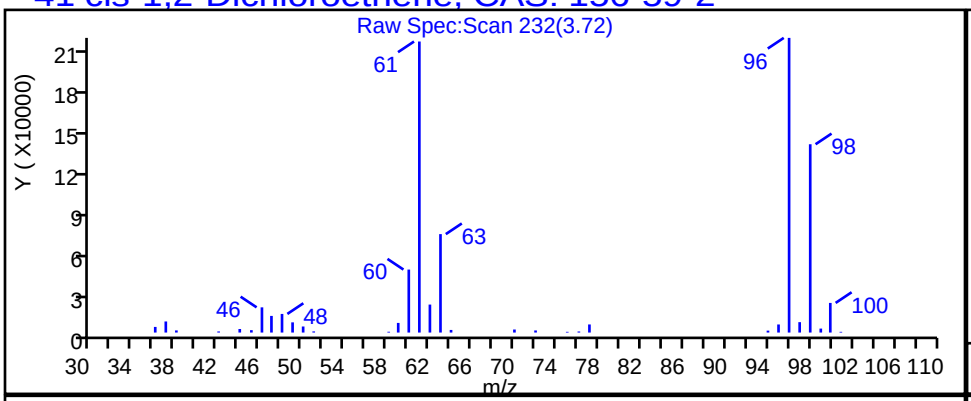
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.1	85.55
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	15.1	75.27
$ 6 Toluene-d8 (Surr)	20.0	18.7	93.74
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.2	81.07

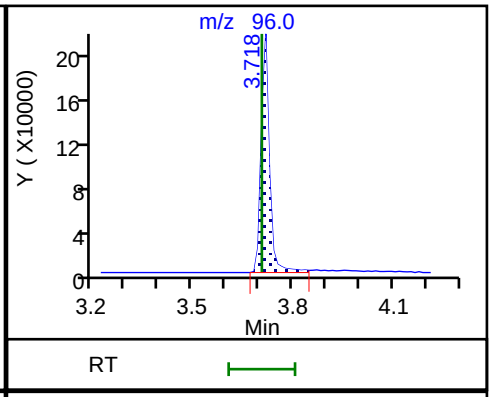
Eurofins TestAmerica, Canton

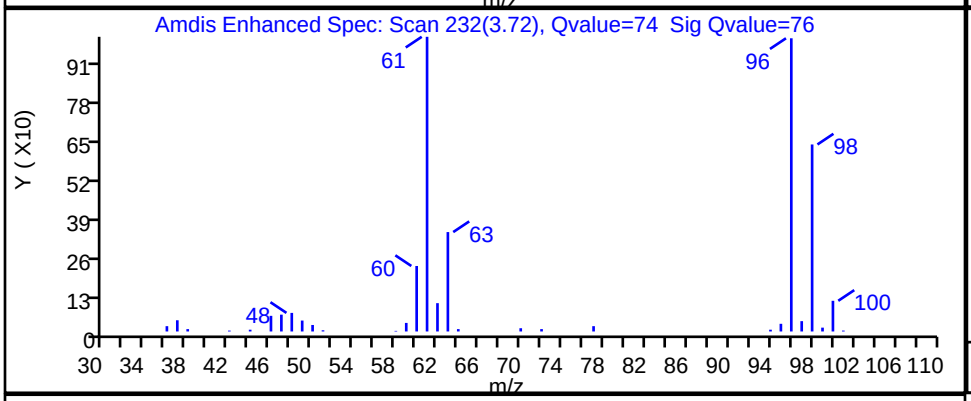
Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D

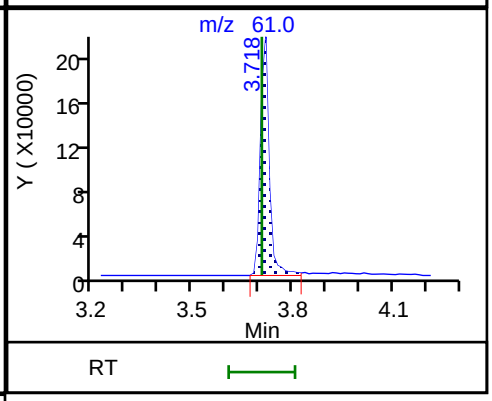
Injection Date:	12-Oct-2021 16:54:30	Instrument ID:	A3UX11
Lims ID:	240-157760-E-8	Lab Sample ID:	240-157760-8
Client ID:	SL-8_100721		
Operator ID:	043582	ALS Bottle#:	26 Worklist Smp#: 58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

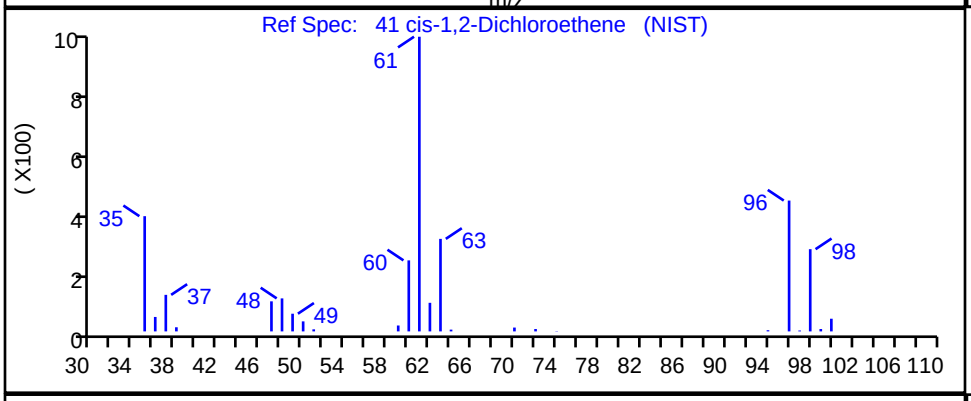
41 cis-1,2-Dichloroethene, CAS: 156-59-2

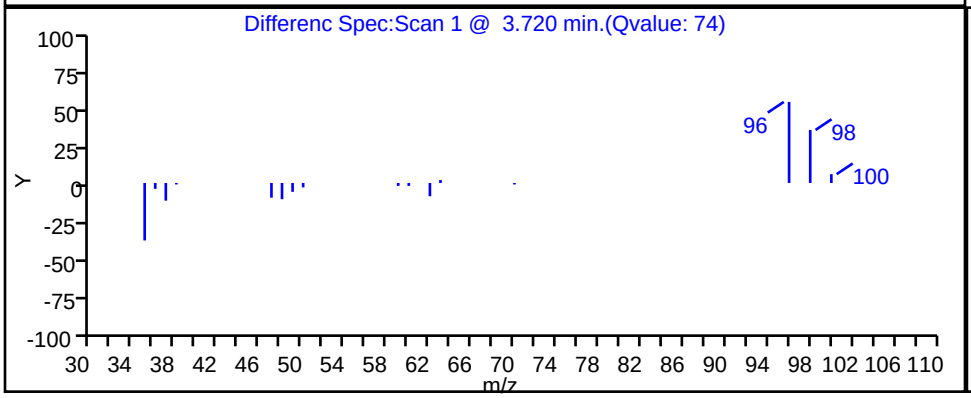


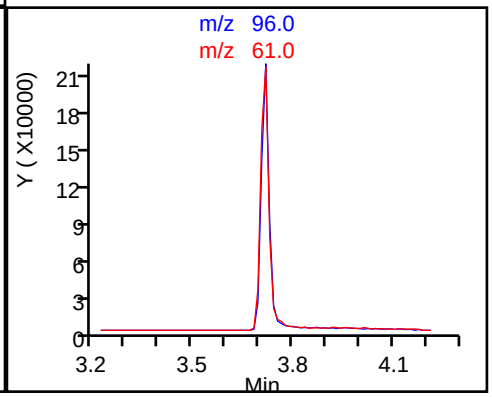












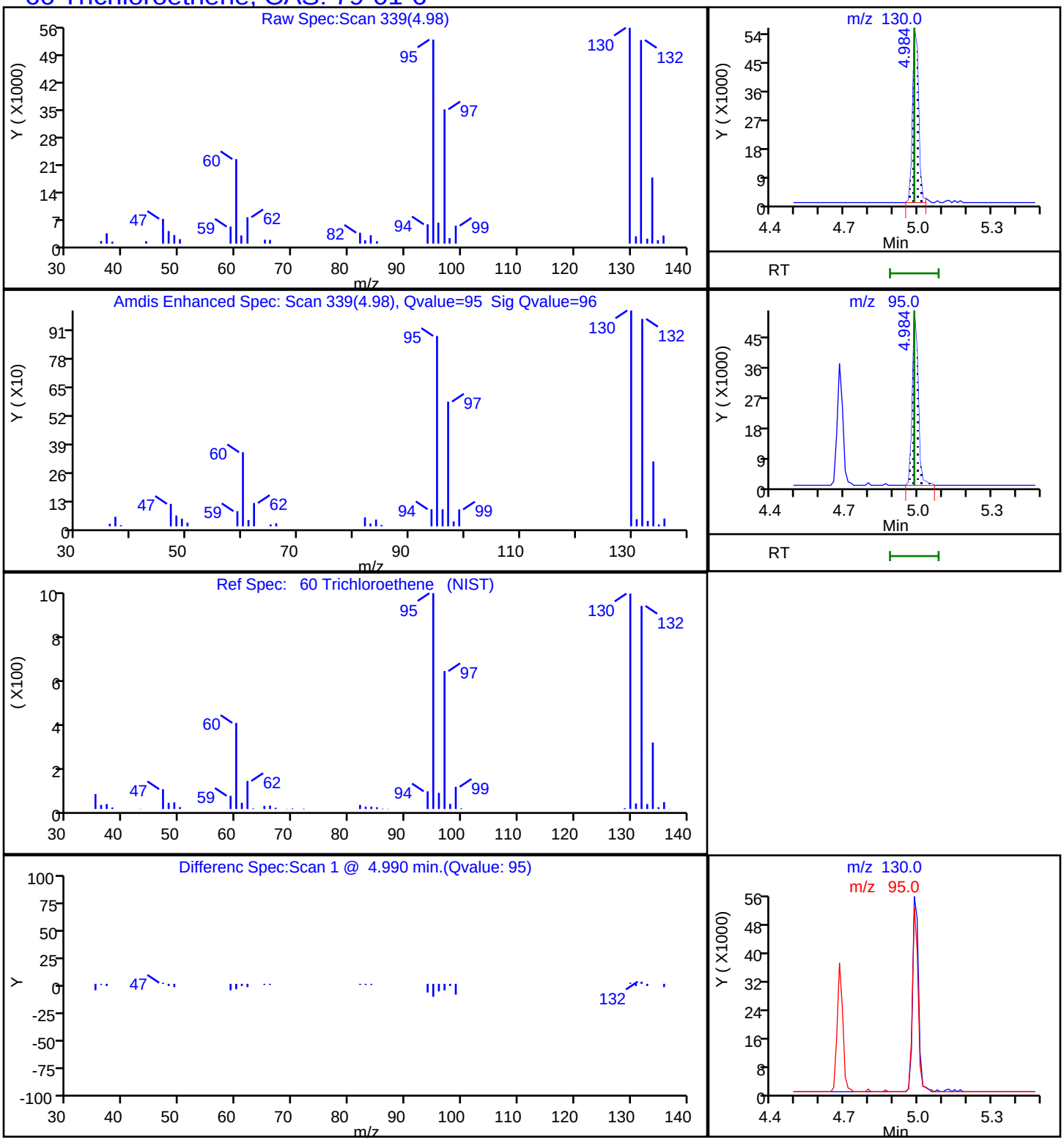
Report Date: 13-Oct-2021 08:35:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D

Injection Date:	12-Oct-2021 16:54:30	Instrument ID:	A3UX11		
Lims ID:	240-157760-E-8	Lab Sample ID:	240-157760-8		
Client ID:	SL-8_100721				
Operator ID:	043582	ALS Bottle#:	26	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

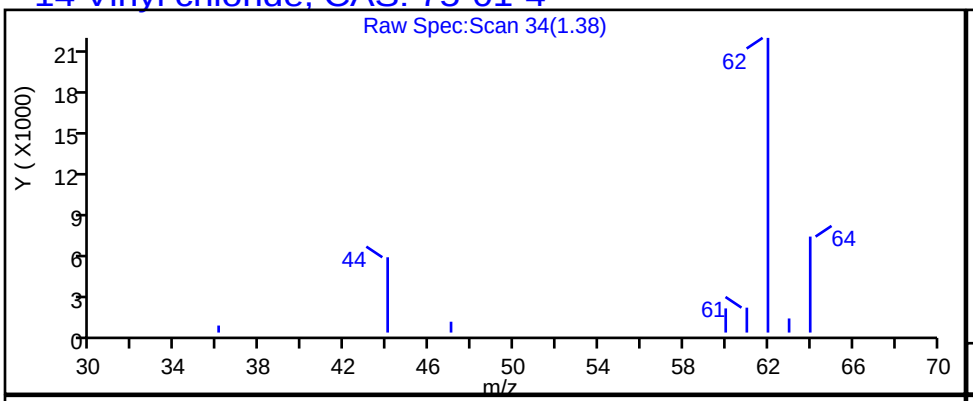


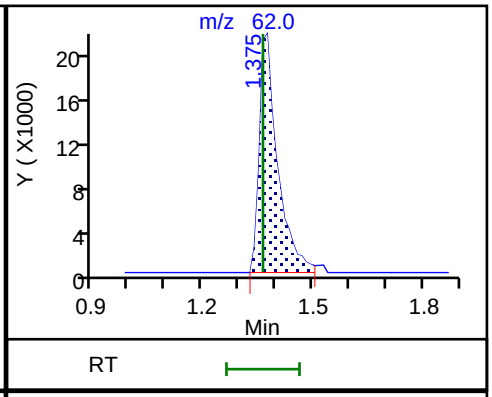
Eurofins TestAmerica, Canton

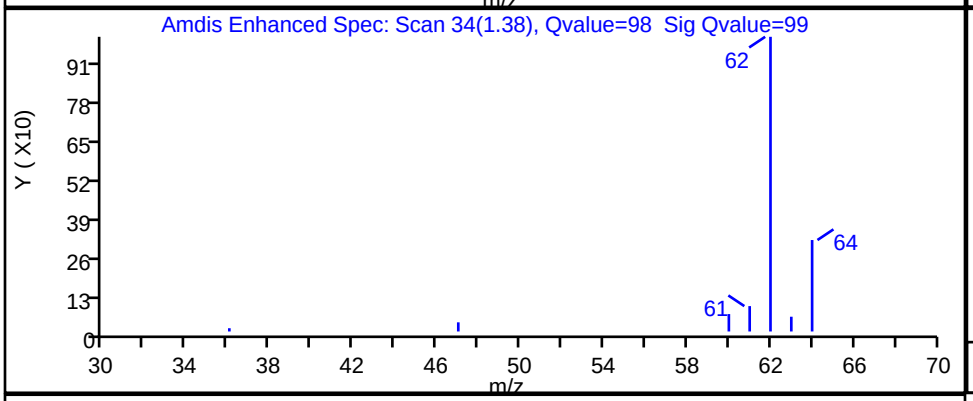
Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1309.D

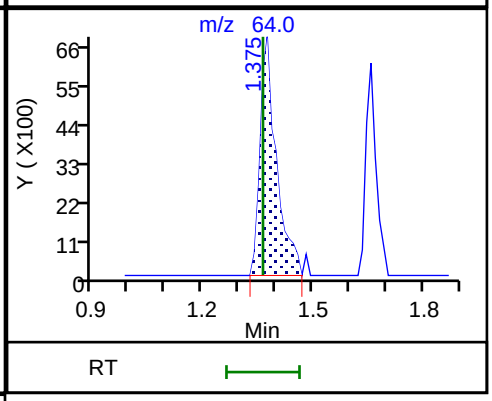
Injection Date:	12-Oct-2021 16:54:30	Instrument ID:	A3UX11
Lims ID:	240-157760-E-8	Lab Sample ID:	240-157760-8
Client ID:	SL-8_100721		
Operator ID:	043582	ALS Bottle#:	26 Worklist Smp#: 58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

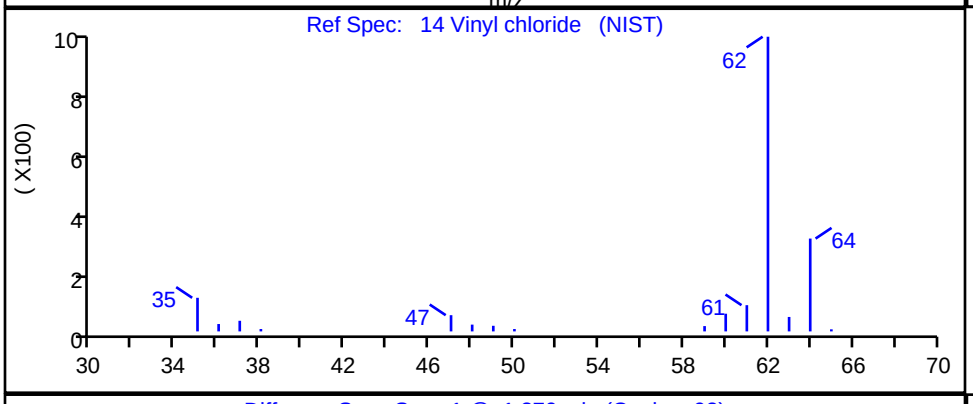
14 Vinyl chloride, CAS: 75-01-4

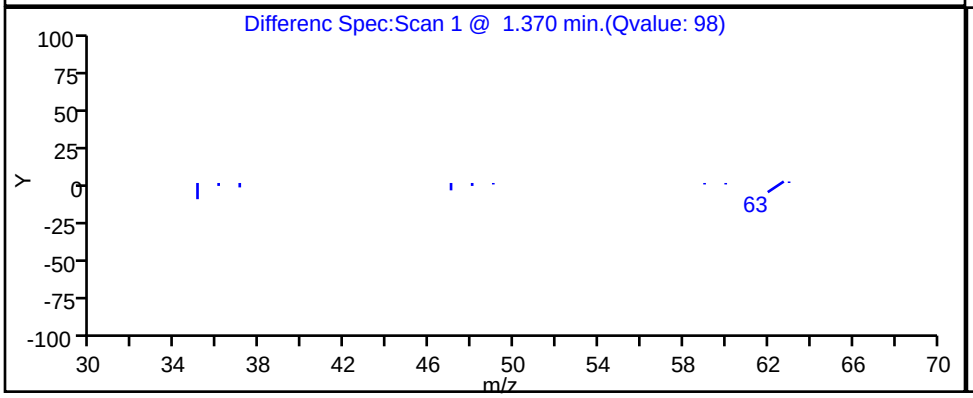


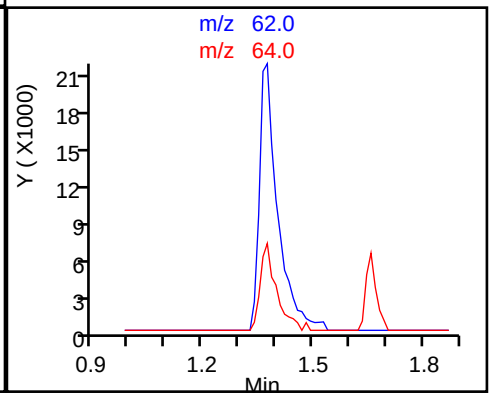












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-9_100721 Lab Sample ID: 240-157760-9

Matrix: Water Lab File ID: UXC9984.D

Analysis Method: 8260B Date Collected: 10/07/2021 13:00

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	18		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	4.7		1.0	0.44
75-01-4	Vinyl chloride	2.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		62-137
460-00-4	4-Bromofluorobenzene (Surr)	92		56-136
2037-26-5	Toluene-d8 (Surr)	90		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D
Lims ID: 240-157760-E-9
Client ID: SL-9_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 12:23:30 ALS Bottle#: 10 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-039
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 12:45:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1588459	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	87	1156513	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	598760	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	327020	8.81	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.001	99	457982	10.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1280290	9.03	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	88	442463	9.23	
11 Vinyl chloride	62	1.645	1.645	0.000	99	96403	2.07	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	8971	0.1956	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	887208	18.3	
60 Trichloroethene	130	5.298	5.298	0.000	97	219452	4.69	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

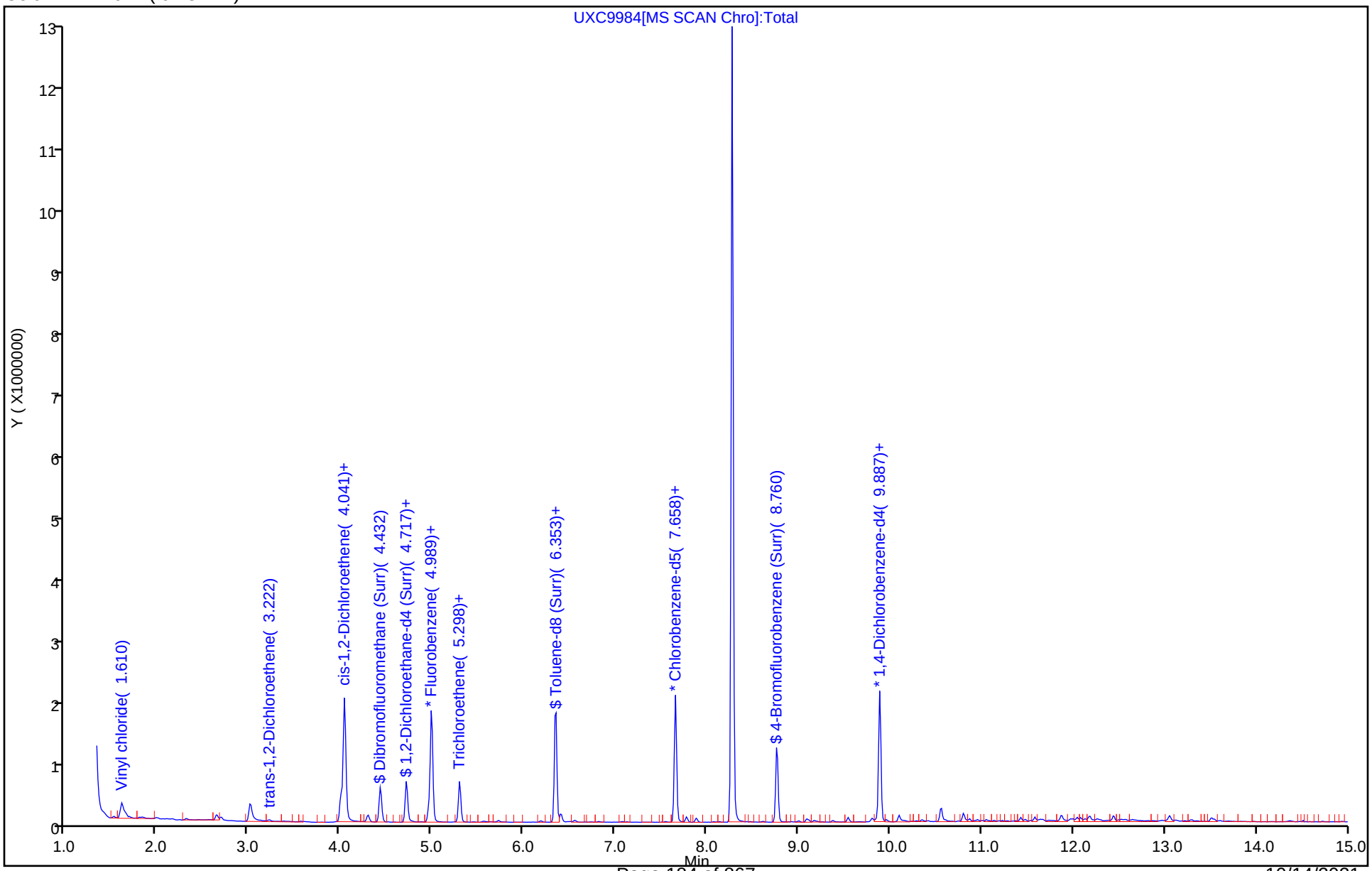
Report Date: 13-Oct-2021 08:54:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D

Injection Date:	12-Oct-2021 12:23:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-9	Lab Sample ID:	240-157760-9	Worklist Smp#:	39
Client ID:	SL-9_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D
Lims ID: 240-157760-E-9
Client ID: SL-9_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 12:23:30 ALS Bottle#: 10 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-039
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

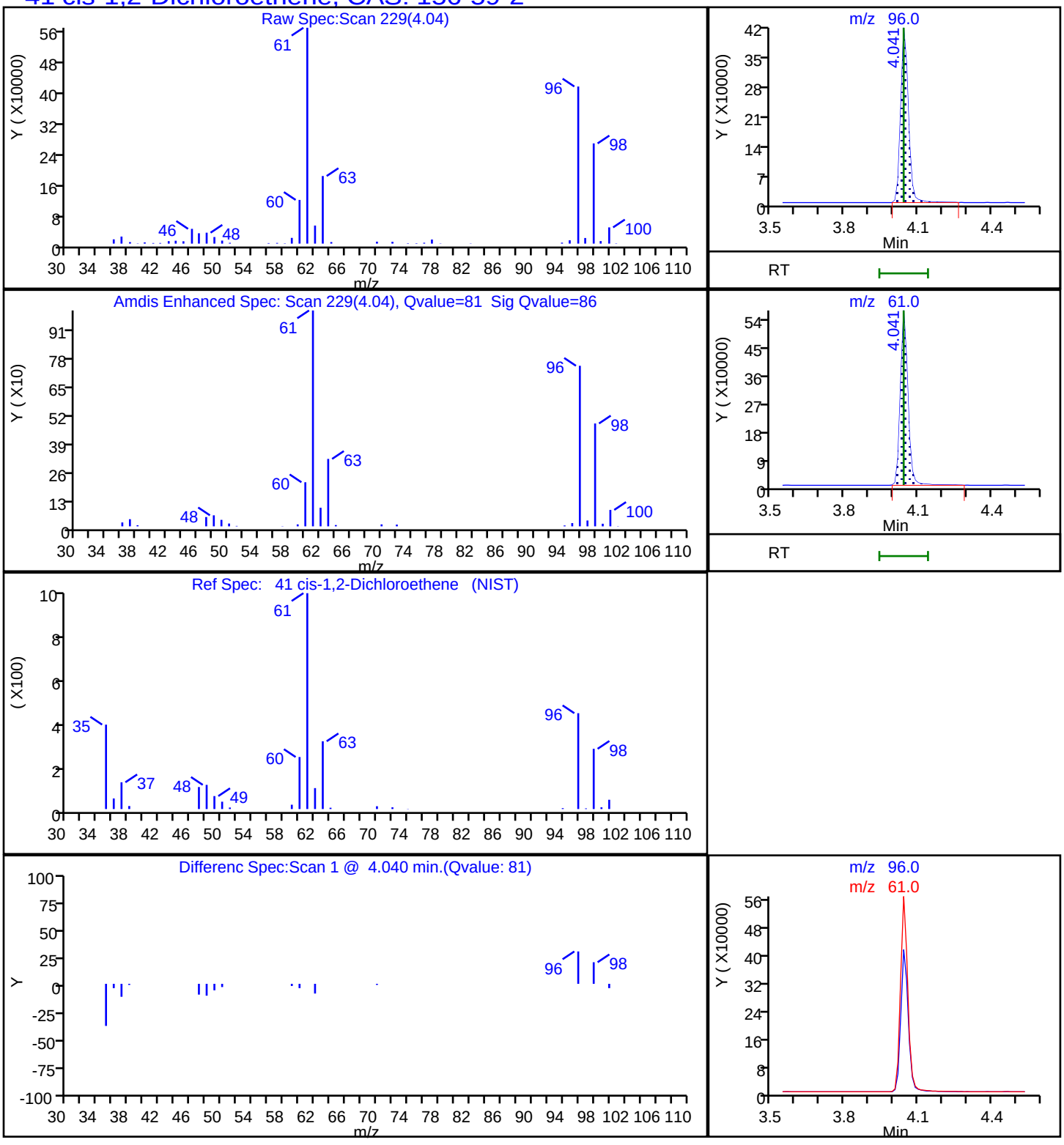
First Level Reviewer: evansle Date: 12-Oct-2021 12:45:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.81	88.08
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	109.50
$ 6 Toluene-d8 (Surr)	10.0	9.03	90.33
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.23	92.29

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D				
Injection Date:	12-Oct-2021 12:23:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-9	Lab Sample ID:	240-157760-9		
Client ID:	SL-9_100721				
Operator ID:	43582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

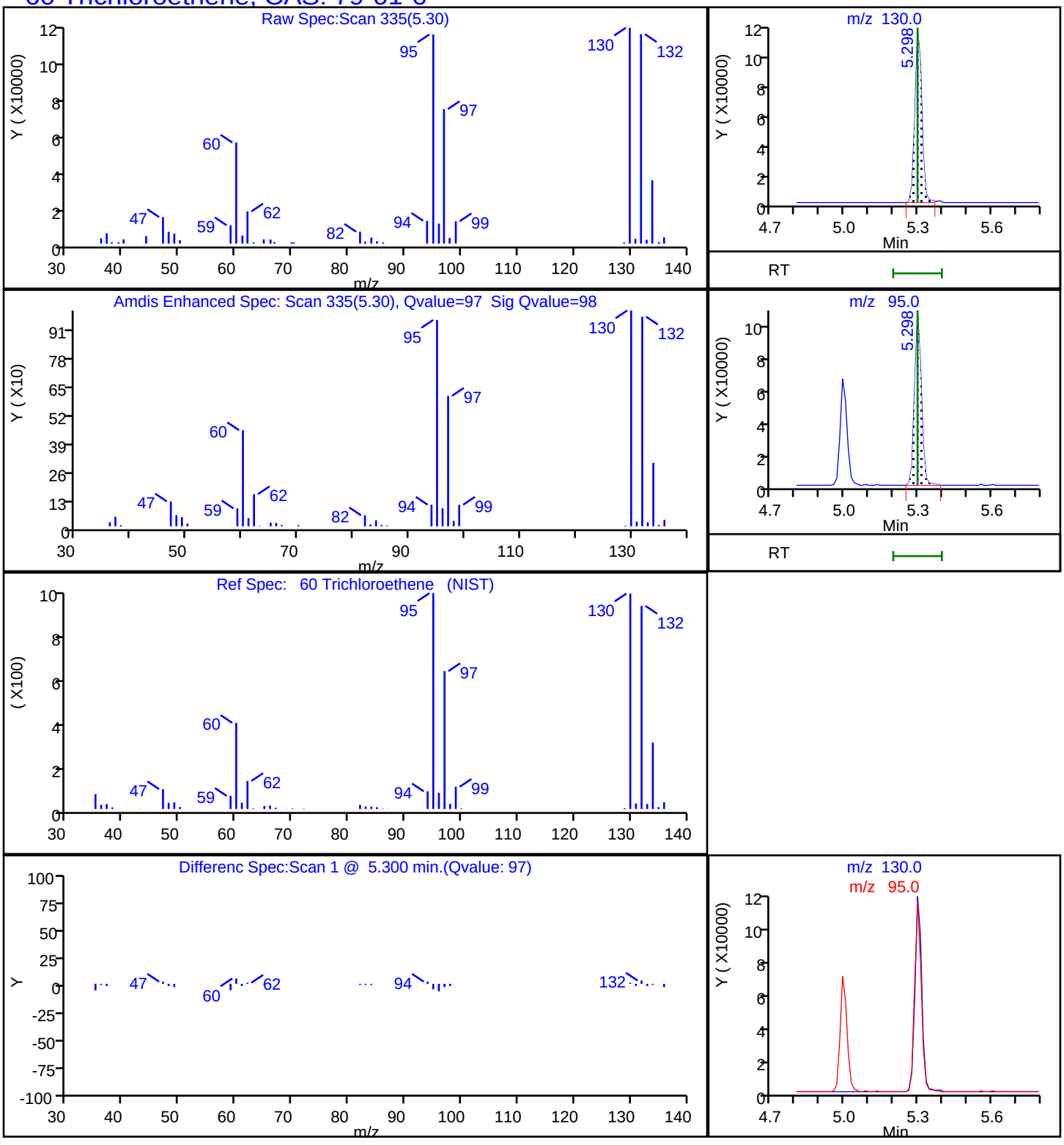


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D

Injection Date:	12-Oct-2021 12:23:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-9	Lab Sample ID:	240-157760-9
Client ID:	SL-9_100721		
Operator ID:	43582	ALS Bottle#:	10 Worklist Smp#: 39
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



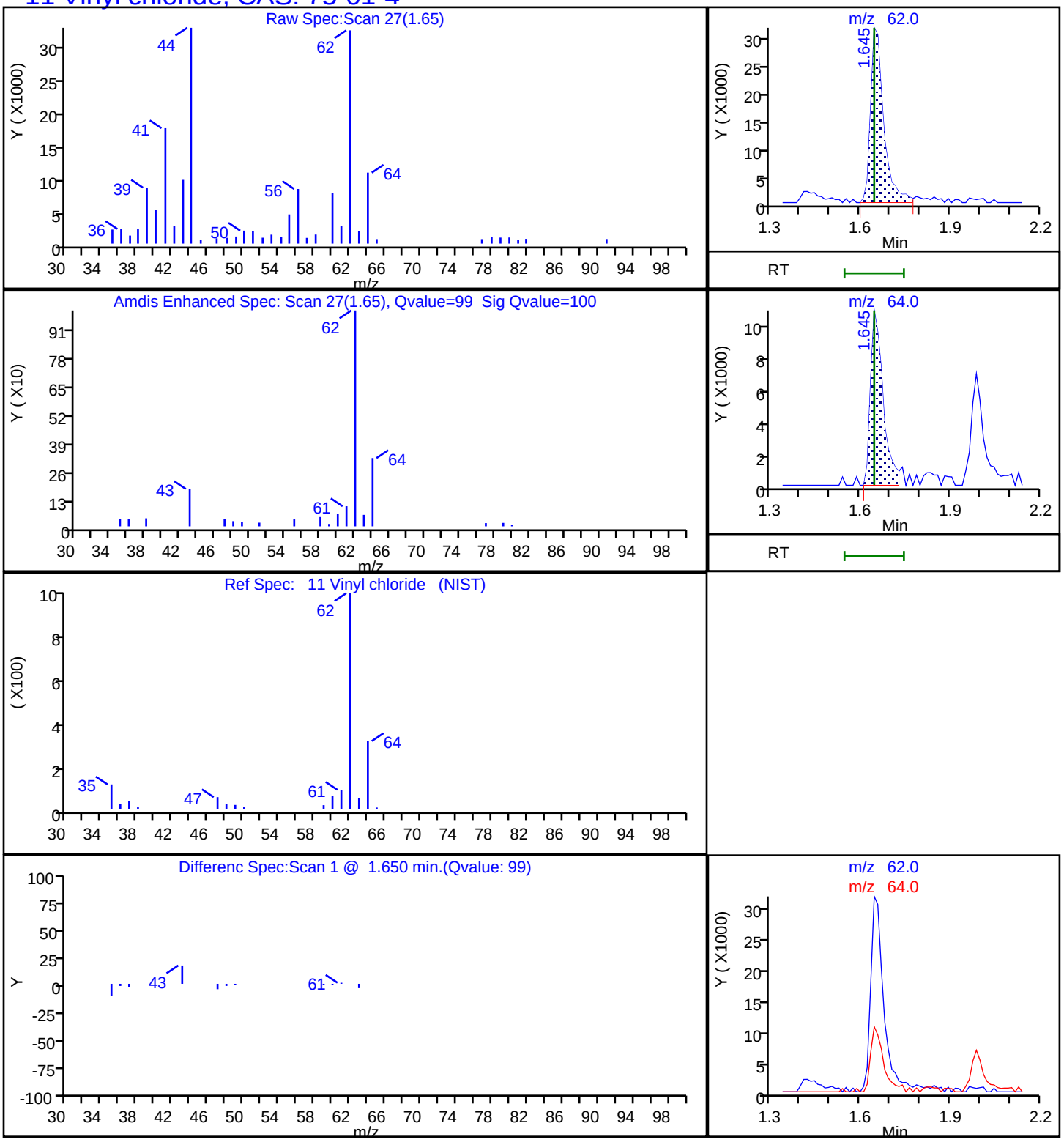
Report Date: 13-Oct-2021 08:54:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9984.D

Injection Date:	12-Oct-2021 12:23:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-9	Lab Sample ID:	240-157760-9		
Client ID:	SL-9_100721				
Operator ID:	43582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-10_100721 Lab Sample ID: 240-157760-10

Matrix: Water Lab File ID: UXC9981.D

Analysis Method: 8260B Date Collected: 10/07/2021 13:25

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 11:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	34		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	7.5		1.0	0.44
75-01-4	Vinyl chloride	4.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	93		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D
Lims ID: 240-157760-E-10
Client ID: SL-10_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 11:13:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-008
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 11:46:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1666669	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1200823	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	642433	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	344959	8.86	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	498662	11.4	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1365825	9.28	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	474601	9.53	
11 Vinyl chloride	62	1.657	1.645	0.012	97	224756	4.59	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	12914	0.2684	
41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	81	1723515	33.9	
60 Trichloroethene	130	5.297	5.298	-0.001	98	367729	7.48	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

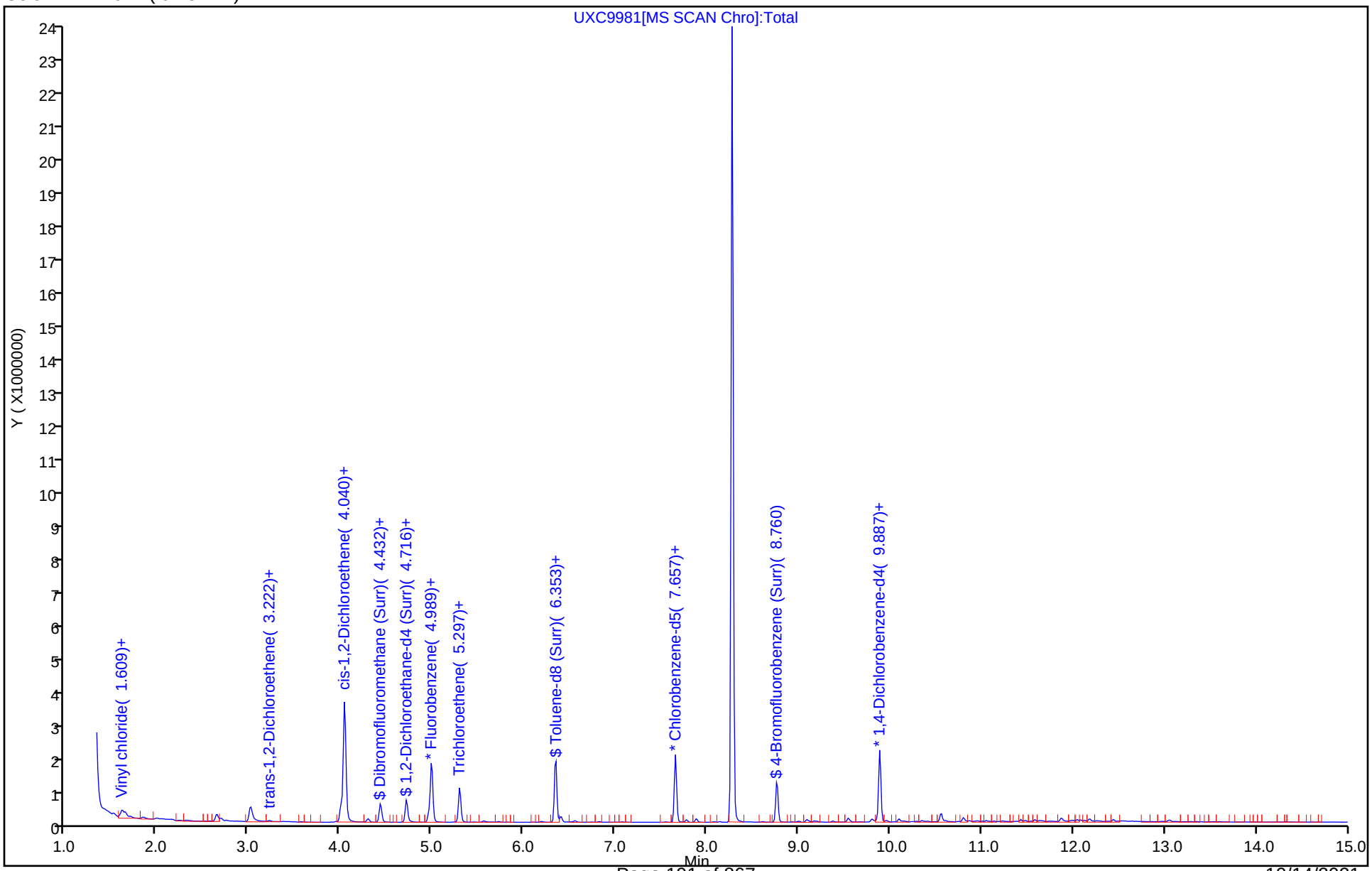
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

Report Date: 13-Oct-2021 08:54:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D				
Injection Date:	12-Oct-2021 11:13:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-10	Lab Sample ID:	240-157760-10	Worklist Smp#:	8
Client ID:	SL-10_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D				
Lims ID:	240-157760-E-10				
Client ID:	SL-10_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 11:13:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114014-008				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

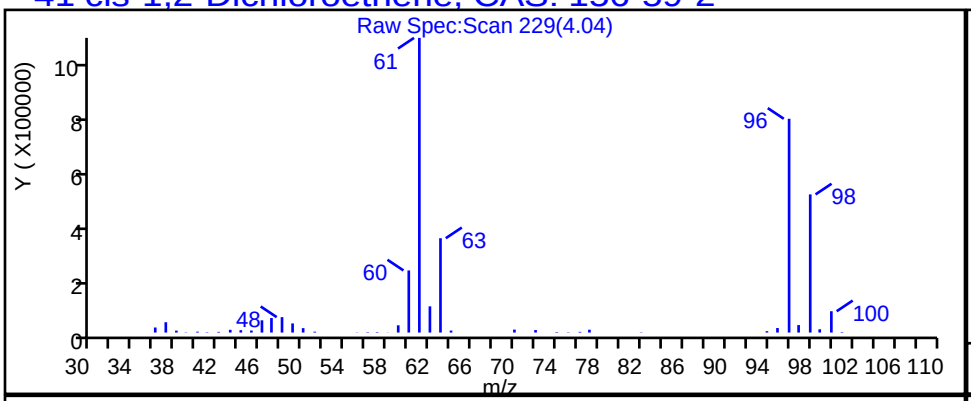
First Level Reviewer: evansle Date: 12-Oct-2021 11:46:22

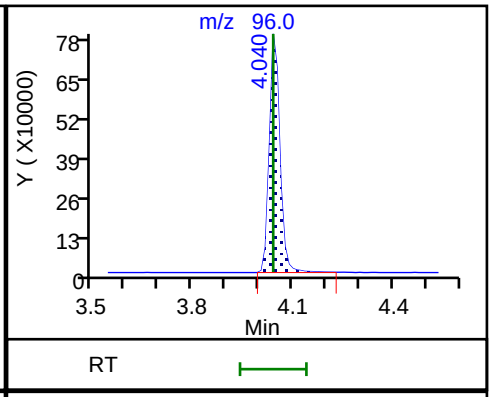
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.86	88.55
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.4	113.63
$ 6 Toluene-d8 (Surr)	10.0	9.28	92.81
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.53	95.34

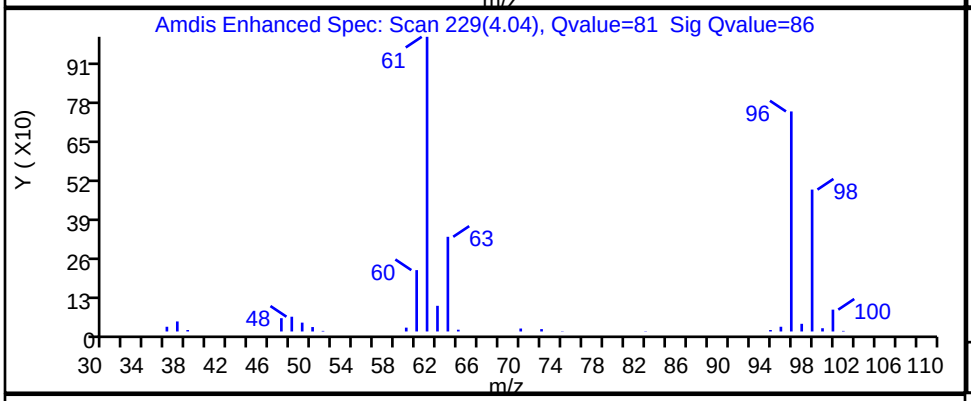
Eurofins TestAmerica, Canton

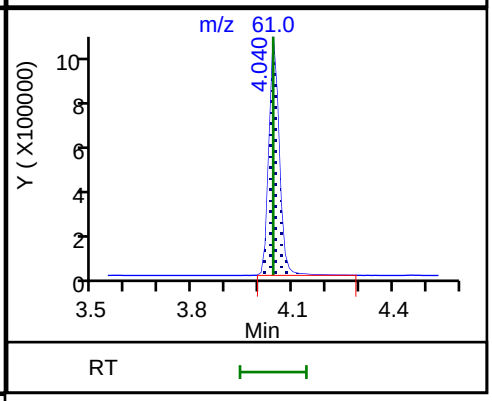
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D		
Injection Date:	12-Oct-2021 11:13:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-10	Lab Sample ID:	240-157760-10
Client ID:	SL-10_100721		
Operator ID:	43582	ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

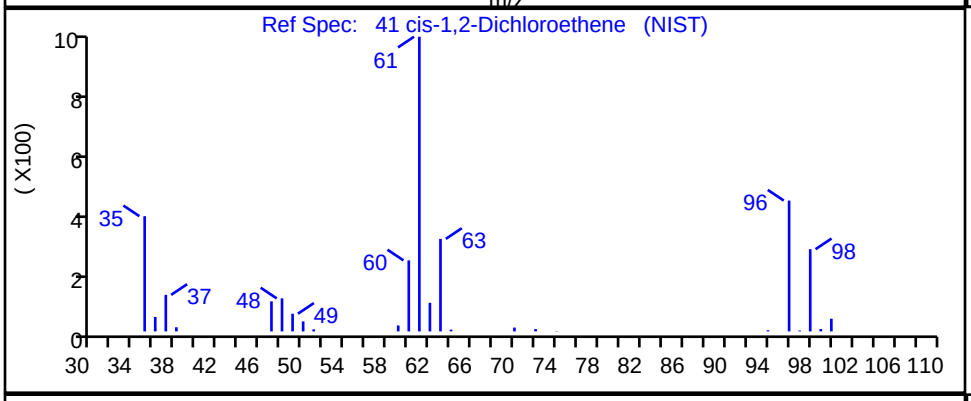
41 cis-1,2-Dichloroethene, CAS: 156-59-2

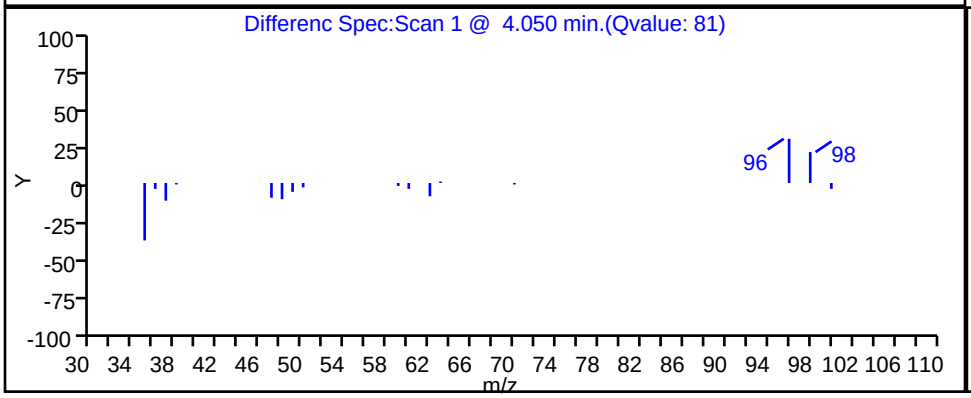


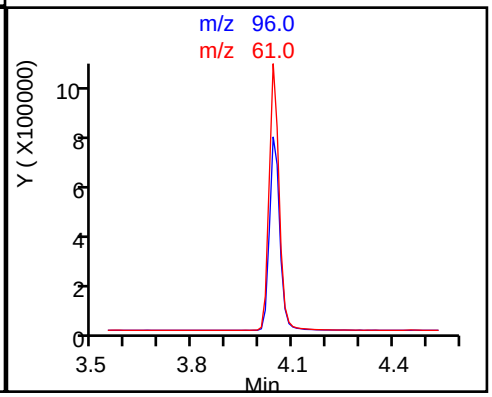








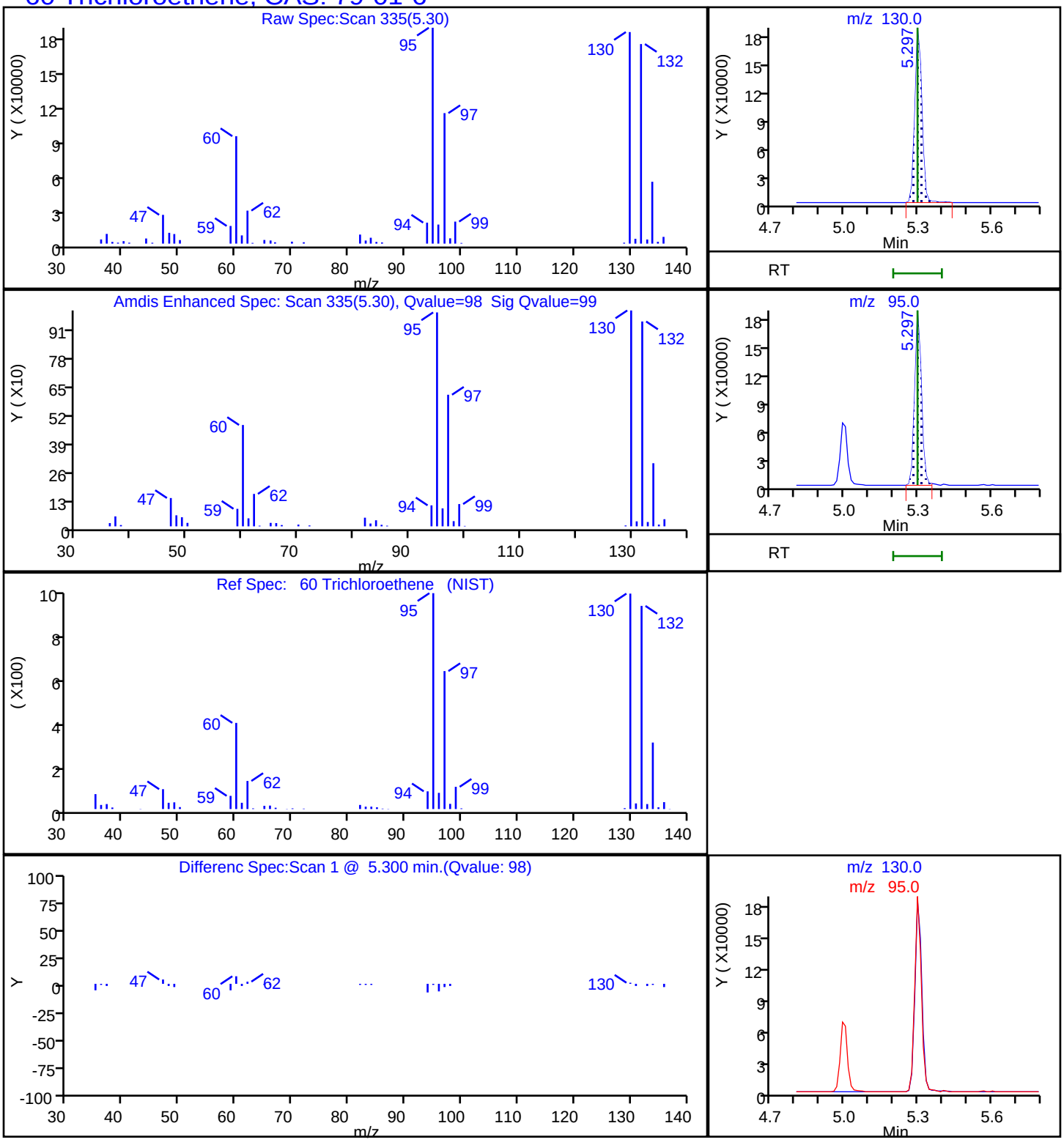




Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D		
Injection Date:	12-Oct-2021 11:13:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-10	Lab Sample ID:	240-157760-10
Client ID:	SL-10_100721		
Operator ID:	43582	ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

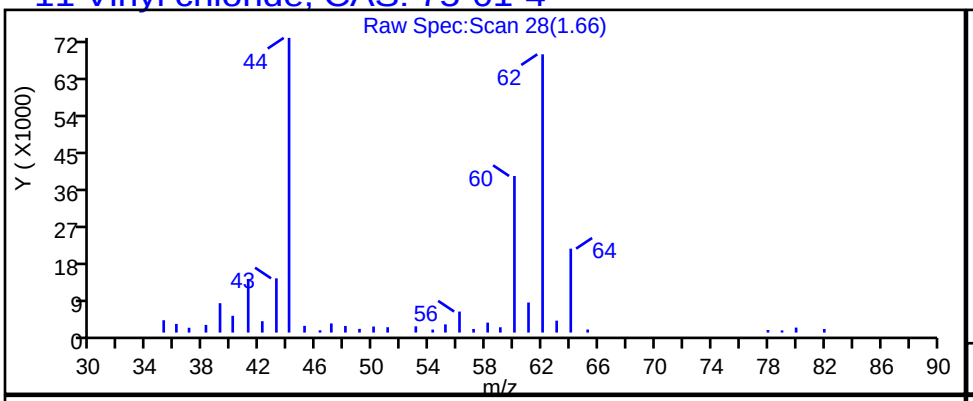


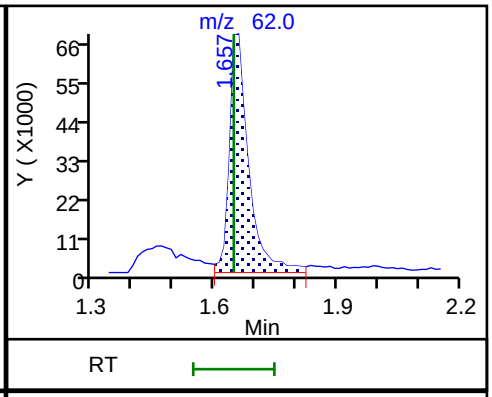
Eurofins TestAmerica, Canton

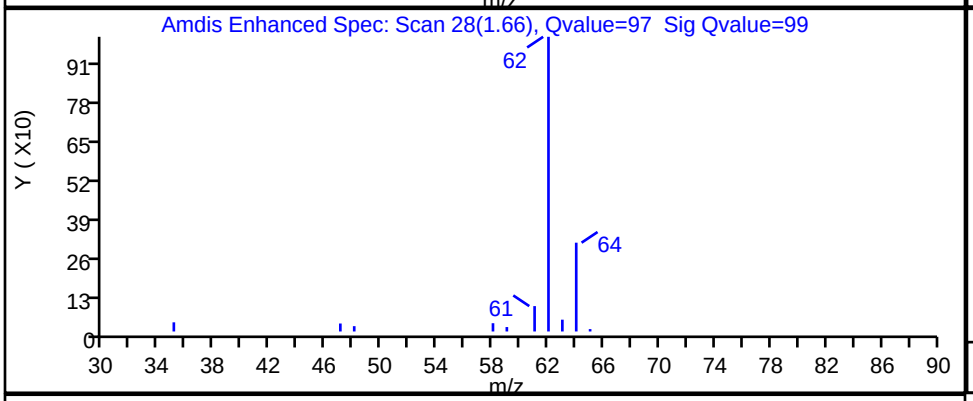
Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9981.D

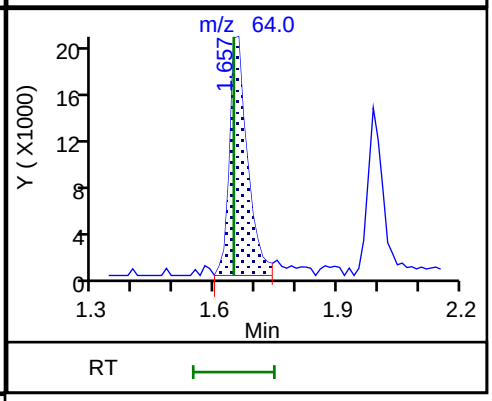
Injection Date:	12-Oct-2021 11:13:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-10	Lab Sample ID:	240-157760-10
Client ID:	SL-10_100721		
Operator ID:	43582	ALS Bottle#:	7 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

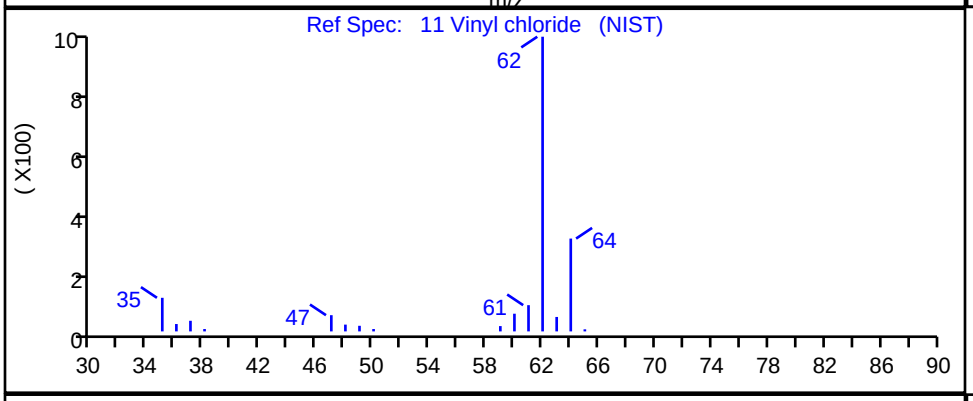
11 Vinyl chloride, CAS: 75-01-4

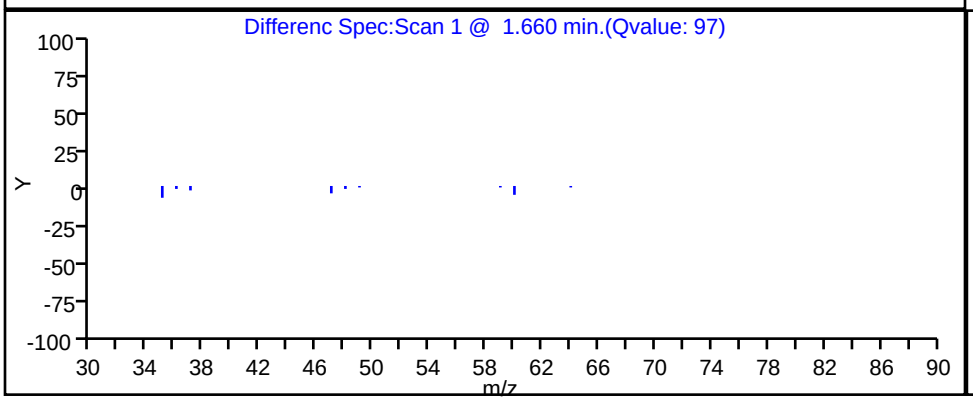


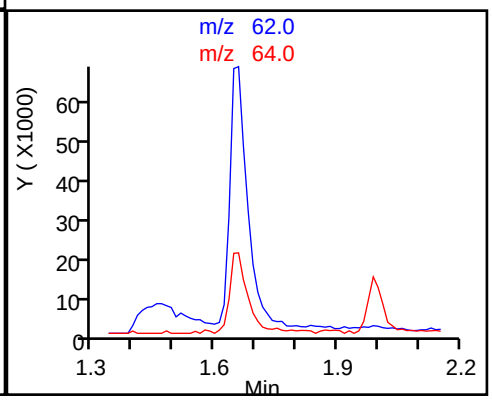












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-11_100721 Lab Sample ID: 240-157760-11

Matrix: Water Lab File ID: UXC9982.D

Analysis Method: 8260B Date Collected: 10/07/2021 13:45

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 11:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	31		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	6.5		1.0	0.44
75-01-4	Vinyl chloride	4.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	94		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D
Lims ID: 240-157760-E-11
Client ID: SL-11_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 11:35:30 ALS Bottle#: 8 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-037
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 12:28:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1710472	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	87	1242431	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	649583	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	359005	8.98	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.001	100	499371	11.1	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1429098	9.39	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	490892	9.53	
11 Vinyl chloride	62	1.657	1.645	0.012	98	211552	4.21	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	11983	0.2426	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	1603677	30.8	
60 Trichloroethene	130	5.298	5.298	0.000	97	326352	6.47	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

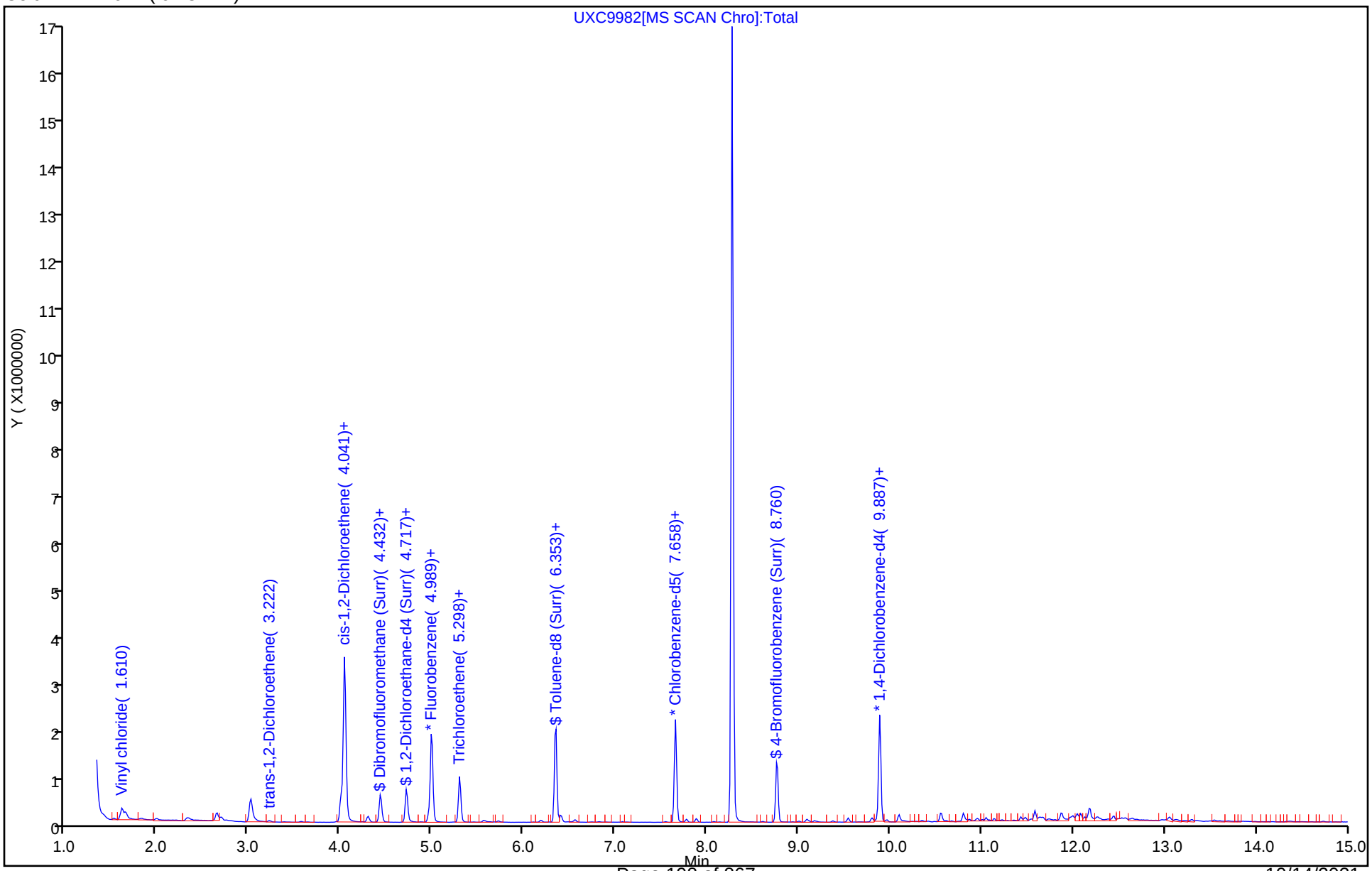
Report Date: 13-Oct-2021 08:54:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D

Injection Date:	12-Oct-2021 11:35:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-11	Lab Sample ID:	240-157760-11	Worklist Smp#:	37
Client ID:	SL-11_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D				
Lims ID:	240-157760-E-11				
Client ID:	SL-11_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 11:35:30	ALS Bottle#:	8	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114014-037				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

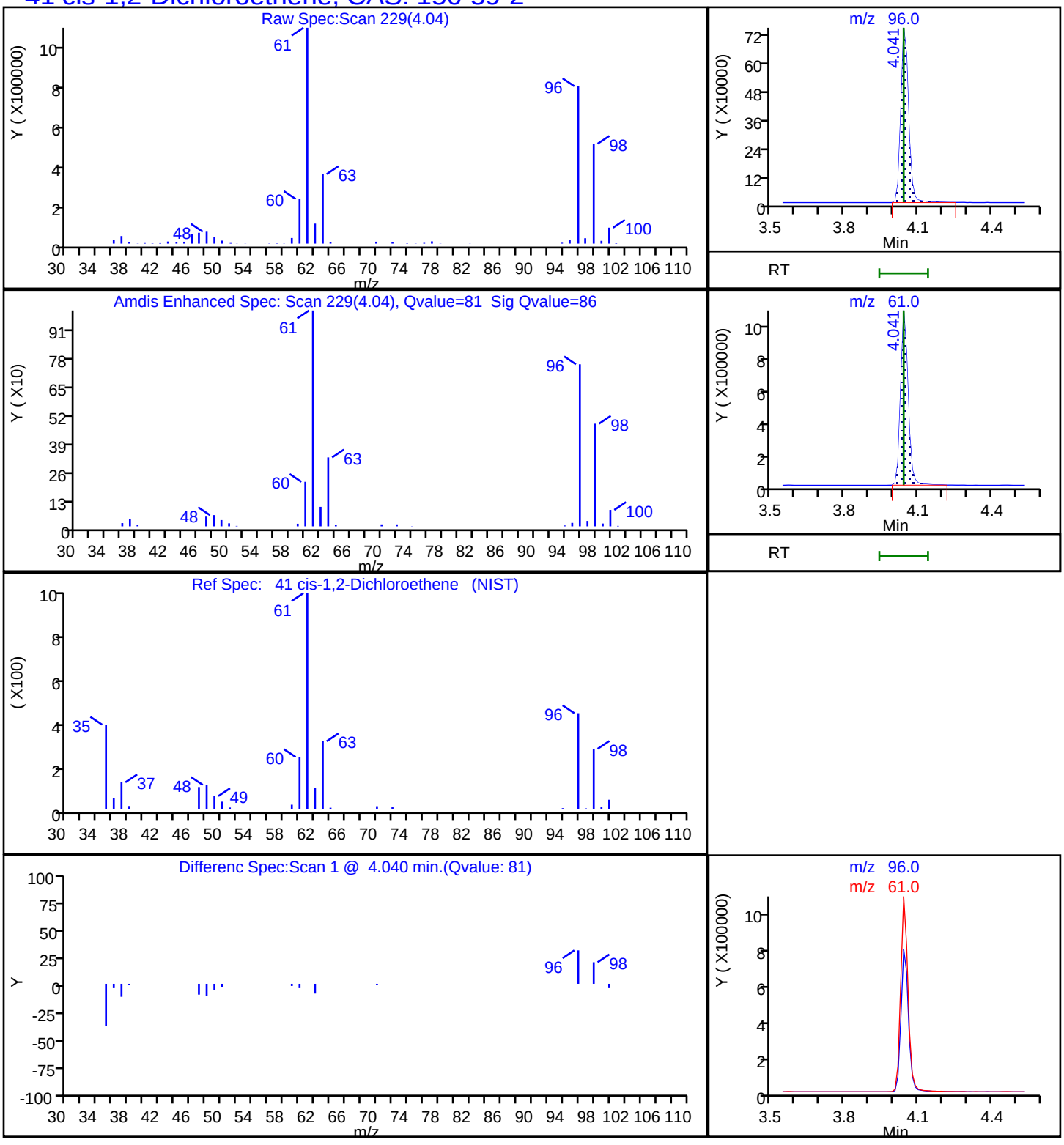
First Level Reviewer: evansle Date: 12-Oct-2021 12:28:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.98	89.80
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.87
$ 6 Toluene-d8 (Surr)	10.0	9.39	93.86
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.53	95.31

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D				
Injection Date:	12-Oct-2021 11:35:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-11	Lab Sample ID:	240-157760-11		
Client ID:	SL-11_100721				
Operator ID:	43582	ALS Bottle#:	8	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

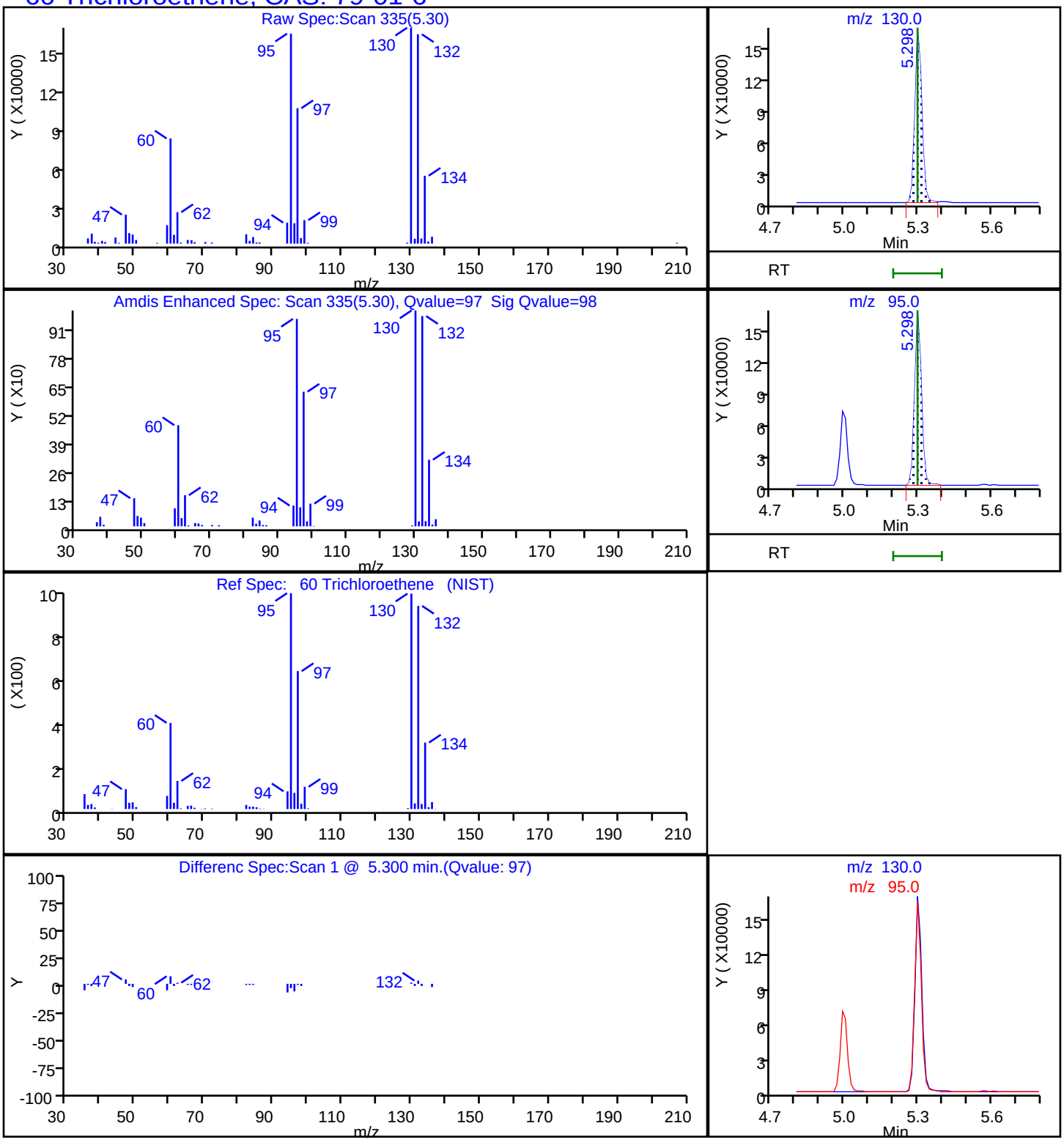


Report Date: 13-Oct-2021 08:54:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D				
Injection Date:	12-Oct-2021 11:35:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-11	Lab Sample ID:	240-157760-11		
Client ID:	SL-11_100721				
Operator ID:	43582	ALS Bottle#:	8	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

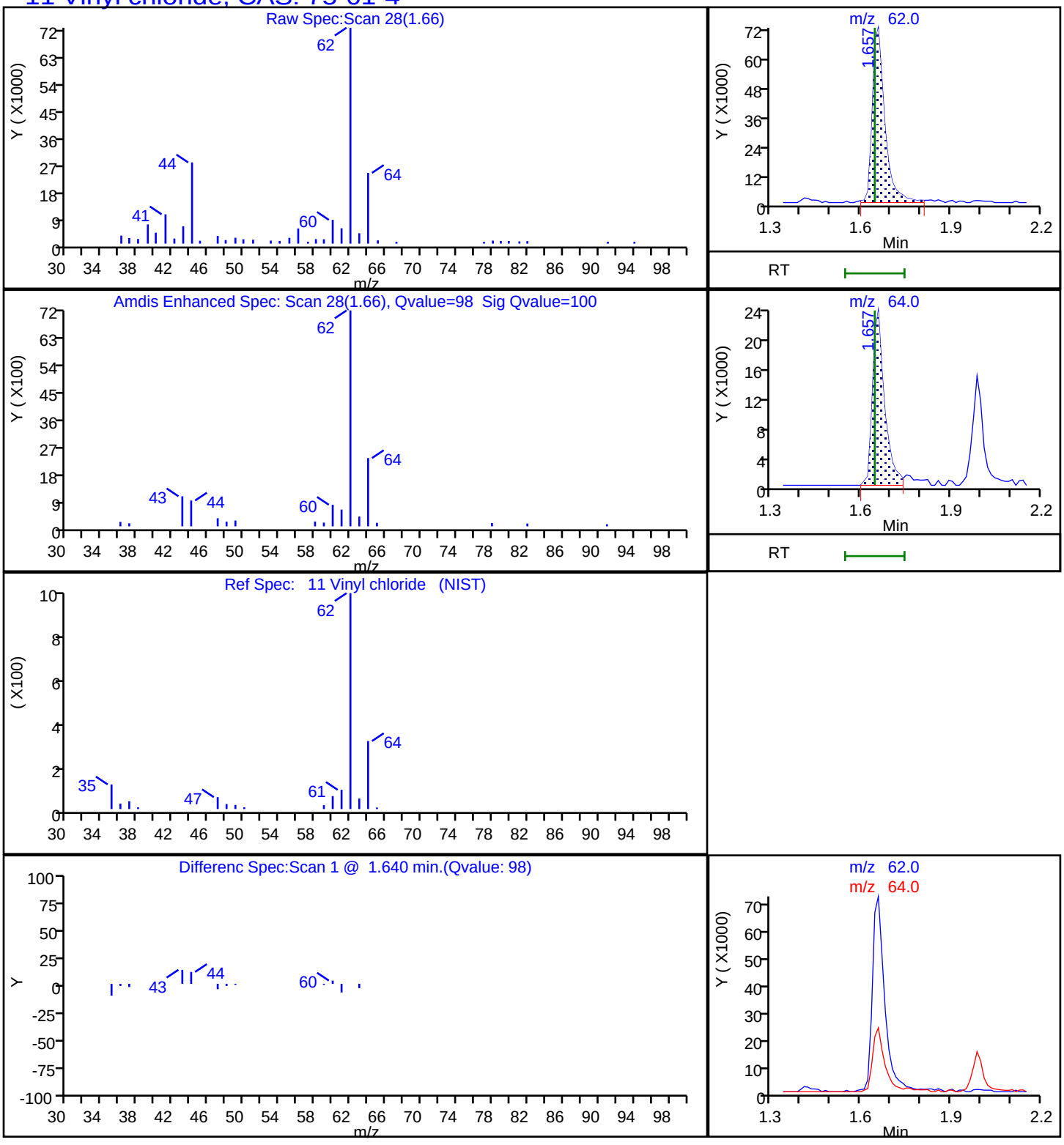


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9982.D

Injection Date:	12-Oct-2021 11:35:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-11	Lab Sample ID:	240-157760-11		
Client ID:	SL-11_100721				
Operator ID:	43582	ALS Bottle#:	8	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-12_100721 Lab Sample ID: 240-157760-12

Matrix: Water Lab File ID: UXC9983.D

Analysis Method: 8260B Date Collected: 10/07/2021 14:05

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 11:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	19		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	4.0		1.0	0.44
75-01-4	Vinyl chloride	2.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	95		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D
Lims ID: 240-157760-E-12
Client ID: SL-12_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 11:57:30 ALS Bottle#: 9 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-038
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 12:44:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	98	1606793	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1176347	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	619138	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	346055	9.21	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	498795	11.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1366774	9.48	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	87	460207	9.44	
11 Vinyl chloride	62	1.657	1.645	0.012	97	107633	2.28	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	95	6740	0.1453	
41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	81	913051	18.6	
60 Trichloroethene	130	5.297	5.298	-0.001	97	188099	3.97	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

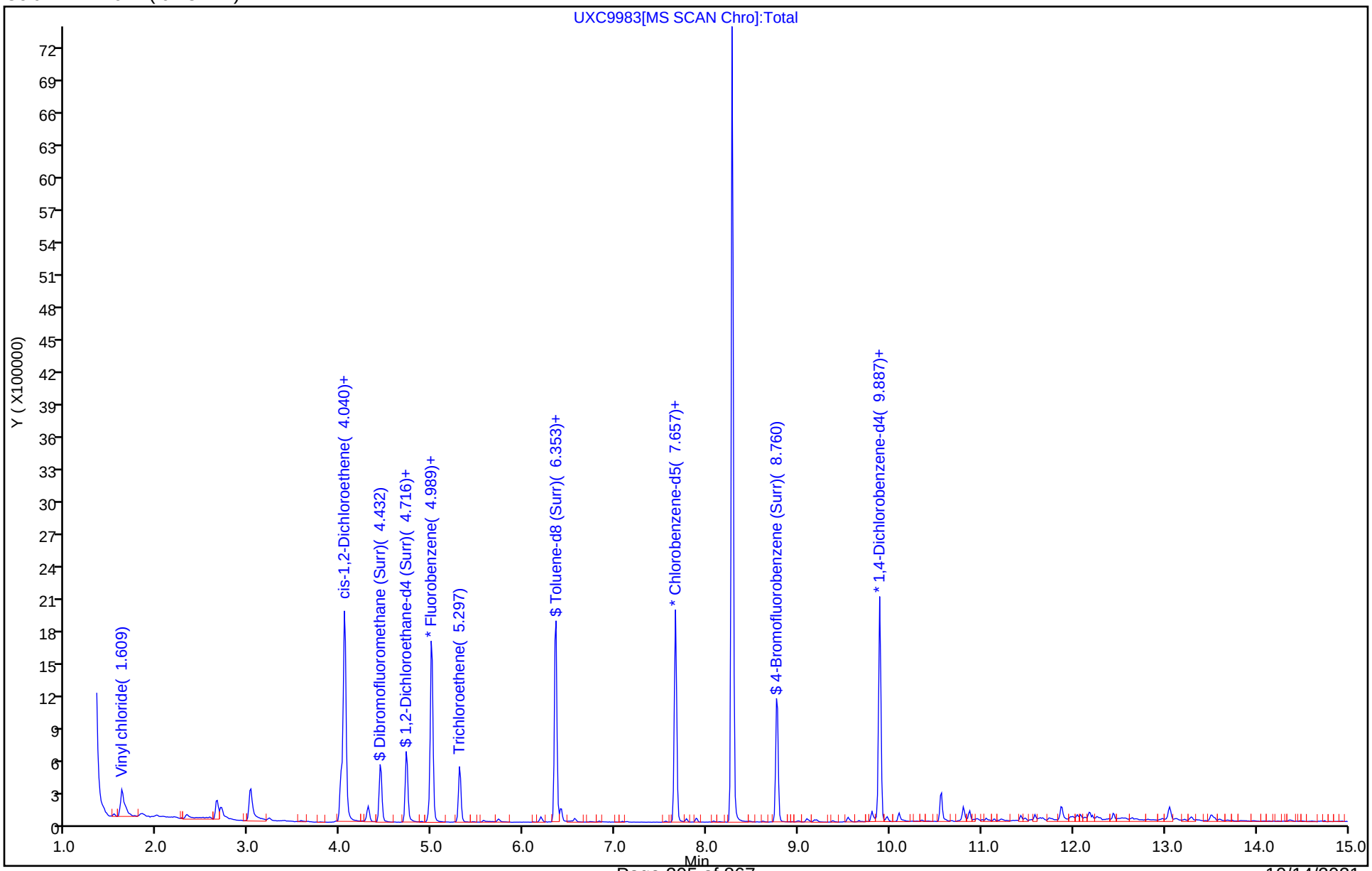
Report Date: 13-Oct-2021 08:54:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D

Injection Date:	12-Oct-2021 11:57:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-12	Lab Sample ID:	240-157760-12	Worklist Smp#:	38
Client ID:	SL-12_100721				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D				
Lims ID:	240-157760-E-12				
Client ID:	SL-12_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 11:57:30	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114014-038				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

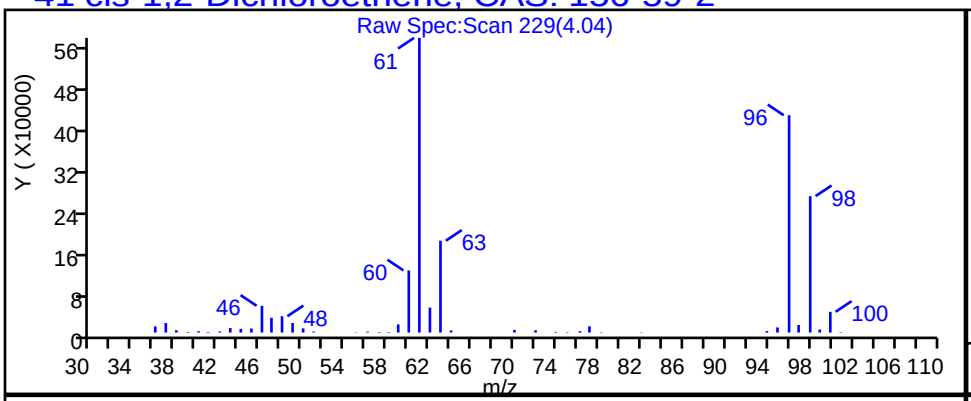
First Level Reviewer: evansle Date: 12-Oct-2021 12:44:06

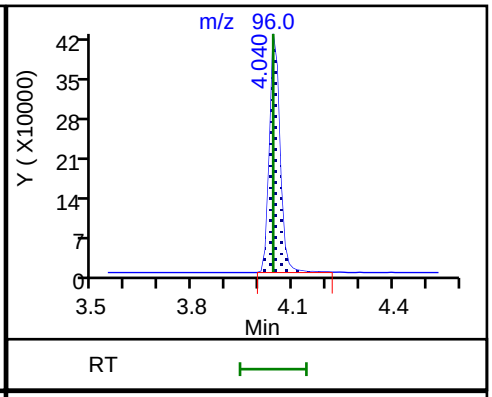
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.21	92.14
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	117.89
$ 6 Toluene-d8 (Surr)	10.0	9.48	94.81
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.44	94.37

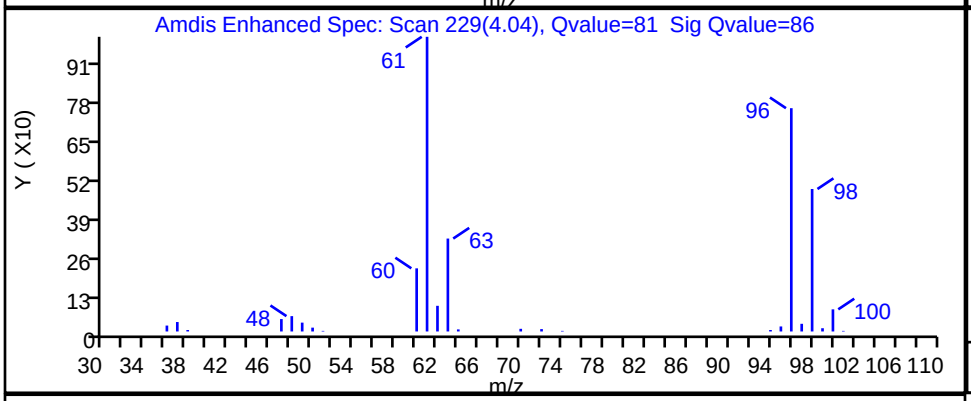
Eurofins TestAmerica, Canton

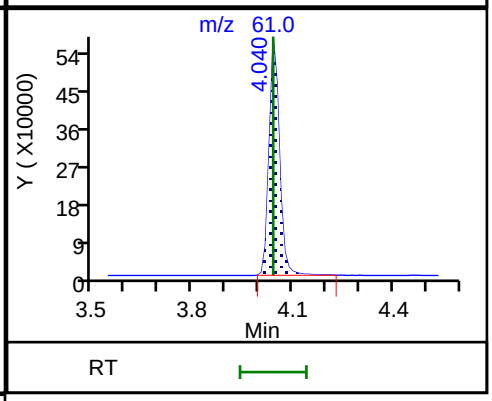
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D		
Injection Date:	12-Oct-2021 11:57:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-12	Lab Sample ID:	240-157760-12
Client ID:	SL-12_100721		
Operator ID:	43582	ALS Bottle#:	9 Worklist Smp#: 38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

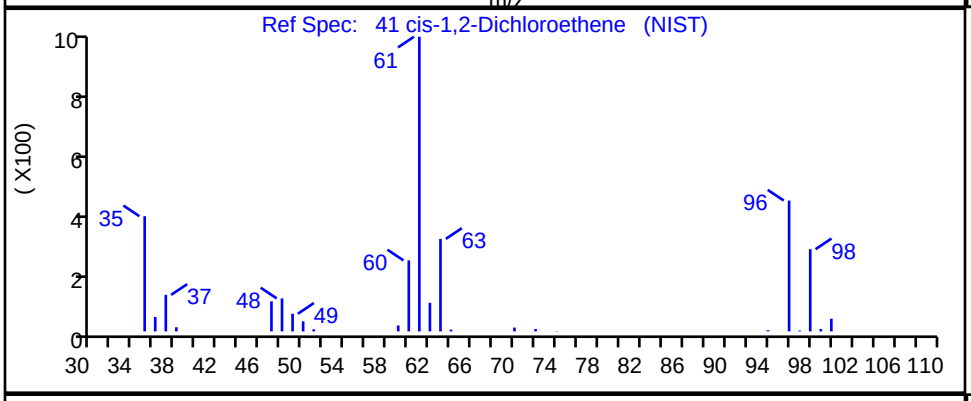
41 cis-1,2-Dichloroethene, CAS: 156-59-2

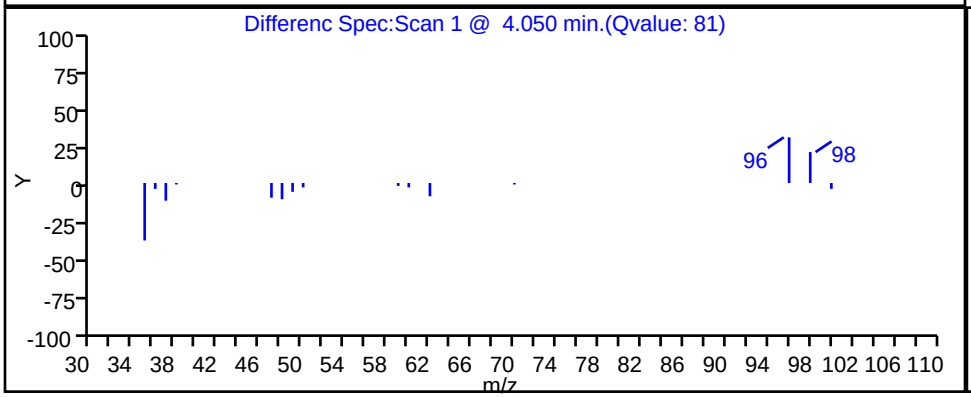


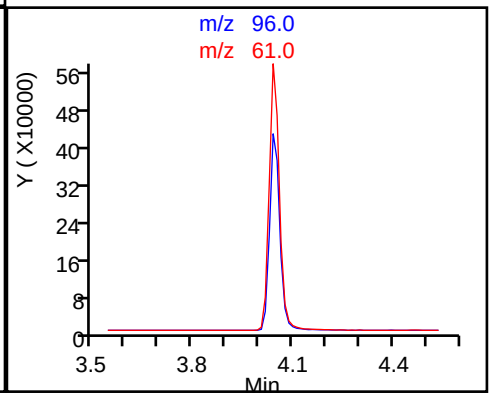








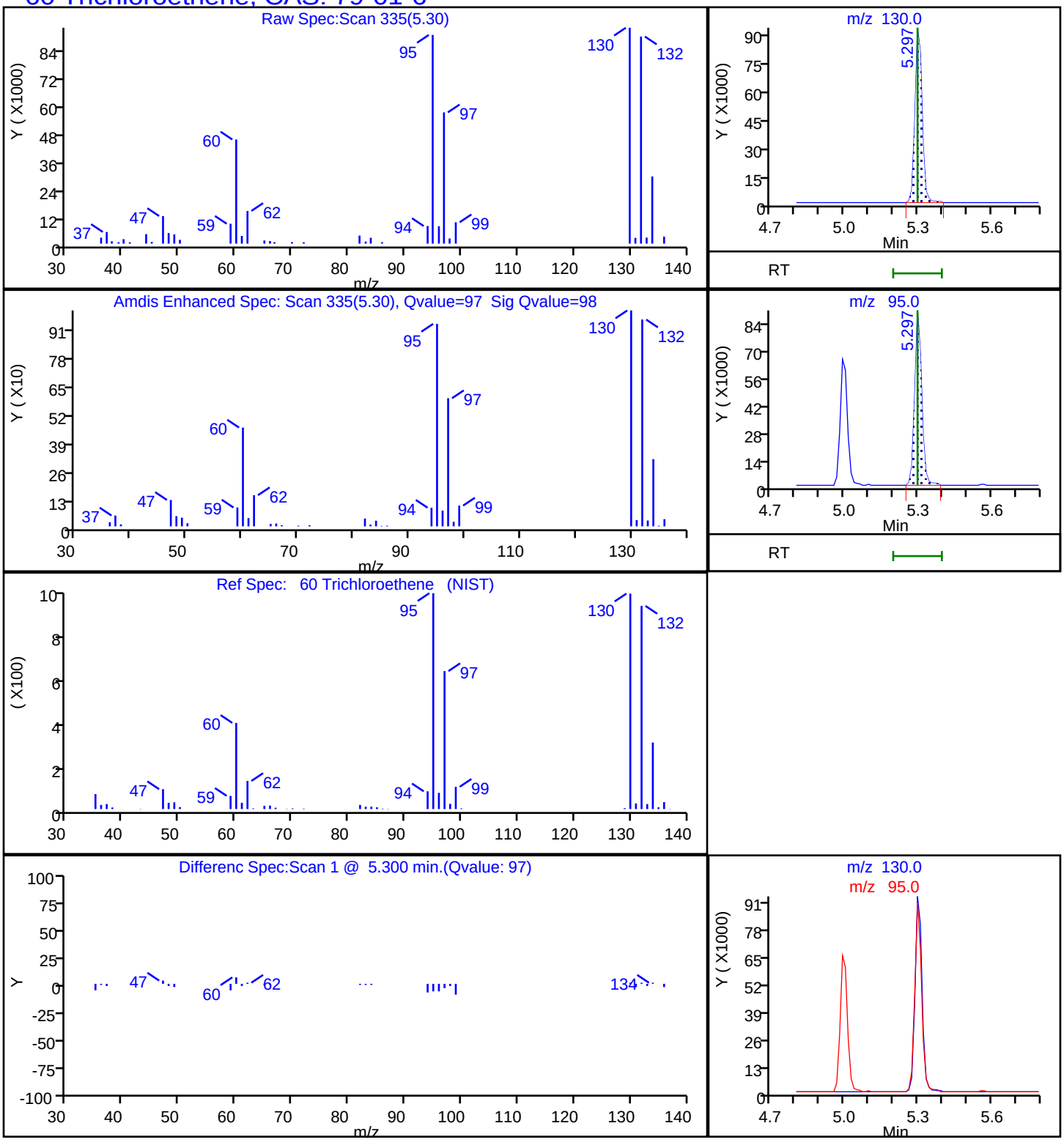




Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D				
Injection Date:	12-Oct-2021 11:57:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-12	Lab Sample ID:	240-157760-12		
Client ID:	SL-12_100721				
Operator ID:	43582	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



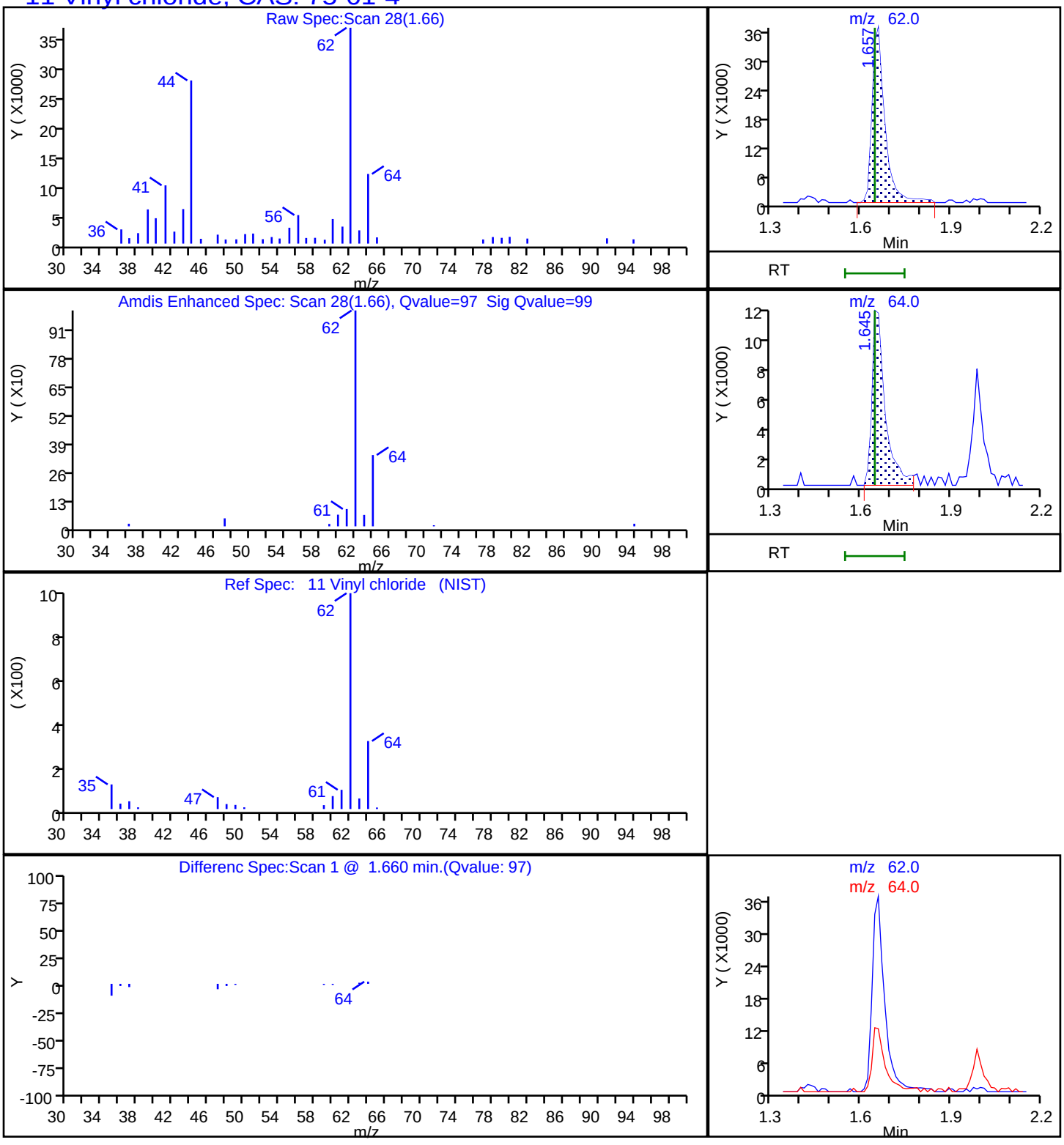
Report Date: 13-Oct-2021 08:54:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9983.D

Injection Date:	12-Oct-2021 11:57:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-12	Lab Sample ID:	240-157760-12		
Client ID:	SL-12_100721				
Operator ID:	43582	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: MH-1231_100721 Lab Sample ID: 240-157760-13

Matrix: Water Lab File ID: UXC9985.D

Analysis Method: 8260B Date Collected: 10/07/2021 14:45

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 12:45

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10	U	10	4.9
156-59-2	cis-1,2-Dichloroethene	260		10	4.6
127-18-4	Tetrachloroethene	10	U	10	4.4
156-60-5	trans-1,2-Dichloroethene	10	U	10	5.1
79-01-6	Trichloroethene	51		10	4.4
75-01-4	Vinyl chloride	38		10	4.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	92		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D
Lims ID: 240-157760-E-13
Client ID: MS-1231_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 12:45:30 ALS Bottle#: 11 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 240-0114014-040
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 13:39:50

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.989	4.989	0.000	98	1617344	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1192607	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	609068	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	345099	9.13	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.001	100	500527	11.8	
$	6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1342780	9.19	
$	7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	88	462516	9.36	
	11 Vinyl chloride	62	1.657	1.645	0.012	97	182009	3.83	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	93	9097	0.1948	
	41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	1287931	26.1	
	60 Trichloroethene	130	5.298	5.298	0.000	97	244736	5.13	
	76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

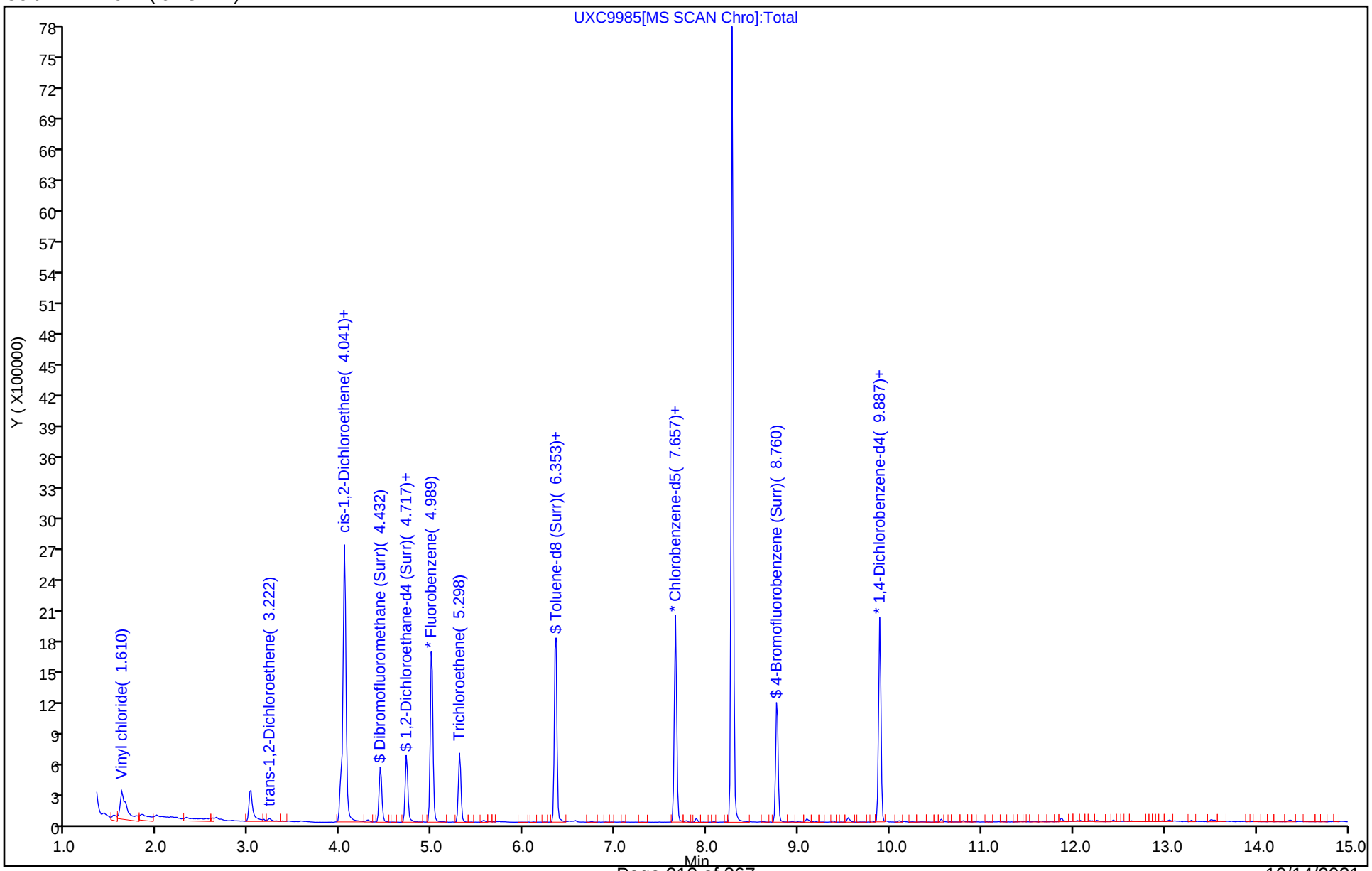
Report Date: 13-Oct-2021 08:54:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D

Injection Date:	12-Oct-2021 12:45:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-13	Lab Sample ID:	240-157760-13	Worklist Smp#:	40
Client ID:	MS-1231_100721				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D				
Lims ID:	240-157760-E-13				
Client ID:	MS-1231_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 12:45:30	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Sample Info:	240-0114014-040				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

First Level Reviewer: evansle Date: 12-Oct-2021 13:39:50

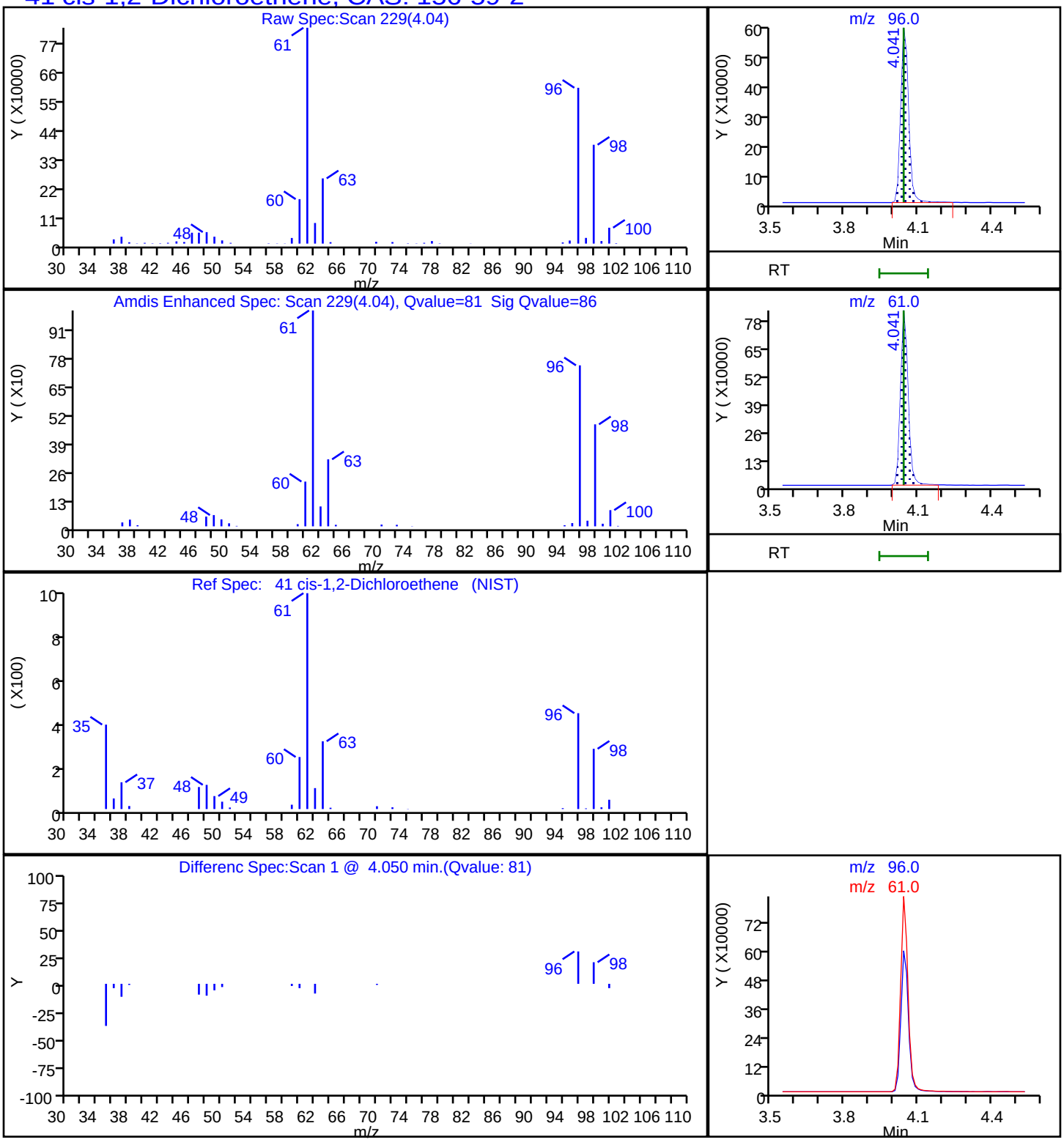
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.13	91.29
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	117.53
$ 6 Toluene-d8 (Surr)	10.0	9.19	91.87
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.36	93.55

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D

Injection Date:	12-Oct-2021 12:45:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-13	Lab Sample ID:	240-157760-13		
Client ID:	MS-1231_100721				
Operator ID:	43582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

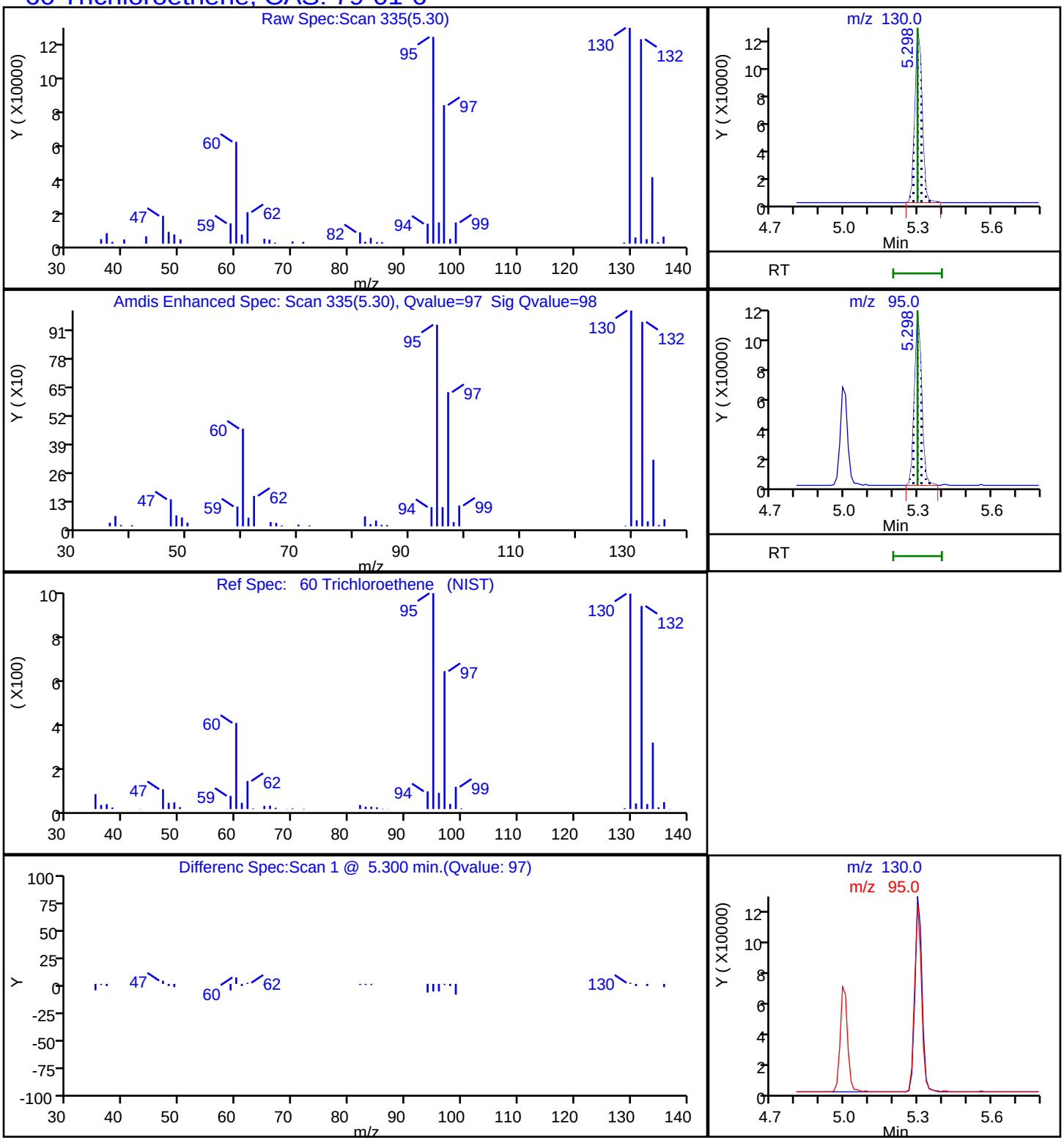


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D

Injection Date:	12-Oct-2021 12:45:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-13	Lab Sample ID:	240-157760-13
Client ID:	MS-1231_100721		
Operator ID:	43582	ALS Bottle#:	11 Worklist Smp#: 40
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

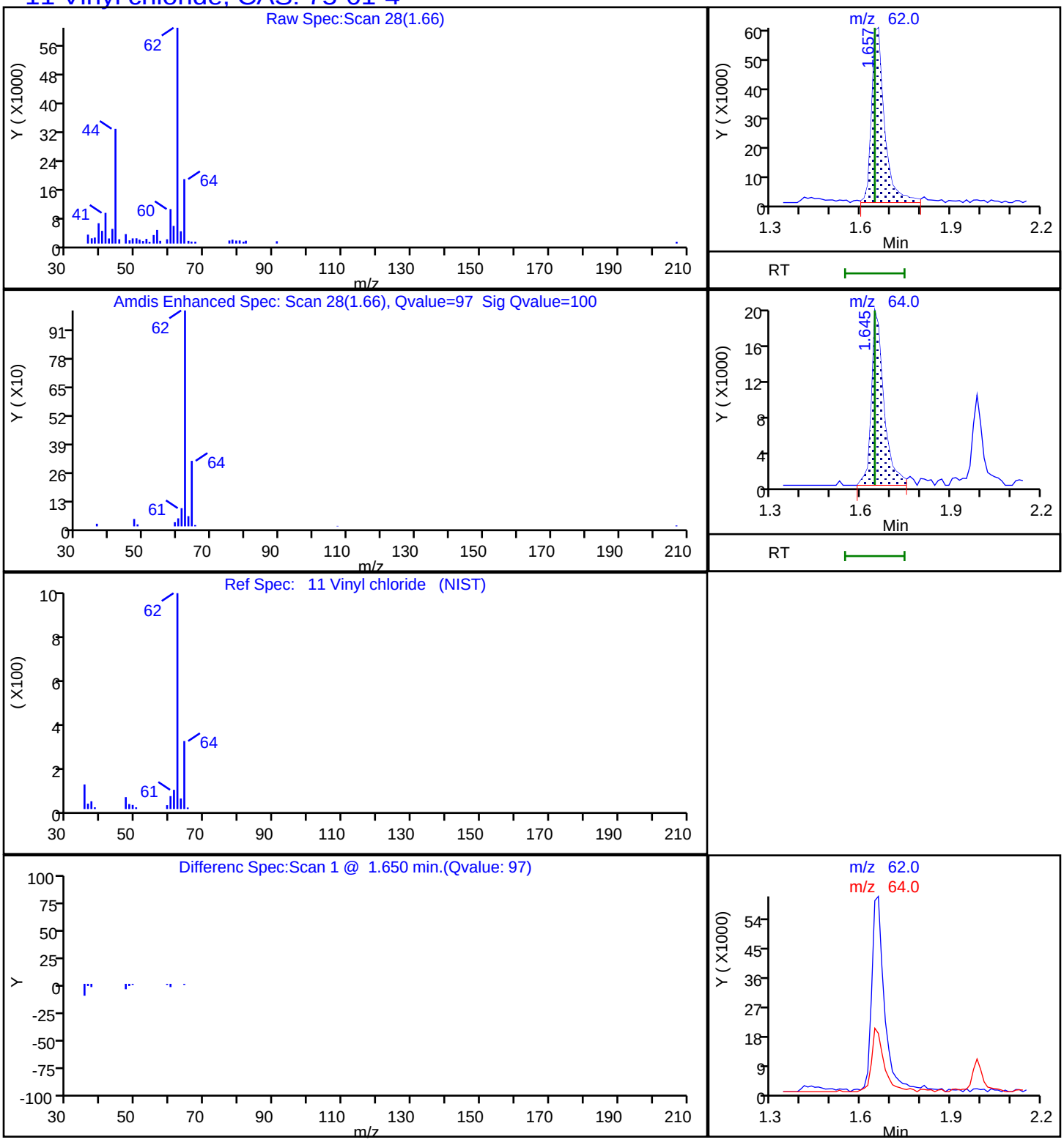


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9985.D

Injection Date:	12-Oct-2021 12:45:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-13	Lab Sample ID:	240-157760-13		
Client ID:	MS-1231_100721				
Operator ID:	43582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-2_100721 Lab Sample ID: 240-157760-14

Matrix: Water Lab File ID: UXC9986.D

Analysis Method: 8260B Date Collected: 10/07/2021 15:15

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 13:07

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.5	U	2.5	1.2
156-59-2	cis-1,2-Dichloroethene	91		2.5	1.2
127-18-4	Tetrachloroethene	2.5	U	2.5	1.1
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	1.3
79-01-6	Trichloroethene	20		2.5	1.1
75-01-4	Vinyl chloride	14		2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		62-137
460-00-4	4-Bromofluorobenzene (Surr)	93		56-136
2037-26-5	Toluene-d8 (Surr)	92		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D
Lims ID: 240-157760-E-14
Client ID: SL-2_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 13:07:30 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 240-0114014-041
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 14:00:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	98	1563961	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1149070	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	593897	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	337710	9.24	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	474225	11.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1300701	9.24	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	444940	9.34	
11 Vinyl chloride	62	1.657	1.645	0.012	98	248548	5.41	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	14019	0.3105	
41 cis-1,2-Dichloroethene	96	4.041	4.041	-0.001	80	1741482	36.5	
60 Trichloroethene	130	5.298	5.298	0.000	98	369404	8.01	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

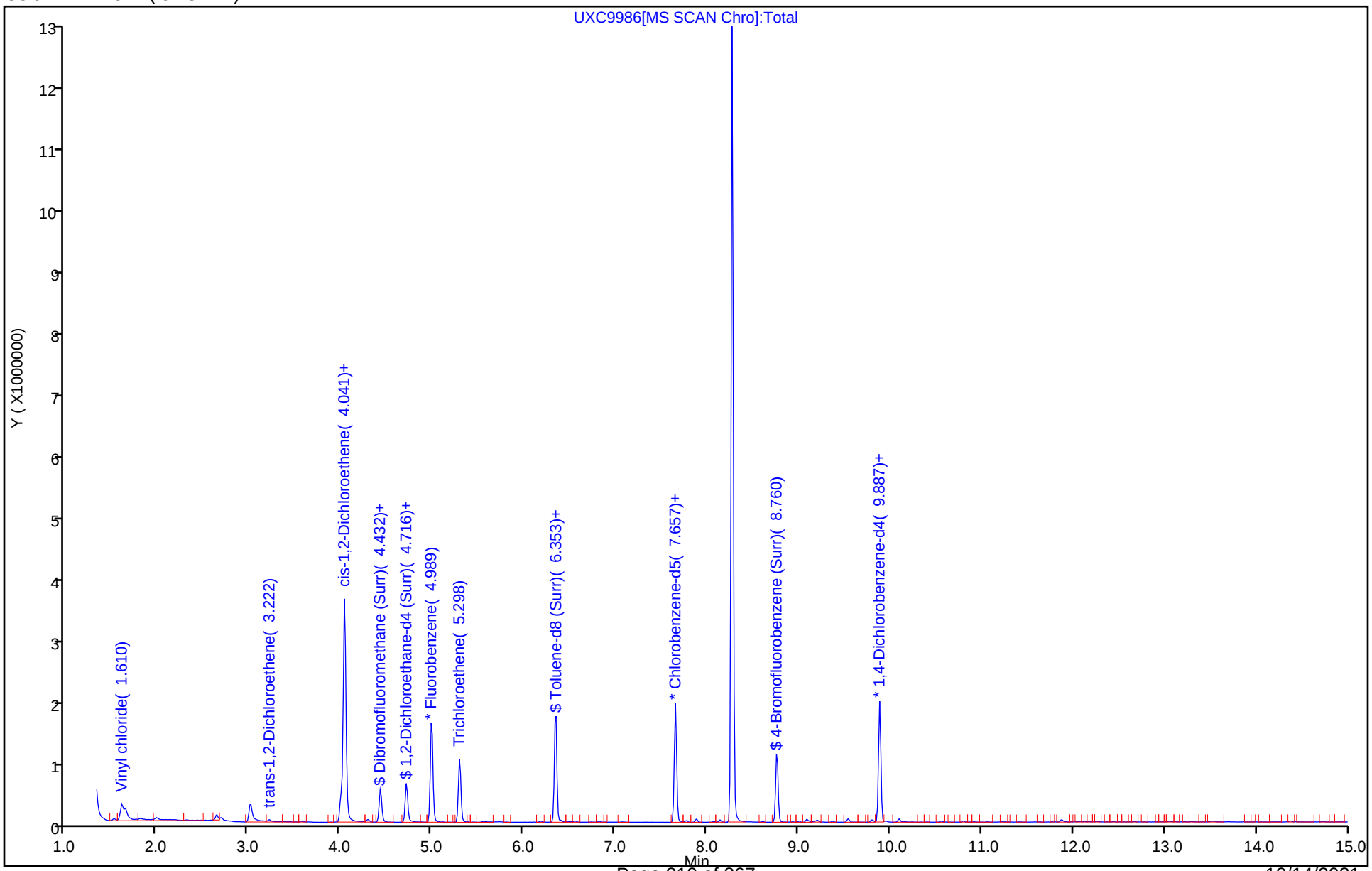
Report Date: 13-Oct-2021 08:54:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D

Injection Date:	12-Oct-2021 13:07:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-14	Lab Sample ID:	240-157760-14	Worklist Smp#:	41
Client ID:	SL-2_100721				
Purge Vol:	5.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D
Lims ID: 240-157760-E-14
Client ID: SL-2_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 13:07:30 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 240-0114014-041
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 14:00:12

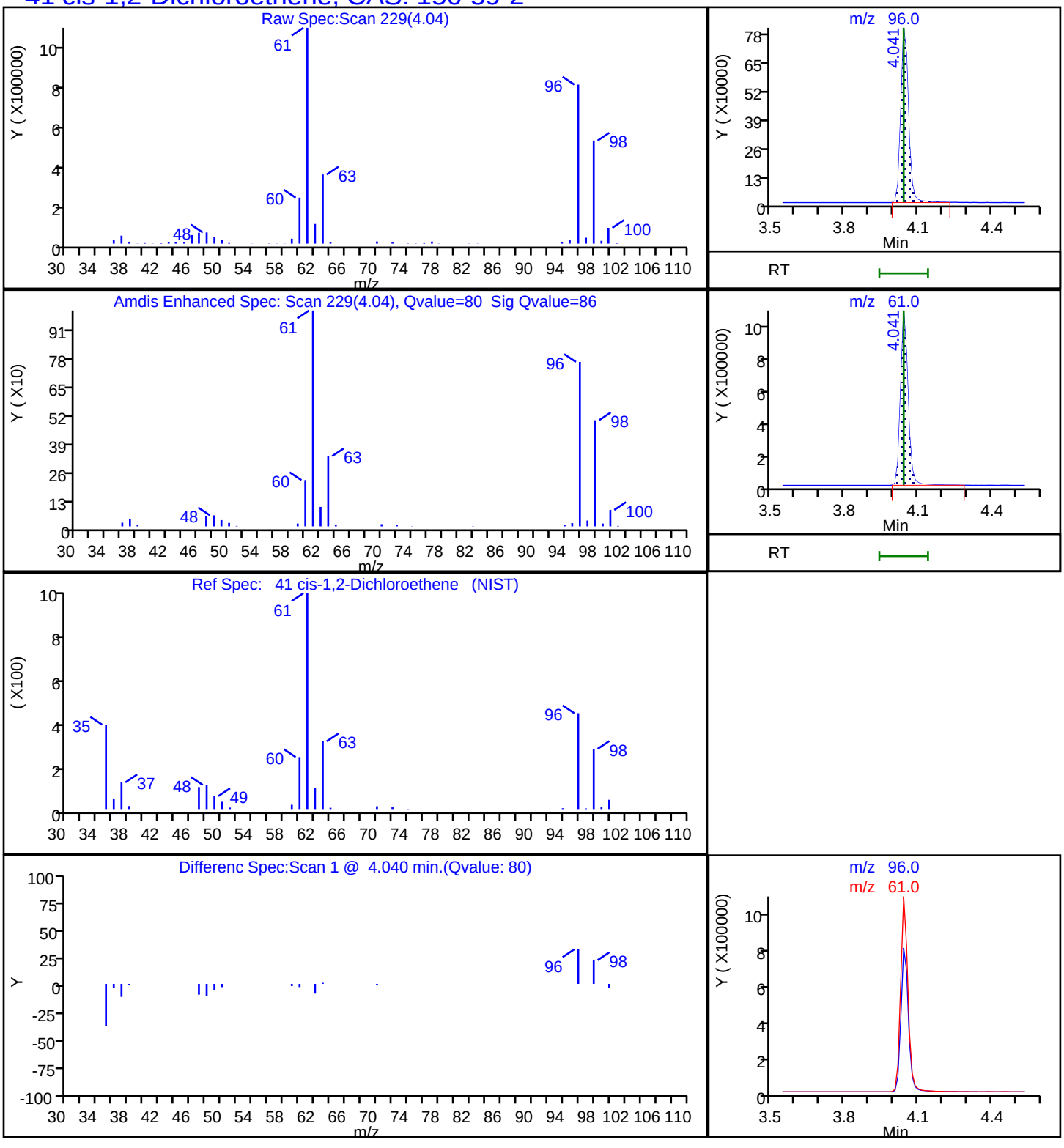
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.24	92.38
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.5	115.15
$ 6 Toluene-d8 (Surr)	10.0	9.24	92.37
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.34	93.41

Report Date: 13-Oct-2021 08:54:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D				
Injection Date:	12-Oct-2021 13:07:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-14	Lab Sample ID:	240-157760-14		
Client ID:	SL-2_100721				
Operator ID:	43582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

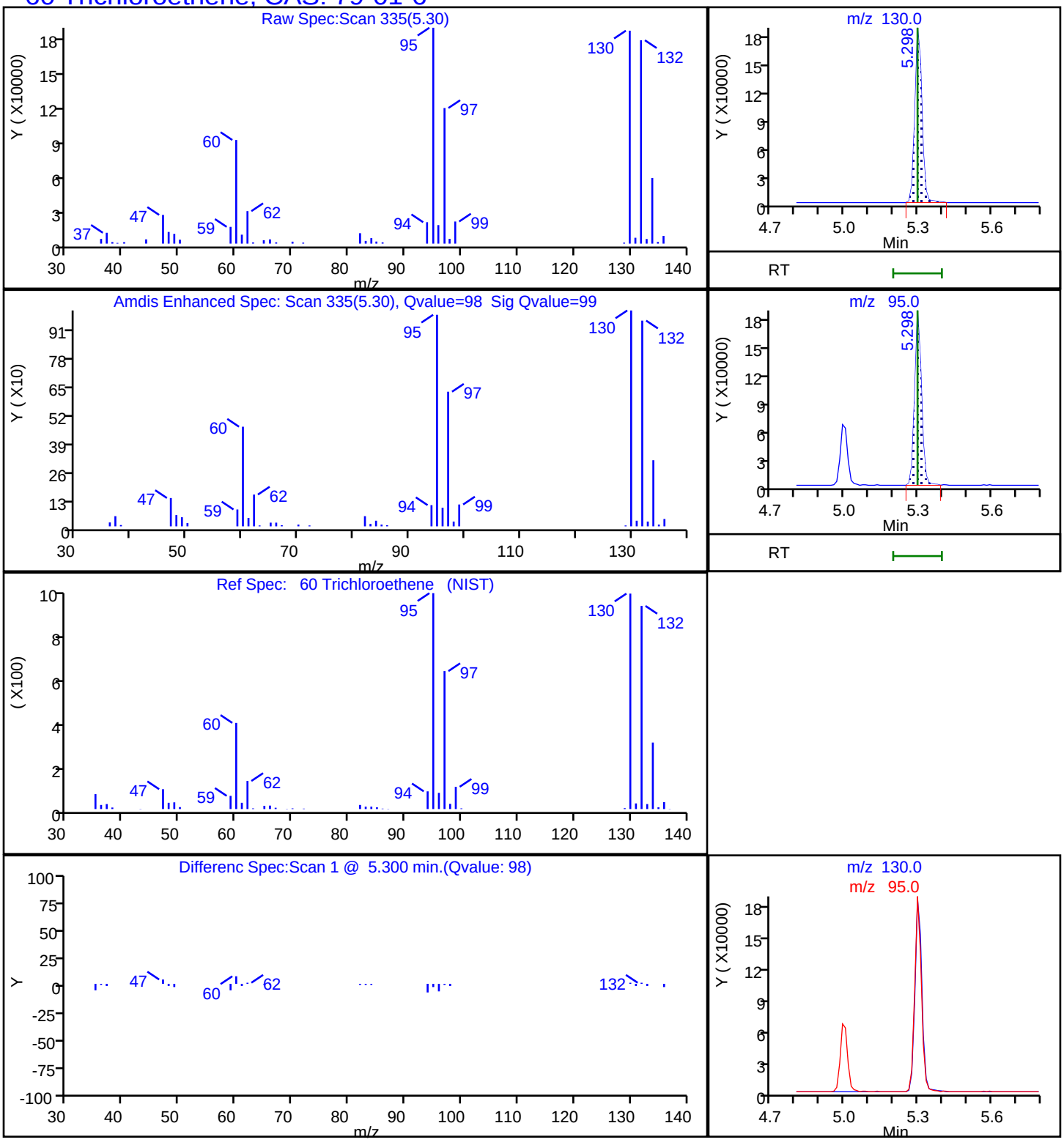


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D

Injection Date:	12-Oct-2021 13:07:30	Instrument ID:	A3UX15
Lims ID:	240-157760-E-14	Lab Sample ID:	240-157760-14
Client ID:	SL-2_100721		
Operator ID:	43582	ALS Bottle#:	12 Worklist Smp#: 41
Purge Vol:	5.000 mL	Dil. Factor:	2.5000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

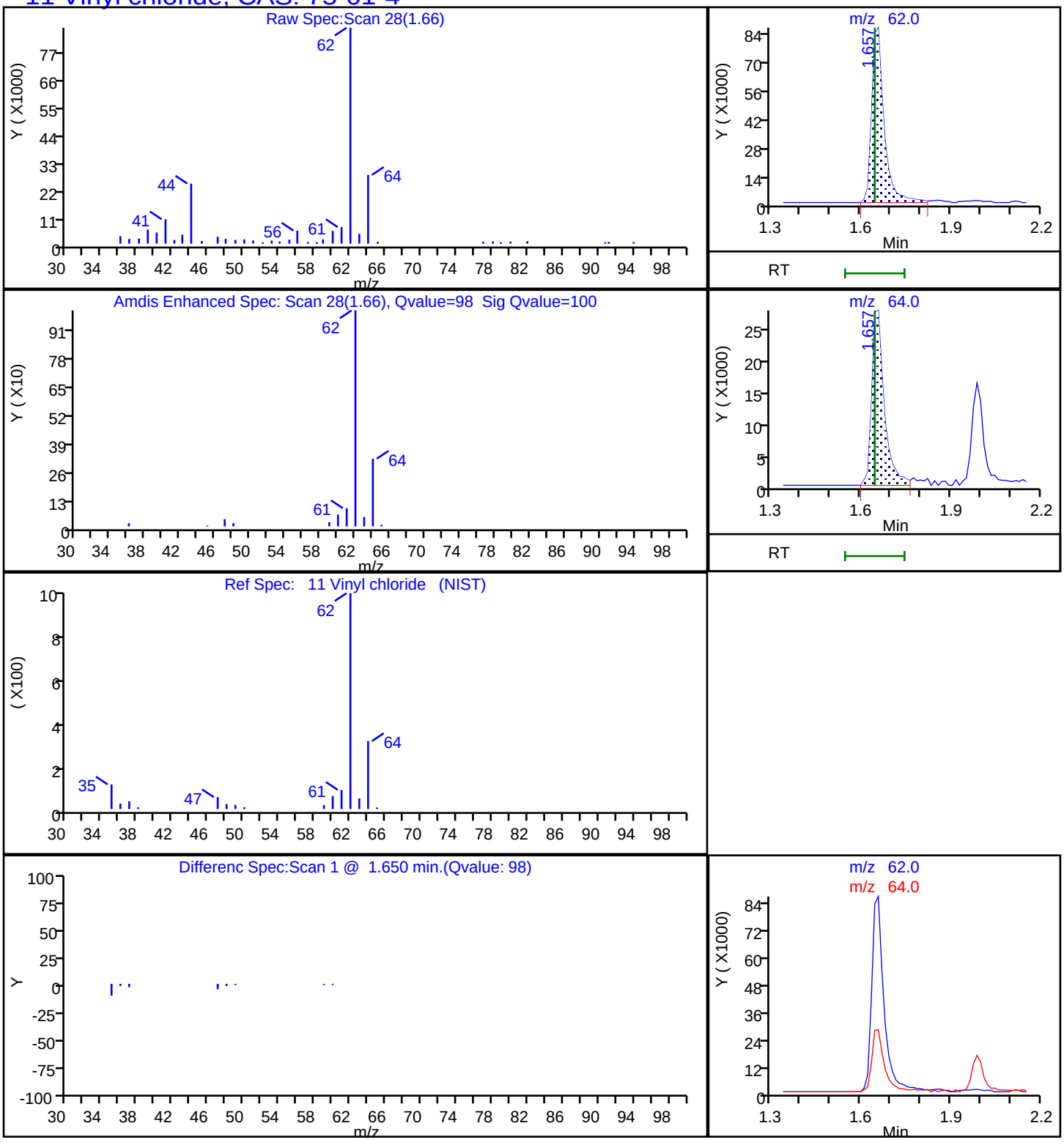


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9986.D

Injection Date:	12-Oct-2021 13:07:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-14	Lab Sample ID:	240-157760-14		
Client ID:	SL-2_100721				
Operator ID:	43582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-3_100721 Lab Sample ID: 240-157760-15

Matrix: Water Lab File ID: UXC9987.D

Analysis Method: 8260B Date Collected: 10/07/2021 15:45

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 13:29

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.5
156-59-2	cis-1,2-Dichloroethene	140		5.0	2.3
127-18-4	Tetrachloroethene	5.0	U	5.0	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	2.6
79-01-6	Trichloroethene	25		5.0	2.2
75-01-4	Vinyl chloride	17		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	93		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D
Lims ID: 240-157760-E-15
Client ID: SL-3_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 13:29:30 ALS Bottle#: 13 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0114014-042
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 14:01:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	98	1566236	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	87	1142345	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	573650	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	338768	9.25	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.001	99	484724	11.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1308488	9.35	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	450460	9.51	
11 Vinyl chloride	62	1.657	1.645	0.012	97	154354	3.36	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	9882	0.2185	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	1366459	28.6	
60 Trichloroethene	130	5.298	5.298	0.000	97	229773	4.98	
76 Tetrachloroethene	164		6.898				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

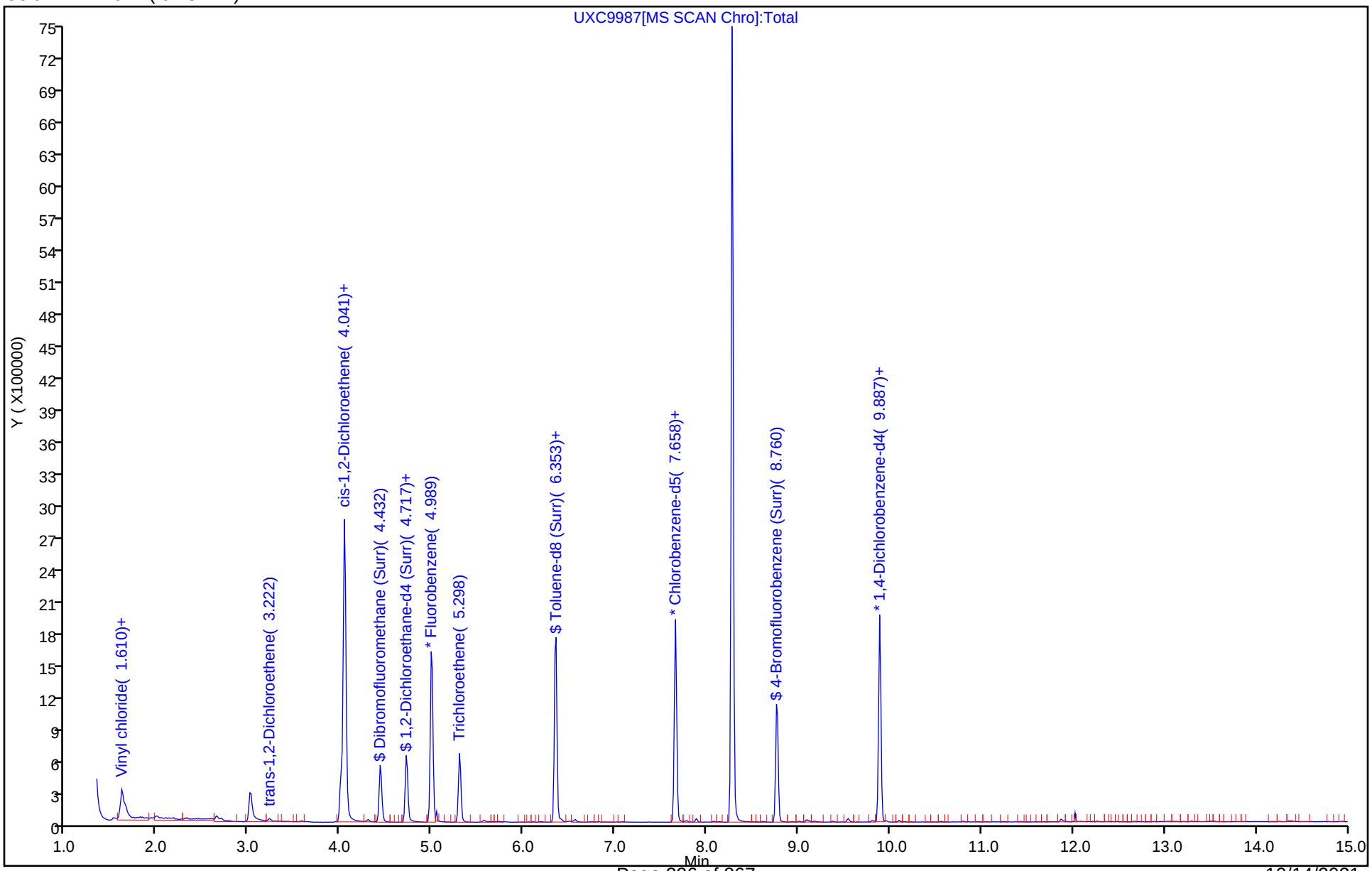
Report Date: 13-Oct-2021 08:54:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D

Injection Date:	12-Oct-2021 13:29:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-15	Lab Sample ID:	240-157760-15	Worklist Smp#:	42
Client ID:	SL-3_100721				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	13
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

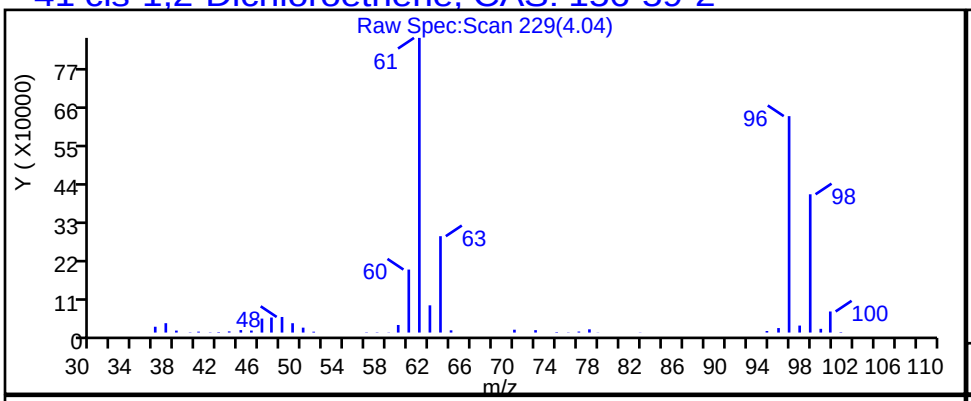
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D				
Lims ID:	240-157760-E-15				
Client ID:	SL-3_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 13:29:30	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Sample Info:	240-0114014-042				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				
First Level Reviewer: evansle		Date:	12-Oct-2021 14:01:05		

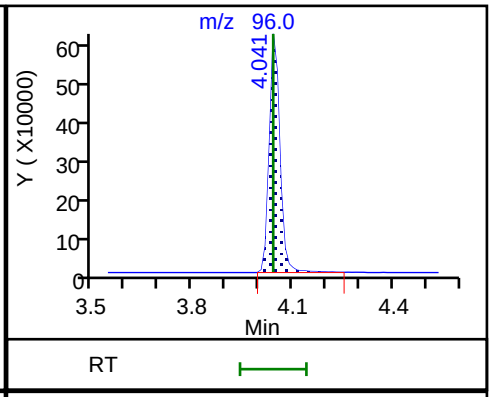
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.25	92.54
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	117.53
$ 6 Toluene-d8 (Surr)	10.0	9.35	93.47
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.51	95.12

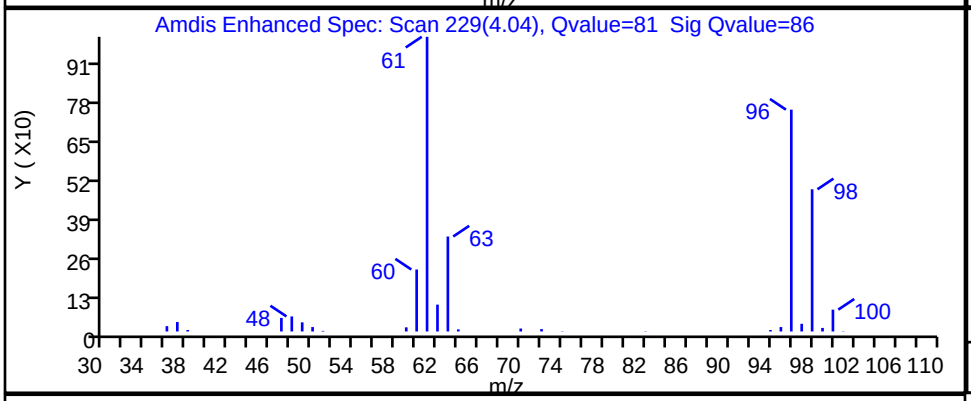
Eurofins TestAmerica, Canton

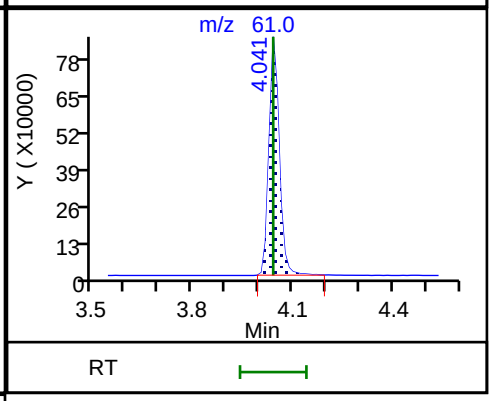
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D				
Injection Date:	12-Oct-2021 13:29:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-15	Lab Sample ID:	240-157760-15		
Client ID:	SL-3_100721				
Operator ID:	43582	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

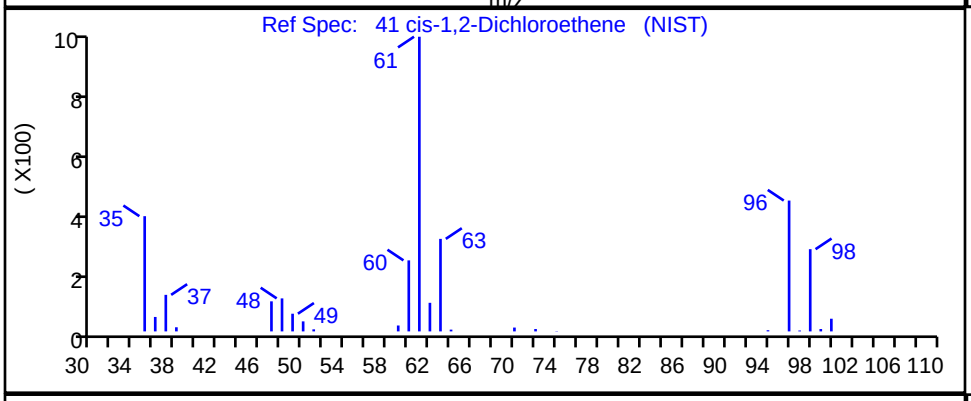
41 cis-1,2-Dichloroethene, CAS: 156-59-2

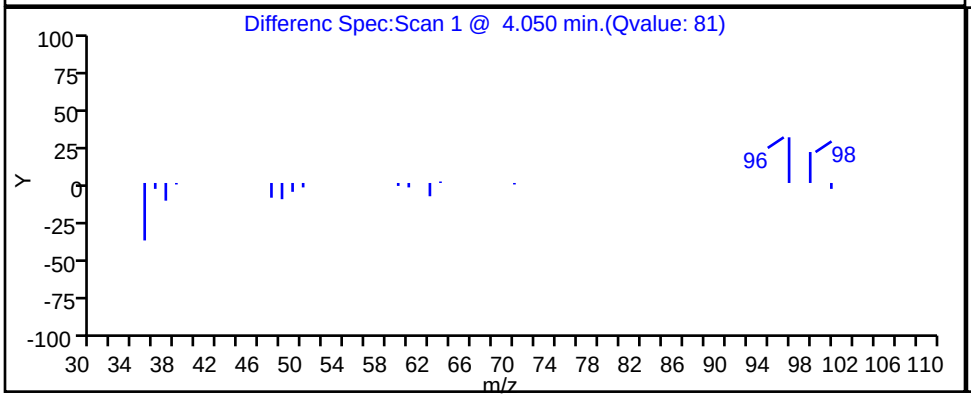


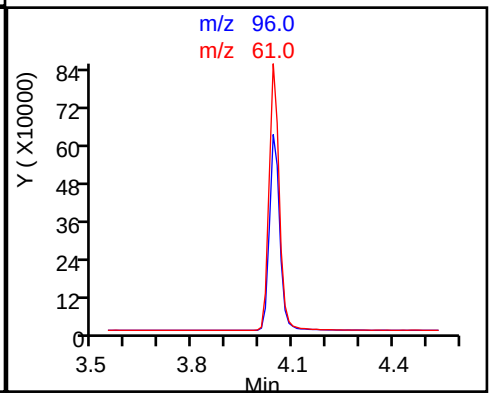












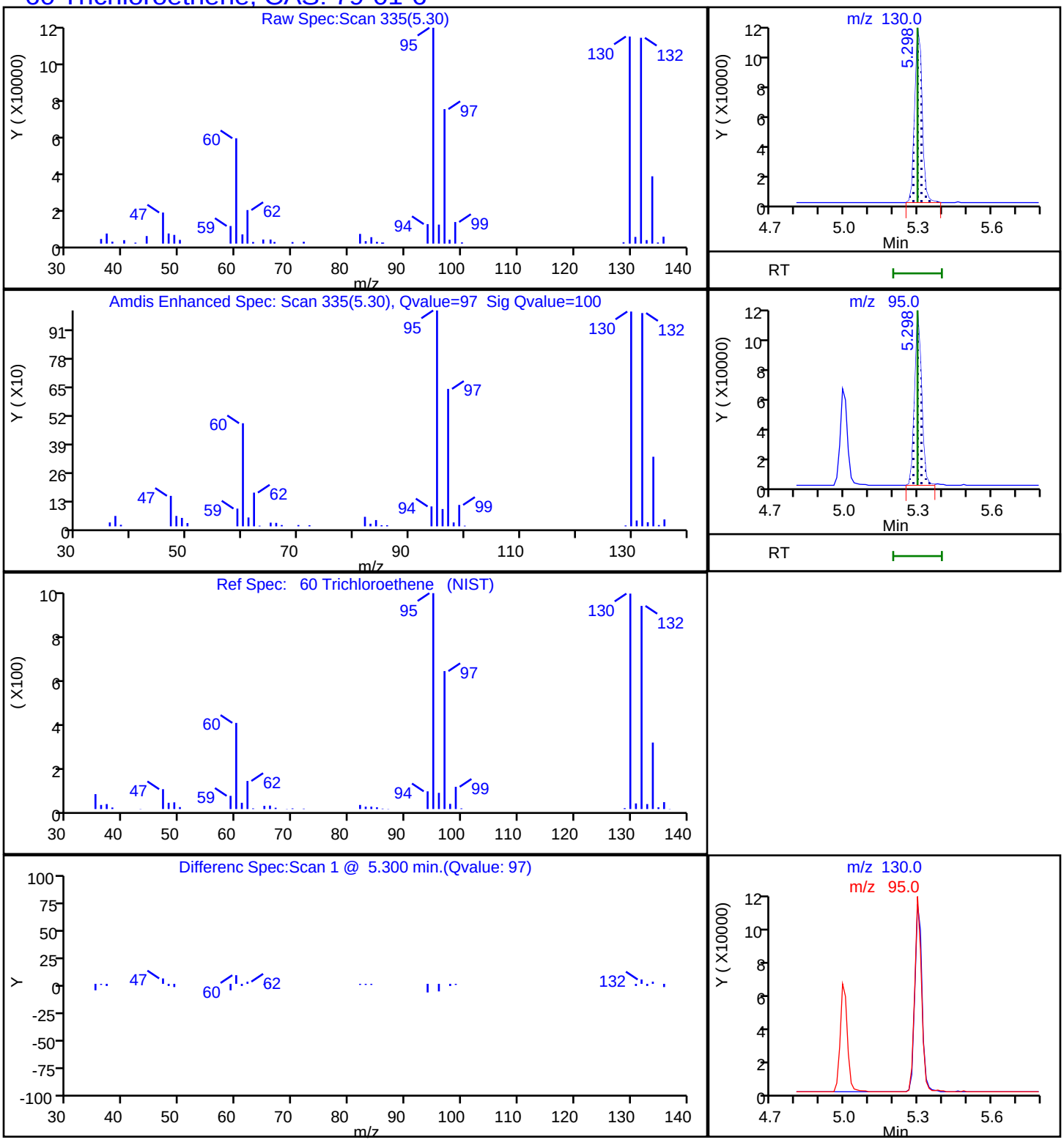
Report Date: 13-Oct-2021 08:54:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D

Injection Date:	12-Oct-2021 13:29:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-15	Lab Sample ID:	240-157760-15		
Client ID:	SL-3_100721				
Operator ID:	43582	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

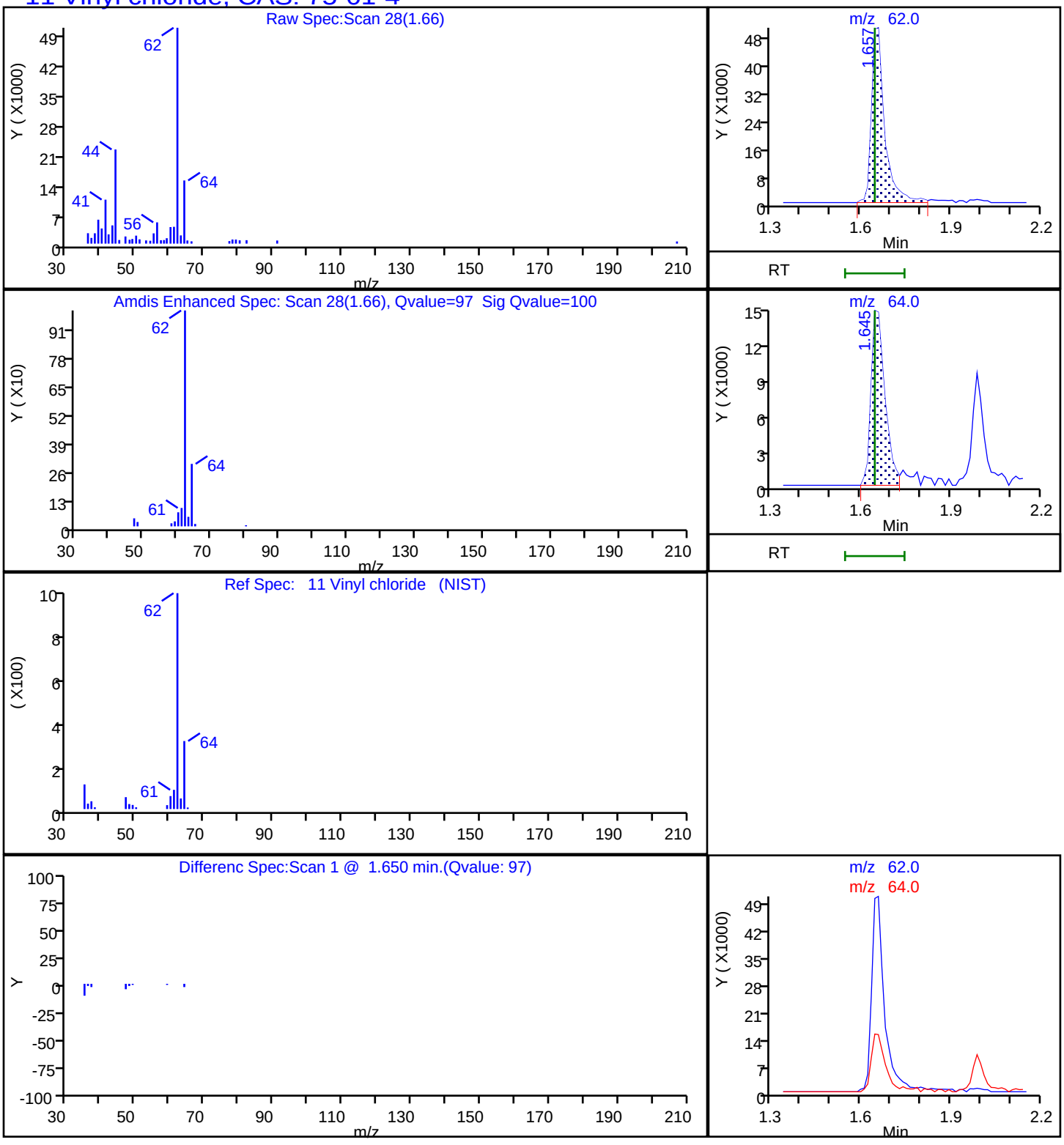


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9987.D

Injection Date:	12-Oct-2021 13:29:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-15	Lab Sample ID:	240-157760-15		
Client ID:	SL-3_100721				
Operator ID:	43582	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-4_100721 Lab Sample ID: 240-157760-16

Matrix: Water Lab File ID: UXC9988.D

Analysis Method: 8260B Date Collected: 10/07/2021 16:15

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 13:51

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.5	U	2.5	1.2
156-59-2	cis-1,2-Dichloroethene	97		2.5	1.2
127-18-4	Tetrachloroethene	2.5	U	2.5	1.1
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	1.3
79-01-6	Trichloroethene	17		2.5	1.1
75-01-4	Vinyl chloride	11		2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	94		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D				
Lims ID:	240-157760-E-16				
Client ID:	SL-4_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 13:51:30	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Sample Info:	240-0114014-043				
Misc. Info.:	C211012A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:53:53	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.989	4.989	0.000	98	1554916	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1152543	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	602548	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	335345	9.23	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	481543	11.8	
$	6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1322847	9.37	
$	7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	449966	9.42	
	11 Vinyl chloride	62	1.645	1.645	0.000	98	199157	4.36	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	11280	0.2513	
	41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	1848404	39.0	
	60 Trichloroethene	130	5.298	5.298	0.000	97	313305	6.84	
	76 Tetrachloroethene	164		6.898				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added: 1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added: 0.00	Units:	Run Reagent

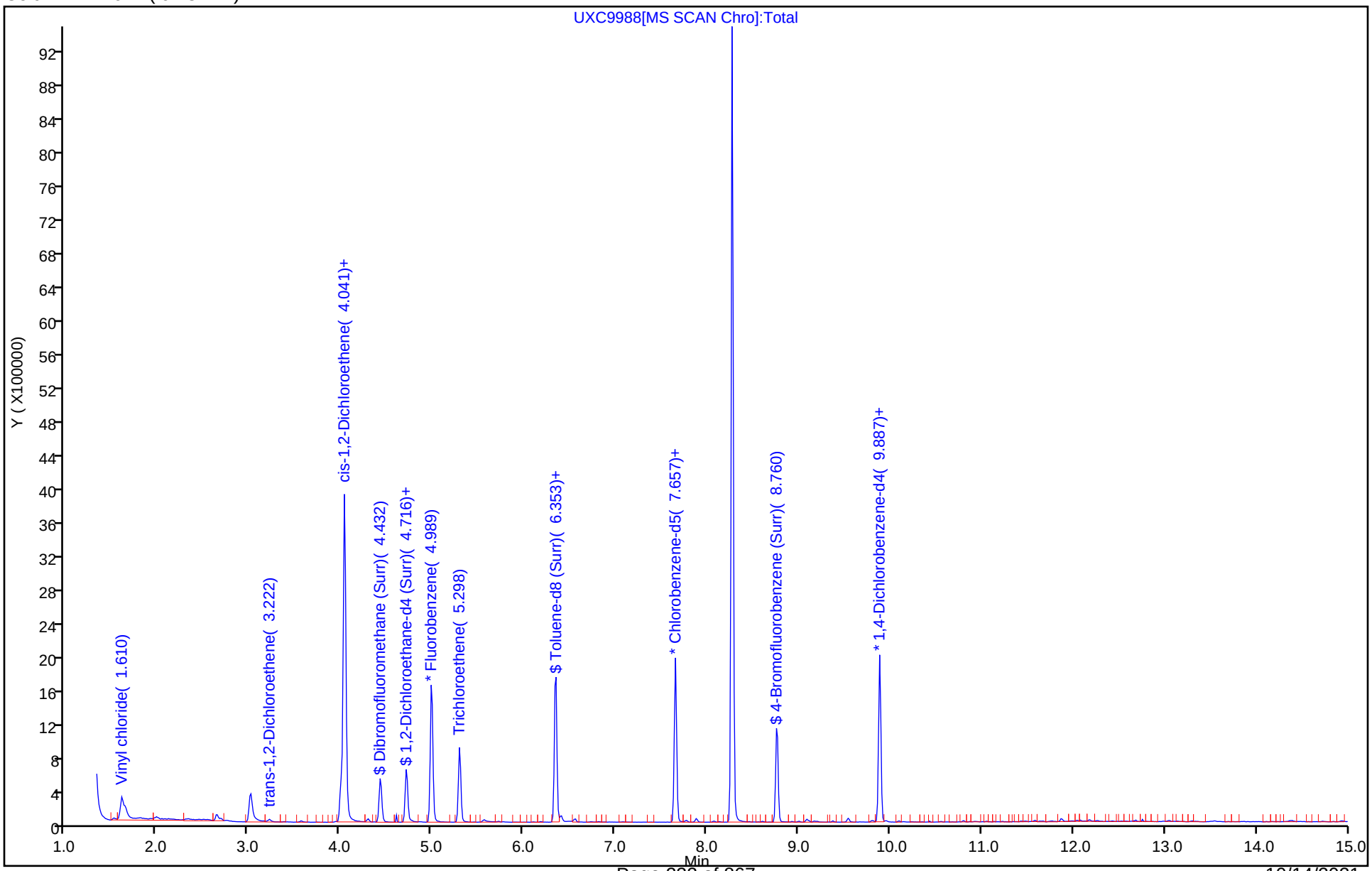
Report Date: 13-Oct-2021 08:54:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D

Injection Date:	12-Oct-2021 13:51:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-E-16	Lab Sample ID:	240-157760-16	Worklist Smp#:	43
Client ID:	SL-4_100721				
Purge Vol:	5.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D
Lims ID: 240-157760-E-16
Client ID: SL-4_100721
Sample Type: Client
Inject. Date: 12-Oct-2021 13:51:30 ALS Bottle#: 14 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 240-0114014-043
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

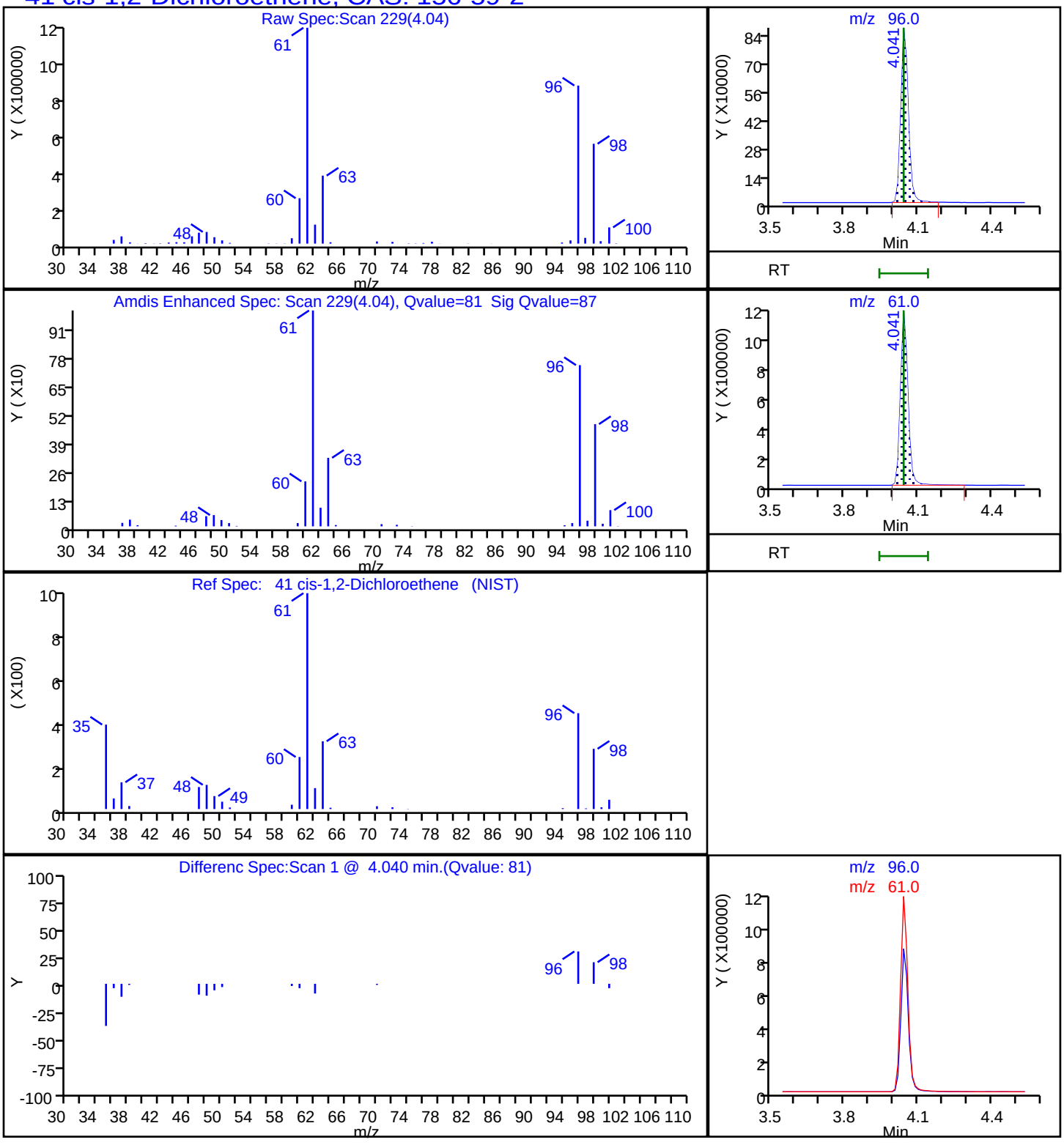
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.23	92.27
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	117.61
$ 6 Toluene-d8 (Surr)	10.0	9.37	93.66
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.42	94.18

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D

Injection Date:	12-Oct-2021 13:51:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-16	Lab Sample ID:	240-157760-16		
Client ID:	SL-4_100721				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



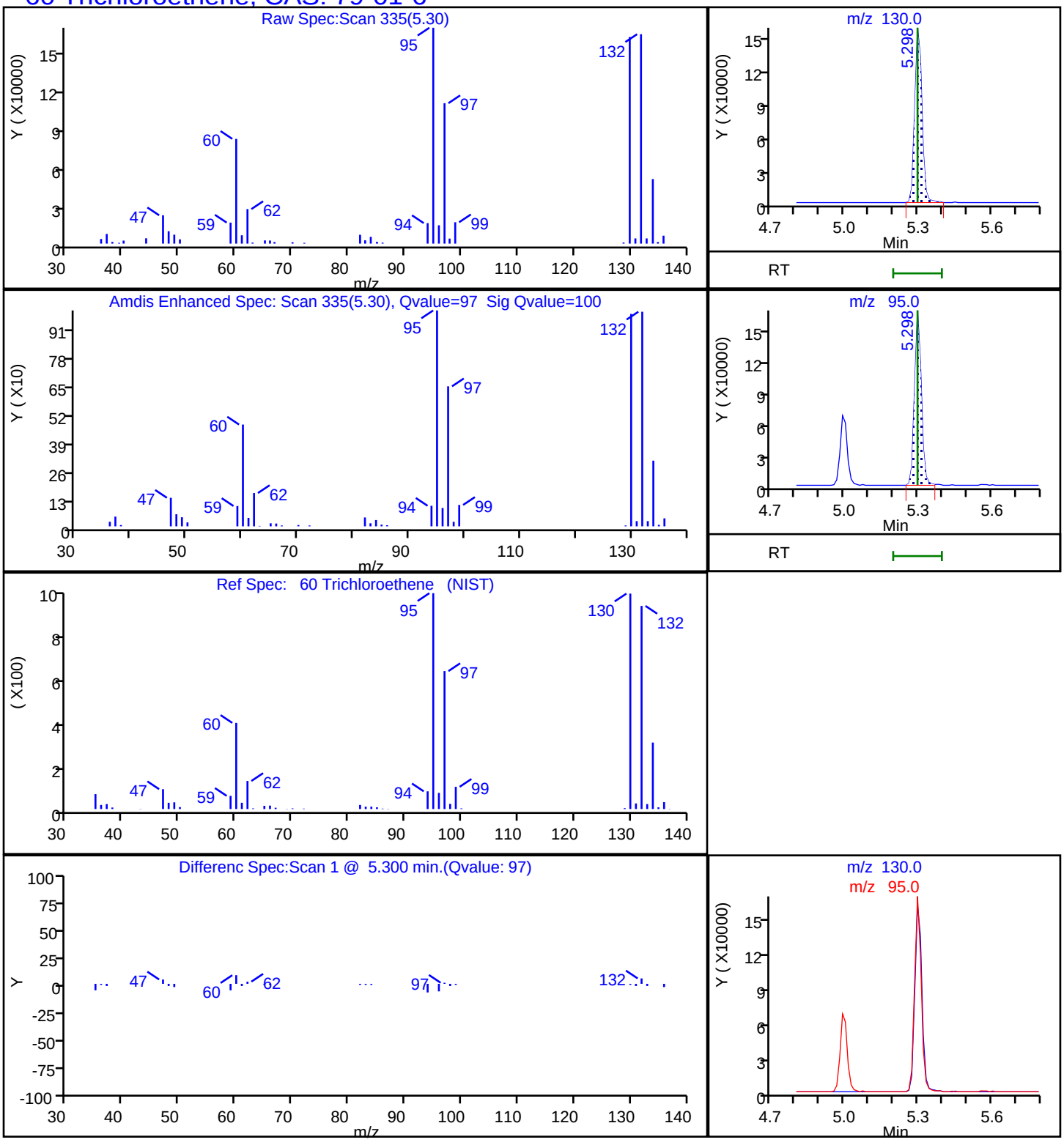
Report Date: 13-Oct-2021 08:54:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D

Injection Date:	12-Oct-2021 13:51:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-16	Lab Sample ID:	240-157760-16		
Client ID:	SL-4_100721				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6

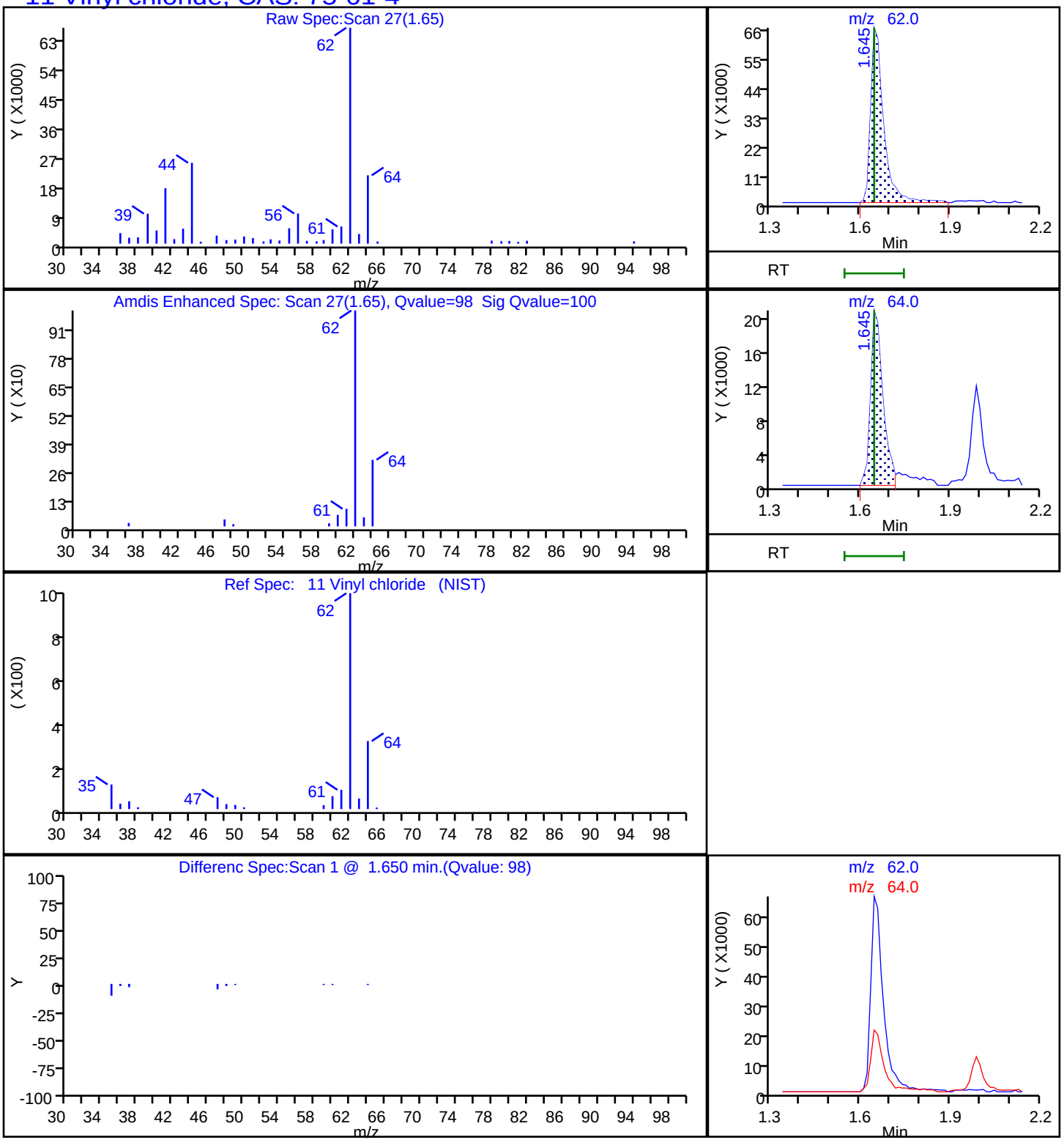


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9988.D

Injection Date:	12-Oct-2021 13:51:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-E-16	Lab Sample ID:	240-157760-16		
Client ID:	SL-4_100721				
Operator ID:	43582	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-157760-17

Matrix: Water Lab File ID: UXC0010.D

Analysis Method: 8260B Date Collected: 10/07/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 12:09

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508019 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.98
156-59-2	cis-1,2-Dichloroethene	40		2.0	0.92
127-18-4	Tetrachloroethene	2.0	U	2.0	0.88
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.0
79-01-6	Trichloroethene	7.2		2.0	0.88
75-01-4	Vinyl chloride	4.6		2.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	96		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D
Lims ID: 240-157760-F-17
Client ID: DUP-01
Sample Type: Client
Inject. Date: 13-Oct-2021 12:09:30 ALS Bottle#: 7 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0114059-046
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:32:35

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.989	4.989	0.000	99	1594907	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1159939	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	587133	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	349078	9.36	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	492994	11.7	
$	6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1361247	9.58	
$	7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	454875	9.46	
	11 Vinyl chloride	62	1.645	1.645	0.000	97	106889	2.28	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	7442	0.1616	
	41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	81	978306	20.1	
	60 Trichloroethene	130	5.297	5.298	-0.001	97	169799	3.61	
	76 Tetrachloroethene	164		6.899				ND	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

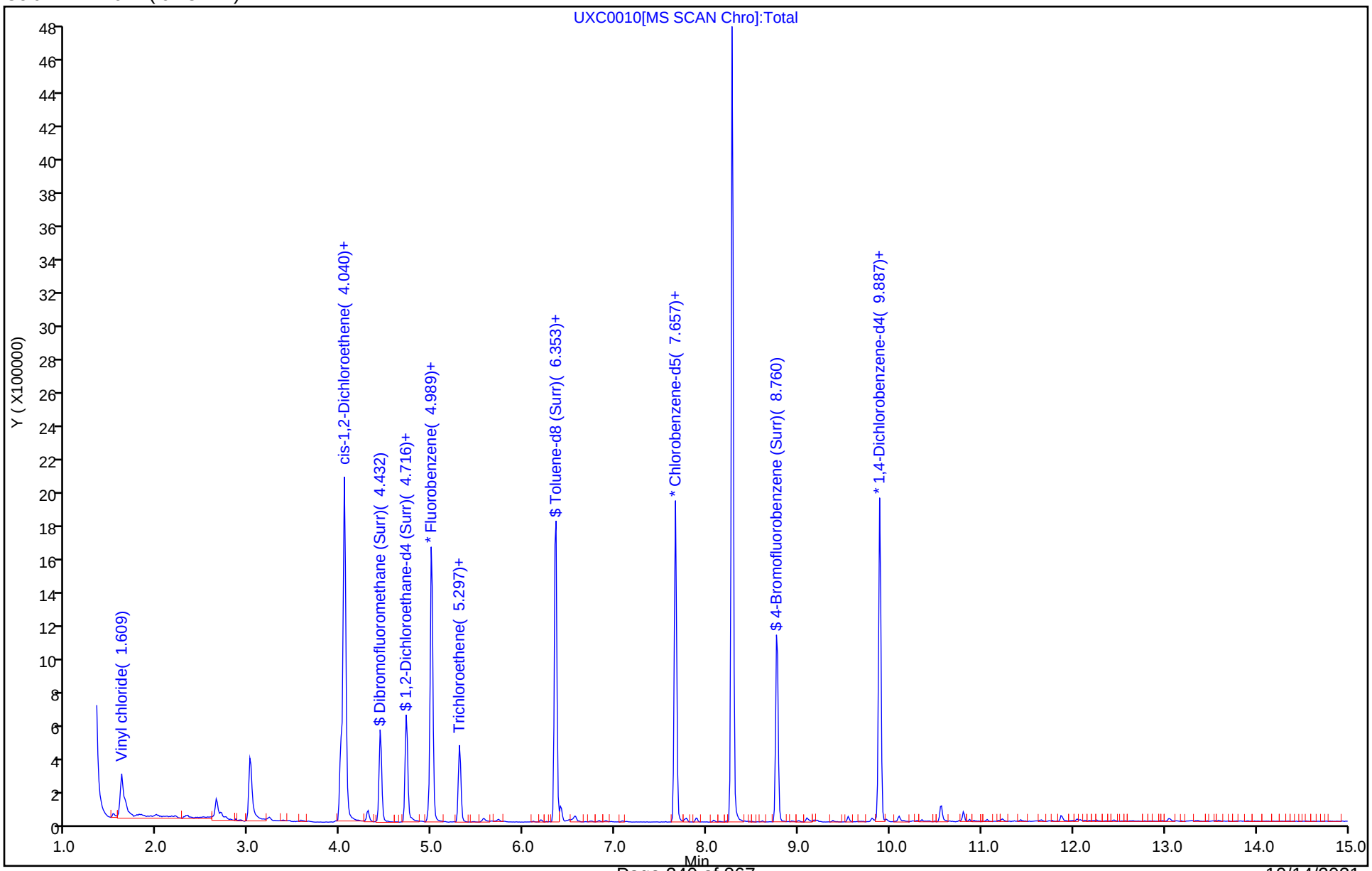
Report Date: 14-Oct-2021 05:36:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D

Injection Date:	13-Oct-2021 12:09:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157760-F-17	Lab Sample ID:	240-157760-17	Worklist Smp#:	46
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D				
Lims ID:	240-157760-F-17				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	13-Oct-2021 12:09:30	ALS Bottle#:	7	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	240-0114059-046				
Misc. Info.:	C211013A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	14-Oct-2021 05:35:55	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1605				

First Level Reviewer: evansle Date: 14-Oct-2021 05:32:35

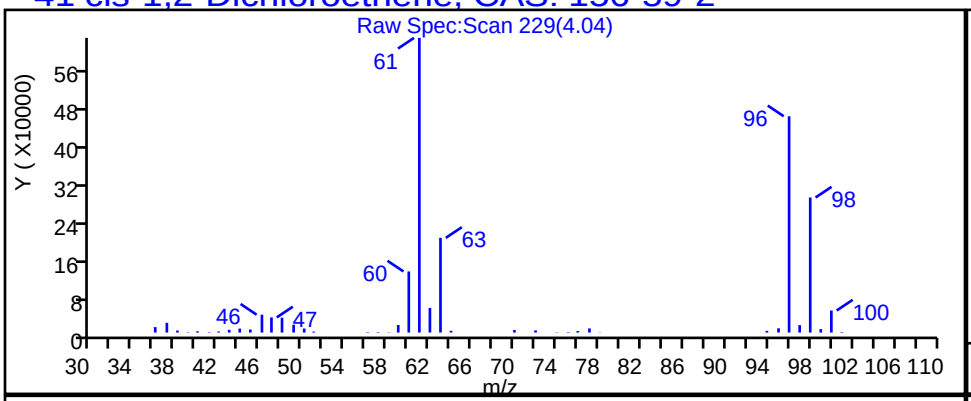
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.36	93.64
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.7	117.39
$ 6 Toluene-d8 (Surr)	10.0	9.58	95.76
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.46	94.60

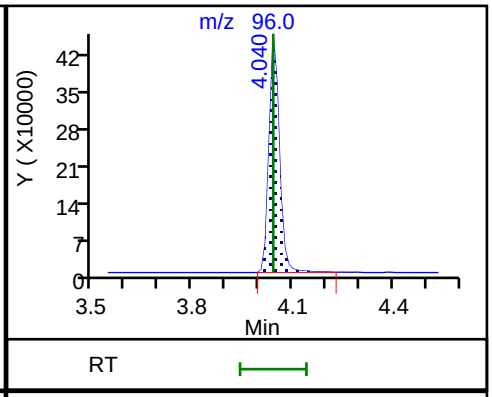
Report Date: 14-Oct-2021 05:36:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

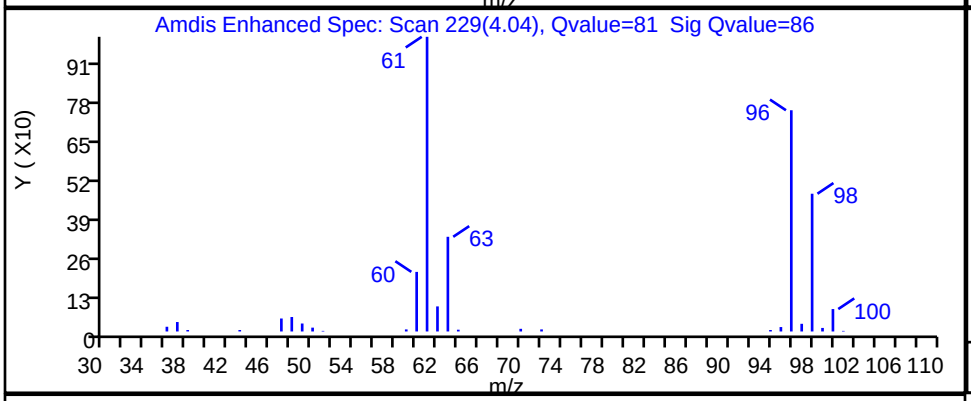
Eurofins TestAmerica, Canton

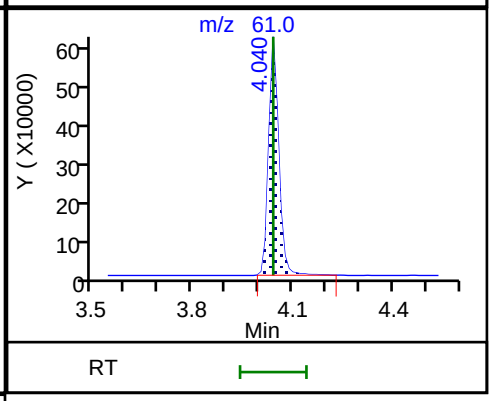
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D				
Injection Date:	13-Oct-2021 12:09:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-F-17	Lab Sample ID:	240-157760-17		
Client ID:	DUP-01				
Operator ID:	43582	ALS Bottle#:	7	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

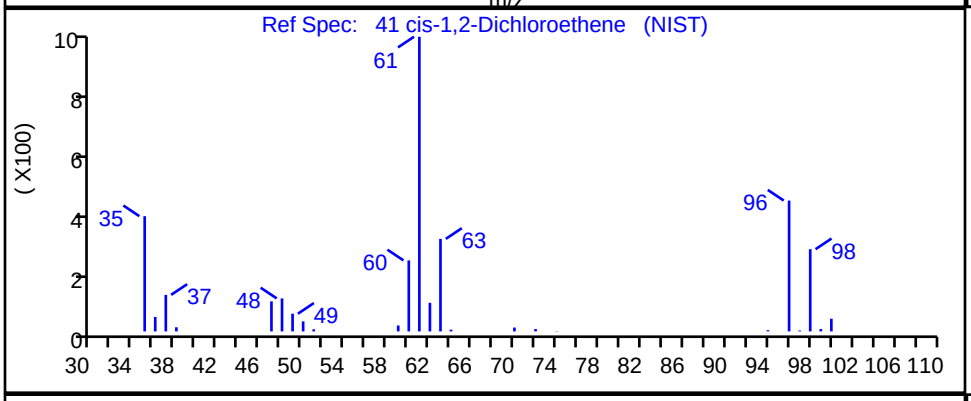
41 cis-1,2-Dichloroethene, CAS: 156-59-2

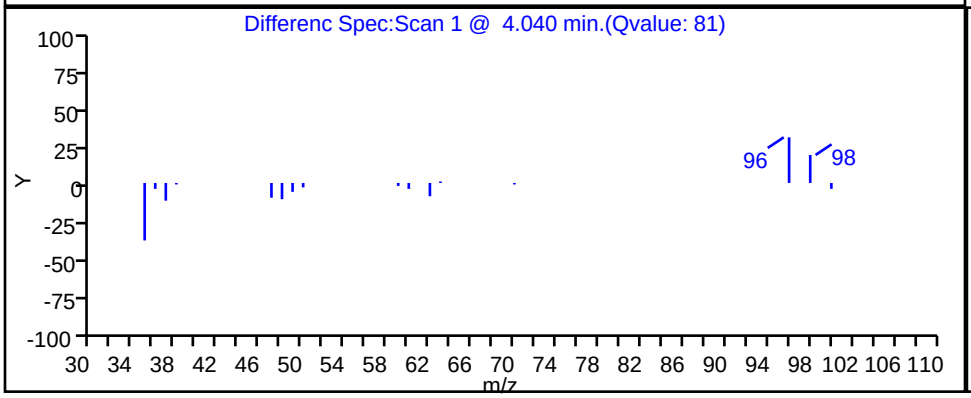


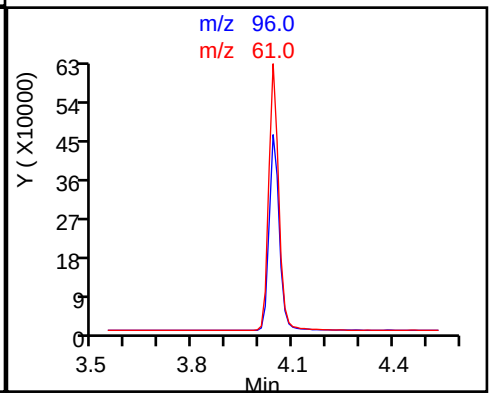










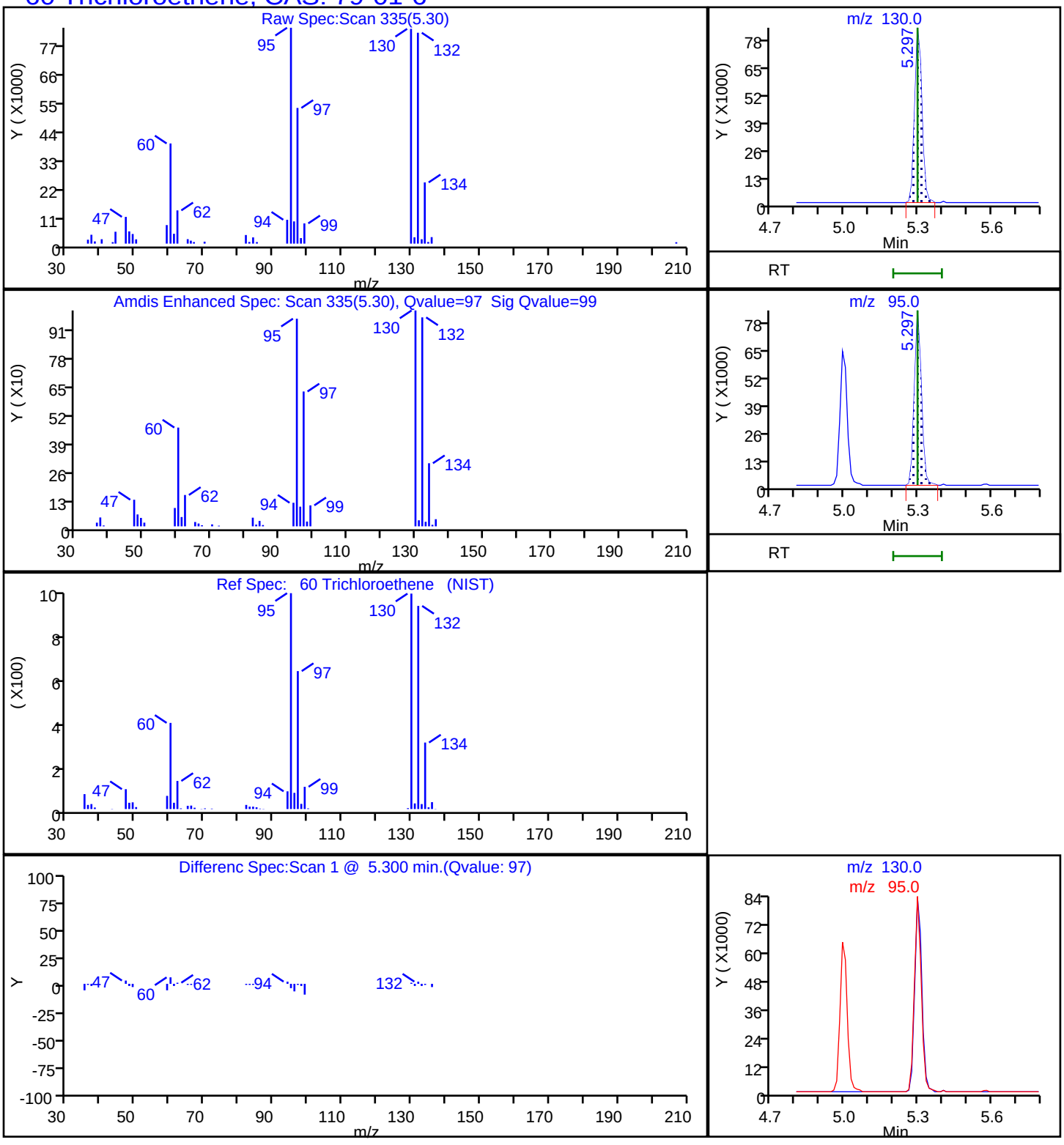


Report Date: 14-Oct-2021 05:36:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D		
Injection Date:	13-Oct-2021 12:09:30	Instrument ID:	A3UX15
Lims ID:	240-157760-F-17	Lab Sample ID:	240-157760-17
Client ID:	DUP-01		
Operator ID:	43582	ALS Bottle#:	7 Worklist Smp#: 46
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6

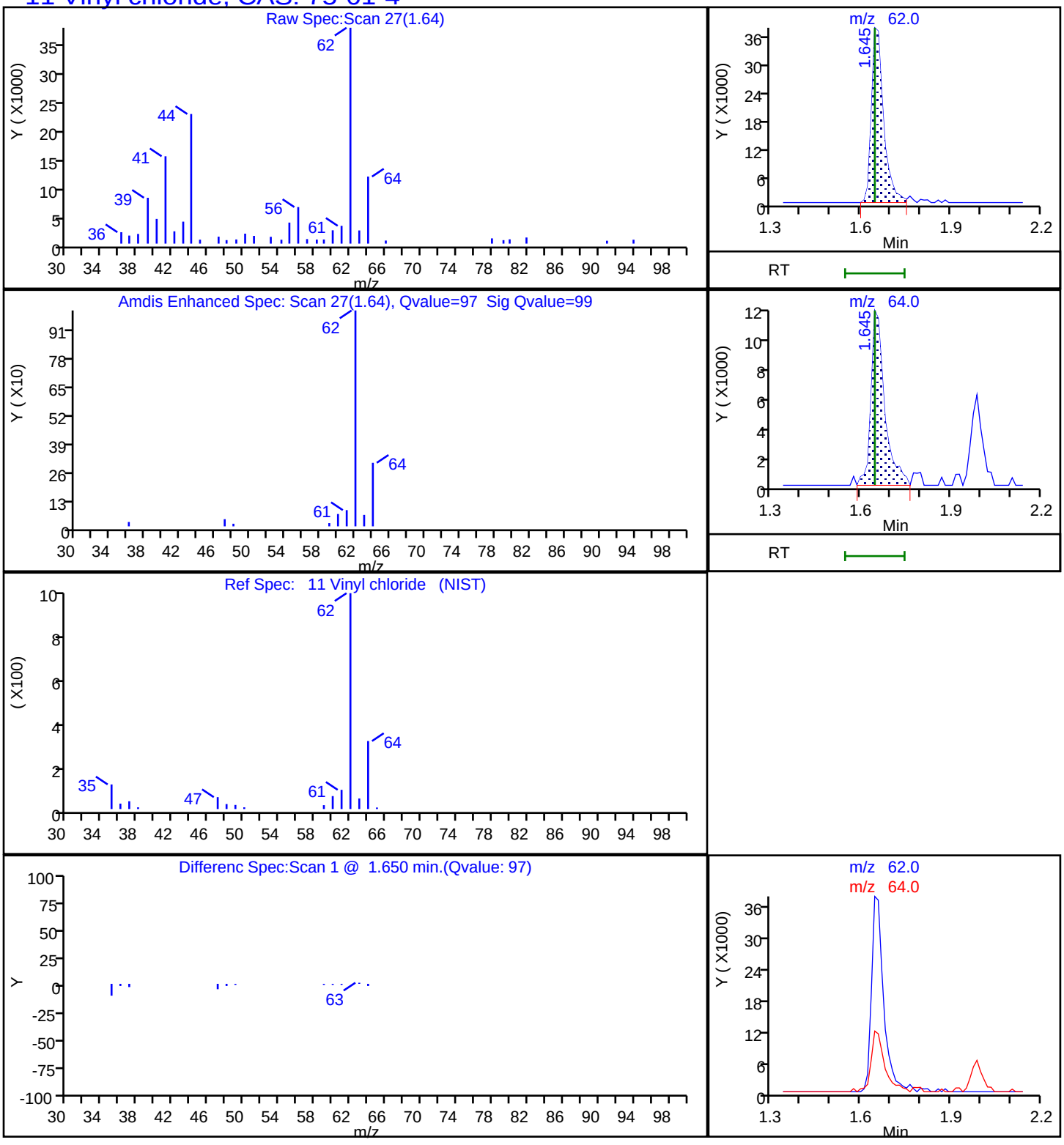


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0010.D

Injection Date:	13-Oct-2021 12:09:30	Instrument ID:	A3UX15		
Lims ID:	240-157760-F-17	Lab Sample ID:	240-157760-17		
Client ID:	DUP-01				
Operator ID:	43582	ALS Bottle#:	7	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2512 0.2574	0.2630	0.2637	0.2825	0.2704	Ave		0.2647				4.1		15.0			
Chloromethane	0.2317 0.1795	0.2122	0.2145	0.2226	0.1904	Ave		0.2085			0.1000	9.5		15.0			
Butadiene	0.2185 0.2038	0.2386	0.2203	0.2293	0.2062	Ave		0.2195				6.1		15.0			
Vinyl chloride	0.2467 0.2324	0.2605	0.2509	0.2618	0.2383	Ave		0.2484				4.7		15.0			
Bromomethane	0.1925 0.1659	0.1837	0.1816	0.1885	0.1603	Ave		0.1787				7.2		15.0			
Chloroethane	0.1597 0.1350	0.1478	0.1485	0.1577	0.1331	Ave		0.1469				7.6		15.0			
Dichlorofluoromethane	0.3895 0.3237	0.3864	0.3789	0.3749	0.3313	Ave		0.3641				7.9		15.0			
Trichlorofluoromethane	0.4432 0.4077	0.4339	0.4149	0.4339	0.4138	Ave		0.4246				3.4		15.0			
Ethyl ether	0.1802 0.1784	0.1757	0.2069	0.2000	0.1935	Ave		0.1891				6.8		15.0			
Acrolein	0.0090 0.0070	0.0065	0.0066	0.0079	0.0069	Ave		0.0073				13.3		15.0			
1,1-Dichloroethene	0.2336 0.2259	0.2440	0.2449	0.2526	0.2380	Ave		0.2398				3.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1506 0.1905	0.1733	0.1811	0.2021	0.2001	Ave		0.1830				10.5		15.0			
Acetone	0.1334 0.0538	0.1138	0.0890	0.0752	0.0676	Qua	0.1389	0.0756	-0.000293						1.0000		0.9900
Iodomethane	0.4324 0.4064	0.4152	0.4520	0.4461	0.4232	Ave		0.4292				4.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6924 0.6702	0.7119	0.7310	0.7655	0.7122	Ave		0.7139				4.6		15.0			
3-Chloro-1-propene	0.1561 0.1574	0.1548	0.1690	0.1655	0.1624	Ave		0.1609				3.5		15.0			
Methyl acetate	0.1679 0.1457	0.1567	0.1644	0.1678	0.1581	Ave		0.1601				5.3		15.0			
Methylene Chloride	0.3069 0.2303	0.2685	0.2748	0.2613	0.2461	Ave		0.2646				9.9		15.0			
2-Methyl-2-propanol	0.0280 +++++	0.0341	0.0314	0.0327	0.0353	Ave		0.0323				8.8		15.0			
Acrylonitrile	0.0798 0.0742	0.0831	0.0833	0.0871	0.0826	Ave		0.0817				5.3		15.0			
trans-1,2-Dichloroethene	0.2891 0.2568	0.2767	0.3033	0.2904	0.2755	Ave		0.2819				5.7		15.0			
Methyl tert-butyl ether	0.6799 0.6510	0.6721	0.7103	0.7601	0.6909	Ave		0.6940				5.5		15.0			
Hexane	0.0543 0.0684	0.0590	0.0652	0.0680	0.0727	Ave		0.0646				10.5		15.0			
1,1-Dichloroethane	0.3844 0.3876	0.4141	0.4287	0.4377	0.4033	Ave		0.4093			0.1000	5.3		15.0			
Vinyl acetate	0.4385 0.4256	0.4185	0.4478	0.4841	0.4337	Ave		0.4414				5.3		15.0			
cis-1,2-Dichloroethene	0.2900 0.2615	0.2972	0.3080	0.3048	0.2817	Ave		0.2905				5.9		15.0			
2,2-Dichloropropane	0.0518 0.0653	0.0625	0.0731	0.0763	0.0711	Ave		0.0667				13.3		15.0			
2-Butanone (MEK)	0.1393 0.0931	0.1231	0.1225	0.1219	0.1027	Ave		0.1171				14.1		15.0			
Chlorobromomethane	0.1525 0.1295	0.1350	0.1572	0.1521	0.1440	Ave		0.1450				7.5		15.0			
Tetrahydrofuran	0.0736 0.0606	0.0682	0.0705	0.0714	0.0681	Ave		0.0687				6.5		15.0			
Chloroform	0.4465 0.4105	0.4407	0.4643	0.4673	0.4413	Ave		0.4451				4.6		15.0			
1,1,1-Trichloroethane	0.3738 0.3739	0.3928	0.3946	0.4175	0.3891	Ave		0.3903				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.2829 0.3325	0.3036	0.3192	0.3487	0.3553	Ave		0.3237				8.5		15.0			
1,1-Dichloropropene	0.3587 0.3323	0.3324	0.3641	0.3737	0.3564	Ave		0.3529				4.8		15.0			
Carbon tetrachloride	0.3214 0.3589	0.3393	0.3614	0.3946	0.3694	Ave		0.3575				7.0		15.0			
Isobutyl alcohol	0.0099 0.0096	0.0114	0.0133	0.0134	0.0127	Ave		0.0117				14.5		15.0			
Benzene	0.9683 0.9496	1.0018	1.0313	1.0676	0.9656	Ave		0.9974				4.5		15.0			
1,2-Dichloroethane	0.3000 0.2978	0.3312	0.3504	0.3463	0.3141	Ave		0.3233				7.1		15.0			
n-Heptane	0.0548 0.0611	0.0518	0.0587	0.0619	0.0591	Ave		0.0579				6.7		15.0			
Trichloroethene	0.3207 0.2794	0.3058	0.3425	0.3230	0.3019	Ave		0.3122				6.9		15.0			
Methylcyclohexane	0.2934 0.3724	0.3406	0.3477	0.3778	0.3843	Ave		0.3527				9.6		15.0			
1,2-Dichloropropane	0.2086 0.1921	0.2113	0.2109	0.2242	0.2038	Ave		0.2085				5.0		15.0			
Dibromomethane	0.1591 0.1363	0.1529	0.1561	0.1626	0.1473	Ave		0.1524				6.2		15.0			
1,4-Dioxane	0.0013 0.0019	0.0020	0.0035	0.0028	0.0029	Qua	-0.059	0.0039	-0.000002						0.9950		0.9900
Dichlorobromomethane	0.2924 0.2991	0.2858	0.3201	0.3334	0.3098	Ave		0.3068				5.8		15.0			
2-Chloroethyl vinyl ether	0.1392 0.1369	0.1536	0.1490	0.1654	0.1471	Ave		0.1485				7.0		15.0			
cis-1,3-Dichloropropene	0.3738 0.3581	0.3911	0.3814	0.4002	0.3727	Ave		0.3795				3.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1882 0.1904	0.2096	0.2155	0.2367	0.2094	Ave		0.2083				8.5		15.0			
Toluene	1.4677 1.4494	1.5201	1.5904	1.6184	1.4660	Ave		1.5187				4.7		15.0			
trans-1,3-Dichloropropene	0.4450 0.4729	0.5063	0.5231	0.5197	0.4896	Ave		0.4928				6.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.3251 0.4008	0.3575	0.4000	0.4303	0.4003	Ave		0.3857				9.8		15.0			
1,1,2-Trichloroethane	0.3028 0.2755	0.3046	0.3175	0.3238	0.2829	Ave		0.3012				6.3		15.0			
Tetrachloroethene	0.2944 0.3080	0.3235	0.3381	0.3495	0.3263	Ave		0.3233				6.2		15.0			
1,3-Dichloropropane	0.4802 0.4715	0.5170	0.5076	0.5517	0.4816	Ave		0.5016				6.0		15.0			
2-Hexanone	0.1928 0.2053	0.2082	0.2249	0.2372	0.2119	Ave		0.2134				7.3		15.0			
Chlorodibromomethane	0.2982 0.3414	0.3172	0.3352	0.3636	0.3415	Ave		0.3328				6.8		15.0			
Ethylene Dibromide	0.2992 0.2916	0.3275	0.3323	0.3492	0.2991	Ave		0.3165				7.3		15.0			
Chlorobenzene	0.9880 0.9276	0.9924	1.0409	1.0528	0.9535	Ave		0.9925			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3242 0.3202	0.3214	0.3392	0.3619	0.3294	Ave		0.3327				4.8		15.0			
Ethylbenzene	0.4780 0.5015	0.4859	0.5645	0.5795	0.5108	Ave		0.5200				8.1		15.0			
m-Xylene & p-Xylene	0.5934 0.6058	0.6376	0.6599	0.7052	0.6238	Ave		0.6376				6.4		15.0			
o-Xylene	0.5418 0.5612	0.5672	0.6215	0.6473	0.5828	Ave		0.5870				6.8		15.0			
Styrene	0.7650 0.8563	0.8225	0.8867	0.9293	0.8569	Ave		0.8528				6.6		15.0			
Bromoform	0.1263 0.2304	0.1685	0.2041	0.2270	0.2197	Lin1	-0.113	0.2313			0.1000				0.9990		0.9900
Isopropylbenzene	1.3133 1.4763	1.4762	1.5653	1.6732	1.4949	Ave		1.4999				7.9		15.0			
1,1,2,2-Tetrachloroethane	0.7171 0.7403	0.8072	0.7913	0.8434	0.7594	Ave		0.7764			0.3000	6.0		15.0			
Bromobenzene	0.8434 0.8086	0.8334	0.9146	0.9233	0.8387	Ave		0.8603				5.5		15.0			
1,2,3-Trichloropropane	0.3066 0.2601	0.3326	0.3009	0.3070	0.2793	Ave		0.2977				8.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2076 0.2248	0.1858	0.2339	0.2457	0.2294	Ave		0.2212				9.6		15.0			
N-Propylbenzene	0.8638 0.8936	0.8431	0.9611	1.0166	0.9160	Ave		0.9157				7.0		15.0			
2-Chlorotoluene	0.7410 0.7316	0.8054	0.8053	0.8365	0.7828	Ave		0.7837				5.2		15.0			
1,3,5-Trimethylbenzene	2.4462 2.4744	2.4266	2.5432	2.7773	2.5754	Ave		2.5405				5.1		15.0			
4-Chlorotoluene	0.8371 0.7380	0.8148	0.8637	0.8880	0.7897	Ave		0.8219				6.5		15.0			
tert-Butylbenzene	2.0236 2.1921	2.2177	2.4001	2.4622	2.2933	Ave		2.2648				6.9		15.0			
1,2,4-Trimethylbenzene	2.1832 2.4320	2.5314	2.5993	2.7780	2.5535	Ave		2.5129				7.9		15.0			
sec-Butylbenzene	2.5086 2.8887	2.8631	3.0145	3.1672	2.9984	Ave		2.9068				7.7		15.0			
1,3-Dichlorobenzene	1.5610 1.3797	1.6364	1.5925	1.6498	1.4798	Ave		1.5499				6.7		15.0			
4-Isopropyltoluene	2.1963 2.4943	2.4866	2.6436	2.7958	2.6531	Ave		2.5449				8.1		15.0			
1,4-Dichlorobenzene	1.6289 1.3914	1.5764	1.6560	1.6398	1.5282	Ave		1.5701				6.3		15.0			
1,2-Dichlorobenzene	1.4384 1.3188	1.5613	1.5695	1.5527	1.4318	Ave		1.4787				6.8		15.0			
n-Butylbenzene	1.7865 1.9154	1.9463	2.0665	2.1692	2.0573	Ave		1.9902				6.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1737 0.1787	0.2006	0.2037	0.2124	0.1986	Ave		0.1946				7.8		15.0			
1,2,4-Trichlorobenzene	0.9133 0.7565	0.9440	0.9400	0.9193	0.8866	Ave		0.8933				7.8		15.0			
Hexachlorobutadiene	0.3023 0.2329	0.3330	0.3390	0.3313	0.3087	Ave		0.3079				12.8		15.0			
Naphthalene	2.4801 2.3872	2.7045	2.8675	2.8661	2.8541	Ave		2.6932				7.9		15.0			
1,2,3-Trichlorobenzene	0.8703 0.7083	0.9406	0.8821	0.8807	0.8644	Ave		0.8577				9.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2759 0.2358	0.2627	0.2481	0.2597	0.2464	Ave		0.2548				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3230 0.2533	0.3151	0.2913	0.2904	0.2610	Ave		0.2890				9.7		15.0			
Toluene-d8 (Surr)	1.5591 1.2990	1.4814	1.4033	1.4755	1.3169	Ave		1.4225				7.1		15.0			
4-Bromofluorobenzene (Surr)	0.6103 0.4291	0.5208	0.4838	0.5054	0.4410	Ave		0.4984				13.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	15545 721258	31418	80613	164460	338735	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	14340 502904	25355	65579	129598	238538	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	13521 571062	28511	67351	133533	258402	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15264 651219	31125	76699	152409	298544	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	11910 464869	21942	55501	109770	200899	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	9885 378138	17658	45377	91798	166717	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	24102 907097	46164	115827	218267	415026	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	27428 1142489	51835	126814	252670	518477	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	11151 499751	20989	63254	116451	242452	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	2788 97712	3869	10031	22968	43331	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	14457 633100	29147	74855	147052	298144	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9322 533768	20704	55364	117673	250667	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	16505 301658	27191	54384	87518	169338	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	26756 1138640	49606	138148	259758	530219	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	42851 1877998	85053	223442	445715	892313	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	9657 441008	18496	51666	96370	203463	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	20775 816332	37455	100508	195357	396110	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	18990 645225	32083	83987	152159	308369	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	17313 +++++	40795	95943	190467	441997	10.0 +++++	20.0	50.0	100	200
Acrylonitrile	FB	Ave	49387 2079971	99328	254760	507306	1034581	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	17888 719544	33055	92696	169059	345215	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	42075 1824022	80293	217115	442599	865638	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	3359 191762	7051	19919	39610	91031	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	23786 1086189	49476	131033	254843	505328	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	27137 1192582	49994	136870	281858	543430	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	17946 732765	35504	94152	177452	352905	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	3204 183063	7464	22350	44411	89071	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	17238 521553	29417	74913	141932	257396	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	9438 362817	16126	48037	88584	180439	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	9114 339871	16287	43094	83099	170596	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	27629 1150137	52653	141913	272070	552954	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	23130 1047553	46927	120621	243120	487548	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	17507 931808	36267	97556	203020	445198	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	22199 931119	39708	111305	217609	446475	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	19888 1005638	40537	110470	229782	462865	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	11230 469468	24642	71782	140015	282518	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	59923 2660921	119695	315227	621645	1209746	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	18563 834572	39572	107089	201630	393564	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	3391 171246	6187	17935	36044	74044	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	19843 782934	36541	104678	188089	378293	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	18159 1043552	40688	106284	219959	481488	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	12909 538152	25247	64453	130547	255306	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	9846 381807	18262	47703	94687	184521	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	1561 107884	4800	21628	32269	72492	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	18093 838078	34149	97830	194130	388202	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	17224 767090	36692	91082	192632	368563	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	23129 1003327	46722	116575	233030	467002	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23297 1067188	50083	131752	275675	524791	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene	CBNZ d5	Ave	66435 2839911	131172	342544	674102	1305035	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20141 926501	43688	112670	216478	435826	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	14716 785342	30851	86162	179245	356343	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	13706 539869	26286	68391	134855	251827	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	13324 603539	27919	72821	145597	290477	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	21737 923814	44615	109339	229816	428737	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	17457 804351	35938	96869	197584	377295	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	13496 668910	27373	72196	151446	303982	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	13541 571287	28263	71577	145448	266234	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	44721 1817385	85638	224201	438529	848785	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	14675 627467	27733	73060	150727	293218	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	21634 982501	41926	121583	241366	454730	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
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RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	26859 1186930	55016	142126	293732	555344	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	24523 1099593	48945	133865	269611	518830	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	34628 1677750	70977	190984	387081	762818	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Lin1	5716 451459	14539	43950	94573	195621	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	59446 2892536	127385	337134	696938	1330791	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	15088 674085	32478	80391	168581	314210	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	17745 736292	33533	92916	184549	347047	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	6451 236888	13381	30569	61360	115557	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4369 204685	7477	23761	49109	94933	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	18175 813669	33926	97641	203203	379016	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	15591 666172	32406	81808	167202	323910	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	51470 2253201	97641	258368	555148	1065649	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	17614 672031	32785	87751	177509	326743	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	42578 1996174	89236	243838	492162	948917	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	45937 2214589	101857	264071	555283	1056574	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	52784 2630484	115205	306253	633082	1240690	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	32844 1256378	65846	161785	329769	612308	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	46211 2271314	100055	268571	558841	1097800	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	34274 1266972	63431	168239	327781	632325	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	30265 1200899	62822	159450	310374	592436	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	37590 1744132	78313	209941	433586	851264	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3654 162763	8071	20694	42452	82195	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	19216 688885	37983	95499	183760	366855	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	6361 212109	13398	34437	66215	127737	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
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SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	52184 2173823	108820	291314	572904	1180957	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	18312 645009	37847	89613	176040	357662	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	17076 660842	31381	75844	151229	308654	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19989 709889	37647	89035	169071	327027	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	70570 2545197	127833	302251	614578	1172369	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	27622 840665	44939	104195	210523	392550	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jan-2021 11:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-002
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:24 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 11:30:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1401011	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	82	979659	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	455301	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	660842	40.0	37.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	97	709889	40.0	35.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	2545197	40.0	36.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	99	840665	40.0	34.4	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	721258	40.0	38.9	
12 Chloromethane	50	1.293	1.293	0.000	99	502904	40.0	34.4	
13 Butadiene	54	1.352	1.352	0.000	96	571062	40.0	37.1	
14 Vinyl chloride	62	1.376	1.376	0.000	98	651219	40.0	37.4	
15 Bromomethane	94	1.589	1.589	0.000	91	464869	40.0	37.1	
16 Chloroethane	64	1.648	1.648	0.000	99	378138	40.0	36.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	907097	40.0	35.6	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	1142489	40.0	38.4	
19 Ethyl ether	59	2.062	2.062	0.000	86	499751	40.0	37.7	
20 Acrolein	56	2.157	2.157	0.001	99	97712	200.0	190.9	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	633100	40.0	37.7	
23 112TCTFE	151	2.275	2.275	0.000	91	533768	40.0	41.6	
24 Acetone	43	2.299	2.298	0.001	100	301658	80.0	80.0	
25 Iodomethane	142	2.358	2.358	0.000	98	1138640	40.0	37.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	1877998	40.0	37.6	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	441008	40.0	39.1	
29 Methyl acetate	43	2.571	2.571	0.000	96	816332	80.0	72.8	
30 Methylene Chloride	84	2.642	2.642	0.000	84	645225	40.0	34.8	
31 2-Methyl-2-propanol	59	2.772	2.784	-0.012	100	569636	400.0	251.8	
32 Acrylonitrile	53	2.843	2.855	-0.012	99	2079971	400.0	363.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	95	719544	40.0	36.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	1824022	40.0	37.5	
35 Hexane	86	3.115	3.115	0.000	89	191762	40.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.222	3.221	0.001	96	1086189	40.0	37.9	
37 Vinyl acetate	43	3.281	3.281	0.000	97	1192582	40.0	38.6	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	732765	40.0	36.0	
42 2,2-Dichloropropane	97	3.707	3.718	-0.011	64	183063	40.0	39.2	
43 2-Butanone (MEK)	43	3.730	3.742	-0.012	97	521553	80.0	63.6	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	362817	40.0	35.7	
49 Tetrahydrofuran	42	3.967	3.967	0.000	83	339871	80.0	70.6	
48 Chloroform	83	3.979	3.979	0.000	92	1150137	40.0	36.9	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	1047553	40.0	38.3	
51 Cyclohexane	56	4.180	4.180	0.000	83	931808	40.0	41.1	
53 1,1-Dichloropropene	75	4.263	4.275	-0.012	95	931119	40.0	37.7	
52 Carbon tetrachloride	117	4.275	4.275	0.000	96	1005638	40.0	40.2	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	469468	1000.0	816.8	
55 Benzene	78	4.440	4.440	0.000	94	2660921	40.0	38.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	834572	40.0	36.9	
58 n-Heptane	100	4.677	4.689	-0.012	83	171246	40.0	42.2	
60 Trichloroethene	130	4.985	4.985	0.000	95	782934	40.0	35.8	
62 Methylcyclohexane	83	5.150	5.150	0.000	88	1043552	40.0	42.2	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	538152	40.0	36.9	
64 Dibromomethane	93	5.269	5.269	0.000	94	381807	40.0	35.8	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	107884	800.0	771.7	
67 Dichlorobromomethane	83	5.399	5.411	-0.012	99	838078	40.0	39.0	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	767090	80.0	73.7	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	1003327	40.0	37.7	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	95	1067188	80.0	73.1	
72 Toluene	91	6.097	6.097	0.000	98	2839911	40.0	38.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	926501	40.0	38.4	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	785342	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	89	539869	40.0	36.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	603539	40.0	38.1	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	923814	40.0	37.6	
78 2-Hexanone	43	6.689	6.689	0.001	93	804351	80.0	77.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	668910	40.0	41.0	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	571287	40.0	36.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	1817385	40.0	37.4	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	627467	40.0	38.5	
86 Ethylbenzene	106	7.458	7.469	-0.011	98	982501	40.0	38.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	1186930	40.0	38.0	
89 o-Xylene	106	7.943	7.943	0.000	96	1099593	40.0	38.2	
88 Styrene	104	7.955	7.955	0.000	93	1677750	40.0	40.2	
90 Bromoform	173	8.120	8.120	0.000	97	451459	40.0	40.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	2892536	40.0	39.4	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	80	674085	40.0	38.1	
95 Bromobenzene	156	8.570	8.570	0.000	89	736292	40.0	37.6	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	82	236888	40.0	34.9	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	94	204685	40.0	40.6	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	813669	40.0	39.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	666172	40.0	37.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	2253201	40.0	39.0	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	672031	40.0	35.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	1996174	40.0	38.7	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	2214589	40.0	38.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	2630484	40.0	39.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	1256378	40.0	35.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	2271314	40.0	39.2	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	1266972	40.0	35.4	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	1200899	40.0	35.7	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	1744132	40.0	38.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	162763	40.0	36.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	688885	40.0	33.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	212109	40.0	30.3	
118 Naphthalene	128	11.753	11.753	0.000	96	2173823	40.0	35.5	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	645009	40.0	33.0	
S 129 Total BTEX	1				0		200.0	191.1	
S 128 Trihalomethanes, Total	1				0		160.0	157.2	
S 130 1,2-Dichloroethene, Total	96				0			72.4	
S 131 1,3-Dichloropropene, Total	75				0			76.1	
S 132 Xylenes, Total	106				0		80.0	76.2	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	32.00	Units: uL
VM50SS_STK_00086	Amount Added:	32.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	32.00	Units: uL
VMAROLISTDW_00376	Amount Added:	32.00	Units: uL

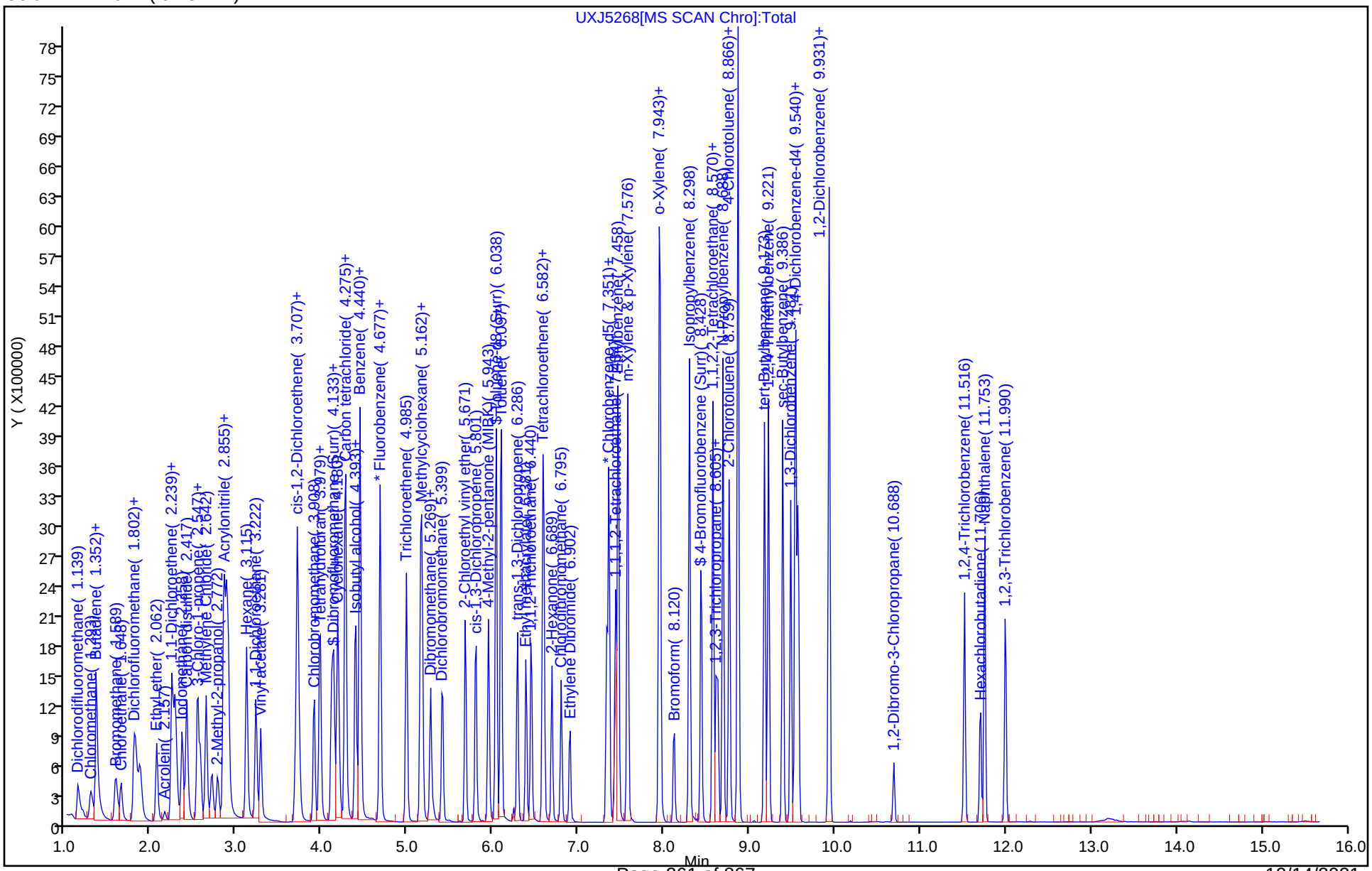
Report Date: 18-Jan-2021 09:24:25 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D

Injection Date:	15-Jan-2021 11:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jan-2021 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-003
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 12:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1252890	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	890220	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	96	413781	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	308654	20.0	19.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	327027	20.0	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1172369	20.0	18.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	392550	20.0	17.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	338735	20.0	20.4	
12 Chloromethane	50	1.305	1.293	0.012	99	238538	20.0	18.3	
13 Butadiene	54	1.364	1.352	0.012	97	258402	20.0	18.8	
14 Vinyl chloride	62	1.376	1.376	0.000	98	298544	20.0	19.2	
15 Bromomethane	94	1.589	1.589	0.000	92	200899	20.0	17.9	
16 Chloroethane	64	1.660	1.648	0.012	100	166717	20.0	18.1	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	415026	20.0	18.2	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	518477	20.0	19.5	
19 Ethyl ether	59	2.074	2.062	0.012	87	242452	20.0	20.5	
20 Acrolein	56	2.168	2.157	0.012	98	43331	100.0	94.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	298144	20.0	19.8	
23 112TCTFE	151	2.287	2.275	0.012	90	250667	20.0	21.9	
24 Acetone	43	2.310	2.298	0.012	100	169338	40.0	40.2	
25 Iodomethane	142	2.370	2.358	0.012	98	530219	20.0	19.7	
26 Carbon disulfide	76	2.429	2.417	0.012	99	892313	20.0	20.0	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	203463	20.0	20.2	
29 Methyl acetate	43	2.583	2.571	0.012	96	396110	40.0	39.5	
30 Methylene Chloride	84	2.654	2.642	0.012	84	308369	20.0	18.6	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	100	441997	200.0	218.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	1034581	200.0	202.1	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	95	345215	20.0	19.5	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	92	865638	20.0	19.9	
35 Hexane	86	3.127	3.115	0.012	89	91031	20.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	505328	20.0	19.7	
37 Vinyl acetate	43	3.293	3.281	0.012	97	543430	20.0	19.7	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	81	352905	20.0	19.4	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	69	89071	20.0	21.3	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	97	257396	40.0	35.1	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	180439	20.0	19.9	
49 Tetrahydrofuran	42	3.979	3.967	0.012	80	170596	40.0	39.6	
48 Chloroform	83	3.979	3.979	0.000	94	552954	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	487548	20.0	19.9	
51 Cyclohexane	56	4.192	4.180	0.012	84	445198	20.0	22.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	446475	20.0	20.2	
52 Carbon tetrachloride	117	4.275	4.275	0.000	89	462865	20.0	20.7	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	282518	500.0	540.9	
55 Benzene	78	4.440	4.440	0.000	94	1209746	20.0	19.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	393564	20.0	19.4	
58 n-Heptane	100	4.689	4.689	0.000	84	74044	20.0	20.4	
60 Trichloroethene	130	4.997	4.985	0.012	96	378293	20.0	19.3	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	481488	20.0	21.8	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	255306	20.0	19.5	
64 Dibromomethane	93	5.269	5.269	0.000	95	184521	20.0	19.3	
66 1,4-Dioxane	88	5.316	5.304	0.012	87	72492	400.0	417.9	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	388202	20.0	20.2	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	368563	40.0	39.6	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	467002	20.0	19.6	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	524791	40.0	40.2	
72 Toluene	91	6.097	6.097	0.000	98	1305035	20.0	19.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	435826	20.0	19.9	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	356343	20.0	20.8	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	251827	20.0	18.8	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	290477	20.0	20.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	428737	20.0	19.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	377295	40.0	39.7	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	303982	20.0	20.5	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	266234	20.0	18.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	848785	20.0	19.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	293218	20.0	19.8	
86 Ethylbenzene	106	7.470	7.469	0.001	97	454730	20.0	19.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	555344	20.0	19.6	
89 o-Xylene	106	7.943	7.943	0.000	96	518830	20.0	19.9	
88 Styrene	104	7.955	7.955	0.000	93	762818	20.0	20.1	
90 Bromoform	173	8.120	8.120	0.000	97	195621	20.0	19.5	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	1330791	20.0	19.9	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	79	314210	20.0	19.6	
95 Bromobenzene	156	8.570	8.570	0.000	88	347047	20.0	19.5	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	115557	20.0	18.8	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	94933	20.0	20.7	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	379016	20.0	20.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	323910	20.0	20.0	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	1065649	20.0	20.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	326743	20.0	19.2	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	948917	20.0	20.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	1056574	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.387	9.386	0.001	93	1240690	20.0	20.6	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	612308	20.0	19.1	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	1097800	20.0	20.8	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	632325	20.0	19.5	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	592436	20.0	19.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	851264	20.0	20.7	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	82195	20.0	20.4	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	366855	20.0	19.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	127737	20.0	20.1	
118 Naphthalene	128	11.753	11.753	0.000	96	1180957	20.0	21.2	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	357662	20.0	20.2	
S 129 Total BTEX	1				0		100.0	97.7	
S 128 Trihalomethanes, Total	1				0		80.0	80.0	
S 130 1,2-Dichloroethene, Total	96				0			38.9	
S 131 1,3-Dichloropropene, Total	75				0			39.5	
S 132 Xylenes, Total	106				0		40.0	39.4	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	16.00	Units: uL
VM50SS_STK_00086	Amount Added:	16.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	16.00	Units: uL
VMAROLISTDW_00376	Amount Added:	16.00	Units: uL

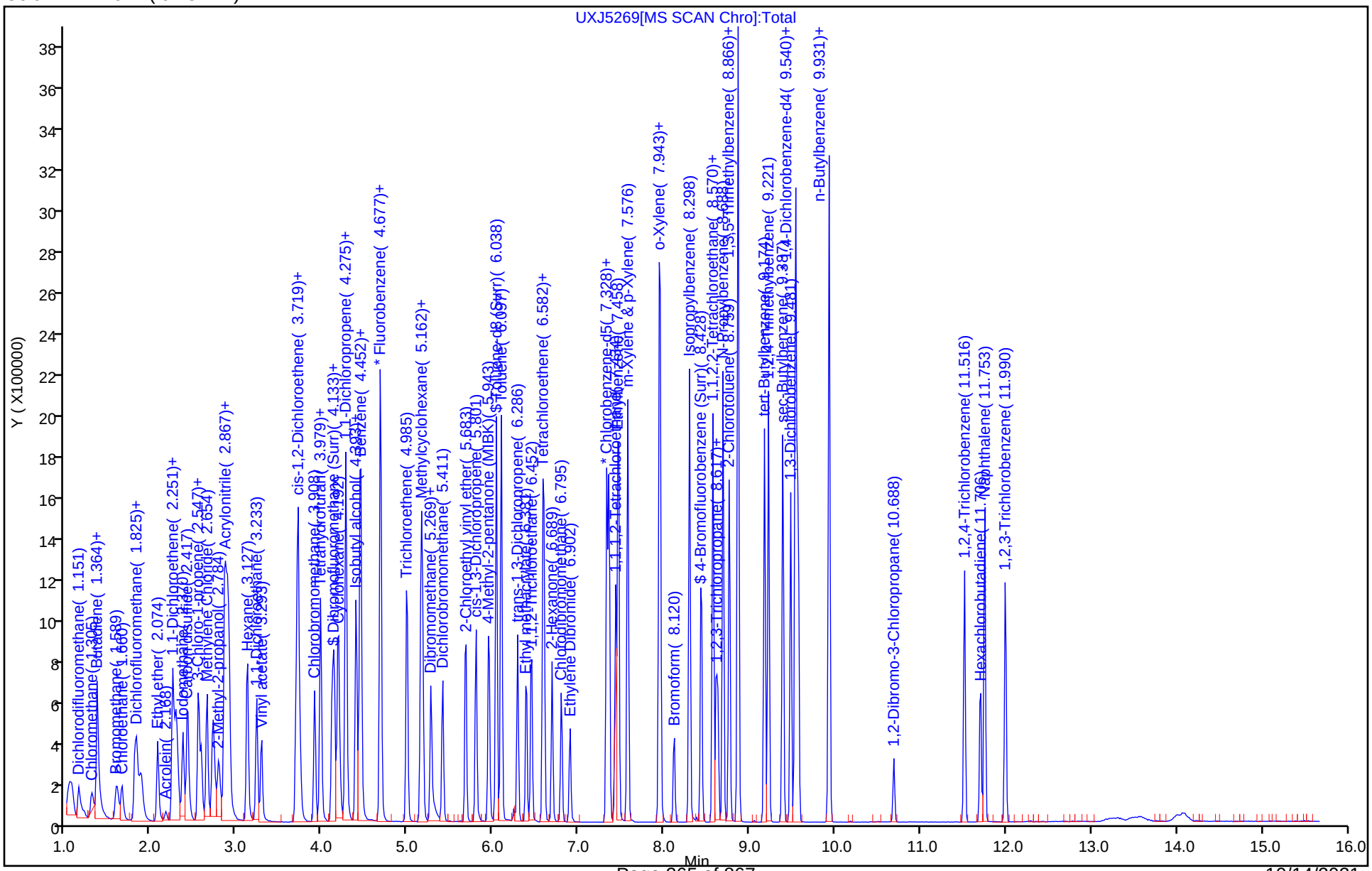
Report Date: 18-Jan-2021 09:24:33 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D

Injection Date:	15-Jan-2021 11:29:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 15-Jan-2021 11:51:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-004
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:18 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 09:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1164516	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	833065	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	399775	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	151229	10.0	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	169071	10.0	10.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	614578	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	210523	10.0	10.1	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	100	164460	10.0	10.7	
12 Chloromethane	50	1.293	1.293	0.000	100	129598	10.0	10.7	
13 Butadiene	54	1.352	1.352	0.000	97	133533	10.0	10.4	
14 Vinyl chloride	62	1.376	1.376	0.000	98	152409	10.0	10.5	
15 Bromomethane	94	1.589	1.589	0.000	91	109770	10.0	10.5	
16 Chloroethane	64	1.648	1.648	0.000	99	91798	10.0	10.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	218267	10.0	10.3	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	252670	10.0	10.2	
19 Ethyl ether	59	2.062	2.062	0.000	87	116451	10.0	10.6	
20 Acrolein	56	2.157	2.157	0.000	98	22968	50.0	54.0	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	147052	10.0	10.5	
23 112TCTFE	151	2.275	2.275	0.000	91	117673	10.0	11.0	
24 Acetone	43	2.298	2.298	0.000	100	87518	20.0	19.5	
25 Iodomethane	142	2.358	2.358	0.000	98	259758	10.0	10.4	
26 Carbon disulfide	76	2.417	2.417	0.000	99	445715	10.0	10.7	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	96370	10.0	10.3	
29 Methyl acetate	43	2.571	2.571	0.000	96	195357	20.0	21.0	
30 Methylene Chloride	84	2.642	2.642	0.000	84	152159	10.0	9.87	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	190467	100.0	101.3	
32 Acrylonitrile	53	2.855	2.855	0.000	98	507306	100.0	106.6	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	96	169059	10.0	10.3	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	442599	10.0	11.0	
35 Hexane	86	3.115	3.115	0.000	90	39610	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	97	254843	10.0	10.7	
37 Vinyl acetate	43	3.281	3.281	0.000	97	281858	10.0	11.0	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	177452	10.0	10.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	74	44411	10.0	11.4	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	141932	20.0	20.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	88584	10.0	10.5	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	83099	20.0	20.8	
48 Chloroform	83	3.979	3.979	0.000	94	272070	10.0	10.5	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	243120	10.0	10.7	
51 Cyclohexane	56	4.180	4.180	0.000	85	203020	10.0	10.8	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	229782	10.0	11.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	217609	10.0	10.6	
54 Isobutyl alcohol	41	4.393	4.393	0.000	91	140015	250.0	286.5	
55 Benzene	78	4.440	4.440	0.000	94	621645	10.0	10.7	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	201630	10.0	10.7	
58 n-Heptane	100	4.689	4.689	0.000	83	36044	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	188089	10.0	10.3	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	219959	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	130547	10.0	10.8	
64 Dibromomethane	93	5.269	5.269	0.000	92	94687	10.0	10.7	
66 1,4-Dioxane	88	5.304	5.304	0.000	85	32269	200.0	176.1	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	194130	10.0	10.9	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	192632	20.0	22.3	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	233030	10.0	10.5	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	275675	20.0	22.7	
72 Toluene	91	6.097	6.097	0.000	98	674102	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	216478	10.0	10.5	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	179245	10.0	11.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	134855	10.0	10.7	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	145597	10.0	10.8	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	229816	10.0	11.0	
78 2-Hexanone	43	6.689	6.689	0.000	92	197584	20.0	22.2	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	151446	10.0	10.9	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	145448	10.0	11.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	438529	10.0	10.6	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	150727	10.0	10.9	
86 Ethylbenzene	106	7.469	7.469	0.000	97	241366	10.0	11.1	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	293732	10.0	11.1	
89 o-Xylene	106	7.943	7.943	0.000	96	269611	10.0	11.0	
88 Styrene	104	7.955	7.955	0.000	92	387081	10.0	10.9	
90 Bromoform	173	8.120	8.120	0.000	97	94573	10.0	10.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	696938	10.0	11.2	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	168581	10.0	10.9	
95 Bromobenzene	156	8.570	8.570	0.000	87	184549	10.0	10.7	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	61360	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	49109	10.0	11.1	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	203203	10.0	11.1	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	167202	10.0	10.7	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	177509	10.0	10.8	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	555148	10.0	10.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	492162	10.0	10.9	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	555283	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	633082	10.0	10.9	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	329769	10.0	10.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	558841	10.0	11.0	
108 1,4-Dichlorobenzene	146	9.576	9.576	0.000	95	327781	10.0	10.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	433586	10.0	10.9	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	310374	10.0	10.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	42452	10.0	10.9	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	183760	10.0	10.3	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	66215	10.0	10.8	
118 Naphthalene	128	11.753	11.753	0.000	96	572904	10.0	10.6	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	176040	10.0	10.3	
S 129 Total BTEX	1				0		50.0	54.6	
S 128 Trihalomethanes, Total	1				0		40.0	42.6	
S 132 Xylenes, Total	106				0		20.0	22.1	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	8.00	Units: uL
VM50SS_STK_00086	Amount Added:	8.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	8.00	Units: uL
VMAROLISTDW_00376	Amount Added:	8.00	Units: uL

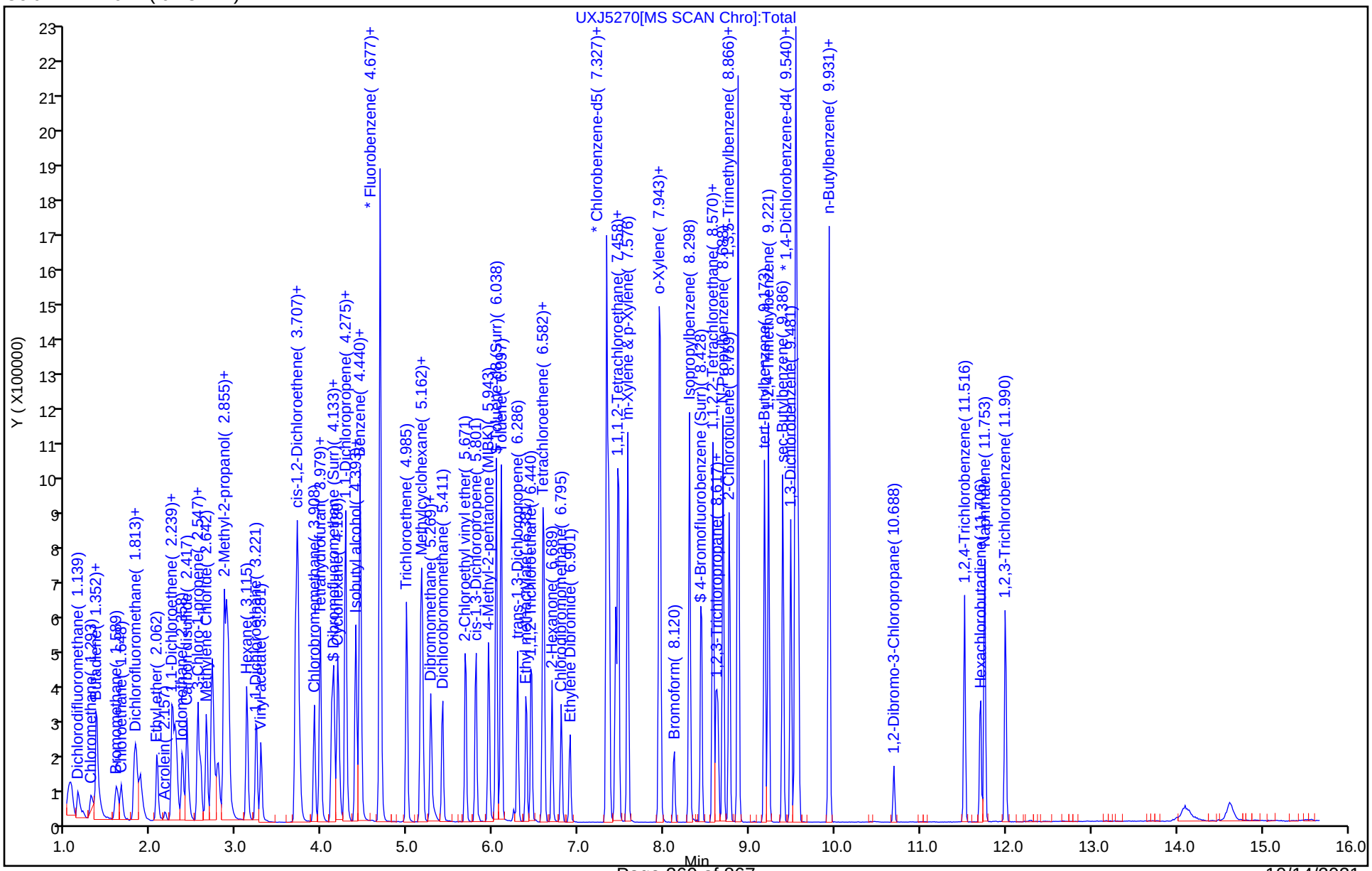
Report Date: 18-Jan-2021 09:24:18 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D

Injection Date:	15-Jan-2021 11:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jan-2021 12:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-005
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:38 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1222644	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	861537	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	406373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	75844	5.00	4.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	95	89035	5.00	5.04	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	302251	5.00	4.93	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	97	104195	5.00	4.85	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	98	80613	5.00	4.98	
12 Chloromethane	50	1.305	1.293	0.012	98	65579	5.00	5.15	
13 Butadiene	54	1.364	1.352	0.012	96	67351	5.00	5.02	
14 Vinyl chloride	62	1.387	1.376	0.011	98	76699	5.00	5.05	
15 Bromomethane	94	1.600	1.589	0.011	91	55501	5.00	5.08	
16 Chloroethane	64	1.660	1.648	0.012	99	45377	5.00	5.05	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	97	115827	5.00	5.20	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	98	126814	5.00	4.89	
19 Ethyl ether	59	2.074	2.062	0.012	87	63254	5.00	5.47	
20 Acrolein	56	2.168	2.157	0.012	94	10031	25.0	22.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	74855	5.00	5.11	
23 112TCTFE	151	2.287	2.275	0.012	91	55364	5.00	4.95	
24 Acetone	43	2.310	2.298	0.012	100	54384	10.0	10.3	
25 Iodomethane	142	2.370	2.358	0.012	98	138148	5.00	5.27	
26 Carbon disulfide	76	2.429	2.417	0.012	99	223442	5.00	5.12	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	84	51666	5.00	5.25	
29 Methyl acetate	43	2.583	2.571	0.012	95	100508	10.0	10.3	
30 Methylene Chloride	84	2.654	2.642	0.012	83	83987	5.00	5.19	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	95943	50.0	48.6	
32 Acrylonitrile	53	2.855	2.855	0.000	98	254760	50.0	51.0	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	92696	5.00	5.38	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	92	217115	5.00	5.12	
35 Hexane	86	3.127	3.115	0.012	88	19919	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	131033	5.00	5.24	
37 Vinyl acetate	43	3.293	3.281	0.012	97	136870	5.00	5.07	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	94152	5.00	5.30	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	70	22350	5.00	5.48	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	74913	10.0	10.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	81	48037	5.00	5.42	
49 Tetrahydrofuran	42	3.979	3.967	0.012	82	43094	10.0	10.3	
48 Chloroform	83	3.979	3.979	0.000	92	141913	5.00	5.22	
50 1,1,1-Trichloroethane	97	4.145	4.133	0.011	98	120621	5.00	5.06	
51 Cyclohexane	56	4.192	4.180	0.012	82	97556	5.00	4.93	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	111305	5.00	5.16	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	110470	5.00	5.05	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	71782	125.0	142.0	
55 Benzene	78	4.440	4.440	0.000	94	315227	5.00	5.17	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	107089	5.00	5.42	
58 n-Heptane	100	4.689	4.689	0.000	84	17935	5.00	5.07	
60 Trichloroethene	130	4.996	4.985	0.011	94	104678	5.00	5.48	
62 Methylcyclohexane	83	5.162	5.150	0.012	88	106284	5.00	4.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	64453	5.00	5.06	
64 Dibromomethane	93	5.269	5.269	0.000	94	47703	5.00	5.12	
66 1,4-Dioxane	88	5.316	5.304	0.012	86	21628	100.0	113.8	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	97830	5.00	5.22	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	91082	10.0	10.0	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	116575	5.00	5.02	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	131752	10.0	10.3	
72 Toluene	91	6.097	6.097	0.000	98	342544	5.00	5.24	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	112670	5.00	5.31	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	86162	5.00	5.19	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	88	68391	5.00	5.27	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	72821	5.00	5.23	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	89	109339	5.00	5.06	
78 2-Hexanone	43	6.689	6.689	0.001	91	96869	10.0	10.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	72196	5.00	5.04	
82 Ethylene Dibromide	107	6.902	6.901	0.001	100	71577	5.00	5.25	
84 Chlorobenzene	112	7.351	7.351	0.000	97	224201	5.00	5.24	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	73060	5.00	5.10	
86 Ethylbenzene	106	7.470	7.469	0.001	97	121583	5.00	5.43	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	142126	5.00	5.17	
89 o-Xylene	106	7.943	7.943	0.000	95	133865	5.00	5.29	
88 Styrene	104	7.955	7.955	0.000	94	190984	5.00	5.20	
90 Bromoform	173	8.120	8.120	0.000	96	43950	5.00	4.90	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	337134	5.00	5.22	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	80391	5.00	5.10	
95 Bromobenzene	156	8.570	8.570	0.000	88	92916	5.00	5.32	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	85	30569	5.00	5.05	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	82	23761	5.00	5.29	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	97641	5.00	5.25	
99 2-Chlorotoluene	126	8.759	8.759	0.000	96	81808	5.00	5.14	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	258368	5.00	5.01	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	87751	5.00	5.25	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	243838	5.00	5.30	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	264071	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	306253	5.00	5.19	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	161785	5.00	5.14	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	268571	5.00	5.19	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	168239	5.00	5.27	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	159450	5.00	5.31	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	209941	5.00	5.19	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	20694	5.00	5.23	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	95499	5.00	5.26	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	34437	5.00	5.51	
118 Naphthalene	128	11.753	11.753	0.000	96	291314	5.00	5.32	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	94	89613	5.00	5.14	
S 129 Total BTEX	1				0		25.0	26.3	
S 128 Trihalomethanes, Total	1				0		20.0	20.4	
S 130 1,2-Dichloroethene, Total	96				0			10.7	
S 131 1,3-Dichloropropene, Total	75				0			10.3	
S 132 Xylenes, Total	106				0		10.0	10.5	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	4.00	Units: uL
VM50SS_STK_00086	Amount Added:	4.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	4.00	Units: uL
VMAROLISTDW_00376	Amount Added:	4.00	Units: uL

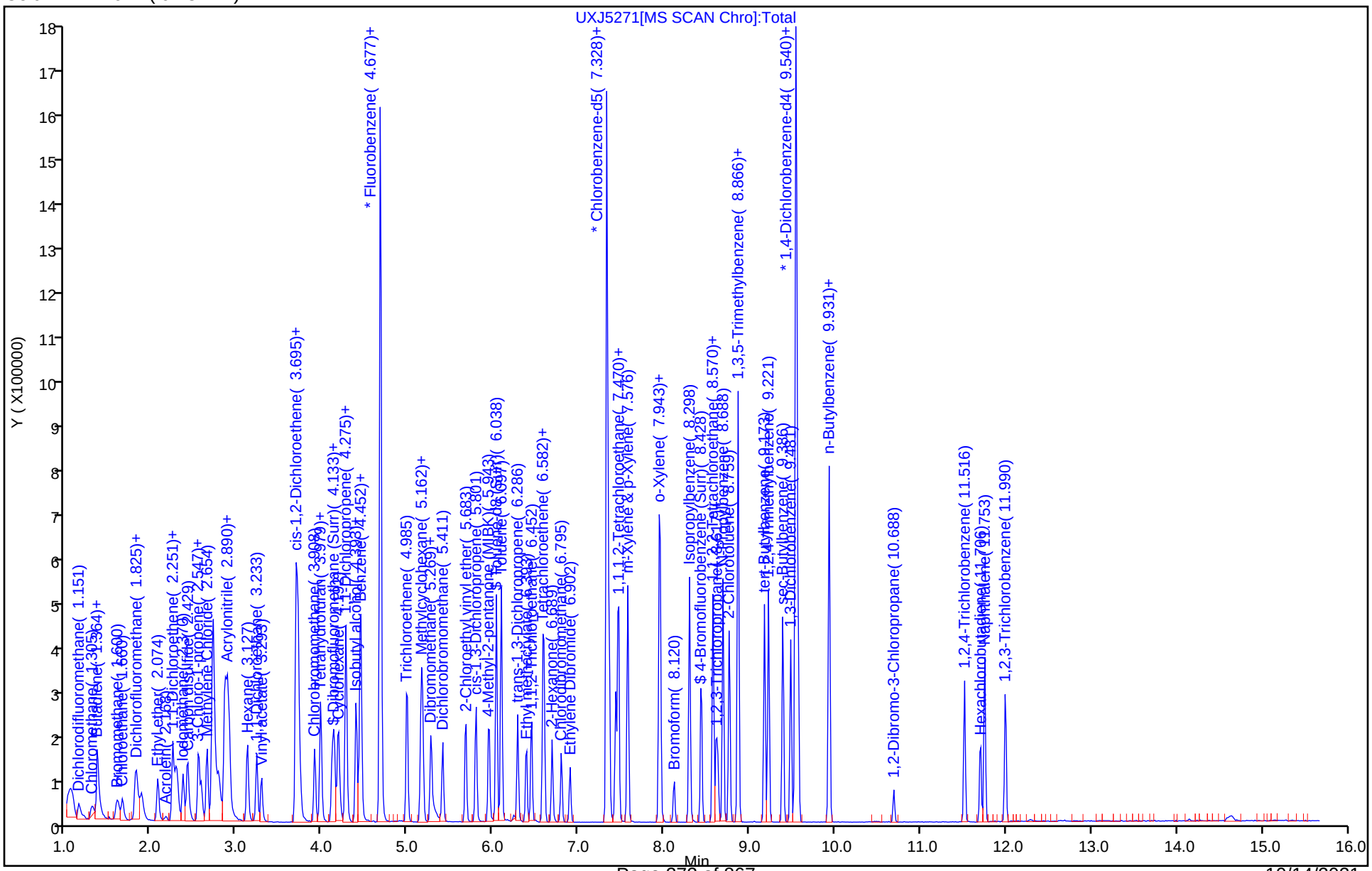
Report Date: 18-Jan-2021 09:24:39 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D

Injection Date:	15-Jan-2021 12:13:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jan-2021 12:36:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-006
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:45 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1194740	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	862909	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	402373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	31381	2.00	2.06	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	37647	2.00	2.18	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	91	127833	2.00	2.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	44939	2.00	2.09	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	31418	2.00	1.99	
12 Chloromethane	50	1.293	1.293	0.000	98	25355	2.00	2.04	
13 Butadiene	54	1.364	1.352	0.012	97	28511	2.00	2.17	
14 Vinyl chloride	62	1.375	1.376	-0.001	53	31125	2.00	2.10	
15 Bromomethane	94	1.588	1.589	-0.001	93	21942	2.00	2.05	
16 Chloroethane	64	1.648	1.648	0.000	99	17658	2.00	2.01	
17 Dichlorofluoromethane	67	1.801	1.802	-0.001	97	46164	2.00	2.12	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	51835	2.00	2.04	
19 Ethyl ether	59	2.074	2.062	0.012	88	20989	2.00	1.86	
20 Acrolein	56	2.168	2.157	0.012	92	3869	10.0	8.87	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	29147	2.00	2.03	
23 112TCTFE	151	2.287	2.275	0.012	91	20704	2.00	1.89	
24 Acetone	43	2.298	2.298	0.000	99	27191	4.00	4.25	
25 Iodomethane	142	2.369	2.358	0.011	97	49606	2.00	1.93	
26 Carbon disulfide	76	2.417	2.417	0.000	98	85053	2.00	1.99	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	88	18496	2.00	1.92	
29 Methyl acetate	43	2.582	2.571	0.011	95	37455	4.00	3.92	
30 Methylene Chloride	84	2.653	2.642	0.011	83	32083	2.00	2.03	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	40795	20.0	21.1	
32 Acrylonitrile	53	2.855	2.855	0.000	98	99328	20.0	20.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	33055	2.00	1.96	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	80293	2.00	1.94	
35 Hexane	86	3.127	3.115	0.012	91	7051	2.00	1.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	49476	2.00	2.02	
37 Vinyl acetate	43	3.281	3.281	0.000	96	49994	2.00	1.90	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	35504	2.00	2.05	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	7464	2.00	1.87	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	95	29417	4.00	4.21	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	16126	2.00	1.86	
49 Tetrahydrofuran	42	3.979	3.967	0.012	53	16287	4.00	3.97	
48 Chloroform	83	3.979	3.979	0.000	93	52653	2.00	1.98	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	46927	2.00	2.01	
51 Cyclohexane	56	4.180	4.180	0.000	80	36267	2.00	1.88	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	39708	2.00	1.88	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	40537	2.00	1.90	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	24642	50.0	48.7	
55 Benzene	78	4.440	4.440	0.000	94	119695	2.00	2.01	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	39572	2.00	2.05	
58 n-Heptane	100	4.689	4.689	0.000	71	6187	2.00	1.79	
60 Trichloroethene	130	4.985	4.985	0.000	94	36541	2.00	1.96	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	40688	2.00	1.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	25247	2.00	2.03	
64 Dibromomethane	93	5.269	5.269	-0.001	95	18262	2.00	2.01	
66 1,4-Dioxane	88	5.316	5.304	0.012	85	4800	40.0	36.6	
67 Dichlorobromomethane	83	5.411	5.411	-0.001	98	34149	2.00	1.86	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	36692	4.00	4.14	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	46722	2.00	2.06	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	50083	4.00	4.02	
72 Toluene	91	6.097	6.097	0.000	99	131172	2.00	2.00	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	43688	2.00	2.05	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	30851	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	26286	2.00	2.02	
76 Tetrachloroethene	164	6.582	6.582	0.000	95	27919	2.00	2.00	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	44615	2.00	2.06	
78 2-Hexanone	43	6.688	6.689	0.000	93	35938	4.00	3.90	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	27373	2.00	1.91	
82 Ethylene Dibromide	107	6.901	6.901	0.000	95	28263	2.00	2.07	
84 Chlorobenzene	112	7.351	7.351	0.000	97	85638	2.00	2.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	27733	2.00	1.93	
86 Ethylbenzene	106	7.469	7.469	0.000	97	41926	2.00	1.87	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	55016	2.00	2.00	
89 o-Xylene	106	7.943	7.943	0.000	96	48945	2.00	1.93	
88 Styrene	104	7.955	7.955	0.000	94	70977	2.00	1.93	
90 Bromoform	173	8.120	8.120	0.000	94	14539	2.00	1.95	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	127385	2.00	1.97	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	32478	2.00	2.08	
95 Bromobenzene	156	8.570	8.570	0.000	91	33533	2.00	1.94	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	85	13381	2.00	2.23	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	84	7477	2.00	1.68	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	33926	2.00	1.84	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	32406	2.00	2.06	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	97641	2.00	1.91	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	32785	2.00	1.98	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	89236	2.00	1.96	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	101857	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	115205	2.00	1.97	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	65846	2.00	2.11	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	100055	2.00	1.95	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	94	63431	2.00	2.01	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	62822	2.00	2.11	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	78313	2.00	1.96	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	8071	2.00	2.06	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	37983	2.00	2.11	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	94	13398	2.00	2.16	
118 Naphthalene	128	11.753	11.753	0.000	96	108820	2.00	2.01	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	37847	2.00	2.19	
S 129 Total BTEX	1				0		10.0	9.81	
S 128 Trihalomethanes, Total	1				0		8.00	7.70	
S 130 1,2-Dichloroethene, Total	96				0			4.01	
S 131 1,3-Dichloropropene, Total	75				0			4.12	
S 132 Xylenes, Total	106				0		4.00	3.93	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	1.60	Units: uL
VM50SS_STK_00086	Amount Added:	1.60	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	1.60	Units: uL
VMAROLISTDW_00376	Amount Added:	1.60	Units: uL

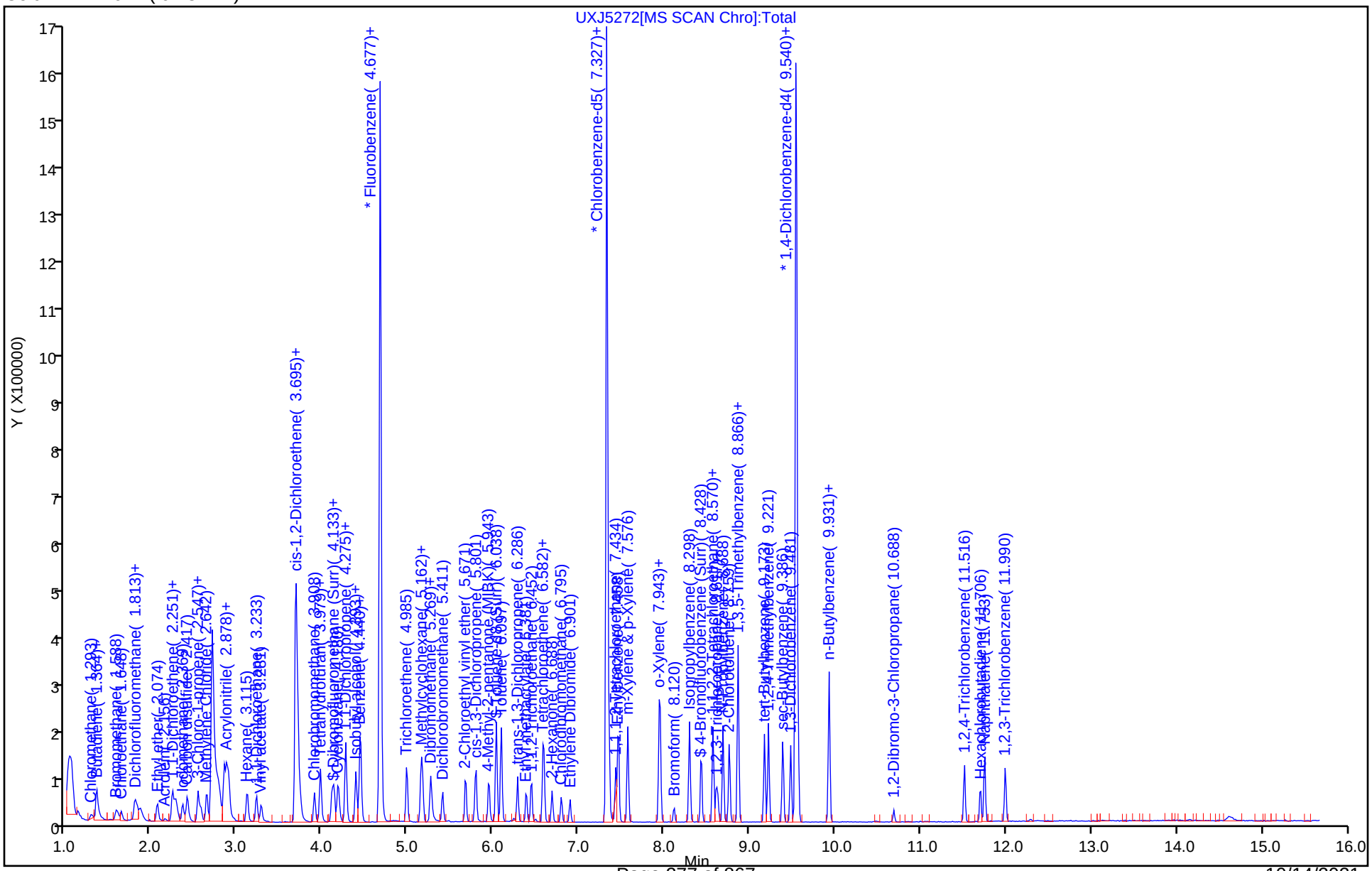
Report Date: 18-Jan-2021 09:24:45 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D

Injection Date:	15-Jan-2021 12:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jan-2021 12:58:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-007
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:50 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:48:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1237666	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	83	905264	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	93	420817	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	98	17076	1.00	1.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	19989	1.00	1.12	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	70570	1.00	1.10	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	27622	1.00	1.22	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	96	15545	1.00	0.9490	
12 Chloromethane	50	1.305	1.293	0.012	95	14340	1.00	1.11	
13 Butadiene	54	1.364	1.352	0.012	91	13521	1.00	1.00	
14 Vinyl chloride	62	1.376	1.376	0.000	59	15264	1.00	0.99	
15 Bromomethane	94	1.612	1.589	0.023	88	11910	1.00	1.08	
16 Chloroethane	64	1.660	1.648	0.012	97	9885	1.00	1.09	
17 Dichlorofluoromethane	67	1.825	1.802	0.023	95	24102	1.00	1.07	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	87	27428	1.00	1.04	M
19 Ethyl ether	59	2.074	2.062	0.012	85	11151	1.00	0.9528	
20 Acrolein	56	2.180	2.157	0.024	88	2788	5.00	6.17	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	14457	1.00	0.9741	
23 112TCTFE	151	2.287	2.275	0.012	83	9322	1.00	0.8234	
24 Acetone	43	2.310	2.298	0.012	97	16505	2.00	1.70	
25 Iodomethane	142	2.370	2.358	0.012	98	26756	1.00	1.01	
26 Carbon disulfide	76	2.429	2.417	0.012	98	42851	1.00	0.9700	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	83	9657	1.00	0.9701	
29 Methyl acetate	43	2.583	2.571	0.012	96	20775	2.00	2.10	
30 Methylene Chloride	84	2.654	2.642	0.012	87	18990	1.00	1.16	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	17313	10.0	8.66	
32 Acrylonitrile	53	2.855	2.855	0.000	98	49387	10.0	9.77	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	93	17888	1.00	1.03	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	94	42075	1.00	0.9796	
35 Hexane	86	3.127	3.115	0.012	91	3359	1.00	0.8403	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	97	23786	1.00	0.9391	
37 Vinyl acetate	43	3.292	3.281	0.011	98	27137	1.00	0.99	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	17946	1.00	1.00	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	64	3204	1.00	0.7765	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	17238	2.00	2.38	
46 Chlorobromomethane	128	3.920	3.908	0.012	80	9438	1.00	1.05	
49 Tetrahydrofuran	42	3.979	3.967	0.012	55	9114	2.00	2.14	
48 Chloroform	83	3.979	3.979	0.000	91	27629	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.144	4.133	0.011	96	23130	1.00	0.9577	
51 Cyclohexane	56	4.192	4.180	0.012	85	17507	1.00	0.8740	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	22199	1.00	1.02	
52 Carbon tetrachloride	117	4.286	4.275	0.011	82	19888	1.00	0.8989	
54 Isobutyl alcohol	41	4.405	4.393	0.012	57	11230	25.0	21.1	
55 Benzene	78	4.440	4.440	0.000	96	59923	1.00	0.9709	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	18563	1.00	0.9278	
58 n-Heptane	100	4.689	4.689	0.000	37	3391	1.00	0.9465	
60 Trichloroethene	130	4.996	4.985	0.011	96	19843	1.00	1.03	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	18159	1.00	0.8320	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	93	12909	1.00	1.00	
64 Dibromomethane	93	5.269	5.269	0.000	57	9846	1.00	1.04	
66 1,4-Dioxane	88	5.304	5.304	0.000	8	1561	20.0	22.0	
67 Dichlorobromomethane	83	5.411	5.411	0.000	98	18093	1.00	0.9531	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	17224	2.00	1.87	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	95	23129	1.00	0.9848	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	23297	2.00	1.81	
72 Toluene	91	6.097	6.097	0.000	98	66435	1.00	0.9665	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	20141	1.00	0.9030	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	14716	1.00	0.8430	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	85	13706	1.00	1.01	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	13324	1.00	0.9105	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	21737	1.00	0.9574	
78 2-Hexanone	43	6.689	6.689	0.001	92	17457	2.00	1.81	
80 Chlorodibromomethane	129	6.795	6.795	0.000	87	13496	1.00	0.8958	
82 Ethylene Dibromide	107	6.902	6.901	0.001	94	13541	1.00	0.9453	
84 Chlorobenzene	112	7.363	7.351	0.012	97	44721	1.00	1.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	87	14675	1.00	0.9744	
86 Ethylbenzene	106	7.470	7.469	0.001	97	21634	1.00	0.9191	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	26859	1.00	0.9307	
89 o-Xylene	106	7.943	7.943	0.000	95	24523	1.00	0.9230	
88 Styrene	104	7.955	7.955	0.000	91	34628	1.00	0.8971	
90 Bromoform	173	8.120	8.120	0.000	90	5716	1.00	1.03	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	59446	1.00	0.8756	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	76	15088	1.00	0.9236	
95 Bromobenzene	156	8.570	8.570	0.000	89	17745	1.00	0.9803	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	79	6451	1.00	1.03	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	4369	1.00	0.9387	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	18175	1.00	0.9433	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	15591	1.00	0.9454	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	86	51470	1.00	0.9629	
101 4-Chlorotoluene	126	8.866	8.866	0.000	97	17614	1.00	1.02	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	42578	1.00	0.8935	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	94	45937	1.00	0.8688	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	52784	1.00	0.8630	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	96	32844	1.00	1.01	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	95	46211	1.00	0.8630	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	93	34274	1.00	1.04	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	30265	1.00	0.9727	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	37590	1.00	0.8977	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	3654	1.00	0.8923	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	91	19216	1.00	1.02	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	88	6361	1.00	0.9820	
118 Naphthalene	128	11.753	11.753	0.000	96	52184	1.00	0.9209	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	18312	1.00	1.01	
S 129 Total BTEX	1				0		5.00	4.71	
S 128 Trihalomethanes, Total	1				0		4.00	3.89	
S 130 1,2-Dichloroethene, Total	96				0			2.02	
S 131 1,3-Dichloropropene, Total	75				0			1.89	
S 132 Xylenes, Total	106				0		2.00	1.85	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

VMRGAS_00369	Amount Added:	0.80	Units: uL
VM50SS_STK_00086	Amount Added:	0.80	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	0.80	Units: uL
VMAROLISTDW_00376	Amount Added:	0.80	Units: uL

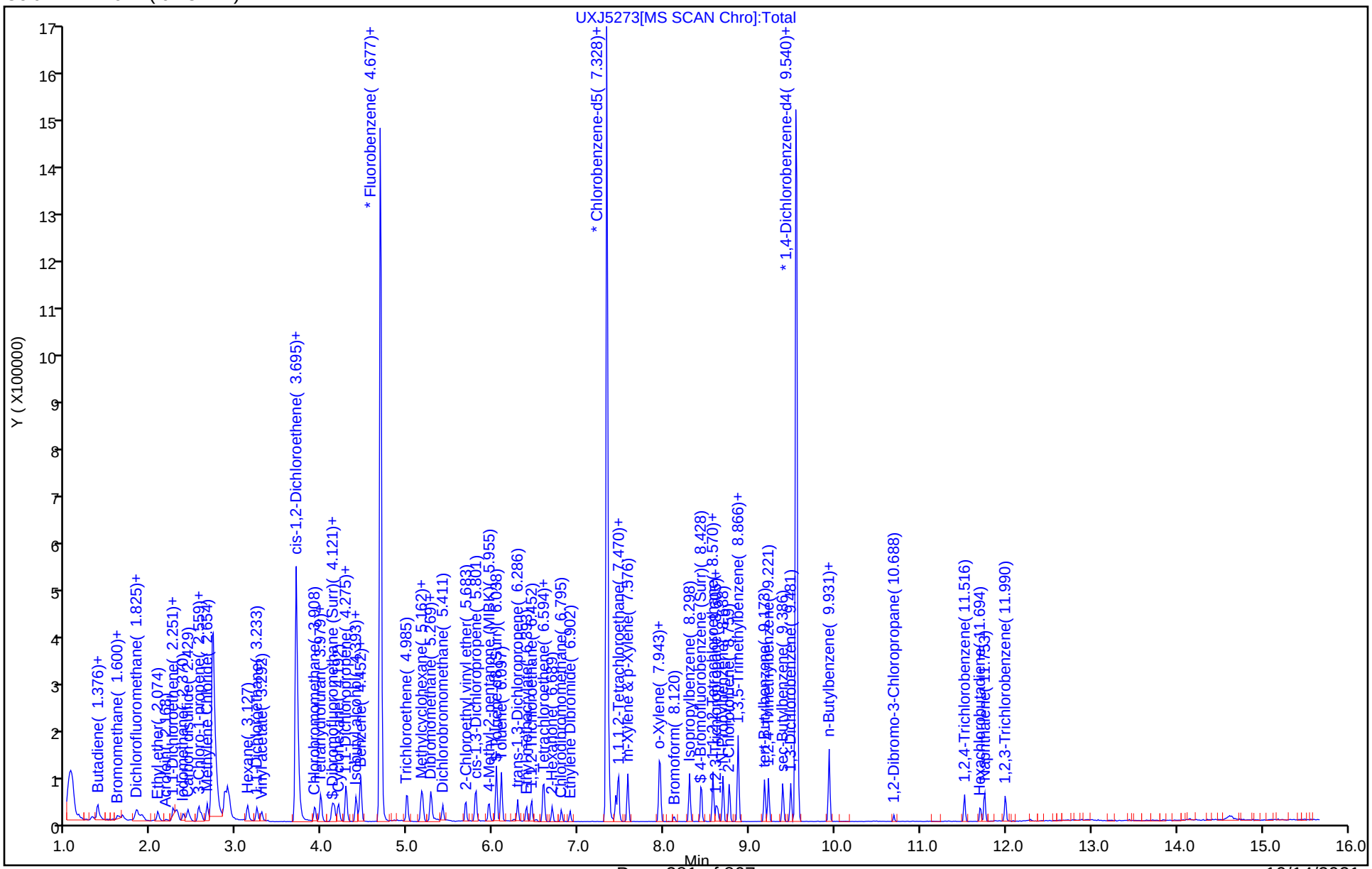
Report Date: 18-Jan-2021 09:24:51 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D

Injection Date:	15-Jan-2021 12:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

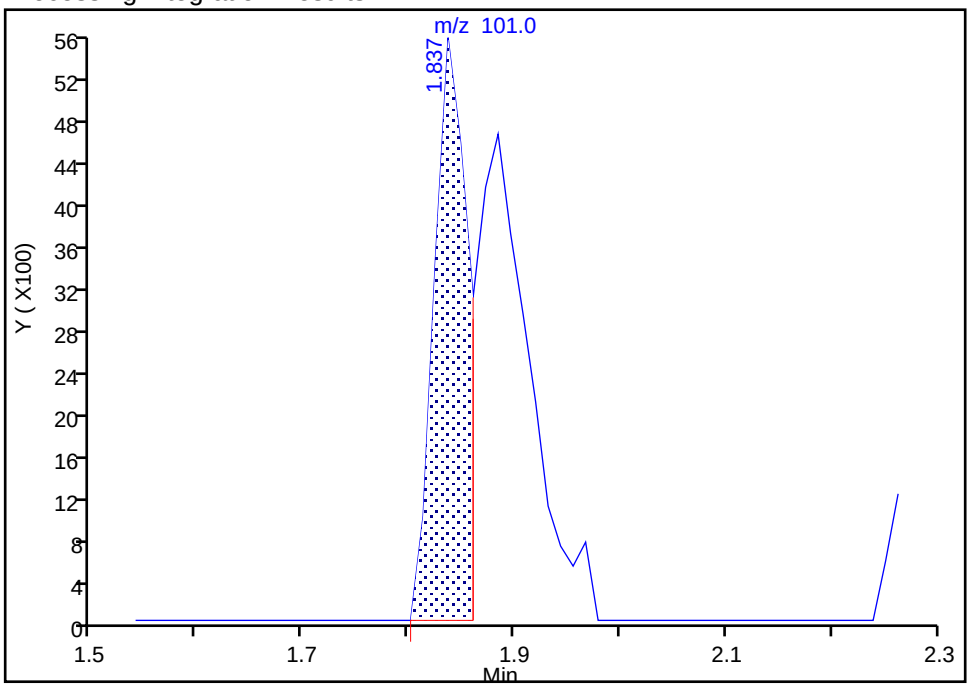
Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Injection Date: 15-Jan-2021 12:58:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 043582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

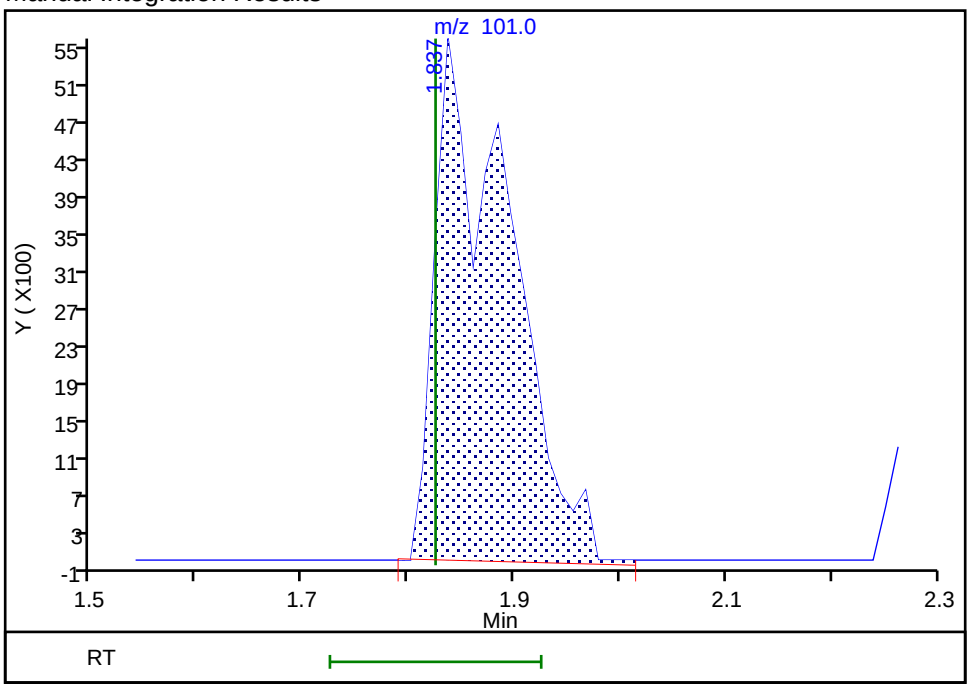
Processing Integration Results

RT: 1.84
Area: 12554
Amount: 0.752513
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 27428
Amount: 1.043907
Amount Units: ug/l



Reviewer: evansle, 18-Jan-2021 08:47:53
Audit Action: Manually Integrated Audit Reason: Split Peak

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

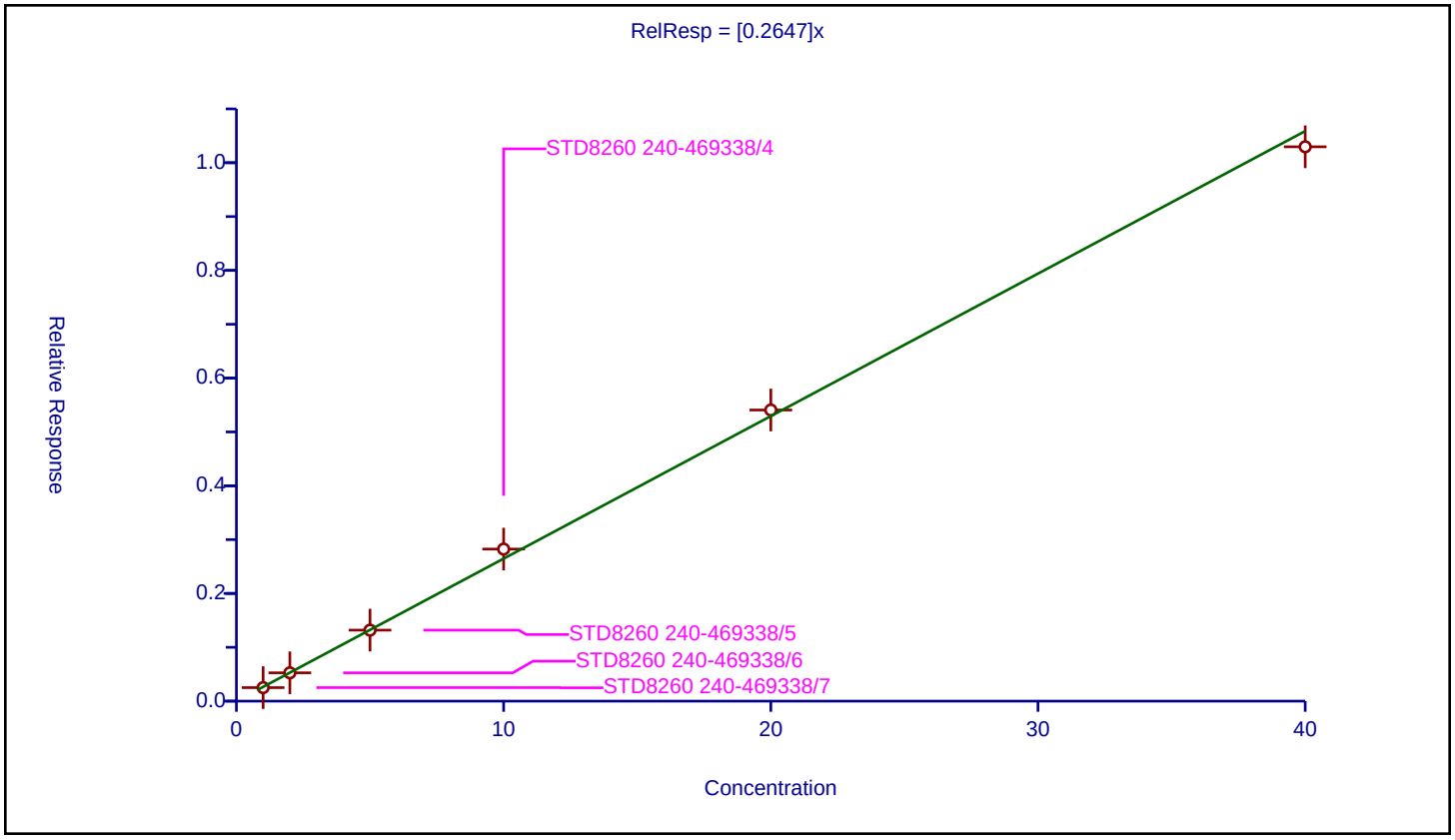
Curve Coefficients

Intercept:	0
Slope:	0.2647

Error Coefficients

Standard Error:	366000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.251199	20.0	1237666.0	0.251199	Y
2	STD8260 240-469338/6	2.0	0.525939	20.0	1194740.0	0.262969	Y
3	STD8260 240-469338/5	5.0	1.318667	20.0	1222644.0	0.263733	Y
4	STD8260 240-469338/4	10.0	2.824521	20.0	1164516.0	0.282452	Y
5	STD8260 240-469338/3	20.0	5.407258	20.0	1252890.0	0.270363	Y
6	STD8260 240-469338/2	40.0	10.29625	20.0	1401011.0	0.257406	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

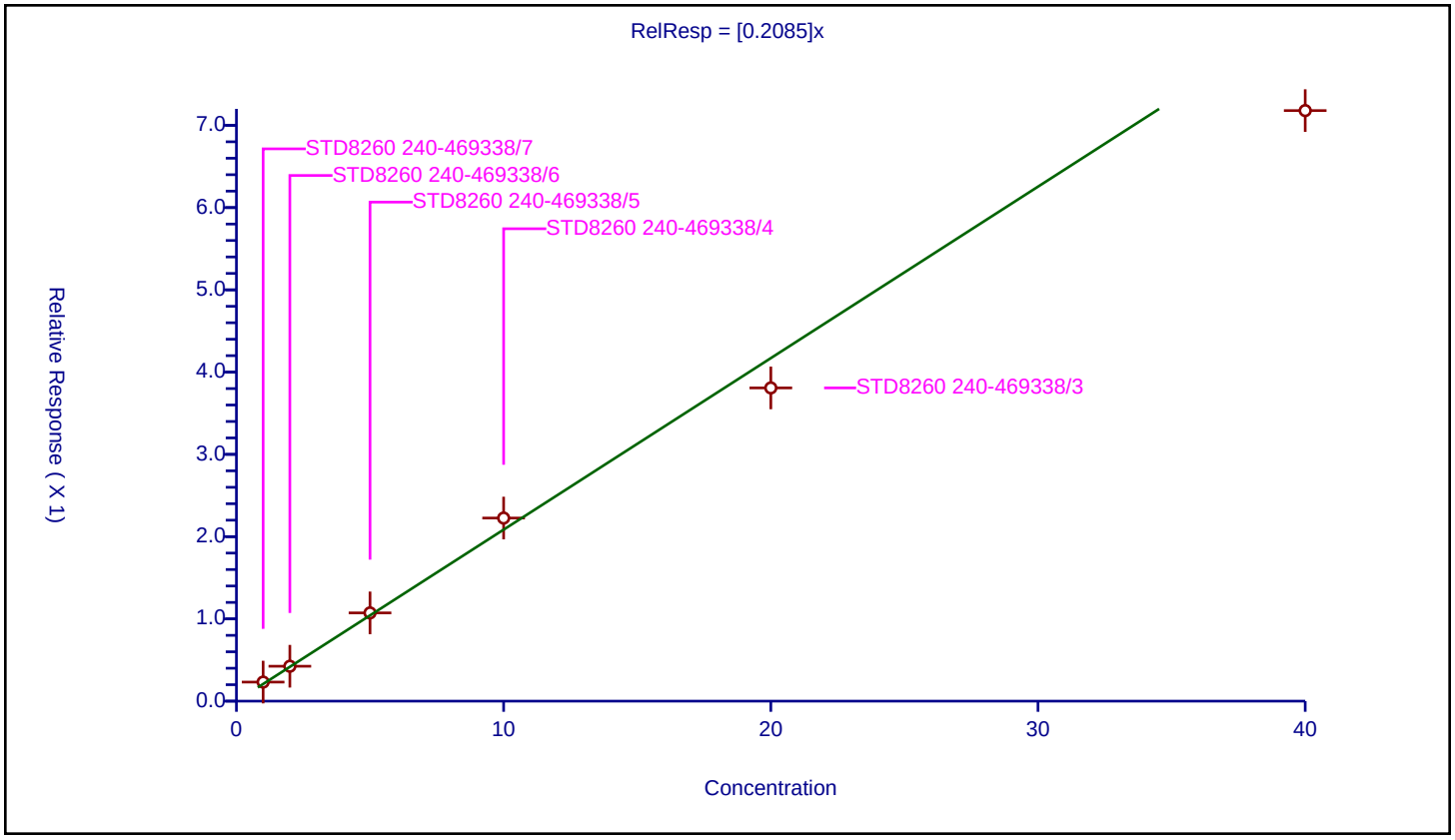
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	258000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.231726	20.0	1237666.0	0.231726	Y
2	STD8260 240-469338/6	2.0	0.424444	20.0	1194740.0	0.212222	Y
3	STD8260 240-469338/5	5.0	1.072741	20.0	1222644.0	0.214548	Y
4	STD8260 240-469338/4	10.0	2.225783	20.0	1164516.0	0.222578	Y
5	STD8260 240-469338/3	20.0	3.807804	20.0	1252890.0	0.19039	Y
6	STD8260 240-469338/2	40.0	7.179158	20.0	1401011.0	0.179479	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

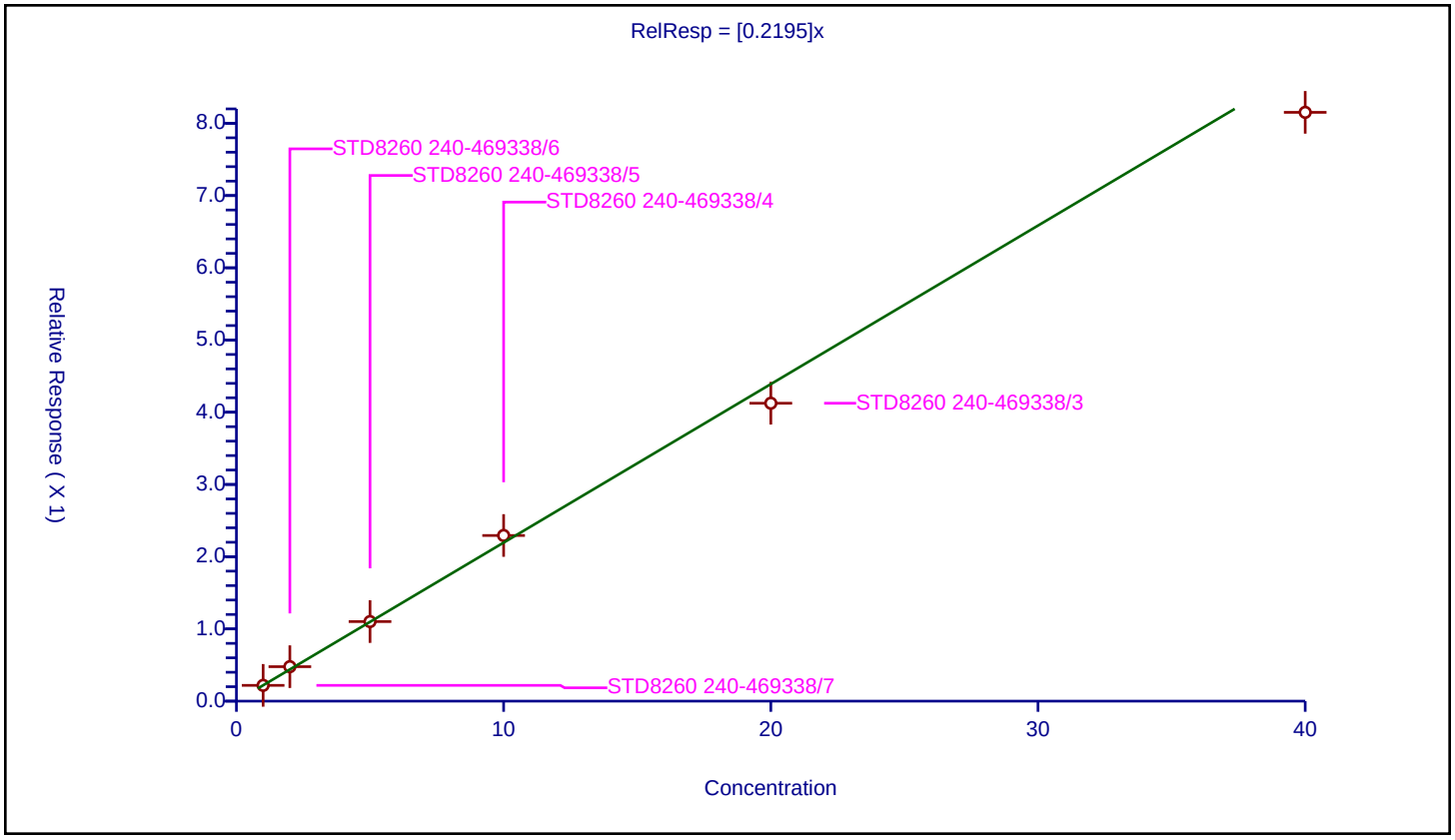
Curve Coefficients

Intercept:	0
Slope:	0.2195

Error Coefficients

Standard Error:	289000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.218492	20.0	1237666.0	0.218492	Y
2	STD8260 240-469338/6	2.0	0.477275	20.0	1194740.0	0.238638	Y
3	STD8260 240-469338/5	5.0	1.101727	20.0	1222644.0	0.220345	Y
4	STD8260 240-469338/4	10.0	2.293365	20.0	1164516.0	0.229336	Y
5	STD8260 240-469338/3	20.0	4.124895	20.0	1252890.0	0.206245	Y
6	STD8260 240-469338/2	40.0	8.152142	20.0	1401011.0	0.203804	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

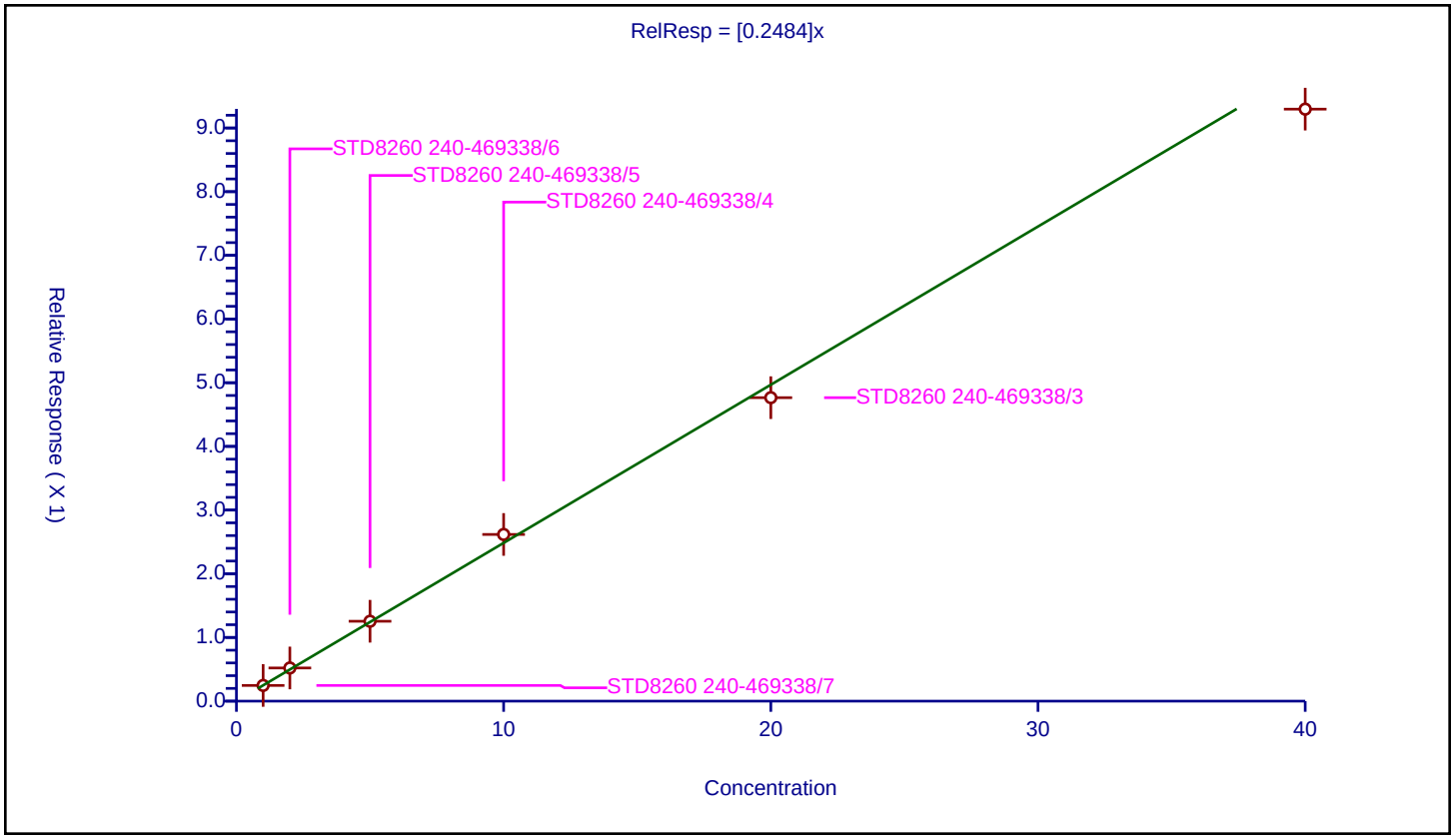
Curve Coefficients

Intercept:	0
Slope:	0.2484

Error Coefficients

Standard Error:	330000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.246658	20.0	1237666.0	0.246658	Y
2	STD8260 240-469338/6	2.0	0.521034	20.0	1194740.0	0.260517	Y
3	STD8260 240-469338/5	5.0	1.254642	20.0	1222644.0	0.250928	Y
4	STD8260 240-469338/4	10.0	2.617551	20.0	1164516.0	0.261755	Y
5	STD8260 240-469338/3	20.0	4.765686	20.0	1252890.0	0.238284	Y
6	STD8260 240-469338/2	40.0	9.296415	20.0	1401011.0	0.23241	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

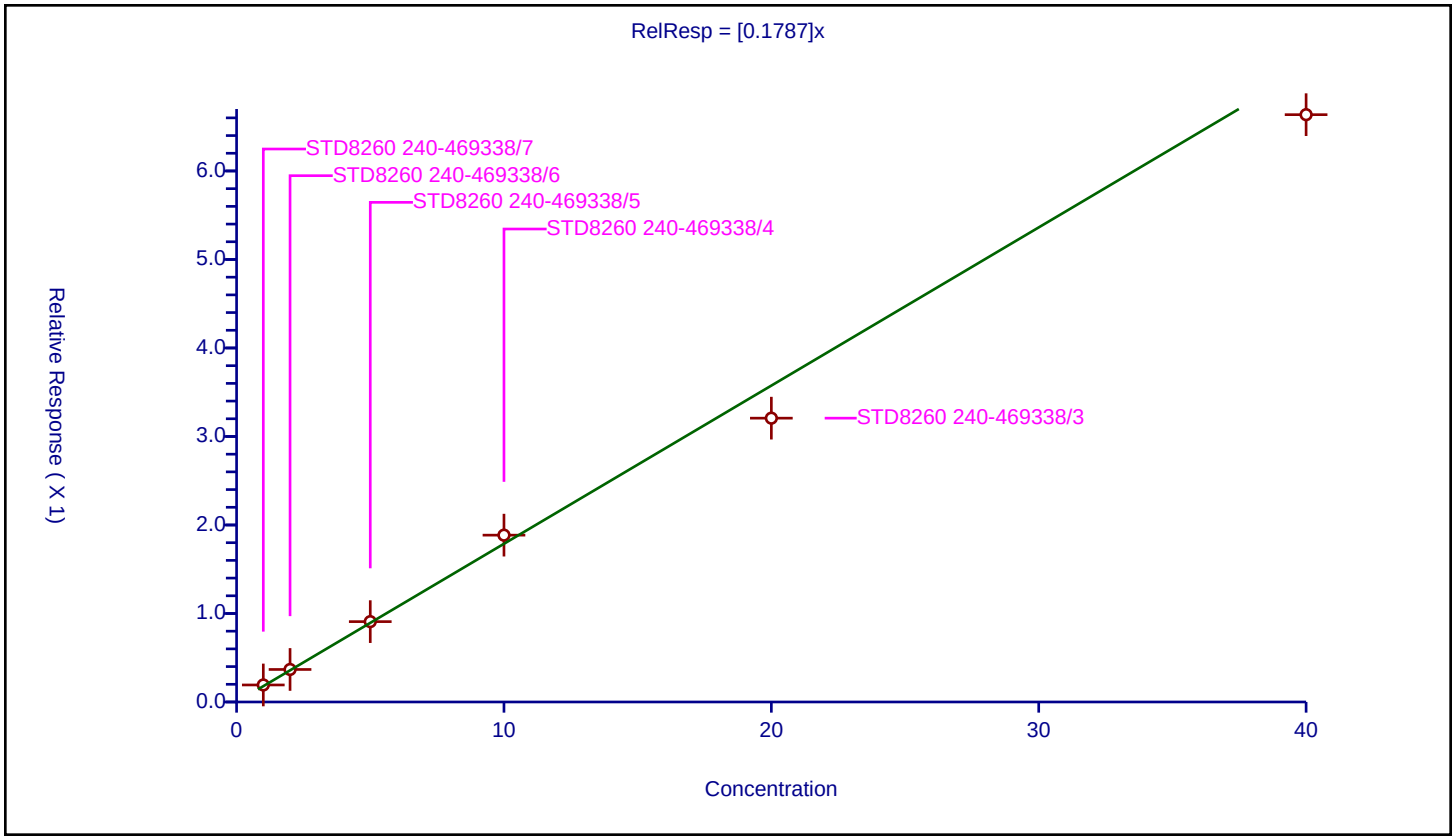
Curve Coefficients

Intercept:	0
Slope:	0.1787

Error Coefficients

Standard Error:	233000
Relative Standard Error:	7.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.192459	20.0	1237666.0	0.192459	Y
2	STD8260 240-469338/6	2.0	0.36731	20.0	1194740.0	0.183655	Y
3	STD8260 240-469338/5	5.0	0.907885	20.0	1222644.0	0.181577	Y
4	STD8260 240-469338/4	10.0	1.885247	20.0	1164516.0	0.188525	Y
5	STD8260 240-469338/3	20.0	3.206969	20.0	1252890.0	0.160348	Y
6	STD8260 240-469338/2	40.0	6.636193	20.0	1401011.0	0.165905	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

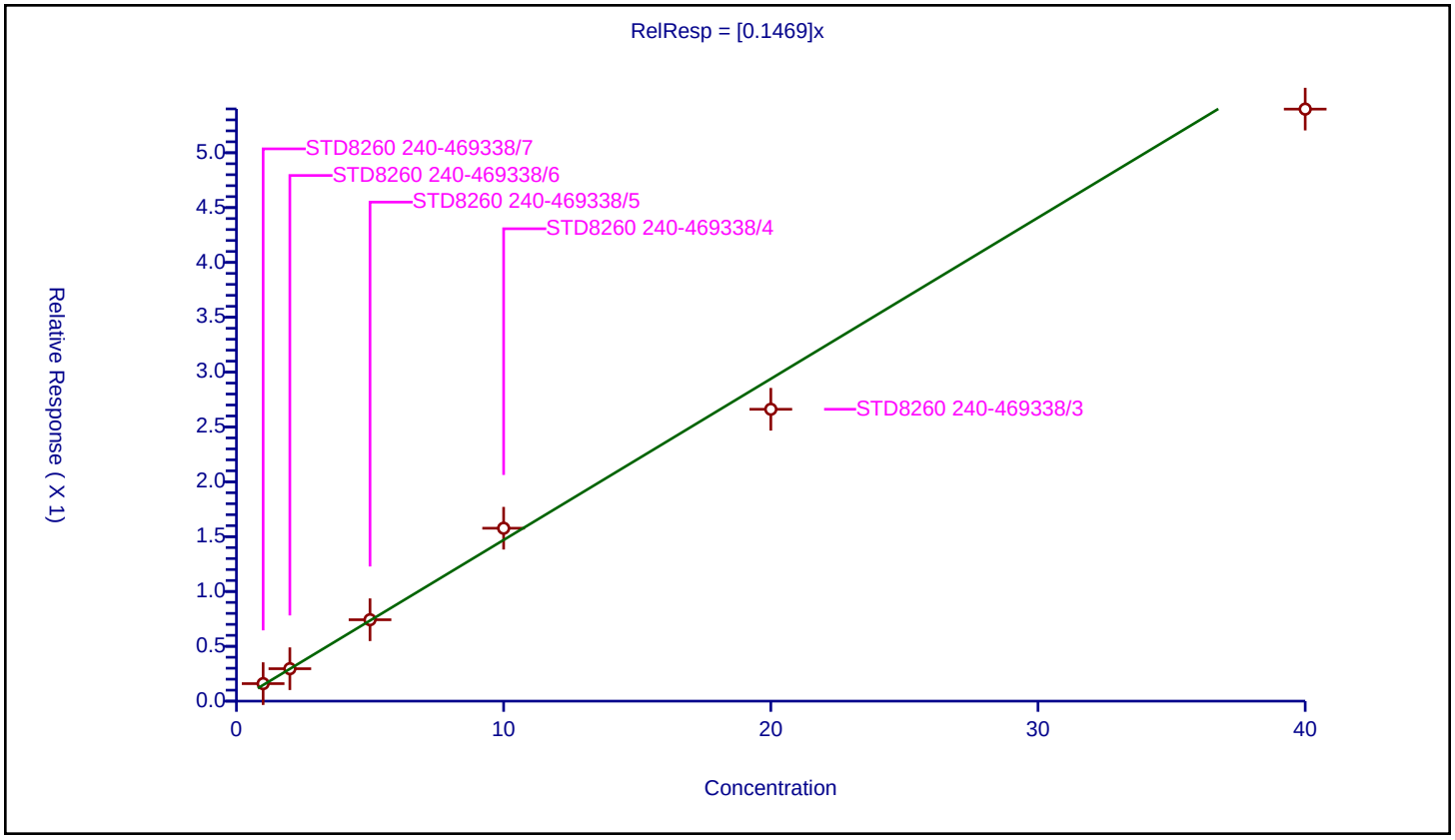
Curve Coefficients

Intercept:	0
Slope:	0.1469

Error Coefficients

Standard Error:	191000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159736	20.0	1237666.0	0.159736	Y
2	STD8260 240-469338/6	2.0	0.295596	20.0	1194740.0	0.147798	Y
3	STD8260 240-469338/5	5.0	0.742277	20.0	1222644.0	0.148455	Y
4	STD8260 240-469338/4	10.0	1.576586	20.0	1164516.0	0.157659	Y
5	STD8260 240-469338/3	20.0	2.661319	20.0	1252890.0	0.133066	Y
6	STD8260 240-469338/2	40.0	5.398073	20.0	1401011.0	0.134952	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

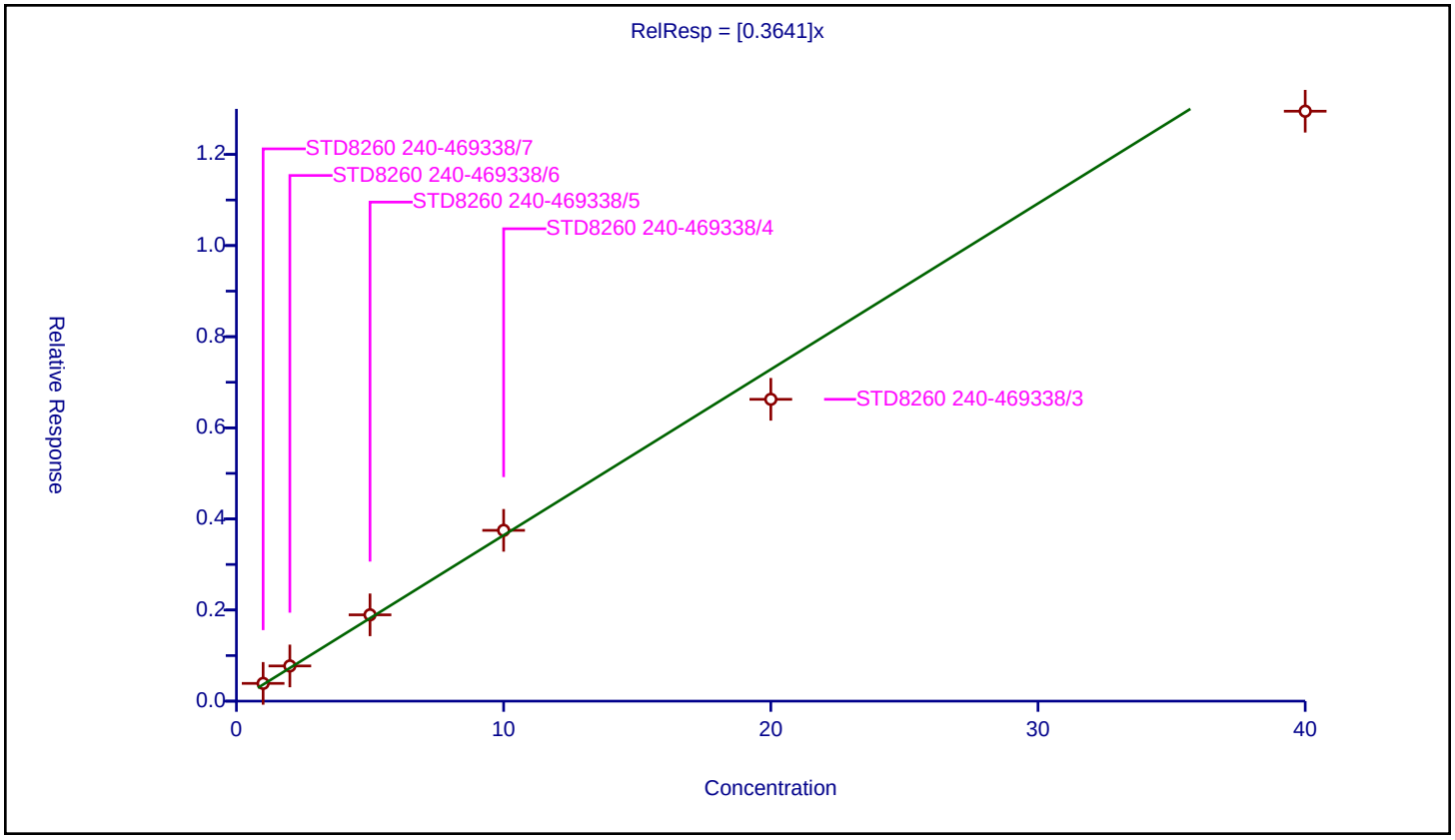
Curve Coefficients

Intercept:	0
Slope:	0.3641

Error Coefficients

Standard Error:	460000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.389475	20.0	1237666.0	0.389475	Y
2	STD8260 240-469338/6	2.0	0.772787	20.0	1194740.0	0.386394	Y
3	STD8260 240-469338/5	5.0	1.894697	20.0	1222644.0	0.378939	Y
4	STD8260 240-469338/4	10.0	3.74863	20.0	1164516.0	0.374863	Y
5	STD8260 240-469338/3	20.0	6.625099	20.0	1252890.0	0.331255	Y
6	STD8260 240-469338/2	40.0	12.949177	20.0	1401011.0	0.323729	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

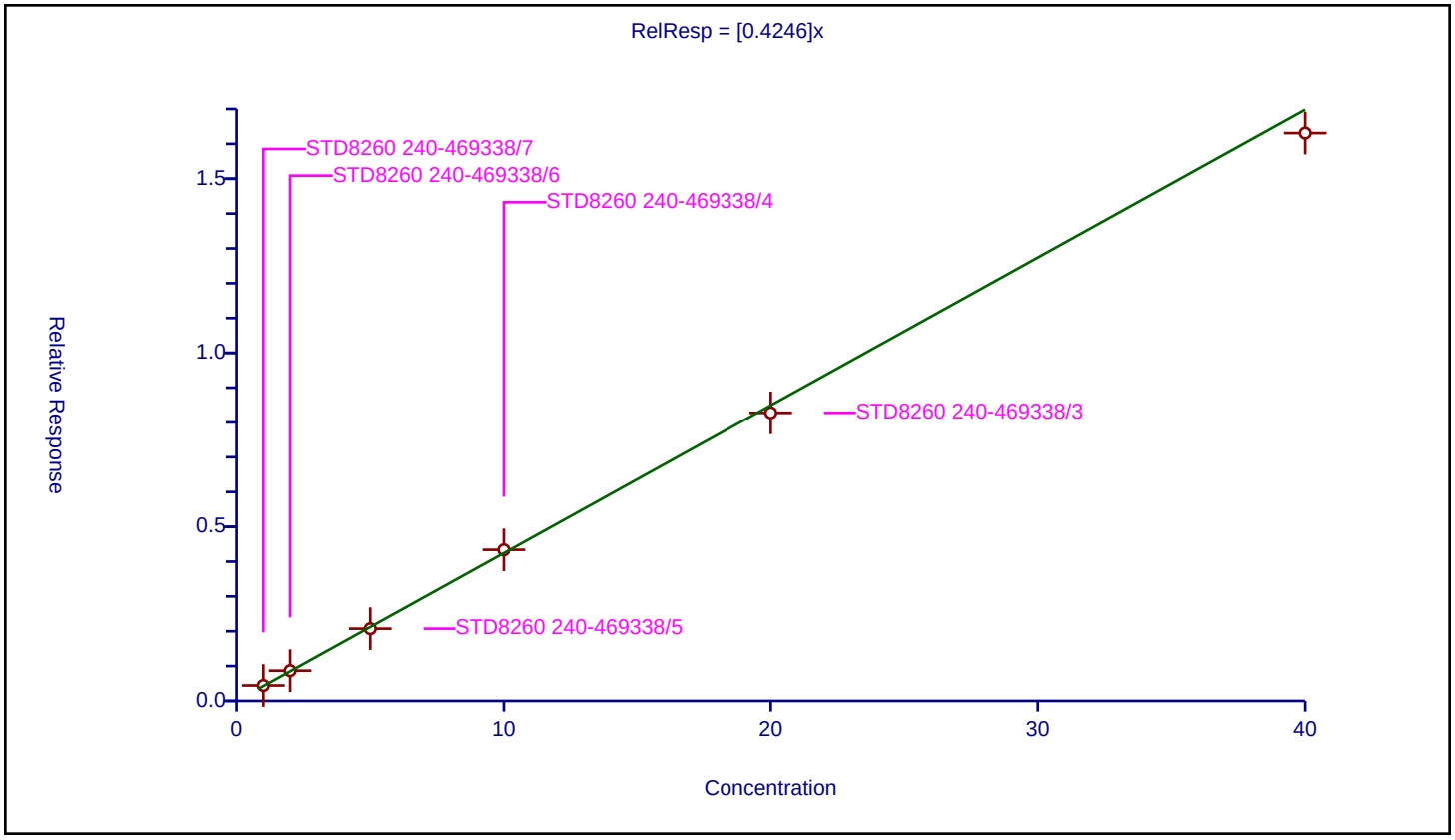
Curve Coefficients

Intercept:	0
Slope:	0.4246

Error Coefficients

Standard Error:	576000
Relative Standard Error:	3.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.443221	20.0	1237666.0	0.443221	Y
2	STD8260 240-469338/6	2.0	0.86772	20.0	1194740.0	0.43386	Y
3	STD8260 240-469338/5	5.0	2.074422	20.0	1222644.0	0.414884	Y
4	STD8260 240-469338/4	10.0	4.339485	20.0	1164516.0	0.433949	Y
5	STD8260 240-469338/3	20.0	8.276497	20.0	1252890.0	0.413825	Y
6	STD8260 240-469338/2	40.0	16.309494	20.0	1401011.0	0.407737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

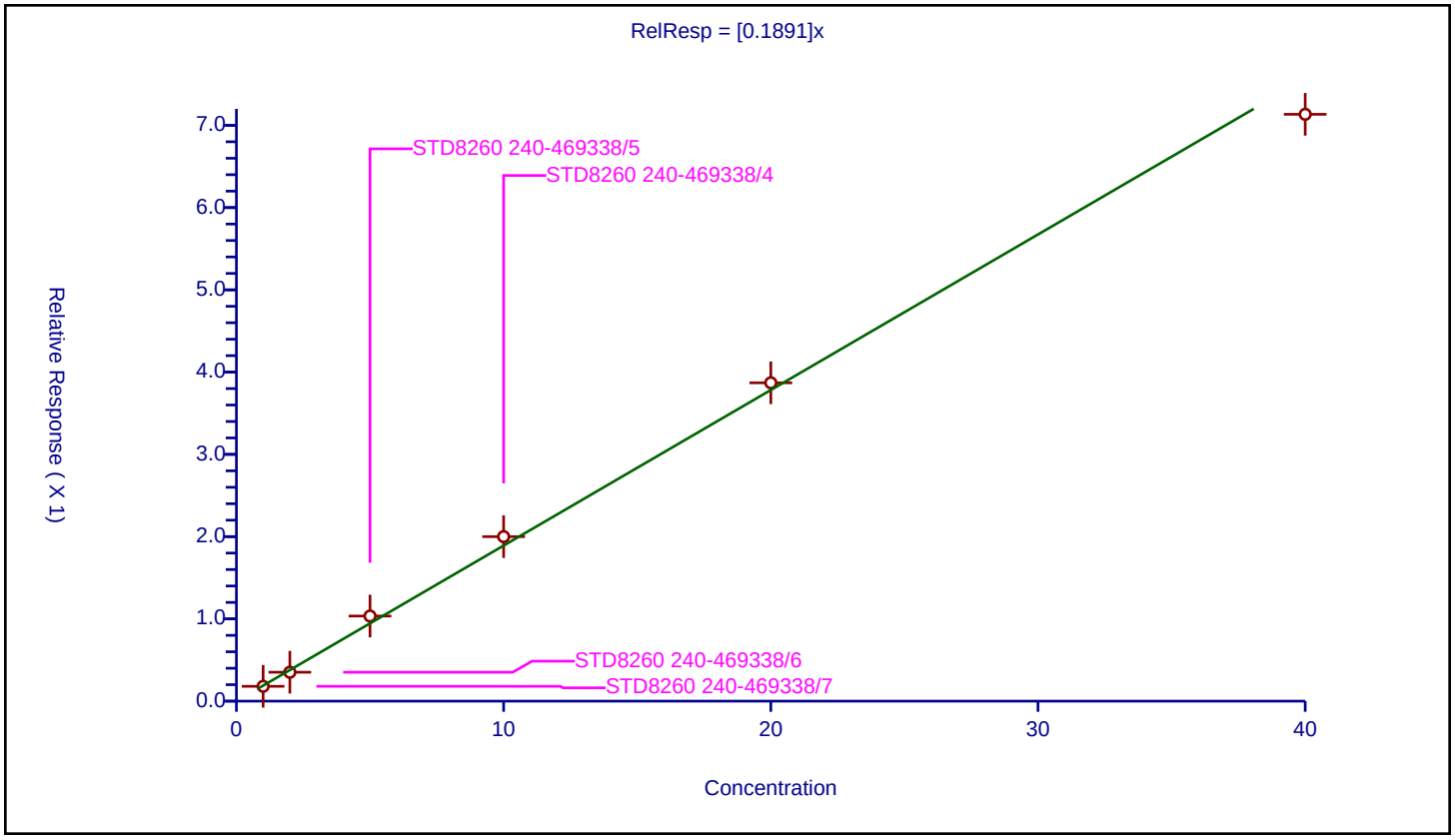
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	256000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.180194	20.0	1237666.0	0.180194	Y
2	STD8260 240-469338/6	2.0	0.351357	20.0	1194740.0	0.175678	Y
3	STD8260 240-469338/5	5.0	1.034708	20.0	1222644.0	0.206942	Y
4	STD8260 240-469338/4	10.0	1.99999	20.0	1164516.0	0.199999	Y
5	STD8260 240-469338/3	20.0	3.870284	20.0	1252890.0	0.193514	Y
6	STD8260 240-469338/2	40.0	7.134148	20.0	1401011.0	0.178354	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

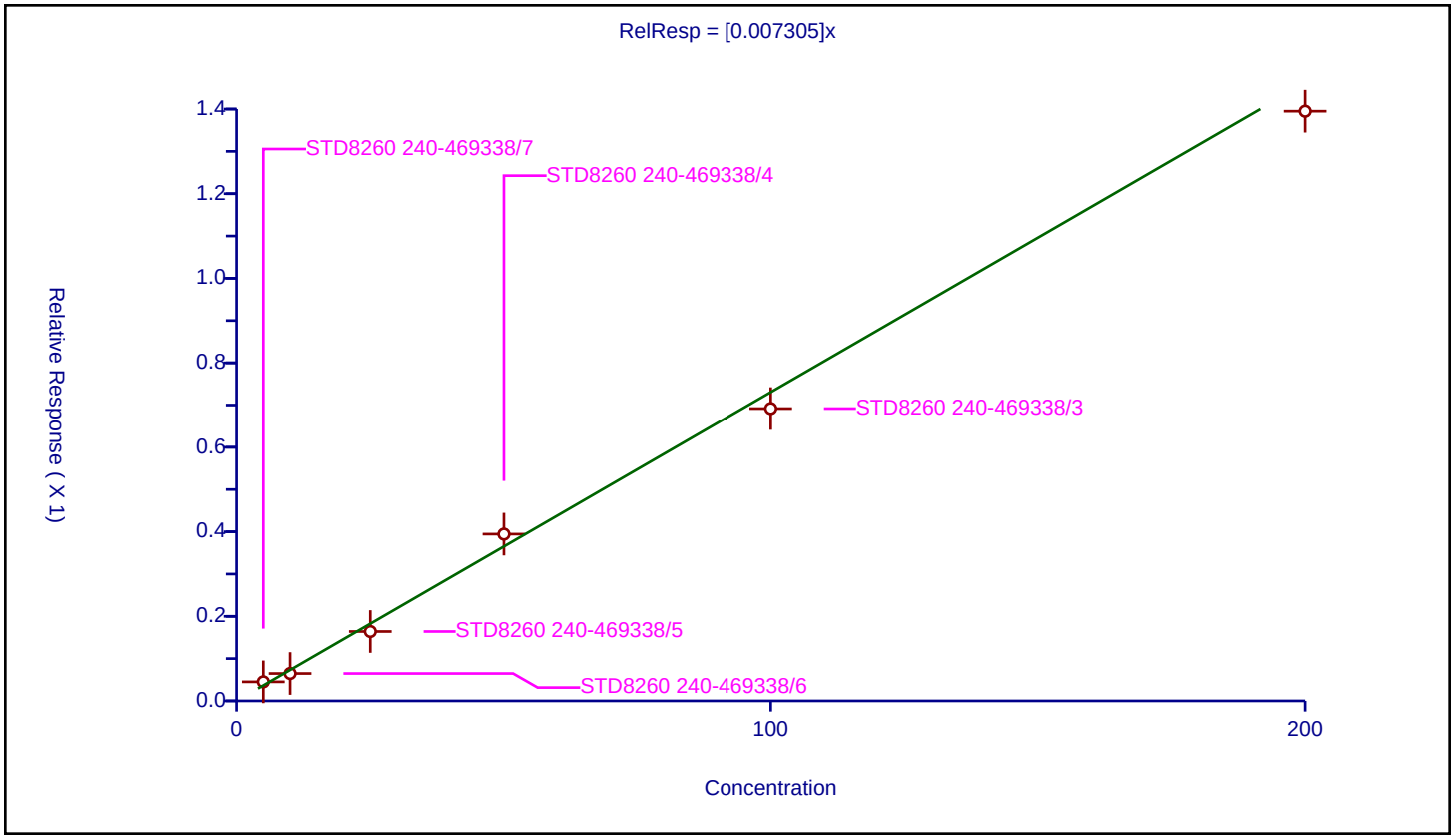
Curve Coefficients

Intercept:	0
Slope:	0.007305

Error Coefficients

Standard Error:	49100
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	5.0	0.045053	20.0	1237666.0	0.009011	Y
2	STD8260 240-469338/6	10.0	0.064767	20.0	1194740.0	0.006477	Y
3	STD8260 240-469338/5	25.0	0.164087	20.0	1222644.0	0.006563	Y
4	STD8260 240-469338/4	50.0	0.394464	20.0	1164516.0	0.007889	Y
5	STD8260 240-469338/3	100.0	0.691697	20.0	1252890.0	0.006917	Y
6	STD8260 240-469338/2	200.0	1.394878	20.0	1401011.0	0.006974	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

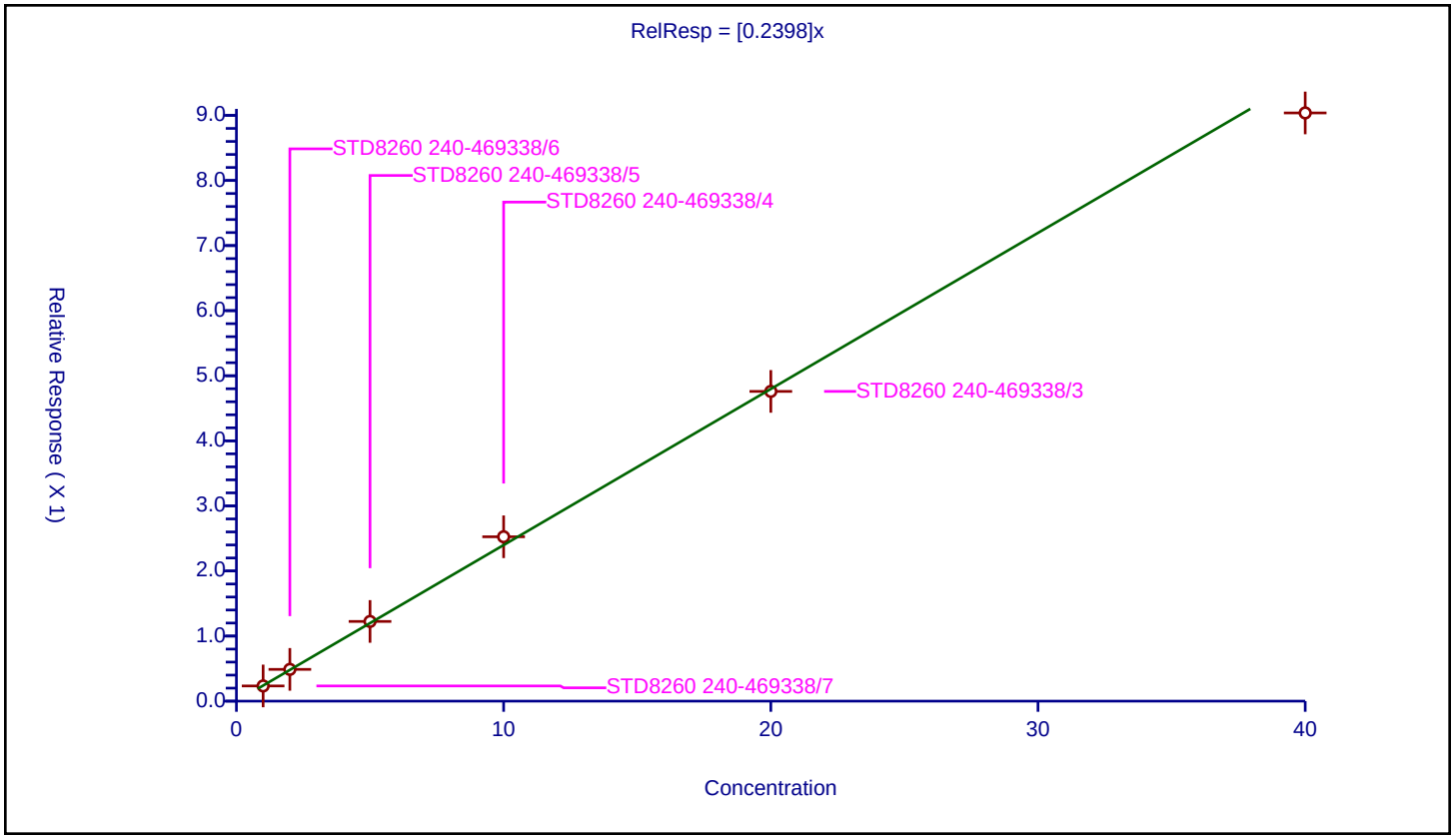
Curve Coefficients

Intercept:	0
Slope:	0.2398

Error Coefficients

Standard Error:	322000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.233617	20.0	1237666.0	0.233617	Y
2	STD8260 240-469338/6	2.0	0.487922	20.0	1194740.0	0.243961	Y
3	STD8260 240-469338/5	5.0	1.224477	20.0	1222644.0	0.244895	Y
4	STD8260 240-469338/4	10.0	2.525547	20.0	1164516.0	0.252555	Y
5	STD8260 240-469338/3	20.0	4.7593	20.0	1252890.0	0.237965	Y
6	STD8260 240-469338/2	40.0	9.037759	20.0	1401011.0	0.225944	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

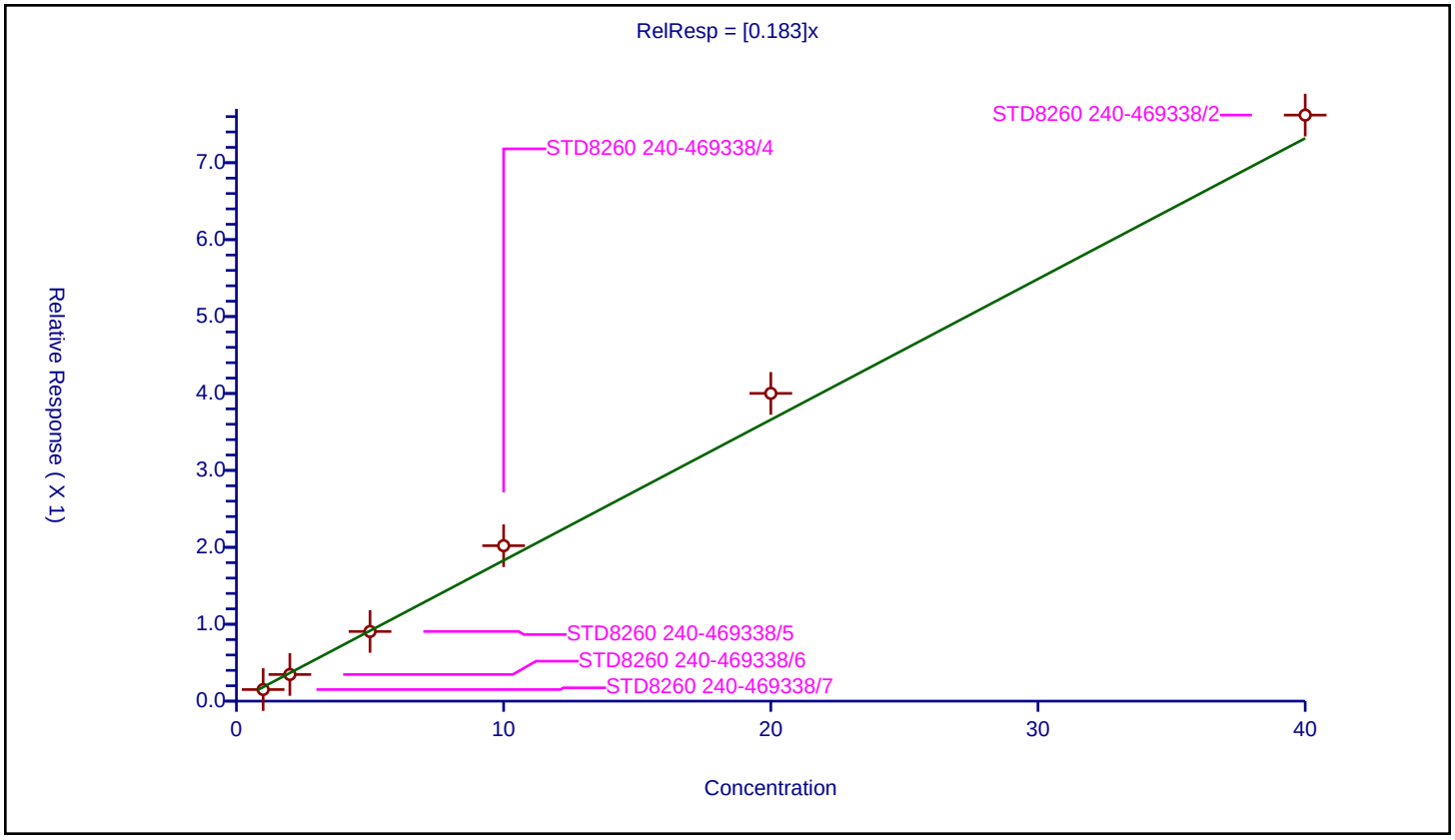
Curve Coefficients

Intercept:	0
Slope:	0.183

Error Coefficients

Standard Error:	270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.150638	20.0	1237666.0	0.150638	Y
2	STD8260 240-469338/6	2.0	0.346586	20.0	1194740.0	0.173293	Y
3	STD8260 240-469338/5	5.0	0.905644	20.0	1222644.0	0.181129	Y
4	STD8260 240-469338/4	10.0	2.020977	20.0	1164516.0	0.202098	Y
5	STD8260 240-469338/3	20.0	4.001421	20.0	1252890.0	0.200071	Y
6	STD8260 240-469338/2	40.0	7.619755	20.0	1401011.0	0.190494	Y



Calibration / Acetone

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

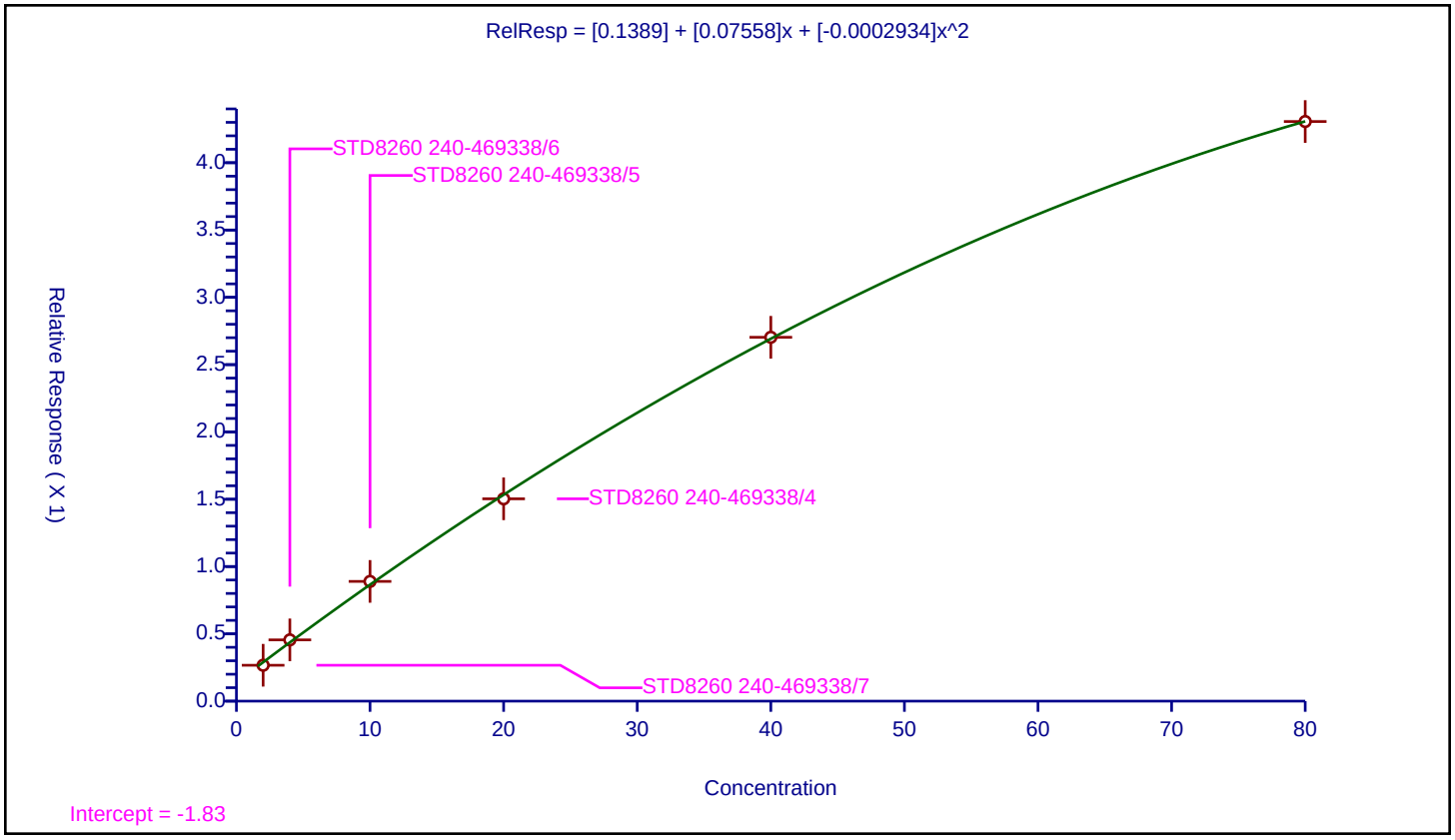
Curve Coefficients

Intercept:	0.1389
Slope:	0.07558
Second Order:	-0.0002934

Error Coefficients

Standard Error:	209000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.266712	20.0	1237666.0	0.133356	Y
2	STD8260 240-469338/6	4.0	0.455179	20.0	1194740.0	0.113795	Y
3	STD8260 240-469338/5	10.0	0.889613	20.0	1222644.0	0.088961	Y
4	STD8260 240-469338/4	20.0	1.503079	20.0	1164516.0	0.075154	Y
5	STD8260 240-469338/3	40.0	2.703158	20.0	1252890.0	0.067579	Y
6	STD8260 240-469338/2	80.0	4.30629	20.0	1401011.0	0.053829	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

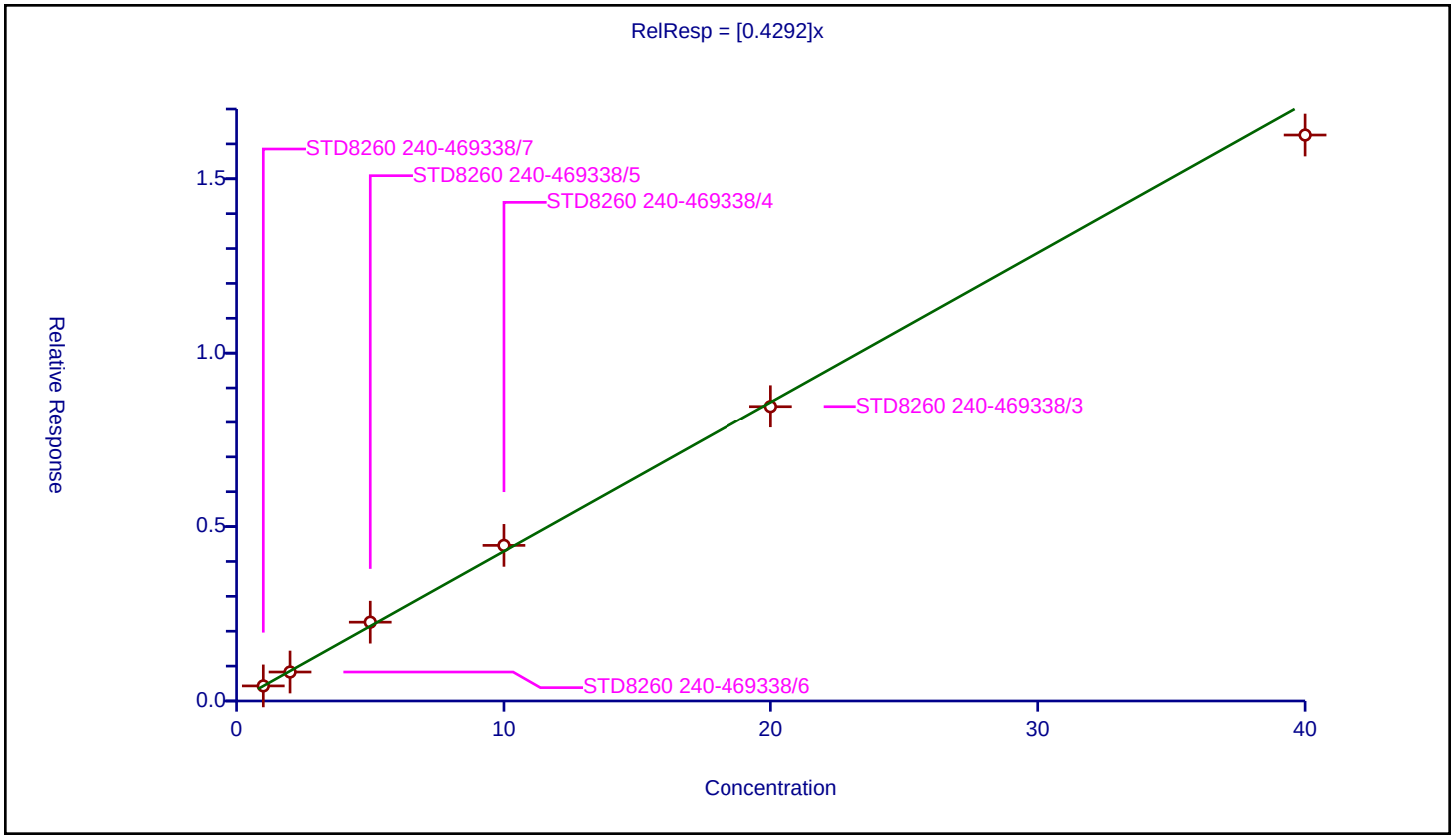
Curve Coefficients

Intercept:	0
Slope:	0.4292

Error Coefficients

Standard Error:	577000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.432362	20.0	1237666.0	0.432362	Y
2	STD8260 240-469338/6	2.0	0.830407	20.0	1194740.0	0.415203	Y
3	STD8260 240-469338/5	5.0	2.259824	20.0	1222644.0	0.451965	Y
4	STD8260 240-469338/4	10.0	4.461218	20.0	1164516.0	0.446122	Y
5	STD8260 240-469338/3	20.0	8.463935	20.0	1252890.0	0.423197	Y
6	STD8260 240-469338/2	40.0	16.254548	20.0	1401011.0	0.406364	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

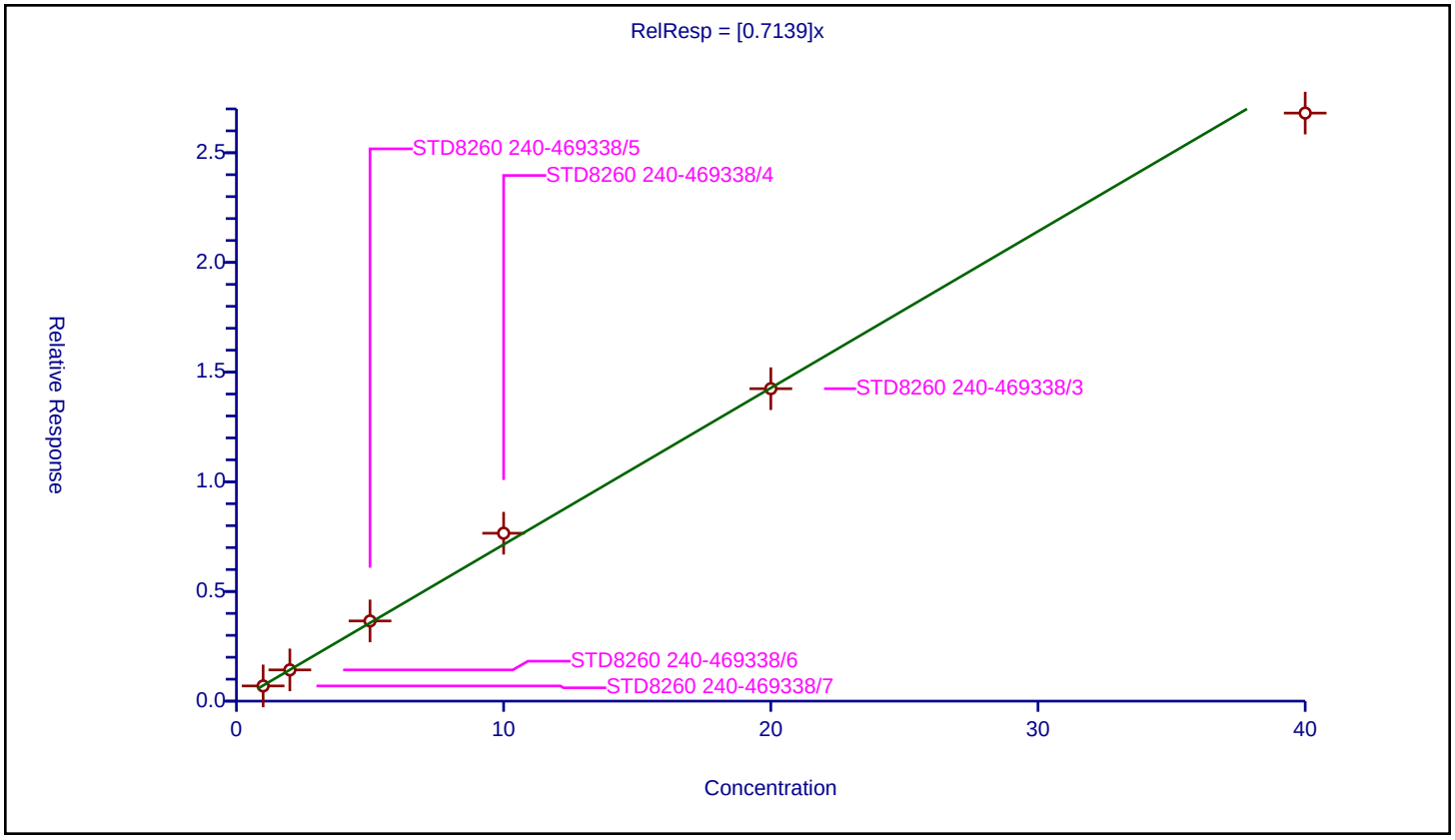
Curve Coefficients

Intercept:	0
Slope:	0.7139

Error Coefficients

Standard Error:	957000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.692449	20.0	1237666.0	0.692449	Y
2	STD8260 240-469338/6	2.0	1.423791	20.0	1194740.0	0.711895	Y
3	STD8260 240-469338/5	5.0	3.655062	20.0	1222644.0	0.731012	Y
4	STD8260 240-469338/4	10.0	7.65494	20.0	1164516.0	0.765494	Y
5	STD8260 240-469338/3	20.0	14.244076	20.0	1252890.0	0.712204	Y
6	STD8260 240-469338/2	40.0	26.809183	20.0	1401011.0	0.67023	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

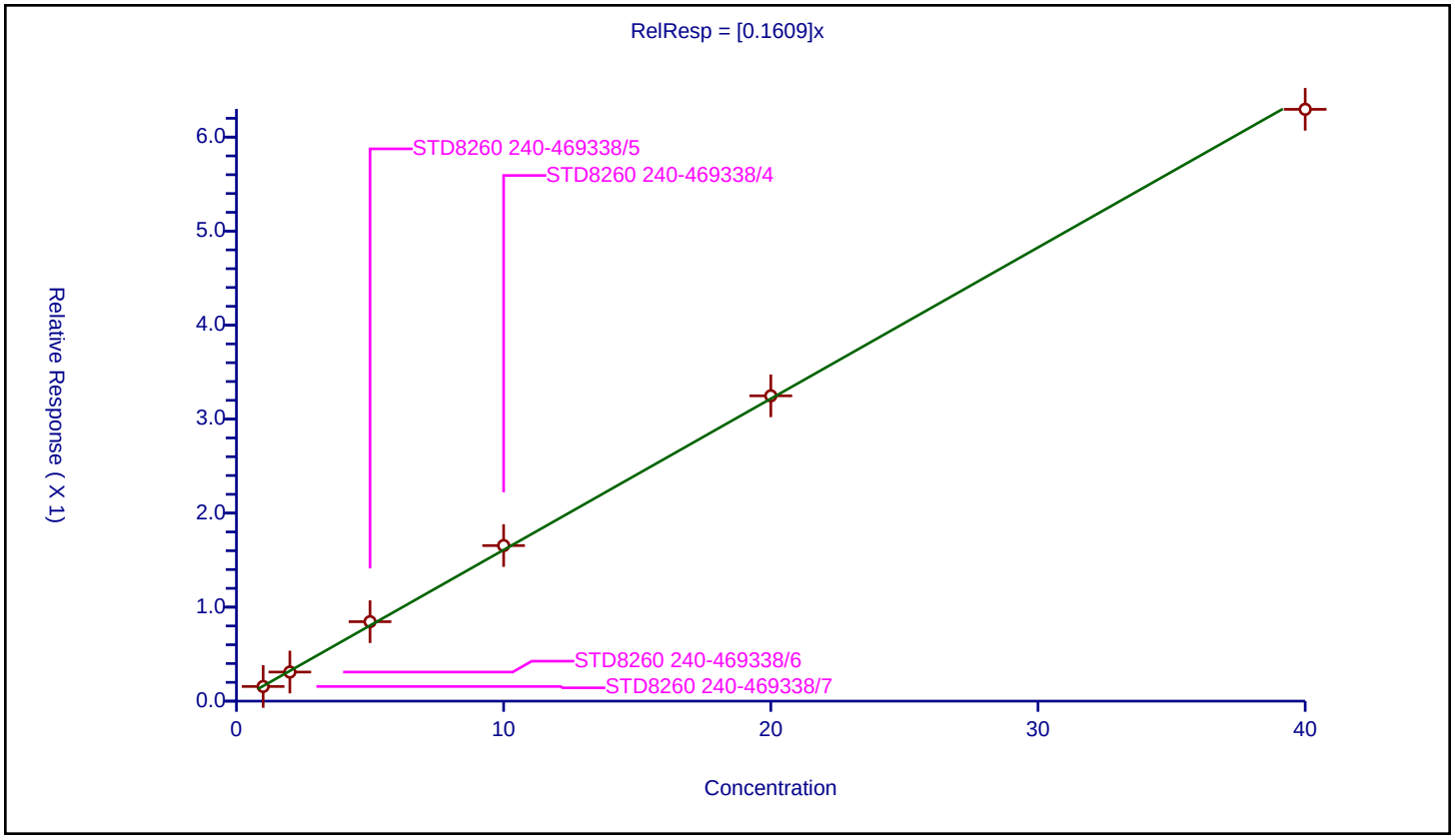
Curve Coefficients

Intercept:	0
Slope:	0.1609

Error Coefficients

Standard Error:	223000
Relative Standard Error:	3.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.156052	20.0	1237666.0	0.156052	Y
2	STD8260 240-469338/6	2.0	0.309624	20.0	1194740.0	0.154812	Y
3	STD8260 240-469338/5	5.0	0.845152	20.0	1222644.0	0.16903	Y
4	STD8260 240-469338/4	10.0	1.655108	20.0	1164516.0	0.165511	Y
5	STD8260 240-469338/3	20.0	3.247899	20.0	1252890.0	0.162395	Y
6	STD8260 240-469338/2	40.0	6.295568	20.0	1401011.0	0.157389	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

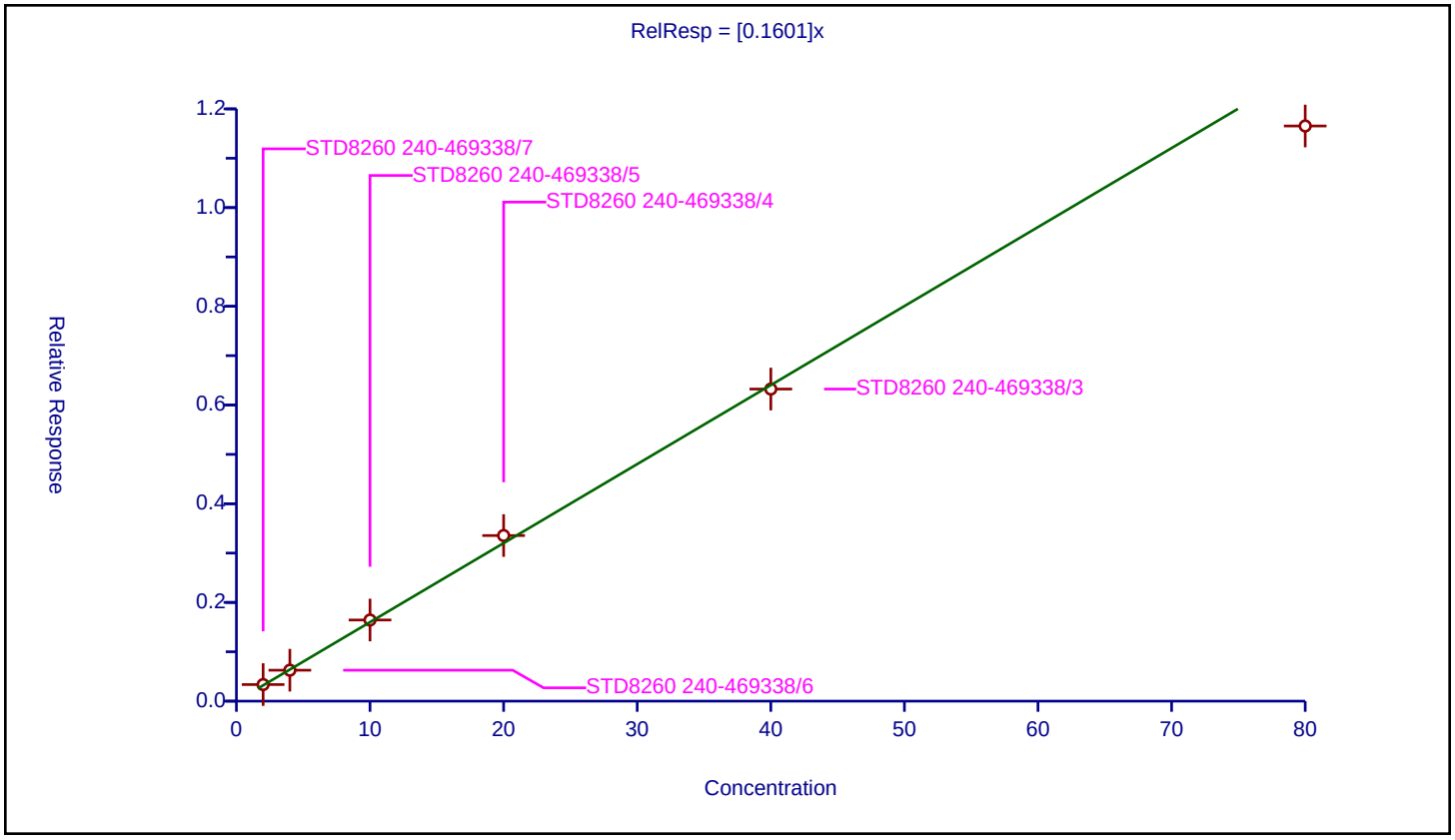
Curve Coefficients

Intercept:	0
Slope:	0.1601

Error Coefficients

Standard Error:	418000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.335713	20.0	1237666.0	0.167856	Y
2	STD8260 240-469338/6	4.0	0.626998	20.0	1194740.0	0.15675	Y
3	STD8260 240-469338/5	10.0	1.644109	20.0	1222644.0	0.164411	Y
4	STD8260 240-469338/4	20.0	3.355162	20.0	1164516.0	0.167758	Y
5	STD8260 240-469338/3	40.0	6.323141	20.0	1252890.0	0.158079	Y
6	STD8260 240-469338/2	80.0	11.65347	20.0	1401011.0	0.145668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

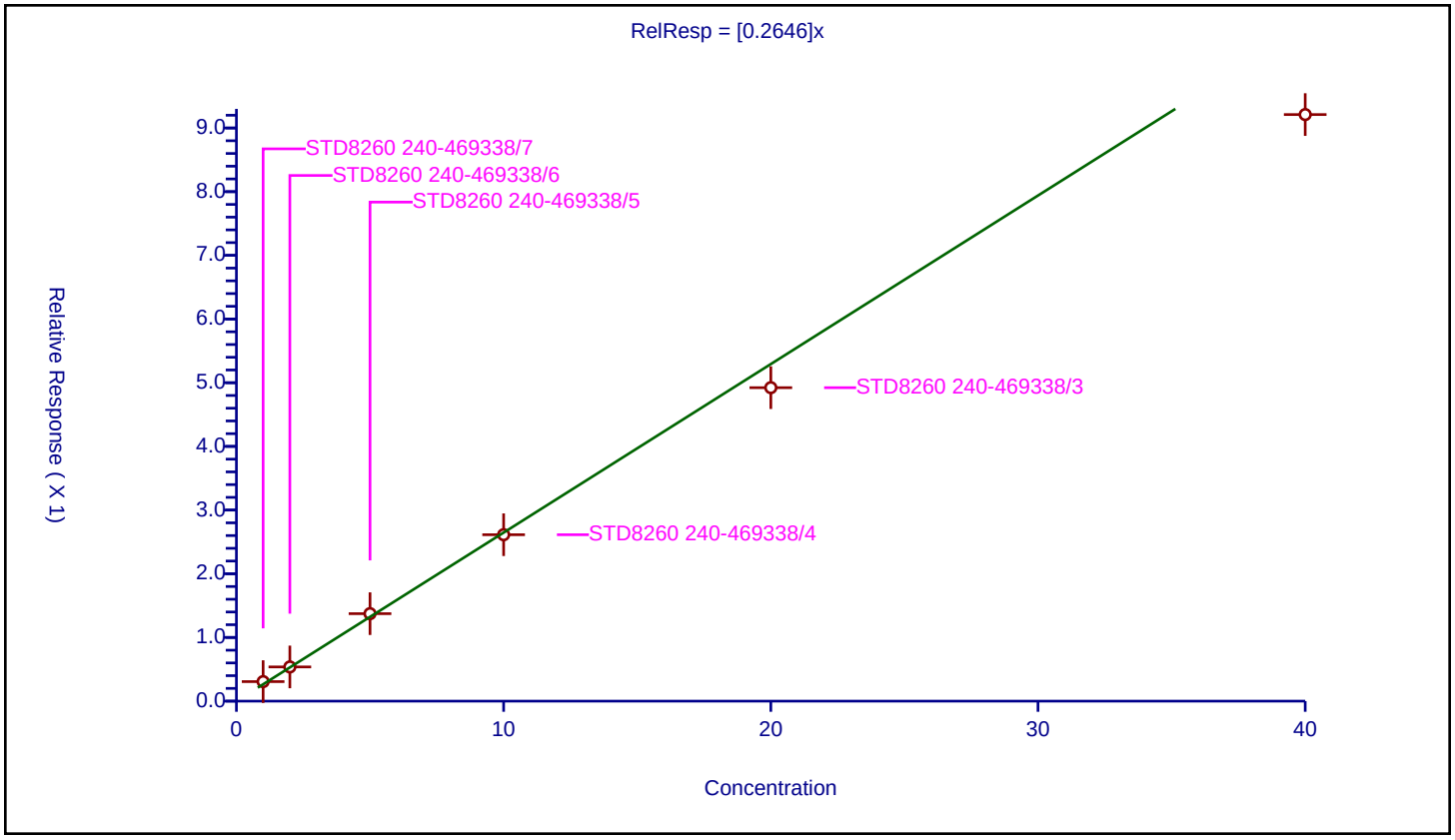
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	330000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306868	20.0	1237666.0	0.306868	Y
2	STD8260 240-469338/6	2.0	0.537071	20.0	1194740.0	0.268535	Y
3	STD8260 240-469338/5	5.0	1.373859	20.0	1222644.0	0.274772	Y
4	STD8260 240-469338/4	10.0	2.613257	20.0	1164516.0	0.261326	Y
5	STD8260 240-469338/3	20.0	4.922523	20.0	1252890.0	0.246126	Y
6	STD8260 240-469338/2	40.0	9.210848	20.0	1401011.0	0.230271	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

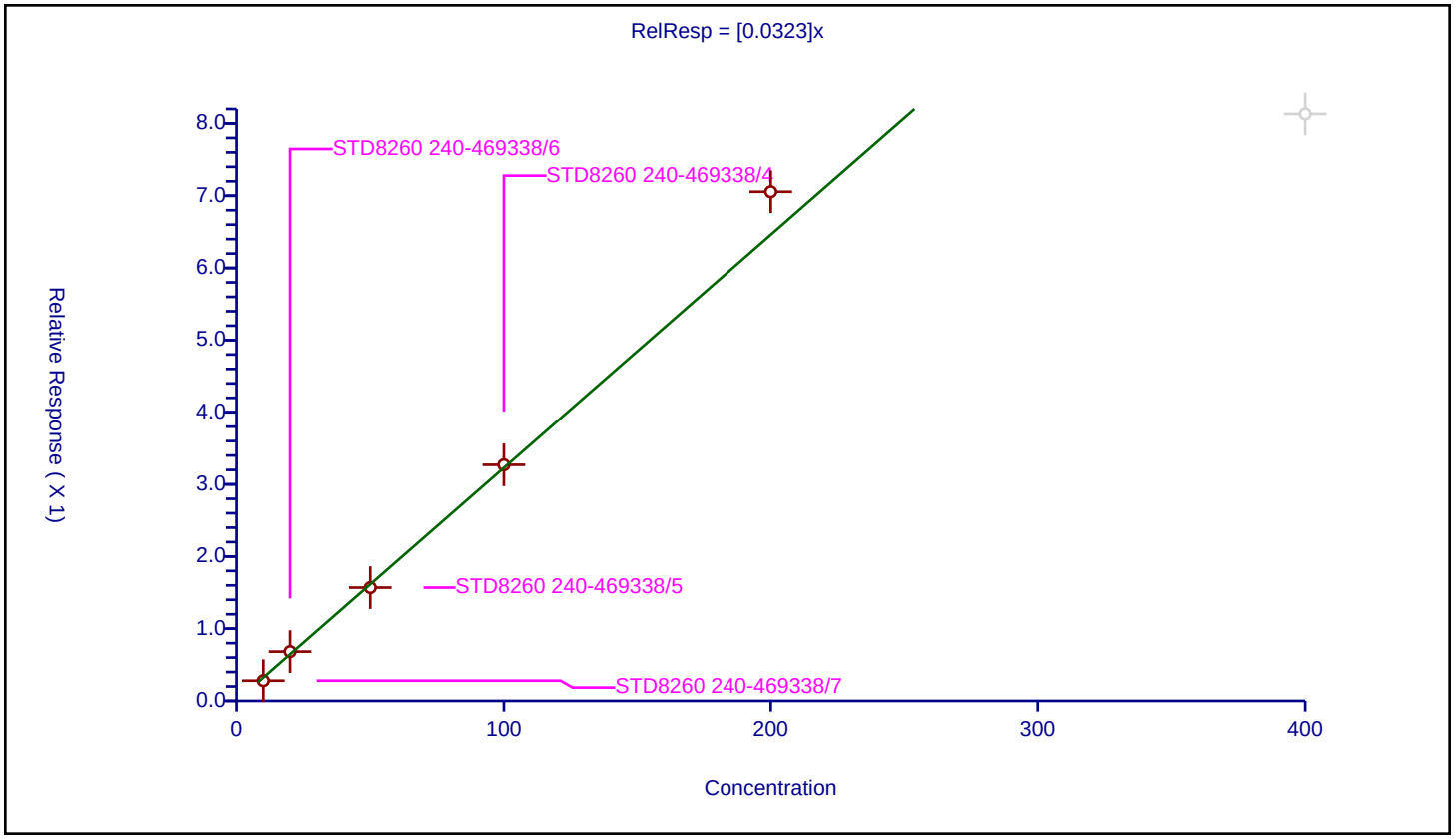
Curve Coefficients

Intercept:	0
Slope:	0.0323

Error Coefficients

Standard Error:	246000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.279769	20.0	1237666.0	0.027977	Y
2	STD8260 240-469338/6	20.0	0.68291	20.0	1194740.0	0.034146	Y
3	STD8260 240-469338/5	50.0	1.569435	20.0	1222644.0	0.031389	Y
4	STD8260 240-469338/4	100.0	3.271179	20.0	1164516.0	0.032712	Y
5	STD8260 240-469338/3	200.0	7.055639	20.0	1252890.0	0.035278	Y
6	STD8260 240-469338/2	400.0	8.131785	20.0	1401011.0	0.020329	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

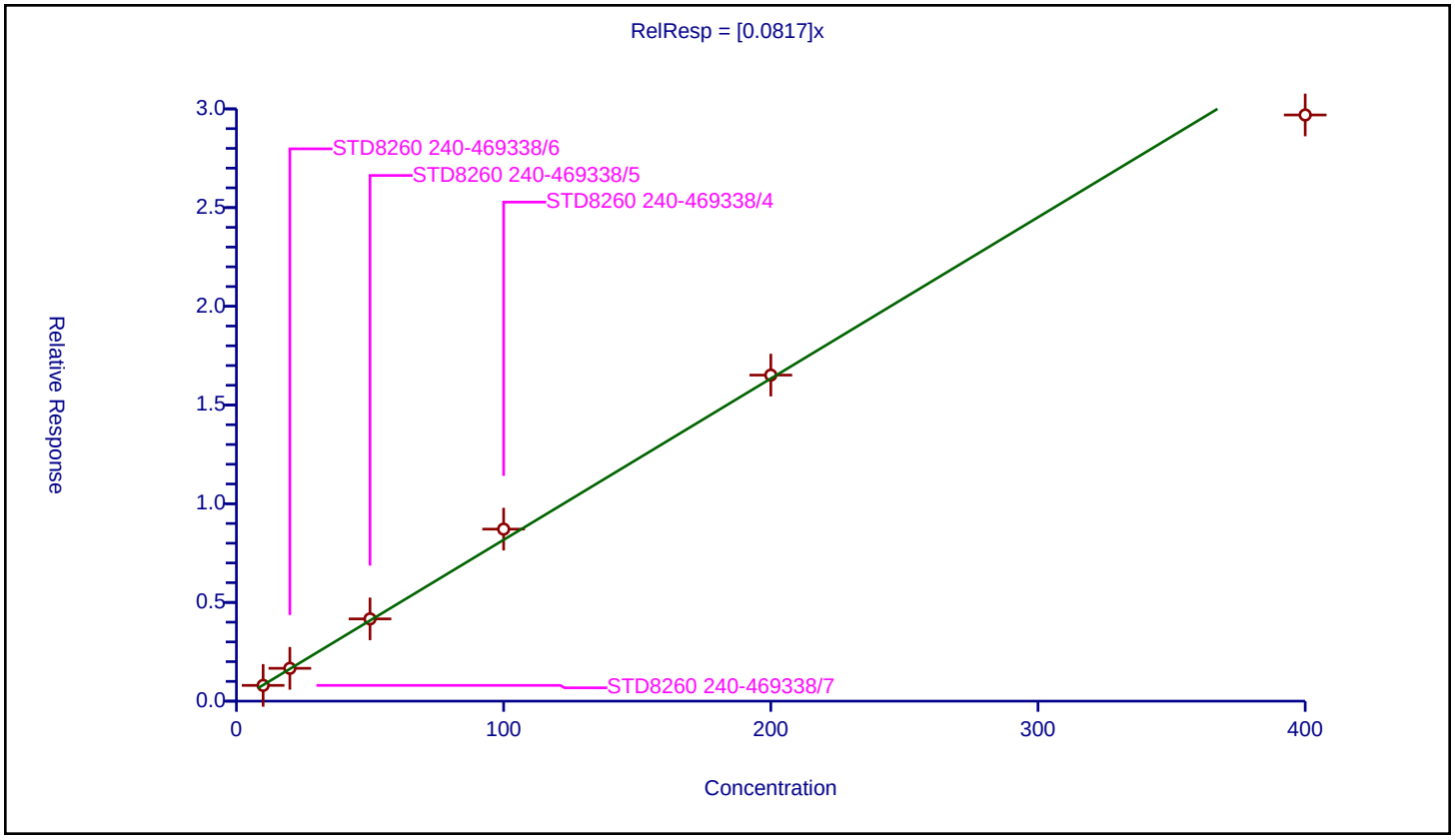
Curve Coefficients

Intercept:	0
Slope:	0.0817

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.798067	20.0	1237666.0	0.079807	Y
2	STD8260 240-469338/6	20.0	1.662755	20.0	1194740.0	0.083138	Y
3	STD8260 240-469338/5	50.0	4.167362	20.0	1222644.0	0.083347	Y
4	STD8260 240-469338/4	100.0	8.712736	20.0	1164516.0	0.087127	Y
5	STD8260 240-469338/3	200.0	16.515113	20.0	1252890.0	0.082576	Y
6	STD8260 240-469338/2	400.0	29.692429	20.0	1401011.0	0.074231	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

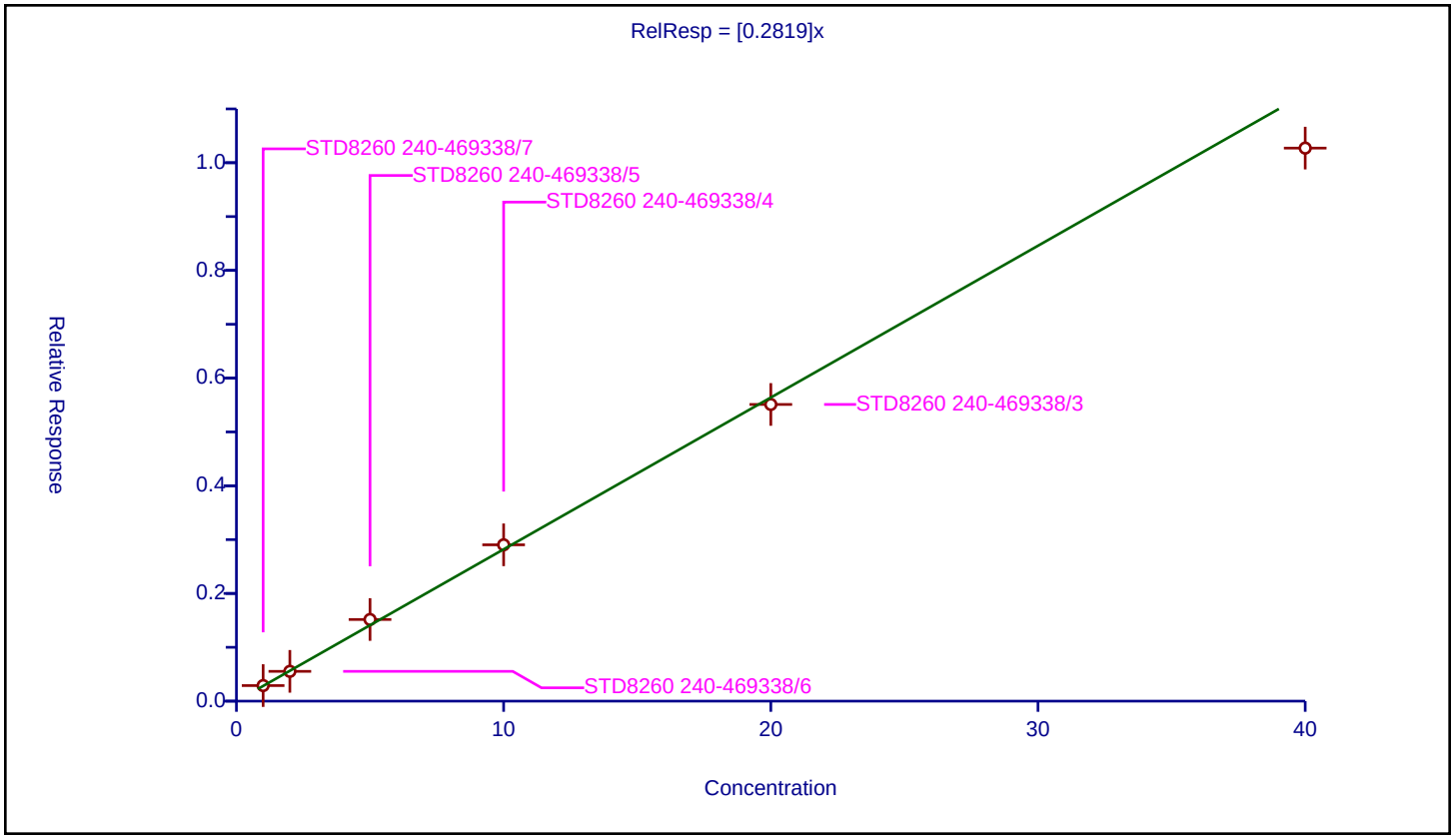
Curve Coefficients

Intercept:	0
Slope:	0.2819

Error Coefficients

Standard Error:	368000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.28906	20.0	1237666.0	0.28906	Y
2	STD8260 240-469338/6	2.0	0.553342	20.0	1194740.0	0.276671	Y
3	STD8260 240-469338/5	5.0	1.51632	20.0	1222644.0	0.303264	Y
4	STD8260 240-469338/4	10.0	2.903507	20.0	1164516.0	0.290351	Y
5	STD8260 240-469338/3	20.0	5.510699	20.0	1252890.0	0.275535	Y
6	STD8260 240-469338/2	40.0	10.271782	20.0	1401011.0	0.256795	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

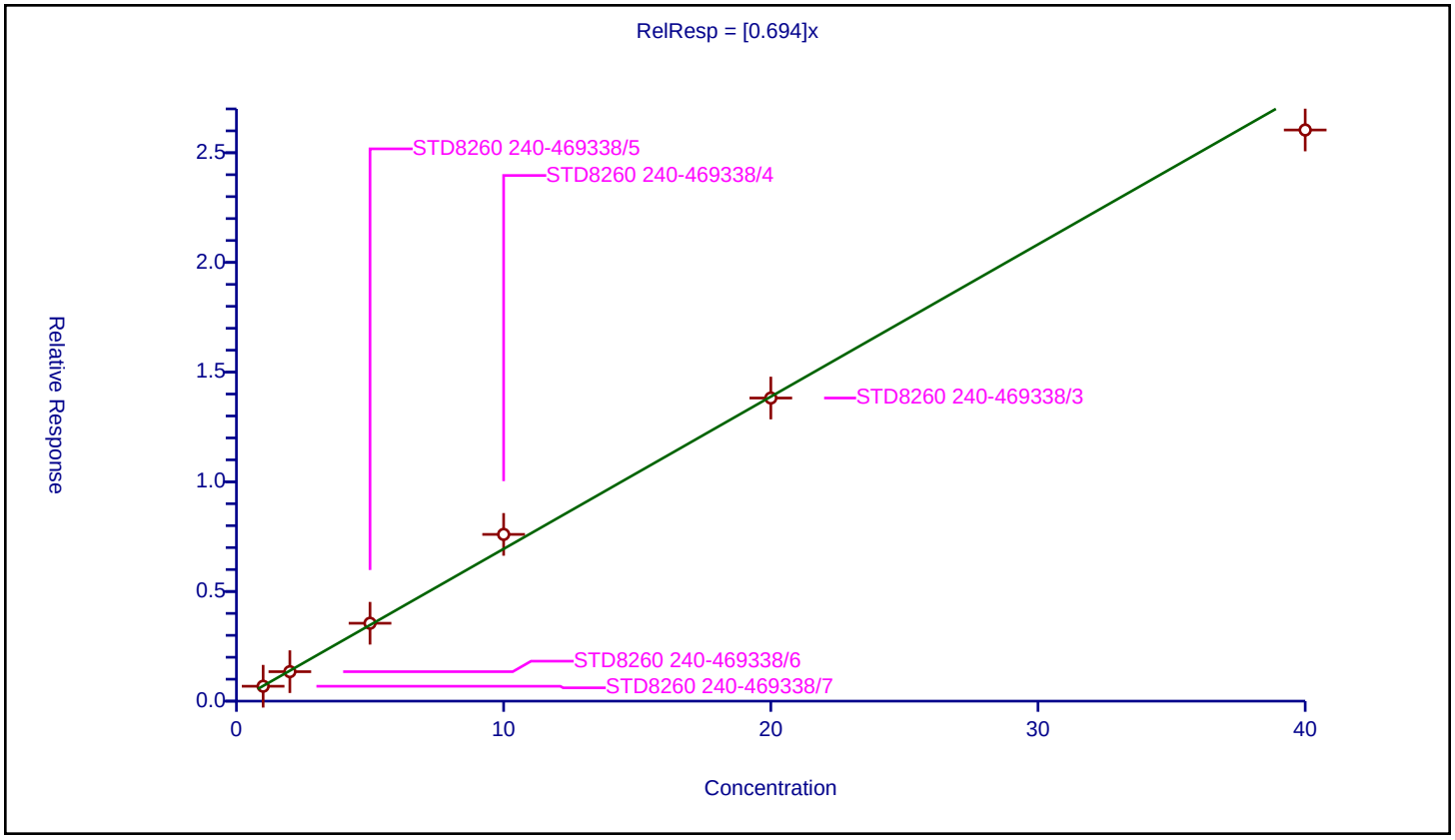
Curve Coefficients

Intercept:	0
Slope:	0.694

Error Coefficients

Standard Error:	930000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.679909	20.0	1237666.0	0.679909	Y
2	STD8260 240-469338/6	2.0	1.344108	20.0	1194740.0	0.672054	Y
3	STD8260 240-469338/5	5.0	3.551565	20.0	1222644.0	0.710313	Y
4	STD8260 240-469338/4	10.0	7.601424	20.0	1164516.0	0.760142	Y
5	STD8260 240-469338/3	20.0	13.81826	20.0	1252890.0	0.690913	Y
6	STD8260 240-469338/2	40.0	26.038654	20.0	1401011.0	0.650966	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

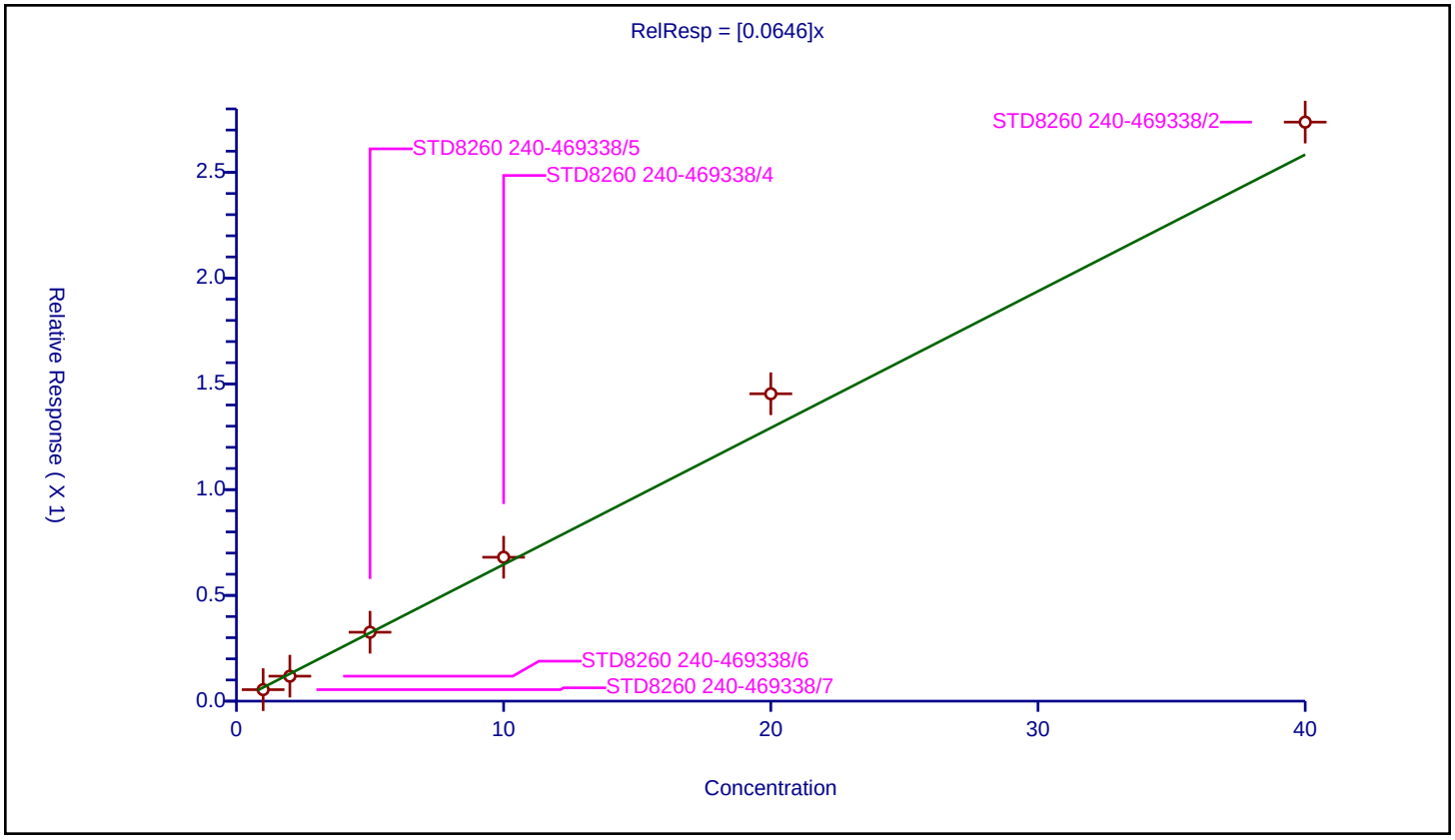
Curve Coefficients

Intercept:	0
Slope:	0.0646

Error Coefficients

Standard Error:	97000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.05428	20.0	1237666.0	0.05428	Y
2	STD8260 240-469338/6	2.0	0.118034	20.0	1194740.0	0.059017	Y
3	STD8260 240-469338/5	5.0	0.325835	20.0	1222644.0	0.065167	Y
4	STD8260 240-469338/4	10.0	0.680283	20.0	1164516.0	0.068028	Y
5	STD8260 240-469338/3	20.0	1.453136	20.0	1252890.0	0.072657	Y
6	STD8260 240-469338/2	40.0	2.73748	20.0	1401011.0	0.068437	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

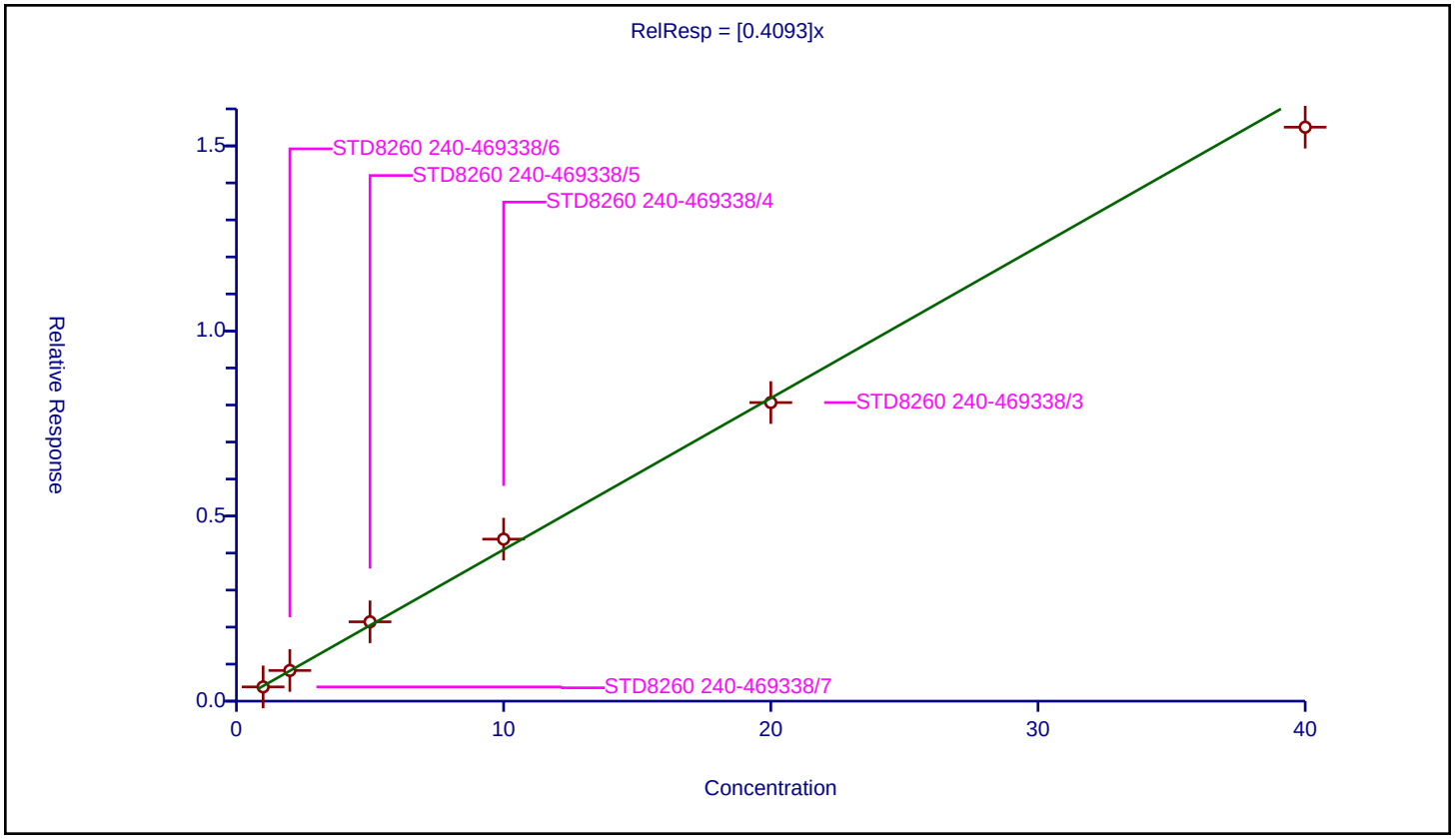
Curve Coefficients

Intercept:	0
Slope:	0.4093

Error Coefficients

Standard Error:	551000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.384369	20.0	1237666.0	0.384369	Y
2	STD8260 240-469338/6	2.0	0.82823	20.0	1194740.0	0.414115	Y
3	STD8260 240-469338/5	5.0	2.143437	20.0	1222644.0	0.428687	Y
4	STD8260 240-469338/4	10.0	4.376805	20.0	1164516.0	0.437681	Y
5	STD8260 240-469338/3	20.0	8.066598	20.0	1252890.0	0.40333	Y
6	STD8260 240-469338/2	40.0	15.505788	20.0	1401011.0	0.387645	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

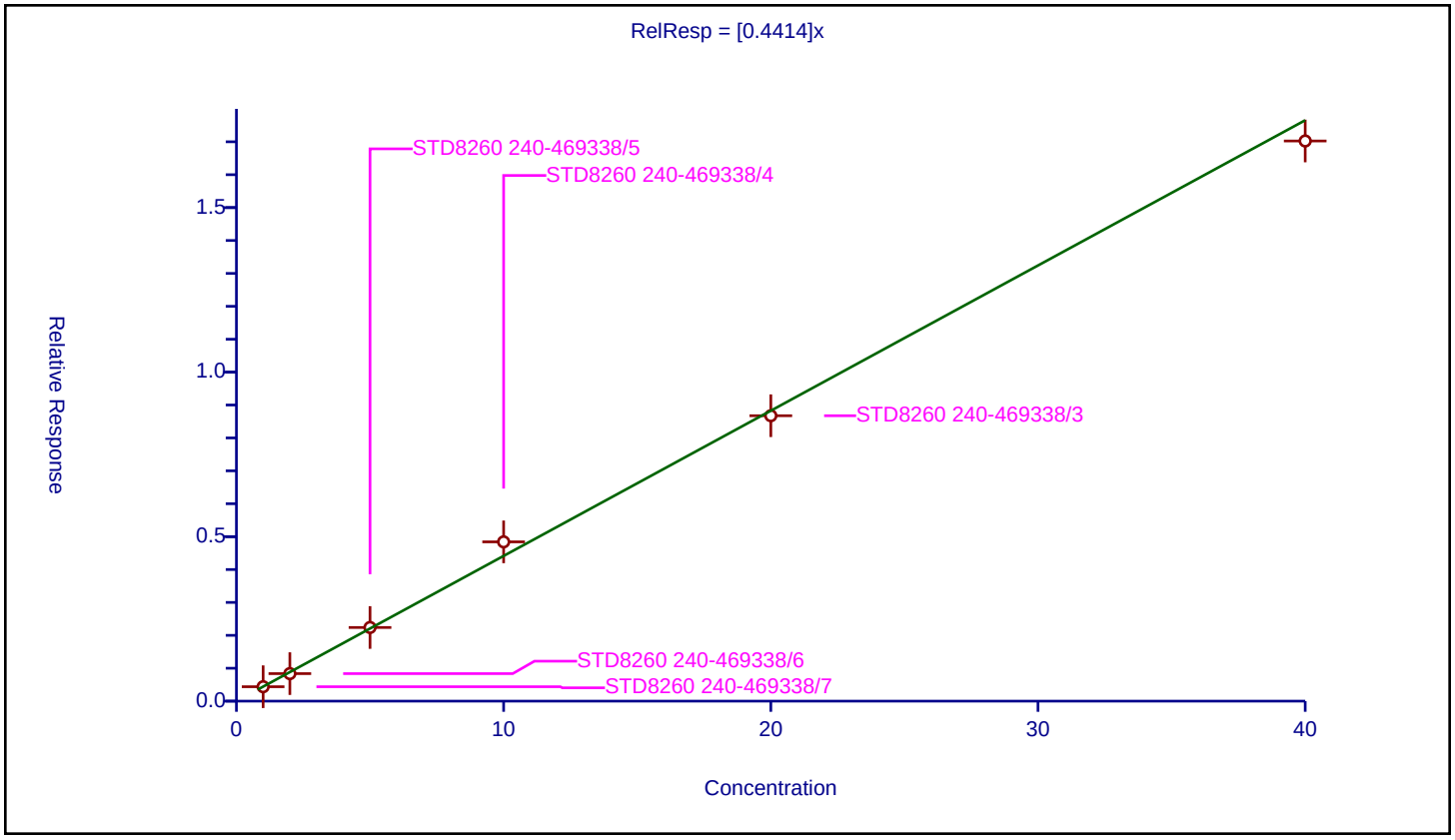
Curve Coefficients

Intercept:	0
Slope:	0.4414

Error Coefficients

Standard Error:	603000
Relative Standard Error:	5.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.438519	20.0	1237666.0	0.438519	Y
2	STD8260 240-469338/6	2.0	0.836902	20.0	1194740.0	0.418451	Y
3	STD8260 240-469338/5	5.0	2.238918	20.0	1222644.0	0.447784	Y
4	STD8260 240-469338/4	10.0	4.840775	20.0	1164516.0	0.484078	Y
5	STD8260 240-469338/3	20.0	8.674824	20.0	1252890.0	0.433741	Y
6	STD8260 240-469338/2	40.0	17.024592	20.0	1401011.0	0.425615	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

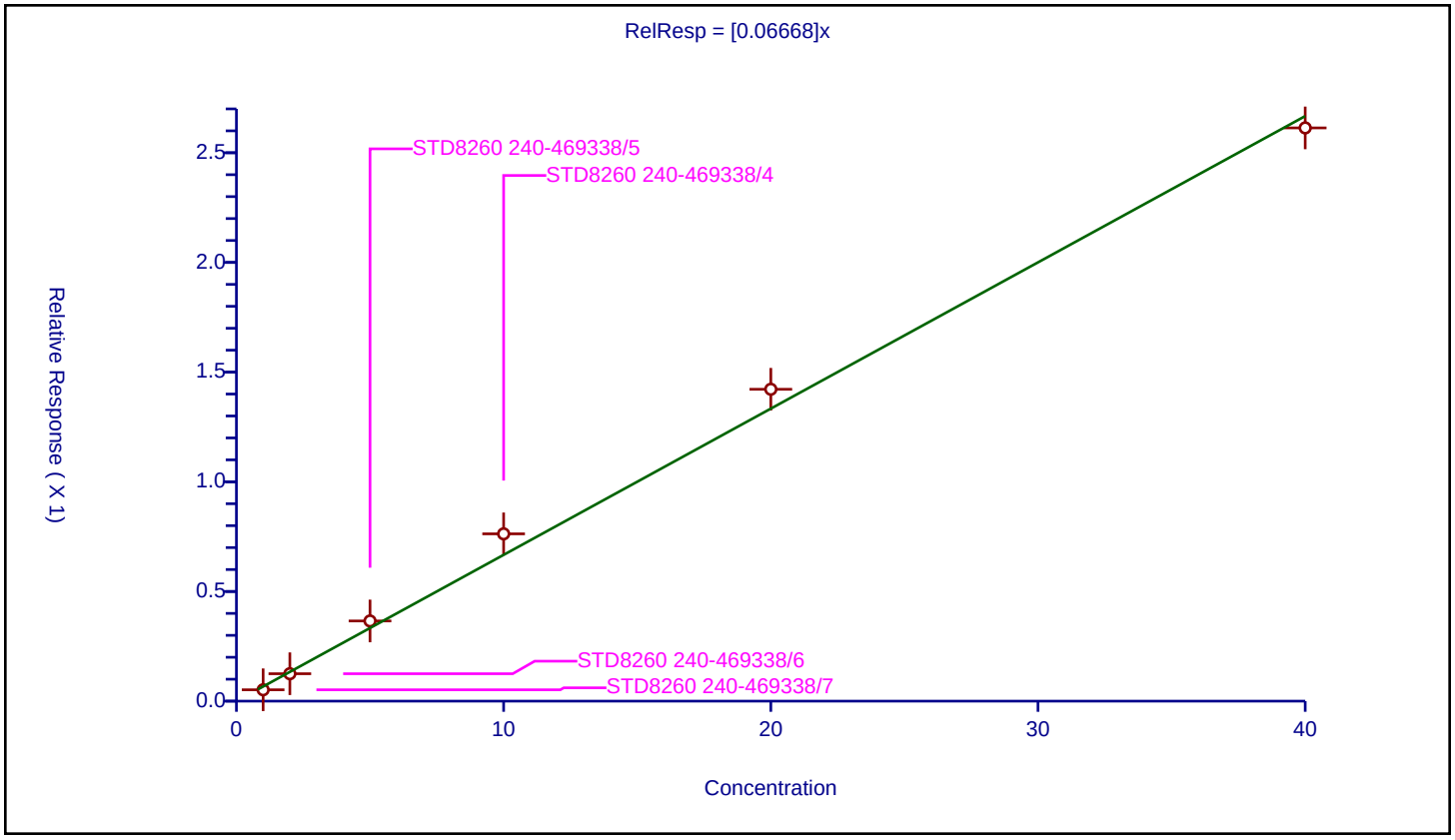
Curve Coefficients

Intercept:	0
Slope:	0.06668

Error Coefficients

Standard Error:	93800
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.051775	20.0	1237666.0	0.051775	Y
2	STD8260 240-469338/6	2.0	0.124948	20.0	1194740.0	0.062474	Y
3	STD8260 240-469338/5	5.0	0.365601	20.0	1222644.0	0.07312	Y
4	STD8260 240-469338/4	10.0	0.762737	20.0	1164516.0	0.076274	Y
5	STD8260 240-469338/3	20.0	1.421849	20.0	1252890.0	0.071092	Y
6	STD8260 240-469338/2	40.0	2.613299	20.0	1401011.0	0.065332	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

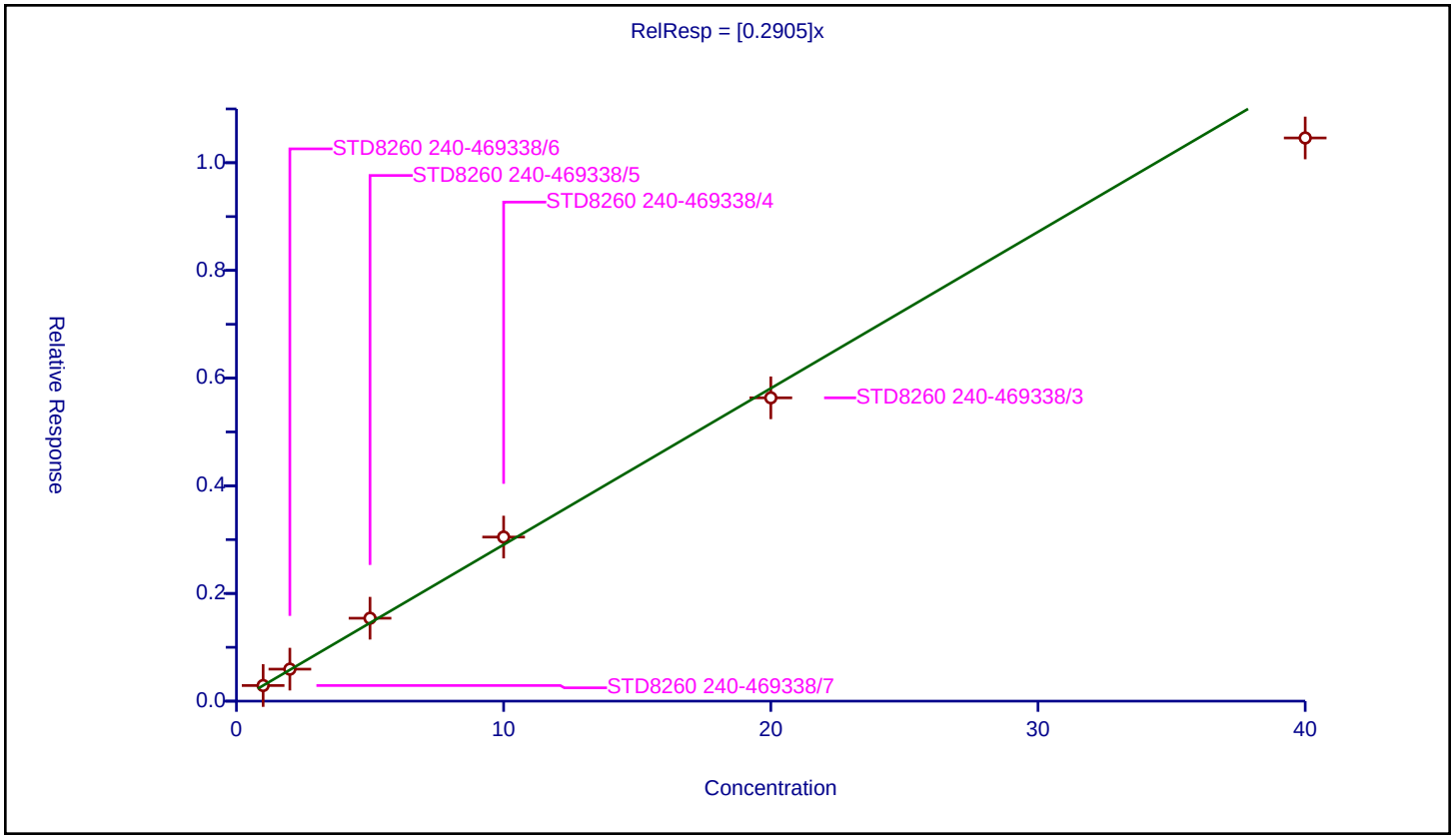
Curve Coefficients

Intercept:	0
Slope:	0.2905

Error Coefficients

Standard Error:	375000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.289997	20.0	1237666.0	0.289997	Y
2	STD8260 240-469338/6	2.0	0.594339	20.0	1194740.0	0.297169	Y
3	STD8260 240-469338/5	5.0	1.540138	20.0	1222644.0	0.308028	Y
4	STD8260 240-469338/4	10.0	3.047652	20.0	1164516.0	0.304765	Y
5	STD8260 240-469338/3	20.0	5.633455	20.0	1252890.0	0.281673	Y
6	STD8260 240-469338/2	40.0	10.460517	20.0	1401011.0	0.261513	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

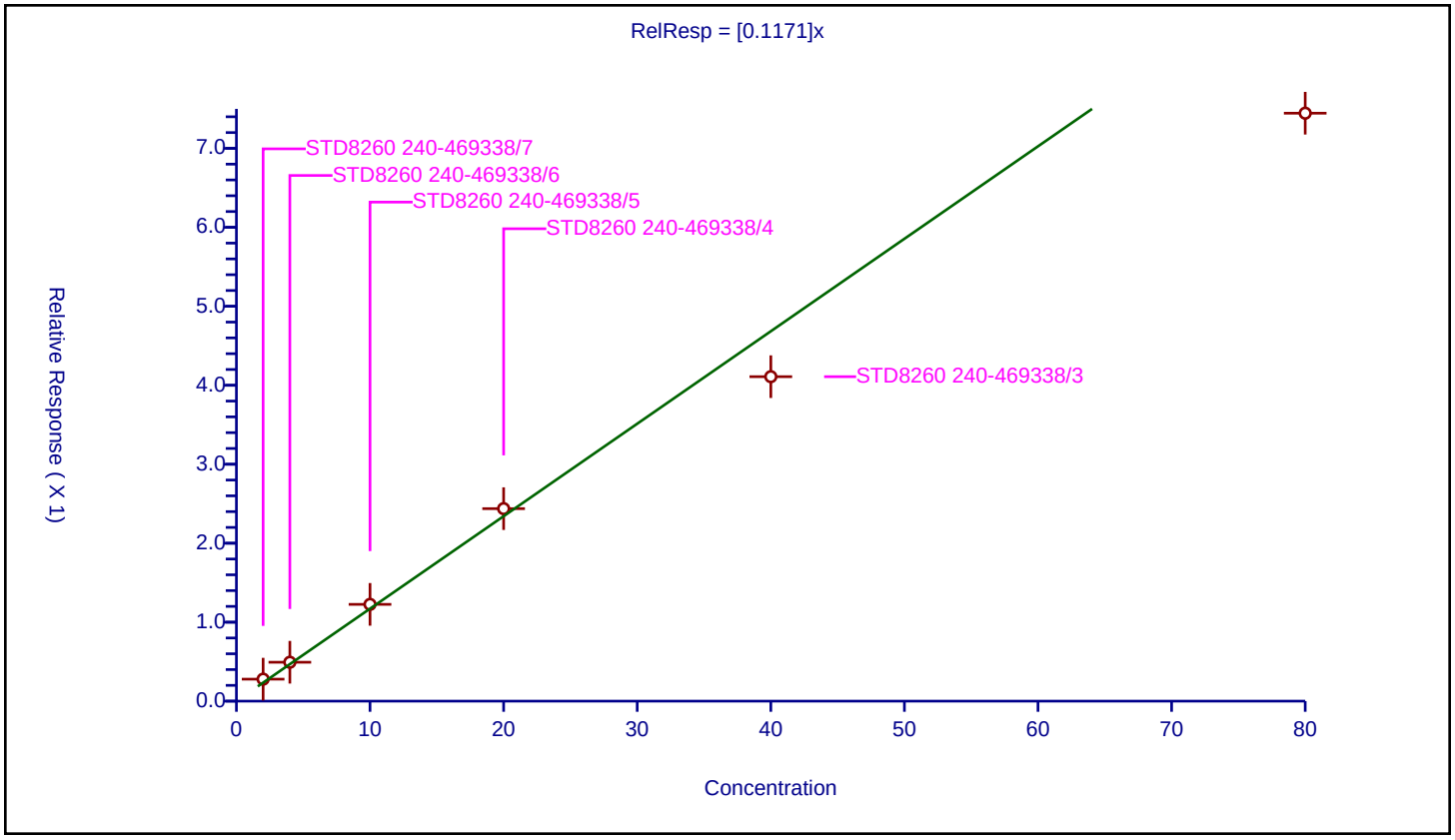
Curve Coefficients

Intercept:	0
Slope:	0.1171

Error Coefficients

Standard Error:	270000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.278557	20.0	1237666.0	0.139278	Y
2	STD8260 240-469338/6	4.0	0.492442	20.0	1194740.0	0.12311	Y
3	STD8260 240-469338/5	10.0	1.225426	20.0	1222644.0	0.122543	Y
4	STD8260 240-469338/4	20.0	2.437614	20.0	1164516.0	0.121881	Y
5	STD8260 240-469338/3	40.0	4.108836	20.0	1252890.0	0.102721	Y
6	STD8260 240-469338/2	80.0	7.445381	20.0	1401011.0	0.093067	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

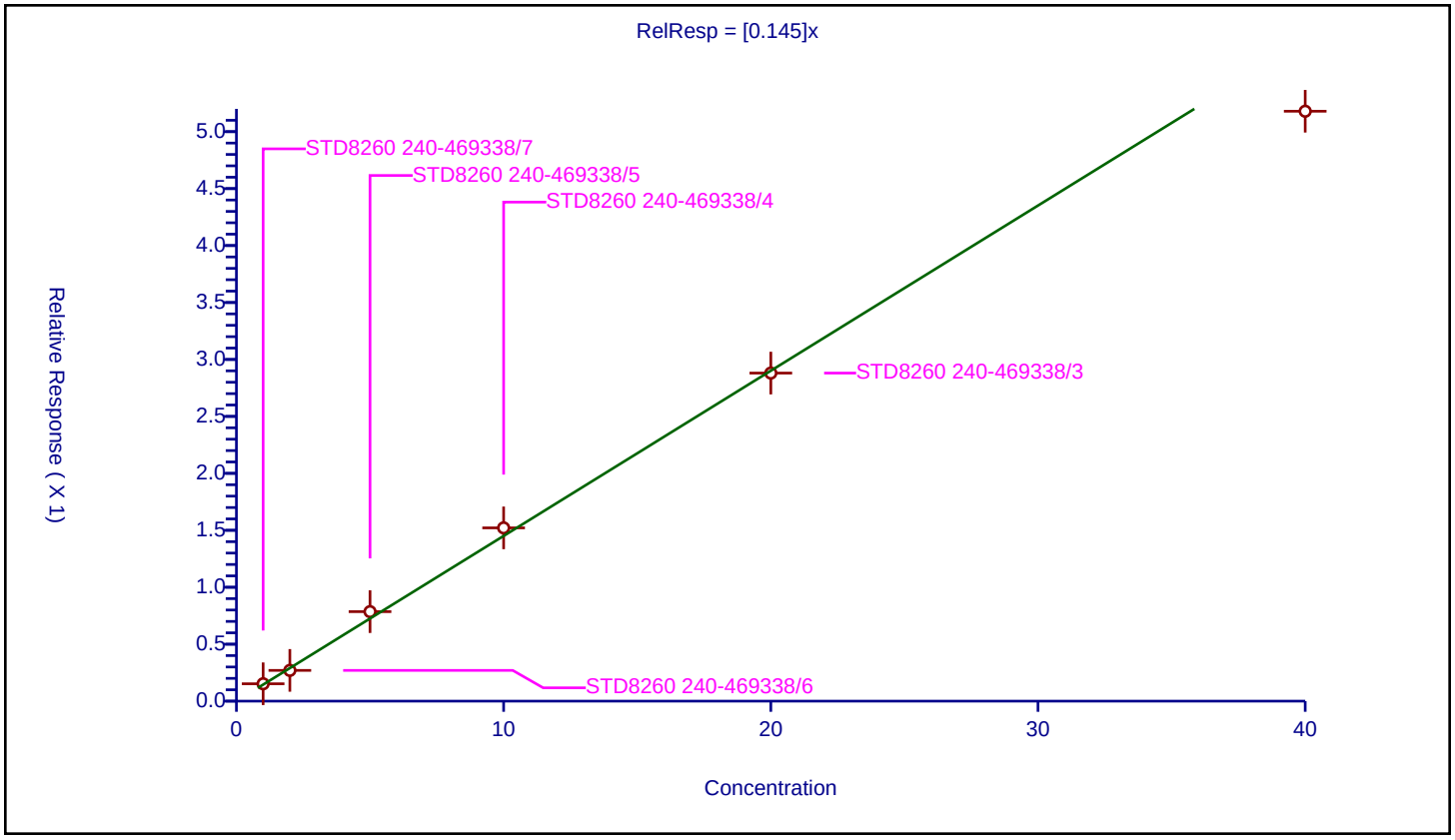
Curve Coefficients

Intercept:	0
Slope:	0.145

Error Coefficients

Standard Error:	187000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.152513	20.0	1237666.0	0.152513	Y
2	STD8260 240-469338/6	2.0	0.26995	20.0	1194740.0	0.134975	Y
3	STD8260 240-469338/5	5.0	0.785789	20.0	1222644.0	0.157158	Y
4	STD8260 240-469338/4	10.0	1.521387	20.0	1164516.0	0.152139	Y
5	STD8260 240-469338/3	20.0	2.880365	20.0	1252890.0	0.144018	Y
6	STD8260 240-469338/2	40.0	5.17936	20.0	1401011.0	0.129484	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

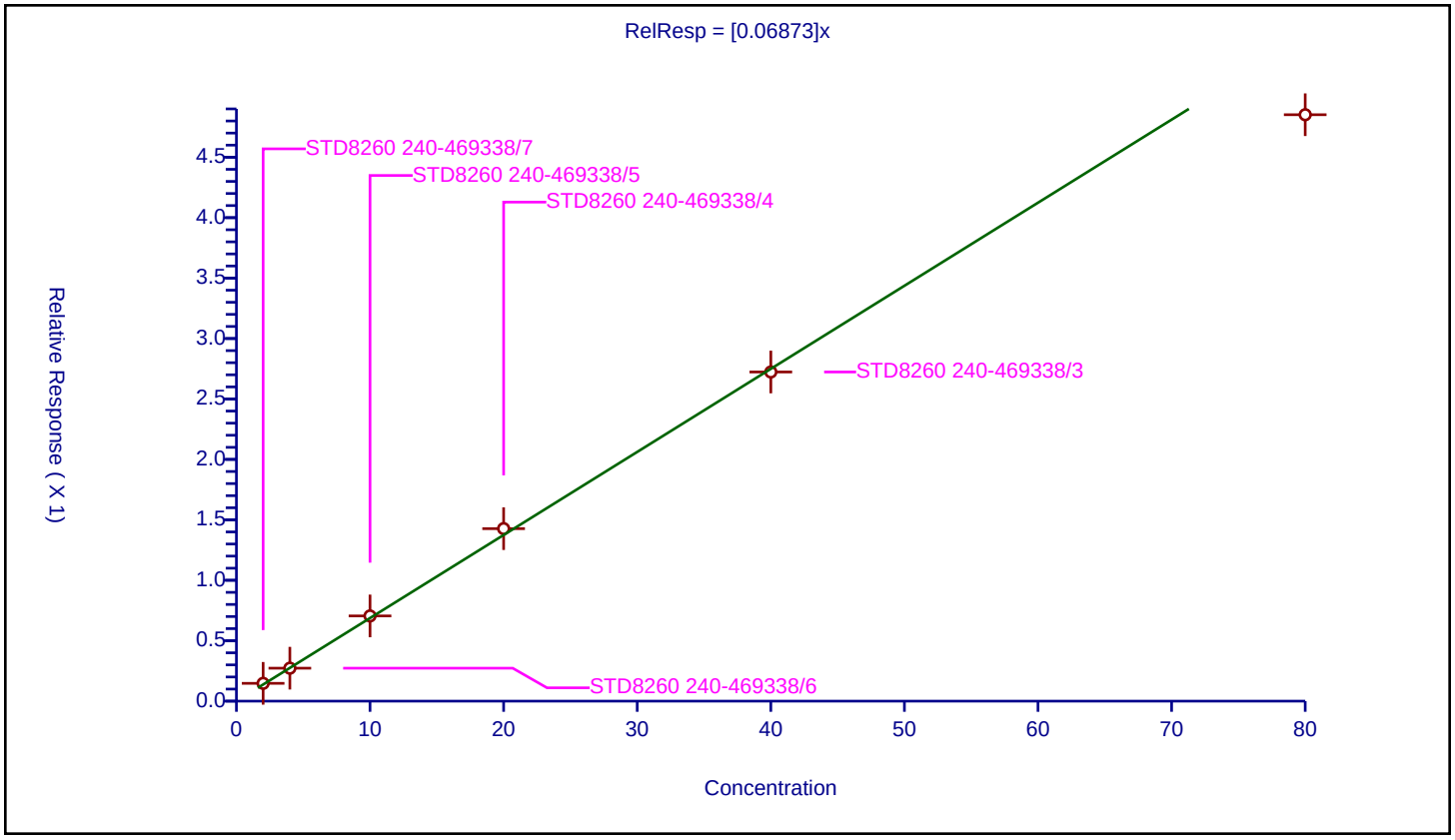
Curve Coefficients

Intercept:	0
Slope:	0.06873

Error Coefficients

Standard Error:	175000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.147277	20.0	1237666.0	0.073639	Y
2	STD8260 240-469338/6	4.0	0.272645	20.0	1194740.0	0.068161	Y
3	STD8260 240-469338/5	10.0	0.704931	20.0	1222644.0	0.070493	Y
4	STD8260 240-469338/4	20.0	1.427185	20.0	1164516.0	0.071359	Y
5	STD8260 240-469338/3	40.0	2.72324	20.0	1252890.0	0.068081	Y
6	STD8260 240-469338/2	80.0	4.851796	20.0	1401011.0	0.060647	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

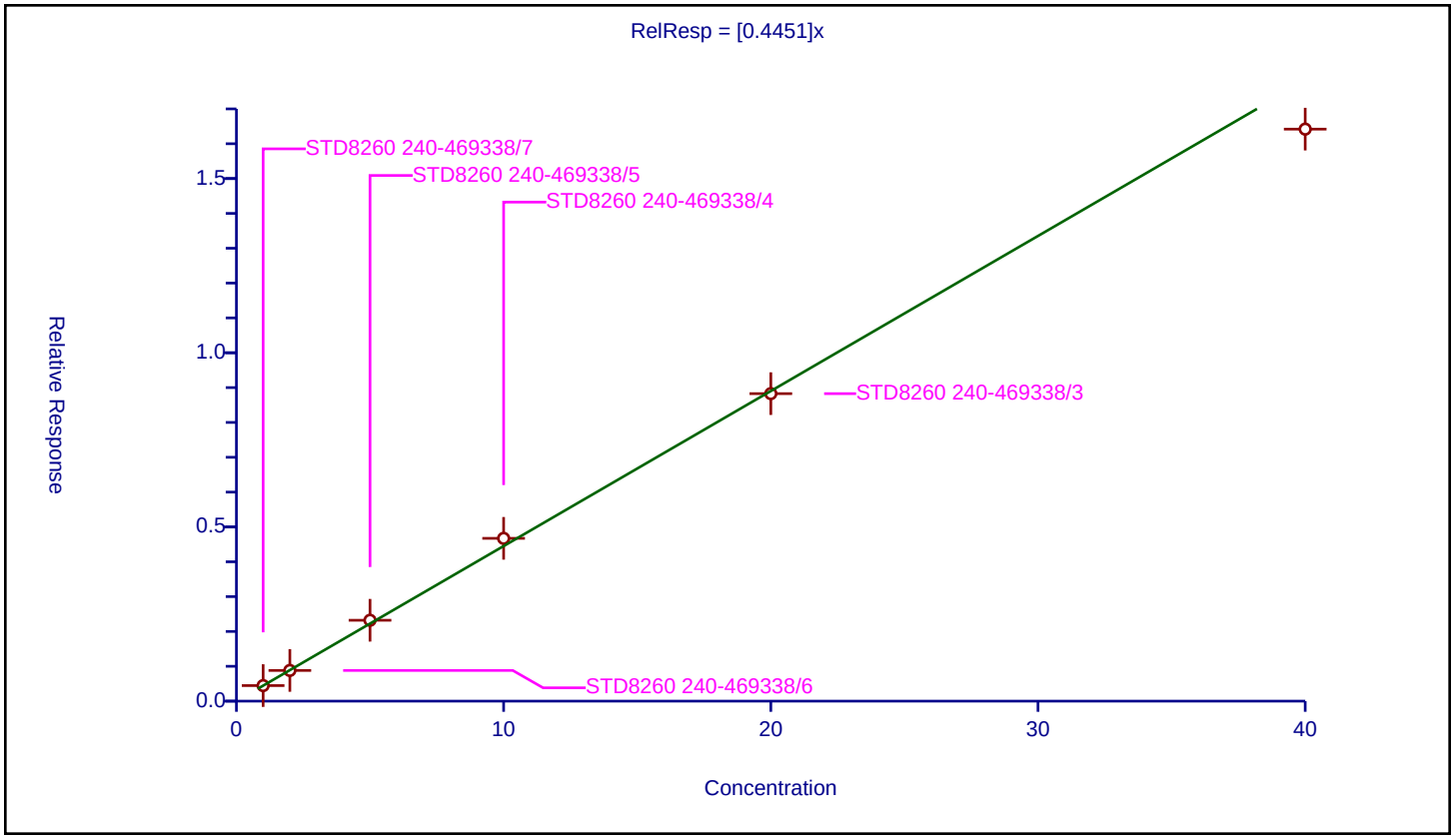
Curve Coefficients

Intercept:	0
Slope:	0.4451

Error Coefficients

Standard Error:	588000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.446469	20.0	1237666.0	0.446469	Y
2	STD8260 240-469338/6	2.0	0.881414	20.0	1194740.0	0.440707	Y
3	STD8260 240-469338/5	5.0	2.321412	20.0	1222644.0	0.464282	Y
4	STD8260 240-469338/4	10.0	4.672671	20.0	1164516.0	0.467267	Y
5	STD8260 240-469338/3	20.0	8.826856	20.0	1252890.0	0.441343	Y
6	STD8260 240-469338/2	40.0	16.418672	20.0	1401011.0	0.410467	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

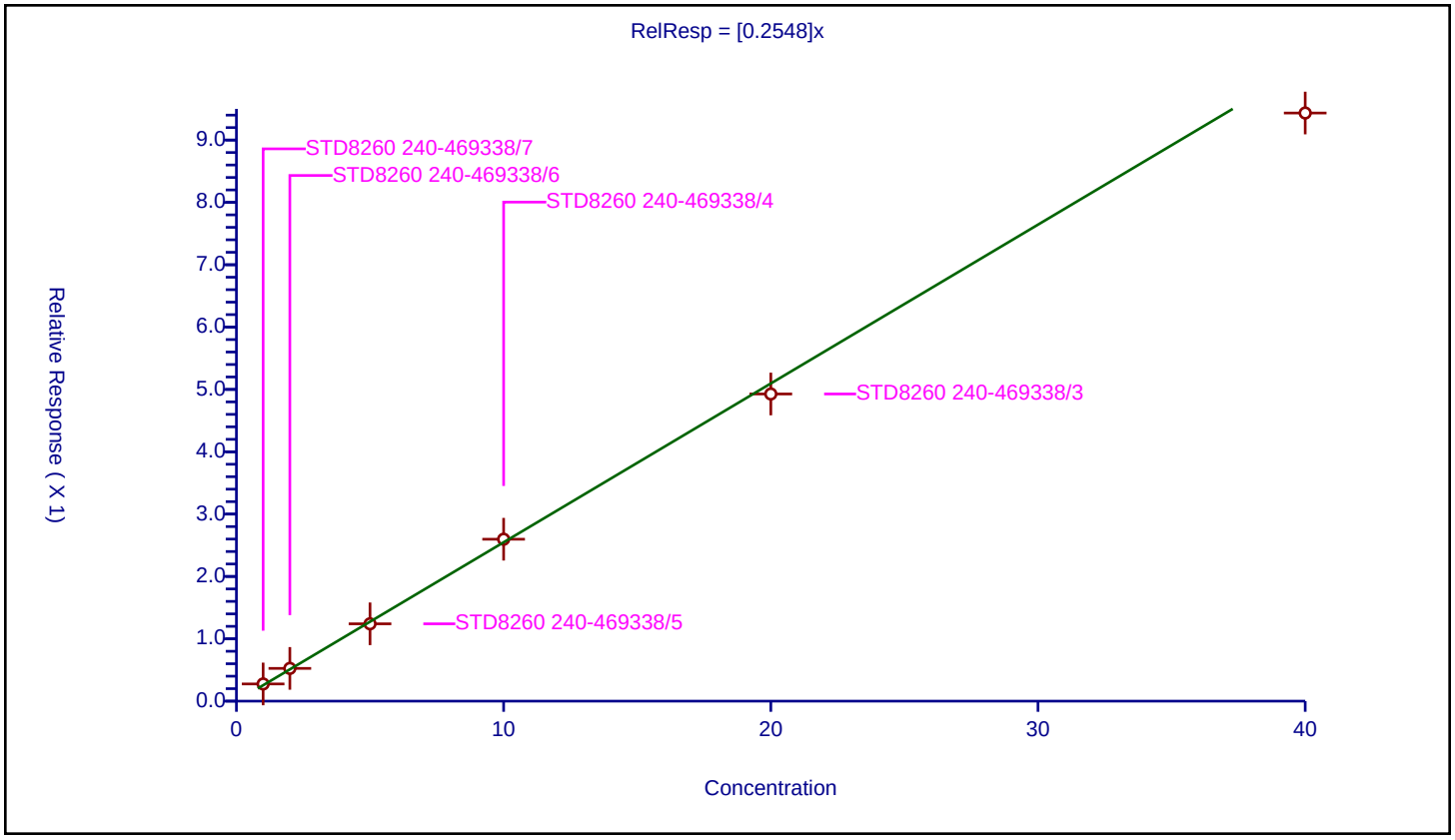
Curve Coefficients

Intercept:	0
Slope:	0.2548

Error Coefficients

Standard Error:	335000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.275939	20.0	1237666.0	0.275939	Y
2	STD8260 240-469338/6	2.0	0.525319	20.0	1194740.0	0.26266	Y
3	STD8260 240-469338/5	5.0	1.240655	20.0	1222644.0	0.248131	Y
4	STD8260 240-469338/4	10.0	2.597285	20.0	1164516.0	0.259729	Y
5	STD8260 240-469338/3	20.0	4.927073	20.0	1252890.0	0.246354	Y
6	STD8260 240-469338/2	40.0	9.433787	20.0	1401011.0	0.235845	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

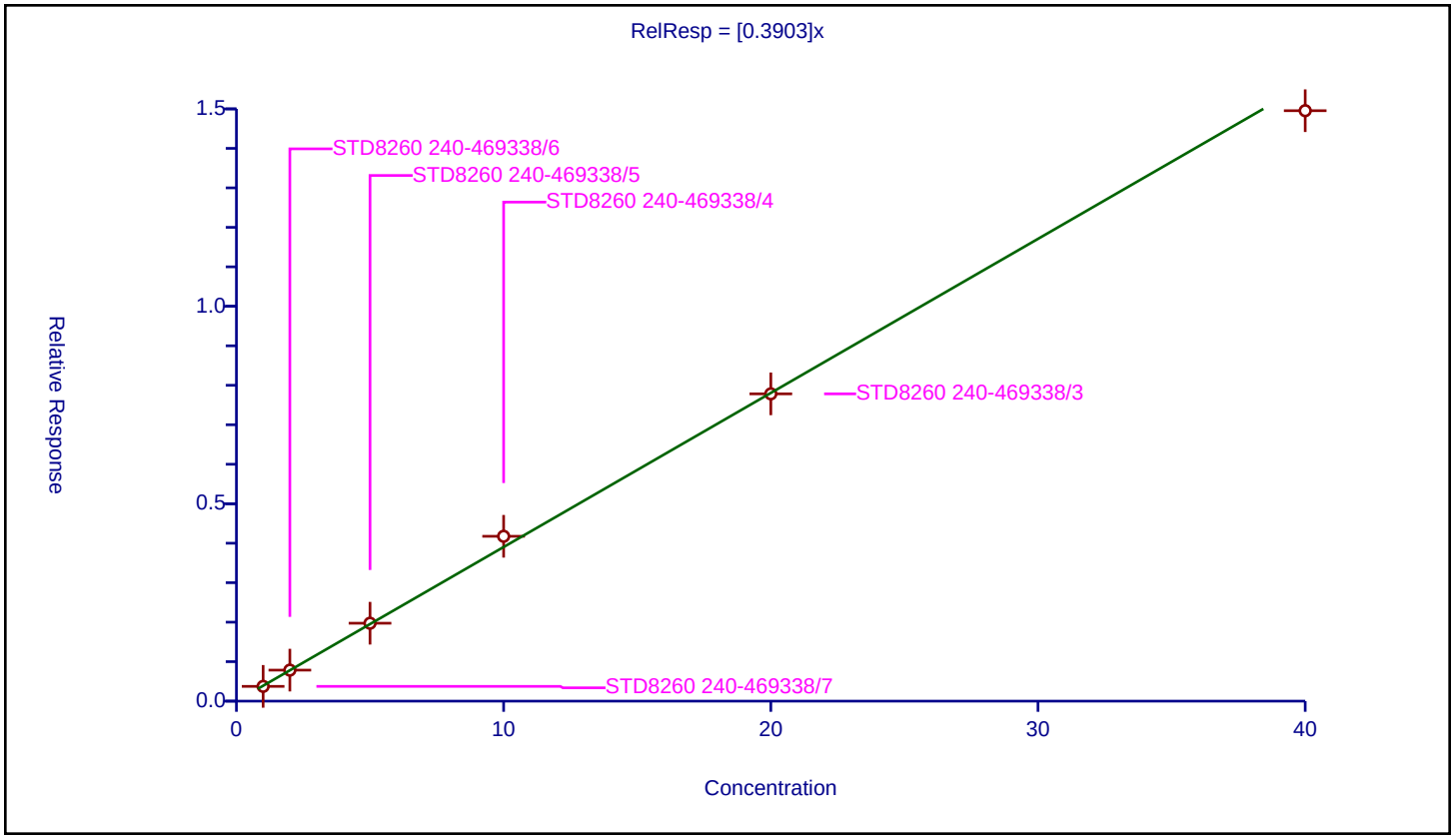
Curve Coefficients

Intercept:	0
Slope:	0.3903

Error Coefficients

Standard Error:	531000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373768	20.0	1237666.0	0.373768	Y
2	STD8260 240-469338/6	2.0	0.78556	20.0	1194740.0	0.39278	Y
3	STD8260 240-469338/5	5.0	1.973117	20.0	1222644.0	0.394623	Y
4	STD8260 240-469338/4	10.0	4.175469	20.0	1164516.0	0.417547	Y
5	STD8260 240-469338/3	20.0	7.782774	20.0	1252890.0	0.389139	Y
6	STD8260 240-469338/2	40.0	14.954244	20.0	1401011.0	0.373856	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

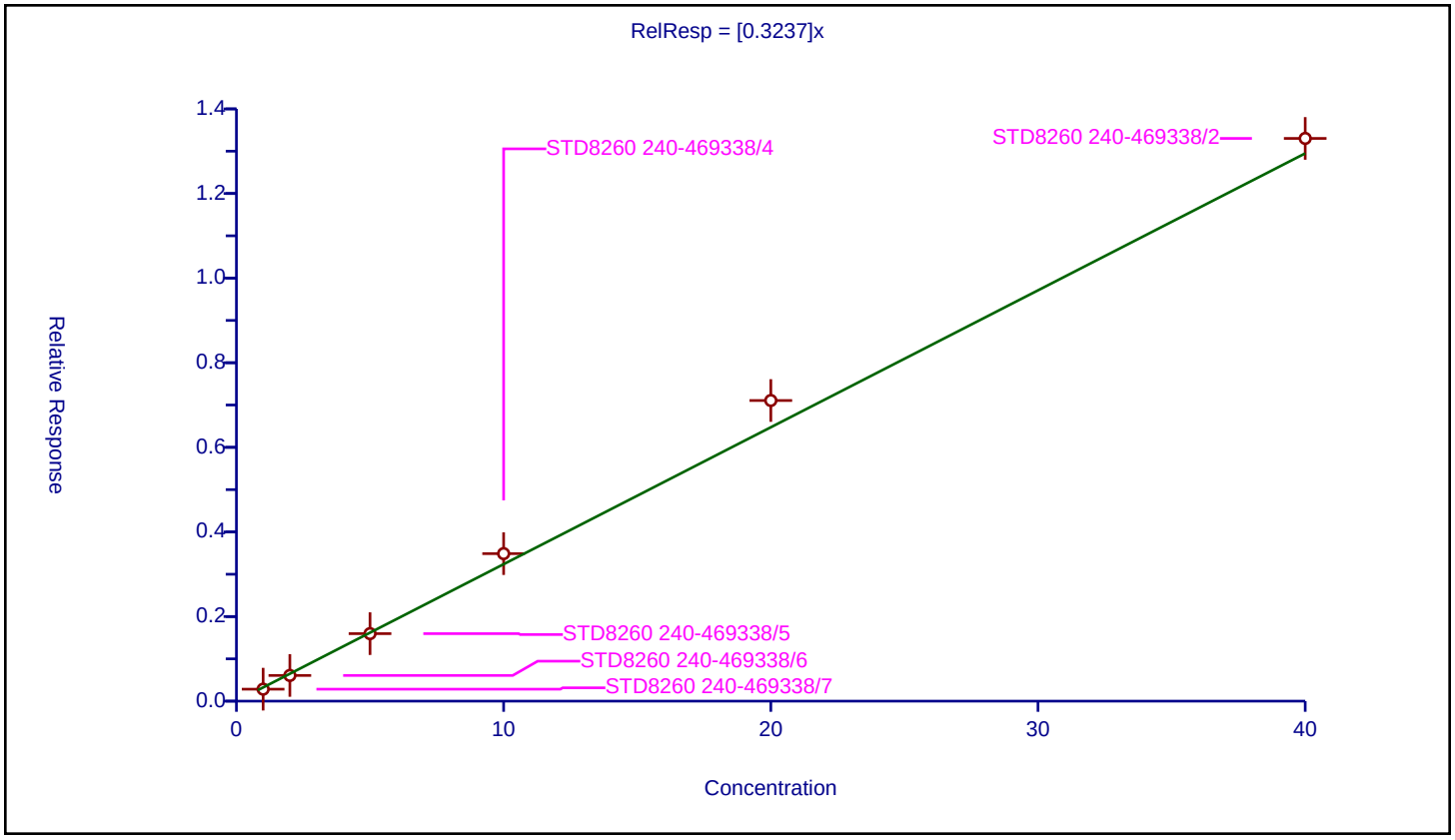
Curve Coefficients

Intercept:	0
Slope:	0.3237

Error Coefficients

Standard Error:	473000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.282903	20.0	1237666.0	0.282903	Y
2	STD8260 240-469338/6	2.0	0.607111	20.0	1194740.0	0.303556	Y
3	STD8260 240-469338/5	5.0	1.59582	20.0	1222644.0	0.319164	Y
4	STD8260 240-469338/4	10.0	3.48677	20.0	1164516.0	0.348677	Y
5	STD8260 240-469338/3	20.0	7.106737	20.0	1252890.0	0.355337	Y
6	STD8260 240-469338/2	40.0	13.301937	20.0	1401011.0	0.332548	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

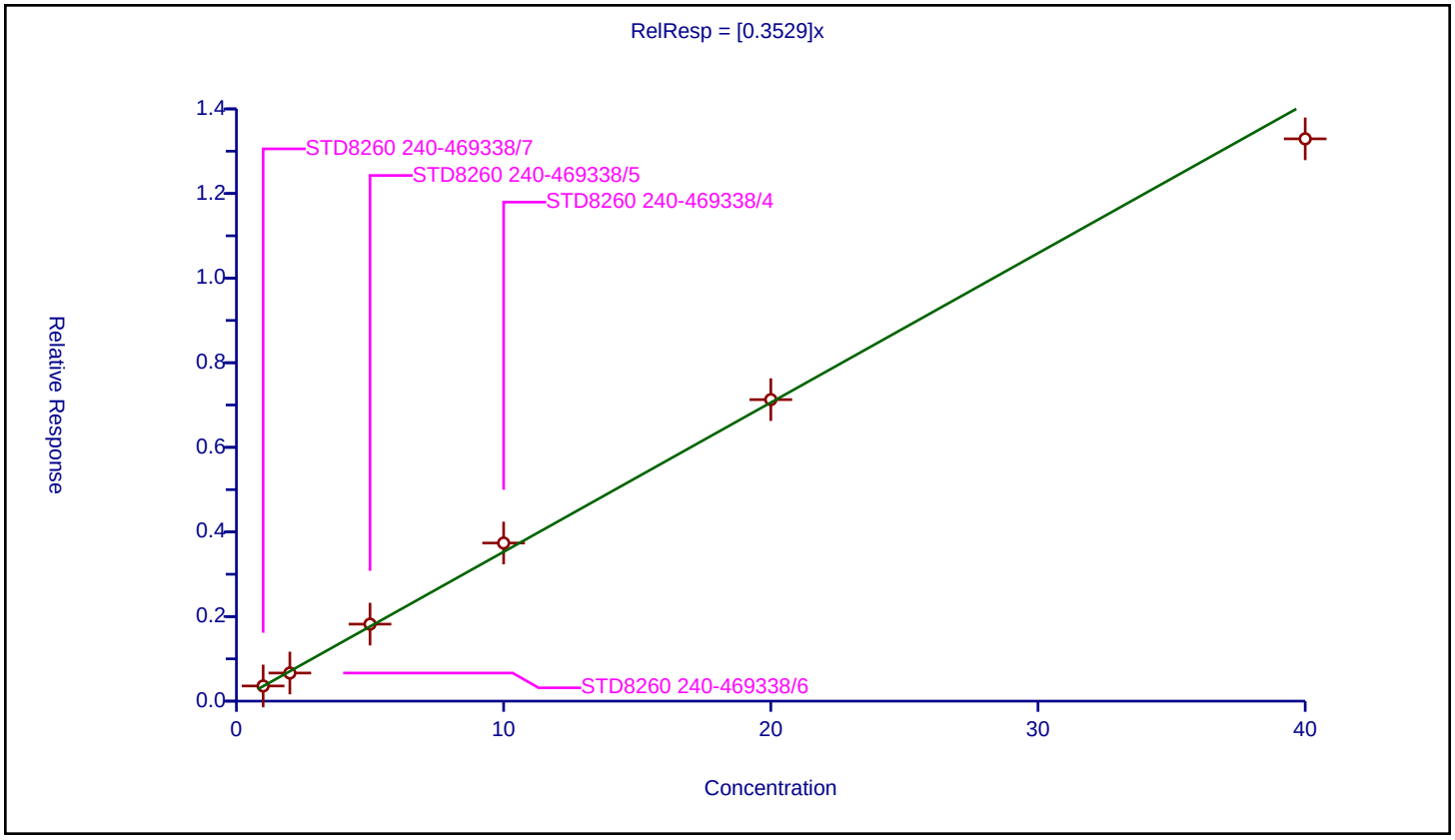
Curve Coefficients

Intercept:	0
Slope:	0.3529

Error Coefficients

Standard Error:	475000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.358724	20.0	1237666.0	0.358724	Y
2	STD8260 240-469338/6	2.0	0.664714	20.0	1194740.0	0.332357	Y
3	STD8260 240-469338/5	5.0	1.820726	20.0	1222644.0	0.364145	Y
4	STD8260 240-469338/4	10.0	3.737329	20.0	1164516.0	0.373733	Y
5	STD8260 240-469338/3	20.0	7.127122	20.0	1252890.0	0.356356	Y
6	STD8260 240-469338/2	40.0	13.292101	20.0	1401011.0	0.332303	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

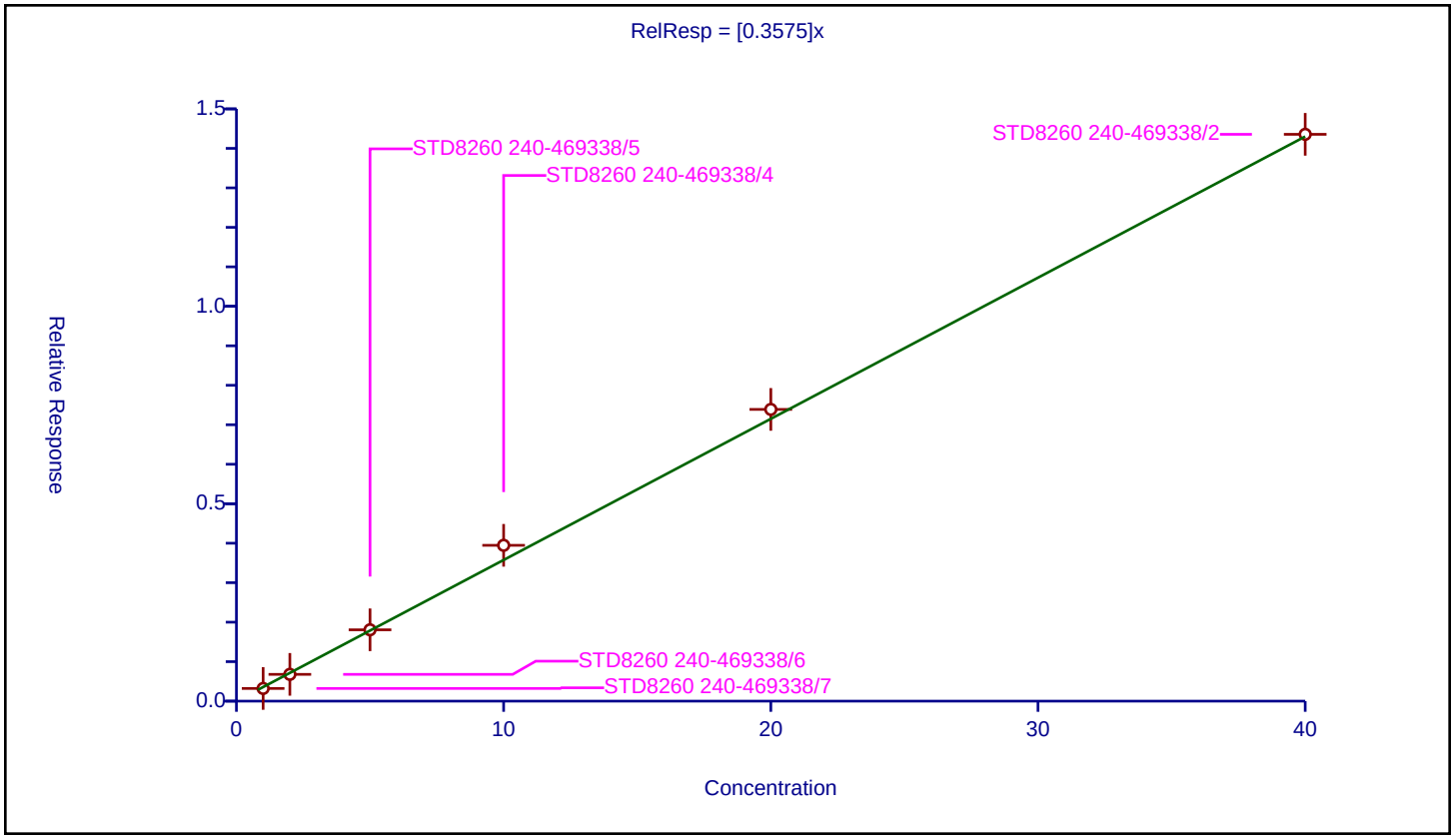
Curve Coefficients

Intercept:	0
Slope:	0.3575

Error Coefficients

Standard Error:	508000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.321379	20.0	1237666.0	0.321379	Y
2	STD8260 240-469338/6	2.0	0.678591	20.0	1194740.0	0.339296	Y
3	STD8260 240-469338/5	5.0	1.807067	20.0	1222644.0	0.361413	Y
4	STD8260 240-469338/4	10.0	3.946395	20.0	1164516.0	0.394639	Y
5	STD8260 240-469338/3	20.0	7.388757	20.0	1252890.0	0.369438	Y
6	STD8260 240-469338/2	40.0	14.35589	20.0	1401011.0	0.358897	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

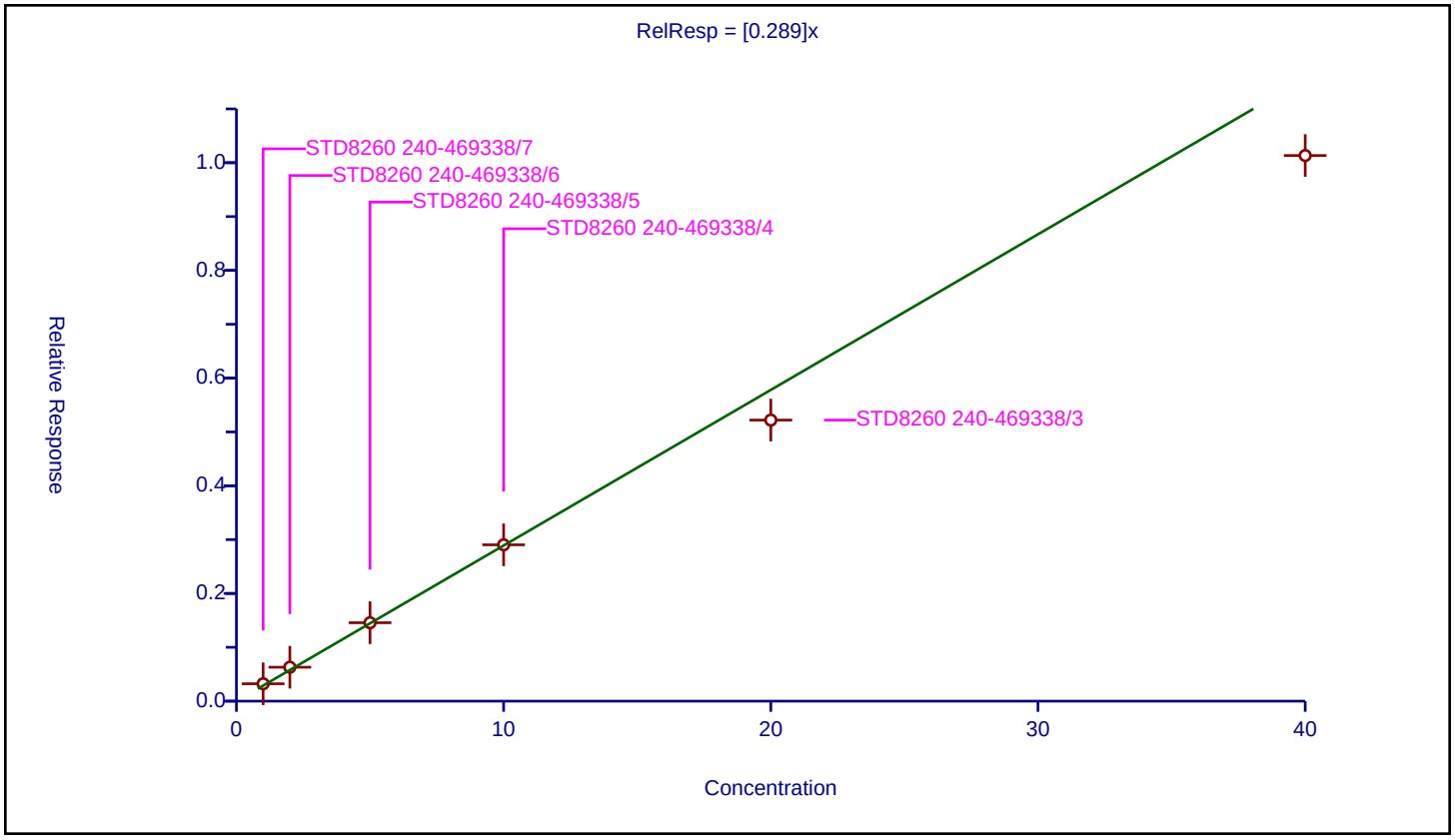
Curve Coefficients

Intercept:	0
Slope:	0.289

Error Coefficients

Standard Error:	360000
Relative Standard Error:	9.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.323011	20.0	1237666.0	0.323011	Y
2	STD8260 240-469338/6	2.0	0.630212	20.0	1194740.0	0.315106	Y
3	STD8260 240-469338/5	5.0	1.456434	20.0	1222644.0	0.291287	Y
4	STD8260 240-469338/4	10.0	2.903713	20.0	1164516.0	0.290371	Y
5	STD8260 240-469338/3	20.0	5.220363	20.0	1252890.0	0.261018	Y
6	STD8260 240-469338/2	40.0	10.133953	20.0	1401011.0	0.253349	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

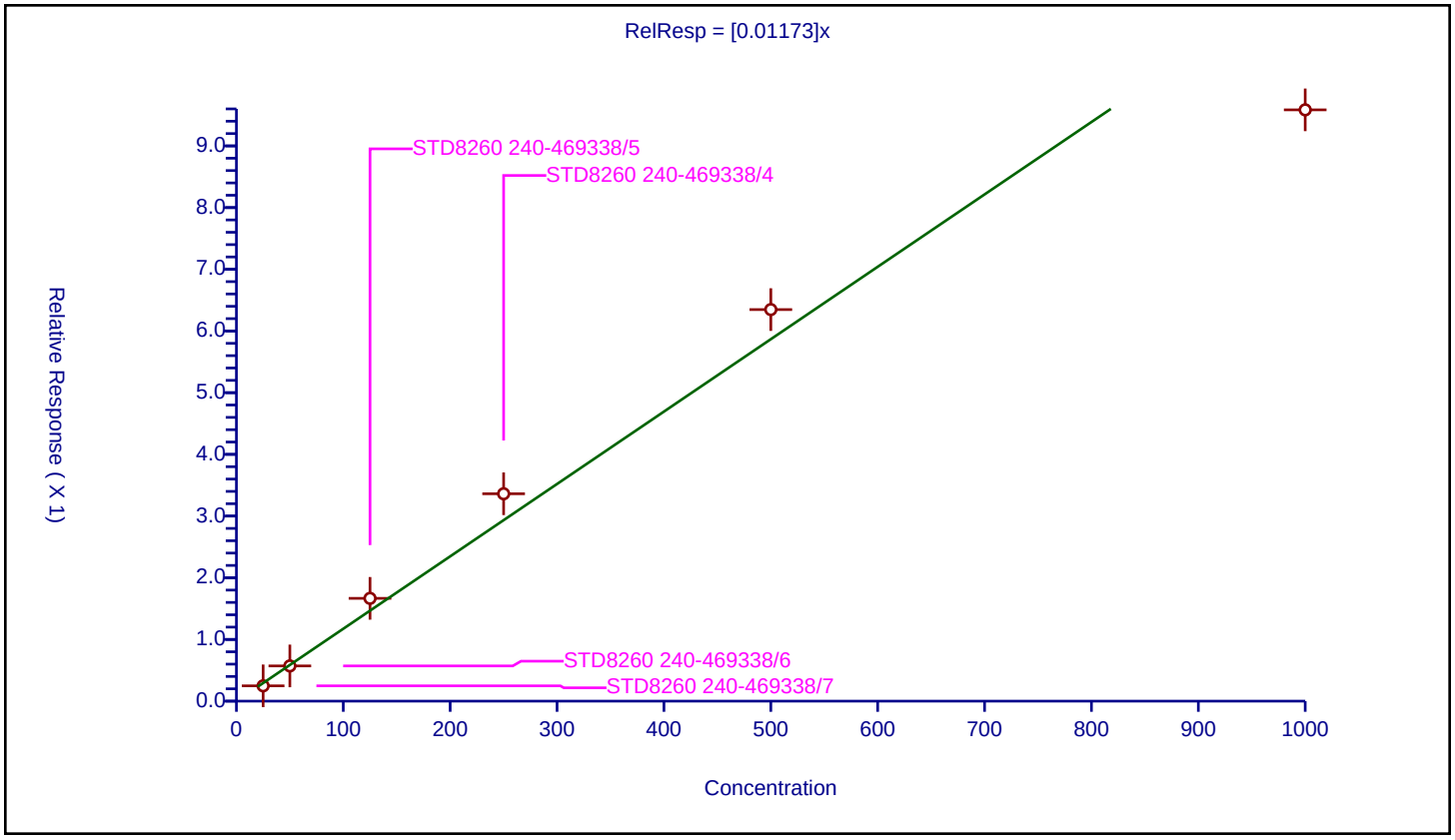
Curve Coefficients

Intercept:	0
Slope:	0.01173

Error Coefficients

Standard Error:	255000
Relative Standard Error:	14.5
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	25.0	0.248104	20.0	905264.0	0.009924	Y
2	STD8260 240-469338/6	50.0	0.571138	20.0	862909.0	0.011423	Y
3	STD8260 240-469338/5	125.0	1.666371	20.0	861537.0	0.013331	Y
4	STD8260 240-469338/4	250.0	3.361442	20.0	833065.0	0.013446	Y
5	STD8260 240-469338/3	500.0	6.34715	20.0	890220.0	0.012694	Y
6	STD8260 240-469338/2	1000.0	9.584315	20.0	979659.0	0.009584	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

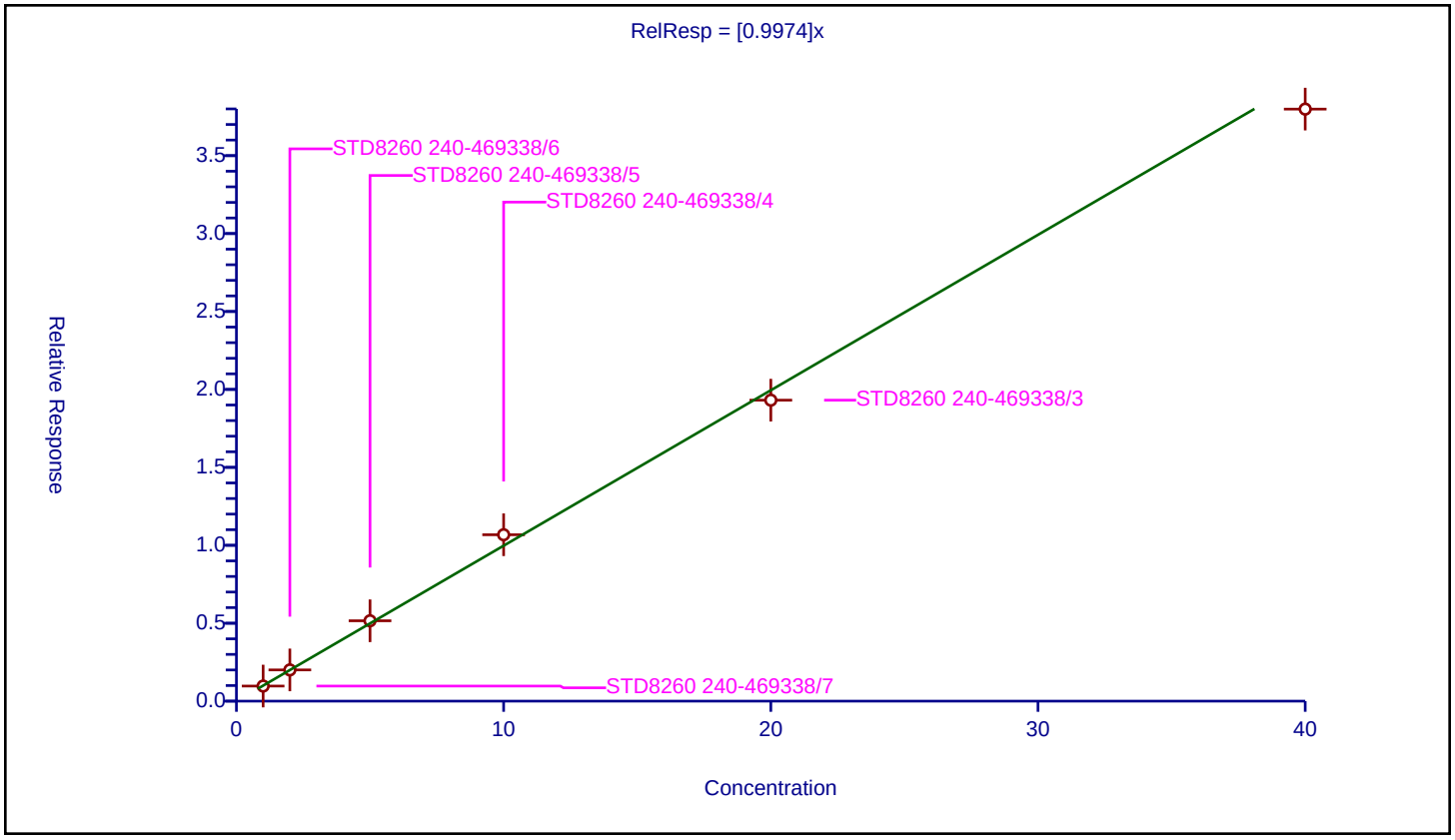
Curve Coefficients

Intercept:	0
Slope:	0.9974

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.968323	20.0	1237666.0	0.968323	Y
2	STD8260 240-469338/6	2.0	2.0037	20.0	1194740.0	1.00185	Y
3	STD8260 240-469338/5	5.0	5.156481	20.0	1222644.0	1.031296	Y
4	STD8260 240-469338/4	10.0	10.676453	20.0	1164516.0	1.067645	Y
5	STD8260 240-469338/3	20.0	19.311288	20.0	1252890.0	0.965564	Y
6	STD8260 240-469338/2	40.0	37.985726	20.0	1401011.0	0.949643	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

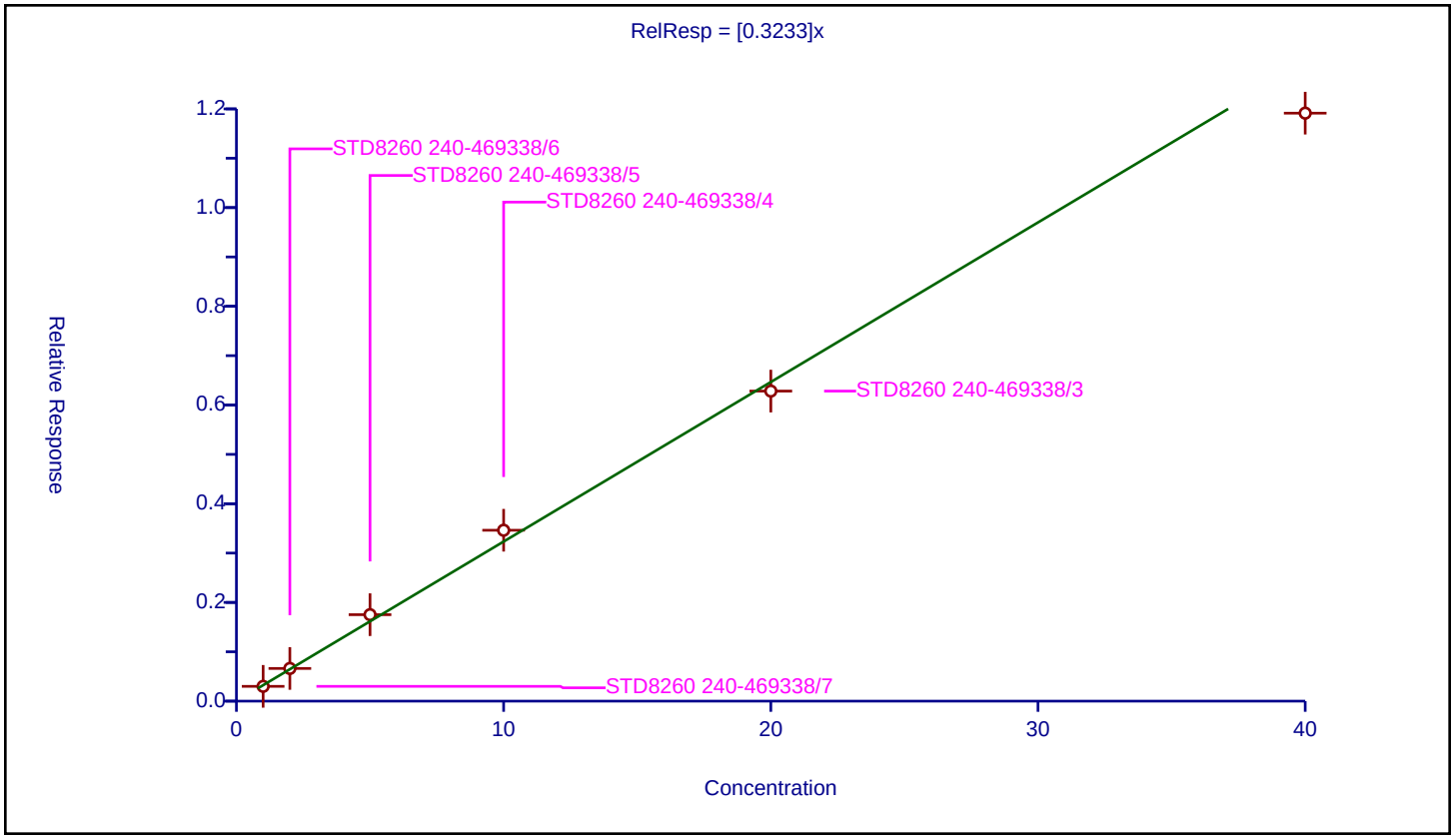
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	426000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299968	20.0	1237666.0	0.299968	Y
2	STD8260 240-469338/6	2.0	0.662437	20.0	1194740.0	0.331219	Y
3	STD8260 240-469338/5	5.0	1.751761	20.0	1222644.0	0.350352	Y
4	STD8260 240-469338/4	10.0	3.462898	20.0	1164516.0	0.34629	Y
5	STD8260 240-469338/3	20.0	6.282499	20.0	1252890.0	0.314125	Y
6	STD8260 240-469338/2	40.0	11.913854	20.0	1401011.0	0.297846	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

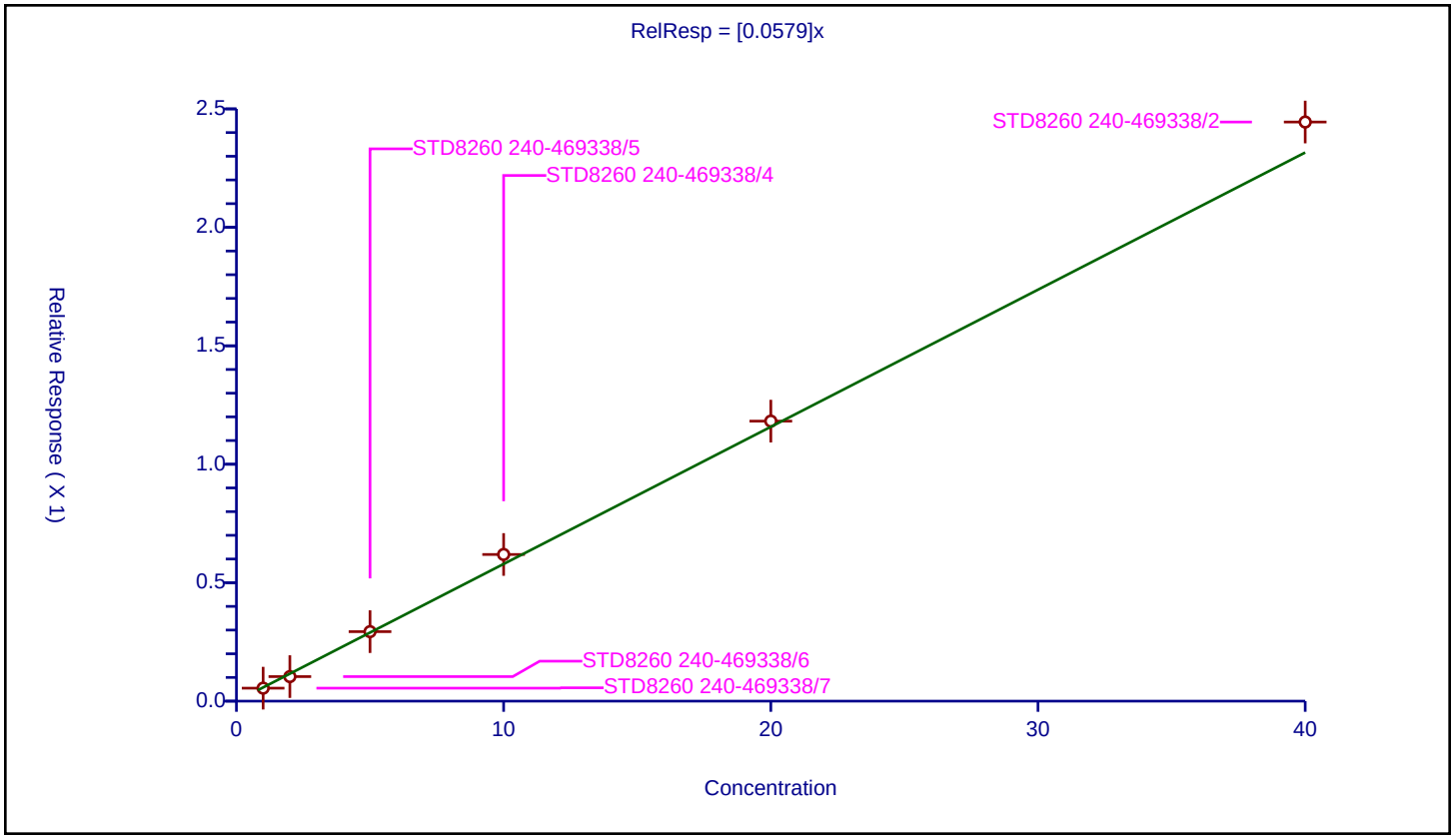
Curve Coefficients

Intercept:	0
Slope:	0.0579

Error Coefficients

Standard Error:	85400
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.054797	20.0	1237666.0	0.054797	Y
2	STD8260 240-469338/6	2.0	0.103571	20.0	1194740.0	0.051785	Y
3	STD8260 240-469338/5	5.0	0.293381	20.0	1222644.0	0.058676	Y
4	STD8260 240-469338/4	10.0	0.619038	20.0	1164516.0	0.061904	Y
5	STD8260 240-469338/3	20.0	1.181971	20.0	1252890.0	0.059099	Y
6	STD8260 240-469338/2	40.0	2.444606	20.0	1401011.0	0.061115	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

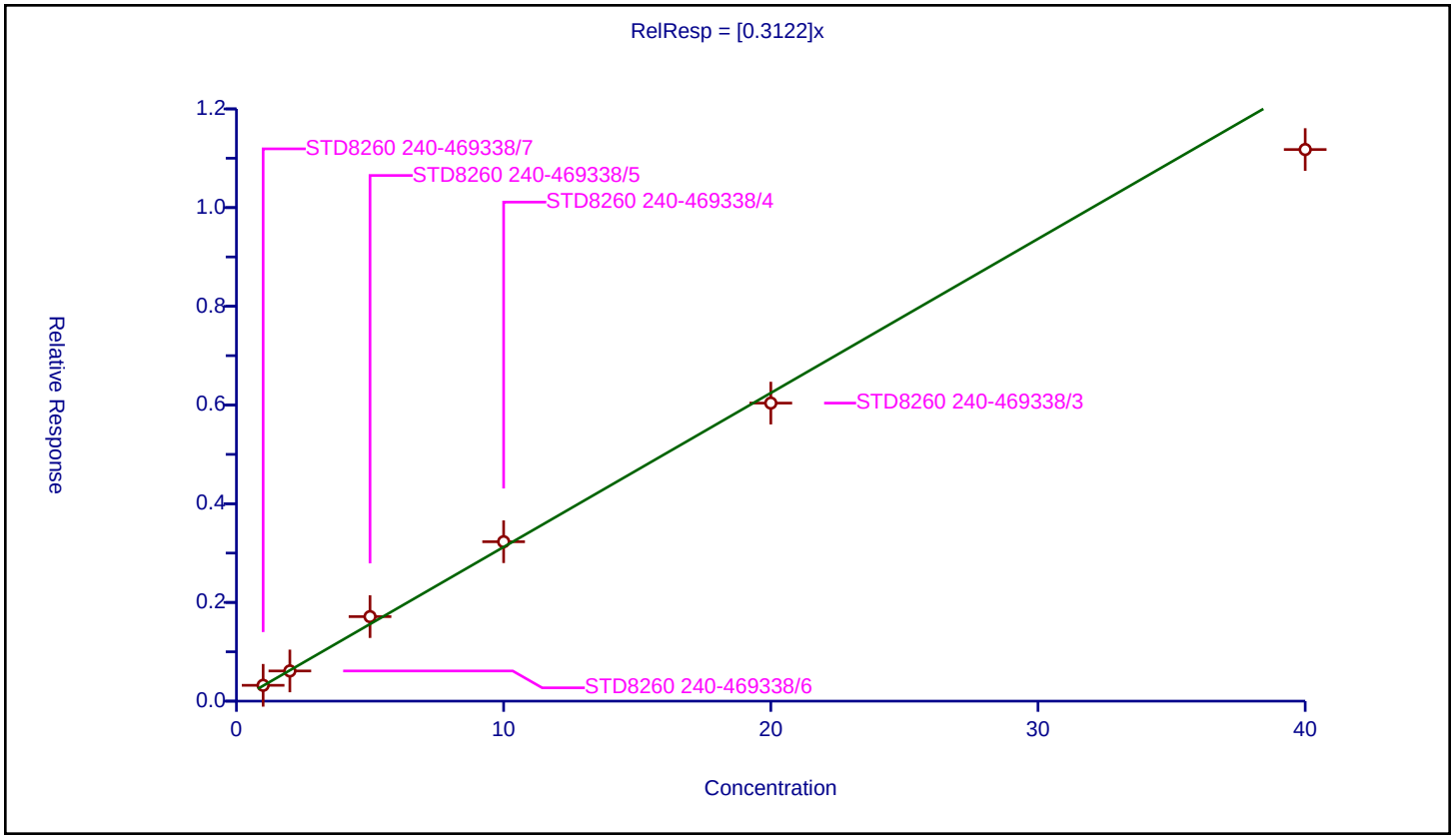
Curve Coefficients

Intercept:	0
Slope:	0.3122

Error Coefficients

Standard Error:	401000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.320652	20.0	1237666.0	0.320652	Y
2	STD8260 240-469338/6	2.0	0.611698	20.0	1194740.0	0.305849	Y
3	STD8260 240-469338/5	5.0	1.712322	20.0	1222644.0	0.342464	Y
4	STD8260 240-469338/4	10.0	3.230338	20.0	1164516.0	0.323034	Y
5	STD8260 240-469338/3	20.0	6.038726	20.0	1252890.0	0.301936	Y
6	STD8260 240-469338/2	40.0	11.1767	20.0	1401011.0	0.279418	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

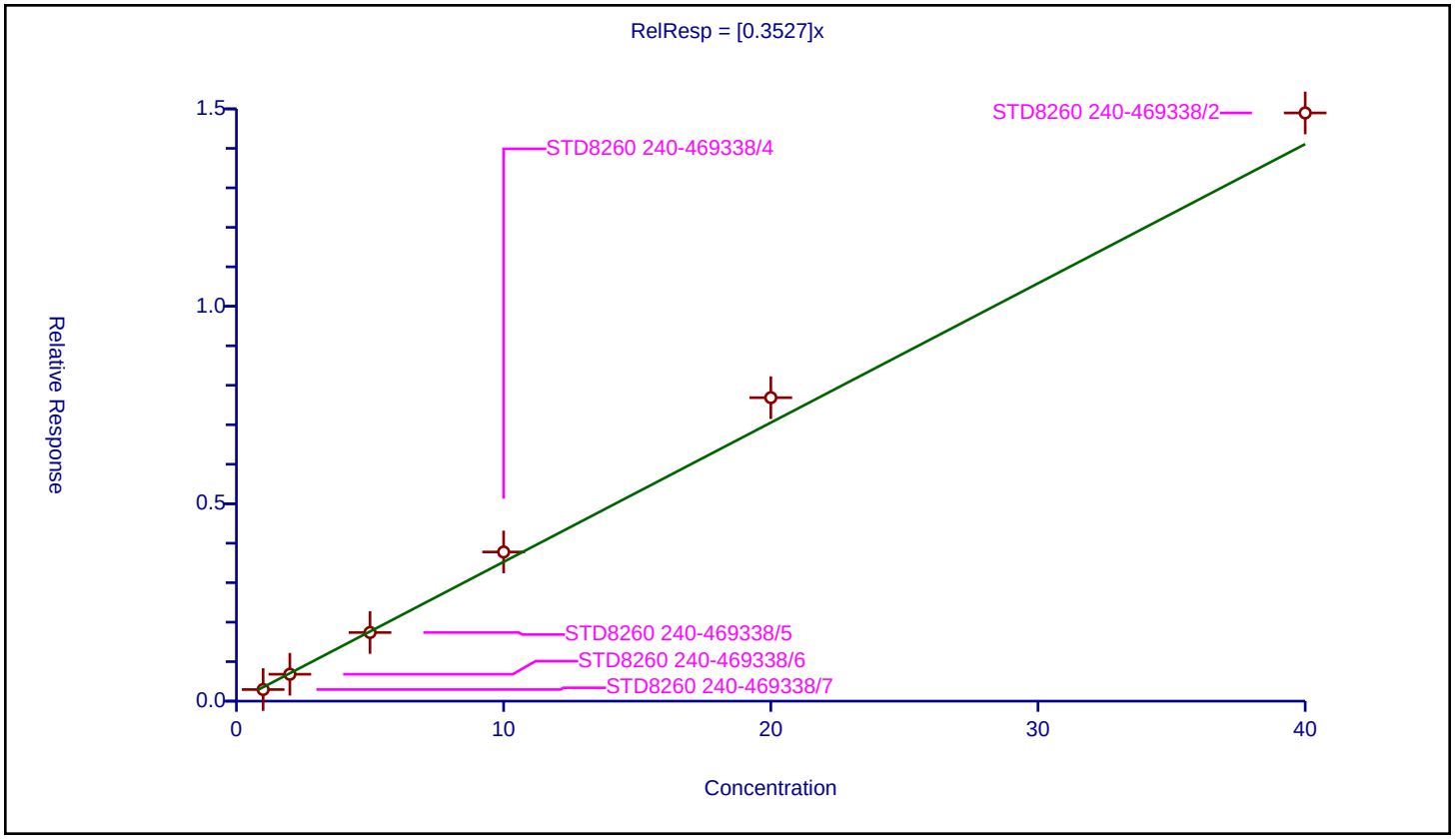
Curve Coefficients

Intercept:	0
Slope:	0.3527

Error Coefficients

Standard Error:	526000
Relative Standard Error:	9.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.293439	20.0	1237666.0	0.293439	Y
2	STD8260 240-469338/6	2.0	0.681119	20.0	1194740.0	0.340559	Y
3	STD8260 240-469338/5	5.0	1.738593	20.0	1222644.0	0.347719	Y
4	STD8260 240-469338/4	10.0	3.77769	20.0	1164516.0	0.377769	Y
5	STD8260 240-469338/3	20.0	7.686038	20.0	1252890.0	0.384302	Y
6	STD8260 240-469338/2	40.0	14.897128	20.0	1401011.0	0.372428	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

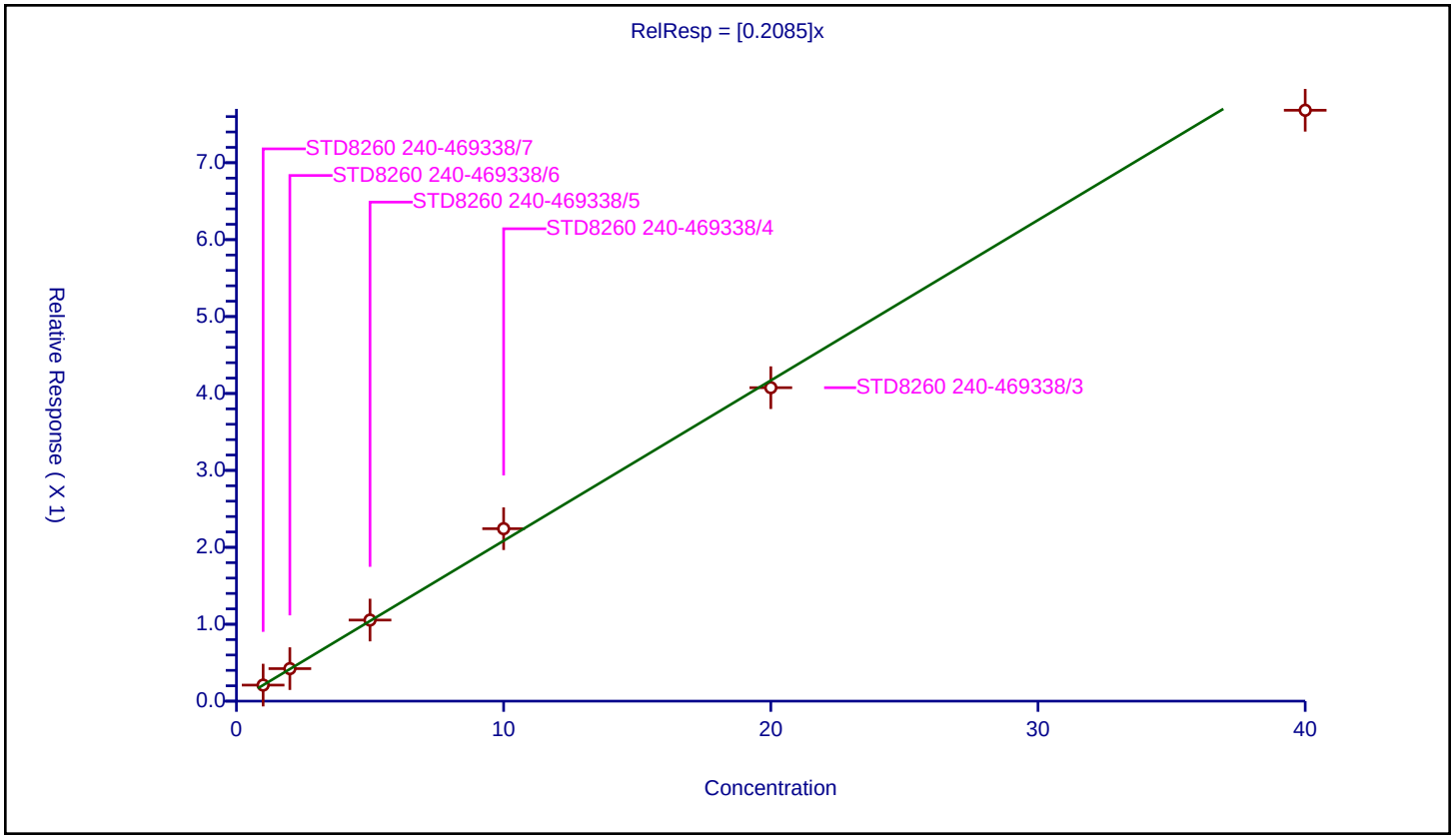
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	275000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.208602	20.0	1237666.0	0.208602	Y
2	STD8260 240-469338/6	2.0	0.422636	20.0	1194740.0	0.211318	Y
3	STD8260 240-469338/5	5.0	1.054322	20.0	1222644.0	0.210864	Y
4	STD8260 240-469338/4	10.0	2.242082	20.0	1164516.0	0.224208	Y
5	STD8260 240-469338/3	20.0	4.075474	20.0	1252890.0	0.203774	Y
6	STD8260 240-469338/2	40.0	7.682338	20.0	1401011.0	0.192058	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

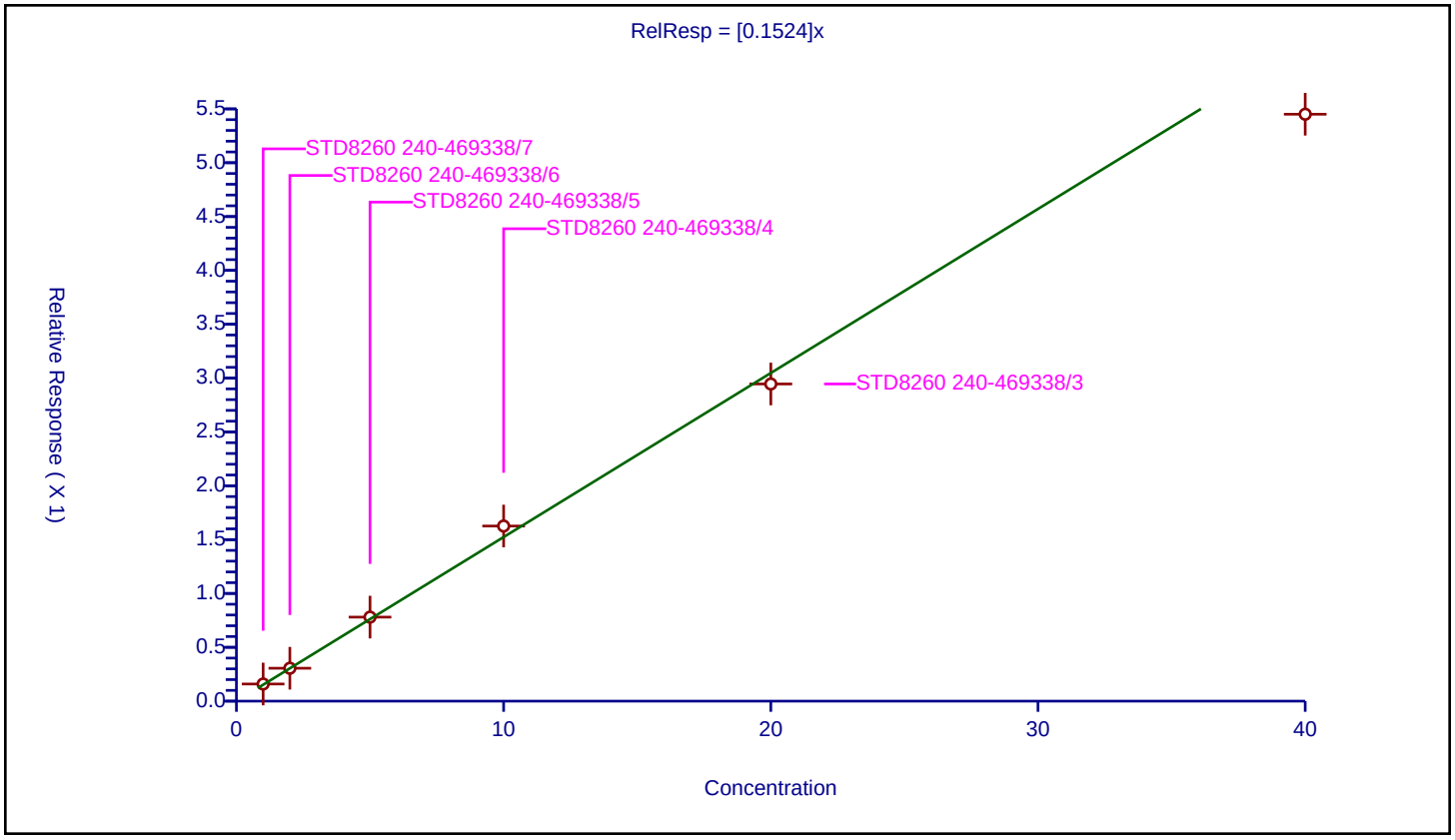
Curve Coefficients

Intercept:	0
Slope:	0.1524

Error Coefficients

Standard Error:	196000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159106	20.0	1237666.0	0.159106	Y
2	STD8260 240-469338/6	2.0	0.305707	20.0	1194740.0	0.152853	Y
3	STD8260 240-469338/5	5.0	0.780325	20.0	1222644.0	0.156065	Y
4	STD8260 240-469338/4	10.0	1.626204	20.0	1164516.0	0.16262	Y
5	STD8260 240-469338/3	20.0	2.945526	20.0	1252890.0	0.147276	Y
6	STD8260 240-469338/2	40.0	5.45045	20.0	1401011.0	0.136261	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

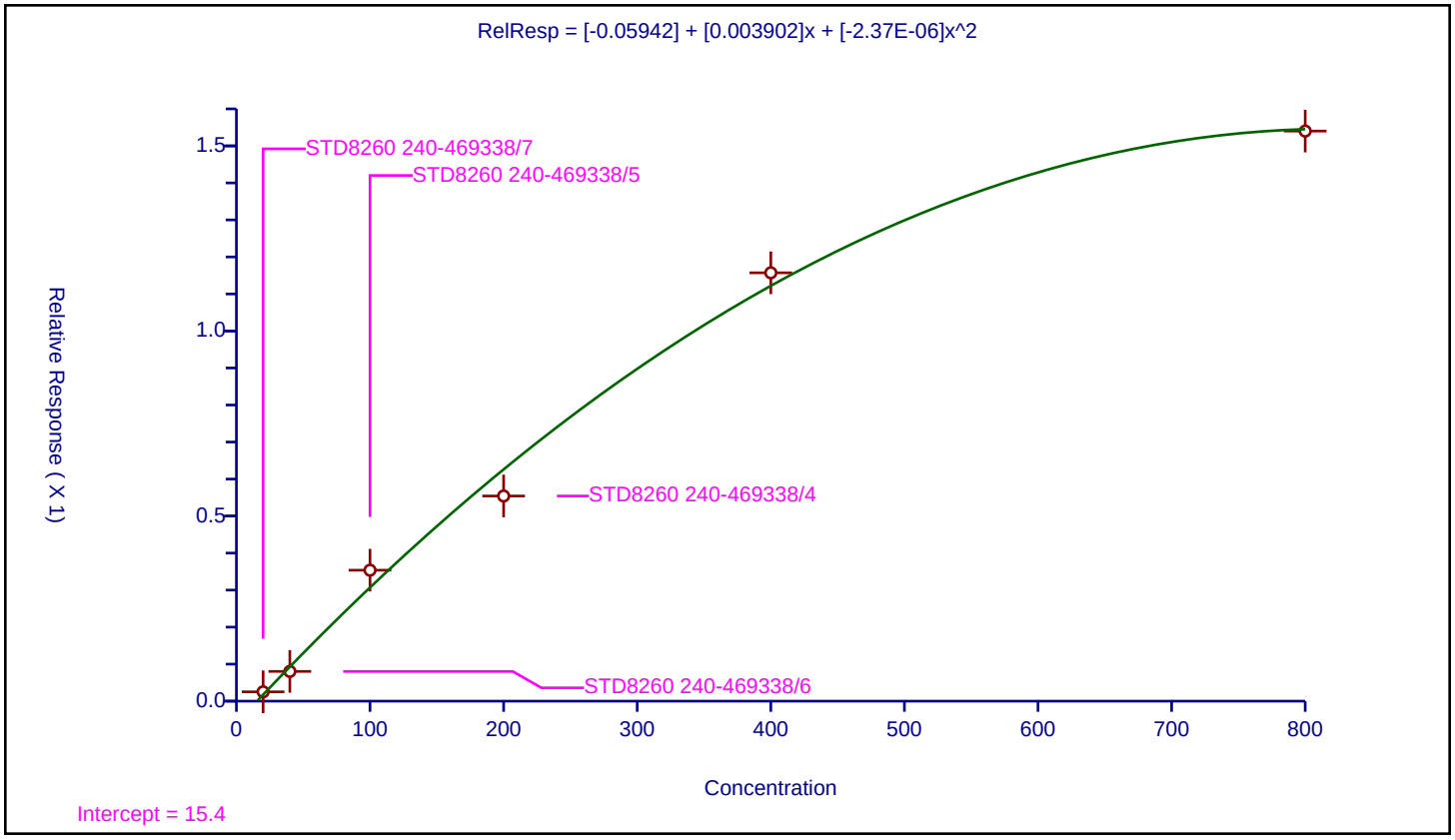
Curve Coefficients

Intercept:	-0.05942
Slope:	0.003902
Second Order:	-2.37E-06

Error Coefficients

Standard Error:	78400
Relative Standard Error:	13.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	20.0	0.025225	20.0	1237666.0	0.001261	Y
2	STD8260 240-469338/6	40.0	0.080352	20.0	1194740.0	0.002009	Y
3	STD8260 240-469338/5	100.0	0.353791	20.0	1222644.0	0.003538	Y
4	STD8260 240-469338/4	200.0	0.554204	20.0	1164516.0	0.002771	Y
5	STD8260 240-469338/3	400.0	1.157197	20.0	1252890.0	0.002893	Y
6	STD8260 240-469338/2	800.0	1.540088	20.0	1401011.0	0.001925	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

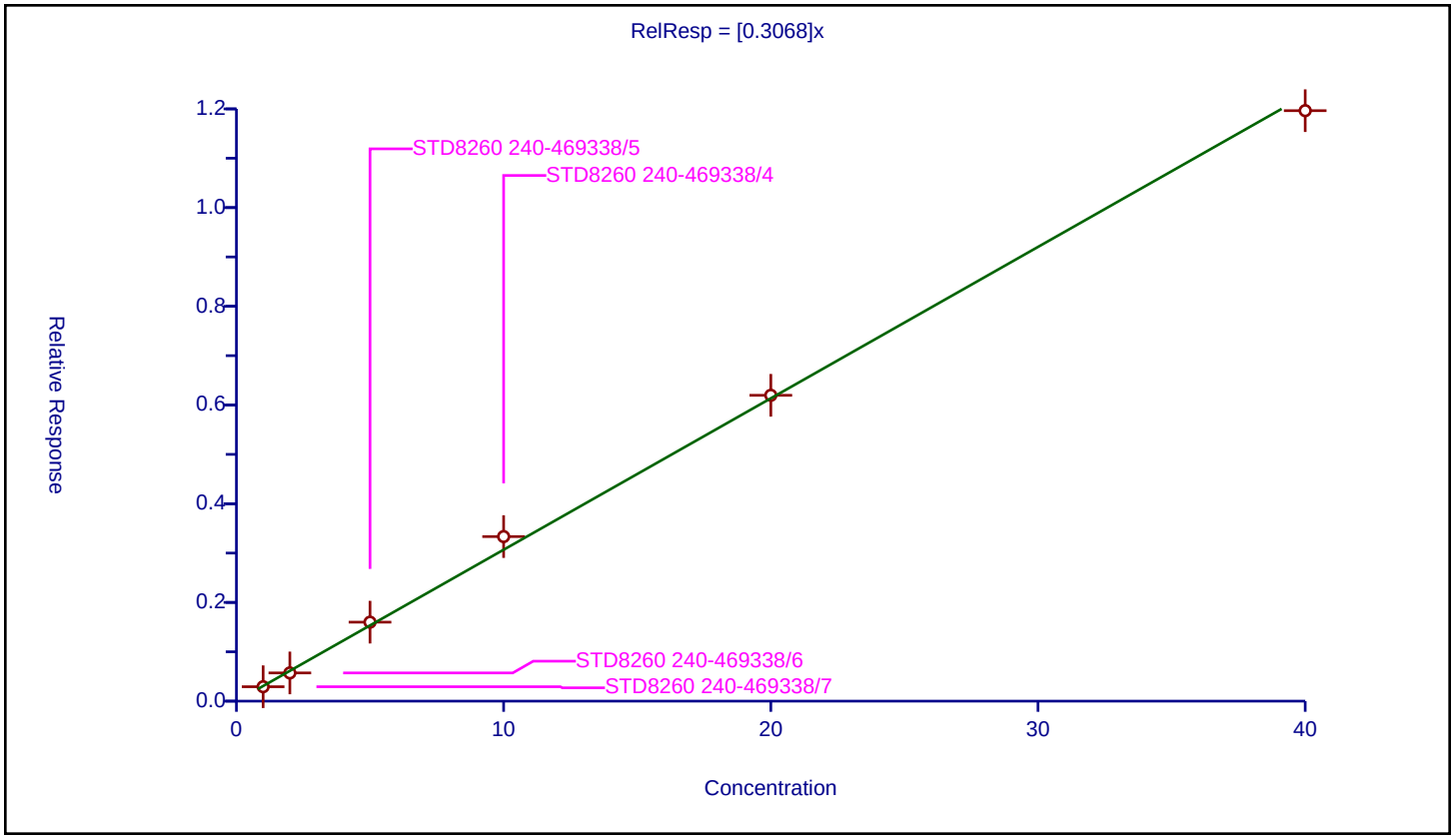
Curve Coefficients

Intercept:	0
Slope:	0.3068

Error Coefficients

Standard Error:	425000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.292373	20.0	1237666.0	0.292373	Y
2	STD8260 240-469338/6	2.0	0.571656	20.0	1194740.0	0.285828	Y
3	STD8260 240-469338/5	5.0	1.600302	20.0	1222644.0	0.32006	Y
4	STD8260 240-469338/4	10.0	3.334089	20.0	1164516.0	0.333409	Y
5	STD8260 240-469338/3	20.0	6.196905	20.0	1252890.0	0.309845	Y
6	STD8260 240-469338/2	40.0	11.963903	20.0	1401011.0	0.299098	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

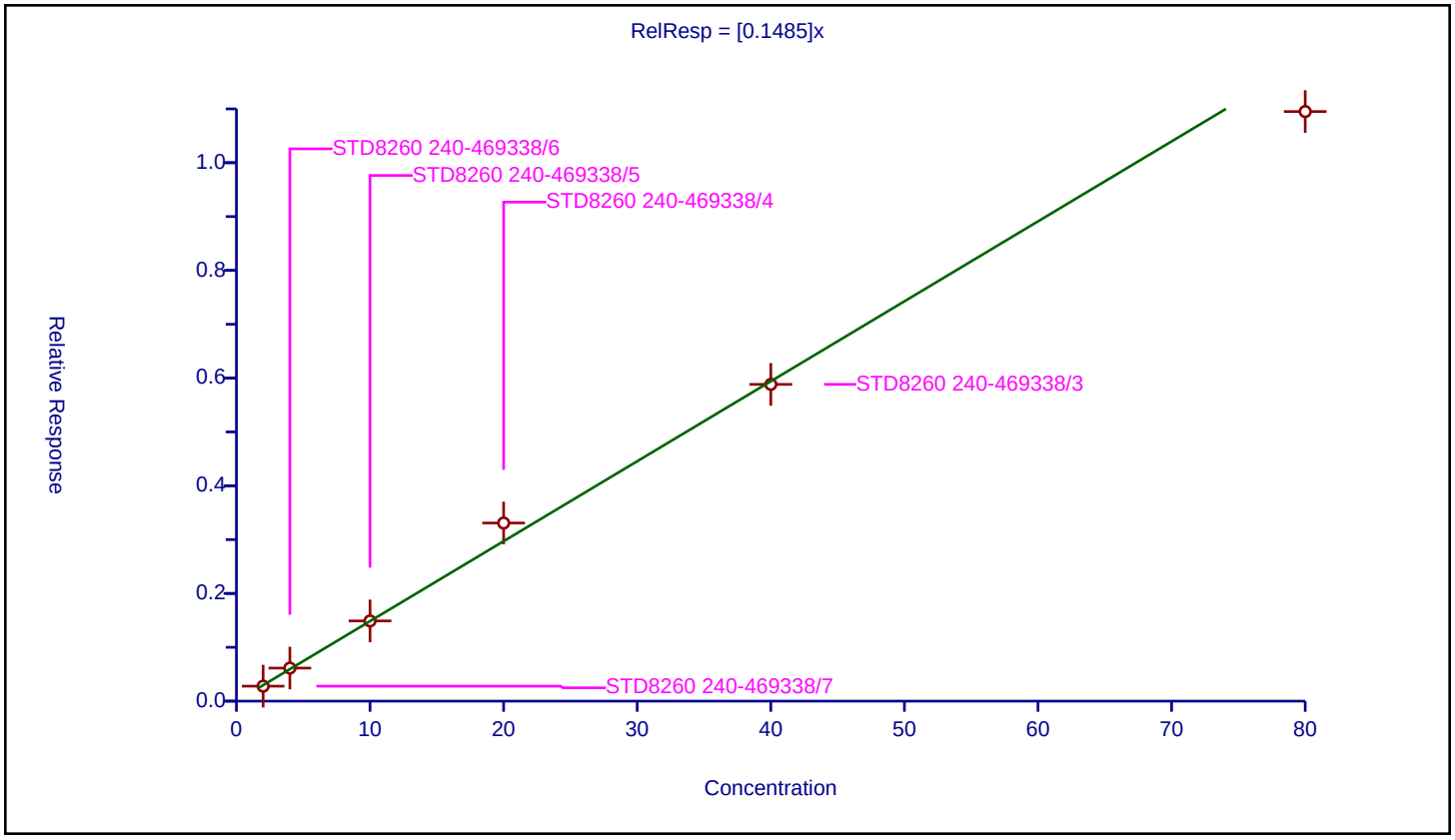
Curve Coefficients

Intercept:	0
Slope:	0.1485

Error Coefficients

Standard Error:	393000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.27833	20.0	1237666.0	0.139165	Y
2	STD8260 240-469338/6	4.0	0.614226	20.0	1194740.0	0.153556	Y
3	STD8260 240-469338/5	10.0	1.489919	20.0	1222644.0	0.148992	Y
4	STD8260 240-469338/4	20.0	3.308362	20.0	1164516.0	0.165418	Y
5	STD8260 240-469338/3	40.0	5.883406	20.0	1252890.0	0.147085	Y
6	STD8260 240-469338/2	80.0	10.950521	20.0	1401011.0	0.136882	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

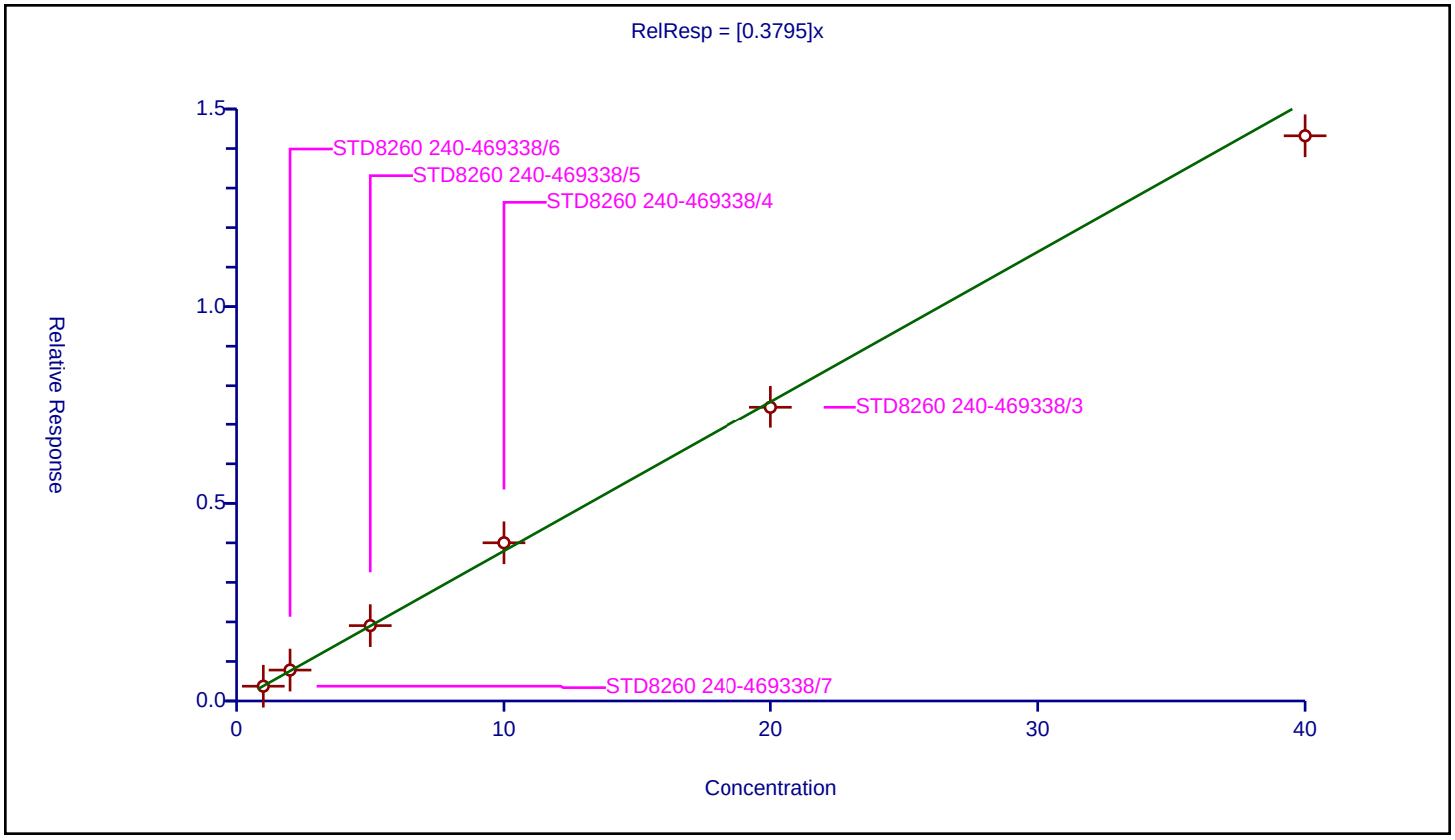
Curve Coefficients

Intercept:	0
Slope:	0.3795

Error Coefficients

Standard Error:	509000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373752	20.0	1237666.0	0.373752	Y
2	STD8260 240-469338/6	2.0	0.782128	20.0	1194740.0	0.391064	Y
3	STD8260 240-469338/5	5.0	1.906933	20.0	1222644.0	0.381387	Y
4	STD8260 240-469338/4	10.0	4.002178	20.0	1164516.0	0.400218	Y
5	STD8260 240-469338/3	20.0	7.454797	20.0	1252890.0	0.37274	Y
6	STD8260 240-469338/2	40.0	14.3229	20.0	1401011.0	0.358072	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

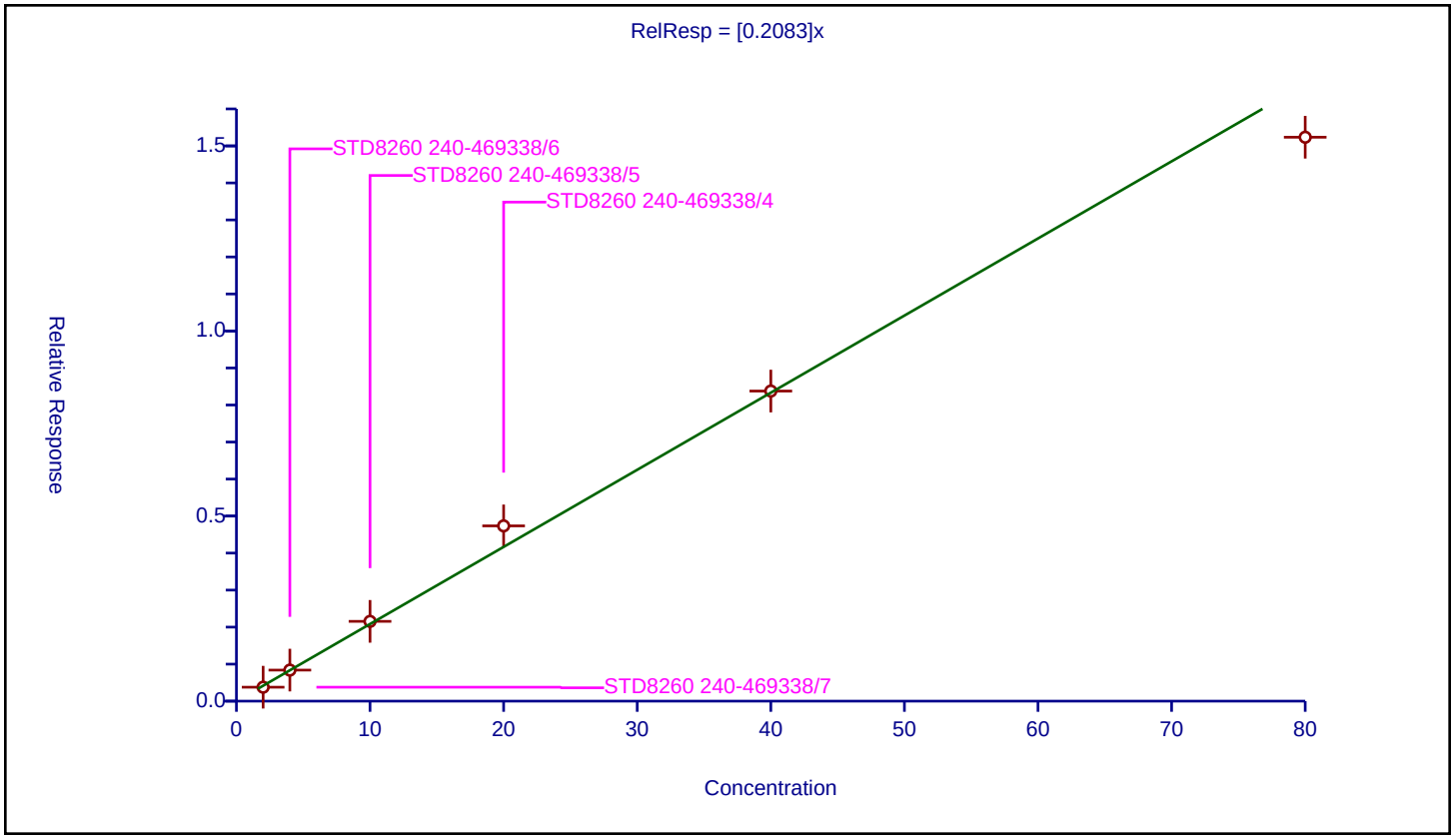
Curve Coefficients

Intercept:	0
Slope:	0.2083

Error Coefficients

Standard Error:	550000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.376467	20.0	1237666.0	0.188233	Y
2	STD8260 240-469338/6	4.0	0.838392	20.0	1194740.0	0.209598	Y
3	STD8260 240-469338/5	10.0	2.155198	20.0	1222644.0	0.21552	Y
4	STD8260 240-469338/4	20.0	4.734585	20.0	1164516.0	0.236729	Y
5	STD8260 240-469338/3	40.0	8.377288	20.0	1252890.0	0.209432	Y
6	STD8260 240-469338/2	80.0	15.234541	20.0	1401011.0	0.190432	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

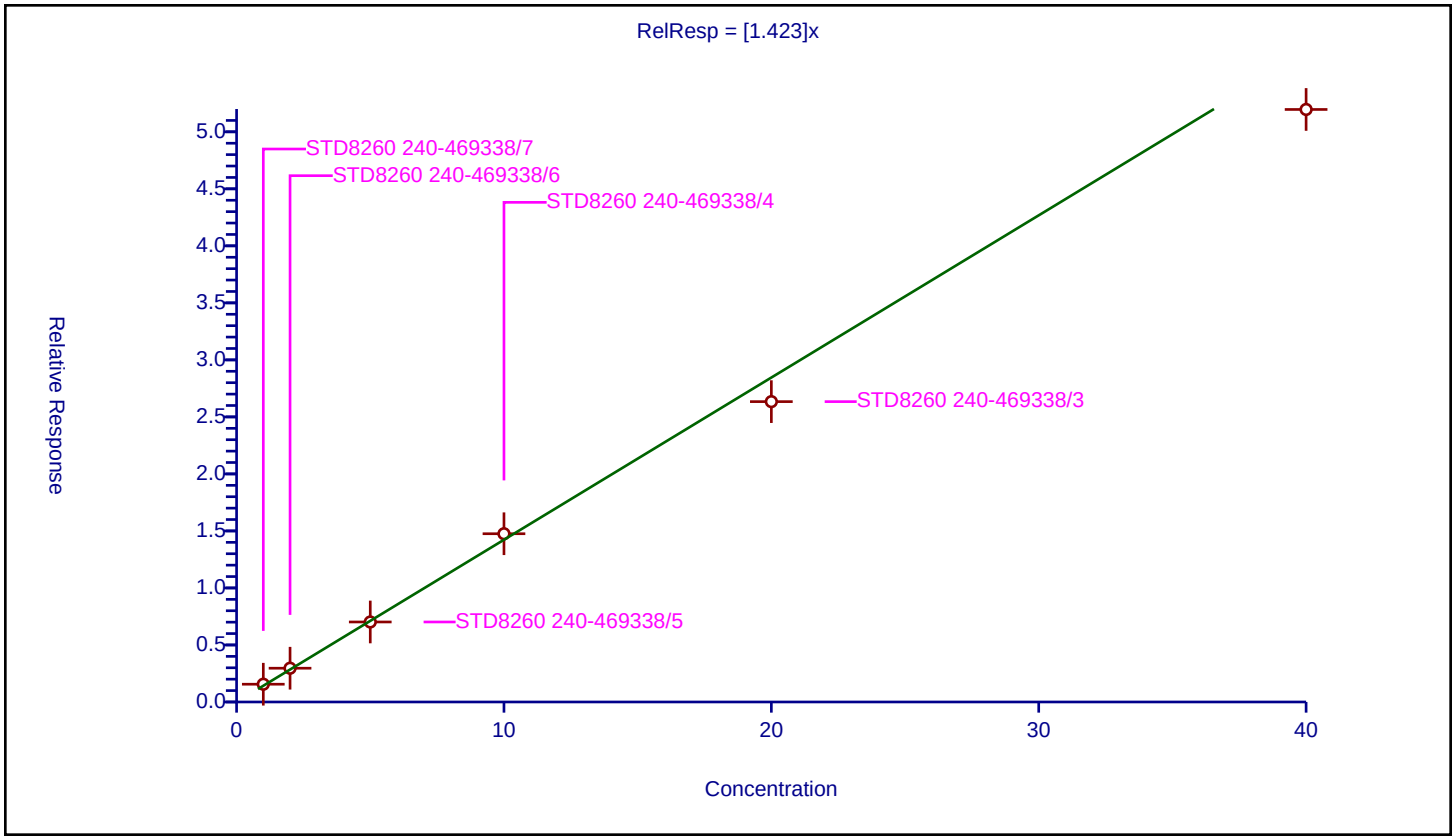
Curve Coefficients

Intercept:	0
Slope:	1.423

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.559103	20.0	905264.0	1.559103	Y
2	STD8260 240-469338/6	2.0	2.962838	20.0	862909.0	1.481419	Y
3	STD8260 240-469338/5	5.0	7.016553	20.0	861537.0	1.403311	Y
4	STD8260 240-469338/4	10.0	14.754623	20.0	833065.0	1.475462	Y
5	STD8260 240-469338/3	20.0	26.33886	20.0	890220.0	1.316943	Y
6	STD8260 240-469338/2	40.0	51.960876	20.0	979659.0	1.299022	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

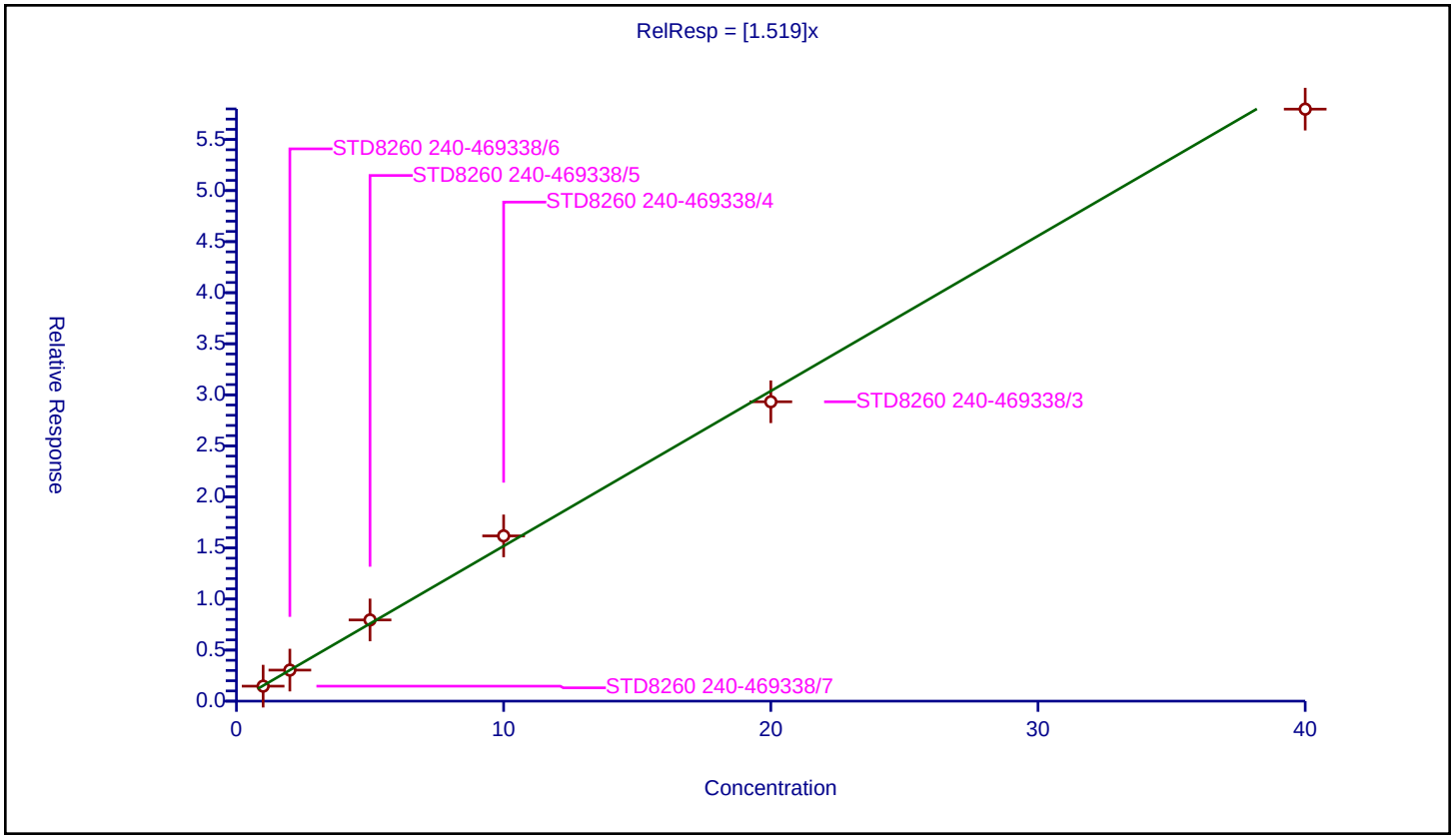
Curve Coefficients

Intercept:	0
Slope:	1.519

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.467749	20.0	905264.0	1.467749	Y
2	STD8260 240-469338/6	2.0	3.040228	20.0	862909.0	1.520114	Y
3	STD8260 240-469338/5	5.0	7.951928	20.0	861537.0	1.590386	Y
4	STD8260 240-469338/4	10.0	16.183659	20.0	833065.0	1.618366	Y
5	STD8260 240-469338/3	20.0	29.319382	20.0	890220.0	1.465969	Y
6	STD8260 240-469338/2	40.0	57.977541	20.0	979659.0	1.449439	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

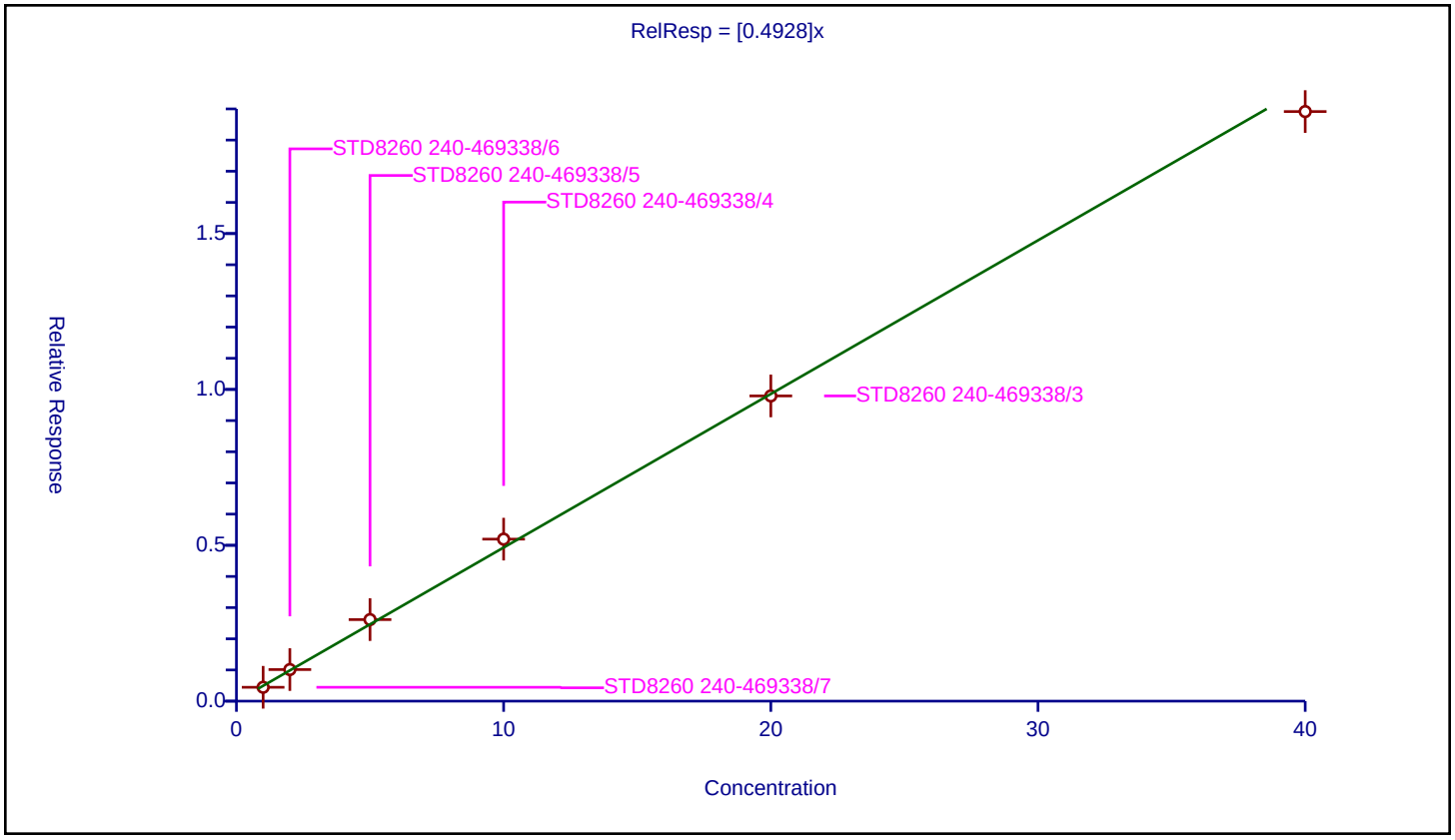
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.444975	20.0	905264.0	0.444975	Y
2	STD8260 240-469338/6	2.0	1.012575	20.0	862909.0	0.506287	Y
3	STD8260 240-469338/5	5.0	2.615558	20.0	861537.0	0.523112	Y
4	STD8260 240-469338/4	10.0	5.197145	20.0	833065.0	0.519715	Y
5	STD8260 240-469338/3	20.0	9.791422	20.0	890220.0	0.489571	Y
6	STD8260 240-469338/2	40.0	18.914765	20.0	979659.0	0.472869	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

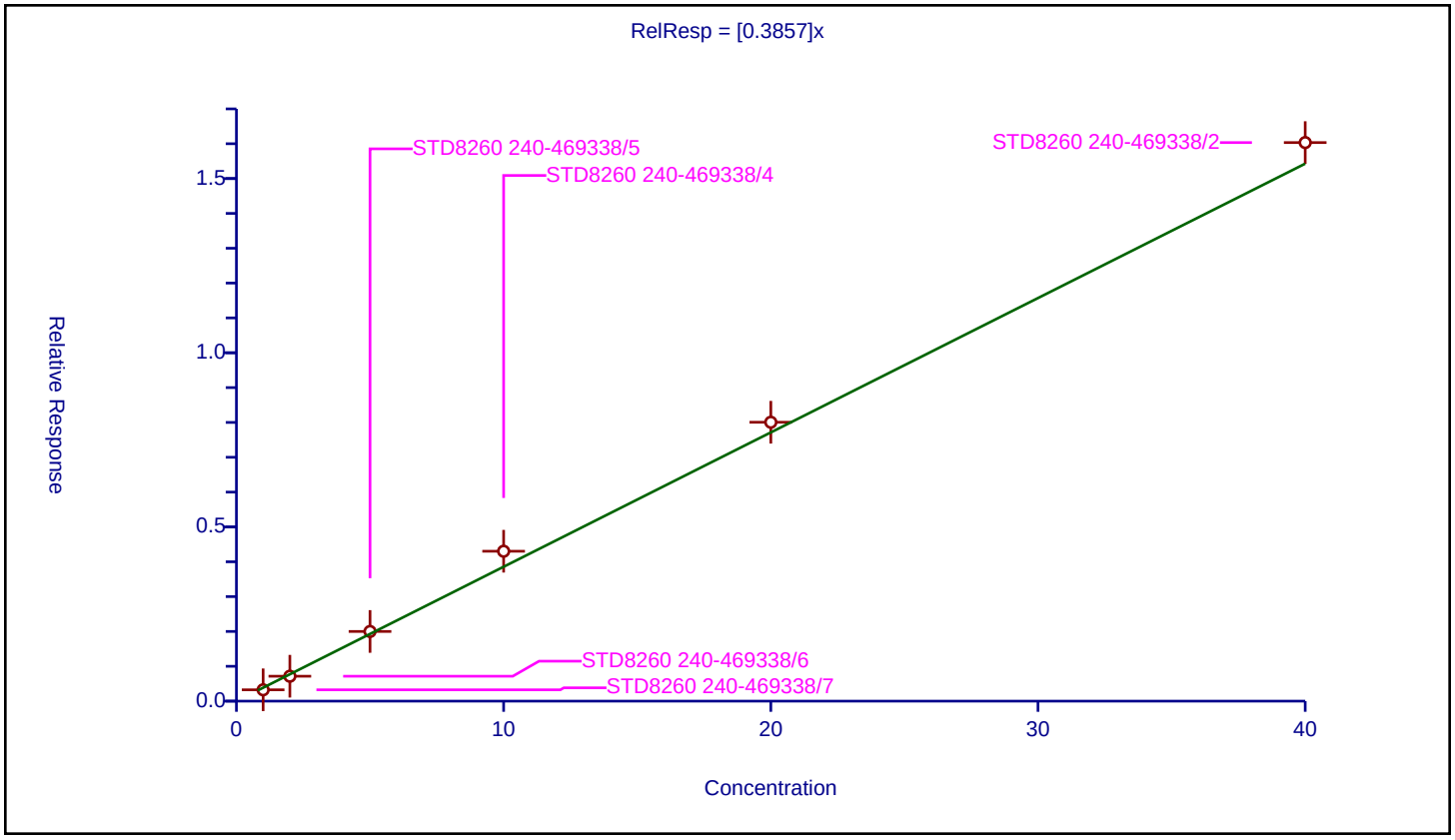
Curve Coefficients

Intercept:	0
Slope:	0.3857

Error Coefficients

Standard Error:	396000
Relative Standard Error:	9.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.325121	20.0	905264.0	0.325121	Y
2	STD8260 240-469338/6	2.0	0.715046	20.0	862909.0	0.357523	Y
3	STD8260 240-469338/5	5.0	2.000193	20.0	861537.0	0.400039	Y
4	STD8260 240-469338/4	10.0	4.303266	20.0	833065.0	0.430327	Y
5	STD8260 240-469338/3	20.0	8.005729	20.0	890220.0	0.400286	Y
6	STD8260 240-469338/2	40.0	16.032967	20.0	979659.0	0.400824	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

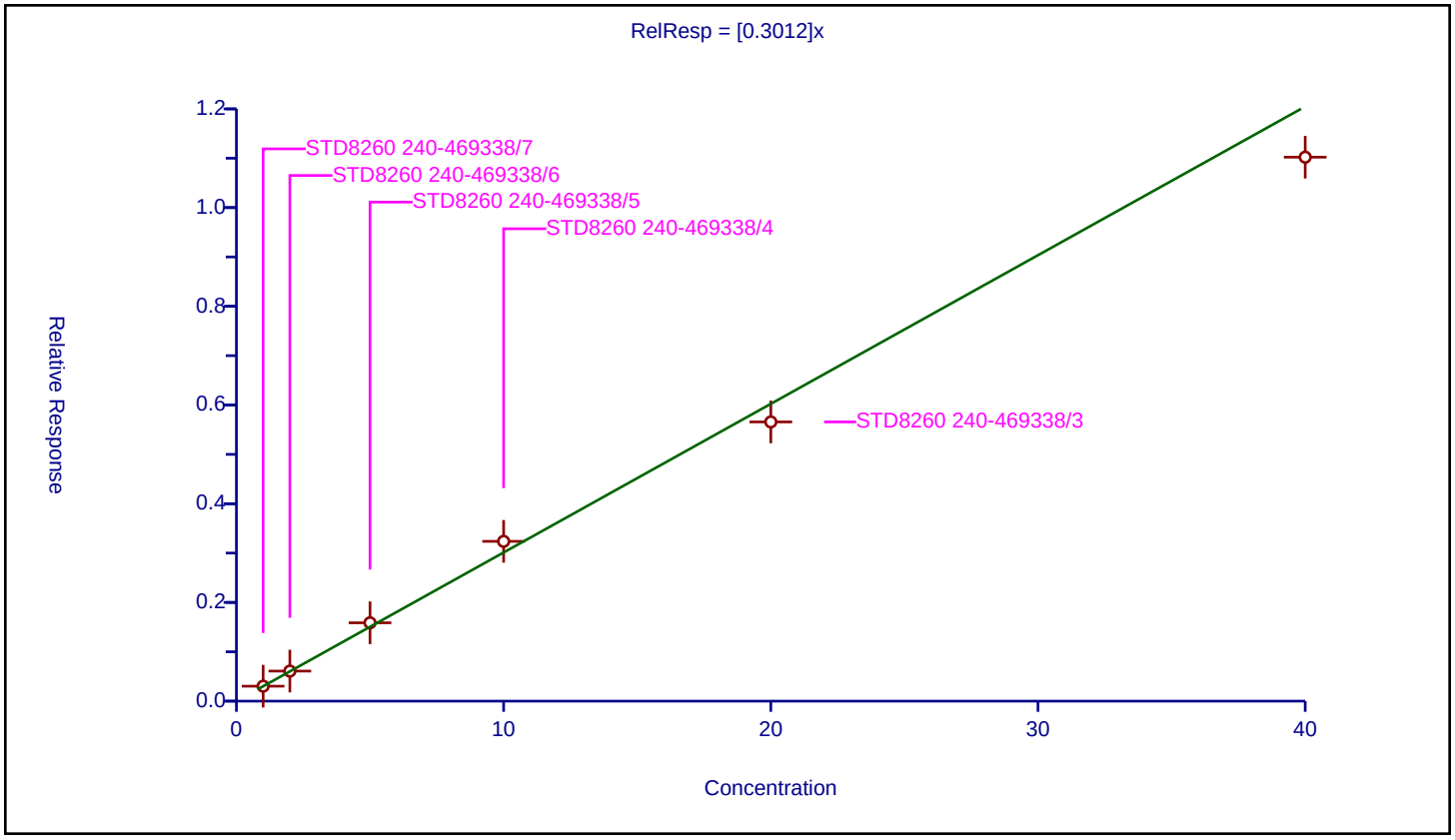
Curve Coefficients

Intercept:	0
Slope:	0.3012

Error Coefficients

Standard Error:	275000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302807	20.0	905264.0	0.302807	Y
2	STD8260 240-469338/6	2.0	0.609242	20.0	862909.0	0.304621	Y
3	STD8260 240-469338/5	5.0	1.587651	20.0	861537.0	0.31753	Y
4	STD8260 240-469338/4	10.0	3.237562	20.0	833065.0	0.323756	Y
5	STD8260 240-469338/3	20.0	5.657635	20.0	890220.0	0.282882	Y
6	STD8260 240-469338/2	40.0	11.02157	20.0	979659.0	0.275539	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

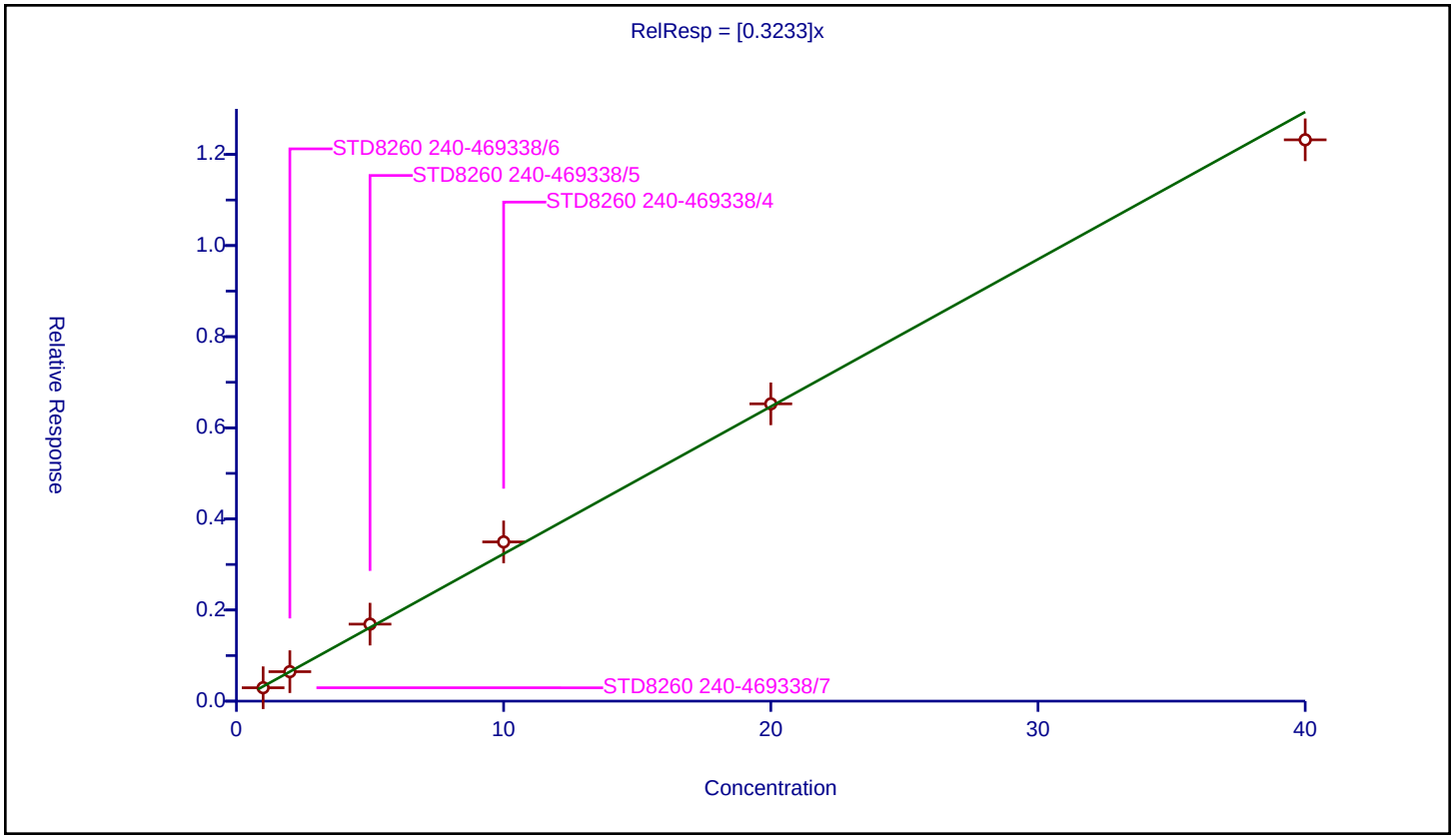
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	309000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.294367	20.0	905264.0	0.294367	Y
2	STD8260 240-469338/6	2.0	0.64709	20.0	862909.0	0.323545	Y
3	STD8260 240-469338/5	5.0	1.69049	20.0	861537.0	0.338098	Y
4	STD8260 240-469338/4	10.0	3.495454	20.0	833065.0	0.349545	Y
5	STD8260 240-469338/3	20.0	6.52596	20.0	890220.0	0.326298	Y
6	STD8260 240-469338/2	40.0	12.32141	20.0	979659.0	0.308035	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

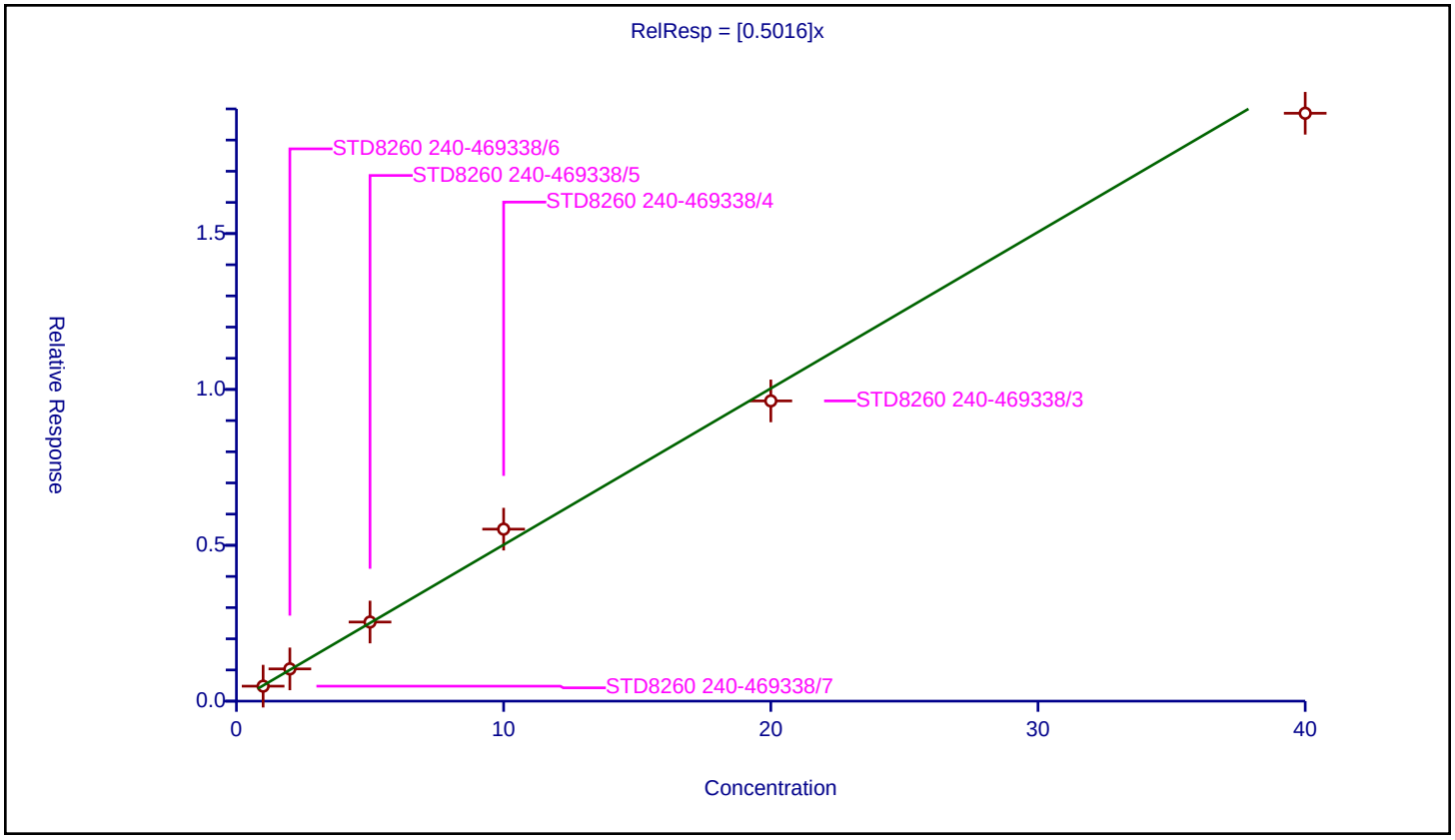
Curve Coefficients

Intercept:	0
Slope:	0.5016

Error Coefficients

Standard Error:	470000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.480236	20.0	905264.0	0.480236	Y
2	STD8260 240-469338/6	2.0	1.03406	20.0	862909.0	0.51703	Y
3	STD8260 240-469338/5	5.0	2.538231	20.0	861537.0	0.507646	Y
4	STD8260 240-469338/4	10.0	5.517361	20.0	833065.0	0.551736	Y
5	STD8260 240-469338/3	20.0	9.632158	20.0	890220.0	0.481608	Y
6	STD8260 240-469338/2	40.0	18.859909	20.0	979659.0	0.471498	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

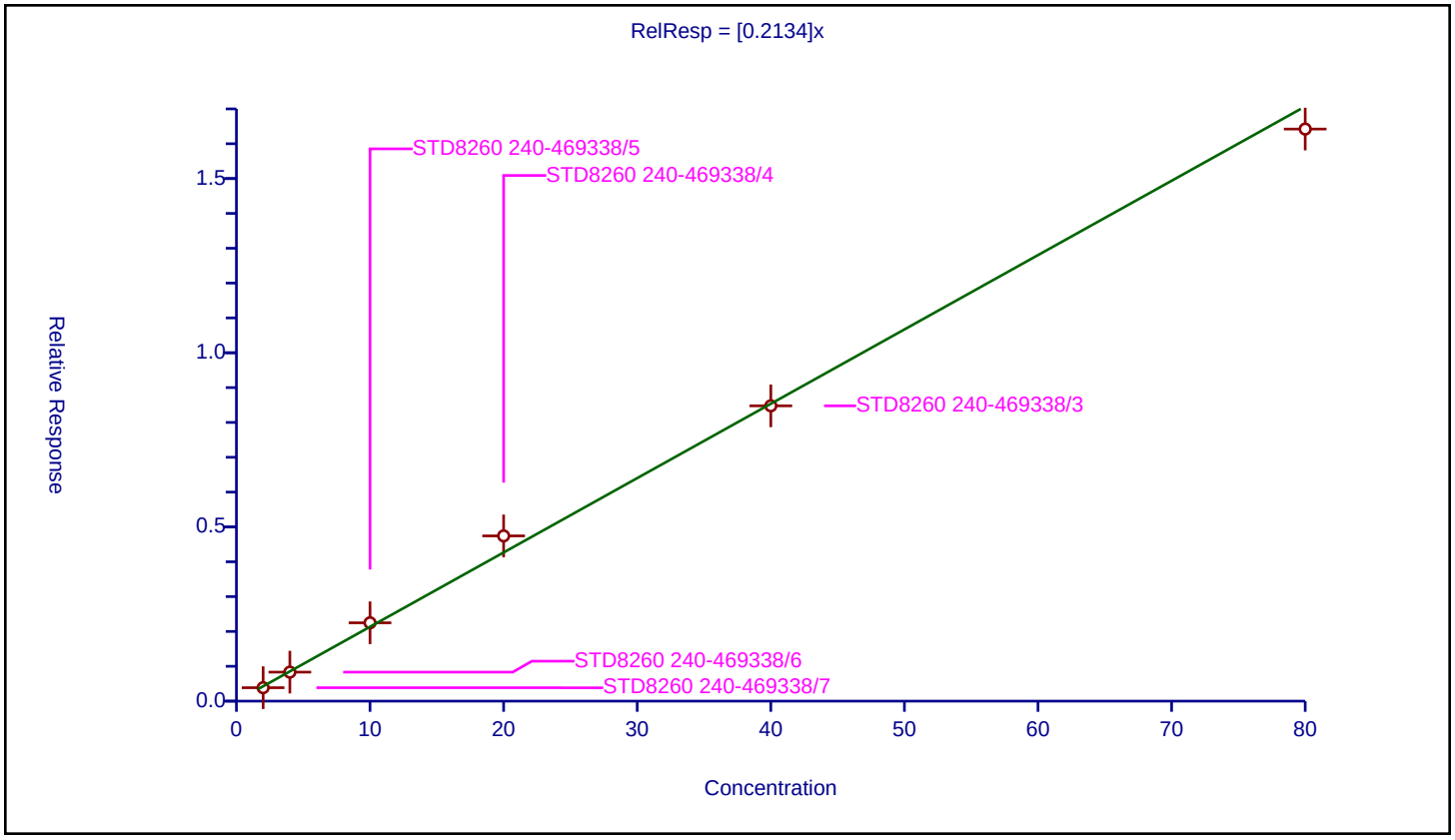
Curve Coefficients

Intercept:	0
Slope:	0.2134

Error Coefficients

Standard Error:	410000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.385678	20.0	905264.0	0.192839	Y
2	STD8260 240-469338/6	4.0	0.83295	20.0	862909.0	0.208237	Y
3	STD8260 240-469338/5	10.0	2.248748	20.0	861537.0	0.224875	Y
4	STD8260 240-469338/4	20.0	4.743543	20.0	833065.0	0.237177	Y
5	STD8260 240-469338/3	40.0	8.476444	20.0	890220.0	0.211911	Y
6	STD8260 240-469338/2	80.0	16.42104	20.0	979659.0	0.205263	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

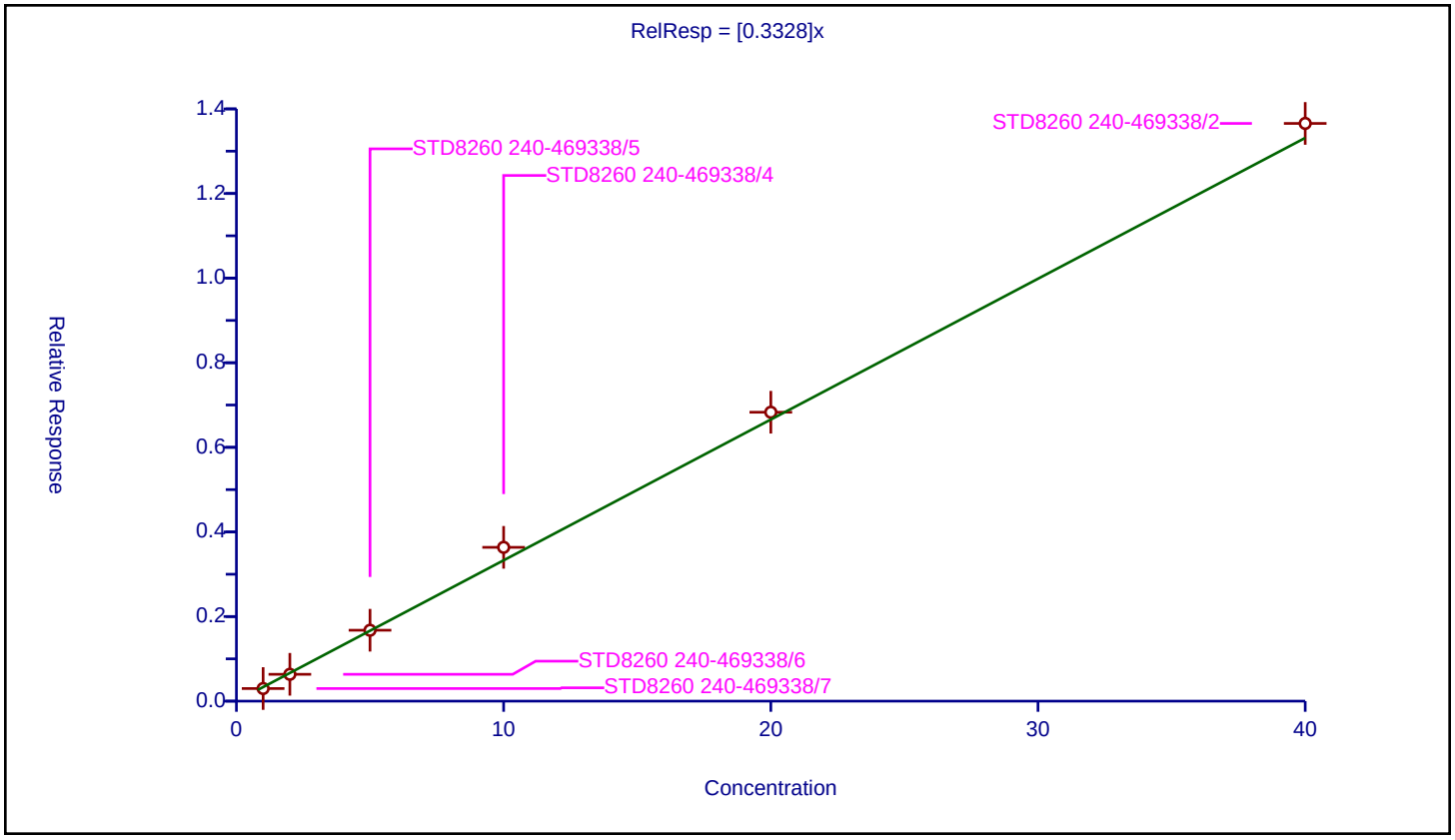
Curve Coefficients

Intercept:	0
Slope:	0.3328

Error Coefficients

Standard Error:	337000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.298167	20.0	905264.0	0.298167	Y
2	STD8260 240-469338/6	2.0	0.634435	20.0	862909.0	0.317218	Y
3	STD8260 240-469338/5	5.0	1.675981	20.0	861537.0	0.335196	Y
4	STD8260 240-469338/4	10.0	3.635875	20.0	833065.0	0.363587	Y
5	STD8260 240-469338/3	20.0	6.829368	20.0	890220.0	0.341468	Y
6	STD8260 240-469338/2	40.0	13.655976	20.0	979659.0	0.341399	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

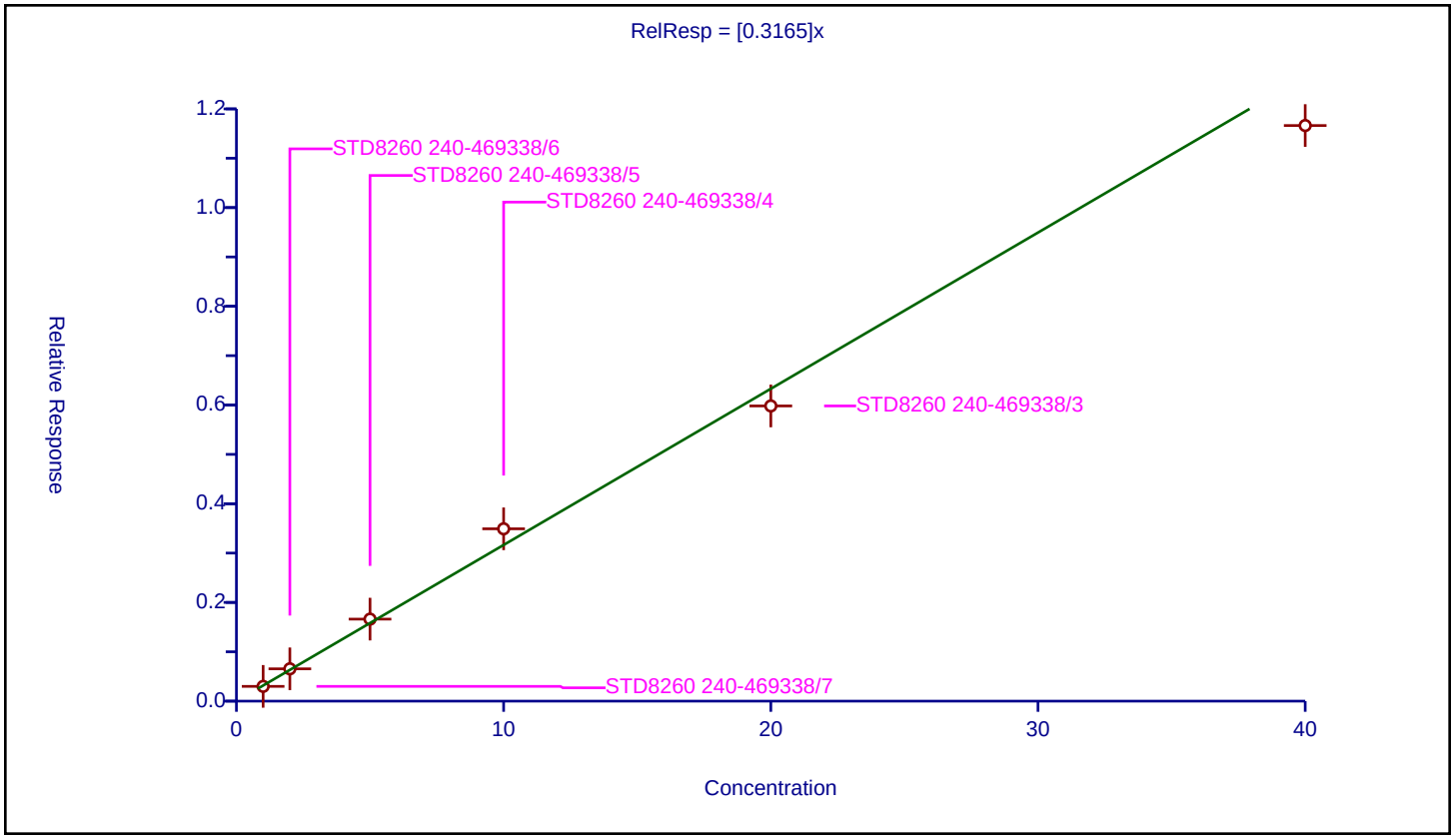
Curve Coefficients

Intercept:	0
Slope:	0.3165

Error Coefficients

Standard Error:	291000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299161	20.0	905264.0	0.299161	Y
2	STD8260 240-469338/6	2.0	0.655063	20.0	862909.0	0.327532	Y
3	STD8260 240-469338/5	5.0	1.661612	20.0	861537.0	0.332322	Y
4	STD8260 240-469338/4	10.0	3.491876	20.0	833065.0	0.349188	Y
5	STD8260 240-469338/3	20.0	5.981308	20.0	890220.0	0.299065	Y
6	STD8260 240-469338/2	40.0	11.662977	20.0	979659.0	0.291574	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

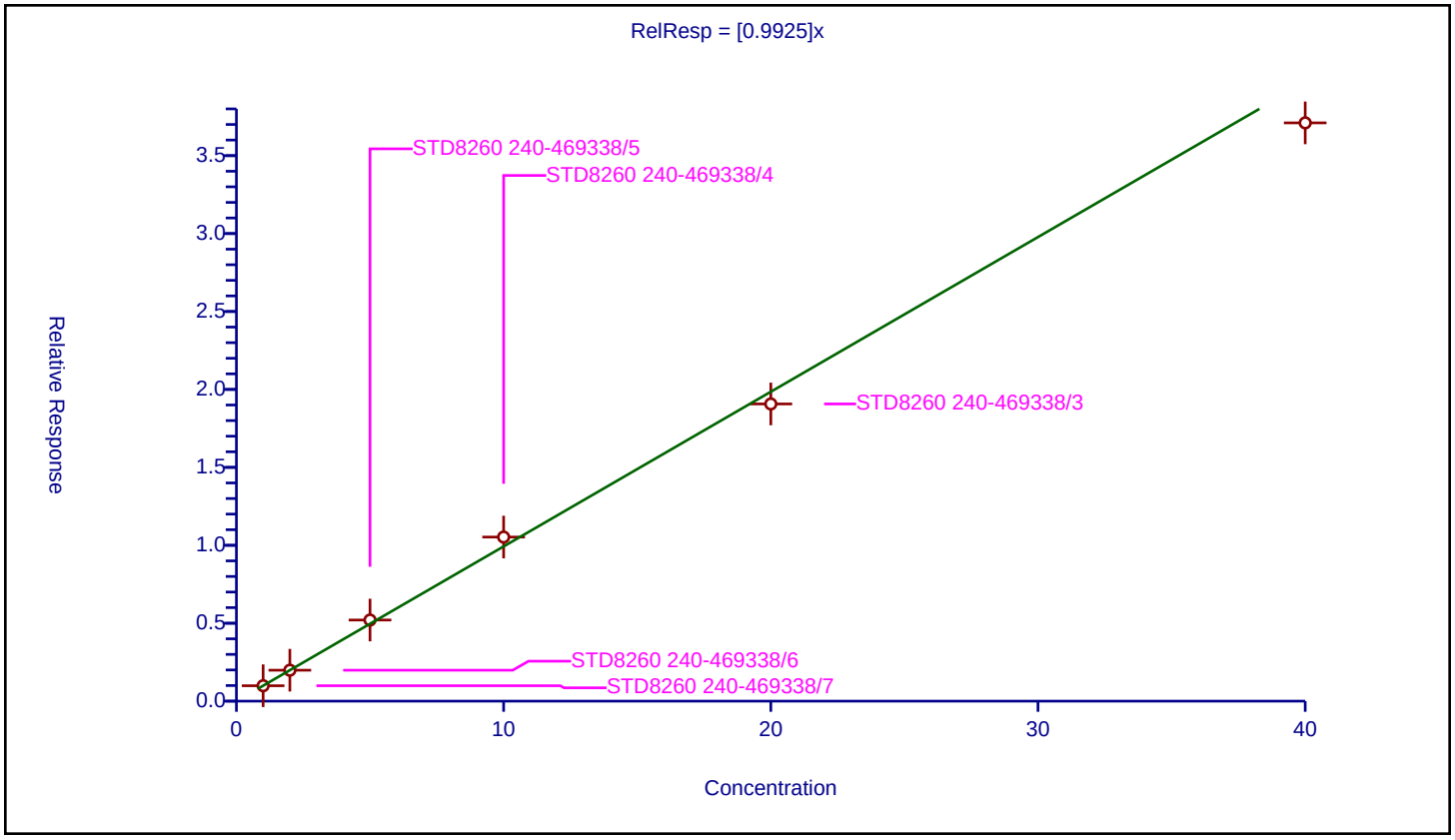
Curve Coefficients

Intercept:	0
Slope:	0.9925

Error Coefficients

Standard Error:	925000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.988021	20.0	905264.0	0.988021	Y
2	STD8260 240-469338/6	2.0	1.984867	20.0	862909.0	0.992434	Y
3	STD8260 240-469338/5	5.0	5.204675	20.0	861537.0	1.040935	Y
4	STD8260 240-469338/4	10.0	10.528086	20.0	833065.0	1.052809	Y
5	STD8260 240-469338/3	20.0	19.069107	20.0	890220.0	0.953455	Y
6	STD8260 240-469338/2	40.0	37.1024	20.0	979659.0	0.92756	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

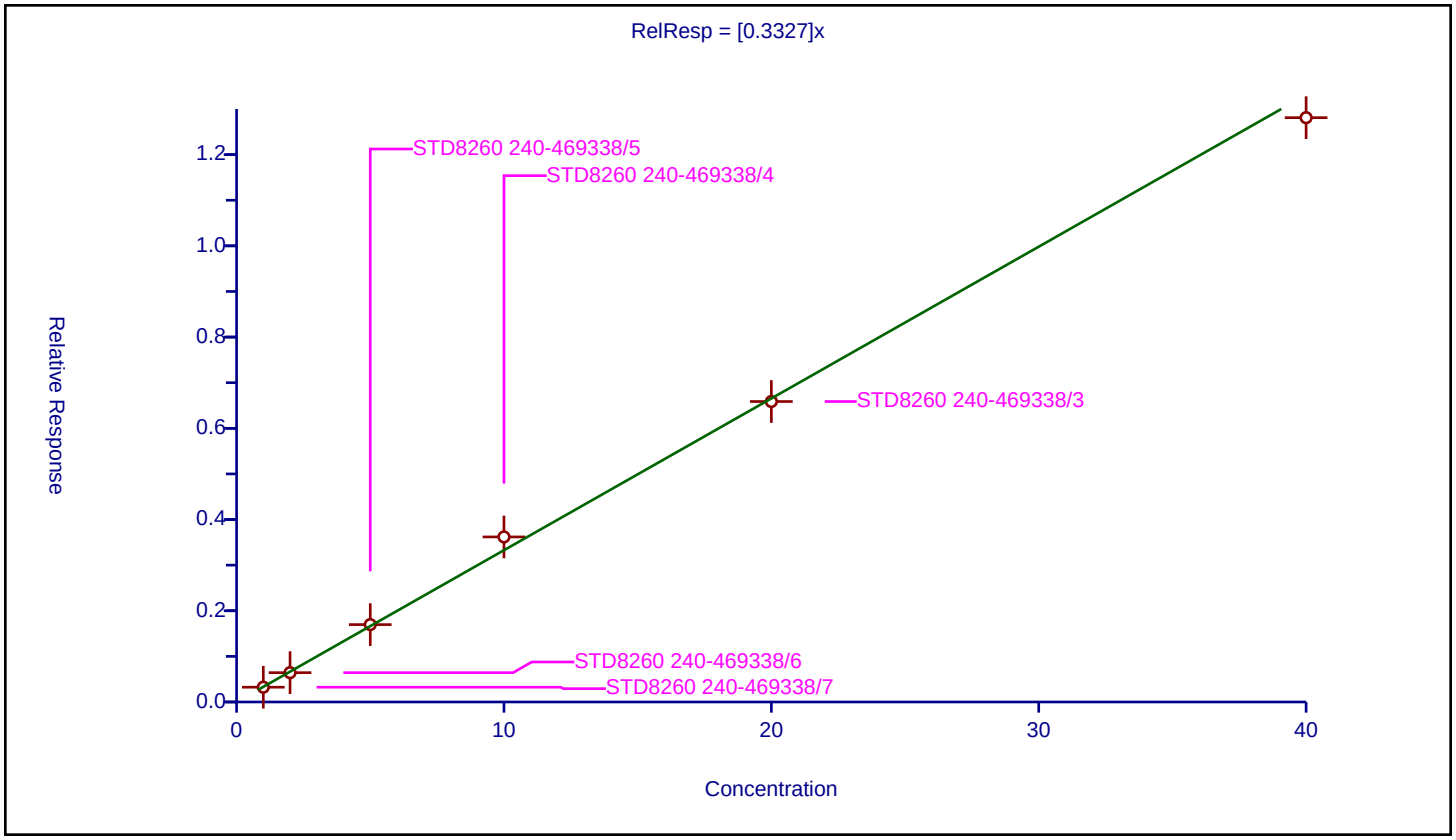
Curve Coefficients

Intercept:	0
Slope:	0.3327

Error Coefficients

Standard Error:	319000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.324215	20.0	905264.0	0.324215	Y
2	STD8260 240-469338/6	2.0	0.642779	20.0	862909.0	0.32139	Y
3	STD8260 240-469338/5	5.0	1.696039	20.0	861537.0	0.339208	Y
4	STD8260 240-469338/4	10.0	3.618613	20.0	833065.0	0.361861	Y
5	STD8260 240-469338/3	20.0	6.58754	20.0	890220.0	0.329377	Y
6	STD8260 240-469338/2	40.0	12.809906	20.0	979659.0	0.320248	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

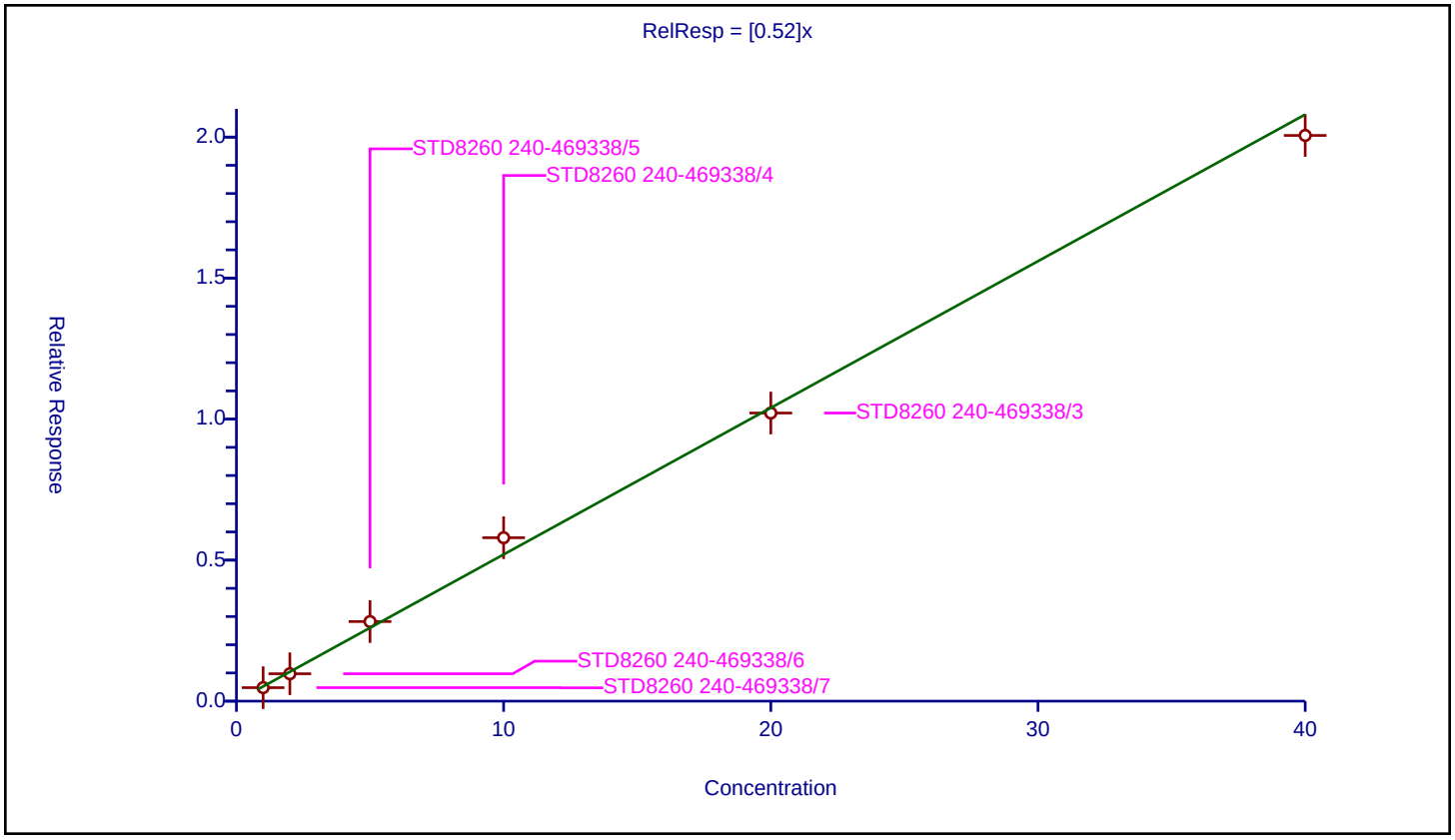
Curve Coefficients

Intercept:	0
Slope:	0.52

Error Coefficients

Standard Error:	499000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.47796	20.0	905264.0	0.47796	Y
2	STD8260 240-469338/6	2.0	0.971736	20.0	862909.0	0.485868	Y
3	STD8260 240-469338/5	5.0	2.822467	20.0	861537.0	0.564493	Y
4	STD8260 240-469338/4	10.0	5.79465	20.0	833065.0	0.579465	Y
5	STD8260 240-469338/3	20.0	10.216126	20.0	890220.0	0.510806	Y
6	STD8260 240-469338/2	40.0	20.05802	20.0	979659.0	0.501451	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

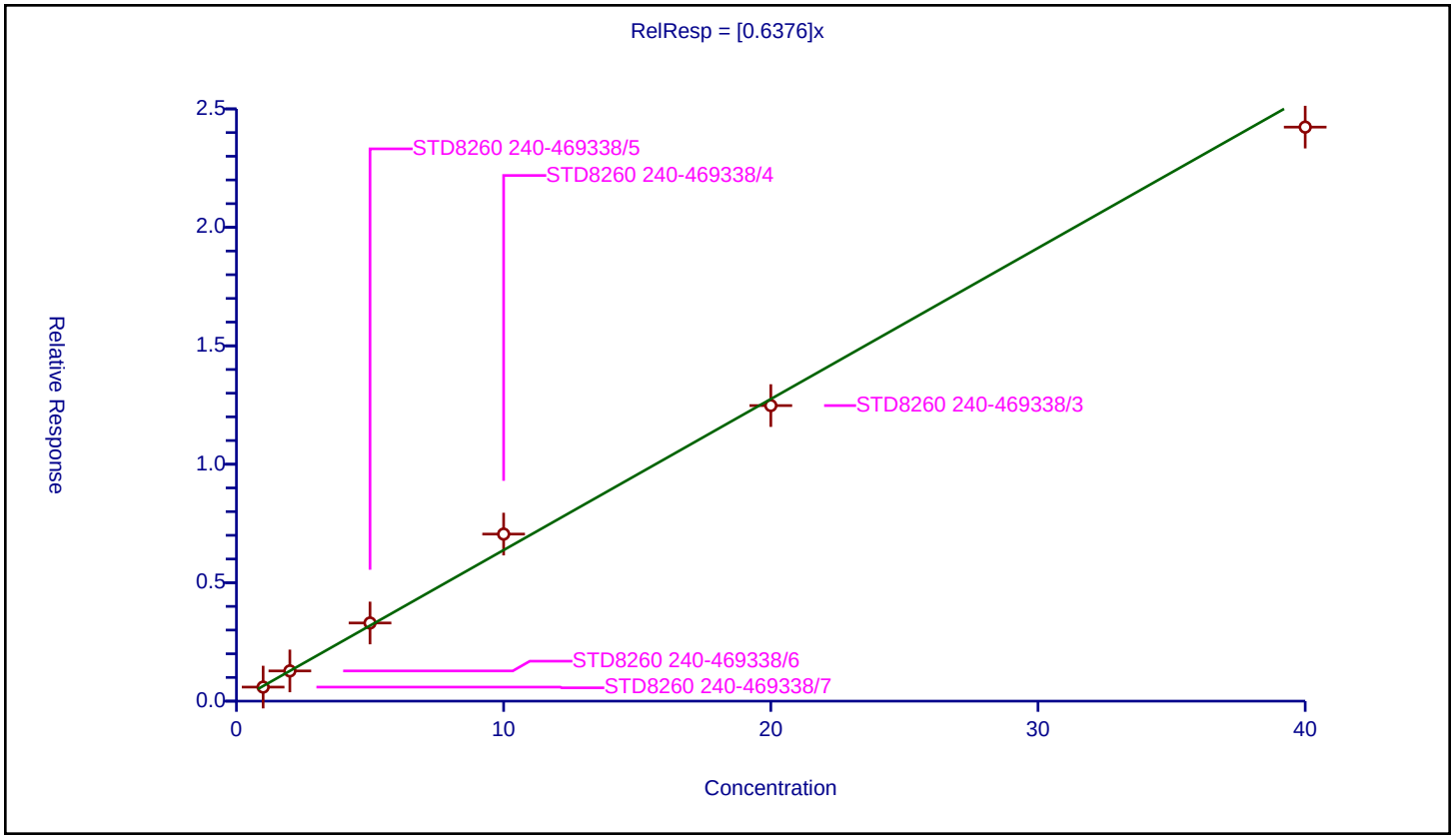
Curve Coefficients

Intercept:	0
Slope:	0.6376

Error Coefficients

Standard Error:	605000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.593396	20.0	905264.0	0.593396	Y
2	STD8260 240-469338/6	2.0	1.275129	20.0	862909.0	0.637564	Y
3	STD8260 240-469338/5	5.0	3.299359	20.0	861537.0	0.659872	Y
4	STD8260 240-469338/4	10.0	7.051839	20.0	833065.0	0.705184	Y
5	STD8260 240-469338/3	20.0	12.476556	20.0	890220.0	0.623828	Y
6	STD8260 240-469338/2	40.0	24.231493	20.0	979659.0	0.605787	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

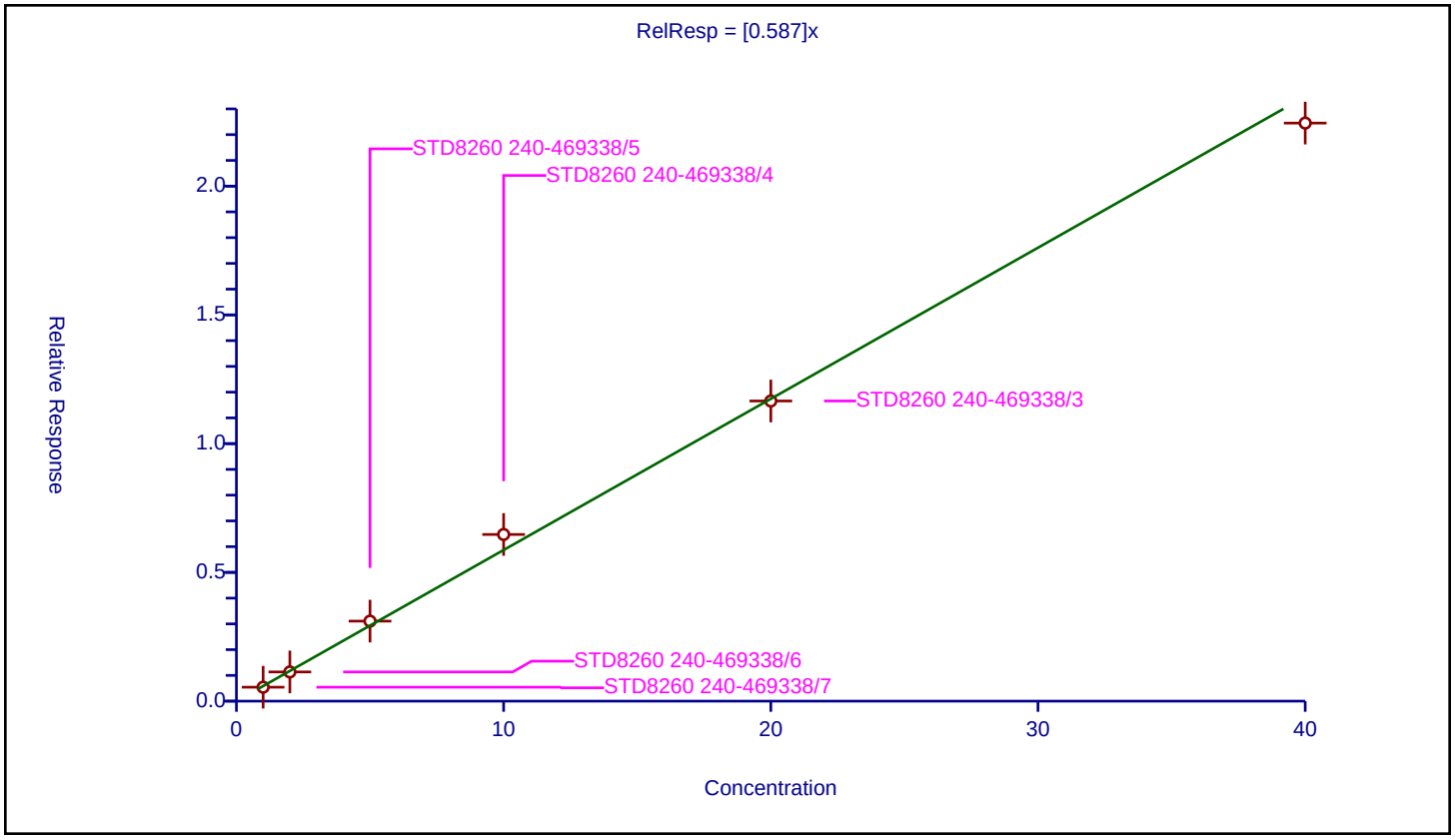
Curve Coefficients

Intercept:	0
Slope:	0.587

Error Coefficients

Standard Error:	561000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.541787	20.0	905264.0	0.541787	Y
2	STD8260 240-469338/6	2.0	1.134419	20.0	862909.0	0.567209	Y
3	STD8260 240-469338/5	5.0	3.107586	20.0	861537.0	0.621517	Y
4	STD8260 240-469338/4	10.0	6.472748	20.0	833065.0	0.647275	Y
5	STD8260 240-469338/3	20.0	11.65622	20.0	890220.0	0.582811	Y
6	STD8260 240-469338/2	40.0	22.448485	20.0	979659.0	0.561212	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

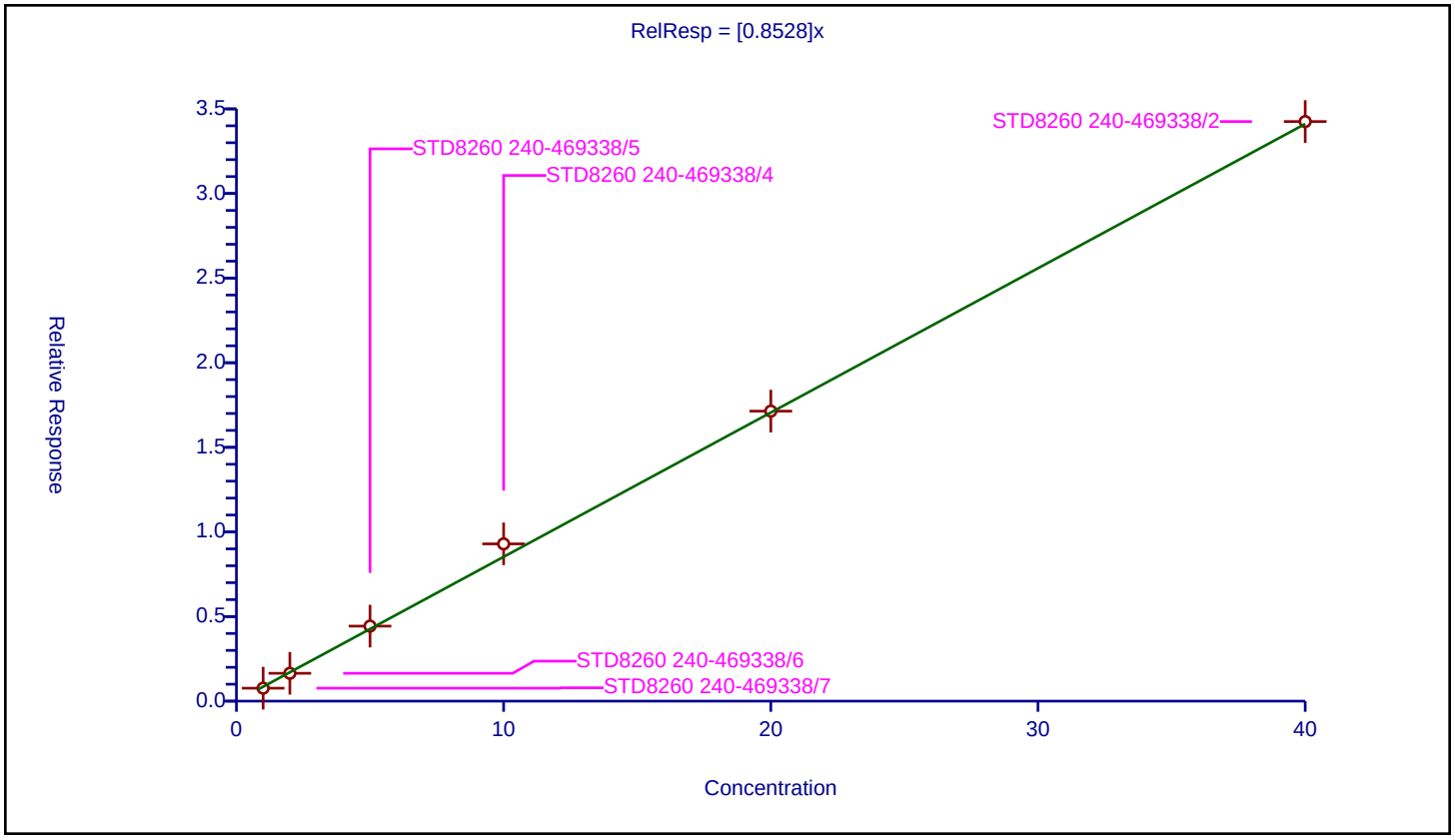
Curve Coefficients

Intercept:	0
Slope:	0.8528

Error Coefficients

Standard Error:	847000
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.765036	20.0	905264.0	0.765036	Y
2	STD8260 240-469338/6	2.0	1.645063	20.0	862909.0	0.822532	Y
3	STD8260 240-469338/5	5.0	4.433565	20.0	861537.0	0.886713	Y
4	STD8260 240-469338/4	10.0	9.292936	20.0	833065.0	0.929294	Y
5	STD8260 240-469338/3	20.0	17.137741	20.0	890220.0	0.856887	Y
6	STD8260 240-469338/2	40.0	34.251714	20.0	979659.0	0.856293	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

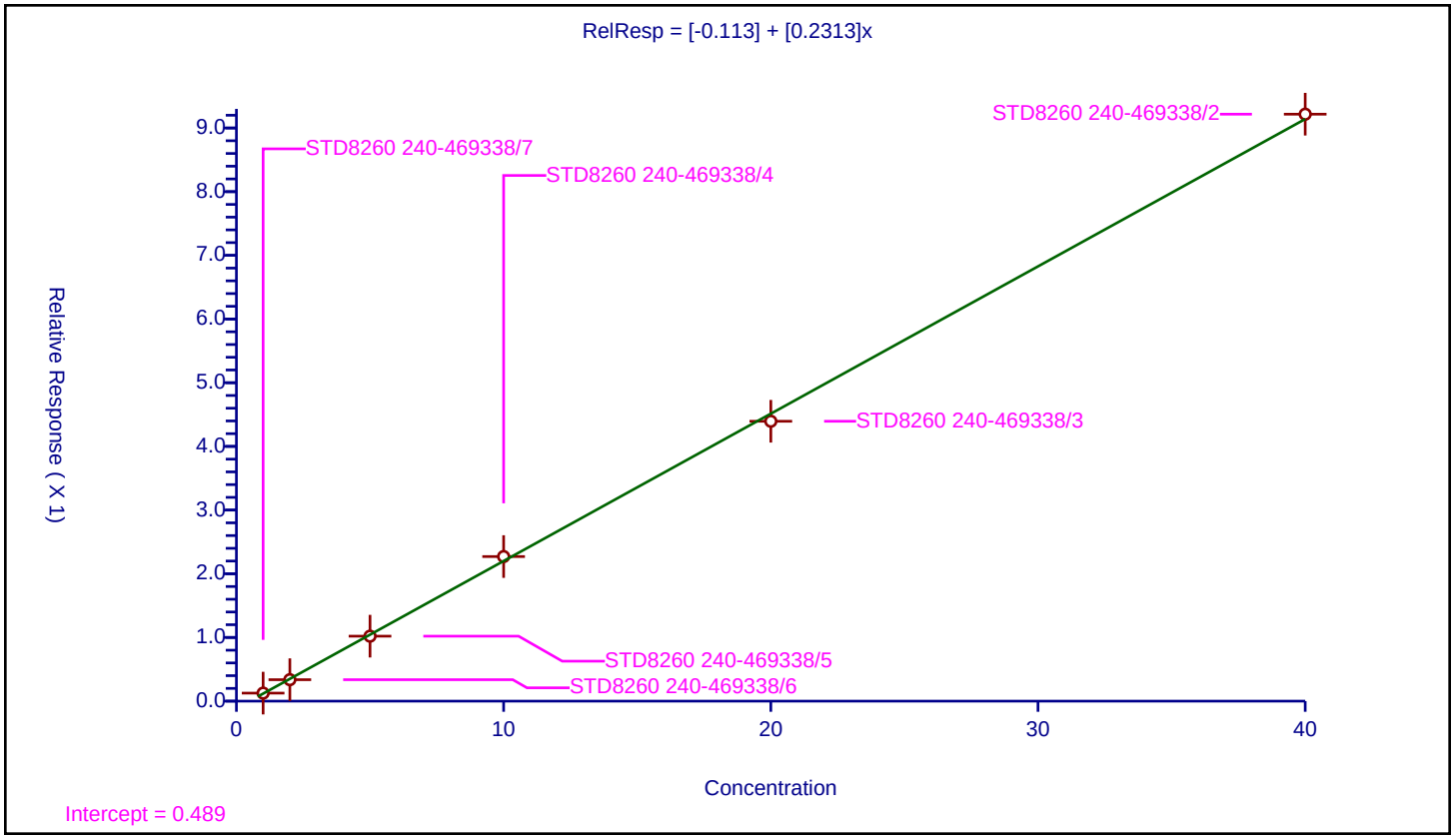
Curve Coefficients

Intercept:	-0.113
Slope:	0.2313

Error Coefficients

Standard Error:	252000
Relative Standard Error:	3.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.126284	20.0	905264.0	0.126284	Y
2	STD8260 240-469338/6	2.0	0.336976	20.0	862909.0	0.168488	Y
3	STD8260 240-469338/5	5.0	1.02027	20.0	861537.0	0.204054	Y
4	STD8260 240-469338/4	10.0	2.270483	20.0	833065.0	0.227048	Y
5	STD8260 240-469338/3	20.0	4.394891	20.0	890220.0	0.219745	Y
6	STD8260 240-469338/2	40.0	9.216656	20.0	979659.0	0.230416	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

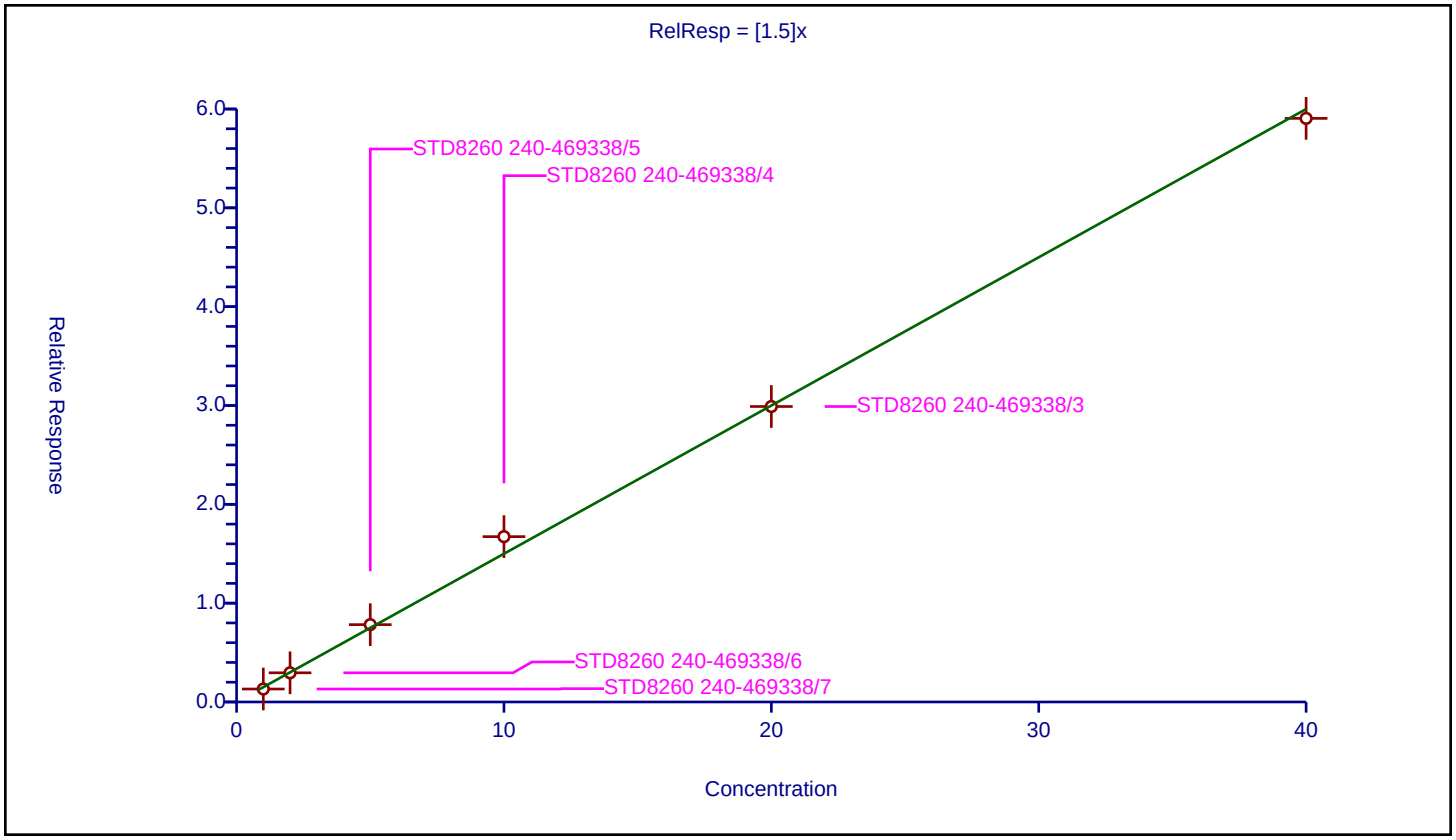
Curve Coefficients

Intercept:	0
Slope:	1.5

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.313341	20.0	905264.0	1.313341	Y
2	STD8260 240-469338/6	2.0	2.952455	20.0	862909.0	1.476228	Y
3	STD8260 240-469338/5	5.0	7.826338	20.0	861537.0	1.565268	Y
4	STD8260 240-469338/4	10.0	16.7319	20.0	833065.0	1.67319	Y
5	STD8260 240-469338/3	20.0	29.898025	20.0	890220.0	1.494901	Y
6	STD8260 240-469338/2	40.0	59.051895	20.0	979659.0	1.476297	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

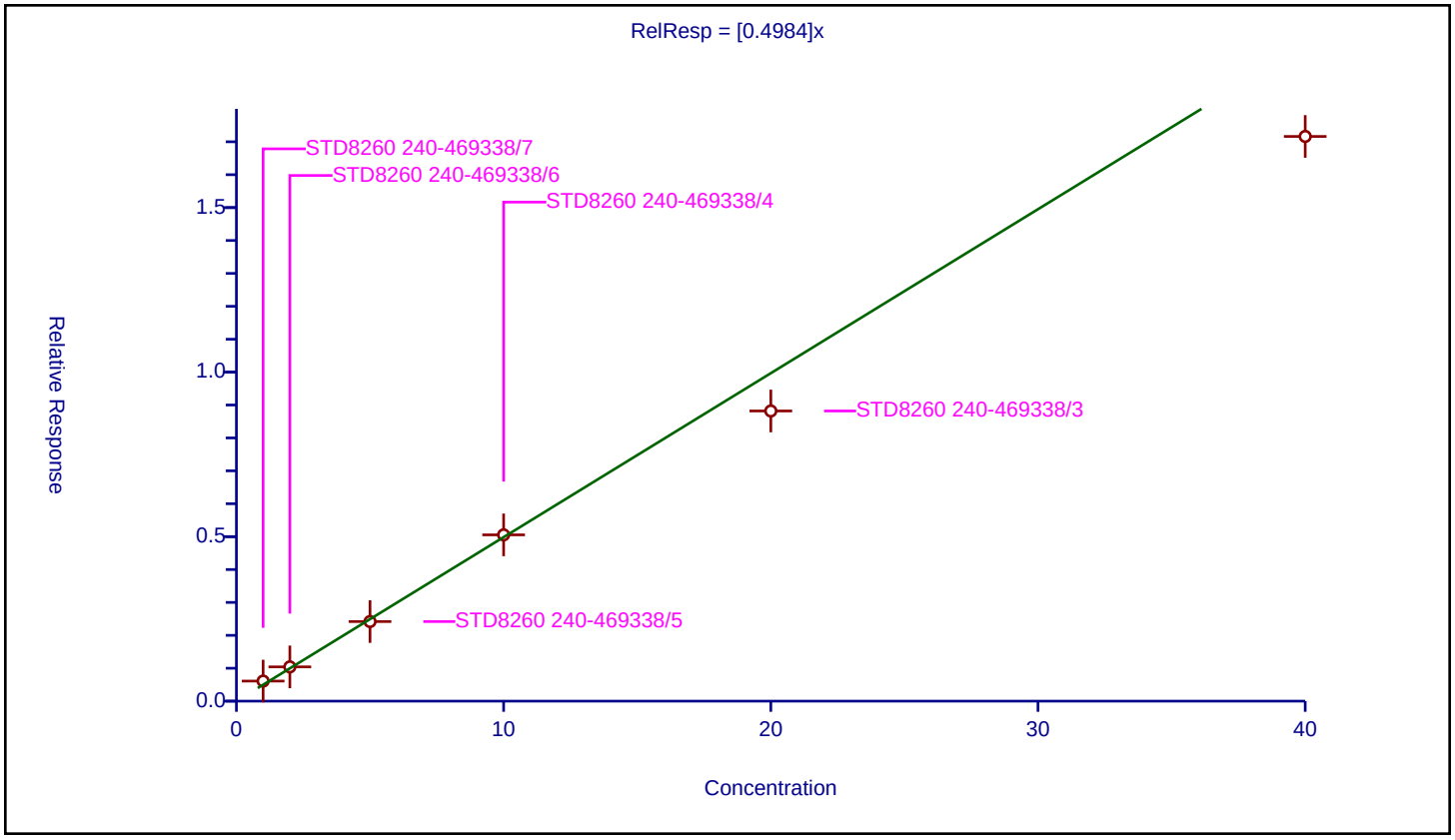
Curve Coefficients

Intercept:	0
Slope:	0.4984

Error Coefficients

Standard Error:	429000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.610253	20.0	905264.0	0.610253	Y
2	STD8260 240-469338/6	2.0	1.04157	20.0	862909.0	0.520785	Y
3	STD8260 240-469338/5	5.0	2.418817	20.0	861537.0	0.483763	Y
4	STD8260 240-469338/4	10.0	5.054179	20.0	833065.0	0.505418	Y
5	STD8260 240-469338/3	20.0	8.819168	20.0	890220.0	0.440958	Y
6	STD8260 240-469338/2	40.0	17.1624	20.0	979659.0	0.42906	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

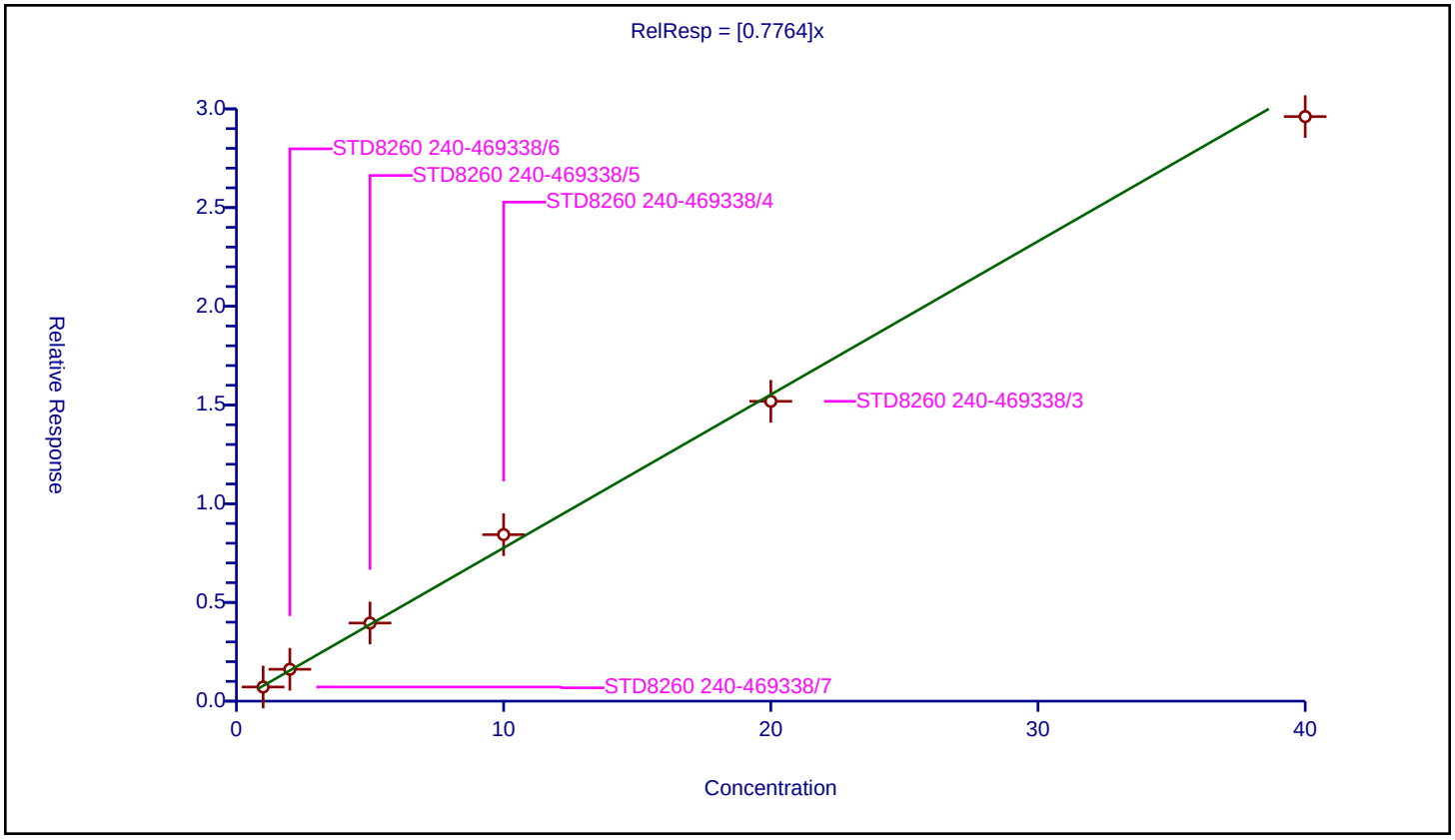
Curve Coefficients

Intercept:	0
Slope:	0.7764

Error Coefficients

Standard Error:	343000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.717081	20.0	420817.0	0.717081	Y
2	STD8260 240-469338/6	2.0	1.614323	20.0	402373.0	0.807162	Y
3	STD8260 240-469338/5	5.0	3.956513	20.0	406373.0	0.791303	Y
4	STD8260 240-469338/4	10.0	8.433794	20.0	399775.0	0.843379	Y
5	STD8260 240-469338/3	20.0	15.187261	20.0	413781.0	0.759363	Y
6	STD8260 240-469338/2	40.0	29.610521	20.0	455301.0	0.740263	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

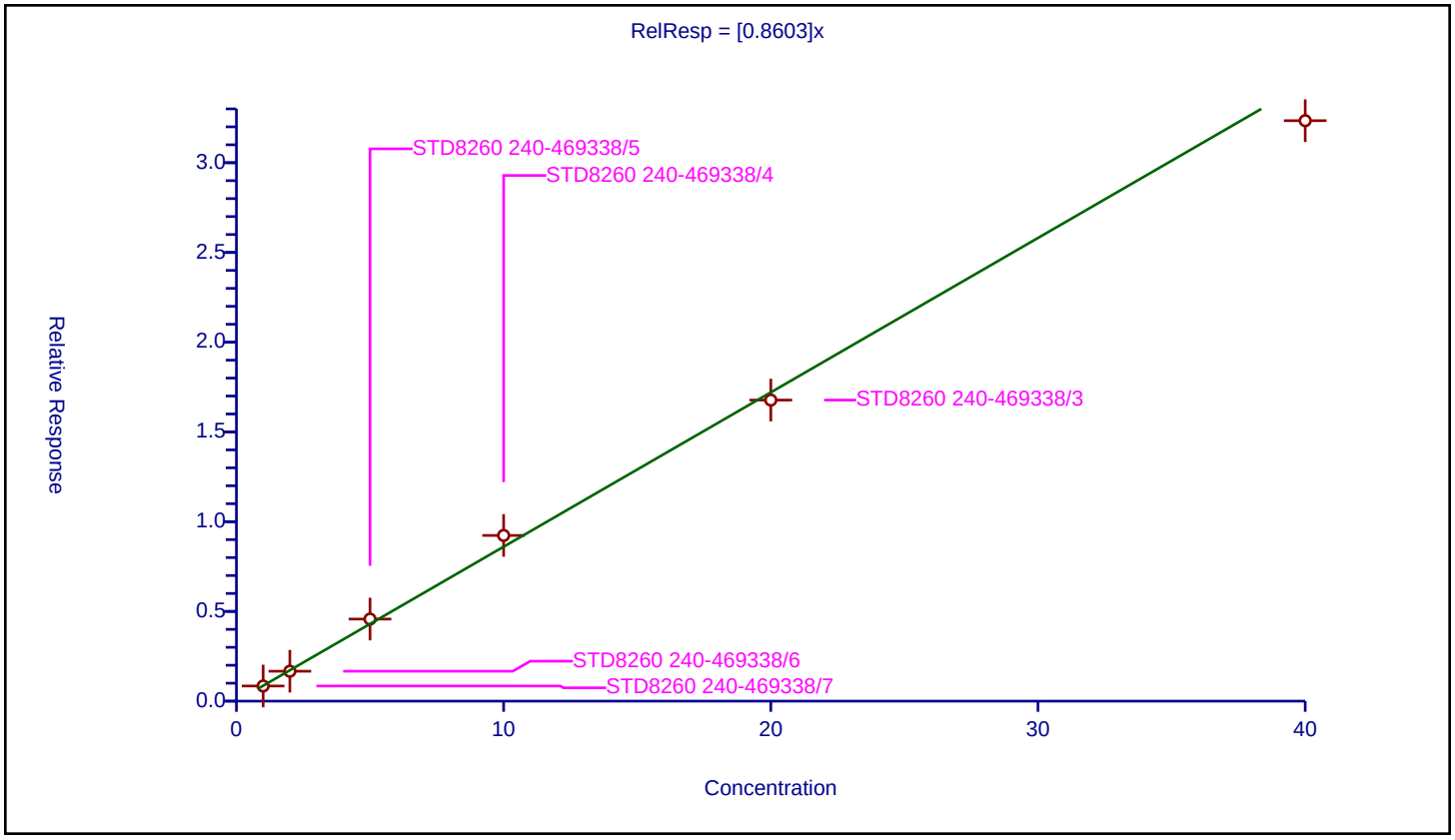
Curve Coefficients

Intercept:	0
Slope:	0.8603

Error Coefficients

Standard Error:	376000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.843359	20.0	420817.0	0.843359	Y
2	STD8260 240-469338/6	2.0	1.666762	20.0	402373.0	0.833381	Y
3	STD8260 240-469338/5	5.0	4.572942	20.0	406373.0	0.914588	Y
4	STD8260 240-469338/4	10.0	9.232643	20.0	399775.0	0.923264	Y
5	STD8260 240-469338/3	20.0	16.774429	20.0	413781.0	0.838721	Y
6	STD8260 240-469338/2	40.0	32.343087	20.0	455301.0	0.808577	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

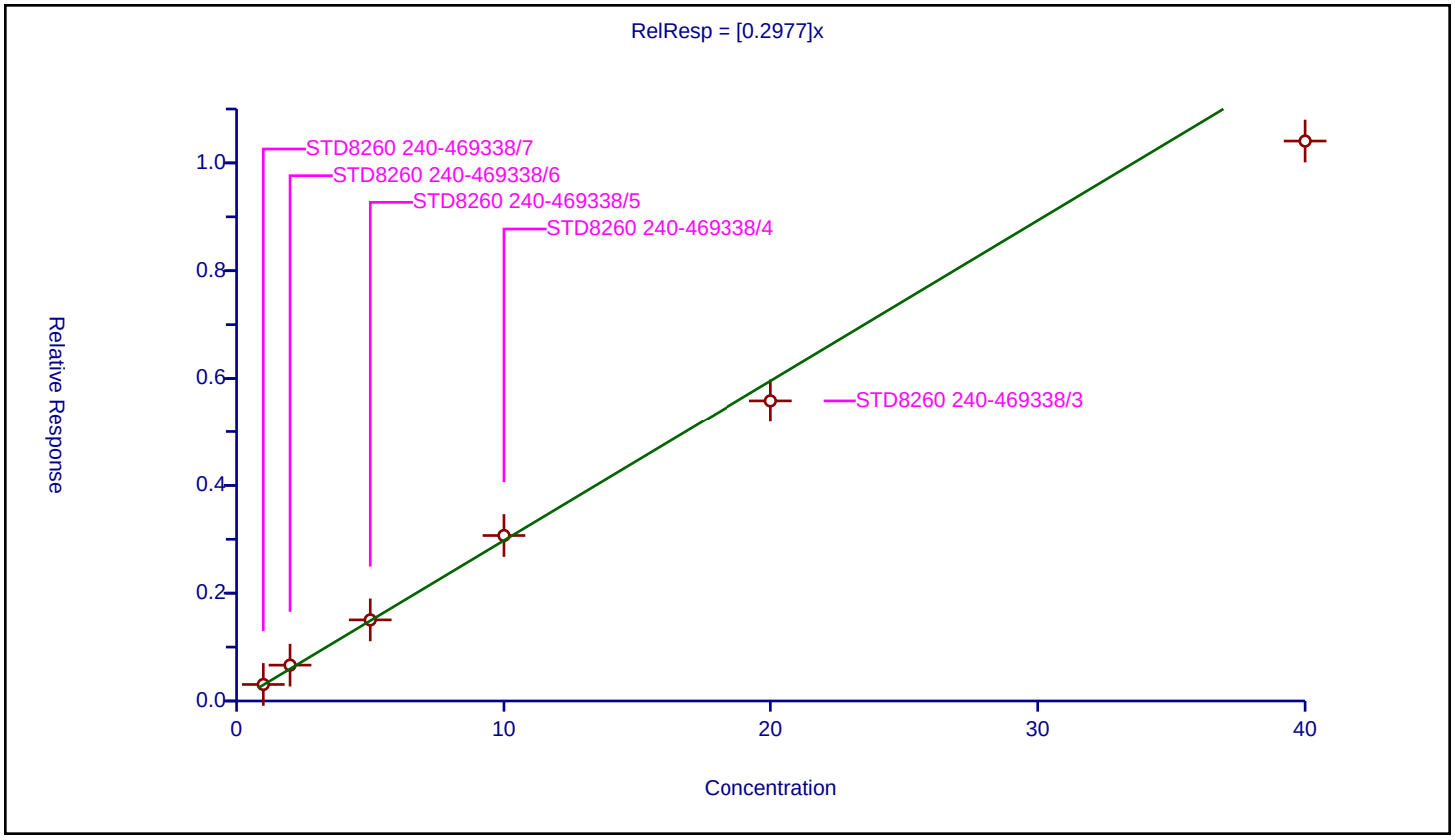
Curve Coefficients

Intercept:	0
Slope:	0.2977

Error Coefficients

Standard Error:	122000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306594	20.0	420817.0	0.306594	Y
2	STD8260 240-469338/6	2.0	0.665104	20.0	402373.0	0.332552	Y
3	STD8260 240-469338/5	5.0	1.50448	20.0	406373.0	0.300896	Y
4	STD8260 240-469338/4	10.0	3.069727	20.0	399775.0	0.306973	Y
5	STD8260 240-469338/3	20.0	5.585418	20.0	413781.0	0.279271	Y
6	STD8260 240-469338/2	40.0	10.405776	20.0	455301.0	0.260144	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

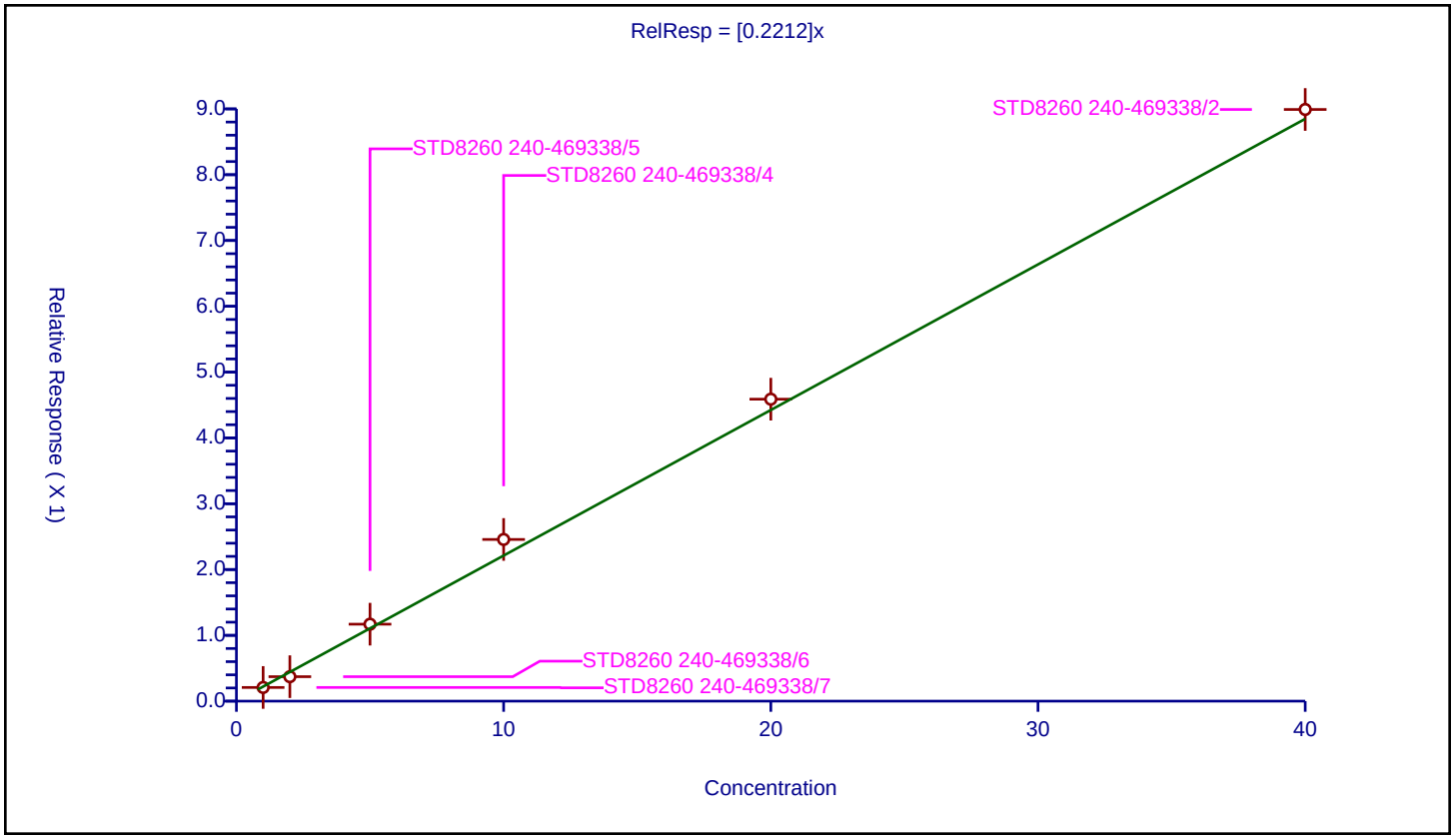
Curve Coefficients

Intercept:	0
Slope:	0.2212

Error Coefficients

Standard Error:	104000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.207644	20.0	420817.0	0.207644	Y
2	STD8260 240-469338/6	2.0	0.371645	20.0	402373.0	0.185823	Y
3	STD8260 240-469338/5	5.0	1.169418	20.0	406373.0	0.233884	Y
4	STD8260 240-469338/4	10.0	2.456832	20.0	399775.0	0.245683	Y
5	STD8260 240-469338/3	20.0	4.588563	20.0	413781.0	0.229428	Y
6	STD8260 240-469338/2	40.0	8.991195	20.0	455301.0	0.22478	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

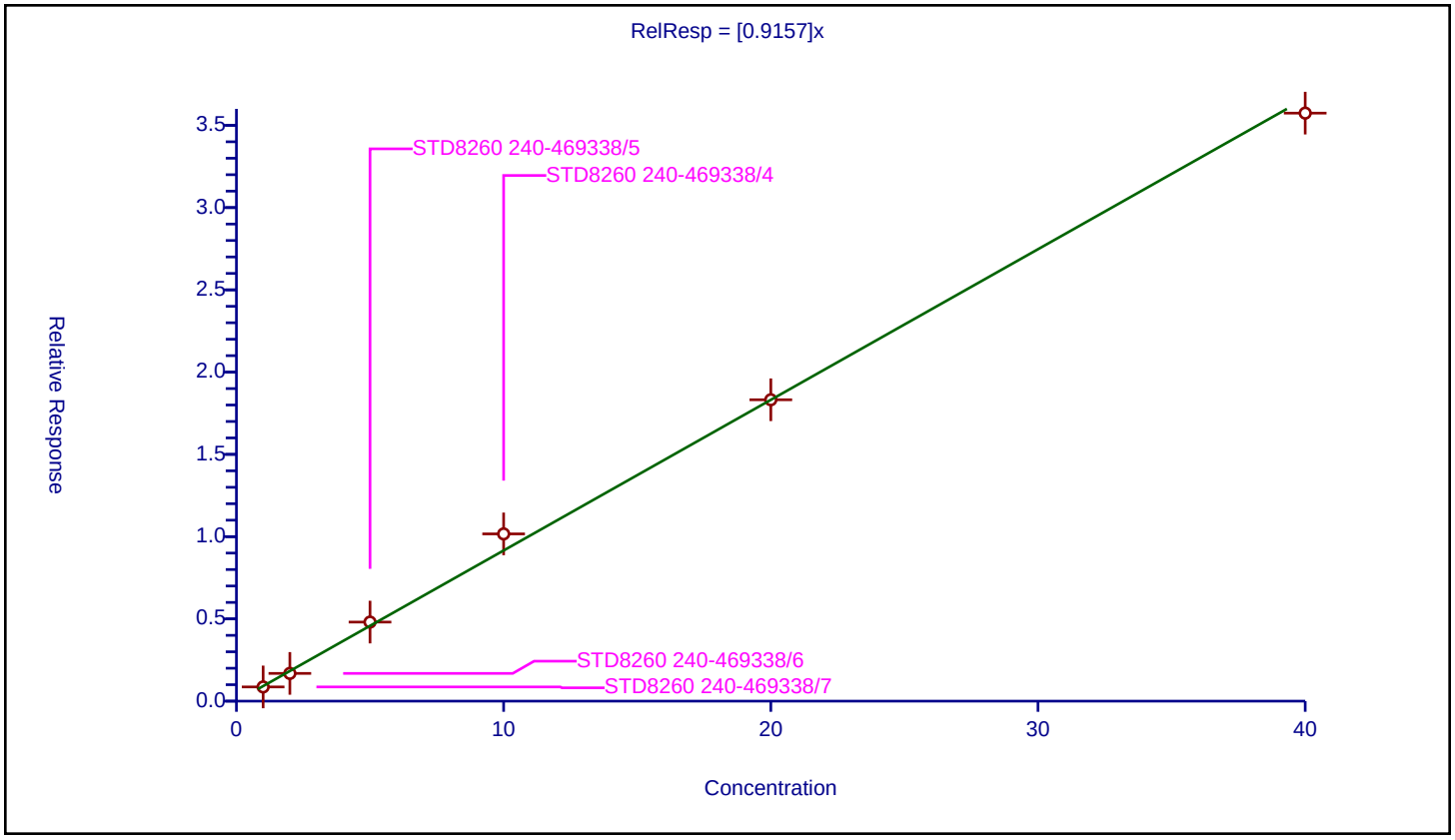
Curve Coefficients

Intercept:	0
Slope:	0.9157

Error Coefficients

Standard Error:	414000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.863796	20.0	420817.0	0.863796	Y
2	STD8260 240-469338/6	2.0	1.686296	20.0	402373.0	0.843148	Y
3	STD8260 240-469338/5	5.0	4.805487	20.0	406373.0	0.961097	Y
4	STD8260 240-469338/4	10.0	10.165868	20.0	399775.0	1.016587	Y
5	STD8260 240-469338/3	20.0	18.319643	20.0	413781.0	0.915982	Y
6	STD8260 240-469338/2	40.0	35.742026	20.0	455301.0	0.893551	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

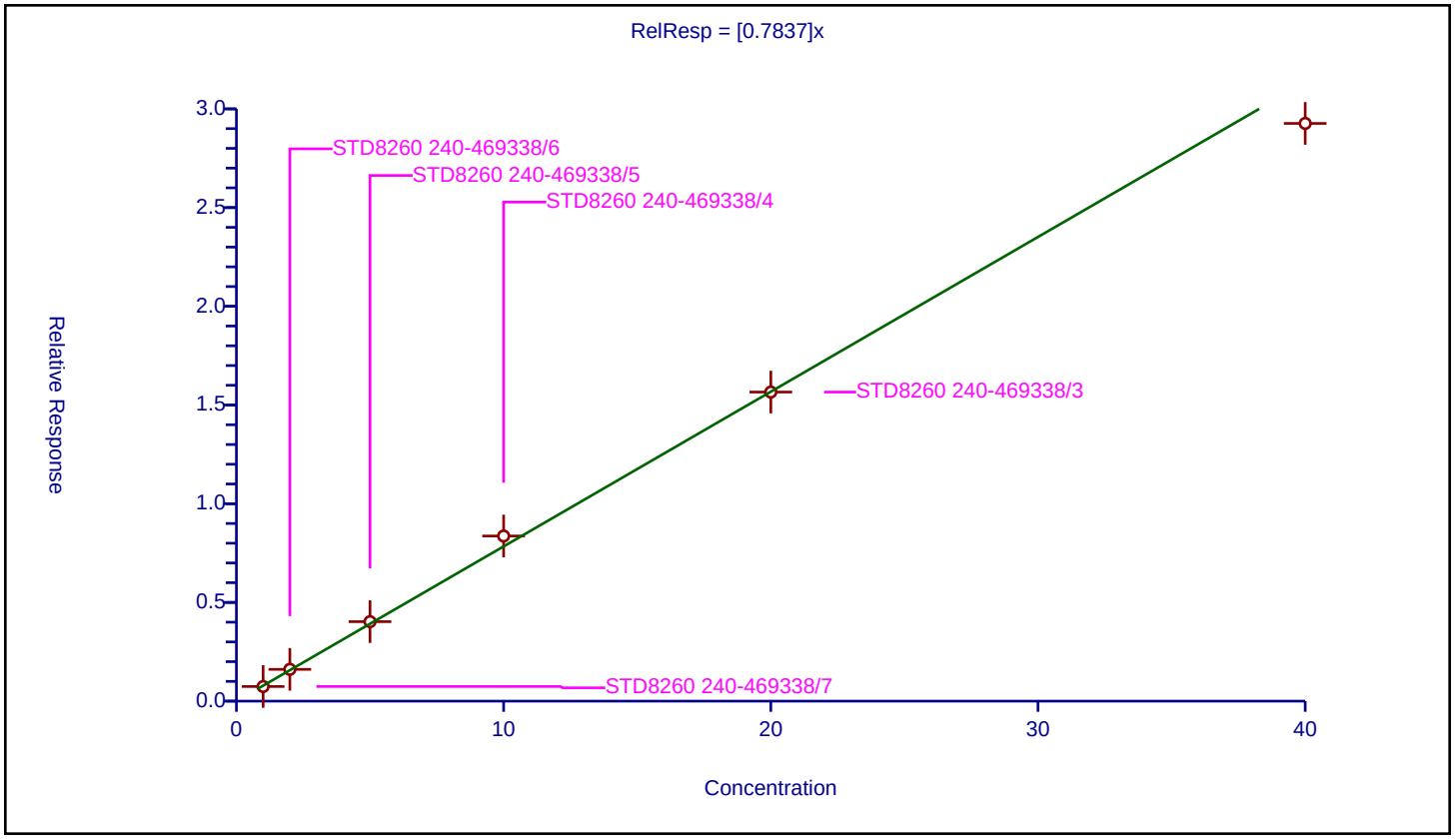
Curve Coefficients

Intercept:	0
Slope:	0.7837

Error Coefficients

Standard Error:	342000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.740987	20.0	420817.0	0.740987	Y
2	STD8260 240-469338/6	2.0	1.610744	20.0	402373.0	0.805372	Y
3	STD8260 240-469338/5	5.0	4.026252	20.0	406373.0	0.80525	Y
4	STD8260 240-469338/4	10.0	8.364805	20.0	399775.0	0.836481	Y
5	STD8260 240-469338/3	20.0	15.656108	20.0	413781.0	0.782805	Y
6	STD8260 240-469338/2	40.0	29.262927	20.0	455301.0	0.731573	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

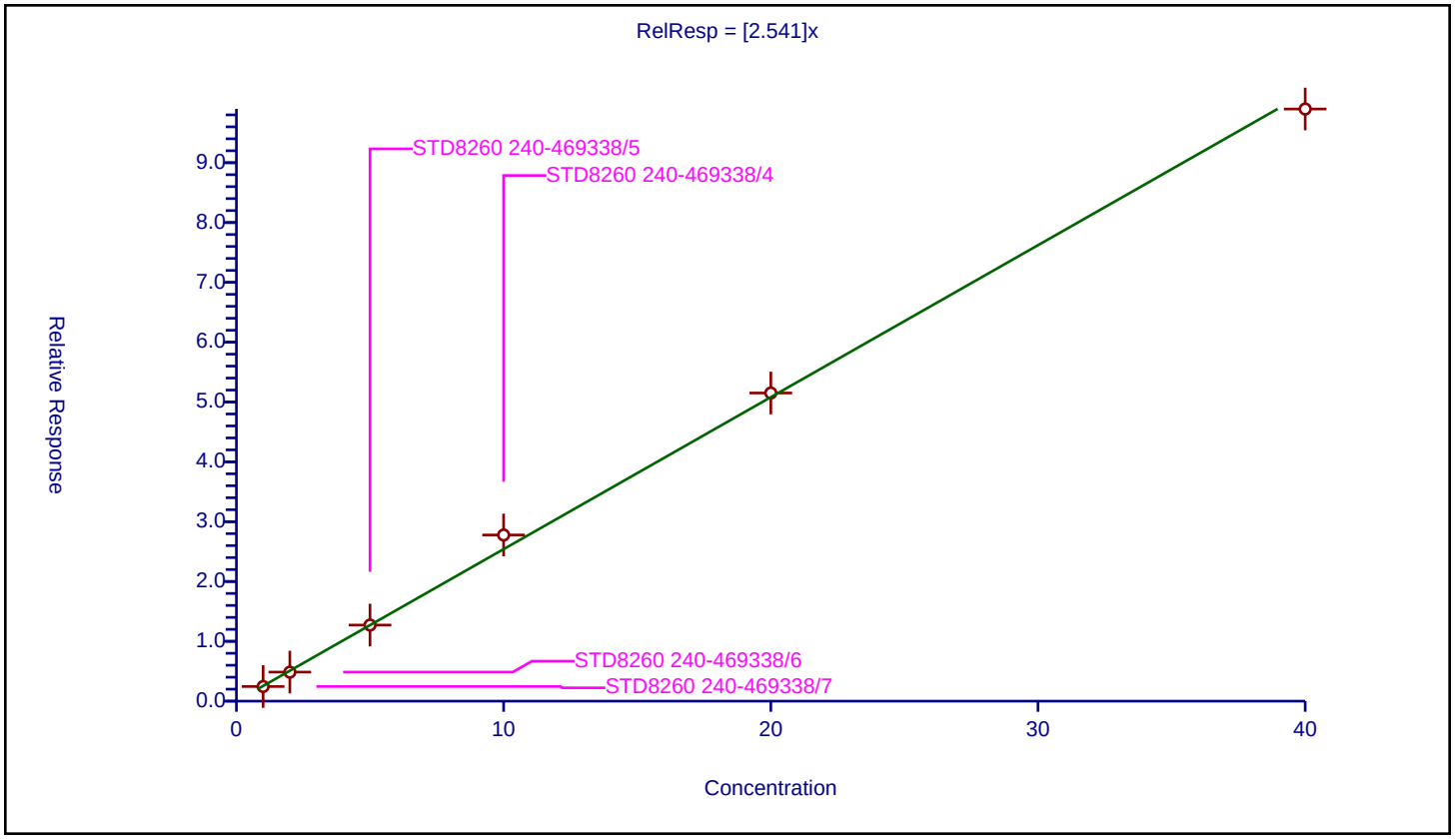
Curve Coefficients

Intercept:	0
Slope:	2.541

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.446194	20.0	420817.0	2.446194	Y
2	STD8260 240-469338/6	2.0	4.853258	20.0	402373.0	2.426629	Y
3	STD8260 240-469338/5	5.0	12.715805	20.0	406373.0	2.543161	Y
4	STD8260 240-469338/4	10.0	27.773022	20.0	399775.0	2.777302	Y
5	STD8260 240-469338/3	20.0	51.507875	20.0	413781.0	2.575394	Y
6	STD8260 240-469338/2	40.0	98.976326	20.0	455301.0	2.474408	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

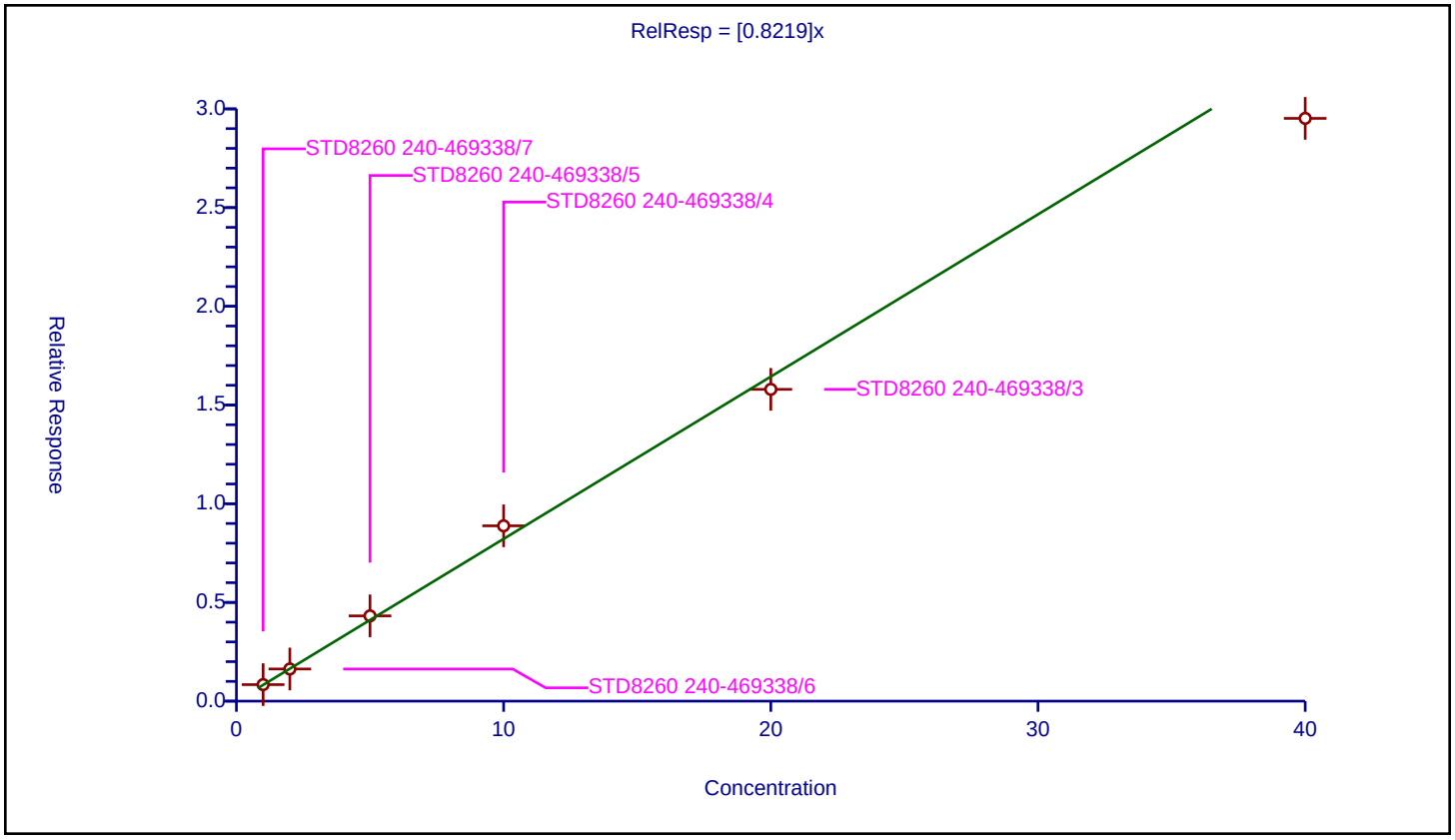
Curve Coefficients

Intercept:	0
Slope:	0.8219

Error Coefficients

Standard Error:	346000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.837133	20.0	420817.0	0.837133	Y
2	STD8260 240-469338/6	2.0	1.629583	20.0	402373.0	0.814791	Y
3	STD8260 240-469338/5	5.0	4.318742	20.0	406373.0	0.863748	Y
4	STD8260 240-469338/4	10.0	8.880445	20.0	399775.0	0.888045	Y
5	STD8260 240-469338/3	20.0	15.79304	20.0	413781.0	0.789652	Y
6	STD8260 240-469338/2	40.0	29.520295	20.0	455301.0	0.738007	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

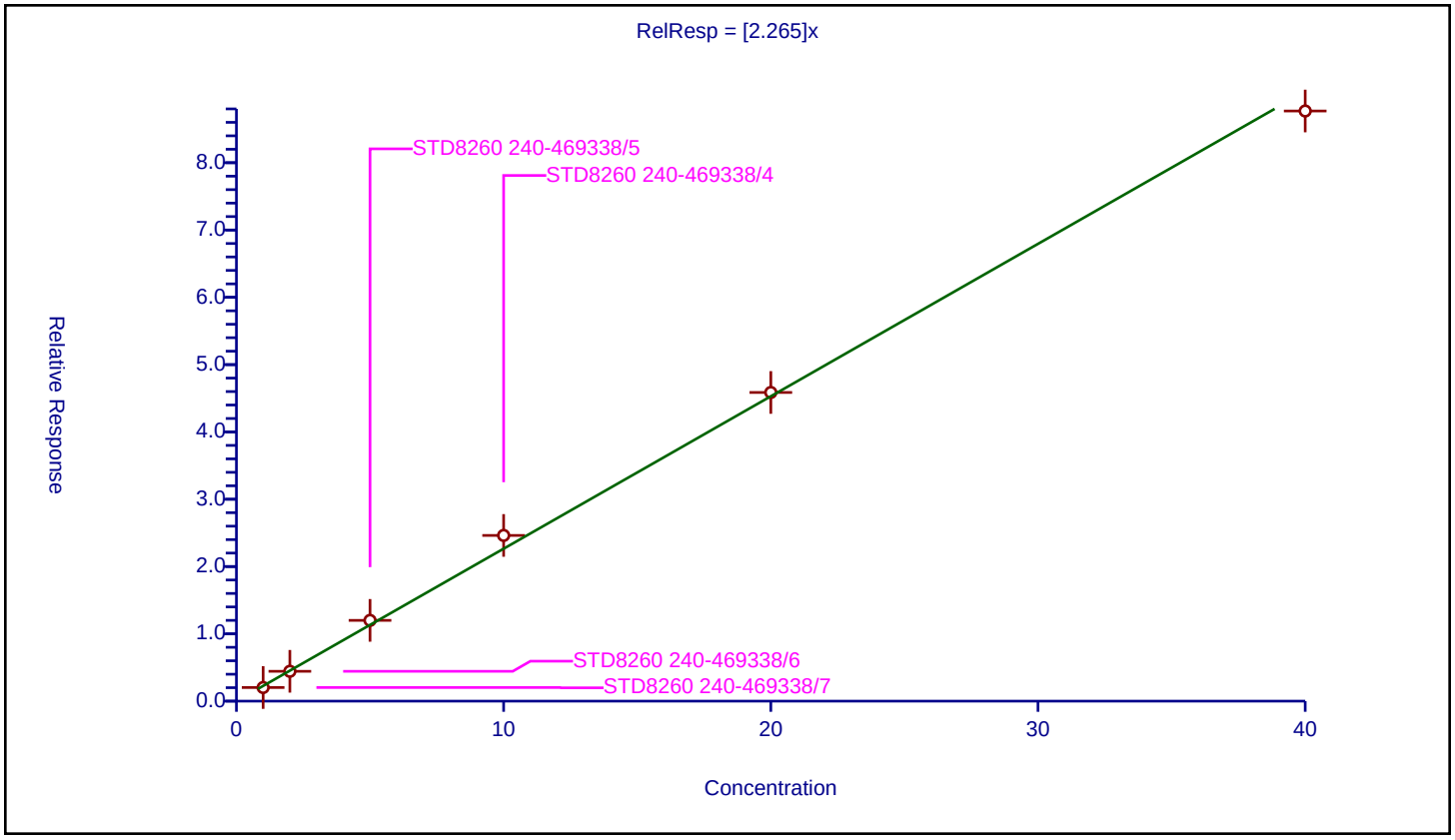
Curve Coefficients

Intercept:	0
Slope:	2.265

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.023587	20.0	420817.0	2.023587	Y
2	STD8260 240-469338/6	2.0	4.435486	20.0	402373.0	2.217743	Y
3	STD8260 240-469338/5	5.0	12.000699	20.0	406373.0	2.40014	Y
4	STD8260 240-469338/4	10.0	24.62195	20.0	399775.0	2.462195	Y
5	STD8260 240-469338/3	20.0	45.865663	20.0	413781.0	2.293283	Y
6	STD8260 240-469338/2	40.0	87.685904	20.0	455301.0	2.192148	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

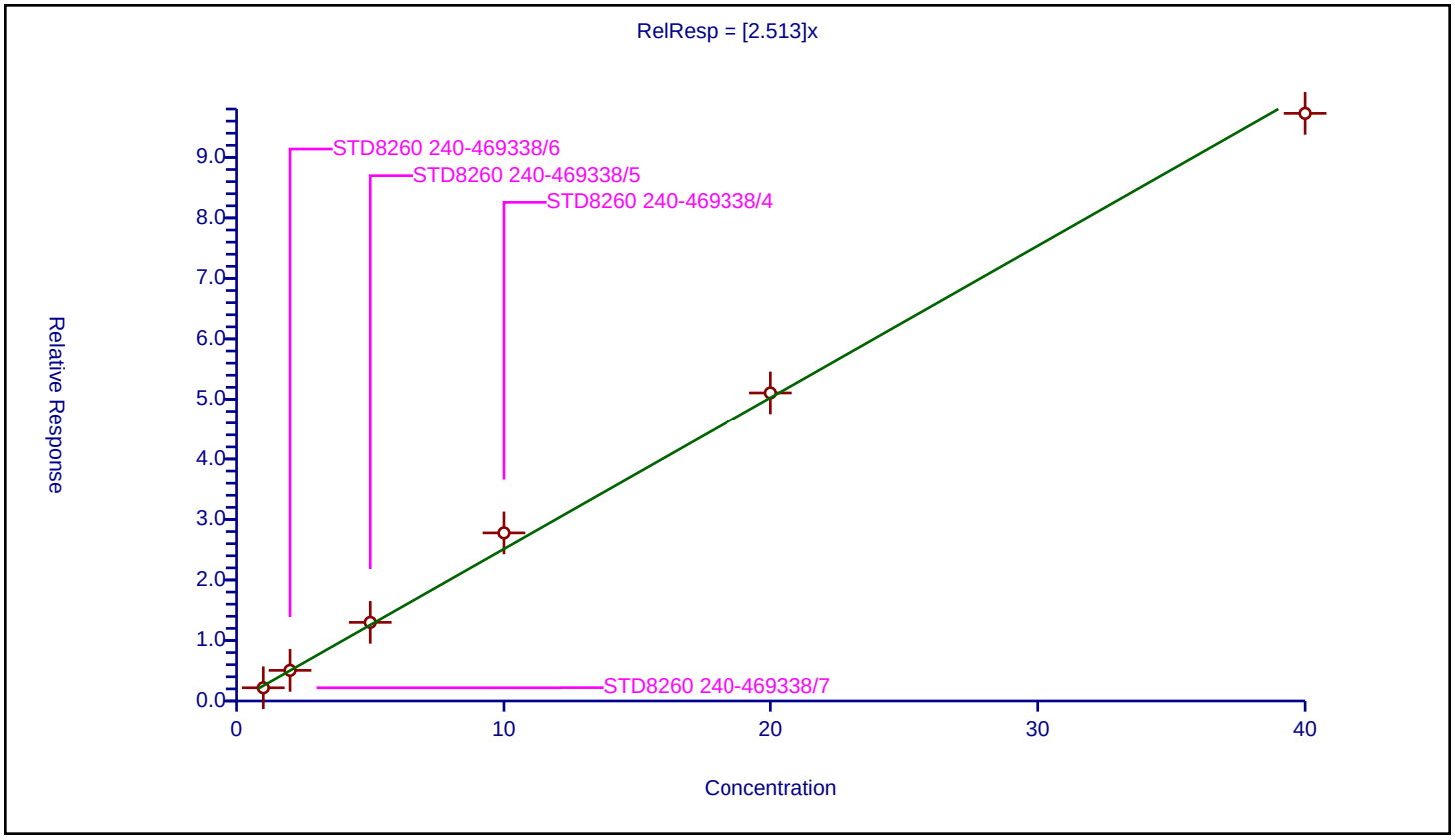
Curve Coefficients

Intercept:	0
Slope:	2.513

Error Coefficients

Standard Error:	1130000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.183229	20.0	420817.0	2.183229	Y
2	STD8260 240-469338/6	2.0	5.062815	20.0	402373.0	2.531407	Y
3	STD8260 240-469338/5	5.0	12.996484	20.0	406373.0	2.599297	Y
4	STD8260 240-469338/4	10.0	27.779776	20.0	399775.0	2.777978	Y
5	STD8260 240-469338/3	20.0	51.069237	20.0	413781.0	2.553462	Y
6	STD8260 240-469338/2	40.0	97.280217	20.0	455301.0	2.432005	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

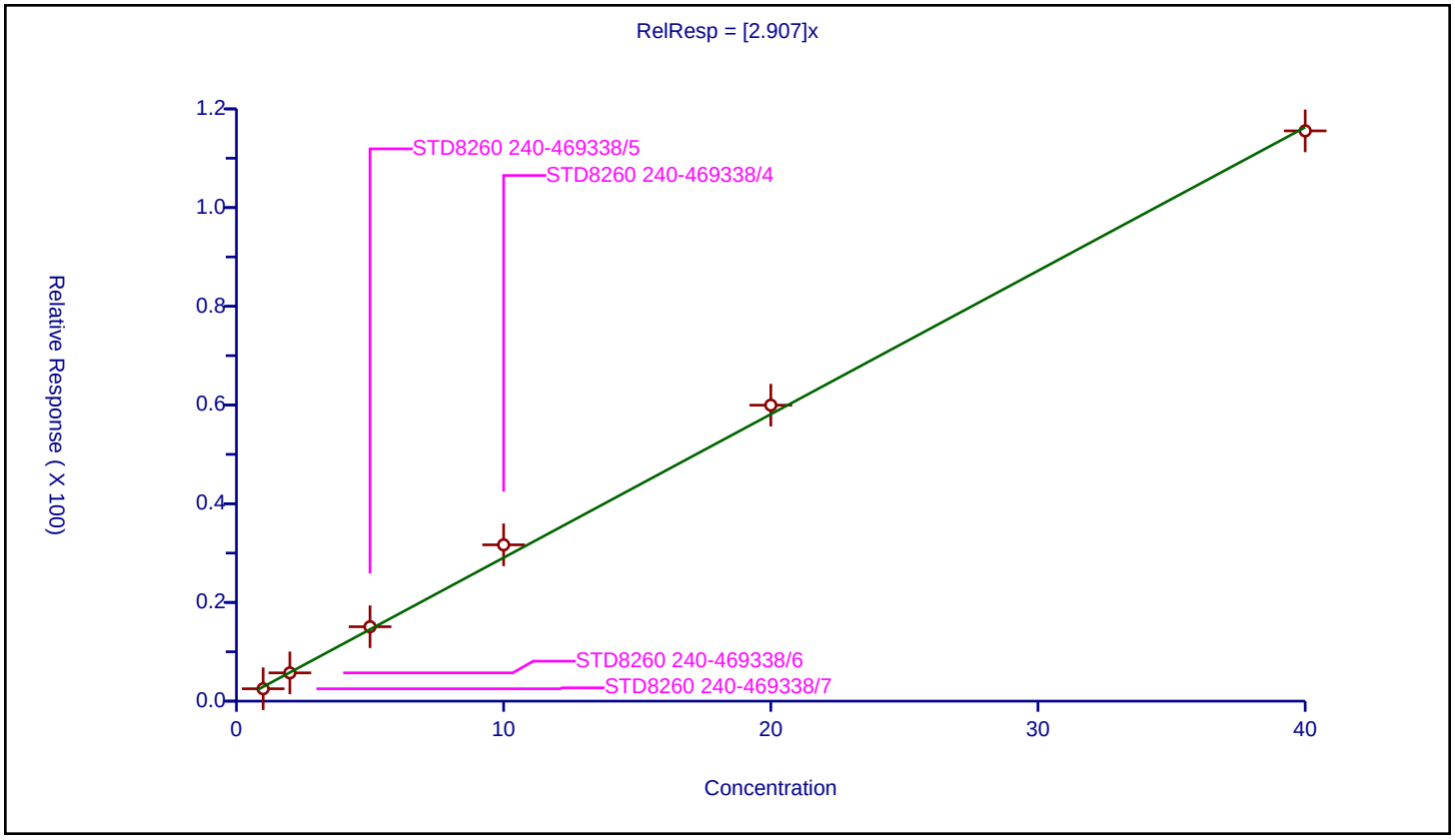
Curve Coefficients

Intercept:	0
Slope:	2.907

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.508644	20.0	420817.0	2.508644	Y
2	STD8260 240-469338/6	2.0	5.726279	20.0	402373.0	2.863139	Y
3	STD8260 240-469338/5	5.0	15.072507	20.0	406373.0	3.014501	Y
4	STD8260 240-469338/4	10.0	31.671915	20.0	399775.0	3.167192	Y
5	STD8260 240-469338/3	20.0	59.968437	20.0	413781.0	2.998422	Y
6	STD8260 240-469338/2	40.0	115.54923	20.0	455301.0	2.888731	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

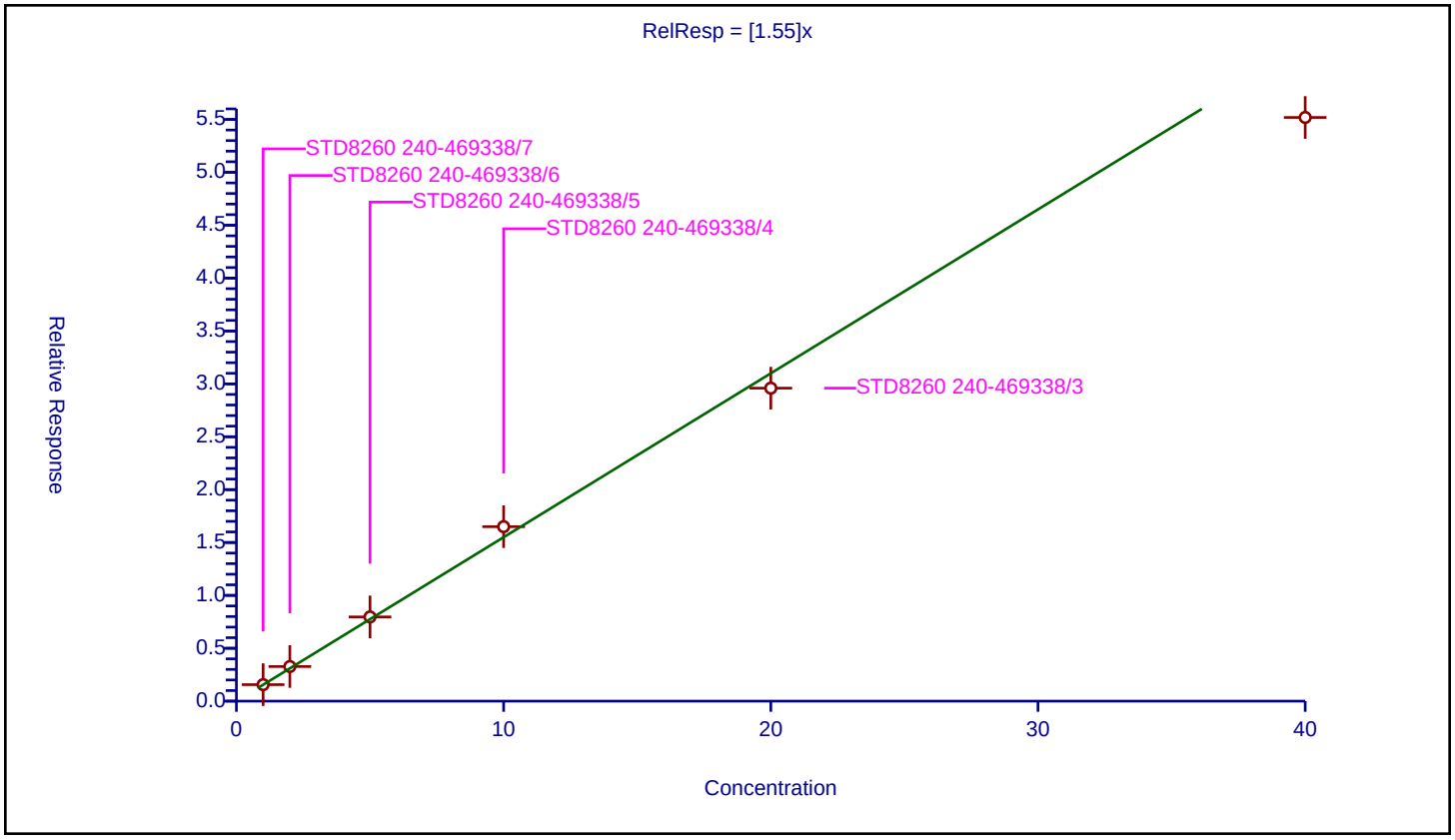
Curve Coefficients

Intercept:	0
Slope:	1.55

Error Coefficients

Standard Error:	647000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.560964	20.0	420817.0	1.560964	Y
2	STD8260 240-469338/6	2.0	3.272884	20.0	402373.0	1.636442	Y
3	STD8260 240-469338/5	5.0	7.962389	20.0	406373.0	1.592478	Y
4	STD8260 240-469338/4	10.0	16.49773	20.0	399775.0	1.649773	Y
5	STD8260 240-469338/3	20.0	29.595752	20.0	413781.0	1.479788	Y
6	STD8260 240-469338/2	40.0	55.188897	20.0	455301.0	1.379722	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

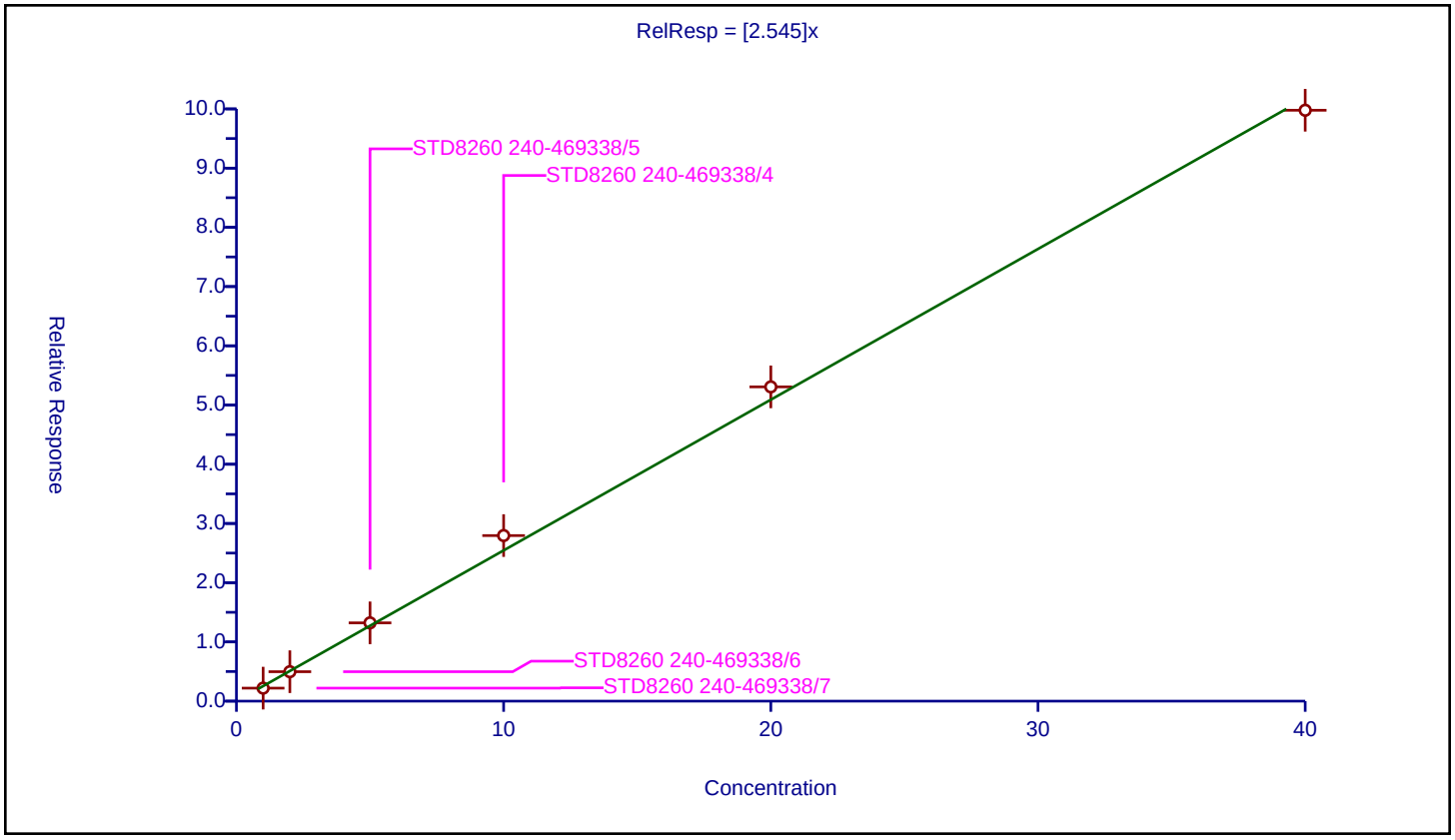
Curve Coefficients

Intercept:	0
Slope:	2.545

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.196252	20.0	420817.0	2.196252	Y
2	STD8260 240-469338/6	2.0	4.973246	20.0	402373.0	2.486623	Y
3	STD8260 240-469338/5	5.0	13.217955	20.0	406373.0	2.643591	Y
4	STD8260 240-469338/4	10.0	27.957776	20.0	399775.0	2.795778	Y
5	STD8260 240-469338/3	20.0	53.061885	20.0	413781.0	2.653094	Y
6	STD8260 240-469338/2	40.0	99.771975	20.0	455301.0	2.494299	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

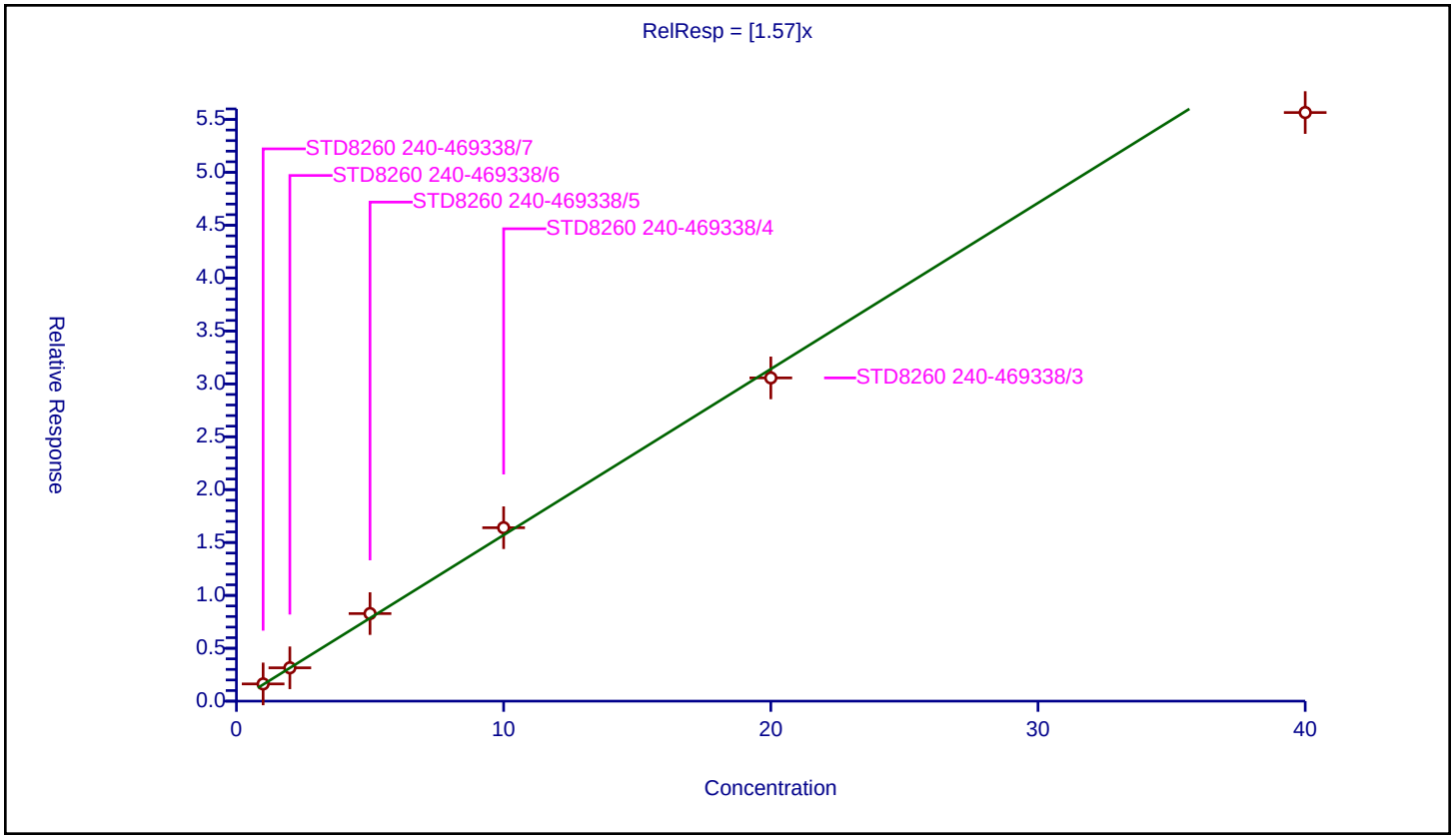
Curve Coefficients

Intercept:	0
Slope:	1.57

Error Coefficients

Standard Error:	655000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.628927	20.0	420817.0	1.628927	Y
2	STD8260 240-469338/6	2.0	3.152846	20.0	402373.0	1.576423	Y
3	STD8260 240-469338/5	5.0	8.280028	20.0	406373.0	1.656006	Y
4	STD8260 240-469338/4	10.0	16.398274	20.0	399775.0	1.639827	Y
5	STD8260 240-469338/3	20.0	30.563269	20.0	413781.0	1.528163	Y
6	STD8260 240-469338/2	40.0	55.654259	20.0	455301.0	1.391356	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

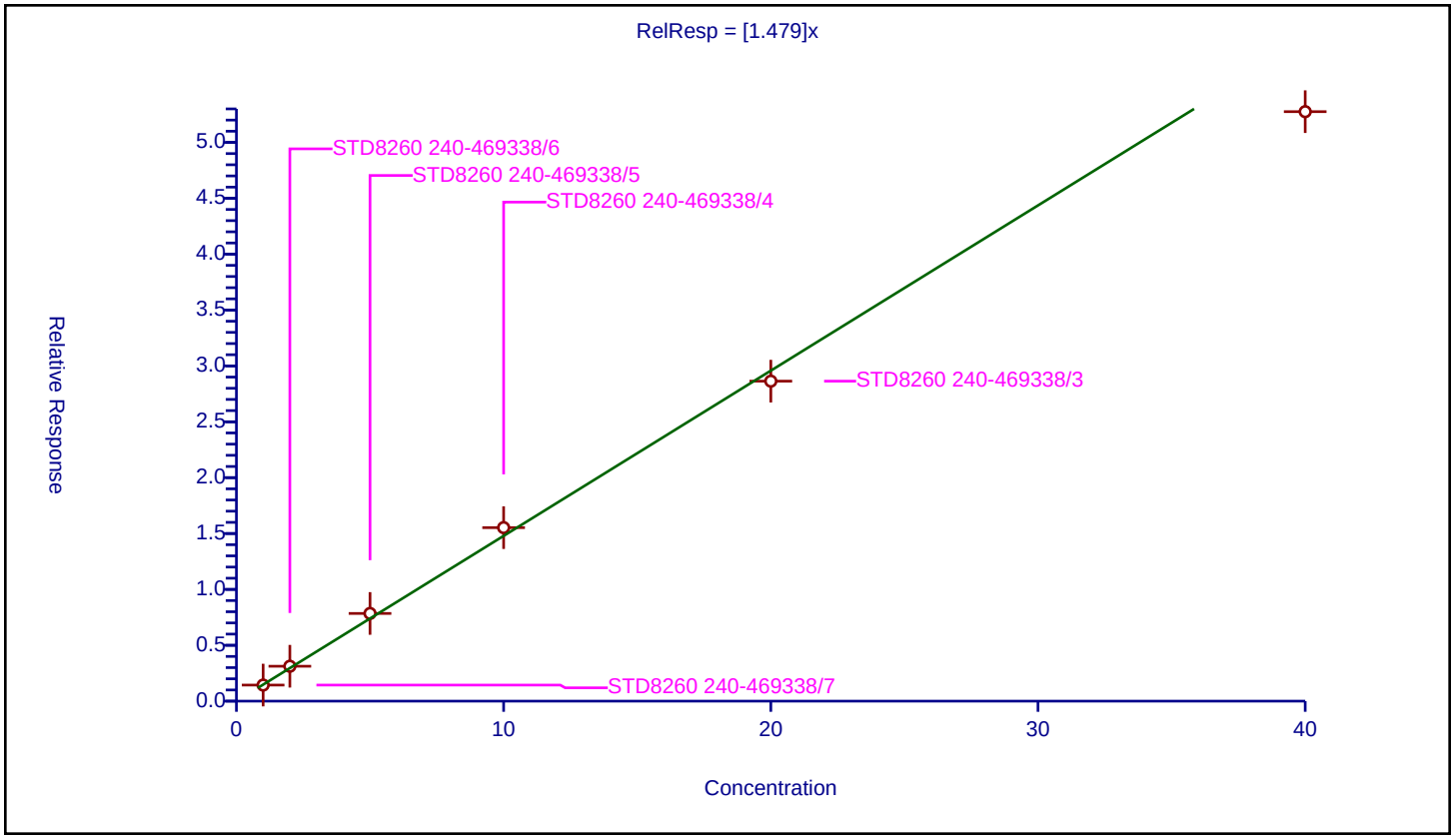
Curve Coefficients

Intercept:	0
Slope:	1.479

Error Coefficients

Standard Error:	620000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.438392	20.0	420817.0	1.438392	Y
2	STD8260 240-469338/6	2.0	3.122575	20.0	402373.0	1.561288	Y
3	STD8260 240-469338/5	5.0	7.84747	20.0	406373.0	1.569494	Y
4	STD8260 240-469338/4	10.0	15.527434	20.0	399775.0	1.552743	Y
5	STD8260 240-469338/3	20.0	28.635244	20.0	413781.0	1.431762	Y
6	STD8260 240-469338/2	40.0	52.751872	20.0	455301.0	1.318797	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

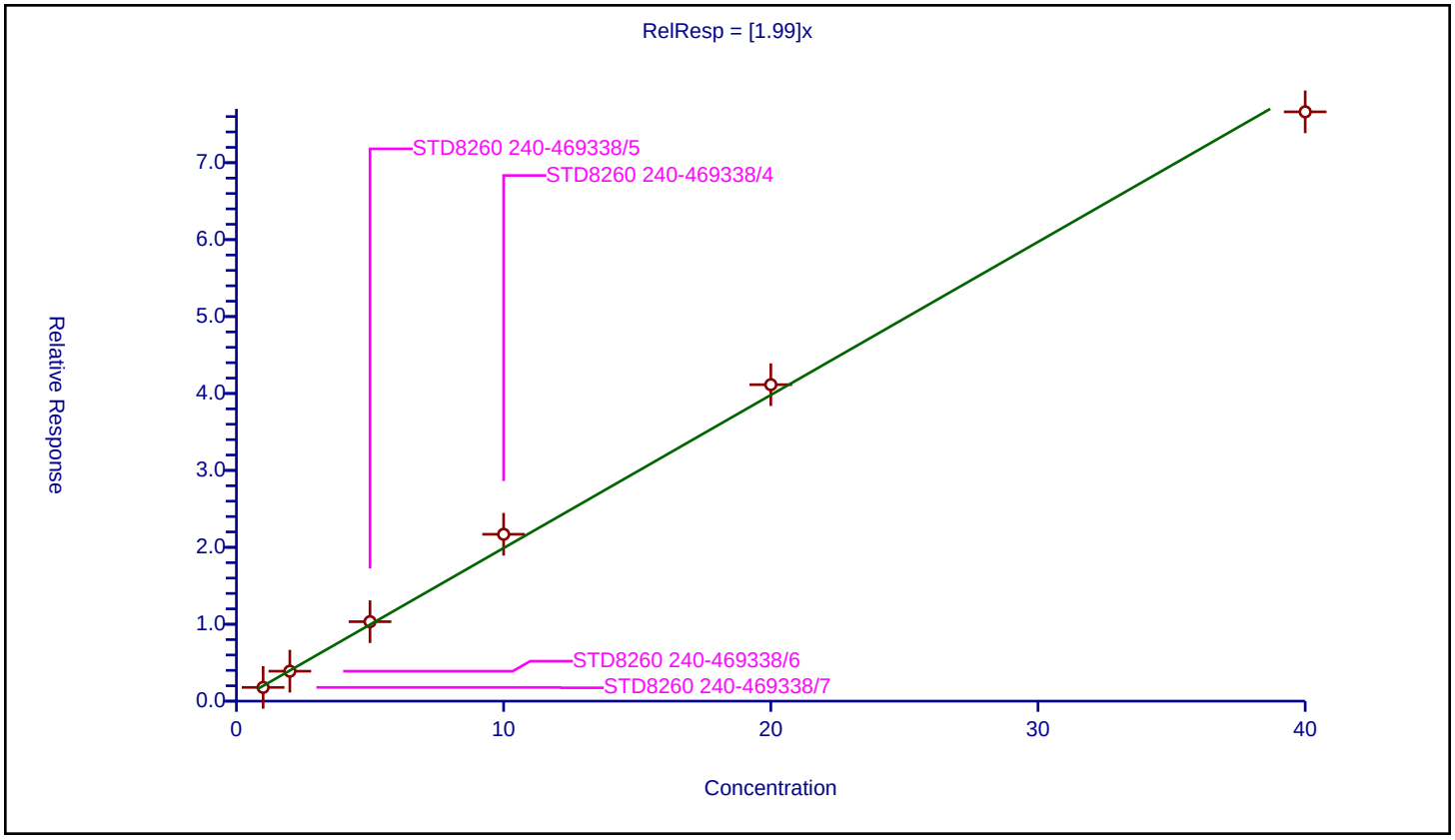
Curve Coefficients

Intercept:	0
Slope:	1.99

Error Coefficients

Standard Error:	895000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.786525	20.0	420817.0	1.786525	Y
2	STD8260 240-469338/6	2.0	3.892557	20.0	402373.0	1.946279	Y
3	STD8260 240-469338/5	5.0	10.332429	20.0	406373.0	2.066486	Y
4	STD8260 240-469338/4	10.0	21.691501	20.0	399775.0	2.16915	Y
5	STD8260 240-469338/3	20.0	41.14563	20.0	413781.0	2.057282	Y
6	STD8260 240-469338/2	40.0	76.614459	20.0	455301.0	1.915361	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

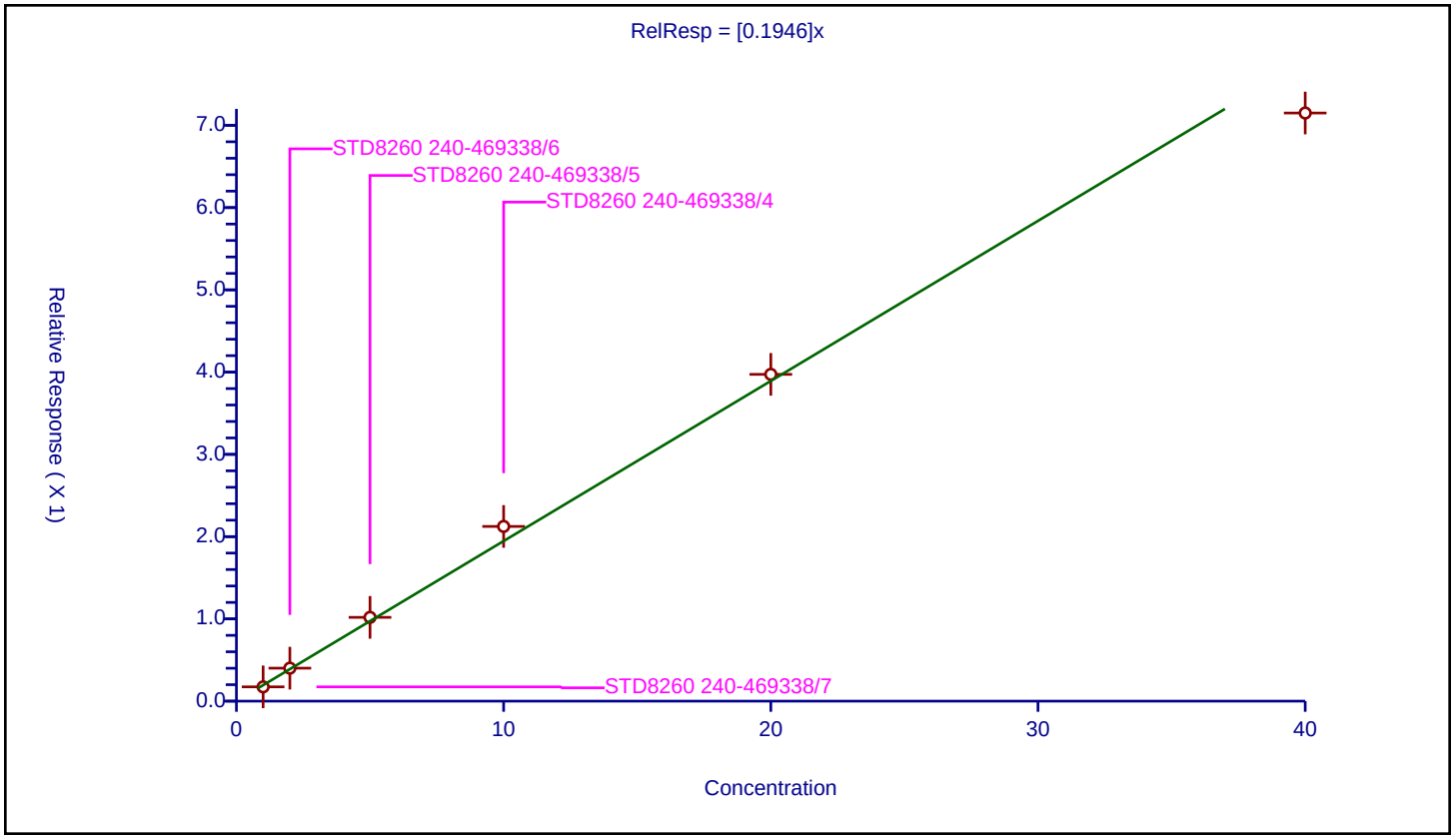
Curve Coefficients

Intercept:	0
Slope:	0.1946

Error Coefficients

Standard Error:	84300
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.173662	20.0	420817.0	0.173662	Y
2	STD8260 240-469338/6	2.0	0.40117	20.0	402373.0	0.200585	Y
3	STD8260 240-469338/5	5.0	1.018473	20.0	406373.0	0.203695	Y
4	STD8260 240-469338/4	10.0	2.123795	20.0	399775.0	0.212379	Y
5	STD8260 240-469338/3	20.0	3.972875	20.0	413781.0	0.198644	Y
6	STD8260 240-469338/2	40.0	7.149688	20.0	455301.0	0.178742	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

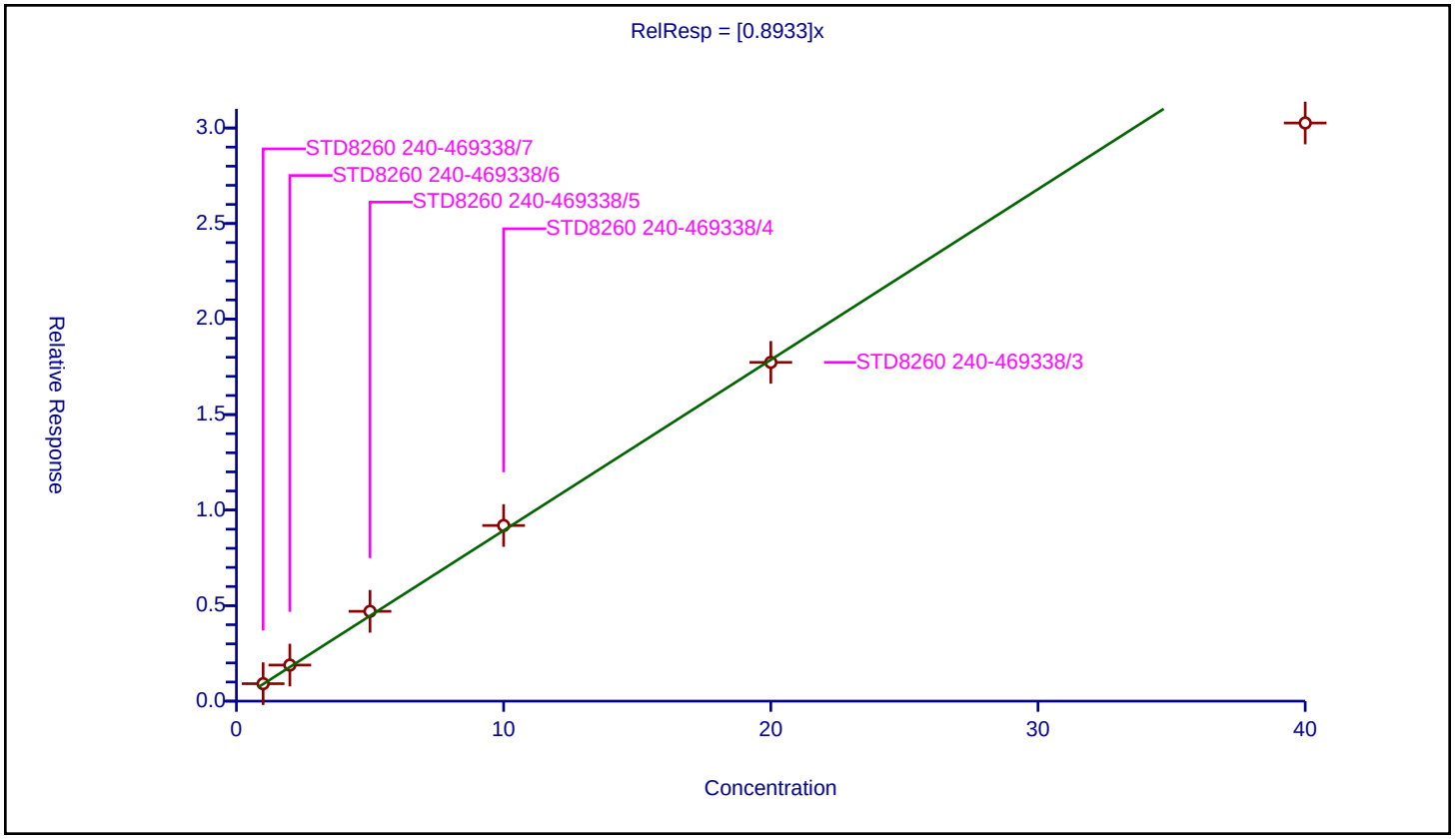
Curve Coefficients

Intercept:	0
Slope:	0.8933

Error Coefficients

Standard Error:	362000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.913271	20.0	420817.0	0.913271	Y
2	STD8260 240-469338/6	2.0	1.88795	20.0	402373.0	0.943975	Y
3	STD8260 240-469338/5	5.0	4.700066	20.0	406373.0	0.940013	Y
4	STD8260 240-469338/4	10.0	9.193171	20.0	399775.0	0.919317	Y
5	STD8260 240-469338/3	20.0	17.731844	20.0	413781.0	0.886592	Y
6	STD8260 240-469338/2	40.0	30.260641	20.0	455301.0	0.756516	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

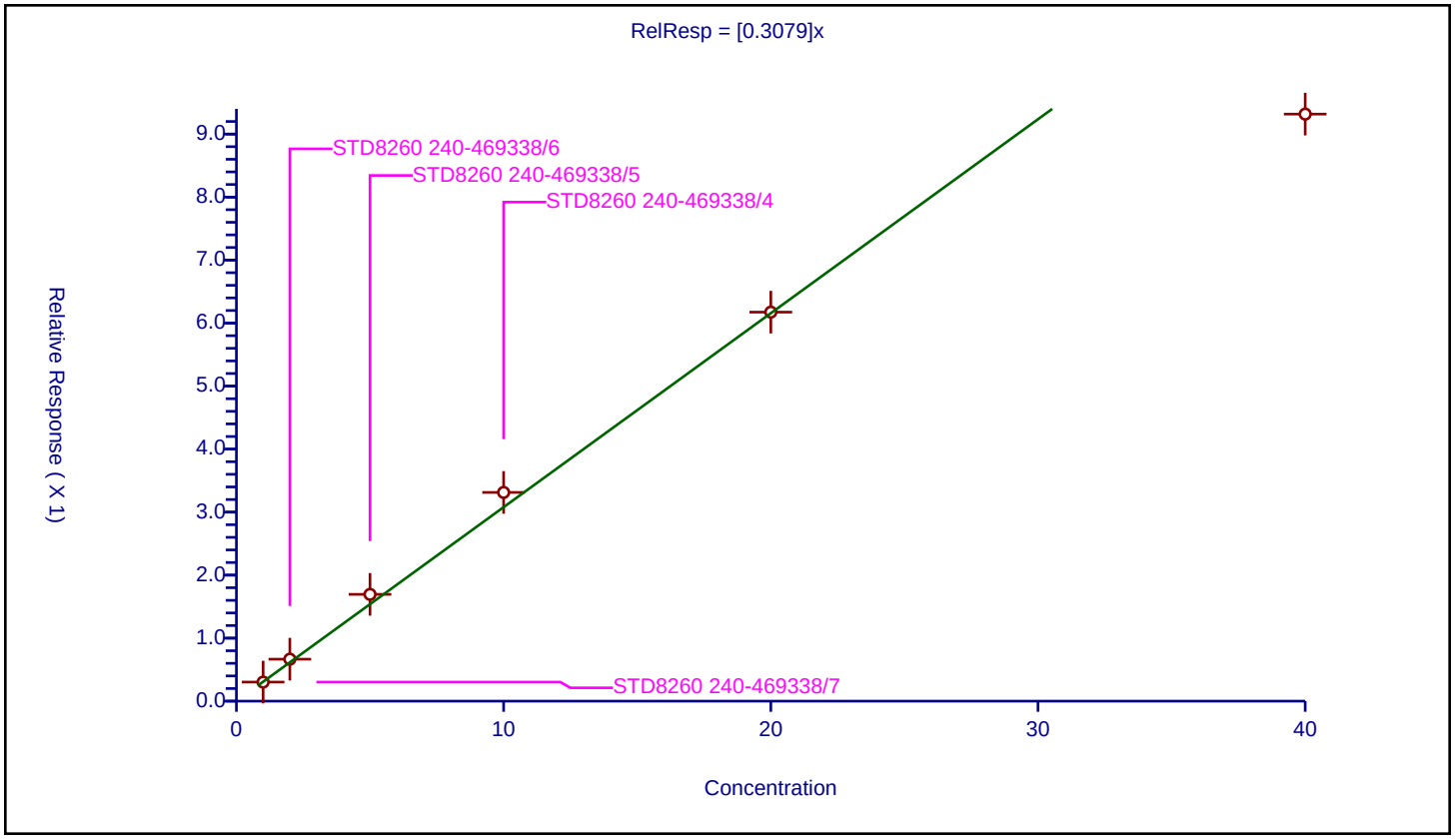
Curve Coefficients

Intercept:	0
Slope:	0.3079

Error Coefficients

Standard Error:	116000
Relative Standard Error:	12.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302317	20.0	420817.0	0.302317	Y
2	STD8260 240-469338/6	2.0	0.665949	20.0	402373.0	0.332975	Y
3	STD8260 240-469338/5	5.0	1.694847	20.0	406373.0	0.338969	Y
4	STD8260 240-469338/4	10.0	3.312613	20.0	399775.0	0.331261	Y
5	STD8260 240-469338/3	20.0	6.174136	20.0	413781.0	0.308707	Y
6	STD8260 240-469338/2	40.0	9.317309	20.0	455301.0	0.232933	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

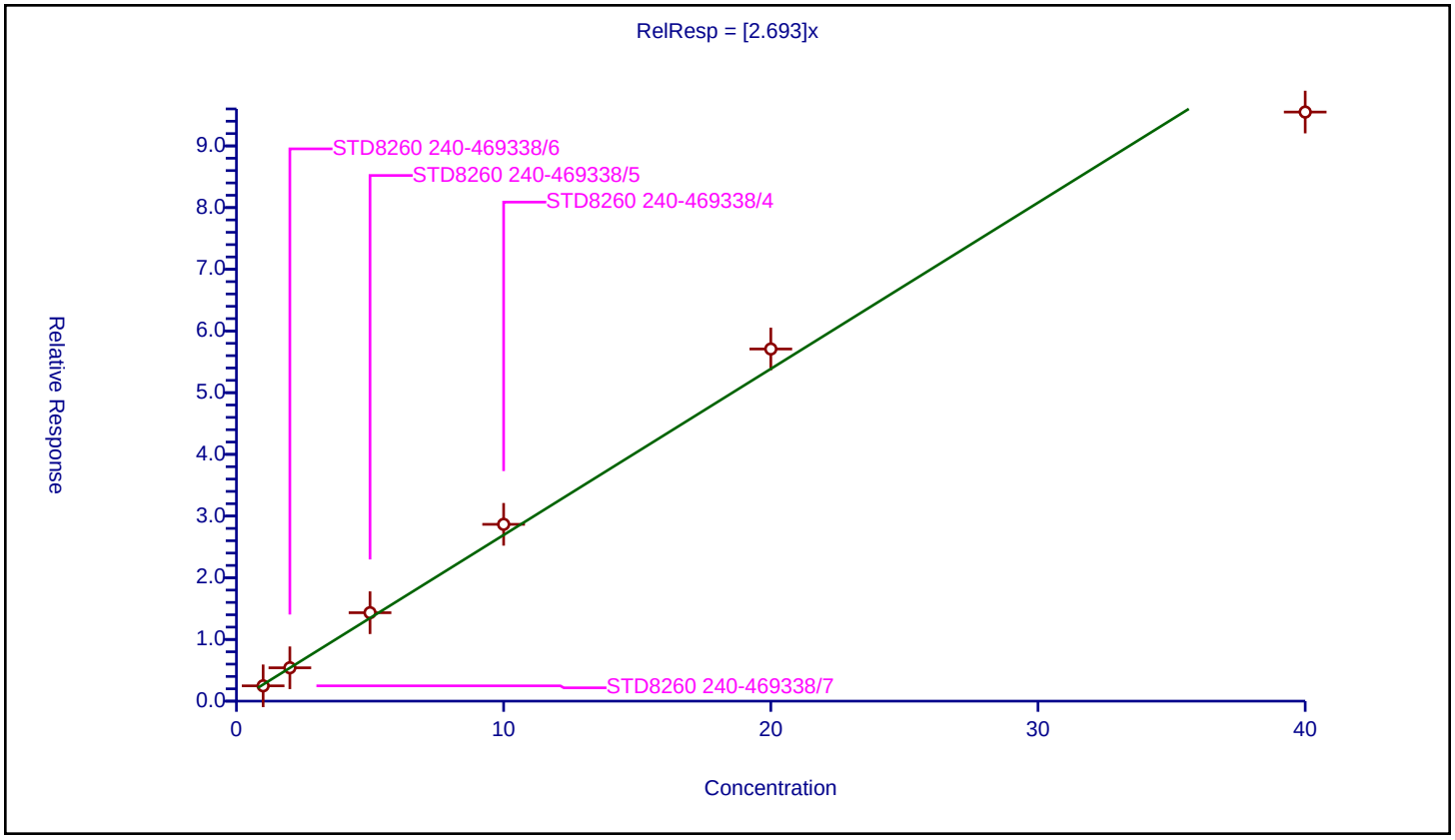
Curve Coefficients

Intercept:	0
Slope:	2.693

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.480128	20.0	420817.0	2.480128	Y
2	STD8260 240-469338/6	2.0	5.408912	20.0	402373.0	2.704456	Y
3	STD8260 240-469338/5	5.0	14.337271	20.0	406373.0	2.867454	Y
4	STD8260 240-469338/4	10.0	28.661322	20.0	399775.0	2.866132	Y
5	STD8260 240-469338/3	20.0	57.081258	20.0	413781.0	2.854063	Y
6	STD8260 240-469338/2	40.0	95.489489	20.0	455301.0	2.387237	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

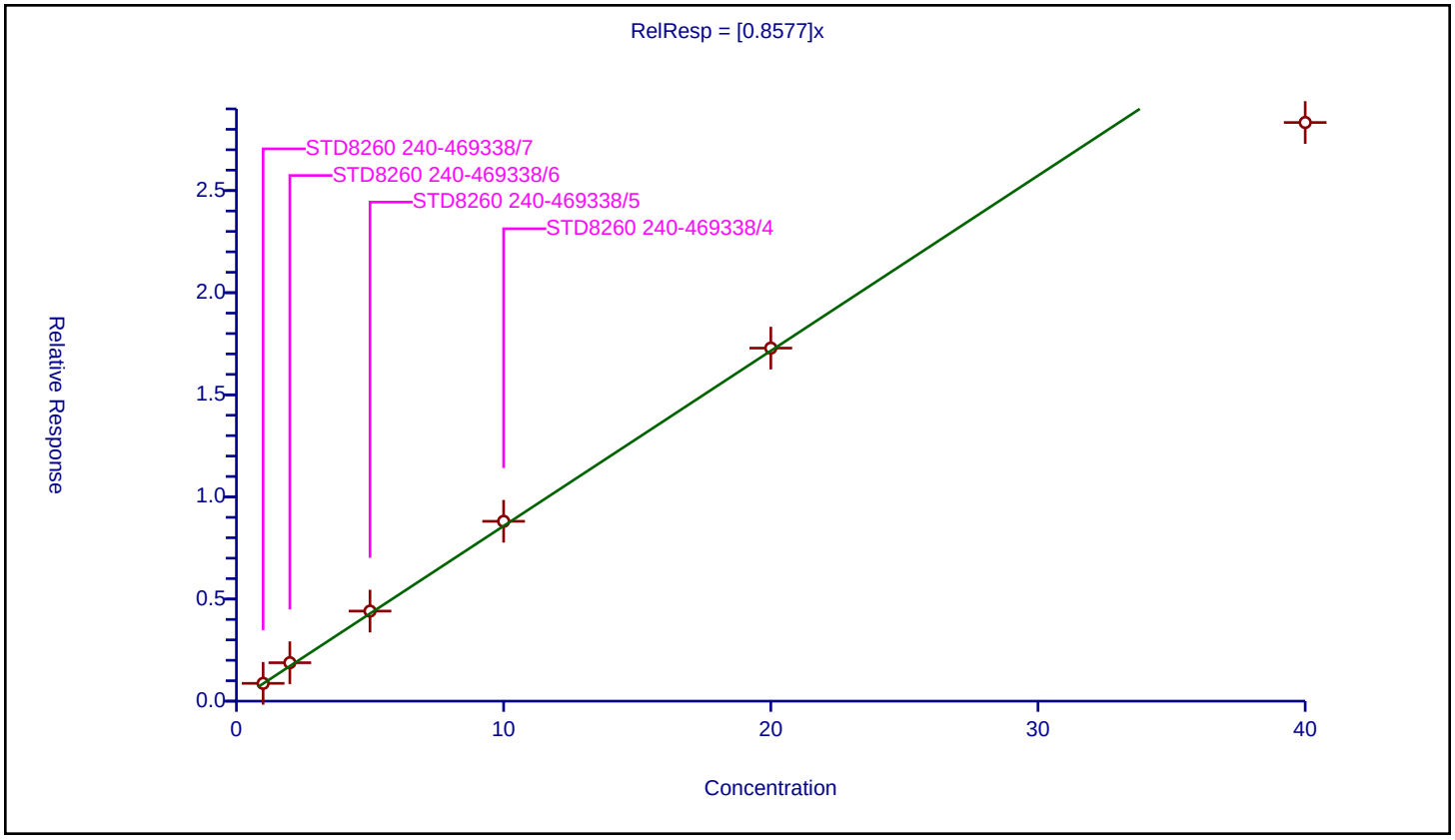
Curve Coefficients

Intercept:	0
Slope:	0.8577

Error Coefficients

Standard Error:	342000
Relative Standard Error:	9.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.870307	20.0	420817.0	0.870307	Y
2	STD8260 240-469338/6	2.0	1.88119	20.0	402373.0	0.940595	Y
3	STD8260 240-469338/5	5.0	4.410382	20.0	406373.0	0.882076	Y
4	STD8260 240-469338/4	10.0	8.806954	20.0	399775.0	0.880695	Y
5	STD8260 240-469338/3	20.0	17.287502	20.0	413781.0	0.864375	Y
6	STD8260 240-469338/2	40.0	28.3333	20.0	455301.0	0.708333	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3179 0.2856	0.3024	0.2990	0.3093	0.2937	Ave		0.3013				3.8		15.0			
Chloromethane	0.3871 0.3075	0.3410	0.3529	0.3559	0.3114	Ave		0.3426			0.1000	8.7		15.0			
Vinyl chloride	0.3105 0.2686	0.3356	0.2760	0.2664	0.3046	Ave		0.2936				9.5		15.0			
Butadiene	0.4584 0.3354	0.3649	0.3794	0.3693	0.3400	Ave		0.3746				11.9		15.0			
Bromomethane	0.2768 0.2260	0.2769	0.2353	0.2197	0.2414	Ave		0.2460				10.2		15.0			
Chloroethane	0.2500 0.1946	0.2244	0.2174	0.2026	0.2094	Ave		0.2164				9.0		15.0			
Dichlorofluoromethane	0.6535 0.5185	0.6173	0.5751	0.5610	0.5287	Ave		0.5757				9.0		15.0			
Trichlorofluoromethane	0.5721 0.4983	0.5300	0.5049	0.5023	0.5195	Ave		0.5212				5.3		15.0			
Ethyl ether	0.2699 0.2372	0.2623	0.2530	0.2461	0.2385	Ave		0.2512				5.2		15.0			
Acrolein	0.0123 0.0151	0.0265	0.0166	0.0157	0.0144	Lin	0.0400	0.0147							0.9980		0.9900
1,1-Dichloroethene	0.2595 0.2858	0.3045	0.2995	0.2904	0.2951	Ave		0.2891				5.5		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2193 0.2523	0.2341	0.2455	0.2413	0.2535	Ave		0.2410				5.3		15.0			
Acetone	0.0236 0.0187	0.0236	0.0180	0.0187	0.0188	Ave		0.0202				13.0		15.0			
Iodomethane	0.4069 0.4206	0.4383	0.4410	0.4405	0.5097	Ave		0.4428				8.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7748 0.7495	0.8943	0.7779	0.7790	0.8588	Ave		0.8057				7.1		15.0			
3-Chloro-1-propene	0.1523 0.1727	0.1717	0.1742	0.1728	0.1753	Ave		0.1698				5.1		15.0			
Methyl acetate	0.1303 0.1267	0.1239	0.1291	0.1258	0.1258	Ave		0.1269				1.9		15.0			
Methylene Chloride	0.2754 0.2543	0.2829	0.2711	0.2630	0.2675	Ave		0.2691				3.7		15.0			
2-Methyl-2-propanol	0.0139 0.0139	0.0139	0.0149	0.0145	0.0137	Ave		0.0141				3.2		15.0			
Acrylonitrile	0.0679 0.0681	0.0675	0.0685	0.0682	0.0670	Ave		0.0679				0.8		15.0			
Methyl tert-butyl ether	0.6990 0.7045	0.6881	0.7075	0.7039	0.7051	Ave		0.7014				1.0		15.0			
trans-1,2-Dichloroethene	0.3026 0.2717	0.2966	0.2890	0.2898	0.2827	Ave		0.2887				3.7		15.0			
Hexane	0.0635 0.0565	0.0591	0.0530	0.0577	0.0571	Ave		0.0578				6.0		15.0			
1,1-Dichloroethane	0.4664 0.4434	0.4651	0.4613	0.4568	0.4509	Ave		0.4573			0.1000	1.9		15.0			
Vinyl acetate	0.3496 0.4336	0.3537	0.3849	0.3975	0.4151	Ave		0.3891				8.6		15.0			
cis-1,2-Dichloroethene	0.3175 0.2885	0.3169	0.3097	0.2994	0.2972	Ave		0.3049				3.8		15.0			
2,2-Dichloropropane	0.0915 0.0867	0.0884	0.0888	0.0884	0.0896	Ave		0.0889				1.8		15.0			
2-Butanone (MEK)	0.0250 0.0203	0.0207	0.0206	0.0202	0.0199	Ave		0.0211				9.1		15.0			
Chlorobromomethane	0.1490 0.1374	0.1449	0.1452	0.1451	0.1425	Ave		0.1440				2.7		15.0			
Tetrahydrofuran	0.0654 0.0486	0.0574	0.0475	0.0490	0.0474	Ave		0.0526				14.0		15.0			
Chloroform	0.4702 0.4401	0.4549	0.4601	0.4542	0.4522	Ave		0.4553				2.2		15.0			
1,1,1-Trichloroethane	0.4008 0.4063	0.4114	0.4159	0.4099	0.4153	Ave		0.4100				1.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.4370 0.4135	0.4233	0.4223	0.4167	0.4262	Ave		0.4232				1.9		15.0			
1,1-Dichloropropene	0.3743 0.3536	0.3795	0.3718	0.3710	0.3626	Ave		0.3688				2.5		15.0			
Carbon tetrachloride	0.3477 0.3720	0.3559	0.3693	0.3681	0.3752	Ave		0.3647				2.9		15.0			
Isobutyl alcohol	0.0049 0.0043	0.0044	0.0045	0.0046	0.0042	Ave		0.0045				5.3		15.0			
Benzene	1.2010 1.0461	1.1411	1.0798	1.0653	1.0477	Ave		1.0968				5.6		15.0			
1,2-Dichloroethane	0.3411 0.3175	0.3231	0.3274	0.3265	0.3220	Ave		0.3263				2.5		15.0			
n-Heptane	0.0498 0.0480	0.0560	0.0483	0.0455	0.0492	Ave		0.0495				7.1		15.0			
Trichloroethene	0.3118 0.2826	0.3021	0.2966	0.2911	0.2845	Ave		0.2948				3.8		15.0			
Methylcyclohexane	0.3833 0.3620	0.3762	0.3566	0.3621	0.3694	Ave		0.3683				2.7		15.0			
1,2-Dichloropropane	0.2360 0.2274	0.2187	0.2263	0.2276	0.2272	Ave		0.2272				2.4		15.0			
Dibromomethane	0.1384 0.1274	0.1289	0.1310	0.1317	0.1301	Ave		0.1312				2.9		15.0			
1,4-Dioxane	0.0018 0.0009	0.0021	0.0018	0.0018	0.0016	Qua	-0.0016	0.0023	-0.000002						0.9980		0.9900
Dichlorobromomethane	0.2759 0.3033	0.2804	0.2834	0.2964	0.2965	Ave		0.2893				3.8		15.0			
2-Chloroethyl vinyl ether	0.0711 0.0876	0.0746	0.0752	0.0804	0.0825	Ave		0.0786				7.7		15.0			
cis-1,3-Dichloropropene	0.2804 0.3428	0.2988	0.3091	0.3239	0.3343	Ave		0.3149				7.4		15.0			
4-Methyl-2-pentanone (MIBK)	0.1544 0.1523	0.1447	0.1540	0.1535	0.1510	Ave		0.1517				2.4		15.0			
Toluene	1.4749 1.4887	1.5001	1.4604	1.4518	1.4917	Ave		1.4780				1.3		15.0			
trans-1,3-Dichloropropene	0.3347 0.4117	0.3596	0.3694	0.3885	0.4080	Ave		0.3786				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.2809 0.2972	0.2641	0.2863	0.2828	0.3017	Ave		0.2855				4.7		15.0			
1,1,2-Trichloroethane	0.2563 0.2365	0.2382	0.2409	0.2401	0.2429	Ave		0.2425				2.9		15.0			
Tetrachloroethene	0.3037 0.3079	0.3201	0.3113	0.3119	0.3130	Ave		0.3113				1.8		15.0			
1,3-Dichloropropane	0.4197 0.4167	0.4153	0.4127	0.4196	0.4177	Ave		0.4170				0.7		15.0			
2-Hexanone	0.1501 0.1200	0.1443	0.1446	0.1397	0.1337	Ave		0.1387				7.7		15.0			
Chlorodibromomethane	0.2323 0.2923	0.2465	0.2649	0.2741	0.2887	Ave		0.2665				8.9		15.0			
Ethylene Dibromide	0.2344 0.2310	0.2379	0.2318	0.2314	0.2384	Ave		0.2342				1.4		15.0			
Chlorobenzene	0.9136 0.8959	0.8886	0.9073	0.8926	0.9138	Ave		0.9020			0.3000	1.2		15.0			
1,1,1,2-Tetrachloroethane	0.3709 0.3850	0.3637	0.3673	0.3752	0.3934	Ave		0.3759				3.0		15.0			
Ethylbenzene	0.4869 0.4992	0.4811	0.4884	0.4972	0.5040	Ave		0.4928				1.8		15.0			
m-Xylene & p-Xylene	1.1891 1.2048	1.1647	1.1868	1.1935	1.2334	Ave		1.1954				1.9		15.0			
o-Xylene	0.6311 0.6468	0.6392	0.6438	0.6364	0.6572	Ave		0.6424				1.4		15.0			
Styrene	0.7794 0.8791	0.7890	0.8297	0.8434	0.8787	Ave		0.8332				5.1		15.0			
Bromoform	0.1330 0.1936	0.1599	0.1548	0.1634	0.1838	Ave		0.1647			0.1000	13.1		15.0			
Isopropylbenzene	1.5146 1.6219	1.5392	1.5891	1.5922	1.6570	Ave		1.5857				3.3		15.0			
1,1,2,2-Tetrachloroethane	0.4957 0.5275	0.4849	0.5173	0.5132	0.5314	Ave		0.5117			0.3000	3.5		15.0			
Bromobenzene	0.7097 0.7040	0.7113	0.6942	0.7071	0.6981	Ave		0.7041				1.0		15.0			
1,2,3-Trichloropropane	0.1614 0.1668	0.1728	0.1633	0.1647	0.1668	Ave		0.1660				2.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.0847 0.1203	0.1398	0.0974	0.1090	0.1210	Lin1	-0.024	0.1194							0.9950		0.9900
N-Propylbenzene	0.6653 0.7317	0.6810	0.6868	0.6968	0.7241	Ave		0.6976				3.7		15.0			
2-Chlorotoluene	0.6141 0.6675	0.6391	0.6443	0.6600	0.6600	Ave		0.6475				3.0		15.0			
1,3,5-Trimethylbenzene	2.0712 2.3194	2.1346	2.1473	2.2049	2.2987	Ave		2.1960				4.4		15.0			
4-Chlorotoluene	2.0606 2.0977	2.0703	2.0407	2.0504	2.0938	Ave		2.0689				1.1		15.0			
tert-Butylbenzene	1.7730 1.9620	1.8289	1.8362	1.8968	1.9663	Ave		1.8772				4.2		15.0			
1,2,4-Trimethylbenzene	2.0752 2.3637	2.2175	2.2267	2.2798	2.3497	Ave		2.2521				4.7		15.0			
sec-Butylbenzene	2.3353 2.5702	2.4193	2.4140	2.5090	2.5980	Ave		2.4743				4.1		15.0			
1,3-Dichlorobenzene	1.3198 1.2859	1.3553	1.3336	1.3113	1.3072	Ave		1.3189				1.8		15.0			
4-Isopropyltoluene	2.0713 2.3030	2.2050	2.1642	2.2210	2.3142	Ave		2.2131				4.1		15.0			
1,4-Dichlorobenzene	1.4231 1.3122	1.4118	1.3771	1.3493	1.3452	Ave		1.3698				3.1		15.0			
n-Butylbenzene	1.7422 1.7773	1.8664	1.7621	1.7842	1.8219	Ave		1.7923				2.5		15.0			
1,2-Dichlorobenzene	1.3707 1.3458	1.3830	1.3899	1.3753	1.3705	Ave		1.3725				1.1		15.0			
1,2-Dibromo-3-Chloropropane	0.0946 0.1206	0.1171	0.1126	0.1149	0.1172	Ave		0.1128				8.3		15.0			
1,2,4-Trichlorobenzene	1.0114 0.9190	1.1387	1.0099	0.9964	0.9699	Ave		1.0075				7.2		15.0			
Hexachlorobutadiene	0.5947 0.3863	0.5965	0.4754	0.4514	0.4287	Lin1	0.2952	0.3966							0.9960		0.9900
Naphthalene	2.0025 2.1634	2.1584	2.1858	2.1964	2.1872	Ave		2.1490				3.4		15.0			
1,2,3-Trichlorobenzene	0.9724 0.8555	1.1085	0.9556	0.9345	0.9096	Ave		0.9560				8.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2421 0.2237	0.2290	0.2413	0.2339	0.2324	Ave		0.2337				3.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2760 0.2495	0.2670	0.2708	0.2600	0.2566	Ave		0.2633				3.7		15.0			
Toluene-d8 (Surr)	1.2309 1.2106	1.2019	1.2453	1.2250	1.2394	Ave		1.2255				1.4		15.0			
4-Bromofluorobenzene (Surr)	0.4300 0.3945	0.4096	0.4208	0.4175	0.4149	Ave		0.4145				2.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	47955 1985876	96788	236340	505763	1015755	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	58389 2137858	109132	278892	581954	1076987	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	46845 1867423	107404	218141	435655	1053493	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	69152 2331823	116788	299854	603954	1175768	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	41750 1571689	88628	185985	359282	834840	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	37706 1352876	71803	171841	331296	724185	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	98585 3604788	197535	454576	917387	1828501	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	86296 3464762	169605	399090	821375	1796517	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	40718 1648971	83944	199967	402519	824901	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Lin	9294 523416	42337	65464	127991	249680	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	39151 1987280	97460	236738	474847	1020497	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	33084 1754372	74912	194077	394578	876594	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	7111 259443	15117	28520	61024	129995	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	61380 2924204	140257	348537	720329	1762805	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	116874 5211254	286182	614828	1273944	2970031	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	22980 1200557	54960	137672	282597	606147	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	39316 1761410	79302	204142	411585	869993	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	41550 1768190	90541	214303	430176	925140	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	20999 966491	44457	117539	237680	475246	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	102496 4734494	216160	541571	1114638	2316749	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	105442 4898428	220217	559170	1151185	2438583	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	45650 1888831	94914	228419	473854	977825	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	9581 392577	18928	41895	94360	197372	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	70364 3082713	148843	364589	747006	1559420	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	52739 3014699	113199	304236	650063	1435718	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	47902 2005786	101403	244751	489671	1027988	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	13807 603120	28276	70219	144526	309943	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	7540 281791	13268	32640	66059	137808	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	22476 955220	46356	114745	237215	492922	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	19738 676139	36744	75127	160132	327685	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	70935 3059766	145589	363680	742858	1563762	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	60467 2825060	131645	328759	670415	1436238	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	65918 2874773	135465	333807	681490	1474122	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	56469 2458560	121447	293864	606744	1253974	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	52456 2586568	113888	291902	601989	1297566	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	18341 742762	35137	89469	186811	364589	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	181175 7273390	365182	853447	1742135	3623322	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	51453 2207739	103413	258800	533877	1113535	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	7518 334066	17934	38208	74441	170034	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	47038 1964997	96690	234414	476021	983943	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	57824 2517271	120389	281838	592186	1277610	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	35608 1581278	69979	178849	372280	785821	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	20875 885521	41243	103540	215335	449938	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	5574 120475	13582	28764	59463	110747	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	41626 2108837	89718	224007	484704	1025475	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	21442 1217878	47750	118901	263000	570636	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	42305 2383514	95626	244291	529695	1156157	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	46573 2117506	92610	243498	502124	1044731	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	148278	307593	756651	1573355	3370989	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			7004750					40.0				
trans-1,3-Dichloropropene	CBNZ d5	Ave	33643 1937105	73739	191368	420983	922042	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	28235 1398285	54155	148354	306515	681749	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	25770 1112850	48837	124819	260222	549002	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	30533 1448870	65641	161314	338041	707318	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	42197 1960760	85147	213808	454762	943985	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	30177 1128839	59188	149884	302863	604348	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	23357 1375317	50550	137225	297016	652498	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	23568 1087018	48784	120100	250735	538641	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	91842 4215604	182215	470075	967329	2065080	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	37283 1811750	74581	190281	406561	888983	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	48952 2348653	98654	253063	538828	1138861	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	119546	238816	614921	1293431	2787248	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5668949					40.0				
o-Xylene	CBNZ d5	Ave	63450 3043471	131067	333576	689690	1485220	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	78354 4136534	161777	429902	913969	1985697	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	13367 910703	32788	80220	177112	415352	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	152266 7631521	315606	823347	1725432	3744436	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	30042 1413960	58976	160683	328387	704816	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	43010 1887184	86512	215609	452432	925930	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	9782 447188	21011	50734	105370	221278	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	5133 322478	17008	30267	69740	160485	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	40320 1961209	82831	213311	445896	960393	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	37216 1789216	77726	200124	422328	875326	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	125526 6217268	259616	666934	1410902	3048822	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	124885	251801	633815	1311993	2777057	1.00	2.00	5.00	10.0	20.0

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5622899					40.0				
tert-Butylbenzene	DCBd 4	Ave	107456 5259257	222437	570303	1213704	2608022	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	125769 6336062	269709	691594	1458830	3116448	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	141534 6889593	294251	749769	1605451	3445811	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	79988 3446839	164834	414203	839103	1733837	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	125533 6173286	268187	672177	1421147	3069390	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	86247 3517407	171714	427734	863405	1784216	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	105585 4764027	226998	547299	1141647	2416429	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	83074 3607534	168210	431687	880005	1817774	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5731 323157	14241	34964	73534	155451	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	61295 2463296	138494	313669	637594	1286481	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Lin1	36040 1035440	72546	147661	288855	568587	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	121361	262519	678882	1405465	2900947	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5799160					40.0				
1,2,3-Trichlorobenzene	DCBd 4	Ave	58935 2293306	134820	296808	597963	1206461	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	36526 1555302	73272	190756	382556	803605	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	41633 1734501	85434	214048	425239	887545	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	123741 5696194	246447	645215	1327515	2800914	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	43228 1856230	83987	218006	452465	937497	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2021 08:36:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-002
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:38 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:13:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1738218	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1176310	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	87	670129	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	1555302	40.0	38.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	1734501	40.0	37.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	5696194	40.0	39.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	1856230	40.0	38.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1985876	40.0	37.9	
10 Chloromethane	50	1.574	1.574	0.000	99	2137858	40.0	35.9	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1867423	40.0	36.6	
12 Butadiene	54	1.669	1.681	-0.012	99	2331823	40.0	35.8	
13 Bromomethane	94	1.918	1.918	0.000	91	1571689	40.0	36.8	
14 Chloroethane	64	2.001	2.001	0.000	100	1352876	40.0	36.0	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	3604788	40.0	36.0	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	3464762	40.0	38.2	
17 Ethyl ether	59	2.404	2.416	-0.012	91	1648971	40.0	37.8	
18 Acrolein	56	2.523	2.523	0.000	99	523416	200.0	201.9	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1987280	40.0	39.5	
20 112TCTFE	151	2.629	2.629	0.000	95	1754372	40.0	41.9	
21 Acetone	58	2.653	2.653	0.000	100	259443	80.0	73.8	
22 Iodomethane	142	2.736	2.748	-0.012	98	2924204	40.0	38.0	
24 Carbon disulfide	76	2.796	2.796	0.000	100	5211254	40.0	37.2	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	1200557	40.0	40.7	
27 Methyl acetate	43	2.914	2.914	0.000	97	1761410	80.0	79.8	
28 Methylene Chloride	84	2.997	3.009	-0.012	92	1768190	40.0	37.8	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	99	966491	400.0	393.1	
30 Acrylonitrile	53	3.211	3.211	0.000	99	4734494	400.0	401.3	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	4898428	40.0	40.2	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	1888831	40.0	37.6	
34 Hexane	86	3.436	3.436	0.000	92	392577	40.0	39.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	3082713	40.0	38.8	
36 Vinyl acetate	43	3.602	3.602	0.000	97	3014699	40.0	44.6	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	99	281791	80.0	76.7	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	82	603120	40.0	39.0	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.011	82	2005786	40.0	37.8	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	955220	40.0	38.2	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	676139	80.0	74.0	
48 Chloroform	83	4.302	4.302	0.000	93	3059766	40.0	38.7	
49 1,1,1-Trichloroethane	97	4.456	4.468	-0.012	98	2825060	40.0	39.6	
50 Cyclohexane	56	4.503	4.503	0.000	90	2874773	40.0	39.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	95	2586568	40.0	40.8	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	2458560	40.0	38.4	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	742762	1000.0	955.2	
55 Benzene	78	4.764	4.776	-0.012	95	7273390	40.0	38.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	2207739	40.0	38.9	
58 n-Heptane	100	4.966	4.966	0.000	91	334066	40.0	38.8	
60 Trichloroethene	130	5.298	5.298	0.000	96	1964997	40.0	38.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	2517271	40.0	39.3	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	1581278	40.0	40.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	89	120475	800.0	492.5	
65 Dibromomethane	93	5.606	5.606	0.000	90	885521	40.0	38.8	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	2108837	40.0	41.9	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	93	1217878	80.0	89.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	96	2383514	40.0	43.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	2117506	80.0	80.3	
72 Toluene	91	6.412	6.412	0.000	98	7004750	40.0	40.3	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	1937105	40.0	43.5	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	1398285	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	1112850	40.0	39.0	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	1448870	40.0	39.6	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	1960760	40.0	40.0	
78 2-Hexanone	43	6.982	6.982	0.000	96	1128839	80.0	69.2	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	1375317	40.0	43.9	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	1087018	40.0	39.5	
84 Chlorobenzene	112	7.681	7.681	0.000	95	4215604	40.0	39.7	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	1811750	40.0	41.0	
86 Ethylbenzene	106	7.776	7.776	0.000	98	2348653	40.0	40.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	92	5668949	40.0	40.3	
88 o-Xylene	106	8.262	8.262	0.000	97	3043471	40.0	40.3	
89 Styrene	104	8.274	8.274	0.000	93	4136534	40.0	42.2	
90 Bromoform	173	8.464	8.464	0.000	98	910703	40.0	47.0	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	7631521	40.0	40.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	1413960	40.0	41.2	
95 Bromobenzene	156	8.914	8.914	0.000	91	1887184	40.0	40.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	447188	40.0	40.2	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	92	322478	40.0	40.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	1961209	40.0	42.0	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	1789216	40.0	41.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	6217268	40.0	42.2	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	5622899	40.0	40.6	
104 tert-Butylbenzene	119	9.507	9.496	0.011	91	5259257	40.0	41.8	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	6336062	40.0	42.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	6889593	40.0	41.6	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	3446839	40.0	39.0	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	6173286	40.0	41.6	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	3517407	40.0	38.3	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	4764027	40.0	39.7	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	3607534	40.0	39.2	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	323157	40.0	42.7	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	2463296	40.0	36.5	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	1035440	40.0	38.2	
119 Naphthalene	128	12.128	12.128	0.000	96	5799160	40.0	40.3	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	2293306	40.0	35.8	
S 127 1,2-Dichloroethene, Total	96				0			75.5	
S 128 1,3-Dichloropropene, Total	75				0			87.0	
S 129 Xylenes, Total	106				0		80.0	80.6	
S 130 Total BTEX	1				0		200.0	199.5	
S 131 Trihalomethanes, Total	1				0		160.0	171.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_stk_00086	Amount Added:	32.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	32.00	Units: uL
VMAROLISTDW_00384	Amount Added:	32.00	Units: uL
VMRGAS_00377	Amount Added:	32.00	Units: uL

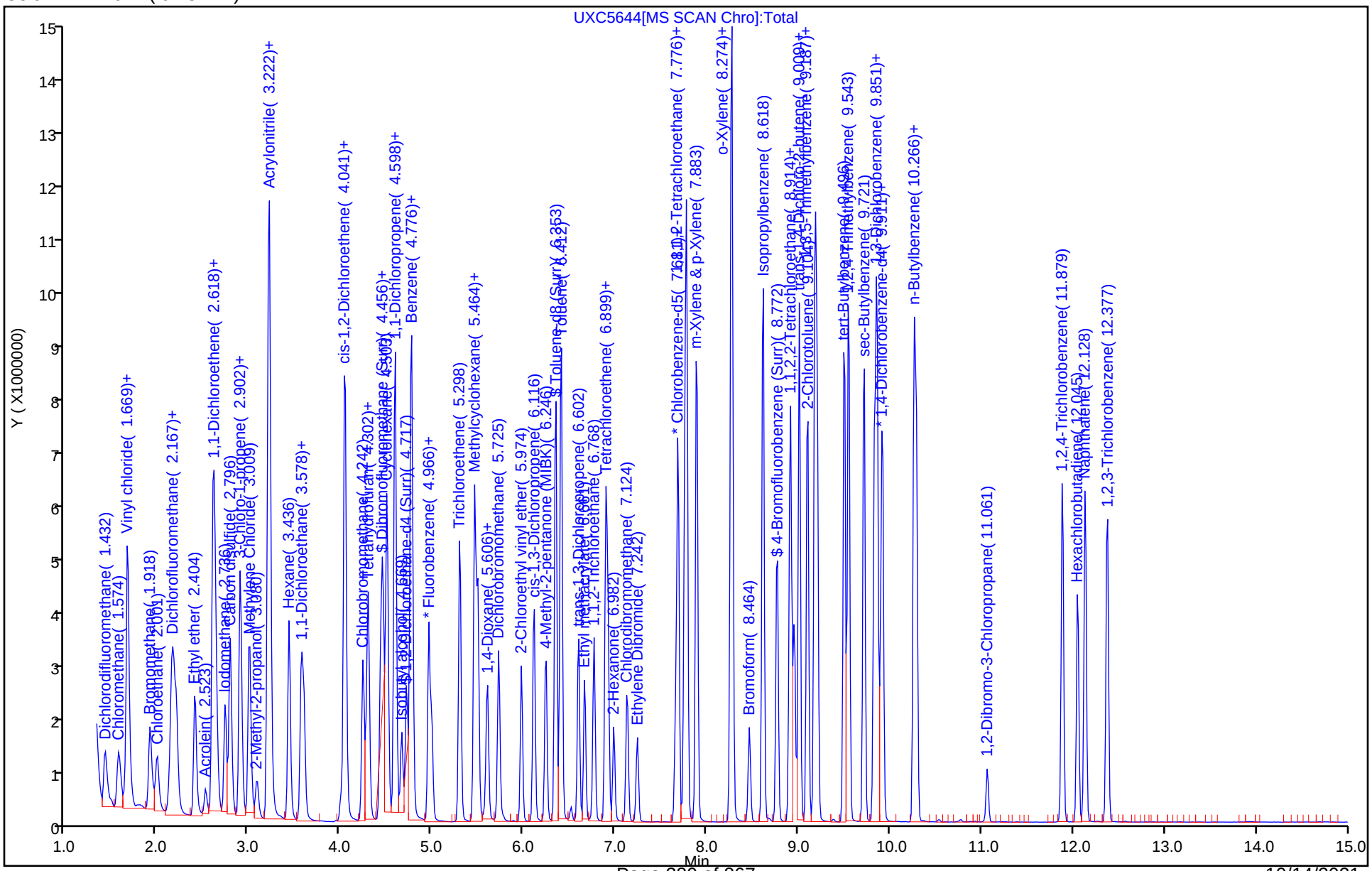
Report Date: 18-Mar-2021 09:00:39 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D

Injection Date:	16-Mar-2021 08:36:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2021 08:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-003
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:45 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:18:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1729200	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1129906	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	663171	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	803605	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	887545	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2800914	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	937497	20.0	20.0	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1015755	20.0	19.5	
10 Chloromethane	50	1.574	1.574	0.000	99	1076987	20.0	18.2	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1053493	20.0	20.7	
12 Butadiene	54	1.669	1.681	-0.012	99	1175768	20.0	18.2	
13 Bromomethane	94	1.918	1.918	0.000	90	834840	20.0	19.6	
14 Chloroethane	64	1.989	2.001	-0.012	100	724185	20.0	19.4	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	1828501	20.0	18.4	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	1796517	20.0	19.9	
17 Ethyl ether	59	2.404	2.416	-0.012	91	824901	20.0	19.0	
18 Acrolein	56	2.523	2.523	0.000	100	249680	100.0	95.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1020497	20.0	20.4	
20 112TCTFE	151	2.629	2.629	0.000	92	876594	20.0	21.0	
21 Acetone	58	2.653	2.653	0.000	100	129995	40.0	37.2	
22 Iodomethane	142	2.736	2.748	-0.012	99	1762805	20.0	23.0	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	2970031	20.0	21.3	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	606147	20.0	20.6	
27 Methyl acetate	43	2.914	2.914	0.000	97	869993	40.0	39.6	
28 Methylene Chloride	84	3.009	3.009	0.000	92	925140	20.0	19.9	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	98	475246	200.0	194.3	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	2316749	200.0	197.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	2438583	20.0	20.1	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	977825	20.0	19.6	
34 Hexane	86	3.436	3.436	0.000	93	197372	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	1559420	20.0	19.7	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1435718	20.0	21.3	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	1027988	20.0	19.5	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	137808	40.0	37.7	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	83	309943	20.0	20.2	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	492922	20.0	19.8	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	327685	40.0	36.1	
48 Chloroform	83	4.301	4.302	-0.001	93	1563762	20.0	19.9	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	1436238	20.0	20.3	
50 Cyclohexane	56	4.503	4.503	0.000	90	1474122	20.0	20.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	1297566	20.0	20.6	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	1253974	20.0	19.7	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	364589	500.0	471.3	
55 Benzene	78	4.764	4.776	-0.012	95	3623322	20.0	19.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	1113535	20.0	19.7	
58 n-Heptane	100	4.966	4.966	0.000	90	170034	20.0	19.9	
60 Trichloroethene	130	5.298	5.298	0.000	96	983943	20.0	19.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	1277610	20.0	20.1	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	785821	20.0	20.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	37	110747	400.0	416.6	
65 Dibromomethane	93	5.606	5.606	0.000	91	449938	20.0	19.8	
67 Dichlorobromomethane	83	5.725	5.725	-0.001	99	1025475	20.0	20.5	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	570636	40.0	42.0	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	1156157	20.0	21.2	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	1044731	40.0	39.8	
72 Toluene	91	6.412	6.412	0.000	98	3370989	20.0	20.2	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	922042	20.0	21.6	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	681749	20.0	21.1	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	549002	20.0	20.0	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	707318	20.0	20.1	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	943985	20.0	20.0	
78 2-Hexanone	43	6.982	6.982	0.000	97	604348	40.0	38.6	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	652498	20.0	21.7	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	538641	20.0	20.4	
84 Chlorobenzene	112	7.681	7.681	0.000	95	2065080	20.0	20.3	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	888983	20.0	20.9	
86 Ethylbenzene	106	7.776	7.776	0.000	98	1138861	20.0	20.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	2787248	20.0	20.6	
88 o-Xylene	106	8.262	8.262	0.000	95	1485220	20.0	20.5	
89 Styrene	104	8.274	8.274	0.000	90	1985697	20.0	21.1	
90 Bromoform	173	8.464	8.464	0.000	98	415352	20.0	22.3	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	3744436	20.0	20.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	704816	20.0	20.8	
95 Bromobenzene	156	8.914	8.914	0.000	91	925930	20.0	19.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	221278	20.0	20.1	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	87	160485	20.0	20.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	960393	20.0	20.8	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	875326	20.0	20.4	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	3048822	20.0	20.9	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2777057	20.0	20.2	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	2608022	20.0	20.9	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	3116448	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	3445811	20.0	21.0	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	1733837	20.0	19.8	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	3069390	20.0	20.9	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	97	1784216	20.0	19.6	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	2416429	20.0	20.3	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	1817774	20.0	20.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	155451	20.0	20.8	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	1286481	20.0	19.3	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	568587	20.0	20.9	
119 Naphthalene	128	12.128	12.128	0.000	97	2900947	20.0	20.4	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	1206461	20.0	19.0	
S 127 1,2-Dichloroethene, Total	96				0			39.1	
S 128 1,3-Dichloropropene, Total	75				0			42.8	
S 129 Xylenes, Total	106				0		40.0	41.1	
S 130 Total BTEX	1				0		100.0	100.8	
S 131 Trihalomethanes, Total	1				0		80.0	84.3	

Reagents:

vm50ss_stk_00086	Amount Added:	16.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	16.00	Units: uL
VMAROLISTDW_00384	Amount Added:	16.00	Units: uL
VMRGAS_00377	Amount Added:	16.00	Units: uL

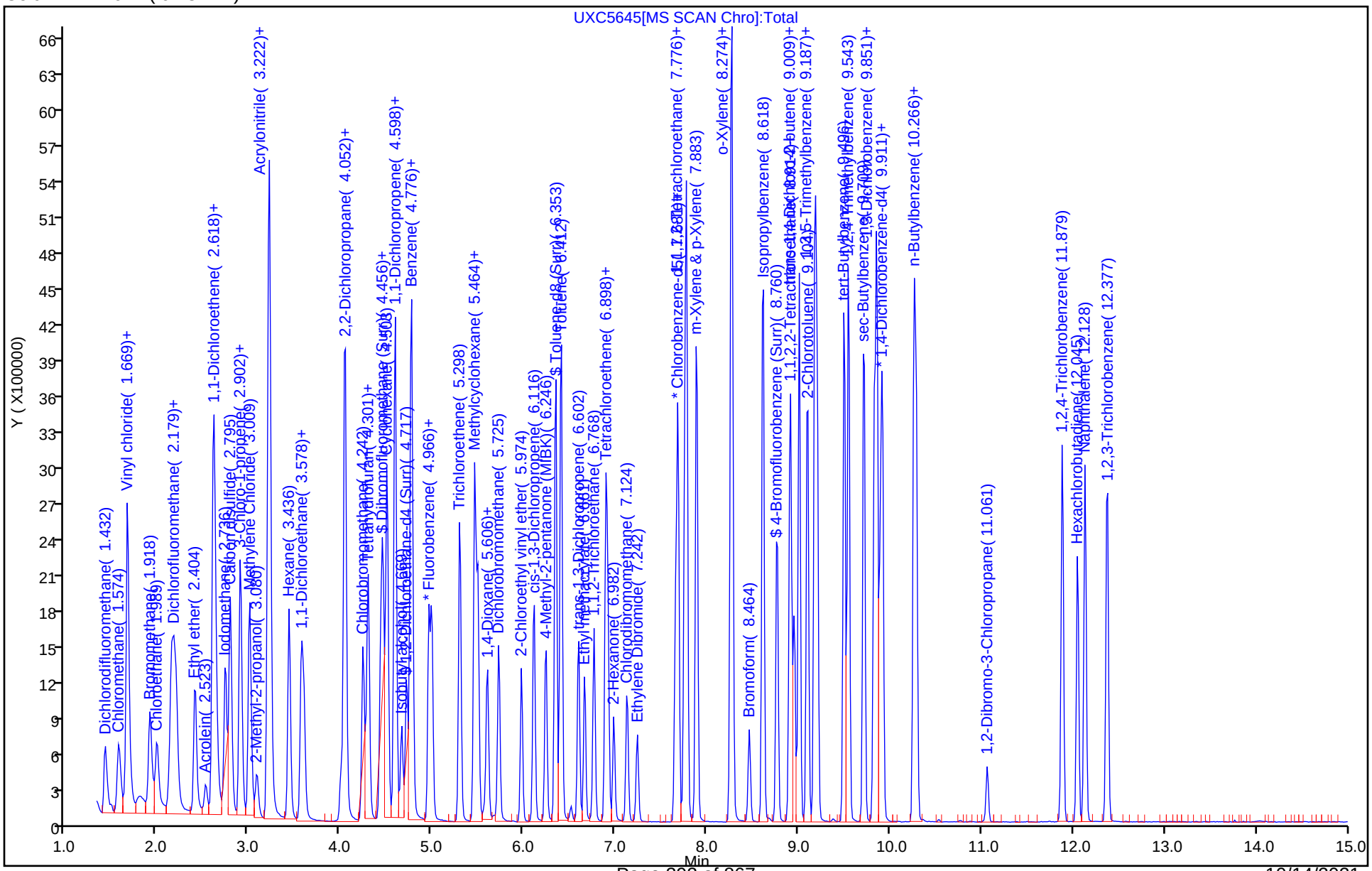
Report Date: 18-Mar-2021 09:00:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D

Injection Date:	16-Mar-2021 08:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Mar-2021 09:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-004
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:51 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1635381	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1083691	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	639882	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	382556	10.0	10.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	425239	10.0	9.88	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1327515	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	452465	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	505763	10.0	10.3	
10 Chloromethane	50	1.574	1.574	0.000	99	581954	10.0	10.4	
11 Vinyl chloride	62	1.669	1.669	0.000	97	435655	10.0	9.07	
12 Butadiene	54	1.681	1.681	0.000	99	603954	10.0	9.86	
13 Bromomethane	94	1.918	1.918	0.000	91	359282	10.0	8.93	
14 Chloroethane	64	2.001	2.001	0.000	100	331296	10.0	9.36	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	917387	10.0	9.74	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	97	821375	10.0	9.64	
17 Ethyl ether	59	2.416	2.416	0.000	90	402519	10.0	9.80	
18 Acrolein	56	2.523	2.523	0.000	99	127991	50.0	50.5	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	474847	10.0	10.0	
20 112TCTFE	151	2.629	2.629	0.000	93	394578	10.0	10.0	
21 Acetone	58	2.653	2.653	0.000	100	61024	20.0	18.5	
22 Iodomethane	142	2.748	2.748	0.000	98	720329	10.0	9.95	
24 Carbon disulfide	76	2.796	2.796	0.000	100	1273944	10.0	9.67	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	282597	10.0	10.2	
27 Methyl acetate	43	2.914	2.914	0.000	98	411585	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	430176	10.0	9.78	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	237680	100.0	102.8	
30 Acrylonitrile	53	3.211	3.211	0.000	99	1114638	100.0	100.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	97	1151185	10.0	10.0	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	473854	10.0	10.0	
34 Hexane	86	3.436	3.436	0.000	92	94360	10.0	9.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	747006	10.0	9.99	
36 Vinyl acetate	43	3.602	3.602	0.000	97	650063	10.0	10.2	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	80	144526	10.0	9.94	
41 cis-1,2-Dichloroethene	96	4.053	4.053	0.000	82	489671	10.0	9.82	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	100	66059	20.0	19.1	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	237215	10.0	10.1	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	160132	20.0	18.6	
48 Chloroform	83	4.302	4.302	0.000	93	742858	10.0	9.98	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	670415	10.0	10.0	
50 Cyclohexane	56	4.503	4.503	0.000	90	681490	10.0	9.85	
52 Carbon tetrachloride	117	4.598	4.598	0.000	93	601989	10.0	10.1	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	606744	10.0	10.1	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	186811	250.0	255.3	
55 Benzene	78	4.776	4.776	0.000	95	1742135	10.0	9.71	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	533877	10.0	10.0	
58 n-Heptane	100	4.966	4.966	0.000	91	74441	10.0	9.20	
60 Trichloroethene	130	5.298	5.298	0.000	97	476021	10.0	9.87	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	592186	10.0	9.83	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	372280	10.0	10.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	85	59463	200.0	191.9	
65 Dibromomethane	93	5.606	5.606	0.000	91	215335	10.0	10.0	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	484704	10.0	10.2	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	263000	20.0	20.5	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	529695	10.0	10.3	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	502124	20.0	20.2	
72 Toluene	91	6.412	6.412	0.000	98	1573355	10.0	9.82	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	420983	10.0	10.3	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	306515	10.0	9.91	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	260222	10.0	9.90	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	338041	10.0	10.0	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	454762	10.0	10.1	
78 2-Hexanone	43	6.982	6.982	0.000	97	302863	20.0	20.1	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	297016	10.0	10.3	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	250735	10.0	9.88	
84 Chlorobenzene	112	7.681	7.681	0.000	95	967329	10.0	9.90	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	406561	10.0	9.98	
86 Ethylbenzene	106	7.776	7.776	0.000	98	538828	10.0	10.1	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1293431	10.0	9.98	
88 o-Xylene	106	8.262	8.262	0.000	96	689690	10.0	9.91	
89 Styrene	104	8.274	8.274	0.000	93	913969	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	98	177112	10.0	9.92	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1725432	10.0	10.0	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	328387	10.0	10.0	
95 Bromobenzene	156	8.914	8.914	0.000	90	452432	10.0	10.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	105370	10.0	9.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	73	69740	10.0	9.32	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	445896	10.0	9.99	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	422328	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	1410902	10.0	10.0	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1311993	10.0	9.91	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	1213704	10.0	10.1	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1458830	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	1605451	10.0	10.1	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	839103	10.0	9.94	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1421147	10.0	10.0	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	863405	10.0	9.85	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1141647	10.0	9.95	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	880005	10.0	10.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	87	73534	10.0	10.2	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	637594	10.0	9.89	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	288855	10.0	10.6	
119 Naphthalene	128	12.128	12.128	0.000	96	1405465	10.0	10.2	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	597963	10.0	9.77	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.5	
S 131 Trihalomethanes, Total	1				0		40.0	40.4	

QC Flag Legend

Processing Flags

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	8.00	Units: uL
VMAROLISTDW_00384	Amount Added:	8.00	Units: uL
VMRPRIMW_00427	Amount Added:	8.00	Units: uL
VMRGAS_00377	Amount Added:	8.00	Units: uL

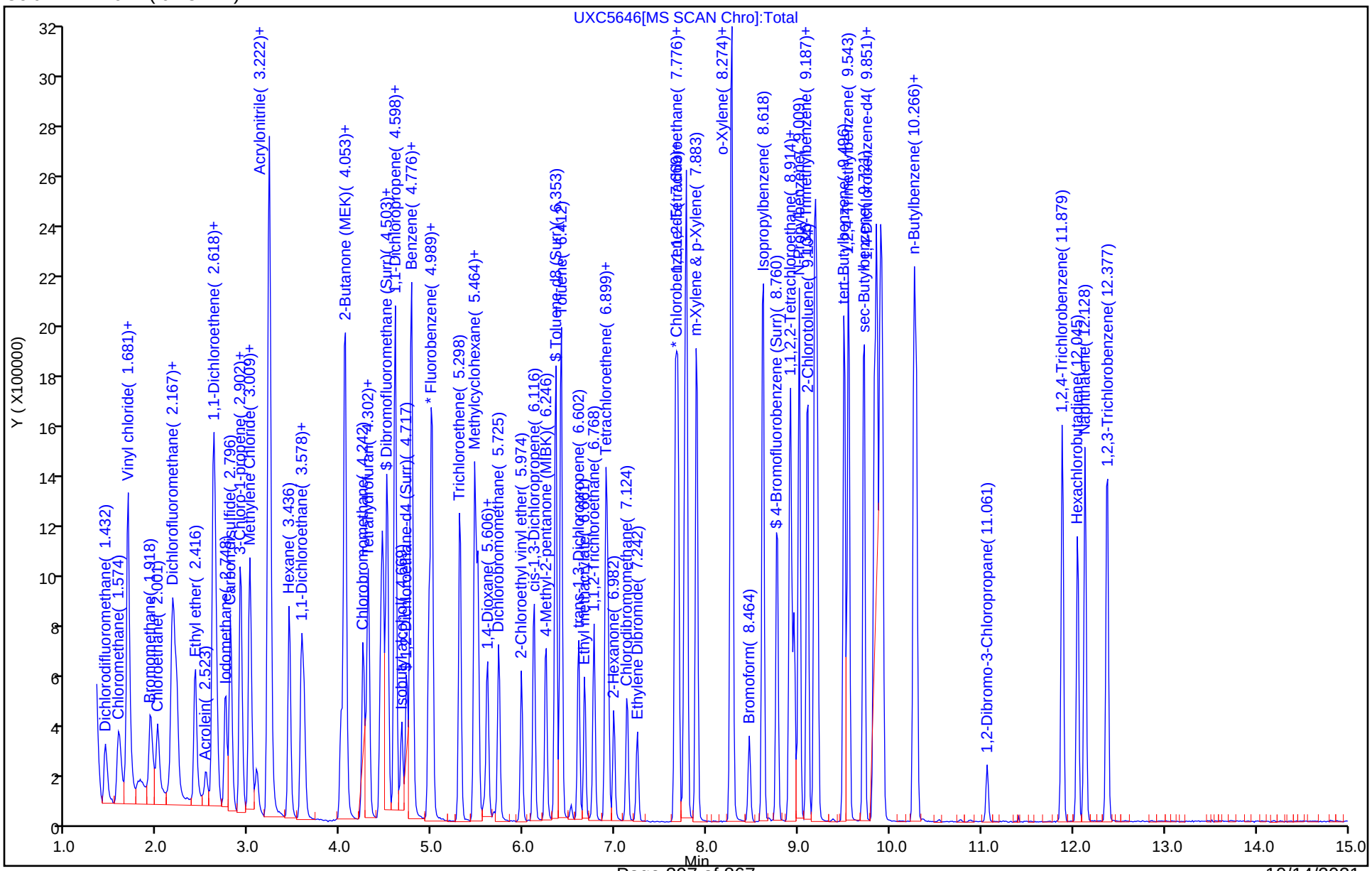
Report Date: 18-Mar-2021 09:00:52 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D

Injection Date:	16-Mar-2021 09:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Mar-2021 09:42:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-005
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:57 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	100	1580769	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1036230	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	621189	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	190756	5.00	5.16	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	214048	5.00	5.14	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	645215	5.00	5.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	218006	5.00	5.08	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	236340	5.00	4.96	
10 Chloromethane	50	1.574	1.574	0.000	99	278892	5.00	5.15	
11 Vinyl chloride	62	1.669	1.669	0.000	98	218141	5.00	4.70	
12 Butadiene	54	1.681	1.681	0.000	99	299854	5.00	5.06	
13 Bromomethane	94	1.918	1.918	0.000	90	185985	5.00	4.78	
14 Chloroethane	64	2.001	2.001	0.000	100	171841	5.00	5.02	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	454576	5.00	5.00	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	399090	5.00	4.84	
17 Ethyl ether	59	2.416	2.416	0.000	90	199967	5.00	5.04	
18 Acrolein	56	2.523	2.523	0.000	98	65464	25.0	25.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	236738	5.00	5.18	
20 112TCTFE	151	2.629	2.629	0.000	93	194077	5.00	5.09	
21 Acetone	58	2.653	2.653	0.000	98	28520	10.0	8.92	
22 Iodomethane	142	2.736	2.748	-0.012	99	348537	5.00	4.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	614828	5.00	4.83	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	137672	5.00	5.13	
27 Methyl acetate	43	2.914	2.914	0.000	98	204142	10.0	10.2	
28 Methylene Chloride	84	3.009	3.009	0.000	92	214303	5.00	5.04	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	117539	50.0	52.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	98	541571	50.0	50.5	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	559170	5.00	5.04	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	228419	5.00	5.00	
34 Hexane	86	3.436	3.436	0.000	92	41895	5.00	4.58	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	364589	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	97	304236	5.00	4.95	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	99	32640	10.0	9.77	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	81	70219	5.00	5.00	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	85	244751	5.00	5.08	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	114745	5.00	5.04	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	75127	10.0	9.04	
48 Chloroform	83	4.301	4.302	-0.001	94	363680	5.00	5.05	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	328759	5.00	5.07	
50 Cyclohexane	56	4.503	4.503	0.000	90	333807	5.00	4.99	
52 Carbon tetrachloride	117	4.598	4.598	0.000	94	291902	5.00	5.06	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	293864	5.00	5.04	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	89469	125.0	126.5	
55 Benzene	78	4.776	4.776	0.000	95	853447	5.00	4.92	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	258800	5.00	5.02	
58 n-Heptane	100	4.966	4.966	0.000	91	38208	5.00	4.88	
60 Trichloroethene	130	5.298	5.298	0.000	96	234414	5.00	5.03	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	281838	5.00	4.84	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	178849	5.00	4.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	38	28764	100.0	91.7	
65 Dibromomethane	93	5.606	5.606	0.000	90	103540	5.00	4.99	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	224007	5.00	4.90	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	93	118901	10.0	9.57	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	244291	5.00	4.91	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	243498	10.0	10.2	
72 Toluene	91	6.412	6.412	0.000	98	756651	5.00	4.94	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	191368	5.00	4.88	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	148354	5.00	5.01	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	92	124819	5.00	4.97	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	161314	5.00	5.00	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	213808	5.00	4.95	
78 2-Hexanone	43	6.981	6.982	-0.001	97	149884	10.0	10.4	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	137225	5.00	4.97	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	120100	5.00	4.95	
84 Chlorobenzene	112	7.681	7.681	0.000	97	470075	5.00	5.03	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	190281	5.00	4.88	
86 Ethylbenzene	106	7.776	7.776	0.000	98	253063	5.00	4.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	614921	5.00	4.96	
88 o-Xylene	106	8.262	8.262	0.000	96	333576	5.00	5.01	
89 Styrene	104	8.274	8.274	0.000	93	429902	5.00	4.98	
90 Bromoform	173	8.464	8.464	0.000	98	80220	5.00	4.70	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	823347	5.00	5.01	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	160683	5.00	5.06	
95 Bromobenzene	156	8.914	8.914	0.000	90	215609	5.00	4.93	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	85	50734	5.00	4.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	70	30267	5.00	4.28	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	213311	5.00	4.92	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	200124	5.00	4.98	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	666934	5.00	4.89	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	633815	5.00	4.93	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	570303	5.00	4.89	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	691594	5.00	4.94	
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	749769	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	414203	5.00	5.06	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	96	672177	5.00	4.89	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	427734	5.00	5.03	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	547299	5.00	4.92	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	431687	5.00	5.06	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	34964	5.00	4.99	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	313669	5.00	5.01	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	147661	5.00	5.25	
119 Naphthalene	128	12.128	12.128	0.000	96	678882	5.00	5.09	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	296808	5.00	5.00	
S 127 1,2-Dichloroethene, Total	96				0			10.1	
S 128 1,3-Dichloropropene, Total	75				0			9.79	
S 129 Xylenes, Total	106				0		10.0	9.97	
S 130 Total BTEX	1				0		25.0	24.8	
S 131 Trihalomethanes, Total	1				0		20.0	19.6	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	4.00	Units: uL
VMRPRIMW_00427	Amount Added:	4.00	Units: uL
VMRGAS_00377	Amount Added:	4.00	Units: uL
VMAROLISTDW_00384	Amount Added:	4.00	Units: uL

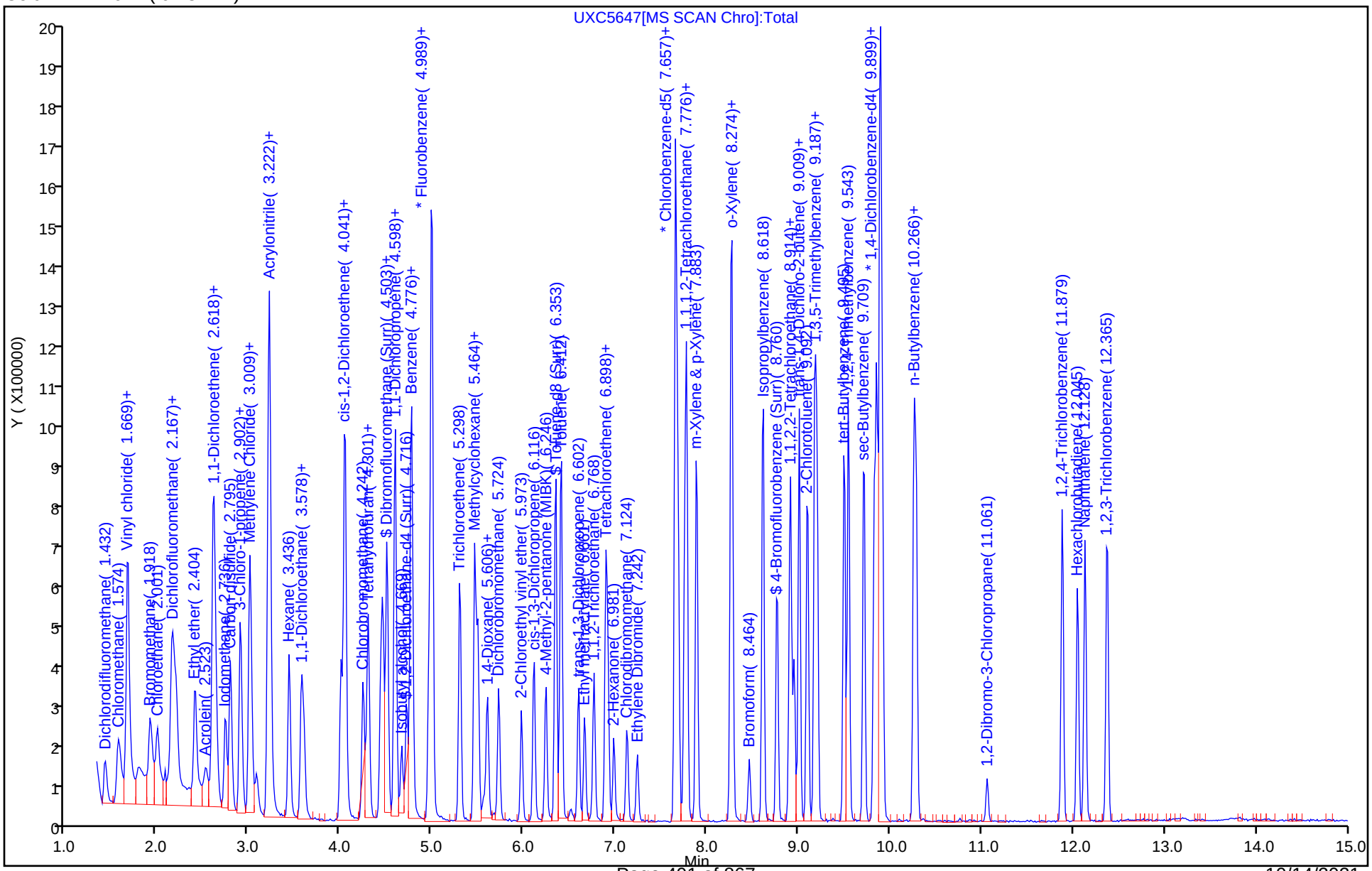
Report Date: 18-Mar-2021 09:00:58 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D

Injection Date:	16-Mar-2021 09:42:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2021 10:17:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-006
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:02 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 11:41:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1600104	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1025239	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	608128	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	73272	2.00	1.96	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	85434	2.00	2.03	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	246447	2.00	1.96	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	83987	2.00	1.98	
9 Dichlorodifluoromethane	85	1.420	1.432	-0.012	99	96788	2.00	2.01	
10 Chloromethane	50	1.574	1.574	0.000	99	109132	2.00	1.99	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	107404	2.00	2.29	
12 Butadiene	54	1.669	1.681	-0.012	99	116788	2.00	1.95	
13 Bromomethane	94	1.918	1.918	0.000	91	88628	2.00	2.25	
14 Chloroethane	64	1.989	2.001	-0.012	99	71803	2.00	2.07	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	197535	2.00	2.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	169605	2.00	2.03	
17 Ethyl ether	59	2.404	2.416	-0.012	89	83944	2.00	2.09	
18 Acrolein	56	2.523	2.523	0.000	97	42337	10.0	15.3	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	99	97460	2.00	2.11	
20 112TCTFE	151	2.617	2.629	-0.012	90	74912	2.00	1.94	
21 Acetone	58	2.653	2.653	0.000	97	15117	4.00	4.67	
22 Iodomethane	142	2.736	2.748	-0.012	99	140257	2.00	1.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	286182	2.00	2.22	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	87	54960	2.00	2.02	
27 Methyl acetate	43	2.914	2.914	0.000	97	79302	4.00	3.90	
28 Methylene Chloride	84	3.009	3.009	0.000	91	90541	2.00	2.10	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	97	44457	20.0	19.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	216160	20.0	19.9	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	220217	2.00	1.96	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	94914	2.00	2.05	
34 Hexane	86	3.436	3.436	0.000	93	18928	2.00	2.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	97	148843	2.00	2.03	
36 Vinyl acetate	43	3.602	3.602	0.000	97	113199	2.00	1.82	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.012	81	101403	2.00	2.08	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	45	13268	4.00	3.93	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	76	28276	2.00	1.99	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	46356	2.00	2.01	
47 Tetrahydrofuran	42	4.290	4.278	0.012	87	36744	4.00	4.37	
48 Chloroform	83	4.301	4.302	-0.001	93	145589	2.00	2.00	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	131645	2.00	2.01	
50 Cyclohexane	56	4.503	4.503	0.000	90	135465	2.00	2.00	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	113888	2.00	1.95	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	121447	2.00	2.06	
53 Isobutyl alcohol	41	4.669	4.669	0.000	91	35137	50.0	49.1	
55 Benzene	78	4.764	4.776	-0.012	95	365182	2.00	2.08	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	103413	2.00	1.98	
58 n-Heptane	100	4.965	4.966	-0.001	91	17934	2.00	2.26	
60 Trichloroethene	130	5.298	5.298	0.000	94	96690	2.00	2.05	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	120389	2.00	2.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	69979	2.00	1.92	
66 1,4-Dioxane	88	5.606	5.606	0.000	41	13582	40.0	44.9	
65 Dibromomethane	93	5.594	5.606	-0.012	89	41243	2.00	1.96	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	89718	2.00	1.94	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	91	47750	4.00	3.80	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	95626	2.00	1.90	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	92610	4.00	3.82	
72 Toluene	91	6.412	6.412	0.000	98	307593	2.00	2.03	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	73739	2.00	1.90	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	54155	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	48837	2.00	1.96	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	65641	2.00	2.06	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	85147	2.00	1.99	
78 2-Hexanone	43	6.981	6.982	-0.001	97	59188	4.00	4.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	50550	2.00	1.85	
82 Ethylene Dibromide	107	7.242	7.242	0.000	97	48784	2.00	2.03	
84 Chlorobenzene	112	7.681	7.681	0.000	95	182215	2.00	1.97	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	74581	2.00	1.94	
86 Ethylbenzene	106	7.776	7.776	0.000	98	98654	2.00	1.95	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	238816	2.00	1.95	
88 o-Xylene	106	8.262	8.262	0.000	96	131067	2.00	1.99	
89 Styrene	104	8.274	8.274	0.000	91	161777	2.00	1.89	
90 Bromoform	173	8.464	8.464	0.000	96	32788	2.00	1.94	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	315606	2.00	1.94	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	58976	2.00	1.90	
95 Bromobenzene	156	8.914	8.914	0.000	90	86512	2.00	2.02	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	87	21011	2.00	2.08	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	77	17008	2.00	2.54	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	82831	2.00	1.95	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	77726	2.00	1.97	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	259616	2.00	1.94	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	251801	2.00	2.00	
104 tert-Butylbenzene	119	9.507	9.496	0.011	90	222437	2.00	1.95	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	269709	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	294251	2.00	1.96	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	164834	2.00	2.06	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	268187	2.00	1.99	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	171714	2.00	2.06	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	226998	2.00	2.08	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	168210	2.00	2.02	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	82	14241	2.00	2.08	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	138494	2.00	2.26	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	72546	2.00	2.26	
119 Naphthalene	128	12.128	12.128	0.000	96	262519	2.00	2.01	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	134820	2.00	2.32	
S 127 1,2-Dichloroethene, Total	96				0			4.13	
S 128 1,3-Dichloropropene, Total	75				0			3.80	
S 129 Xylenes, Total	106				0		4.00	3.94	
S 130 Total BTEX	1				0		10.0	10.0	
S 131 Trihalomethanes, Total	1				0		8.00	7.73	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	1.60	Units: uL
VMRPRIMW_00427	Amount Added:	1.60	Units: uL
VMAROLISTDW_00384	Amount Added:	1.60	Units: uL
VMRGAS_00377	Amount Added:	1.60	Units: uL

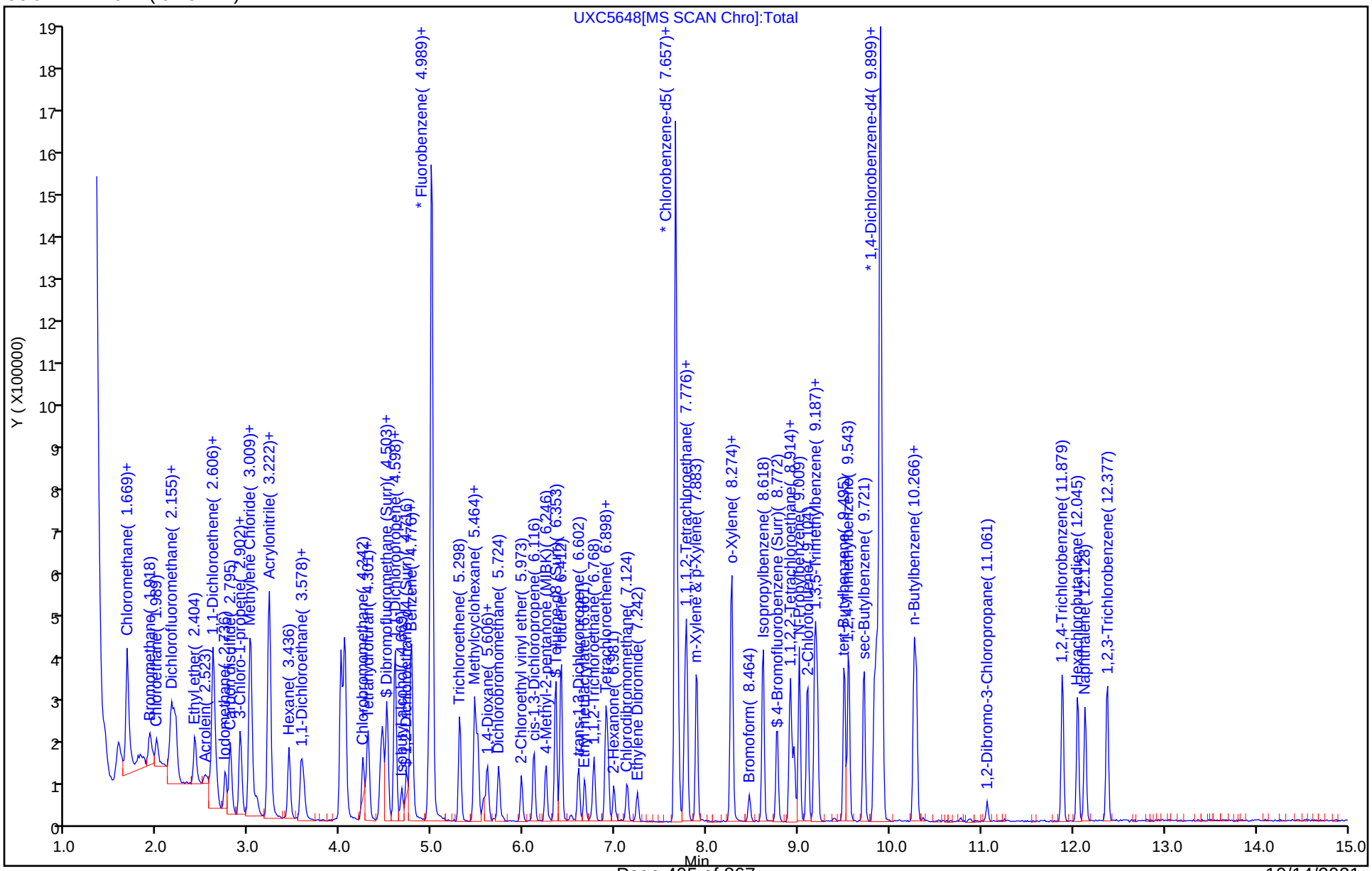
Report Date: 18-Mar-2021 09:01:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D

Injection Date:	16-Mar-2021 10:17:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Mar-2021 10:39:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-007
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:07 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 12:42:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1508502	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1005314	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	606056	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	36526	1.00	1.04	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	41633	1.00	1.05	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	123741	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	95	43228	1.00	1.04	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	98	47955	1.00	1.06	
10 Chloromethane	50	1.574	1.574	0.000	98	58389	1.00	1.13	
11 Vinyl chloride	62	1.657	1.669	-0.012	78	46845	1.00	1.06	
12 Butadiene	54	1.669	1.681	-0.012	96	69152	1.00	1.22	
13 Bromomethane	94	1.918	1.918	0.000	91	41750	1.00	1.12	
14 Chloroethane	64	2.001	2.001	0.000	99	37706	1.00	1.16	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	98585	1.00	1.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	86296	1.00	1.10	
17 Ethyl ether	59	2.404	2.416	-0.012	88	40718	1.00	1.07	
18 Acrolein	56	2.534	2.523	0.011	96	9294	5.00	1.47	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	39151	1.00	0.8976	
20 112TCTFE	151	2.629	2.629	0.000	91	33084	1.00	0.9100	
21 Acetone	58	2.653	2.653	0.000	99	7111	2.00	2.33	
22 Iodomethane	142	2.736	2.748	-0.012	99	61380	1.00	0.9189	
24 Carbon disulfide	76	2.795	2.796	-0.001	99	116874	1.00	0.9616	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	22980	1.00	0.8970	
27 Methyl acetate	43	2.914	2.914	0.000	97	39316	2.00	2.05	
28 Methylene Chloride	84	3.009	3.009	0.000	89	41550	1.00	1.02	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	96	20999	10.0	9.84	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	102496	10.0	10.0	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	105442	1.00	1.00	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	45650	1.00	1.05	
34 Hexane	86	3.436	3.436	0.000	91	9581	1.00	1.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	70364	1.00	1.02	
36 Vinyl acetate	43	3.602	3.602	0.000	97	52739	1.00	0.8986	
42 2,2-Dichloropropane	97	4.041	4.053	-0.011	78	13807	1.00	1.03	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	81	47902	1.00	1.04	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	48	7540	2.00	2.37	
46 Chlorobromomethane	128	4.242	4.242	0.000	87	22476	1.00	1.03	
47 Tetrahydrofuran	42	4.290	4.278	0.012	85	19738	2.00	2.49	
48 Chloroform	83	4.301	4.302	-0.001	93	70935	1.00	1.03	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	60467	1.00	0.9778	
50 Cyclohexane	56	4.503	4.503	0.000	90	65918	1.00	1.03	
52 Carbon tetrachloride	117	4.598	4.598	0.000	92	52456	1.00	0.9535	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	56469	1.00	1.02	
53 Isobutyl alcohol	41	4.669	4.669	0.000	93	18341	25.0	27.2	
55 Benzene	78	4.764	4.776	-0.012	96	181175	1.00	1.09	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	96	51453	1.00	1.05	
58 n-Heptane	100	4.965	4.966	-0.001	92	7518	1.00	1.01	
60 Trichloroethene	130	5.298	5.298	0.000	95	47038	1.00	1.06	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	57824	1.00	1.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	35608	1.00	1.04	
66 1,4-Dioxane	88	5.606	5.606	0.000	39	5574	20.0	23.1	
65 Dibromomethane	93	5.606	5.606	0.000	89	20875	1.00	1.05	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	41626	1.00	0.9538	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	21442	2.00	1.81	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	42305	1.00	0.8906	
71 4-Methyl-2-pentanone (MIBK)	43	6.234	6.246	-0.012	96	46573	2.00	2.04	
72 Toluene	91	6.412	6.412	0.000	98	148278	1.00	1.00	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	33643	1.00	0.8838	
74 Ethyl methacrylate	69	6.673	6.661	0.012	88	28235	1.00	0.9837	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	25770	1.00	1.06	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	30533	1.00	0.9755	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	42197	1.00	1.01	
78 2-Hexanone	43	6.981	6.982	-0.001	95	30177	2.00	2.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	89	23357	1.00	0.8719	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	23568	1.00	1.00	
84 Chlorobenzene	112	7.681	7.681	0.000	95	91842	1.00	1.01	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.764	-0.012	92	37283	1.00	0.9866	
86 Ethylbenzene	106	7.776	7.776	0.000	98	48952	1.00	0.9881	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	95	119546	1.00	0.99	
88 o-Xylene	106	8.262	8.262	0.000	96	63450	1.00	0.9824	
89 Styrene	104	8.274	8.274	0.000	93	78354	1.00	0.9354	
90 Bromoform	173	8.464	8.464	0.000	96	13367	1.00	0.8071	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	152266	1.00	0.9552	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	-0.001	97	30042	1.00	0.9688	
95 Bromobenzene	156	8.914	8.914	0.000	90	43010	1.00	1.01	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	9782	1.00	0.9725	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	66	5133	1.00	0.9070	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	40320	1.00	0.9537	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	37216	1.00	0.9484	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	125526	1.00	0.9432	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	124885	1.00	1.00	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	107456	1.00	0.9445	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	125769	1.00	0.9214	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	141534	1.00	0.9438	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	96	79988	1.00	1.00	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	96	125533	1.00	0.9359	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	86247	1.00	1.04	
113 n-Butylbenzene	91	10.266	10.266	0.000	96	105585	1.00	0.9720	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	83074	1.00	1.00	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	79	5731	1.00	0.8382	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	61295	1.00	1.00	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	36040	1.00	0.7551	
119 Naphthalene	128	12.128	12.128	0.000	97	121361	1.00	0.9318	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	58935	1.00	1.02	
S 127 1,2-Dichloroethene, Total	96				0			2.09	
S 128 1,3-Dichloropropene, Total	75				0			1.77	
S 129 Xylenes, Total	106				0		2.00	1.98	
S 130 Total BTEX	1				0		5.00	5.06	
S 131 Trihalomethanes, Total	1				0		4.00	3.67	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	0.80	Units: uL
VMRPRIMW_00427	Amount Added:	0.80	Units: uL
VMAROLISTDW_00384	Amount Added:	0.80	Units: uL
VMRGAS_00377	Amount Added:	0.80	Units: uL

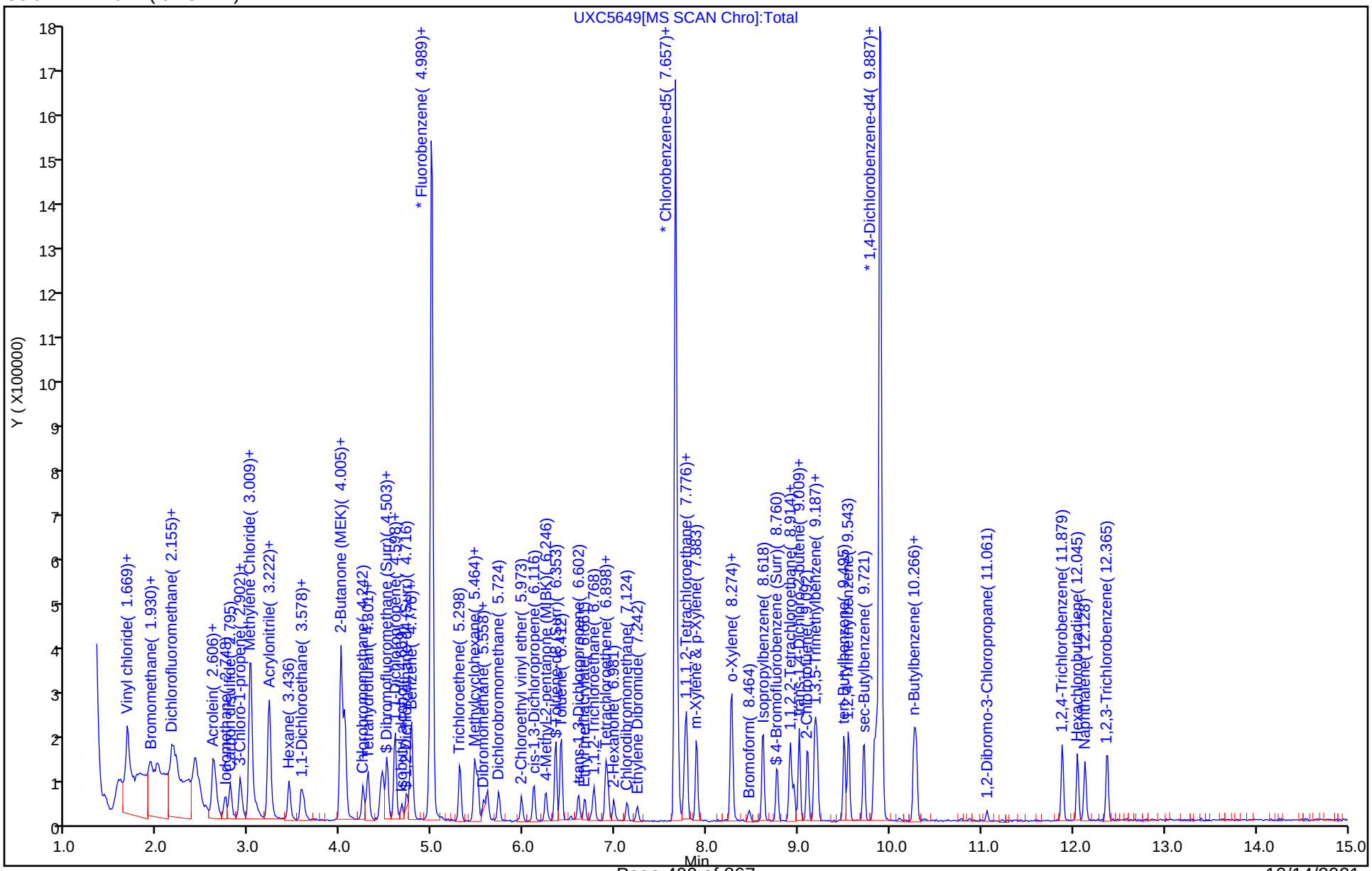
Report Date: 18-Mar-2021 09:01:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D

Injection Date:	16-Mar-2021 10:39:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

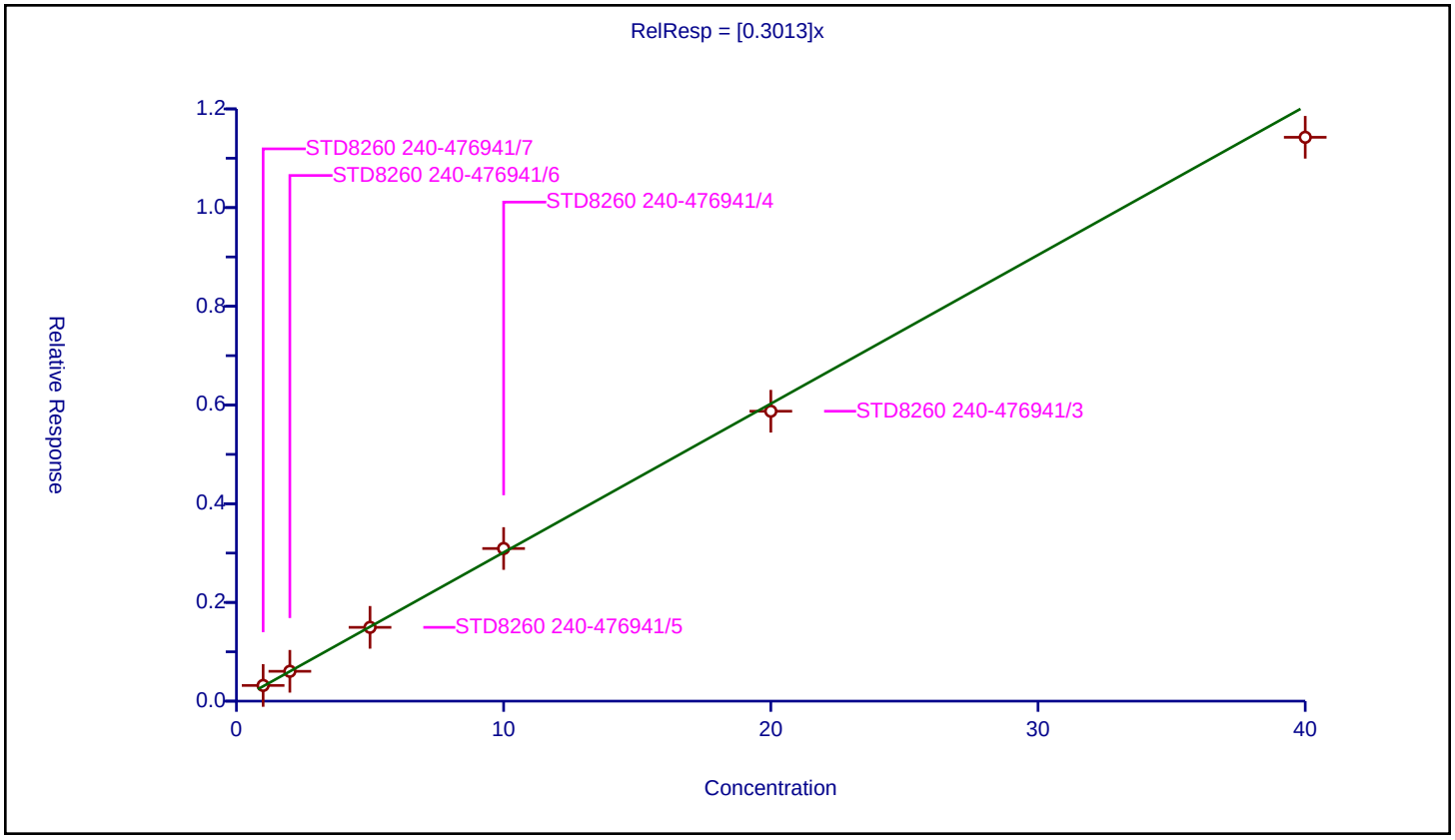
Curve Coefficients

Intercept:	0
Slope:	0.3013

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317898	10.0	1508502.0	0.317898	Y
2	STD8260 240-476941/6	2.0	0.604886	10.0	1600104.0	0.302443	Y
3	STD8260 240-476941/5	5.0	1.495095	10.0	1580769.0	0.299019	Y
4	STD8260 240-476941/4	10.0	3.092631	10.0	1635381.0	0.309263	Y
5	STD8260 240-476941/3	20.0	5.874133	10.0	1729200.0	0.293707	Y
6	STD8260 240-476941/2	40.0	11.424781	10.0	1738218.0	0.28562	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

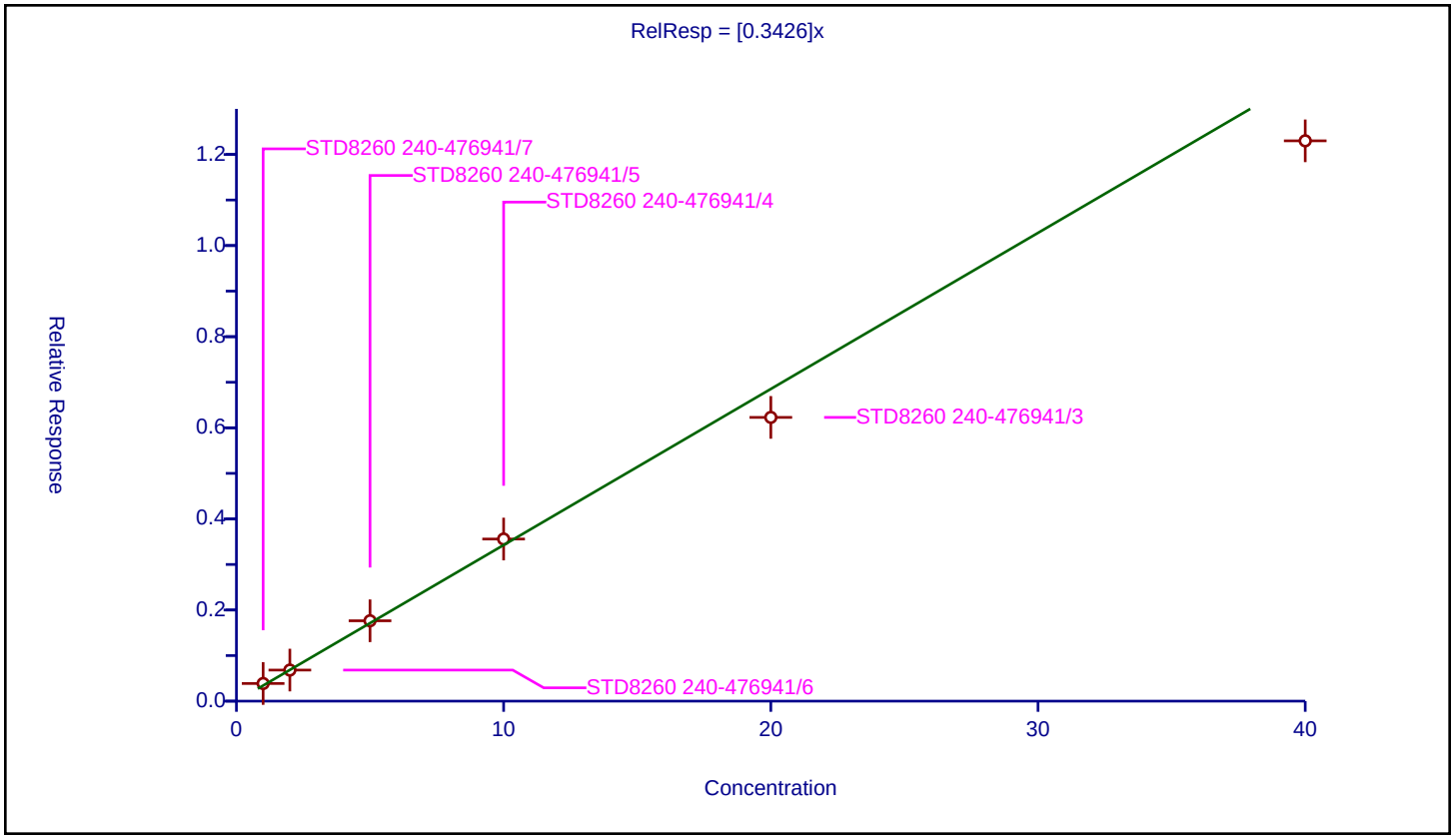
Curve Coefficients

Intercept:	0
Slope:	0.3426

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.387066	10.0	1508502.0	0.387066	Y
2	STD8260 240-476941/6	2.0	0.682031	10.0	1600104.0	0.341015	Y
3	STD8260 240-476941/5	5.0	1.764281	10.0	1580769.0	0.352856	Y
4	STD8260 240-476941/4	10.0	3.558522	10.0	1635381.0	0.355852	Y
5	STD8260 240-476941/3	20.0	6.228238	10.0	1729200.0	0.311412	Y
6	STD8260 240-476941/2	40.0	12.299136	10.0	1738218.0	0.307478	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

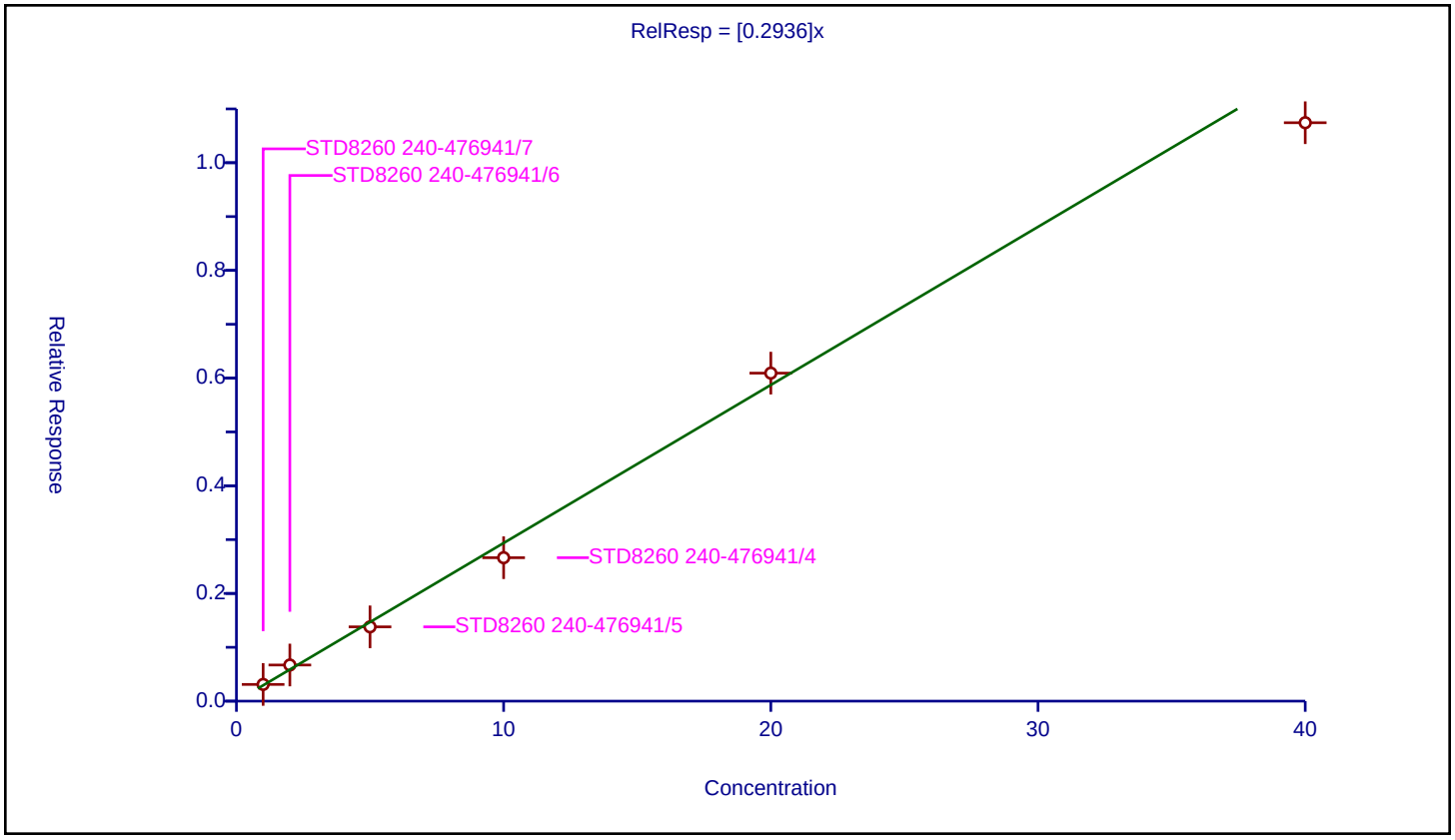
Curve Coefficients

Intercept:	0
Slope:	0.2936

Error Coefficients

Standard Error:	985000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.31054	10.0	1508502.0	0.31054	Y
2	STD8260 240-476941/6	2.0	0.671231	10.0	1600104.0	0.335616	Y
3	STD8260 240-476941/5	5.0	1.379968	10.0	1580769.0	0.275994	Y
4	STD8260 240-476941/4	10.0	2.663936	10.0	1635381.0	0.266394	Y
5	STD8260 240-476941/3	20.0	6.092372	10.0	1729200.0	0.304619	Y
6	STD8260 240-476941/2	40.0	10.743319	10.0	1738218.0	0.268583	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

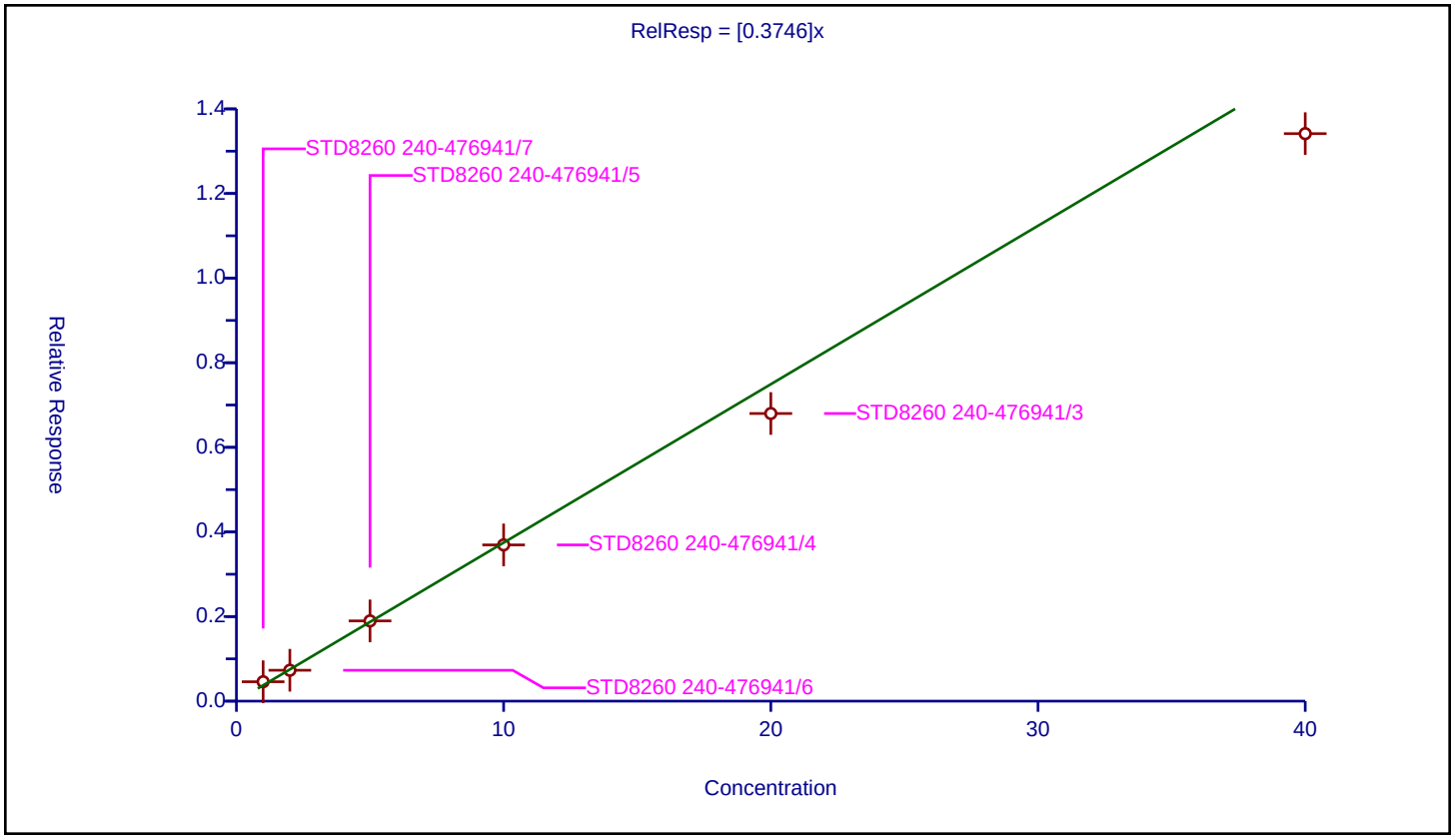
Curve Coefficients

Intercept:	0
Slope:	0.3746

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	11.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.458415	10.0	1508502.0	0.458415	Y
2	STD8260 240-476941/6	2.0	0.729878	10.0	1600104.0	0.364939	Y
3	STD8260 240-476941/5	5.0	1.896887	10.0	1580769.0	0.379377	Y
4	STD8260 240-476941/4	10.0	3.693048	10.0	1635381.0	0.369305	Y
5	STD8260 240-476941/3	20.0	6.799491	10.0	1729200.0	0.339975	Y
6	STD8260 240-476941/2	40.0	13.41502	10.0	1738218.0	0.335376	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

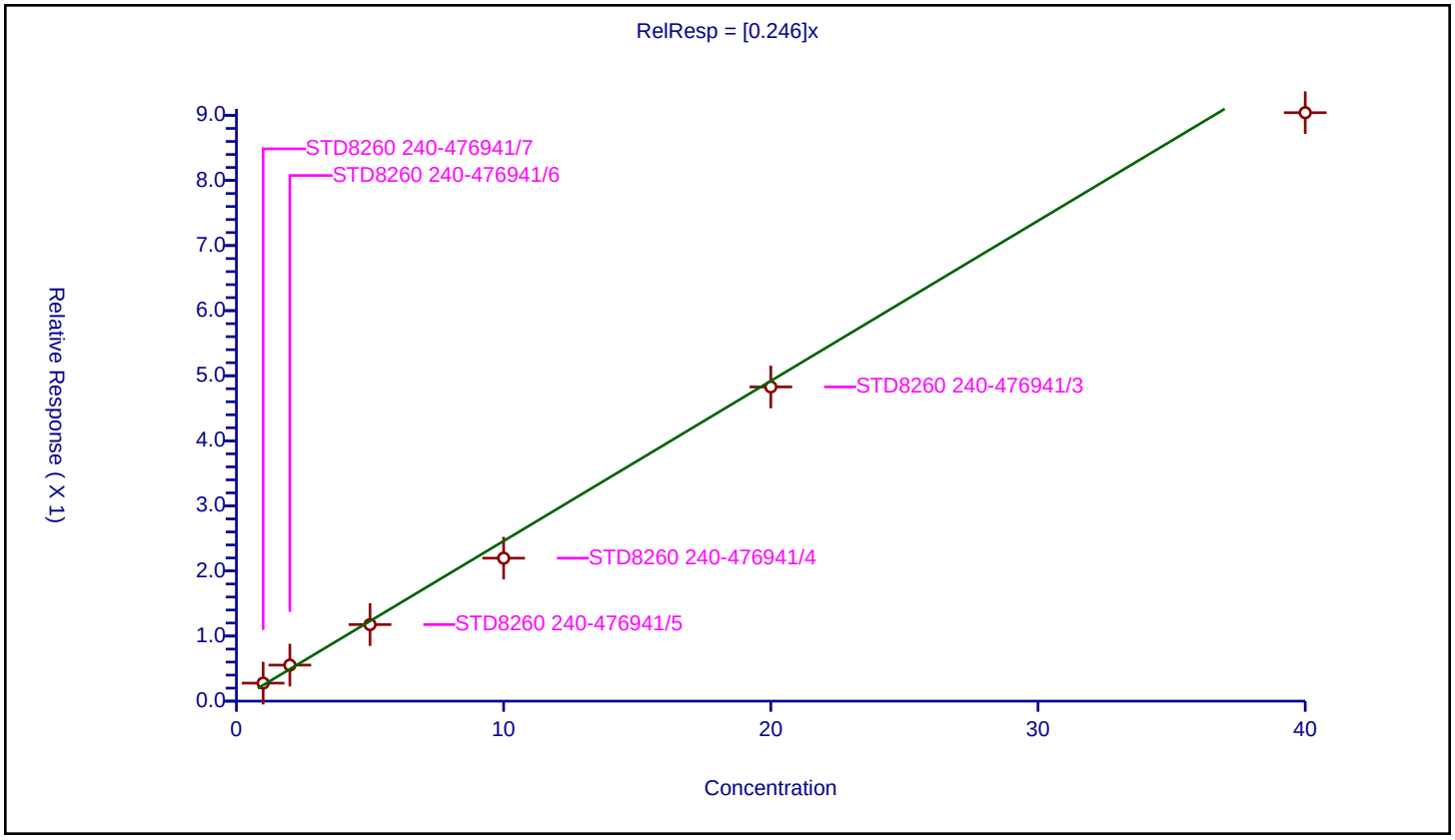
Curve Coefficients

Intercept:	0
Slope:	0.246

Error Coefficients

Standard Error:	817000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.276765	10.0	1508502.0	0.276765	Y
2	STD8260 240-476941/6	2.0	0.553889	10.0	1600104.0	0.276944	Y
3	STD8260 240-476941/5	5.0	1.176548	10.0	1580769.0	0.23531	Y
4	STD8260 240-476941/4	10.0	2.196931	10.0	1635381.0	0.219693	Y
5	STD8260 240-476941/3	20.0	4.827897	10.0	1729200.0	0.241395	Y
6	STD8260 240-476941/2	40.0	9.041956	10.0	1738218.0	0.226049	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

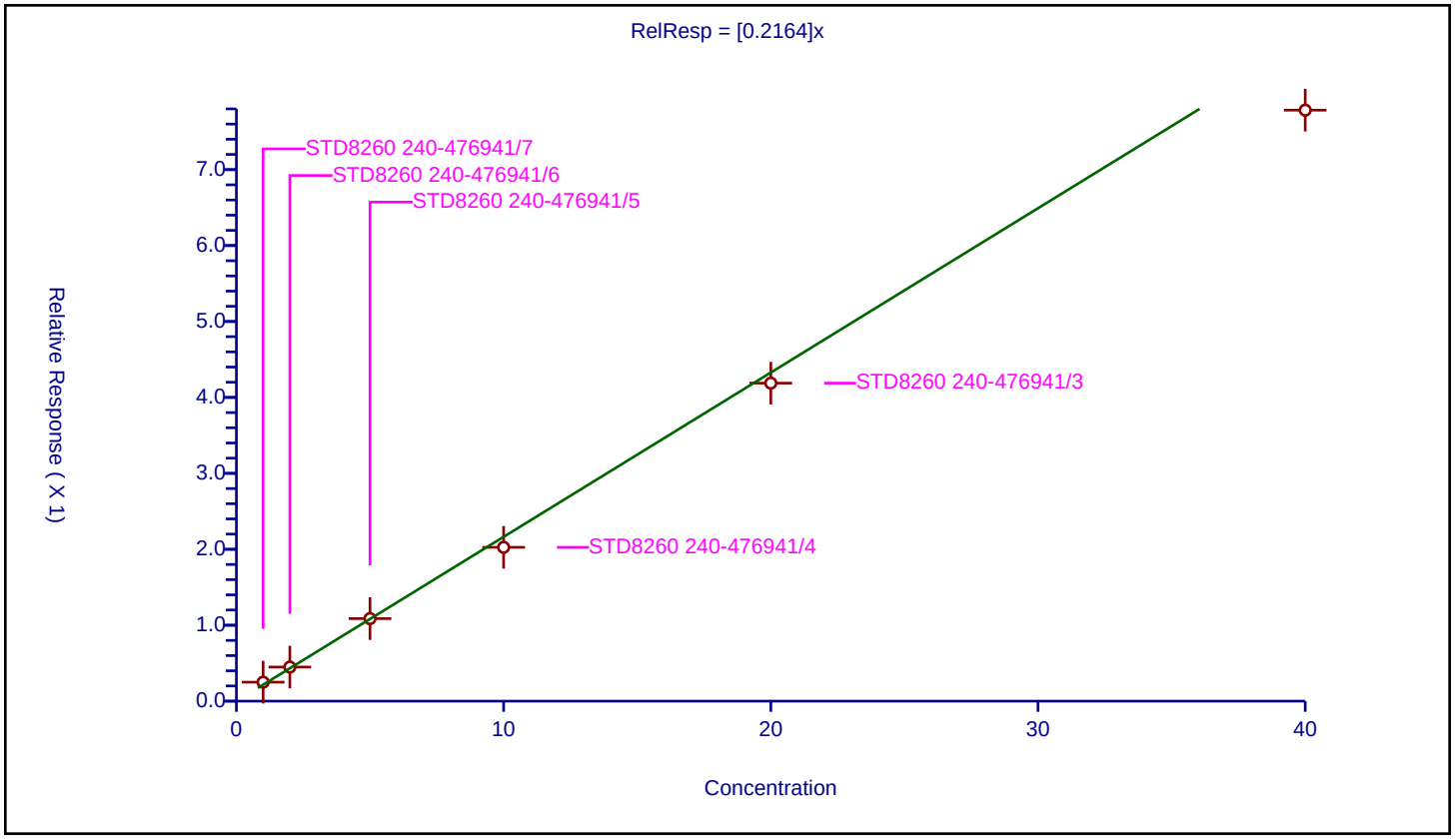
Curve Coefficients

Intercept:	0
Slope:	0.2164

Error Coefficients

Standard Error:	707000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.249957	10.0	1508502.0	0.249957	Y
2	STD8260 240-476941/6	2.0	0.44874	10.0	1600104.0	0.22437	Y
3	STD8260 240-476941/5	5.0	1.087072	10.0	1580769.0	0.217414	Y
4	STD8260 240-476941/4	10.0	2.025803	10.0	1635381.0	0.20258	Y
5	STD8260 240-476941/3	20.0	4.187977	10.0	1729200.0	0.209399	Y
6	STD8260 240-476941/2	40.0	7.78312	10.0	1738218.0	0.194578	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

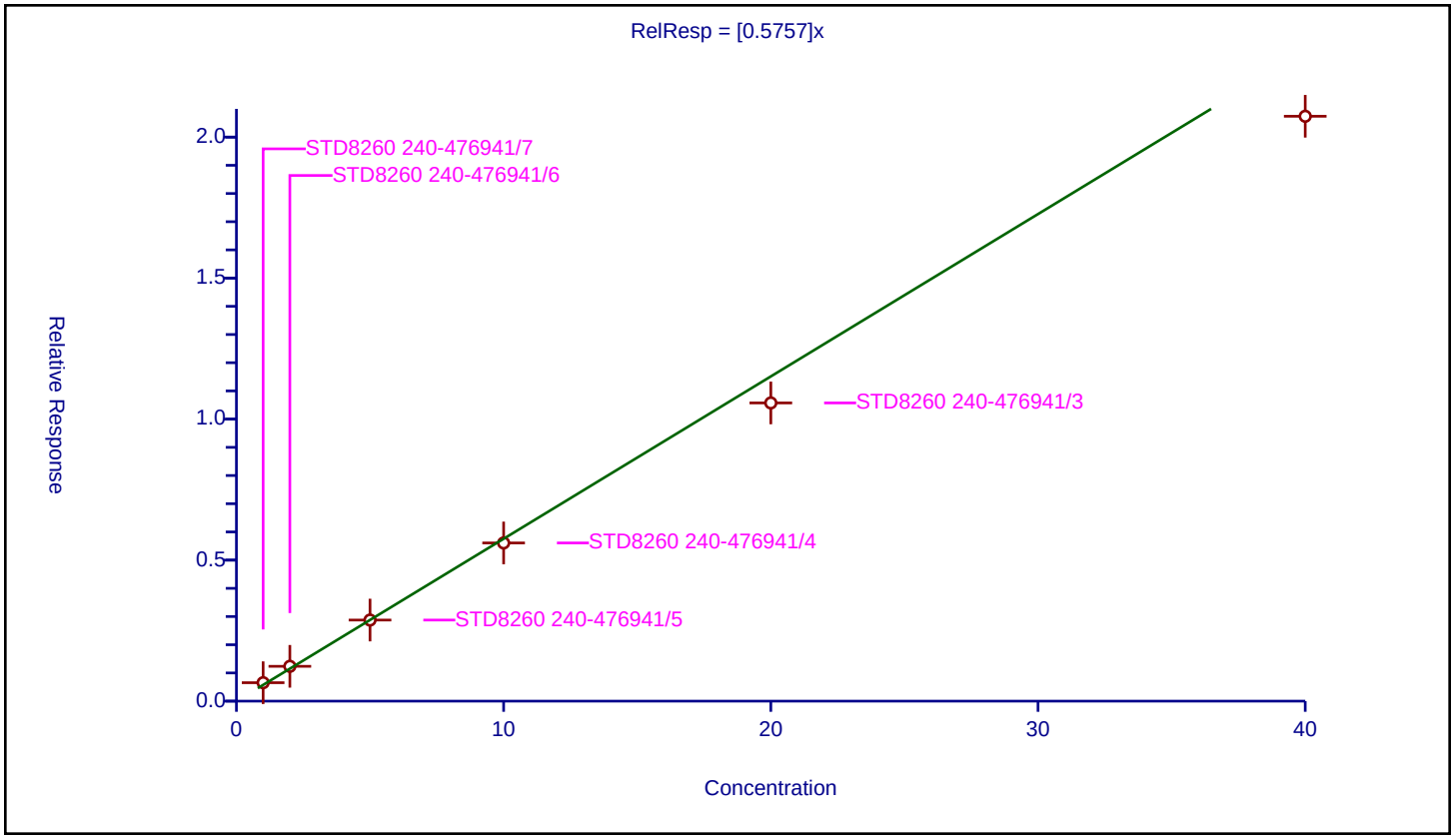
Curve Coefficients

Intercept:	0
Slope:	0.5757

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.653529	10.0	1508502.0	0.653529	Y
2	STD8260 240-476941/6	2.0	1.234514	10.0	1600104.0	0.617257	Y
3	STD8260 240-476941/5	5.0	2.875664	10.0	1580769.0	0.575133	Y
4	STD8260 240-476941/4	10.0	5.609622	10.0	1635381.0	0.560962	Y
5	STD8260 240-476941/3	20.0	10.57426	10.0	1729200.0	0.528713	Y
6	STD8260 240-476941/2	40.0	20.738411	10.0	1738218.0	0.51846	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

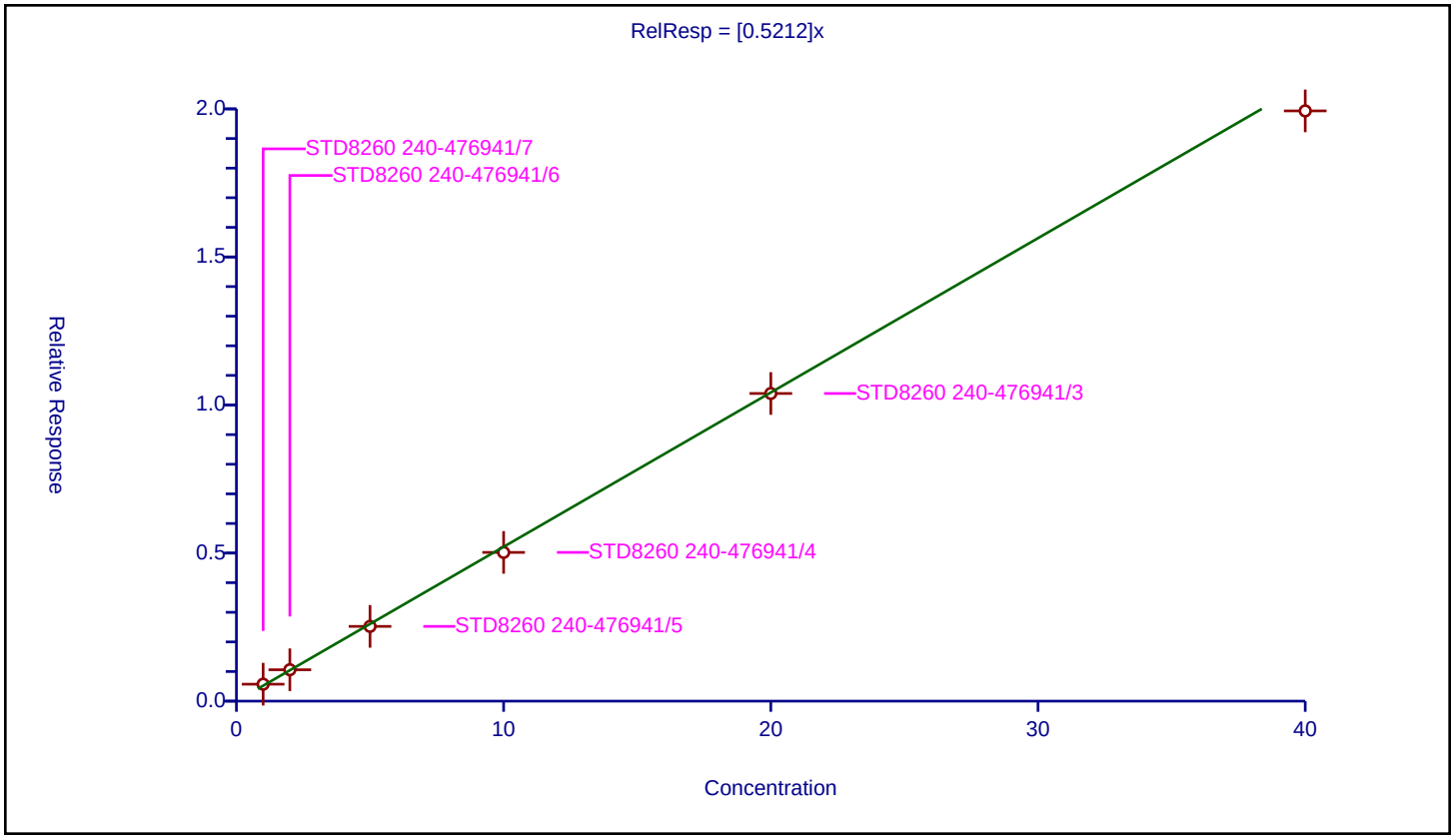
Curve Coefficients

Intercept:	0
Slope:	0.5212

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.572064	10.0	1508502.0	0.572064	Y
2	STD8260 240-476941/6	2.0	1.059962	10.0	1600104.0	0.529981	Y
3	STD8260 240-476941/5	5.0	2.524657	10.0	1580769.0	0.504931	Y
4	STD8260 240-476941/4	10.0	5.02253	10.0	1635381.0	0.502253	Y
5	STD8260 240-476941/3	20.0	10.389296	10.0	1729200.0	0.519465	Y
6	STD8260 240-476941/2	40.0	19.932839	10.0	1738218.0	0.498321	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

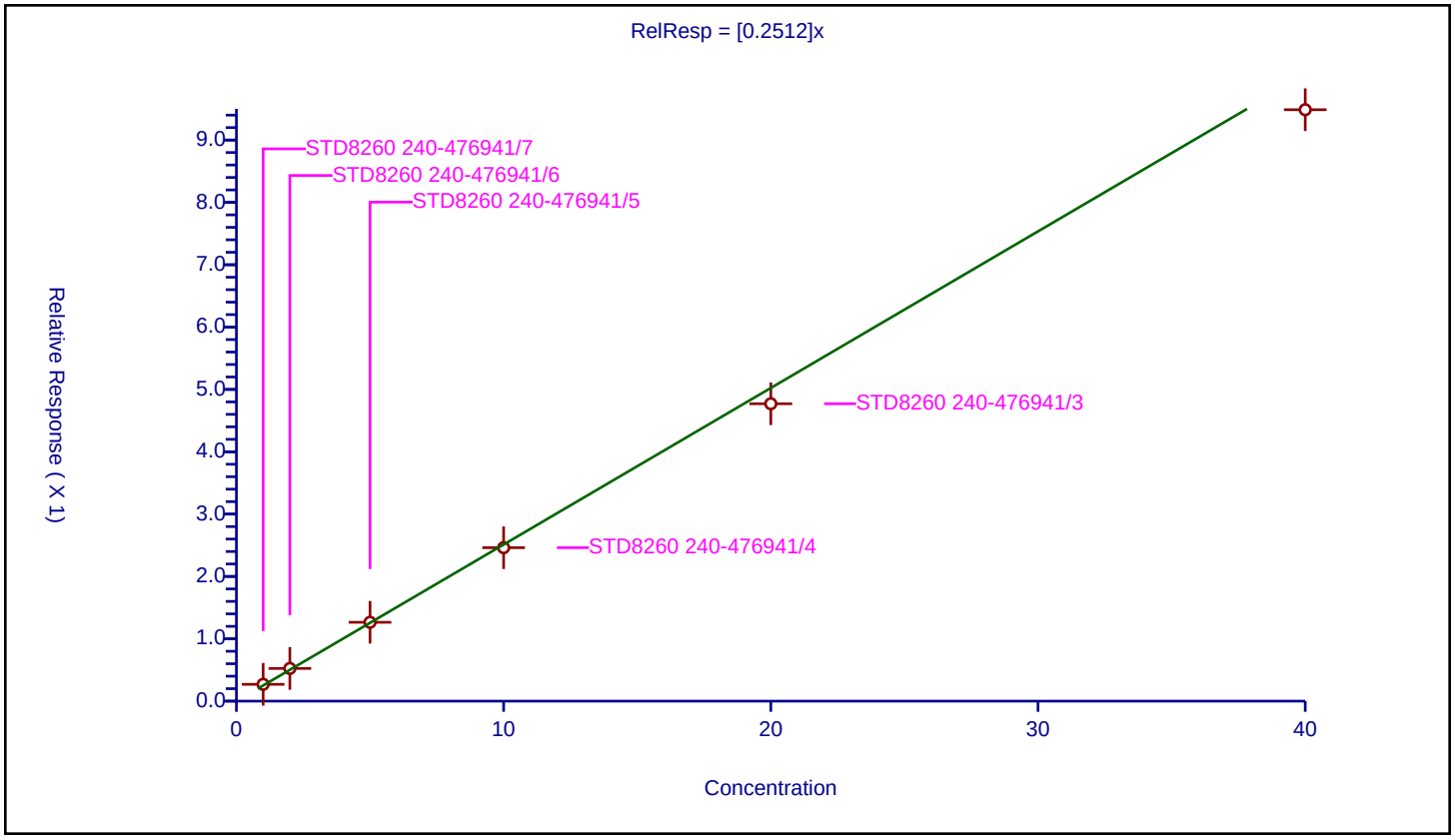
Curve Coefficients

Intercept:	0
Slope:	0.2512

Error Coefficients

Standard Error:	850000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.269923	10.0	1508502.0	0.269923	Y
2	STD8260 240-476941/6	2.0	0.524616	10.0	1600104.0	0.262308	Y
3	STD8260 240-476941/5	5.0	1.264998	10.0	1580769.0	0.253	Y
4	STD8260 240-476941/4	10.0	2.461316	10.0	1635381.0	0.246132	Y
5	STD8260 240-476941/3	20.0	4.77042	10.0	1729200.0	0.238521	Y
6	STD8260 240-476941/2	40.0	9.48656	10.0	1738218.0	0.237164	Y



Calibration / Acrolein

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

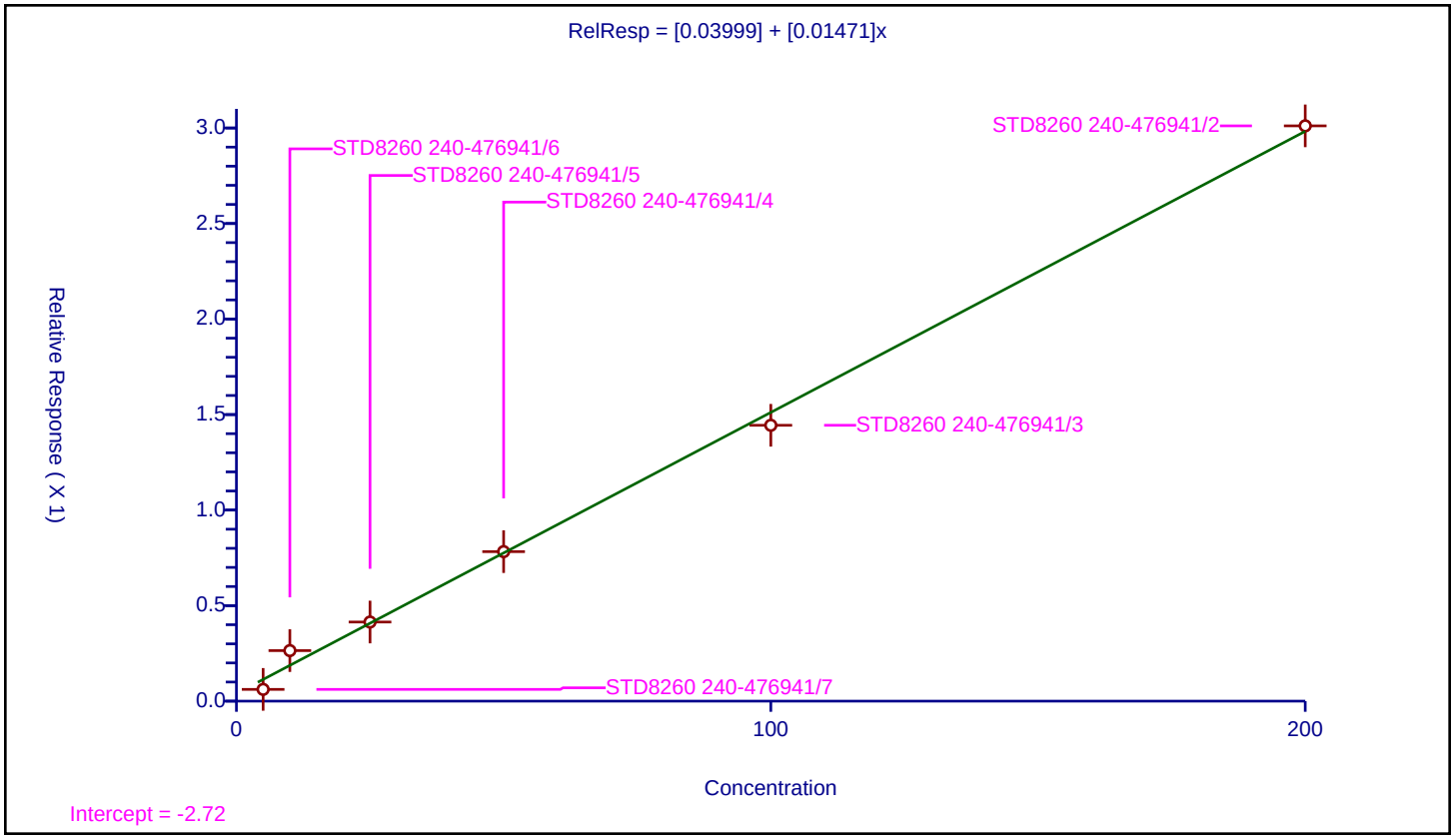
Curve Coefficients

Intercept:	0.03999
Slope:	0.01471

Error Coefficients

Standard Error:	300000
Relative Standard Error:	44.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	5.0	0.061611	10.0	1508502.0	0.012322	Y
2	STD8260 240-476941/6	10.0	0.264589	10.0	1600104.0	0.026459	Y
3	STD8260 240-476941/5	25.0	0.414128	10.0	1580769.0	0.016565	Y
4	STD8260 240-476941/4	50.0	0.782637	10.0	1635381.0	0.015653	Y
5	STD8260 240-476941/3	100.0	1.443905	10.0	1729200.0	0.014439	Y
6	STD8260 240-476941/2	200.0	3.011222	10.0	1738218.0	0.015056	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

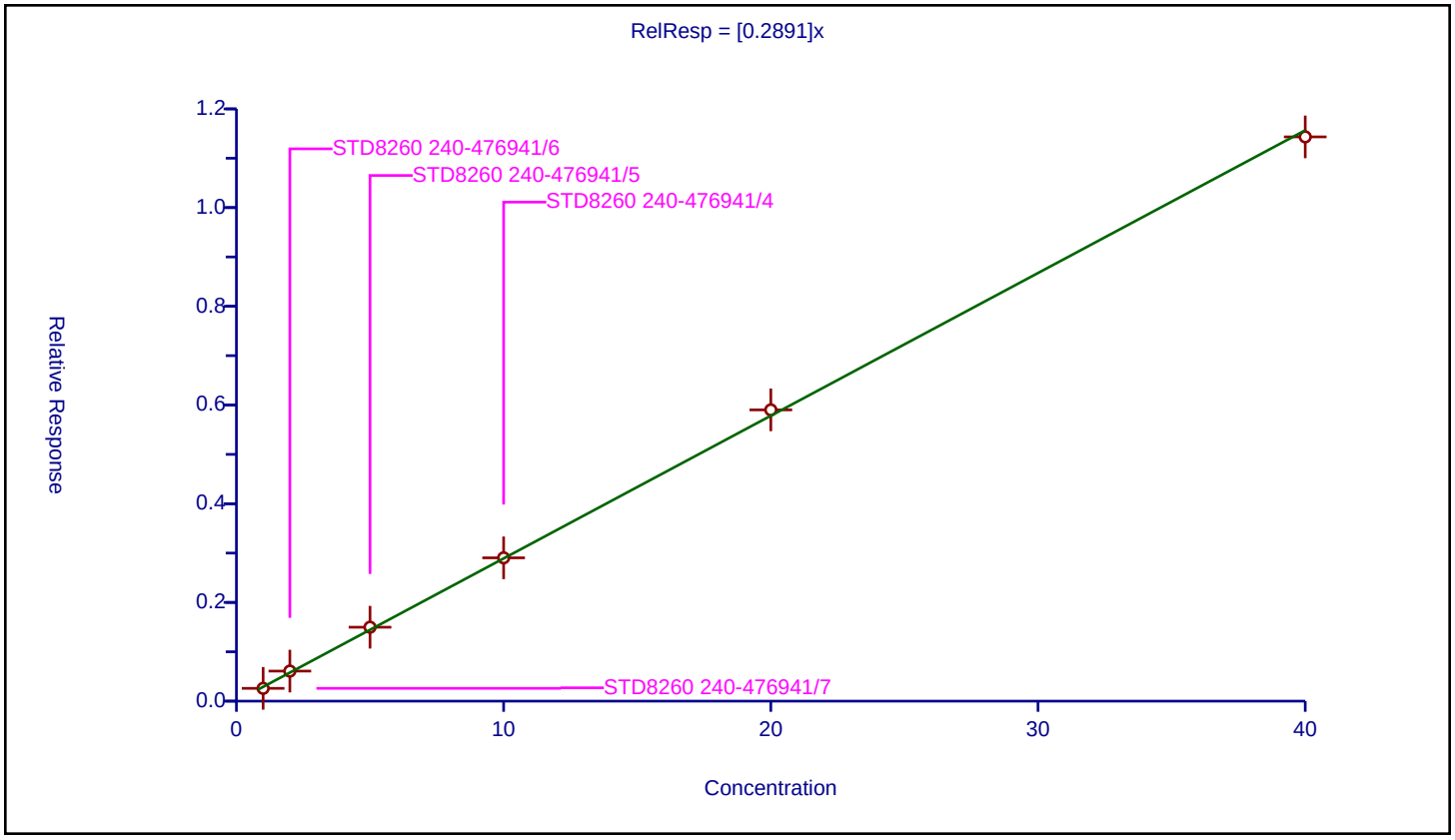
Curve Coefficients

Intercept:	0
Slope:	0.2891

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.259536	10.0	1508502.0	0.259536	Y
2	STD8260 240-476941/6	2.0	0.609085	10.0	1600104.0	0.304543	Y
3	STD8260 240-476941/5	5.0	1.497613	10.0	1580769.0	0.299523	Y
4	STD8260 240-476941/4	10.0	2.903586	10.0	1635381.0	0.290359	Y
5	STD8260 240-476941/3	20.0	5.901556	10.0	1729200.0	0.295078	Y
6	STD8260 240-476941/2	40.0	11.432858	10.0	1738218.0	0.285821	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

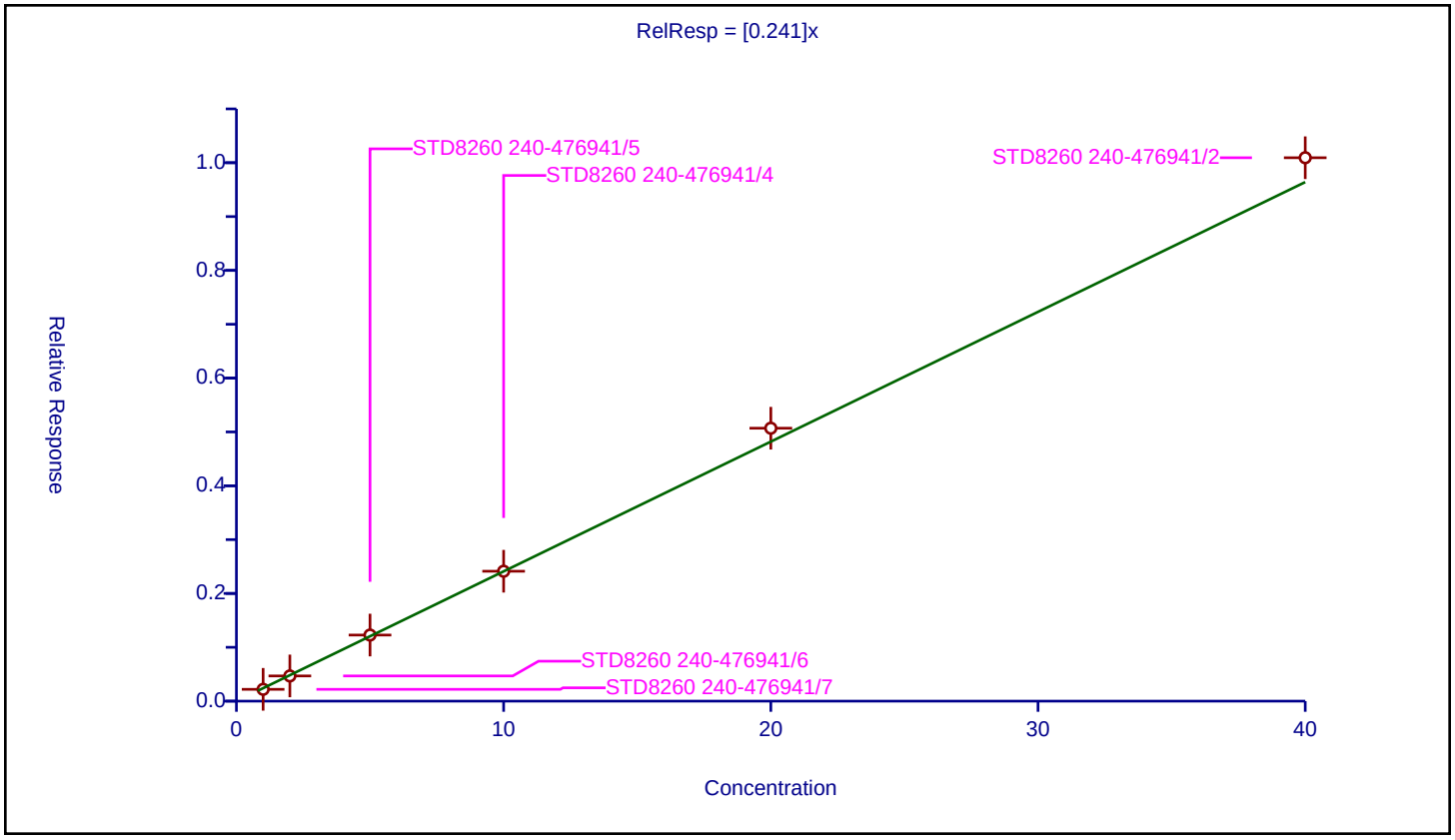
Curve Coefficients

Intercept:	0
Slope:	0.241

Error Coefficients

Standard Error:	900000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.219317	10.0	1508502.0	0.219317	Y
2	STD8260 240-476941/6	2.0	0.46817	10.0	1600104.0	0.234085	Y
3	STD8260 240-476941/5	5.0	1.227738	10.0	1580769.0	0.245548	Y
4	STD8260 240-476941/4	10.0	2.412759	10.0	1635381.0	0.241276	Y
5	STD8260 240-476941/3	20.0	5.069362	10.0	1729200.0	0.253468	Y
6	STD8260 240-476941/2	40.0	10.092934	10.0	1738218.0	0.252323	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

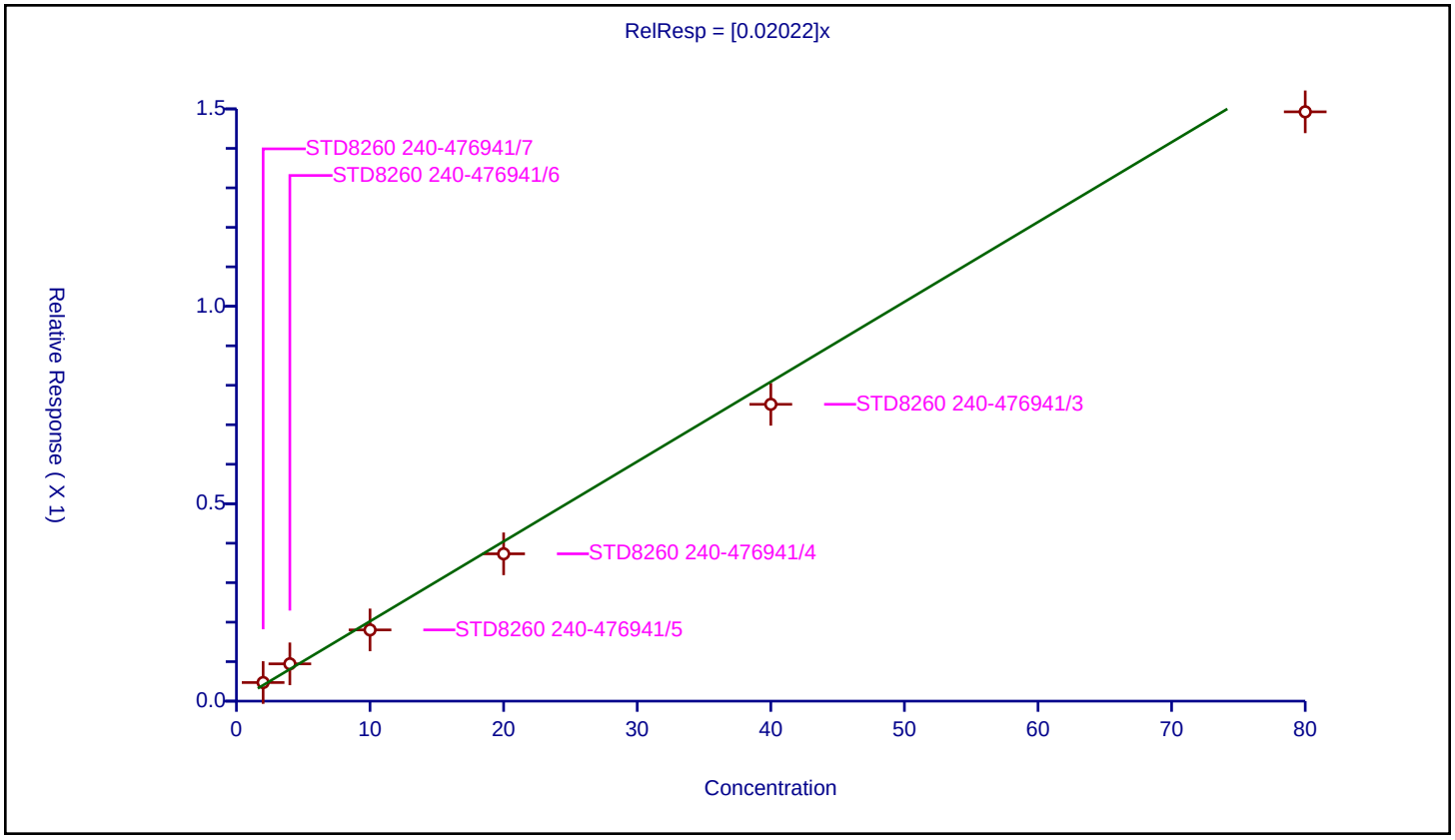
Curve Coefficients

Intercept:	0
Slope:	0.02022

Error Coefficients

Standard Error:	133000
Relative Standard Error:	13.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.047139	10.0	1508502.0	0.02357	Y
2	STD8260 240-476941/6	4.0	0.094475	10.0	1600104.0	0.023619	Y
3	STD8260 240-476941/5	10.0	0.180419	10.0	1580769.0	0.018042	Y
4	STD8260 240-476941/4	20.0	0.373149	10.0	1635381.0	0.018657	Y
5	STD8260 240-476941/3	40.0	0.751764	10.0	1729200.0	0.018794	Y
6	STD8260 240-476941/2	80.0	1.49258	10.0	1738218.0	0.018657	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

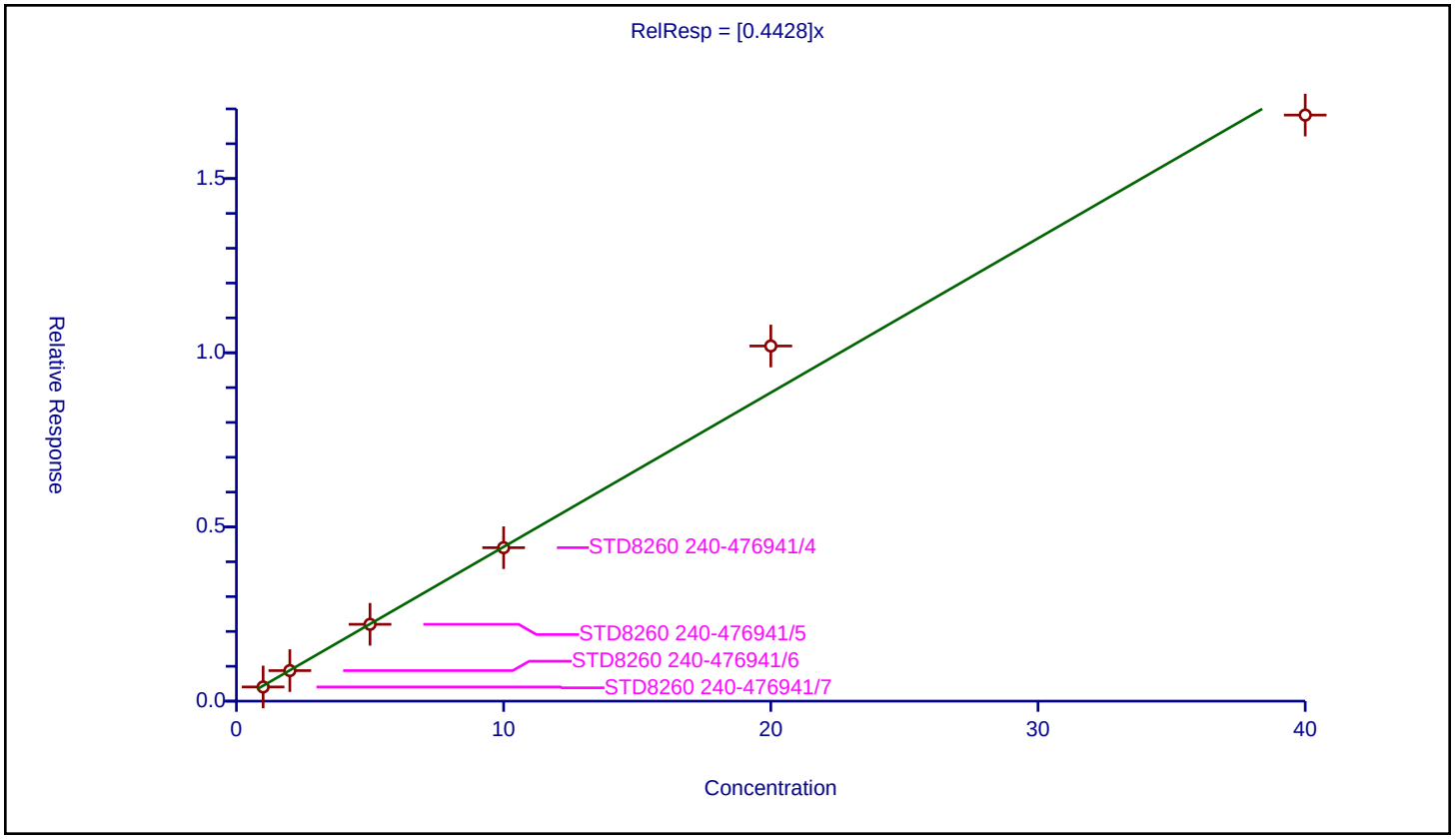
Curve Coefficients

Intercept:	0
Slope:	0.4428

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	8.0
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.406894	10.0	1508502.0	0.406894	Y
2	STD8260 240-476941/6	2.0	0.876549	10.0	1600104.0	0.438275	Y
3	STD8260 240-476941/5	5.0	2.204857	10.0	1580769.0	0.440971	Y
4	STD8260 240-476941/4	10.0	4.404656	10.0	1635381.0	0.440466	Y
5	STD8260 240-476941/3	20.0	10.194338	10.0	1729200.0	0.509717	Y
6	STD8260 240-476941/2	40.0	16.822999	10.0	1738218.0	0.420575	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

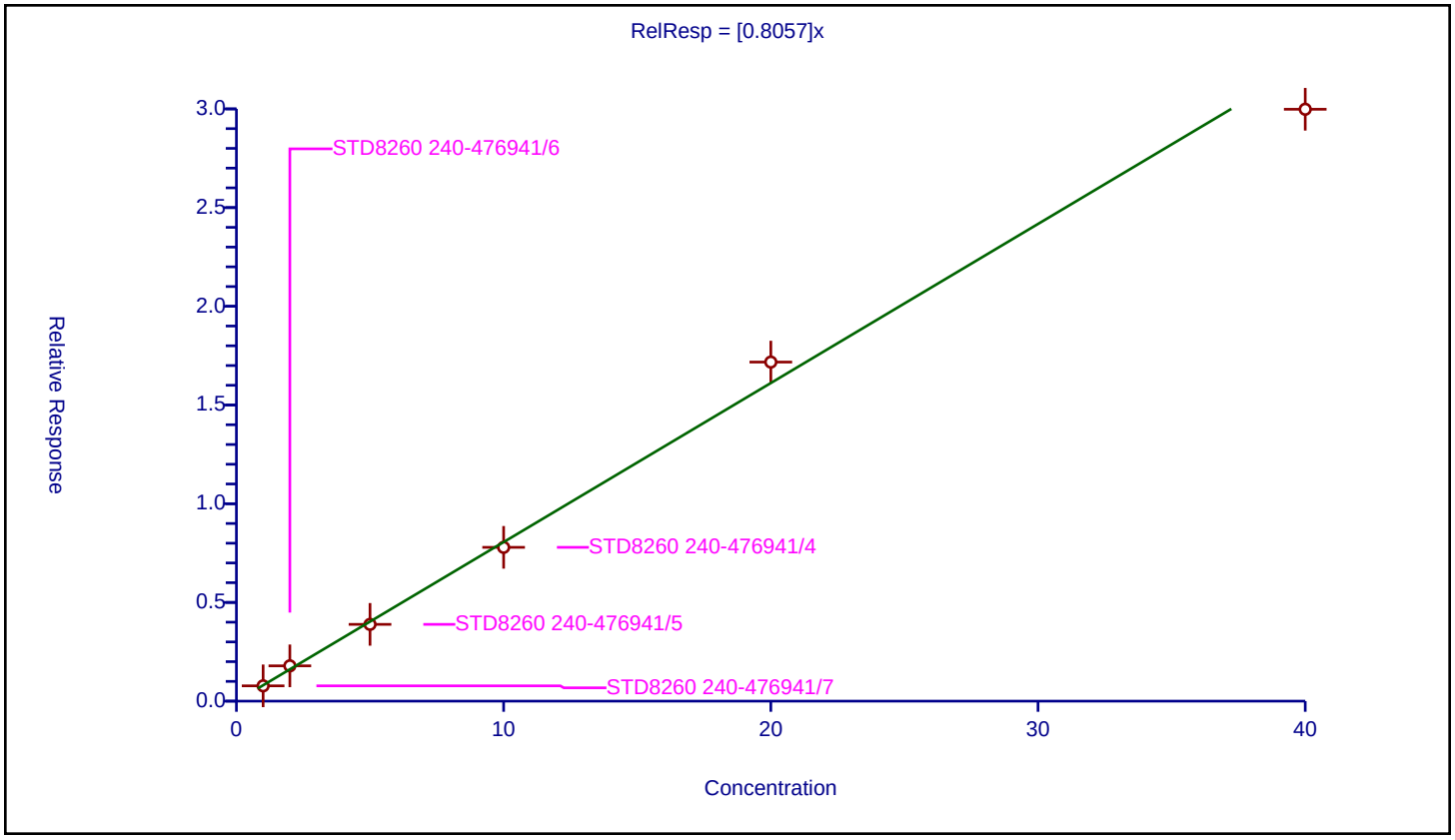
Curve Coefficients

Intercept:	0
Slope:	0.8057

Error Coefficients

Standard Error:	2760000
Relative Standard Error:	7.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.774769	10.0	1508502.0	0.774769	Y
2	STD8260 240-476941/6	2.0	1.788521	10.0	1600104.0	0.894261	Y
3	STD8260 240-476941/5	5.0	3.889423	10.0	1580769.0	0.777885	Y
4	STD8260 240-476941/4	10.0	7.789891	10.0	1635381.0	0.778989	Y
5	STD8260 240-476941/3	20.0	17.175752	10.0	1729200.0	0.858788	Y
6	STD8260 240-476941/2	40.0	29.98044	10.0	1738218.0	0.749511	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

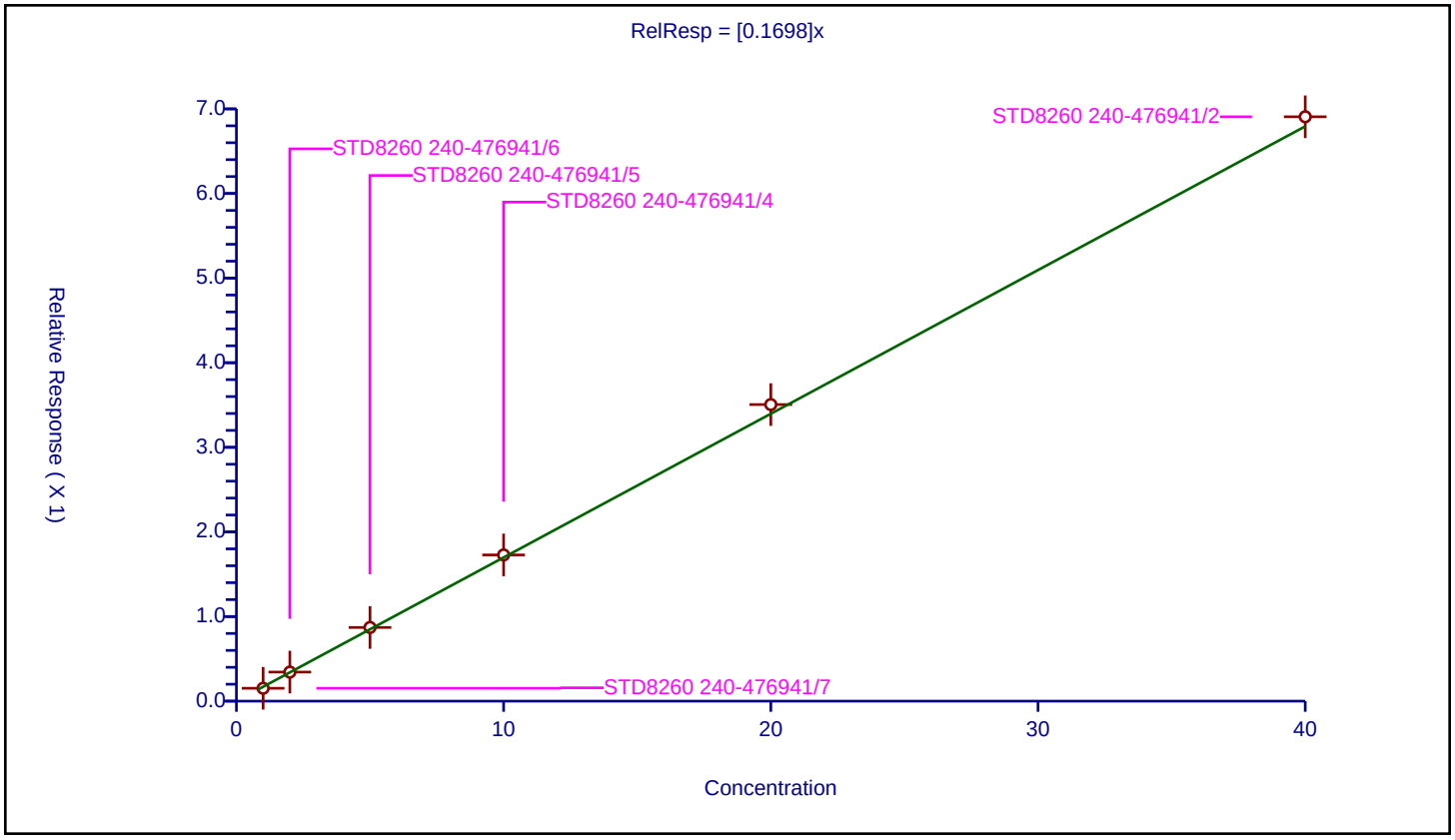
Curve Coefficients

Intercept:	0
Slope:	0.1698

Error Coefficients

Standard Error:	618000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.152337	10.0	1508502.0	0.152337	Y
2	STD8260 240-476941/6	2.0	0.343478	10.0	1600104.0	0.171739	Y
3	STD8260 240-476941/5	5.0	0.870918	10.0	1580769.0	0.174184	Y
4	STD8260 240-476941/4	10.0	1.728019	10.0	1635381.0	0.172802	Y
5	STD8260 240-476941/3	20.0	3.505361	10.0	1729200.0	0.175268	Y
6	STD8260 240-476941/2	40.0	6.906826	10.0	1738218.0	0.172671	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

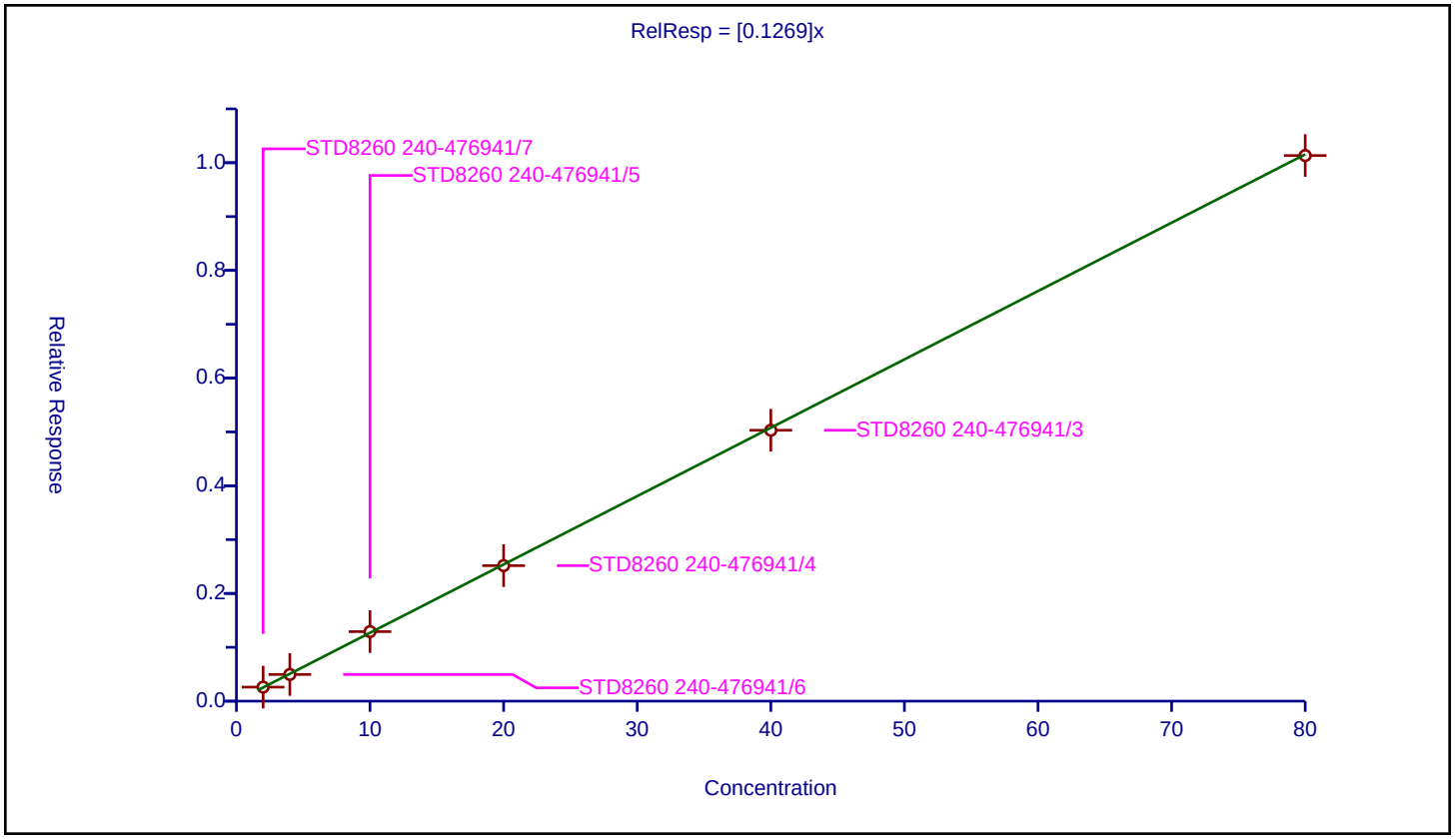
Curve Coefficients

Intercept:	0
Slope:	0.1269

Error Coefficients

Standard Error:	903000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.260629	10.0	1508502.0	0.130315	Y
2	STD8260 240-476941/6	4.0	0.495605	10.0	1600104.0	0.123901	Y
3	STD8260 240-476941/5	10.0	1.291409	10.0	1580769.0	0.129141	Y
4	STD8260 240-476941/4	20.0	2.516753	10.0	1635381.0	0.125838	Y
5	STD8260 240-476941/3	40.0	5.031188	10.0	1729200.0	0.12578	Y
6	STD8260 240-476941/2	80.0	10.133424	10.0	1738218.0	0.126668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

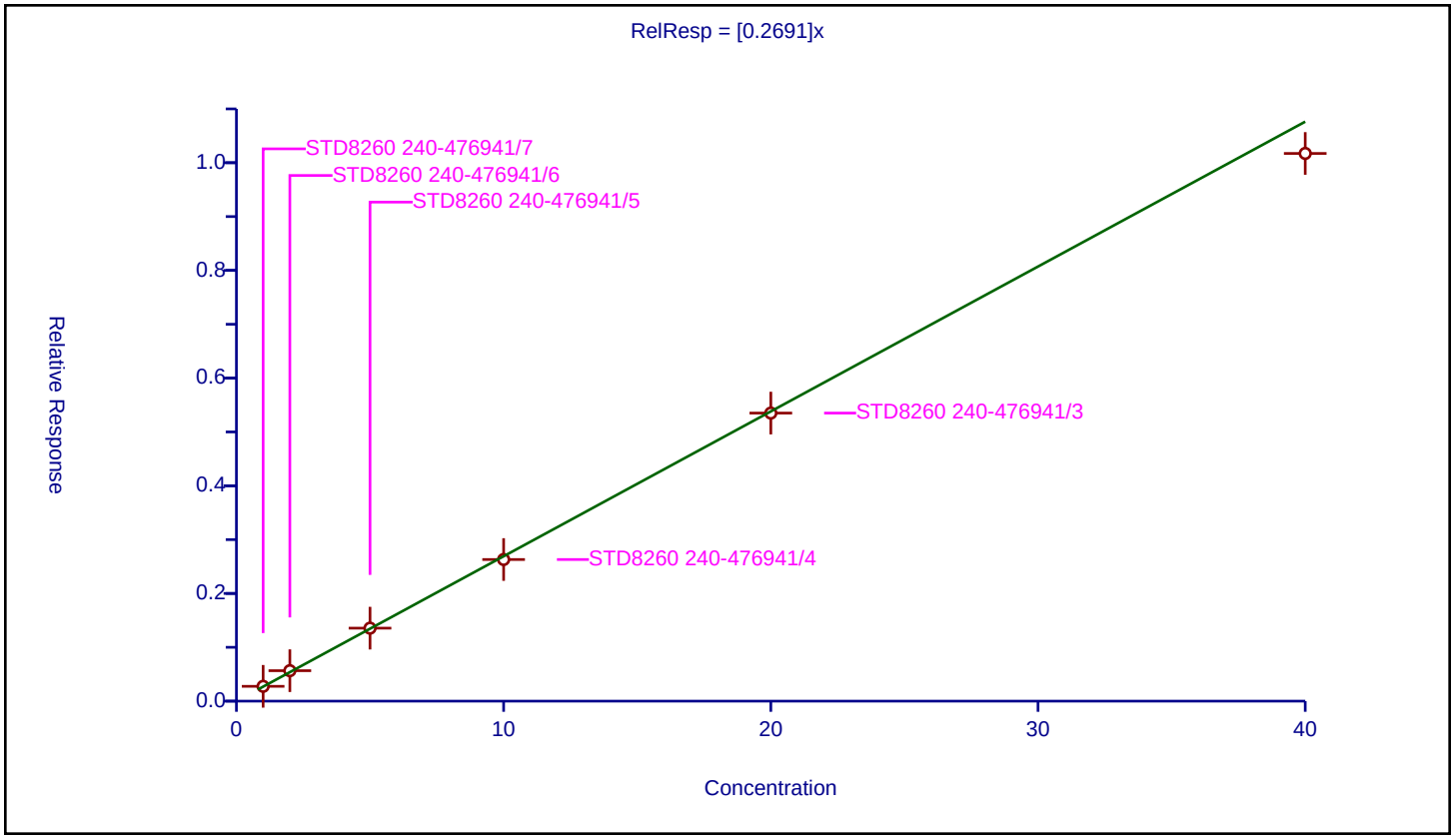
Curve Coefficients

Intercept:	0
Slope:	0.2691

Error Coefficients

Standard Error:	919000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275439	10.0	1508502.0	0.275439	Y
2	STD8260 240-476941/6	2.0	0.565844	10.0	1600104.0	0.282922	Y
3	STD8260 240-476941/5	5.0	1.355688	10.0	1580769.0	0.271138	Y
4	STD8260 240-476941/4	10.0	2.630433	10.0	1635381.0	0.263043	Y
5	STD8260 240-476941/3	20.0	5.350104	10.0	1729200.0	0.267505	Y
6	STD8260 240-476941/2	40.0	10.172429	10.0	1738218.0	0.254311	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

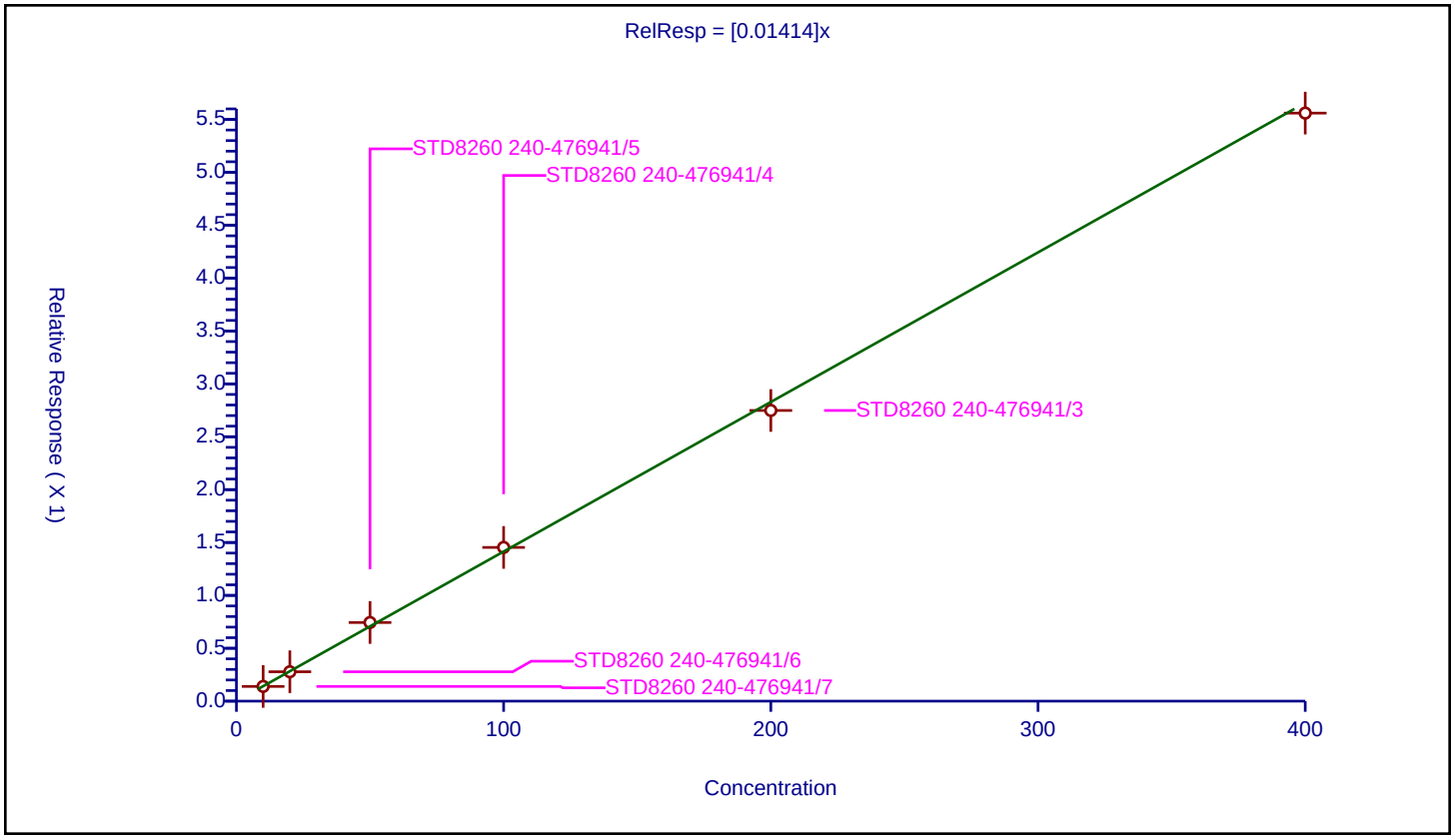
Curve Coefficients

Intercept:	0
Slope:	0.01414

Error Coefficients

Standard Error:	497000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.139204	10.0	1508502.0	0.01392	Y
2	STD8260 240-476941/6	20.0	0.277838	10.0	1600104.0	0.013892	Y
3	STD8260 240-476941/5	50.0	0.743556	10.0	1580769.0	0.014871	Y
4	STD8260 240-476941/4	100.0	1.453362	10.0	1635381.0	0.014534	Y
5	STD8260 240-476941/3	200.0	2.748358	10.0	1729200.0	0.013742	Y
6	STD8260 240-476941/2	400.0	5.56024	10.0	1738218.0	0.013901	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

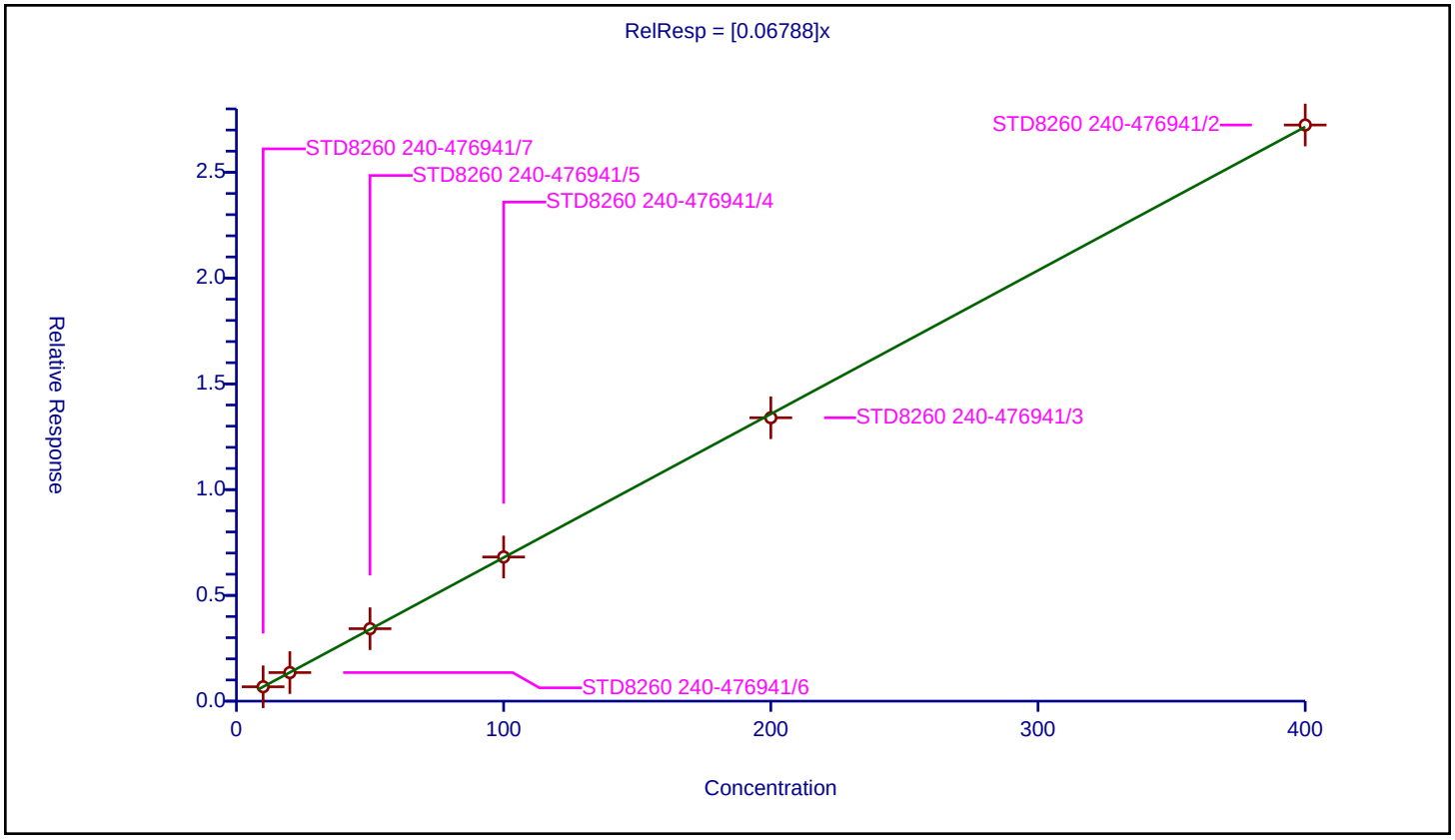
Curve Coefficients

Intercept:	0
Slope:	0.06788

Error Coefficients

Standard Error:	2420000
Relative Standard Error:	0.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.679456	10.0	1508502.0	0.067946	Y
2	STD8260 240-476941/6	20.0	1.350912	10.0	1600104.0	0.067546	Y
3	STD8260 240-476941/5	50.0	3.425997	10.0	1580769.0	0.06852	Y
4	STD8260 240-476941/4	100.0	6.81577	10.0	1635381.0	0.068158	Y
5	STD8260 240-476941/3	200.0	13.397808	10.0	1729200.0	0.066989	Y
6	STD8260 240-476941/2	400.0	27.237631	10.0	1738218.0	0.068094	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

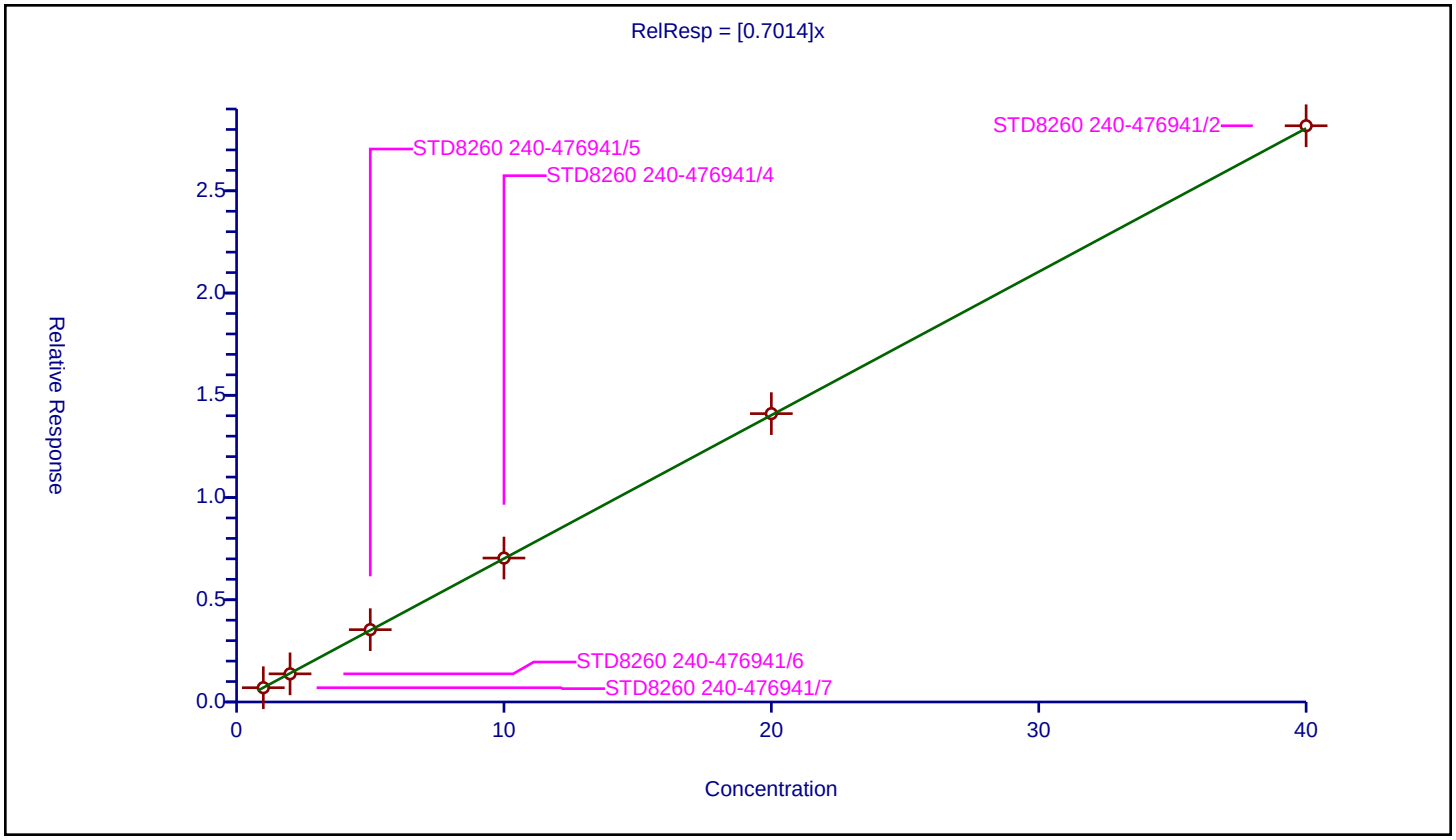
Curve Coefficients

Intercept:	0
Slope:	0.7014

Error Coefficients

Standard Error:	2520000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.698985	10.0	1508502.0	0.698985	Y
2	STD8260 240-476941/6	2.0	1.376267	10.0	1600104.0	0.688133	Y
3	STD8260 240-476941/5	5.0	3.537329	10.0	1580769.0	0.707466	Y
4	STD8260 240-476941/4	10.0	7.039247	10.0	1635381.0	0.703925	Y
5	STD8260 240-476941/3	20.0	14.102377	10.0	1729200.0	0.705119	Y
6	STD8260 240-476941/2	40.0	28.180746	10.0	1738218.0	0.704519	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

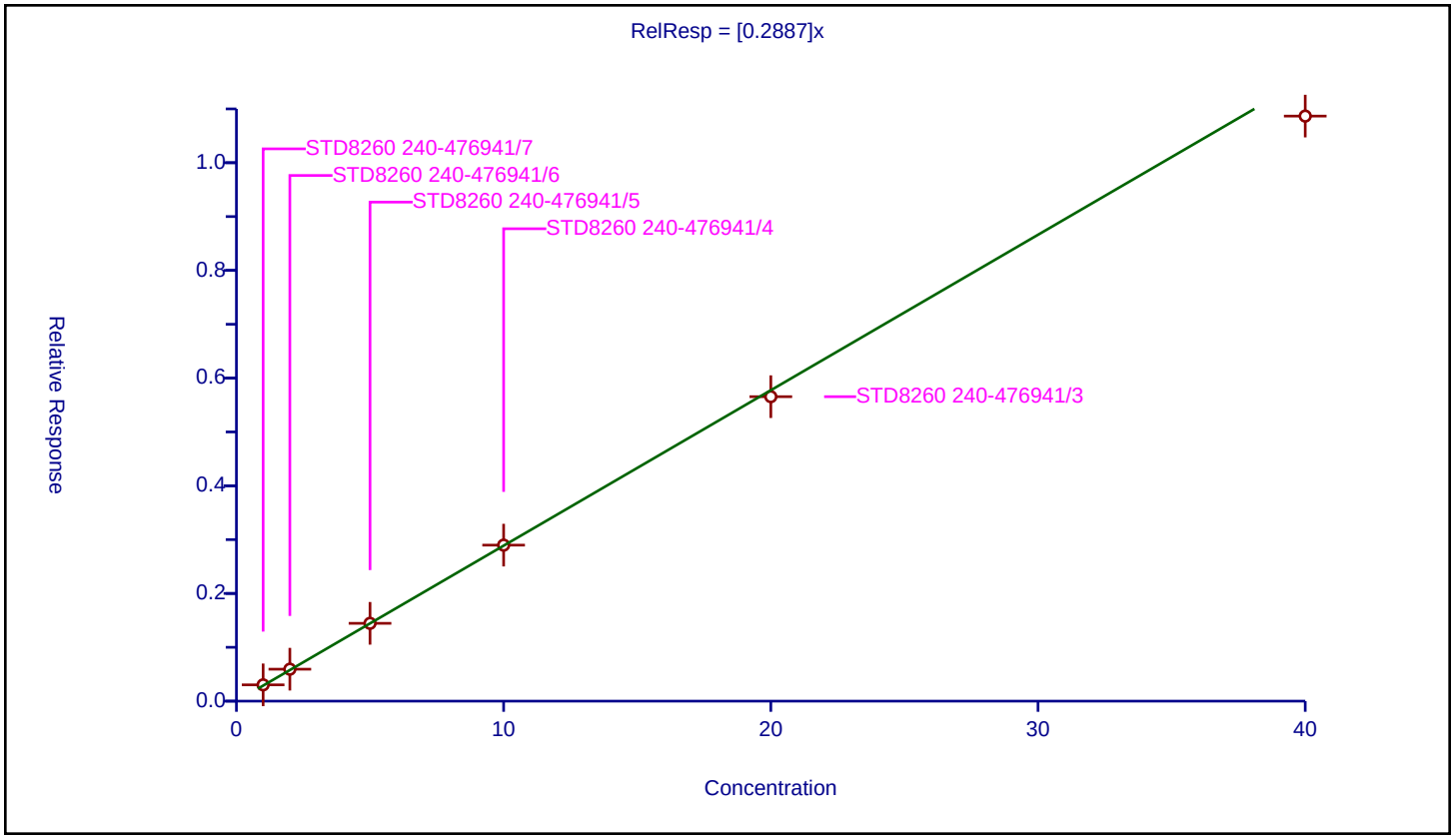
Curve Coefficients

Intercept:	0
Slope:	0.2887

Error Coefficients

Standard Error:	981000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.302618	10.0	1508502.0	0.302618	Y
2	STD8260 240-476941/6	2.0	0.593174	10.0	1600104.0	0.296587	Y
3	STD8260 240-476941/5	5.0	1.444987	10.0	1580769.0	0.288997	Y
4	STD8260 240-476941/4	10.0	2.897514	10.0	1635381.0	0.289751	Y
5	STD8260 240-476941/3	20.0	5.654783	10.0	1729200.0	0.282739	Y
6	STD8260 240-476941/2	40.0	10.866479	10.0	1738218.0	0.271662	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

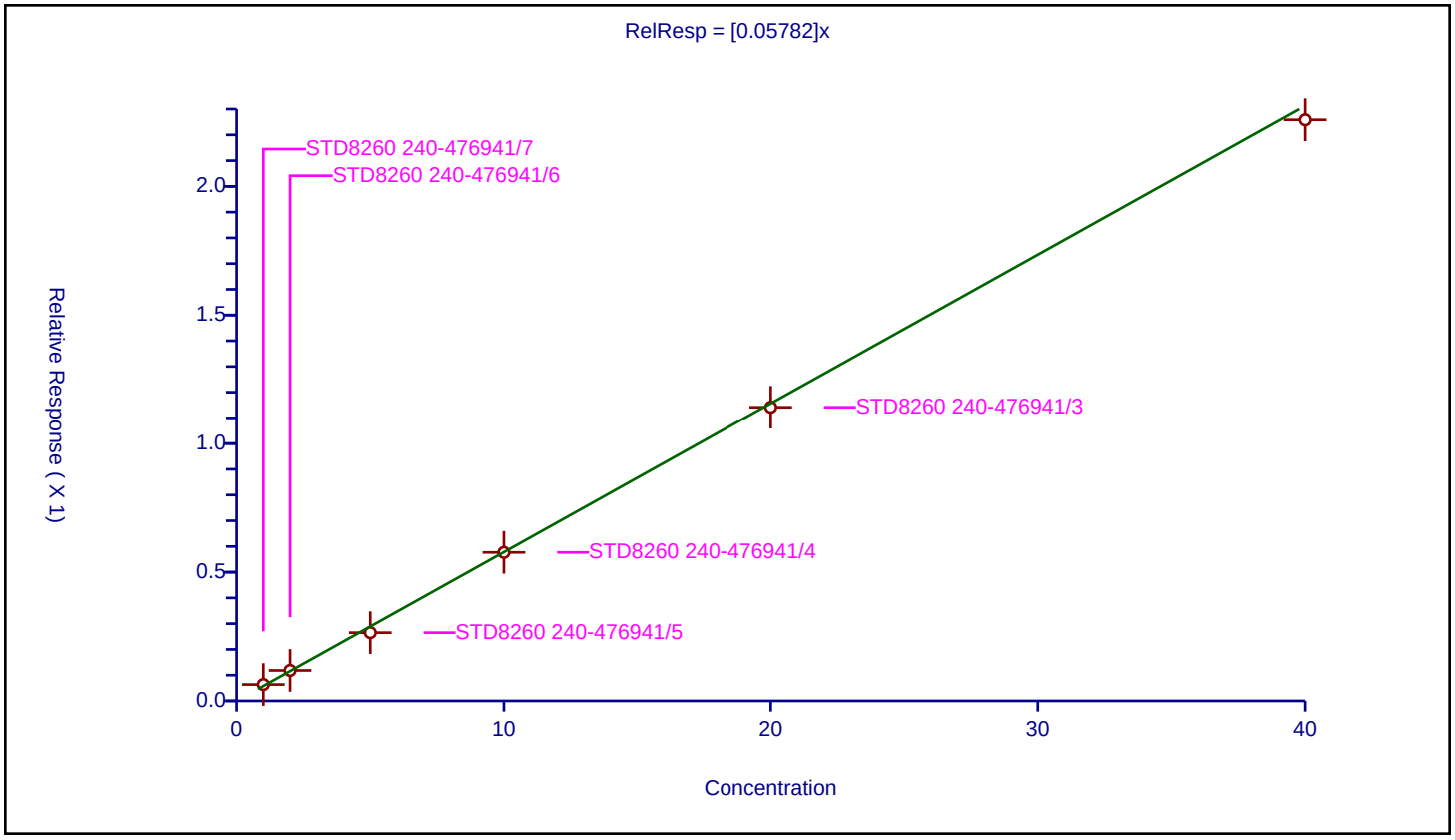
Curve Coefficients

Intercept:	0
Slope:	0.05782

Error Coefficients

Standard Error:	202000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.063513	10.0	1508502.0	0.063513	Y
2	STD8260 240-476941/6	2.0	0.118292	10.0	1600104.0	0.059146	Y
3	STD8260 240-476941/5	5.0	0.265029	10.0	1580769.0	0.053006	Y
4	STD8260 240-476941/4	10.0	0.576991	10.0	1635381.0	0.057699	Y
5	STD8260 240-476941/3	20.0	1.141406	10.0	1729200.0	0.05707	Y
6	STD8260 240-476941/2	40.0	2.258503	10.0	1738218.0	0.056463	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

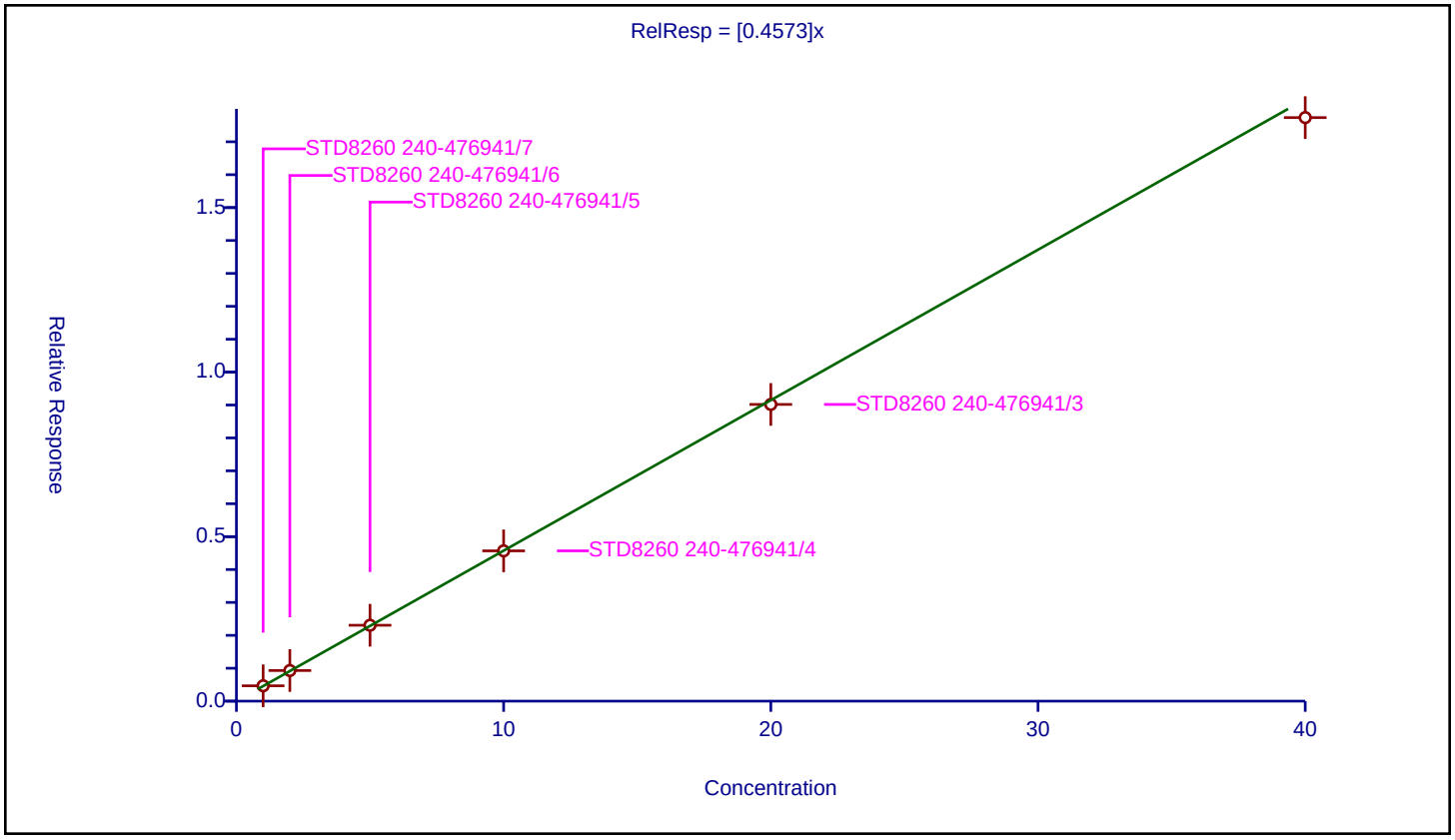
Curve Coefficients

Intercept:	0
Slope:	0.4573

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.466449	10.0	1508502.0	0.466449	Y
2	STD8260 240-476941/6	2.0	0.930208	10.0	1600104.0	0.465104	Y
3	STD8260 240-476941/5	5.0	2.306403	10.0	1580769.0	0.461281	Y
4	STD8260 240-476941/4	10.0	4.56778	10.0	1635381.0	0.456778	Y
5	STD8260 240-476941/3	20.0	9.018159	10.0	1729200.0	0.450908	Y
6	STD8260 240-476941/2	40.0	17.734904	10.0	1738218.0	0.443373	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

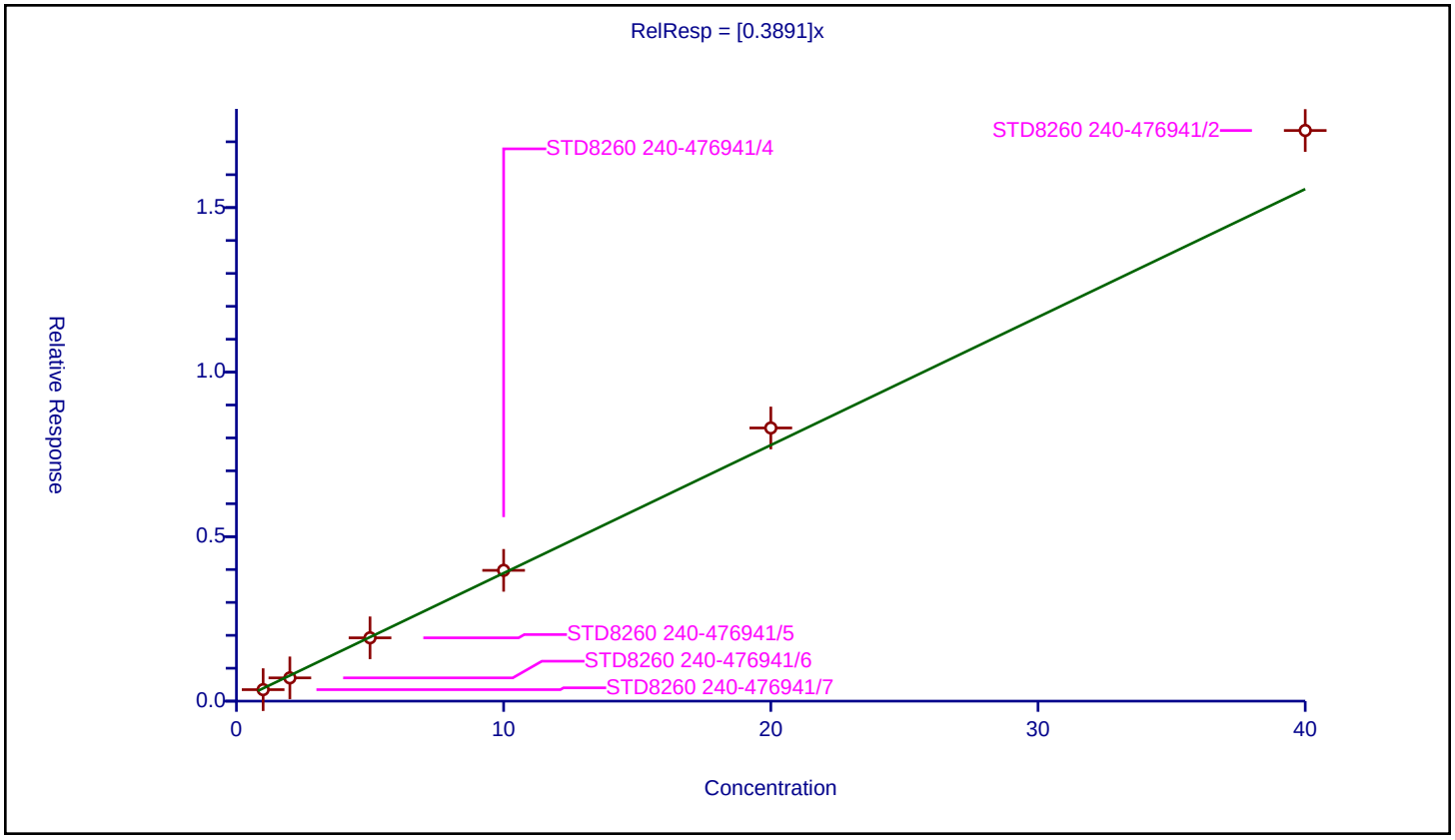
Curve Coefficients

Intercept:	0
Slope:	0.3891

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.349612	10.0	1508502.0	0.349612	Y
2	STD8260 240-476941/6	2.0	0.707448	10.0	1600104.0	0.353724	Y
3	STD8260 240-476941/5	5.0	1.924608	10.0	1580769.0	0.384922	Y
4	STD8260 240-476941/4	10.0	3.974994	10.0	1635381.0	0.397499	Y
5	STD8260 240-476941/3	20.0	8.302787	10.0	1729200.0	0.415139	Y
6	STD8260 240-476941/2	40.0	17.343619	10.0	1738218.0	0.43359	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

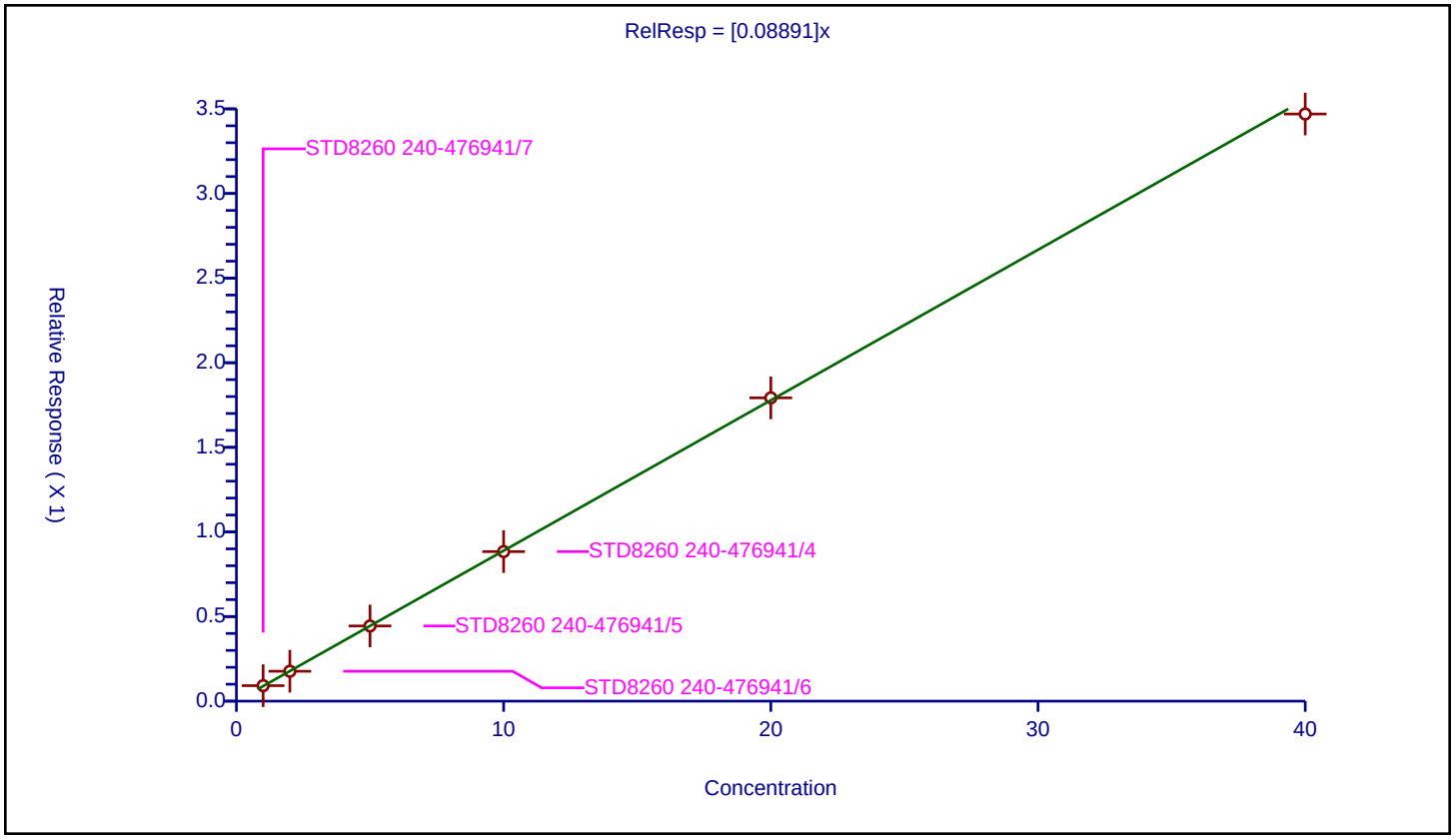
Curve Coefficients

Intercept:	0
Slope:	0.08891

Error Coefficients

Standard Error:	312000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.091528	10.0	1508502.0	0.091528	Y
2	STD8260 240-476941/6	2.0	0.176714	10.0	1600104.0	0.088357	Y
3	STD8260 240-476941/5	5.0	0.444208	10.0	1580769.0	0.088842	Y
4	STD8260 240-476941/4	10.0	0.883745	10.0	1635381.0	0.088375	Y
5	STD8260 240-476941/3	20.0	1.792407	10.0	1729200.0	0.08962	Y
6	STD8260 240-476941/2	40.0	3.46976	10.0	1738218.0	0.086744	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

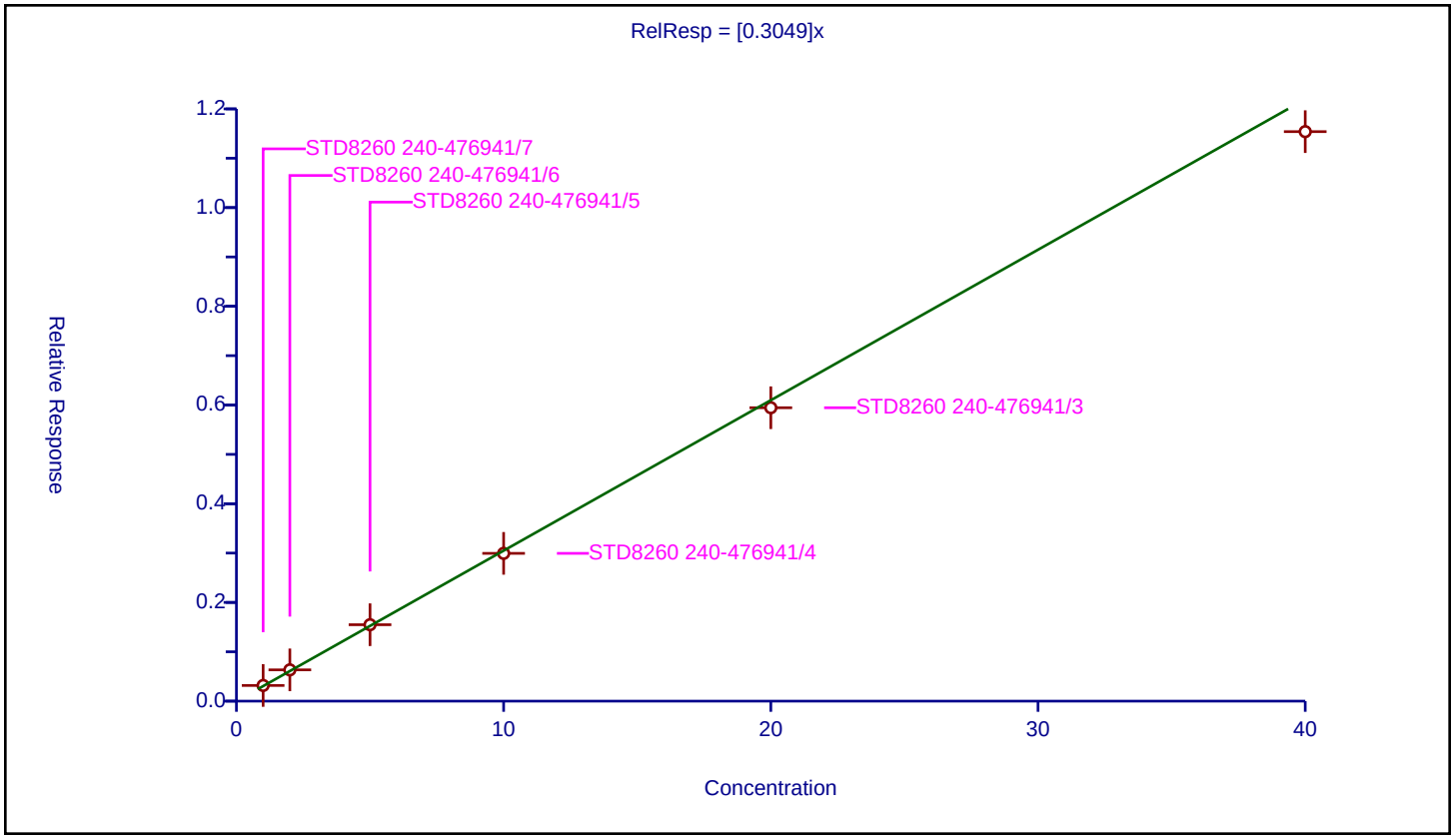
Curve Coefficients

Intercept:	0
Slope:	0.3049

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317547	10.0	1508502.0	0.317547	Y
2	STD8260 240-476941/6	2.0	0.633728	10.0	1600104.0	0.316864	Y
3	STD8260 240-476941/5	5.0	1.548303	10.0	1580769.0	0.309661	Y
4	STD8260 240-476941/4	10.0	2.994232	10.0	1635381.0	0.299423	Y
5	STD8260 240-476941/3	20.0	5.944876	10.0	1729200.0	0.297244	Y
6	STD8260 240-476941/2	40.0	11.539324	10.0	1738218.0	0.288483	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

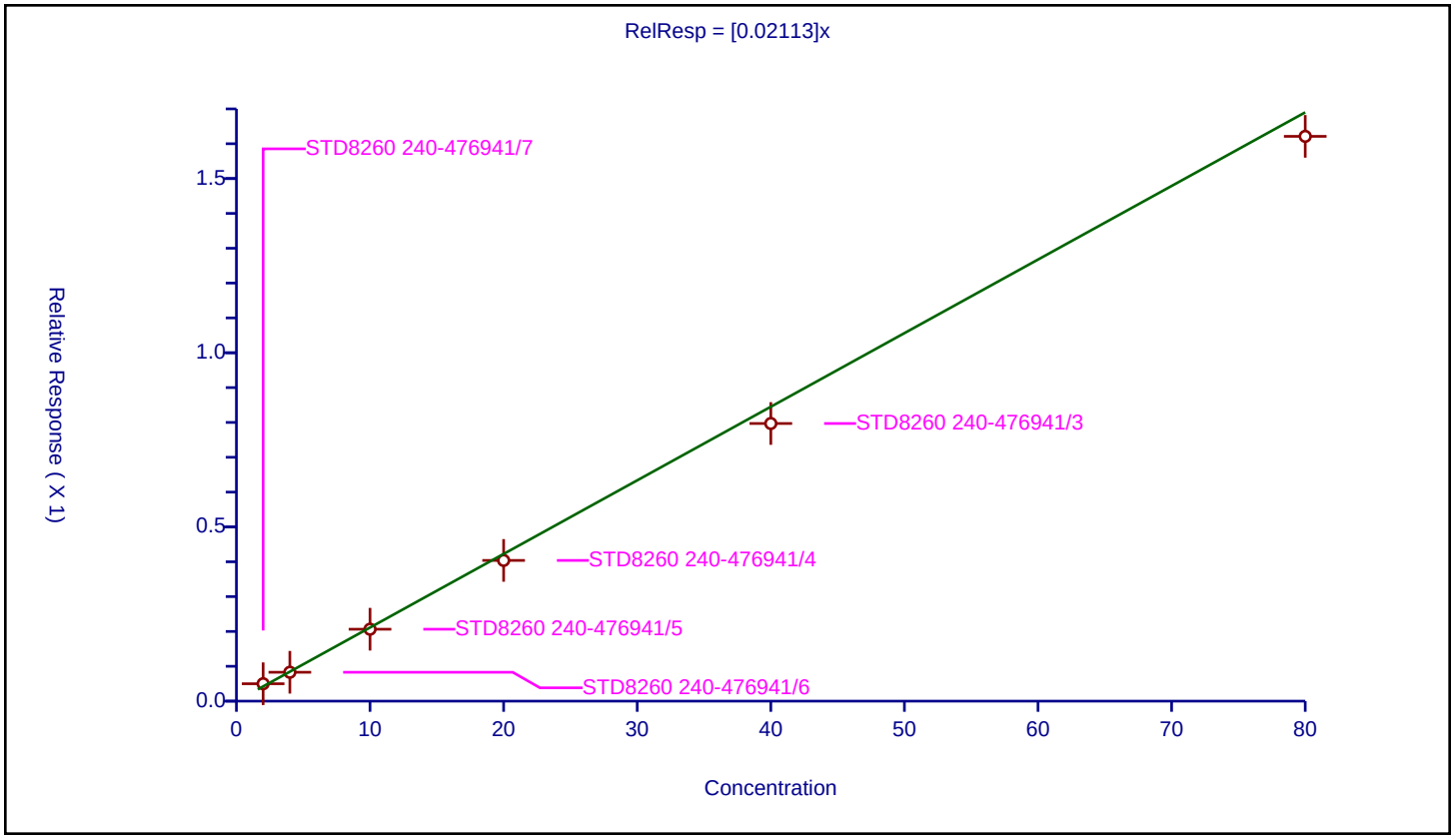
Curve Coefficients

Intercept:	0
Slope:	0.02113

Error Coefficients

Standard Error:	144000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.049983	10.0	1508502.0	0.024992	Y
2	STD8260 240-476941/6	4.0	0.08292	10.0	1600104.0	0.02073	Y
3	STD8260 240-476941/5	10.0	0.206482	10.0	1580769.0	0.020648	Y
4	STD8260 240-476941/4	20.0	0.403936	10.0	1635381.0	0.020197	Y
5	STD8260 240-476941/3	40.0	0.796947	10.0	1729200.0	0.019924	Y
6	STD8260 240-476941/2	80.0	1.621149	10.0	1738218.0	0.020264	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

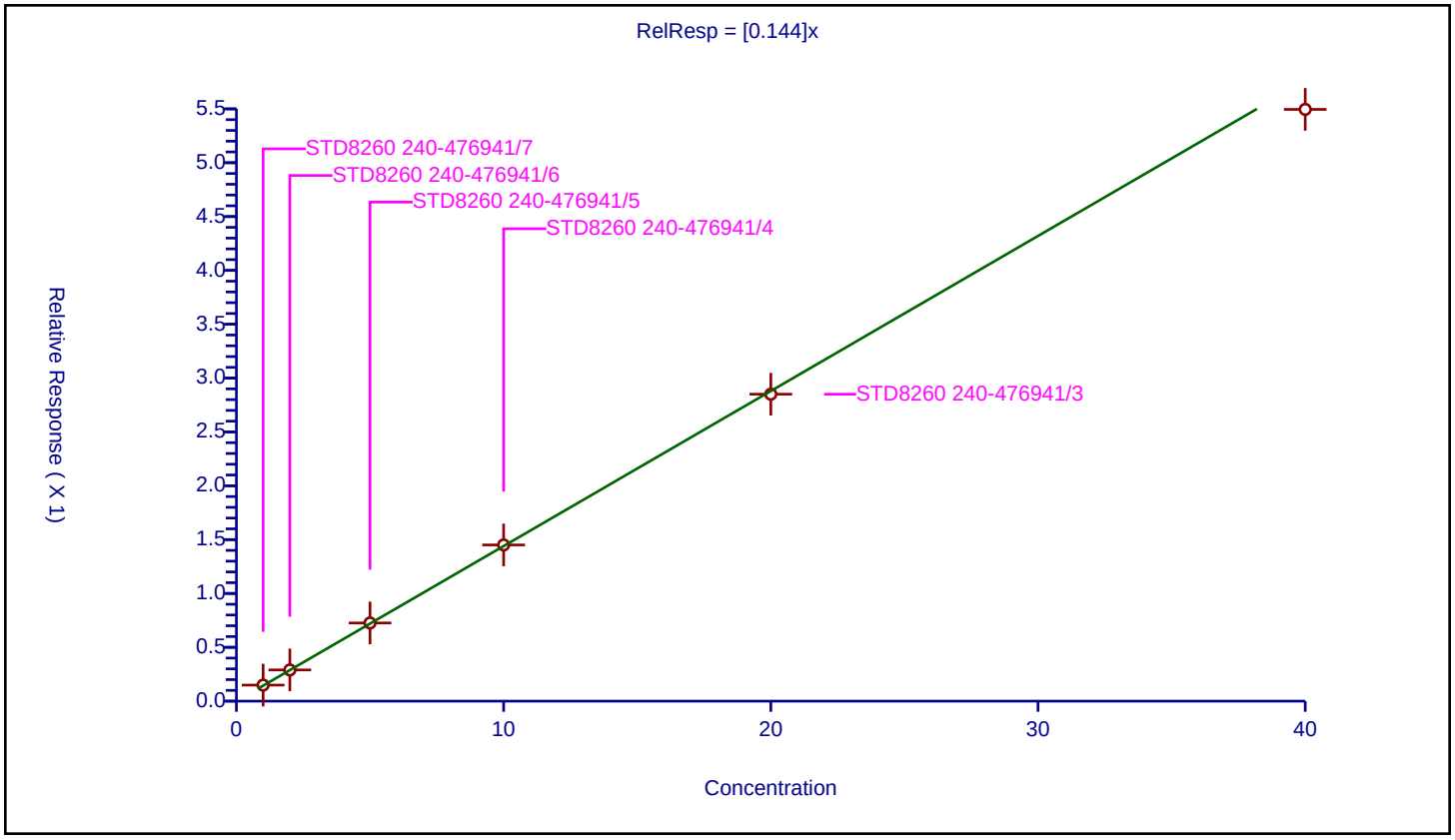
Curve Coefficients

Intercept:	0
Slope:	0.144

Error Coefficients

Standard Error:	495000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.148995	10.0	1508502.0	0.148995	Y
2	STD8260 240-476941/6	2.0	0.289706	10.0	1600104.0	0.144853	Y
3	STD8260 240-476941/5	5.0	0.725881	10.0	1580769.0	0.145176	Y
4	STD8260 240-476941/4	10.0	1.450518	10.0	1635381.0	0.145052	Y
5	STD8260 240-476941/3	20.0	2.850578	10.0	1729200.0	0.142529	Y
6	STD8260 240-476941/2	40.0	5.495398	10.0	1738218.0	0.137385	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

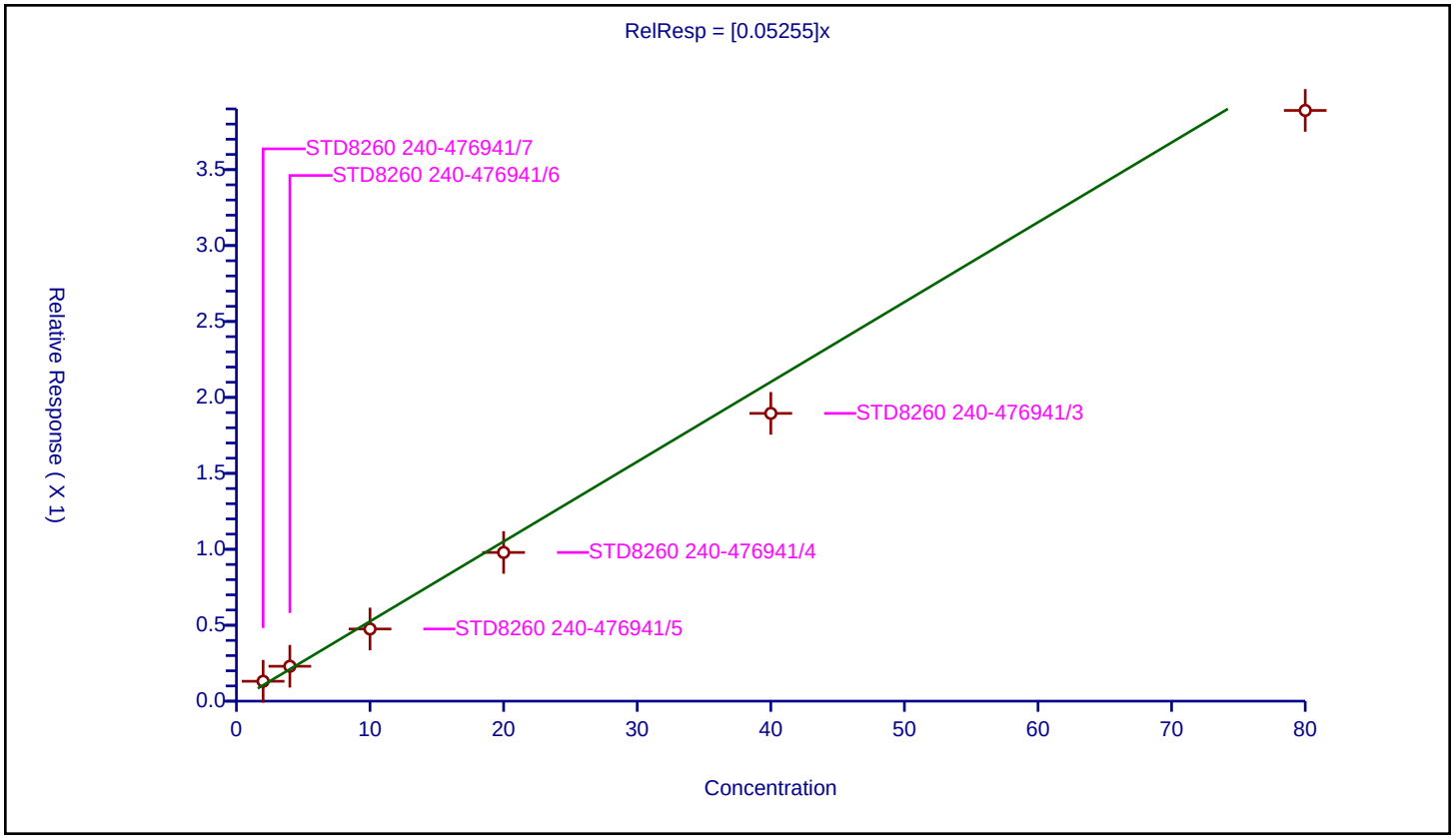
Curve Coefficients

Intercept:	0
Slope:	0.05255

Error Coefficients

Standard Error:	346000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.130845	10.0	1508502.0	0.065423	Y
2	STD8260 240-476941/6	4.0	0.229635	10.0	1600104.0	0.057409	Y
3	STD8260 240-476941/5	10.0	0.475256	10.0	1580769.0	0.047526	Y
4	STD8260 240-476941/4	20.0	0.979172	10.0	1635381.0	0.048959	Y
5	STD8260 240-476941/3	40.0	1.895009	10.0	1729200.0	0.047375	Y
6	STD8260 240-476941/2	80.0	3.88984	10.0	1738218.0	0.048623	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

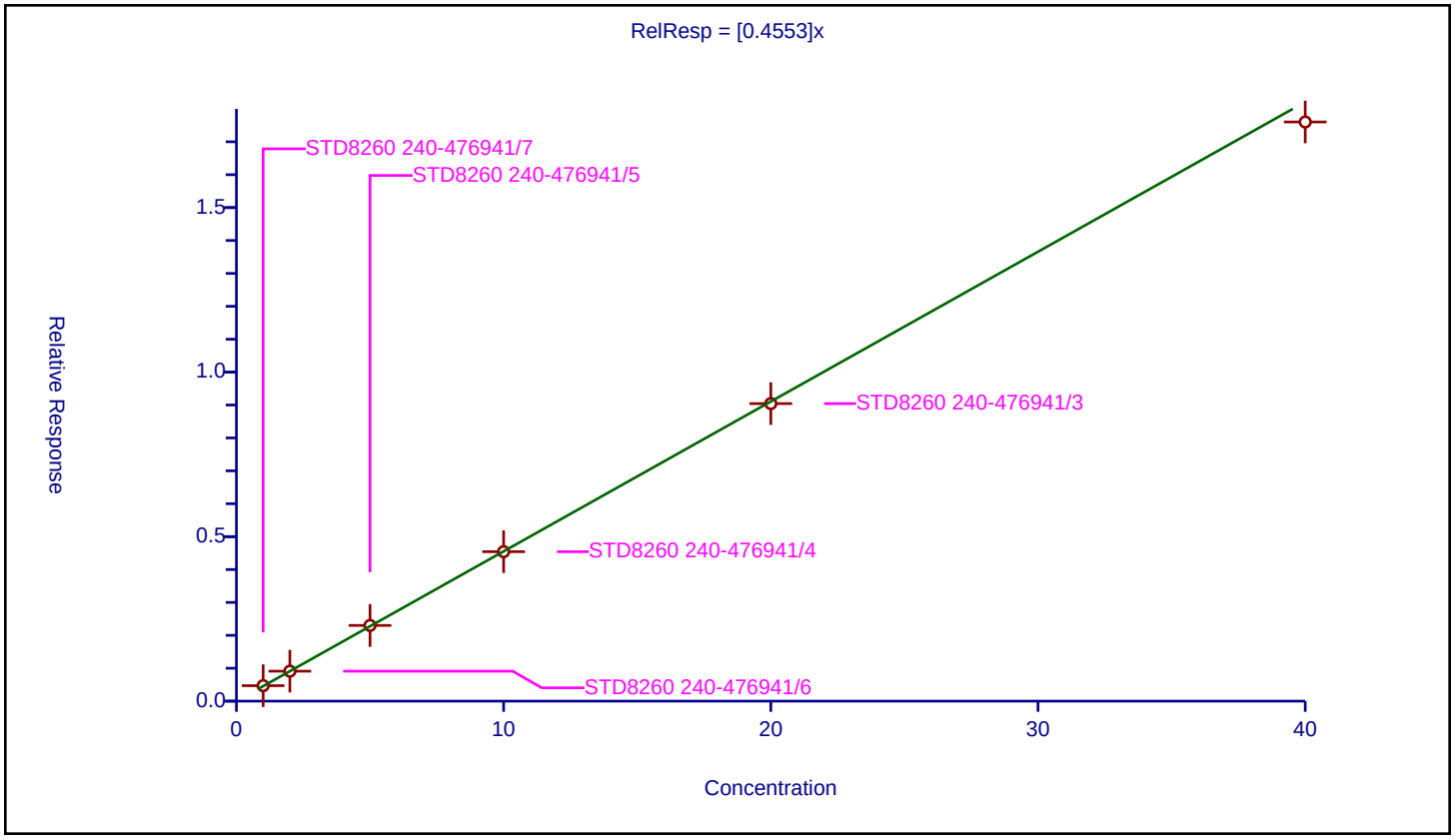
Curve Coefficients

Intercept:	0
Slope:	0.4553

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.470235	10.0	1508502.0	0.470235	Y
2	STD8260 240-476941/6	2.0	0.909872	10.0	1600104.0	0.454936	Y
3	STD8260 240-476941/5	5.0	2.300652	10.0	1580769.0	0.46013	Y
4	STD8260 240-476941/4	10.0	4.542415	10.0	1635381.0	0.454242	Y
5	STD8260 240-476941/3	20.0	9.043269	10.0	1729200.0	0.452163	Y
6	STD8260 240-476941/2	40.0	17.60289	10.0	1738218.0	0.440072	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

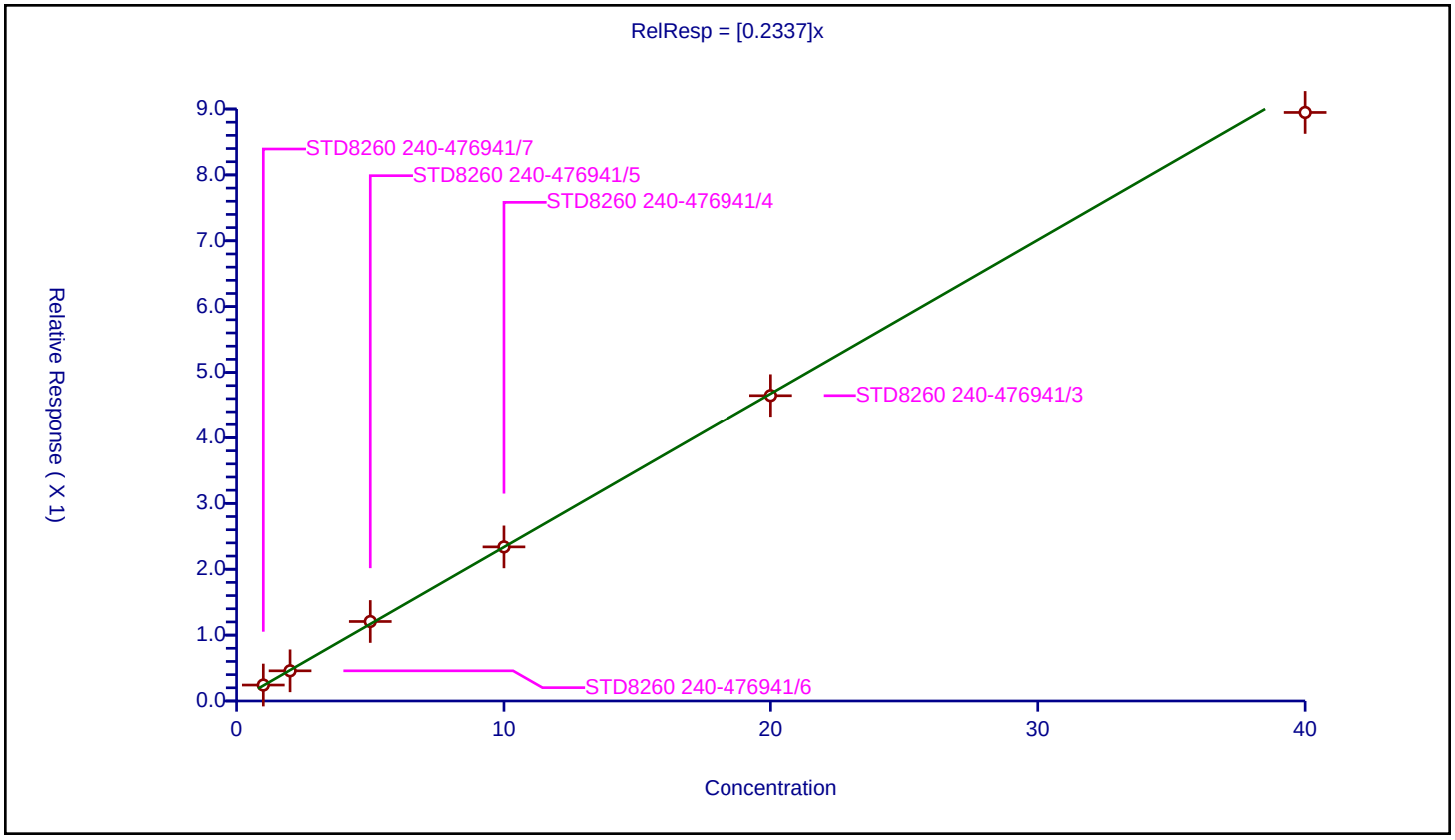
Curve Coefficients

Intercept:	0
Slope:	0.2337

Error Coefficients

Standard Error:	807000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.242134	10.0	1508502.0	0.242134	Y
2	STD8260 240-476941/6	2.0	0.45792	10.0	1600104.0	0.22896	Y
3	STD8260 240-476941/5	5.0	1.206729	10.0	1580769.0	0.241346	Y
4	STD8260 240-476941/4	10.0	2.339247	10.0	1635381.0	0.233925	Y
5	STD8260 240-476941/3	20.0	4.647265	10.0	1729200.0	0.232363	Y
6	STD8260 240-476941/2	40.0	8.947681	10.0	1738218.0	0.223692	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

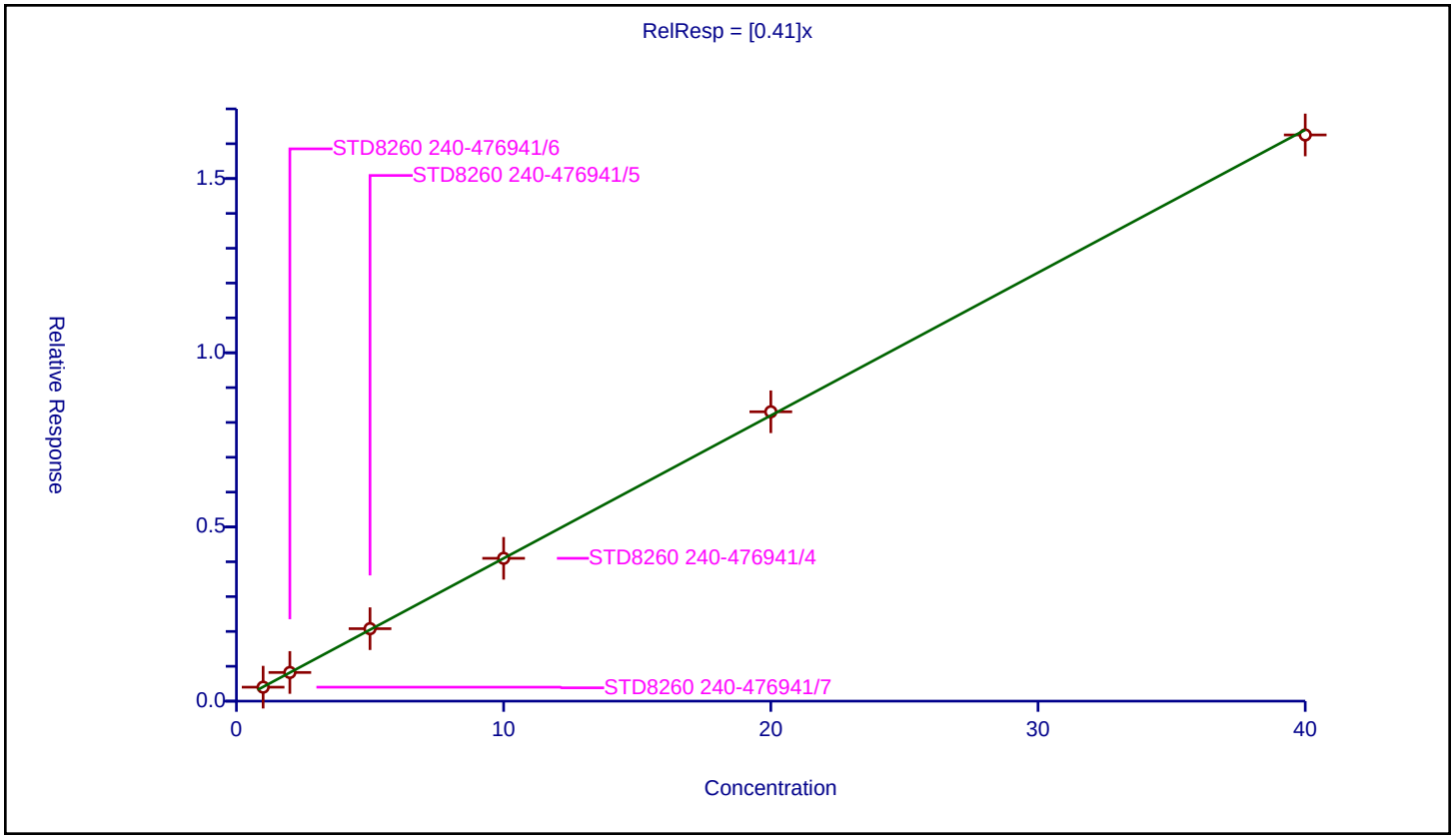
Curve Coefficients

Intercept:	0
Slope:	0.41

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.400841	10.0	1508502.0	0.400841	Y
2	STD8260 240-476941/6	2.0	0.822728	10.0	1600104.0	0.411364	Y
3	STD8260 240-476941/5	5.0	2.079741	10.0	1580769.0	0.415948	Y
4	STD8260 240-476941/4	10.0	4.099442	10.0	1635381.0	0.409944	Y
5	STD8260 240-476941/3	20.0	8.305795	10.0	1729200.0	0.41529	Y
6	STD8260 240-476941/2	40.0	16.252622	10.0	1738218.0	0.406316	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

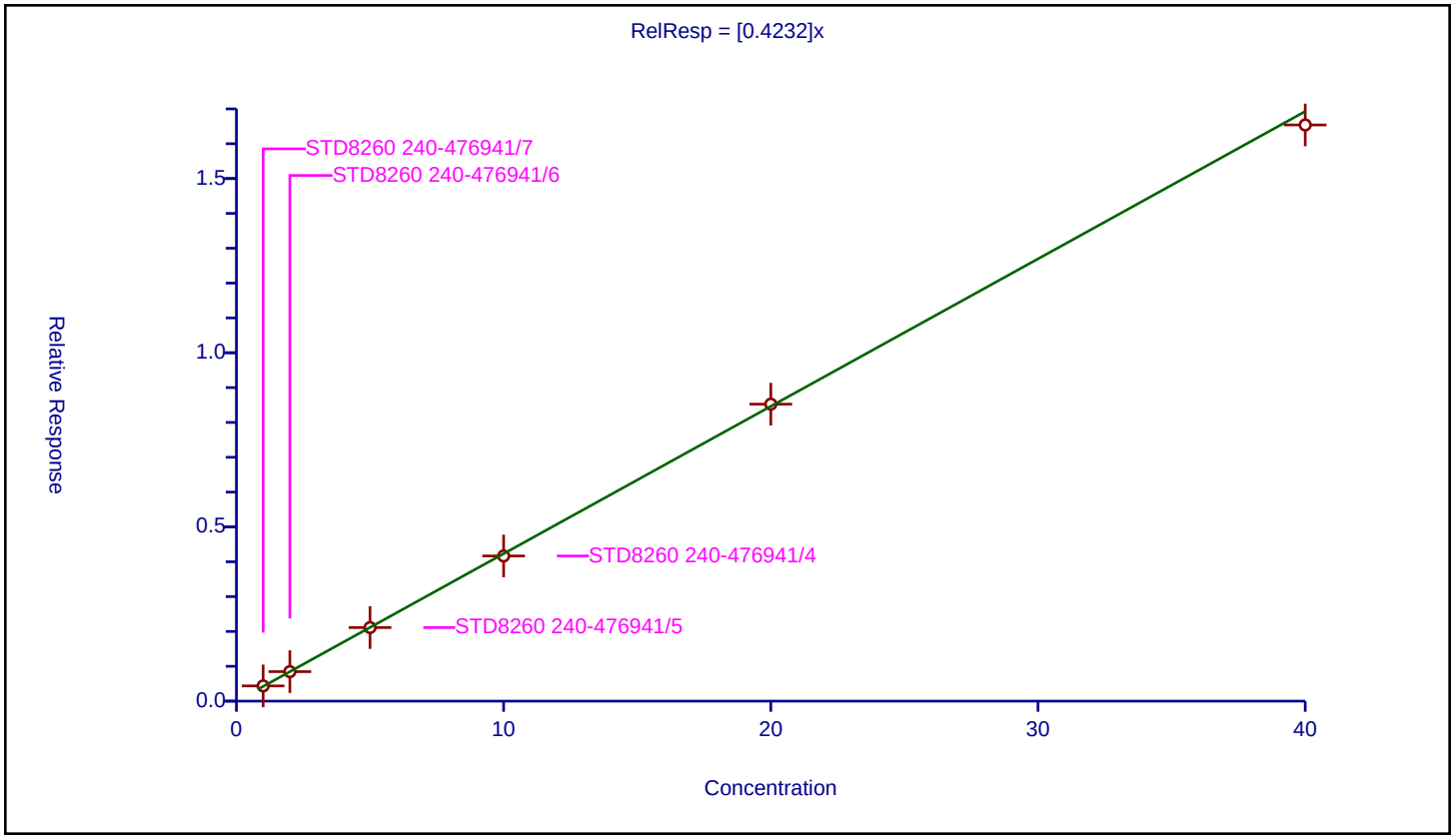
Curve Coefficients

Intercept:	0
Slope:	0.4232

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.436977	10.0	1508502.0	0.436977	Y
2	STD8260 240-476941/6	2.0	0.846601	10.0	1600104.0	0.423301	Y
3	STD8260 240-476941/5	5.0	2.111675	10.0	1580769.0	0.422335	Y
4	STD8260 240-476941/4	10.0	4.167163	10.0	1635381.0	0.416716	Y
5	STD8260 240-476941/3	20.0	8.524879	10.0	1729200.0	0.426244	Y
6	STD8260 240-476941/2	40.0	16.538622	10.0	1738218.0	0.413466	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

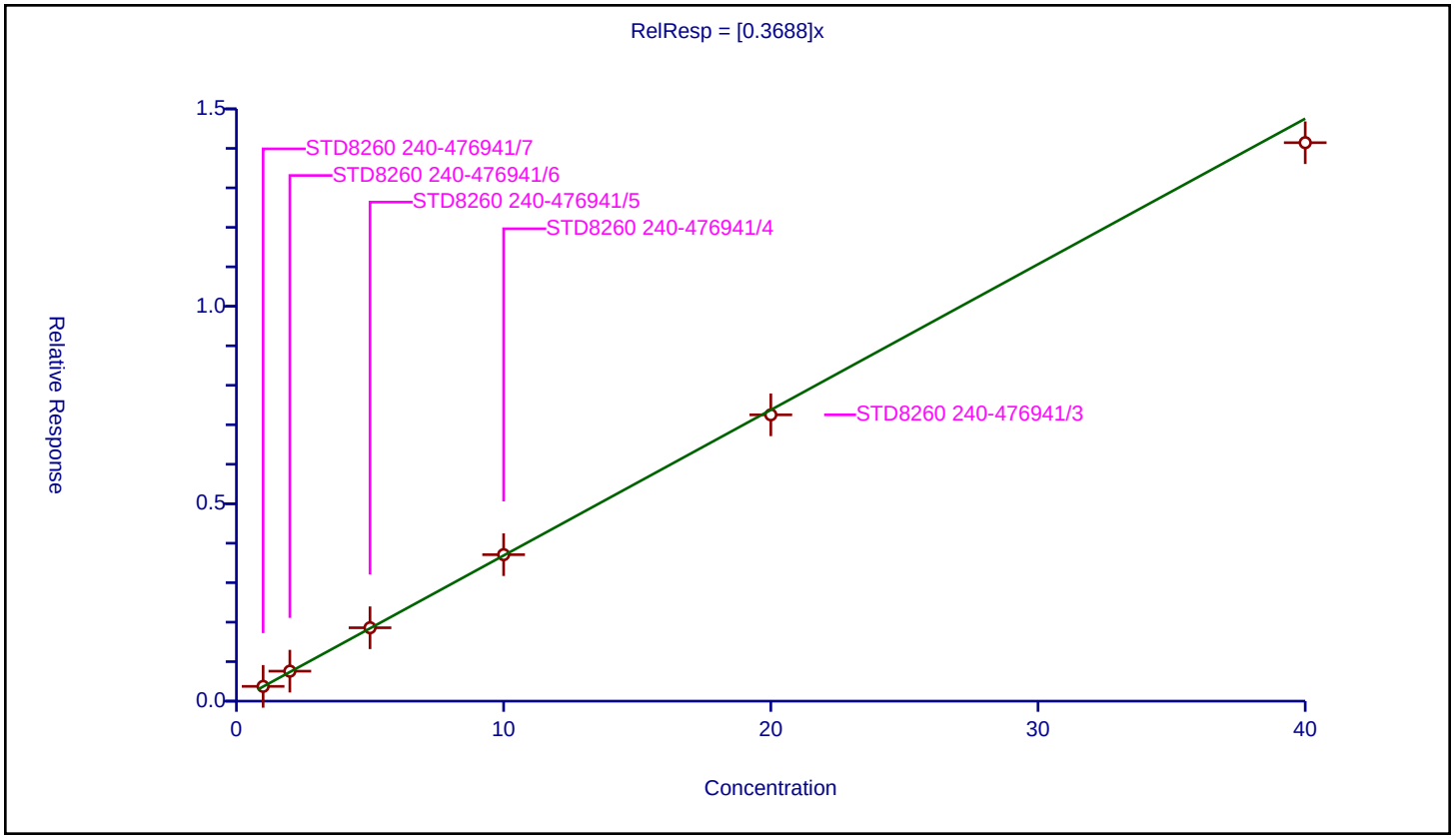
Curve Coefficients

Intercept:	0
Slope:	0.3688

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.374338	10.0	1508502.0	0.374338	Y
2	STD8260 240-476941/6	2.0	0.758994	10.0	1600104.0	0.379497	Y
3	STD8260 240-476941/5	5.0	1.858994	10.0	1580769.0	0.371799	Y
4	STD8260 240-476941/4	10.0	3.710108	10.0	1635381.0	0.371011	Y
5	STD8260 240-476941/3	20.0	7.251758	10.0	1729200.0	0.362588	Y
6	STD8260 240-476941/2	40.0	14.144141	10.0	1738218.0	0.353604	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

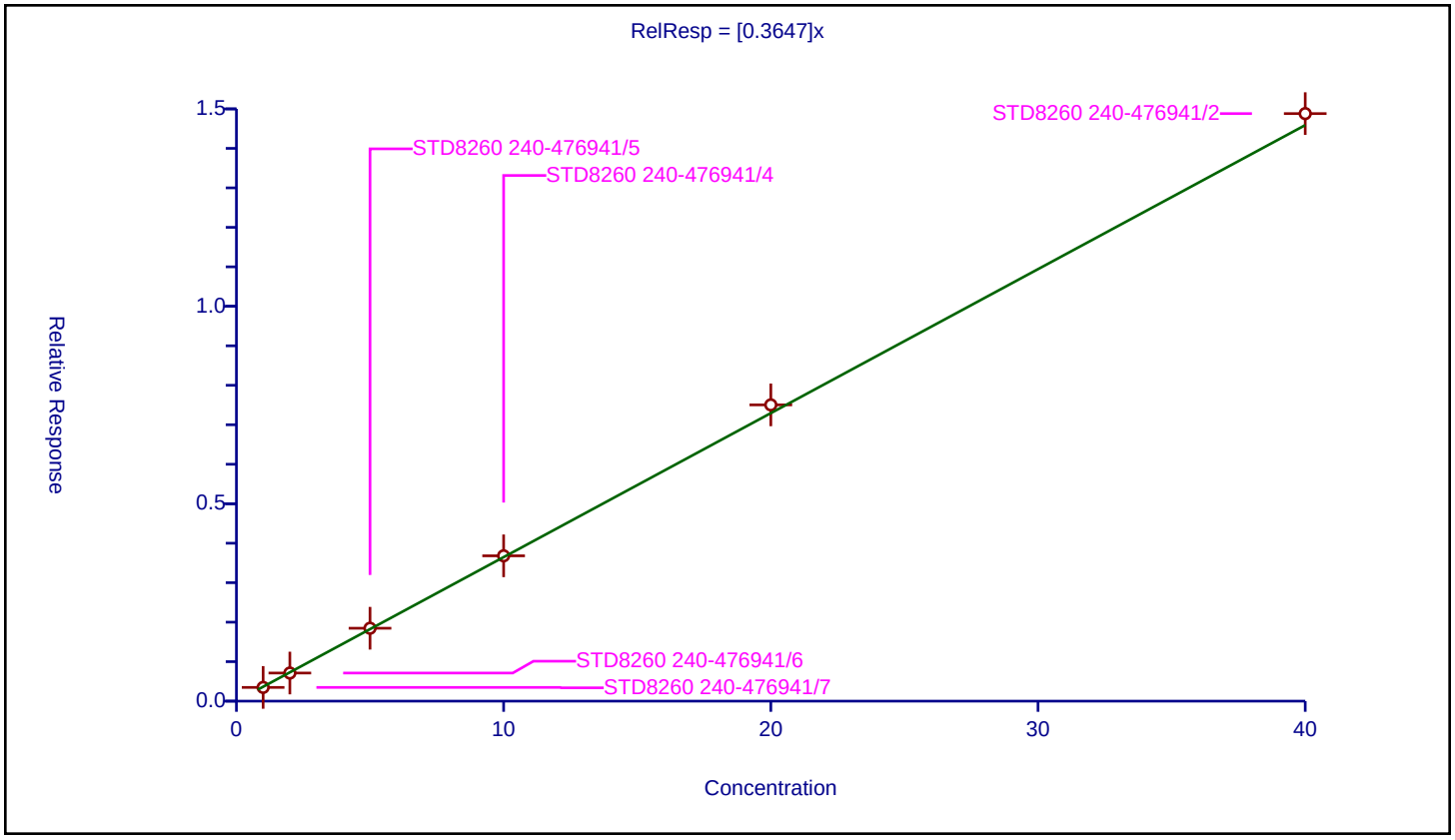
Curve Coefficients

Intercept:	0
Slope:	0.3647

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.347736	10.0	1508502.0	0.347736	Y
2	STD8260 240-476941/6	2.0	0.711754	10.0	1600104.0	0.355877	Y
3	STD8260 240-476941/5	5.0	1.846582	10.0	1580769.0	0.369316	Y
4	STD8260 240-476941/4	10.0	3.681032	10.0	1635381.0	0.368103	Y
5	STD8260 240-476941/3	20.0	7.503851	10.0	1729200.0	0.375193	Y
6	STD8260 240-476941/2	40.0	14.880573	10.0	1738218.0	0.372014	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

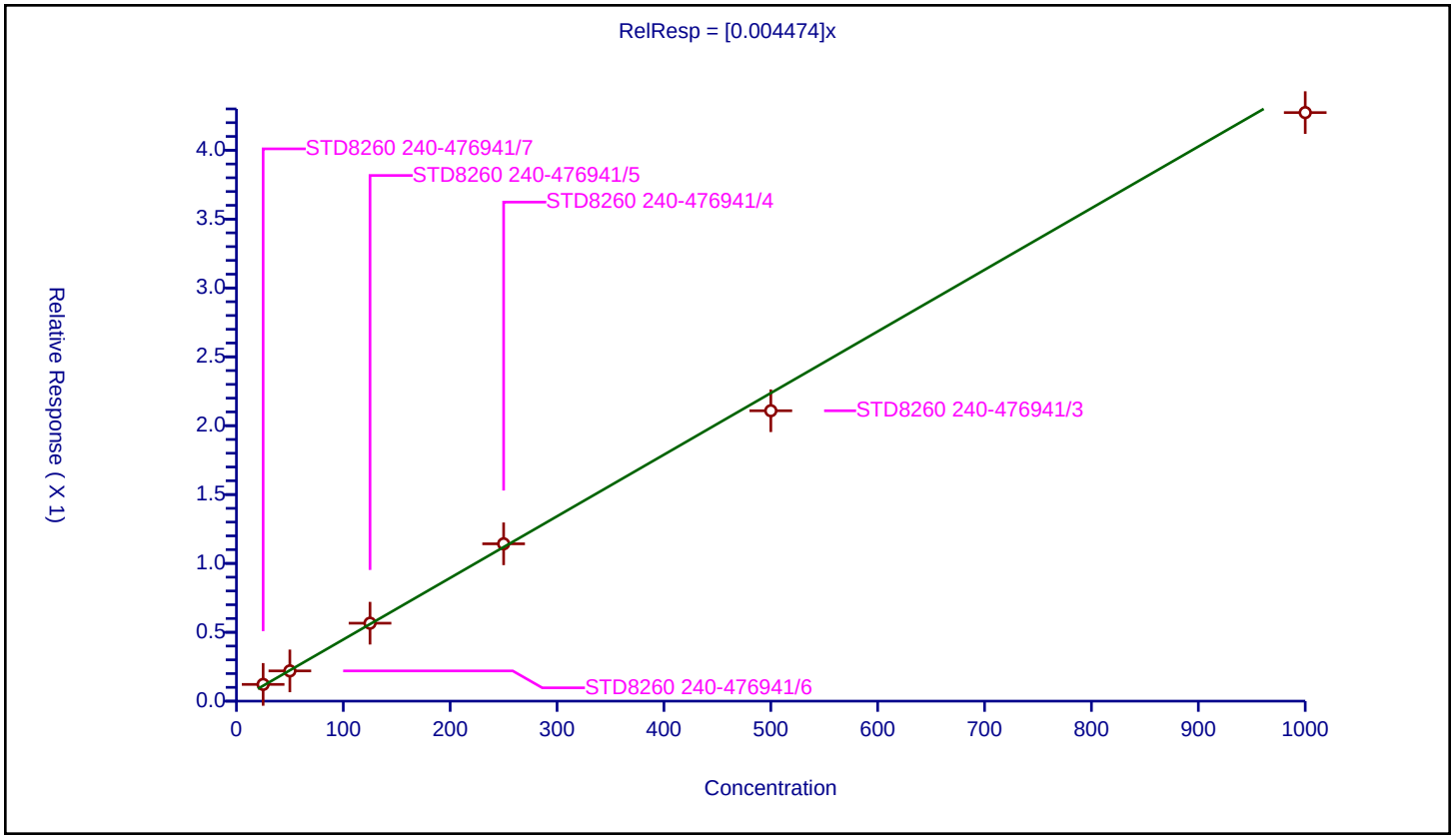
Curve Coefficients

Intercept:	0
Slope:	0.004474

Error Coefficients

Standard Error:	382000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	25.0	0.121584	10.0	1508502.0	0.004863	Y
2	STD8260 240-476941/6	50.0	0.219592	10.0	1600104.0	0.004392	Y
3	STD8260 240-476941/5	125.0	0.565984	10.0	1580769.0	0.004528	Y
4	STD8260 240-476941/4	250.0	1.142309	10.0	1635381.0	0.004569	Y
5	STD8260 240-476941/3	500.0	2.108426	10.0	1729200.0	0.004217	Y
6	STD8260 240-476941/2	1000.0	4.273123	10.0	1738218.0	0.004273	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

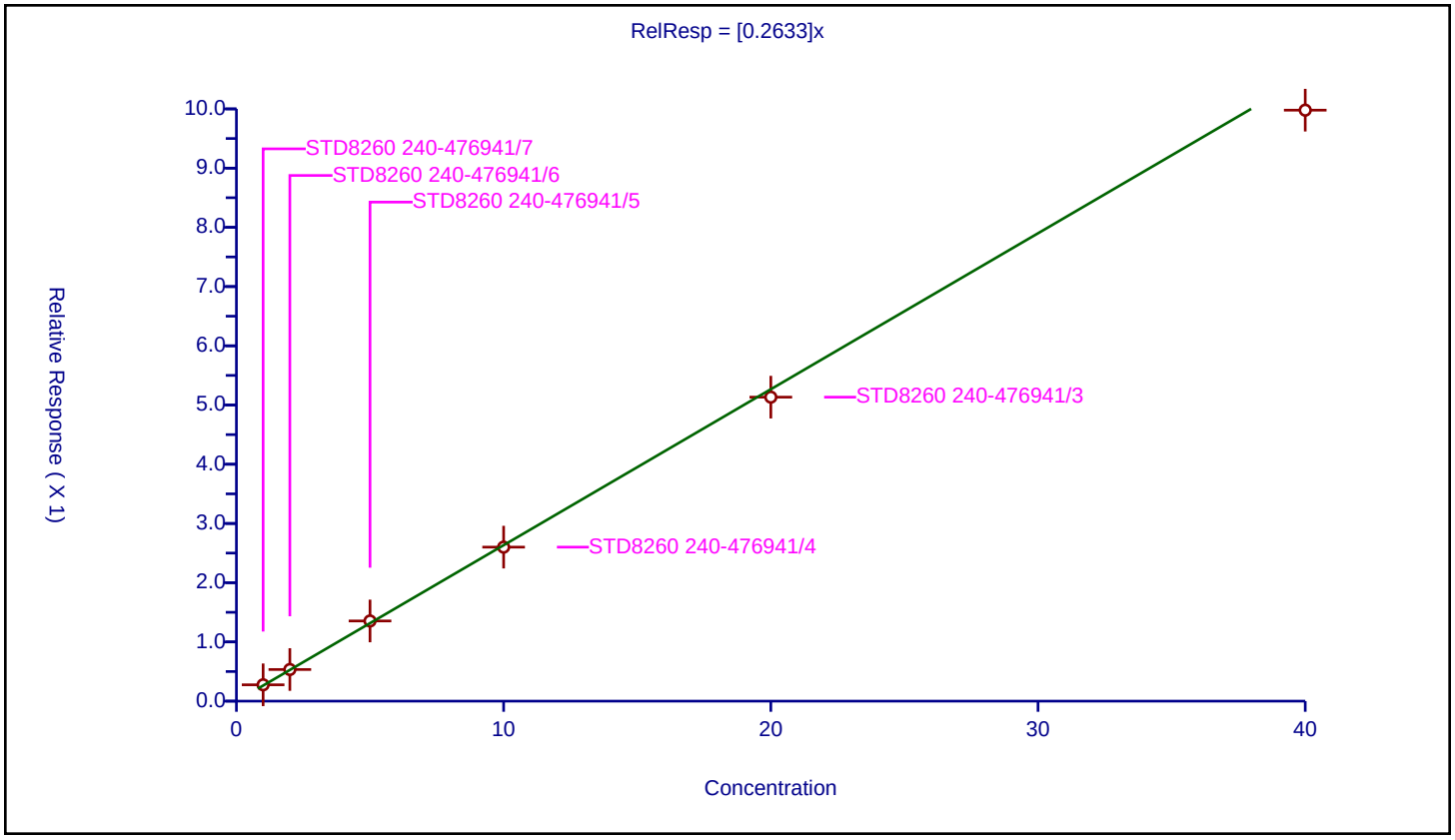
Curve Coefficients

Intercept:	0
Slope:	0.2633

Error Coefficients

Standard Error:	898000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275989	10.0	1508502.0	0.275989	Y
2	STD8260 240-476941/6	2.0	0.533928	10.0	1600104.0	0.266964	Y
3	STD8260 240-476941/5	5.0	1.354075	10.0	1580769.0	0.270815	Y
4	STD8260 240-476941/4	10.0	2.600244	10.0	1635381.0	0.260024	Y
5	STD8260 240-476941/3	20.0	5.132691	10.0	1729200.0	0.256635	Y
6	STD8260 240-476941/2	40.0	9.978616	10.0	1738218.0	0.249465	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

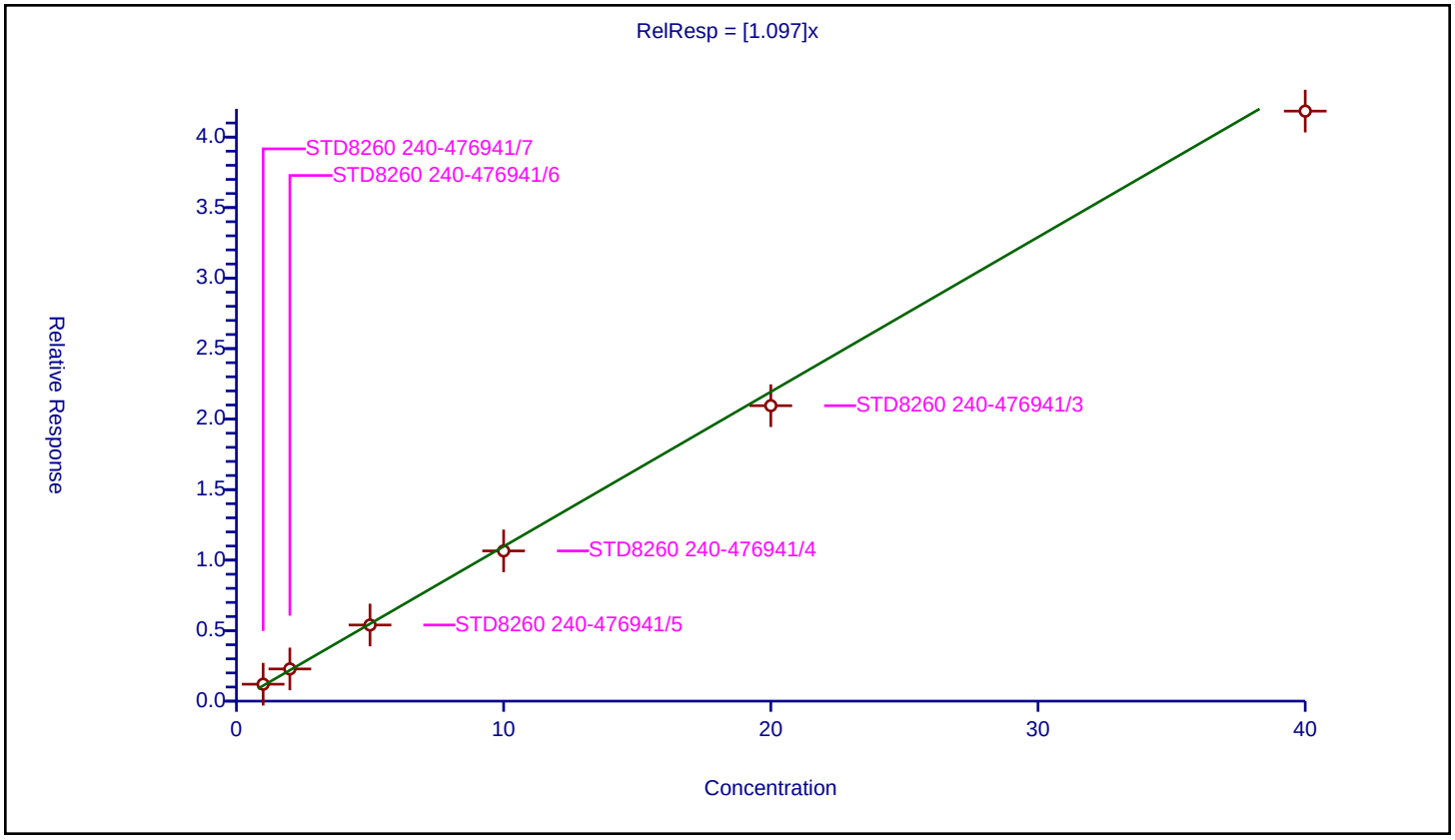
Curve Coefficients

Intercept:	0
Slope:	1.097

Error Coefficients

Standard Error:	3740000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.201026	10.0	1508502.0	1.201026	Y
2	STD8260 240-476941/6	2.0	2.282239	10.0	1600104.0	1.14112	Y
3	STD8260 240-476941/5	5.0	5.398936	10.0	1580769.0	1.079787	Y
4	STD8260 240-476941/4	10.0	10.652778	10.0	1635381.0	1.065278	Y
5	STD8260 240-476941/3	20.0	20.953747	10.0	1729200.0	1.047687	Y
6	STD8260 240-476941/2	40.0	41.843946	10.0	1738218.0	1.046099	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

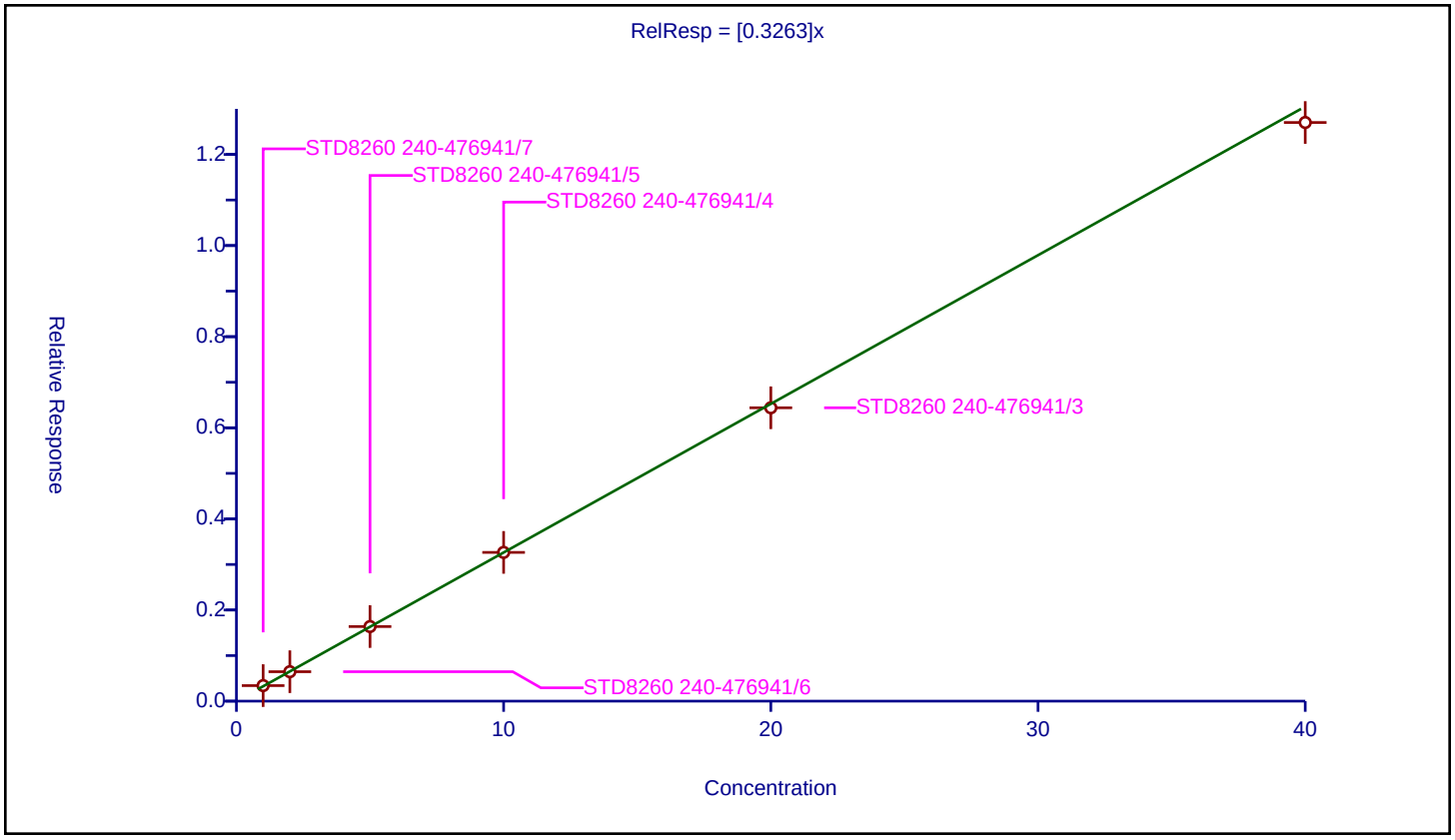
Curve Coefficients

Intercept:	0
Slope:	0.3263

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.341087	10.0	1508502.0	0.341087	Y
2	STD8260 240-476941/6	2.0	0.646289	10.0	1600104.0	0.323145	Y
3	STD8260 240-476941/5	5.0	1.637178	10.0	1580769.0	0.327436	Y
4	STD8260 240-476941/4	10.0	3.264542	10.0	1635381.0	0.326454	Y
5	STD8260 240-476941/3	20.0	6.439596	10.0	1729200.0	0.32198	Y
6	STD8260 240-476941/2	40.0	12.701163	10.0	1738218.0	0.317529	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

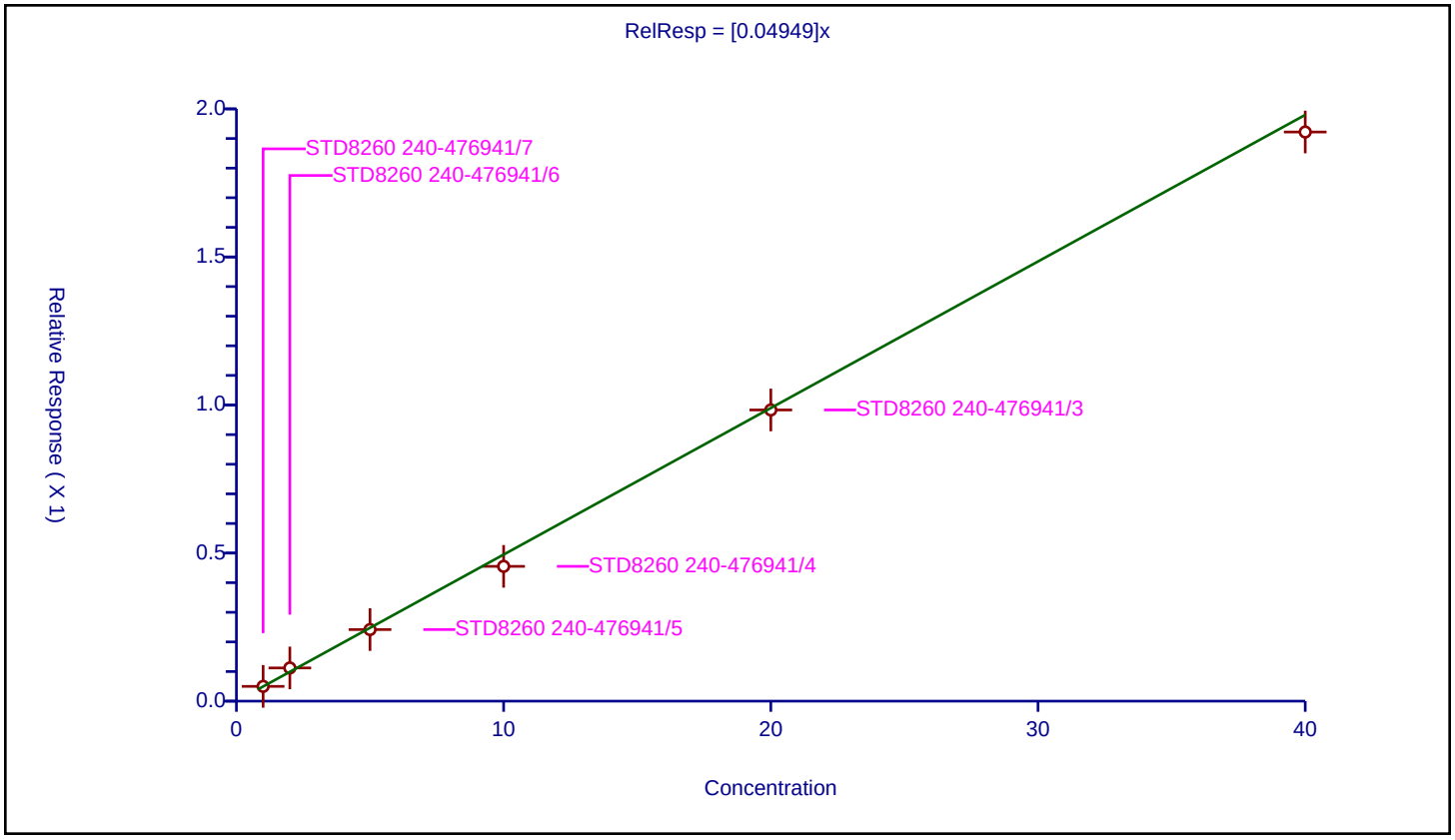
Curve Coefficients

Intercept:	0
Slope:	0.04949

Error Coefficients

Standard Error:	172000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.049838	10.0	1508502.0	0.049838	Y
2	STD8260 240-476941/6	2.0	0.11208	10.0	1600104.0	0.05604	Y
3	STD8260 240-476941/5	5.0	0.241705	10.0	1580769.0	0.048341	Y
4	STD8260 240-476941/4	10.0	0.455191	10.0	1635381.0	0.045519	Y
5	STD8260 240-476941/3	20.0	0.98331	10.0	1729200.0	0.049166	Y
6	STD8260 240-476941/2	40.0	1.921888	10.0	1738218.0	0.048047	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

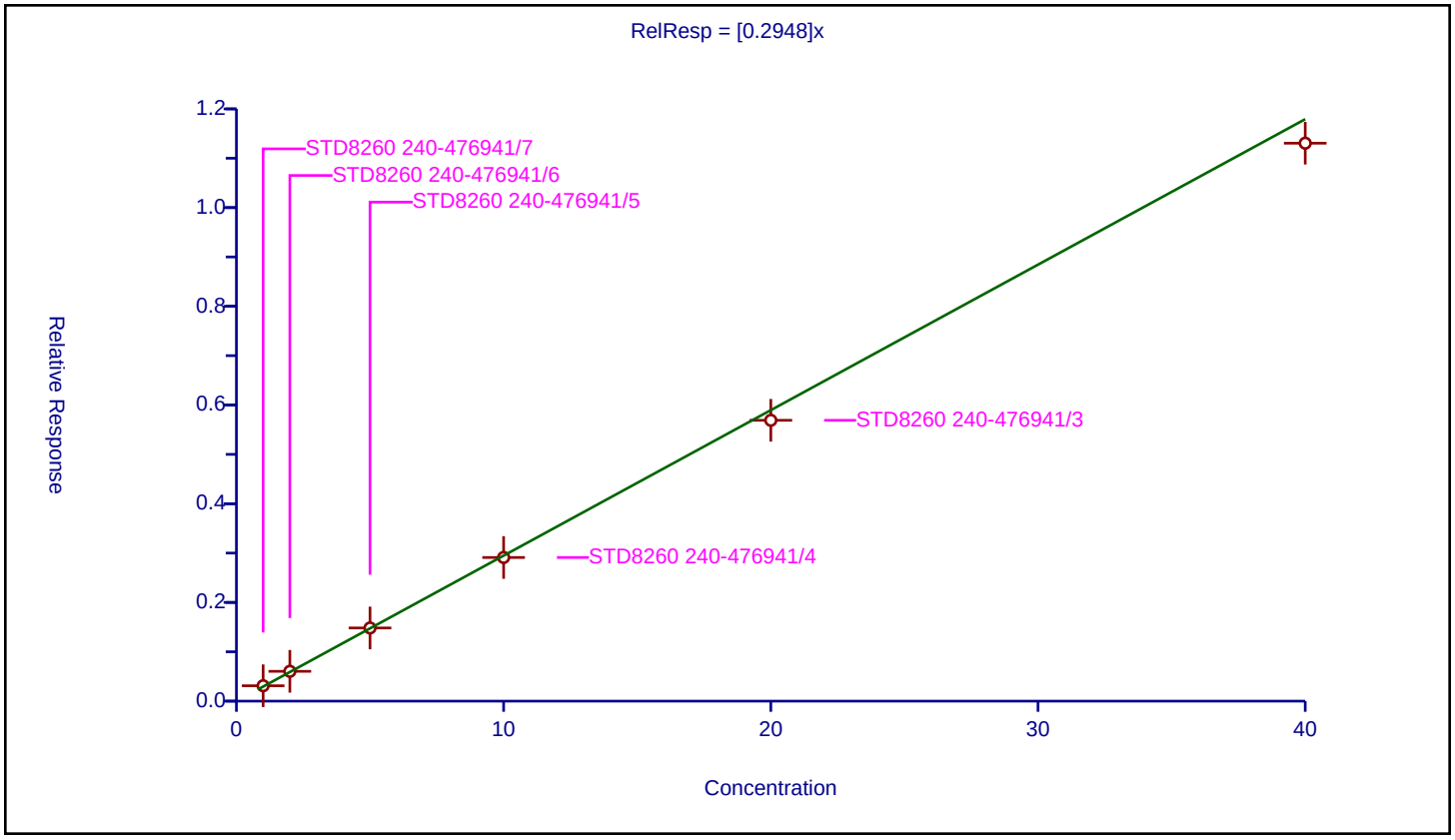
Curve Coefficients

Intercept:	0
Slope:	0.2948

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.311819	10.0	1508502.0	0.311819	Y
2	STD8260 240-476941/6	2.0	0.604273	10.0	1600104.0	0.302137	Y
3	STD8260 240-476941/5	5.0	1.482911	10.0	1580769.0	0.296582	Y
4	STD8260 240-476941/4	10.0	2.910765	10.0	1635381.0	0.291077	Y
5	STD8260 240-476941/3	20.0	5.690163	10.0	1729200.0	0.284508	Y
6	STD8260 240-476941/2	40.0	11.304664	10.0	1738218.0	0.282617	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

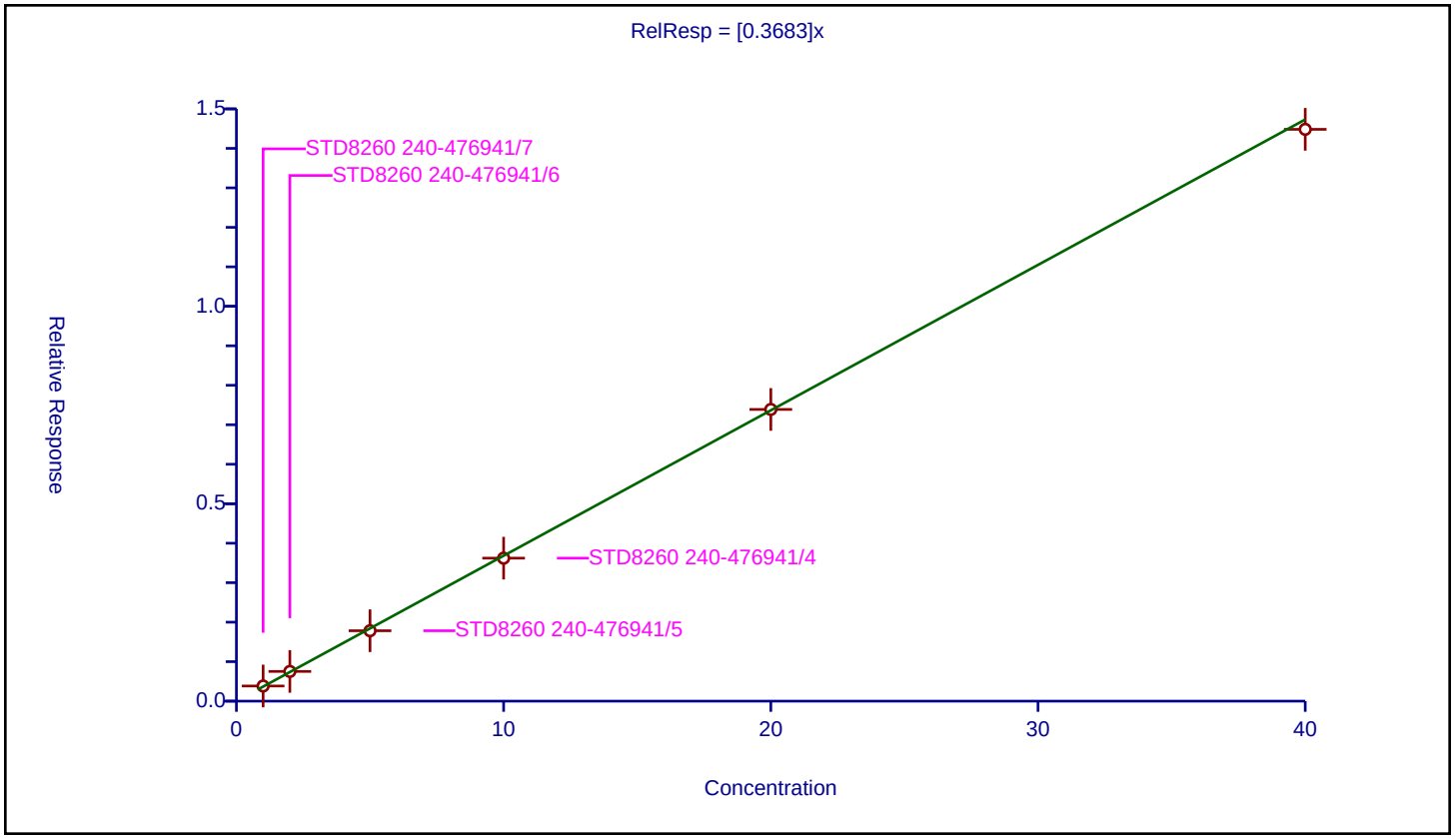
Curve Coefficients

Intercept:	0
Slope:	0.3683

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.383321	10.0	1508502.0	0.383321	Y
2	STD8260 240-476941/6	2.0	0.752382	10.0	1600104.0	0.376191	Y
3	STD8260 240-476941/5	5.0	1.782917	10.0	1580769.0	0.356583	Y
4	STD8260 240-476941/4	10.0	3.621089	10.0	1635381.0	0.362109	Y
5	STD8260 240-476941/3	20.0	7.388446	10.0	1729200.0	0.369422	Y
6	STD8260 240-476941/2	40.0	14.481906	10.0	1738218.0	0.362048	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

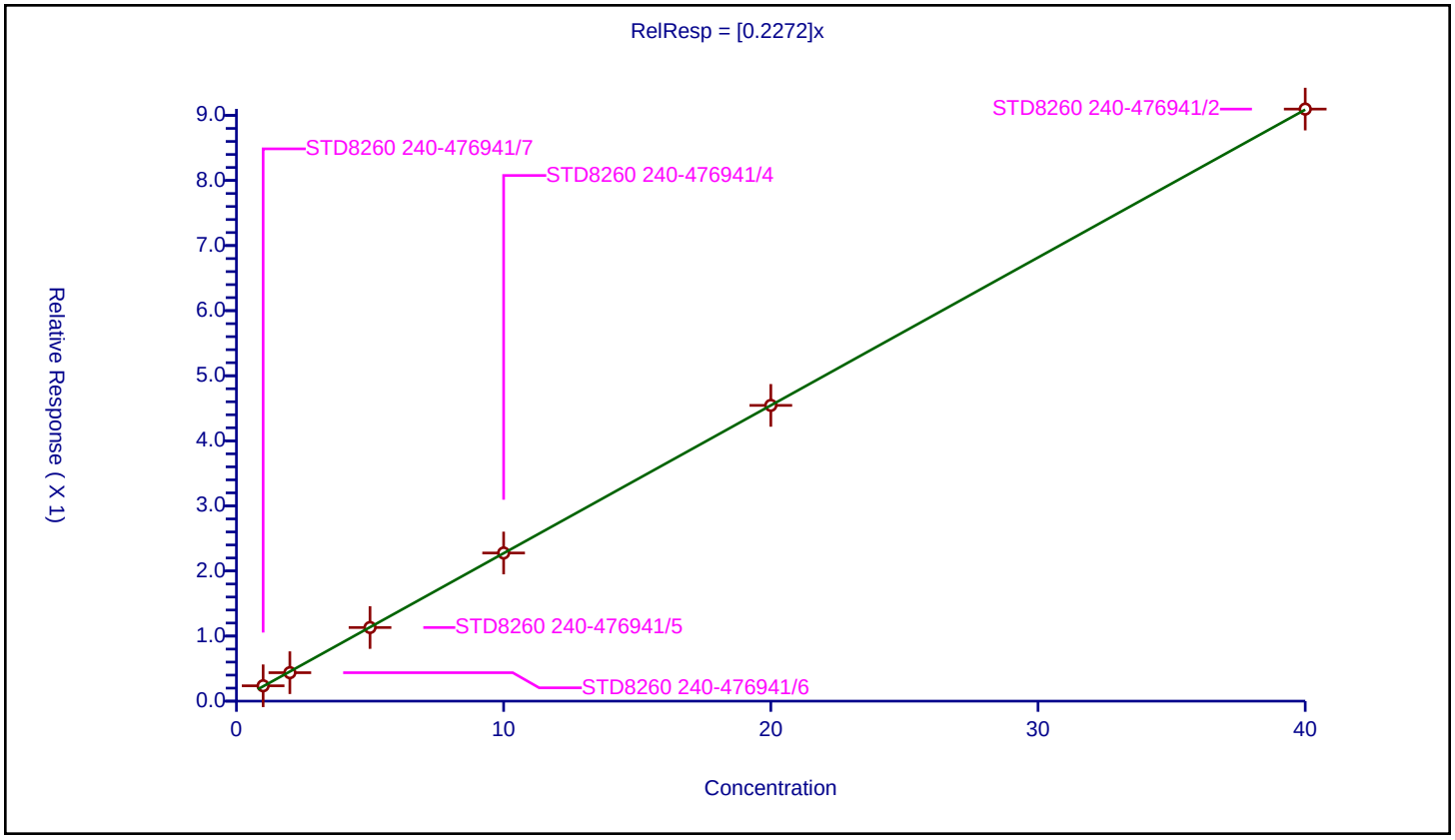
Curve Coefficients

Intercept:	0
Slope:	0.2272

Error Coefficients

Standard Error:	812000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.236049	10.0	1508502.0	0.236049	Y
2	STD8260 240-476941/6	2.0	0.43734	10.0	1600104.0	0.21867	Y
3	STD8260 240-476941/5	5.0	1.131405	10.0	1580769.0	0.226281	Y
4	STD8260 240-476941/4	10.0	2.276411	10.0	1635381.0	0.227641	Y
5	STD8260 240-476941/3	20.0	4.544419	10.0	1729200.0	0.227221	Y
6	STD8260 240-476941/2	40.0	9.097121	10.0	1738218.0	0.227428	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

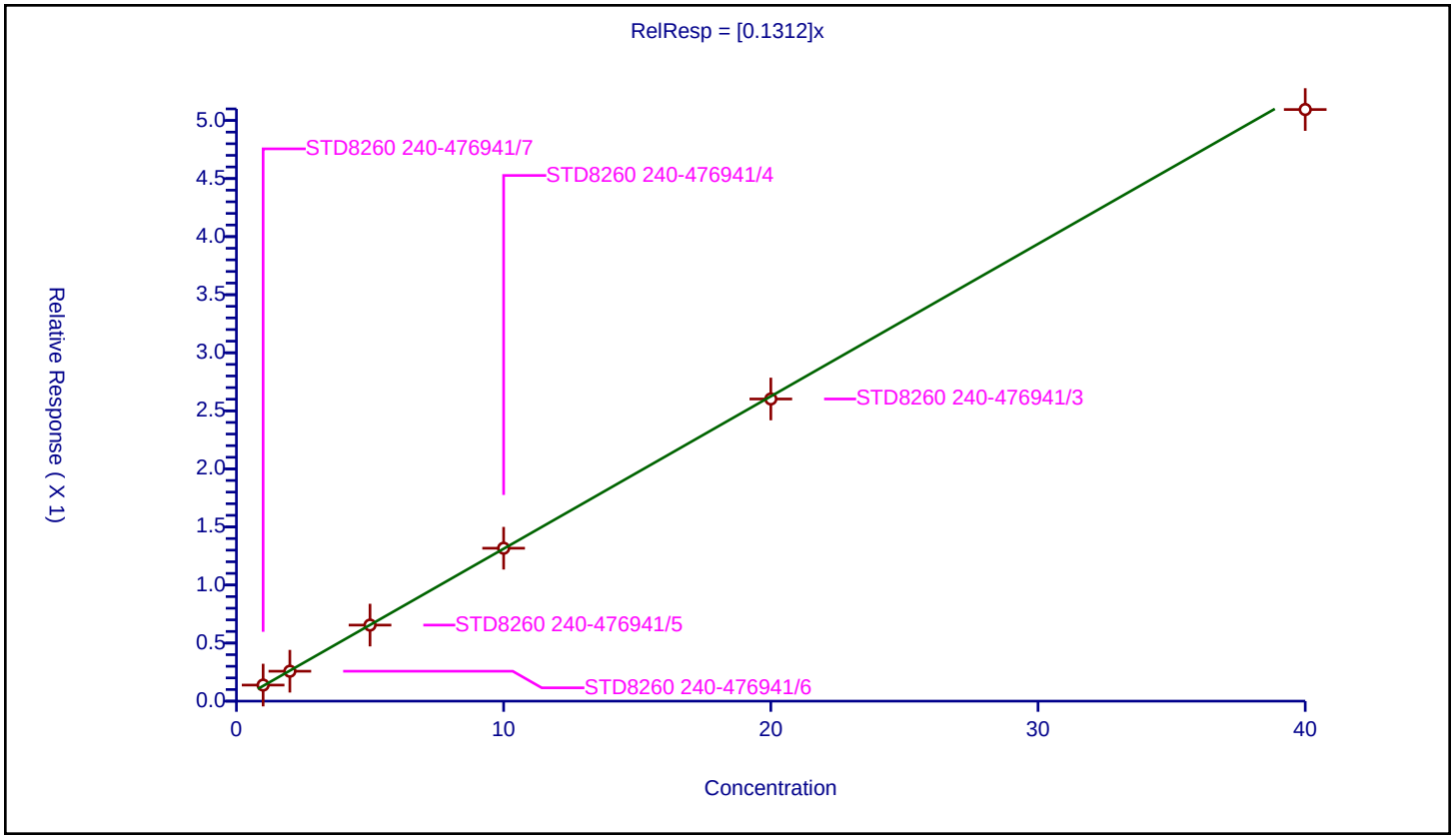
Curve Coefficients

Intercept:	0
Slope:	0.1312

Error Coefficients

Standard Error:	457000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.138382	10.0	1508502.0	0.138382	Y
2	STD8260 240-476941/6	2.0	0.257752	10.0	1600104.0	0.128876	Y
3	STD8260 240-476941/5	5.0	0.654998	10.0	1580769.0	0.131	Y
4	STD8260 240-476941/4	10.0	1.316727	10.0	1635381.0	0.131673	Y
5	STD8260 240-476941/3	20.0	2.602001	10.0	1729200.0	0.1301	Y
6	STD8260 240-476941/2	40.0	5.094419	10.0	1738218.0	0.12736	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

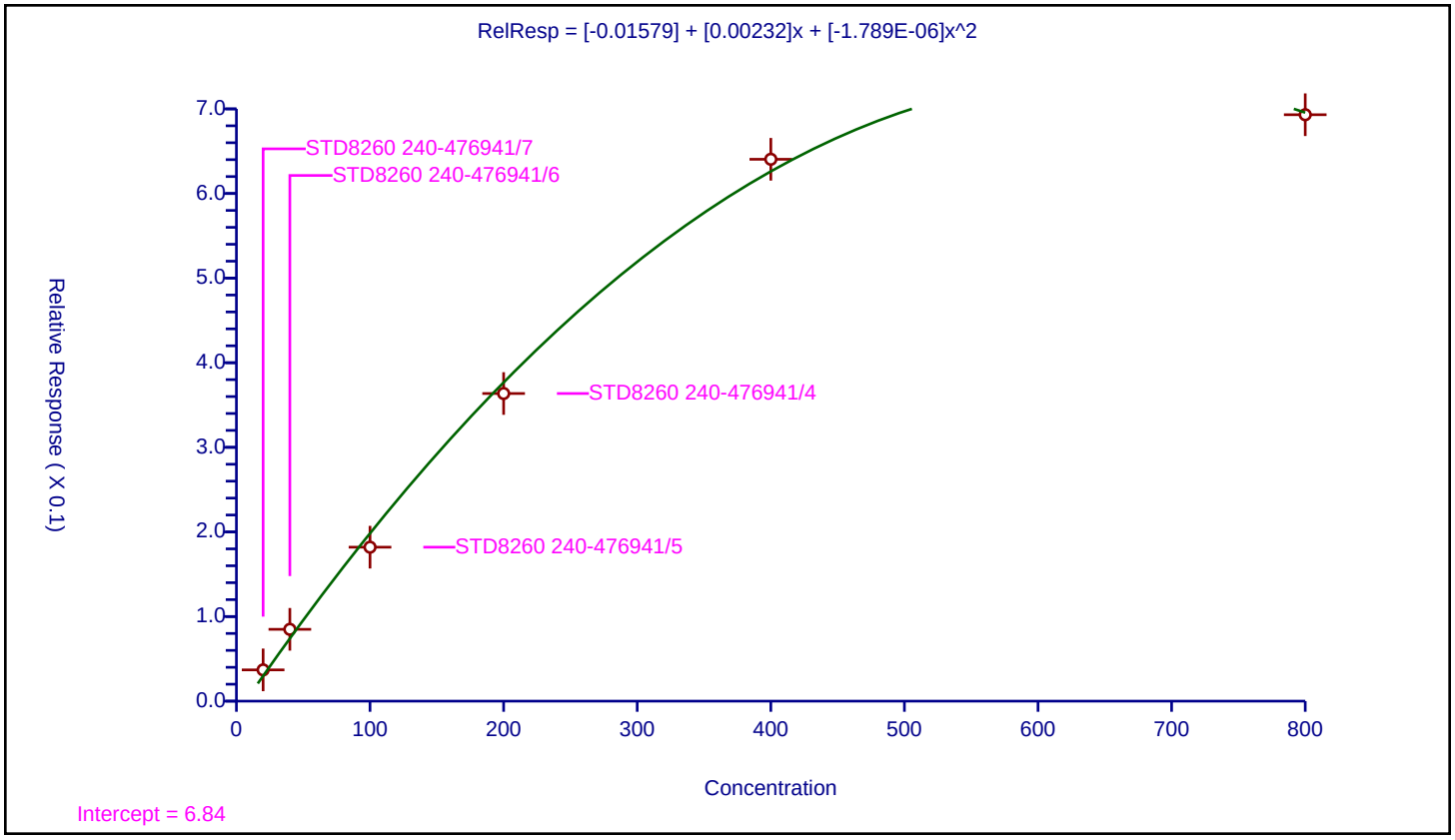
Curve Coefficients

Intercept:	-0.01579
Slope:	0.00232
Second Order:	-1.789E-06

Error Coefficients

Standard Error:	102000
Relative Standard Error:	25.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	20.0	0.036951	10.0	1508502.0	0.001848	Y
2	STD8260 240-476941/6	40.0	0.084882	10.0	1600104.0	0.002122	Y
3	STD8260 240-476941/5	100.0	0.181962	10.0	1580769.0	0.00182	Y
4	STD8260 240-476941/4	200.0	0.363603	10.0	1635381.0	0.001818	Y
5	STD8260 240-476941/3	400.0	0.640452	10.0	1729200.0	0.001601	Y
6	STD8260 240-476941/2	800.0	0.693095	10.0	1738218.0	0.000866	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

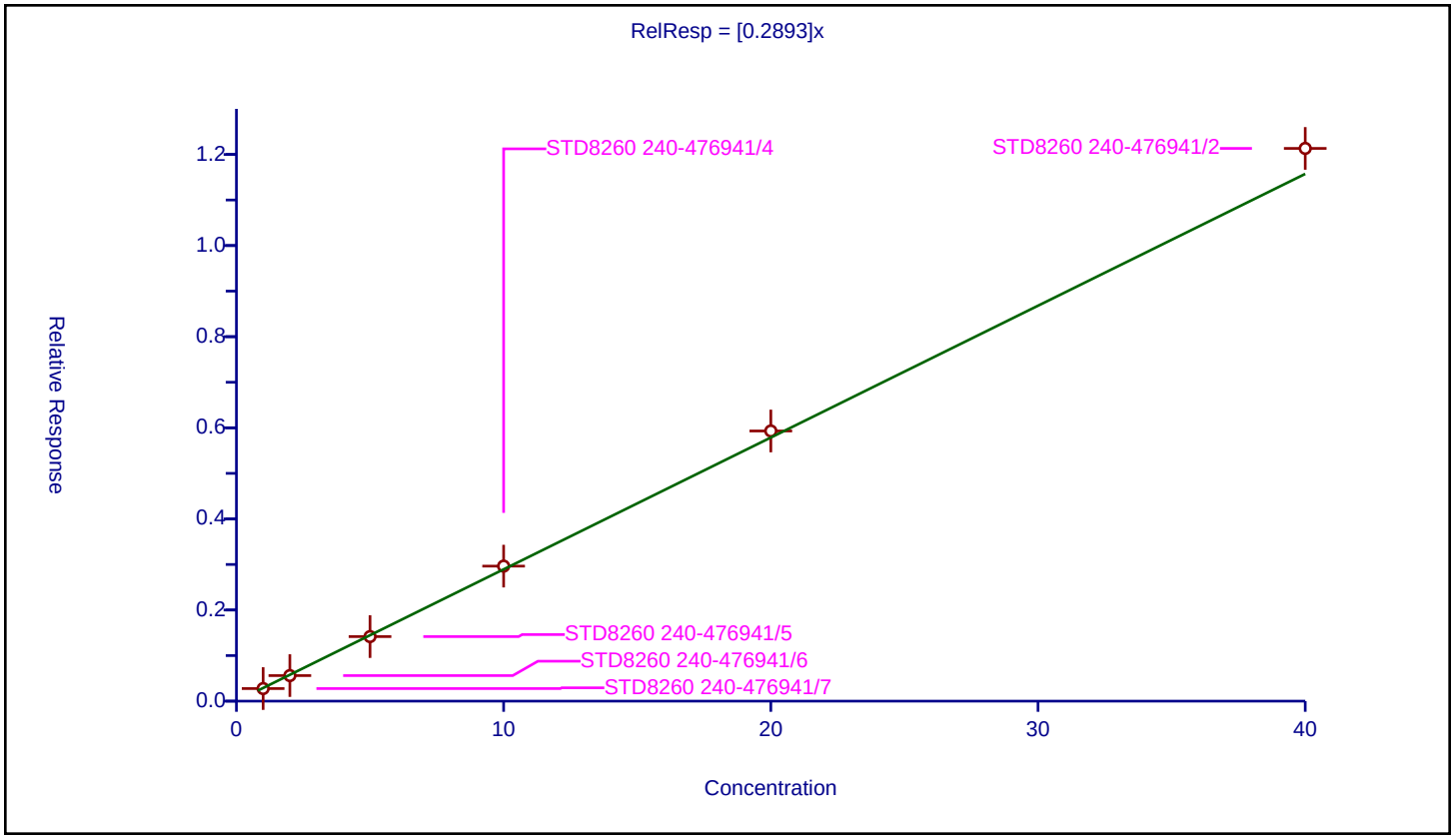
Curve Coefficients

Intercept:	0
Slope:	0.2893

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275943	10.0	1508502.0	0.275943	Y
2	STD8260 240-476941/6	2.0	0.560701	10.0	1600104.0	0.280351	Y
3	STD8260 240-476941/5	5.0	1.417076	10.0	1580769.0	0.283415	Y
4	STD8260 240-476941/4	10.0	2.96386	10.0	1635381.0	0.296386	Y
5	STD8260 240-476941/3	20.0	5.930344	10.0	1729200.0	0.296517	Y
6	STD8260 240-476941/2	40.0	12.132178	10.0	1738218.0	0.303304	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

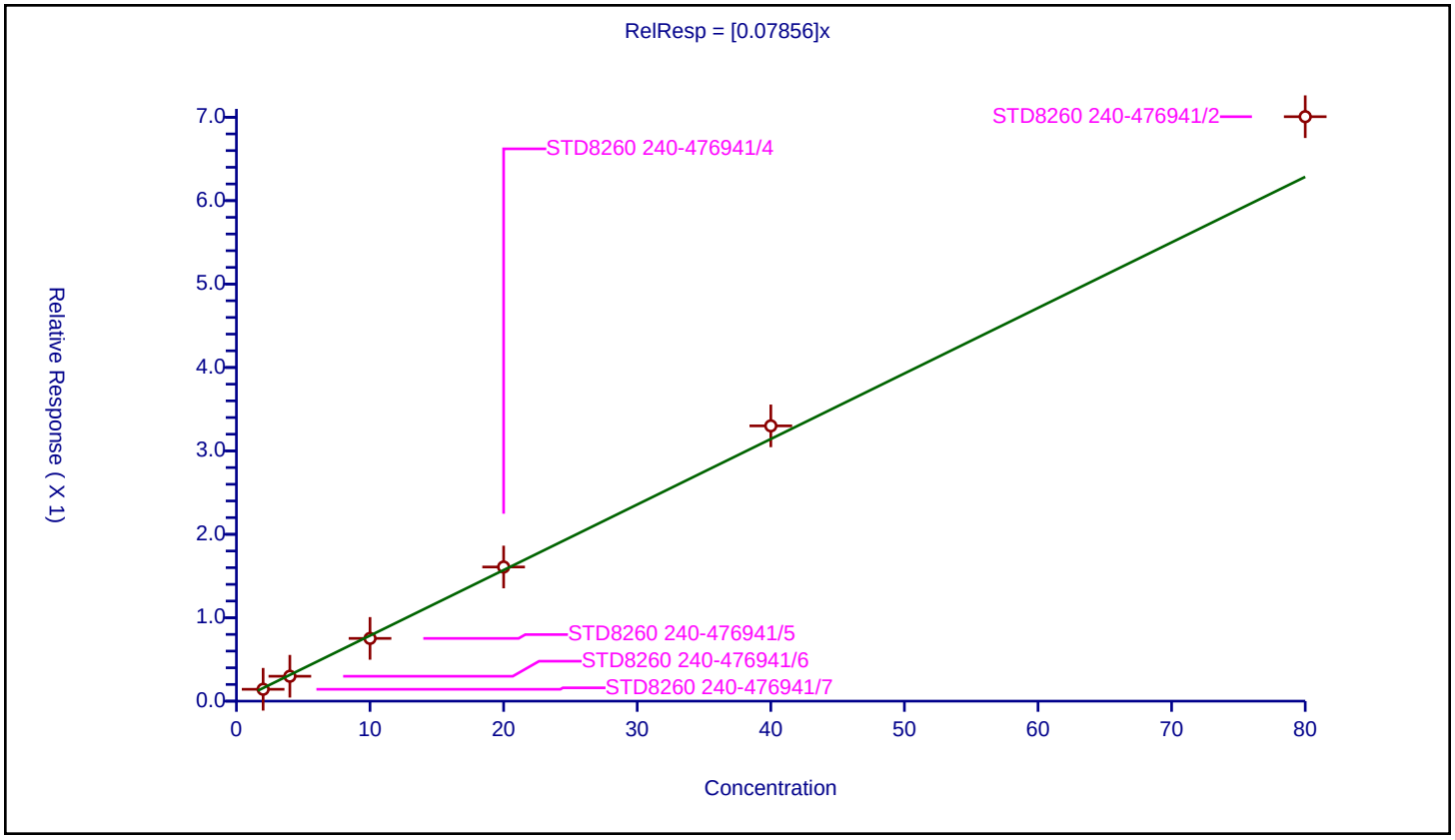
Curve Coefficients

Intercept:	0
Slope:	0.07856

Error Coefficients

Standard Error:	616000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.142141	10.0	1508502.0	0.071071	Y
2	STD8260 240-476941/6	4.0	0.298418	10.0	1600104.0	0.074605	Y
3	STD8260 240-476941/5	10.0	0.752172	10.0	1580769.0	0.075217	Y
4	STD8260 240-476941/4	20.0	1.608188	10.0	1635381.0	0.080409	Y
5	STD8260 240-476941/3	40.0	3.3	10.0	1729200.0	0.0825	Y
6	STD8260 240-476941/2	80.0	7.006474	10.0	1738218.0	0.087581	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

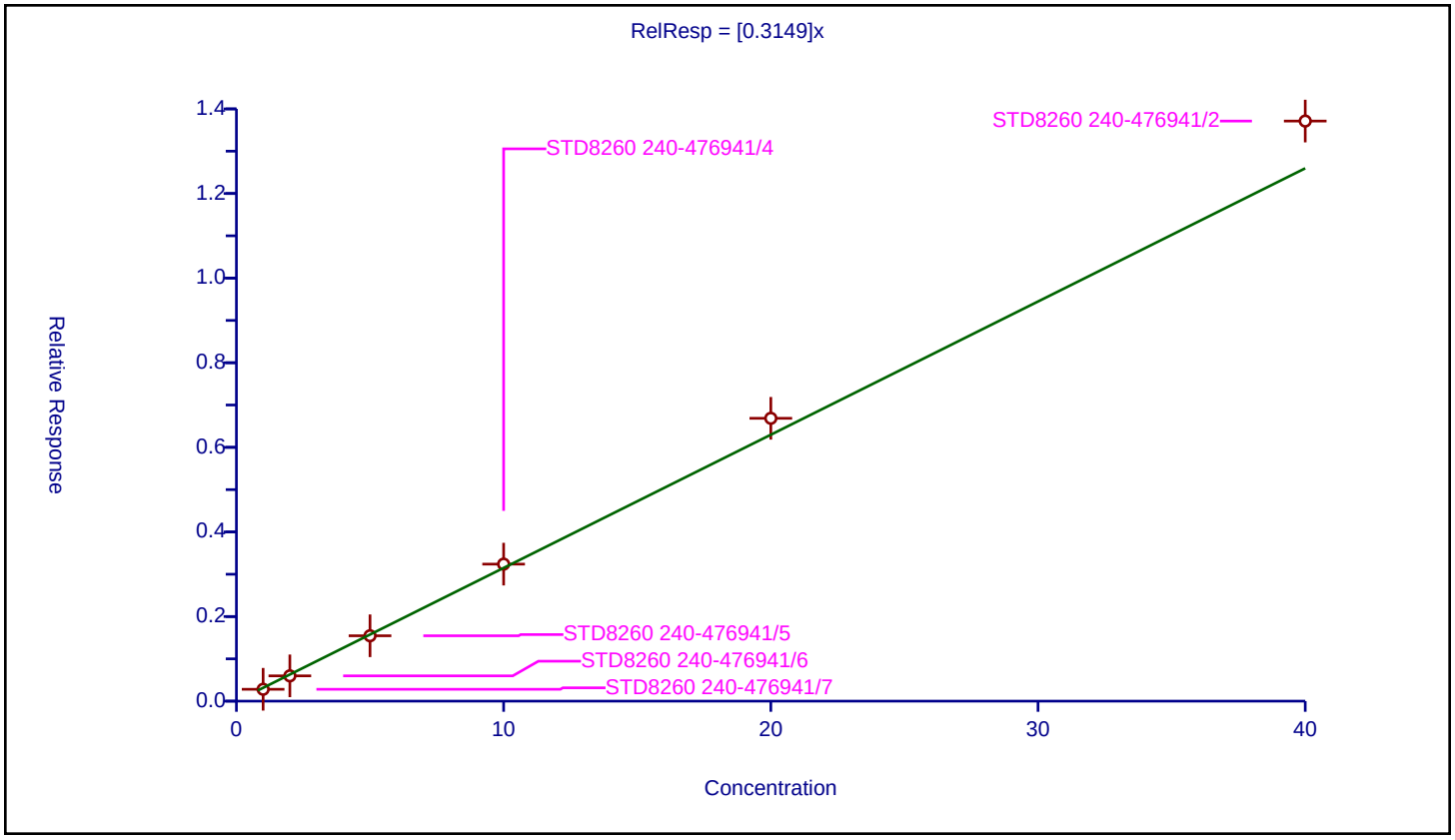
Curve Coefficients

Intercept:	0
Slope:	0.3149

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280444	10.0	1508502.0	0.280444	Y
2	STD8260 240-476941/6	2.0	0.597624	10.0	1600104.0	0.298812	Y
3	STD8260 240-476941/5	5.0	1.545393	10.0	1580769.0	0.309079	Y
4	STD8260 240-476941/4	10.0	3.23897	10.0	1635381.0	0.323897	Y
5	STD8260 240-476941/3	20.0	6.68608	10.0	1729200.0	0.334304	Y
6	STD8260 240-476941/2	40.0	13.7124	10.0	1738218.0	0.34281	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

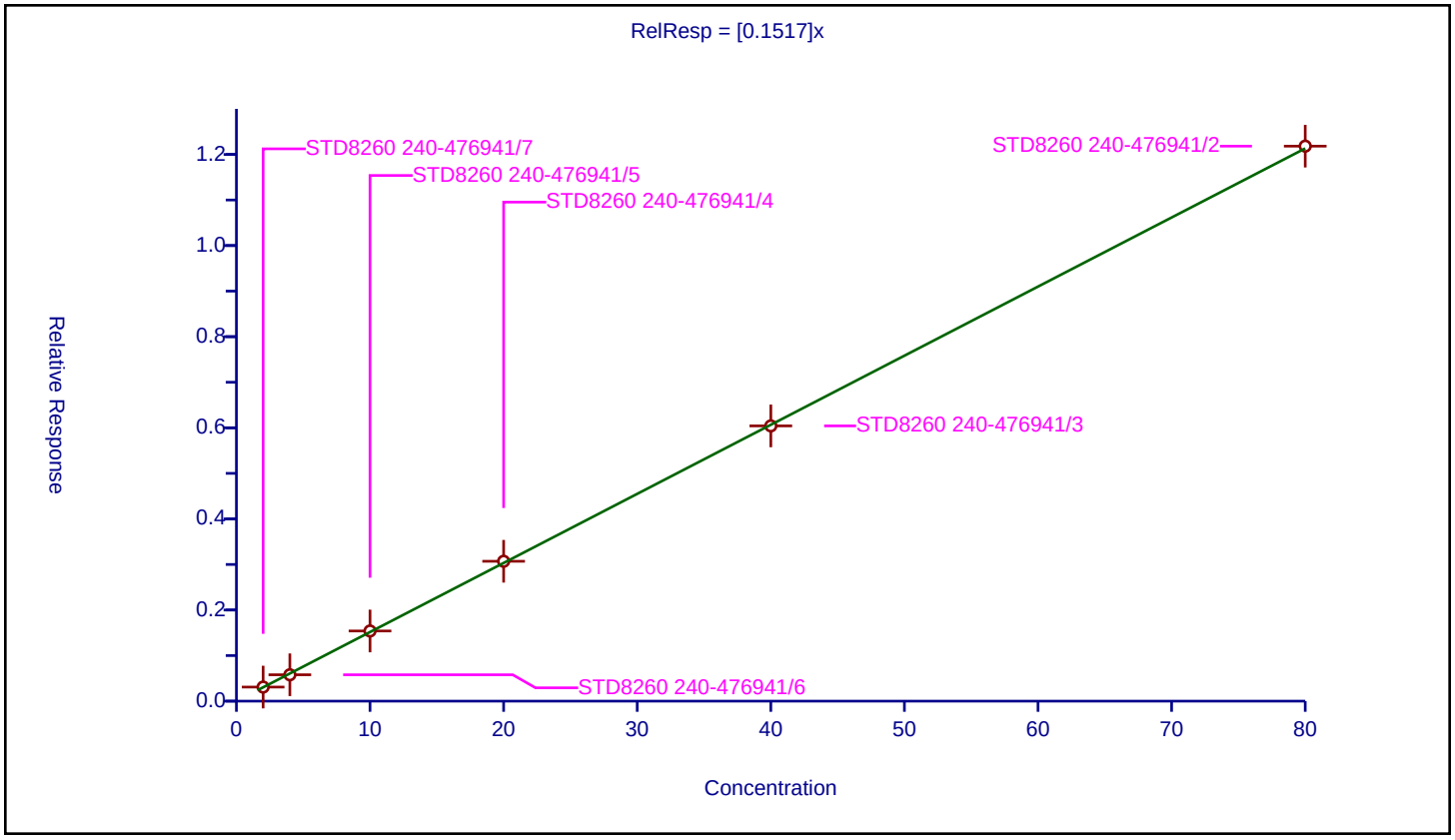
Curve Coefficients

Intercept:	0
Slope:	0.1517

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.308737	10.0	1508502.0	0.154368	Y
2	STD8260 240-476941/6	4.0	0.578775	10.0	1600104.0	0.144694	Y
3	STD8260 240-476941/5	10.0	1.540377	10.0	1580769.0	0.154038	Y
4	STD8260 240-476941/4	20.0	3.070379	10.0	1635381.0	0.153519	Y
5	STD8260 240-476941/3	40.0	6.041701	10.0	1729200.0	0.151043	Y
6	STD8260 240-476941/2	80.0	12.182051	10.0	1738218.0	0.152276	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

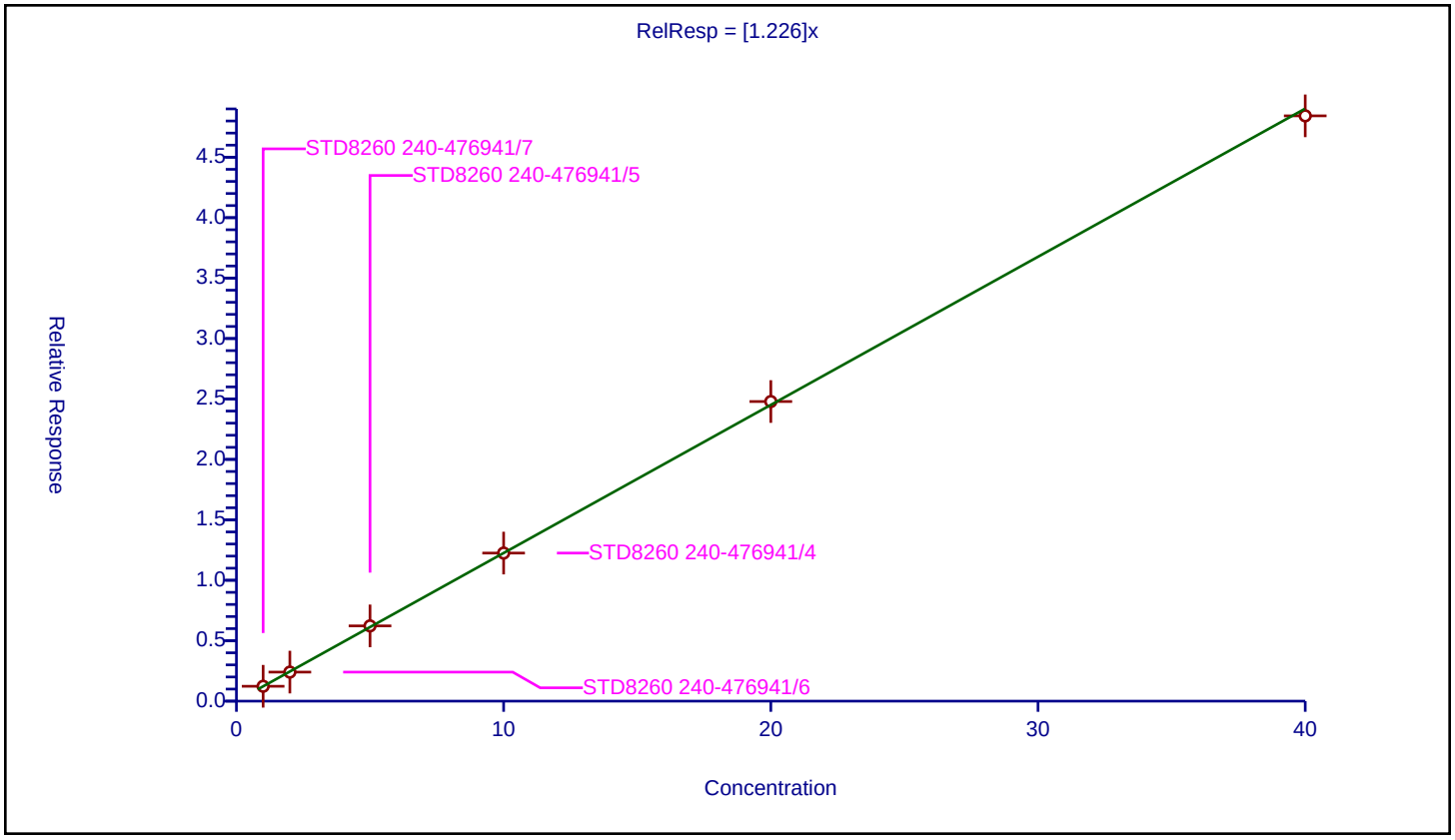
Curve Coefficients

Intercept:	0
Slope:	1.226

Error Coefficients

Standard Error:	2920000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.230869	10.0	1005314.0	1.230869	Y
2	STD8260 240-476941/6	2.0	2.4038	10.0	1025239.0	1.2019	Y
3	STD8260 240-476941/5	5.0	6.226562	10.0	1036230.0	1.245312	Y
4	STD8260 240-476941/4	10.0	12.24994	10.0	1083691.0	1.224994	Y
5	STD8260 240-476941/3	20.0	24.788912	10.0	1129906.0	1.239446	Y
6	STD8260 240-476941/2	40.0	48.424259	10.0	1176310.0	1.210606	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

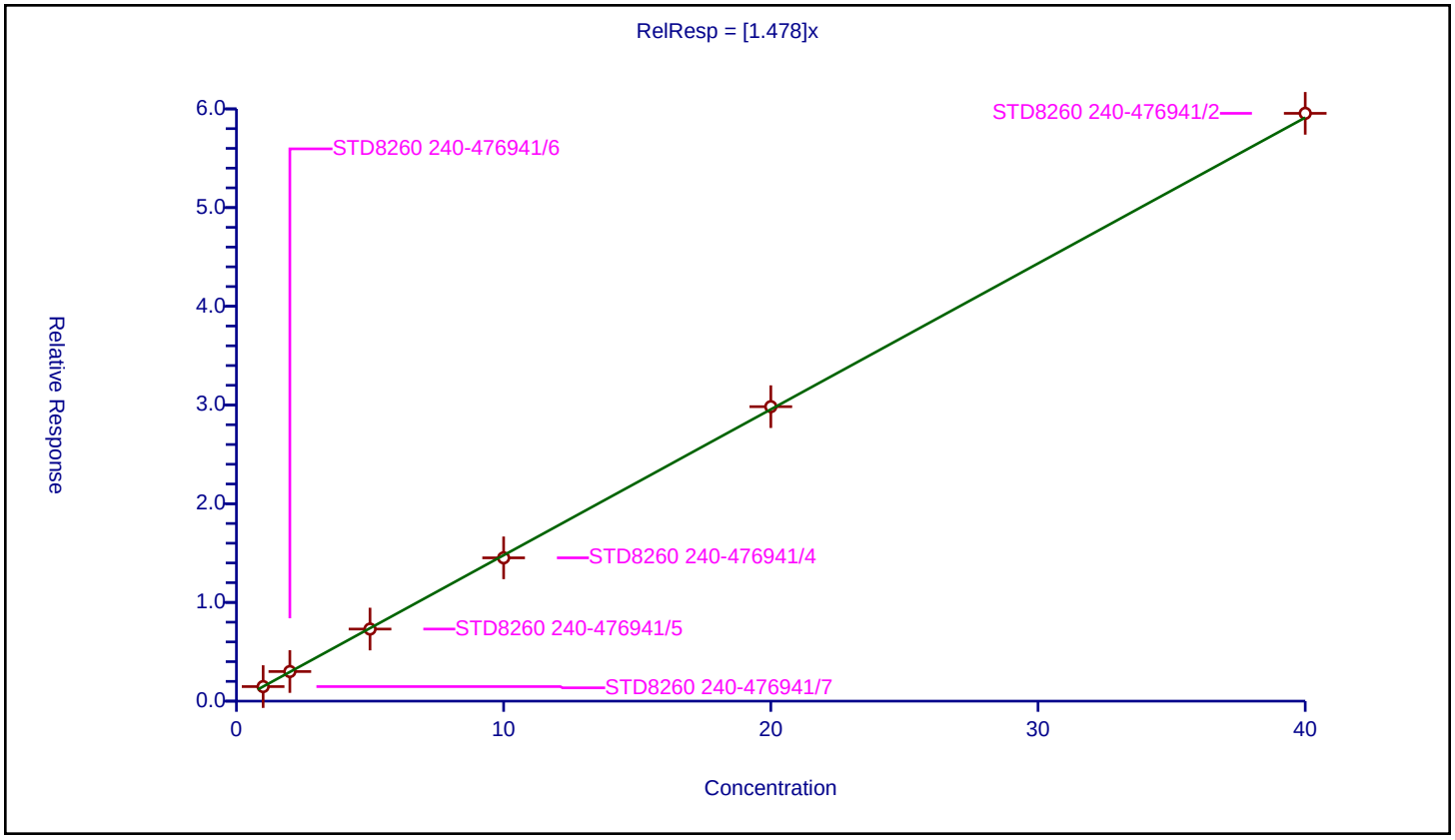
Curve Coefficients

Intercept:	0
Slope:	1.478

Error Coefficients

Standard Error:	3570000
Relative Standard Error:	1.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.474942	10.0	1005314.0	1.474942	Y
2	STD8260 240-476941/6	2.0	3.000208	10.0	1025239.0	1.500104	Y
3	STD8260 240-476941/5	5.0	7.30196	10.0	1036230.0	1.460392	Y
4	STD8260 240-476941/4	10.0	14.518484	10.0	1083691.0	1.451848	Y
5	STD8260 240-476941/3	20.0	29.834243	10.0	1129906.0	1.491712	Y
6	STD8260 240-476941/2	40.0	59.548503	10.0	1176310.0	1.488713	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

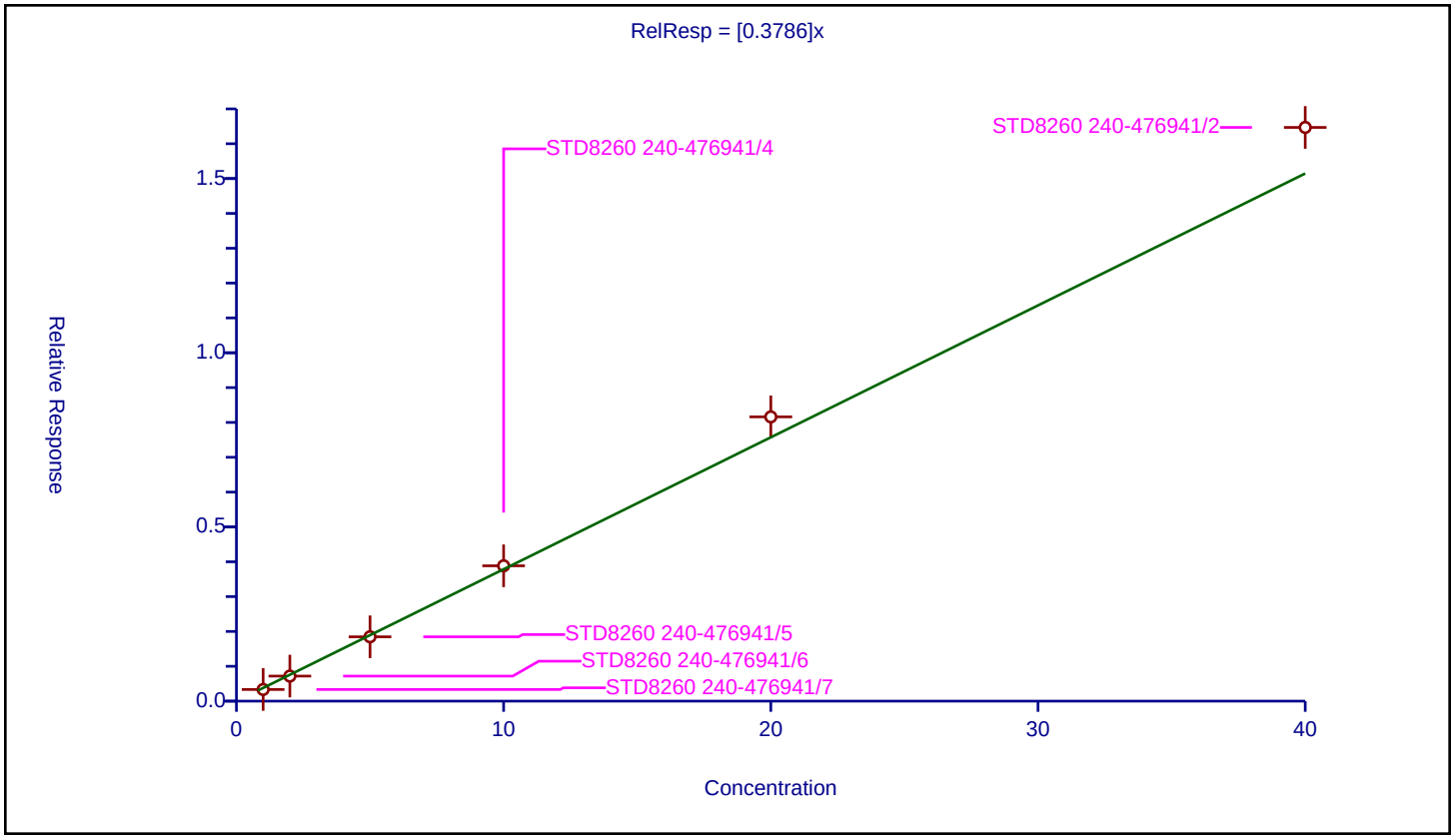
Curve Coefficients

Intercept:	0
Slope:	0.3786

Error Coefficients

Standard Error:	982000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.334652	10.0	1005314.0	0.334652	Y
2	STD8260 240-476941/6	2.0	0.719237	10.0	1025239.0	0.359619	Y
3	STD8260 240-476941/5	5.0	1.846771	10.0	1036230.0	0.369354	Y
4	STD8260 240-476941/4	10.0	3.884714	10.0	1083691.0	0.388471	Y
5	STD8260 240-476941/3	20.0	8.160343	10.0	1129906.0	0.408017	Y
6	STD8260 240-476941/2	40.0	16.46764	10.0	1176310.0	0.411691	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

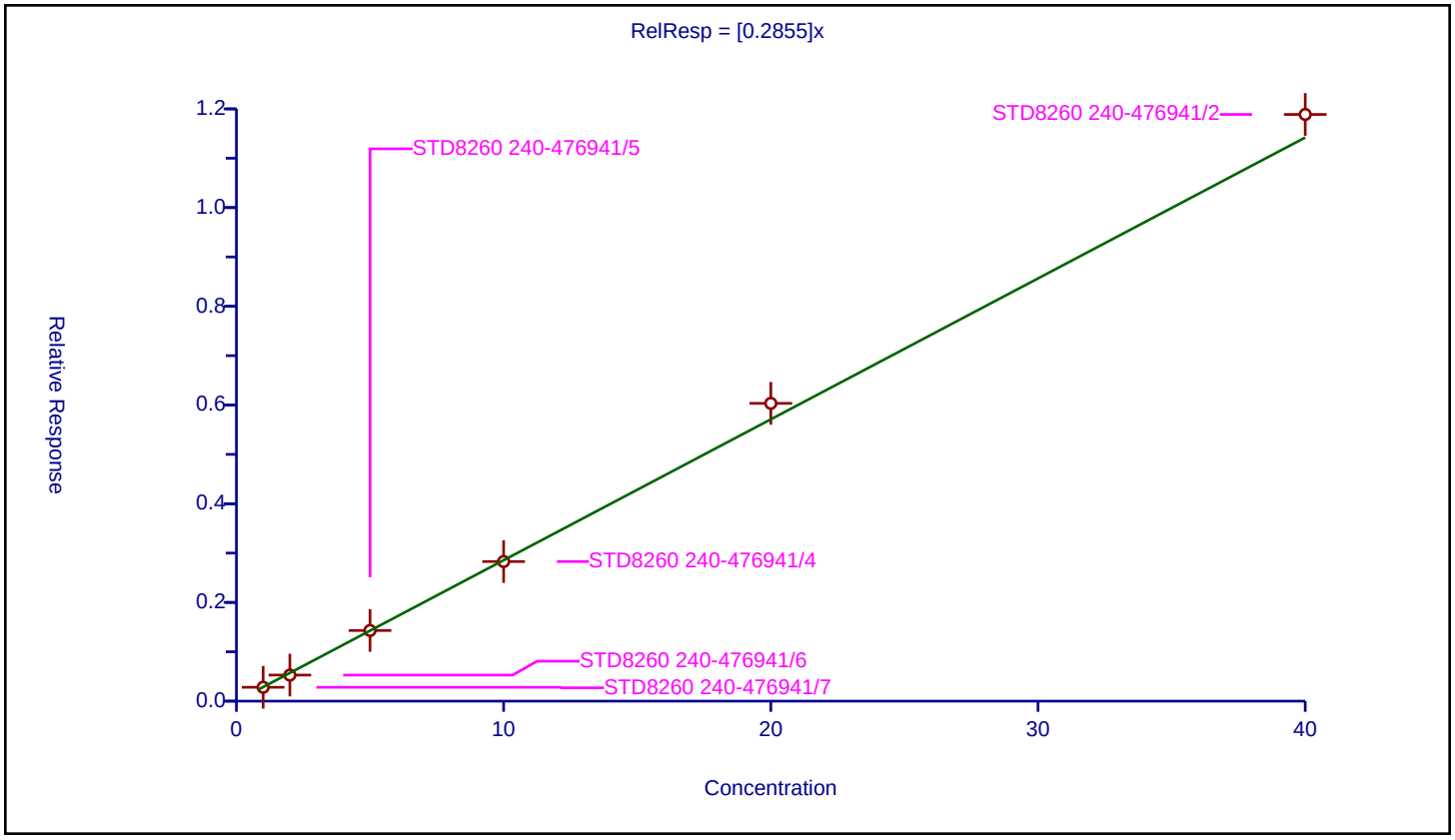
Curve Coefficients

Intercept:	0
Slope:	0.2855

Error Coefficients

Standard Error:	713000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280858	10.0	1005314.0	0.280858	Y
2	STD8260 240-476941/6	2.0	0.528218	10.0	1025239.0	0.264109	Y
3	STD8260 240-476941/5	5.0	1.431671	10.0	1036230.0	0.286334	Y
4	STD8260 240-476941/4	10.0	2.828435	10.0	1083691.0	0.282844	Y
5	STD8260 240-476941/3	20.0	6.033679	10.0	1129906.0	0.301684	Y
6	STD8260 240-476941/2	40.0	11.887045	10.0	1176310.0	0.297176	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

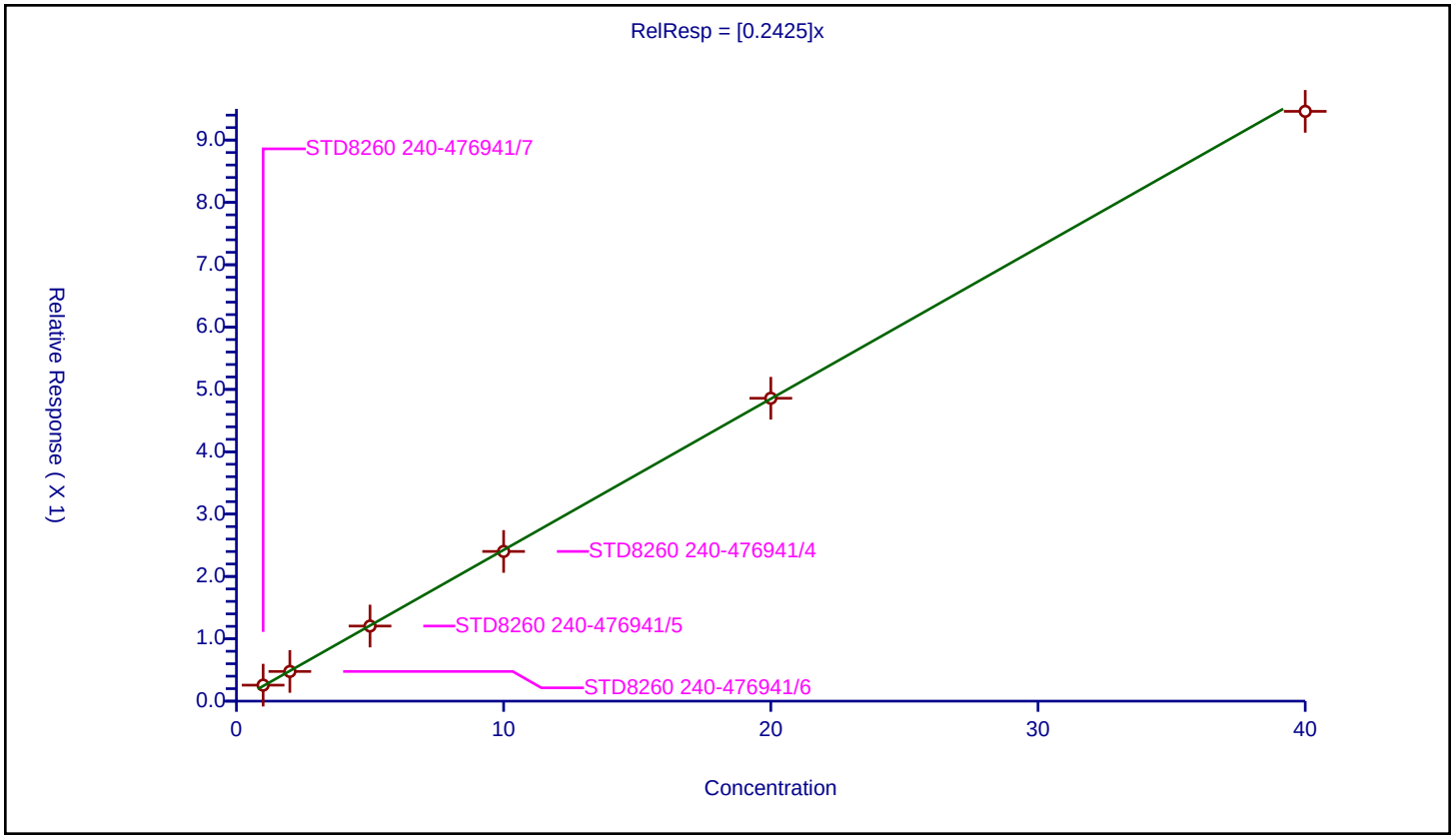
Curve Coefficients

Intercept:	0
Slope:	0.2425

Error Coefficients

Standard Error:	570000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.256338	10.0	1005314.0	0.256338	Y
2	STD8260 240-476941/6	2.0	0.476347	10.0	1025239.0	0.238174	Y
3	STD8260 240-476941/5	5.0	1.204549	10.0	1036230.0	0.24091	Y
4	STD8260 240-476941/4	10.0	2.401256	10.0	1083691.0	0.240126	Y
5	STD8260 240-476941/3	20.0	4.858829	10.0	1129906.0	0.242941	Y
6	STD8260 240-476941/2	40.0	9.460516	10.0	1176310.0	0.236513	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

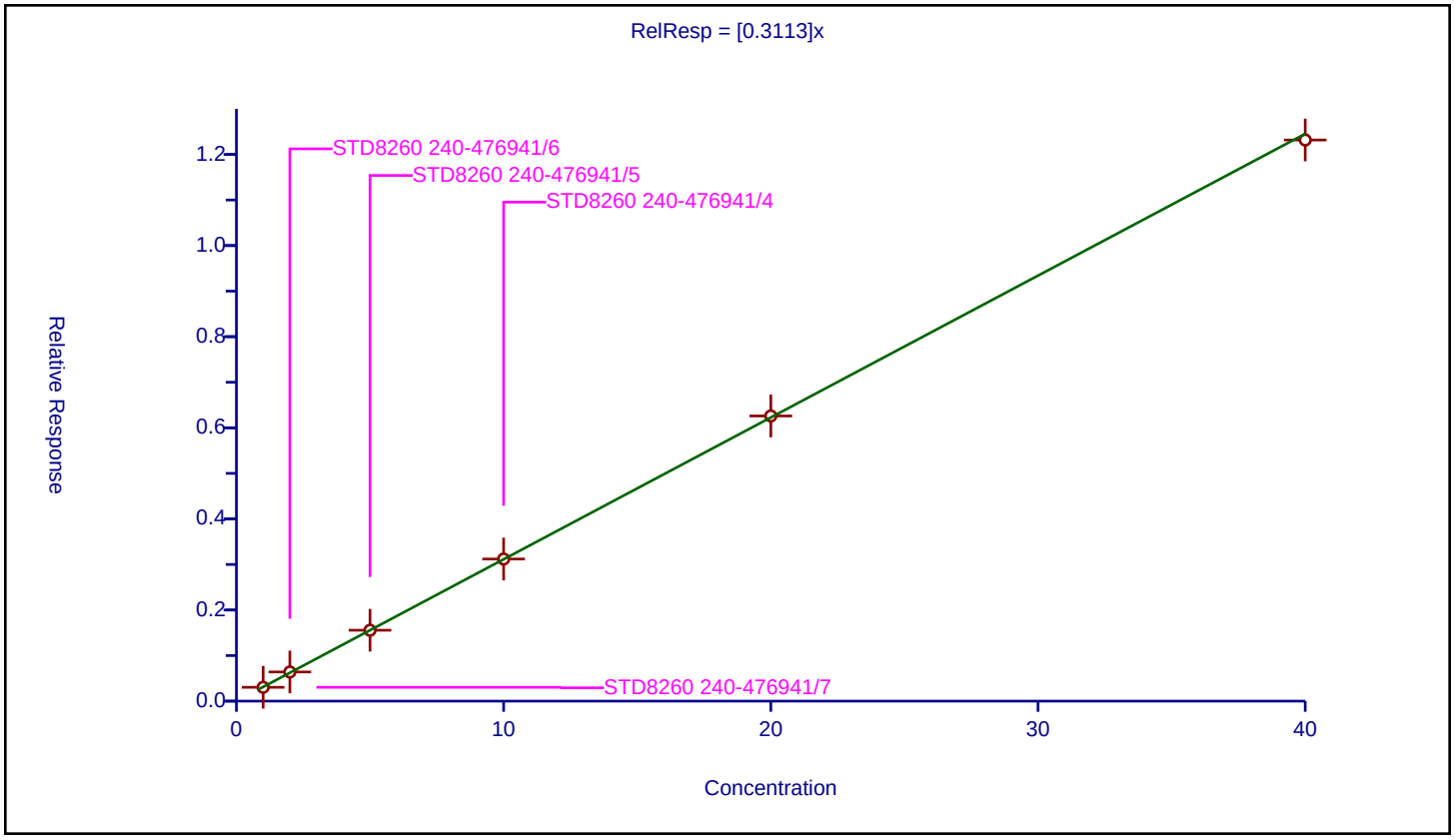
Curve Coefficients

Intercept:	0
Slope:	0.3113

Error Coefficients

Standard Error:	741000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.303716	10.0	1005314.0	0.303716	Y
2	STD8260 240-476941/6	2.0	0.640251	10.0	1025239.0	0.320125	Y
3	STD8260 240-476941/5	5.0	1.556739	10.0	1036230.0	0.311348	Y
4	STD8260 240-476941/4	10.0	3.119349	10.0	1083691.0	0.311935	Y
5	STD8260 240-476941/3	20.0	6.259972	10.0	1129906.0	0.312999	Y
6	STD8260 240-476941/2	40.0	12.317076	10.0	1176310.0	0.307927	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

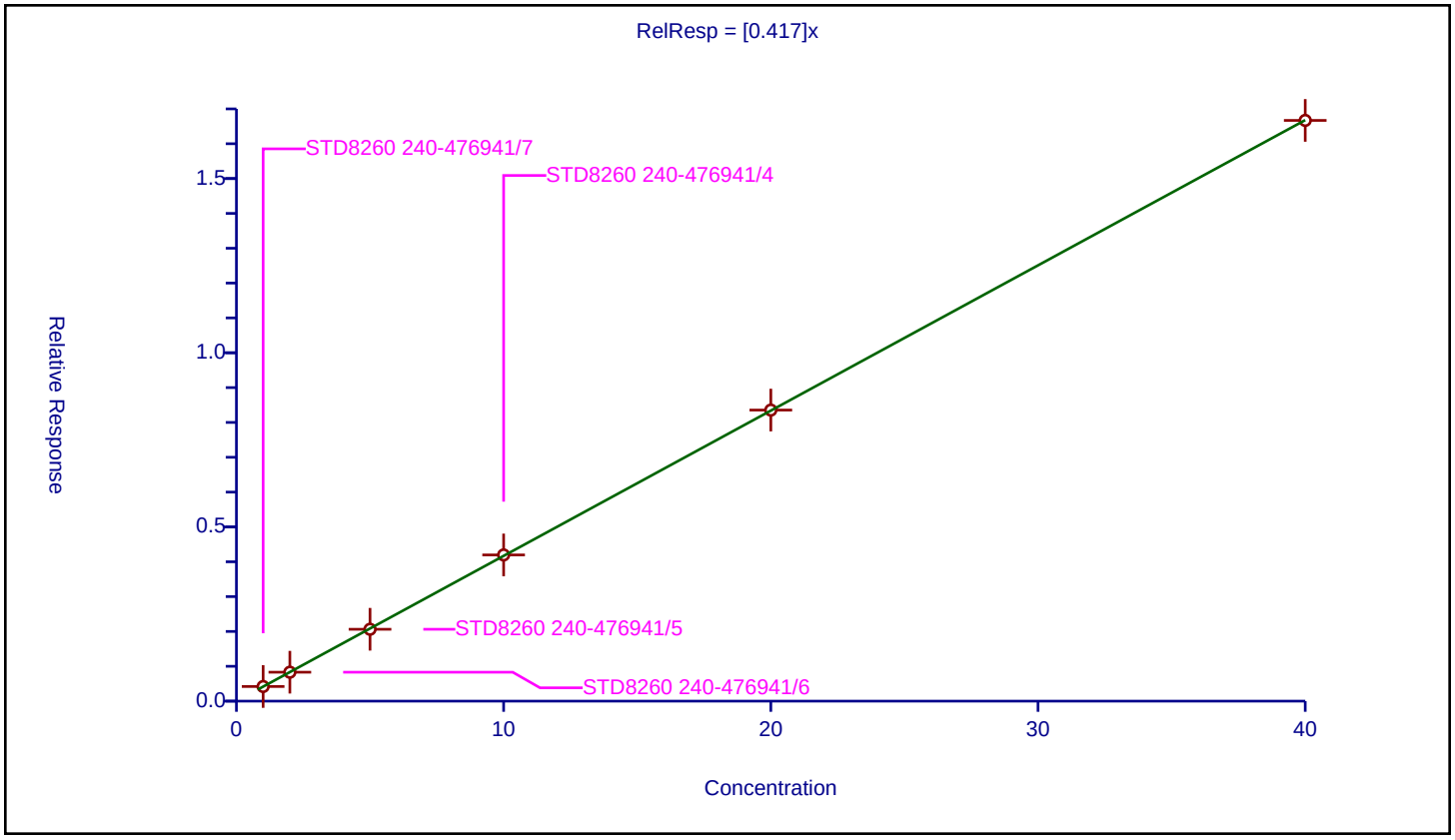
Curve Coefficients

Intercept:	0
Slope:	0.417

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	0.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.41974	10.0	1005314.0	0.41974	Y
2	STD8260 240-476941/6	2.0	0.830509	10.0	1025239.0	0.415254	Y
3	STD8260 240-476941/5	5.0	2.063326	10.0	1036230.0	0.412665	Y
4	STD8260 240-476941/4	10.0	4.196418	10.0	1083691.0	0.419642	Y
5	STD8260 240-476941/3	20.0	8.354545	10.0	1129906.0	0.417727	Y
6	STD8260 240-476941/2	40.0	16.668735	10.0	1176310.0	0.416718	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

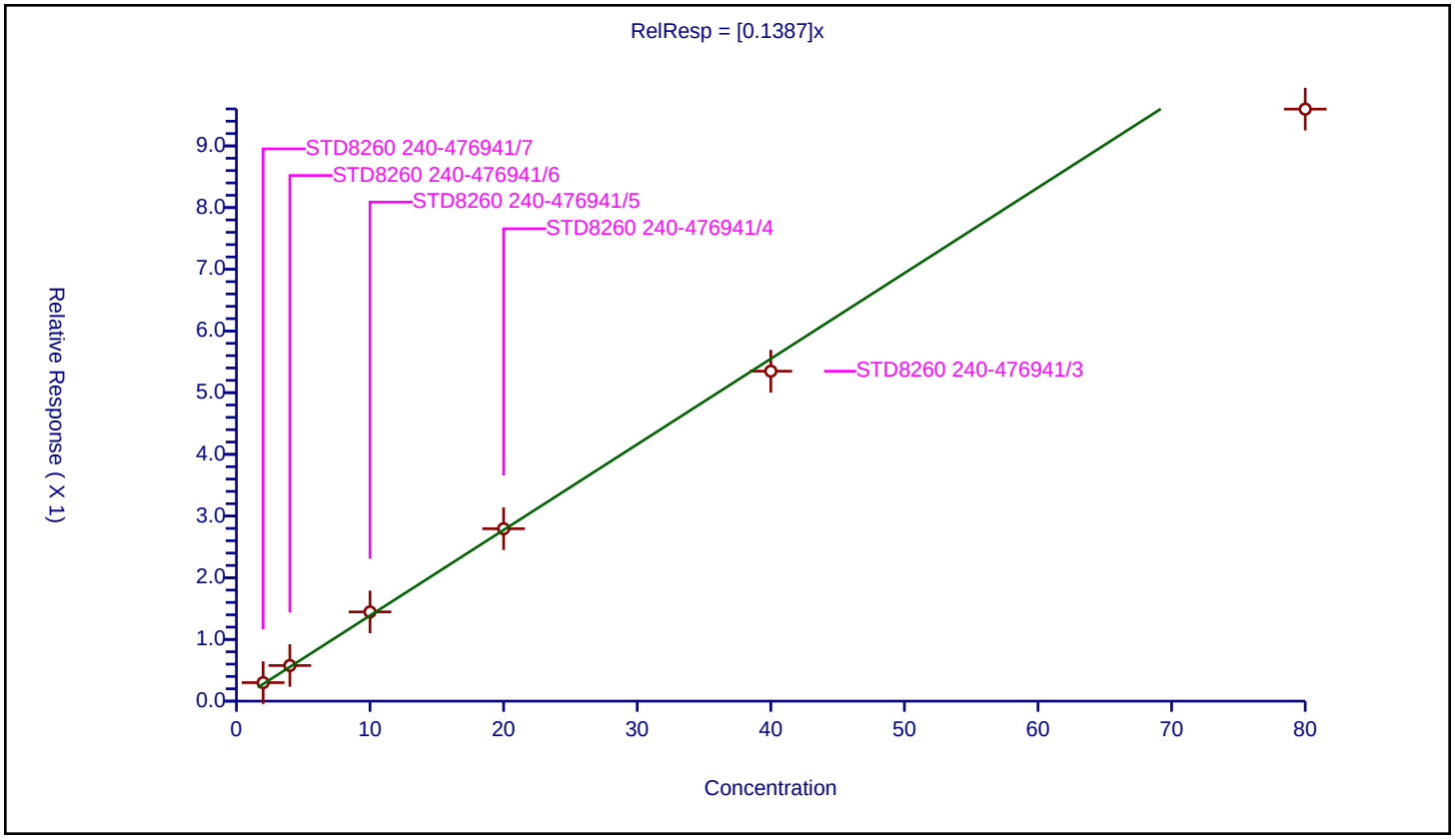
Curve Coefficients

Intercept:	0
Slope:	0.1387

Error Coefficients

Standard Error:	593000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.300175	10.0	1005314.0	0.150087	Y
2	STD8260 240-476941/6	4.0	0.577309	10.0	1025239.0	0.144327	Y
3	STD8260 240-476941/5	10.0	1.446436	10.0	1036230.0	0.144644	Y
4	STD8260 240-476941/4	20.0	2.794736	10.0	1083691.0	0.139737	Y
5	STD8260 240-476941/3	40.0	5.348657	10.0	1129906.0	0.133716	Y
6	STD8260 240-476941/2	80.0	9.596441	10.0	1176310.0	0.119956	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

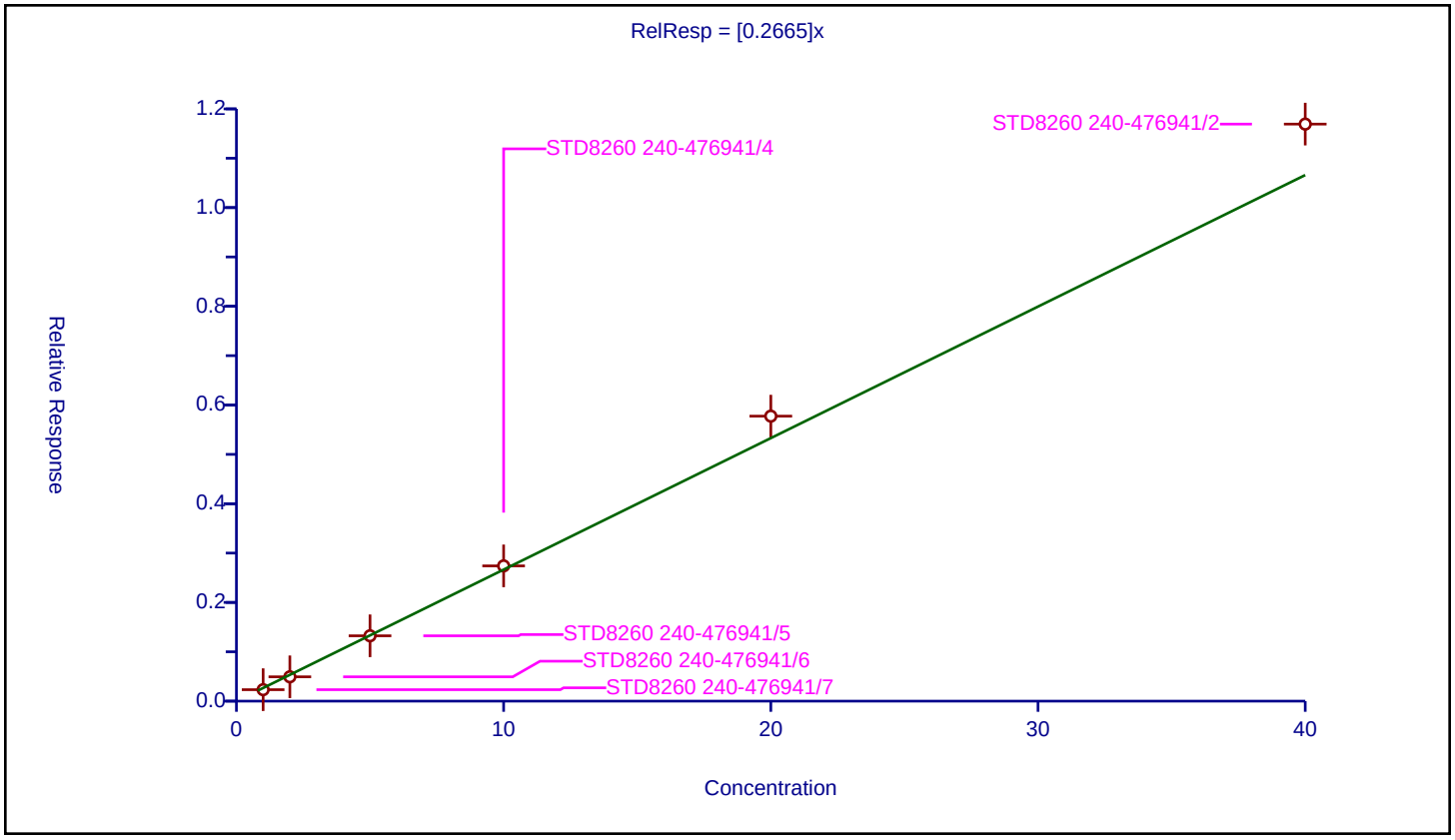
Curve Coefficients

Intercept:	0
Slope:	0.2665

Error Coefficients

Standard Error:	697000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.232335	10.0	1005314.0	0.232335	Y
2	STD8260 240-476941/6	2.0	0.493056	10.0	1025239.0	0.246528	Y
3	STD8260 240-476941/5	5.0	1.324272	10.0	1036230.0	0.264854	Y
4	STD8260 240-476941/4	10.0	2.740781	10.0	1083691.0	0.274078	Y
5	STD8260 240-476941/3	20.0	5.774799	10.0	1129906.0	0.28874	Y
6	STD8260 240-476941/2	40.0	11.69179	10.0	1176310.0	0.292295	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

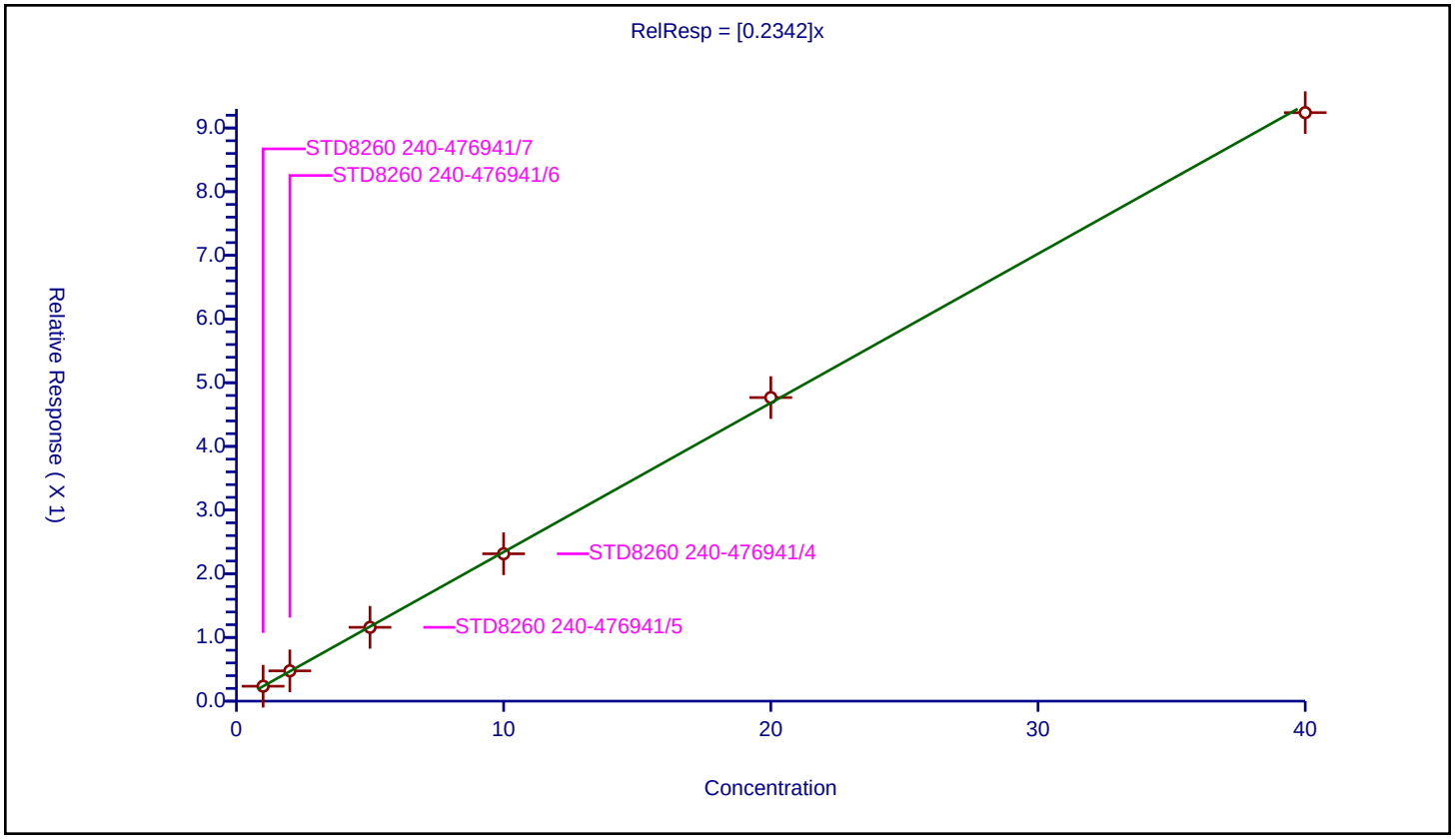
Curve Coefficients

Intercept:	0
Slope:	0.2342

Error Coefficients

Standard Error:	557000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.234434	10.0	1005314.0	0.234434	Y
2	STD8260 240-476941/6	2.0	0.475831	10.0	1025239.0	0.237915	Y
3	STD8260 240-476941/5	5.0	1.159009	10.0	1036230.0	0.231802	Y
4	STD8260 240-476941/4	10.0	2.313713	10.0	1083691.0	0.231371	Y
5	STD8260 240-476941/3	20.0	4.767131	10.0	1129906.0	0.238357	Y
6	STD8260 240-476941/2	40.0	9.240914	10.0	1176310.0	0.231023	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

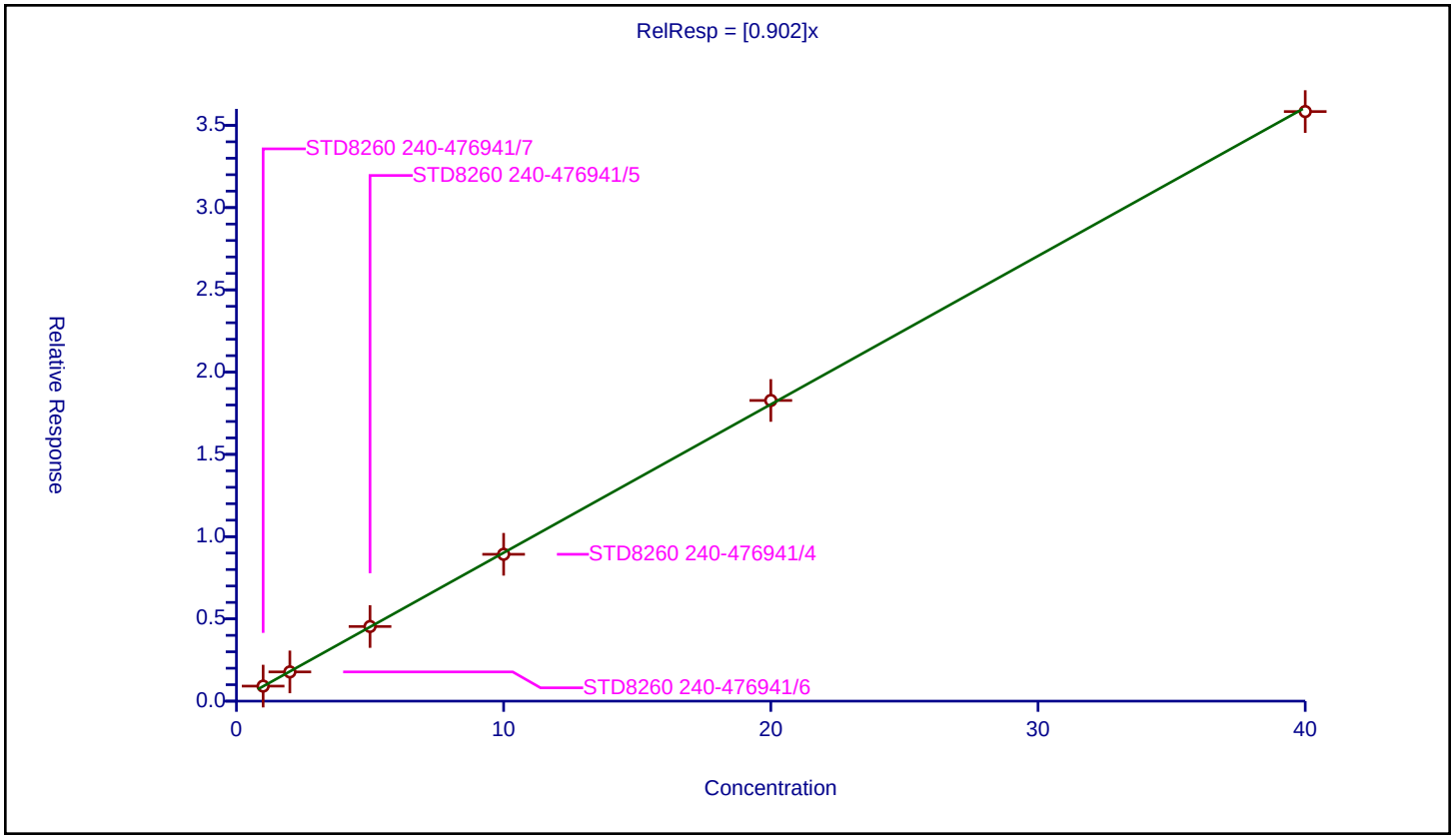
Curve Coefficients

Intercept:	0
Slope:	0.902

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.913565	10.0	1005314.0	0.913565	Y
2	STD8260 240-476941/6	2.0	1.777293	10.0	1025239.0	0.888646	Y
3	STD8260 240-476941/5	5.0	4.536396	10.0	1036230.0	0.907279	Y
4	STD8260 240-476941/4	10.0	8.926244	10.0	1083691.0	0.892624	Y
5	STD8260 240-476941/3	20.0	18.276565	10.0	1129906.0	0.913828	Y
6	STD8260 240-476941/2	40.0	35.837526	10.0	1176310.0	0.895938	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

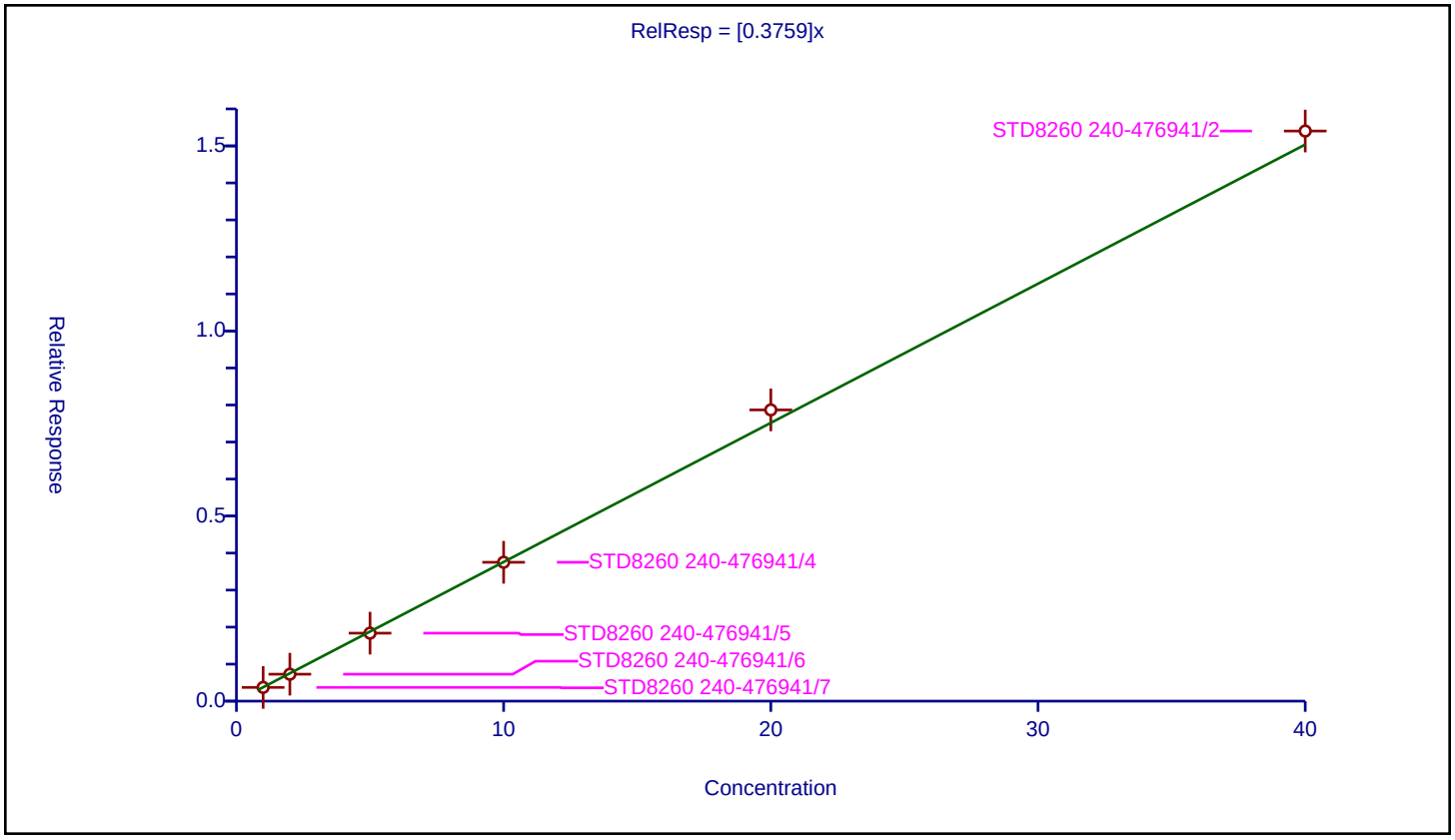
Curve Coefficients

Intercept:	0
Slope:	0.3759

Error Coefficients

Standard Error:	925000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.370859	10.0	1005314.0	0.370859	Y
2	STD8260 240-476941/6	2.0	0.72745	10.0	1025239.0	0.363725	Y
3	STD8260 240-476941/5	5.0	1.836282	10.0	1036230.0	0.367256	Y
4	STD8260 240-476941/4	10.0	3.751632	10.0	1083691.0	0.375163	Y
5	STD8260 240-476941/3	20.0	7.867761	10.0	1129906.0	0.393388	Y
6	STD8260 240-476941/2	40.0	15.401977	10.0	1176310.0	0.385049	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

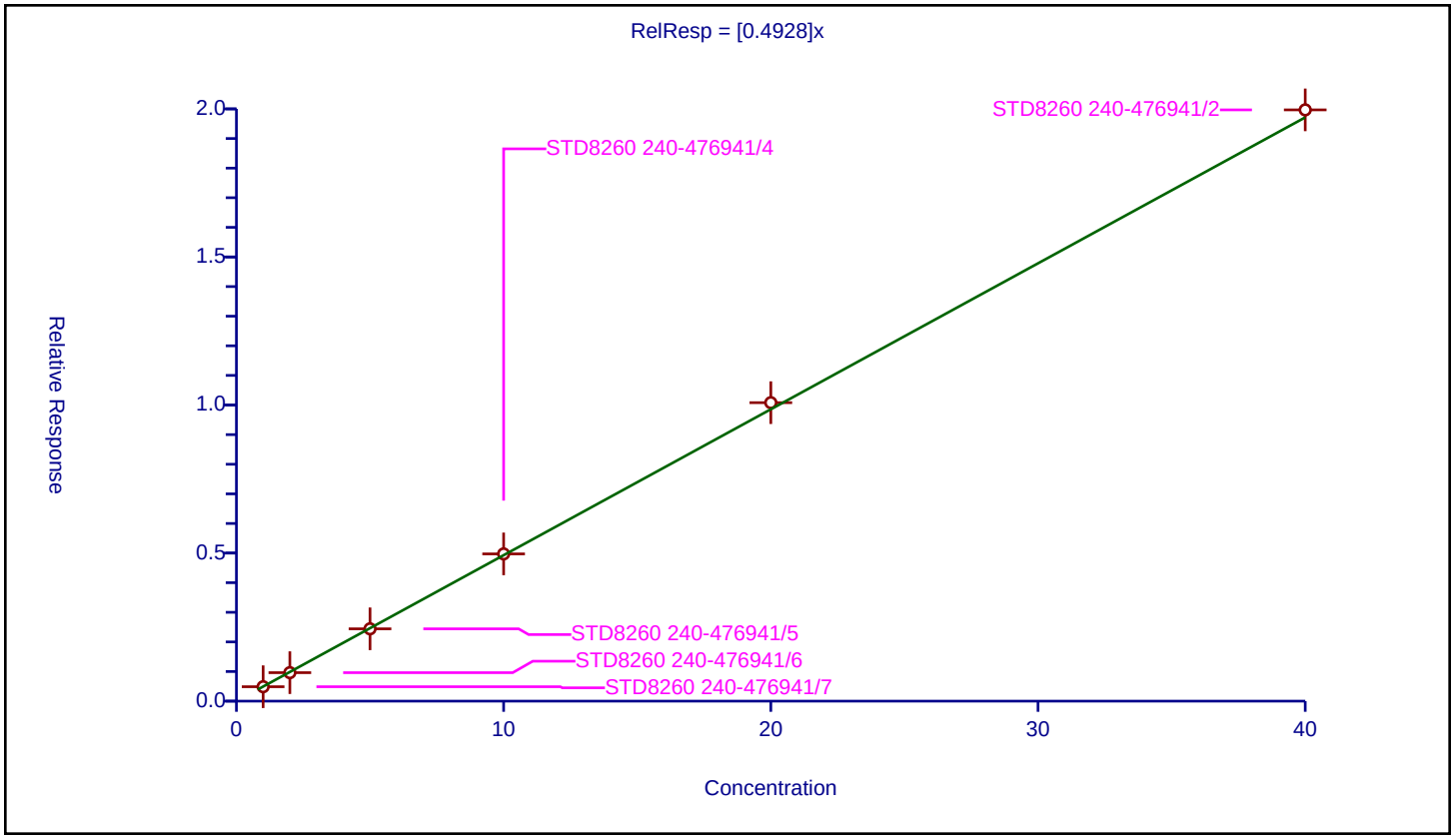
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.486932	10.0	1005314.0	0.486932	Y
2	STD8260 240-476941/6	2.0	0.962254	10.0	1025239.0	0.481127	Y
3	STD8260 240-476941/5	5.0	2.442151	10.0	1036230.0	0.48843	Y
4	STD8260 240-476941/4	10.0	4.972155	10.0	1083691.0	0.497216	Y
5	STD8260 240-476941/3	20.0	10.079254	10.0	1129906.0	0.503963	Y
6	STD8260 240-476941/2	40.0	19.966276	10.0	1176310.0	0.499157	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

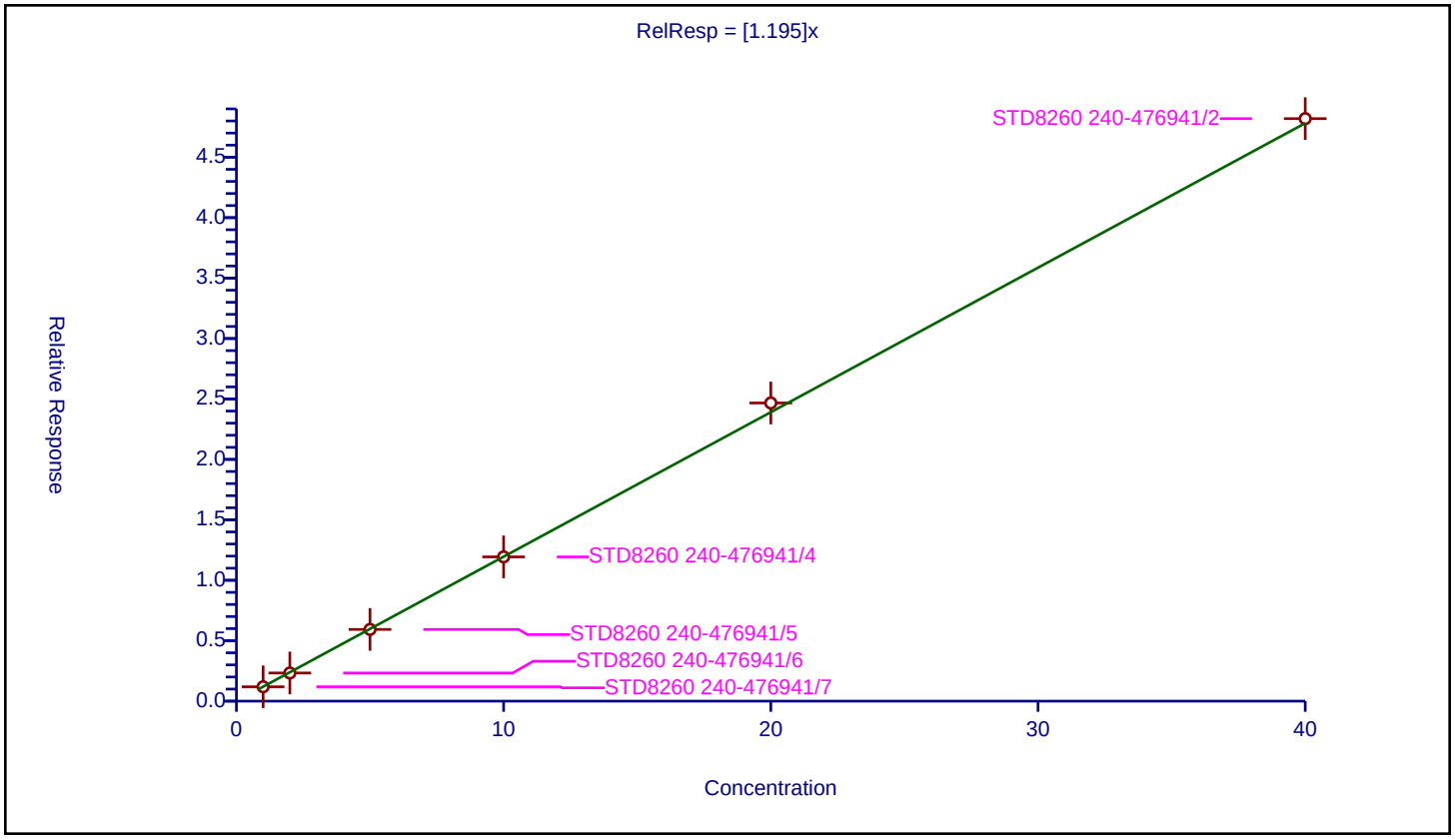
Curve Coefficients

Intercept:	0
Slope:	1.195

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.189141	10.0	1005314.0	1.189141	Y
2	STD8260 240-476941/6	2.0	2.329369	10.0	1025239.0	1.164685	Y
3	STD8260 240-476941/5	5.0	5.934213	10.0	1036230.0	1.186843	Y
4	STD8260 240-476941/4	10.0	11.935423	10.0	1083691.0	1.193542	Y
5	STD8260 240-476941/3	20.0	24.667964	10.0	1129906.0	1.233398	Y
6	STD8260 240-476941/2	40.0	48.192645	10.0	1176310.0	1.204816	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

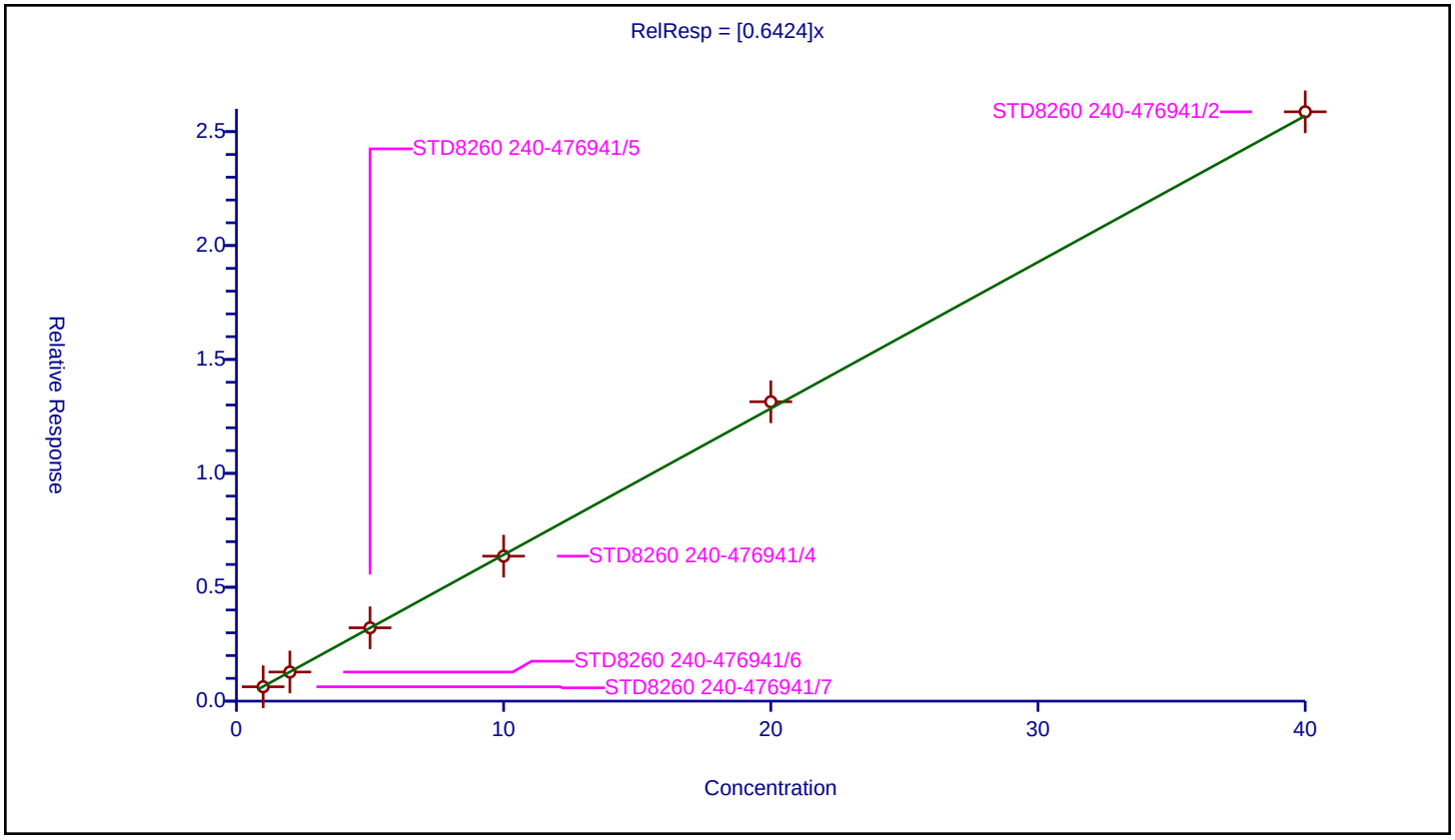
Curve Coefficients

Intercept:	0
Slope:	0.6424

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.631146	10.0	1005314.0	0.631146	Y
2	STD8260 240-476941/6	2.0	1.278404	10.0	1025239.0	0.639202	Y
3	STD8260 240-476941/5	5.0	3.219131	10.0	1036230.0	0.643826	Y
4	STD8260 240-476941/4	10.0	6.364268	10.0	1083691.0	0.636427	Y
5	STD8260 240-476941/3	20.0	13.144633	10.0	1129906.0	0.657232	Y
6	STD8260 240-476941/2	40.0	25.873035	10.0	1176310.0	0.646826	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

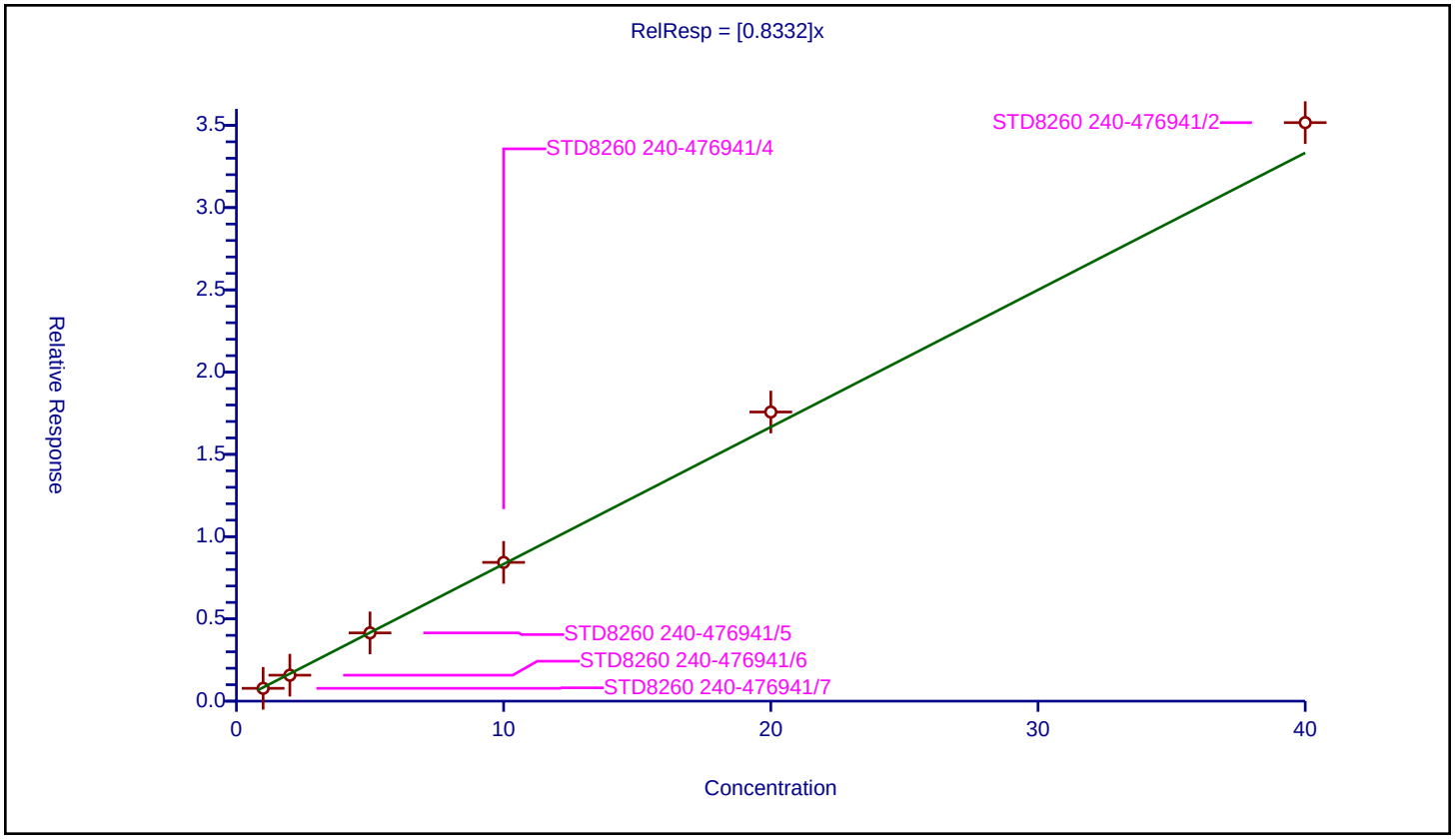
Curve Coefficients

Intercept:	0
Slope:	0.8332

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.779398	10.0	1005314.0	0.779398	Y
2	STD8260 240-476941/6	2.0	1.577944	10.0	1025239.0	0.788972	Y
3	STD8260 240-476941/5	5.0	4.148712	10.0	1036230.0	0.829742	Y
4	STD8260 240-476941/4	10.0	8.433852	10.0	1083691.0	0.843385	Y
5	STD8260 240-476941/3	20.0	17.574002	10.0	1129906.0	0.8787	Y
6	STD8260 240-476941/2	40.0	35.165339	10.0	1176310.0	0.879133	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

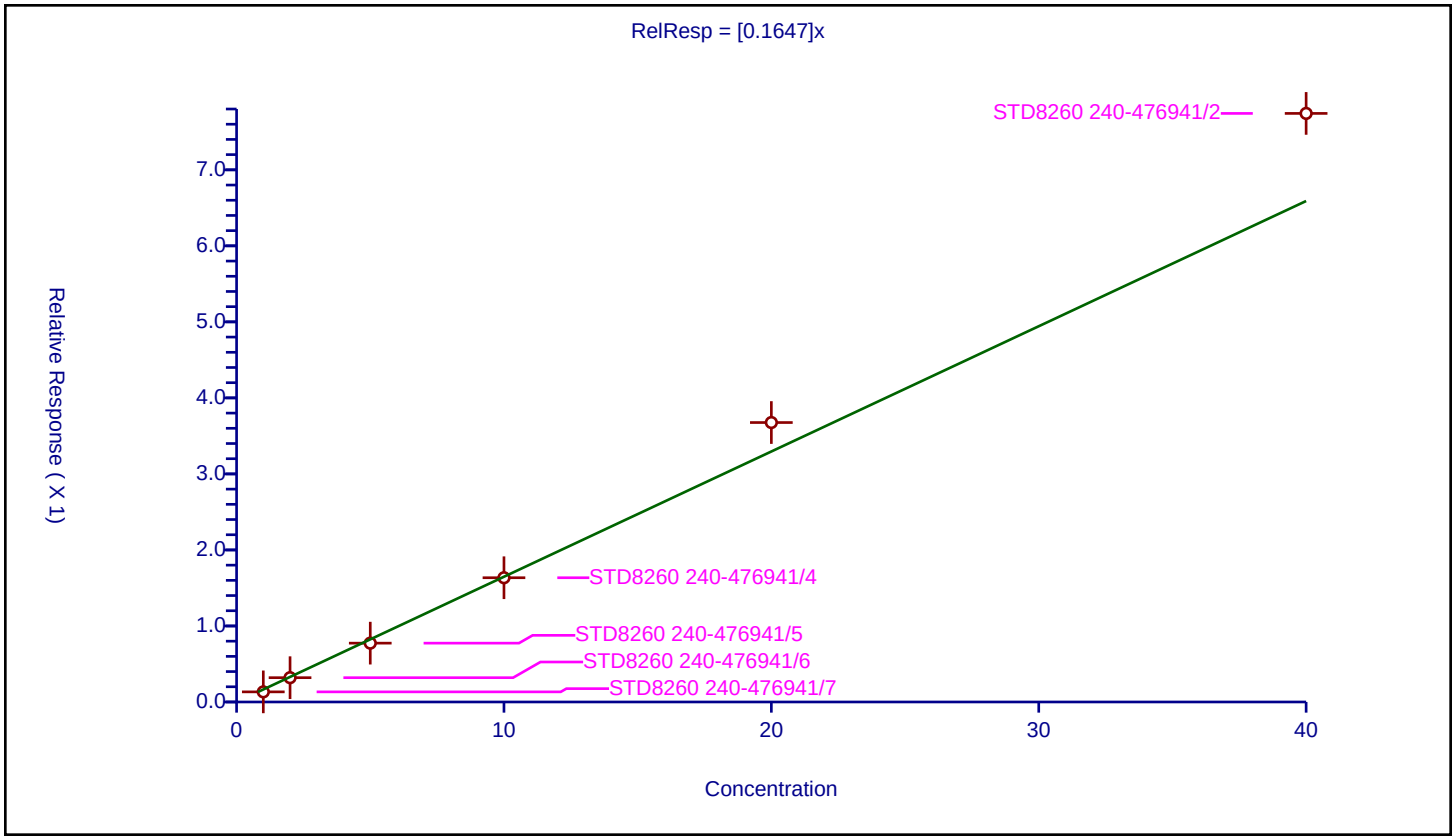
Curve Coefficients

Intercept:	0
Slope:	0.1647

Error Coefficients

Standard Error:	456000
Relative Standard Error:	13.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.132963	10.0	1005314.0	0.132963	Y
2	STD8260 240-476941/6	2.0	0.319808	10.0	1025239.0	0.159904	Y
3	STD8260 240-476941/5	5.0	0.774152	10.0	1036230.0	0.15483	Y
4	STD8260 240-476941/4	10.0	1.63434	10.0	1083691.0	0.163434	Y
5	STD8260 240-476941/3	20.0	3.675987	10.0	1129906.0	0.183799	Y
6	STD8260 240-476941/2	40.0	7.742032	10.0	1176310.0	0.193551	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

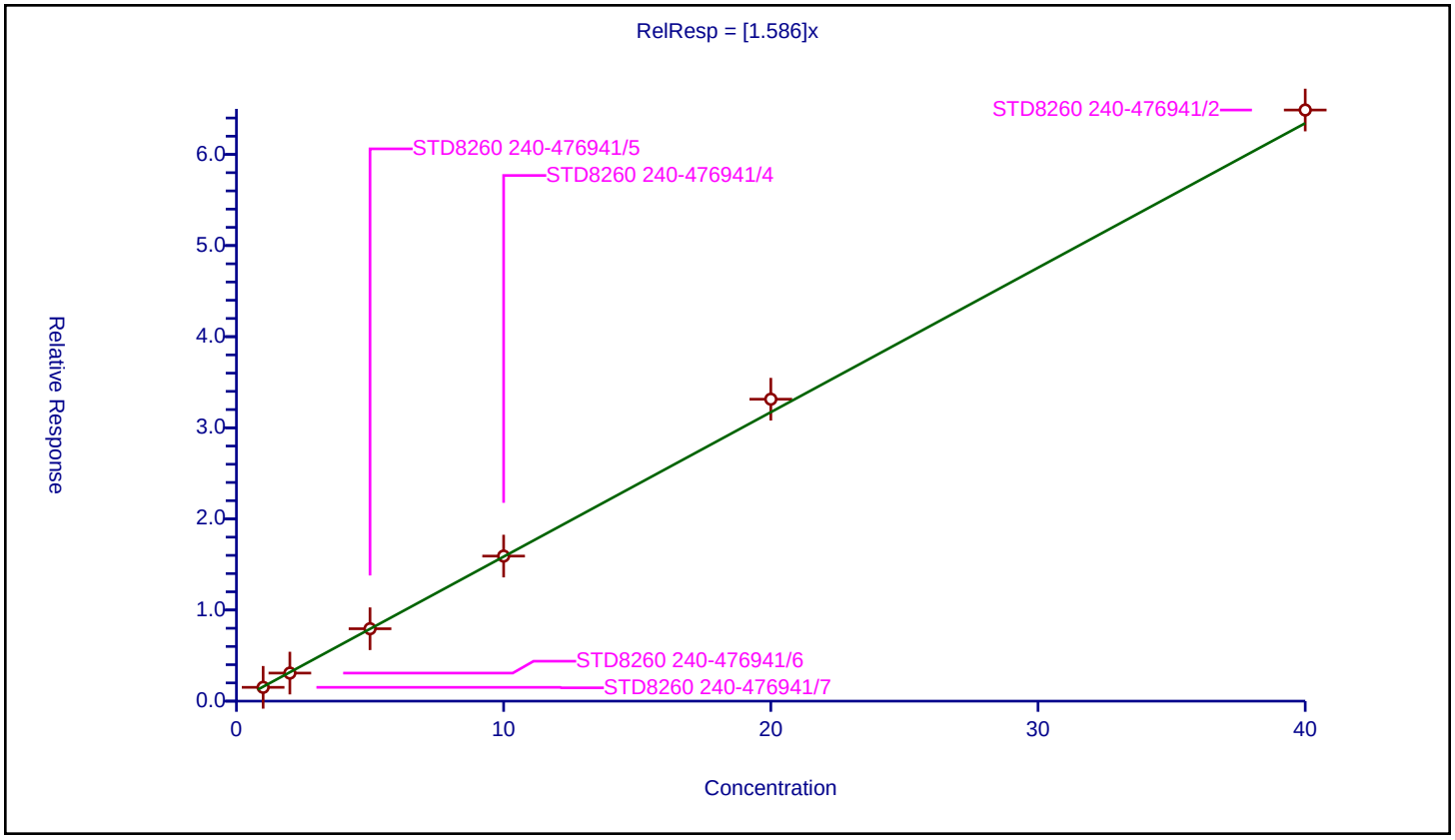
Curve Coefficients

Intercept:	0
Slope:	1.586

Error Coefficients

Standard Error:	3900000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.514611	10.0	1005314.0	1.514611	Y
2	STD8260 240-476941/6	2.0	3.078365	10.0	1025239.0	1.539183	Y
3	STD8260 240-476941/5	5.0	7.945601	10.0	1036230.0	1.58912	Y
4	STD8260 240-476941/4	10.0	15.921808	10.0	1083691.0	1.592181	Y
5	STD8260 240-476941/3	20.0	33.139358	10.0	1129906.0	1.656968	Y
6	STD8260 240-476941/2	40.0	64.876784	10.0	1176310.0	1.62192	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

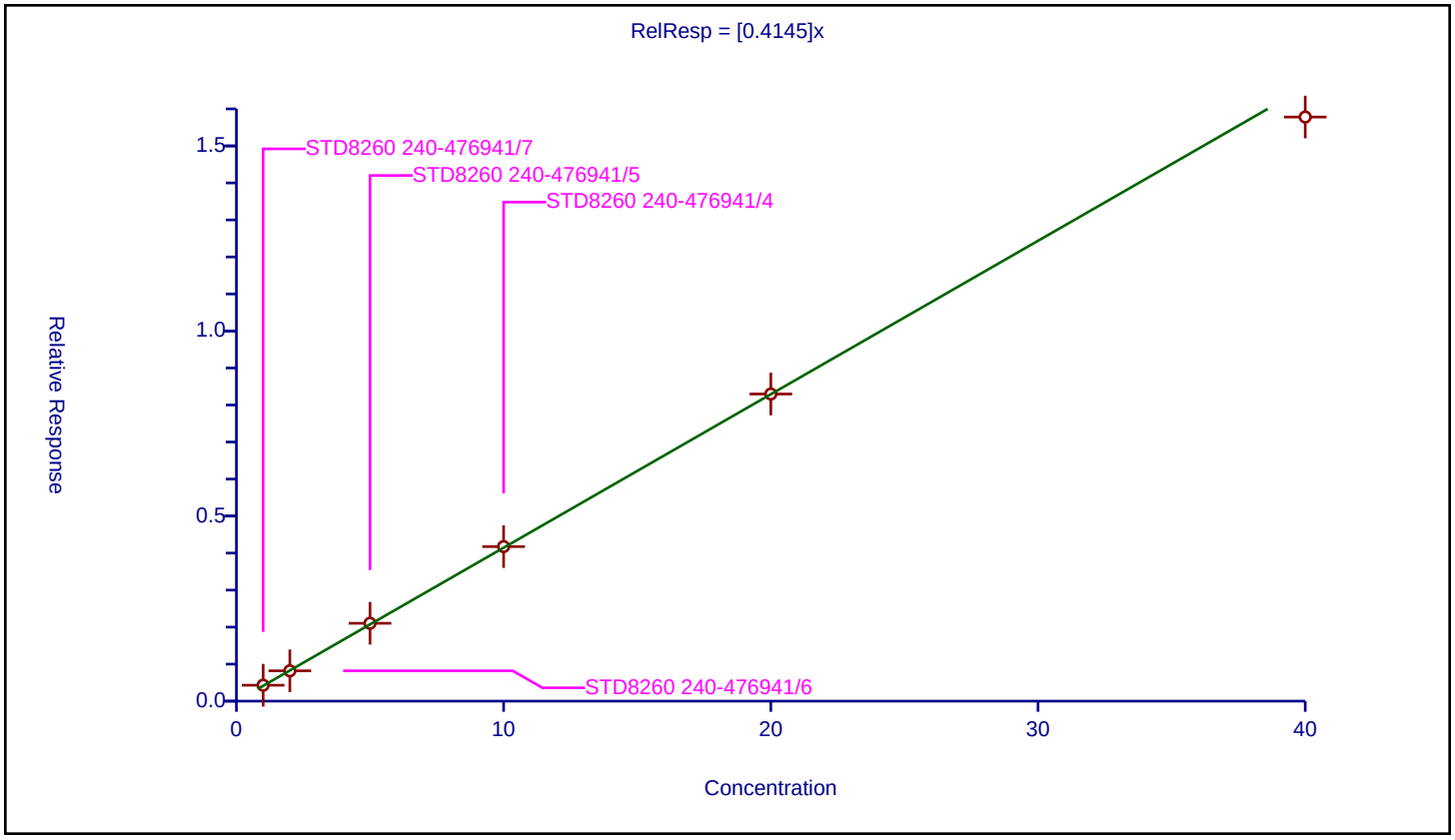
Curve Coefficients

Intercept:	0
Slope:	0.4145

Error Coefficients

Standard Error:	958000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.429995	10.0	1005314.0	0.429995	Y
2	STD8260 240-476941/6	2.0	0.819194	10.0	1025239.0	0.409597	Y
3	STD8260 240-476941/5	5.0	2.103838	10.0	1036230.0	0.420768	Y
4	STD8260 240-476941/4	10.0	4.175222	10.0	1083691.0	0.417522	Y
5	STD8260 240-476941/3	20.0	8.297124	10.0	1129906.0	0.414856	Y
6	STD8260 240-476941/2	40.0	15.780109	10.0	1176310.0	0.394503	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

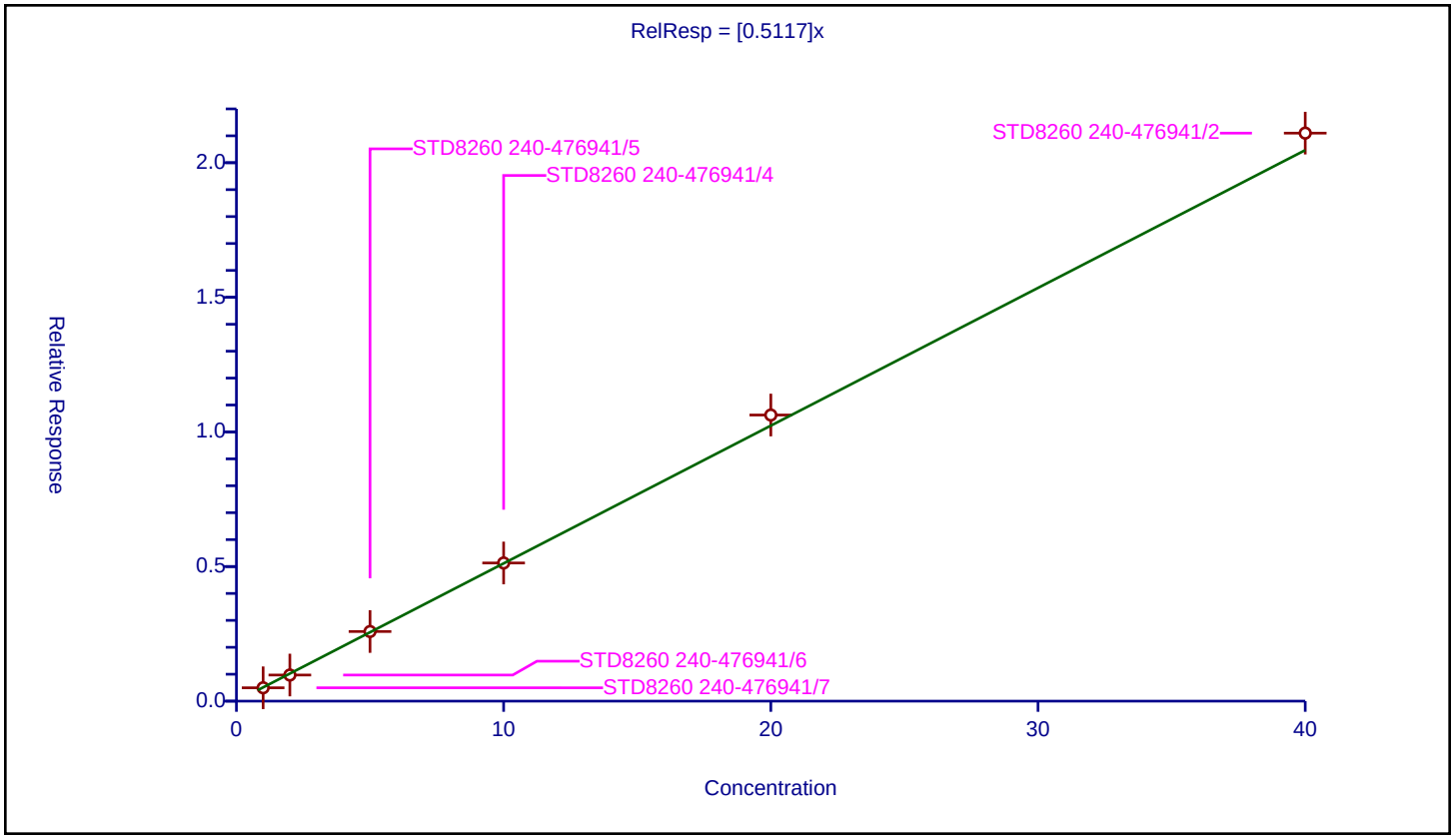
Curve Coefficients

Intercept:	0
Slope:	0.5117

Error Coefficients

Standard Error:	726000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.495697	10.0	606056.0	0.495697	Y
2	STD8260 240-476941/6	2.0	0.969796	10.0	608128.0	0.484898	Y
3	STD8260 240-476941/5	5.0	2.586701	10.0	621189.0	0.51734	Y
4	STD8260 240-476941/4	10.0	5.131993	10.0	639882.0	0.513199	Y
5	STD8260 240-476941/3	20.0	10.627968	10.0	663171.0	0.531398	Y
6	STD8260 240-476941/2	40.0	21.099818	10.0	670129.0	0.527495	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

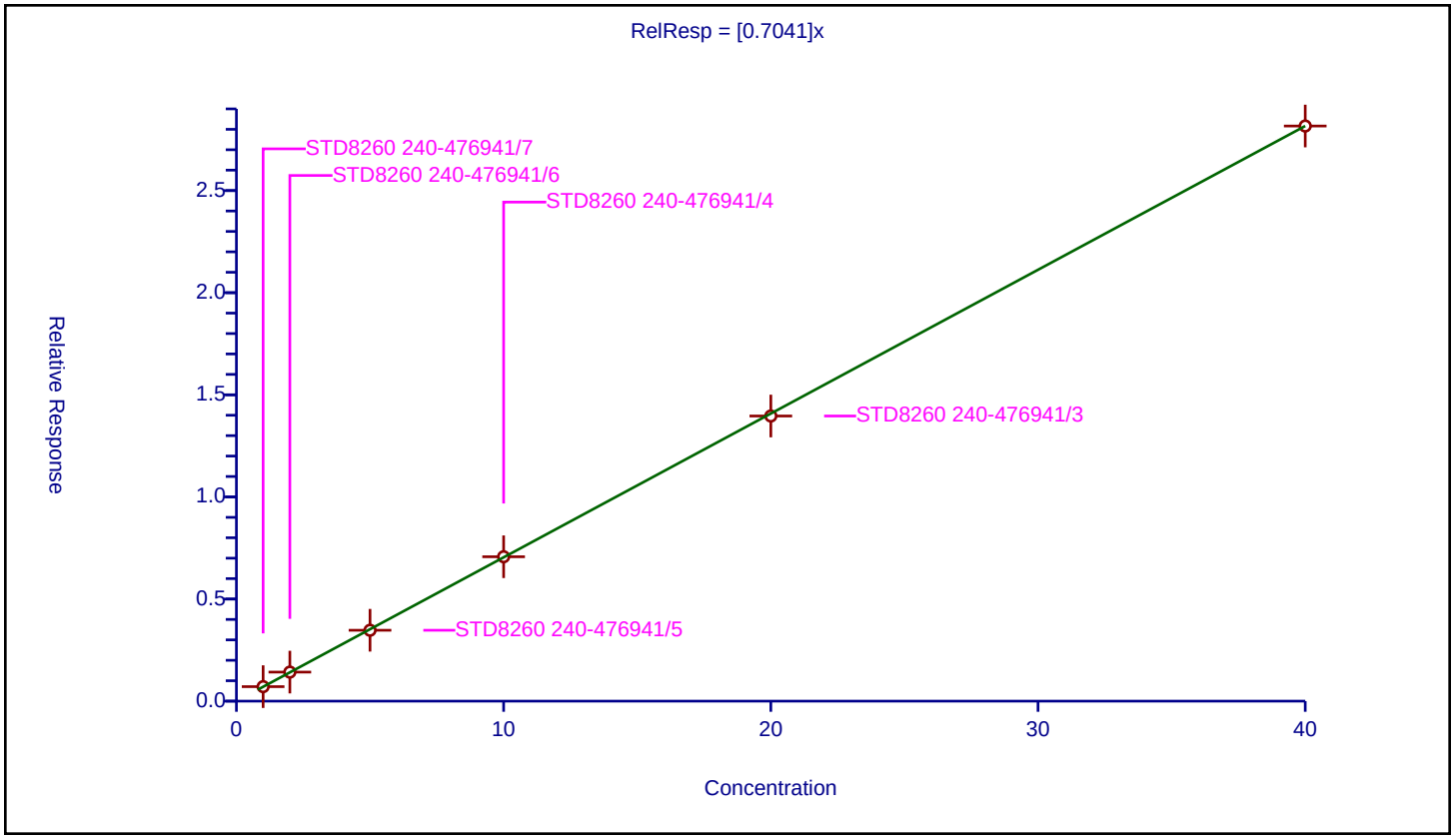
Curve Coefficients

Intercept:	0
Slope:	0.7041

Error Coefficients

Standard Error:	967000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.70967	10.0	606056.0	0.70967	Y
2	STD8260 240-476941/6	2.0	1.422595	10.0	608128.0	0.711298	Y
3	STD8260 240-476941/5	5.0	3.470908	10.0	621189.0	0.694182	Y
4	STD8260 240-476941/4	10.0	7.070554	10.0	639882.0	0.707055	Y
5	STD8260 240-476941/3	20.0	13.962161	10.0	663171.0	0.698108	Y
6	STD8260 240-476941/2	40.0	28.161503	10.0	670129.0	0.704038	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

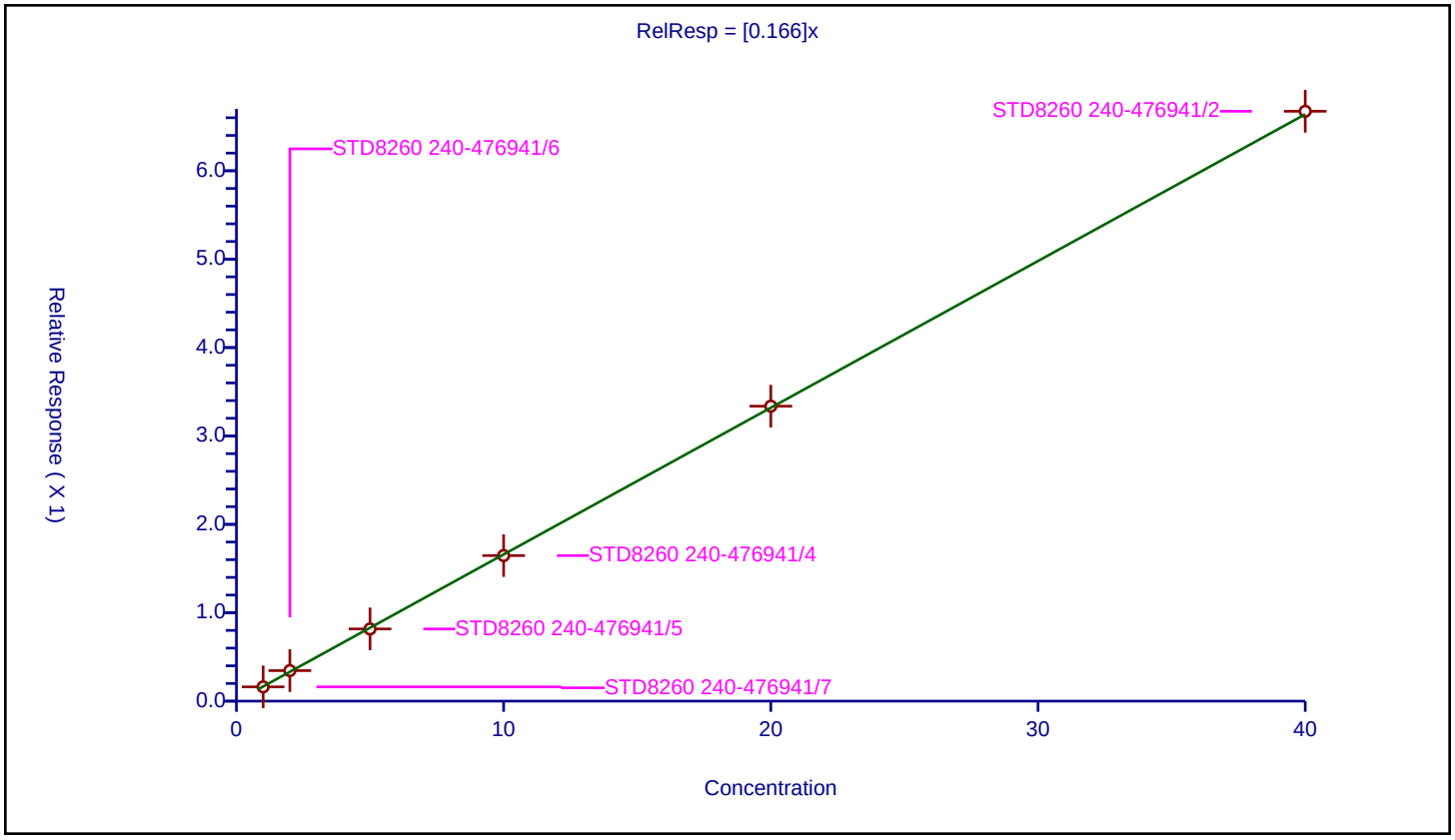
Curve Coefficients

Intercept:	0
Slope:	0.166

Error Coefficients

Standard Error:	229000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.161404	10.0	606056.0	0.161404	Y
2	STD8260 240-476941/6	2.0	0.345503	10.0	608128.0	0.172751	Y
3	STD8260 240-476941/5	5.0	0.816724	10.0	621189.0	0.163345	Y
4	STD8260 240-476941/4	10.0	1.64671	10.0	639882.0	0.164671	Y
5	STD8260 240-476941/3	20.0	3.336666	10.0	663171.0	0.166833	Y
6	STD8260 240-476941/2	40.0	6.673163	10.0	670129.0	0.166829	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

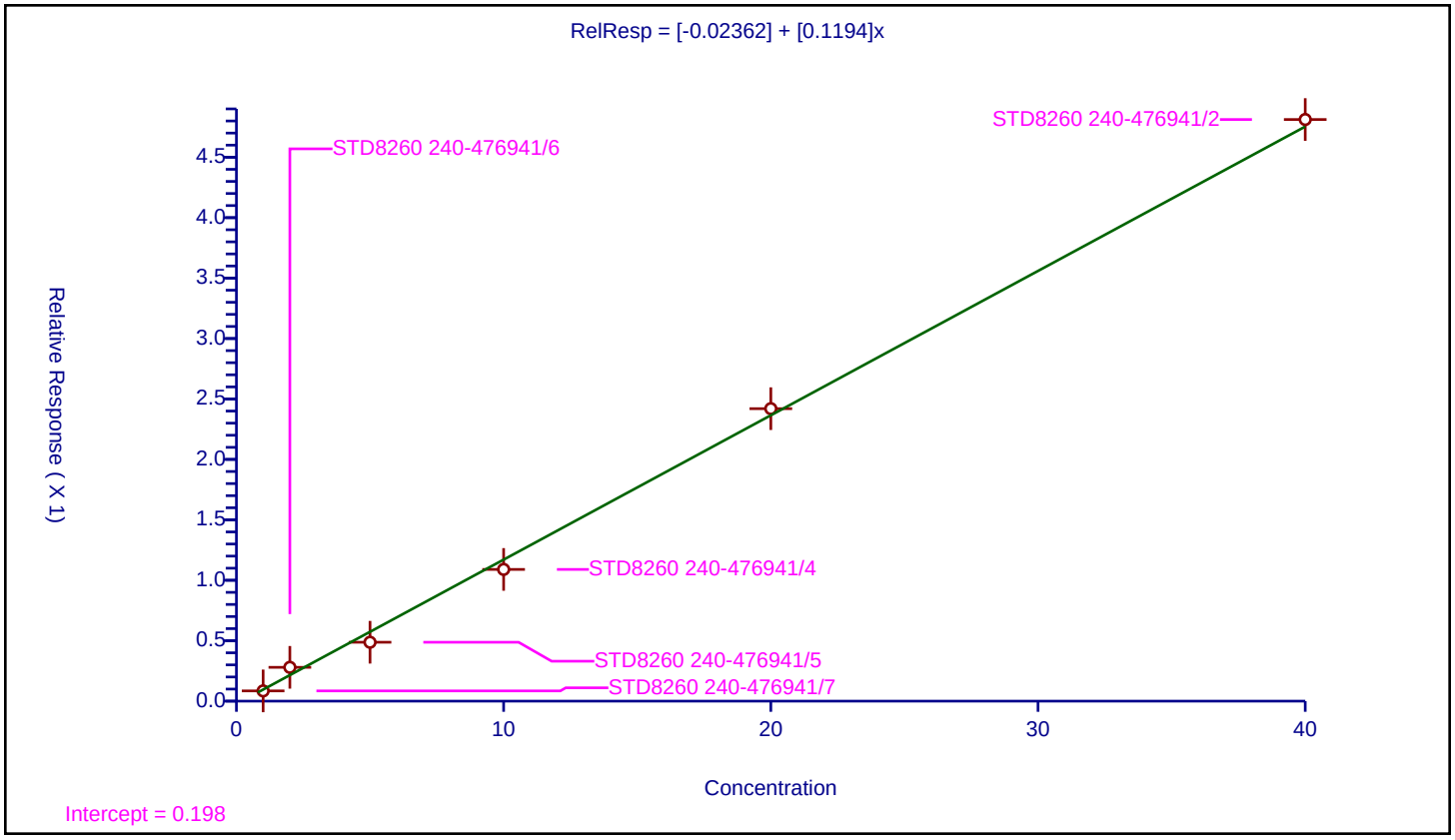
Curve Coefficients

Intercept:	-0.02362
Slope:	0.1194

Error Coefficients

Standard Error:	184000
Relative Standard Error:	16.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.084695	10.0	606056.0	0.084695	Y
2	STD8260 240-476941/6	2.0	0.279678	10.0	608128.0	0.139839	Y
3	STD8260 240-476941/5	5.0	0.487243	10.0	621189.0	0.097449	Y
4	STD8260 240-476941/4	10.0	1.089888	10.0	639882.0	0.108989	Y
5	STD8260 240-476941/3	20.0	2.419964	10.0	663171.0	0.120998	Y
6	STD8260 240-476941/2	40.0	4.812178	10.0	670129.0	0.120304	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

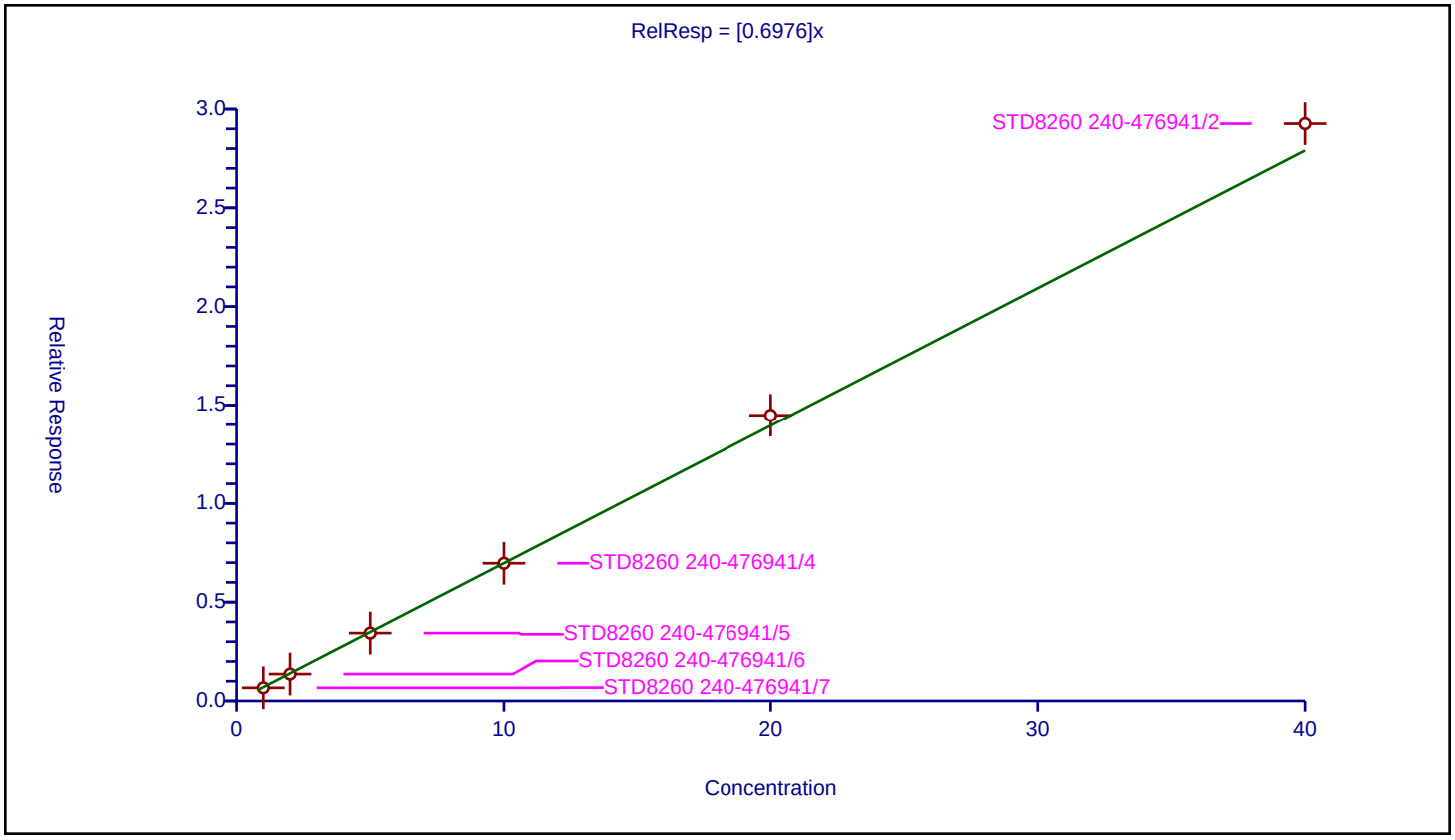
Curve Coefficients

Intercept:	0
Slope:	0.6976

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.665285	10.0	606056.0	0.665285	Y
2	STD8260 240-476941/6	2.0	1.362065	10.0	608128.0	0.681033	Y
3	STD8260 240-476941/5	5.0	3.433915	10.0	621189.0	0.686783	Y
4	STD8260 240-476941/4	10.0	6.96841	10.0	639882.0	0.696841	Y
5	STD8260 240-476941/3	20.0	14.48183	10.0	663171.0	0.724092	Y
6	STD8260 240-476941/2	40.0	29.266141	10.0	670129.0	0.731654	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

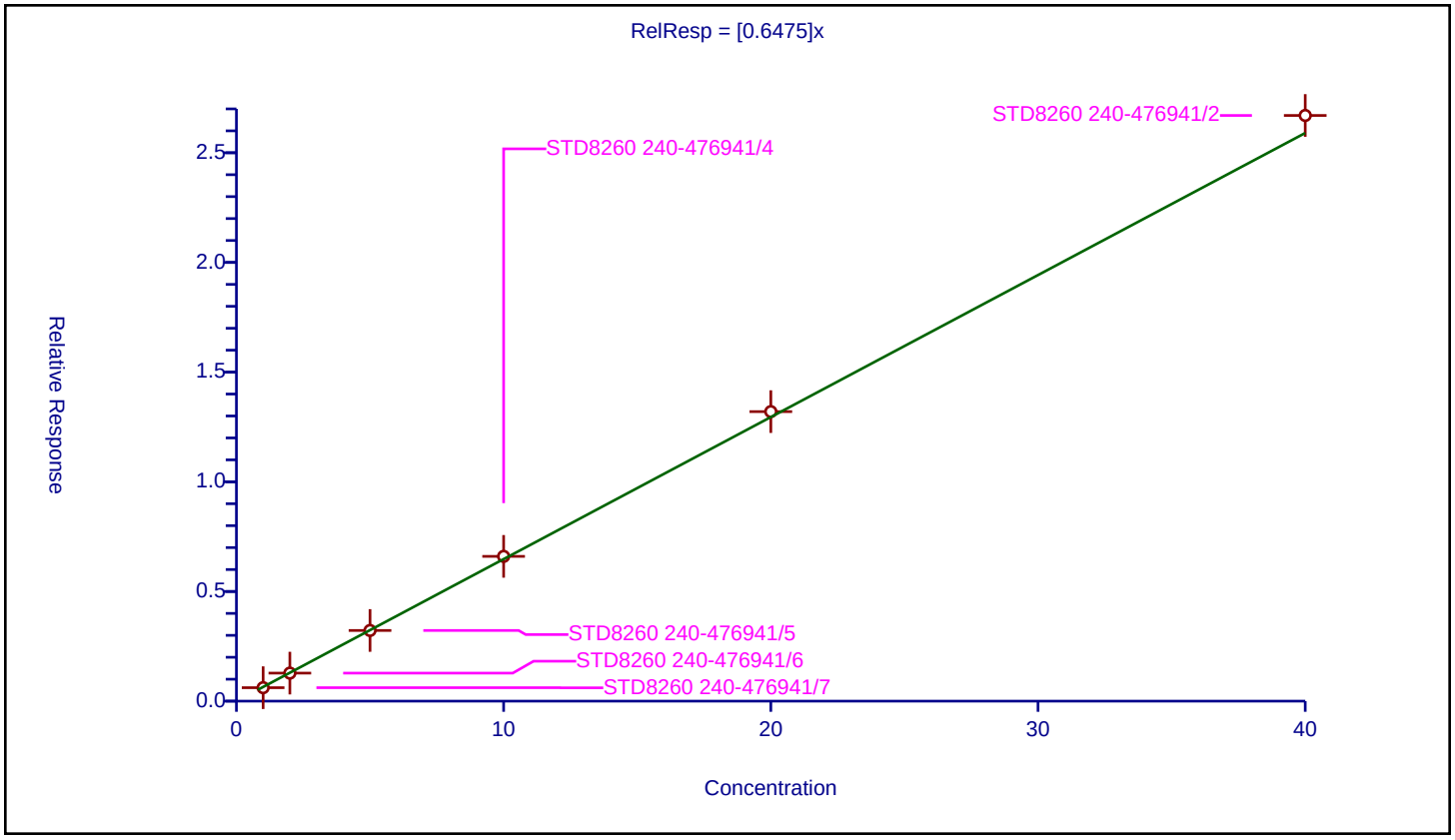
Curve Coefficients

Intercept:	0
Slope:	0.6475

Error Coefficients

Standard Error:	916000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.614069	10.0	606056.0	0.614069	Y
2	STD8260 240-476941/6	2.0	1.278119	10.0	608128.0	0.63906	Y
3	STD8260 240-476941/5	5.0	3.221628	10.0	621189.0	0.644326	Y
4	STD8260 240-476941/4	10.0	6.600092	10.0	639882.0	0.660009	Y
5	STD8260 240-476941/3	20.0	13.199099	10.0	663171.0	0.659955	Y
6	STD8260 240-476941/2	40.0	26.699576	10.0	670129.0	0.667489	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

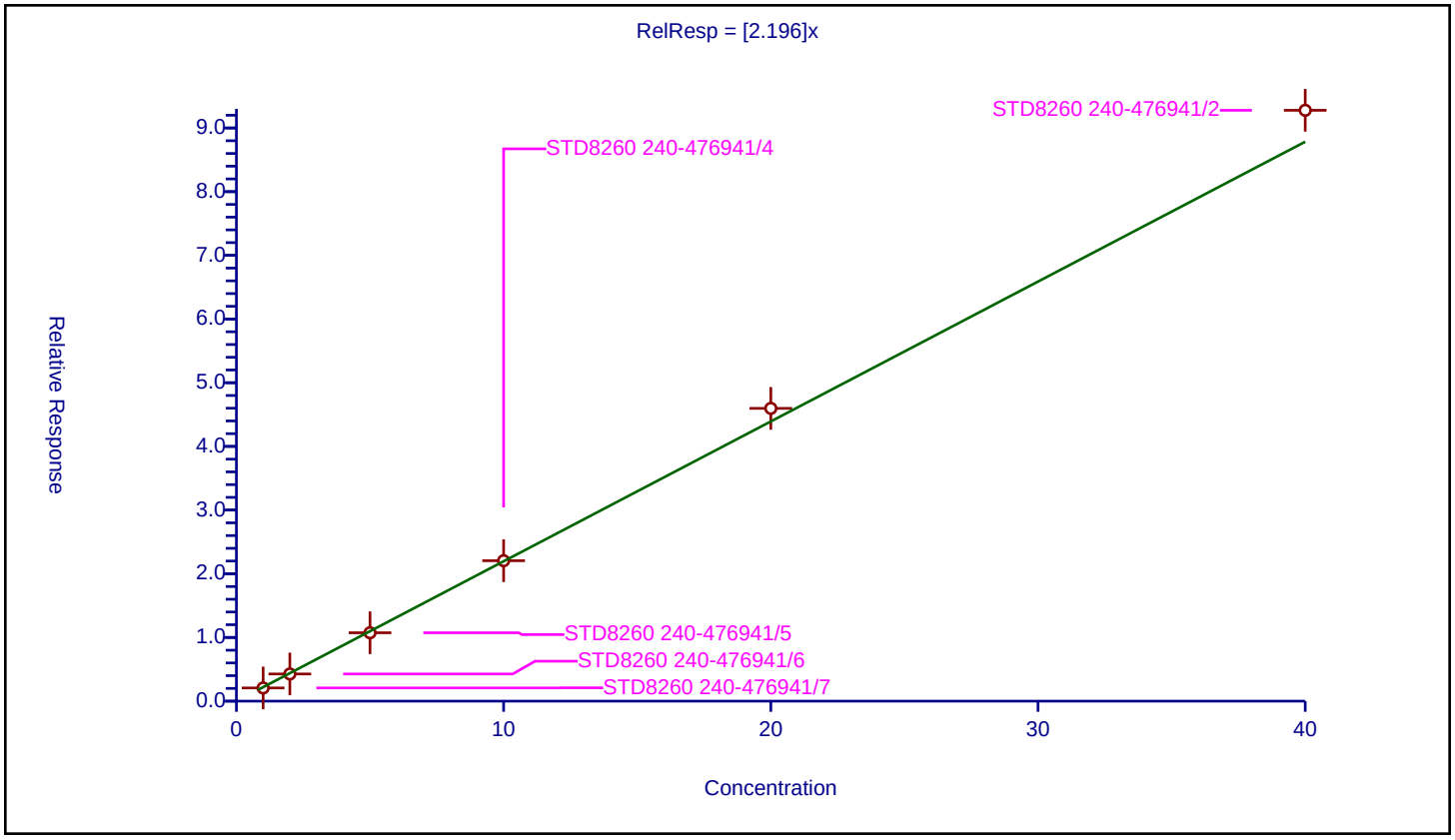
Curve Coefficients

Intercept:	0
Slope:	2.196

Error Coefficients

Standard Error:	3180000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.071195	10.0	606056.0	2.071195	Y
2	STD8260 240-476941/6	2.0	4.269101	10.0	608128.0	2.134551	Y
3	STD8260 240-476941/5	5.0	10.73641	10.0	621189.0	2.147282	Y
4	STD8260 240-476941/4	10.0	22.049409	10.0	639882.0	2.204941	Y
5	STD8260 240-476941/3	20.0	45.973391	10.0	663171.0	2.29867	Y
6	STD8260 240-476941/2	40.0	92.777182	10.0	670129.0	2.31943	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

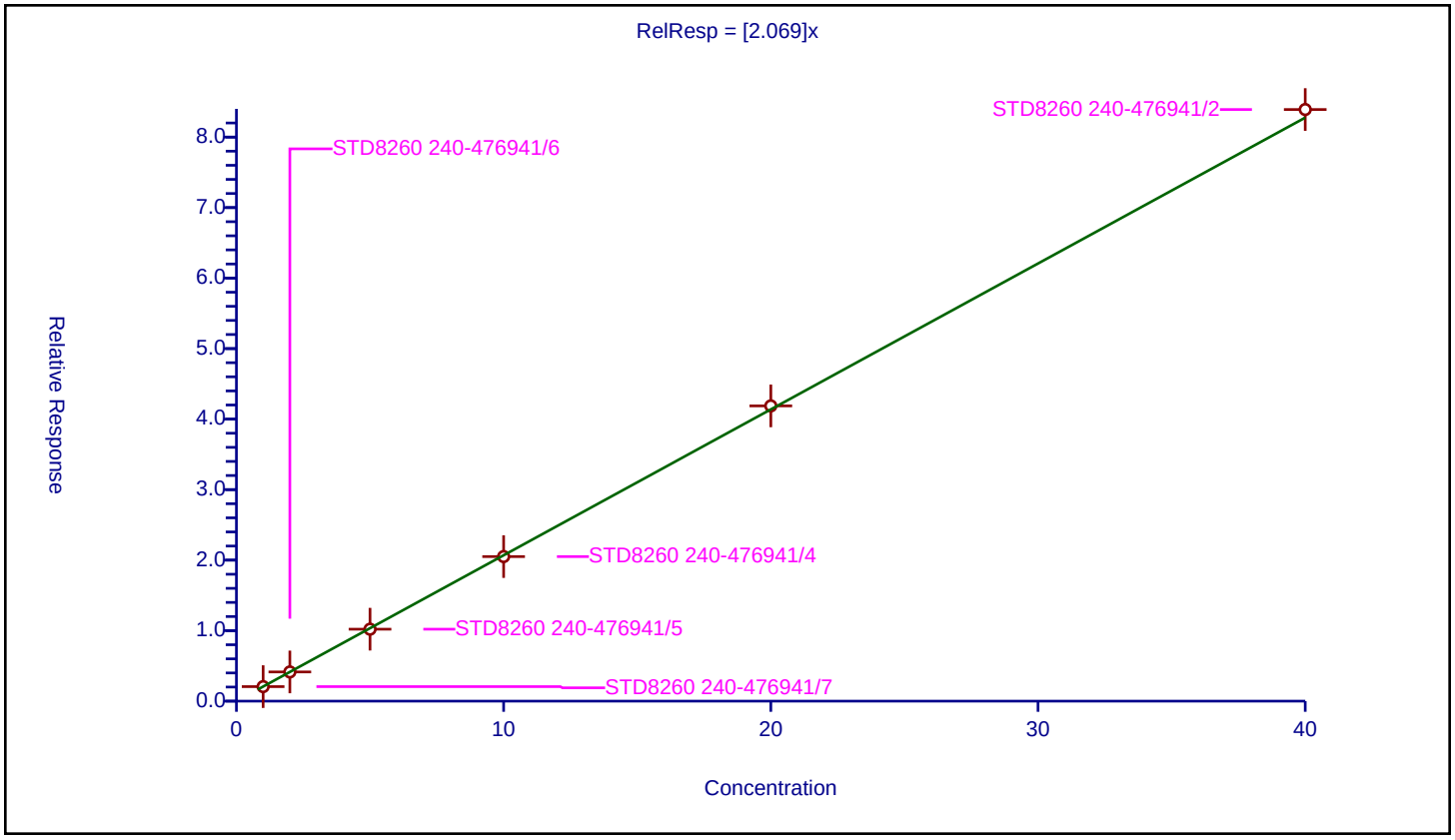
Curve Coefficients

Intercept:	0
Slope:	2.069

Error Coefficients

Standard Error:	2880000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.060618	10.0	606056.0	2.060618	Y
2	STD8260 240-476941/6	2.0	4.140592	10.0	608128.0	2.070296	Y
3	STD8260 240-476941/5	5.0	10.203255	10.0	621189.0	2.040651	Y
4	STD8260 240-476941/4	10.0	20.503671	10.0	639882.0	2.050367	Y
5	STD8260 240-476941/3	20.0	41.875429	10.0	663171.0	2.093771	Y
6	STD8260 240-476941/2	40.0	83.90771	10.0	670129.0	2.097693	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

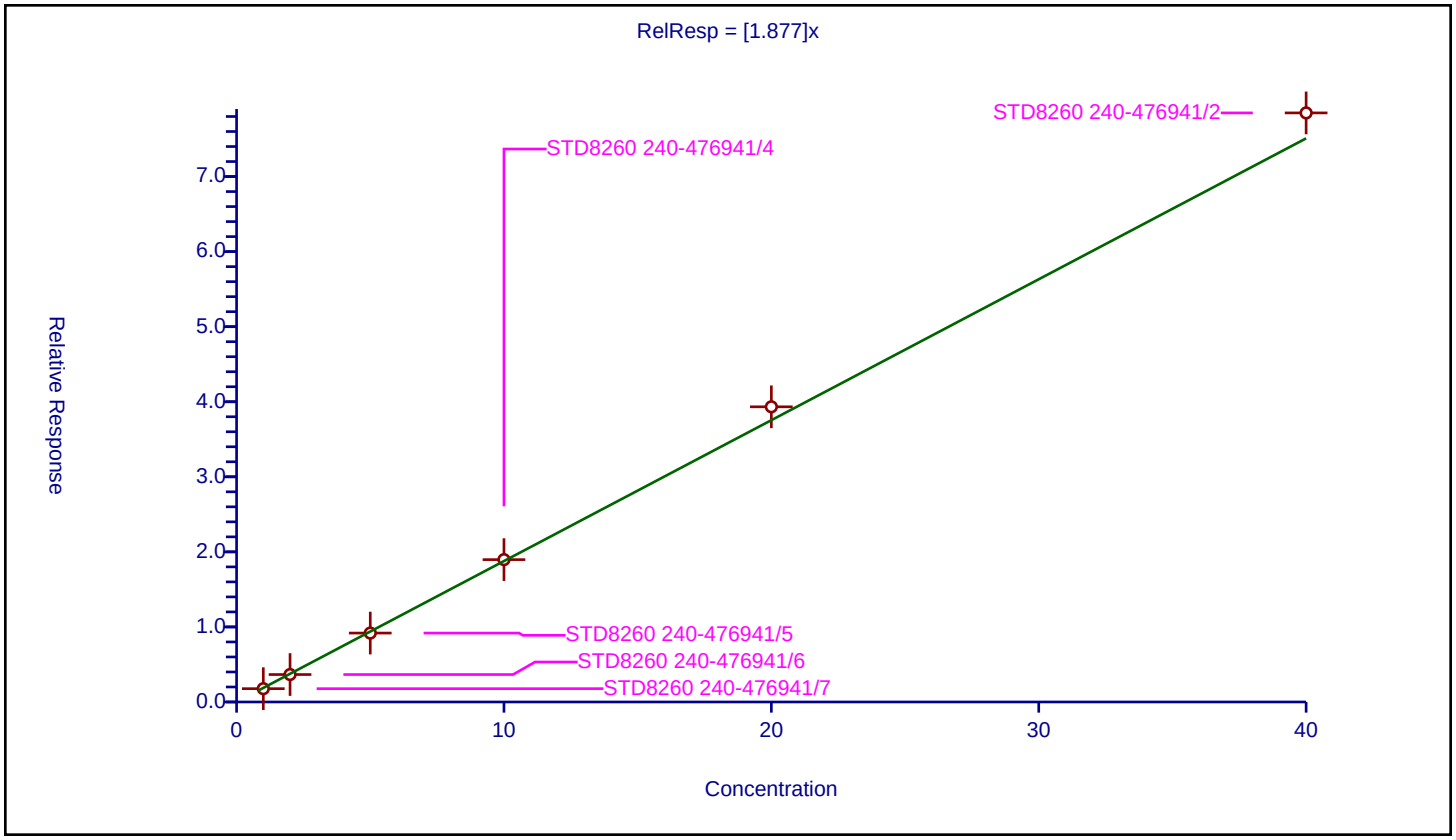
Curve Coefficients

Intercept:	0
Slope:	1.877

Error Coefficients

Standard Error:	2700000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.773037	10.0	606056.0	1.773037	Y
2	STD8260 240-476941/6	2.0	3.657733	10.0	608128.0	1.828867	Y
3	STD8260 240-476941/5	5.0	9.180829	10.0	621189.0	1.836166	Y
4	STD8260 240-476941/4	10.0	18.967622	10.0	639882.0	1.896762	Y
5	STD8260 240-476941/3	20.0	39.326539	10.0	663171.0	1.966327	Y
6	STD8260 240-476941/2	40.0	78.481263	10.0	670129.0	1.962032	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

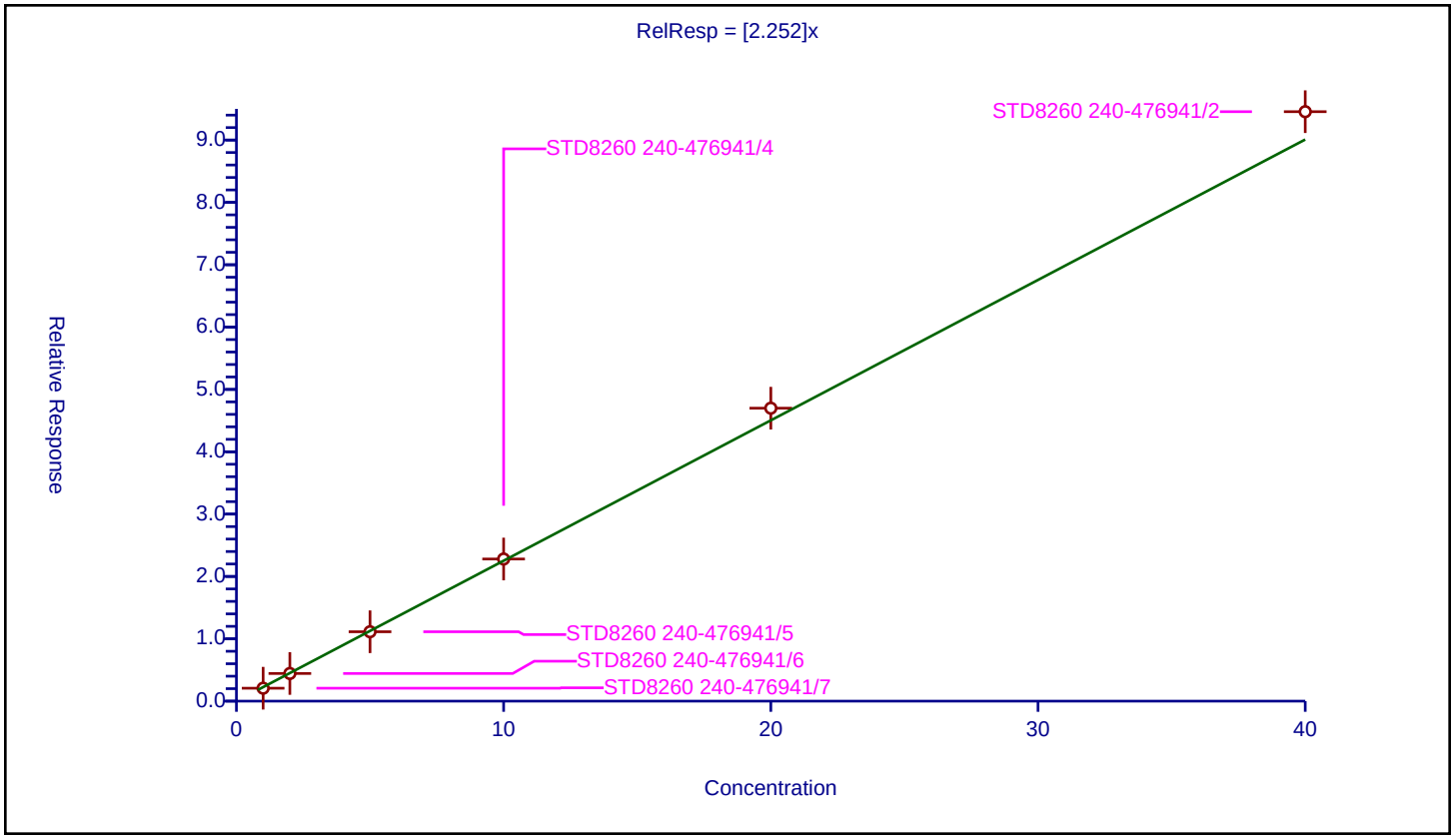
Curve Coefficients

Intercept:	0
Slope:	2.252

Error Coefficients

Standard Error:	3240000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.075204	10.0	606056.0	2.075204	Y
2	STD8260 240-476941/6	2.0	4.43507	10.0	608128.0	2.217535	Y
3	STD8260 240-476941/5	5.0	11.133391	10.0	621189.0	2.226678	Y
4	STD8260 240-476941/4	10.0	22.798422	10.0	639882.0	2.279842	Y
5	STD8260 240-476941/3	20.0	46.993128	10.0	663171.0	2.349656	Y
6	STD8260 240-476941/2	40.0	94.549885	10.0	670129.0	2.363747	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

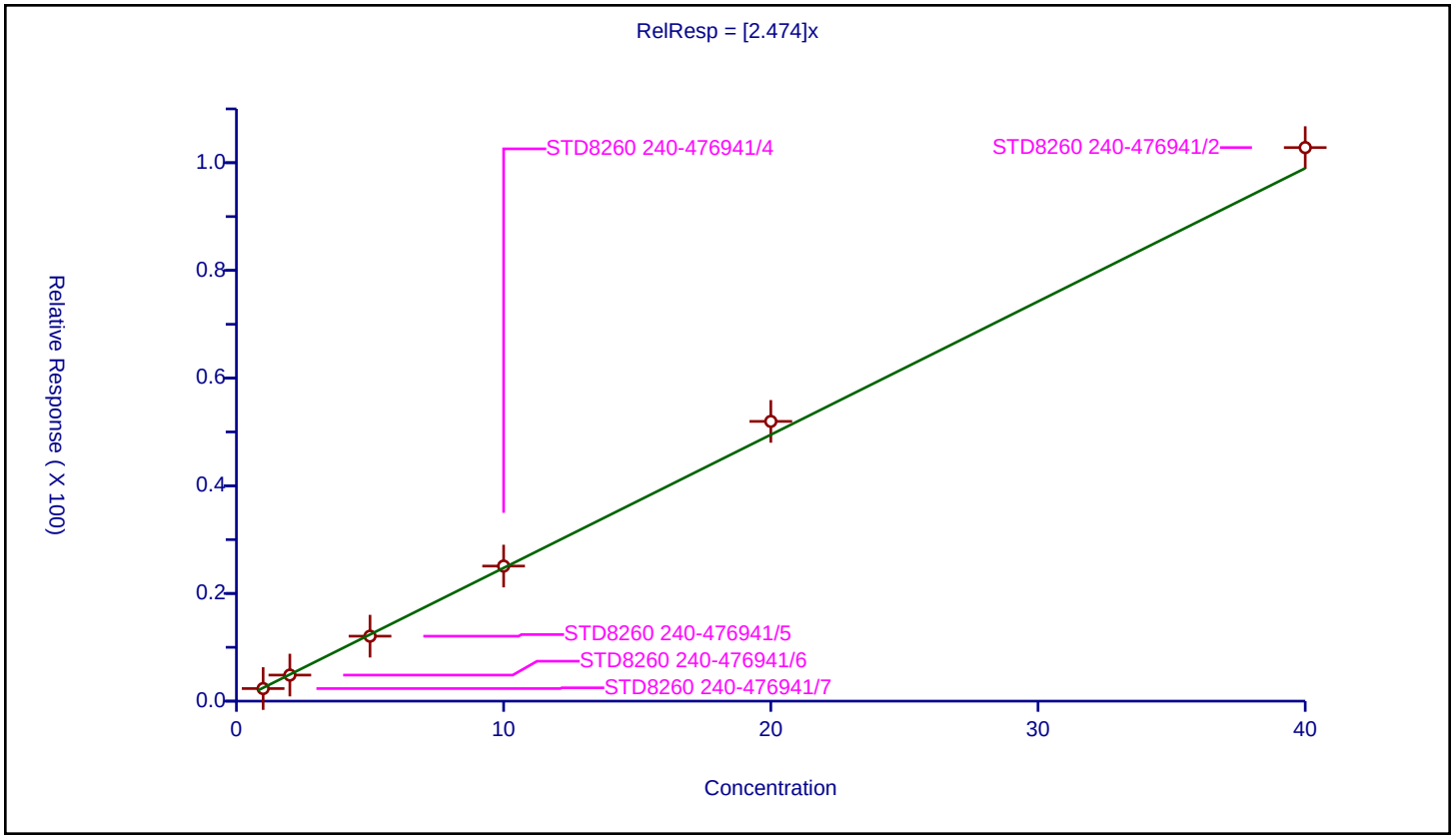
Curve Coefficients

Intercept:	0
Slope:	2.474

Error Coefficients

Standard Error:	3540000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.335329	10.0	606056.0	2.335329	Y
2	STD8260 240-476941/6	2.0	4.838636	10.0	608128.0	2.419318	Y
3	STD8260 240-476941/5	5.0	12.069901	10.0	621189.0	2.41398	Y
4	STD8260 240-476941/4	10.0	25.089798	10.0	639882.0	2.50898	Y
5	STD8260 240-476941/3	20.0	51.959615	10.0	663171.0	2.597981	Y
6	STD8260 240-476941/2	40.0	102.809952	10.0	670129.0	2.570249	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

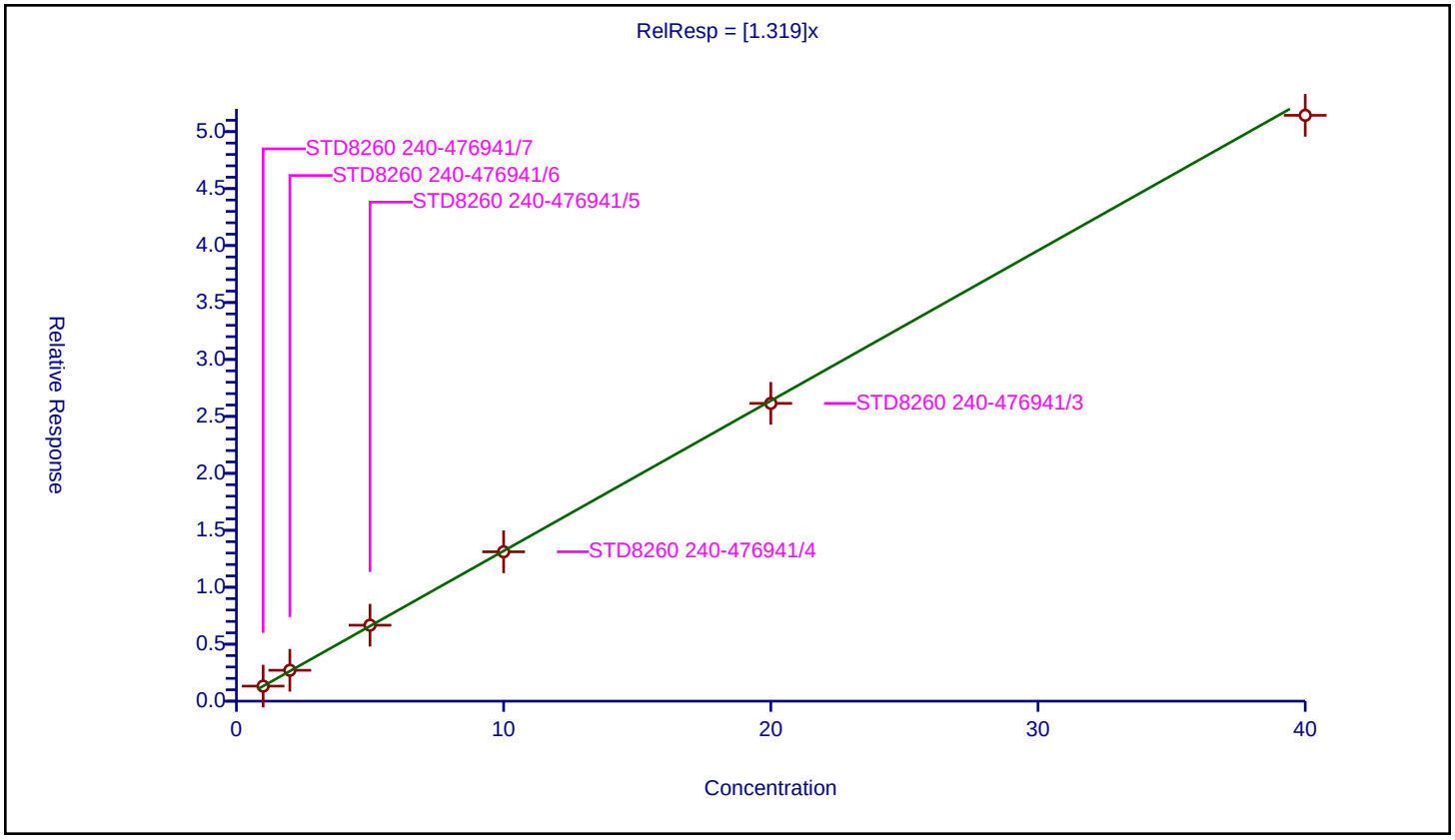
Curve Coefficients

Intercept:	0
Slope:	1.319

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.319812	10.0	606056.0	1.319812	Y
2	STD8260 240-476941/6	2.0	2.710515	10.0	608128.0	1.355257	Y
3	STD8260 240-476941/5	5.0	6.667906	10.0	621189.0	1.333581	Y
4	STD8260 240-476941/4	10.0	13.113402	10.0	639882.0	1.31134	Y
5	STD8260 240-476941/3	20.0	26.144644	10.0	663171.0	1.307232	Y
6	STD8260 240-476941/2	40.0	51.435455	10.0	670129.0	1.285886	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

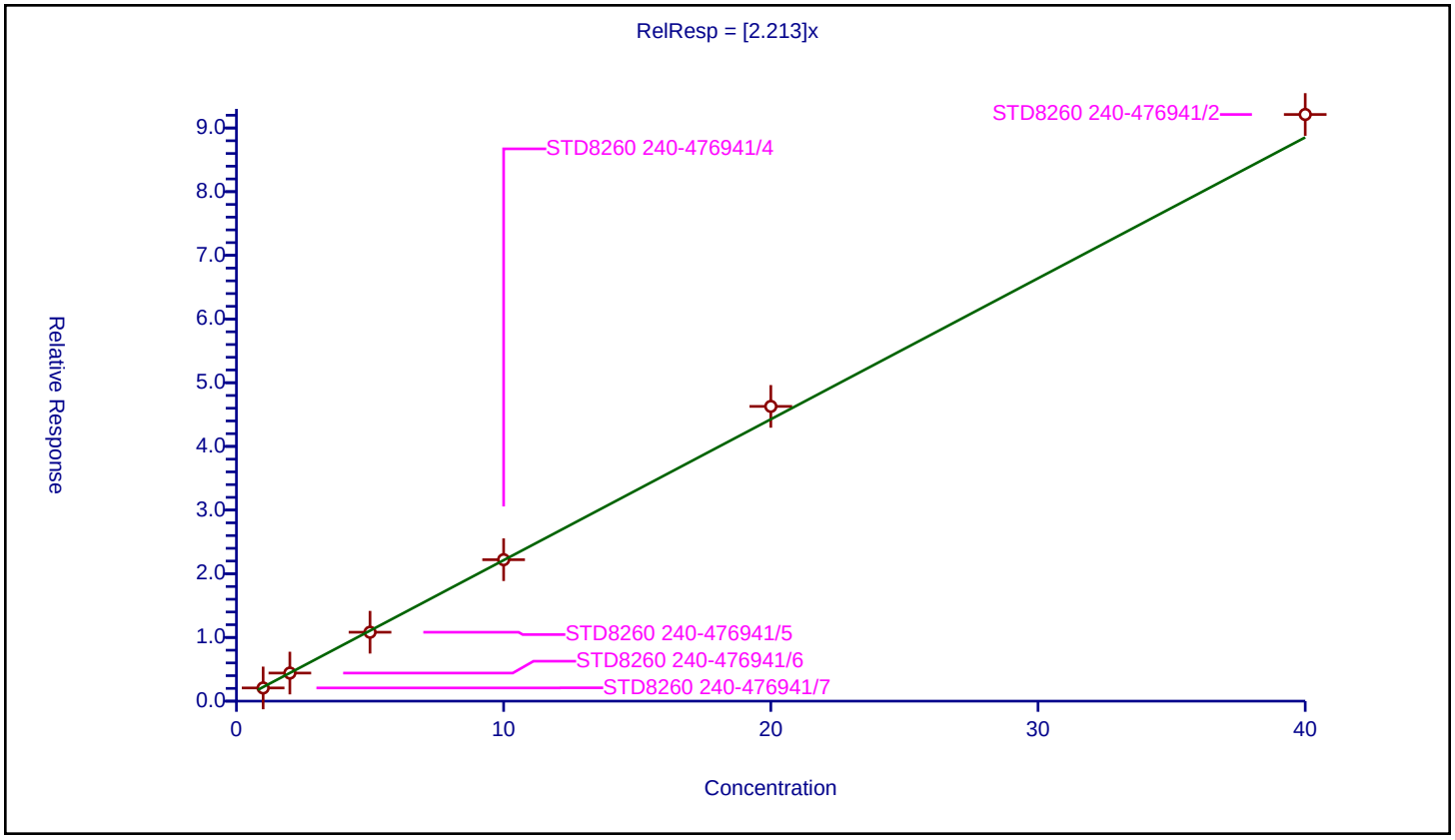
Curve Coefficients

Intercept:	0
Slope:	2.213

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.07131	10.0	606056.0	2.07131	Y
2	STD8260 240-476941/6	2.0	4.410042	10.0	608128.0	2.205021	Y
3	STD8260 240-476941/5	5.0	10.820813	10.0	621189.0	2.164163	Y
4	STD8260 240-476941/4	10.0	22.209517	10.0	639882.0	2.220952	Y
5	STD8260 240-476941/3	20.0	46.283538	10.0	663171.0	2.314177	Y
6	STD8260 240-476941/2	40.0	92.12086	10.0	670129.0	2.303022	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

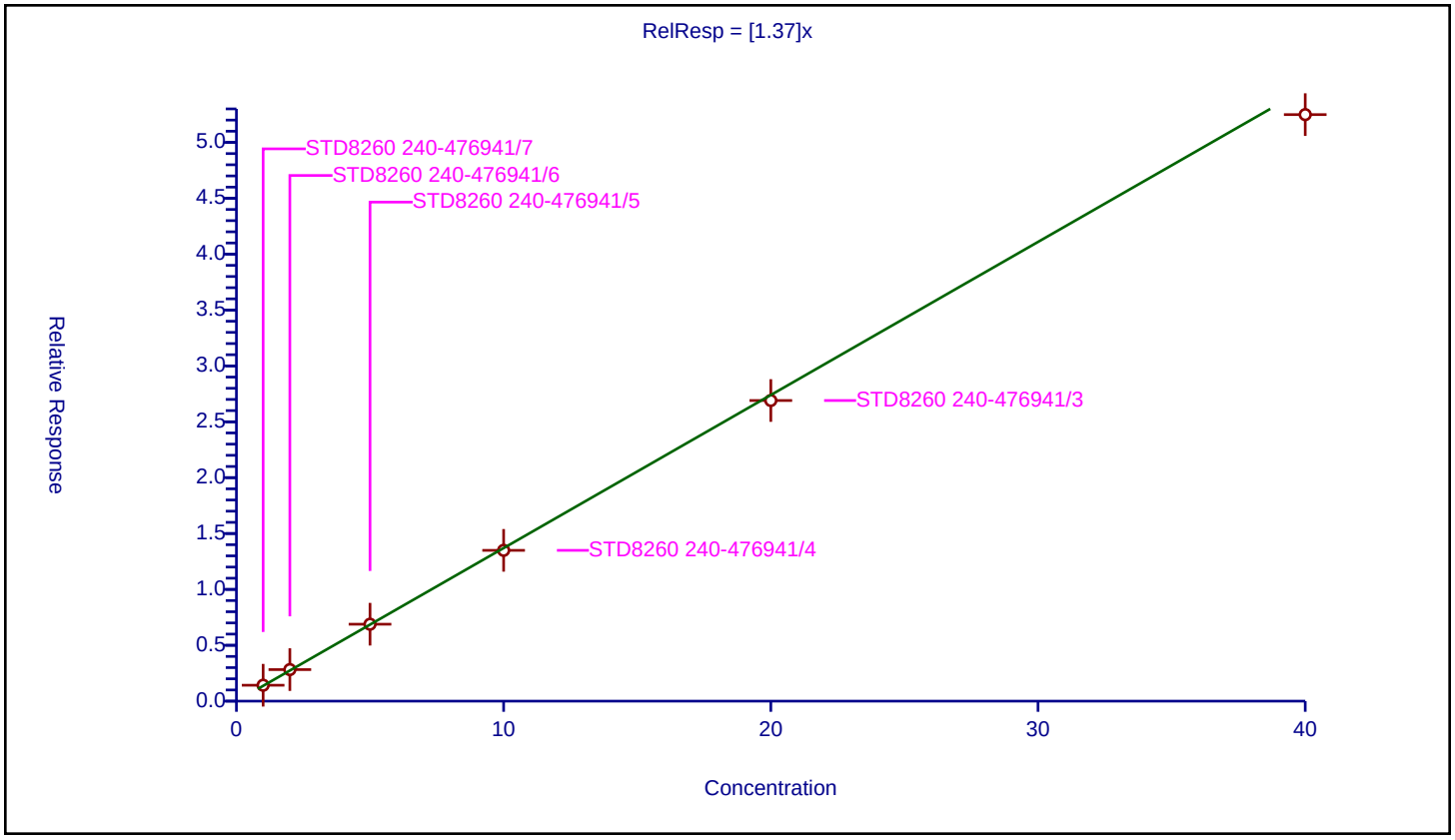
Curve Coefficients

Intercept:	0
Slope:	1.37

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.423086	10.0	606056.0	1.423086	Y
2	STD8260 240-476941/6	2.0	2.823649	10.0	608128.0	1.411824	Y
3	STD8260 240-476941/5	5.0	6.88573	10.0	621189.0	1.377146	Y
4	STD8260 240-476941/4	10.0	13.493191	10.0	639882.0	1.349319	Y
5	STD8260 240-476941/3	20.0	26.904313	10.0	663171.0	1.345216	Y
6	STD8260 240-476941/2	40.0	52.488506	10.0	670129.0	1.312213	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

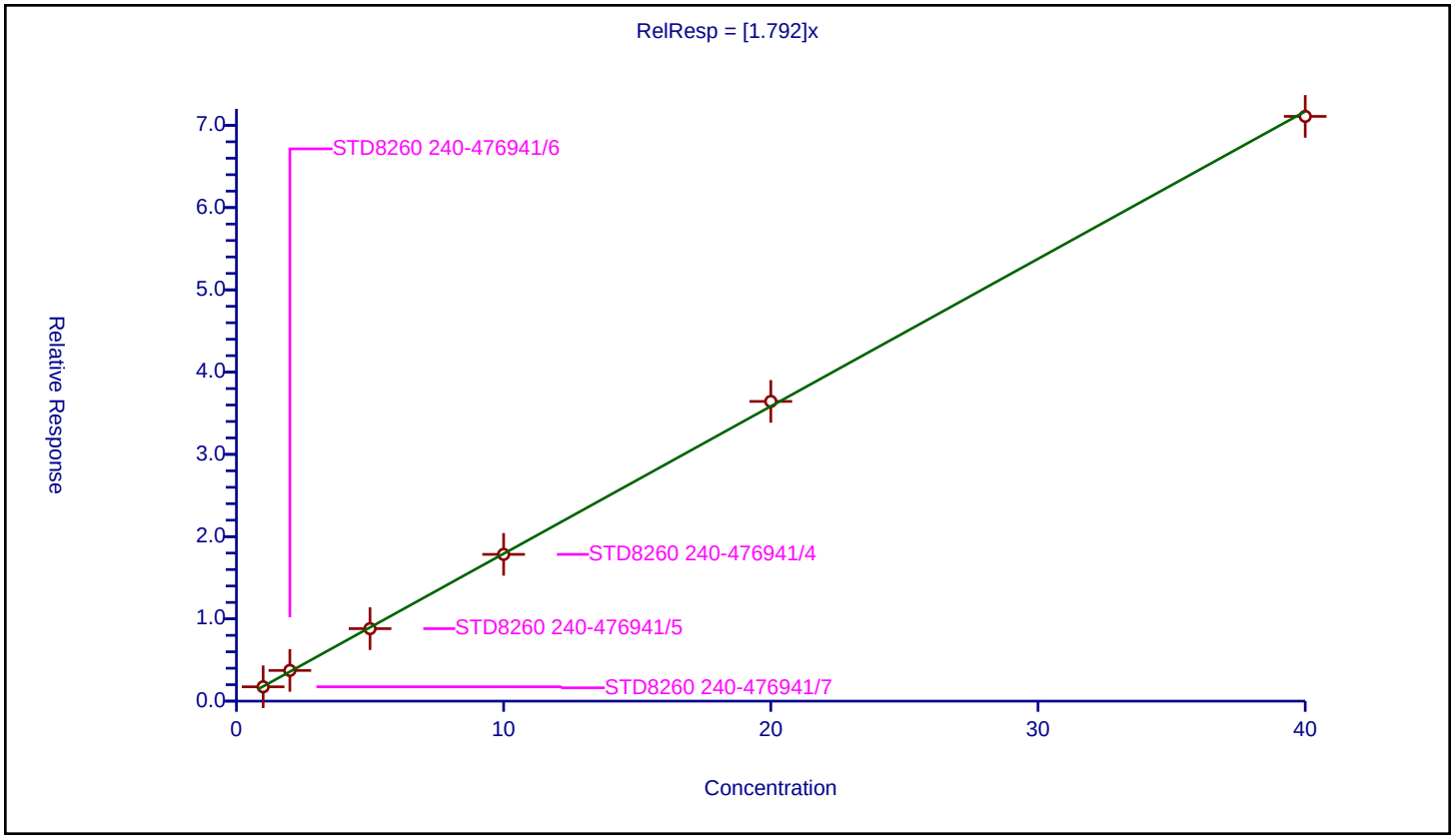
Curve Coefficients

Intercept:	0
Slope:	1.792

Error Coefficients

Standard Error:	2460000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.742166	10.0	606056.0	1.742166	Y
2	STD8260 240-476941/6	2.0	3.732734	10.0	608128.0	1.866367	Y
3	STD8260 240-476941/5	5.0	8.810507	10.0	621189.0	1.762101	Y
4	STD8260 240-476941/4	10.0	17.841524	10.0	639882.0	1.784152	Y
5	STD8260 240-476941/3	20.0	36.437495	10.0	663171.0	1.821875	Y
6	STD8260 240-476941/2	40.0	71.091193	10.0	670129.0	1.77728	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

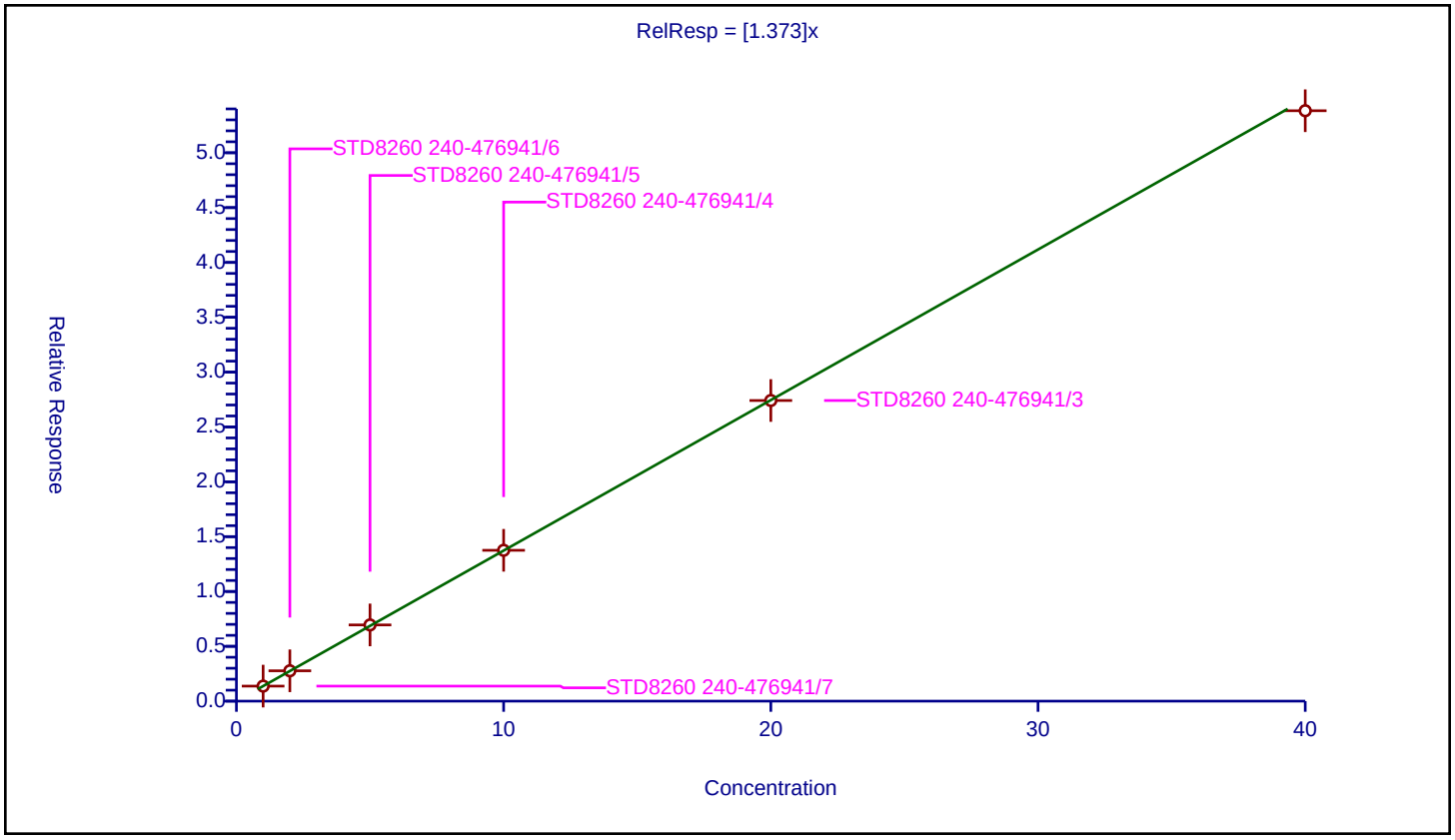
Curve Coefficients

Intercept:	0
Slope:	1.373

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.370731	10.0	606056.0	1.370731	Y
2	STD8260 240-476941/6	2.0	2.76603	10.0	608128.0	1.383015	Y
3	STD8260 240-476941/5	5.0	6.949366	10.0	621189.0	1.389873	Y
4	STD8260 240-476941/4	10.0	13.752614	10.0	639882.0	1.375261	Y
5	STD8260 240-476941/3	20.0	27.410336	10.0	663171.0	1.370517	Y
6	STD8260 240-476941/2	40.0	53.833426	10.0	670129.0	1.345836	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

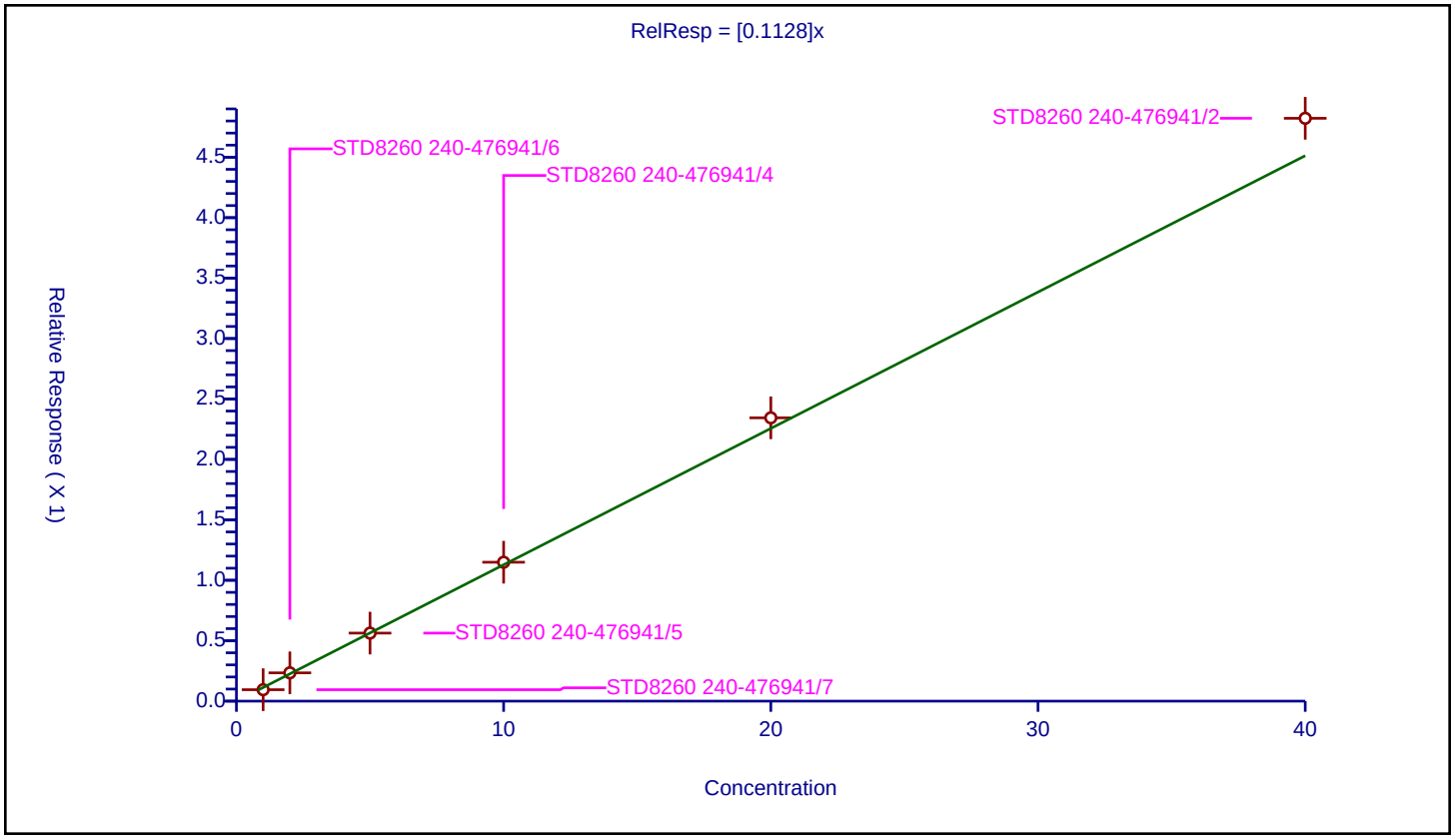
Curve Coefficients

Intercept:	0
Slope:	0.1128

Error Coefficients

Standard Error:	165000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.094562	10.0	606056.0	0.094562	Y
2	STD8260 240-476941/6	2.0	0.234178	10.0	608128.0	0.117089	Y
3	STD8260 240-476941/5	5.0	0.562856	10.0	621189.0	0.112571	Y
4	STD8260 240-476941/4	10.0	1.149181	10.0	639882.0	0.114918	Y
5	STD8260 240-476941/3	20.0	2.344056	10.0	663171.0	0.117203	Y
6	STD8260 240-476941/2	40.0	4.82231	10.0	670129.0	0.120558	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

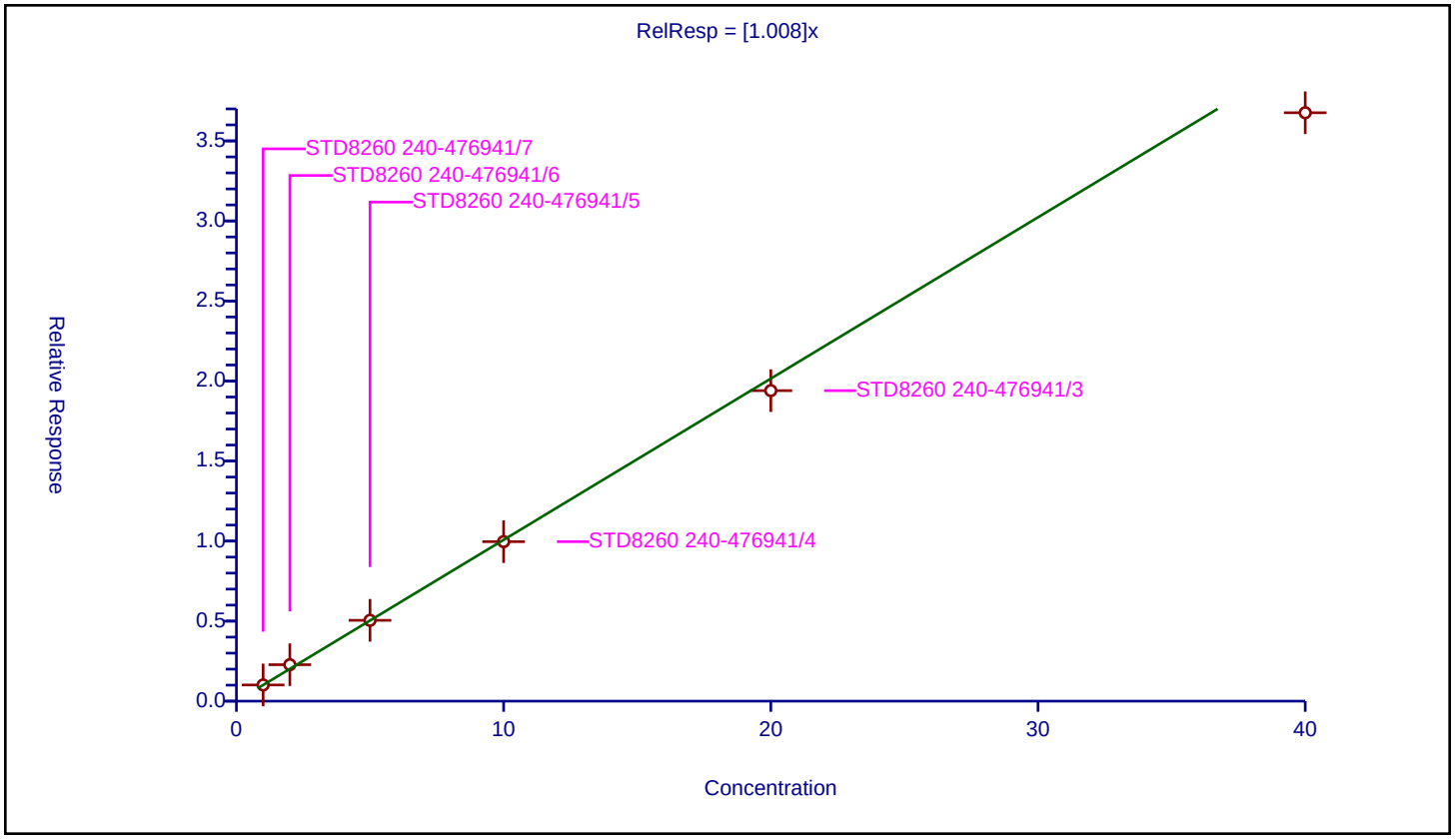
Curve Coefficients

Intercept:	0
Slope:	1.008

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.011375	10.0	606056.0	1.011375	Y
2	STD8260 240-476941/6	2.0	2.277382	10.0	608128.0	1.138691	Y
3	STD8260 240-476941/5	5.0	5.049494	10.0	621189.0	1.009899	Y
4	STD8260 240-476941/4	10.0	9.964243	10.0	639882.0	0.996424	Y
5	STD8260 240-476941/3	20.0	19.398933	10.0	663171.0	0.969947	Y
6	STD8260 240-476941/2	40.0	36.758535	10.0	670129.0	0.918963	Y



Calibration / Hexachlorobutadiene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

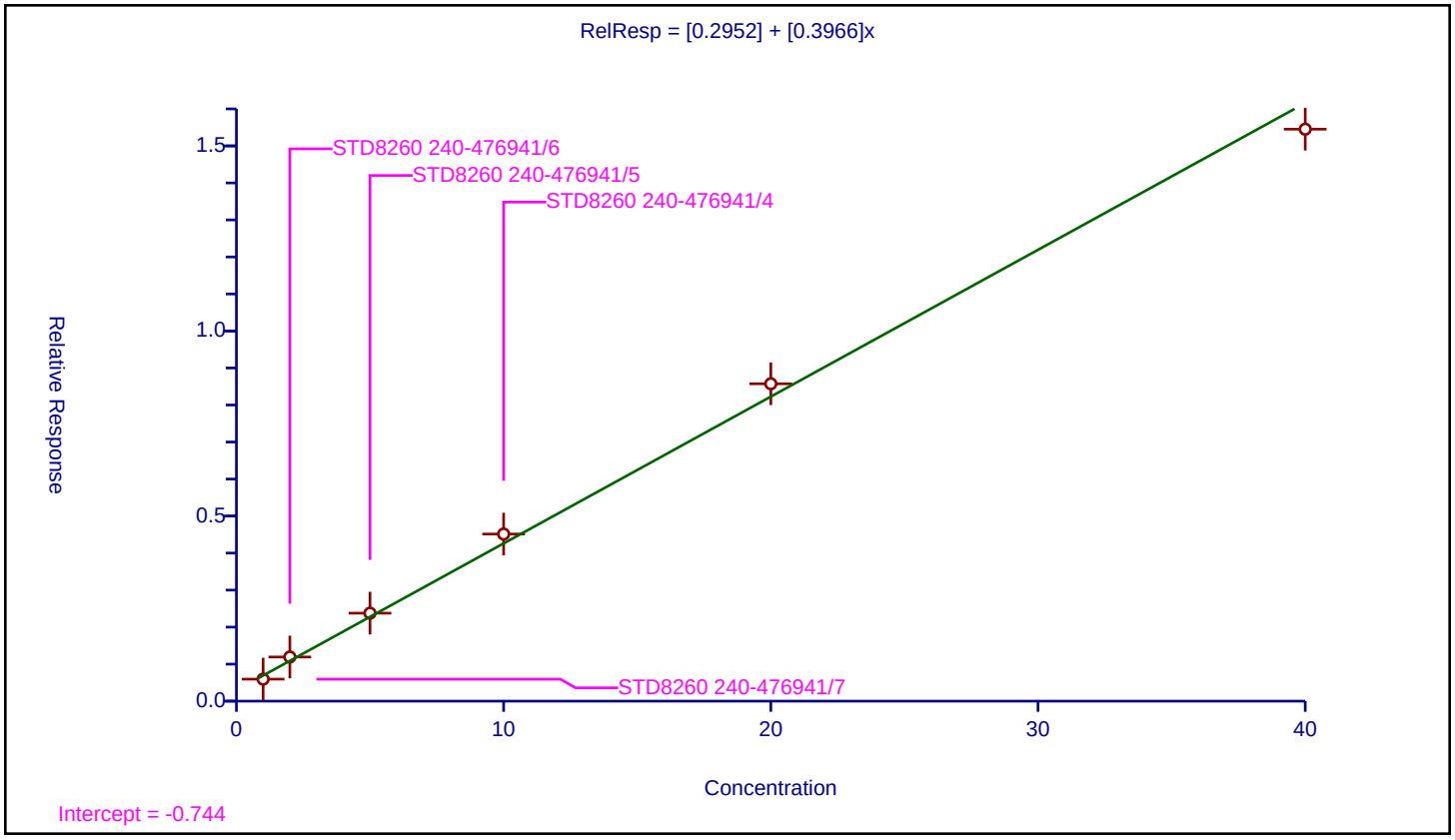
Curve Coefficients

Intercept:	0.2952
Slope:	0.3966

Error Coefficients

Standard Error:	614000
Relative Standard Error:	14.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.594665	10.0	606056.0	0.594665	Y
2	STD8260 240-476941/6	2.0	1.19294	10.0	608128.0	0.59647	Y
3	STD8260 240-476941/5	5.0	2.37707	10.0	621189.0	0.475414	Y
4	STD8260 240-476941/4	10.0	4.514192	10.0	639882.0	0.451419	Y
5	STD8260 240-476941/3	20.0	8.573762	10.0	663171.0	0.428688	Y
6	STD8260 240-476941/2	40.0	15.451353	10.0	670129.0	0.386284	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

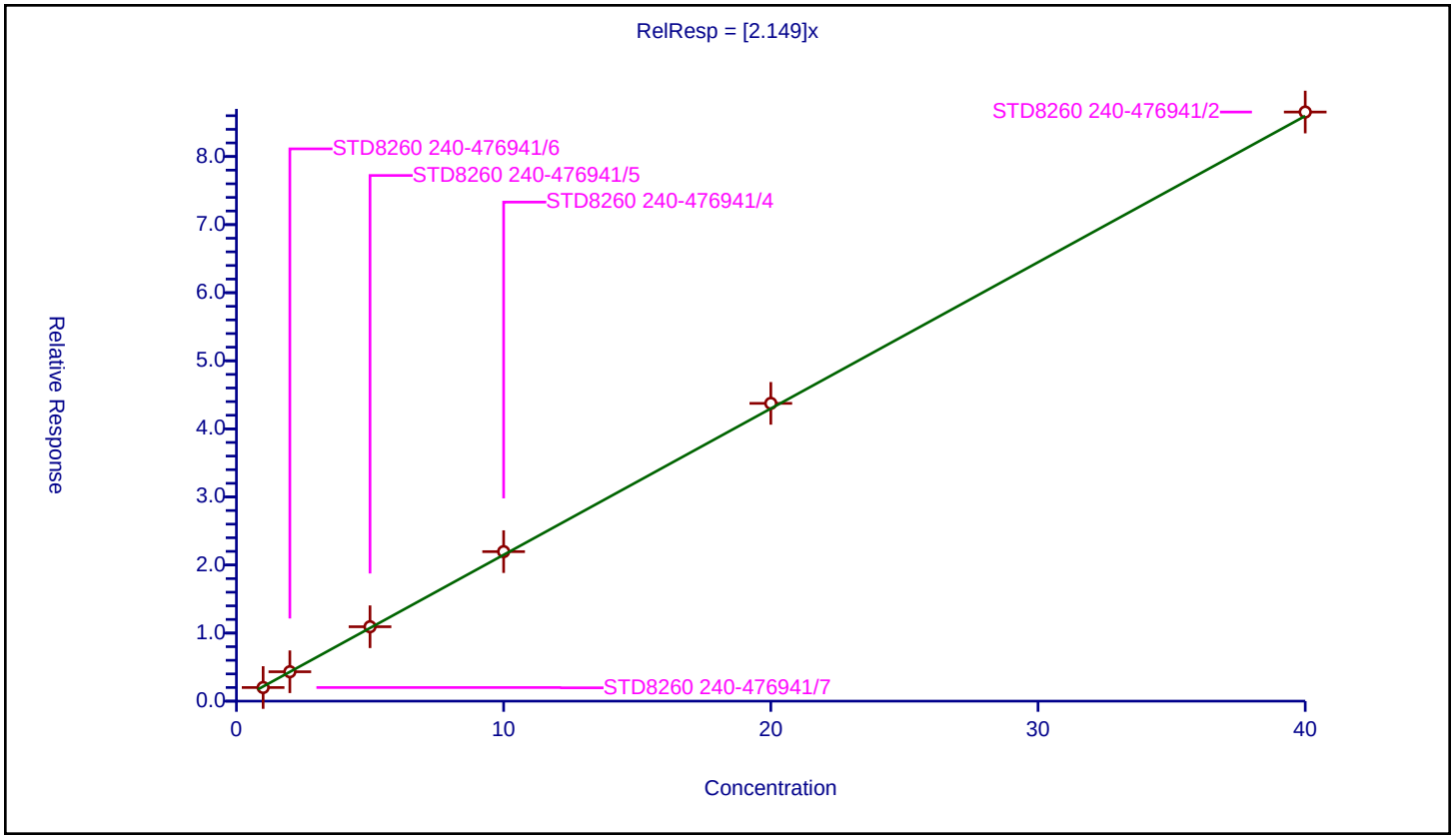
Curve Coefficients

Intercept:	0
Slope:	2.149

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.002472	10.0	606056.0	2.002472	Y
2	STD8260 240-476941/6	2.0	4.316838	10.0	608128.0	2.158419	Y
3	STD8260 240-476941/5	5.0	10.928751	10.0	621189.0	2.18575	Y
4	STD8260 240-476941/4	10.0	21.96444	10.0	639882.0	2.196444	Y
5	STD8260 240-476941/3	20.0	43.743574	10.0	663171.0	2.187179	Y
6	STD8260 240-476941/2	40.0	86.537965	10.0	670129.0	2.163449	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

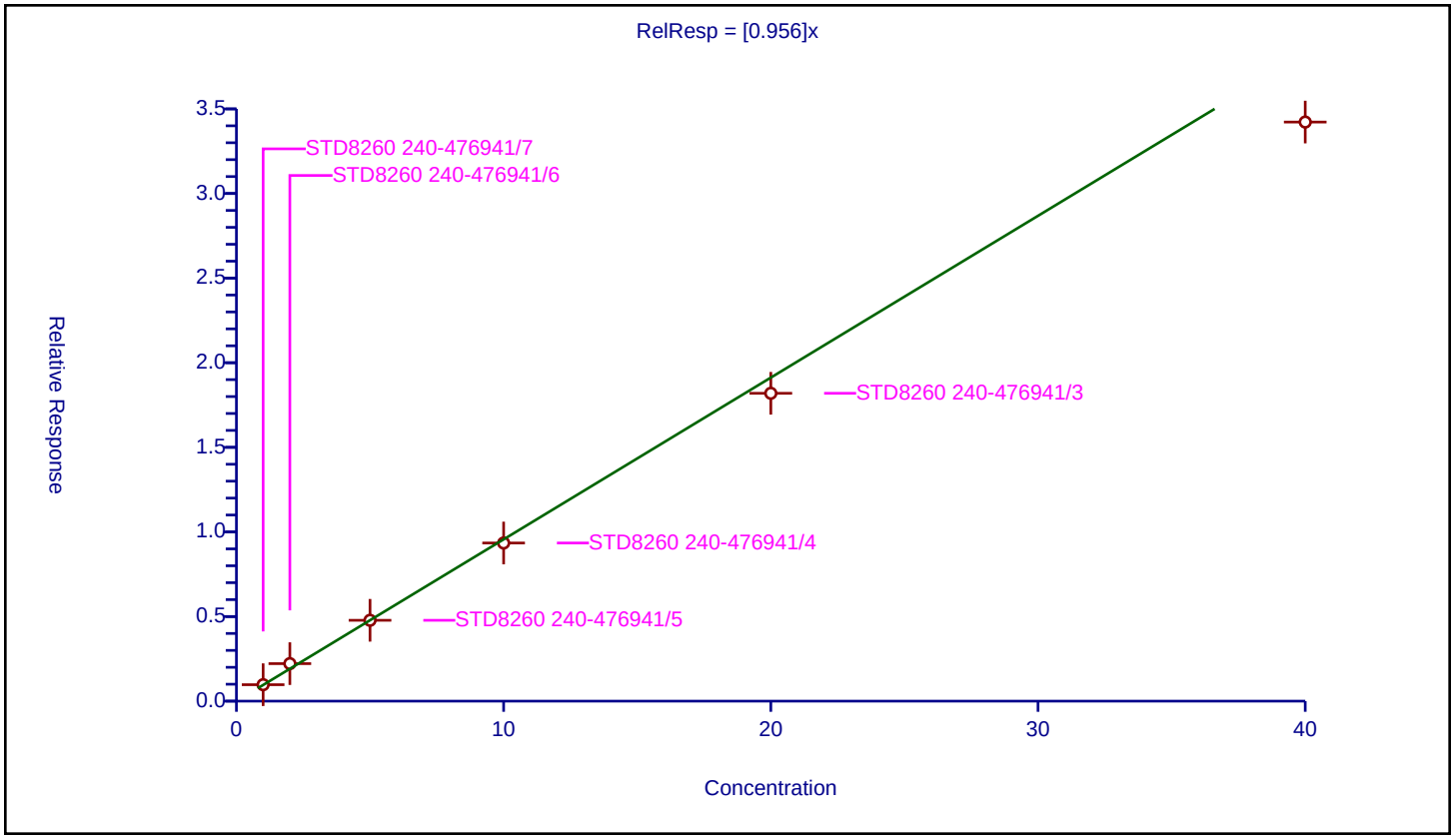
Curve Coefficients

Intercept:	0
Slope:	0.956

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.972435	10.0	606056.0	0.972435	Y
2	STD8260 240-476941/6	2.0	2.216967	10.0	608128.0	1.108484	Y
3	STD8260 240-476941/5	5.0	4.778063	10.0	621189.0	0.955613	Y
4	STD8260 240-476941/4	10.0	9.344895	10.0	639882.0	0.934489	Y
5	STD8260 240-476941/3	20.0	18.192306	10.0	663171.0	0.909615	Y
6	STD8260 240-476941/2	40.0	34.221859	10.0	670129.0	0.855546	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.3204		0.0121	0.0100	21.0	50.0
Chloromethane	Ave	0.2085	0.2316	0.1000	0.0111	0.0100	11.1	50.0
Butadiene	Ave	0.2195	0.2175		0.00991	0.0100	-0.9	50.0
Vinyl chloride	Ave	0.2484	0.2737		0.0110	0.0100	10.2	20.0
Bromomethane	Ave	0.1787	0.1948		0.0109	0.0100	9.0	50.0
Chloroethane	Ave	0.1469	0.1634		0.0111	0.0100	11.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3916		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.4398		0.0104	0.0100	3.6	50.0
Ethyl ether	Ave	0.1891	0.2067		0.0109	0.0100	9.3	50.0
Acrolein	Ave	0.0073	0.0087		0.0595	0.0500	19.0	50.0
1,1-Dichloroethene	Ave	0.2398	0.2587		0.0108	0.0100	7.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.2103		0.0115	0.0100	15.0	50.0
Acetone	Qua		0.0663		0.0168	0.0200	-16.0	50.0
Iodomethane	Ave	0.4292	0.4457		0.0104	0.0100	3.8	50.0
Carbon disulfide	Ave	0.7139	0.7183		0.0101	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1609	0.1661		0.0103	0.0100	3.3	50.0
Methyl acetate	Ave	0.1601	0.1572		0.0196	0.0200	-1.8	50.0
Methylene Chloride	Ave	0.2646	0.2601		0.00983	0.0100	-1.7	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0282		0.0874	0.100	-12.6	50.0
Acrylonitrile	Ave	0.0817	0.0808		0.0989	0.100	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2923		0.0104	0.0100	3.7	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7137		0.0103	0.0100	2.8	50.0
Hexane	Ave	0.0646	0.0732		0.0113	0.0100	13.4	20.0
1,1-Dichloroethane	Ave	0.4093	0.4326	0.1000	0.0106	0.0100	5.7	50.0
Vinyl acetate	Ave	0.4414	0.4244		0.00962	0.0100	-3.8	50.0
2,2-Dichloropropane	Ave	0.0667	0.0739		0.0111	0.0100	10.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2973		0.0102	0.0100	2.3	50.0
2-Butanone (MEK)	Ave	0.1171	0.1005		0.0172	0.0200	-14.2	50.0
Chlorobromomethane	Ave	0.1450	0.1423		0.00981	0.0100	-1.9	50.0
Chloroform	Ave	0.4451	0.4453		0.0100	0.0100	0.0	20.0
Tetrahydrofuran	Ave	0.0687	0.0660		0.0192	0.0200	-4.0	50.0
1,1,1-Trichloroethane	Ave	0.3903	0.3971		0.0102	0.0100	1.8	50.0
Cyclohexane	Ave	0.3237	0.3509		0.0108	0.0100	8.4	50.0
1,1-Dichloropropene	Ave	0.3529	0.3538		0.0100	0.0100	0.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3627		0.0101	0.0100	1.5	50.0
Isobutyl alcohol	Ave	0.0117	0.0112		0.239	0.250	-4.5	50.0
Benzene	Ave	0.997	1.008		0.0101	0.0100	1.1	50.0
1,2-Dichloroethane	Ave	0.3233	0.3310		0.0102	0.0100	2.4	50.0
n-Heptane	Ave	0.0579	0.0622		0.0107	0.0100	7.4	50.0
Trichloroethene	Ave	0.3122	0.3144		0.0101	0.0100	0.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3828		0.0109	0.0100	8.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2201		0.0106	0.0100	5.6	20.0
Dibromomethane	Ave	0.1524	0.1520		0.00997	0.0100	-0.3	50.0
1,4-Dioxane	Qua		0.0023		0.145	0.200	-27.3	50.0
Dichlorobromomethane	Ave	0.3068	0.3197		0.0104	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1498		0.0101	0.0100	0.9	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3793		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2083		0.0200	0.0200	-0.0	50.0
Toluene	Ave	1.519	1.513		0.00997	0.0100	-0.3	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4614		0.00936	0.0100	-6.4	50.0
Ethyl methacrylate	Ave	0.3857	0.3929		0.0102	0.0100	1.9	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3015		0.0100	0.0100	0.1	50.0
Tetrachloroethene	Ave	0.3233	0.3416		0.0106	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.5016	0.5097		0.0102	0.0100	1.6	50.0
2-Hexanone	Ave	0.2134	0.2222		0.0208	0.0200	4.1	50.0
Chlorodibromomethane	Ave	0.3328	0.3379		0.0102	0.0100	1.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3176		0.0100	0.0100	0.3	50.0
Chlorobenzene	Ave	0.9925	1.006	0.3000	0.0101	0.0100	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3394		0.0102	0.0100	2.0	50.0
Ethylbenzene	Ave	0.5200	0.5412		0.0104	0.0100	4.1	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6567		0.0103	0.0100	3.0	50.0
o-Xylene	Ave	0.5870	0.6377		0.0109	0.0100	8.6	50.0
Styrene	Ave	0.8528	0.8951		0.0105	0.0100	5.0	50.0
Bromoform	Lin1		0.1995	0.1000	0.00911	0.0100	-8.9	50.0
Isopropylbenzene	Ave	1.500	1.585		0.0106	0.0100	5.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.7796	0.3000	0.0100	0.0100	0.4	50.0
Bromobenzene	Ave	0.8603	0.8714		0.0101	0.0100	1.3	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2926		0.00983	0.0100	-1.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.2175		0.00983	0.0100	-1.7	50.0
N-Propylbenzene	Ave	0.9157	0.9721		0.0106	0.0100	6.2	50.0
2-Chlorotoluene	Ave	0.7837	0.8108		0.0103	0.0100	3.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.608		0.0103	0.0100	2.7	50.0
4-Chlorotoluene	Ave	0.8219	0.8306		0.0101	0.0100	1.1	50.0
tert-Butylbenzene	Ave	2.265	2.342		0.0103	0.0100	3.4	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.663		0.0106	0.0100	6.0	50.0
sec-Butylbenzene	Ave	2.907	3.132		0.0108	0.0100	7.8	50.0
1,3-Dichlorobenzene	Ave	1.550	1.593		0.0103	0.0100	2.8	50.0
4-Isopropyltoluene	Ave	2.545	2.724		0.0107	0.0100	7.0	50.0
1,4-Dichlorobenzene	Ave	1.570	1.620		0.0103	0.0100	3.2	50.0
1,2-Dichlorobenzene	Ave	1.479	1.496		0.0101	0.0100	1.1	50.0
n-Butylbenzene	Ave	1.990	2.014		0.0101	0.0100	1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2078		0.0107	0.0100	6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8965		0.0100	0.0100	0.4	50.0
Hexachlorobutadiene	Ave	0.3079	0.2781		0.00903	0.0100	-9.7	50.0
Naphthalene	Ave	2.693	2.701		0.0100	0.0100	0.3	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.8686		0.0101	0.0100	1.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2556		0.0201	0.0200	0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2786		0.0193	0.0200	-3.6	50.0
Toluene-d8 (Surr)	Ave	1.423	1.364		0.0192	0.0200	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4637		0.0186	0.0200	-6.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 13:20:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-014
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:50:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1139518	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	814816	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	388972	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	291259	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	317501	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1111224	20.0	19.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	377864	20.0	18.6	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	182533	10.0	12.1	
12 Chloromethane	50	1.305	1.293	0.012	99	131974	10.0	11.1	
13 Butadiene	54	1.364	1.352	0.012	95	123899	10.0	9.91	
14 Vinyl chloride	62	1.376	1.376	0.000	98	155927	10.0	11.0	
15 Bromomethane	94	1.600	1.589	0.011	90	110983	10.0	10.9	
16 Chloroethane	64	1.648	1.648	0.000	99	93120	10.0	11.1	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	98	223097	10.0	10.8	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	96	250556	10.0	10.4	
19 Ethyl ether	59	2.074	2.062	0.012	87	117780	10.0	10.9	
20 Acrolein	56	2.168	2.157	0.012	98	24774	50.0	59.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	147377	10.0	10.8	
23 112TCTFE	151	2.287	2.275	0.012	90	119846	10.0	11.5	
24 Acetone	43	2.299	2.298	0.001	100	75504	20.0	16.8	
25 Iodomethane	142	2.370	2.358	0.012	98	253950	10.0	10.4	
26 Carbon disulfide	76	2.429	2.417	0.012	99	409283	10.0	10.1	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	94654	10.0	10.3	
29 Methyl acetate	43	2.583	2.571	0.012	96	179186	20.0	19.6	
30 Methylene Chloride	84	2.654	2.642	0.012	86	148216	10.0	9.83	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	160833	100.0	87.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	460333	100.0	98.9	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	166535	10.0	10.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	406634	10.0	10.3	
35 Hexane	86	3.127	3.115	0.012	88	41725	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	246486	10.0	10.6	
37 Vinyl acetate	43	3.293	3.281	0.012	97	241829	10.0	9.62	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	169379	10.0	10.2	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	72	42131	10.0	11.1	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	114545	20.0	17.2	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	81061	10.0	9.81	
49 Tetrahydrofuran	42	3.979	3.967	0.012	83	75213	20.0	19.2	
48 Chloroform	83	3.979	3.979	0.000	93	253696	10.0	10.0	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	226278	10.0	10.2	
51 Cyclohexane	56	4.192	4.180	0.012	83	199902	10.0	10.8	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	201601	10.0	10.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	206652	10.0	10.1	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	114166	250.0	238.8	
55 Benzene	78	4.440	4.440	0.000	95	574397	10.0	10.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	188586	10.0	10.2	
58 n-Heptane	100	4.689	4.689	0.000	82	35418	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	179111	10.0	10.1	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	218131	10.0	10.9	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	125385	10.0	10.6	
64 Dibromomethane	93	5.269	5.269	0.000	92	86580	10.0	9.97	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	26089	200.0	145.4	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	182159	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	85339	10.0	10.1	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	216118	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	237362	20.0	20.0	
72 Toluene	91	6.097	6.097	0.000	99	616594	10.0	9.97	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	91	187970	10.0	9.36	
74 Ethyl methacrylate	69	6.393	6.381	0.012	85	160062	10.0	10.2	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	89	122846	10.0	10.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	139184	10.0	10.6	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	207644	10.0	10.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	181066	20.0	20.8	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	137672	10.0	10.2	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	129379	10.0	10.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	409667	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	138267	10.0	10.2	
86 Ethylbenzene	106	7.470	7.469	0.001	97	220495	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	267564	10.0	10.3	
89 o-Xylene	106	7.943	7.943	0.000	95	259795	10.0	10.9	
88 Styrene	104	7.955	7.955	0.000	94	364651	10.0	10.5	
90 Bromoform	173	8.120	8.120	0.000	97	81292	10.0	9.11	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	645571	10.0	10.6	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	151615	10.0	10.0	
95 Bromobenzene	156	8.570	8.570	0.000	91	169468	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	56911	10.0	9.83	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	77	42300	10.0	9.83	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	189067	10.0	10.6	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	157698	10.0	10.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	507306	10.0	10.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	161531	10.0	10.1	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	455517	10.0	10.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	517914	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	609221	10.0	10.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	309806	10.0	10.3	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	529687	10.0	10.7	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	315092	10.0	10.3	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	290856	10.0	10.1	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	391670	10.0	10.1	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	40406	10.0	10.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	95	174348	10.0	10.0	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	54094	10.0	9.03	
118 Naphthalene	128	11.753	11.753	0.000	96	525229	10.0	10.0	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	168935	10.0	10.1	
S 129 Total BTEX	1				0		50.0	51.6	
S 128 Trihalomethanes, Total	1				0		40.0	39.7	
S 132 Xylenes, Total	106				0		20.0	21.2	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00382	Amount Added:	8.00	Units: uL	
VMFASAW_00359	Amount Added:	8.00	Units: uL	
VMFASGW_00391	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

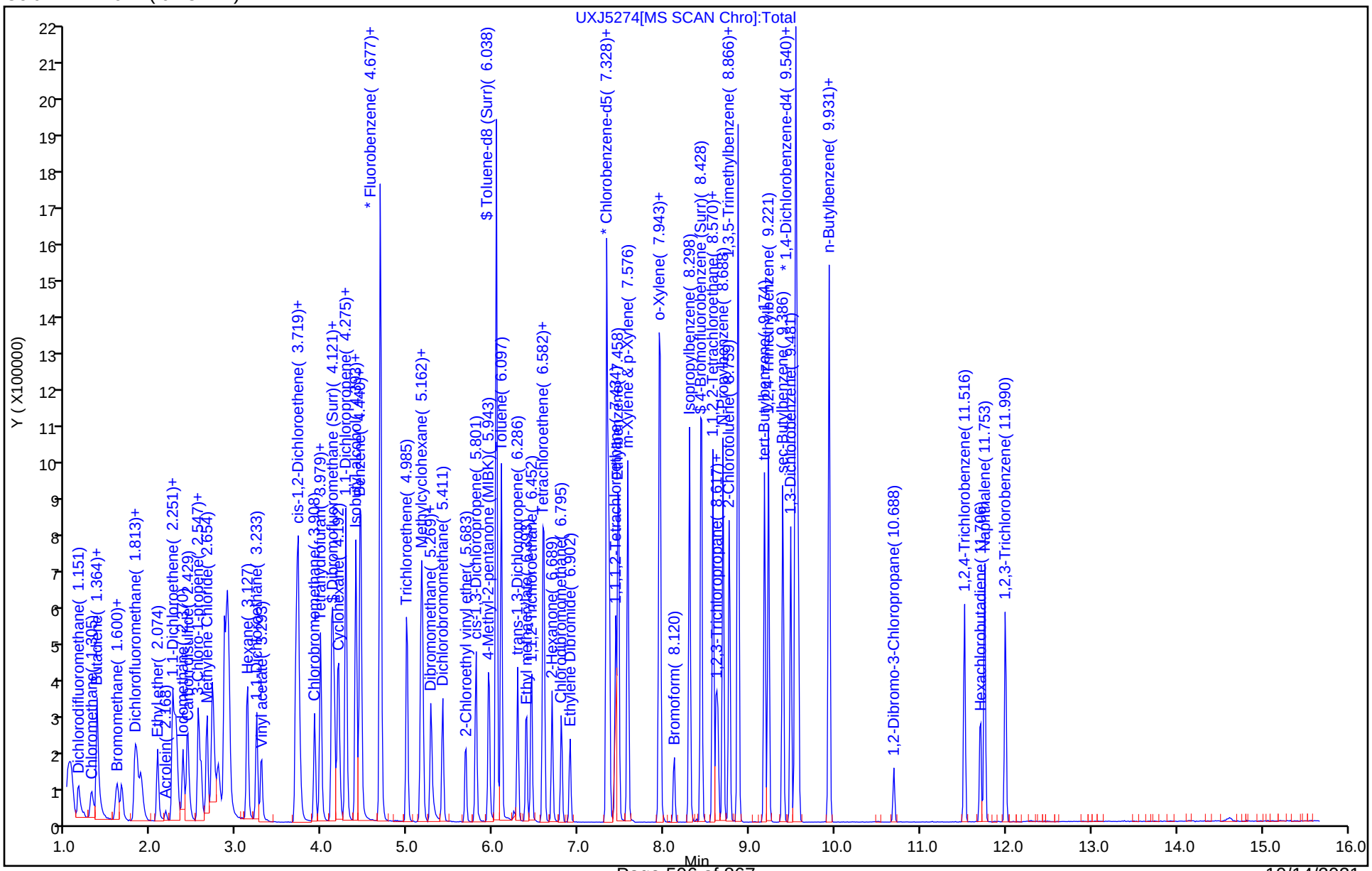
Report Date: 18-Jan-2021 09:31:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D

Injection Date:	15-Jan-2021 13:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2548	0.2367		0.0186	0.0200	-7.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2719		0.0188	0.0200	-5.9	50.0
Toluene-d8 (Surr)	Ave	1.423	1.305		0.0183	0.0200	-8.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4431		0.0178	0.0200	-11.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

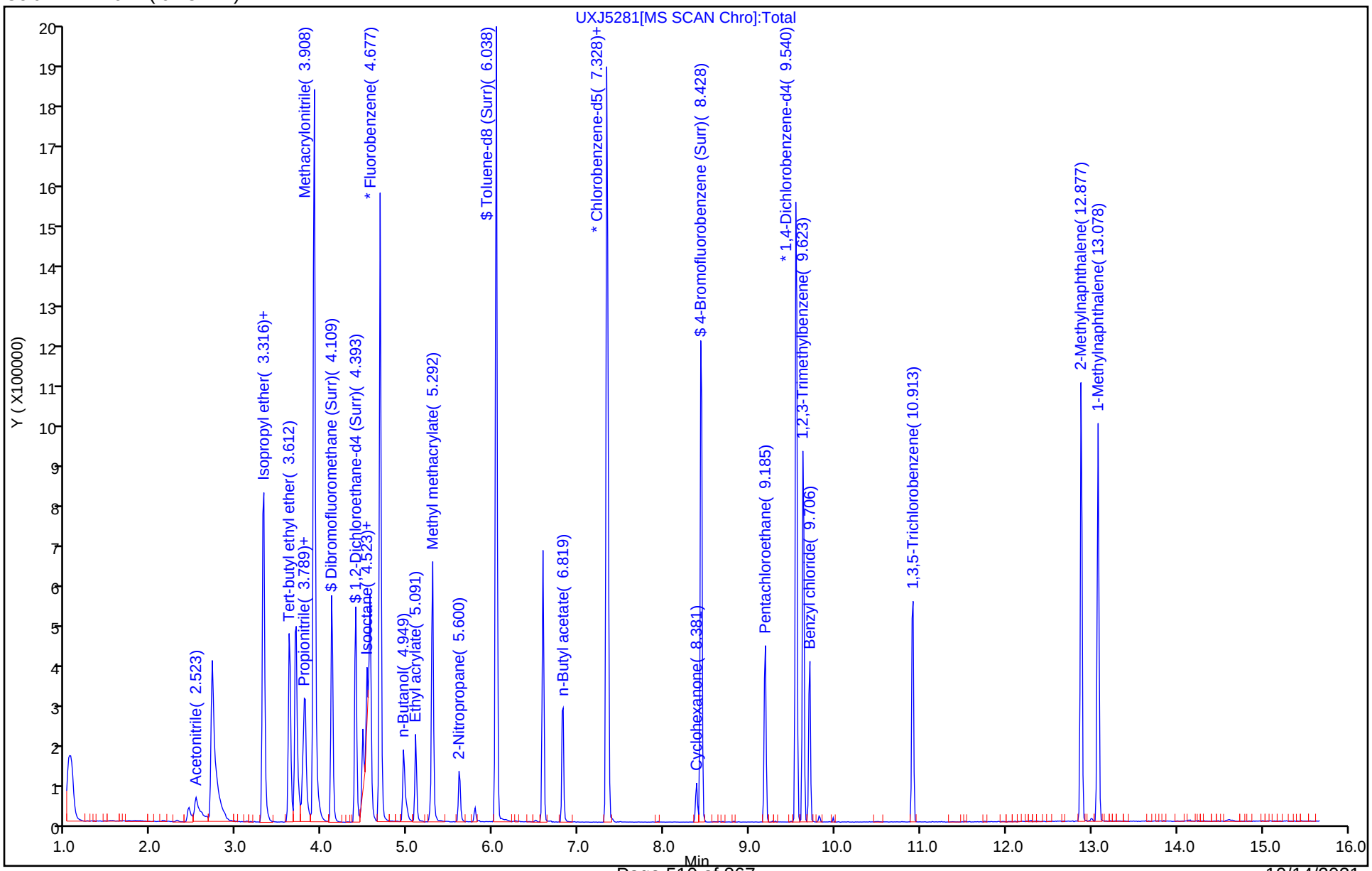
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 13:42

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 15:33

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0243		0.112	0.100	12.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3560	0.3676		0.0103	0.0100	3.3	50.0
Isopropyl ether	Ave	0.2182	0.2176		0.00997	0.0100	-0.3	50.0
Tert-butyl ethyl ether	Ave	0.6105	0.6145		0.0101	0.0100	0.7	50.0
Propionitrile	Ave	0.0327	0.0329		0.101	0.100	0.9	50.0
Ethyl acetate	Ave	0.2110	0.2208		0.0209	0.0200	4.7	50.0
Methacrylonitrile	Ave	0.1278	0.1289		0.101	0.100	0.9	50.0
Tert-amyl methyl ether	Ave	0.6525	0.6551		0.0100	0.0100	0.4	50.0
n-Butanol	Ave	0.0112	0.0108		0.240	0.250	-4.0	50.0
Ethyl acrylate	Ave	0.2791	0.2897		0.0104	0.0100	3.8	50.0
Methyl methacrylate	Ave	0.1775	0.1876		0.0211	0.0200	5.7	50.0
2-Nitropropane	Ave	0.0615	0.0576		0.0187	0.0200	-6.4	50.0
n-Butyl acetate	Ave	0.2958	0.3050		0.0103	0.0100	3.1	50.0
1-Chlorohexane	Ave	0.4822	0.4843		0.0100	0.0100	0.4	50.0
Cyclohexanone	Ave	0.0212	0.0192		0.0904	0.100	-9.6	50.0
Pentachloroethane	Ave	0.1300	0.0945		0.0145	0.0200	-27.3	50.0
1,2,3-Trimethylbenzene	Ave	2.497	2.446		0.00980	0.0100	-2.0	50.0
Benzyl chloride	Ave	0.3080	0.2891		0.00939	0.0100	-6.1	50.0
1,3,5-Trichlorobenzene	Ave	0.9535	0.8699		0.00912	0.0100	-8.8	50.0
2-Methylnaphthalene	Ave	1.501	1.191		0.0159	0.0200	-20.7	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

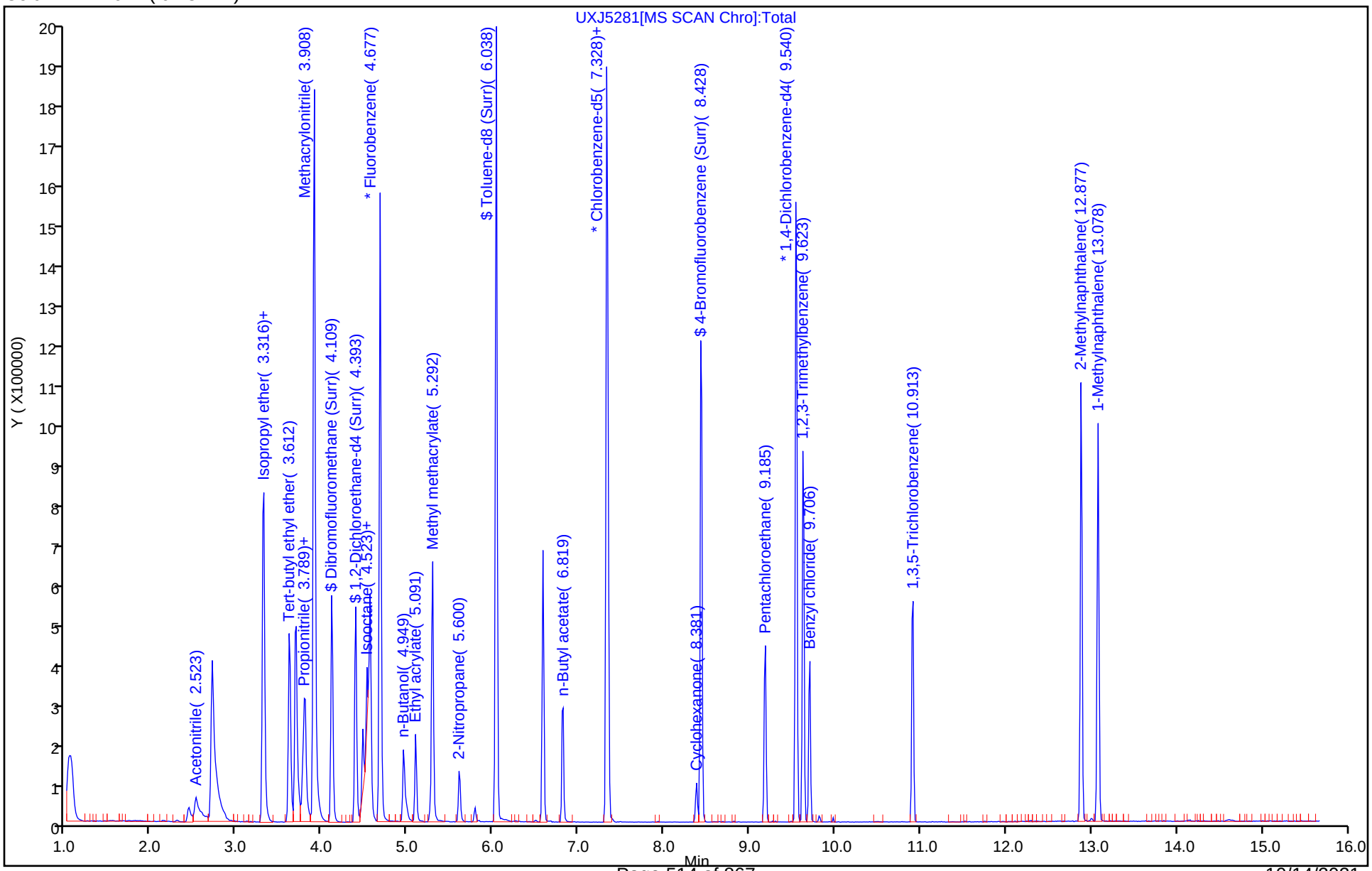
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507762/2 Calibration Date: 10/12/2021 07:31

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2849		0.0108	0.0100	7.6	50.0
Chloromethane	Ave	0.2085	0.2400	0.1000	0.0115	0.0100	15.1	50.0
Butadiene	Ave	0.2195	0.2275		0.0104	0.0100	3.7	50.0
Vinyl chloride	Ave	0.2484	0.2926		0.0118	0.0100	17.8	20.0
Bromomethane	Ave	0.1787	0.2274		0.0127	0.0100	27.2	50.0
Chloroethane	Ave	0.1469	0.1860		0.0127	0.0100	26.6	50.0
Dichlorofluoromethane	Ave	0.3641	0.3983		0.0109	0.0100	9.4	50.0
Trichlorofluoromethane	Ave	0.4246	0.4078		0.00960	0.0100	-4.0	50.0
Ethyl ether	Ave	0.1891	0.2434		0.0129	0.0100	28.7	50.0
Acrolein	Ave	0.0073	0.0181		0.124	0.0500	147.6*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2339		0.00975	0.0100	-2.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1090		0.00596	0.0100	-40.4	50.0
Acetone	Qua		0.0772		0.0202	0.0200	0.9	50.0
Iodomethane	Ave	0.4292	0.4664		0.0109	0.0100	8.7	50.0
Carbon disulfide	Ave	0.7139	0.6938		0.00972	0.0100	-2.8	50.0
3-Chloro-1-propene	Ave	0.1609	0.1758		0.0109	0.0100	9.3	50.0
Methyl acetate	Ave	0.1601	0.1699		0.0212	0.0200	6.1	50.0
Methylene Chloride	Ave	0.2646	0.2819		0.0107	0.0100	6.5	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0297		0.0918	0.100	-8.2	50.0
Acrylonitrile	Ave	0.0817	0.0938		0.115	0.100	14.7	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.3114		0.0110	0.0100	10.4	50.0
Methyl tert-butyl ether	Ave	0.6940	0.6970		0.0100	0.0100	0.4	50.0
Hexane	Ave	0.0646	0.0440		0.00682	0.0100	-31.8*	20.0
1,1-Dichloroethane	Ave	0.4093	0.4713	0.1000	0.0115	0.0100	15.1	50.0
Vinyl acetate	Ave	0.4414	0.4021		0.00911	0.0100	-8.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.3305		0.0114	0.0100	13.7	50.0
2,2-Dichloropropane	Ave	0.0667	0.0772		0.0116	0.0100	15.8	50.0
2-Butanone (MEK)	Ave	0.1171	0.1052		0.0180	0.0200	-10.2	50.0
Chlorobromomethane	Ave	0.1450	0.1561		0.0108	0.0100	7.6	50.0
Tetrahydrofuran	Ave	0.0687	0.0669		0.0195	0.0200	-2.7	50.0
Chloroform	Ave	0.4451	0.4566		0.0103	0.0100	2.6	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3718		0.00953	0.0100	-4.7	50.0
Cyclohexane	Ave	0.3237	0.2151		0.00665	0.0100	-33.5	50.0
1,1-Dichloropropene	Ave	0.3529	0.3165		0.00897	0.0100	-10.3	50.0
Carbon tetrachloride	Ave	0.3575	0.2857		0.00799	0.0100	-20.1	50.0
Isobutyl alcohol	Ave	0.0117	0.0142		0.302	0.250	20.9	50.0
Benzene	Ave	0.997	1.065		0.0107	0.0100	6.8	50.0
1,2-Dichloroethane	Ave	0.3233	0.3045		0.00942	0.0100	-5.8	50.0
n-Heptane	Ave	0.0579	0.0437		0.00755	0.0100	-24.5	50.0
Trichloroethene	Ave	0.3122	0.2906		0.00931	0.0100	-6.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507762/2 Calibration Date: 10/12/2021 07:31

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.2401		0.00681	0.0100	-31.9	50.0
1,2-Dichloropropane	Ave	0.2085	0.2047		0.00982	0.0100	-1.8	20.0
Dibromomethane	Ave	0.1524	0.1400		0.00919	0.0100	-8.1	50.0
1,4-Dioxane	Qua		0.0029		0.182	0.200	-9.1	50.0
Dichlorobromomethane	Ave	0.3068	0.2570		0.00838	0.0100	-16.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1053		0.0142	0.0200	-29.1	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.2956		0.00779	0.0100	-22.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.1748		0.0168	0.0200	-16.1	50.0
Toluene	Ave	1.519	1.702		0.0112	0.0100	12.0	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4119		0.00836	0.0100	-16.4	50.0
Ethyl methacrylate	Ave	0.3857	0.3784		0.00981	0.0100	-1.9	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.2917		0.00968	0.0100	-3.2	50.0
Tetrachloroethene	Ave	0.3233	0.3086		0.00954	0.0100	-4.6	50.0
1,3-Dichloropropane	Ave	0.5016	0.4949		0.00987	0.0100	-1.3	50.0
2-Hexanone	Ave	0.2134	0.1842		0.0173	0.0200	-13.7	50.0
Chlorodibromomethane	Ave	0.3328	0.3045		0.00915	0.0100	-8.5	50.0
Ethylene Dibromide	Ave	0.3165	0.2846		0.00899	0.0100	-10.1	50.0
Chlorobenzene	Ave	0.9925	0.9939	0.3000	0.0100	0.0100	0.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3617		0.0109	0.0100	8.7	50.0
Ethylbenzene	Ave	0.5200	0.5211		0.0100	0.0100	0.2	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6111		0.00958	0.0100	-4.2	50.0
o-Xylene	Ave	0.5870	0.6149		0.0105	0.0100	4.8	50.0
Styrene	Ave	0.8528	0.9374		0.0110	0.0100	9.9	50.0
Bromoform	Lin1		0.2156	0.1000	0.00981	0.0100	-1.9	50.0
Isopropylbenzene	Ave	1.500	1.435		0.00957	0.0100	-4.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.7342	0.3000	0.00946	0.0100	-5.4	50.0
Bromobenzene	Ave	0.8603	0.6765		0.00786	0.0100	-21.4	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2317		0.00778	0.0100	-22.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1538		0.00695	0.0100	-30.5	50.0
N-Propylbenzene	Ave	0.9157	0.6663		0.00728	0.0100	-27.2	50.0
2-Chlorotoluene	Ave	0.7837	0.6305		0.00804	0.0100	-19.6	50.0
1,3,5-Trimethylbenzene	Ave	2.541	1.948		0.00767	0.0100	-23.3	50.0
4-Chlorotoluene	Ave	0.8219	0.6345		0.00772	0.0100	-22.8	50.0
tert-Butylbenzene	Ave	2.265	1.496		0.00661	0.0100	-33.9	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.093		0.00833	0.0100	-16.7	50.0
sec-Butylbenzene	Ave	2.907	2.137		0.00735	0.0100	-26.5	50.0
1,3-Dichlorobenzene	Ave	1.550	1.343		0.00867	0.0100	-13.3	50.0
4-Isopropyltoluene	Ave	2.545	2.020		0.00794	0.0100	-20.6	50.0
1,4-Dichlorobenzene	Ave	1.570	1.375		0.00876	0.0100	-12.4	50.0
1,2-Dichlorobenzene	Ave	1.479	1.346		0.00910	0.0100	-9.0	50.0
n-Butylbenzene	Ave	1.990	1.586		0.00797	0.0100	-20.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507762/2 Calibration Date: 10/12/2021 07:31

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1284.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.1568		0.00806	0.0100	-19.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.6824		0.00764	0.0100	-23.6	50.0
Hexachlorobutadiene	Ave	0.3079	0.2604		0.00846	0.0100	-15.4	50.0
Naphthalene	Ave	2.693	1.748		0.00649	0.0100	-35.1	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.6286		0.00733	0.0100	-26.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2533		0.0199	0.0200	-0.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2603		0.0180	0.0200	-9.9	50.0
Toluene-d8 (Surr)	Ave	1.423	1.483		0.0209	0.0200	4.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4278		0.0172	0.0200	-14.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1284.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Oct-2021 07:31:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-002
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:22 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	929880	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	531501	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	323663	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	235511	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	242047	20.0	18.0	
$ 6 Toluene-d8 (Surr)	98	6.037	6.037	0.000	92	788282	20.0	20.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	227376	20.0	17.2	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	132447	10.0	10.8	
12 Chloromethane	50	1.292	1.292	0.000	99	111602	10.0	11.5	
13 Butadiene	54	1.363	1.363	0.000	91	105769	10.0	10.4	
14 Vinyl chloride	62	1.363	1.363	0.000	97	136024	10.0	11.8	
15 Bromomethane	94	1.600	1.600	0.000	90	105707	10.0	12.7	
16 Chloroethane	64	1.647	1.647	0.000	99	86485	10.0	12.7	
17 Dichlorofluoromethane	67	1.801	1.801	0.000	97	185203	10.0	10.9	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	189587	10.0	9.60	
19 Ethyl ether	59	2.062	2.062	0.000	85	113166	10.0	12.9	
20 Acrolein	56	2.156	2.156	0.000	99	42050	50.0	123.8	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	108766	10.0	9.75	
23 112TCTFE	151	2.286	2.286	0.000	92	50656	10.0	5.96	
24 Acetone	43	2.286	2.286	0.000	99	71792	20.0	20.2	
25 Iodomethane	142	2.369	2.369	0.000	97	216869	10.0	10.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	322562	10.0	9.72	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	85	81732	10.0	10.9	
29 Methyl acetate	43	2.570	2.570	0.000	96	157975	20.0	21.2	
30 Methylene Chloride	84	2.641	2.641	0.000	84	131062	10.0	10.7	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	98	137930	100.0	91.8	
32 Acrylonitrile	53	2.854	2.854	0.000	98	435899	100.0	114.7	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	144761	10.0	11.0	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	324049	10.0	10.0	
35 Hexane	86	3.115	3.115	0.000	89	20475	10.0	6.82	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	219111	10.0	11.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 Vinyl acetate	43	3.280	3.280	0.000	97	186971	10.0	9.11	
41 cis-1,2-Dichloroethene	96	3.706	3.706	0.000	76	153644	10.0	11.4	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	87	35900	10.0	11.6	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	95	97811	20.0	18.0	
46 Chlorobromomethane	128	3.907	3.907	0.000	85	72583	10.0	10.8	
49 Tetrahydrofuran	42	3.967	3.967	0.000	79	62168	20.0	19.5	
48 Chloroform	83	3.978	3.978	0.000	93	212296	10.0	10.3	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	98	172842	10.0	9.53	
51 Cyclohexane	56	4.180	4.180	0.000	87	100016	10.0	6.65	
53 1,1-Dichloropropene	75	4.274	4.274	0.000	95	147169	10.0	8.97	
52 Carbon tetrachloride	117	4.274	4.274	0.000	87	132849	10.0	7.99	
54 Isobutyl alcohol	41	4.393	4.393	0.000	62	94232	250.0	302.2	
55 Benzene	78	4.440	4.440	0.000	94	495186	10.0	10.7	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	141595	10.0	9.42	
58 n-Heptane	100	4.688	4.688	0.000	82	20318	10.0	7.55	
60 Trichloroethene	130	4.984	4.984	0.000	95	135118	10.0	9.31	
62 Methylcyclohexane	83	5.150	5.150	0.000	86	111629	10.0	6.81	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	96	95196	10.0	9.82	
64 Dibromomethane	93	5.268	5.268	0.000	93	65106	10.0	9.19	
66 1,4-Dioxane	88	5.304	5.304	0.000	85	26567	200.0	181.7	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	119480	10.0	8.38	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	90	97948	20.0	14.2	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	137425	10.0	7.79	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	162535	20.0	16.8	
72 Toluene	91	6.097	6.097	0.000	99	452196	10.0	11.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	109450	10.0	8.36	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	100569	10.0	9.81	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	90	77518	10.0	9.68	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	82005	10.0	9.54	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	131523	10.0	9.87	
78 2-Hexanone	43	6.676	6.676	0.000	93	97916	20.0	17.3	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	80909	10.0	9.15	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	75638	10.0	8.99	
84 Chlorobenzene	112	7.351	7.351	0.000	97	264125	10.0	10.0	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	96117	10.0	10.9	
86 Ethylbenzene	106	7.457	7.457	0.000	97	138489	10.0	10.0	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	162396	10.0	9.58	
89 o-Xylene	106	7.943	7.943	0.000	95	163401	10.0	10.5	
88 Styrene	104	7.954	7.954	0.000	94	249115	10.0	11.0	
90 Bromoform	173	8.108	8.108	0.000	96	57285	10.0	9.81	
91 Isopropylbenzene	105	8.297	8.297	0.000	94	381262	10.0	9.57	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	118817	10.0	9.46	
95 Bromobenzene	156	8.570	8.570	0.000	85	109476	10.0	7.86	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	85	37497	10.0	7.78	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	76	24883	10.0	6.95	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	107829	10.0	7.28	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	102036	10.0	8.04	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	97	315312	10.0	7.67	
101 4-Chlorotoluene	126	8.865	8.865	0.000	98	102676	10.0	7.72	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	242152	10.0	6.61	
104 1,2,4-Trimethylbenzene	105	9.220	9.220	0.000	96	338720	10.0	8.33	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	345758	10.0	7.35	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	217359	10.0	8.67	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	326853	10.0	7.94	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	222483	10.0	8.76	
111 n-Butylbenzene	91	9.930	9.930	0.000	97	256620	10.0	7.97	
112 1,2-Dichlorobenzene	146	9.930	9.930	0.000	99	217834	10.0	9.10	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	90	25381	10.0	8.06	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	110441	10.0	7.64	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	94	42141	10.0	8.46	
118 Naphthalene	128	11.741	11.741	0.000	96	282866	10.0	6.49	
119 1,2,3-Trichlorobenzene	180	11.989	11.989	0.000	96	101734	10.0	7.33	
S 129 Total BTEX	1				0		50.0	52.0	
S 128 Trihalomethanes, Total	1				0		40.0	37.6	
S 132 Xylenes, Total	106				0		20.0	20.1	

Reagents:

VMRPRIMW_00455	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00412	Amount Added:	8.00	Units: uL	
vmrgas_00403	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

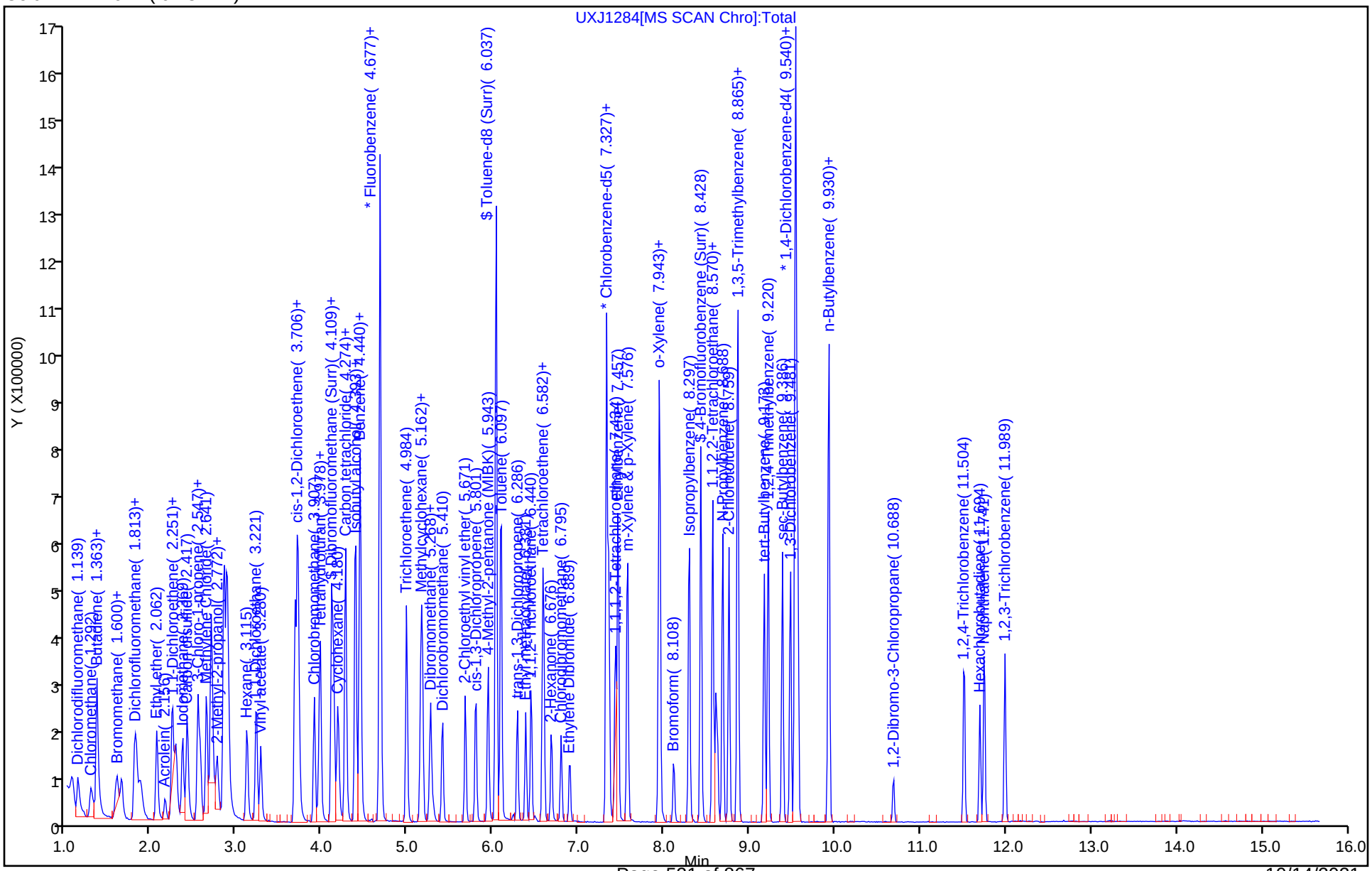
Report Date: 13-Oct-2021 08:35:23 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1284.D

Injection Date:	12-Oct-2021 07:31:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508017/2 Calibration Date: 10/13/2021 09:00

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1317.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.3079		0.0116	0.0100	16.3	50.0
Chloromethane	Ave	0.2085	0.2451	0.1000	0.0118	0.0100	17.6	50.0
Butadiene	Ave	0.2195	0.2435		0.0111	0.0100	10.9	50.0
Vinyl chloride	Ave	0.2484	0.2847		0.0115	0.0100	14.6	20.0
Bromomethane	Ave	0.1787	0.2233		0.0125	0.0100	24.9	50.0
Chloroethane	Ave	0.1469	0.1850		0.0126	0.0100	25.9	50.0
Dichlorofluoromethane	Ave	0.3641	0.3965		0.0109	0.0100	8.9	50.0
Trichlorofluoromethane	Ave	0.4246	0.4816		0.0113	0.0100	13.4	50.0
Ethyl ether	Ave	0.1891	0.2780		0.0147	0.0100	47.0	50.0
Acrolein	Ave	0.0073	0.0264		0.181	0.0500	262.0*	50.0
1,1-Dichloroethene	Ave	0.2398	0.3211		0.0134	0.0100	33.9*	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.2003		0.0109	0.0100	9.5	50.0
Acetone	Qua		0.1193		0.0343	0.0200	71.6*	50.0
Iodomethane	Ave	0.4292	0.5570		0.0130	0.0100	29.8	50.0
Carbon disulfide	Ave	0.7139	0.8700		0.0122	0.0100	21.9	50.0
3-Chloro-1-propene	Ave	0.1609	0.2004		0.0125	0.0100	24.6	50.0
Methyl acetate	Ave	0.1601	0.2461		0.0307	0.0200	53.7*	50.0
Methylene Chloride	Ave	0.2646	0.3334		0.0126	0.0100	26.0	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0474		0.147	0.100	46.7	50.0
Acrylonitrile	Ave	0.0817	0.1370		0.168	0.100	67.7*	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.3587		0.0127	0.0100	27.2	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7642		0.0110	0.0100	10.1	50.0
Hexane	Ave	0.0646	0.0829		0.0128	0.0100	28.3*	20.0
1,1-Dichloroethane	Ave	0.4093	0.5152	0.1000	0.0126	0.0100	25.9	50.0
Vinyl acetate	Ave	0.4414	0.4993		0.0113	0.0100	13.1	50.0
2,2-Dichloropropane	Ave	0.0667	0.0825		0.0124	0.0100	23.8	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.3630		0.0125	0.0100	24.9	50.0
2-Butanone (MEK)	Ave	0.1171	0.1513		0.0258	0.0200	29.2	50.0
Chlorobromomethane	Ave	0.1450	0.1815		0.0125	0.0100	25.1	50.0
Tetrahydrofuran	Ave	0.0687	0.1003		0.0292	0.0200	45.9	50.0
Chloroform	Ave	0.4451	0.5135		0.0115	0.0100	15.4	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.4376		0.0112	0.0100	12.1	50.0
Cyclohexane	Ave	0.3237	0.3994		0.0123	0.0100	23.4	50.0
1,1-Dichloropropene	Ave	0.3529	0.3963		0.0112	0.0100	12.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3936		0.0110	0.0100	10.1	50.0
Isobutyl alcohol	Ave	0.0117	0.0225		0.480	0.250	91.9*	50.0
Benzene	Ave	0.997	1.161		0.0116	0.0100	16.4	50.0
1,2-Dichloroethane	Ave	0.3233	0.3423		0.0106	0.0100	5.9	50.0
n-Heptane	Ave	0.0579	0.0645		0.0111	0.0100	11.4	50.0
Trichloroethene	Ave	0.3122	0.3152		0.0101	0.0100	0.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508017/2 Calibration Date: 10/13/2021 09:00

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1317.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.4242		0.0120	0.0100	20.3	50.0
1,2-Dichloropropane	Ave	0.2085	0.2238		0.0107	0.0100	7.3	20.0
Dibromomethane	Ave	0.1524	0.1577		0.0103	0.0100	3.5	50.0
1,4-Dioxane	Qua		0.0048		0.326	0.200	63.0*	50.0
Dichlorobromomethane	Ave	0.3068	0.2865		0.00934	0.0100	-6.6	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1296		0.0174	0.0200	-12.8	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3415		0.00900	0.0100	-10.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2379		0.0228	0.0200	14.2	50.0
Toluene	Ave	1.519	2.025		0.0133	0.0100	33.3*	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4856		0.00985	0.0100	-1.5	50.0
Ethyl methacrylate	Ave	0.3857	0.4802		0.0125	0.0100	24.5	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3482		0.0116	0.0100	15.6	50.0
Tetrachloroethene	Ave	0.3233	0.4017		0.0124	0.0100	24.2	50.0
1,3-Dichloropropane	Ave	0.5016	0.5731		0.0114	0.0100	14.3	50.0
2-Hexanone	Ave	0.2134	0.2835		0.0266	0.0200	32.8	50.0
Chlorodibromomethane	Ave	0.3328	0.3468		0.0104	0.0100	4.2	50.0
Ethylene Dibromide	Ave	0.3165	0.3459		0.0109	0.0100	9.3	50.0
Chlorobenzene	Ave	0.9925	1.068	0.3000	0.0108	0.0100	7.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3775		0.0113	0.0100	13.5	50.0
Ethylbenzene	Ave	0.5200	0.5728		0.0110	0.0100	10.1	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.7008		0.0110	0.0100	9.9	50.0
o-Xylene	Ave	0.5870	0.6647		0.0113	0.0100	13.2	50.0
Styrene	Ave	0.8528	0.9623		0.0113	0.0100	12.8	50.0
Bromoform	Lin1		0.2316	0.1000	0.0105	0.0100	5.0	50.0
Isopropylbenzene	Ave	1.500	1.600		0.0107	0.0100	6.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.9431	0.3000	0.0121	0.0100	21.5	50.0
Bromobenzene	Ave	0.8603	0.7746		0.00900	0.0100	-10.0	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.3152		0.0106	0.0100	5.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1947		0.00880	0.0100	-12.0	50.0
N-Propylbenzene	Ave	0.9157	0.8556		0.00934	0.0100	-6.6	50.0
2-Chlorotoluene	Ave	0.7837	0.7379		0.00941	0.0100	-5.9	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.335		0.00919	0.0100	-8.1	50.0
4-Chlorotoluene	Ave	0.8219	0.7336		0.00893	0.0100	-10.7	50.0
tert-Butylbenzene	Ave	2.265	1.867		0.00824	0.0100	-17.6	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.381		0.00948	0.0100	-5.2	50.0
sec-Butylbenzene	Ave	2.907	2.728		0.00939	0.0100	-6.1	50.0
1,3-Dichlorobenzene	Ave	1.550	1.469		0.00948	0.0100	-5.2	50.0
4-Isopropyltoluene	Ave	2.545	2.413		0.00948	0.0100	-5.2	50.0
1,4-Dichlorobenzene	Ave	1.570	1.533		0.00976	0.0100	-2.4	50.0
1,2-Dichlorobenzene	Ave	1.479	1.550		0.0105	0.0100	4.8	50.0
n-Butylbenzene	Ave	1.990	1.969		0.00989	0.0100	-1.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508017/2 Calibration Date: 10/13/2021 09:00

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1317.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2530		0.0130	0.0100	30.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8544		0.00956	0.0100	-4.4	50.0
Hexachlorobutadiene	Ave	0.3079	0.3170		0.0103	0.0100	3.0	50.0
Naphthalene	Ave	2.693	2.445		0.00908	0.0100	-9.2	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.7402		0.00863	0.0100	-13.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2822		0.0222	0.0200	10.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2815		0.0195	0.0200	-2.6	50.0
Toluene-d8 (Surr)	Ave	1.423	1.777		0.0250	0.0200	24.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4182		0.0168	0.0200	-16.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1317.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Oct-2021 09:00:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-002
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:56 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 10:58:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1085074	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	575097	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	301848	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	306259	20.0	22.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	305421	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1022063	20.0	25.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	240519	20.0	16.8	
10 Dichlorodifluoromethane	85	1.151	1.151	0.000	99	167065	10.0	11.6	
12 Chloromethane	50	1.304	1.304	0.000	99	132992	10.0	11.8	
13 Butadiene	54	1.364	1.364	0.000	96	132093	10.0	11.1	
14 Vinyl chloride	62	1.375	1.375	0.000	97	154478	10.0	11.5	
15 Bromomethane	94	1.600	1.600	0.000	89	121157	10.0	12.5	
16 Chloroethane	64	1.659	1.659	0.000	99	100377	10.0	12.6	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	97	215095	10.0	10.9	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	261284	10.0	11.3	
19 Ethyl ether	59	2.074	2.074	0.000	86	150834	10.0	14.7	
20 Acrolein	56	2.168	2.168	0.000	99	71743	50.0	181.0	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	94	174225	10.0	13.4	
23 112TCTFE	151	2.287	2.287	0.000	90	108683	10.0	10.9	
24 Acetone	43	2.298	2.298	0.000	99	129493	20.0	34.3	
25 Iodomethane	142	2.369	2.369	0.000	97	302207	10.0	13.0	
26 Carbon disulfide	76	2.429	2.429	0.000	99	472009	10.0	12.2	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	82	108741	10.0	12.5	
29 Methyl acetate	43	2.571	2.571	0.000	96	267058	20.0	30.7	
30 Methylene Chloride	84	2.653	2.653	0.000	83	180886	10.0	12.6	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	99	257030	100.0	146.7	
32 Acrylonitrile	53	2.855	2.855	0.000	99	743363	100.0	167.7	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	93	194607	10.0	12.7	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	92	414584	10.0	11.0	
35 Hexane	86	3.127	3.127	0.000	87	44979	10.0	12.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.233	0.000	95	279496	10.0	12.6	
37 Vinyl acetate	43	3.281	3.281	0.000	97	270879	10.0	11.3	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	78	196939	10.0	12.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	68	44771	10.0	12.4	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	97	164215	20.0	25.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	98463	10.0	12.5	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	108809	20.0	29.2	
48 Chloroform	83	3.979	3.979	0.000	93	278614	10.0	11.5	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	97	237404	10.0	11.2	
51 Cyclohexane	56	4.180	4.180	0.000	83	216709	10.0	12.3	
53 1,1-Dichloropropene	75	4.274	4.274	0.000	94	215023	10.0	11.2	
52 Carbon tetrachloride	117	4.274	4.274	0.000	93	213538	10.0	11.0	
54 Isobutyl alcohol	41	4.393	4.393	0.000	74	161846	250.0	479.7	
55 Benzene	78	4.440	4.440	0.000	94	630032	10.0	11.6	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	185729	10.0	10.6	
58 n-Heptane	100	4.689	4.689	0.000	79	34994	10.0	11.1	
60 Trichloroethene	130	4.984	4.984	0.000	94	170991	10.0	10.1	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	230150	10.0	12.0	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	121393	10.0	10.7	
64 Dibromomethane	93	5.268	5.268	0.000	95	85538	10.0	10.3	
66 1,4-Dioxane	88	5.304	5.304	0.000	87	52113	200.0	325.9	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	155412	10.0	9.34	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	140593	20.0	17.4	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	185284	10.0	9.00	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	258128	20.0	22.8	
72 Toluene	91	6.097	6.097	0.000	98	582270	10.0	13.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	139628	10.0	9.85	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	138085	10.0	12.5	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	87	100136	10.0	11.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	115503	10.0	12.4	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	164797	10.0	11.4	
78 2-Hexanone	43	6.677	6.677	0.000	91	163026	20.0	26.6	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	99724	10.0	10.4	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	99453	10.0	10.9	
84 Chlorobenzene	112	7.351	7.351	0.000	98	307025	10.0	10.8	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	108546	10.0	11.3	
86 Ethylbenzene	106	7.458	7.458	0.000	97	164700	10.0	11.0	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	201507	10.0	11.0	
89 o-Xylene	106	7.943	7.943	0.000	94	191131	10.0	11.3	
88 Styrene	104	7.955	7.955	0.000	95	276695	10.0	11.3	
90 Bromoform	173	8.108	8.108	0.000	96	66600	10.0	10.5	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	460123	10.0	10.7	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	91	142329	10.0	12.1	
95 Bromobenzene	156	8.570	8.570	0.000	83	116903	10.0	9.00	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	85	47573	10.0	10.6	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	77	29385	10.0	8.80	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	129133	10.0	9.34	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	111366	10.0	9.41	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	95	352471	10.0	9.19	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	110714	10.0	8.93	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	281815	10.0	8.24	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	359346	10.0	9.48	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	411734	10.0	9.39	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	221710	10.0	9.48	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	96	364158	10.0	9.48	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	231325	10.0	9.76	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	98	233956	10.0	10.5	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	297121	10.0	9.89	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	91	38177	10.0	13.0	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	128945	10.0	9.56	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	47836	10.0	10.3	
118 Naphthalene	128	11.741	11.741	0.000	96	369019	10.0	9.08	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	111719	10.0	8.63	
S 129 Total BTEX	1				0		50.0	58.3	
S 128 Trihalomethanes, Total	1				0		40.0	41.8	
S 132 Xylenes, Total	106				0		20.0	22.3	

QC Flag Legend

Processing Flags

Reagents:

VMRPRIMW_00455	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00412	Amount Added:	8.00	Units: uL	
vmrgas_00403	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

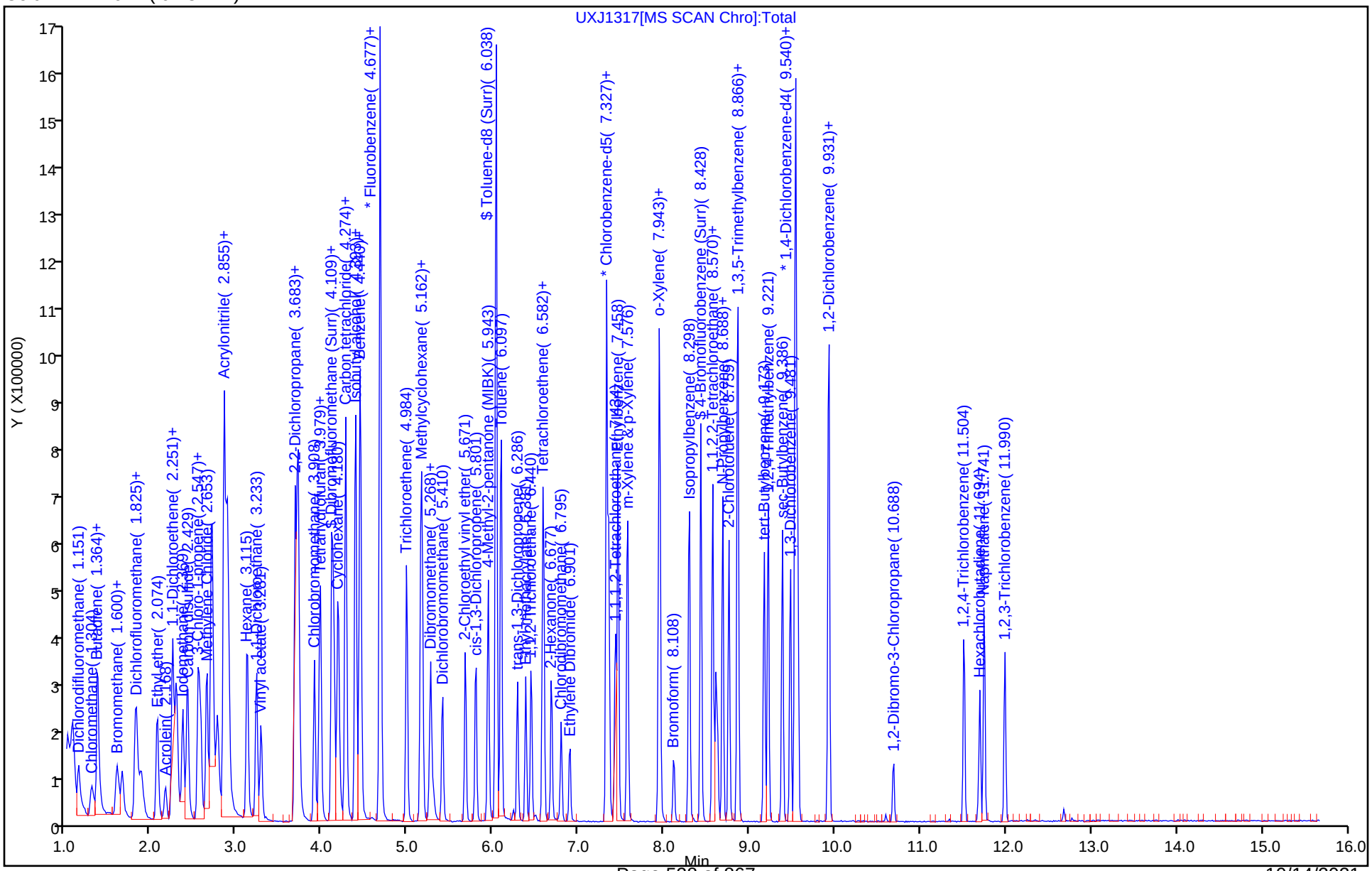
Report Date: 14-Oct-2021 05:28:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1317.D

Injection Date:	13-Oct-2021 09:00:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3162		0.0105	0.0100	4.9	50.0
Chloromethane	Ave	0.3426	0.3320	0.1000	0.00969	0.0100	-3.1	50.0
Vinyl chloride	Ave	0.2936	0.2920		0.00994	0.0100	-0.6	20.0
Butadiene	Ave	0.3746	0.3489		0.00932	0.0100	-6.8	50.0
Bromomethane	Ave	0.2460	0.2290		0.00931	0.0100	-6.9	50.0
Chloroethane	Ave	0.2164	0.2012		0.00930	0.0100	-7.0	50.0
Dichlorofluoromethane	Ave	0.5757	0.5490		0.00954	0.0100	-4.6	50.0
Trichlorofluoromethane	Ave	0.5212	0.5235		0.0100	0.0100	0.5	50.0
Ethyl ether	Ave	0.2512	0.2446		0.00974	0.0100	-2.6	50.0
Acrolein	Lin		0.0072		0.0217	0.0500	-56.5*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2948		0.0102	0.0100	2.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2477		0.0103	0.0100	2.8	50.0
Acetone	Ave	0.0202	0.0217		0.0215	0.0200	7.4	50.0
Iodomethane	Ave	0.4428	0.4952		0.0112	0.0100	11.8	50.0
Carbon disulfide	Ave	0.8057	0.7778		0.00965	0.0100	-3.5	50.0
3-Chloro-1-propene	Ave	0.1698	0.1619		0.00953	0.0100	-4.7	50.0
Methyl acetate	Ave	0.1269	0.1257		0.0198	0.0200	-1.0	50.0
Methylene Chloride	Ave	0.2691	0.2551		0.00948	0.0100	-5.2	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0135		0.0952	0.100	-4.8	50.0
Acrylonitrile	Ave	0.0679	0.0654		0.0964	0.100	-3.6	50.0
Methyl tert-butyl ether	Ave	0.7014	0.6922		0.00987	0.0100	-1.3	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2782		0.00964	0.0100	-3.6	50.0
Hexane	Ave	0.0578	0.0516		0.00893	0.0100	-10.7	20.0
1,1-Dichloroethane	Ave	0.4573	0.4471	0.1000	0.00978	0.0100	-2.2	50.0
Vinyl acetate	Ave	0.3891	0.3568		0.00917	0.0100	-8.3	50.0
2,2-Dichloropropane	Ave	0.0889	0.0893		0.0100	0.0100	0.5	50.0
2-Butanone (MEK)	Ave	0.0211	0.0211		0.0200	0.0200	0.0	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3083		0.0101	0.0100	1.1	50.0
Chlorobromomethane	Ave	0.1440	0.1399		0.00971	0.0100	-2.9	50.0
Tetrahydrofuran	Ave	0.0526	0.0498		0.0189	0.0200	-5.3	50.0
Chloroform	Ave	0.4553	0.4511		0.00991	0.0100	-0.9	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.4200		0.0102	0.0100	2.4	50.0
Cyclohexane	Ave	0.4232	0.4079		0.00964	0.0100	-3.6	50.0
1,1-Dichloropropene	Ave	0.3688	0.3540		0.00960	0.0100	-4.0	50.0
Carbon tetrachloride	Ave	0.3647	0.3645		0.00999	0.0100	-0.0	50.0
Isobutyl alcohol	Ave	0.0045	0.0045		0.250	0.250	-0.0	50.0
Benzene	Ave	1.097	1.041		0.00949	0.0100	-5.1	50.0
1,2-Dichloroethane	Ave	0.3263	0.3199		0.00981	0.0100	-1.9	50.0
n-Heptane	Ave	0.0495	0.0427		0.00864	0.0100	-13.6	50.0
Trichloroethene	Ave	0.2948	0.2849		0.00966	0.0100	-3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3434		0.00933	0.0100	-6.7	50.0
1,2-Dichloropropane	Ave	0.2272	0.2268		0.00998	0.0100	-0.2	20.0
1,4-Dioxane	Qua		0.0008		0.0759	0.200	-62.0*	50.0
Dibromomethane	Ave	0.1312	0.1315		0.0100	0.0100	0.2	50.0
Dichlorobromomethane	Ave	0.2893	0.2932		0.0101	0.0100	1.4	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.0771		0.00982	0.0100	-1.8	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3147		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1567		0.0207	0.0200	3.4	50.0
Toluene	Ave	1.478	1.427		0.00966	0.0100	-3.4	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.3485		0.00920	0.0100	-8.0	50.0
Ethyl methacrylate	Ave	0.2855	0.2734		0.00958	0.0100	-4.2	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.2384		0.00983	0.0100	-1.7	50.0
Tetrachloroethene	Ave	0.3113	0.3026		0.00972	0.0100	-2.8	50.0
1,3-Dichloropropane	Ave	0.4170	0.4070		0.00976	0.0100	-2.4	50.0
2-Hexanone	Ave	0.1387	0.1422		0.0205	0.0200	2.5	50.0
Chlorodibromomethane	Ave	0.2665	0.2652		0.00995	0.0100	-0.5	50.0
Ethylene Dibromide	Ave	0.2342	0.2240		0.00957	0.0100	-4.3	50.0
Chlorobenzene	Ave	0.9020	0.8871	0.3000	0.00983	0.0100	-1.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3822		0.0102	0.0100	1.7	50.0
Ethylbenzene	Ave	0.4928	0.4906		0.00996	0.0100	-0.4	20.0
m-Xylene & p-Xylene	Ave	1.195	1.180		0.00987	0.0100	-1.3	50.0
o-Xylene	Ave	0.6424	0.6426		0.0100	0.0100	0.0	50.0
Styrene	Ave	0.8332	0.8410		0.0101	0.0100	0.9	50.0
Bromoform	Ave	0.1647	0.1612	0.1000	0.00979	0.0100	-2.1	50.0
Isopropylbenzene	Ave	1.586	1.602		0.0101	0.0100	1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.5091	0.3000	0.00995	0.0100	-0.5	50.0
Bromobenzene	Ave	0.7041	0.7006		0.00995	0.0100	-0.5	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.1703		0.0103	0.0100	2.6	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1015		0.00870	0.0100	-13.0	50.0
N-Propylbenzene	Ave	0.6976	0.6962		0.00998	0.0100	-0.2	50.0
2-Chlorotoluene	Ave	0.6475	0.6591		0.0102	0.0100	1.8	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.185		0.00995	0.0100	-0.5	50.0
4-Chlorotoluene	Ave	2.069	2.053		0.00992	0.0100	-0.8	50.0
tert-Butylbenzene	Ave	1.877	1.840		0.00980	0.0100	-2.0	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.297		0.0102	0.0100	2.0	50.0
sec-Butylbenzene	Ave	2.474	2.409		0.00974	0.0100	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.319	1.302		0.00987	0.0100	-1.3	50.0
4-Isopropyltoluene	Ave	2.213	2.161		0.00977	0.0100	-2.3	50.0
1,4-Dichlorobenzene	Ave	1.370	1.339		0.00978	0.0100	-2.2	50.0
n-Butylbenzene	Ave	1.792	1.672		0.00933	0.0100	-6.7	50.0
1,2-Dichlorobenzene	Ave	1.373	1.340		0.00976	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1117		0.00990	0.0100	-1.0	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.9456		0.00939	0.0100	-6.1	50.0
Hexachlorobutadiene	Lin1		0.3990		0.00932	0.0100	-6.8	50.0
Naphthalene	Ave	2.149	2.141		0.00996	0.0100	-0.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.8985		0.00940	0.0100	-6.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2236		0.00957	0.0100	-4.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2484		0.00943	0.0100	-5.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.185		0.00967	0.0100	-3.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4194		0.0101	0.0100	1.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 11:01:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-014
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 13:17:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1567389	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1054688	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.898	9.899	-0.001	92	623148	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	350444	10.0	9.57	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	389325	10.0	9.43	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1249416	10.0	9.67	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	442373	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	495659	10.0	10.5	
10 Chloromethane	50	1.574	1.574	0.000	99	520359	10.0	9.69	
11 Vinyl chloride	62	1.669	1.669	0.000	98	457630	10.0	9.94	
12 Butadiene	54	1.681	1.681	0.000	99	546882	10.0	9.32	
13 Bromomethane	94	1.930	1.918	0.012	91	358879	10.0	9.31	
14 Chloroethane	64	2.001	2.001	0.000	100	315290	10.0	9.30	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	860500	10.0	9.54	
16 Trichlorofluoromethane	101	2.190	2.191	-0.001	98	820589	10.0	10.0	
17 Ethyl ether	59	2.416	2.416	0.000	90	383408	10.0	9.74	
18 Acrolein	56	2.534	2.523	0.011	96	56412	50.0	21.7	
19 1,1-Dichloroethene	96	2.617	2.606	0.011	98	462079	10.0	10.2	
20 112TCTFE	151	2.629	2.629	0.000	93	388305	10.0	10.3	
21 Acetone	58	2.653	2.653	0.000	98	68104	20.0	21.5	
22 Iodomethane	142	2.748	2.748	0.000	99	776173	10.0	11.2	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	1219081	10.0	9.65	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	253795	10.0	9.53	
27 Methyl acetate	43	2.914	2.914	0.000	97	394009	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	399883	10.0	9.48	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	97	211021	100.0	95.2	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	1025302	100.0	96.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1084905	10.0	9.87	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	436028	10.0	9.64	
34 Hexane	86	3.436	3.436	0.000	93	80909	10.0	8.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	700751	10.0	9.78	
36 Vinyl acetate	43	3.602	3.602	0.000	97	559271	10.0	9.17	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	82	140009	10.0	10.0	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	483248	10.0	10.1	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	66266	20.0	20.0	
46 Chlorobromomethane	128	4.242	4.242	0.000	92	219218	10.0	9.71	
47 Tetrahydrofuran	42	4.278	4.278	0.000	89	156037	20.0	18.9	
48 Chloroform	83	4.301	4.302	-0.001	93	707088	10.0	9.91	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	658226	10.0	10.2	
50 Cyclohexane	56	4.503	4.503	0.000	90	639283	10.0	9.64	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	571263	10.0	10.0	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	95	554900	10.0	9.60	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	175205	250.0	249.9	
55 Benzene	78	4.776	4.776	0.000	95	1630870	10.0	9.49	
56 1,2-Dichloroethane	62	4.787	4.788	-0.001	98	501437	10.0	9.81	
58 n-Heptane	100	4.965	4.966	-0.001	89	67003	10.0	8.64	
60 Trichloroethene	130	5.309	5.298	0.011	96	446561	10.0	9.66	
62 Methylcyclohexane	83	5.463	5.464	-0.001	87	538310	10.0	9.33	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	355502	10.0	9.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	23519	200.0	75.9	
65 Dibromomethane	93	5.606	5.606	0.000	89	206169	10.0	10.0	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	459603	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	120867	10.0	9.82	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	493282	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	491361	20.0	20.7	
72 Toluene	91	6.412	6.412	0.000	98	1505186	10.0	9.66	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	367547	10.0	9.20	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	288347	10.0	9.58	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	251484	10.0	9.83	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	319194	10.0	9.72	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	429296	10.0	9.76	
78 2-Hexanone	43	6.981	6.982	-0.001	96	299921	20.0	20.5	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	279748	10.0	9.95	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	236269	10.0	9.57	
84 Chlorobenzene	112	7.681	7.681	0.000	99	935597	10.0	9.83	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	403079	10.0	10.2	
86 Ethylbenzene	106	7.776	7.776	0.000	98	517466	10.0	9.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1244371	10.0	9.87	
88 o-Xylene	106	8.262	8.262	0.000	97	677724	10.0	10.0	
89 Styrene	104	8.274	8.274	0.000	94	887028	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	97	170025	10.0	9.79	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1690078	10.0	10.1	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	317225	10.0	9.95	
95 Bromobenzene	156	8.914	8.914	0.000	89	436574	10.0	9.95	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	106115	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	81	63245	10.0	8.70	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	433860	10.0	9.98	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	410722	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1361735	10.0	9.95	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1279373	10.0	9.92	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	91	1146514	10.0	9.80	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1431299	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	1501320	10.0	9.74	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	811165	10.0	9.87	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	1346833	10.0	9.77	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	834590	10.0	9.78	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1041656	10.0	9.33	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	834752	10.0	9.76	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	69628	10.0	9.90	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	589242	10.0	9.39	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	248610	10.0	9.32	
119 Naphthalene	128	12.128	12.128	0.000	97	1333933	10.0	9.96	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	559905	10.0	9.40	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.0	
S 131 Trihalomethanes, Total	1				0		40.0	39.8	

QC Flag Legend

Processing Flags

Reagents:

VMFASAW_00366	Amount Added:	8.00	Units: uL	
VMFASGW_00399	Amount Added:	8.00	Units: uL	
VMFASPW_00390	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

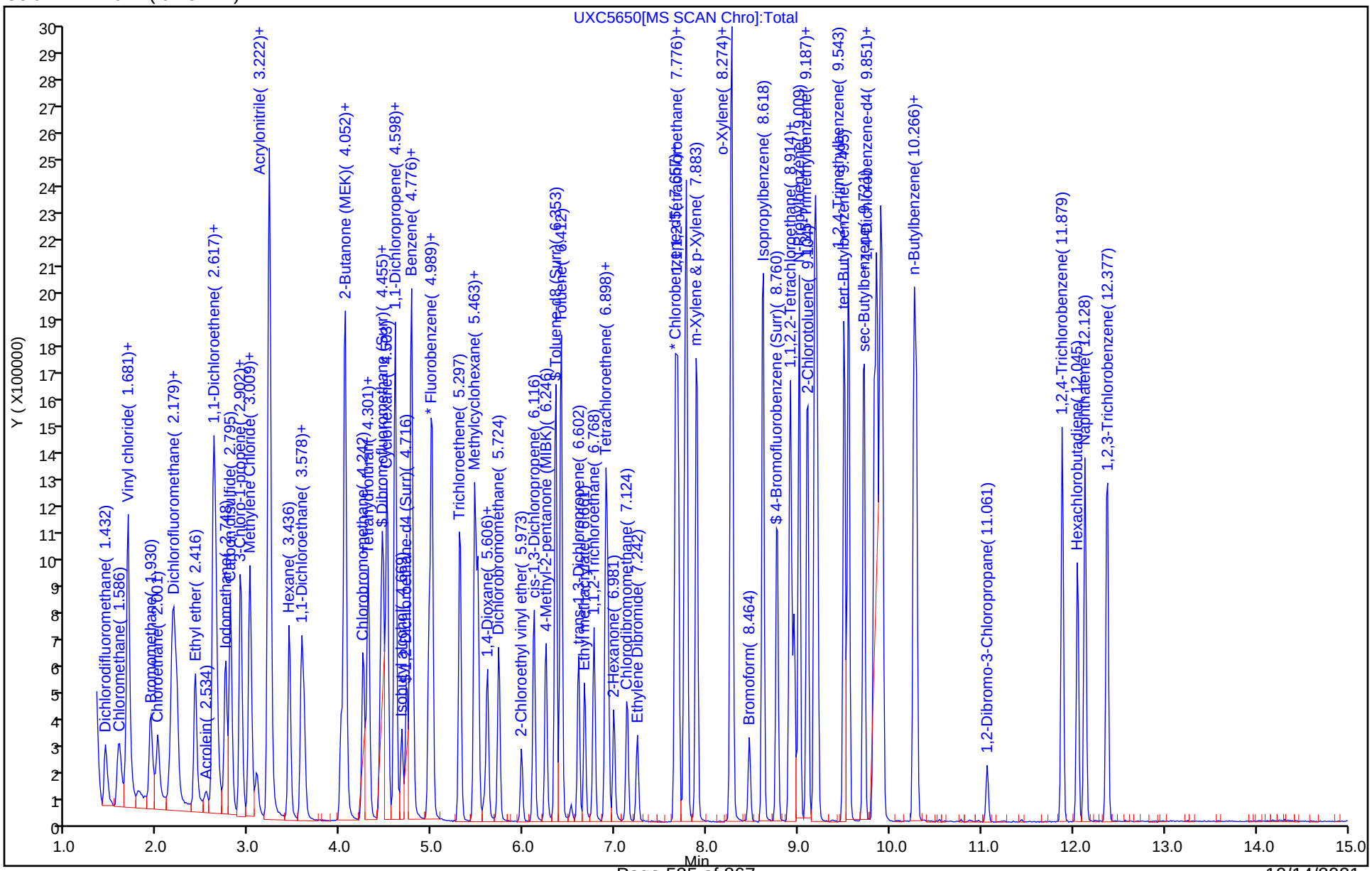
Report Date: 18-Mar-2021 09:02:21 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D

Injection Date:	16-Mar-2021 11:01:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2337	0.2225		0.00952	0.0100	-4.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2492		0.00946	0.0100	-5.4	50.0
Toluene-d8 (Surr)	Ave	1.226	1.118		0.00912	0.0100	-8.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3942		0.00951	0.0100	-4.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

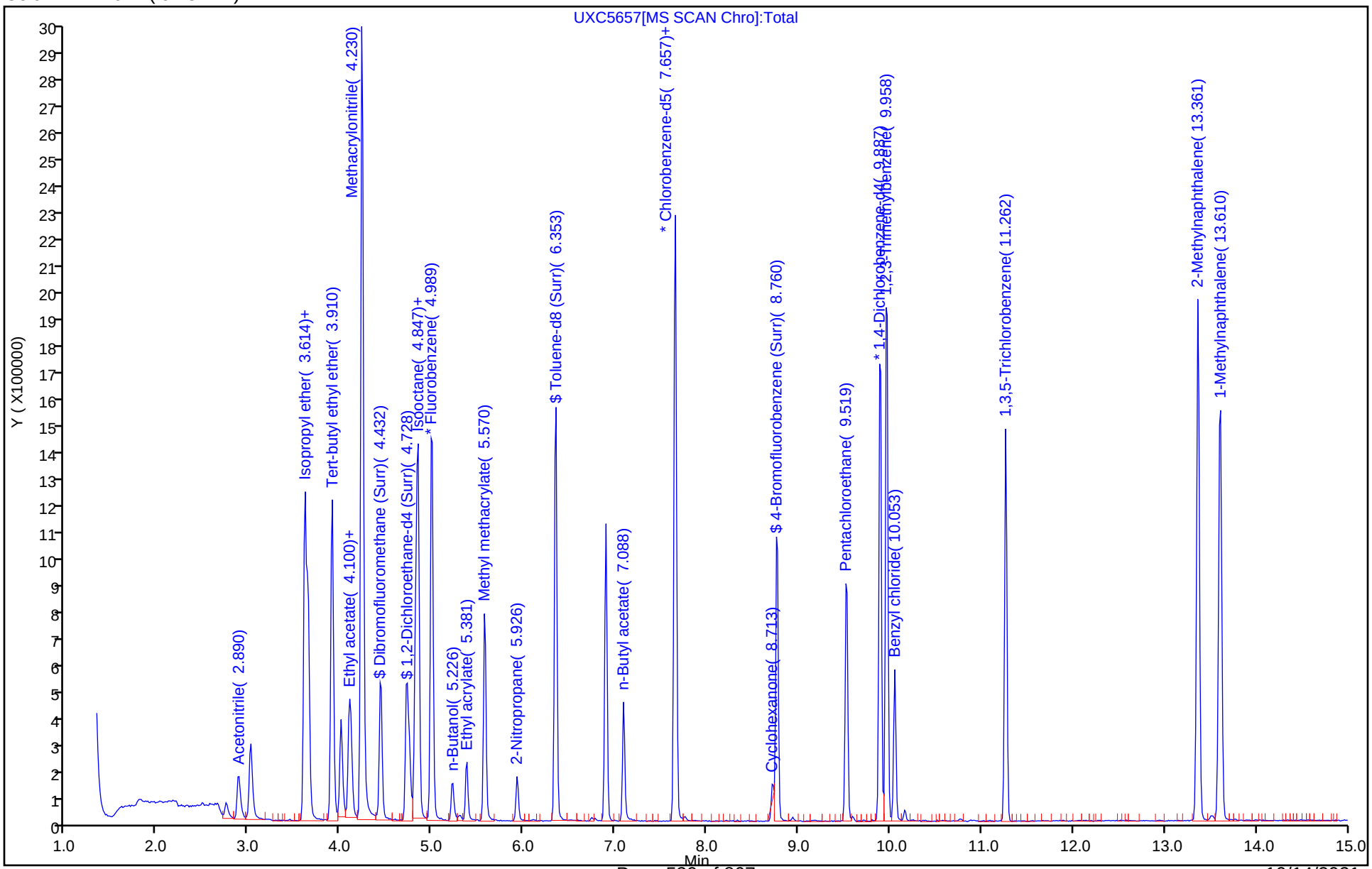
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 11:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 13:12

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0180	0.0164		0.0909	0.100	-9.1	50.0
Isopropyl ether	Ave	0.2240	0.2138		0.00955	0.0100	-4.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4022	0.3508		0.00872	0.0100	-12.8	50.0
Tert-butyl ethyl ether	Ave	0.7237	0.6928		0.00957	0.0100	-4.3	50.0
Ethyl acetate	Ave	0.1508	0.1399		0.0186	0.0200	-7.2	50.0
Propionitrile	Ave	0.0231	0.0223		0.0965	0.100	-3.5	50.0
Methacrylonitrile	Ave	0.1091	0.1079		0.0989	0.100	-1.1	50.0
Tert-amyl methyl ether	Ave	0.6734	0.6581		0.00977	0.0100	-2.3	50.0
n-Butanol	Ave	0.0032	0.0027		0.210	0.250	-16.0	50.0
Ethyl acrylate	Ave	0.1660	0.1646		0.00992	0.0100	-0.8	50.0
Methyl methacrylate	Ave	0.1247	0.1254		0.0201	0.0200	0.6	50.0
2-Nitropropane	Ave	0.0367	0.0371		0.0202	0.0200	1.2	50.0
n-Butyl acetate	Ave	0.2211	0.2201		0.00995	0.0100	-0.5	50.0
1-Chlorohexane	Ave	0.3516	0.3290		0.00936	0.0100	-6.4	50.0
Cyclohexanone	Ave	0.0139	0.0129		0.0928	0.100	-7.2	50.0
Pentachloroethane	Qua		0.1025		0.0113	0.0200	-43.3	50.0
1,2,3-Trimethylbenzene	Ave	2.318	2.339		0.0101	0.0100	0.9	50.0
Benzyl chloride	Lin1		0.1676		0.00810	0.0100	-19.0	50.0
1,3,5-Trichlorobenzene	Ave	1.033	0.9570		0.00926	0.0100	-7.4	50.0
2-Methylnaphthalene	Ave	1.199	1.114		0.0186	0.0200	-7.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

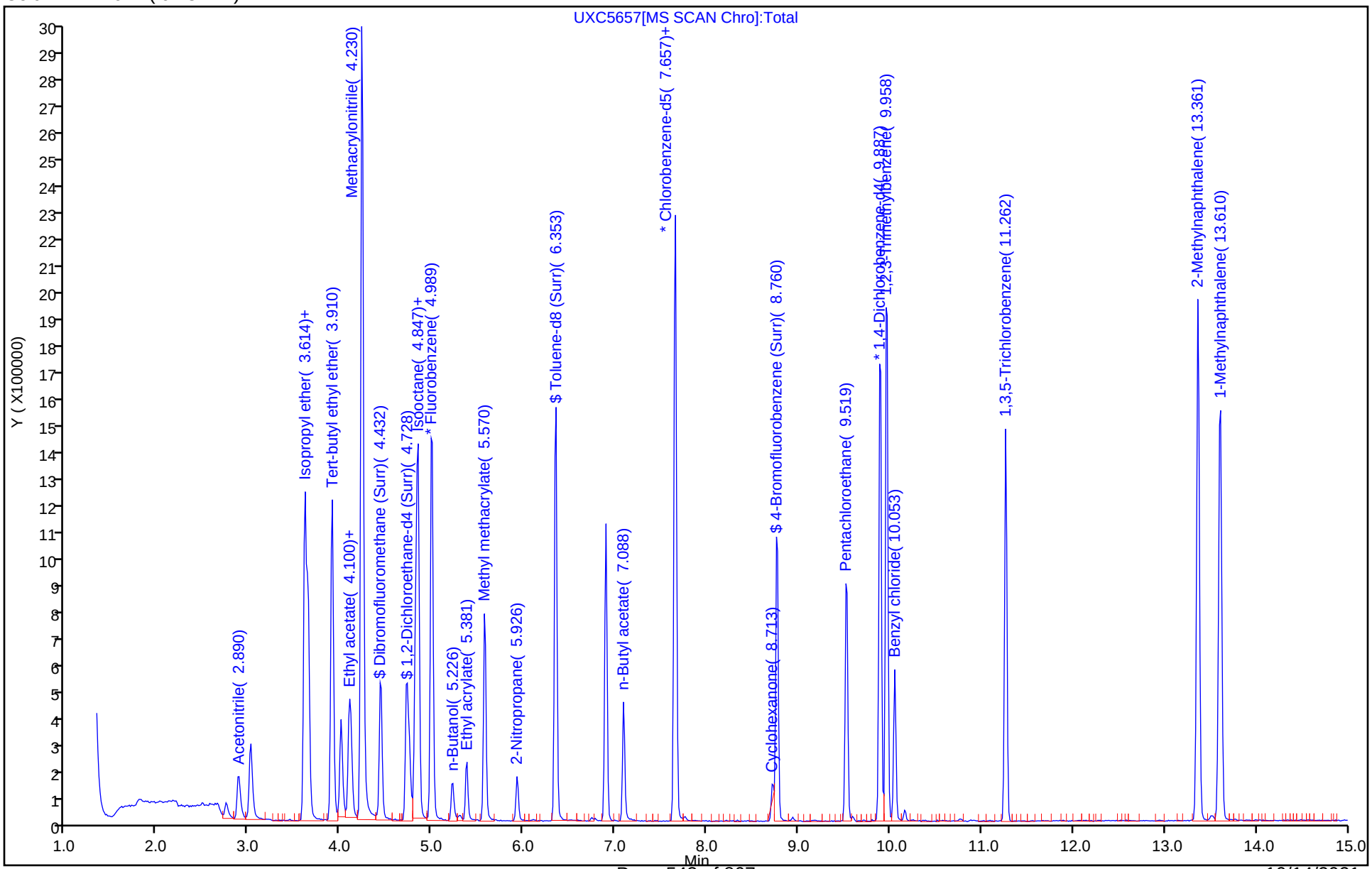
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507764/2 Calibration Date: 10/12/2021 08:20

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC9975.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3421		0.0114	0.0100	13.5	50.0
Chloromethane	Ave	0.3426	0.3810	0.1000	0.0111	0.0100	11.2	50.0
Vinyl chloride	Ave	0.2936	0.3022		0.0103	0.0100	2.9	20.0
Butadiene	Ave	0.3746	0.3509		0.00937	0.0100	-6.3	50.0
Bromomethane	Ave	0.2460	0.1691		0.00687	0.0100	-31.3	50.0
Chloroethane	Ave	0.2164	0.1996		0.00922	0.0100	-7.8	50.0
Dichlorofluoromethane	Ave	0.5757	0.4370		0.00759	0.0100	-24.1	50.0
Trichlorofluoromethane	Ave	0.5212	0.3505		0.00672	0.0100	-32.8	50.0
Ethyl ether	Ave	0.2512	0.2547		0.0101	0.0100	1.4	50.0
Acrolein	Lin		0.0260		0.0858	0.0500	71.5*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2588		0.00895	0.0100	-10.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2025		0.00840	0.0100	-16.0	50.0
Acetone	Ave	0.0202	0.0256		0.0253	0.0200	26.6	50.0
Iodomethane	Ave	0.4428	0.3935		0.00889	0.0100	-11.1	50.0
Carbon disulfide	Ave	0.8057	0.5832		0.00724	0.0100	-27.6	50.0
3-Chloro-1-propene	Ave	0.1698	0.1706		0.0100	0.0100	0.4	50.0
Methyl acetate	Ave	0.1269	0.1807		0.0285	0.0200	42.3	50.0
Methylene Chloride	Ave	0.2691	0.2893		0.0108	0.0100	7.5	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0133		0.0943	0.100	-5.7	50.0
Acrylonitrile	Ave	0.0679	0.0951		0.140	0.100	40.1	50.0
Methyl tert-butyl ether	Ave	0.7014	0.6694		0.00954	0.0100	-4.6	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2909		0.0101	0.0100	0.7	50.0
Hexane	Ave	0.0578	0.0518		0.00896	0.0100	-10.4	20.0
1,1-Dichloroethane	Ave	0.4573	0.5057	0.1000	0.0111	0.0100	10.6	50.0
Vinyl acetate	Ave	0.3891	0.4621		0.0119	0.0100	18.8	50.0
2,2-Dichloropropane	Ave	0.0889	0.0709		0.00798	0.0100	-20.2	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3049		0.0100	0.0100	0.0	50.0
2-Butanone (MEK)	Ave	0.0211	0.0268		0.0254	0.0200	26.8	50.0
Chlorobromomethane	Ave	0.1440	0.1432		0.00994	0.0100	-0.6	50.0
Tetrahydrofuran	Ave	0.0526	0.0623		0.0237	0.0200	18.6	50.0
Chloroform	Ave	0.4553	0.4816		0.0106	0.0100	5.8	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.3761		0.00917	0.0100	-8.3	50.0
Cyclohexane	Ave	0.4232	0.4242		0.0100	0.0100	0.2	50.0
1,1-Dichloropropene	Ave	0.3688	0.3863		0.0105	0.0100	4.8	50.0
Carbon tetrachloride	Ave	0.3647	0.2967		0.00813	0.0100	-18.7	50.0
Isobutyl alcohol	Ave	0.0045	0.0065		0.362	0.250	44.8	50.0
Benzene	Ave	1.097	1.195		0.0109	0.0100	8.9	50.0
1,2-Dichloroethane	Ave	0.3263	0.4028		0.0123	0.0100	23.5	50.0
n-Heptane	Ave	0.0495	0.0438		0.00886	0.0100	-11.4	50.0
Trichloroethene	Ave	0.2948	0.2779		0.00943	0.0100	-5.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507764/2 Calibration Date: 10/12/2021 08:20

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC9975.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3181		0.00864	0.0100	-13.6	50.0
1,2-Dichloropropane	Ave	0.2272	0.2840		0.0125	0.0100	25.0*	20.0
Dibromomethane	Ave	0.1312	0.1484		0.0113	0.0100	13.1	50.0
1,4-Dioxane	Qua		0.0012		0.120	0.200	-39.9	50.0
Dichlorobromomethane	Ave	0.2893	0.2779		0.00961	0.0100	-3.9	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1345		0.0342	0.0200	71.2*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3396		0.0108	0.0100	7.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1908		0.0252	0.0200	25.8	50.0
Toluene	Ave	1.478	1.604		0.0108	0.0100	8.5	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.3772		0.00996	0.0100	-0.4	50.0
Ethyl methacrylate	Ave	0.2855	0.3250		0.0114	0.0100	13.8	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.2965		0.0122	0.0100	22.3	50.0
Tetrachloroethene	Ave	0.3113	0.2841		0.00912	0.0100	-8.8	50.0
1,3-Dichloropropane	Ave	0.4170	0.5605		0.0134	0.0100	34.4	50.0
2-Hexanone	Ave	0.1387	0.1601		0.0231	0.0200	15.4	50.0
Chlorodibromomethane	Ave	0.2665	0.2318		0.00870	0.0100	-13.0	50.0
Ethylene Dibromide	Ave	0.2342	0.2721		0.0116	0.0100	16.2	50.0
Chlorobenzene	Ave	0.9020	0.9891	0.3000	0.0110	0.0100	9.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3045		0.00810	0.0100	-19.0	50.0
Ethylbenzene	Ave	0.4928	0.5032		0.0102	0.0100	2.1	20.0
m-Xylene & p-Xylene	Ave	1.195	1.222		0.0102	0.0100	2.3	50.0
o-Xylene	Ave	0.6424	0.5961		0.00928	0.0100	-7.2	50.0
Styrene	Ave	0.8332	0.9930		0.0119	0.0100	19.2	50.0
Bromoform	Ave	0.1647	0.1158	0.1000	0.00703	0.0100	-29.7	50.0
Isopropylbenzene	Ave	1.586	1.364		0.00860	0.0100	-14.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.6246	0.3000	0.0122	0.0100	22.1	50.0
Bromobenzene	Ave	0.7041	0.6883		0.00978	0.0100	-2.2	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2087		0.0126	0.0100	25.8	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1271		0.0108	0.0100	8.4	50.0
N-Propylbenzene	Ave	0.6976	0.6825		0.00978	0.0100	-2.2	50.0
2-Chlorotoluene	Ave	0.6475	0.6420		0.00991	0.0100	-0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.048		0.00932	0.0100	-6.8	50.0
4-Chlorotoluene	Ave	2.069	2.305		0.0111	0.0100	11.4	50.0
tert-Butylbenzene	Ave	1.877	1.593		0.00848	0.0100	-15.2	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.172		0.00964	0.0100	-3.6	50.0
sec-Butylbenzene	Ave	2.474	2.104		0.00850	0.0100	-15.0	50.0
1,3-Dichlorobenzene	Ave	1.319	1.273		0.00965	0.0100	-3.5	50.0
4-Isopropyltoluene	Ave	2.213	1.888		0.00853	0.0100	-14.7	50.0
1,4-Dichlorobenzene	Ave	1.370	1.330		0.00971	0.0100	-2.9	50.0
n-Butylbenzene	Ave	1.792	1.458		0.00814	0.0100	-18.6	50.0
1,2-Dichlorobenzene	Ave	1.373	1.294		0.00943	0.0100	-5.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507764/2 Calibration Date: 10/12/2021 08:20

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC9975.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.0750		0.00665	0.0100	-33.5	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.5917		0.00587	0.0100	-41.3	50.0
Hexachlorobutadiene	Lin1		0.2466		0.00547	0.0100	-45.3	50.0
Naphthalene	Ave	2.149	1.345		0.00626	0.0100	-37.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.5567		0.00582	0.0100	-41.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2025		0.00866	0.0100	-13.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2837		0.0108	0.0100	7.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.175		0.00959	0.0100	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3961		0.00956	0.0100	-4.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9975.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 12-Oct-2021 08:20:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-002
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:51 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1868411	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1377291	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	768703	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	378344	10.0	8.66	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	530016	10.0	10.8	
$ 6 Toluene-d8 (Surr)	98	6.341	6.341	0.000	94	1617923	10.0	9.59	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	545553	10.0	9.56	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	639255	10.0	11.4	
10 Chloromethane	50	1.562	1.562	0.000	99	711797	10.0	11.1	
11 Vinyl chloride	62	1.645	1.645	0.000	98	564656	10.0	10.3	
12 Butadiene	54	1.669	1.669	0.000	99	655718	10.0	9.37	
13 Bromomethane	94	1.930	1.930	0.000	91	315856	10.0	6.87	
14 Chloroethane	64	1.989	1.989	0.000	99	372920	10.0	9.22	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	816510	10.0	7.59	
16 Trichlorofluoromethane	101	2.203	2.203	0.000	99	654806	10.0	6.72	
17 Ethyl ether	59	2.404	2.404	0.000	92	475803	10.0	10.1	
18 Acrolein	56	2.523	2.523	0.000	99	243230	50.0	85.8	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	483580	10.0	8.95	
20 112TCTFE	151	2.618	2.618	0.000	91	378302	10.0	8.40	
21 Acetone	58	2.641	2.641	0.000	99	95641	20.0	25.3	
22 Iodomethane	142	2.736	2.736	0.000	98	735277	10.0	8.89	
24 Carbon disulfide	76	2.807	2.807	0.000	100	1089706	10.0	7.24	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	318703	10.0	10.0	
27 Methyl acetate	43	2.914	2.914	0.000	98	675137	20.0	28.5	
28 Methylene Chloride	84	2.997	2.997	0.000	95	540580	10.0	10.8	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	90	249260	100.0	94.3	
30 Acrylonitrile	53	3.199	3.199	0.000	98	1776971	100.0	140.1	
31 Methyl tert-butyl ether	73	3.210	3.210	0.000	96	1250739	10.0	9.54	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	98	543437	10.0	10.1	
34 Hexane	86	3.436	3.436	0.000	95	96784	10.0	8.96	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	96	944847	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	98	863456	10.0	11.9	
42 2,2-Dichloropropane	97	4.041	4.041	0.000	72	132536	10.0	7.98	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	84	569674	10.0	10.0	
40 2-Butanone (MEK)	72	4.052	4.052	0.000	100	100123	20.0	25.4	
46 Chlorobromomethane	128	4.242	4.242	0.000	97	267553	10.0	9.94	
47 Tetrahydrofuran	42	4.278	4.278	0.000	87	232811	20.0	23.7	
48 Chloroform	83	4.301	4.301	0.000	93	899853	10.0	10.6	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	702640	10.0	9.17	
50 Cyclohexane	56	4.503	4.503	0.000	91	792525	10.0	10.0	
51 1,1-Dichloropropene	75	4.586	4.586	0.000	94	721823	10.0	10.5	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	554333	10.0	8.13	
53 Isobutyl alcohol	41	4.669	4.669	0.000	91	302497	250.0	361.9	
55 Benzene	78	4.764	4.764	0.000	96	2232030	10.0	10.9	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	98	752622	10.0	12.3	
58 n-Heptane	100	4.966	4.966	0.000	91	81921	10.0	8.86	
60 Trichloroethene	130	5.298	5.298	0.000	97	519154	10.0	9.43	
62 Methylcyclohexane	83	5.464	5.464	0.000	92	594264	10.0	8.64	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	530604	10.0	12.5	
65 Dibromomethane	93	5.594	5.594	0.000	94	277320	10.0	11.3	
66 1,4-Dioxane	88	5.606	5.606	0.000	32	44335	200.0	120.2	
67 Dichlorobromomethane	83	5.724	5.724	0.000	99	519317	10.0	9.61	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	502700	20.0	34.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	634457	10.0	10.8	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	712833	20.0	25.2	
72 Toluene	91	6.400	6.400	0.000	98	2208549	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	96	519527	10.0	9.96	
74 Ethyl methacrylate	69	6.661	6.661	0.000	90	447666	10.0	11.4	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	408323	10.0	12.2	
76 Tetrachloroethene	164	6.898	6.898	0.000	97	391277	10.0	9.12	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	93	771995	10.0	13.4	
78 2-Hexanone	43	6.981	6.981	0.000	98	441089	20.0	23.1	
80 Chlorodibromomethane	129	7.124	7.124	0.000	91	319280	10.0	8.70	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	374812	10.0	11.6	
84 Chlorobenzene	112	7.681	7.681	0.000	93	1362243	10.0	11.0	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.752	0.000	93	419378	10.0	8.10	
86 Ethylbenzene	106	7.776	7.776	0.000	99	693034	10.0	10.2	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1683526	10.0	10.2	
88 o-Xylene	106	8.262	8.262	0.000	97	820998	10.0	9.28	
89 Styrene	104	8.274	8.274	0.000	94	1367641	10.0	11.9	
90 Bromoform	173	8.464	8.464	0.000	96	159422	10.0	7.03	
91 Isopropylbenzene	105	8.606	8.606	0.000	96	1878406	10.0	8.60	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	480137	10.0	12.2	
95 Bromobenzene	156	8.914	8.914	0.000	95	529093	10.0	9.78	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	88	160441	10.0	12.6	
97 trans-1,4-Dichloro-2-butene	53	8.950	8.950	0.000	66	97721	10.0	10.8	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	524634	10.0	9.78	
99 2-Chlorotoluene	126	9.092	9.092	0.000	98	493481	10.0	9.91	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1574104	10.0	9.32	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	1772213	10.0	11.1	
104 tert-Butylbenzene	119	9.495	9.495	0.000	93	1224352	10.0	8.48	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	95	1669548	10.0	9.64	
107 sec-Butylbenzene	105	9.709	9.709	0.000	95	1616992	10.0	8.50	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	97	978607	10.0	9.65	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1451291	10.0	8.53	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	96	1022533	10.0	9.71	
113 n-Butylbenzene	91	10.254	10.254	0.000	98	1120980	10.0	8.14	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	96	994945	10.0	9.43	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	75	57673	10.0	6.65	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	454861	10.0	5.87	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	189573	10.0	5.47	
119 Naphthalene	128	12.128	12.128	0.000	97	1033871	10.0	6.26	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	427915	10.0	5.82	
S 129 Xylenes, Total	106				0		20.0	19.5	
S 130 Total BTEX	1				0		50.0	51.5	
S 131 Trihalomethanes, Total	1				0		40.0	35.9	

Reagents:

VMRPRIMW_00455	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00412	Amount Added:	8.00	Units: uL	
vmrgas_00403	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

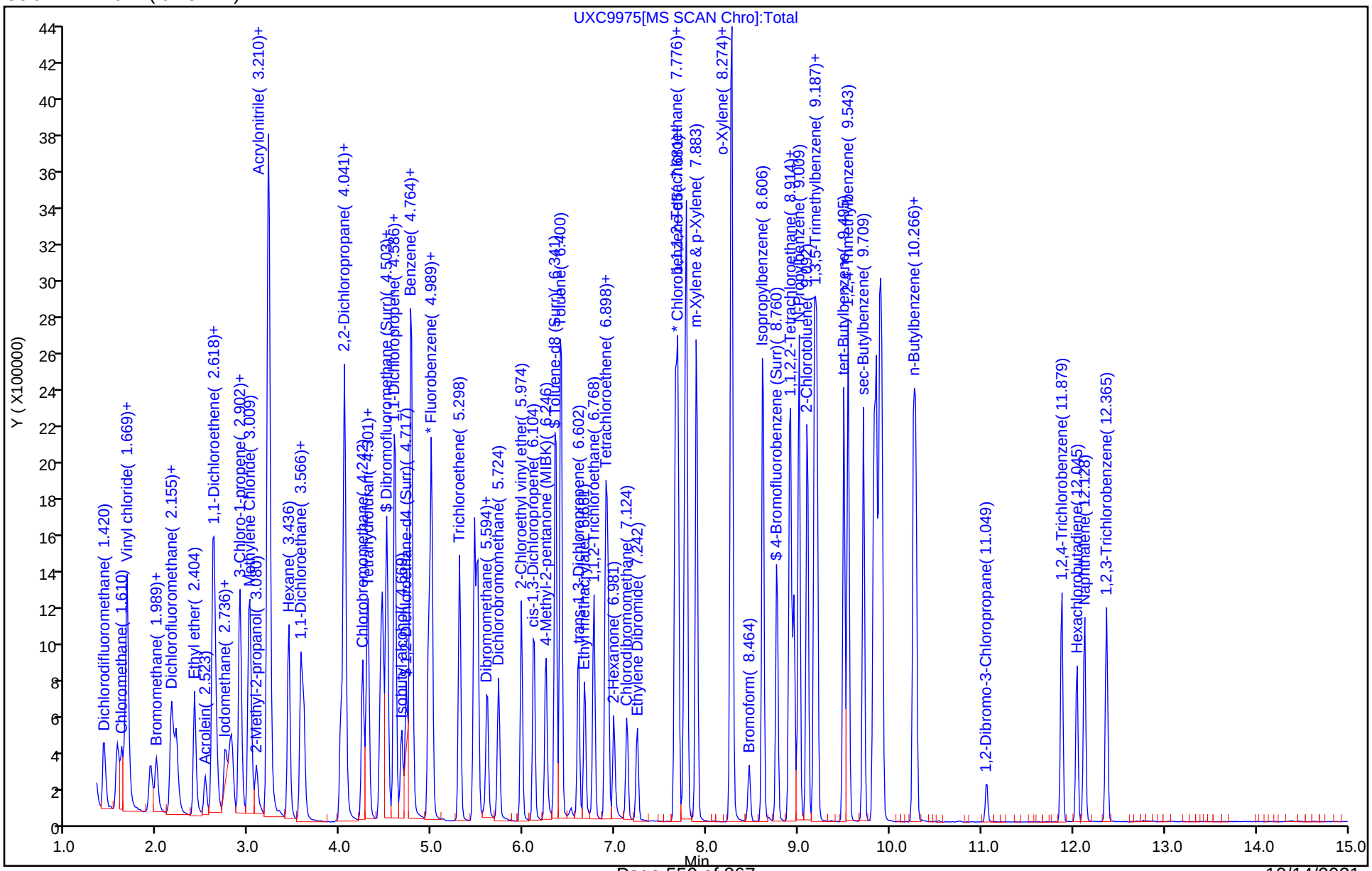
Report Date: 13-Oct-2021 08:53:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9975.D

Injection Date:	12-Oct-2021 08:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508019/2 Calibration Date: 10/13/2021 09:57

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC0004.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3259		0.0108	0.0100	8.1	50.0
Chloromethane	Ave	0.3426	0.3668	0.1000	0.0107	0.0100	7.1	50.0
Vinyl chloride	Ave	0.2936	0.3057		0.0104	0.0100	4.1	20.0
Butadiene	Ave	0.3746	0.3243		0.00866	0.0100	-13.4	50.0
Bromomethane	Ave	0.2460	0.1843		0.00749	0.0100	-25.1	50.0
Chloroethane	Ave	0.2164	0.1993		0.00921	0.0100	-7.9	50.0
Dichlorofluoromethane	Ave	0.5757	0.4304		0.00748	0.0100	-25.2	50.0
Trichlorofluoromethane	Ave	0.5212	0.3504		0.00672	0.0100	-32.8	50.0
Ethyl ether	Ave	0.2512	0.2568		0.0102	0.0100	2.2	50.0
Acrolein	Lin		0.0255		0.0839	0.0500	67.7*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2610		0.00903	0.0100	-9.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2005		0.00832	0.0100	-16.8	50.0
Acetone	Ave	0.0202	0.0238		0.0235	0.0200	17.6	50.0
Iodomethane	Ave	0.4428	0.3906		0.00882	0.0100	-11.8	50.0
Carbon disulfide	Ave	0.8057	0.5912		0.00734	0.0100	-26.6	50.0
3-Chloro-1-propene	Ave	0.1698	0.1771		0.0104	0.0100	4.3	50.0
Methyl acetate	Ave	0.1269	0.1801		0.0284	0.0200	41.9	50.0
Methylene Chloride	Ave	0.2691	0.3003		0.0112	0.0100	11.6	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0108		0.0762	0.100	-23.8	50.0
Acrylonitrile	Ave	0.0679	0.0930		0.137	0.100	37.0	50.0
Methyl tert-butyl ether	Ave	0.7014	0.6758		0.00964	0.0100	-3.6	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2880		0.00998	0.0100	-0.2	50.0
Hexane	Ave	0.0578	0.0557		0.00963	0.0100	-3.7	20.0
1,1-Dichloroethane	Ave	0.4573	0.5109	0.1000	0.0112	0.0100	11.7	50.0
Vinyl acetate	Ave	0.3891	0.4674		0.0120	0.0100	20.1	50.0
2,2-Dichloropropane	Ave	0.0889	0.0720		0.00810	0.0100	-19.0	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3118		0.0102	0.0100	2.3	50.0
2-Butanone (MEK)	Ave	0.0211	0.0273		0.0258	0.0200	29.1	50.0
Chlorobromomethane	Ave	0.1440	0.1422		0.00988	0.0100	-1.2	50.0
Tetrahydrofuran	Ave	0.0526	0.0614		0.0234	0.0200	16.9	50.0
Chloroform	Ave	0.4553	0.4827		0.0106	0.0100	6.0	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.3743		0.00913	0.0100	-8.7	50.0
Cyclohexane	Ave	0.4232	0.4186		0.00989	0.0100	-1.1	50.0
1,1-Dichloropropene	Ave	0.3688	0.3914		0.0106	0.0100	6.1	50.0
Carbon tetrachloride	Ave	0.3647	0.3076		0.00843	0.0100	-15.7	50.0
Isobutyl alcohol	Ave	0.0045	0.0059		0.330	0.250	32.0	50.0
Benzene	Ave	1.097	1.203		0.0110	0.0100	9.6	50.0
1,2-Dichloroethane	Ave	0.3263	0.4100		0.0126	0.0100	25.7	50.0
n-Heptane	Ave	0.0495	0.0430		0.00869	0.0100	-13.1	50.0
Trichloroethene	Ave	0.2948	0.2812		0.00954	0.0100	-4.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508019/2 Calibration Date: 10/13/2021 09:57

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC0004.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3100		0.00842	0.0100	-15.8	50.0
1,2-Dichloropropane	Ave	0.2272	0.2797		0.0123	0.0100	23.1*	20.0
Dibromomethane	Ave	0.1312	0.1505		0.0115	0.0100	14.6	50.0
1,4-Dioxane	Qua		0.0009		0.0906	0.200	-54.7*	50.0
Dichlorobromomethane	Ave	0.2893	0.2864		0.00990	0.0100	-1.0	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1360		0.0346	0.0200	73.1*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3499		0.0111	0.0100	11.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1857		0.0245	0.0200	22.4	50.0
Toluene	Ave	1.478	1.599		0.0108	0.0100	8.2	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.3893		0.0103	0.0100	2.8	50.0
Ethyl methacrylate	Ave	0.2855	0.3301		0.0116	0.0100	15.6	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.2924		0.0121	0.0100	20.6	50.0
Tetrachloroethene	Ave	0.3113	0.3064		0.00984	0.0100	-1.6	50.0
1,3-Dichloropropane	Ave	0.4170	0.5563		0.0133	0.0100	33.4	50.0
2-Hexanone	Ave	0.1387	0.1568		0.0226	0.0200	13.0	50.0
Chlorodibromomethane	Ave	0.2665	0.2376		0.00892	0.0100	-10.8	50.0
Ethylene Dibromide	Ave	0.2342	0.2729		0.0117	0.0100	16.5	50.0
Chlorobenzene	Ave	0.9020	0.9869	0.3000	0.0109	0.0100	9.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3013		0.00802	0.0100	-19.8	50.0
Ethylbenzene	Ave	0.4928	0.4914		0.00997	0.0100	-0.3	20.0
m-Xylene & p-Xylene	Ave	1.195	1.201		0.0100	0.0100	0.4	50.0
o-Xylene	Ave	0.6424	0.5896		0.00918	0.0100	-8.2	50.0
Styrene	Ave	0.8332	0.997		0.0120	0.0100	19.6	50.0
Bromoform	Ave	0.1647	0.1183	0.1000	0.00718	0.0100	-28.2	50.0
Isopropylbenzene	Ave	1.586	1.340		0.00845	0.0100	-15.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.6181	0.3000	0.0121	0.0100	20.8	50.0
Bromobenzene	Ave	0.7041	0.6791		0.00964	0.0100	-3.6	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2023		0.0122	0.0100	21.9	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1315		0.0112	0.0100	12.1	50.0
N-Propylbenzene	Ave	0.6976	0.6483		0.00929	0.0100	-7.1	50.0
2-Chlorotoluene	Ave	0.6475	0.6064		0.00937	0.0100	-6.3	50.0
1,3,5-Trimethylbenzene	Ave	2.196	1.947		0.00887	0.0100	-11.3	50.0
4-Chlorotoluene	Ave	2.069	2.227		0.0108	0.0100	7.6	50.0
tert-Butylbenzene	Ave	1.877	1.496		0.00797	0.0100	-20.3	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.068		0.00918	0.0100	-8.2	50.0
sec-Butylbenzene	Ave	2.474	1.991		0.00805	0.0100	-19.5	50.0
1,3-Dichlorobenzene	Ave	1.319	1.237		0.00938	0.0100	-6.2	50.0
4-Isopropyltoluene	Ave	2.213	1.770		0.00800	0.0100	-20.0	50.0
1,4-Dichlorobenzene	Ave	1.370	1.287		0.00940	0.0100	-6.0	50.0
n-Butylbenzene	Ave	1.792	1.350		0.00753	0.0100	-24.7	50.0
1,2-Dichlorobenzene	Ave	1.373	1.206		0.00879	0.0100	-12.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-508019/2 Calibration Date: 10/13/2021 09:57

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC0004.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.0702		0.00623	0.0100	-37.7	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.5154		0.00511	0.0100	-48.9	50.0
Hexachlorobutadiene	Lin1		0.2005		0.00431	0.0100	-56.9*	50.0
Naphthalene	Ave	2.149	1.174		0.00546	0.0100	-45.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.4609		0.00482	0.0100	-51.8*	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2020		0.00864	0.0100	-13.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2827		0.0107	0.0100	7.4	50.0
Toluene-d8 (Surr)	Ave	1.226	1.161		0.00947	0.0100	-5.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3954		0.00954	0.0100	-4.6	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0004.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Oct-2021 09:57:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114059-002
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1935640	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.658	0.000	87	1451673	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	823449	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	391085	10.0	8.64	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	547237	10.0	10.7	
$ 6 Toluene-d8 (Surr)	98	6.341	6.341	0.000	93	1685433	10.0	9.47	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	573956	10.0	9.54	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	630784	10.0	10.8	
10 Chloromethane	50	1.562	1.562	0.000	99	710073	10.0	10.7	
11 Vinyl chloride	62	1.645	1.645	0.000	98	591783	10.0	10.4	
12 Butadiene	54	1.669	1.669	0.000	98	627716	10.0	8.66	
13 Bromomethane	94	1.930	1.930	0.000	89	356682	10.0	7.49	
14 Chloroethane	64	1.989	1.989	0.000	99	385743	10.0	9.21	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	833126	10.0	7.48	
16 Trichlorofluoromethane	101	2.203	2.203	0.000	99	678329	10.0	6.72	
17 Ethyl ether	59	2.404	2.404	0.000	91	497111	10.0	10.2	
18 Acrolein	56	2.523	2.523	0.000	98	246592	50.0	83.9	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	96	505146	10.0	9.03	
20 112TCTFE	151	2.618	2.618	0.000	92	388067	10.0	8.32	
21 Acetone	58	2.641	2.641	0.000	100	92045	20.0	23.5	
22 Iodomethane	142	2.748	2.748	0.000	98	756028	10.0	8.82	
24 Carbon disulfide	76	2.807	2.807	0.000	99	1144412	10.0	7.34	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	342718	10.0	10.4	
27 Methyl acetate	43	2.914	2.914	0.000	98	697263	20.0	28.4	
28 Methylene Chloride	84	2.997	2.997	0.000	94	581366	10.0	11.2	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	90	208716	100.0	76.2	
30 Acrylonitrile	53	3.199	3.199	0.000	99	1799579	100.0	137.0	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1308170	10.0	9.64	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	557490	10.0	9.98	
34 Hexane	86	3.436	3.436	0.000	94	107737	10.0	9.63	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	96	988879	10.0	11.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	98	904726	10.0	12.0	
42 2,2-Dichloropropane	97	4.041	4.041	0.000	79	139361	10.0	8.10	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	83	603605	10.0	10.2	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	100	105560	20.0	25.8	
46 Chlorobromomethane	128	4.242	4.242	0.000	98	275314	10.0	9.88	
47 Tetrahydrofuran	42	4.278	4.278	0.000	87	237745	20.0	23.4	
48 Chloroform	83	4.302	4.302	0.000	93	934334	10.0	10.6	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	724601	10.0	9.13	
50 Cyclohexane	56	4.503	4.503	0.000	91	810353	10.0	9.89	
51 1,1-Dichloropropene	75	4.586	4.586	0.000	95	757546	10.0	10.6	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	595328	10.0	8.43	
53 Isobutyl alcohol	41	4.669	4.669	0.000	92	285715	250.0	329.9	
55 Benzene	78	4.764	4.764	0.000	96	2327705	10.0	11.0	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	98	793664	10.0	12.6	
58 n-Heptane	100	4.966	4.966	0.000	90	83282	10.0	8.69	
60 Trichloroethene	130	5.298	5.298	0.000	98	544206	10.0	9.54	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	600108	10.0	8.42	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	541481	10.0	12.3	
65 Dibromomethane	93	5.594	5.594	0.000	95	291223	10.0	11.5	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	34808	200.0	90.6	
67 Dichlorobromomethane	83	5.725	5.725	0.000	98	554313	10.0	9.90	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	526506	20.0	34.6	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	677311	10.0	11.1	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	98	718879	20.0	24.5	
72 Toluene	91	6.401	6.401	0.000	98	2321298	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	96	565116	10.0	10.3	
74 Ethyl methacrylate	69	6.661	6.661	0.000	91	479224	10.0	11.6	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	424459	10.0	12.1	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	444727	10.0	9.84	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	93	807500	10.0	13.3	
78 2-Hexanone	43	6.982	6.982	0.000	97	455377	20.0	22.6	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	344925	10.0	8.92	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	396116	10.0	11.7	
84 Chlorobenzene	112	7.681	7.681	0.000	95	1432669	10.0	10.9	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.752	0.000	93	437439	10.0	8.02	
86 Ethylbenzene	106	7.776	7.776	0.000	99	713314	10.0	9.97	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1742953	10.0	10.0	
88 o-Xylene	106	8.262	8.262	0.000	97	855971	10.0	9.18	
89 Styrene	104	8.274	8.274	0.000	93	1447156	10.0	12.0	
90 Bromoform	173	8.464	8.464	0.000	96	171729	10.0	7.18	
91 Isopropylbenzene	105	8.606	8.606	0.000	96	1944551	10.0	8.45	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	509006	10.0	12.1	
95 Bromobenzene	156	8.915	8.915	0.000	95	559165	10.0	9.64	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	166567	10.0	12.2	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	67	108265	10.0	11.2	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	533843	10.0	9.29	
99 2-Chlorotoluene	126	9.092	9.092	0.000	99	499339	10.0	9.37	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1603069	10.0	8.87	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	1833413	10.0	10.8	
104 tert-Butylbenzene	119	9.496	9.496	0.000	93	1232075	10.0	7.97	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	95	1702690	10.0	9.18	
107 sec-Butylbenzene	105	9.709	9.709	0.000	95	1639853	10.0	8.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	1018496	10.0	9.38	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1457149	10.0	8.00	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	96	1059775	10.0	9.40	
113 n-Butylbenzene	91	10.255	10.255	0.000	98	1111461	10.0	7.53	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	96	993105	10.0	8.79	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	78	57832	10.0	6.23	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	424368	10.0	5.11	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	165096	10.0	4.31	
119 Naphthalene	128	12.128	12.128	0.000	97	966342	10.0	5.46	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	379536	10.0	4.82	
S 129 Xylenes, Total	106				0		20.0	19.2	
S 130 Total BTEX	1				0		50.0	51.0	
S 131 Trihalomethanes, Total	1				0		40.0	36.6	

Reagents:

VMRPRIMW_00455	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00412	Amount Added:	8.00	Units: uL	
vmrgas_00403	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

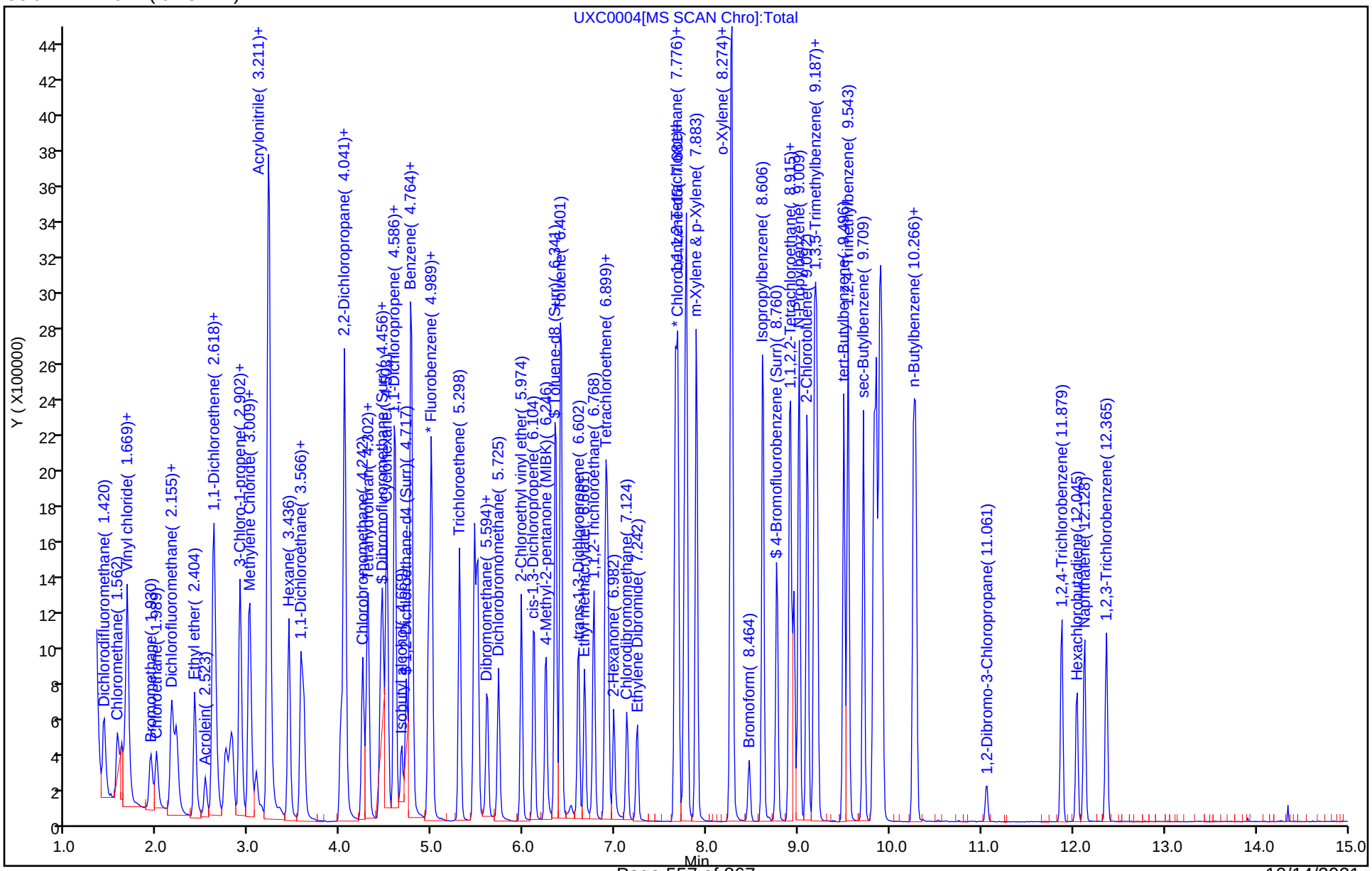
Report Date: 14-Oct-2021 05:35:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0004.D

Injection Date:	13-Oct-2021 09:57:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jan-2021 10:36:30	ALS Bottle#:	4	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211015A-IC,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Jan-2021 09:28:08	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1641				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.350	4.350	0.000	0	393211	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

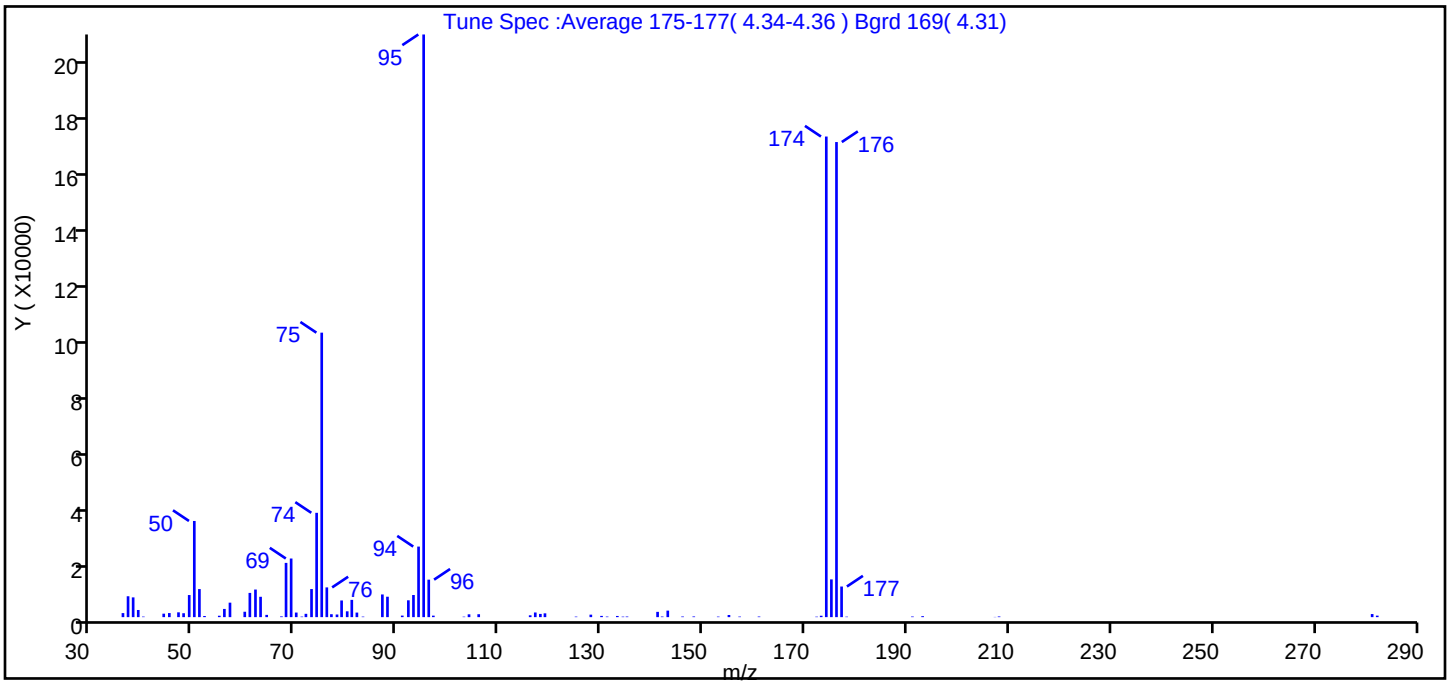
VMBFB_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D
Injection Date: 15-Jan-2021 10:36:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.5
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	82.5
175	5 to 9% of m/z 174	6.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	81.5 (98.9)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D\8260_11.rslt\spectra.d
Injection Date: 15-Jan-2021 10:36:30
Spectrum: Tune Spec :Average 175-177(4.34-4.36) Bgrd 169(4.31)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1457	67.00	272	93.00	7966	143.00	2347
37.00	7520	68.00	19528	94.00	25400	146.00	229
38.00	7112	69.00	21104	95.00	209728	148.00	248
39.00	2576	70.00	1651	96.00	13491	153.00	194
40.00	196	71.00	196	97.00	539	155.00	774
44.00	1250	72.00	1197	103.00	169	157.00	207
45.00	1468	73.00	10110	104.00	1019	161.00	223
47.00	1730	74.00	37552	106.00	1050	172.00	174
48.00	1410	75.00	102400	116.00	659	173.00	502
49.00	7954	76.00	10706	117.00	1675	174.00	172992
50.00	34616	77.00	1056	118.00	1161	175.00	13587
51.00	10108	78.00	952	119.00	1367	176.00	171008
52.00	407	79.00	6005	125.00	193	177.00	11023
55.00	505	80.00	2102	128.00	895	178.00	172
56.00	2954	81.00	6216	130.00	450	191.00	226
57.00	5212	82.00	1644	131.00	207	193.00	350
60.00	1944	83.00	190	133.00	424	207.00	72
61.00	8722	87.00	8167	134.00	185	208.00	245
62.00	9935	88.00	7351	135.00	224	281.00	1116
63.00	7326	91.00	558	141.00	1904	282.00	543
64.00	815	92.00	6063	142.00	222		

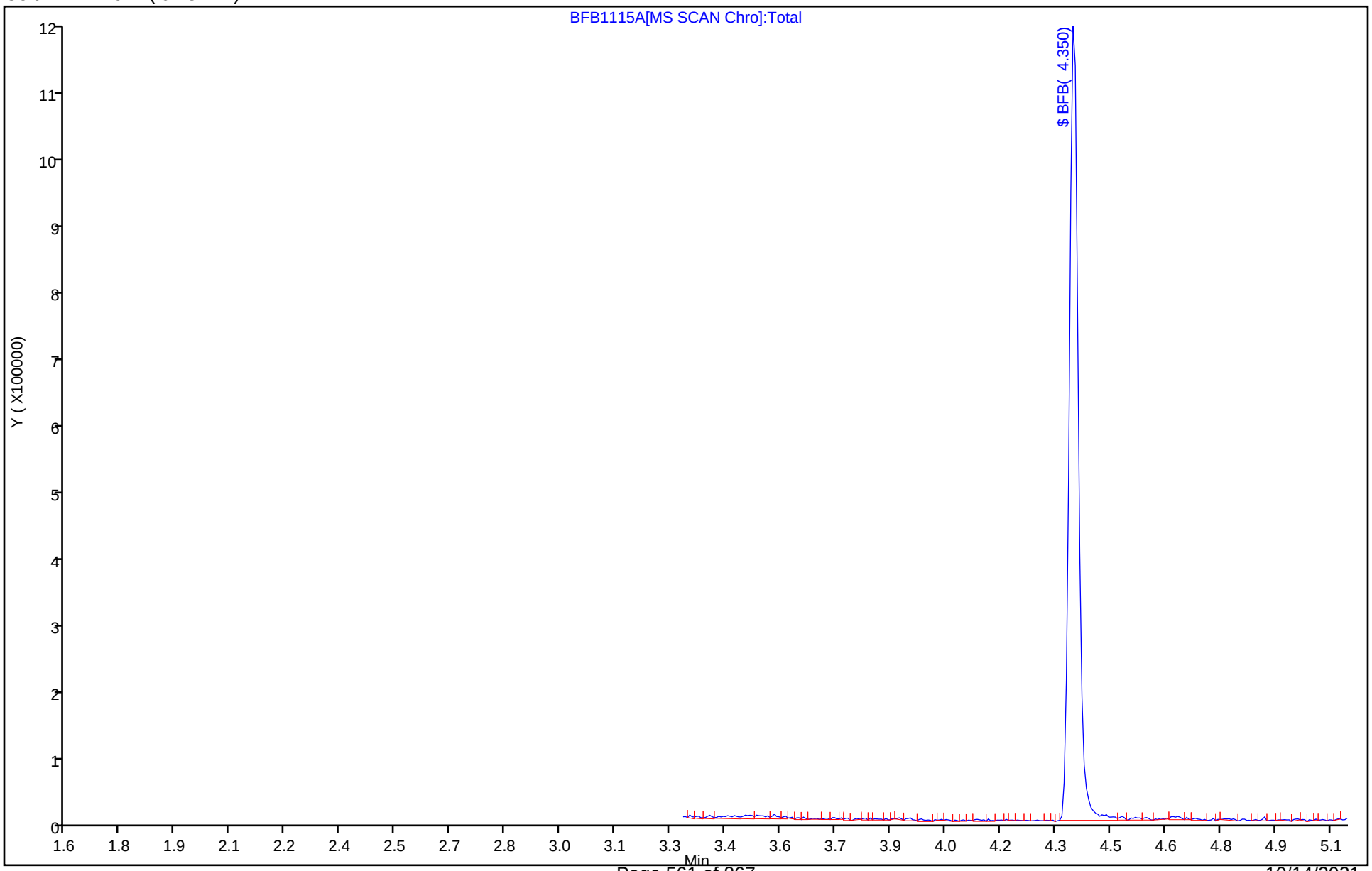
Report Date: 18-Jan-2021 09:28:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D

Injection Date:	15-Jan-2021 10:36:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\BFB1012A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	12-Oct-2021 07:03:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211012A,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	13-Oct-2021 08:35:21	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1658				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.343	4.343	0.000	0	371642	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

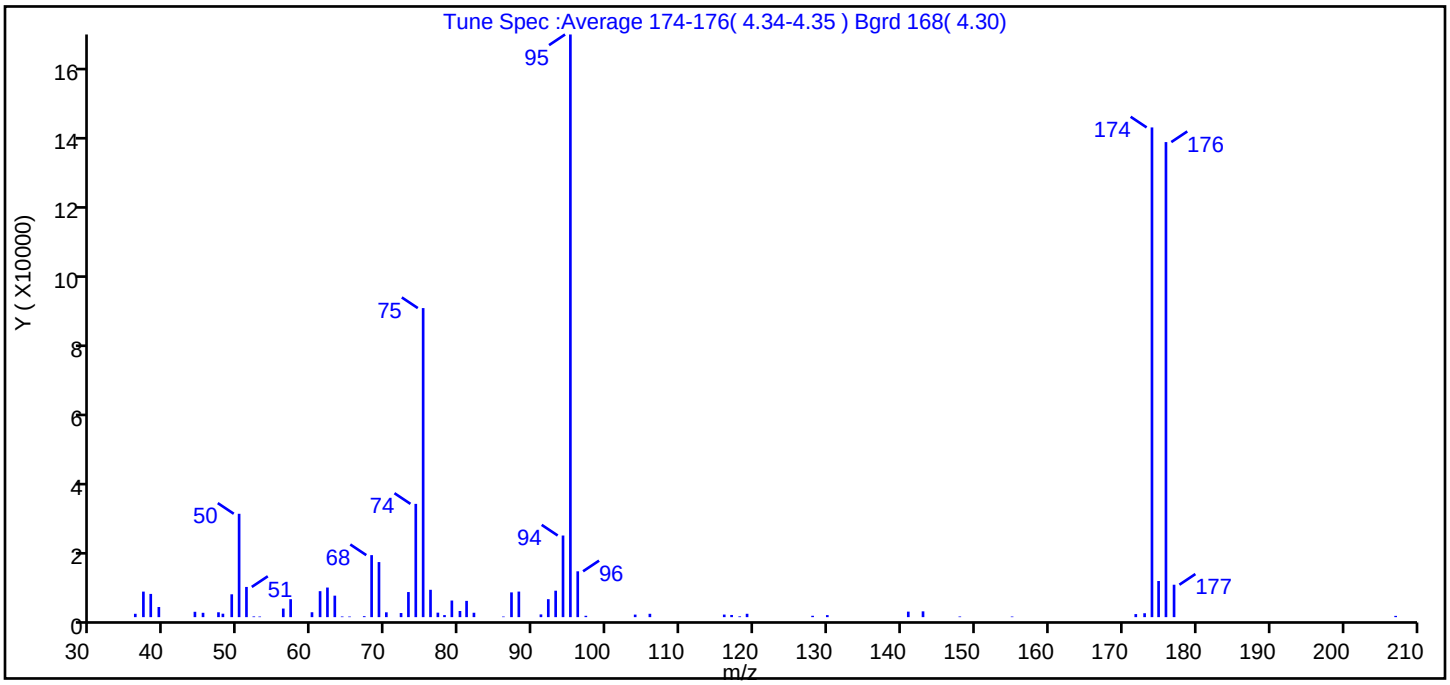
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\BFB1012A.D
Injection Date: 12-Oct-2021 07:03:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.7
75	30 to 60% of m/z 95	53.0
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	84.0
175	5 to 9% of m/z 174	6.2 (7.4)
176	Greater than 95% but less than 101% of m/z 174	81.5 (97.0)
177	5 to 9% of m/z 176	5.6 (6.8)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\BFB1012A.D\8260_11.rslt\spectra.d
Injection Date: 12-Oct-2021 07:03:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 168(4.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 65

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	939	62.00	8274	81.00	4549	119.00	942
37.00	7138	63.00	6006	82.00	1229	128.00	382
38.00	6493	64.00	186	86.00	168	130.00	567
39.00	2831	65.00	172	87.00	6921	141.00	1542
44.00	1496	67.00	267	88.00	7147	143.00	1622
45.00	1215	68.00	17336	91.00	762	148.00	182
47.00	1360	69.00	15392	92.00	5024	155.00	170
48.00	963	70.00	1351	93.00	7393	172.00	855
49.00	6388	72.00	1152	94.00	22816	173.00	1092
50.00	28896	73.00	7016	95.00	162880	174.00	136896
51.00	8444	74.00	31664	96.00	12814	175.00	10100
52.00	199	75.00	86392	97.00	382	176.00	132800
53.00	173	76.00	7647	104.00	711	177.00	9065
56.00	2402	77.00	1255	106.00	939	207.00	356
57.00	5015	78.00	573	116.00	720		
60.00	1369	79.00	4644	117.00	609		
61.00	7261	80.00	1717	118.00	218		

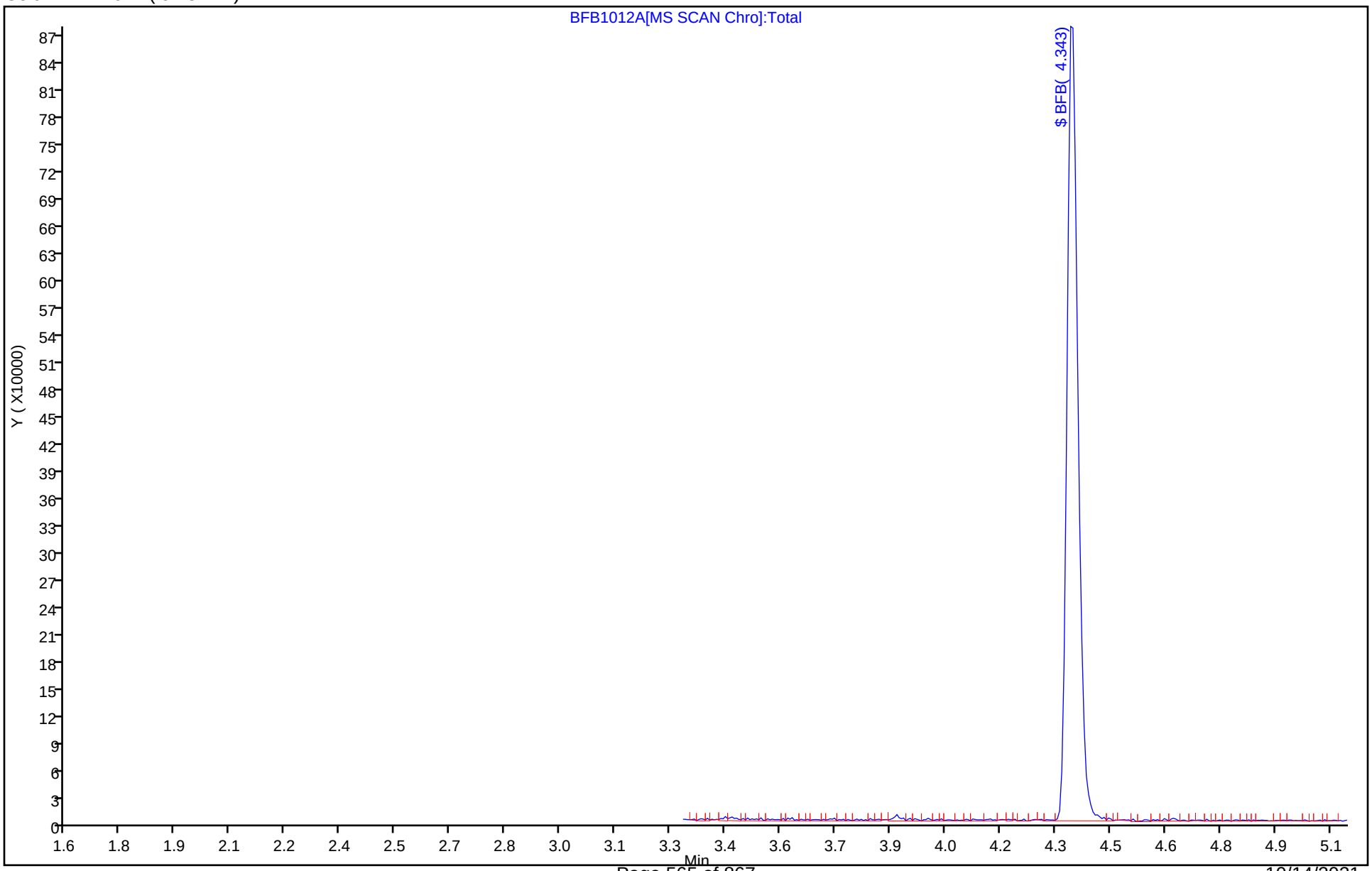
Report Date: 13-Oct-2021 08:35:22 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\BFB1012A.D

Injection Date:	12-Oct-2021 07:03:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\BFB1013.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 13-Oct-2021 08:31:30 ALS Bottle#: 33 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: J211013A,BFBUX11,,43582
Operator ID: Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:55 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 09:45:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.343	4.343	0.000	0	604805	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

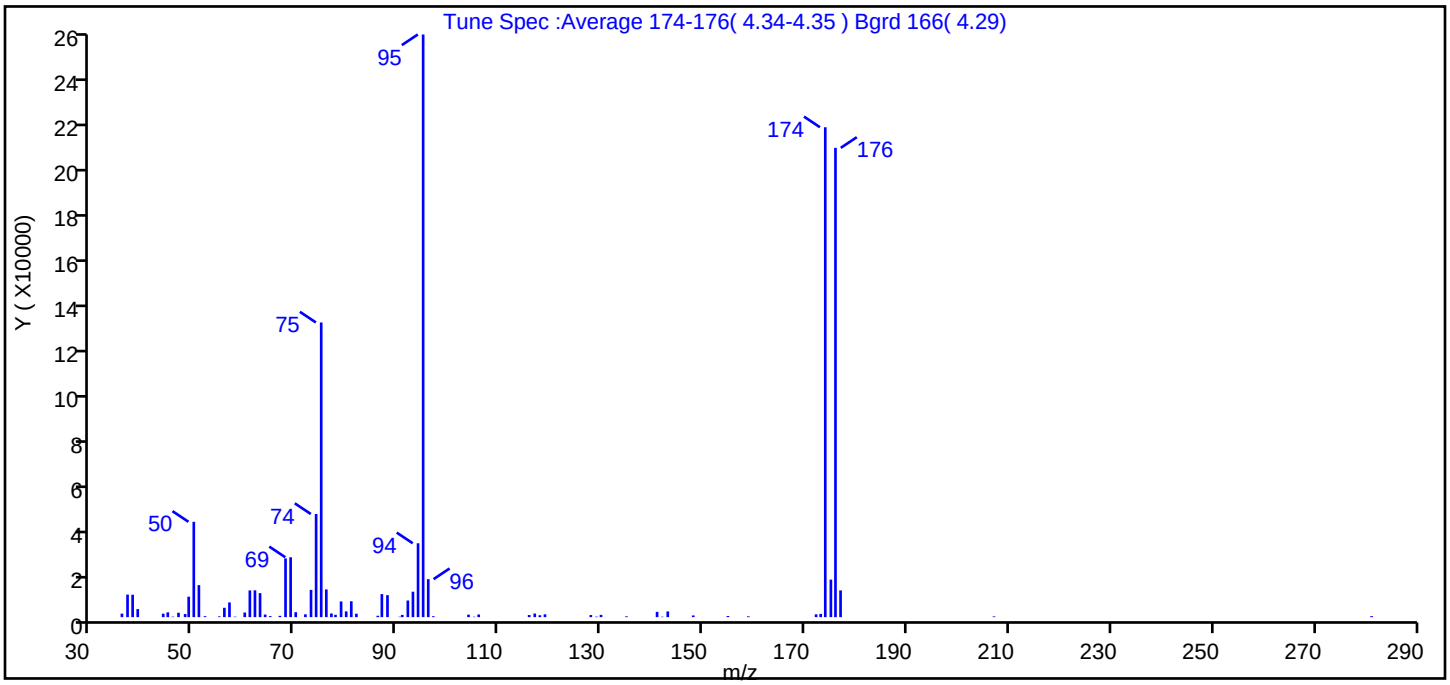
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\BFB1013.D
Injection Date: 13-Oct-2021 08:31:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 33 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.4
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	84.1
175	5 to 9% of m/z 174	6.4 (7.7)
176	Greater than 95% but less than 101% of m/z 174	80.5 (95.8)
177	5 to 9% of m/z 176	4.6 (5.7)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\BFB1013.D\8260_11.rslt\spectra.d
Injection Date: 13-Oct-2021 08:31:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 166(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1573	62.00	11915	86.00	615	129.00	223
37.00	10024	63.00	10658	87.00	10240	130.00	1005
38.00	9950	64.00	1150	88.00	9770	135.00	361
39.00	3577	65.00	448	90.00	178	141.00	2354
44.00	1549	67.00	584	91.00	996	142.00	185
45.00	2130	68.00	26104	92.00	7390	143.00	2539
46.00	212	69.00	26600	93.00	11304	148.00	752
47.00	1946	70.00	2197	94.00	32824	155.00	499
48.00	1375	72.00	1255	95.00	258880	159.00	363
49.00	9098	73.00	12120	96.00	16880	172.00	1251
50.00	42360	74.00	45832	97.00	405	173.00	1437
51.00	14221	75.00	130928	104.00	1124	174.00	217664
52.00	426	76.00	12304	105.00	177	175.00	16664
55.00	344	77.00	1630	106.00	1175	176.00	208512
56.00	4157	78.00	1037	116.00	943	177.00	11882
57.00	6525	79.00	6984	117.00	1603	207.00	325
58.00	218	80.00	2565	118.00	844	281.00	451
60.00	2059	81.00	7044	119.00	1254		
61.00	11879	82.00	1531	128.00	933		

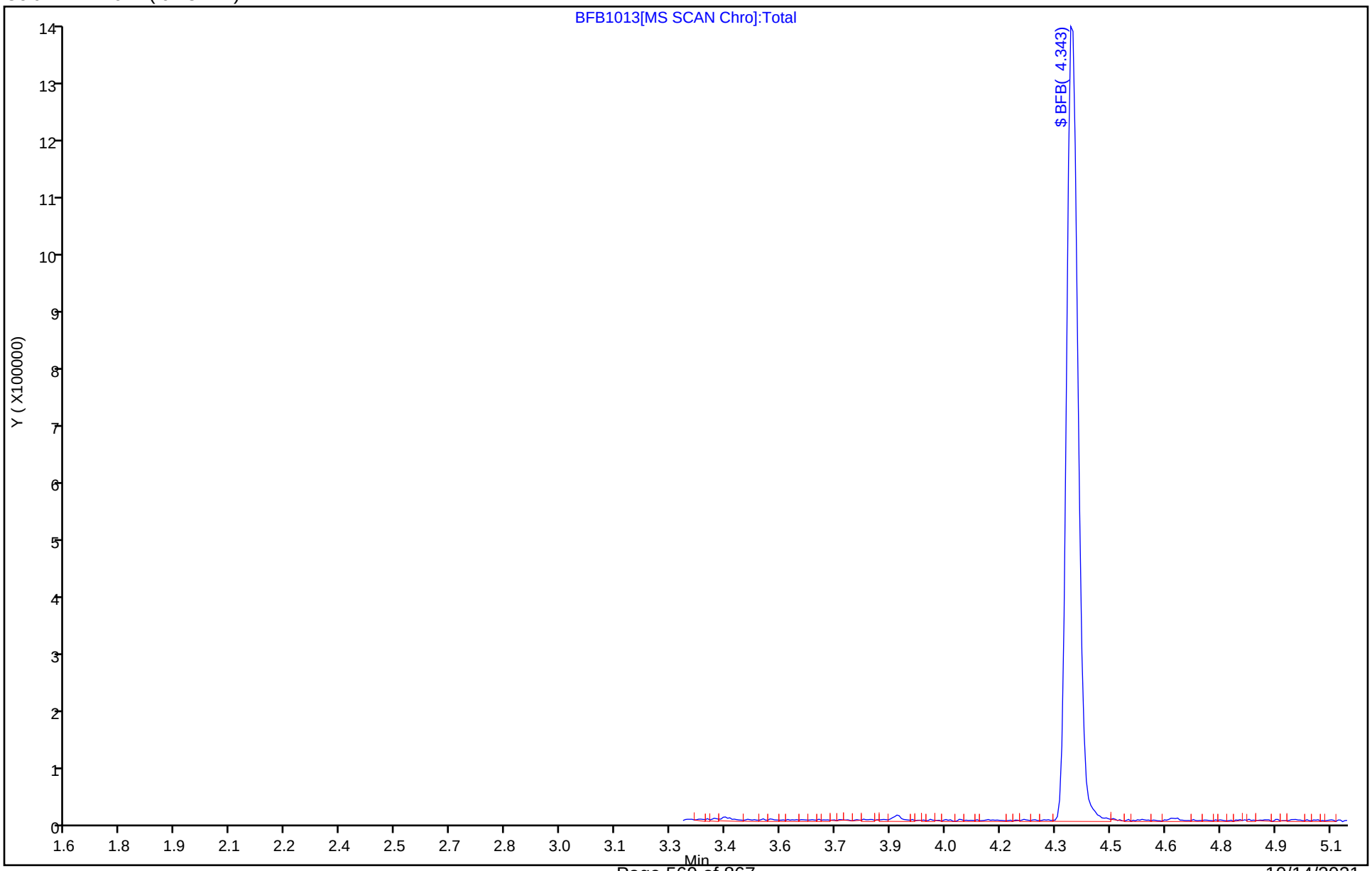
Report Date: 14-Oct-2021 05:28:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\BFB1013.D

Injection Date:	13-Oct-2021 08:31:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Mar-2021 07:33:30	ALS Bottle#:	22	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C210316A-IC,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Mar-2021 09:02:03	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1642				
First Level Reviewer: evansle		Date:	16-Mar-2021 09:13:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	12980962	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

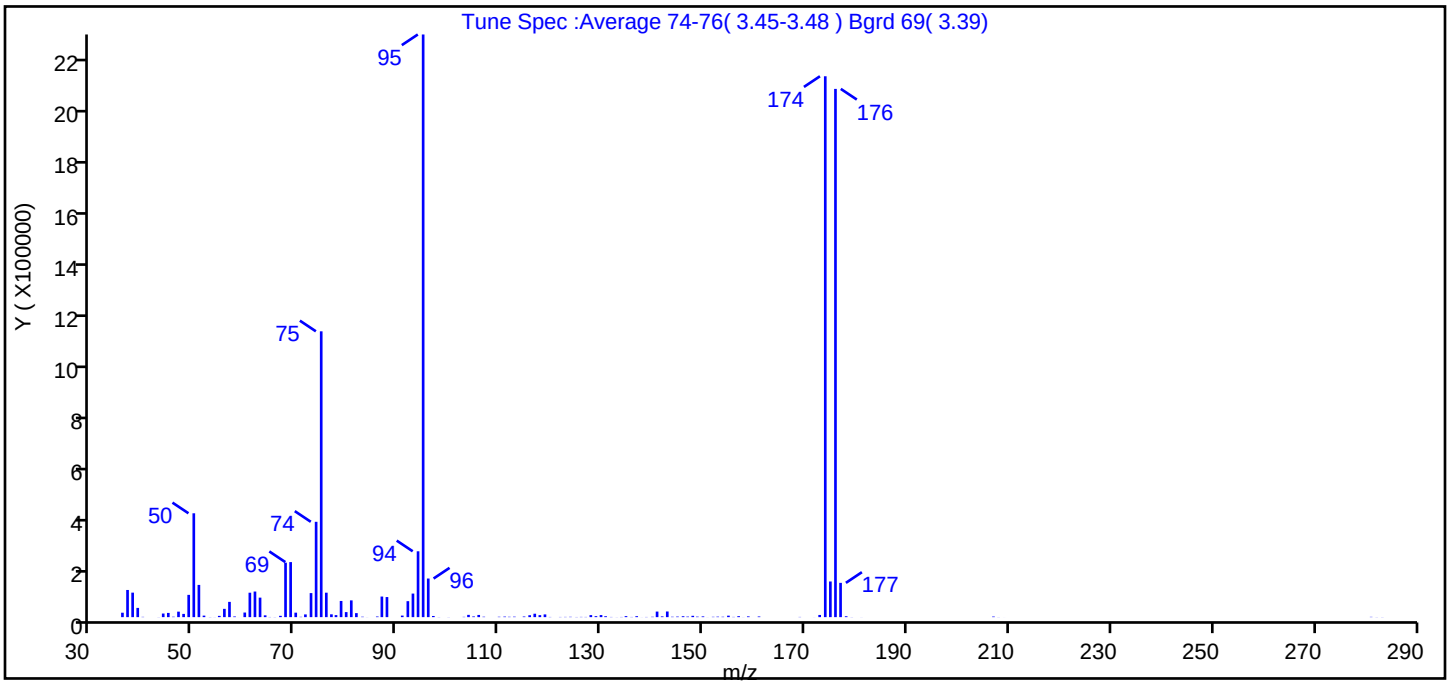
vmbfb_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D
Injection Date: 16-Mar-2021 07:33:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 22 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	92.8
175	5 to 9% of m/z 174	6.1 (6.6)
176	Greater than 95% but less than 101% of m/z 174	90.7 (97.7)
177	5 to 9% of m/z 176	5.9 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D\8260_15.rslt\spectra.d
Injection Date: 16-Mar-2021 07:33:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 69(3.39)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

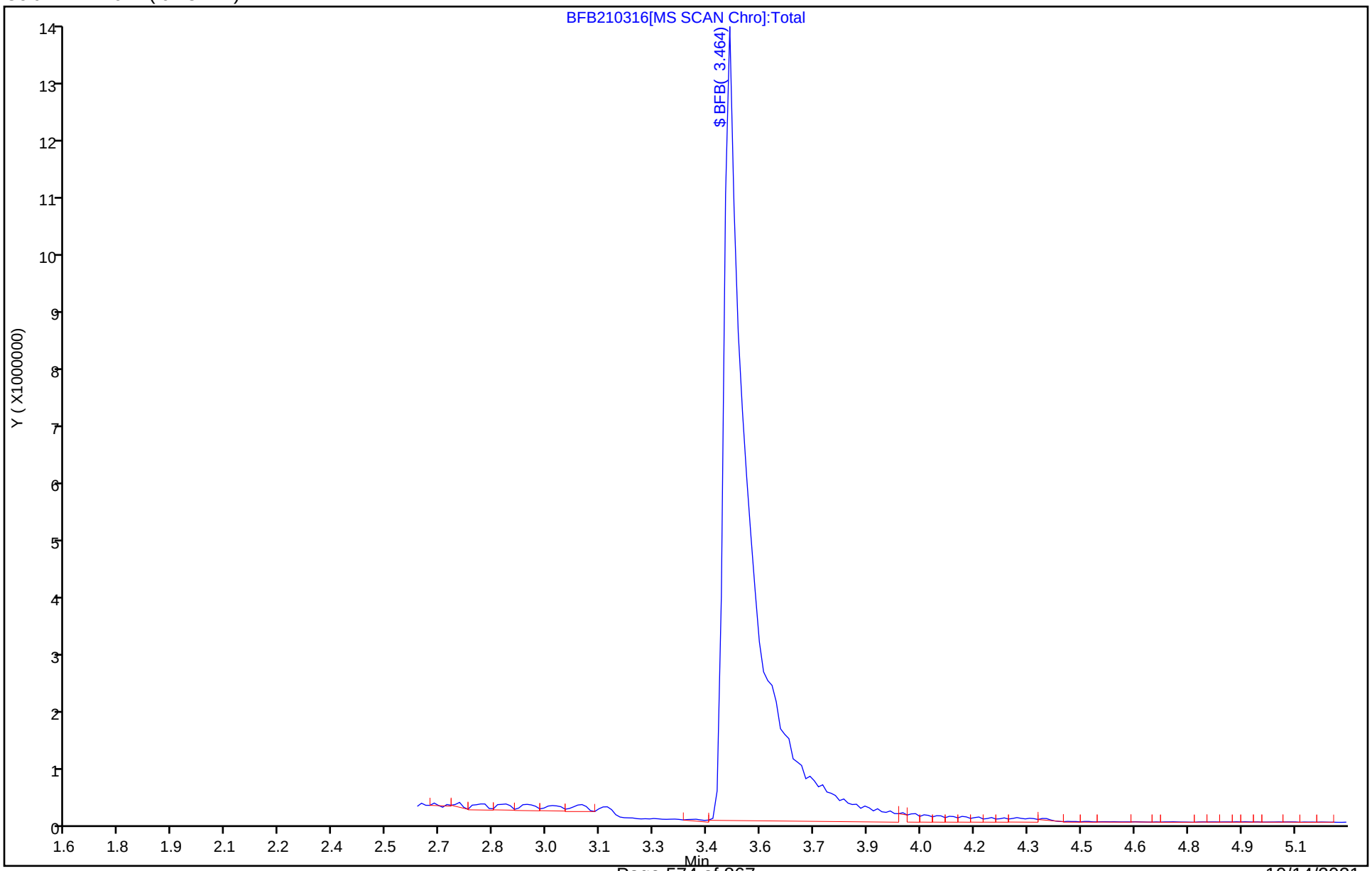
Report Date: 18-Mar-2021 09:02:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D

Injection Date:	16-Mar-2021 07:33:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\BFB1012.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 12-Oct-2021 07:54:30 ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C211012A,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:50 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	12047615	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

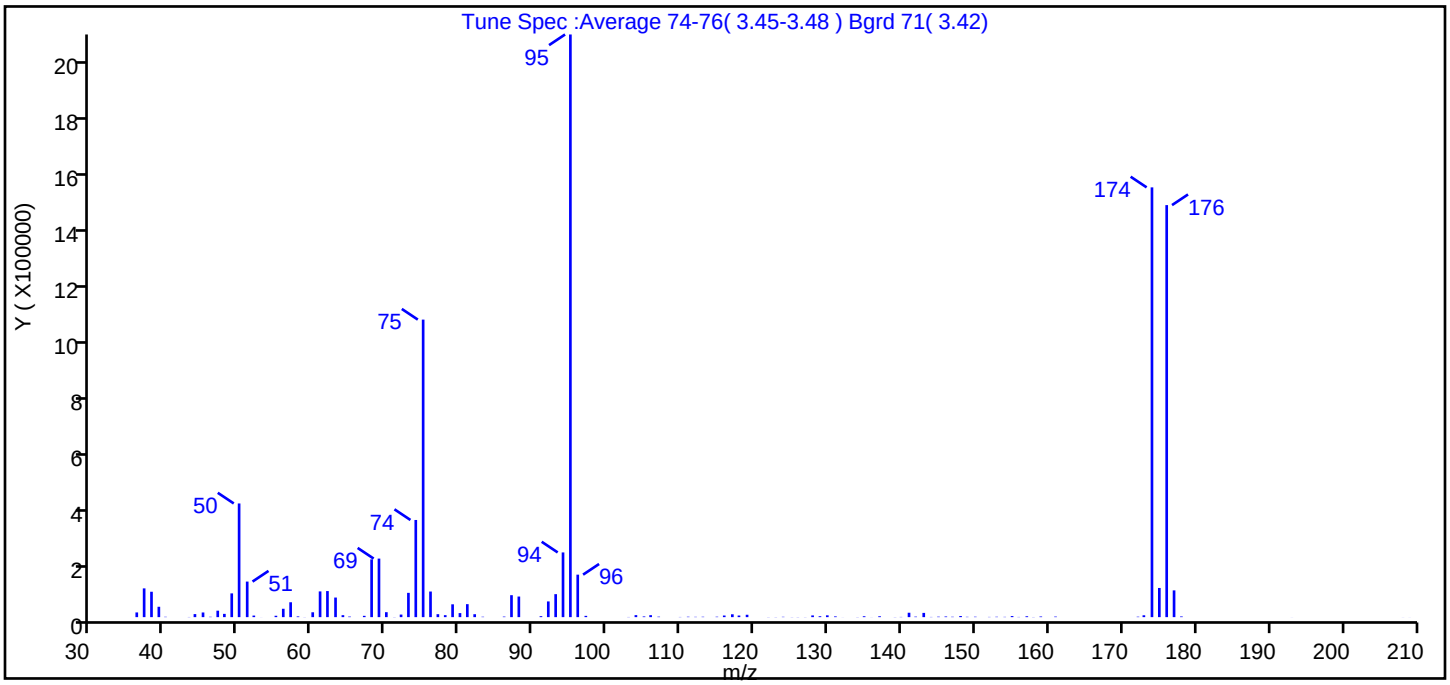
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\BFB1012.D
Injection Date: 12-Oct-2021 07:54:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.5
75	30 to 60% of m/z 95	51.1
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	73.8
175	5 to 9% of m/z 174	5.0 (6.8)
176	Greater than 95% but less than 101% of m/z 174	70.7 (95.9)
177	5 to 9% of m/z 176	4.6 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\BFB1012.D\8260_15.rslt\spectra.d
Injection Date: 12-Oct-2021 07:54:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 71(3.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16177	69.00	201152	107.00	1612	143.00	14586
37.00	98816	70.00	17032	110.00	638	144.00	696
38.00	87264	71.00	479	111.00	1443	145.00	1576
39.00	35632	72.00	8835	112.00	1069	146.00	2259
40.00	1188	73.00	83456	113.00	1346	147.00	1318
43.00	571	74.00	333824	115.00	1515	148.00	3810
44.00	10489	75.00	1022272	116.00	5579	149.00	1116
45.00	16046	76.00	88000	117.00	9822	150.00	1453
46.00	1235	77.00	10137	118.00	5578	152.00	780
47.00	22192	78.00	6790	119.00	8191	153.00	1323
48.00	11262	79.00	44088	122.00	402	154.00	965
49.00	81632	80.00	13888	123.00	462	155.00	3662
50.00	390592	81.00	44600	124.00	1154	156.00	693
51.00	122192	82.00	10087	125.00	397	157.00	3029
52.00	5411	83.00	1381	126.00	454	158.00	519
53.00	172	86.00	1849	127.00	373	159.00	2214
55.00	4762	87.00	75456	128.00	5911	161.00	1917
56.00	28784	88.00	70808	129.00	3077	172.00	1538
57.00	51152	91.00	3341	130.00	6208	173.00	6381
58.00	2499	92.00	53992	131.00	2543	174.00	1476608
59.00	353	93.00	78968	132.00	184	175.00	100224
60.00	16712	94.00	222336	134.00	454	176.00	1415680
61.00	88408	95.00	2001920	135.00	3022	177.00	91952
62.00	89584	96.00	145984	136.00	213	178.00	2346
63.00	67328	97.00	4436	137.00	2992	193.00	170
64.00	6763	103.00	599	139.00	432	208.00	189
65.00	1944	104.00	6873	140.00	730	209.00	161
67.00	4503	105.00	2415	141.00	15130		
68.00	198464	106.00	6770	142.00	1758		

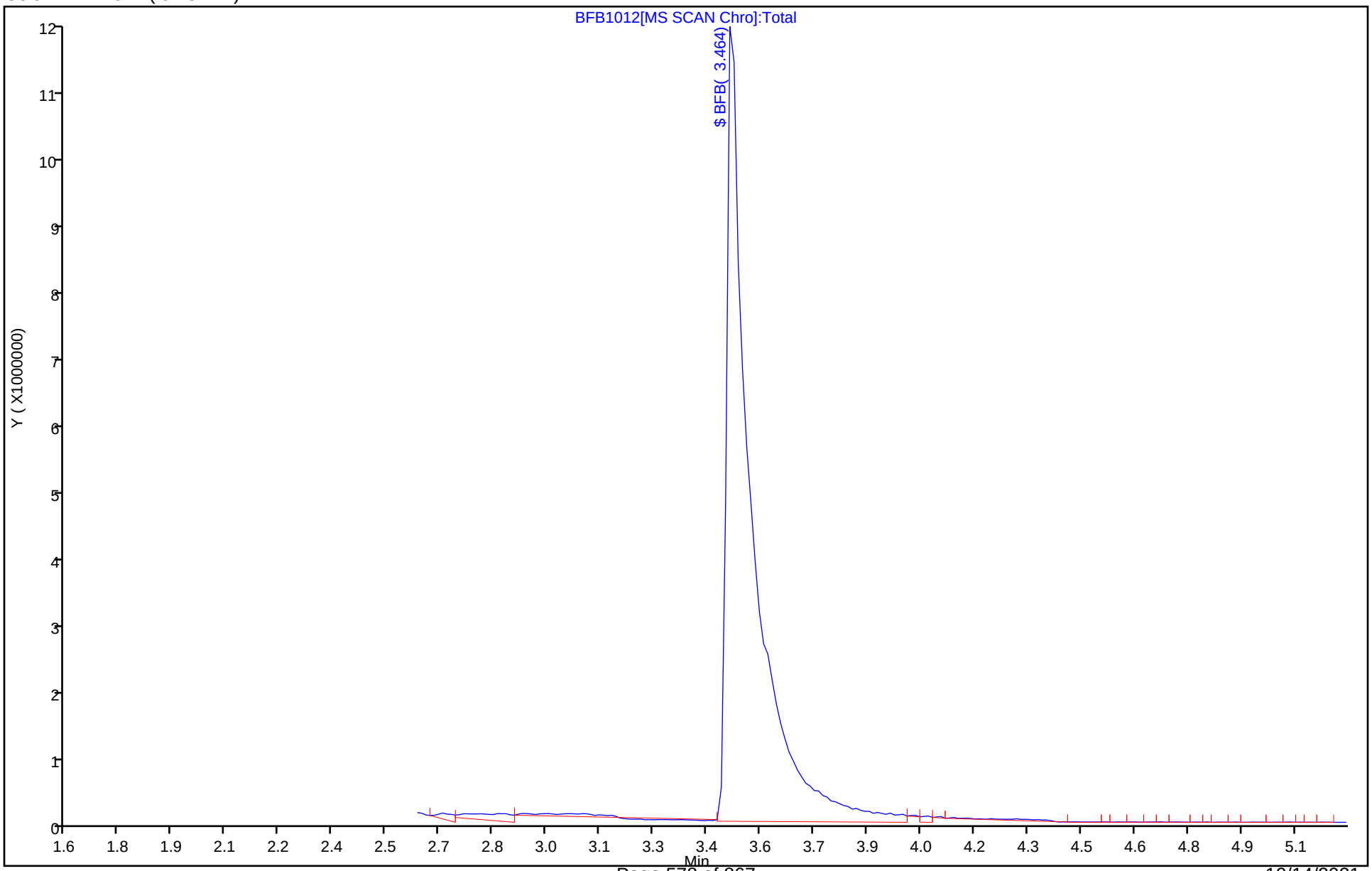
Report Date: 13-Oct-2021 08:53:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\BFB1012.D

Injection Date:	12-Oct-2021 07:54:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\BFB1013.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	13-Oct-2021 09:22:30	ALS Bottle#:	29	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C211013A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	14-Oct-2021 05:35:52	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1605				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.476	3.476	0.000	0	11799949	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

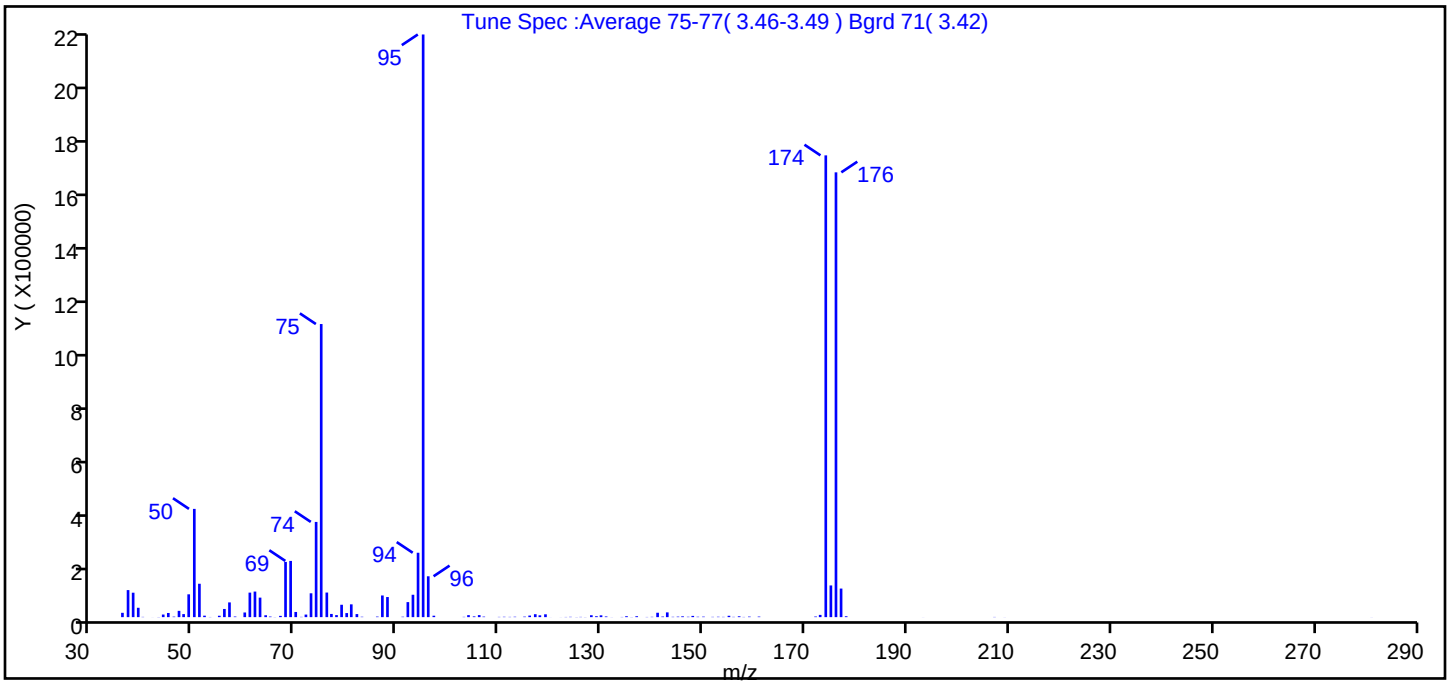
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\BFB1013.D
Injection Date: 13-Oct-2021 09:22:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.6
75	30 to 60% of m/z 95	50.3
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	79.3
175	5 to 9% of m/z 174	5.4 (6.9)
176	Greater than 95% but less than 101% of m/z 174	76.3 (96.3)
177	5 to 9% of m/z 176	4.9 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\BFB1013.D\8260_15.rslt\spectra.d
Injection Date: 13-Oct-2021 09:22:30
Spectrum: Tune Spec :Average 75-77(3.46-3.49) Bgrd 71(3.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16198	69.00	210240	110.00	950	144.00	1235
37.00	101160	70.00	19368	111.00	1348	145.00	1910
38.00	91400	71.00	984	112.00	968	146.00	3001
39.00	35008	72.00	9633	113.00	1517	147.00	1420
40.00	953	73.00	89232	115.00	1942	148.00	4636
42.00	172	74.00	356096	116.00	5885	149.00	1478
43.00	564	75.00	1096192	117.00	11004	150.00	1873
44.00	9769	76.00	91976	118.00	6806	152.00	1041
45.00	15551	77.00	11969	119.00	10619	153.00	1459
46.00	1855	78.00	7686	120.00	167	154.00	981
47.00	23536	79.00	46288	122.00	188	155.00	5111
48.00	11411	80.00	15173	123.00	706	156.00	1040
49.00	85328	81.00	47872	124.00	1182	157.00	3211
50.00	404864	82.00	11453	125.00	460	158.00	762
51.00	124864	83.00	1468	126.00	932	159.00	2047
52.00	5522	86.00	2063	127.00	417	161.00	2106
53.00	618	87.00	81032	128.00	7104	172.00	2329
55.00	5213	88.00	75176	129.00	3406	173.00	8376
56.00	30584	91.00	1570	130.00	6784	174.00	1726976
57.00	55128	92.00	56208	131.00	2523	175.00	118552
58.00	2309	93.00	83728	132.00	286	176.00	1663488
60.00	17432	94.00	240832	134.00	722	177.00	106880
61.00	91704	95.00	2179072	135.00	3456	178.00	3289
62.00	95640	96.00	152832	136.00	462	193.00	168
63.00	73000	97.00	5339	137.00	3445	207.00	753
64.00	7068	103.00	1064	139.00	714	209.00	221
65.00	2144	104.00	7509	140.00	1205	281.00	236
66.00	412	105.00	2753	141.00	16440		
67.00	4760	106.00	7612	142.00	2188		
68.00	206592	107.00	1957	143.00	17792		

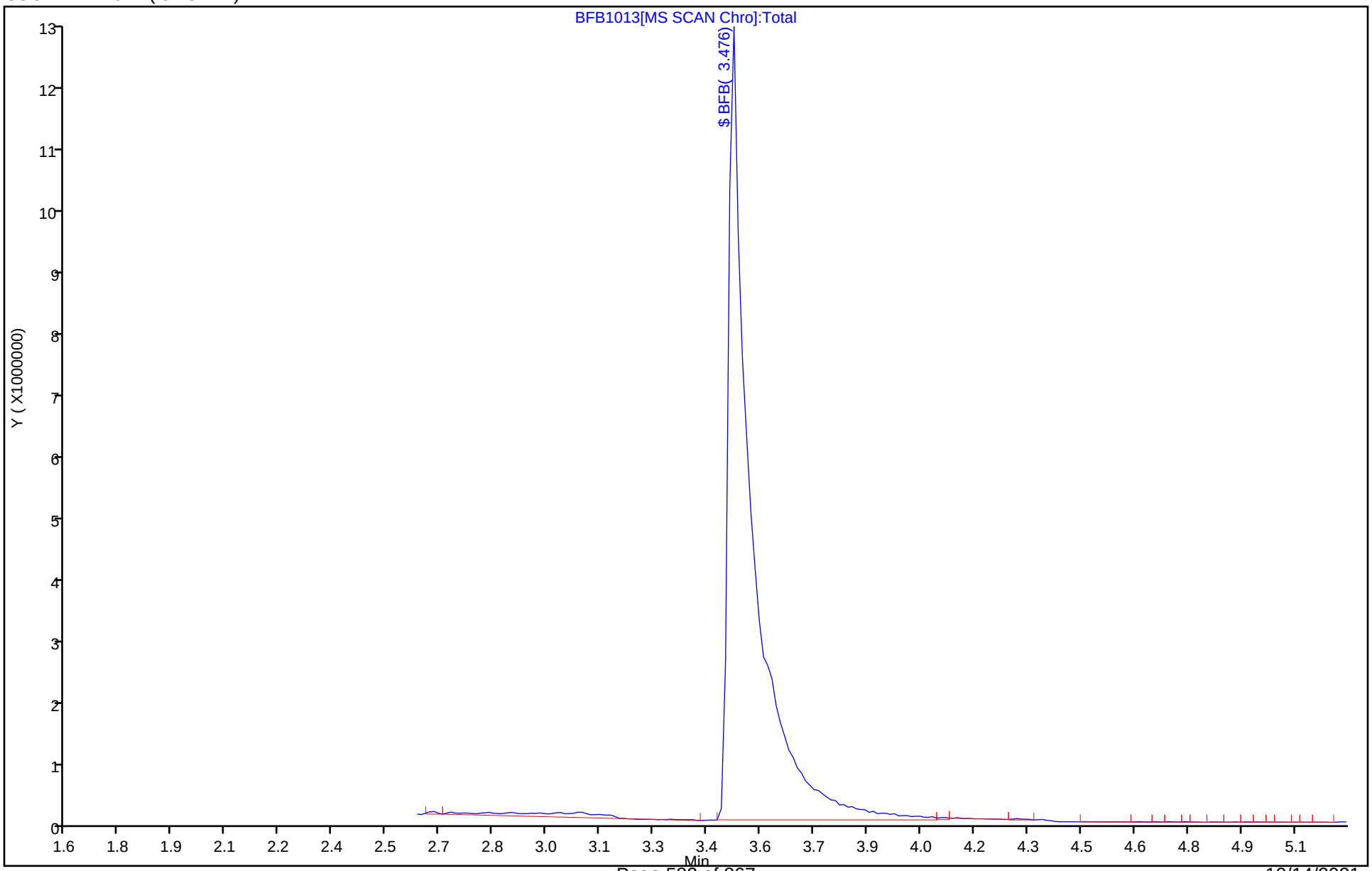
Report Date: 14-Oct-2021 05:35:52 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\BFB1013.D

Injection Date:	13-Oct-2021 09:22:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-507762/6

Matrix: Water Lab File ID: UXJ1289.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 09:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	111		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1289.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2021 09:24:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-006
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 10:43:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	687719	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	396525	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	198801	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	95	194549	20.0	22.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	199720	20.0	20.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.037	0.001	92	620917	20.0	22.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	154425	20.0	15.6	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.139					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.292					ND	
13 Butadiene	54		1.363					ND	
14 Vinyl chloride	62		1.363					ND	
15 Bromomethane	94		1.600					ND	
16 Chloroethane	64		1.647					ND	
17 Dichlorofluoromethane	67		1.801					ND	
18 Trichlorofluoromethane	101		1.825					ND	
19 Ethyl ether	59		2.062					ND	
20 Acrolein	56		2.156					ND	
21 1,1-Dichloroethene	96		2.239					ND	
23 112TCTFE	151		2.286					ND	
24 Acetone	43		2.286					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.369					ND	
26 Carbon disulfide	76		2.417					ND	7
27 Acetonitrile	41		2.511					ND	
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.570					ND	
30 Methylene Chloride	84		2.641					ND	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.854					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.878					ND	
34 Methyl tert-butyl ether	73		2.902					ND	
35 Hexane	86		3.115					ND	
36 1,1-Dichloroethane	63		3.233					ND	
37 Vinyl acetate	43		3.280					ND	
38 2-Chloro-1,3-butadiene	53		3.304					ND	
39 Isopropyl ether	87		3.304					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
41 cis-1,2-Dichloroethene	96		3.706					ND	
42 2,2-Dichloropropane	97		3.718					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.765					ND	
45 Ethyl acetate	43		3.789					ND	
47 Methacrylonitrile	41		3.896					ND	
46 Chlorobromomethane	128		3.907					ND	
49 Tetrahydrofuran	42		3.967					ND	
48 Chloroform	83		3.978					ND	
50 1,1,1-Trichloroethane	97		4.132					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.274					ND	
52 Carbon tetrachloride	117		4.274					ND	
54 Isobutyl alcohol	41		4.393					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.546					ND	
58 n-Heptane	100		4.688					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.984					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.174					ND	
64 Dibromomethane	93		5.268					ND	
65 Methyl methacrylate	41		5.280					ND	
66 1,4-Dioxane	88		5.304					ND	
67 Dichlorobromomethane	83		5.410					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.801					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.943					ND	
72 Toluene	91		6.097					ND	
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.676					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.806					ND	
82 Ethylene Dibromide	107		6.901					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.457					ND	
87 m-Xylene & p-Xylene	106		7.576					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.954					ND	
90 Bromoform	173		8.108					ND	
91 Isopropylbenzene	105		8.297					ND	
93 Cyclohexanone	55		8.368					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
95 Bromobenzene	156		8.570					ND	
96 1,2,3-Trichloropropane	110		8.605					ND	
97 trans-1,4-Dichloro-2-butene	53		8.629					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.865					ND	
103 tert-Butylbenzene	119		9.173					ND	
102 Pentachloroethane	167		9.185					ND	
104 1,2,4-Trimethylbenzene	105		9.220					ND	
105 sec-Butylbenzene	105		9.386					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.528					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
111 n-Butylbenzene	91		9.930					ND	
112 1,2-Dichlorobenzene	146		9.930					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180		10.901					ND	
116 1,2,4-Trichlorobenzene	180		11.516					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	
119 1,2,3-Trichlorobenzene	180		11.989					ND	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	95	6421		0.4304	
127 1-Methylnaphthalene	142	13.066	13.066	0.000	94	6785		0.4999	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

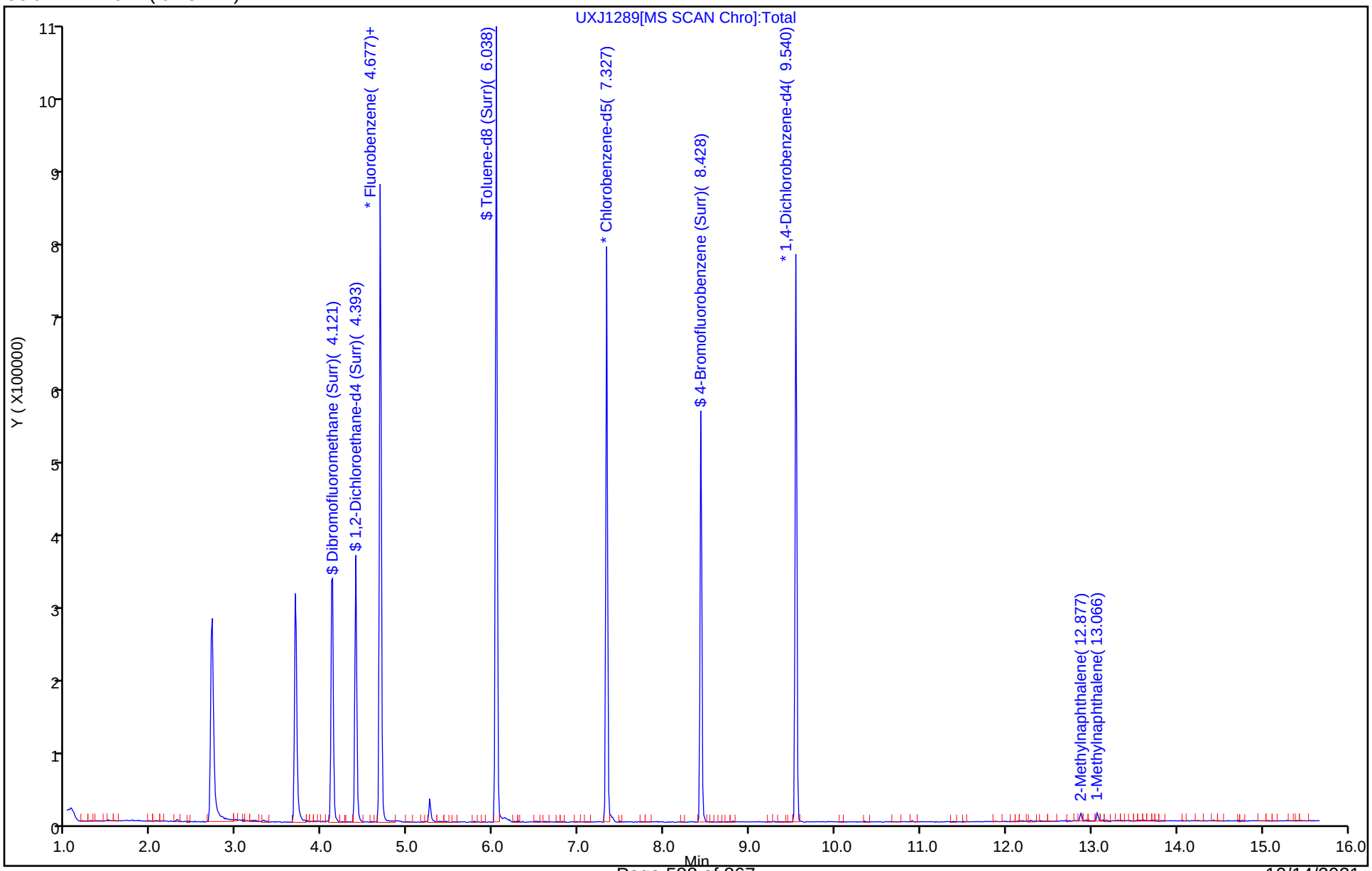
Report Date: 13-Oct-2021 08:35:30 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1289.D

Injection Date:	12-Oct-2021 09:24:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1289.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2021 09:24:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-006
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 10:43:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	22.2	111.03
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.1	100.48
$ 6 Toluene-d8 (Surr)	20.0	22.0	110.08
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.6	78.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-507764/7

Matrix: Water Lab File ID: UXC9980.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 10:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	77		56-136
2037-26-5	Toluene-d8 (Surr)	92		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9980.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2021 10:51:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-007
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 11:45:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1617587	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1210836	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	571986	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	335746	10.0	8.88	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.001	100	503042	10.0	11.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1363353	10.0	9.19	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	90	384999	10.0	7.67	
9 Dichlorodifluoromethane	85		1.420					ND	
10 Chloromethane	50		1.562					ND	
11 Vinyl chloride	62		1.645					ND	
12 Butadiene	54		1.669					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		1.989					ND	
15 Dichlorofluoromethane	67		2.155					ND	
16 Trichlorofluoromethane	101		2.203					ND	
17 Ethyl ether	59		2.404					ND	
18 Acrolein	56		2.523					ND	7
19 1,1-Dichloroethene	96		2.606					ND	
20 112TCTFE	151		2.618					ND	
21 Acetone	58	2.641	2.641	0.000	99	5884		1.80	
22 Iodomethane	142		2.736					ND	
24 Carbon disulfide	76	2.807	2.807	0.000	95	16074		0.1233	
23 Methylal	45		2.872					ND	
25 Acetonitrile	41	2.890	2.878	0.012	74	6154		2.11	
26 3-Chloro-1-propene	76		2.902					ND	
27 Methyl acetate	43		2.914					ND	
28 Methylene Chloride	84		2.997					ND	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	38	2173		0.9498	
30 Acrylonitrile	53		3.199					ND	
31 Methyl tert-butyl ether	73		3.210					ND	
32 trans-1,2-Dichloroethene	96		3.222					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	86		3.436					ND	
33 Chlorodifluoromethane TIC	51		3.441					ND	
35 1,1-Dichloroethane	63		3.566					ND	
36 Vinyl acetate	43		3.602					ND	
37 Isopropyl ether	87		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.637					ND	
39 Tert-butyl ethyl ether	59		3.910					ND	
42 2,2-Dichloropropane	97		4.041					ND	
41 cis-1,2-Dichloroethene	96		4.041					ND	
40 2-Butanone (MEK)	72		4.052					ND	
43 Ethyl acetate	43		4.088					ND	
44 Propionitrile	54		4.112					ND	
45 Methacrylonitrile	41		4.230					ND	
46 Chlorobromomethane	128		4.242					ND	
47 Tetrahydrofuran	42	4.278	4.278	0.000	90	9384		1.10	
48 Chloroform	83		4.301					ND	
49 1,1,1-Trichloroethane	97		4.456					ND	
50 Cyclohexane	56		4.503					ND	
51 1,1-Dichloropropene	75		4.586					ND	
52 Carbon tetrachloride	117		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78	4.776	4.764	0.012	91	18813		0.1060	
56 1,2-Dichloroethane	62		4.776					ND	
54 Isooctane	57	4.823	4.811	0.012	93	9612		0.1054	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.966					ND	
59 n-Butanol	56		5.215					ND	
60 Trichloroethene	130		5.298					ND	7
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.570					ND	
65 Dibromomethane	93		5.594					ND	
66 1,4-Dioxane	88		5.606					ND	
67 Dichlorobromomethane	83		5.724					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.974					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.400					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.661					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.898					ND	
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.981					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.124					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.646					ND	7
84 Chlorobenzene	112		7.681					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.752					ND	
86 Ethylbenzene	106		7.776					ND	
87 m-Xylene & p-Xylene	91		7.883					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.606					ND	
92 Cyclohexanone	55		8.725					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.903					ND	
95 Bromobenzene	156		8.914					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.950					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.092					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.495					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.828					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.911					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.254					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	7
117 1,2,4-Trichlorobenzene	180		11.879					ND	
118 Hexachlorobutadiene	225		12.045					ND	7
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142	13.350	13.361	-0.011	85	9129		0.1331	
122 1-Methylnaphthalene	142	13.599	13.599	0.000	92	10881		0.1780	
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1				0			0.1060	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

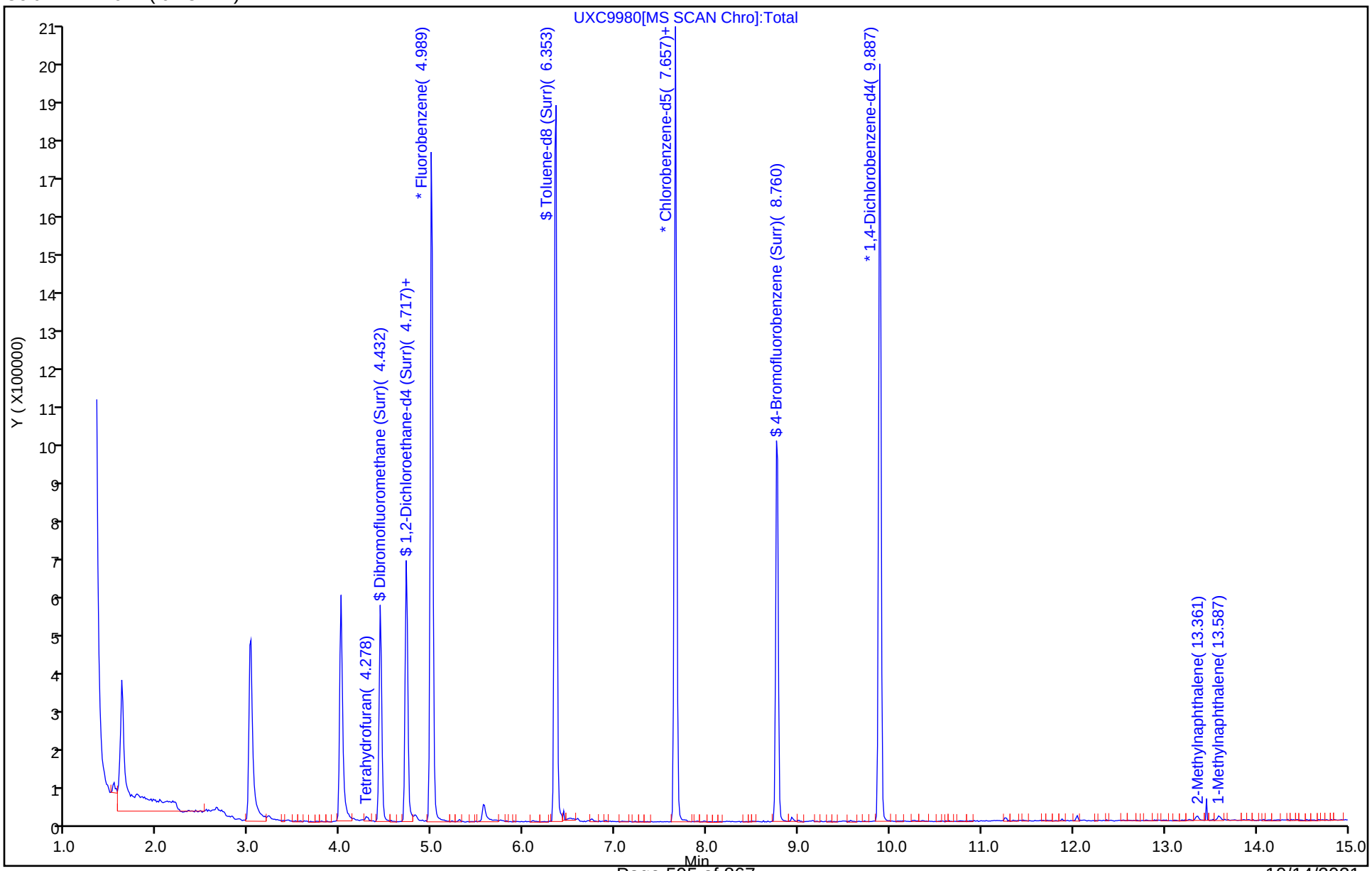
Report Date: 13-Oct-2021 08:54:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9980.D

Injection Date:	12-Oct-2021 10:51:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9980.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2021 10:51:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-007
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: evansle Date: 12-Oct-2021 11:45:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.88	88.80
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	118.10
$ 6 Toluene-d8 (Surr)	10.0	9.19	91.88
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.67	76.70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-508017/6

Matrix: Water Lab File ID: UXJ1322.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 10:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508017 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-137
460-00-4	4-Bromofluorobenzene (Surr)	68		56-136
2037-26-5	Toluene-d8 (Surr)	102		78-122
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1322.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2021 10:53:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-006
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 12:14:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	900705	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	519372	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	251870	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	96	235065	20.0	20.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	232162	20.0	17.8	
$ 6 Toluene-d8 (Surr)	98	6.037	6.038	-0.001	92	750004	20.0	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	176476	20.0	13.6	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.151					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.304					ND	
13 Butadiene	54		1.364					ND	
14 Vinyl chloride	62		1.375					ND	
15 Bromomethane	94		1.600					ND	
16 Chloroethane	64		1.659					ND	
17 Dichlorofluoromethane	67		1.813					ND	
18 Trichlorofluoromethane	101		1.825					ND	
19 Ethyl ether	59		2.074					ND	
20 Acrolein	56		2.168					ND	
21 1,1-Dichloroethene	96		2.251					ND	
23 112TCTFE	151		2.287					ND	
24 Acetone	43		2.298					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.369					ND	
26 Carbon disulfide	76		2.429					ND	7
27 Acetonitrile	41		2.511					ND	
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.571					ND	
30 Methylene Chloride	84		2.653					ND	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.855					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.878					ND	
34 Methyl tert-butyl ether	73		2.902					ND	
35 Hexane	86		3.127					ND	
36 1,1-Dichloroethane	63		3.233					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.304					ND	
39 Isopropyl ether	87		3.304					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
41 cis-1,2-Dichloroethene	96		3.718					ND	
42 2,2-Dichloropropane	97		3.718					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.765					ND	U
45 Ethyl acetate	43		3.789					ND	
47 Methacrylonitrile	41		3.896					ND	
46 Chlorobromomethane	128		3.908					ND	
49 Tetrahydrofuran	42		3.967					ND	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.132					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.274					ND	
52 Carbon tetrachloride	117		4.274					ND	
54 Isobutyl alcohol	41		4.393					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.546					ND	
58 n-Heptane	100		4.689					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.984					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.174					ND	
64 Dibromomethane	93		5.268					ND	
65 Methyl methacrylate	41		5.280					ND	
66 1,4-Dioxane	88		5.304					ND	
67 Dichlorobromomethane	83		5.410					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.801					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.943					ND	
72 Toluene	91		6.097					ND	
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.901					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.458					ND	
87 m-Xylene & p-Xylene	106		7.576					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.955					ND	
90 Bromoform	173		8.108					ND	
91 Isopropylbenzene	105		8.298					ND	
93 Cyclohexanone	55		8.368					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
95 Bromobenzene	156		8.570					ND	
96 1,2,3-Trichloropropane	110		8.605					ND	
97 trans-1,4-Dichloro-2-butene	53		8.629					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.866					ND	
103 tert-Butylbenzene	119		9.173					ND	
102 Pentachloroethane	167		9.185					ND	
104 1,2,4-Trimethylbenzene	105		9.221					ND	
105 sec-Butylbenzene	105		9.386					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.528					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
112 1,2-Dichlorobenzene	146		9.919					ND	
111 n-Butylbenzene	91		9.931					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180		10.901					ND	
116 1,2,4-Trichlorobenzene	180		11.516					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	
119 1,2,3-Trichlorobenzene	180		11.990					ND	
120 2-Methylnaphthalene	142		12.877					ND	U
127 1-Methylnaphthalene	142	13.078	13.066	0.012	85	9115		0.5300	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

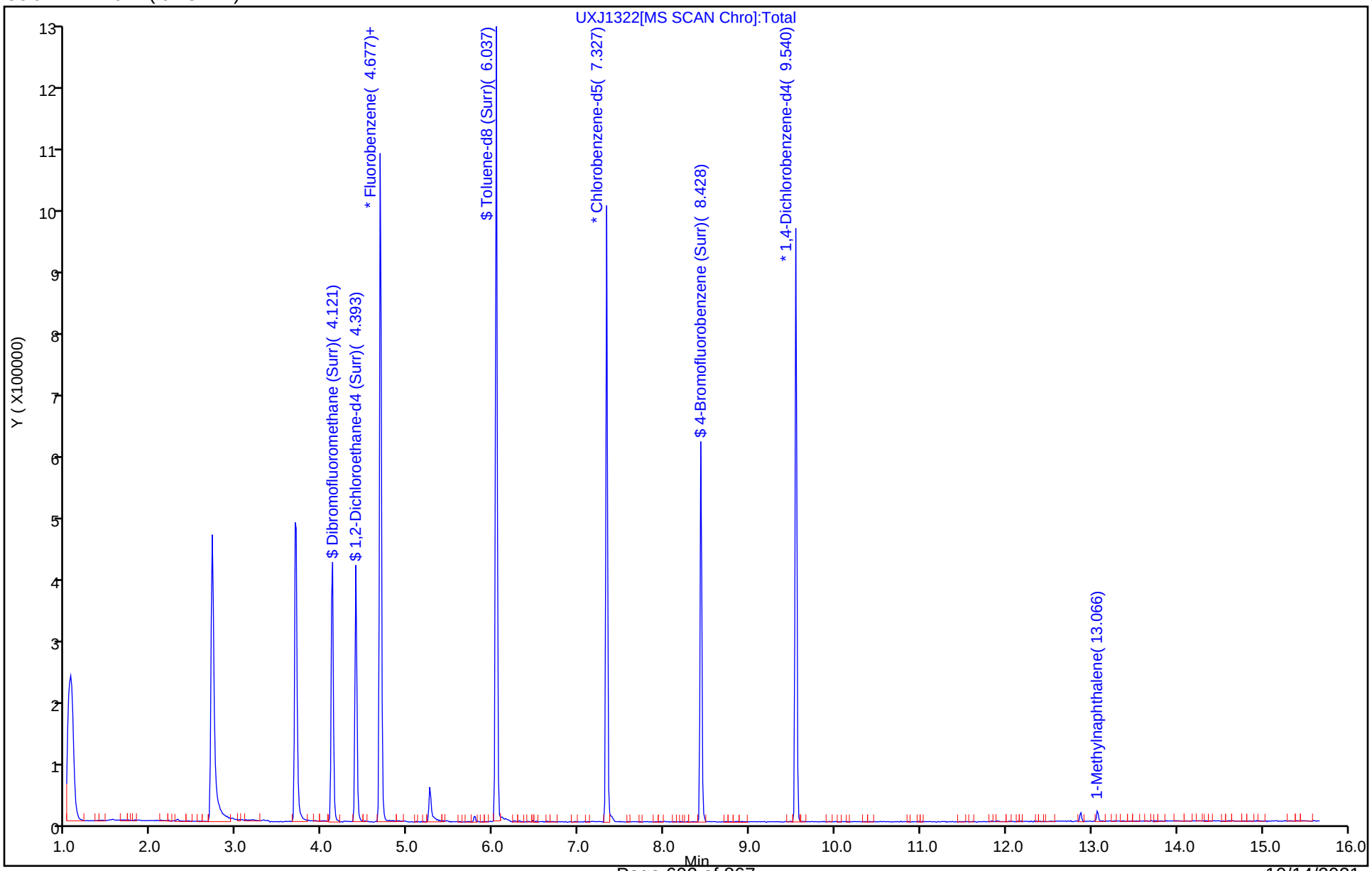
Report Date: 14-Oct-2021 05:29:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1322.D

Injection Date:	13-Oct-2021 10:53:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1322.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2021 10:53:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-006
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 12:14:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.5	102.43
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.8	89.18
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.51
$ 7 4-Bromofluorobenzene (Surr)	20.0	13.6	68.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-508019/7

Matrix: Water Lab File ID: UXC0009.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 11:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508019 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		62-137
460-00-4	4-Bromofluorobenzene (Surr)	79		56-136
2037-26-5	Toluene-d8 (Surr)	94		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0009.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2021 11:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114059-007
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 12:17:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	98	1548161	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.657	0.001	87	1128216	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	533754	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	334416	10.0	9.24	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	484009	10.0	11.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1305445	10.0	9.44	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	88	367989	10.0	7.87	
9 Dichlorodifluoromethane	85		1.420					ND	
10 Chloromethane	50		1.562					ND	
11 Vinyl chloride	62		1.645					ND	
12 Butadiene	54		1.669					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		1.989					ND	
15 Dichlorofluoromethane	67		2.155					ND	
16 Trichlorofluoromethane	101		2.203					ND	
17 Ethyl ether	59		2.404					ND	
18 Acrolein	56		2.523					ND	7
19 1,1-Dichloroethene	96		2.606					ND	
20 112TCTFE	151		2.618					ND	
21 Acetone	58	2.653	2.641	0.012	98	5471		1.75	
22 Iodomethane	142		2.748					ND	
24 Carbon disulfide	76		2.807					ND	7
23 Methylal	45		2.872					ND	
25 Acetonitrile	41		2.878					ND	
26 3-Chloro-1-propene	76		2.902					ND	
27 Methyl acetate	43		2.914					ND	
28 Methylene Chloride	84		2.997					ND	
29 2-Methyl-2-propanol	59		3.080					ND	
30 Acrylonitrile	53		3.199					ND	
31 Methyl tert-butyl ether	73		3.222					ND	
32 trans-1,2-Dichloroethene	96		3.222					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	86		3.436					ND	
33 Chlorodifluoromethane TIC	51		3.441					ND	
35 1,1-Dichloroethane	63		3.566					ND	
36 Vinyl acetate	43		3.602					ND	
37 Isopropyl ether	87		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.637					ND	
39 Tert-butyl ethyl ether	59		3.898					ND	
42 2,2-Dichloropropane	97		4.041					ND	
41 cis-1,2-Dichloroethene	96		4.041					ND	
40 2-Butanone (MEK)	72		4.053					ND	
43 Ethyl acetate	43		4.088					ND	
44 Propionitrile	54		4.112					ND	
45 Methacrylonitrile	41		4.230					ND	
46 Chlorobromomethane	128		4.242					ND	
47 Tetrahydrofuran	42		4.278					ND	
48 Chloroform	83		4.302					ND	
49 1,1,1-Trichloroethane	97		4.456					ND	
50 Cyclohexane	56		4.503					ND	
51 1,1-Dichloropropene	75		4.586					ND	
52 Carbon tetrachloride	117		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78	4.776	4.764	0.012	89	24611		0.1449	
56 1,2-Dichloroethane	62		4.776					ND	
54 Isooctane	57	4.811	4.811	0.000	92	4445		0.0509	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.966					ND	
59 n-Butanol	56		5.215					ND	
60 Trichloroethene	130		5.298					ND	
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.570					ND	
65 Dibromomethane	93		5.594					ND	
66 1,4-Dioxane	88		5.606					ND	
67 Dichlorobromomethane	83		5.725					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.974					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.401					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.661					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.899					ND	7
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.982					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.124					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.646					ND	7
84 Chlorobenzene	112		7.681					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.752					ND	
86 Ethylbenzene	106		7.776					ND	
87 m-Xylene & p-Xylene	91		7.883					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.606					ND	
92 Cyclohexanone	55		8.713					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.903					ND	
95 Bromobenzene	156		8.915					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.962					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.092					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.496					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.828					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.911					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.255					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	7
117 1,2,4-Trichlorobenzene	180		11.879					ND	
118 Hexachlorobutadiene	225		12.045					ND	
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142	13.350	13.349	0.001	94	11616		0.1815	
122 1-Methylnaphthalene	142	13.599	13.598	0.001	88	10923		0.1914	
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1				0			0.1449	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

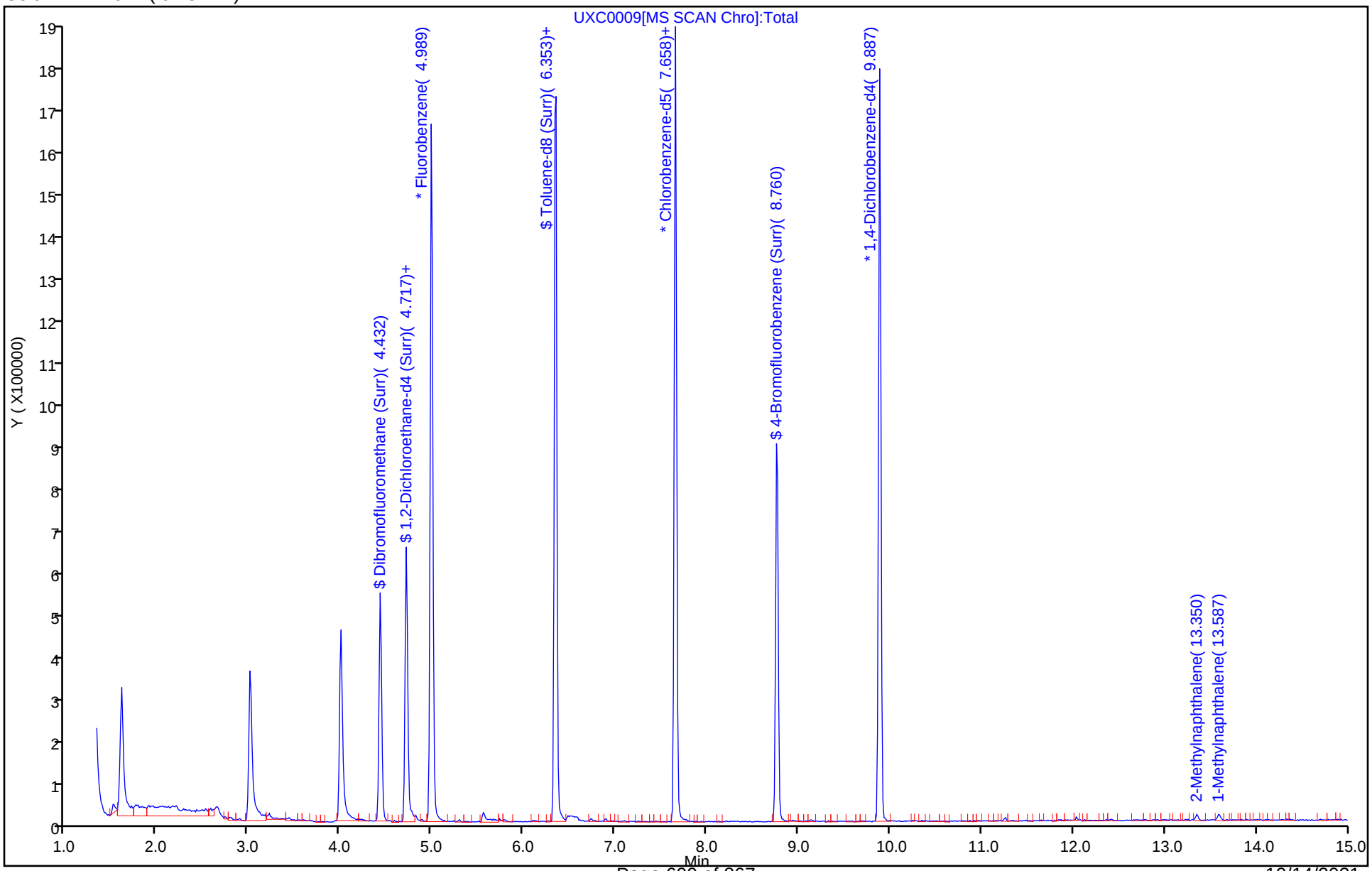
Report Date: 14-Oct-2021 05:36:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0009.D

Injection Date:	13-Oct-2021 11:47:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0009.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2021 11:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114059-007
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 13-Oct-2021 12:17:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.24	92.42
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.9	118.73
$ 6 Toluene-d8 (Surr)	10.0	9.44	94.42
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.87	78.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-507762/4

Matrix: Water Lab File ID: UXJ1285.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 07:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.3		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11.6		1.0	0.46
127-18-4	Tetrachloroethene	10.2		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.2		1.0	0.51
79-01-6	Trichloroethene	9.12		1.0	0.44
75-01-4	Vinyl chloride	11.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	89		56-136
2037-26-5	Toluene-d8 (Surr)	115		78-122
1868-53-7	Dibromofluoromethane (Surr)	104		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1285.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2021 07:54:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-004
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	780078	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	425892	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	250104	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	207279	20.0	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	212000	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.037	0.001	93	696290	20.0	23.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	188896	20.0	17.8	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	93403	10.0	9.05	
12 Chloromethane	50	1.304	1.292	0.012	99	89381	10.0	11.0	
13 Butadiene	54	1.375	1.363	0.012	87	91028	10.0	10.6	
14 Vinyl chloride	62	1.375	1.363	0.012	72	108601	10.0	11.2	
15 Bromomethane	94	1.612	1.600	0.012	90	90988	10.0	13.1	
16 Chloroethane	64	1.659	1.647	0.012	99	71033	10.0	12.4	
17 Dichlorofluoromethane	67	1.813	1.801	0.012	96	169347	10.0	11.9	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	173464	10.0	10.5	
19 Ethyl ether	59	2.074	2.062	0.012	86	105495	10.0	14.3	
20 Acrolein	56	2.168	2.156	0.012	98	50674	50.0	177.8	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	96268	10.0	10.3	
23 112TCTFE	151	2.298	2.286	0.012	86	41902	10.0	5.87	
24 Acetone	43	2.298	2.286	0.012	98	58055	20.0	19.3	
25 Iodomethane	142	2.369	2.369	0.000	97	192015	10.0	11.5	
26 Carbon disulfide	76	2.429	2.417	0.012	99	263105	10.0	9.45	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	73021	10.0	11.6	
29 Methyl acetate	43	2.582	2.570	0.012	95	142875	20.0	22.9	
30 Methylene Chloride	84	2.653	2.641	0.012	84	117446	10.0	11.4	
31 2-Methyl-2-propanol	59	2.784	2.772	0.012	99	114393	100.0	90.8	
32 Acrylonitrile	53	2.855	2.854	0.000	100	385110	100.0	120.8	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	93	122938	10.0	11.2	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	289148	10.0	10.7	
35 Hexane	86	3.127	3.115	0.012	86	15681	10.0	6.22	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	189381	10.0	11.9	
37 Vinyl acetate	43	3.280	3.280	0.000	98	149581	10.0	8.69	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	3.718	3.706	0.012	79	131734	10.0	11.6	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	70	29929	10.0	11.5	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	97	89225	20.0	19.5	
46 Chlorobromomethane	128	3.908	3.907	0.001	85	62496	10.0	11.0	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	55500	20.0	20.7	
48 Chloroform	83	3.979	3.978	0.001	93	190959	10.0	11.0	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	97	145636	10.0	9.57	
51 Cyclohexane	56	4.192	4.180	0.012	83	84394	10.0	6.68	
53 1,1-Dichloropropene	75	4.274	4.274	0.000	95	123468	10.0	8.97	
52 Carbon tetrachloride	117	4.274	4.274	0.000	82	113768	10.0	8.16	
54 Isobutyl alcohol	41	4.393	4.393	0.000	60	80042	250.0	320.3	
55 Benzene	78	4.440	4.440	0.000	95	441843	10.0	11.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	122348	10.0	9.70	
58 n-Heptane	100	4.689	4.688	0.001	76	14353	10.0	6.36	
60 Trichloroethene	130	4.984	4.984	0.000	96	111081	10.0	9.12	
62 Methylcyclohexane	83	5.162	5.150	0.012	84	89650	10.0	6.52	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	86180	10.0	10.6	
64 Dibromomethane	93	5.268	5.268	0.000	93	55364	10.0	9.32	
66 1,4-Dioxane	88	5.304	5.304	0.000	83	21490	200.0	175.1	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	108061	10.0	9.03	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	40059	10.0	6.92	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	120068	10.0	8.11	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	92	141512	20.0	17.4	
72 Toluene	91	6.097	6.097	0.000	99	396419	10.0	12.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	96502	10.0	9.20	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	88155	10.0	10.7	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	69429	10.0	10.8	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	70060	10.0	10.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	116106	10.0	10.9	
78 2-Hexanone	43	6.677	6.676	0.001	92	89040	20.0	19.6	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	73918	10.0	10.4	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	71266	10.0	10.6	
84 Chlorobenzene	112	7.351	7.351	0.000	98	225765	10.0	10.7	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	82028	10.0	11.6	
86 Ethylbenzene	106	7.458	7.457	0.001	98	112706	10.0	10.2	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	138118	10.0	10.2	
89 o-Xylene	106	7.943	7.943	0.001	96	139128	10.0	11.1	
88 Styrene	104	7.954	7.954	0.000	94	209220	10.0	11.5	
90 Bromoform	173	8.120	8.108	0.012	95	48801	10.0	10.4	
91 Isopropylbenzene	105	8.298	8.297	0.001	94	313743	10.0	9.82	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	92	114968	10.0	11.8	
95 Bromobenzene	156	8.570	8.570	0.000	85	95748	10.0	8.90	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	86	34941	10.0	9.38	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	76	19746	10.0	7.14	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	89678	10.0	7.83	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	85768	10.0	8.75	
100 1,3,5-Trimethylbenzene	105	8.866	8.854	0.012	95	273318	10.0	8.60	
101 4-Chlorotoluene	126	8.866	8.865	0.001	98	91222	10.0	8.88	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	198282	10.0	7.00	
104 1,2,4-Trimethylbenzene	105	9.221	9.220	0.001	96	288604	10.0	9.18	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	274132	10.0	7.54	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	187470	10.0	9.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	262163	10.0	8.24	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	193655	10.0	9.86	
111 n-Butylbenzene	91	9.931	9.930	0.001	97	203381	10.0	8.17	
112 1,2-Dichlorobenzene	146	9.931	9.930	0.001	98	199937	10.0	10.8	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	90	25867	10.0	10.6	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	103736	10.0	9.29	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	94	34082	10.0	8.85	
118 Naphthalene	128	11.741	11.741	0.000	96	279702	10.0	8.30	
119 1,2,3-Trichlorobenzene	180	11.990	11.989	0.001	96	102770	10.0	9.58	
S 129 Total BTEX	1				0		50.0	55.1	
S 128 Trihalomethanes, Total	1				0		40.0	40.9	
S 132 Xylenes, Total	106				0		20.0	21.3	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

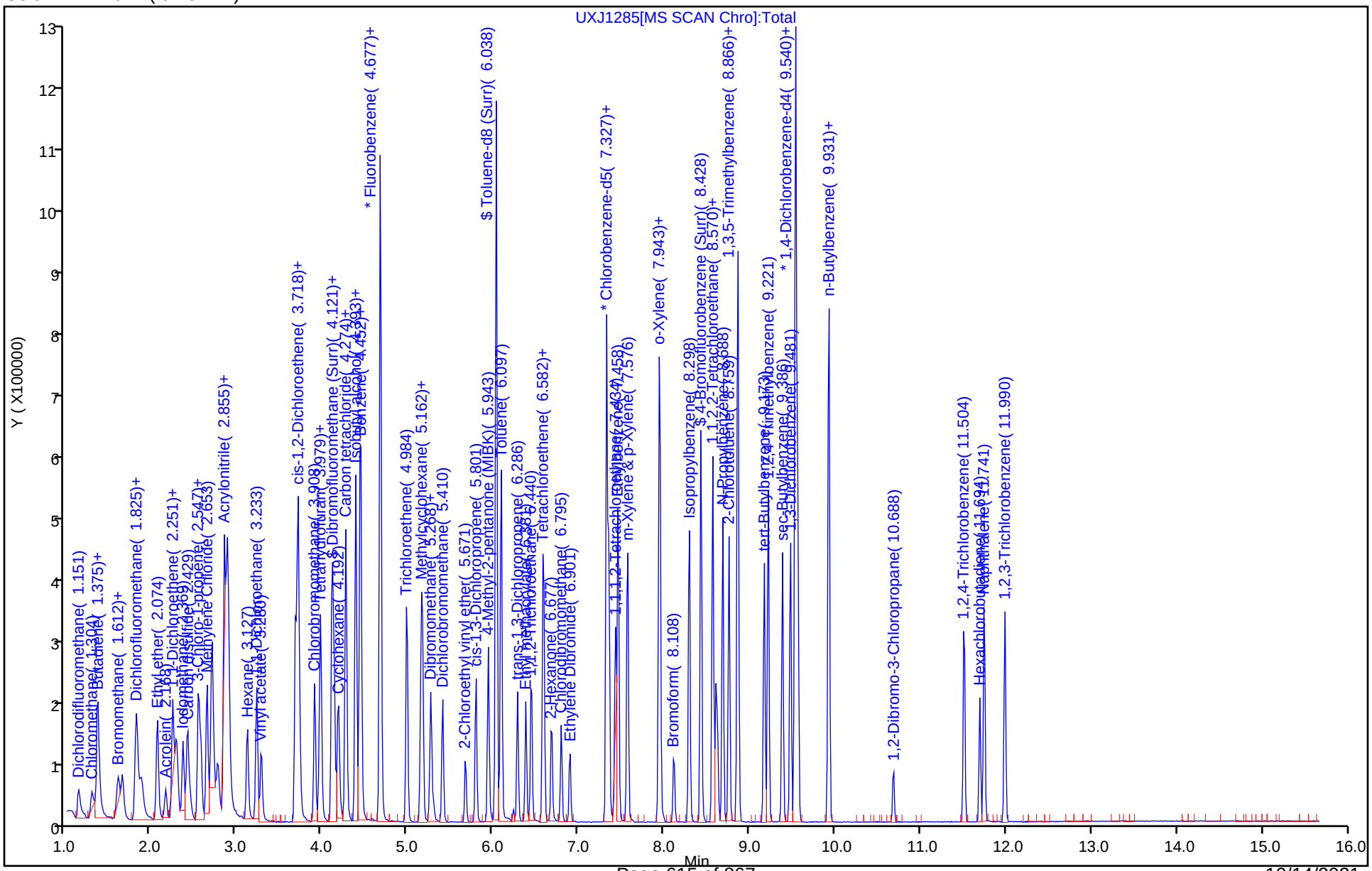
Report Date: 13-Oct-2021 08:35:26 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1285.D

Injection Date:	12-Oct-2021 07:54:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1285.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2021 07:54:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-004
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.29
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	94.03
$ 6 Toluene-d8 (Surr)	20.0	23.0	114.93
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.8	89.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-507764/4

Matrix: Water Lab File ID: UXC9976.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 08:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.34		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.93		1.0	0.46
127-18-4	Tetrachloroethene	9.50		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.51
79-01-6	Trichloroethene	9.44		1.0	0.44
75-01-4	Vinyl chloride	10.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	98		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9976.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2021 08:42:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-004
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1861670	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1362324	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	766187	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	381796	10.0	8.77	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	99	534351	10.0	10.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	93	1634992	10.0	9.79	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	552816	10.0	9.79	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	100	495612	10.0	8.83	
10 Chloromethane	50	1.562	1.562	0.000	98	653786	10.0	10.3	
11 Vinyl chloride	62	1.657	1.645	0.012	98	565032	10.0	10.3	
12 Butadiene	54	1.669	1.669	0.000	97	595986	10.0	8.55	
13 Bromomethane	94	1.930	1.930	0.000	91	310663	10.0	6.78	
14 Chloroethane	64	1.989	1.989	0.000	99	358832	10.0	8.91	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	809194	10.0	7.55	
16 Trichlorofluoromethane	101	2.202	2.203	0.000	98	635092	10.0	6.55	
17 Ethyl ether	59	2.404	2.404	0.000	91	497031	10.0	10.6	
18 Acrolein	56	2.523	2.523	0.000	99	299522	50.0	106.6	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	502563	10.0	9.34	
20 112TCTFE	151	2.618	2.618	0.000	91	396936	10.0	8.85	
21 Acetone	58	2.641	2.641	0.000	100	92026	20.0	24.4	
22 Iodomethane	142	2.748	2.736	0.012	98	740491	10.0	8.98	
24 Carbon disulfide	76	2.807	2.807	0.000	100	1150191	10.0	7.67	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	88	328784	10.0	10.4	
27 Methyl acetate	43	2.914	2.914	0.000	98	713272	20.0	30.2	
28 Methylene Chloride	84	2.997	2.997	0.000	94	554128	10.0	11.1	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	89	265699	100.0	100.9	
30 Acrylonitrile	53	3.210	3.199	0.011	98	1795289	100.0	142.1	
31 Methyl tert-butyl ether	73	3.222	3.210	0.012	96	1228036	10.0	9.41	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	98	546246	10.0	10.2	
34 Hexane	86	3.436	3.436	0.000	94	103162	10.0	9.58	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	97	946108	10.0	11.1	
36 Vinyl acetate	43	3.602	3.602	0.000	97	736317	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	4.041	4.041	0.000	74	133051	10.0	8.04	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	83	563748	10.0	9.93	
40 2-Butanone (MEK)	72	4.052	4.052	0.000	100	102350	20.0	26.0	
46 Chlorobromomethane	128	4.242	4.242	0.000	98	260291	10.0	9.71	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	230113	20.0	23.5	
48 Chloroform	83	4.301	4.301	0.000	93	906213	10.0	10.7	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	695128	10.0	9.11	
50 Cyclohexane	56	4.503	4.503	0.000	92	809387	10.0	10.3	
51 1,1-Dichloropropene	75	4.586	4.586	0.000	94	713539	10.0	10.4	
52 Carbon tetrachloride	117	4.598	4.598	0.000	82	569904	10.0	8.39	
53 Isobutyl alcohol	41	4.669	4.669	0.000	91	341491	250.0	410.0	
55 Benzene	78	4.764	4.764	0.000	96	2252410	10.0	11.0	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	98	750836	10.0	12.4	
58 n-Heptane	100	4.966	4.966	0.000	91	79767	10.0	8.66	
60 Trichloroethene	130	5.298	5.298	0.000	97	518267	10.0	9.44	
62 Methylcyclohexane	83	5.464	5.464	0.000	92	595748	10.0	8.69	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	96	519648	10.0	12.3	
65 Dibromomethane	93	5.594	5.594	0.000	96	280116	10.0	11.5	
66 1,4-Dioxane	88	5.606	5.606	0.000	33	84598	200.0	251.3	
67 Dichlorobromomethane	83	5.724	5.724	0.000	98	533191	10.0	9.90	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	228025	10.0	15.6	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	630046	10.0	10.7	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	714610	20.0	25.3	
72 Toluene	91	6.412	6.400	0.012	98	2184306	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	95	538646	10.0	10.4	
74 Ethyl methacrylate	69	6.661	6.661	0.000	90	459200	10.0	11.8	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	420835	10.0	12.7	
76 Tetrachloroethene	164	6.898	6.898	0.000	97	402995	10.0	9.50	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	93	772967	10.0	13.6	
78 2-Hexanone	43	6.981	6.981	0.000	98	476557	20.0	25.2	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	334465	10.0	9.21	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	376122	10.0	11.8	
84 Chlorobenzene	112	7.681	7.681	0.000	93	1365085	10.0	11.1	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.752	0.000	92	429581	10.0	8.39	
86 Ethylbenzene	106	7.776	7.776	0.000	99	694274	10.0	10.3	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1684815	10.0	10.3	
88 o-Xylene	106	8.262	8.262	0.000	95	835685	10.0	9.55	
89 Styrene	104	8.274	8.274	0.000	93	1364834	10.0	12.0	
90 Bromoform	173	8.464	8.464	0.000	96	165798	10.0	7.39	
91 Isopropylbenzene	105	8.618	8.606	0.012	96	1890592	10.0	8.75	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	510120	10.0	13.0	
95 Bromobenzene	156	8.914	8.914	0.000	95	544292	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	88	165168	10.0	13.0	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.950	0.012	68	106169	10.0	11.8	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	533405	10.0	9.98	
99 2-Chlorotoluene	126	9.092	9.092	0.000	99	487221	10.0	9.82	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1626116	10.0	9.66	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	1812066	10.0	11.4	
104 tert-Butylbenzene	119	9.495	9.495	0.000	93	1230887	10.0	8.56	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	95	1733099	10.0	10.0	
107 sec-Butylbenzene	105	9.709	9.709	0.000	95	1716462	10.0	9.05	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	97	1005162	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1502794	10.0	8.86	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	94	1069351	10.0	10.2	
113 n-Butylbenzene	91	10.254	10.254	0.000	98	1166301	10.0	8.49	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	96	1014023	10.0	9.64	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	75	56450	10.0	6.53	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	485534	10.0	6.29	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	210958	10.0	6.20	
119 Naphthalene	128	12.128	12.128	0.000	97	1080008	10.0	6.56	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	463732	10.0	6.33	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	52.1	
S 131 Trihalomethanes, Total	1				0		40.0	37.2	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

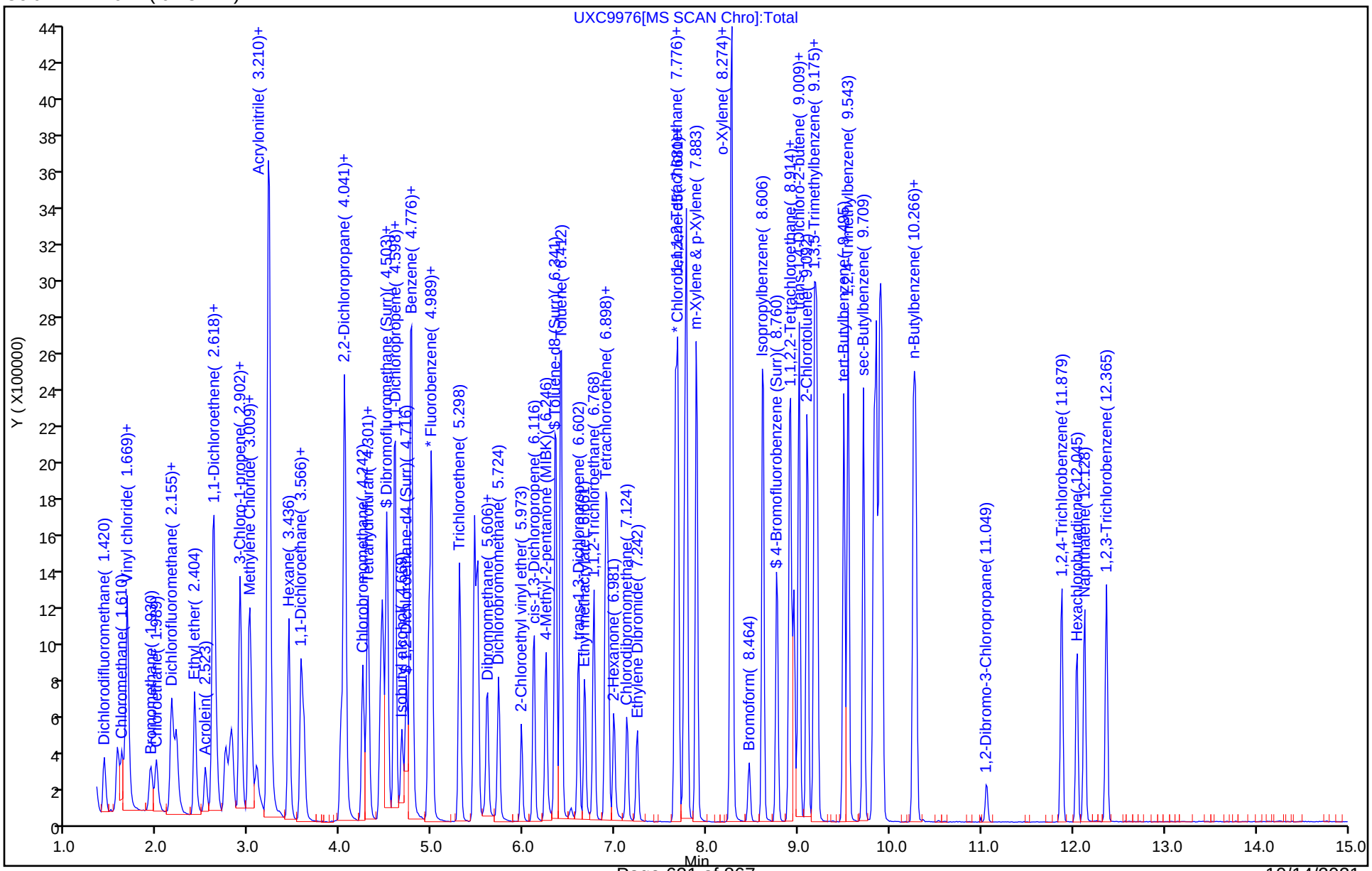
Report Date: 13-Oct-2021 08:53:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9976.D

Injection Date:	12-Oct-2021 08:42:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9976.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Oct-2021 08:42:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-004
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.77	87.74
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	109.01
$ 6 Toluene-d8 (Surr)	10.0	9.79	97.93
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.79	97.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-508017/4

Matrix: Water Lab File ID: UXJ1318.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 09:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508017 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.64		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11.4		1.0	0.46
127-18-4	Tetrachloroethene	9.88		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.0		1.0	0.51
79-01-6	Trichloroethene	9.20		1.0	0.44
75-01-4	Vinyl chloride	9.65		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-137
460-00-4	4-Bromofluorobenzene (Surr)	77		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	99		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1318.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2021 09:23:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-004
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	985110	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	551084	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	287369	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	249445	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	253915	20.0	17.8	
$ 6 Toluene-d8 (Surr)	98	6.037	6.038	-0.001	92	889631	20.0	22.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	211844	20.0	15.4	
10 Dichlorodifluoromethane	85	1.150	1.151	-0.001	98	105073	10.0	8.06	
12 Chloromethane	50	1.304	1.304	0.000	98	97782	10.0	9.52	
13 Butadiene	54	1.375	1.364	0.011	92	96760	10.0	8.95	
14 Vinyl chloride	62	1.375	1.375	0.000	97	118128	10.0	9.65	
15 Bromomethane	94	1.612	1.600	0.012	91	101777	10.0	11.6	
16 Chloroethane	64	1.659	1.659	0.000	100	83108	10.0	11.5	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	97	191878	10.0	10.7	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	195741	10.0	9.36	
19 Ethyl ether	59	2.073	2.074	-0.001	86	122668	10.0	13.2	
20 Acrolein	56	2.168	2.168	0.000	99	57064	50.0	158.6	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	94	113885	10.0	9.64	
23 112TCTFE	151	2.298	2.287	0.011	91	53523	10.0	5.94	
24 Acetone	43	2.298	2.298	0.000	100	91521	20.0	25.2	
25 Iodomethane	142	2.369	2.369	0.000	97	226065	10.0	10.7	
26 Carbon disulfide	76	2.428	2.429	-0.001	99	317734	10.0	9.04	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	86	85035	10.0	10.7	
29 Methyl acetate	43	2.582	2.571	0.011	96	209173	20.0	26.5	
30 Methylene Chloride	84	2.653	2.653	0.000	85	144311	10.0	11.1	
31 2-Methyl-2-propanol	59	2.783	2.772	0.011	99	186885	100.0	117.5	
32 Acrylonitrile	53	2.854	2.855	-0.001	98	570846	100.0	141.8	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	95	153156	10.0	11.0	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	340018	10.0	9.95	
35 Hexane	86	3.127	3.127	0.000	87	22715	10.0	7.14	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	229625	10.0	11.4	
37 Vinyl acetate	43	3.280	3.281	0.000	97	201395	10.0	9.26	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	80	162588	10.0	11.4	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	34850	10.0	10.6	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	96	130306	20.0	22.6	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	79272	10.0	11.1	
49 Tetrahydrofuran	42	3.967	3.967	0.000	78	81857	20.0	24.2	
48 Chloroform	83	3.978	3.979	-0.001	93	234669	10.0	10.7	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	98	176201	10.0	9.17	
51 Cyclohexane	56	4.191	4.180	0.011	82	117750	10.0	7.39	
53 1,1-Dichloropropene	75	4.274	4.274	0.000	95	152069	10.0	8.75	
52 Carbon tetrachloride	117	4.274	4.274	0.000	87	140591	10.0	7.98	
54 Isobutyl alcohol	41	4.393	4.393	0.000	72	128020	250.0	396.0	
55 Benzene	78	4.440	4.440	0.000	94	534767	10.0	10.9	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	155978	10.0	9.79	
58 n-Heptane	100	4.688	4.689	-0.001	81	22782	10.0	7.99	
60 Trichloroethene	130	4.984	4.984	0.000	95	141468	10.0	9.20	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	134451	10.0	7.74	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	102743	10.0	10.0	
64 Dibromomethane	93	5.268	5.268	0.000	91	68746	10.0	9.16	
66 1,4-Dioxane	88	5.304	5.304	0.000	84	39391	200.0	261.8	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	132618	10.0	8.78	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	59765	10.0	8.17	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	151685	10.0	8.11	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	210044	20.0	20.5	
72 Toluene	91	6.097	6.097	0.000	98	494060	10.0	11.8	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	128381	10.0	9.46	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	126216	10.0	11.9	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	89	88379	10.0	10.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	88029	10.0	9.88	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	145598	10.0	10.5	
78 2-Hexanone	43	6.676	6.677	-0.001	92	143386	20.0	24.4	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	88453	10.0	9.64	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	88644	10.0	10.2	
84 Chlorobenzene	112	7.351	7.351	0.000	97	273621	10.0	10.0	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	92023	10.0	10.0	
86 Ethylbenzene	106	7.457	7.458	-0.001	98	144288	10.0	10.1	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	174211	10.0	9.92	
89 o-Xylene	106	7.943	7.943	0.000	95	165128	10.0	10.2	
88 Styrene	104	7.954	7.955	0.000	94	250602	10.0	10.7	
90 Bromoform	173	8.120	8.108	0.012	97	56072	10.0	9.29	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	375904	10.0	9.10	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	127532	10.0	11.4	
95 Bromobenzene	156	8.570	8.570	0.000	84	106839	10.0	8.64	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	42541	10.0	9.94	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	80	23084	10.0	7.26	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	103861	10.0	7.89	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	100327	10.0	8.91	
100 1,3,5-Trimethylbenzene	105	8.865	8.854	0.011	96	310825	10.0	8.51	
101 4-Chlorotoluene	126	8.865	8.866	-0.001	98	103790	10.0	8.79	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	235378	10.0	7.23	
104 1,2,4-Trimethylbenzene	105	9.220	9.221	-0.001	96	328719	10.0	9.10	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	338561	10.0	8.11	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	205980	10.0	9.25	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	306547	10.0	8.38	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	220292	10.0	9.76	
112 1,2-Dichlorobenzene	146	9.930	9.919	0.011	99	215011	10.0	10.1	
111 n-Butylbenzene	91	9.930	9.931	-0.001	97	248607	10.0	8.69	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	90	32465	10.0	11.6	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	122702	10.0	9.56	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	42663	10.0	9.64	
118 Naphthalene	128	11.741	11.741	0.000	96	353241	10.0	9.13	
119 1,2,3-Trichlorobenzene	180	11.989	11.990	-0.001	95	117663	10.0	9.55	
S 129 Total BTEX	1				0		50.0	52.9	
S 128 Trihalomethanes, Total	1				0		40.0	38.4	
S 132 Xylenes, Total	106				0		20.0	20.1	

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

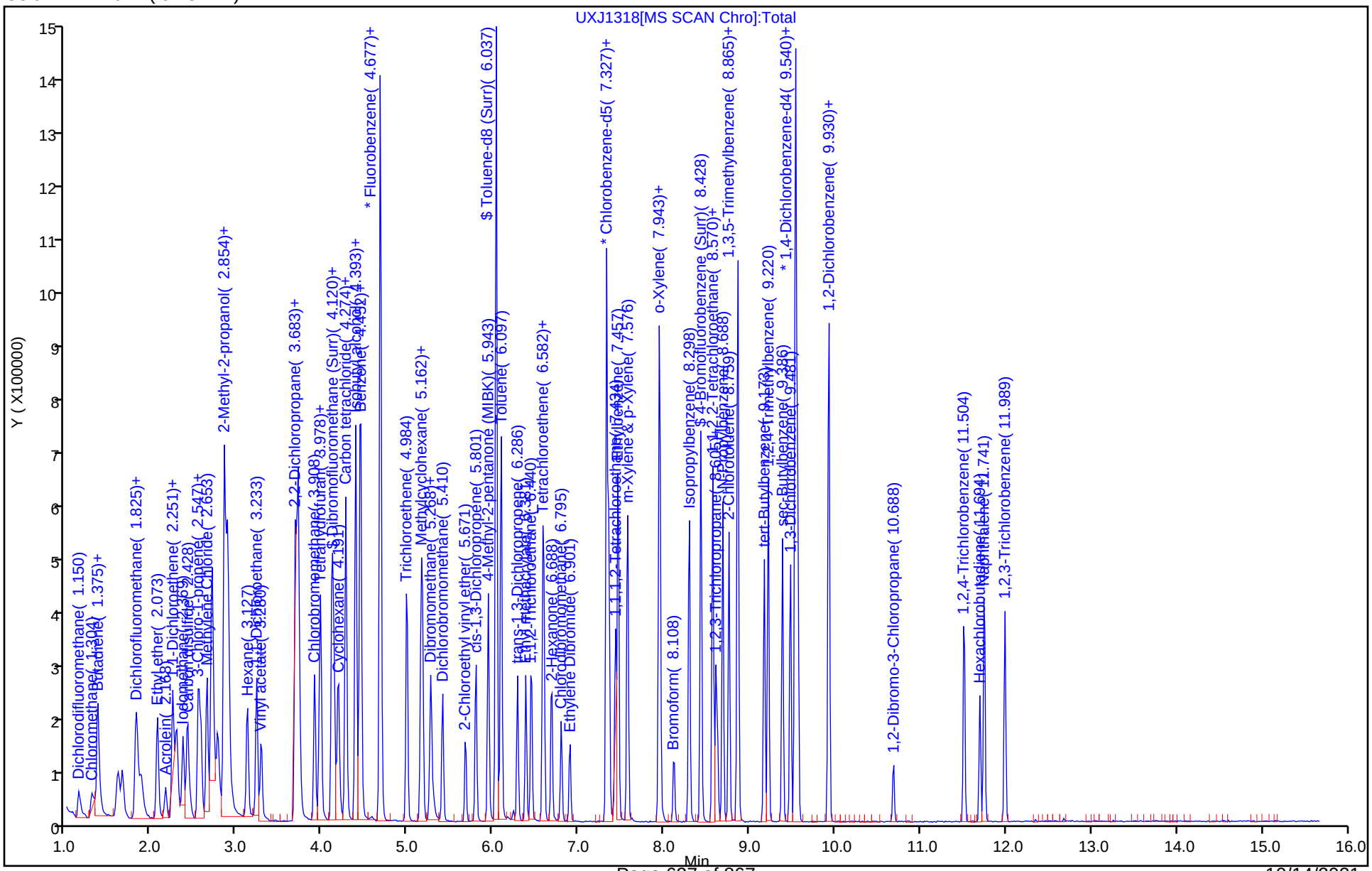
Report Date: 14-Oct-2021 05:28:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1318.D

Injection Date:	13-Oct-2021 09:23:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1318.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2021 09:23:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-004
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.9	99.39
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.8	89.18
$ 6 Toluene-d8 (Surr)	20.0	22.7	113.48
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.4	77.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-508019/4

Matrix: Water Lab File ID: UXC0005.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 10:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508019 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.15		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.4		1.0	0.46
127-18-4	Tetrachloroethene	9.15		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.51
79-01-6	Trichloroethene	9.59		1.0	0.44
75-01-4	Vinyl chloride	9.74		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	100		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2021 10:19:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114059-004
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1874234	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1386991	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	93	775387	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	390347	10.0	8.91	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	522145	10.0	10.6	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1702045	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	88	565762	10.0	9.84	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	513687	10.0	9.10	
10 Chloromethane	50	1.562	1.562	0.000	99	664709	10.0	10.4	
11 Vinyl chloride	62	1.645	1.645	0.000	98	535836	10.0	9.74	
12 Butadiene	54	1.669	1.669	0.000	97	609172	10.0	8.68	
13 Bromomethane	94	1.930	1.930	0.000	90	307528	10.0	6.67	
14 Chloroethane	64	1.989	1.989	0.000	99	342809	10.0	8.45	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	784312	10.0	7.27	
16 Trichlorofluoromethane	101	2.202	2.203	-0.001	98	646620	10.0	6.62	
17 Ethyl ether	59	2.404	2.404	0.000	91	489863	10.0	10.4	
18 Acrolein	56	2.523	2.523	0.000	99	285059	50.0	100.7	
19 1,1-Dichloroethene	96	2.617	2.606	0.011	97	495997	10.0	9.15	
20 112TCTFE	151	2.617	2.618	-0.001	94	371696	10.0	8.23	
21 Acetone	58	2.641	2.641	0.000	99	87682	20.0	23.1	
22 Iodomethane	142	2.748	2.748	0.000	98	729420	10.0	8.79	
24 Carbon disulfide	76	2.807	2.807	0.000	100	1143213	10.0	7.57	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	351445	10.0	11.0	
27 Methyl acetate	43	2.914	2.914	0.000	98	692623	20.0	29.1	
28 Methylene Chloride	84	2.997	2.997	0.000	94	570085	10.0	11.3	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	89	218887	100.0	82.6	
30 Acrylonitrile	53	3.198	3.199	-0.001	100	1771773	100.0	139.3	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1279787	10.0	9.74	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	77	552823	10.0	10.2	
34 Hexane	86	3.436	3.436	0.000	94	98609	10.0	9.10	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	96	968103	10.0	11.3	
36 Vinyl acetate	43	3.602	3.602	0.000	97	791356	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	4.040	4.041	-0.001	77	130998	10.0	7.86	
41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	84	593096	10.0	10.4	
40 2-Butanone (MEK)	72	4.052	4.053	-0.001	99	100141	20.0	25.3	
46 Chlorobromomethane	128	4.242	4.242	0.000	97	271600	10.0	10.1	
47 Tetrahydrofuran	42	4.278	4.278	0.000	89	232836	20.0	23.6	
48 Chloroform	83	4.301	4.302	-0.001	94	934222	10.0	10.9	
49 1,1,1-Trichloroethane	97	4.455	4.456	-0.001	97	704138	10.0	9.16	
50 Cyclohexane	56	4.503	4.503	0.000	92	777982	10.0	9.81	
51 1,1-Dichloropropene	75	4.586	4.586	0.000	94	725535	10.0	10.5	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	567575	10.0	8.30	
53 Isobutyl alcohol	41	4.669	4.669	0.000	90	291293	250.0	347.4	
55 Benzene	78	4.764	4.764	0.000	96	2315620	10.0	11.3	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	98	765879	10.0	12.5	
58 n-Heptane	100	4.965	4.966	-0.001	90	81755	10.0	8.81	
60 Trichloroethene	130	5.297	5.298	-0.001	97	529771	10.0	9.59	
62 Methylcyclohexane	83	5.463	5.464	-0.001	91	579004	10.0	8.39	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	544743	10.0	12.8	
65 Dibromomethane	93	5.594	5.594	0.000	95	288826	10.0	11.7	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	65915	200.0	184.7	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	558906	10.0	10.3	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	93	231292	10.0	15.7	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	93	646296	10.0	11.0	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	98	736817	20.0	25.9	
72 Toluene	91	6.412	6.401	0.012	98	2273476	10.0	11.1	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	95	552685	10.0	10.5	
74 Ethyl methacrylate	69	6.661	6.661	0.000	90	480249	10.0	12.1	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	92	425835	10.0	12.7	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	395320	10.0	9.15	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	93	794864	10.0	13.7	
78 2-Hexanone	43	6.981	6.982	-0.001	98	475760	20.0	24.7	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	342556	10.0	9.27	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	386082	10.0	11.9	
84 Chlorobenzene	112	7.681	7.681	0.000	94	1404806	10.0	11.2	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.752	0.000	93	438813	10.0	8.42	
86 Ethylbenzene	106	7.776	7.776	0.000	99	709057	10.0	10.4	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1717524	10.0	10.4	
88 o-Xylene	106	8.262	8.262	0.000	97	847167	10.0	9.51	
89 Styrene	104	8.274	8.274	0.000	94	1400514	10.0	12.1	
90 Bromoform	173	8.464	8.464	0.000	96	168808	10.0	7.39	
91 Isopropylbenzene	105	8.606	8.606	0.000	97	1906626	10.0	8.67	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	513159	10.0	12.9	
95 Bromobenzene	156	8.914	8.915	-0.001	94	556680	10.0	10.2	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	165292	10.0	12.8	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	66	88688	10.0	9.78	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	526598	10.0	9.74	
99 2-Chlorotoluene	126	9.092	9.092	0.000	98	514076	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	93	1624512	10.0	9.54	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	1850093	10.0	11.5	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	93	1233750	10.0	8.48	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	95	1744372	10.0	9.99	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	1661708	10.0	8.66	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	1004244	10.0	9.82	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1483497	10.0	8.65	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	94	1067879	10.0	10.1	
113 n-Butylbenzene	91	10.254	10.255	-0.001	97	1124120	10.0	8.09	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	97	1017191	10.0	9.56	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	92	56887	10.0	6.50	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	473252	10.0	6.06	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	98	191593	10.0	5.49	
119 Naphthalene	128	12.128	12.128	0.000	97	1103085	10.0	6.62	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	451993	10.0	6.10	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	52.6	
S 131 Trihalomethanes, Total	1				0		40.0	37.9	

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

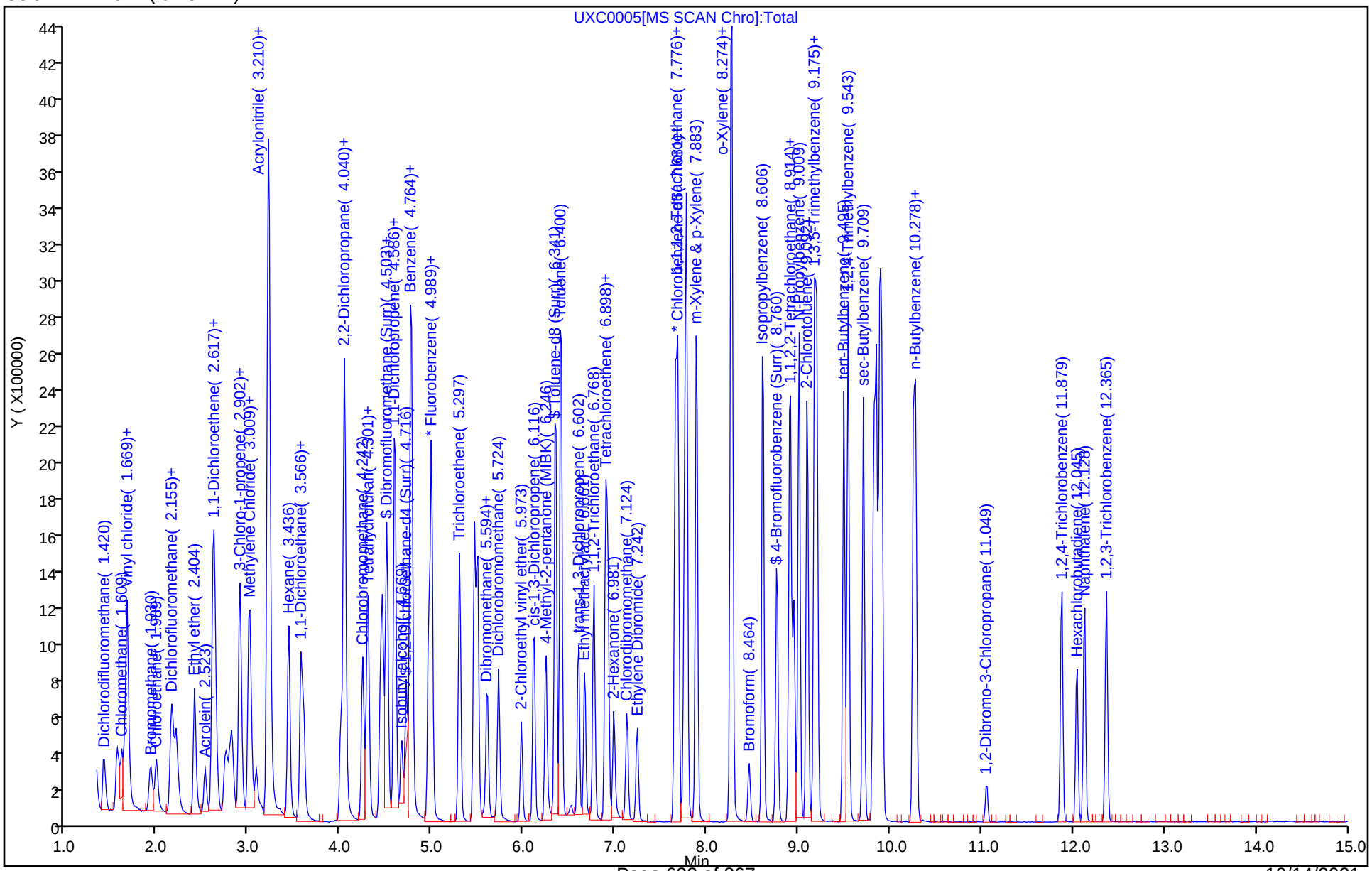
Report Date: 14-Oct-2021 05:35:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0005.D

Injection Date:	13-Oct-2021 10:19:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2021 10:19:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114059-004
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.91	89.10
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.80
$ 6 Toluene-d8 (Surr)	10.0	10.0	100.13
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.84	98.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157588-G-1 MS

Matrix: Water Lab File ID: UXJ1312.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 18:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.7		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	15.1		1.0	0.46
127-18-4	Tetrachloroethene	9.20		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.3		1.0	0.51
79-01-6	Trichloroethene	9.30		1.0	0.44
75-01-4	Vinyl chloride	15.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		62-137
460-00-4	4-Bromofluorobenzene (Surr)	85		56-136
2037-26-5	Toluene-d8 (Surr)	101		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1312.D
Lims ID: 240-157588-G-1 MS
Client ID: WG-100521-JV-01
Sample Type: MS
Inject. Date: 12-Oct-2021 18:02:30 ALS Bottle#: 29 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-059
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	895117	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	546376	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	320688	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	222895	20.0	19.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	227007	20.0	17.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.037	0.001	92	784275	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	232044	20.0	17.0	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	83682	10.0	7.06	
12 Chloromethane	50	1.293	1.292	0.001	97	101215	10.0	10.8	
14 Vinyl chloride	62	1.364	1.363	0.001	98	173329	10.0	15.6	
15 Bromomethane	94	1.600	1.600	0.000	90	113052	10.0	14.1	
16 Chloroethane	64	1.648	1.647	0.001	99	86280	10.0	13.1	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	163404	10.0	8.60	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	95	115313	10.0	10.7	
23 112TCTFE	151	2.287	2.286	0.001	92	60672	10.0	7.41	
24 Acetone	43	2.298	2.286	0.012	99	79597	20.0	23.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	297053	10.0	9.30	
29 Methyl acetate	43	2.571	2.570	0.001	96	178481	20.0	24.9	
30 Methylene Chloride	84	2.642	2.641	0.001	85	123137	10.0	10.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	95	142983	10.0	11.3	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	300656	10.0	9.68	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	197670	10.0	10.8	
41 cis-1,2-Dichloroethene	96	3.718	3.706	0.012	78	196245	10.0	15.1	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	96	120652	20.0	23.0	
48 Chloroform	83	3.979	3.978	0.001	93	202312	10.0	10.2	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	97	166939	10.0	9.56	
51 Cyclohexane	56	4.180	4.180	0.000	86	107477	10.0	7.42	
52 Carbon tetrachloride	117	4.274	4.274	0.000	96	138523	10.0	8.66	
55 Benzene	78	4.440	4.440	0.000	94	473438	10.0	10.6	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	94	134799	10.0	9.32	
60 Trichloroethene	130	4.984	4.984	0.000	95	129957	10.0	9.30	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	106837	10.0	6.77	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	93375	10.0	10.0	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	110652	10.0	8.06	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	116985	10.0	6.89	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	190271	20.0	20.4	
72 Toluene	91	6.097	6.097	0.000	98	443903	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	100562	10.0	7.47	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	88	81502	10.0	9.91	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	81270	10.0	9.20	
78 2-Hexanone	43	6.677	6.676	0.001	93	131368	20.0	22.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	75200	10.0	8.27	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	80907	10.0	9.36	
84 Chlorobenzene	112	7.351	7.351	0.000	97	252666	10.0	9.32	
86 Ethylbenzene	106	7.458	7.457	0.001	97	138676	10.0	9.76	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	161583	10.0	9.28	
89 o-Xylene	106	7.943	7.943	0.001	95	160460	10.0	10.0	
88 Styrene	104	7.955	7.954	0.000	93	236319	10.0	10.1	
90 Bromoform	173	8.120	8.108	0.012	96	48872	10.0	8.22	
91 Isopropylbenzene	105	8.298	8.297	0.001	94	380622	10.0	9.29	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	132002	10.0	10.6	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	200608	10.0	8.07	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	204369	10.0	8.12	
112 1,2-Dichlorobenzene	146	9.931	9.930	0.001	87	203849	10.0	8.60	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	27991	10.0	8.97	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	95	100433	10.0	7.01	
S 132 Xylenes, Total	106				0		20.0	19.3	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

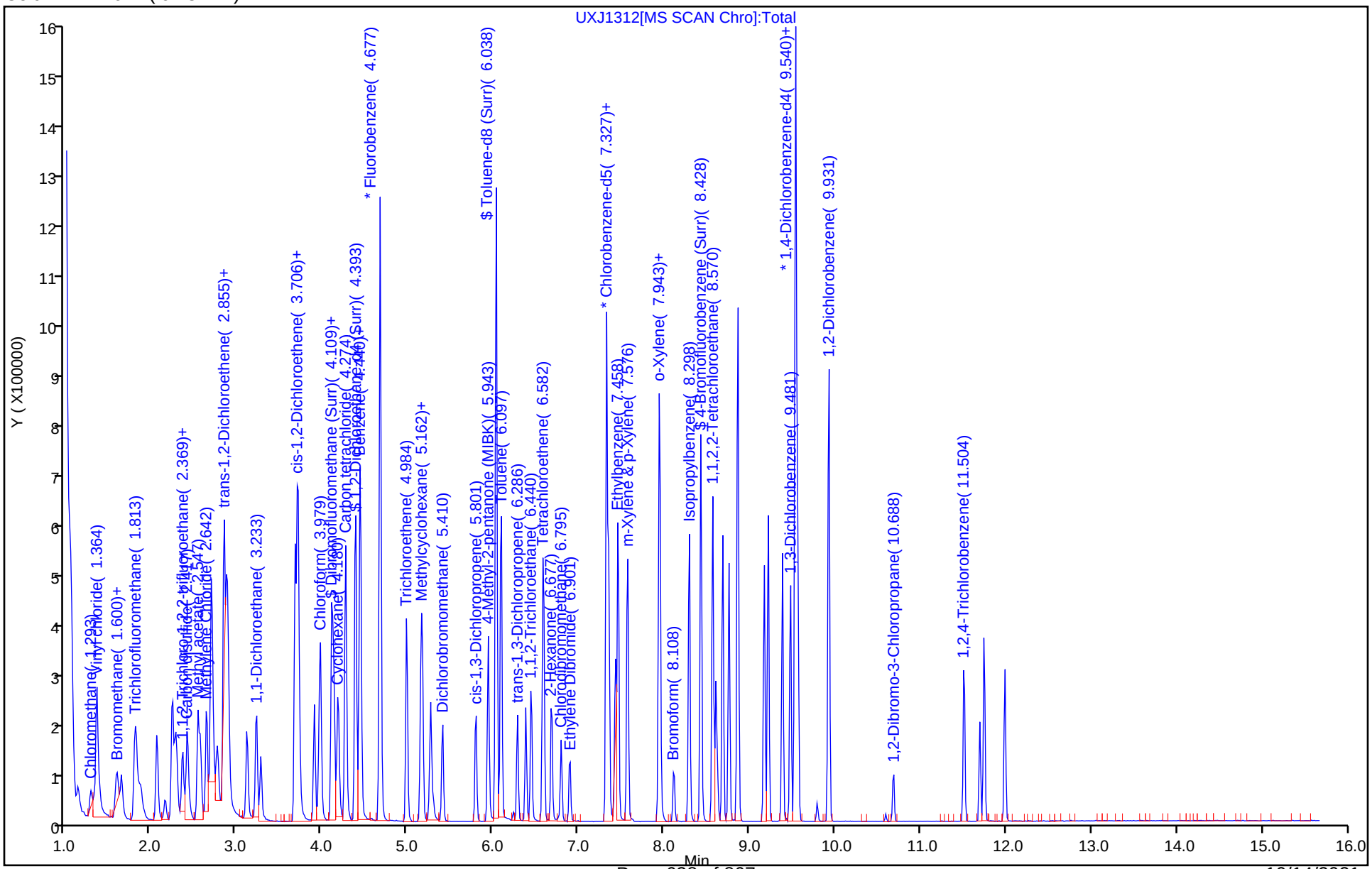
Report Date: 13-Oct-2021 08:35:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1312.D

Injection Date:	12-Oct-2021 18:02:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157588-G-1 MS			Worklist Smp#:	59
Client ID:	WG-100521-JV-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1312.D
Lims ID: 240-157588-G-1 MS
Client ID: WG-100521-JV-01
Sample Type: MS
Inject. Date: 12-Oct-2021 18:02:30 ALS Bottle#: 29 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-059
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.5	97.74
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.5	87.75
$ 6 Toluene-d8 (Surr)	20.0	20.2	100.90
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.0	85.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157641-H-4 MS

Matrix: Water Lab File ID: UXC9994.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 16:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.67		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.89		1.0	0.46
127-18-4	Tetrachloroethene	8.68		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.91		1.0	0.51
79-01-6	Trichloroethene	8.90		1.0	0.44
75-01-4	Vinyl chloride	8.98		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	101		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9994.D
Lims ID: 240-157641-H-4 MS
Client ID: GW-100621-BE-004
Sample Type: MS
Inject. Date: 12-Oct-2021 16:02:30 ALS Bottle#: 20 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-049
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1719754	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1229758	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	706794	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	364821	10.0	9.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	488542	10.0	10.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1522432	10.0	10.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	92	498155	10.0	9.77	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	291753	10.0	5.63	
10 Chloromethane	50	1.562	1.562	0.000	99	598431	10.0	10.2	
11 Vinyl chloride	62	1.657	1.645	0.012	98	453266	10.0	8.98	
13 Bromomethane	94	1.930	1.930	0.000	90	349237	10.0	8.25	
14 Chloroethane	64	1.989	1.989	0.000	100	347903	10.0	9.35	
16 Trichlorofluoromethane	101	2.202	2.203	0.000	98	514198	10.0	5.74	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	431128	10.0	8.67	
20 112TCTFE	151	2.617	2.618	-0.001	68	256819	10.0	6.20	
21 Acetone	58	2.653	2.641	0.012	98	66245	20.0	19.0	
24 Carbon disulfide	76	2.807	2.807	0.000	100	1007474	10.0	7.27	
27 Methyl acetate	43	2.914	2.914	0.000	98	599976	20.0	27.5	
28 Methylene Chloride	84	3.009	2.997	0.012	95	508402	10.0	11.0	
31 Methyl tert-butyl ether	73	3.222	3.210	0.012	96	1080847	10.0	8.96	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	99	492225	10.0	9.91	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	97	854430	10.0	10.9	
41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	83	518345	10.0	9.89	
40 2-Butanone (MEK)	72	4.052	4.052	0.000	100	81598	20.0	22.5	
48 Chloroform	83	4.301	4.301	0.000	93	822579	10.0	10.5	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	591371	10.0	8.39	
50 Cyclohexane	56	4.503	4.503	0.000	92	515169	10.0	7.08	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	456115	10.0	7.27	
55 Benzene	78	4.764	4.764	0.000	96	1996192	10.0	10.6	
56 1,2-Dichloroethane	62	4.788	4.776	0.012	98	678715	10.0	12.1	
60 Trichloroethene	130	5.297	5.298	-0.001	98	451243	10.0	8.90	
62 Methylcyclohexane	83	5.463	5.464	-0.001	92	391607	10.0	6.18	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63	5.499	5.499	0.000	96	458365	10.0	11.7	
67 Dichlorobromomethane	83	5.724	5.724	0.000	98	486356	10.0	9.77	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	492894	10.0	9.10	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	98	601545	20.0	23.1	
72 Toluene	91	6.412	6.400	0.012	97	1932116	10.0	10.6	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	96	446431	10.0	9.59	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	360831	10.0	12.1	
76 Tetrachloroethene	164	6.898	6.898	0.000	97	332292	10.0	8.68	
78 2-Hexanone	43	6.981	6.981	0.000	98	399398	20.0	23.4	
80 Chlorodibromomethane	129	7.124	7.124	0.000	91	295913	10.0	9.03	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	328062	10.0	11.4	
84 Chlorobenzene	112	7.681	7.681	0.000	93	1186519	10.0	10.7	
86 Ethylbenzene	106	7.776	7.776	0.000	99	597223	10.0	9.85	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1506482	10.0	10.2	
88 o-Xylene	106	8.262	8.262	0.000	95	729194	10.0	9.23	
89 Styrene	104	8.274	8.274	0.000	92	1201092	10.0	11.7	
90 Bromoform	173	8.464	8.464	0.000	96	146437	10.0	7.23	
91 Isopropylbenzene	105	8.618	8.606	0.012	96	1599477	10.0	8.20	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	446814	10.0	12.4	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	868303	10.0	9.31	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	94	920010	10.0	9.50	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	97	898738	10.0	9.26	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	77	47792	10.0	5.99	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	348438	10.0	4.89	
S 129 Xylenes, Total	106				0		20.0	19.5	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

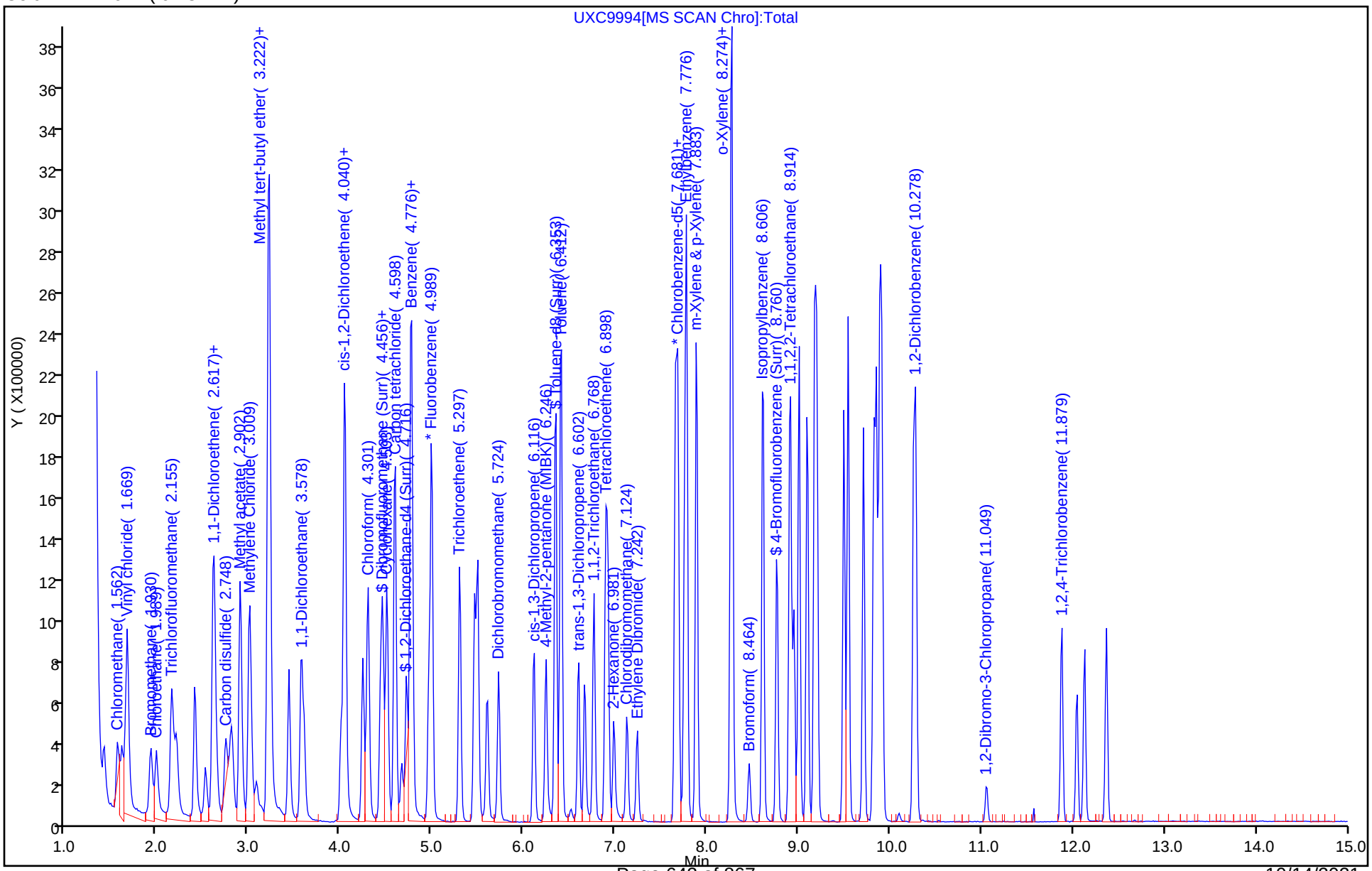
Report Date: 13-Oct-2021 08:54:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9994.D

Injection Date:	12-Oct-2021 16:02:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157641-H-4 MS			Worklist Smp#:	49
Client ID:	GW-100621-BE-004				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9994.D
Lims ID: 240-157641-H-4 MS
Client ID: GW-100621-BE-004
Sample Type: MS
Inject. Date: 12-Oct-2021 16:02:30 ALS Bottle#: 20 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-049
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.08	90.76
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.88
$ 6 Toluene-d8 (Surr)	10.0	10.1	101.02
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.77	97.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157764-A-11 MS

Matrix: Water Lab File ID: UXJ1339.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508017 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	11.7		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11.6		1.0	0.46
127-18-4	Tetrachloroethene	33.0		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.6		1.0	0.51
79-01-6	Trichloroethene	11.4		1.0	0.44
75-01-4	Vinyl chloride	10.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	119		78-122
1868-53-7	Dibromofluoromethane (Surr)	110		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1339.D
Lims ID: 240-157764-A-11 MS
Client ID:
Sample Type: MS
Inject. Date: 13-Oct-2021 17:16:30 ALS Bottle#: 23 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-058
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	768948	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	453811	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	255795	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	215955	20.0	22.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	95	222270	20.0	20.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	768461	20.0	23.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	204112	20.0	18.0	
14 Vinyl chloride	62	1.375	1.375	0.000	97	102765	10.0	10.8	
16 Chloroethane	64	1.659	1.659	0.000	98	66113	10.0	11.7	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	93	107695	10.0	11.7	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	125625	10.0	11.6	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	186549	10.0	11.9	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	79	129821	10.0	11.6	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	98	159133	10.0	10.6	
55 Benzene	78	4.440	4.440	0.000	94	436036	10.0	11.4	
60 Trichloroethene	130	4.984	4.984	0.000	95	137110	10.0	11.4	
72 Toluene	91	6.097	6.097	0.000	99	409010	10.0	11.9	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	242038	10.0	33.0	
86 Ethylbenzene	106	7.457	7.458	-0.001	98	117356	10.0	9.95	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	143858	10.0	9.94	
89 o-Xylene	106	7.943	7.943	0.000	95	136074	10.0	10.2	
S 132 Xylenes, Total	106				0		20.0	20.2	

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

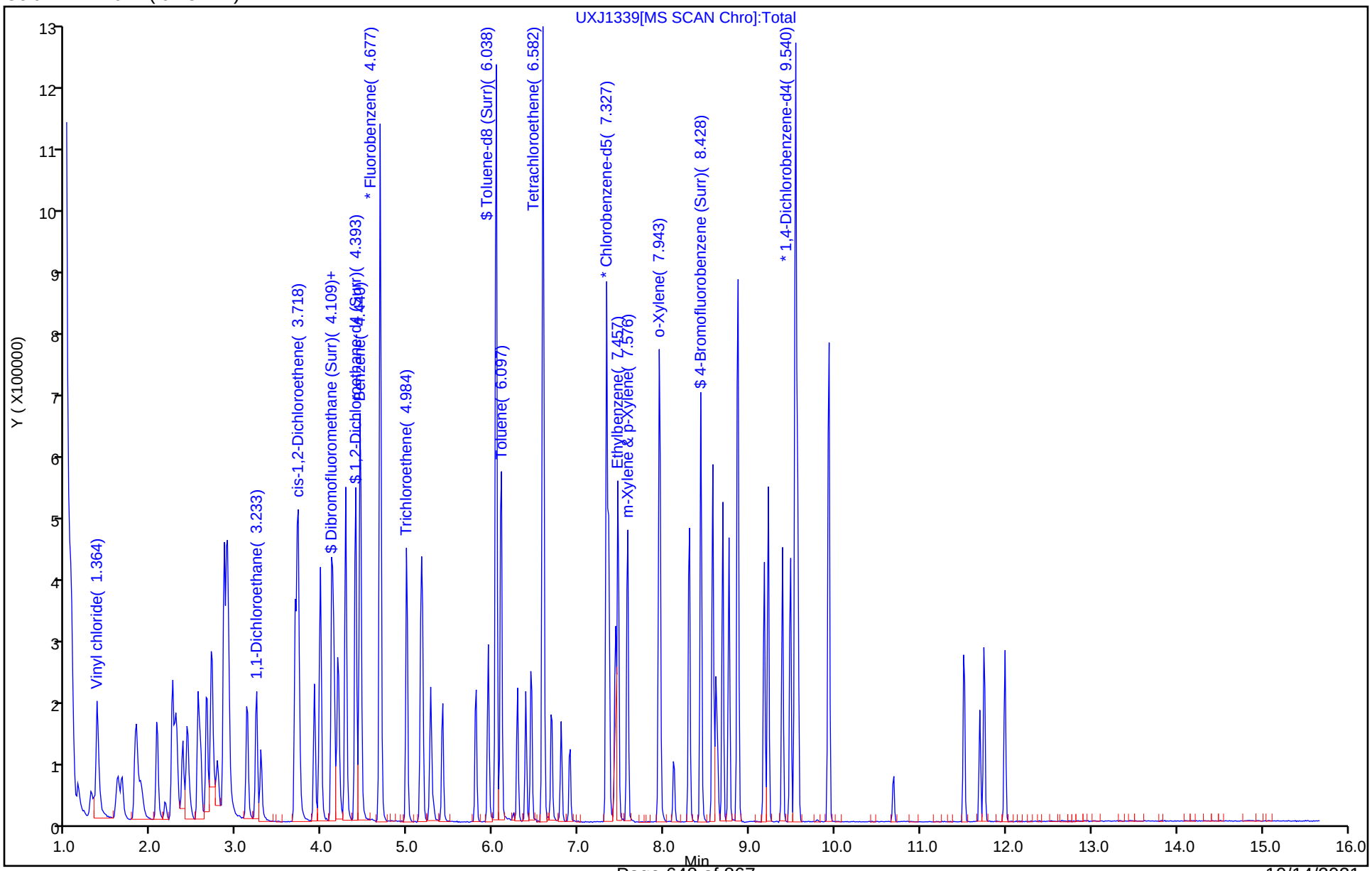
Report Date: 14-Oct-2021 05:29:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1339.D

Injection Date:	13-Oct-2021 17:16:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157764-A-11 MS			Worklist Smp#:	58
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1339.D
Lims ID: 240-157764-A-11 MS
Client ID:
Sample Type: MS
Inject. Date: 13-Oct-2021 17:16:30 ALS Bottle#: 23 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-058
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	22.0	110.23
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.0	100.01
$ 6 Toluene-d8 (Surr)	20.0	23.8	119.04
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.0	90.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157641-B-1 MS

Matrix: Water Lab File ID: UXC0014.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 13:36

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508019 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	30.7		3.3	1.6
156-59-2	cis-1,2-Dichloroethene	65.1		3.3	1.5
127-18-4	Tetrachloroethene	29.0		3.3	1.5
156-60-5	trans-1,2-Dichloroethene	92.1		3.3	1.7
79-01-6	Trichloroethene	79.3		3.3	1.5
75-01-4	Vinyl chloride	36.2		3.3	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		62-137
460-00-4	4-Bromofluorobenzene (Surr)	99		56-136
2037-26-5	Toluene-d8 (Surr)	101		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0014.D
Lims ID: 240-157641-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 13-Oct-2021 13:36:30 ALS Bottle#: 11 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 3.3300
Sample Info: 240-0114059-050
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1746958	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1259668	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	725407	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	375911	10.0	9.21	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	497708	10.0	10.8	
$ 6 Toluene-d8 (Surr)	98	6.341	6.341	0.000	93	1555610	10.0	10.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	516980	10.0	9.90	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	473407	10.0	8.99	
10 Chloromethane	50	1.562	1.562	0.000	99	613108	10.0	10.2	
11 Vinyl chloride	62	1.645	1.645	0.000	97	558197	10.0	10.9	
13 Bromomethane	94	1.918	1.930	-0.012	91	365321	10.0	8.50	
14 Chloroethane	64	1.989	1.989	0.000	100	363479	10.0	9.62	
16 Trichlorofluoromethane	101	2.202	2.203	-0.001	98	645968	10.0	7.09	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	465174	10.0	9.21	
20 112TCTFE	151	2.618	2.618	0.000	89	360459	10.0	8.56	
21 Acetone	58	2.641	2.641	0.000	99	71585	20.0	20.3	
24 Carbon disulfide	76	2.807	2.807	0.000	99	1050745	10.0	7.47	
27 Methyl acetate	43	2.914	2.914	0.000	98	608973	20.0	27.5	
28 Methylene Chloride	84	2.997	2.997	0.000	94	518185	10.0	11.0	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1112203	10.0	9.08	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	99	1395778	10.0	27.7	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	97	863690	10.0	10.8	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	83	1040997	10.0	19.5	
40 2-Butanone (MEK)	72	4.052	4.053	-0.001	99	86600	20.0	23.5	
48 Chloroform	83	4.301	4.302	-0.001	93	852757	10.0	10.7	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	623646	10.0	8.71	
50 Cyclohexane	56	4.503	4.503	0.000	92	695860	10.0	9.41	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	519996	10.0	8.16	
55 Benzene	78	4.764	4.764	0.000	96	2087043	10.0	10.9	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	97	700750	10.0	12.3	
60 Trichloroethene	130	5.298	5.298	0.000	97	1226568	10.0	23.8	
62 Methylcyclohexane	83	5.464	5.464	0.000	92	519782	10.0	8.08	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63	5.499	5.499	0.000	96	478440	10.0	12.1	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	508416	10.0	10.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	529692	10.0	9.63	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	98	606974	20.0	22.9	
72 Toluene	91	6.400	6.401	0.000	98	2017124	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	95	470659	10.0	9.87	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	94	383042	10.0	12.5	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	341053	10.0	8.70	
78 2-Hexanone	43	6.981	6.982	-0.001	97	385524	20.0	22.1	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	313324	10.0	9.33	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	341170	10.0	11.6	
84 Chlorobenzene	112	7.681	7.681	0.000	95	1246588	10.0	11.0	
86 Ethylbenzene	106	7.776	7.776	0.000	99	611694	10.0	9.85	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1549936	10.0	10.3	
88 o-Xylene	106	8.262	8.262	0.000	96	749400	10.0	9.26	
89 Styrene	104	8.274	8.274	0.000	94	1222848	10.0	11.7	
90 Bromoform	173	8.464	8.464	0.000	95	158150	10.0	7.62	
91 Isopropylbenzene	105	8.606	8.606	0.000	96	1629248	10.0	8.16	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	467476	10.0	12.6	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	97	893359	10.0	9.34	
110 1,4-Dichlorobenzene	146	9.911	9.911	-0.001	96	954464	10.0	9.61	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	97	930587	10.0	9.35	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	92	49499	10.0	6.05	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	95	351981	10.0	4.82	
S 129 Xylenes, Total	106				0		20.0	19.6	

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

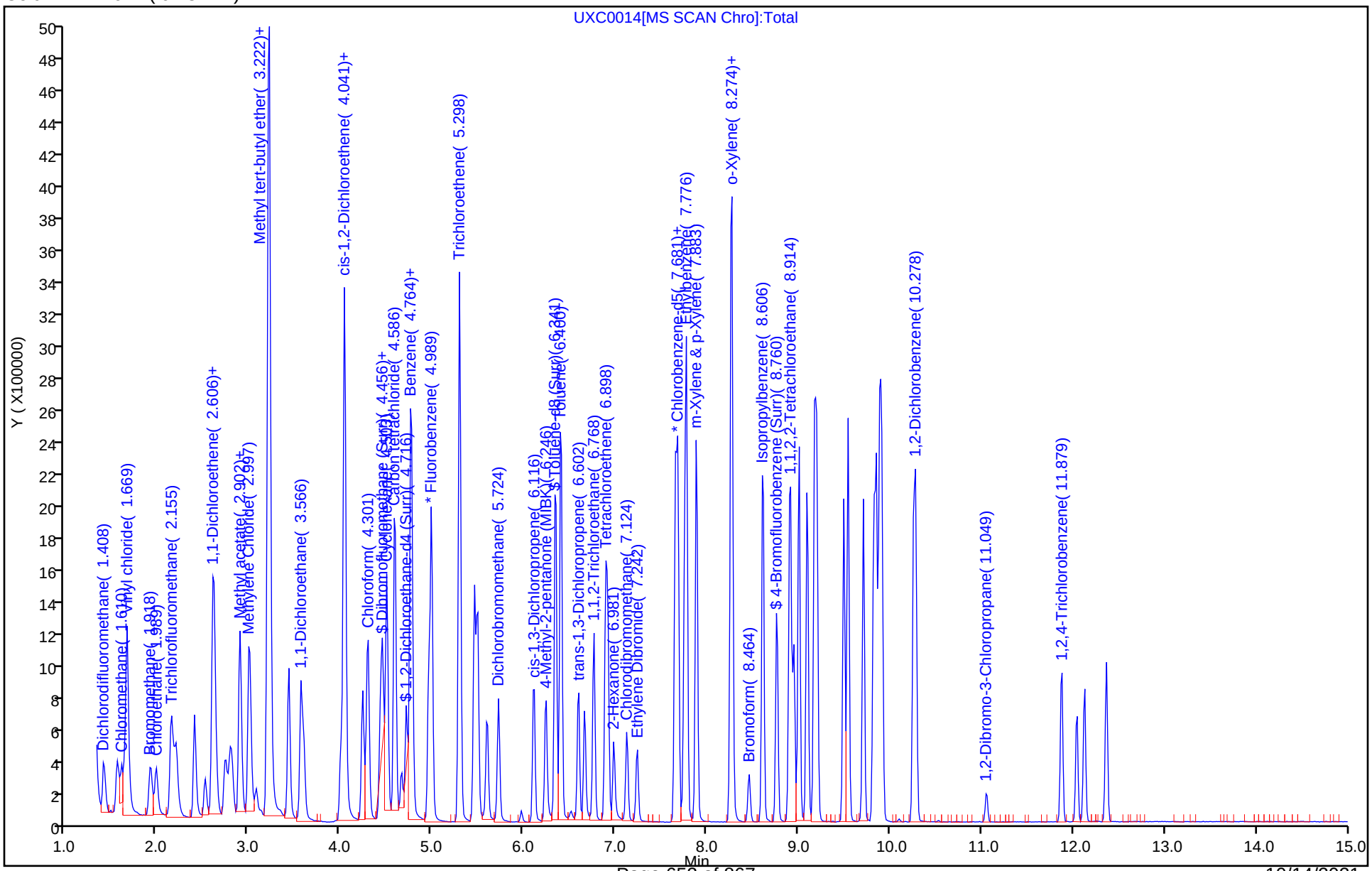
Report Date: 14-Oct-2021 05:36:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0014.D

Injection Date:	13-Oct-2021 13:36:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157641-B-1 MS			Worklist Smp#:	50
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	3.3300	ALS Bottle#:	11
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0014.D
Lims ID: 240-157641-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 13-Oct-2021 13:36:30 ALS Bottle#: 11 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 3.3300
Sample Info: 240-0114059-050
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:35:55 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.21	92.06
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.20
$ 6 Toluene-d8 (Surr)	10.0	10.1	100.77
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.90	99.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157588-F-1 MSD

Matrix: Water Lab File ID: UXJ1313.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 18:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507762 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	11.8		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	15.7		1.0	0.46
127-18-4	Tetrachloroethene	9.82		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.5		1.0	0.51
79-01-6	Trichloroethene	9.11		1.0	0.44
75-01-4	Vinyl chloride	16.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-137
460-00-4	4-Bromofluorobenzene (Surr)	83		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1313.D
Lims ID: 240-157588-F-1 MSD
Client ID: WG-100521-JV-01
Sample Type: MSD
Inject. Date: 12-Oct-2021 18:24:30 ALS Bottle#: 30 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-060
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	873485	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	508330	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	291907	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	227307	20.0	20.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	229649	20.0	18.2	
$ 6 Toluene-d8 (Surr)	98	6.038	6.037	0.001	92	779402	20.0	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	211505	20.0	16.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	107135	10.0	9.27	
12 Chloromethane	50	1.304	1.292	0.012	98	100775	10.0	11.1	
14 Vinyl chloride	62	1.375	1.363	0.012	98	180659	10.0	16.7	
15 Bromomethane	94	1.600	1.600	0.000	90	102323	10.0	13.1	
16 Chloroethane	64	1.659	1.647	0.012	98	80774	10.0	12.6	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	98	186769	10.0	10.1	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	123875	10.0	11.8	
23 112TCTFE	151	2.286	2.286	0.000	92	81489	10.0	10.2	
24 Acetone	43	2.298	2.286	0.012	100	79963	20.0	24.8	
26 Carbon disulfide	76	2.428	2.417	0.011	99	303922	10.0	9.75	
29 Methyl acetate	43	2.582	2.570	0.012	95	177724	20.0	25.4	
30 Methylene Chloride	84	2.653	2.641	0.012	84	122344	10.0	10.6	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	92	141348	10.0	11.5	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	303302	10.0	10.0	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	199787	10.0	11.2	
41 cis-1,2-Dichloroethene	96	3.718	3.706	0.012	77	198811	10.0	15.7	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	96	110092	20.0	21.5	
48 Chloroform	83	3.979	3.978	0.001	93	197424	10.0	10.2	
50 1,1,1-Trichloroethane	97	4.132	4.132	0.000	97	171625	10.0	10.1	
51 Cyclohexane	56	4.192	4.180	0.012	83	146837	10.0	10.4	
52 Carbon tetrachloride	117	4.274	4.274	0.000	90	148247	10.0	9.49	
55 Benzene	78	4.440	4.440	0.000	94	453114	10.0	10.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	125739	10.0	8.91	
60 Trichloroethene	130	4.984	4.984	0.000	94	124227	10.0	9.11	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	141355	10.0	9.18	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63	5.174	5.174	0.000	96	88190	10.0	9.69	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	110185	10.0	8.22	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	113912	10.0	6.87	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	181372	20.0	19.9	
72 Toluene	91	6.097	6.097	0.000	99	410225	10.0	10.6	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	94414	10.0	7.54	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	76060	10.0	9.94	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	80730	10.0	9.82	
78 2-Hexanone	43	6.677	6.676	0.000	93	116258	20.0	21.4	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	72247	10.0	8.54	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	76503	10.0	9.51	
84 Chlorobenzene	112	7.351	7.351	0.000	97	232563	10.0	9.22	
86 Ethylbenzene	106	7.457	7.457	0.000	97	125502	10.0	9.50	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	149016	10.0	9.20	
89 o-Xylene	106	7.943	7.943	0.001	96	145674	10.0	9.76	
88 Styrene	104	7.954	7.954	0.000	95	211253	10.0	9.75	
90 Bromoform	173	8.120	8.108	0.012	97	45952	10.0	8.30	
91 Isopropylbenzene	105	8.298	8.297	0.001	94	356187	10.0	9.34	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	95	125288	10.0	11.1	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	183768	10.0	8.12	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	192886	10.0	8.42	
112 1,2-Dichlorobenzene	146	9.931	9.930	0.001	98	188285	10.0	8.72	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	28951	10.0	10.2	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	98779	10.0	7.58	
S 132 Xylenes, Total	106				0		20.0	19.0	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

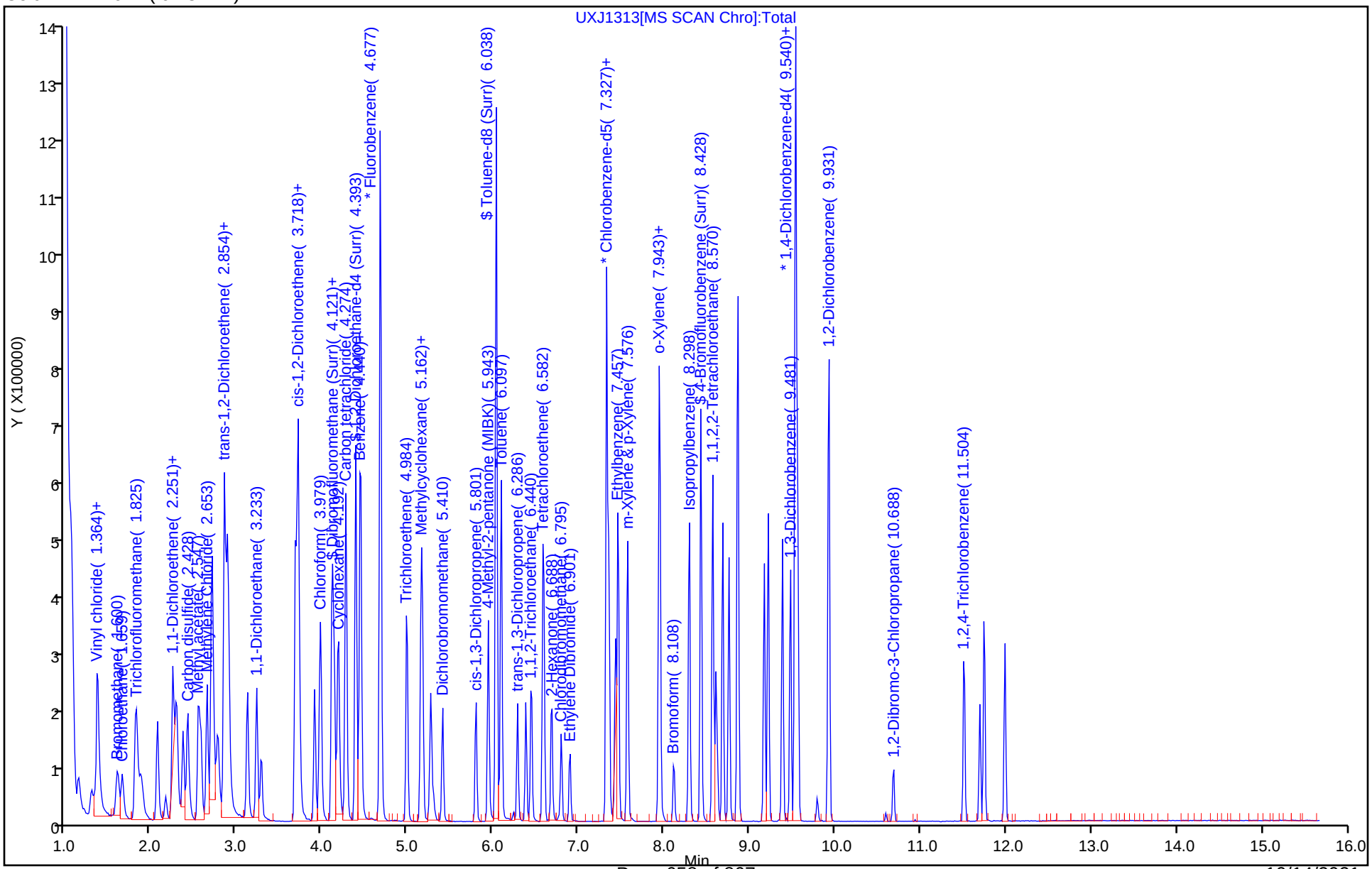
Report Date: 13-Oct-2021 08:35:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1313.D

Injection Date:	12-Oct-2021 18:24:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157588-F-1 MSD			Worklist Smp#:	60
Client ID:	WG-100521-JV-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\UXJ1313.D
Lims ID: 240-157588-F-1 MSD
Client ID: WG-100521-JV-01
Sample Type: MSD
Inject. Date: 12-Oct-2021 18:24:30 ALS Bottle#: 30 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114013-060
Misc. Info.: J211012A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211012-114013.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:35:25 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.4	102.14
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.2	90.97
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.78
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.7	83.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157641-E-4 MSD

Matrix: Water Lab File ID: UXC9995.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/12/2021 16:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.64		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.87		1.0	0.46
127-18-4	Tetrachloroethene	9.10		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.1		1.0	0.51
79-01-6	Trichloroethene	9.26		1.0	0.44
75-01-4	Vinyl chloride	11.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	100		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9995.D
Lims ID: 240-157641-E-4 MSD
Client ID: GW-100621-BE-004
Sample Type: MSD
Inject. Date: 12-Oct-2021 16:24:30 ALS Bottle#: 21 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-050
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1764686	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1277836	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	728523	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	372548	10.0	9.03	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	0.000	100	501754	10.0	10.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1561500	10.0	9.97	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	88	518379	10.0	9.79	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	475261	10.0	8.94	
10 Chloromethane	50	1.562	1.562	0.000	99	684738	10.0	11.3	
11 Vinyl chloride	62	1.645	1.645	0.000	98	577289	10.0	11.1	
13 Bromomethane	94	1.930	1.930	0.000	90	367596	10.0	8.47	
14 Chloroethane	64	1.989	1.989	0.000	99	393633	10.0	10.3	
16 Trichlorofluoromethane	101	2.202	2.203	0.000	99	743498	10.0	8.08	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	491824	10.0	9.64	
20 112TCTFE	151	2.617	2.618	-0.001	89	383823	10.0	9.02	
21 Acetone	58	2.641	2.641	0.000	99	66684	20.0	18.7	
24 Carbon disulfide	76	2.807	2.807	0.000	99	1126164	10.0	7.92	
27 Methyl acetate	43	2.914	2.914	0.000	98	594648	20.0	26.5	
28 Methylene Chloride	84	2.997	2.997	0.000	94	509241	10.0	10.7	
31 Methyl tert-butyl ether	73	3.222	3.210	0.012	95	1093186	10.0	8.83	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	80	512896	10.0	10.1	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	97	879878	10.0	10.9	
41 cis-1,2-Dichloroethene	96	4.041	4.041	-0.001	83	531008	10.0	9.87	
40 2-Butanone (MEK)	72	4.052	4.052	0.000	100	81762	20.0	21.9	
48 Chloroform	83	4.301	4.301	0.000	93	846203	10.0	10.5	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	653154	10.0	9.03	
50 Cyclohexane	56	4.503	4.503	0.000	92	742575	10.0	9.94	
52 Carbon tetrachloride	117	4.598	4.598	0.000	83	541918	10.0	8.42	
55 Benzene	78	4.764	4.764	0.000	96	2081145	10.0	10.8	
56 1,2-Dichloroethane	62	4.776	4.776	0.000	98	692944	10.0	12.0	
60 Trichloroethene	130	5.298	5.298	0.000	97	481612	10.0	9.26	
62 Methylcyclohexane	83	5.464	5.464	0.000	93	543957	10.0	8.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	482338	10.0	12.0	
67 Dichlorobromomethane	83	5.724	5.724	0.000	98	499721	10.0	9.79	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	93	528936	10.0	9.52	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	619734	20.0	23.2	
72 Toluene	91	6.412	6.400	0.012	98	2018725	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	95	468913	10.0	9.69	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	373767	10.0	12.1	
76 Tetrachloroethene	164	6.898	6.898	0.000	97	362184	10.0	9.10	
78 2-Hexanone	43	6.981	6.981	0.000	98	404794	20.0	22.8	
80 Chlorodibromomethane	129	7.124	7.124	0.000	89	302524	10.0	8.88	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	336803	10.0	11.3	
84 Chlorobenzene	112	7.681	7.681	0.000	93	1231639	10.0	10.7	
86 Ethylbenzene	106	7.776	7.776	0.000	99	624063	10.0	9.91	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1532608	10.0	10.0	
88 o-Xylene	106	8.262	8.262	0.000	95	747754	10.0	9.11	
89 Styrene	104	8.274	8.274	0.000	93	1226439	10.0	11.5	
90 Bromoform	173	8.464	8.464	0.000	95	147415	10.0	7.00	
91 Isopropylbenzene	105	8.618	8.606	0.012	96	1688824	10.0	8.33	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	452060	10.0	12.1	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	905805	10.0	9.43	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	97	961398	10.0	9.63	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	97	935078	10.0	9.35	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	74	46982	10.0	5.72	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	383450	10.0	5.22	
S 129 Xylenes, Total	106				0		20.0	19.1	

Reagents:

vmfaspw_00417	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

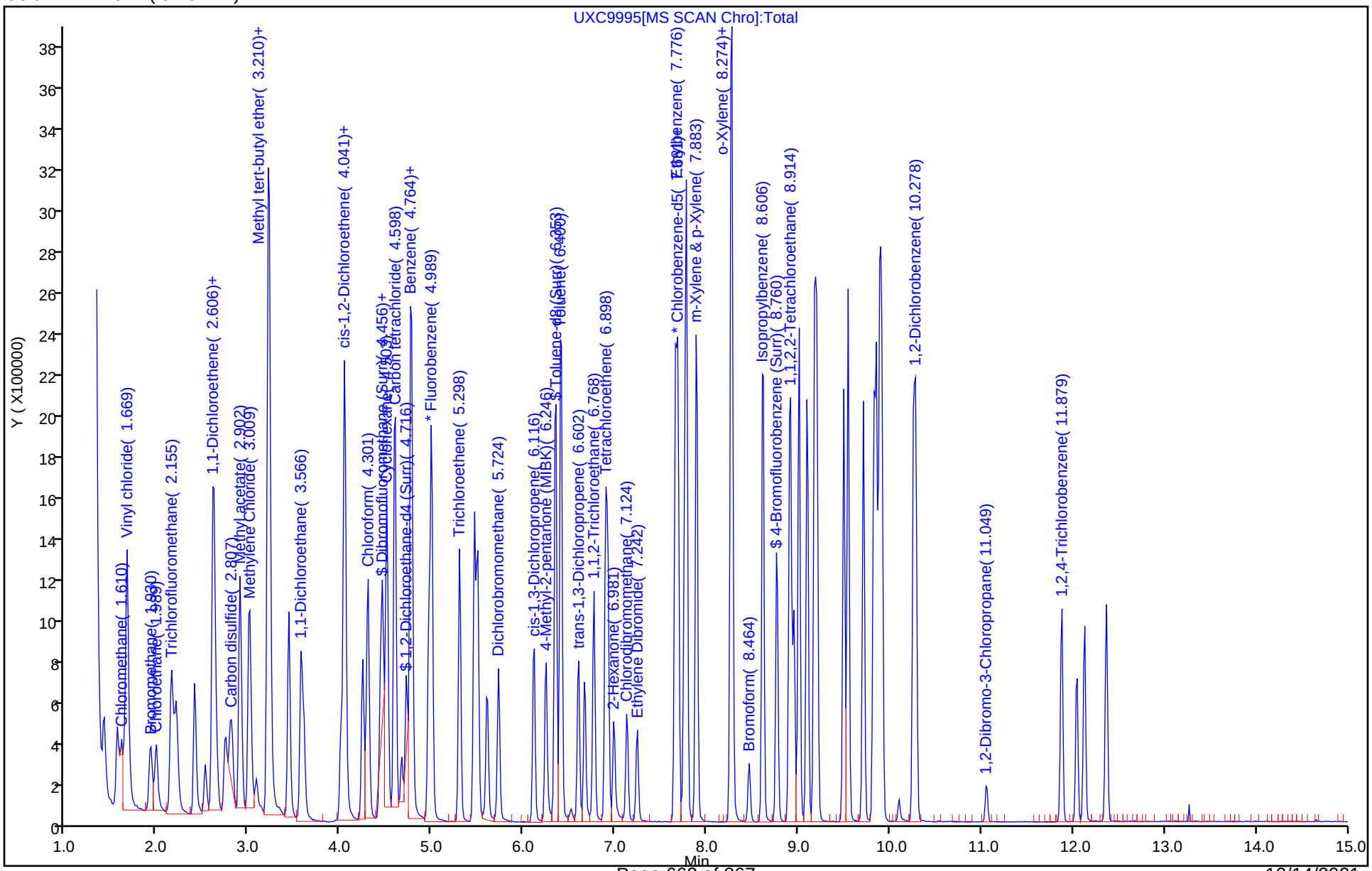
Report Date: 13-Oct-2021 08:54:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9995.D

Injection Date:	12-Oct-2021 16:24:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157641-E-4 MSD			Worklist Smp#:	50
Client ID:	GW-100621-BE-004				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\UXC9995.D
Lims ID: 240-157641-E-4 MSD
Client ID: GW-100621-BE-004
Sample Type: MSD
Inject. Date: 12-Oct-2021 16:24:30 ALS Bottle#: 21 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114014-050
Misc. Info.: C211012A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211012-114014.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 08:53:53 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1658

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.03	90.32
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.98
$ 6 Toluene-d8 (Surr)	10.0	9.97	99.71
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.79	97.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157764-C-11 MSD

Matrix: Water Lab File ID: UXJ1340.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 17:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508017 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	11.9		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11.2		1.0	0.46
127-18-4	Tetrachloroethene	30.8		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	11.5		1.0	0.51
79-01-6	Trichloroethene	10.9		1.0	0.44
75-01-4	Vinyl chloride	11.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	87		56-136
2037-26-5	Toluene-d8 (Surr)	119		78-122
1868-53-7	Dibromofluoromethane (Surr)	109		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1340.D
Lims ID: 240-157764-C-11 MSD
Client ID:
Sample Type: MSD
Inject. Date: 13-Oct-2021 17:38:30 ALS Bottle#: 24 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-059
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:30:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	821577	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	82	465290	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	240190	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	227378	20.0	21.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	223788	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.037	6.038	-0.001	92	789969	20.0	23.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	201016	20.0	17.3	
14 Vinyl chloride	62	1.375	1.375	0.000	70	116802	10.0	11.4	
16 Chloroethane	64	1.671	1.659	0.012	99	76357	10.0	12.6	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	95	117124	10.0	11.9	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	92	132965	10.0	11.5	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	188899	10.0	11.2	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	78	133639	10.0	11.2	
50 1,1,1-Trichloroethane	97	4.144	4.132	0.012	97	166489	10.0	10.4	
55 Benzene	78	4.440	4.440	0.000	94	433210	10.0	10.6	
60 Trichloroethene	130	4.996	4.984	0.012	95	139974	10.0	10.9	
72 Toluene	91	6.097	6.097	0.000	99	405000	10.0	11.5	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	231358	10.0	30.8	
86 Ethylbenzene	106	7.457	7.458	-0.001	97	117187	10.0	9.69	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	143355	10.0	9.66	
89 o-Xylene	106	7.943	7.943	0.000	95	137237	10.0	10.0	
S 132 Xylenes, Total	106				0		20.0	19.7	

QC Flag Legend
Processing Flags

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

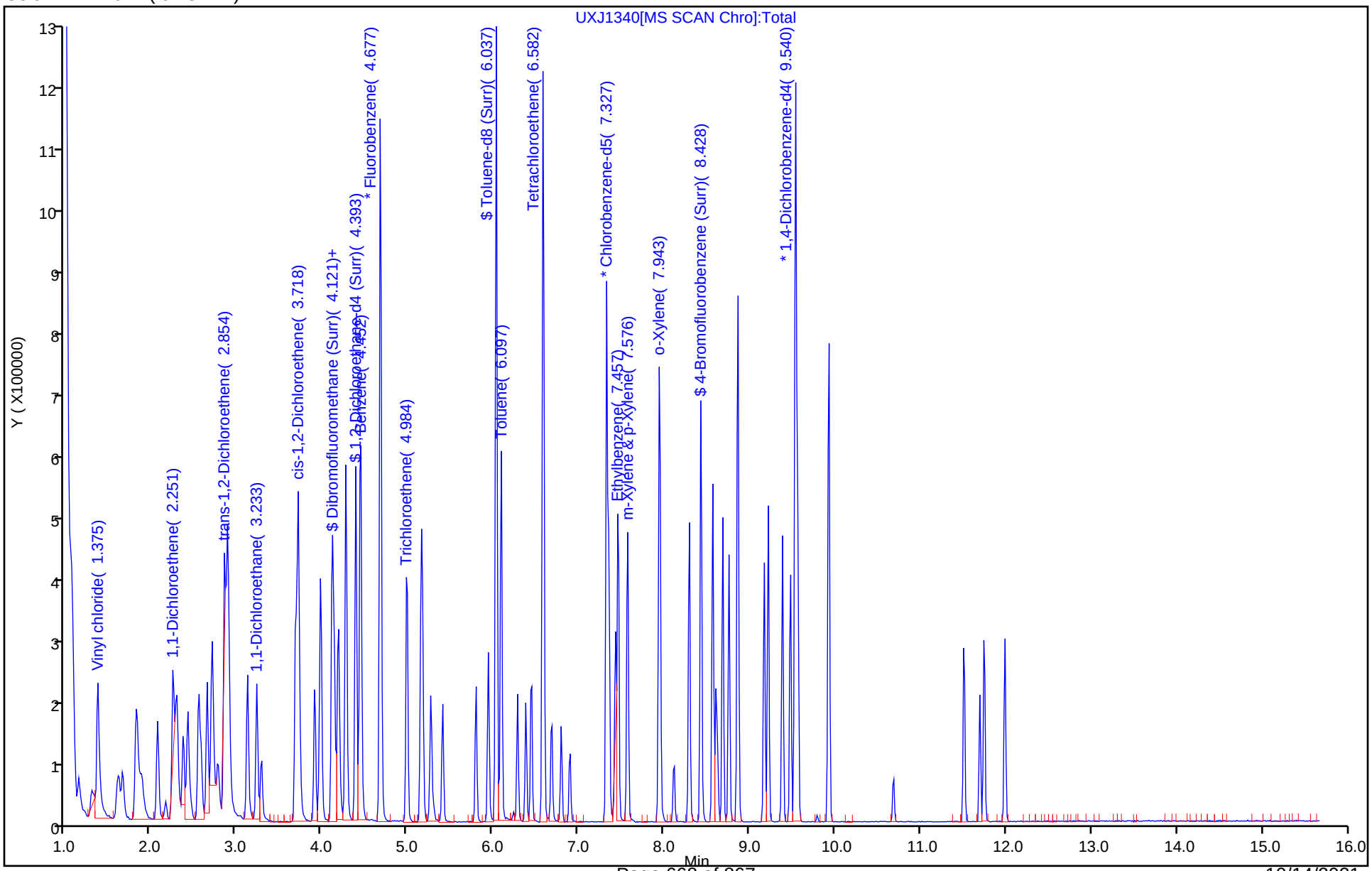
Report Date: 14-Oct-2021 05:30:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1340.D

Injection Date:	13-Oct-2021 17:38:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-157764-C-11 MSD			Worklist Smp#:	59
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\UXJ1340.D
Lims ID: 240-157764-C-11 MSD
Client ID:
Sample Type: MSD
Inject. Date: 13-Oct-2021 17:38:30 ALS Bottle#: 24 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114058-059
Misc. Info.: J211013A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211013-114058.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Oct-2021 05:28:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:30:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.7	108.63
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	94.24
$ 6 Toluene-d8 (Surr)	20.0	23.9	119.35
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-157641-B-1 MSD

Matrix: Water Lab File ID: UXC0015.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/13/2021 13:58

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 508019 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	31.8		3.3	1.6
156-59-2	cis-1,2-Dichloroethene	63.7		3.3	1.5
127-18-4	Tetrachloroethene	30.9		3.3	1.5
156-60-5	trans-1,2-Dichloroethene	91.8		3.3	1.7
79-01-6	Trichloroethene	78.5		3.3	1.5
75-01-4	Vinyl chloride	40.9		3.3	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		62-137
460-00-4	4-Bromofluorobenzene (Surr)	96		56-136
2037-26-5	Toluene-d8 (Surr)	98		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0015.D
Lims ID: 240-157641-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 13-Oct-2021 13:58:30 ALS Bottle#: 12 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 3.3300
Sample Info: 240-0114059-051
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 12:14:49 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:40:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	4.989	0.000	99	1800582	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1314299	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	740705	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	383070	10.0	9.10	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	512251	10.0	10.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.341	0.012	94	1578654	10.0	9.80	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	89	521301	10.0	9.57	
9 Dichlorodifluoromethane	85	1.420	1.420	0.000	99	537036	10.0	9.90	
10 Chloromethane	50	1.562	1.562	0.000	99	711379	10.0	11.5	
11 Vinyl chloride	62	1.645	1.645	0.000	97	648849	10.0	12.3	
13 Bromomethane	94	1.930	1.930	0.000	90	383831	10.0	8.66	
14 Chloroethane	64	1.989	1.989	0.000	99	408238	10.0	10.5	
16 Trichlorofluoromethane	101	2.202	2.203	-0.001	99	731845	10.0	7.80	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	497896	10.0	9.56	
20 112TCTFE	151	2.617	2.618	-0.001	91	390592	10.0	9.00	
21 Acetone	58	2.641	2.641	0.000	99	76028	20.0	20.9	
24 Carbon disulfide	76	2.807	2.807	0.000	100	1171498	10.0	8.08	
27 Methyl acetate	43	2.914	2.914	0.000	97	622129	20.0	27.2	
28 Methylene Chloride	84	2.997	2.997	0.000	94	543184	10.0	11.2	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	71	1157447	10.0	9.17	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	1432423	10.0	27.6	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	97	897336	10.0	10.9	
41 cis-1,2-Dichloroethene	96	4.041	4.041	-0.001	82	1049524	10.0	19.1	
40 2-Butanone (MEK)	72	4.052	4.053	-0.001	99	91007	20.0	23.9	
48 Chloroform	83	4.301	4.302	-0.001	93	876677	10.0	10.7	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	97	679674	10.0	9.21	
50 Cyclohexane	56	4.503	4.503	0.000	92	766391	10.0	10.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	564212	10.0	8.59	
55 Benzene	78	4.764	4.764	0.000	96	2173081	10.0	11.0	
56 1,2-Dichloroethane	62	4.788	4.776	0.012	97	722584	10.0	12.3	
60 Trichloroethene	130	5.298	5.298	0.000	98	1250917	10.0	23.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 Methylcyclohexane	83	5.464	5.464	0.000	91	586694	10.0	8.85	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	96	507045	10.0	12.4	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	524860	10.0	10.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	553030	10.0	9.75	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	98	609150	20.0	22.3	
72 Toluene	91	6.412	6.401	0.012	98	2101645	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	95	499129	10.0	10.0	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	389029	10.0	12.2	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	379622	10.0	9.28	
78 2-Hexanone	43	6.981	6.982	-0.001	97	414752	20.0	22.7	
80 Chlorodibromomethane	129	7.124	7.124	0.000	91	318747	10.0	9.10	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	360071	10.0	11.7	
84 Chlorobenzene	112	7.681	7.681	0.000	97	1287237	10.0	10.9	
86 Ethylbenzene	106	7.776	7.776	0.000	99	651825	10.0	10.1	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1648118	10.0	10.5	
88 o-Xylene	106	8.262	8.262	0.000	97	779708	10.0	9.23	
89 Styrene	104	8.274	8.274	0.000	94	1283176	10.0	11.7	
90 Bromoform	173	8.464	8.464	0.000	96	164139	10.0	7.58	
91 Isopropylbenzene	105	8.618	8.606	0.012	96	1742569	10.0	8.36	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	-0.001	96	482894	10.0	12.7	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	937525	10.0	9.60	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	93	1009749	10.0	9.95	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	96	963067	10.0	9.47	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	76	52197	10.0	6.25	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	389147	10.0	5.21	
S 129 Xylenes, Total	106				0		20.0	19.7	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00418	Amount Added:	8.00	Units: uL	
vmfasaw_00394	Amount Added:	8.00	Units: uL	
vmfasgw_00428	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

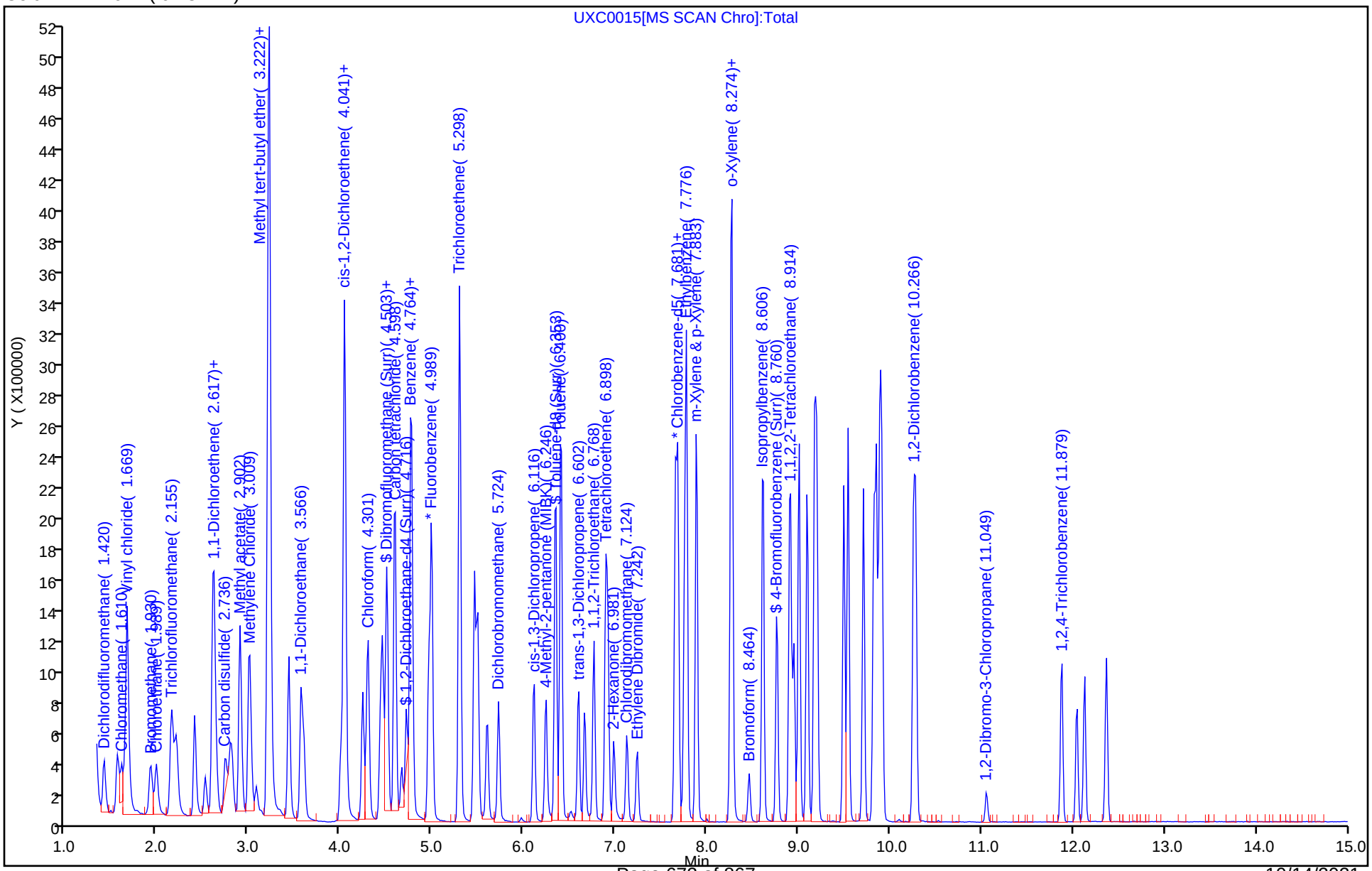
Report Date: 14-Oct-2021 05:40:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0015.D

Injection Date:	13-Oct-2021 13:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-157641-B-1 MSD			Worklist Smp#:	51
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	3.3300	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\UXC0015.D
Lims ID: 240-157641-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 13-Oct-2021 13:58:30 ALS Bottle#: 12 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 3.3300
Sample Info: 240-0114059-051
Misc. Info.: C211013A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211013-114059.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 13-Oct-2021 12:14:49 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: evansle Date: 14-Oct-2021 05:40:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.10	91.02
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.04
$ 6 Toluene-d8 (Surr)	10.0	9.80	98.01
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.57	95.68

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX11 Start Date: 01/15/2021 10:36

Analysis Batch Number: 469338 End Date: 01/15/2021 15:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-469338/1		01/15/2021 10:36	1	BFB1115A.D	DB-624 0.18(mm)
STD8260 240-469338/2 IC		01/15/2021 11:06	1	UXJ5268.D	DB-624 0.18(mm)
STD8260 240-469338/3 IC		01/15/2021 11:29	1	UXJ5269.D	DB-624 0.18(mm)
STD8260 240-469338/4 ICIS		01/15/2021 11:51	1	UXJ5270.D	DB-624 0.18(mm)
STD8260 240-469338/5 IC		01/15/2021 12:13	1	UXJ5271.D	DB-624 0.18(mm)
STD8260 240-469338/6 IC		01/15/2021 12:36	1	UXJ5272.D	DB-624 0.18(mm)
STD8260 240-469338/7 IC		01/15/2021 12:58	1	UXJ5273.D	DB-624 0.18(mm)
ICV 240-469338/14		01/15/2021 13:20	1	UXJ5274.D	DB-624 0.18(mm)
STD6 240-469338/8 IC		01/15/2021 13:42	1		DB-624 0.18(mm)
STD5 240-469338/9 IC		01/15/2021 14:05	1		DB-624 0.18(mm)
STD4 240-469338/10 IC		01/15/2021 14:26	1		DB-624 0.18(mm)
STD3 240-469338/11 IC		01/15/2021 14:48	1		DB-624 0.18(mm)
STD2 240-469338/12 IC		01/15/2021 15:10	1		DB-624 0.18(mm)
STD1 240-469338/13 IC		01/15/2021 15:33	1		DB-624 0.18(mm)
ICV 240-469338/15		01/15/2021 15:55	1	UXJ5281.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX15 Start Date: 03/16/2021 07:33

Analysis Batch Number: 476941 End Date: 03/16/2021 13:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-476941/1		03/16/2021 07:33	1	BFB210316.D	DB-624 0.18(mm)
STD8260 240-476941/2 IC		03/16/2021 08:36	1	UXC5644.D	DB-624 0.18(mm)
STD8260 240-476941/3 IC		03/16/2021 08:58	1	UXC5645.D	DB-624 0.18(mm)
STD8260 240-476941/4 ICIS		03/16/2021 09:20	1	UXC5646.D	DB-624 0.18(mm)
STD8260 240-476941/5 IC		03/16/2021 09:42	1	UXC5647.D	DB-624 0.18(mm)
STD8260 240-476941/6 IC		03/16/2021 10:17	1	UXC5648.D	DB-624 0.18(mm)
STD8260 240-476941/7 IC		03/16/2021 10:39	1	UXC5649.D	DB-624 0.18(mm)
ICV 240-476941/14		03/16/2021 11:01	1	UXC5650.D	DB-624 0.18(mm)
STD 240-476941/8 IC		03/16/2021 11:23	1		DB-624 0.18(mm)
STD 240-476941/9 IC		03/16/2021 11:45	1		DB-624 0.18(mm)
STD 240-476941/10 IC		03/16/2021 12:06	1		DB-624 0.18(mm)
STD 240-476941/11 IC		03/16/2021 12:28	1		DB-624 0.18(mm)
STD 240-476941/12 IC		03/16/2021 12:50	1		DB-624 0.18(mm)
STD 240-476941/13 IC		03/16/2021 13:12	1		DB-624 0.18(mm)
ICV 240-476941/15		03/16/2021 13:34	1	UXC5657.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX11 Start Date: 10/12/2021 07:03

Analysis Batch Number: 507762 End Date: 10/12/2021 19:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-507762/1		10/12/2021 07:03	1	BFB1012A.D	DB-624 0.18(mm)
CCVIS 240-507762/2		10/12/2021 07:31	1	UXJ1284.D	DB-624 0.18(mm)
LCS 240-507762/4		10/12/2021 07:54	1	UXJ1285.D	DB-624 0.18(mm)
CCV 240-507762/3		10/12/2021 08:16	1	UXJ1286.D	DB-624 0.18(mm)
MRL 240-507762/5 MDLV		10/12/2021 08:39	1		DB-624 0.18(mm)
MRL 240-507762/7 MDLV		10/12/2021 09:01	1		DB-624 0.18(mm)
MB 240-507762/6		10/12/2021 09:24	1	UXJ1289.D	DB-624 0.18(mm)
240-157760-1	TRIP BLANK	10/12/2021 09:46	1	UXJ1290.D	DB-624 0.18(mm)
240-157760-2	SL-15_100721	10/12/2021 10:09	1	UXJ1291.D	DB-624 0.18(mm)
240-157760-3	SL-14_100721	10/12/2021 10:31	1	UXJ1292.D	DB-624 0.18(mm)
240-157760-4	SL-13_100721	10/12/2021 10:54	1	UXJ1293.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 11:17	666.667		DB-624 0.18(mm)
ZZZZZ		10/12/2021 11:39	16666.67		DB-624 0.18(mm)
ZZZZZ		10/12/2021 12:02	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 12:24	142.86		DB-624 0.18(mm)
ZZZZZ		10/12/2021 12:47	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 13:09	2		DB-624 0.18(mm)
ZZZZZ		10/12/2021 13:32	5		DB-624 0.18(mm)
ZZZZZ		10/12/2021 13:54	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 14:17	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 14:40	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 15:02	2		DB-624 0.18(mm)
ZZZZZ		10/12/2021 15:25	1		DB-624 0.18(mm)
240-157760-5	SL-7_100721	10/12/2021 15:47	1	UXJ1306.D	DB-624 0.18(mm)
240-157760-6	SL-6_100721	10/12/2021 16:09	1	UXJ1307.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 16:32	1		DB-624 0.18(mm)
240-157760-8	SL-8_100721	10/12/2021 16:54	1	UXJ1309.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 17:17	14.29		DB-624 0.18(mm)
ZZZZZ		10/12/2021 17:39	2		DB-624 0.18(mm)
240-157588-G-1 MS		10/12/2021 18:02	1	UXJ1312.D	DB-624 0.18(mm)
240-157588-F-1 MSD		10/12/2021 18:24	1	UXJ1313.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 18:46	5		DB-624 0.18(mm)
ZZZZZ		10/12/2021 19:09	5		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX15 Start Date: 10/12/2021 07:54

Analysis Batch Number: 507764 End Date: 10/12/2021 19:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-507764/1		10/12/2021 07:54	1	BFB1012.D	DB-624 0.18(mm)
CCVIS 240-507764/2		10/12/2021 08:20	1	UXC9975.D	DB-624 0.18(mm)
LCS 240-507764/4		10/12/2021 08:42	1	UXC9976.D	DB-624 0.18(mm)
CCV 240-507764/3		10/12/2021 09:04	1	UXC9977.D	DB-624 0.18(mm)
MRL 240-507764/5 MDLV		10/12/2021 09:26	1		DB-624 0.18(mm)
MRL 240-507764/6 MDLV		10/12/2021 09:48	1		DB-624 0.18(mm)
MB 240-507764/7		10/12/2021 10:51	1	UXC9980.D	DB-624 0.18(mm)
240-157760-10	SL-10_100721	10/12/2021 11:13	1	UXC9981.D	DB-624 0.18(mm)
240-157760-11	SL-11_100721	10/12/2021 11:35	1	UXC9982.D	DB-624 0.18(mm)
240-157760-12	SL-12_100721	10/12/2021 11:57	1	UXC9983.D	DB-624 0.18(mm)
240-157760-9	SL-9_100721	10/12/2021 12:23	1	UXC9984.D	DB-624 0.18(mm)
240-157760-13	MH-1231_100721	10/12/2021 12:45	10	UXC9985.D	DB-624 0.18(mm)
240-157760-14	SL-2_100721	10/12/2021 13:07	2.5	UXC9986.D	DB-624 0.18(mm)
240-157760-15	SL-3_100721	10/12/2021 13:29	5	UXC9987.D	DB-624 0.18(mm)
240-157760-16	SL-4_100721	10/12/2021 13:51	2.5	UXC9988.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 14:56	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 15:40	1		DB-624 0.18(mm)
240-157641-H-4 MS		10/12/2021 16:02	1	UXC9994.D	DB-624 0.18(mm)
240-157641-E-4 MSD		10/12/2021 16:24	1	UXC9995.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 16:46	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 17:29	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 17:51	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 18:13	5		DB-624 0.18(mm)
ZZZZZ		10/12/2021 18:35	2		DB-624 0.18(mm)
ZZZZZ		10/12/2021 19:04	2		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX11 Start Date: 10/13/2021 08:31

Analysis Batch Number: 508017 End Date: 10/13/2021 17:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-508017/1		10/13/2021 08:31	1	BFB1013.D	DB-624 0.18(mm)
CCVIS 240-508017/2		10/13/2021 09:00	1	UXJ1317.D	DB-624 0.18(mm)
LCS 240-508017/4		10/13/2021 09:23	1	UXJ1318.D	DB-624 0.18(mm)
CCV 240-508017/3		10/13/2021 09:45	1	UXJ1319.D	DB-624 0.18(mm)
MRL 240-508017/5 MDLV		10/13/2021 10:08	1		DB-624 0.18(mm)
MRL 240-508017/7 MDLV		10/13/2021 10:31	1		DB-624 0.18(mm)
MB 240-508017/6		10/13/2021 10:53	1	UXJ1322.D	DB-624 0.18(mm)
240-157760-7	SL-5_100721	10/13/2021 11:16	2	UXJ1323.D	DB-624 0.18(mm)
ZZZZZ		10/13/2021 11:38	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 12:01	2		DB-624 0.18(mm)
ZZZZZ		10/13/2021 12:23	2		DB-624 0.18(mm)
ZZZZZ		10/13/2021 12:46	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 13:31	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 13:53	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 14:16	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 14:38	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 15:01	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 15:23	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 15:46	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 16:09	20		DB-624 0.18(mm)
ZZZZZ		10/13/2021 16:31	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 16:54	1		DB-624 0.18(mm)
240-157764-A-11 MS		10/13/2021 17:16	1	UXJ1339.D	DB-624 0.18(mm)
240-157764-C-11 MSD		10/13/2021 17:38	1	UXJ1340.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX15 Start Date: 10/13/2021 09:22

Analysis Batch Number: 508019 End Date: 10/13/2021 13:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-508019/1		10/13/2021 09:22	1	BFB1013.D	DB-624 0.18(mm)
CCVIS 240-508019/2		10/13/2021 09:57	1	UXC0004.D	DB-624 0.18(mm)
LCS 240-508019/4		10/13/2021 10:19	1	UXC0005.D	DB-624 0.18(mm)
CCV 240-508019/3		10/13/2021 10:41	1	UXC0006.D	DB-624 0.18(mm)
MRL 240-508019/5 MDLV		10/13/2021 11:03	1		DB-624 0.18(mm)
MRL 240-508019/6 MDLV		10/13/2021 11:25	1		DB-624 0.18(mm)
MB 240-508019/7		10/13/2021 11:47	1	UXC0009.D	DB-624 0.18(mm)
240-157760-17	DUP-01	10/13/2021 12:09	2	UXC0010.D	DB-624 0.18(mm)
ZZZZZ		10/13/2021 12:31	3.33		DB-624 0.18(mm)
ZZZZZ		10/13/2021 12:53	1		DB-624 0.18(mm)
ZZZZZ		10/13/2021 13:14	1		DB-624 0.18(mm)
240-157641-B-1 MS		10/13/2021 13:36	3.33	UXC0014.D	DB-624 0.18(mm)
240-157641-B-1 MSD		10/13/2021 13:58	3.33	UXC0015.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00086	VM50SS_STK 00086	VMAROLISTDW 00376	VMBFB 00026
BFB 240-469338/1		8260B		5 mL	5 mL				1 uL
STD8260 240-469338/2 IC		8260B		5 mL	5 mL	2 uL	32 uL	32 uL	
STD8260 240-469338/3 IC		8260B		5 mL	5 mL	2 uL	16 uL	16 uL	
STD8260 240-469338/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL	8 uL	
STD8260 240-469338/5 IC		8260B		5 mL	5 mL	2 uL	4 uL	4 uL	
STD8260 240-469338/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL	1.6 uL	
STD8260 240-469338/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL	0.8 uL	
ICV 240-469338/14		8260B		5 mL	5 mL	2 uL	2 uL		
ICV 240-469338/15		8260B		5 mL	5 mL	2 uL	2 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00305	VMFASAW 00359	VMFASGW 00391	VMFASPW 00382	VMRGAS 00369	VMRPRIMW 00419
BFB 240-469338/1		8260B							
STD8260 240-469338/2 IC		8260B						32 uL	32 uL
STD8260 240-469338/3 IC		8260B						16 uL	16 uL
STD8260 240-469338/4 ICIS		8260B						8 uL	8 uL
STD8260 240-469338/5 IC		8260B						4 uL	4 uL
STD8260 240-469338/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-469338/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-469338/14		8260B			8 uL	8 uL	8 uL		
ICV 240-469338/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	hc907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50is 00086	vm50ss_stk 00086	VMAROLISTDW 00384	vmbfb 00026
BFB 240-476941/1		8260B		5 mL	5 mL				1 uL
STD8260 240-476941/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-476941/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-476941/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-476941/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-476941/6 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-476941/7 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-476941/14		8260B		5 mL	5 mL	1 uL	1 uL		
ICV 240-476941/15		8260B		5 mL	5 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00312	VMFASAW 00366	VMFASGW 00399	VMFASPW 00390	VMRGAS 00377	VMRPRIMW 00427
BFB 240-476941/1		8260B							
STD8260 240-476941/2 IC		8260B						32 uL	32 uL
STD8260 240-476941/3 IC		8260B						16 uL	16 uL
STD8260 240-476941/4 ICIS		8260B						8 uL	8 uL
STD8260 240-476941/5 IC		8260B						4 uL	4 uL
STD8260 240-476941/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-476941/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-476941/14		8260B			8 uL	8 uL	8 uL		
ICV 240-476941/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507762 Batch Start Date: 10/12/21 07:03 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-507762/1		8260B		5 mL	5 mL				
CCVIS 240-507762/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-507762/3		8260B		5 mL	5 mL		2 uL		
LCS 240-507762/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-507762/6		8260B		5 mL	5 mL			2 uL	2 uL
240-157760-B-1	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-2	SL-15_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-3	SL-14_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-4	SL-13_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-5	SL-7_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-6	SL-6_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157760-E-8	SL-8_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157588-G-1 MS	WG-100521-JV-01	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157588-F-1 MSD	WG-100521-JV-01	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	vmfaspw 00417	VMRA9W 00409
BFB 240-507762/1		8260B			1 uL				
CCVIS 240-507762/2		8260B		8 uL					
CCV 240-507762/3		8260B							8 uL
LCS 240-507762/4		8260B				8 uL	8 uL	8 uL	
MB 240-507762/6		8260B							
240-157760-B-1	TRIP BLANK	8260B	T						
240-157760-E-2	SL-15_100721	8260B	T						
240-157760-E-3	SL-14_100721	8260B	T						
240-157760-E-4	SL-13_100721	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507762 Batch Start Date: 10/12/21 07:03 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	vmfaspw 00417	VMRA9W 00409
240-157760-E-5	SL-7_100721	8260B	T						
240-157760-E-6	SL-6_100721	8260B	T						
240-157760-E-8	SL-8_100721	8260B	T						
240-157588-G-1 MS	WG-100521-JV-01	8260B	T			8 uL	8 uL	8 uL	
240-157588-F-1 MSD	WG-100521-JV-01	8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
BFB 240-507762/1		8260B							
CCVIS 240-507762/2		8260B		8 uL	8 uL				
CCV 240-507762/3		8260B							
LCS 240-507762/4		8260B							
MB 240-507762/6		8260B							
240-157760-B-1	TRIP BLANK	8260B	T						
240-157760-E-2	SL-15_100721	8260B	T						
240-157760-E-3	SL-14_100721	8260B	T						
240-157760-E-4	SL-13_100721	8260B	T						
240-157760-E-5	SL-7_100721	8260B	T						
240-157760-E-6	SL-6_100721	8260B	T						
240-157760-E-8	SL-8_100721	8260B	T						
240-157588-G-1 MS	WG-100521-JV-01	8260B	T						
240-157588-F-1 MSD	WG-100521-JV-01	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507762 Batch Start Date: 10/12/21 07:03 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507764 Batch Start Date: 10/12/21 07:54 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-507764/1		8260B		5 mL	5 mL				
CCVIS 240-507764/2		8260B		5 mL	5 mL			1 uL	1 uL
CCV 240-507764/3		8260B		5 mL	5 mL		1 uL		
LCS 240-507764/4		8260B		5 mL	5 mL			1 uL	1 uL
MB 240-507764/7		8260B		5 mL	5 mL			1 uL	1 uL
240-157760-E-10	SL-10_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-11	SL-11_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-12	SL-12_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-9	SL-9_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-13	MS-1231_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-14	SL-2_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-15	SL-3_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157760-E-16	SL-4_100721	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157641-H-4 MS	GW-100621-BE-004	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157641-E-4 MSD	GW-100621-BE-004	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	vmfaspw 00417	VMRA9W 00409
BFB 240-507764/1		8260B			1 uL				
CCVIS 240-507764/2		8260B		8 uL					
CCV 240-507764/3		8260B							8 uL
LCS 240-507764/4		8260B				8 uL	8 uL	8 uL	
MB 240-507764/7		8260B							
240-157760-E-10	SL-10_100721	8260B	T						
240-157760-E-11	SL-11_100721	8260B	T						
240-157760-E-12	SL-12_100721	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507764 Batch Start Date: 10/12/21 07:54 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	vmfaspw 00417	VMRA9W 00409
240-157760-E-9	SL-9_100721	8260B	T						
240-157760-E-13	MS-1231_100721	8260B	T						
240-157760-E-14	SL-2_100721	8260B	T						
240-157760-E-15	SL-3_100721	8260B	T						
240-157760-E-16	SL-4_100721	8260B	T						
240-157641-H-4 MS	GW-100621-BE-004	8260B	T			8 uL	8 uL	8 uL	
240-157641-E-4 MSD	GW-100621-BE-004	8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
BFB 240-507764/1		8260B							
CCVIS 240-507764/2		8260B		8 uL	8 uL				
CCV 240-507764/3		8260B							
LCS 240-507764/4		8260B							
MB 240-507764/7		8260B							
240-157760-E-10	SL-10_100721	8260B	T						
240-157760-E-11	SL-11_100721	8260B	T						
240-157760-E-12	SL-12_100721	8260B	T						
240-157760-E-9	SL-9_100721	8260B	T						
240-157760-E-13	MS-1231_100721	8260B	T						
240-157760-E-14	SL-2_100721	8260B	T						
240-157760-E-15	SL-3_100721	8260B	T						
240-157760-E-16	SL-4_100721	8260B	T						
240-157641-H-4 MS	GW-100621-BE-004	8260B	T						
240-157641-E-4 MSD	GW-100621-BE-004	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507764 Batch Start Date: 10/12/21 07:54 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 508017 Batch Start Date: 10/13/21 08:31 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-508017/1		8260B		5 mL	5 mL				
CCVIS 240-508017/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-508017/3		8260B		5 mL	5 mL		2 uL		
LCS 240-508017/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-508017/6		8260B		5 mL	5 mL			2 uL	2 uL
240-157760-C-7	SL-5_100721	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157764-A-11 MS		8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-157764-C-11 MSD		8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	VMFASPW 00418	VMRA9W 00409
BFB 240-508017/1		8260B			1 uL				
CCVIS 240-508017/2		8260B		8 uL					
CCV 240-508017/3		8260B							8 uL
LCS 240-508017/4		8260B				8 uL	8 uL	8 uL	
MB 240-508017/6		8260B							
240-157760-C-7	SL-5_100721	8260B	T						
240-157764-A-11 MS		8260B	T			8 uL	8 uL	8 uL	
240-157764-C-11 MSD		8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
BFB 240-508017/1		8260B							
CCVIS 240-508017/2		8260B		8 uL	8 uL				
CCV 240-508017/3		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 508017 Batch Start Date: 10/13/21 08:31 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
LCS 240-508017/4		8260B							
MB 240-508017/6		8260B							
240-157760-C-7	SL-5_100721	8260B	T						
240-157764-A-11 MS		8260B	T						
240-157764-C-11 MSD		8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 508019 Batch Start Date: 10/13/21 09:22 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-508019/1		8260B		5 mL	5 mL				
CCVIS 240-508019/2		8260B		5 mL	5 mL			1 uL	1 uL
CCV 240-508019/3		8260B		5 mL	5 mL		1 uL		
LCS 240-508019/4		8260B		5 mL	5 mL			1 uL	1 uL
MB 240-508019/7		8260B		5 mL	5 mL			1 uL	1 uL
240-157760-F-17	DUP-01	8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157641-B-1 MS		8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL
240-157641-B-1 MSD		8260B	T	5 mL	5 mL	<2 SU		1 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00412	vmbfb 00027	vmfasaw 00394	vmfasgw 00428	VMFASPW 00418	VMRA9W 00409
BFB 240-508019/1		8260B			1 uL				
CCVIS 240-508019/2		8260B		8 uL					
CCV 240-508019/3		8260B							8 uL
LCS 240-508019/4		8260B				8 uL	8 uL	8 uL	
MB 240-508019/7		8260B							
240-157760-F-17	DUP-01	8260B	T						
240-157641-B-1 MS		8260B	T			8 uL	8 uL	8 uL	
240-157641-B-1 MSD		8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
BFB 240-508019/1		8260B							
CCVIS 240-508019/2		8260B		8 uL	8 uL				
CCV 240-508019/3		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 508019 Batch Start Date: 10/13/21 09:22 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrgas 00403	VMRPRIMW 00455				
LCS 240-508019/4		8260B							
MB 240-508019/7		8260B							
240-157760-F-17	DUP-01	8260B	T						
240-157641-B-1 MS		8260B	T						
240-157641-B-1 MSD		8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-15_100721	240-157760-2	81
SL-14_100721	240-157760-3	81
SL-13_100721	240-157760-4	81
SL-7_100721	240-157760-5	80
SL-6_100721	240-157760-6	80
SL-5_100721	240-157760-7	81
SL-8_100721	240-157760-8	82
SL-9_100721	240-157760-9	78
SL-10_100721	240-157760-10	84
SL-11_100721	240-157760-11	82
SL-12_100721	240-157760-12	83
MH-1231_100721	240-157760-13	84
SL-2_100721	240-157760-14	84
SL-3_100721	240-157760-15	83
SL-4_100721	240-157760-16	83
DUP-01	240-157760-17	80
	MB 240-507716/5	83
	LCS 240-507716/4	83
	500-206406-A-2 MS	81
	500-206406-A-2 MSD	82

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201902.D

Lab ID: LCS 240-507716/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	9.49	95	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201912.D

Lab ID: 500-206406-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	9.39	94	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 201913.D

Lab ID: 500-206406-A-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	9.80	98	4	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: 201903.D Lab Sample ID: MB 240-507716/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 10/11/2021 20:19

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-507716/4	201902.D	10/11/2021 19:55
SL-15_100721	240-157760-2	201906.D	10/11/2021 21:31
SL-14_100721	240-157760-3	201907.D	10/11/2021 21:55
SL-13_100721	240-157760-4	201908.D	10/11/2021 22:18
SL-7_100721	240-157760-5	201909.D	10/11/2021 22:42
SL-6_100721	240-157760-6	201910.D	10/11/2021 23:06
	500-206406-A-2 MS	201912.D	10/11/2021 23:54
	500-206406-A-2 MSD	201913.D	10/12/2021 00:18
SL-5_100721	240-157760-7	201914.D	10/12/2021 00:42
SL-8_100721	240-157760-8	201915.D	10/12/2021 01:05
SL-9_100721	240-157760-9	201916.D	10/12/2021 01:29
SL-10_100721	240-157760-10	201917.D	10/12/2021 01:53
SL-11_100721	240-157760-11	201918.D	10/12/2021 02:17
SL-12_100721	240-157760-12	201919.D	10/12/2021 02:41
MH-1231_100721	240-157760-13	201920.D	10/12/2021 03:04
SL-2_100721	240-157760-14	201921.D	10/12/2021 03:28
SL-3_100721	240-157760-15	201922.D	10/12/2021 03:52
SL-4_100721	240-157760-16	201923.D	10/12/2021 04:16
DUP-01	240-157760-17	201924.D	10/12/2021 04:40

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB20126.D BFB Injection Date: 09/09/2021

Instrument ID: A3UX20 BFB Injection Time: 13:33

Analysis Batch No.: 503003

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.3	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	68.0	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	66.1	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-503003/3	201661.D	09/09/2021	14:25
	IC 240-503003/4	201662.D	09/09/2021	14:49
	IC 240-503003/5	201663.D	09/09/2021	15:14
	IC 240-503003/6	201664.D	09/09/2021	15:38
	ICIS 240-503003/7	201665.D	09/09/2021	16:03
	IC 240-503003/8	201666.D	09/09/2021	16:27
	IC 240-503003/9	201667.D	09/09/2021	16:52
	IC 240-503003/10	201668.D	09/09/2021	17:16
	ICV 240-503003/12	201670.D	09/09/2021	18:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab File ID: BFB20140.D BFB Injection Date: 10/11/2021

Instrument ID: A3UX20 BFB Injection Time: 18:52

Analysis Batch No.: 507716

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.3	
75	30.0 - 60.0 % of mass 95	48.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	69.7	
175	5.0 - 9.0 % of mass 174	5.1	(7.3) 1
176	95.0 - 101.0 % of mass 174	67.4	(96.7) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-507716/3	201901.D	10/11/2021	19:31
	LCS 240-507716/4	201902.D	10/11/2021	19:55
	MB 240-507716/5	201903.D	10/11/2021	20:19
SL-15_100721	240-157760-2	201906.D	10/11/2021	21:31
SL-14_100721	240-157760-3	201907.D	10/11/2021	21:55
SL-13_100721	240-157760-4	201908.D	10/11/2021	22:18
SL-7_100721	240-157760-5	201909.D	10/11/2021	22:42
SL-6_100721	240-157760-6	201910.D	10/11/2021	23:06
	500-206406-A-2 MS	201912.D	10/11/2021	23:54
	500-206406-A-2 MSD	201913.D	10/12/2021	0:18
SL-5_100721	240-157760-7	201914.D	10/12/2021	0:42
SL-8_100721	240-157760-8	201915.D	10/12/2021	1:05
SL-9_100721	240-157760-9	201916.D	10/12/2021	1:29
SL-10_100721	240-157760-10	201917.D	10/12/2021	1:53
SL-11_100721	240-157760-11	201918.D	10/12/2021	2:17
SL-12_100721	240-157760-12	201919.D	10/12/2021	2:41
MH-1231_100721	240-157760-13	201920.D	10/12/2021	3:04
SL-2_100721	240-157760-14	201921.D	10/12/2021	3:28
SL-3_100721	240-157760-15	201922.D	10/12/2021	3:52
SL-4_100721	240-157760-16	201923.D	10/12/2021	4:16
DUP-01	240-157760-17	201924.D	10/12/2021	4:40

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: ICIS 240-503003/7 Date Analyzed: 09/09/2021 16:03

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201665.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3376203	7.44	100508	8.19		
UPPER LIMIT		6752406	7.94	201016	8.69		
LOWER LIMIT		1688102	6.94	50254	7.69		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-507716/3		2975236	7.42	102694	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Sample No.: CCVIS 240-507716/3 Date Analyzed: 10/11/2021 19:31

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201901.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2975236	7.42	102694	8.18		
UPPER LIMIT		5950472	7.92	205388	8.68		
LOWER LIMIT		1487618	6.92	51347	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-507716/4		2954548	7.42	95362	8.18		
MB 240-507716/5		2901557	7.42	91322	8.18		
240-157760-2	SL-15_100721	2923539	7.42	90762	8.18		
240-157760-3	SL-14_100721	2954307	7.44	81311	8.18		
240-157760-4	SL-13_100721	3049401	7.44	90323	8.19		
240-157760-5	SL-7_100721	2886618	7.42	89097	8.18		
240-157760-6	SL-6_100721	2972135	7.44	85297	8.19		
500-206406-A-2 MS		3024411	7.44	92202	8.19		
500-206406-A-2 MSD		2975271	7.44	90507	8.18		
240-157760-7	SL-5_100721	2941159	7.44	90316	8.18		
240-157760-8	SL-8_100721	2982458	7.44	89846	8.18		
240-157760-9	SL-9_100721	2854206	7.42	82065	8.18		
240-157760-10	SL-10_100721	2936368	7.44	86146	8.18		
240-157760-11	SL-11_100721	2960651	7.44	88276	8.19		
240-157760-12	SL-12_100721	2938138	7.44	88154	8.18		
240-157760-13	MH-1231_100721	2973388	7.44	93753	8.18		
240-157760-14	SL-2_100721	2924506	7.44	84801	8.18		
240-157760-15	SL-3_100721	3072417	7.44	92565	8.19		
240-157760-16	SL-4_100721	2972109	7.44	88136	8.18		
240-157760-17	DUP-01	2963776	7.44	84778	8.19		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-15_100721 Lab Sample ID: 240-157760-2

Matrix: Water Lab File ID: 201906.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 09:55

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 21:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.3	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201906.D				
Lims ID:	240-157760-B-2				
Client ID:	SL-15_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 21:31:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:13		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	759478	8.13	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2923539	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	90762	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	25	936	1.26	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

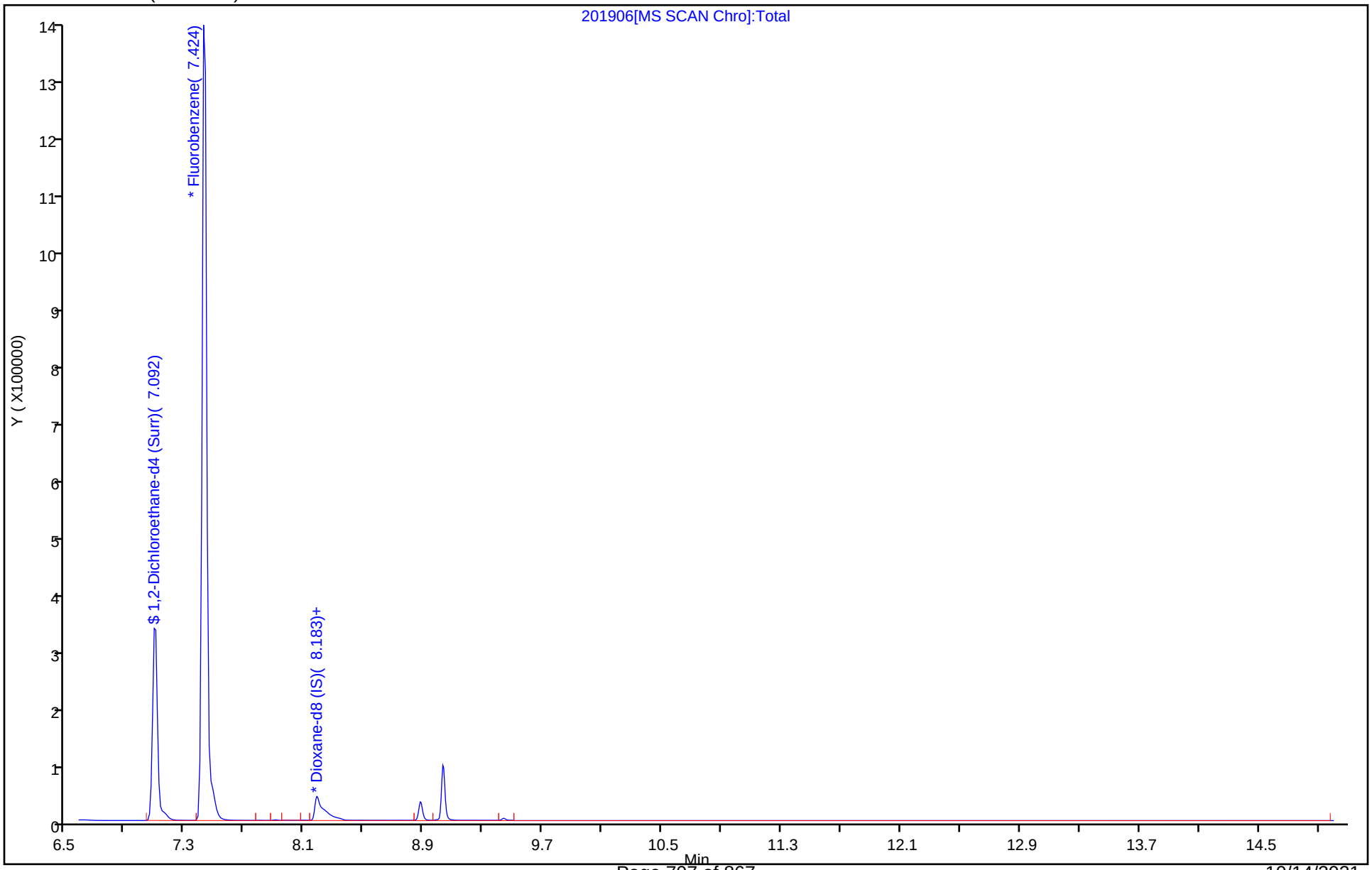
Report Date: 12-Oct-2021 12:19:28 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201906.D

Injection Date:	11-Oct-2021 21:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-2	Lab Sample ID:	240-157760-2	Worklist Smp#:	8
Client ID:	SL-15_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201906.D				
Lims ID:	240-157760-B-2				
Client ID:	SL-15_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 21:31:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.13	81.35

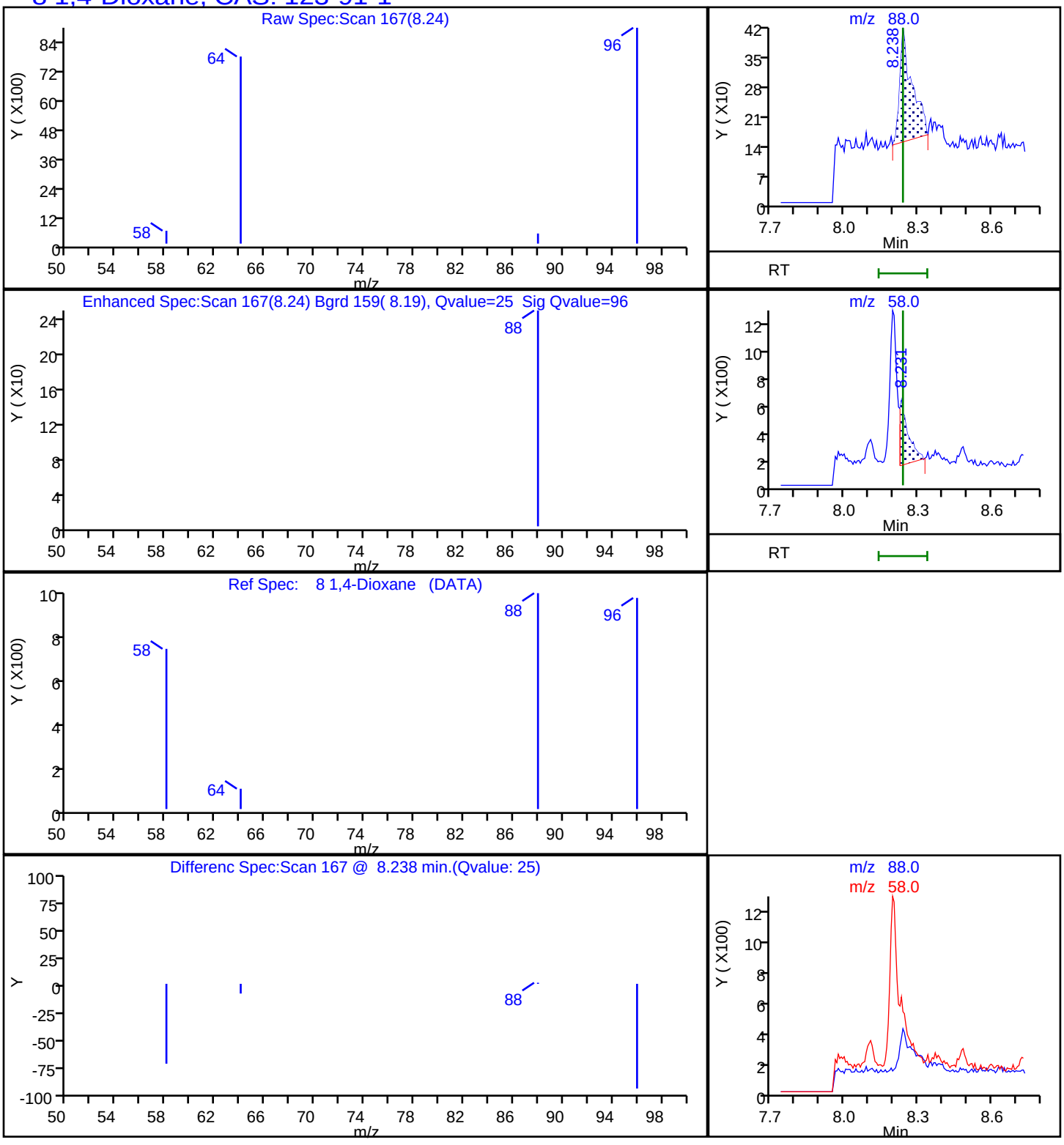
Report Date: 12-Oct-2021 12:19:28 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201906.D

Injection Date:	11-Oct-2021 21:31:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-2	Lab Sample ID:	240-157760-2		
Client ID:	SL-15_100721				
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

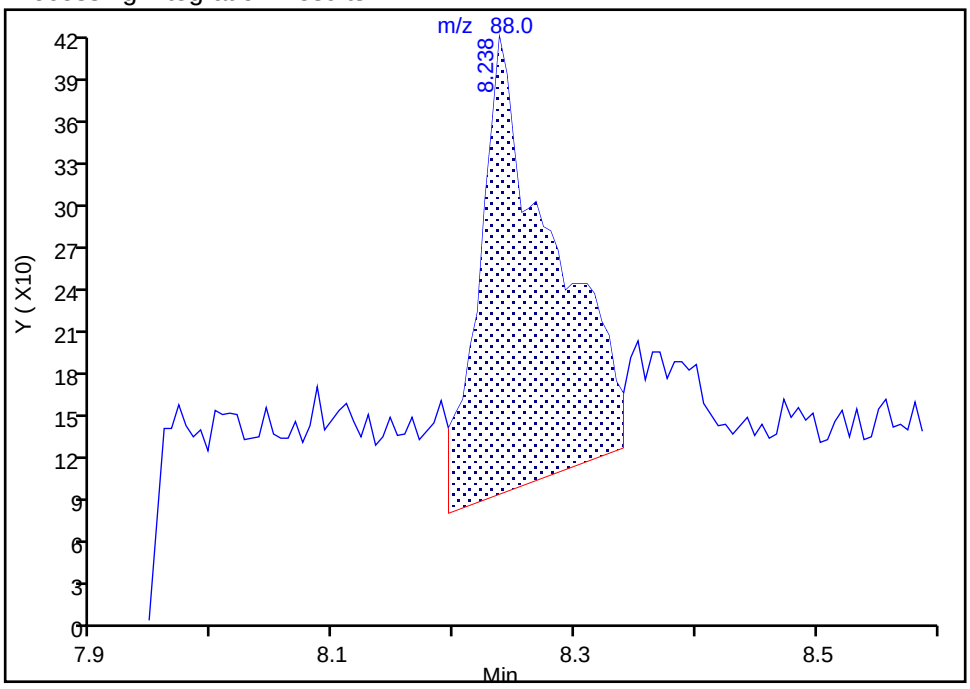
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201906.D				
Injection Date:	11-Oct-2021 21:31:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-2	Lab Sample ID:	240-157760-2		
Client ID:	SL-15_100721				
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

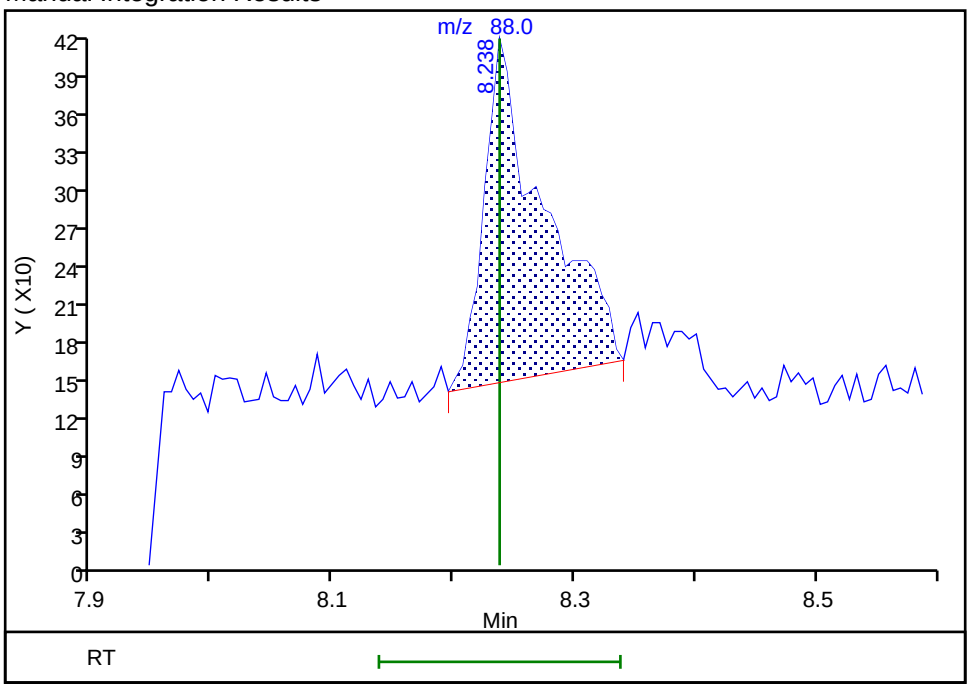
Processing Integration Results

RT: 8.24
Area: 1389
Amount: 1.875111
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 936
Amount: 1.263574
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:55:09

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-14_100721 Lab Sample ID: 240-157760-3

Matrix: Water Lab File ID: 201907.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 10:10

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 21:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201907.D				
Lims ID:	240-157760-B-3				
Client ID:	SL-14_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 21:55:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:16		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	763462	8.09	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2954307	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	81311	200.0	
8 1,4-Dioxane	88	8.232	8.238	-0.006	35	383	0.5771	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

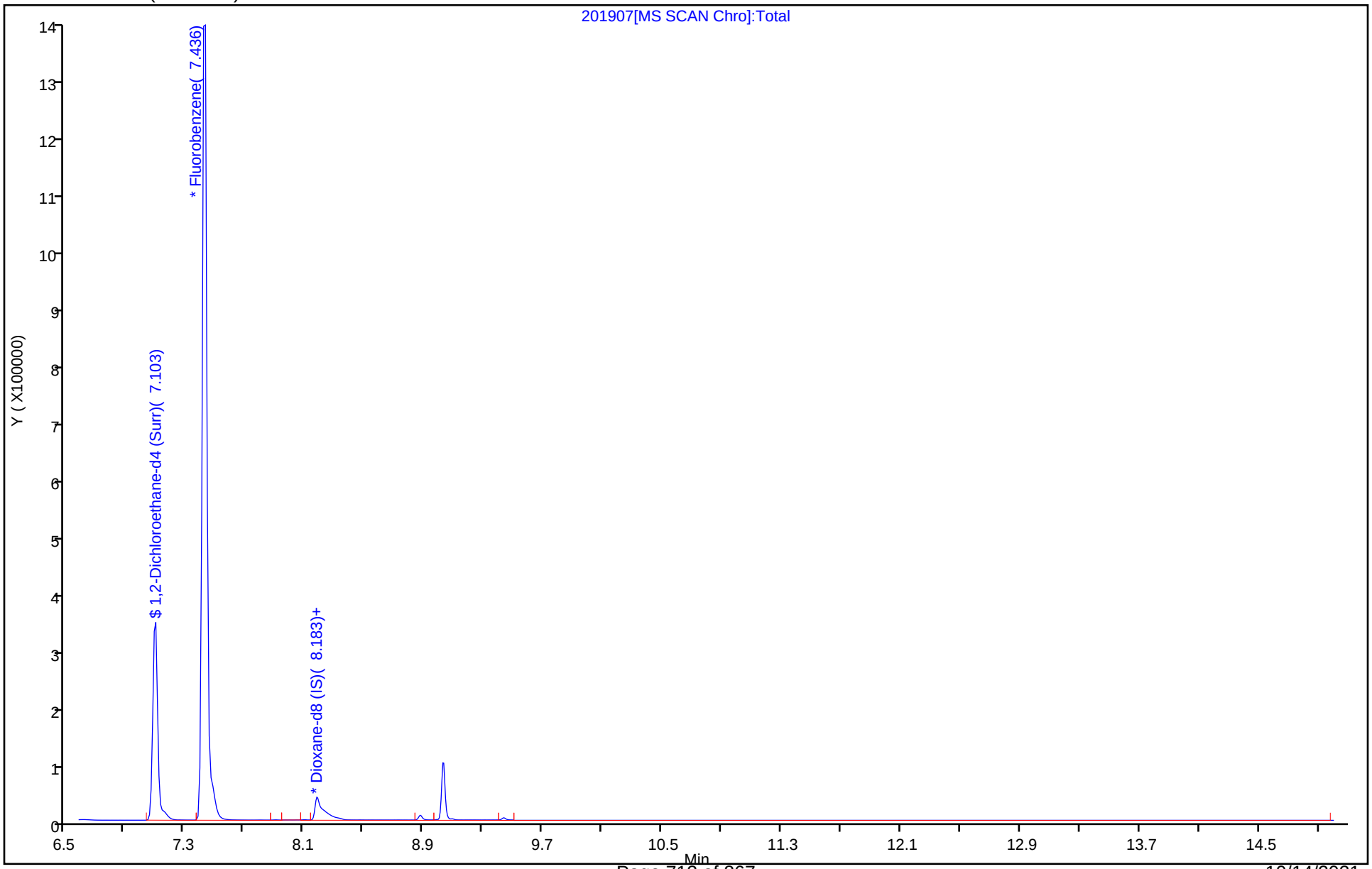
Report Date: 12-Oct-2021 12:19:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201907.D

Injection Date:	11-Oct-2021 21:55:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-3	Lab Sample ID:	240-157760-3	Worklist Smp#:	9
Client ID:	SL-14_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201907.D				
Lims ID:	240-157760-B-3				
Client ID:	SL-14_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 21:55:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.09	80.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-13_100721 Lab Sample ID: 240-157760-4

Matrix: Water Lab File ID: 201908.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 10:30

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 22:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.1	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201908.D				
Lims ID:	240-157760-B-4				
Client ID:	SL-13_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 22:18:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:20		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	788236	8.09	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	3049401	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	95	90323	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	25	803	1.09	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

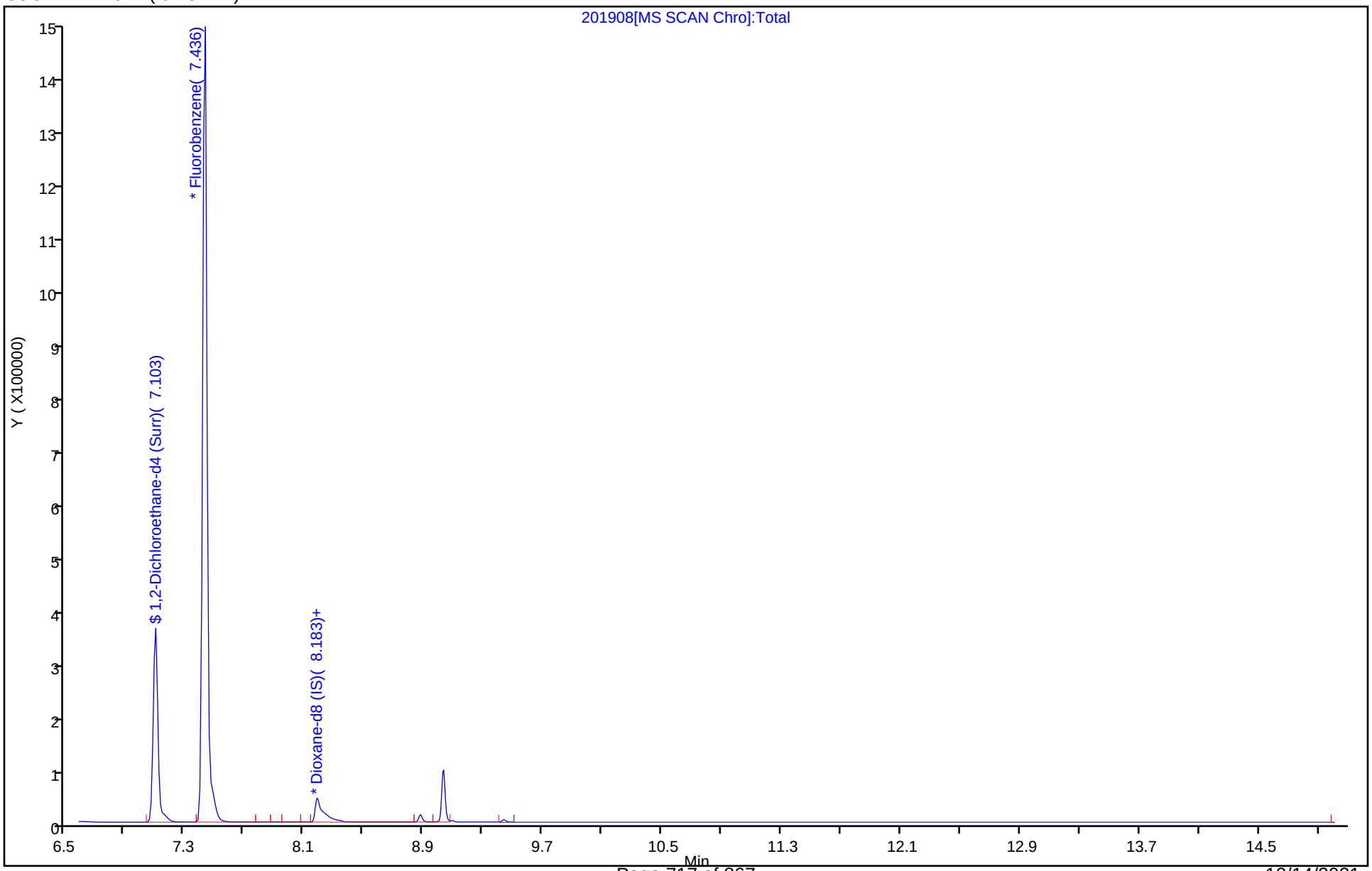
Report Date: 12-Oct-2021 12:19:30 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201908.D

Injection Date:	11-Oct-2021 22:18:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-4	Lab Sample ID:	240-157760-4	Worklist Smp#:	10
Client ID:	SL-13_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201908.D				
Lims ID:	240-157760-B-4				
Client ID:	SL-13_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 22:18:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

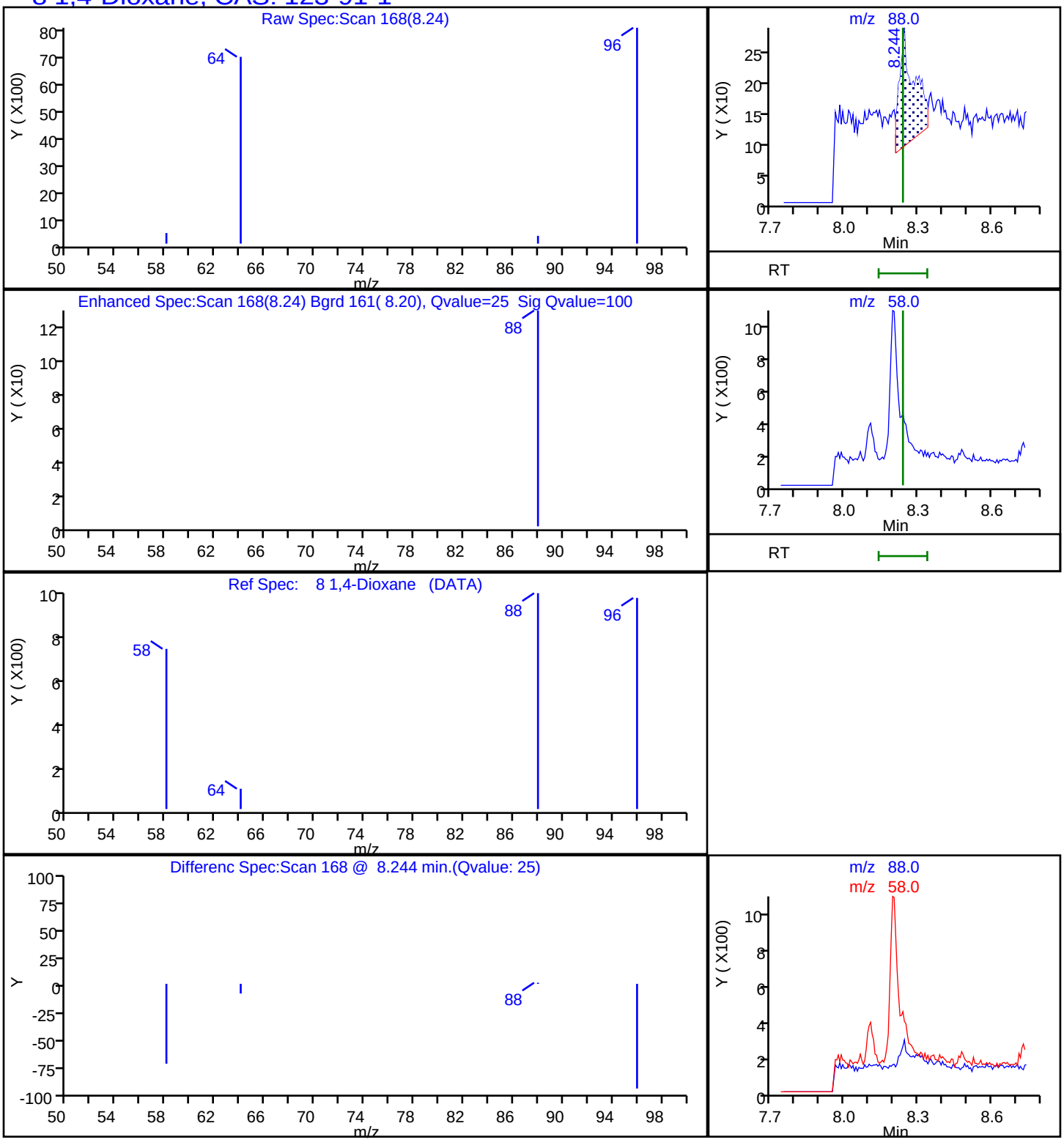
First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.09	80.94

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201908.D				
Injection Date:	11-Oct-2021 22:18:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-4	Lab Sample ID:	240-157760-4		
Client ID:	SL-13_100721				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-7_100721 Lab Sample ID: 240-157760-5

Matrix: Water Lab File ID: 201909.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 10:50

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 22:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201909.D				
Lims ID:	240-157760-B-5				
Client ID:	SL-7_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 22:42:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:25		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	734200	7.96	
* 7 Fluorobenzene	96	7.423	7.424	-0.001	100	2886618	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	89097	200.0	
8 1,4-Dioxane	88	8.231	8.238	-0.007	14	691	0.9503	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

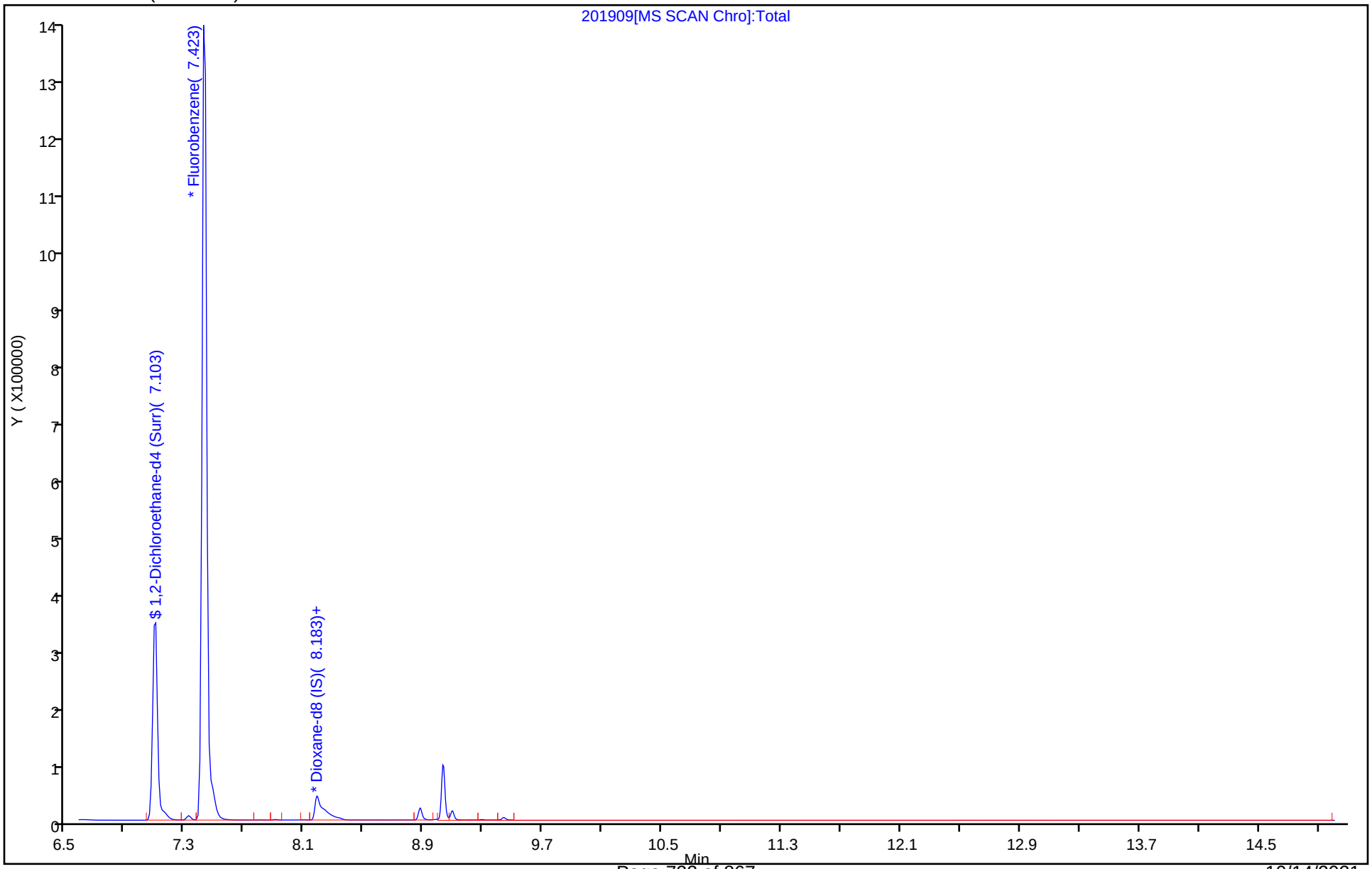
Report Date: 12-Oct-2021 12:19:32 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201909.D

Injection Date:	11-Oct-2021 22:42:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-5	Lab Sample ID:	240-157760-5	Worklist Smp#:	11
Client ID:	SL-7_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201909.D				
Lims ID:	240-157760-B-5				
Client ID:	SL-7_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 22:42:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:25

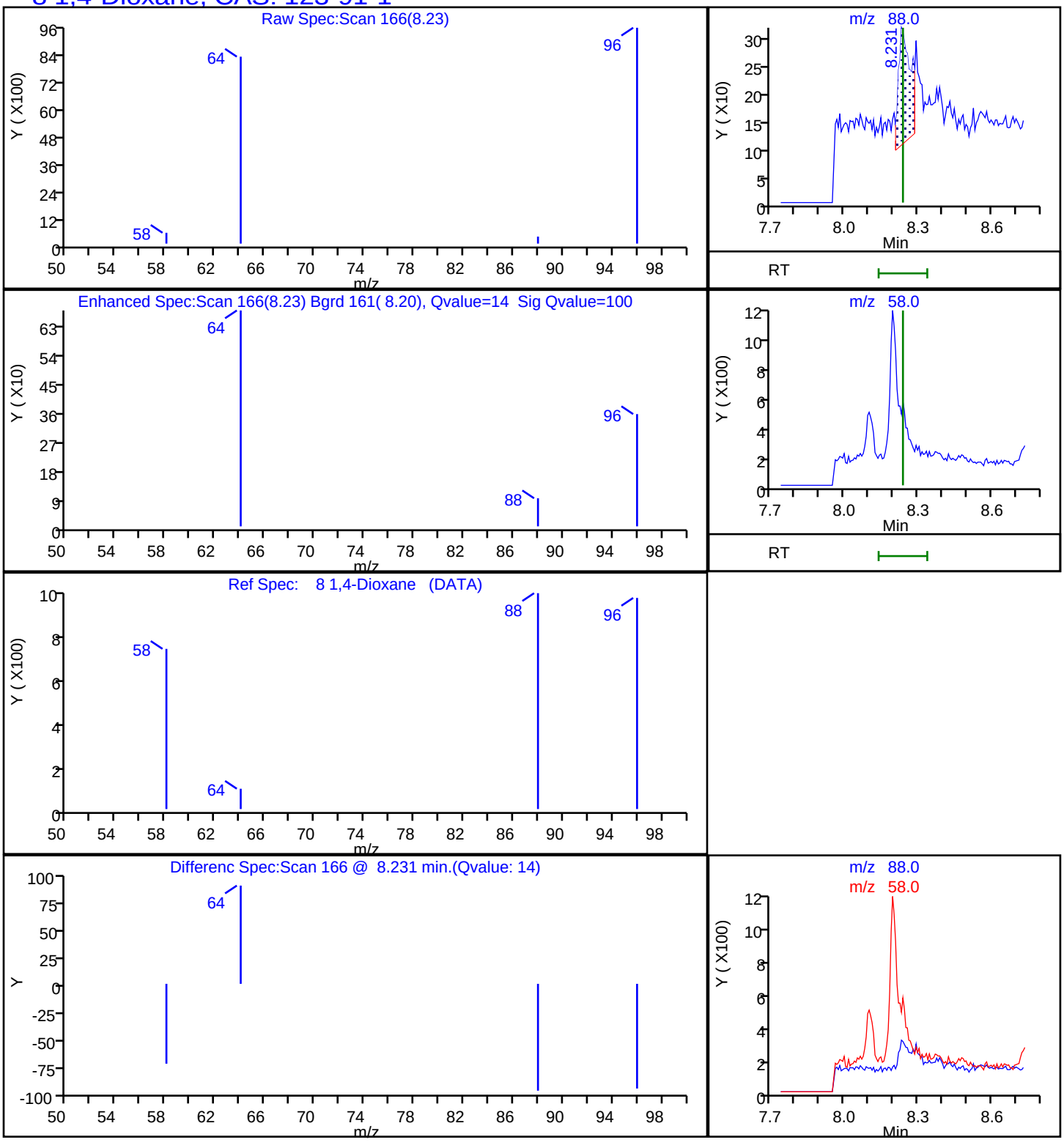
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.96	79.65

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201909.D

Injection Date:	11-Oct-2021 22:42:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-5	Lab Sample ID:	240-157760-5		
Client ID:	SL-7_100721				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-6_100721 Lab Sample ID: 240-157760-6

Matrix: Water Lab File ID: 201910.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 11:05

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 23:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.92	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201910.D				
Lims ID:	240-157760-B-6				
Client ID:	SL-6_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 23:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	754705	7.95	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2972135	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	95	85297	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	25	637	0.9150	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

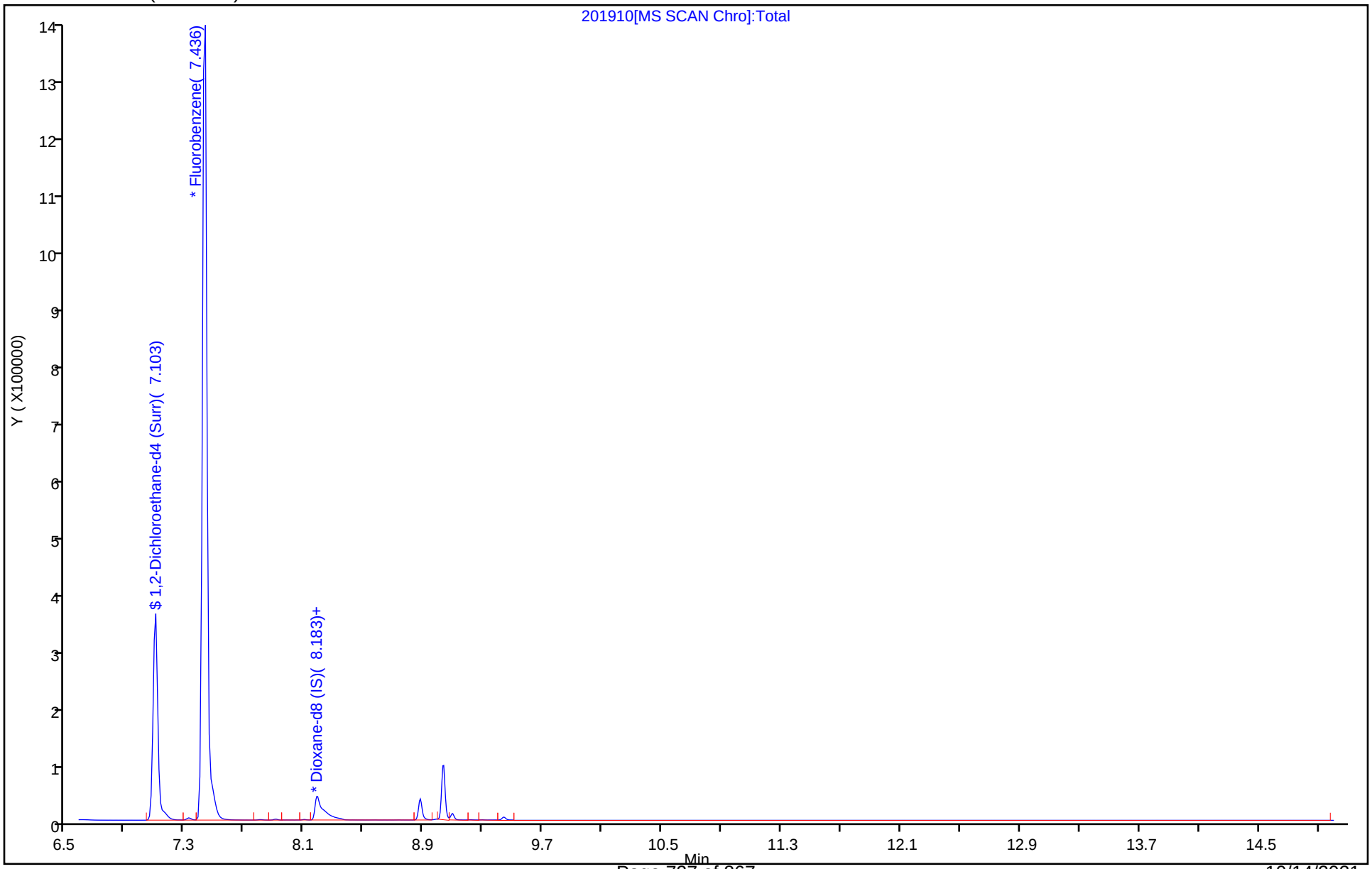
Report Date: 12-Oct-2021 12:19:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201910.D

Injection Date:	11-Oct-2021 23:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-6	Lab Sample ID:	240-157760-6	Worklist Smp#:	12
Client ID:	SL-6_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201910.D				
Lims ID:	240-157760-B-6				
Client ID:	SL-6_100721				
Sample Type:	Client				
Inject. Date:	11-Oct-2021 23:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:32

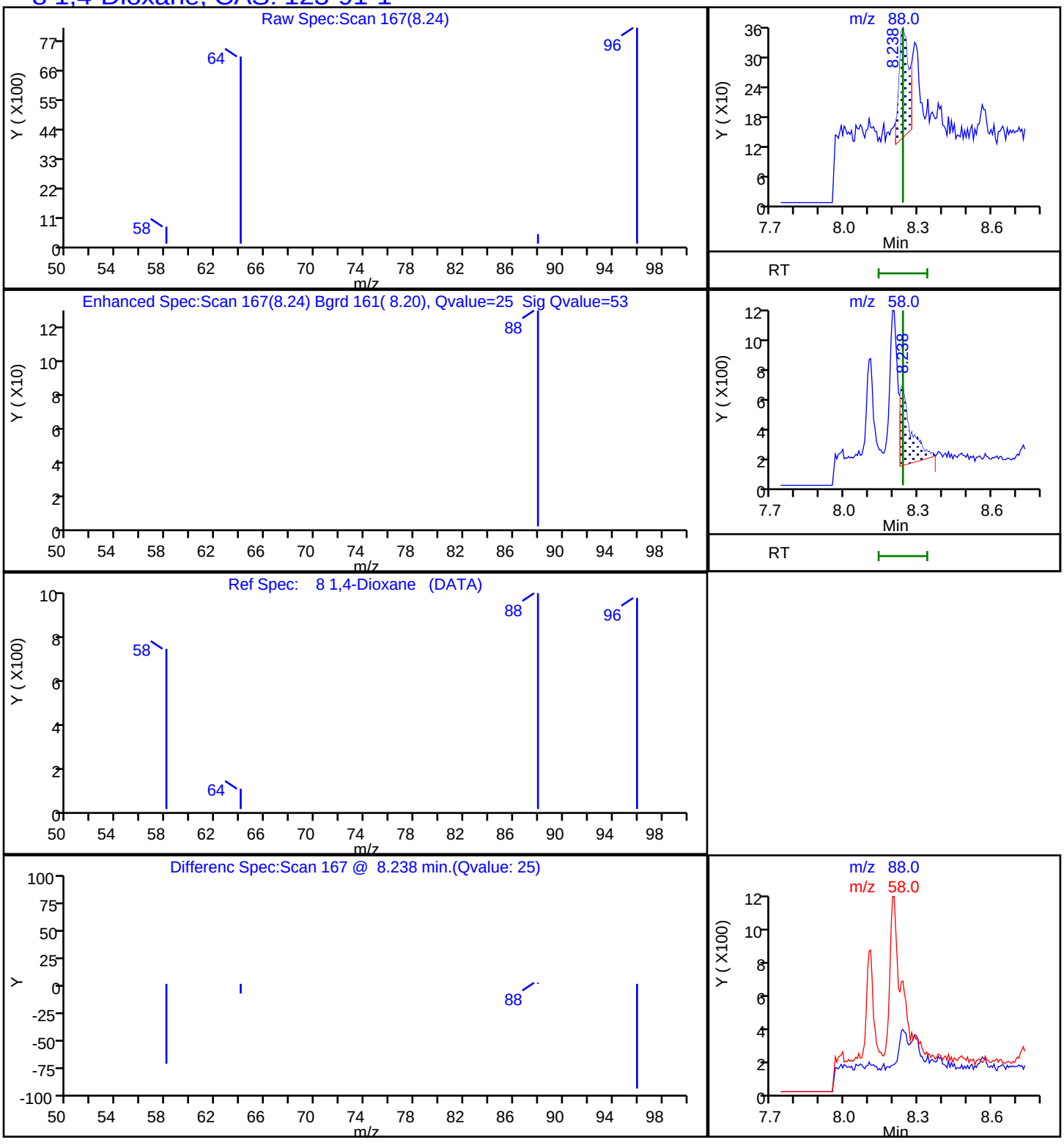
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.95	79.51

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201910.D

Injection Date:	11-Oct-2021 23:06:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-6	Lab Sample ID:	240-157760-6		
Client ID:	SL-6_100721				
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-5_100721 Lab Sample ID: 240-157760-7

Matrix: Water Lab File ID: 201914.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 12:15

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 00:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.9		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201914.D				
Lims ID:	240-157760-B-7				
Client ID:	SL-5_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 00:42:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:56:25		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	759539	8.09	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2941159	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	90316	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	35	2138	2.90	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

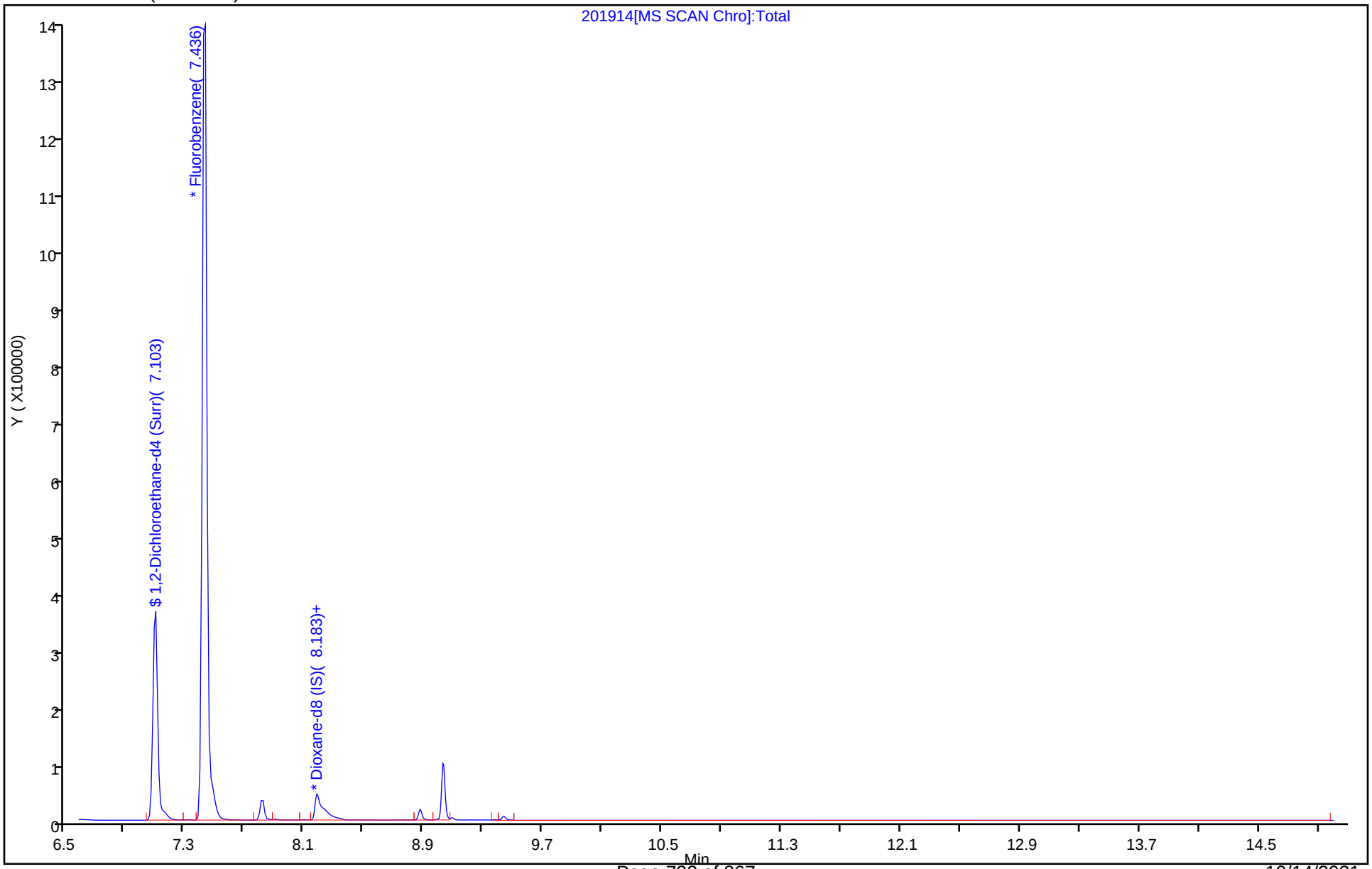
Report Date: 12-Oct-2021 12:19:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201914.D

Injection Date:	12-Oct-2021 00:42:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-7	Lab Sample ID:	240-157760-7	Worklist Smp#:	16
Client ID:	SL-5_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201914.D				
Lims ID:	240-157760-B-7				
Client ID:	SL-5_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 00:42:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:56:25

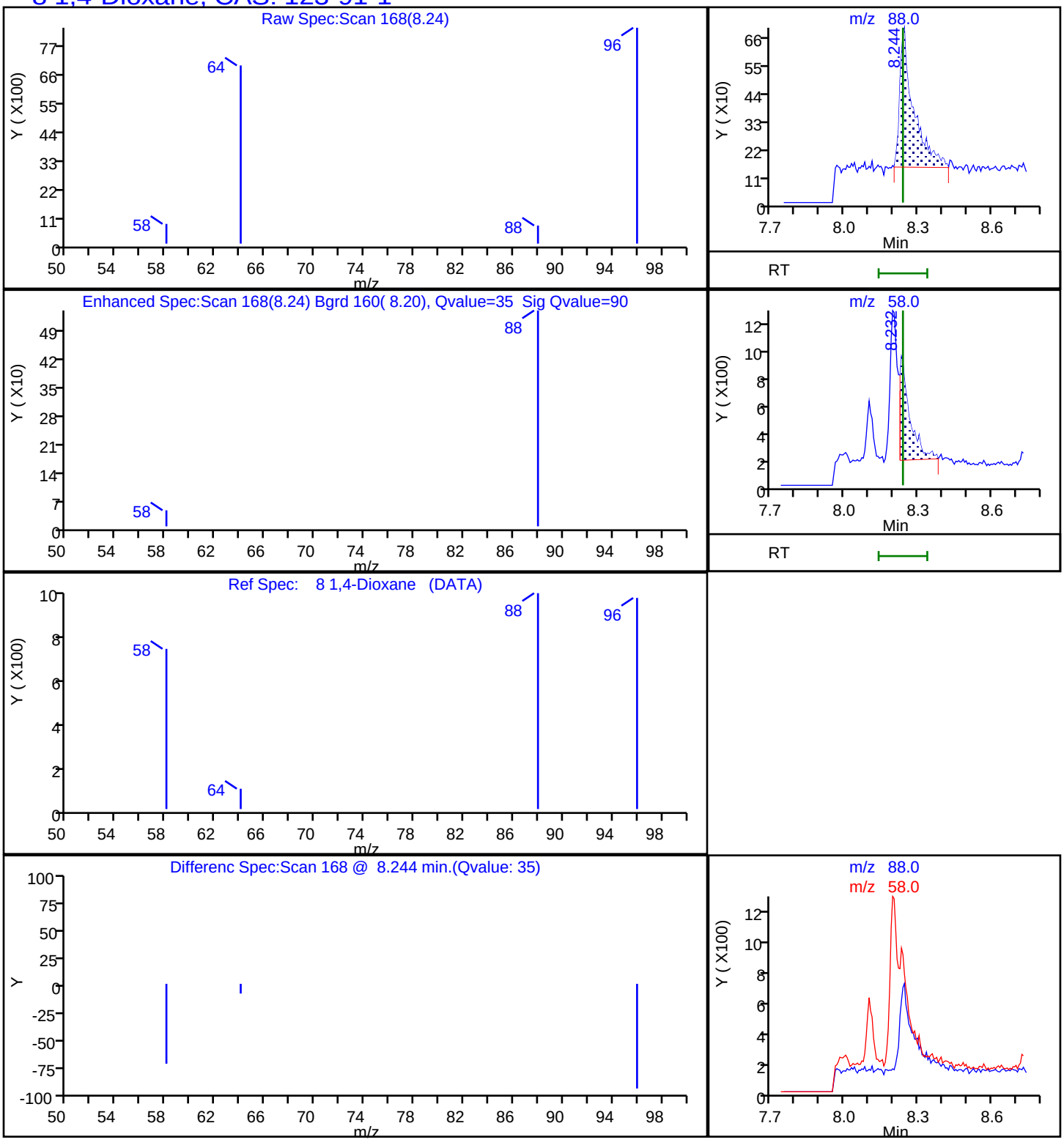
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.09	80.87

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201914.D

Injection Date:	12-Oct-2021 00:42:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-7	Lab Sample ID:	240-157760-7		
Client ID:	SL-5_100721				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

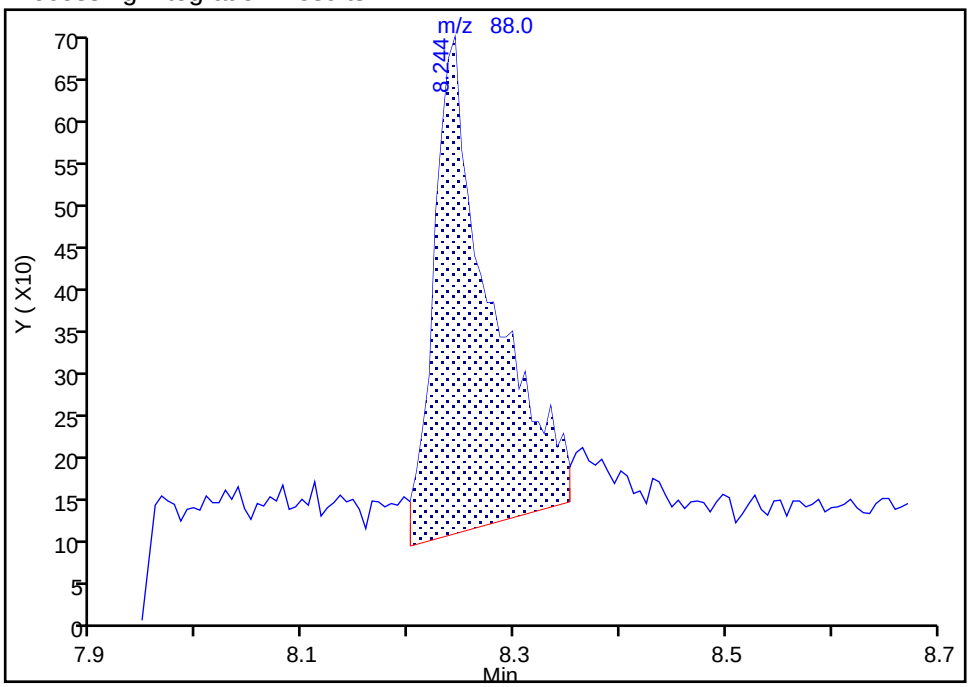
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201914.D				
Injection Date:	12-Oct-2021 00:42:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-7	Lab Sample ID:	240-157760-7		
Client ID:	SL-5_100721				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

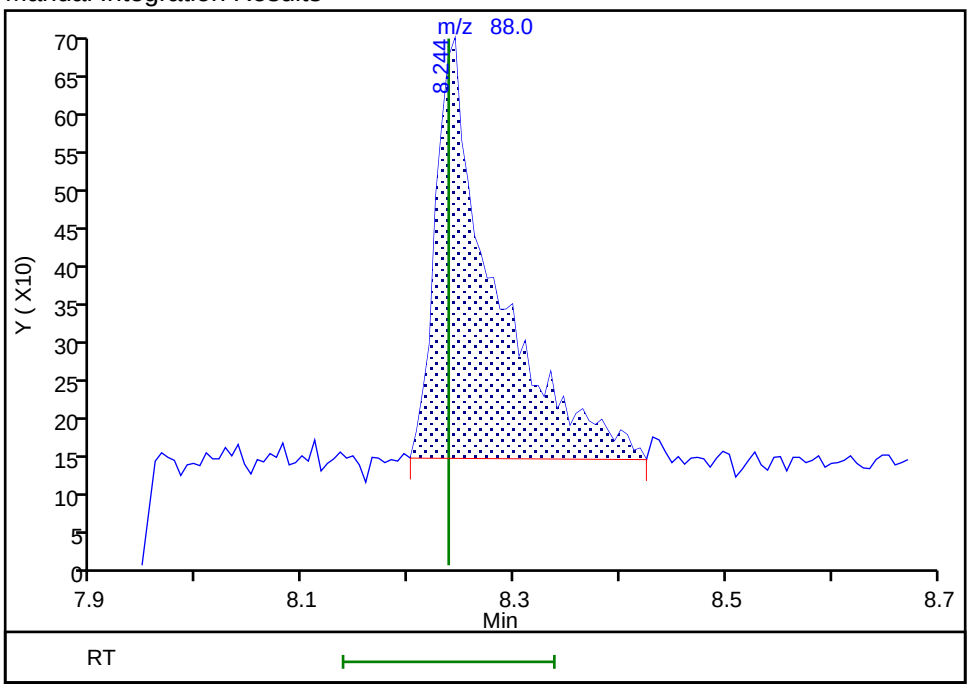
Processing Integration Results

RT: 8.24
Area: 2223
Amount: 3.015807
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2138
Amount: 2.900492
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:56:21

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-8_100721 Lab Sample ID: 240-157760-8

Matrix: Water Lab File ID: 201915.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 12:45

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 01:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.8		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201915.D				
Lims ID:	240-157760-B-8				
Client ID:	SL-8_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:05:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:57:08		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	780388	8.19	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2982458	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	89846	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	51	3523	4.80	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

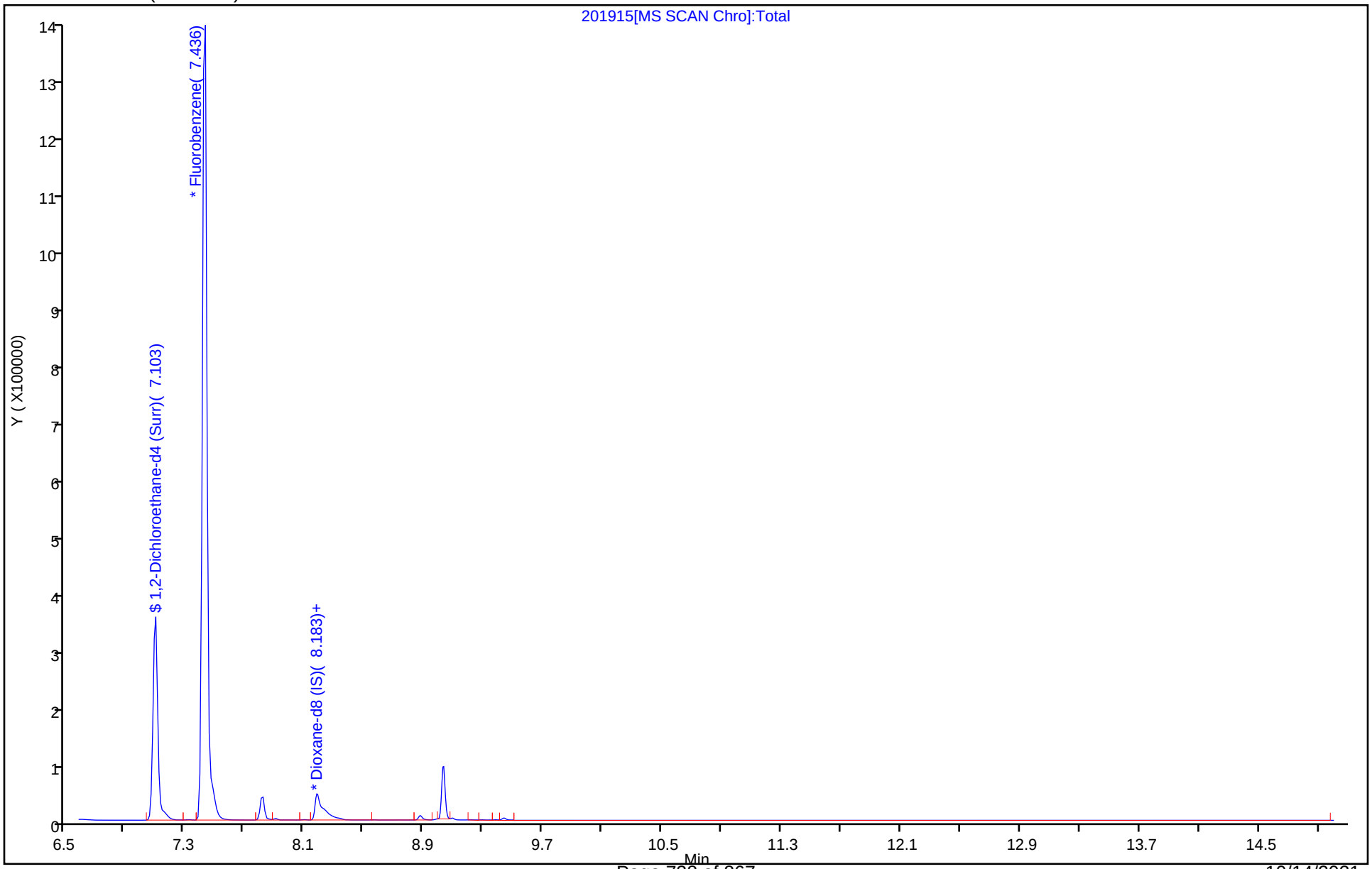
Report Date: 12-Oct-2021 12:19:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201915.D

Injection Date:	12-Oct-2021 01:05:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-8	Lab Sample ID:	240-157760-8	Worklist Smp#:	17
Client ID:	SL-8_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201915.D				
Lims ID:	240-157760-B-8				
Client ID:	SL-8_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:05:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:57:08

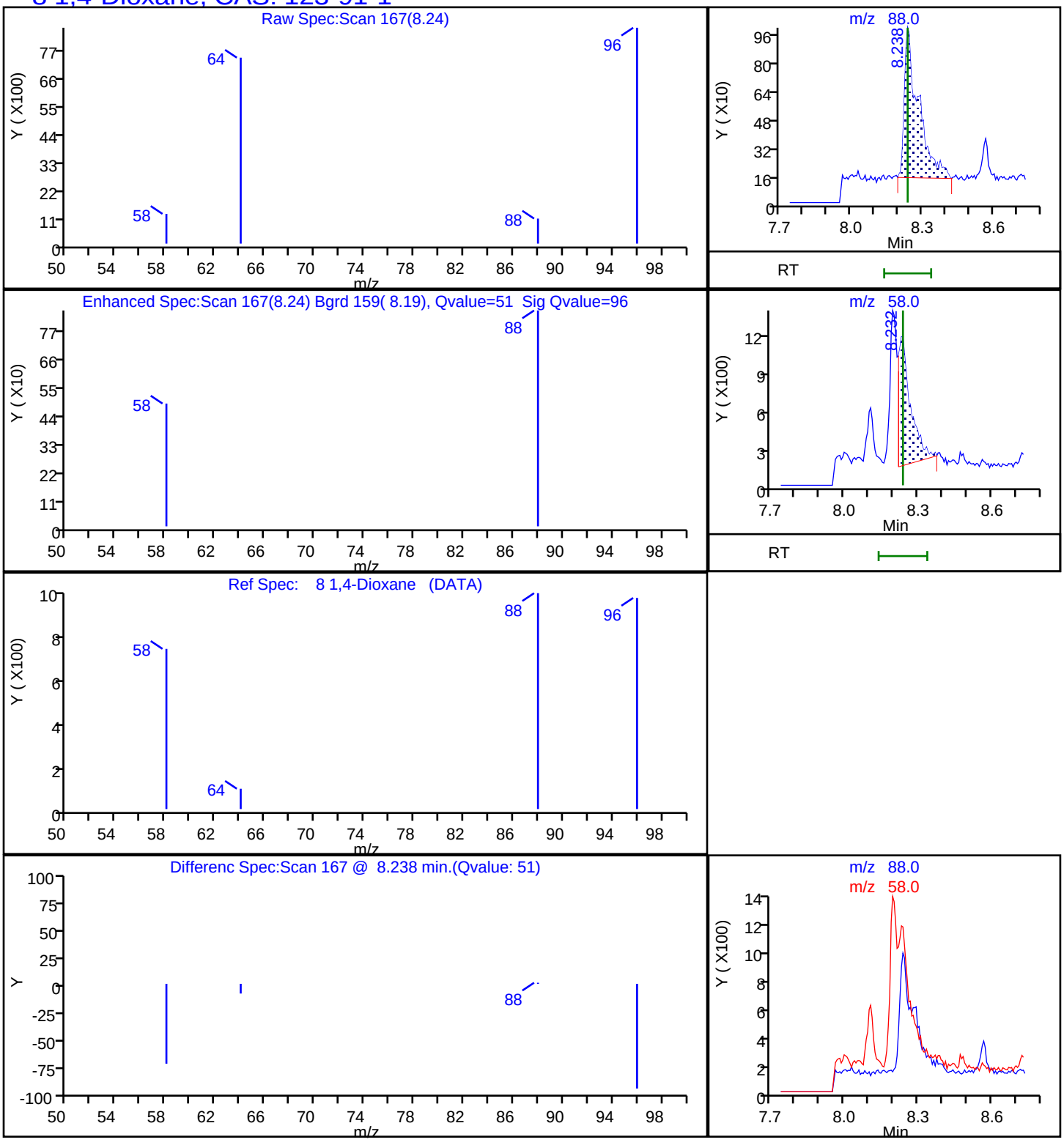
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.19	81.94

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201915.D

Injection Date:	12-Oct-2021 01:05:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-8	Lab Sample ID:	240-157760-8		
Client ID:	SL-8_100721				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

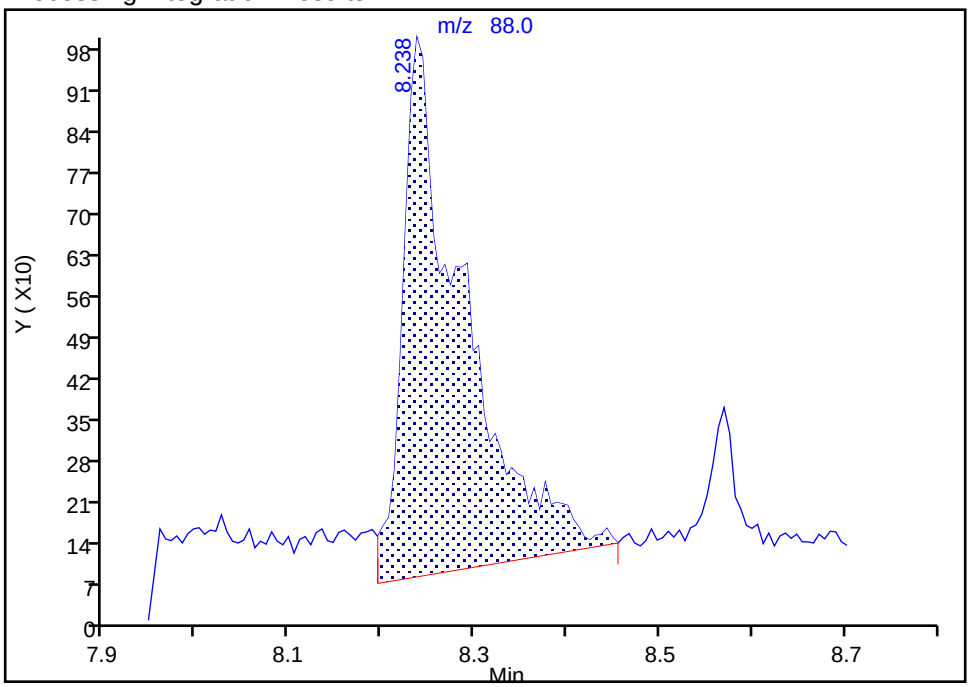
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201915.D				
Injection Date:	12-Oct-2021 01:05:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-8	Lab Sample ID:	240-157760-8		
Client ID:	SL-8_100721				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

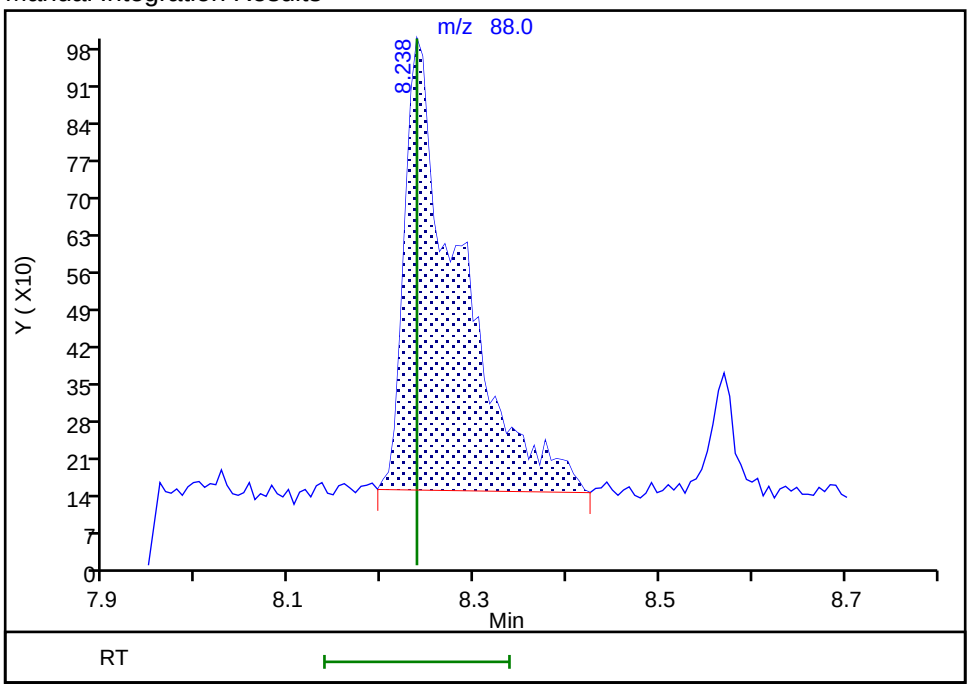
Processing Integration Results

RT: 8.24
Area: 4208
Amount: 5.738597
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 3523
Amount: 4.804438
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:57:19

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-9_100721 Lab Sample ID: 240-157760-9

Matrix: Water Lab File ID: 201916.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 13:00

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 01:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201916.D				
Lims ID:	240-157760-B-9				
Client ID:	SL-9_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:29:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:57:25		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	710533	7.80	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2854206	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	82065	200.0	
8 1,4-Dioxane	88	8.232	8.238	-0.006	25	404	0.6032	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

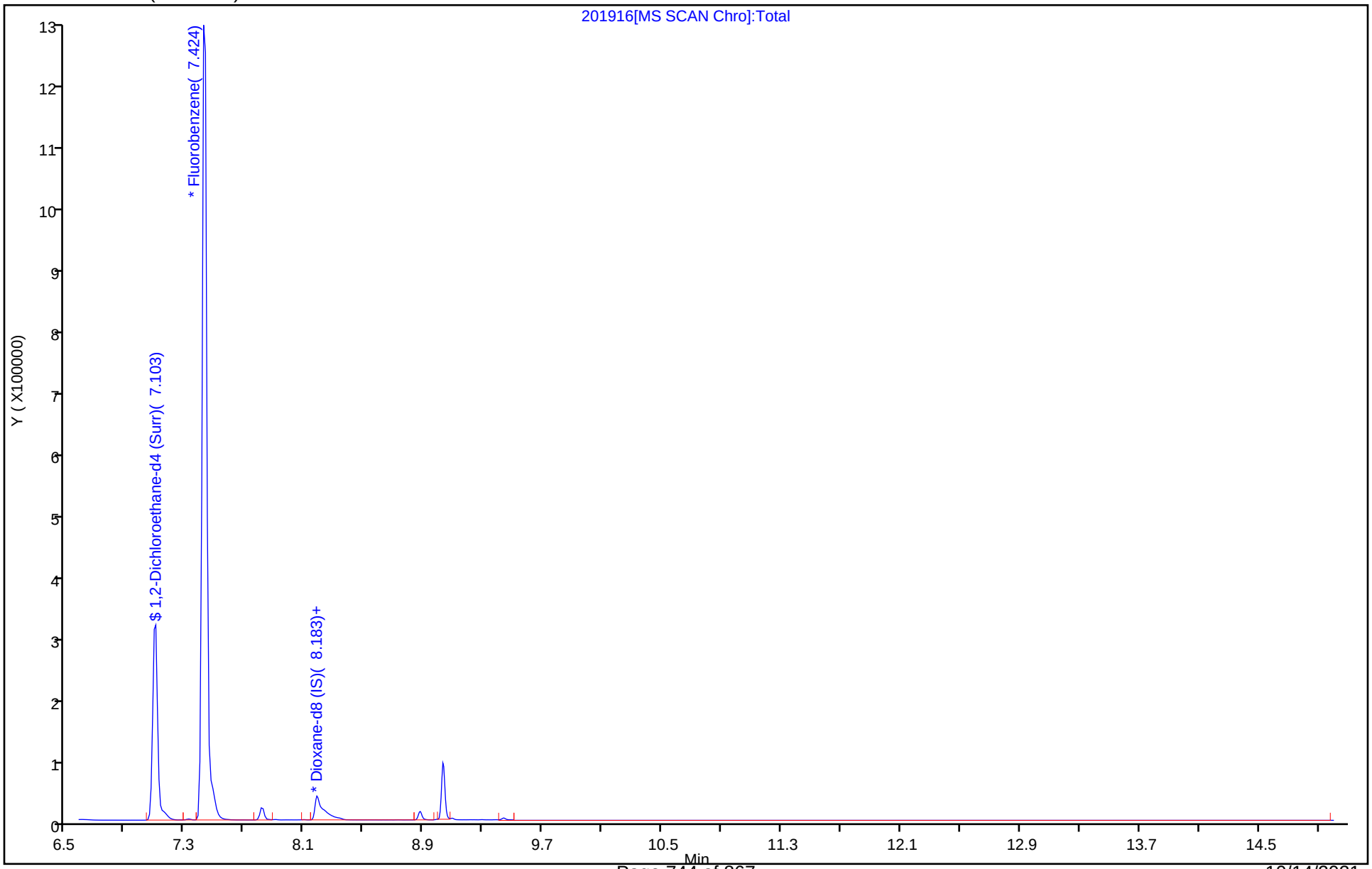
Report Date: 12-Oct-2021 12:19:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201916.D

Injection Date:	12-Oct-2021 01:29:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-9	Lab Sample ID:	240-157760-9	Worklist Smp#:	18
Client ID:	SL-9_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201916.D				
Lims ID:	240-157760-B-9				
Client ID:	SL-9_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:29:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:57:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.80	77.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-10_100721 Lab Sample ID: 240-157760-10

Matrix: Water Lab File ID: 201917.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 13:25

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 01:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201917.D				
Lims ID:	240-157760-B-10				
Client ID:	SL-10_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:53:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:57:41		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	789899	8.42	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2936368	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	86146	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	59	1885	2.68	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

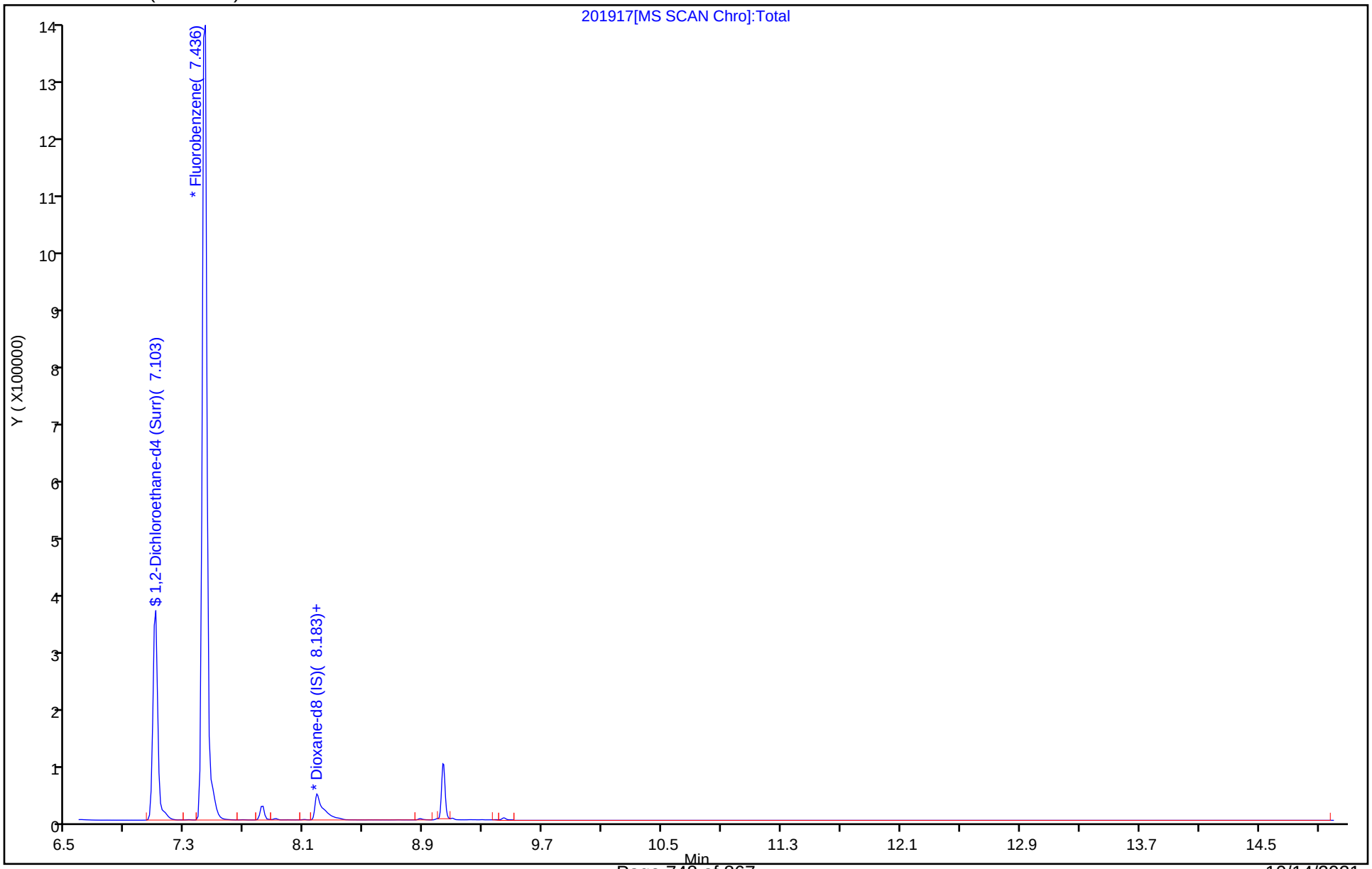
Report Date: 12-Oct-2021 12:19:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201917.D

Injection Date:	12-Oct-2021 01:53:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-10	Lab Sample ID:	240-157760-10	Worklist Smp#:	19
Client ID:	SL-10_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201917.D				
Lims ID:	240-157760-B-10				
Client ID:	SL-10_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 01:53:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:57:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.42	84.24

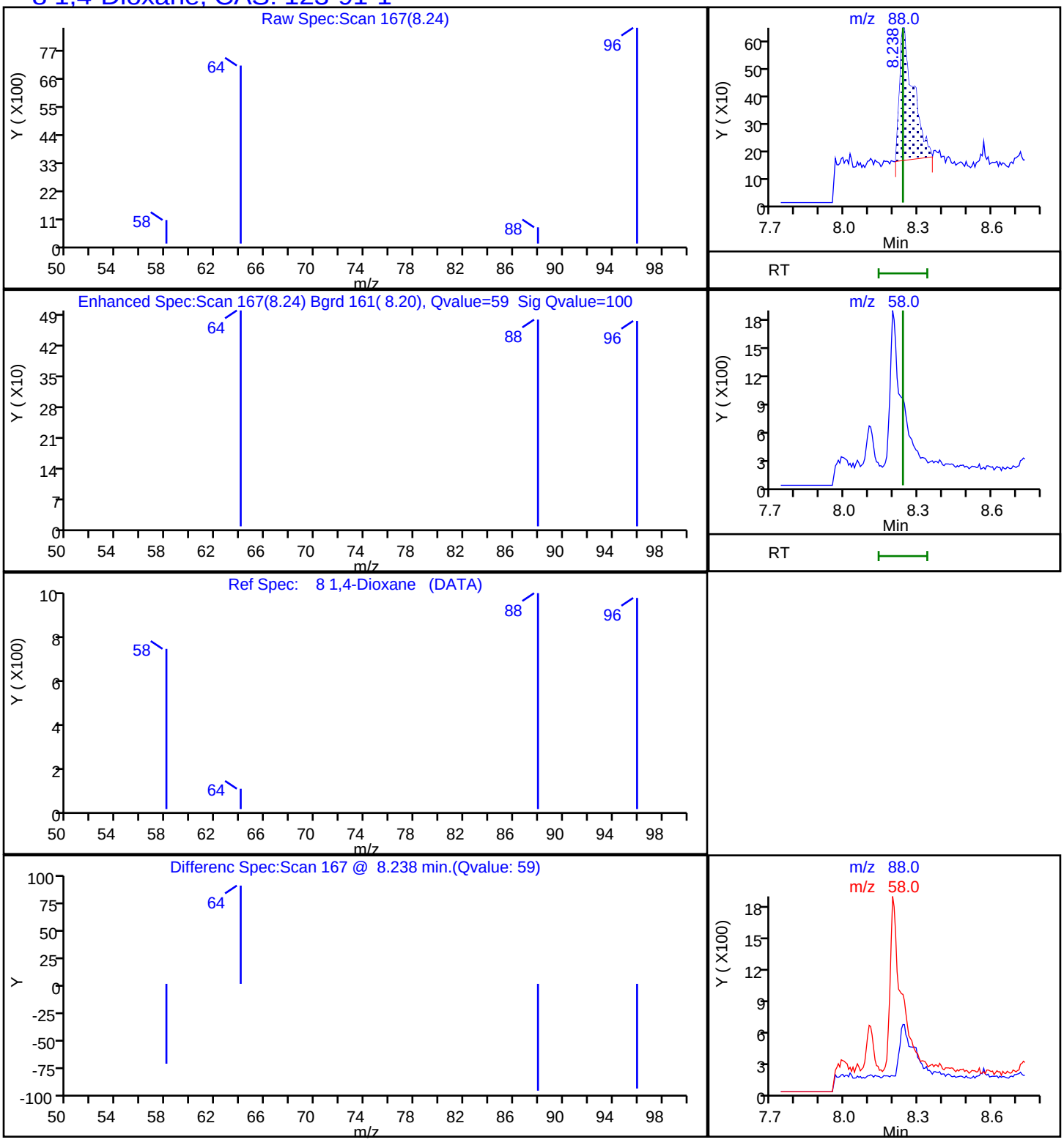
Report Date: 12-Oct-2021 12:19:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201917.D

Injection Date:	12-Oct-2021 01:53:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-10	Lab Sample ID:	240-157760-10		
Client ID:	SL-10_100721				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

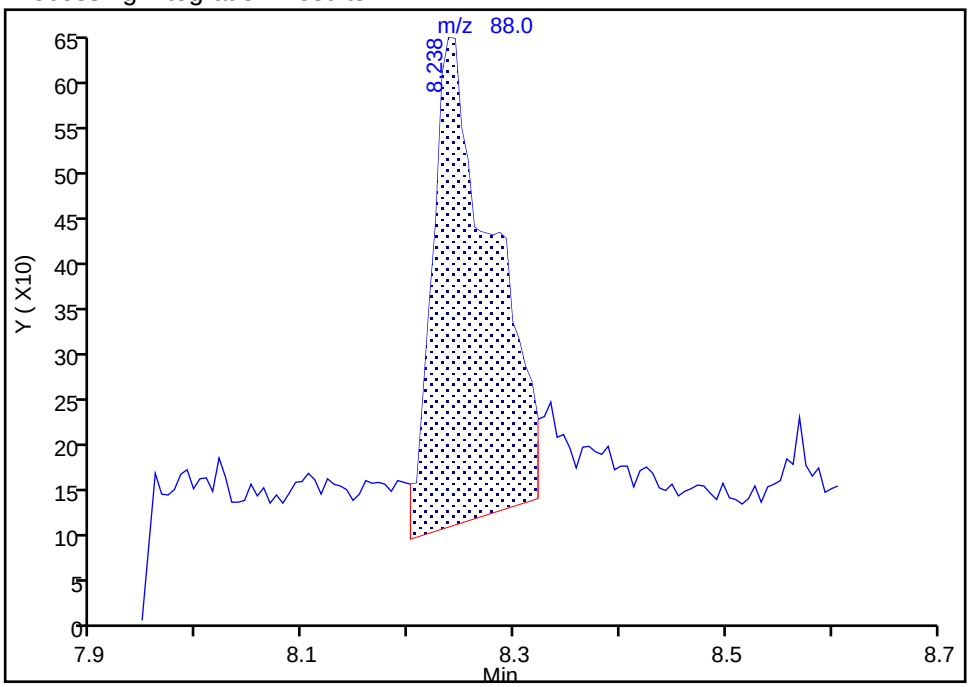
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201917.D				
Injection Date:	12-Oct-2021 01:53:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-10	Lab Sample ID:	240-157760-10		
Client ID:	SL-10_100721				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

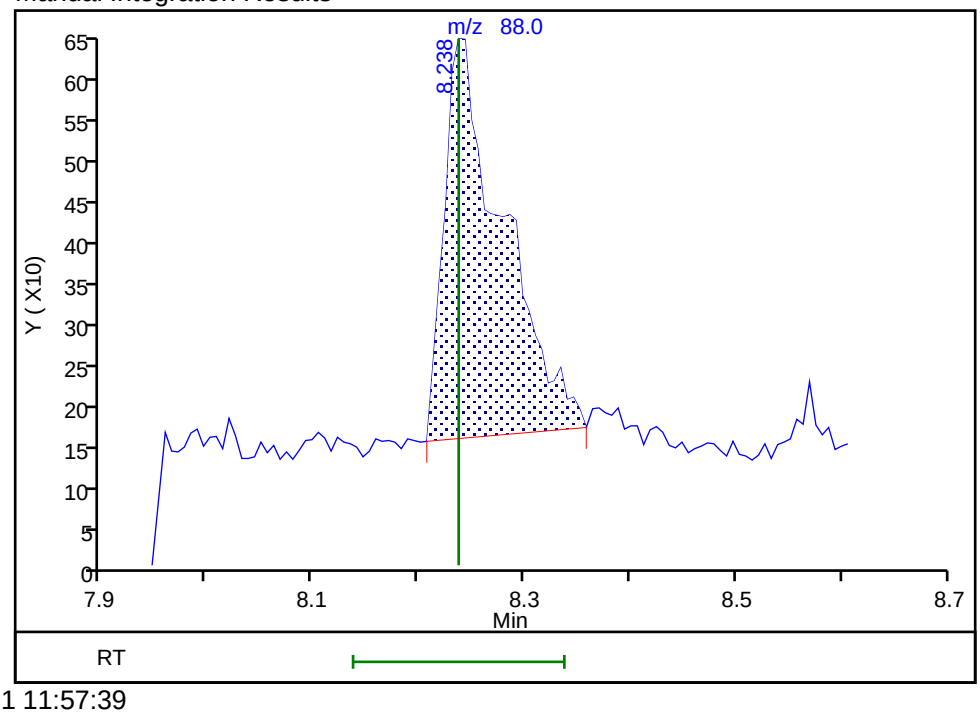
Processing Integration Results

RT: 8.24
Area: 2148
Amount: 3.055117
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1885
Amount: 2.681050
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:57:39

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-11_100721 Lab Sample ID: 240-157760-11

Matrix: Water Lab File ID: 201918.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 13:45

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 02:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201918.D				
Lims ID:	240-157760-B-11				
Client ID:	SL-11_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 02:17:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:58:43		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	772589	8.17	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2960651	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	94	88276	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	53	2238	3.11	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

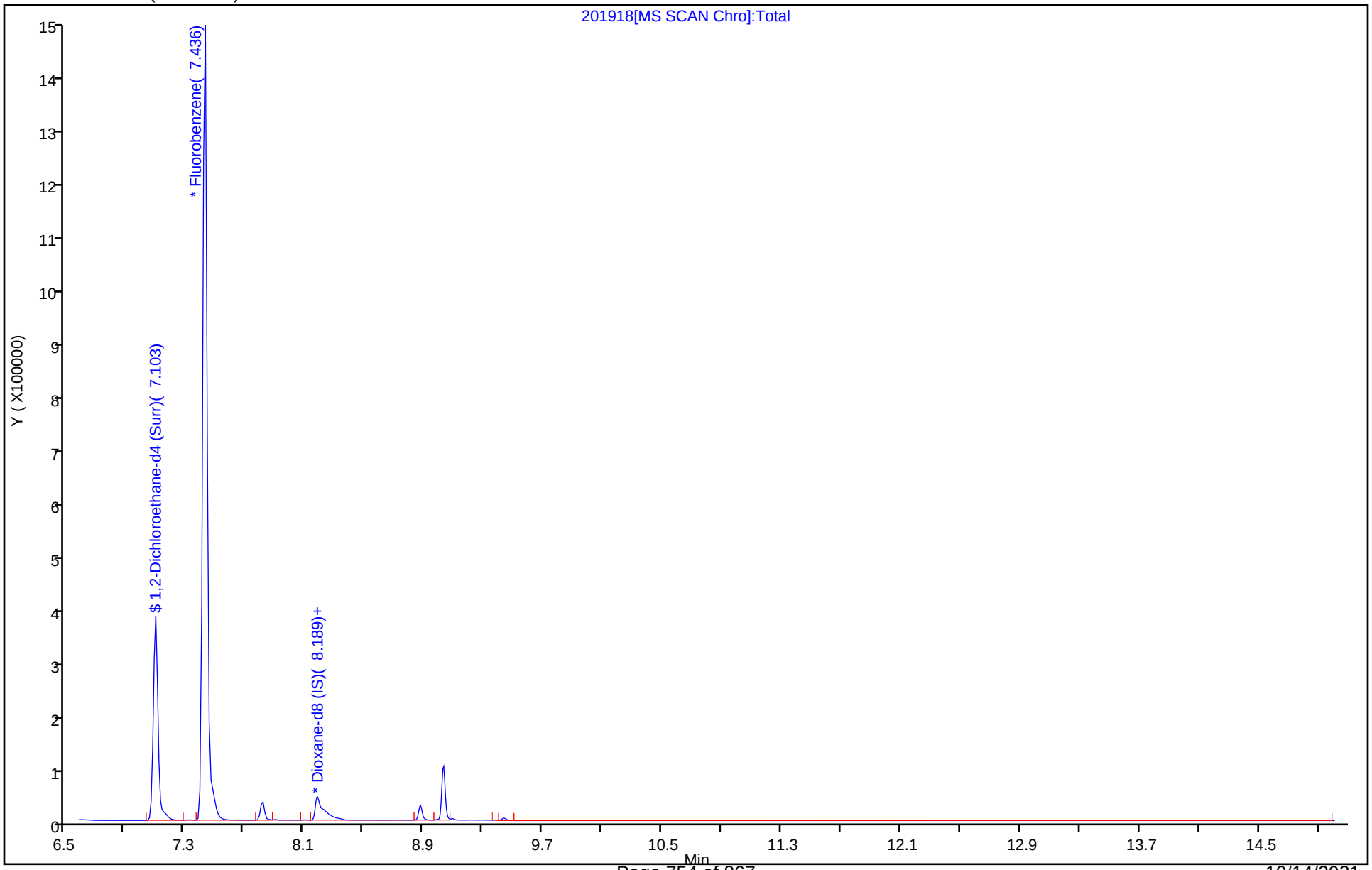
Report Date: 12-Oct-2021 12:19:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201918.D

Injection Date:	12-Oct-2021 02:17:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-11	Lab Sample ID:	240-157760-11	Worklist Smp#:	20
Client ID:	SL-11_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201918.D				
Lims ID:	240-157760-B-11				
Client ID:	SL-11_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 02:17:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:58:43

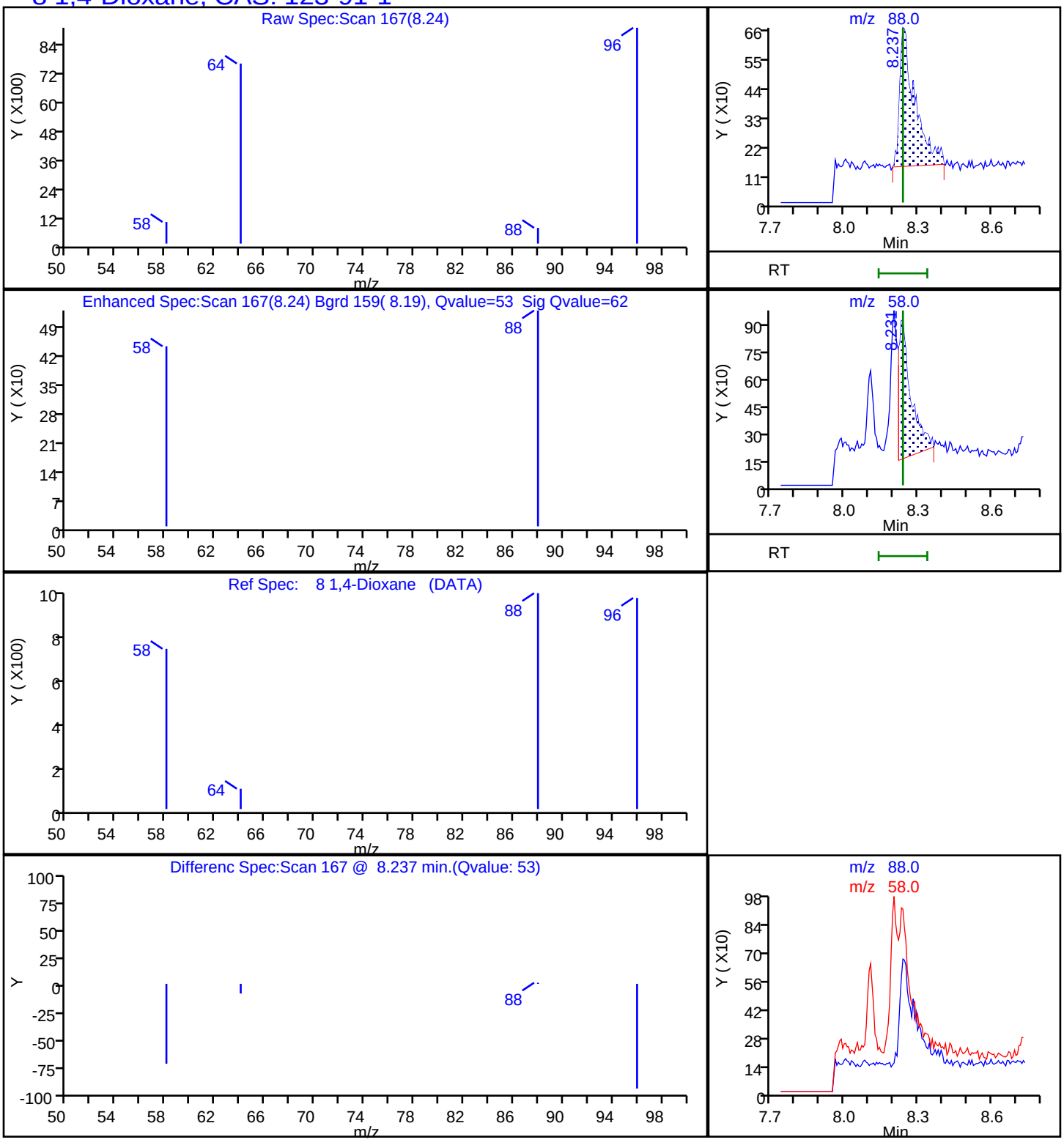
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.17	81.71

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201918.D

Injection Date:	12-Oct-2021 02:17:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-11	Lab Sample ID:	240-157760-11		
Client ID:	SL-11_100721				
Operator ID:	434006	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

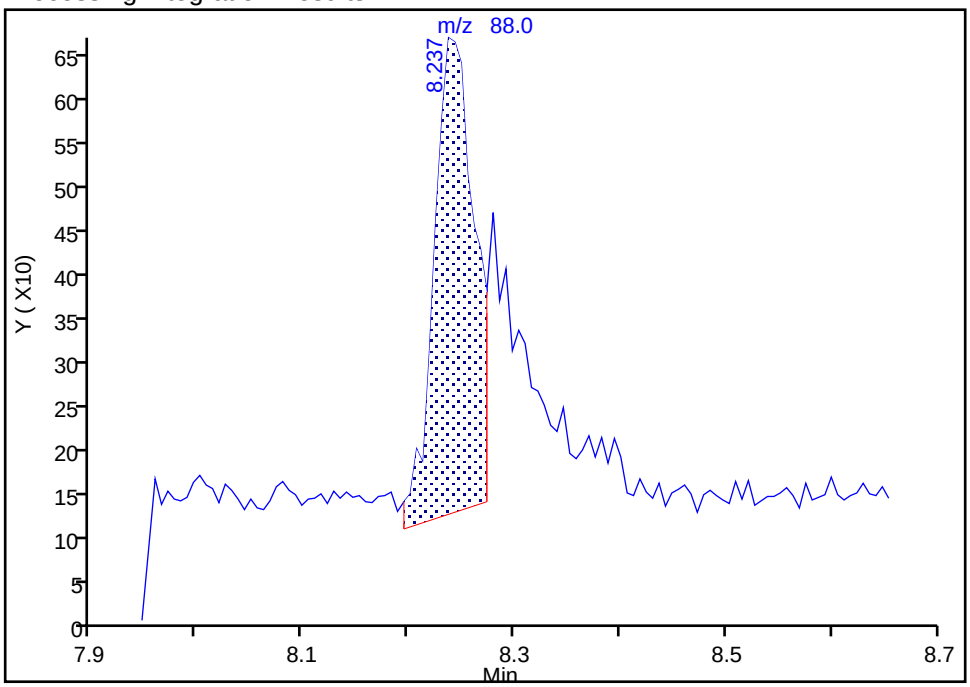
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201918.D				
Injection Date:	12-Oct-2021 02:17:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-11	Lab Sample ID:	240-157760-11		
Client ID:	SL-11_100721				
Operator ID:	434006	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

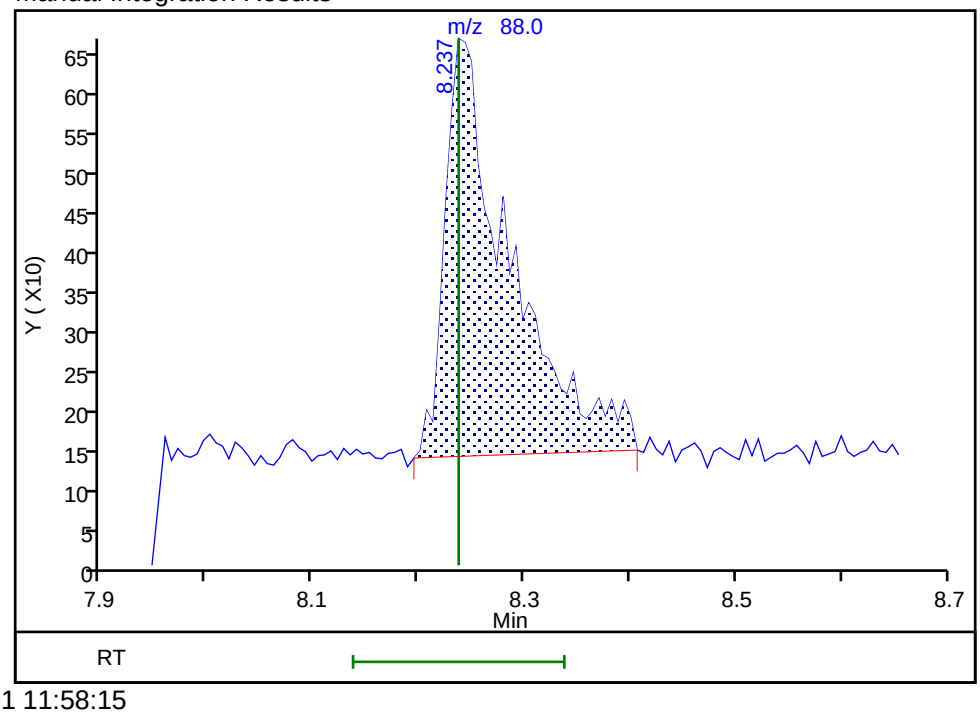
Processing Integration Results

RT: 8.24
Area: 1458
Amount: 2.023688
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2238
Amount: 3.106320
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:58:15

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-12_100721 Lab Sample ID: 240-157760-12

Matrix: Water Lab File ID: 201919.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 14:05

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 02:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.7	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201919.D				
Lims ID:	240-157760-B-12				
Client ID:	SL-12_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 02:41:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:59:05		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	779791	8.31	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2938138	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	88154	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	39	1213	1.69	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

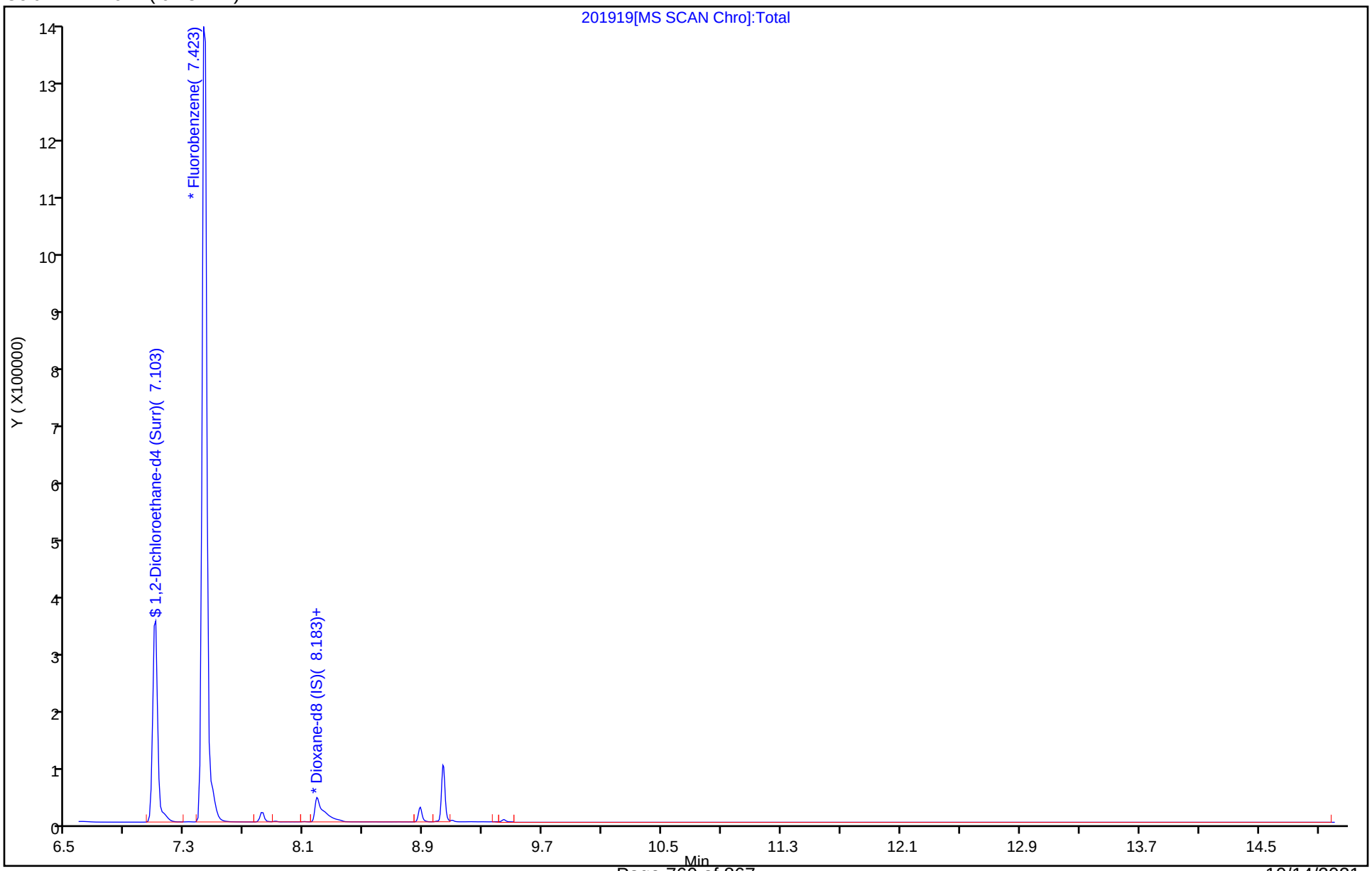
Report Date: 12-Oct-2021 12:19:44 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201919.D

Injection Date:	12-Oct-2021 02:41:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-12	Lab Sample ID:	240-157760-12	Worklist Smp#:	21
Client ID:	SL-12_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201919.D				
Lims ID:	240-157760-B-12				
Client ID:	SL-12_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 02:41:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:59:05

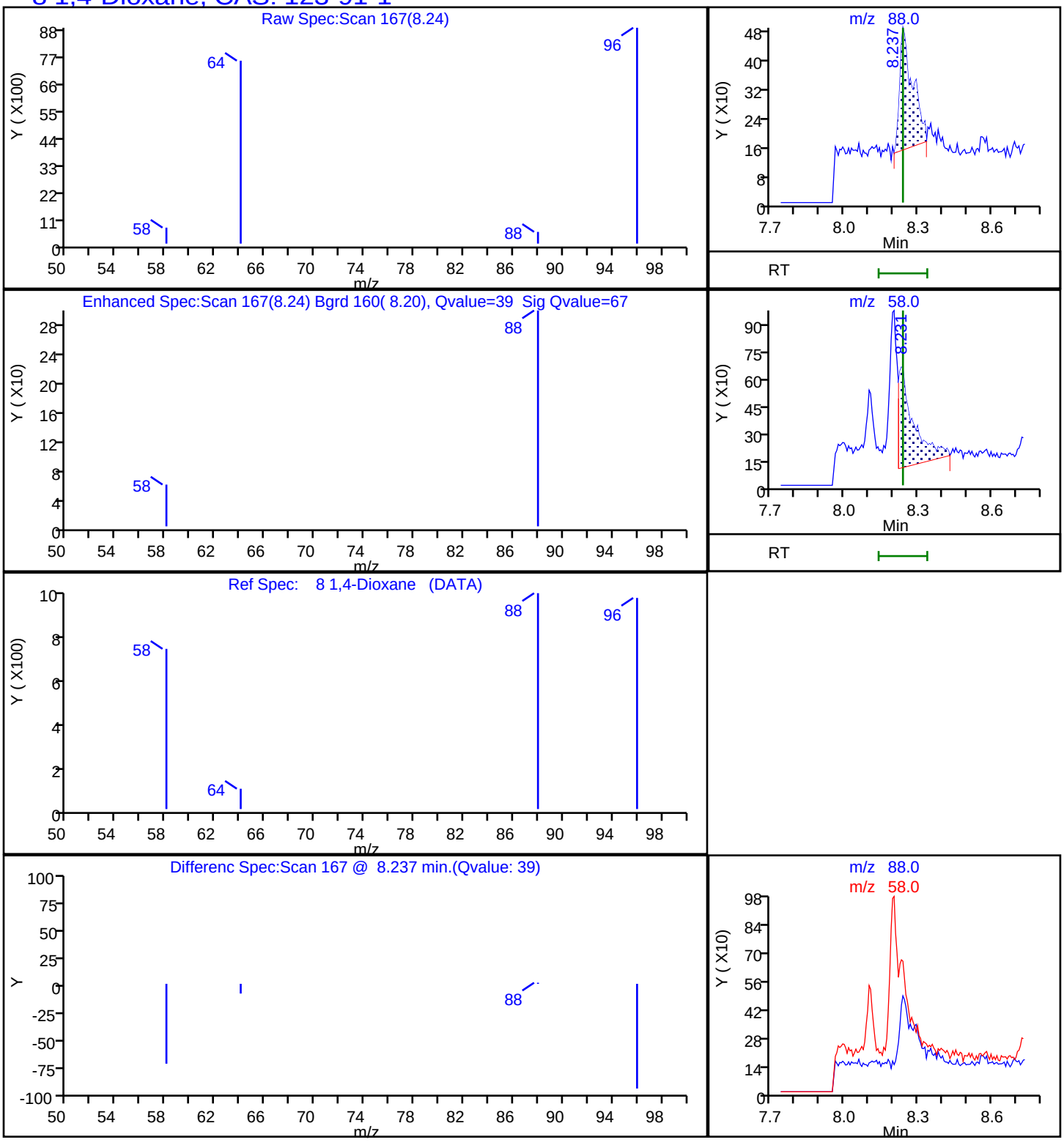
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.31	83.11

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201919.D

Injection Date:	12-Oct-2021 02:41:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-12	Lab Sample ID:	240-157760-12		
Client ID:	SL-12_100721				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

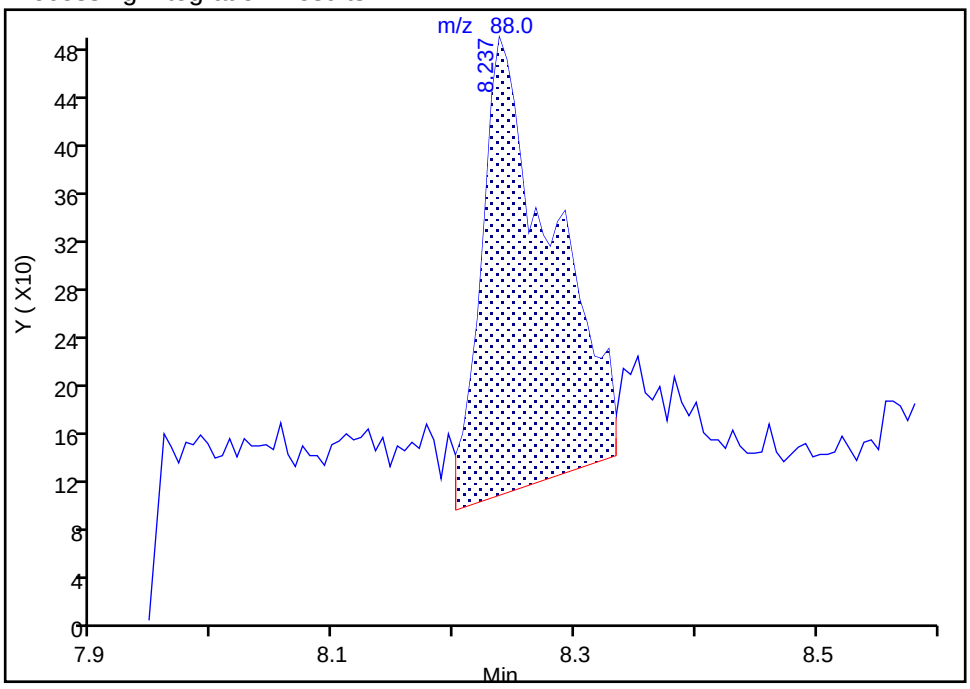
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201919.D				
Injection Date:	12-Oct-2021 02:41:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-12	Lab Sample ID:	240-157760-12		
Client ID:	SL-12_100721				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

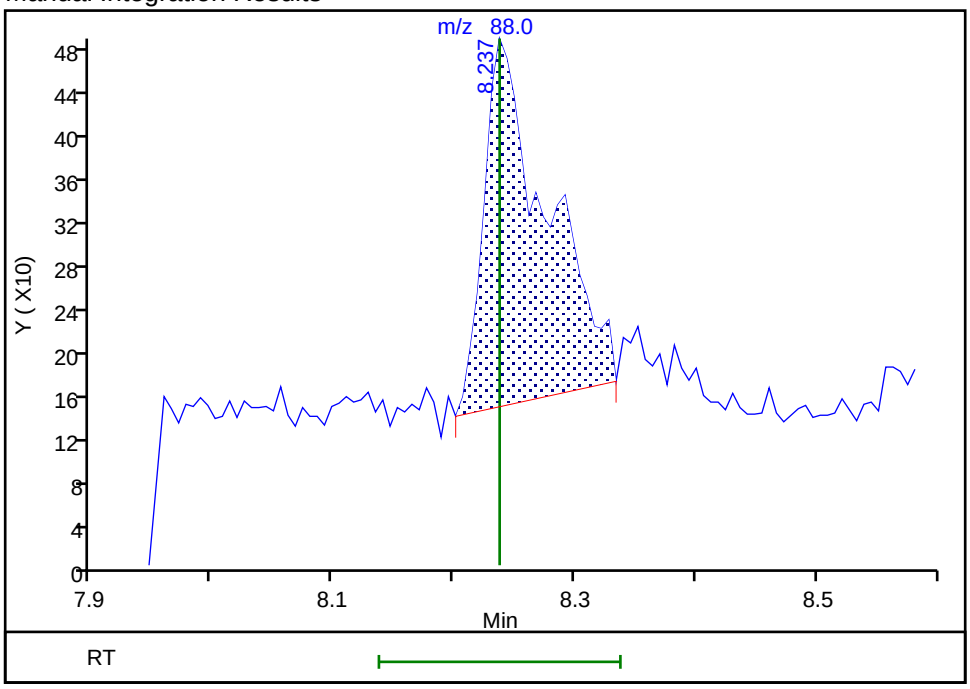
Processing Integration Results

RT: 8.24
Area: 1534
Amount: 2.132122
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1213
Amount: 1.685961
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:59:00

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: MH-1231_100721 Lab Sample ID: 240-157760-13

Matrix: Water Lab File ID: 201920.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 14:45

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 03:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	11		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201920.D				
Lims ID:	240-157760-B-13				
Client ID:	MS-1231_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:04:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:59:20		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	800925	8.43	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2973388	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	93753	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	54	8049	10.5	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

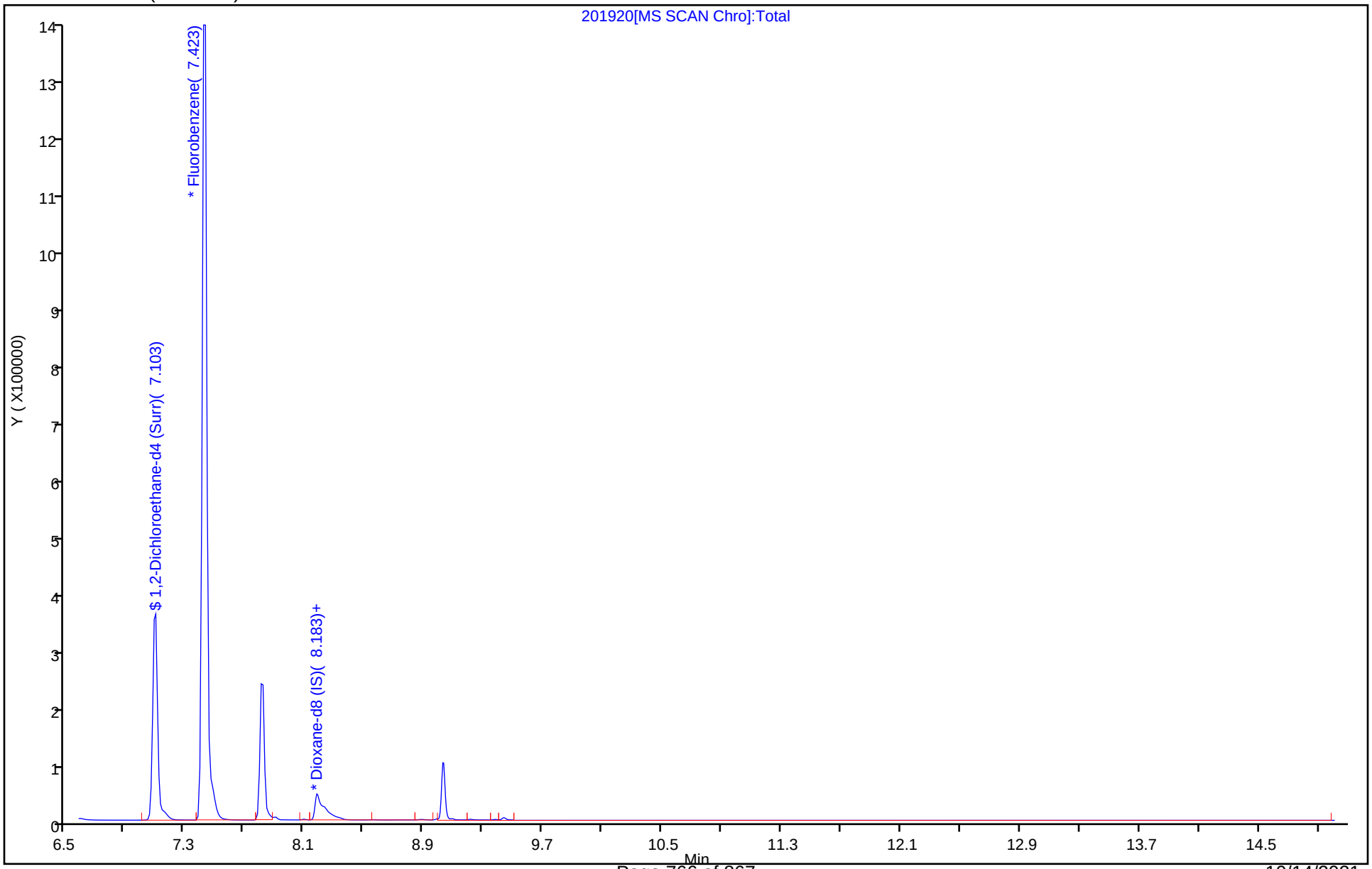
Report Date: 12-Oct-2021 12:19:45 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201920.D

Injection Date:	12-Oct-2021 03:04:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-13	Lab Sample ID:	240-157760-13	Worklist Smp#:	22
Client ID:	MS-1231_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201920.D				
Lims ID:	240-157760-B-13				
Client ID:	MS-1231_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:04:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:59:20

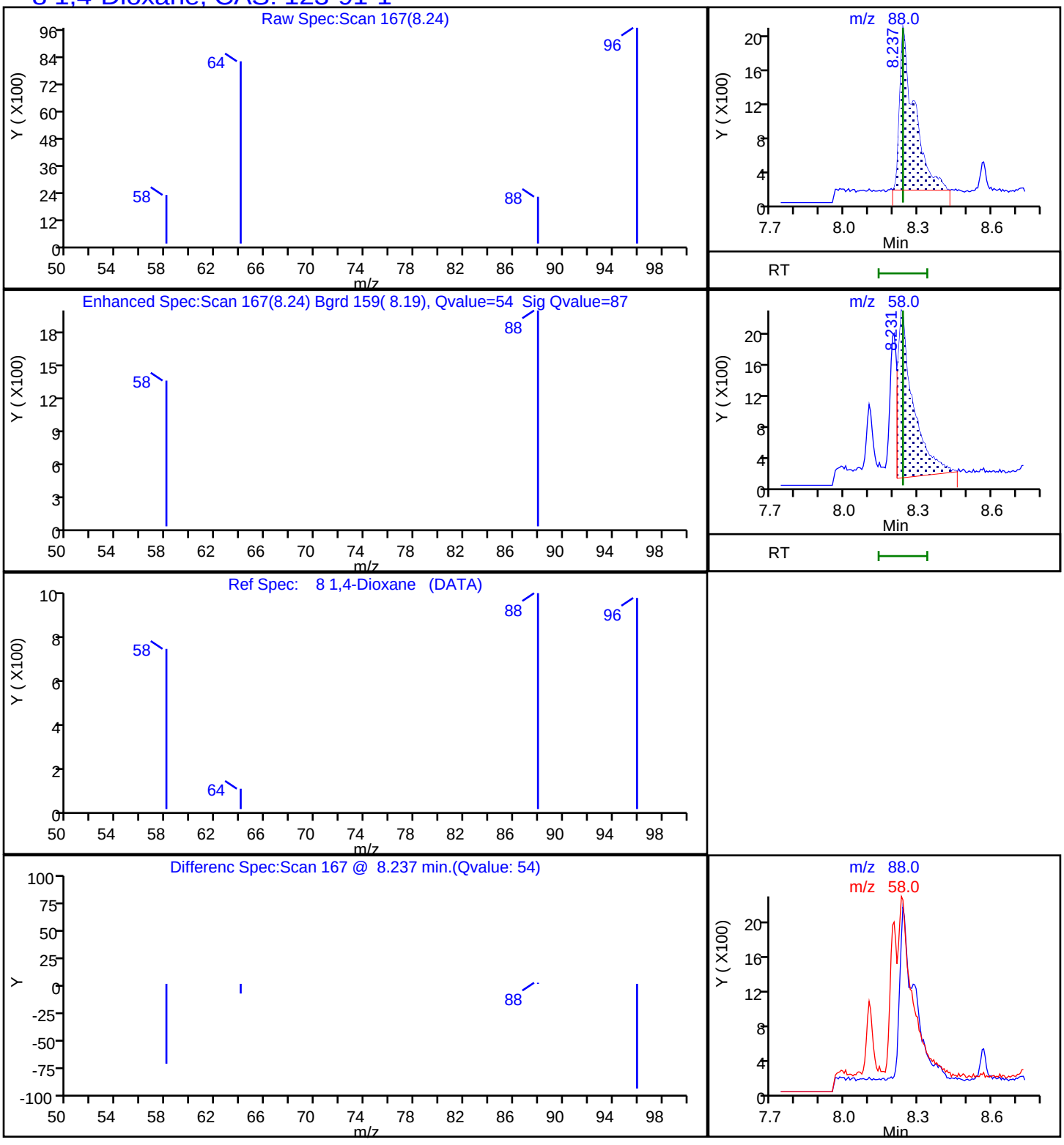
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.43	84.35

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201920.D

Injection Date:	12-Oct-2021 03:04:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-13	Lab Sample ID:	240-157760-13		
Client ID:	MS-1231_100721				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

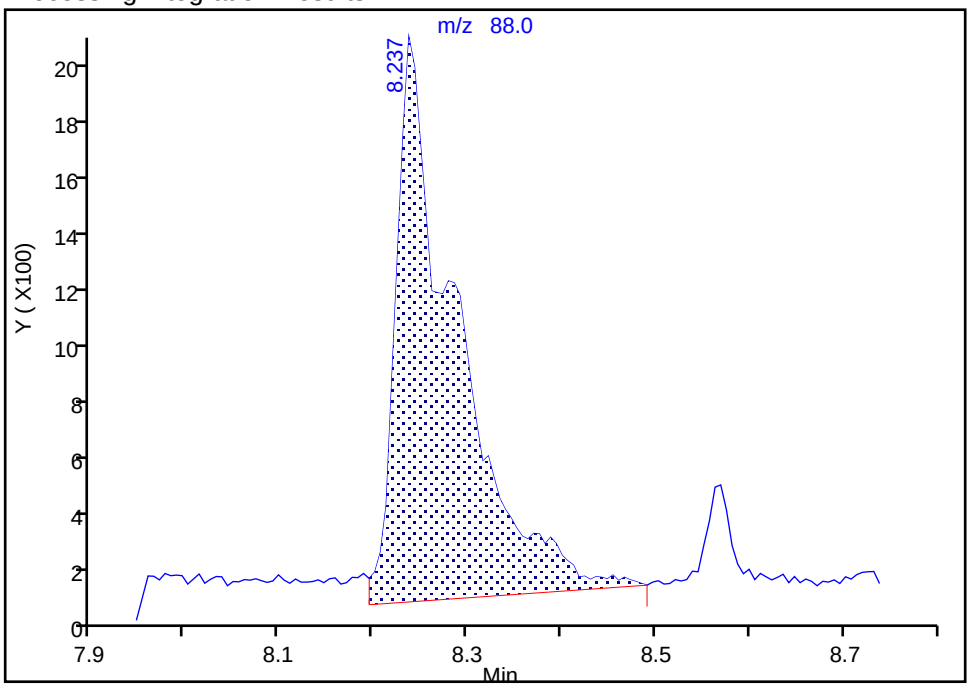
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201920.D				
Injection Date:	12-Oct-2021 03:04:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-13	Lab Sample ID:	240-157760-13		
Client ID:	MS-1231_100721				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

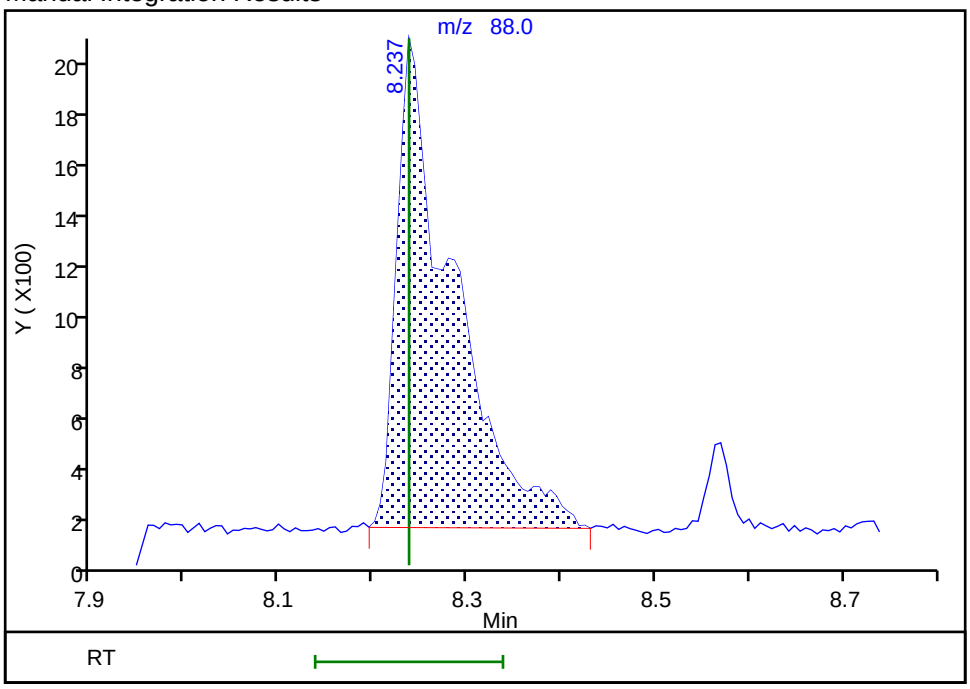
Processing Integration Results

RT: 8.24
Area: 9074
Amount: 11.858843
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8049
Amount: 10.519267
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:59:16

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-2_100721 Lab Sample ID: 240-157760-14

Matrix: Water Lab File ID: 201921.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 15:15

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 03:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	7.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201921.D				
Lims ID:	240-157760-B-14				
Client ID:	SL-2_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:28:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:59:39		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	785140	8.41	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2924506	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	84801	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	5151	7.44	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

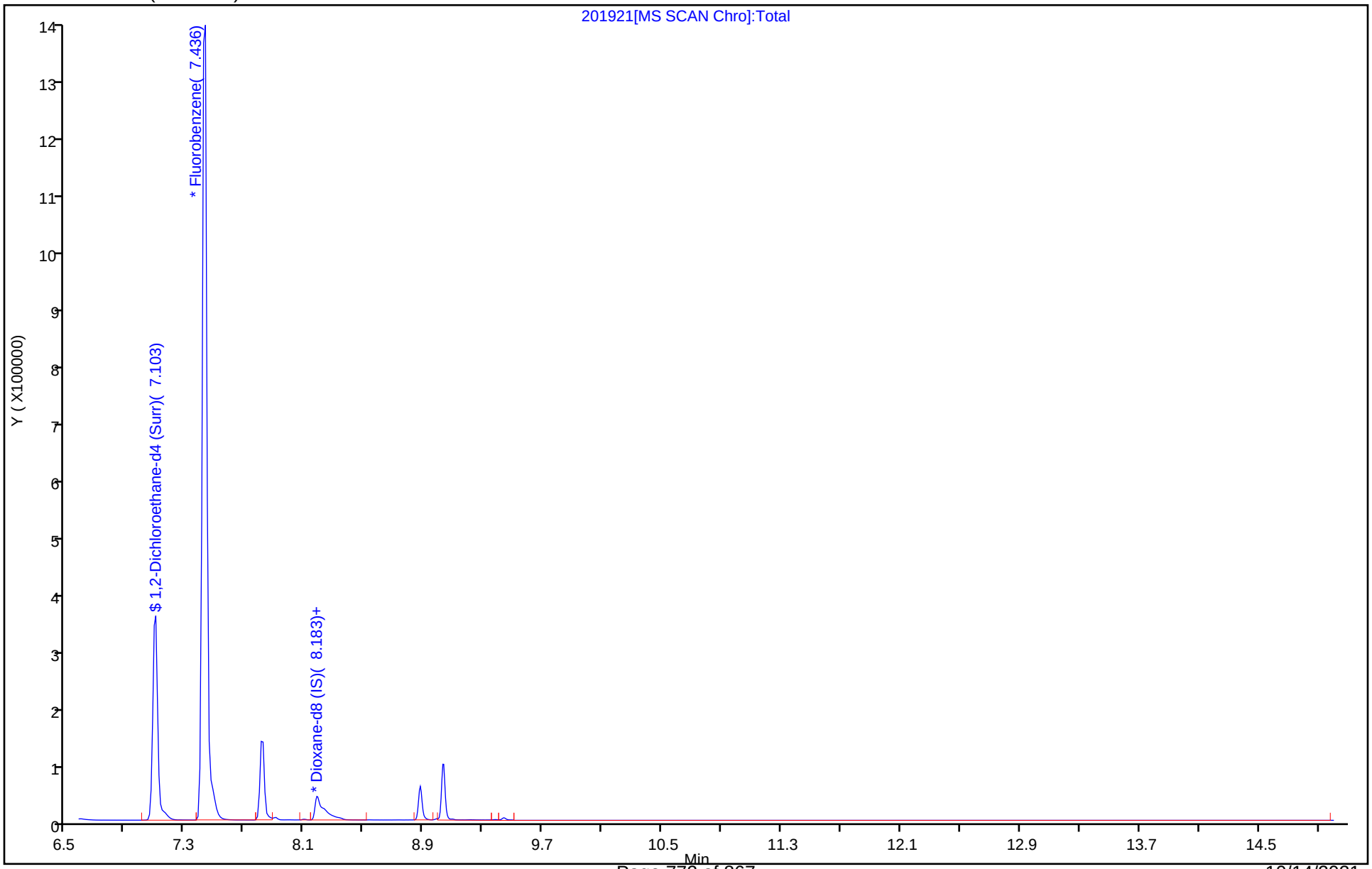
Report Date: 12-Oct-2021 12:19:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201921.D

Injection Date:	12-Oct-2021 03:28:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-14	Lab Sample ID:	240-157760-14	Worklist Smp#:	23
Client ID:	SL-2_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201921.D				
Lims ID:	240-157760-B-14				
Client ID:	SL-2_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:28:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:59:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.41	84.07

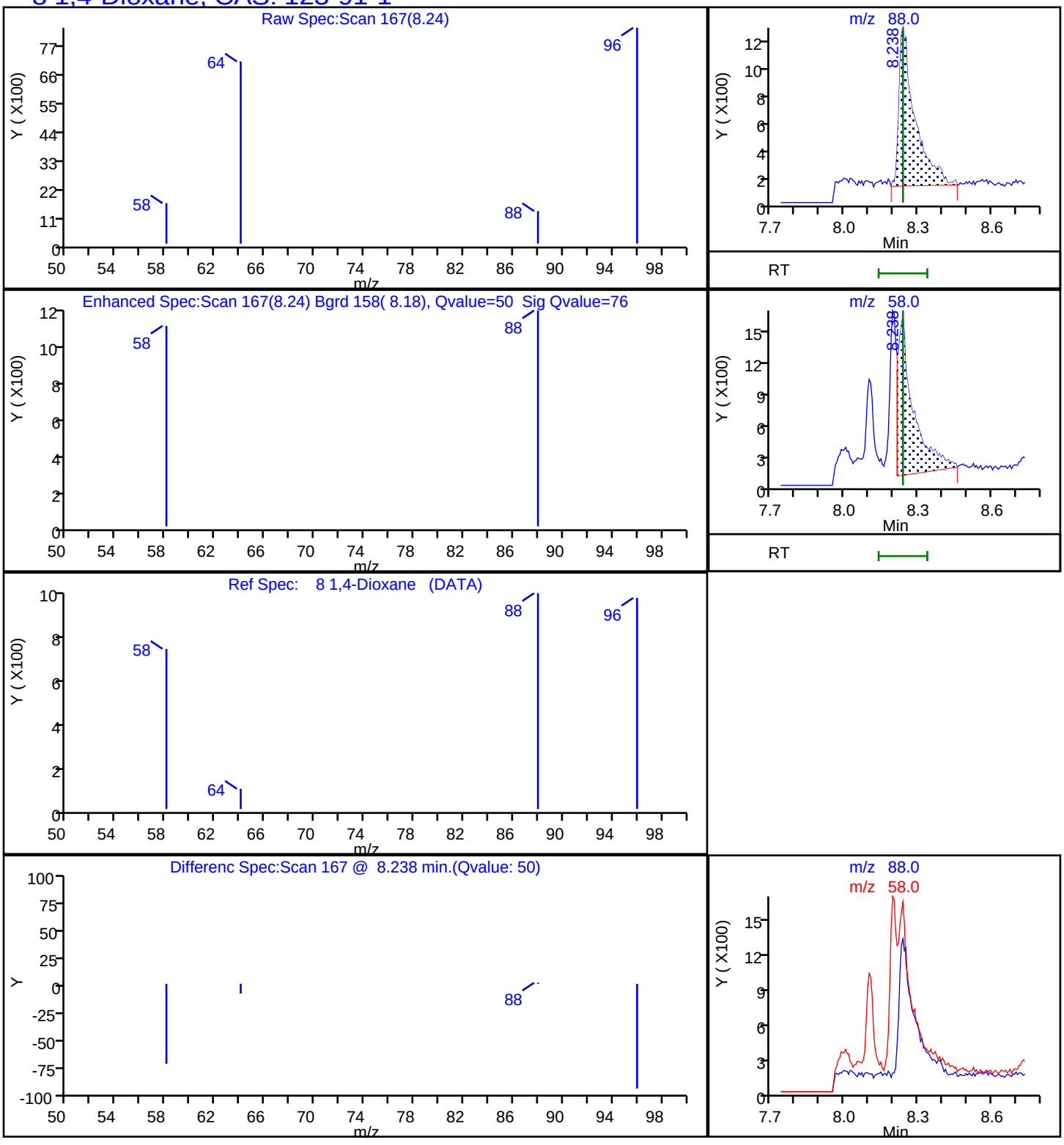
Report Date: 12-Oct-2021 12:19:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201921.D

Injection Date:	12-Oct-2021 03:28:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-14	Lab Sample ID:	240-157760-14		
Client ID:	SL-2_100721				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

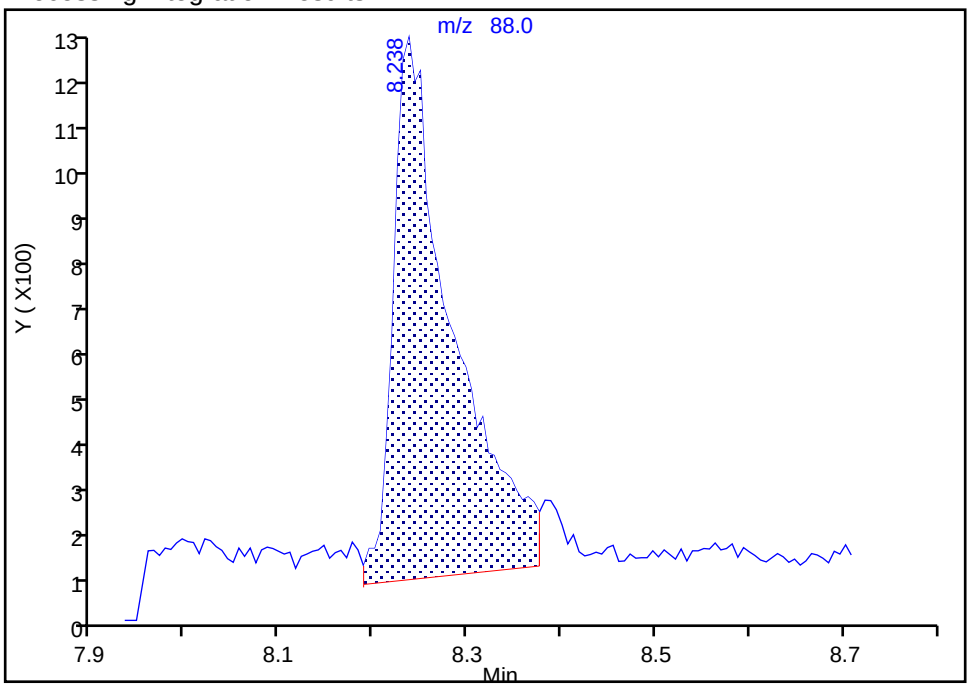
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201921.D				
Injection Date:	12-Oct-2021 03:28:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-14	Lab Sample ID:	240-157760-14		
Client ID:	SL-2_100721				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

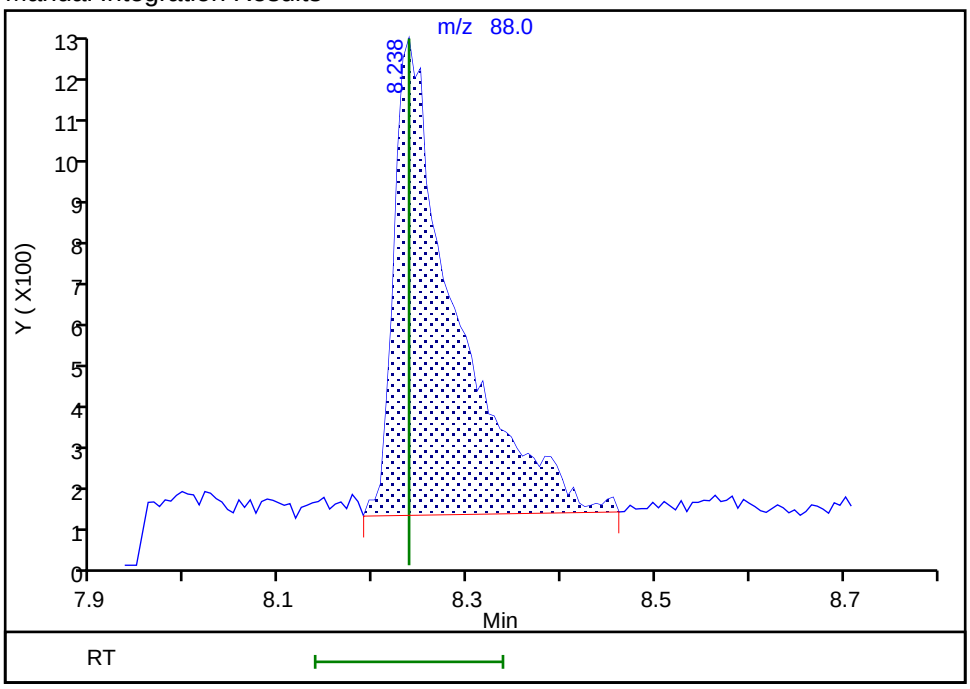
Processing Integration Results

RT: 8.24
Area: 5162
Amount: 7.458401
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 5151
Amount: 7.442508
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:59:31

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-3_100721 Lab Sample ID: 240-157760-15

Matrix: Water Lab File ID: 201922.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 15:45

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 03:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	8.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201922.D				
Lims ID:	240-157760-B-15				
Client ID:	SL-3_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:52:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 12:00:10		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	817426	8.33	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	3072417	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	94	92565	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	55	6242	8.26	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added: 0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added: 1.00	Units: uL	Run Reagent

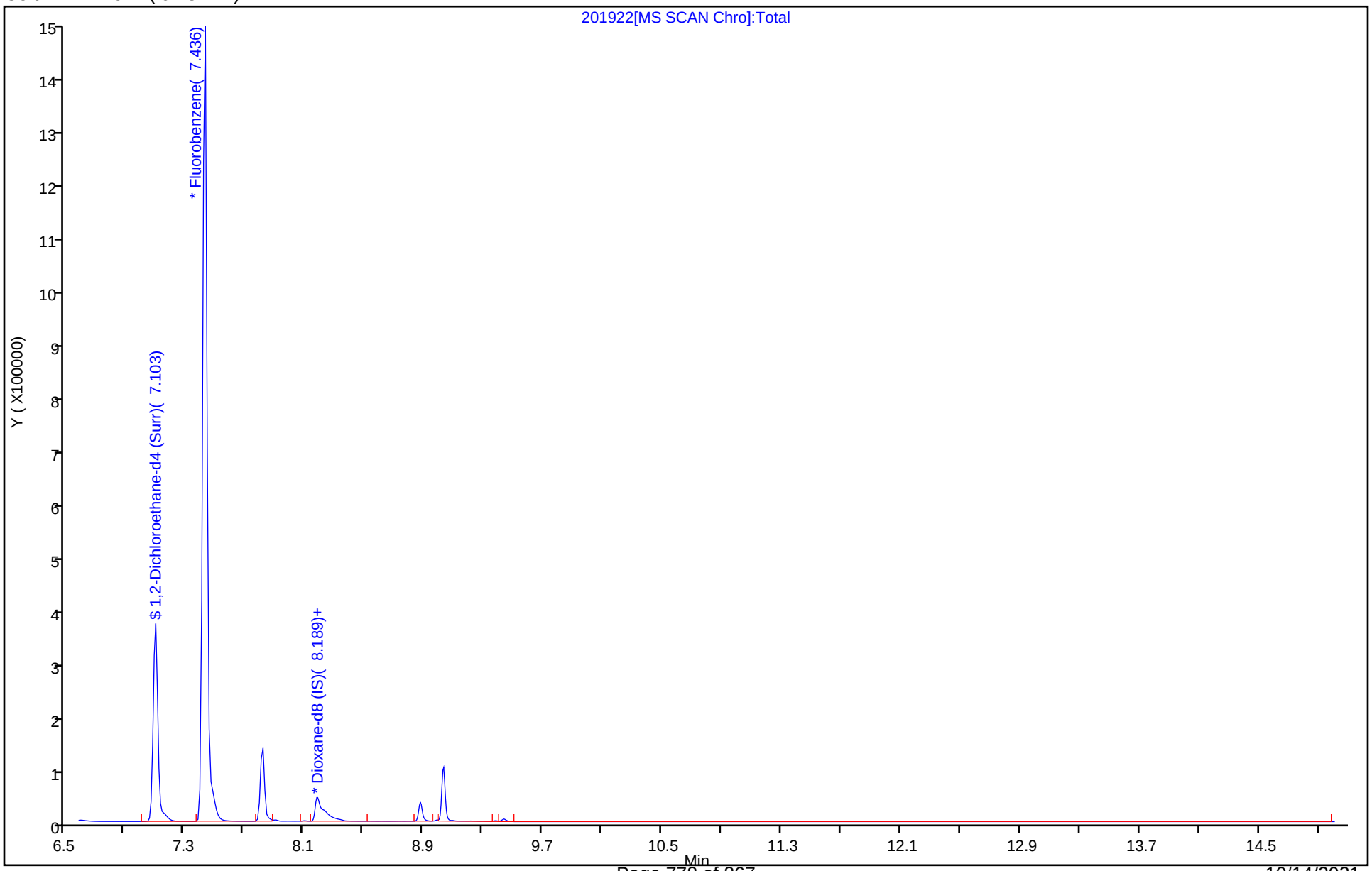
Report Date: 12-Oct-2021 12:19:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201922.D

Injection Date:	12-Oct-2021 03:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-15	Lab Sample ID:	240-157760-15	Worklist Smp#:	24
Client ID:	SL-3_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201922.D				
Lims ID:	240-157760-B-15				
Client ID:	SL-3_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 03:52:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 12:00:10

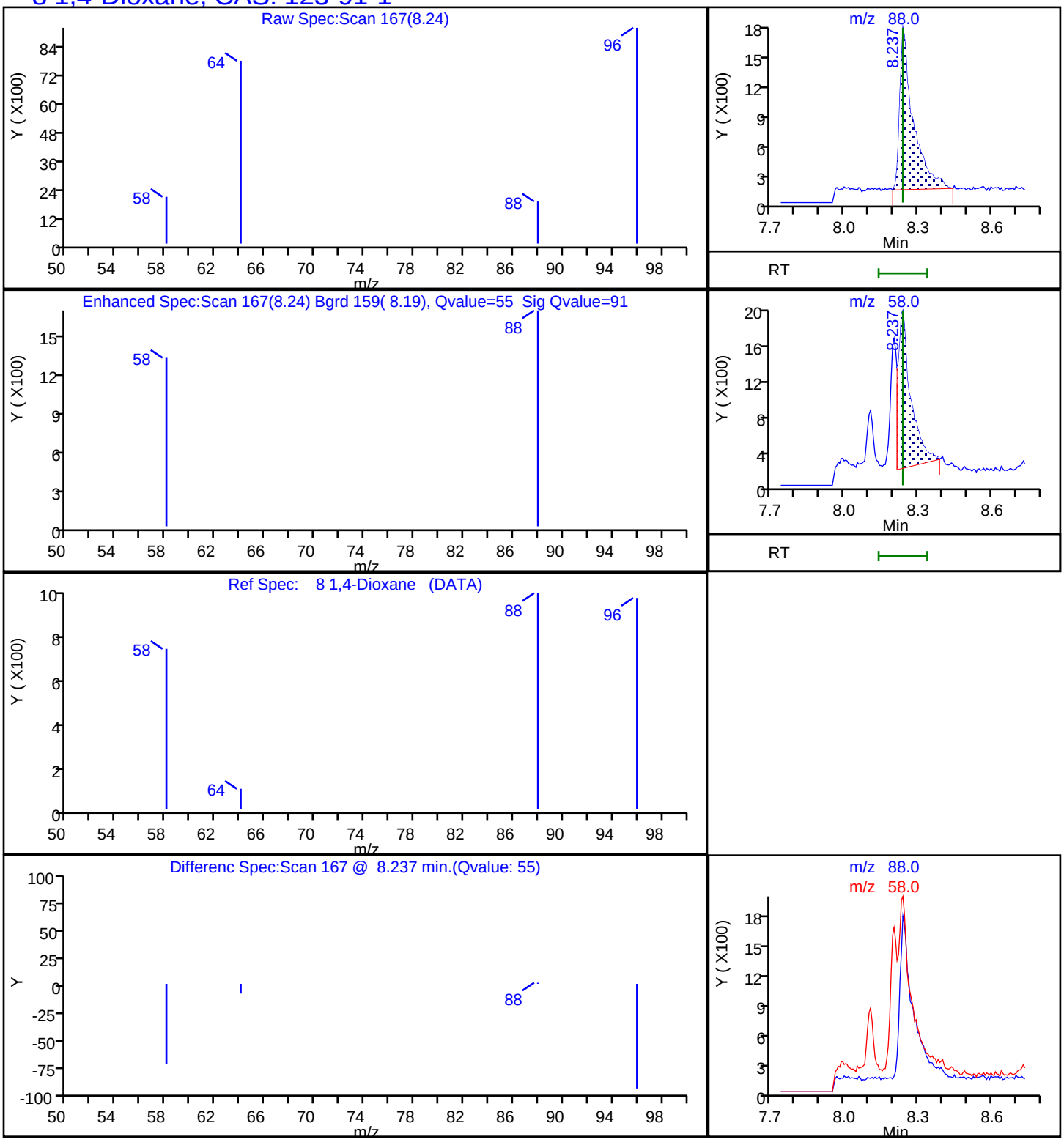
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.33	83.31

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201922.D

Injection Date:	12-Oct-2021 03:52:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-15	Lab Sample ID:	240-157760-15		
Client ID:	SL-3_100721				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

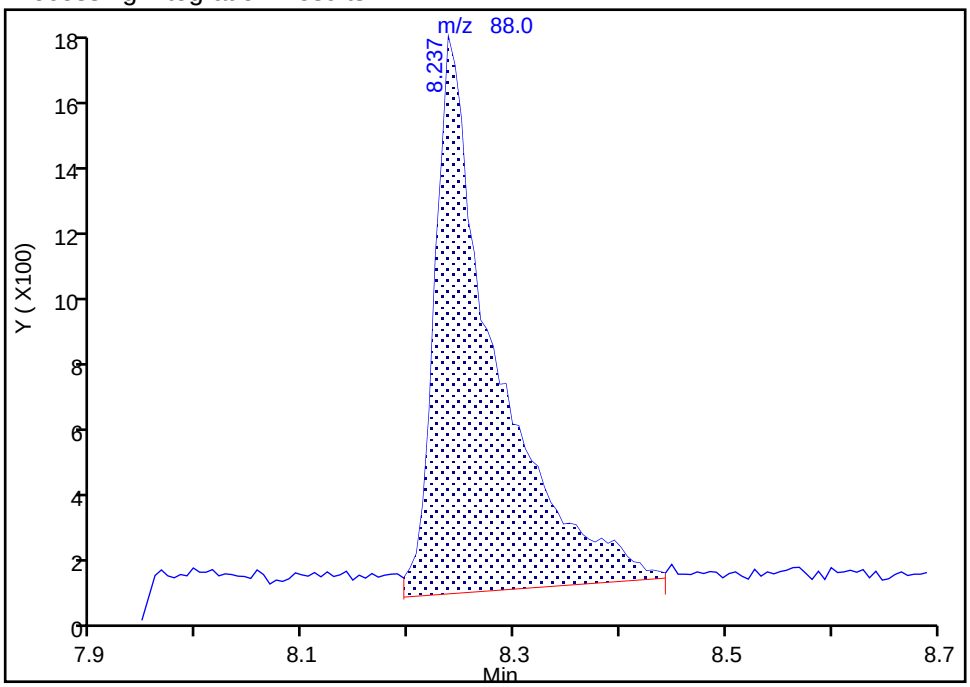
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201922.D				
Injection Date:	12-Oct-2021 03:52:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-15	Lab Sample ID:	240-157760-15		
Client ID:	SL-3_100721				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

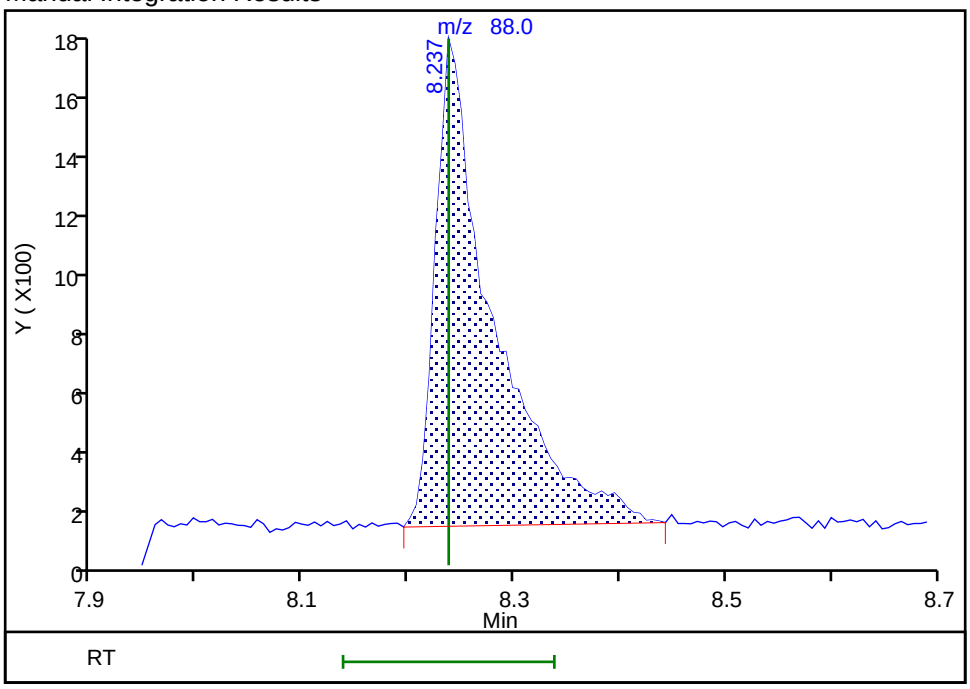
Processing Integration Results

RT: 8.24
Area: 6797
Amount: 8.997030
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6242
Amount: 8.262390
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 12:00:03

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: SL-4_100721 Lab Sample ID: 240-157760-16

Matrix: Water Lab File ID: 201923.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 16:15

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 04:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201923.D				
Lims ID:	240-157760-B-16				
Client ID:	SL-4_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 04:16:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 12:00:25		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	792159	8.35	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2972109	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	88136	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	55	4784	6.65	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

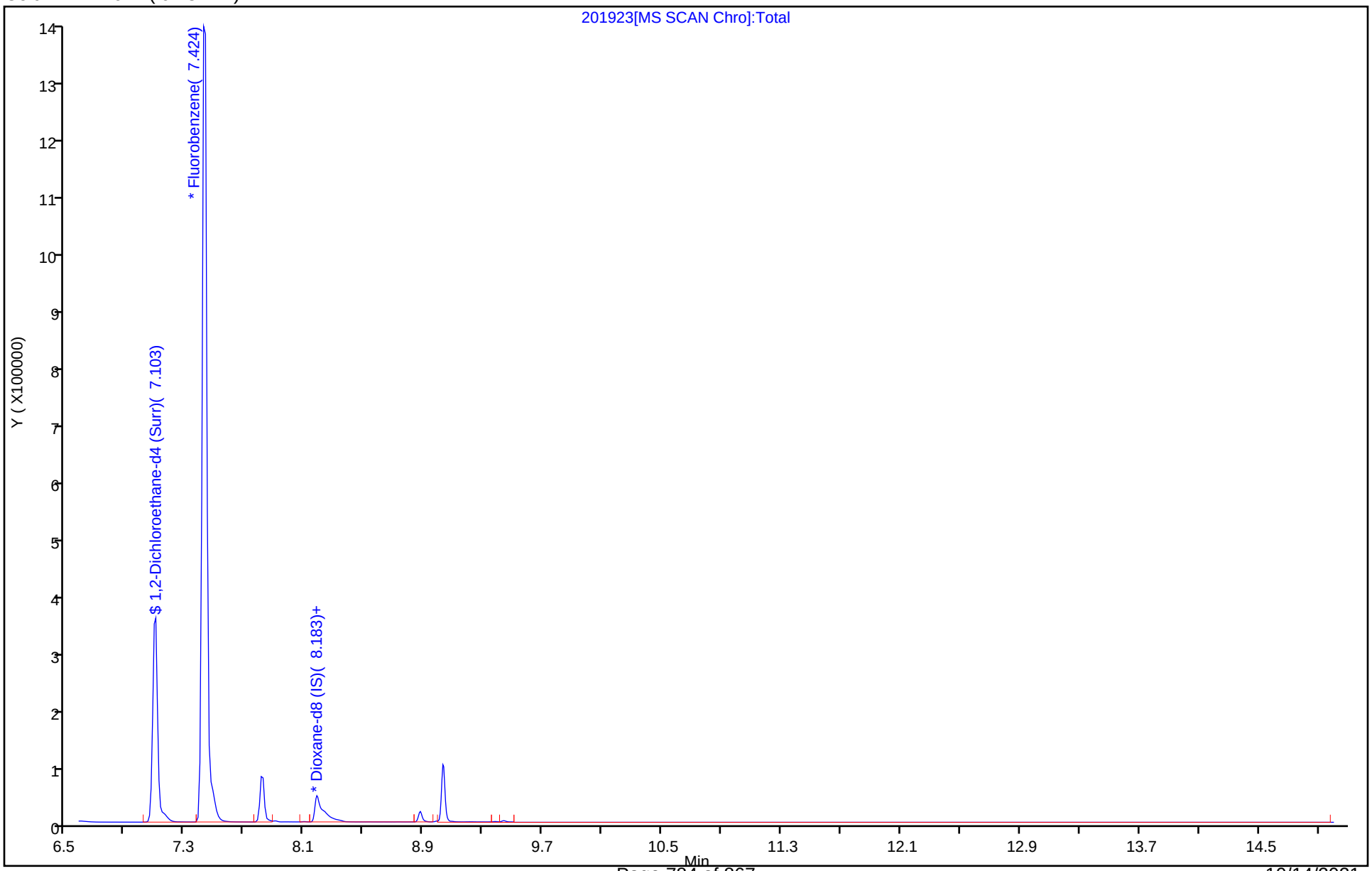
Report Date: 12-Oct-2021 12:19:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201923.D

Injection Date:	12-Oct-2021 04:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-16	Lab Sample ID:	240-157760-16	Worklist Smp#:	25
Client ID:	SL-4_100721				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201923.D				
Lims ID:	240-157760-B-16				
Client ID:	SL-4_100721				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 04:16:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 12:00:25

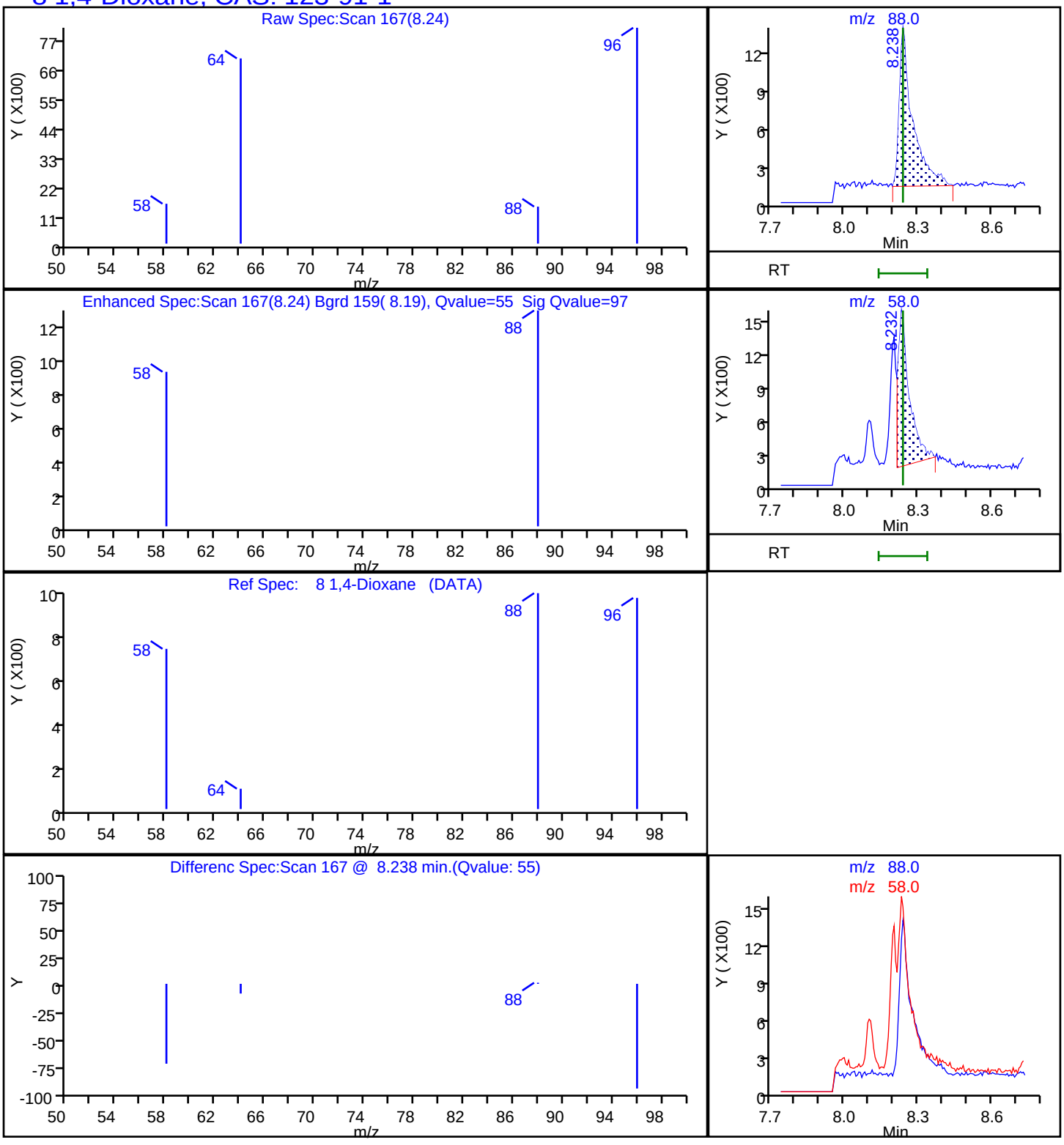
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.35	83.46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201923.D

Injection Date:	12-Oct-2021 04:16:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-16	Lab Sample ID:	240-157760-16		
Client ID:	SL-4_100721				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

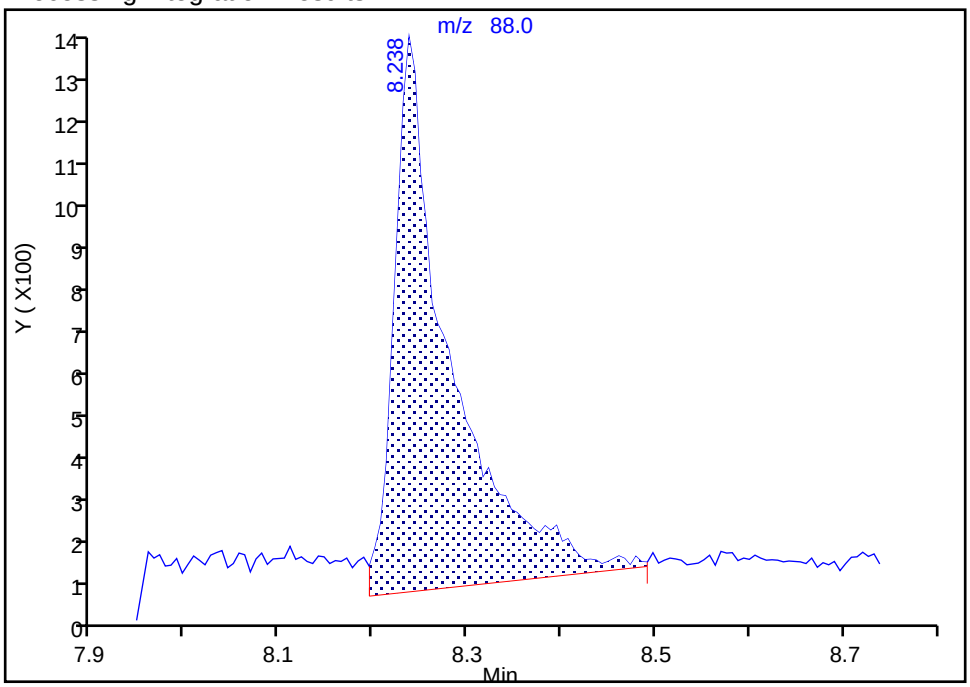
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201923.D				
Injection Date:	12-Oct-2021 04:16:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-16	Lab Sample ID:	240-157760-16		
Client ID:	SL-4_100721				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

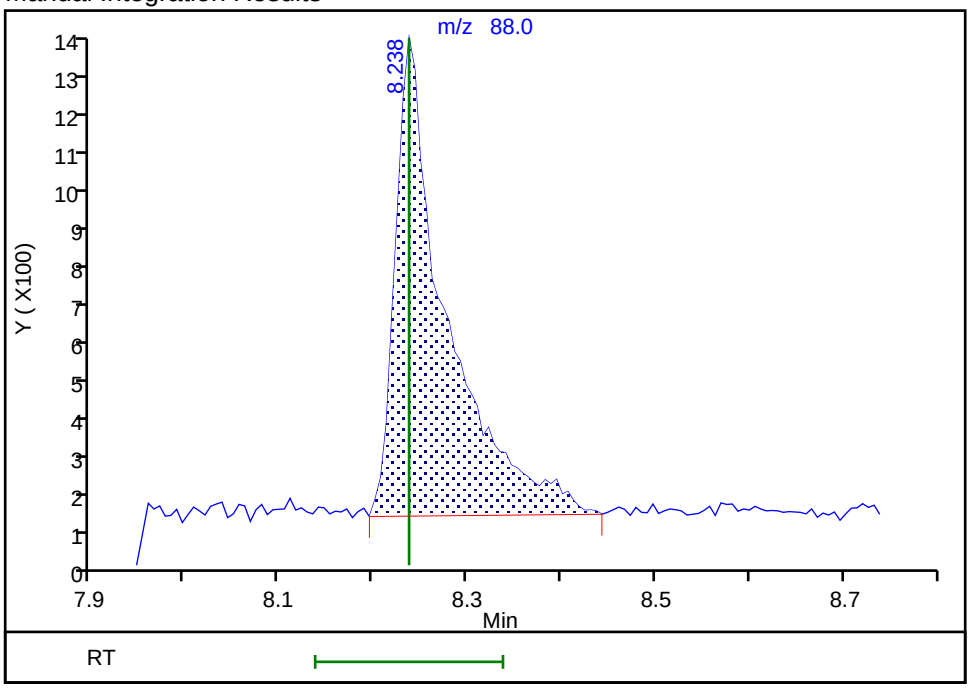
Processing Integration Results

RT: 8.24
Area: 5517
Amount: 7.669700
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4784
Amount: 6.650688
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 12:00:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-157760-17

Matrix: Water Lab File ID: 201924.D

Analysis Method: 8260B SIM Date Collected: 10/07/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 04:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.0		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201924.D				
Lims ID:	240-157760-B-17				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 04:40:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 12:00:43		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	758487	8.01	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2963776	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	94	84778	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	48	2042	2.95	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

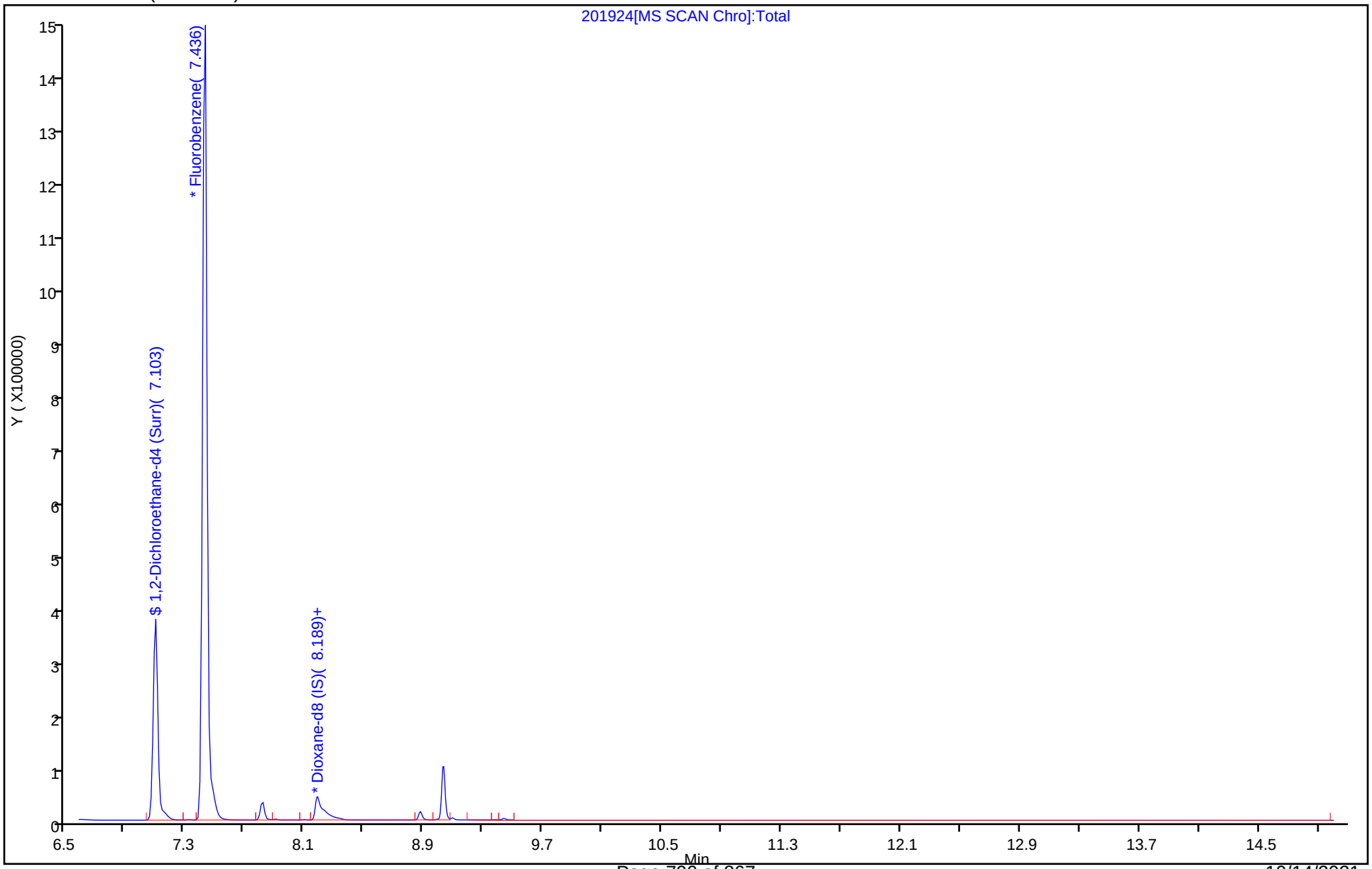
Report Date: 12-Oct-2021 12:19:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201924.D

Injection Date:	12-Oct-2021 04:40:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-157760-B-17	Lab Sample ID:	240-157760-17	Worklist Smp#:	26
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201924.D				
Lims ID:	240-157760-B-17				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	12-Oct-2021 04:40:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

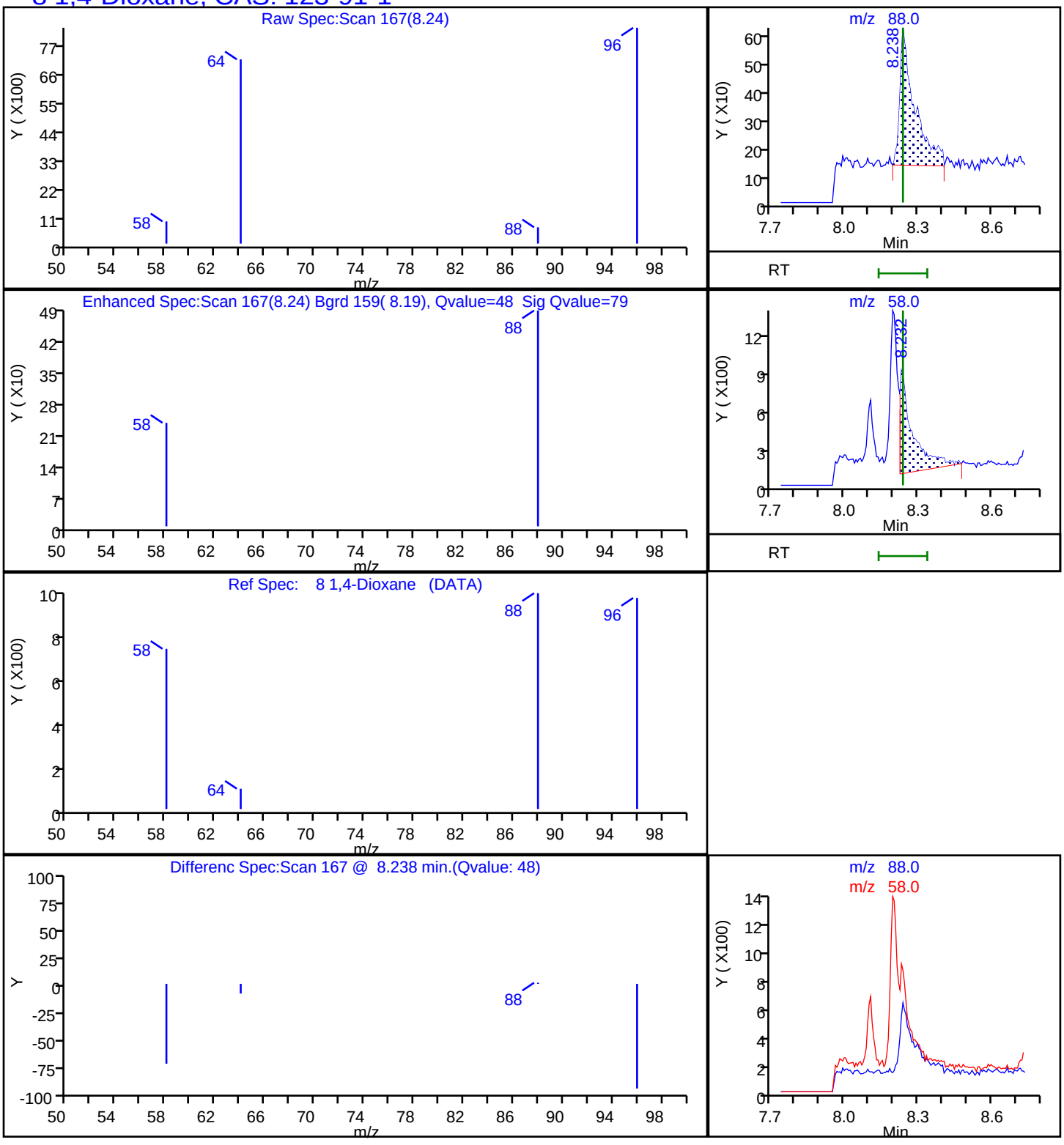
First Level Reviewer: seymourc Date: 12-Oct-2021 12:00:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.01	80.14

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201924.D				
Injection Date:	12-Oct-2021 04:40:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-17	Lab Sample ID:	240-157760-17		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

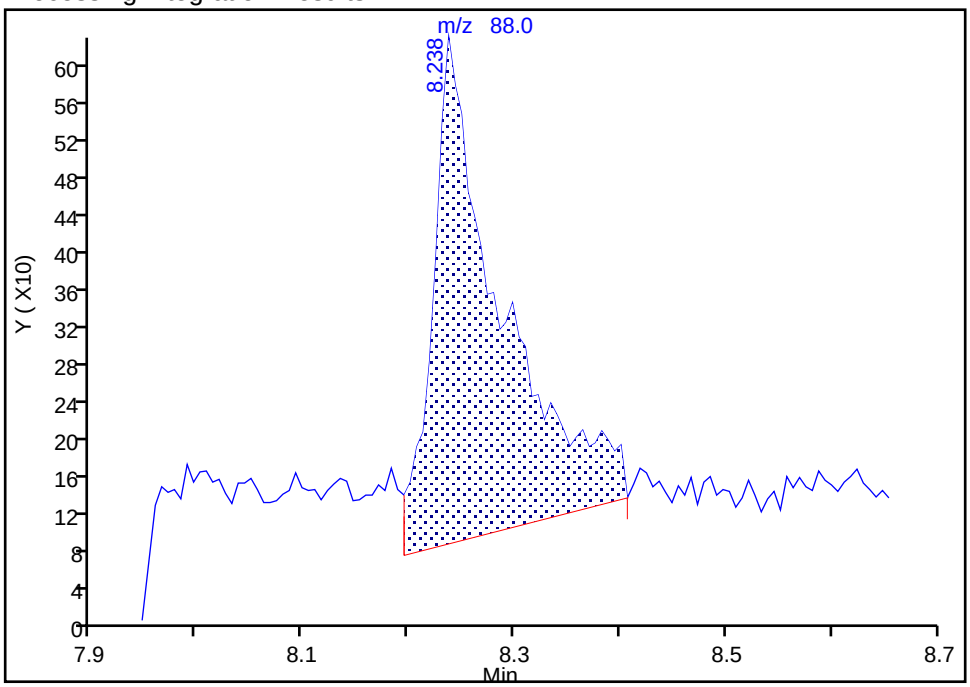
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201924.D				
Injection Date:	12-Oct-2021 04:40:30	Instrument ID:	A3UX20		
Lims ID:	240-157760-B-17	Lab Sample ID:	240-157760-17		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

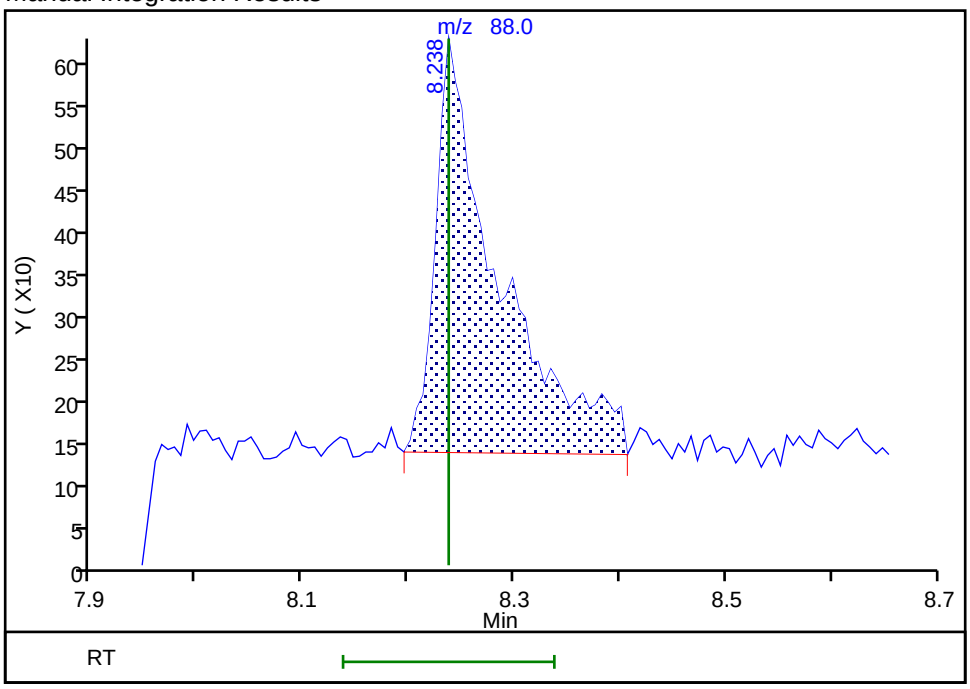
Processing Integration Results

RT: 8.24
Area: 2466
Amount: 3.564008
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2042
Amount: 2.951218
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 12:00:39

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 1.5375	1.8357 1.5662	1.7028 1.5384	1.6415	1.6040	Ave		1.6323				6.6		35.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3150	0.3083 0.3197	0.3159 0.3393	0.3206	0.3166	Ave		0.3193				3.0		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Ave	+++++ 36824	1616 77285	4129 162137	8243	16121	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 2674197	99153 5574700	260453 11798688	541364	1068809	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	09-Sep-2021 14:25:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:15		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	60669	0.5000	0.5822	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3263223	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	94647	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	40	1001	1.00	1.30	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.15	Units: uL
vm50ss_00453	Amount Added:	0.15	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

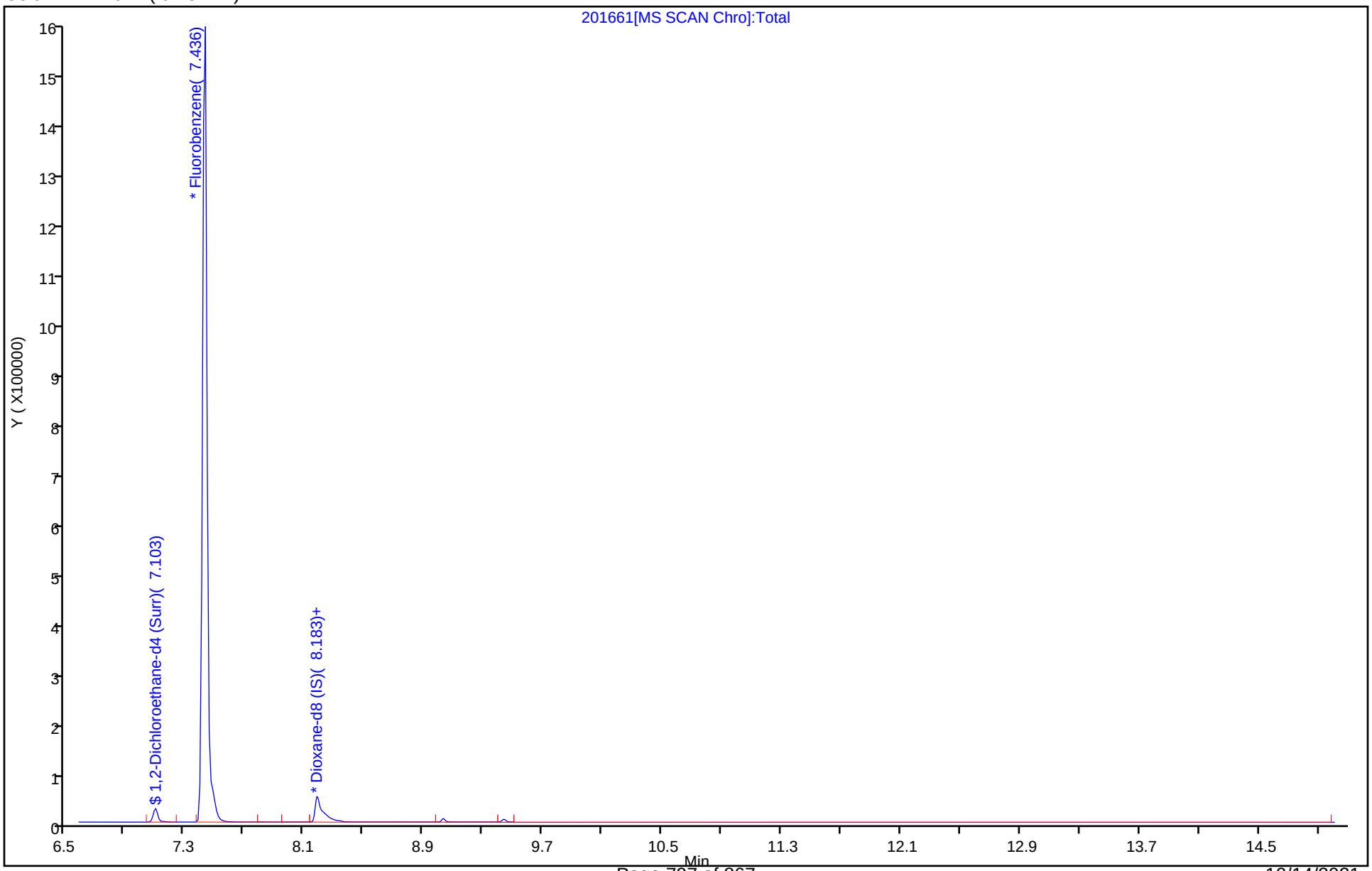
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D

Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



10/14/2021

Eurofins TestAmerica, Canton

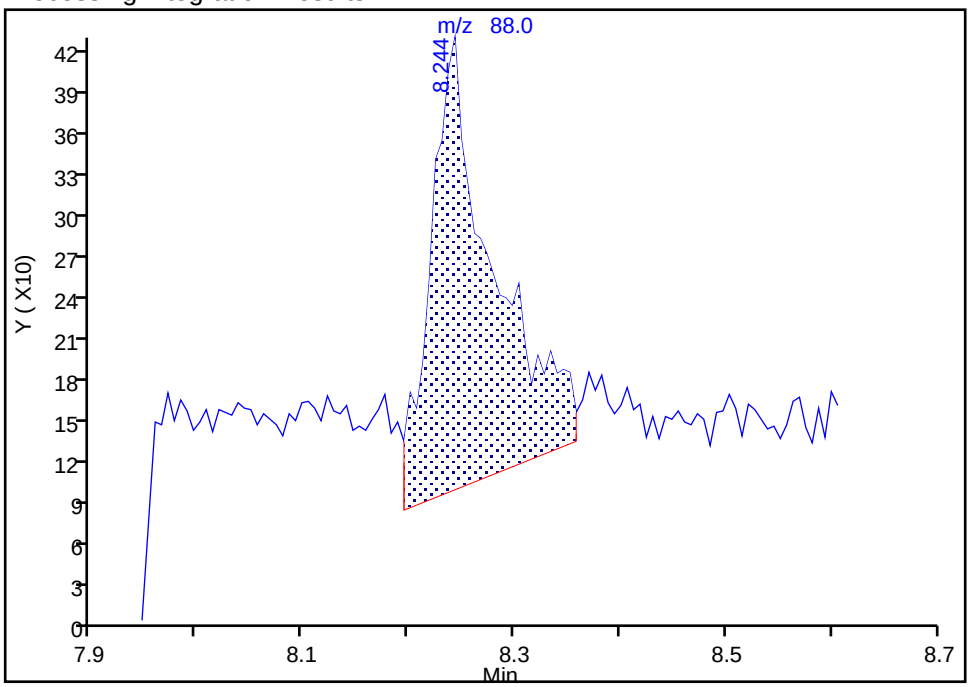
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

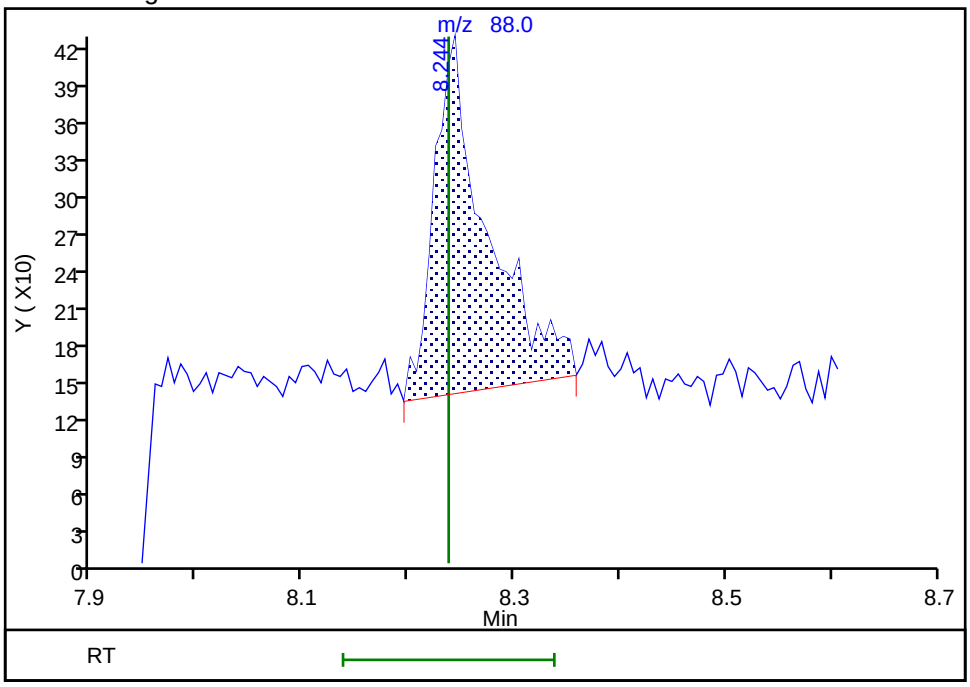
Processing Integration Results

RT: 8.24
Area: 1361
Amount: 1.197683
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1001
Amount: 1.295854
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:10:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	09-Sep-2021 14:49:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:35		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	99153	1.00	0.9655	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3215764	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	88032	200.0	200.0	
	8 1,4-Dioxane	88	8.244	8.238	0.006	49	1616	2.00	2.25	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.30	Units: uL
vm50ss_00453	Amount Added:	0.30	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

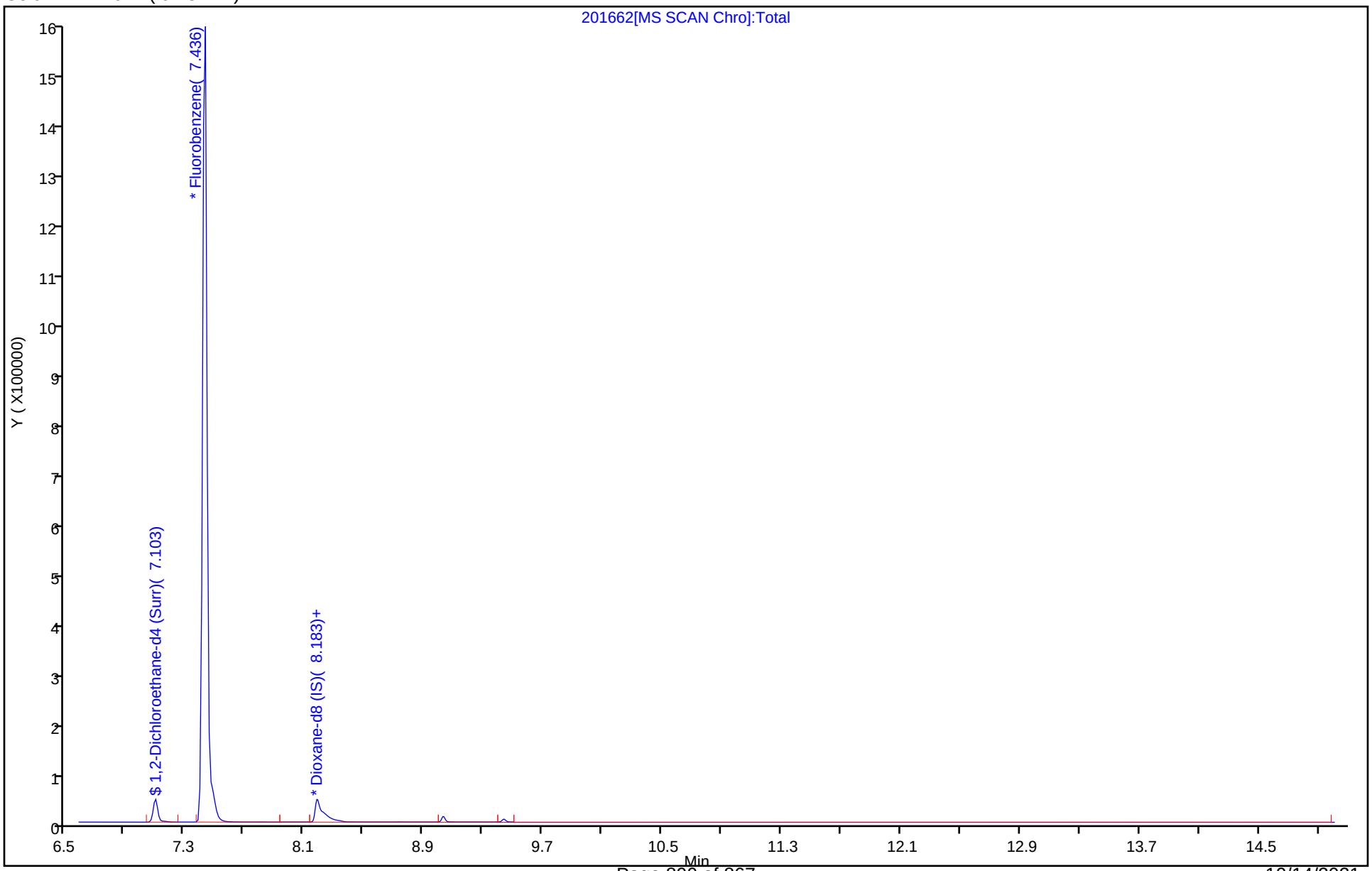
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D

Injection Date:	09-Sep-2021 14:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



10/14/2021

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

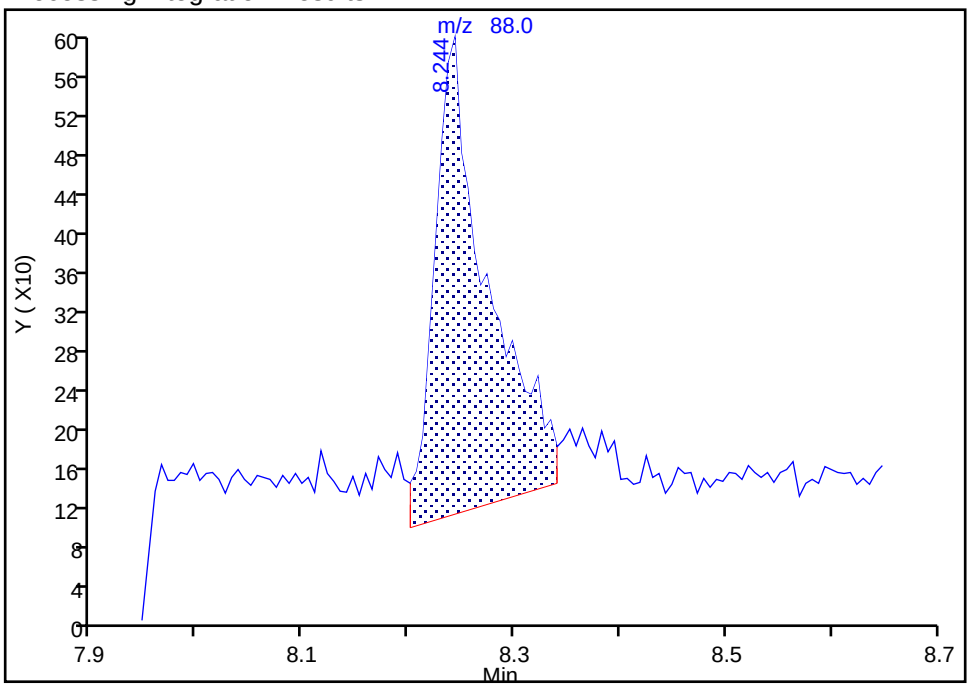
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D
Injection Date: 09-Sep-2021 14:49:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

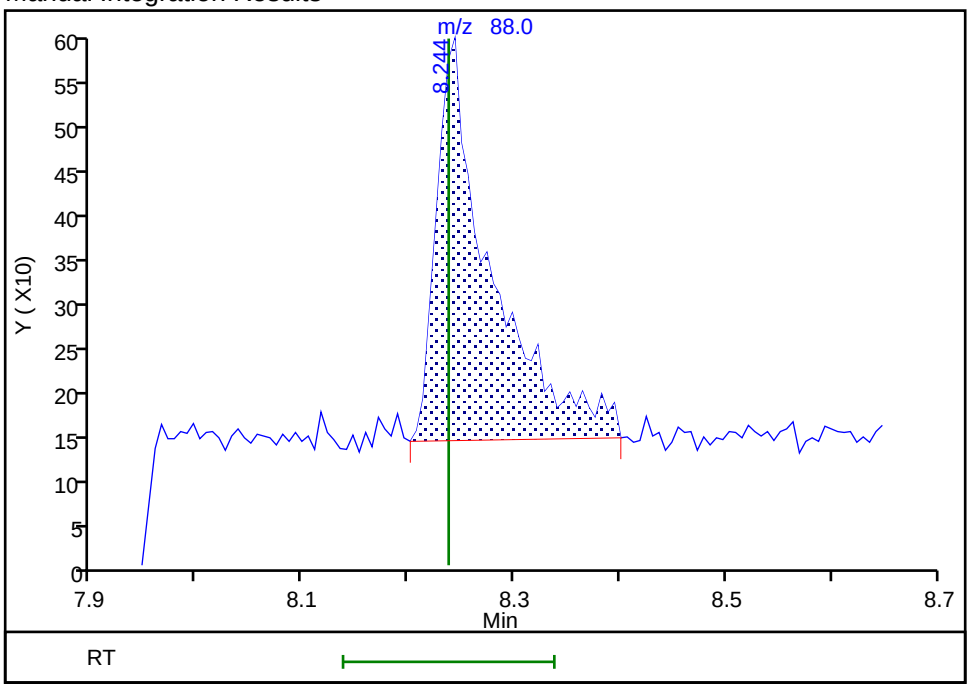
Processing Integration Results

RT: 8.24
Area: 1696
Amount: 1.906648
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1616
Amount: 2.249207
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:11:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	09-Sep-2021 15:14:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:18	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:51:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	260453	2.50	2.47	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3297506	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	96993	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	55	4129	5.00	5.22	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.75	Units: uL
vm50ss_00453	Amount Added:	0.75	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

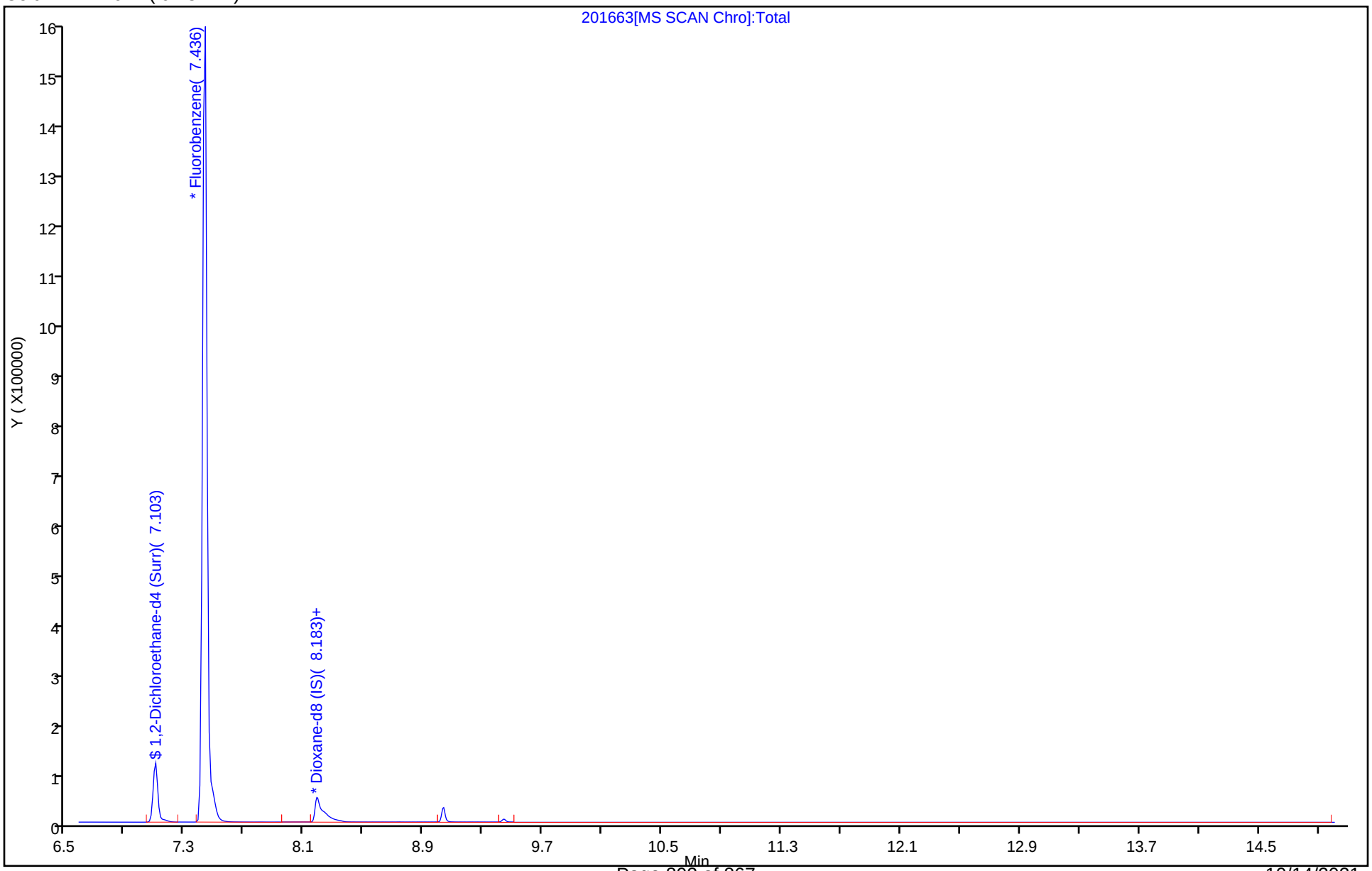
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D

Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

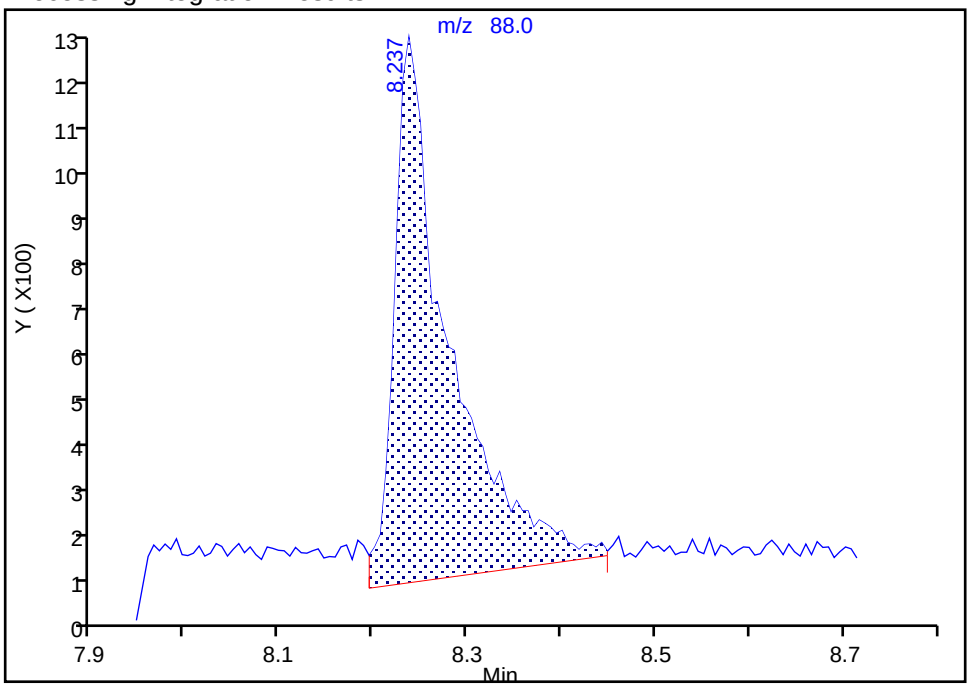
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D				
Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

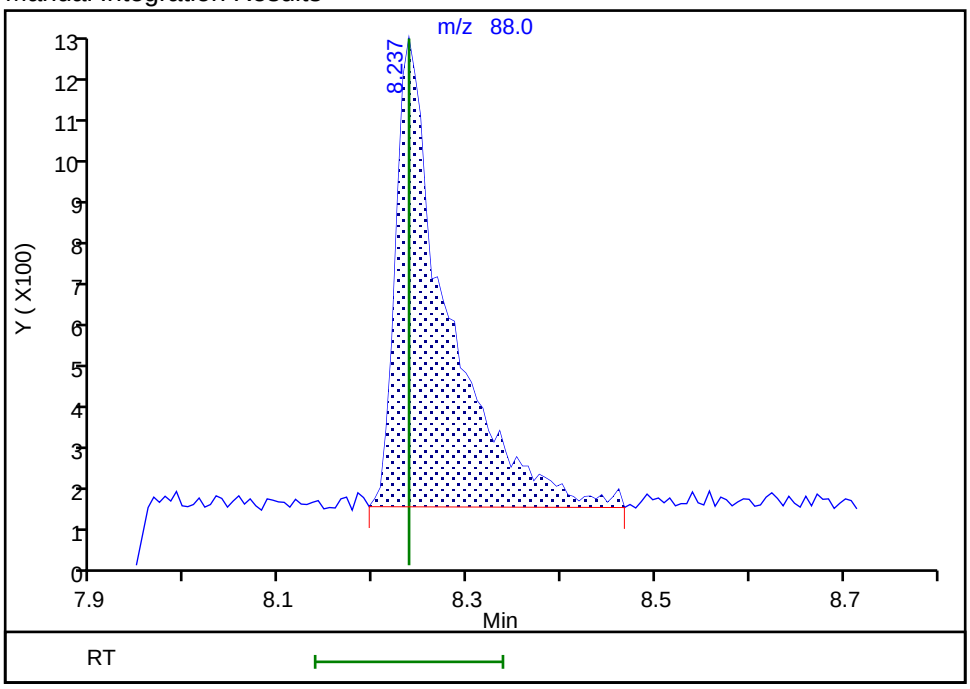
Processing Integration Results

RT: 8.24
Area: 4620
Amount: 5.267691
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4129
Amount: 5.215948
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:51:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Sep-2021 15:38:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-006
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 16:52:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	541364	5.00	5.02	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3377511	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	100431	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	51	8243	10.0	10.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453 Amount Added: 1.50 Units: uL
vmdioxanew_00264 Amount Added: 1.50 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

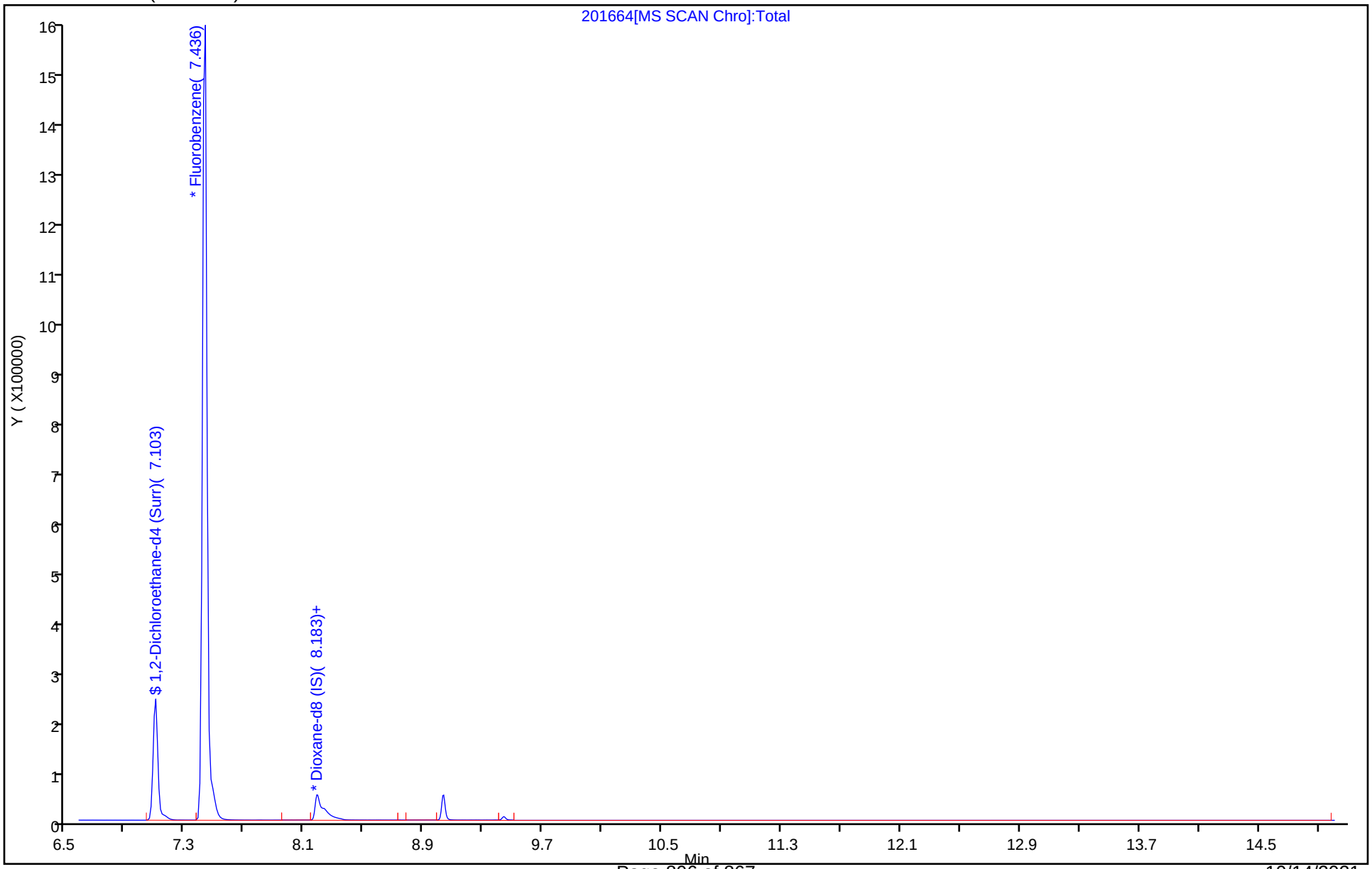
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D

Injection Date:	09-Sep-2021 15:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

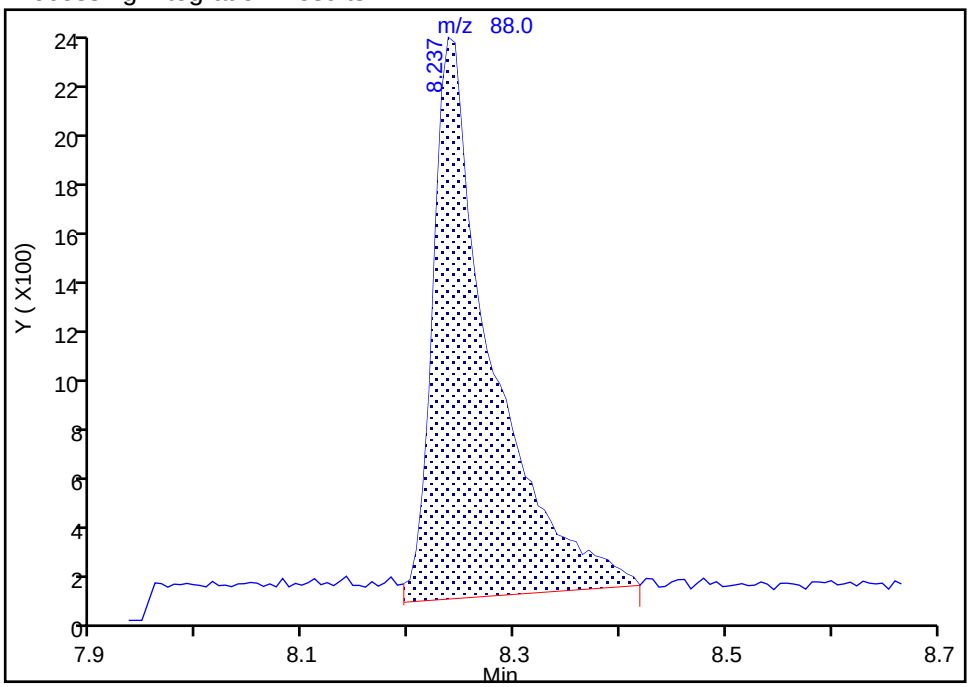
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Injection Date: 09-Sep-2021 15:38:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

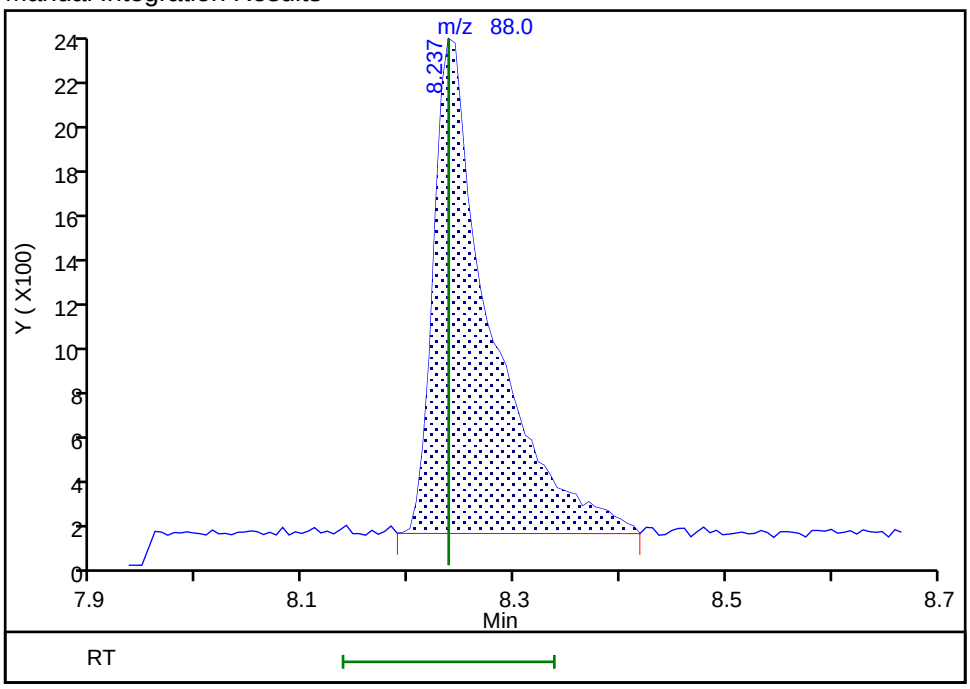
Processing Integration Results

RT: 8.24
Area: 8718
Amount: 9.782476
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8243
Amount: 10.056486
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:52:21
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D				
Lims ID:	ICIS				
Client ID:					
Sample Type:	ICIS	Calib Level:	5		
Inject. Date:	09-Sep-2021 16:03:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:49:17		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1068809	10.0	9.91	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3376203	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	96	100508	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	49	16121	20.0	19.7	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	3.00	Units: uL
vm50ss_00453	Amount Added:	3.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

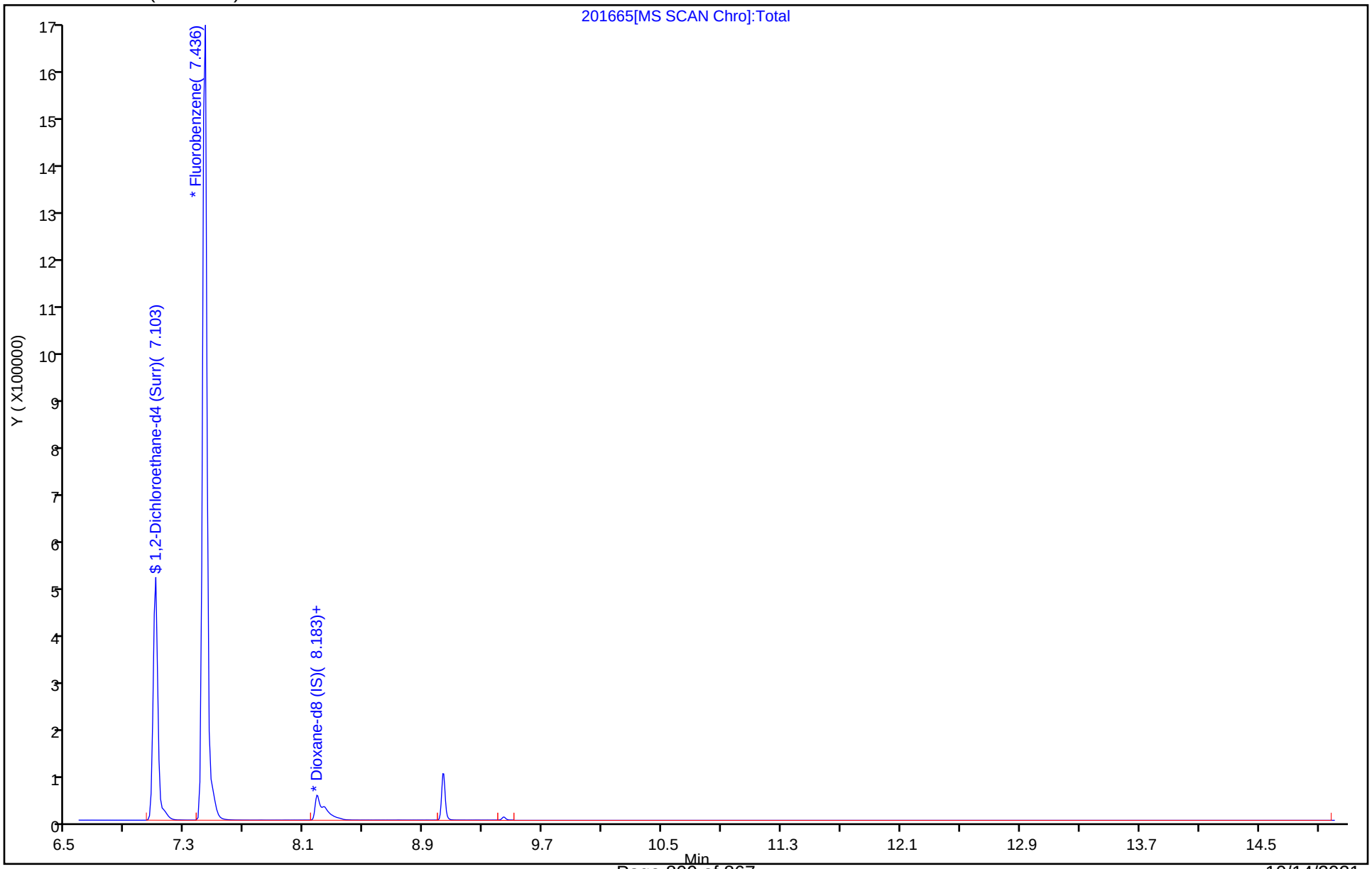
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D

Injection Date:	09-Sep-2021 16:03:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

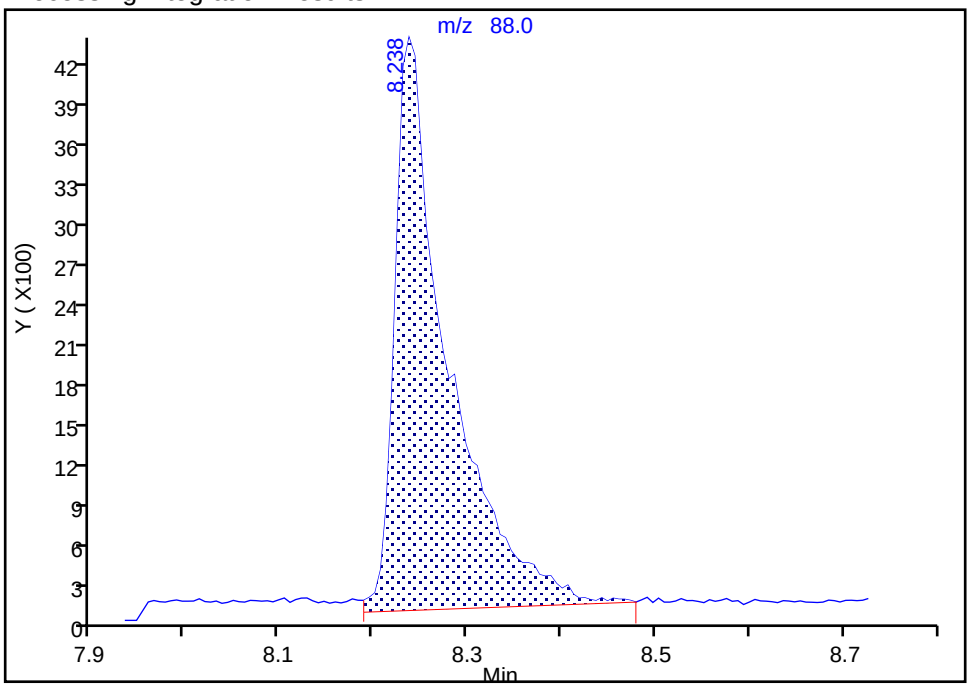
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Injection Date: 09-Sep-2021 16:03:30 Instrument ID: A3UX20
Lims ID: ICIS
Client ID:
Operator ID: 434006 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

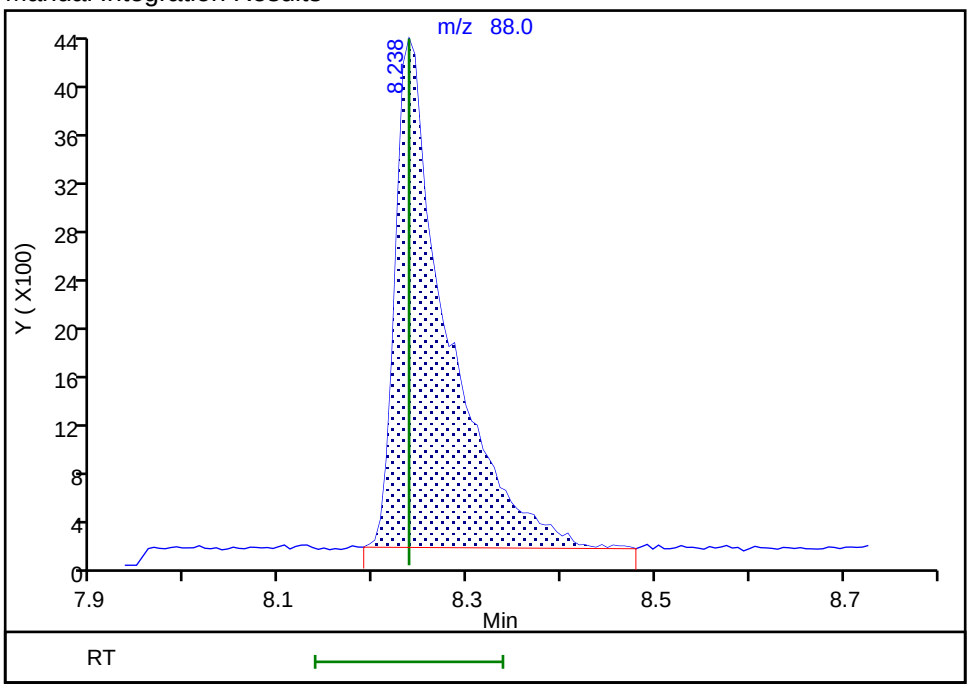
Processing Integration Results

RT: 8.24
Area: 16911
Amount: 19.131260
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 16121
Amount: 19.652602
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	09-Sep-2021 16:27:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:19	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:54:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	2674197	25.0	24.7	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3395321	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.189	-0.006	92	95801	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	36824	50.0	47.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	7.50	Units: uL
vmdioxanew_00264	Amount Added:	7.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

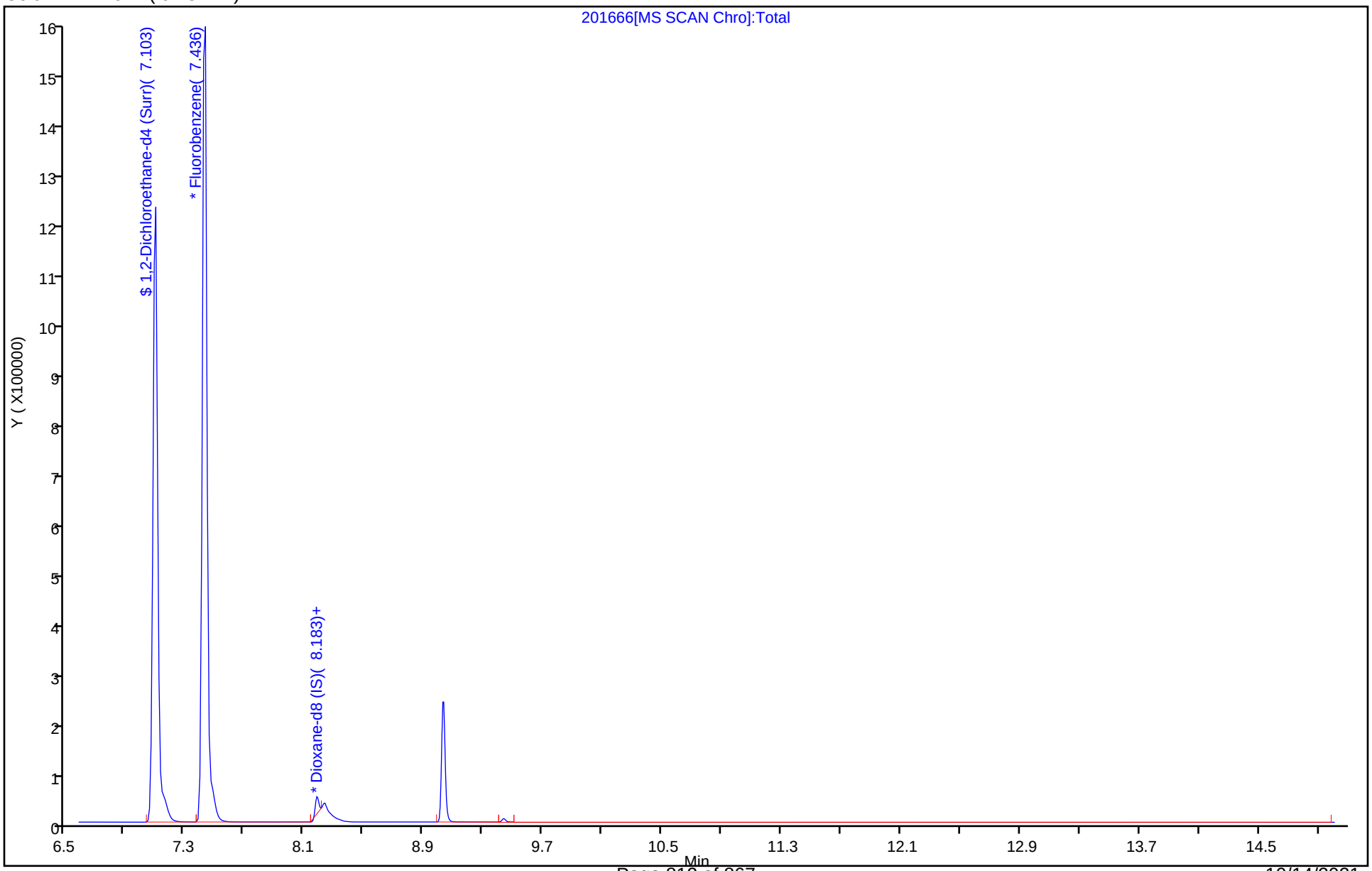
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D

Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

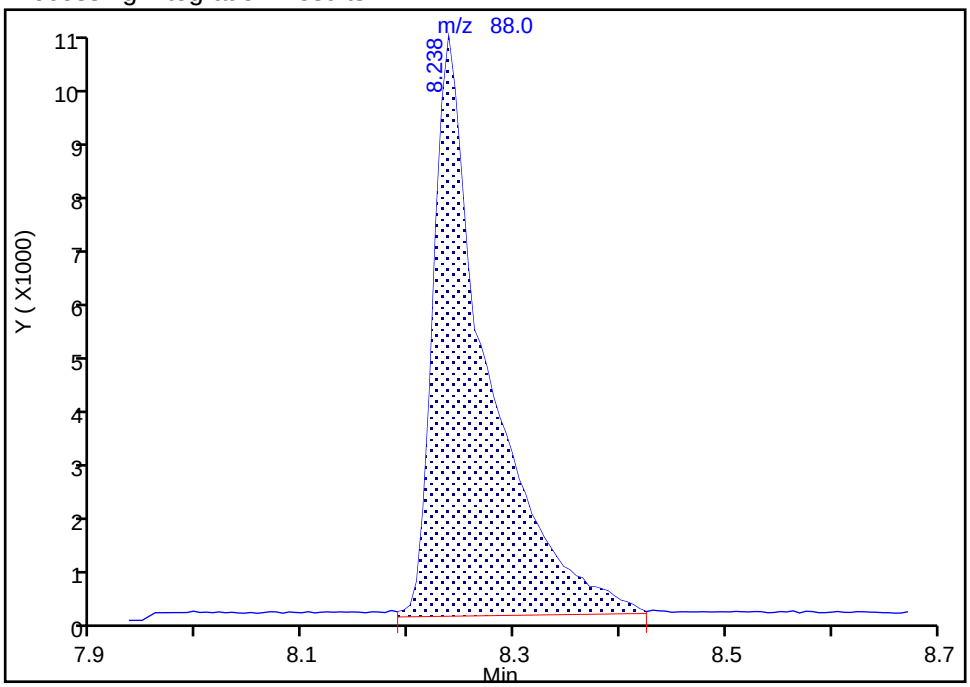
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

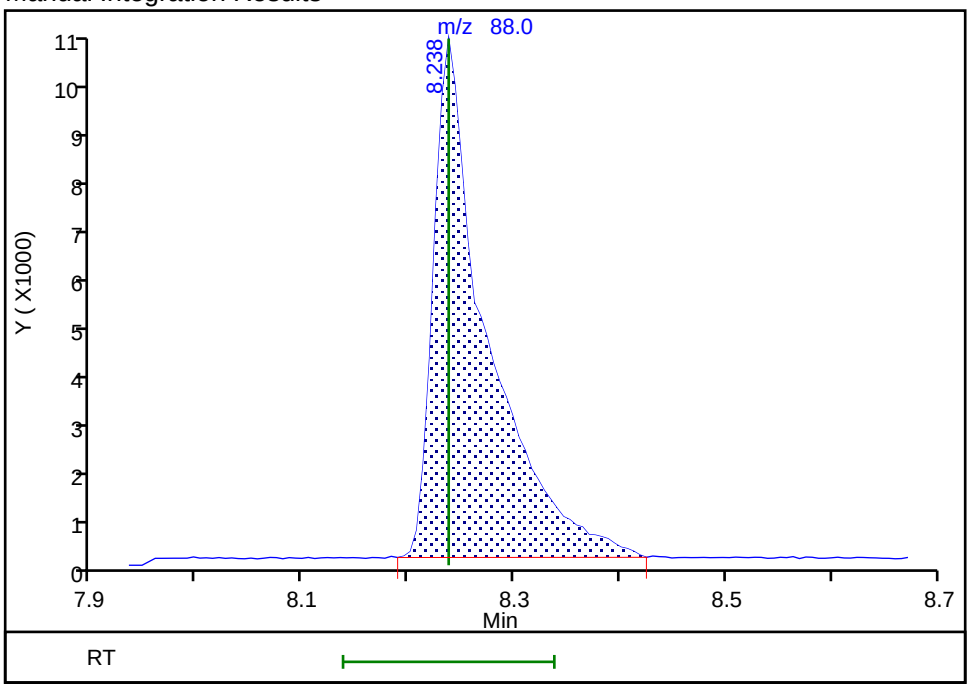
Processing Integration Results

RT: 8.24
Area: 37744
Amount: 45.133538
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 36824
Amount: 47.096609
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	09-Sep-2021 16:52:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:19	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:40:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	5574700	50.0	50.1	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3487222	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	98689	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	77285	100.0	96.0	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	15.00	Units: uL
vm50ss_00453	Amount Added:	15.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

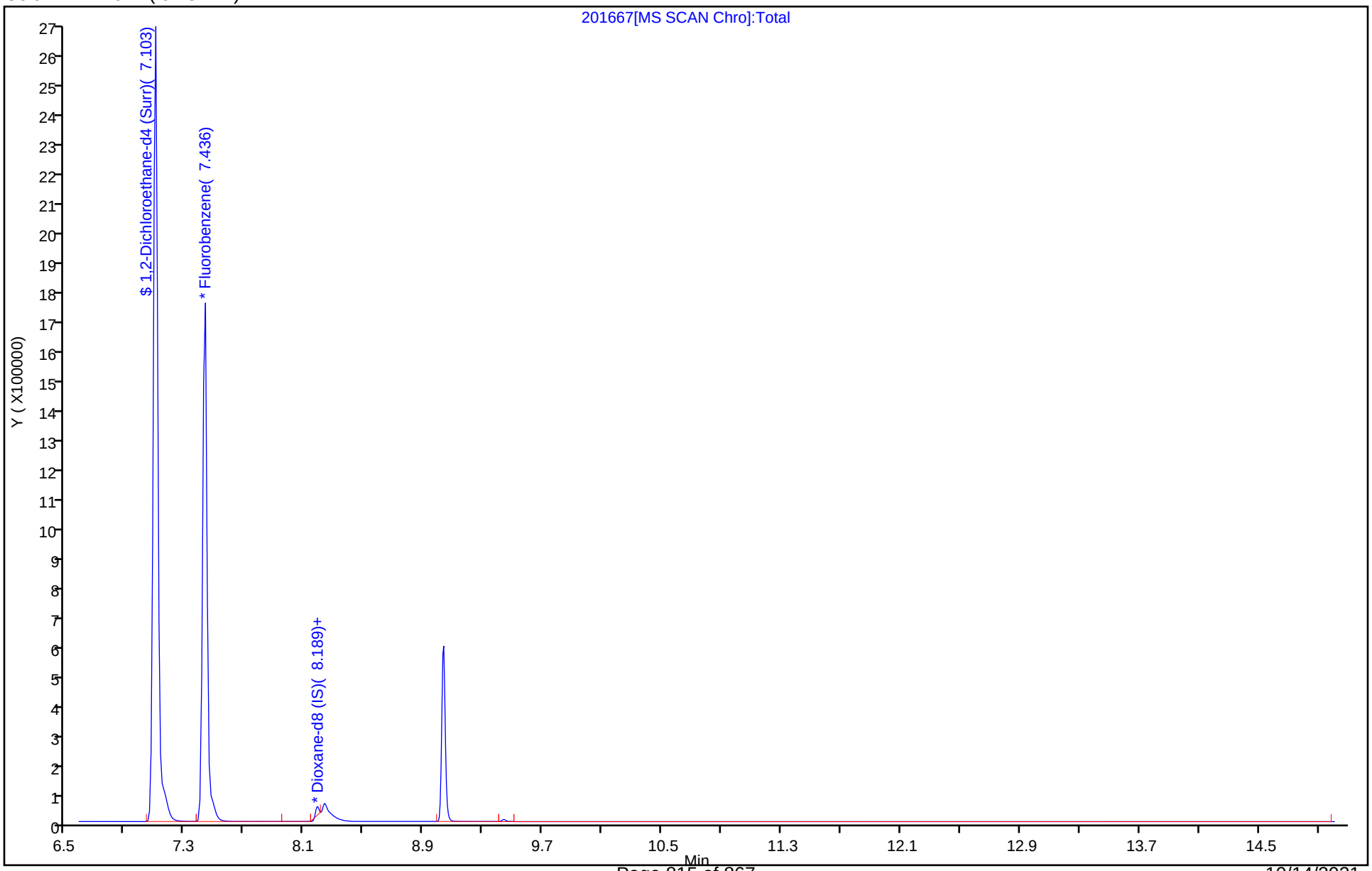
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D

Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

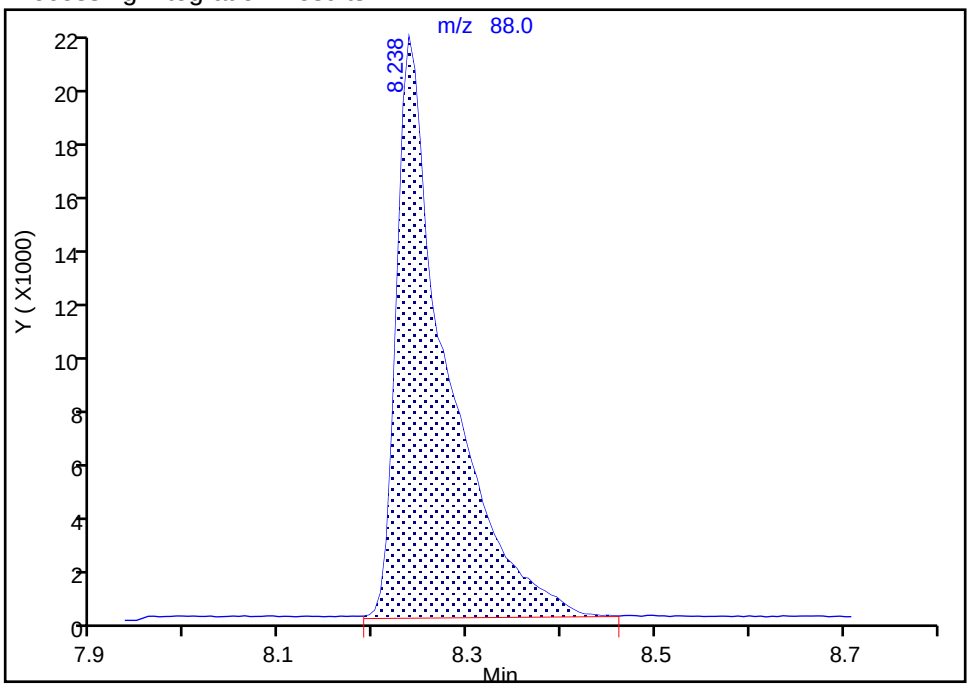
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D				
Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

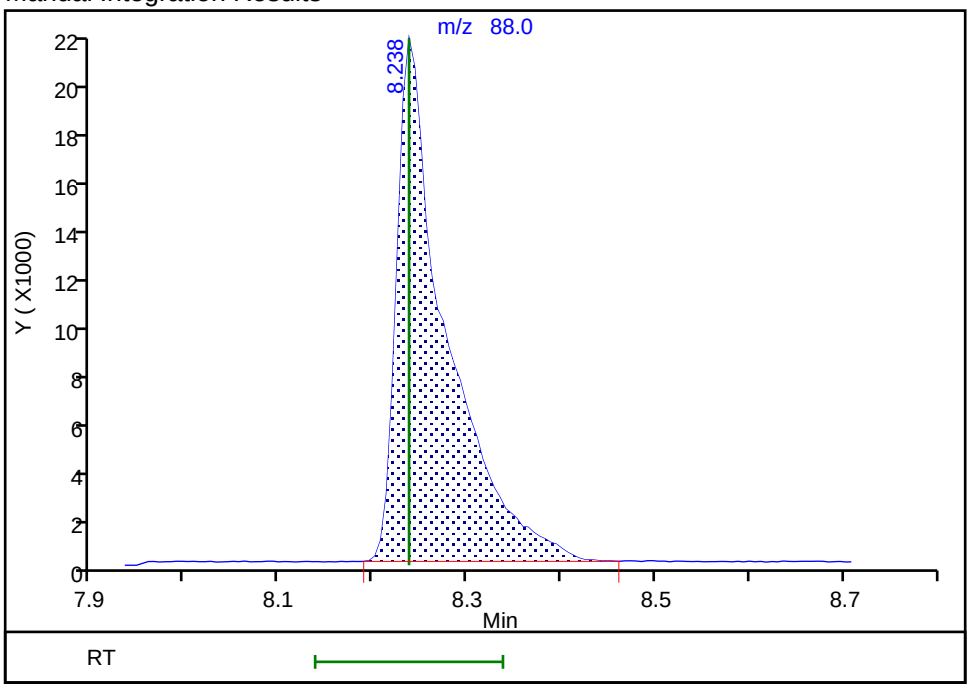
Processing Integration Results

RT: 8.24
Area: 78168
Amount: 96.896781
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 77285
Amount: 95.952255
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 17:41:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	09-Sep-2021 17:16:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:20	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:40:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	11798688	100.0	106.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3477775	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	105393	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	162137	200.0	188.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_00453	Amount Added:	30.00	Units: uL
vmdioxanew_00264	Amount Added:	30.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

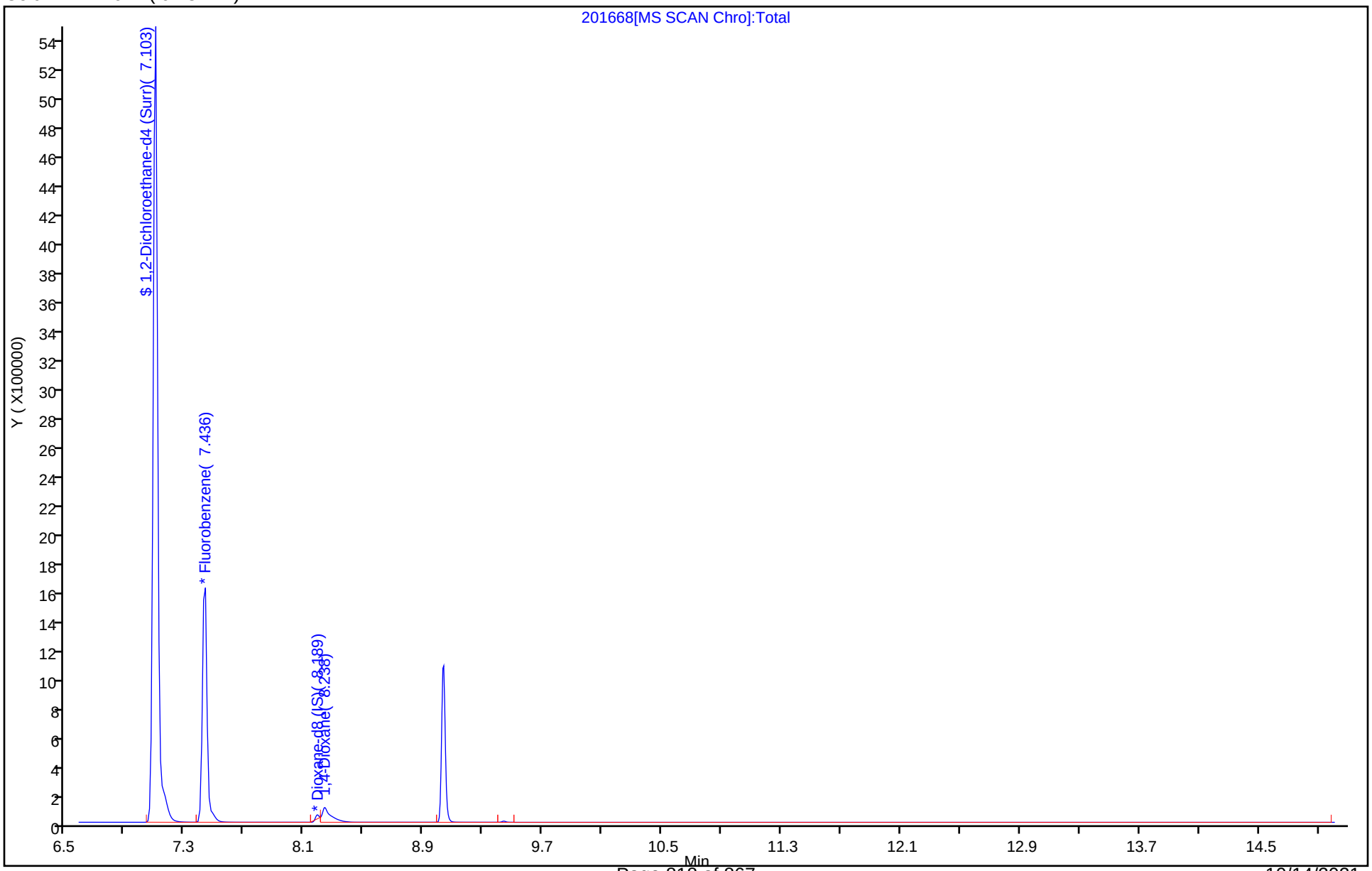
Report Date: 09-Sep-2021 17:49:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Injection Date:	09-Sep-2021 17:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

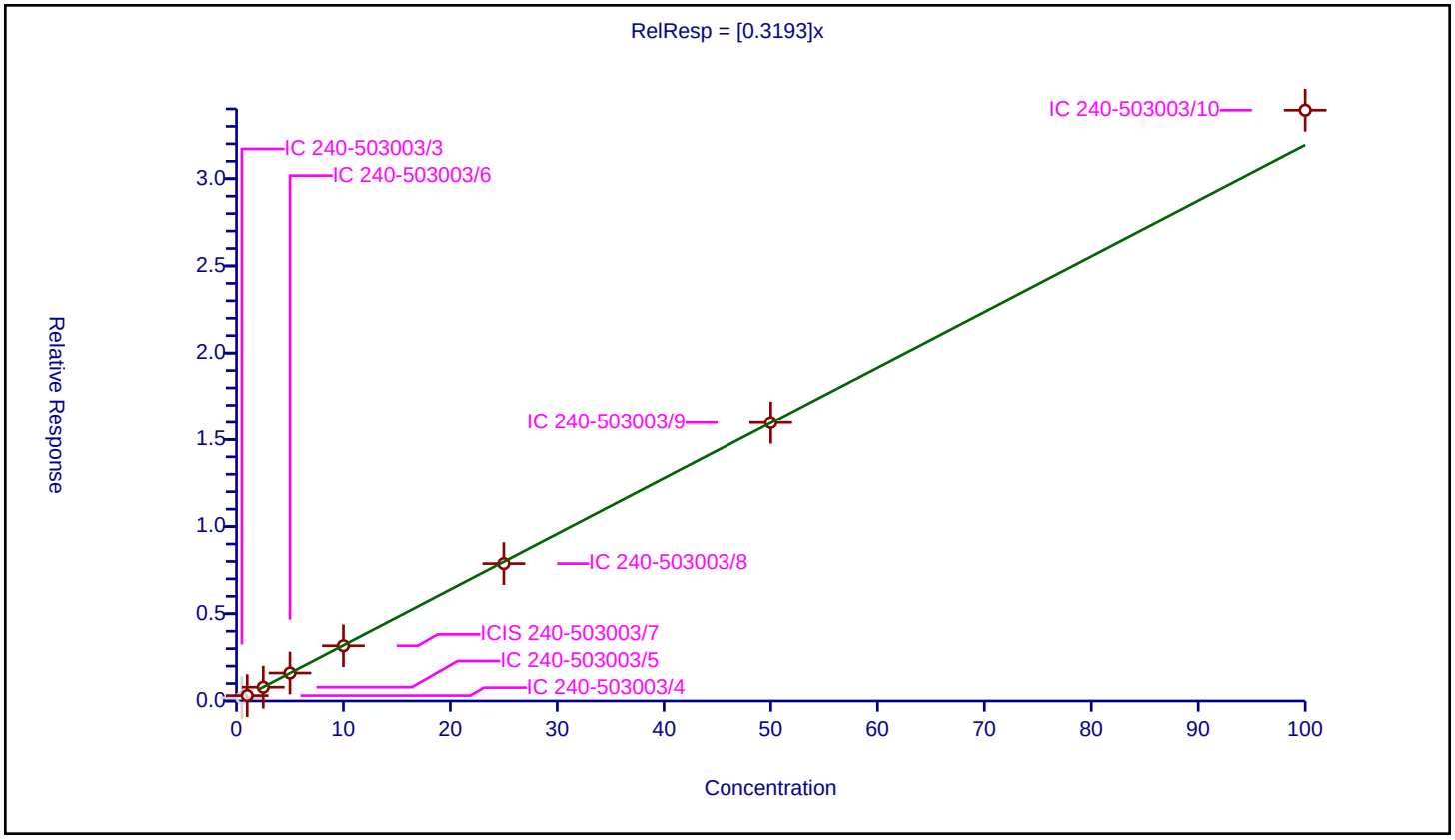
Curve Coefficients

Intercept:	0
Slope:	0.3193

Error Coefficients

Standard Error:	5460000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	0.5	0.185917	10.0	3263223.0	0.371835	N
2	IC 240-503003/4	1.0	0.308334	10.0	3215764.0	0.308334	Y
3	IC 240-503003/5	2.5	0.789848	10.0	3297506.0	0.315939	Y
4	IC 240-503003/6	5.0	1.602849	10.0	3377511.0	0.32057	Y
5	ICIS 240-503003/7	10.0	3.165713	10.0	3376203.0	0.316571	Y
6	IC 240-503003/8	25.0	7.876124	10.0	3395321.0	0.315045	Y
7	IC 240-503003/9	50.0	15.986077	10.0	3487222.0	0.319722	Y
8	IC 240-503003/10	100.0	33.925967	10.0	3477775.0	0.33926	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

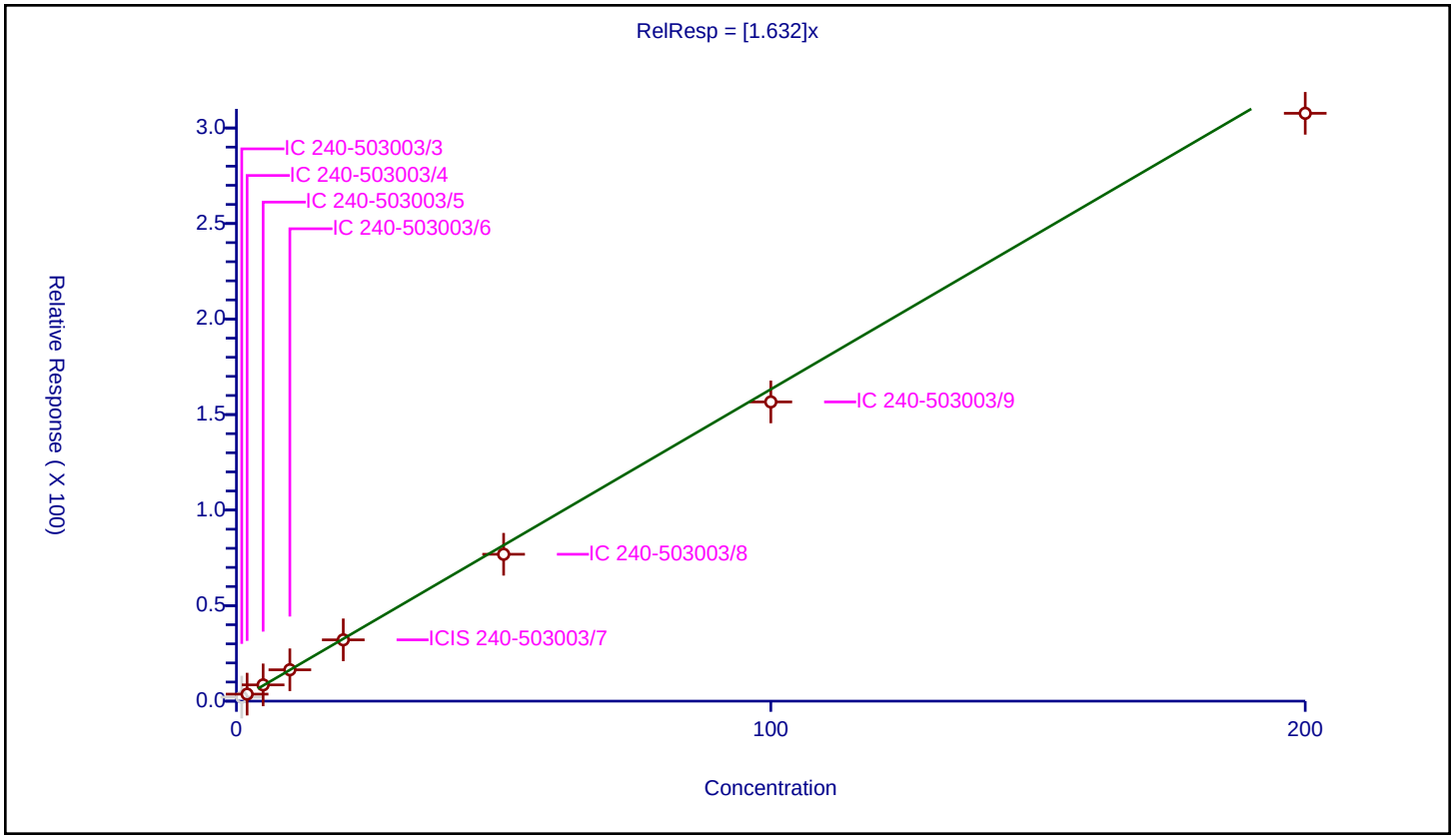
Curve Coefficients

Intercept:	0
Slope:	1.632

Error Coefficients

Standard Error:	75100
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	1.0	2.115228	200.0	94647.0	2.115228	N
2	IC 240-503003/4	2.0	3.671392	200.0	88032.0	1.835696	Y
3	IC 240-503003/5	5.0	8.514016	200.0	96993.0	1.702803	Y
4	IC 240-503003/6	10.0	16.41525	200.0	100431.0	1.641525	Y
5	ICIS 240-503003/7	20.0	32.079038	200.0	100508.0	1.603952	Y
6	IC 240-503003/8	50.0	76.876024	200.0	95801.0	1.53752	Y
7	IC 240-503003/9	100.0	156.623332	200.0	98689.0	1.566233	Y
8	IC 240-503003/10	200.0	307.680776	200.0	105393.0	1.538404	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: ICV 240-503003/12 Calibration Date: 09/09/2021 18:06

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 201670.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.559		0.00955	0.0100	-4.5	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2641		0.00827	0.0100	-17.3	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	09-Sep-2021 18:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:37:00	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1666				
First Level Reviewer: seymourc		Date:	09-Sep-2021 18:34:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	893369	10.0	8.27	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3382724	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	94434	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	54	7360	10.0	9.55	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00275	Amount Added:	3.00	Units: uL	
vm150IS20_00012	Amount Added:	1.00	Units: uL	Run Reagent
vm150SS20_00003	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00201	Amount Added:	0.00	Units:	Run Reagent

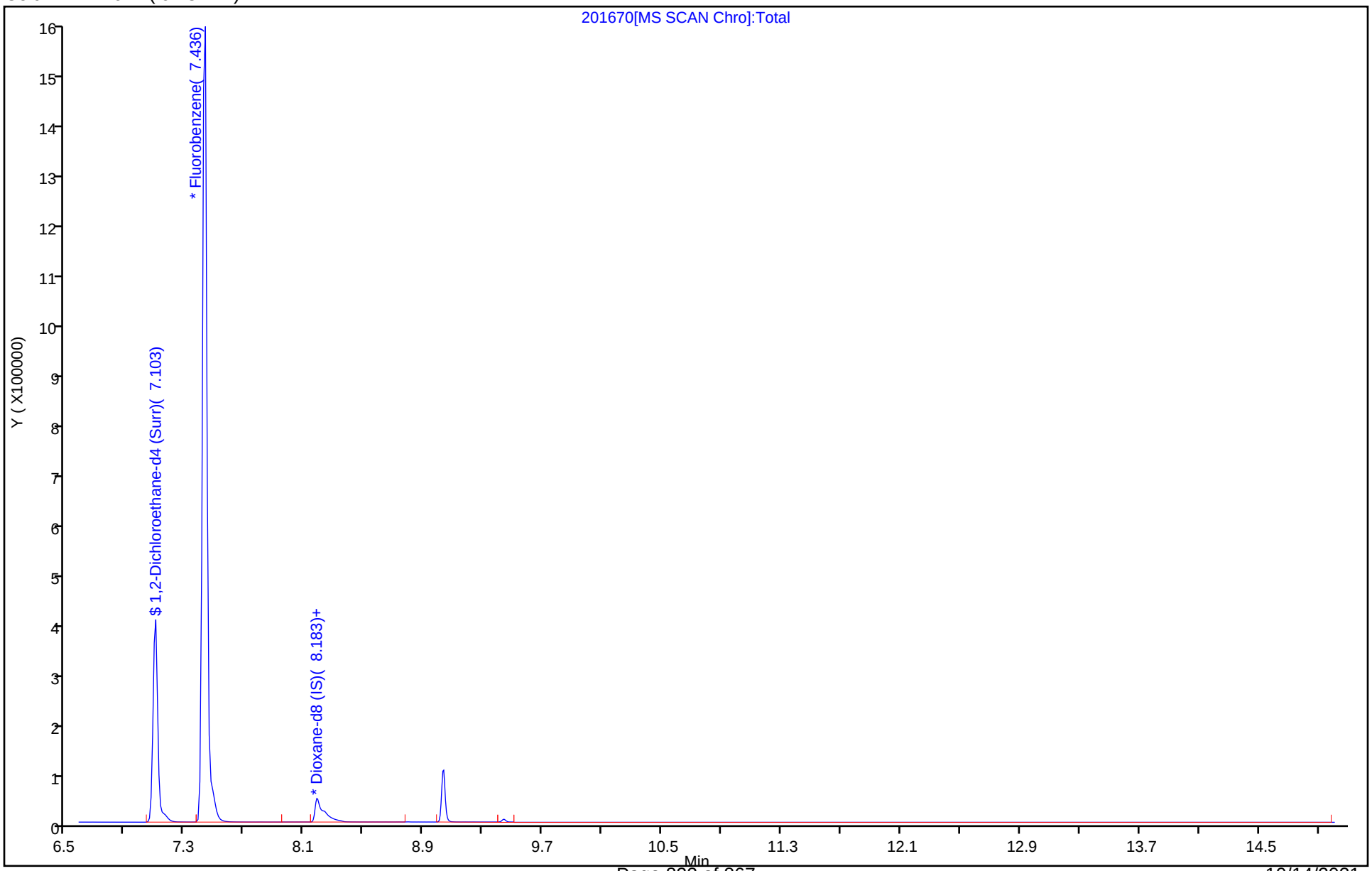
Report Date: 10-Sep-2021 15:14:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D

Injection Date:	09-Sep-2021 18:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

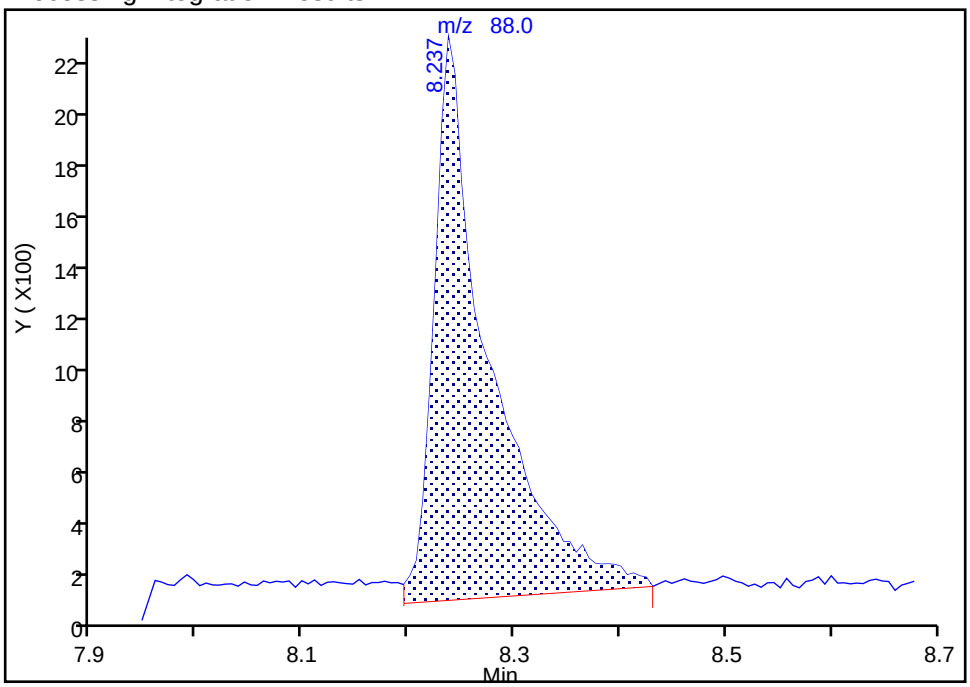
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D
Injection Date: 09-Sep-2021 18:06:30 Instrument ID: A3UX20
Lims ID: ICV
Client ID:
Operator ID: 434006 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

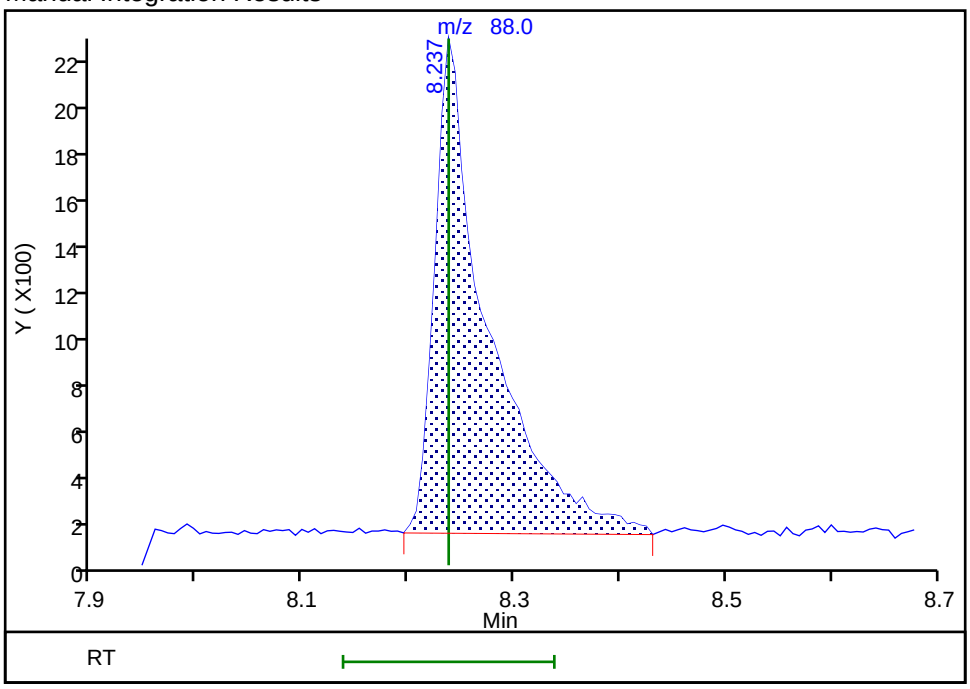
Processing Integration Results

RT: 8.24
Area: 7881
Amount: 10.225432
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7360
Amount: 9.549445
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 18:34:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Lab Sample ID: CCVIS 240-507716/3 Calibration Date: 10/11/2021 19:31

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 201901.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.444		0.0177	0.0200	-11.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2705		0.00847	0.0100	-15.3	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201901.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 11-Oct-2021 19:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0113999-003
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 12-Oct-2021 12:19:23 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1667

First Level Reviewer: seymourc Date: 11-Oct-2021 20:34:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	804732	10.0	8.47	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2975236	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	102694	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	52	14830	20.0	17.7	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00267	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

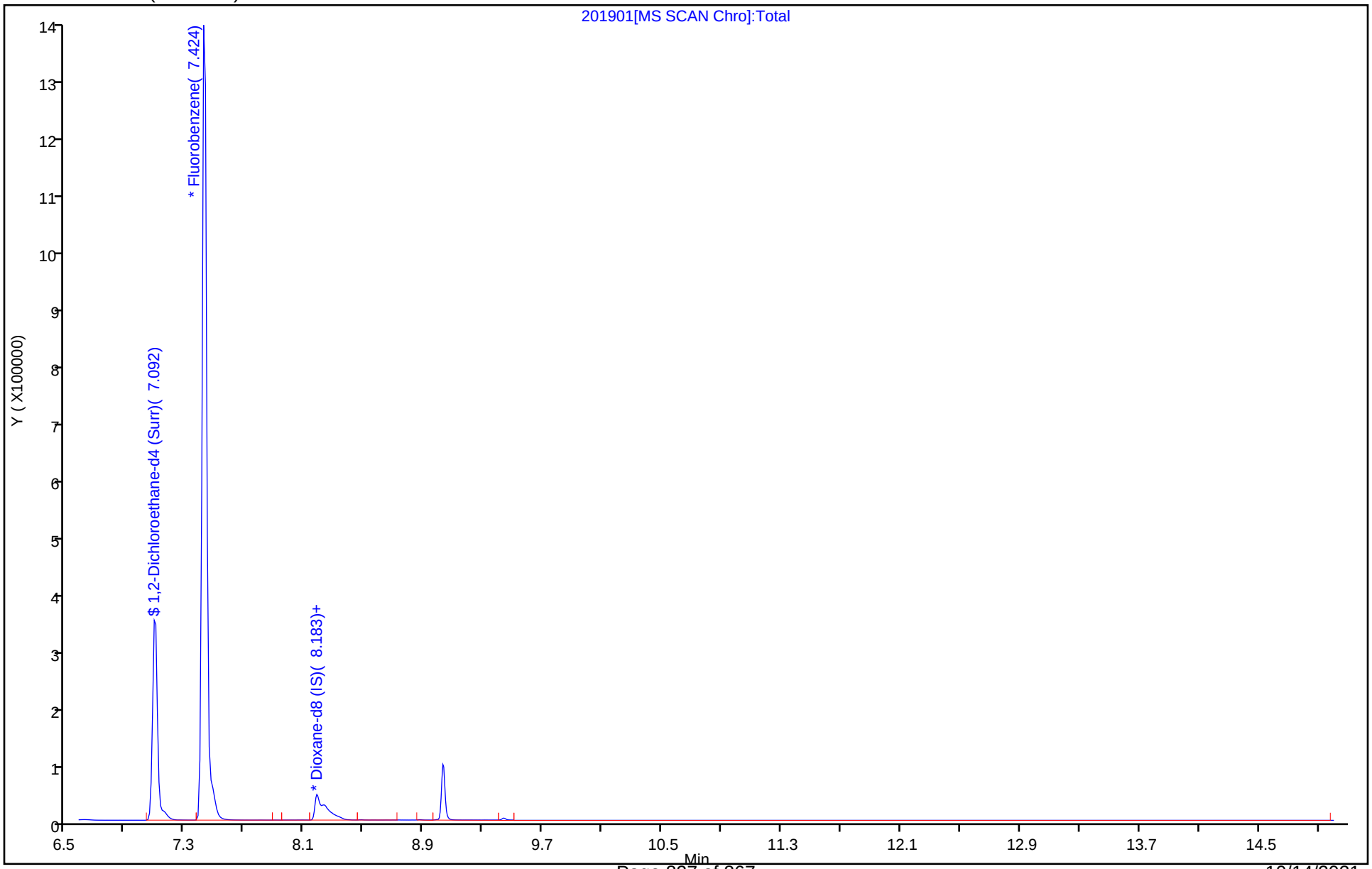
Report Date: 12-Oct-2021 12:19:23 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201901.D

Injection Date:	11-Oct-2021 19:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

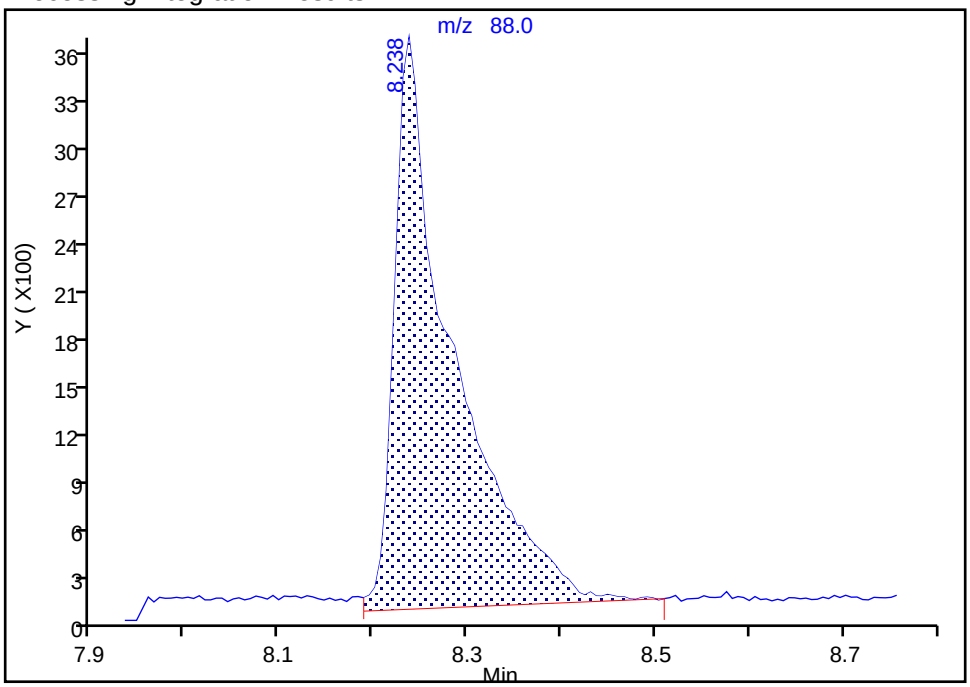
Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201901.D
Injection Date: 11-Oct-2021 19:31:30 Instrument ID: A3UX20
Lims ID: CCVIS
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

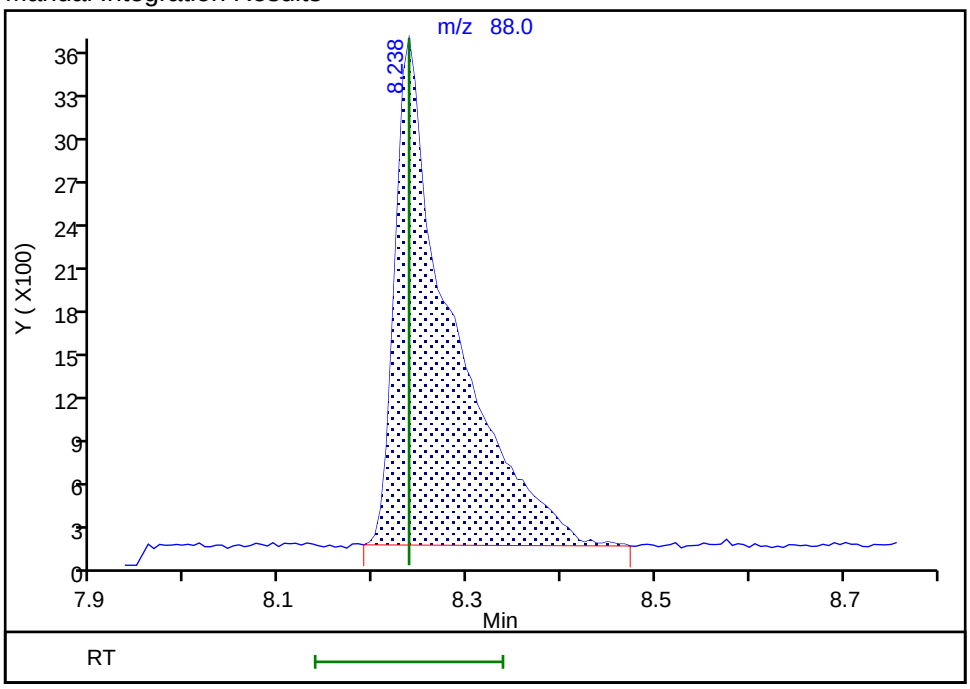
Processing Integration Results

RT: 8.24
Area: 15622
Amount: 18.638900
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 14830
Amount: 17.693950
Amount Units: ug/l



Reviewer: seymourc, 11-Oct-2021 20:34:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Sep-2021 13:33:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:29 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 15:10:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	994347	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

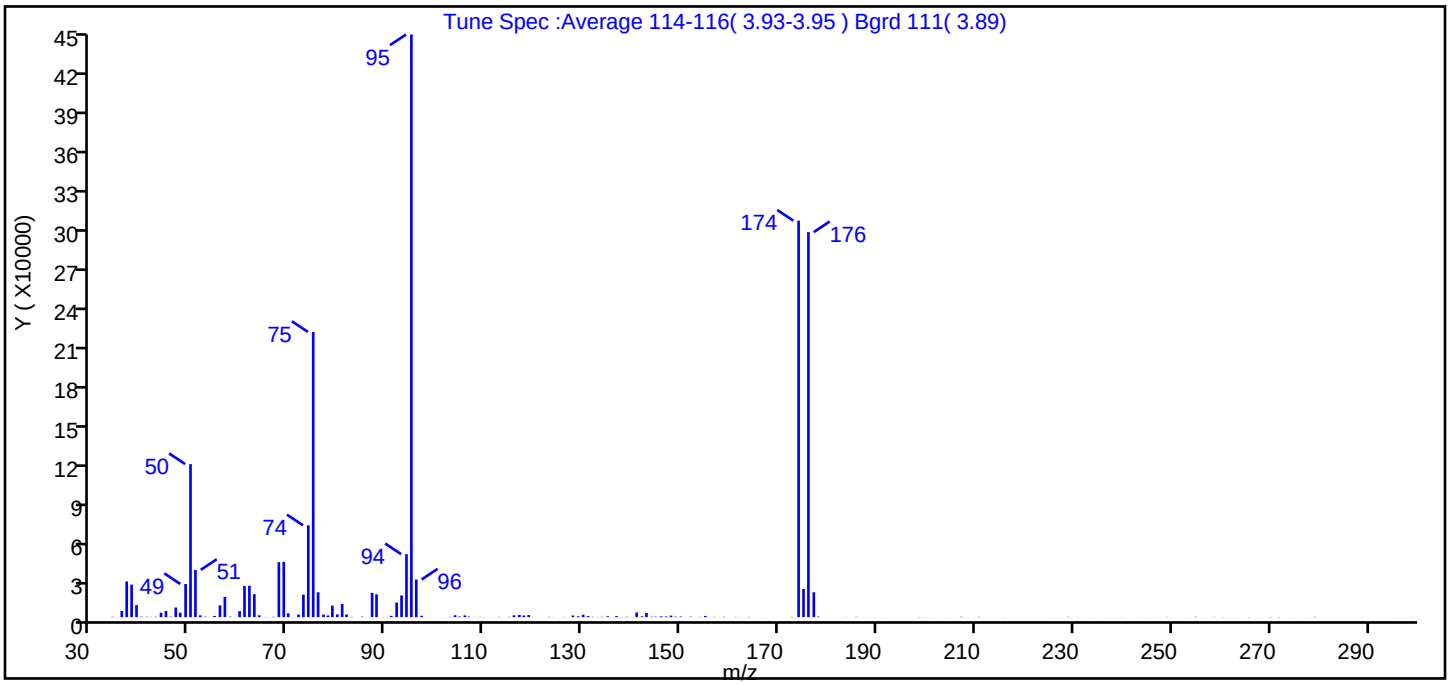
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Injection Date: 09-Sep-2021 13:33:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	68.0
175	5 to 9% of m/z 174	4.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	66.1 (97.1)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	256	80.00	2103	135.00	668	201.00	55
35.00	86	81.00	9949	137.00	827	204.00	78
36.00	4779	82.00	2003	138.00	143	205.00	60
37.00	27144	83.00	168	139.00	299	207.00	277
38.00	24712	85.00	349	140.00	100	208.00	34
39.00	9159	87.00	18480	141.00	3566	211.00	203
40.00	362	88.00	17352	142.00	626	214.00	50
41.00	277	89.00	103	143.00	3194	216.00	120
42.00	206	90.00	57	144.00	298	225.00	54
43.00	269	91.00	1044	145.00	366	227.00	79
44.00	3367	92.00	11093	146.00	611	229.00	209
45.00	4727	93.00	16488	147.00	529	230.00	53
46.00	338	94.00	47864	148.00	1161	231.00	54
47.00	7337	95.00	442816	149.00	328	233.00	56
48.00	3399	96.00	28600	150.00	472	237.00	123
49.00	25192	97.00	1012	151.00	41	239.00	53
50.00	116304	102.00	123	152.00	311	240.00	84
51.00	35920	103.00	171	153.00	38	243.00	51
52.00	1379	104.00	1466	154.00	184	244.00	89
53.00	392	105.00	453	155.00	919	245.00	74
55.00	917	106.00	1305	157.00	192	246.00	54
56.00	8982	107.00	417	158.00	61	247.00	108
57.00	15386	108.00	86	159.00	228	249.00	145
58.00	343	109.00	166	161.00	192	250.00	54
59.00	72	110.00	113	162.00	67	254.00	59
60.00	4577	111.00	70	164.00	180	255.00	260
61.00	23744	112.00	91	167.00	77	256.00	73
62.00	23856	113.00	159	170.00	20	258.00	67
63.00	17464	115.00	229	173.00	205	259.00	146
64.00	1361	116.00	1389	174.00	301312	260.00	114
65.00	141	117.00	1709	175.00	21384	262.00	77
66.00	76	118.00	1227	176.00	292608	263.00	60
67.00	238	119.00	1583	177.00	18904	266.00	126

Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	41776	122.00	24	178.00	412	268.00	53
69.00	42072	123.00	216	182.00	67	270.00	152
70.00	2909	124.00	108	184.00	125	272.00	68
71.00	46	126.00	169	186.00	193	272.00	142
72.00	1983	127.00	15	187.00	87	275.00	79
73.00	17120	128.00	1271	188.00	79	277.00	64
74.00	69792	129.00	629	189.00	50	279.00	219
75.00	216768	130.00	1823	190.00	50	289.00	58
76.00	18920	131.00	784	191.00	81	296.00	59
77.00	1972	132.00	215	198.00	129	298.00	63
78.00	1260	133.00	137	199.00	112	299.00	127
79.00	8784	134.00	230	200.00	98		

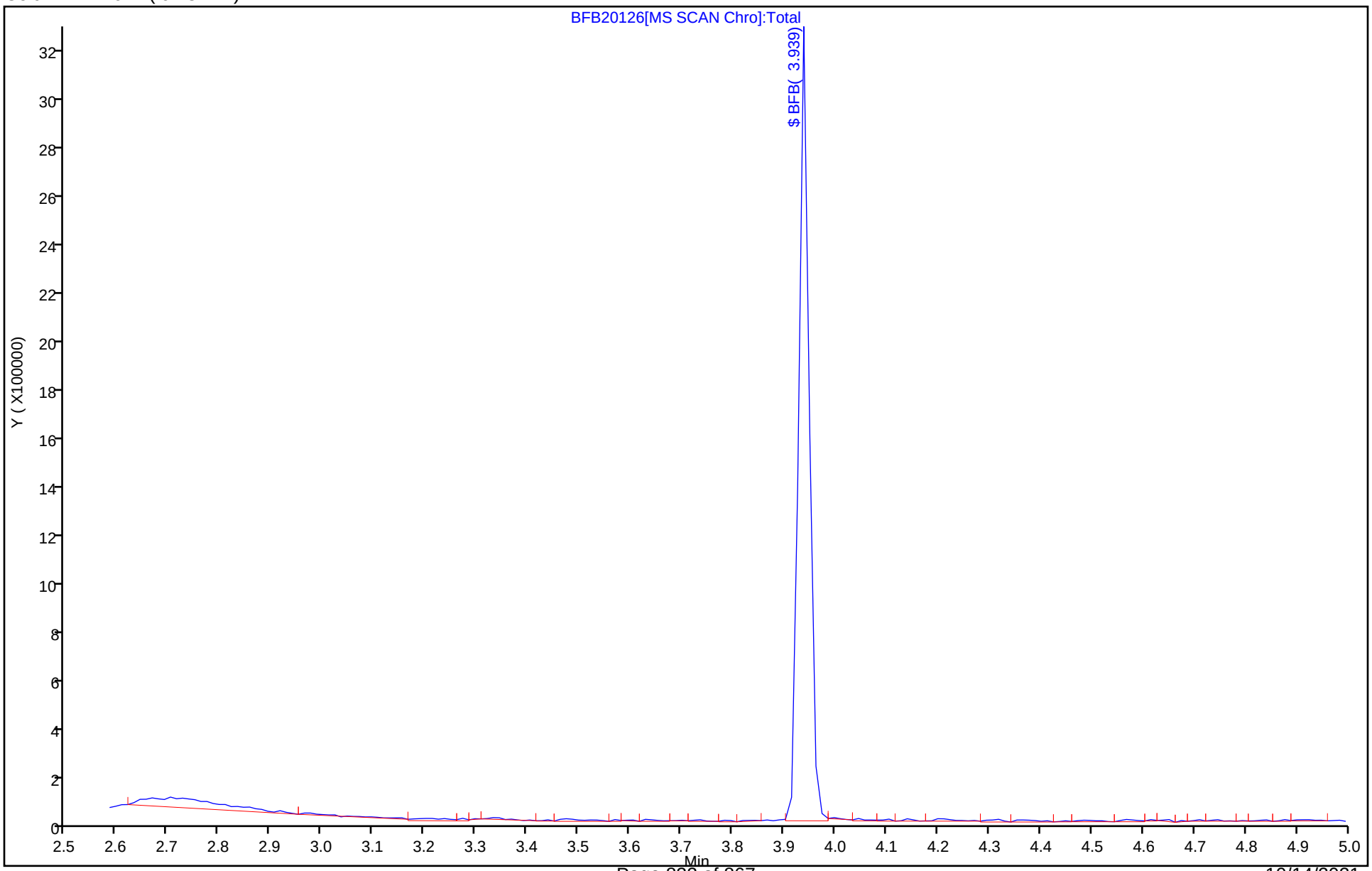
Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D

Injection Date:	09-Sep-2021 13:33:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\BFB20140.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 11-Oct-2021 18:52:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0113999-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 12-Oct-2021 12:19:56 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1667

First Level Reviewer: seymourc Date: 11-Oct-2021 19:47:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	1645251	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

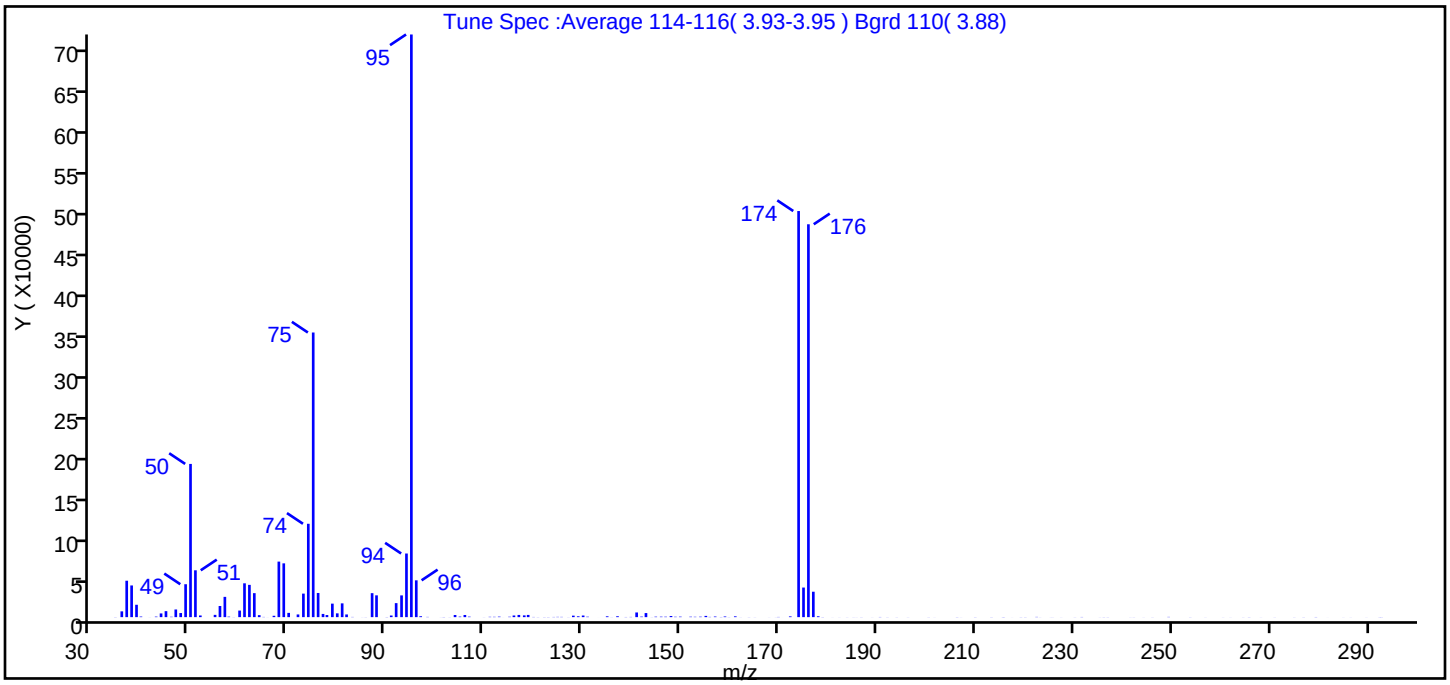
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\BFB20140.D
Injection Date: 11-Oct-2021 18:52:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.3
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	69.7
175	5 to 9% of m/z 174	5.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	67.4 (96.7)
177	5 to 9% of m/z 176	4.4 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\BFB20140.D\8260SIM_20.rslt\spectra.d
Injection Date: 11-Oct-2021 18:52:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 182

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	147	86.00	106	139.00	197	196.00	76
36.00	7094	87.00	29336	140.00	257	200.00	100
37.00	44552	88.00	26664	141.00	5718	202.00	50
38.00	38768	90.00	179	142.00	650	206.00	134
39.00	15133	91.00	1985	143.00	4992	207.00	49
40.00	719	92.00	17144	144.00	80	210.00	132
42.00	56	93.00	26608	145.00	566	213.00	122
43.00	651	94.00	77856	146.00	576	216.00	71
44.00	4560	95.00	712832	147.00	531	216.00	133
45.00	7329	96.00	45048	148.00	1397	218.00	37
46.00	450	97.00	1112	149.00	467	219.00	115
47.00	9375	98.00	275	150.00	599	220.00	121
48.00	5022	101.00	52	152.00	538	222.00	290
49.00	40272	102.00	181	153.00	429	223.00	65
50.00	187456	103.00	96	154.00	560	225.00	56
51.00	57312	104.00	2609	155.00	1518	226.00	59
52.00	2029	105.00	633	156.00	284	228.00	52
55.00	2790	106.00	2630	157.00	749	230.00	82
56.00	13634	107.00	596	158.00	183	232.00	221
57.00	24808	110.00	74	159.00	818	235.00	65
58.00	603	111.00	395	160.00	113	236.00	115
59.00	105	112.00	384	161.00	978	237.00	107
60.00	8033	113.00	627	162.00	64	242.00	64
61.00	41392	114.00	31	164.00	102	242.00	86
62.00	39488	115.00	480	165.00	75	244.00	57
63.00	29360	116.00	2020	168.00	50	246.00	83
64.00	2431	117.00	2699	169.00	64	249.00	288
65.00	253	118.00	2153	170.00	243	254.00	104
66.00	48	119.00	2713	171.00	13	257.00	59
67.00	1662	120.00	232	172.00	906	260.00	59
68.00	67944	121.00	123	174.00	496832	262.00	52
69.00	65808	122.00	146	175.00	36200	265.00	77
70.00	5217	123.00	159	176.00	480640	266.00	127

Report Date: 12-Oct-2021 12:19:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46
Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\BFB20140.D\8260SIM_20.rslt\spectra.d
Injection Date: 11-Oct-2021 18:52:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 182

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3294	124.00	231	177.00	31104	268.00	53
73.00	28800	125.00	320	178.00	1013	271.00	76
74.00	114232	126.00	295	179.00	158	275.00	87
75.00	348224	127.00	90	181.00	44	277.00	109
76.00	29560	128.00	1823	182.00	61	279.00	189
77.00	3934	129.00	1022	184.00	74	282.00	27
78.00	2567	130.00	1976	185.00	75	285.00	51
79.00	16528	131.00	528	186.00	53	286.00	55
80.00	4651	133.00	17	187.00	106	290.00	52
81.00	16864	135.00	1015	189.00	55	292.00	123
82.00	3292	136.00	74	191.00	205	293.00	111
83.00	249	137.00	1086	192.00	100		
85.00	55	138.00	5	194.00	96		

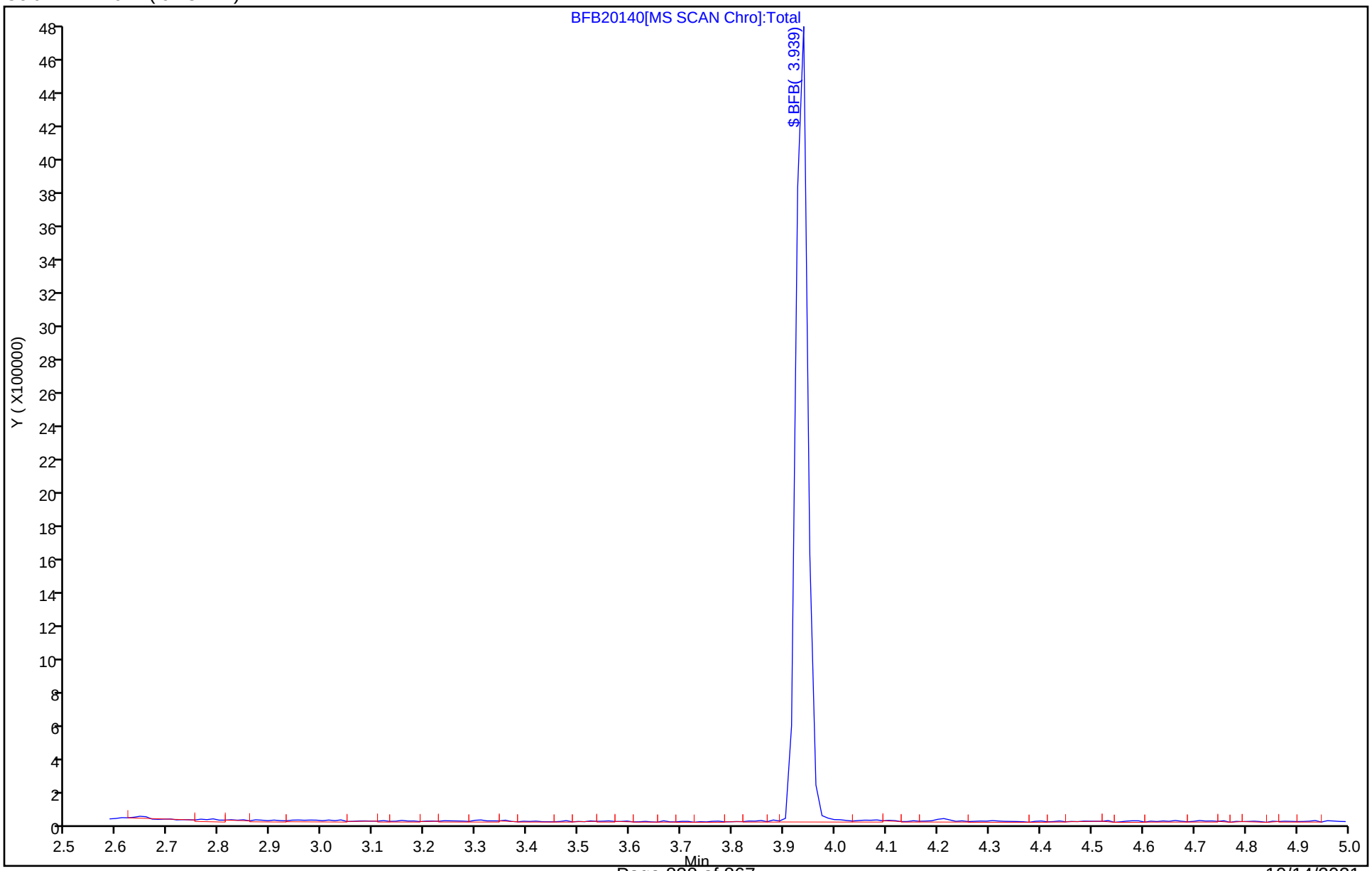
Report Date: 12-Oct-2021 12:19:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\BFB20140.D

Injection Date:	11-Oct-2021 18:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-507716/5

Matrix: Water Lab File ID: 201903.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 20:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201903.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Oct-2021 20:19:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0113999-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 12-Oct-2021 12:19:23 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1667

First Level Reviewer: seymourc Date: 11-Oct-2021 21:26:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	766520	10.0	8.27	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2901557	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	91322	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

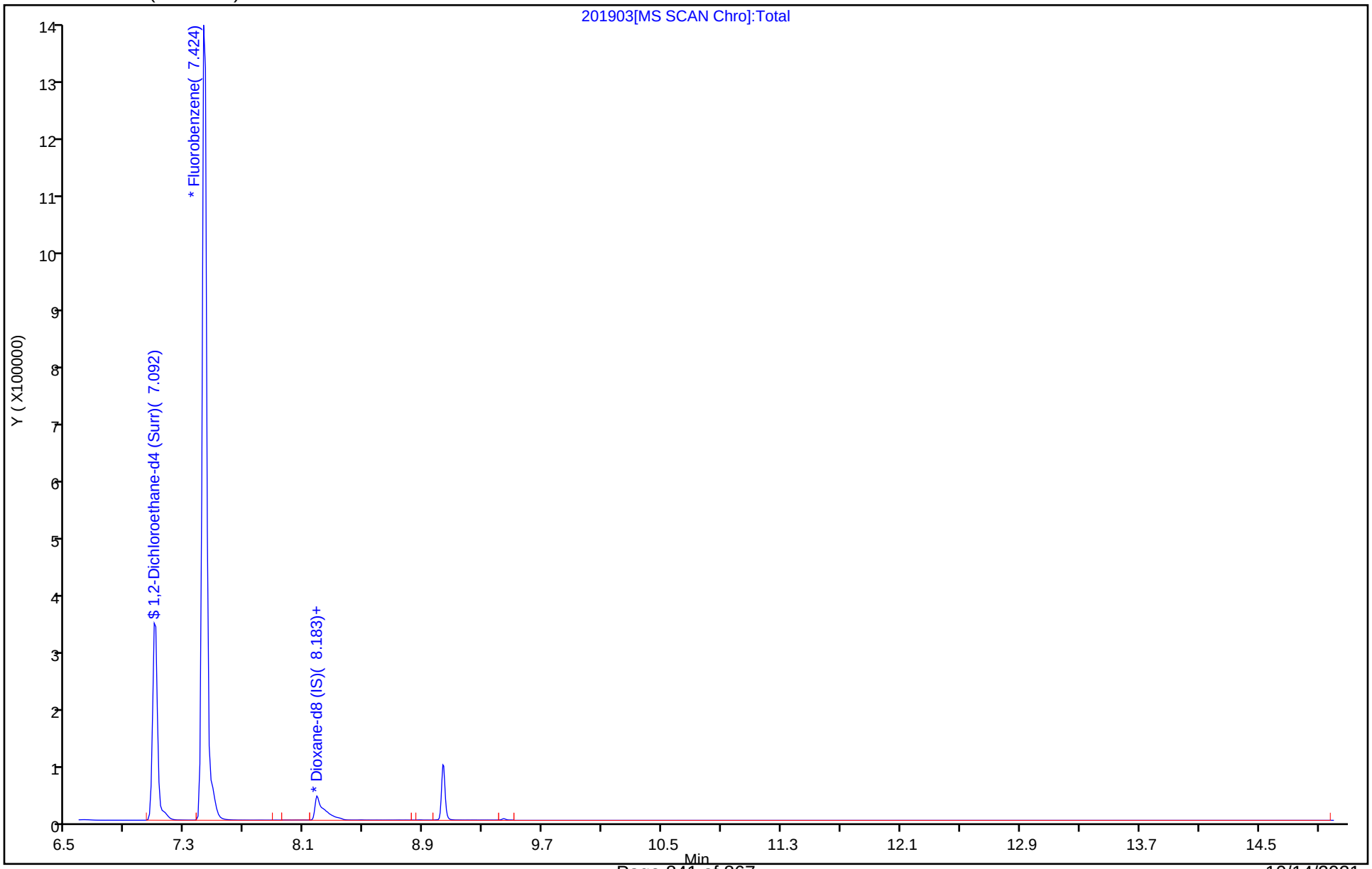
Report Date: 12-Oct-2021 12:19:25 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201903.D

Injection Date:	11-Oct-2021 20:19:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201903.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	11-Oct-2021 20:19:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 11-Oct-2021 21:26:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.27	82.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-507716/4

Matrix: Water Lab File ID: 201902.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 19:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.49		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201902.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2021 19:55:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0113999-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 12-Oct-2021 12:19:23 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1667

First Level Reviewer: seymourc Date: 11-Oct-2021 20:35:02

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	784289	10.0	8.31	
*	7 Fluorobenzene	96	7.424	7.424	0.000	100	2954548	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	95362	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.238	0.000	50	7383	10.0	9.49	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00279	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

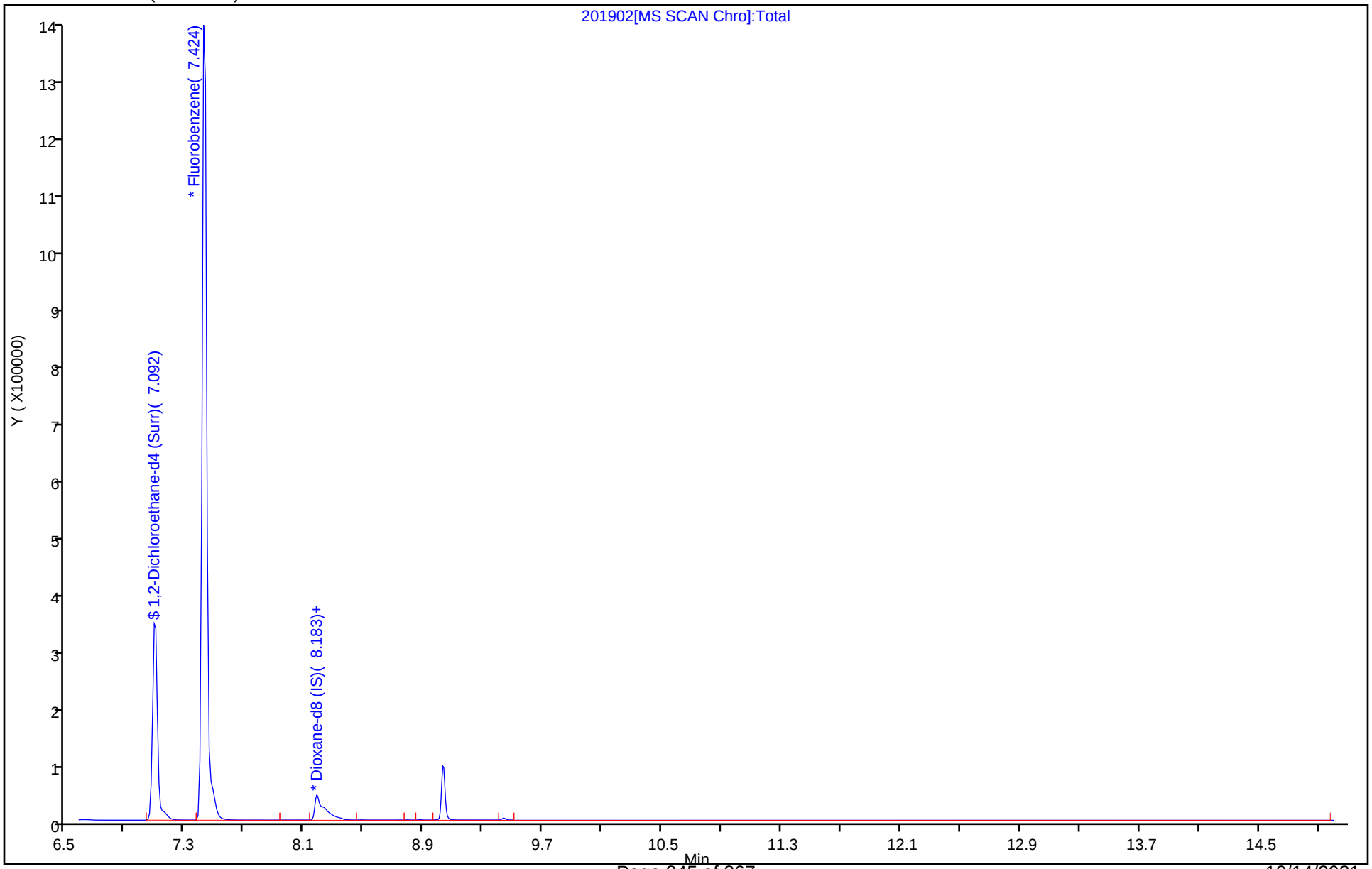
Report Date: 12-Oct-2021 12:19:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201902.D

Injection Date:	11-Oct-2021 19:55:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201902.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Oct-2021 19:55:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 11-Oct-2021 20:35:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.31	83.12

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

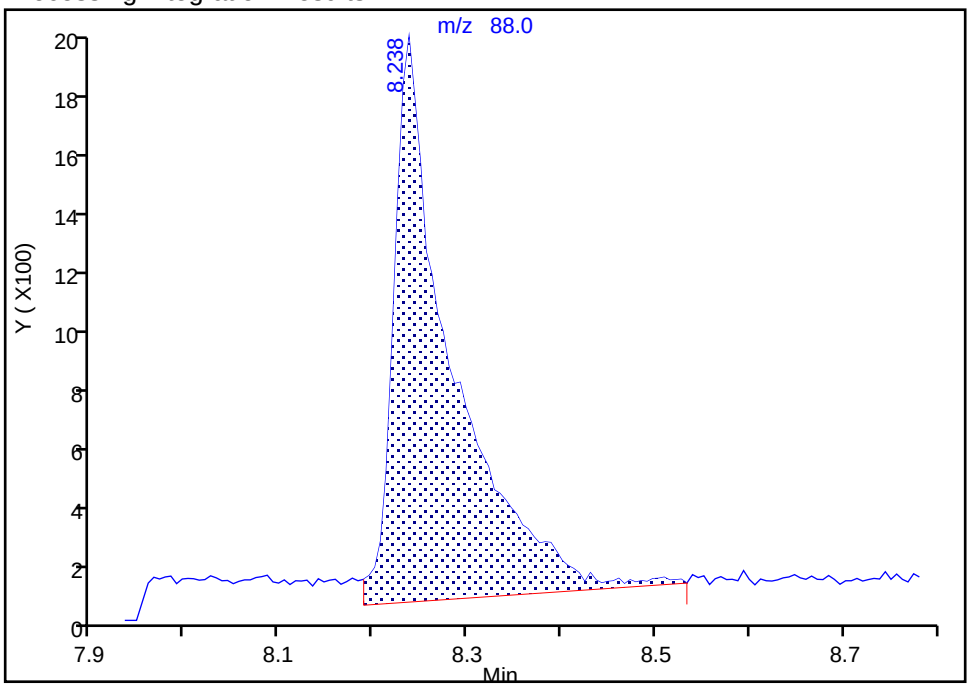
Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201902.D
Injection Date: 11-Oct-2021 19:55:30 Instrument ID: A3UX20
Lims ID: LCS
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

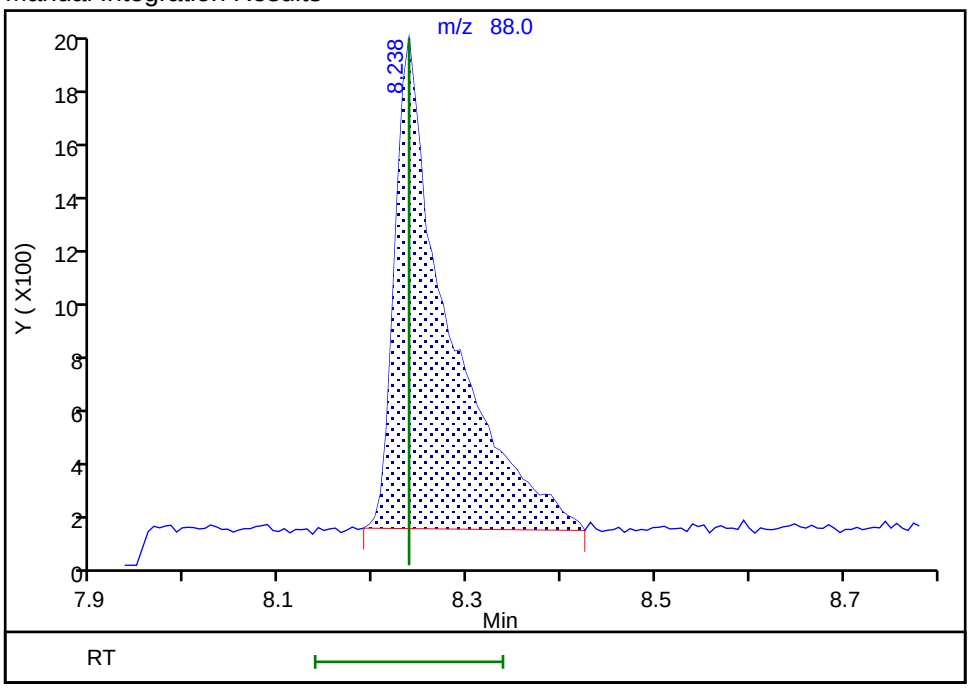
Processing Integration Results

RT: 8.24
Area: 8371
Amount: 10.755503
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7383
Amount: 9.486068
Amount Units: ug/l



Reviewer: seymourc, 11-Oct-2021 20:34:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 500-206406-A-2 MS

Matrix: Water Lab File ID: 201912.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 10/11/2021 23:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.39		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201912.D				
Lims ID:	500-206406-A-2 MS				
Client ID:	MW-3B-GW-100421				
Sample Type:	MS				
Inject. Date:	11-Oct-2021 23:54:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:55:52		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	780491	10.0	8.08	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	3024411	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	95	92202	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	7065	10.0	9.39	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vmdiox_spike_00279	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

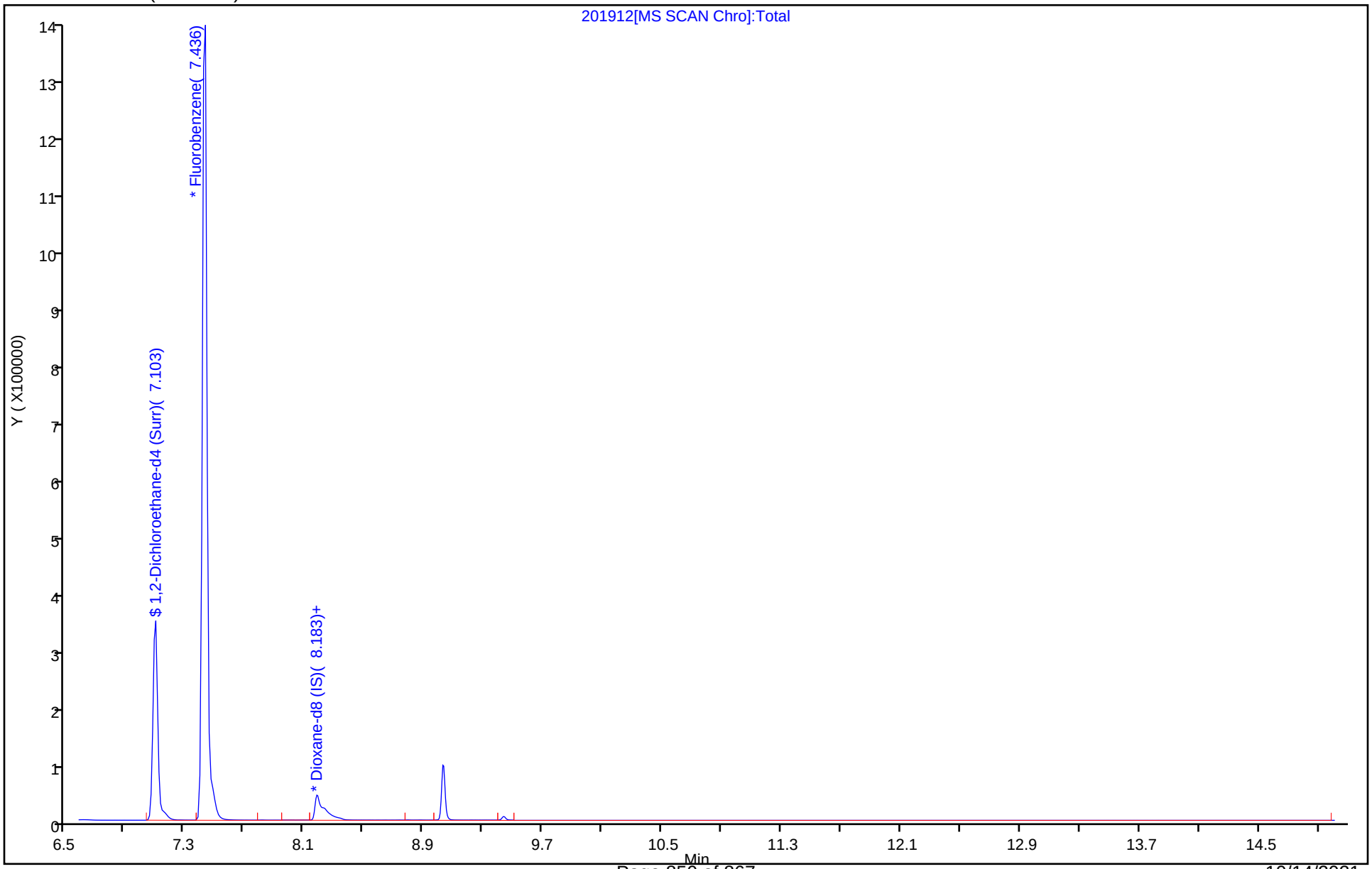
Report Date: 12-Oct-2021 12:19:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201912.D

Injection Date:	11-Oct-2021 23:54:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	500-206406-A-2 MS			Worklist Smp#:	14
Client ID:	MW-3B-GW-100421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201912.D				
Lims ID:	500-206406-A-2 MS				
Client ID:	MW-3B-GW-100421				
Sample Type:	MS				
Inject. Date:	11-Oct-2021 23:54:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:55:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.08	80.81

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

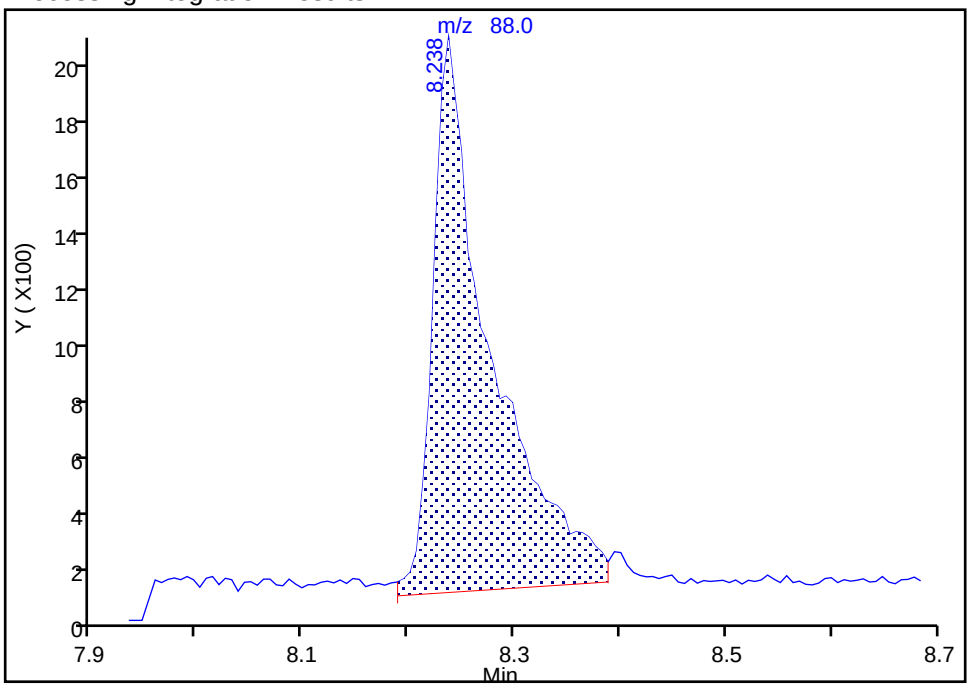
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201912.D				
Injection Date:	11-Oct-2021 23:54:30	Instrument ID:	A3UX20		
Lims ID:	500-206406-A-2 MS				
Client ID:	MW-3B-GW-100421				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

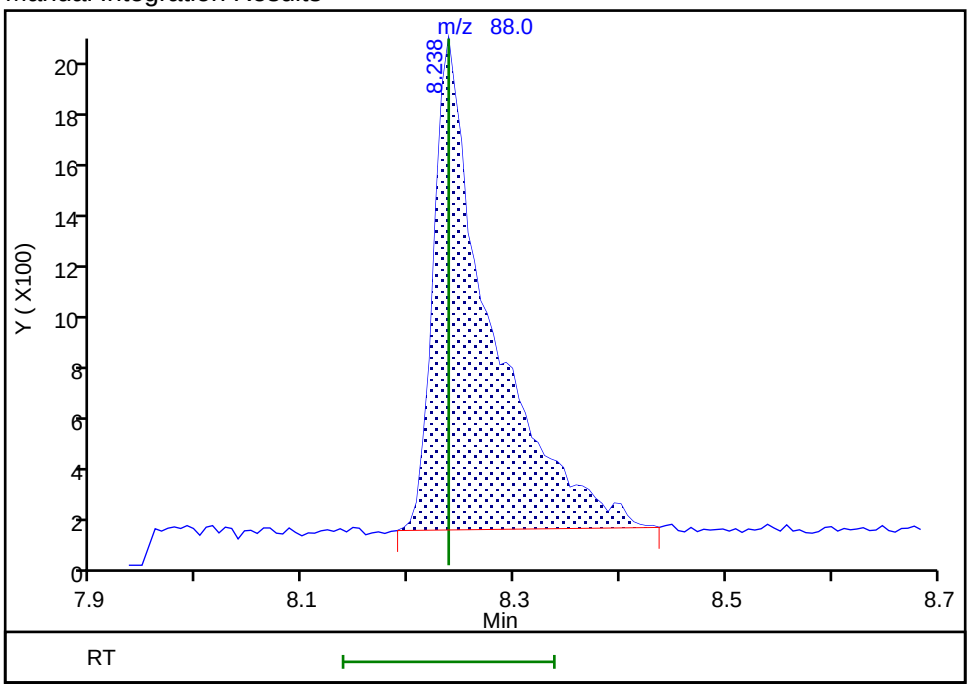
Processing Integration Results

RT: 8.24
Area: 7319
Amount: 9.726131
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7065
Amount: 9.388594
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:55:48

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Client Sample ID: Lab Sample ID: 500-206406-A-2 MSD

Matrix: Water Lab File ID: 201913.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 10/12/2021 00:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 507716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.80		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201913.D				
Lims ID:	500-206406-A-2 MSD				
Client ID:	MW-3B-GW-100421				
Sample Type:	MSD				
Inject. Date:	12-Oct-2021 00:18:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				
First Level Reviewer: seymourc		Date:	12-Oct-2021 11:56:07		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	780941	10.0	8.22	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2975271	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	90507	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	52	7239	10.0	9.80	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vmdiox_spike_00279	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00014	Amount Added:	1.00	Units: uL	Run Reagent

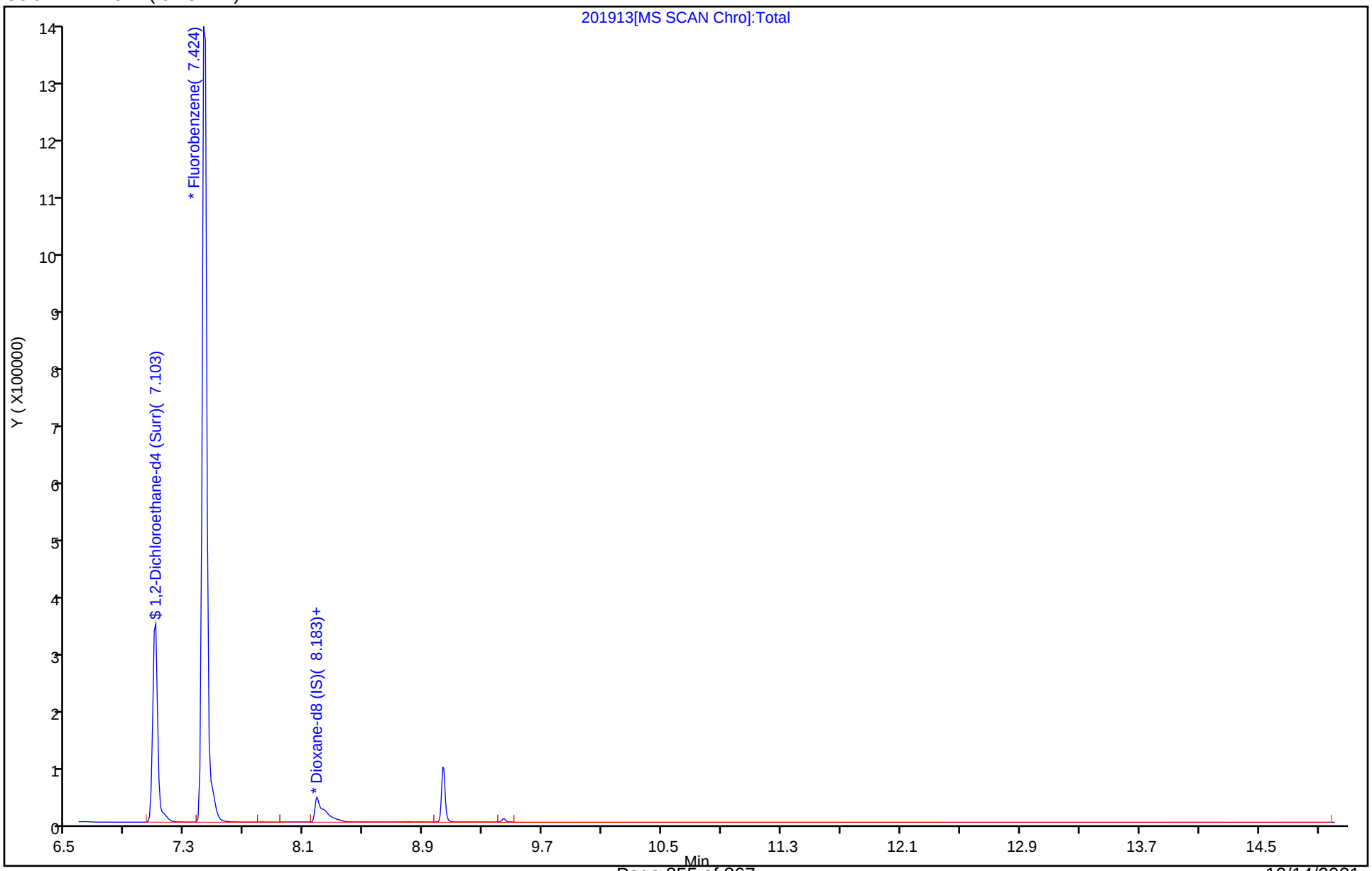
Report Date: 12-Oct-2021 12:19:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201913.D

Injection Date:	12-Oct-2021 00:18:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	500-206406-A-2 MSD			Worklist Smp#:	15
Client ID:	MW-3B-GW-100421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201913.D				
Lims ID:	500-206406-A-2 MSD				
Client ID:	MW-3B-GW-100421				
Sample Type:	MSD				
Inject. Date:	12-Oct-2021 00:18:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0113999-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	12-Oct-2021 12:19:23	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1667				

First Level Reviewer: seymourc Date: 12-Oct-2021 11:56:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.22	82.19

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

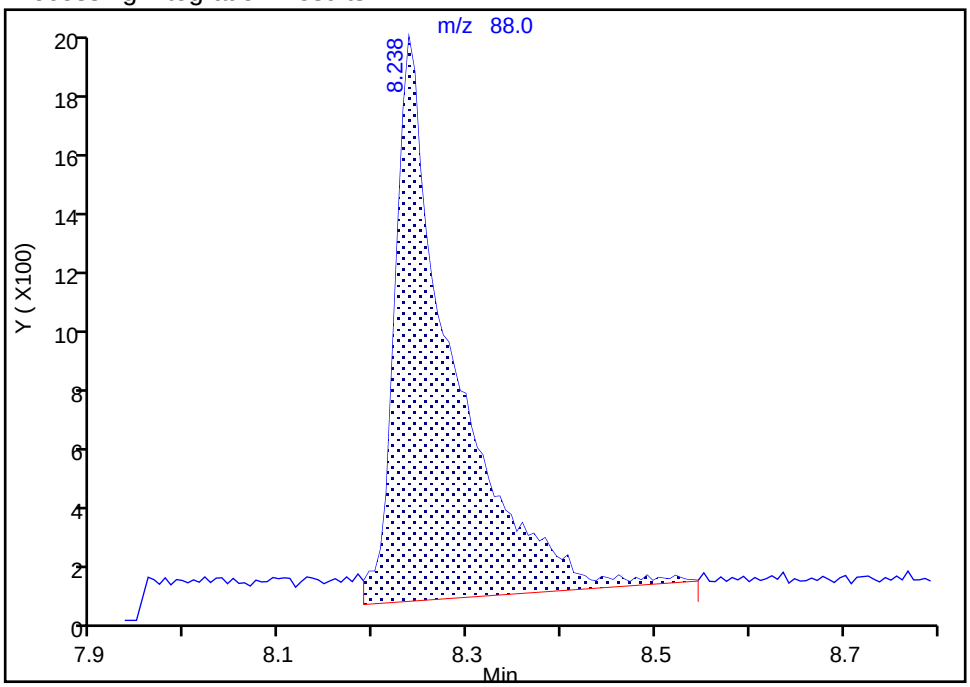
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211011-113999.b\201913.D				
Injection Date:	12-Oct-2021 00:18:30	Instrument ID:	A3UX20		
Lims ID:	500-206406-A-2 MSD				
Client ID:	MW-3B-GW-100421				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

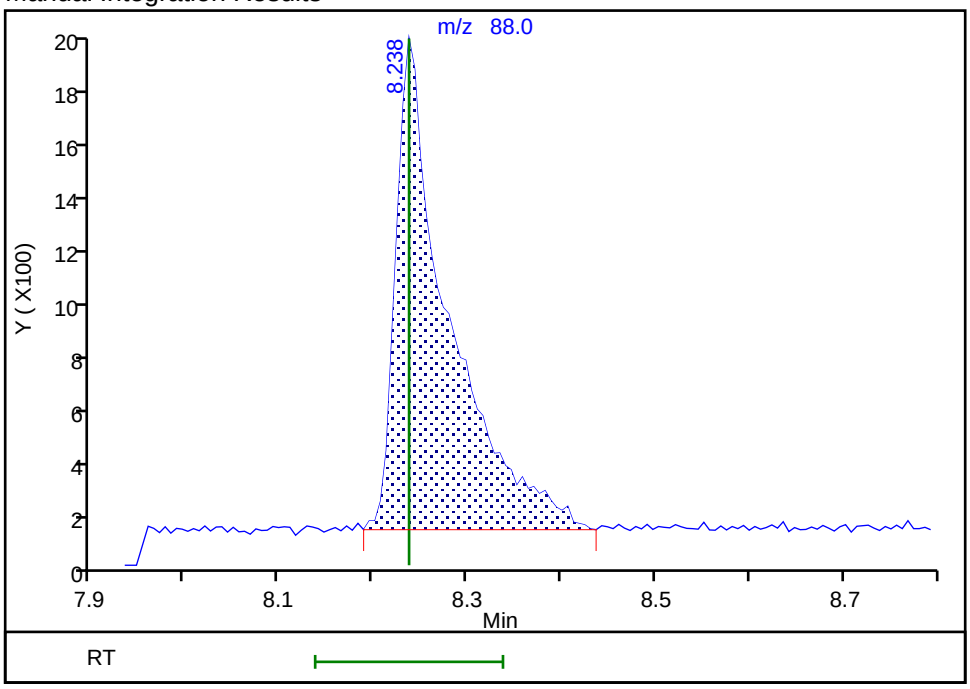
Processing Integration Results

RT: 8.24
Area: 8166
Amount: 11.054928
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7239
Amount: 9.799979
Amount Units: ug/l



Reviewer: seymourc, 12-Oct-2021 11:56:02

Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Start Date: 09/09/2021 13:33

Analysis Batch Number: 503003 End Date: 09/09/2021 18:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-503003/1		09/09/2021 13:33	1	BFB20126.D	DB-624 0.18(mm)
IC 240-503003/3		09/09/2021 14:25	1	201661.D	DB-624 0.18(mm)
IC 240-503003/4		09/09/2021 14:49	1	201662.D	DB-624 0.18(mm)
IC 240-503003/5		09/09/2021 15:14	1	201663.D	DB-624 0.18(mm)
IC 240-503003/6		09/09/2021 15:38	1	201664.D	DB-624 0.18(mm)
ICIS 240-503003/7		09/09/2021 16:03	1	201665.D	DB-624 0.18(mm)
IC 240-503003/8		09/09/2021 16:27	1	201666.D	DB-624 0.18(mm)
IC 240-503003/9		09/09/2021 16:52	1	201667.D	DB-624 0.18(mm)
IC 240-503003/10		09/09/2021 17:16	1	201668.D	DB-624 0.18(mm)
ICV 240-503003/12		09/09/2021 18:06	1	201670.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Instrument ID: A3UX20 Start Date: 10/11/2021 18:52

Analysis Batch Number: 507716 End Date: 10/12/2021 06:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-507716/1		10/11/2021 18:52	1	BFB20140.D	DB-624 0.18(mm)
CCVIS 240-507716/3		10/11/2021 19:31	1	201901.D	DB-624 0.18(mm)
LCS 240-507716/4		10/11/2021 19:55	1	201902.D	DB-624 0.18(mm)
MB 240-507716/5		10/11/2021 20:19	1	201903.D	DB-624 0.18(mm)
240-157370-A-2 MDLV		10/11/2021 20:43	1		DB-624 0.18(mm)
ZZZZZ		10/11/2021 21:07	1		DB-624 0.18(mm)
240-157760-2	SL-15_100721	10/11/2021 21:31	1	201906.D	DB-624 0.18(mm)
240-157760-3	SL-14_100721	10/11/2021 21:55	1	201907.D	DB-624 0.18(mm)
240-157760-4	SL-13_100721	10/11/2021 22:18	1	201908.D	DB-624 0.18(mm)
240-157760-5	SL-7_100721	10/11/2021 22:42	1	201909.D	DB-624 0.18(mm)
240-157760-6	SL-6_100721	10/11/2021 23:06	1	201910.D	DB-624 0.18(mm)
ZZZZZ		10/11/2021 23:30	1		DB-624 0.18(mm)
500-206406-A-2 MS		10/11/2021 23:54	1	201912.D	DB-624 0.18(mm)
500-206406-A-2 MSD		10/12/2021 00:18	1	201913.D	DB-624 0.18(mm)
240-157760-7	SL-5_100721	10/12/2021 00:42	1	201914.D	DB-624 0.18(mm)
240-157760-8	SL-8_100721	10/12/2021 01:05	1	201915.D	DB-624 0.18(mm)
240-157760-9	SL-9_100721	10/12/2021 01:29	1	201916.D	DB-624 0.18(mm)
240-157760-10	SL-10_100721	10/12/2021 01:53	1	201917.D	DB-624 0.18(mm)
240-157760-11	SL-11_100721	10/12/2021 02:17	1	201918.D	DB-624 0.18(mm)
240-157760-12	SL-12_100721	10/12/2021 02:41	1	201919.D	DB-624 0.18(mm)
240-157760-13	MH-1231_100721	10/12/2021 03:04	1	201920.D	DB-624 0.18(mm)
240-157760-14	SL-2_100721	10/12/2021 03:28	1	201921.D	DB-624 0.18(mm)
240-157760-15	SL-3_100721	10/12/2021 03:52	1	201922.D	DB-624 0.18(mm)
240-157760-16	SL-4_100721	10/12/2021 04:16	1	201923.D	DB-624 0.18(mm)
240-157760-17	DUP-01	10/12/2021 04:40	1	201924.D	DB-624 0.18(mm)
ZZZZZ		10/12/2021 05:04	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 05:27	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 05:51	1		DB-624 0.18(mm)
ZZZZZ		10/12/2021 06:15	5		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00012	vm150SS20 00003	vm50ss 00453	vmbfb 00027
BFB 240-503003/1		8260B SIM		5 mL	5 mL				1 uL
IC 240-503003/3		8260B SIM		15 mL	15 mL	1 uL		0.15 uL	
IC 240-503003/4		8260B SIM		15 mL	15 mL	1 uL		0.3 uL	
IC 240-503003/5		8260B SIM		15 mL	15 mL	1 uL		0.75 uL	
IC 240-503003/6		8260B SIM		15 mL	15 mL	1 uL		1.5 uL	
ICIS 240-503003/7		8260B SIM		15 mL	15 mL	1 uL		3 uL	
IC 240-503003/8		8260B SIM		15 mL	15 mL	1 uL		7.5 uL	
IC 240-503003/9		8260B SIM		15 mL	15 mL	1 uL		15 uL	
IC 240-503003/10		8260B SIM		15 mL	15 mL	1 uL		30 uL	
ICV 240-503003/12		8260B SIM		15 mL	15 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00275	vmdioxanew 00264				
BFB 240-503003/1		8260B SIM							
IC 240-503003/3		8260B SIM			0.15 uL				
IC 240-503003/4		8260B SIM			0.3 uL				
IC 240-503003/5		8260B SIM			0.75 uL				
IC 240-503003/6		8260B SIM			1.5 uL				
ICIS 240-503003/7		8260B SIM			3 uL				
IC 240-503003/8		8260B SIM			7.5 uL				
IC 240-503003/9		8260B SIM			15 uL				
IC 240-503003/10		8260B SIM			30 uL				
ICV 240-503003/12		8260B SIM		3 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507716 Batch Start Date: 10/11/21 18:52 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00014	vm150SS20 00004	vmbfb 00027
BFB 240-507716/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-507716/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-507716/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-507716/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-157760-B-2	SL-15_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-3	SL-14_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-4	SL-13_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-5	SL-7_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-6	SL-6_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
500-206406-A-2 MS	MW-3B-GW-100421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
500-206406-A-2 MSD	MW-3B-GW-100421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-7	SL-5_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-8	SL-8_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-9	SL-9_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-10	SL-10_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-11	SL-11_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-12	SL-12_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-13	MS-1231_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-14	SL-2_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-15	SL-3_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-16	SL-4_100721	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-157760-B-17	DUP-01	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00279	vmdioxanew 00267				
BFB 240-507716/1		8260B SIM							
CCVIS 240-507716/3		8260B SIM			3 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-157760-1

SDG No.:

Batch Number: 507716 Batch Start Date: 10/11/21 18:52 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00279	vmdioxanew 00267				
LCS 240-507716/4		8260B SIM		3 uL					
MB 240-507716/5		8260B SIM							
240-157760-B-2	SL-15_100721	8260B SIM	T						
240-157760-B-3	SL-14_100721	8260B SIM	T						
240-157760-B-4	SL-13_100721	8260B SIM	T						
240-157760-B-5	SL-7_100721	8260B SIM	T						
240-157760-B-6	SL-6_100721	8260B SIM	T						
500-206406-A-2 MS	MW-3B-GW-100421	8260B SIM	T	3 uL					
500-206406-A-2 MSD	MW-3B-GW-100421	8260B SIM	T	3 uL					
240-157760-B-7	SL-5_100721	8260B SIM	T						
240-157760-B-8	SL-8_100721	8260B SIM	T						
240-157760-B-9	SL-9_100721	8260B SIM	T						
240-157760-B-10	SL-10_100721	8260B SIM	T						
240-157760-B-11	SL-11_100721	8260B SIM	T						
240-157760-B-12	SL-12_100721	8260B SIM	T						
240-157760-B-13	MS-1231_100721	8260B SIM	T						
240-157760-B-14	SL-2_100721	8260B SIM	T						
240-157760-B-15	SL-3_100721	8260B SIM	T						
240-157760-B-16	SL-4_100721	8260B SIM	T						
240-157760-B-17	DUP-01	8260B SIM	T						

Batch Notes	
pH Indicator ID	HC155968

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

0-2/0,3

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton – 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Andrew Banitt, Korey Pearson	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day		Walk-in client:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	1 day		Lab sampling:
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-15_100721	10/7/21	0955		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-14_100721	10/7/21	1010		X						6					N	G	X	X	X	X	X	X	X					
SL-13_100721	10/7/21	1030		X						6					N	G	X	X	X	X	X	X	X					
SL-7_100721	10/7/21	1050		X						6					N	G	X	X	X	X	X	X	X					
SL-6_100721	10/7/21	1105		X						6					N	G	X	X	X	X	X	X	X					
SL-5_100721	10/7/21	1215		X						6					N	G	X	X	X	X	X	X	X					
SL-8_100721	10/7/21	1245		X						6					N	G	X	X	X	X	X	X	X					
SL-9_100721	10/7/21	1300		X						6					N	G	X	X	X	X	X	X	X					
SL-10_100721	10/7/21	1325		X						6					N	G	X	X	X	X	X	X	X					

240-157760 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	10/8/21 1430		ETA	10/8/21 1435
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	10/8/21 1435		ETA	10/9/21 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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10/14/2021

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763 MICHIGAN 190

TestAmerica Laboratories, Inc.

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 2 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Andrew Banitt, Korey Pearson	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day (1 day)		Walk-in client:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Lab sampling:
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
SL-11_100721	10/7/21	1345		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12_100721	10/7/21	1405		X						6					N	G	X	X	X	X	X	X	X					
MH-1231_100721	10/7/21	1445		X						6					N	G	X	X	X	X	X	X	X					
SL-2_100721	10/7/21	1515		X						6					N	G	X	X	X	X	X	X	X					
SL-3_100721	10/7/21	1545		X						6					N	G	X	X	X	X	X	X	X					
SL-4_100721	10/7/21	1615		X						6					N	G	X	X	X	X	X	X	X					
DUP-01	10/7/21	--		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	10/8/21 1430		ETA	10/8/21 1435
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	10/8/21 1435		ETA	10/9/21 ECO
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 157760**
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Trent

Cooler Received on 10/9/21 Opened on 10/9/21

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 785 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp. 0.2 °C Corrected Cooler Temp. 0.3 °C
   IR GUN #IR-15 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt? TC 10/9/21	Yes	No NA pH Strip Lot# HC157842
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

FB does not receive 8260-Sim

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

ANALYTICAL REPORT

Job Number: 240-159369-1

Job Description: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
11/11/2021 8:42 AM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
11/11/2021

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-159369-1

Comments
No additional comments.

Receipt
The samples were received on 11/5/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5º C and 0.6º C.

GC/MS VOA
Method 8260B: The following sample was diluted due to the abundance of non-target analytes: SL-5_110221 (240-159369-7). Elevated reporting limits (RLs) are provided.

Method 8260B SIM: The Matrix spike/matrix spike duplicate (MS/MSD) samples for analytical batch 240-511974 did not analyze due to instrument failure.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-159369-1

No Detections.

Client Sample ID: SL-15_110221 — Lab Sample ID: 240-159369-2

No Detections.

Client Sample ID: SL-14_110221 — Lab Sample ID: 240-159369-3

No Detections.

Client Sample ID: SL-13_110221 — Lab Sample ID: 240-159369-4

No Detections.

Client Sample ID: SL-7_110221 — Lab Sample ID: 240-159369-5

No Detections.

Client Sample ID: SL-6_110221 — Lab Sample ID: 240-159369-6

No Detections.

Client Sample ID: SL-5_110221 — Lab Sample ID: 240-159369-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.5	J	2.0	0.92	ug/L	2		8260B	Total/NA

Client Sample ID: SL-8_110221 — Lab Sample ID: 240-159369-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-9_110221 — Lab Sample ID: 240-159369-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-10_110221 — Lab Sample ID: 240-159369-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-11_110221 — Lab Sample ID: 240-159369-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.1		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_110221 — Lab Sample ID: 240-159369-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.50	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1231_110221 — Lab Sample ID: 240-159369-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	12		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	12		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-2_110221 — Lab Sample ID: 240-159369-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.46	J	1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	1.2		1.0	0.44	ug/L	1		8260B	Total/NA

Client Sample ID: SL-3_110221 — Lab Sample ID: 240-159369-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.4		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-4_110221 — Lab Sample ID: 240-159369-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-16_110221 — Lab Sample ID: 240-159369-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-17_110221 — Lab Sample ID: 240-159369-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-18_110221 — Lab Sample ID: 240-159369-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.3		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-159369-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-01 (Continued) Lab Sample ID: 240-159369-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.74	J	1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-159369-1

Date Collected: 11/02/21 00:00 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 12:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 12:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 12:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 12:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 12:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 12:43*	*1*
4-Bromofluorobenzene (Surr)	*79*		*56 - 136*		*11/08/21 12:43*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*11/08/21 12:43*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*11/08/21 12:43*	*1*

Client Sample ID: SL-15_110221 — Lab Sample ID: 240-159369-2

Date Collected: 11/02/21 08:30 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/08/21 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*		*11/08/21 21:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 13:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 13:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 13:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*11/08/21 13:05*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*11/08/21 13:05*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*11/08/21 13:05*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*11/08/21 13:05*	*1*

Client Sample ID: SL-14_110221 — Lab Sample ID: 240-159369-3

Date Collected: 11/02/21 08:50 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 120*		*11/09/21 14:26*	*1*

Client Sample ID: SL-14_110221 — Lab Sample ID: 240-159369-3

Date Collected: 11/02/21 08:50 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 13:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 13:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 13:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*11/08/21 13:28*	*1*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*		*11/08/21 13:28*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*11/08/21 13:28*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*11/08/21 13:28*	*1*

Client Sample ID: SL-13_110221 — Lab Sample ID: 240-159369-4

Date Collected: 11/02/21 09:15 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*11/09/21 14:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 13:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 13:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 13:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 13:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 13:50*	*1*
4-Bromofluorobenzene (Surr)	*76*		*56 - 136*		*11/08/21 13:50*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*11/08/21 13:50*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*11/08/21 13:50*	*1*

Client Sample ID: SL-7_110221 — Lab Sample ID: 240-159369-5

Date Collected: 11/02/21 09:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*66 - 120*		*11/09/21 15:14*	*1*

Client Sample ID: SL-7_110221 — Lab Sample ID: 240-159369-5

Date Collected: 11/02/21 09:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 14:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 14:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 14:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 14:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 14:12	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*11/08/21 14:12*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*11/08/21 14:12*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*11/08/21 14:12*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*11/08/21 14:12*	*1*

Client Sample ID: SL-6_110221 — Lab Sample ID: 240-159369-6

Date Collected: 11/02/21 10:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*11/09/21 16:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 14:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 14:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 14:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 14:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 14:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*11/08/21 14:34*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*11/08/21 14:34*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*11/08/21 14:34*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*11/08/21 14:34*	*1*

Client Sample ID: SL-5_110221 — Lab Sample ID: 240-159369-7

Date Collected: 11/02/21 10:35 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		2.0	0.86	ug/L			11/09/21 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*11/09/21 16:49*	*1*

Client Sample ID: SL-5_110221 — Lab Sample ID: 240-159369-7

Date Collected: 11/02/21 10:35 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			11/08/21 10:51	2
cis-1,2-Dichloroethene	**1.5**	**J**	2.0	0.92	ug/L			11/08/21 10:51	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			11/08/21 10:51	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			11/08/21 10:51	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			11/08/21 10:51	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			11/08/21 10:51	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*11/08/21 10:51*	*2*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*11/08/21 10:51*	*2*
Toluene-d8 (Surr)	*111*		*78 - 122*		*11/08/21 10:51*	*2*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*11/08/21 10:51*	*2*

Client Sample ID: SL-8_110221 — Lab Sample ID: 240-159369-8

Date Collected: 11/02/21 11:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			11/09/21 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*11/09/21 17:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/09/21 13:00	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			11/09/21 13:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/09/21 13:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/09/21 13:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/09/21 13:00	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			11/09/21 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*11/09/21 13:00*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*11/09/21 13:00*	*1*
Toluene-d8 (Surr)	*111*		*78 - 122*		*11/09/21 13:00*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*11/09/21 13:00*	*1*

Client Sample ID: SL-9_110221 — Lab Sample ID: 240-159369-9

Date Collected: 11/02/21 12:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			11/09/21 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*66 - 120*		*11/09/21 17:37*	*1*

Client Sample ID: SL-9_110221 — Lab Sample ID: 240-159369-9

Date Collected: 11/02/21 12:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 15:19	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			11/08/21 15:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 15:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 15:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 15:19	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			11/08/21 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 15:19*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*11/08/21 15:19*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*11/08/21 15:19*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/08/21 15:19*	*1*

Client Sample ID: SL-10_110221 — Lab Sample ID: 240-159369-10

Date Collected: 11/02/21 12:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			11/09/21 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*11/09/21 18:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 15:42	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			11/08/21 15:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 15:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 15:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 15:42	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			11/08/21 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 137*		*11/08/21 15:42*	*1*
4-Bromofluorobenzene (Surr)	*85*		*56 - 136*		*11/08/21 15:42*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*11/08/21 15:42*	*1*
Dibromofluoromethane (Surr)	*86*		*73 - 120*		*11/08/21 15:42*	*1*

Client Sample ID: SL-11_110221 — Lab Sample ID: 240-159369-11

Date Collected: 11/02/21 13:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			11/09/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*11/09/21 18:25*	*1*

Client Sample ID: SL-11_110221 — Lab Sample ID: 240-159369-11

Date Collected: 11/02/21 13:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 16:04	1
cis-1,2-Dichloroethene	**1.1**		1.0	0.46	ug/L			11/08/21 16:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 16:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:04	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			11/08/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*11/08/21 16:04*	*1*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*		*11/08/21 16:04*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/08/21 16:04*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*11/08/21 16:04*	*1*

Client Sample ID: SL-12_110221 — Lab Sample ID: 240-159369-12

Date Collected: 11/02/21 13:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*11/09/21 18:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 16:27	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.46	ug/L			11/08/21 16:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 16:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:27	1
Vinyl chloride	**0.50**	**J**	1.0	0.45	ug/L			11/08/21 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 16:27*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*11/08/21 16:27*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*11/08/21 16:27*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*11/08/21 16:27*	*1*

Client Sample ID: MH-1231_110221 — Lab Sample ID: 240-159369-13

Date Collected: 11/02/21 14:15 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.1**		2.0	0.86	ug/L			11/09/21 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*		*11/09/21 19:13*	*1*

Client Sample ID: MH-1231_110221 — Lab Sample ID: 240-159369-13

Date Collected: 11/02/21 14:15 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 18:19	1
cis-1,2-Dichloroethene	**12**		1.0	0.46	ug/L			11/08/21 18:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 18:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 18:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 18:19	1
Vinyl chloride	**12**		1.0	0.45	ug/L			11/08/21 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 137*		*11/08/21 18:19*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*11/08/21 18:19*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*11/08/21 18:19*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/08/21 18:19*	*1*

Client Sample ID: SL-2_110221 — Lab Sample ID: 240-159369-14

Date Collected: 11/02/21 14:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*11/09/21 19:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 18:41	1
cis-1,2-Dichloroethene	**0.46**	**J**	1.0	0.46	ug/L			11/08/21 18:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 18:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 18:41	1
Trichloroethene	**1.2**		1.0	0.44	ug/L			11/08/21 18:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*11/08/21 18:41*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*11/08/21 18:41*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*11/08/21 18:41*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*11/08/21 18:41*	*1*

Client Sample ID: SL-3_110221 — Lab Sample ID: 240-159369-15

Date Collected: 11/02/21 15:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			11/09/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*11/09/21 20:01*	*1*

Client Sample ID: SL-3_110221 — Lab Sample ID: 240-159369-15

Date Collected: 11/02/21 15:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 19:03	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			11/08/21 19:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 19:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 19:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 19:03	1
Vinyl chloride	**4.4**		1.0	0.45	ug/L			11/08/21 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 19:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*11/08/21 19:03*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*11/08/21 19:03*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/08/21 19:03*	*1*

Client Sample ID: SL-4_110221 — Lab Sample ID: 240-159369-16

Date Collected: 11/02/21 16:50 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			11/09/21 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*		*11/09/21 20:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 19:25	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			11/08/21 19:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 19:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 19:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 19:25	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			11/08/21 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*11/08/21 19:25*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*11/08/21 19:25*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*11/08/21 19:25*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/08/21 19:25*	*1*

Client Sample ID: SL-16_110221 — Lab Sample ID: 240-159369-17

Date Collected: 11/02/21 15:30 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			11/09/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*11/09/21 20:48*	*1*

Client Sample ID: SL-16_110221 — Lab Sample ID: 240-159369-17

Date Collected: 11/02/21 15:30 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 16:49	1
cis-1,2-Dichloroethene	**5.0**		1.0	0.46	ug/L			11/08/21 16:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 16:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 16:49	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			11/08/21 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 16:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*11/08/21 16:49*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*11/08/21 16:49*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*11/08/21 16:49*	*1*

Client Sample ID: SL-17_110221 — Lab Sample ID: 240-159369-18

Date Collected: 11/02/21 16:00 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			11/09/21 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 120*		*11/09/21 21:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 17:12	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			11/08/21 17:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 17:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:12	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			11/08/21 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*11/08/21 17:12*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*11/08/21 17:12*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*11/08/21 17:12*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*11/08/21 17:12*	*1*

Client Sample ID: SL-18_110221 — Lab Sample ID: 240-159369-19

Date Collected: 11/02/21 16:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.3**		2.0	0.86	ug/L			11/09/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*11/09/21 21:36*	*1*

Client Sample ID: SL-18_110221 — Lab Sample ID: 240-159369-19

Date Collected: 11/02/21 16:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 17:34	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			11/08/21 17:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 17:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:34	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			11/08/21 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*11/08/21 17:34*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*11/08/21 17:34*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*11/08/21 17:34*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*11/08/21 17:34*	*1*

Client Sample ID: DUP-01 — Lab Sample ID: 240-159369-20

Date Collected: 11/02/21 00:00 — **Matrix: Water**
Date Received: 11/05/21 10:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			11/09/21 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*11/09/21 22:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 17:56	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.46	ug/L			11/08/21 17:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 17:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 17:56	1
Vinyl chloride	**0.74**	**J**	1.0	0.45	ug/L			11/08/21 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*11/08/21 17:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*11/08/21 17:56*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/08/21 17:56*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*11/08/21 17:56*	*1*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-158842-M-3 MSD	Matrix Spike Duplicate	87	87	110	92
240-158842-N-3 MS	Matrix Spike	93	95	112	93
240-159369-1	TRIP BLANK	92	79	108	96
240-159369-2	SL-15_110221	93	86	105	99
240-159369-2 MS	SL-15_110221	98	98	116	94
240-159369-2 MSD	SL-15_110221	80	80	94	83
240-159369-3	SL-14_110221	96	87	110	102
240-159369-4	SL-13_110221	92	76	107	95
240-159369-5	SL-7_110221	94	82	104	99
240-159369-6	SL-6_110221	97	89	107	99
240-159369-7	SL-5_110221	95	88	111	97
240-159369-8	SL-8_110221	93	95	111	97
240-159369-9	SL-9_110221	92	92	101	92
240-159369-10	SL-10_110221	86	85	103	86
240-159369-11	SL-11_110221	90	87	106	89
240-159369-12	SL-12_110221	92	90	105	93
240-159369-13	MH-1231_110221	87	94	108	92
240-159369-14	SL-2_110221	91	88	103	91
240-159369-15	SL-3_110221	92	91	107	92
240-159369-16	SL-4_110221	90	86	107	92
240-159369-17	SL-16_110221	92	92	105	93
240-159369-18	SL-17_110221	92	93	107	94
240-159369-19	SL-18_110221	91	86	105	96
240-159369-20	DUP-01	94	98	106	98
LCS 240-511833/4	Lab Control Sample	95	93	113	98
LCS 240-512078/4	Lab Control Sample	89	90	108	92
MB 240-511833/6	Method Blank	94	83	106	95
MB 240-512078/6	Method Blank	86	81	100	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-159369-2	SL-15_110221	89
240-159369-3	SL-14_110221	95
240-159369-4	SL-13_110221	94
240-159369-5	SL-7_110221	90
240-159369-5 MS	SL-7_110221	92
240-159369-5 MSD	SL-7_110221	89
240-159369-6	SL-6_110221	88
240-159369-7	SL-5_110221	92
240-159369-8	SL-8_110221	94

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-159369-9	SL-9_110221	90
240-159369-10	SL-10_110221	91
240-159369-11	SL-11_110221	91
240-159369-12	SL-12_110221	91
240-159369-13	MH-1231_110221	89
240-159369-14	SL-2_110221	91
240-159369-15	SL-3_110221	92
240-159369-16	SL-4_110221	89
240-159369-17	SL-16_110221	92
240-159369-18	SL-17_110221	93
240-159369-19	SL-18_110221	92
240-159369-20	DUP-01	94
LCS 240-511974/3	Lab Control Sample	91
LCS 240-512125/4	Lab Control Sample	93
MB 240-511974/4	Method Blank	92
MB 240-512125/5	Method Blank	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(10-150)
MRL 240-511974/5	Lab Control Sample	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-511833/6
Matrix: Water
Analysis Batch: 511833

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/08/21 10:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/08/21 10:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 10:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/08/21 10:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/08/21 10:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/08/21 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*11/08/21 10:29*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*11/08/21 10:29*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/08/21 10:29*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*11/08/21 10:29*	*1*

Lab Sample ID: LCS 240-511833/4
Matrix: Water
Analysis Batch: 511833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	10.8		ug/L		108	63 - 134		
cis-1,2-Dichloroethene			10.0	10.4		ug/L		104	77 - 123		
Tetrachloroethene			10.0	11.8		ug/L		118	76 - 123		
trans-1,2-Dichloroethene			10.0	10.7		ug/L		107	75 - 124		
Trichloroethene			10.0	8.69		ug/L		87	70 - 122		
Vinyl chloride			10.0	10.1		ug/L		101	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*
Toluene-d8 (Surr)	*113*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-159369-2 MS
Matrix: Water
Analysis Batch: 511833

Client Sample ID: SL-15_110221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	1.0	U	10.0	9.24		ug/L		92	56 - 135		
cis-1,2-Dichloroethene	1.0	U	10.0	9.71		ug/L		97	66 - 128		
Tetrachloroethene	1.0	U	10.0	9.25		ug/L		93	62 - 131		
trans-1,2-Dichloroethene	1.0	U	10.0	9.61		ug/L		96	56 - 136		
Trichloroethene	1.0	U	10.0	8.57		ug/L		86	61 - 124		
Vinyl chloride	1.0	U	10.0	10.1		ug/L		101	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*116*		*78 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-159369-2 MS **Client Sample ID: SL-15_110221**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 511833

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*94*		*73 - 120*

Lab Sample ID: 240-159369-2 MSD **Client Sample ID: SL-15_110221**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 511833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	9.67		ug/L		97	56 - 135	5	26
cis-1,2-Dichloroethene	1.0	U	10.0	9.32		ug/L		93	66 - 128	4	14
Tetrachloroethene	1.0	U	10.0	9.41		ug/L		94	62 - 131	2	20
trans-1,2-Dichloroethene	1.0	U	10.0	9.38		ug/L		94	56 - 136	2	15
Trichloroethene	1.0	U	10.0	7.89		ug/L		79	61 - 124	8	15
Vinyl chloride	1.0	U	10.0	9.87		ug/L		99	43 - 157	3	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 137*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*
Toluene-d8 (Surr)	*94*		*78 - 122*
Dibromofluoromethane (Surr)	*83*		*73 - 120*

Lab Sample ID: MB 240-512078/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 512078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/09/21 12:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/09/21 12:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/09/21 12:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/09/21 12:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/09/21 12:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/09/21 12:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 137*		*11/09/21 12:38*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*11/09/21 12:38*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*11/09/21 12:38*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*11/09/21 12:38*	*1*

Lab Sample ID: LCS 240-512078/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 512078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	8.76		ug/L		88	63 - 134
cis-1,2-Dichloroethene	10.0	9.96		ug/L		100	77 - 123
Tetrachloroethene	10.0	9.58		ug/L		96	76 - 123
trans-1,2-Dichloroethene	10.0	9.73		ug/L		97	75 - 124
Trichloroethene	10.0	8.70		ug/L		87	70 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-512078/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 512078

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	9.99		ug/L		100	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*108*		*78 - 122*
Dibromofluoromethane (Surr)	*92*		*73 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-511974/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 511974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/08/21 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*11/08/21 20:12*	*1*

Lab Sample ID: LCS 240-511974/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 511974

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.47		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*

Lab Sample ID: MRL 240-511974/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 511974

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			0.00100	0.00140	J	ng/uL		140	10 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*10 - 150*

Lab Sample ID: MB 240-512125/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 512125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/09/21 13:38	1

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-512125/5
Matrix: Water
Analysis Batch: 512125

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 120		11/09/21 13:38	1

Lab Sample ID: LCS 240-512125/4
Matrix: Water
Analysis Batch: 512125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.3		ug/L		103	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		66 - 120

Lab Sample ID: 240-159369-5 MS
Matrix: Water
Analysis Batch: 512125

Client Sample ID: SL-7_110221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	9.49		ug/L		95	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		66 - 120

Lab Sample ID: 240-159369-5 MSD
Matrix: Water
Analysis Batch: 512125

Client Sample ID: SL-7_110221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.5		ug/L		105	51 - 153	11	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		66 - 120

GC/MS VOA

Analysis Batch: 511833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159369-1	TRIP BLANK	Total/NA	Water	8260B	
240-159369-2	SL-15_110221	Total/NA	Water	8260B	
240-159369-3	SL-14_110221	Total/NA	Water	8260B	
240-159369-4	SL-13_110221	Total/NA	Water	8260B	
240-159369-5	SL-7_110221	Total/NA	Water	8260B	
240-159369-6	SL-6_110221	Total/NA	Water	8260B	
240-159369-7	SL-5_110221	Total/NA	Water	8260B	
240-159369-9	SL-9_110221	Total/NA	Water	8260B	
240-159369-10	SL-10_110221	Total/NA	Water	8260B	
240-159369-11	SL-11_110221	Total/NA	Water	8260B	
240-159369-12	SL-12_110221	Total/NA	Water	8260B	
240-159369-13	MH-1231_110221	Total/NA	Water	8260B	
240-159369-14	SL-2_110221	Total/NA	Water	8260B	
240-159369-15	SL-3_110221	Total/NA	Water	8260B	
240-159369-16	SL-4_110221	Total/NA	Water	8260B	
240-159369-17	SL-16_110221	Total/NA	Water	8260B	
240-159369-18	SL-17_110221	Total/NA	Water	8260B	
240-159369-19	SL-18_110221	Total/NA	Water	8260B	
240-159369-20	DUP-01	Total/NA	Water	8260B	
MB 240-511833/6	Method Blank	Total/NA	Water	8260B	
LCS 240-511833/4	Lab Control Sample	Total/NA	Water	8260B	
240-159369-2 MS	SL-15_110221	Total/NA	Water	8260B	
240-159369-2 MSD	SL-15_110221	Total/NA	Water	8260B	

Analysis Batch: 511974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159369-2	SL-15_110221	Total/NA	Water	8260B SIM	
MB 240-511974/4	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-511974/3	Lab Control Sample	Total/NA	Water	8260B SIM	
MRL 240-511974/5	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 512078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159369-8	SL-8_110221	Total/NA	Water	8260B	
MB 240-512078/6	Method Blank	Total/NA	Water	8260B	
LCS 240-512078/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 512125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159369-3	SL-14_110221	Total/NA	Water	8260B SIM	
240-159369-4	SL-13_110221	Total/NA	Water	8260B SIM	
240-159369-5	SL-7_110221	Total/NA	Water	8260B SIM	
240-159369-6	SL-6_110221	Total/NA	Water	8260B SIM	
240-159369-7	SL-5_110221	Total/NA	Water	8260B SIM	
240-159369-8	SL-8_110221	Total/NA	Water	8260B SIM	
240-159369-9	SL-9_110221	Total/NA	Water	8260B SIM	
240-159369-10	SL-10_110221	Total/NA	Water	8260B SIM	
240-159369-11	SL-11_110221	Total/NA	Water	8260B SIM	
240-159369-12	SL-12_110221	Total/NA	Water	8260B SIM	
240-159369-13	MH-1231_110221	Total/NA	Water	8260B SIM	
240-159369-14	SL-2_110221	Total/NA	Water	8260B SIM	

GC/MS VOA (Continued)

Analysis Batch: 512125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159369-15	SL-3_110221	Total/NA	Water	8260B SIM	
240-159369-16	SL-4_110221	Total/NA	Water	8260B SIM	
240-159369-17	SL-16_110221	Total/NA	Water	8260B SIM	
240-159369-18	SL-17_110221	Total/NA	Water	8260B SIM	
240-159369-19	SL-18_110221	Total/NA	Water	8260B SIM	
240-159369-20	DUP-01	Total/NA	Water	8260B SIM	
MB 240-512125/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-512125/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-159369-5 MS	SL-7_110221	Total/NA	Water	8260B SIM	
240-159369-5 MSD	SL-7_110221	Total/NA	Water	8260B SIM	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-159369-1

Date Collected: 11/02/21 00:00 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 12:43	LEE	TAL CAN

Client Sample ID: SL-15_110221 — Lab Sample ID: 240-159369-2

Date Collected: 11/02/21 08:30 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 13:05	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	511974	11/08/21 21:00	CS	TAL CAN

Client Sample ID: SL-14_110221 — Lab Sample ID: 240-159369-3

Date Collected: 11/02/21 08:50 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 13:28	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 14:26	CS	TAL CAN

Client Sample ID: SL-13_110221 — Lab Sample ID: 240-159369-4

Date Collected: 11/02/21 09:15 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 13:50	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 14:50	CS	TAL CAN

Client Sample ID: SL-7_110221 — Lab Sample ID: 240-159369-5

Date Collected: 11/02/21 09:40 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 14:12	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 15:14	CS	TAL CAN

Client Sample ID: SL-6_110221 — Lab Sample ID: 240-159369-6

Date Collected: 11/02/21 10:05 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 14:34	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 16:25	CS	TAL CAN

Client Sample ID: SL-5_110221 — Lab Sample ID: 240-159369-7

Date Collected: 11/02/21 10:35 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	511833	11/08/21 10:51	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 16:49	CS	TAL CAN

Client Sample ID: SL-8_110221 — Lab Sample ID: 240-159369-8

Date Collected: 11/02/21 11:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	512078	11/09/21 13:00	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 17:13	CS	TAL CAN

Client Sample ID: SL-9_110221 — Lab Sample ID: 240-159369-9

Date Collected: 11/02/21 12:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 15:19	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 17:37	CS	TAL CAN

Client Sample ID: SL-10_110221 — Lab Sample ID: 240-159369-10

Date Collected: 11/02/21 12:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 15:42	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 18:01	CS	TAL CAN

Client Sample ID: SL-11_110221 — Lab Sample ID: 240-159369-11

Date Collected: 11/02/21 13:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 16:04	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 18:25	CS	TAL CAN

Client Sample ID: SL-12_110221 — Lab Sample ID: 240-159369-12

Date Collected: 11/02/21 13:25 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 16:27	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 18:49	CS	TAL CAN

Client Sample ID: MH-1231_110221 — Lab Sample ID: 240-159369-13

Date Collected: 11/02/21 14:15 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 18:19	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 19:13	CS	TAL CAN

Client Sample ID: SL-2_110221 — Lab Sample ID: 240-159369-14

Date Collected: 11/02/21 14:40 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 18:41	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 19:37	CS	TAL CAN

Client Sample ID: SL-3_110221 — Lab Sample ID: 240-159369-15

Date Collected: 11/02/21 15:05 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 19:03	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 20:01	CS	TAL CAN

Client Sample ID: SL-4_110221 — Lab Sample ID: 240-159369-16

Date Collected: 11/02/21 16:50 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 19:25	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 20:25	CS	TAL CAN

Client Sample ID: SL-16_110221 — Lab Sample ID: 240-159369-17

Date Collected: 11/02/21 15:30 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 16:49	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 20:48	CS	TAL CAN

Client Sample ID: SL-17_110221 — Lab Sample ID: 240-159369-18

Date Collected: 11/02/21 16:00 — **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 17:12	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 21:12	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_110221 Lab Sample ID: 240-159369-19

Date Collected: 11/02/21 16:25 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 17:34	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 21:36	CS	TAL CAN

Client Sample ID: DUP-01 Lab Sample ID: 240-159369-20

Date Collected: 11/02/21 00:00 **Matrix: Water**
Date Received: 11/05/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	511833	11/08/21 17:56	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	512125	11/09/21 22:00	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-18-10	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-159369-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-159369-1	TRIP BLANK	Water	11/02/21 00:00	11/05/21 10:00
240-159369-2	SL-15_110221	Water	11/02/21 08:30	11/05/21 10:00
240-159369-3	SL-14_110221	Water	11/02/21 08:50	11/05/21 10:00
240-159369-4	SL-13_110221	Water	11/02/21 09:15	11/05/21 10:00
240-159369-5	SL-7_110221	Water	11/02/21 09:40	11/05/21 10:00
240-159369-6	SL-6_110221	Water	11/02/21 10:05	11/05/21 10:00
240-159369-7	SL-5_110221	Water	11/02/21 10:35	11/05/21 10:00
240-159369-8	SL-8_110221	Water	11/02/21 11:05	11/05/21 10:00
240-159369-9	SL-9_110221	Water	11/02/21 12:25	11/05/21 10:00
240-159369-10	SL-10_110221	Water	11/02/21 12:40	11/05/21 10:00
240-159369-11	SL-11_110221	Water	11/02/21 13:05	11/05/21 10:00
240-159369-12	SL-12_110221	Water	11/02/21 13:25	11/05/21 10:00
240-159369-13	MH-1231_110221	Water	11/02/21 14:15	11/05/21 10:00
240-159369-14	SL-2_110221	Water	11/02/21 14:40	11/05/21 10:00
240-159369-15	SL-3_110221	Water	11/02/21 15:05	11/05/21 10:00
240-159369-16	SL-4_110221	Water	11/02/21 16:50	11/05/21 10:00
240-159369-17	SL-16_110221	Water	11/02/21 15:30	11/05/21 10:00
240-159369-18	SL-17_110221	Water	11/02/21 16:00	11/05/21 10:00
240-159369-19	SL-18_110221	Water	11/02/21 16:25	11/05/21 10:00
240-159369-20	DUP-01	Water	11/02/21 00:00	11/05/21 10:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 469338

Lab Sample ID: STD8260 240-469338/7 IC Client Sample ID:

Date Analyzed: 01/15/21 12:58 Lab File ID: UXJ5273.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.84	Split Peak	evansle	01/18/21 08:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/3 Client Sample ID:

Date Analyzed: 09/09/21 14:25 Lab File ID: 201661.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:10

Lab Sample ID: IC 240-503003/4 Client Sample ID:

Date Analyzed: 09/09/21 14:49 Lab File ID: 201662.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:11

Lab Sample ID: IC 240-503003/5 Client Sample ID:

Date Analyzed: 09/09/21 15:14 Lab File ID: 201663.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:51

Lab Sample ID: IC 240-503003/6 Client Sample ID:

Date Analyzed: 09/09/21 15:38 Lab File ID: 201664.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:52

Lab Sample ID: ICIS 240-503003/7 Client Sample ID:

Date Analyzed: 09/09/21 16:03 Lab File ID: 201665.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/8 Client Sample ID:

Date Analyzed: 09/09/21 16:27 Lab File ID: 201666.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

Lab Sample ID: IC 240-503003/9 Client Sample ID:

Date Analyzed: 09/09/21 16:52 Lab File ID: 201667.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 17:41

Lab Sample ID: ICV 240-503003/12 Client Sample ID:

Date Analyzed: 09/09/21 18:06 Lab File ID: 201670.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 18:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 511974

Lab Sample ID: CCVIS 240-511974/2 Client Sample ID:

Date Analyzed: 11/08/21 19:24 Lab File ID: 202299.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/08/21 19:56

Lab Sample ID: LCS 240-511974/3 Client Sample ID:

Date Analyzed: 11/08/21 19:48 Lab File ID: 202300.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/09/21 12:36

Lab Sample ID: MRL 240-511974/5 Client Sample ID:

Date Analyzed: 11/08/21 20:36 Lab File ID: 202302.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/09/21 12:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 512125

Lab Sample ID: CCVIS 240-512125/3 Client Sample ID:

Date Analyzed: 11/09/21 12:50 Lab File ID: 202305.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/09/21 13:43

Lab Sample ID: LCS 240-512125/4 Client Sample ID:

Date Analyzed: 11/09/21 13:14 Lab File ID: 202306.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/09/21 13:44

Lab Sample ID: 240-159369-3 Client Sample ID: SL-14_110221

Date Analyzed: 11/09/21 14:26 Lab File ID: 202309.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	seymourc	11/10/21 14:34

Lab Sample ID: 240-159369-4 Client Sample ID: SL-13_110221

Date Analyzed: 11/09/21 14:50 Lab File ID: 202310.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:23

Lab Sample ID: 240-159369-5 Client Sample ID: SL-7_110221

Date Analyzed: 11/09/21 15:14 Lab File ID: 202311.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	seymourc	11/10/21 14:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 512125

Lab Sample ID: 240-159369-5 MS Client Sample ID: SL-7_110221 MS

Date Analyzed: 11/09/21 15:38 Lab File ID: 202312.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:24

Lab Sample ID: 240-159369-5 MSD Client Sample ID: SL-7_110221 MSD

Date Analyzed: 11/09/21 16:01 Lab File ID: 202313.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:24

Lab Sample ID: 240-159369-7 Client Sample ID: SL-5_110221

Date Analyzed: 11/09/21 16:49 Lab File ID: 202315.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:24

Lab Sample ID: 240-159369-8 Client Sample ID: SL-8_110221

Date Analyzed: 11/09/21 17:13 Lab File ID: 202316.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:25

Lab Sample ID: 240-159369-9 Client Sample ID: SL-9_110221

Date Analyzed: 11/09/21 17:37 Lab File ID: 202317.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:26

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 512125

Lab Sample ID: 240-159369-10 Client Sample ID: SL-10_110221

Date Analyzed: 11/09/21 18:01 Lab File ID: 202318.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:27

Lab Sample ID: 240-159369-11 Client Sample ID: SL-11_110221

Date Analyzed: 11/09/21 18:25 Lab File ID: 202319.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:27

Lab Sample ID: 240-159369-12 Client Sample ID: SL-12_110221

Date Analyzed: 11/09/21 18:49 Lab File ID: 202320.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:28

Lab Sample ID: 240-159369-13 Client Sample ID: MH-1231_110221

Date Analyzed: 11/09/21 19:13 Lab File ID: 202321.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:28

Lab Sample ID: 240-159369-15 Client Sample ID: SL-3_110221

Date Analyzed: 11/09/21 20:01 Lab File ID: 202323.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 512125

Lab Sample ID: 240-159369-16 Client Sample ID: SL-4_110221

Date Analyzed: 11/09/21 20:25 Lab File ID: 202324.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:29

Lab Sample ID: 240-159369-17 Client Sample ID: SL-16_110221

Date Analyzed: 11/09/21 20:48 Lab File ID: 202325.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:30

Lab Sample ID: 240-159369-18 Client Sample ID: SL-17_110221

Date Analyzed: 11/09/21 21:12 Lab File ID: 202326.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:30

Lab Sample ID: 240-159369-19 Client Sample ID: SL-18_110221

Date Analyzed: 11/09/21 21:36 Lab File ID: 202327.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:30

Lab Sample ID: 240-159369-20 Client Sample ID: DUP-01

Date Analyzed: 11/09/21 22:00 Lab File ID: 202328.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.10	Invalid Compound ID	seymourc	11/10/21 14:32
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/10/21 14:32

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm150IS20_00012	11/24/21	08/24/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150IS20_00015	01/20/22	10/20/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150SS20_00003	11/25/21	08/25/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm150SS20_00004	11/30/21	08/30/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50IS_00086	05/27/21	11/27/20	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_00089	12/28/21	06/28/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00090	03/22/22	09/22/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00453	09/10/21	09/03/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50SS_STK_00086	03/28/21	09/28/20	MEOH, Lot 0000230446	200 mL	VM567650_00033	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00033	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00376	01/21/21	01/14/21	MEOH, Lot na	5 mL	VMACROLSTD_00091	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00091	02/07/21	01/07/21	MEOH, Lot 0000258810	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
VMBFB_00026							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmdiox_spike_00275	09/10/21	09/03/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00282	11/08/21	11/01/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00283	11/16/21	11/09/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00264	09/14/21	09/07/21	MEOH, Lot na	1 mL	vmdioxane_00033	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00033	10/01/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00270	11/08/21	11/01/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00271	11/16/21	11/09/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24		Restek, Lot A0151797		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00391	01/15/21	01/08/21	MEOH, Lot NA	5 mL	VMFASG_00102	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00102	02/08/21	01/08/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00431	11/09/21	11/02/21	MEOH, Lot NA	5 mL	VMFASG_00111	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00111	11/16/21	10/16/21	MEOH, Lot 0000273166	100 mL	vm569722S_00009	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00009	04/30/23		Restek, Lot A0159768		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00382	01/18/21	01/11/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00421	11/08/21	11/01/21	MEOH, Lot n/a	5 mL	VMRFASP_00079	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00079	11/30/21	10/31/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00422	11/16/21	11/09/21	MEOH, Lot n/a	5 mL	VMRFASP_00079	5 mL	1,1-Dichloroethene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00079	11/30/21	10/31/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00369	01/15/21	01/08/21	MEOH, Lot 0000258810	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00406	11/10/21	11/03/21	MEOH, Lot 0000273166	10 mL	vm569722_00019	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00019	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRPRIMW_00419	01/21/21	01/14/21	MEOH, Lot NA	5 mL	VMRPRIM_00048	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00048	02/28/21	11/28/20	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00458	11/08/21	11/01/21	MEOH, Lot NA	5 mL	VMRPRIM_00053	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00053	02/28/22	10/31/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22	Restek, Lot A0159680			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00459	11/16/21	11/09/21	MEOH, Lot NA	5 mL	VMRPRIM_00053	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMRPRIM_00053	02/28/22	10/31/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22	Restek, Lot A0159680			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00033

vm567650_00033 Rec: 4/9/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00019

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,002.2 µg/mL	+/- 29.0815 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.0965 µg/mL	Unstressed
	Purity 98%		+/- 110.2100 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	251.8 µg/mL	+/- 1.4674 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3920 µg/mL	Unstressed
	Purity 99%		+/- 5.5487 µg/mL	Stressed
4	1,4-Dioxane-d8	5,003.8 µg/mL	+/- 29.0907 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19942)		+/- 107.1305 µg/mL	Unstressed
	Purity 99%		+/- 110.2450 µg/mL	Stressed
5	Chlorobenzene-d5	250.8 µg/mL	+/- 1.4613 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/- 5.3695 µg/mL	Unstressed
	Purity 99%		+/- 5.5256 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	250.5 µg/mL	+/- 1.4595 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.3631 µg/mL	Unstressed
	Purity 99%		+/- 5.5189 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

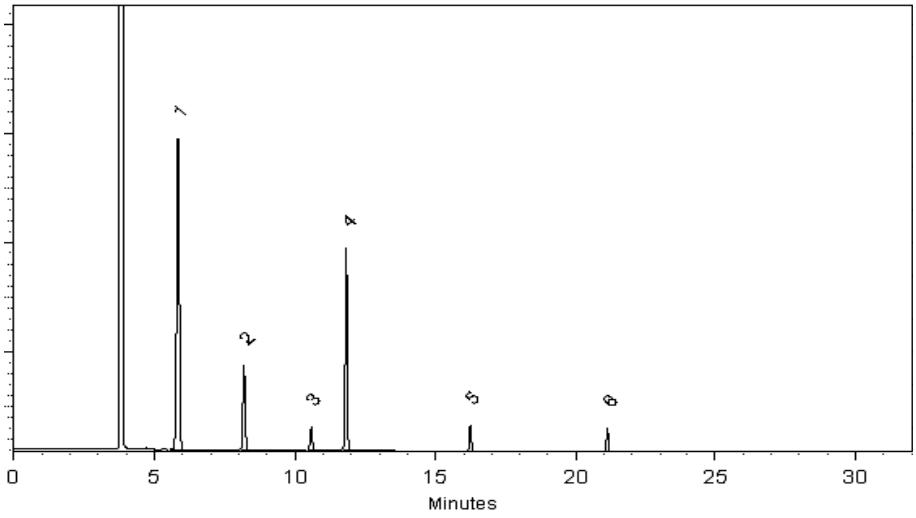
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	250.8 µg/mL	+/- 1.4615 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3706 µg/mL	Unstressed
	Purity 99%		+/- 5.5267 µg/mL	Stressed
4	1,4-Dioxane-d8	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I19942-0122JM)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
5	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4569 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 5.3534 µg/mL	Unstressed
	Purity 99%		+/- 5.5090 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	252.4 µg/mL	+/- 1.4709 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.4048 µg/mL	Unstressed
	Purity 99%		+/- 5.5619 µg/mL	Stressed

Reagent

VM568720_00039

Rec: 4/7/20
VM568720_00039

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156861

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,752.0 µg/mL	+/- 115.6523	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 394.5922	µg/mL	Unstressed
	Purity 99%		+/- 885.2572	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721-00007

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00017

Rec: 6/29/20
VM569722-00017

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Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 +/- 140.5076 +/- 143.7858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 +/- 140.4038 +/- 143.6799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 +/- 140.4890 +/- 143.7623	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 +/- 140.5681 +/- 143.8406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 +/- 140.4450 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 +/- 140.5555 +/- 143.8274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4 µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)		+/-	140.4203	µg/mL	Unstressed
	Purity 99%			+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

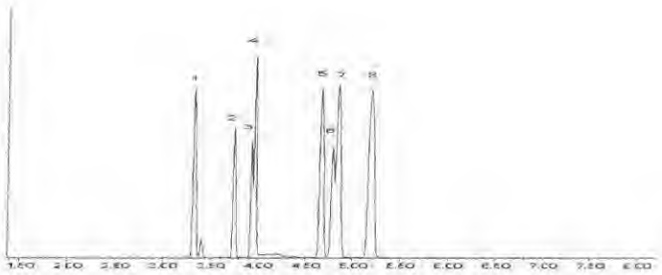
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

vm569722_00019

Rec: 1/20/21
VMS69722_00019

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Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,502.3 µg/mL	+/- 16.4178 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5076 µg/mL	Unstressed
	Purity 99%		+/- 143.7858 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.6 µg/mL	+/- 16.3299 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.4038 µg/mL	Unstressed
	Purity 99%		+/- 143.6799 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 17.2154 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4890 µg/mL	Unstressed
	Purity 99%		+/- 143.7623 µg/mL	Stressed
4	1,3-Butadiene	2,500.7 µg/mL	+/- 17.6652 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.5681 µg/mL	Unstressed
	Purity 99%		+/- 143.8406 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.2 µg/mL	+/- 16.4034 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4450 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/- 17.7279 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5555 µg/mL	Unstressed
	Purity 99%		+/- 143.8274 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 8582700)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

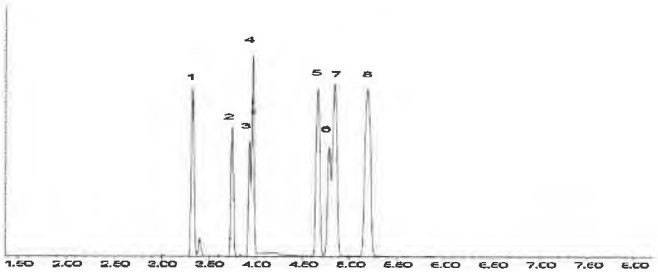
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Mar-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

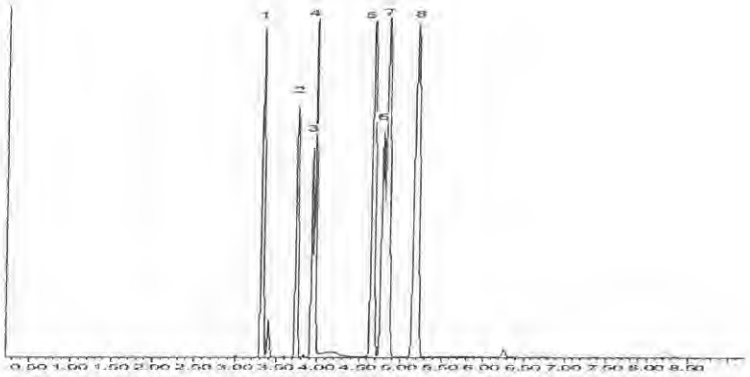
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00009

Rec: 12/2/20

VM569722S-00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,501.8 µg/mL	+/- 19.9803 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/- 140.9385 µg/mL	Unstressed
	Purity 99%		+/- 144.2054 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,510.1 µg/mL	+/- 18.7758 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.2337 µg/mL	Unstressed
	Purity 99%		+/- 144.5155 µg/mL	Stressed
3	Vinyl chloride	2,518.3 µg/mL	+/- 19.4159 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 141.7727 µg/mL	Unstressed
	Purity 99%		+/- 145.0634 µg/mL	Stressed
4	1,3-Butadiene	2,510.8 µg/mL	+/- 17.5328 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/- 141.1137 µg/mL	Unstressed
	Purity 99%		+/- 144.4001 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,506.4 µg/mL	+/- 23.4232 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 141.7223 µg/mL	Unstressed
	Purity 99%		+/- 144.9835 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,523.5 µg/mL	+/- 21.4589 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 142.3524 µg/mL	Unstressed
	Purity 99%		+/- 145.6434 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 4938100)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5	µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	140.3462	µg/mL	Unstressed
	Purity 99%				+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

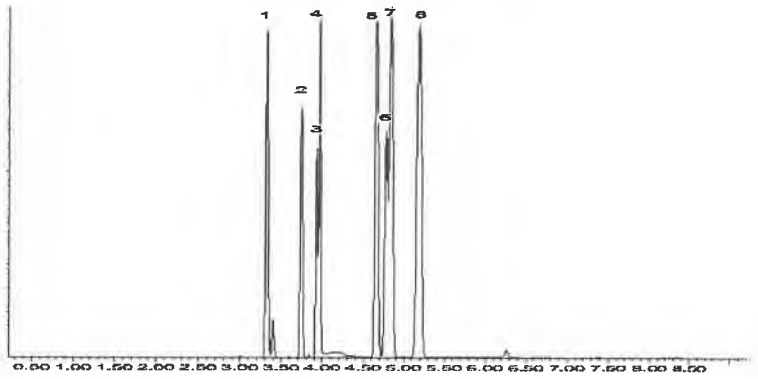
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Feng-Yun Lo - QC Analyst

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 53.5253 µg/mL +/- 55.0814 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4 µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5 µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1 µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0 µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

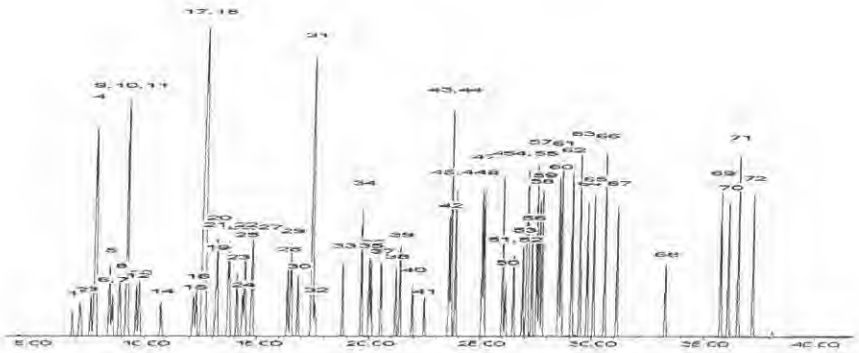
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992_00005

Rec'd 4/19/21 VM571992_00005

RESTEK CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3122.01

Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3122.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571992S_00007

VMS71992S-00007 Rec; 2-21-20

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4	µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7	µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7	µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7	µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2	µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2	µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,505.2	µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3	µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7	µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2	µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7	µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

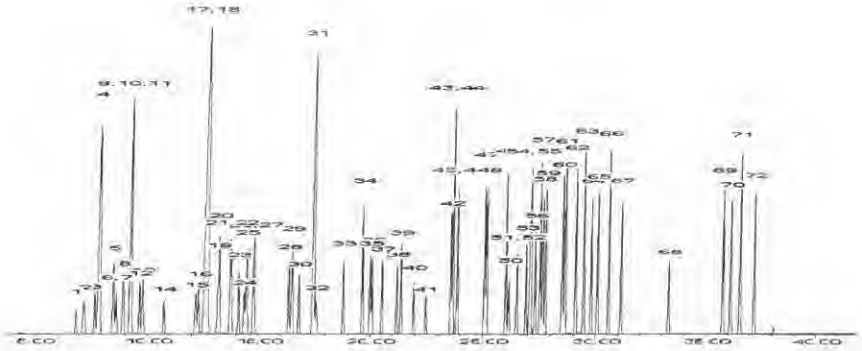
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00008

Rec'd 6/10/21 VM571992 00008

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Solution Order	Compound	Assay Value (weight/volume)	Expanded Uncertainty (95% CL, k=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot HGCHN) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00010

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 210419
Manufacture Date: 04/19/2021
Expiration: 04/30/2022
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100.0%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.5%	25016.8 ± 232.9

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 210419

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-159369-1	96	92	108	79
SL-15_110221	240-159369-2	99	93	105	86
SL-14_110221	240-159369-3	102	96	110	87
SL-13_110221	240-159369-4	95	92	107	76
SL-7_110221	240-159369-5	99	94	104	82
SL-6_110221	240-159369-6	99	97	107	89
SL-5_110221	240-159369-7	97	95	111	88
SL-8_110221	240-159369-8	97	93	111	95
SL-9_110221	240-159369-9	92	92	101	92
SL-10_110221	240-159369-10	86	86	103	85
SL-11_110221	240-159369-11	89	90	106	87
SL-12_110221	240-159369-12	93	92	105	90
MH-1231_110221	240-159369-13	92	87	108	94
SL-2_110221	240-159369-14	91	91	103	88
SL-3_110221	240-159369-15	92	92	107	91
SL-4_110221	240-159369-16	92	90	107	86
SL-16_110221	240-159369-17	93	92	105	92
SL-17_110221	240-159369-18	94	92	107	93
SL-18_110221	240-159369-19	96	91	105	86
DUP-01	240-159369-20	98	94	106	98
	MB 240-511833/6	95	94	106	83
	MB 240-512078/6	88	86	100	81
	LCS 240-511833/4	98	95	113	93
	LCS 240-512078/4	92	89	108	90
SL-15_110221 MS	240-159369-2 MS	94	98	116	98
	240-158842-N-3 MS	93	93	112	95
SL-15_110221 MSD	240-159369-2 MSD	83	80	94	80
	240-158842-M-3 MSD	92	87	110	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1878.D

Lab ID: LCS 240-511833/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.8	108	63-134	
cis-1,2-Dichloroethene	10.0	10.4	104	77-123	
Tetrachloroethene	10.0	11.8	118	76-123	
trans-1,2-Dichloroethene	10.0	10.7	107	75-124	
Trichloroethene	10.0	8.69	87	70-122	
Vinyl chloride	10.0	10.1	101	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1878A.D

Lab ID: LCS 240-512078/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	8.76	88	63-134	
cis-1,2-Dichloroethene	10.0	9.96	100	77-123	
Tetrachloroethene	10.0	9.58	96	76-123	
trans-1,2-Dichloroethene	10.0	9.73	97	75-124	
Trichloroethene	10.0	8.70	87	70-122	
Vinyl chloride	10.0	9.99	100	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1907.D

Lab ID: 240-159369-2 MS Client ID: SL-15_110221 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	9.24	92	56-135	
cis-1,2-Dichloroethene	10.0	1.0 U	9.71	97	66-128	
Tetrachloroethene	10.0	1.0 U	9.25	93	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	9.61	96	56-136	
Trichloroethene	10.0	1.0 U	8.57	86	61-124	
Vinyl chloride	10.0	1.0 U	10.1	101	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1908.D

Lab ID: 240-159369-2 MSD Client ID: SL-15_110221 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.67	97	5	26	56-135	
cis-1,2-Dichloroethene	10.0	9.32	93	4	14	66-128	
Tetrachloroethene	10.0	9.41	94	2	20	62-131	
trans-1,2-Dichloroethene	10.0	9.38	94	2	15	56-136	
Trichloroethene	10.0	7.89	79	8	15	61-124	
Vinyl chloride	10.0	9.87	99	3	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: UXJ1882.D Lab Sample ID: MB 240-511833/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 11/08/2021 10:29

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-511833/4	UXJ1878.D	11/08/2021 09:00
SL-5_110221	240-159369-7	UXJ1883.D	11/08/2021 10:51
TRIP BLANK	240-159369-1	UXJ1888.D	11/08/2021 12:43
SL-15_110221	240-159369-2	UXJ1889.D	11/08/2021 13:05
SL-14_110221	240-159369-3	UXJ1890.D	11/08/2021 13:28
SL-13_110221	240-159369-4	UXJ1891.D	11/08/2021 13:50
SL-7_110221	240-159369-5	UXJ1892.D	11/08/2021 14:12
SL-6_110221	240-159369-6	UXJ1893.D	11/08/2021 14:34
SL-9_110221	240-159369-9	UXJ1895.D	11/08/2021 15:19
SL-10_110221	240-159369-10	UXJ1896.D	11/08/2021 15:42
SL-11_110221	240-159369-11	UXJ1897.D	11/08/2021 16:04
SL-12_110221	240-159369-12	UXJ1898.D	11/08/2021 16:27
SL-16_110221	240-159369-17	UXJ1899.D	11/08/2021 16:49
SL-17_110221	240-159369-18	UXJ1900.D	11/08/2021 17:12
SL-18_110221	240-159369-19	UXJ1901.D	11/08/2021 17:34
DUP-01	240-159369-20	UXJ1902.D	11/08/2021 17:56
MH-1231_110221	240-159369-13	UXJ1903.D	11/08/2021 18:19
SL-2_110221	240-159369-14	UXJ1904.D	11/08/2021 18:41
SL-3_110221	240-159369-15	UXJ1905.D	11/08/2021 19:03
SL-4_110221	240-159369-16	UXJ1906.D	11/08/2021 19:25
SL-15_110221 MS	240-159369-2 MS	UXJ1907.D	11/08/2021 19:47
SL-15_110221 MSD	240-159369-2 MSD	UXJ1908.D	11/08/2021 20:10

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: UXJ1882.D Lab Sample ID: MB 240-512078/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 11/09/2021 12:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-512078/4	UXJ1878A.D	11/09/2021 11:08
SL-8_110221	240-159369-8	UXJ1883.D	11/09/2021 13:00
	240-158842-N-3 MS	UXJ1903.D	11/09/2021 20:28
	240-158842-M-3 MSD	UXJ1904.D	11/09/2021 20:50

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB1115A.D BFB Injection Date: 01/15/2021

Instrument ID: A3UX11 BFB Injection Time: 10:36

Analysis Batch No.: 469338

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	82.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.9) 1
176	95.0 - 101.0 % of mass 174	81.5	(98.9) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-469338/2	UXJ5268.D	01/15/2021	11:06
	STD8260 240-469338/3	UXJ5269.D	01/15/2021	11:29
	STD8260 240-469338/4	UXJ5270.D	01/15/2021	11:51
	STD8260 240-469338/5	UXJ5271.D	01/15/2021	12:13
	STD8260 240-469338/6	UXJ5272.D	01/15/2021	12:36
	STD8260 240-469338/7	UXJ5273.D	01/15/2021	12:58
	ICV 240-469338/14	UXJ5274.D	01/15/2021	13:20
	ICV 240-469338/15	UXJ5281.D	01/15/2021	15:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB1108A.D BFB Injection Date: 11/08/2021

Instrument ID: A3UX11 BFB Injection Time: 08:12

Analysis Batch No.: 511833

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	46.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	89.3	
175	5.0 - 9.0 % of mass 174	6.8	(7.6) 1
176	95.0 - 101.0 % of mass 174	85.9	(96.2) 1
177	5.0 - 9.0 % of mass 176	5.8	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-511833/2	UXJ1877.D	11/08/2021	8:38
	LCS 240-511833/4	UXJ1878.D	11/08/2021	9:00
	CCV 240-511833/3	UXJ1879.D	11/08/2021	9:23
	MB 240-511833/6	UXJ1882.D	11/08/2021	10:29
SL-5_110221	240-159369-7	UXJ1883.D	11/08/2021	10:51
TRIP BLANK	240-159369-1	UXJ1888.D	11/08/2021	12:43
SL-15_110221	240-159369-2	UXJ1889.D	11/08/2021	13:05
SL-14_110221	240-159369-3	UXJ1890.D	11/08/2021	13:28
SL-13_110221	240-159369-4	UXJ1891.D	11/08/2021	13:50
SL-7_110221	240-159369-5	UXJ1892.D	11/08/2021	14:12
SL-6_110221	240-159369-6	UXJ1893.D	11/08/2021	14:34
SL-9_110221	240-159369-9	UXJ1895.D	11/08/2021	15:19
SL-10_110221	240-159369-10	UXJ1896.D	11/08/2021	15:42
SL-11_110221	240-159369-11	UXJ1897.D	11/08/2021	16:04
SL-12_110221	240-159369-12	UXJ1898.D	11/08/2021	16:27
SL-16_110221	240-159369-17	UXJ1899.D	11/08/2021	16:49
SL-17_110221	240-159369-18	UXJ1900.D	11/08/2021	17:12
SL-18_110221	240-159369-19	UXJ1901.D	11/08/2021	17:34
DUP-01	240-159369-20	UXJ1902.D	11/08/2021	17:56
MH-1231_110221	240-159369-13	UXJ1903.D	11/08/2021	18:19
SL-2_110221	240-159369-14	UXJ1904.D	11/08/2021	18:41
SL-3_110221	240-159369-15	UXJ1905.D	11/08/2021	19:03
SL-4_110221	240-159369-16	UXJ1906.D	11/08/2021	19:25
SL-15_110221 MS	240-159369-2 MS	UXJ1907.D	11/08/2021	19:47
SL-15_110221 MSD	240-159369-2 MSD	UXJ1908.D	11/08/2021	20:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB1109.D BFB Injection Date: 11/09/2021

Instrument ID: A3UX11 BFB Injection Time: 10:06

Analysis Batch No.: 512078

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	45.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	92.5	
175	5.0 - 9.0 % of mass 174	6.9	(7.4) 1
176	95.0 - 101.0 % of mass 174	89.3	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-512078/2	UXJ1877A.D	11/09/2021	10:45
	LCS 240-512078/4	UXJ1878A.D	11/09/2021	11:08
	CCV 240-512078/3	UXJ1879.D	11/09/2021	11:31
	MB 240-512078/6	UXJ1882.D	11/09/2021	12:38
SL-8_110221	240-159369-8	UXJ1883.D	11/09/2021	13:00
	240-158842-N-3 MS	UXJ1903.D	11/09/2021	20:28
	240-158842-M-3 MSD	UXJ1904.D	11/09/2021	20:50

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: STD8260 240-469338/4 Date Analyzed: 01/15/2021 11:51

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5270.D Heated Purge: (Y/N) N

Calibration ID: 60081

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1164516	4.68	833065	7.33	399775	9.55
UPPER LIMIT		2329032	5.18	1666130	7.83	799550	10.05
LOWER LIMIT		582258	4.18	416533	6.83	199888	9.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-469338/14		1139518	4.68	814816	7.33	388972	9.55
ICV 240-469338/15		1208129	4.68	881966	7.33	428396	9.54
CCVIS 240-511833/2		1610200	4.68	910611	7.33	504176	9.54
CCVIS 240-512078/2		1704483	4.68	942886	7.33	528826	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: CCVIS 240-511833/2 Date Analyzed: 11/08/2021 08:38

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ1877.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1610200	4.68	910611	7.33	504176	9.54
UPPER LIMIT		3220400	5.18	1821222	7.83	1008352	10.04
LOWER LIMIT		805100	4.18	455306	6.83	252088	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-511833/4		1422071	4.68	790236	7.33	420429	9.54
CCV 240-511833/3		1332458	4.68	740595	7.33	377337	9.54
MB 240-511833/6		1376386	4.68	752653	7.33	389701	9.54
240-159369-7	SL-5_110221	1345315	4.68	757444	7.33	414607	9.54
240-159369-1	TRIP BLANK	1433629	4.68	781775	7.33	403453	9.54
240-159369-2	SL-15_110221	1223275	4.68	713967	7.33	367999	9.54
240-159369-3	SL-14_110221	1240793	4.68	702894	7.33	350572	9.54
240-159369-4	SL-13_110221	1466894	4.68	789514	7.33	402174	9.54
240-159369-5	SL-7_110221	1331486	4.68	767030	7.33	396440	9.54
240-159369-6	SL-6_110221	1295512	4.68	771200	7.33	408683	9.54
240-159369-9	SL-9_110221	1334583	4.68	824258	7.33	452658	9.54
240-159369-10	SL-10_110221	1433817	4.68	828819	7.33	443810	9.54
240-159369-11	SL-11_110221	1462797	4.68	880230	7.33	425442	9.54
240-159369-12	SL-12_110221	1388486	4.68	821503	7.33	454604	9.54
240-159369-17	SL-16_110221	1465111	4.68	865399	7.33	479922	9.54
240-159369-18	SL-17_110221	1493646	4.68	865014	7.33	446195	9.54
240-159369-19	SL-18_110221	1556507	4.68	904647	7.33	491990	9.54
240-159369-20	DUP-01	1303400	4.68	786193	7.33	420507	9.54
240-159369-13	MH-1231_110221	1463976	4.68	859919	7.33	431530	9.54
240-159369-14	SL-2_110221	1438234	4.68	872815	7.33	456461	9.54
240-159369-15	SL-3_110221	1409332	4.68	843925	7.33	433837	9.54
240-159369-16	SL-4_110221	1498681	4.68	876392	7.33	431747	9.54
240-159369-2 MS	SL-15_110221 MS	1559503	4.68	898867	7.33	451905	9.54
240-159369-2 MSD	SL-15_110221 MSD	1592342	4.68	949362	7.33	547543	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: CCVIS 240-512078/2 Date Analyzed: 11/09/2021 10:45

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ1877A.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1704483	4.68	942886	7.33	528826	9.54
UPPER LIMIT		3408966	5.18	1885772	7.83	1057652	10.04
LOWER LIMIT		852242	4.18	471443	6.83	264413	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-512078/4		1478087	4.68	855999	7.33	463271	9.54
CCV 240-512078/3		1607245	4.68	874410	7.33	430894	9.54
MB 240-512078/6		1595294	4.68	913960	7.33	499665	9.54
240-159369-8	SL-8_110221	1315686	4.68	763503	7.33	437768	9.54
240-158842-N-3 MS		1478357	4.68	829147	7.33	454778	9.54
240-158842-M-3 MSD		1427453	4.68	792931	7.33	433880	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-159369-1

Matrix: Water Lab File ID: UXJ1888.D

Analysis Method: 8260B Date Collected: 11/02/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	79		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	96		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1888.D
Lims ID: 240-159369-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 08-Nov-2021 12:43:30 ALS Bottle#: 12 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-042
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:38:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1433629	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	781775	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	403453	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	350150	19.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	380620	18.4	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1203038	21.6	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	308528	15.8	
	14 Vinyl chloride	62		1.364				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

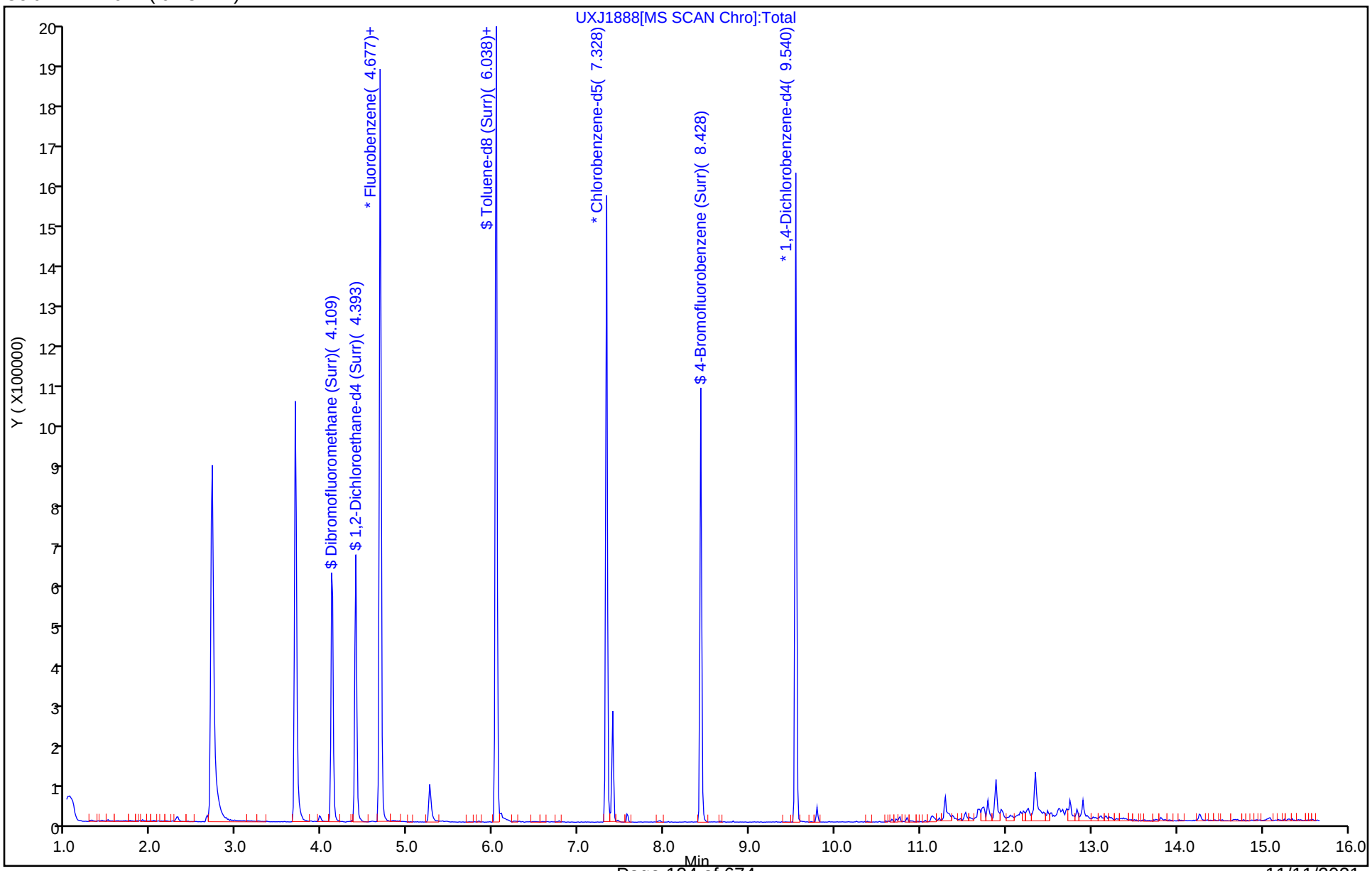
Report Date: 09-Nov-2021 08:41:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1888.D

Injection Date:	08-Nov-2021 12:43:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-A-1	Lab Sample ID:	240-159369-1	Worklist Smp#:	42
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1888.D
Lims ID: 240-159369-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 08-Nov-2021 12:43:30 ALS Bottle#: 12 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-042
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:38:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.2	95.86
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	91.86
$ 6 Toluene-d8 (Surr)	20.0	21.6	108.18
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.8	79.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-15_110221 Lab Sample ID: 240-159369-2

Matrix: Water Lab File ID: UXJ1889.D

Analysis Method: 8260B Date Collected: 11/02/2021 08:30

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	105		78-122
1868-53-7	Dibromofluoromethane (Surr)	99		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1889.D
Lims ID: 240-159369-B-2
Client ID: SL-15_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 13:05:30 ALS Bottle#: 13 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-043
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1223275	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	713967	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	367999	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	307767	19.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	330223	18.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1067707	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	304303	17.1	
14 Vinyl chloride	62		1.364				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.707				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added: 2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added: 0.00	Units:	Run Reagent

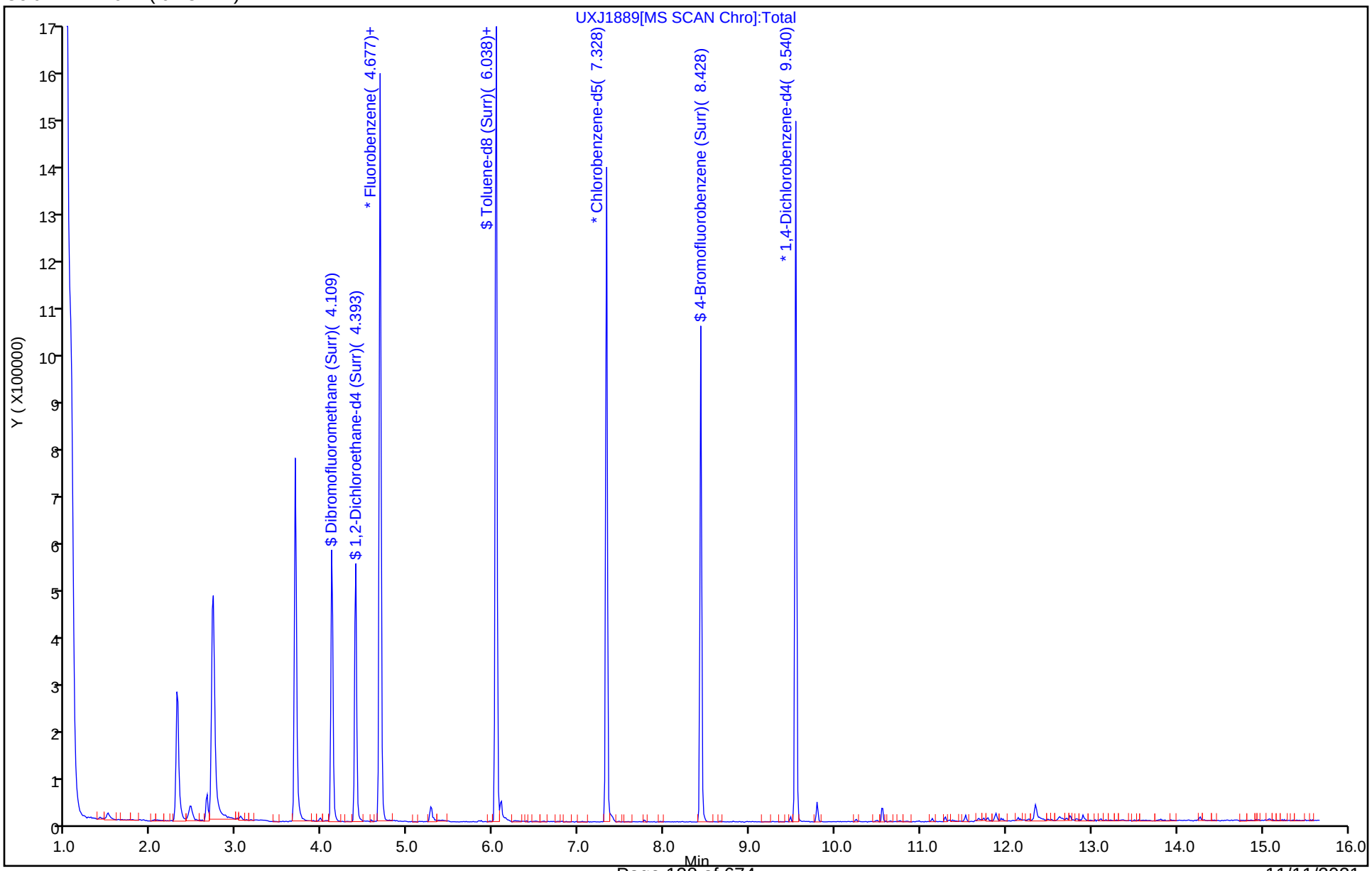
Report Date: 09-Nov-2021 08:41:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1889.D

Injection Date:	08-Nov-2021 13:05:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-2	Lab Sample ID:	240-159369-2	Worklist Smp#:	43
Client ID:	SL-15_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1889.D
Lims ID: 240-159369-B-2
Client ID: SL-15_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 13:05:30 ALS Bottle#: 13 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-043
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.8	98.75
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.40
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.13
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.1	85.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-14_110221 Lab Sample ID: 240-159369-3

Matrix: Water Lab File ID: UXJ1890.D

Analysis Method: 8260B Date Collected: 11/02/2021 08:50

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 13:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	87		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1890.D				
Lims ID:	240-159369-B-3				
Client ID:	SL-14_110221				
Sample Type:	Client				
Inject. Date:	08-Nov-2021 13:28:30	ALS Bottle#:	14	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114885-044				
Misc. Info.:	J211108A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	09-Nov-2021 08:41:32	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1240793	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	702894	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	350572	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	321431	20.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	344943	19.2	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1102230	22.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	303180	17.3	
14 Vinyl chloride	62		1.364				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.707				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

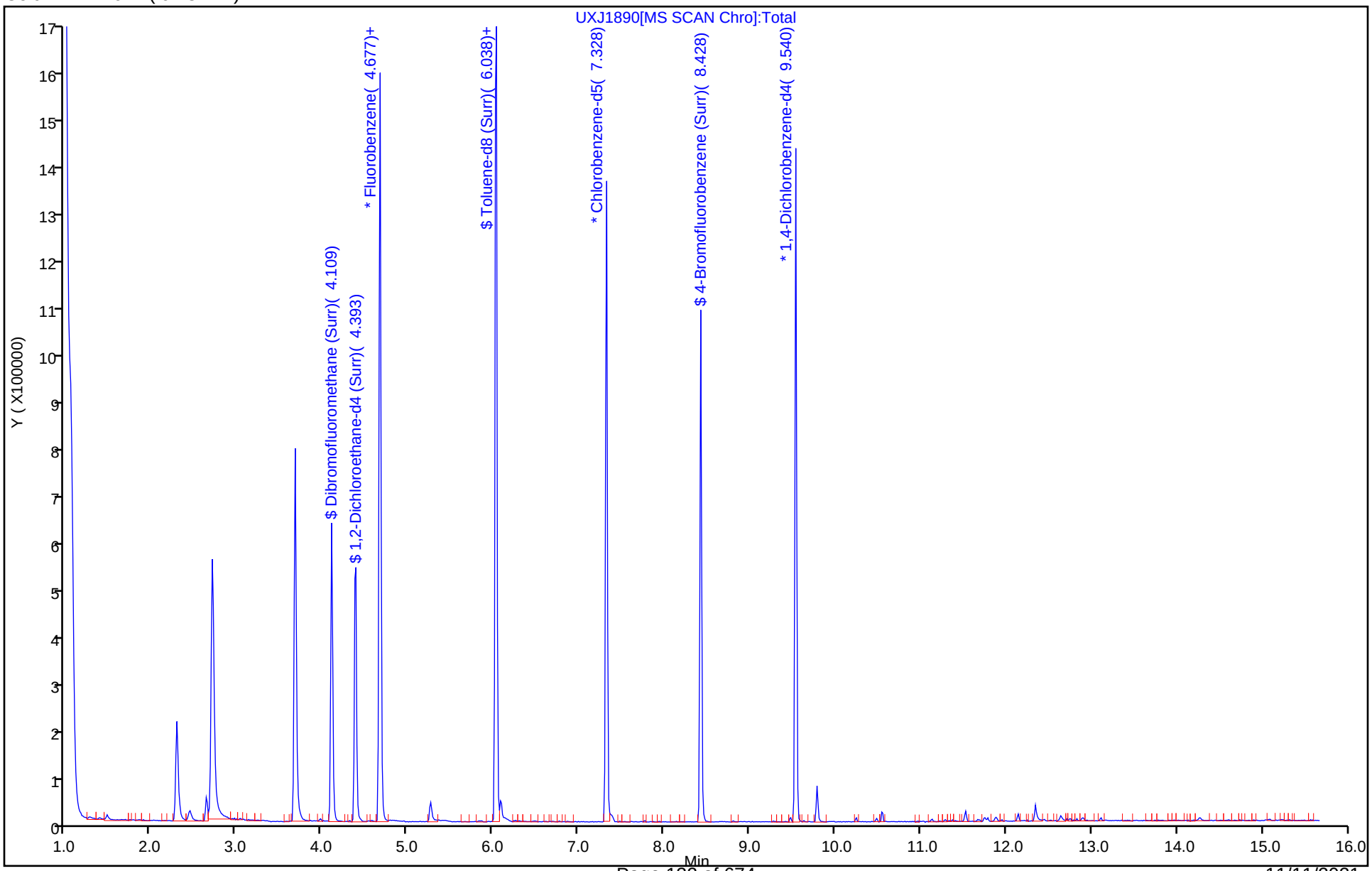
Report Date: 09-Nov-2021 08:41:44 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1890.D

Injection Date:	08-Nov-2021 13:28:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-3	Lab Sample ID:	240-159369-3	Worklist Smp#:	44
Client ID:	SL-14_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1890.D
Lims ID: 240-159369-B-3
Client ID: SL-14_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 13:28:30 ALS Bottle#: 14 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-044
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.3	101.68
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.2	96.19
$ 6 Toluene-d8 (Surr)	20.0	22.0	110.23
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-13_110221 Lab Sample ID: 240-159369-4

Matrix: Water Lab File ID: UXJ1891.D

Analysis Method: 8260B Date Collected: 11/02/2021 09:15

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 13:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	76		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1891.D
Lims ID: 240-159369-B-4
Client ID: SL-13_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 13:50:30 ALS Bottle#: 15 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-045
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1466894	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	789514	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	402174	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	355372	19.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	97	390367	18.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1199038	21.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	299161	15.2	
14 Vinyl chloride	62		1.364				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.707				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added: 2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added: 0.00	Units:	Run Reagent

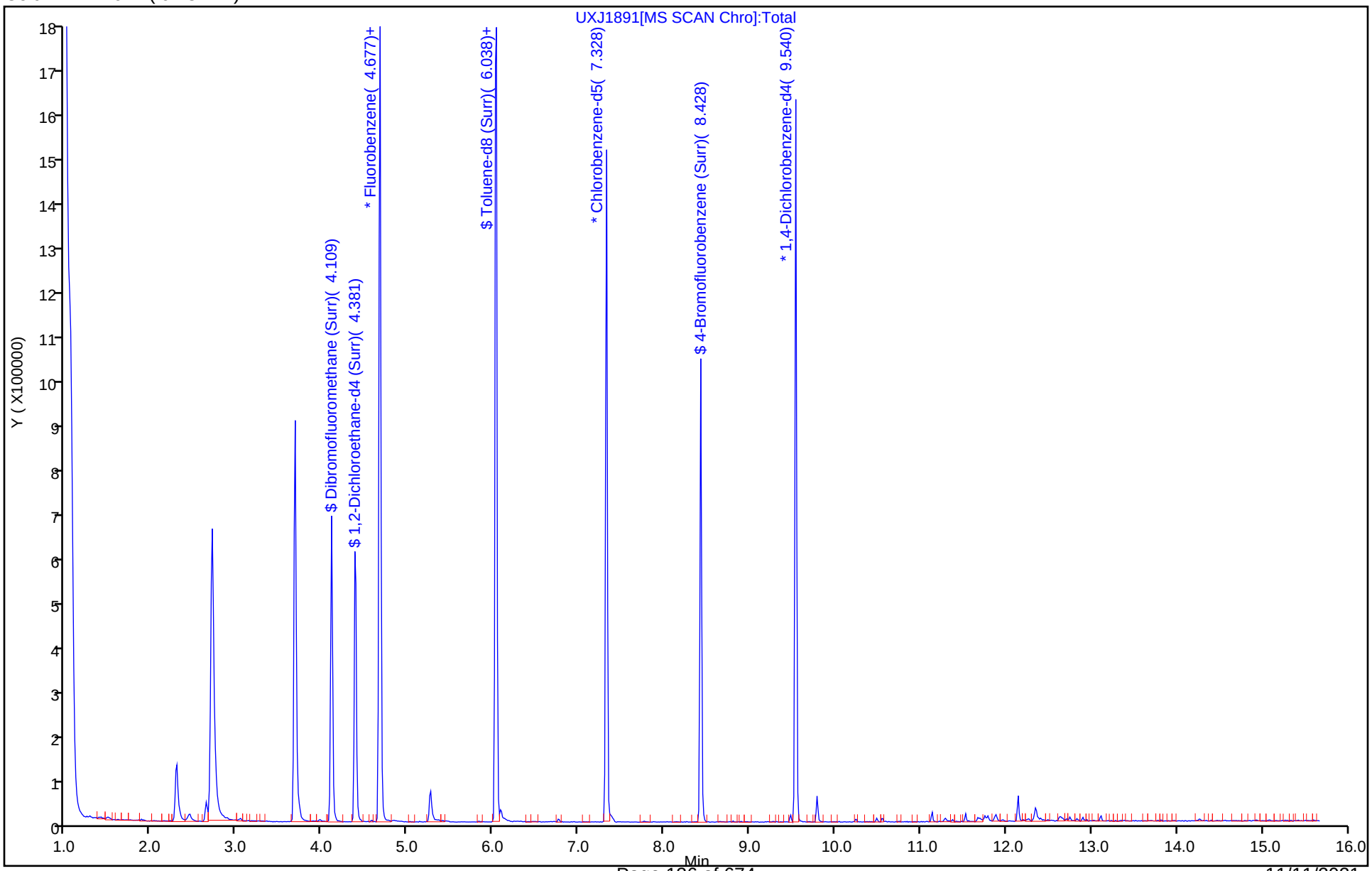
Report Date: 09-Nov-2021 08:41:44 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1891.D

Injection Date:	08-Nov-2021 13:50:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-4	Lab Sample ID:	240-159369-4	Worklist Smp#:	45
Client ID:	SL-13_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1891.D
Lims ID: 240-159369-B-4
Client ID: SL-13_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 13:50:30 ALS Bottle#: 15 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-045
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.0	95.09
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	92.07
$ 6 Toluene-d8 (Surr)	20.0	21.4	106.76
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.2	76.03

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-7_110221 Lab Sample ID: 240-159369-5

Matrix: Water Lab File ID: UXJ1892.D

Analysis Method: 8260B Date Collected: 11/02/2021 09:40

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 14:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	104		78-122
1868-53-7	Dibromofluoromethane (Surr)	99		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1892.D
Lims ID: 240-159369-B-5
Client ID: SL-7_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 14:12:30 ALS Bottle#: 16 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-046
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1331486	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	767030	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	396440	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	336343	19.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	363158	18.9	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1139695	20.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	313267	16.4	
	14 Vinyl chloride	62		1.364				ND	7
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	7
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

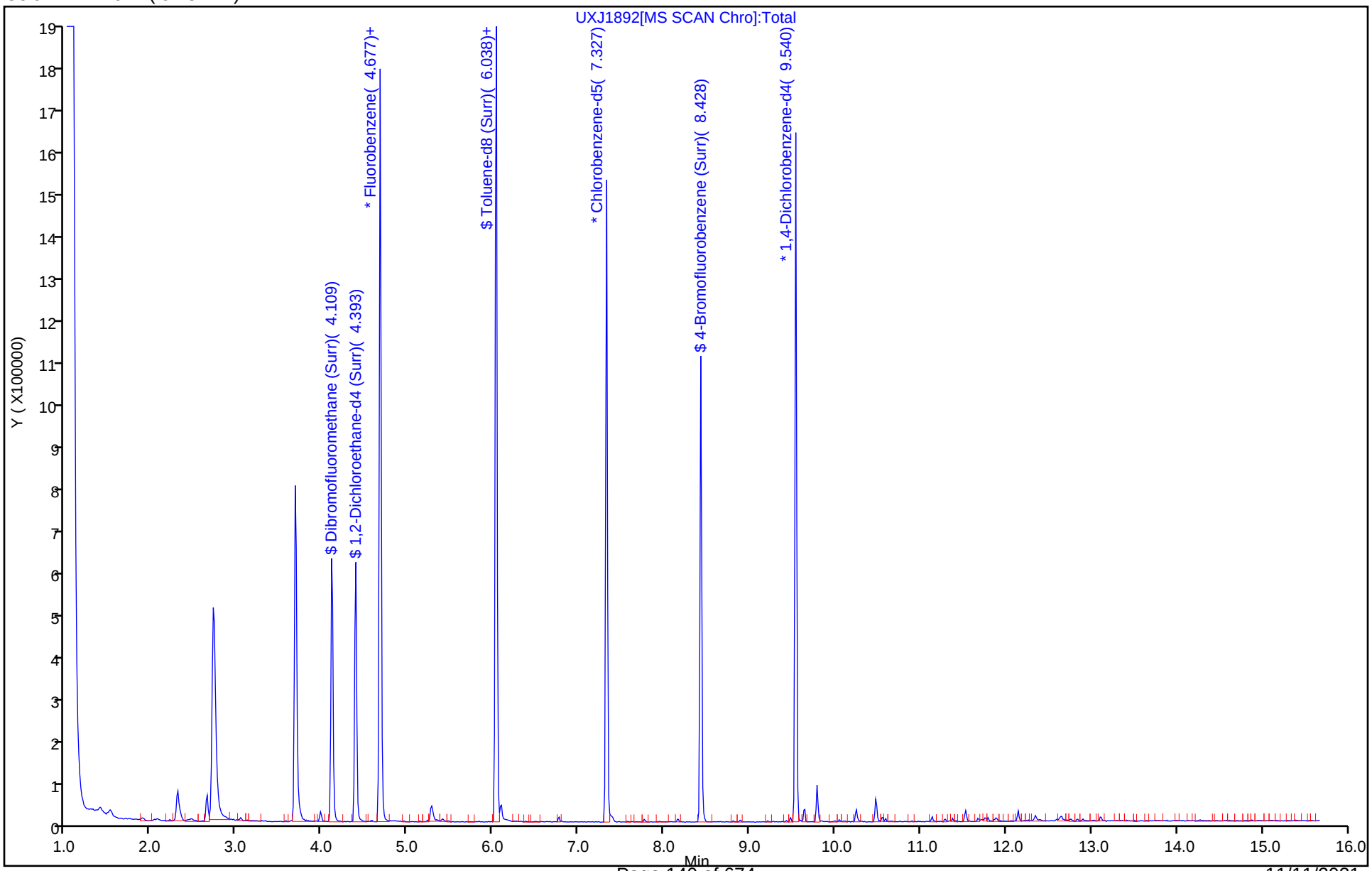
Report Date: 09-Nov-2021 08:41:45 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1892.D

Injection Date:	08-Nov-2021 14:12:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-5	Lab Sample ID:	240-159369-5	Worklist Smp#:	46
Client ID:	SL-7_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1892.D
Lims ID: 240-159369-B-5
Client ID: SL-7_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 14:12:30 ALS Bottle#: 16 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-046
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.8	99.15
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.9	94.37
$ 6 Toluene-d8 (Surr)	20.0	20.9	104.45
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.4	81.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-6_110221 Lab Sample ID: 240-159369-6

Matrix: Water Lab File ID: UXJ1893.D

Analysis Method: 8260B Date Collected: 11/02/2021 10:05

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 14:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	89		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	99		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1893.D
Lims ID: 240-159369-B-6
Client ID: SL-6_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 14:34:30 ALS Bottle#: 17 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-047
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1295512	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	83	771200	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	408683	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	325877	19.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	362787	19.4	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1169505	21.3	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	342646	17.8	
	14 Vinyl chloride	62		1.364				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	7
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

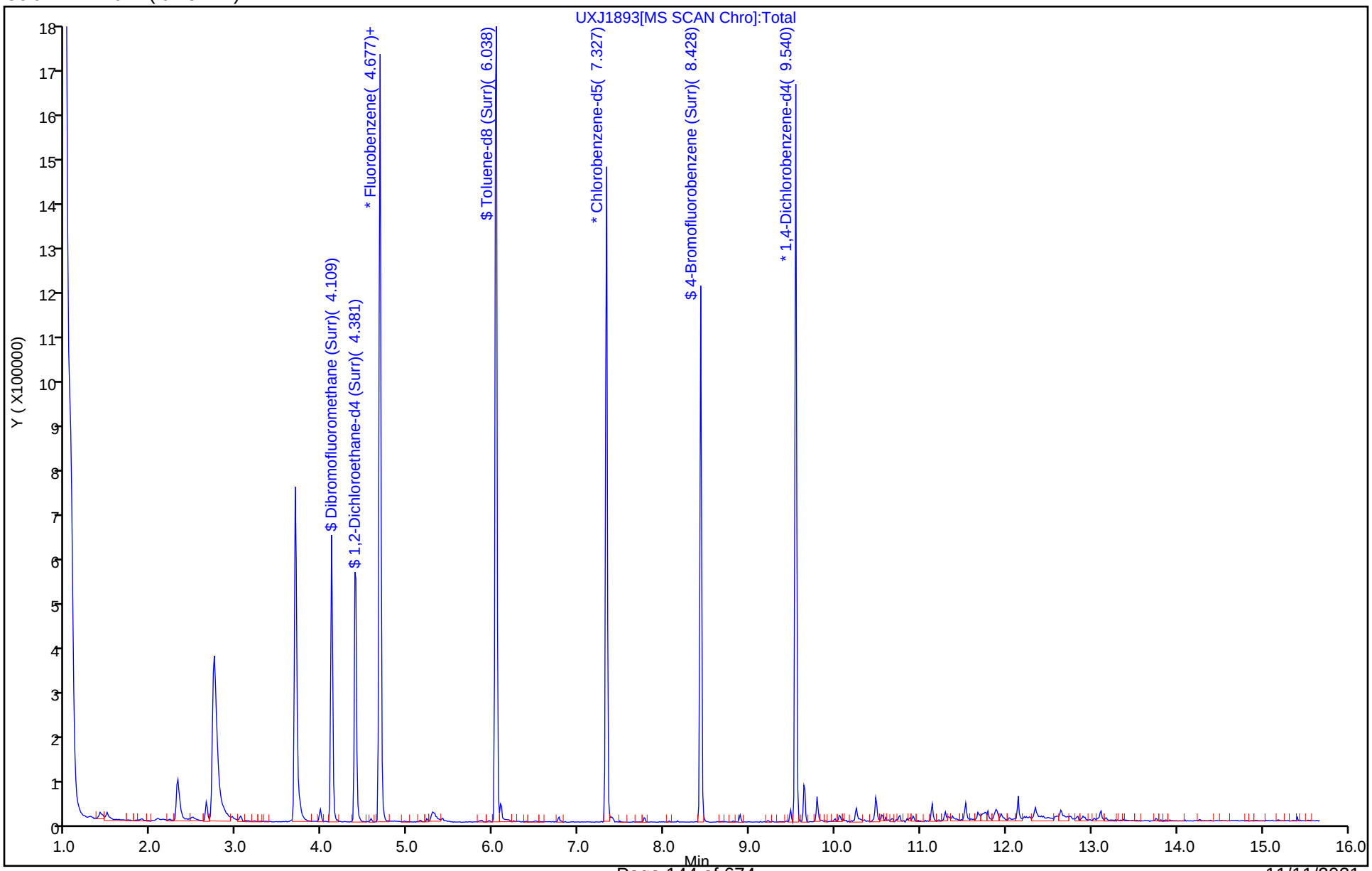
Report Date: 09-Nov-2021 08:41:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1893.D

Injection Date:	08-Nov-2021 14:34:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-6	Lab Sample ID:	240-159369-6	Worklist Smp#:	47
Client ID:	SL-6_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1893.D
Lims ID: 240-159369-B-6
Client ID: SL-6_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 14:34:30 ALS Bottle#: 17 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-047
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.7	98.73
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.4	96.89
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.60
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.8	89.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-5_110221 Lab Sample ID: 240-159369-7

Matrix: Water Lab File ID: UXJ1883.D

Analysis Method: 8260B Date Collected: 11/02/2021 10:35

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 10:51

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.98
156-59-2	cis-1,2-Dichloroethene	1.5	J	2.0	0.92
127-18-4	Tetrachloroethene	2.0	U	2.0	0.88
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.0
79-01-6	Trichloroethene	2.0	U	2.0	0.88
75-01-4	Vinyl chloride	2.0	U	2.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-137
460-00-4	4-Bromofluorobenzene (Surr)	88		56-136
2037-26-5	Toluene-d8 (Surr)	111		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1883.D
Lims ID: 240-159369-B-7
Client ID: SL-5_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 10:51:30 ALS Bottle#: 7 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0114885-037
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 11:42:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1345315	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	757444	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	414607	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	333246	19.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	371096	19.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1200170	22.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	332772	17.6	
14 Vinyl chloride	62	1.387	1.364	0.023	94	5587	0.3343	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	79	14223	0.7278	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

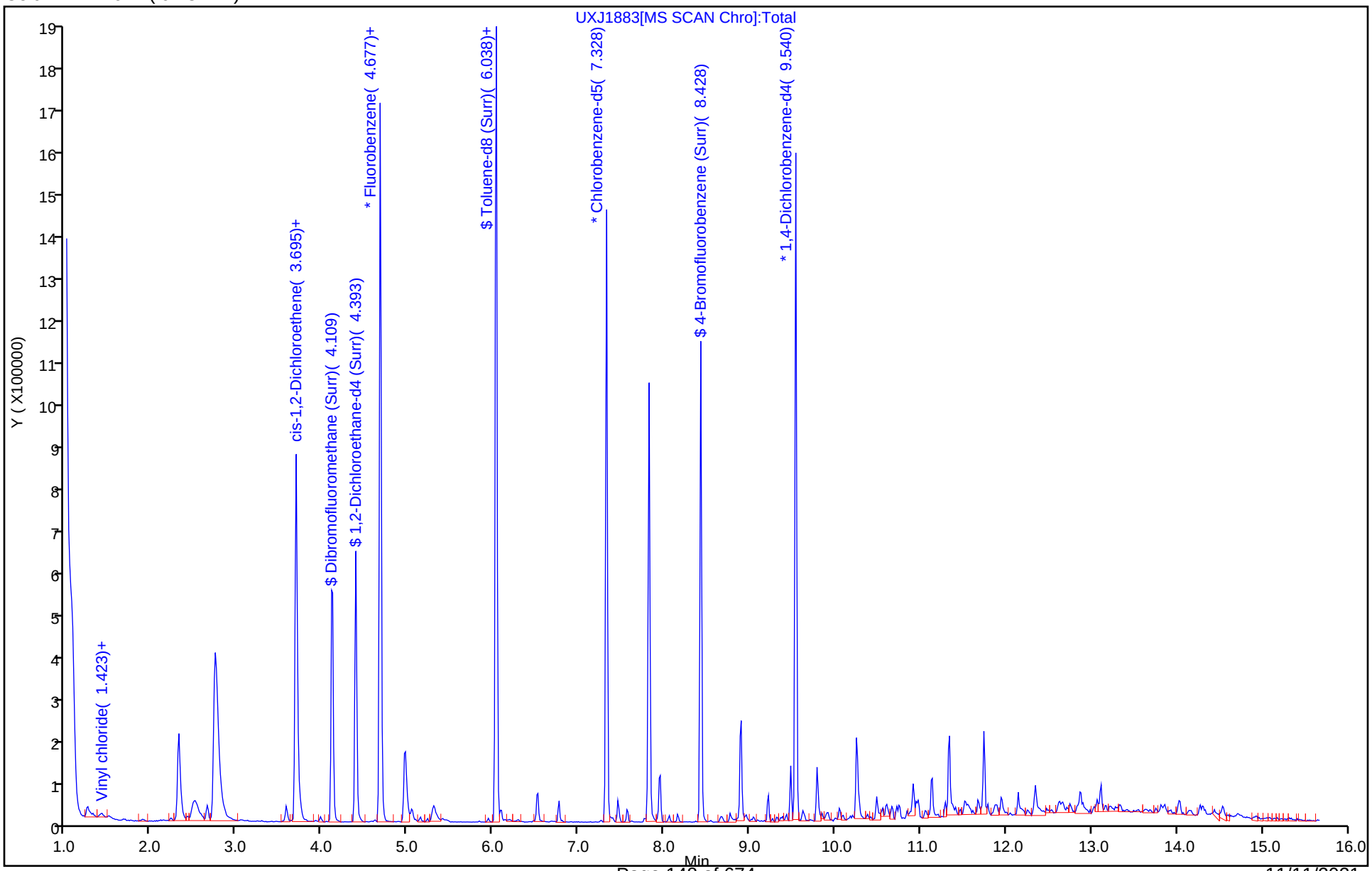
Report Date: 09-Nov-2021 08:41:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1883.D

Injection Date:	08-Nov-2021 10:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-7	Lab Sample ID:	240-159369-7	Worklist Smp#:	37
Client ID:	SL-5_110221				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1883.D
Lims ID: 240-159369-B-7
Client ID: SL-5_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 10:51:30 ALS Bottle#: 7 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0114885-037
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

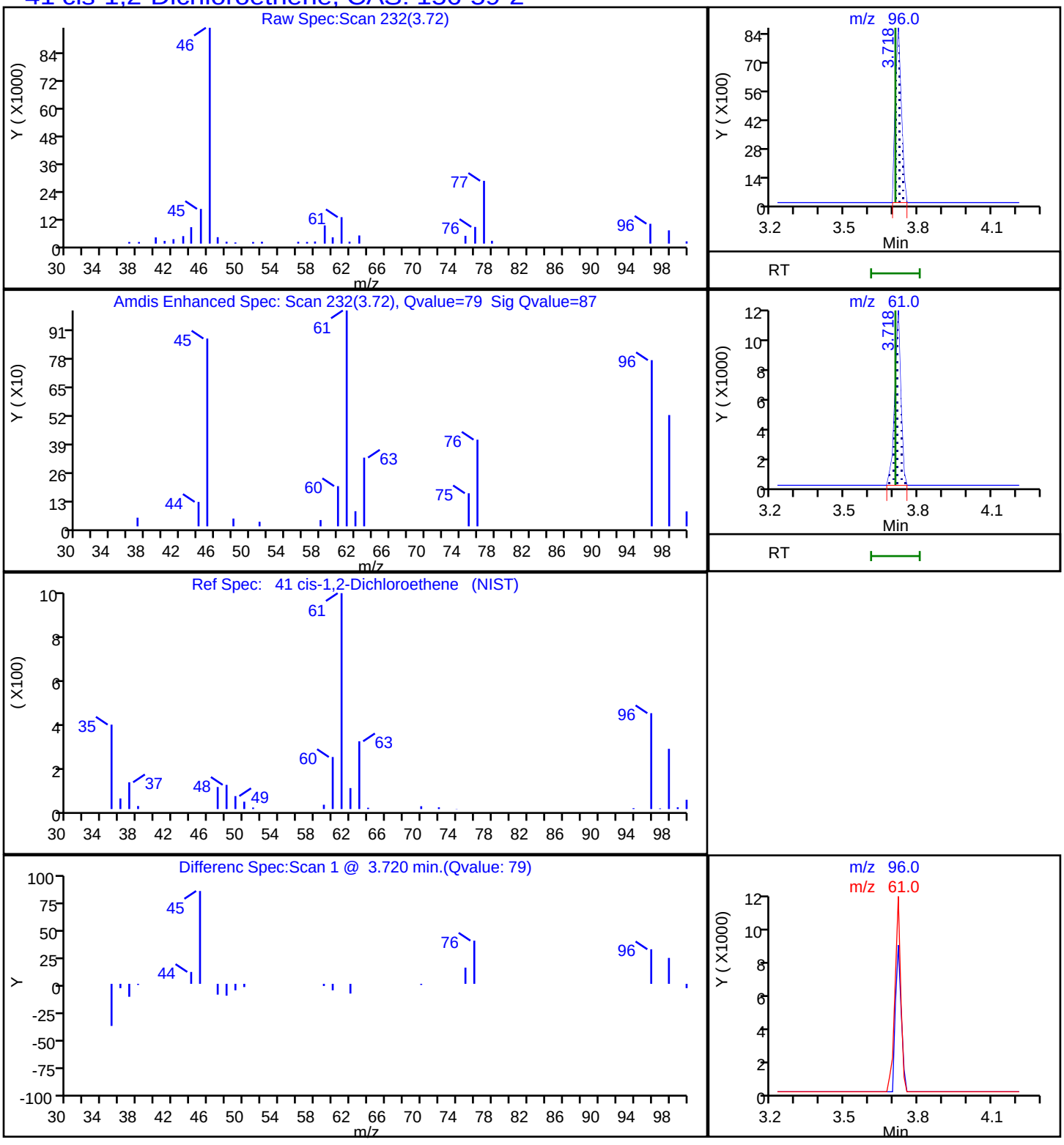
First Level Reviewer: evansle Date: 08-Nov-2021 11:42:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.4	97.23
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.1	95.44
$ 6 Toluene-d8 (Surr)	20.0	22.3	111.39
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	88.15

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1883.D				
Injection Date:	08-Nov-2021 10:51:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-7	Lab Sample ID:	240-159369-7		
Client ID:	SL-5_110221				
Operator ID:	043582	ALS Bottle#:	7	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-8_110221 Lab Sample ID: 240-159369-8

Matrix: Water Lab File ID: UXJ1883.D

Analysis Method: 8260B Date Collected: 11/02/2021 11:05

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2021 13:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512078 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.9		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	111		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1883.D
Lims ID: 240-159369-E-8
Client ID: SL-8_110221
Sample Type: Client
Inject. Date: 09-Nov-2021 13:00:30 ALS Bottle#: 7 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-037
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: evansle Date: 09-Nov-2021 13:28:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1315686	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	763503	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	437768	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	325844	19.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	352352	18.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1207200	22.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	360652	19.0	
14 Vinyl chloride	62	1.376	1.376	0.000	96	22085	1.35	
21 1,1-Dichloroethene	96		2.251				ND	
33 trans-1,2-Dichloroethene	96		2.890				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	78	35822	1.87	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

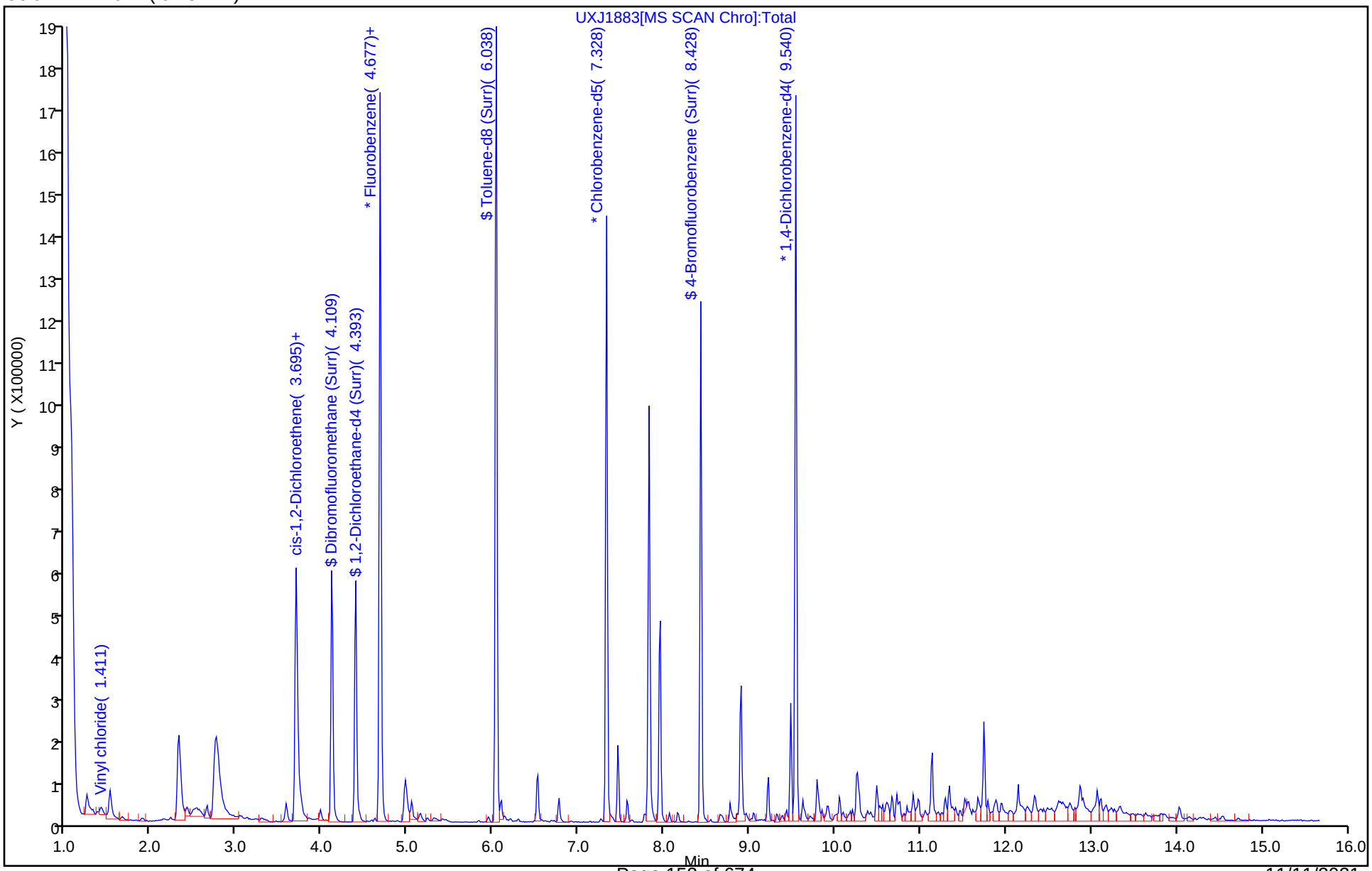
Report Date: 10-Nov-2021 09:09:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1883.D

Injection Date:	09-Nov-2021 13:00:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-E-8	Lab Sample ID:	240-159369-8	Worklist Smp#:	37
Client ID:	SL-8_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1883.D
Lims ID: 240-159369-E-8
Client ID: SL-8_110221
Sample Type: Client
Inject. Date: 09-Nov-2021 13:00:30 ALS Bottle#: 7 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-037
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

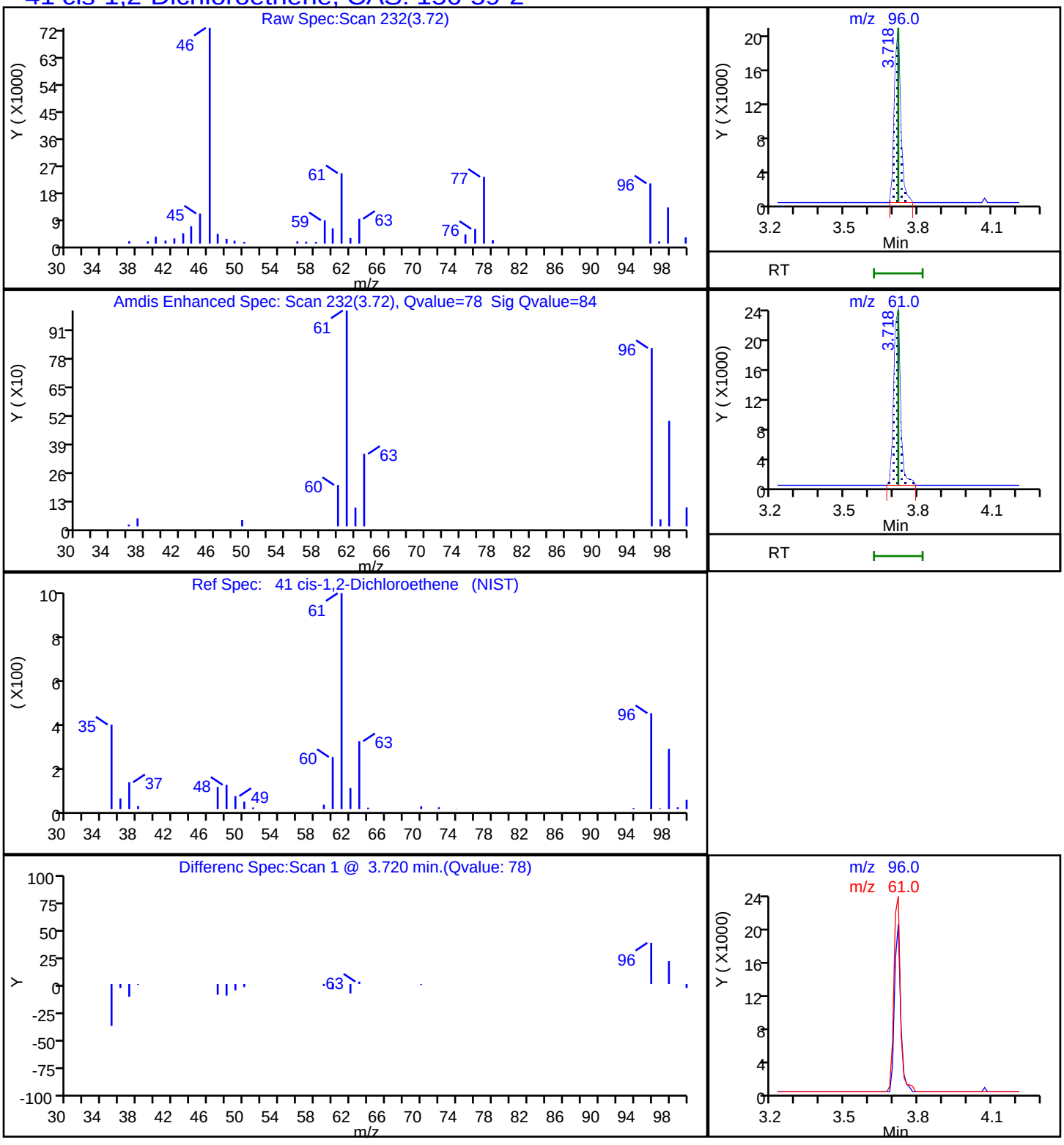
First Level Reviewer: evansle Date: 09-Nov-2021 13:28:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.4	97.21
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.5	92.66
$ 6 Toluene-d8 (Surr)	20.0	22.2	111.15
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.0	94.78

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1883.D				
Injection Date:	09-Nov-2021 13:00:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-E-8	Lab Sample ID:	240-159369-8		
Client ID:	SL-8_110221				
Operator ID:	043582	ALS Bottle#:	7	Worklist Smp#:	37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

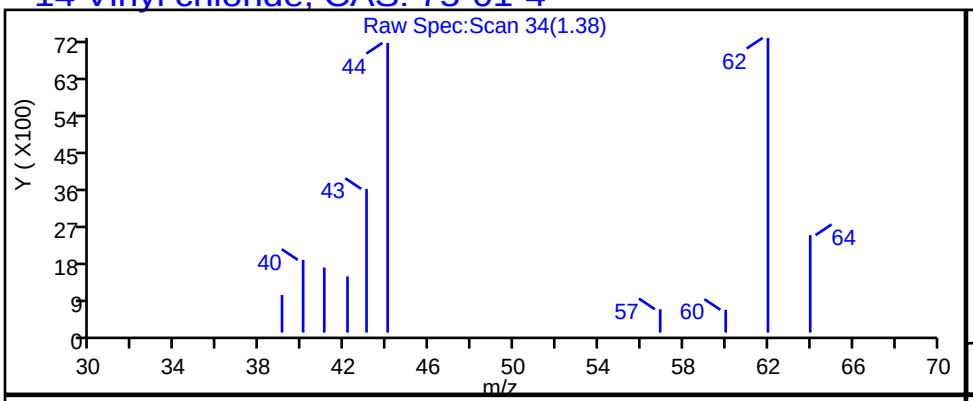


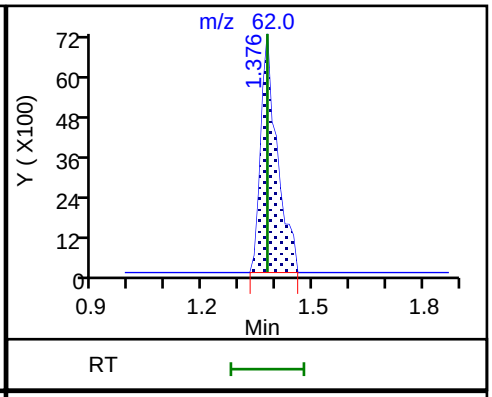
Eurofins TestAmerica, Canton

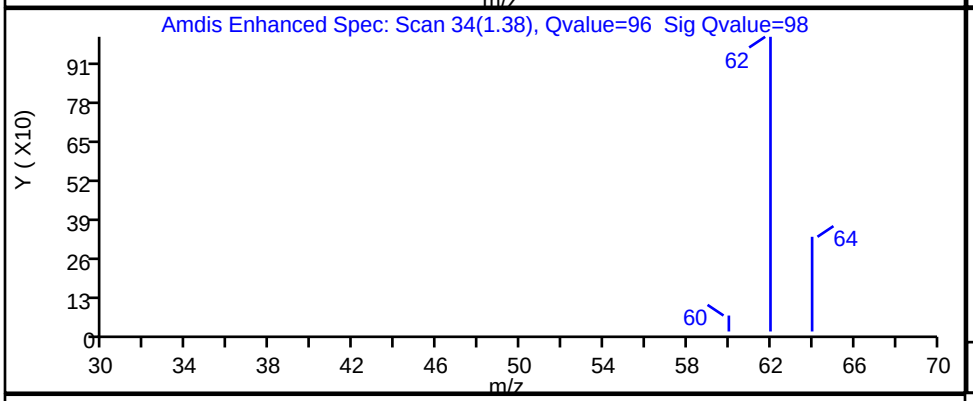
Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1883.D

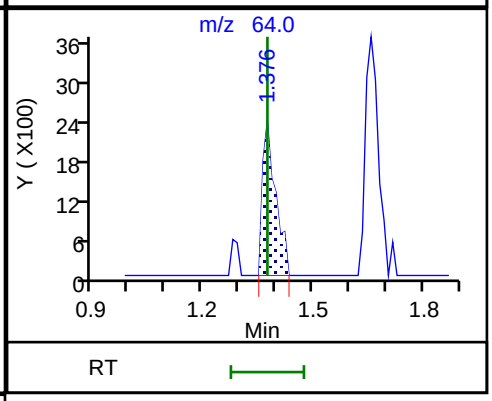
Injection Date:	09-Nov-2021 13:00:30	Instrument ID:	A3UX11
Lims ID:	240-159369-E-8	Lab Sample ID:	240-159369-8
Client ID:	SL-8_110221		
Operator ID:	043582	ALS Bottle#:	7 Worklist Smp#: 37
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

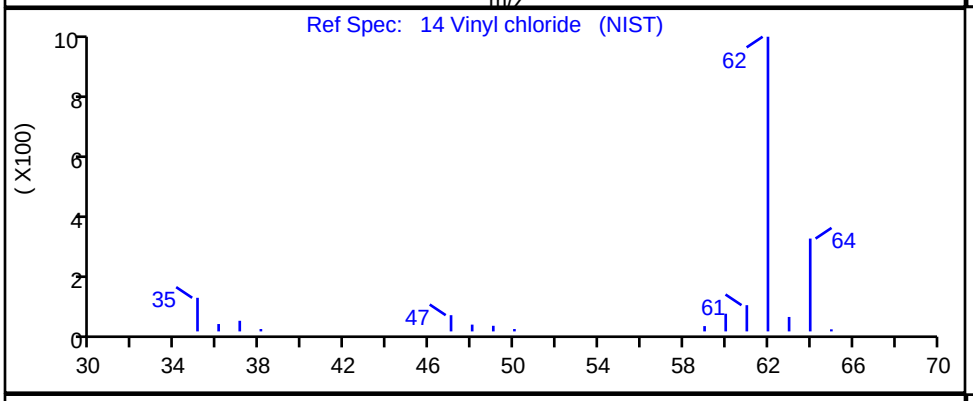
14 Vinyl chloride, CAS: 75-01-4

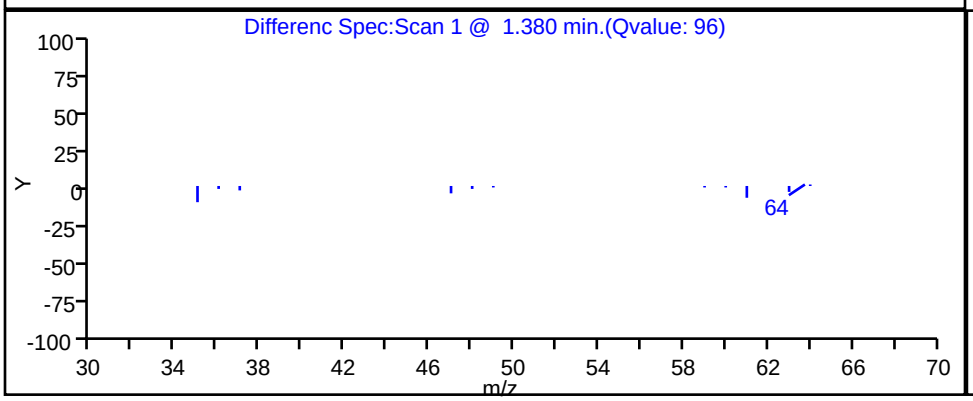


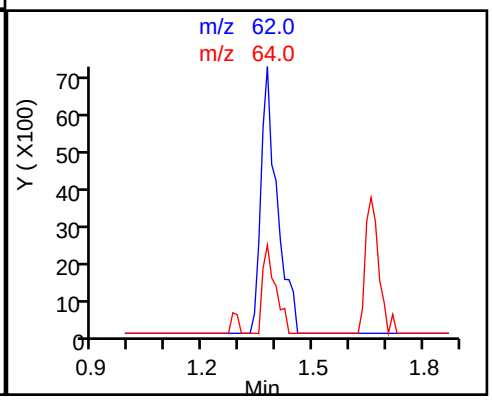












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-9_110221 Lab Sample ID: 240-159369-9

Matrix: Water Lab File ID: UXJ1895.D

Analysis Method: 8260B Date Collected: 11/02/2021 12:25

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 15:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	92		56-136
2037-26-5	Toluene-d8 (Surr)	101		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1895.D
Lims ID: 240-159369-B-9
Client ID: SL-9_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 15:19:30 ALS Bottle#: 19 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-049
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1334583	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	824258	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	452658	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	313537	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	355542	18.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1189574	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	378584	18.4	
14 Vinyl chloride	62	1.376	1.364	0.012	96	21274	1.28	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	39751	2.05	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

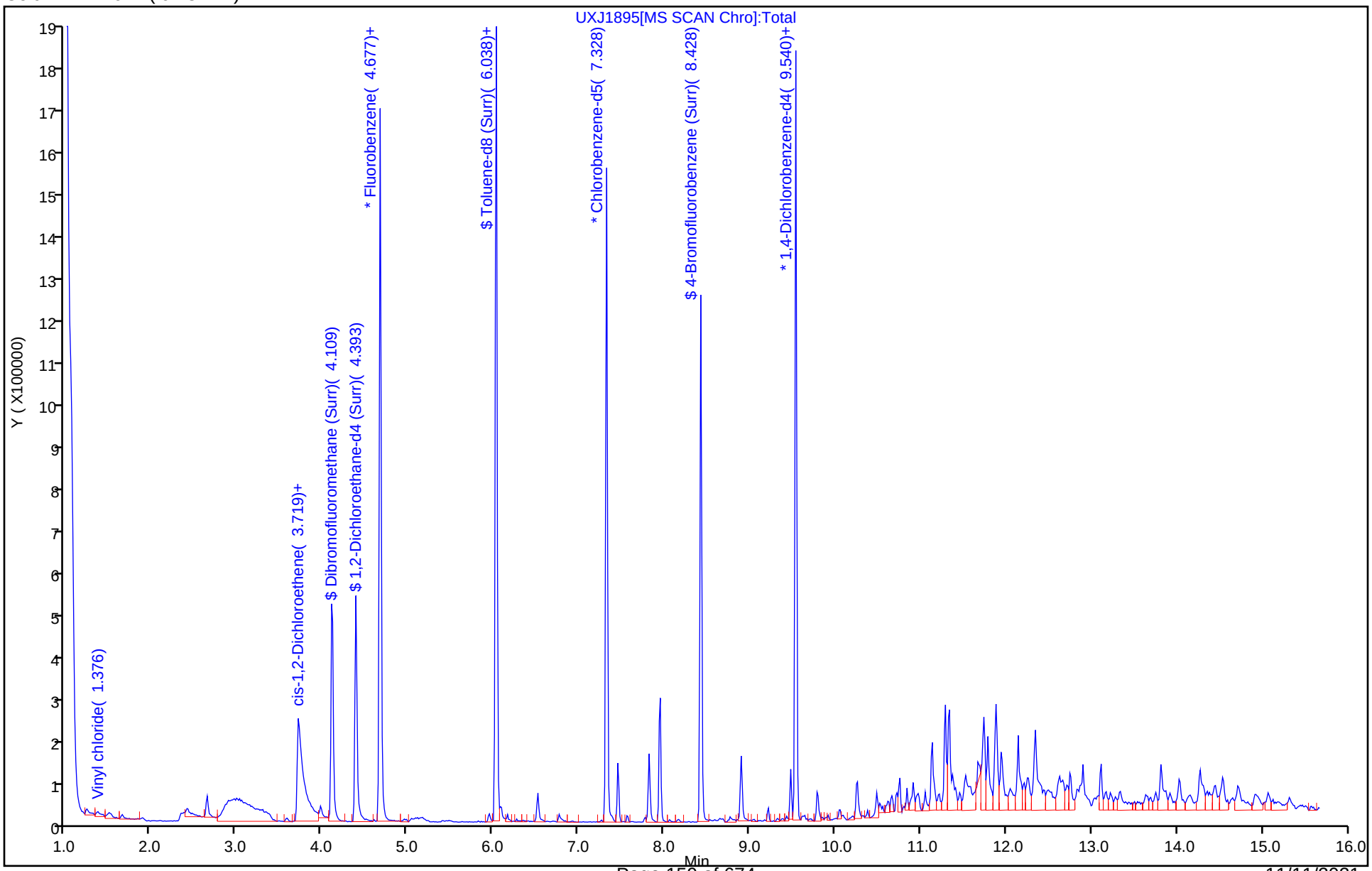
Report Date: 09-Nov-2021 08:41:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1895.D

Injection Date:	08-Nov-2021 15:19:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-9	Lab Sample ID:	240-159369-9	Worklist Smp#:	49
Client ID:	SL-9_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1895.D
Lims ID: 240-159369-B-9
Client ID: SL-9_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 15:19:30 ALS Bottle#: 19 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-049
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:14

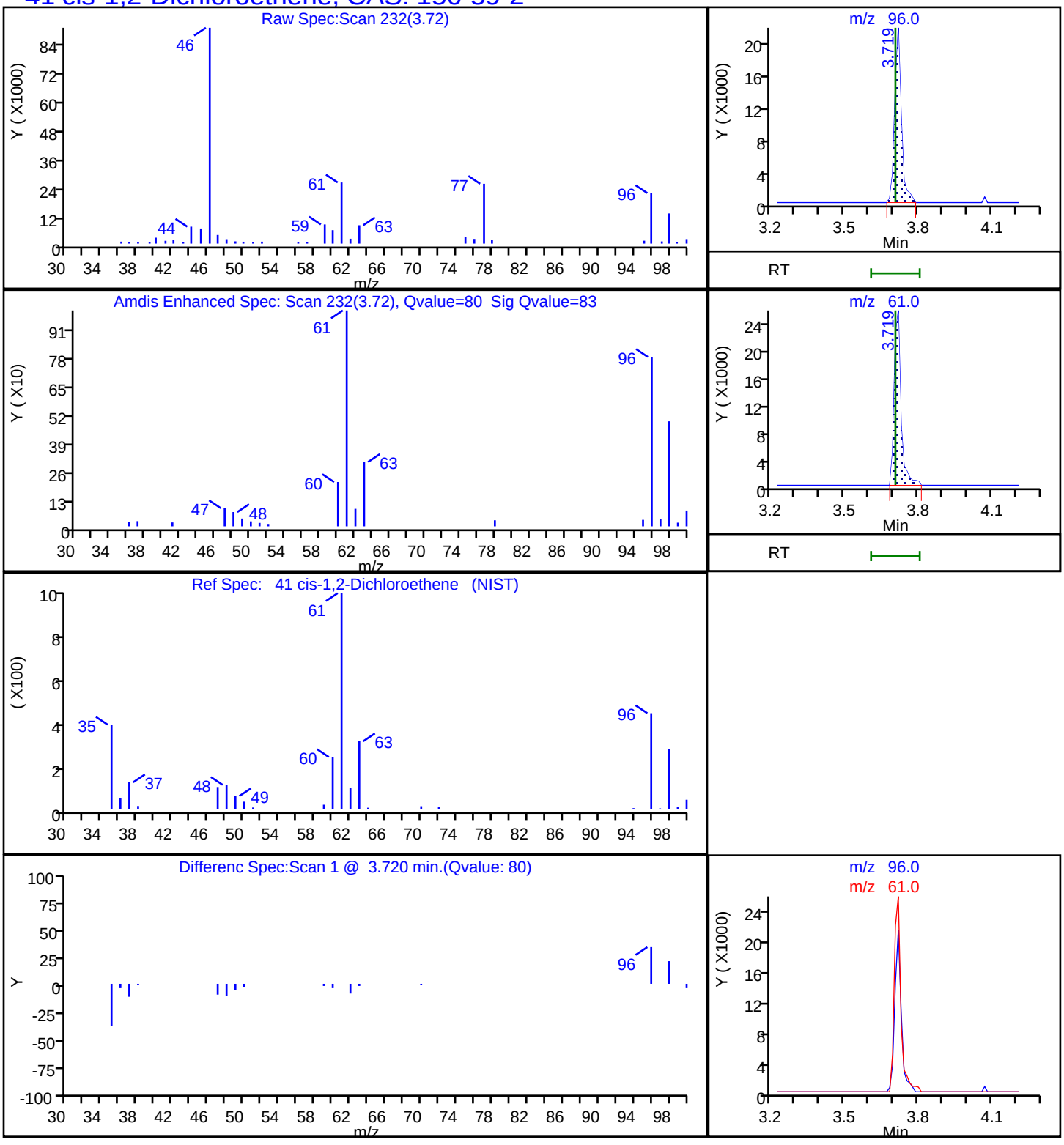
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.21
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	92.17
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.45
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.4	92.16

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1895.D

Injection Date:	08-Nov-2021 15:19:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-9	Lab Sample ID:	240-159369-9		
Client ID:	SL-9_110221				
Operator ID:	043582	ALS Bottle#:	19	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

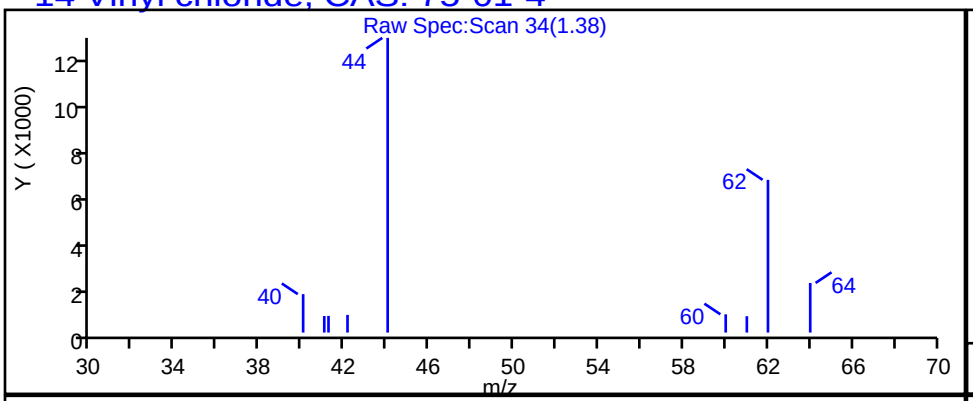


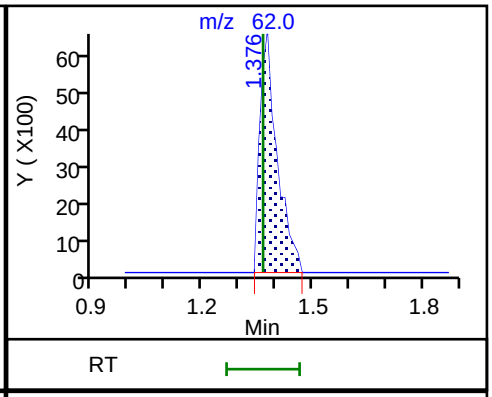
Eurofins TestAmerica, Canton

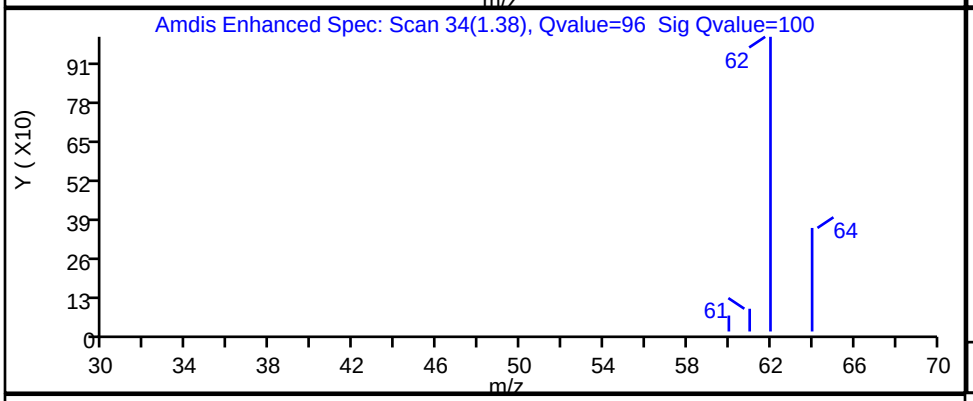
Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1895.D

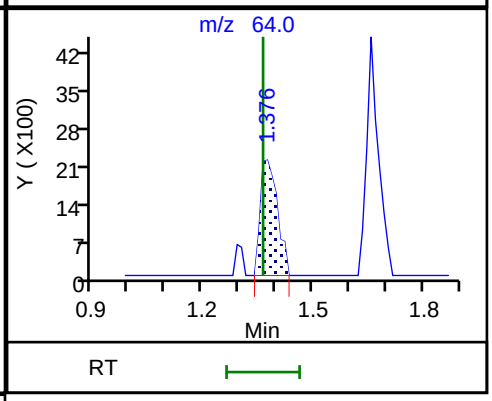
Injection Date:	08-Nov-2021 15:19:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-9	Lab Sample ID:	240-159369-9
Client ID:	SL-9_110221		
Operator ID:	043582	ALS Bottle#:	19 Worklist Smp#: 49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

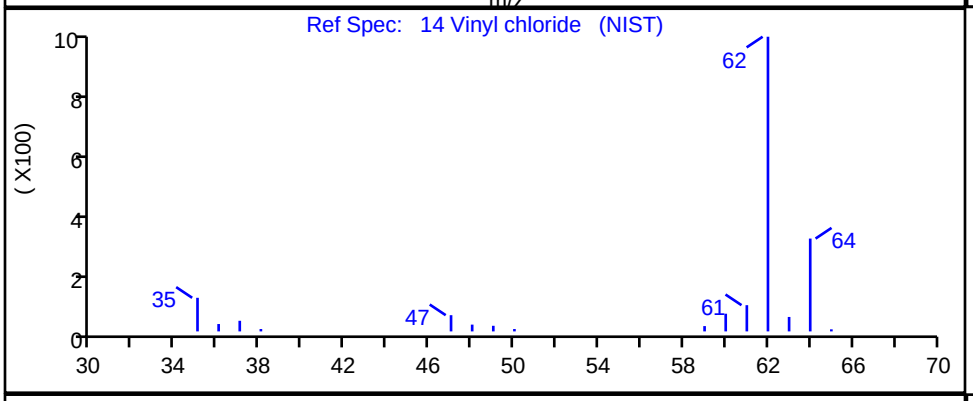
14 Vinyl chloride, CAS: 75-01-4

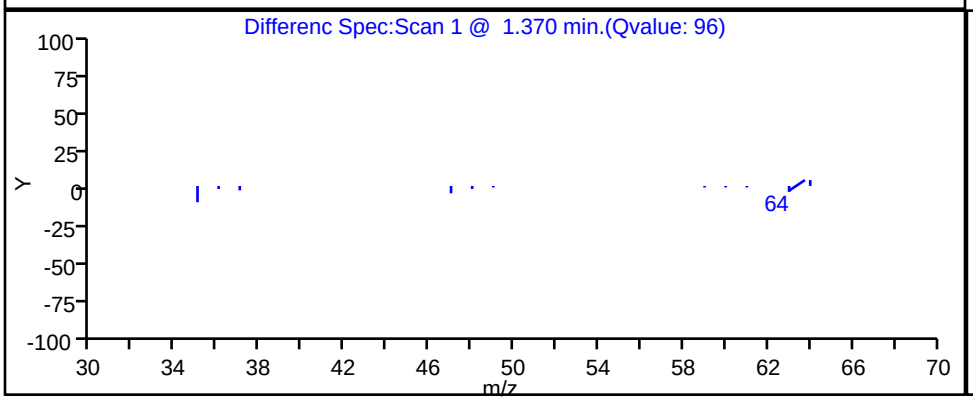


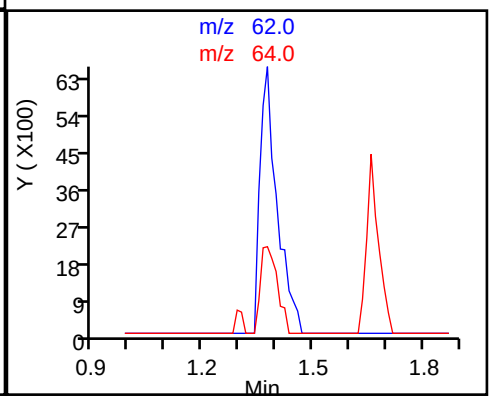












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-10_110221 Lab Sample ID: 240-159369-10

Matrix: Water Lab File ID: UXJ1896.D

Analysis Method: 8260B Date Collected: 11/02/2021 12:40

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.8		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-137
460-00-4	4-Bromofluorobenzene (Surr)	85		56-136
2037-26-5	Toluene-d8 (Surr)	103		78-122
1868-53-7	Dibromofluoromethane (Surr)	86		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1896.D
Lims ID: 240-159369-B-10
Client ID: SL-10_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 15:42:30 ALS Bottle#: 20 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-050
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1433817	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	828819	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	443810	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	97	314614	17.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	354971	17.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1218820	20.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	349505	16.9	
14 Vinyl chloride	62	1.375	1.364	0.011	94	25036	1.41	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	74	37645	1.81	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

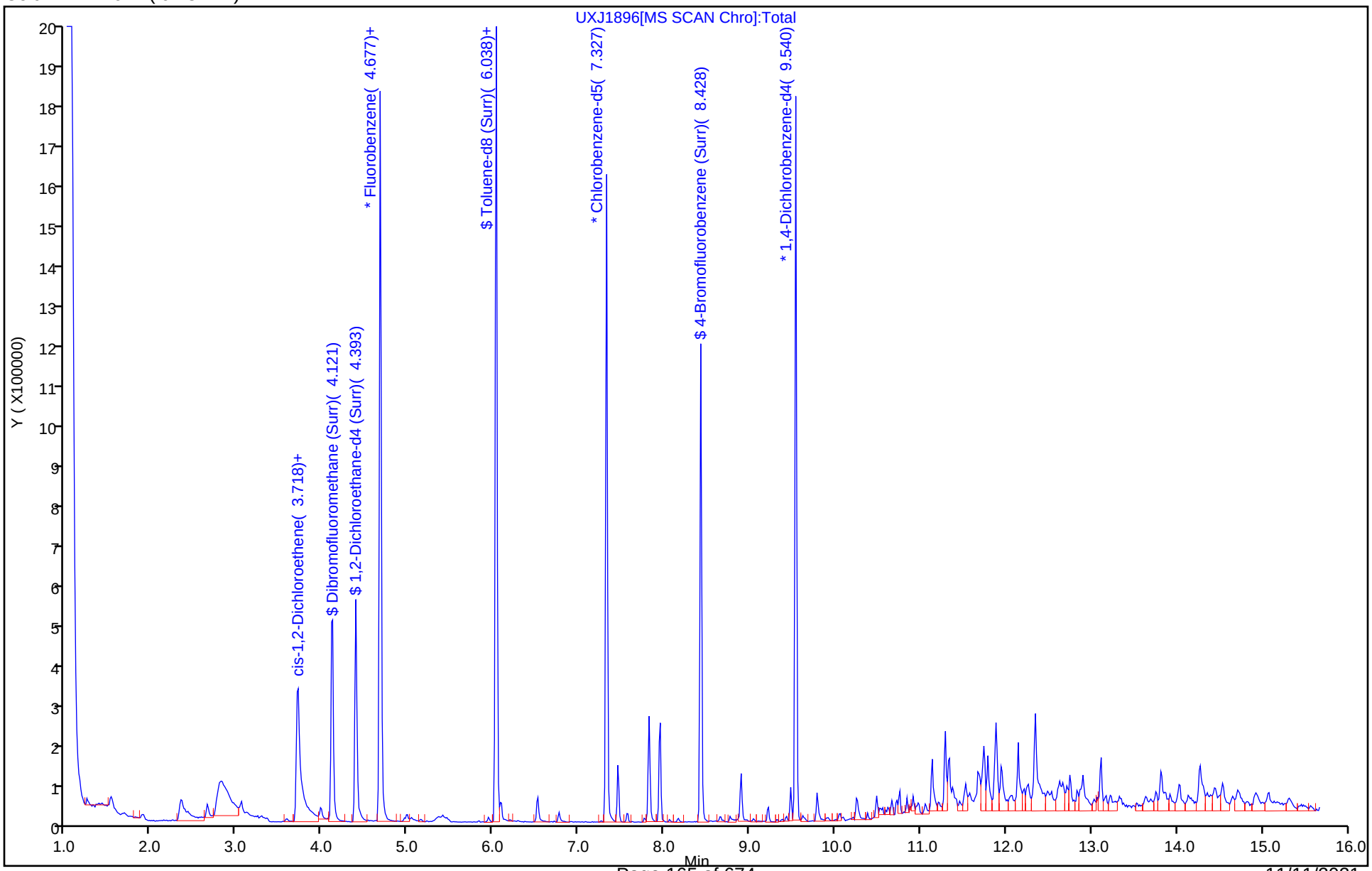
Report Date: 09-Nov-2021 08:41:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1896.D

Injection Date:	08-Nov-2021 15:42:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-10	Lab Sample ID:	240-159369-10	Worklist Smp#:	50
Client ID:	SL-10_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1896.D
Lims ID: 240-159369-B-10
Client ID: SL-10_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 15:42:30 ALS Bottle#: 20 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-050
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

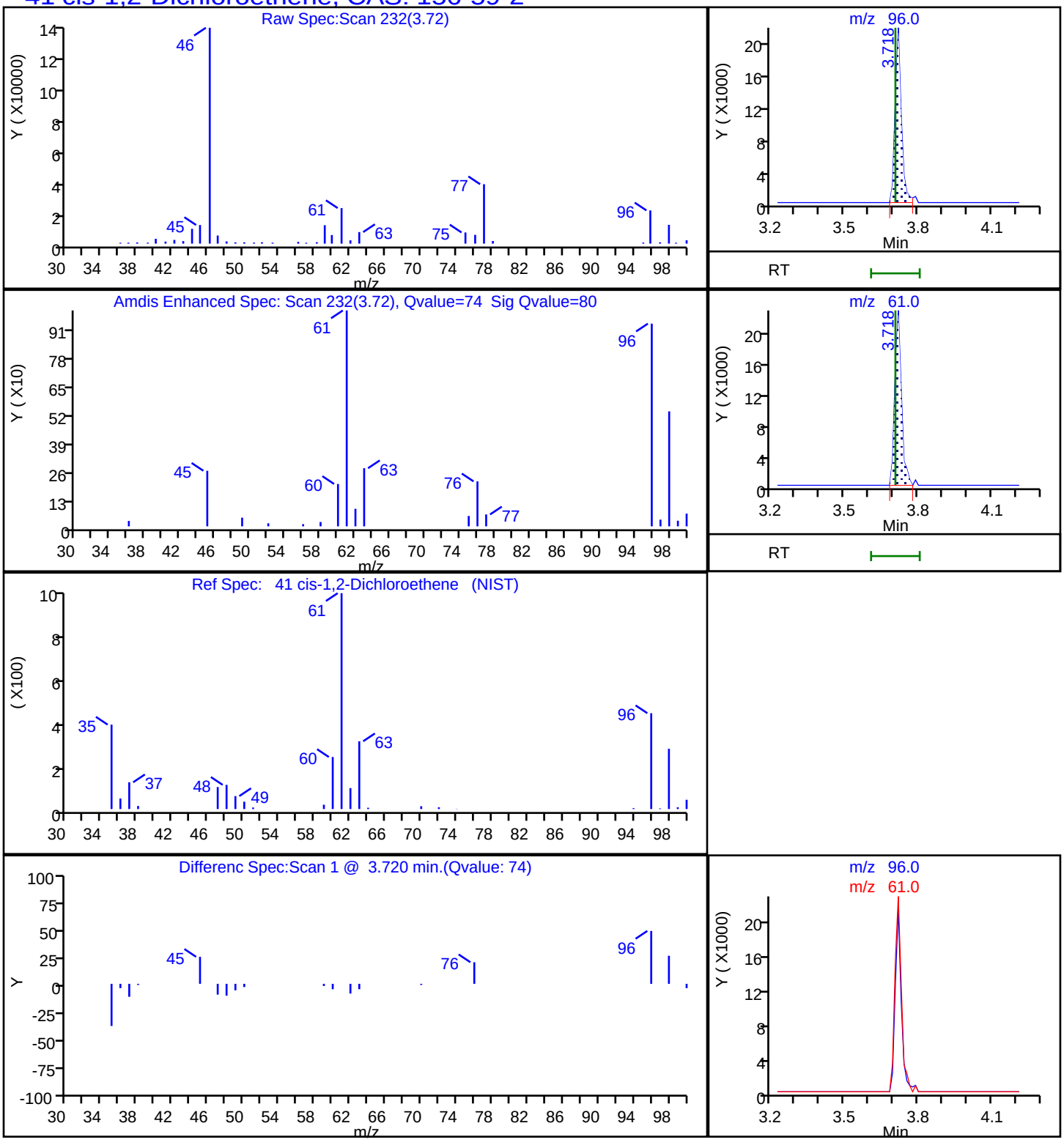
First Level Reviewer: evansle Date: 09-Nov-2021 08:39:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.2	86.12
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.1	85.66
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.37
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.9	84.61

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1896.D				
Injection Date:	08-Nov-2021 15:42:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-10	Lab Sample ID:	240-159369-10		
Client ID:	SL-10_110221				
Operator ID:	043582	ALS Bottle#:	20	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

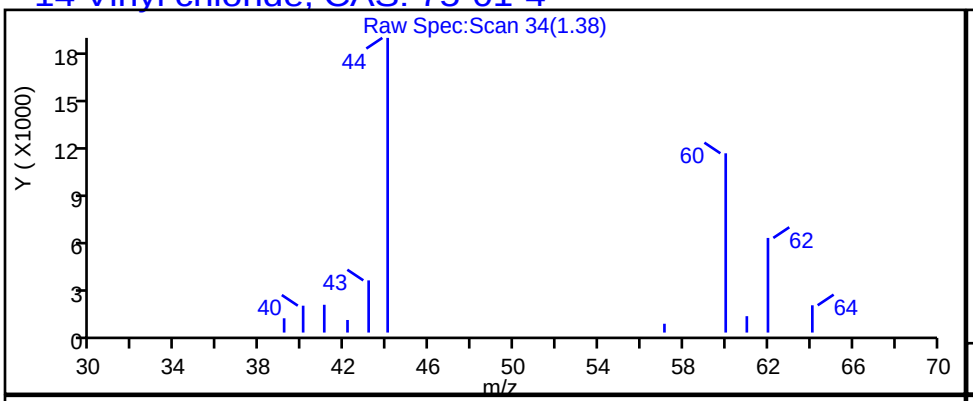


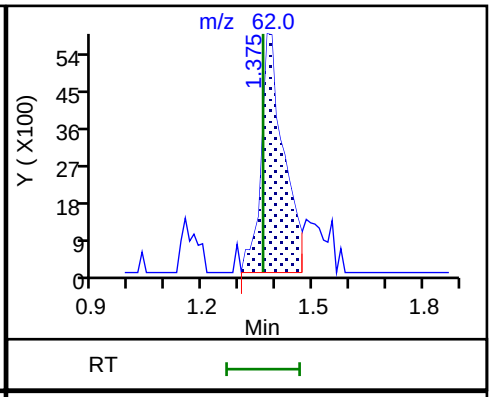
Eurofins TestAmerica, Canton

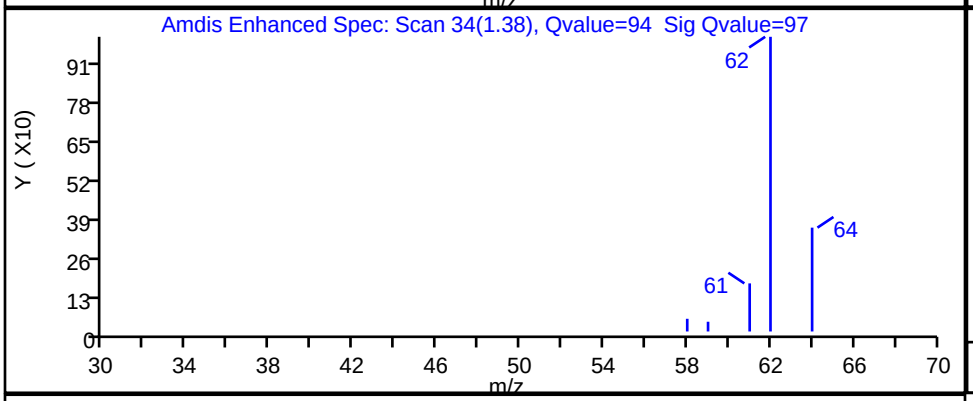
Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1896.D

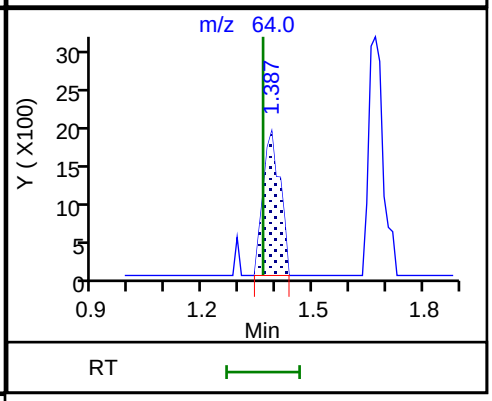
Injection Date:	08-Nov-2021 15:42:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-10	Lab Sample ID:	240-159369-10
Client ID:	SL-10_110221		
Operator ID:	043582	ALS Bottle#:	20 Worklist Smp#: 50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

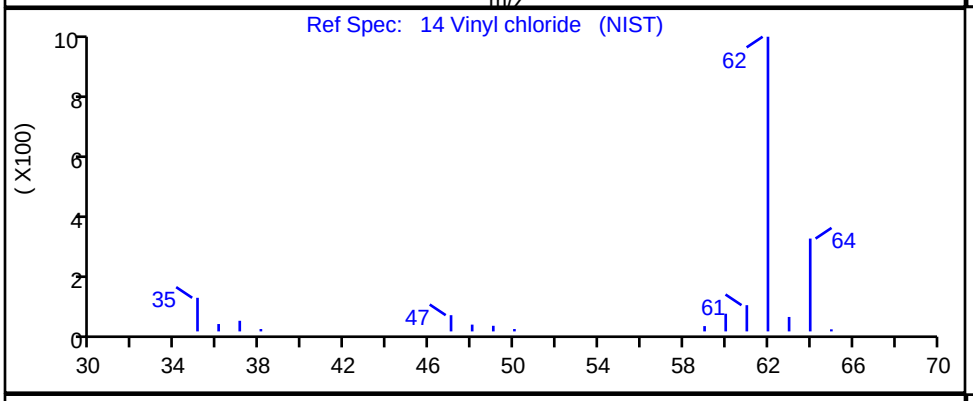
14 Vinyl chloride, CAS: 75-01-4

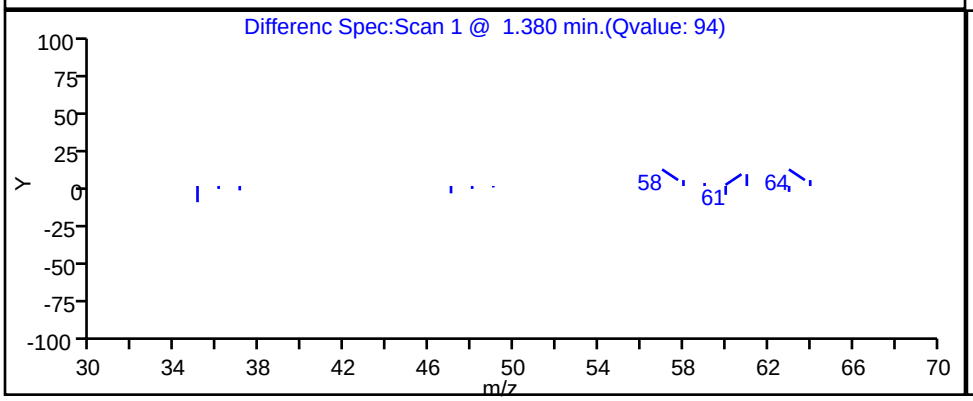


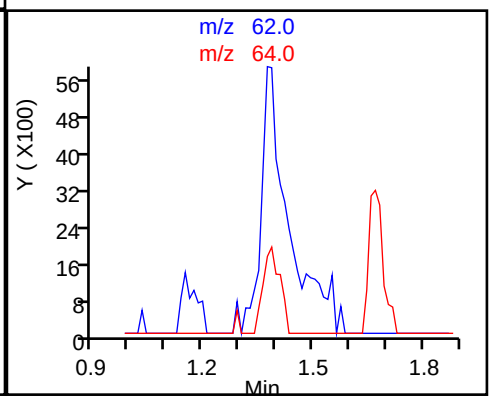












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-11_110221 Lab Sample ID: 240-159369-11

Matrix: Water Lab File ID: UXJ1897.D

Analysis Method: 8260B Date Collected: 11/02/2021 13:05

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 16:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		62-137
460-00-4	4-Bromofluorobenzene (Surr)	87		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1897.D
Lims ID: 240-159369-B-11
Client ID: SL-11_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 16:04:30 ALS Bottle#: 21 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-051
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1462797	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	880230	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	425442	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	330594	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	381749	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1326554	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	381549	17.4	
14 Vinyl chloride	62	1.375	1.364	0.011	96	20516	1.13	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	77	23035	1.08	
60 Trichloroethene	130		4.985				ND	7
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

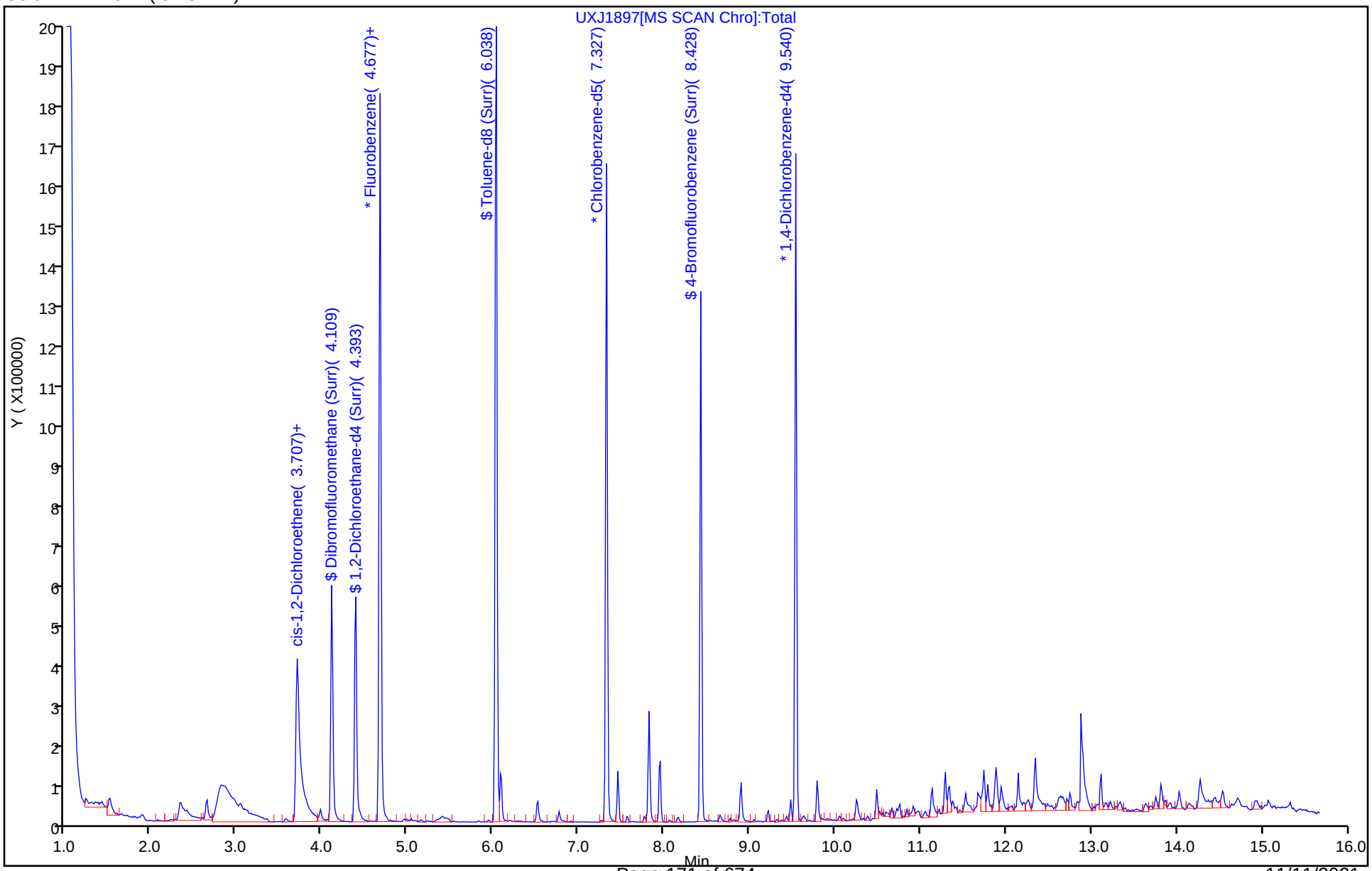
Report Date: 09-Nov-2021 08:41:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1897.D

Injection Date:	08-Nov-2021 16:04:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-11	Lab Sample ID:	240-159369-11	Worklist Smp#:	51
Client ID:	SL-11_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1897.D
Lims ID: 240-159369-B-11
Client ID: SL-11_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 16:04:30 ALS Bottle#: 21 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-051
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

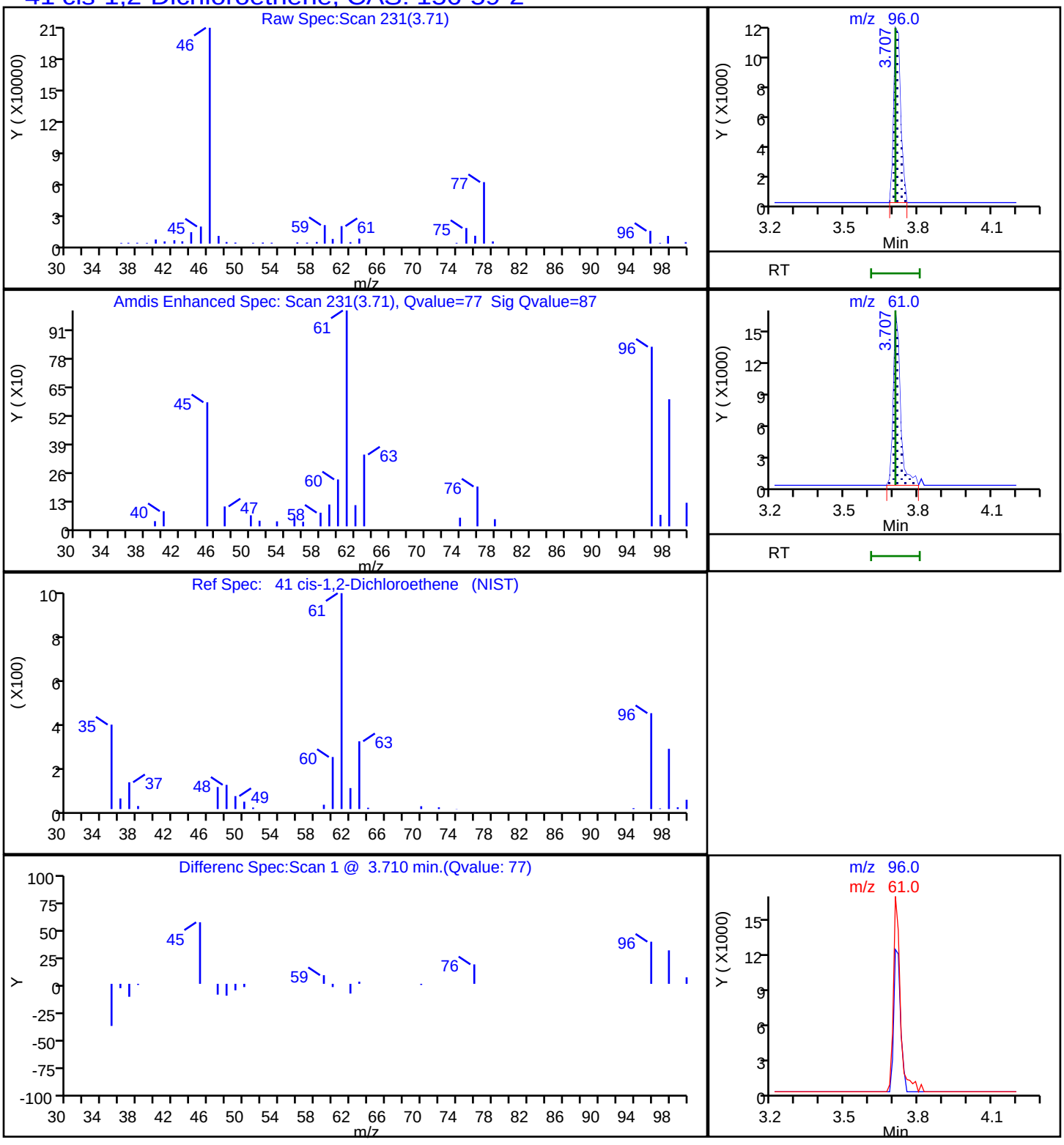
First Level Reviewer: evansle Date: 09-Nov-2021 08:39:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.71
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.1	90.29
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.94
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.4	86.98

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1897.D				
Injection Date:	08-Nov-2021 16:04:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-11	Lab Sample ID:	240-159369-11		
Client ID:	SL-11_110221				
Operator ID:	043582	ALS Bottle#:	21	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

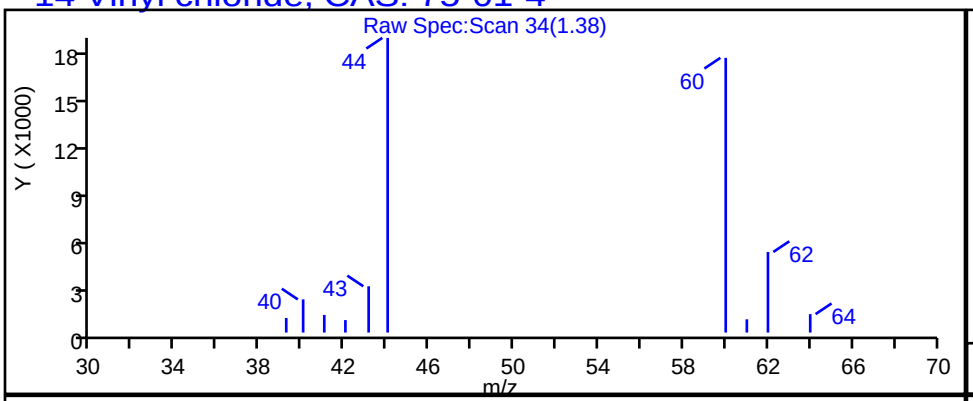


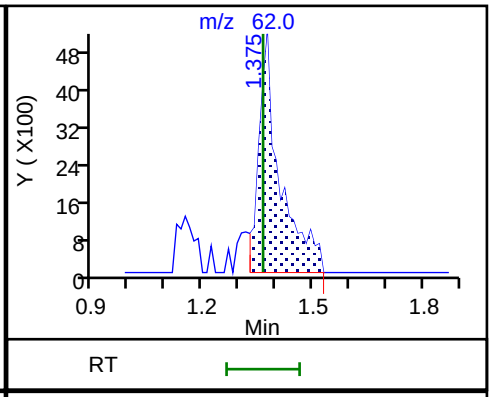
Eurofins TestAmerica, Canton

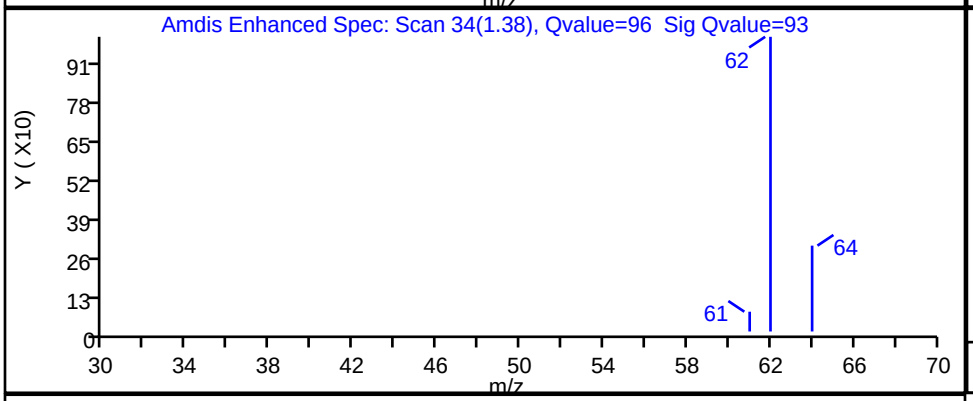
Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1897.D

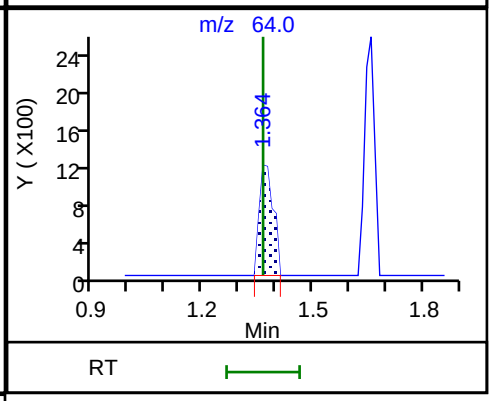
Injection Date:	08-Nov-2021 16:04:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-11	Lab Sample ID:	240-159369-11
Client ID:	SL-11_110221		
Operator ID:	043582	ALS Bottle#:	21 Worklist Smp#: 51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

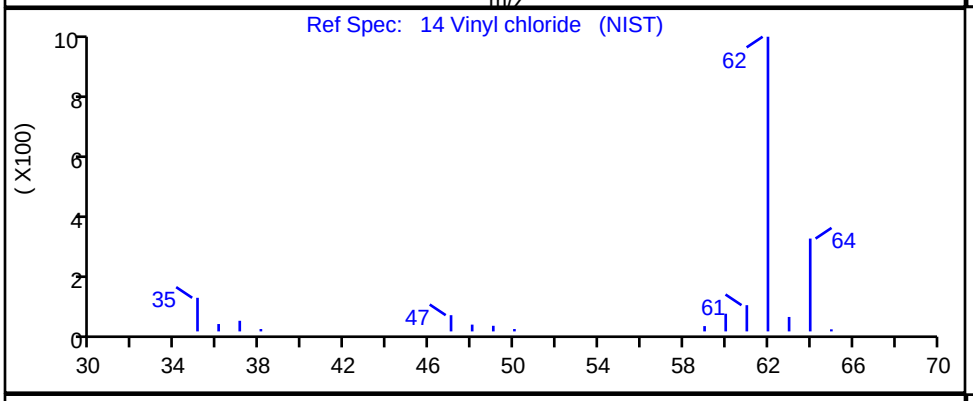
14 Vinyl chloride, CAS: 75-01-4

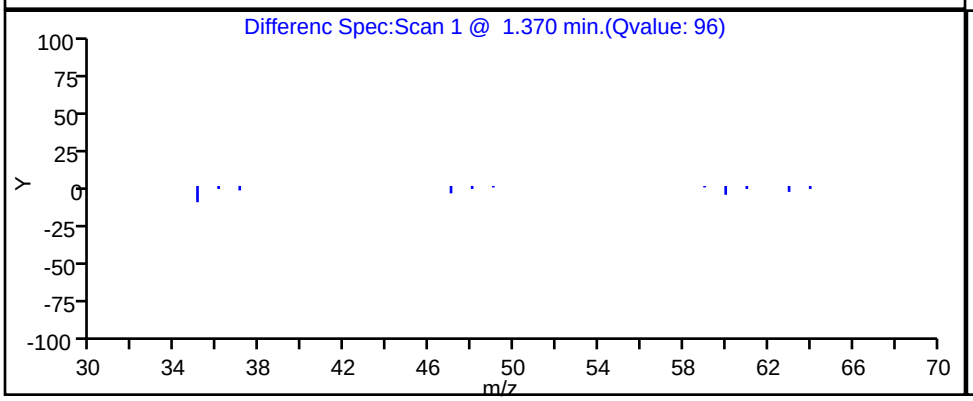


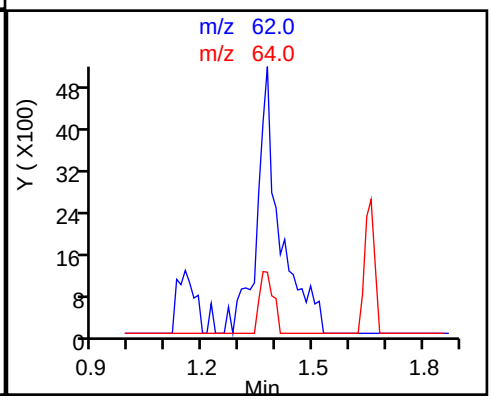












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-12_110221 Lab Sample ID: 240-159369-12

Matrix: Water Lab File ID: UXJ1898.D

Analysis Method: 8260B Date Collected: 11/02/2021 13:25

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 16:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.50	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	105		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1898.D
Lims ID: 240-159369-C-12
Client ID: SL-12_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 16:27:30 ALS Bottle#: 22 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-052
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1388486	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	821503	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	454604	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	329203	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	369053	18.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1229090	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	366633	17.9	
14 Vinyl chloride	62	1.376	1.364	0.012	95	8577	0.4973	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	77	20474	1.02	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

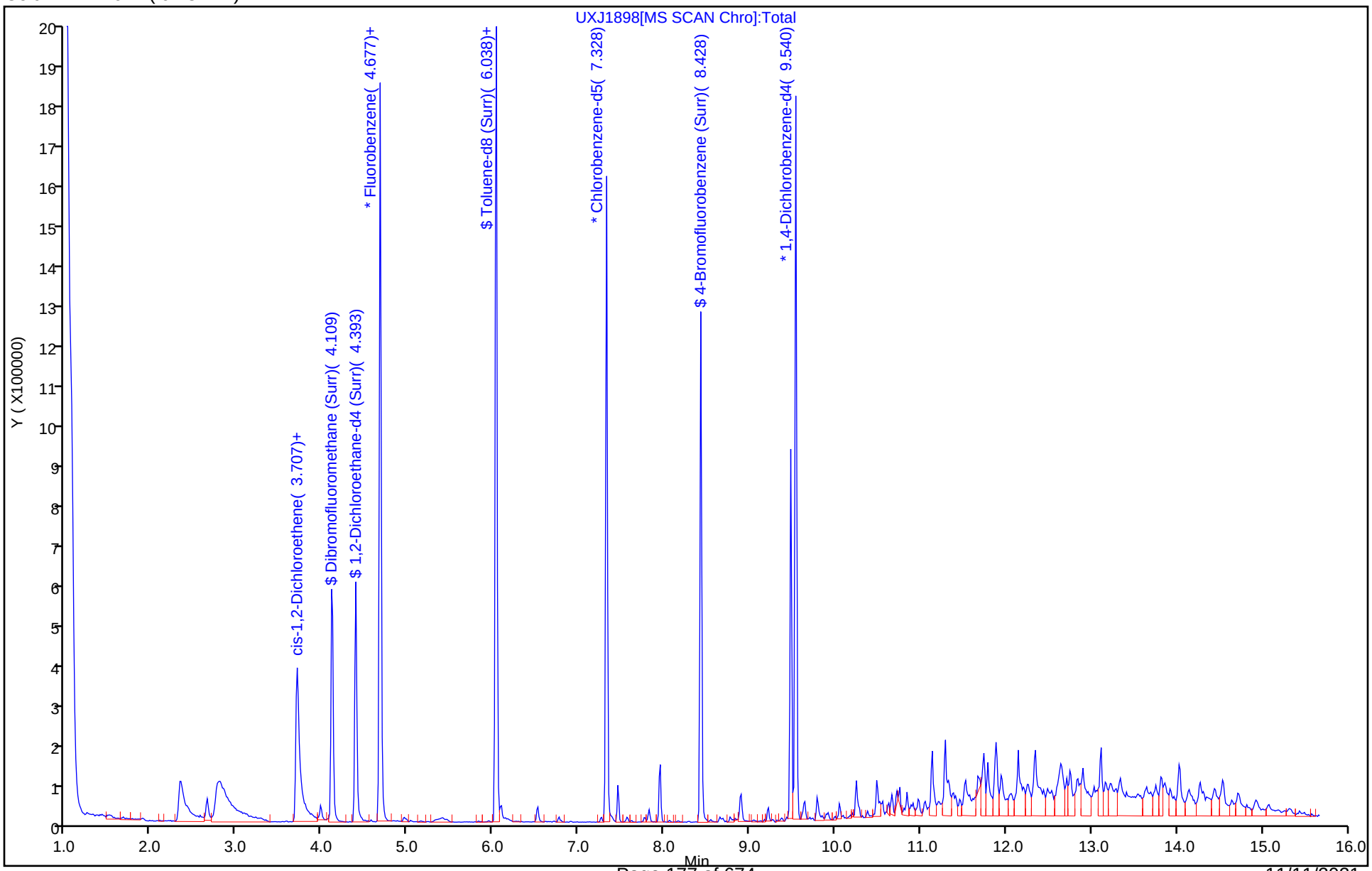
Report Date: 09-Nov-2021 08:41:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1898.D

Injection Date:	08-Nov-2021 16:27:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-C-12	Lab Sample ID:	240-159369-12	Worklist Smp#:	52
Client ID:	SL-12_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1898.D				
Lims ID:	240-159369-C-12				
Client ID:	SL-12_110221				
Sample Type:	Client				
Inject. Date:	08-Nov-2021 16:27:30	ALS Bottle#:	22	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114885-052				
Misc. Info.:	J211108A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	09-Nov-2021 08:41:32	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:36

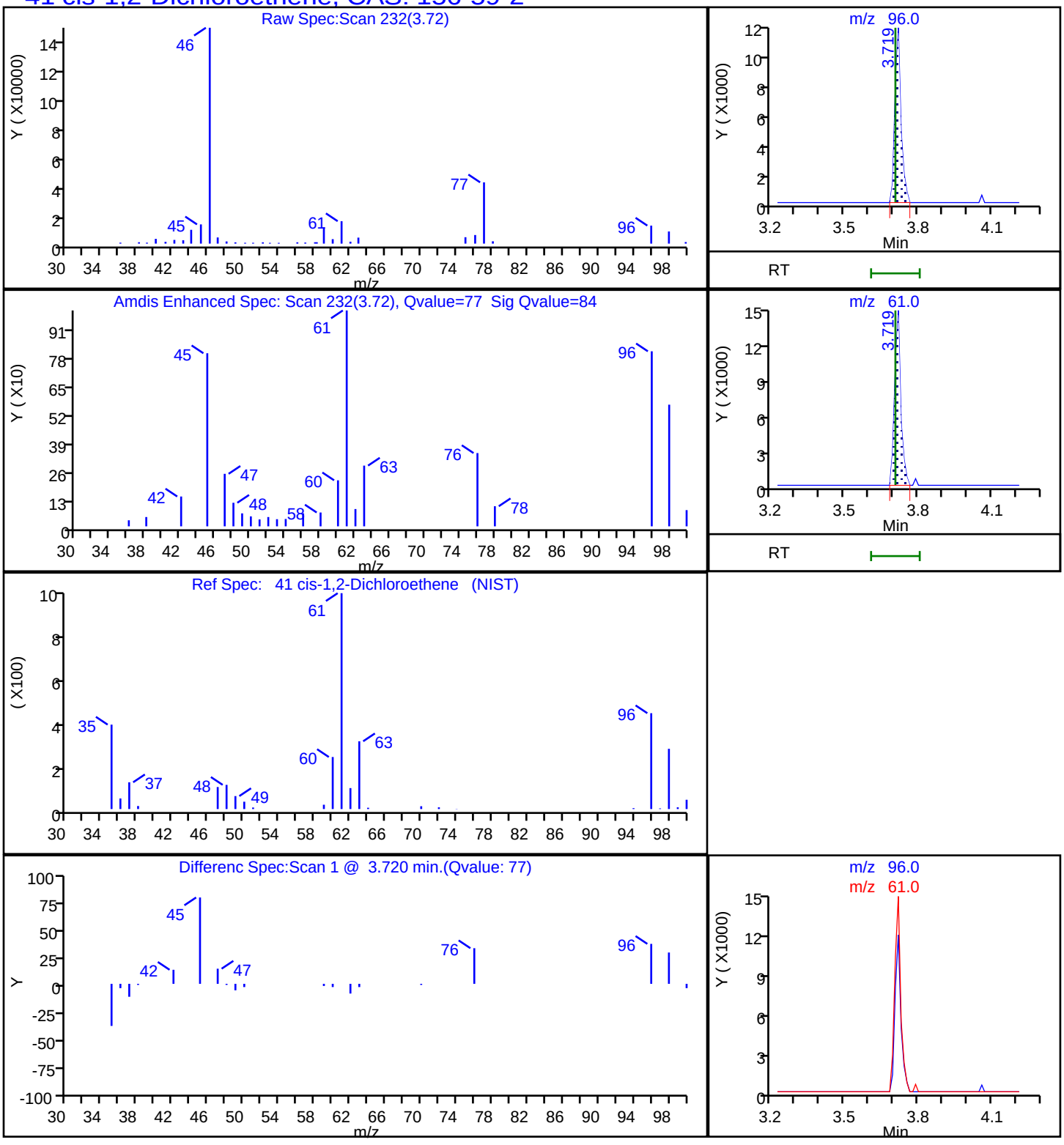
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.06
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	91.96
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.17
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.9	89.55

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1898.D

Injection Date:	08-Nov-2021 16:27:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-C-12	Lab Sample ID:	240-159369-12		
Client ID:	SL-12_110221				
Operator ID:	043582	ALS Bottle#:	22	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

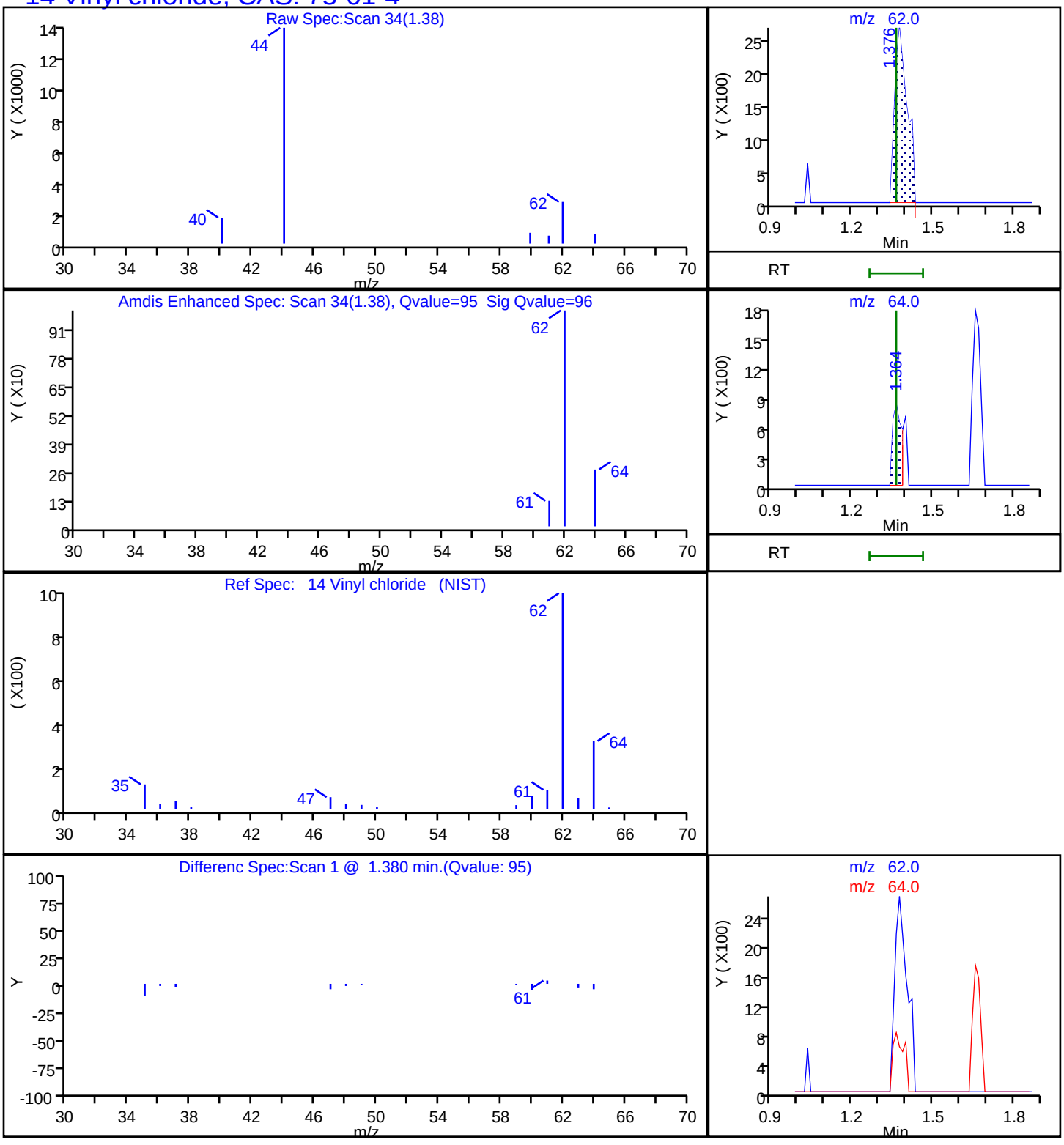


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1898.D

Injection Date:	08-Nov-2021 16:27:30	Instrument ID:	A3UX11
Lims ID:	240-159369-C-12	Lab Sample ID:	240-159369-12
Client ID:	SL-12_110221		
Operator ID:	043582	ALS Bottle#:	22 Worklist Smp#: 52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: MH-1231_110221 Lab Sample ID: 240-159369-13

Matrix: Water Lab File ID: UXJ1903.D

Analysis Method: 8260B Date Collected: 11/02/2021 14:15

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 18:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	12		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	12		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1903.D
Lims ID: 240-159369-D-13
Client ID: MH-1231_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 18:19:30 ALS Bottle#: 27 Worklist Smp#: 57
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-057
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1463976	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	859919	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	431530	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	344866	18.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	367486	17.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1320269	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	403044	18.8	
14 Vinyl chloride	62	1.375	1.364	0.011	98	216393	11.9	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	96	2764	0.1339	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	255066	12.0	
60 Trichloroethene	130	4.996	4.985	0.011	89	7210	0.3155	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

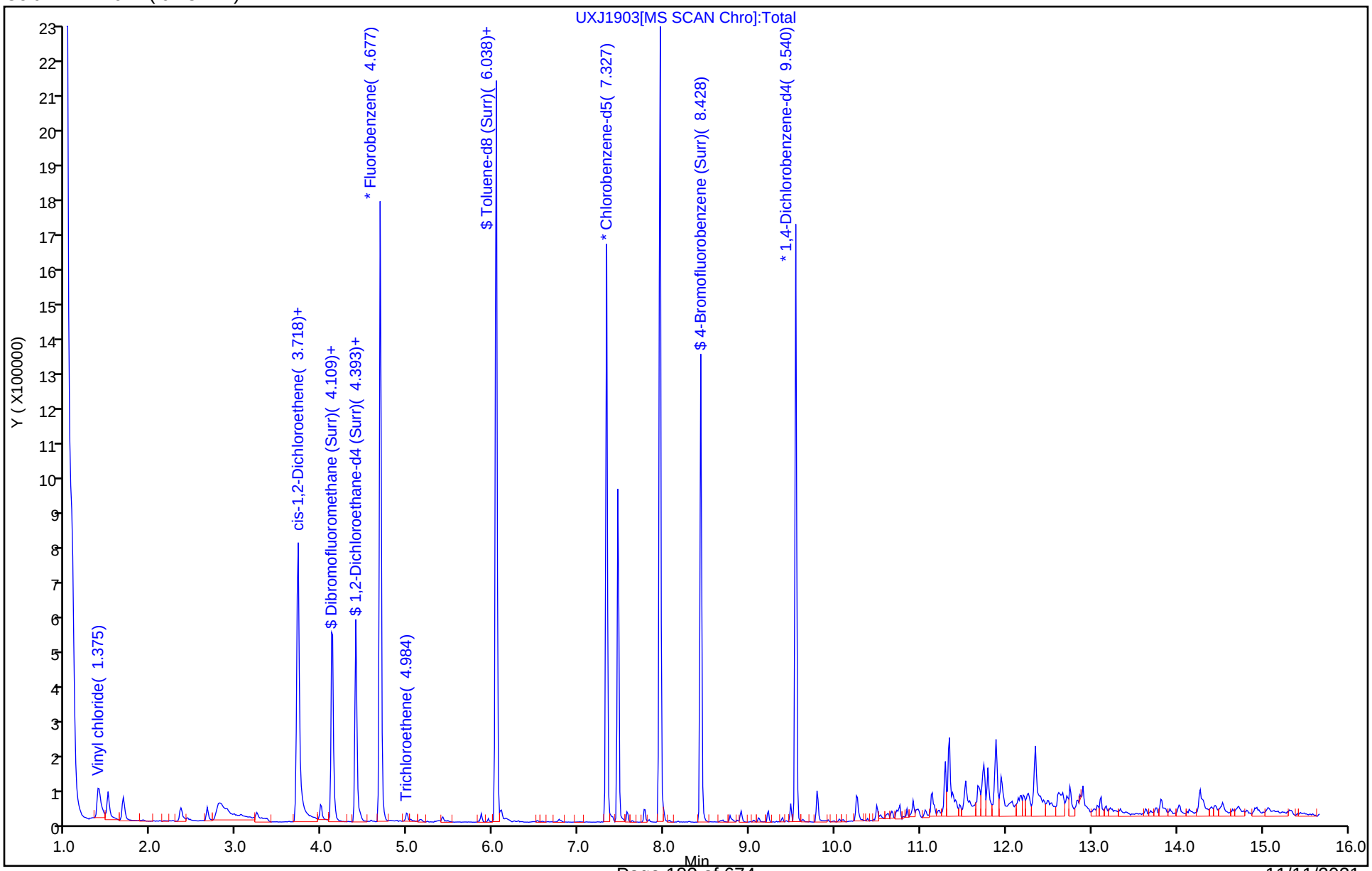
Report Date: 09-Nov-2021 08:41:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1903.D

Injection Date:	08-Nov-2021 18:19:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-D-13	Lab Sample ID:	240-159369-13	Worklist Smp#:	57
Client ID:	MH-1231_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1903.D				
Lims ID:	240-159369-D-13				
Client ID:	MH-1231_110221				
Sample Type:	Client				
Inject. Date:	08-Nov-2021 18:19:30	ALS Bottle#:	27	Worklist Smp#:	57
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114885-057				
Misc. Info.:	J211108A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	09-Nov-2021 08:41:32	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				

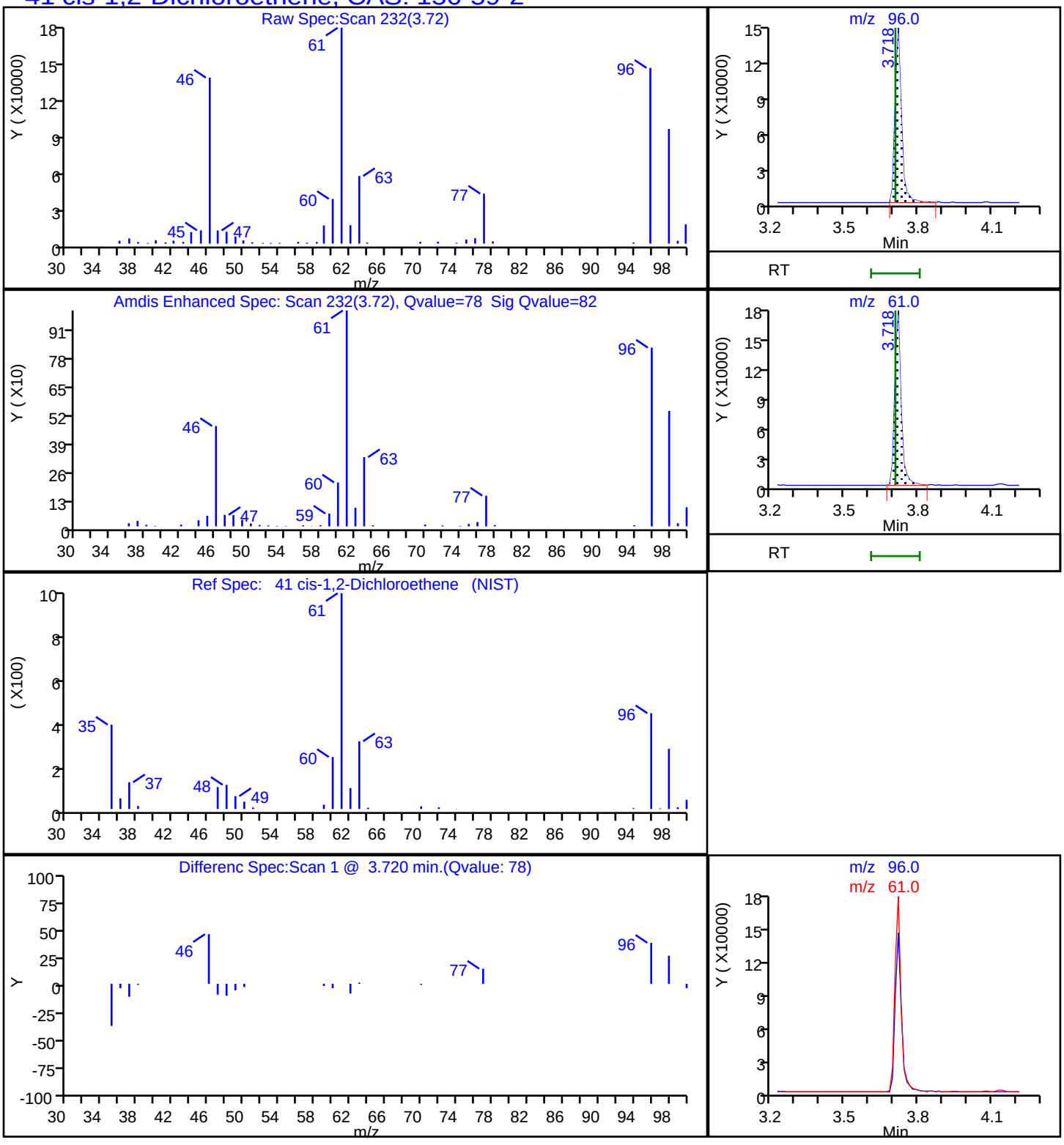
First Level Reviewer: evansle Date: 09-Nov-2021 08:40:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.5	92.46
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.4	86.85
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.93
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	94.05

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1903.D				
Injection Date:	08-Nov-2021 18:19:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-D-13	Lab Sample ID:	240-159369-13		
Client ID:	MH-1231_110221				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	57
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

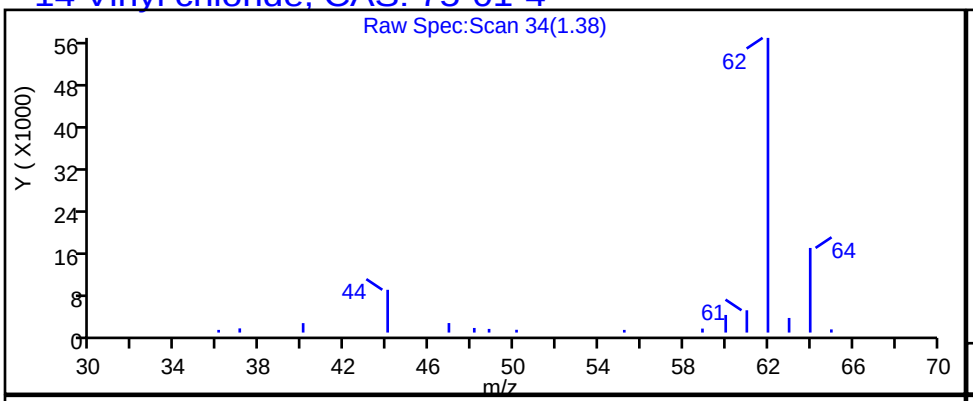
41 cis-1,2-Dichloroethene, CAS: 156-59-2

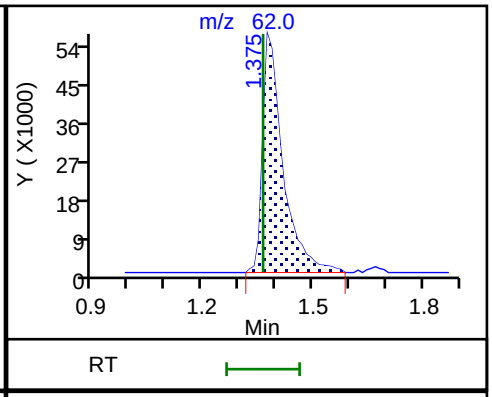


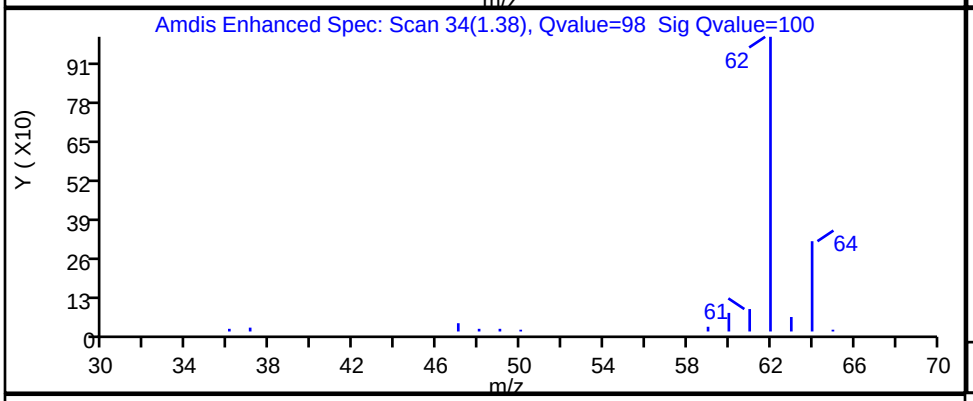
Eurofins TestAmerica, Canton

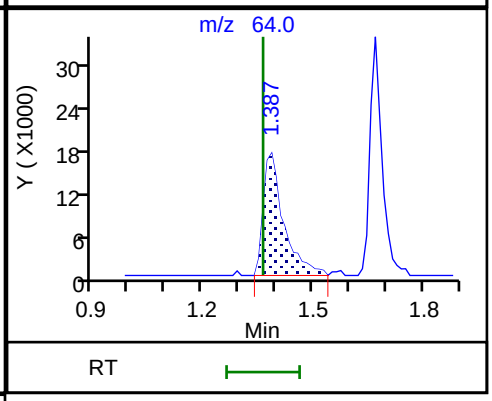
Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1903.D				
Injection Date:	08-Nov-2021 18:19:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-D-13	Lab Sample ID:	240-159369-13		
Client ID:	MH-1231_110221				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	57
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

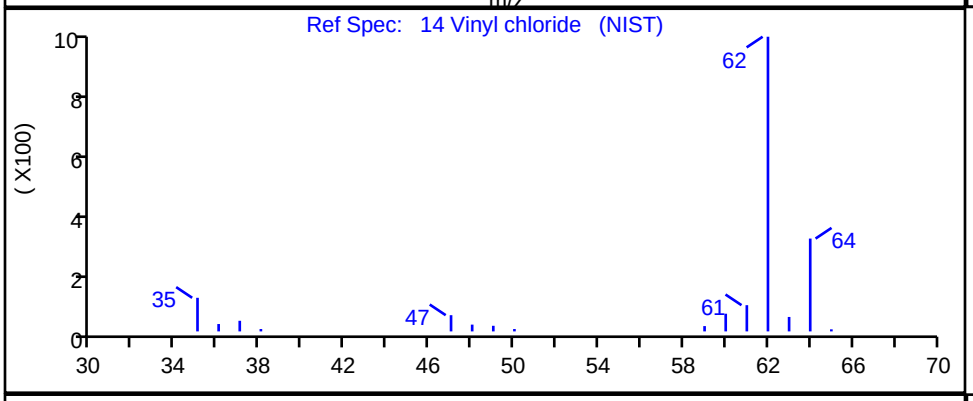
14 Vinyl chloride, CAS: 75-01-4

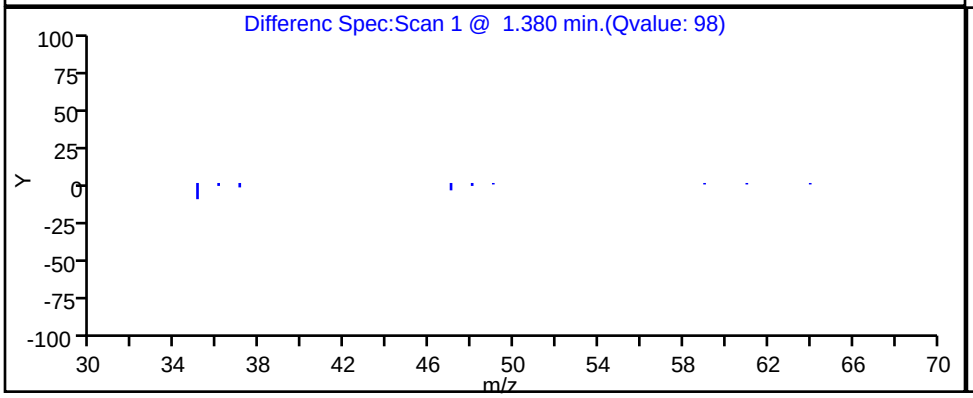


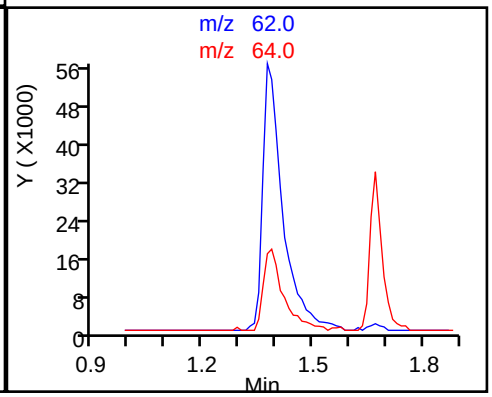












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-2_110221 Lab Sample ID: 240-159369-14

Matrix: Water Lab File ID: UXJ1904.D

Analysis Method: 8260B Date Collected: 11/02/2021 14:40

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.46	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.2		1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-137
460-00-4	4-Bromofluorobenzene (Surr)	88		56-136
2037-26-5	Toluene-d8 (Surr)	103		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1904.D
Lims ID: 240-159369-D-14
Client ID: SL-2_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 18:41:30 ALS Bottle#: 28 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-058
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:30

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1438234	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	872815	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	456461	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	334184	18.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	377160	18.1	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1283529	20.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	383615	17.6	
	14 Vinyl chloride	62		1.364				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	84	9580	0.4585	
	60 Trichloroethene	130	4.985	4.985	0.000	96	25904	1.15	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

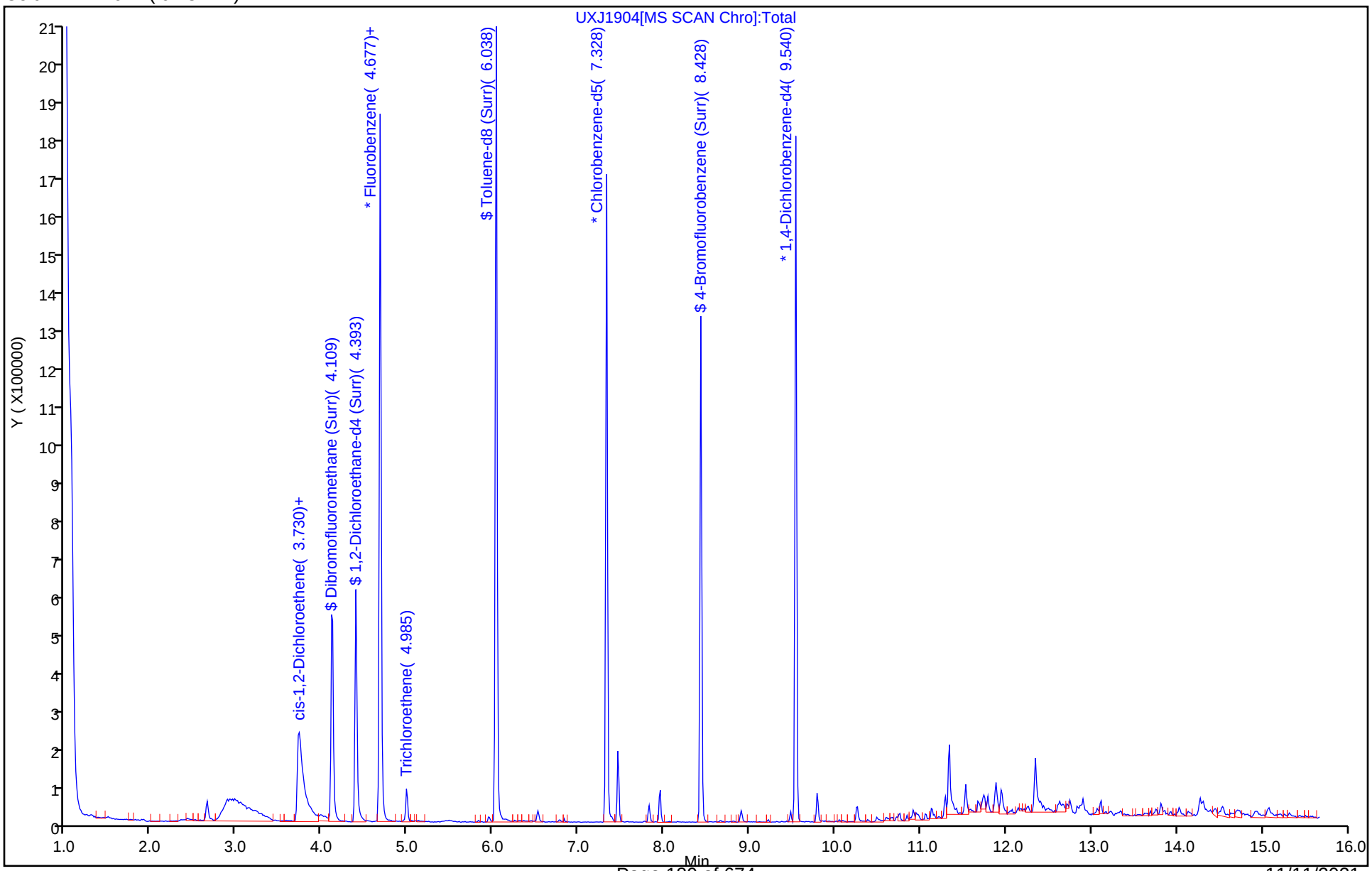
Report Date: 09-Nov-2021 08:41:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1904.D

Injection Date:	08-Nov-2021 18:41:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-D-14	Lab Sample ID:	240-159369-14	Worklist Smp#:	58
Client ID:	SL-2_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1904.D
Lims ID: 240-159369-D-14
Client ID: SL-2_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 18:41:30 ALS Bottle#: 28 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-058
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:30

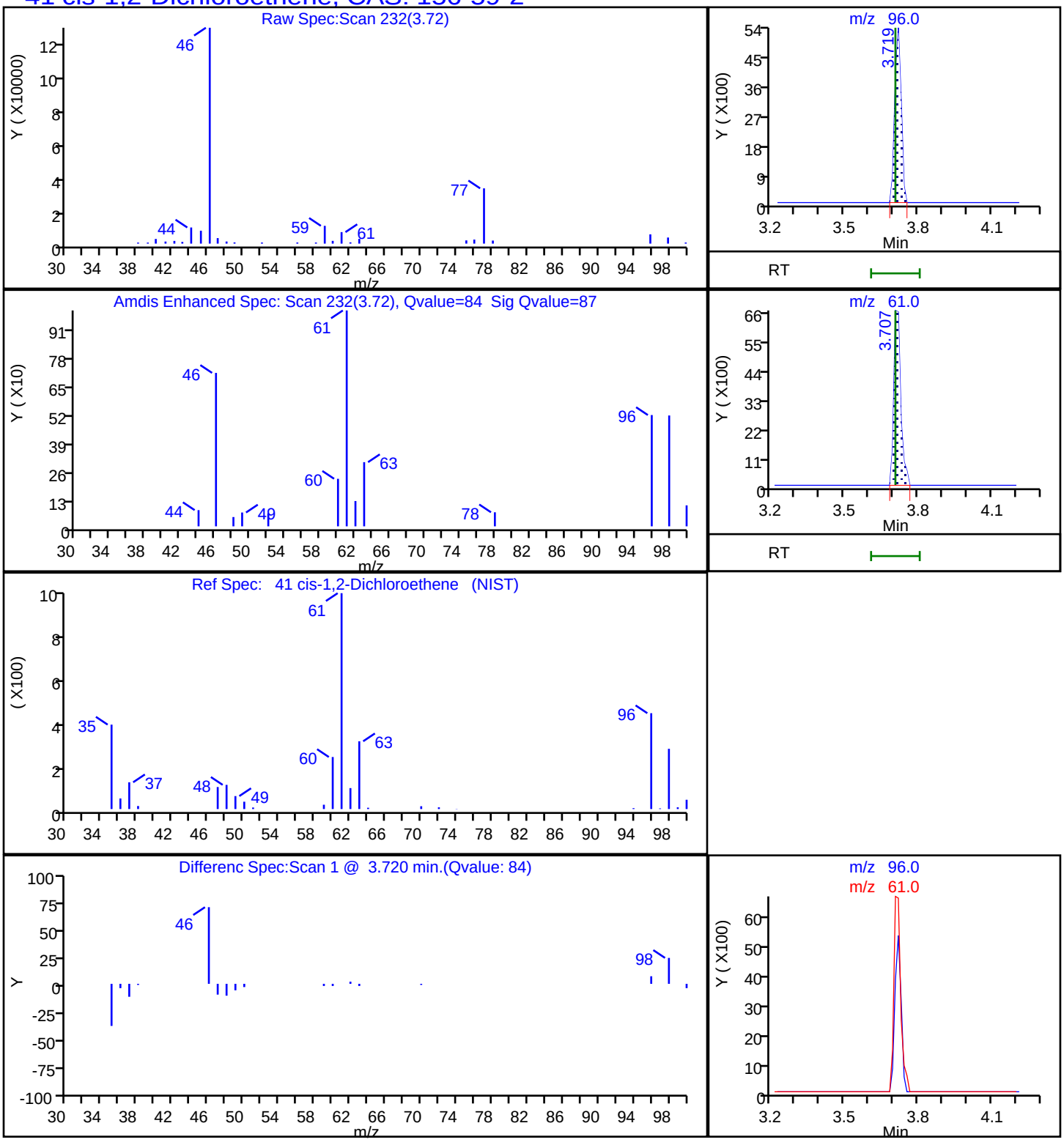
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.2	91.20
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.1	90.73
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.38
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	88.19

Report Date: 09-Nov-2021 08:41:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1904.D				
Injection Date:	08-Nov-2021 18:41:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-D-14	Lab Sample ID:	240-159369-14		
Client ID:	SL-2_110221				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

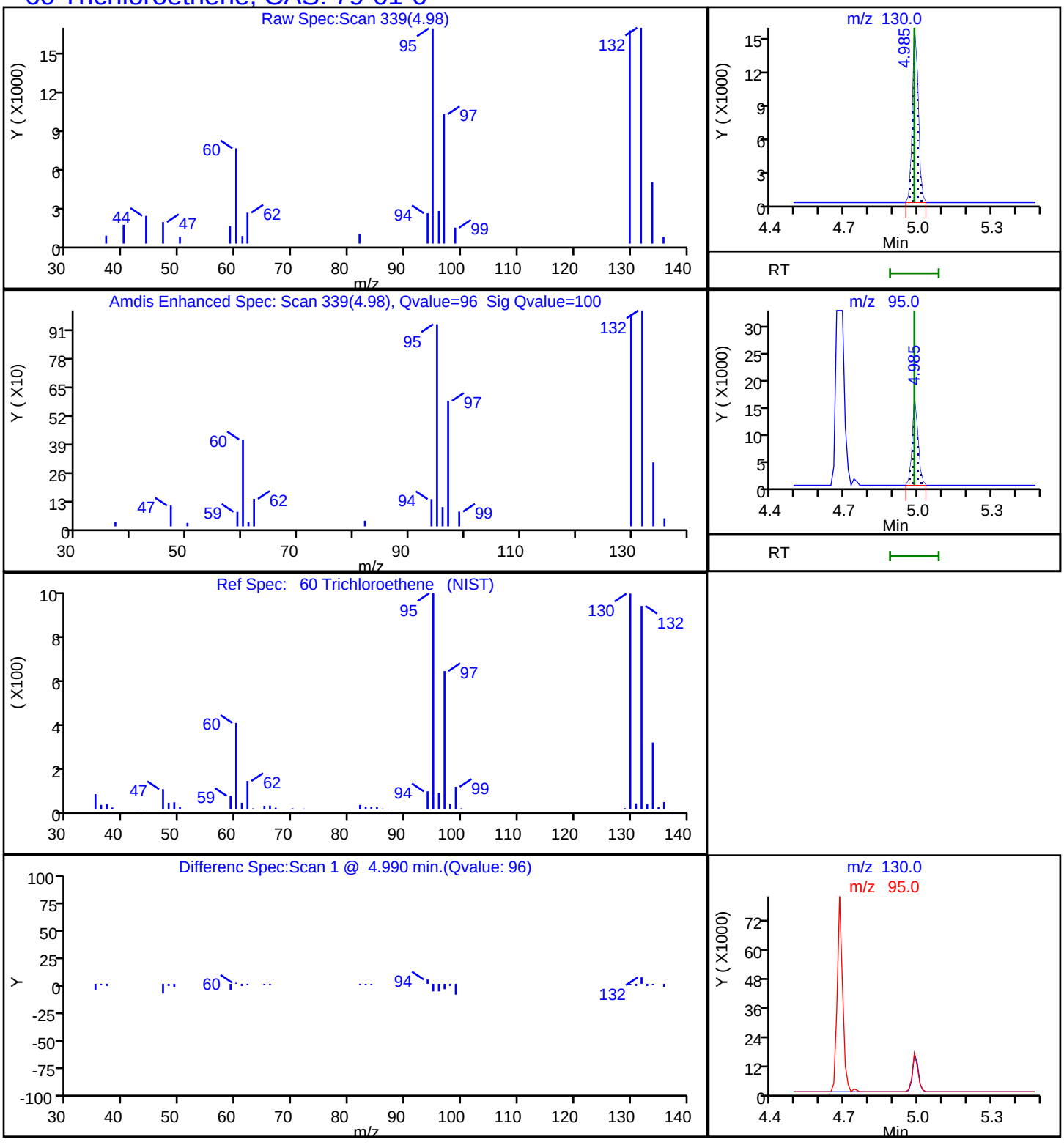
41 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1904.D				
Injection Date:	08-Nov-2021 18:41:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-D-14	Lab Sample ID:	240-159369-14		
Client ID:	SL-2_110221				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-3_110221 Lab Sample ID: 240-159369-15

Matrix: Water Lab File ID: UXJ1905.D

Analysis Method: 8260B Date Collected: 11/02/2021 15:05

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 19:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	91		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1905.D
Lims ID: 240-159369-D-15
Client ID: SL-3_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 19:03:30 ALS Bottle#: 29 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-059
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:41

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1409332	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	843925	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	433837	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	331158	18.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	376740	18.5	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1281958	21.4	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	384720	18.3	
	14 Vinyl chloride	62	1.364	1.364	0.000	98	77230	4.41	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	75	103695	5.07	
	60 Trichloroethene	130	4.985	4.985	0.000	88	2998	0.1363	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

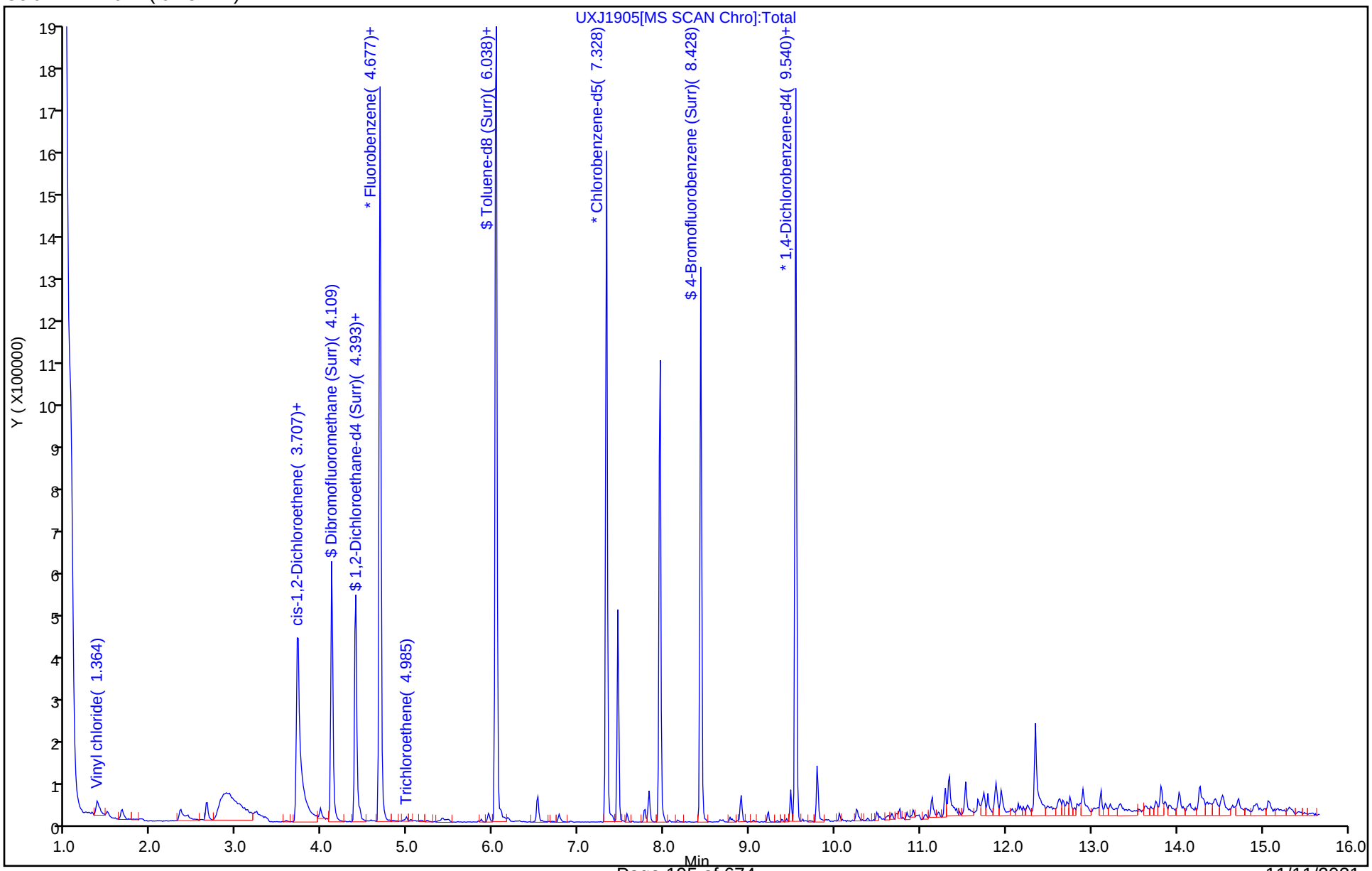
Report Date: 09-Nov-2021 08:41:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1905.D

Injection Date:	08-Nov-2021 19:03:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-D-15	Lab Sample ID:	240-159369-15	Worklist Smp#:	59
Client ID:	SL-3_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1905.D
Lims ID: 240-159369-D-15
Client ID: SL-3_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 19:03:30 ALS Bottle#: 29 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-059
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

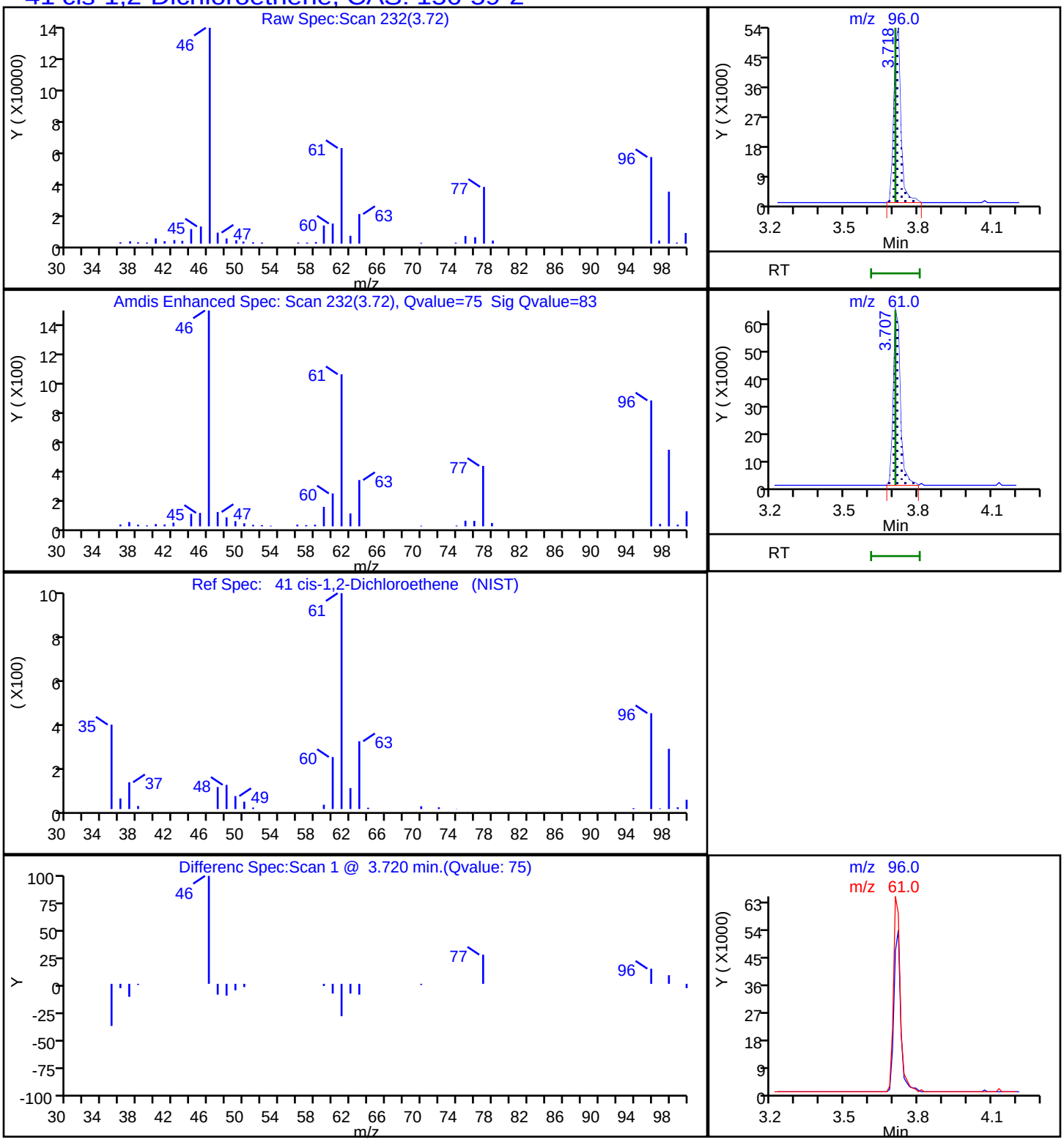
First Level Reviewer: evansle Date: 09-Nov-2021 08:40:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.23
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.5	92.49
$ 6 Toluene-d8 (Surr)	20.0	21.4	106.78
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.3	91.47

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1905.D				
Injection Date:	08-Nov-2021 19:03:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-D-15	Lab Sample ID:	240-159369-15		
Client ID:	SL-3_110221				
Operator ID:	043582	ALS Bottle#:	29	Worklist Smp#:	59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

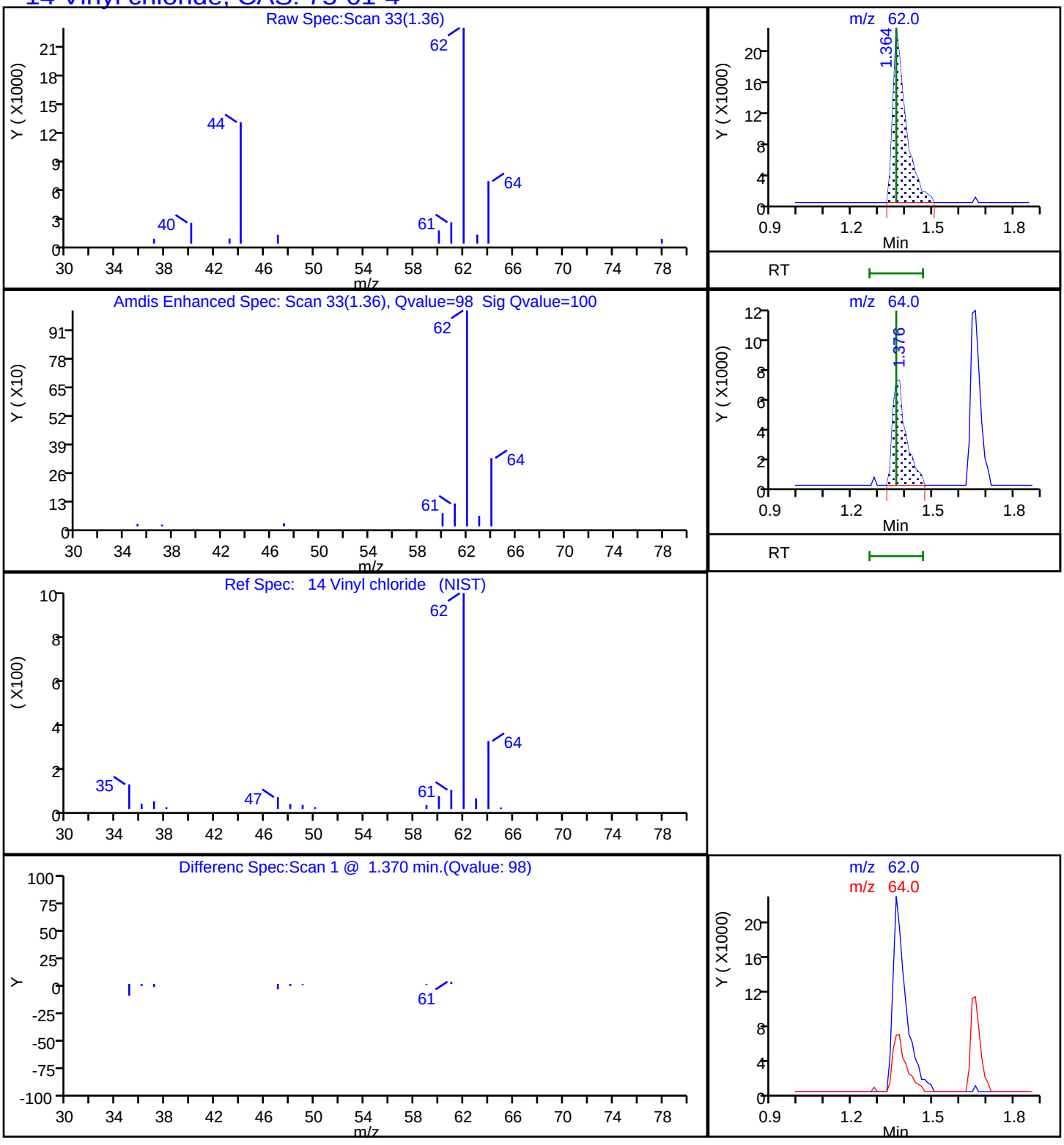


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1905.D

Injection Date:	08-Nov-2021 19:03:30	Instrument ID:	A3UX11
Lims ID:	240-159369-D-15	Lab Sample ID:	240-159369-15
Client ID:	SL-3_110221		
Operator ID:	043582	ALS Bottle#:	29 Worklist Smp#: 59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-4_110221 Lab Sample ID: 240-159369-16

Matrix: Water Lab File ID: UXJ1906.D

Analysis Method: 8260B Date Collected: 11/02/2021 16:50

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1906.D
Lims ID: 240-159369-B-16
Client ID: SL-4_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 19:25:30 ALS Bottle#: 30 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-060
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1498681	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	876392	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	431747	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	351598	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	387979	17.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1335903	21.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	374869	17.2	
14 Vinyl chloride	62	1.364	1.364	0.000	97	48071	2.58	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	76	79695	3.66	
60 Trichloroethene	130	4.985	4.985	0.000	87	2802	0.1198	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

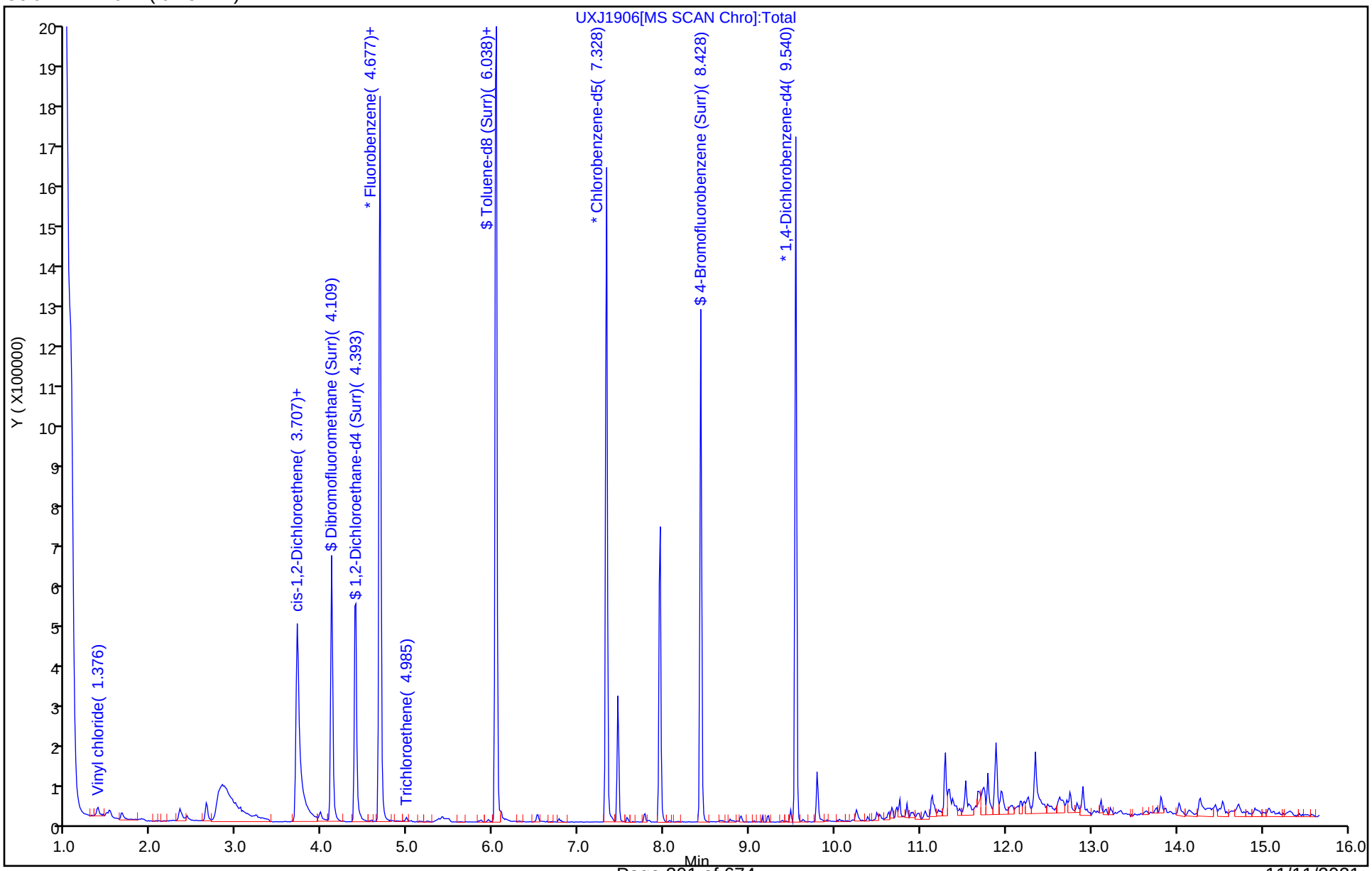
Report Date: 09-Nov-2021 08:41:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1906.D

Injection Date:	08-Nov-2021 19:25:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-16	Lab Sample ID:	240-159369-16	Worklist Smp#:	60
Client ID:	SL-4_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1906.D
Lims ID: 240-159369-B-16
Client ID: SL-4_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 19:25:30 ALS Bottle#: 30 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-060
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.08
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.9	89.57
$ 6 Toluene-d8 (Surr)	20.0	21.4	107.15
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.2	85.83

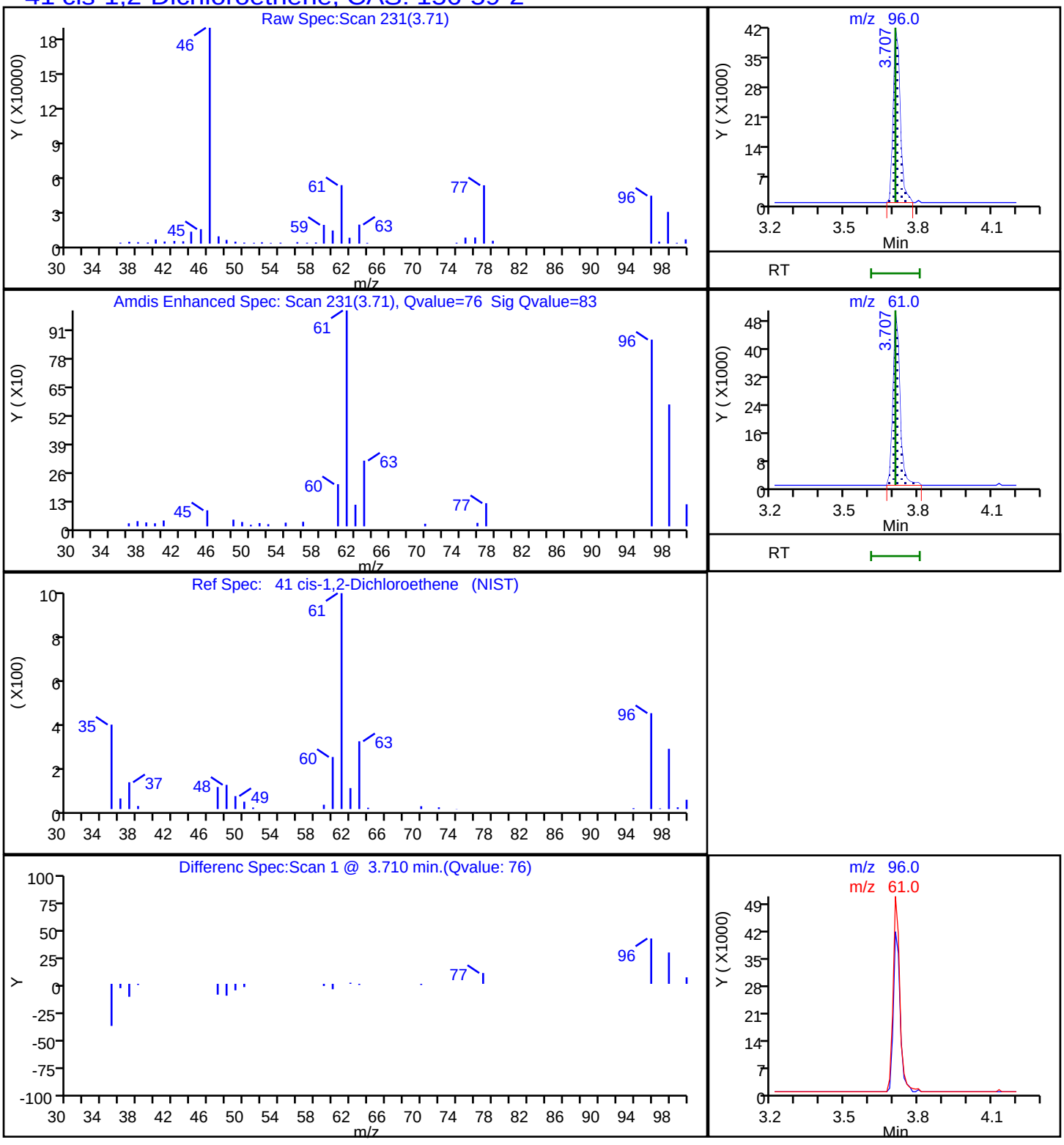
Report Date: 09-Nov-2021 08:41:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1906.D

Injection Date:	08-Nov-2021 19:25:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-16	Lab Sample ID:	240-159369-16		
Client ID:	SL-4_110221				
Operator ID:	043582	ALS Bottle#:	30	Worklist Smp#:	60
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

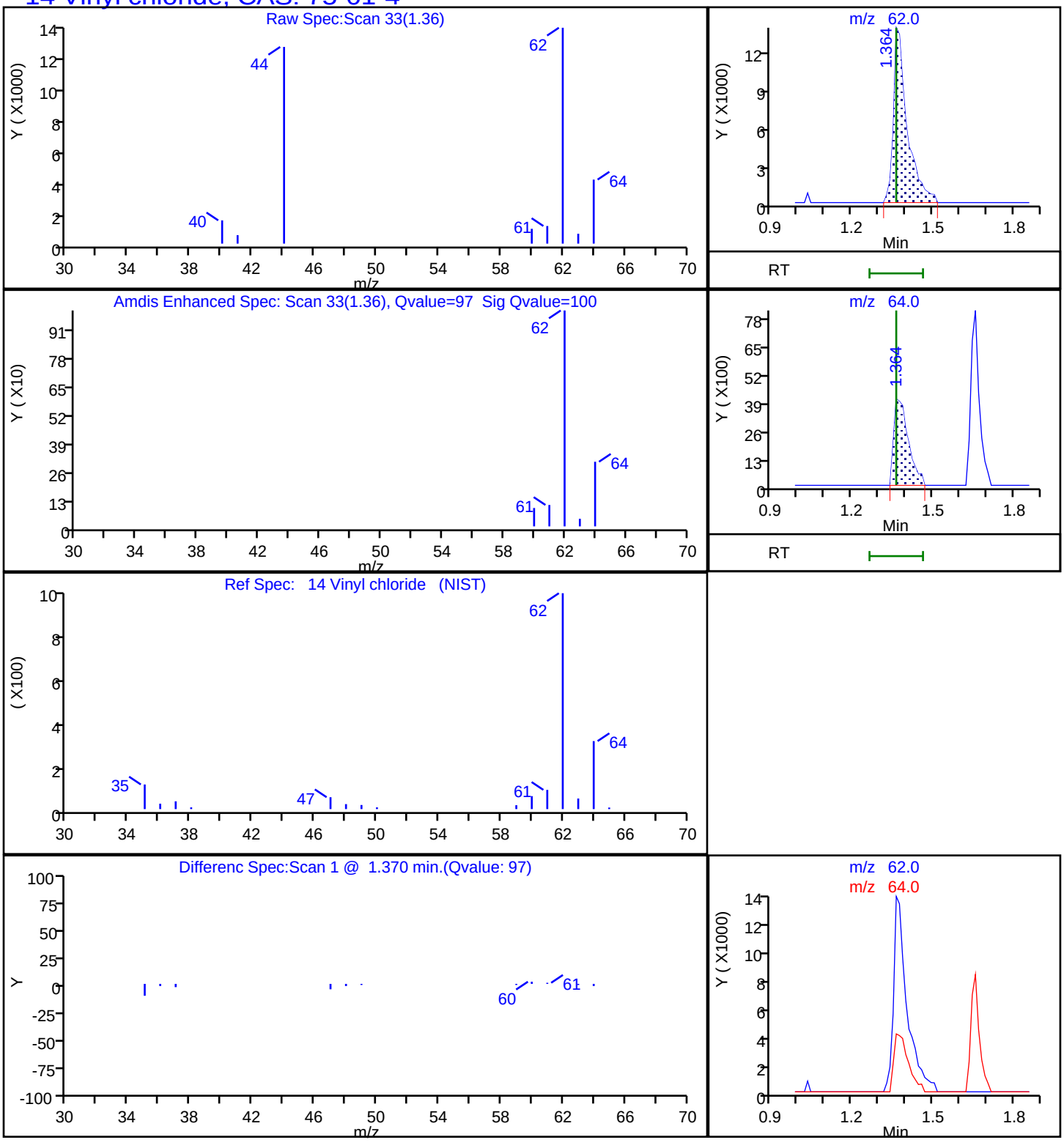


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1906.D

Injection Date:	08-Nov-2021 19:25:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-16	Lab Sample ID:	240-159369-16
Client ID:	SL-4_110221		
Operator ID:	043582	ALS Bottle#:	30 Worklist Smp#: 60
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-16_110221 Lab Sample ID: 240-159369-17

Matrix: Water Lab File ID: UXJ1899.D

Analysis Method: 8260B Date Collected: 11/02/2021 15:30

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 16:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	92		56-136
2037-26-5	Toluene-d8 (Surr)	105		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1899.D
Lims ID: 240-159369-B-17
Client ID: SL-16_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 16:49:30 ALS Bottle#: 23 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-053
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:45

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1465111	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	83	865399	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	479922	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	96	347283	18.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	387961	18.3	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1290396	21.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	396698	18.4	
	14 Vinyl chloride	62	1.375	1.364	0.011	97	75555	4.15	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	105578	4.96	
	60 Trichloroethene	130	4.985	4.985	-0.001	94	2864	0.1252	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

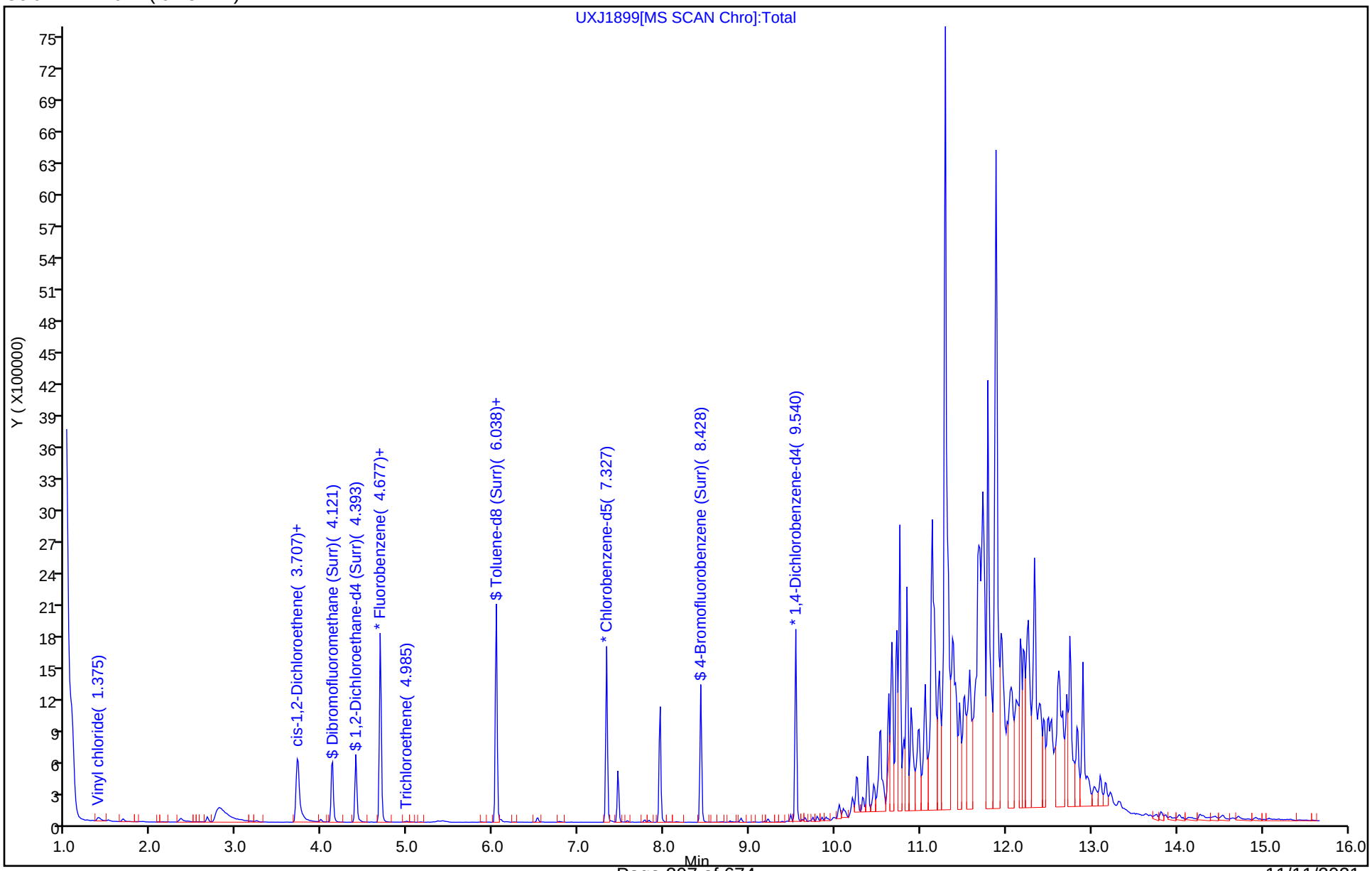
Report Date: 09-Nov-2021 08:41:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1899.D

Injection Date:	08-Nov-2021 16:49:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-17	Lab Sample ID:	240-159369-17	Worklist Smp#:	53
Client ID:	SL-16_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1899.D
Lims ID: 240-159369-B-17
Client ID: SL-16_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 16:49:30 ALS Bottle#: 23 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-053
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

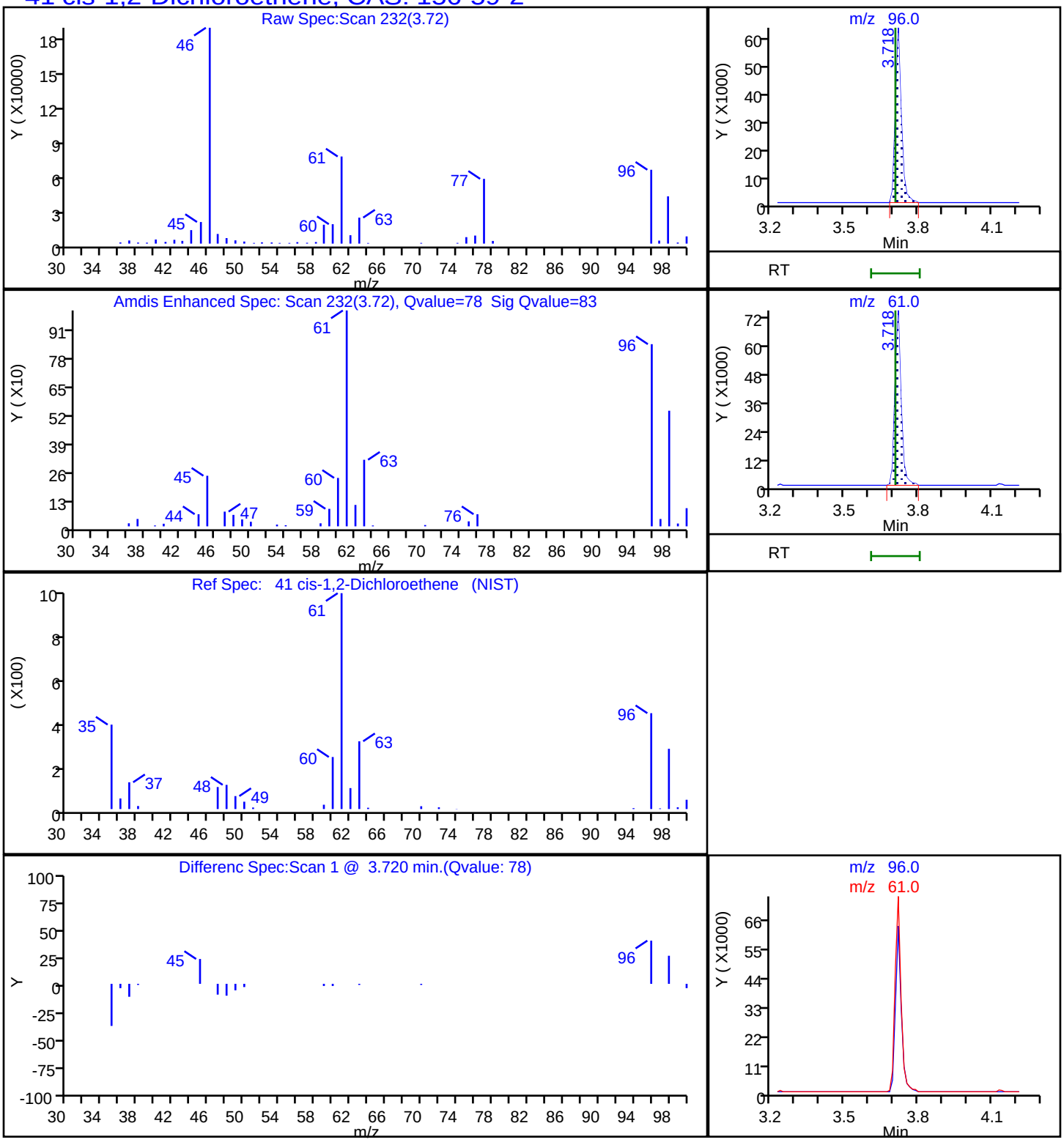
First Level Reviewer: evansle Date: 09-Nov-2021 08:39:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.04
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.3	91.62
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.82
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.4	91.98

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1899.D				
Injection Date:	08-Nov-2021 16:49:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-17	Lab Sample ID:	240-159369-17		
Client ID:	SL-16_110221				
Operator ID:	043582	ALS Bottle#:	23	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

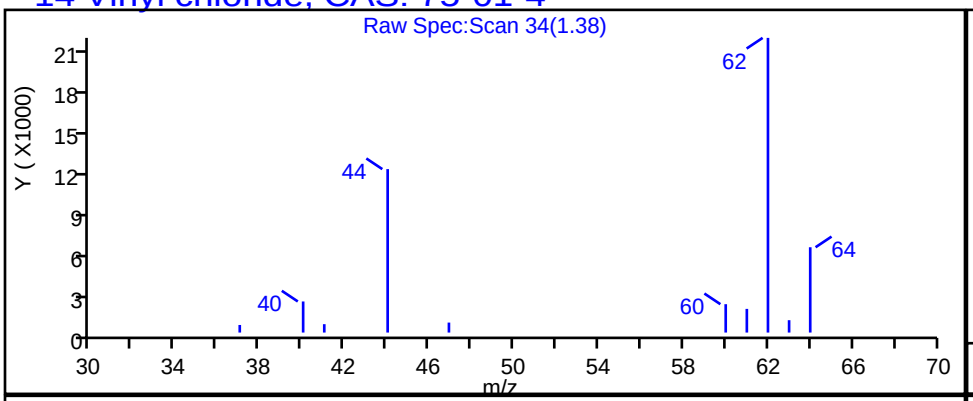


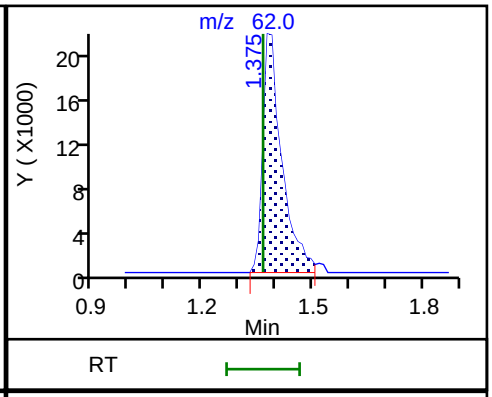
Eurofins TestAmerica, Canton

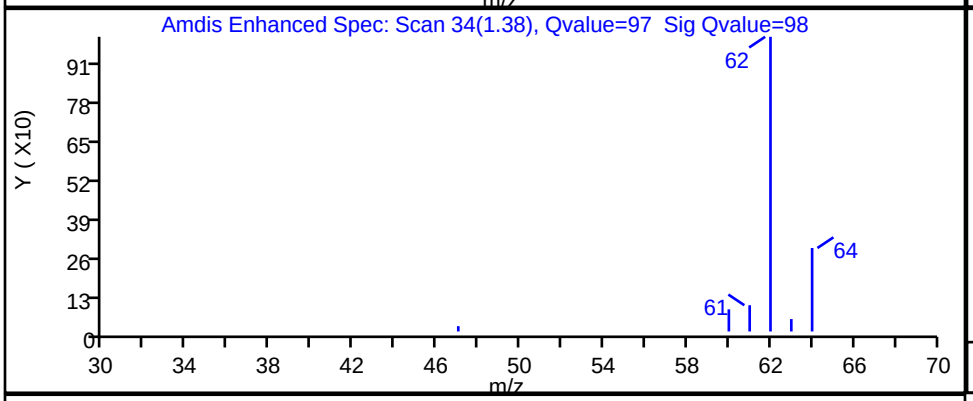
Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1899.D

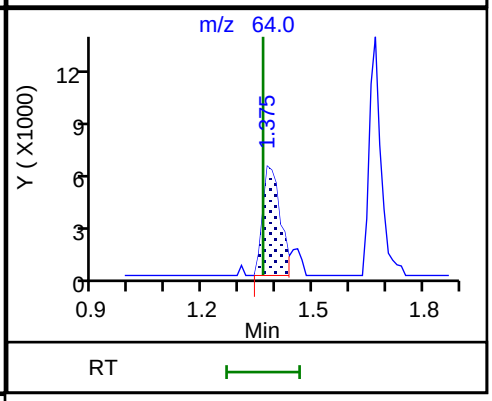
Injection Date:	08-Nov-2021 16:49:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-17	Lab Sample ID:	240-159369-17
Client ID:	SL-16_110221		
Operator ID:	043582	ALS Bottle#:	23 Worklist Smp#: 53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

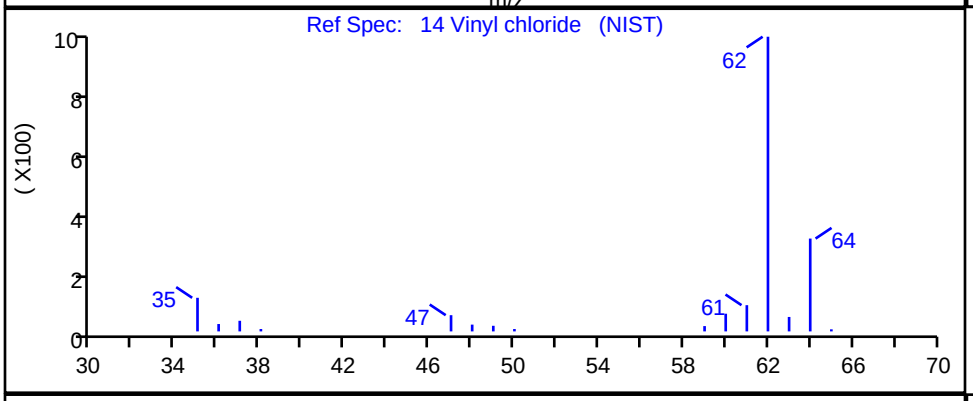
14 Vinyl chloride, CAS: 75-01-4

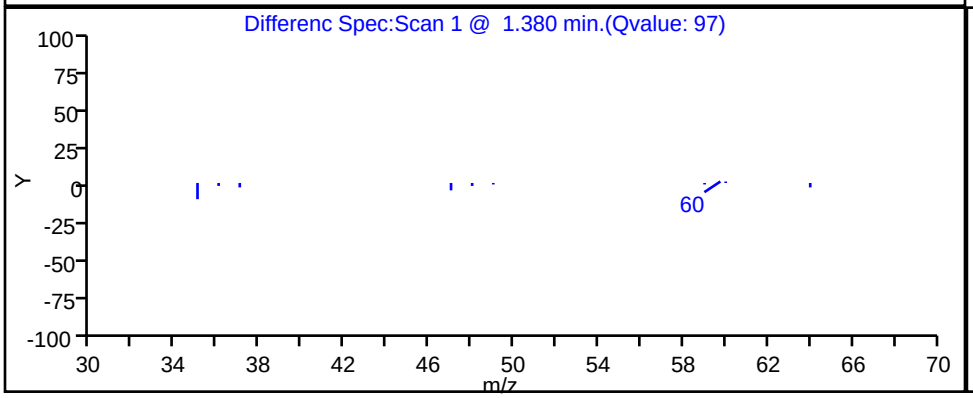


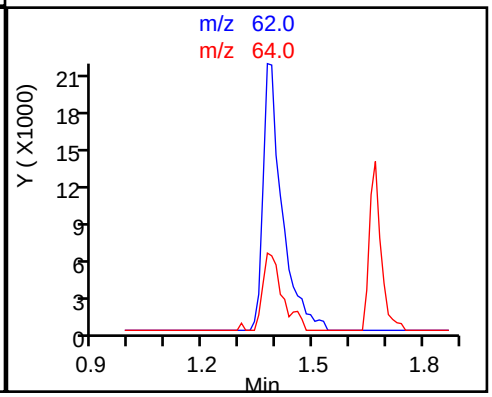












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-17_110221 Lab Sample ID: 240-159369-18

Matrix: Water Lab File ID: UXJ1900.D

Analysis Method: 8260B Date Collected: 11/02/2021 16:00

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 17:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	93		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1900.D
Lims ID: 240-159369-C-18
Client ID: SL-17_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 17:12:30 ALS Bottle#: 24 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-054
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:39:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1493646	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	865014	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	446195	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	356390	18.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	396878	18.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1312436	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	399432	18.5	
14 Vinyl chloride	62	1.376	1.364	0.012	97	64352	3.47	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	7
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	76	97094	4.47	
60 Trichloroethene	130	4.985	4.985	0.000	91	9486	0.4068	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

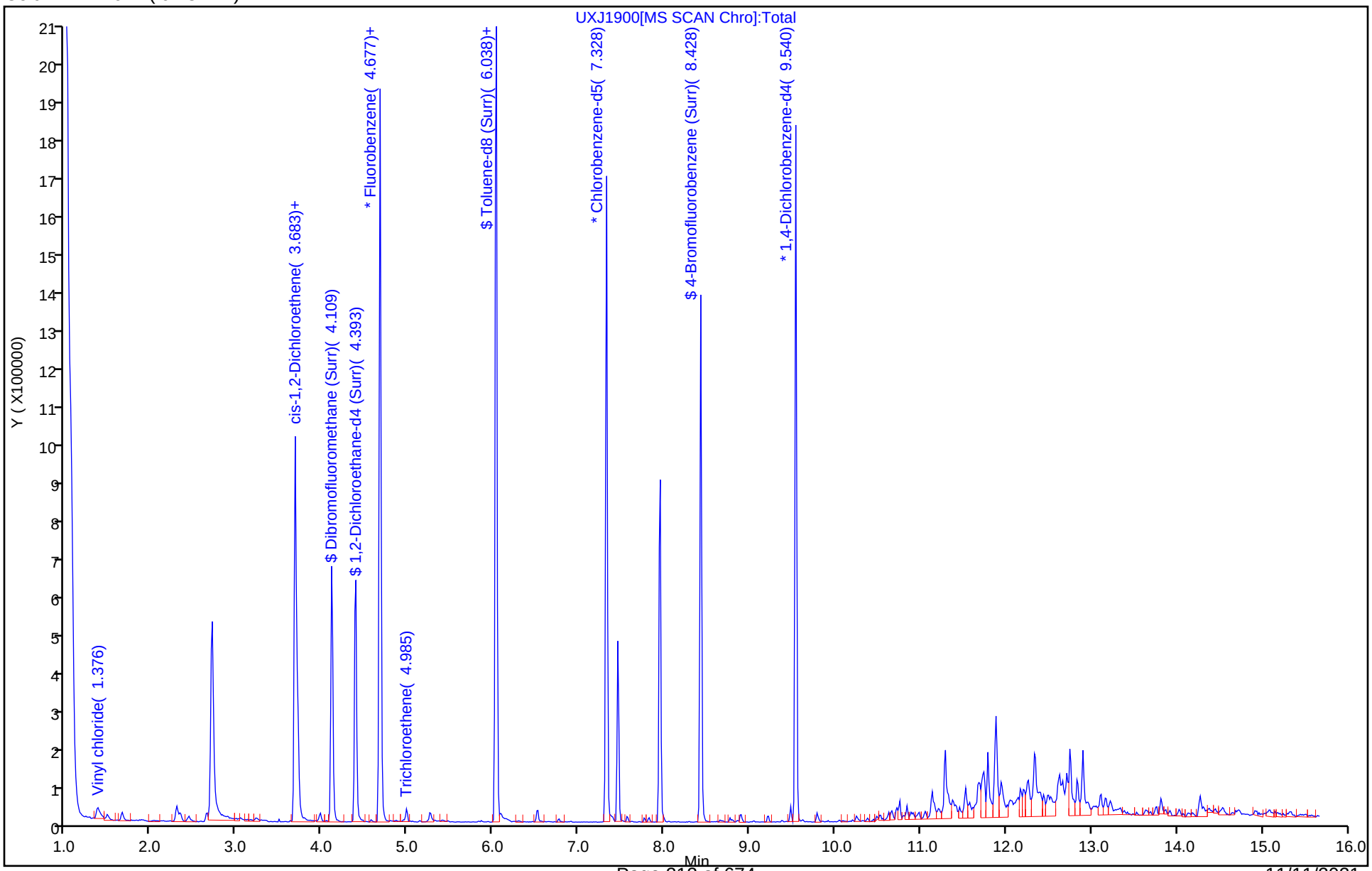
Report Date: 09-Nov-2021 08:41:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1900.D

Injection Date:	08-Nov-2021 17:12:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-C-18	Lab Sample ID:	240-159369-18	Worklist Smp#:	54
Client ID:	SL-17_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1900.D
Lims ID: 240-159369-C-18
Client ID: SL-17_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 17:12:30 ALS Bottle#: 24 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-054
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

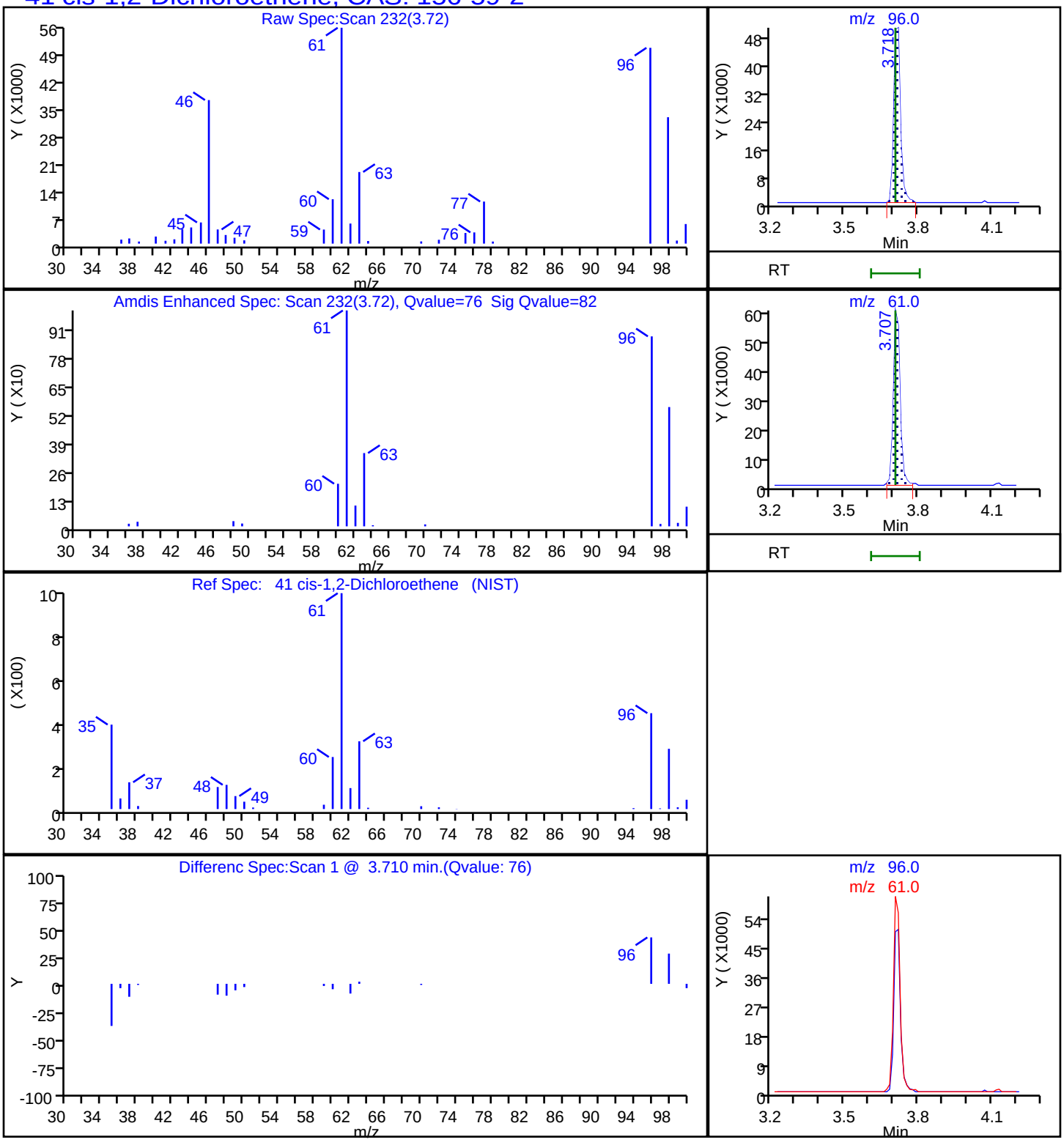
First Level Reviewer: evansle Date: 09-Nov-2021 08:39:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.65
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	91.93
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.66
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.65

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1900.D				
Injection Date:	08-Nov-2021 17:12:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-C-18	Lab Sample ID:	240-159369-18		
Client ID:	SL-17_110221				
Operator ID:	043582	ALS Bottle#:	24	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

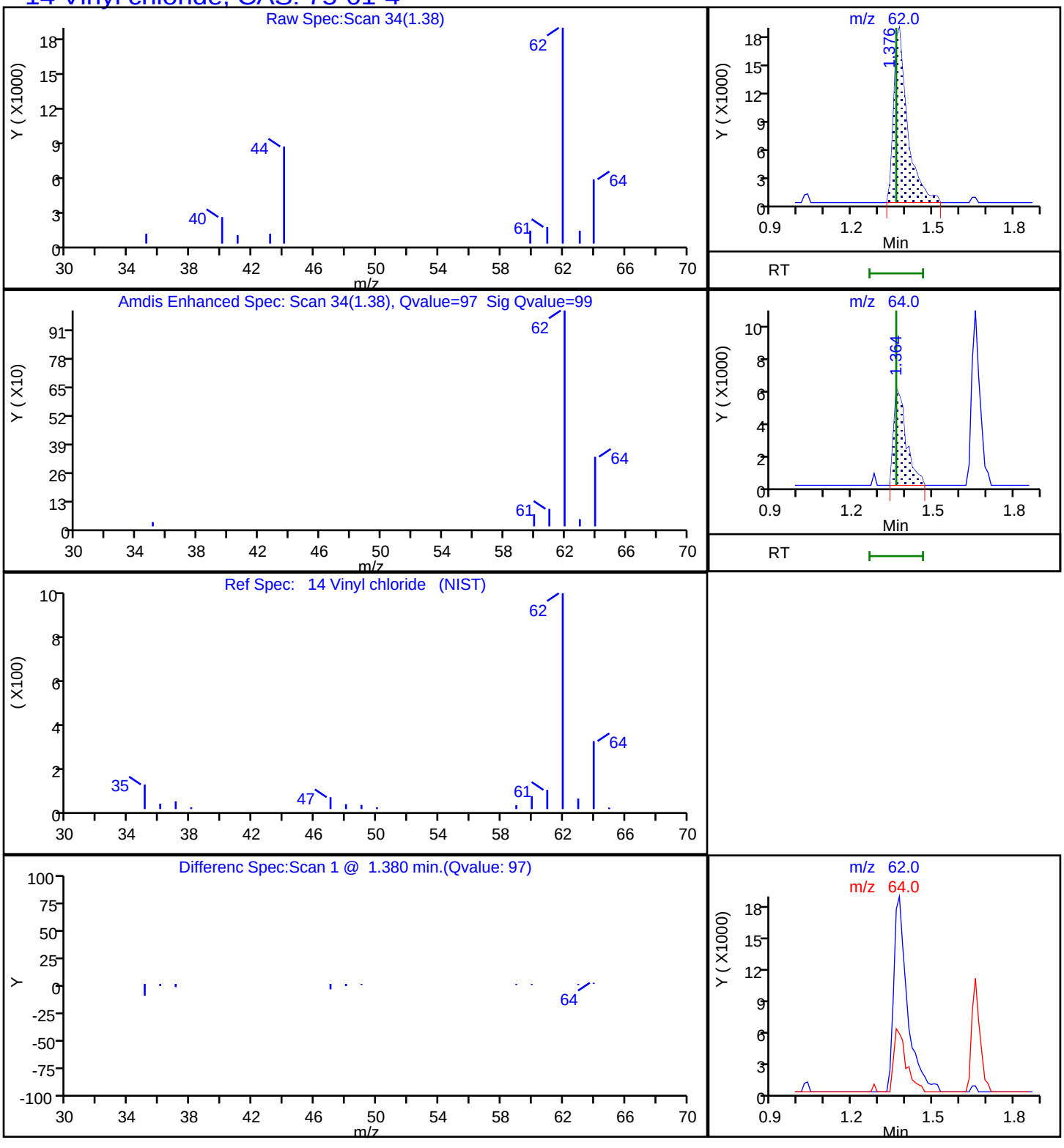


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1900.D

Injection Date:	08-Nov-2021 17:12:30	Instrument ID:	A3UX11
Lims ID:	240-159369-C-18	Lab Sample ID:	240-159369-18
Client ID:	SL-17_110221		
Operator ID:	043582	ALS Bottle#:	24 Worklist Smp#: 54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-18_110221 Lab Sample ID: 240-159369-19

Matrix: Water Lab File ID: UXJ1901.D

Analysis Method: 8260B Date Collected: 11/02/2021 16:25

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 17:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	105		78-122
1868-53-7	Dibromofluoromethane (Surr)	96		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1901.D
Lims ID: 240-159369-B-19
Client ID: SL-18_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 17:34:30 ALS Bottle#: 25 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-055
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1556507	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	83	904647	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	491990	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	379468	19.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	407997	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1349258	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	386200	17.1	
14 Vinyl chloride	62	1.376	1.364	0.012	96	62462	3.23	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	77	101313	4.48	
60 Trichloroethene	130	4.985	4.985	0.000	92	3754	0.1545	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

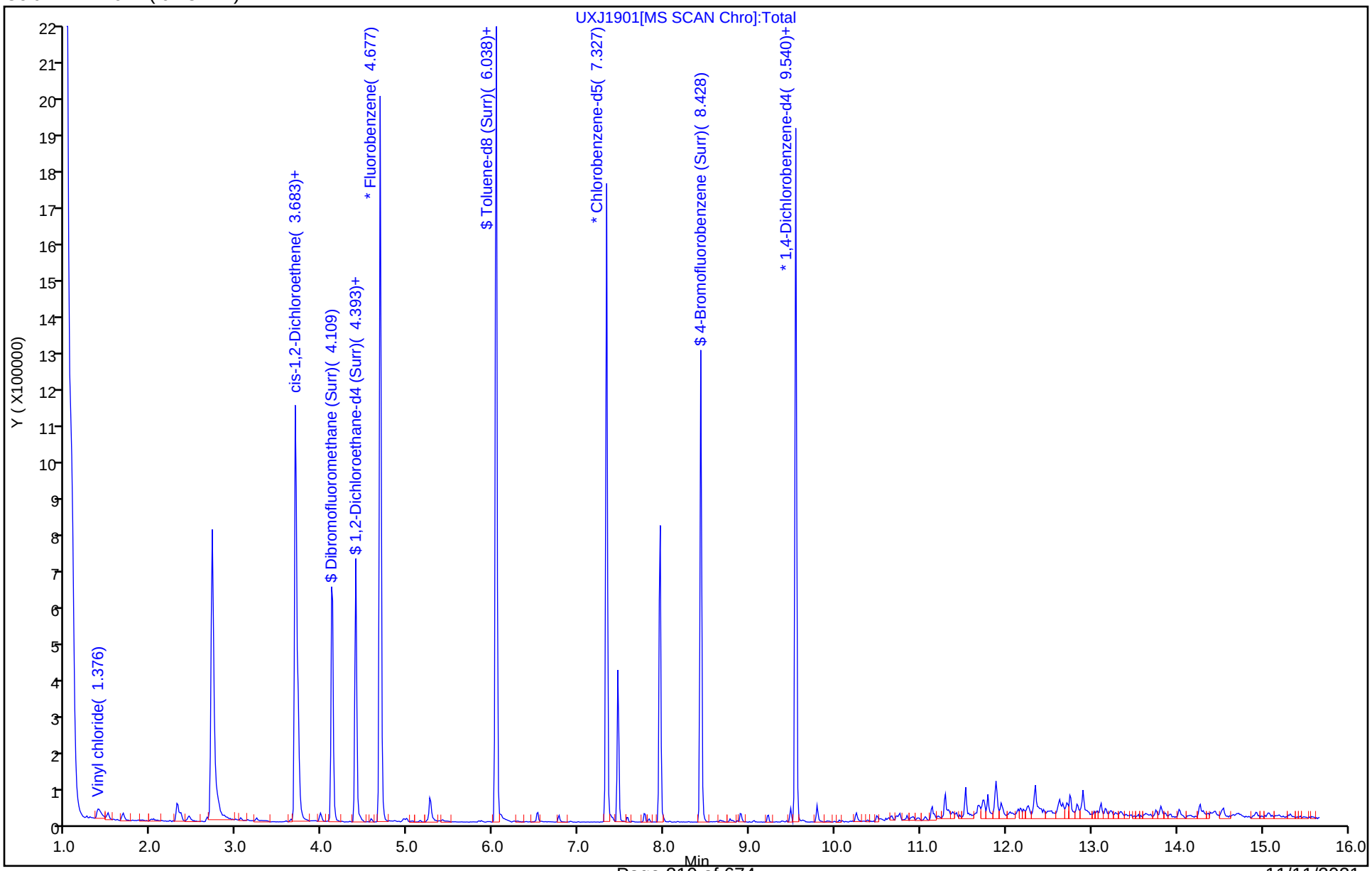
Report Date: 09-Nov-2021 08:41:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1901.D

Injection Date:	08-Nov-2021 17:34:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-B-19	Lab Sample ID:	240-159369-19	Worklist Smp#:	55
Client ID:	SL-18_110221				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1901.D
Lims ID: 240-159369-B-19
Client ID: SL-18_110221
Sample Type: Client
Inject. Date: 08-Nov-2021 17:34:30 ALS Bottle#: 25 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-055
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

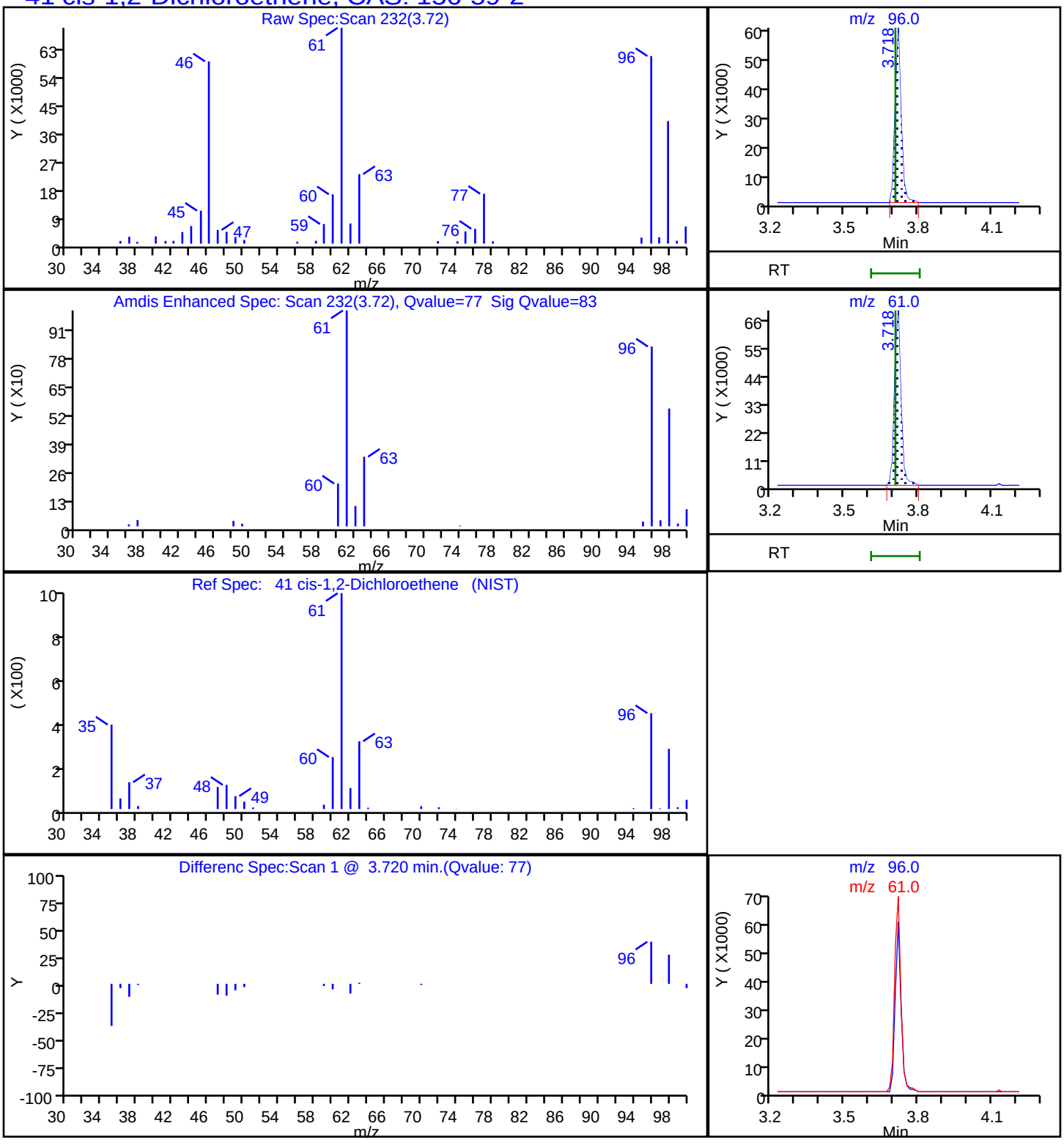
First Level Reviewer: evansle Date: 09-Nov-2021 08:40:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.1	95.69
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.1	90.69
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.85
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.1	85.66

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1901.D				
Injection Date:	08-Nov-2021 17:34:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-B-19	Lab Sample ID:	240-159369-19		
Client ID:	SL-18_110221				
Operator ID:	043582	ALS Bottle#:	25	Worklist Smp#:	55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

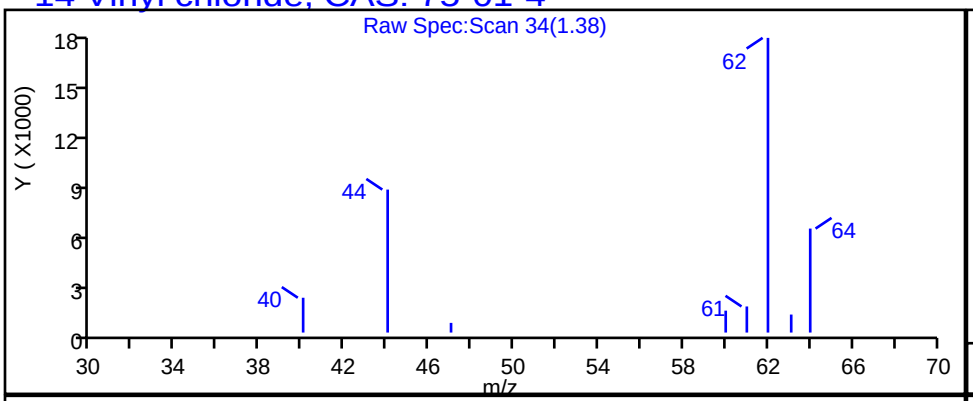


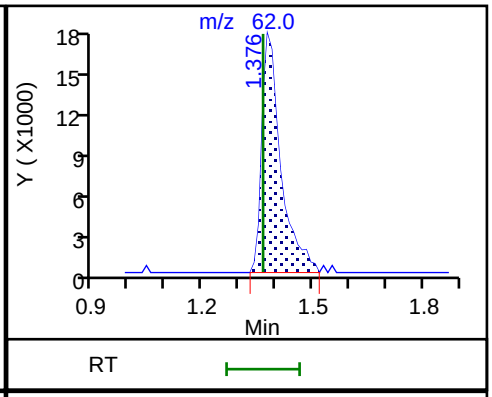
Eurofins TestAmerica, Canton

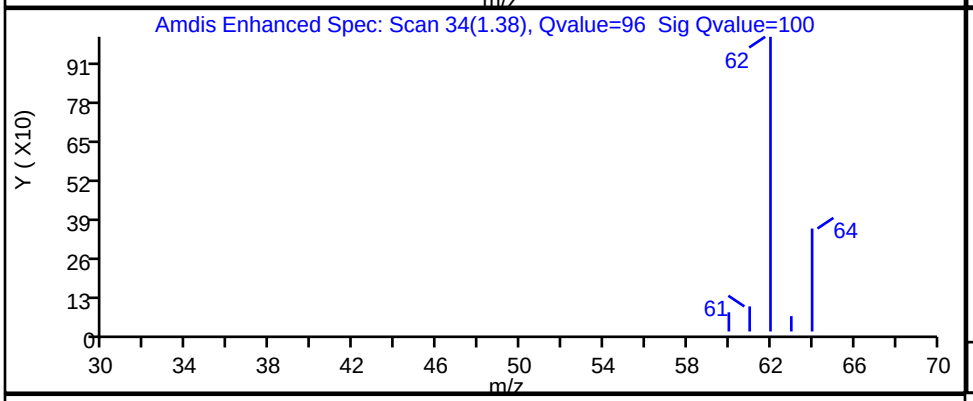
Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1901.D

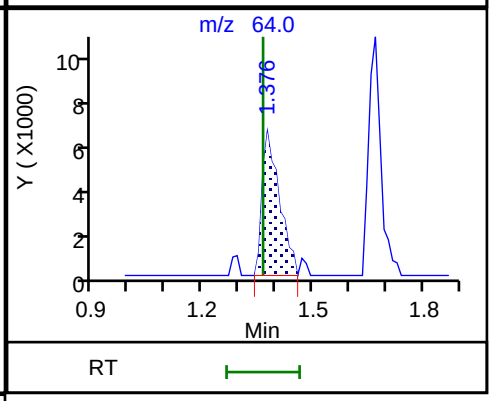
Injection Date:	08-Nov-2021 17:34:30	Instrument ID:	A3UX11
Lims ID:	240-159369-B-19	Lab Sample ID:	240-159369-19
Client ID:	SL-18_110221		
Operator ID:	043582	ALS Bottle#:	25 Worklist Smp#: 55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

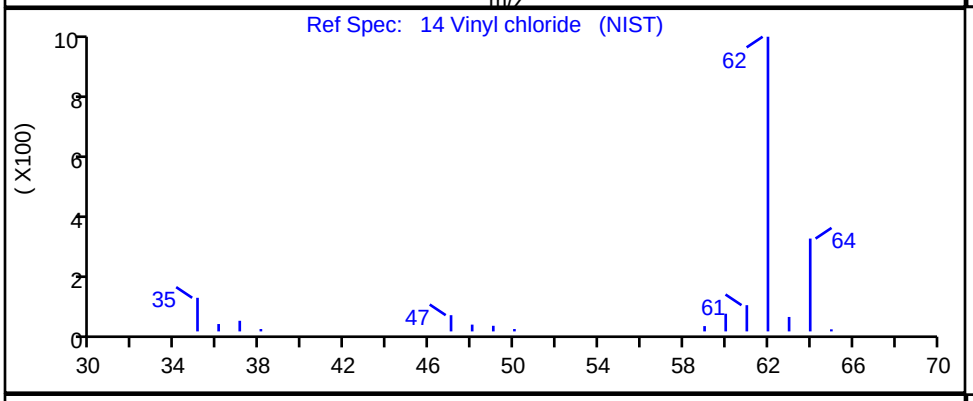
14 Vinyl chloride, CAS: 75-01-4

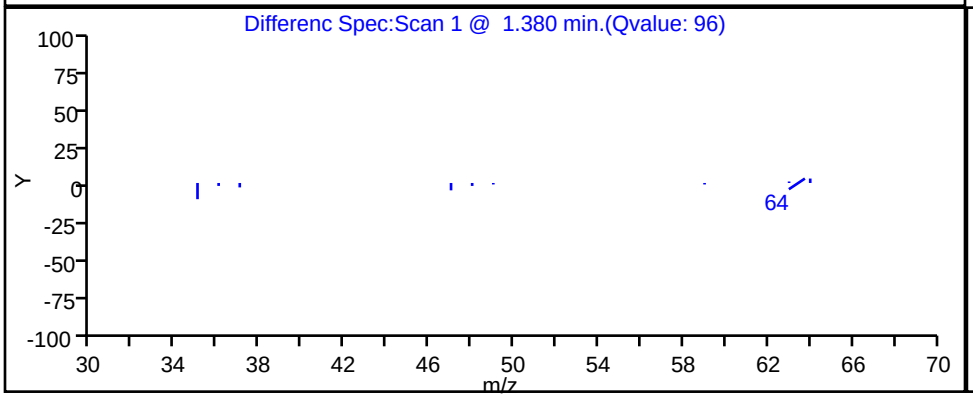


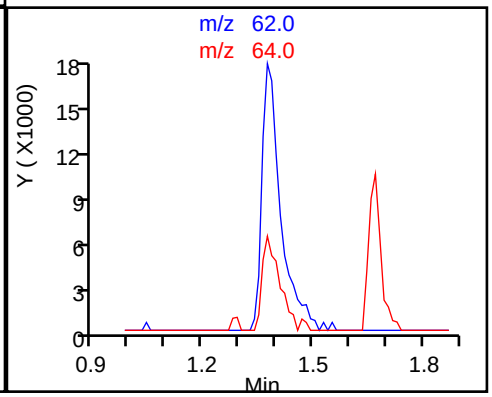












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-159369-20

Matrix: Water Lab File ID: UXJ1902.D

Analysis Method: 8260B Date Collected: 11/02/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 17:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.74	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1902.D
Lims ID: 240-159369-C-20
Client ID: DUP-01
Sample Type: Client
Inject. Date: 08-Nov-2021 17:56:30 ALS Bottle#: 26 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-056
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:40:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1303400	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	786193	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	420507	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	325706	19.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	355389	18.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1190040	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	382451	19.5	
14 Vinyl chloride	62	1.364	1.364	0.000	96	12060	0.7449	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	22432	1.18	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

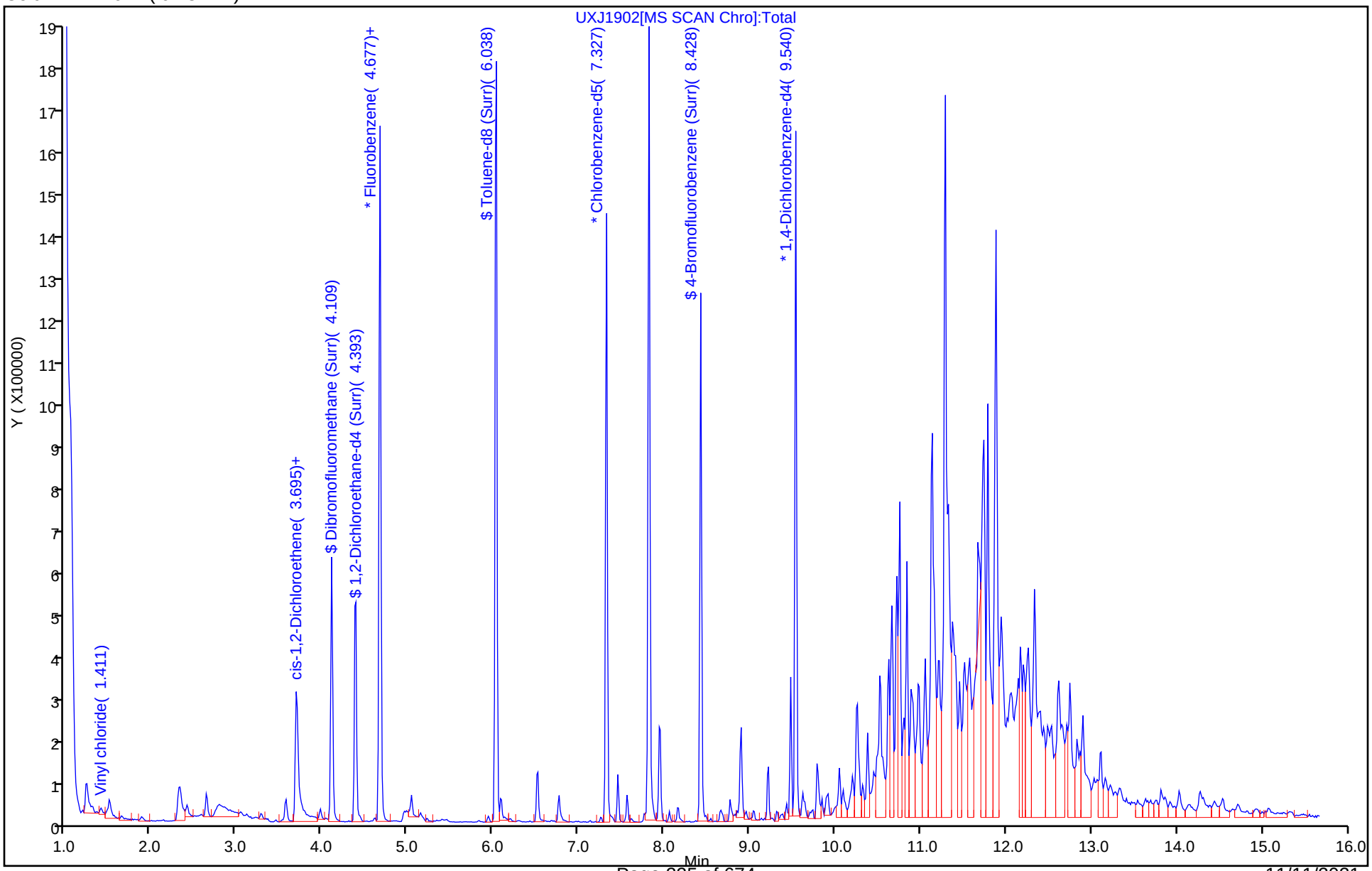
Report Date: 09-Nov-2021 08:41:52 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1902.D

Injection Date:	08-Nov-2021 17:56:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-C-20	Lab Sample ID:	240-159369-20	Worklist Smp#:	56
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1902.D
Lims ID: 240-159369-C-20
Client ID: DUP-01
Sample Type: Client
Inject. Date: 08-Nov-2021 17:56:30 ALS Bottle#: 26 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-056
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

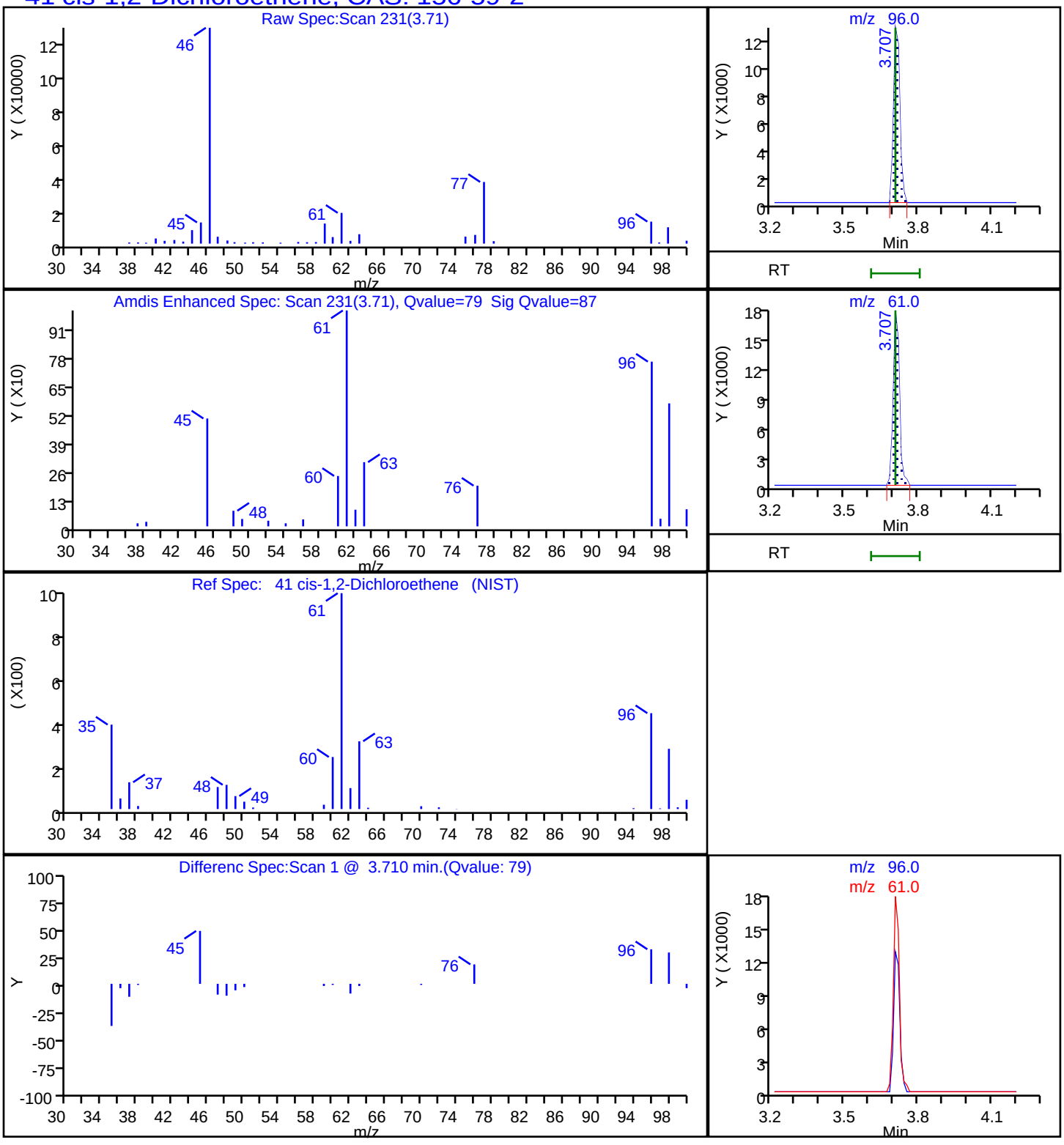
First Level Reviewer: evansle Date: 09-Nov-2021 08:40:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.6	98.08
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.9	94.34
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.41
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.5	97.61

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1902.D				
Injection Date:	08-Nov-2021 17:56:30	Instrument ID:	A3UX11		
Lims ID:	240-159369-C-20	Lab Sample ID:	240-159369-20		
Client ID:	DUP-01				
Operator ID:	043582	ALS Bottle#:	26	Worklist Smp#:	56
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

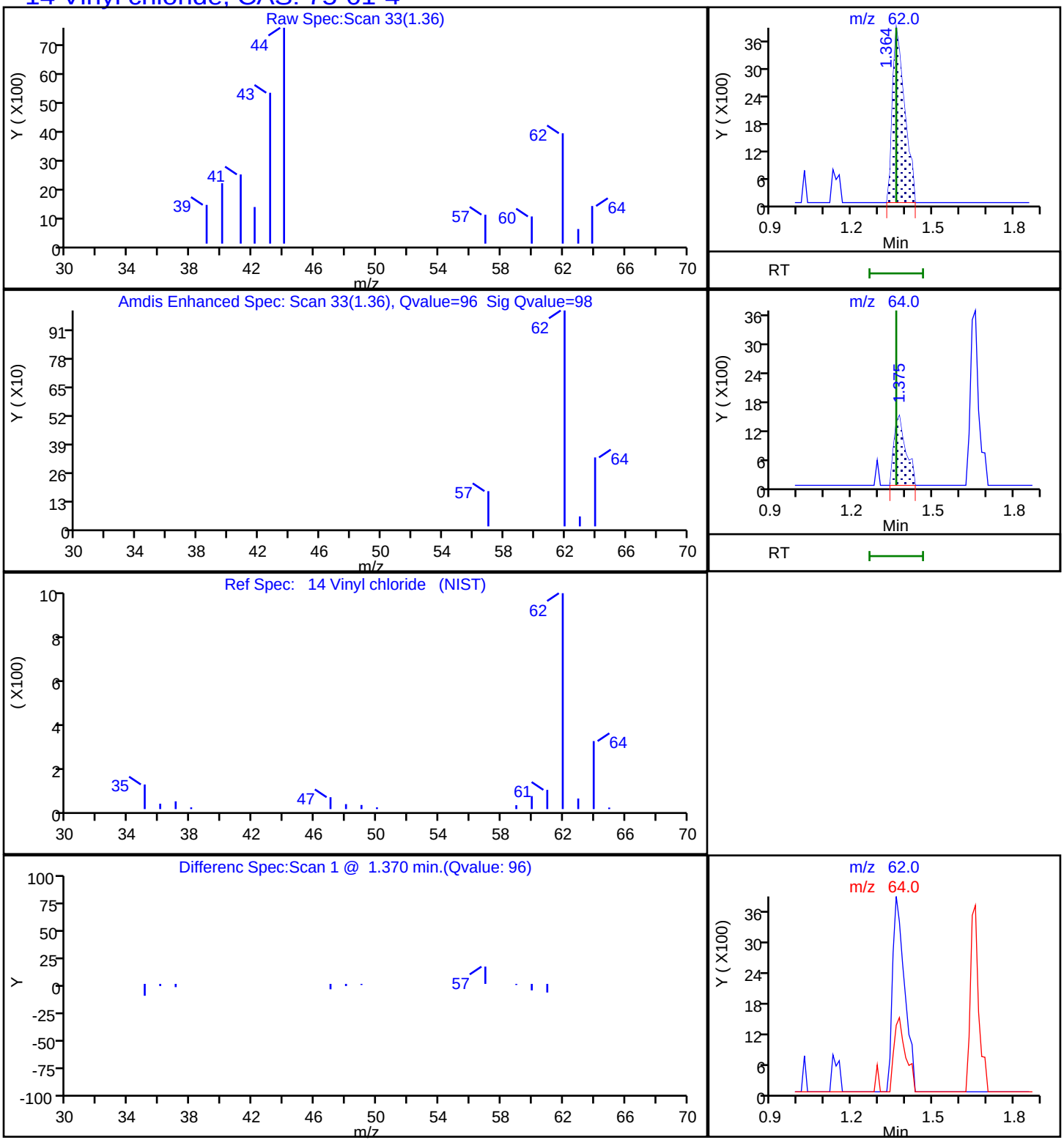


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1902.D

Injection Date:	08-Nov-2021 17:56:30	Instrument ID:	A3UX11
Lims ID:	240-159369-C-20	Lab Sample ID:	240-159369-20
Client ID:	DUP-01		
Operator ID:	043582	ALS Bottle#:	26 Worklist Smp#: 56
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2512 0.2574	0.2630	0.2637	0.2825	0.2704	Ave		0.2647				4.1		15.0			
Chloromethane	0.2317 0.1795	0.2122	0.2145	0.2226	0.1904	Ave		0.2085			0.1000	9.5		15.0			
Butadiene	0.2185 0.2038	0.2386	0.2203	0.2293	0.2062	Ave		0.2195				6.1		15.0			
Vinyl chloride	0.2467 0.2324	0.2605	0.2509	0.2618	0.2383	Ave		0.2484				4.7		15.0			
Bromomethane	0.1925 0.1659	0.1837	0.1816	0.1885	0.1603	Ave		0.1787				7.2		15.0			
Chloroethane	0.1597 0.1350	0.1478	0.1485	0.1577	0.1331	Ave		0.1469				7.6		15.0			
Dichlorofluoromethane	0.3895 0.3237	0.3864	0.3789	0.3749	0.3313	Ave		0.3641				7.9		15.0			
Trichlorofluoromethane	0.4432 0.4077	0.4339	0.4149	0.4339	0.4138	Ave		0.4246				3.4		15.0			
Ethyl ether	0.1802 0.1784	0.1757	0.2069	0.2000	0.1935	Ave		0.1891				6.8		15.0			
Acrolein	0.0090 0.0070	0.0065	0.0066	0.0079	0.0069	Ave		0.0073				13.3		15.0			
1,1-Dichloroethene	0.2336 0.2259	0.2440	0.2449	0.2526	0.2380	Ave		0.2398				3.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1506 0.1905	0.1733	0.1811	0.2021	0.2001	Ave		0.1830				10.5		15.0			
Acetone	0.1334 0.0538	0.1138	0.0890	0.0752	0.0676	Qua	0.1389	0.0756	-0.000293						1.0000		0.9900
Iodomethane	0.4324 0.4064	0.4152	0.4520	0.4461	0.4232	Ave		0.4292				4.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6924 0.6702	0.7119	0.7310	0.7655	0.7122	Ave		0.7139				4.6		15.0			
3-Chloro-1-propene	0.1561 0.1574	0.1548	0.1690	0.1655	0.1624	Ave		0.1609				3.5		15.0			
Methyl acetate	0.1679 0.1457	0.1567	0.1644	0.1678	0.1581	Ave		0.1601				5.3		15.0			
Methylene Chloride	0.3069 0.2303	0.2685	0.2748	0.2613	0.2461	Ave		0.2646				9.9		15.0			
2-Methyl-2-propanol	0.0280 +++++	0.0341	0.0314	0.0327	0.0353	Ave		0.0323				8.8		15.0			
Acrylonitrile	0.0798 0.0742	0.0831	0.0833	0.0871	0.0826	Ave		0.0817				5.3		15.0			
trans-1,2-Dichloroethene	0.2891 0.2568	0.2767	0.3033	0.2904	0.2755	Ave		0.2819				5.7		15.0			
Methyl tert-butyl ether	0.6799 0.6510	0.6721	0.7103	0.7601	0.6909	Ave		0.6940				5.5		15.0			
Hexane	0.0543 0.0684	0.0590	0.0652	0.0680	0.0727	Ave		0.0646				10.5		15.0			
1,1-Dichloroethane	0.3844 0.3876	0.4141	0.4287	0.4377	0.4033	Ave		0.4093			0.1000	5.3		15.0			
Vinyl acetate	0.4385 0.4256	0.4185	0.4478	0.4841	0.4337	Ave		0.4414				5.3		15.0			
cis-1,2-Dichloroethene	0.2900 0.2615	0.2972	0.3080	0.3048	0.2817	Ave		0.2905				5.9		15.0			
2,2-Dichloropropane	0.0518 0.0653	0.0625	0.0731	0.0763	0.0711	Ave		0.0667				13.3		15.0			
2-Butanone (MEK)	0.1393 0.0931	0.1231	0.1225	0.1219	0.1027	Ave		0.1171				14.1		15.0			
Chlorobromomethane	0.1525 0.1295	0.1350	0.1572	0.1521	0.1440	Ave		0.1450				7.5		15.0			
Tetrahydrofuran	0.0736 0.0606	0.0682	0.0705	0.0714	0.0681	Ave		0.0687				6.5		15.0			
Chloroform	0.4465 0.4105	0.4407	0.4643	0.4673	0.4413	Ave		0.4451				4.6		15.0			
1,1,1-Trichloroethane	0.3738 0.3739	0.3928	0.3946	0.4175	0.3891	Ave		0.3903				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.2829 0.3325	0.3036	0.3192	0.3487	0.3553	Ave		0.3237				8.5		15.0			
1,1-Dichloropropene	0.3587 0.3323	0.3324	0.3641	0.3737	0.3564	Ave		0.3529				4.8		15.0			
Carbon tetrachloride	0.3214 0.3589	0.3393	0.3614	0.3946	0.3694	Ave		0.3575				7.0		15.0			
Isobutyl alcohol	0.0099 0.0096	0.0114	0.0133	0.0134	0.0127	Ave		0.0117				14.5		15.0			
Benzene	0.9683 0.9496	1.0018	1.0313	1.0676	0.9656	Ave		0.9974				4.5		15.0			
1,2-Dichloroethane	0.3000 0.2978	0.3312	0.3504	0.3463	0.3141	Ave		0.3233				7.1		15.0			
n-Heptane	0.0548 0.0611	0.0518	0.0587	0.0619	0.0591	Ave		0.0579				6.7		15.0			
Trichloroethene	0.3207 0.2794	0.3058	0.3425	0.3230	0.3019	Ave		0.3122				6.9		15.0			
Methylcyclohexane	0.2934 0.3724	0.3406	0.3477	0.3778	0.3843	Ave		0.3527				9.6		15.0			
1,2-Dichloropropane	0.2086 0.1921	0.2113	0.2109	0.2242	0.2038	Ave		0.2085				5.0		15.0			
Dibromomethane	0.1591 0.1363	0.1529	0.1561	0.1626	0.1473	Ave		0.1524				6.2		15.0			
1,4-Dioxane	0.0013 0.0019	0.0020	0.0035	0.0028	0.0029	Qua	-0.059	0.0039	-0.000002						0.9950		0.9900
Dichlorobromomethane	0.2924 0.2991	0.2858	0.3201	0.3334	0.3098	Ave		0.3068				5.8		15.0			
2-Chloroethyl vinyl ether	0.1392 0.1369	0.1536	0.1490	0.1654	0.1471	Ave		0.1485				7.0		15.0			
cis-1,3-Dichloropropene	0.3738 0.3581	0.3911	0.3814	0.4002	0.3727	Ave		0.3795				3.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1882 0.1904	0.2096	0.2155	0.2367	0.2094	Ave		0.2083				8.5		15.0			
Toluene	1.4677 1.4494	1.5201	1.5904	1.6184	1.4660	Ave		1.5187				4.7		15.0			
trans-1,3-Dichloropropene	0.4450 0.4729	0.5063	0.5231	0.5197	0.4896	Ave		0.4928				6.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.3251 0.4008	0.3575	0.4000	0.4303	0.4003	Ave		0.3857				9.8		15.0			
1,1,2-Trichloroethane	0.3028 0.2755	0.3046	0.3175	0.3238	0.2829	Ave		0.3012				6.3		15.0			
Tetrachloroethene	0.2944 0.3080	0.3235	0.3381	0.3495	0.3263	Ave		0.3233				6.2		15.0			
1,3-Dichloropropane	0.4802 0.4715	0.5170	0.5076	0.5517	0.4816	Ave		0.5016				6.0		15.0			
2-Hexanone	0.1928 0.2053	0.2082	0.2249	0.2372	0.2119	Ave		0.2134				7.3		15.0			
Chlorodibromomethane	0.2982 0.3414	0.3172	0.3352	0.3636	0.3415	Ave		0.3328				6.8		15.0			
Ethylene Dibromide	0.2992 0.2916	0.3275	0.3323	0.3492	0.2991	Ave		0.3165				7.3		15.0			
Chlorobenzene	0.9880 0.9276	0.9924	1.0409	1.0528	0.9535	Ave		0.9925			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3242 0.3202	0.3214	0.3392	0.3619	0.3294	Ave		0.3327				4.8		15.0			
Ethylbenzene	0.4780 0.5015	0.4859	0.5645	0.5795	0.5108	Ave		0.5200				8.1		15.0			
m-Xylene & p-Xylene	0.5934 0.6058	0.6376	0.6599	0.7052	0.6238	Ave		0.6376				6.4		15.0			
o-Xylene	0.5418 0.5612	0.5672	0.6215	0.6473	0.5828	Ave		0.5870				6.8		15.0			
Styrene	0.7650 0.8563	0.8225	0.8867	0.9293	0.8569	Ave		0.8528				6.6		15.0			
Bromoform	0.1263 0.2304	0.1685	0.2041	0.2270	0.2197	Lin1	-0.113	0.2313			0.1000				0.9990		0.9900
Isopropylbenzene	1.3133 1.4763	1.4762	1.5653	1.6732	1.4949	Ave		1.4999				7.9		15.0			
1,1,2,2-Tetrachloroethane	0.7171 0.7403	0.8072	0.7913	0.8434	0.7594	Ave		0.7764			0.3000	6.0		15.0			
Bromobenzene	0.8434 0.8086	0.8334	0.9146	0.9233	0.8387	Ave		0.8603				5.5		15.0			
1,2,3-Trichloropropane	0.3066 0.2601	0.3326	0.3009	0.3070	0.2793	Ave		0.2977				8.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2076 0.2248	0.1858	0.2339	0.2457	0.2294	Ave		0.2212				9.6		15.0			
N-Propylbenzene	0.8638 0.8936	0.8431	0.9611	1.0166	0.9160	Ave		0.9157				7.0		15.0			
2-Chlorotoluene	0.7410 0.7316	0.8054	0.8053	0.8365	0.7828	Ave		0.7837				5.2		15.0			
1,3,5-Trimethylbenzene	2.4462 2.4744	2.4266	2.5432	2.7773	2.5754	Ave		2.5405				5.1		15.0			
4-Chlorotoluene	0.8371 0.7380	0.8148	0.8637	0.8880	0.7897	Ave		0.8219				6.5		15.0			
tert-Butylbenzene	2.0236 2.1921	2.2177	2.4001	2.4622	2.2933	Ave		2.2648				6.9		15.0			
1,2,4-Trimethylbenzene	2.1832 2.4320	2.5314	2.5993	2.7780	2.5535	Ave		2.5129				7.9		15.0			
sec-Butylbenzene	2.5086 2.8887	2.8631	3.0145	3.1672	2.9984	Ave		2.9068				7.7		15.0			
1,3-Dichlorobenzene	1.5610 1.3797	1.6364	1.5925	1.6498	1.4798	Ave		1.5499				6.7		15.0			
4-Isopropyltoluene	2.1963 2.4943	2.4866	2.6436	2.7958	2.6531	Ave		2.5449				8.1		15.0			
1,4-Dichlorobenzene	1.6289 1.3914	1.5764	1.6560	1.6398	1.5282	Ave		1.5701				6.3		15.0			
1,2-Dichlorobenzene	1.4384 1.3188	1.5613	1.5695	1.5527	1.4318	Ave		1.4787				6.8		15.0			
n-Butylbenzene	1.7865 1.9154	1.9463	2.0665	2.1692	2.0573	Ave		1.9902				6.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1737 0.1787	0.2006	0.2037	0.2124	0.1986	Ave		0.1946				7.8		15.0			
1,2,4-Trichlorobenzene	0.9133 0.7565	0.9440	0.9400	0.9193	0.8866	Ave		0.8933				7.8		15.0			
Hexachlorobutadiene	0.3023 0.2329	0.3330	0.3390	0.3313	0.3087	Ave		0.3079				12.8		15.0			
Naphthalene	2.4801 2.3872	2.7045	2.8675	2.8661	2.8541	Ave		2.6932				7.9		15.0			
1,2,3-Trichlorobenzene	0.8703 0.7083	0.9406	0.8821	0.8807	0.8644	Ave		0.8577				9.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2759 0.2358	0.2627	0.2481	0.2597	0.2464	Ave		0.2548				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3230 0.2533	0.3151	0.2913	0.2904	0.2610	Ave		0.2890				9.7		15.0			
Toluene-d8 (Surr)	1.5591 1.2990	1.4814	1.4033	1.4755	1.3169	Ave		1.4225				7.1		15.0			
4-Bromofluorobenzene (Surr)	0.6103 0.4291	0.5208	0.4838	0.5054	0.4410	Ave		0.4984				13.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	15545 721258	31418	80613	164460	338735	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	14340 502904	25355	65579	129598	238538	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	13521 571062	28511	67351	133533	258402	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15264 651219	31125	76699	152409	298544	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	11910 464869	21942	55501	109770	200899	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	9885 378138	17658	45377	91798	166717	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	24102 907097	46164	115827	218267	415026	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	27428 1142489	51835	126814	252670	518477	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	11151 499751	20989	63254	116451	242452	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	2788 97712	3869	10031	22968	43331	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	14457 633100	29147	74855	147052	298144	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9322 533768	20704	55364	117673	250667	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	16505 301658	27191	54384	87518	169338	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	26756 1138640	49606	138148	259758	530219	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	42851 1877998	85053	223442	445715	892313	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	9657 441008	18496	51666	96370	203463	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	20775 816332	37455	100508	195357	396110	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	18990 645225	32083	83987	152159	308369	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	17313 +++++	40795	95943	190467	441997	10.0 +++++	20.0	50.0	100	200
Acrylonitrile	FB	Ave	49387 2079971	99328	254760	507306	1034581	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	17888 719544	33055	92696	169059	345215	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	42075 1824022	80293	217115	442599	865638	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	3359 191762	7051	19919	39610	91031	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	23786 1086189	49476	131033	254843	505328	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	27137 1192582	49994	136870	281858	543430	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	17946 732765	35504	94152	177452	352905	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	3204 183063	7464	22350	44411	89071	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	17238 521553	29417	74913	141932	257396	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	9438 362817	16126	48037	88584	180439	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	9114 339871	16287	43094	83099	170596	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	27629 1150137	52653	141913	272070	552954	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	23130 1047553	46927	120621	243120	487548	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	17507 931808	36267	97556	203020	445198	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	22199 931119	39708	111305	217609	446475	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	19888 1005638	40537	110470	229782	462865	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	11230 469468	24642	71782	140015	282518	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	59923 2660921	119695	315227	621645	1209746	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	18563 834572	39572	107089	201630	393564	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	3391 171246	6187	17935	36044	74044	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	19843 782934	36541	104678	188089	378293	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	18159 1043552	40688	106284	219959	481488	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	12909 538152	25247	64453	130547	255306	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	9846 381807	18262	47703	94687	184521	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	1561 107884	4800	21628	32269	72492	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	18093 838078	34149	97830	194130	388202	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	17224 767090	36692	91082	192632	368563	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	23129 1003327	46722	116575	233030	467002	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23297 1067188	50083	131752	275675	524791	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene	CBNZ d5	Ave	66435 2839911	131172	342544	674102	1305035	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20141 926501	43688	112670	216478	435826	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	14716 785342	30851	86162	179245	356343	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	13706 539869	26286	68391	134855	251827	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	13324 603539	27919	72821	145597	290477	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	21737 923814	44615	109339	229816	428737	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	17457 804351	35938	96869	197584	377295	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	13496 668910	27373	72196	151446	303982	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	13541 571287	28263	71577	145448	266234	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	44721 1817385	85638	224201	438529	848785	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	14675 627467	27733	73060	150727	293218	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	21634 982501	41926	121583	241366	454730	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	26859 1186930	55016	142126	293732	555344	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	24523 1099593	48945	133865	269611	518830	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	34628 1677750	70977	190984	387081	762818	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Lin1	5716 451459	14539	43950	94573	195621	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	59446 2892536	127385	337134	696938	1330791	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	15088 674085	32478	80391	168581	314210	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	17745 736292	33533	92916	184549	347047	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	6451 236888	13381	30569	61360	115557	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4369 204685	7477	23761	49109	94933	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	18175 813669	33926	97641	203203	379016	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	15591 666172	32406	81808	167202	323910	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	51470 2253201	97641	258368	555148	1065649	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	17614 672031	32785	87751	177509	326743	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	42578 1996174	89236	243838	492162	948917	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	45937 2214589	101857	264071	555283	1056574	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	52784 2630484	115205	306253	633082	1240690	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	32844 1256378	65846	161785	329769	612308	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	46211 2271314	100055	268571	558841	1097800	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	34274 1266972	63431	168239	327781	632325	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	30265 1200899	62822	159450	310374	592436	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	37590 1744132	78313	209941	433586	851264	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3654 162763	8071	20694	42452	82195	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	19216 688885	37983	95499	183760	366855	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	6361 212109	13398	34437	66215	127737	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	52184 2173823	108820	291314	572904	1180957	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	18312 645009	37847	89613	176040	357662	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	17076 660842	31381	75844	151229	308654	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19989 709889	37647	89035	169071	327027	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	70570 2545197	127833	302251	614578	1172369	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	27622 840665	44939	104195	210523	392550	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jan-2021 11:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-002
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:24 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 11:30:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1401011	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	82	979659	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	455301	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	660842	40.0	37.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	97	709889	40.0	35.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	2545197	40.0	36.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	99	840665	40.0	34.4	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	721258	40.0	38.9	
12 Chloromethane	50	1.293	1.293	0.000	99	502904	40.0	34.4	
13 Butadiene	54	1.352	1.352	0.000	96	571062	40.0	37.1	
14 Vinyl chloride	62	1.376	1.376	0.000	98	651219	40.0	37.4	
15 Bromomethane	94	1.589	1.589	0.000	91	464869	40.0	37.1	
16 Chloroethane	64	1.648	1.648	0.000	99	378138	40.0	36.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	907097	40.0	35.6	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	1142489	40.0	38.4	
19 Ethyl ether	59	2.062	2.062	0.000	86	499751	40.0	37.7	
20 Acrolein	56	2.157	2.157	0.001	99	97712	200.0	190.9	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	633100	40.0	37.7	
23 112TCTFE	151	2.275	2.275	0.000	91	533768	40.0	41.6	
24 Acetone	43	2.299	2.298	0.001	100	301658	80.0	80.0	
25 Iodomethane	142	2.358	2.358	0.000	98	1138640	40.0	37.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	1877998	40.0	37.6	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	441008	40.0	39.1	
29 Methyl acetate	43	2.571	2.571	0.000	96	816332	80.0	72.8	
30 Methylene Chloride	84	2.642	2.642	0.000	84	645225	40.0	34.8	
31 2-Methyl-2-propanol	59	2.772	2.784	-0.012	100	569636	400.0	251.8	
32 Acrylonitrile	53	2.843	2.855	-0.012	99	2079971	400.0	363.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	95	719544	40.0	36.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	1824022	40.0	37.5	
35 Hexane	86	3.115	3.115	0.000	89	191762	40.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.222	3.221	0.001	96	1086189	40.0	37.9	
37 Vinyl acetate	43	3.281	3.281	0.000	97	1192582	40.0	38.6	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	732765	40.0	36.0	
42 2,2-Dichloropropane	97	3.707	3.718	-0.011	64	183063	40.0	39.2	
43 2-Butanone (MEK)	43	3.730	3.742	-0.012	97	521553	80.0	63.6	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	362817	40.0	35.7	
49 Tetrahydrofuran	42	3.967	3.967	0.000	83	339871	80.0	70.6	
48 Chloroform	83	3.979	3.979	0.000	92	1150137	40.0	36.9	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	1047553	40.0	38.3	
51 Cyclohexane	56	4.180	4.180	0.000	83	931808	40.0	41.1	
53 1,1-Dichloropropene	75	4.263	4.275	-0.012	95	931119	40.0	37.7	
52 Carbon tetrachloride	117	4.275	4.275	0.000	96	1005638	40.0	40.2	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	469468	1000.0	816.8	
55 Benzene	78	4.440	4.440	0.000	94	2660921	40.0	38.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	834572	40.0	36.9	
58 n-Heptane	100	4.677	4.689	-0.012	83	171246	40.0	42.2	
60 Trichloroethene	130	4.985	4.985	0.000	95	782934	40.0	35.8	
62 Methylcyclohexane	83	5.150	5.150	0.000	88	1043552	40.0	42.2	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	538152	40.0	36.9	
64 Dibromomethane	93	5.269	5.269	0.000	94	381807	40.0	35.8	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	107884	800.0	771.7	
67 Dichlorobromomethane	83	5.399	5.411	-0.012	99	838078	40.0	39.0	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	767090	80.0	73.7	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	1003327	40.0	37.7	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	95	1067188	80.0	73.1	
72 Toluene	91	6.097	6.097	0.000	98	2839911	40.0	38.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	926501	40.0	38.4	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	785342	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	89	539869	40.0	36.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	603539	40.0	38.1	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	923814	40.0	37.6	
78 2-Hexanone	43	6.689	6.689	0.001	93	804351	80.0	77.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	668910	40.0	41.0	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	571287	40.0	36.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	1817385	40.0	37.4	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	627467	40.0	38.5	
86 Ethylbenzene	106	7.458	7.469	-0.011	98	982501	40.0	38.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	1186930	40.0	38.0	
89 o-Xylene	106	7.943	7.943	0.000	96	1099593	40.0	38.2	
88 Styrene	104	7.955	7.955	0.000	93	1677750	40.0	40.2	
90 Bromoform	173	8.120	8.120	0.000	97	451459	40.0	40.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	2892536	40.0	39.4	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	80	674085	40.0	38.1	
95 Bromobenzene	156	8.570	8.570	0.000	89	736292	40.0	37.6	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	82	236888	40.0	34.9	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	94	204685	40.0	40.6	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	813669	40.0	39.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	666172	40.0	37.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	2253201	40.0	39.0	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	672031	40.0	35.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	1996174	40.0	38.7	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	2214589	40.0	38.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	2630484	40.0	39.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	1256378	40.0	35.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	2271314	40.0	39.2	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	1266972	40.0	35.4	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	1200899	40.0	35.7	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	1744132	40.0	38.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	162763	40.0	36.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	688885	40.0	33.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	212109	40.0	30.3	
118 Naphthalene	128	11.753	11.753	0.000	96	2173823	40.0	35.5	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	645009	40.0	33.0	
S 129 Total BTEX	1				0		200.0	191.1	
S 128 Trihalomethanes, Total	1				0		160.0	157.2	
S 130 1,2-Dichloroethene, Total	96				0			72.4	
S 131 1,3-Dichloropropene, Total	75				0			76.1	
S 132 Xylenes, Total	106				0		80.0	76.2	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	32.00	Units: uL
VM50SS_STK_00086	Amount Added:	32.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	32.00	Units: uL
VMAROLISTDW_00376	Amount Added:	32.00	Units: uL

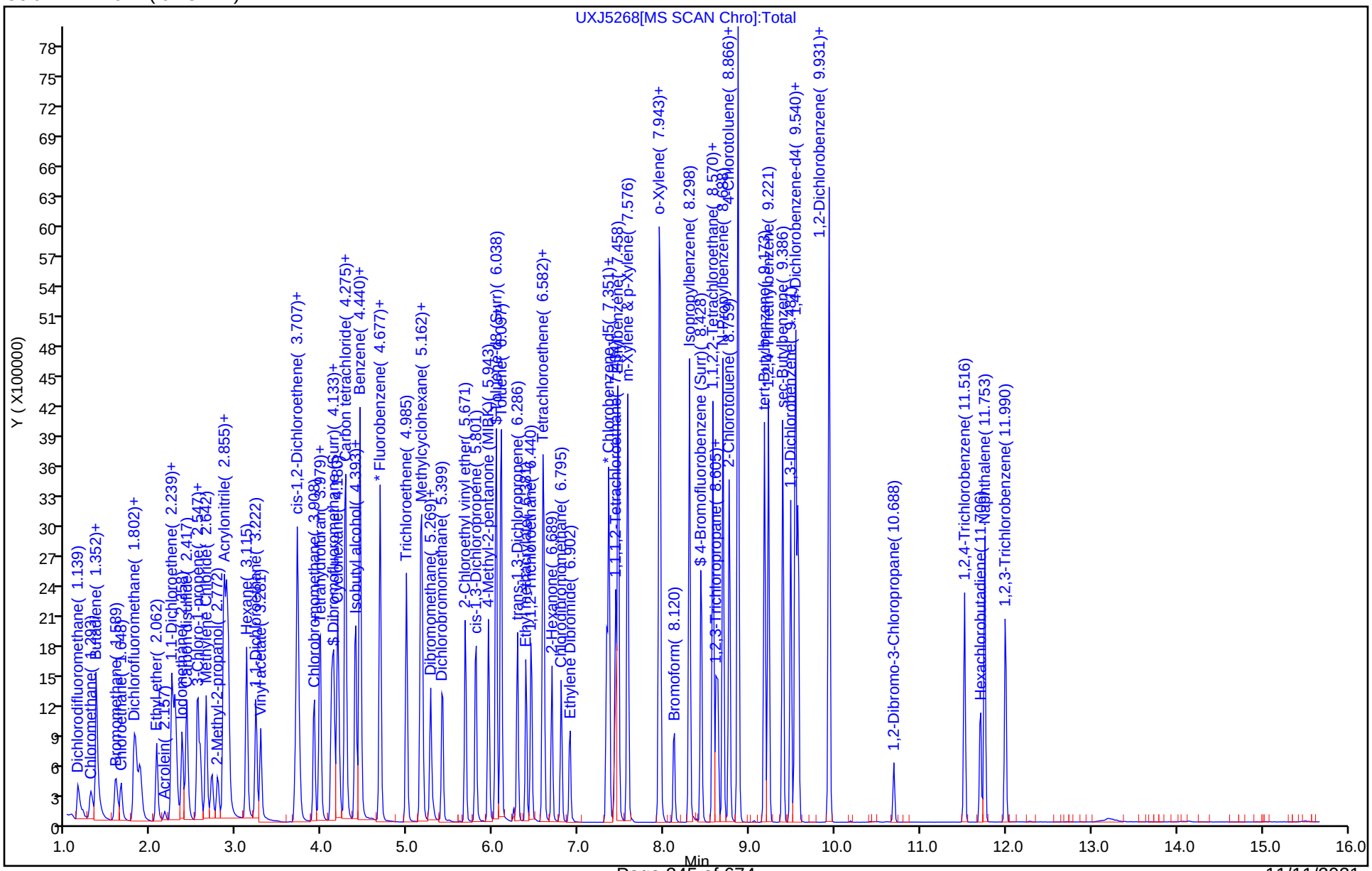
Report Date: 18-Jan-2021 09:24:25 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D

Injection Date:	15-Jan-2021 11:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jan-2021 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-003
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 12:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1252890	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	890220	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	96	413781	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	308654	20.0	19.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	327027	20.0	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1172369	20.0	18.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	392550	20.0	17.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	338735	20.0	20.4	
12 Chloromethane	50	1.305	1.293	0.012	99	238538	20.0	18.3	
13 Butadiene	54	1.364	1.352	0.012	97	258402	20.0	18.8	
14 Vinyl chloride	62	1.376	1.376	0.000	98	298544	20.0	19.2	
15 Bromomethane	94	1.589	1.589	0.000	92	200899	20.0	17.9	
16 Chloroethane	64	1.660	1.648	0.012	100	166717	20.0	18.1	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	415026	20.0	18.2	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	518477	20.0	19.5	
19 Ethyl ether	59	2.074	2.062	0.012	87	242452	20.0	20.5	
20 Acrolein	56	2.168	2.157	0.012	98	43331	100.0	94.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	298144	20.0	19.8	
23 112TCTFE	151	2.287	2.275	0.012	90	250667	20.0	21.9	
24 Acetone	43	2.310	2.298	0.012	100	169338	40.0	40.2	
25 Iodomethane	142	2.370	2.358	0.012	98	530219	20.0	19.7	
26 Carbon disulfide	76	2.429	2.417	0.012	99	892313	20.0	20.0	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	203463	20.0	20.2	
29 Methyl acetate	43	2.583	2.571	0.012	96	396110	40.0	39.5	
30 Methylene Chloride	84	2.654	2.642	0.012	84	308369	20.0	18.6	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	100	441997	200.0	218.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	1034581	200.0	202.1	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	95	345215	20.0	19.5	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	92	865638	20.0	19.9	
35 Hexane	86	3.127	3.115	0.012	89	91031	20.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	505328	20.0	19.7	
37 Vinyl acetate	43	3.293	3.281	0.012	97	543430	20.0	19.7	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	81	352905	20.0	19.4	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	69	89071	20.0	21.3	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	97	257396	40.0	35.1	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	180439	20.0	19.9	
49 Tetrahydrofuran	42	3.979	3.967	0.012	80	170596	40.0	39.6	
48 Chloroform	83	3.979	3.979	0.000	94	552954	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	487548	20.0	19.9	
51 Cyclohexane	56	4.192	4.180	0.012	84	445198	20.0	22.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	446475	20.0	20.2	
52 Carbon tetrachloride	117	4.275	4.275	0.000	89	462865	20.0	20.7	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	282518	500.0	540.9	
55 Benzene	78	4.440	4.440	0.000	94	1209746	20.0	19.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	393564	20.0	19.4	
58 n-Heptane	100	4.689	4.689	0.000	84	74044	20.0	20.4	
60 Trichloroethene	130	4.997	4.985	0.012	96	378293	20.0	19.3	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	481488	20.0	21.8	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	255306	20.0	19.5	
64 Dibromomethane	93	5.269	5.269	0.000	95	184521	20.0	19.3	
66 1,4-Dioxane	88	5.316	5.304	0.012	87	72492	400.0	417.9	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	388202	20.0	20.2	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	368563	40.0	39.6	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	467002	20.0	19.6	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	524791	40.0	40.2	
72 Toluene	91	6.097	6.097	0.000	98	1305035	20.0	19.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	435826	20.0	19.9	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	356343	20.0	20.8	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	251827	20.0	18.8	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	290477	20.0	20.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	428737	20.0	19.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	377295	40.0	39.7	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	303982	20.0	20.5	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	266234	20.0	18.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	848785	20.0	19.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	293218	20.0	19.8	
86 Ethylbenzene	106	7.470	7.469	0.001	97	454730	20.0	19.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	555344	20.0	19.6	
89 o-Xylene	106	7.943	7.943	0.000	96	518830	20.0	19.9	
88 Styrene	104	7.955	7.955	0.000	93	762818	20.0	20.1	
90 Bromoform	173	8.120	8.120	0.000	97	195621	20.0	19.5	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	1330791	20.0	19.9	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	79	314210	20.0	19.6	
95 Bromobenzene	156	8.570	8.570	0.000	88	347047	20.0	19.5	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	115557	20.0	18.8	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	94933	20.0	20.7	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	379016	20.0	20.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	323910	20.0	20.0	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	1065649	20.0	20.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	326743	20.0	19.2	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	948917	20.0	20.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	1056574	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.387	9.386	0.001	93	1240690	20.0	20.6	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	612308	20.0	19.1	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	1097800	20.0	20.8	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	632325	20.0	19.5	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	592436	20.0	19.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	851264	20.0	20.7	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	82195	20.0	20.4	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	366855	20.0	19.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	127737	20.0	20.1	
118 Naphthalene	128	11.753	11.753	0.000	96	1180957	20.0	21.2	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	357662	20.0	20.2	
S 129 Total BTEX	1				0		100.0	97.7	
S 128 Trihalomethanes, Total	1				0		80.0	80.0	
S 130 1,2-Dichloroethene, Total	96				0			38.9	
S 131 1,3-Dichloropropene, Total	75				0			39.5	
S 132 Xylenes, Total	106				0		40.0	39.4	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	16.00	Units: uL
VM50SS_STK_00086	Amount Added:	16.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	16.00	Units: uL
VMAROLISTDW_00376	Amount Added:	16.00	Units: uL

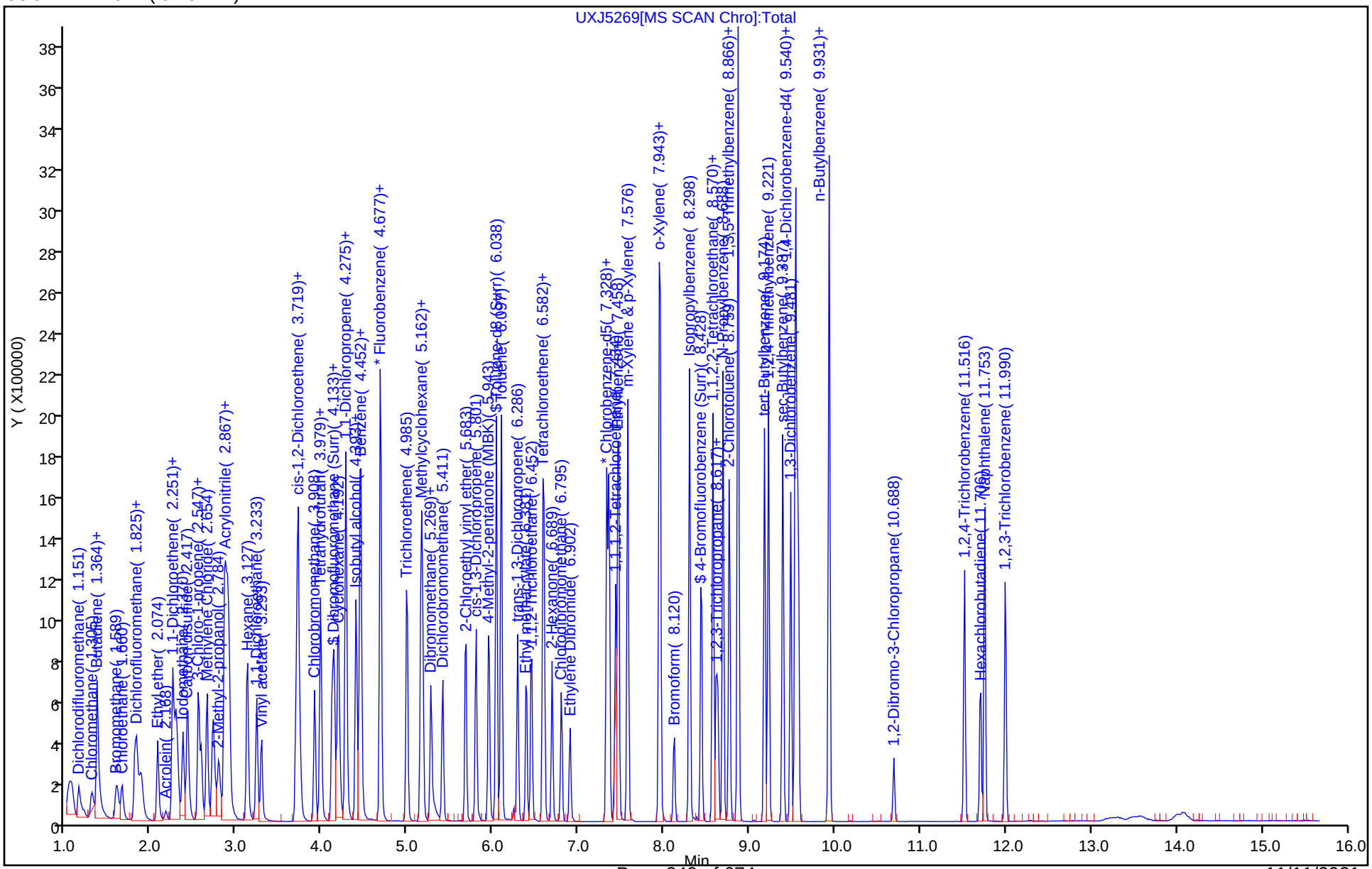
Report Date: 18-Jan-2021 09:24:33 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D

Injection Date:	15-Jan-2021 11:29:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 15-Jan-2021 11:51:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-004
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:18 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 09:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1164516	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	833065	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	399775	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	151229	10.0	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	169071	10.0	10.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	614578	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	210523	10.0	10.1	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	100	164460	10.0	10.7	
12 Chloromethane	50	1.293	1.293	0.000	100	129598	10.0	10.7	
13 Butadiene	54	1.352	1.352	0.000	97	133533	10.0	10.4	
14 Vinyl chloride	62	1.376	1.376	0.000	98	152409	10.0	10.5	
15 Bromomethane	94	1.589	1.589	0.000	91	109770	10.0	10.5	
16 Chloroethane	64	1.648	1.648	0.000	99	91798	10.0	10.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	218267	10.0	10.3	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	252670	10.0	10.2	
19 Ethyl ether	59	2.062	2.062	0.000	87	116451	10.0	10.6	
20 Acrolein	56	2.157	2.157	0.000	98	22968	50.0	54.0	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	147052	10.0	10.5	
23 112TCTFE	151	2.275	2.275	0.000	91	117673	10.0	11.0	
24 Acetone	43	2.298	2.298	0.000	100	87518	20.0	19.5	
25 Iodomethane	142	2.358	2.358	0.000	98	259758	10.0	10.4	
26 Carbon disulfide	76	2.417	2.417	0.000	99	445715	10.0	10.7	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	96370	10.0	10.3	
29 Methyl acetate	43	2.571	2.571	0.000	96	195357	20.0	21.0	
30 Methylene Chloride	84	2.642	2.642	0.000	84	152159	10.0	9.87	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	190467	100.0	101.3	
32 Acrylonitrile	53	2.855	2.855	0.000	98	507306	100.0	106.6	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	96	169059	10.0	10.3	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	442599	10.0	11.0	
35 Hexane	86	3.115	3.115	0.000	90	39610	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	97	254843	10.0	10.7	
37 Vinyl acetate	43	3.281	3.281	0.000	97	281858	10.0	11.0	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	177452	10.0	10.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	74	44411	10.0	11.4	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	141932	20.0	20.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	88584	10.0	10.5	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	83099	20.0	20.8	
48 Chloroform	83	3.979	3.979	0.000	94	272070	10.0	10.5	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	243120	10.0	10.7	
51 Cyclohexane	56	4.180	4.180	0.000	85	203020	10.0	10.8	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	229782	10.0	11.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	217609	10.0	10.6	
54 Isobutyl alcohol	41	4.393	4.393	0.000	91	140015	250.0	286.5	
55 Benzene	78	4.440	4.440	0.000	94	621645	10.0	10.7	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	201630	10.0	10.7	
58 n-Heptane	100	4.689	4.689	0.000	83	36044	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	188089	10.0	10.3	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	219959	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	130547	10.0	10.8	
64 Dibromomethane	93	5.269	5.269	0.000	92	94687	10.0	10.7	
66 1,4-Dioxane	88	5.304	5.304	0.000	85	32269	200.0	176.1	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	194130	10.0	10.9	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	192632	20.0	22.3	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	233030	10.0	10.5	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	275675	20.0	22.7	
72 Toluene	91	6.097	6.097	0.000	98	674102	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	216478	10.0	10.5	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	179245	10.0	11.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	134855	10.0	10.7	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	145597	10.0	10.8	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	229816	10.0	11.0	
78 2-Hexanone	43	6.689	6.689	0.000	92	197584	20.0	22.2	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	151446	10.0	10.9	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	145448	10.0	11.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	438529	10.0	10.6	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	150727	10.0	10.9	
86 Ethylbenzene	106	7.469	7.469	0.000	97	241366	10.0	11.1	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	293732	10.0	11.1	
89 o-Xylene	106	7.943	7.943	0.000	96	269611	10.0	11.0	
88 Styrene	104	7.955	7.955	0.000	92	387081	10.0	10.9	
90 Bromoform	173	8.120	8.120	0.000	97	94573	10.0	10.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	696938	10.0	11.2	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	168581	10.0	10.9	
95 Bromobenzene	156	8.570	8.570	0.000	87	184549	10.0	10.7	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	61360	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	49109	10.0	11.1	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	203203	10.0	11.1	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	167202	10.0	10.7	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	177509	10.0	10.8	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	555148	10.0	10.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	492162	10.0	10.9	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	555283	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	633082	10.0	10.9	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	329769	10.0	10.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	558841	10.0	11.0	
108 1,4-Dichlorobenzene	146	9.576	9.576	0.000	95	327781	10.0	10.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	433586	10.0	10.9	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	310374	10.0	10.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	42452	10.0	10.9	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	183760	10.0	10.3	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	66215	10.0	10.8	
118 Naphthalene	128	11.753	11.753	0.000	96	572904	10.0	10.6	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	176040	10.0	10.3	
S 129 Total BTEX	1				0		50.0	54.6	
S 128 Trihalomethanes, Total	1				0		40.0	42.6	
S 132 Xylenes, Total	106				0		20.0	22.1	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	8.00	Units: uL
VM50SS_STK_00086	Amount Added:	8.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	8.00	Units: uL
VMAROLISTDW_00376	Amount Added:	8.00	Units: uL

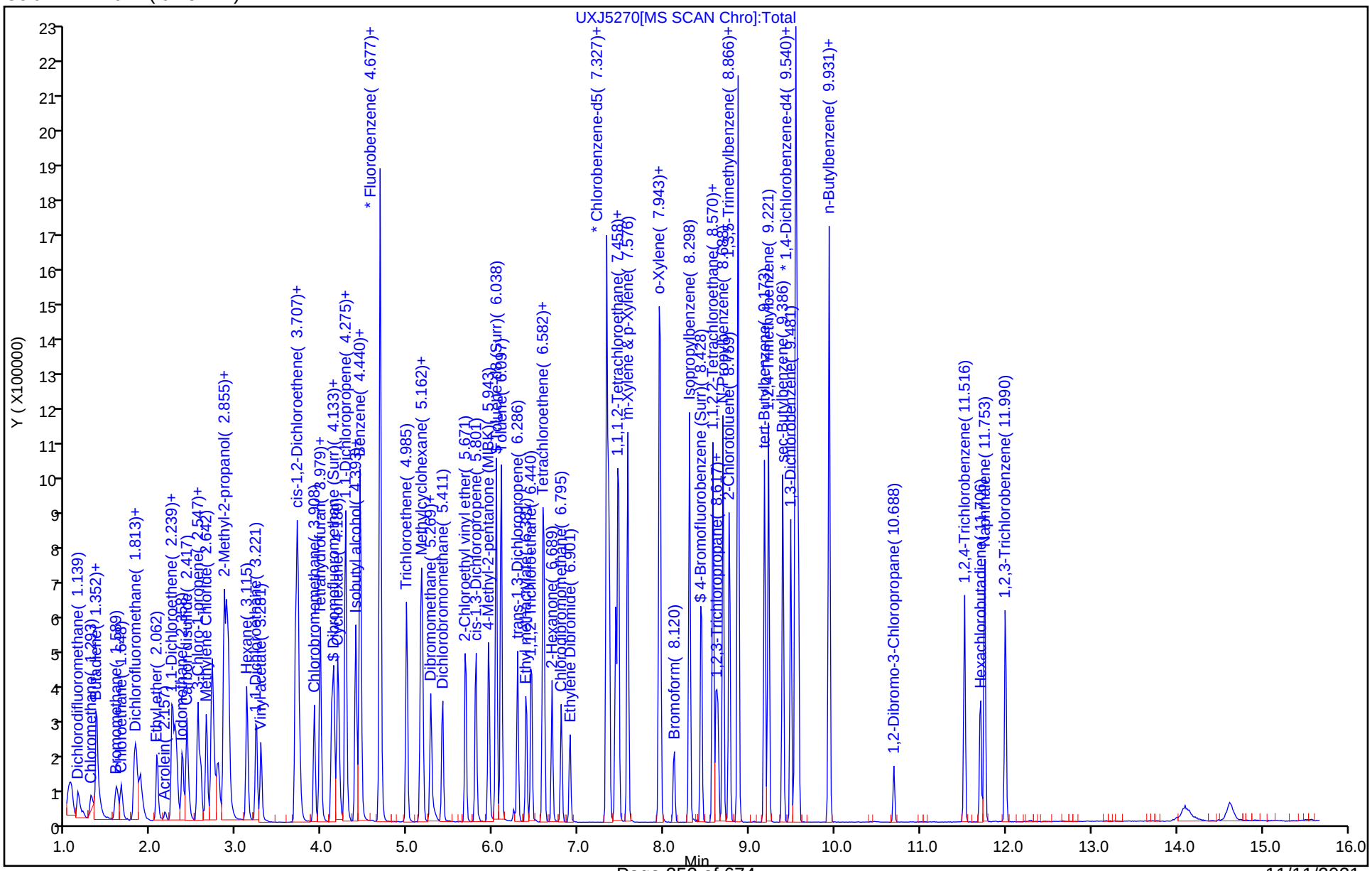
Report Date: 18-Jan-2021 09:24:18 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D

Injection Date:	15-Jan-2021 11:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jan-2021 12:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-005
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:38 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1222644	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	861537	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	406373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	75844	5.00	4.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	95	89035	5.00	5.04	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	302251	5.00	4.93	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	97	104195	5.00	4.85	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	98	80613	5.00	4.98	
12 Chloromethane	50	1.305	1.293	0.012	98	65579	5.00	5.15	
13 Butadiene	54	1.364	1.352	0.012	96	67351	5.00	5.02	
14 Vinyl chloride	62	1.387	1.376	0.011	98	76699	5.00	5.05	
15 Bromomethane	94	1.600	1.589	0.011	91	55501	5.00	5.08	
16 Chloroethane	64	1.660	1.648	0.012	99	45377	5.00	5.05	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	97	115827	5.00	5.20	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	98	126814	5.00	4.89	
19 Ethyl ether	59	2.074	2.062	0.012	87	63254	5.00	5.47	
20 Acrolein	56	2.168	2.157	0.012	94	10031	25.0	22.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	74855	5.00	5.11	
23 112TCTFE	151	2.287	2.275	0.012	91	55364	5.00	4.95	
24 Acetone	43	2.310	2.298	0.012	100	54384	10.0	10.3	
25 Iodomethane	142	2.370	2.358	0.012	98	138148	5.00	5.27	
26 Carbon disulfide	76	2.429	2.417	0.012	99	223442	5.00	5.12	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	84	51666	5.00	5.25	
29 Methyl acetate	43	2.583	2.571	0.012	95	100508	10.0	10.3	
30 Methylene Chloride	84	2.654	2.642	0.012	83	83987	5.00	5.19	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	95943	50.0	48.6	
32 Acrylonitrile	53	2.855	2.855	0.000	98	254760	50.0	51.0	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	92696	5.00	5.38	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	92	217115	5.00	5.12	
35 Hexane	86	3.127	3.115	0.012	88	19919	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	131033	5.00	5.24	
37 Vinyl acetate	43	3.293	3.281	0.012	97	136870	5.00	5.07	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	94152	5.00	5.30	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	70	22350	5.00	5.48	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	74913	10.0	10.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	81	48037	5.00	5.42	
49 Tetrahydrofuran	42	3.979	3.967	0.012	82	43094	10.0	10.3	
48 Chloroform	83	3.979	3.979	0.000	92	141913	5.00	5.22	
50 1,1,1-Trichloroethane	97	4.145	4.133	0.011	98	120621	5.00	5.06	
51 Cyclohexane	56	4.192	4.180	0.012	82	97556	5.00	4.93	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	111305	5.00	5.16	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	110470	5.00	5.05	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	71782	125.0	142.0	
55 Benzene	78	4.440	4.440	0.000	94	315227	5.00	5.17	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	107089	5.00	5.42	
58 n-Heptane	100	4.689	4.689	0.000	84	17935	5.00	5.07	
60 Trichloroethene	130	4.996	4.985	0.011	94	104678	5.00	5.48	
62 Methylcyclohexane	83	5.162	5.150	0.012	88	106284	5.00	4.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	64453	5.00	5.06	
64 Dibromomethane	93	5.269	5.269	0.000	94	47703	5.00	5.12	
66 1,4-Dioxane	88	5.316	5.304	0.012	86	21628	100.0	113.8	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	97830	5.00	5.22	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	91082	10.0	10.0	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	116575	5.00	5.02	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	131752	10.0	10.3	
72 Toluene	91	6.097	6.097	0.000	98	342544	5.00	5.24	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	112670	5.00	5.31	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	86162	5.00	5.19	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	88	68391	5.00	5.27	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	72821	5.00	5.23	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	89	109339	5.00	5.06	
78 2-Hexanone	43	6.689	6.689	0.001	91	96869	10.0	10.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	72196	5.00	5.04	
82 Ethylene Dibromide	107	6.902	6.901	0.001	100	71577	5.00	5.25	
84 Chlorobenzene	112	7.351	7.351	0.000	97	224201	5.00	5.24	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	73060	5.00	5.10	
86 Ethylbenzene	106	7.470	7.469	0.001	97	121583	5.00	5.43	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	142126	5.00	5.17	
89 o-Xylene	106	7.943	7.943	0.000	95	133865	5.00	5.29	
88 Styrene	104	7.955	7.955	0.000	94	190984	5.00	5.20	
90 Bromoform	173	8.120	8.120	0.000	96	43950	5.00	4.90	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	337134	5.00	5.22	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	80391	5.00	5.10	
95 Bromobenzene	156	8.570	8.570	0.000	88	92916	5.00	5.32	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	85	30569	5.00	5.05	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	82	23761	5.00	5.29	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	97641	5.00	5.25	
99 2-Chlorotoluene	126	8.759	8.759	0.000	96	81808	5.00	5.14	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	258368	5.00	5.01	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	87751	5.00	5.25	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	243838	5.00	5.30	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	264071	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	306253	5.00	5.19	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	161785	5.00	5.14	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	268571	5.00	5.19	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	168239	5.00	5.27	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	159450	5.00	5.31	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	209941	5.00	5.19	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	20694	5.00	5.23	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	95499	5.00	5.26	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	34437	5.00	5.51	
118 Naphthalene	128	11.753	11.753	0.000	96	291314	5.00	5.32	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	94	89613	5.00	5.14	
S 129 Total BTEX	1				0		25.0	26.3	
S 128 Trihalomethanes, Total	1				0		20.0	20.4	
S 130 1,2-Dichloroethene, Total	96				0			10.7	
S 131 1,3-Dichloropropene, Total	75				0			10.3	
S 132 Xylenes, Total	106				0		10.0	10.5	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	4.00	Units: uL
VM50SS_STK_00086	Amount Added:	4.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	4.00	Units: uL
VMAROLISTDW_00376	Amount Added:	4.00	Units: uL

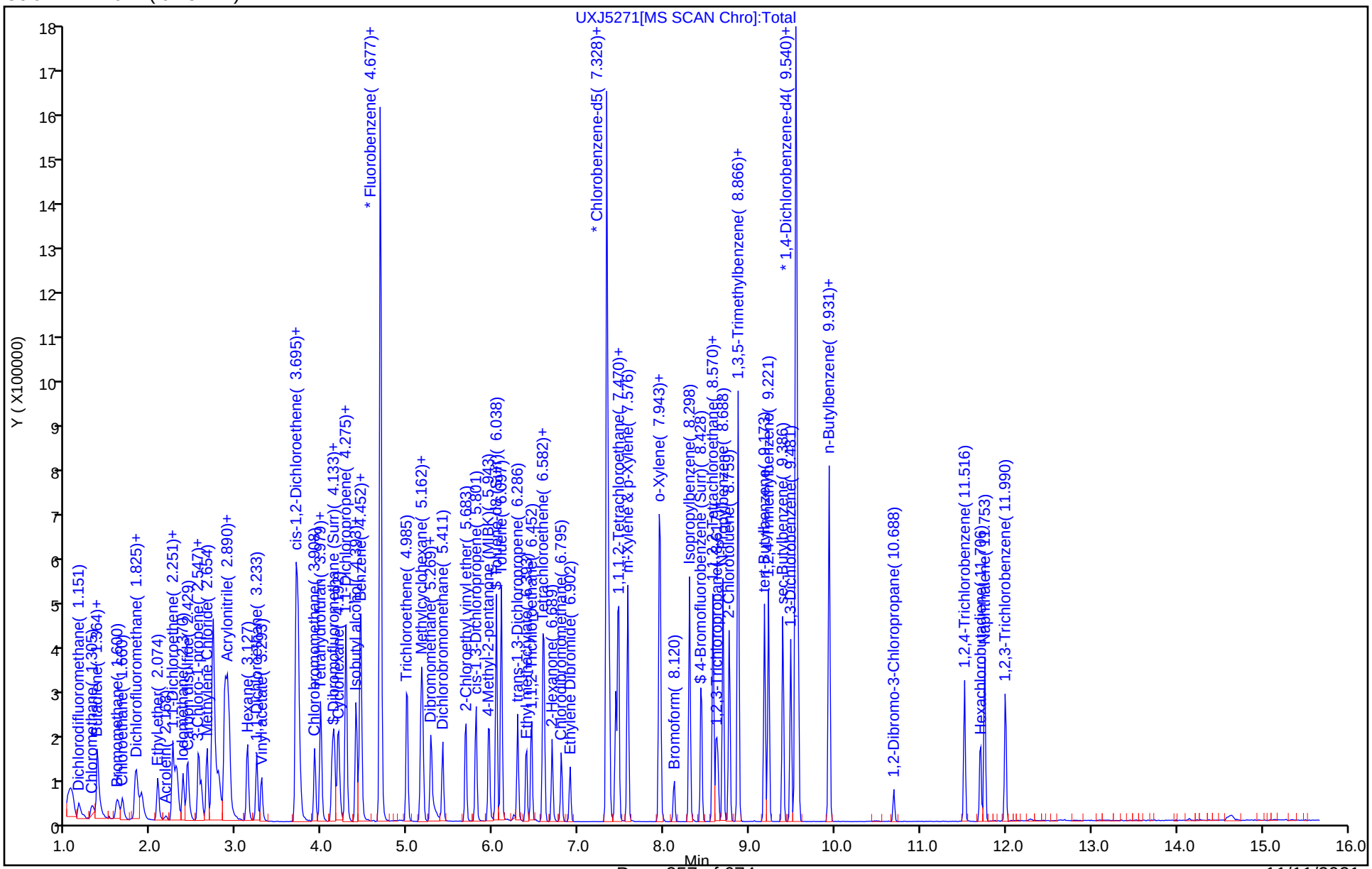
Report Date: 18-Jan-2021 09:24:39 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D

Injection Date:	15-Jan-2021 12:13:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jan-2021 12:36:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-006
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:45 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1194740	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	862909	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	402373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	31381	2.00	2.06	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	37647	2.00	2.18	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	91	127833	2.00	2.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	44939	2.00	2.09	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	31418	2.00	1.99	
12 Chloromethane	50	1.293	1.293	0.000	98	25355	2.00	2.04	
13 Butadiene	54	1.364	1.352	0.012	97	28511	2.00	2.17	
14 Vinyl chloride	62	1.375	1.376	-0.001	53	31125	2.00	2.10	
15 Bromomethane	94	1.588	1.589	-0.001	93	21942	2.00	2.05	
16 Chloroethane	64	1.648	1.648	0.000	99	17658	2.00	2.01	
17 Dichlorofluoromethane	67	1.801	1.802	-0.001	97	46164	2.00	2.12	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	51835	2.00	2.04	
19 Ethyl ether	59	2.074	2.062	0.012	88	20989	2.00	1.86	
20 Acrolein	56	2.168	2.157	0.012	92	3869	10.0	8.87	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	29147	2.00	2.03	
23 112TCTFE	151	2.287	2.275	0.012	91	20704	2.00	1.89	
24 Acetone	43	2.298	2.298	0.000	99	27191	4.00	4.25	
25 Iodomethane	142	2.369	2.358	0.011	97	49606	2.00	1.93	
26 Carbon disulfide	76	2.417	2.417	0.000	98	85053	2.00	1.99	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	88	18496	2.00	1.92	
29 Methyl acetate	43	2.582	2.571	0.011	95	37455	4.00	3.92	
30 Methylene Chloride	84	2.653	2.642	0.011	83	32083	2.00	2.03	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	40795	20.0	21.1	
32 Acrylonitrile	53	2.855	2.855	0.000	98	99328	20.0	20.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	33055	2.00	1.96	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	80293	2.00	1.94	
35 Hexane	86	3.127	3.115	0.012	91	7051	2.00	1.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	49476	2.00	2.02	
37 Vinyl acetate	43	3.281	3.281	0.000	96	49994	2.00	1.90	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	35504	2.00	2.05	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	7464	2.00	1.87	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	95	29417	4.00	4.21	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	16126	2.00	1.86	
49 Tetrahydrofuran	42	3.979	3.967	0.012	53	16287	4.00	3.97	
48 Chloroform	83	3.979	3.979	0.000	93	52653	2.00	1.98	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	46927	2.00	2.01	
51 Cyclohexane	56	4.180	4.180	0.000	80	36267	2.00	1.88	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	39708	2.00	1.88	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	40537	2.00	1.90	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	24642	50.0	48.7	
55 Benzene	78	4.440	4.440	0.000	94	119695	2.00	2.01	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	39572	2.00	2.05	
58 n-Heptane	100	4.689	4.689	0.000	71	6187	2.00	1.79	
60 Trichloroethene	130	4.985	4.985	0.000	94	36541	2.00	1.96	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	40688	2.00	1.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	25247	2.00	2.03	
64 Dibromomethane	93	5.269	5.269	-0.001	95	18262	2.00	2.01	
66 1,4-Dioxane	88	5.316	5.304	0.012	85	4800	40.0	36.6	
67 Dichlorobromomethane	83	5.411	5.411	-0.001	98	34149	2.00	1.86	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	36692	4.00	4.14	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	46722	2.00	2.06	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	50083	4.00	4.02	
72 Toluene	91	6.097	6.097	0.000	99	131172	2.00	2.00	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	43688	2.00	2.05	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	30851	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	26286	2.00	2.02	
76 Tetrachloroethene	164	6.582	6.582	0.000	95	27919	2.00	2.00	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	44615	2.00	2.06	
78 2-Hexanone	43	6.688	6.689	0.000	93	35938	4.00	3.90	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	27373	2.00	1.91	
82 Ethylene Dibromide	107	6.901	6.901	0.000	95	28263	2.00	2.07	
84 Chlorobenzene	112	7.351	7.351	0.000	97	85638	2.00	2.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	27733	2.00	1.93	
86 Ethylbenzene	106	7.469	7.469	0.000	97	41926	2.00	1.87	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	55016	2.00	2.00	
89 o-Xylene	106	7.943	7.943	0.000	96	48945	2.00	1.93	
88 Styrene	104	7.955	7.955	0.000	94	70977	2.00	1.93	
90 Bromoform	173	8.120	8.120	0.000	94	14539	2.00	1.95	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	127385	2.00	1.97	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	32478	2.00	2.08	
95 Bromobenzene	156	8.570	8.570	0.000	91	33533	2.00	1.94	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	85	13381	2.00	2.23	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	84	7477	2.00	1.68	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	33926	2.00	1.84	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	32406	2.00	2.06	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	97641	2.00	1.91	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	32785	2.00	1.98	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	89236	2.00	1.96	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	101857	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	115205	2.00	1.97	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	65846	2.00	2.11	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	100055	2.00	1.95	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	94	63431	2.00	2.01	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	62822	2.00	2.11	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	78313	2.00	1.96	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	8071	2.00	2.06	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	37983	2.00	2.11	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	94	13398	2.00	2.16	
118 Naphthalene	128	11.753	11.753	0.000	96	108820	2.00	2.01	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	37847	2.00	2.19	
S 129 Total BTEX	1				0		10.0	9.81	
S 128 Trihalomethanes, Total	1				0		8.00	7.70	
S 130 1,2-Dichloroethene, Total	96				0			4.01	
S 131 1,3-Dichloropropene, Total	75				0			4.12	
S 132 Xylenes, Total	106				0		4.00	3.93	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	1.60	Units: uL
VM50SS_STK_00086	Amount Added:	1.60	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	1.60	Units: uL
VMAROLISTDW_00376	Amount Added:	1.60	Units: uL

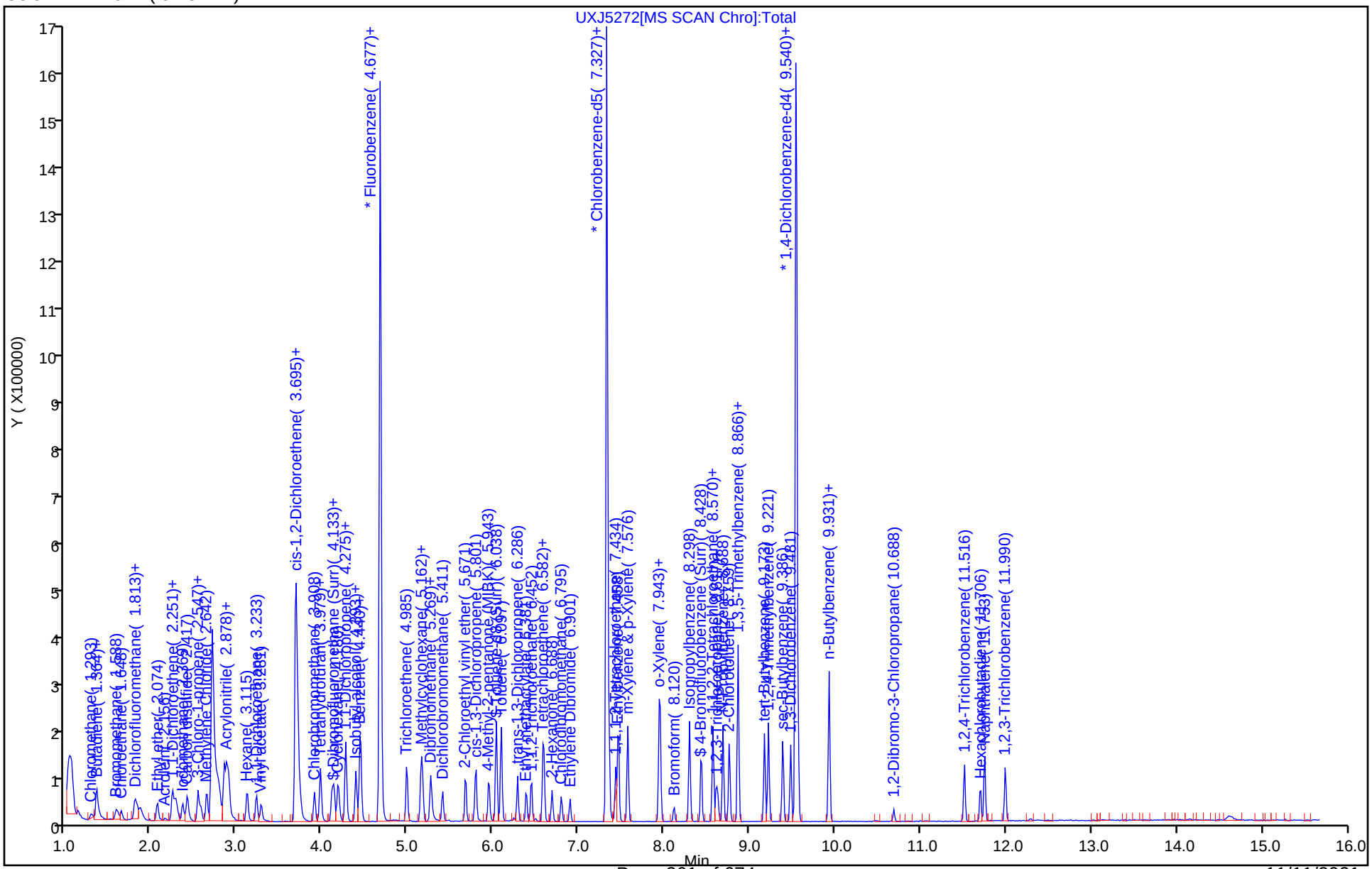
Report Date: 18-Jan-2021 09:24:45 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D

Injection Date:	15-Jan-2021 12:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jan-2021 12:58:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-007
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:50 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:48:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1237666	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	83	905264	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	93	420817	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	98	17076	1.00	1.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	19989	1.00	1.12	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	70570	1.00	1.10	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	27622	1.00	1.22	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	96	15545	1.00	0.9490	
12 Chloromethane	50	1.305	1.293	0.012	95	14340	1.00	1.11	
13 Butadiene	54	1.364	1.352	0.012	91	13521	1.00	1.00	
14 Vinyl chloride	62	1.376	1.376	0.000	59	15264	1.00	0.99	
15 Bromomethane	94	1.612	1.589	0.023	88	11910	1.00	1.08	
16 Chloroethane	64	1.660	1.648	0.012	97	9885	1.00	1.09	
17 Dichlorofluoromethane	67	1.825	1.802	0.023	95	24102	1.00	1.07	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	87	27428	1.00	1.04	M
19 Ethyl ether	59	2.074	2.062	0.012	85	11151	1.00	0.9528	
20 Acrolein	56	2.180	2.157	0.024	88	2788	5.00	6.17	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	14457	1.00	0.9741	
23 112TCTFE	151	2.287	2.275	0.012	83	9322	1.00	0.8234	
24 Acetone	43	2.310	2.298	0.012	97	16505	2.00	1.70	
25 Iodomethane	142	2.370	2.358	0.012	98	26756	1.00	1.01	
26 Carbon disulfide	76	2.429	2.417	0.012	98	42851	1.00	0.9700	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	83	9657	1.00	0.9701	
29 Methyl acetate	43	2.583	2.571	0.012	96	20775	2.00	2.10	
30 Methylene Chloride	84	2.654	2.642	0.012	87	18990	1.00	1.16	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	17313	10.0	8.66	
32 Acrylonitrile	53	2.855	2.855	0.000	98	49387	10.0	9.77	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	93	17888	1.00	1.03	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	94	42075	1.00	0.9796	
35 Hexane	86	3.127	3.115	0.012	91	3359	1.00	0.8403	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	97	23786	1.00	0.9391	
37 Vinyl acetate	43	3.292	3.281	0.011	98	27137	1.00	0.99	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	17946	1.00	1.00	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	64	3204	1.00	0.7765	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	17238	2.00	2.38	
46 Chlorobromomethane	128	3.920	3.908	0.012	80	9438	1.00	1.05	
49 Tetrahydrofuran	42	3.979	3.967	0.012	55	9114	2.00	2.14	
48 Chloroform	83	3.979	3.979	0.000	91	27629	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.144	4.133	0.011	96	23130	1.00	0.9577	
51 Cyclohexane	56	4.192	4.180	0.012	85	17507	1.00	0.8740	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	22199	1.00	1.02	
52 Carbon tetrachloride	117	4.286	4.275	0.011	82	19888	1.00	0.8989	
54 Isobutyl alcohol	41	4.405	4.393	0.012	57	11230	25.0	21.1	
55 Benzene	78	4.440	4.440	0.000	96	59923	1.00	0.9709	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	18563	1.00	0.9278	
58 n-Heptane	100	4.689	4.689	0.000	37	3391	1.00	0.9465	
60 Trichloroethene	130	4.996	4.985	0.011	96	19843	1.00	1.03	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	18159	1.00	0.8320	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	93	12909	1.00	1.00	
64 Dibromomethane	93	5.269	5.269	0.000	57	9846	1.00	1.04	
66 1,4-Dioxane	88	5.304	5.304	0.000	8	1561	20.0	22.0	
67 Dichlorobromomethane	83	5.411	5.411	0.000	98	18093	1.00	0.9531	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	17224	2.00	1.87	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	95	23129	1.00	0.9848	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	23297	2.00	1.81	
72 Toluene	91	6.097	6.097	0.000	98	66435	1.00	0.9665	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	20141	1.00	0.9030	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	14716	1.00	0.8430	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	85	13706	1.00	1.01	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	13324	1.00	0.9105	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	21737	1.00	0.9574	
78 2-Hexanone	43	6.689	6.689	0.001	92	17457	2.00	1.81	
80 Chlorodibromomethane	129	6.795	6.795	0.000	87	13496	1.00	0.8958	
82 Ethylene Dibromide	107	6.902	6.901	0.001	94	13541	1.00	0.9453	
84 Chlorobenzene	112	7.363	7.351	0.012	97	44721	1.00	1.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	87	14675	1.00	0.9744	
86 Ethylbenzene	106	7.470	7.469	0.001	97	21634	1.00	0.9191	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	26859	1.00	0.9307	
89 o-Xylene	106	7.943	7.943	0.000	95	24523	1.00	0.9230	
88 Styrene	104	7.955	7.955	0.000	91	34628	1.00	0.8971	
90 Bromoform	173	8.120	8.120	0.000	90	5716	1.00	1.03	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	59446	1.00	0.8756	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	76	15088	1.00	0.9236	
95 Bromobenzene	156	8.570	8.570	0.000	89	17745	1.00	0.9803	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	79	6451	1.00	1.03	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	4369	1.00	0.9387	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	18175	1.00	0.9433	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	15591	1.00	0.9454	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	86	51470	1.00	0.9629	
101 4-Chlorotoluene	126	8.866	8.866	0.000	97	17614	1.00	1.02	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	42578	1.00	0.8935	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	94	45937	1.00	0.8688	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	52784	1.00	0.8630	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	96	32844	1.00	1.01	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	95	46211	1.00	0.8630	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	93	34274	1.00	1.04	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	30265	1.00	0.9727	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	37590	1.00	0.8977	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	3654	1.00	0.8923	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	91	19216	1.00	1.02	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	88	6361	1.00	0.9820	
118 Naphthalene	128	11.753	11.753	0.000	96	52184	1.00	0.9209	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	18312	1.00	1.01	
S 129 Total BTEX	1				0		5.00	4.71	
S 128 Trihalomethanes, Total	1				0		4.00	3.89	
S 130 1,2-Dichloroethene, Total	96				0			2.02	
S 131 1,3-Dichloropropene, Total	75				0			1.89	
S 132 Xylenes, Total	106				0		2.00	1.85	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

VMRGAS_00369	Amount Added:	0.80	Units: uL
VM50SS_STK_00086	Amount Added:	0.80	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	0.80	Units: uL
VMAROLISTDW_00376	Amount Added:	0.80	Units: uL

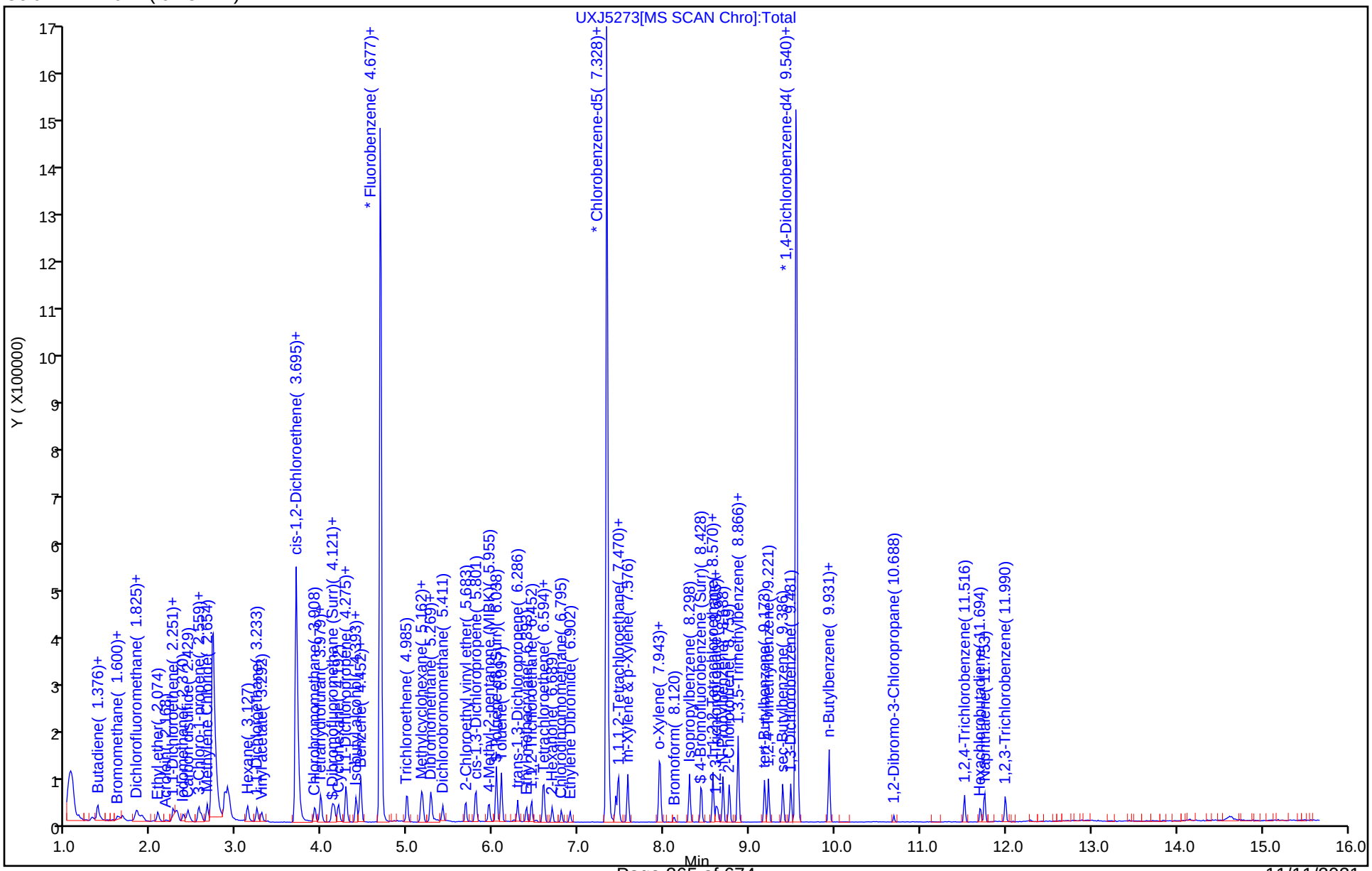
Report Date: 18-Jan-2021 09:24:51 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D

Injection Date:	15-Jan-2021 12:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

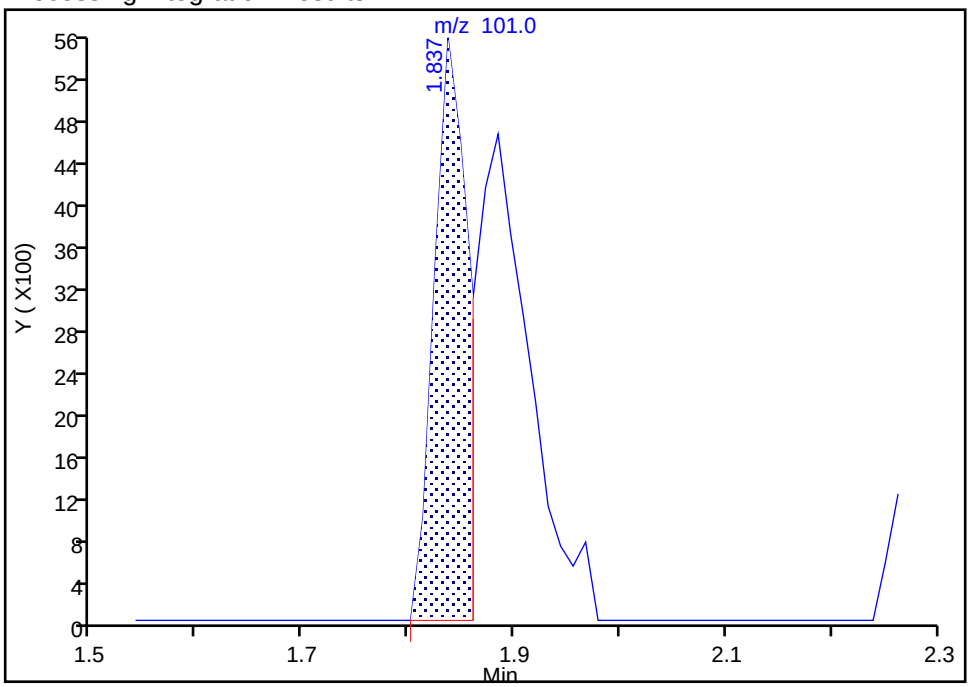
Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Injection Date: 15-Jan-2021 12:58:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 043582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

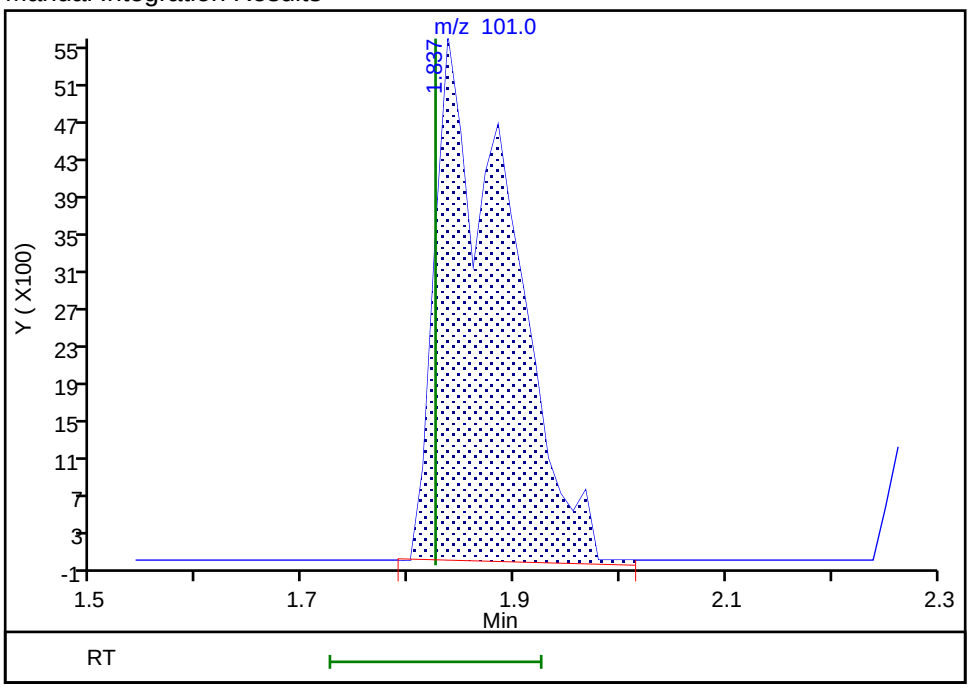
Processing Integration Results

RT: 1.84
Area: 12554
Amount: 0.752513
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 27428
Amount: 1.043907
Amount Units: ug/l



Reviewer: evansle, 18-Jan-2021 08:47:53
Audit Action: Manually Integrated Audit Reason: Split Peak

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

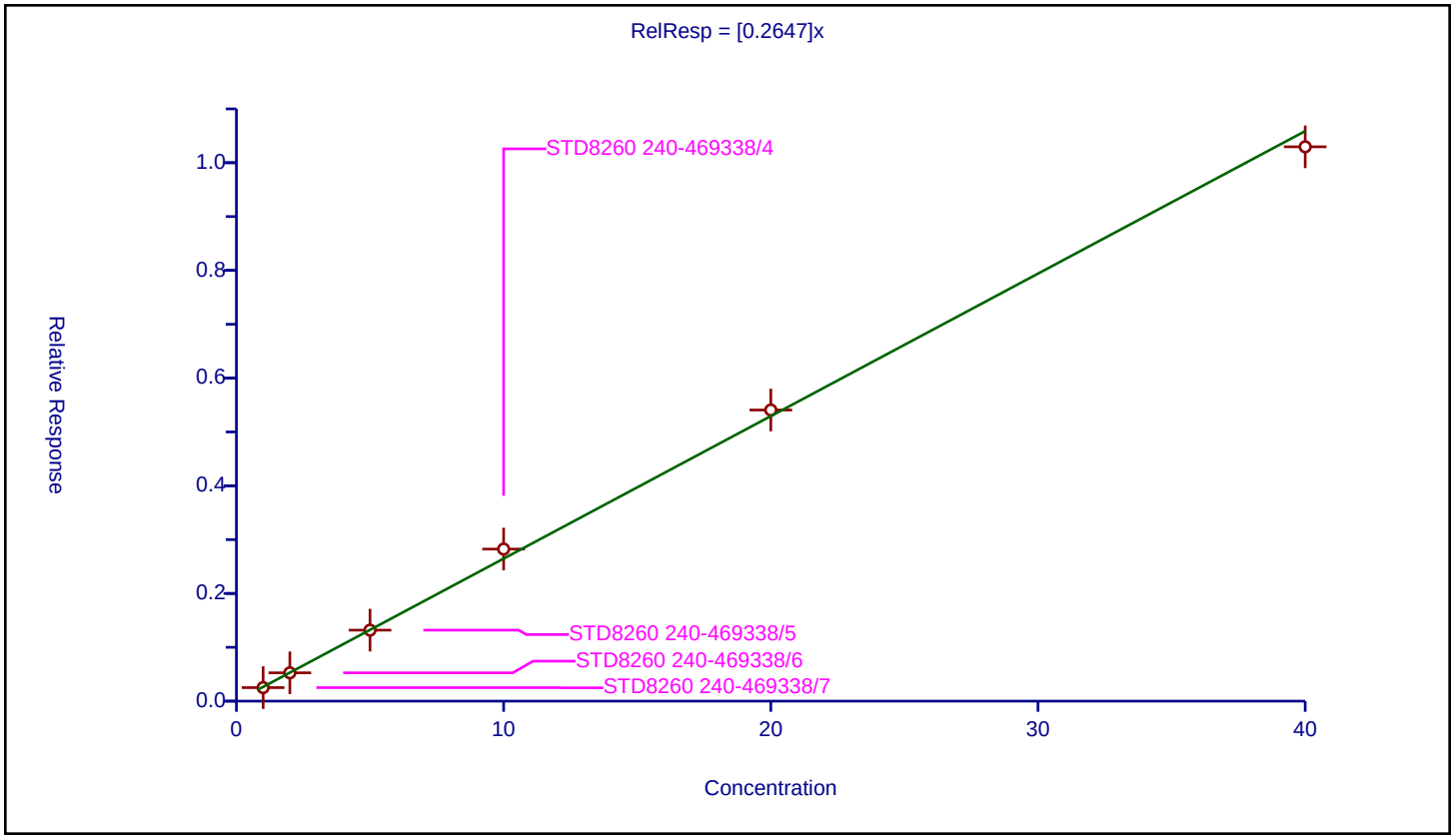
Curve Coefficients

Intercept:	0
Slope:	0.2647

Error Coefficients

Standard Error:	366000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.251199	20.0	1237666.0	0.251199	Y
2	STD8260 240-469338/6	2.0	0.525939	20.0	1194740.0	0.262969	Y
3	STD8260 240-469338/5	5.0	1.318667	20.0	1222644.0	0.263733	Y
4	STD8260 240-469338/4	10.0	2.824521	20.0	1164516.0	0.282452	Y
5	STD8260 240-469338/3	20.0	5.407258	20.0	1252890.0	0.270363	Y
6	STD8260 240-469338/2	40.0	10.29625	20.0	1401011.0	0.257406	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

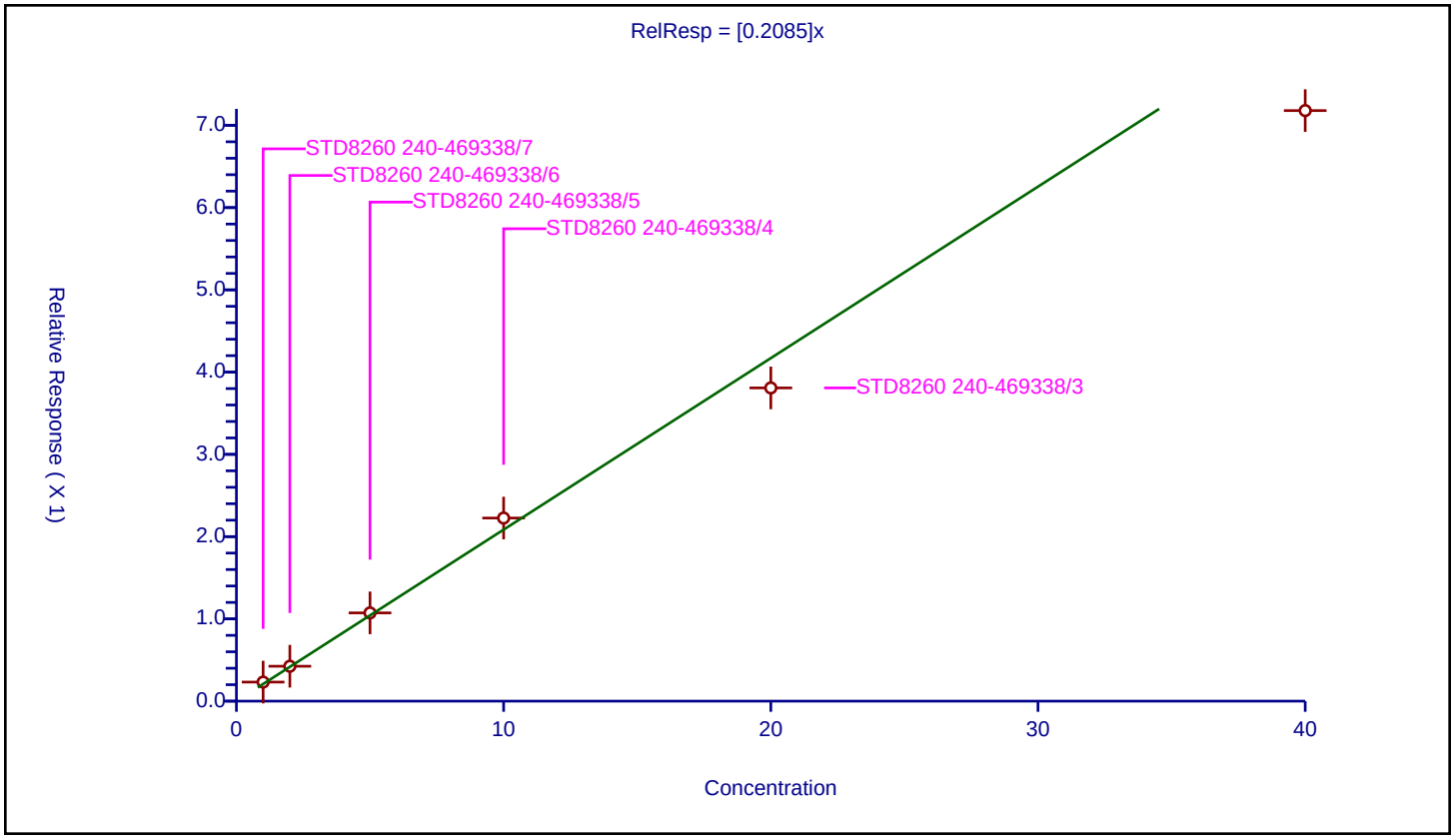
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	258000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.231726	20.0	1237666.0	0.231726	Y
2	STD8260 240-469338/6	2.0	0.424444	20.0	1194740.0	0.212222	Y
3	STD8260 240-469338/5	5.0	1.072741	20.0	1222644.0	0.214548	Y
4	STD8260 240-469338/4	10.0	2.225783	20.0	1164516.0	0.222578	Y
5	STD8260 240-469338/3	20.0	3.807804	20.0	1252890.0	0.19039	Y
6	STD8260 240-469338/2	40.0	7.179158	20.0	1401011.0	0.179479	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

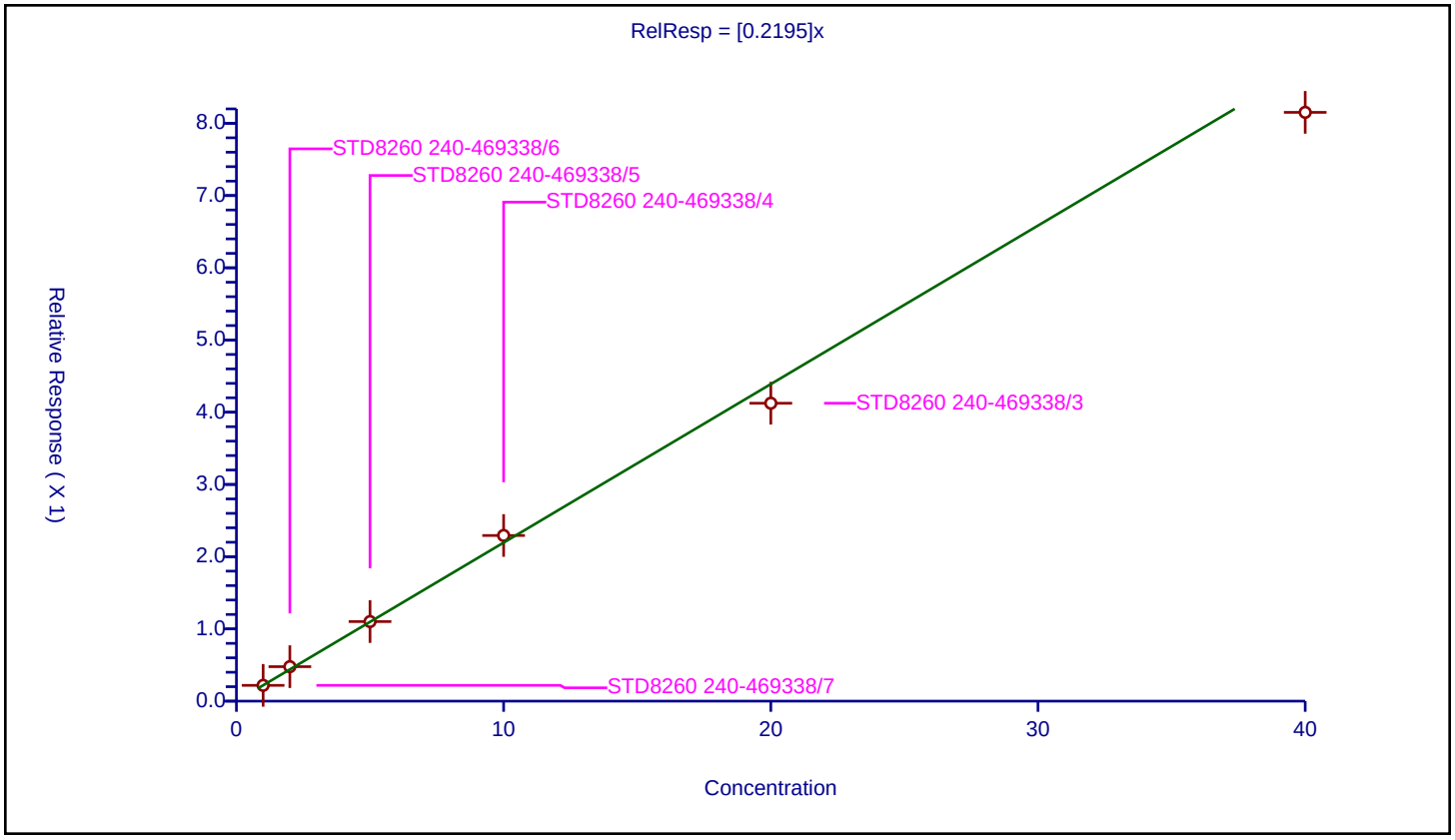
Curve Coefficients

Intercept:	0
Slope:	0.2195

Error Coefficients

Standard Error:	289000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.218492	20.0	1237666.0	0.218492	Y
2	STD8260 240-469338/6	2.0	0.477275	20.0	1194740.0	0.238638	Y
3	STD8260 240-469338/5	5.0	1.101727	20.0	1222644.0	0.220345	Y
4	STD8260 240-469338/4	10.0	2.293365	20.0	1164516.0	0.229336	Y
5	STD8260 240-469338/3	20.0	4.124895	20.0	1252890.0	0.206245	Y
6	STD8260 240-469338/2	40.0	8.152142	20.0	1401011.0	0.203804	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

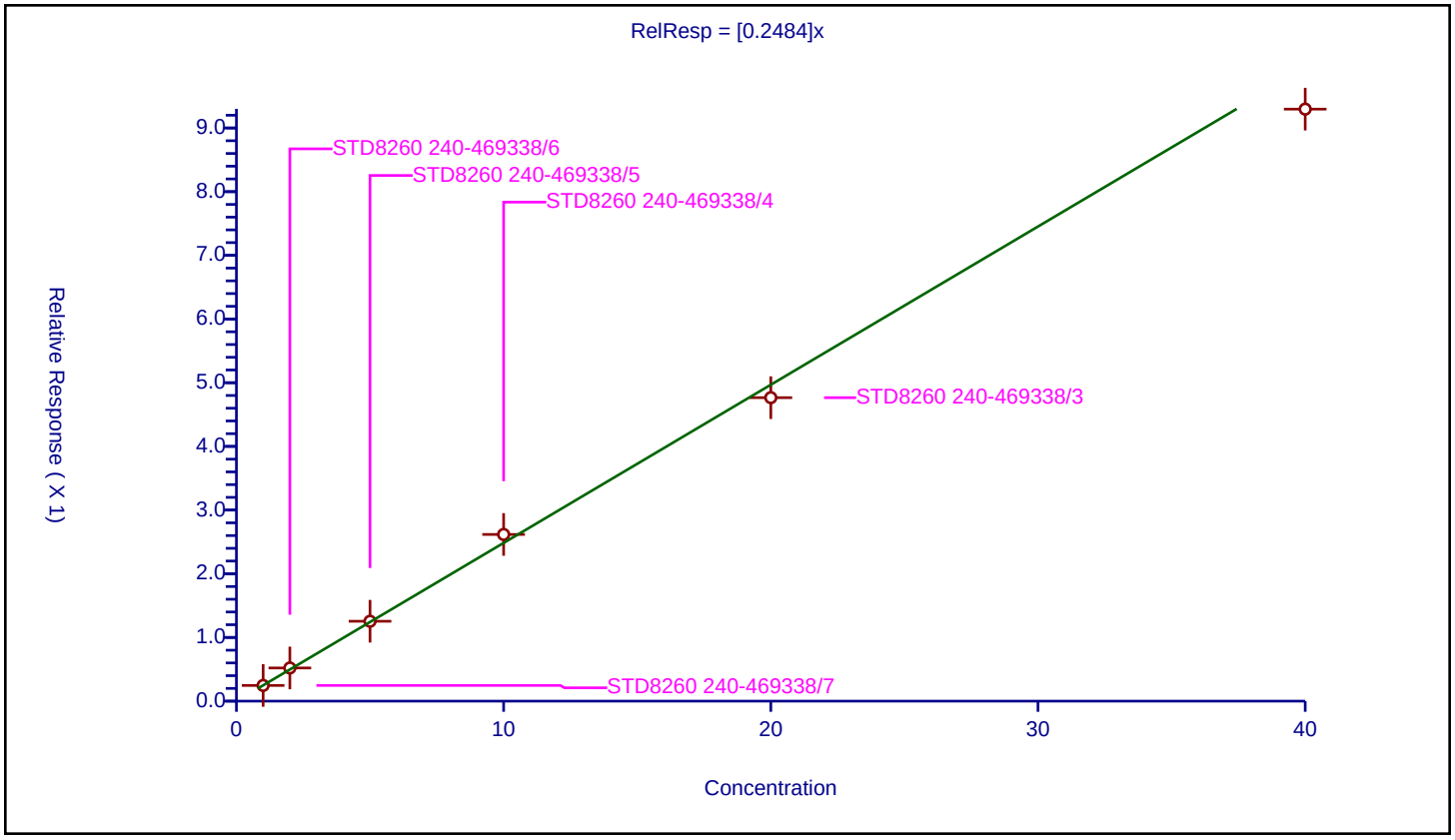
Curve Coefficients

Intercept:	0
Slope:	0.2484

Error Coefficients

Standard Error:	330000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.246658	20.0	1237666.0	0.246658	Y
2	STD8260 240-469338/6	2.0	0.521034	20.0	1194740.0	0.260517	Y
3	STD8260 240-469338/5	5.0	1.254642	20.0	1222644.0	0.250928	Y
4	STD8260 240-469338/4	10.0	2.617551	20.0	1164516.0	0.261755	Y
5	STD8260 240-469338/3	20.0	4.765686	20.0	1252890.0	0.238284	Y
6	STD8260 240-469338/2	40.0	9.296415	20.0	1401011.0	0.23241	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

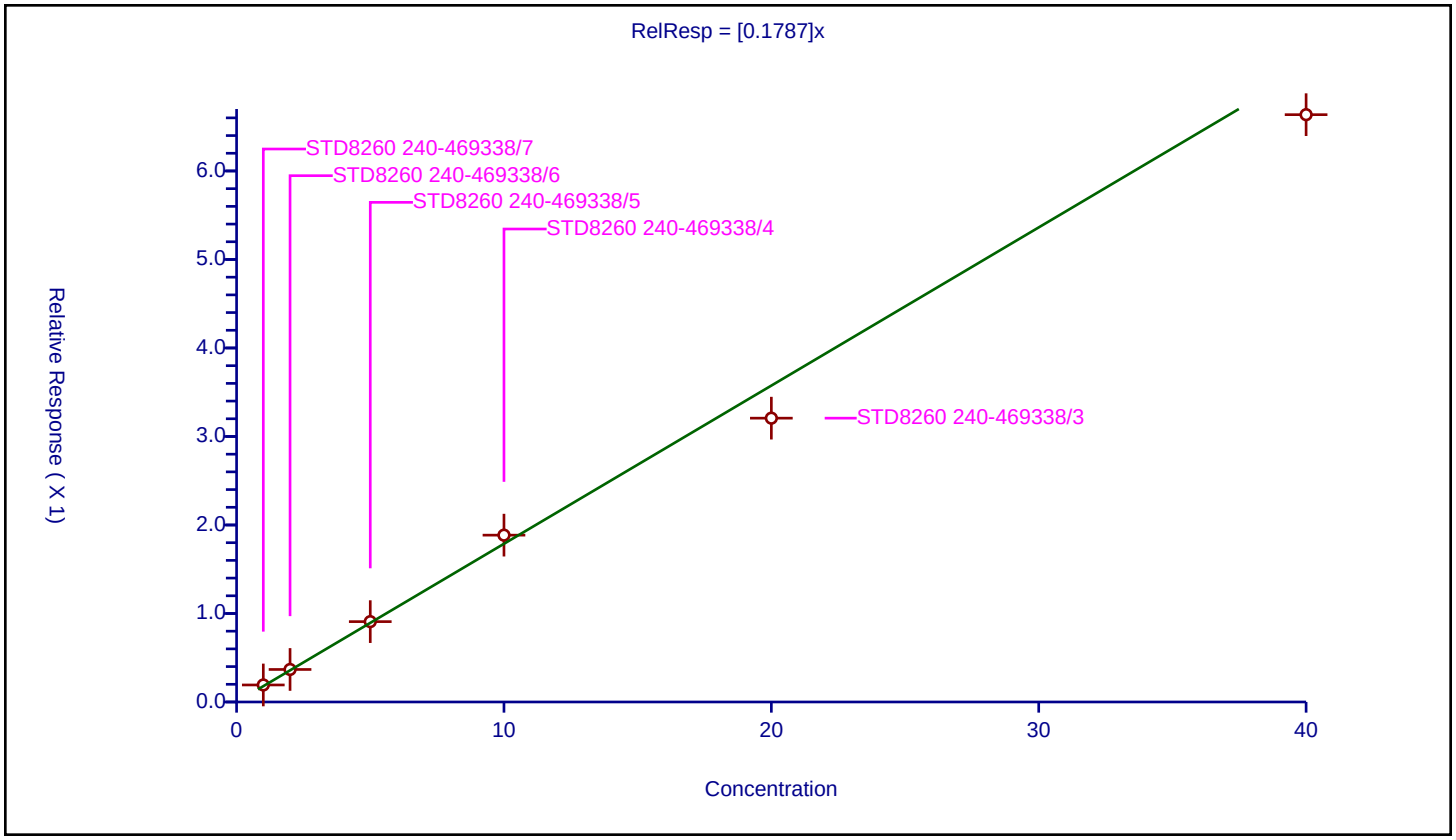
Curve Coefficients

Intercept:	0
Slope:	0.1787

Error Coefficients

Standard Error:	233000
Relative Standard Error:	7.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.192459	20.0	1237666.0	0.192459	Y
2	STD8260 240-469338/6	2.0	0.36731	20.0	1194740.0	0.183655	Y
3	STD8260 240-469338/5	5.0	0.907885	20.0	1222644.0	0.181577	Y
4	STD8260 240-469338/4	10.0	1.885247	20.0	1164516.0	0.188525	Y
5	STD8260 240-469338/3	20.0	3.206969	20.0	1252890.0	0.160348	Y
6	STD8260 240-469338/2	40.0	6.636193	20.0	1401011.0	0.165905	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

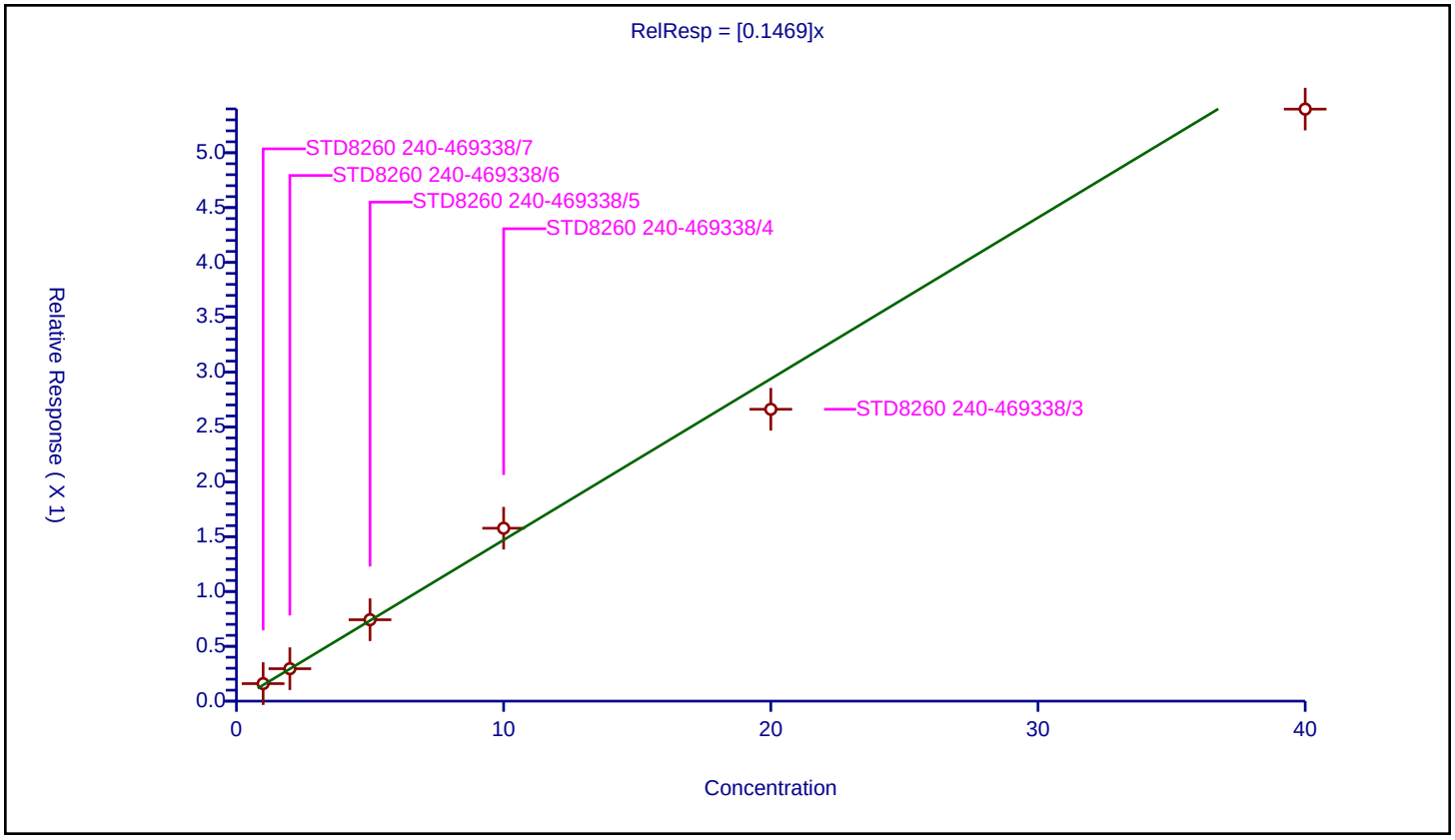
Curve Coefficients

Intercept:	0
Slope:	0.1469

Error Coefficients

Standard Error:	191000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159736	20.0	1237666.0	0.159736	Y
2	STD8260 240-469338/6	2.0	0.295596	20.0	1194740.0	0.147798	Y
3	STD8260 240-469338/5	5.0	0.742277	20.0	1222644.0	0.148455	Y
4	STD8260 240-469338/4	10.0	1.576586	20.0	1164516.0	0.157659	Y
5	STD8260 240-469338/3	20.0	2.661319	20.0	1252890.0	0.133066	Y
6	STD8260 240-469338/2	40.0	5.398073	20.0	1401011.0	0.134952	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

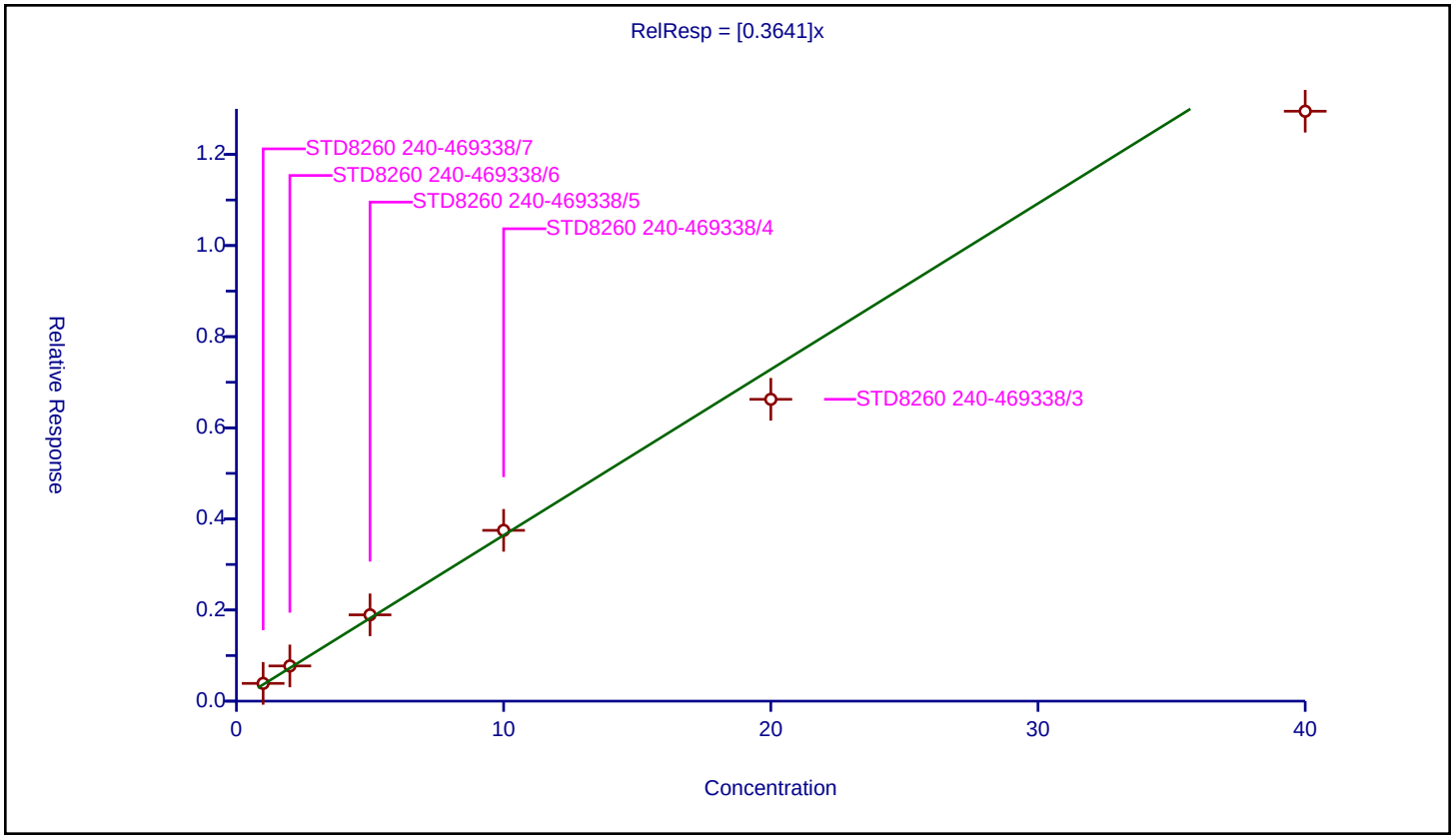
Curve Coefficients

Intercept:	0
Slope:	0.3641

Error Coefficients

Standard Error:	460000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.389475	20.0	1237666.0	0.389475	Y
2	STD8260 240-469338/6	2.0	0.772787	20.0	1194740.0	0.386394	Y
3	STD8260 240-469338/5	5.0	1.894697	20.0	1222644.0	0.378939	Y
4	STD8260 240-469338/4	10.0	3.74863	20.0	1164516.0	0.374863	Y
5	STD8260 240-469338/3	20.0	6.625099	20.0	1252890.0	0.331255	Y
6	STD8260 240-469338/2	40.0	12.949177	20.0	1401011.0	0.323729	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

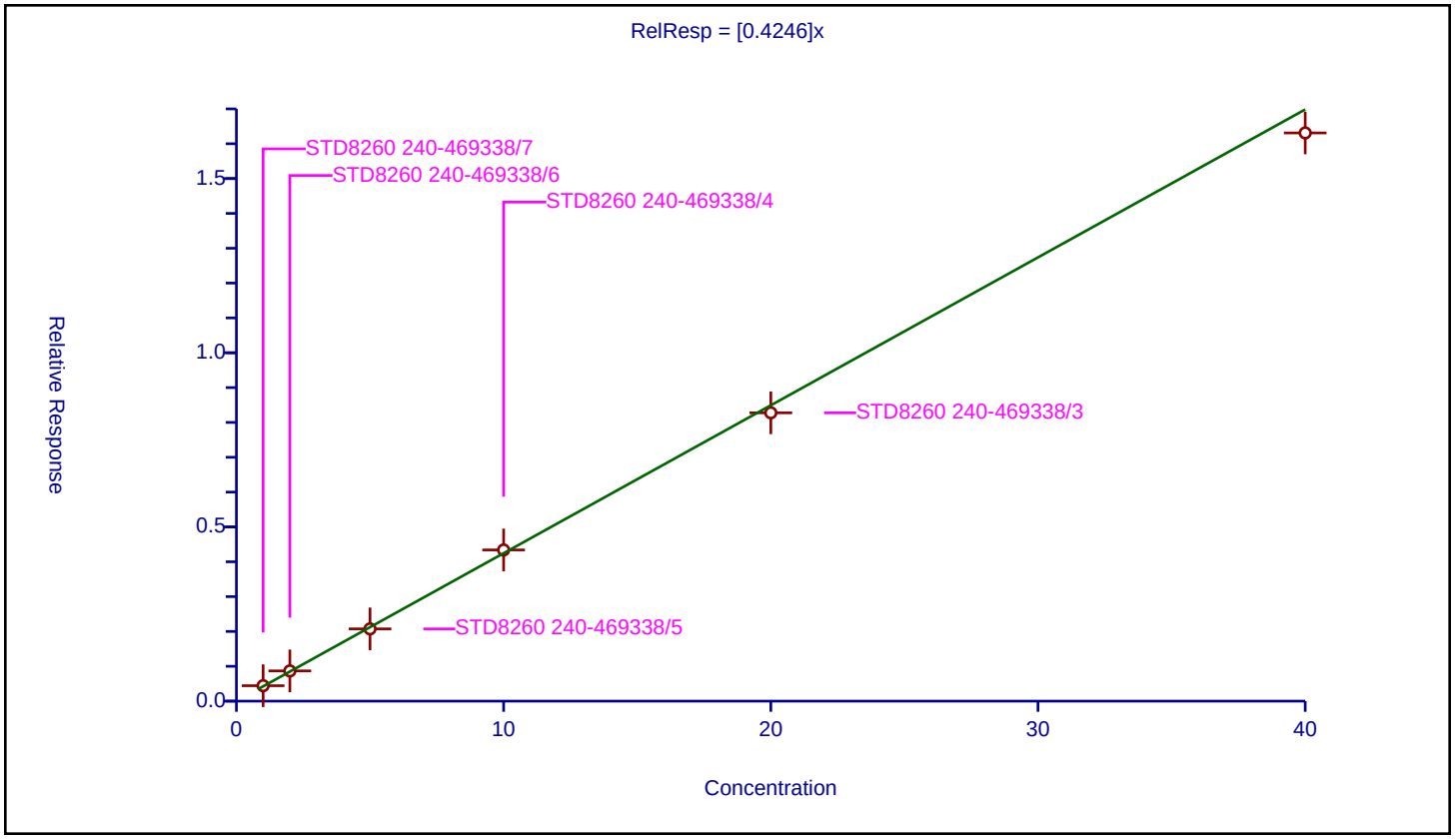
Curve Coefficients

Intercept:	0
Slope:	0.4246

Error Coefficients

Standard Error:	576000
Relative Standard Error:	3.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.443221	20.0	1237666.0	0.443221	Y
2	STD8260 240-469338/6	2.0	0.86772	20.0	1194740.0	0.43386	Y
3	STD8260 240-469338/5	5.0	2.074422	20.0	1222644.0	0.414884	Y
4	STD8260 240-469338/4	10.0	4.339485	20.0	1164516.0	0.433949	Y
5	STD8260 240-469338/3	20.0	8.276497	20.0	1252890.0	0.413825	Y
6	STD8260 240-469338/2	40.0	16.309494	20.0	1401011.0	0.407737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

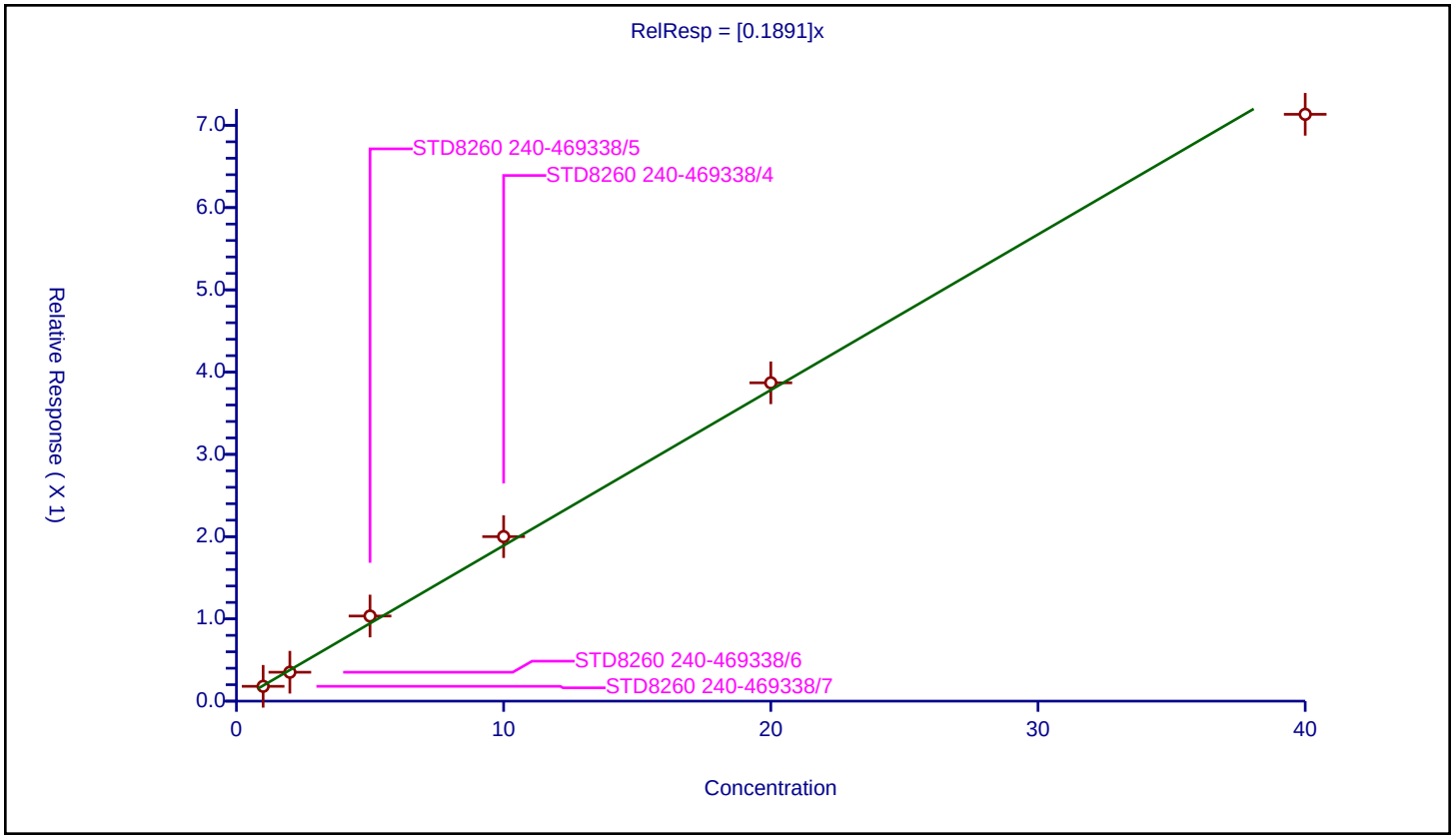
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	256000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.180194	20.0	1237666.0	0.180194	Y
2	STD8260 240-469338/6	2.0	0.351357	20.0	1194740.0	0.175678	Y
3	STD8260 240-469338/5	5.0	1.034708	20.0	1222644.0	0.206942	Y
4	STD8260 240-469338/4	10.0	1.99999	20.0	1164516.0	0.199999	Y
5	STD8260 240-469338/3	20.0	3.870284	20.0	1252890.0	0.193514	Y
6	STD8260 240-469338/2	40.0	7.134148	20.0	1401011.0	0.178354	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

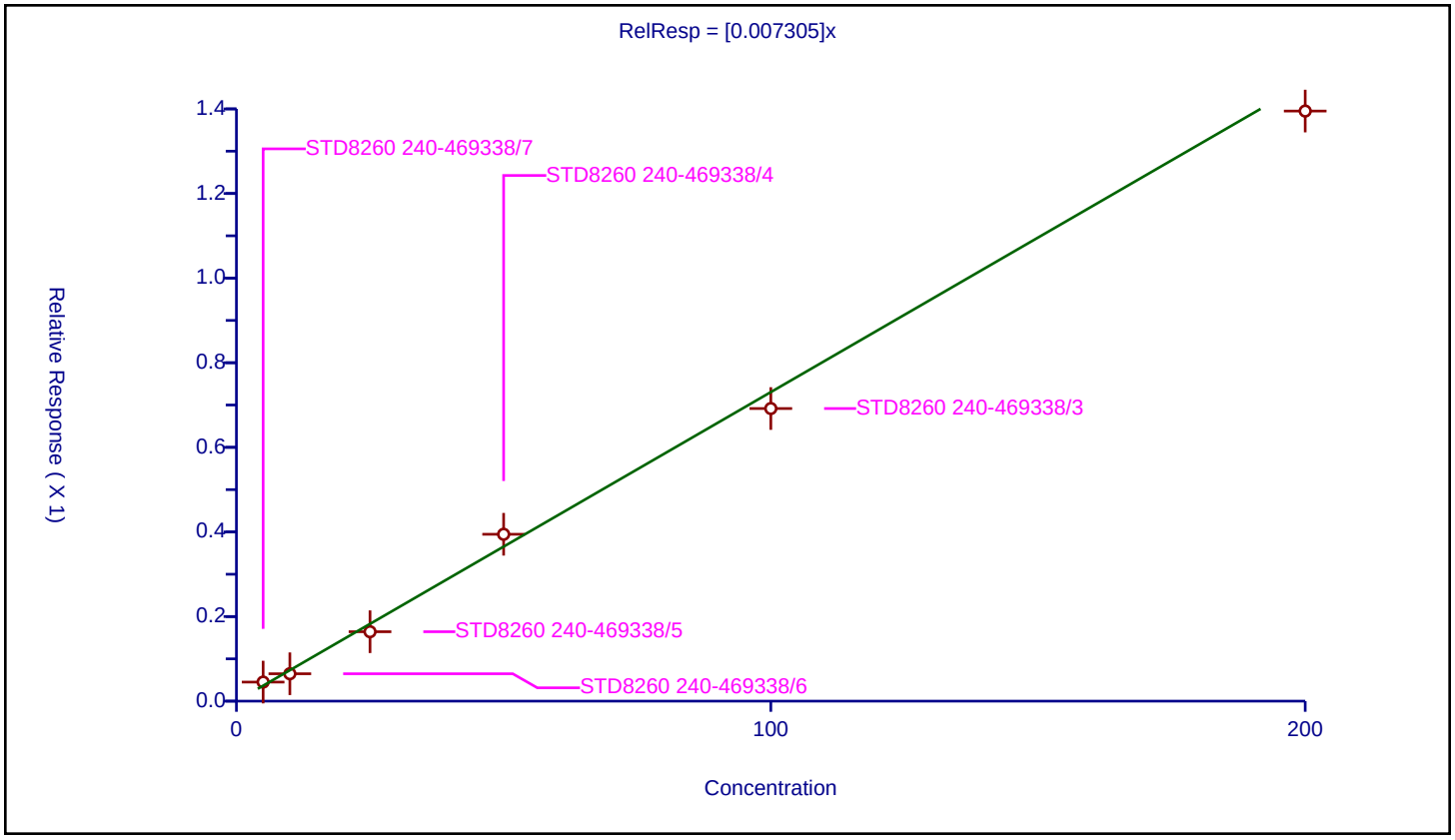
Curve Coefficients

Intercept:	0
Slope:	0.007305

Error Coefficients

Standard Error:	49100
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	5.0	0.045053	20.0	1237666.0	0.009011	Y
2	STD8260 240-469338/6	10.0	0.064767	20.0	1194740.0	0.006477	Y
3	STD8260 240-469338/5	25.0	0.164087	20.0	1222644.0	0.006563	Y
4	STD8260 240-469338/4	50.0	0.394464	20.0	1164516.0	0.007889	Y
5	STD8260 240-469338/3	100.0	0.691697	20.0	1252890.0	0.006917	Y
6	STD8260 240-469338/2	200.0	1.394878	20.0	1401011.0	0.006974	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

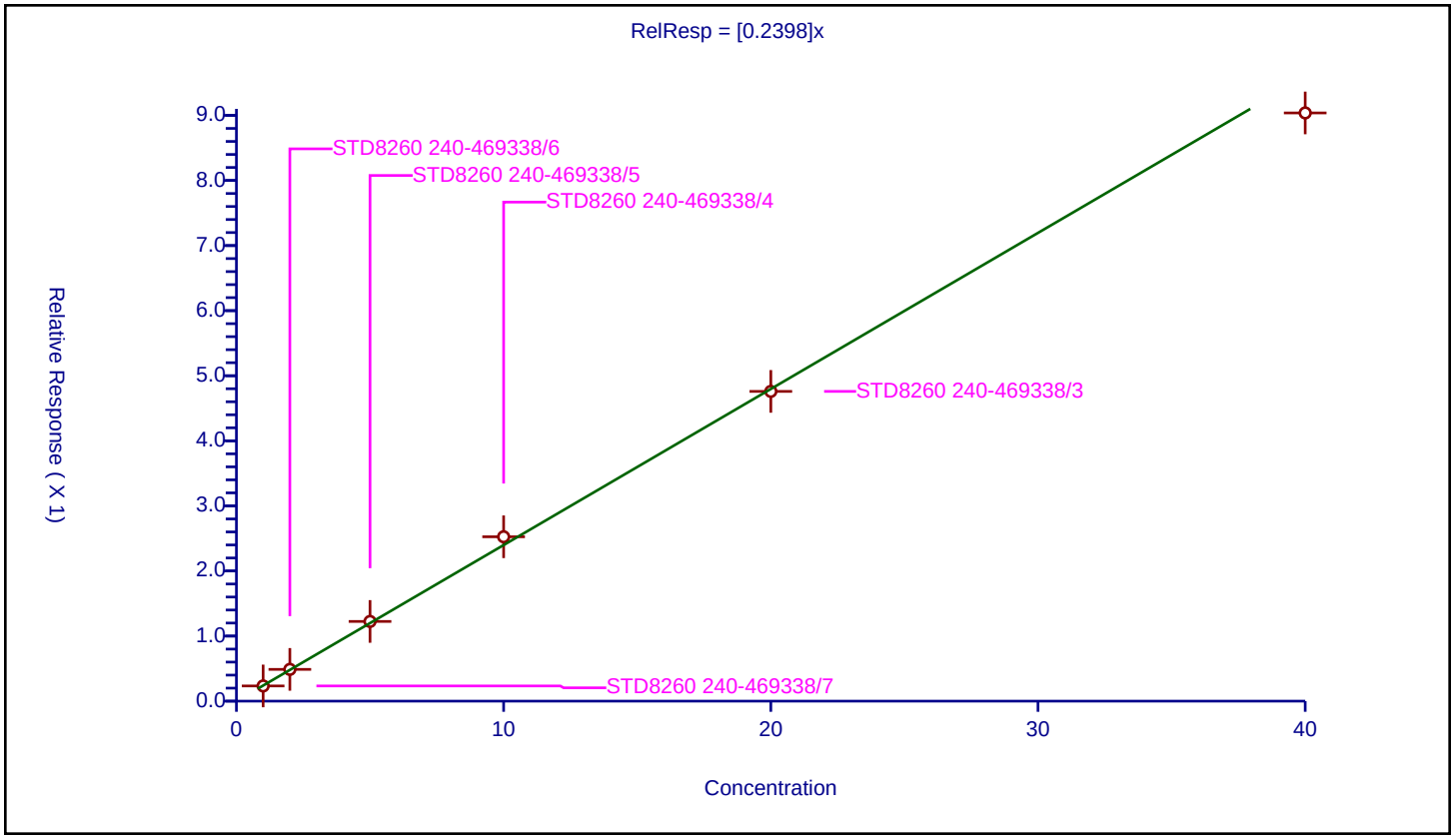
Curve Coefficients

Intercept:	0
Slope:	0.2398

Error Coefficients

Standard Error:	322000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.233617	20.0	1237666.0	0.233617	Y
2	STD8260 240-469338/6	2.0	0.487922	20.0	1194740.0	0.243961	Y
3	STD8260 240-469338/5	5.0	1.224477	20.0	1222644.0	0.244895	Y
4	STD8260 240-469338/4	10.0	2.525547	20.0	1164516.0	0.252555	Y
5	STD8260 240-469338/3	20.0	4.7593	20.0	1252890.0	0.237965	Y
6	STD8260 240-469338/2	40.0	9.037759	20.0	1401011.0	0.225944	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

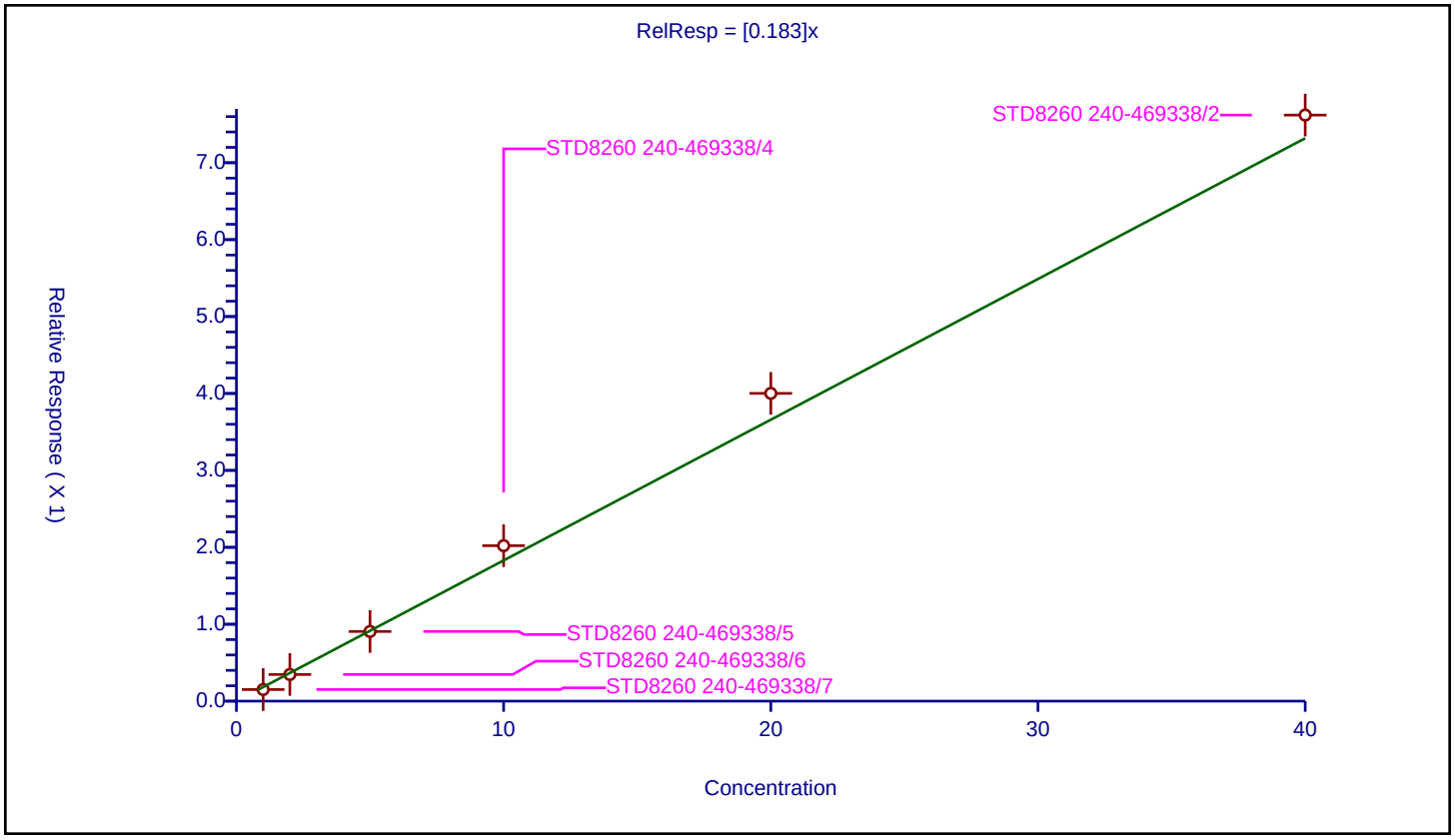
Curve Coefficients

Intercept:	0
Slope:	0.183

Error Coefficients

Standard Error:	270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.150638	20.0	1237666.0	0.150638	Y
2	STD8260 240-469338/6	2.0	0.346586	20.0	1194740.0	0.173293	Y
3	STD8260 240-469338/5	5.0	0.905644	20.0	1222644.0	0.181129	Y
4	STD8260 240-469338/4	10.0	2.020977	20.0	1164516.0	0.202098	Y
5	STD8260 240-469338/3	20.0	4.001421	20.0	1252890.0	0.200071	Y
6	STD8260 240-469338/2	40.0	7.619755	20.0	1401011.0	0.190494	Y



Calibration / Acetone

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

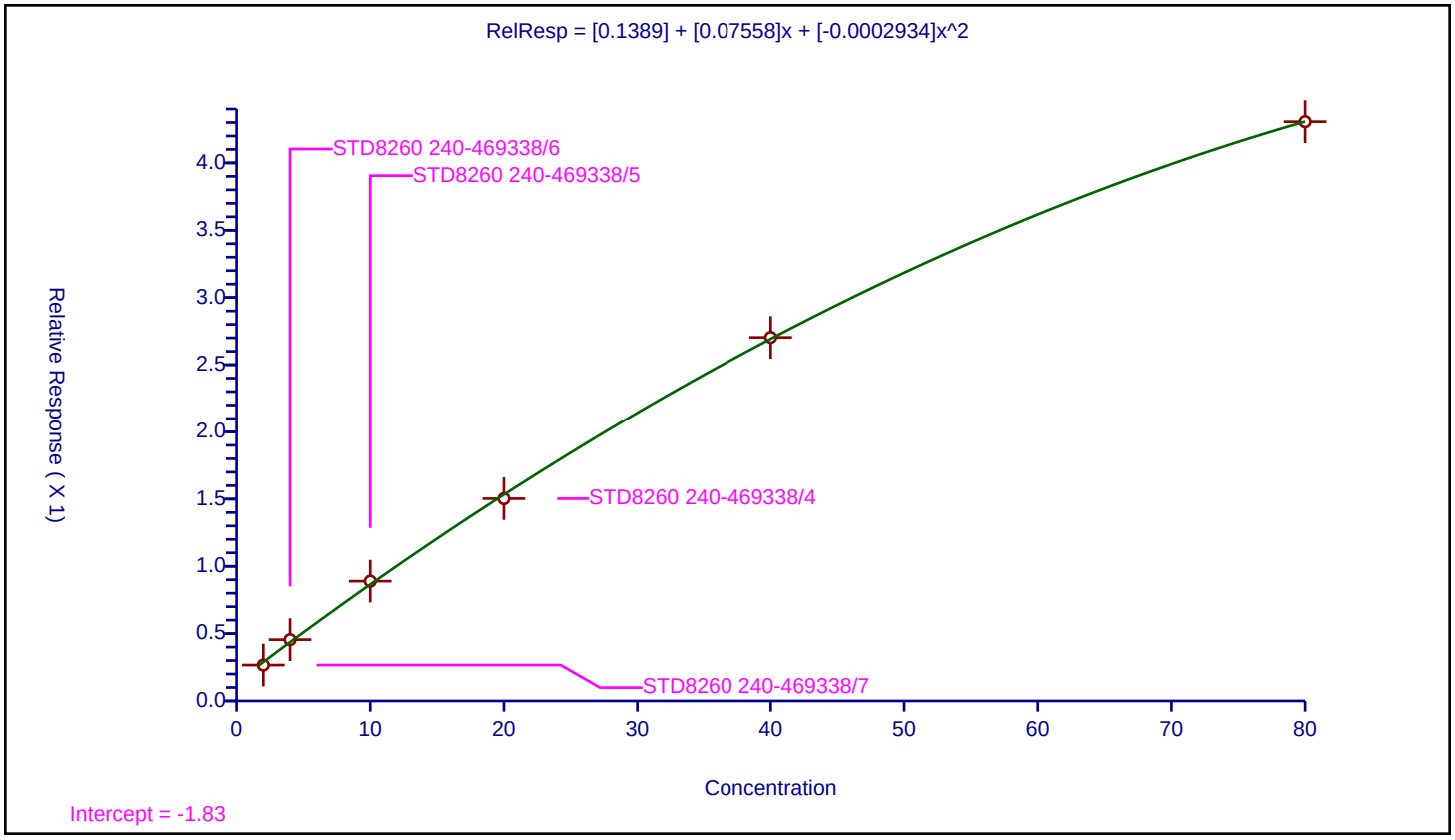
Curve Coefficients

Intercept:	0.1389
Slope:	0.07558
Second Order:	-0.0002934

Error Coefficients

Standard Error:	209000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.266712	20.0	1237666.0	0.133356	Y
2	STD8260 240-469338/6	4.0	0.455179	20.0	1194740.0	0.113795	Y
3	STD8260 240-469338/5	10.0	0.889613	20.0	1222644.0	0.088961	Y
4	STD8260 240-469338/4	20.0	1.503079	20.0	1164516.0	0.075154	Y
5	STD8260 240-469338/3	40.0	2.703158	20.0	1252890.0	0.067579	Y
6	STD8260 240-469338/2	80.0	4.30629	20.0	1401011.0	0.053829	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

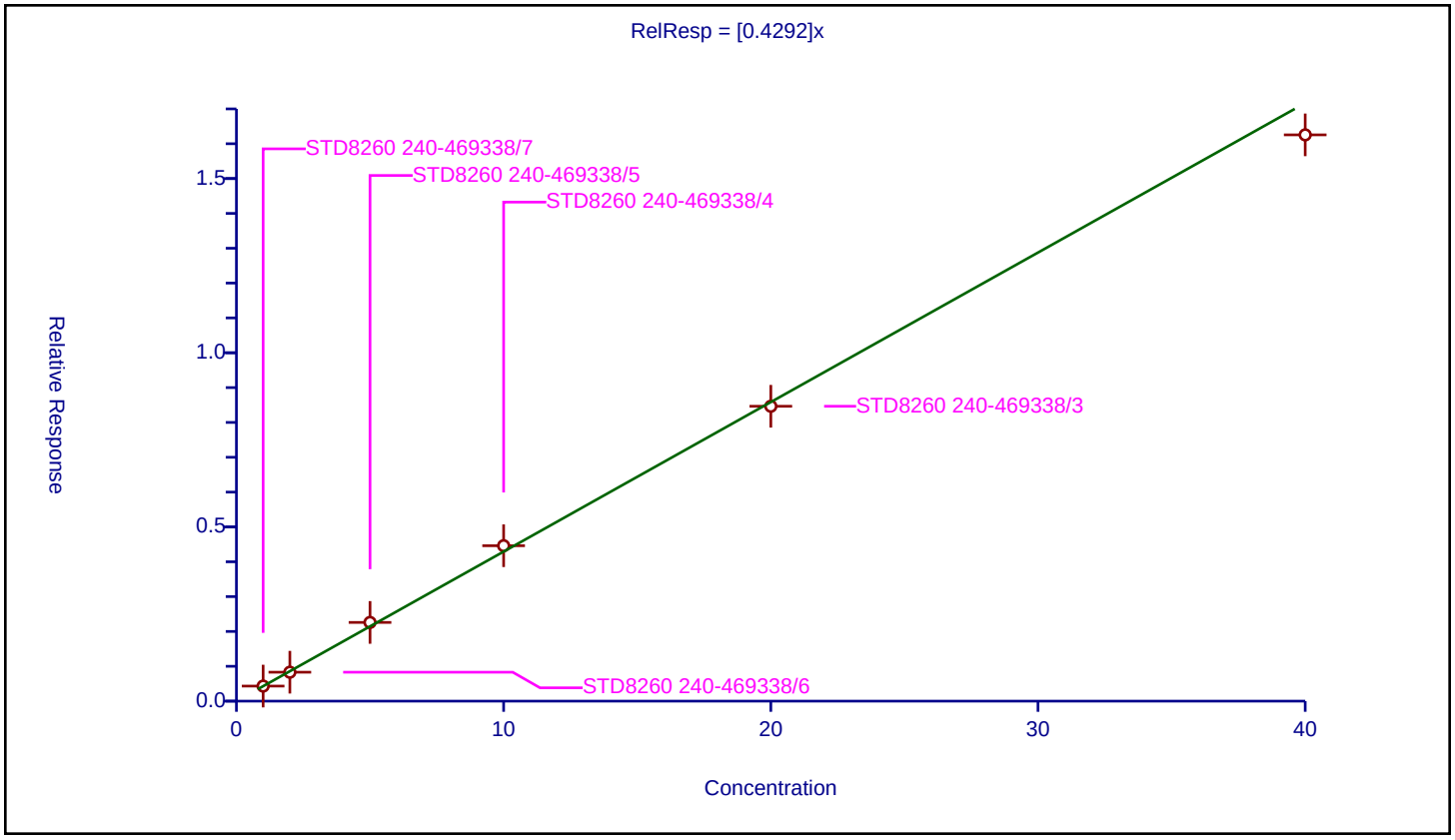
Curve Coefficients

Intercept:	0
Slope:	0.4292

Error Coefficients

Standard Error:	577000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.432362	20.0	1237666.0	0.432362	Y
2	STD8260 240-469338/6	2.0	0.830407	20.0	1194740.0	0.415203	Y
3	STD8260 240-469338/5	5.0	2.259824	20.0	1222644.0	0.451965	Y
4	STD8260 240-469338/4	10.0	4.461218	20.0	1164516.0	0.446122	Y
5	STD8260 240-469338/3	20.0	8.463935	20.0	1252890.0	0.423197	Y
6	STD8260 240-469338/2	40.0	16.254548	20.0	1401011.0	0.406364	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

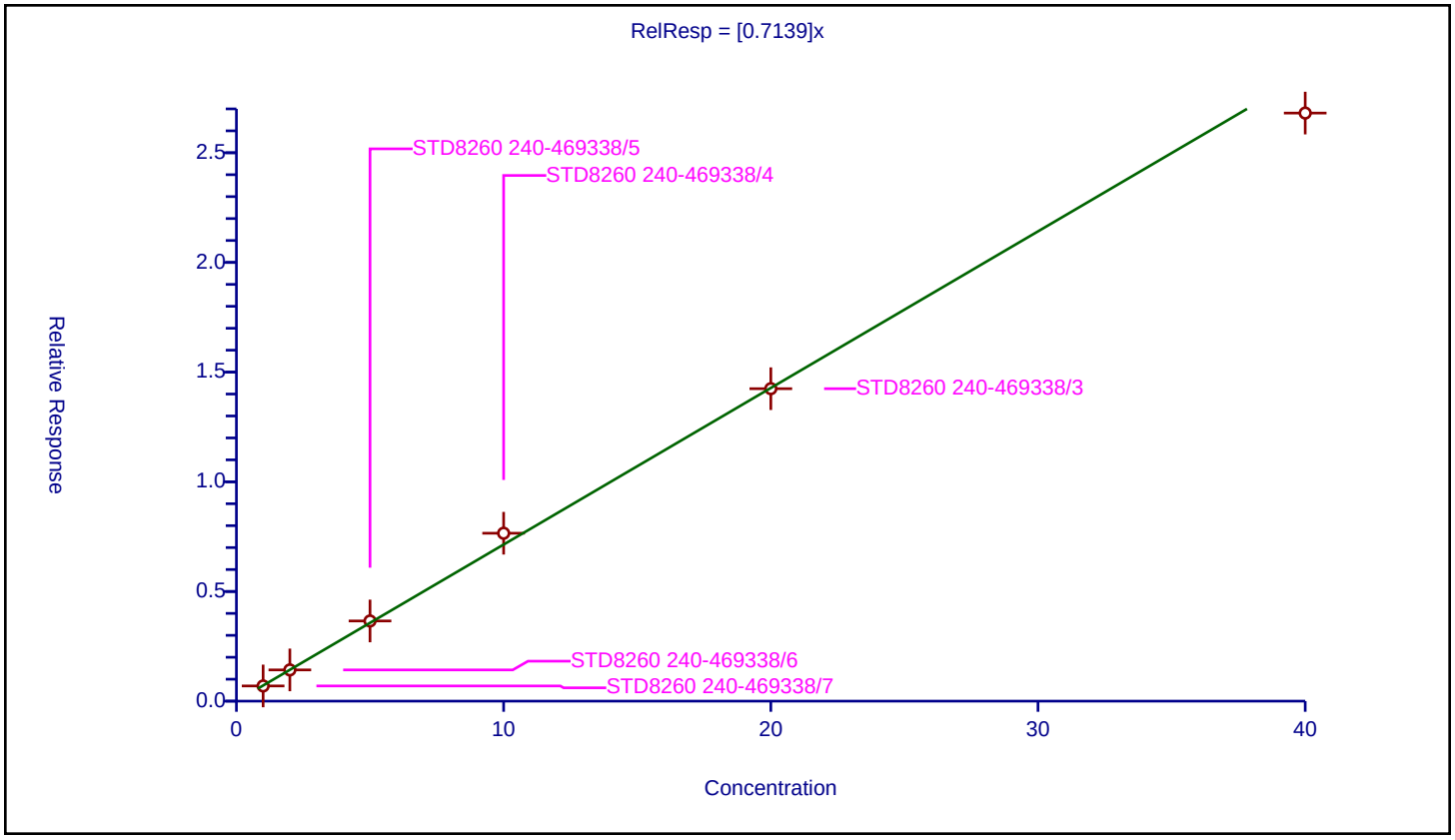
Curve Coefficients

Intercept:	0
Slope:	0.7139

Error Coefficients

Standard Error:	957000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.692449	20.0	1237666.0	0.692449	Y
2	STD8260 240-469338/6	2.0	1.423791	20.0	1194740.0	0.711895	Y
3	STD8260 240-469338/5	5.0	3.655062	20.0	1222644.0	0.731012	Y
4	STD8260 240-469338/4	10.0	7.65494	20.0	1164516.0	0.765494	Y
5	STD8260 240-469338/3	20.0	14.244076	20.0	1252890.0	0.712204	Y
6	STD8260 240-469338/2	40.0	26.809183	20.0	1401011.0	0.67023	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

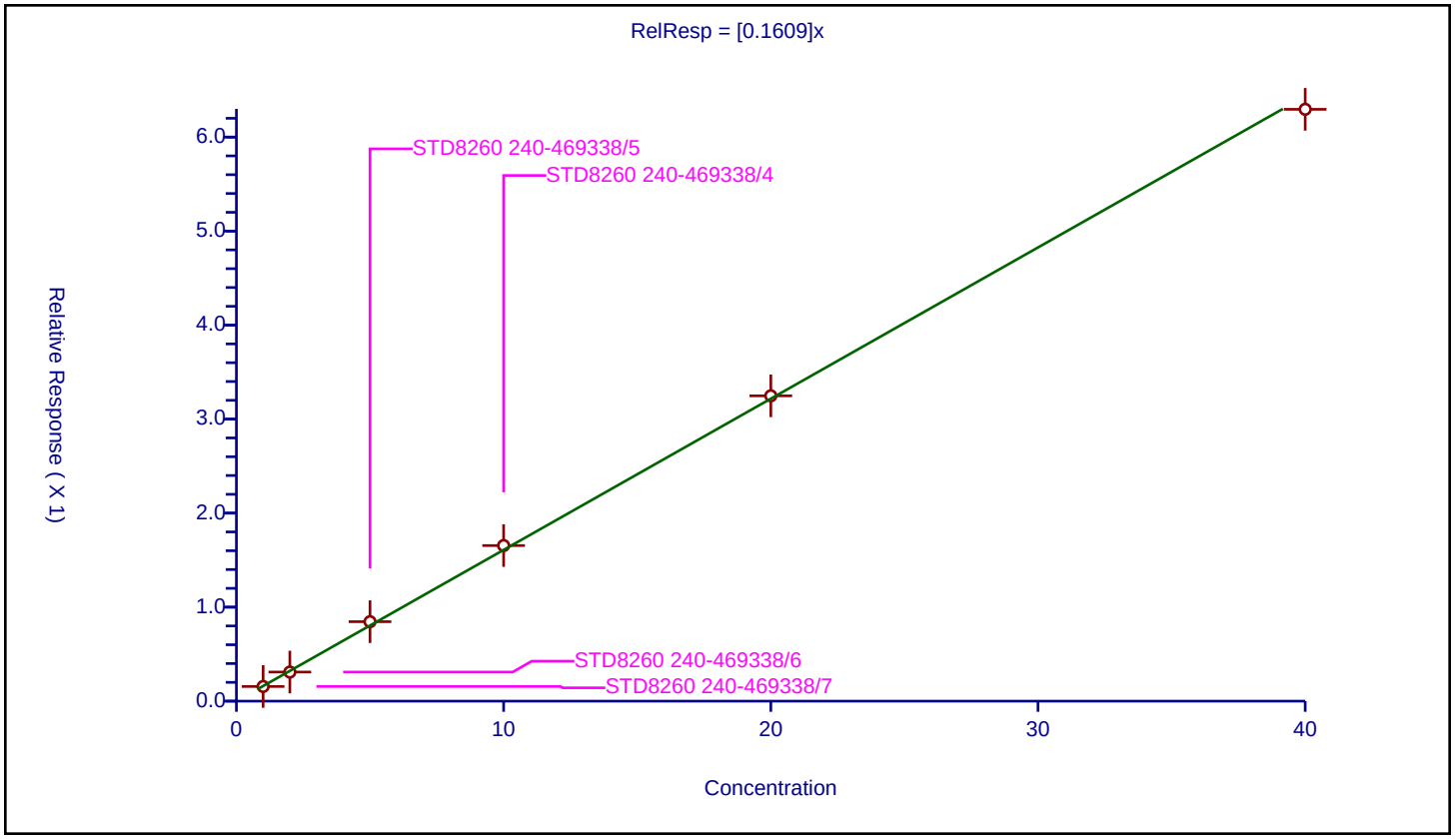
Curve Coefficients

Intercept:	0
Slope:	0.1609

Error Coefficients

Standard Error:	223000
Relative Standard Error:	3.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.156052	20.0	1237666.0	0.156052	Y
2	STD8260 240-469338/6	2.0	0.309624	20.0	1194740.0	0.154812	Y
3	STD8260 240-469338/5	5.0	0.845152	20.0	1222644.0	0.16903	Y
4	STD8260 240-469338/4	10.0	1.655108	20.0	1164516.0	0.165511	Y
5	STD8260 240-469338/3	20.0	3.247899	20.0	1252890.0	0.162395	Y
6	STD8260 240-469338/2	40.0	6.295568	20.0	1401011.0	0.157389	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

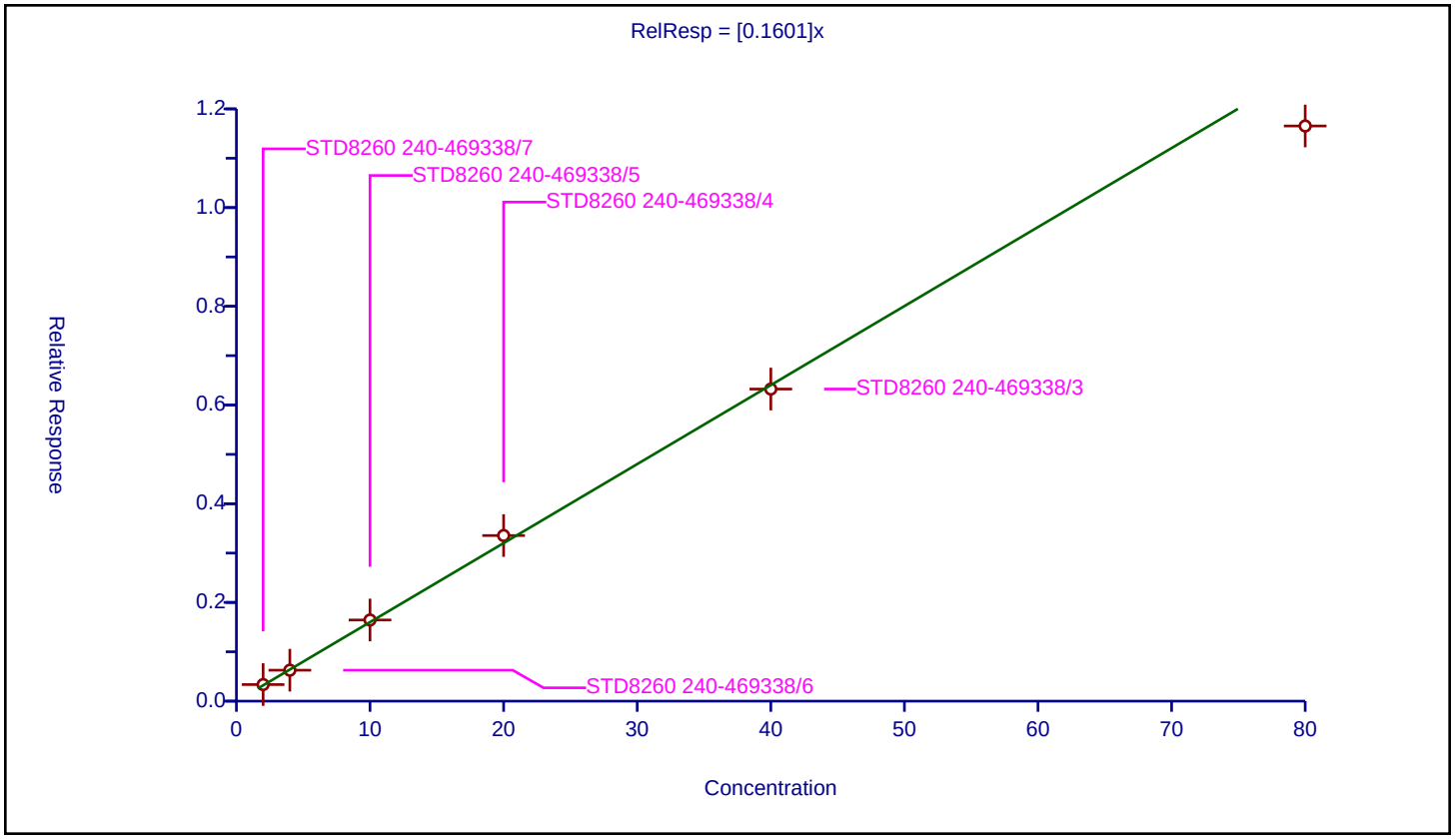
Curve Coefficients

Intercept:	0
Slope:	0.1601

Error Coefficients

Standard Error:	418000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.335713	20.0	1237666.0	0.167856	Y
2	STD8260 240-469338/6	4.0	0.626998	20.0	1194740.0	0.15675	Y
3	STD8260 240-469338/5	10.0	1.644109	20.0	1222644.0	0.164411	Y
4	STD8260 240-469338/4	20.0	3.355162	20.0	1164516.0	0.167758	Y
5	STD8260 240-469338/3	40.0	6.323141	20.0	1252890.0	0.158079	Y
6	STD8260 240-469338/2	80.0	11.65347	20.0	1401011.0	0.145668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

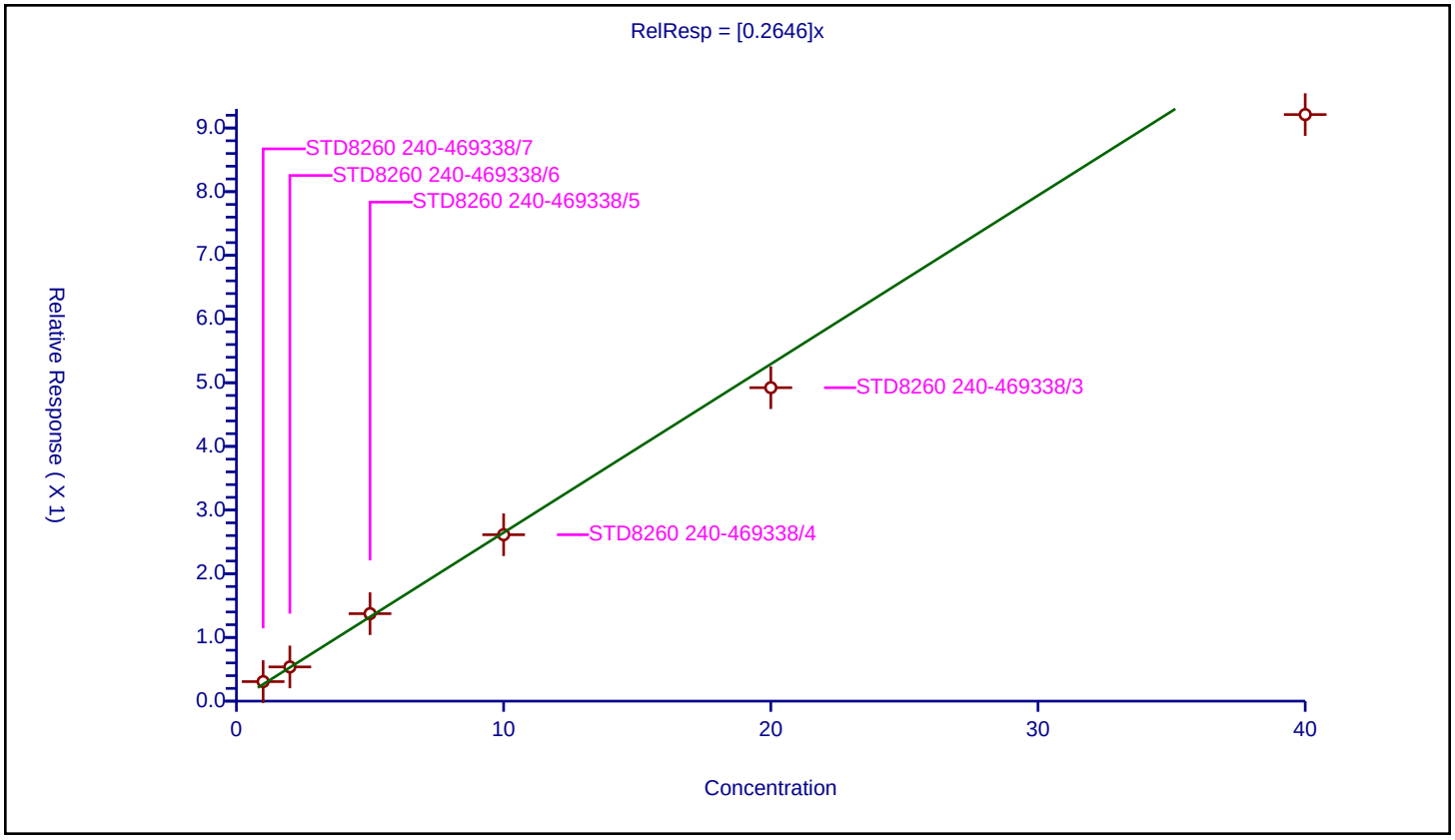
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	330000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306868	20.0	1237666.0	0.306868	Y
2	STD8260 240-469338/6	2.0	0.537071	20.0	1194740.0	0.268535	Y
3	STD8260 240-469338/5	5.0	1.373859	20.0	1222644.0	0.274772	Y
4	STD8260 240-469338/4	10.0	2.613257	20.0	1164516.0	0.261326	Y
5	STD8260 240-469338/3	20.0	4.922523	20.0	1252890.0	0.246126	Y
6	STD8260 240-469338/2	40.0	9.210848	20.0	1401011.0	0.230271	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

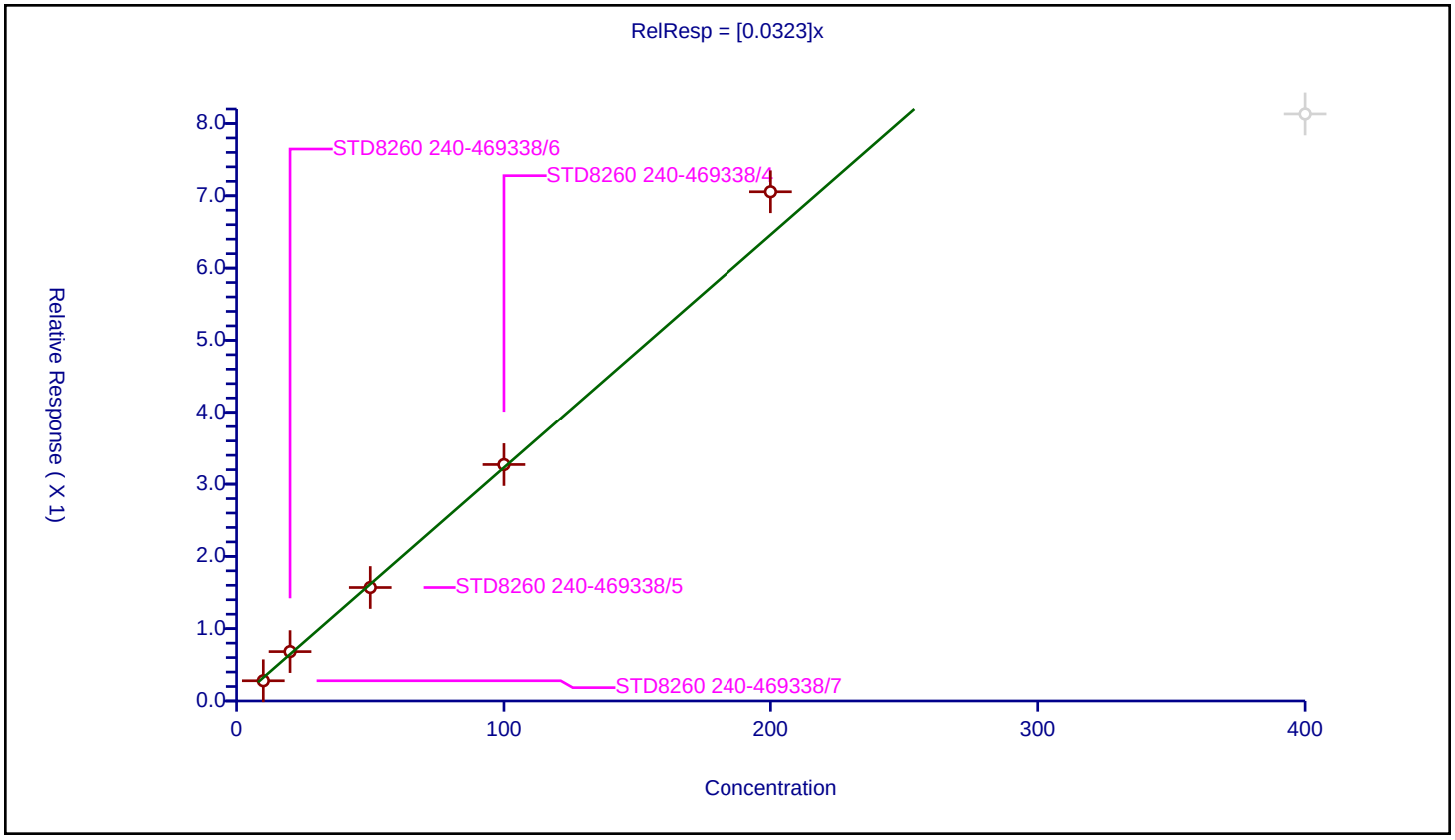
Curve Coefficients

Intercept:	0
Slope:	0.0323

Error Coefficients

Standard Error:	246000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.279769	20.0	1237666.0	0.027977	Y
2	STD8260 240-469338/6	20.0	0.68291	20.0	1194740.0	0.034146	Y
3	STD8260 240-469338/5	50.0	1.569435	20.0	1222644.0	0.031389	Y
4	STD8260 240-469338/4	100.0	3.271179	20.0	1164516.0	0.032712	Y
5	STD8260 240-469338/3	200.0	7.055639	20.0	1252890.0	0.035278	Y
6	STD8260 240-469338/2	400.0	8.131785	20.0	1401011.0	0.020329	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

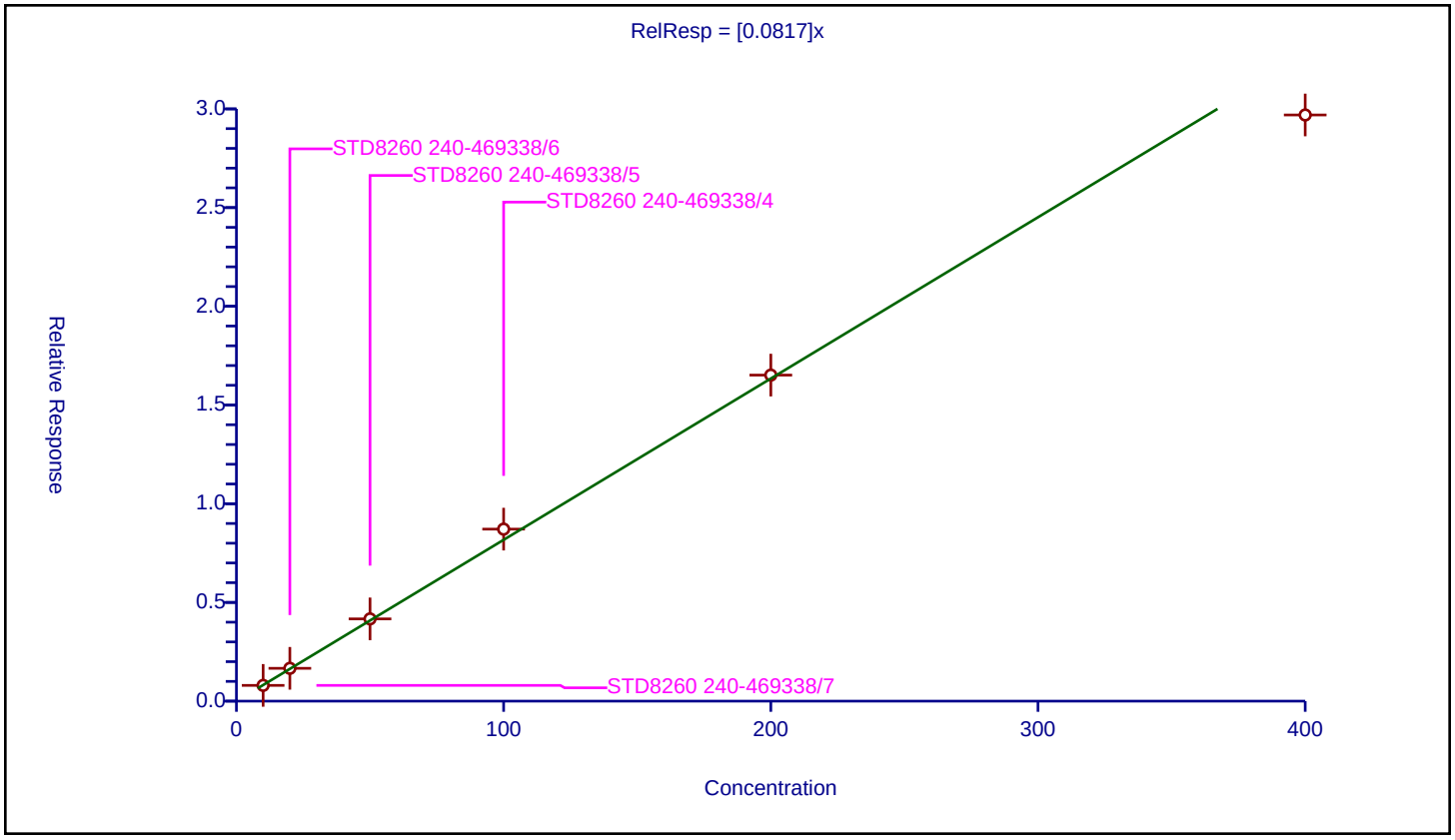
Curve Coefficients

Intercept:	0
Slope:	0.0817

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.798067	20.0	1237666.0	0.079807	Y
2	STD8260 240-469338/6	20.0	1.662755	20.0	1194740.0	0.083138	Y
3	STD8260 240-469338/5	50.0	4.167362	20.0	1222644.0	0.083347	Y
4	STD8260 240-469338/4	100.0	8.712736	20.0	1164516.0	0.087127	Y
5	STD8260 240-469338/3	200.0	16.515113	20.0	1252890.0	0.082576	Y
6	STD8260 240-469338/2	400.0	29.692429	20.0	1401011.0	0.074231	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

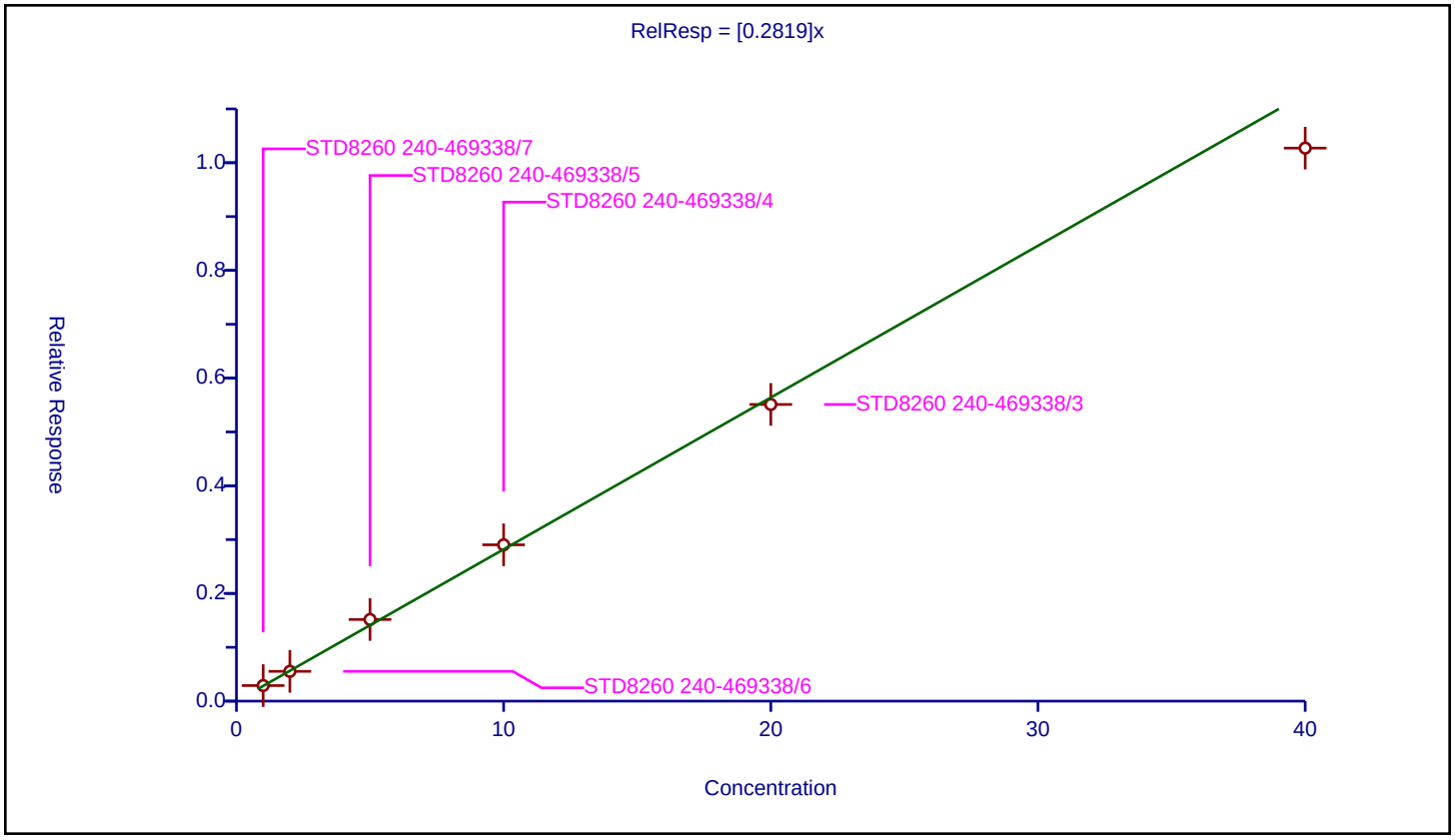
Curve Coefficients

Intercept:	0
Slope:	0.2819

Error Coefficients

Standard Error:	368000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.28906	20.0	1237666.0	0.28906	Y
2	STD8260 240-469338/6	2.0	0.553342	20.0	1194740.0	0.276671	Y
3	STD8260 240-469338/5	5.0	1.51632	20.0	1222644.0	0.303264	Y
4	STD8260 240-469338/4	10.0	2.903507	20.0	1164516.0	0.290351	Y
5	STD8260 240-469338/3	20.0	5.510699	20.0	1252890.0	0.275535	Y
6	STD8260 240-469338/2	40.0	10.271782	20.0	1401011.0	0.256795	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

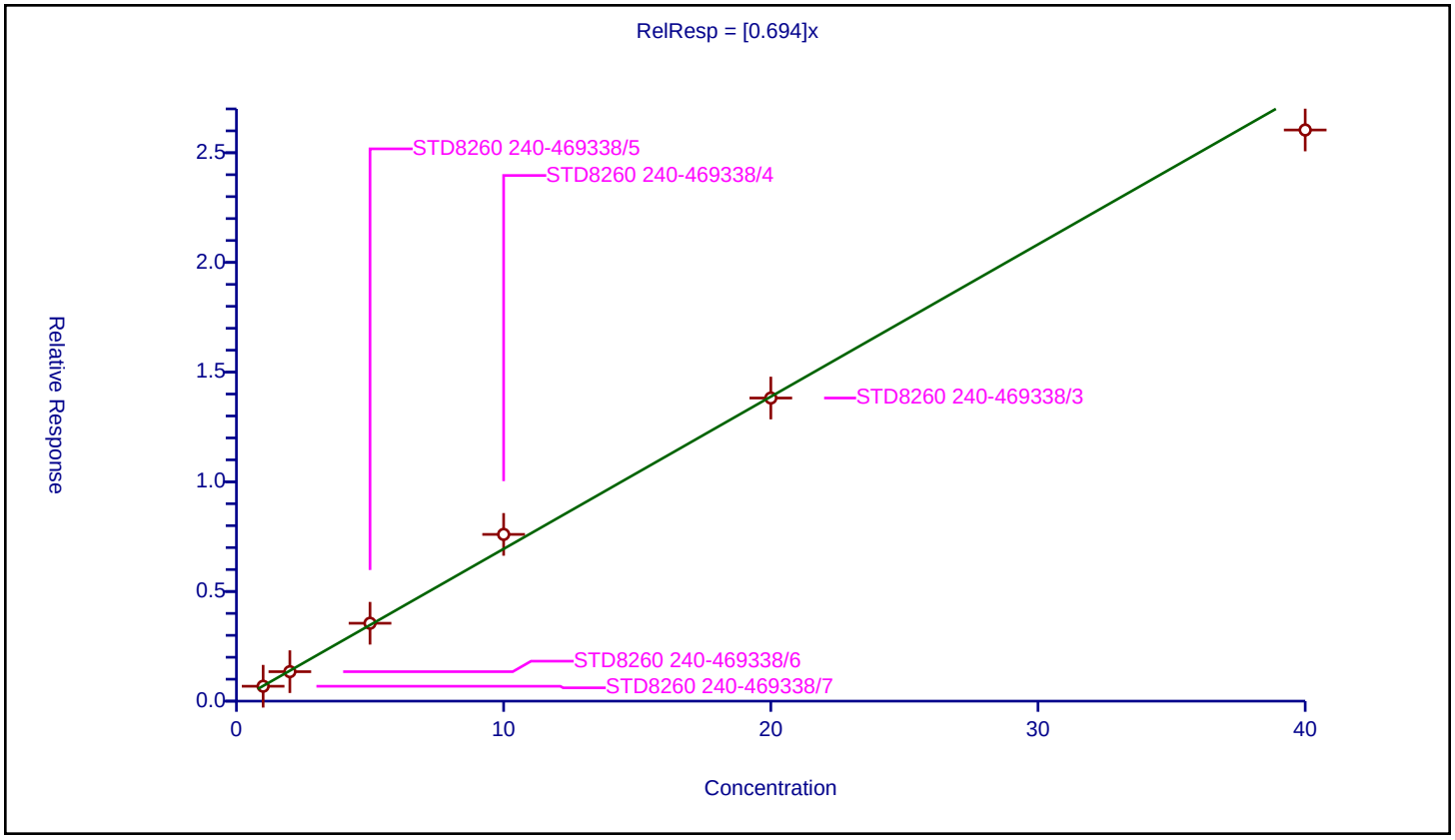
Curve Coefficients

Intercept:	0
Slope:	0.694

Error Coefficients

Standard Error:	930000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.679909	20.0	1237666.0	0.679909	Y
2	STD8260 240-469338/6	2.0	1.344108	20.0	1194740.0	0.672054	Y
3	STD8260 240-469338/5	5.0	3.551565	20.0	1222644.0	0.710313	Y
4	STD8260 240-469338/4	10.0	7.601424	20.0	1164516.0	0.760142	Y
5	STD8260 240-469338/3	20.0	13.81826	20.0	1252890.0	0.690913	Y
6	STD8260 240-469338/2	40.0	26.038654	20.0	1401011.0	0.650966	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

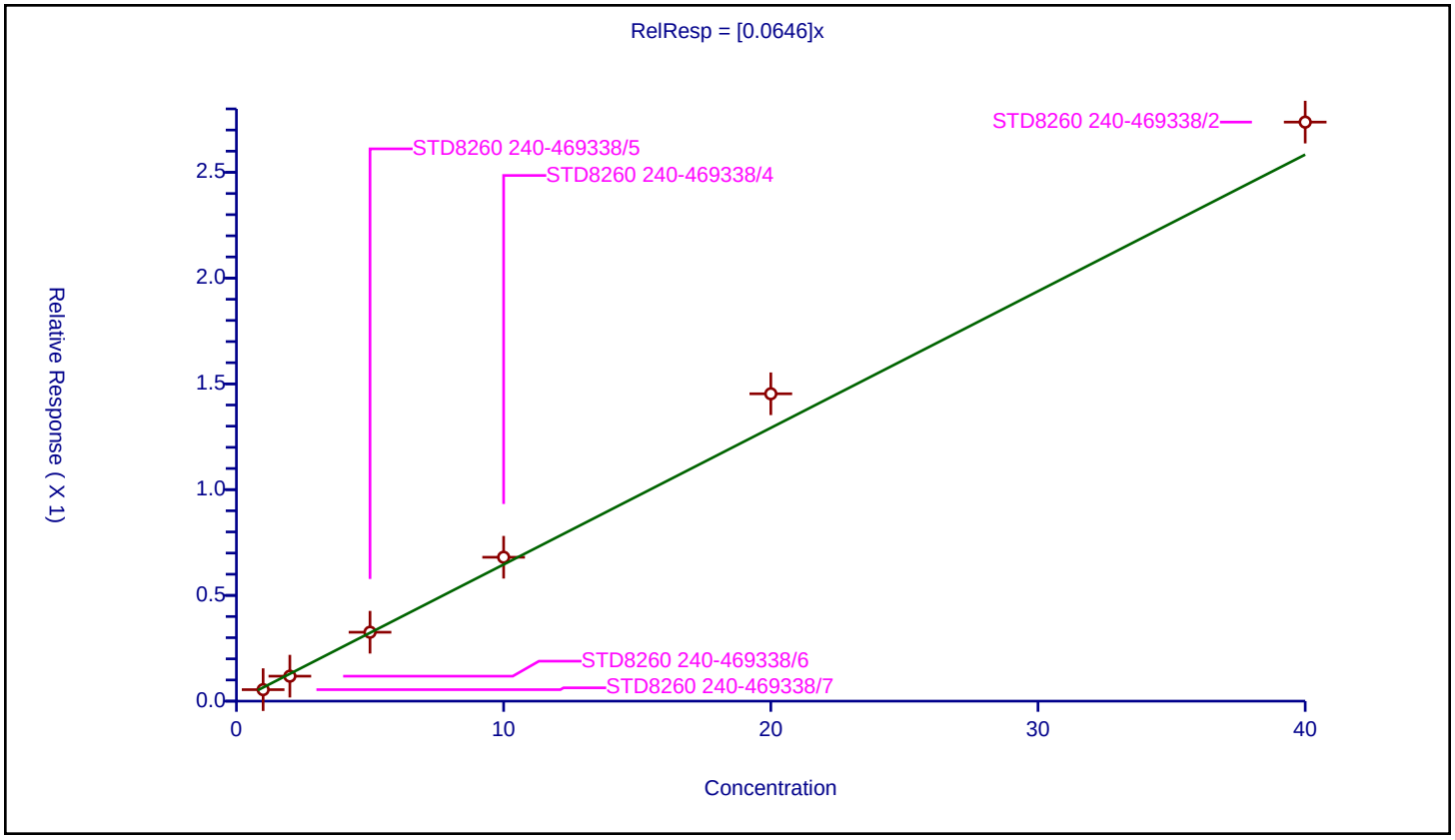
Curve Coefficients

Intercept:	0
Slope:	0.0646

Error Coefficients

Standard Error:	97000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.05428	20.0	1237666.0	0.05428	Y
2	STD8260 240-469338/6	2.0	0.118034	20.0	1194740.0	0.059017	Y
3	STD8260 240-469338/5	5.0	0.325835	20.0	1222644.0	0.065167	Y
4	STD8260 240-469338/4	10.0	0.680283	20.0	1164516.0	0.068028	Y
5	STD8260 240-469338/3	20.0	1.453136	20.0	1252890.0	0.072657	Y
6	STD8260 240-469338/2	40.0	2.73748	20.0	1401011.0	0.068437	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

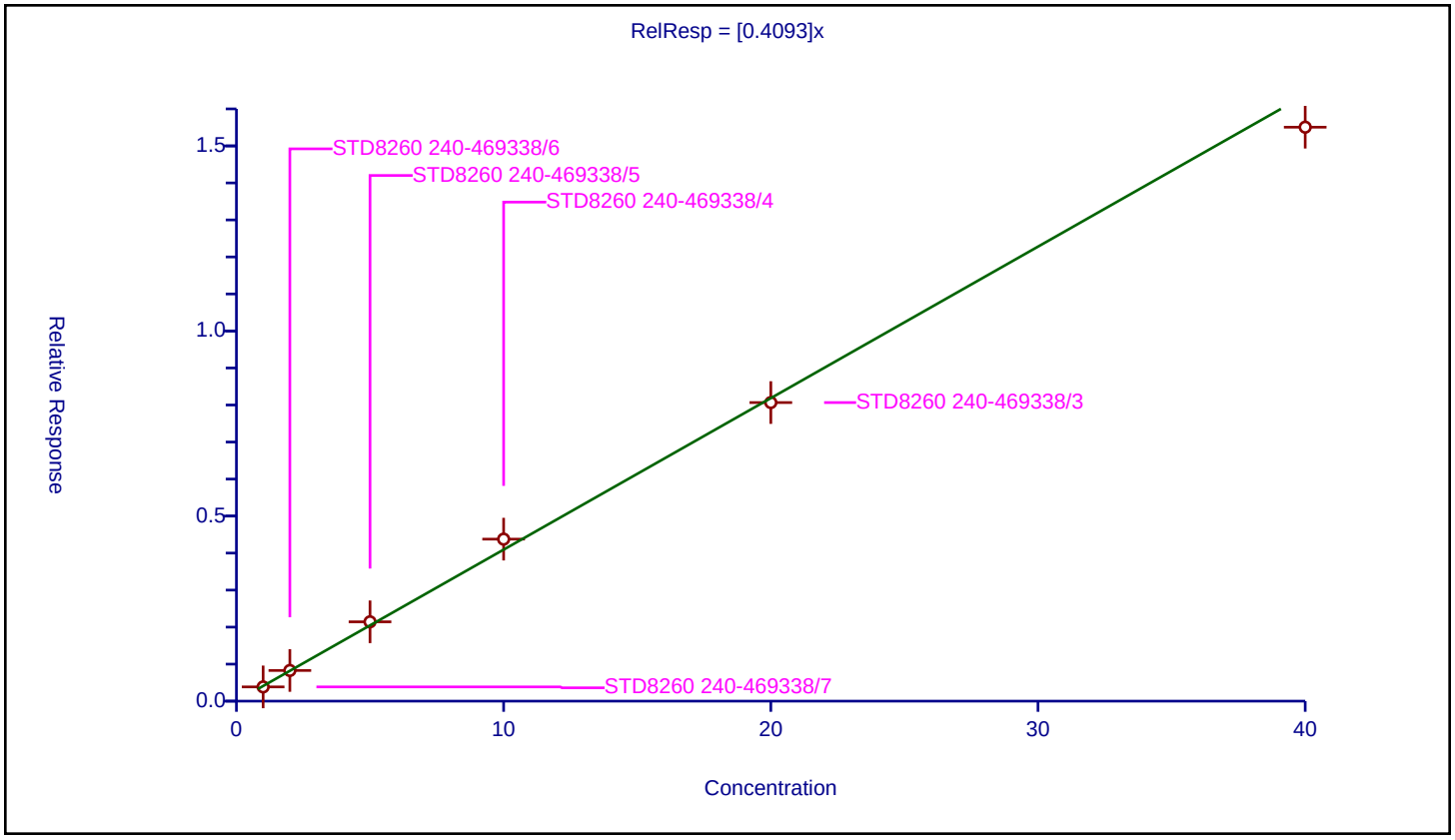
Curve Coefficients

Intercept:	0
Slope:	0.4093

Error Coefficients

Standard Error:	551000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.384369	20.0	1237666.0	0.384369	Y
2	STD8260 240-469338/6	2.0	0.82823	20.0	1194740.0	0.414115	Y
3	STD8260 240-469338/5	5.0	2.143437	20.0	1222644.0	0.428687	Y
4	STD8260 240-469338/4	10.0	4.376805	20.0	1164516.0	0.437681	Y
5	STD8260 240-469338/3	20.0	8.066598	20.0	1252890.0	0.40333	Y
6	STD8260 240-469338/2	40.0	15.505788	20.0	1401011.0	0.387645	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

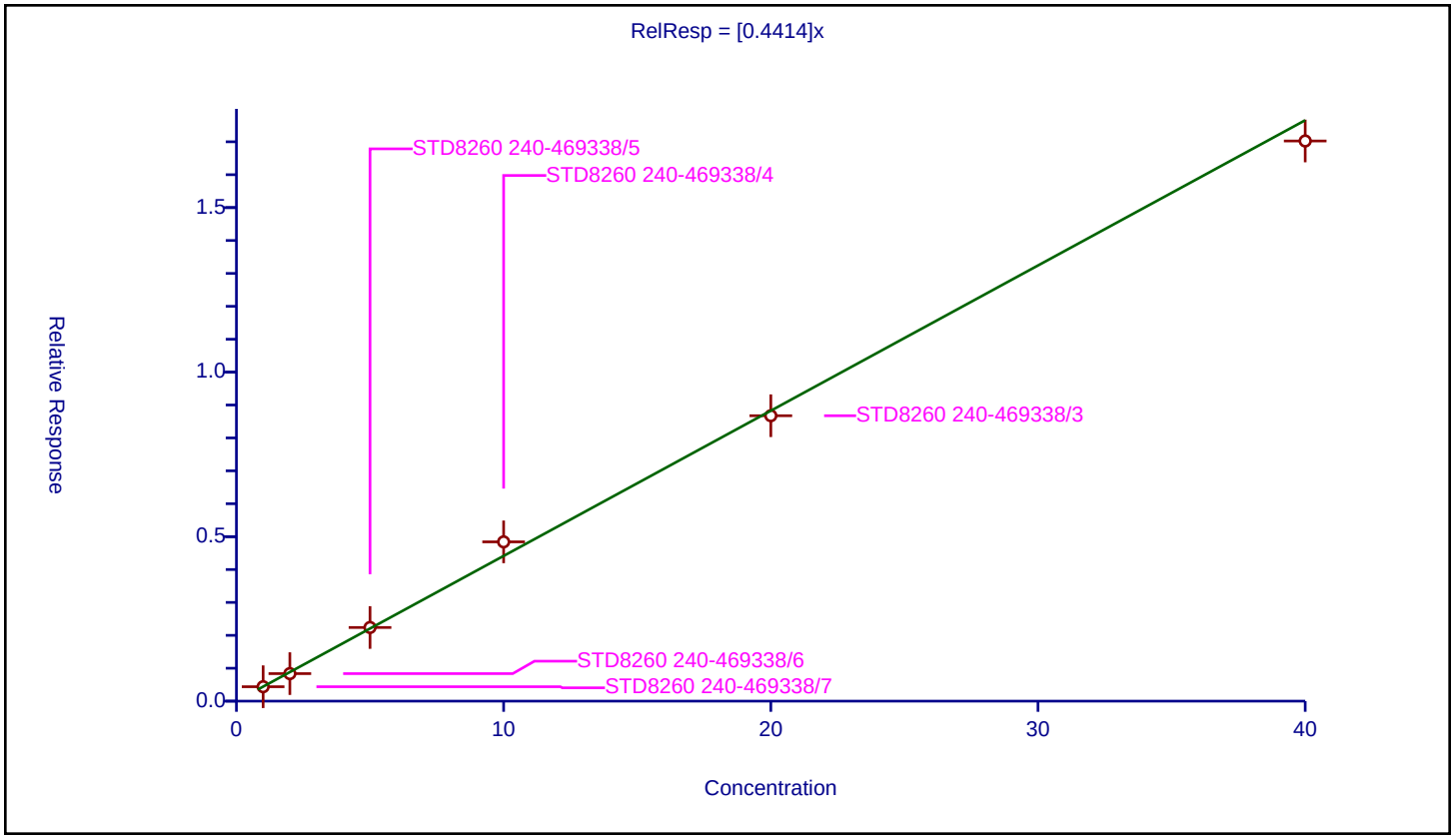
Curve Coefficients

Intercept:	0
Slope:	0.4414

Error Coefficients

Standard Error:	603000
Relative Standard Error:	5.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.438519	20.0	1237666.0	0.438519	Y
2	STD8260 240-469338/6	2.0	0.836902	20.0	1194740.0	0.418451	Y
3	STD8260 240-469338/5	5.0	2.238918	20.0	1222644.0	0.447784	Y
4	STD8260 240-469338/4	10.0	4.840775	20.0	1164516.0	0.484078	Y
5	STD8260 240-469338/3	20.0	8.674824	20.0	1252890.0	0.433741	Y
6	STD8260 240-469338/2	40.0	17.024592	20.0	1401011.0	0.425615	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

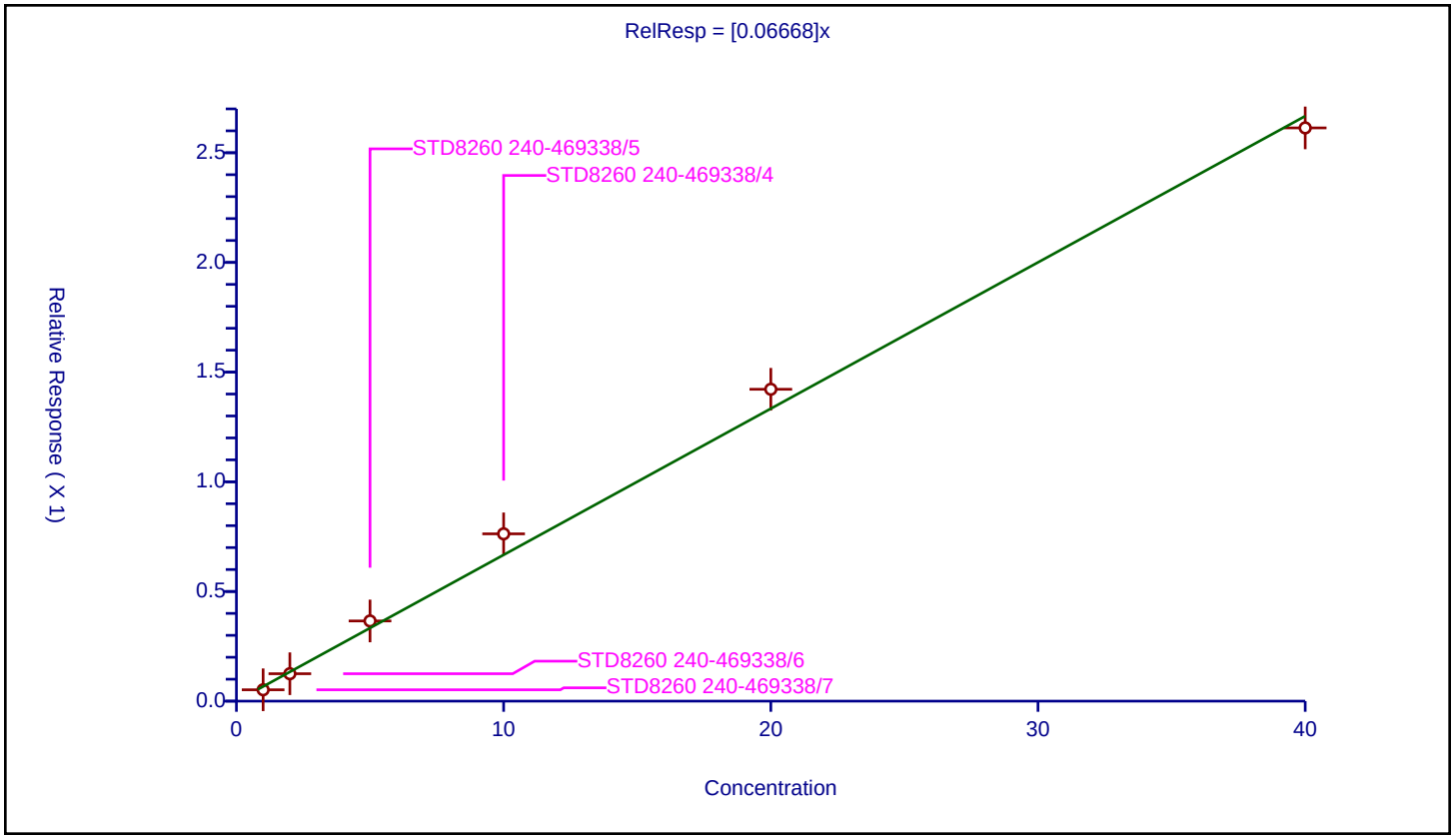
Curve Coefficients

Intercept:	0
Slope:	0.06668

Error Coefficients

Standard Error:	93800
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.051775	20.0	1237666.0	0.051775	Y
2	STD8260 240-469338/6	2.0	0.124948	20.0	1194740.0	0.062474	Y
3	STD8260 240-469338/5	5.0	0.365601	20.0	1222644.0	0.07312	Y
4	STD8260 240-469338/4	10.0	0.762737	20.0	1164516.0	0.076274	Y
5	STD8260 240-469338/3	20.0	1.421849	20.0	1252890.0	0.071092	Y
6	STD8260 240-469338/2	40.0	2.613299	20.0	1401011.0	0.065332	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

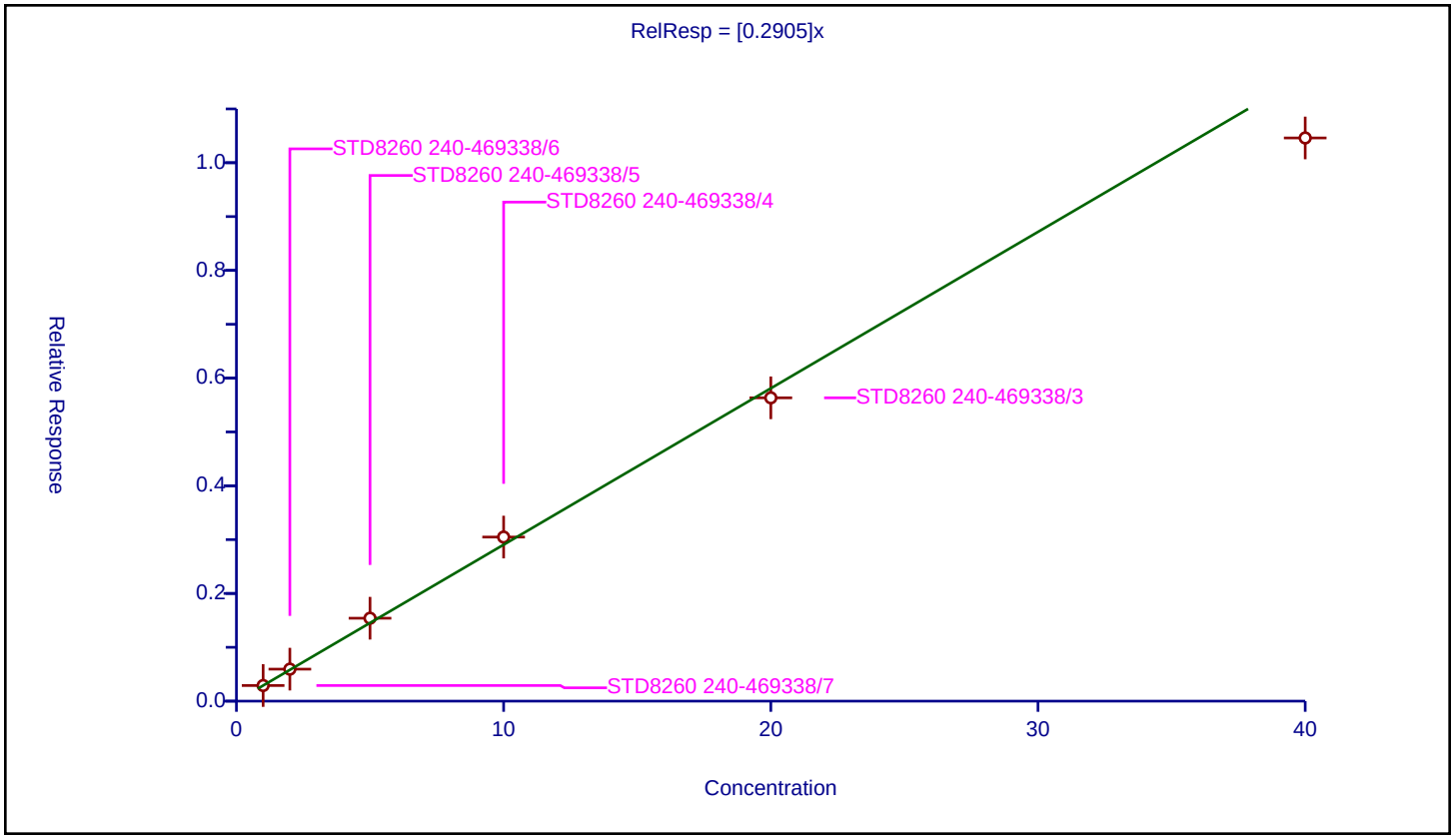
Curve Coefficients

Intercept:	0
Slope:	0.2905

Error Coefficients

Standard Error:	375000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.289997	20.0	1237666.0	0.289997	Y
2	STD8260 240-469338/6	2.0	0.594339	20.0	1194740.0	0.297169	Y
3	STD8260 240-469338/5	5.0	1.540138	20.0	1222644.0	0.308028	Y
4	STD8260 240-469338/4	10.0	3.047652	20.0	1164516.0	0.304765	Y
5	STD8260 240-469338/3	20.0	5.633455	20.0	1252890.0	0.281673	Y
6	STD8260 240-469338/2	40.0	10.460517	20.0	1401011.0	0.261513	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

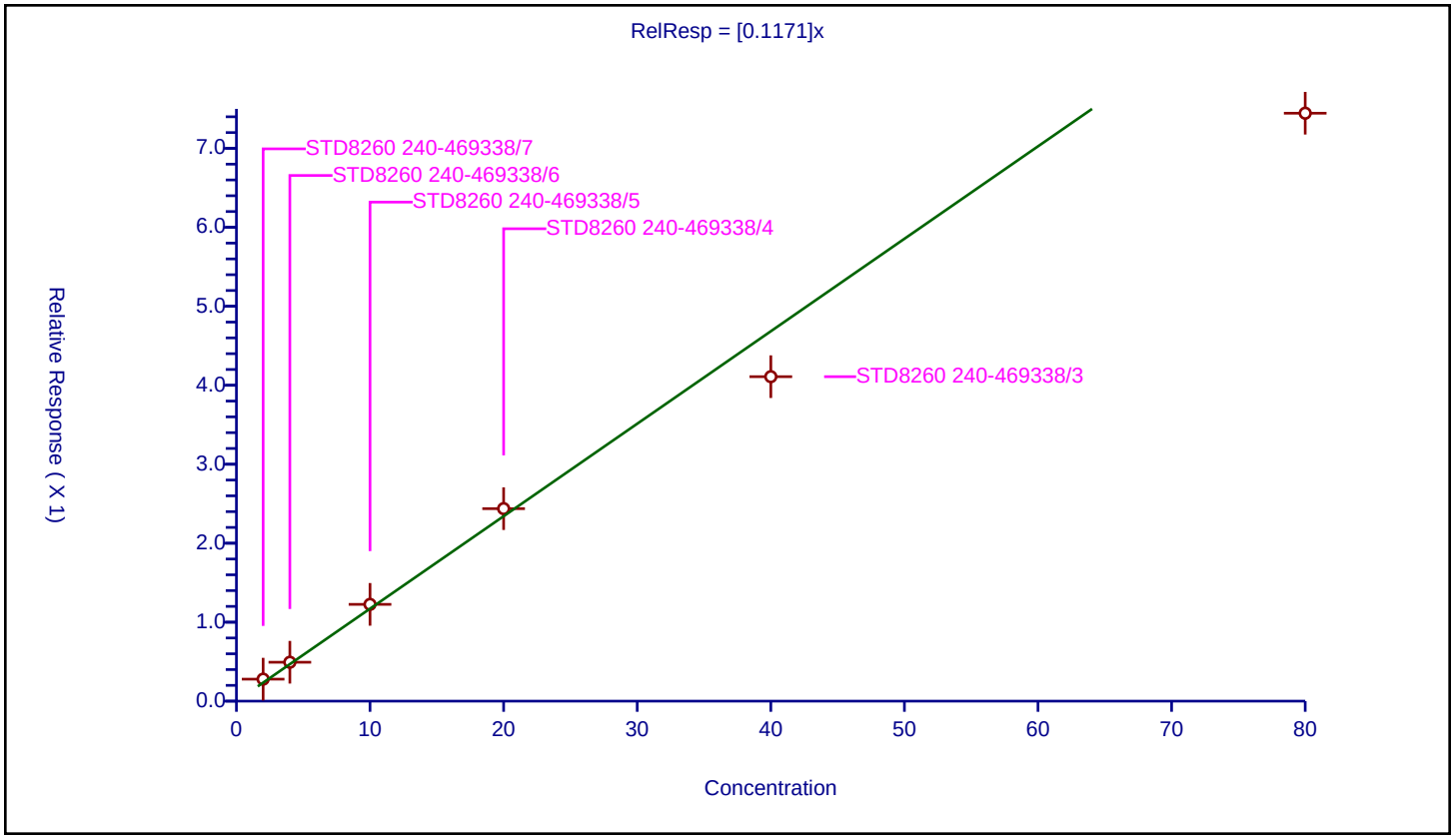
Curve Coefficients

Intercept:	0
Slope:	0.1171

Error Coefficients

Standard Error:	270000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.278557	20.0	1237666.0	0.139278	Y
2	STD8260 240-469338/6	4.0	0.492442	20.0	1194740.0	0.12311	Y
3	STD8260 240-469338/5	10.0	1.225426	20.0	1222644.0	0.122543	Y
4	STD8260 240-469338/4	20.0	2.437614	20.0	1164516.0	0.121881	Y
5	STD8260 240-469338/3	40.0	4.108836	20.0	1252890.0	0.102721	Y
6	STD8260 240-469338/2	80.0	7.445381	20.0	1401011.0	0.093067	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

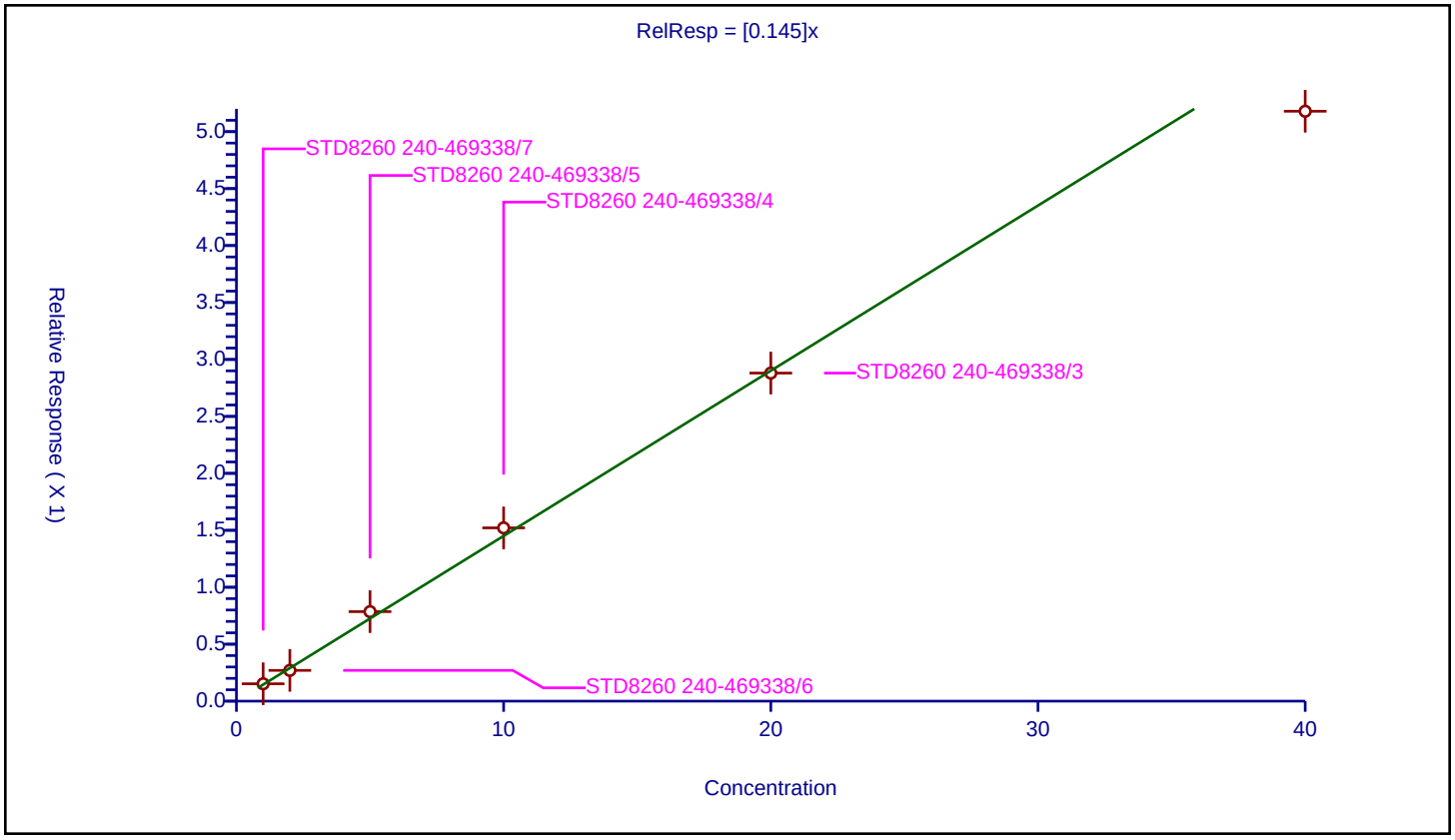
Curve Coefficients

Intercept:	0
Slope:	0.145

Error Coefficients

Standard Error:	187000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.152513	20.0	1237666.0	0.152513	Y
2	STD8260 240-469338/6	2.0	0.26995	20.0	1194740.0	0.134975	Y
3	STD8260 240-469338/5	5.0	0.785789	20.0	1222644.0	0.157158	Y
4	STD8260 240-469338/4	10.0	1.521387	20.0	1164516.0	0.152139	Y
5	STD8260 240-469338/3	20.0	2.880365	20.0	1252890.0	0.144018	Y
6	STD8260 240-469338/2	40.0	5.17936	20.0	1401011.0	0.129484	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

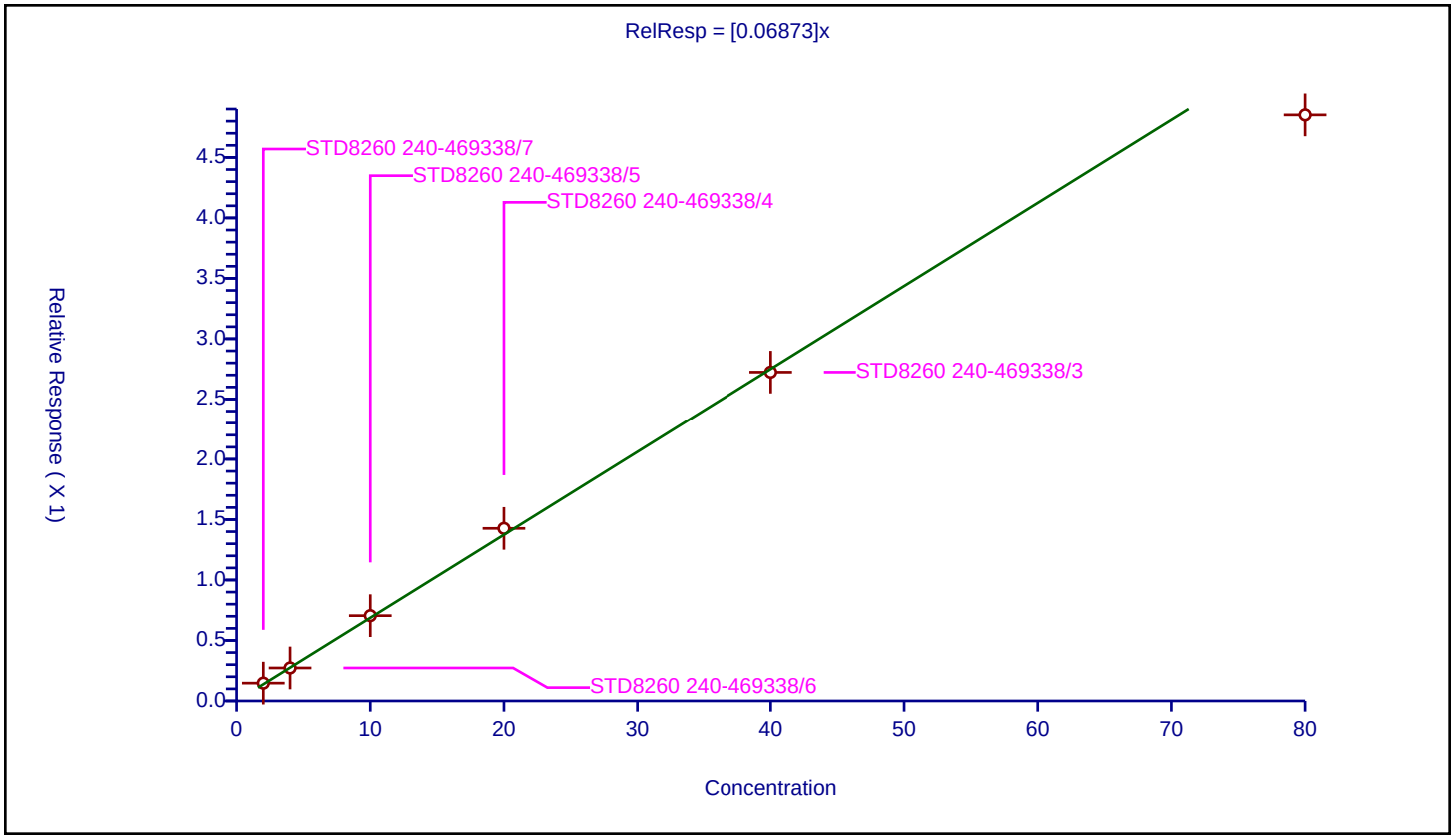
Curve Coefficients

Intercept:	0
Slope:	0.06873

Error Coefficients

Standard Error:	175000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.147277	20.0	1237666.0	0.073639	Y
2	STD8260 240-469338/6	4.0	0.272645	20.0	1194740.0	0.068161	Y
3	STD8260 240-469338/5	10.0	0.704931	20.0	1222644.0	0.070493	Y
4	STD8260 240-469338/4	20.0	1.427185	20.0	1164516.0	0.071359	Y
5	STD8260 240-469338/3	40.0	2.72324	20.0	1252890.0	0.068081	Y
6	STD8260 240-469338/2	80.0	4.851796	20.0	1401011.0	0.060647	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

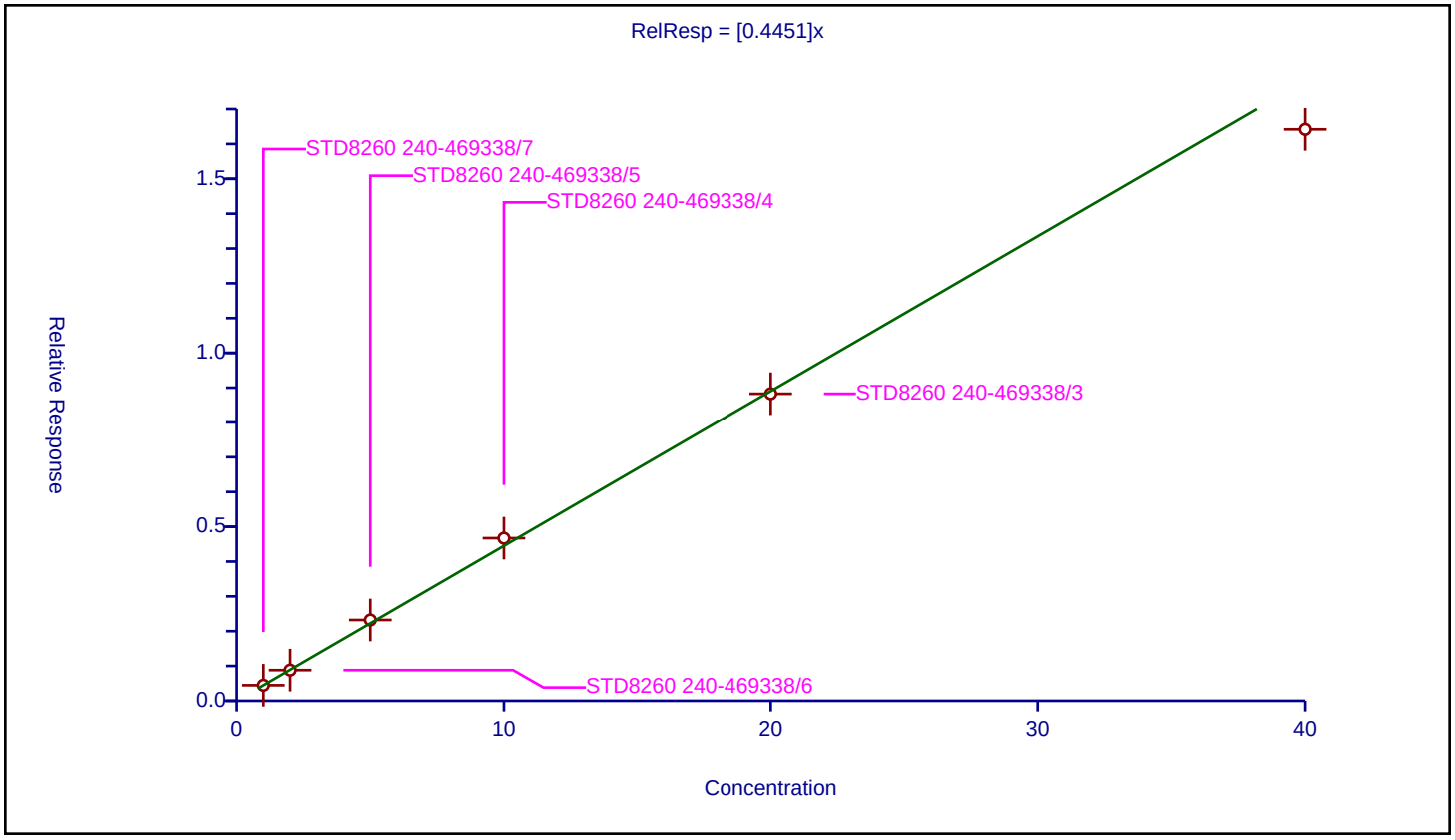
Curve Coefficients

Intercept:	0
Slope:	0.4451

Error Coefficients

Standard Error:	588000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.446469	20.0	1237666.0	0.446469	Y
2	STD8260 240-469338/6	2.0	0.881414	20.0	1194740.0	0.440707	Y
3	STD8260 240-469338/5	5.0	2.321412	20.0	1222644.0	0.464282	Y
4	STD8260 240-469338/4	10.0	4.672671	20.0	1164516.0	0.467267	Y
5	STD8260 240-469338/3	20.0	8.826856	20.0	1252890.0	0.441343	Y
6	STD8260 240-469338/2	40.0	16.418672	20.0	1401011.0	0.410467	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

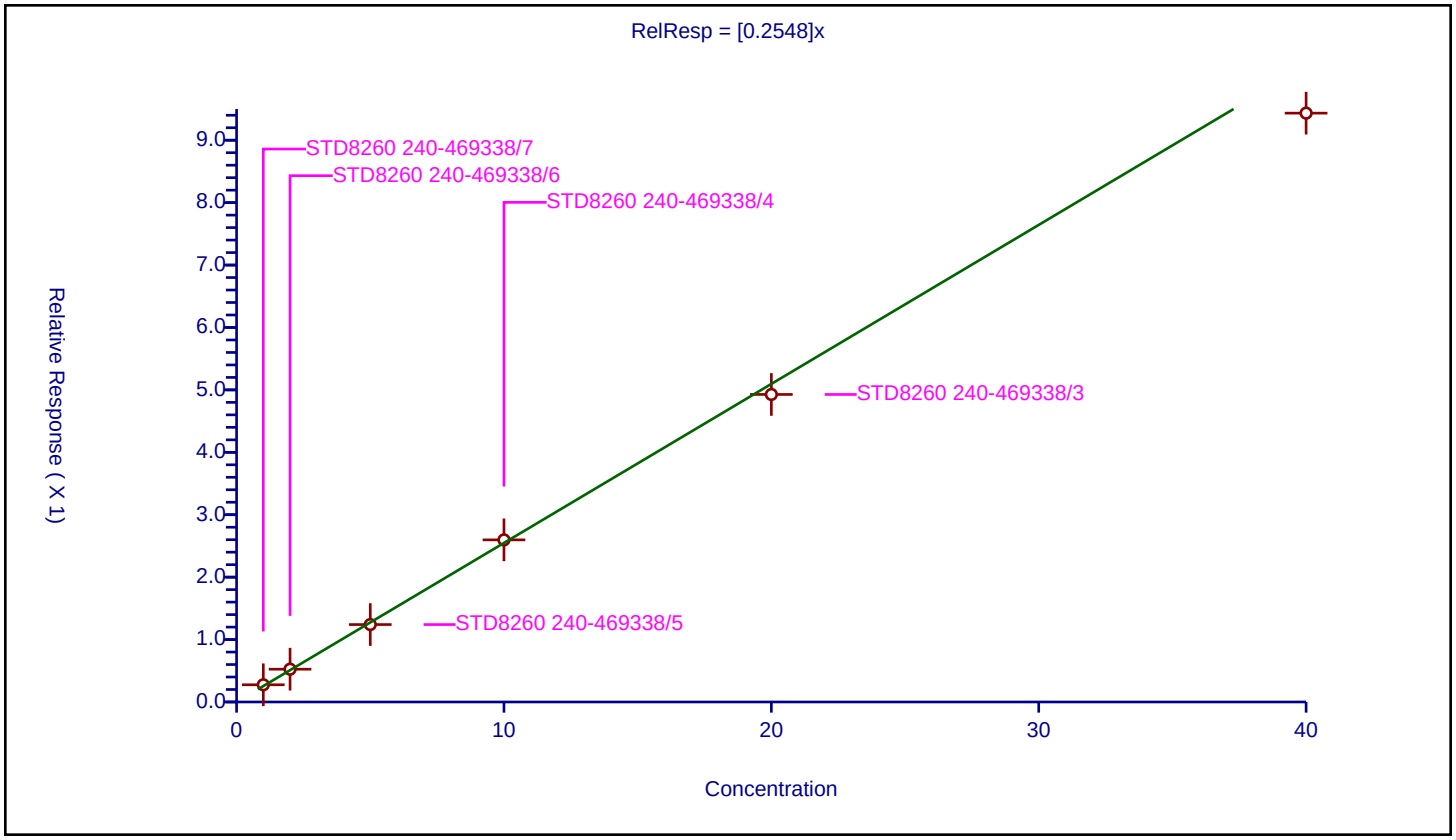
Curve Coefficients

Intercept:	0
Slope:	0.2548

Error Coefficients

Standard Error:	335000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.275939	20.0	1237666.0	0.275939	Y
2	STD8260 240-469338/6	2.0	0.525319	20.0	1194740.0	0.26266	Y
3	STD8260 240-469338/5	5.0	1.240655	20.0	1222644.0	0.248131	Y
4	STD8260 240-469338/4	10.0	2.597285	20.0	1164516.0	0.259729	Y
5	STD8260 240-469338/3	20.0	4.927073	20.0	1252890.0	0.246354	Y
6	STD8260 240-469338/2	40.0	9.433787	20.0	1401011.0	0.235845	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

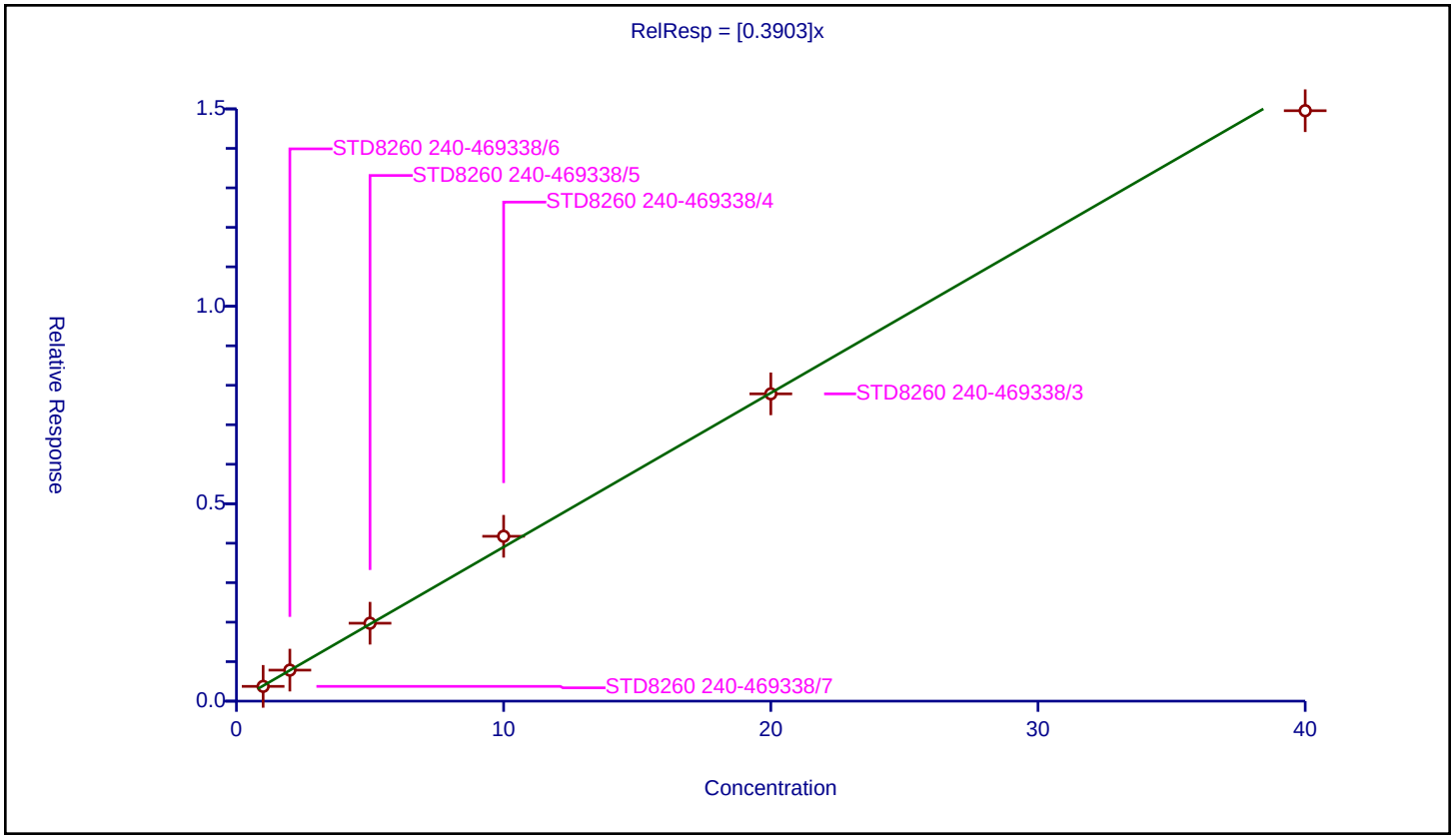
Curve Coefficients

Intercept:	0
Slope:	0.3903

Error Coefficients

Standard Error:	531000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373768	20.0	1237666.0	0.373768	Y
2	STD8260 240-469338/6	2.0	0.78556	20.0	1194740.0	0.39278	Y
3	STD8260 240-469338/5	5.0	1.973117	20.0	1222644.0	0.394623	Y
4	STD8260 240-469338/4	10.0	4.175469	20.0	1164516.0	0.417547	Y
5	STD8260 240-469338/3	20.0	7.782774	20.0	1252890.0	0.389139	Y
6	STD8260 240-469338/2	40.0	14.954244	20.0	1401011.0	0.373856	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

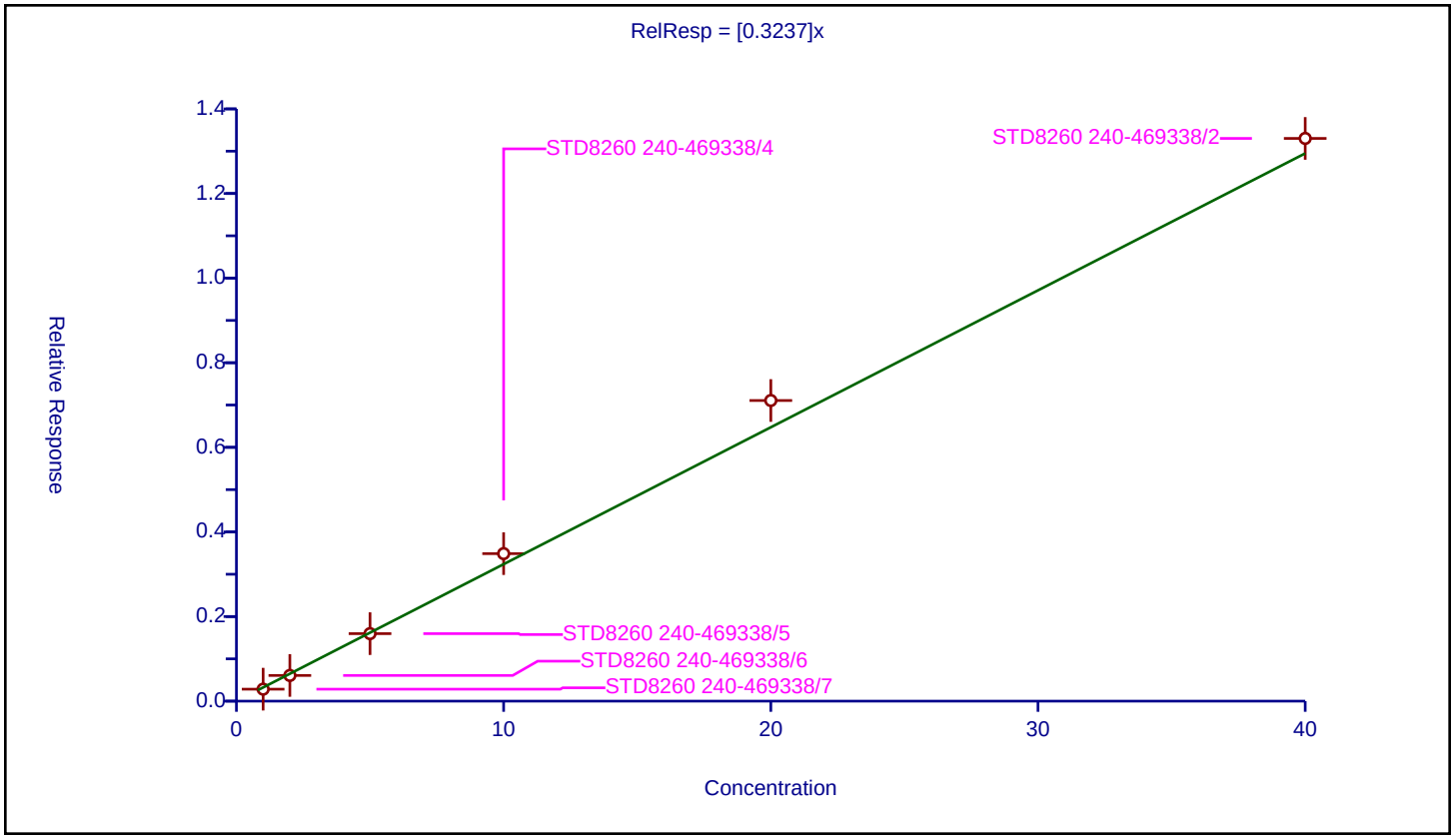
Curve Coefficients

Intercept:	0
Slope:	0.3237

Error Coefficients

Standard Error:	473000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.282903	20.0	1237666.0	0.282903	Y
2	STD8260 240-469338/6	2.0	0.607111	20.0	1194740.0	0.303556	Y
3	STD8260 240-469338/5	5.0	1.59582	20.0	1222644.0	0.319164	Y
4	STD8260 240-469338/4	10.0	3.48677	20.0	1164516.0	0.348677	Y
5	STD8260 240-469338/3	20.0	7.106737	20.0	1252890.0	0.355337	Y
6	STD8260 240-469338/2	40.0	13.301937	20.0	1401011.0	0.332548	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

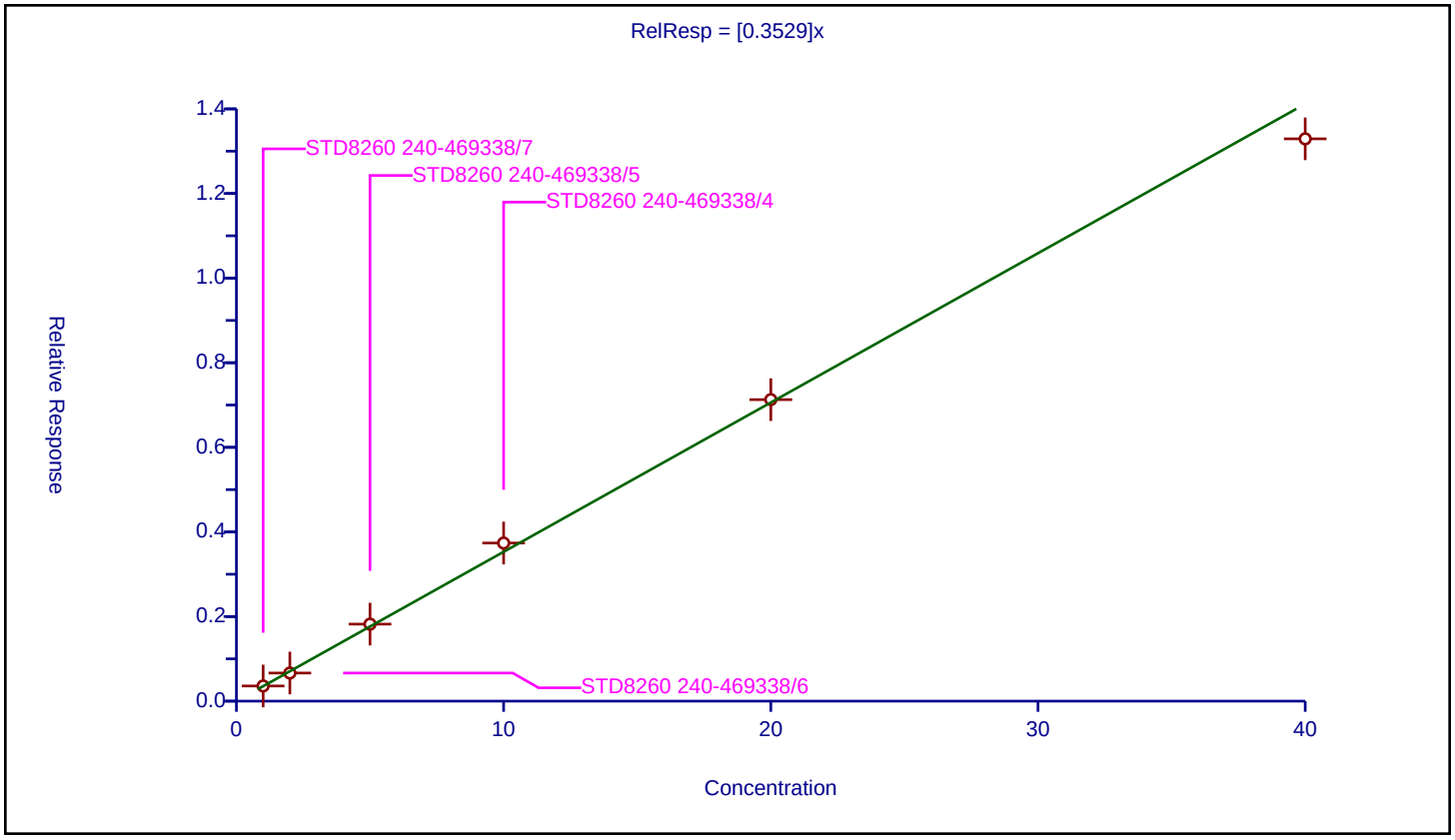
Curve Coefficients

Intercept:	0
Slope:	0.3529

Error Coefficients

Standard Error:	475000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.358724	20.0	1237666.0	0.358724	Y
2	STD8260 240-469338/6	2.0	0.664714	20.0	1194740.0	0.332357	Y
3	STD8260 240-469338/5	5.0	1.820726	20.0	1222644.0	0.364145	Y
4	STD8260 240-469338/4	10.0	3.737329	20.0	1164516.0	0.373733	Y
5	STD8260 240-469338/3	20.0	7.127122	20.0	1252890.0	0.356356	Y
6	STD8260 240-469338/2	40.0	13.292101	20.0	1401011.0	0.332303	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

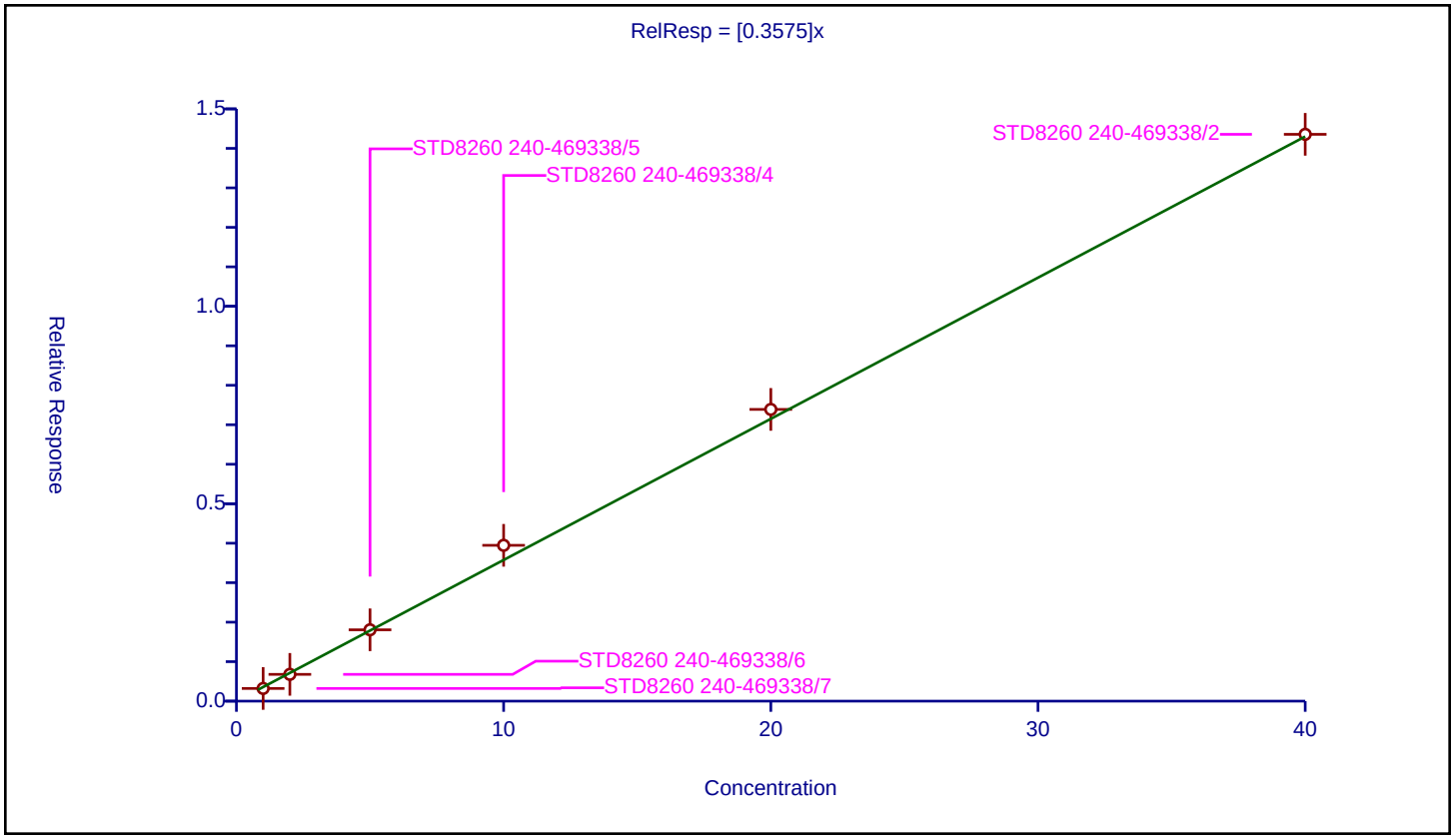
Curve Coefficients

Intercept:	0
Slope:	0.3575

Error Coefficients

Standard Error:	508000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.321379	20.0	1237666.0	0.321379	Y
2	STD8260 240-469338/6	2.0	0.678591	20.0	1194740.0	0.339296	Y
3	STD8260 240-469338/5	5.0	1.807067	20.0	1222644.0	0.361413	Y
4	STD8260 240-469338/4	10.0	3.946395	20.0	1164516.0	0.394639	Y
5	STD8260 240-469338/3	20.0	7.388757	20.0	1252890.0	0.369438	Y
6	STD8260 240-469338/2	40.0	14.35589	20.0	1401011.0	0.358897	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

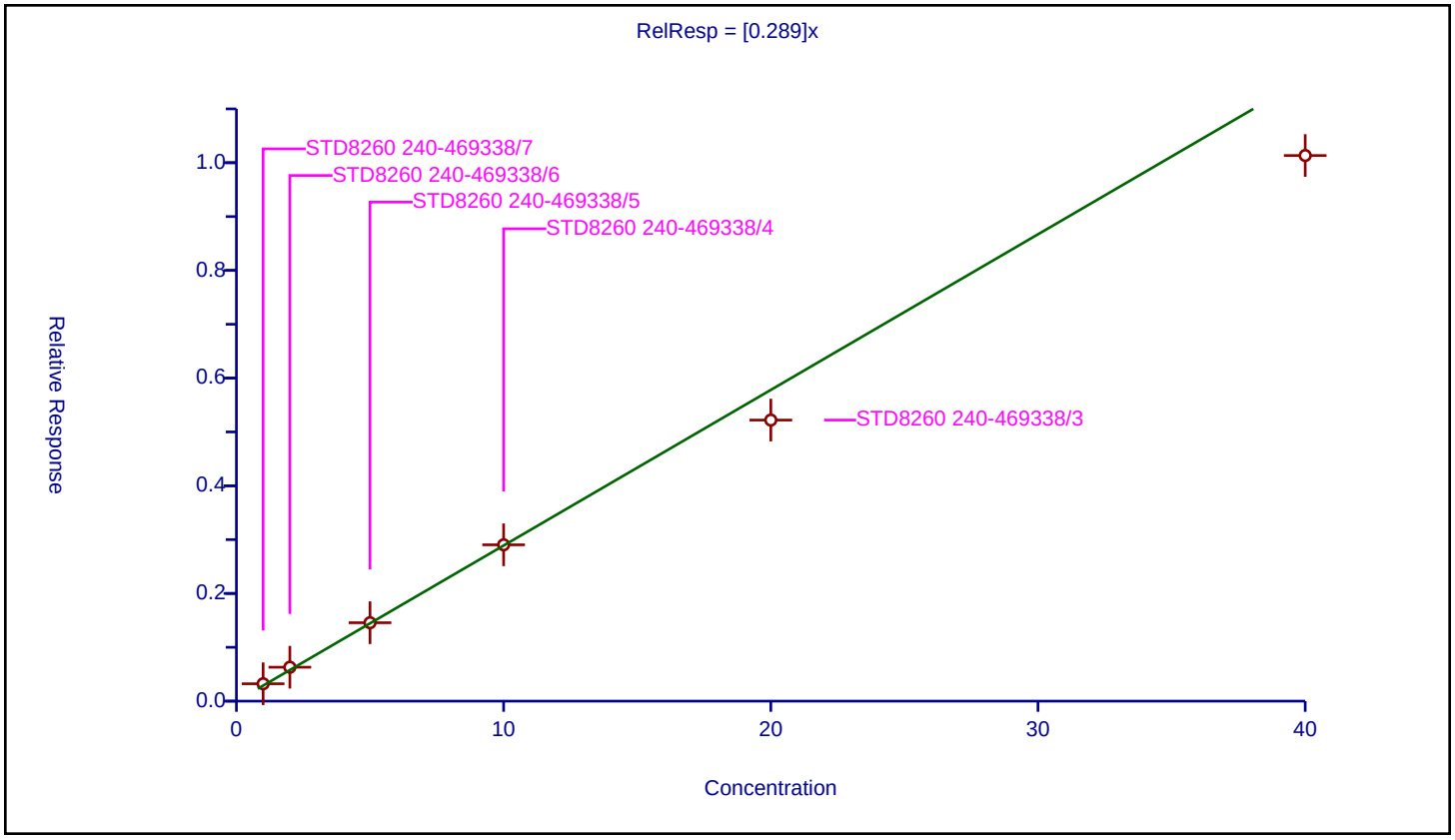
Curve Coefficients

Intercept:	0
Slope:	0.289

Error Coefficients

Standard Error:	360000
Relative Standard Error:	9.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.323011	20.0	1237666.0	0.323011	Y
2	STD8260 240-469338/6	2.0	0.630212	20.0	1194740.0	0.315106	Y
3	STD8260 240-469338/5	5.0	1.456434	20.0	1222644.0	0.291287	Y
4	STD8260 240-469338/4	10.0	2.903713	20.0	1164516.0	0.290371	Y
5	STD8260 240-469338/3	20.0	5.220363	20.0	1252890.0	0.261018	Y
6	STD8260 240-469338/2	40.0	10.133953	20.0	1401011.0	0.253349	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

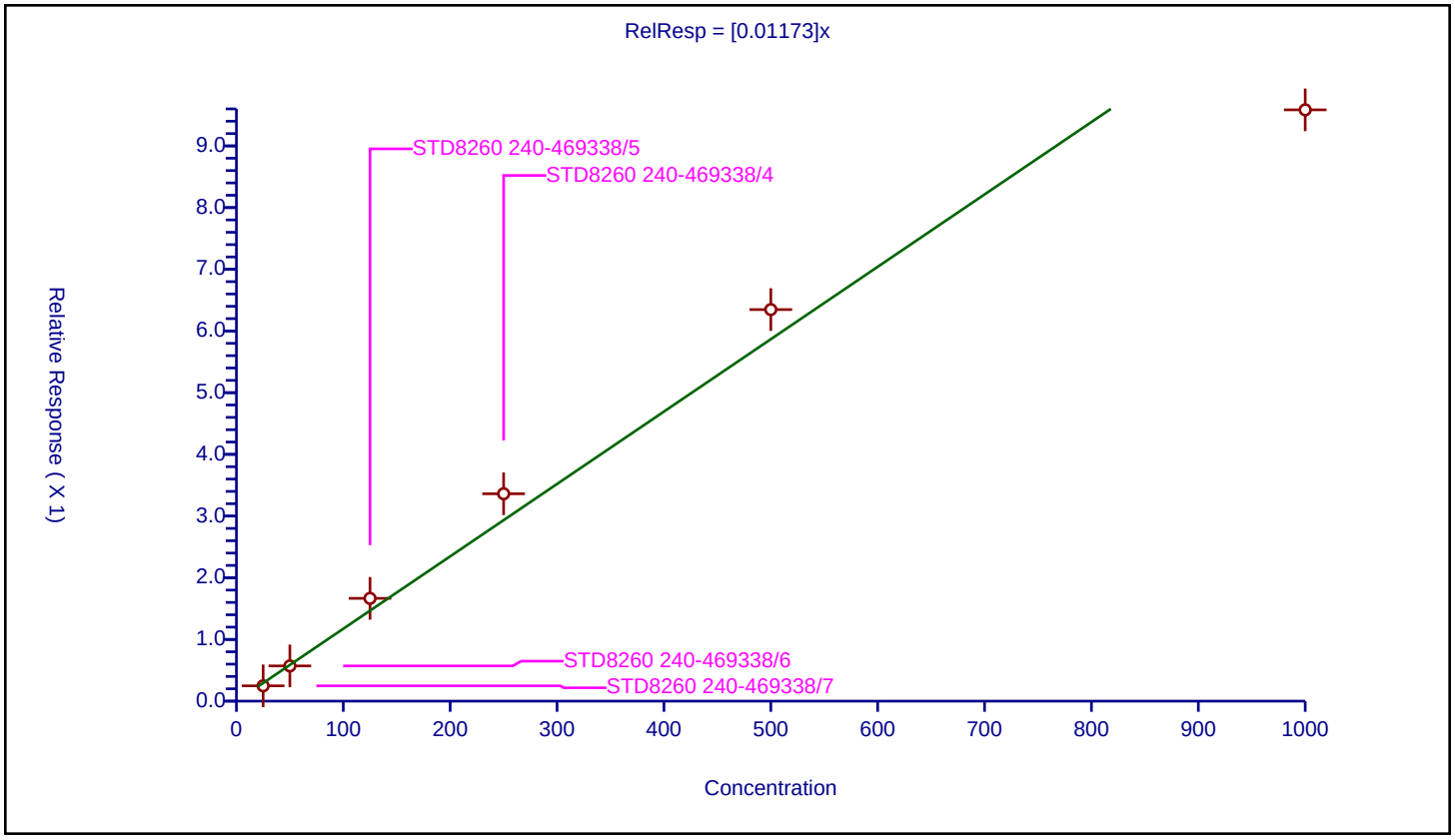
Curve Coefficients

Intercept:	0
Slope:	0.01173

Error Coefficients

Standard Error:	255000
Relative Standard Error:	14.5
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	25.0	0.248104	20.0	905264.0	0.009924	Y
2	STD8260 240-469338/6	50.0	0.571138	20.0	862909.0	0.011423	Y
3	STD8260 240-469338/5	125.0	1.666371	20.0	861537.0	0.013331	Y
4	STD8260 240-469338/4	250.0	3.361442	20.0	833065.0	0.013446	Y
5	STD8260 240-469338/3	500.0	6.34715	20.0	890220.0	0.012694	Y
6	STD8260 240-469338/2	1000.0	9.584315	20.0	979659.0	0.009584	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

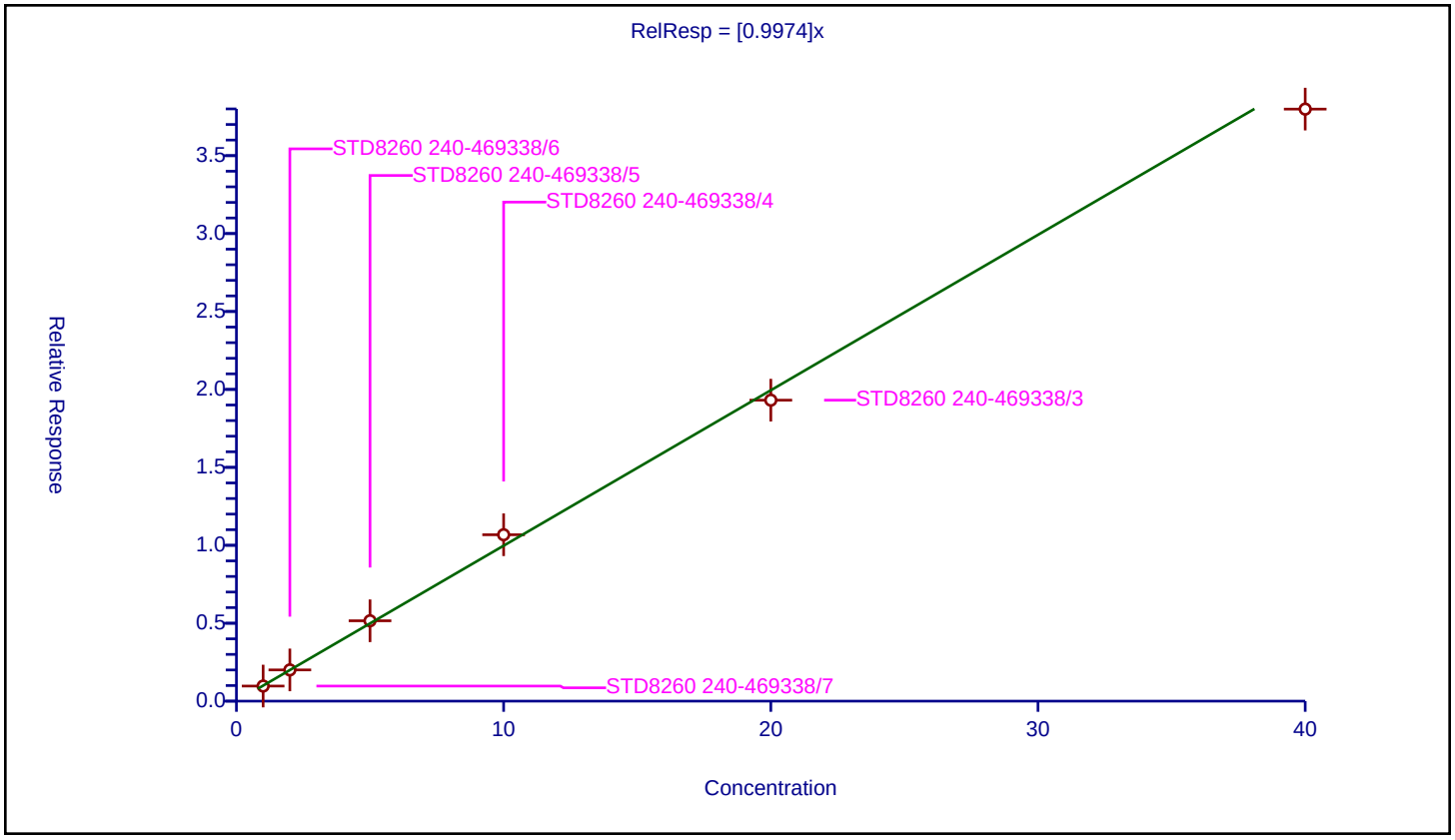
Curve Coefficients

Intercept:	0
Slope:	0.9974

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.968323	20.0	1237666.0	0.968323	Y
2	STD8260 240-469338/6	2.0	2.0037	20.0	1194740.0	1.00185	Y
3	STD8260 240-469338/5	5.0	5.156481	20.0	1222644.0	1.031296	Y
4	STD8260 240-469338/4	10.0	10.676453	20.0	1164516.0	1.067645	Y
5	STD8260 240-469338/3	20.0	19.311288	20.0	1252890.0	0.965564	Y
6	STD8260 240-469338/2	40.0	37.985726	20.0	1401011.0	0.949643	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

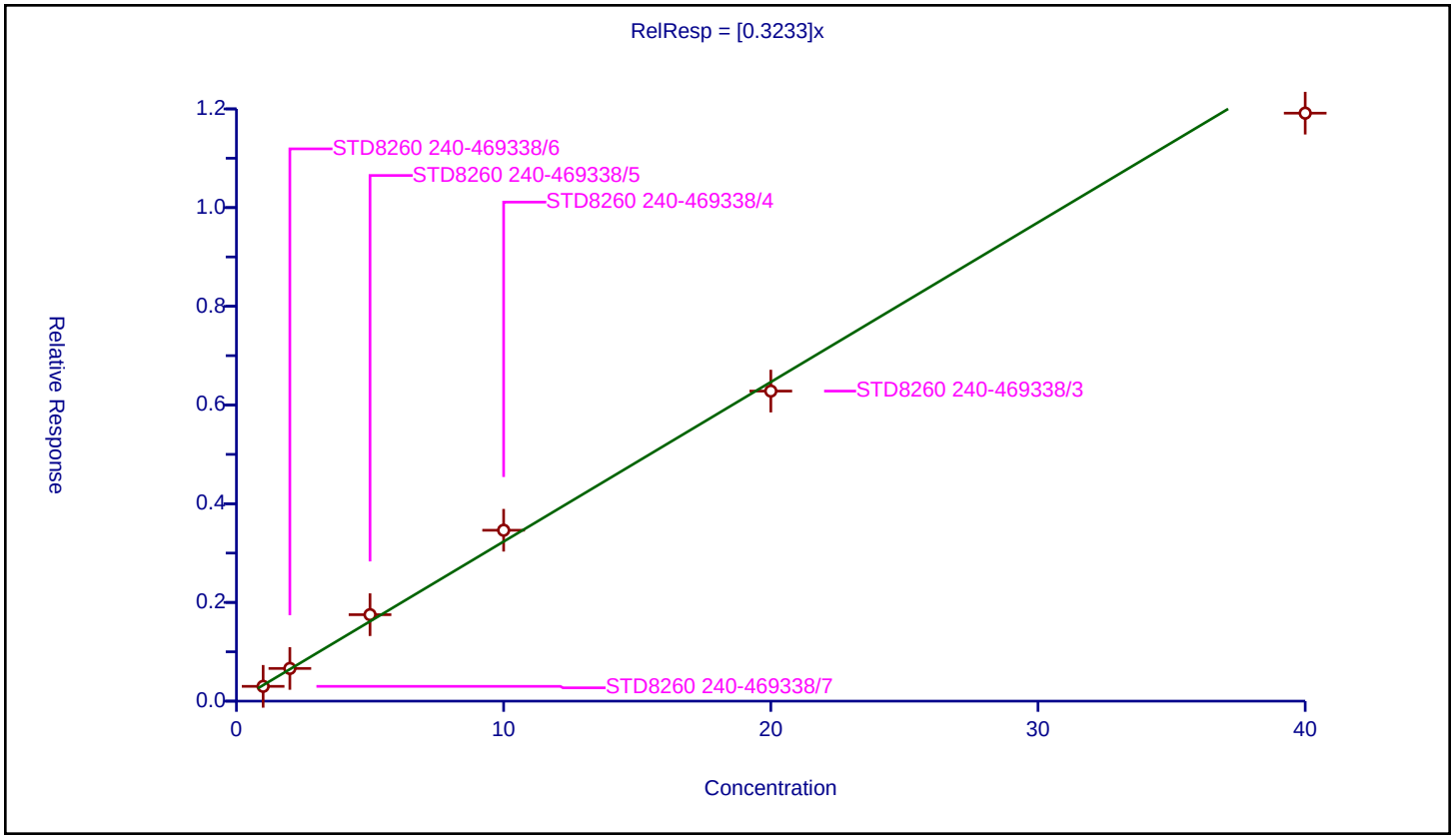
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	426000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299968	20.0	1237666.0	0.299968	Y
2	STD8260 240-469338/6	2.0	0.662437	20.0	1194740.0	0.331219	Y
3	STD8260 240-469338/5	5.0	1.751761	20.0	1222644.0	0.350352	Y
4	STD8260 240-469338/4	10.0	3.462898	20.0	1164516.0	0.34629	Y
5	STD8260 240-469338/3	20.0	6.282499	20.0	1252890.0	0.314125	Y
6	STD8260 240-469338/2	40.0	11.913854	20.0	1401011.0	0.297846	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

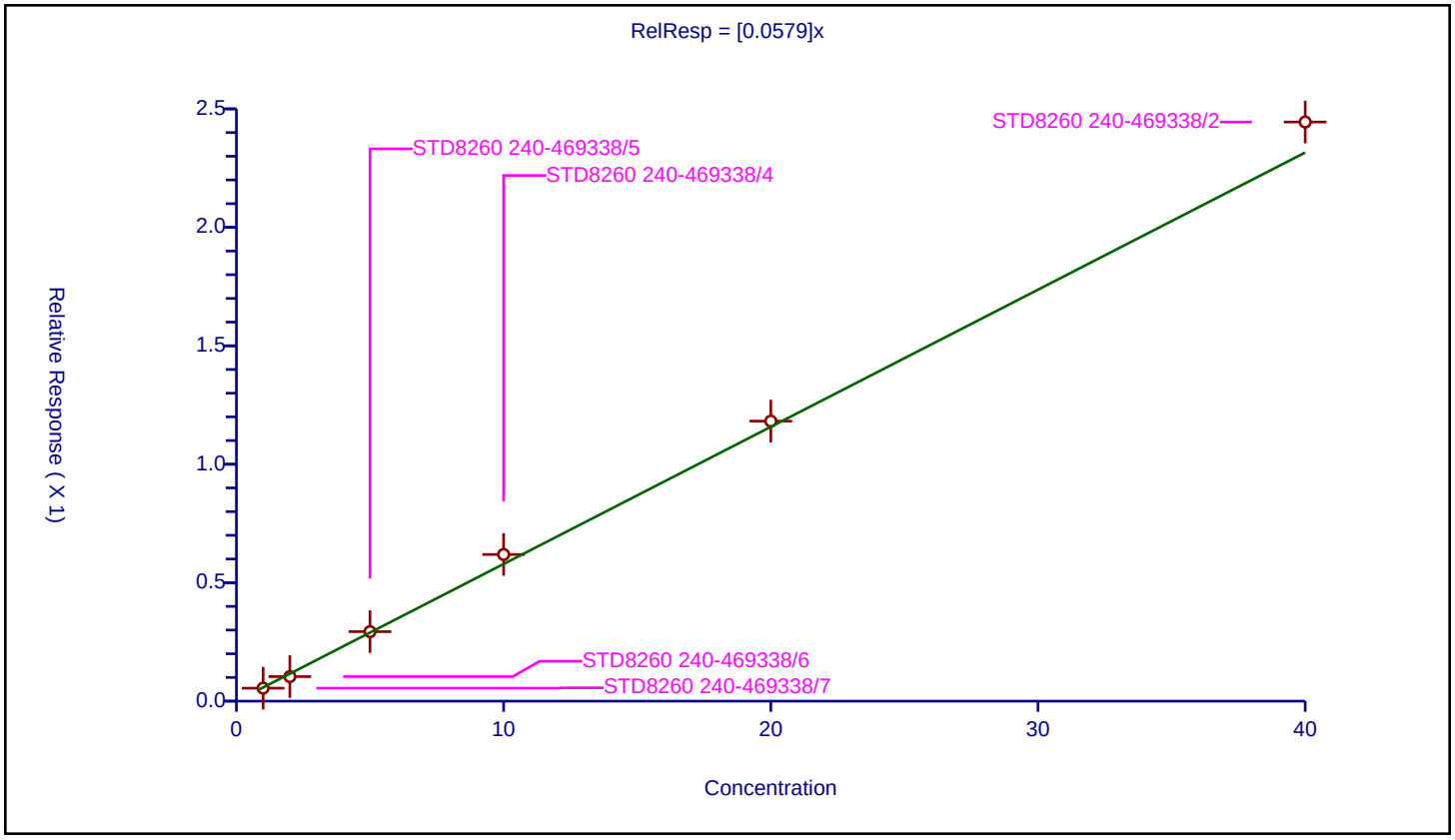
Curve Coefficients

Intercept:	0
Slope:	0.0579

Error Coefficients

Standard Error:	85400
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.054797	20.0	1237666.0	0.054797	Y
2	STD8260 240-469338/6	2.0	0.103571	20.0	1194740.0	0.051785	Y
3	STD8260 240-469338/5	5.0	0.293381	20.0	1222644.0	0.058676	Y
4	STD8260 240-469338/4	10.0	0.619038	20.0	1164516.0	0.061904	Y
5	STD8260 240-469338/3	20.0	1.181971	20.0	1252890.0	0.059099	Y
6	STD8260 240-469338/2	40.0	2.444606	20.0	1401011.0	0.061115	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

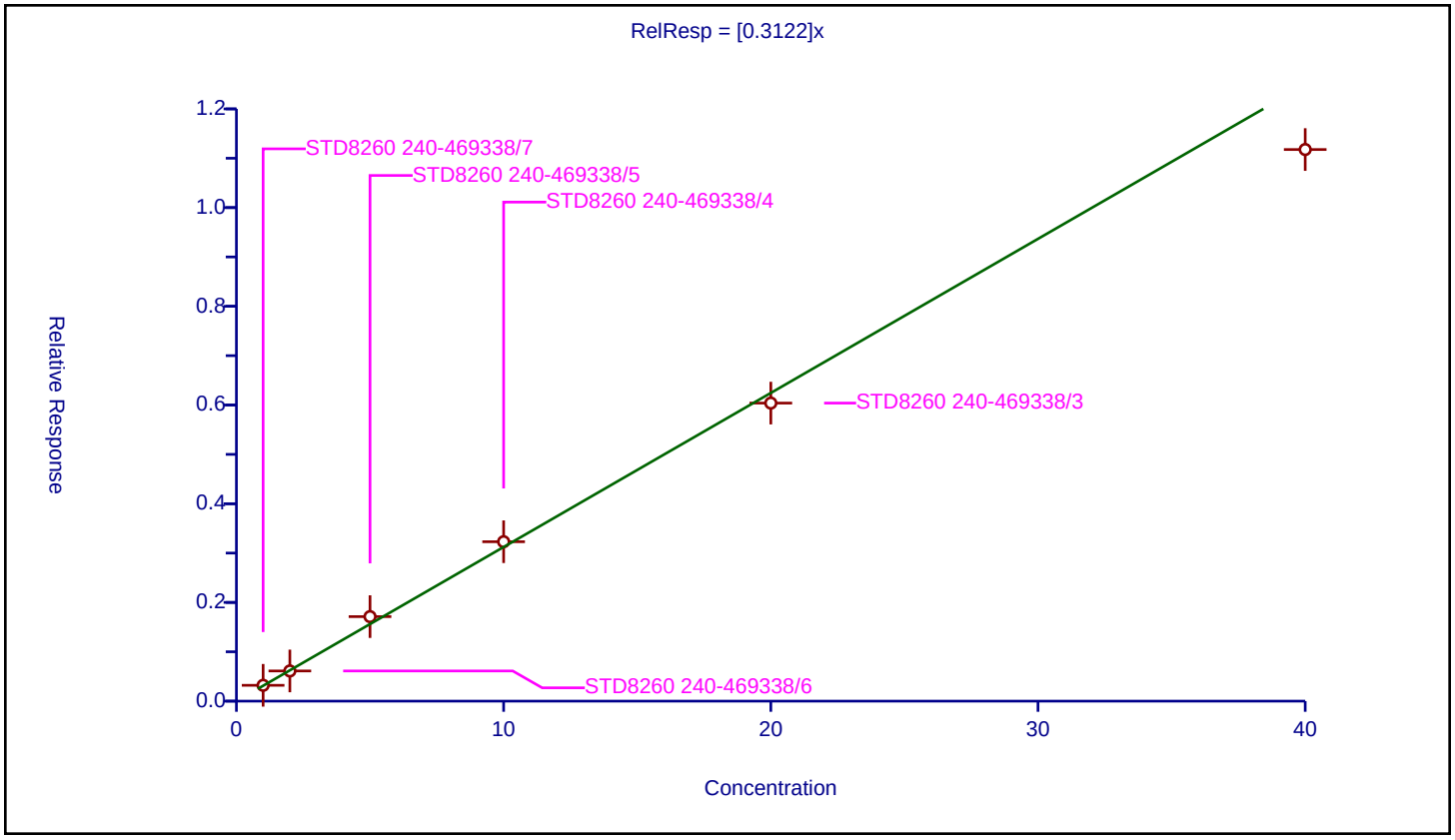
Curve Coefficients

Intercept:	0
Slope:	0.3122

Error Coefficients

Standard Error:	401000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.320652	20.0	1237666.0	0.320652	Y
2	STD8260 240-469338/6	2.0	0.611698	20.0	1194740.0	0.305849	Y
3	STD8260 240-469338/5	5.0	1.712322	20.0	1222644.0	0.342464	Y
4	STD8260 240-469338/4	10.0	3.230338	20.0	1164516.0	0.323034	Y
5	STD8260 240-469338/3	20.0	6.038726	20.0	1252890.0	0.301936	Y
6	STD8260 240-469338/2	40.0	11.1767	20.0	1401011.0	0.279418	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

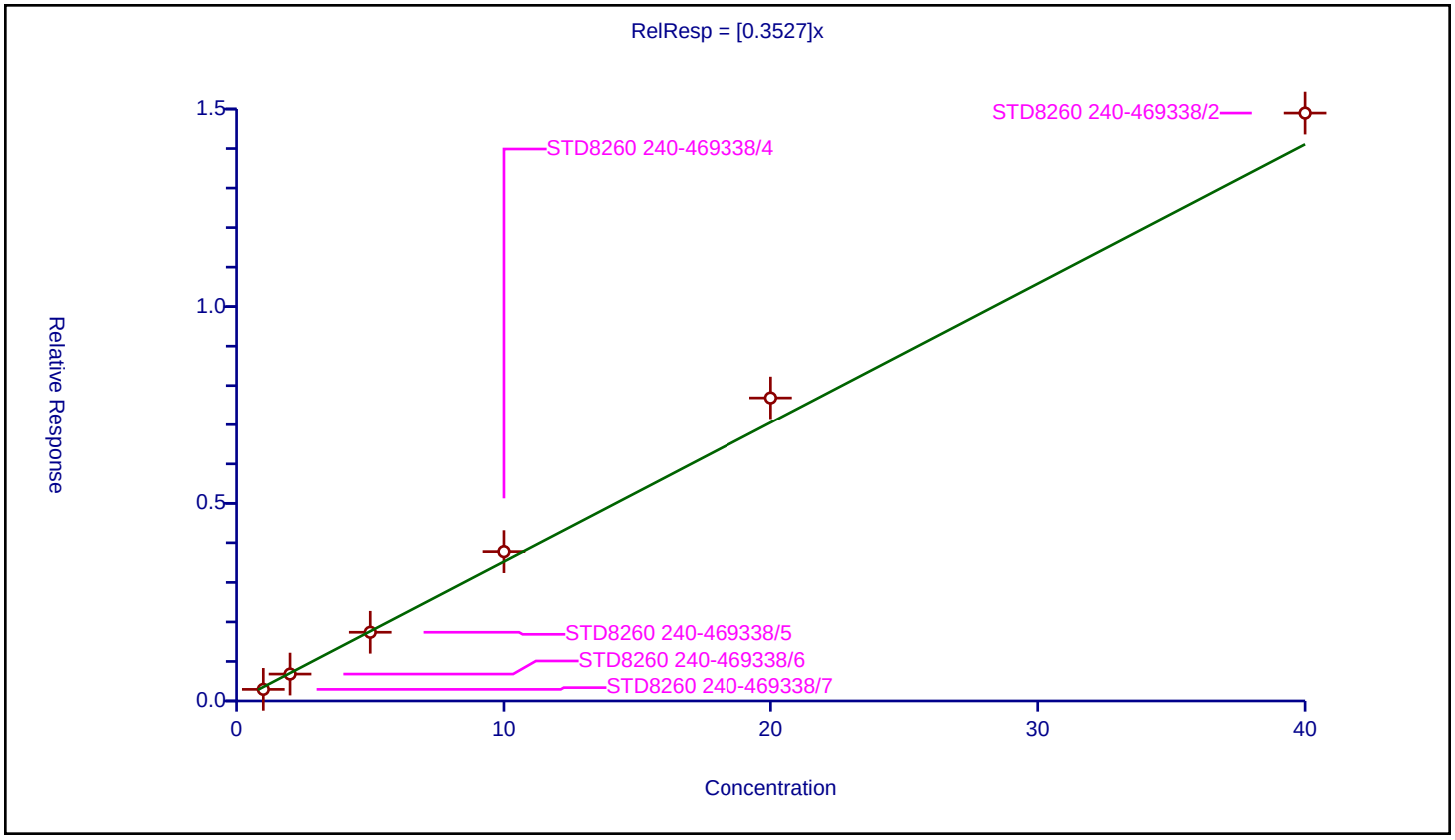
Curve Coefficients

Intercept:	0
Slope:	0.3527

Error Coefficients

Standard Error:	526000
Relative Standard Error:	9.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.293439	20.0	1237666.0	0.293439	Y
2	STD8260 240-469338/6	2.0	0.681119	20.0	1194740.0	0.340559	Y
3	STD8260 240-469338/5	5.0	1.738593	20.0	1222644.0	0.347719	Y
4	STD8260 240-469338/4	10.0	3.77769	20.0	1164516.0	0.377769	Y
5	STD8260 240-469338/3	20.0	7.686038	20.0	1252890.0	0.384302	Y
6	STD8260 240-469338/2	40.0	14.897128	20.0	1401011.0	0.372428	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

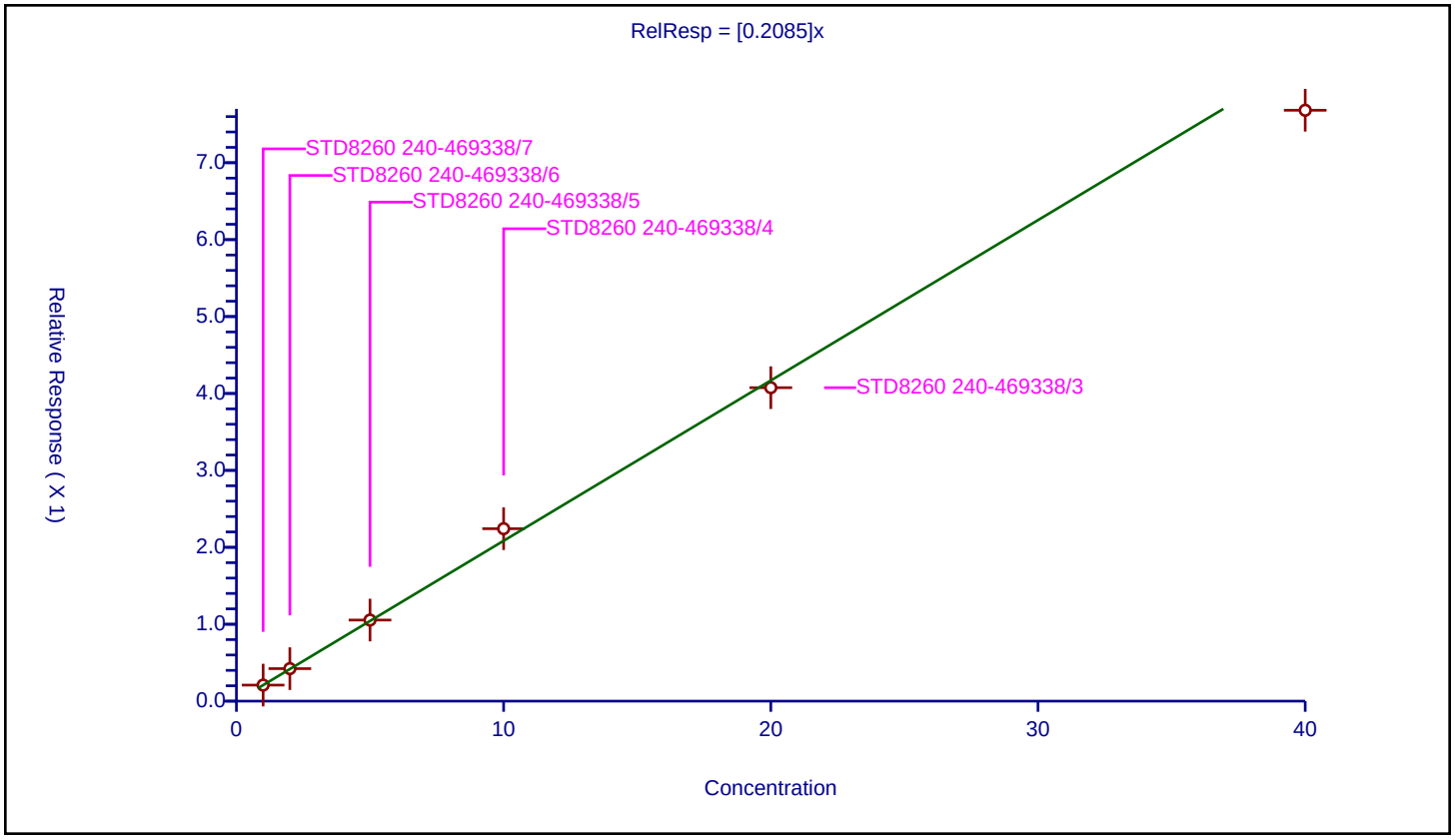
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	275000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.208602	20.0	1237666.0	0.208602	Y
2	STD8260 240-469338/6	2.0	0.422636	20.0	1194740.0	0.211318	Y
3	STD8260 240-469338/5	5.0	1.054322	20.0	1222644.0	0.210864	Y
4	STD8260 240-469338/4	10.0	2.242082	20.0	1164516.0	0.224208	Y
5	STD8260 240-469338/3	20.0	4.075474	20.0	1252890.0	0.203774	Y
6	STD8260 240-469338/2	40.0	7.682338	20.0	1401011.0	0.192058	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

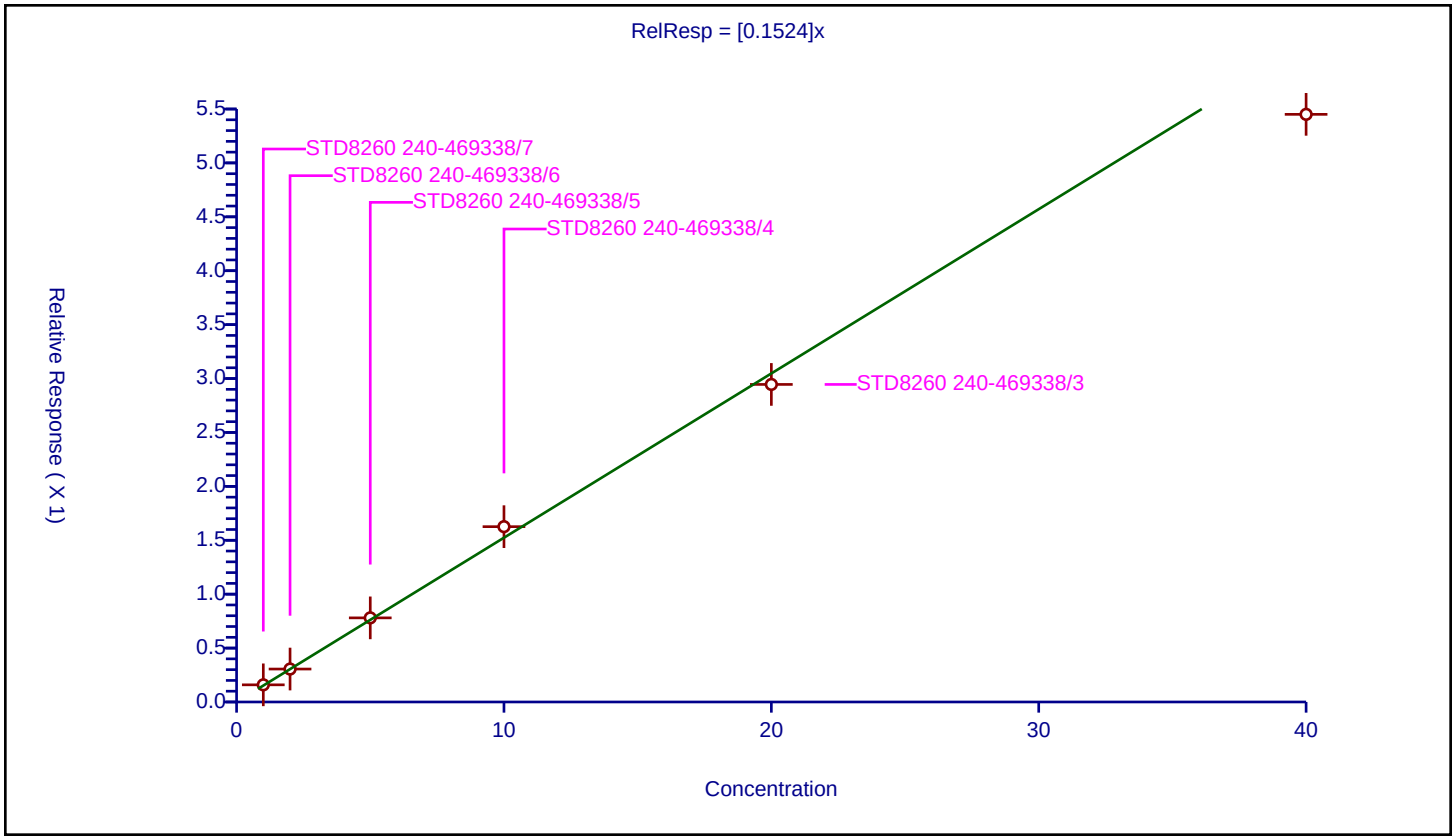
Curve Coefficients

Intercept:	0
Slope:	0.1524

Error Coefficients

Standard Error:	196000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159106	20.0	1237666.0	0.159106	Y
2	STD8260 240-469338/6	2.0	0.305707	20.0	1194740.0	0.152853	Y
3	STD8260 240-469338/5	5.0	0.780325	20.0	1222644.0	0.156065	Y
4	STD8260 240-469338/4	10.0	1.626204	20.0	1164516.0	0.16262	Y
5	STD8260 240-469338/3	20.0	2.945526	20.0	1252890.0	0.147276	Y
6	STD8260 240-469338/2	40.0	5.45045	20.0	1401011.0	0.136261	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

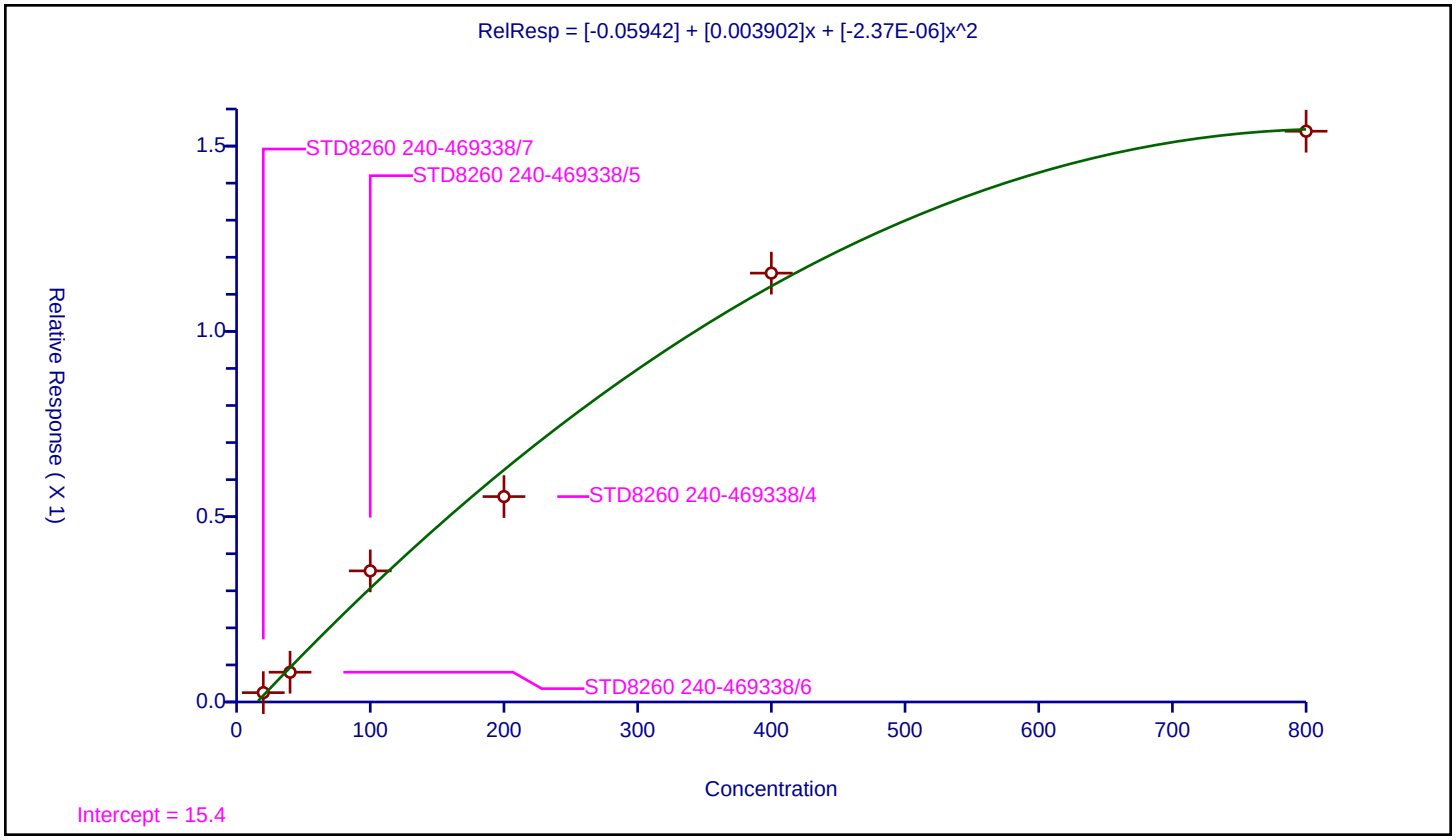
Curve Coefficients

Intercept:	-0.05942
Slope:	0.003902
Second Order:	-2.37E-06

Error Coefficients

Standard Error:	78400
Relative Standard Error:	13.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	20.0	0.025225	20.0	1237666.0	0.001261	Y
2	STD8260 240-469338/6	40.0	0.080352	20.0	1194740.0	0.002009	Y
3	STD8260 240-469338/5	100.0	0.353791	20.0	1222644.0	0.003538	Y
4	STD8260 240-469338/4	200.0	0.554204	20.0	1164516.0	0.002771	Y
5	STD8260 240-469338/3	400.0	1.157197	20.0	1252890.0	0.002893	Y
6	STD8260 240-469338/2	800.0	1.540088	20.0	1401011.0	0.001925	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

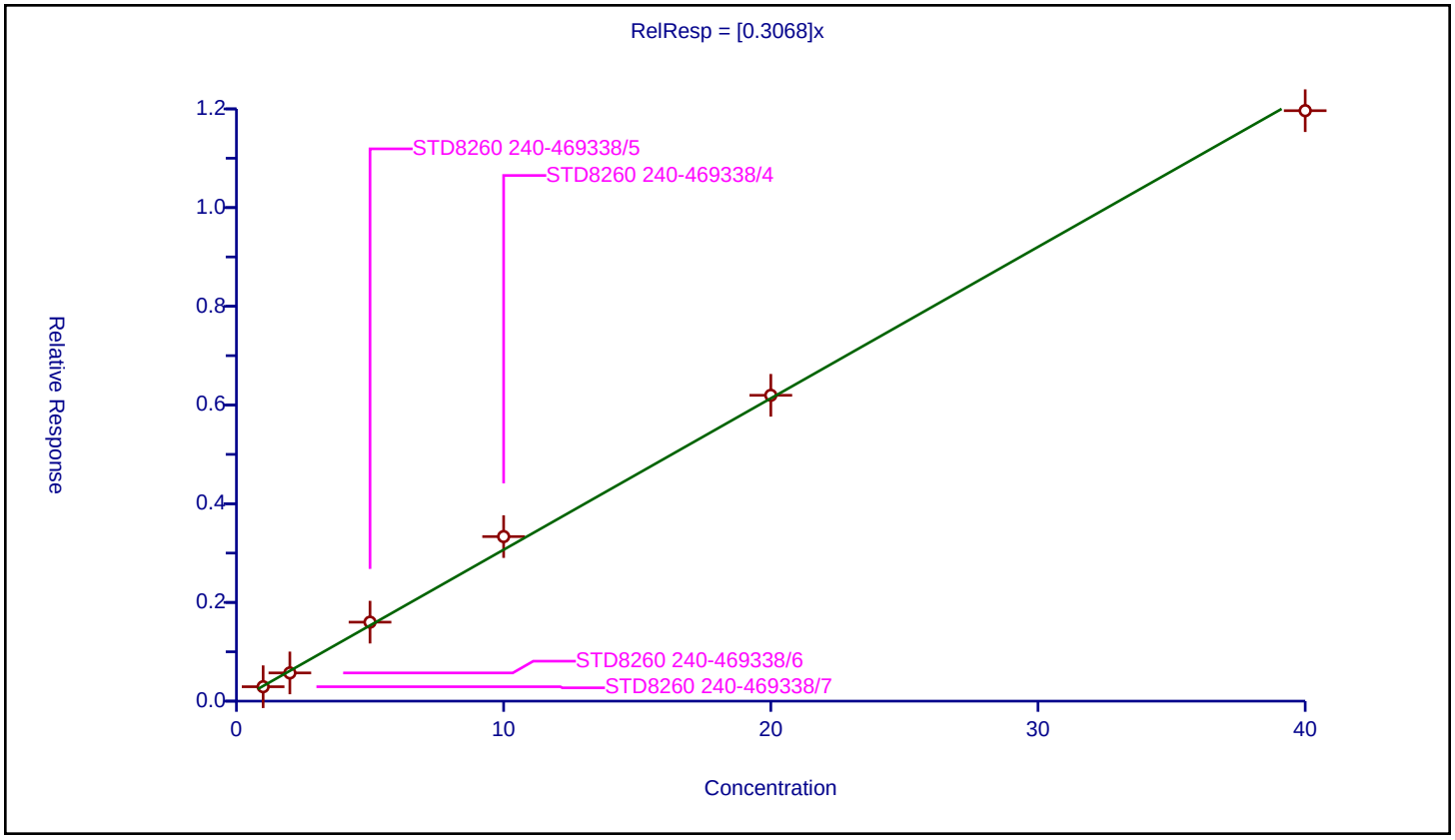
Curve Coefficients

Intercept:	0
Slope:	0.3068

Error Coefficients

Standard Error:	425000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.292373	20.0	1237666.0	0.292373	Y
2	STD8260 240-469338/6	2.0	0.571656	20.0	1194740.0	0.285828	Y
3	STD8260 240-469338/5	5.0	1.600302	20.0	1222644.0	0.32006	Y
4	STD8260 240-469338/4	10.0	3.334089	20.0	1164516.0	0.333409	Y
5	STD8260 240-469338/3	20.0	6.196905	20.0	1252890.0	0.309845	Y
6	STD8260 240-469338/2	40.0	11.963903	20.0	1401011.0	0.299098	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

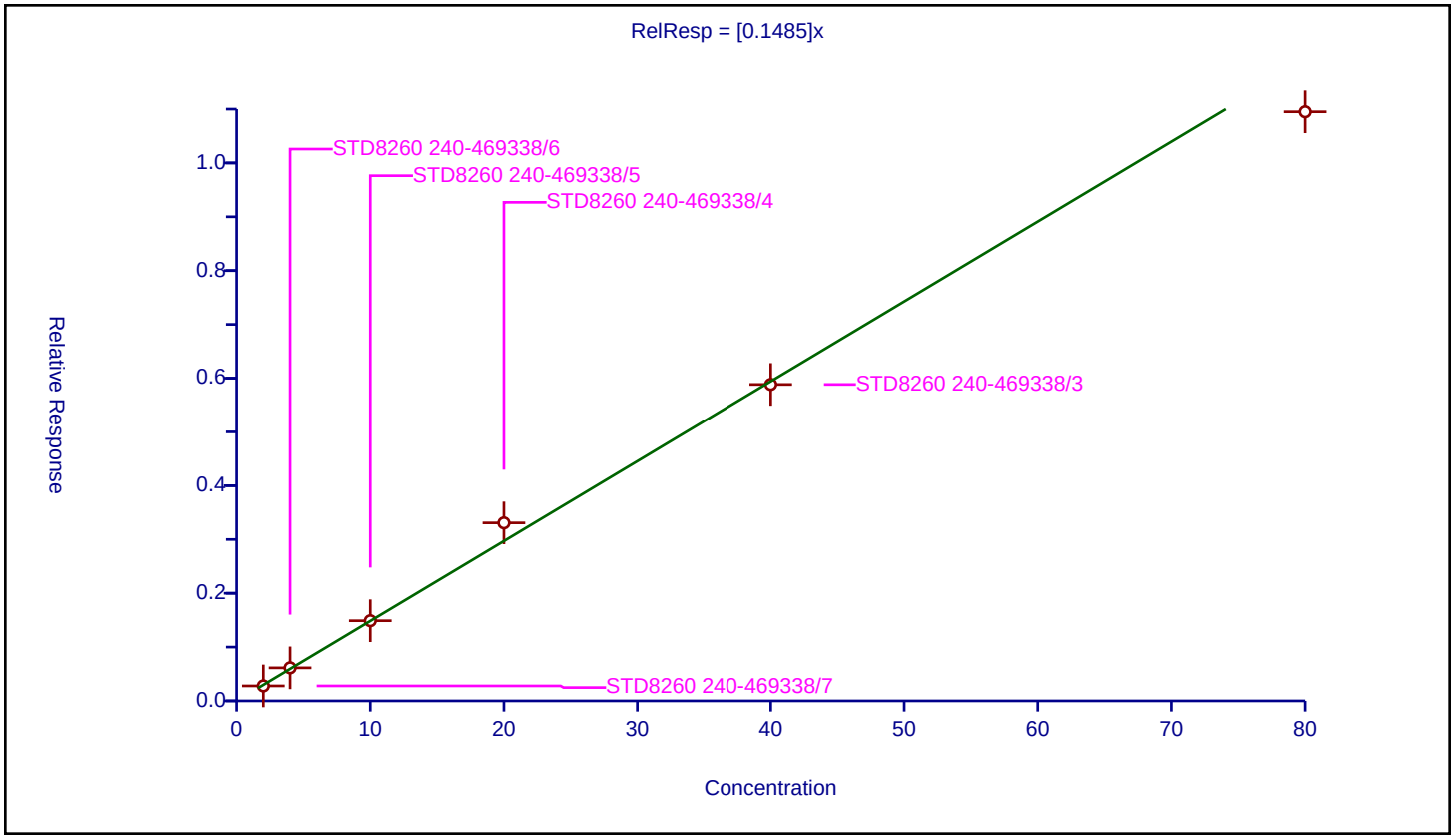
Curve Coefficients

Intercept:	0
Slope:	0.1485

Error Coefficients

Standard Error:	393000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.27833	20.0	1237666.0	0.139165	Y
2	STD8260 240-469338/6	4.0	0.614226	20.0	1194740.0	0.153556	Y
3	STD8260 240-469338/5	10.0	1.489919	20.0	1222644.0	0.148992	Y
4	STD8260 240-469338/4	20.0	3.308362	20.0	1164516.0	0.165418	Y
5	STD8260 240-469338/3	40.0	5.883406	20.0	1252890.0	0.147085	Y
6	STD8260 240-469338/2	80.0	10.950521	20.0	1401011.0	0.136882	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

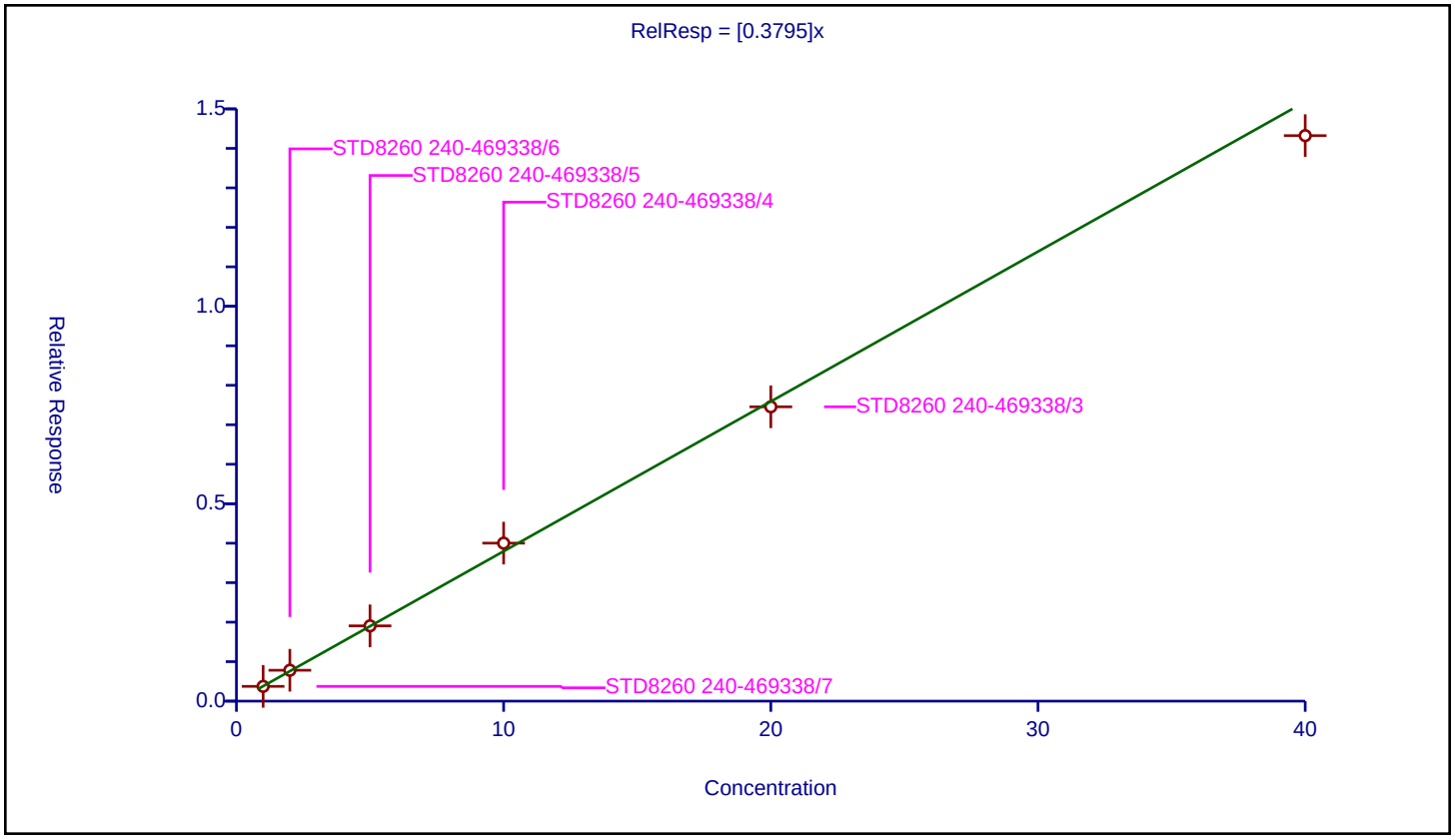
Curve Coefficients

Intercept:	0
Slope:	0.3795

Error Coefficients

Standard Error:	509000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373752	20.0	1237666.0	0.373752	Y
2	STD8260 240-469338/6	2.0	0.782128	20.0	1194740.0	0.391064	Y
3	STD8260 240-469338/5	5.0	1.906933	20.0	1222644.0	0.381387	Y
4	STD8260 240-469338/4	10.0	4.002178	20.0	1164516.0	0.400218	Y
5	STD8260 240-469338/3	20.0	7.454797	20.0	1252890.0	0.37274	Y
6	STD8260 240-469338/2	40.0	14.3229	20.0	1401011.0	0.358072	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

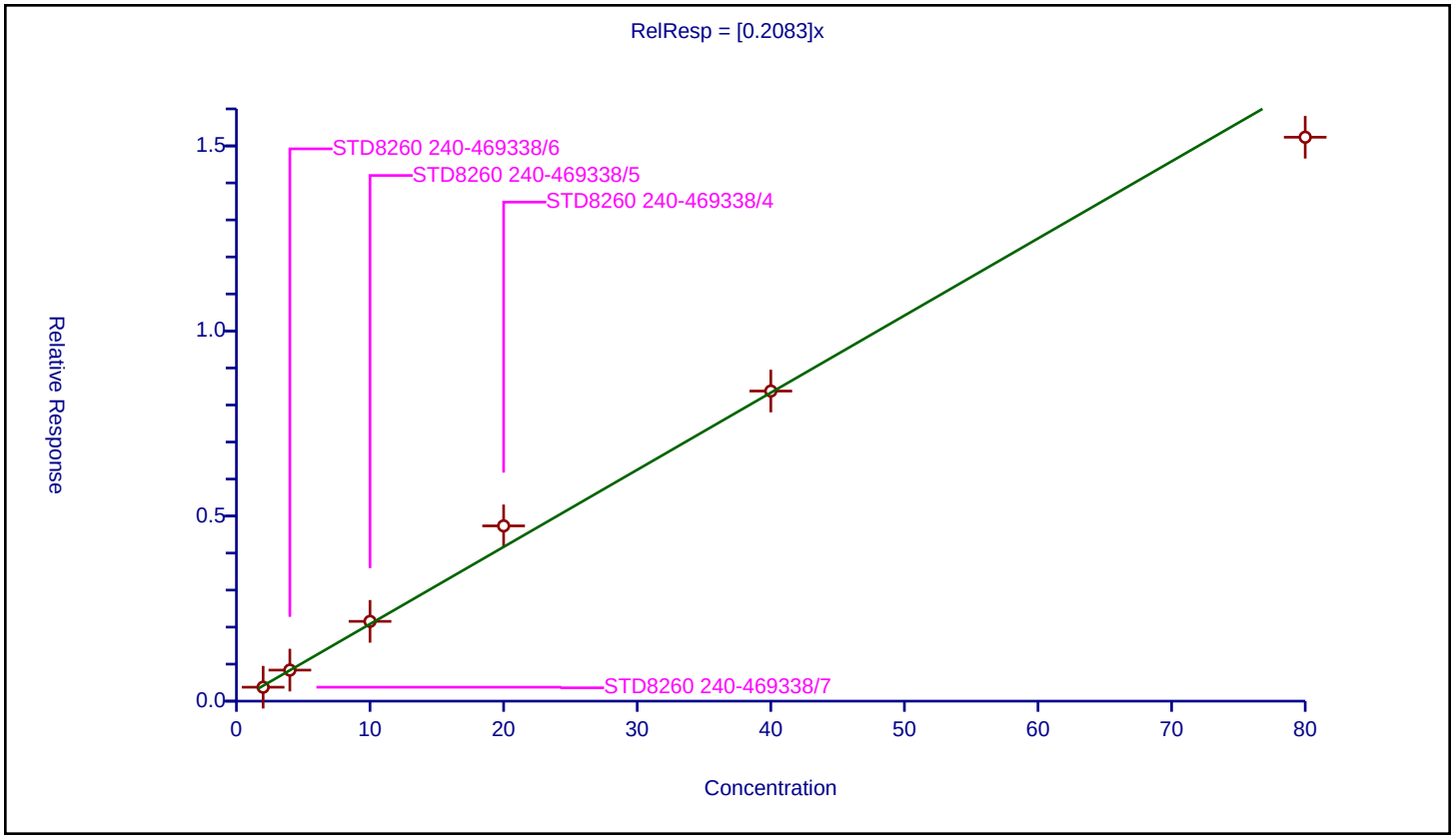
Curve Coefficients

Intercept:	0
Slope:	0.2083

Error Coefficients

Standard Error:	550000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.376467	20.0	1237666.0	0.188233	Y
2	STD8260 240-469338/6	4.0	0.838392	20.0	1194740.0	0.209598	Y
3	STD8260 240-469338/5	10.0	2.155198	20.0	1222644.0	0.21552	Y
4	STD8260 240-469338/4	20.0	4.734585	20.0	1164516.0	0.236729	Y
5	STD8260 240-469338/3	40.0	8.377288	20.0	1252890.0	0.209432	Y
6	STD8260 240-469338/2	80.0	15.234541	20.0	1401011.0	0.190432	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

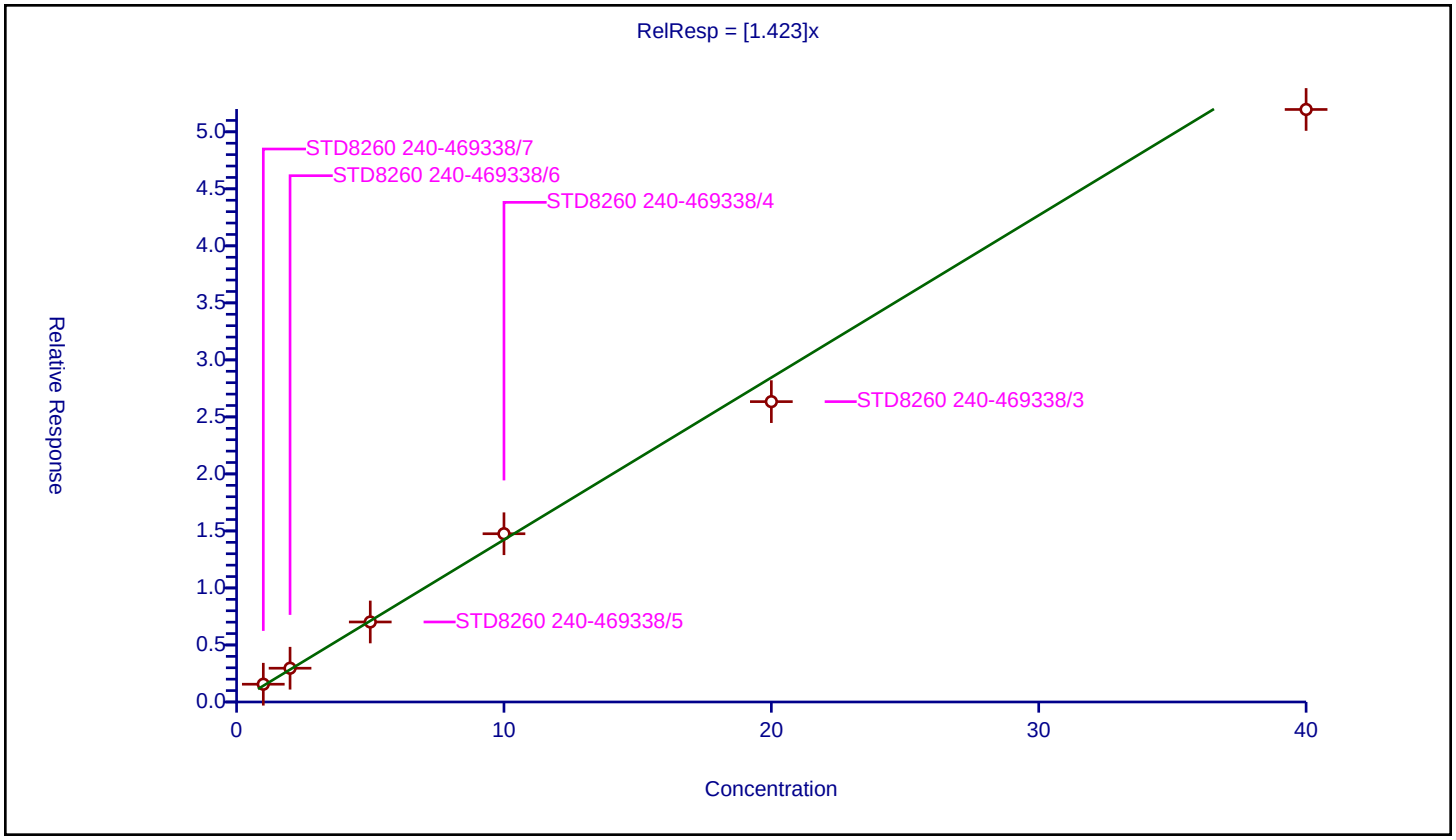
Curve Coefficients

Intercept:	0
Slope:	1.423

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.559103	20.0	905264.0	1.559103	Y
2	STD8260 240-469338/6	2.0	2.962838	20.0	862909.0	1.481419	Y
3	STD8260 240-469338/5	5.0	7.016553	20.0	861537.0	1.403311	Y
4	STD8260 240-469338/4	10.0	14.754623	20.0	833065.0	1.475462	Y
5	STD8260 240-469338/3	20.0	26.33886	20.0	890220.0	1.316943	Y
6	STD8260 240-469338/2	40.0	51.960876	20.0	979659.0	1.299022	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

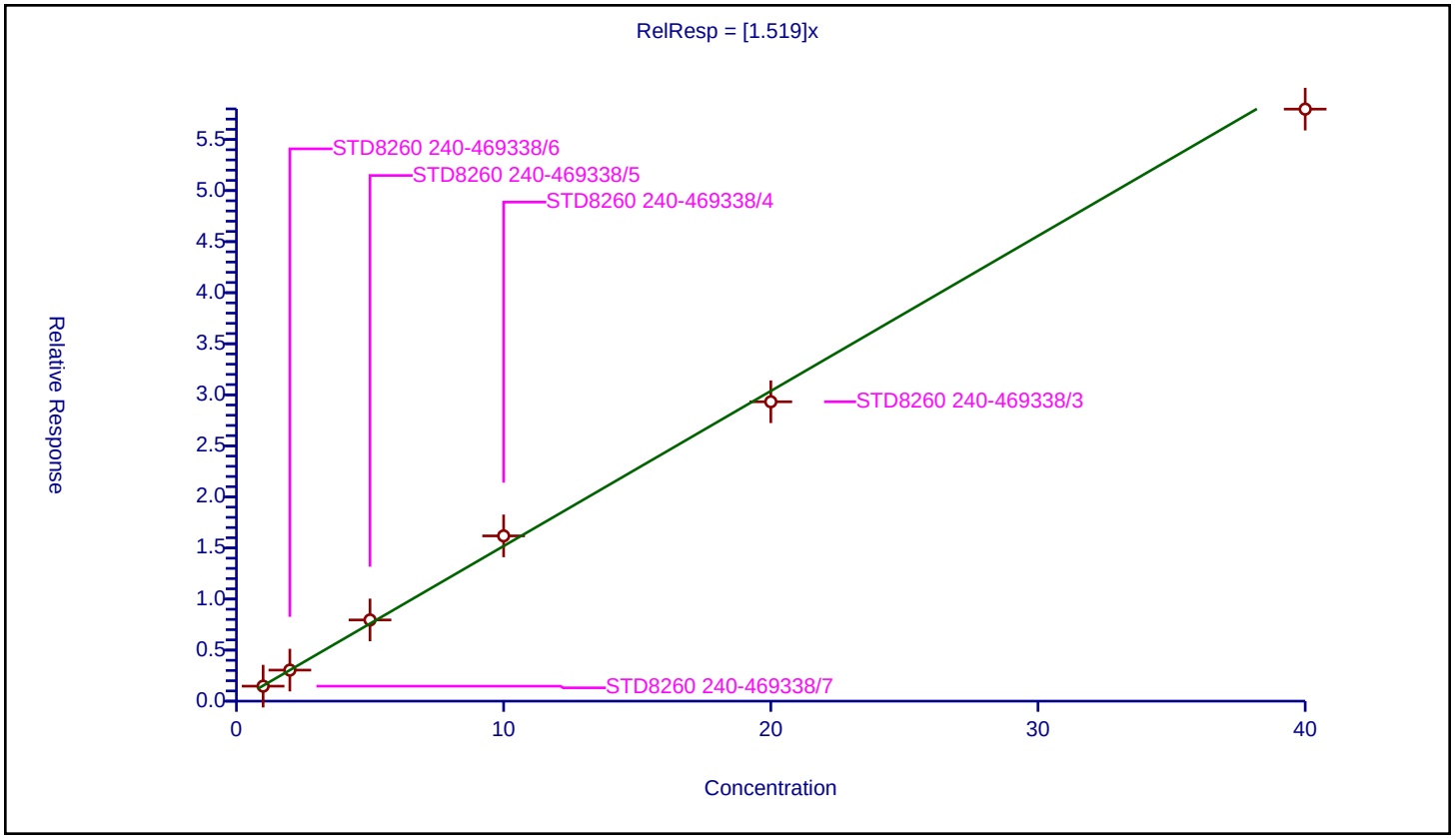
Curve Coefficients

Intercept:	0
Slope:	1.519

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.467749	20.0	905264.0	1.467749	Y
2	STD8260 240-469338/6	2.0	3.040228	20.0	862909.0	1.520114	Y
3	STD8260 240-469338/5	5.0	7.951928	20.0	861537.0	1.590386	Y
4	STD8260 240-469338/4	10.0	16.183659	20.0	833065.0	1.618366	Y
5	STD8260 240-469338/3	20.0	29.319382	20.0	890220.0	1.465969	Y
6	STD8260 240-469338/2	40.0	57.977541	20.0	979659.0	1.449439	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

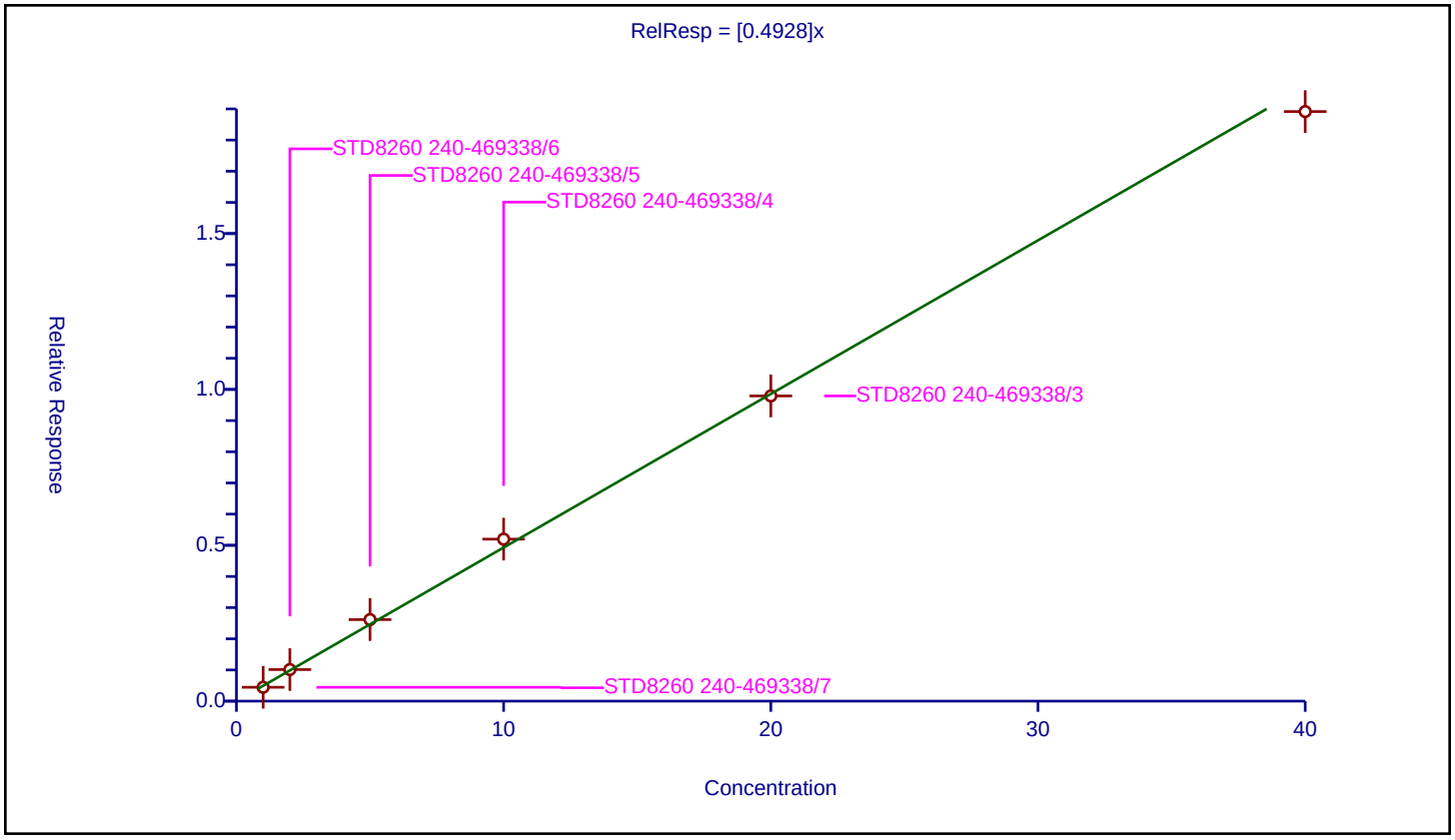
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.444975	20.0	905264.0	0.444975	Y
2	STD8260 240-469338/6	2.0	1.012575	20.0	862909.0	0.506287	Y
3	STD8260 240-469338/5	5.0	2.615558	20.0	861537.0	0.523112	Y
4	STD8260 240-469338/4	10.0	5.197145	20.0	833065.0	0.519715	Y
5	STD8260 240-469338/3	20.0	9.791422	20.0	890220.0	0.489571	Y
6	STD8260 240-469338/2	40.0	18.914765	20.0	979659.0	0.472869	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

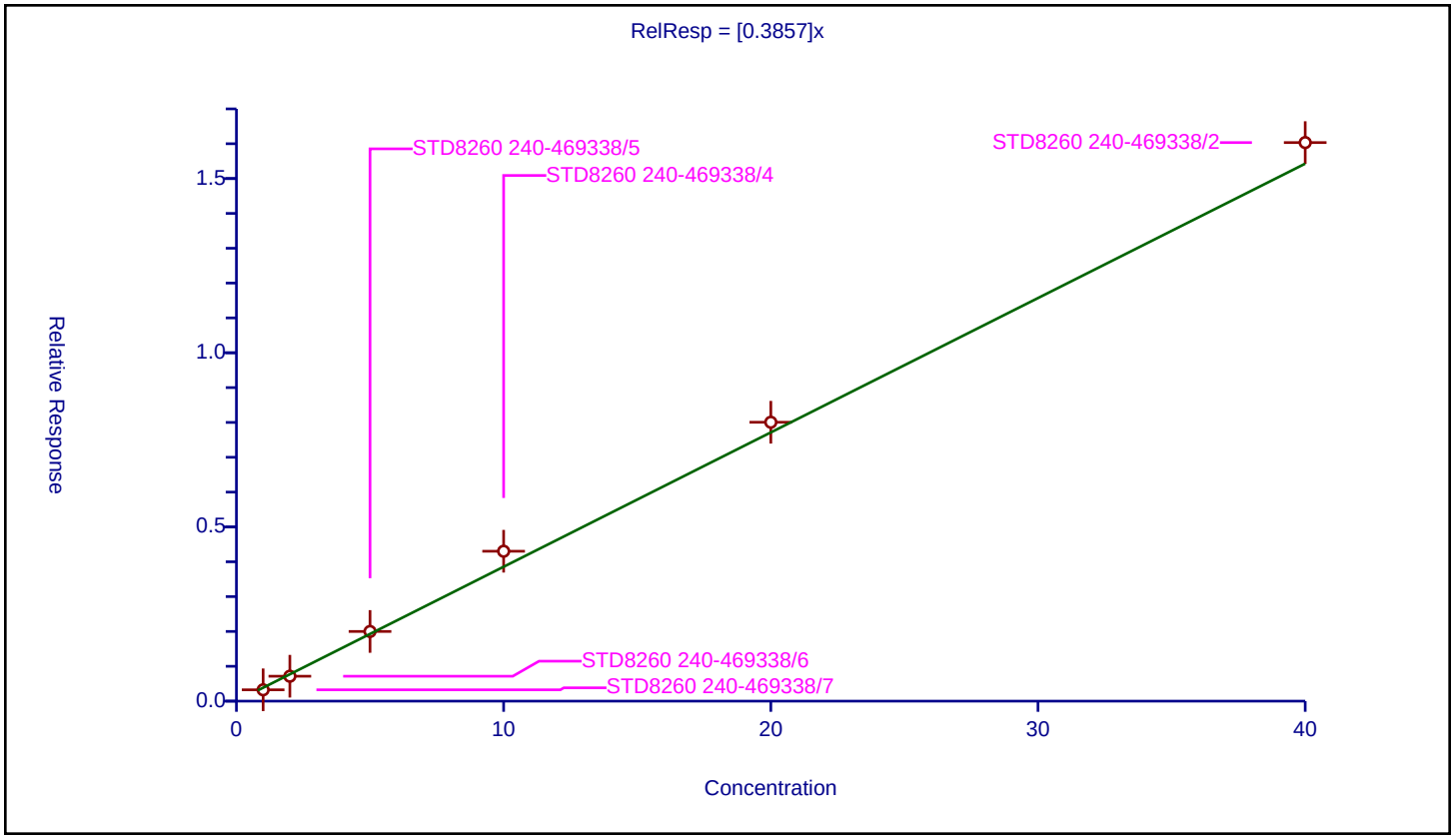
Curve Coefficients

Intercept:	0
Slope:	0.3857

Error Coefficients

Standard Error:	396000
Relative Standard Error:	9.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.325121	20.0	905264.0	0.325121	Y
2	STD8260 240-469338/6	2.0	0.715046	20.0	862909.0	0.357523	Y
3	STD8260 240-469338/5	5.0	2.000193	20.0	861537.0	0.400039	Y
4	STD8260 240-469338/4	10.0	4.303266	20.0	833065.0	0.430327	Y
5	STD8260 240-469338/3	20.0	8.005729	20.0	890220.0	0.400286	Y
6	STD8260 240-469338/2	40.0	16.032967	20.0	979659.0	0.400824	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

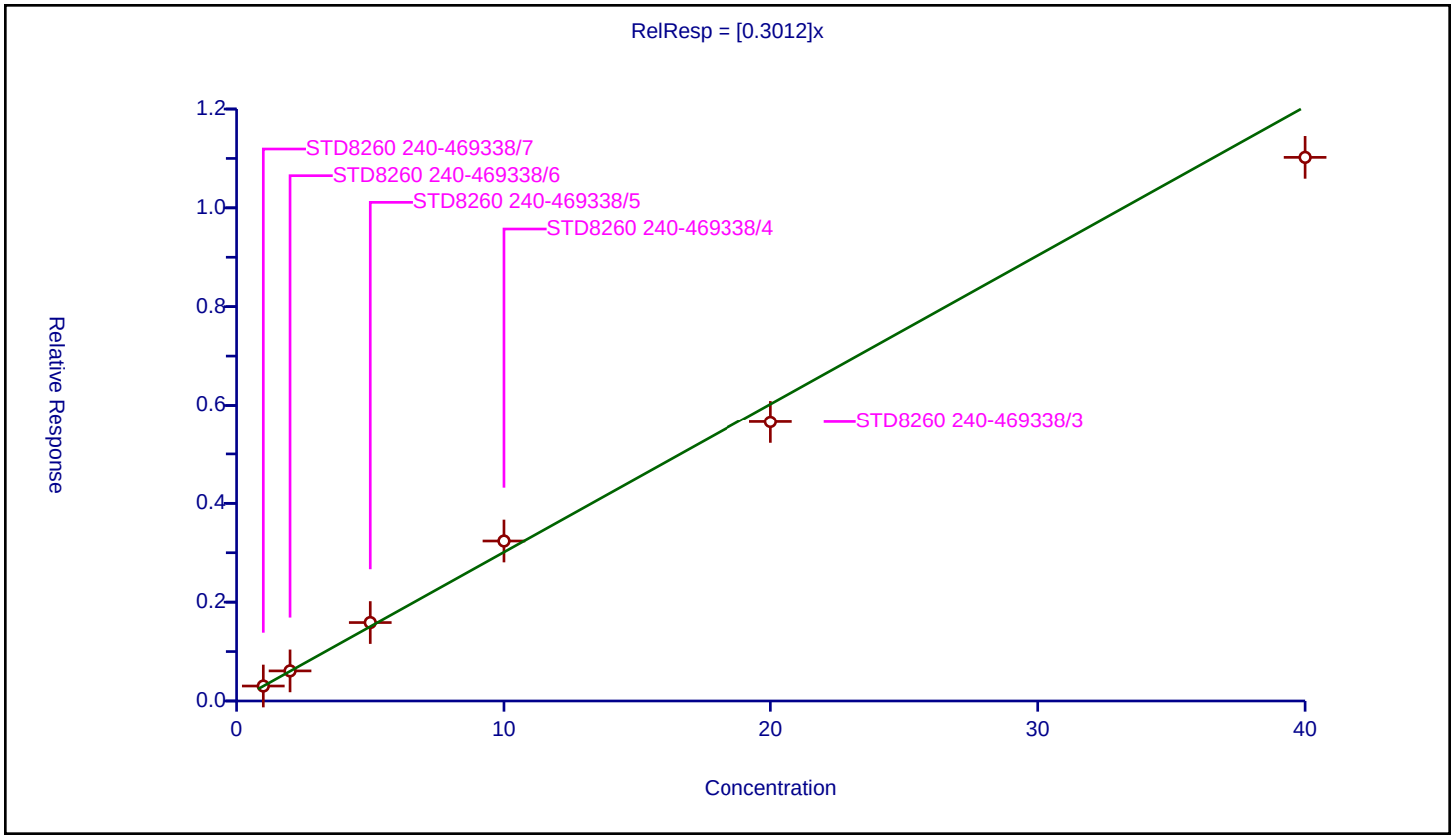
Curve Coefficients

Intercept:	0
Slope:	0.3012

Error Coefficients

Standard Error:	275000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302807	20.0	905264.0	0.302807	Y
2	STD8260 240-469338/6	2.0	0.609242	20.0	862909.0	0.304621	Y
3	STD8260 240-469338/5	5.0	1.587651	20.0	861537.0	0.31753	Y
4	STD8260 240-469338/4	10.0	3.237562	20.0	833065.0	0.323756	Y
5	STD8260 240-469338/3	20.0	5.657635	20.0	890220.0	0.282882	Y
6	STD8260 240-469338/2	40.0	11.02157	20.0	979659.0	0.275539	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

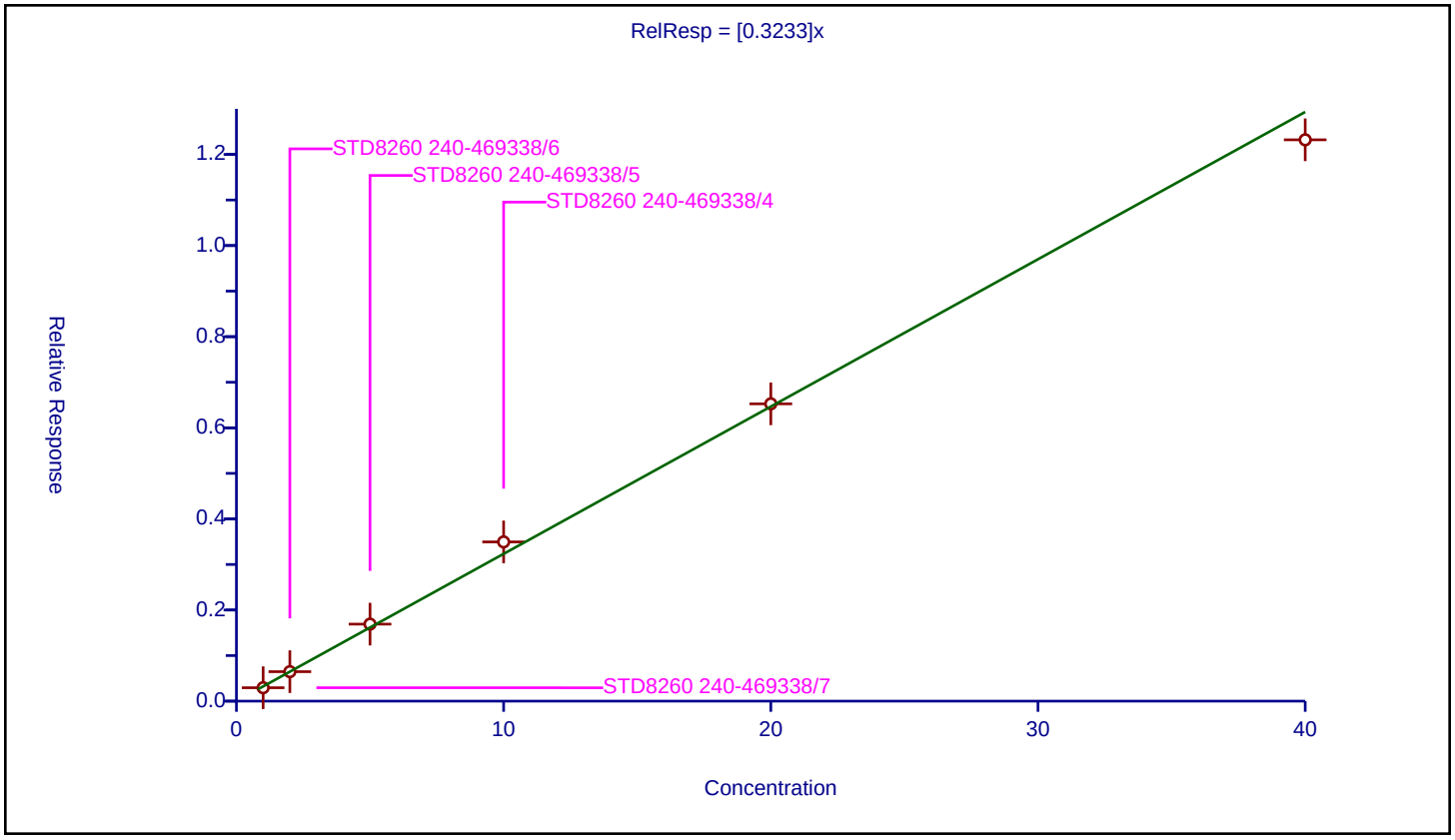
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	309000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.294367	20.0	905264.0	0.294367	Y
2	STD8260 240-469338/6	2.0	0.64709	20.0	862909.0	0.323545	Y
3	STD8260 240-469338/5	5.0	1.69049	20.0	861537.0	0.338098	Y
4	STD8260 240-469338/4	10.0	3.495454	20.0	833065.0	0.349545	Y
5	STD8260 240-469338/3	20.0	6.52596	20.0	890220.0	0.326298	Y
6	STD8260 240-469338/2	40.0	12.32141	20.0	979659.0	0.308035	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

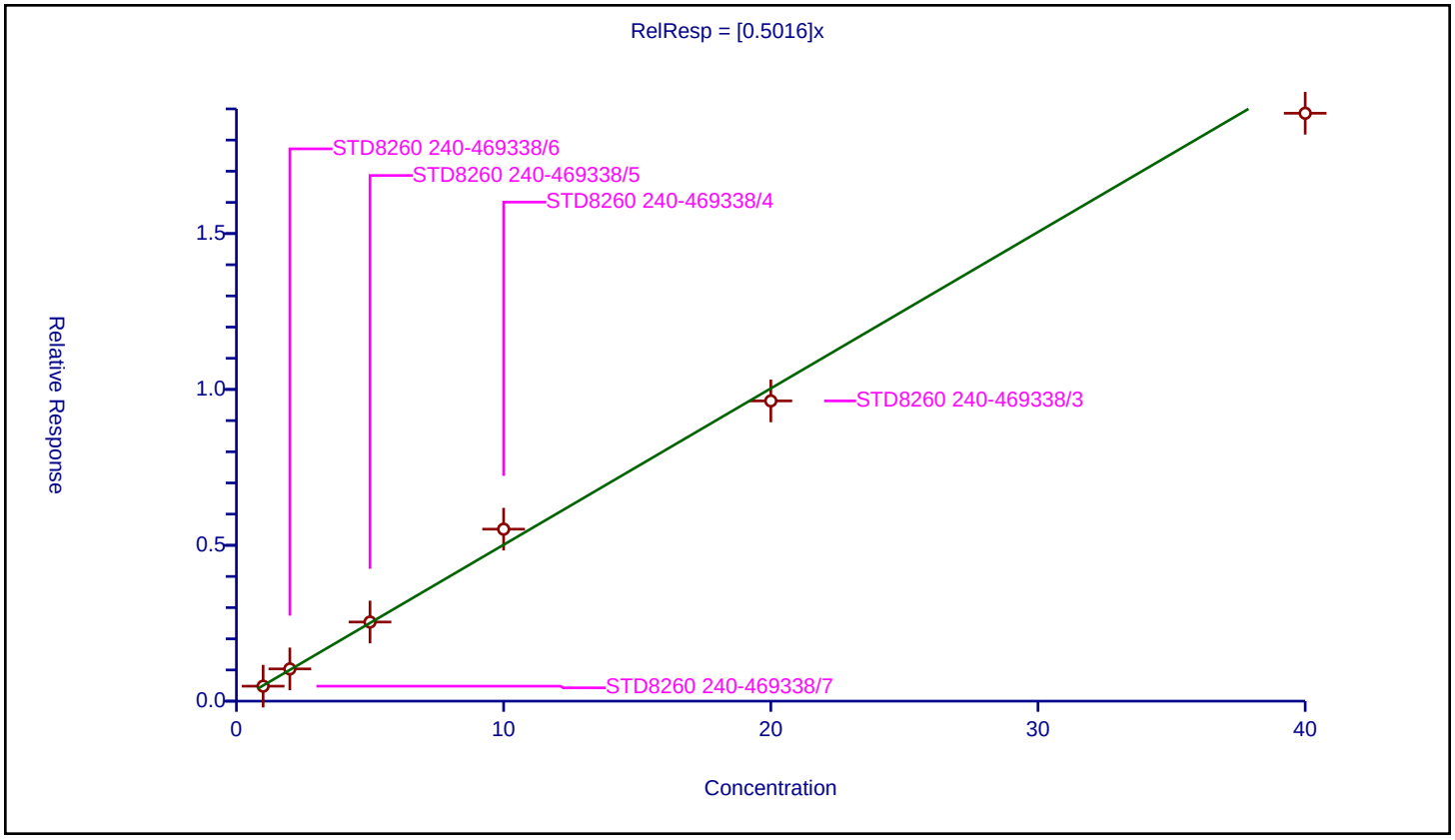
Curve Coefficients

Intercept:	0
Slope:	0.5016

Error Coefficients

Standard Error:	470000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.480236	20.0	905264.0	0.480236	Y
2	STD8260 240-469338/6	2.0	1.03406	20.0	862909.0	0.51703	Y
3	STD8260 240-469338/5	5.0	2.538231	20.0	861537.0	0.507646	Y
4	STD8260 240-469338/4	10.0	5.517361	20.0	833065.0	0.551736	Y
5	STD8260 240-469338/3	20.0	9.632158	20.0	890220.0	0.481608	Y
6	STD8260 240-469338/2	40.0	18.859909	20.0	979659.0	0.471498	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

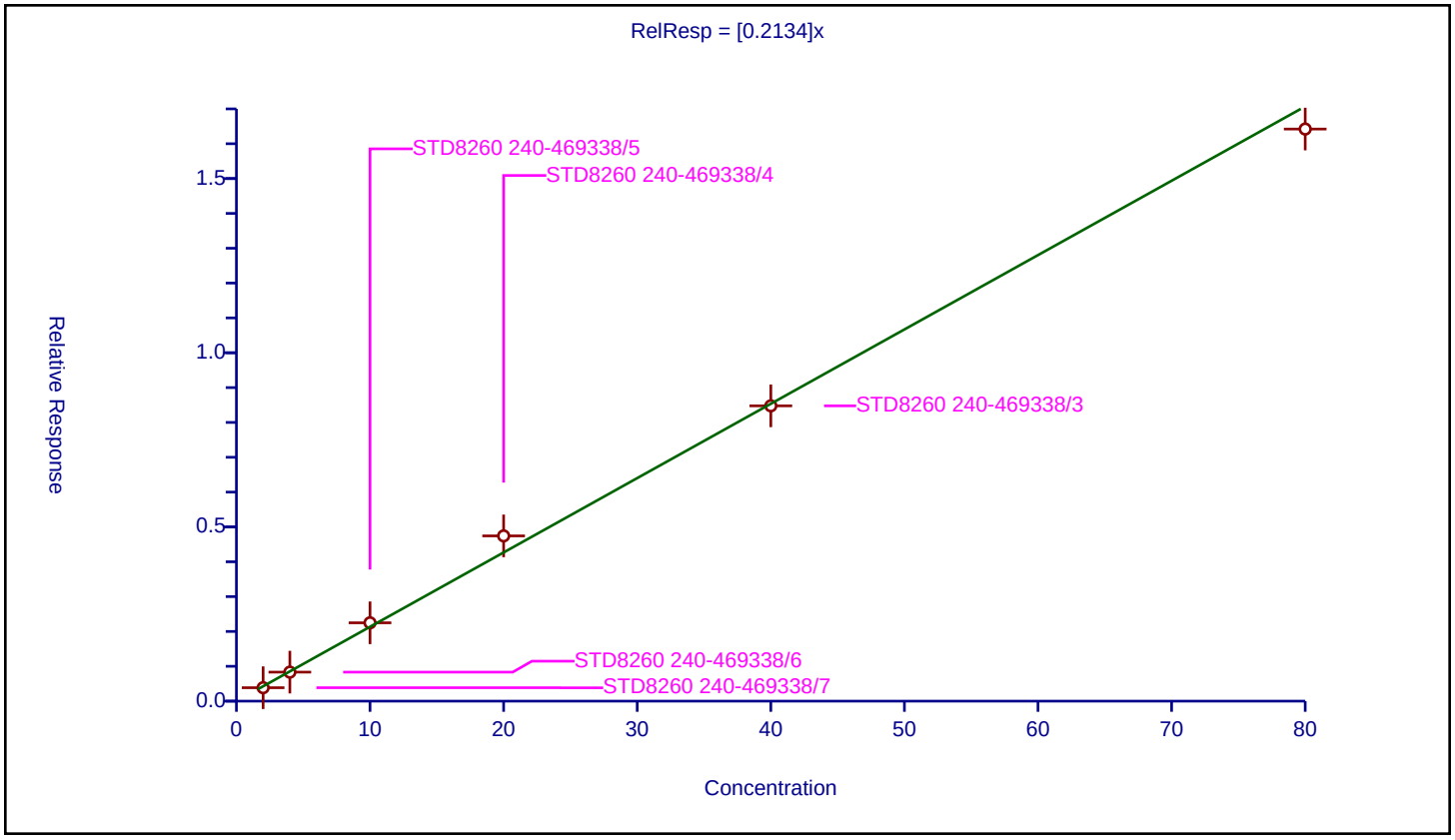
Curve Coefficients

Intercept:	0
Slope:	0.2134

Error Coefficients

Standard Error:	410000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.385678	20.0	905264.0	0.192839	Y
2	STD8260 240-469338/6	4.0	0.83295	20.0	862909.0	0.208237	Y
3	STD8260 240-469338/5	10.0	2.248748	20.0	861537.0	0.224875	Y
4	STD8260 240-469338/4	20.0	4.743543	20.0	833065.0	0.237177	Y
5	STD8260 240-469338/3	40.0	8.476444	20.0	890220.0	0.211911	Y
6	STD8260 240-469338/2	80.0	16.42104	20.0	979659.0	0.205263	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

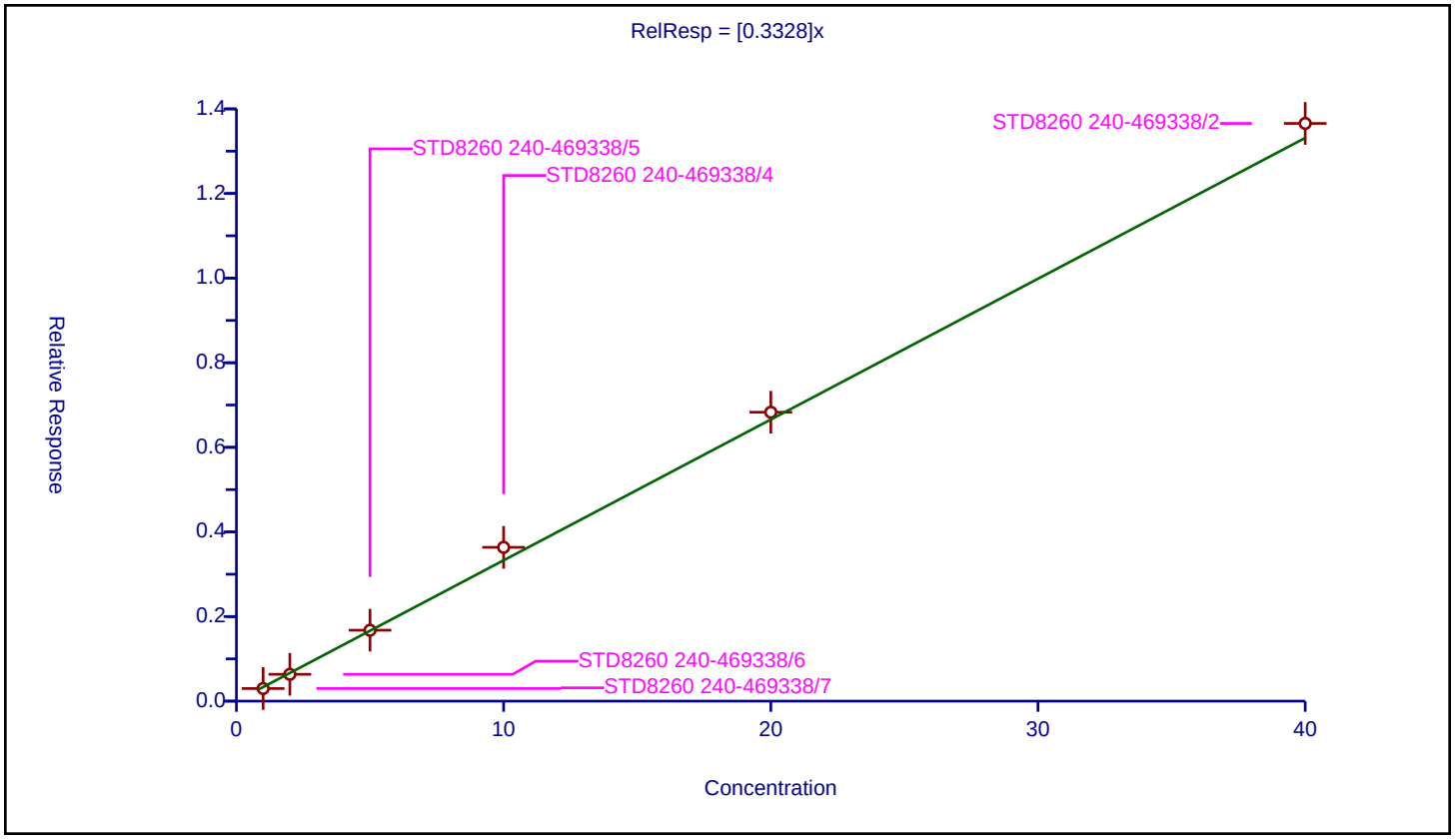
Curve Coefficients

Intercept:	0
Slope:	0.3328

Error Coefficients

Standard Error:	337000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.298167	20.0	905264.0	0.298167	Y
2	STD8260 240-469338/6	2.0	0.634435	20.0	862909.0	0.317218	Y
3	STD8260 240-469338/5	5.0	1.675981	20.0	861537.0	0.335196	Y
4	STD8260 240-469338/4	10.0	3.635875	20.0	833065.0	0.363587	Y
5	STD8260 240-469338/3	20.0	6.829368	20.0	890220.0	0.341468	Y
6	STD8260 240-469338/2	40.0	13.655976	20.0	979659.0	0.341399	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

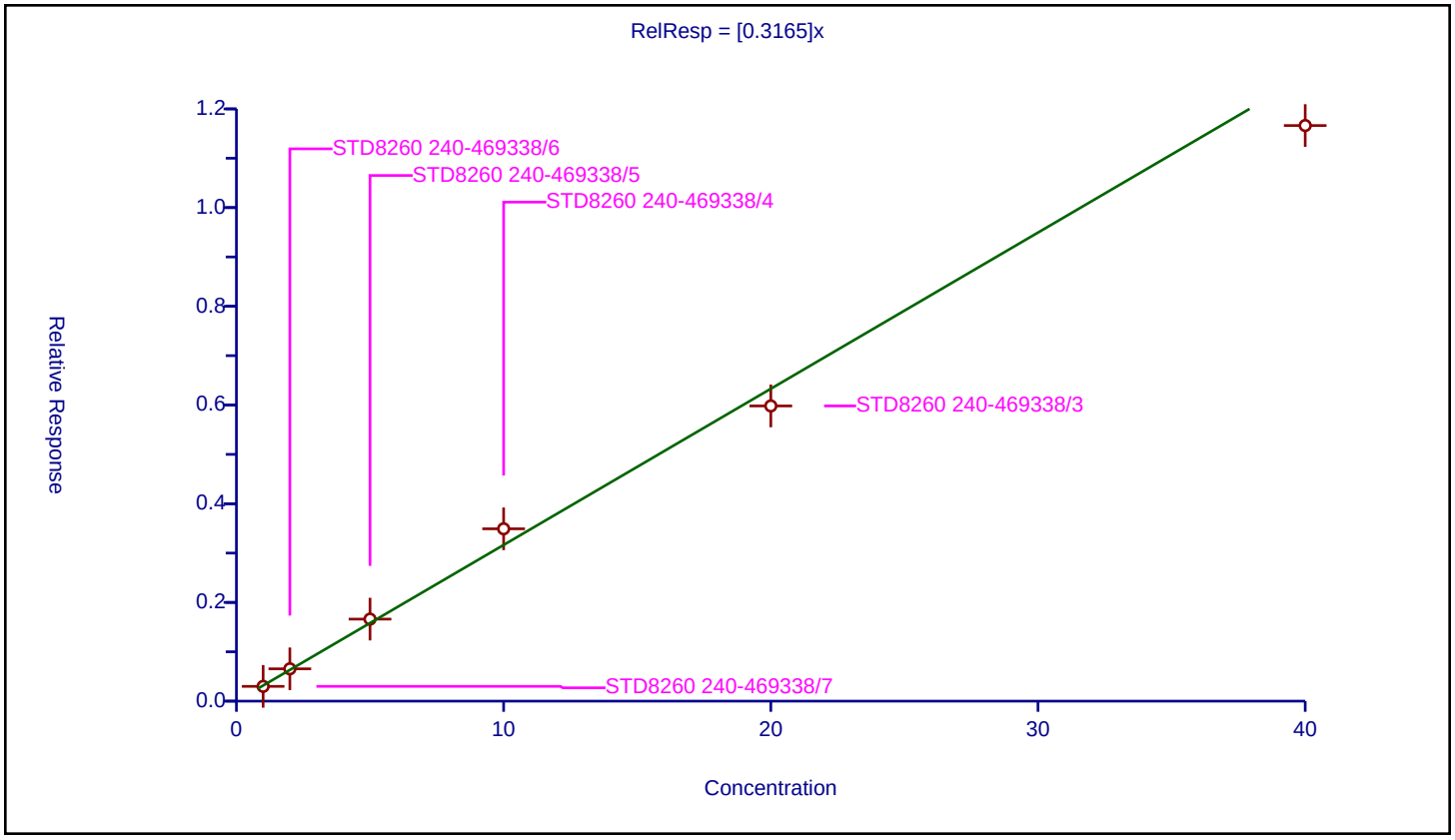
Curve Coefficients

Intercept:	0
Slope:	0.3165

Error Coefficients

Standard Error:	291000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299161	20.0	905264.0	0.299161	Y
2	STD8260 240-469338/6	2.0	0.655063	20.0	862909.0	0.327532	Y
3	STD8260 240-469338/5	5.0	1.661612	20.0	861537.0	0.332322	Y
4	STD8260 240-469338/4	10.0	3.491876	20.0	833065.0	0.349188	Y
5	STD8260 240-469338/3	20.0	5.981308	20.0	890220.0	0.299065	Y
6	STD8260 240-469338/2	40.0	11.662977	20.0	979659.0	0.291574	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

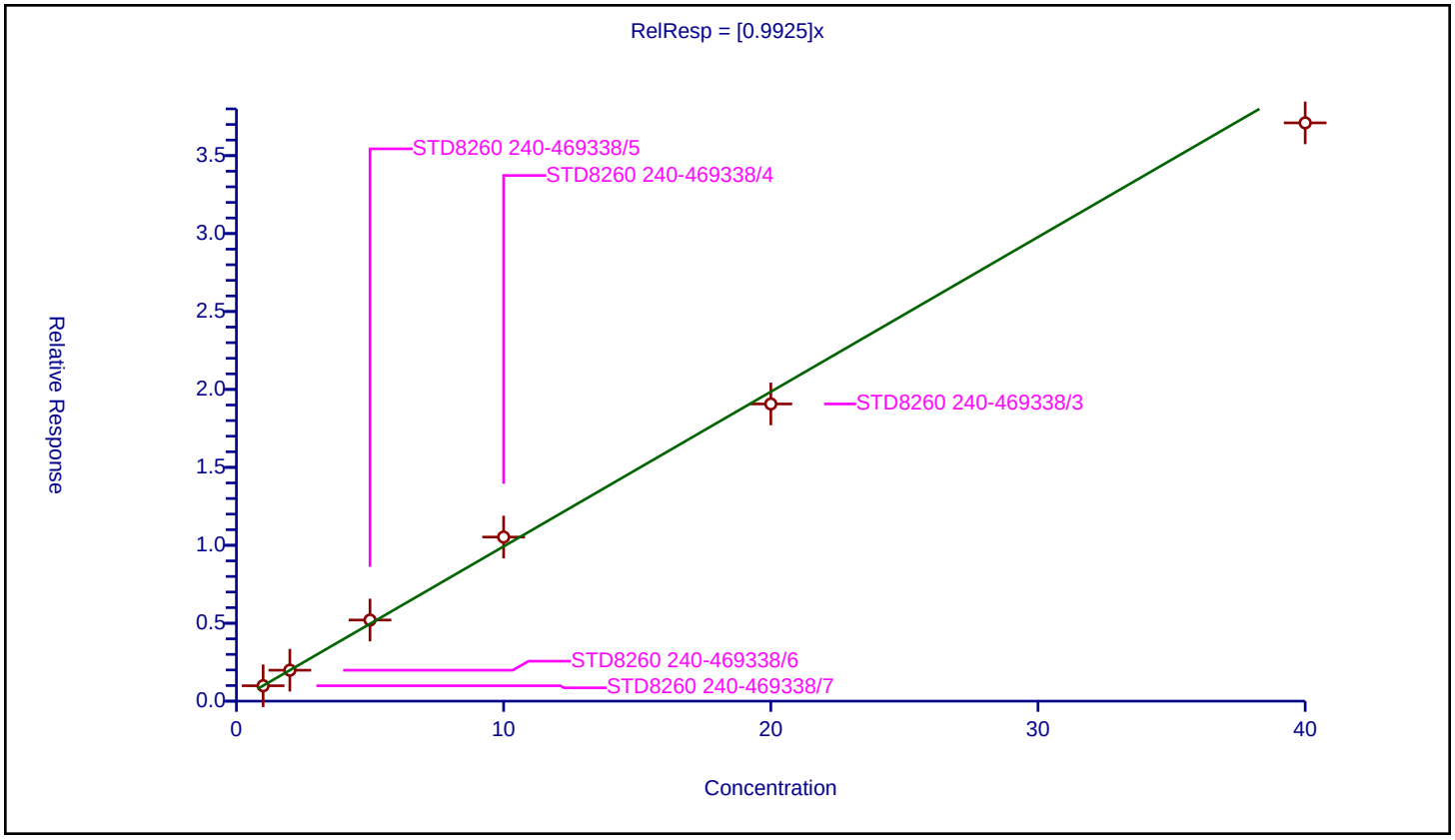
Curve Coefficients

Intercept:	0
Slope:	0.9925

Error Coefficients

Standard Error:	925000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.988021	20.0	905264.0	0.988021	Y
2	STD8260 240-469338/6	2.0	1.984867	20.0	862909.0	0.992434	Y
3	STD8260 240-469338/5	5.0	5.204675	20.0	861537.0	1.040935	Y
4	STD8260 240-469338/4	10.0	10.528086	20.0	833065.0	1.052809	Y
5	STD8260 240-469338/3	20.0	19.069107	20.0	890220.0	0.953455	Y
6	STD8260 240-469338/2	40.0	37.1024	20.0	979659.0	0.92756	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

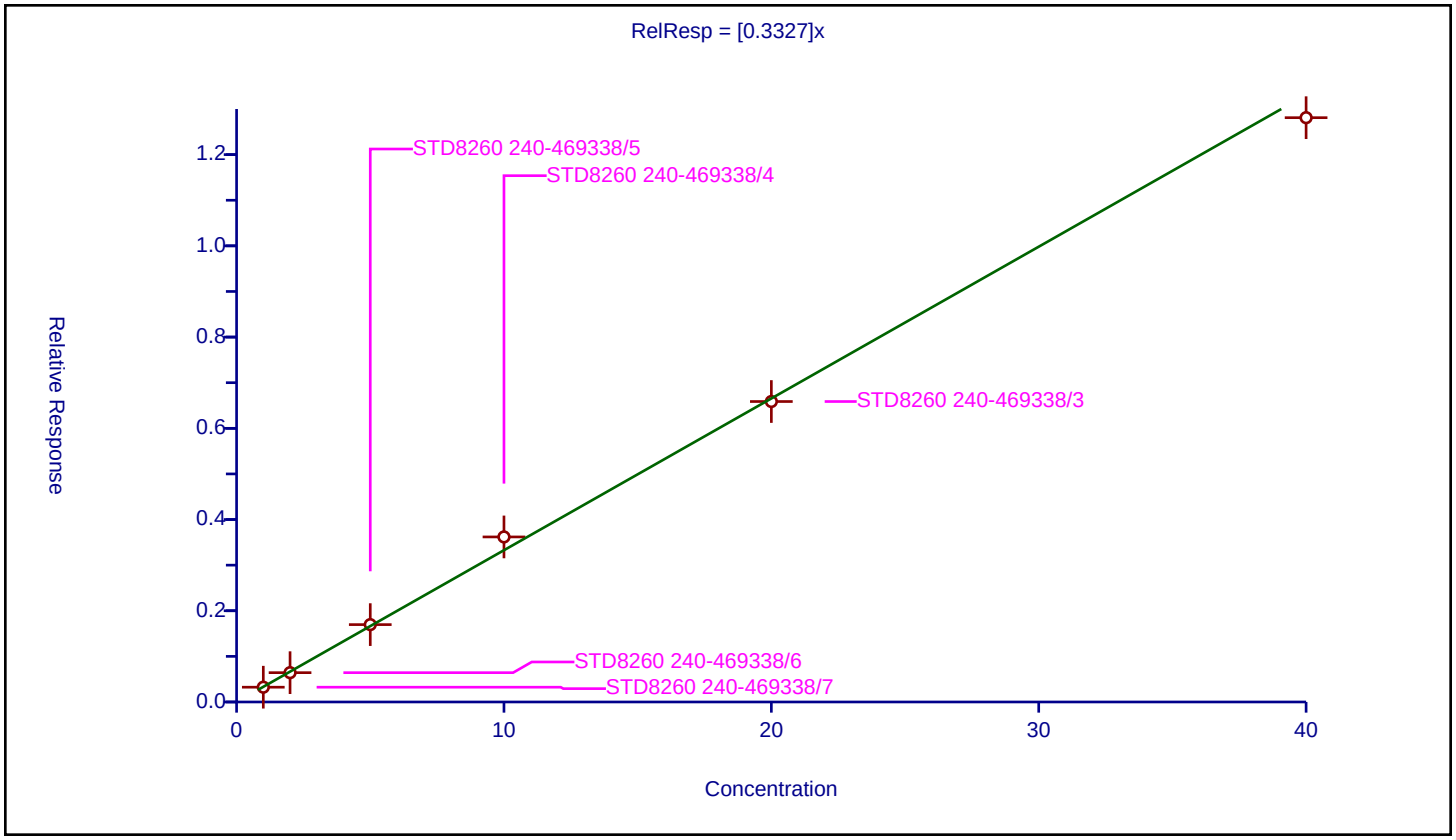
Curve Coefficients

Intercept:	0
Slope:	0.3327

Error Coefficients

Standard Error:	319000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.324215	20.0	905264.0	0.324215	Y
2	STD8260 240-469338/6	2.0	0.642779	20.0	862909.0	0.32139	Y
3	STD8260 240-469338/5	5.0	1.696039	20.0	861537.0	0.339208	Y
4	STD8260 240-469338/4	10.0	3.618613	20.0	833065.0	0.361861	Y
5	STD8260 240-469338/3	20.0	6.58754	20.0	890220.0	0.329377	Y
6	STD8260 240-469338/2	40.0	12.809906	20.0	979659.0	0.320248	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

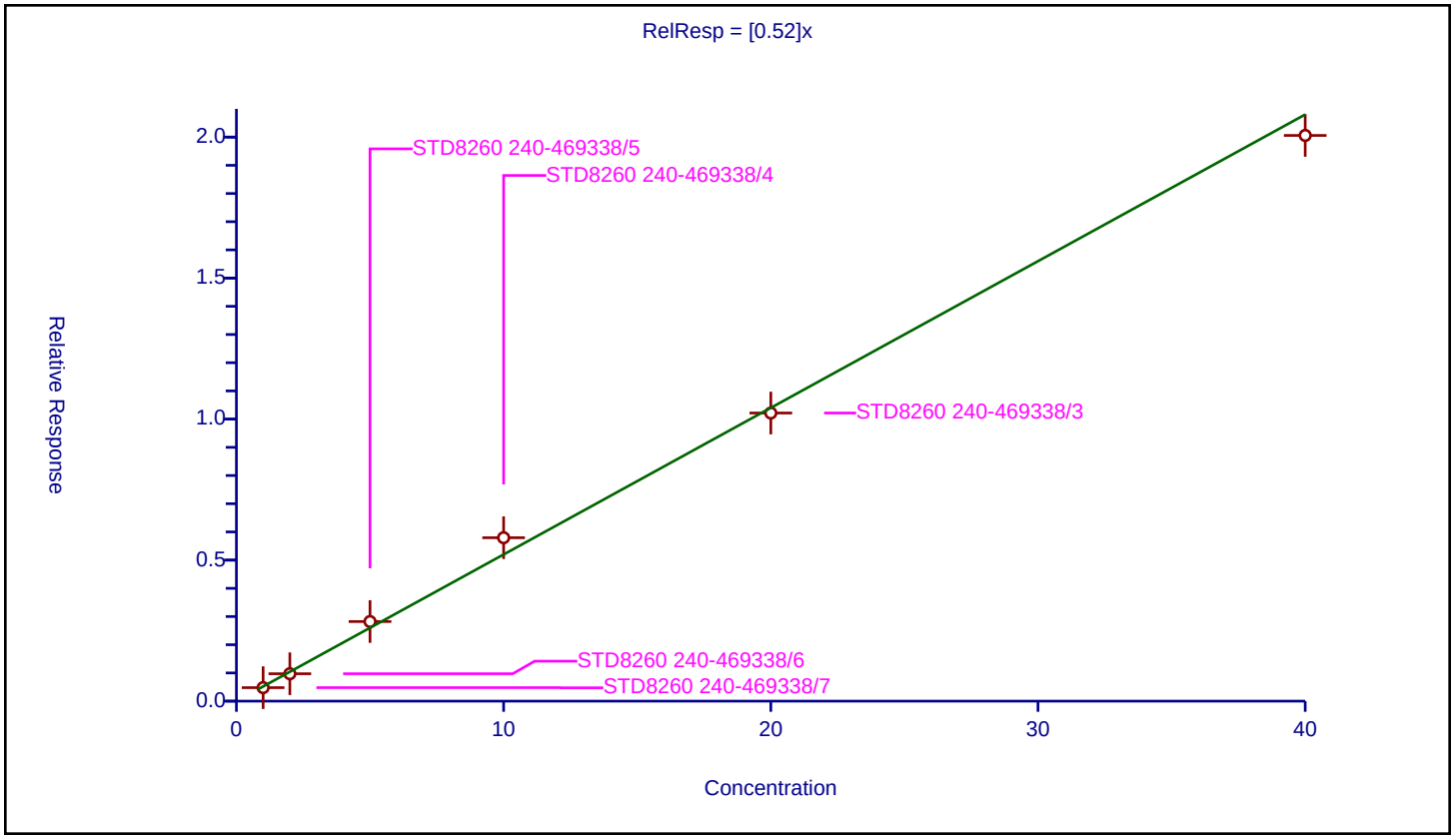
Curve Coefficients

Intercept:	0
Slope:	0.52

Error Coefficients

Standard Error:	499000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.47796	20.0	905264.0	0.47796	Y
2	STD8260 240-469338/6	2.0	0.971736	20.0	862909.0	0.485868	Y
3	STD8260 240-469338/5	5.0	2.822467	20.0	861537.0	0.564493	Y
4	STD8260 240-469338/4	10.0	5.79465	20.0	833065.0	0.579465	Y
5	STD8260 240-469338/3	20.0	10.216126	20.0	890220.0	0.510806	Y
6	STD8260 240-469338/2	40.0	20.05802	20.0	979659.0	0.501451	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

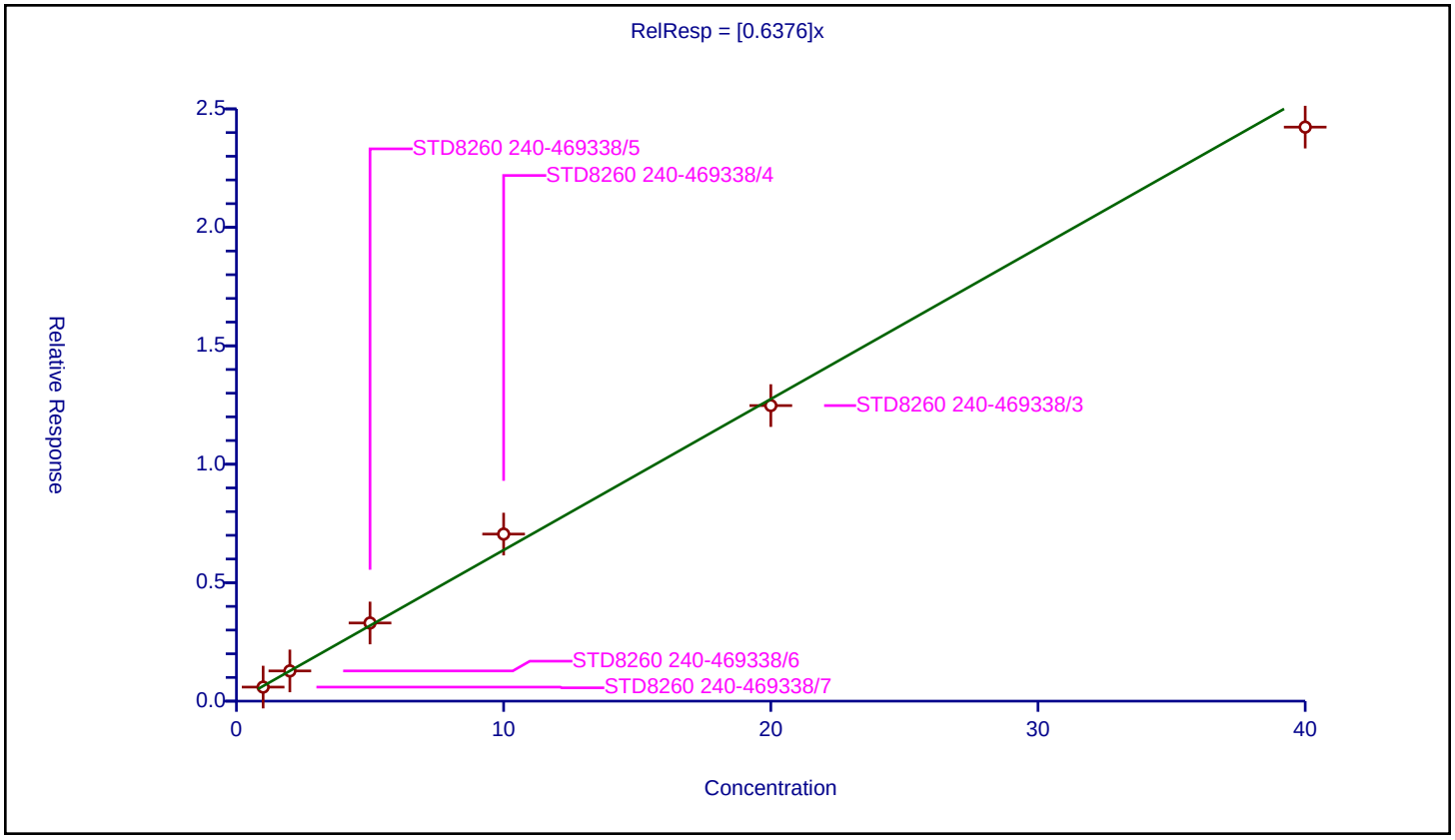
Curve Coefficients

Intercept:	0
Slope:	0.6376

Error Coefficients

Standard Error:	605000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.593396	20.0	905264.0	0.593396	Y
2	STD8260 240-469338/6	2.0	1.275129	20.0	862909.0	0.637564	Y
3	STD8260 240-469338/5	5.0	3.299359	20.0	861537.0	0.659872	Y
4	STD8260 240-469338/4	10.0	7.051839	20.0	833065.0	0.705184	Y
5	STD8260 240-469338/3	20.0	12.476556	20.0	890220.0	0.623828	Y
6	STD8260 240-469338/2	40.0	24.231493	20.0	979659.0	0.605787	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

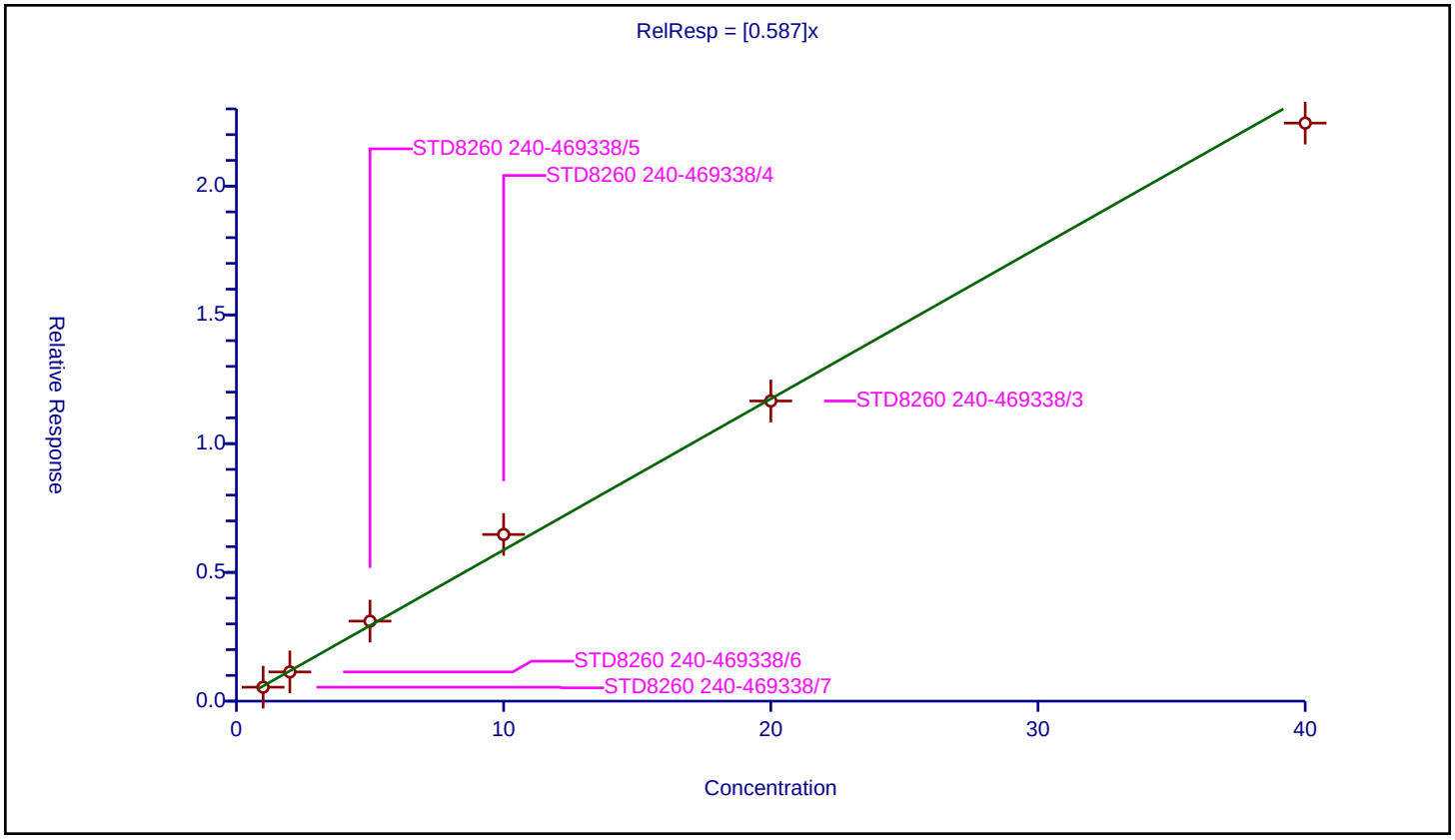
Curve Coefficients

Intercept:	0
Slope:	0.587

Error Coefficients

Standard Error:	561000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.541787	20.0	905264.0	0.541787	Y
2	STD8260 240-469338/6	2.0	1.134419	20.0	862909.0	0.567209	Y
3	STD8260 240-469338/5	5.0	3.107586	20.0	861537.0	0.621517	Y
4	STD8260 240-469338/4	10.0	6.472748	20.0	833065.0	0.647275	Y
5	STD8260 240-469338/3	20.0	11.65622	20.0	890220.0	0.582811	Y
6	STD8260 240-469338/2	40.0	22.448485	20.0	979659.0	0.561212	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

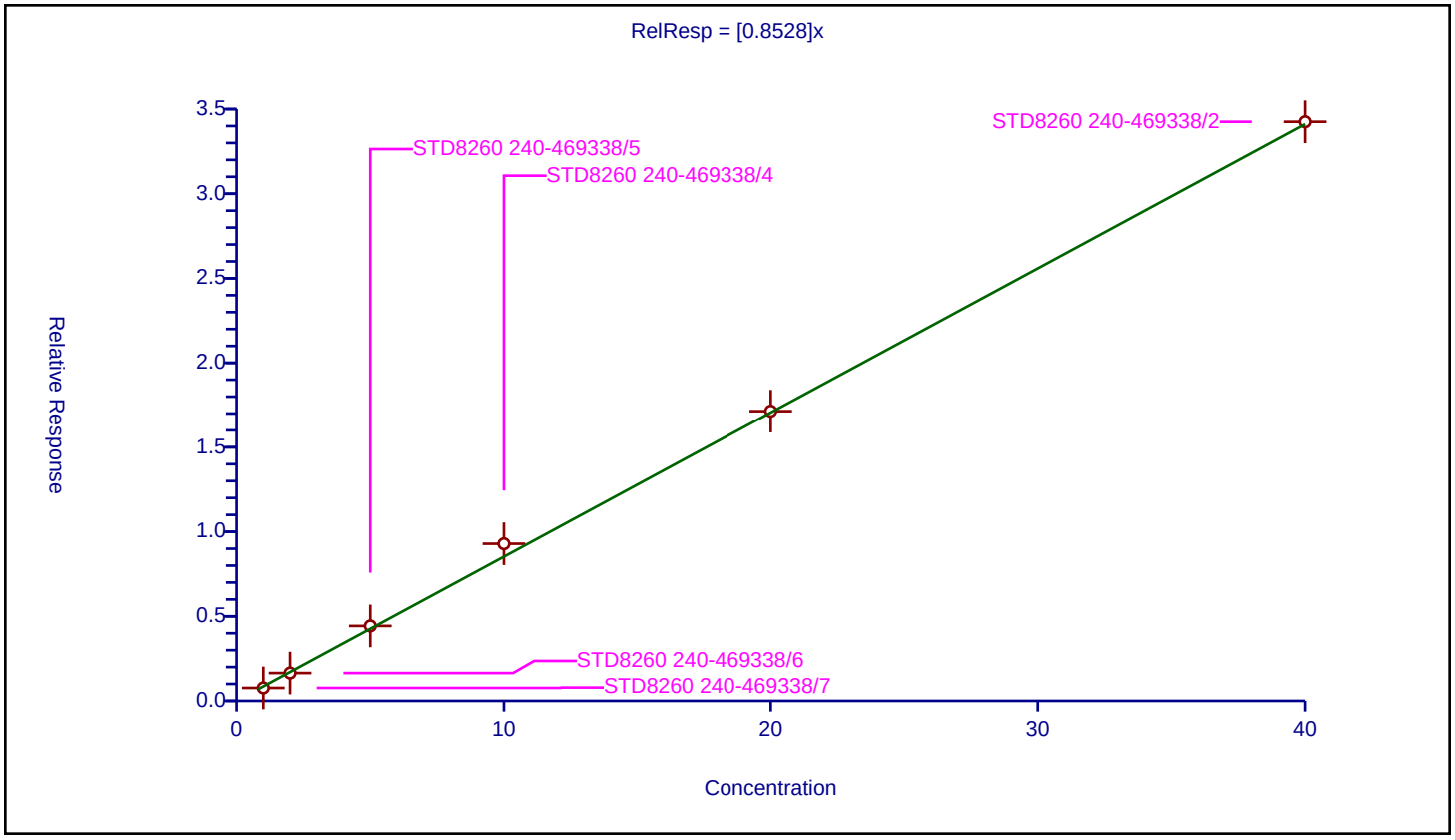
Curve Coefficients

Intercept:	0
Slope:	0.8528

Error Coefficients

Standard Error:	847000
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.765036	20.0	905264.0	0.765036	Y
2	STD8260 240-469338/6	2.0	1.645063	20.0	862909.0	0.822532	Y
3	STD8260 240-469338/5	5.0	4.433565	20.0	861537.0	0.886713	Y
4	STD8260 240-469338/4	10.0	9.292936	20.0	833065.0	0.929294	Y
5	STD8260 240-469338/3	20.0	17.137741	20.0	890220.0	0.856887	Y
6	STD8260 240-469338/2	40.0	34.251714	20.0	979659.0	0.856293	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

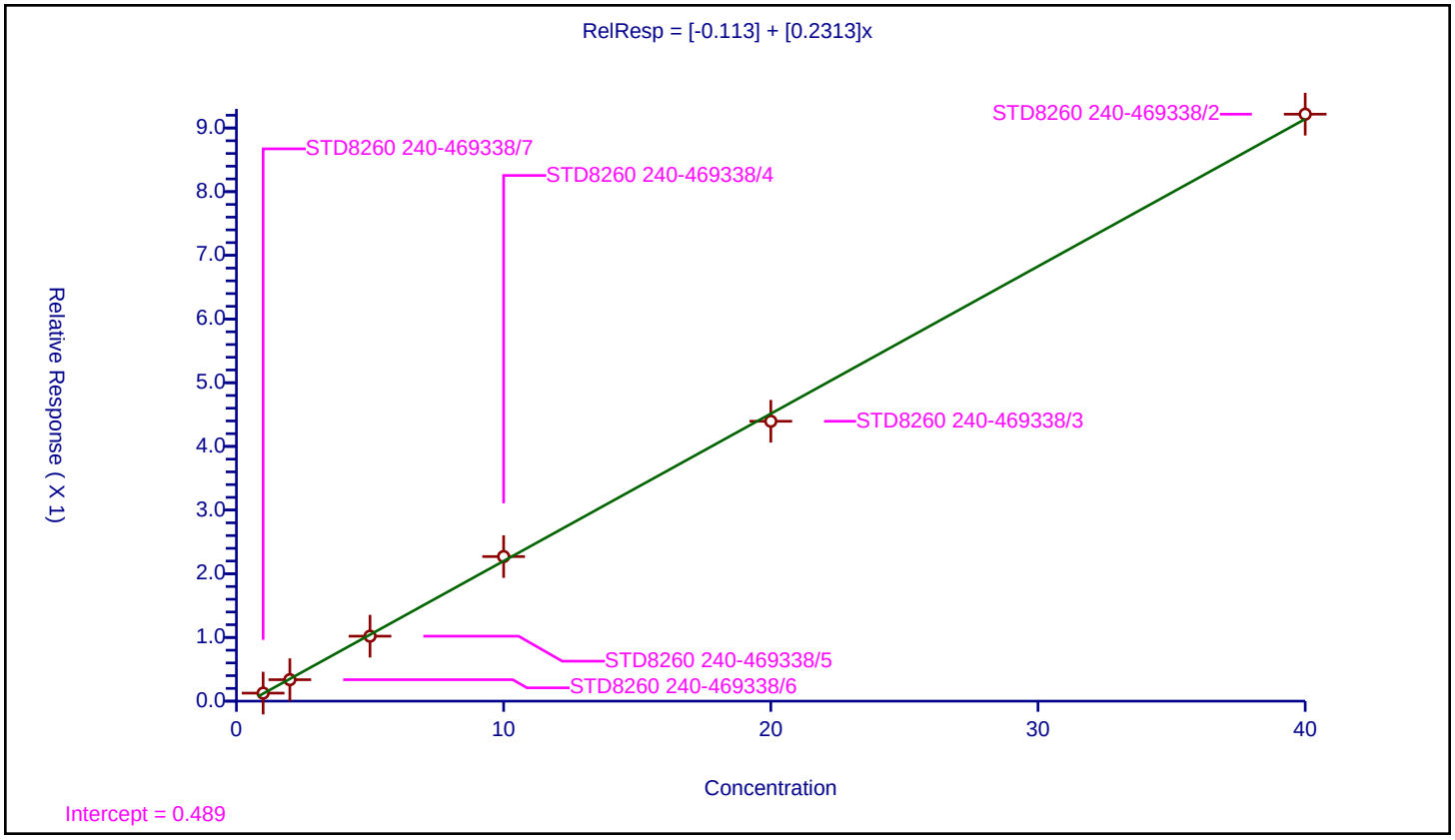
Curve Coefficients

Intercept:	-0.113
Slope:	0.2313

Error Coefficients

Standard Error:	252000
Relative Standard Error:	3.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.126284	20.0	905264.0	0.126284	Y
2	STD8260 240-469338/6	2.0	0.336976	20.0	862909.0	0.168488	Y
3	STD8260 240-469338/5	5.0	1.02027	20.0	861537.0	0.204054	Y
4	STD8260 240-469338/4	10.0	2.270483	20.0	833065.0	0.227048	Y
5	STD8260 240-469338/3	20.0	4.394891	20.0	890220.0	0.219745	Y
6	STD8260 240-469338/2	40.0	9.216656	20.0	979659.0	0.230416	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

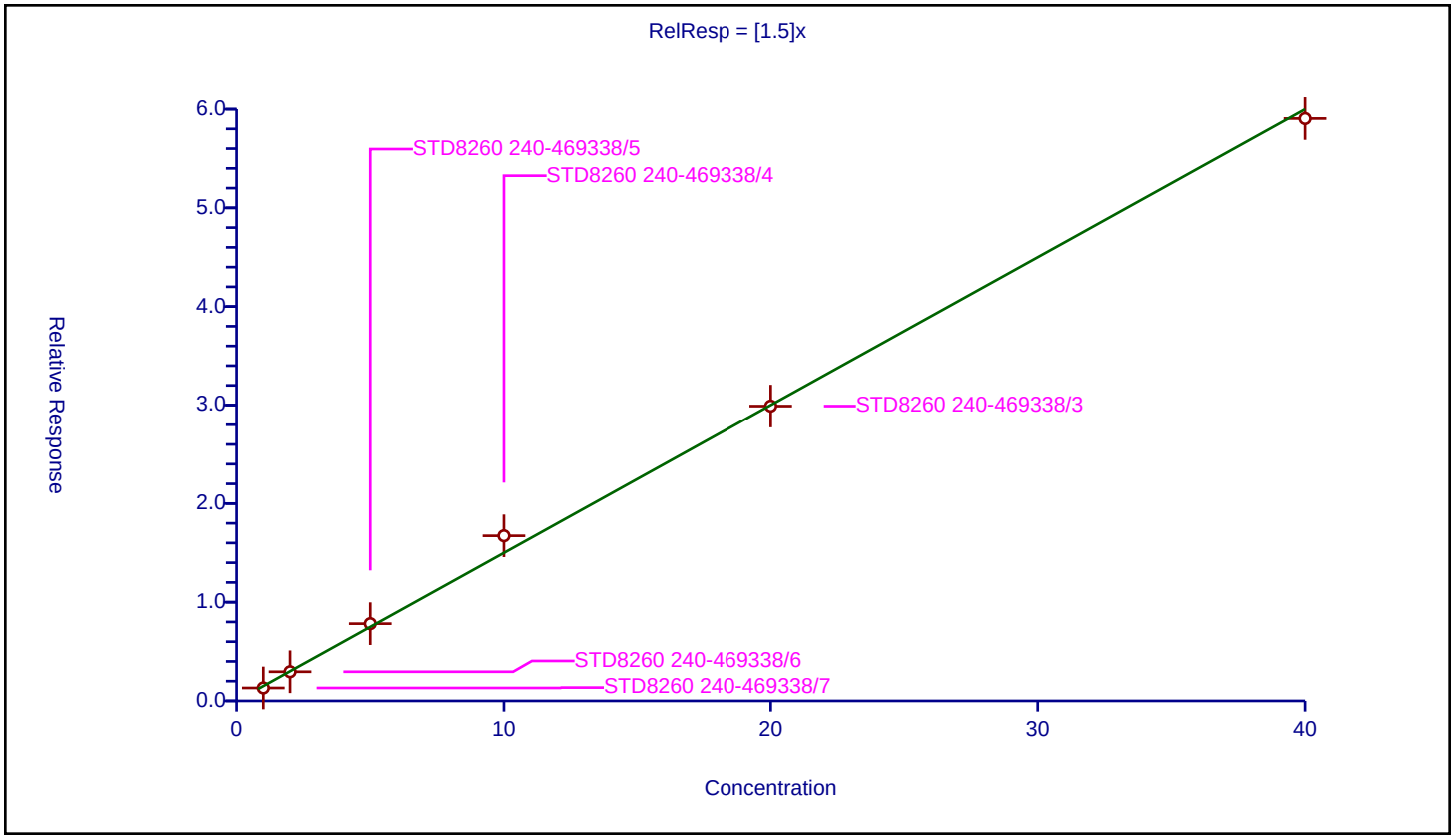
Curve Coefficients

Intercept:	0
Slope:	1.5

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.313341	20.0	905264.0	1.313341	Y
2	STD8260 240-469338/6	2.0	2.952455	20.0	862909.0	1.476228	Y
3	STD8260 240-469338/5	5.0	7.826338	20.0	861537.0	1.565268	Y
4	STD8260 240-469338/4	10.0	16.7319	20.0	833065.0	1.67319	Y
5	STD8260 240-469338/3	20.0	29.898025	20.0	890220.0	1.494901	Y
6	STD8260 240-469338/2	40.0	59.051895	20.0	979659.0	1.476297	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

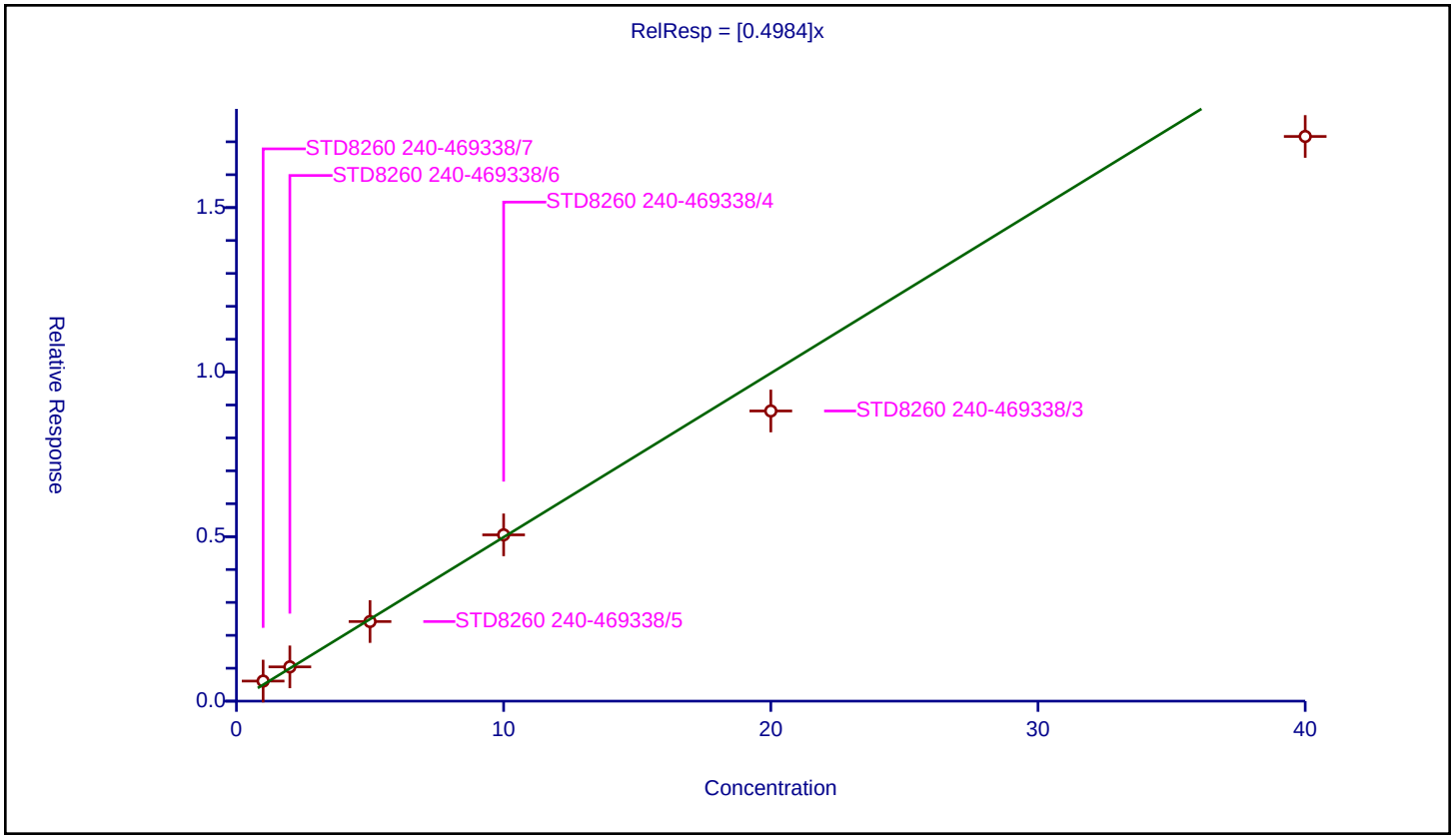
Curve Coefficients

Intercept:	0
Slope:	0.4984

Error Coefficients

Standard Error:	429000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.610253	20.0	905264.0	0.610253	Y
2	STD8260 240-469338/6	2.0	1.04157	20.0	862909.0	0.520785	Y
3	STD8260 240-469338/5	5.0	2.418817	20.0	861537.0	0.483763	Y
4	STD8260 240-469338/4	10.0	5.054179	20.0	833065.0	0.505418	Y
5	STD8260 240-469338/3	20.0	8.819168	20.0	890220.0	0.440958	Y
6	STD8260 240-469338/2	40.0	17.1624	20.0	979659.0	0.42906	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

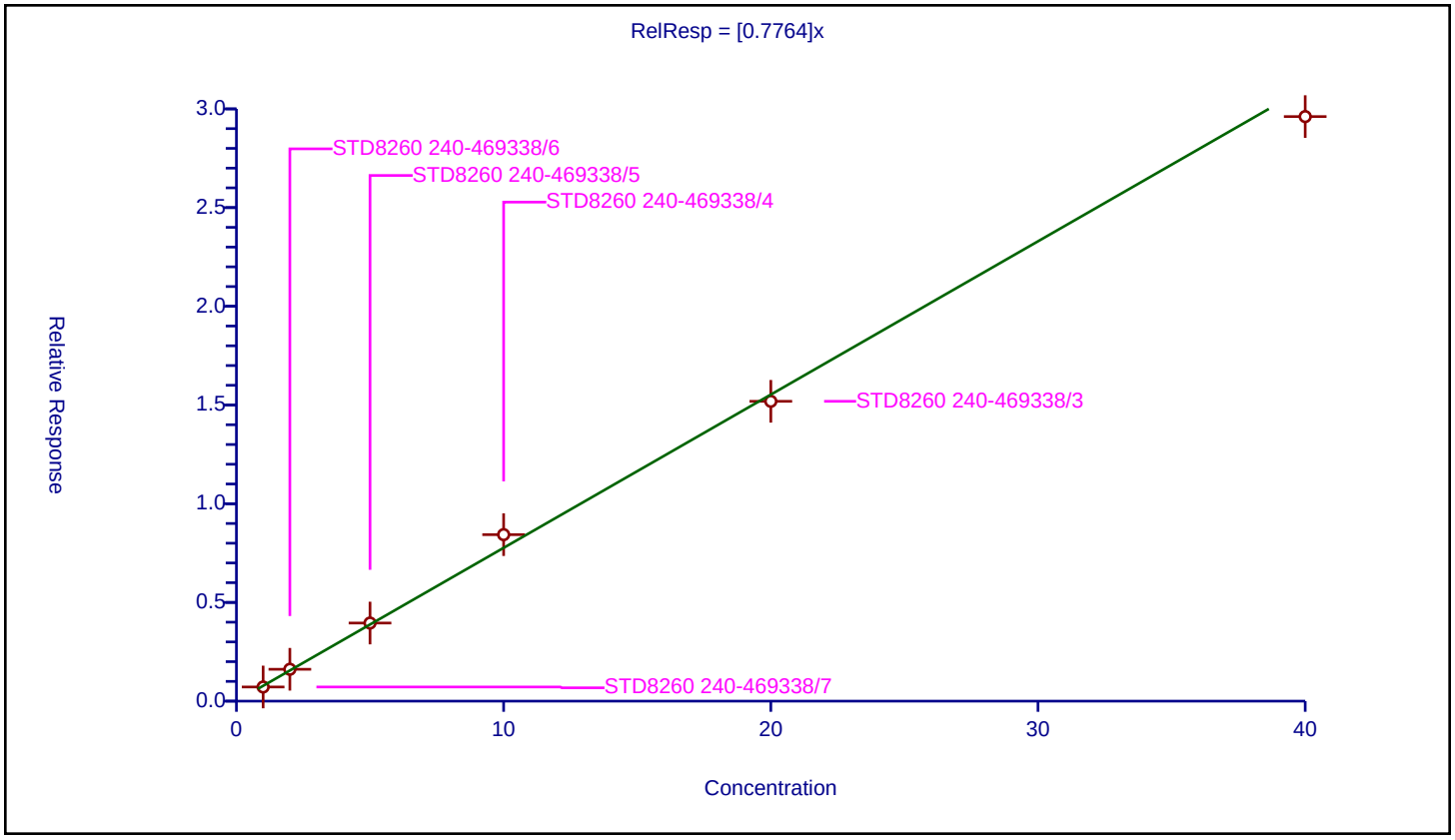
Curve Coefficients

Intercept:	0
Slope:	0.7764

Error Coefficients

Standard Error:	343000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.717081	20.0	420817.0	0.717081	Y
2	STD8260 240-469338/6	2.0	1.614323	20.0	402373.0	0.807162	Y
3	STD8260 240-469338/5	5.0	3.956513	20.0	406373.0	0.791303	Y
4	STD8260 240-469338/4	10.0	8.433794	20.0	399775.0	0.843379	Y
5	STD8260 240-469338/3	20.0	15.187261	20.0	413781.0	0.759363	Y
6	STD8260 240-469338/2	40.0	29.610521	20.0	455301.0	0.740263	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

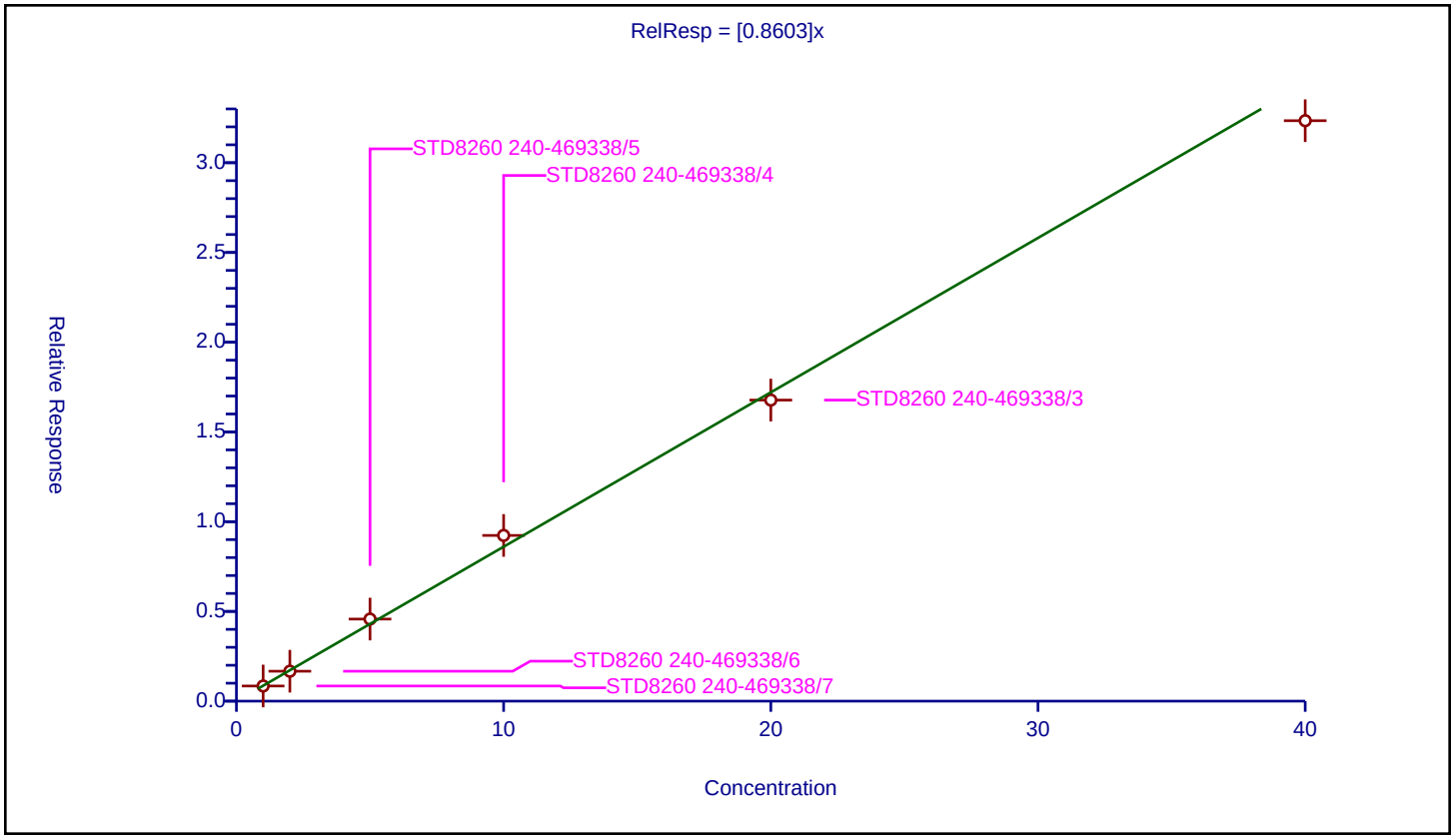
Curve Coefficients

Intercept:	0
Slope:	0.8603

Error Coefficients

Standard Error:	376000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.843359	20.0	420817.0	0.843359	Y
2	STD8260 240-469338/6	2.0	1.666762	20.0	402373.0	0.833381	Y
3	STD8260 240-469338/5	5.0	4.572942	20.0	406373.0	0.914588	Y
4	STD8260 240-469338/4	10.0	9.232643	20.0	399775.0	0.923264	Y
5	STD8260 240-469338/3	20.0	16.774429	20.0	413781.0	0.838721	Y
6	STD8260 240-469338/2	40.0	32.343087	20.0	455301.0	0.808577	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

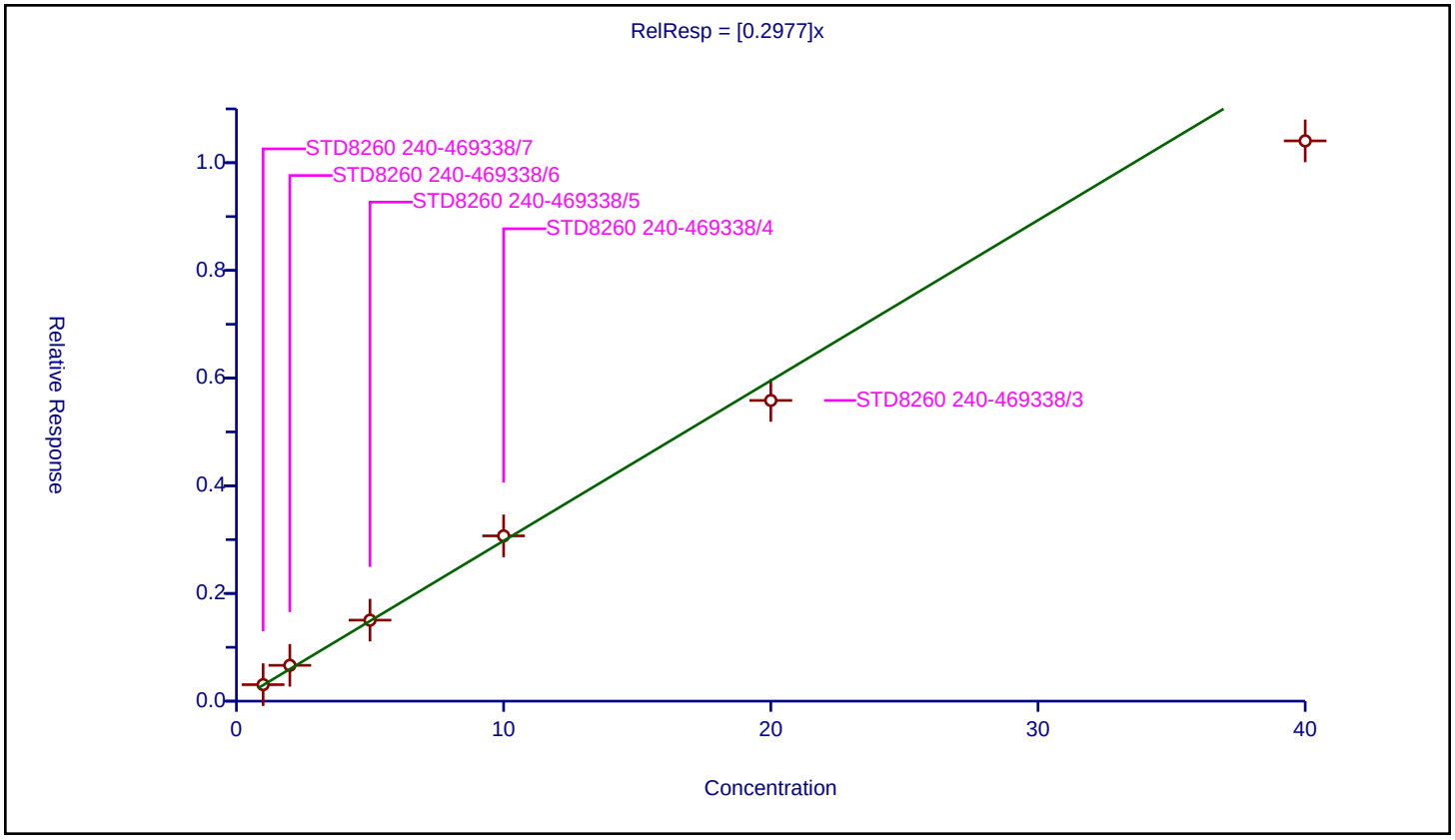
Curve Coefficients

Intercept:	0
Slope:	0.2977

Error Coefficients

Standard Error:	122000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306594	20.0	420817.0	0.306594	Y
2	STD8260 240-469338/6	2.0	0.665104	20.0	402373.0	0.332552	Y
3	STD8260 240-469338/5	5.0	1.50448	20.0	406373.0	0.300896	Y
4	STD8260 240-469338/4	10.0	3.069727	20.0	399775.0	0.306973	Y
5	STD8260 240-469338/3	20.0	5.585418	20.0	413781.0	0.279271	Y
6	STD8260 240-469338/2	40.0	10.405776	20.0	455301.0	0.260144	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

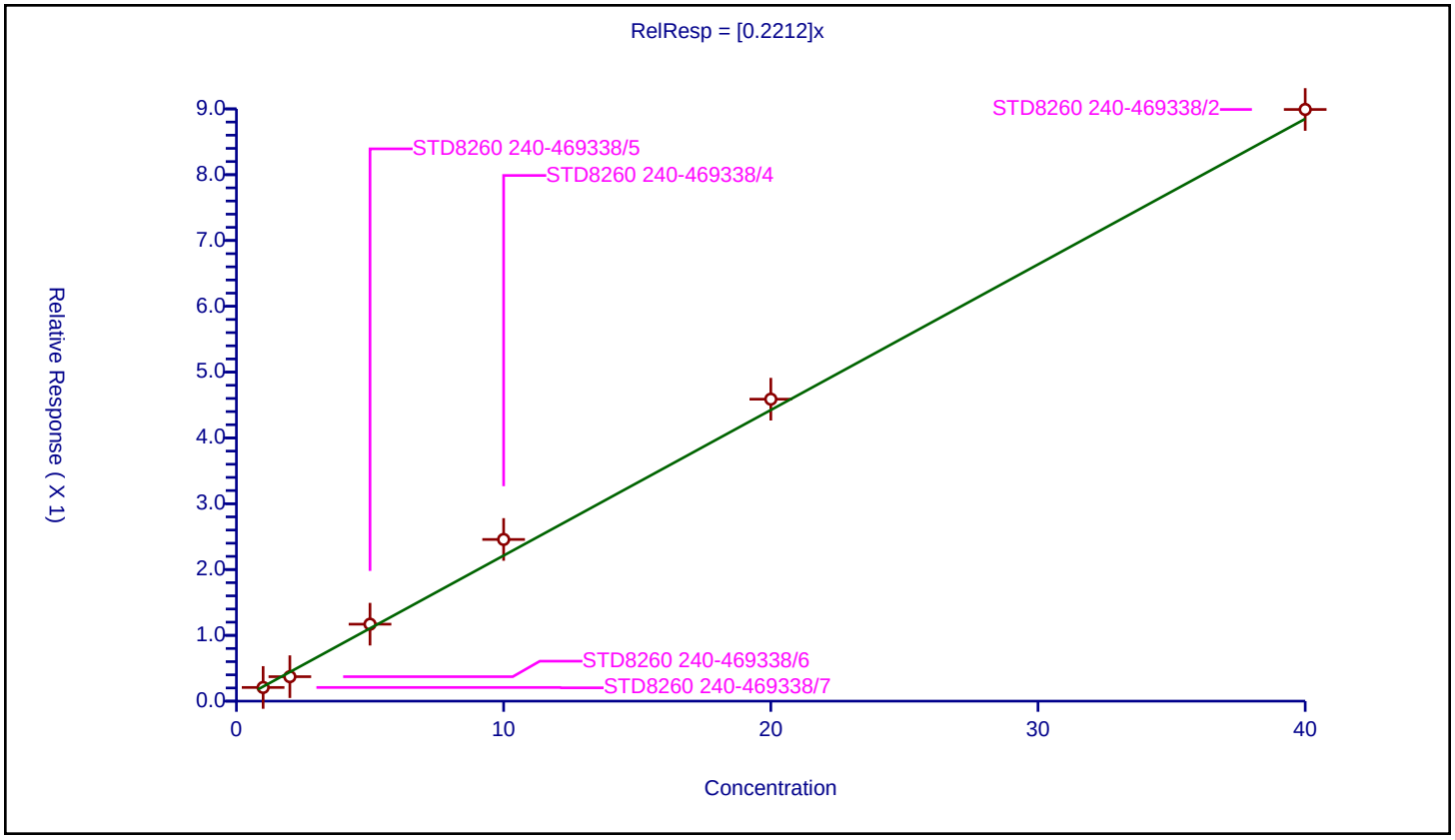
Curve Coefficients

Intercept:	0
Slope:	0.2212

Error Coefficients

Standard Error:	104000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.207644	20.0	420817.0	0.207644	Y
2	STD8260 240-469338/6	2.0	0.371645	20.0	402373.0	0.185823	Y
3	STD8260 240-469338/5	5.0	1.169418	20.0	406373.0	0.233884	Y
4	STD8260 240-469338/4	10.0	2.456832	20.0	399775.0	0.245683	Y
5	STD8260 240-469338/3	20.0	4.588563	20.0	413781.0	0.229428	Y
6	STD8260 240-469338/2	40.0	8.991195	20.0	455301.0	0.22478	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

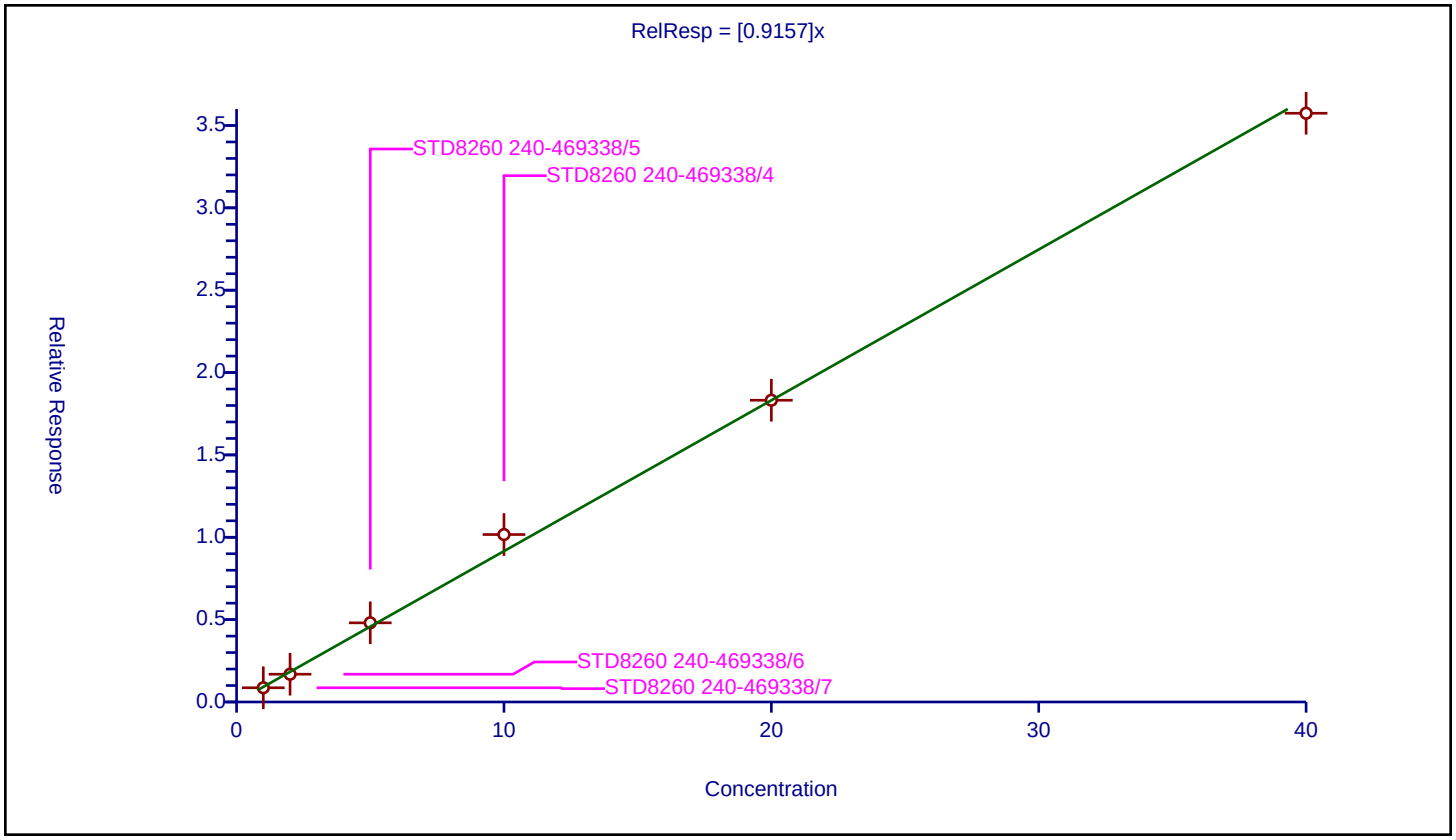
Curve Coefficients

Intercept:	0
Slope:	0.9157

Error Coefficients

Standard Error:	414000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.863796	20.0	420817.0	0.863796	Y
2	STD8260 240-469338/6	2.0	1.686296	20.0	402373.0	0.843148	Y
3	STD8260 240-469338/5	5.0	4.805487	20.0	406373.0	0.961097	Y
4	STD8260 240-469338/4	10.0	10.165868	20.0	399775.0	1.016587	Y
5	STD8260 240-469338/3	20.0	18.319643	20.0	413781.0	0.915982	Y
6	STD8260 240-469338/2	40.0	35.742026	20.0	455301.0	0.893551	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

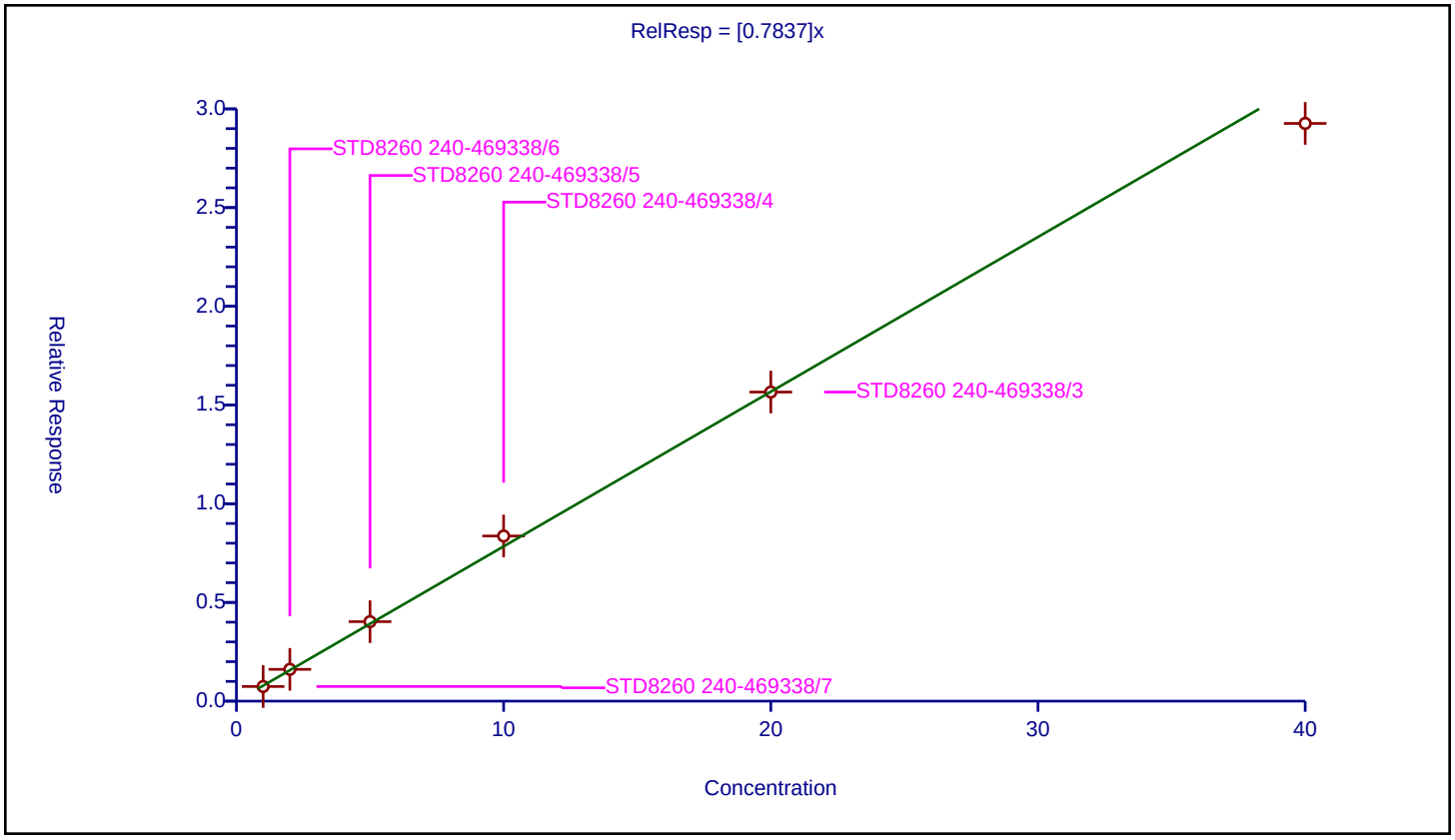
Curve Coefficients

Intercept:	0
Slope:	0.7837

Error Coefficients

Standard Error:	342000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.740987	20.0	420817.0	0.740987	Y
2	STD8260 240-469338/6	2.0	1.610744	20.0	402373.0	0.805372	Y
3	STD8260 240-469338/5	5.0	4.026252	20.0	406373.0	0.80525	Y
4	STD8260 240-469338/4	10.0	8.364805	20.0	399775.0	0.836481	Y
5	STD8260 240-469338/3	20.0	15.656108	20.0	413781.0	0.782805	Y
6	STD8260 240-469338/2	40.0	29.262927	20.0	455301.0	0.731573	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

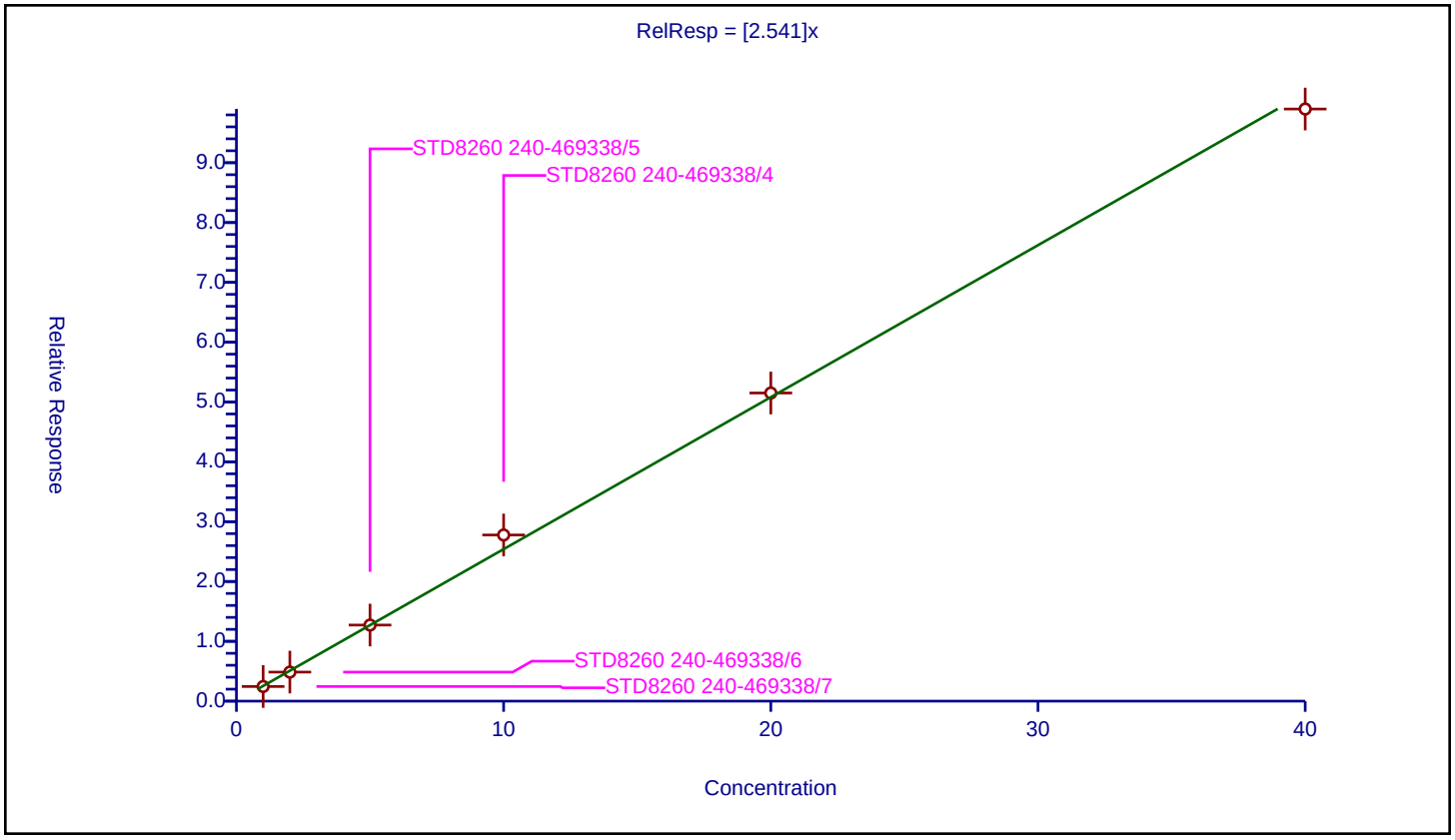
Curve Coefficients

Intercept:	0
Slope:	2.541

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.446194	20.0	420817.0	2.446194	Y
2	STD8260 240-469338/6	2.0	4.853258	20.0	402373.0	2.426629	Y
3	STD8260 240-469338/5	5.0	12.715805	20.0	406373.0	2.543161	Y
4	STD8260 240-469338/4	10.0	27.773022	20.0	399775.0	2.777302	Y
5	STD8260 240-469338/3	20.0	51.507875	20.0	413781.0	2.575394	Y
6	STD8260 240-469338/2	40.0	98.976326	20.0	455301.0	2.474408	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

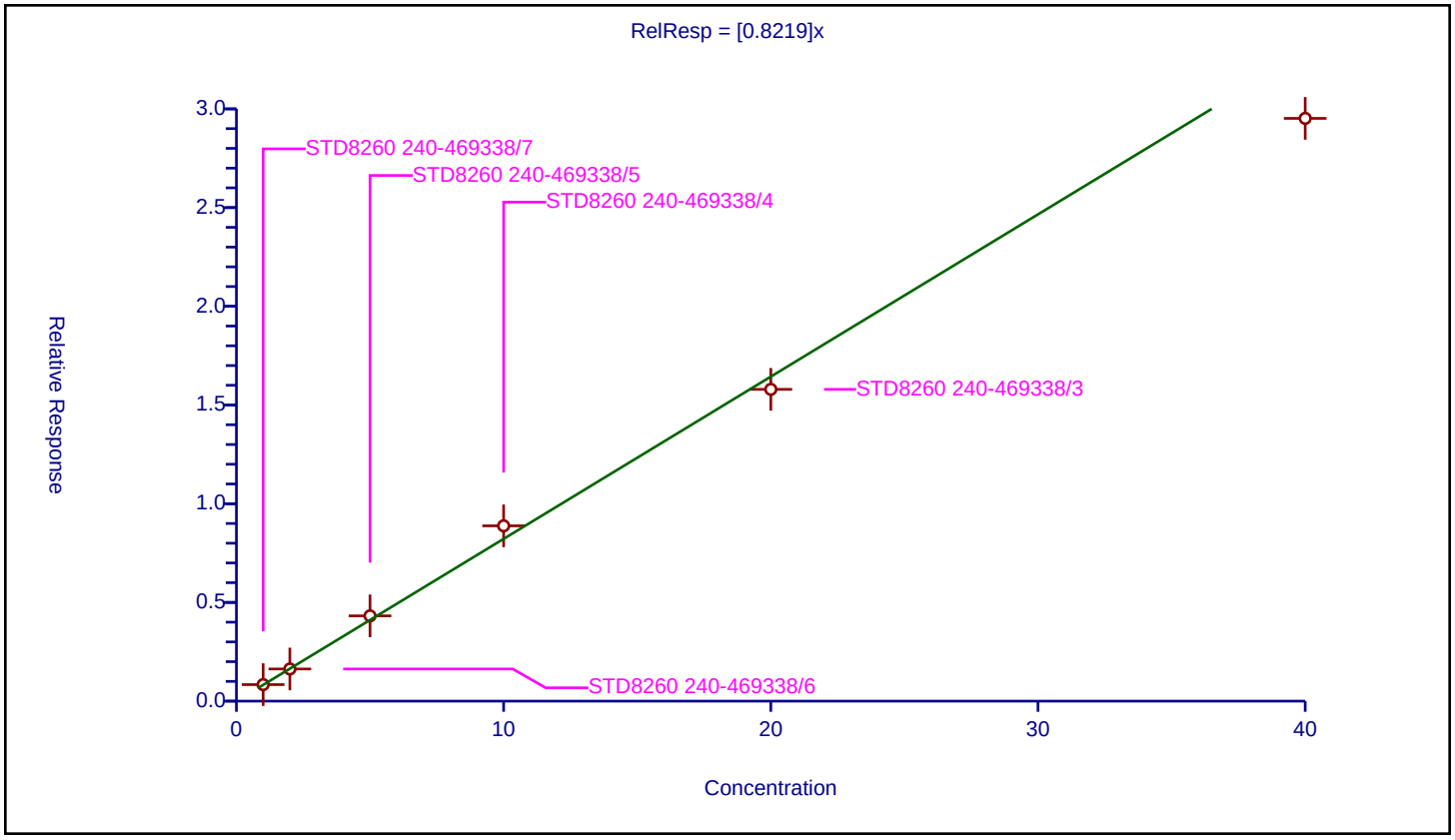
Curve Coefficients

Intercept:	0
Slope:	0.8219

Error Coefficients

Standard Error:	346000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.837133	20.0	420817.0	0.837133	Y
2	STD8260 240-469338/6	2.0	1.629583	20.0	402373.0	0.814791	Y
3	STD8260 240-469338/5	5.0	4.318742	20.0	406373.0	0.863748	Y
4	STD8260 240-469338/4	10.0	8.880445	20.0	399775.0	0.888045	Y
5	STD8260 240-469338/3	20.0	15.79304	20.0	413781.0	0.789652	Y
6	STD8260 240-469338/2	40.0	29.520295	20.0	455301.0	0.738007	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

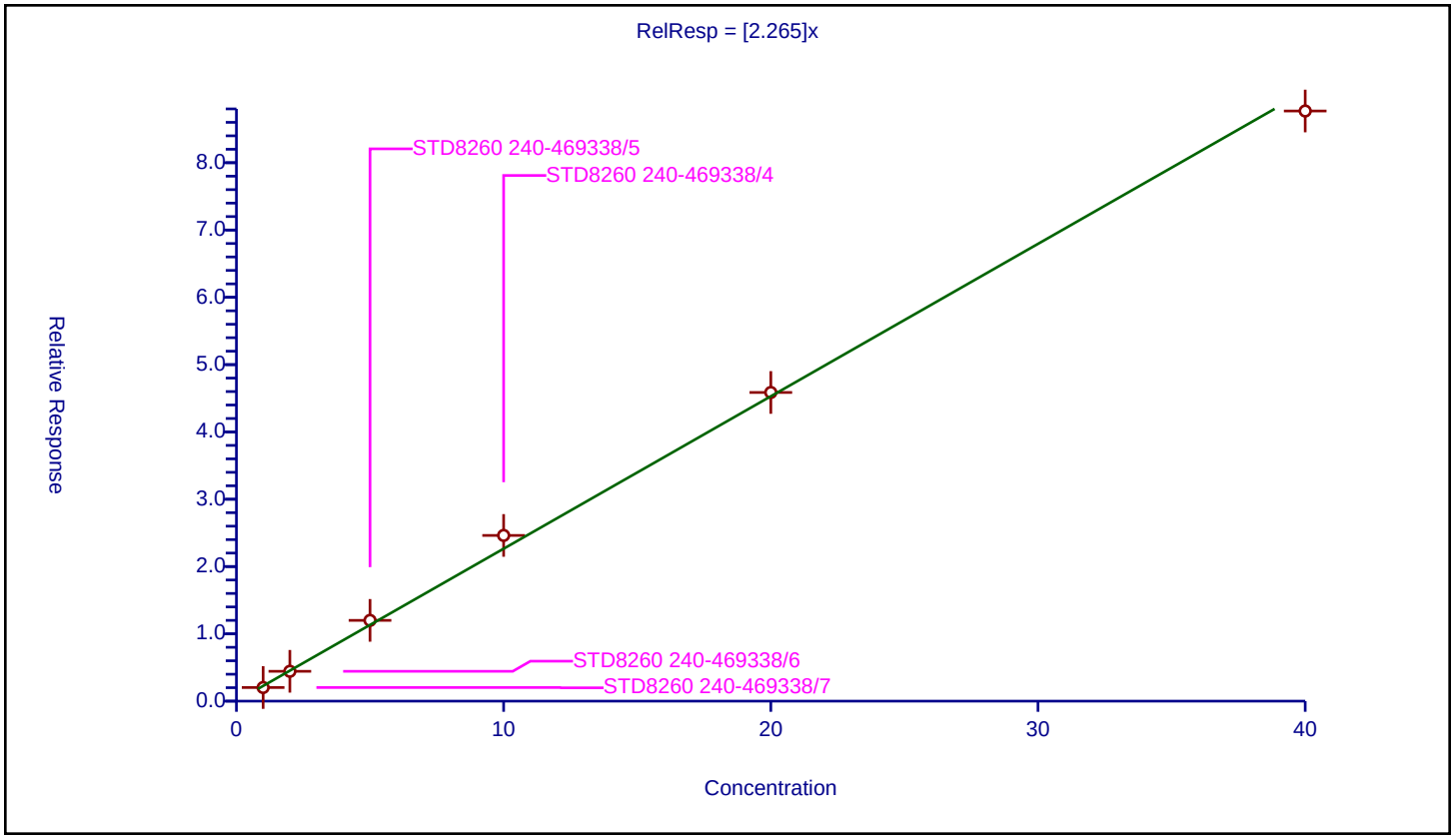
Curve Coefficients

Intercept:	0
Slope:	2.265

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.023587	20.0	420817.0	2.023587	Y
2	STD8260 240-469338/6	2.0	4.435486	20.0	402373.0	2.217743	Y
3	STD8260 240-469338/5	5.0	12.000699	20.0	406373.0	2.40014	Y
4	STD8260 240-469338/4	10.0	24.62195	20.0	399775.0	2.462195	Y
5	STD8260 240-469338/3	20.0	45.865663	20.0	413781.0	2.293283	Y
6	STD8260 240-469338/2	40.0	87.685904	20.0	455301.0	2.192148	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

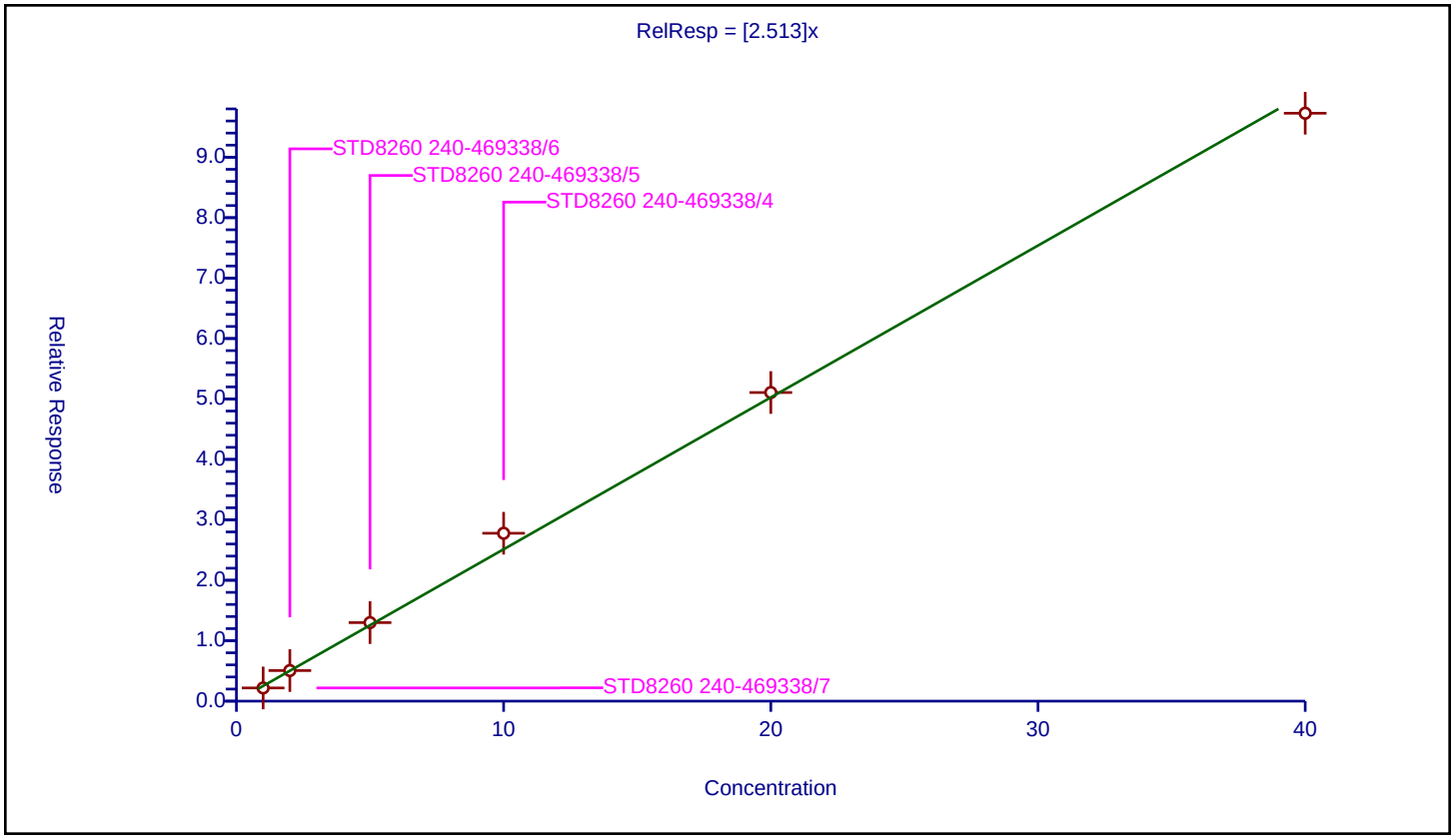
Curve Coefficients

Intercept:	0
Slope:	2.513

Error Coefficients

Standard Error:	1130000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.183229	20.0	420817.0	2.183229	Y
2	STD8260 240-469338/6	2.0	5.062815	20.0	402373.0	2.531407	Y
3	STD8260 240-469338/5	5.0	12.996484	20.0	406373.0	2.599297	Y
4	STD8260 240-469338/4	10.0	27.779776	20.0	399775.0	2.777978	Y
5	STD8260 240-469338/3	20.0	51.069237	20.0	413781.0	2.553462	Y
6	STD8260 240-469338/2	40.0	97.280217	20.0	455301.0	2.432005	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

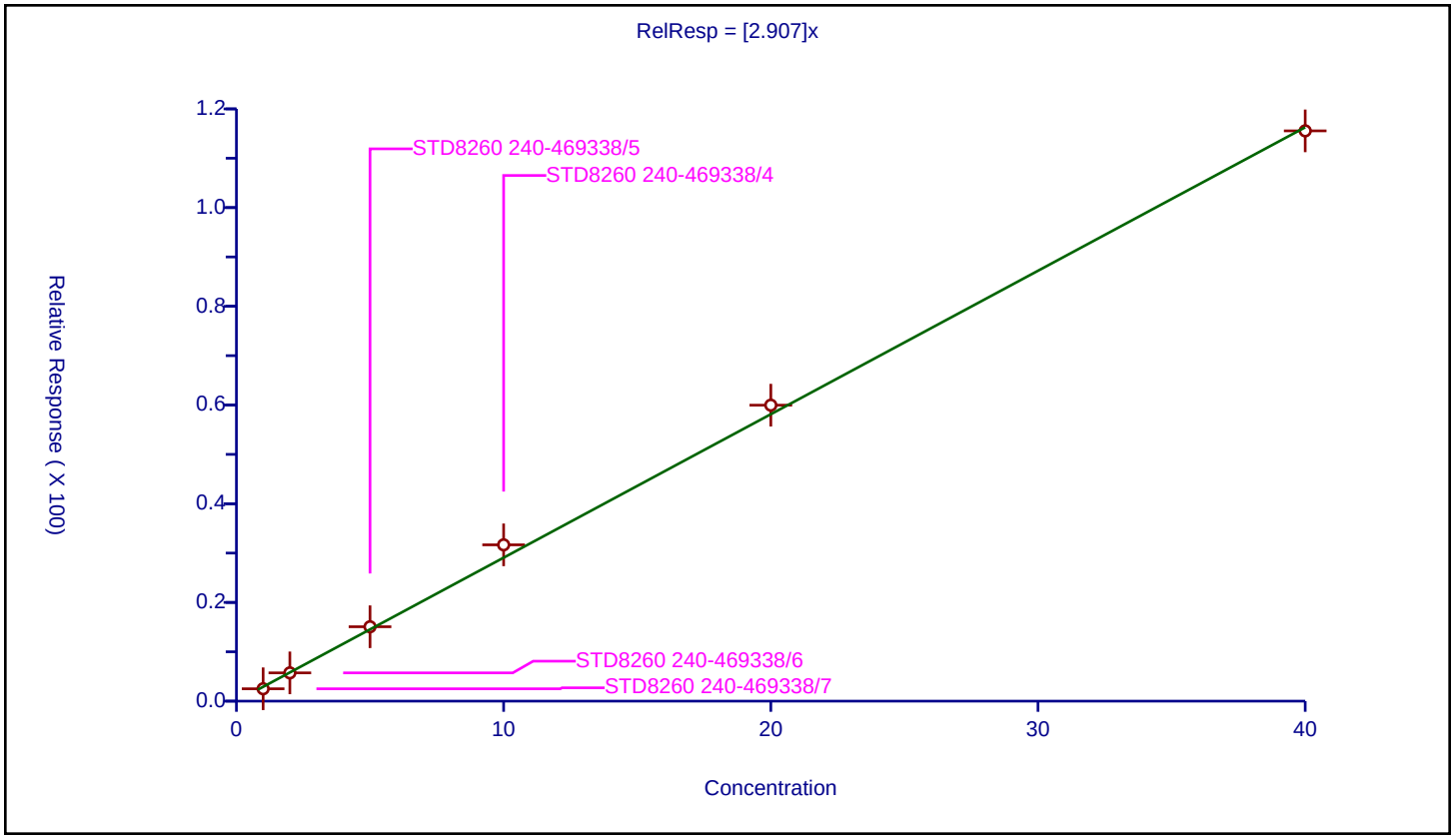
Curve Coefficients

Intercept:	0
Slope:	2.907

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.508644	20.0	420817.0	2.508644	Y
2	STD8260 240-469338/6	2.0	5.726279	20.0	402373.0	2.863139	Y
3	STD8260 240-469338/5	5.0	15.072507	20.0	406373.0	3.014501	Y
4	STD8260 240-469338/4	10.0	31.671915	20.0	399775.0	3.167192	Y
5	STD8260 240-469338/3	20.0	59.968437	20.0	413781.0	2.998422	Y
6	STD8260 240-469338/2	40.0	115.54923	20.0	455301.0	2.888731	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

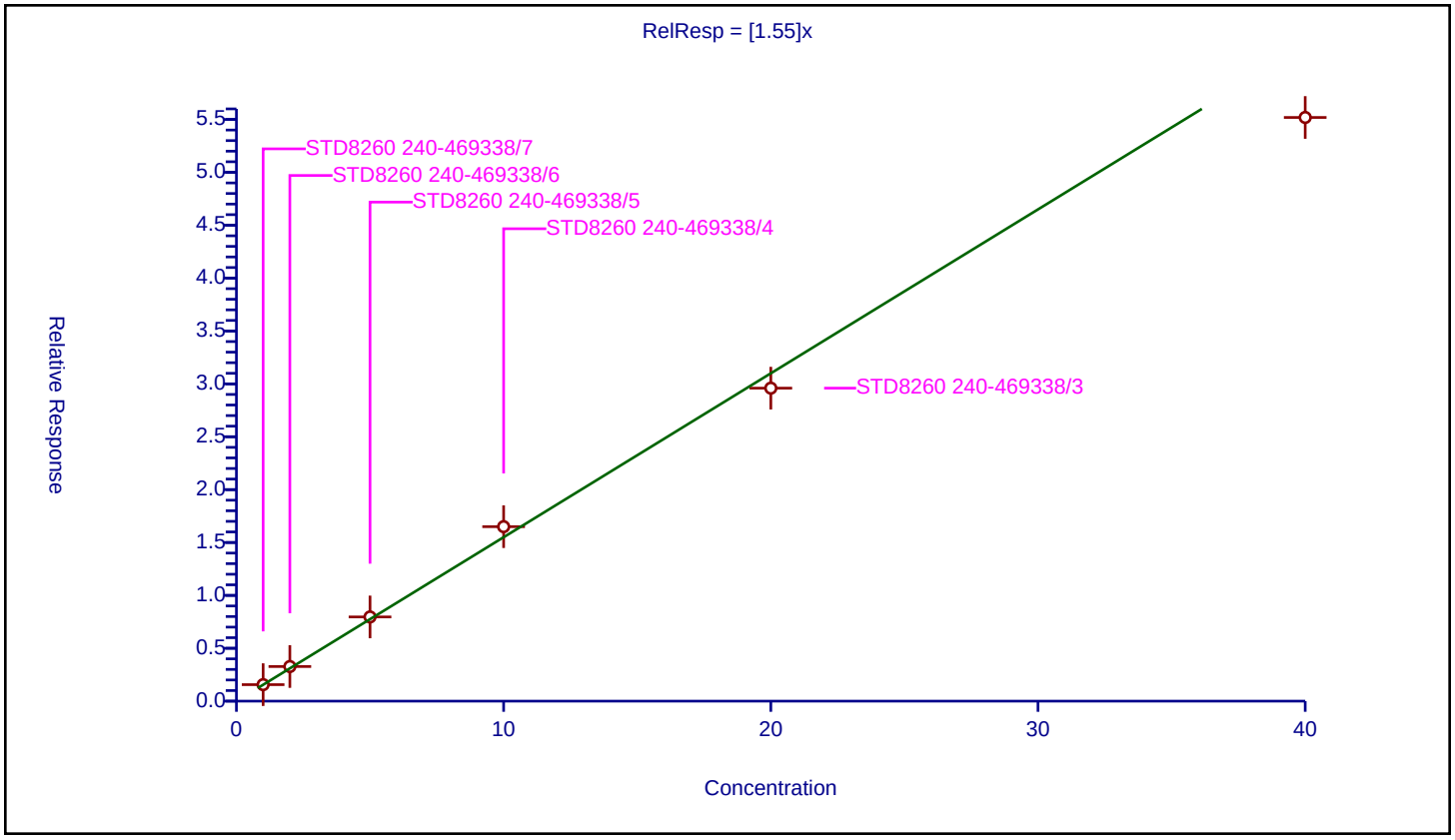
Curve Coefficients

Intercept:	0
Slope:	1.55

Error Coefficients

Standard Error:	647000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.560964	20.0	420817.0	1.560964	Y
2	STD8260 240-469338/6	2.0	3.272884	20.0	402373.0	1.636442	Y
3	STD8260 240-469338/5	5.0	7.962389	20.0	406373.0	1.592478	Y
4	STD8260 240-469338/4	10.0	16.49773	20.0	399775.0	1.649773	Y
5	STD8260 240-469338/3	20.0	29.595752	20.0	413781.0	1.479788	Y
6	STD8260 240-469338/2	40.0	55.188897	20.0	455301.0	1.379722	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

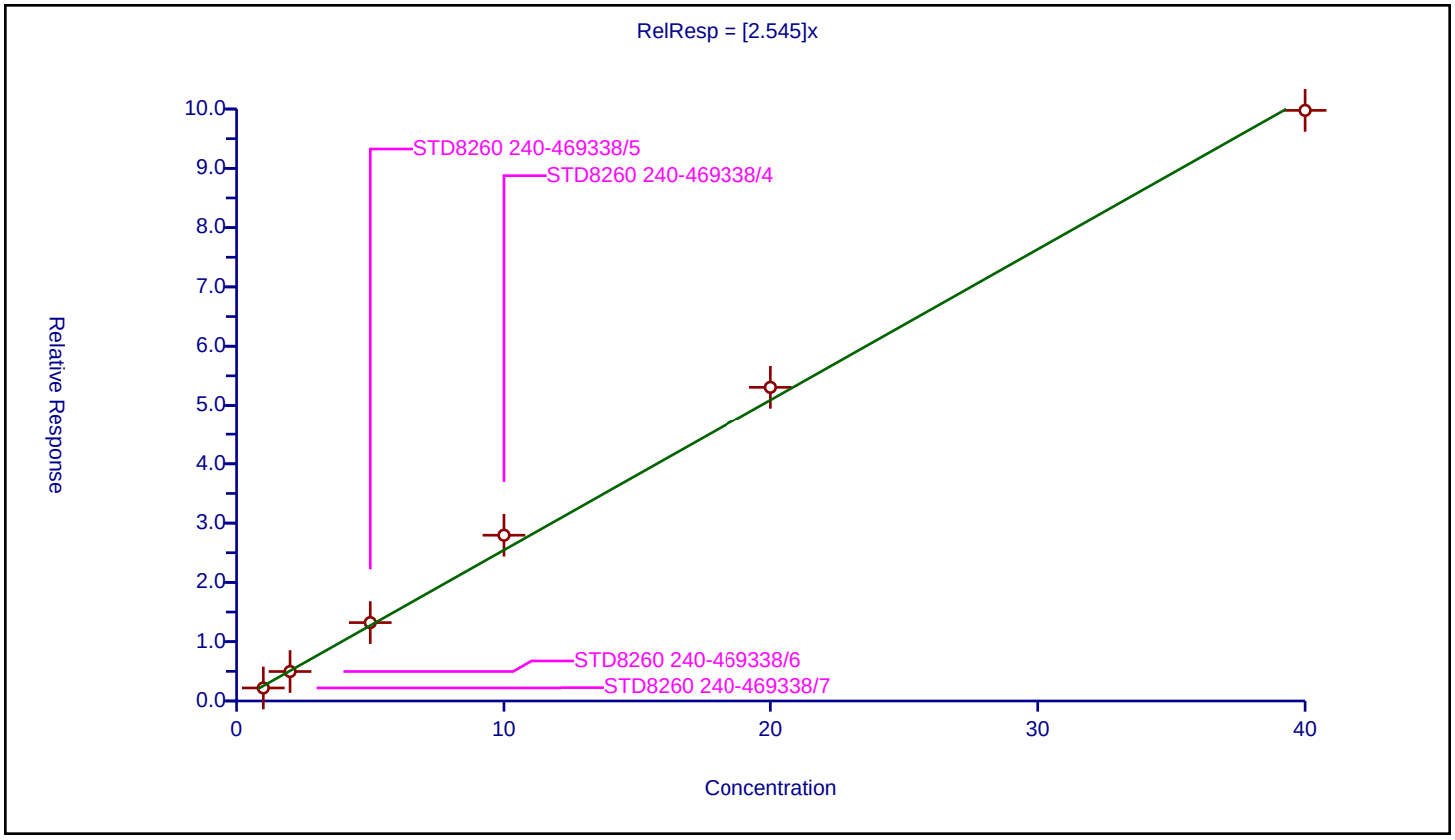
Curve Coefficients

Intercept:	0
Slope:	2.545

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.196252	20.0	420817.0	2.196252	Y
2	STD8260 240-469338/6	2.0	4.973246	20.0	402373.0	2.486623	Y
3	STD8260 240-469338/5	5.0	13.217955	20.0	406373.0	2.643591	Y
4	STD8260 240-469338/4	10.0	27.957776	20.0	399775.0	2.795778	Y
5	STD8260 240-469338/3	20.0	53.061885	20.0	413781.0	2.653094	Y
6	STD8260 240-469338/2	40.0	99.771975	20.0	455301.0	2.494299	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

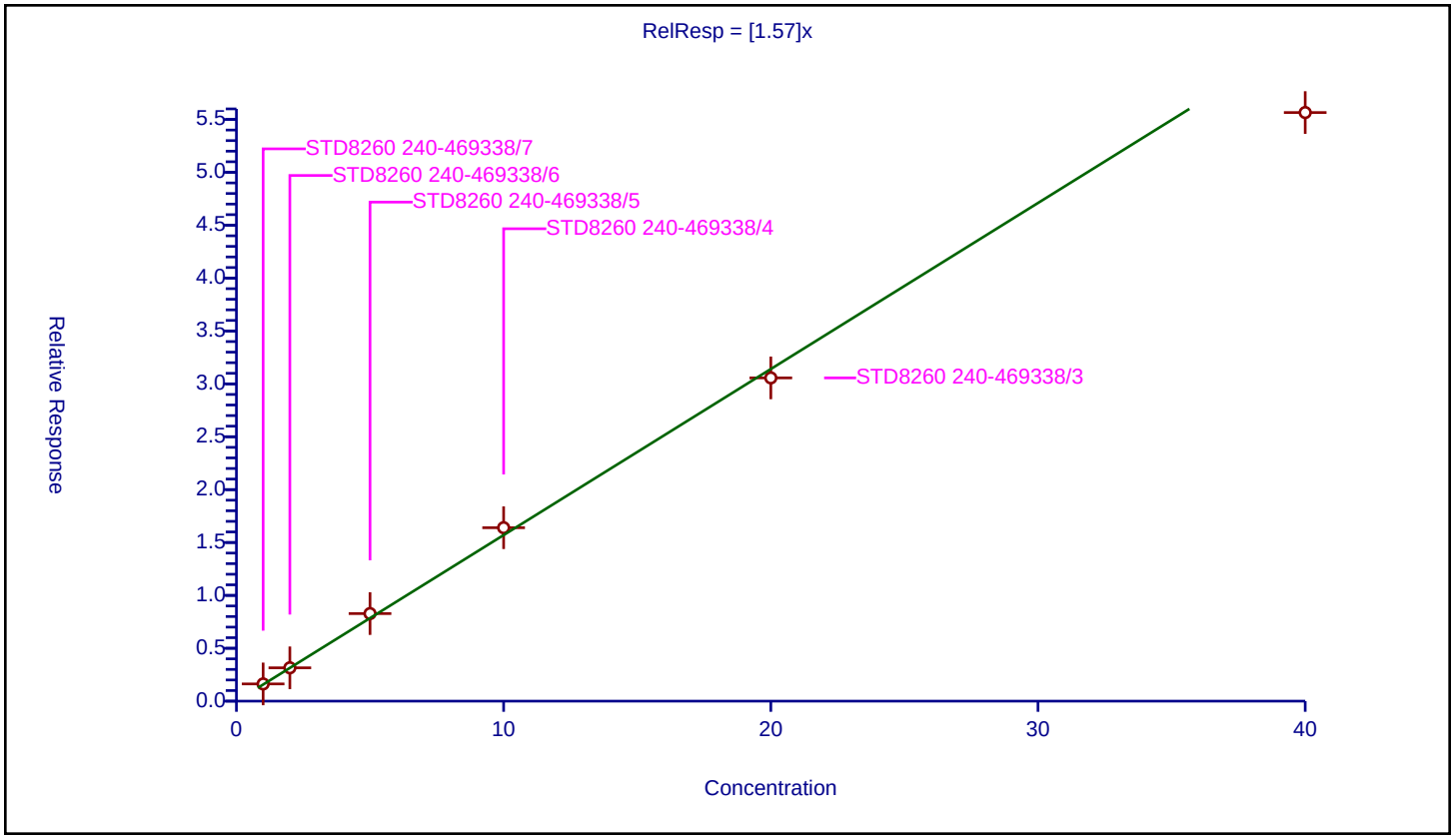
Curve Coefficients

Intercept:	0
Slope:	1.57

Error Coefficients

Standard Error:	655000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.628927	20.0	420817.0	1.628927	Y
2	STD8260 240-469338/6	2.0	3.152846	20.0	402373.0	1.576423	Y
3	STD8260 240-469338/5	5.0	8.280028	20.0	406373.0	1.656006	Y
4	STD8260 240-469338/4	10.0	16.398274	20.0	399775.0	1.639827	Y
5	STD8260 240-469338/3	20.0	30.563269	20.0	413781.0	1.528163	Y
6	STD8260 240-469338/2	40.0	55.654259	20.0	455301.0	1.391356	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

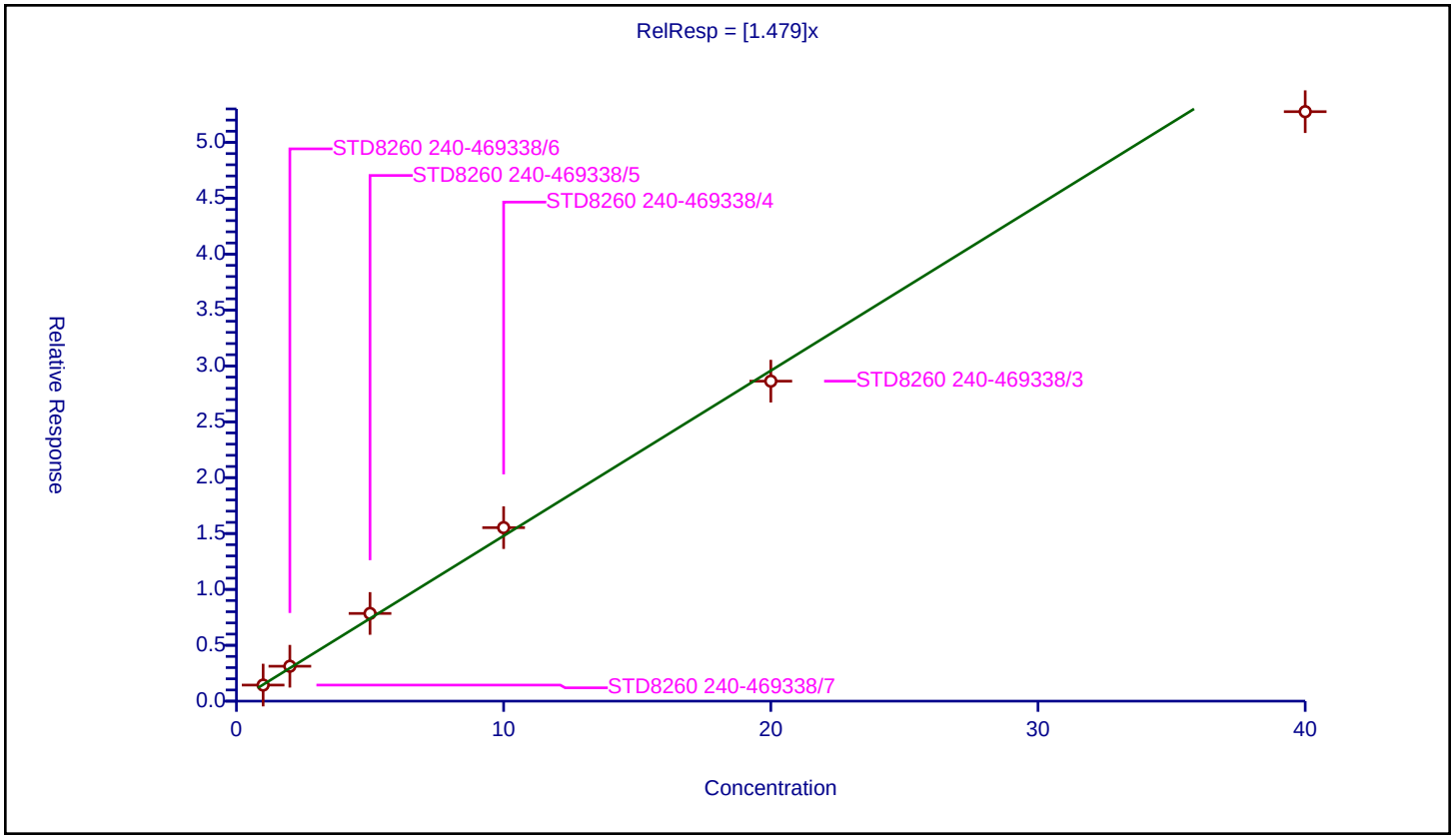
Curve Coefficients

Intercept:	0
Slope:	1.479

Error Coefficients

Standard Error:	620000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.438392	20.0	420817.0	1.438392	Y
2	STD8260 240-469338/6	2.0	3.122575	20.0	402373.0	1.561288	Y
3	STD8260 240-469338/5	5.0	7.84747	20.0	406373.0	1.569494	Y
4	STD8260 240-469338/4	10.0	15.527434	20.0	399775.0	1.552743	Y
5	STD8260 240-469338/3	20.0	28.635244	20.0	413781.0	1.431762	Y
6	STD8260 240-469338/2	40.0	52.751872	20.0	455301.0	1.318797	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

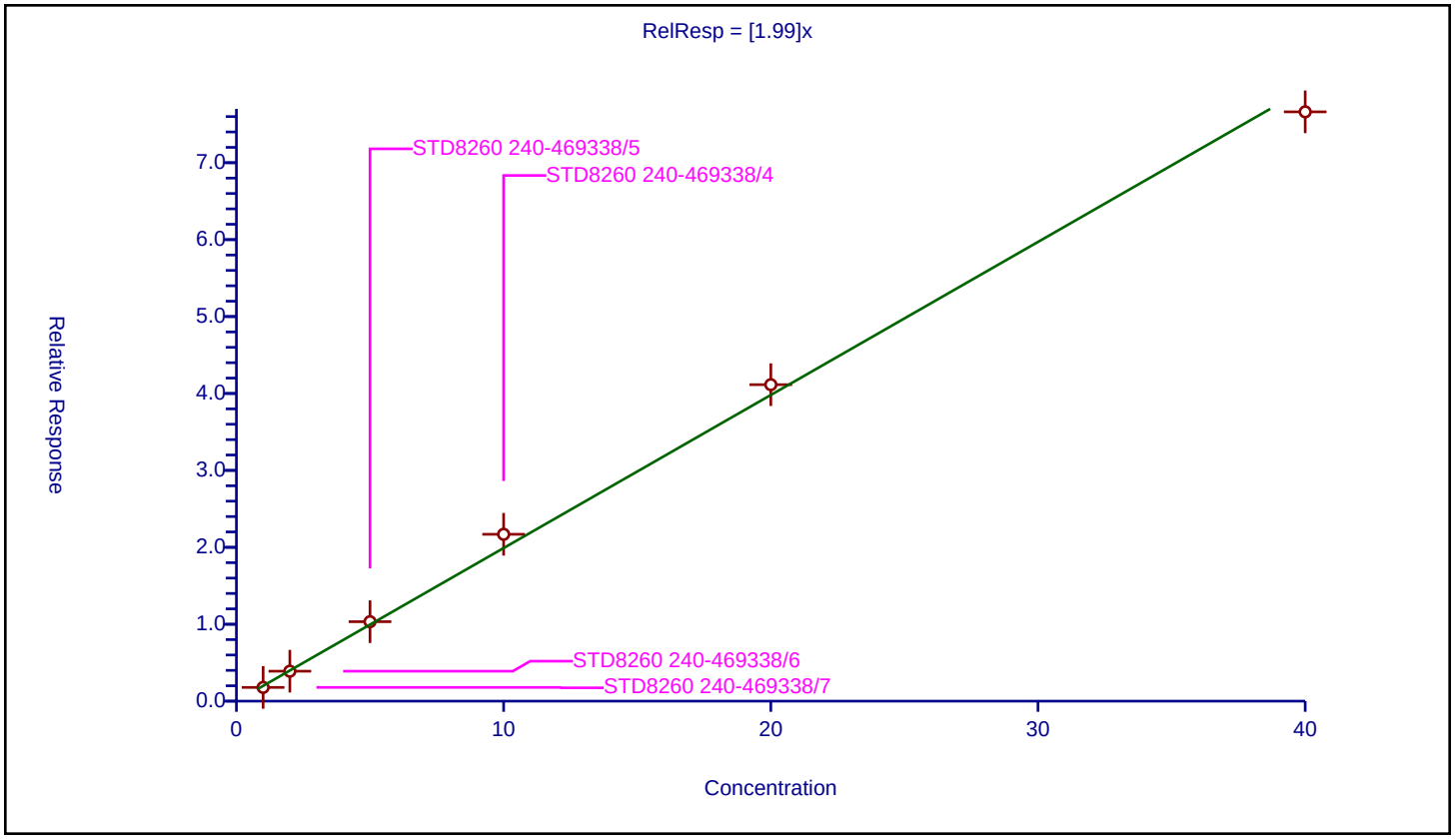
Curve Coefficients

Intercept:	0
Slope:	1.99

Error Coefficients

Standard Error:	895000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.786525	20.0	420817.0	1.786525	Y
2	STD8260 240-469338/6	2.0	3.892557	20.0	402373.0	1.946279	Y
3	STD8260 240-469338/5	5.0	10.332429	20.0	406373.0	2.066486	Y
4	STD8260 240-469338/4	10.0	21.691501	20.0	399775.0	2.16915	Y
5	STD8260 240-469338/3	20.0	41.14563	20.0	413781.0	2.057282	Y
6	STD8260 240-469338/2	40.0	76.614459	20.0	455301.0	1.915361	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

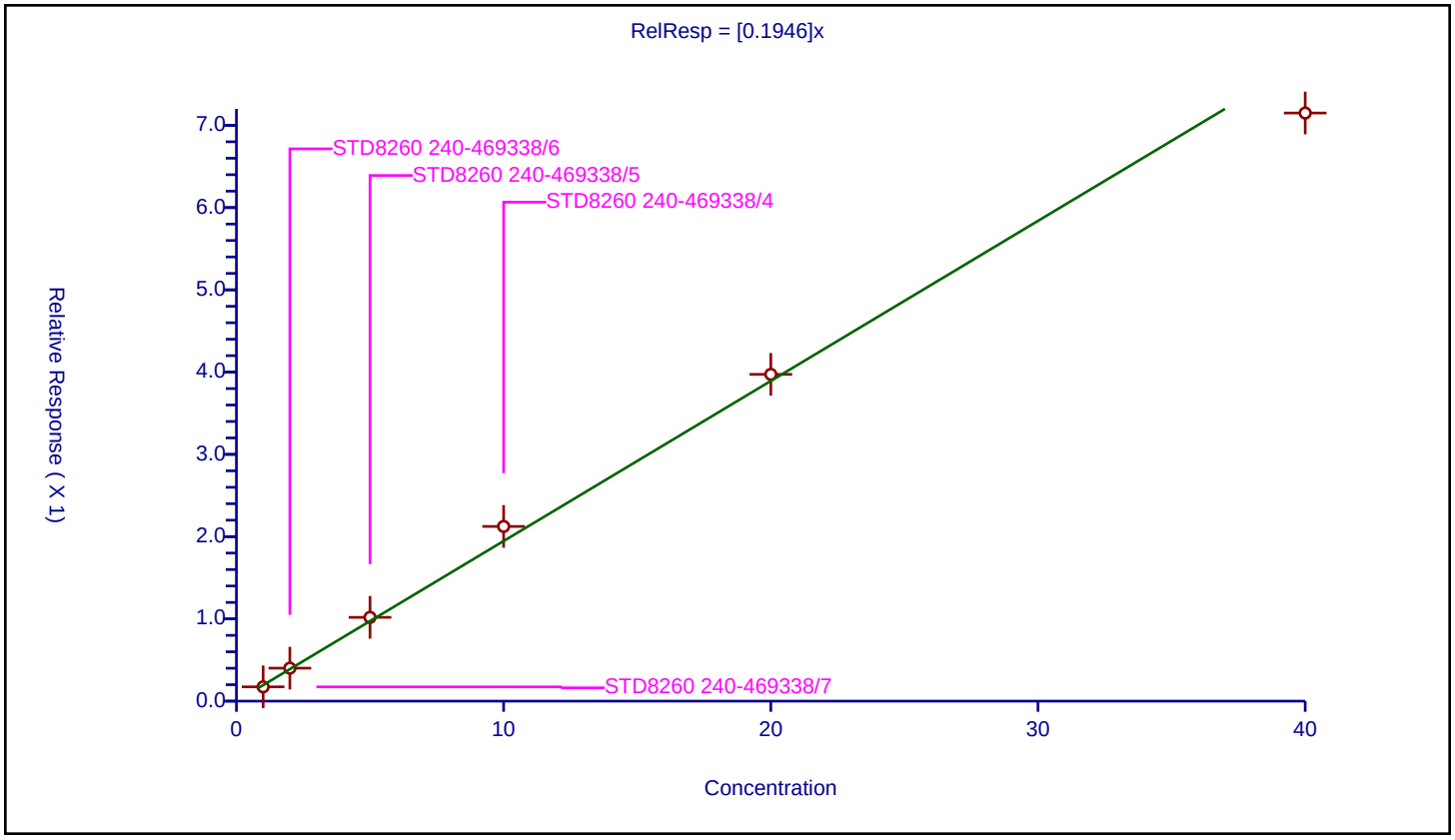
Curve Coefficients

Intercept:	0
Slope:	0.1946

Error Coefficients

Standard Error:	84300
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.173662	20.0	420817.0	0.173662	Y
2	STD8260 240-469338/6	2.0	0.40117	20.0	402373.0	0.200585	Y
3	STD8260 240-469338/5	5.0	1.018473	20.0	406373.0	0.203695	Y
4	STD8260 240-469338/4	10.0	2.123795	20.0	399775.0	0.212379	Y
5	STD8260 240-469338/3	20.0	3.972875	20.0	413781.0	0.198644	Y
6	STD8260 240-469338/2	40.0	7.149688	20.0	455301.0	0.178742	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

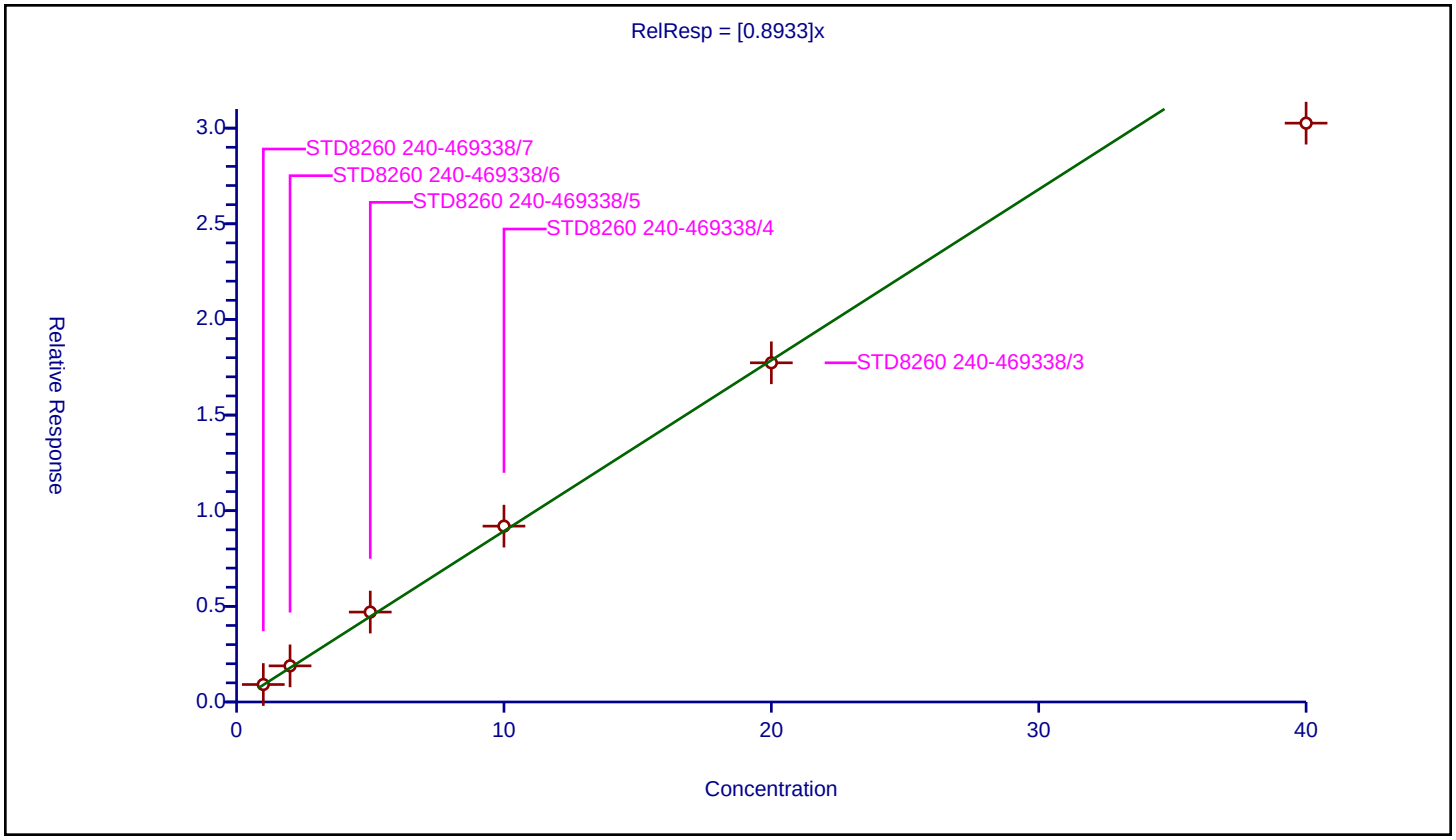
Curve Coefficients

Intercept:	0
Slope:	0.8933

Error Coefficients

Standard Error:	362000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.913271	20.0	420817.0	0.913271	Y
2	STD8260 240-469338/6	2.0	1.88795	20.0	402373.0	0.943975	Y
3	STD8260 240-469338/5	5.0	4.700066	20.0	406373.0	0.940013	Y
4	STD8260 240-469338/4	10.0	9.193171	20.0	399775.0	0.919317	Y
5	STD8260 240-469338/3	20.0	17.731844	20.0	413781.0	0.886592	Y
6	STD8260 240-469338/2	40.0	30.260641	20.0	455301.0	0.756516	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

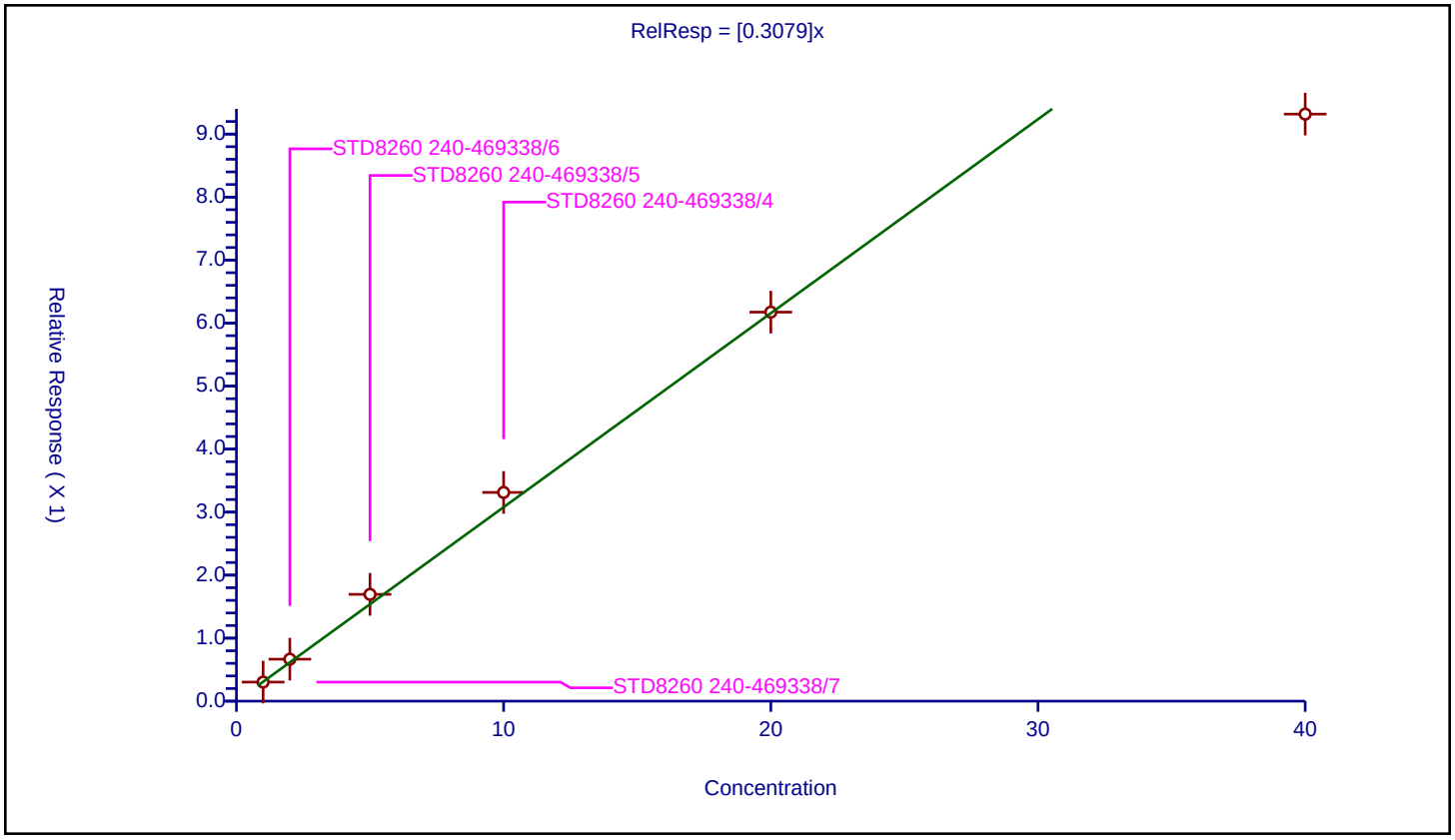
Curve Coefficients

Intercept:	0
Slope:	0.3079

Error Coefficients

Standard Error:	116000
Relative Standard Error:	12.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302317	20.0	420817.0	0.302317	Y
2	STD8260 240-469338/6	2.0	0.665949	20.0	402373.0	0.332975	Y
3	STD8260 240-469338/5	5.0	1.694847	20.0	406373.0	0.338969	Y
4	STD8260 240-469338/4	10.0	3.312613	20.0	399775.0	0.331261	Y
5	STD8260 240-469338/3	20.0	6.174136	20.0	413781.0	0.308707	Y
6	STD8260 240-469338/2	40.0	9.317309	20.0	455301.0	0.232933	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

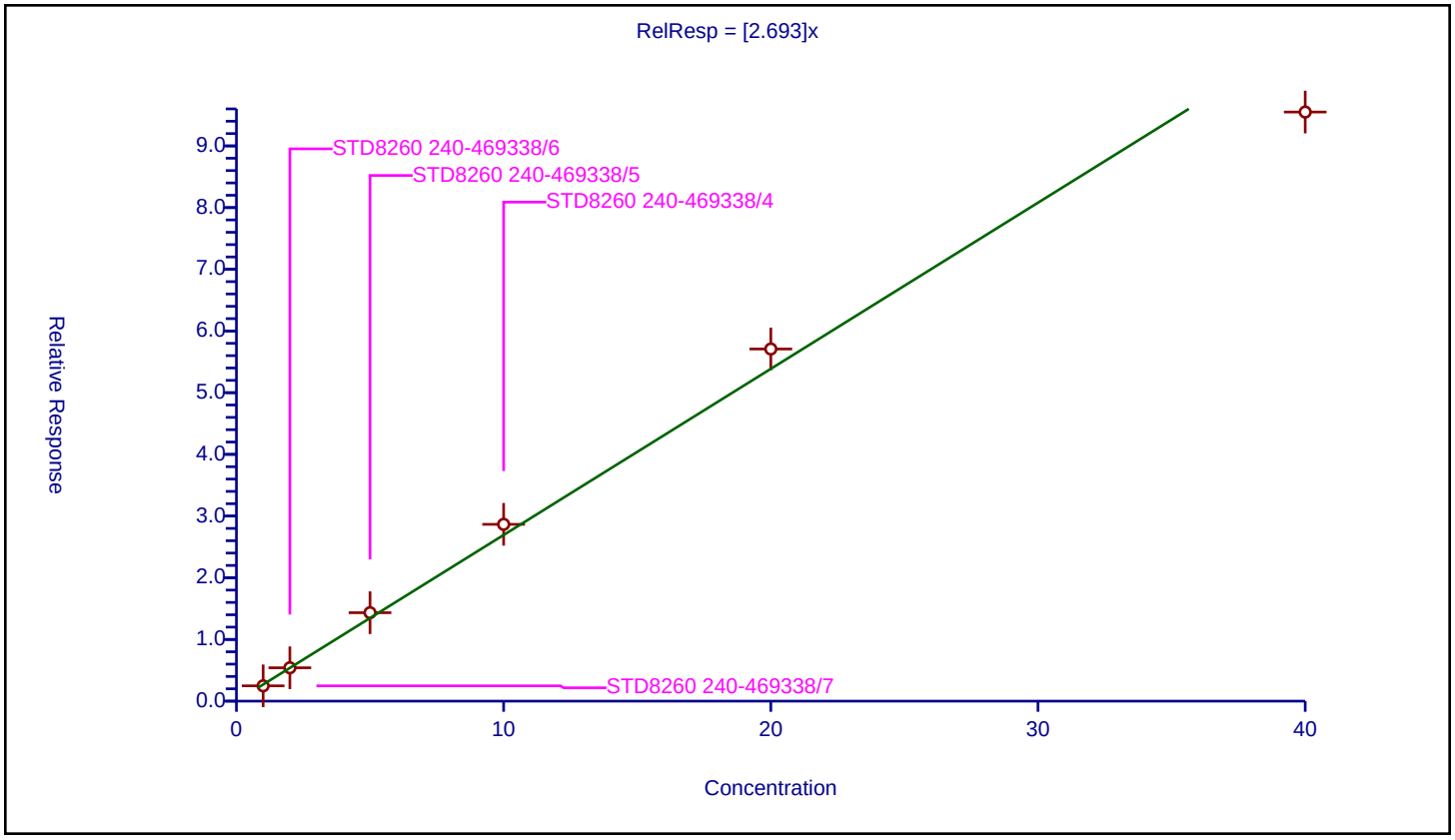
Curve Coefficients

Intercept:	0
Slope:	2.693

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.480128	20.0	420817.0	2.480128	Y
2	STD8260 240-469338/6	2.0	5.408912	20.0	402373.0	2.704456	Y
3	STD8260 240-469338/5	5.0	14.337271	20.0	406373.0	2.867454	Y
4	STD8260 240-469338/4	10.0	28.661322	20.0	399775.0	2.866132	Y
5	STD8260 240-469338/3	20.0	57.081258	20.0	413781.0	2.854063	Y
6	STD8260 240-469338/2	40.0	95.489489	20.0	455301.0	2.387237	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

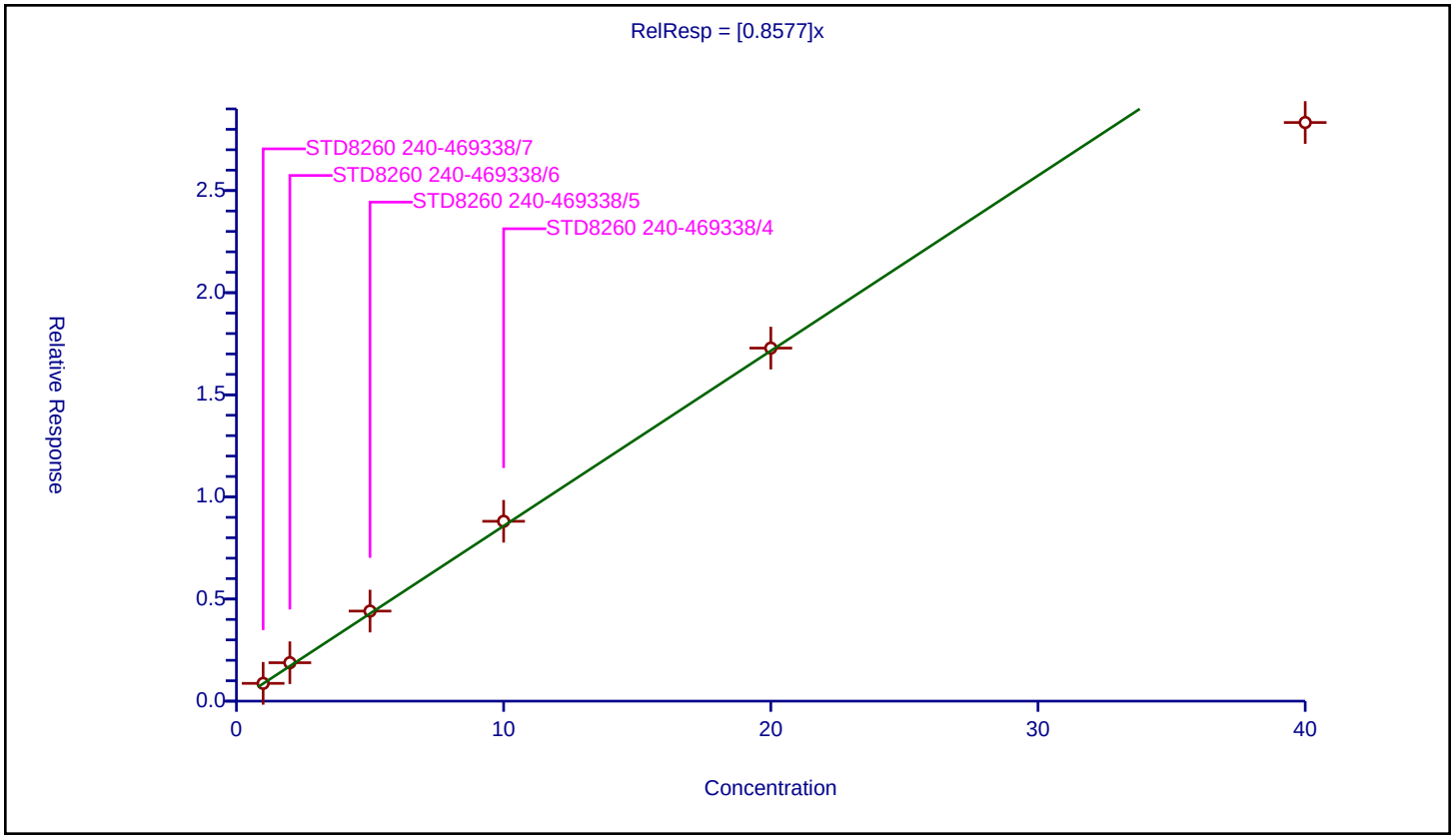
Curve Coefficients

Intercept:	0
Slope:	0.8577

Error Coefficients

Standard Error:	342000
Relative Standard Error:	9.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.870307	20.0	420817.0	0.870307	Y
2	STD8260 240-469338/6	2.0	1.88119	20.0	402373.0	0.940595	Y
3	STD8260 240-469338/5	5.0	4.410382	20.0	406373.0	0.882076	Y
4	STD8260 240-469338/4	10.0	8.806954	20.0	399775.0	0.880695	Y
5	STD8260 240-469338/3	20.0	17.287502	20.0	413781.0	0.864375	Y
6	STD8260 240-469338/2	40.0	28.3333	20.0	455301.0	0.708333	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.3204		0.0121	0.0100	21.0	50.0
Chloromethane	Ave	0.2085	0.2316	0.1000	0.0111	0.0100	11.1	50.0
Butadiene	Ave	0.2195	0.2175		0.00991	0.0100	-0.9	50.0
Vinyl chloride	Ave	0.2484	0.2737		0.0110	0.0100	10.2	20.0
Bromomethane	Ave	0.1787	0.1948		0.0109	0.0100	9.0	50.0
Chloroethane	Ave	0.1469	0.1634		0.0111	0.0100	11.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3916		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.4398		0.0104	0.0100	3.6	50.0
Ethyl ether	Ave	0.1891	0.2067		0.0109	0.0100	9.3	50.0
Acrolein	Ave	0.0073	0.0087		0.0595	0.0500	19.0	50.0
1,1-Dichloroethene	Ave	0.2398	0.2587		0.0108	0.0100	7.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.2103		0.0115	0.0100	15.0	50.0
Acetone	Qua		0.0663		0.0168	0.0200	-16.0	50.0
Iodomethane	Ave	0.4292	0.4457		0.0104	0.0100	3.8	50.0
Carbon disulfide	Ave	0.7139	0.7183		0.0101	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1609	0.1661		0.0103	0.0100	3.3	50.0
Methyl acetate	Ave	0.1601	0.1572		0.0196	0.0200	-1.8	50.0
Methylene Chloride	Ave	0.2646	0.2601		0.00983	0.0100	-1.7	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0282		0.0874	0.100	-12.6	50.0
Acrylonitrile	Ave	0.0817	0.0808		0.0989	0.100	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2923		0.0104	0.0100	3.7	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7137		0.0103	0.0100	2.8	50.0
Hexane	Ave	0.0646	0.0732		0.0113	0.0100	13.4	20.0
1,1-Dichloroethane	Ave	0.4093	0.4326	0.1000	0.0106	0.0100	5.7	50.0
Vinyl acetate	Ave	0.4414	0.4244		0.00962	0.0100	-3.8	50.0
2,2-Dichloropropane	Ave	0.0667	0.0739		0.0111	0.0100	10.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2973		0.0102	0.0100	2.3	50.0
2-Butanone (MEK)	Ave	0.1171	0.1005		0.0172	0.0200	-14.2	50.0
Chlorobromomethane	Ave	0.1450	0.1423		0.00981	0.0100	-1.9	50.0
Chloroform	Ave	0.4451	0.4453		0.0100	0.0100	0.0	20.0
Tetrahydrofuran	Ave	0.0687	0.0660		0.0192	0.0200	-4.0	50.0
1,1,1-Trichloroethane	Ave	0.3903	0.3971		0.0102	0.0100	1.8	50.0
Cyclohexane	Ave	0.3237	0.3509		0.0108	0.0100	8.4	50.0
1,1-Dichloropropene	Ave	0.3529	0.3538		0.0100	0.0100	0.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3627		0.0101	0.0100	1.5	50.0
Isobutyl alcohol	Ave	0.0117	0.0112		0.239	0.250	-4.5	50.0
Benzene	Ave	0.997	1.008		0.0101	0.0100	1.1	50.0
1,2-Dichloroethane	Ave	0.3233	0.3310		0.0102	0.0100	2.4	50.0
n-Heptane	Ave	0.0579	0.0622		0.0107	0.0100	7.4	50.0
Trichloroethene	Ave	0.3122	0.3144		0.0101	0.0100	0.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3828		0.0109	0.0100	8.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2201		0.0106	0.0100	5.6	20.0
Dibromomethane	Ave	0.1524	0.1520		0.00997	0.0100	-0.3	50.0
1,4-Dioxane	Qua		0.0023		0.145	0.200	-27.3	50.0
Dichlorobromomethane	Ave	0.3068	0.3197		0.0104	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1498		0.0101	0.0100	0.9	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3793		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2083		0.0200	0.0200	-0.0	50.0
Toluene	Ave	1.519	1.513		0.00997	0.0100	-0.3	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4614		0.00936	0.0100	-6.4	50.0
Ethyl methacrylate	Ave	0.3857	0.3929		0.0102	0.0100	1.9	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3015		0.0100	0.0100	0.1	50.0
Tetrachloroethene	Ave	0.3233	0.3416		0.0106	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.5016	0.5097		0.0102	0.0100	1.6	50.0
2-Hexanone	Ave	0.2134	0.2222		0.0208	0.0200	4.1	50.0
Chlorodibromomethane	Ave	0.3328	0.3379		0.0102	0.0100	1.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3176		0.0100	0.0100	0.3	50.0
Chlorobenzene	Ave	0.9925	1.006	0.3000	0.0101	0.0100	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3394		0.0102	0.0100	2.0	50.0
Ethylbenzene	Ave	0.5200	0.5412		0.0104	0.0100	4.1	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6567		0.0103	0.0100	3.0	50.0
o-Xylene	Ave	0.5870	0.6377		0.0109	0.0100	8.6	50.0
Styrene	Ave	0.8528	0.8951		0.0105	0.0100	5.0	50.0
Bromoform	Lin1		0.1995	0.1000	0.00911	0.0100	-8.9	50.0
Isopropylbenzene	Ave	1.500	1.585		0.0106	0.0100	5.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.7796	0.3000	0.0100	0.0100	0.4	50.0
Bromobenzene	Ave	0.8603	0.8714		0.0101	0.0100	1.3	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2926		0.00983	0.0100	-1.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.2175		0.00983	0.0100	-1.7	50.0
N-Propylbenzene	Ave	0.9157	0.9721		0.0106	0.0100	6.2	50.0
2-Chlorotoluene	Ave	0.7837	0.8108		0.0103	0.0100	3.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.608		0.0103	0.0100	2.7	50.0
4-Chlorotoluene	Ave	0.8219	0.8306		0.0101	0.0100	1.1	50.0
tert-Butylbenzene	Ave	2.265	2.342		0.0103	0.0100	3.4	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.663		0.0106	0.0100	6.0	50.0
sec-Butylbenzene	Ave	2.907	3.132		0.0108	0.0100	7.8	50.0
1,3-Dichlorobenzene	Ave	1.550	1.593		0.0103	0.0100	2.8	50.0
4-Isopropyltoluene	Ave	2.545	2.724		0.0107	0.0100	7.0	50.0
1,4-Dichlorobenzene	Ave	1.570	1.620		0.0103	0.0100	3.2	50.0
1,2-Dichlorobenzene	Ave	1.479	1.496		0.0101	0.0100	1.1	50.0
n-Butylbenzene	Ave	1.990	2.014		0.0101	0.0100	1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2078		0.0107	0.0100	6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8965		0.0100	0.0100	0.4	50.0
Hexachlorobutadiene	Ave	0.3079	0.2781		0.00903	0.0100	-9.7	50.0
Naphthalene	Ave	2.693	2.701		0.0100	0.0100	0.3	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.8686		0.0101	0.0100	1.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2556		0.0201	0.0200	0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2786		0.0193	0.0200	-3.6	50.0
Toluene-d8 (Surr)	Ave	1.423	1.364		0.0192	0.0200	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4637		0.0186	0.0200	-6.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 13:20:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-014
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:50:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1139518	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	814816	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	388972	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	291259	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	317501	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1111224	20.0	19.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	377864	20.0	18.6	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	182533	10.0	12.1	
12 Chloromethane	50	1.305	1.293	0.012	99	131974	10.0	11.1	
13 Butadiene	54	1.364	1.352	0.012	95	123899	10.0	9.91	
14 Vinyl chloride	62	1.376	1.376	0.000	98	155927	10.0	11.0	
15 Bromomethane	94	1.600	1.589	0.011	90	110983	10.0	10.9	
16 Chloroethane	64	1.648	1.648	0.000	99	93120	10.0	11.1	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	98	223097	10.0	10.8	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	96	250556	10.0	10.4	
19 Ethyl ether	59	2.074	2.062	0.012	87	117780	10.0	10.9	
20 Acrolein	56	2.168	2.157	0.012	98	24774	50.0	59.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	147377	10.0	10.8	
23 112TCTFE	151	2.287	2.275	0.012	90	119846	10.0	11.5	
24 Acetone	43	2.299	2.298	0.001	100	75504	20.0	16.8	
25 Iodomethane	142	2.370	2.358	0.012	98	253950	10.0	10.4	
26 Carbon disulfide	76	2.429	2.417	0.012	99	409283	10.0	10.1	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	94654	10.0	10.3	
29 Methyl acetate	43	2.583	2.571	0.012	96	179186	20.0	19.6	
30 Methylene Chloride	84	2.654	2.642	0.012	86	148216	10.0	9.83	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	160833	100.0	87.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	460333	100.0	98.9	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	166535	10.0	10.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	406634	10.0	10.3	
35 Hexane	86	3.127	3.115	0.012	88	41725	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	246486	10.0	10.6	
37 Vinyl acetate	43	3.293	3.281	0.012	97	241829	10.0	9.62	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	169379	10.0	10.2	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	72	42131	10.0	11.1	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	114545	20.0	17.2	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	81061	10.0	9.81	
49 Tetrahydrofuran	42	3.979	3.967	0.012	83	75213	20.0	19.2	
48 Chloroform	83	3.979	3.979	0.000	93	253696	10.0	10.0	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	226278	10.0	10.2	
51 Cyclohexane	56	4.192	4.180	0.012	83	199902	10.0	10.8	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	201601	10.0	10.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	206652	10.0	10.1	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	114166	250.0	238.8	
55 Benzene	78	4.440	4.440	0.000	95	574397	10.0	10.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	188586	10.0	10.2	
58 n-Heptane	100	4.689	4.689	0.000	82	35418	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	179111	10.0	10.1	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	218131	10.0	10.9	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	125385	10.0	10.6	
64 Dibromomethane	93	5.269	5.269	0.000	92	86580	10.0	9.97	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	26089	200.0	145.4	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	182159	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	85339	10.0	10.1	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	216118	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	237362	20.0	20.0	
72 Toluene	91	6.097	6.097	0.000	99	616594	10.0	9.97	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	91	187970	10.0	9.36	
74 Ethyl methacrylate	69	6.393	6.381	0.012	85	160062	10.0	10.2	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	89	122846	10.0	10.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	139184	10.0	10.6	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	207644	10.0	10.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	181066	20.0	20.8	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	137672	10.0	10.2	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	129379	10.0	10.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	409667	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	138267	10.0	10.2	
86 Ethylbenzene	106	7.470	7.469	0.001	97	220495	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	267564	10.0	10.3	
89 o-Xylene	106	7.943	7.943	0.000	95	259795	10.0	10.9	
88 Styrene	104	7.955	7.955	0.000	94	364651	10.0	10.5	
90 Bromoform	173	8.120	8.120	0.000	97	81292	10.0	9.11	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	645571	10.0	10.6	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	151615	10.0	10.0	
95 Bromobenzene	156	8.570	8.570	0.000	91	169468	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	56911	10.0	9.83	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	77	42300	10.0	9.83	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	189067	10.0	10.6	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	157698	10.0	10.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	507306	10.0	10.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	161531	10.0	10.1	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	455517	10.0	10.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	517914	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	609221	10.0	10.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	309806	10.0	10.3	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	529687	10.0	10.7	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	315092	10.0	10.3	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	290856	10.0	10.1	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	391670	10.0	10.1	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	40406	10.0	10.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	95	174348	10.0	10.0	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	54094	10.0	9.03	
118 Naphthalene	128	11.753	11.753	0.000	96	525229	10.0	10.0	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	168935	10.0	10.1	
S 129 Total BTEX	1				0		50.0	51.6	
S 128 Trihalomethanes, Total	1				0		40.0	39.7	
S 132 Xylenes, Total	106				0		20.0	21.2	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00382	Amount Added:	8.00	Units: uL	
VMFASAW_00359	Amount Added:	8.00	Units: uL	
VMFASGW_00391	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

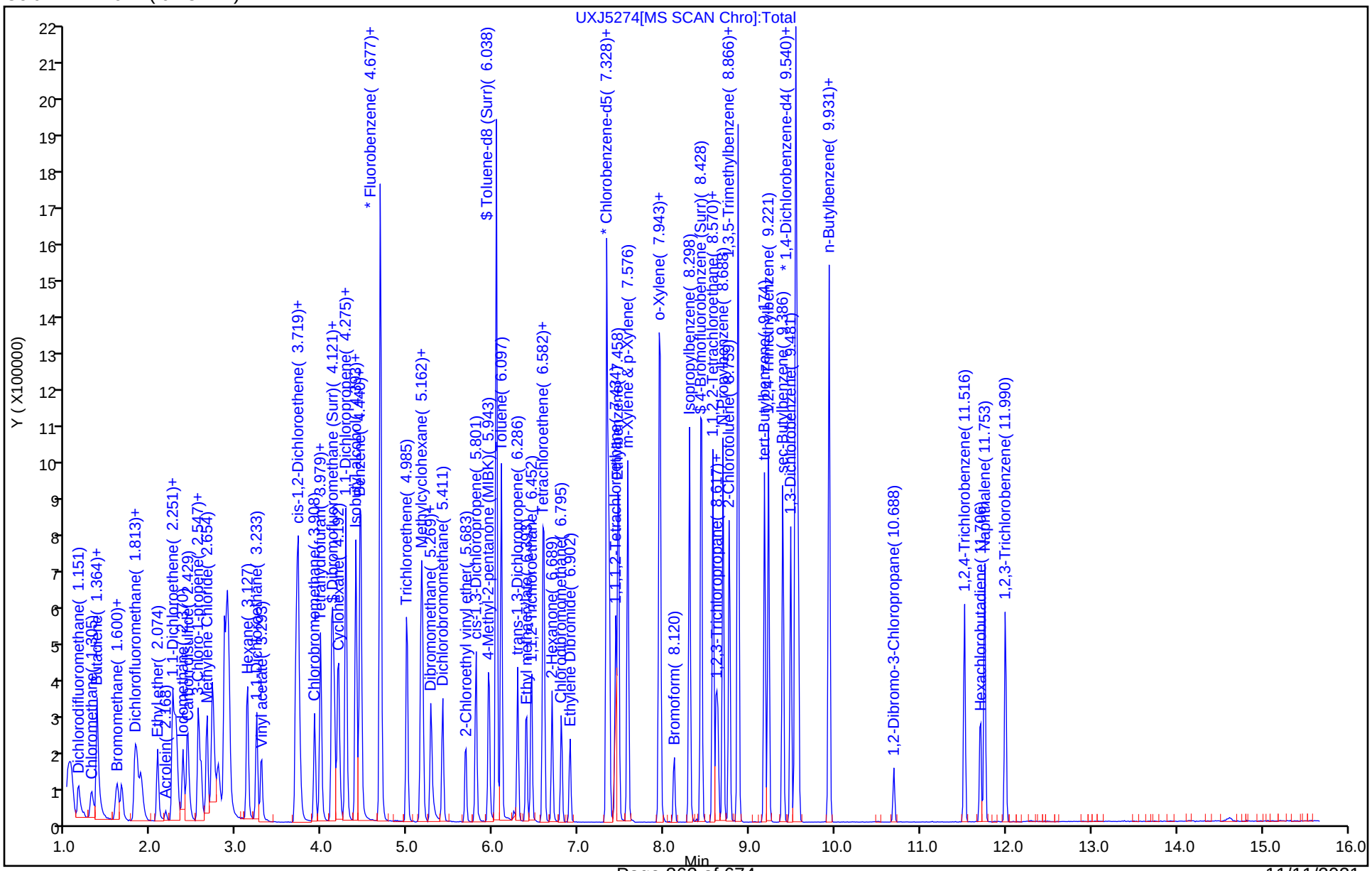
Report Date: 18-Jan-2021 09:31:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D

Injection Date:	15-Jan-2021 13:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2548	0.2367		0.0186	0.0200	-7.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2719		0.0188	0.0200	-5.9	50.0
Toluene-d8 (Surr)	Ave	1.423	1.305		0.0183	0.0200	-8.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4431		0.0178	0.0200	-11.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

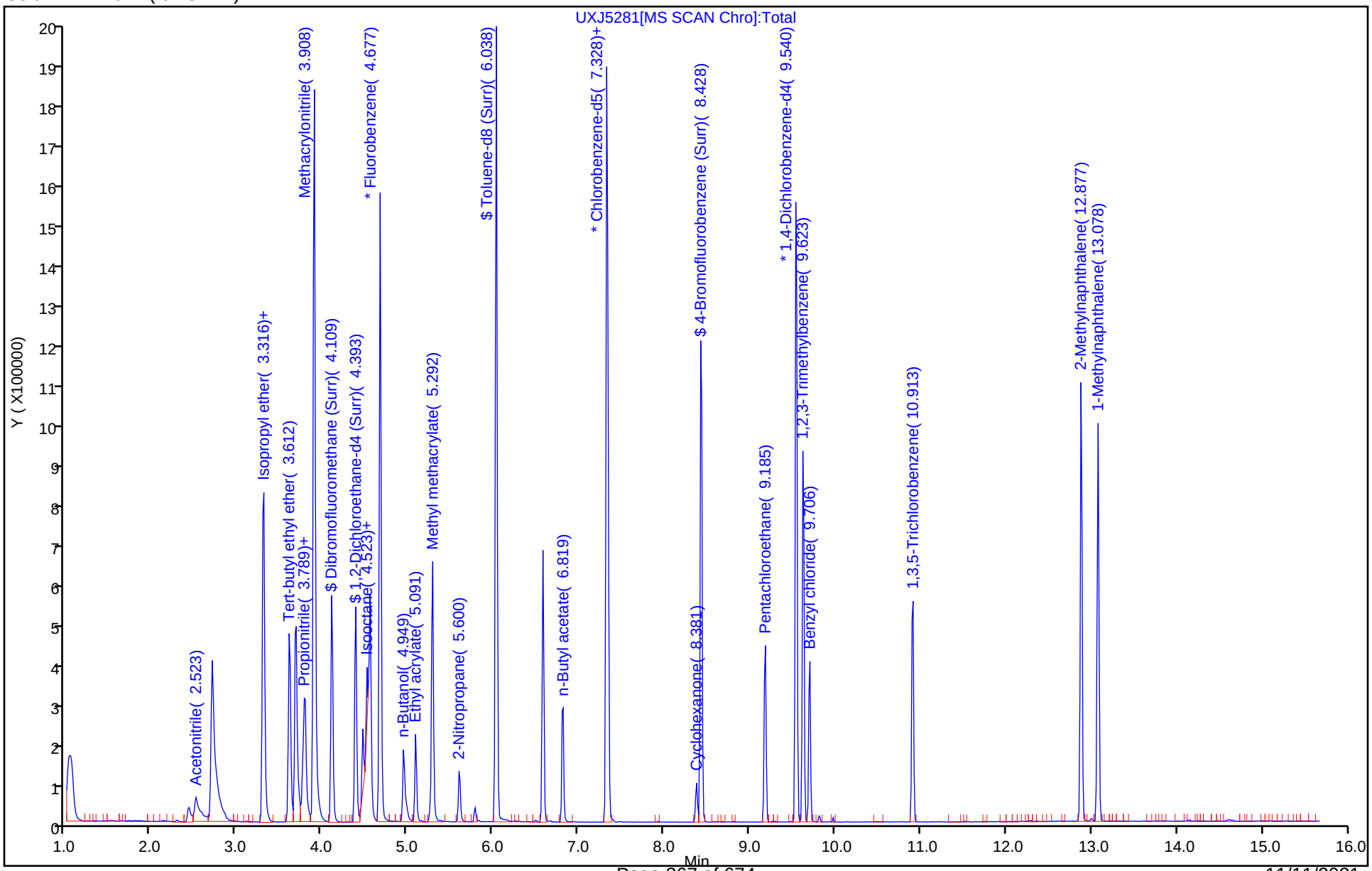
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 13:42

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 15:33

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0243		0.112	0.100	12.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3560	0.3676		0.0103	0.0100	3.3	50.0
Isopropyl ether	Ave	0.2182	0.2176		0.00997	0.0100	-0.3	50.0
Tert-butyl ethyl ether	Ave	0.6105	0.6145		0.0101	0.0100	0.7	50.0
Propionitrile	Ave	0.0327	0.0329		0.101	0.100	0.9	50.0
Ethyl acetate	Ave	0.2110	0.2208		0.0209	0.0200	4.7	50.0
Methacrylonitrile	Ave	0.1278	0.1289		0.101	0.100	0.9	50.0
Tert-amyl methyl ether	Ave	0.6525	0.6551		0.0100	0.0100	0.4	50.0
n-Butanol	Ave	0.0112	0.0108		0.240	0.250	-4.0	50.0
Ethyl acrylate	Ave	0.2791	0.2897		0.0104	0.0100	3.8	50.0
Methyl methacrylate	Ave	0.1775	0.1876		0.0211	0.0200	5.7	50.0
2-Nitropropane	Ave	0.0615	0.0576		0.0187	0.0200	-6.4	50.0
n-Butyl acetate	Ave	0.2958	0.3050		0.0103	0.0100	3.1	50.0
1-Chlorohexane	Ave	0.4822	0.4843		0.0100	0.0100	0.4	50.0
Cyclohexanone	Ave	0.0212	0.0192		0.0904	0.100	-9.6	50.0
Pentachloroethane	Ave	0.1300	0.0945		0.0145	0.0200	-27.3	50.0
1,2,3-Trimethylbenzene	Ave	2.497	2.446		0.00980	0.0100	-2.0	50.0
Benzyl chloride	Ave	0.3080	0.2891		0.00939	0.0100	-6.1	50.0
1,3,5-Trichlorobenzene	Ave	0.9535	0.8699		0.00912	0.0100	-8.8	50.0
2-Methylnaphthalene	Ave	1.501	1.191		0.0159	0.0200	-20.7	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

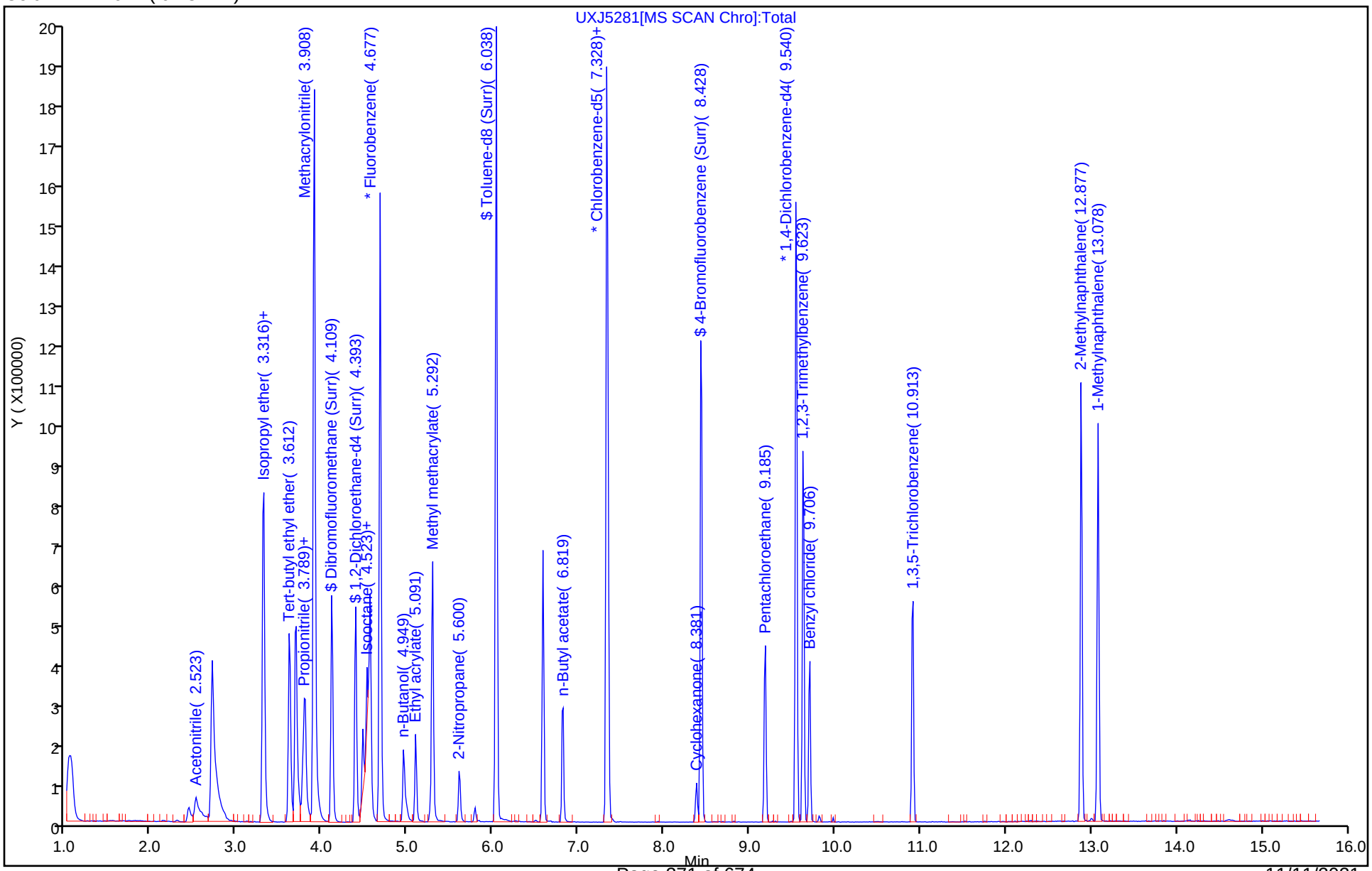
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-511833/2 Calibration Date: 11/08/2021 08:38

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2351		0.00888	0.0100	-11.2	50.0
Chloromethane	Ave	0.2085	0.2083	0.1000	0.00999	0.0100	-0.0	50.0
Butadiene	Ave	0.2195	0.2141		0.00975	0.0100	-2.5	50.0
Vinyl chloride	Ave	0.2484	0.2154		0.00867	0.0100	-13.3	20.0
Bromomethane	Ave	0.1787	0.1241		0.00694	0.0100	-30.6	50.0
Chloroethane	Ave	0.1469	0.1181		0.00804	0.0100	-19.6	50.0
Dichlorofluoromethane	Ave	0.3641	0.2766		0.00760	0.0100	-24.0	50.0
Trichlorofluoromethane	Ave	0.4246	0.3170		0.00747	0.0100	-25.3	50.0
Ethyl ether	Ave	0.1891	0.2097		0.0111	0.0100	10.9	50.0
Acrolein	Ave	0.0073	0.0257		0.176	0.0500	252.2*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2448		0.0102	0.0100	2.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1790		0.00978	0.0100	-2.2	50.0
Acetone	Qua		0.1159		0.0331	0.0200	65.3*	50.0
Iodomethane	Ave	0.4292	0.3886		0.00905	0.0100	-9.5	50.0
Carbon disulfide	Ave	0.7139	0.7205		0.0101	0.0100	0.9	50.0
3-Chloro-1-propene	Ave	0.1609	0.1832		0.0114	0.0100	13.9	50.0
Methyl acetate	Ave	0.1601	0.2714		0.0339	0.0200	69.6*	50.0
Methylene Chloride	Ave	0.2646	0.2982		0.0113	0.0100	12.7	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0478		0.148	0.100	48.0	50.0
Acrylonitrile	Ave	0.0817	0.1363		0.167	0.100	66.9*	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2866		0.0102	0.0100	1.6	50.0
Methyl tert-butyl ether	Ave	0.6940	0.6626		0.00955	0.0100	-4.5	50.0
Hexane	Ave	0.0646	0.0746		0.0116	0.0100	15.5	20.0
1,1-Dichloroethane	Ave	0.4093	0.4692	0.1000	0.0115	0.0100	14.6	50.0
Vinyl acetate	Ave	0.4414	0.2590		0.0117	0.0200	-41.3	50.0
2,2-Dichloropropane	Ave	0.0667	0.0737		0.0111	0.0100	10.5	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2843		0.00979	0.0100	-2.1	50.0
2-Butanone (MEK)	Ave	0.1171	0.1699		0.0290	0.0200	45.1	50.0
Chlorobromomethane	Ave	0.1450	0.1376		0.00949	0.0100	-5.1	50.0
Tetrahydrofuran	Ave	0.0687	0.1124		0.0327	0.0200	63.6*	50.0
Chloroform	Ave	0.4451	0.4230		0.00950	0.0100	-5.0	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3915		0.0100	0.0100	0.3	50.0
Cyclohexane	Ave	0.3237	0.4051		0.0125	0.0100	25.2	50.0
1,1-Dichloropropene	Ave	0.3529	0.3521		0.00998	0.0100	-0.2	50.0
Carbon tetrachloride	Ave	0.3575	0.3590		0.0100	0.0100	0.4	50.0
Isobutyl alcohol	Ave	0.0117	0.0235		0.501	0.250	100.2*	50.0
Benzene	Ave	0.997	1.035		0.0104	0.0100	3.8	50.0
1,2-Dichloroethane	Ave	0.3233	0.3014		0.00932	0.0100	-6.8	50.0
n-Heptane	Ave	0.0579	0.0595		0.0103	0.0100	2.8	50.0
Trichloroethene	Ave	0.3122	0.2654		0.00850	0.0100	-15.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-511833/2 Calibration Date: 11/08/2021 08:38

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3807		0.0108	0.0100	7.9	50.0
1,2-Dichloropropane	Ave	0.2085	0.2286		0.0110	0.0100	9.6	20.0
Dibromomethane	Ave	0.1524	0.1300		0.00853	0.0100	-14.7	50.0
1,4-Dioxane	Qua		0.0042		0.274	0.200	36.9	50.0
Dichlorobromomethane	Ave	0.3068	0.2778		0.00905	0.0100	-9.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1443		0.0194	0.0200	-2.8	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3365		0.00887	0.0100	-11.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2717		0.0261	0.0200	30.4	50.0
Toluene	Ave	1.519	1.727		0.0114	0.0100	13.7	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4966		0.0101	0.0100	0.8	50.0
Ethyl methacrylate	Ave	0.3857	0.4858		0.0126	0.0100	26.0	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.2933		0.00974	0.0100	-2.6	50.0
Tetrachloroethene	Ave	0.3233	0.3558		0.0110	0.0100	10.0	50.0
1,3-Dichloropropane	Ave	0.5016	0.5424		0.0108	0.0100	8.1	50.0
2-Hexanone	Ave	0.2134	0.3137		0.0294	0.0200	47.0	50.0
Chlorodibromomethane	Ave	0.3328	0.3165		0.00951	0.0100	-4.9	50.0
Ethylene Dibromide	Ave	0.3165	0.3106		0.00981	0.0100	-1.9	50.0
Chlorobenzene	Ave	0.9925	0.9367	0.3000	0.00944	0.0100	-5.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3435		0.0103	0.0100	3.2	50.0
Ethylbenzene	Ave	0.5200	0.4955		0.00953	0.0100	-4.7	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6138		0.00963	0.0100	-3.7	50.0
o-Xylene	Ave	0.5870	0.5761		0.00981	0.0100	-1.9	50.0
Styrene	Ave	0.8528	0.9118		0.0107	0.0100	6.9	50.0
Bromoform	Lin1		0.2364	0.1000	0.0107	0.0100	7.1	50.0
Isopropylbenzene	Ave	1.500	1.447		0.00965	0.0100	-3.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.8335	0.3000	0.0107	0.0100	7.3	50.0
Bromobenzene	Ave	0.8603	0.6802		0.00791	0.0100	-20.9	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2635		0.00885	0.0100	-11.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1968		0.00890	0.0100	-11.0	50.0
N-Propylbenzene	Ave	0.9157	0.7424		0.00811	0.0100	-18.9	50.0
2-Chlorotoluene	Ave	0.7837	0.6513		0.00831	0.0100	-16.9	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.076		0.00817	0.0100	-18.3	50.0
4-Chlorotoluene	Ave	0.8219	0.6628		0.00806	0.0100	-19.4	50.0
tert-Butylbenzene	Ave	2.265	1.729		0.00763	0.0100	-23.7	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.126		0.00846	0.0100	-15.4	50.0
sec-Butylbenzene	Ave	2.907	2.461		0.00847	0.0100	-15.3	50.0
1,3-Dichlorobenzene	Ave	1.550	1.261		0.00813	0.0100	-18.7	50.0
4-Isopropyltoluene	Ave	2.545	2.184		0.00858	0.0100	-14.2	50.0
1,4-Dichlorobenzene	Ave	1.570	1.335		0.00851	0.0100	-14.9	50.0
1,2-Dichlorobenzene	Ave	1.479	1.271		0.00860	0.0100	-14.0	50.0
n-Butylbenzene	Ave	1.990	1.763		0.00886	0.0100	-11.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-511833/2 Calibration Date: 11/08/2021 08:38

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2229		0.0115	0.0100	14.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.7783		0.00871	0.0100	-12.9	50.0
Hexachlorobutadiene	Ave	0.3079	0.3668		0.0119	0.0100	19.2	50.0
Naphthalene	Ave	2.693	2.154		0.00800	0.0100	-20.0	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.7401		0.00863	0.0100	-13.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2283		0.0179	0.0200	-10.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2615		0.0181	0.0200	-9.5	50.0
Toluene-d8 (Surr)	Ave	1.423	1.528		0.0215	0.0200	7.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4291		0.0172	0.0200	-13.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1877.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Nov-2021 08:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-002
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:29 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 09:15:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1610200	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	910611	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	504176	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	367558	20.0	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	97	421145	20.0	18.1	
$ 6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	92	1391191	20.0	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	390747	20.0	17.2	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	189259	10.0	8.88	
12 Chloromethane	50	1.293	1.293	0.000	99	167702	10.0	10.0	
13 Butadiene	54	1.364	1.364	0.000	92	172332	10.0	9.75	
14 Vinyl chloride	62	1.364	1.364	0.000	64	173410	10.0	8.67	
15 Bromomethane	94	1.600	1.600	0.000	92	99885	10.0	6.94	
16 Chloroethane	64	1.648	1.648	0.000	99	95066	10.0	8.04	
17 Dichlorofluoromethane	67	1.801	1.801	0.000	97	222655	10.0	7.60	
18 Trichlorofluoromethane	101	1.813	1.813	0.000	97	255192	10.0	7.47	
19 Ethyl ether	59	2.062	2.062	0.000	90	168831	10.0	11.1	
20 Acrolein	56	2.156	2.156	0.000	100	103568	50.0	176.1	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	98	197094	10.0	10.2	
23 112TCTFE	151	2.287	2.287	0.000	92	144080	10.0	9.78	
24 Acetone	43	2.287	2.287	0.000	100	186573	20.0	33.1	
25 Iodomethane	142	2.358	2.358	0.000	98	312895	10.0	9.05	
26 Carbon disulfide	76	2.417	2.417	0.000	99	580073	10.0	10.1	
28 3-Chloro-1-propene	76	2.535	2.535	0.000	93	147458	10.0	11.4	
29 Methyl acetate	43	2.571	2.571	0.000	97	437080	20.0	33.9	
30 Methylene Chloride	84	2.642	2.642	0.000	91	240105	10.0	11.3	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	99	384896	100.0	148.0	
32 Acrylonitrile	53	2.843	2.843	0.000	99	1097569	100.0	166.9	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	97	230713	10.0	10.2	
34 Methyl tert-butyl ether	73	2.890	2.890	0.000	93	533480	10.0	9.55	
35 Hexane	86	3.115	3.115	0.000	90	60090	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	96	377721	10.0	11.5	
37 Vinyl acetate	43	3.281	3.281	0.000	97	417098	20.0	11.7	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	80	228902	10.0	9.79	
42 2,2-Dichloropropane	97	3.707	3.707	0.000	75	59344	10.0	11.1	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	99	273591	20.0	29.0	
46 Chlorobromomethane	128	3.908	3.908	0.000	92	110794	10.0	9.49	
49 Tetrahydrofuran	42	3.955	3.955	0.000	87	181024	20.0	32.7	
48 Chloroform	83	3.979	3.979	0.000	92	340527	10.0	9.50	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	315173	10.0	10.0	
51 Cyclohexane	56	4.180	4.180	0.000	87	326168	10.0	12.5	
53 1,1-Dichloropropene	75	4.263	4.263	0.000	98	283509	10.0	9.98	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	289061	10.0	10.0	
54 Isobutyl alcohol	41	4.381	4.381	0.000	88	267451	250.0	500.6	
55 Benzene	78	4.440	4.440	0.000	94	833287	10.0	10.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	242683	10.0	9.32	
58 n-Heptane	100	4.677	4.677	0.000	85	47926	10.0	10.3	
60 Trichloroethene	130	4.985	4.985	0.000	96	213639	10.0	8.50	
62 Methylcyclohexane	83	5.150	5.150	0.000	91	306464	10.0	10.8	
63 1,2-Dichloropropane	63	5.162	5.162	0.000	96	184032	10.0	11.0	
64 Dibromomethane	93	5.269	5.269	0.000	93	104674	10.0	8.53	
66 1,4-Dioxane	88	5.292	5.292	0.000	94	66936	200.0	273.9	
67 Dichlorobromomethane	83	5.399	5.399	0.000	99	223634	10.0	9.05	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	232409	20.0	19.4	
70 cis-1,3-Dichloropropene	75	5.789	5.789	0.000	97	270923	10.0	8.87	
71 4-Methyl-2-pentanone (MIBK)	43	5.931	5.931	0.000	95	437565	20.0	26.1	
72 Toluene	91	6.085	6.085	0.000	99	786222	10.0	11.4	
73 trans-1,3-Dichloropropene	75	6.274	6.274	0.000	91	226122	10.0	10.1	
74 Ethyl methacrylate	69	6.381	6.381	0.000	87	221182	10.0	12.6	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	90	133524	10.0	9.74	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	161975	10.0	11.0	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	246935	10.0	10.8	
78 2-Hexanone	43	6.677	6.677	0.000	95	285640	20.0	29.4	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	144096	10.0	9.51	
82 Ethylene Dibromide	107	6.890	6.890	0.000	98	141422	10.0	9.81	
84 Chlorobenzene	112	7.351	7.351	0.000	97	426480	10.0	9.44	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	156404	10.0	10.3	
86 Ethylbenzene	106	7.458	7.458	0.000	98	225596	10.0	9.53	
87 m-Xylene & p-Xylene	106	7.564	7.564	0.000	98	279450	10.0	9.63	
89 o-Xylene	106	7.943	7.943	0.000	96	262305	10.0	9.81	
88 Styrene	104	7.955	7.955	0.000	95	415156	10.0	10.7	
90 Bromoform	173	8.108	8.108	0.000	98	107646	10.0	10.7	
91 Isopropylbenzene	105	8.286	8.286	0.000	96	659033	10.0	9.65	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	94	210105	10.0	10.7	
95 Bromobenzene	156	8.570	8.570	0.000	86	171474	10.0	7.91	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	66422	10.0	8.85	
97 trans-1,4-Dichloro-2-butene	53	8.617	8.617	0.000	82	49620	10.0	8.90	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	187144	10.0	8.11	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	164179	10.0	8.31	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	94	523324	10.0	8.17	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	167093	10.0	8.06	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	435819	10.0	7.63	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	535923	10.0	8.46	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	620370	10.0	8.47	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	317791	10.0	8.13	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	550570	10.0	8.58	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	97	336640	10.0	8.51	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	96	320499	10.0	8.60	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	444534	10.0	8.86	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	94	56189	10.0	11.5	
116 1,2,4-Trichlorobenzene	180	11.504	11.504	0.000	93	196209	10.0	8.71	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	92478	10.0	11.9	
118 Naphthalene	128	11.741	11.741	0.000	96	543083	10.0	8.00	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	186579	10.0	8.63	
S 129 Total BTEX	1				0		50.0	50.7	
S 128 Trihalomethanes, Total	1				0		40.0	38.8	
S 132 Xylenes, Total	106				0		20.0	19.4	

QC Flag Legend

Processing Flags

Reagents:

VMRPRIMW_00458	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00415	Amount Added:	8.00	Units: uL	
VMRGAS_00406	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

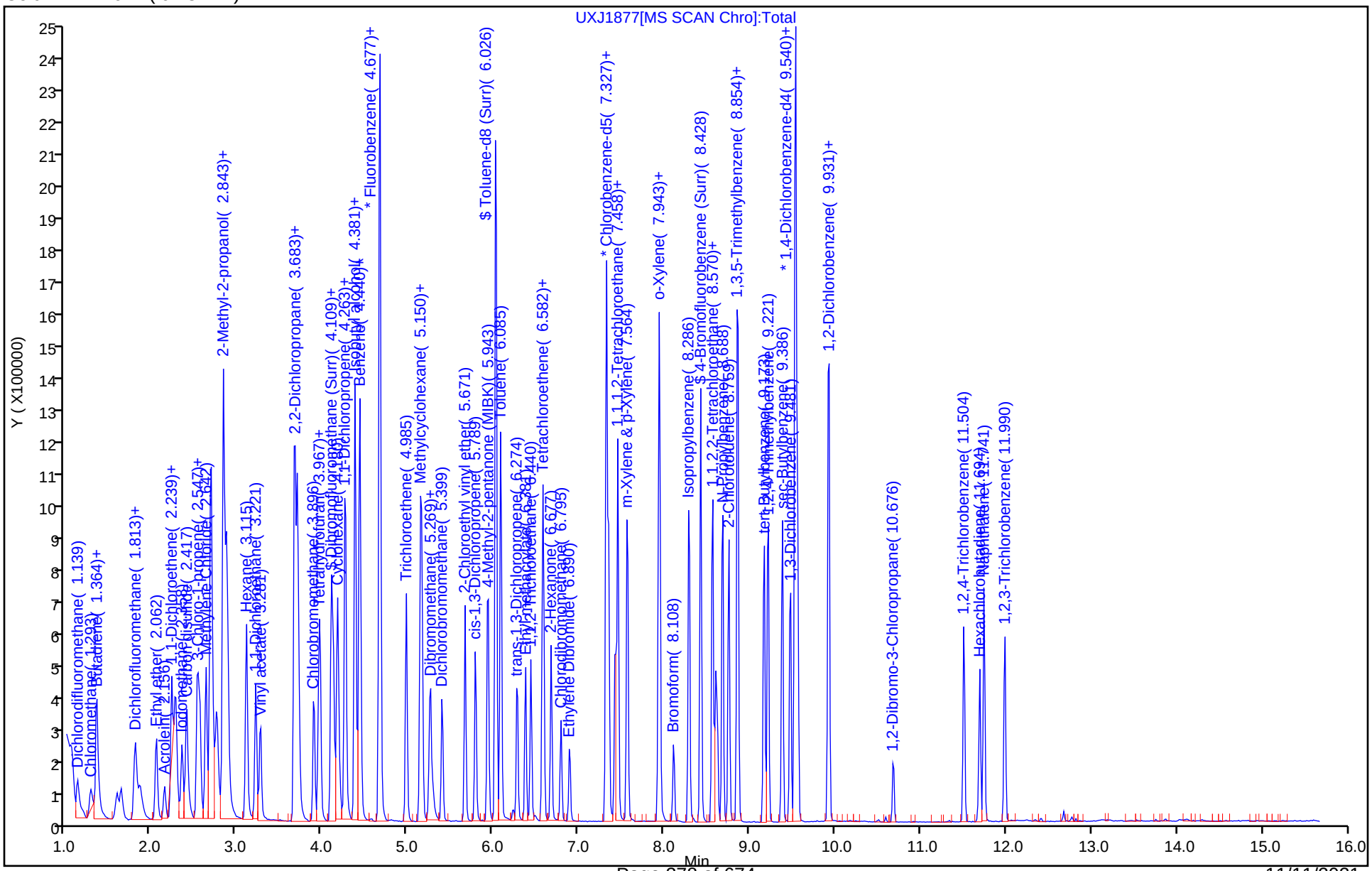
Report Date: 09-Nov-2021 08:41:30 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1877.D

Injection Date:	08-Nov-2021 08:38:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-512078/2 Calibration Date: 11/09/2021 10:45

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877A.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2160		0.00816	0.0100	-18.4	50.0
Chloromethane	Ave	0.2085	0.2012	0.1000	0.00965	0.0100	-3.5	50.0
Butadiene	Ave	0.2195	0.2077		0.00946	0.0100	-5.4	50.0
Vinyl chloride	Ave	0.2484	0.2135		0.00859	0.0100	-14.1	20.0
Bromomethane	Ave	0.1787	0.1291		0.00722	0.0100	-27.8	50.0
Chloroethane	Ave	0.1469	0.1239		0.00843	0.0100	-15.7	50.0
Dichlorofluoromethane	Ave	0.3641	0.2810		0.00772	0.0100	-22.8	50.0
Trichlorofluoromethane	Ave	0.4246	0.3143		0.00740	0.0100	-26.0	50.0
Ethyl ether	Ave	0.1891	0.2048		0.0108	0.0100	8.3	50.0
Acrolein	Ave	0.0073	0.0127		0.0869	0.0500	73.7*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2270		0.00947	0.0100	-5.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1553		0.00849	0.0100	-15.1	50.0
Acetone	Qua		0.1012		0.0280	0.0200	39.8	50.0
Iodomethane	Ave	0.4292	0.3867		0.00901	0.0100	-9.9	50.0
Carbon disulfide	Ave	0.7139	0.6846		0.00959	0.0100	-4.1	50.0
3-Chloro-1-propene	Ave	0.1609	0.1677		0.0104	0.0100	4.2	50.0
Methyl acetate	Ave	0.1601	0.2376		0.0297	0.0200	48.4	50.0
Methylene Chloride	Ave	0.2646	0.3028		0.0114	0.0100	14.4	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0400		0.124	0.100	24.0	50.0
Acrylonitrile	Ave	0.0817	0.1170		0.143	0.100	43.2	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2809		0.00996	0.0100	-0.4	50.0
Methyl tert-butyl ether	Ave	0.6940	0.6876		0.00991	0.0100	-0.9	50.0
Hexane	Ave	0.0646	0.0600		0.00929	0.0100	-7.1	20.0
1,1-Dichloroethane	Ave	0.4093	0.4702	0.1000	0.0115	0.0100	14.9	50.0
Vinyl acetate	Ave	0.4414	0.2297		0.0104	0.0200	-47.9	50.0
2,2-Dichloropropane	Ave	0.0667	0.0775		0.0116	0.0100	16.2	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2930		0.0101	0.0100	0.9	50.0
2-Butanone (MEK)	Ave	0.1171	0.1398		0.0239	0.0200	19.4	50.0
Chlorobromomethane	Ave	0.1450	0.1361		0.00938	0.0100	-6.2	50.0
Tetrahydrofuran	Ave	0.0687	0.0943		0.0275	0.0200	37.3	50.0
Chloroform	Ave	0.4451	0.4357		0.00979	0.0100	-2.1	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3773		0.00967	0.0100	-3.3	50.0
Cyclohexane	Ave	0.3237	0.3941		0.0122	0.0100	21.7	50.0
1,1-Dichloropropene	Ave	0.3529	0.3581		0.0101	0.0100	1.5	50.0
Carbon tetrachloride	Ave	0.3575	0.3483		0.00974	0.0100	-2.6	50.0
Isobutyl alcohol	Ave	0.0117	0.0200		0.425	0.250	70.1*	50.0
Benzene	Ave	0.997	1.020		0.0102	0.0100	2.2	50.0
1,2-Dichloroethane	Ave	0.3233	0.2990		0.00925	0.0100	-7.5	50.0
n-Heptane	Ave	0.0579	0.0533		0.00920	0.0100	-8.0	50.0
Trichloroethene	Ave	0.3122	0.2720		0.00871	0.0100	-12.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-512078/2 Calibration Date: 11/09/2021 10:45

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877A.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3539		0.0100	0.0100	0.4	50.0
1,2-Dichloropropane	Ave	0.2085	0.2244		0.0108	0.0100	7.7	20.0
Dibromomethane	Ave	0.1524	0.1336		0.00877	0.0100	-12.3	50.0
1,4-Dioxane	Qua		0.0037		0.238	0.200	19.0	50.0
Dichlorobromomethane	Ave	0.3068	0.2677		0.00873	0.0100	-12.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1333		0.0180	0.0200	-10.2	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3348		0.00882	0.0100	-11.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2541		0.0244	0.0200	22.0	50.0
Toluene	Ave	1.519	1.724		0.0114	0.0100	13.5	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4924		0.00999	0.0100	-0.0	50.0
Ethyl methacrylate	Ave	0.3857	0.5015		0.0130	0.0100	30.0	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3026		0.0100	0.0100	0.5	50.0
Tetrachloroethene	Ave	0.3233	0.3407		0.0105	0.0100	5.4	50.0
1,3-Dichloropropane	Ave	0.5016	0.5499		0.0110	0.0100	9.6	50.0
2-Hexanone	Ave	0.2134	0.2813		0.0264	0.0200	31.8	50.0
Chlorodibromomethane	Ave	0.3328	0.3313		0.00995	0.0100	-0.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3020		0.00954	0.0100	-4.6	50.0
Chlorobenzene	Ave	0.9925	0.9743	0.3000	0.00982	0.0100	-1.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3509		0.0105	0.0100	5.5	50.0
Ethylbenzene	Ave	0.5200	0.5102		0.00981	0.0100	-1.9	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6353		0.00996	0.0100	-0.4	50.0
o-Xylene	Ave	0.5870	0.5870		0.0100	0.0100	0.0	50.0
Styrene	Ave	0.8528	0.9400		0.0110	0.0100	10.2	50.0
Bromoform	Lin1		0.2487	0.1000	0.0112	0.0100	12.4	50.0
Isopropylbenzene	Ave	1.500	1.522		0.0101	0.0100	1.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.8224	0.3000	0.0106	0.0100	5.9	50.0
Bromobenzene	Ave	0.8603	0.7130		0.00829	0.0100	-17.1	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2556		0.00858	0.0100	-14.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1727		0.00781	0.0100	-21.9	50.0
N-Propylbenzene	Ave	0.9157	0.7415		0.00810	0.0100	-19.0	50.0
2-Chlorotoluene	Ave	0.7837	0.6547		0.00835	0.0100	-16.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.149		0.00846	0.0100	-15.4	50.0
4-Chlorotoluene	Ave	0.8219	0.6724		0.00818	0.0100	-18.2	50.0
tert-Butylbenzene	Ave	2.265	1.804		0.00797	0.0100	-20.3	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.227		0.00886	0.0100	-11.4	50.0
sec-Butylbenzene	Ave	2.907	2.539		0.00873	0.0100	-12.7	50.0
1,3-Dichlorobenzene	Ave	1.550	1.351		0.00872	0.0100	-12.8	50.0
4-Isopropyltoluene	Ave	2.545	2.264		0.00889	0.0100	-11.1	50.0
1,4-Dichlorobenzene	Ave	1.570	1.404		0.00894	0.0100	-10.6	50.0
1,2-Dichlorobenzene	Ave	1.479	1.369		0.00926	0.0100	-7.4	50.0
n-Butylbenzene	Ave	1.990	1.890		0.00950	0.0100	-5.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-512078/2 Calibration Date: 11/09/2021 10:45

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ1877A.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2213		0.0114	0.0100	13.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8520		0.00954	0.0100	-4.6	50.0
Hexachlorobutadiene	Ave	0.3079	0.3887		0.0126	0.0100	26.2	50.0
Naphthalene	Ave	2.693	2.248		0.00835	0.0100	-16.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.7140		0.00832	0.0100	-16.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2367		0.0186	0.0200	-7.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2569		0.0178	0.0200	-11.1	50.0
Toluene-d8 (Surr)	Ave	1.423	1.552		0.0218	0.0200	9.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4479		0.0180	0.0200	-10.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1877A.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 09-Nov-2021 10:45:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-004
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:50 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1704483	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	942886	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	528826	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	403399	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	437869	20.0	17.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1463578	20.0	21.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	422295	20.0	18.0	
10 Dichlorodifluoromethane	85	1.151	1.151	0.000	99	184054	10.0	8.16	
12 Chloromethane	50	1.305	1.305	0.000	98	171512	10.0	9.65	
13 Butadiene	54	1.376	1.376	0.000	97	176991	10.0	9.46	
14 Vinyl chloride	62	1.376	1.376	0.000	98	181963	10.0	8.59	
15 Bromomethane	94	1.600	1.600	0.000	91	109988	10.0	7.22	
16 Chloroethane	64	1.660	1.660	0.000	99	105603	10.0	8.43	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	97	239461	10.0	7.72	
18 Trichlorofluoromethane	101	1.837	1.837	0.000	98	267863	10.0	7.40	
19 Ethyl ether	59	2.074	2.074	0.000	90	174572	10.0	10.8	
20 Acrolein	56	2.168	2.168	0.000	99	54076	50.0	86.9	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	97	193463	10.0	9.47	
23 112TCTFE	151	2.299	2.299	0.000	93	132336	10.0	8.49	
24 Acetone	43	2.299	2.299	0.000	100	172427	20.0	28.0	
25 Iodomethane	142	2.370	2.370	0.000	98	329557	10.0	9.01	
26 Carbon disulfide	76	2.429	2.429	0.000	99	583408	10.0	9.59	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	93	142883	10.0	10.4	
29 Methyl acetate	43	2.583	2.583	0.000	97	404986	20.0	29.7	
30 Methylene Chloride	84	2.654	2.654	0.000	91	258030	10.0	11.4	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	99	341214	100.0	124.0	
32 Acrylonitrile	53	2.855	2.855	0.000	100	997165	100.0	143.2	
33 trans-1,2-Dichloroethene	96	2.890	2.890	0.000	97	239414	10.0	9.96	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	585989	10.0	9.91	
35 Hexane	86	3.127	3.127	0.000	91	51151	10.0	9.29	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	400716	10.0	11.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 Vinyl acetate	43	3.281	3.281	0.000	97	391574	20.0	10.4	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	82	249706	10.0	10.1	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	64	66022	10.0	11.6	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	99	238334	20.0	23.9	
46 Chlorobromomethane	128	3.908	3.908	0.000	93	115986	10.0	9.38	
49 Tetrahydrofuran	42	3.967	3.967	0.000	86	160813	20.0	27.5	
48 Chloroform	83	3.979	3.979	0.000	93	371330	10.0	9.79	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	321549	10.0	9.67	
51 Cyclohexane	56	4.180	4.180	0.000	89	335826	10.0	12.2	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	97	305181	10.0	10.1	
52 Carbon tetrachloride	117	4.275	4.275	0.000	90	296850	10.0	9.74	
54 Isobutyl alcohol	41	4.393	4.393	0.000	76	235182	250.0	425.1	
55 Benzene	78	4.440	4.440	0.000	95	869103	10.0	10.2	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	254810	10.0	9.25	
58 n-Heptane	100	4.689	4.689	0.000	89	45394	10.0	9.20	
60 Trichloroethene	130	4.985	4.985	0.000	95	231787	10.0	8.71	
62 Methylcyclohexane	83	5.150	5.150	0.000	91	301649	10.0	10.0	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	96	191283	10.0	10.8	
64 Dibromomethane	93	5.269	5.269	0.000	96	113900	10.0	8.77	
66 1,4-Dioxane	88	5.304	5.304	0.000	91	62628	200.0	238.0	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	228160	10.0	8.73	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	227282	20.0	18.0	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	285334	10.0	8.82	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	95	433080	20.0	24.4	
72 Toluene	91	6.097	6.097	0.000	98	812763	10.0	11.4	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	232115	10.0	10.0	
74 Ethyl methacrylate	69	6.381	6.381	0.000	88	236441	10.0	13.0	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	90	142649	10.0	10.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	160610	10.0	10.5	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	259265	10.0	11.0	
78 2-Hexanone	43	6.677	6.677	0.000	95	265256	20.0	26.4	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	156183	10.0	9.95	
82 Ethylene Dibromide	107	6.890	6.890	0.000	100	142353	10.0	9.54	
84 Chlorobenzene	112	7.351	7.351	0.000	97	459342	10.0	9.82	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	165429	10.0	10.5	
86 Ethylbenzene	106	7.458	7.458	0.000	98	240535	10.0	9.81	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	299511	10.0	9.96	
89 o-Xylene	106	7.943	7.943	0.000	96	276725	10.0	10.0	
88 Styrene	104	7.955	7.955	0.000	94	443170	10.0	11.0	
90 Bromoform	173	8.108	8.108	0.000	98	117227	10.0	11.2	
91 Isopropylbenzene	105	8.286	8.286	0.000	95	717628	10.0	10.1	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	90	217451	10.0	10.6	
95 Bromobenzene	156	8.570	8.570	0.000	85	188519	10.0	8.29	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	84	67571	10.0	8.58	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	80	45652	10.0	7.81	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	196075	10.0	8.10	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	173108	10.0	8.35	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	94	568239	10.0	8.46	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	177794	10.0	8.18	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	477055	10.0	7.97	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	588978	10.0	8.86	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	671260	10.0	8.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	357308	10.0	8.72	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	598548	10.0	8.89	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	371118	10.0	8.94	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	96	361947	10.0	9.26	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	499861	10.0	9.50	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	92	58505	10.0	11.4	
116 1,2,4-Trichlorobenzene	180	11.505	11.505	0.000	94	225273	10.0	9.54	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	102769	10.0	12.6	
118 Naphthalene	128	11.741	11.741	0.000	96	594389	10.0	8.35	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	188783	10.0	8.32	
S 129 Total BTEX	1				0		50.0	51.4	
S 128 Trihalomethanes, Total	1				0		40.0	39.7	
S 132 Xylenes, Total	106				0		20.0	20.0	

Reagents:

VMRPRIMW_00459	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00415	Amount Added:	8.00	Units: uL	
VMRGAS_00406	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

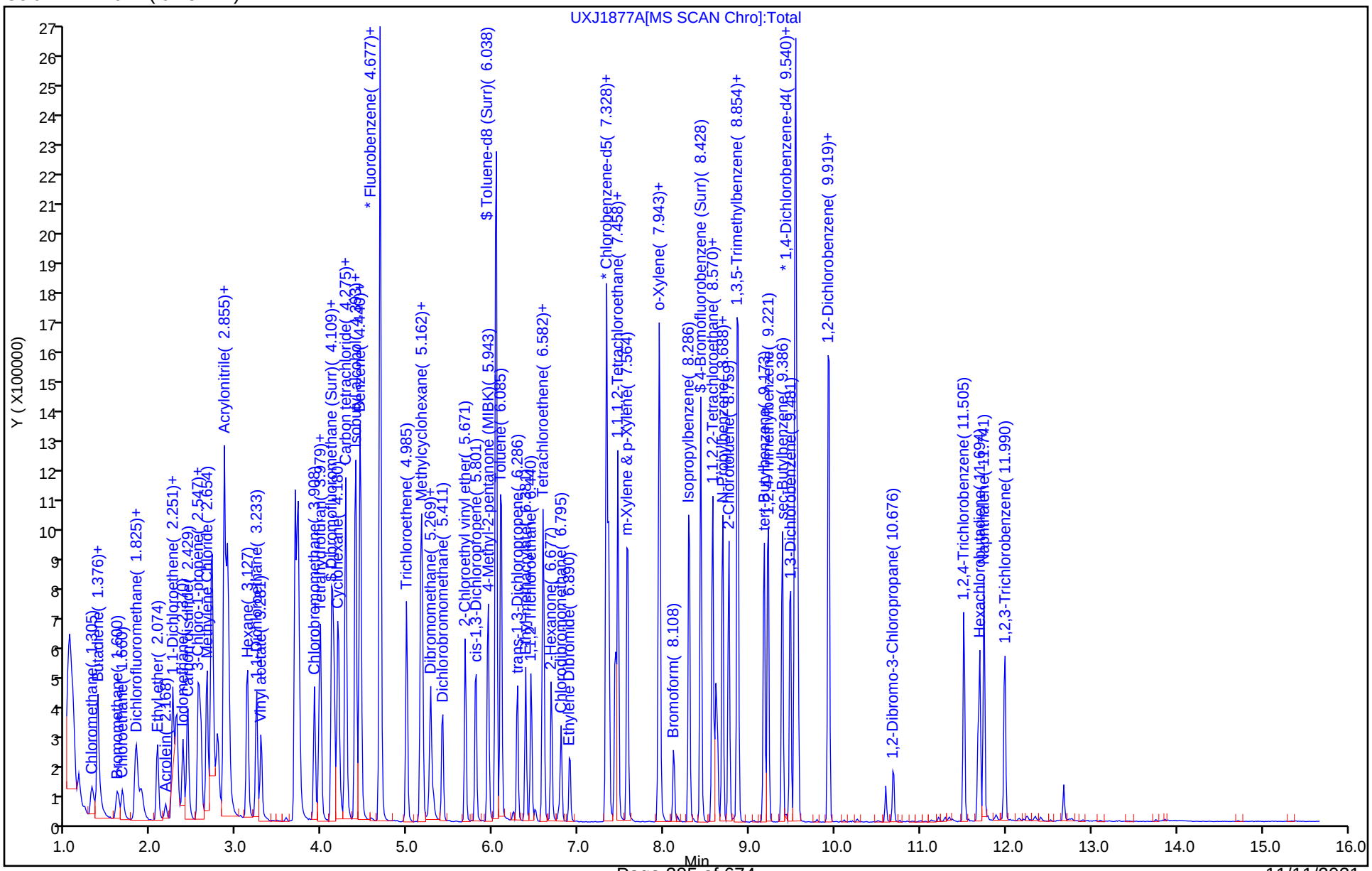
Report Date: 10-Nov-2021 09:08:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1877A.D

Injection Date:	09-Nov-2021 10:45:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jan-2021 10:36:30	ALS Bottle#:	4	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211015A-IC,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Jan-2021 09:28:08	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1641				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.350	4.350	0.000	0	393211	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

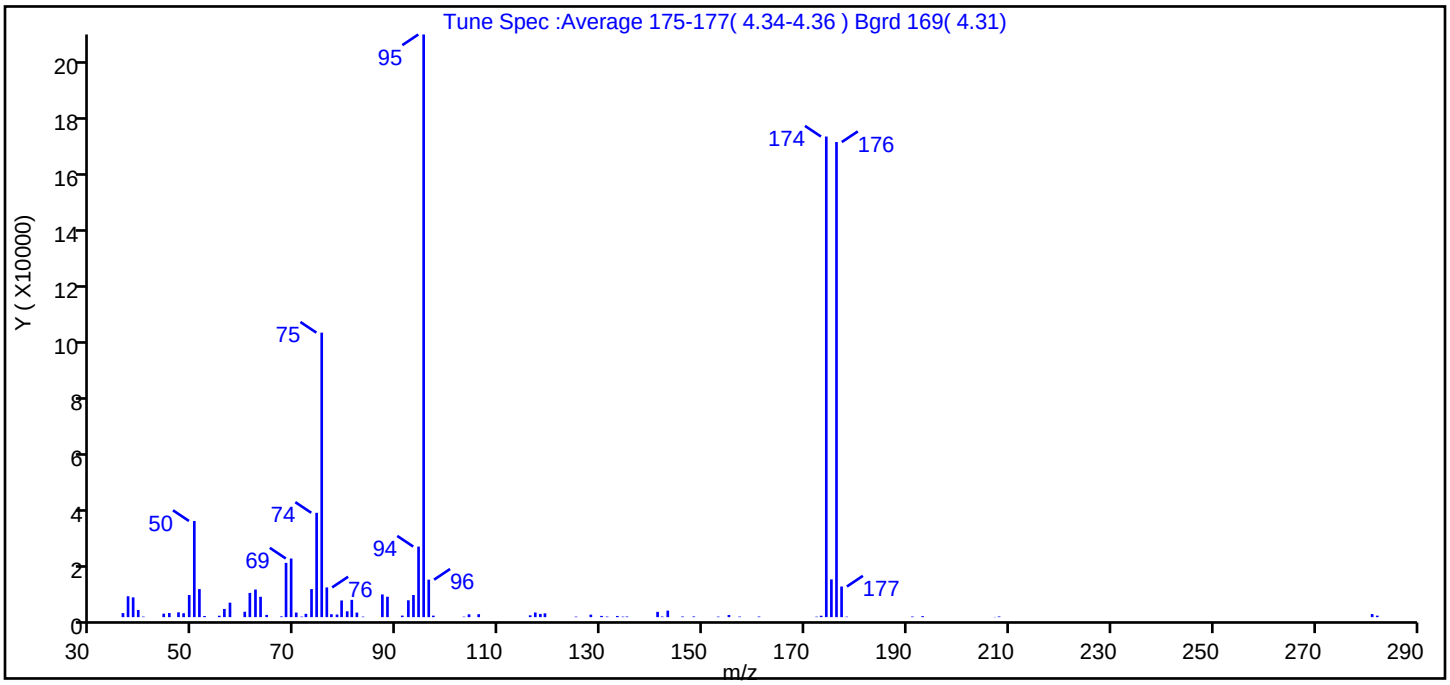
VMBFB_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D
Injection Date: 15-Jan-2021 10:36:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.5
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	82.5
175	5 to 9% of m/z 174	6.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	81.5 (98.9)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D\8260_11.rslt\spectra.d
Injection Date: 15-Jan-2021 10:36:30
Spectrum: Tune Spec :Average 175-177(4.34-4.36) Bgrd 169(4.31)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1457	67.00	272	93.00	7966	143.00	2347
37.00	7520	68.00	19528	94.00	25400	146.00	229
38.00	7112	69.00	21104	95.00	209728	148.00	248
39.00	2576	70.00	1651	96.00	13491	153.00	194
40.00	196	71.00	196	97.00	539	155.00	774
44.00	1250	72.00	1197	103.00	169	157.00	207
45.00	1468	73.00	10110	104.00	1019	161.00	223
47.00	1730	74.00	37552	106.00	1050	172.00	174
48.00	1410	75.00	102400	116.00	659	173.00	502
49.00	7954	76.00	10706	117.00	1675	174.00	172992
50.00	34616	77.00	1056	118.00	1161	175.00	13587
51.00	10108	78.00	952	119.00	1367	176.00	171008
52.00	407	79.00	6005	125.00	193	177.00	11023
55.00	505	80.00	2102	128.00	895	178.00	172
56.00	2954	81.00	6216	130.00	450	191.00	226
57.00	5212	82.00	1644	131.00	207	193.00	350
60.00	1944	83.00	190	133.00	424	207.00	72
61.00	8722	87.00	8167	134.00	185	208.00	245
62.00	9935	88.00	7351	135.00	224	281.00	1116
63.00	7326	91.00	558	141.00	1904	282.00	543
64.00	815	92.00	6063	142.00	222		

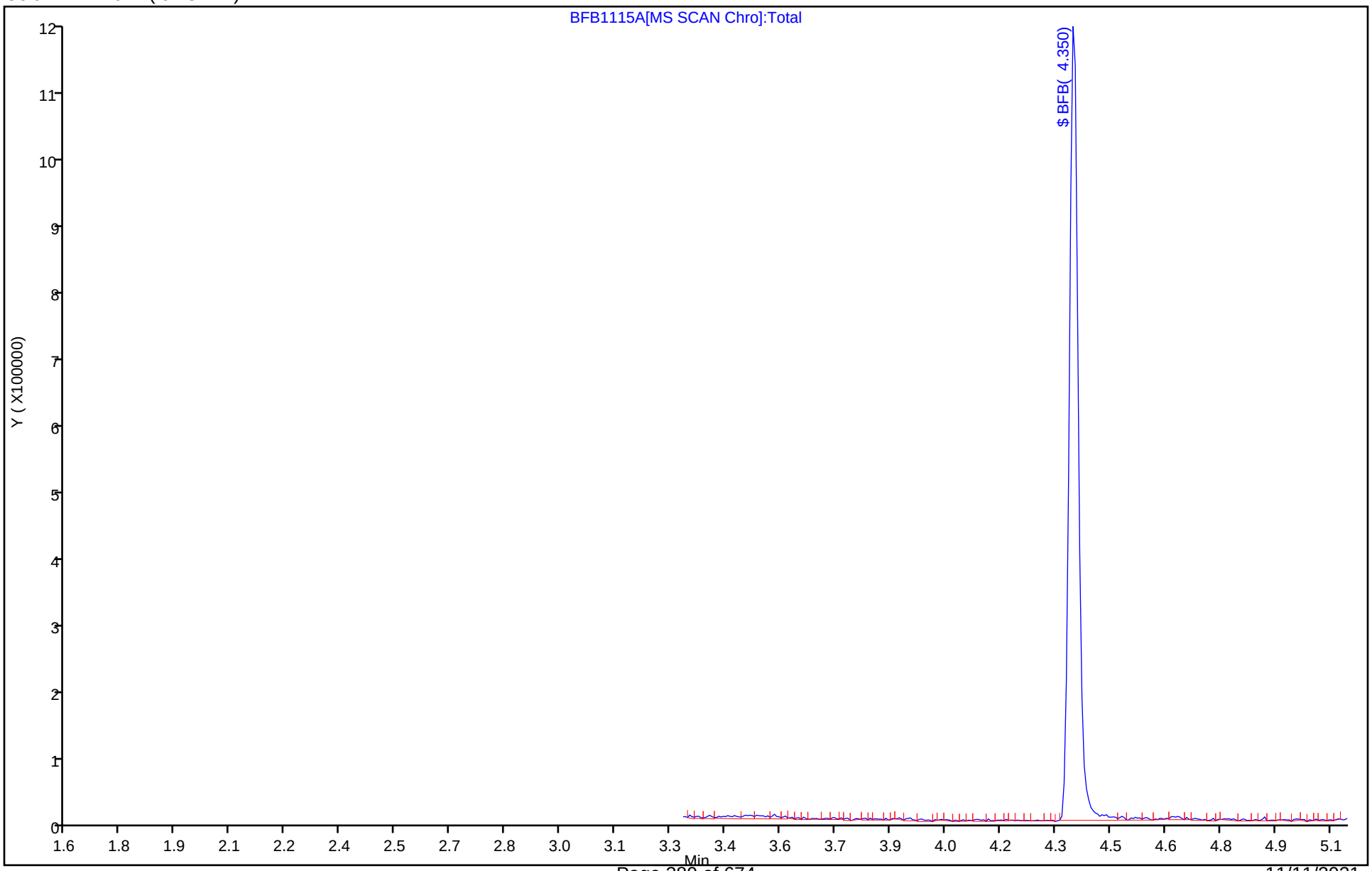
Report Date: 18-Jan-2021 09:28:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D

Injection Date:	15-Jan-2021 10:36:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\BFB1108A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	08-Nov-2021 08:12:30	ALS Bottle#:	31	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211108A,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	09-Nov-2021 08:41:28	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.343	4.343	0.000	0	836966	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

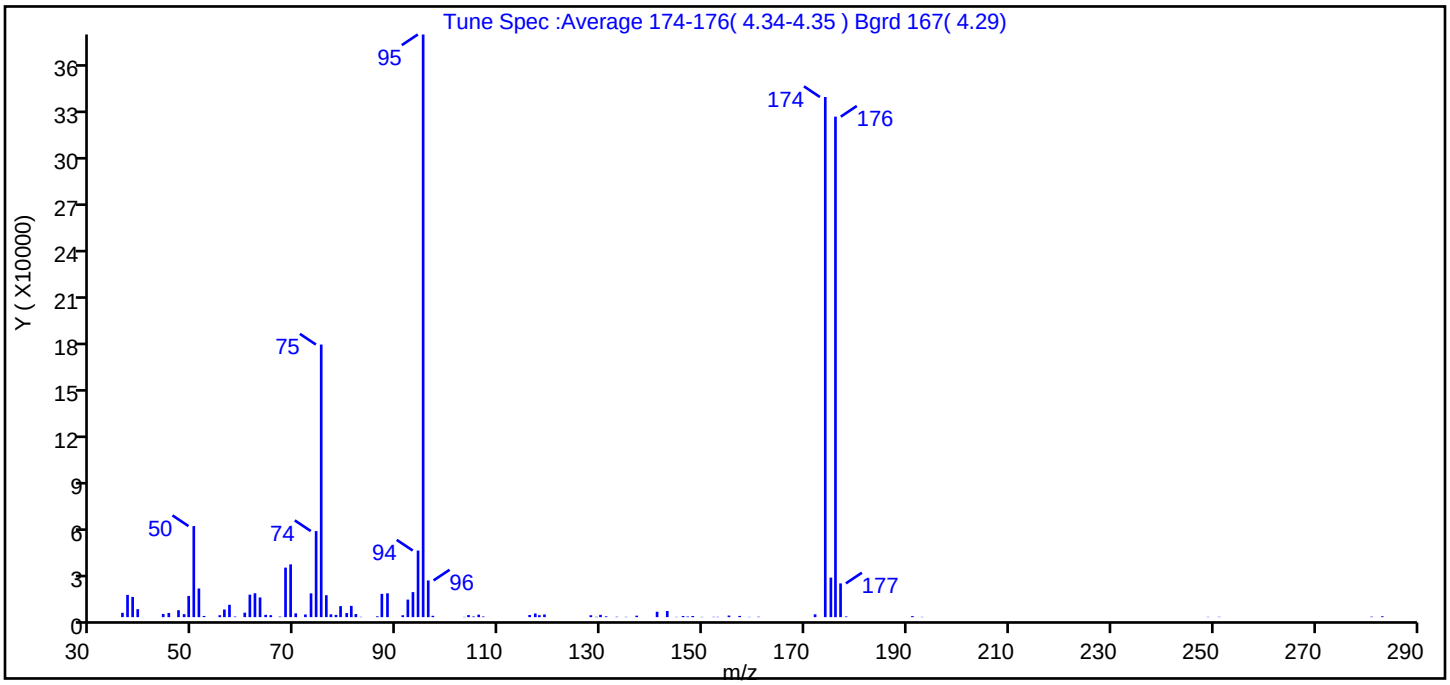
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\BFB1108A.D
Injection Date: 08-Nov-2021 08:12:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 31 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	46.8
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	89.3
175	5 to 9% of m/z 174	6.8 (7.6)
176	Greater than 95% but less than 101% of m/z 174	85.9 (96.2)
177	5 to 9% of m/z 176	5.8 (6.7)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\BFB1108A.D\8260_11.rslt\spectra.d
Injection Date: 08-Nov-2021 08:12:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 167(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2779	67.00	353	95.00	374400	147.00	381
37.00	14303	68.00	31824	96.00	23584	148.00	737
38.00	13006	69.00	33920	97.00	870	150.00	173
39.00	5122	70.00	2435	103.00	172	152.00	204
40.00	58	72.00	1723	104.00	1315	153.00	200
44.00	2046	73.00	15291	105.00	435	155.00	1025
45.00	2669	74.00	55312	106.00	1598	157.00	793
47.00	4437	75.00	175168	107.00	411	159.00	168
48.00	1925	76.00	14089	116.00	1365	161.00	277
49.00	13621	77.00	1831	117.00	2362	172.00	1804
50.00	58520	78.00	1446	118.00	1271	174.00	334208
51.00	18408	79.00	7101	119.00	1706	175.00	25408
52.00	770	80.00	2623	128.00	1217	176.00	321600
55.00	1228	81.00	7243	129.00	234	177.00	21696
56.00	4918	82.00	1970	130.00	1464	178.00	440
57.00	7939	83.00	184	131.00	506	191.00	664
58.00	385	86.00	536	133.00	257	193.00	188
60.00	2873	87.00	14966	135.00	200	249.00	181
61.00	14443	88.00	15333	137.00	942	251.00	212
62.00	15360	91.00	1201	141.00	3480	281.00	301
63.00	12662	92.00	11283	143.00	3954	283.00	550
64.00	1491	93.00	16104	145.00	179		
65.00	1258	94.00	42800	146.00	754		

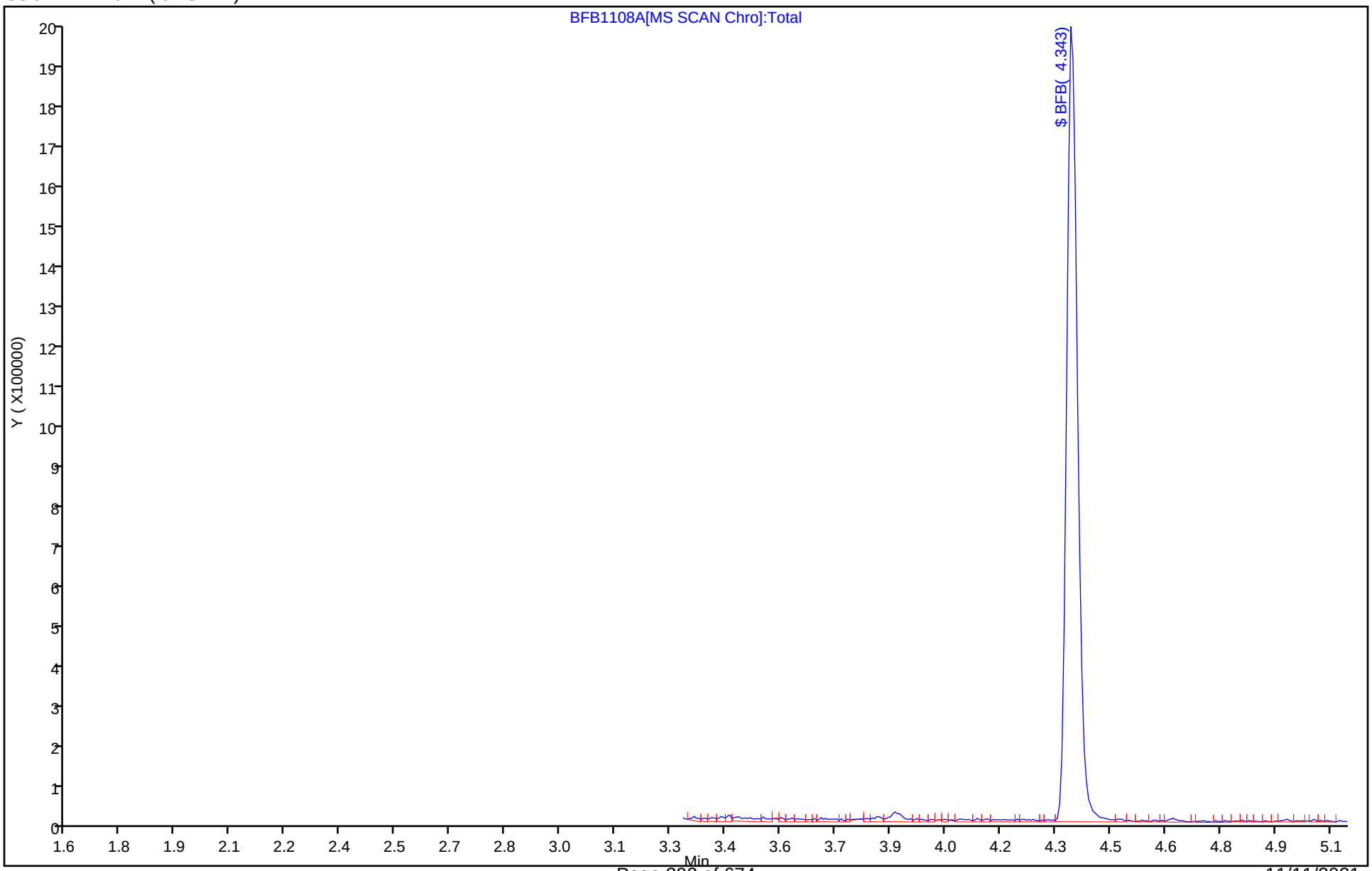
Report Date: 09-Nov-2021 08:41:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\BFB1108A.D

Injection Date:	08-Nov-2021 08:12:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\BFB1109.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	09-Nov-2021 10:06:30	ALS Bottle#:	63	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211109,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	10-Nov-2021 09:08:48	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1632				
First Level Reviewer: evansle		Date:	09-Nov-2021 10:27:58		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.344	4.344	0.000	0	991914	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

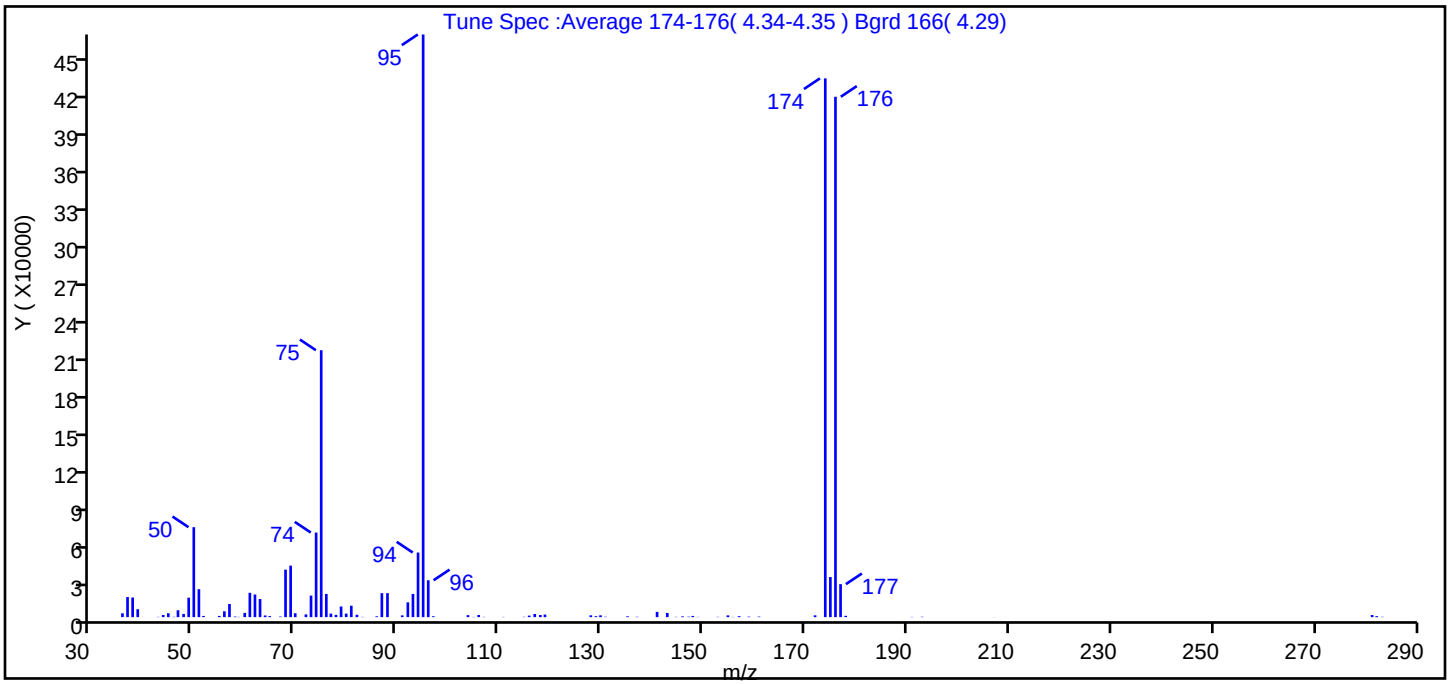
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\BFB1109.D
Injection Date: 09-Nov-2021 10:06:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 63 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	45.8
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	92.5
175	5 to 9% of m/z 174	6.9 (7.4)
176	Greater than 95% but less than 101% of m/z 174	89.3 (96.6)
177	5 to 9% of m/z 176	5.7 (6.3)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\BFB1109.D\8260_11.rslt\spectra.d
Injection Date: 09-Nov-2021 10:06:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 166(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3046	64.00	1335	93.00	18400	145.00	228
37.00	15951	65.00	825	94.00	51256	146.00	617
38.00	15566	67.00	464	95.00	462144	147.00	351
39.00	6273	68.00	37656	96.00	29240	148.00	967
43.00	218	69.00	40848	97.00	689	149.00	173
44.00	1730	70.00	3091	104.00	1606	153.00	231
45.00	3073	72.00	2172	105.00	180	155.00	1395
46.00	263	73.00	17088	106.00	1723	156.00	172
47.00	5453	74.00	67096	107.00	208	157.00	767
48.00	2543	75.00	211712	111.00	181	159.00	399
49.00	15401	76.00	18408	115.00	245	161.00	427
50.00	71360	77.00	2812	116.00	1234	172.00	1443
51.00	22168	78.00	1809	117.00	2505	174.00	427328
52.00	971	79.00	8468	118.00	1684	175.00	31808
55.00	954	80.00	2801	119.00	2030	176.00	412736
56.00	4641	81.00	9040	128.00	1450	177.00	26168
57.00	10442	82.00	1872	129.00	764	178.00	1055
58.00	478	83.00	212	130.00	1433	191.00	195
59.00	191	86.00	674	131.00	315	193.00	302
60.00	3373	87.00	19008	135.00	658	207.00	83
61.00	19304	88.00	19032	137.00	303	281.00	1659
62.00	17960	91.00	1406	141.00	4182	282.00	790
63.00	14365	92.00	11739	143.00	3329	283.00	278

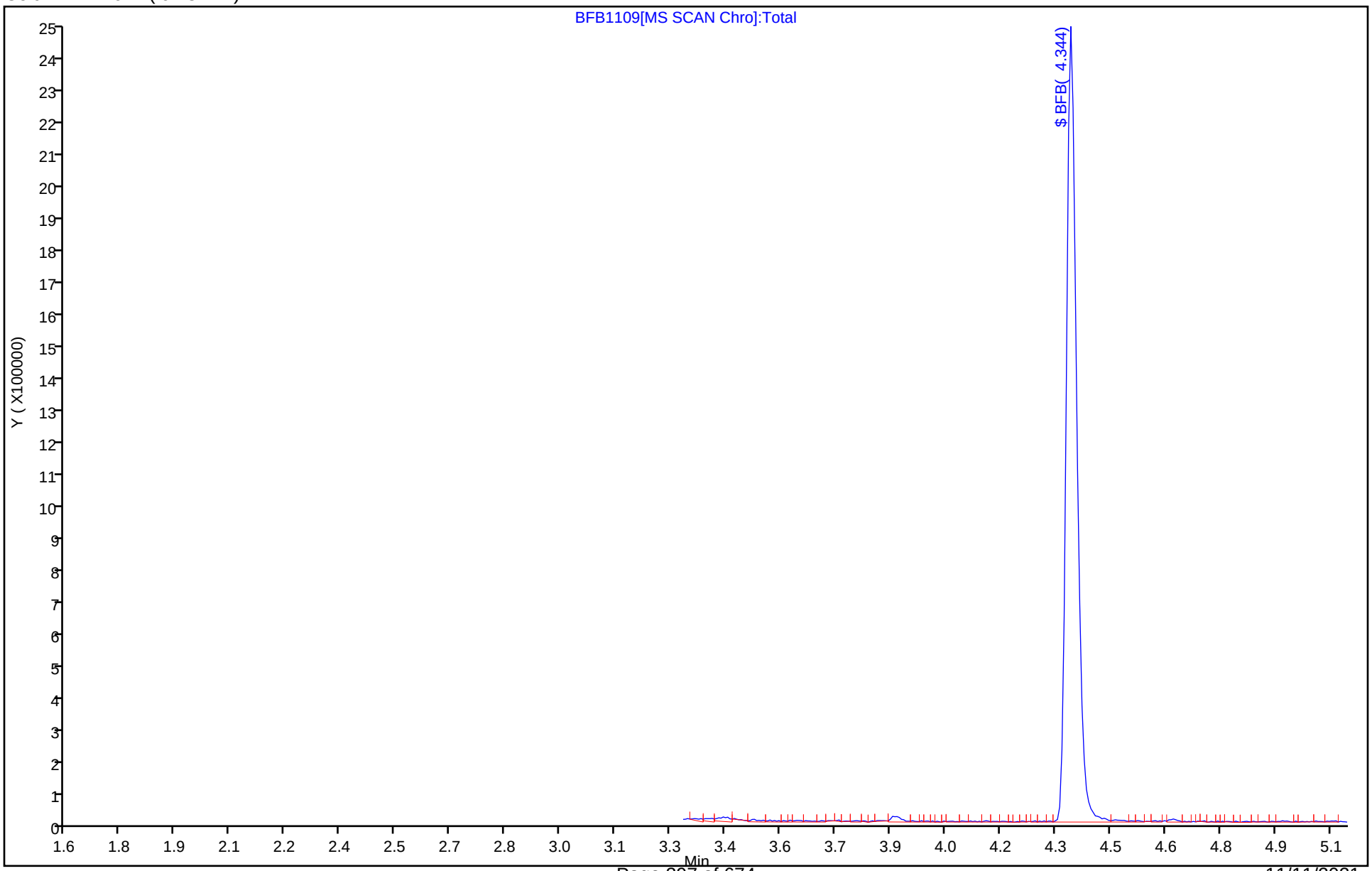
Report Date: 10-Nov-2021 09:08:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\BFB1109.D

Injection Date:	09-Nov-2021 10:06:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-511833/6

Matrix: Water Lab File ID: UXJ1882.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 10:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	83		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1882.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2021 10:29:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-006
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 11:01:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1376386	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	752653	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	389701	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	333630	20.0	19.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	97	373270	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1131687	20.0	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	311737	20.0	16.6	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.139					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.293					ND	
13 Butadiene	54		1.364					ND	
14 Vinyl chloride	62		1.364					ND	
15 Bromomethane	94		1.600					ND	
16 Chloroethane	64		1.648					ND	
17 Dichlorofluoromethane	67		1.801					ND	
18 Trichlorofluoromethane	101		1.813					ND	
19 Ethyl ether	59		2.062					ND	
20 Acrolein	56		2.156					ND	
21 1,1-Dichloroethene	96		2.239					ND	
23 112TCTFE	151		2.287					ND	
24 Acetone	43		2.287					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.358					ND	
26 Carbon disulfide	76		2.417					ND	
27 Acetonitrile	41		2.512					ND	U
28 3-Chloro-1-propene	76		2.535					ND	
29 Methyl acetate	43		2.571					ND	
30 Methylene Chloride	84	2.642	2.642	0.000	94	24291		1.33	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.843					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.878					ND	
34 Methyl tert-butyl ether	73		2.890					ND	
35 Hexane	86		3.115					ND	
36 1,1-Dichloroethane	63		3.221					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.304					ND	
39 Isopropyl ether	87		3.304					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
41 cis-1,2-Dichloroethene	96		3.707					ND	
42 2,2-Dichloropropane	97		3.707					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.766					ND	U
45 Ethyl acetate	43		3.790					ND	
47 Methacrylonitrile	41		3.896					ND	
46 Chlorobromomethane	128		3.908					ND	
49 Tetrahydrofuran	42		3.955					ND	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.133					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.263					ND	
52 Carbon tetrachloride	117		4.275					ND	
54 Isobutyl alcohol	41		4.381					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.547					ND	
58 n-Heptane	100		4.677					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.985					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.162					ND	
64 Dibromomethane	93		5.269					ND	
65 Methyl methacrylate	41		5.280					ND	
66 1,4-Dioxane	88		5.292					ND	
67 Dichlorobromomethane	83		5.399					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.789					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.931					ND	
72 Toluene	91		6.085					ND	
73 trans-1,3-Dichloropropene	75		6.274					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.890					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.458					ND	
87 m-Xylene & p-Xylene	106		7.564					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.955					ND	
90 Bromoform	173		8.108					ND	
91 Isopropylbenzene	105		8.286					ND	
93 Cyclohexanone	55		8.369					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
95 Bromobenzene	156		8.570					ND	
96 1,2,3-Trichloropropane	110		8.605					ND	
97 trans-1,4-Dichloro-2-butene	53		8.617					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.866					ND	
103 tert-Butylbenzene	119		9.173					ND	
102 Pentachloroethane	167		9.174					ND	
104 1,2,4-Trimethylbenzene	105		9.221					ND	
105 sec-Butylbenzene	105		9.386					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.528					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
112 1,2-Dichlorobenzene	146		9.919					ND	
111 n-Butylbenzene	91		9.931					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180		10.901					ND	
116 1,2,4-Trichlorobenzene	180		11.504					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	
119 1,2,3-Trichlorobenzene	180		11.990					ND	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	98	13019		0.4452	
127 1-Methylnaphthalene	142	13.066	13.067	-0.001	94	14816		0.5568	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

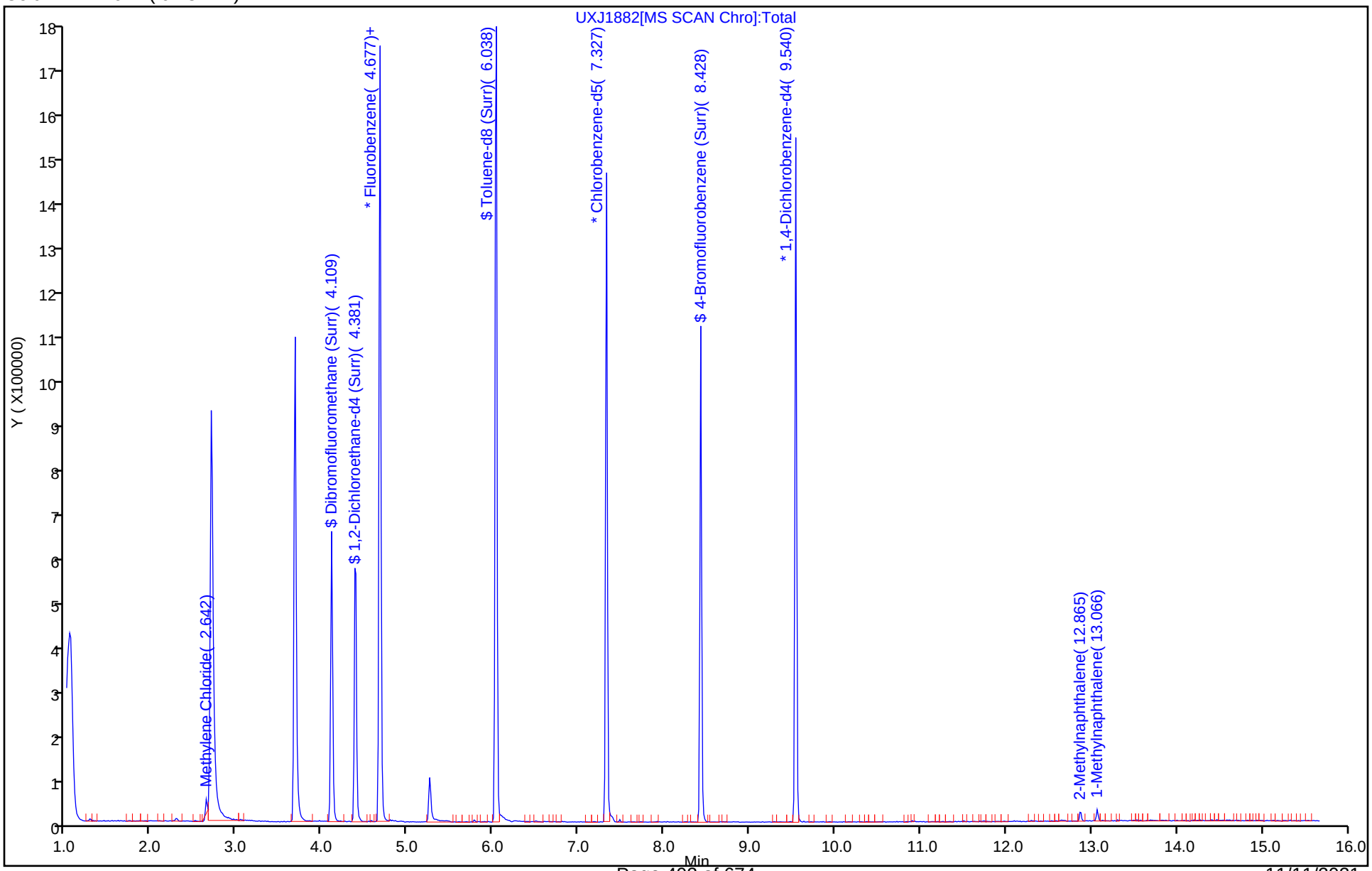
Report Date: 09-Nov-2021 08:41:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1882.D

Injection Date:	08-Nov-2021 10:29:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1882.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2021 10:29:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-006
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 11:01:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.0	95.14
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	93.83
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.70
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.6	83.11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-512078/6

Matrix: Water Lab File ID: UXJ1882.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2021 12:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512078 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	100		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1882.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2021 12:38:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-006
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: evansle Date: 09-Nov-2021 13:17:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1595294	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	913960	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	499665	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	355790	20.0	17.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	98	395035	20.0	17.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1296662	20.0	19.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	367613	20.0	16.1	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.151					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.305					ND	
13 Butadiene	54		1.376					ND	
14 Vinyl chloride	62		1.376					ND	
15 Bromomethane	94		1.600					ND	
16 Chloroethane	64		1.660					ND	
17 Dichlorofluoromethane	67		1.813					ND	
18 Trichlorofluoromethane	101		1.837					ND	
19 Ethyl ether	59		2.074					ND	
20 Acrolein	56		2.168					ND	
21 1,1-Dichloroethene	96		2.251					ND	
23 112TCTFE	151		2.299					ND	
24 Acetone	43		2.299					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.370					ND	
26 Carbon disulfide	76		2.429					ND	7
27 Acetonitrile	41		2.523					ND	U
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.583					ND	
30 Methylene Chloride	84	2.642	2.654	-0.012	90	14985		0.7099	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.855					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.890					ND	
34 Methyl tert-butyl ether	73		2.902					ND	
35 Hexane	86		3.127					ND	
36 1,1-Dichloroethane	63		3.233					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.316					ND	
39 Isopropyl ether	87		3.316					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
41 cis-1,2-Dichloroethene	96		3.718					ND	
42 2,2-Dichloropropane	97		3.718					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.778					ND	U
45 Ethyl acetate	43		3.790					ND	
46 Chlorobromomethane	128		3.908					ND	
47 Methacrylonitrile	41		3.908					ND	
49 Tetrahydrofuran	42		3.967					ND	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.133					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.275					ND	
52 Carbon tetrachloride	117		4.275					ND	
54 Isobutyl alcohol	41		4.393					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.559					ND	
58 n-Heptane	100		4.689					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.985					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.174					ND	
64 Dibromomethane	93		5.269					ND	
65 Methyl methacrylate	41		5.281					ND	
66 1,4-Dioxane	88		5.304					ND	
67 Dichlorobromomethane	83		5.411					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.801					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.943					ND	
72 Toluene	91		6.097					ND	
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.890					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.458					ND	
87 m-Xylene & p-Xylene	106		7.576					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.955					ND	
90 Bromoform	173		8.108					ND	
91 Isopropylbenzene	105		8.286					ND	
93 Cyclohexanone	55		8.369					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
95 Bromobenzene	156		8.570					ND	
96 1,2,3-Trichloropropane	110		8.605					ND	
97 trans-1,4-Dichloro-2-butene	53		8.629					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.866					ND	
103 tert-Butylbenzene	119		9.173					ND	
102 Pentachloroethane	167		9.174					ND	
104 1,2,4-Trimethylbenzene	105		9.221					ND	
105 sec-Butylbenzene	105		9.386					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.528					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
112 1,2-Dichlorobenzene	146		9.919					ND	
111 n-Butylbenzene	91		9.931					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180		10.901					ND	7
116 1,2,4-Trichlorobenzene	180		11.505					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	7
119 1,2,3-Trichlorobenzene	180		11.990					ND	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	95	35284		0.9411	
127 1-Methylnaphthalene	142	13.066	13.067	-0.001	93	38315		1.12	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

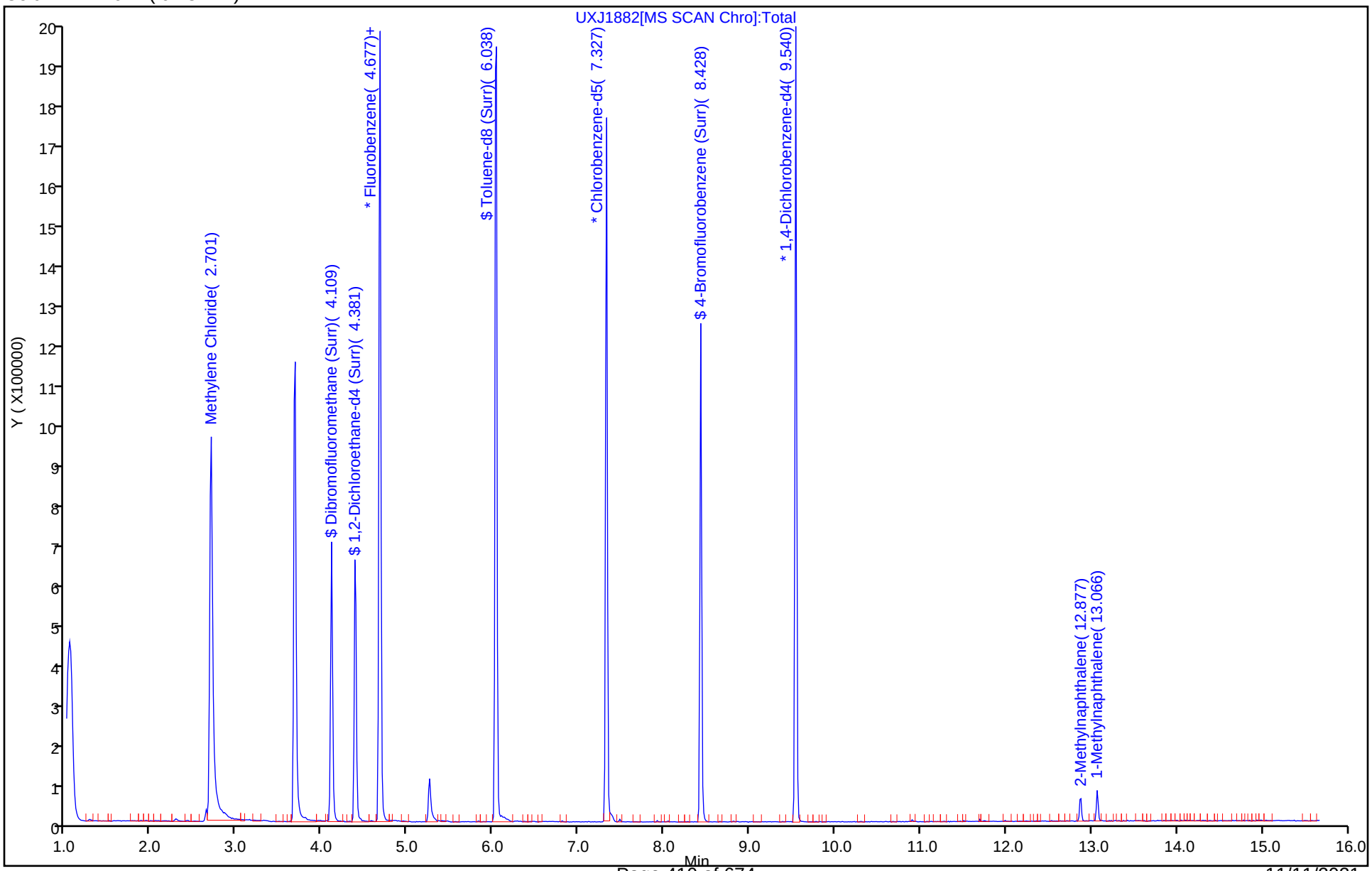
Report Date: 10-Nov-2021 09:08:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1882.D

Injection Date:	09-Nov-2021 12:38:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1882.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2021 12:38:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-006
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: evansle Date: 09-Nov-2021 13:17:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.5	87.54
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.1	85.68
$ 6 Toluene-d8 (Surr)	20.0	19.9	99.73
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.1	80.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-511833/4

Matrix: Water Lab File ID: UXJ1878.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 09:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.8		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.4		1.0	0.46
127-18-4	Tetrachloroethene	11.8		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.7		1.0	0.51
79-01-6	Trichloroethene	8.69		1.0	0.44
75-01-4	Vinyl chloride	10.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-137
460-00-4	4-Bromofluorobenzene (Surr)	93		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1878.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2021 09:00:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-004
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 09:23:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1422071	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	790236	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	420429	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	355519	20.0	19.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	390238	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1265331	20.0	22.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	367894	20.0	18.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	187202	10.0	9.95	
12 Chloromethane	50	1.305	1.293	0.011	99	159061	10.0	10.7	
13 Butadiene	54	1.364	1.364	0.000	98	163031	10.0	10.4	
14 Vinyl chloride	62	1.376	1.364	0.012	97	178697	10.0	10.1	
15 Bromomethane	94	1.600	1.600	0.000	91	104060	10.0	8.19	
16 Chloroethane	64	1.659	1.648	0.011	99	99762	10.0	9.55	
17 Dichlorofluoromethane	67	1.813	1.801	0.012	97	235852	10.0	9.11	
18 Trichlorofluoromethane	101	1.825	1.813	0.012	98	268672	10.0	8.90	
19 Ethyl ether	59	2.074	2.062	0.012	91	160432	10.0	11.9	
20 Acrolein	56	2.168	2.156	0.012	99	133848	50.0	257.7	E
21 1,1-Dichloroethene	96	2.251	2.239	0.012	98	184975	10.0	10.8	
23 112TCTFE	151	2.287	2.287	0.000	91	141870	10.0	10.9	
24 Acetone	43	2.298	2.287	0.011	100	169999	20.0	34.4	
25 Iodomethane	142	2.369	2.358	0.011	97	311743	10.0	10.2	
26 Carbon disulfide	76	2.417	2.417	0.000	99	570427	10.0	11.2	
28 3-Chloro-1-propene	76	2.547	2.535	0.012	94	132198	10.0	11.6	
29 Methyl acetate	43	2.571	2.571	0.000	97	393669	20.0	34.6	
30 Methylene Chloride	84	2.653	2.642	0.011	90	230769	10.0	12.3	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	99	369232	100.0	160.8	
32 Acrylonitrile	53	2.855	2.843	0.012	99	1004503	100.0	172.9	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	98	214800	10.0	10.7	
34 Methyl tert-butyl ether	73	2.902	2.890	0.012	93	523373	10.0	10.6	
35 Hexane	86	3.127	3.115	0.012	90	51715	10.0	11.3	
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	345780	10.0	11.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 Vinyl acetate	43	3.281	3.281	0.000	97	367707	10.0	11.7	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	81	215647	10.0	10.4	
42 2,2-Dichloropropane	97	3.718	3.707	0.011	66	54784	10.0	11.6	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	98	248235	20.0	29.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	95	100656	10.0	9.76	
49 Tetrahydrofuran	42	3.967	3.955	0.012	86	157571	20.0	32.2	
48 Chloroform	83	3.979	3.979	0.000	93	316894	10.0	10.0	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	289277	10.0	10.4	
51 Cyclohexane	56	4.180	4.180	0.000	88	312402	10.0	13.6	
53 1,1-Dichloropropene	75	4.275	4.263	0.012	97	261846	10.0	10.4	
52 Carbon tetrachloride	117	4.275	4.275	0.000	93	273831	10.0	10.8	
54 Isobutyl alcohol	41	4.393	4.381	0.012	84	244251	250.0	526.8	
55 Benzene	78	4.440	4.440	0.000	95	763912	10.0	10.8	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	222708	10.0	9.69	
58 n-Heptane	100	4.689	4.677	0.012	87	41677	10.0	10.1	
60 Trichloroethene	130	4.985	4.985	0.000	96	192820	10.0	8.69	
62 Methylcyclohexane	83	5.150	5.150	0.000	90	293370	10.0	11.7	
63 1,2-Dichloropropane	63	5.174	5.162	0.012	97	169329	10.0	11.4	
64 Dibromomethane	93	5.269	5.269	0.000	92	96460	10.0	8.90	
66 1,4-Dioxane	88	5.304	5.292	0.012	96	58287	200.0	269.4	
67 Dichlorobromomethane	83	5.411	5.399	0.012	99	197621	10.0	9.06	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	99965	10.0	9.47	
70 cis-1,3-Dichloropropene	75	5.801	5.789	0.012	97	234281	10.0	8.68	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.931	0.012	95	387363	20.0	26.2	
72 Toluene	91	6.097	6.085	0.012	99	689593	10.0	11.5	
73 trans-1,3-Dichloropropene	75	6.286	6.274	0.012	91	199306	10.0	10.2	
74 Ethyl methacrylate	69	6.381	6.381	0.000	88	194877	10.0	12.8	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	87	129804	10.0	10.9	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	150612	10.0	11.8	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	89	224794	10.0	11.3	
78 2-Hexanone	43	6.677	6.677	0.000	96	261022	20.0	31.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	128667	10.0	9.78	
82 Ethylene Dibromide	107	6.890	6.890	0.000	99	126970	10.0	10.2	
84 Chlorobenzene	112	7.351	7.351	0.000	96	381190	10.0	9.72	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	141549	10.0	10.8	
86 Ethylbenzene	106	7.458	7.458	0.000	98	207877	10.0	10.1	
87 m-Xylene & p-Xylene	106	7.576	7.564	0.012	97	251274	10.0	9.97	
89 o-Xylene	106	7.943	7.943	0.000	95	242664	10.0	10.5	
88 Styrene	104	7.955	7.955	0.000	94	364614	10.0	10.8	
90 Bromoform	173	8.108	8.108	0.000	97	97363	10.0	11.1	
91 Isopropylbenzene	105	8.298	8.286	0.012	95	606117	10.0	10.2	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	198475	10.0	12.2	
95 Bromobenzene	156	8.570	8.570	0.000	86	154015	10.0	8.52	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	84	58775	10.0	9.39	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.617	0.012	83	42605	10.0	9.16	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	170260	10.0	8.85	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	151382	10.0	9.19	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	94	477573	10.0	8.94	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	148529	10.0	8.60	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	396934	10.0	8.34	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	498563	10.0	9.44	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	577363	10.0	9.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	295121	10.0	9.06	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	510931	10.0	9.55	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	97	309907	10.0	9.39	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	95	295192	10.0	9.50	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	398346	10.0	9.52	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	91	51998	10.0	12.7	
116 1,2,4-Trichlorobenzene	180	11.504	11.504	0.000	94	192710	10.0	10.3	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	92343	10.0	14.3	
118 Naphthalene	128	11.741	11.741	0.000	96	508796	10.0	8.99	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	180261	10.0	10.0	
S 129 Total BTEX	1				0		50.0	52.8	
S 128 Trihalomethanes, Total	1				0		40.0	40.0	
S 132 Xylenes, Total	106				0		20.0	20.4	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASPW_00421	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

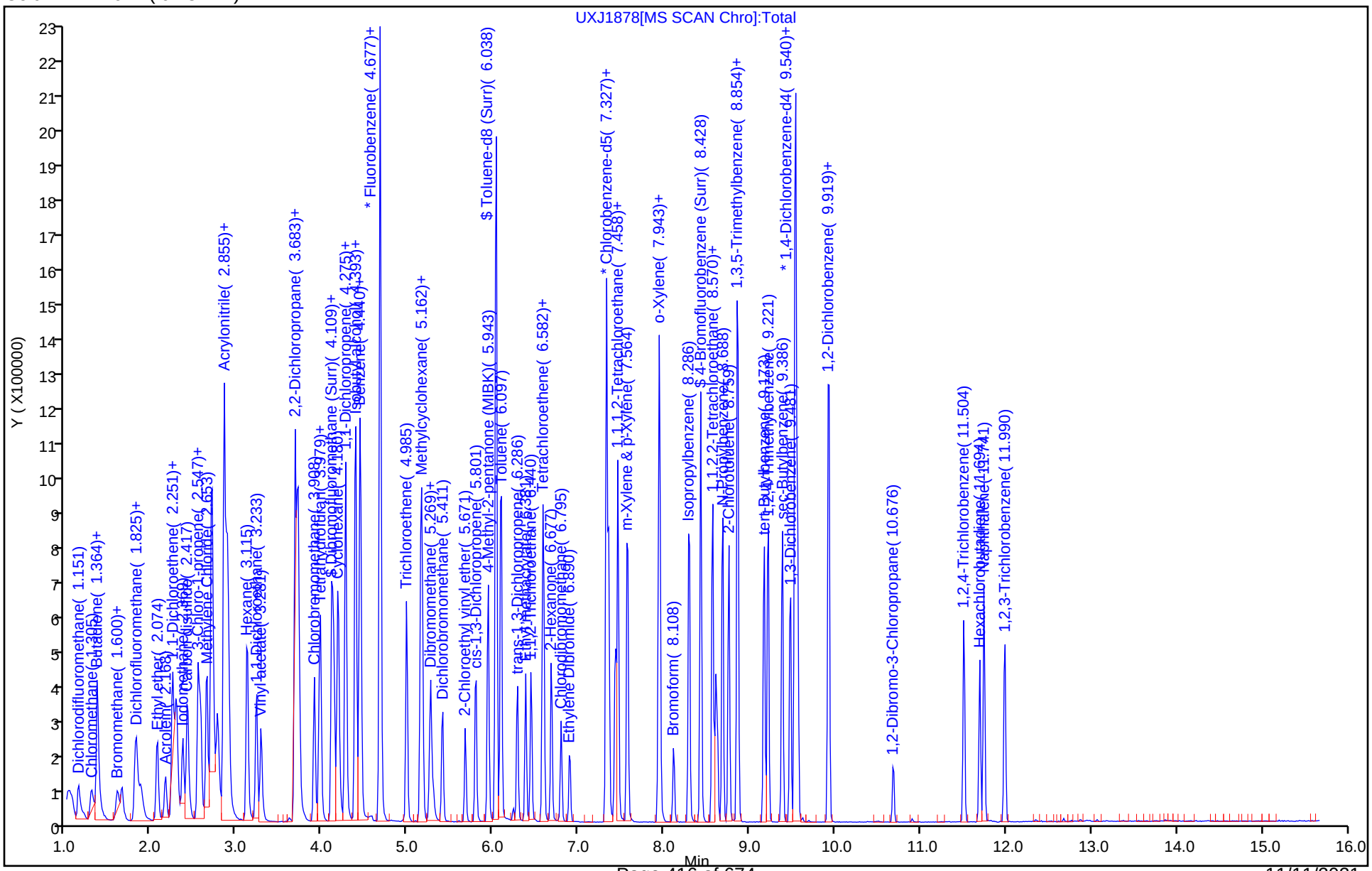
Report Date: 09-Nov-2021 08:41:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1878.D

Injection Date:	08-Nov-2021 09:00:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1878.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2021 09:00:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-004
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 08-Nov-2021 09:23:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.6	98.13
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.0	94.95
$ 6 Toluene-d8 (Surr)	20.0	22.5	112.56
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-512078/4

Matrix: Water Lab File ID: UXJ1878A.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2021 11:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512078 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.76		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.96		1.0	0.46
127-18-4	Tetrachloroethene	9.58		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.73		1.0	0.51
79-01-6	Trichloroethene	8.70		1.0	0.44
75-01-4	Vinyl chloride	9.99		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1878A.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2021 11:08:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-004
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1478087	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	855999	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	463271	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	347270	20.0	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	97	380495	20.0	17.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1312400	20.0	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	383796	20.0	18.0	
10 Dichlorodifluoromethane	85	1.139	1.151	-0.012	99	175765	10.0	8.99	
12 Chloromethane	50	1.293	1.305	-0.012	98	169916	10.0	11.0	
13 Butadiene	54	1.364	1.376	-0.012	97	184438	10.0	11.4	
14 Vinyl chloride	62	1.364	1.376	-0.012	98	183386	10.0	9.99	
15 Bromomethane	94	1.600	1.600	0.000	90	107514	10.0	8.14	
16 Chloroethane	64	1.648	1.660	-0.012	99	102704	10.0	9.46	
17 Dichlorofluoromethane	67	1.802	1.813	-0.011	97	243958	10.0	9.07	
18 Trichlorofluoromethane	101	1.825	1.837	-0.012	97	254487	10.0	8.11	
19 Ethyl ether	59	2.062	2.074	-0.012	90	171669	10.0	12.3	
20 Acrolein	56	2.157	2.168	-0.011	99	55532	50.0	102.9	
21 1,1-Dichloroethene	96	2.239	2.251	-0.012	97	155175	10.0	8.76	
23 112TCTFE	151	2.287	2.299	-0.012	89	96547	10.0	7.14	
24 Acetone	43	2.287	2.299	-0.012	100	131480	20.0	23.9	
25 Iodomethane	142	2.358	2.370	-0.012	97	307931	10.0	9.71	
26 Carbon disulfide	76	2.417	2.429	-0.012	99	512984	10.0	9.72	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	93	131670	10.0	11.1	
29 Methyl acetate	43	2.571	2.583	-0.012	97	333741	20.0	28.2	
30 Methylene Chloride	84	2.642	2.654	-0.012	90	233358	10.0	11.9	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	100	271378	100.0	113.7	
32 Acrylonitrile	53	2.843	2.855	-0.012	99	849725	100.0	140.7	
33 trans-1,2-Dichloroethene	96	2.878	2.890	-0.012	98	202736	10.0	9.73	
34 Methyl tert-butyl ether	73	2.890	2.902	-0.012	95	532737	10.0	10.4	
35 Hexane	86	3.115	3.127	-0.012	90	36919	10.0	7.73	
36 1,1-Dichloroethane	63	3.222	3.233	-0.011	95	349299	10.0	11.5	
37 Vinyl acetate	43	3.281	3.281	0.000	97	411288	10.0	12.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	3.707	3.718	-0.011	81	213922	10.0	9.96	
42 2,2-Dichloropropane	97	3.707	3.718	-0.011	67	50282	10.0	10.2	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	99	222337	20.0	25.7	
46 Chlorobromomethane	128	3.908	3.908	0.000	94	103162	10.0	9.62	
49 Tetrahydrofuran	42	3.955	3.967	-0.012	86	146813	20.0	28.9	
48 Chloroform	83	3.979	3.979	0.000	93	324650	10.0	9.87	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	252465	10.0	8.75	
51 Cyclohexane	56	4.180	4.180	0.000	87	223337	10.0	9.34	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	98	235903	10.0	9.04	
52 Carbon tetrachloride	117	4.275	4.275	0.000	86	215483	10.0	8.16	
54 Isobutyl alcohol	41	4.381	4.393	-0.012	75	205121	250.0	408.4	
55 Benzene	78	4.440	4.440	0.000	95	776725	10.0	10.5	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	234315	10.0	9.81	
58 n-Heptane	100	4.677	4.689	-0.012	85	33047	10.0	7.72	
60 Trichloroethene	130	4.985	4.985	0.000	95	200643	10.0	8.70	
62 Methylcyclohexane	83	5.150	5.150	0.000	90	202948	10.0	7.79	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	97	172566	10.0	11.2	
64 Dibromomethane	93	5.269	5.269	0.000	92	102700	10.0	9.12	
66 1,4-Dioxane	88	5.304	5.304	0.000	89	45752	200.0	197.6	
67 Dichlorobromomethane	83	5.399	5.411	-0.012	99	207943	10.0	9.17	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	90	114707	10.0	10.5	
70 cis-1,3-Dichloropropene	75	5.789	5.801	-0.012	98	259599	10.0	9.26	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	382757	20.0	24.9	
72 Toluene	91	6.085	6.097	-0.012	98	745081	10.0	11.5	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	220655	10.0	10.5	
74 Ethyl methacrylate	69	6.381	6.381	0.000	87	220527	10.0	13.4	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	89	142772	10.0	11.1	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	132588	10.0	9.58	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	250435	10.0	11.7	
78 2-Hexanone	43	6.677	6.677	0.000	94	263968	20.0	28.9	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	145069	10.0	10.2	
82 Ethylene Dibromide	107	6.890	6.890	0.000	99	140138	10.0	10.3	
84 Chlorobenzene	112	7.351	7.351	0.000	97	423100	10.0	9.96	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	93	154713	10.0	10.9	
86 Ethylbenzene	106	7.458	7.458	0.000	98	217625	10.0	9.78	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	265927	10.0	9.74	
89 o-Xylene	106	7.943	7.943	0.000	96	260048	10.0	10.4	
88 Styrene	104	7.955	7.955	0.000	94	415222	10.0	11.4	
90 Bromoform	173	8.109	8.108	0.001	98	104999	10.0	11.1	
91 Isopropylbenzene	105	8.298	8.286	0.012	95	592828	10.0	9.23	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	92	211696	10.0	11.8	
95 Bromobenzene	156	8.570	8.570	0.000	92	178019	10.0	8.93	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	85	64685	10.0	9.38	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	73	28934	10.0	5.65	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	163628	10.0	7.71	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	161338	10.0	8.89	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	94	503477	10.0	8.56	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	166183	10.0	8.73	
103 tert-Butylbenzene	119	9.174	9.173	0.001	90	395644	10.0	7.54	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	541792	10.0	9.31	
105 sec-Butylbenzene	105	9.387	9.386	0.001	93	547113	10.0	8.13	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	339461	10.0	9.46	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.529	9.528	0.001	97	506278	10.0	8.59	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	346711	10.0	9.53	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	97	343253	10.0	10.0	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	400445	10.0	8.69	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	91	48856	10.0	10.8	
116 1,2,4-Trichlorobenzene	180	11.505	11.505	0.000	94	211152	10.0	10.2	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	88033	10.0	12.3	
118 Naphthalene	128	11.741	11.741	0.000	97	569707	10.0	9.13	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	200360	10.0	10.1	
S 129 Total BTEX	1				0		50.0	51.9	
S 128 Trihalomethanes, Total	1				0		40.0	40.3	
S 132 Xylenes, Total	106				0		20.0	20.1	

Reagents:

VMFASPW_00422	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

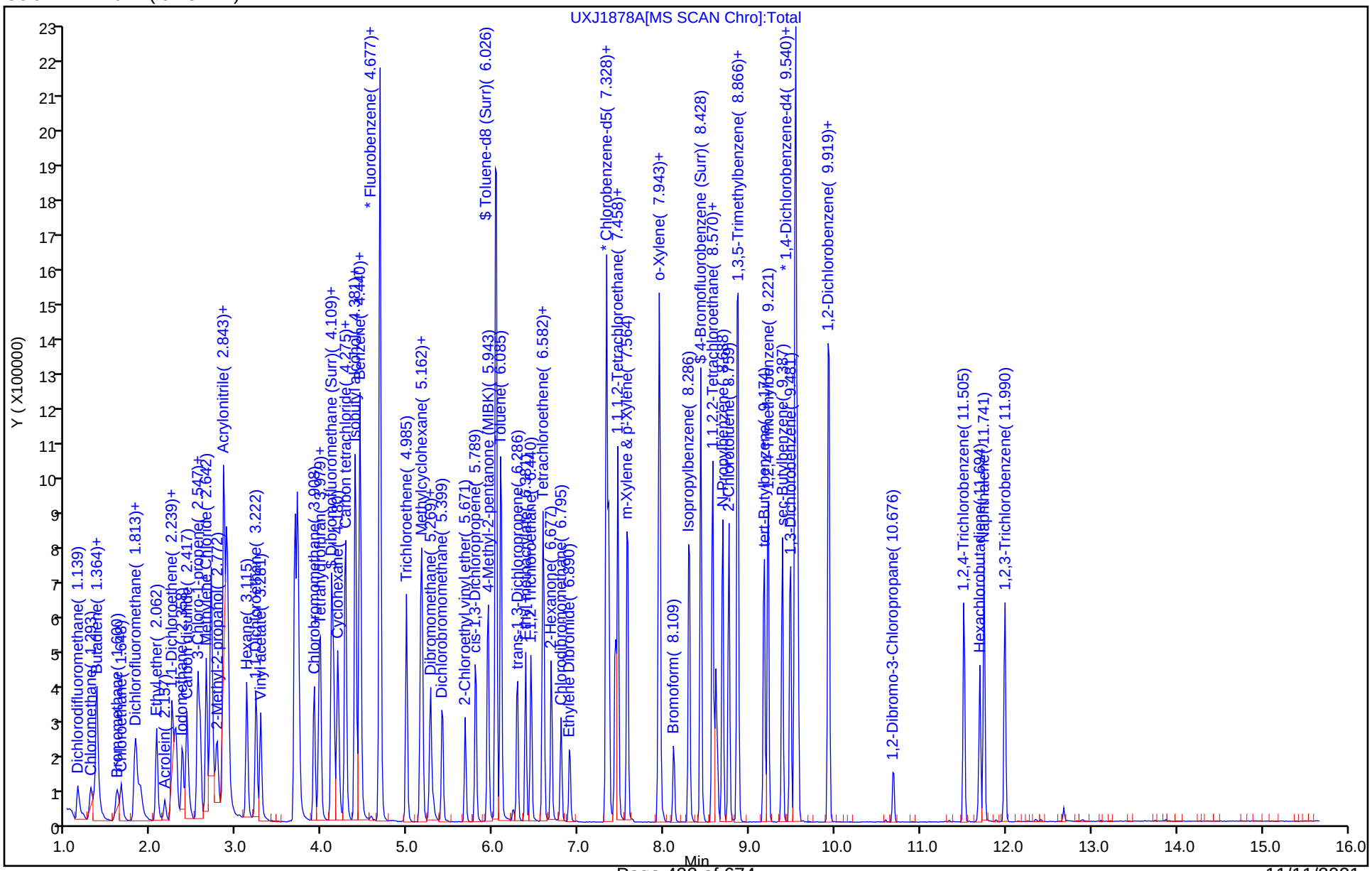
Report Date: 10-Nov-2021 09:08:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1878A.D

Injection Date:	09-Nov-2021 11:08:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1878A.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2021 11:08:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-004
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.22
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.8	89.07
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.78
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.0	89.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-15_110221 MS Lab Sample ID: 240-159369-2 MS

Matrix: Water Lab File ID: UXJ1907.D

Analysis Method: 8260B Date Collected: 11/02/2021 08:30

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 19:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.24		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.71		1.0	0.46
127-18-4	Tetrachloroethene	9.25		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.61		1.0	0.51
79-01-6	Trichloroethene	8.57		1.0	0.44
75-01-4	Vinyl chloride	10.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	116		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1907.D
Lims ID: 240-159369-C-2 MS
Client ID:
Sample Type: MS
Inject. Date: 08-Nov-2021 19:47:30 ALS Bottle#: 31 Worklist Smp#: 61
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-061
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:47:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1559503	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	898867	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	451905	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	373462	20.0	18.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	442052	20.0	19.6	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1481970	20.0	23.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	440430	20.0	19.7	
14 Vinyl chloride	62	1.375	1.364	0.011	96	196329	10.0	10.1	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	98	172798	10.0	9.24	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	98	211373	10.0	9.61	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	220011	10.0	9.71	
60 Trichloroethene	130	4.985	4.985	-0.001	96	208755	10.0	8.57	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	134432	10.0	9.25	

QC Flag Legend
Processing Flags

Reagents:

VMFASPW_00421	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

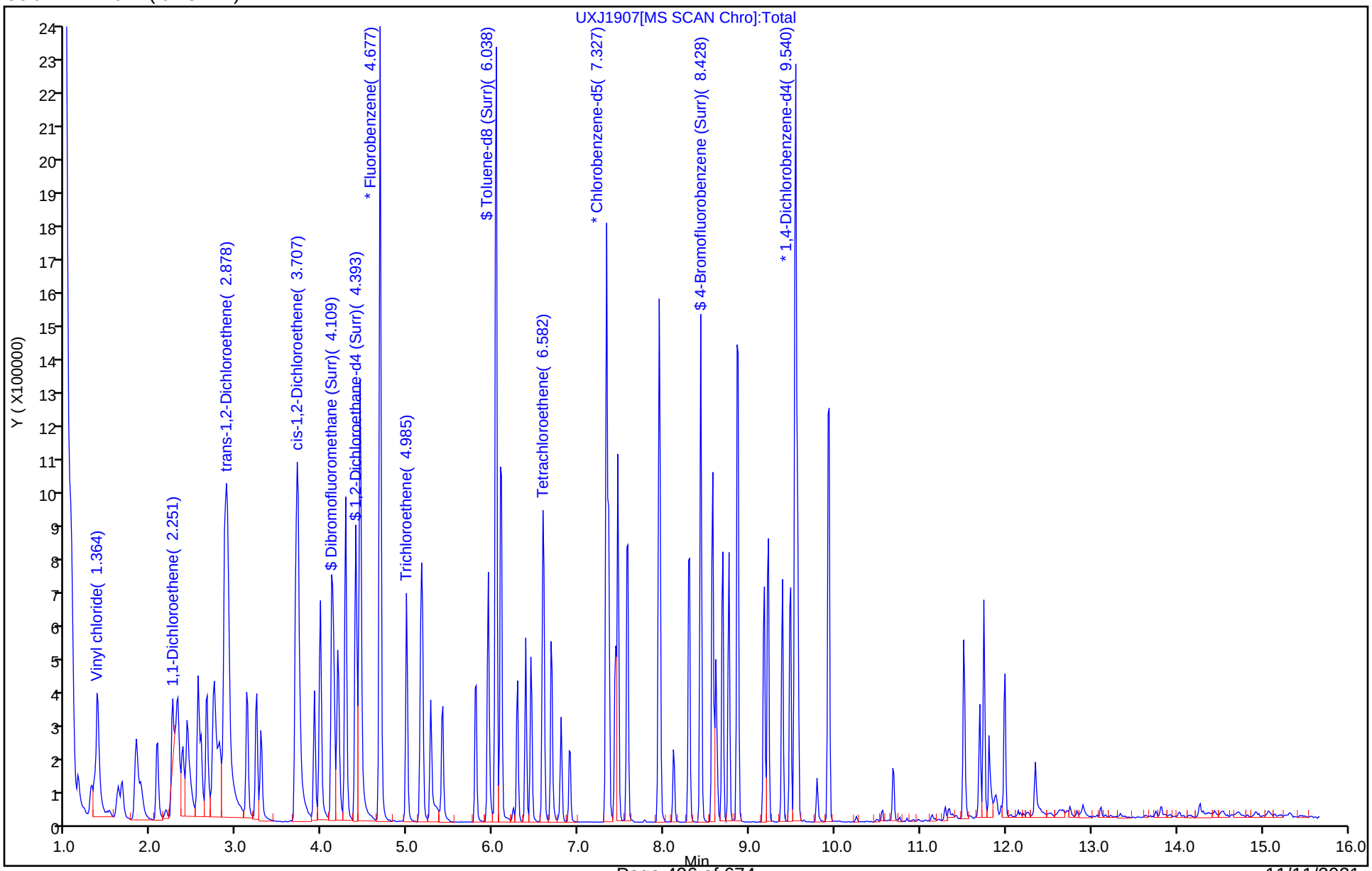
Report Date: 09-Nov-2021 08:47:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1907.D

Injection Date:	08-Nov-2021 19:47:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-C-2 MS			Worklist Smp#:	61
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1907.D
Lims ID: 240-159369-C-2 MS
Client ID:
Sample Type: MS
Inject. Date: 08-Nov-2021 19:47:30 ALS Bottle#: 31 Worklist Smp#: 61
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-061
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:47:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.8	93.99
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.6	98.07
$ 6 Toluene-d8 (Surr)	20.0	23.2	115.90
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.7	98.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-158842-N-3 MS

Matrix: Water Lab File ID: UXJ1903.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2021 20:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512078 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		62-137
460-00-4	4-Bromofluorobenzene (Surr)	95		56-136
2037-26-5	Toluene-d8 (Surr)	112		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1903.D
Lims ID: 240-158842-N-3 MS
Client ID: FW-18S
Sample Type: MS
Inject. Date: 09-Nov-2021 20:28:30 ALS Bottle#: 27 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-055
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1478357	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	829147	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	454778	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	348971	20.0	18.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	98	396984	20.0	18.6	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1321533	20.0	22.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	393040	20.0	19.0	
26 Carbon disulfide	76	2.417	2.429	-0.012	99	529748	10.0	10.0	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	99	237507	20.0	27.4	
48 Chloroform	83	3.979	3.979	0.000	92	327905	10.0	9.97	
55 Benzene	78	4.440	4.440	0.000	94	813784	10.0	11.0	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	234399	10.0	9.81	
72 Toluene	91	6.085	6.097	-0.012	99	719496	10.0	11.4	
84 Chlorobenzene	112	7.351	7.351	0.000	97	418901	10.0	10.2	
86 Ethylbenzene	106	7.458	7.458	0.000	98	209074	10.0	9.70	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	250922	10.0	9.49	
89 o-Xylene	106	7.943	7.943	0.000	96	237544	10.0	9.76	
88 Styrene	104	7.955	7.955	0.000	94	385725	10.0	10.9	
S 132 Xylenes, Total	106				0		20.0	19.3	

Reagents:

VMFASPW_00422	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

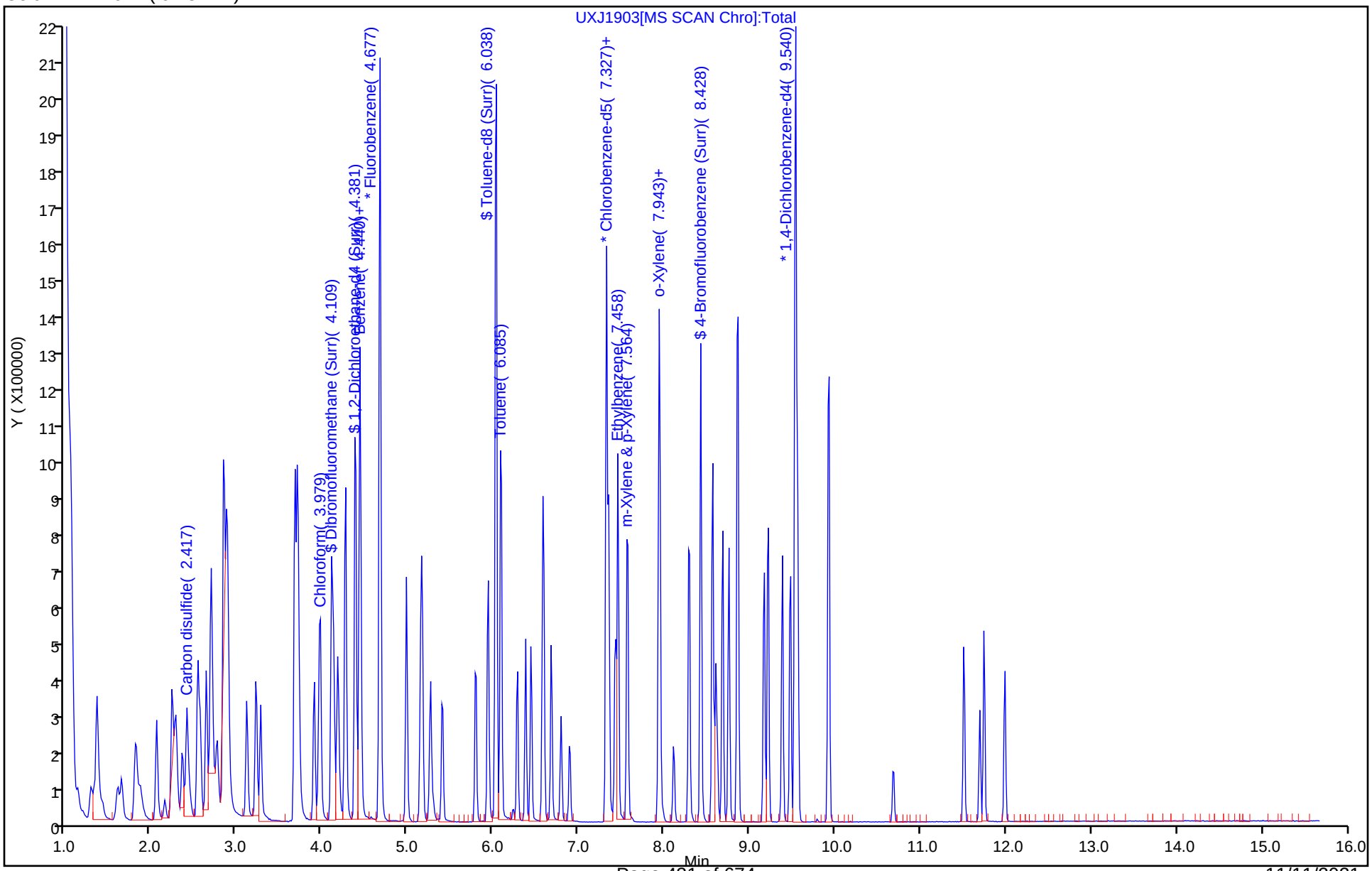
Report Date: 10-Nov-2021 09:09:22 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1903.D

Injection Date:	09-Nov-2021 20:28:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-158842-N-3 MS			Worklist Smp#:	55
Client ID:	FW-18S				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1903.D
Lims ID: 240-158842-N-3 MS
Client ID: FW-18S
Sample Type: MS
Inject. Date: 09-Nov-2021 20:28:30 ALS Bottle#: 27 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-055
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.5	92.65
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.6	92.91
$ 6 Toluene-d8 (Surr)	20.0	22.4	112.04
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.0	95.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-15_110221 MSD Lab Sample ID: 240-159369-2 MSD

Matrix: Water Lab File ID: UXJ1908.D

Analysis Method: 8260B Date Collected: 11/02/2021 08:30

Sample wt/vol: 5(mL) Date Analyzed: 11/08/2021 20:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511833 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.67		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.32		1.0	0.46
127-18-4	Tetrachloroethene	9.41		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.38		1.0	0.51
79-01-6	Trichloroethene	7.89		1.0	0.44
75-01-4	Vinyl chloride	9.87		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	94		78-122
1868-53-7	Dibromofluoromethane (Surr)	83		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1908.D
Lims ID: 240-159369-A-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 08-Nov-2021 20:10:30 ALS Bottle#: 32 Worklist Smp#: 62
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-062
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:46:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1592342	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	949362	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	547543	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	335194	20.0	16.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	367206	20.0	16.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	92	1273658	20.0	18.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	377628	20.0	16.0	
14 Vinyl chloride	62	1.364	1.364	0.000	97	195308	10.0	9.87	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	98	184677	10.0	9.67	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	99	210641	10.0	9.38	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	85	215525	10.0	9.32	
60 Trichloroethene	130	4.985	4.985	0.000	96	196157	10.0	7.89	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	144356	10.0	9.41	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00421	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

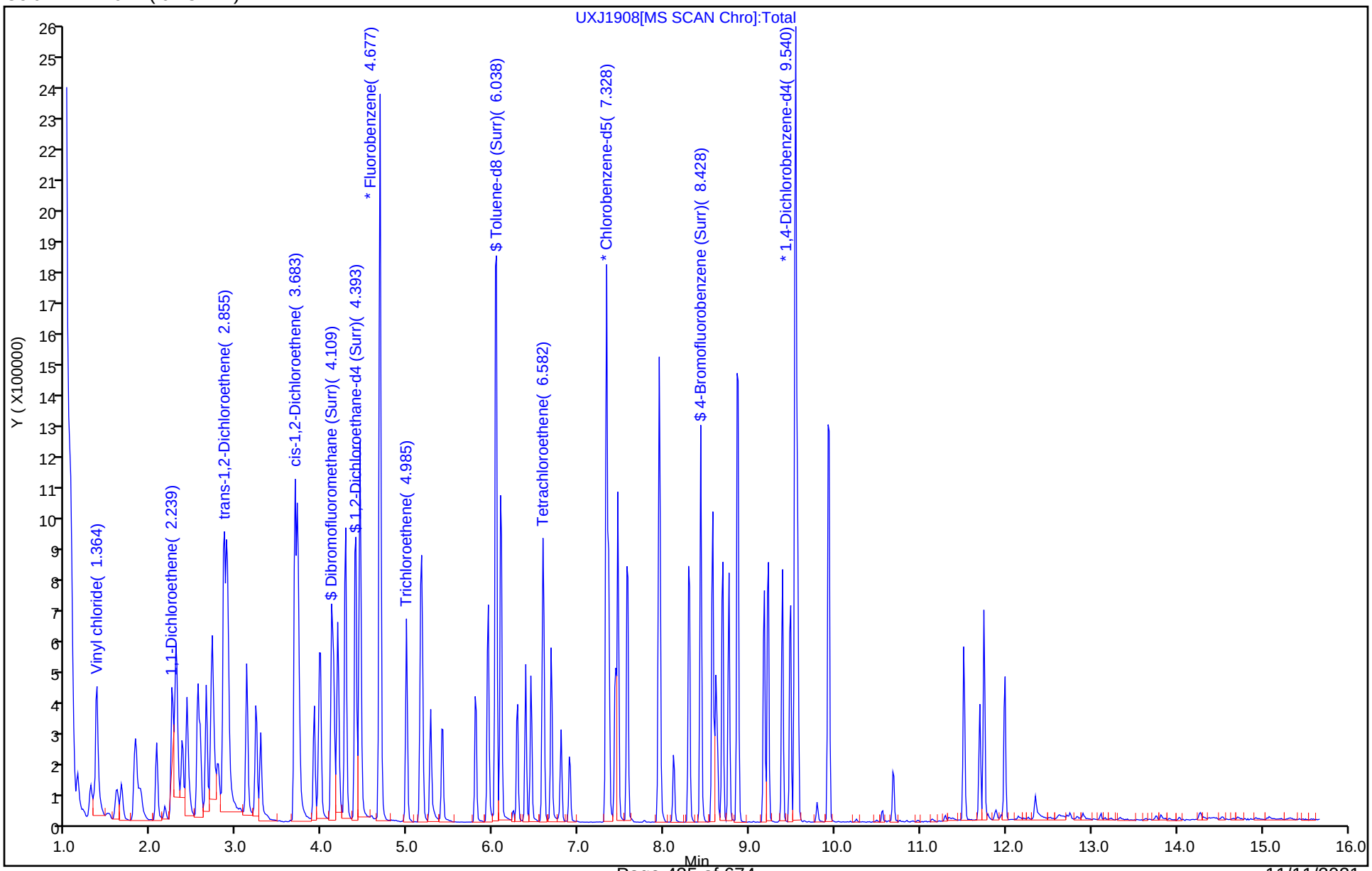
Report Date: 09-Nov-2021 08:46:32 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1908.D

Injection Date:	08-Nov-2021 20:10:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-159369-A-2 MSD			Worklist Smp#:	62
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\UXJ1908.D
Lims ID: 240-159369-A-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 08-Nov-2021 20:10:30 ALS Bottle#: 32 Worklist Smp#: 62
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114885-062
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211108-114885.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Nov-2021 08:41:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: evansle Date: 09-Nov-2021 08:46:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	16.5	82.62
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	16.0	79.79
$ 6 Toluene-d8 (Surr)	20.0	18.9	94.31
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.0	79.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-158842-M-3 MSD

Matrix: Water Lab File ID: UXJ1904.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2021 20:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512078 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		62-137
460-00-4	4-Bromofluorobenzene (Surr)	87		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1904.D
Lims ID: 240-158842-M-3 MSD
Client ID: FW-18S
Sample Type: MSD
Inject. Date: 09-Nov-2021 20:50:30 ALS Bottle#: 28 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-056
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1427453	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	792931	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	433880	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	335976	20.0	18.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	357376	20.0	17.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1246245	20.0	22.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	342593	20.0	17.3	
26 Carbon disulfide	76	2.428	2.429	-0.001	99	537370	10.0	10.5	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	200218	20.0	24.0	
48 Chloroform	83	3.979	3.979	0.000	93	321036	10.0	10.1	
55 Benzene	78	4.440	4.440	0.000	95	751294	10.0	10.6	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	224309	10.0	9.72	
72 Toluene	91	6.097	6.097	0.000	98	665655	10.0	11.1	
84 Chlorobenzene	112	7.351	7.351	0.000	97	375560	10.0	9.54	
86 Ethylbenzene	106	7.457	7.458	-0.001	98	190226	10.0	9.23	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	234112	10.0	9.26	
89 o-Xylene	106	7.943	7.943	0.000	96	230265	10.0	9.89	
88 Styrene	104	7.954	7.955	-0.001	95	372513	10.0	11.0	
S 132 Xylenes, Total	106				0		20.0	19.2	

Reagents:

VMFASPW_00422	Amount Added:	8.00	Units: uL	
VMFASAW_00397	Amount Added:	8.00	Units: uL	
VMFASGW_00431	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

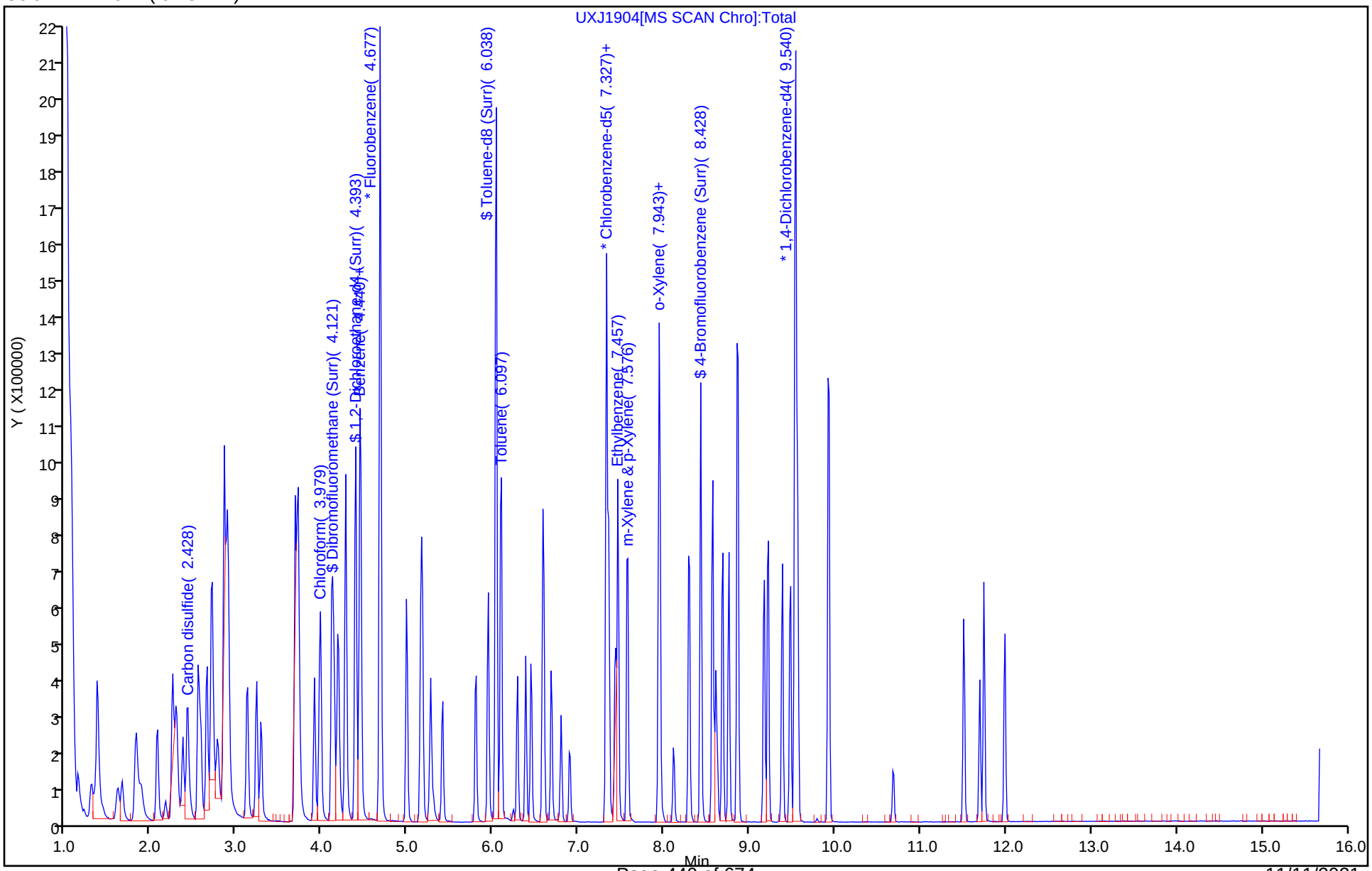
Report Date: 10-Nov-2021 09:09:23 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1904.D

Injection Date:	09-Nov-2021 20:50:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-158842-M-3 MSD			Worklist Smp#:	56
Client ID:	FW-18S				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\UXJ1904.D
Lims ID: 240-158842-M-3 MSD
Client ID: FW-18S
Sample Type: MSD
Inject. Date: 09-Nov-2021 20:50:30 ALS Bottle#: 28 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114944-056
Misc. Info.: J211108A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211109-114944.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Nov-2021 09:08:53 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1632

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.5	92.38
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.3	86.62
$ 6 Toluene-d8 (Surr)	20.0	22.1	110.48
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.69

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX11 Start Date: 01/15/2021 10:36

Analysis Batch Number: 469338 End Date: 01/15/2021 15:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-469338/1		01/15/2021 10:36	1	BFB1115A.D	DB-624 0.18(mm)
STD8260 240-469338/2 IC		01/15/2021 11:06	1	UXJ5268.D	DB-624 0.18(mm)
STD8260 240-469338/3 IC		01/15/2021 11:29	1	UXJ5269.D	DB-624 0.18(mm)
STD8260 240-469338/4 ICIS		01/15/2021 11:51	1	UXJ5270.D	DB-624 0.18(mm)
STD8260 240-469338/5 IC		01/15/2021 12:13	1	UXJ5271.D	DB-624 0.18(mm)
STD8260 240-469338/6 IC		01/15/2021 12:36	1	UXJ5272.D	DB-624 0.18(mm)
STD8260 240-469338/7 IC		01/15/2021 12:58	1	UXJ5273.D	DB-624 0.18(mm)
ICV 240-469338/14		01/15/2021 13:20	1	UXJ5274.D	DB-624 0.18(mm)
STD6 240-469338/8 IC		01/15/2021 13:42	1		DB-624 0.18(mm)
STD5 240-469338/9 IC		01/15/2021 14:05	1		DB-624 0.18(mm)
STD4 240-469338/10 IC		01/15/2021 14:26	1		DB-624 0.18(mm)
STD3 240-469338/11 IC		01/15/2021 14:48	1		DB-624 0.18(mm)
STD2 240-469338/12 IC		01/15/2021 15:10	1		DB-624 0.18(mm)
STD1 240-469338/13 IC		01/15/2021 15:33	1		DB-624 0.18(mm)
ICV 240-469338/15		01/15/2021 15:55	1	UXJ5281.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX11 Start Date: 11/08/2021 08:12

Analysis Batch Number: 511833 End Date: 11/08/2021 20:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-511833/1		11/08/2021 08:12	1	BFB1108A.D	DB-624 0.18(mm)
CCVIS 240-511833/2		11/08/2021 08:38	1	UXJ1877.D	DB-624 0.18(mm)
LCS 240-511833/4		11/08/2021 09:00	1	UXJ1878.D	DB-624 0.18(mm)
CCV 240-511833/3		11/08/2021 09:23	1	UXJ1879.D	DB-624 0.18(mm)
ZZZZZ		11/08/2021 09:45	1		DB-624 0.18(mm)
ZZZZZ		11/08/2021 10:07	1		DB-624 0.18(mm)
MB 240-511833/6		11/08/2021 10:29	1	UXJ1882.D	DB-624 0.18(mm)
240-159369-7	SL-5_110221	11/08/2021 10:51	2	UXJ1883.D	DB-624 0.18(mm)
ZZZZZ		11/08/2021 11:14	10		DB-624 0.18(mm)
ZZZZZ		11/08/2021 11:36	2.5		DB-624 0.18(mm)
ZZZZZ		11/08/2021 11:58	5		DB-624 0.18(mm)
ZZZZZ		11/08/2021 12:21	2.5		DB-624 0.18(mm)
240-159369-1	TRIP BLANK	11/08/2021 12:43	1	UXJ1888.D	DB-624 0.18(mm)
240-159369-2	SL-15_110221	11/08/2021 13:05	1	UXJ1889.D	DB-624 0.18(mm)
240-159369-3	SL-14_110221	11/08/2021 13:28	1	UXJ1890.D	DB-624 0.18(mm)
240-159369-4	SL-13_110221	11/08/2021 13:50	1	UXJ1891.D	DB-624 0.18(mm)
240-159369-5	SL-7_110221	11/08/2021 14:12	1	UXJ1892.D	DB-624 0.18(mm)
240-159369-6	SL-6_110221	11/08/2021 14:34	1	UXJ1893.D	DB-624 0.18(mm)
ZZZZZ		11/08/2021 14:57	1		DB-624 0.18(mm)
240-159369-9	SL-9_110221	11/08/2021 15:19	1	UXJ1895.D	DB-624 0.18(mm)
240-159369-10	SL-10_110221	11/08/2021 15:42	1	UXJ1896.D	DB-624 0.18(mm)
240-159369-11	SL-11_110221	11/08/2021 16:04	1	UXJ1897.D	DB-624 0.18(mm)
240-159369-12	SL-12_110221	11/08/2021 16:27	1	UXJ1898.D	DB-624 0.18(mm)
240-159369-17	SL-16_110221	11/08/2021 16:49	1	UXJ1899.D	DB-624 0.18(mm)
240-159369-18	SL-17_110221	11/08/2021 17:12	1	UXJ1900.D	DB-624 0.18(mm)
240-159369-19	SL-18_110221	11/08/2021 17:34	1	UXJ1901.D	DB-624 0.18(mm)
240-159369-20	DUP-01	11/08/2021 17:56	1	UXJ1902.D	DB-624 0.18(mm)
240-159369-13	MH-1231_110221	11/08/2021 18:19	1	UXJ1903.D	DB-624 0.18(mm)
240-159369-14	SL-2_110221	11/08/2021 18:41	1	UXJ1904.D	DB-624 0.18(mm)
240-159369-15	SL-3_110221	11/08/2021 19:03	1	UXJ1905.D	DB-624 0.18(mm)
240-159369-16	SL-4_110221	11/08/2021 19:25	1	UXJ1906.D	DB-624 0.18(mm)
240-159369-2 MS	SL-15_110221 MS	11/08/2021 19:47	1	UXJ1907.D	DB-624 0.18(mm)
240-159369-2 MSD	SL-15_110221 MSD	11/08/2021 20:10	1	UXJ1908.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX11 Start Date: 11/09/2021 10:06

Analysis Batch Number: 512078 End Date: 11/09/2021 20:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-512078/1		11/09/2021 10:06	1	BFB1109.D	DB-624 0.18(mm)
CCVIS 240-512078/2		11/09/2021 10:45	1	UXJ1877A.D	DB-624 0.18(mm)
LCS 240-512078/4		11/09/2021 11:08	1	UXJ1878A.D	DB-624 0.18(mm)
CCV 240-512078/3		11/09/2021 11:31	1	UXJ1879.D	DB-624 0.18(mm)
ZZZZZ		11/09/2021 11:53	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 12:15	1		DB-624 0.18(mm)
MB 240-512078/6		11/09/2021 12:38	1	UXJ1882.D	DB-624 0.18(mm)
240-159369-8	SL-8_110221	11/09/2021 13:00	1	UXJ1883.D	DB-624 0.18(mm)
ZZZZZ		11/09/2021 13:23	2500		DB-624 0.18(mm)
ZZZZZ		11/09/2021 13:45	2		DB-624 0.18(mm)
ZZZZZ		11/09/2021 14:07	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 14:30	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 14:53	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 15:15	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 15:37	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 16:00	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 16:22	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 16:45	3.33		DB-624 0.18(mm)
ZZZZZ		11/09/2021 17:07	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 17:29	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 17:51	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 18:13	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 18:36	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 18:58	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 19:21	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 19:43	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 20:06	10		DB-624 0.18(mm)
240-158842-N-3 MS		11/09/2021 20:28	1	UXJ1903.D	DB-624 0.18(mm)
240-158842-M-3 MSD		11/09/2021 20:50	1	UXJ1904.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00086	VM50SS_STK 00086	VMAROLISTDW 00376	VMBFB 00026
BFB 240-469338/1		8260B		5 mL	5 mL				1 uL
STD8260 240-469338/2 IC		8260B		5 mL	5 mL	2 uL	32 uL	32 uL	
STD8260 240-469338/3 IC		8260B		5 mL	5 mL	2 uL	16 uL	16 uL	
STD8260 240-469338/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL	8 uL	
STD8260 240-469338/5 IC		8260B		5 mL	5 mL	2 uL	4 uL	4 uL	
STD8260 240-469338/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL	1.6 uL	
STD8260 240-469338/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL	0.8 uL	
ICV 240-469338/14		8260B		5 mL	5 mL	2 uL	2 uL		
ICV 240-469338/15		8260B		5 mL	5 mL	2 uL	2 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00305	VMFASAW 00359	VMFASGW 00391	VMFASPW 00382	VMRGAS 00369	VMRPRIMW 00419
BFB 240-469338/1		8260B							
STD8260 240-469338/2 IC		8260B						32 uL	32 uL
STD8260 240-469338/3 IC		8260B						16 uL	16 uL
STD8260 240-469338/4 ICIS		8260B						8 uL	8 uL
STD8260 240-469338/5 IC		8260B						4 uL	4 uL
STD8260 240-469338/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-469338/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-469338/14		8260B			8 uL	8 uL	8 uL		
ICV 240-469338/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	hc907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 511833 Batch Start Date: 11/08/21 08:12 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-511833/1		8260B		5 mL	5 mL				
CCVIS 240-511833/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-511833/3		8260B		5 mL	5 mL		2 uL		
LCS 240-511833/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-511833/6		8260B		5 mL	5 mL			2 uL	2 uL
240-159369-B-7	SL-5_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-A-1	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-2	SL-15_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-3	SL-14_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-4	SL-13_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-5	SL-7_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-6	SL-6_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-9	SL-9_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-10	SL-10_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-11	SL-11_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-C-12	SL-12_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-17	SL-16_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-C-18	SL-17_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-19	SL-18_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-C-20	DUP-01	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-D-13	MH-1231_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-D-14	SL-2_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-D-15	SL-3_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-B-16	SL-4_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-C-2 MS	SL-15_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-159369-A-2 MSD	SL-15_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 511833 Batch Start Date: 11/08/21 08:12 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00415	vmbfb 00027	VMFASAW 00397	VMFASGW 00431	VMFASPW 00421	VMRA9W 00413
BFB 240-511833/1		8260B			1 uL				
CCVIS 240-511833/2		8260B		8 uL					
CCV 240-511833/3		8260B							8 uL
LCS 240-511833/4		8260B				8 uL	8 uL	8 uL	
MB 240-511833/6		8260B							
240-159369-B-7	SL-5_110221	8260B	T						
240-159369-A-1	TRIP BLANK	8260B	T						
240-159369-B-2	SL-15_110221	8260B	T						
240-159369-B-3	SL-14_110221	8260B	T						
240-159369-B-4	SL-13_110221	8260B	T						
240-159369-B-5	SL-7_110221	8260B	T						
240-159369-B-6	SL-6_110221	8260B	T						
240-159369-B-9	SL-9_110221	8260B	T						
240-159369-B-10	SL-10_110221	8260B	T						
240-159369-B-11	SL-11_110221	8260B	T						
240-159369-C-12	SL-12_110221	8260B	T						
240-159369-B-17	SL-16_110221	8260B	T						
240-159369-C-18	SL-17_110221	8260B	T						
240-159369-B-19	SL-18_110221	8260B	T						
240-159369-C-20	DUP-01	8260B	T						
240-159369-D-13	MH-1231_110221	8260B	T						
240-159369-D-14	SL-2_110221	8260B	T						
240-159369-D-15	SL-3_110221	8260B	T						
240-159369-B-16	SL-4_110221	8260B	T						
240-159369-C-2 MS	SL-15_110221	8260B	T			8 uL	8 uL	8 uL	
240-159369-A-2 MSD	SL-15_110221	8260B	T			8 uL	8 uL	8 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 511833 Batch Start Date: 11/08/21 08:12 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00406	VMRPRIMW 00458				
BFB 240-511833/1		8260B							
CCVIS 240-511833/2		8260B		8 uL	8 uL				
CCV 240-511833/3		8260B							
LCS 240-511833/4		8260B							
MB 240-511833/6		8260B							
240-159369-B-7	SL-5_110221	8260B	T						
240-159369-A-1	TRIP BLANK	8260B	T						
240-159369-B-2	SL-15_110221	8260B	T						
240-159369-B-3	SL-14_110221	8260B	T						
240-159369-B-4	SL-13_110221	8260B	T						
240-159369-B-5	SL-7_110221	8260B	T						
240-159369-B-6	SL-6_110221	8260B	T						
240-159369-B-9	SL-9_110221	8260B	T						
240-159369-B-10	SL-10_110221	8260B	T						
240-159369-B-11	SL-11_110221	8260B	T						
240-159369-C-12	SL-12_110221	8260B	T						
240-159369-B-17	SL-16_110221	8260B	T						
240-159369-C-18	SL-17_110221	8260B	T						
240-159369-B-19	SL-18_110221	8260B	T						
240-159369-C-20	DUP-01	8260B	T						
240-159369-D-13	MH-1231_110221	8260B	T						
240-159369-D-14	SL-2_110221	8260B	T						
240-159369-D-15	SL-3_110221	8260B	T						
240-159369-B-16	SL-4_110221	8260B	T						
240-159369-C-2 MS	SL-15_110221	8260B	T						
240-159369-A-2 MSD	SL-15_110221	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 511833 Batch Start Date: 11/08/21 08:12 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 512078 Batch Start Date: 11/09/21 10:06 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-512078/1		8260B		5 mL	5 mL				
CCVIS 240-512078/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-512078/3		8260B		5 mL	5 mL		2 uL		
LCS 240-512078/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-512078/6		8260B		5 mL	5 mL			2 uL	2 uL
240-159369-E-8	SL-8_110221	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-158842-N-3 MS	FW-18S	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-158842-M-3 MSD	FW-18S	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00415	vmbfb 00027	VMFASAW 00397	VMFASGW 00431	VMFASPW 00422	VMRA9W 00413
BFB 240-512078/1		8260B			1 uL				
CCVIS 240-512078/2		8260B		8 uL					
CCV 240-512078/3		8260B							8 uL
LCS 240-512078/4		8260B				8 uL	8 uL	8 uL	
MB 240-512078/6		8260B							
240-159369-E-8	SL-8_110221	8260B	T						
240-158842-N-3 MS	FW-18S	8260B	T			8 uL	8 uL	8 uL	
240-158842-M-3 MSD	FW-18S	8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00406	VMRPRIMW 00459				
BFB 240-512078/1		8260B							
CCVIS 240-512078/2		8260B		8 uL	8 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 512078 Batch Start Date: 11/09/21 10:06 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00406	VMRPRIMW 00459				
CCV 240-512078/3		8260B							
LCS 240-512078/4		8260B							
MB 240-512078/6		8260B							
240-159369-E-8	SL-8_110221	8260B	T						
240-158842-N-3 MS	FW-18S	8260B	T						
240-158842-M-3 MSD	FW-18S	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
	MRL 240-511974/5	93

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	10-150

Column to be used to flag recovery values

FORM II 8260B SIM

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-15_110221	240-159369-2	89
SL-14_110221	240-159369-3	95
SL-13_110221	240-159369-4	94
SL-7_110221	240-159369-5	90
SL-6_110221	240-159369-6	88
SL-5_110221	240-159369-7	92
SL-8_110221	240-159369-8	94
SL-9_110221	240-159369-9	90
SL-10_110221	240-159369-10	91
SL-11_110221	240-159369-11	91
SL-12_110221	240-159369-12	91
MH-1231_110221	240-159369-13	89
SL-2_110221	240-159369-14	91
SL-3_110221	240-159369-15	92
SL-4_110221	240-159369-16	89
SL-16_110221	240-159369-17	92
SL-17_110221	240-159369-18	93
SL-18_110221	240-159369-19	92
DUP-01	240-159369-20	94
	MB 240-511974/4	92
	MB 240-512125/5	91
	LCS 240-511974/3	91
	LCS 240-512125/4	93
SL-7_110221 MS	240-159369-5 MS	92
SL-7_110221 MSD	240-159369-5 MSD	89

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202300.D

Lab ID: LCS 240-511974/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	9.47	95	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202306.D

Lab ID: LCS 240-512125/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	10.3	103	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202302.D

Lab ID: MRL 240-511974/5 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,4-Dioxane	0.00100	0.00140 J	140	10-150	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202312.D

Lab ID: 240-159369-5 MS Client ID: SL-7_110221 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	9.49	95	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202313.D

Lab ID: 240-159369-5 MSD Client ID: SL-7_110221 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	10.5	105	11	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: 202301.D Lab Sample ID: MB 240-511974/4

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 11/08/2021 20:12

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-511974/3	202300.D	11/08/2021 19:48
SL-15_110221	240-159369-2	202303.D	11/08/2021 21:00

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: 202307.D Lab Sample ID: MB 240-512125/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 11/09/2021 13:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-512125/4	202306.D	11/09/2021 13:14
SL-14_110221	240-159369-3	202309.D	11/09/2021 14:26
SL-13_110221	240-159369-4	202310.D	11/09/2021 14:50
SL-7_110221	240-159369-5	202311.D	11/09/2021 15:14
SL-7_110221 MS	240-159369-5 MS	202312.D	11/09/2021 15:38
SL-7_110221 MSD	240-159369-5 MSD	202313.D	11/09/2021 16:01
SL-6_110221	240-159369-6	202314.D	11/09/2021 16:25
SL-5_110221	240-159369-7	202315.D	11/09/2021 16:49
SL-8_110221	240-159369-8	202316.D	11/09/2021 17:13
SL-9_110221	240-159369-9	202317.D	11/09/2021 17:37
SL-10_110221	240-159369-10	202318.D	11/09/2021 18:01
SL-11_110221	240-159369-11	202319.D	11/09/2021 18:25
SL-12_110221	240-159369-12	202320.D	11/09/2021 18:49
MH-1231_110221	240-159369-13	202321.D	11/09/2021 19:13
SL-2_110221	240-159369-14	202322.D	11/09/2021 19:37
SL-3_110221	240-159369-15	202323.D	11/09/2021 20:01
SL-4_110221	240-159369-16	202324.D	11/09/2021 20:25
SL-16_110221	240-159369-17	202325.D	11/09/2021 20:48
SL-17_110221	240-159369-18	202326.D	11/09/2021 21:12
SL-18_110221	240-159369-19	202327.D	11/09/2021 21:36
DUP-01	240-159369-20	202328.D	11/09/2021 22:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB20126.D BFB Injection Date: 09/09/2021

Instrument ID: A3UX20 BFB Injection Time: 13:33

Analysis Batch No.: 503003

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.3	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	68.0	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	66.1	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-503003/3	201661.D	09/09/2021	14:25
	IC 240-503003/4	201662.D	09/09/2021	14:49
	IC 240-503003/5	201663.D	09/09/2021	15:14
	IC 240-503003/6	201664.D	09/09/2021	15:38
	ICIS 240-503003/7	201665.D	09/09/2021	16:03
	IC 240-503003/8	201666.D	09/09/2021	16:27
	IC 240-503003/9	201667.D	09/09/2021	16:52
	IC 240-503003/10	201668.D	09/09/2021	17:16
	ICV 240-503003/12	201670.D	09/09/2021	18:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB20156.D BFB Injection Date: 11/08/2021

Instrument ID: A3UX20 BFB Injection Time: 19:11

Analysis Batch No.: 511974

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.3	
75	30.0 - 60.0 % of mass 95	54.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	61.8	
175	5.0 - 9.0 % of mass 174	4.5	(7.4) 1
176	95.0 - 101.0 % of mass 174	59.7	(96.5) 1
177	5.0 - 9.0 % of mass 176	3.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-511974/2	202299.D	11/08/2021	19:24
	LCS 240-511974/3	202300.D	11/08/2021	19:48
	MB 240-511974/4	202301.D	11/08/2021	20:12
	MRL 240-511974/5	202302.D	11/08/2021	20:36
SL-15_110221	240-159369-2	202303.D	11/08/2021	21:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab File ID: BFB20157.D BFB Injection Date: 11/09/2021

Instrument ID: A3UX20 BFB Injection Time: 12:05

Analysis Batch No.: 512125

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.0	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	69.1	
175	5.0 - 9.0 % of mass 174	5.1	(7.4) 1
176	95.0 - 101.0 % of mass 174	66.4	(96.2) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-512125/3	202305.D	11/09/2021	12:50
	LCS 240-512125/4	202306.D	11/09/2021	13:14
	MB 240-512125/5	202307.D	11/09/2021	13:38
SL-14_110221	240-159369-3	202309.D	11/09/2021	14:26
SL-13_110221	240-159369-4	202310.D	11/09/2021	14:50
SL-7_110221	240-159369-5	202311.D	11/09/2021	15:14
SL-7_110221 MS	240-159369-5 MS	202312.D	11/09/2021	15:38
SL-7_110221 MSD	240-159369-5 MSD	202313.D	11/09/2021	16:01
SL-6_110221	240-159369-6	202314.D	11/09/2021	16:25
SL-5_110221	240-159369-7	202315.D	11/09/2021	16:49
SL-8_110221	240-159369-8	202316.D	11/09/2021	17:13
SL-9_110221	240-159369-9	202317.D	11/09/2021	17:37
SL-10_110221	240-159369-10	202318.D	11/09/2021	18:01
SL-11_110221	240-159369-11	202319.D	11/09/2021	18:25
SL-12_110221	240-159369-12	202320.D	11/09/2021	18:49
MH-1231_110221	240-159369-13	202321.D	11/09/2021	19:13
SL-2_110221	240-159369-14	202322.D	11/09/2021	19:37
SL-3_110221	240-159369-15	202323.D	11/09/2021	20:01
SL-4_110221	240-159369-16	202324.D	11/09/2021	20:25
SL-16_110221	240-159369-17	202325.D	11/09/2021	20:48
SL-17_110221	240-159369-18	202326.D	11/09/2021	21:12
SL-18_110221	240-159369-19	202327.D	11/09/2021	21:36
DUP-01	240-159369-20	202328.D	11/09/2021	22:00

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: ICIS 240-503003/7 Date Analyzed: 09/09/2021 16:03

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201665.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3376203	7.44	100508	8.19		
UPPER LIMIT		6752406	7.94	201016	8.69		
LOWER LIMIT		1688102	6.94	50254	7.69		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-511974/2		2239531	7.42	74516	8.18		
CCVIS 240-512125/3		2338902	7.42	69577	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: CCVIS 240-511974/2 Date Analyzed: 11/08/2021 19:24

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 202299.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2239531	7.42	74516	8.18		
UPPER LIMIT		4479062	7.92	149032	8.68		
LOWER LIMIT		1119766	6.92	37258	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-511974/3		2363903	7.44	67737	8.18		
MB 240-511974/4		2249601	7.42	68698	8.18		
MRL 240-511974/5		2266943	7.42	63054	8.18		
240-159369-2	SL-15_110221	2382705	7.44	64272	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Sample No.: CCVIS 240-512125/3 Date Analyzed: 11/09/2021 12:50

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 202305.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2338902	7.42	69577	8.18		
UPPER LIMIT		4677804	7.92	139154	8.68		
LOWER LIMIT		1169451	6.92	34789	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-512125/4		2330177	7.44	63111	8.18		
MB 240-512125/5		2269805	7.42	63473	8.18		
240-159369-3	SL-14_110221	2262472	7.42	64656	8.18		
240-159369-4	SL-13_110221	2333314	7.42	70777	8.18		
240-159369-5	SL-7_110221	2464139	7.44	63996	8.18		
240-159369-5 MS	SL-7_110221 MS	2275531	7.42	62878	8.18		
240-159369-5 MSD	SL-7_110221 MSD	2312113	7.44	54353	8.18		
240-159369-6	SL-6_110221	2312197	7.42	58274	8.18		
240-159369-7	SL-5_110221	2079293	7.42	64627	8.18		
240-159369-8	SL-8_110221	2030742	7.42	64022	8.18		
240-159369-9	SL-9_110221	2127221	7.42	61719	8.18		
240-159369-10	SL-10_110221	2166077	7.42	60768	8.18		
240-159369-11	SL-11_110221	2232240	7.44	62328	8.19		
240-159369-12	SL-12_110221	2252466	7.42	62979	8.18		
240-159369-13	MH-1231_110221	2362457	7.42	61795	8.18		
240-159369-14	SL-2_110221	2252052	7.42	63880	8.18		
240-159369-15	SL-3_110221	2211473	7.42	60982	8.18		
240-159369-16	SL-4_110221	2394436	7.42	60691	8.18		
240-159369-17	SL-16_110221	2357095	7.44	68922	8.19		
240-159369-18	SL-17_110221	2310501	7.42	67960	8.18		
240-159369-19	SL-18_110221	2280521	7.42	54131	8.18		
240-159369-20	DUP-01	2003759	7.44	60764	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-15_110221 Lab Sample ID: 240-159369-2

Matrix: Water Lab File ID: 202303.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 08:30

Sample wt/vol: 15(mL) Date Analyzed: 11/08/2021 21:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511974 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202303.D				
Lims ID:	240-159369-D-2				
Client ID:	SL-15_110221				
Sample Type:	Client				
Inject. Date:	08-Nov-2021 21:00:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-006				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				
First Level Reviewer: seymourc		Date:	09-Nov-2021 12:36:57		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	678702	8.92	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2382705	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	64272	200.0	
8 1,4-Dioxane	88	8.231	8.231	0.000	3	388	0.7397	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

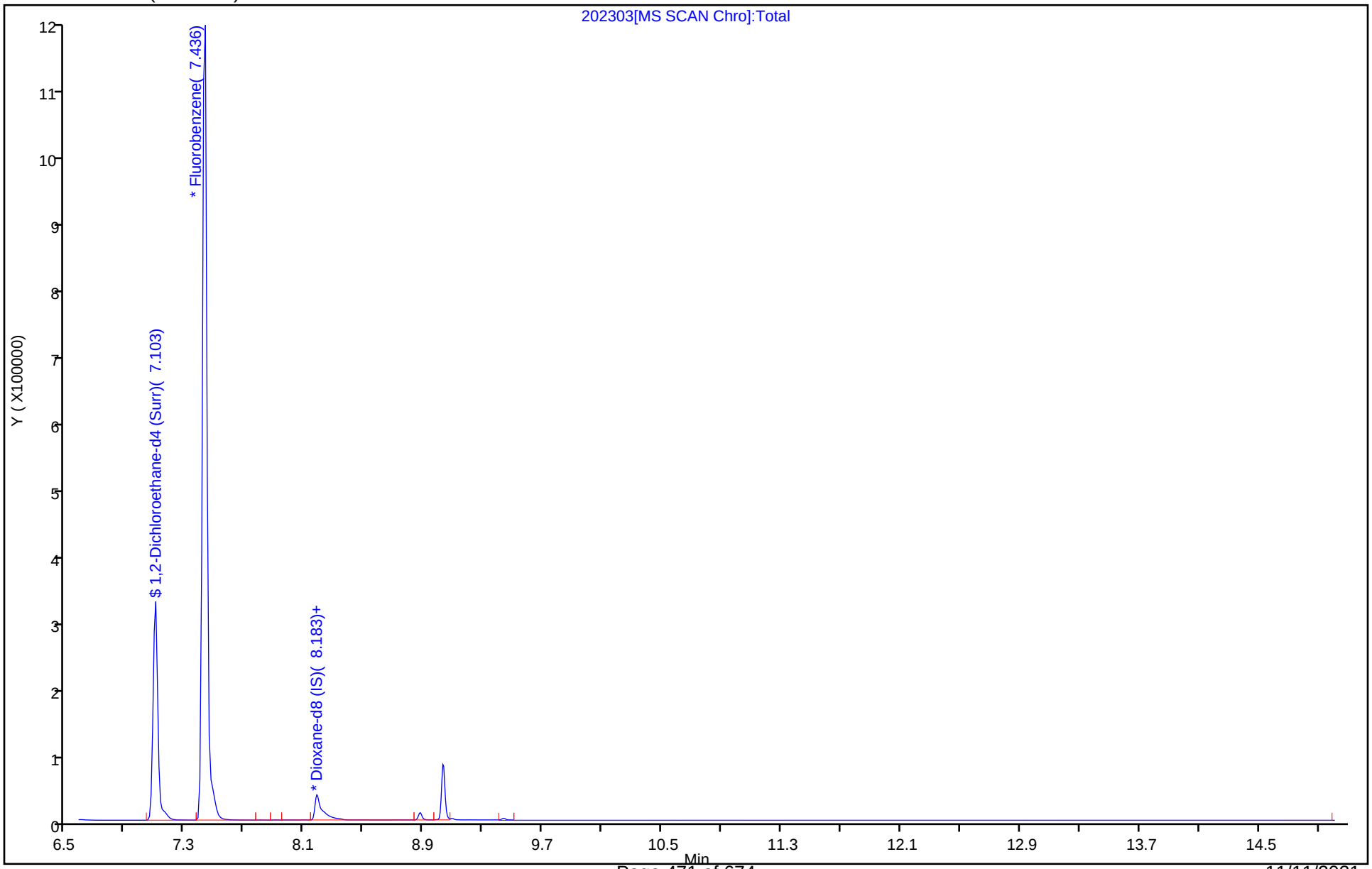
Report Date: 09-Nov-2021 12:37:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202303.D

Injection Date:	08-Nov-2021 21:00:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-D-2	Lab Sample ID:	240-159369-2	Worklist Smp#:	6
Client ID:	SL-15_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202303.D				
Lims ID:	240-159369-D-2				
Client ID:	SL-15_110221				
Sample Type:	Client				
Inject. Date:	08-Nov-2021 21:00:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-006				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.92	89.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-14_110221 Lab Sample ID: 240-159369-3

Matrix: Water Lab File ID: 202309.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 08:50

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202309.D				
Lims ID:	240-159369-A-3				
Client ID:	SL-14_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 14:26:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:23:17		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	689209	9.54	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2262472	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	64656	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

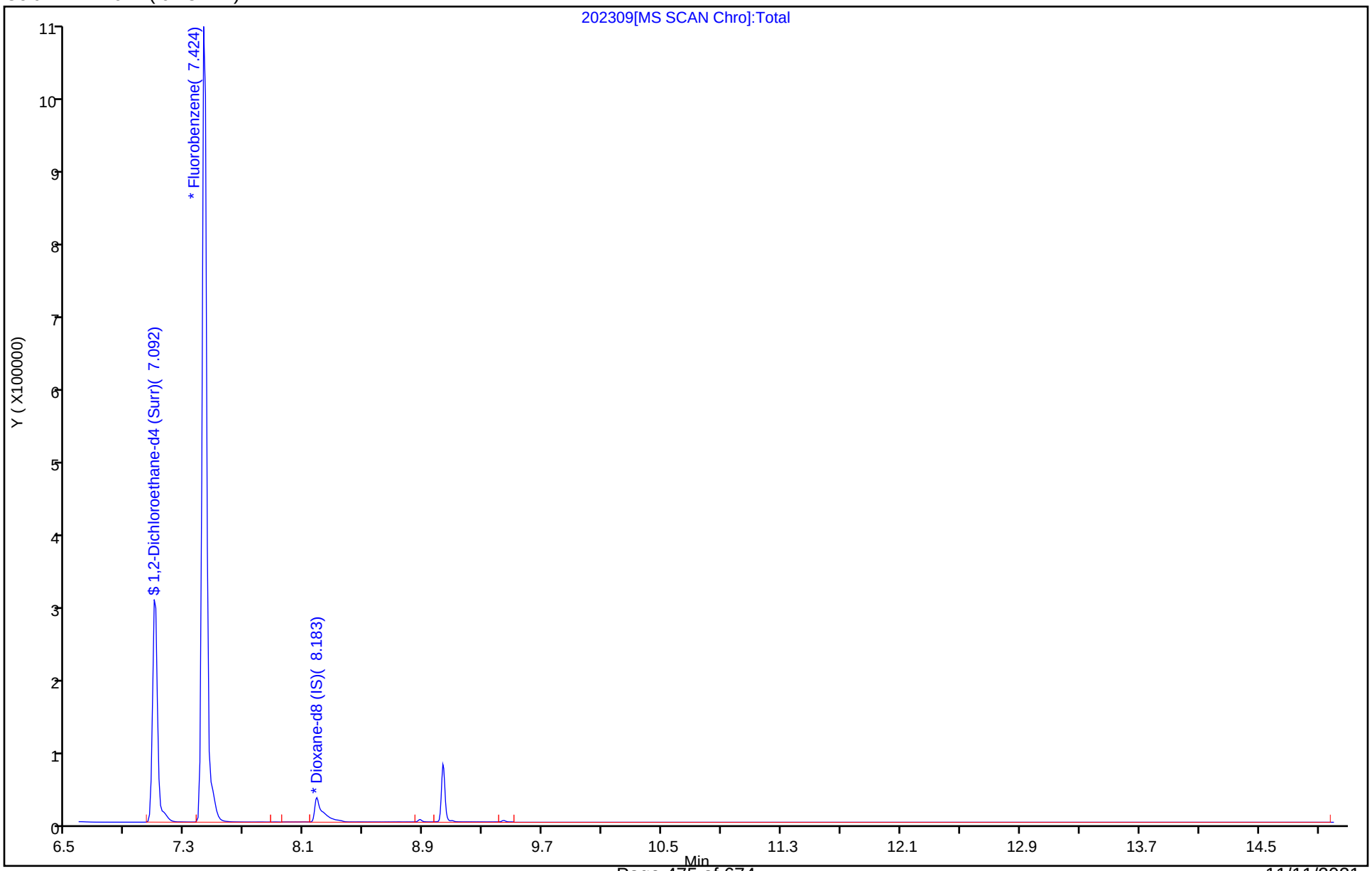
Report Date: 10-Nov-2021 14:35:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202309.D

Injection Date:	09-Nov-2021 14:26:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-3	Lab Sample ID:	240-159369-3	Worklist Smp#:	7
Client ID:	SL-14_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202309.D				
Lims ID:	240-159369-A-3				
Client ID:	SL-14_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 14:26:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:23:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.54	95.39

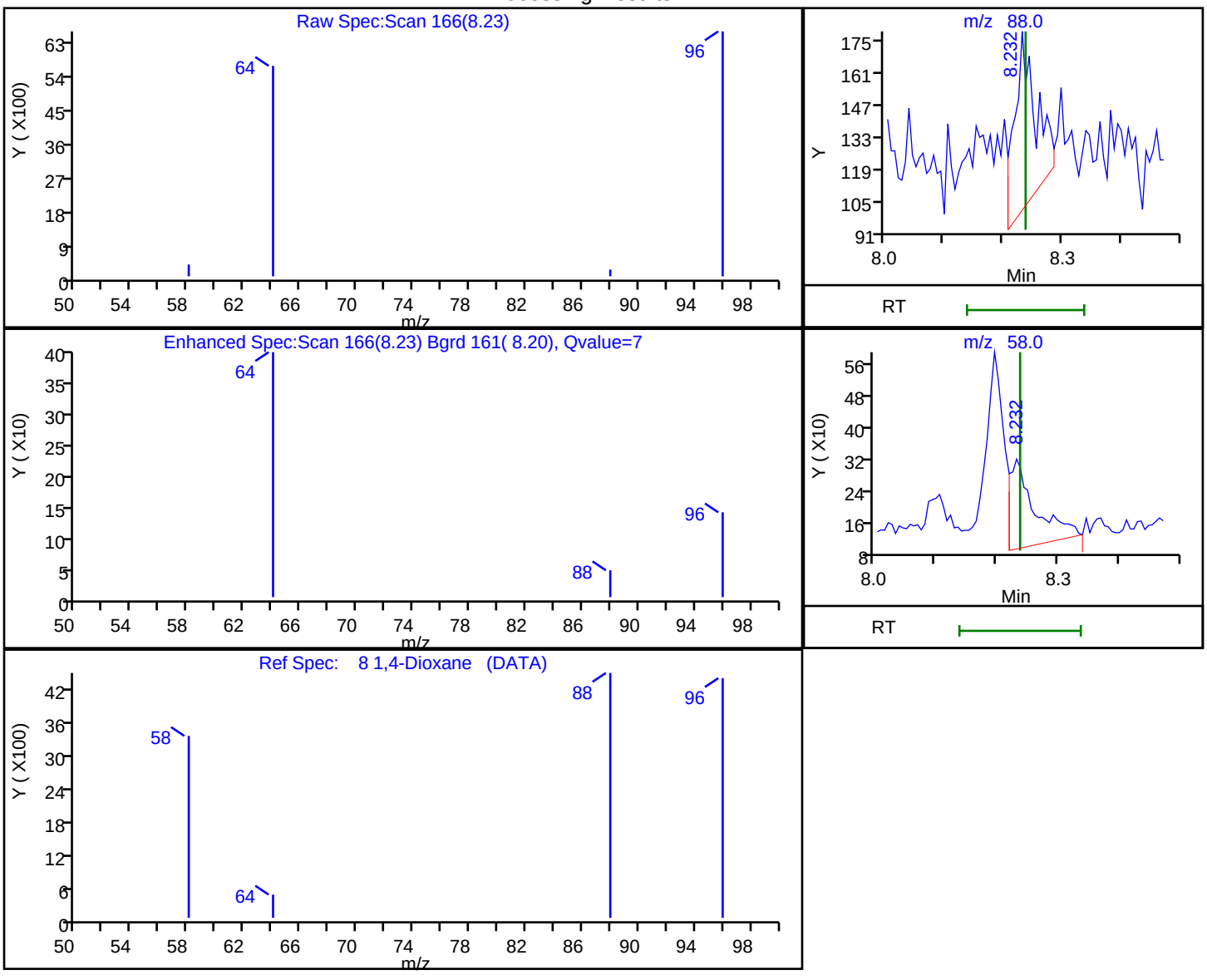
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202309.D				
Injection Date:	09-Nov-2021 14:26:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-3	Lab Sample ID:	240-159369-3		
Client ID:	SL-14_110221				
Operator ID:	434006	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
8.23	88.00	196	0.371429
8.23	58.00	655	

Reviewer: seymourc, 10-Nov-2021 14:34:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-13_110221 Lab Sample ID: 240-159369-4

Matrix: Water Lab File ID: 202310.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 09:15

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 14:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202310.D				
Lims ID:	240-159369-A-4				
Client ID:	SL-13_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 14:50:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:23:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	699894	9.39	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2333314	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	70777	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	128	0.2216	7M

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

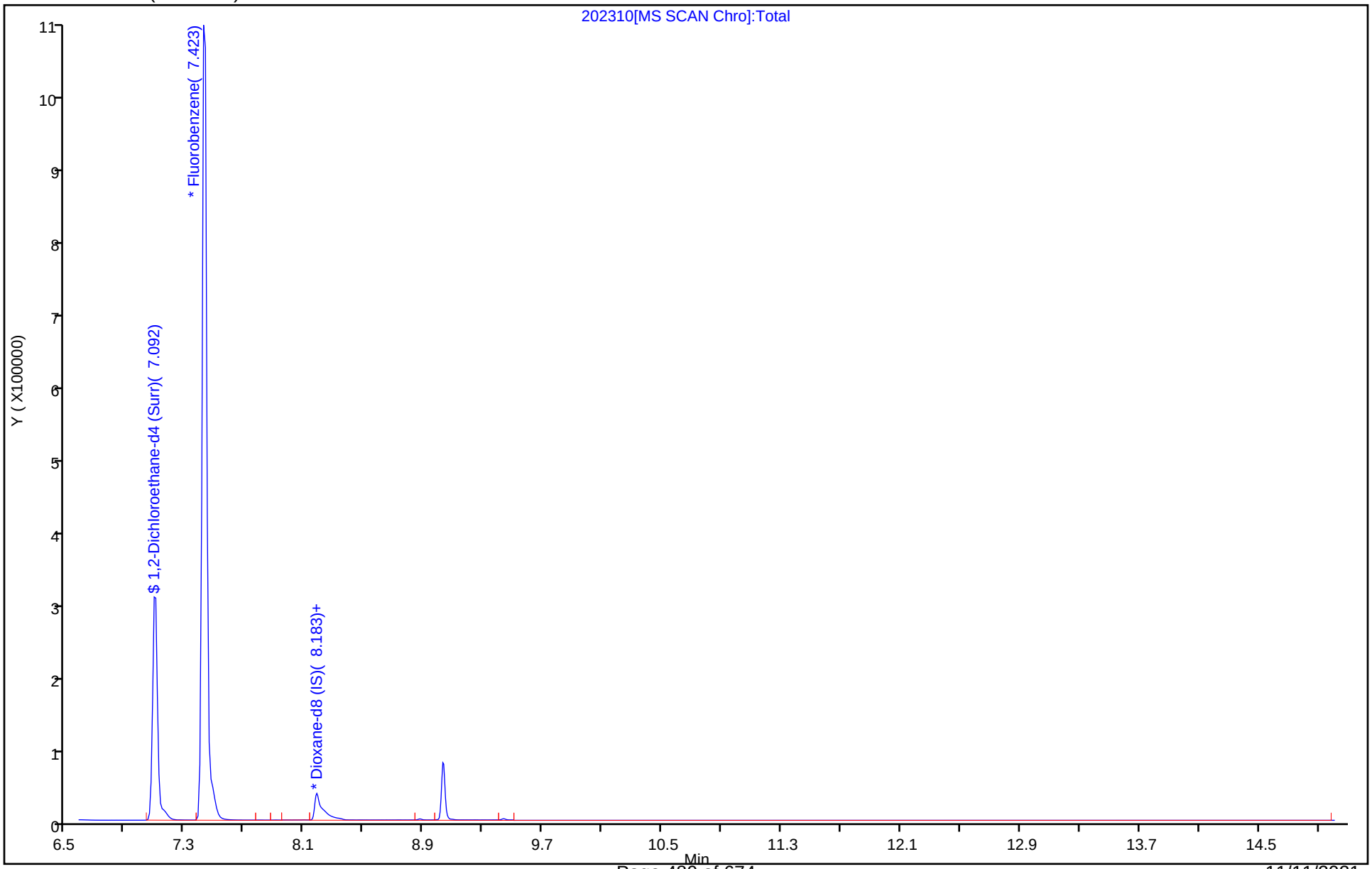
Report Date: 10-Nov-2021 14:35:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202310.D

Injection Date:	09-Nov-2021 14:50:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-4	Lab Sample ID:	240-159369-4	Worklist Smp#:	8
Client ID:	SL-13_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202310.D				
Lims ID:	240-159369-A-4				
Client ID:	SL-13_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 14:50:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:23:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.39	93.93

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

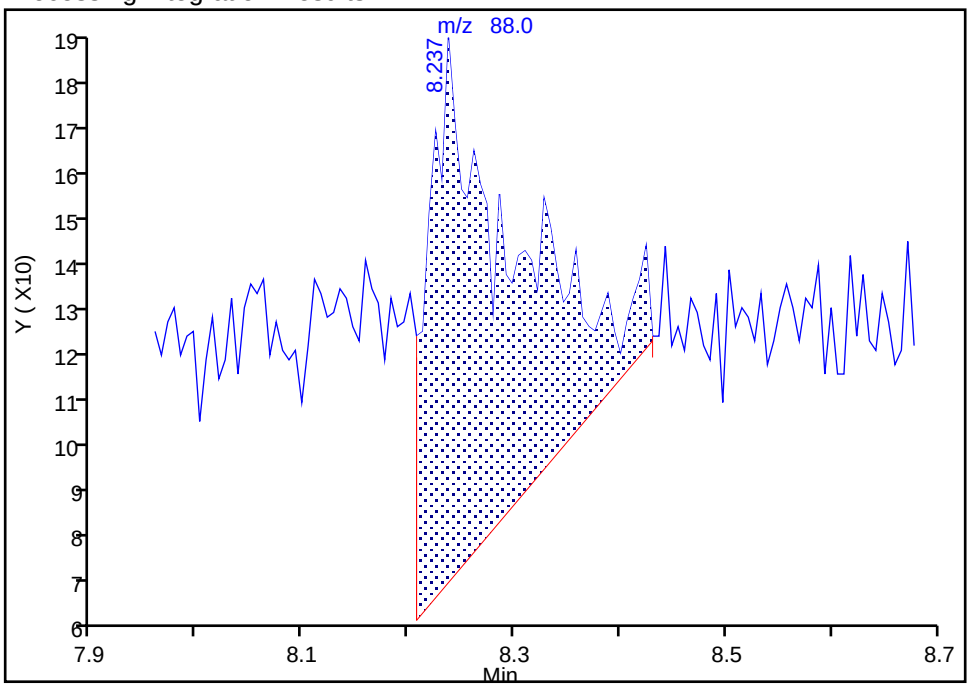
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202310.D				
Injection Date:	09-Nov-2021 14:50:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-4	Lab Sample ID:	240-159369-4		
Client ID:	SL-13_110221				
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

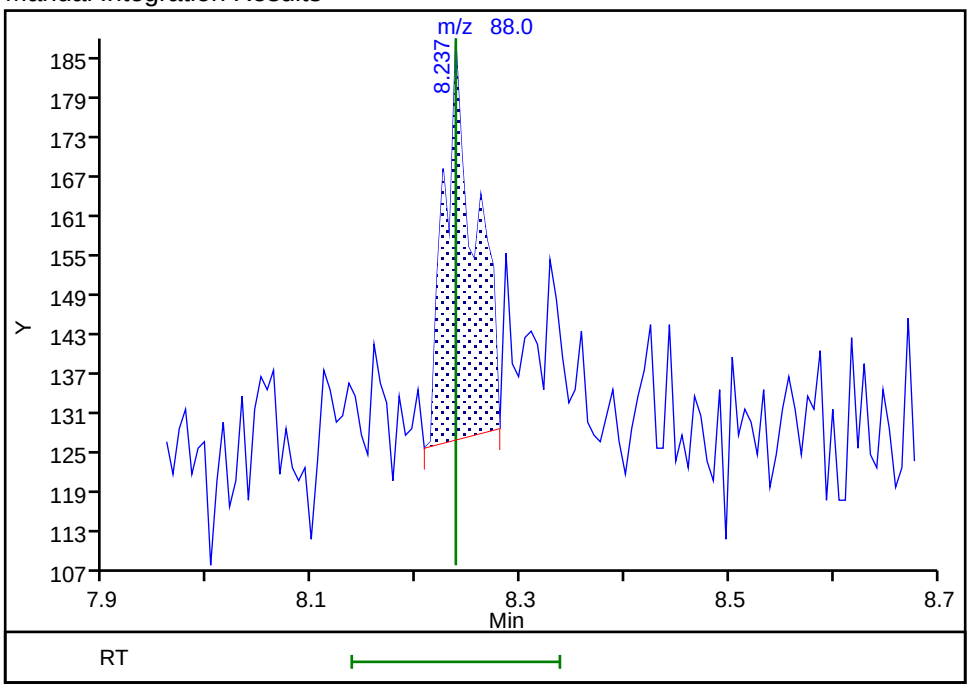
Processing Integration Results

RT: 8.24
Area: 654
Amount: 1.132177
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 128
Amount: 0.221588
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:23:29

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-7_110221 Lab Sample ID: 240-159369-5

Matrix: Water Lab File ID: 202311.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 09:40

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 15:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202311.D				
Lims ID:	240-159369-A-5				
Client ID:	SL-7_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 15:14:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:23:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	707246	8.99	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2464139	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	63996	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

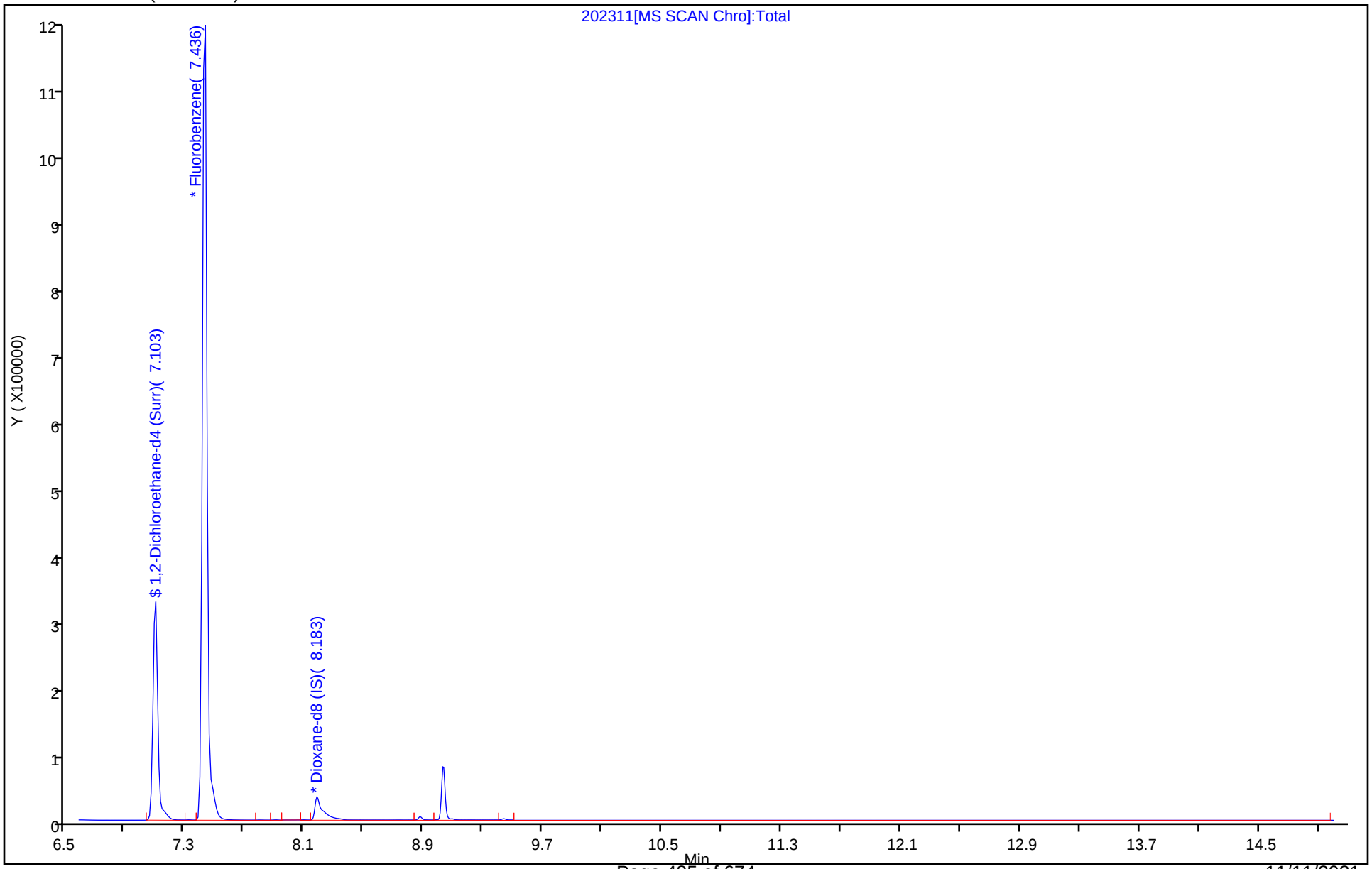
Report Date: 10-Nov-2021 14:35:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202311.D

Injection Date:	09-Nov-2021 15:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-5	Lab Sample ID:	240-159369-5	Worklist Smp#:	9
Client ID:	SL-7_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202311.D				
Lims ID:	240-159369-A-5				
Client ID:	SL-7_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 15:14:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:23:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.99	89.88

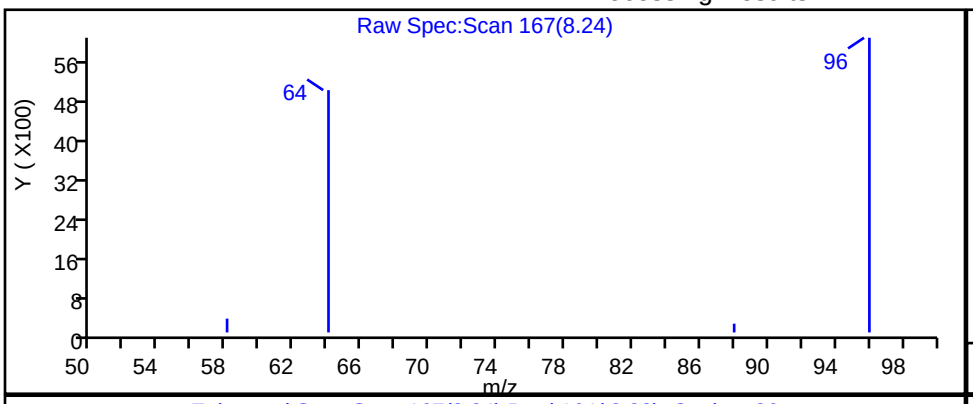
User Disabled Compound Report

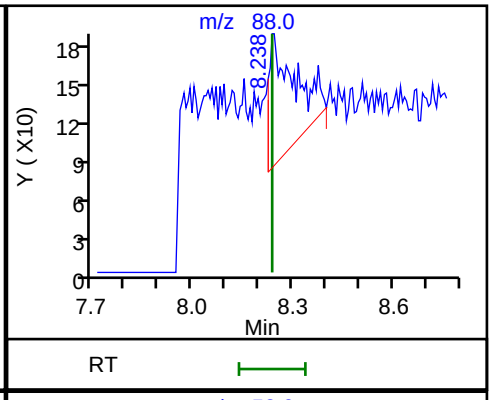
Eurofins TestAmerica, Canton

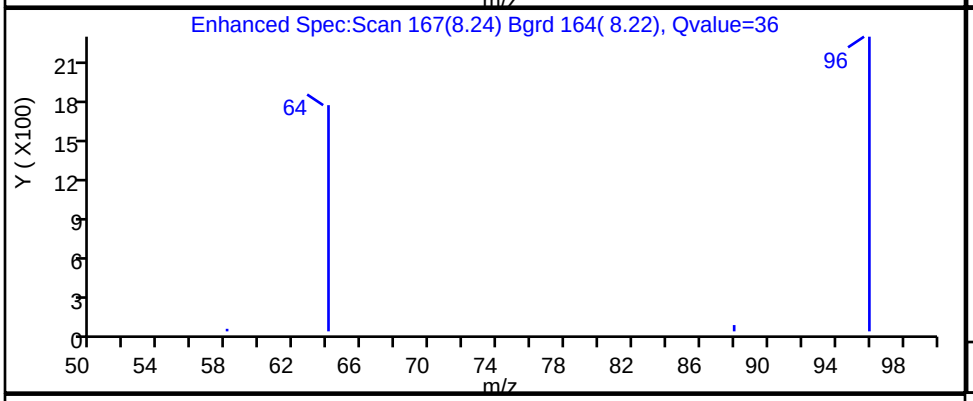
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202311.D				
Injection Date:	09-Nov-2021 15:14:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-5	Lab Sample ID:	240-159369-5		
Client ID:	SL-7_110221				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

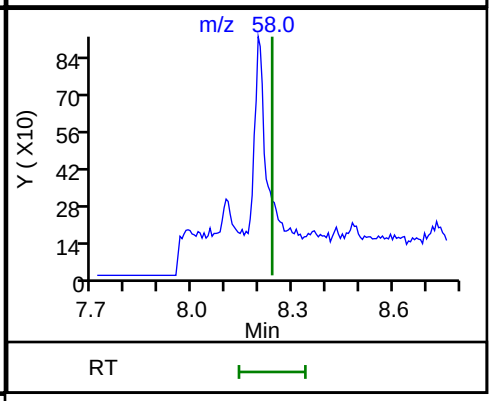
8 1,4-Dioxane, CAS: 123-91-1

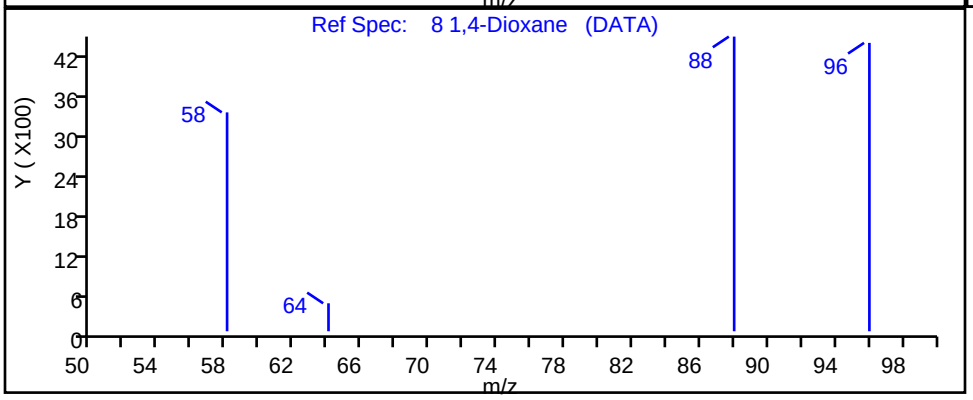
Processing Results











RT	Mass	Response	Amount
8.24	88.00	503	0.963039
8.24	58.00	0	

Reviewer: seymourc, 10-Nov-2021 14:34:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-6_110221 Lab Sample ID: 240-159369-6

Matrix: Water Lab File ID: 202314.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 10:05

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 16:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202314.D				
Lims ID:	240-159369-C-6				
Client ID:	SL-6_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 16:25:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:24:34		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	99	646705	8.76	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2312197	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	58274	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

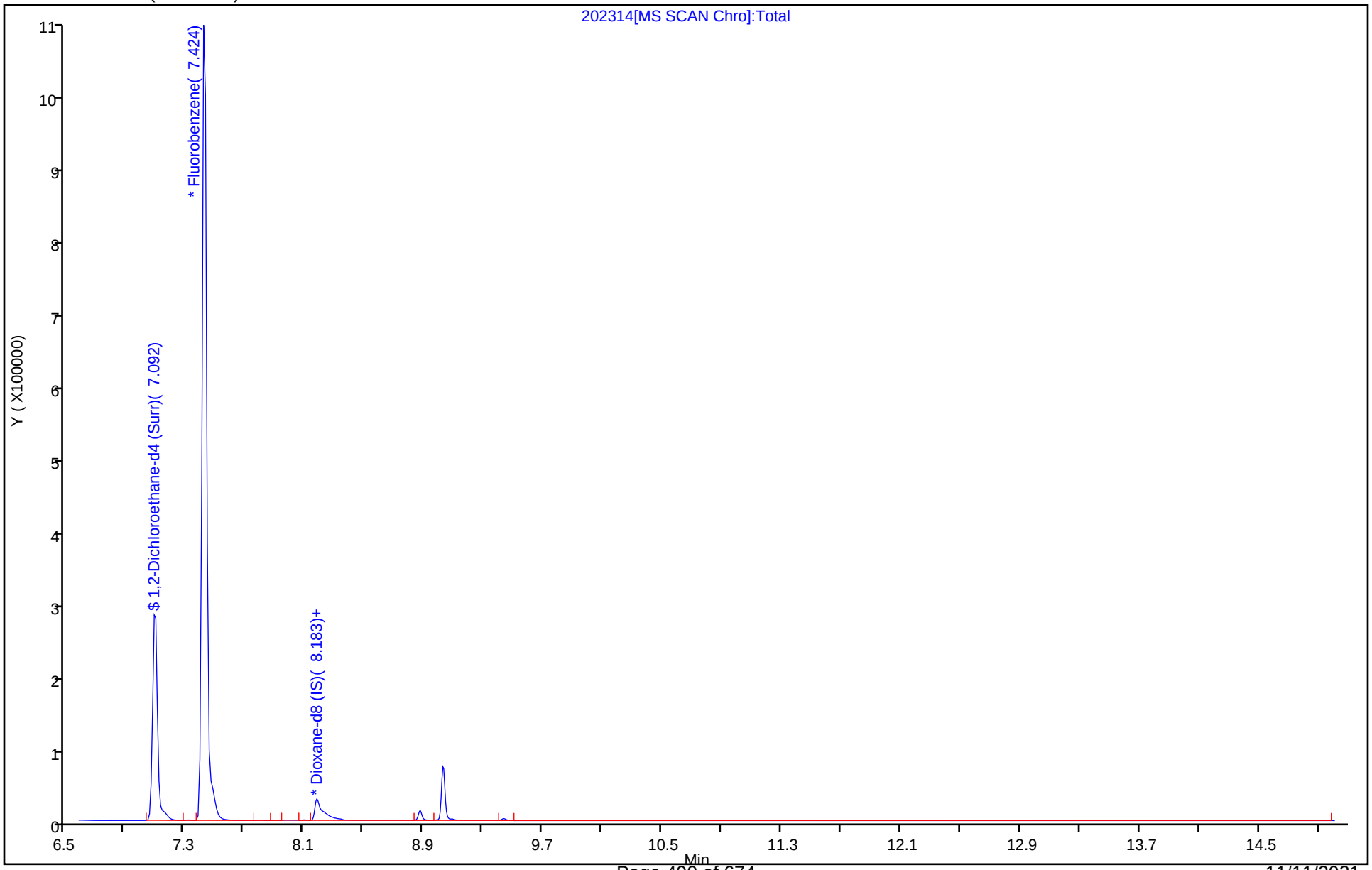
Report Date: 10-Nov-2021 14:35:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202314.D

Injection Date:	09-Nov-2021 16:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-6	Lab Sample ID:	240-159369-6	Worklist Smp#:	12
Client ID:	SL-6_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202314.D				
Lims ID:	240-159369-C-6				
Client ID:	SL-6_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 16:25:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:24:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.76	87.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-5_110221 Lab Sample ID: 240-159369-7

Matrix: Water Lab File ID: 202315.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 10:35

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 16:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202315.D				
Lims ID:	240-159369-C-7				
Client ID:	SL-5_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 16:49:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:25:02		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	611616	9.21	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2079293	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	94	64627	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	1224	2.32	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

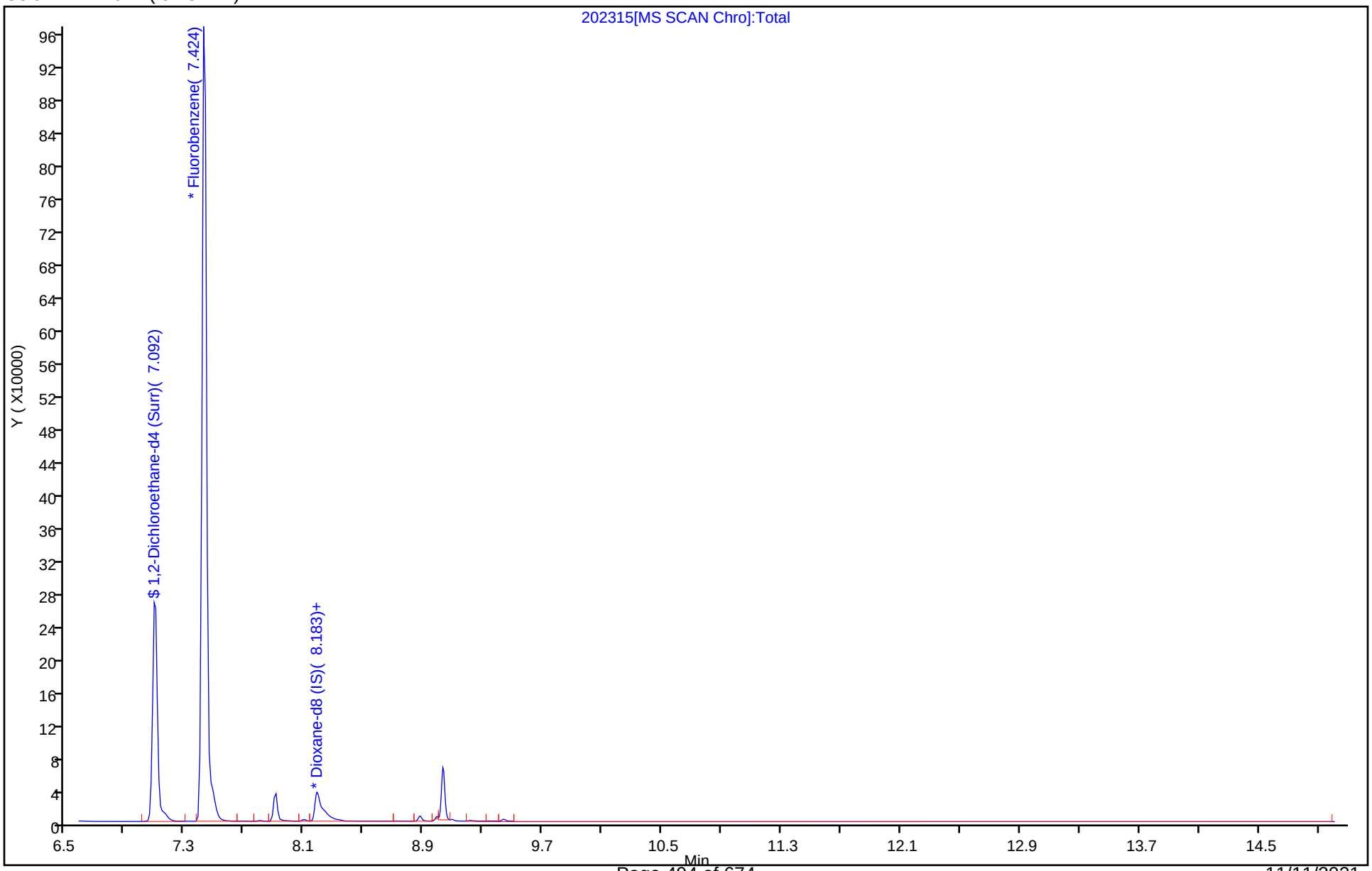
Report Date: 10-Nov-2021 14:35:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202315.D

Injection Date:	09-Nov-2021 16:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-7	Lab Sample ID:	240-159369-7	Worklist Smp#:	13
Client ID:	SL-5_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202315.D				
Lims ID:	240-159369-C-7				
Client ID:	SL-5_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 16:49:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

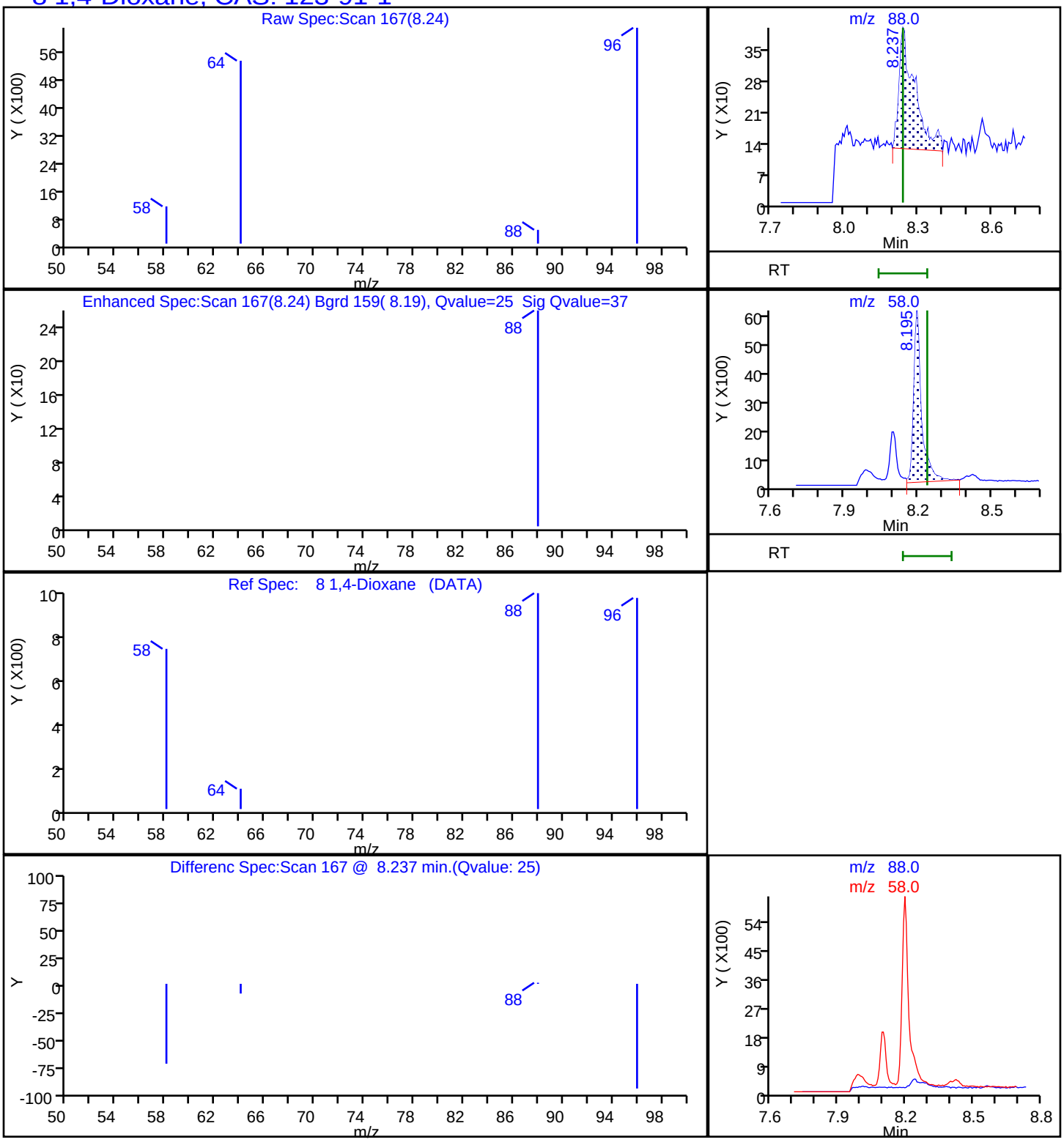
First Level Reviewer: seymourc Date: 10-Nov-2021 14:25:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.21	92.11

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202315.D				
Injection Date:	09-Nov-2021 16:49:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-7	Lab Sample ID:	240-159369-7		
Client ID:	SL-5_110221				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

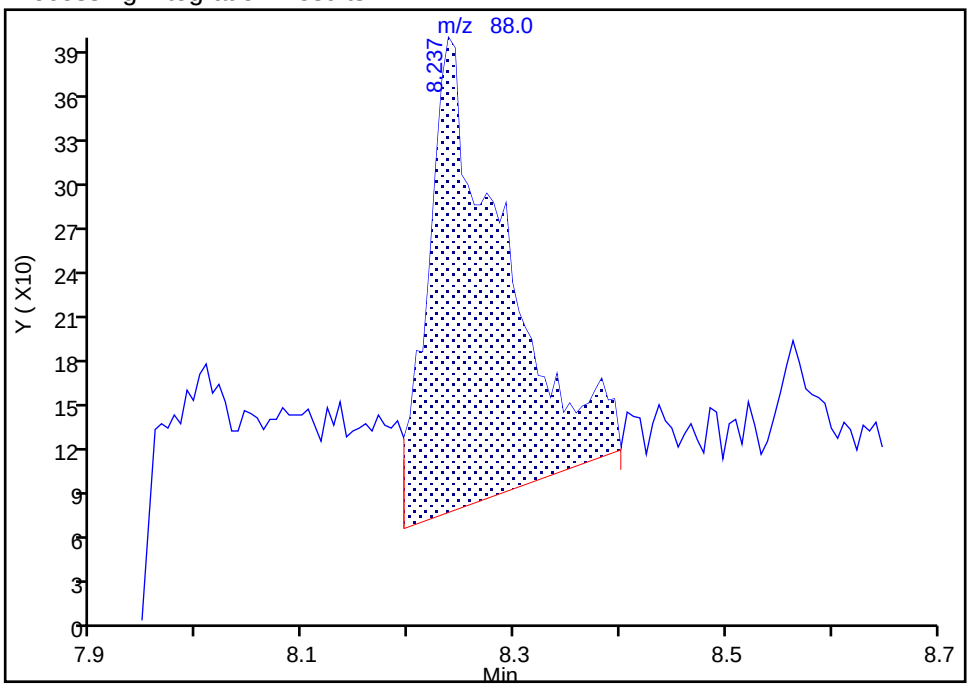
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202315.D				
Injection Date:	09-Nov-2021 16:49:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-7	Lab Sample ID:	240-159369-7		
Client ID:	SL-5_110221				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

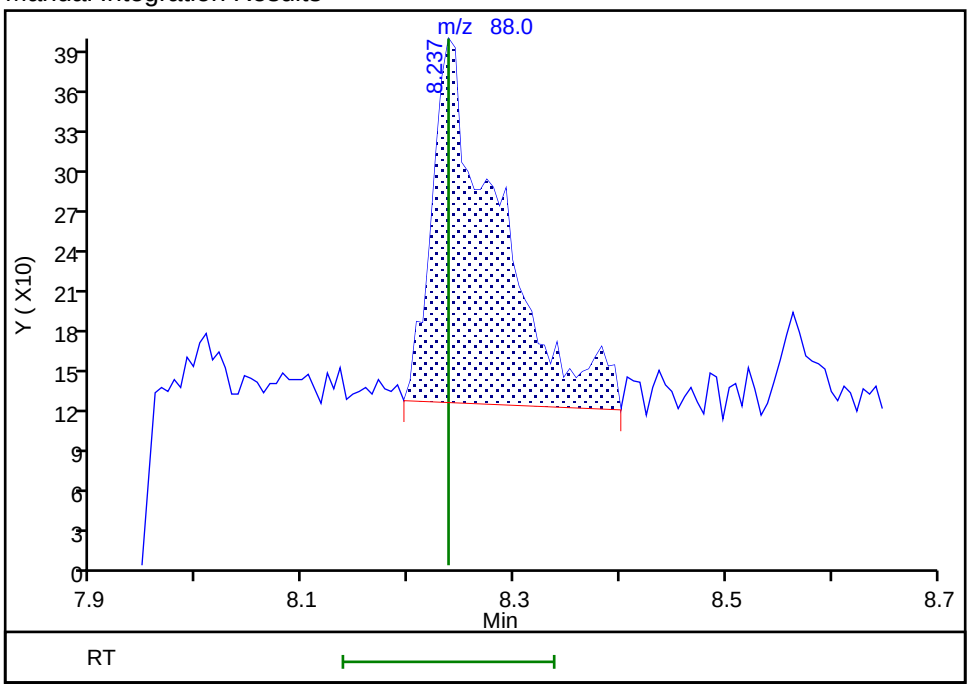
Processing Integration Results

RT: 8.24
Area: 1624
Amount: 3.078937
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1224
Amount: 2.320578
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:24:52

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-8_110221 Lab Sample ID: 240-159369-8

Matrix: Water Lab File ID: 202316.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 11:05

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 17:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202316.D				
Lims ID:	240-159369-C-8				
Client ID:	SL-8_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 17:13:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:25:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	612420	9.44	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2030742	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	64022	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	36	1125	2.15	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

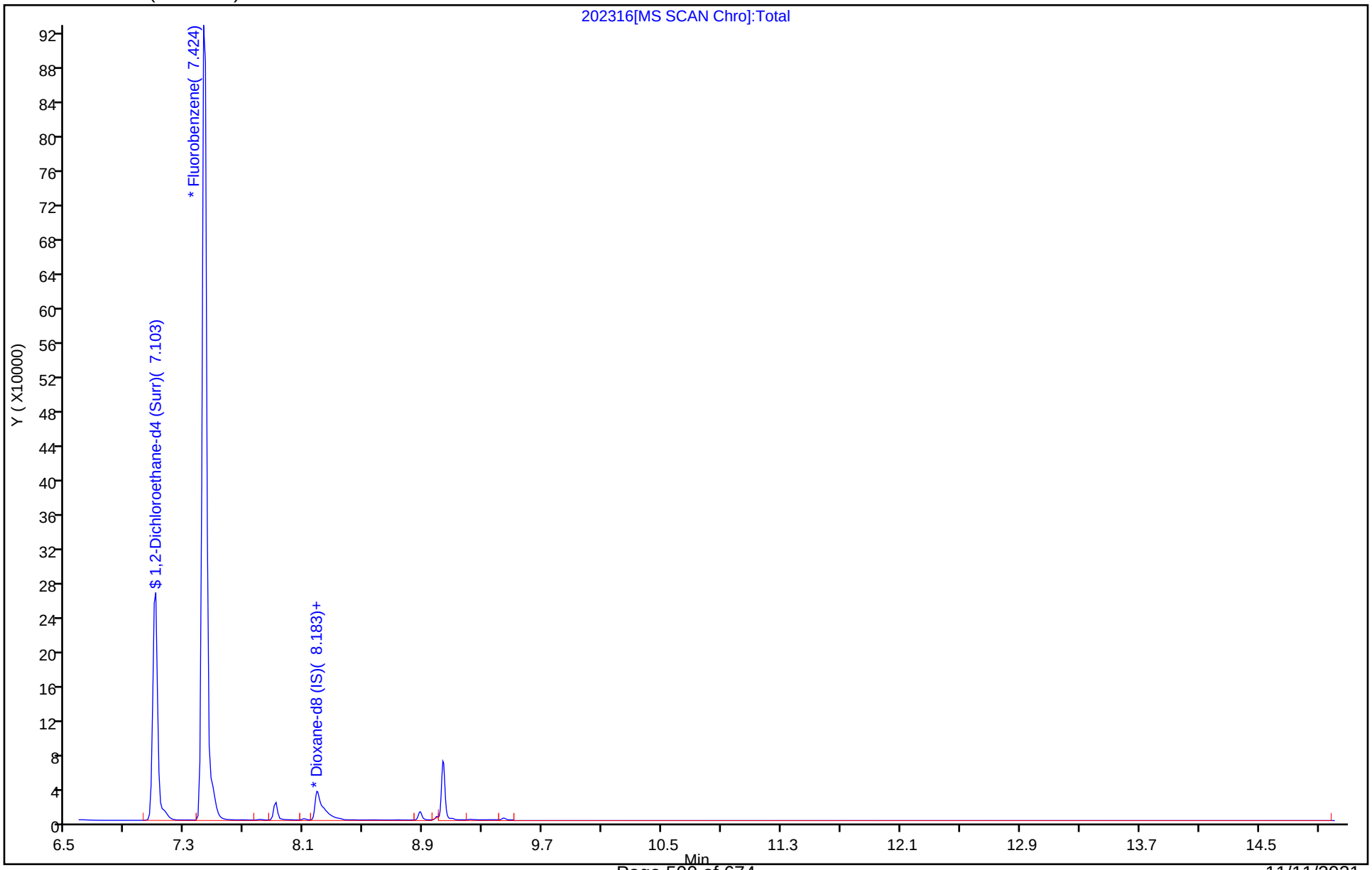
Report Date: 10-Nov-2021 14:35:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202316.D

Injection Date:	09-Nov-2021 17:13:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-8	Lab Sample ID:	240-159369-8	Worklist Smp#:	14
Client ID:	SL-8_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202316.D				
Lims ID:	240-159369-C-8				
Client ID:	SL-8_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 17:13:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

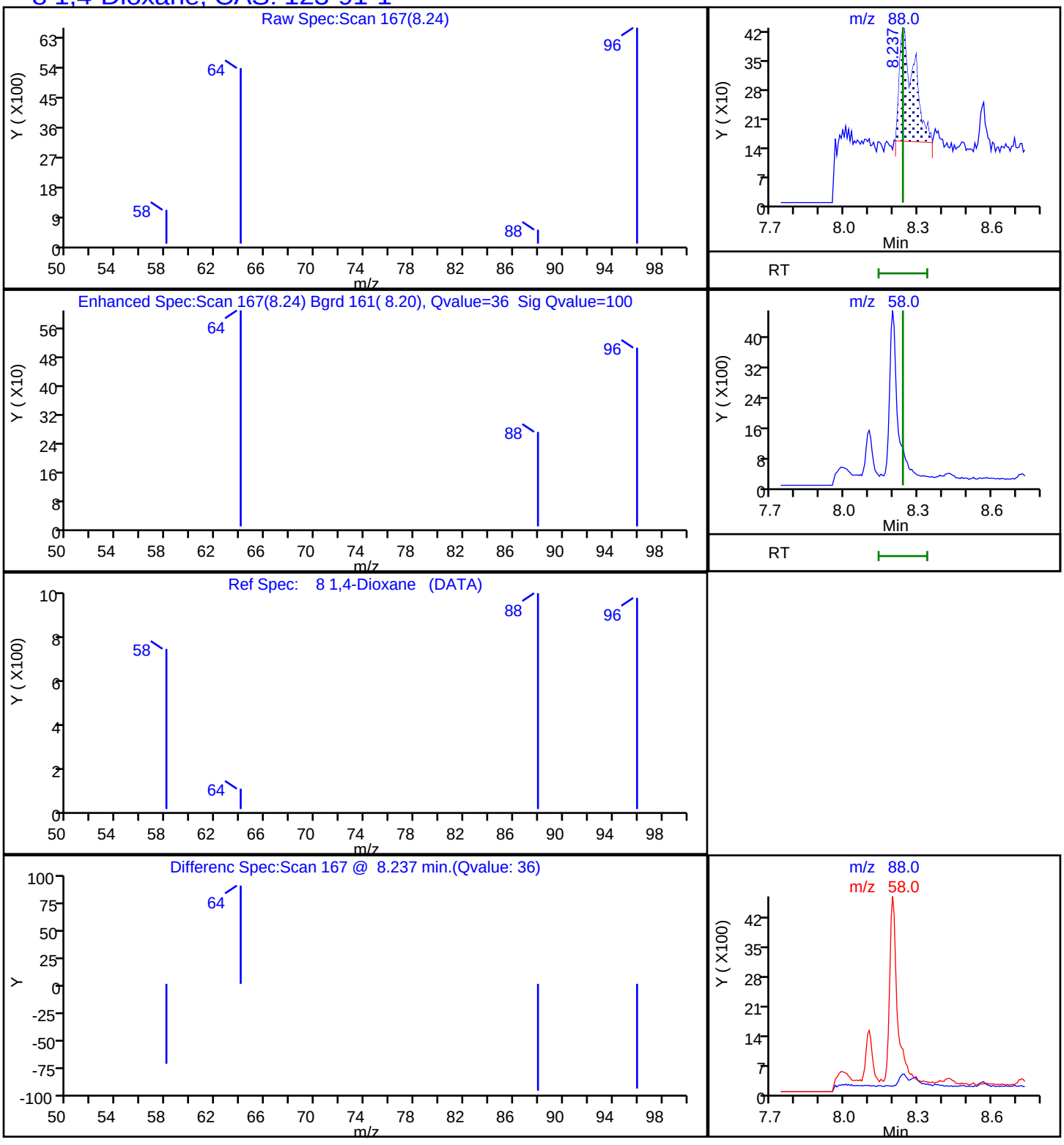
First Level Reviewer: seymourc Date: 10-Nov-2021 14:25:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.44	94.43

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202316.D				
Injection Date:	09-Nov-2021 17:13:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-8	Lab Sample ID:	240-159369-8		
Client ID:	SL-8_110221				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

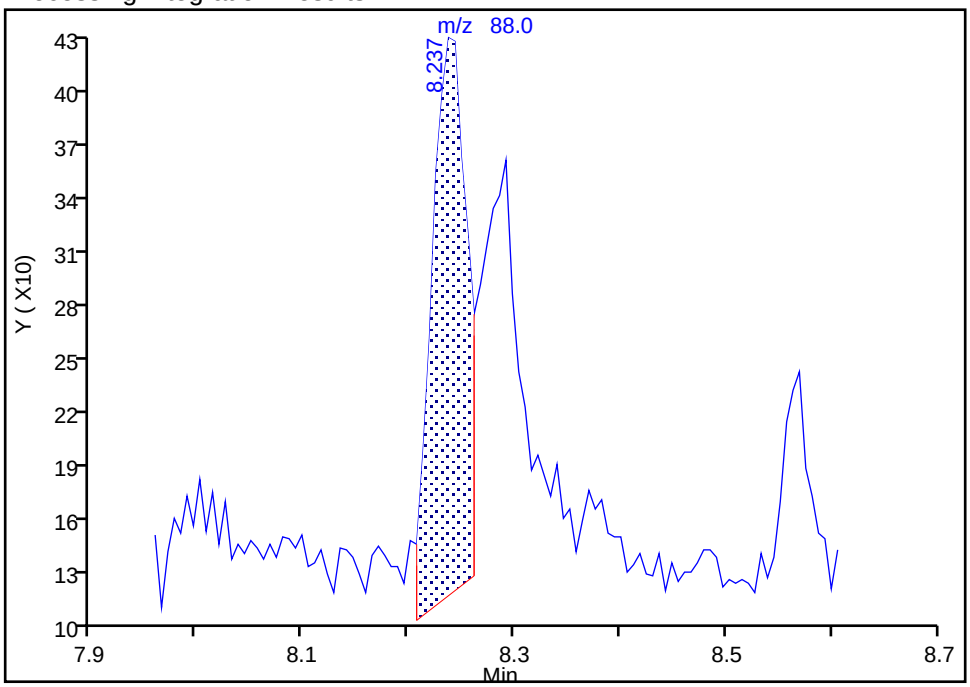
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202316.D				
Injection Date:	09-Nov-2021 17:13:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-8	Lab Sample ID:	240-159369-8		
Client ID:	SL-8_110221				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

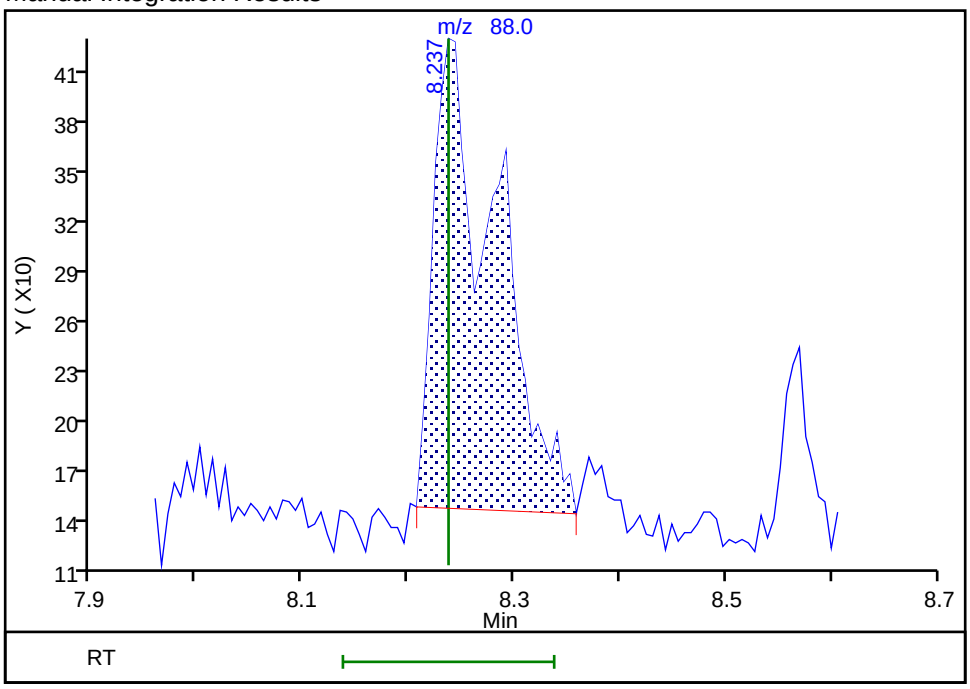
Processing Integration Results

RT: 8.24
Area: 703
Amount: 1.345410
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1125
Amount: 2.153040
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:25:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-9_110221 Lab Sample ID: 240-159369-9

Matrix: Water Lab File ID: 202317.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 12:25

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 17:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202317.D				
Lims ID:	240-159369-C-9				
Client ID:	SL-9_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 17:37:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:26:57		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	613629	9.03	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2127221	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	61719	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	31	1125	2.23	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

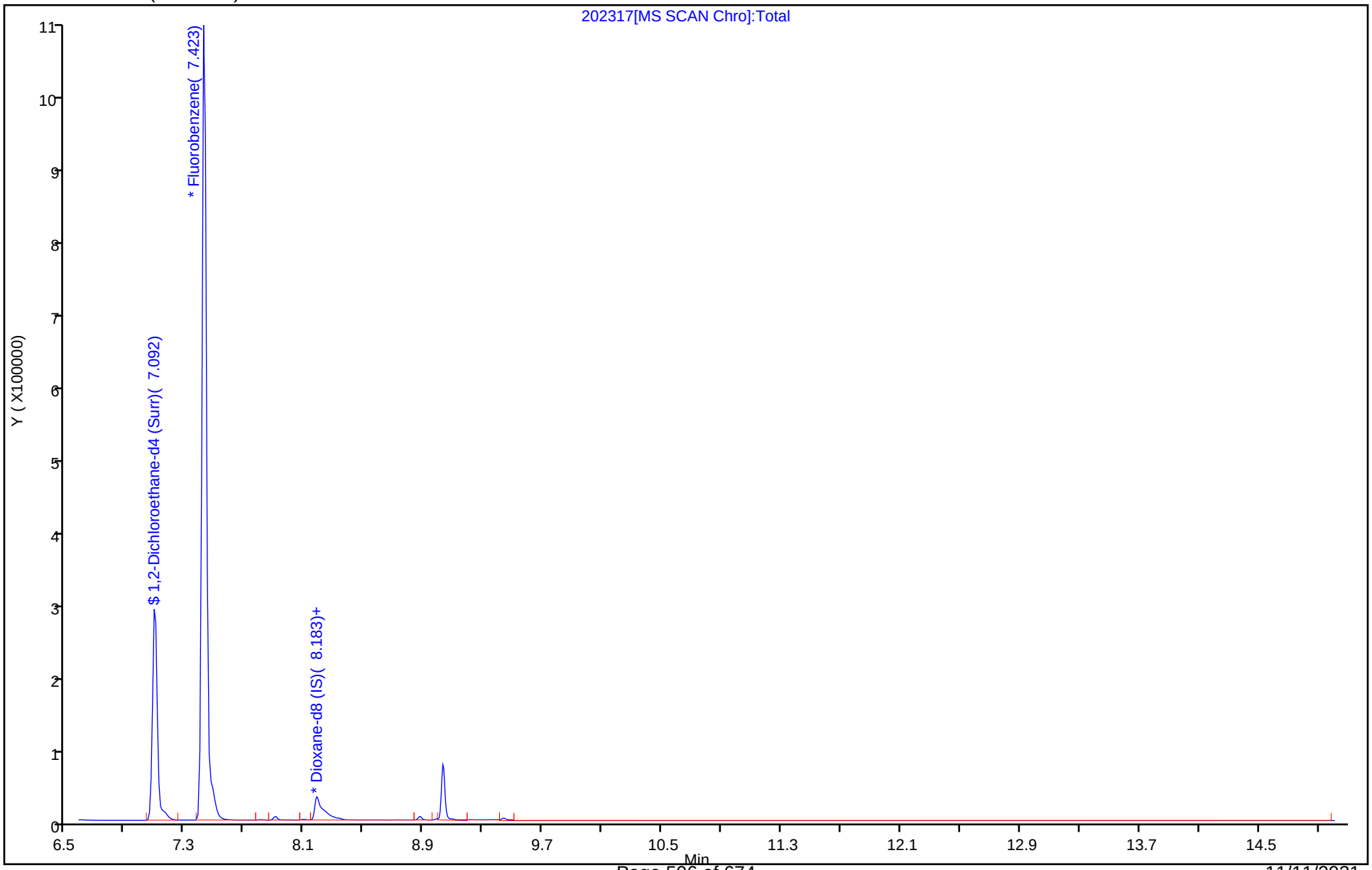
Report Date: 10-Nov-2021 14:35:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202317.D

Injection Date:	09-Nov-2021 17:37:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-9	Lab Sample ID:	240-159369-9	Worklist Smp#:	15
Client ID:	SL-9_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



11/11/2021

Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202317.D				
Lims ID:	240-159369-C-9				
Client ID:	SL-9_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 17:37:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

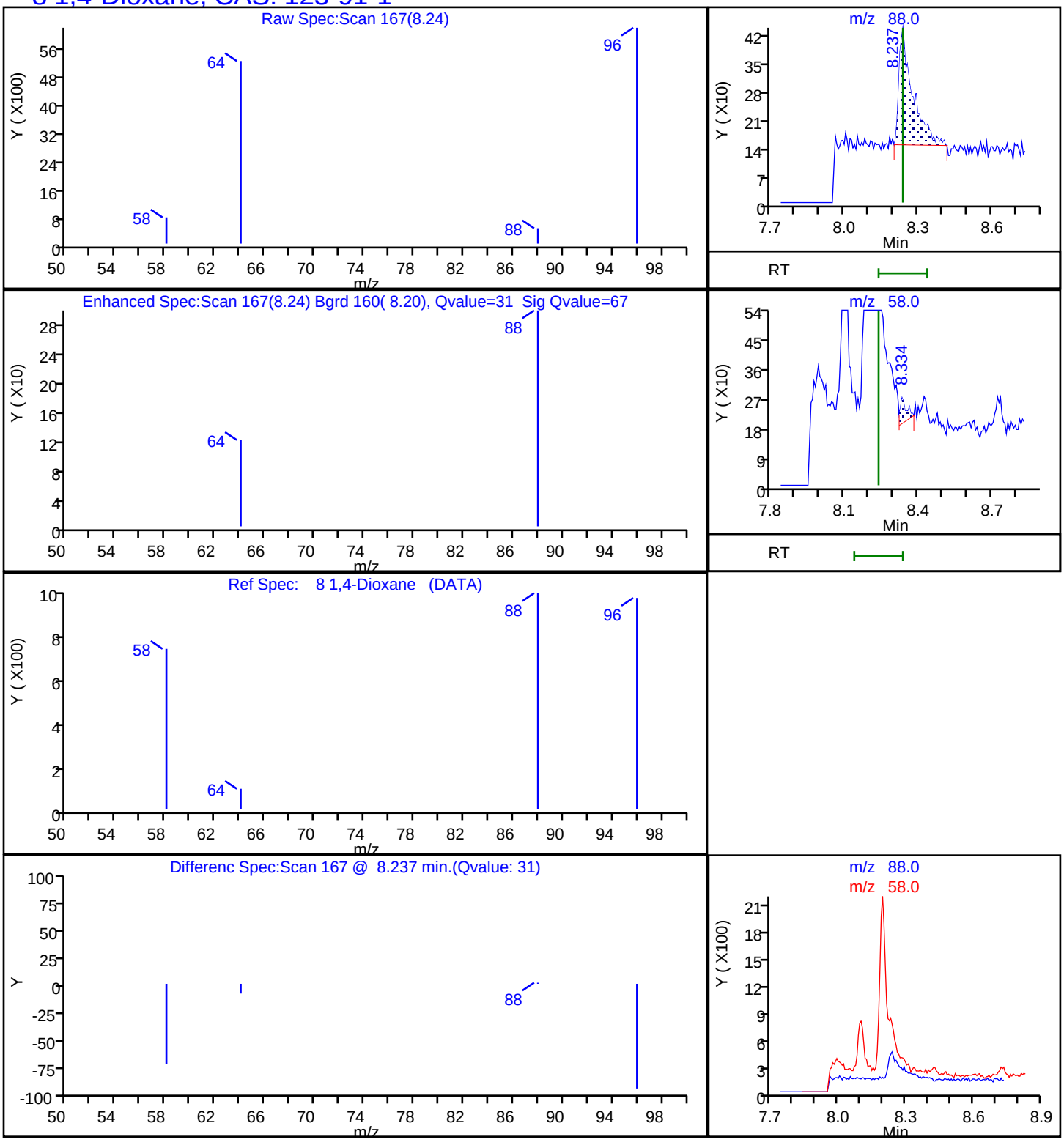
First Level Reviewer: seymourc Date: 10-Nov-2021 14:26:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.03	90.33

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202317.D				
Injection Date:	09-Nov-2021 17:37:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-9	Lab Sample ID:	240-159369-9		
Client ID:	SL-9_110221				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

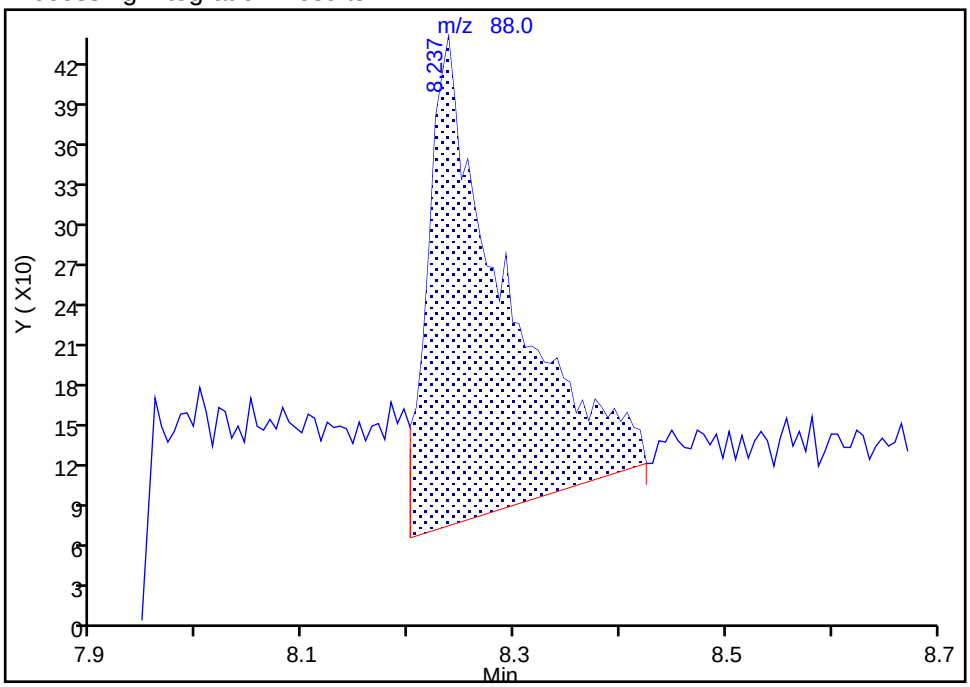
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202317.D				
Injection Date:	09-Nov-2021 17:37:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-9	Lab Sample ID:	240-159369-9		
Client ID:	SL-9_110221				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

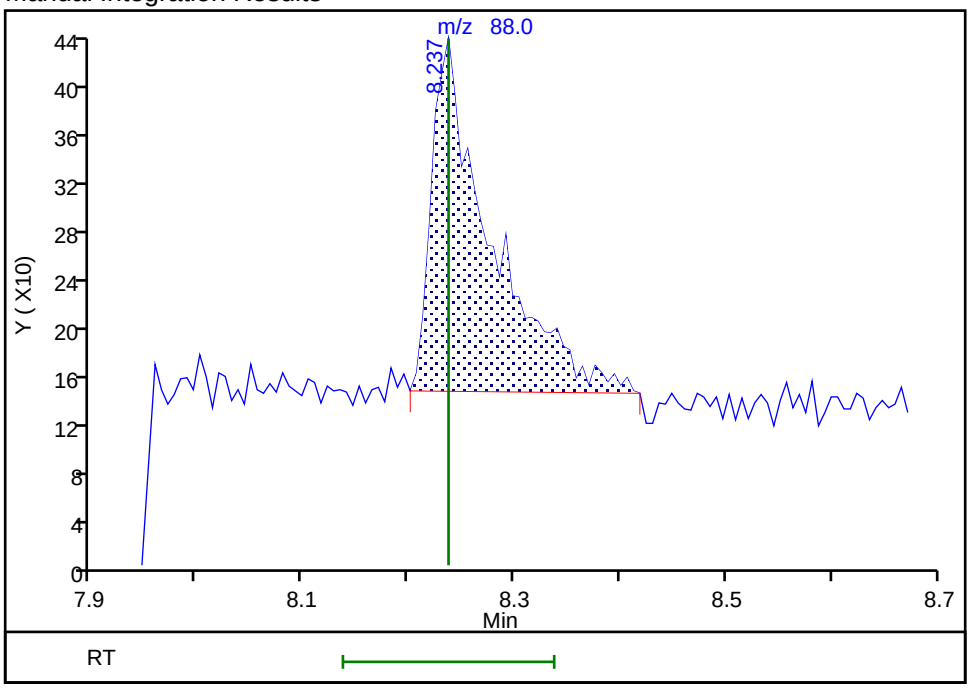
Processing Integration Results

RT: 8.24
Area: 1859
Amount: 3.690534
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1125
Amount: 2.233379
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:26:40

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-10_110221 Lab Sample ID: 240-159369-10

Matrix: Water Lab File ID: 202318.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 12:40

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202318.D				
Lims ID:	240-159369-C-10				
Client ID:	SL-10_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:01:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:27:12		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	99	626358	9.05	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2166077	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	60768	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	1002	2.02	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

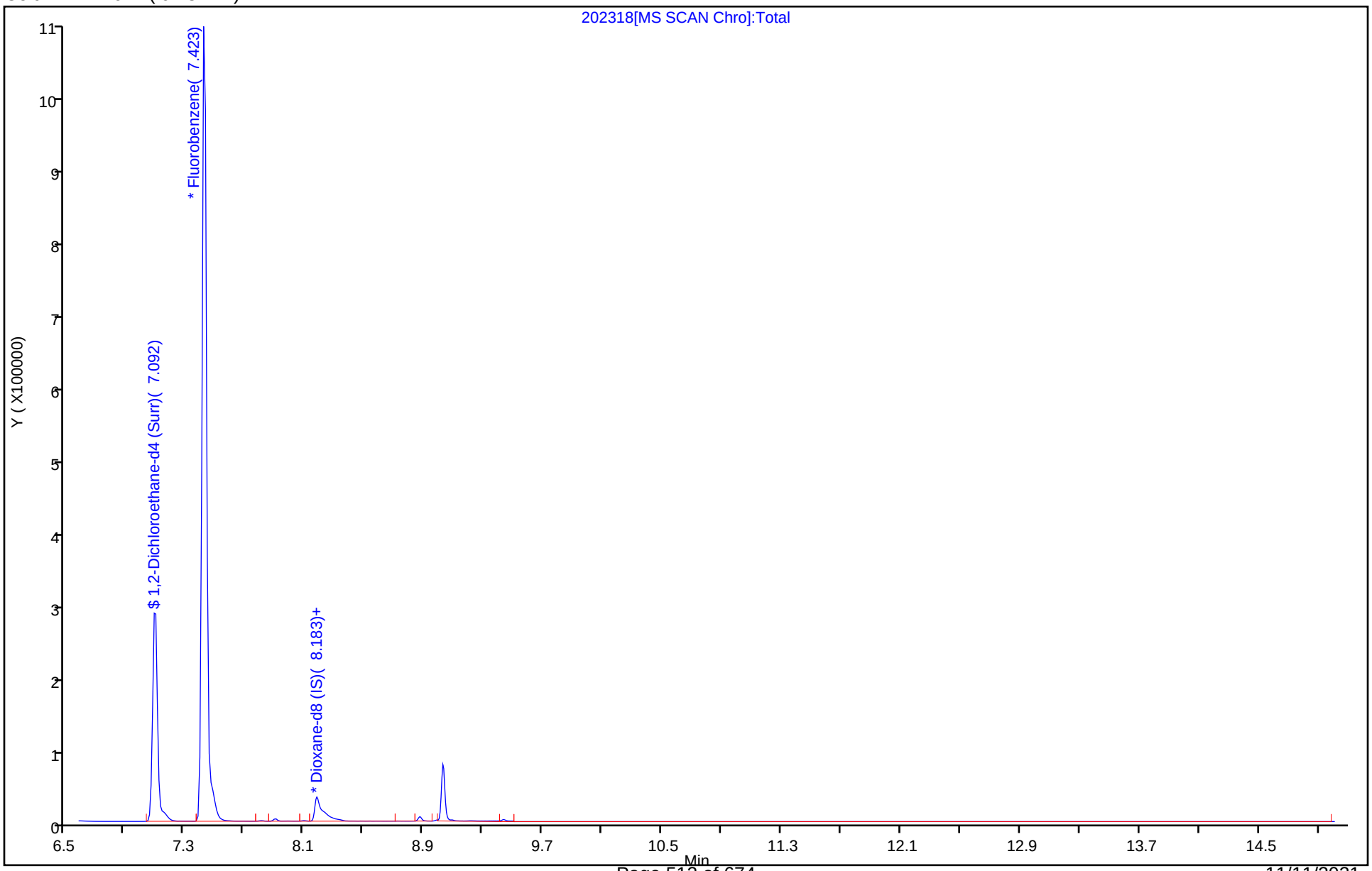
Report Date: 10-Nov-2021 14:35:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202318.D

Injection Date:	09-Nov-2021 18:01:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-10	Lab Sample ID:	240-159369-10	Worklist Smp#:	16
Client ID:	SL-10_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202318.D				
Lims ID:	240-159369-C-10				
Client ID:	SL-10_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:01:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

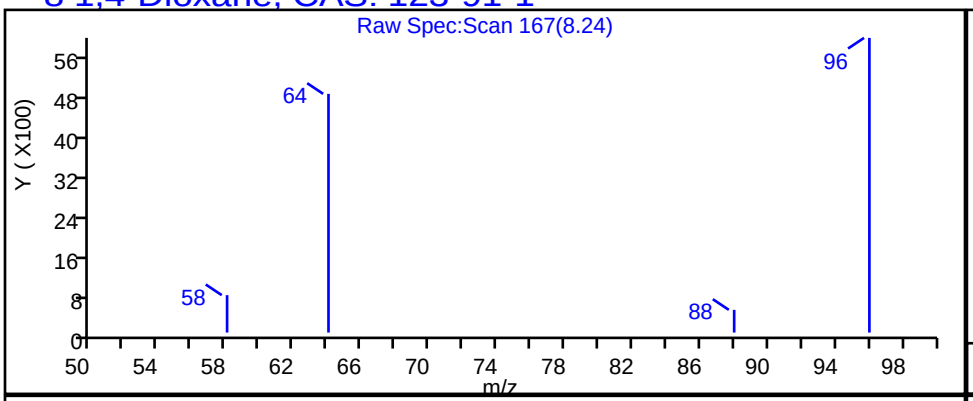
First Level Reviewer: seymourc Date: 10-Nov-2021 14:27:12

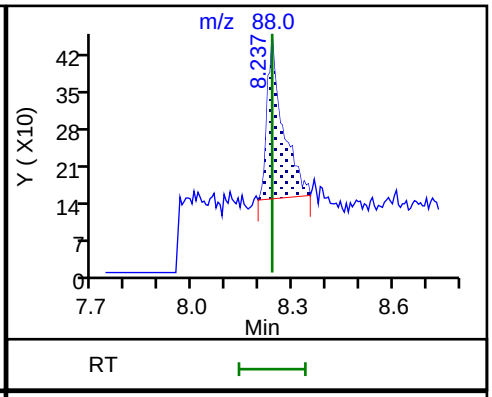
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.05	90.55

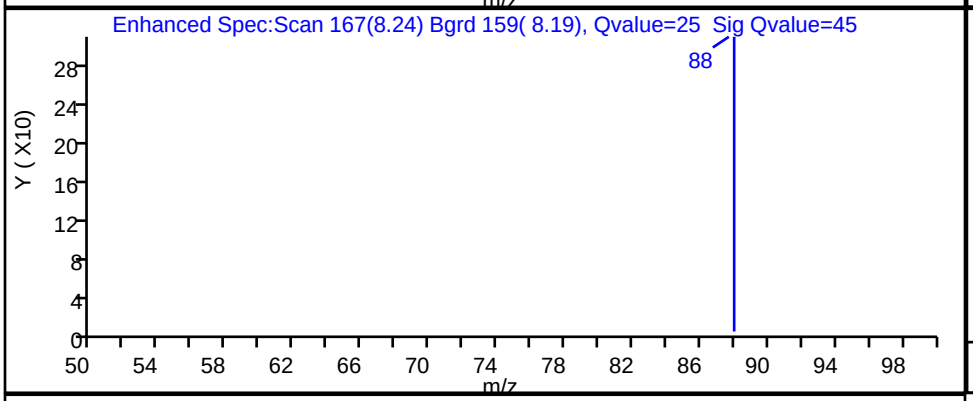
Eurofins TestAmerica, Canton

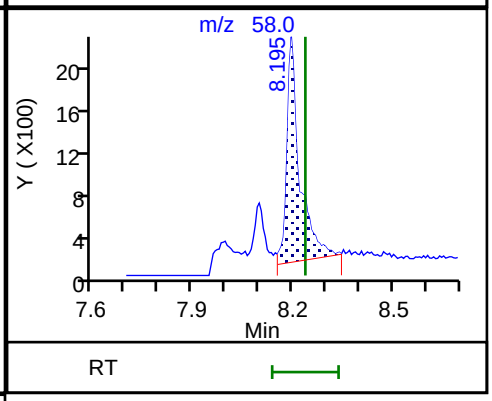
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202318.D				
Injection Date:	09-Nov-2021 18:01:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-10	Lab Sample ID:	240-159369-10		
Client ID:	SL-10_110221				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

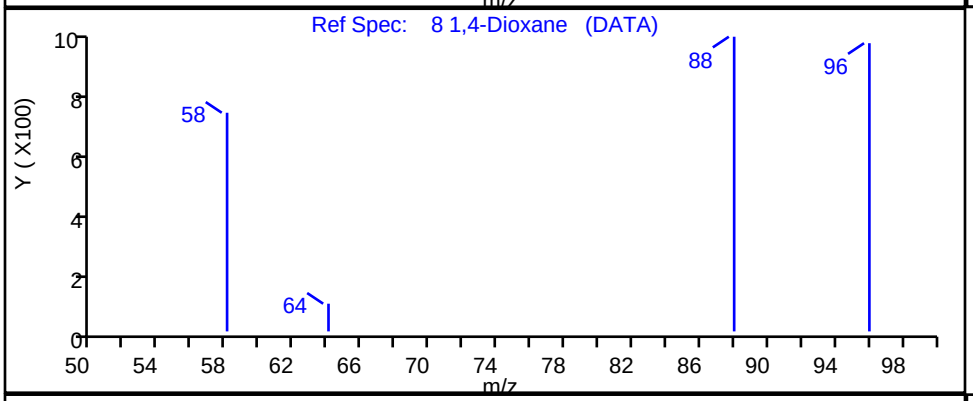
8 1,4-Dioxane, CAS: 123-91-1

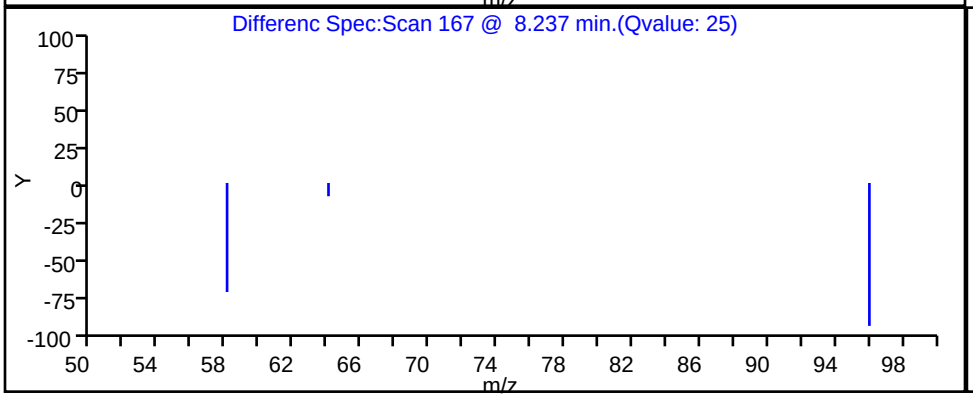


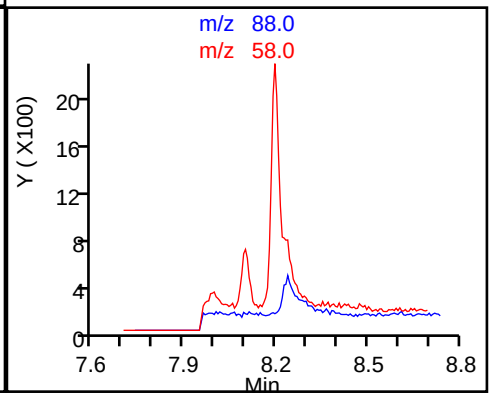












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

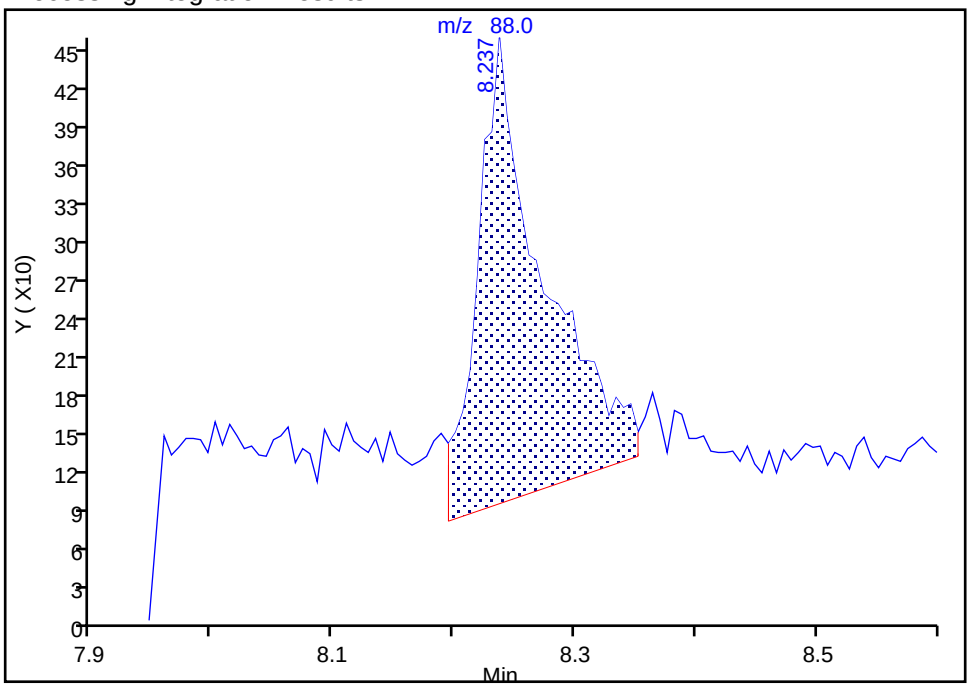
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202318.D				
Injection Date:	09-Nov-2021 18:01:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-10	Lab Sample ID:	240-159369-10		
Client ID:	SL-10_110221				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

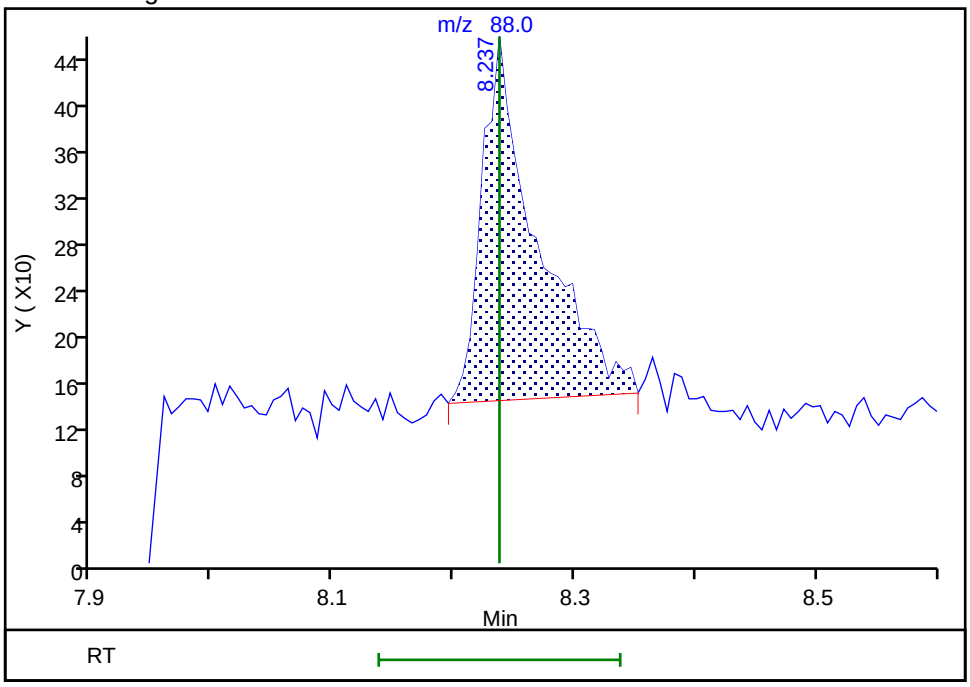
Processing Integration Results

RT: 8.24
Area: 1393
Amount: 2.808697
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1002
Amount: 2.020326
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:27:07

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-11_110221 Lab Sample ID: 240-159369-11

Matrix: Water Lab File ID: 202319.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 13:05

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 18:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.5	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202319.D				
Lims ID:	240-159369-C-11				
Client ID:	SL-11_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:25:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:27:52		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	647994	9.09	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2232240	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	96	62328	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	788	1.55	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

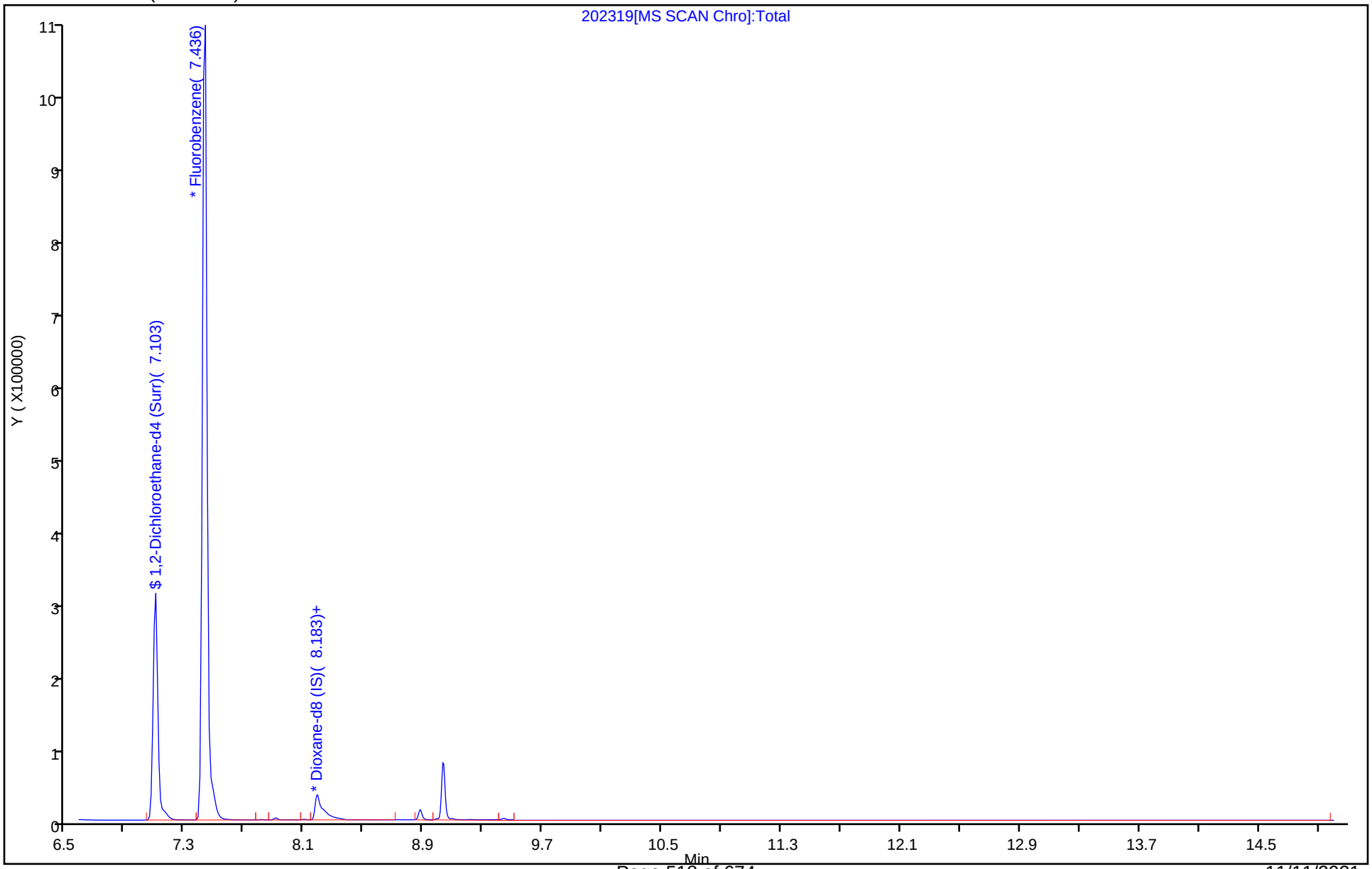
Report Date: 10-Nov-2021 14:35:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202319.D

Injection Date:	09-Nov-2021 18:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-11	Lab Sample ID:	240-159369-11	Worklist Smp#:	17
Client ID:	SL-11_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202319.D				
Lims ID:	240-159369-C-11				
Client ID:	SL-11_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:25:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

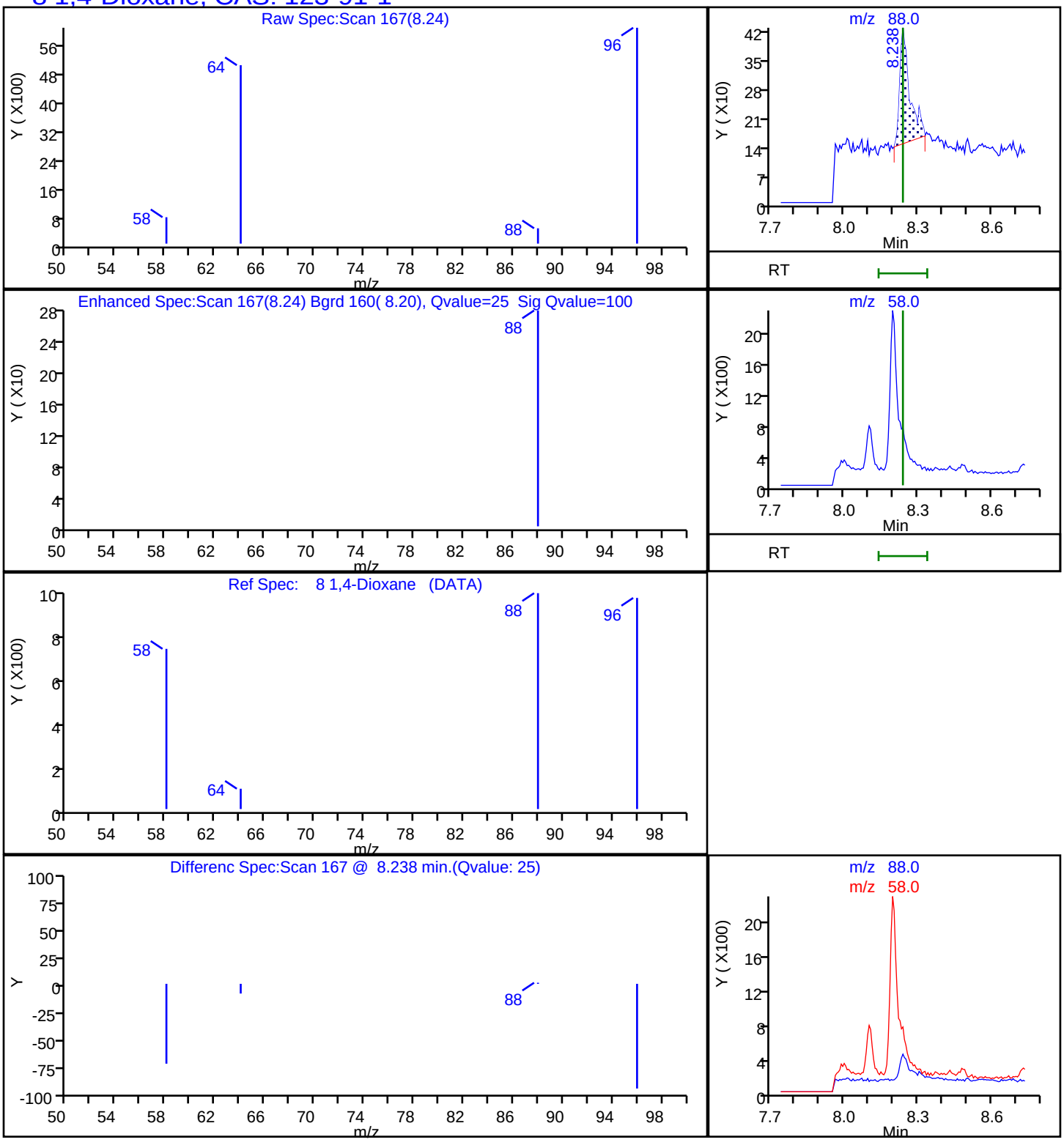
First Level Reviewer: seymourc Date: 10-Nov-2021 14:27:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.09	90.90

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202319.D				
Injection Date:	09-Nov-2021 18:25:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-11	Lab Sample ID:	240-159369-11		
Client ID:	SL-11_110221				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

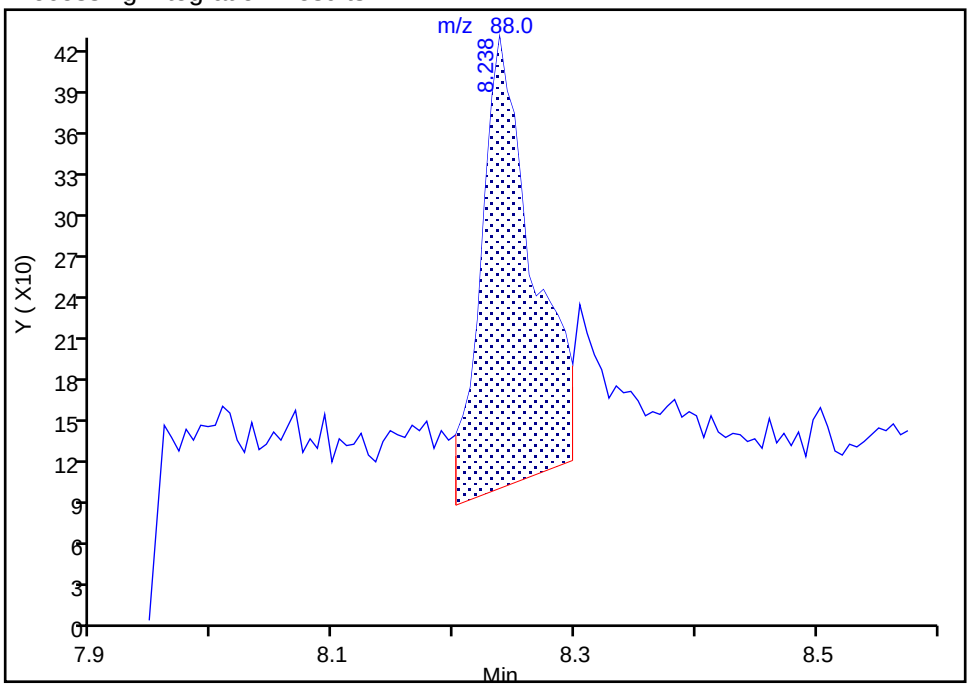
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202319.D				
Injection Date:	09-Nov-2021 18:25:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-11	Lab Sample ID:	240-159369-11		
Client ID:	SL-11_110221				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

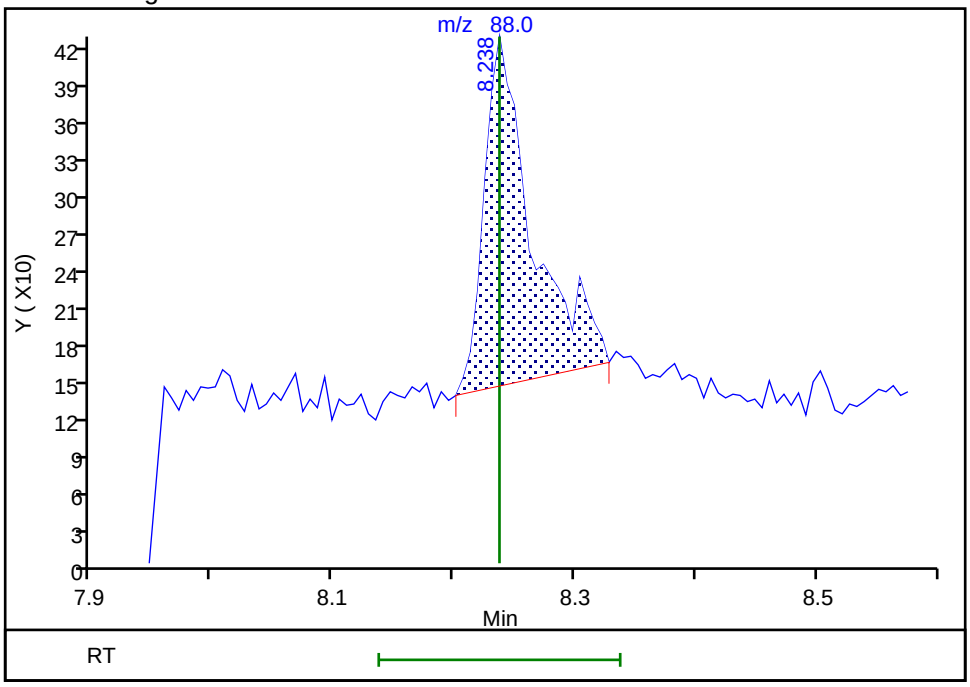
Processing Integration Results

RT: 8.24
Area: 1004
Amount: 1.973691
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 788
Amount: 1.549073
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:27:23

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-12_110221 Lab Sample ID: 240-159369-12

Matrix: Water Lab File ID: 202320.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 13:25

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202320.D				
Lims ID:	240-159369-D-12				
Client ID:	SL-12_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:49:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:28:10		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	651639	9.06	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2252466	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	62979	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	28	241	0.4689	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

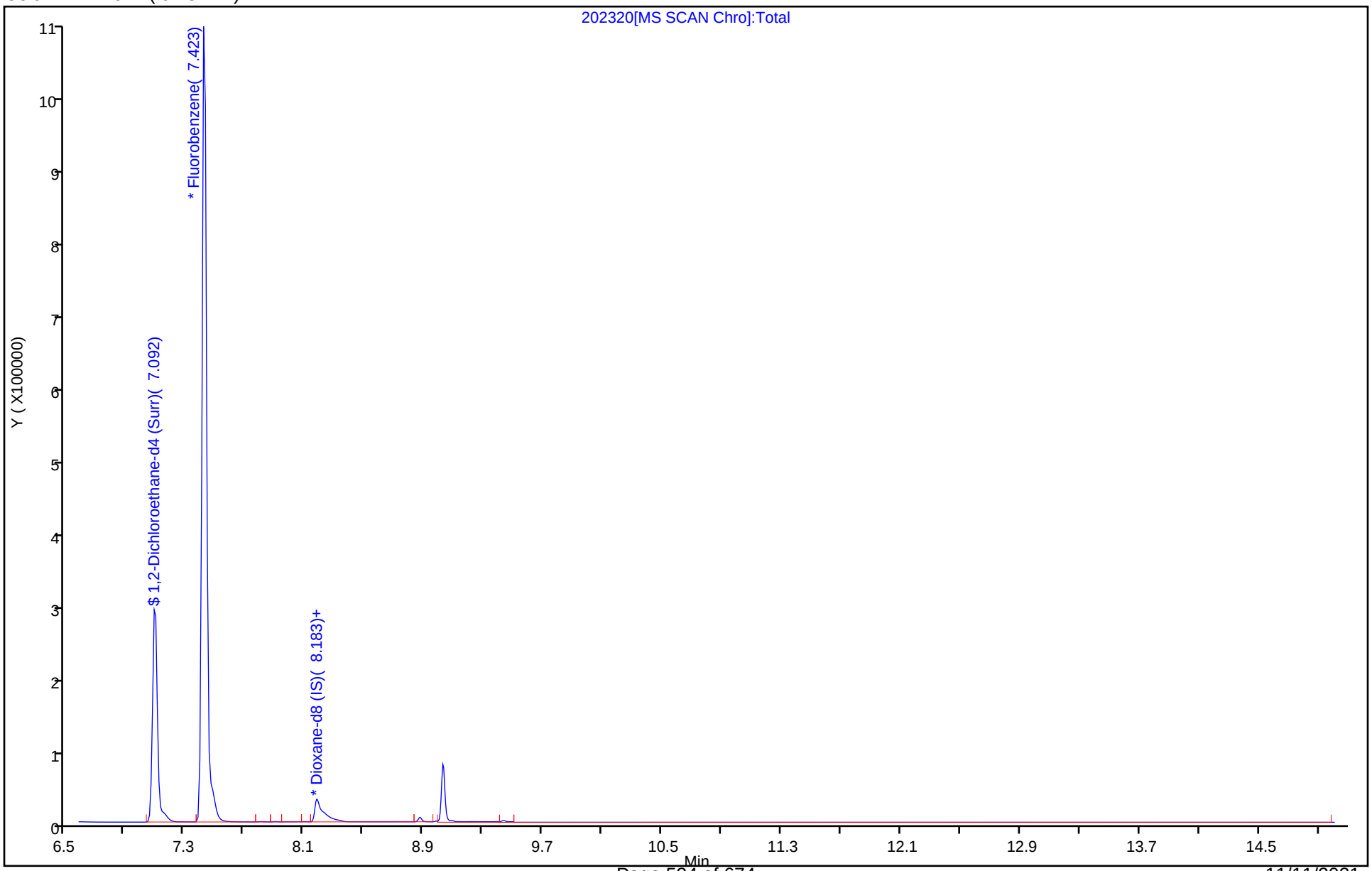
Report Date: 10-Nov-2021 14:35:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202320.D

Injection Date:	09-Nov-2021 18:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-D-12	Lab Sample ID:	240-159369-12	Worklist Smp#:	18
Client ID:	SL-12_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202320.D				
Lims ID:	240-159369-D-12				
Client ID:	SL-12_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 18:49:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:28:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.06	90.59

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

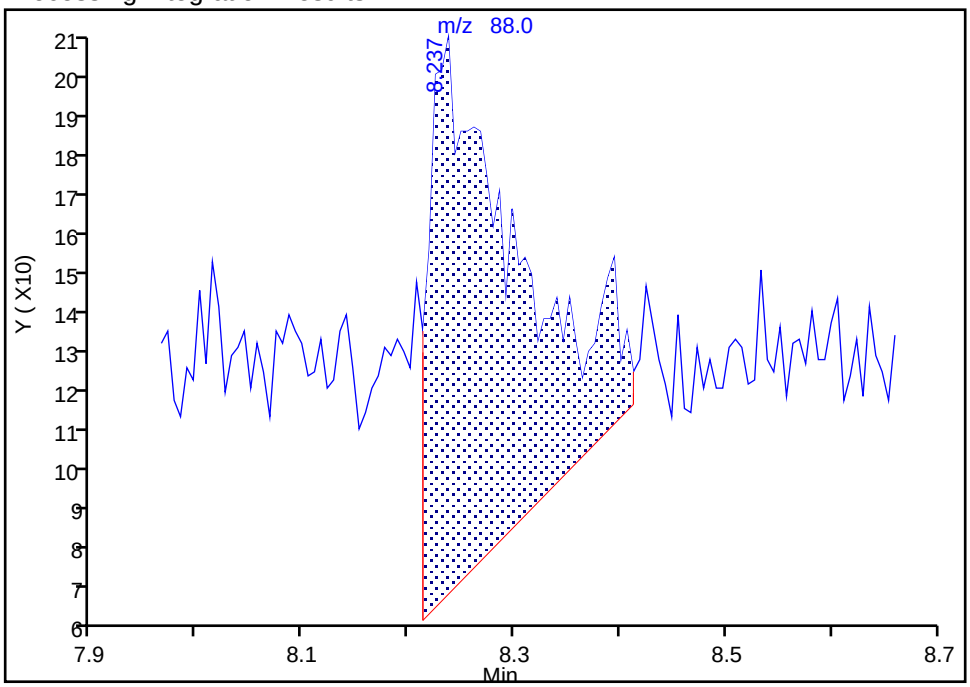
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202320.D				
Injection Date:	09-Nov-2021 18:49:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-D-12	Lab Sample ID:	240-159369-12		
Client ID:	SL-12_110221				
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

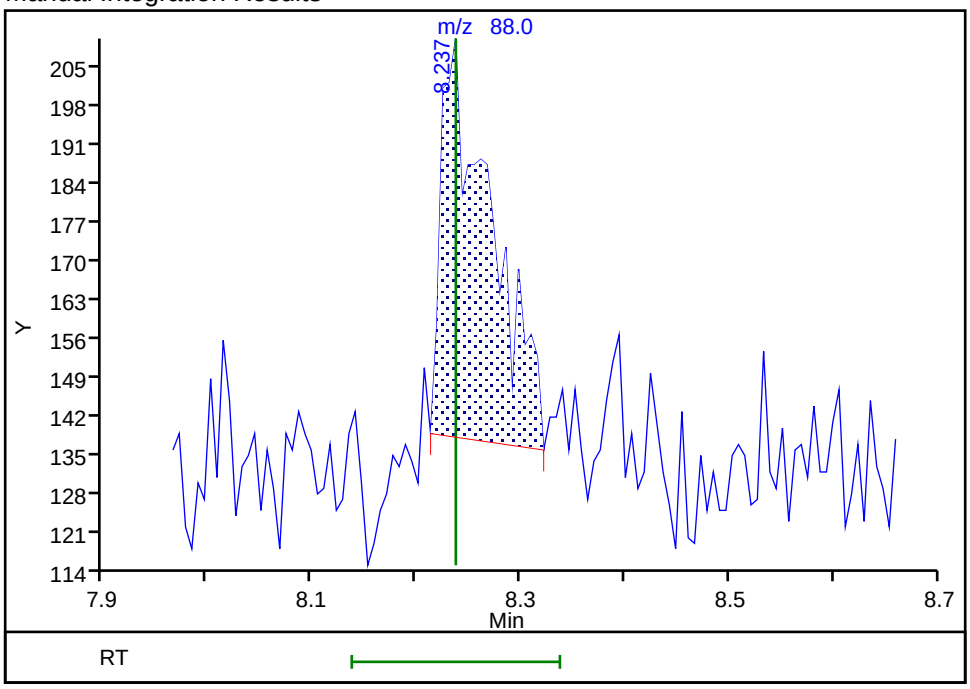
Processing Integration Results

RT: 8.24
Area: 785
Amount: 1.527224
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 241
Amount: 0.468867
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:28:04

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: MH-1231_110221 Lab Sample ID: 240-159369-13

Matrix: Water Lab File ID: 202321.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 14:15

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 19:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	8.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202321.D				
Lims ID:	240-159369-A-13				
Client ID:	MH-1231_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 19:13:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:28:29		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	674795	8.94	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2362457	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	61795	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	40	4100	8.13	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

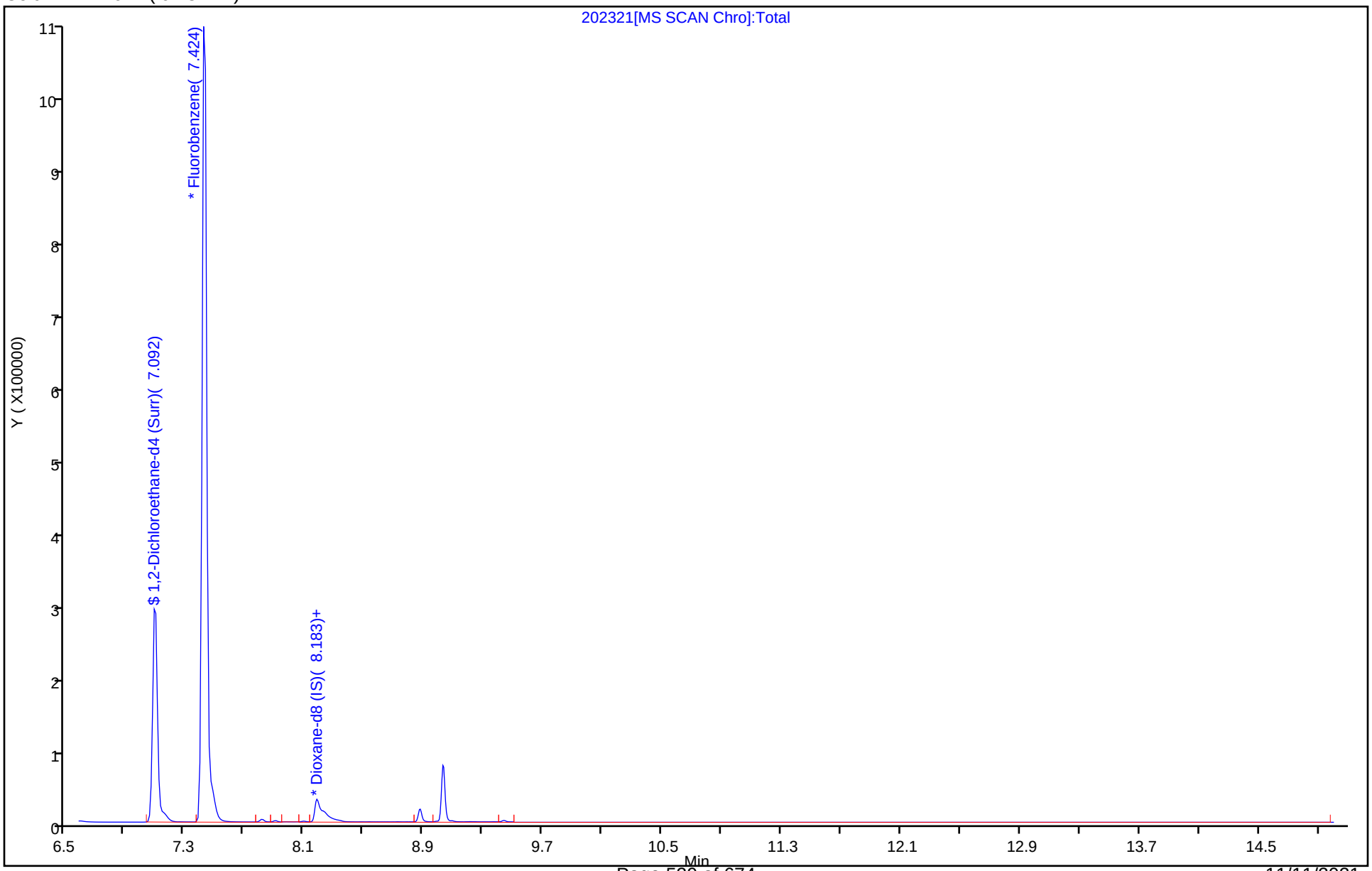
Report Date: 10-Nov-2021 14:35:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202321.D

Injection Date:	09-Nov-2021 19:13:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-13	Lab Sample ID:	240-159369-13	Worklist Smp#:	19
Client ID:	MH-1231_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202321.D				
Lims ID:	240-159369-A-13				
Client ID:	MH-1231_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 19:13:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

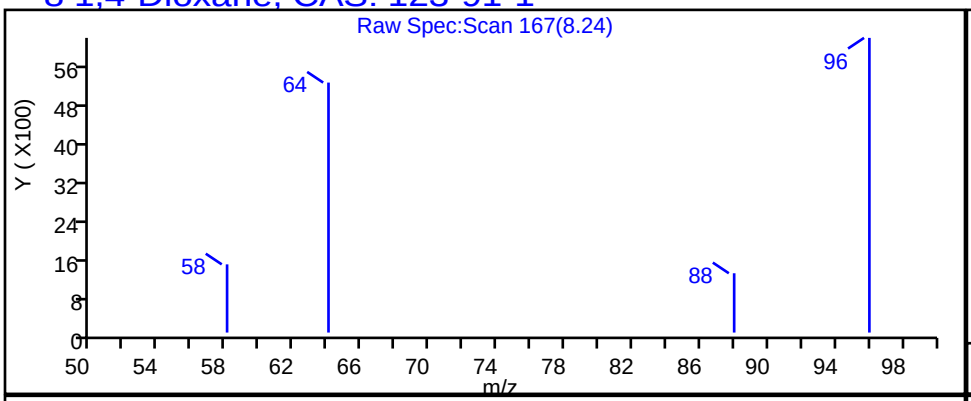
First Level Reviewer: seymourc Date: 10-Nov-2021 14:28:29

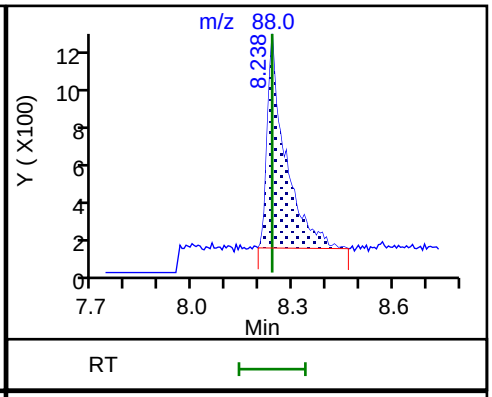
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.94	89.44

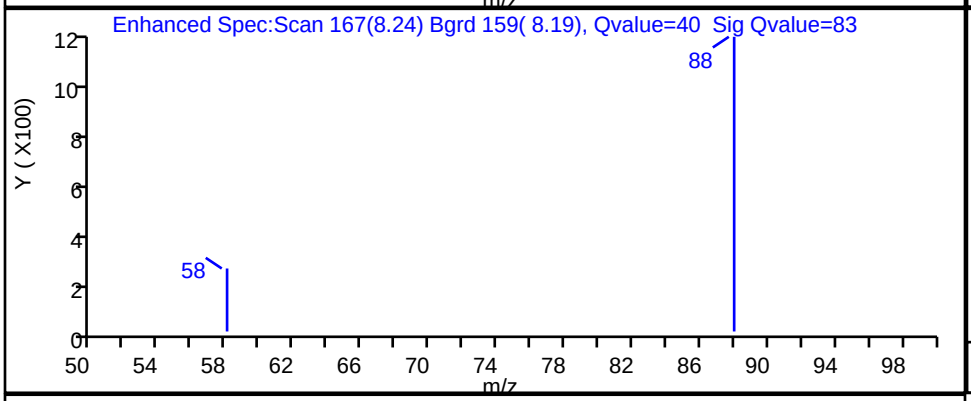
Eurofins TestAmerica, Canton

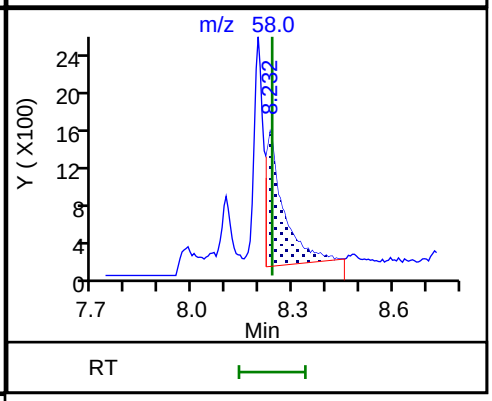
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202321.D				
Injection Date:	09-Nov-2021 19:13:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-13	Lab Sample ID:	240-159369-13		
Client ID:	MH-1231_110221				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

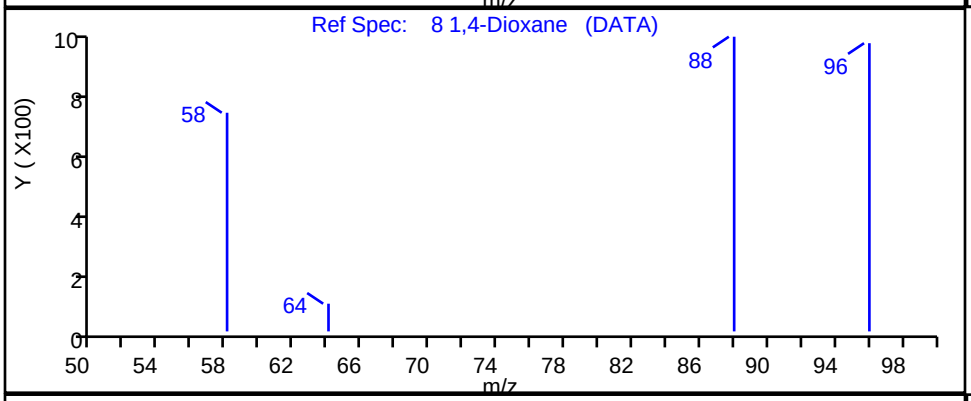
8 1,4-Dioxane, CAS: 123-91-1

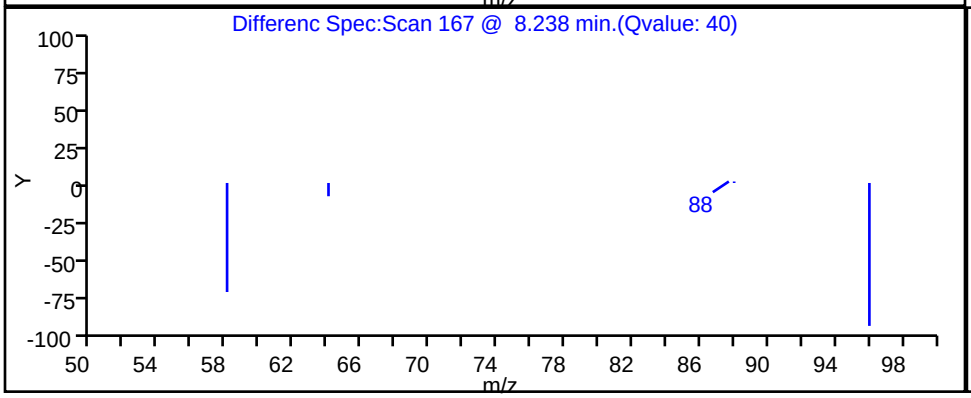


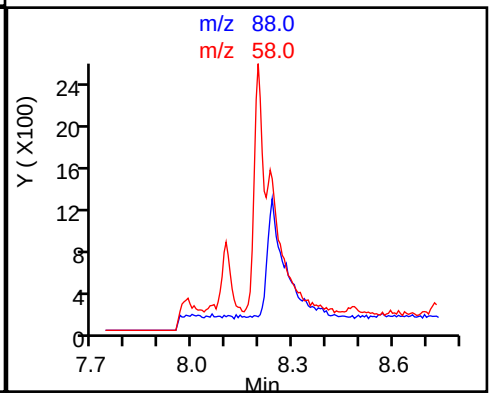












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

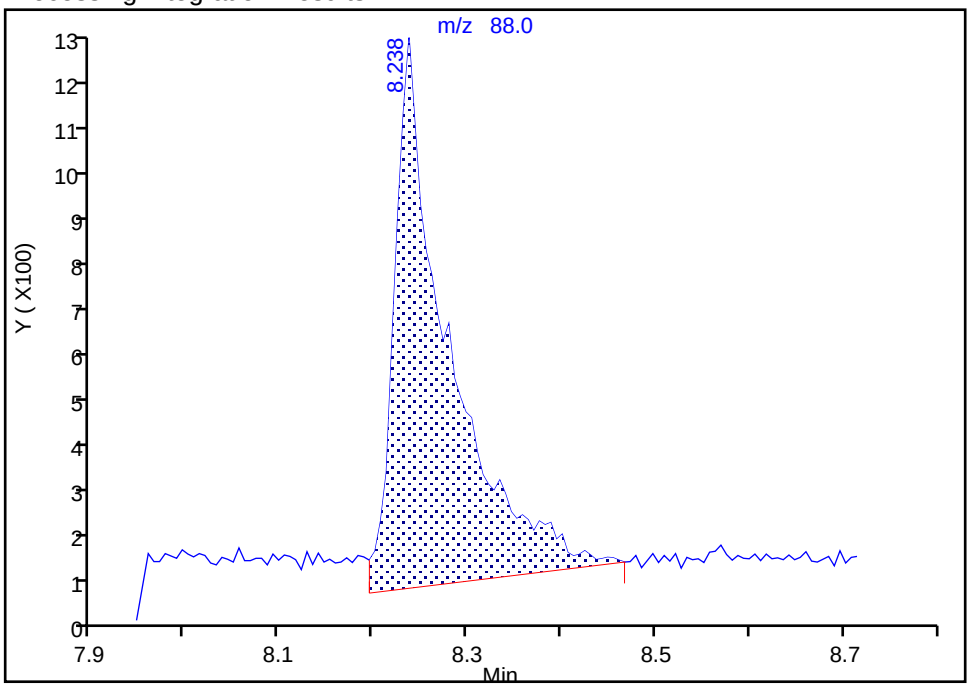
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202321.D				
Injection Date:	09-Nov-2021 19:13:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-13	Lab Sample ID:	240-159369-13		
Client ID:	MH-1231_110221				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

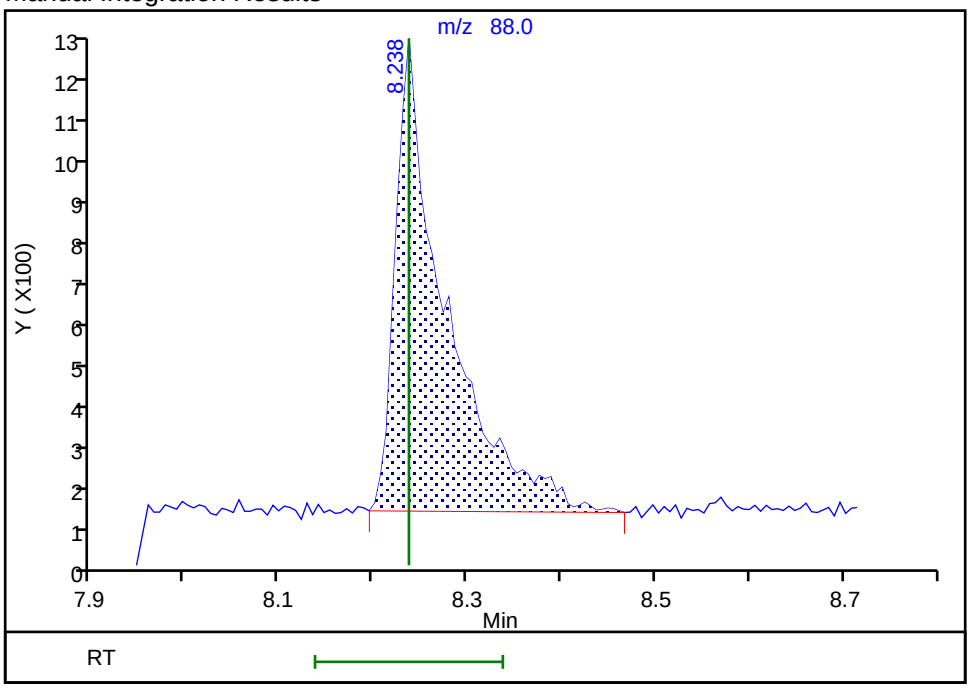
Processing Integration Results

RT: 8.24
Area: 4683
Amount: 9.285377
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4100
Amount: 8.129414
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:28:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-2_110221 Lab Sample ID: 240-159369-14

Matrix: Water Lab File ID: 202322.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 14:40

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 19:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202322.D				
Lims ID:	240-159369-A-14				
Client ID:	SL-2_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 19:37:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:28:33		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	656431	9.13	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2252052	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	63880	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	164	0.3146	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

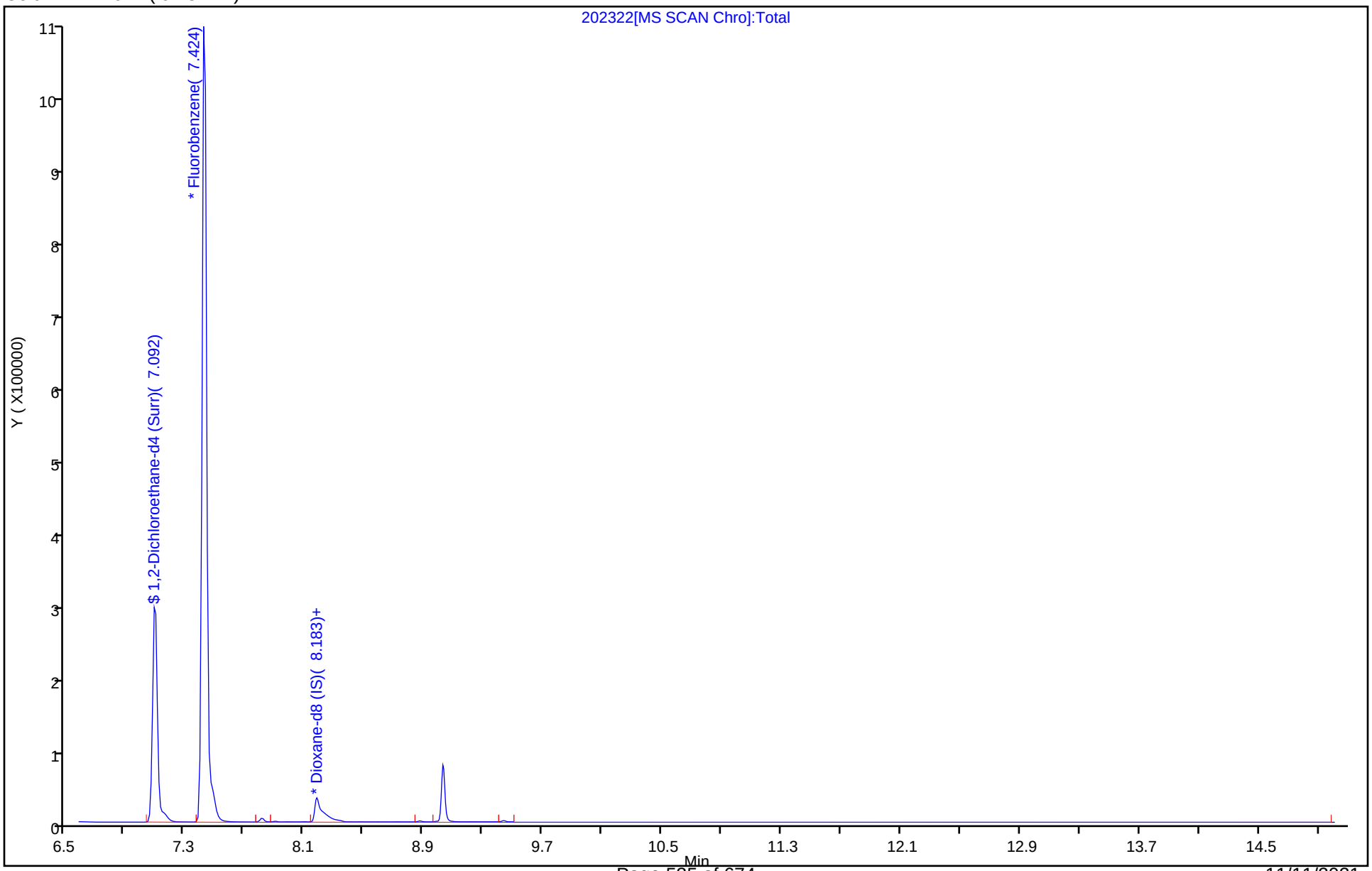
Report Date: 10-Nov-2021 14:35:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202322.D

Injection Date:	09-Nov-2021 19:37:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-14	Lab Sample ID:	240-159369-14	Worklist Smp#:	20
Client ID:	SL-2_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202322.D				
Lims ID:	240-159369-A-14				
Client ID:	SL-2_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 19:37:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:28:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.13	91.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-3_110221 Lab Sample ID: 240-159369-15

Matrix: Water Lab File ID: 202323.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 15:05

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 20:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202323.D				
Lims ID:	240-159369-A-15				
Client ID:	SL-3_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:01:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:29:16		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	99	650122	9.21	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2211473	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	60982	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	2173	4.37	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

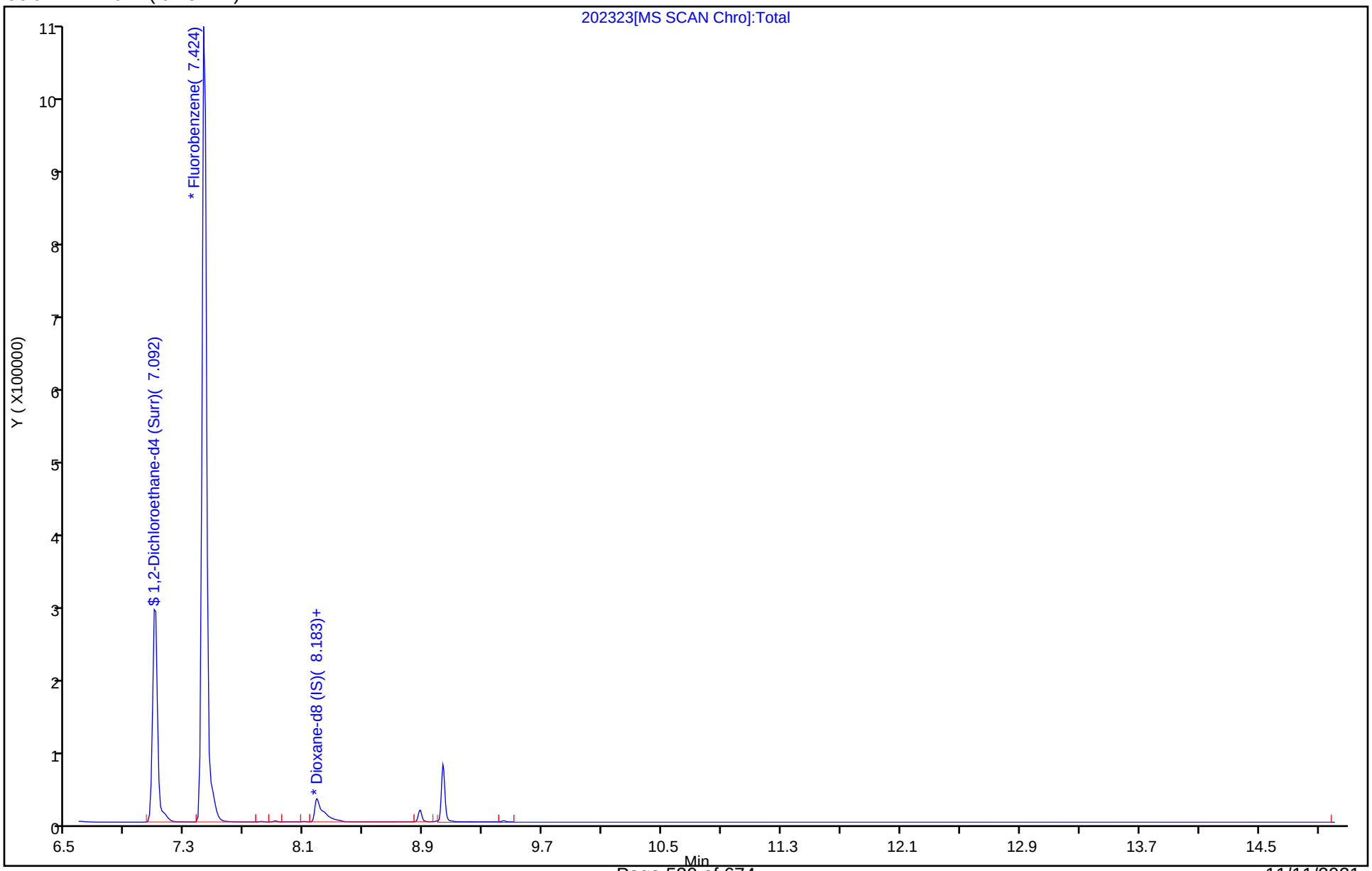
Report Date: 10-Nov-2021 14:35:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202323.D

Injection Date:	09-Nov-2021 20:01:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-15	Lab Sample ID:	240-159369-15	Worklist Smp#:	21
Client ID:	SL-3_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202323.D				
Lims ID:	240-159369-A-15				
Client ID:	SL-3_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:01:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

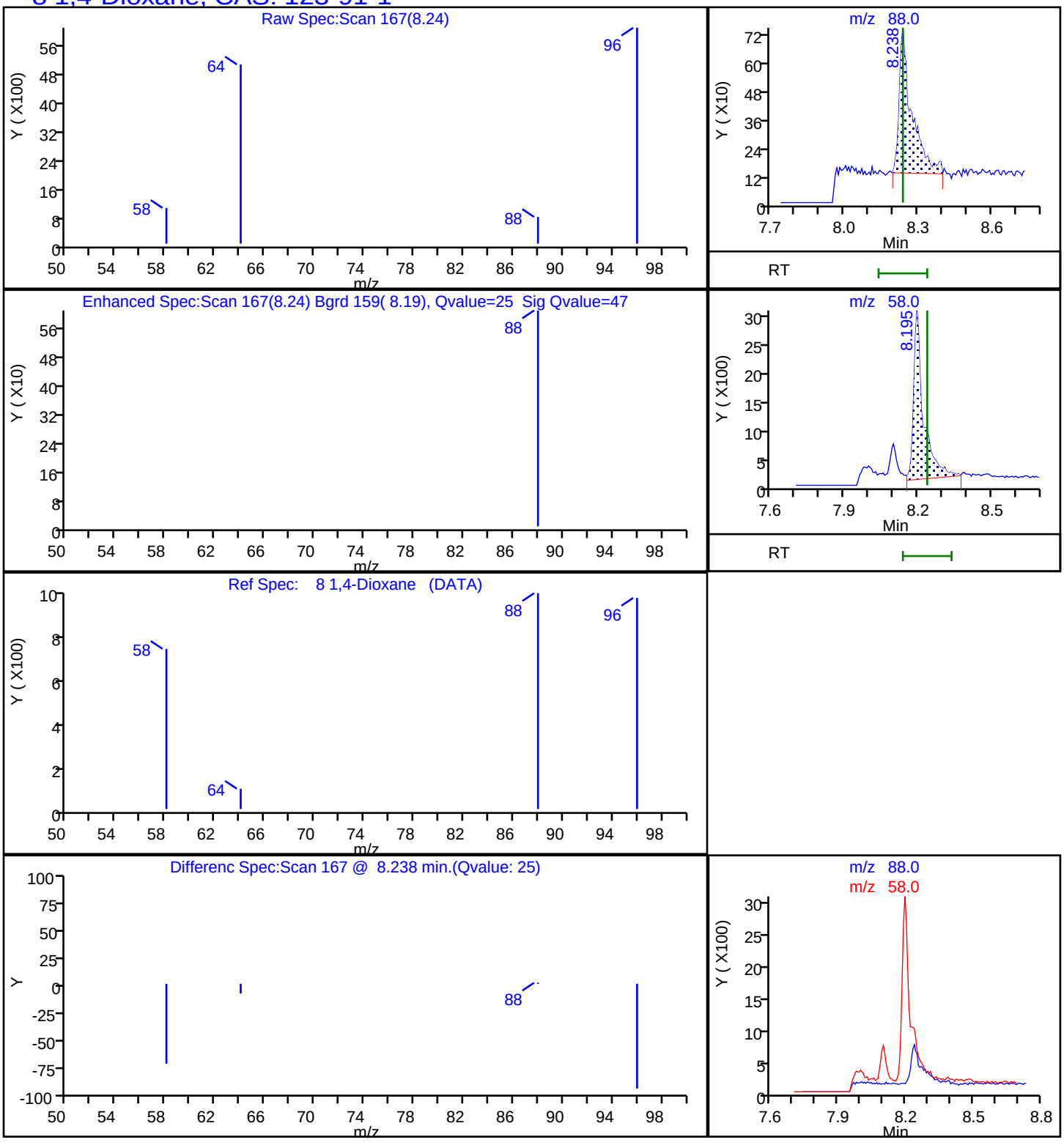
First Level Reviewer: seymourc Date: 10-Nov-2021 14:29:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.21	92.06

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202323.D				
Injection Date:	09-Nov-2021 20:01:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-15	Lab Sample ID:	240-159369-15		
Client ID:	SL-3_110221				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

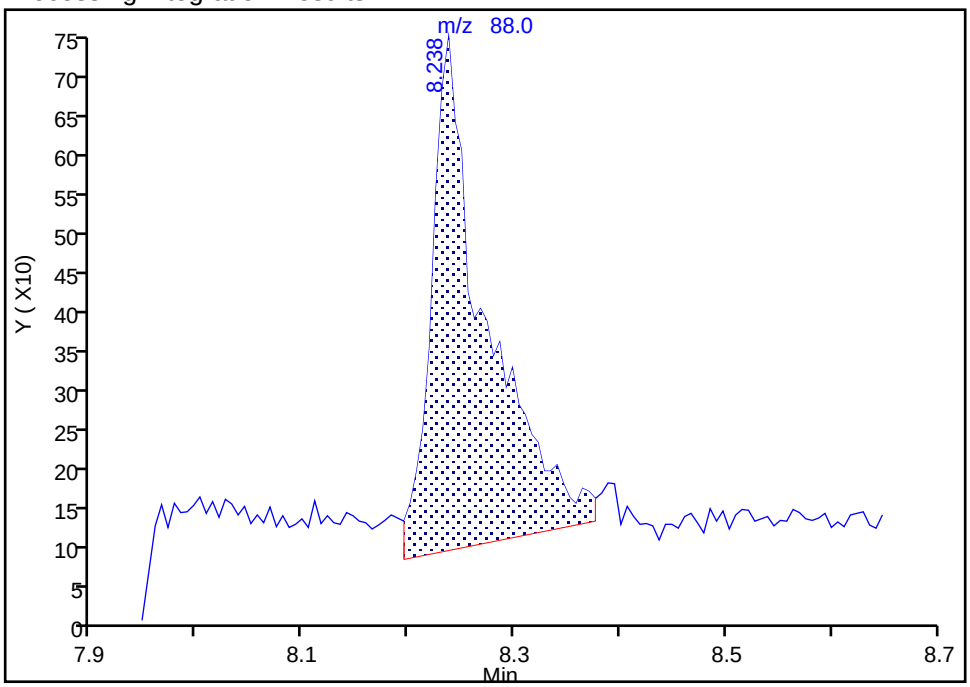
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202323.D				
Injection Date:	09-Nov-2021 20:01:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-15	Lab Sample ID:	240-159369-15		
Client ID:	SL-3_110221				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

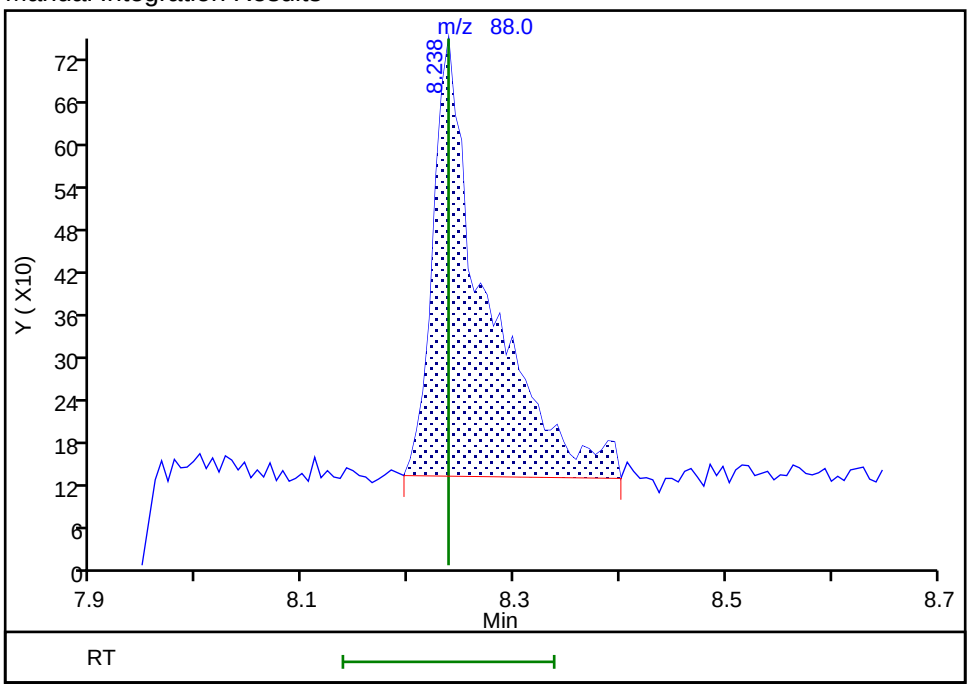
Processing Integration Results

RT: 8.24
Area: 2376
Amount: 4.773902
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2173
Amount: 4.366031
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:28:44

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-4_110221 Lab Sample ID: 240-159369-16

Matrix: Water Lab File ID: 202324.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 16:50

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 20:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202324.D				
Lims ID:	240-159369-D-16				
Client ID:	SL-4_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:25:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:29:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	681964	8.92	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2394436	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	60691	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	42	1789	3.61	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

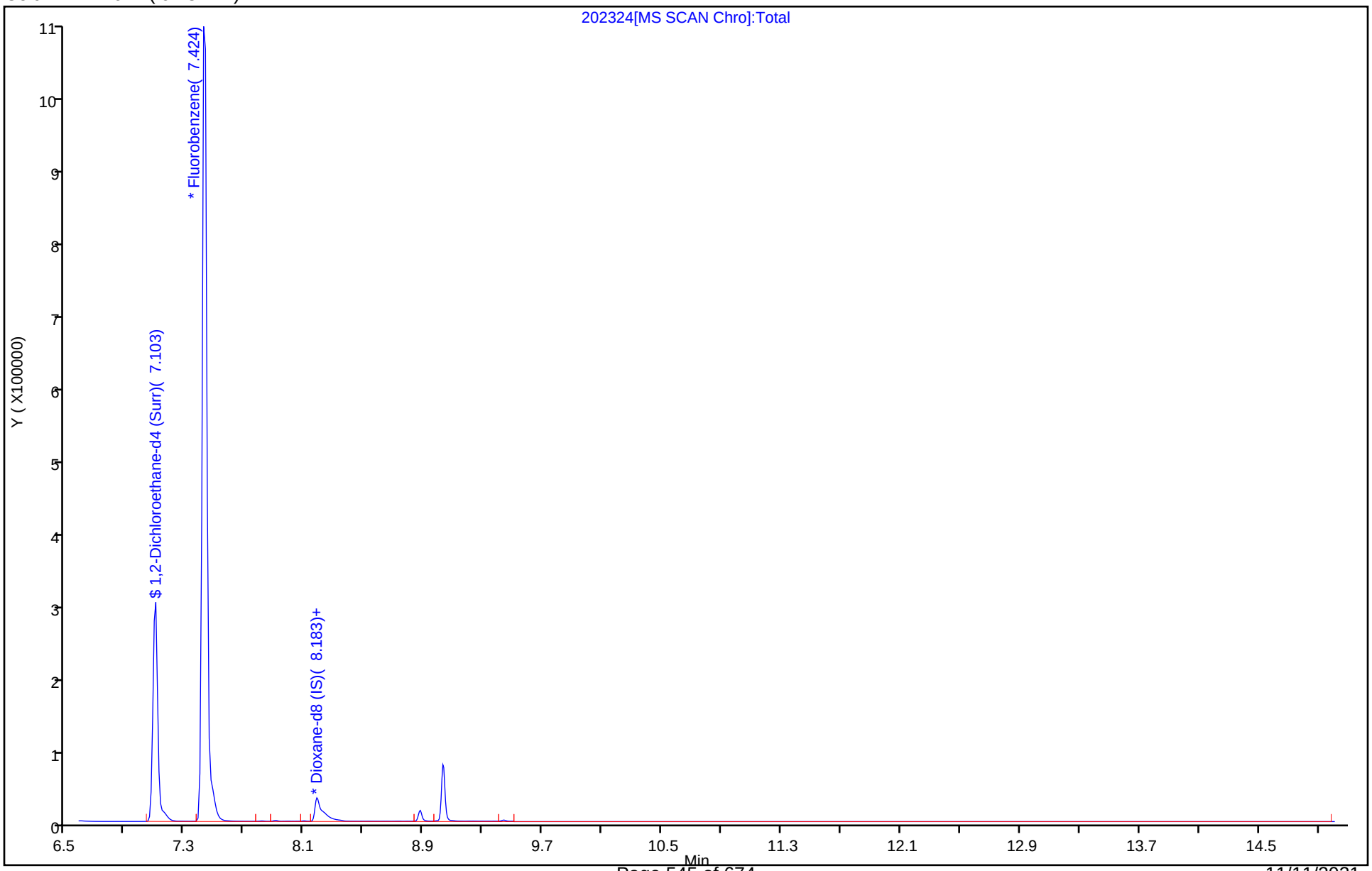
Report Date: 10-Nov-2021 14:35:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202324.D

Injection Date:	09-Nov-2021 20:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-D-16	Lab Sample ID:	240-159369-16	Worklist Smp#:	22
Client ID:	SL-4_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



11/11/2021

Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202324.D				
Lims ID:	240-159369-D-16				
Client ID:	SL-4_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:25:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

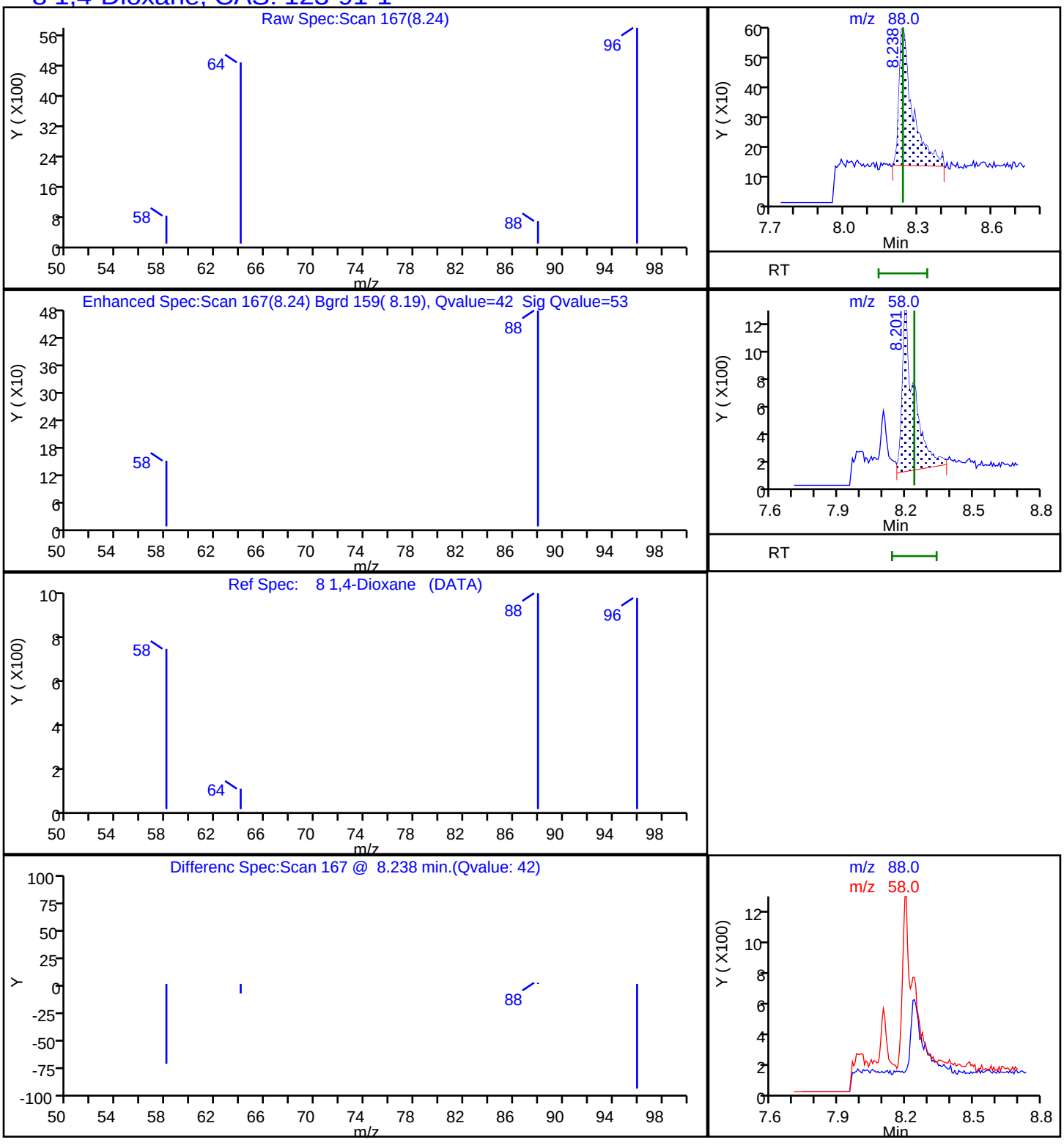
First Level Reviewer: seymourc Date: 10-Nov-2021 14:29:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.92	89.19

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202324.D		
Injection Date:	09-Nov-2021 20:25:30	Instrument ID:	A3UX20
Lims ID:	240-159369-D-16	Lab Sample ID:	240-159369-16
Client ID:	SL-4_110221		
Operator ID:	434006	ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

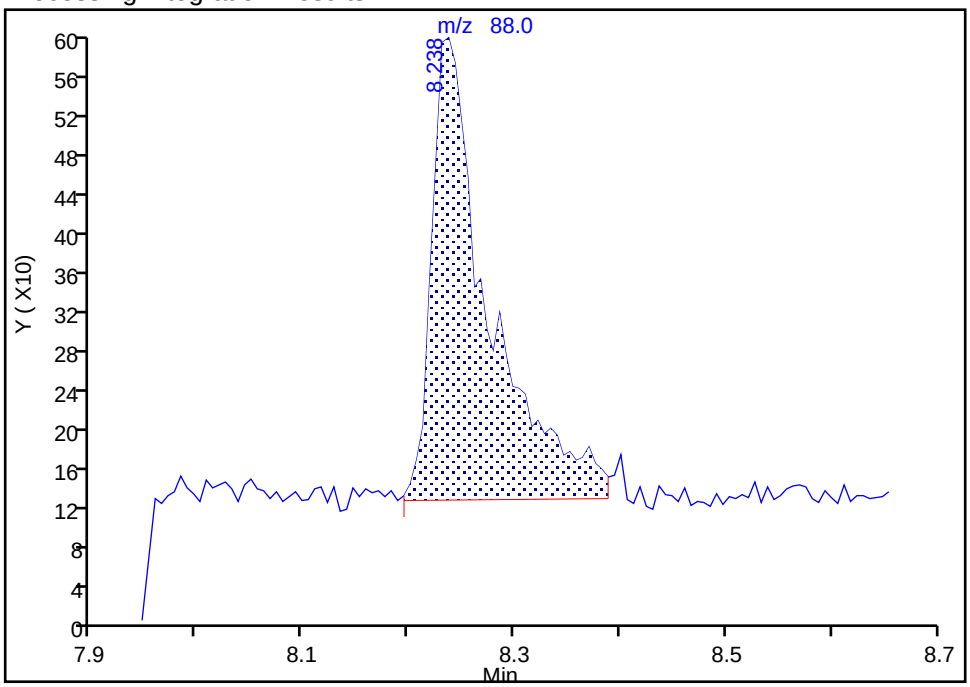
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202324.D				
Injection Date:	09-Nov-2021 20:25:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-D-16	Lab Sample ID:	240-159369-16		
Client ID:	SL-4_110221				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

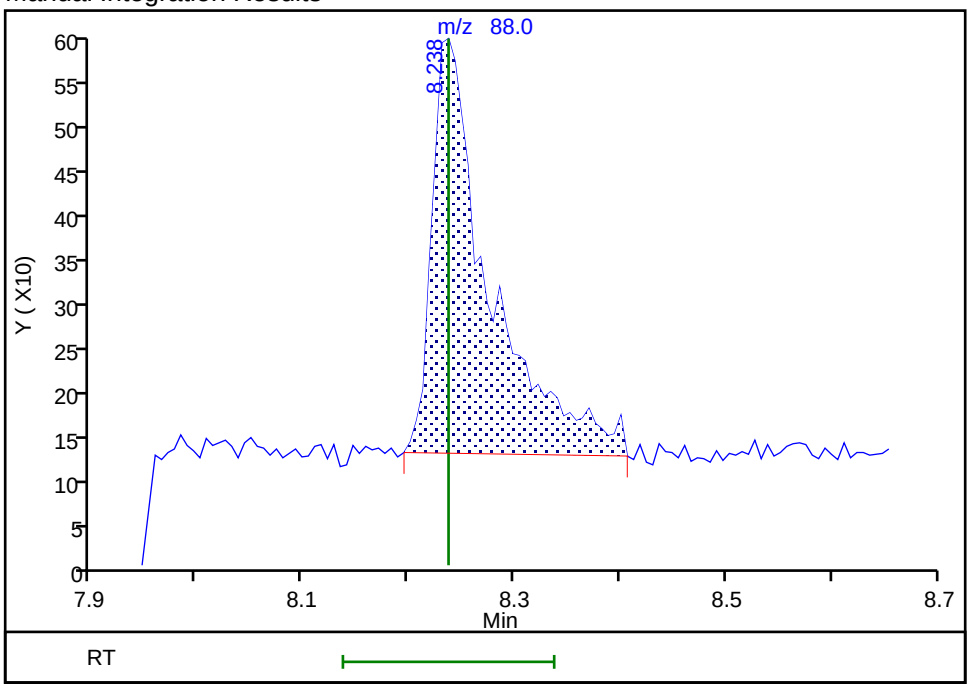
Processing Integration Results

RT: 8.24
Area: 1790
Amount: 3.613745
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1789
Amount: 3.611726
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:29:30

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-16_110221 Lab Sample ID: 240-159369-17

Matrix: Water Lab File ID: 202325.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 15:30

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202325.D				
Lims ID:	240-159369-A-17				
Client ID:	SL-16_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:48:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:30:05		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	692898	9.21	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2357095	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.183	0.006	95	68922	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	2363	4.20	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

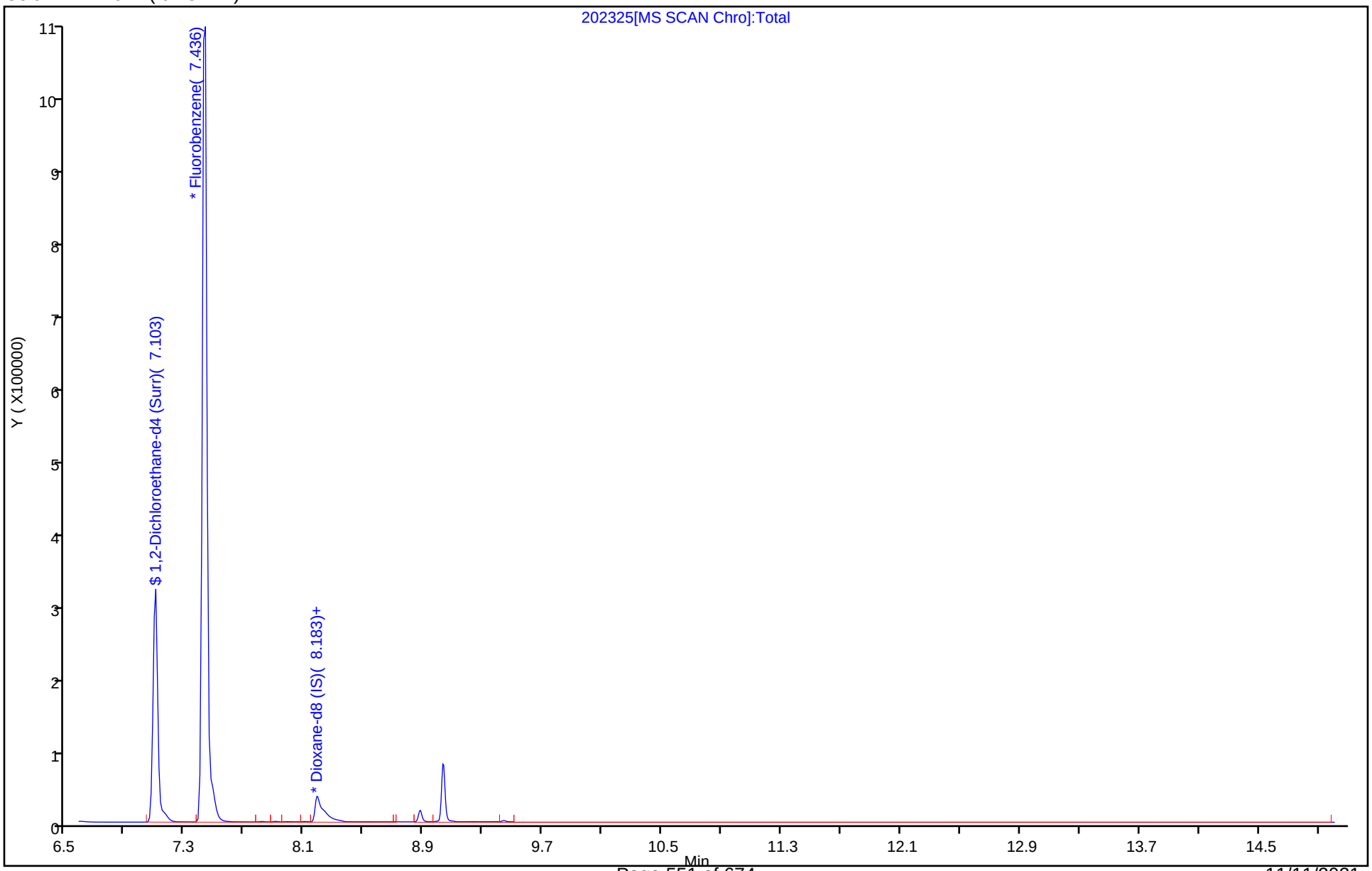
Report Date: 10-Nov-2021 14:35:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202325.D

Injection Date:	09-Nov-2021 20:48:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-17	Lab Sample ID:	240-159369-17	Worklist Smp#:	23
Client ID:	SL-16_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202325.D				
Lims ID:	240-159369-A-17				
Client ID:	SL-16_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 20:48:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

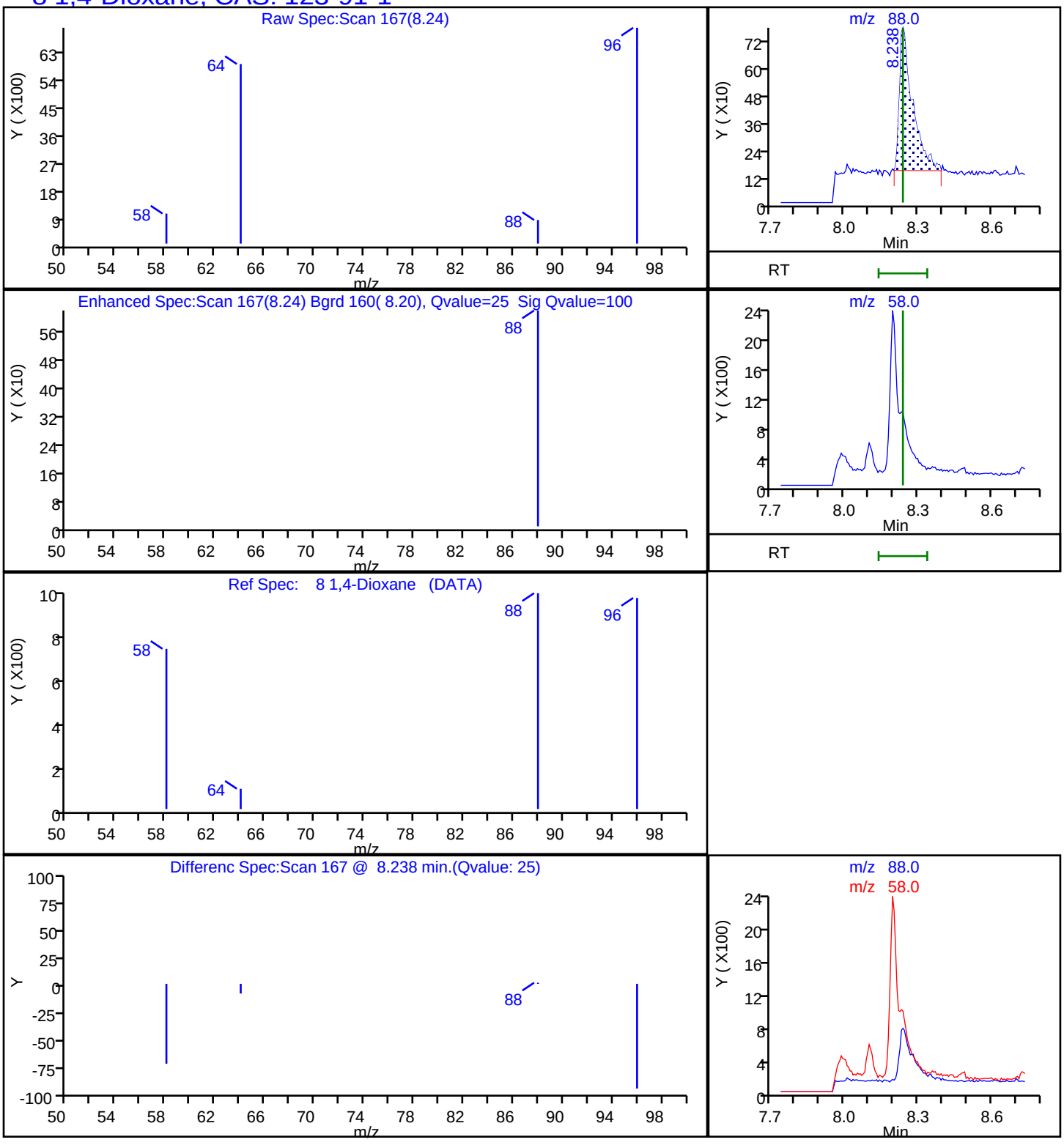
First Level Reviewer: seymourc Date: 10-Nov-2021 14:30:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.21	92.05

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202325.D				
Injection Date:	09-Nov-2021 20:48:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-17	Lab Sample ID:	240-159369-17		
Client ID:	SL-16_110221				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

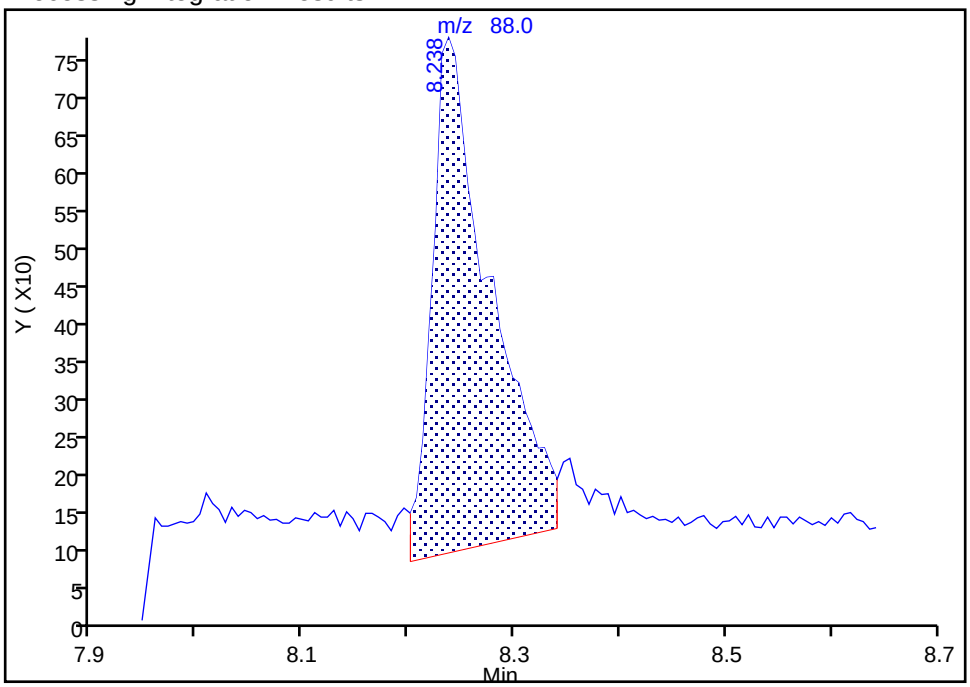
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202325.D				
Injection Date:	09-Nov-2021 20:48:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-17	Lab Sample ID:	240-159369-17		
Client ID:	SL-16_110221				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

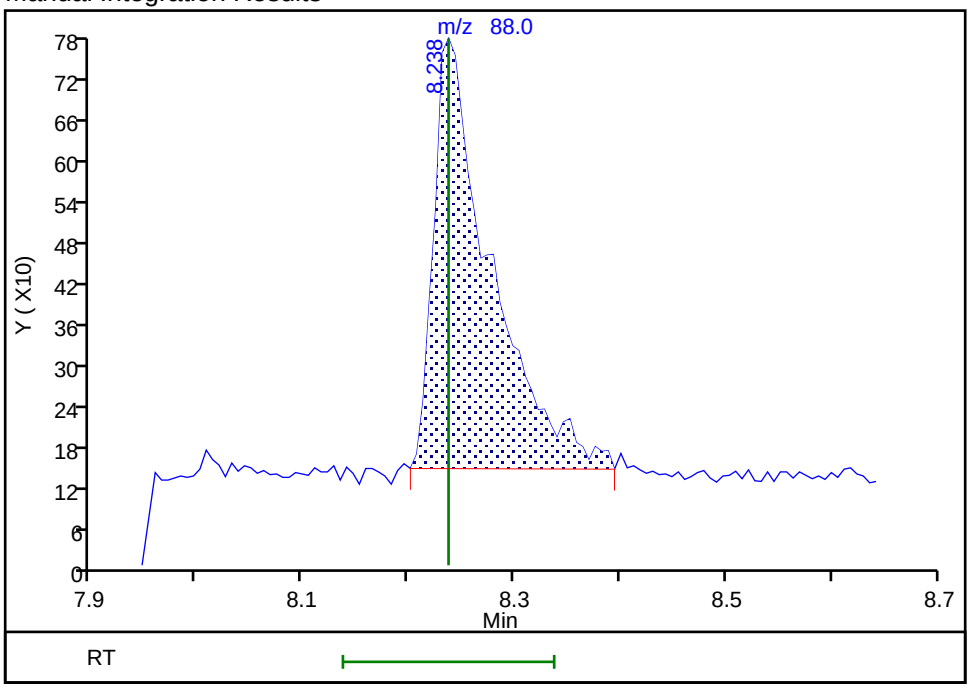
Processing Integration Results

RT: 8.24
Area: 2612
Amount: 4.643485
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2363
Amount: 4.200825
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:30:02

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-17_110221 Lab Sample ID: 240-159369-18

Matrix: Water Lab File ID: 202326.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 16:00

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 21:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.9	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202326.D				
Lims ID:	240-159369-A-18				
Client ID:	SL-17_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 21:12:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:30:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	687063	9.31	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2310501	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	67960	200.0	
8 1,4-Dioxane	88	8.243	8.237	0.006	25	1039	1.87	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

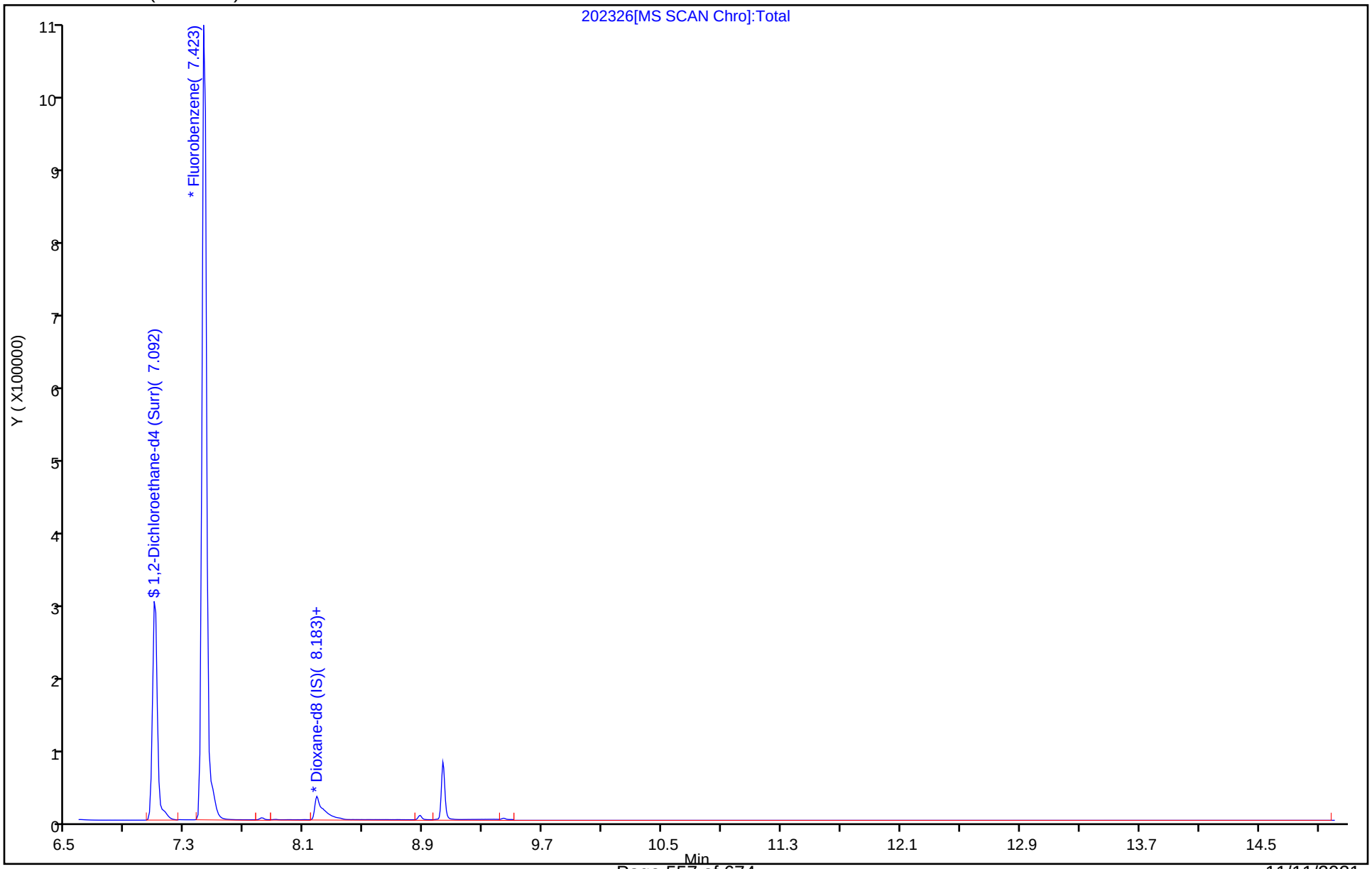
Report Date: 10-Nov-2021 14:35:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202326.D

Injection Date:	09-Nov-2021 21:12:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-A-18	Lab Sample ID:	240-159369-18	Worklist Smp#:	24
Client ID:	SL-17_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



11/11/2021

Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202326.D				
Lims ID:	240-159369-A-18				
Client ID:	SL-17_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 21:12:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

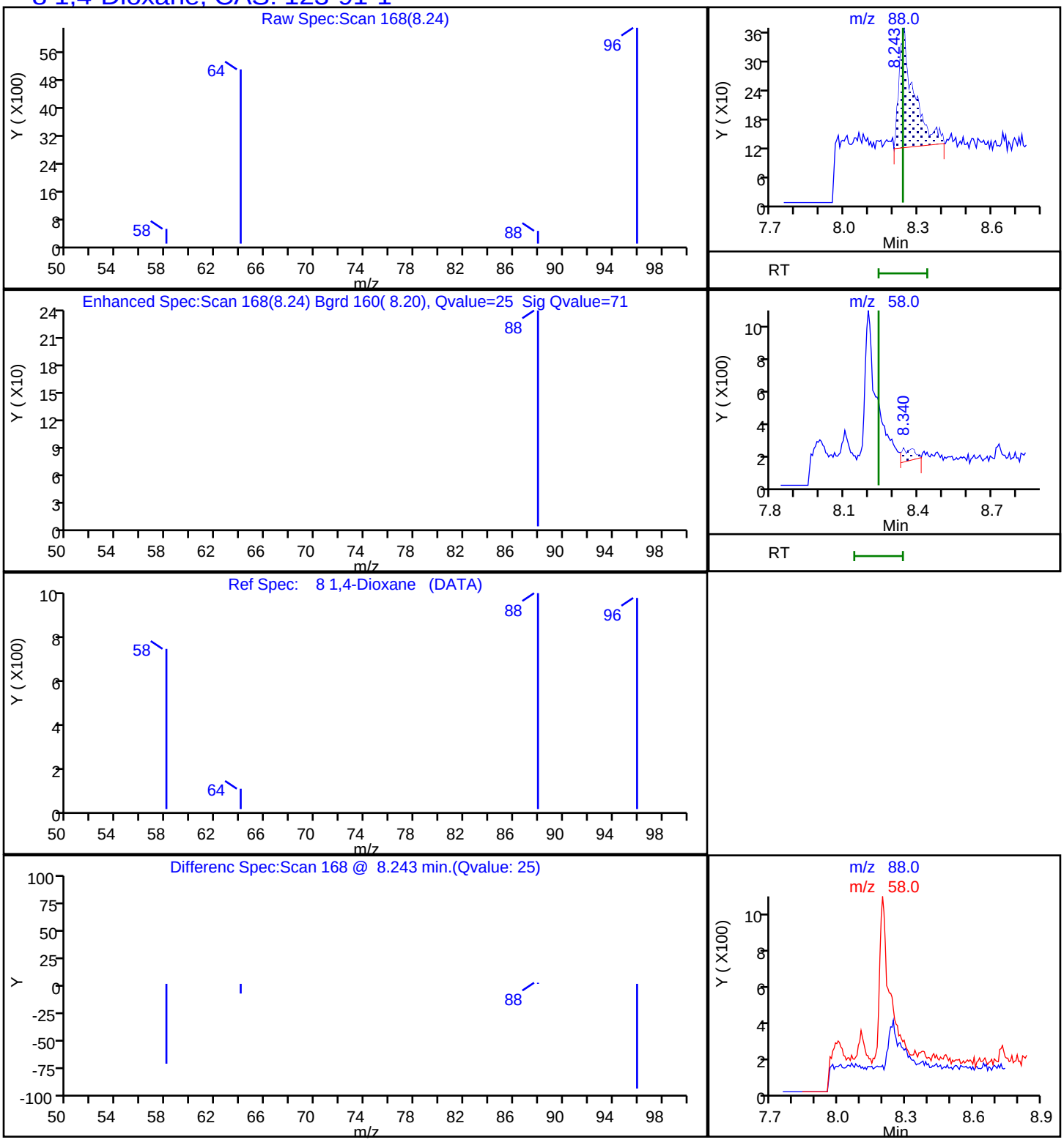
First Level Reviewer: seymourc Date: 10-Nov-2021 14:30:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.31	93.12

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202326.D				
Injection Date:	09-Nov-2021 21:12:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-18	Lab Sample ID:	240-159369-18		
Client ID:	SL-17_110221				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

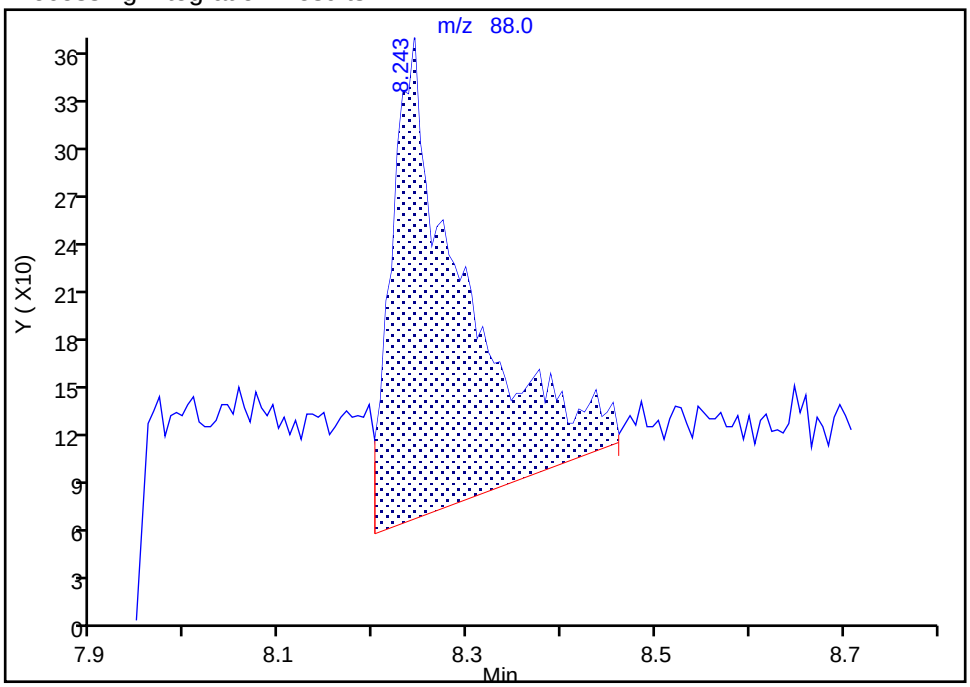
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202326.D				
Injection Date:	09-Nov-2021 21:12:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-A-18	Lab Sample ID:	240-159369-18		
Client ID:	SL-17_110221				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

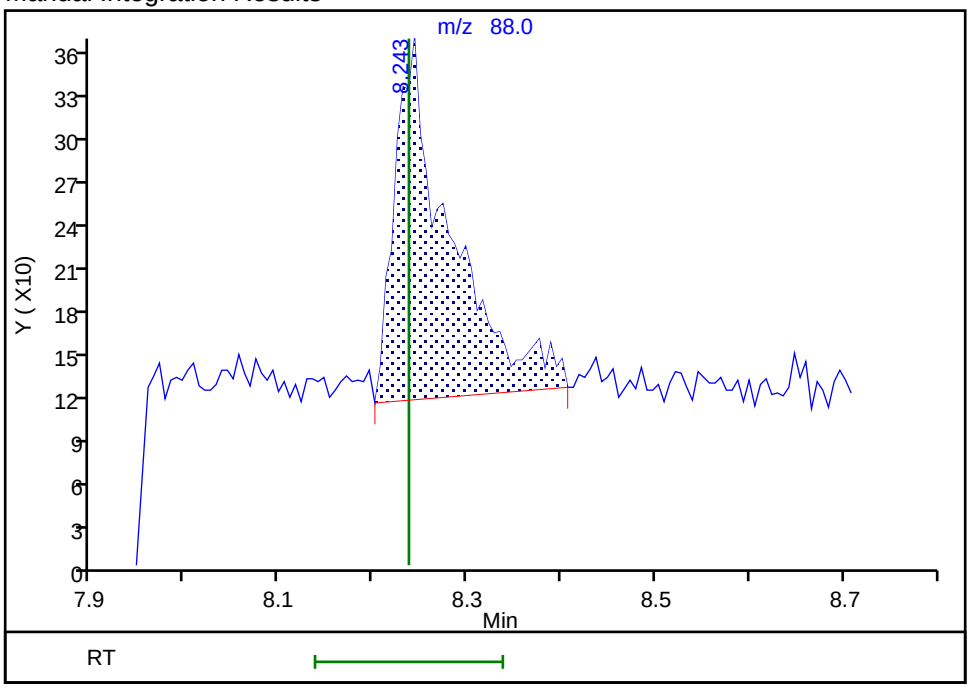
Processing Integration Results

RT: 8.24
Area: 1647
Amount: 2.969402
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1039
Amount: 1.873229
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:30:31

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-18_110221 Lab Sample ID: 240-159369-19

Matrix: Water Lab File ID: 202327.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 16:25

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 21:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202327.D				
Lims ID:	240-159369-C-19				
Client ID:	SL-18_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 21:36:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:31:02		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	672504	9.23	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2280521	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	54131	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	1451	3.28	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

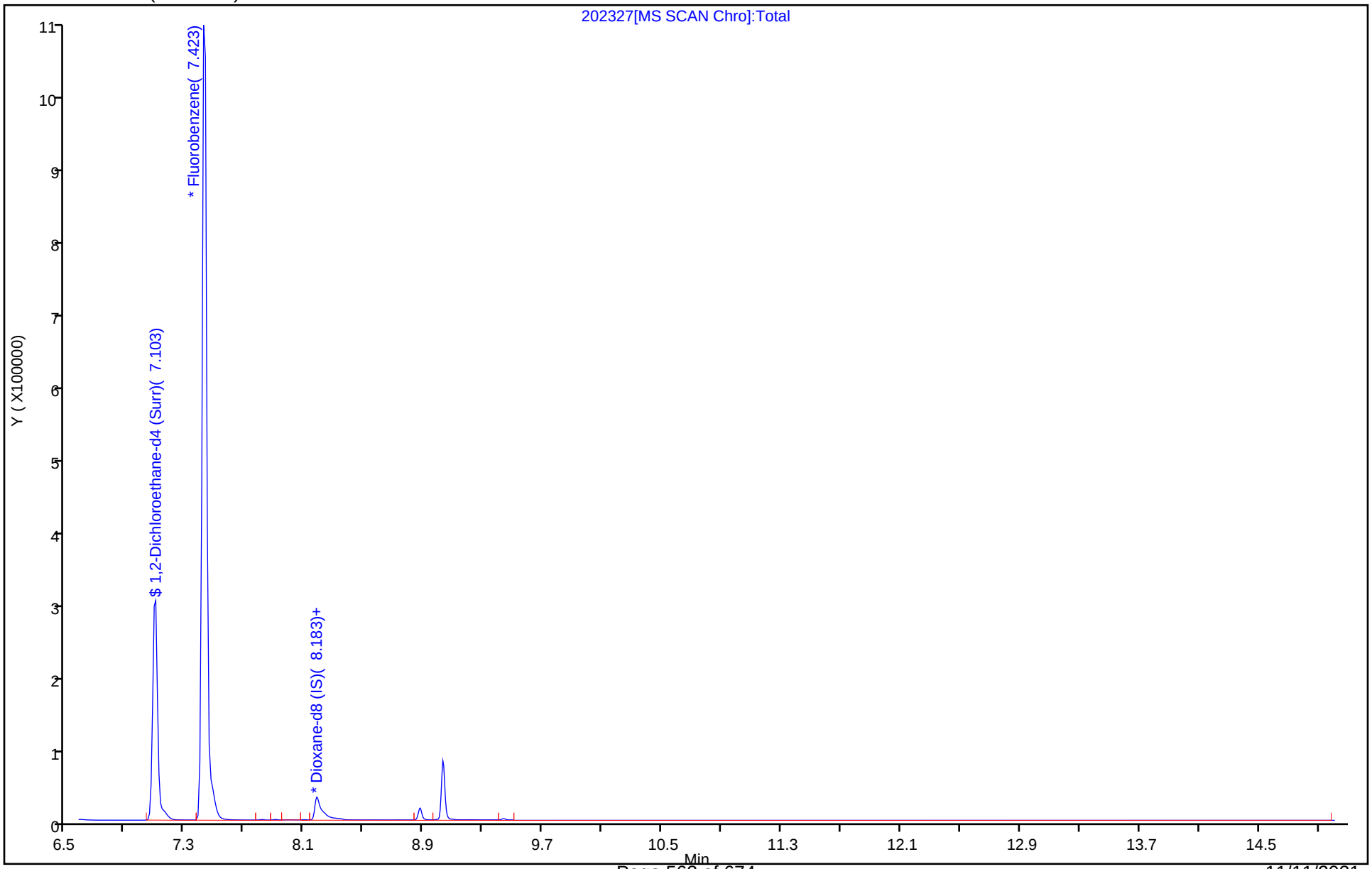
Report Date: 10-Nov-2021 14:35:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202327.D

Injection Date:	09-Nov-2021 21:36:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-C-19	Lab Sample ID:	240-159369-19	Worklist Smp#:	25
Client ID:	SL-18_110221				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202327.D				
Lims ID:	240-159369-C-19				
Client ID:	SL-18_110221				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 21:36:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

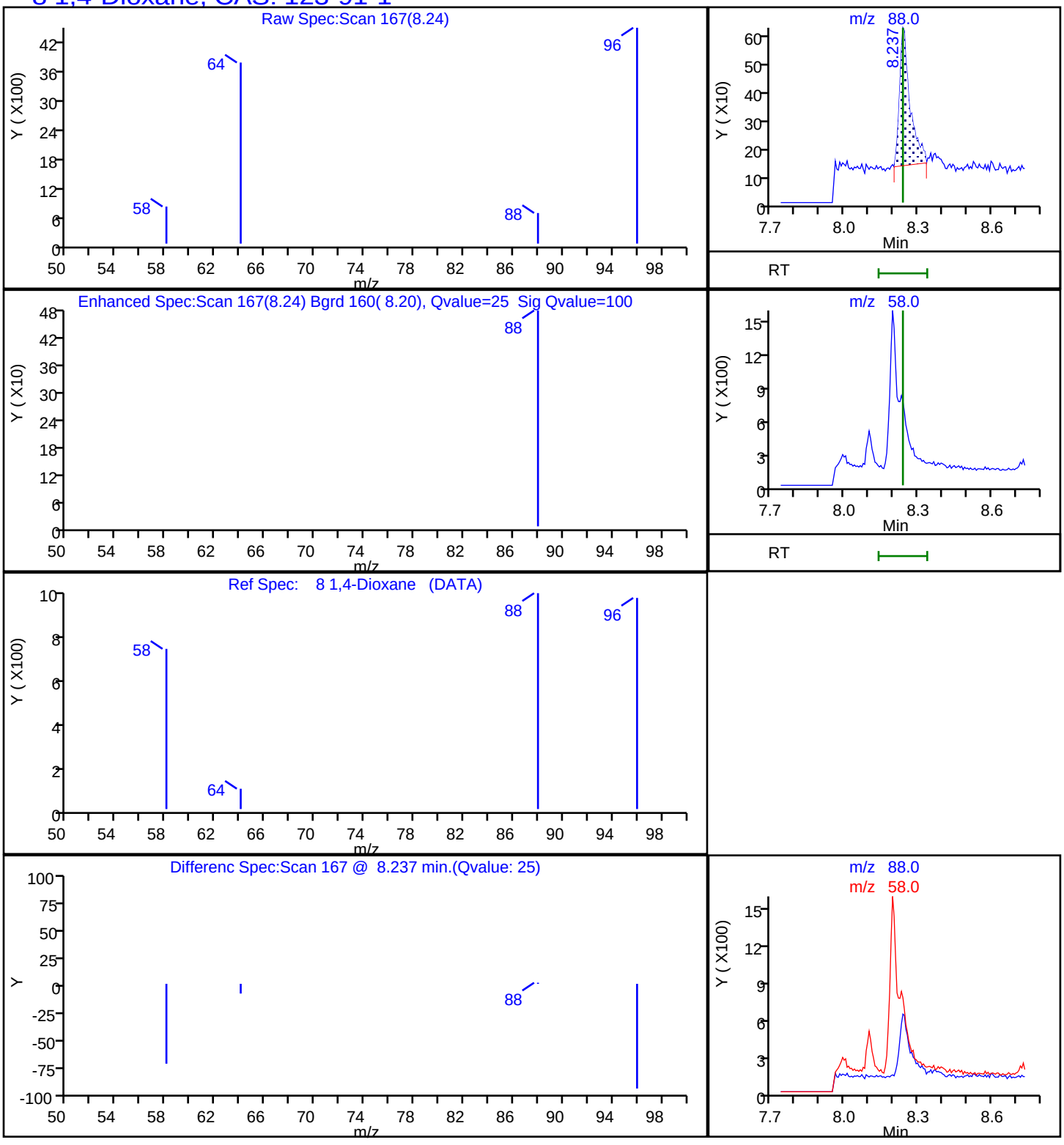
First Level Reviewer: seymourc Date: 10-Nov-2021 14:31:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.23	92.34

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202327.D				
Injection Date:	09-Nov-2021 21:36:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-19	Lab Sample ID:	240-159369-19		
Client ID:	SL-18_110221				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

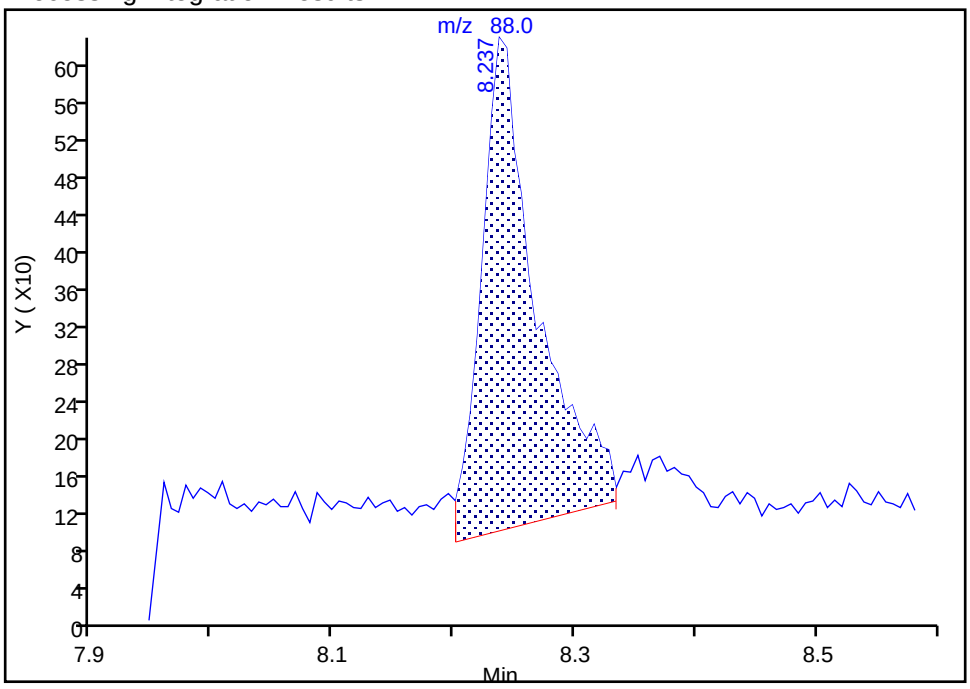
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202327.D				
Injection Date:	09-Nov-2021 21:36:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-C-19	Lab Sample ID:	240-159369-19		
Client ID:	SL-18_110221				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

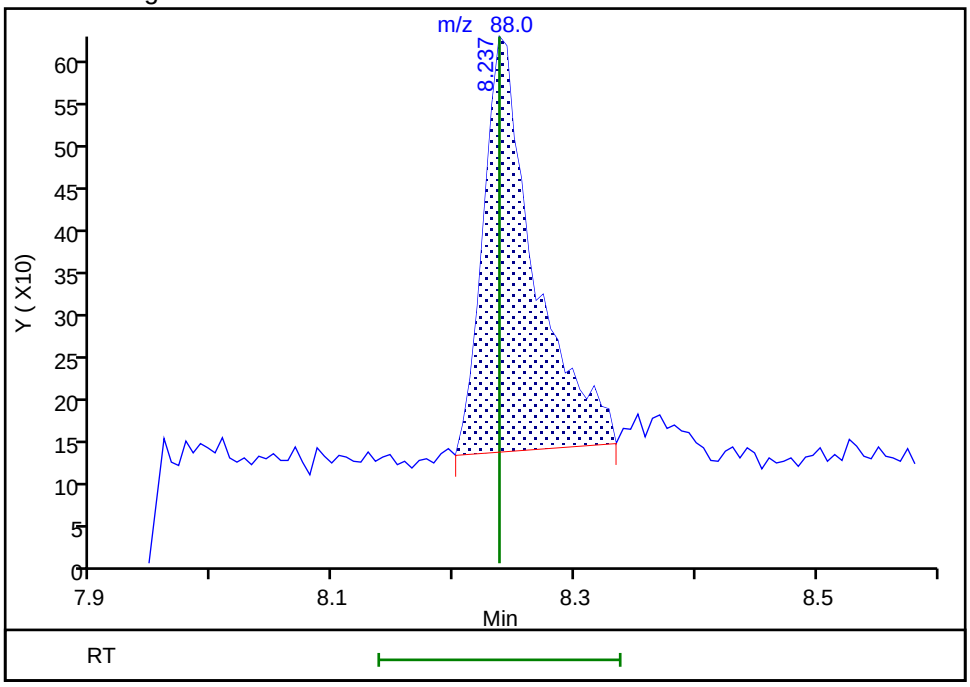
Processing Integration Results

RT: 8.24
Area: 1693
Amount: 3.832125
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1451
Amount: 3.284355
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:30:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-159369-20

Matrix: Water Lab File ID: 202328.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 22:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.6	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Lims ID:	240-159369-F-20				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 22:00:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:31:24		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	598725	9.36	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2003759	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	60764	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	805	1.62	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

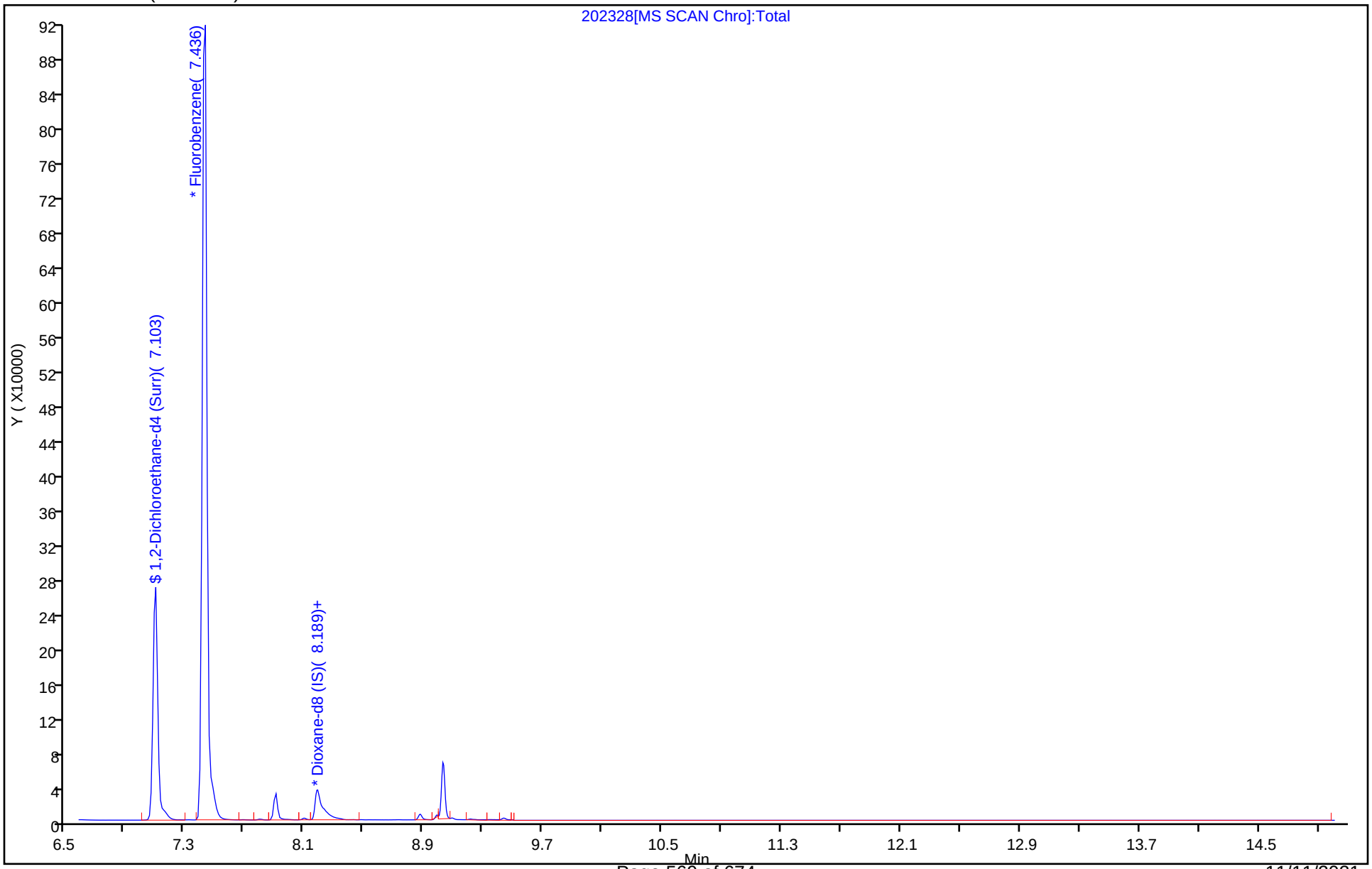
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 10-Nov-2021 14:35:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Injection Date:	09-Nov-2021 22:00:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-F-20	Lab Sample ID:	240-159369-20	Worklist Smp#:	26
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Lims ID:	240-159369-F-20				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	09-Nov-2021 22:00:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

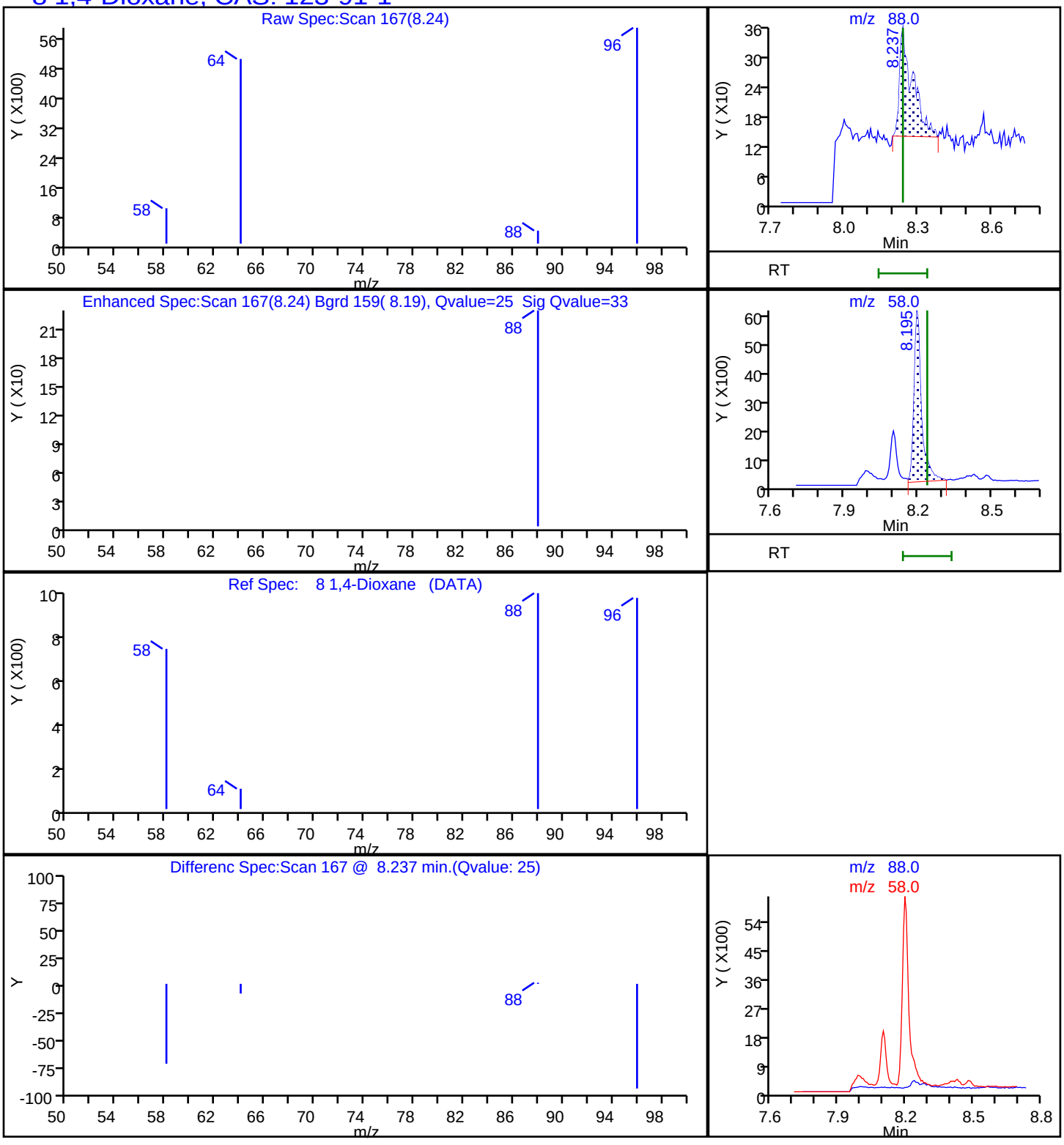
First Level Reviewer: seymourc Date: 10-Nov-2021 14:31:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.36	93.57

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Injection Date:	09-Nov-2021 22:00:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-F-20	Lab Sample ID:	240-159369-20		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Canton

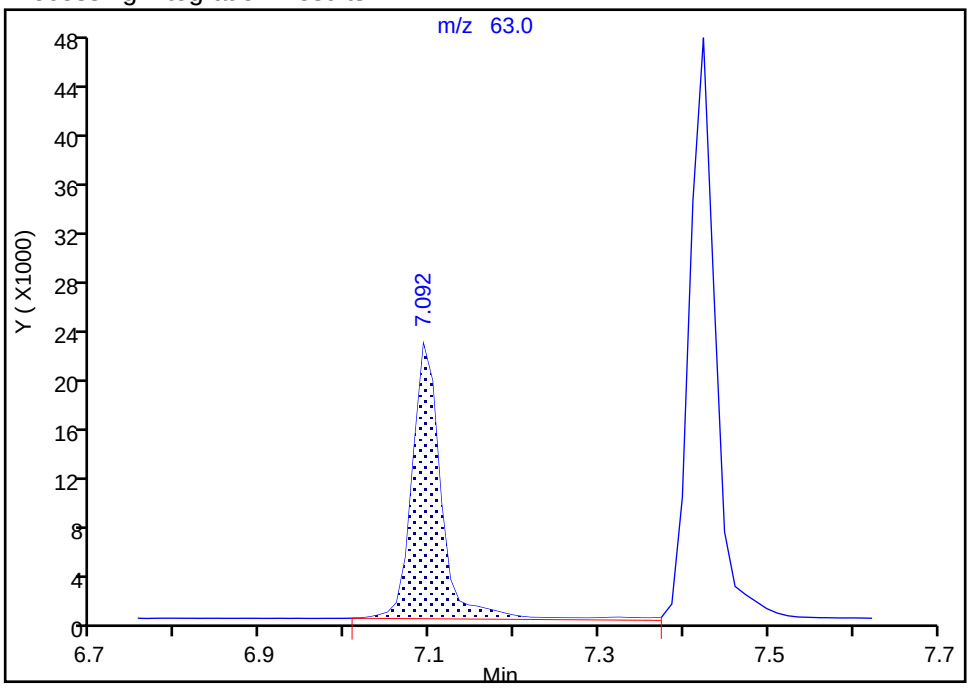
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Injection Date:	09-Nov-2021 22:00:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-F-20	Lab Sample ID:	240-159369-20		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 2

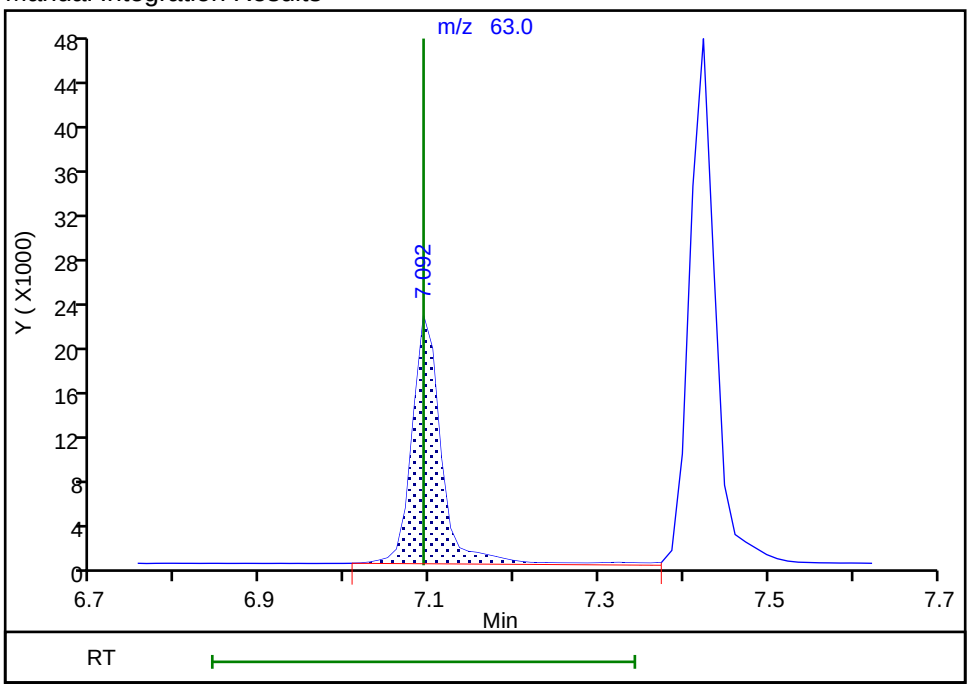
Processing Integration Results

RT: 7.09
Area: 56065
Amount: 9.356572
Amount Units: ug/l



Manual Integration Results

RT: 7.09
Area: 56065
Amount: 9.356572
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:32:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

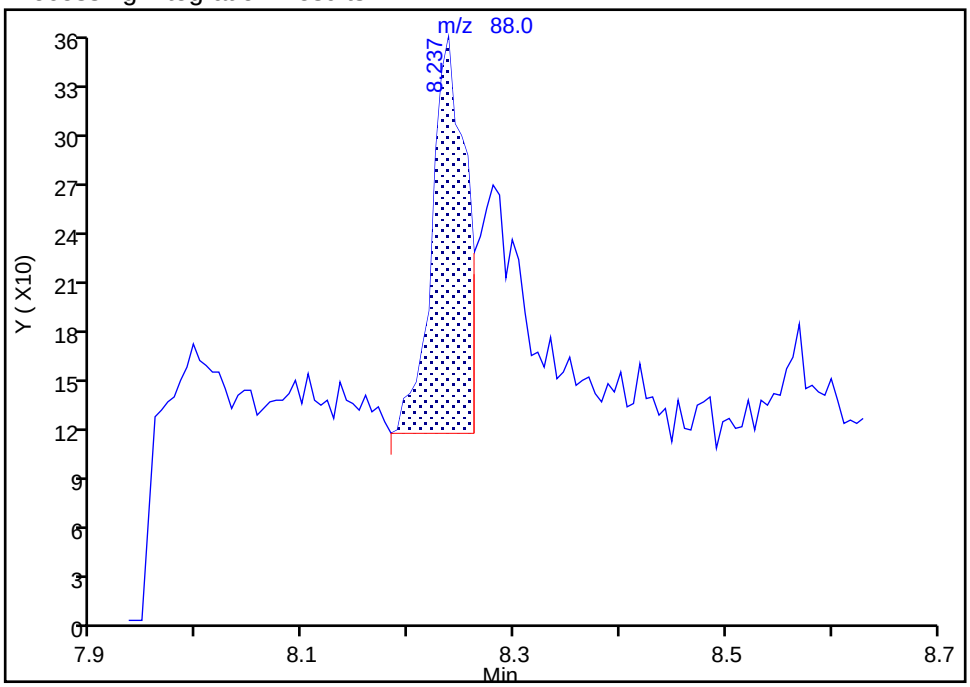
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202328.D				
Injection Date:	09-Nov-2021 22:00:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-F-20	Lab Sample ID:	240-159369-20		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

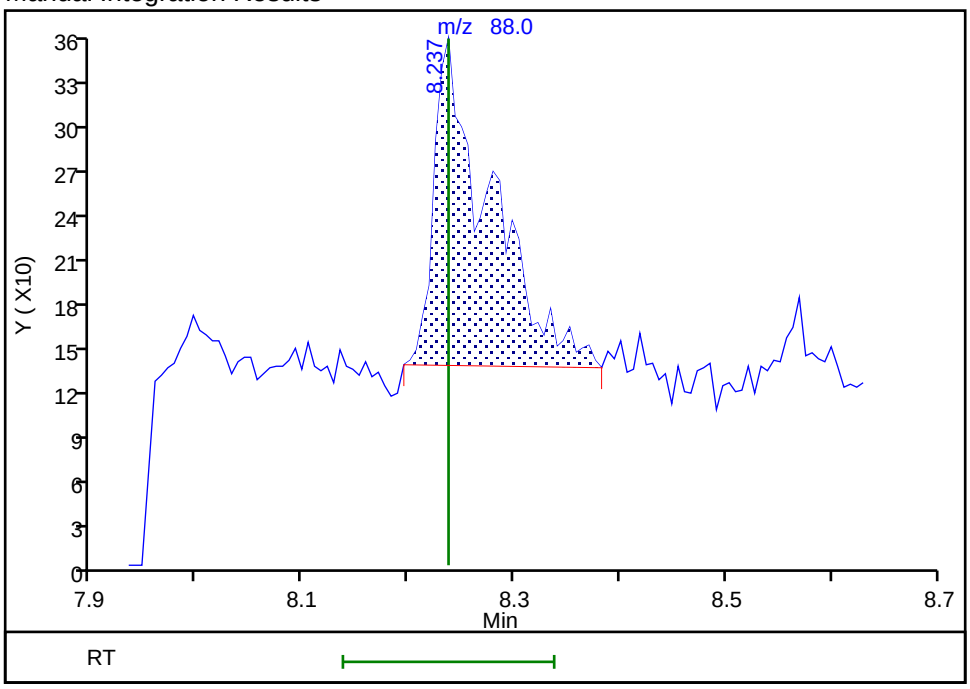
Processing Integration Results

RT: 8.24
Area: 535
Amount: 1.078788
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 805
Amount: 1.623223
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:32:36

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 1.5375	1.8357 1.5662	1.7028 1.5384	1.6415	1.6040	Ave		1.6323				6.6		35.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3150	0.3083 0.3197	0.3159 0.3393	0.3206	0.3166	Ave		0.3193				3.0		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Ave	+++++ 36824	1616 77285	4129 162137	8243	16121	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 2674197	99153 5574700	260453 11798688	541364	1068809	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	09-Sep-2021 14:25:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:15		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	60669	0.5000	0.5822	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3263223	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	94647	200.0	200.0	
	8 1,4-Dioxane	88	8.244	8.238	0.006	40	1001	1.00	1.30	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.15	Units: uL
vm50ss_00453	Amount Added:	0.15	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

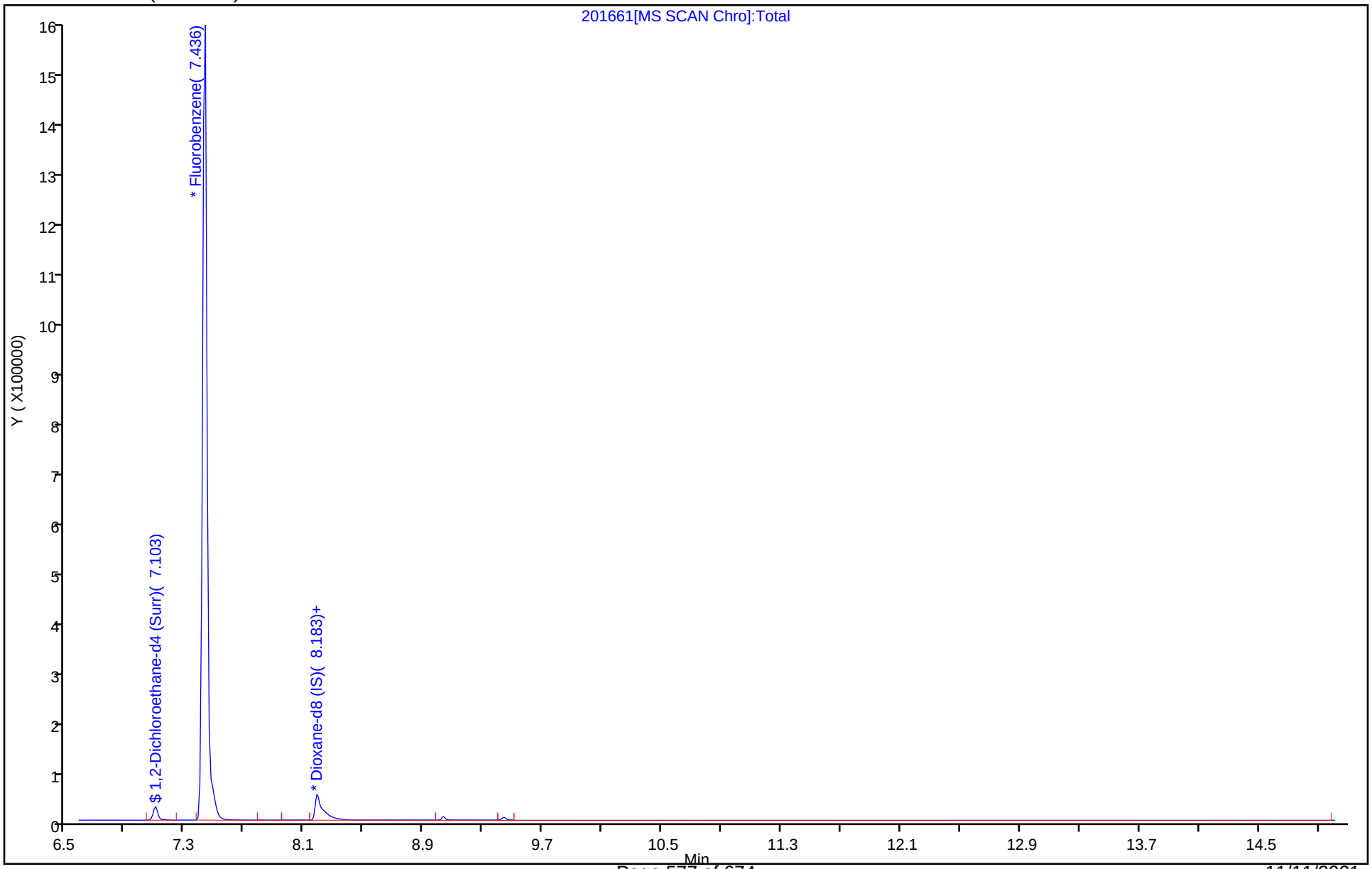
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D

Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

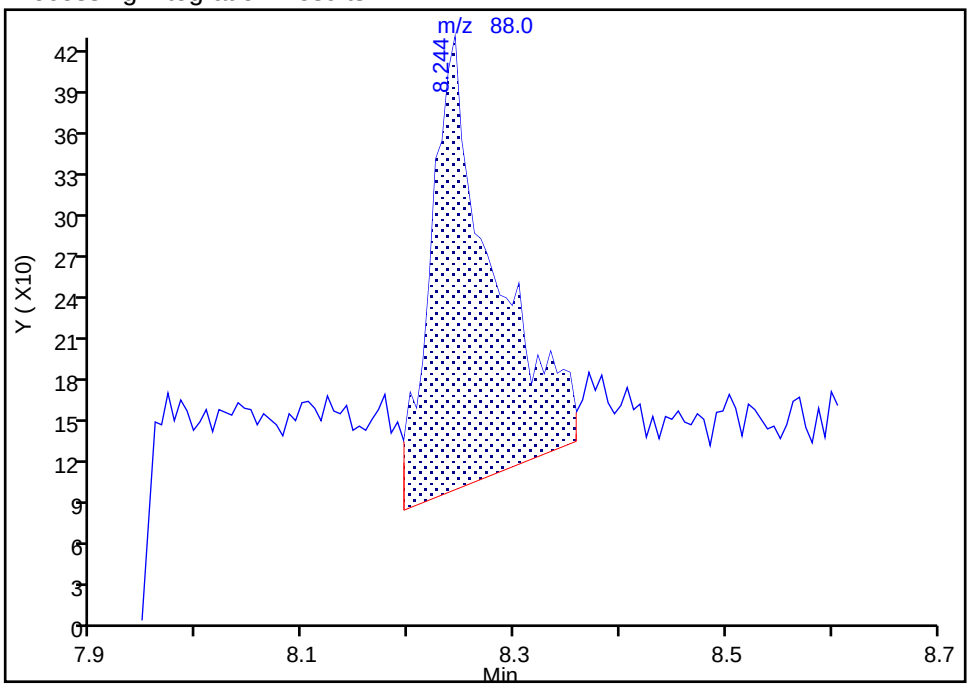
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

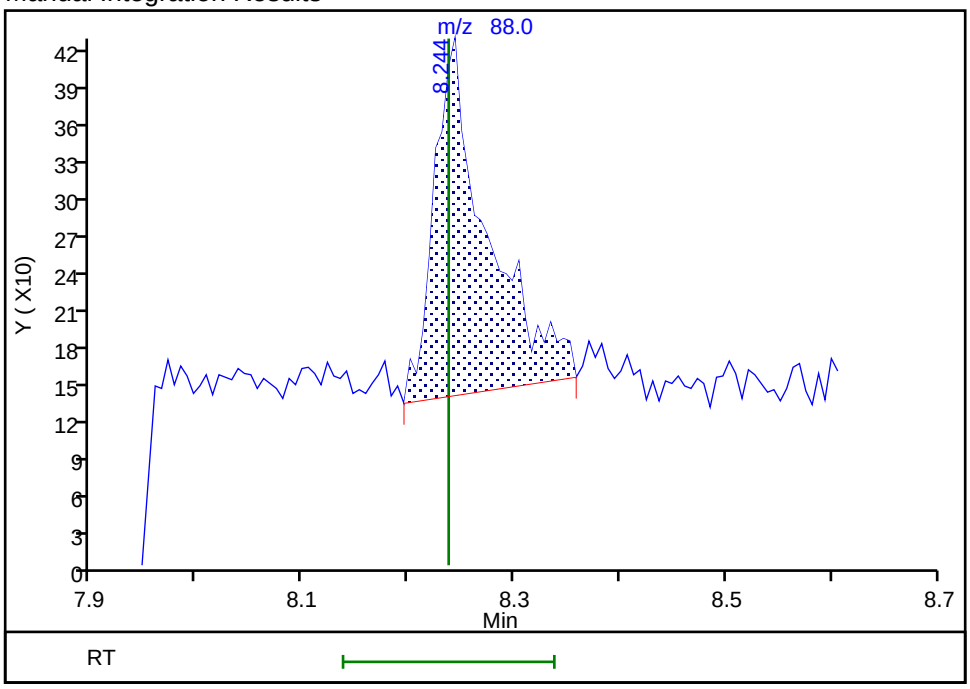
Processing Integration Results

RT: 8.24
Area: 1361
Amount: 1.197683
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1001
Amount: 1.295854
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:10:48

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	09-Sep-2021 14:49:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:35		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	99153	1.00	0.9655	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3215764	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	88032	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	49	1616	2.00	2.25	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.30	Units: uL
vm50ss_00453	Amount Added:	0.30	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

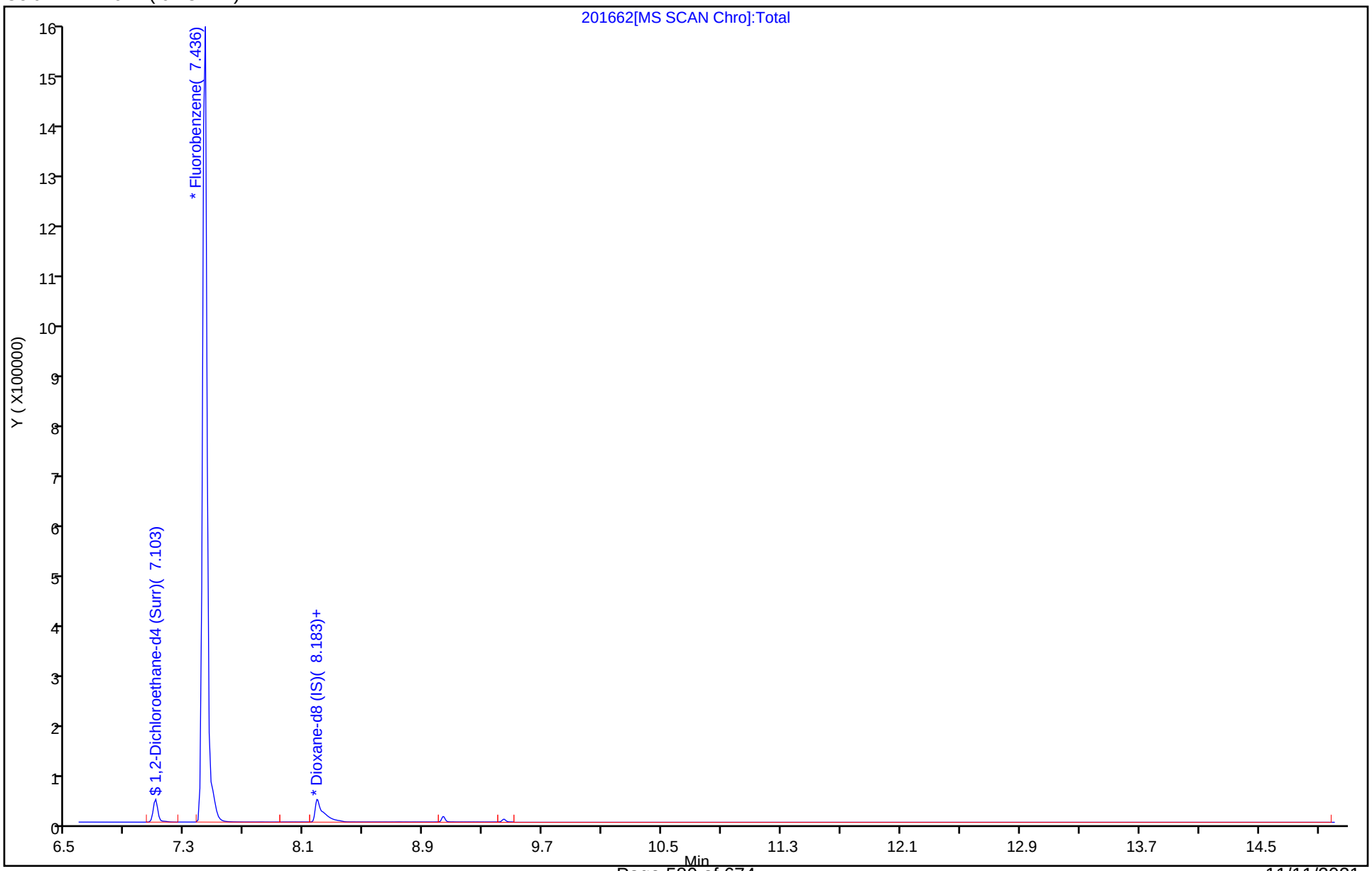
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D

Injection Date:	09-Sep-2021 14:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



11/11/2021

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

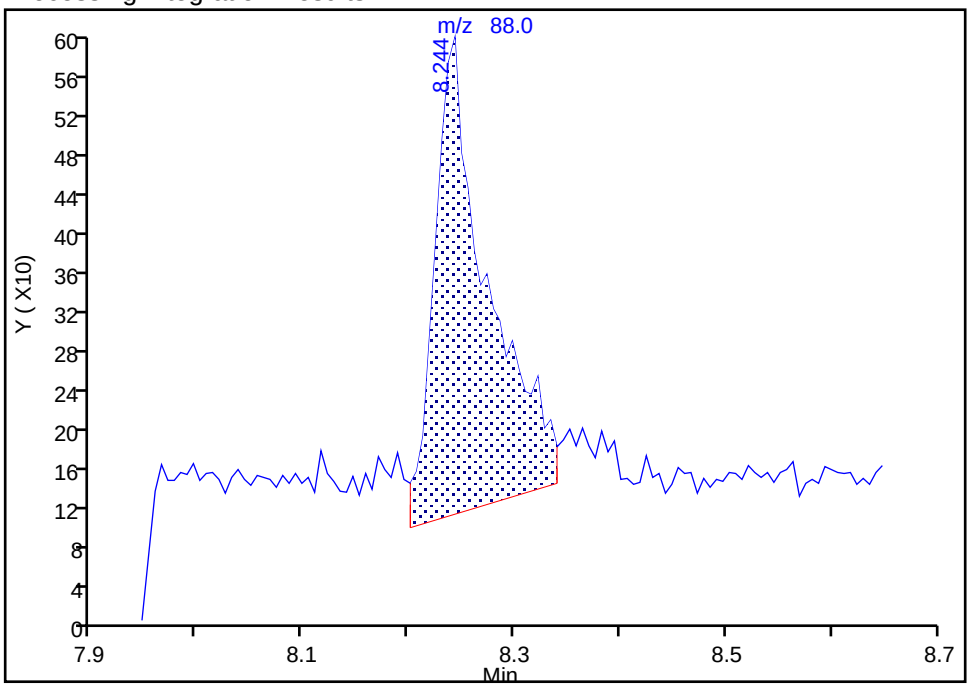
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D
Injection Date: 09-Sep-2021 14:49:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

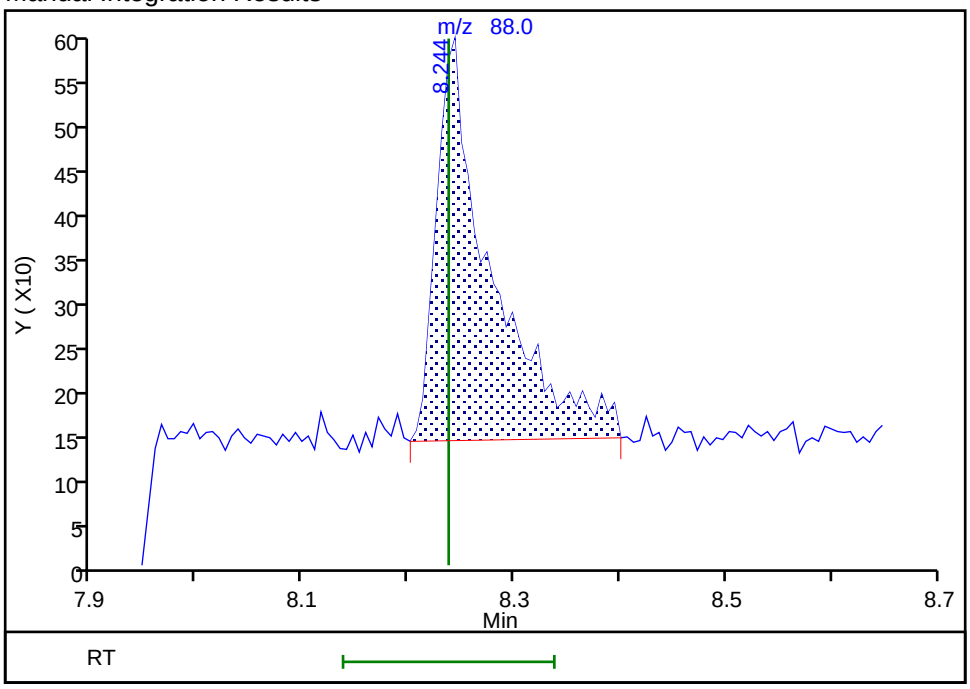
Processing Integration Results

RT: 8.24
Area: 1696
Amount: 1.906648
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1616
Amount: 2.249207
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:11:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	09-Sep-2021 15:14:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:18	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:51:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	260453	2.50	2.47	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3297506	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	96993	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	55	4129	5.00	5.22	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.75	Units: uL
vm50ss_00453	Amount Added:	0.75	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

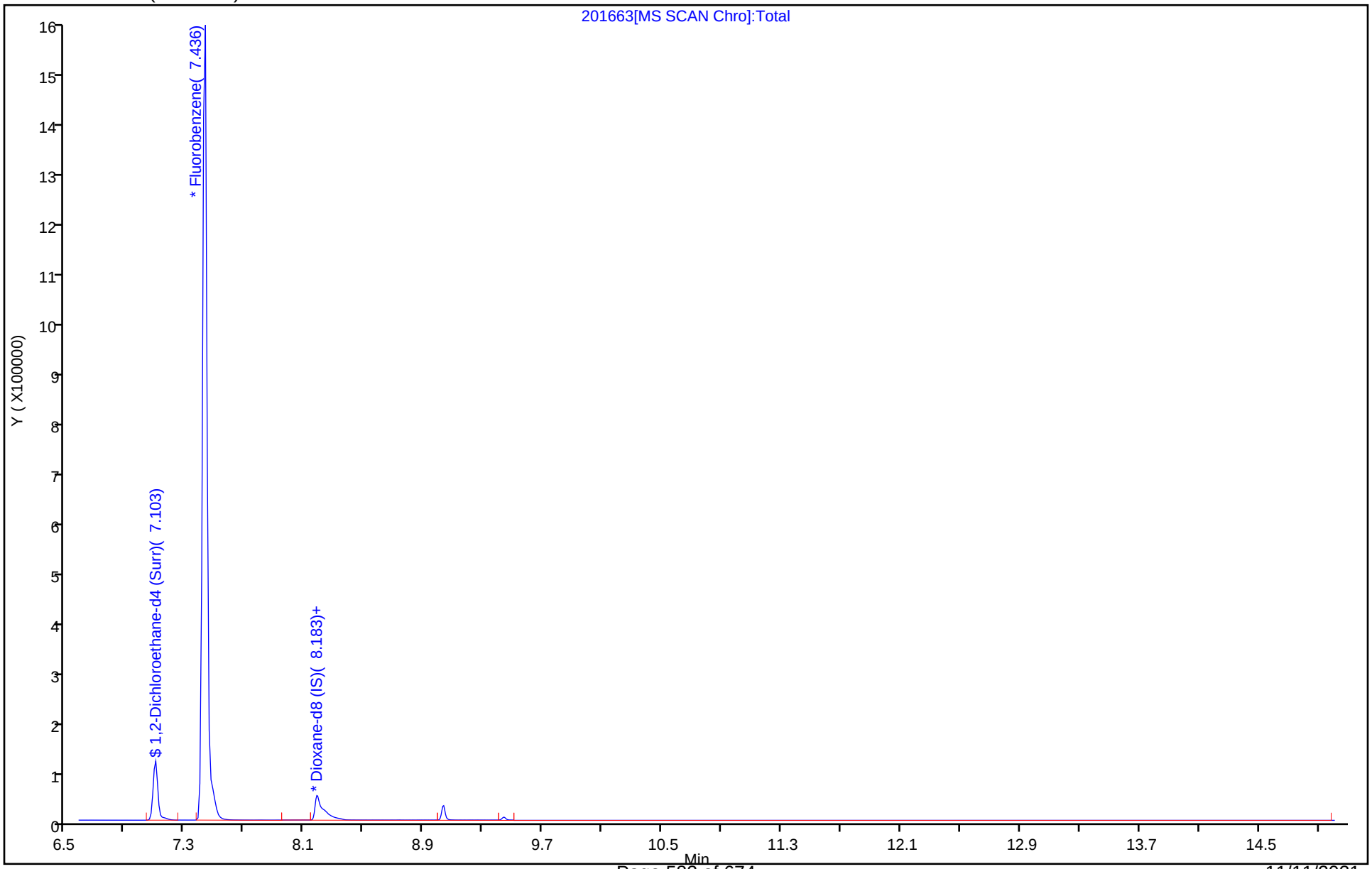
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D

Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

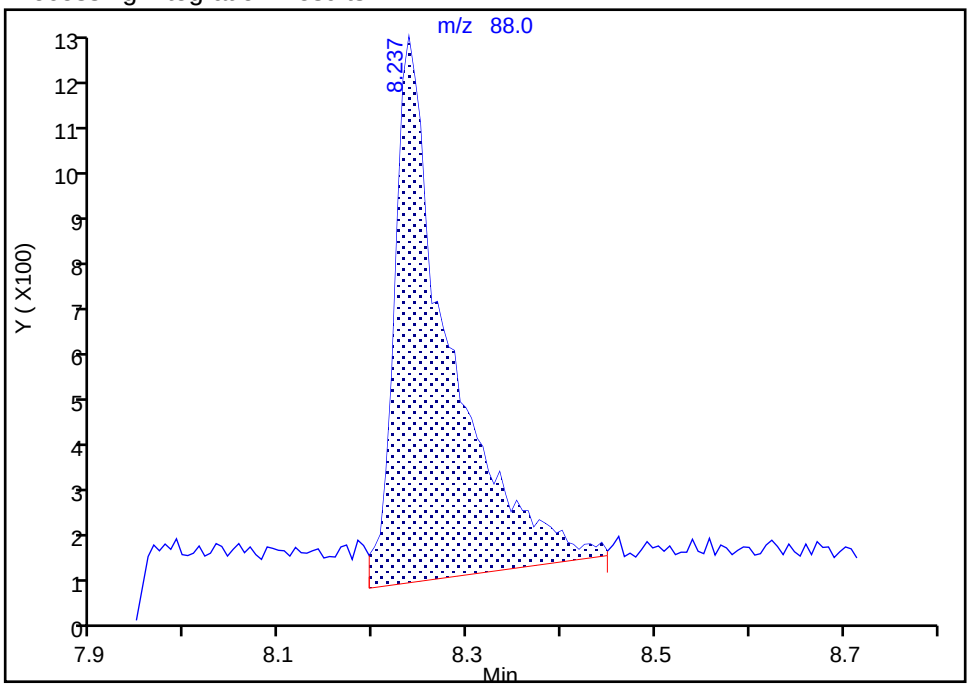
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D				
Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

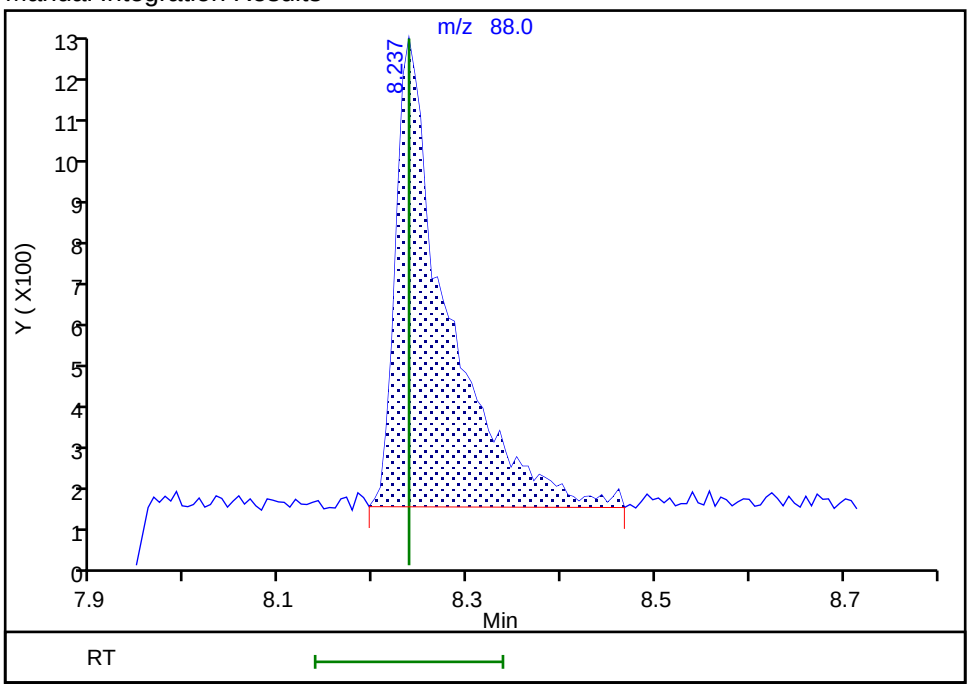
Processing Integration Results

RT: 8.24
Area: 4620
Amount: 5.267691
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4129
Amount: 5.215948
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:51:36

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	09-Sep-2021 15:38:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-006				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:18	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:52:56		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	541364	5.00	5.02	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3377511	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	100431	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	51	8243	10.0	10.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	1.50	Units: uL
vmdioxanew_00264	Amount Added:	1.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

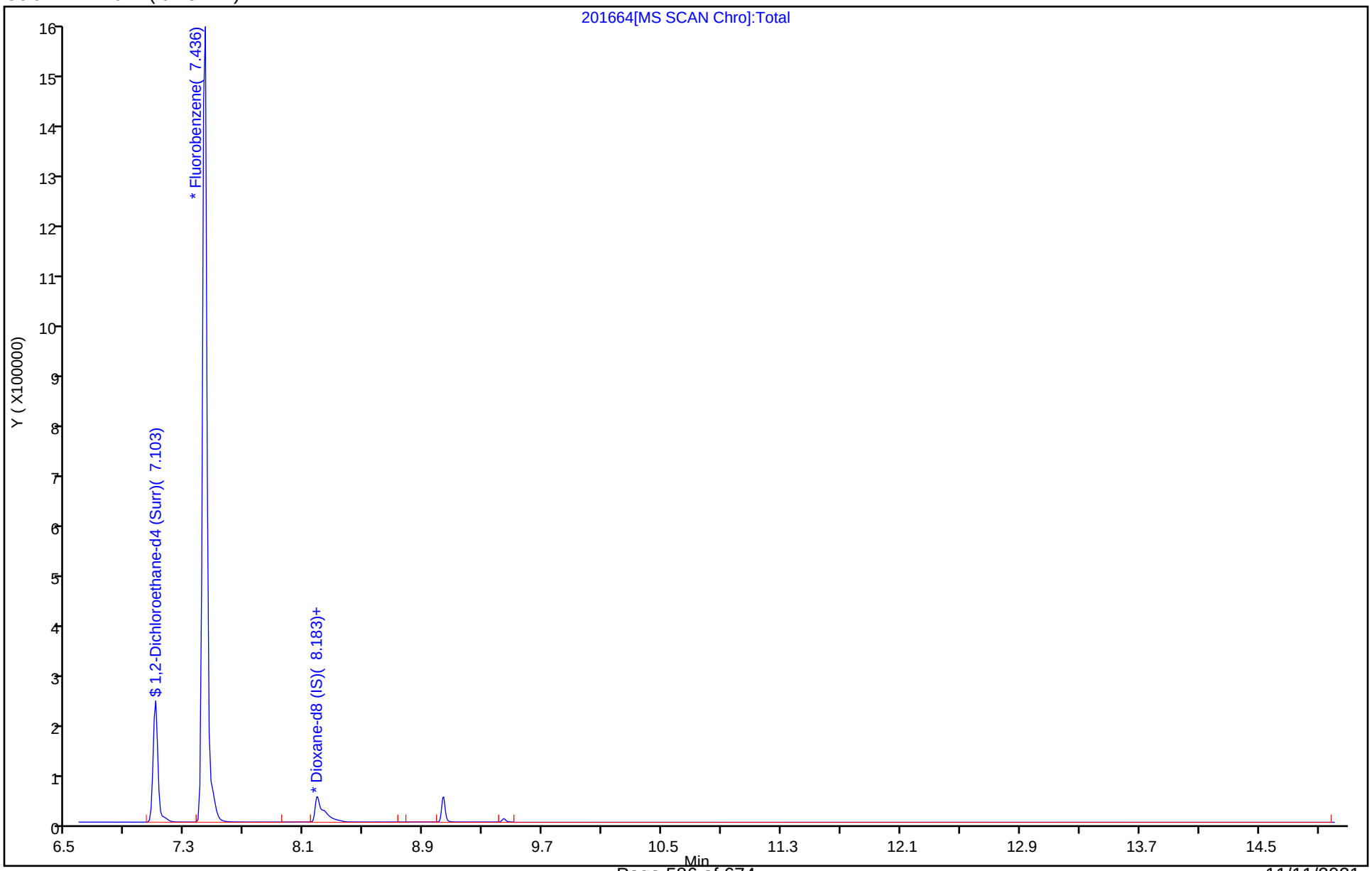
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D

Injection Date:	09-Sep-2021 15:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

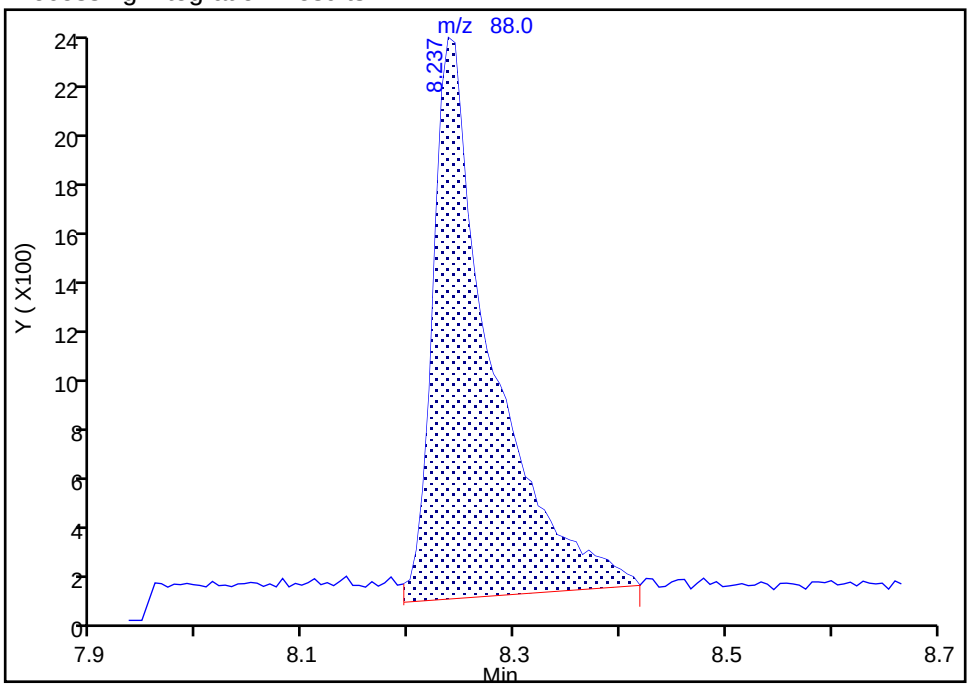
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Injection Date: 09-Sep-2021 15:38:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

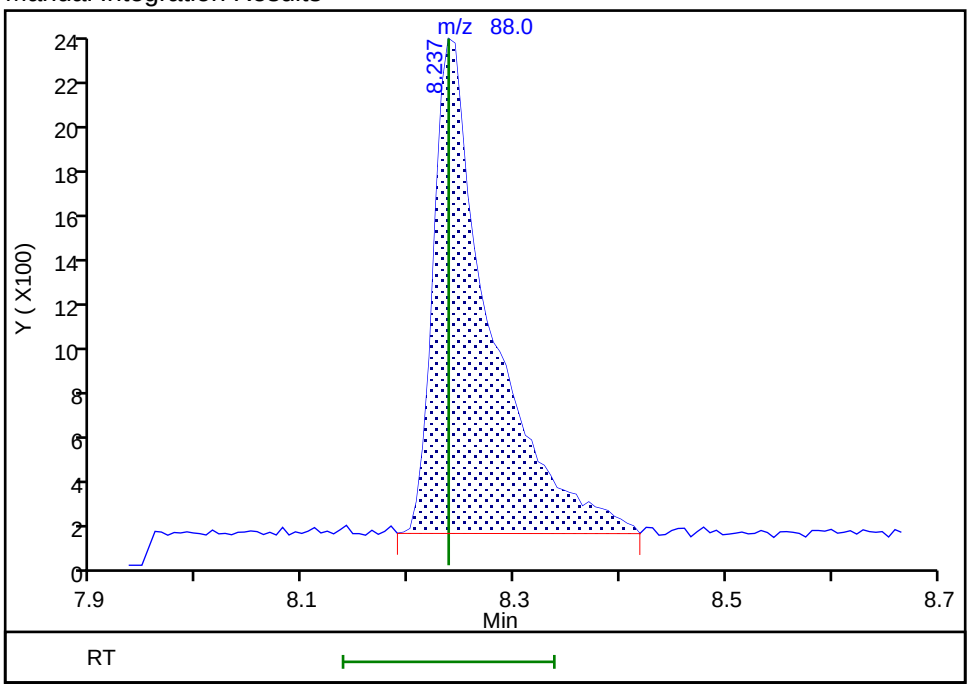
Processing Integration Results

RT: 8.24
Area: 8718
Amount: 9.782476
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8243
Amount: 10.056486
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:52:21
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 09-Sep-2021 16:03:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-007
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:17 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 17:49:17

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1068809	10.0	9.91	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3376203	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	96	100508	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.238	0.000	49	16121	20.0	19.7	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 3.00 Units: uL
vm50ss_00453 Amount Added: 3.00 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

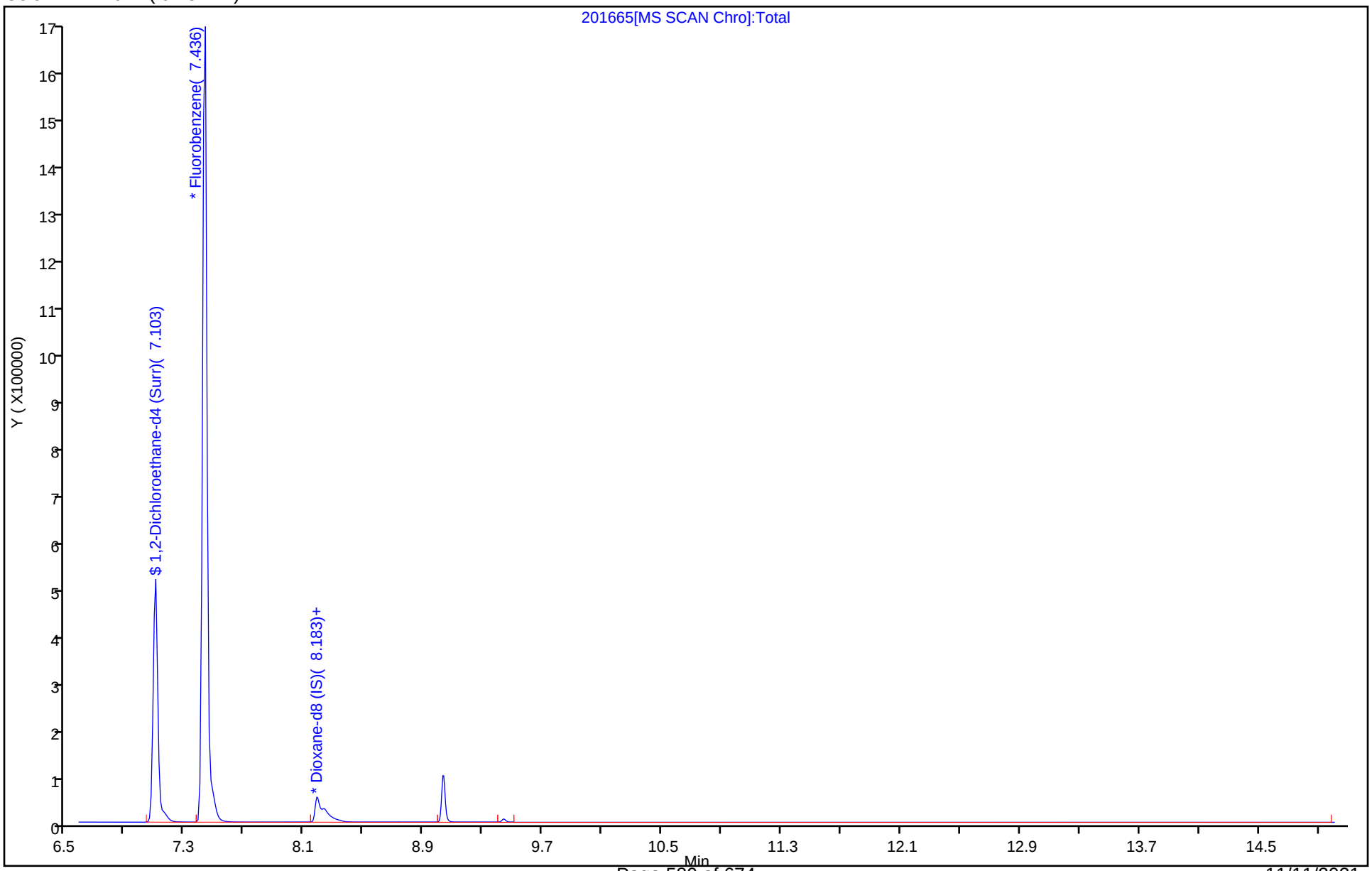
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D

Injection Date:	09-Sep-2021 16:03:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

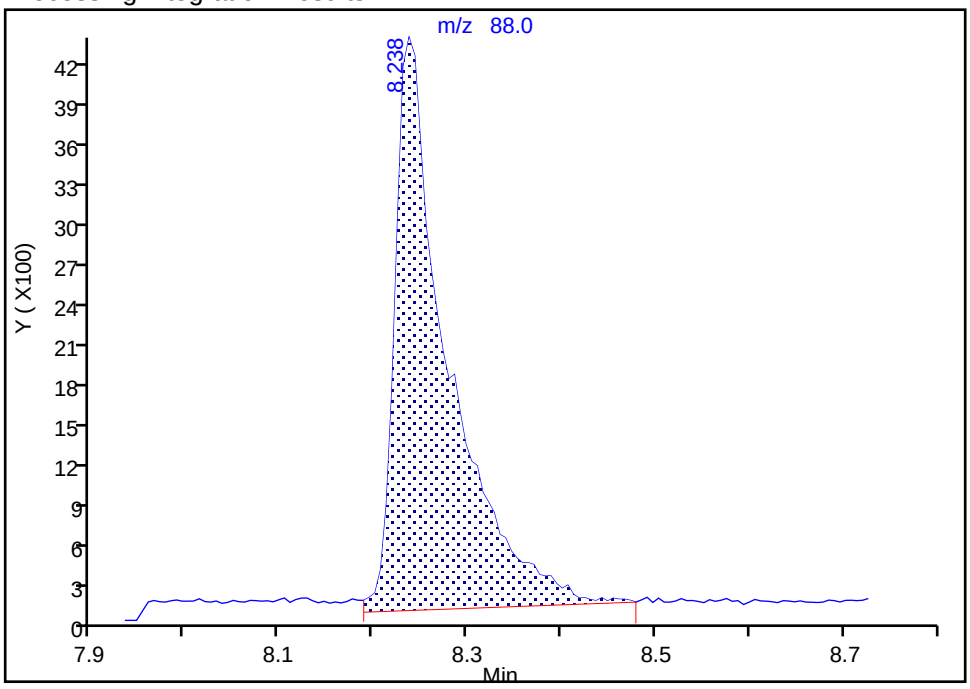
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Injection Date: 09-Sep-2021 16:03:30 Instrument ID: A3UX20
Lims ID: ICIS
Client ID:
Operator ID: 434006 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

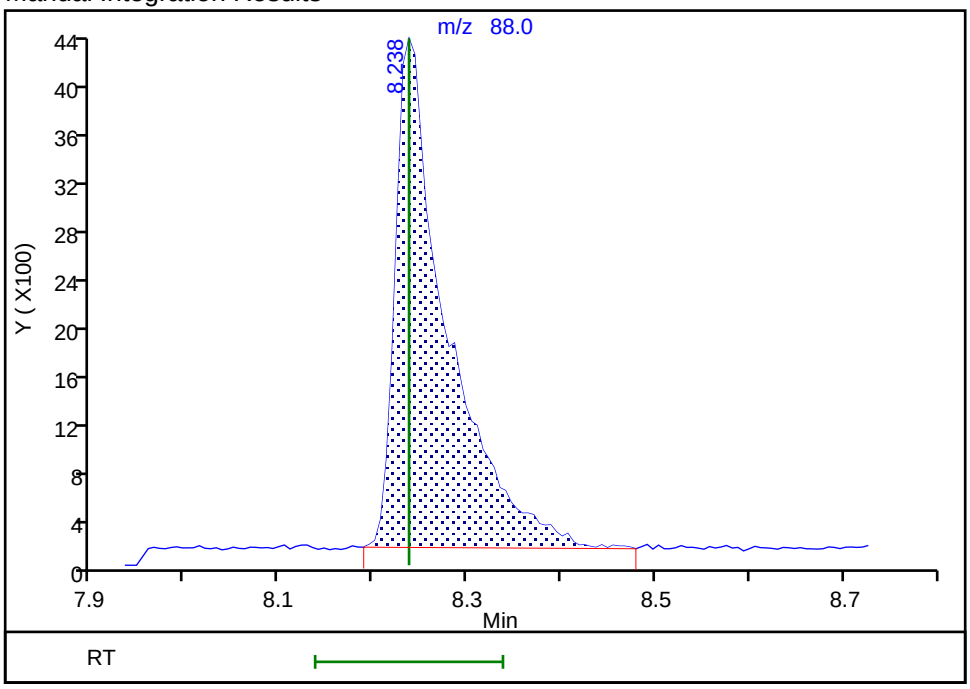
Processing Integration Results

RT: 8.24
Area: 16911
Amount: 19.131260
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 16121
Amount: 19.652602
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	09-Sep-2021 16:27:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:19	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:54:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	2674197	25.0	24.7	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3395321	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.189	-0.006	92	95801	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	36824	50.0	47.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	7.50	Units: uL
vmdioxanew_00264	Amount Added:	7.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

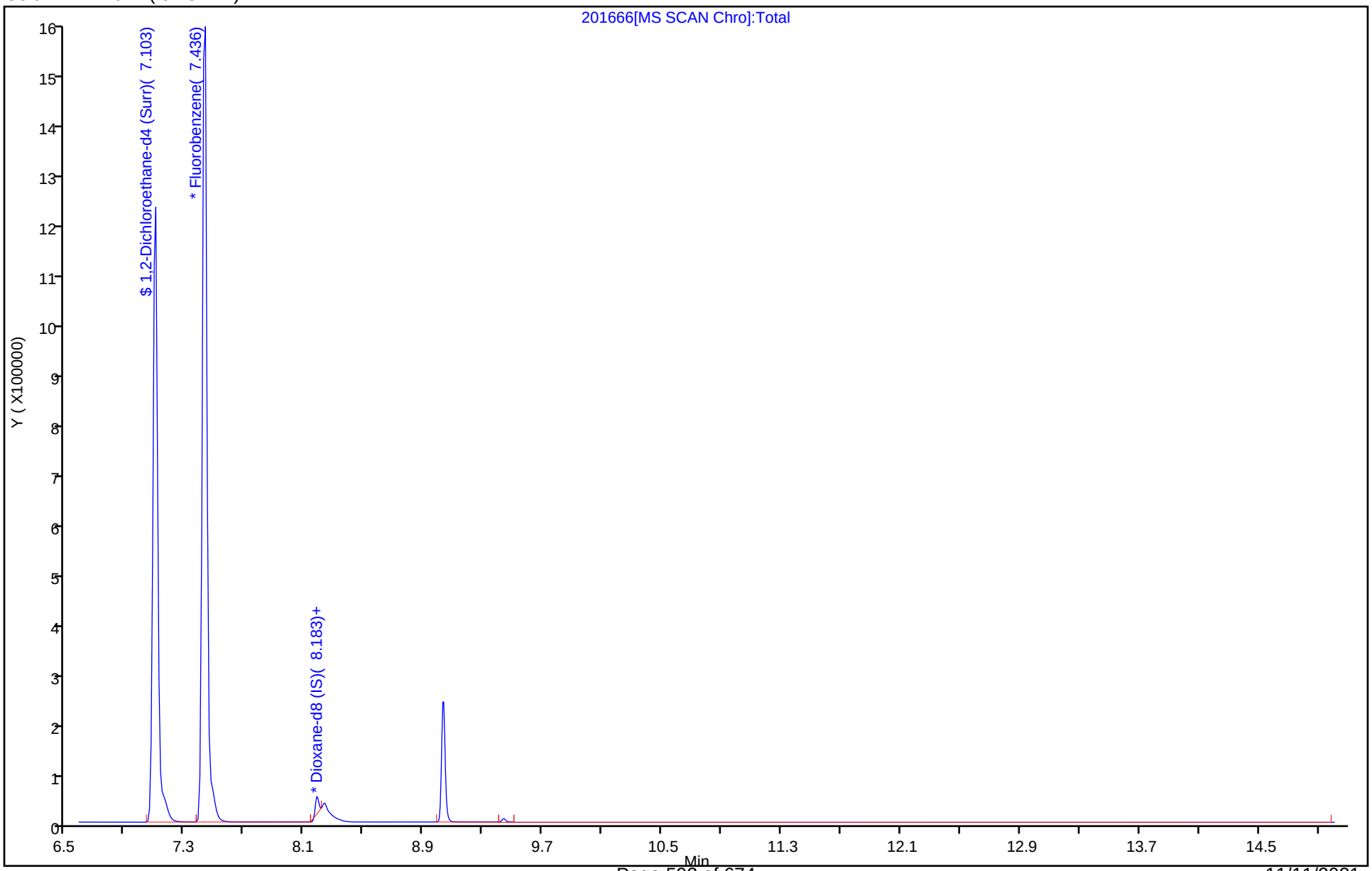
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D

Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

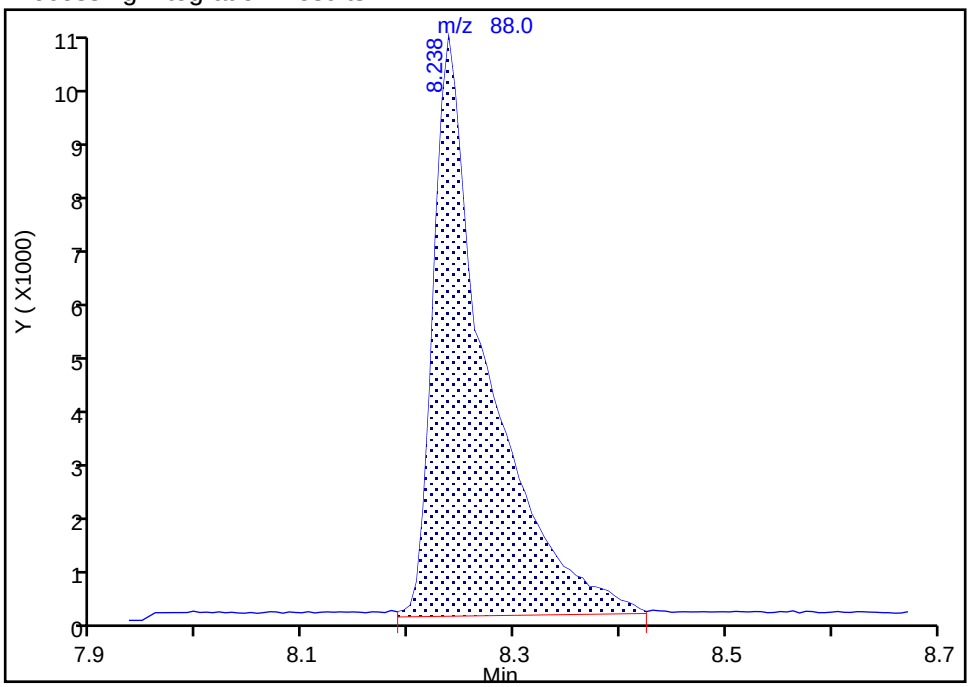
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

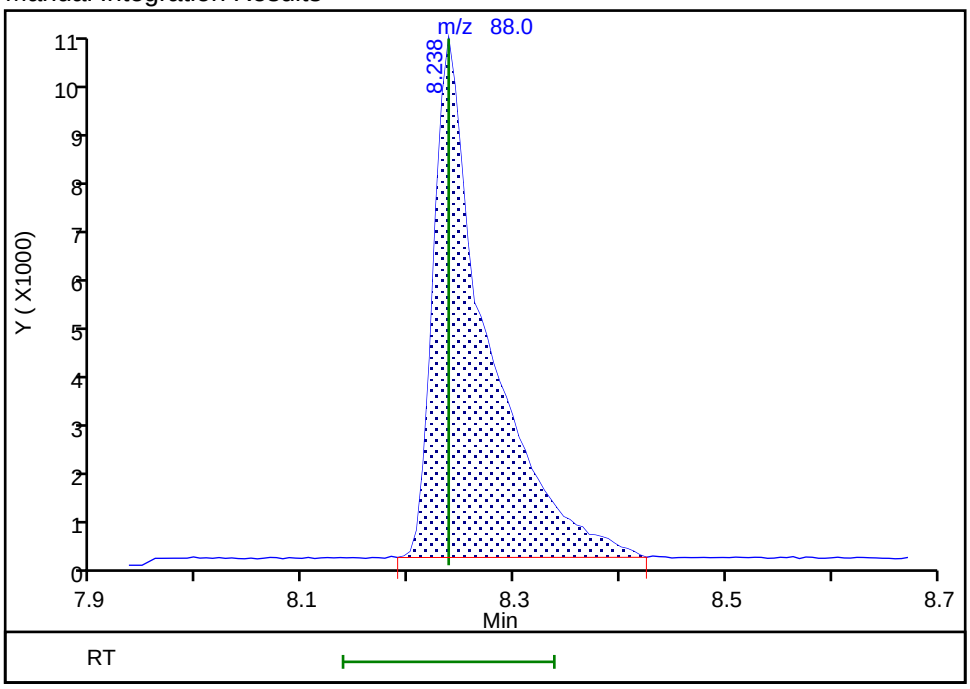
Processing Integration Results

RT: 8.24
Area: 37744
Amount: 45.133538
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 36824
Amount: 47.096609
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Sep-2021 16:52:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-009
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:19 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 17:40:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	5574700	50.0	50.1	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3487222	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	98689	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	77285	100.0	96.0	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 15.00 Units: uL
vm50ss_00453 Amount Added: 15.00 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

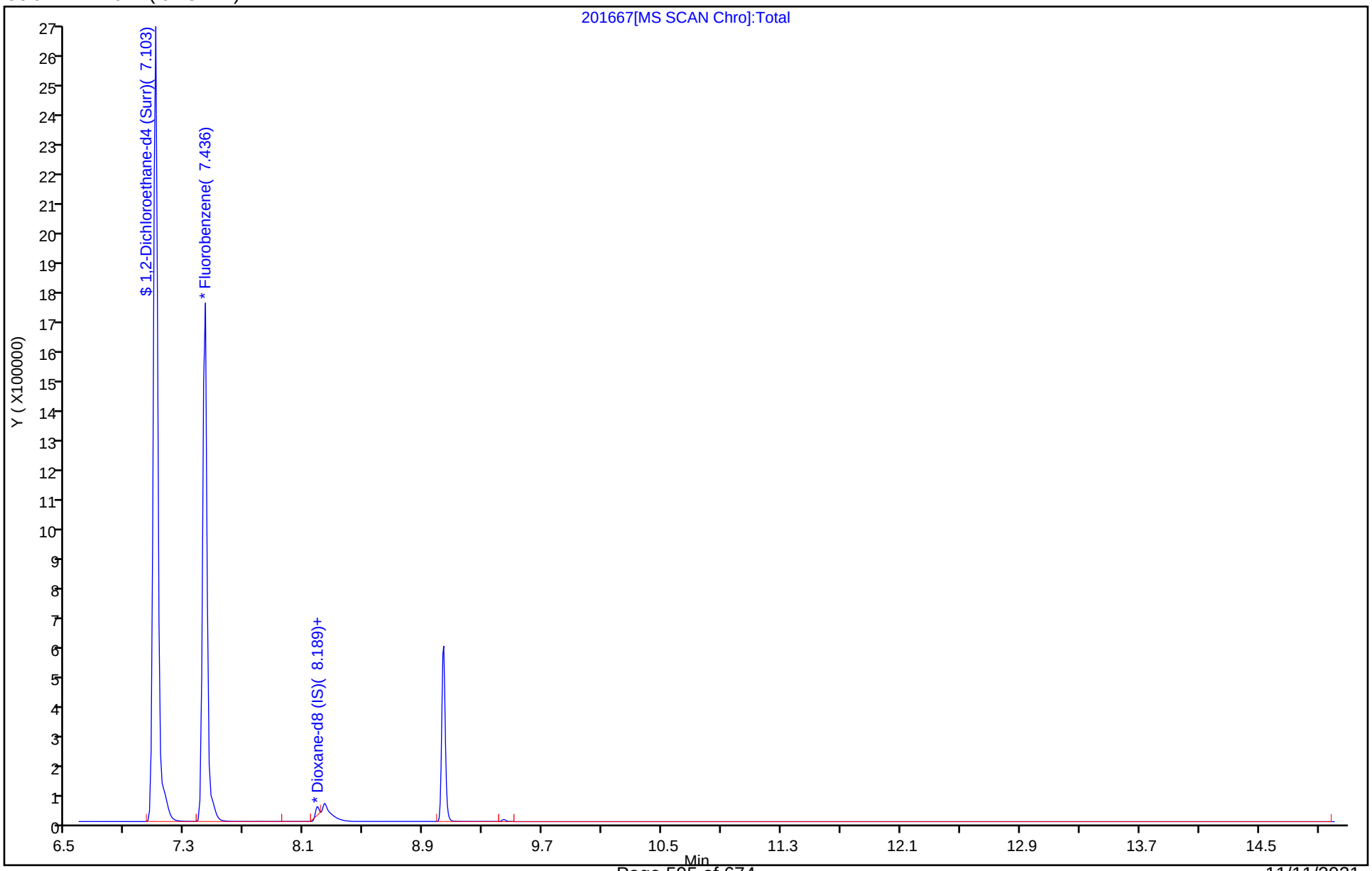
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D

Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

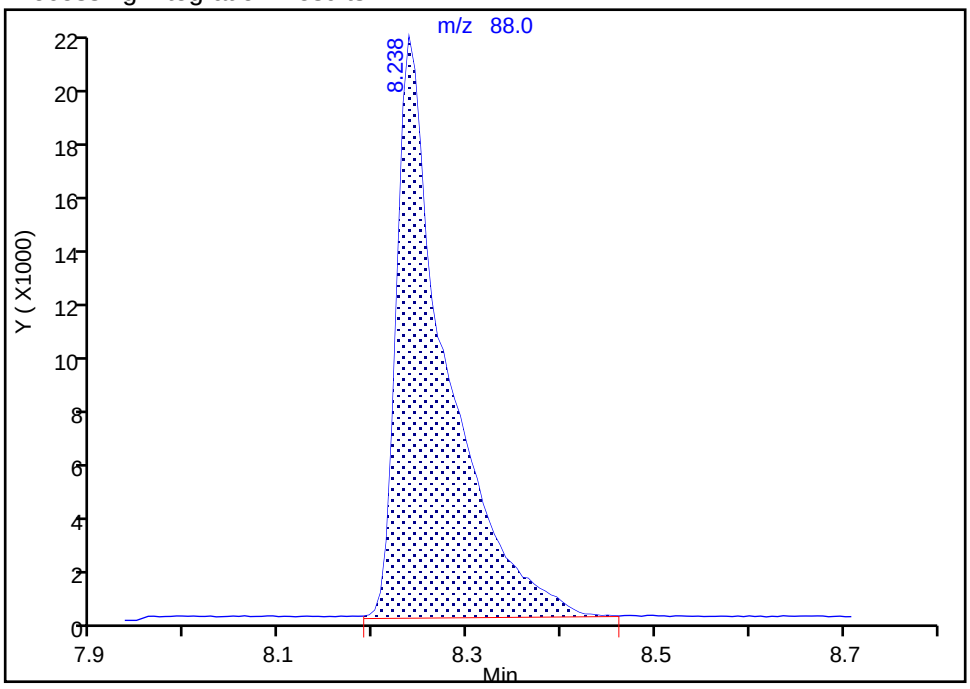
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D
Injection Date: 09-Sep-2021 16:52:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

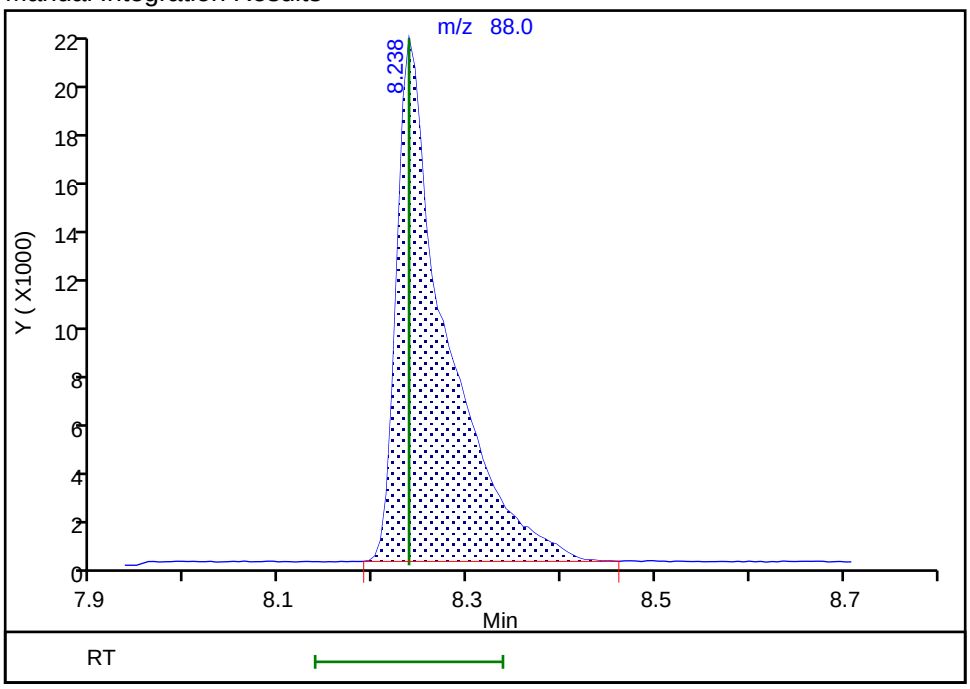
Processing Integration Results

RT: 8.24
Area: 78168
Amount: 96.896781
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 77285
Amount: 95.952255
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 17:41:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	09-Sep-2021 17:16:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:20	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:40:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	11798688	100.0	106.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3477775	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	105393	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	162137	200.0	188.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_00453	Amount Added:	30.00	Units: uL
vmdioxanew_00264	Amount Added:	30.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

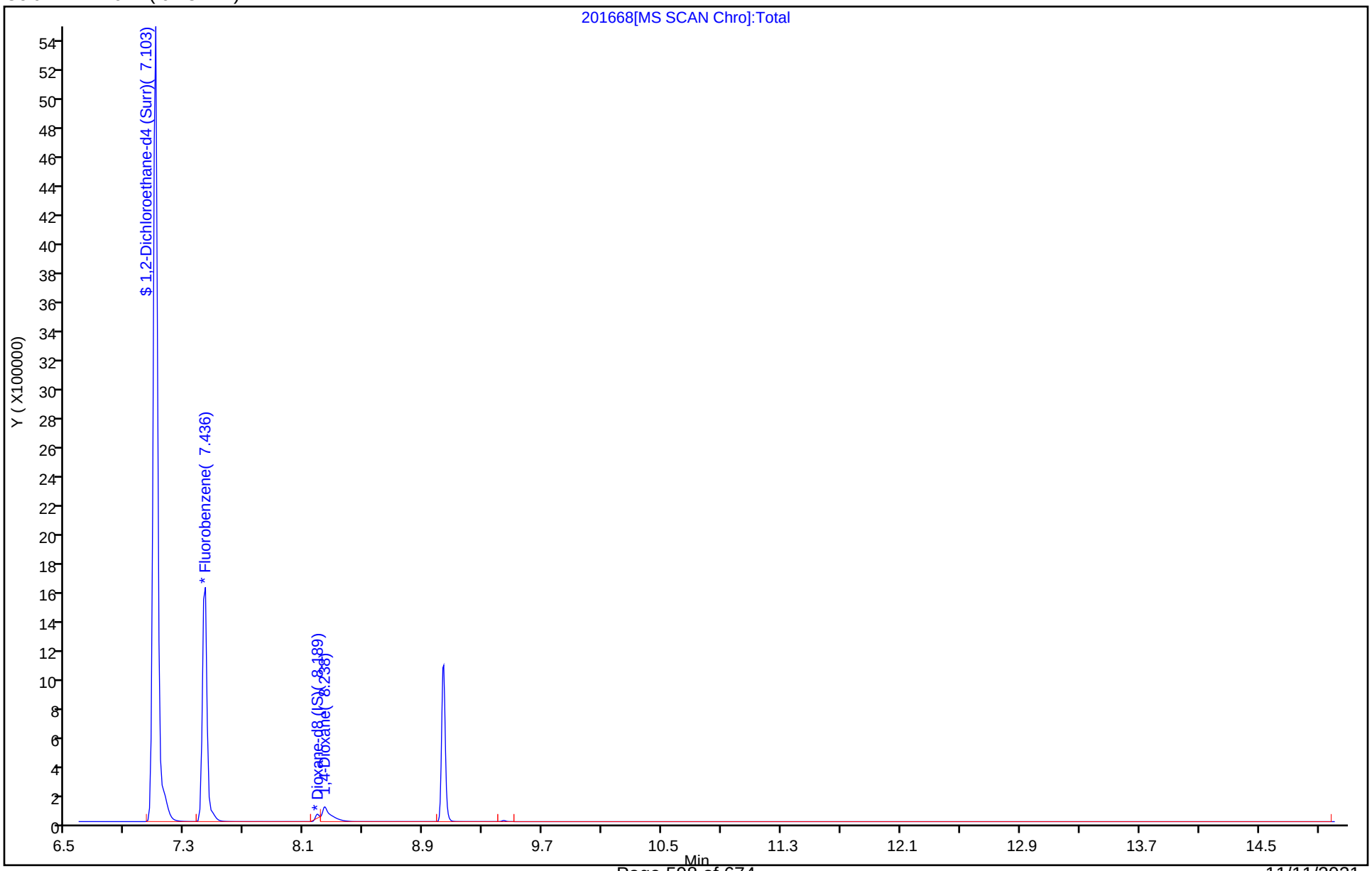
Report Date: 09-Sep-2021 17:49:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Injection Date:	09-Sep-2021 17:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

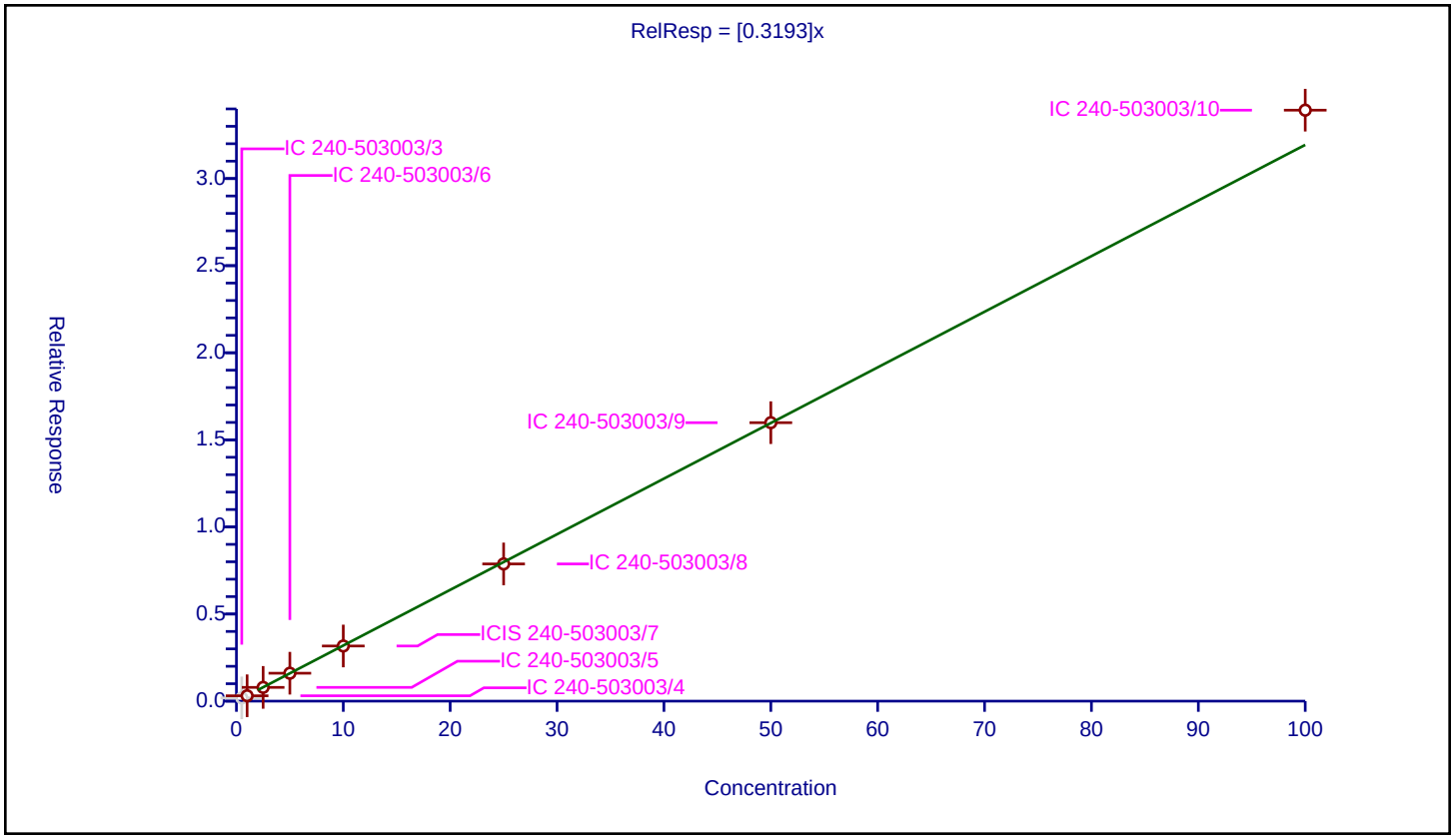
Curve Coefficients

Intercept:	0
Slope:	0.3193

Error Coefficients

Standard Error:	5460000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	0.5	0.185917	10.0	3263223.0	0.371835	N
2	IC 240-503003/4	1.0	0.308334	10.0	3215764.0	0.308334	Y
3	IC 240-503003/5	2.5	0.789848	10.0	3297506.0	0.315939	Y
4	IC 240-503003/6	5.0	1.602849	10.0	3377511.0	0.32057	Y
5	ICIS 240-503003/7	10.0	3.165713	10.0	3376203.0	0.316571	Y
6	IC 240-503003/8	25.0	7.876124	10.0	3395321.0	0.315045	Y
7	IC 240-503003/9	50.0	15.986077	10.0	3487222.0	0.319722	Y
8	IC 240-503003/10	100.0	33.925967	10.0	3477775.0	0.33926	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

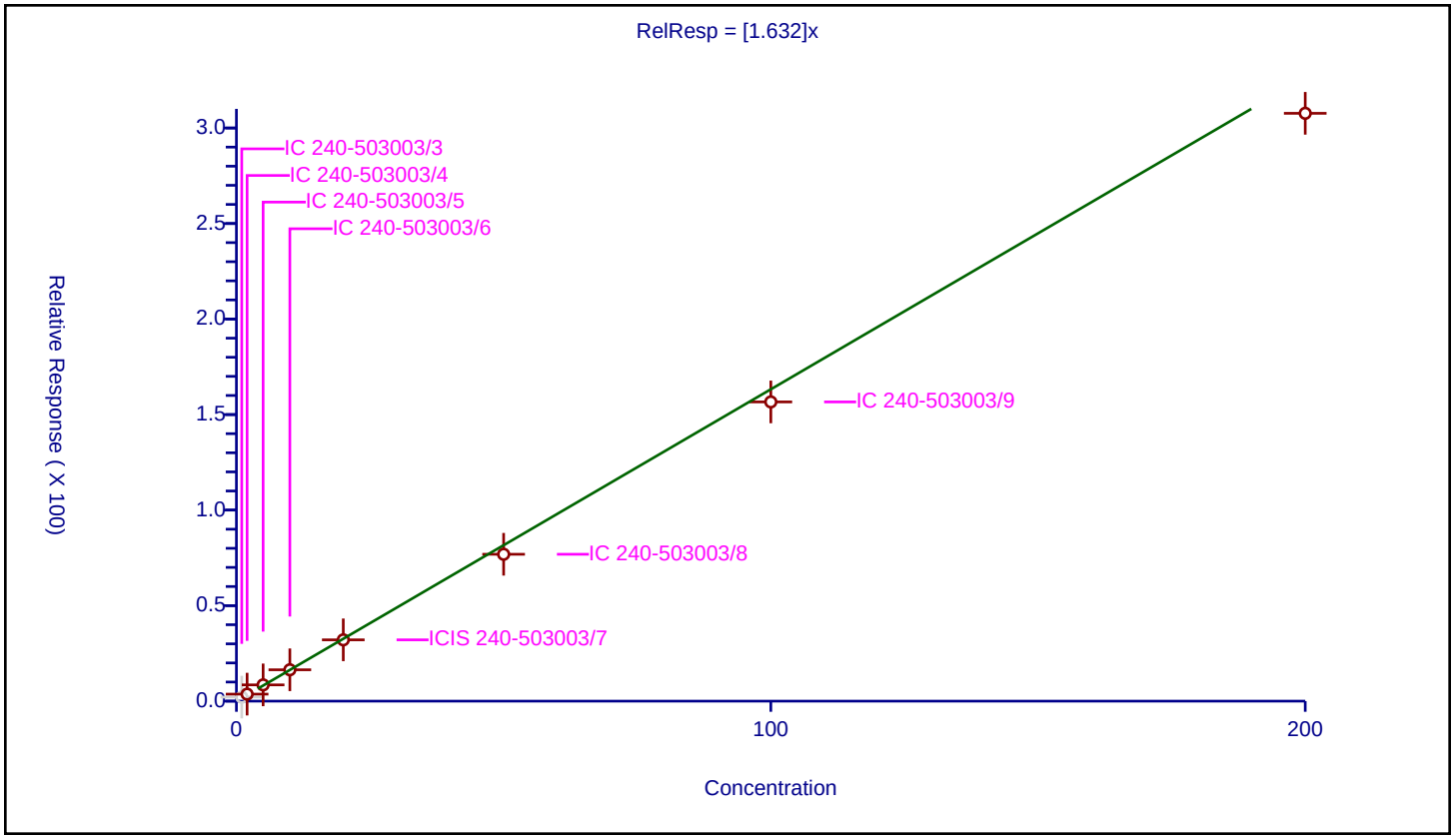
Curve Coefficients

Intercept:	0
Slope:	1.632

Error Coefficients

Standard Error:	75100
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	1.0	2.115228	200.0	94647.0	2.115228	N
2	IC 240-503003/4	2.0	3.671392	200.0	88032.0	1.835696	Y
3	IC 240-503003/5	5.0	8.514016	200.0	96993.0	1.702803	Y
4	IC 240-503003/6	10.0	16.41525	200.0	100431.0	1.641525	Y
5	ICIS 240-503003/7	20.0	32.079038	200.0	100508.0	1.603952	Y
6	IC 240-503003/8	50.0	76.876024	200.0	95801.0	1.53752	Y
7	IC 240-503003/9	100.0	156.623332	200.0	98689.0	1.566233	Y
8	IC 240-503003/10	200.0	307.680776	200.0	105393.0	1.538404	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: ICV 240-503003/12 Calibration Date: 09/09/2021 18:06

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 201670.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.559		0.00955	0.0100	-4.5	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2641		0.00827	0.0100	-17.3	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	09-Sep-2021 18:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:37:00	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1666				
First Level Reviewer: seymourc		Date:	09-Sep-2021 18:34:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	893369	10.0	8.27	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3382724	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	94434	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	54	7360	10.0	9.55	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00275	Amount Added:	3.00	Units: uL	
vm150IS20_00012	Amount Added:	1.00	Units: uL	Run Reagent
vm150SS20_00003	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00201	Amount Added:	0.00	Units:	Run Reagent

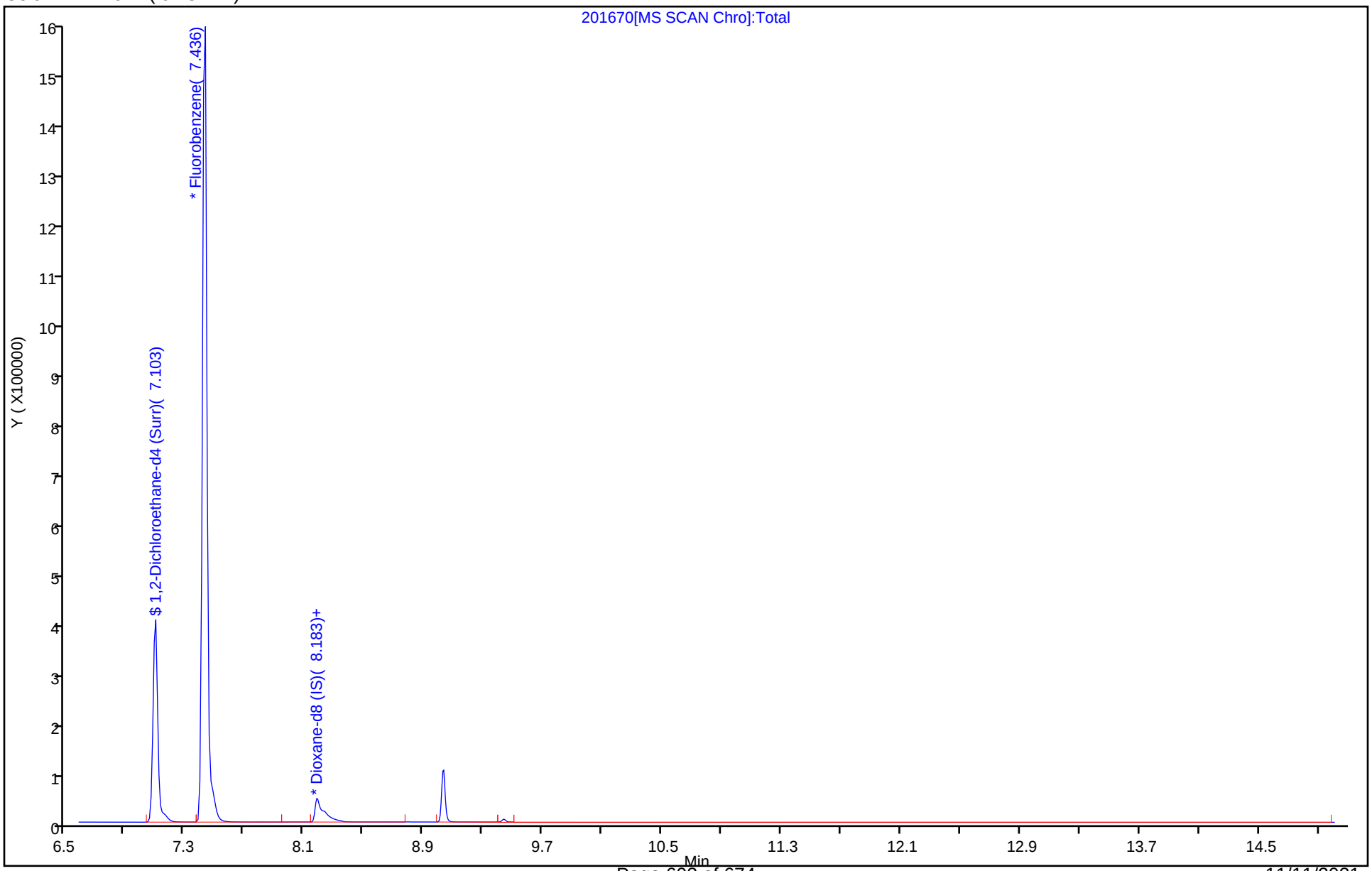
Report Date: 10-Sep-2021 15:14:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D

Injection Date:	09-Sep-2021 18:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

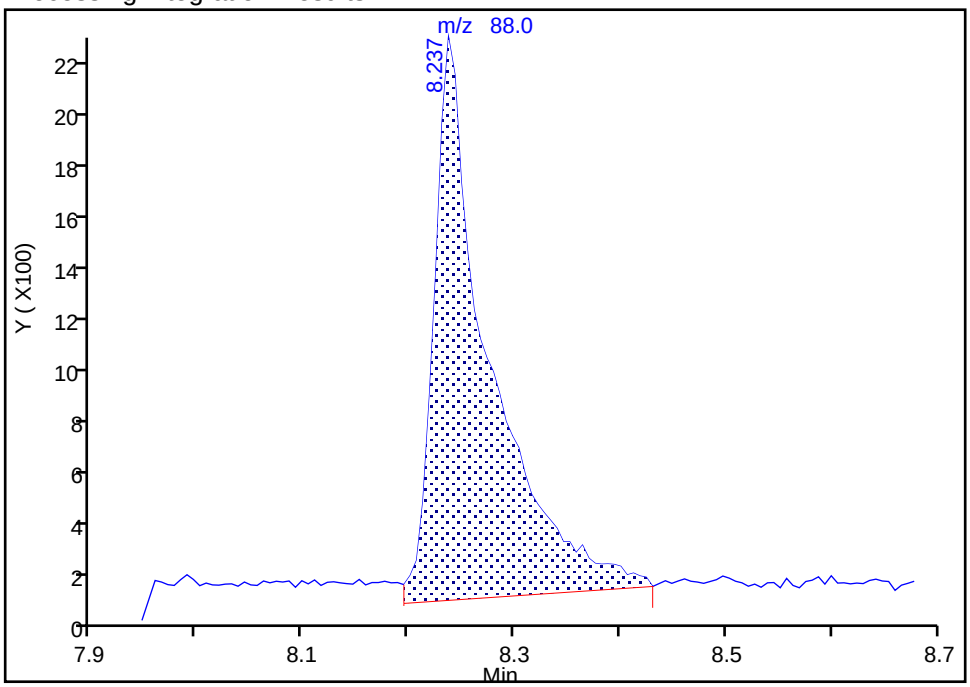
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D
Injection Date: 09-Sep-2021 18:06:30 Instrument ID: A3UX20
Lims ID: ICV
Client ID:
Operator ID: 434006 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

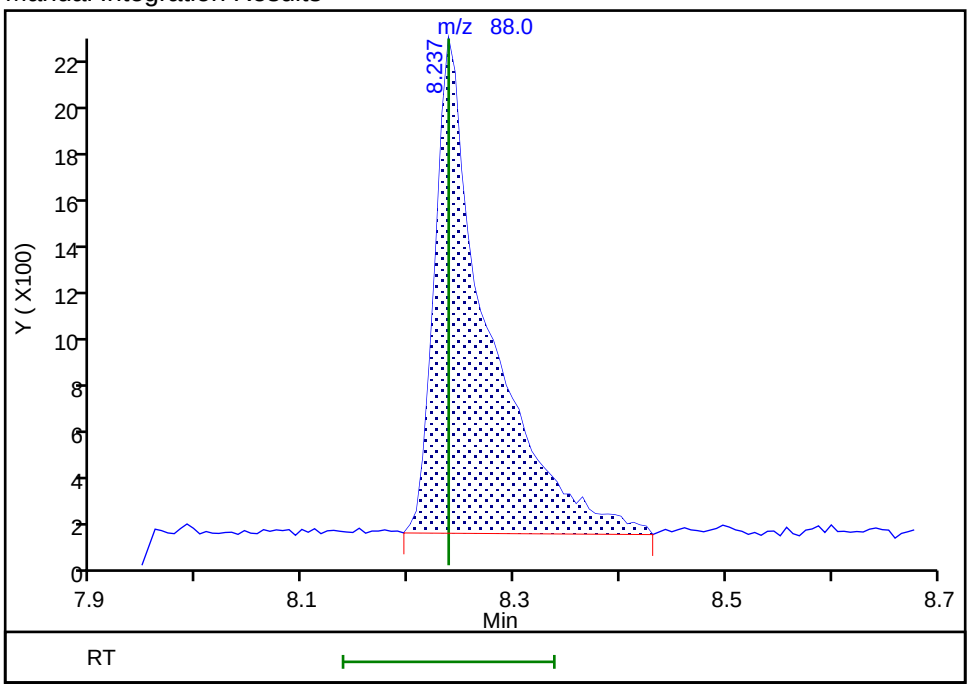
Processing Integration Results

RT: 8.24
Area: 7881
Amount: 10.225432
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7360
Amount: 9.549445
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 18:34:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-511974/2 Calibration Date: 11/08/2021 19:24

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 202299.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.499		0.0184	0.0200	-8.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2959		0.00926	0.0100	-7.4	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202299.D				
Lims ID:	CCVIS				
Client ID:					
Sample Type:	CCVIS				
Inject. Date:	08-Nov-2021 19:24:30	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-002				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				
First Level Reviewer: seymourc		Date:	08-Nov-2021 19:56:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	662570	10.0	9.26	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2239531	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	94	74516	200.0	200.0	
8 1,4-Dioxane	88	8.231	8.231	0.000	51	11171	20.0	18.4	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00270	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

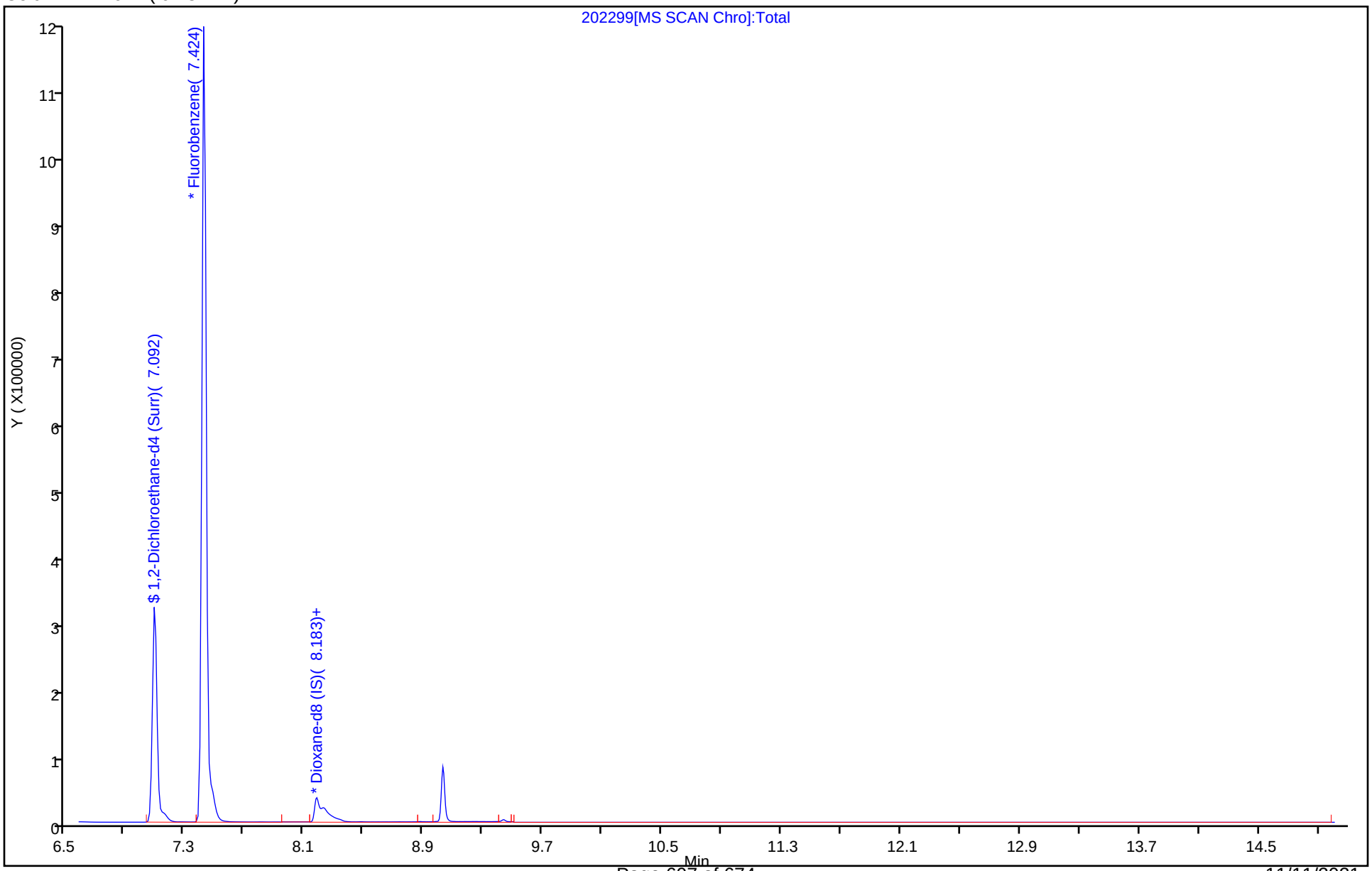
Report Date: 09-Nov-2021 12:37:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202299.D

Injection Date:	08-Nov-2021 19:24:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

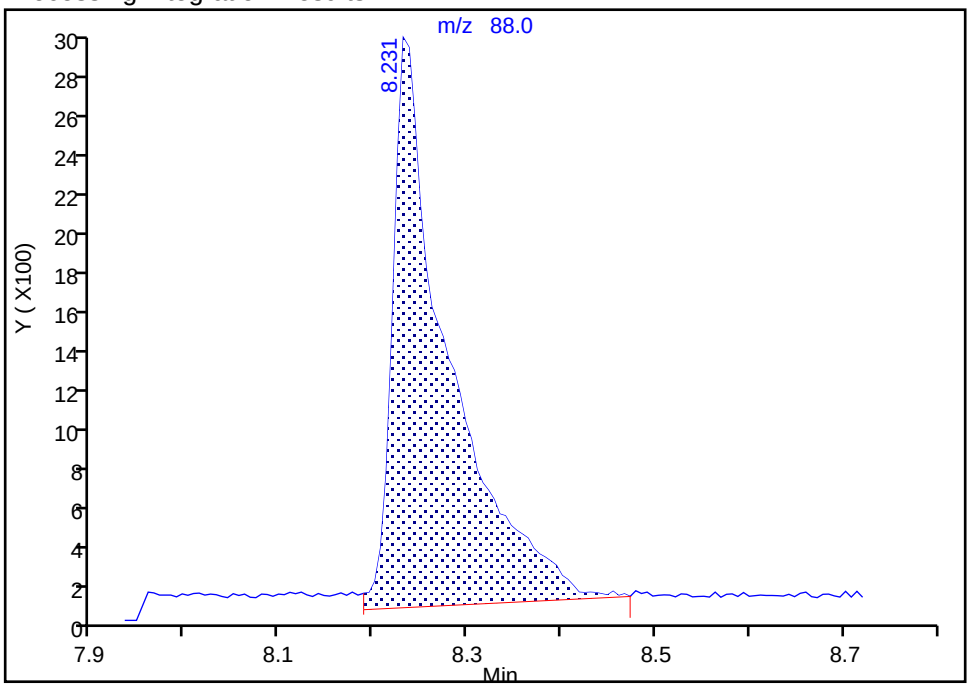
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202299.D				
Injection Date:	08-Nov-2021 19:24:30	Instrument ID:	A3UX20		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

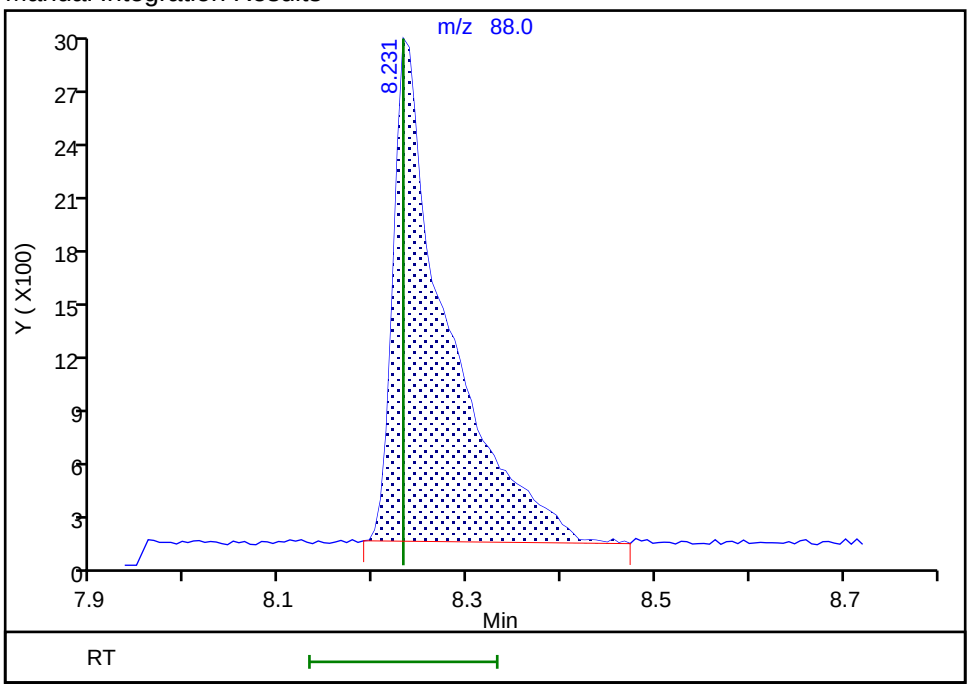
Processing Integration Results

RT: 8.23
Area: 11892
Amount: 19.553931
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 11171
Amount: 18.368396
Amount Units: ug/l



Reviewer: seymourc, 08-Nov-2021 19:56:26
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Lab Sample ID: CCVIS 240-512125/3 Calibration Date: 11/09/2021 12:50

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 202305.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.496		0.0183	0.0200	-8.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2894		0.00906	0.0100	-9.4	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202305.D				
Lims ID:	CCVIS				
Client ID:					
Sample Type:	CCVIS				
Inject. Date:	09-Nov-2021 12:50:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	09-Nov-2021 13:43:58		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	676917	10.0	9.06	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2338902	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	69577	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	53	10412	20.0	18.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00271	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

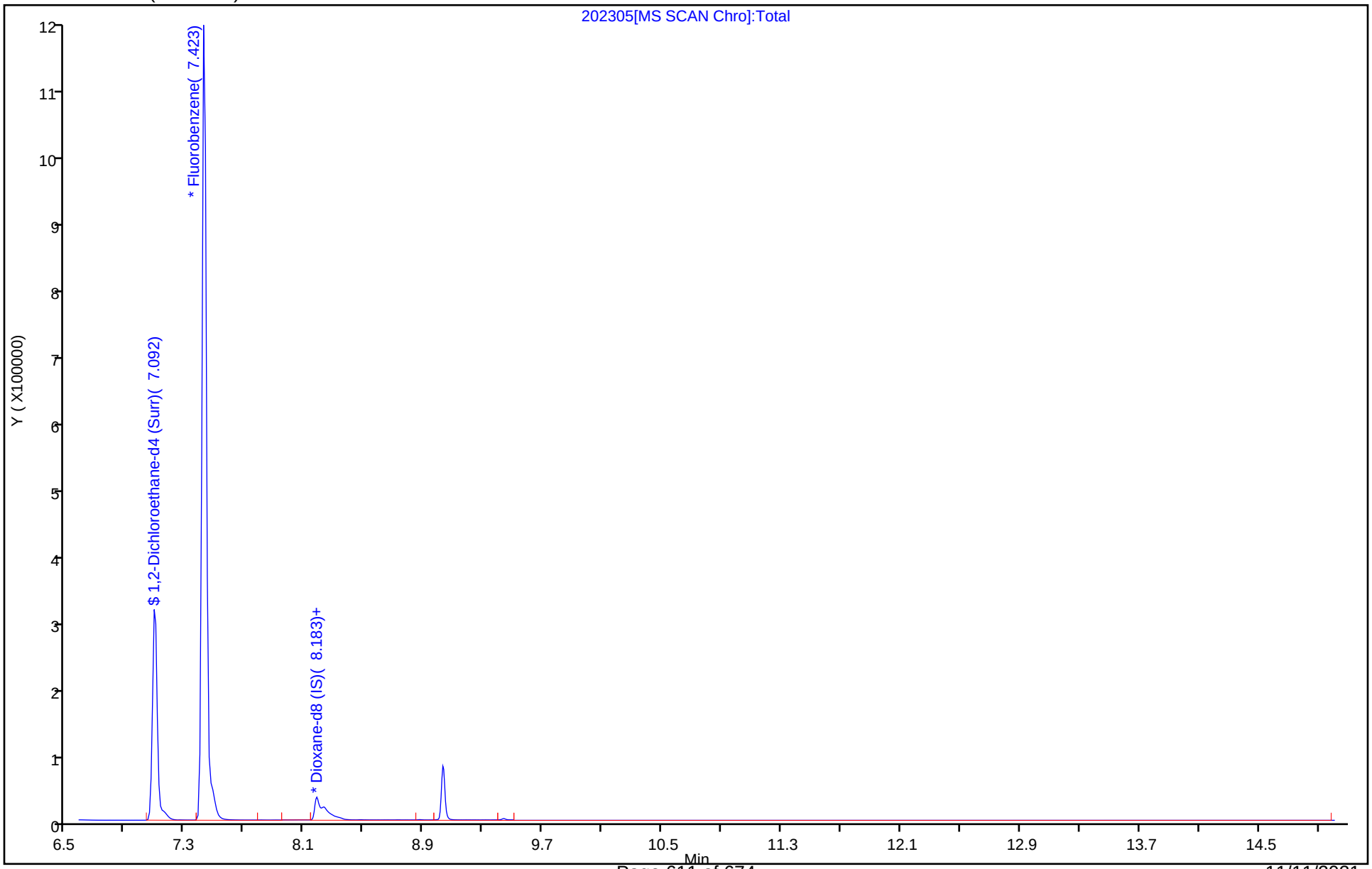
Report Date: 10-Nov-2021 14:35:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202305.D

Injection Date:	09-Nov-2021 12:50:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

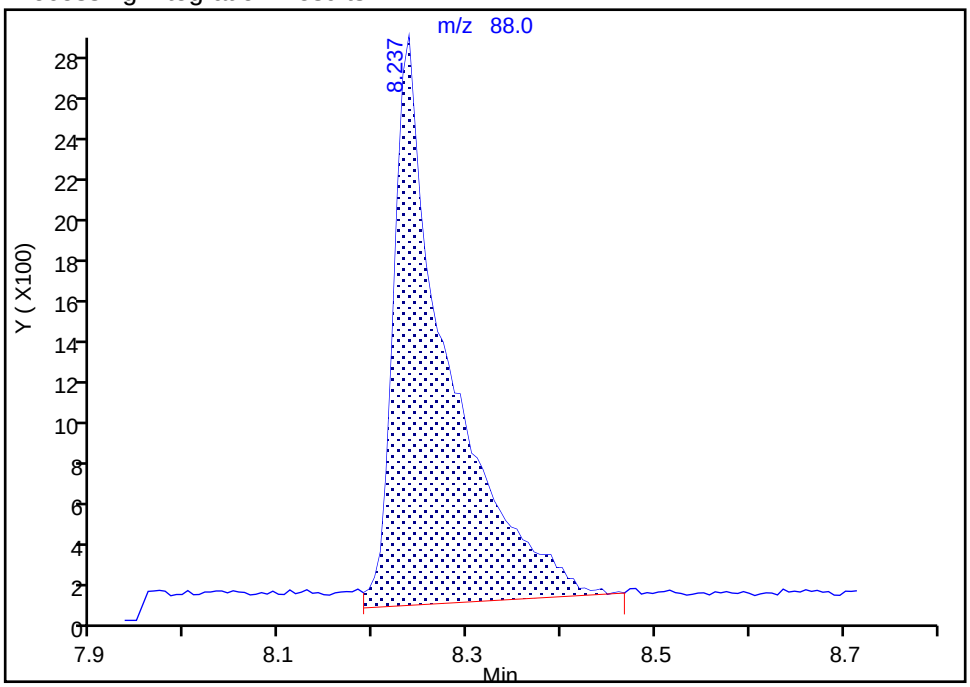
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202305.D				
Injection Date:	09-Nov-2021 12:50:30	Instrument ID:	A3UX20		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

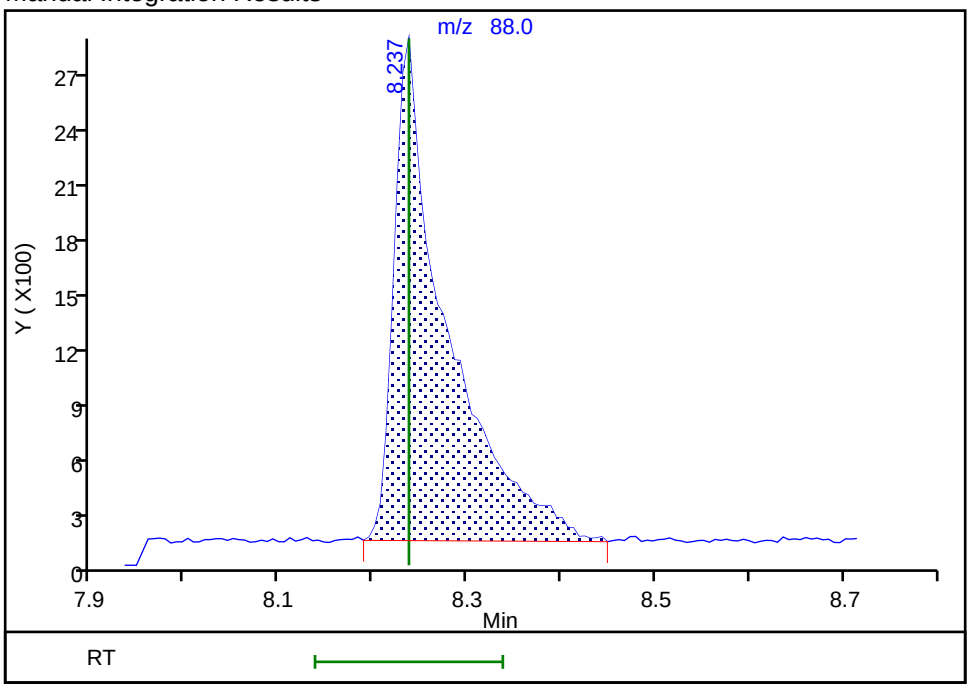
Processing Integration Results

RT: 8.24
Area: 10987
Amount: 19.348270
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 10412
Amount: 18.335687
Amount Units: ug/l



Reviewer: seymourc, 09-Nov-2021 13:43:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Sep-2021 13:33:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:29 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 15:10:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	994347	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

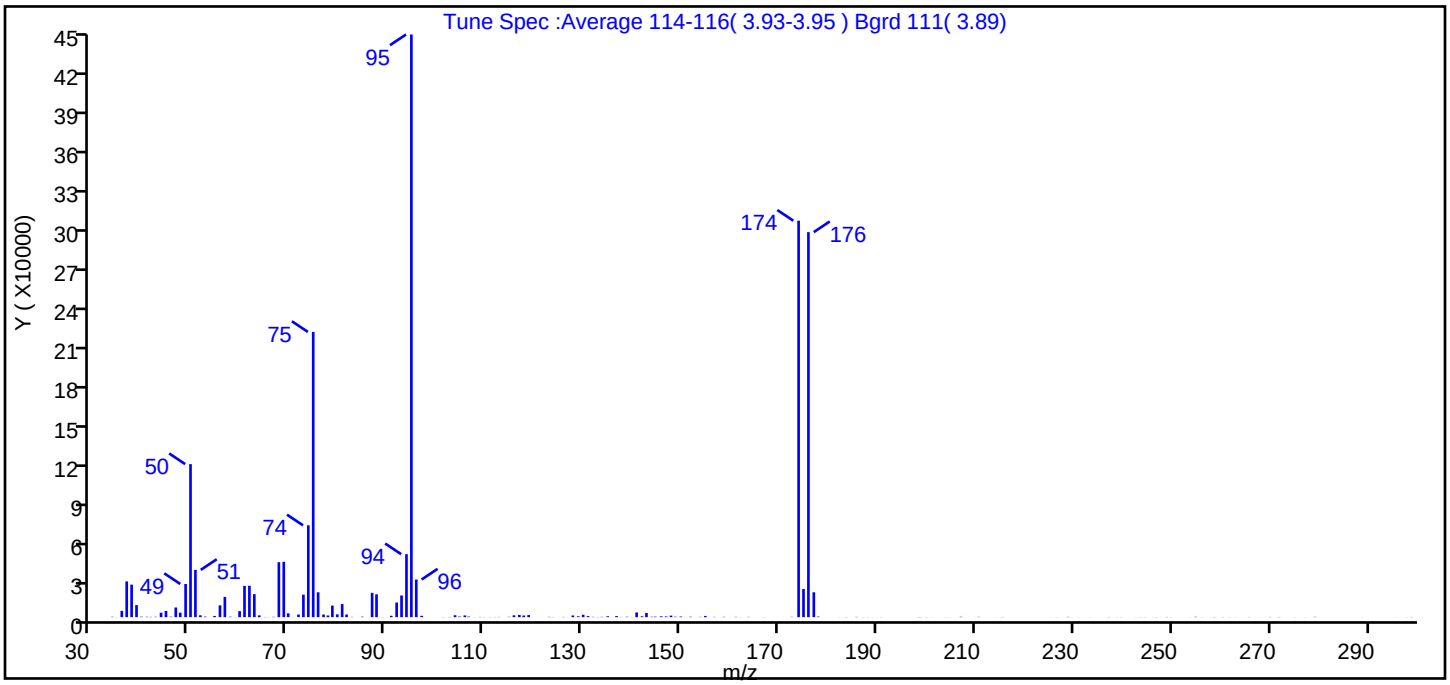
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Injection Date: 09-Sep-2021 13:33:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	68.0
175	5 to 9% of m/z 174	4.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	66.1 (97.1)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	256	80.00	2103	135.00	668	201.00	55
35.00	86	81.00	9949	137.00	827	204.00	78
36.00	4779	82.00	2003	138.00	143	205.00	60
37.00	27144	83.00	168	139.00	299	207.00	277
38.00	24712	85.00	349	140.00	100	208.00	34
39.00	9159	87.00	18480	141.00	3566	211.00	203
40.00	362	88.00	17352	142.00	626	214.00	50
41.00	277	89.00	103	143.00	3194	216.00	120
42.00	206	90.00	57	144.00	298	225.00	54
43.00	269	91.00	1044	145.00	366	227.00	79
44.00	3367	92.00	11093	146.00	611	229.00	209
45.00	4727	93.00	16488	147.00	529	230.00	53
46.00	338	94.00	47864	148.00	1161	231.00	54
47.00	7337	95.00	442816	149.00	328	233.00	56
48.00	3399	96.00	28600	150.00	472	237.00	123
49.00	25192	97.00	1012	151.00	41	239.00	53
50.00	116304	102.00	123	152.00	311	240.00	84
51.00	35920	103.00	171	153.00	38	243.00	51
52.00	1379	104.00	1466	154.00	184	244.00	89
53.00	392	105.00	453	155.00	919	245.00	74
55.00	917	106.00	1305	157.00	192	246.00	54
56.00	8982	107.00	417	158.00	61	247.00	108
57.00	15386	108.00	86	159.00	228	249.00	145
58.00	343	109.00	166	161.00	192	250.00	54
59.00	72	110.00	113	162.00	67	254.00	59
60.00	4577	111.00	70	164.00	180	255.00	260
61.00	23744	112.00	91	167.00	77	256.00	73
62.00	23856	113.00	159	170.00	20	258.00	67
63.00	17464	115.00	229	173.00	205	259.00	146
64.00	1361	116.00	1389	174.00	301312	260.00	114
65.00	141	117.00	1709	175.00	21384	262.00	77
66.00	76	118.00	1227	176.00	292608	263.00	60
67.00	238	119.00	1583	177.00	18904	266.00	126

Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	41776	122.00	24	178.00	412	268.00	53
69.00	42072	123.00	216	182.00	67	270.00	152
70.00	2909	124.00	108	184.00	125	272.00	68
71.00	46	126.00	169	186.00	193	272.00	142
72.00	1983	127.00	15	187.00	87	275.00	79
73.00	17120	128.00	1271	188.00	79	277.00	64
74.00	69792	129.00	629	189.00	50	279.00	219
75.00	216768	130.00	1823	190.00	50	289.00	58
76.00	18920	131.00	784	191.00	81	296.00	59
77.00	1972	132.00	215	198.00	129	298.00	63
78.00	1260	133.00	137	199.00	112	299.00	127
79.00	8784	134.00	230	200.00	98		

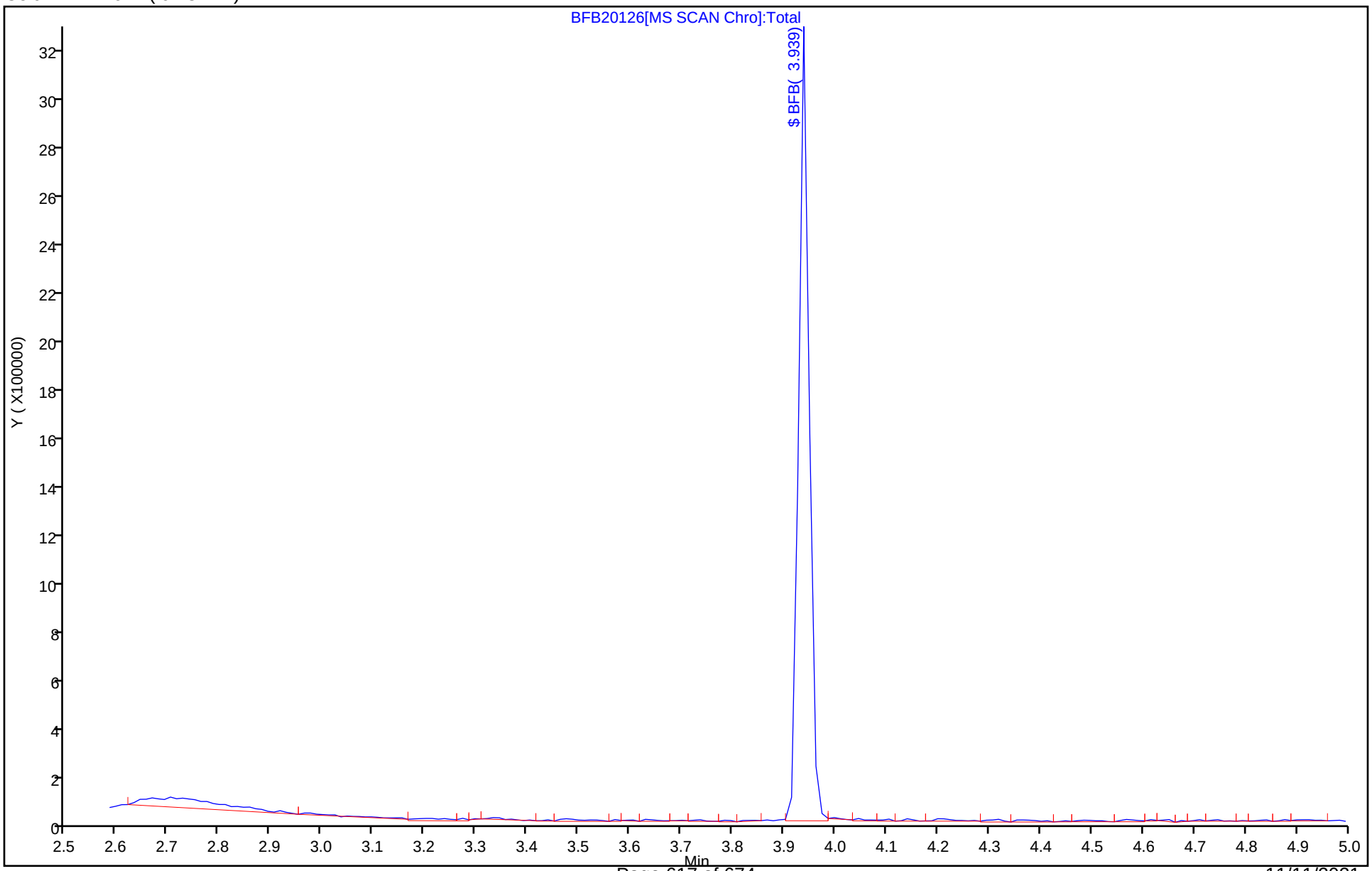
Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D

Injection Date:	09-Sep-2021 13:33:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\BFB20156.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Nov-2021 19:11:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0114920-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Nov-2021 12:37:05 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1626

First Level Reviewer: seymourc Date: 08-Nov-2021 19:56:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.927	3.927	0.000	0	2075877	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

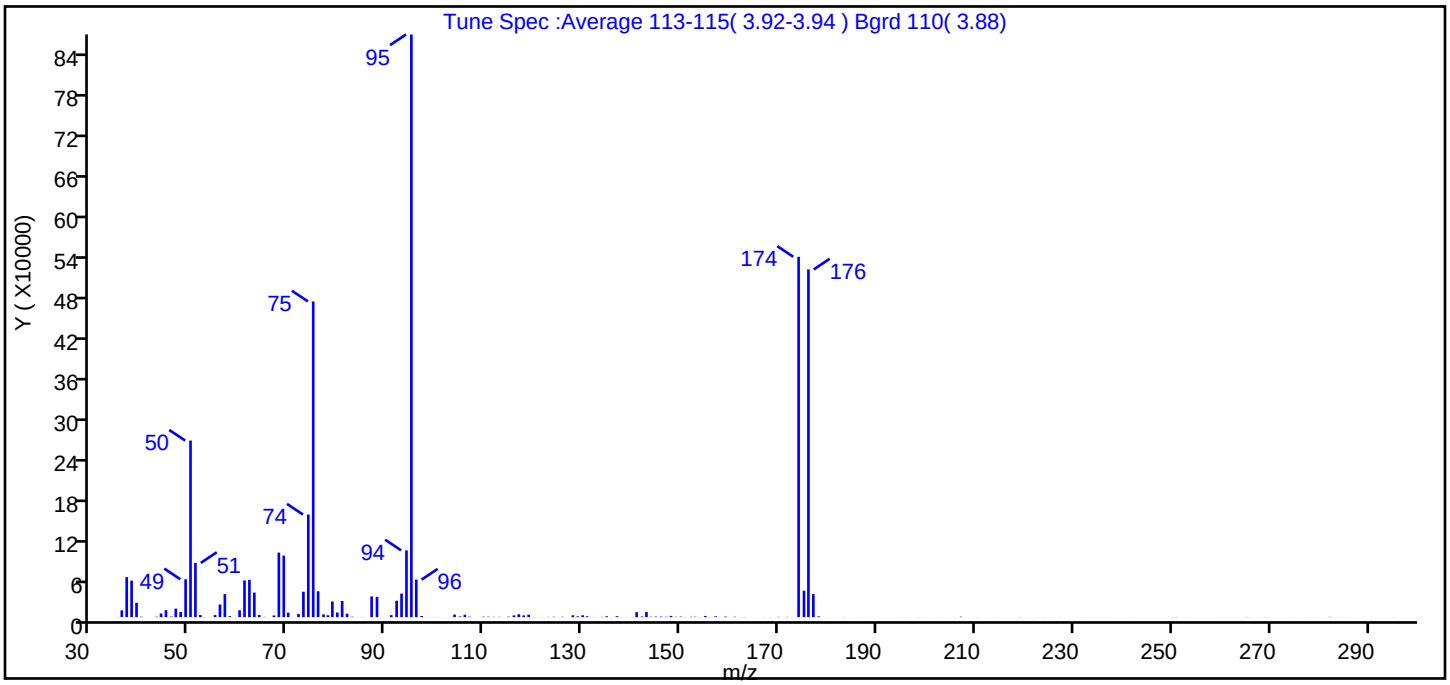
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\BFB20156.D
Injection Date: 08-Nov-2021 19:11:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.3
75	30 to 60% of m/z 95	54.2
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	61.8
175	5 to 9% of m/z 174	4.5 (7.4)
176	Greater than 95% but less than 101% of m/z 174	59.7 (96.5)
177	5 to 9% of m/z 176	3.9 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\BFB20156.D\8260SIM_20.rslt\spectra.d
Injection Date: 08-Nov-2021 19:11:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 185

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	172	85.00	232	140.00	169	206.00	104
36.00	10068	87.00	30872	141.00	7364	207.00	629
37.00	59560	88.00	30232	142.00	948	208.00	30
38.00	54408	91.00	2947	143.00	7756	209.00	71
39.00	21328	92.00	24424	144.00	537	210.00	146
40.00	717	93.00	35120	145.00	767	214.00	57
43.00	630	94.00	99472	146.00	756	215.00	51
44.00	5395	95.00	867840	147.00	610	219.00	214
45.00	10359	96.00	55896	148.00	1879	220.00	57
46.00	799	97.00	1673	149.00	529	222.00	60
47.00	12706	99.00	118	150.00	770	223.00	117
48.00	7613	100.00	193	151.00	174	224.00	149
49.00	56456	101.00	56	152.00	499	225.00	58
50.00	262976	103.00	74	153.00	604	226.00	107
51.00	80728	103.00	44	154.00	181	227.00	112
52.00	3110	104.00	3820	155.00	1809	229.00	58
53.00	229	105.00	952	156.00	213	230.00	50
55.00	3065	106.00	3551	157.00	1216	232.00	118
56.00	18856	107.00	675	158.00	107	233.00	57
57.00	34368	110.00	676	159.00	830	234.00	57
58.00	1429	111.00	602	160.00	91	236.00	50
59.00	37	112.00	445	161.00	603	237.00	52
60.00	10238	113.00	393	162.00	140	243.00	66
61.00	54720	115.00	658	163.00	306	250.00	202
62.00	55432	116.00	2594	167.00	121	251.00	275
63.00	36576	117.00	4323	168.00	192	254.00	67
64.00	3173	118.00	2589	170.00	361	260.00	66
65.00	408	119.00	3579	172.00	347	262.00	61
66.00	57	120.00	294	174.00	536704	264.00	75
67.00	2547	122.00	189	175.00	39480	265.00	240
68.00	96144	123.00	351	176.00	517888	266.00	106
69.00	91688	124.00	545	177.00	34256	268.00	53
70.00	6629	125.00	126	178.00	1120	269.00	171

Report Date: 09-Nov-2021 12:37:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46
Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\BFB20156.D\8260SIM_20.rslt\spectra.d
Injection Date: 08-Nov-2021 19:11:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 185

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	237	126.00	503	179.00	30	270.00	126
72.00	4637	127.00	56	180.00	61	274.00	66
73.00	37864	128.00	2746	181.00	81	277.00	61
74.00	152832	129.00	1221	182.00	70	278.00	65
75.00	470272	130.00	2816	183.00	158	280.00	51
76.00	38560	131.00	1307	186.00	50	282.00	347
77.00	4086	132.00	213	188.00	67	283.00	55
78.00	2818	133.00	165	189.00	86	284.00	147
79.00	23312	134.00	339	194.00	43	285.00	109
80.00	6915	135.00	1308	196.00	52	286.00	57
81.00	24032	136.00	113	196.00	50	295.00	90
82.00	5128	137.00	1448	198.00	60		
83.00	616	138.00	126	199.00	63		
84.00	103	139.00	143	203.00	55		

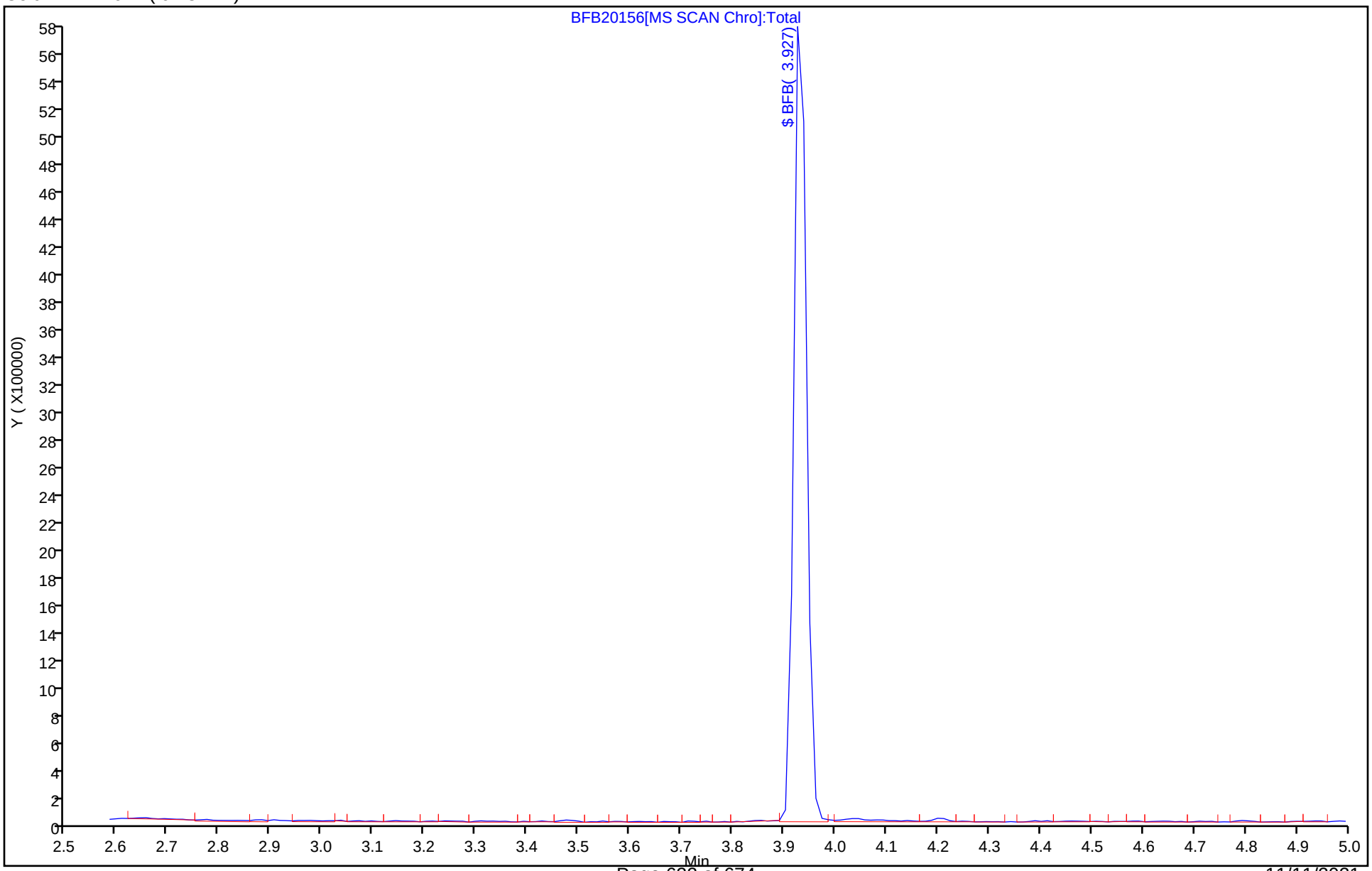
Report Date: 09-Nov-2021 12:37:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\BFB20156.D

Injection Date:	08-Nov-2021 19:11:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\BFB20157.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Nov-2021 12:05:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0114953-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 10-Nov-2021 14:35:11 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1625

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	2420539	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

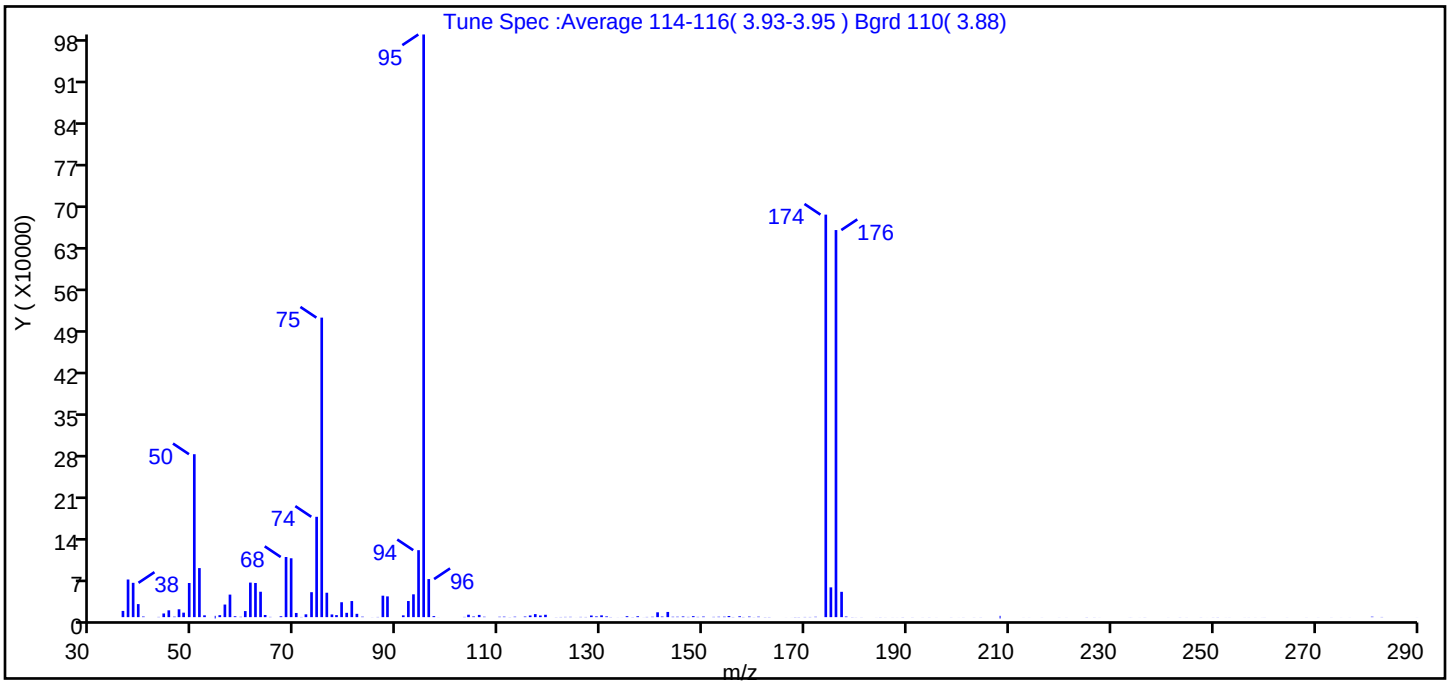
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\BFB20157.D
Injection Date: 09-Nov-2021 12:05:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	28.0
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	69.1
175	5 to 9% of m/z 174	5.1 (7.4)
176	Greater than 95% but less than 101% of m/z 174	66.4 (96.2)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\BFB20157.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Nov-2021 12:05:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10533	86.00	330	142.00	960	199.00	109
37.00	63656	87.00	36296	143.00	8800	200.00	52
38.00	58056	88.00	35104	144.00	647	201.00	102
39.00	22064	91.00	3001	145.00	694	203.00	105
40.00	1001	92.00	27256	146.00	1146	204.00	123
43.00	381	93.00	38592	147.00	405	208.00	1
44.00	6212	94.00	113272	148.00	1664	213.00	66
45.00	11534	95.00	985536	149.00	428	214.00	61
46.00	789	96.00	64408	150.00	967	216.00	76
47.00	13269	97.00	1714	152.00	448	218.00	8
48.00	7577	98.00	78	153.00	653	220.00	68
49.00	57736	103.00	384	154.00	764	221.00	66
50.00	275584	104.00	4107	155.00	1896	225.00	174
51.00	82976	105.00	1083	156.00	268	227.00	112
52.00	3058	106.00	3775	157.00	1399	228.00	54
53.00	38	107.00	673	158.00	281	234.00	54
54.00	3	110.00	642	159.00	979	234.00	68
55.00	3320	111.00	808	160.00	135	236.00	52
56.00	21312	112.00	182	161.00	776	236.00	68
57.00	38128	113.00	749	162.00	228	237.00	68
58.00	1507	115.00	1017	163.00	263	241.00	57
59.00	571	116.00	2814	166.00	56	244.00	117
60.00	10243	117.00	5130	167.00	40	245.00	69
61.00	58440	118.00	2756	168.00	241	248.00	109
62.00	57768	119.00	4013	169.00	227	249.00	22
63.00	42960	121.00	167	170.00	320	250.00	117
64.00	3642	122.00	290	171.00	310	251.00	160
65.00	406	123.00	403	172.00	592	252.00	50
67.00	1478	124.00	489	174.00	680832	253.00	70
68.00	101720	125.00	43	175.00	50376	256.00	60
69.00	99584	126.00	387	176.00	654720	257.00	68
70.00	7079	127.00	298	177.00	42832	258.00	61
71.00	310	128.00	2760	178.00	987	260.00	50

Report Date: 10-Nov-2021 14:35:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46
Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\BFB20157.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Nov-2021 12:05:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	4756	129.00	1218	179.00	195	260.00	81
73.00	42208	130.00	3036	180.00	109	264.00	61
74.00	169728	131.00	1233	181.00	124	268.00	76
75.00	506624	132.00	256	184.00	61	271.00	59
76.00	41288	133.00	84	185.00	151	273.00	82
77.00	4572	134.00	59	186.00	77	275.00	52
78.00	3443	135.00	1610	187.00	74	277.00	54
79.00	25216	136.00	226	188.00	56	281.00	759
80.00	7300	137.00	1526	189.00	180	283.00	305
81.00	27232	138.00	70	191.00	126	290.00	51
82.00	5611	139.00	353	193.00	82		
83.00	771	140.00	646	194.00	119		
85.00	109	141.00	8197	196.00	65		

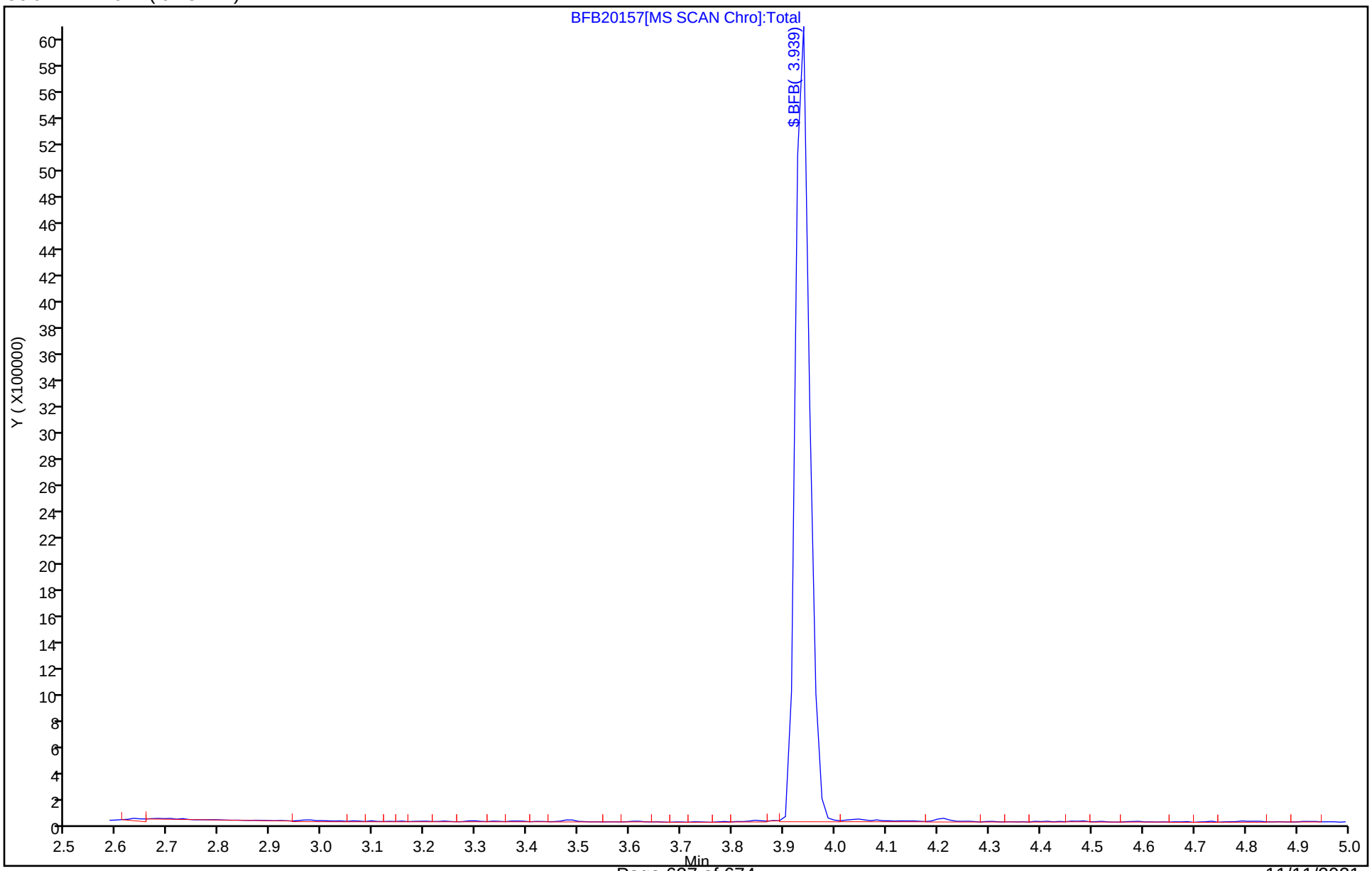
Report Date: 10-Nov-2021 14:35:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\BFB20157.D

Injection Date:	09-Nov-2021 12:05:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-511974/4

Matrix: Water Lab File ID: 202301.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/08/2021 20:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511974 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202301.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2021 20:12:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114920-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Nov-2021 12:37:05 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1626

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	659338	10.0	9.18	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2249601	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	95	68698	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

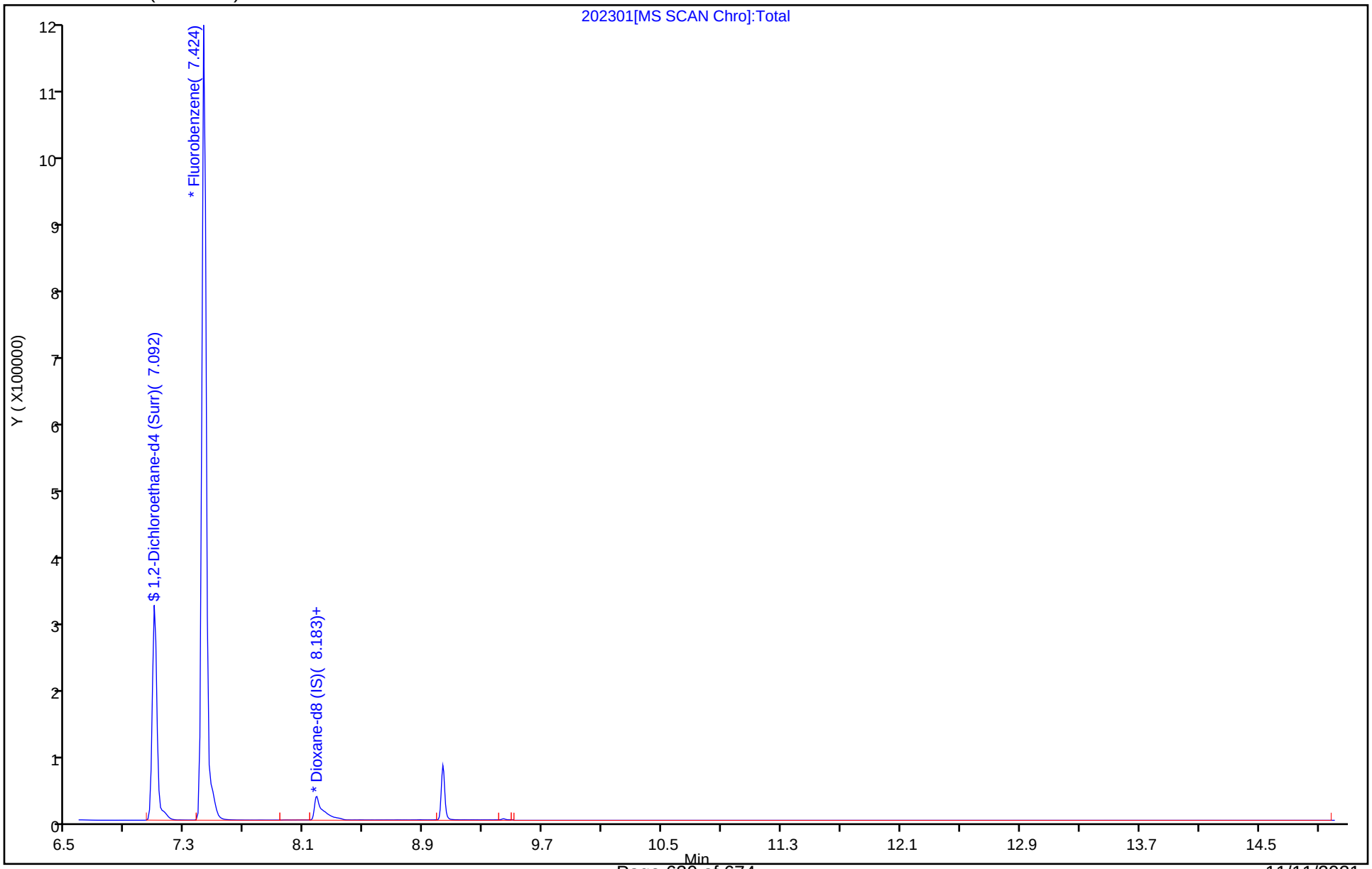
Report Date: 09-Nov-2021 12:37:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202301.D

Injection Date:	08-Nov-2021 20:12:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202301.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Nov-2021 20:12:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.18	91.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-512125/5

Matrix: Water Lab File ID: 202307.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 13:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202307.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2021 13:38:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114953-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 10-Nov-2021 14:35:01 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1625

First Level Reviewer: seymourc Date: 10-Nov-2021 14:22:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	659340	10.0	9.10	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2269805	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	63473	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

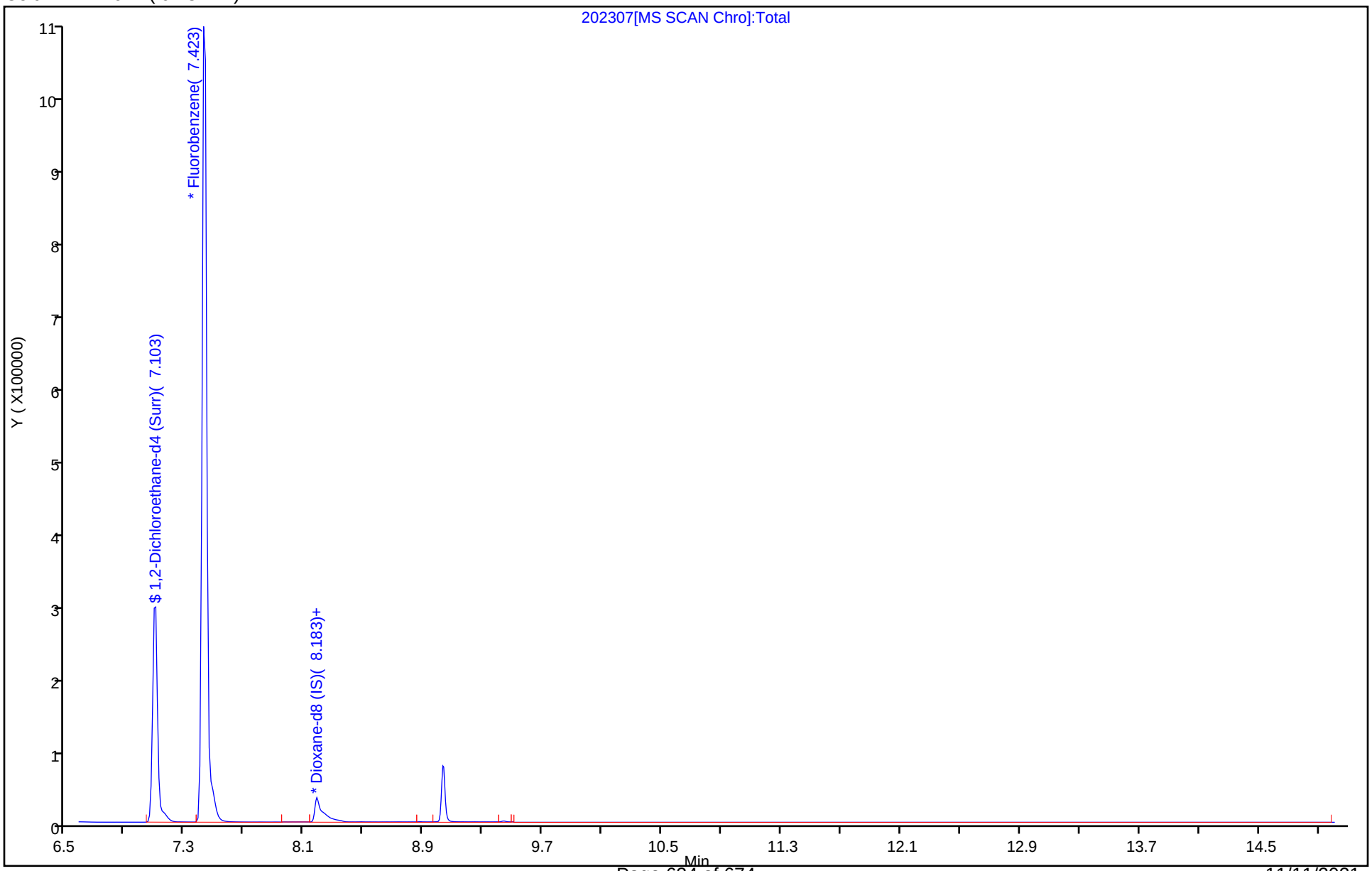
Report Date: 10-Nov-2021 14:35:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202307.D

Injection Date:	09-Nov-2021 13:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202307.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2021 13:38:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114953-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 10-Nov-2021 14:35:01 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1625

First Level Reviewer: seymourc Date: 10-Nov-2021 14:22:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.10	90.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-511974/3

Matrix: Water Lab File ID: 202300.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/08/2021 19:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511974 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.47		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202300.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2021 19:48:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114920-003
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Nov-2021 12:37:05 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1626

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	686504	10.0	9.09	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2363903	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	94	67737	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	54	5237	10.0	9.47	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00282	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

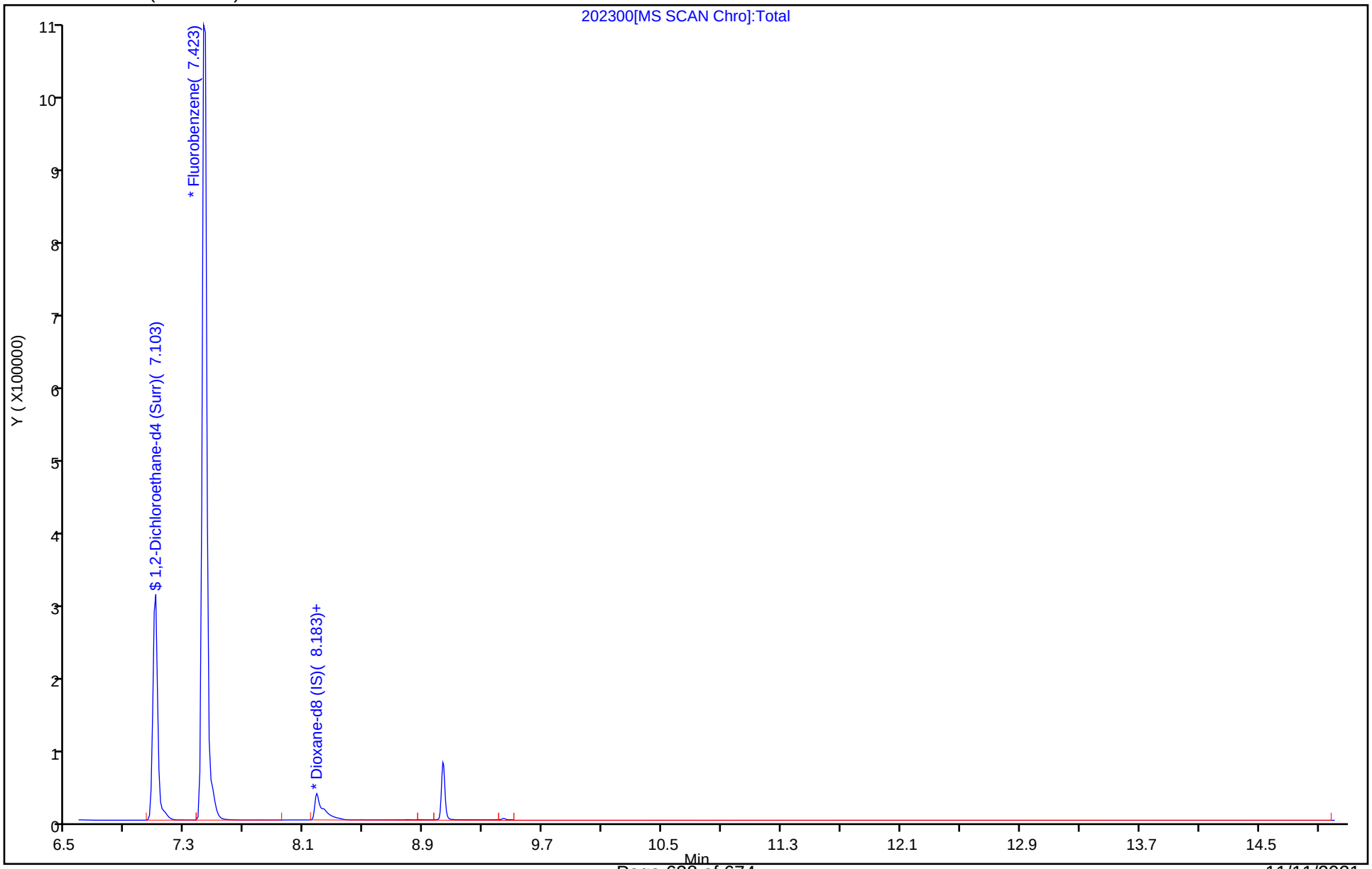
Report Date: 09-Nov-2021 12:37:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202300.D

Injection Date:	08-Nov-2021 19:48:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202300.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Nov-2021 19:48:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.09	90.94

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

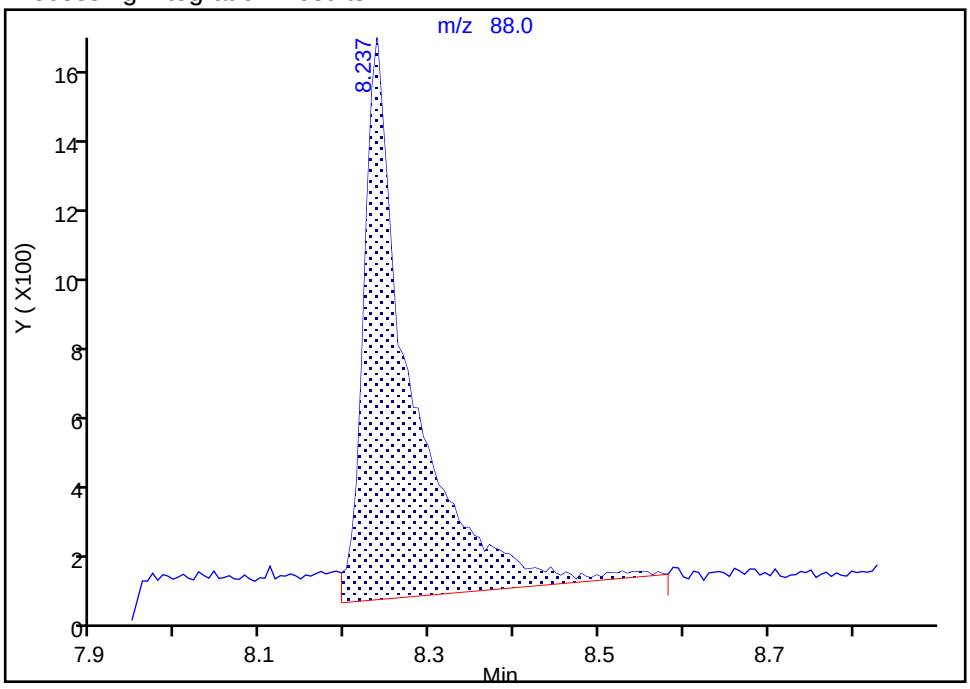
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202300.D				
Injection Date:	08-Nov-2021 19:48:30	Instrument ID:	A3UX20		
Lims ID:	LCS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

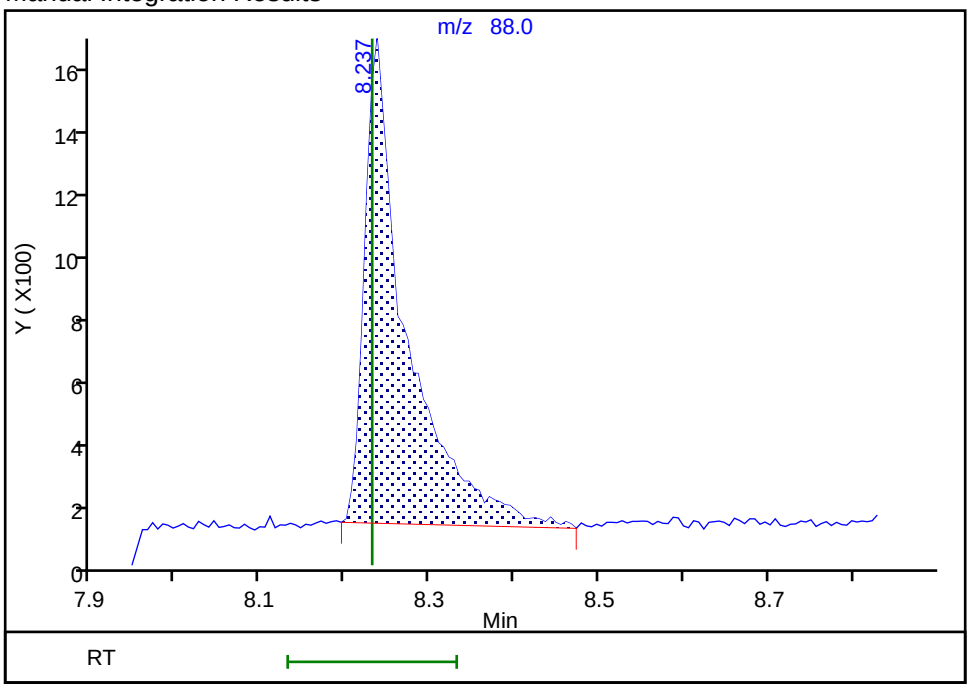
Processing Integration Results

RT: 8.24
Area: 6108
Amount: 11.048461
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 5237
Amount: 9.472952
Amount Units: ug/l



Reviewer: seymourc, 09-Nov-2021 12:36:32

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-512125/4

Matrix: Water Lab File ID: 202306.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 13:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202306.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2021 13:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114953-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 10-Nov-2021 14:35:01 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1625

First Level Reviewer: seymourc Date: 09-Nov-2021 13:44:18

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	695707	10.0	9.35	
*	7 Fluorobenzene	96	7.436	7.423	0.013	100	2330177	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	63111	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.237	0.001	68	5286	10.0	10.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00283	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

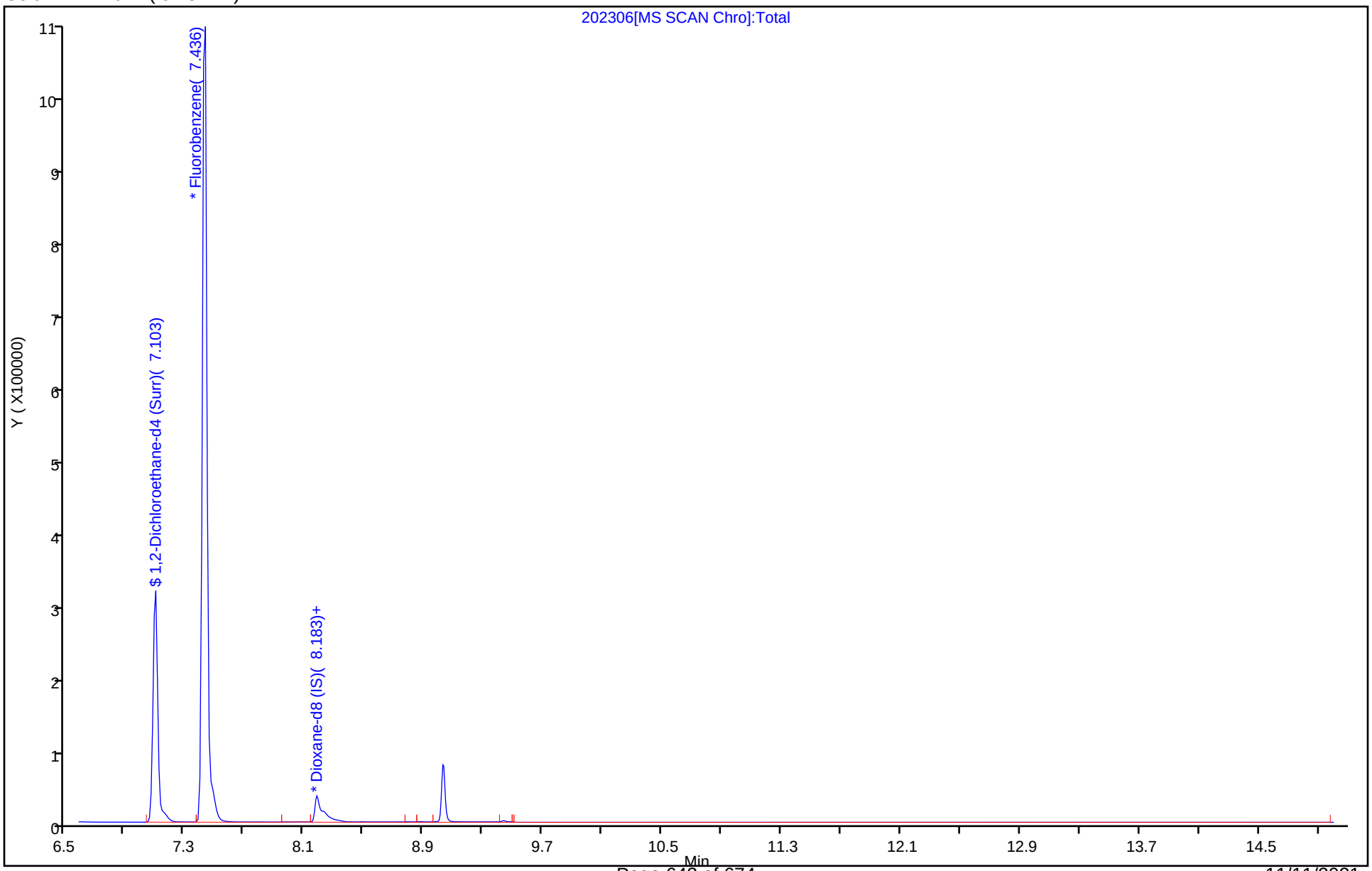
Report Date: 10-Nov-2021 14:35:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202306.D

Injection Date:	09-Nov-2021 13:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202306.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	09-Nov-2021 13:14:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 09-Nov-2021 13:44:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.35	93.49

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

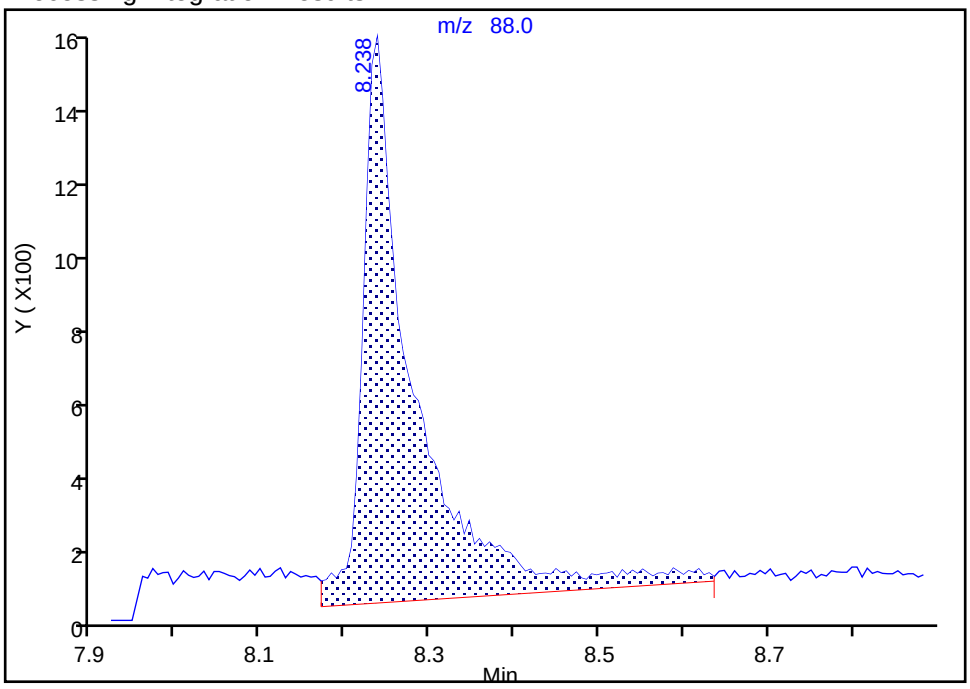
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202306.D				
Injection Date:	09-Nov-2021 13:14:30	Instrument ID:	A3UX20		
Lims ID:	LCS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

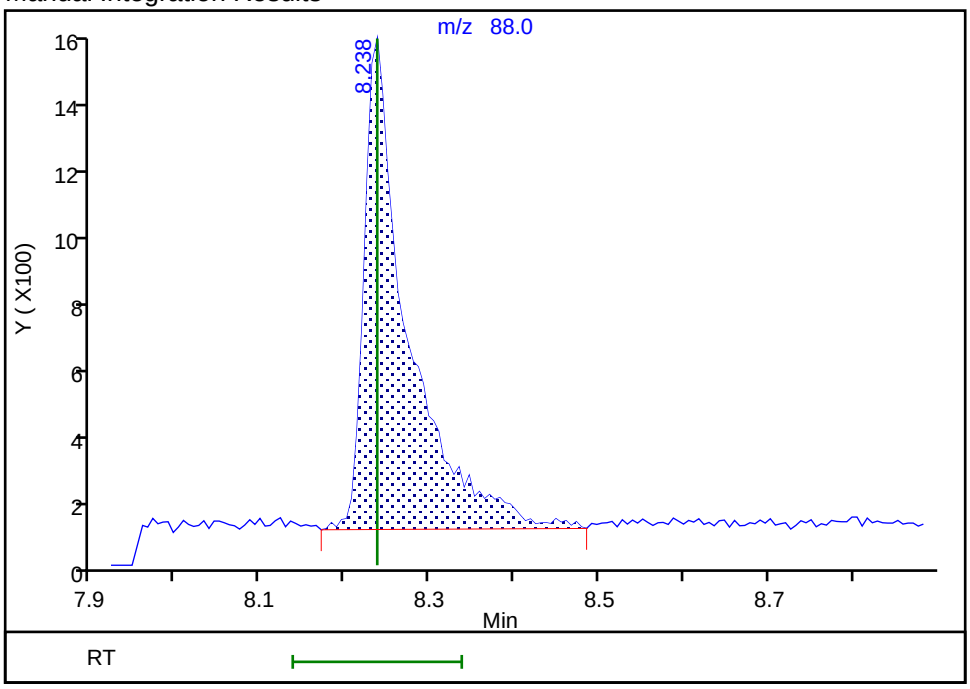
Processing Integration Results

RT: 8.24
Area: 6496
Amount: 12.611585
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 5286
Amount: 10.262444
Amount Units: ug/l



Reviewer: seymourc, 09-Nov-2021 13:44:12

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-511974/5

Matrix: Water Lab File ID: 202302.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/08/2021 20:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 511974 Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.00140	J	0.0020	0.00086

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		10-150

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202302.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 08-Nov-2021 20:36:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114920-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Nov-2021 12:37:05 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1626

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	669869	10.0	9.25	
* 7 Fluorobenzene	96	7.423	7.424	-0.001	100	2266943	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	63054	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	50	719	1.00	1.40	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00270	Amount Added:	0.15	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

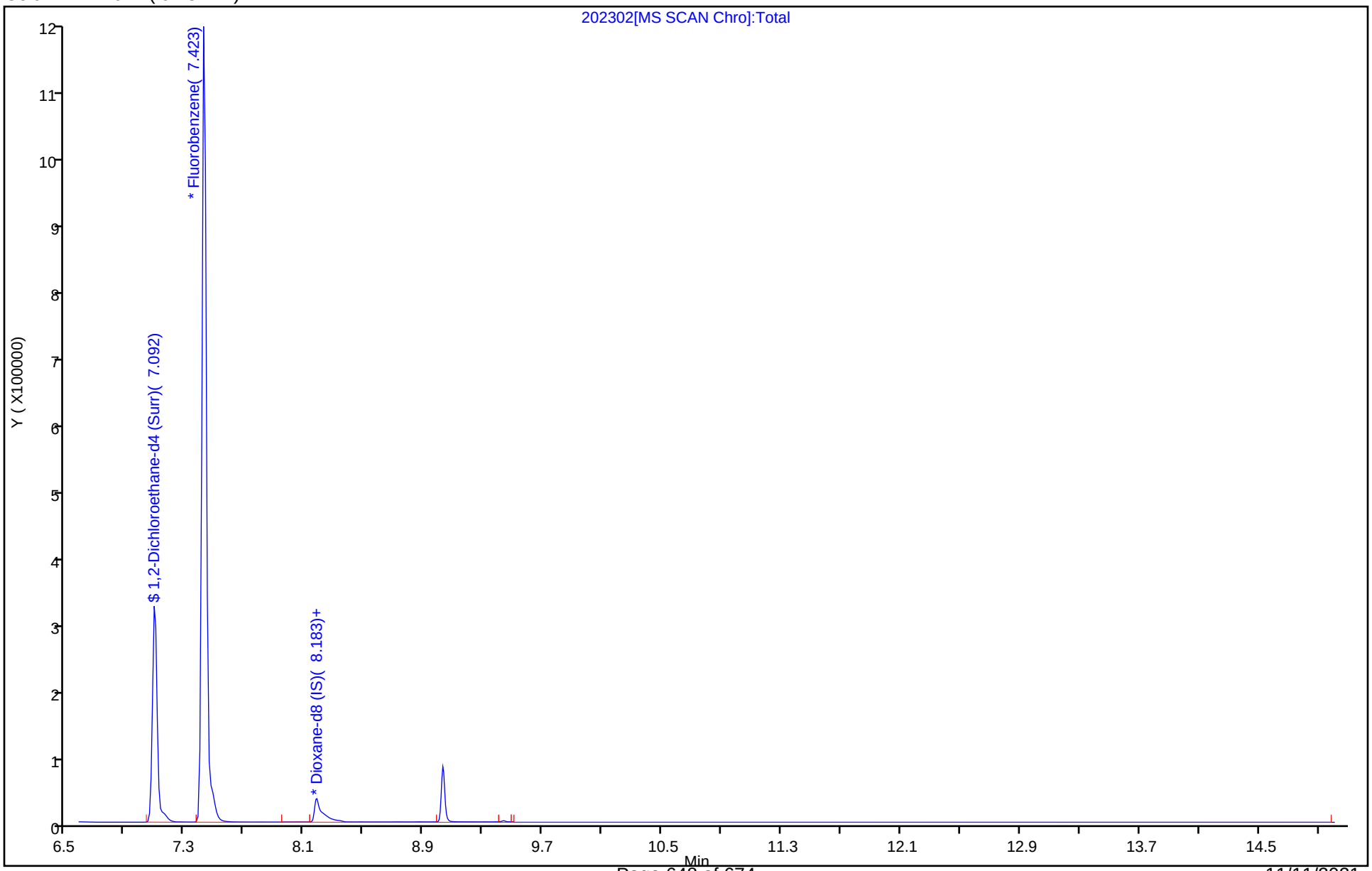
Report Date: 09-Nov-2021 12:38:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202302.D

Injection Date:	08-Nov-2021 20:36:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MRL			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202302.D				
Lims ID:	MRL				
Client ID:					
Sample Type:	MRL				
Inject. Date:	08-Nov-2021 20:36:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114920-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Nov-2021 12:37:05	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1626				

First Level Reviewer: seymourc Date: 09-Nov-2021 12:36:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.25	92.53

Eurofins TestAmerica, Canton

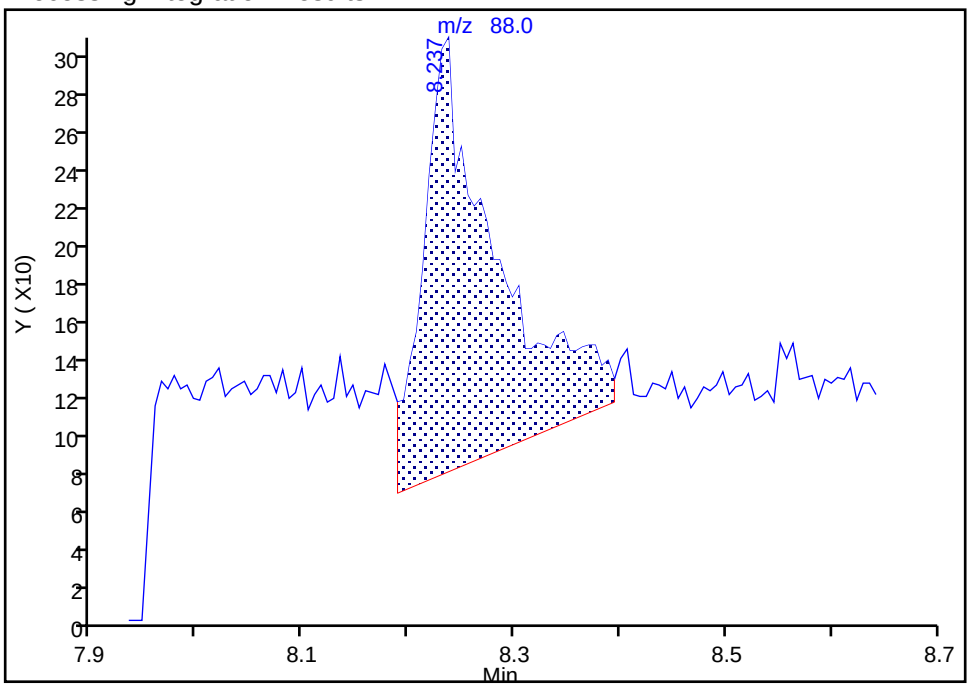
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211108-114920.b\202302.D				
Injection Date:	08-Nov-2021 20:36:30	Instrument ID:	A3UX20		
Lims ID:	MRL				
Client ID:					
Operator ID:	434006	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

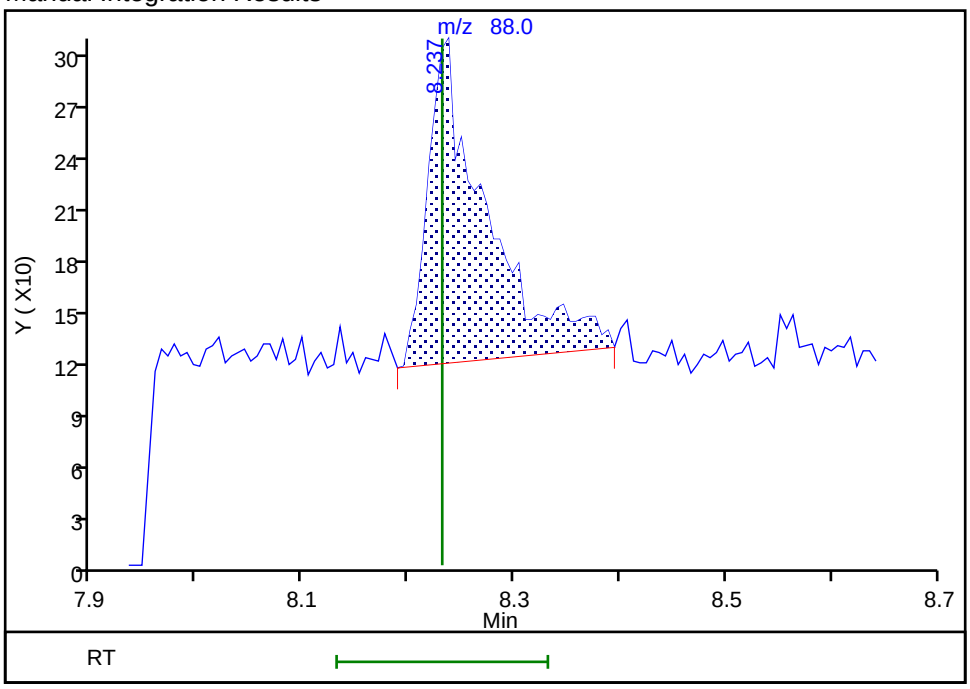
Processing Integration Results

RT: 8.24
Area: 1099
Amount: 2.135570
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 719
Amount: 1.397156
Amount Units: ug/l



Reviewer: seymourc, 09-Nov-2021 12:36:49
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-7_110221 MS Lab Sample ID: 240-159369-5 MS

Matrix: Water Lab File ID: 202312.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 09:40

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 15:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.49		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202312.D				
Lims ID:	240-159369-D-5 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	09-Nov-2021 15:38:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				
First Level Reviewer: seymourc		Date:	10-Nov-2021 14:24:07		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	670913	10.0	9.23	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2275531	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	62878	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	55	4868	10.0	9.49	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vmdiox_spike_00283	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

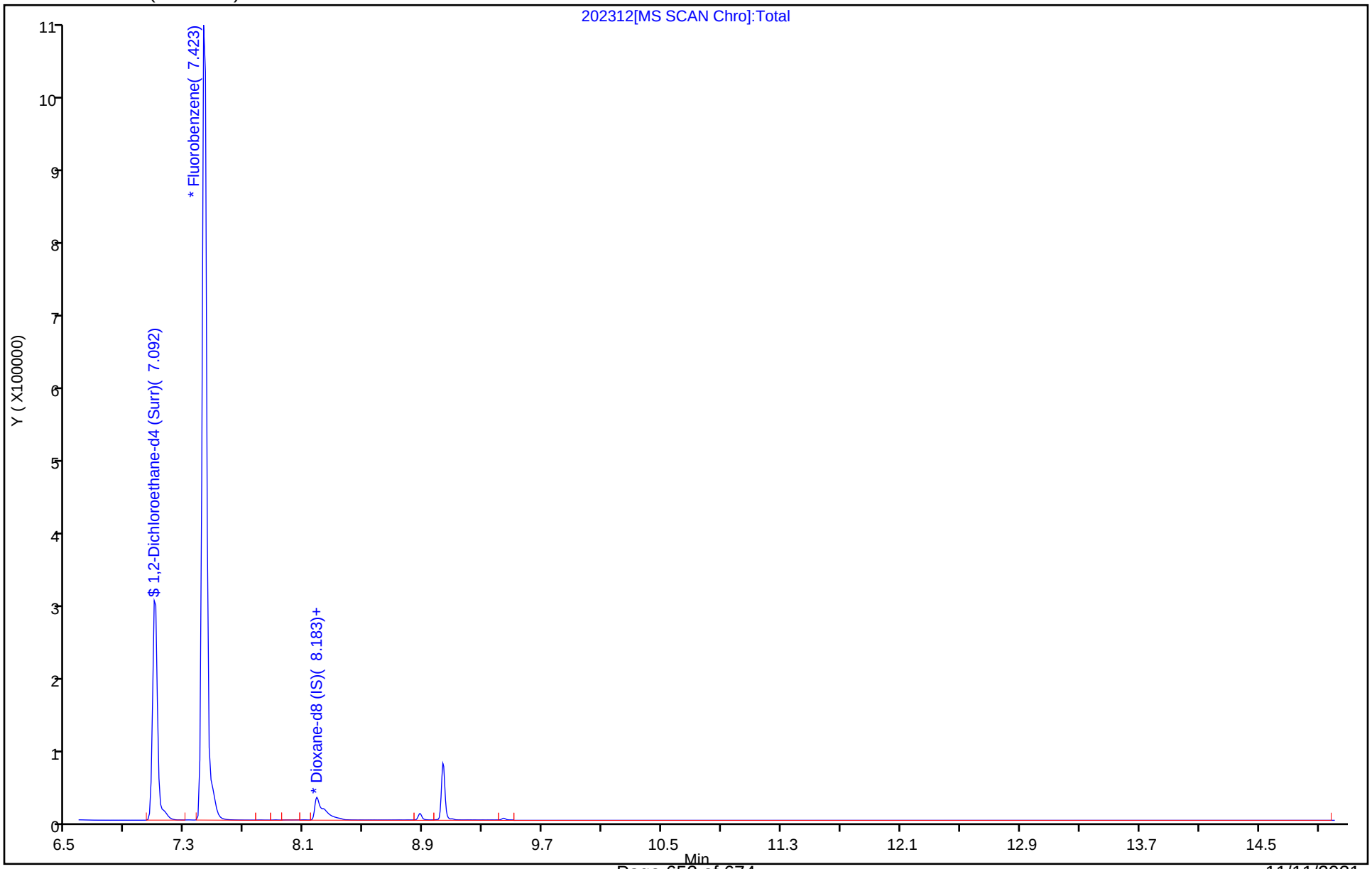
Report Date: 10-Nov-2021 14:35:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202312.D

Injection Date:	09-Nov-2021 15:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-D-5 MS			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202312.D				
Lims ID:	240-159369-D-5 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	09-Nov-2021 15:38:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:24:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.23	92.32

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

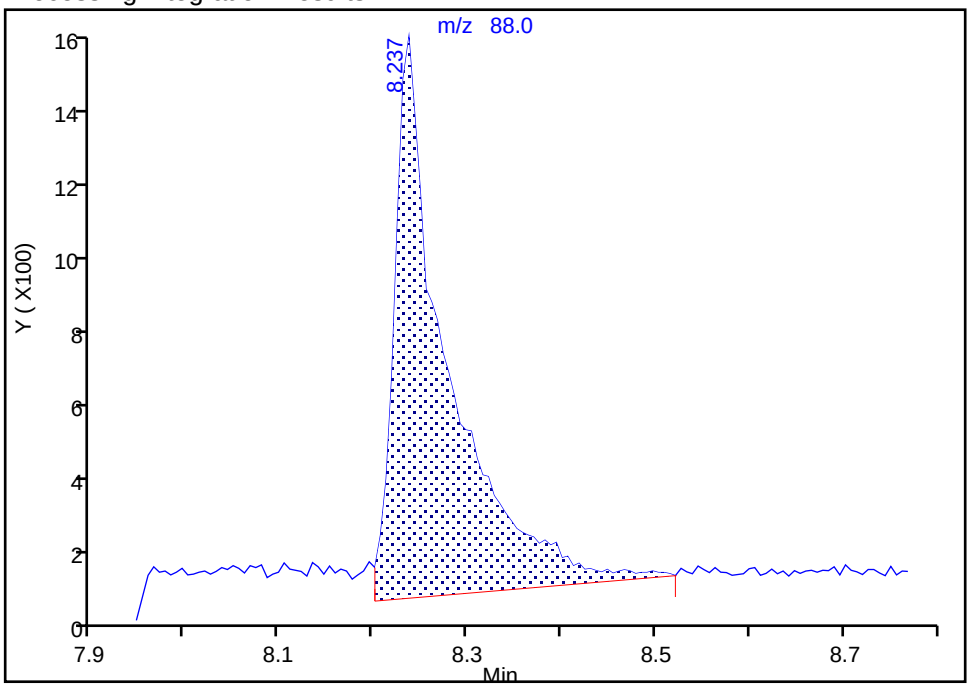
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202312.D				
Injection Date:	09-Nov-2021 15:38:30	Instrument ID:	A3UX20		
Lims ID:	240-159369-D-5 MS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

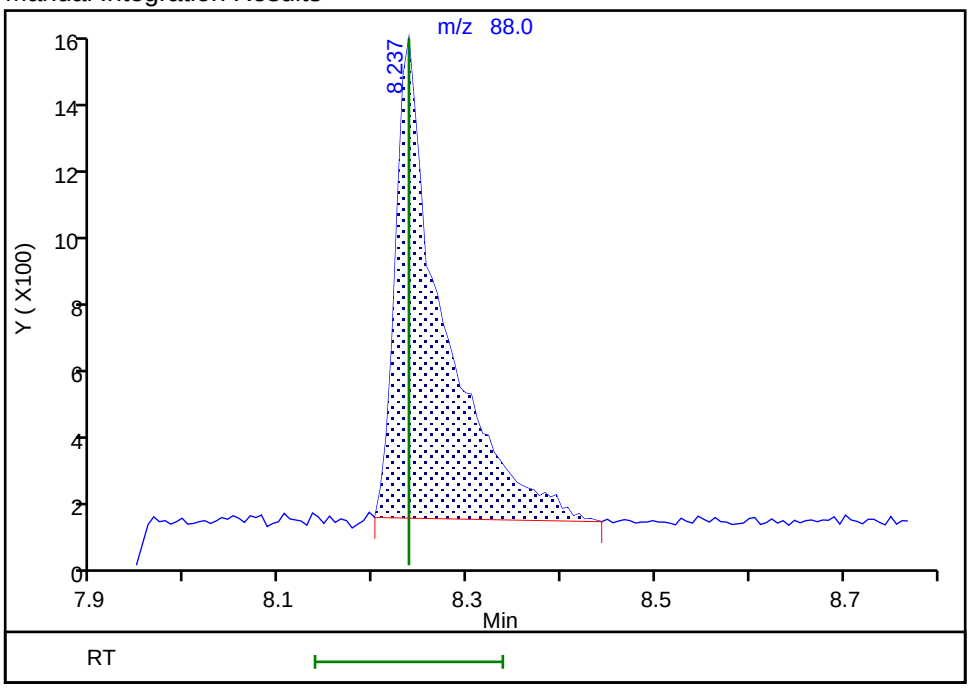
Processing Integration Results

RT: 8.24
Area: 5778
Amount: 11.259200
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4868
Amount: 9.485944
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:24:01

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Client Sample ID: SL-7_110221 MSD Lab Sample ID: 240-159369-5 MSD

Matrix: Water Lab File ID: 202313.D

Analysis Method: 8260B SIM Date Collected: 11/02/2021 09:40

Sample wt/vol: 15(mL) Date Analyzed: 11/09/2021 16:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 512125 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.5		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202313.D
Lims ID: 240-159369-D-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 09-Nov-2021 16:01:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114953-011
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 10-Nov-2021 14:35:01 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1625

First Level Reviewer: seymourc Date: 10-Nov-2021 14:24:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	653920	10.0	8.86	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2312113	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	54353	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	53	4680	10.0	10.5	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00283	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00015	Amount Added:	1.00	Units: uL	Run Reagent

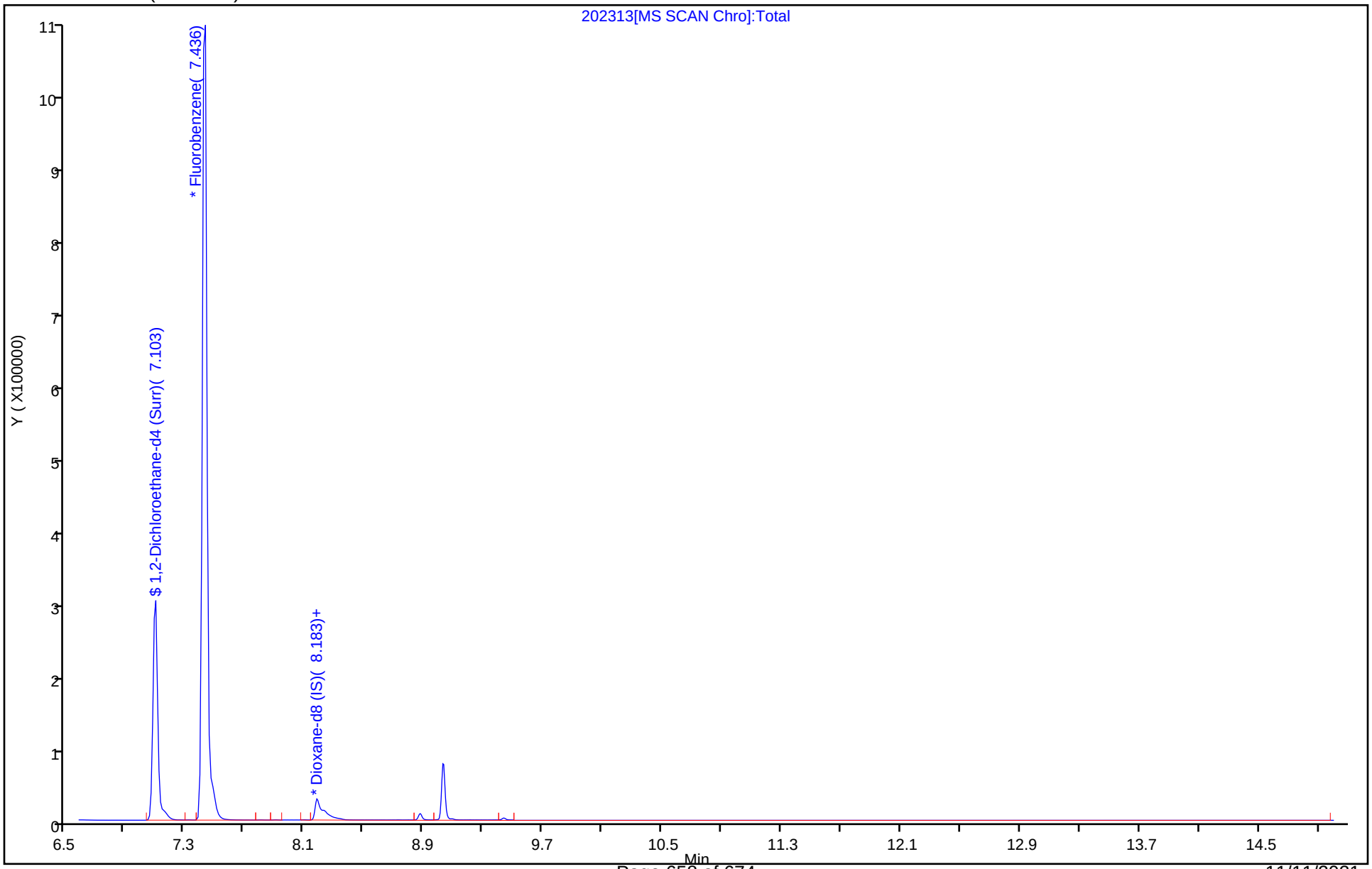
Report Date: 10-Nov-2021 14:35:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202313.D

Injection Date:	09-Nov-2021 16:01:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-159369-D-5 MSD			Worklist Smp#:	11
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202313.D				
Lims ID:	240-159369-D-5 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	09-Nov-2021 16:01:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114953-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	10-Nov-2021 14:35:01	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1625				

First Level Reviewer: seymourc Date: 10-Nov-2021 14:24:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.86	88.56

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

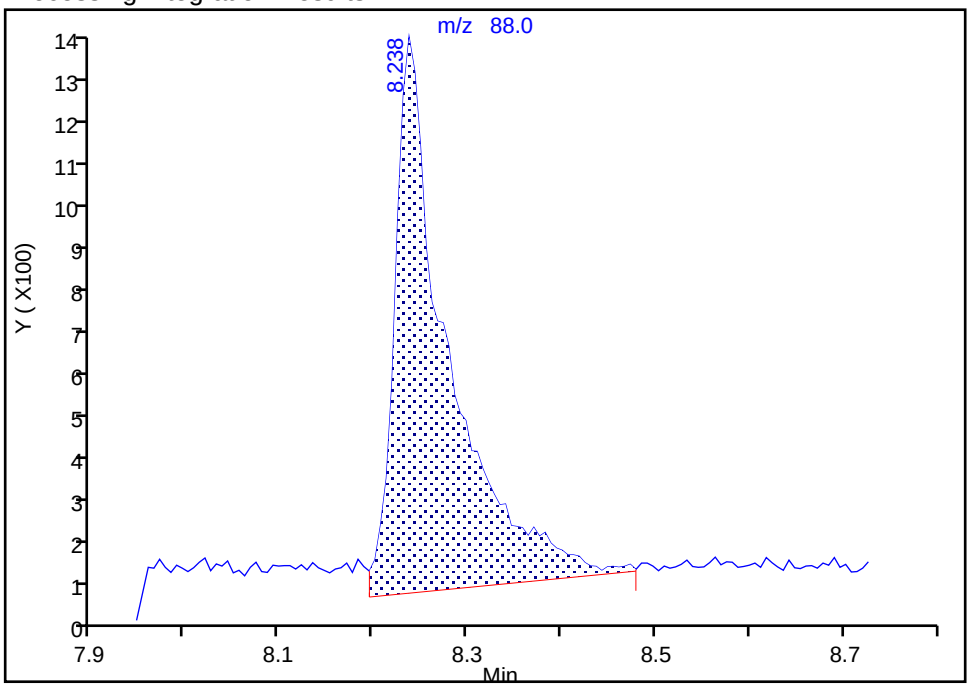
Data File: \\chromfs\Canton\ChromData\A3UX20\20211109-114953.b\202313.D
Injection Date: 09-Nov-2021 16:01:30 Instrument ID: A3UX20
Lims ID: 240-159369-D-5 MSD
Client ID:
Operator ID: 434006 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

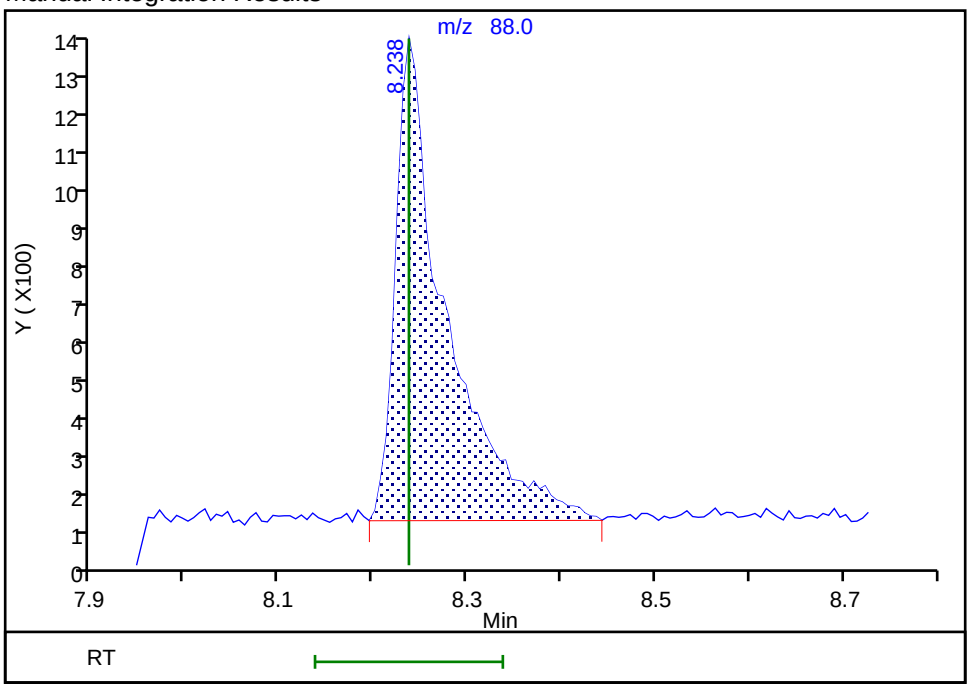
Processing Integration Results

RT: 8.24
Area: 5241
Amount: 11.814609
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4680
Amount: 10.549966
Amount Units: ug/l



Reviewer: seymourc, 10-Nov-2021 14:24:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Start Date: 09/09/2021 13:33

Analysis Batch Number: 503003 End Date: 09/09/2021 18:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-503003/1		09/09/2021 13:33	1	BFB20126.D	DB-624 0.18(mm)
IC 240-503003/3		09/09/2021 14:25	1	201661.D	DB-624 0.18(mm)
IC 240-503003/4		09/09/2021 14:49	1	201662.D	DB-624 0.18(mm)
IC 240-503003/5		09/09/2021 15:14	1	201663.D	DB-624 0.18(mm)
IC 240-503003/6		09/09/2021 15:38	1	201664.D	DB-624 0.18(mm)
ICIS 240-503003/7		09/09/2021 16:03	1	201665.D	DB-624 0.18(mm)
IC 240-503003/8		09/09/2021 16:27	1	201666.D	DB-624 0.18(mm)
IC 240-503003/9		09/09/2021 16:52	1	201667.D	DB-624 0.18(mm)
IC 240-503003/10		09/09/2021 17:16	1	201668.D	DB-624 0.18(mm)
ICV 240-503003/12		09/09/2021 18:06	1	201670.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Start Date: 11/08/2021 19:11

Analysis Batch Number: 511974 End Date: 11/08/2021 21:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-511974/1		11/08/2021 19:11	1	BFB20156.D	DB-624 0.18(mm)
CCVIS 240-511974/2		11/08/2021 19:24	1	202299.D	DB-624 0.18(mm)
LCS 240-511974/3		11/08/2021 19:48	1	202300.D	DB-624 0.18(mm)
MB 240-511974/4		11/08/2021 20:12	1	202301.D	DB-624 0.18(mm)
MRL 240-511974/5		11/08/2021 20:36	1	202302.D	DB-624 0.18(mm)
240-159369-2	SL-15_110221	11/08/2021 21:00	1	202303.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Instrument ID: A3UX20 Start Date: 11/09/2021 12:05

Analysis Batch Number: 512125 End Date: 11/09/2021 23:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-512125/1		11/09/2021 12:05	1	BFB20157.D	DB-624 0.18(mm)
CCVIS 240-512125/3		11/09/2021 12:50	1	202305.D	DB-624 0.18(mm)
LCS 240-512125/4		11/09/2021 13:14	1	202306.D	DB-624 0.18(mm)
MB 240-512125/5		11/09/2021 13:38	1	202307.D	DB-624 0.18(mm)
ZZZZZ		11/09/2021 14:02	1		DB-624 0.18(mm)
240-159369-3	SL-14_110221	11/09/2021 14:26	1	202309.D	DB-624 0.18(mm)
240-159369-4	SL-13_110221	11/09/2021 14:50	1	202310.D	DB-624 0.18(mm)
240-159369-5	SL-7_110221	11/09/2021 15:14	1	202311.D	DB-624 0.18(mm)
240-159369-5 MS	SL-7_110221 MS	11/09/2021 15:38	1	202312.D	DB-624 0.18(mm)
240-159369-5 MSD	SL-7_110221 MSD	11/09/2021 16:01	1	202313.D	DB-624 0.18(mm)
240-159369-6	SL-6_110221	11/09/2021 16:25	1	202314.D	DB-624 0.18(mm)
240-159369-7	SL-5_110221	11/09/2021 16:49	1	202315.D	DB-624 0.18(mm)
240-159369-8	SL-8_110221	11/09/2021 17:13	1	202316.D	DB-624 0.18(mm)
240-159369-9	SL-9_110221	11/09/2021 17:37	1	202317.D	DB-624 0.18(mm)
240-159369-10	SL-10_110221	11/09/2021 18:01	1	202318.D	DB-624 0.18(mm)
240-159369-11	SL-11_110221	11/09/2021 18:25	1	202319.D	DB-624 0.18(mm)
240-159369-12	SL-12_110221	11/09/2021 18:49	1	202320.D	DB-624 0.18(mm)
240-159369-13	MH-1231_110221	11/09/2021 19:13	1	202321.D	DB-624 0.18(mm)
240-159369-14	SL-2_110221	11/09/2021 19:37	1	202322.D	DB-624 0.18(mm)
240-159369-15	SL-3_110221	11/09/2021 20:01	1	202323.D	DB-624 0.18(mm)
240-159369-16	SL-4_110221	11/09/2021 20:25	1	202324.D	DB-624 0.18(mm)
240-159369-17	SL-16_110221	11/09/2021 20:48	1	202325.D	DB-624 0.18(mm)
240-159369-18	SL-17_110221	11/09/2021 21:12	1	202326.D	DB-624 0.18(mm)
240-159369-19	SL-18_110221	11/09/2021 21:36	1	202327.D	DB-624 0.18(mm)
240-159369-20	DUP-01	11/09/2021 22:00	1	202328.D	DB-624 0.18(mm)
ZZZZZ		11/09/2021 22:24	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 22:48	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 23:12	1		DB-624 0.18(mm)
ZZZZZ		11/09/2021 23:36	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00012	vm150SS20 00003	vm50ss 00453	vmbfb 00027
BFB 240-503003/1		8260B SIM		5 mL	5 mL				1 uL
IC 240-503003/3		8260B SIM		15 mL	15 mL	1 uL		0.15 uL	
IC 240-503003/4		8260B SIM		15 mL	15 mL	1 uL		0.3 uL	
IC 240-503003/5		8260B SIM		15 mL	15 mL	1 uL		0.75 uL	
IC 240-503003/6		8260B SIM		15 mL	15 mL	1 uL		1.5 uL	
ICIS 240-503003/7		8260B SIM		15 mL	15 mL	1 uL		3 uL	
IC 240-503003/8		8260B SIM		15 mL	15 mL	1 uL		7.5 uL	
IC 240-503003/9		8260B SIM		15 mL	15 mL	1 uL		15 uL	
IC 240-503003/10		8260B SIM		15 mL	15 mL	1 uL		30 uL	
ICV 240-503003/12		8260B SIM		15 mL	15 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00275	vmdioxanew 00264				
BFB 240-503003/1		8260B SIM							
IC 240-503003/3		8260B SIM			0.15 uL				
IC 240-503003/4		8260B SIM			0.3 uL				
IC 240-503003/5		8260B SIM			0.75 uL				
IC 240-503003/6		8260B SIM			1.5 uL				
ICIS 240-503003/7		8260B SIM			3 uL				
IC 240-503003/8		8260B SIM			7.5 uL				
IC 240-503003/9		8260B SIM			15 uL				
IC 240-503003/10		8260B SIM			30 uL				
ICV 240-503003/12		8260B SIM		3 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 511974 Batch Start Date: 11/08/21 19:11 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00015	vm150SS20 00004	vmbfb 00027
BFB 240-511974/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-511974/2		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-511974/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-511974/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MRL 240-511974/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-159369-D-2	SL-15_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00282	vmdioxanew 00270				
BFB 240-511974/1		8260B SIM							
CCVIS 240-511974/2		8260B SIM			3 uL				
LCS 240-511974/3		8260B SIM		3 uL					
MB 240-511974/4		8260B SIM							
MRL 240-511974/5		8260B SIM			0.15 uL				
240-159369-D-2	SL-15_110221	8260B SIM	T						

Batch Notes	
pH Indicator ID	HC155968

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 512125 Batch Start Date: 11/09/21 12:05 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00015	vm150SS20 00004	vmbfb 00027
BFB 240-512125/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-512125/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-512125/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-512125/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-159369-A-3	SL-14_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-4	SL-13_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-5	SL-7_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-D-5 MS	SL-7_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-D-5 MSD	SL-7_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-6	SL-6_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-7	SL-5_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-8	SL-8_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-9	SL-9_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-10	SL-10_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-11	SL-11_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-D-12	SL-12_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-13	MH-1231_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-14	SL-2_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-15	SL-3_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-D-16	SL-4_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-17	SL-16_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-A-18	SL-17_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-C-19	SL-18_110221	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-159369-F-20	DUP-01	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00283	vmdioxanew 00271				
BFB 240-512125/1		8260B SIM							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 512125 Batch Start Date: 11/09/21 12:05 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00283	vmdioxanew 00271				
CCVIS 240-512125/3		8260B SIM			3 uL				
LCS 240-512125/4		8260B SIM		3 uL					
MB 240-512125/5		8260B SIM							
240-159369-A-3	SL-14_110221	8260B SIM	T						
240-159369-A-4	SL-13_110221	8260B SIM	T						
240-159369-A-5	SL-7_110221	8260B SIM	T						
240-159369-D-5 MS	SL-7_110221	8260B SIM	T	3 uL					
240-159369-D-5 MSD	SL-7_110221	8260B SIM	T	3 uL					
240-159369-C-6	SL-6_110221	8260B SIM	T						
240-159369-C-7	SL-5_110221	8260B SIM	T						
240-159369-C-8	SL-8_110221	8260B SIM	T						
240-159369-C-9	SL-9_110221	8260B SIM	T						
240-159369-C-10	SL-10_110221	8260B SIM	T						
240-159369-C-11	SL-11_110221	8260B SIM	T						
240-159369-D-12	SL-12_110221	8260B SIM	T						
240-159369-A-13	MH-1231_110221	8260B SIM	T						
240-159369-A-14	SL-2_110221	8260B SIM	T						
240-159369-A-15	SL-3_110221	8260B SIM	T						
240-159369-D-16	SL-4_110221	8260B SIM	T						
240-159369-A-17	SL-16_110221	8260B SIM	T						
240-159369-A-18	SL-17_110221	8260B SIM	T						
240-159369-C-19	SL-18_110221	8260B SIM	T						
240-159369-F-20	DUP-01	8260B SIM	T						

Batch Notes	
pH Indicator ID	HC155968

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-159369-1

SDG No.:

Batch Number: 512125 Batch Start Date: 11/09/21 12:05 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

MICHIGAN 190

0.4/0.5 0.5/0.6

Chain of Custody Record

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

240-159369 Chain of Custody

merica ENVIRONMENTAL TESTING

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 2 COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Andrew Banitt, Sommer Guy	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day		Walk-in client:
Phone: 248-994-2240	Method of Shipment/Carrier:	1 day		Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-15_110221	11/2/21	0830		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-14_110221	11/2/21	0850		X						6					N	G	X	X	X	X	X	X	X					
SL-13_110221	11/2/21	0915		X						6					N	G	X	X	X	X	X	X	X					
SL-7_110221	11/2/21	0940		X						6					N	G	X	X	X	X	X	X	X					
SL-6_110221	11/2/21	1005		X						6					N	G	X	X	X	X	X	X	X					
SL-5_110221	11/2/21	1035		X						6					N	G	X	X	X	X	X	X	X					
SL-8_110221	11/2/21	1105		X						6					N	G	X	X	X	X	X	X	X					
SL-9_110221	11/2/21	1225		X						6					N	G	X	X	X	X	X	X	X					
SL-10_110221	11/2/21	1240		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	11/2/21 1700	Ford Trailer	Arcadis	11/2/21 1700
[signature]	Arcadis	11/4/21 1405	[signature]	ETA	11/4/21 1411
[signature]	ETA	11/4/21 1501	[signature]	ETA	11/5/21 1000

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton -- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 2 COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Sommer Guy Andrew Banitt, ~~Korey Pearson~~	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day (1 day)		Walk-in client:
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
SL-11_110221	11/2/21	1305		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12_110221	11/2/21	1325		X						6					N	G	X	X	X	X	X	X	X					
MH-1231_110221	11/2/21	1415		X						6					N	G	X	X	X	X	X	X	X					
SL-2_110221	11/2/21	1440		X						6					N	G	X	X	X	X	X	X	X					
SL-3_110221	11/2/21	1505		X						6					N	G	X	X	X	X	X	X	X					
SL-4_110221	11/2/21	1650		X						6					N	G	X	X	X	X	X	X	X					
SL-16_110221	11/2/21	1530		X						6					N	G	X	X	X	X	X	X	X					
SL-17_110221	11/2/21	1600		X						6					N	G	X	X	X	X	X	X	X					
SL-18_110221	11/2/21	1625		X						6					N	G	X	X	X	X	X	X	X					
DUP-01	11/2/21	--		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	11/2/21 1200	Ford Trailer	Arcadis	11/2/21 1700
[signature]	Arcadis	11/4/21 1405	[signature]	ETA	11/4/21 1411
[signature]	ETA	11/4/21 1501	[signature]	ETA	11/5/21 1000

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11/11/2021

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 159369
Canton Facility

Client Acadis Site Name _____ Cooler unpacked by: Trent

Cooler Received on 11/5/21 Opened on 11/5/21

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # NA Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ ~~See~~ Multiple Cooler Form
   IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF +0.2°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	~~Yes~~ No	
-Were the seals on the outside of the cooler(s) signed & dated?	~~Yes~~ No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	~~Yes~~ No	NA
3. Shippers' packing slip attached to the cooler(s)?	~~Yes~~ No	
4. Did custody papers accompany the sample(s)?	~~Yes~~ No	
5. Were the custody papers relinquished & signed in the appropriate place?	~~Yes~~ No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	~~Yes~~ No	
7. Did all bottles arrive in good condition (Unbroken)?	~~Yes~~ No	
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	~~Yes~~ No	
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11. Sufficient quantity received to perform indicated analyses?	(Yes) No	
12. Are these work share samples and all listed on the COC?	Yes (No)	
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No	(NA) pH Strip Lot# **HC157842**
14. Were VOAs on the COC?	(Yes) No	
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes (No)	NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 61042016	(Yes) No	
17. Was a LL Hg or Me Hg trip blank present? _____	Yes (No)	

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by: R Fink

CoC wrong on # of vials for TB: 2 arrived. Will log 2.

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : 159369

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	0.4	0.5	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	0.5	0.6	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

ANALYTICAL REPORT

Job Number: 240-160744-1

Job Description: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
12/8/2021 2:37 PM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
12/08/2021

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-160744-1

Comments
No additional comments.

Receipt
The samples were received on 11/26/2021 1:02 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0º C and 2.4º C.

GC/MS VOA
Method 8260B: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SL-7_112321 (240-160744-5). Elevated reporting limits (RLs) are provided.

Method 8260B SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-13_112321 (240-160744-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-160744-1

No Detections.

Client Sample ID: SL-15_112321 — Lab Sample ID: 240-160744-2

No Detections.

Client Sample ID: SL-14_112321 — Lab Sample ID: 240-160744-3

No Detections.

Client Sample ID: SL-13_112321 — Lab Sample ID: 240-160744-4

No Detections.

Client Sample ID: SL-7_112321 — Lab Sample ID: 240-160744-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-6_112321 — Lab Sample ID: 240-160744-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: SL-5_112321 — Lab Sample ID: 240-160744-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	14		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-8_112321 — Lab Sample ID: 240-160744-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	23		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-9_112321 — Lab Sample ID: 240-160744-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-10_112321 — Lab Sample ID: 240-160744-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-11_112321 — Lab Sample ID: 240-160744-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	18		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_112321 — Lab Sample ID: 240-160744-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	13		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.72	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1231_112421 — Lab Sample ID: 240-160744-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.9		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.89	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-2_112421 — Lab Sample ID: 240-160744-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.0		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.2		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-3_112421 — Lab Sample ID: 240-160744-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.4		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-4_112421 — Lab Sample ID: 240-160744-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.9		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-19_112321 — Lab Sample ID: 240-160744-17

No Detections.

Client Sample ID: SL-22_112321 — Lab Sample ID: 240-160744-18

No Detections.

Client Sample ID: SL-20_112321 — Lab Sample ID: 240-160744-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.6		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.68	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-16_112421 — Lab Sample ID: 240-160744-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_112421 Lab Sample ID: 240-160744-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	28		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	12		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-21_112421 Lab Sample ID: 240-160744-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.96	J	1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: SL-18_112421 Lab Sample ID: 240-160744-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	13		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-01 Lab Sample ID: 240-160744-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.3		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-02 Lab Sample ID: 240-160744-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.4		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	0.54	J	1.0	0.44	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-160744-1

Date Collected: 11/24/21 00:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 14:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 14:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 14:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 14:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 14:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*62 - 137*		*12/03/21 14:58*	*1*
4-Bromofluorobenzene (Surr)	*69*		*56 - 136*		*12/03/21 14:58*	*1*
Toluene-d8 (Surr)	*87*		*78 - 122*		*12/03/21 14:58*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*12/03/21 14:58*	*1*

Client Sample ID: SL-15_112321 — Lab Sample ID: 240-160744-2

Date Collected: 11/23/21 09:30 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/29/21 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 120*		*11/29/21 21:44*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 15:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 15:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 15:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 15:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 15:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*62 - 137*		*12/03/21 15:20*	*1*
4-Bromofluorobenzene (Surr)	*68*		*56 - 136*		*12/03/21 15:20*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*12/03/21 15:20*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*12/03/21 15:20*	*1*

Client Sample ID: SL-14_112321 — Lab Sample ID: 240-160744-3

Date Collected: 11/23/21 09:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/29/21 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 120*		*11/29/21 22:08*	*1*

Client Sample ID: SL-14_112321 — Lab Sample ID: 240-160744-3

Date Collected: 11/23/21 09:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 15:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 15:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 15:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 15:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 15:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*62 - 137*		*12/03/21 15:42*	*1*
4-Bromofluorobenzene (Surr)	*65*		*56 - 136*		*12/03/21 15:42*	*1*
Toluene-d8 (Surr)	*80*		*78 - 122*		*12/03/21 15:42*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*12/03/21 15:42*	*1*

Client Sample ID: SL-13_112321 — Lab Sample ID: 240-160744-4

Date Collected: 11/23/21 10:20 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/29/21 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*11/29/21 22:32*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 16:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 16:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 16:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 16:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 16:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*62 - 137*		*12/03/21 16:04*	*1*
4-Bromofluorobenzene (Surr)	*70*		*56 - 136*		*12/03/21 16:04*	*1*
Toluene-d8 (Surr)	*88*		*78 - 122*		*12/03/21 16:04*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*12/03/21 16:04*	*1*

Client Sample ID: SL-7_112321 — Lab Sample ID: 240-160744-5

Date Collected: 11/23/21 10:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		2.0	0.86	ug/L			11/29/21 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*11/29/21 23:44*	*1*

Client Sample ID: SL-7_112321 — Lab Sample ID: 240-160744-5

Date Collected: 11/23/21 10:55 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			12/06/21 14:56	2
cis-1,2-Dichloroethene	2.0	U	2.0	0.92	ug/L			12/06/21 14:56	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			12/06/21 14:56	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			12/06/21 14:56	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			12/06/21 14:56	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			12/06/21 14:56	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*12/06/21 14:56*	*2*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*12/06/21 14:56*	*2*
Toluene-d8 (Surr)	*113*		*78 - 122*		*12/06/21 14:56*	*2*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*12/06/21 14:56*	*2*

Client Sample ID: SL-6_112321 — Lab Sample ID: 240-160744-6

Date Collected: 11/23/21 11:15 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			11/30/21 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 00:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/06/21 15:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/06/21 15:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 15:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/06/21 15:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 15:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/06/21 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/06/21 15:18*	*1*
4-Bromofluorobenzene (Surr)	*77*		*56 - 136*		*12/06/21 15:18*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*12/06/21 15:18*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/06/21 15:18*	*1*

Client Sample ID: SL-5_112321 — Lab Sample ID: 240-160744-7

Date Collected: 11/23/21 12:55 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**14**		2.0	0.86	ug/L			11/30/21 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*11/30/21 00:31*	*1*

Client Sample ID: SL-5_112321 — Lab Sample ID: 240-160744-7

Date Collected: 11/23/21 12:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 17:51	1
cis-1,2-Dichloroethene	**3.0**		1.0	0.46	ug/L			12/03/21 17:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 17:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:51	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			12/03/21 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*12/03/21 17:51*	*1*
4-Bromofluorobenzene (Surr)	*74*		*56 - 136*		*12/03/21 17:51*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*12/03/21 17:51*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*12/03/21 17:51*	*1*

Client Sample ID: SL-8_112321 — Lab Sample ID: 240-160744-8

Date Collected: 11/23/21 13:20 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**23**		2.0	0.86	ug/L			11/30/21 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*11/30/21 00:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/06/21 15:40	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			12/06/21 15:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 15:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/06/21 15:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 15:40	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			12/06/21 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*12/06/21 15:40*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*12/06/21 15:40*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*12/06/21 15:40*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/06/21 15:40*	*1*

Client Sample ID: SL-9_112321 — Lab Sample ID: 240-160744-9

Date Collected: 11/23/21 13:35 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		2.0	0.86	ug/L			11/30/21 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*11/30/21 01:19*	*1*

Client Sample ID: SL-9_112321 — Lab Sample ID: 240-160744-9

Date Collected: 11/23/21 13:35 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 18:34	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			12/03/21 18:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 18:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:34	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			12/03/21 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*12/03/21 18:34*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*12/03/21 18:34*	*1*
Toluene-d8 (Surr)	*85*		*78 - 122*		*12/03/21 18:34*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*12/03/21 18:34*	*1*

Client Sample ID: SL-10_112321 — Lab Sample ID: 240-160744-10

Date Collected: 11/23/21 14:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		2.0	0.86	ug/L			11/30/21 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 01:43*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 18:56	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			12/03/21 18:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 18:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:56	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			12/03/21 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*12/03/21 18:56*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*12/03/21 18:56*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*12/03/21 18:56*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/03/21 18:56*	*1*

Client Sample ID: SL-11_112321 — Lab Sample ID: 240-160744-11

Date Collected: 11/23/21 14:25 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**18**		2.0	0.86	ug/L			11/30/21 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*11/30/21 02:07*	*1*

Client Sample ID: SL-11_112321 — Lab Sample ID: 240-160744-11

Date Collected: 11/23/21 14:25 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 19:18	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			12/03/21 19:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 19:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:18	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			12/03/21 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*62 - 137*		*12/03/21 19:18*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*12/03/21 19:18*	*1*
Toluene-d8 (Surr)	*88*		*78 - 122*		*12/03/21 19:18*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*12/03/21 19:18*	*1*

Client Sample ID: SL-12_112321 — Lab Sample ID: 240-160744-12

Date Collected: 11/23/21 14:45 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**13**		2.0	0.86	ug/L			11/30/21 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*11/30/21 02:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 19:40	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			12/03/21 19:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 19:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:40	1
Vinyl chloride	**0.72**	**J**	1.0	0.45	ug/L			12/03/21 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*62 - 137*		*12/03/21 19:40*	*1*
4-Bromofluorobenzene (Surr)	*77*		*56 - 136*		*12/03/21 19:40*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*12/03/21 19:40*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 19:40*	*1*

Client Sample ID: MH-1231_112421 — Lab Sample ID: 240-160744-13

Date Collected: 11/24/21 08:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			11/30/21 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*11/30/21 02:55*	*1*

Client Sample ID: MH-1231_112421 — Lab Sample ID: 240-160744-13

Date Collected: 11/24/21 08:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 20:01	1
cis-1,2-Dichloroethene	**3.9**		1.0	0.46	ug/L			12/03/21 20:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 20:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:01	1
Vinyl chloride	**0.89**	**J**	1.0	0.45	ug/L			12/03/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*12/03/21 20:01*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*12/03/21 20:01*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*12/03/21 20:01*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 20:01*	*1*

Client Sample ID: SL-2_112421 — Lab Sample ID: 240-160744-14

Date Collected: 11/24/21 09:40 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.0**		2.0	0.86	ug/L			11/30/21 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*11/30/21 03:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 20:23	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.46	ug/L			12/03/21 20:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 20:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:23	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			12/03/21 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*62 - 137*		*12/03/21 20:23*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*12/03/21 20:23*	*1*
Toluene-d8 (Surr)	*84*		*78 - 122*		*12/03/21 20:23*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 20:23*	*1*

Client Sample ID: SL-3_112421 — Lab Sample ID: 240-160744-15

Date Collected: 11/24/21 10:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			11/30/21 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*11/30/21 03:43*	*1*

Client Sample ID: SL-3_112421 — Lab Sample ID: 240-160744-15

Date Collected: 11/24/21 10:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 20:45	1
cis-1,2-Dichloroethene	**4.4**		1.0	0.46	ug/L			12/03/21 20:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 20:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:45	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			12/03/21 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*12/03/21 20:45*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*12/03/21 20:45*	*1*
Toluene-d8 (Surr)	*87*		*78 - 122*		*12/03/21 20:45*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/03/21 20:45*	*1*

Client Sample ID: SL-4_112421 — Lab Sample ID: 240-160744-16

Date Collected: 11/24/21 12:10 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.2**		2.0	0.86	ug/L			11/30/21 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*11/30/21 04:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 17:10	1
cis-1,2-Dichloroethene	**4.0**		1.0	0.46	ug/L			12/03/21 17:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 17:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:10	1
Vinyl chloride	**2.9**		1.0	0.45	ug/L			12/03/21 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*12/03/21 17:10*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*12/03/21 17:10*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*12/03/21 17:10*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/03/21 17:10*	*1*

Client Sample ID: SL-19_112321 — Lab Sample ID: 240-160744-17

Date Collected: 11/23/21 15:20 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/30/21 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 04:31*	*1*

Client Sample ID: SL-19_112321 — Lab Sample ID: 240-160744-17

Date Collected: 11/23/21 15:20 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 17:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 17:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 17:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*12/03/21 17:32*	*1*
4-Bromofluorobenzene (Surr)	*75*		*56 - 136*		*12/03/21 17:32*	*1*
Toluene-d8 (Surr)	*113*		*78 - 122*		*12/03/21 17:32*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*12/03/21 17:32*	*1*

Client Sample ID: SL-22_112321 — Lab Sample ID: 240-160744-18

Date Collected: 11/23/21 15:40 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/30/21 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 04:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 17:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 17:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 17:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 17:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*12/03/21 17:54*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*12/03/21 17:54*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*12/03/21 17:54*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 17:54*	*1*

Client Sample ID: SL-20_112321 — Lab Sample ID: 240-160744-19

Date Collected: 11/23/21 16:10 — **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.6**		2.0	0.86	ug/L			11/30/21 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 05:18*	*1*

Client Sample ID: SL-20_112321 — Lab Sample ID: 240-160744-19

Date Collected: 11/23/21 16:10 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 18:16	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			12/03/21 18:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 18:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:16	1
Vinyl chloride	**0.68**	**J**	1.0	0.45	ug/L			12/03/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*12/03/21 18:16*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*12/03/21 18:16*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*12/03/21 18:16*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*12/03/21 18:16*	*1*

Client Sample ID: SL-16_112421 — Lab Sample ID: 240-160744-20

Date Collected: 11/24/21 10:20 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		2.0	0.86	ug/L			11/30/21 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*11/30/21 05:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 18:39	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			12/03/21 18:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 18:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 18:39	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			12/03/21 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*12/03/21 18:39*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*12/03/21 18:39*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/03/21 18:39*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*12/03/21 18:39*	*1*

Client Sample ID: SL-17_112421 — Lab Sample ID: 240-160744-21

Date Collected: 11/24/21 10:45 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**28**		2.0	0.86	ug/L			11/30/21 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*11/30/21 06:06*	*1*

Client Sample ID: SL-17_112421 — Lab Sample ID: 240-160744-21

Date Collected: 11/24/21 10:45 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 19:01	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			12/03/21 19:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 19:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:01	1
Vinyl chloride	**12**		1.0	0.45	ug/L			12/03/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*12/03/21 19:01*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*12/03/21 19:01*	*1*
Toluene-d8 (Surr)	*117*		*78 - 122*		*12/03/21 19:01*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*12/03/21 19:01*	*1*

Client Sample ID: SL-21_112421 — Lab Sample ID: 240-160744-22

Date Collected: 11/24/21 12:50 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			11/30/21 06:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*11/30/21 06:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 19:23	1
cis-1,2-Dichloroethene	**0.96**	**J**	1.0	0.46	ug/L			12/03/21 19:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 19:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*12/03/21 19:23*	*1*
4-Bromofluorobenzene (Surr)	*75*		*56 - 136*		*12/03/21 19:23*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*12/03/21 19:23*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/03/21 19:23*	*1*

Client Sample ID: SL-18_112421 — Lab Sample ID: 240-160744-23

Date Collected: 11/24/21 11:40 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**13**		2.0	0.86	ug/L			11/30/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 20:48*	*1*

Client Sample ID: SL-18_112421 — Lab Sample ID: 240-160744-23

Date Collected: 11/24/21 11:40 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 19:45	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			12/03/21 19:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 19:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 19:45	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			12/03/21 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*12/03/21 19:45*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*12/03/21 19:45*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/03/21 19:45*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 19:45*	*1*

Client Sample ID: DUP-01 — Lab Sample ID: 240-160744-24

Date Collected: 11/24/21 00:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.1**		2.0	0.86	ug/L			11/30/21 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 120*		*11/30/21 21:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 20:07	1
cis-1,2-Dichloroethene	**3.3**		1.0	0.46	ug/L			12/03/21 20:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 20:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:07	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			12/03/21 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*12/03/21 20:07*	*1*
4-Bromofluorobenzene (Surr)	*75*		*56 - 136*		*12/03/21 20:07*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*12/03/21 20:07*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*12/03/21 20:07*	*1*

Client Sample ID: DUP-02 — Lab Sample ID: 240-160744-25

Date Collected: 11/24/21 00:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.4**		2.0	0.86	ug/L			11/30/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*11/30/21 21:36*	*1*

Client Sample ID: DUP-02
Date Collected: 11/24/21 00:00
Date Received: 11/26/21 13:02

Lab Sample ID: 240-160744-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 20:30	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.46	ug/L			12/03/21 20:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 20:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 20:30	1
Trichloroethene	**0.54**	**J**	1.0	0.44	ug/L			12/03/21 20:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*12/03/21 20:30*	*1*
4-Bromofluorobenzene (Surr)	*74*		*56 - 136*		*12/03/21 20:30*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*12/03/21 20:30*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*12/03/21 20:30*	*1*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-160670-C-5 MS	Matrix Spike	98	85	109	89
240-160670-C-5 MSD	Matrix Spike Duplicate	99	89	113	88
240-160744-1	TRIP BLANK	121	69	87	98
240-160744-2	SL-15_112321	120	68	86	97
240-160744-3	SL-14_112321	119	65	80	100
240-160744-4	SL-13_112321	119	70	88	103
240-160744-5	SL-7_112321	102	82	113	93
240-160744-6	SL-6_112321	98	77	108	90
240-160744-7	SL-5_112321	104	74	86	96
240-160744-8	SL-8_112321	99	82	107	90
240-160744-9	SL-9_112321	106	80	85	95
240-160744-10	SL-10_112321	105	78	86	91
240-160744-11	SL-11_112321	111	84	88	95
240-160744-12	SL-12_112321	110	77	86	94
240-160744-13	MH-1231_112421	103	80	86	94
240-160744-14	SL-2_112421	108	90	84	94
240-160744-15	SL-3_112421	106	86	87	90
240-160744-15 MS	SL-3_112421	86	98	96	81
240-160744-15 MSD	SL-3_112421	96	104	99	78
240-160744-16	SL-4_112421	103	80	108	91
240-160744-17	SL-19_112321	106	75	113	95
240-160744-18	SL-22_112321	105	78	110	94
240-160744-19	SL-20_112321	104	78	108	92
240-160744-20	SL-16_112421	104	80	109	93
240-160744-21	SL-17_112421	106	89	117	97
240-160744-22	SL-21_112421	99	75	106	90
240-160744-23	SL-18_112421	103	82	109	94
240-160744-24	DUP-01	96	75	105	88
240-160744-25	DUP-02	100	74	108	89
240-160744-25 MS	DUP-02	100	90	119	92
240-160744-25 MSD	DUP-02	92	83	109	85
LCS 240-515506/4	Lab Control Sample	104	90	114	92
LCS 240-515508/4	Lab Control Sample	98	102	102	82
LCS 240-515635/4	Lab Control Sample	99	86	116	93
MB 240-515506/6	Method Blank	104	78	111	94
MB 240-515508/7	Method Blank	118	75	88	94
MB 240-515635/6	Method Blank	104	84	114	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-160738-A-1 MS	Matrix Spike	103						
240-160738-A-1 MSD	Matrix Spike Duplicate	103						
240-160744-2	SL-15_112321	97						
240-160744-3	SL-14_112321	96						
240-160744-4	SL-13_112321	94						
240-160744-4 MS	SL-13_112321	100						
240-160744-4 MSD	SL-13_112321	101						
240-160744-5	SL-7_112321	101						
240-160744-6	SL-6_112321	100						
240-160744-7	SL-5_112321	99						
240-160744-8	SL-8_112321	103						
240-160744-9	SL-9_112321	103						
240-160744-10	SL-10_112321	100						
240-160744-11	SL-11_112321	101						
240-160744-12	SL-12_112321	101						
240-160744-13	MH-1231_112421	99						
240-160744-14	SL-2_112421	102						
240-160744-15	SL-3_112421	101						
240-160744-16	SL-4_112421	102						
240-160744-17	SL-19_112321	100						
240-160744-18	SL-22_112321	100						
240-160744-19	SL-20_112321	100						
240-160744-20	SL-16_112421	102						
240-160744-21	SL-17_112421	103						
240-160744-22	SL-21_112421	102						
240-160744-23	SL-18_112421	100						
240-160744-24	DUP-01	96						
240-160744-25	DUP-02	100						
LCS 240-514943/4	Lab Control Sample	99						
LCS 240-515124/4	Lab Control Sample	101						
MB 240-514943/5	Method Blank	99						
MB 240-515124/5	Method Blank	103						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-515506/6
Matrix: Water
Analysis Batch: 515506

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 12:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 12:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 12:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 12:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 12:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*12/03/21 12:45*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*12/03/21 12:45*	*1*
Toluene-d8 (Surr)	*111*		*78 - 122*		*12/03/21 12:45*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/03/21 12:45*	*1*

Lab Sample ID: LCS 240-515506/4
Matrix: Water
Analysis Batch: 515506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	9.08		ug/L		91	63 - 134		
cis-1,2-Dichloroethene			10.0	9.97		ug/L		100	77 - 123		
Tetrachloroethene			10.0	10.4		ug/L		104	76 - 123		
trans-1,2-Dichloroethene			10.0	10.2		ug/L		102	75 - 124		
Trichloroethene			10.0	8.50		ug/L		85	70 - 122		
Vinyl chloride			10.0	10.5		ug/L		105	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*114*		*78 - 122*
Dibromofluoromethane (Surr)	*92*		*73 - 120*

Lab Sample ID: 240-160744-25 MS
Matrix: Water
Analysis Batch: 515506

Client Sample ID: DUP-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	1.0	U	10.0	10.3		ug/L		103	56 - 135		
cis-1,2-Dichloroethene	1.2		10.0	12.1		ug/L		110	66 - 128		
Tetrachloroethene	1.0	U	10.0	9.52		ug/L		95	62 - 131		
trans-1,2-Dichloroethene	1.0	U	10.0	9.91		ug/L		99	56 - 136		
Trichloroethene	0.54	J	10.0	8.73		ug/L		82	61 - 124		
Vinyl chloride	1.0	U	10.0	11.7		ug/L		117	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*119*		*78 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-160744-25 MS — **Client Sample ID: DUP-02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515506

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	92		73 - 120

Lab Sample ID: 240-160744-25 MSD — **Client Sample ID: DUP-02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	8.70		ug/L		87	56 - 135	17	26
cis-1,2-Dichloroethene	1.2		10.0	10.7		ug/L		95	66 - 128	13	14
Tetrachloroethene	1.0	U	10.0	9.41		ug/L		94	62 - 131	1	20
trans-1,2-Dichloroethene	1.0	U	10.0	9.07		ug/L		91	56 - 136	9	15
Trichloroethene	0.54	J	10.0	8.24		ug/L		77	61 - 124	6	15
Vinyl chloride	1.0	U	10.0	11.7		ug/L		117	43 - 157	0	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		62 - 137
4-Bromofluorobenzene (Surr)	83		56 - 136
Toluene-d8 (Surr)	109		78 - 122
Dibromofluoromethane (Surr)	85		73 - 120

Lab Sample ID: MB 240-515508/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/03/21 12:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/03/21 12:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 12:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/03/21 12:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/03/21 12:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/03/21 12:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		62 - 137		12/03/21 12:47	1
4-Bromofluorobenzene (Surr)	75		56 - 136		12/03/21 12:47	1
Toluene-d8 (Surr)	88		78 - 122		12/03/21 12:47	1
Dibromofluoromethane (Surr)	94		73 - 120		12/03/21 12:47	1

Lab Sample ID: LCS 240-515508/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	7.33		ug/L		73	63 - 134
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	77 - 123
Tetrachloroethene	10.0	9.85		ug/L		99	76 - 123
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	75 - 124
Trichloroethene	10.0	8.99		ug/L		90	70 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-515508/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515508

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	8.69		ug/L		87	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*
Dibromofluoromethane (Surr)	*82*		*73 - 120*

Lab Sample ID: 240-160744-15 MS — **Client Sample ID: SL-3_112421**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515508

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	1.0	U	10.0	8.26		ug/L		83	56 - 135		
cis-1,2-Dichloroethene	4.4		10.0	13.3		ug/L		89	66 - 128		
Tetrachloroethene	1.0	U	10.0	7.02		ug/L		70	62 - 131		
trans-1,2-Dichloroethene	1.0	U	10.0	9.95		ug/L		99	56 - 136		
Trichloroethene	1.0	U	10.0	8.06		ug/L		81	61 - 124		
Vinyl chloride	2.3		10.0	10.5		ug/L		82	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*81*		*73 - 120*

Lab Sample ID: 240-160744-15 MSD — **Client Sample ID: SL-3_112421**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515508

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	7.64		ug/L		76	56 - 135	8	26
cis-1,2-Dichloroethene	4.4		10.0	13.1		ug/L		87	66 - 128	2	14
Tetrachloroethene	1.0	U	10.0	7.75		ug/L		78	62 - 131	10	20
trans-1,2-Dichloroethene	1.0	U	10.0	10.6		ug/L		106	56 - 136	6	15
Trichloroethene	1.0	U	10.0	8.36		ug/L		84	61 - 124	4	15
Vinyl chloride	2.3		10.0	11.2		ug/L		89	43 - 157	6	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*
Toluene-d8 (Surr)	*99*		*78 - 122*
Dibromofluoromethane (Surr)	*78*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-515635/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 515635

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/06/21 11:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/06/21 11:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 11:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/06/21 11:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/06/21 11:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/06/21 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*12/06/21 11:36*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*12/06/21 11:36*	*1*
Toluene-d8 (Surr)	*114*		*78 - 122*		*12/06/21 11:36*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*12/06/21 11:36*	*1*

Lab Sample ID: LCS 240-515635/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 515635

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			10.0	10.0		ug/L		100	63 - 134		
cis-1,2-Dichloroethene			10.0	9.99		ug/L		100	77 - 123		
Tetrachloroethene			10.0	11.0		ug/L		110	76 - 123		
trans-1,2-Dichloroethene			10.0	10.1		ug/L		101	75 - 124		
Trichloroethene			10.0	8.85		ug/L		89	70 - 122		
Vinyl chloride			10.0	9.66		ug/L		97	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*
Toluene-d8 (Surr)	*116*		*78 - 122*
Dibromofluoromethane (Surr)	*93*		*73 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-514943/5 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 514943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/29/21 20:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*11/29/21 20:32*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-514943/4
Matrix: Water
Analysis Batch: 514943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.54		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*

Lab Sample ID: 240-160744-4 MS
Matrix: Water
Analysis Batch: 514943

Client Sample ID: SL-13_112321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.2		ug/L		102	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*

Lab Sample ID: 240-160744-4 MSD
Matrix: Water
Analysis Batch: 514943

Client Sample ID: SL-13_112321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	9.79		ug/L		98	51 - 153	4	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*

Lab Sample ID: MB 240-515124/5
Matrix: Water
Analysis Batch: 515124

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/30/21 19:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*11/30/21 19:13*	*1*

Lab Sample ID: LCS 240-515124/4
Matrix: Water
Analysis Batch: 515124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.54		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*

GC/MS VOA

Analysis Batch: 514943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160744-2	SL-15_112321	Total/NA	Water	8260B SIM	
240-160744-3	SL-14_112321	Total/NA	Water	8260B SIM	
240-160744-4	SL-13_112321	Total/NA	Water	8260B SIM	
240-160744-5	SL-7_112321	Total/NA	Water	8260B SIM	
240-160744-6	SL-6_112321	Total/NA	Water	8260B SIM	
240-160744-7	SL-5_112321	Total/NA	Water	8260B SIM	
240-160744-8	SL-8_112321	Total/NA	Water	8260B SIM	
240-160744-9	SL-9_112321	Total/NA	Water	8260B SIM	
240-160744-10	SL-10_112321	Total/NA	Water	8260B SIM	
240-160744-11	SL-11_112321	Total/NA	Water	8260B SIM	
240-160744-12	SL-12_112321	Total/NA	Water	8260B SIM	
240-160744-13	MH-1231_112421	Total/NA	Water	8260B SIM	
240-160744-14	SL-2_112421	Total/NA	Water	8260B SIM	
240-160744-15	SL-3_112421	Total/NA	Water	8260B SIM	
240-160744-16	SL-4_112421	Total/NA	Water	8260B SIM	
240-160744-17	SL-19_112321	Total/NA	Water	8260B SIM	
240-160744-18	SL-22_112321	Total/NA	Water	8260B SIM	
240-160744-19	SL-20_112321	Total/NA	Water	8260B SIM	
240-160744-20	SL-16_112421	Total/NA	Water	8260B SIM	
240-160744-21	SL-17_112421	Total/NA	Water	8260B SIM	
240-160744-22	SL-21_112421	Total/NA	Water	8260B SIM	
MB 240-514943/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-514943/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-160744-4 MS	SL-13_112321	Total/NA	Water	8260B SIM	
240-160744-4 MSD	SL-13_112321	Total/NA	Water	8260B SIM	

Analysis Batch: 515124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160744-23	SL-18_112421	Total/NA	Water	8260B SIM	
240-160744-24	DUP-01	Total/NA	Water	8260B SIM	
240-160744-25	DUP-02	Total/NA	Water	8260B SIM	
MB 240-515124/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-515124/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 515506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160744-16	SL-4_112421	Total/NA	Water	8260B	
240-160744-17	SL-19_112321	Total/NA	Water	8260B	
240-160744-18	SL-22_112321	Total/NA	Water	8260B	
240-160744-19	SL-20_112321	Total/NA	Water	8260B	
240-160744-20	SL-16_112421	Total/NA	Water	8260B	
240-160744-21	SL-17_112421	Total/NA	Water	8260B	
240-160744-22	SL-21_112421	Total/NA	Water	8260B	
240-160744-23	SL-18_112421	Total/NA	Water	8260B	
240-160744-24	DUP-01	Total/NA	Water	8260B	
240-160744-25	DUP-02	Total/NA	Water	8260B	
MB 240-515506/6	Method Blank	Total/NA	Water	8260B	
LCS 240-515506/4	Lab Control Sample	Total/NA	Water	8260B	
240-160744-25 MS	DUP-02	Total/NA	Water	8260B	
240-160744-25 MSD	DUP-02	Total/NA	Water	8260B	

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Analysis Batch: 515508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160744-1	TRIP BLANK	Total/NA	Water	8260B	
240-160744-2	SL-15_112321	Total/NA	Water	8260B	
240-160744-3	SL-14_112321	Total/NA	Water	8260B	
240-160744-4	SL-13_112321	Total/NA	Water	8260B	
240-160744-7	SL-5_112321	Total/NA	Water	8260B	
240-160744-9	SL-9_112321	Total/NA	Water	8260B	
240-160744-10	SL-10_112321	Total/NA	Water	8260B	
240-160744-11	SL-11_112321	Total/NA	Water	8260B	
240-160744-12	SL-12_112321	Total/NA	Water	8260B	
240-160744-13	MH-1231_112421	Total/NA	Water	8260B	
240-160744-14	SL-2_112421	Total/NA	Water	8260B	
240-160744-15	SL-3_112421	Total/NA	Water	8260B	
MB 240-515508/7	Method Blank	Total/NA	Water	8260B	
LCS 240-515508/4	Lab Control Sample	Total/NA	Water	8260B	
240-160744-15 MS	SL-3_112421	Total/NA	Water	8260B	
240-160744-15 MSD	SL-3_112421	Total/NA	Water	8260B	

Analysis Batch: 515635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160744-5	SL-7_112321	Total/NA	Water	8260B	
240-160744-6	SL-6_112321	Total/NA	Water	8260B	
240-160744-8	SL-8_112321	Total/NA	Water	8260B	
MB 240-515635/6	Method Blank	Total/NA	Water	8260B	
LCS 240-515635/4	Lab Control Sample	Total/NA	Water	8260B	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-160744-1

Date Collected: 11/24/21 00:00 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 14:58	LEE	TAL CAN

Client Sample ID: SL-15_112321 — Lab Sample ID: 240-160744-2

Date Collected: 11/23/21 09:30 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 15:20	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/29/21 21:44	CS	TAL CAN

Client Sample ID: SL-14_112321 — Lab Sample ID: 240-160744-3

Date Collected: 11/23/21 09:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 15:42	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/29/21 22:08	CS	TAL CAN

Client Sample ID: SL-13_112321 — Lab Sample ID: 240-160744-4

Date Collected: 11/23/21 10:20 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 16:04	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/29/21 22:32	CS	TAL CAN

Client Sample ID: SL-7_112321 — Lab Sample ID: 240-160744-5

Date Collected: 11/23/21 10:55 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	515635	12/06/21 14:56	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/29/21 23:44	CS	TAL CAN

Client Sample ID: SL-6_112321 — Lab Sample ID: 240-160744-6

Date Collected: 11/23/21 11:15 **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515635	12/06/21 15:18	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 00:07	CS	TAL CAN

Client Sample ID: SL-5_112321 — Lab Sample ID: 240-160744-7

Date Collected: 11/23/21 12:55 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 17:51	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 00:31	CS	TAL CAN

Client Sample ID: SL-8_112321 — Lab Sample ID: 240-160744-8

Date Collected: 11/23/21 13:20 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515635	12/06/21 15:40	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 00:55	CS	TAL CAN

Client Sample ID: SL-9_112321 — Lab Sample ID: 240-160744-9

Date Collected: 11/23/21 13:35 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 18:34	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 01:19	CS	TAL CAN

Client Sample ID: SL-10_112321 — Lab Sample ID: 240-160744-10

Date Collected: 11/23/21 14:00 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 18:56	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 01:43	CS	TAL CAN

Client Sample ID: SL-11_112321 — Lab Sample ID: 240-160744-11

Date Collected: 11/23/21 14:25 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 19:18	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 02:07	CS	TAL CAN

Client Sample ID: SL-12_112321 — Lab Sample ID: 240-160744-12

Date Collected: 11/23/21 14:45 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 19:40	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 02:31	CS	TAL CAN

Client Sample ID: MH-1231_112421 — Lab Sample ID: 240-160744-13

Date Collected: 11/24/21 08:55 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 20:01	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 02:55	CS	TAL CAN

Client Sample ID: SL-2_112421 — Lab Sample ID: 240-160744-14

Date Collected: 11/24/21 09:40 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 20:23	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 03:19	CS	TAL CAN

Client Sample ID: SL-3_112421 — Lab Sample ID: 240-160744-15

Date Collected: 11/24/21 10:00 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515508	12/03/21 20:45	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 03:43	CS	TAL CAN

Client Sample ID: SL-4_112421 — Lab Sample ID: 240-160744-16

Date Collected: 11/24/21 12:10 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 17:10	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 04:07	CS	TAL CAN

Client Sample ID: SL-19_112321 — Lab Sample ID: 240-160744-17

Date Collected: 11/23/21 15:20 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 17:32	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 04:31	CS	TAL CAN

Client Sample ID: SL-22_112321 — Lab Sample ID: 240-160744-18

Date Collected: 11/23/21 15:40 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 17:54	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 04:54	CS	TAL CAN

Client Sample ID: SL-20_112321 — Lab Sample ID: 240-160744-19

Date Collected: 11/23/21 16:10 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 18:16	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 05:18	CS	TAL CAN

Client Sample ID: SL-16_112421 — Lab Sample ID: 240-160744-20

Date Collected: 11/24/21 10:20 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 18:39	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 05:42	CS	TAL CAN

Client Sample ID: SL-17_112421 — Lab Sample ID: 240-160744-21

Date Collected: 11/24/21 10:45 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 19:01	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 06:06	CS	TAL CAN

Client Sample ID: SL-21_112421 — Lab Sample ID: 240-160744-22

Date Collected: 11/24/21 12:50 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 19:23	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	514943	11/30/21 06:30	CS	TAL CAN

Client Sample ID: SL-18_112421 — Lab Sample ID: 240-160744-23

Date Collected: 11/24/21 11:40 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 19:45	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	515124	11/30/21 20:48	CS	TAL CAN

Client Sample ID: DUP-01 — Lab Sample ID: 240-160744-24

Date Collected: 11/24/21 00:00 — **Matrix: Water**
Date Received: 11/26/21 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 20:07	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	515124	11/30/21 21:12	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02
Date Collected: 11/24/21 00:00
Date Received: 11/26/21 13:02

Lab Sample ID: 240-160744-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	515506	12/03/21 20:30	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	515124	11/30/21 21:36	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-18-10	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-160744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-160744-1	TRIP BLANK	Water	11/24/21 00:00	11/26/21 13:02
240-160744-2	SL-15_112321	Water	11/23/21 09:30	11/26/21 13:02
240-160744-3	SL-14_112321	Water	11/23/21 09:55	11/26/21 13:02
240-160744-4	SL-13_112321	Water	11/23/21 10:20	11/26/21 13:02
240-160744-5	SL-7_112321	Water	11/23/21 10:55	11/26/21 13:02
240-160744-6	SL-6_112321	Water	11/23/21 11:15	11/26/21 13:02
240-160744-7	SL-5_112321	Water	11/23/21 12:55	11/26/21 13:02
240-160744-8	SL-8_112321	Water	11/23/21 13:20	11/26/21 13:02
240-160744-9	SL-9_112321	Water	11/23/21 13:35	11/26/21 13:02
240-160744-10	SL-10_112321	Water	11/23/21 14:00	11/26/21 13:02
240-160744-11	SL-11_112321	Water	11/23/21 14:25	11/26/21 13:02
240-160744-12	SL-12_112321	Water	11/23/21 14:45	11/26/21 13:02
240-160744-13	MH-1231_112421	Water	11/24/21 08:55	11/26/21 13:02
240-160744-14	SL-2_112421	Water	11/24/21 09:40	11/26/21 13:02
240-160744-15	SL-3_112421	Water	11/24/21 10:00	11/26/21 13:02
240-160744-16	SL-4_112421	Water	11/24/21 12:10	11/26/21 13:02
240-160744-17	SL-19_112321	Water	11/23/21 15:20	11/26/21 13:02
240-160744-18	SL-22_112321	Water	11/23/21 15:40	11/26/21 13:02
240-160744-19	SL-20_112321	Water	11/23/21 16:10	11/26/21 13:02
240-160744-20	SL-16_112421	Water	11/24/21 10:20	11/26/21 13:02
240-160744-21	SL-17_112421	Water	11/24/21 10:45	11/26/21 13:02
240-160744-22	SL-21_112421	Water	11/24/21 12:50	11/26/21 13:02
240-160744-23	SL-18_112421	Water	11/24/21 11:40	11/26/21 13:02
240-160744-24	DUP-01	Water	11/24/21 00:00	11/26/21 13:02
240-160744-25	DUP-02	Water	11/24/21 00:00	11/26/21 13:02

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 469338

Lab Sample ID: STD8260 240-469338/7 IC Client Sample ID:

Date Analyzed: 01/15/21 12:58 Lab File ID: UXJ5273.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.84	Split Peak	evansle	01/18/21 08:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/3 Client Sample ID:

Date Analyzed: 09/09/21 14:25 Lab File ID: 201661.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:10

Lab Sample ID: IC 240-503003/4 Client Sample ID:

Date Analyzed: 09/09/21 14:49 Lab File ID: 201662.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:11

Lab Sample ID: IC 240-503003/5 Client Sample ID:

Date Analyzed: 09/09/21 15:14 Lab File ID: 201663.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:51

Lab Sample ID: IC 240-503003/6 Client Sample ID:

Date Analyzed: 09/09/21 15:38 Lab File ID: 201664.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:52

Lab Sample ID: ICIS 240-503003/7 Client Sample ID:

Date Analyzed: 09/09/21 16:03 Lab File ID: 201665.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/8 Client Sample ID:

Date Analyzed: 09/09/21 16:27 Lab File ID: 201666.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

Lab Sample ID: IC 240-503003/9 Client Sample ID:

Date Analyzed: 09/09/21 16:52 Lab File ID: 201667.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 17:41

Lab Sample ID: ICV 240-503003/12 Client Sample ID:

Date Analyzed: 09/09/21 18:06 Lab File ID: 201670.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 18:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 514943

Lab Sample ID: CCVIS 240-514943/3 Client Sample ID:

Date Analyzed: 11/29/21 19:44 Lab File ID: 202587.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/29/21 20:12

Lab Sample ID: LCS 240-514943/4 Client Sample ID:

Date Analyzed: 11/29/21 20:08 Lab File ID: 202588.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/29/21 20:58

Lab Sample ID: MB 240-514943/5 Client Sample ID:

Date Analyzed: 11/29/21 20:32 Lab File ID: 202589.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/29/21 20:58

Lab Sample ID: 240-160744-4 MS Client Sample ID: SL-13_112321 MS

Date Analyzed: 11/29/21 22:56 Lab File ID: 202595.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/30/21 18:12

Lab Sample ID: 240-160744-4 MSD Client Sample ID: SL-13_112321 MSD

Date Analyzed: 11/29/21 23:20 Lab File ID: 202596.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 514943

Lab Sample ID: 240-160744-5 Client Sample ID: SL-7_112321

Date Analyzed: 11/29/21 23:44 Lab File ID: 202597.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:13

Lab Sample ID: 240-160744-6 Client Sample ID: SL-6_112321

Date Analyzed: 11/30/21 00:07 Lab File ID: 202598.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:15

Lab Sample ID: 240-160744-7 Client Sample ID: SL-5_112321

Date Analyzed: 11/30/21 00:31 Lab File ID: 202599.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:15

Lab Sample ID: 240-160744-9 Client Sample ID: SL-9_112321

Date Analyzed: 11/30/21 01:19 Lab File ID: 202601.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:15

Lab Sample ID: 240-160744-10 Client Sample ID: SL-10_112321

Date Analyzed: 11/30/21 01:43 Lab File ID: 202602.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:16

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 514943

Lab Sample ID: 240-160744-11 Client Sample ID: SL-11_112321

Date Analyzed: 11/30/21 02:07 Lab File ID: 202603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/30/21 18:16

Lab Sample ID: 240-160744-12 Client Sample ID: SL-12_112321

Date Analyzed: 11/30/21 02:31 Lab File ID: 202604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:17

Lab Sample ID: 240-160744-13 Client Sample ID: MH-1231_112421

Date Analyzed: 11/30/21 02:55 Lab File ID: 202605.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:17

Lab Sample ID: 240-160744-14 Client Sample ID: SL-2_112421

Date Analyzed: 11/30/21 03:19 Lab File ID: 202606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:17

Lab Sample ID: 240-160744-15 Client Sample ID: SL-3_112421

Date Analyzed: 11/30/21 03:43 Lab File ID: 202607.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 514943

Lab Sample ID: 240-160744-16 Client Sample ID: SL-4_112421

Date Analyzed: 11/30/21 04:07 Lab File ID: 202608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:18

Lab Sample ID: 240-160744-17 Client Sample ID: SL-19_112321

Date Analyzed: 11/30/21 04:31 Lab File ID: 202609.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	seymourc	11/30/21 18:18

Lab Sample ID: 240-160744-19 Client Sample ID: SL-20_112321

Date Analyzed: 11/30/21 05:18 Lab File ID: 202611.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:19

Lab Sample ID: 240-160744-20 Client Sample ID: SL-16_112421

Date Analyzed: 11/30/21 05:42 Lab File ID: 202612.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/30/21 18:19

Lab Sample ID: 240-160744-21 Client Sample ID: SL-17_112421

Date Analyzed: 11/30/21 06:06 Lab File ID: 202613.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	11/30/21 18:19

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 514943

Lab Sample ID: 240-160744-22 Client Sample ID: SL-21_112421

Date Analyzed: 11/30/21 06:30 Lab File ID: 202614.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 18:19

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 515124

Lab Sample ID: CCVIS 240-515124/3 Client Sample ID:

Date Analyzed: 11/30/21 18:25 Lab File ID: 202617.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 19:00

Lab Sample ID: LCS 240-515124/4 Client Sample ID:

Date Analyzed: 11/30/21 18:49 Lab File ID: 202618.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	11/30/21 19:08

Lab Sample ID: 240-160744-23 Client Sample ID: SL-18_112421

Date Analyzed: 11/30/21 20:48 Lab File ID: 202623.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/01/21 16:00

Lab Sample ID: 240-160744-24 Client Sample ID: DUP-01

Date Analyzed: 11/30/21 21:12 Lab File ID: 202624.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/01/21 16:00

Lab Sample ID: 240-160744-25 Client Sample ID: DUP-02

Date Analyzed: 11/30/21 21:36 Lab File ID: 202625.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	12/01/21 16:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 515124

Lab Sample ID: 240-160738-A-1 MS Client Sample ID:

Date Analyzed: 11/30/21 22:24 Lab File ID: 202627.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/01/21 16:01

Lab Sample ID: 240-160738-A-1 MSD Client Sample ID:

Date Analyzed: 11/30/21 22:48 Lab File ID: 202628.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/01/21 16:01

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm150IS20_00012	11/24/21	08/24/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150IS20_00017	02/23/22	11/23/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00023	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00023	01/31/26		restek, Lot A0168626		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150SS20_00003	11/25/21	08/25/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm150SS20_00004	11/30/21	08/30/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50is_00086	05/27/21	11/27/20	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_00089	12/28/21	06/28/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00090	03/22/22	09/22/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00453	09/10/21	09/03/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50SS_STK_00086	03/28/21	09/28/20	MEOH, Lot 0000230446	200 mL	VM567650_00033	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00033	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00376	01/21/21	01/14/21	MEOH, Lot na	5 mL	VMACROLSTD_00091	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00091	02/07/21	01/07/21	MEOH, Lot 0000258810	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00384	03/23/21	03/16/21	MEOH, Lot na	5 mL	VMACROLSTD_00093	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00093	04/09/21	03/09/21	MEOH, Lot +230910000258810JD	20 mL	VM568720_00040	0.25 mL	Acrolein	250 ug/mL
..VM568720_00040	07/31/21		restek, Lot A0161364		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00026							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							Tentatively Identified Compound	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00029							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmdiox_spike_00275	09/10/21	09/03/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22		NSI Soln, Inc., Lot 210419		(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00285	12/03/21	11/29/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VMNSIMIX2_00010	04/30/22	NSI Soln, Inc., Lot 210419			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00264	09/14/21	09/07/21	MEOH, Lot na	1 mL	vmdioxane_00033	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00033	10/01/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24	Restek, Lot A0151797			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00273	12/06/21	11/29/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24	Restek, Lot A0151797			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00391	01/15/21	01/08/21	MEOH, Lot NA	5 mL	VMFASG_00102	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00102	02/08/21	01/08/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00399	03/17/21	03/10/21	MEOH, Lot NA	5 mL	VMFASG_00104	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00104	04/10/21	03/10/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00436	12/10/21	12/03/21	MEOH, Lot NA	5 mL	VMFASG_00113	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00113	12/17/21	11/17/21	MEOH, Lot 0000273166	50 mL	vm569722S_00010	1 mL	Vinyl chloride	50 ug/mL
..vm569722S_00010	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00382	01/18/21	01/11/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21	Restek, Lot A0144202			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00390	03/23/21	03/16/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21	Restek, Lot A0144202			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00425	12/08/21	12/01/21	MEOH, Lot n/a	5 mL	VMRFASP_00080	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00080	06/01/22	12/01/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00369	01/15/21	01/08/21	MEOH, Lot 0000258810	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00377	03/21/21	03/14/21	MEOH, Lot 0000258810	10 mL	vm569722_00015	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00015	11/30/22		Restek, Lot A0154679		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00409	12/04/21	11/27/21	MEOH, Lot 0000273166	10 mL	vm569722_00020	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00020	04/30/24		Restek, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRGAS_00410	12/13/21	12/06/21	MEOH, Lot 0000273166	10 mL	vm569722_00020	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00020	04/30/24		Restek, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRPRIMW_00419	01/21/21	01/14/21	MEOH, Lot NA	5 mL	VMRPRIM_00048	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00048	02/28/21	11/28/20	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2500 ug/mL
VMRPRIMW_00427	03/23/21	03/16/21	MEOH, Lot NA	5 mL	VMRPRIM_00049	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00049	06/01/21	03/01/21	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00462	12/09/21	12/02/21	MEOH, Lot NA	5 mL	VMRPRIM_00054	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	50 ug/mL
.VMRPRIM_00054	02/28/22	11/16/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22	Restek, Lot A0159680			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00033

VM567650_00033 Rec: 4/9/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00019

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,002.2 µg/mL	+/- 29.0815 µg/mL		Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0965 µg/mL		Unstressed
	Purity 98%			+/- 110.2100 µg/mL		Stressed
2	2-Butanone-d5		1,252.7 µg/mL	+/- 7.2833 µg/mL		Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.8205 µg/mL		Unstressed
	Purity 99%			+/- 27.6002 µg/mL		Stressed
3	Fluorobenzene		251.8 µg/mL	+/- 1.4674 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)		+/- 5.3920 µg/mL		Unstressed
	Purity 99%			+/- 5.5487 µg/mL		Stressed
4	1,4-Dioxane-d8		5,003.8 µg/mL	+/- 29.0907 µg/mL		Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.1305 µg/mL		Unstressed
	Purity 99%			+/- 110.2450 µg/mL		Stressed
5	Chlorobenzene-d5		250.8 µg/mL	+/- 1.4613 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 5.3695 µg/mL		Unstressed
	Purity 99%			+/- 5.5256 µg/mL		Stressed
6	1,4-Dichlorobenzene-d4		250.5 µg/mL	+/- 1.4595 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3631 µg/mL		Unstressed
	Purity 99%			+/- 5.5189 µg/mL		Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

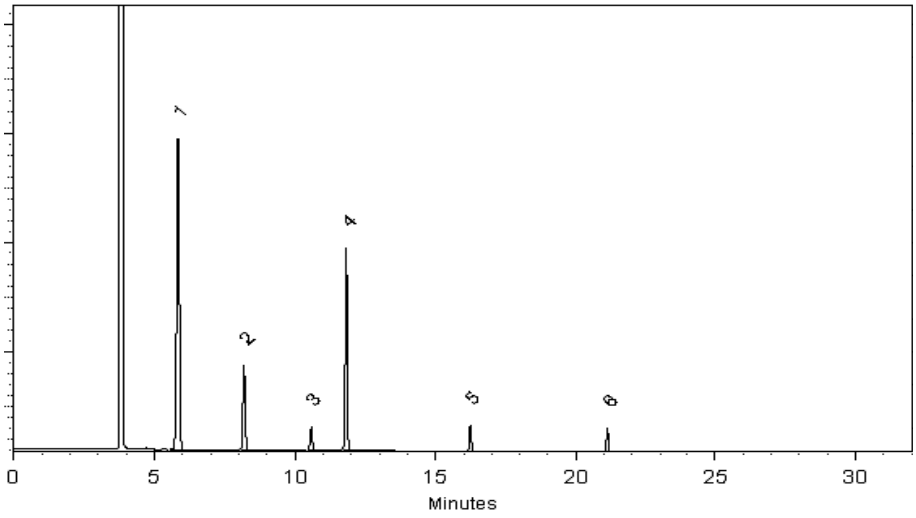
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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Testing Laboratory
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	250.8 µg/mL	+/- 1.4615 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3706 µg/mL	Unstressed
	Purity 99%		+/- 5.5267 µg/mL	Stressed
4	1,4-Dioxane-d8	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I19942-0122JM)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
5	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4569 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 5.3534 µg/mL	Unstressed
	Purity 99%		+/- 5.5090 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	252.4 µg/mL	+/- 1.4709 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.4048 µg/mL	Unstressed
	Purity 99%		+/- 5.5619 µg/mL	Stressed

Reagent

VM568718_00023

Rec: 4/16/21 (39)

VM568718_00023

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Catalog No. : 568718 **Lot No.:** A0168626

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,000.5 µg/mL	+/- 29.0733	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0613	µg/mL	Unstressed
	Purity 99%			+/- 110.1738	µg/mL	Stressed
2	2-Butanone-d5		1,256.6 µg/mL	+/- 7.3060	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.9040	µg/mL	Unstressed
	Purity 99%			+/- 27.6861	µg/mL	Stressed
3	Fluorobenzene		251.0 µg/mL	+/- 1.4627	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3749	µg/mL	Unstressed
	Purity 99%			+/- 5.5311	µg/mL	Stressed
4	1,4-Dioxane-d8		5,003.4 µg/mL	+/- 29.0902	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I19942-0122JM)		+/- 107.1234	µg/mL	Unstressed
	Purity 99%			+/- 110.2377	µg/mL	Stressed
5	Chlorobenzene-d5		250.6 µg/mL	+/- 1.4604	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 5.3663	µg/mL	Unstressed
	Purity 99%			+/- 5.5222	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.9 µg/mL	+/- 1.4621	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)		+/- 5.3727	µg/mL	Unstressed
	Purity 99%			+/- 5.5289	µg/mL	Stressed

Reagent

VM568720_00039

Rec: 4/7/20
VM568720_00039

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156861

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,752.0 µg/mL	+/- 115.6523	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 394.5922	µg/mL	Unstressed
	Purity 99%		+/- 885.2572	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00040

Rc'd 9/17/21 VM 568720_ 00040

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156859

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,830.0 µg/mL	+/- 116.1090 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 396.1504 µg/mL	Unstressed
	Purity 99%		+/- 888.7531 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721-00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00015

Rec: 4/14/20
VM569722_0005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0154679

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.7 µg/mL	+/- 18.2705 +/- 140.7566 +/- 144.0300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 18.7547 +/- 140.6865 +/- 143.9553	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.1 µg/mL	+/- 18.5858 +/- 140.7083 +/- 143.9787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,497.1 µg/mL	+/- 17.5808 +/- 140.3628 +/- 143.6309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 23.3138 +/- 141.3956 +/- 144.6498	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,499.0 µg/mL	+/- 21.4252 +/- 140.9973 +/- 144.2558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane -(CFC-11)		2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%			+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

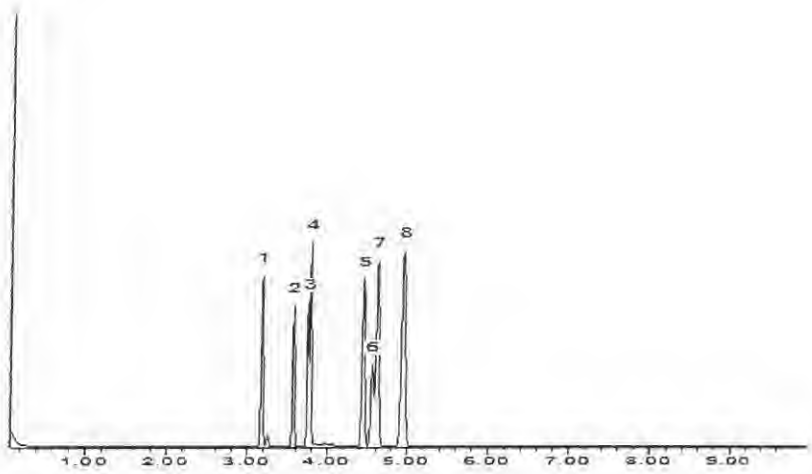
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 **Balance:** B707717271

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

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vm569722_00017

Rec: 6/29/20
VM569722-00017

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Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 +/- 140.5076 +/- 143.7858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 +/- 140.4038 +/- 143.6799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 +/- 140.4890 +/- 143.7623	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 +/- 140.5681 +/- 143.8406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 +/- 140.4450 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 +/- 140.5555 +/- 143.8274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4 µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)		+/-	140.4203	µg/mL	Unstressed
	Purity 99%			+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

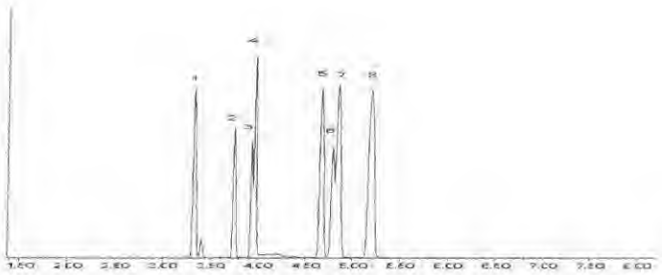
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

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vm569722_00020

VM569722_00020

Rcld 10/6/21

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Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

Reagent

vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

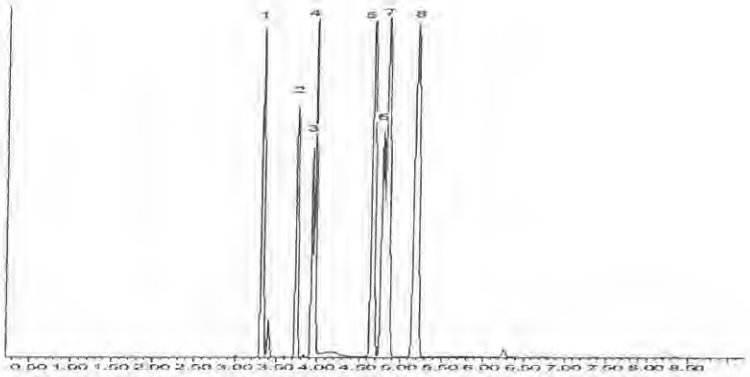
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00010

Rec: 1/26-21
VM569722S-0001O

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,501.8 µg/mL	+/- 19.9803 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/- 140.9385 µg/mL	Unstressed
	Purity 99%		+/- 144.2054 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,510.1 µg/mL	+/- 18.7758 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.2337 µg/mL	Unstressed
	Purity 99%		+/- 144.5155 µg/mL	Stressed
3	Vinyl chloride	2,518.3 µg/mL	+/- 19.4159 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 141.7727 µg/mL	Unstressed
	Purity 99%		+/- 145.0634 µg/mL	Stressed
4	1,3-Butadiene	2,510.8 µg/mL	+/- 17.5328 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/- 141.1137 µg/mL	Unstressed
	Purity 99%		+/- 144.4001 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,506.4 µg/mL	+/- 23.4232 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 141.7223 µg/mL	Unstressed
	Purity 99%		+/- 144.9835 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,523.5 µg/mL	+/- 21.4589 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 142.3524 µg/mL	Unstressed
	Purity 99%		+/- 145.6434 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 4938100)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

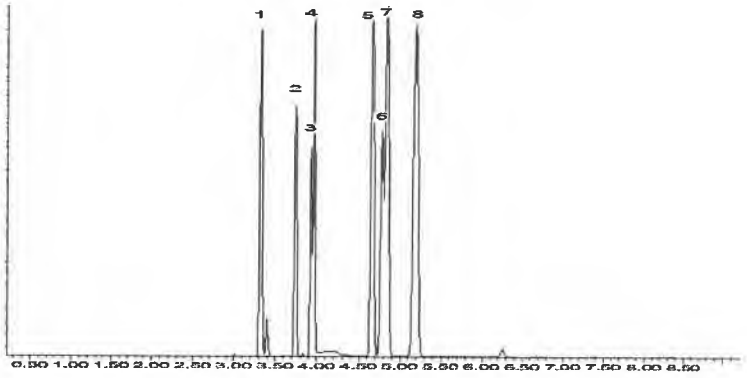
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Fong-Yun Lo - QC Analyst

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 53.5253 µg/mL +/- 55.0814 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

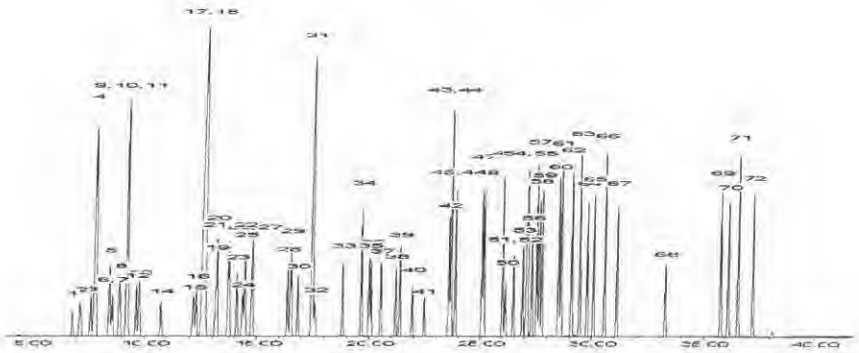
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00005

Rec'd 4/19/21 VM571992_00005

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571992S_00007

VM571992S-00007 Rec; 2-21-20

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4 µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7 µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2 µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-1H)	2,505.2 µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7 µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2 µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7 µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

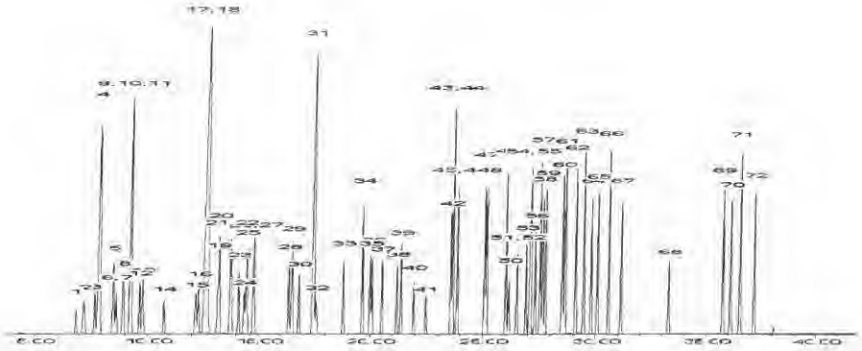
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00008

Rec'd 6/10/21 VM571992 00008

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Solution Order	Compound	Nominal Concentration (weight/volume)	Expanded Uncertainty (95% C.L., k=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99% (Lot F23X068)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99% (Lot 18342)	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99% (Lot 7692300)	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99% (Lot HGCHN)	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99% (Lot UCNEL)	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 99% (Lot Y25A027)	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 99% (Lot H3HGC)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00010

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 210419
Manufacture Date: 04/19/2021
Expiration: 04/30/2022
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100.0%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.5%	25016.8 ± 232.9

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 210419

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-160744-1	98	121	87	69
SL-15_112321	240-160744-2	97	120	86	68
SL-14_112321	240-160744-3	100	119	80	65
SL-13_112321	240-160744-4	103	119	88	70
SL-7_112321	240-160744-5	93	102	113	82
SL-6_112321	240-160744-6	90	98	108	77
SL-5_112321	240-160744-7	96	104	86	74
SL-8_112321	240-160744-8	90	99	107	82
SL-9_112321	240-160744-9	95	106	85	80
SL-10_112321	240-160744-10	91	105	86	78
SL-11_112321	240-160744-11	95	111	88	84
SL-12_112321	240-160744-12	94	110	86	77
MH-1231_112421	240-160744-13	94	103	86	80
SL-2_112421	240-160744-14	94	108	84	90
SL-3_112421	240-160744-15	90	106	87	86
SL-4_112421	240-160744-16	91	103	108	80
SL-19_112321	240-160744-17	95	106	113	75
SL-22_112321	240-160744-18	94	105	110	78
SL-20_112321	240-160744-19	92	104	108	78
SL-16_112421	240-160744-20	93	104	109	80
SL-17_112421	240-160744-21	97	106	117	89
SL-21_112421	240-160744-22	90	99	106	75
SL-18_112421	240-160744-23	94	103	109	82
DUP-01	240-160744-24	88	96	105	75
DUP-02	240-160744-25	89	100	108	74
	MB 240-515506/6	94	104	111	78
	MB 240-515508/7	94	118	88	75
	MB 240-515635/6	93	104	114	84
	LCS 240-515506/4	92	104	114	90
	LCS 240-515508/4	82	98	102	102
	LCS 240-515635/4	93	99	116	86
SL-3_112421 MS	240-160744-15 MS	81	86	96	98
DUP-02 MS	240-160744-25 MS	92	100	119	90
	240-160670-C-5 MS	89	98	109	85

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SL-3_112421 MSD	240-160744-15 MSD	78	96	99	104
DUP-02 MSD	240-160744-25 MSD	85	92	109	83
	240-160670-C-5 MSD	88	99	113	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2920.D

Lab ID: LCS 240-515506/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.08	91	63-134	
cis-1,2-Dichloroethene	10.0	9.97	100	77-123	
Tetrachloroethene	10.0	10.4	104	76-123	
trans-1,2-Dichloroethene	10.0	10.2	102	75-124	
Trichloroethene	10.0	8.50	85	70-122	
Vinyl chloride	10.0	10.5	105	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC1290.D

Lab ID: LCS 240-515508/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	7.33	73	63-134	
cis-1,2-Dichloroethene	10.0	10.1	101	77-123	
Tetrachloroethene	10.0	9.85	99	76-123	
trans-1,2-Dichloroethene	10.0	10.3	103	75-124	
Trichloroethene	10.0	8.99	90	70-122	
Vinyl chloride	10.0	8.69	87	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2950.D

Lab ID: LCS 240-515635/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.0	100	63-134	
cis-1,2-Dichloroethene	10.0	9.99	100	77-123	
Tetrachloroethene	10.0	11.0	110	76-123	
trans-1,2-Dichloroethene	10.0	10.1	101	75-124	
Trichloroethene	10.0	8.85	89	70-122	
Vinyl chloride	10.0	9.66	97	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC1315.D

Lab ID: 240-160744-15 MS Client ID: SL-3_112421 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	8.26	83	56-135	
cis-1,2-Dichloroethene	10.0	4.4	13.3	89	66-128	
Tetrachloroethene	10.0	1.0 U	7.02	70	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	9.95	99	56-136	
Trichloroethene	10.0	1.0 U	8.06	81	61-124	
Vinyl chloride	10.0	2.3	10.5	82	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2946.D

Lab ID: 240-160744-25 MS Client ID: DUP-02 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	10.3	103	56-135	
cis-1,2-Dichloroethene	10.0	1.2	12.1	110	66-128	
Tetrachloroethene	10.0	1.0 U	9.52	95	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	9.91	99	56-136	
Trichloroethene	10.0	0.54 J	8.73	82	61-124	
Vinyl chloride	10.0	1.0 U	11.7	117	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2978.D

Lab ID: 240-160670-C-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	50.0	5.0 U	45.8	92	56-135	
cis-1,2-Dichloroethene	50.0	5.0 U	47.4	95	66-128	
Tetrachloroethene	50.0	5.0 U	40.2	80	62-131	
trans-1,2-Dichloroethene	50.0	5.0 U	45.4	91	56-136	
Trichloroethene	50.0	5.0 U	37.6	75	61-124	
Vinyl chloride	50.0	5.0 U	52.0	104	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC1316.D

Lab ID: 240-160744-15 MSD Client ID: SL-3_112421 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	7.64	76	8	26	56-135	
cis-1,2-Dichloroethene	10.0	13.1	87	2	14	66-128	
Tetrachloroethene	10.0	7.75	78	10	20	62-131	
trans-1,2-Dichloroethene	10.0	10.6	106	6	15	56-136	
Trichloroethene	10.0	8.36	84	4	15	61-124	
Vinyl chloride	10.0	11.2	89	6	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2947.D

Lab ID: 240-160744-25 MSD Client ID: DUP-02 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	8.70	87	17	26	56-135	
cis-1,2-Dichloroethene	10.0	10.7	95	13	14	66-128	
Tetrachloroethene	10.0	9.41	94	1	20	62-131	
trans-1,2-Dichloroethene	10.0	9.07	91	9	15	56-136	
Trichloroethene	10.0	8.24	77	6	15	61-124	
Vinyl chloride	10.0	11.7	117	0	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2979.D

Lab ID: 240-160670-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	50.0	46.7	93	2	26	56-135	
cis-1,2-Dichloroethene	50.0	46.2	92	3	14	66-128	
Tetrachloroethene	50.0	47.2	94	16	20	62-131	
trans-1,2-Dichloroethene	50.0	47.1	94	4	15	56-136	
Trichloroethene	50.0	39.2	78	4	15	61-124	
Vinyl chloride	50.0	54.1	108	4	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: UXJ2924.D Lab Sample ID: MB 240-515506/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 12/03/2021 12:45

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-515506/4	UXJ2920.D	12/03/2021 11:16
SL-4_112421	240-160744-16	UXJ2936.D	12/03/2021 17:10
SL-19_112321	240-160744-17	UXJ2937.D	12/03/2021 17:32
SL-22_112321	240-160744-18	UXJ2938.D	12/03/2021 17:54
SL-20_112321	240-160744-19	UXJ2939.D	12/03/2021 18:16
SL-16_112421	240-160744-20	UXJ2940.D	12/03/2021 18:39
SL-17_112421	240-160744-21	UXJ2941.D	12/03/2021 19:01
SL-21_112421	240-160744-22	UXJ2942.D	12/03/2021 19:23
SL-18_112421	240-160744-23	UXJ2943.D	12/03/2021 19:45
DUP-01	240-160744-24	UXJ2944.D	12/03/2021 20:07
DUP-02	240-160744-25	UXJ2945.D	12/03/2021 20:30
DUP-02 MS	240-160744-25 MS	UXJ2946.D	12/03/2021 20:51
DUP-02 MSD	240-160744-25 MSD	UXJ2947.D	12/03/2021 21:14

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: UXC1294.D Lab Sample ID: MB 240-515508/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 12/03/2021 12:47

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-515508/4	UXC1290.D	12/03/2021 11:20
TRIP BLANK	240-160744-1	UXC1300.D	12/03/2021 14:58
SL-15_112321	240-160744-2	UXC1301.D	12/03/2021 15:20
SL-14_112321	240-160744-3	UXC1302.D	12/03/2021 15:42
SL-13_112321	240-160744-4	UXC1303.D	12/03/2021 16:04
SL-5_112321	240-160744-7	UXC1306.D	12/03/2021 17:51
SL-9_112321	240-160744-9	UXC1308.D	12/03/2021 18:34
SL-10_112321	240-160744-10	UXC1309.D	12/03/2021 18:56
SL-11_112321	240-160744-11	UXC1310.D	12/03/2021 19:18
SL-12_112321	240-160744-12	UXC1311.D	12/03/2021 19:40
MH-1231_112421	240-160744-13	UXC1312.D	12/03/2021 20:01
SL-2_112421	240-160744-14	UXC1313.D	12/03/2021 20:23
SL-3_112421	240-160744-15	UXC1314.D	12/03/2021 20:45
SL-3_112421 MS	240-160744-15 MS	UXC1315.D	12/03/2021 21:07
SL-3_112421 MSD	240-160744-15 MSD	UXC1316.D	12/03/2021 21:29

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: UXJ2955.D Lab Sample ID: MB 240-515635/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 12/06/2021 11:36

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-515635/4	UXJ2950.D	12/06/2021 09:46
SL-7_112321	240-160744-5	UXJ2964.D	12/06/2021 14:56
SL-6_112321	240-160744-6	UXJ2965.D	12/06/2021 15:18
SL-8_112321	240-160744-8	UXJ2966.D	12/06/2021 15:40
	240-160670-C-5 MS	UXJ2978.D	12/06/2021 20:06
	240-160670-C-5 MSD	UXJ2979.D	12/06/2021 20:28

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB1115A.D BFB Injection Date: 01/15/2021

Instrument ID: A3UX11 BFB Injection Time: 10:36

Analysis Batch No.: 469338

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	82.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.9) 1
176	95.0 - 101.0 % of mass 174	81.5	(98.9) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-469338/2	UXJ5268.D	01/15/2021	11:06
	STD8260 240-469338/3	UXJ5269.D	01/15/2021	11:29
	STD8260 240-469338/4	UXJ5270.D	01/15/2021	11:51
	STD8260 240-469338/5	UXJ5271.D	01/15/2021	12:13
	STD8260 240-469338/6	UXJ5272.D	01/15/2021	12:36
	STD8260 240-469338/7	UXJ5273.D	01/15/2021	12:58
	ICV 240-469338/14	UXJ5274.D	01/15/2021	13:20
	ICV 240-469338/15	UXJ5281.D	01/15/2021	15:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB1203.D BFB Injection Date: 12/03/2021

Instrument ID: A3UX11 BFB Injection Time: 10:30

Analysis Batch No.: 515506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.6	
75	30.0 - 60.0 % of mass 95	51.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	96.3	
175	5.0 - 9.0 % of mass 174	6.9	(7.2) 1
176	95.0 - 101.0 % of mass 174	91.5	(95.1) 1
177	5.0 - 9.0 % of mass 176	6.3	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-515506/2	UXJ2919.D	12/03/2021	10:54
	LCS 240-515506/4	UXJ2920.D	12/03/2021	11:16
	CCV 240-515506/3	UXJ2921.D	12/03/2021	11:39
	MB 240-515506/6	UXJ2924.D	12/03/2021	12:45
SL-4_112421	240-160744-16	UXJ2936.D	12/03/2021	17:10
SL-19_112321	240-160744-17	UXJ2937.D	12/03/2021	17:32
SL-22_112321	240-160744-18	UXJ2938.D	12/03/2021	17:54
SL-20_112321	240-160744-19	UXJ2939.D	12/03/2021	18:16
SL-16_112421	240-160744-20	UXJ2940.D	12/03/2021	18:39
SL-17_112421	240-160744-21	UXJ2941.D	12/03/2021	19:01
SL-21_112421	240-160744-22	UXJ2942.D	12/03/2021	19:23
SL-18_112421	240-160744-23	UXJ2943.D	12/03/2021	19:45
DUP-01	240-160744-24	UXJ2944.D	12/03/2021	20:07
DUP-02	240-160744-25	UXJ2945.D	12/03/2021	20:30
DUP-02 MS	240-160744-25 MS	UXJ2946.D	12/03/2021	20:51
DUP-02 MSD	240-160744-25 MSD	UXJ2947.D	12/03/2021	21:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB1206.D BFB Injection Date: 12/06/2021

Instrument ID: A3UX11 BFB Injection Time: 09:00

Analysis Batch No.: 515635

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.9	
75	30.0 - 60.0 % of mass 95	52.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.6) 1
174	Greater than 50% of mass 95	96.1	
175	5.0 - 9.0 % of mass 174	6.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	92.9	(96.7) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	LCS 240-515635/4	UXJ2950.D	12/06/2021	9:46
	CCVIS 240-515635/2	UXJ2951.D	12/06/2021	10:08
	CCV 240-515635/3	UXJ2952.D	12/06/2021	10:30
	MB 240-515635/6	UXJ2955.D	12/06/2021	11:36
SL-7_112321	240-160744-5	UXJ2964.D	12/06/2021	14:56
SL-6_112321	240-160744-6	UXJ2965.D	12/06/2021	15:18
SL-8_112321	240-160744-8	UXJ2966.D	12/06/2021	15:40
	240-160670-C-5 MS	UXJ2978.D	12/06/2021	20:06
	240-160670-C-5 MSD	UXJ2979.D	12/06/2021	20:28

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB210316.D BFB Injection Date: 03/16/2021

Instrument ID: A3UX15 BFB Injection Time: 07:33

Analysis Batch No.: 476941

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	49.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	Greater than 50% of mass 95	92.8	
175	5.0 - 9.0 % of mass 174	6.1	(6.6) 1
176	95.0 - 101.0 % of mass 174	90.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-476941/2	UXC5644.D	03/16/2021	8:36
	STD8260 240-476941/3	UXC5645.D	03/16/2021	8:58
	STD8260 240-476941/4	UXC5646.D	03/16/2021	9:20
	STD8260 240-476941/5	UXC5647.D	03/16/2021	9:42
	STD8260 240-476941/6	UXC5648.D	03/16/2021	10:17
	STD8260 240-476941/7	UXC5649.D	03/16/2021	10:39
	ICV 240-476941/14	UXC5650.D	03/16/2021	11:01
	ICV 240-476941/15	UXC5657.D	03/16/2021	13:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB1203.D BFB Injection Date: 12/03/2021

Instrument ID: A3UX15 BFB Injection Time: 10:32

Analysis Batch No.: 515508

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	71.8	
175	5.0 - 9.0 % of mass 174	4.9	(6.8) 1
176	95.0 - 101.0 % of mass 174	69.3	(96.5) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-515508/2	UXC1289.D	12/03/2021	10:58
	LCS 240-515508/4	UXC1290.D	12/03/2021	11:20
	CCV 240-515508/3	UXC1291.D	12/03/2021	11:42
	MB 240-515508/7	UXC1294.D	12/03/2021	12:47
TRIP BLANK	240-160744-1	UXC1300.D	12/03/2021	14:58
SL-15_112321	240-160744-2	UXC1301.D	12/03/2021	15:20
SL-14_112321	240-160744-3	UXC1302.D	12/03/2021	15:42
SL-13_112321	240-160744-4	UXC1303.D	12/03/2021	16:04
SL-5_112321	240-160744-7	UXC1306.D	12/03/2021	17:51
SL-9_112321	240-160744-9	UXC1308.D	12/03/2021	18:34
SL-10_112321	240-160744-10	UXC1309.D	12/03/2021	18:56
SL-11_112321	240-160744-11	UXC1310.D	12/03/2021	19:18
SL-12_112321	240-160744-12	UXC1311.D	12/03/2021	19:40
MH-1231_112421	240-160744-13	UXC1312.D	12/03/2021	20:01
SL-2_112421	240-160744-14	UXC1313.D	12/03/2021	20:23
SL-3_112421	240-160744-15	UXC1314.D	12/03/2021	20:45
SL-3_112421 MS	240-160744-15 MS	UXC1315.D	12/03/2021	21:07
SL-3_112421 MSD	240-160744-15 MSD	UXC1316.D	12/03/2021	21:29

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: STD8260 240-469338/4 Date Analyzed: 01/15/2021 11:51

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5270.D Heated Purge: (Y/N) N

Calibration ID: 60081

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1164516	4.68	833065	7.33	399775	9.55
UPPER LIMIT		2329032	5.18	1666130	7.83	799550	10.05
LOWER LIMIT		582258	4.18	416533	6.83	199888	9.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-469338/14		1139518	4.68	814816	7.33	388972	9.55
ICV 240-469338/15		1208129	4.68	881966	7.33	428396	9.54
CCVIS 240-515506/2		2315480	4.68	1279340	7.33	717852	9.54
CCVIS 240-515635/2		2113080	4.68	1185380	7.33	670766	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: CCVIS 240-515506/2 Date Analyzed: 12/03/2021 10:54

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ2919.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2315480	4.68	1279340	7.33	717852	9.54
UPPER LIMIT		4630960	5.18	2558680	7.83	1435704	10.04
LOWER LIMIT		1157740	4.18	639670	6.83	358926	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-515506/4		1997890	4.68	1124783	7.33	644744	9.54
CCV 240-515506/3		2135607	4.68	1172129	7.33	581609	9.54
MB 240-515506/6		1859911	4.68	1019887	7.33	503240	9.54
240-160744-16	SL-4_112421	1814976	4.68	1028288	7.33	520205	9.54
240-160744-17	SL-19_112321	1871192	4.68	999394	7.33	505969	9.54
240-160744-18	SL-22_112321	1739025	4.68	976296	7.33	498980	9.54
240-160744-19	SL-20_112321	1853349	4.68	1029713	7.33	569933	9.54
240-160744-20	SL-16_112421	1797665	4.68	1012437	7.33	529376	9.54
240-160744-21	SL-17_112421	1684405	4.68	933742	7.33	462035	9.54
240-160744-22	SL-21_112421	1914809	4.68	1078452	7.33	558369	9.54
240-160744-23	SL-18_112421	1756247	4.68	975460	7.33	479182	9.54
240-160744-24	DUP-01	1942541	4.68	1094770	7.33	571894	9.54
240-160744-25	DUP-02	1998602	4.68	1095619	7.33	556800	9.54
240-160744-25 MS	DUP-02 MS	1969973	4.68	1059232	7.33	584814	9.54
240-160744-25 MSD	DUP-02 MSD	2022122	4.68	1122949	7.33	622038	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: CCVIS 240-515635/2 Date Analyzed: 12/06/2021 10:08

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ2951.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2113080	4.68	1185380	7.33	670766	9.54
UPPER LIMIT		4226160	5.18	2370760	7.83	1341532	10.04
LOWER LIMIT		1056540	4.18	592690	6.83	335383	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-515635/3		2149946	4.68	1208249	7.33	605290	9.54
MB 240-515635/6		1954161	4.68	1079078	7.33	556901	9.54
240-160744-5	SL-7_112321	1848929	4.68	993748	7.33	504035	9.54
240-160744-6	SL-6_112321	1834288	4.68	1023553	7.33	523521	9.54
240-160744-8	SL-8_112321	1935460	4.68	1113988	7.33	595953	9.54
240-160670-C-5 MS		2053864	4.68	1145964	7.33	653402	9.54
240-160670-C-5 MSD		2048967	4.68	1142048	7.33	651105	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: STD8260 240-476941/4 Date Analyzed: 03/16/2021 09:20

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC5646.D Heated Purge: (Y/N) N

Calibration ID: 60823

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1635381	5.00	1083691	7.66	639882	9.90
UPPER LIMIT		3270762	5.50	2167382	8.16	1279764	10.40
LOWER LIMIT		817691	4.50	541846	7.16	319941	9.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-476941/14		1567389	5.00	1054688	7.66	623148	9.90
ICV 240-476941/15		1522004	5.00	1034257	7.66	604775	9.90
CCVIS 240-515508/2		2319217	5.00	1527066	7.66	867928	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: CCVIS 240-515508/2 Date Analyzed: 12/03/2021 10:58

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC1289.D Heated Purge: (Y/N) N

Calibration ID: 60825

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2319217	5.00	1527066	7.66	867928	9.89
UPPER LIMIT		4638434	5.50	3054132	8.16	1735856	10.39
LOWER LIMIT		1159609	4.50	763533	7.16	433964	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-515508/4		2470310	5.00	1589865	7.66	863041	9.89
CCV 240-515508/3		2390978	5.00	1777888	7.66	690430	9.89
MB 240-515508/7		2095663	5.00	1450454	7.66	595759	9.89
240-160744-1	TRIP BLANK	2006212	5.00	1379893	7.66	535342	9.89
240-160744-2	SL-15_112321	1930033	5.00	1346381	7.66	554806	9.89
240-160744-3	SL-14_112321	1970423	5.00	1444768	7.66	531788	9.89
240-160744-4	SL-13_112321	1870474	5.00	1221084	7.66	498885	9.89
240-160744-7	SL-5_112321	1572274	5.00	1043351	7.66	447918	9.89
240-160744-9	SL-9_112321	1482700	5.00	1012395	7.66	456189	9.89
240-160744-10	SL-10_112321	1645068	5.00	1121858	7.66	546172	9.89
240-160744-11	SL-11_112321	1542945	5.00	1032554	7.66	531880	9.89
240-160744-12	SL-12_112321	1602622	5.00	1088113	7.66	492064	9.89
240-160744-13	MH-1231_112421	1525274	5.00	1016221	7.66	539204	9.89
240-160744-14	SL-2_112421	1546913	5.00	1281492	7.66	653907	9.89
240-160744-15	SL-3_112421	1614566	5.00	1063394	7.66	546259	9.89
240-160744-15 MS	SL-3_112421 MS	1890703	5.00	1232815	7.66	714672	9.89
240-160744-15 MSD	SL-3_112421 MSD	2029454	5.00	1265455	7.66	750468	9.89

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-160744-1

Matrix: Water Lab File ID: UXC1300.D

Analysis Method: 8260B Date Collected: 11/24/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 14:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		62-137
460-00-4	4-Bromofluorobenzene (Surr)	69		56-136
2037-26-5	Toluene-d8 (Surr)	87		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1300.D
Lims ID: 240-160744-B-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 03-Dec-2021 14:58:30 ALS Bottle#: 12 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-040
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	98	2006212	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1379893	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	535342	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.432	0.012	93	457250	9.75	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	640565	12.1	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1466504	8.67	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	90	396545	6.93	
11 Vinyl chloride	62		1.669				ND	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	
41 cis-1,2-Dichloroethene	96		4.041				ND	7
60 Trichloroethene	130		5.298				ND	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

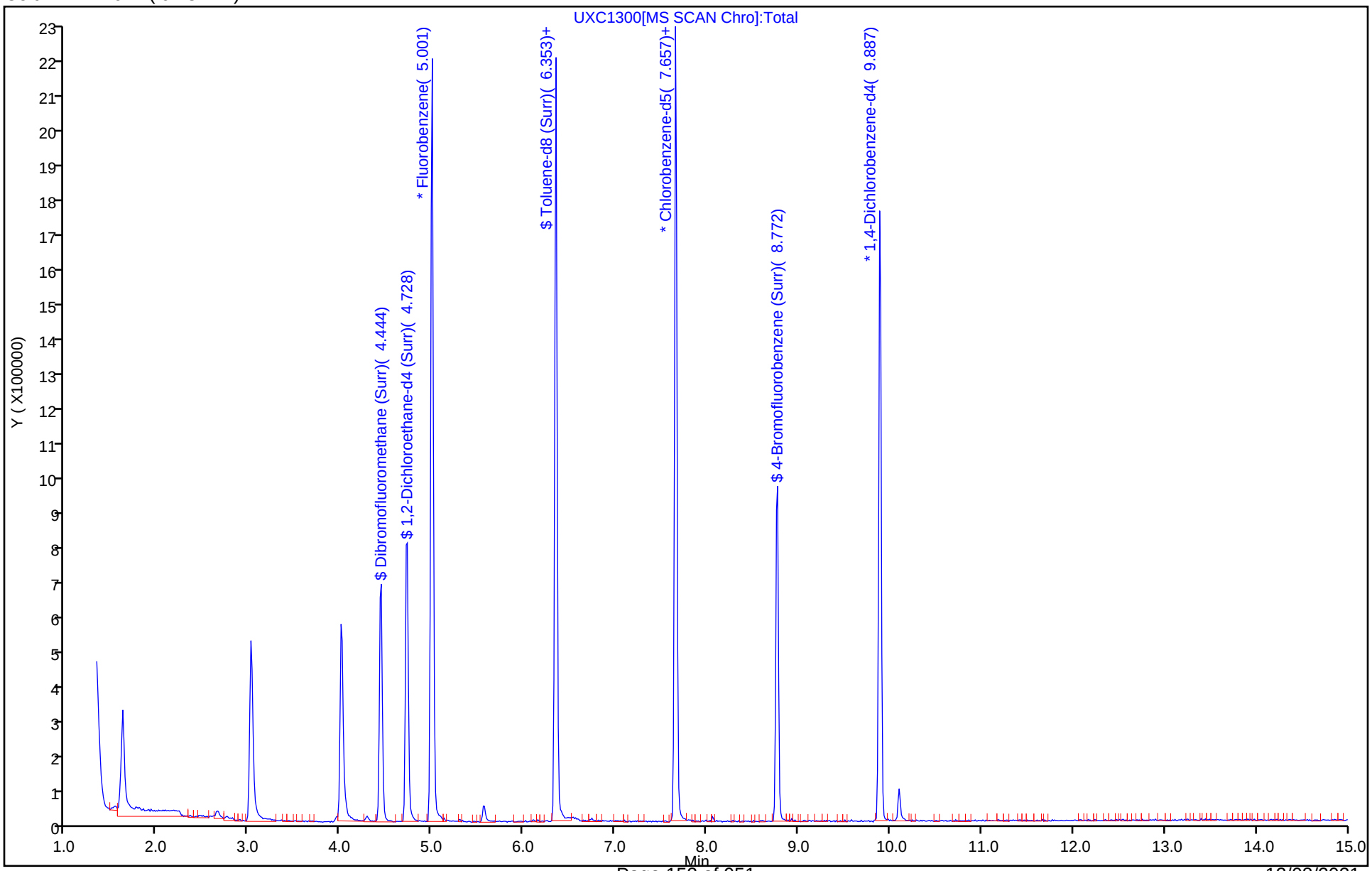
Report Date: 06-Dec-2021 12:55:34 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1300.D

Injection Date:	03-Dec-2021 14:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-1	Lab Sample ID:	240-160744-1	Worklist Smp#:	40
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1300.D				
Lims ID:	240-160744-B-1				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 14:58:30	ALS Bottle#:	12	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-040				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.75	97.51
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.1	121.26
$ 6 Toluene-d8 (Surr)	10.0	8.67	86.72
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.93	69.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-15_112321 Lab Sample ID: 240-160744-2

Matrix: Water Lab File ID: UXC1301.D

Analysis Method: 8260B Date Collected: 11/23/2021 09:30

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 15:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		62-137
460-00-4	4-Bromofluorobenzene (Surr)	68		56-136
2037-26-5	Toluene-d8 (Surr)	86		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1301.D
Lims ID: 240-160744-B-2
Client ID: SL-15_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 15:20:30 ALS Bottle#: 13 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-041
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:16

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1930033	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1346381	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	96	554806	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	437526	9.70	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	608307	12.0	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1413259	8.57	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	90	380955	6.83	
	11 Vinyl chloride	62		1.669				ND	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96		3.222				ND	
	41 cis-1,2-Dichloroethene	96		4.041				ND	
	60 Trichloroethene	130		5.298				ND	
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

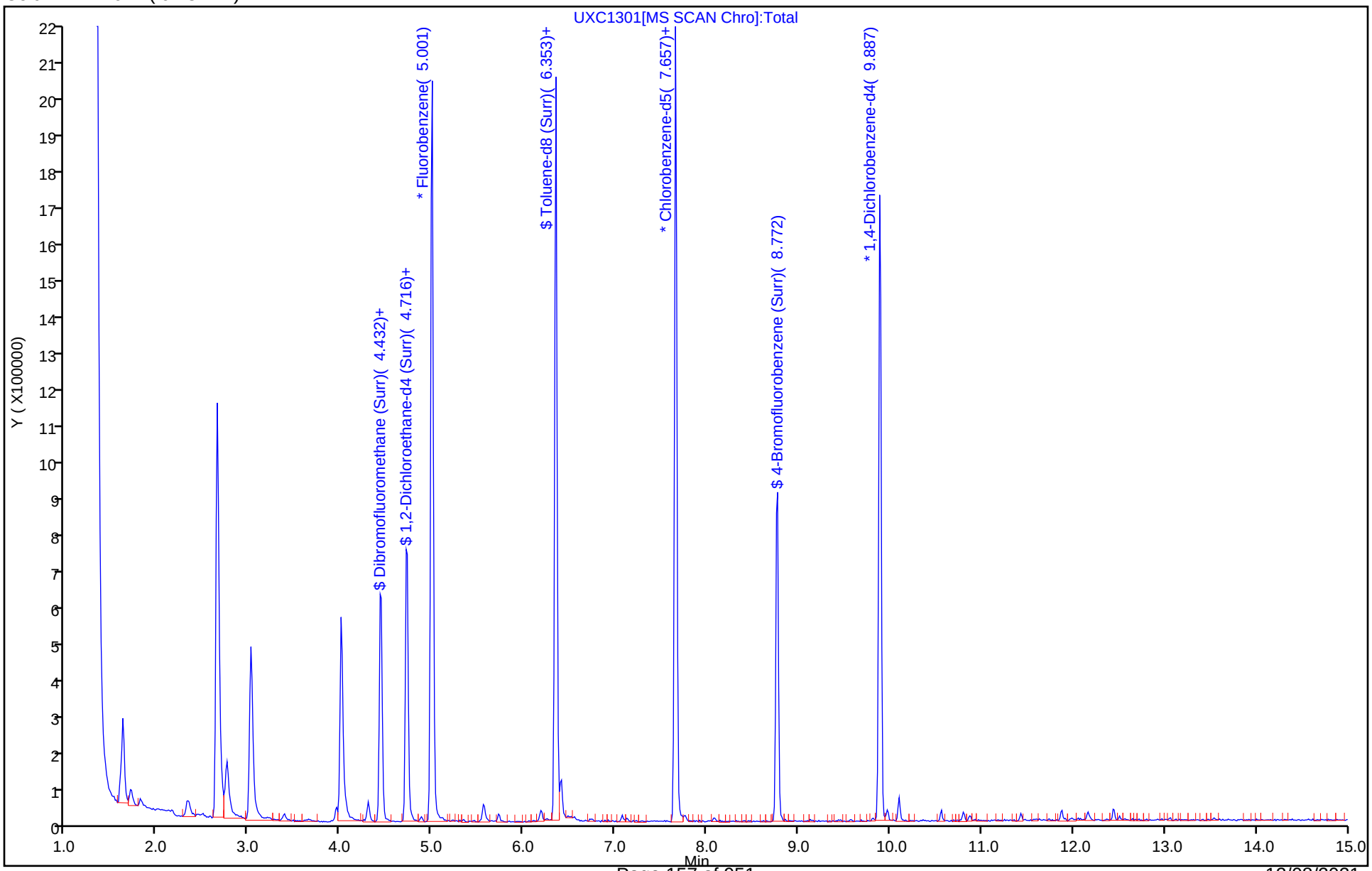
Report Date: 06-Dec-2021 12:55:35 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1301.D

Injection Date:	03-Dec-2021 15:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-2	Lab Sample ID:	240-160744-2	Worklist Smp#:	41
Client ID:	SL-15_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1301.D				
Lims ID:	240-160744-B-2				
Client ID:	SL-15_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 15:20:30	ALS Bottle#:	13	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-041				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.70	96.99
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	12.0	119.70
$ 6 Toluene-d8 (Surr)	10.0	8.57	85.65
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.83	68.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-14_112321 Lab Sample ID: 240-160744-3

Matrix: Water Lab File ID: UXC1302.D

Analysis Method: 8260B Date Collected: 11/23/2021 09:55

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		62-137
460-00-4	4-Bromofluorobenzene (Surr)	65		56-136
2037-26-5	Toluene-d8 (Surr)	80		78-122
1868-53-7	Dibromofluoromethane (Surr)	100		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1302.D
Lims ID: 240-160744-B-3
Client ID: SL-14_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 15:42:30 ALS Bottle#: 14 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-042
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1970423	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1444768	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	531788	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	460333	10.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	615171	11.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1424832	8.05	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	87	392147	6.55	
11 Vinyl chloride	62	1.669	1.669	0.000	86	6798	0.1175	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	
41 cis-1,2-Dichloroethene	96		4.041				ND	7
60 Trichloroethene	130		5.298				ND	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

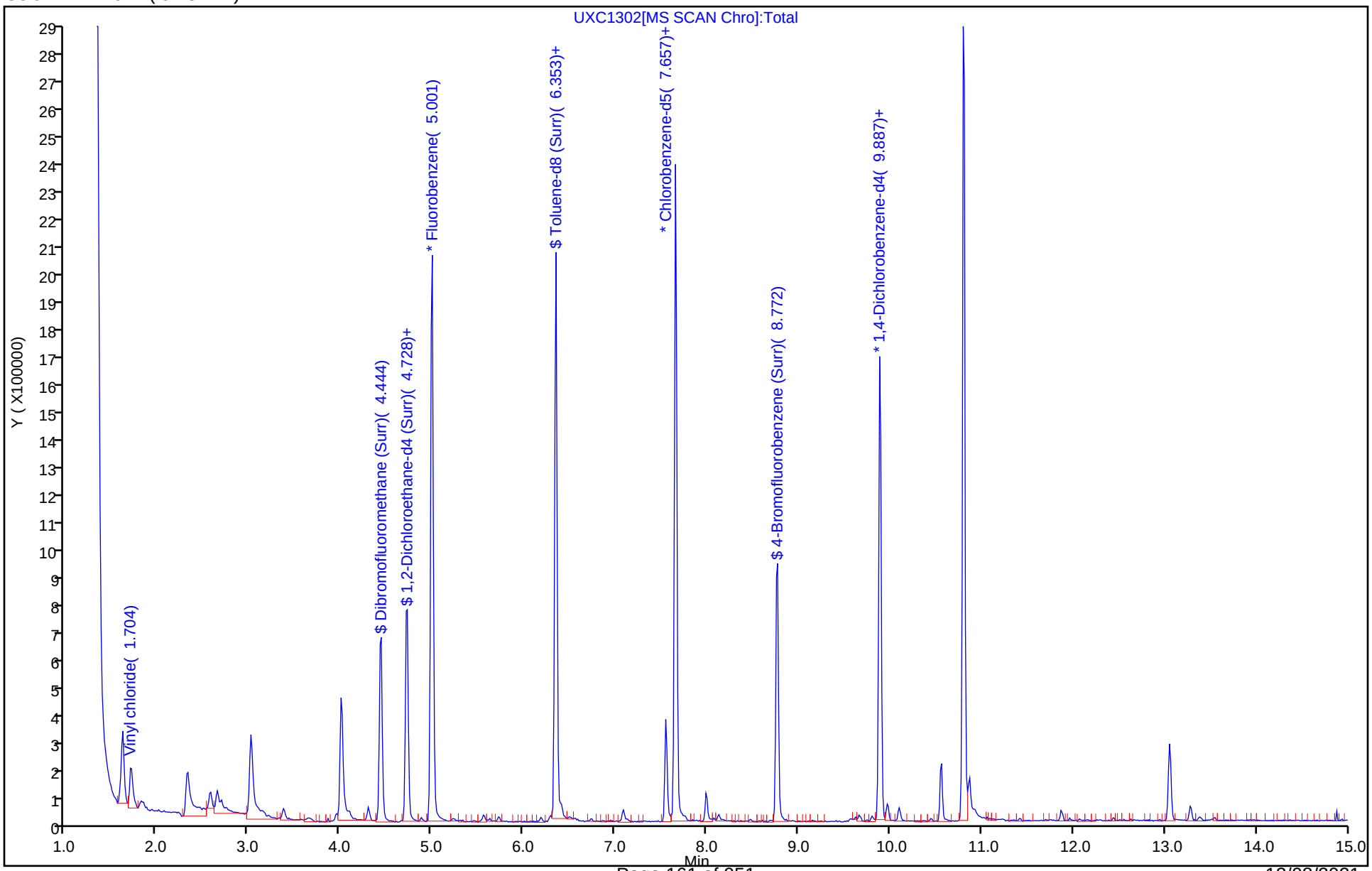
Report Date: 06-Dec-2021 12:55:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1302.D

Injection Date:	03-Dec-2021 15:42:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-3	Lab Sample ID:	240-160744-3	Worklist Smp#:	42
Client ID:	SL-14_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1302.D				
Lims ID:	240-160744-B-3				
Client ID:	SL-14_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 15:42:30	ALS Bottle#:	14	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-042				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 12:48:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.0	99.95
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.9	118.57
$ 6 Toluene-d8 (Surr)	10.0	8.05	80.47
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.55	65.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-13_112321 Lab Sample ID: 240-160744-4

Matrix: Water Lab File ID: UXC1303.D

Analysis Method: 8260B Date Collected: 11/23/2021 10:20

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 16:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		62-137
460-00-4	4-Bromofluorobenzene (Surr)	70		56-136
2037-26-5	Toluene-d8 (Surr)	88		78-122
1868-53-7	Dibromofluoromethane (Surr)	103		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1303.D
Lims ID: 240-160744-E-4
Client ID: SL-13_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 16:04:30 ALS Bottle#: 15 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-043
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1870474	10.0	
*	2 Chlorobenzene-d5	117	7.658	7.657	0.001	87	1221084	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	498885	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.444	4.432	0.012	93	450635	10.3	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	585560	11.9	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1315969	8.79	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	90	353146	6.98	
	11 Vinyl chloride	62		1.669				ND	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96		3.222				ND	
	41 cis-1,2-Dichloroethene	96		4.041				ND	7
	60 Trichloroethene	130		5.298				ND	
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

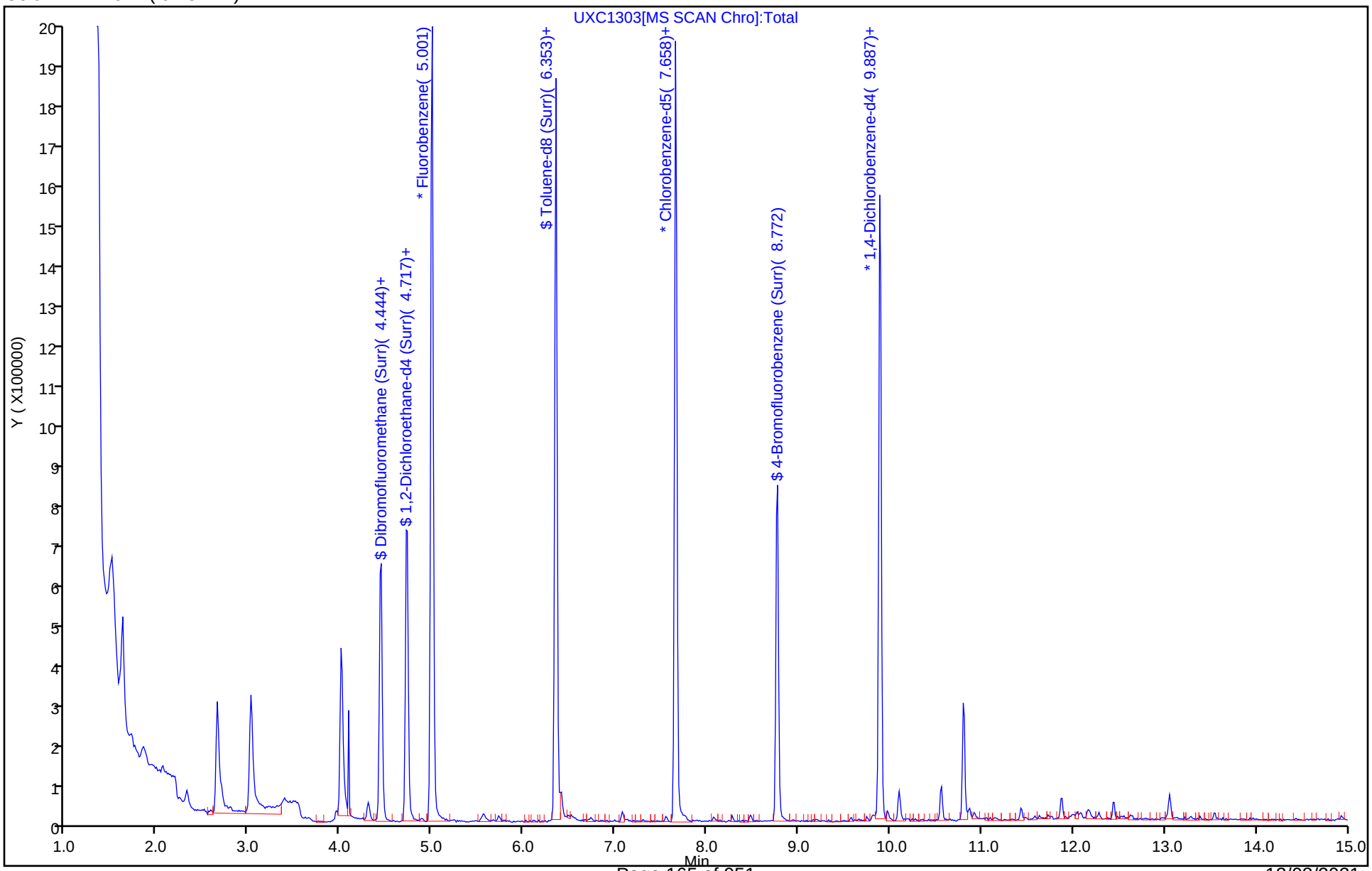
Report Date: 06-Dec-2021 12:55:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1303.D

Injection Date:	03-Dec-2021 16:04:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-4	Lab Sample ID:	240-160744-4	Worklist Smp#:	43
Client ID:	SL-13_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1303.D
Lims ID: 240-160744-E-4
Client ID: SL-13_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 16:04:30 ALS Bottle#: 15 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-043
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.3	103.07
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.9	118.89
$ 6 Toluene-d8 (Surr)	10.0	8.79	87.94
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.98	69.77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-7_112321 Lab Sample ID: 240-160744-5

Matrix: Water Lab File ID: UXJ2964.D

Analysis Method: 8260B Date Collected: 11/23/2021 10:55

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 14:56

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.98
156-59-2	cis-1,2-Dichloroethene	2.0	U	2.0	0.92
127-18-4	Tetrachloroethene	2.0	U	2.0	0.88
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.0
79-01-6	Trichloroethene	2.0	U	2.0	0.88
75-01-4	Vinyl chloride	2.0	U	2.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2964.D				
Lims ID:	240-160744-B-5				
Client ID:	SL-7_112321				
Sample Type:	Client				
Inject. Date:	06-Dec-2021 14:56:30	ALS Bottle#:	16	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	240-0115758-052				
Misc. Info.:	J211206A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	07-Dec-2021 08:25:57	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1684				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1848929	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	993748	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	504035	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	97	439601	18.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	99	544436	20.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1598296	22.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	405422	16.4	
14 Vinyl chloride	62		1.364				ND	
21 1,1-Dichloroethene	96		2.251				ND	
33 trans-1,2-Dichloroethene	96		2.890				ND	
41 cis-1,2-Dichloroethene	96		3.718				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

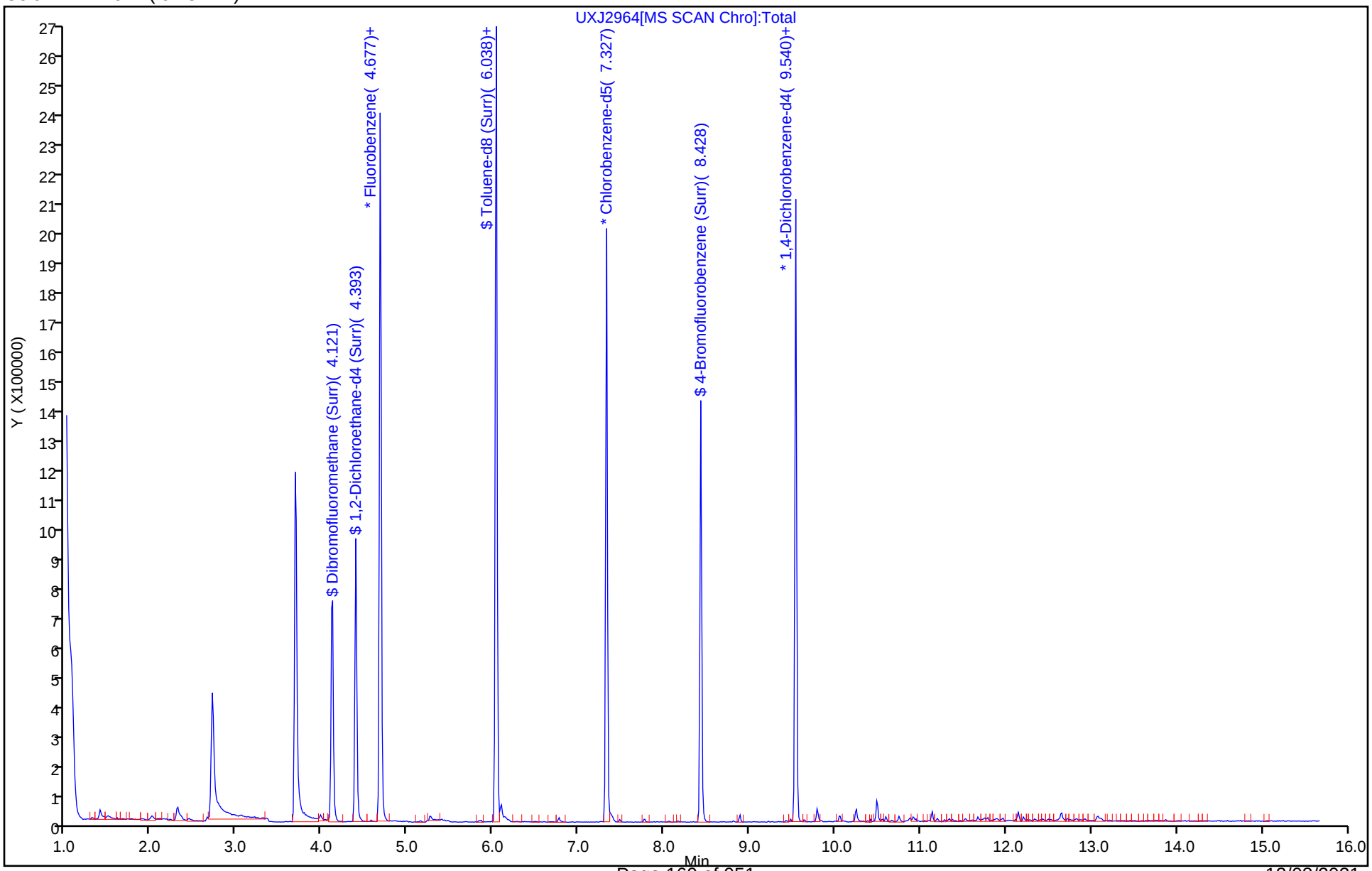
Report Date: 07-Dec-2021 08:26:25 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2964.D

Injection Date:	06-Dec-2021 14:56:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-B-5	Lab Sample ID:	240-160744-5	Worklist Smp#:	52
Client ID:	SL-7_112321				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	16
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2964.D
Lims ID: 240-160744-B-5
Client ID: SL-7_112321
Sample Type: Client
Inject. Date: 06-Dec-2021 14:56:30 ALS Bottle#: 16 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0115758-052
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.32
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.4	101.88
$ 6 Toluene-d8 (Surr)	20.0	22.6	113.06
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.4	81.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-6_112321 Lab Sample ID: 240-160744-6

Matrix: Water Lab File ID: UXJ2965.D

Analysis Method: 8260B Date Collected: 11/23/2021 11:15

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 15:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	77		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2965.D
Lims ID: 240-160744-D-6
Client ID: SL-6_112321
Sample Type: Client
Inject. Date: 06-Dec-2021 15:18:30 ALS Bottle#: 17 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-053
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 07-Dec-2021 08:12:14

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1834288	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1023553	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	523521	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	421608	18.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	521809	19.7	
$	6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1566319	21.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	393975	15.4	
	14 Vinyl chloride	62		1.364				ND	
	21 1,1-Dichloroethene	96		2.251				ND	
	33 trans-1,2-Dichloroethene	96		2.890				ND	
	41 cis-1,2-Dichloroethene	96		3.718				ND	7
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

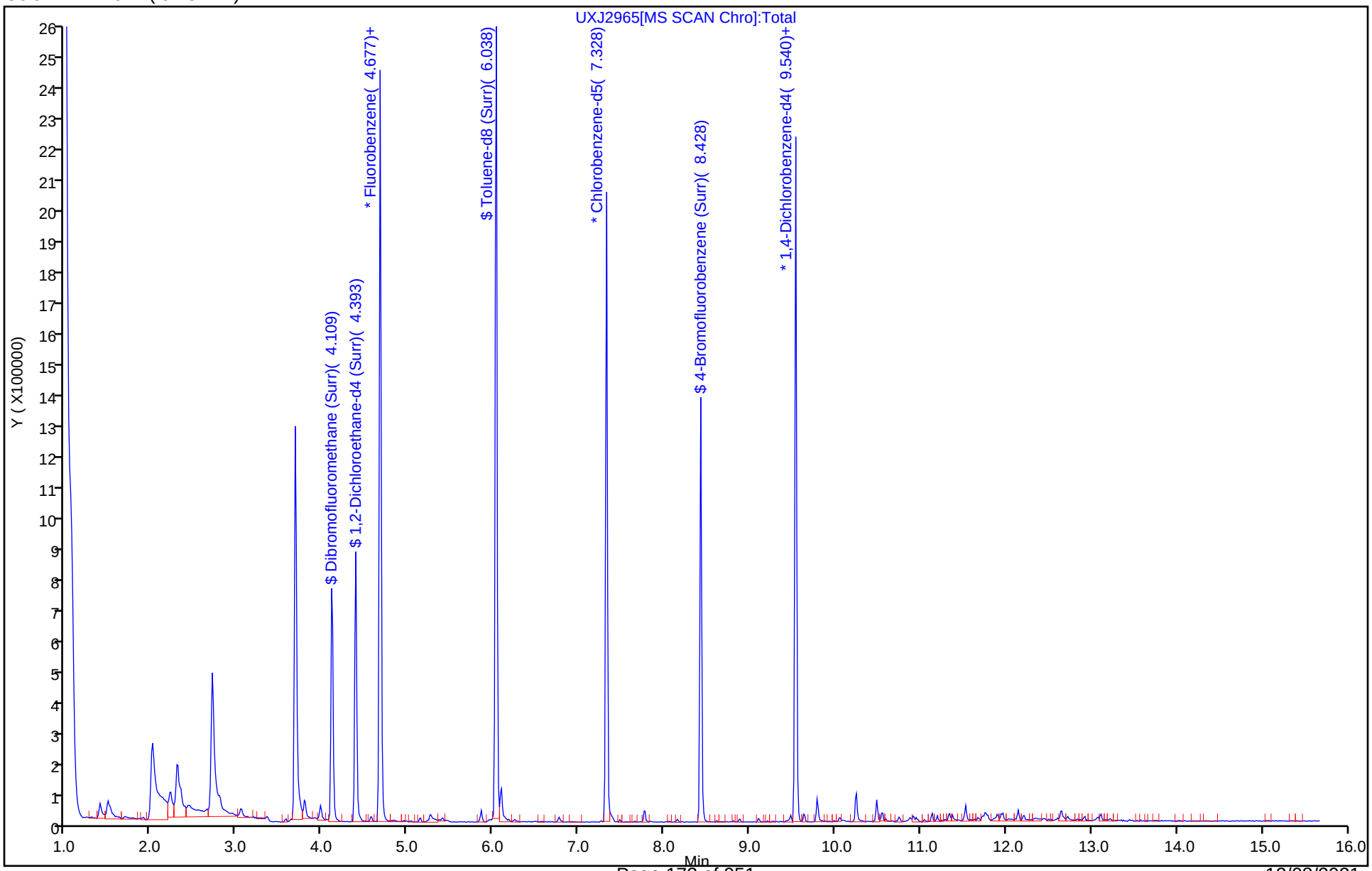
Report Date: 07-Dec-2021 08:26:26 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2965.D

Injection Date:	06-Dec-2021 15:18:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-D-6	Lab Sample ID:	240-160744-6	Worklist Smp#:	53
Client ID:	SL-6_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2965.D
Lims ID: 240-160744-D-6
Client ID: SL-6_112321
Sample Type: Client
Inject. Date: 06-Dec-2021 15:18:30 ALS Bottle#: 17 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-053
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 07-Dec-2021 08:12:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	90.22
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.7	98.43
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.57
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.4	77.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-5_112321 Lab Sample ID: 240-160744-7

Matrix: Water Lab File ID: UXC1306.D

Analysis Method: 8260B Date Collected: 11/23/2021 12:55

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 17:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	74		56-136
2037-26-5	Toluene-d8 (Surr)	86		78-122
1868-53-7	Dibromofluoromethane (Surr)	96		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1306.D				
Lims ID:	240-160744-E-7				
Client ID:	SL-5_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 17:51:30	ALS Bottle#:	18	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-046				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				
First Level Reviewer: evansle		Date:	06-Dec-2021 12:49:23		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1572274	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1043351	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	98	447918	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	351880	9.58	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	429230	10.4	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1102269	8.62	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	87	318069	7.35	
11 Vinyl chloride	62	1.669	1.669	0.000	97	71439	1.55	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	93	6406	0.1411	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	81	145478	3.03	
60 Trichloroethene	130	5.309	5.298	0.011	94	13149	0.2837	
76 Tetrachloroethene	164	6.898	6.899	-0.001	81	3398	0.1046	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

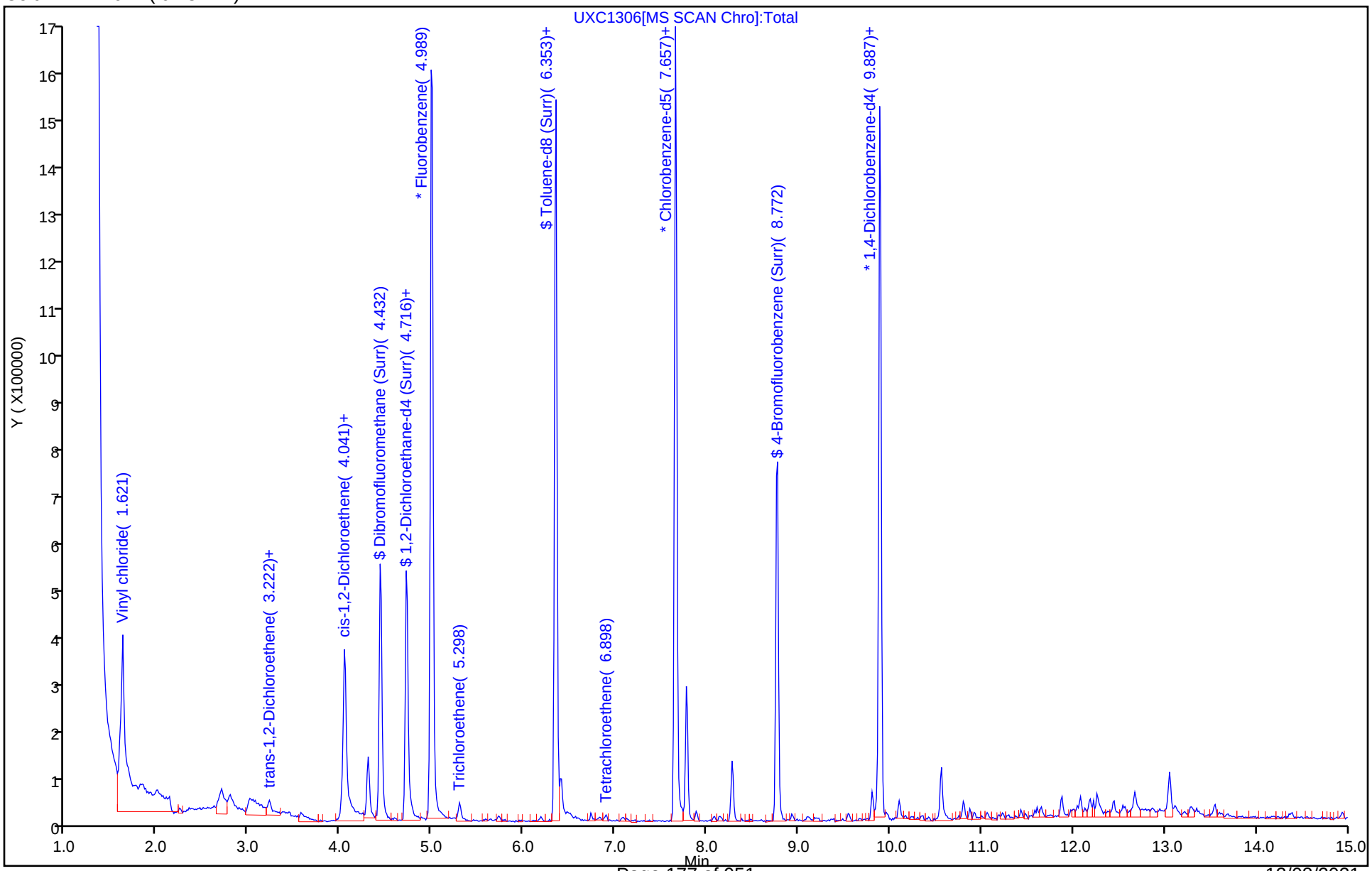
Report Date: 06-Dec-2021 12:55:44 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1306.D

Injection Date:	03-Dec-2021 17:51:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-7	Lab Sample ID:	240-160744-7	Worklist Smp#:	46
Client ID:	SL-5_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1306.D				
Lims ID:	240-160744-E-7				
Client ID:	SL-5_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 17:51:30	ALS Bottle#:	18	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-046				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

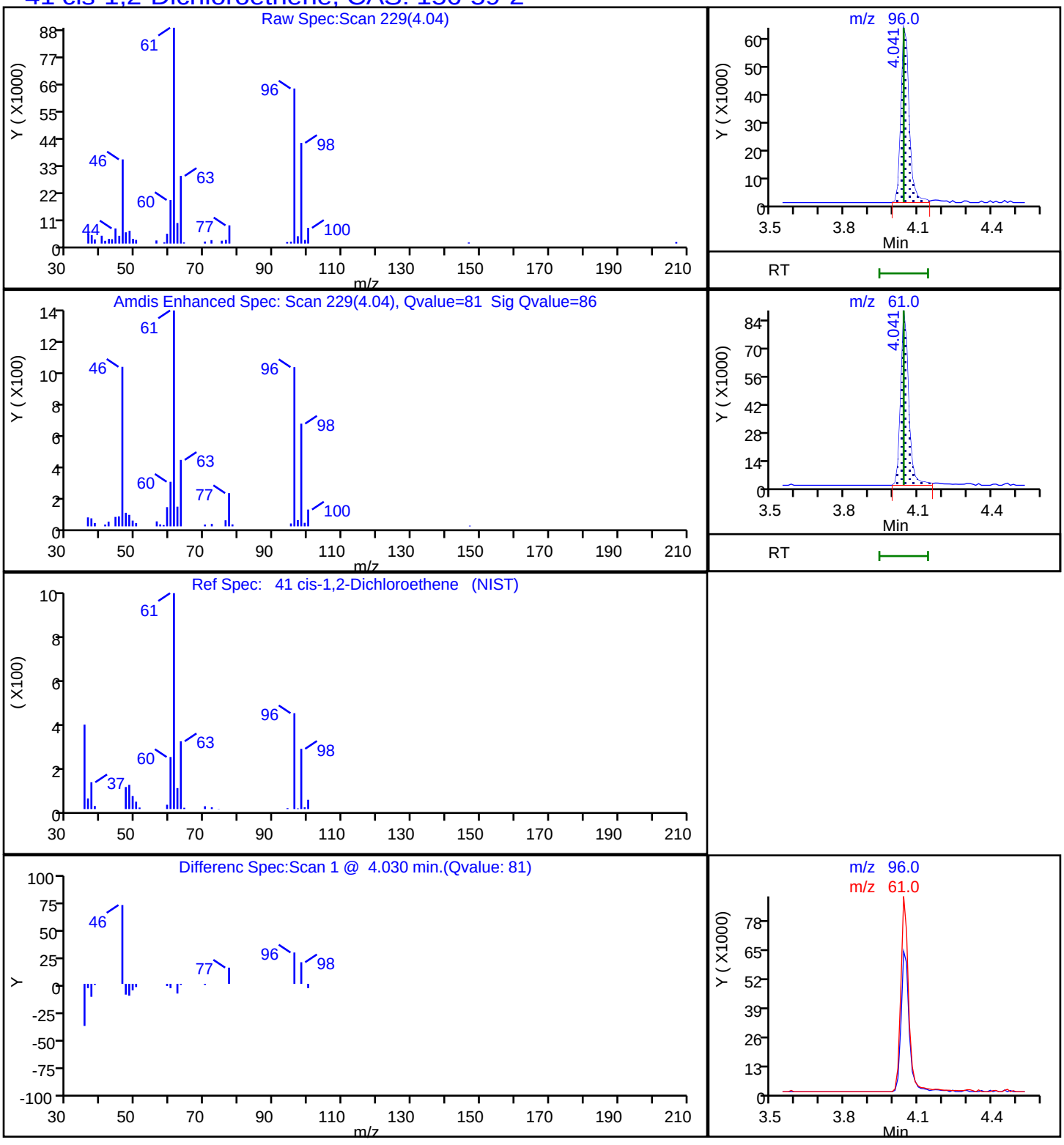
First Level Reviewer: evansle Date: 06-Dec-2021 12:49:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.58	95.75
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.68
$ 6 Toluene-d8 (Surr)	10.0	8.62	86.21
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.35	73.54

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1306.D				
Injection Date:	03-Dec-2021 17:51:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-7	Lab Sample ID:	240-160744-7		
Client ID:	SL-5_112321				
Operator ID:	43582	ALS Bottle#:	18	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

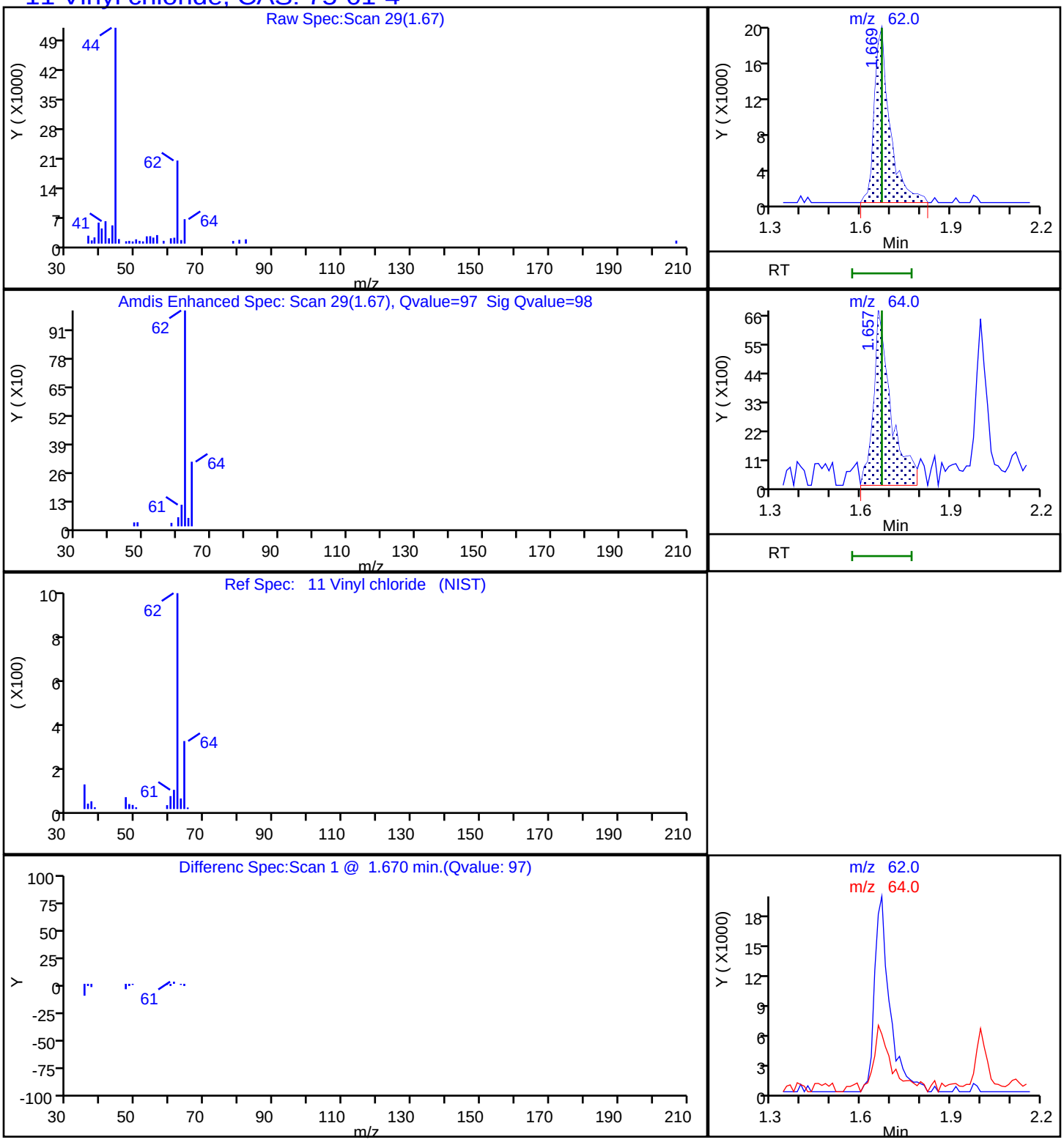


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1306.D

Injection Date:	03-Dec-2021 17:51:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-7	Lab Sample ID:	240-160744-7		
Client ID:	SL-5_112321				
Operator ID:	43582	ALS Bottle#:	18	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-8_112321 Lab Sample ID: 240-160744-8

Matrix: Water Lab File ID: UXJ2966.D

Analysis Method: 8260B Date Collected: 11/23/2021 13:20

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 15:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2966.D				
Lims ID:	240-160744-B-8				
Client ID:	SL-8_112321				
Sample Type:	Client				
Inject. Date:	06-Dec-2021 15:40:30	ALS Bottle#:	18	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115758-054				
Misc. Info.:	J211206A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	07-Dec-2021 08:25:57	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1684				
First Level Reviewer: evansle		Date:	07-Dec-2021 08:12:24		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1935460	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1113988	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	595953	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	442537	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	556430	19.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1702970	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	454626	16.4	
14 Vinyl chloride	62	1.364	1.364	0.000	97	54960	2.29	
21 1,1-Dichloroethene	96		2.251				ND	
33 trans-1,2-Dichloroethene	96		2.890				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	79	103762	3.69	
60 Trichloroethene	130	4.985	4.985	0.001	78	3675	0.1216	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

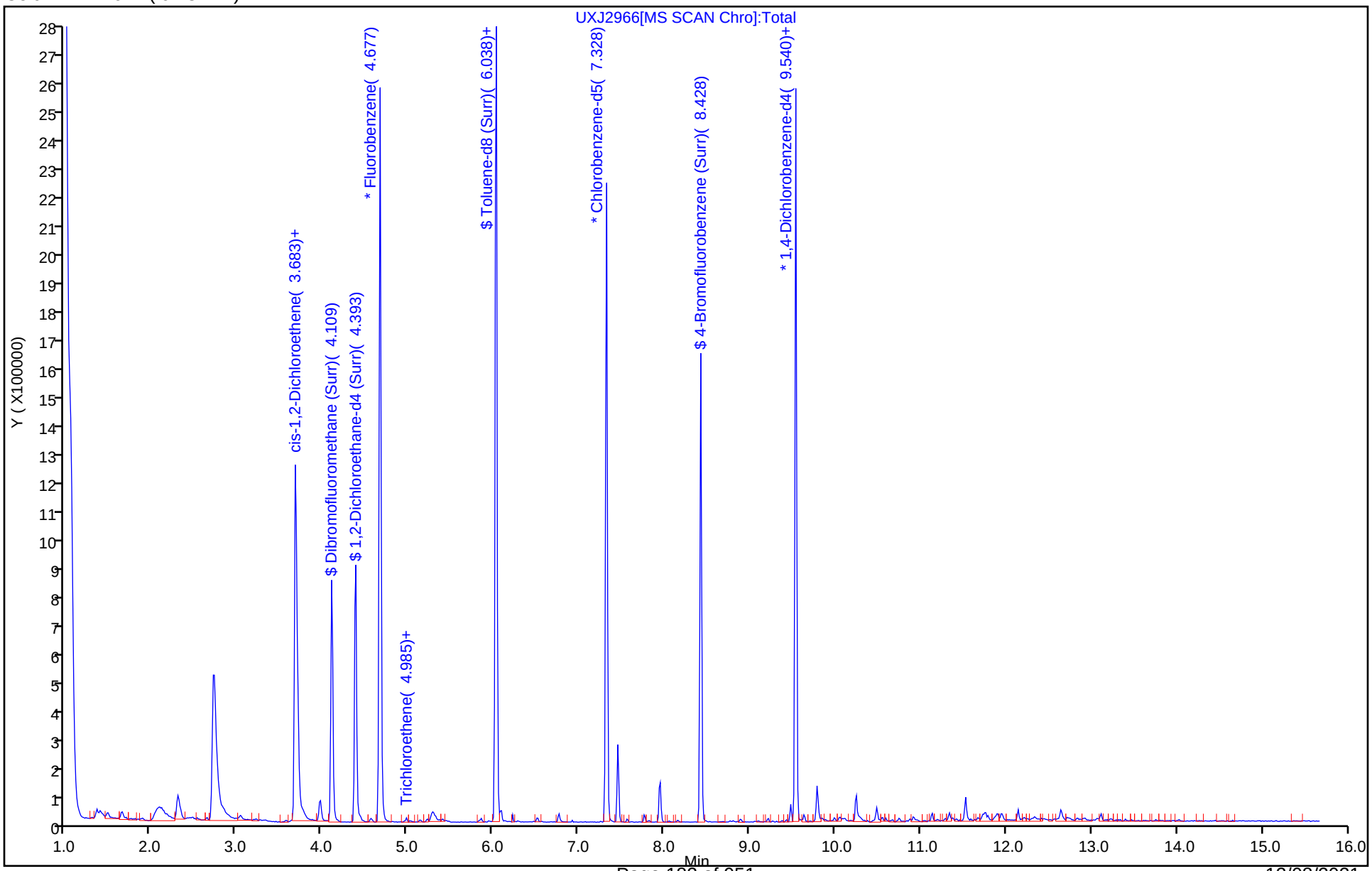
Report Date: 07-Dec-2021 08:26:26 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2966.D

Injection Date:	06-Dec-2021 15:40:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-B-8	Lab Sample ID:	240-160744-8	Worklist Smp#:	54
Client ID:	SL-8_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2966.D				
Lims ID:	240-160744-B-8				
Client ID:	SL-8_112321				
Sample Type:	Client				
Inject. Date:	06-Dec-2021 15:40:30	ALS Bottle#:	18	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115758-054				
Misc. Info.:	J211206A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	07-Dec-2021 08:25:57	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1684				

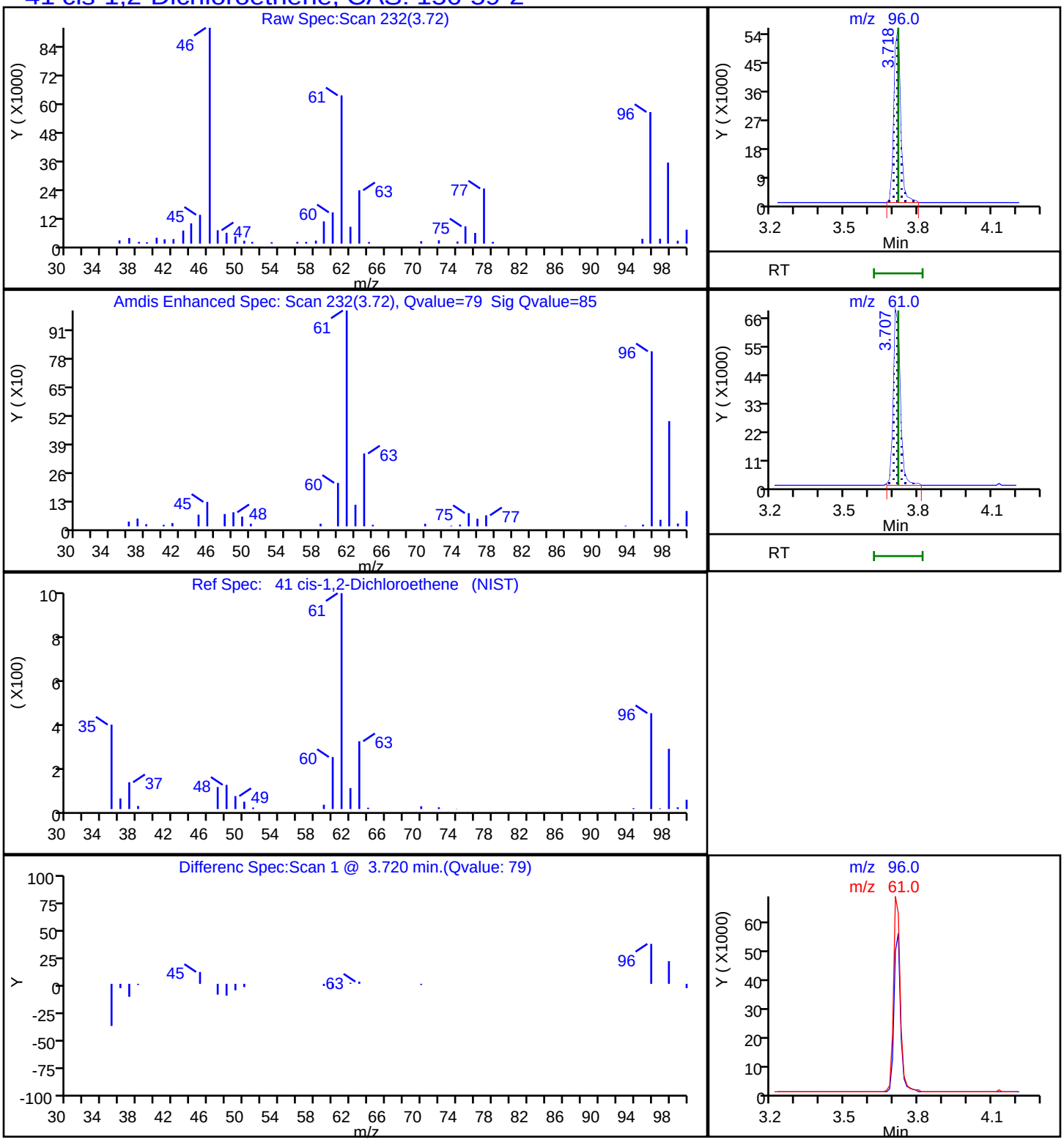
First Level Reviewer: evansle Date: 07-Dec-2021 08:12:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.9	89.74
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.9	99.47
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.46
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.4	81.89

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2966.D				
Injection Date:	06-Dec-2021 15:40:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-B-8	Lab Sample ID:	240-160744-8		
Client ID:	SL-8_112321				
Operator ID:	043582	ALS Bottle#:	18	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

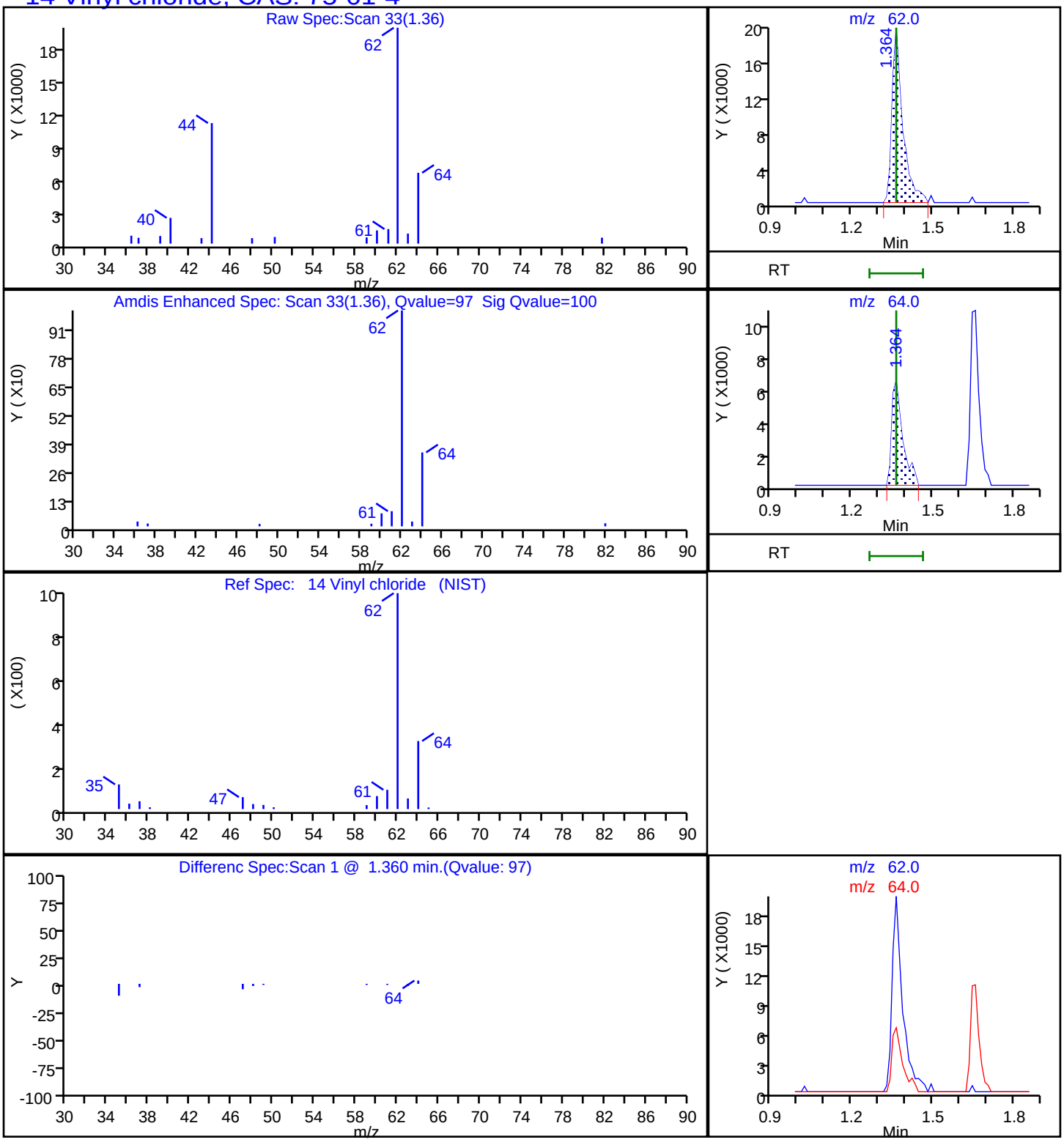


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2966.D

Injection Date:	06-Dec-2021 15:40:30	Instrument ID:	A3UX11
Lims ID:	240-160744-B-8	Lab Sample ID:	240-160744-8
Client ID:	SL-8_112321		
Operator ID:	043582	ALS Bottle#:	18 Worklist Smp#: 54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-9_112321 Lab Sample ID: 240-160744-9

Matrix: Water Lab File ID: UXC1308.D

Analysis Method: 8260B Date Collected: 11/23/2021 13:35

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 18:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	85		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1308.D
Lims ID: 240-160744-E-9
Client ID: SL-9_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 18:34:30 ALS Bottle#: 20 Worklist Smp#: 48
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-048
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:50:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1482700	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1012395	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	456189	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.432	0.012	93	328768	9.49	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	-0.001	99	413070	10.6	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1052190	8.48	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	86	333748	7.95	
11 Vinyl chloride	62	1.669	1.669	0.000	98	120844	2.78	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	
41 cis-1,2-Dichloroethene	96	4.052	4.041	0.011	84	205320	4.54	
60 Trichloroethene	130	5.298	5.298	0.000	87	6219	0.1423	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

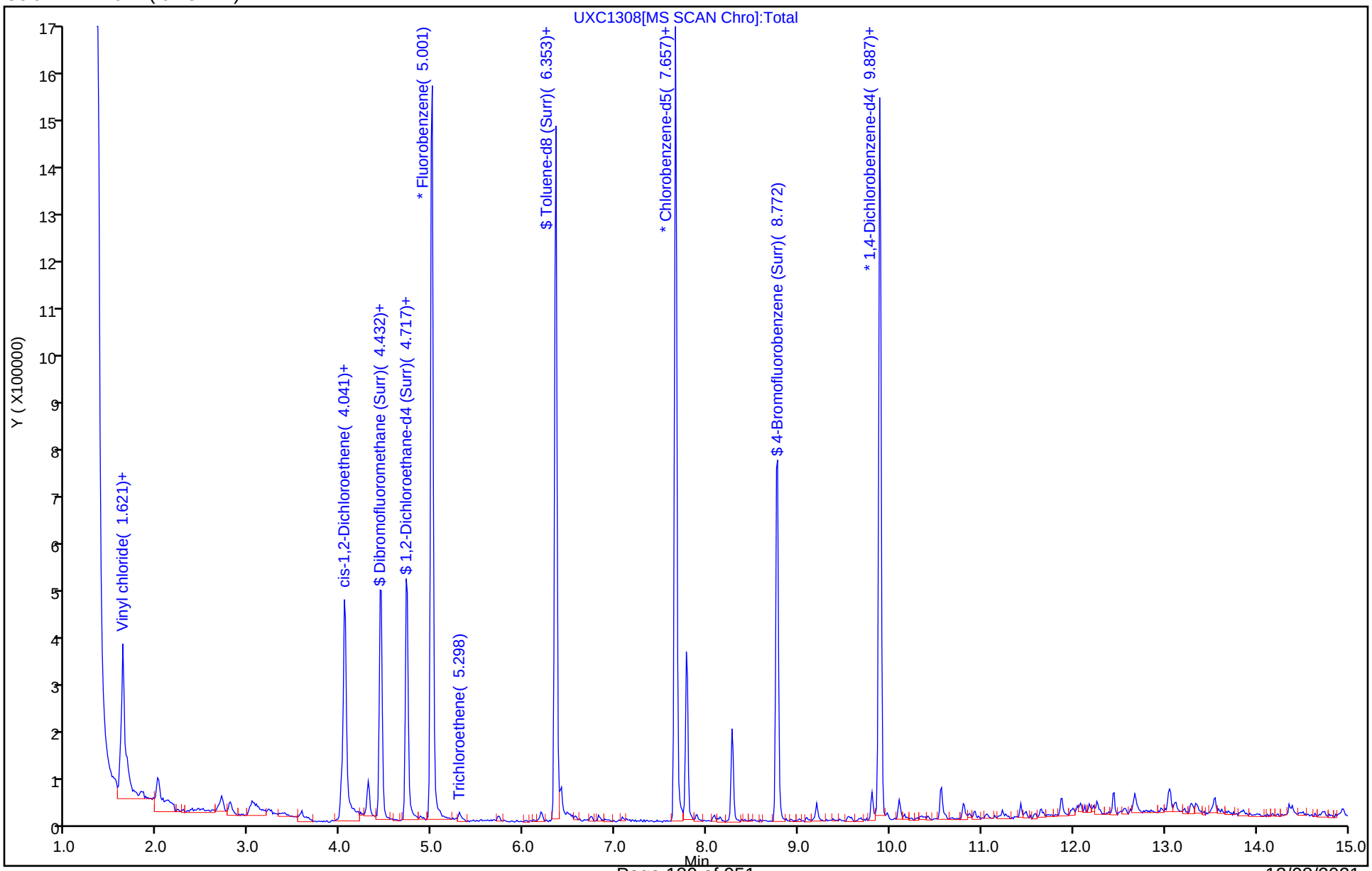
Report Date: 06-Dec-2021 12:55:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1308.D

Injection Date:	03-Dec-2021 18:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-9	Lab Sample ID:	240-160744-9	Worklist Smp#:	48
Client ID:	SL-9_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1308.D				
Lims ID:	240-160744-E-9				
Client ID:	SL-9_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 18:34:30	ALS Bottle#:	20	Worklist Smp#:	48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-048				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

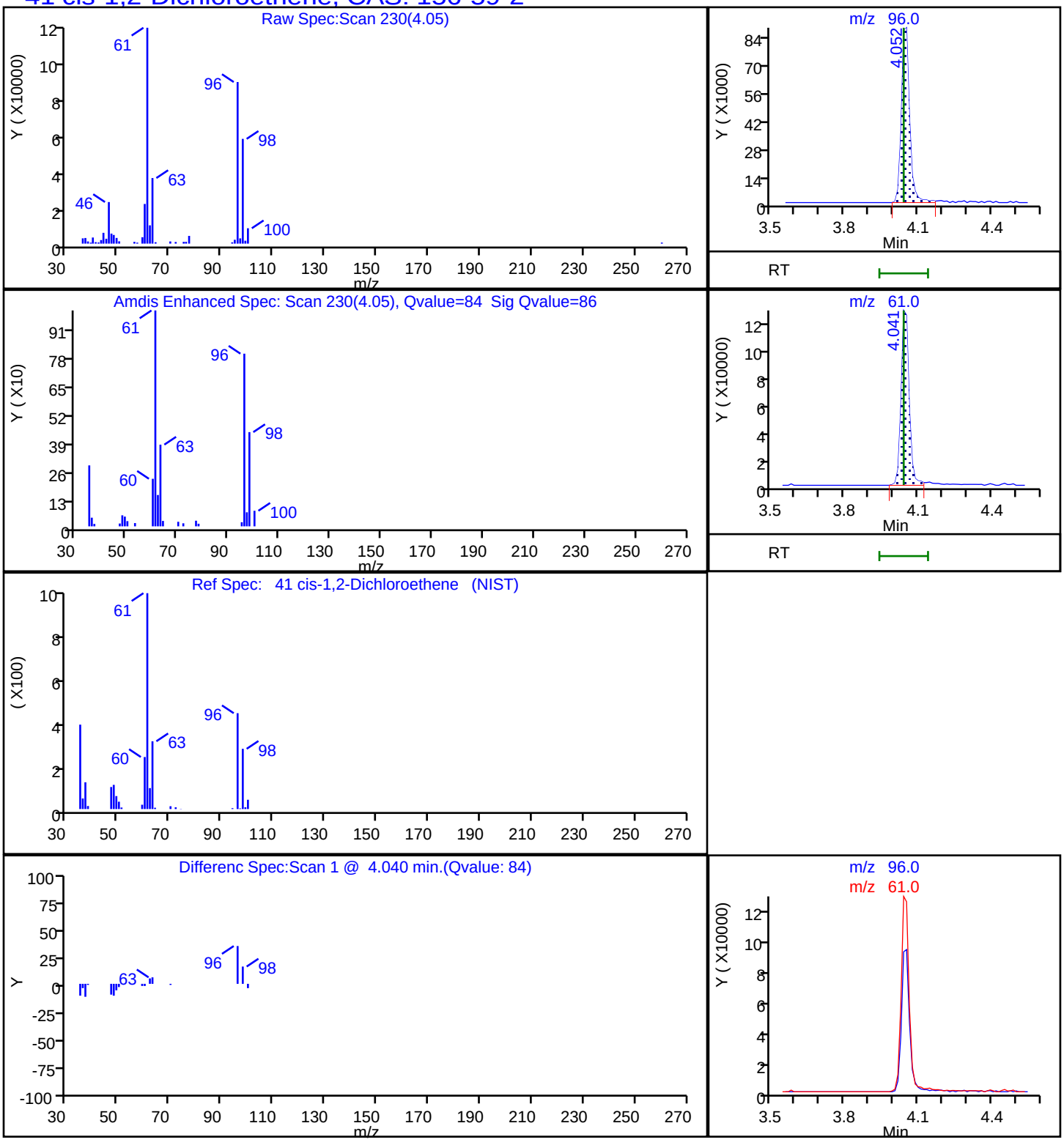
First Level Reviewer: evansle Date: 06-Dec-2021 12:50:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.49	94.87
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.80
$ 6 Toluene-d8 (Surr)	10.0	8.48	84.81
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.95	79.52

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1308.D				
Injection Date:	03-Dec-2021 18:34:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-9	Lab Sample ID:	240-160744-9		
Client ID:	SL-9_112321				
Operator ID:	43582	ALS Bottle#:	20	Worklist Smp#:	48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

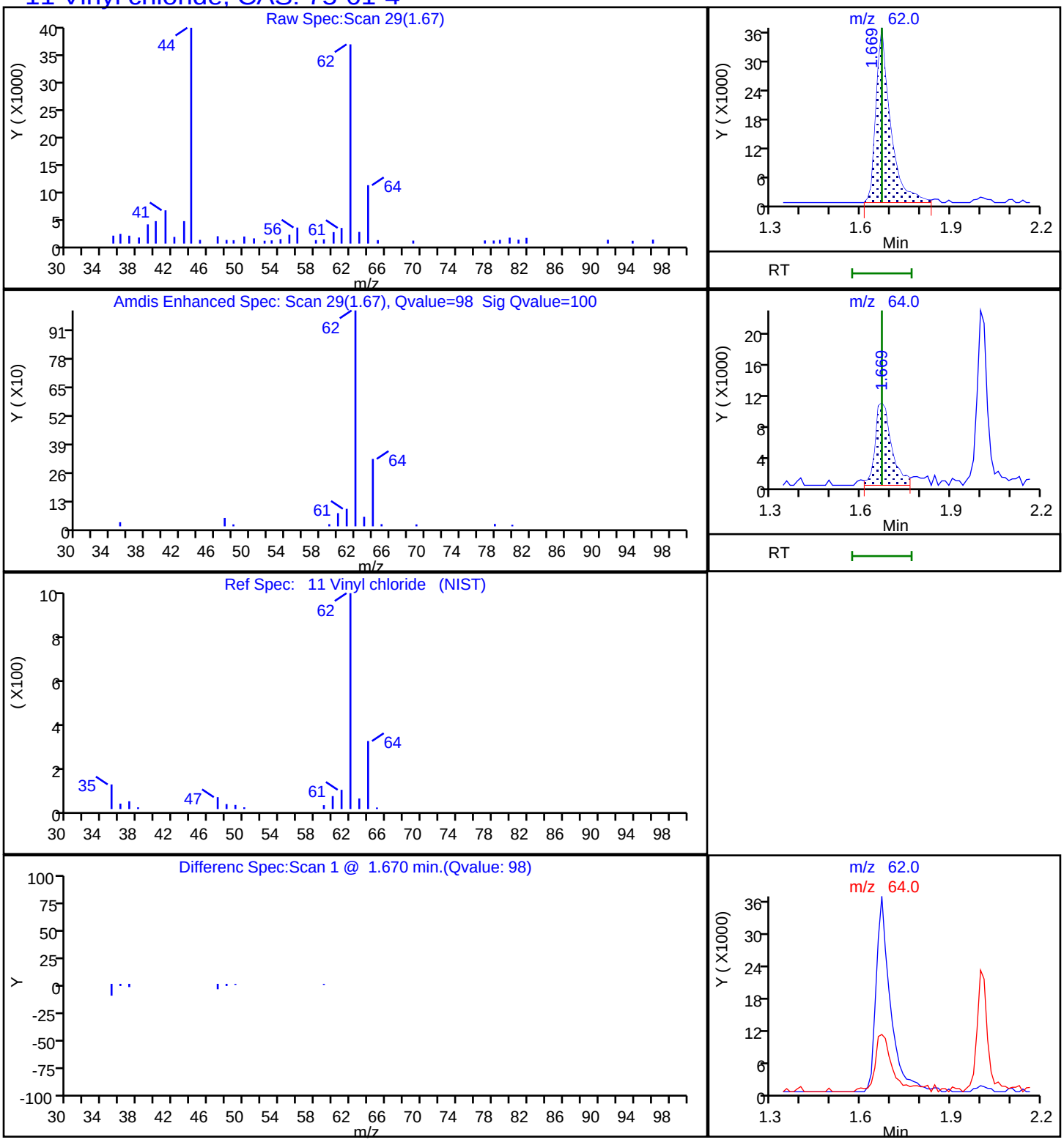
41 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1308.D		
Injection Date:	03-Dec-2021 18:34:30	Instrument ID:	A3UX15
Lims ID:	240-160744-E-9	Lab Sample ID:	240-160744-9
Client ID:	SL-9_112321		
Operator ID:	43582	ALS Bottle#:	20 Worklist Smp#: 48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-10_112321 Lab Sample ID: 240-160744-10

Matrix: Water Lab File ID: UXC1309.D

Analysis Method: 8260B Date Collected: 11/23/2021 14:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 18:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	86		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1309.D				
Lims ID:	240-160744-E-10				
Client ID:	SL-10_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 18:56:30	ALS Bottle#:	21	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-049				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				
First Level Reviewer: evansle		Date:	06-Dec-2021 12:51:05		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1645068	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1121858	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	546172	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	348988	9.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	455708	10.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1179085	8.58	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	89	361727	7.78	
11 Vinyl chloride	62	1.669	1.669	0.000	97	111344	2.31	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	80	187853	3.75	
60 Trichloroethene	130	5.309	5.298	0.011	93	6392	0.1318	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

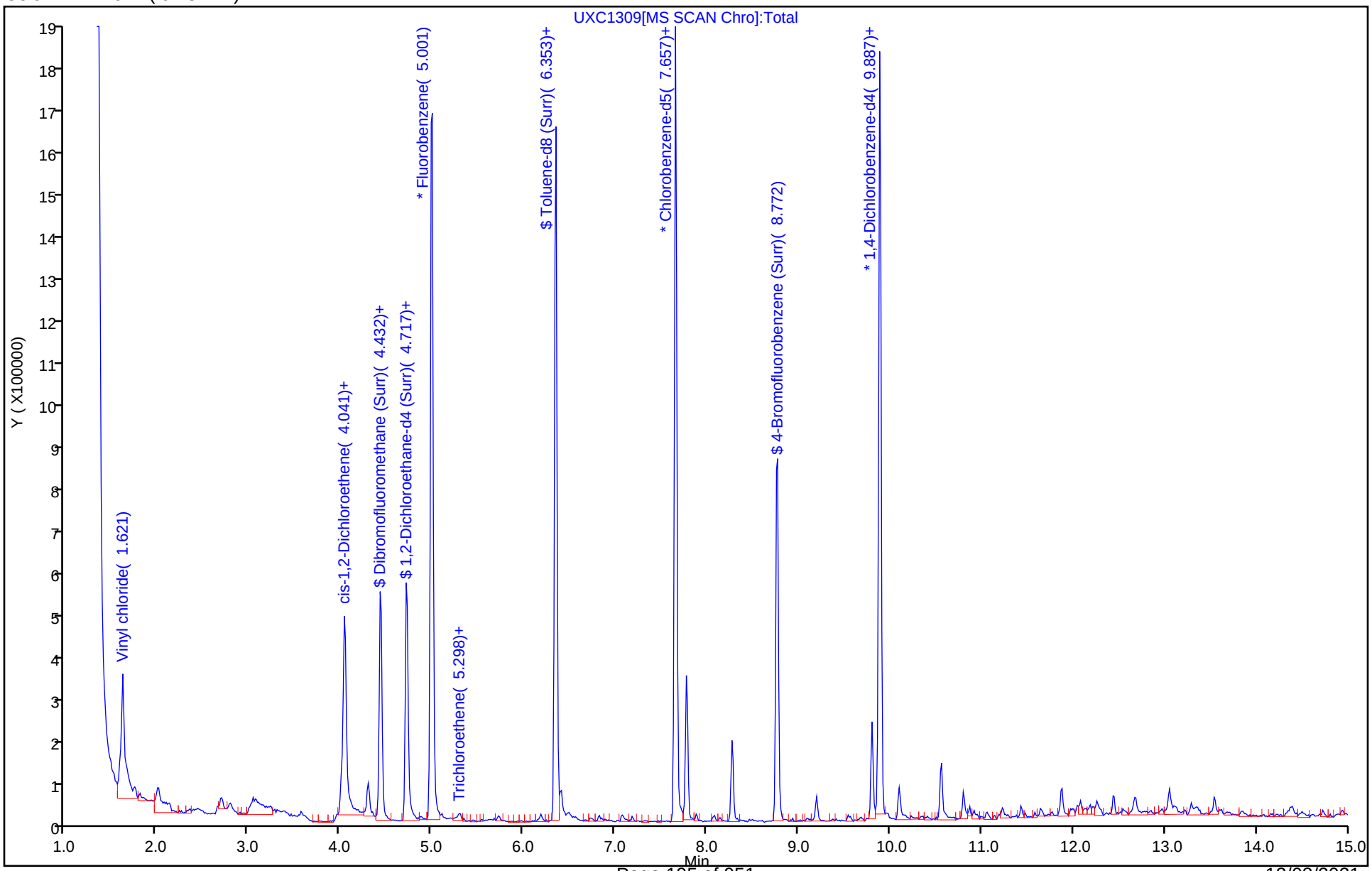
Report Date: 06-Dec-2021 12:55:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1309.D

Injection Date:	03-Dec-2021 18:56:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-10	Lab Sample ID:	240-160744-10	Worklist Smp#:	49
Client ID:	SL-10_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1309.D				
Lims ID:	240-160744-E-10				
Client ID:	SL-10_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 18:56:30	ALS Bottle#:	21	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-049				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

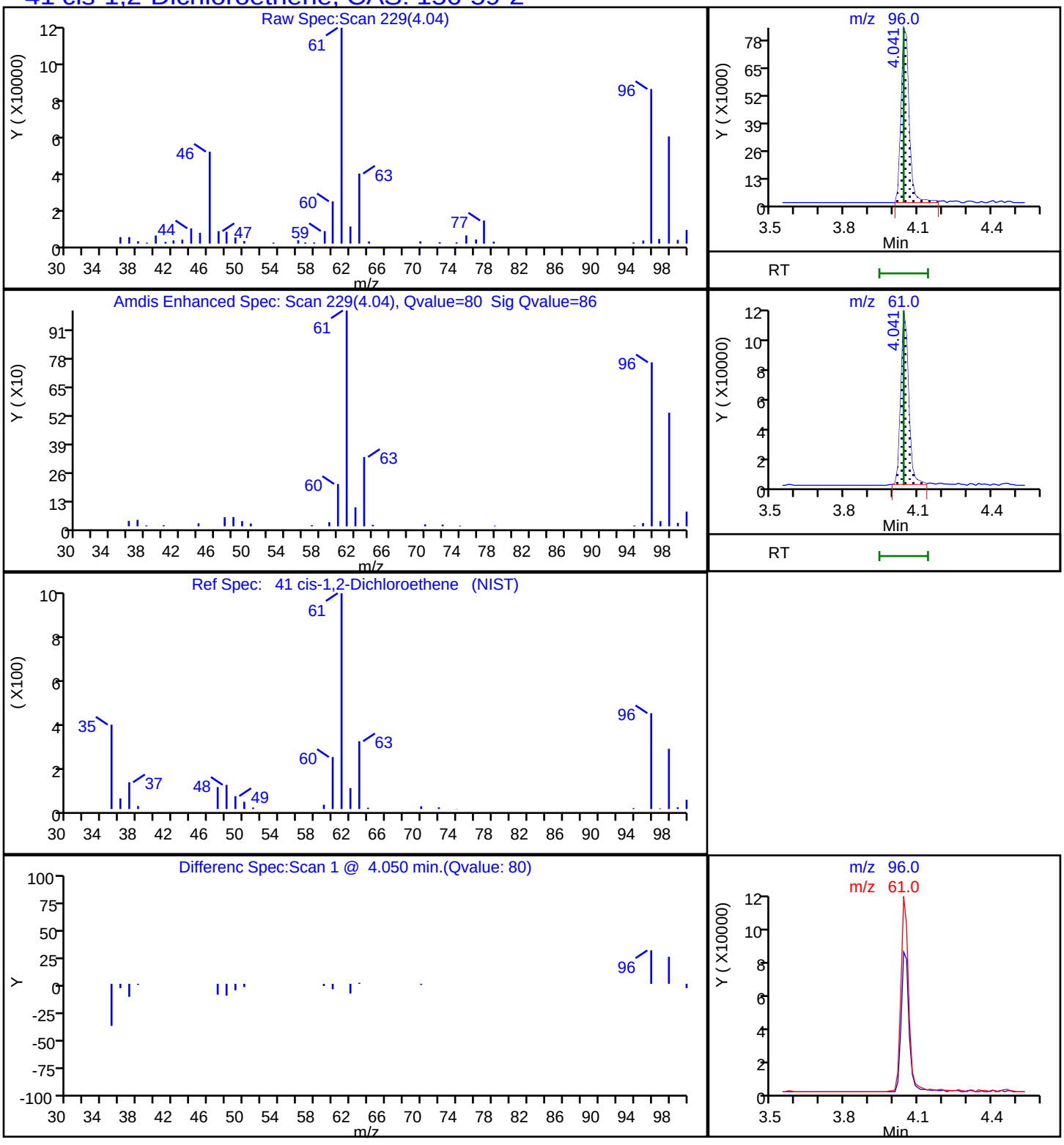
First Level Reviewer: evansle Date: 06-Dec-2021 12:51:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.08	90.76
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.20
$ 6 Toluene-d8 (Surr)	10.0	8.58	85.76
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.78	77.78

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1309.D				
Injection Date:	03-Dec-2021 18:56:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-10	Lab Sample ID:	240-160744-10		
Client ID:	SL-10_112321				
Operator ID:	43582	ALS Bottle#:	21	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

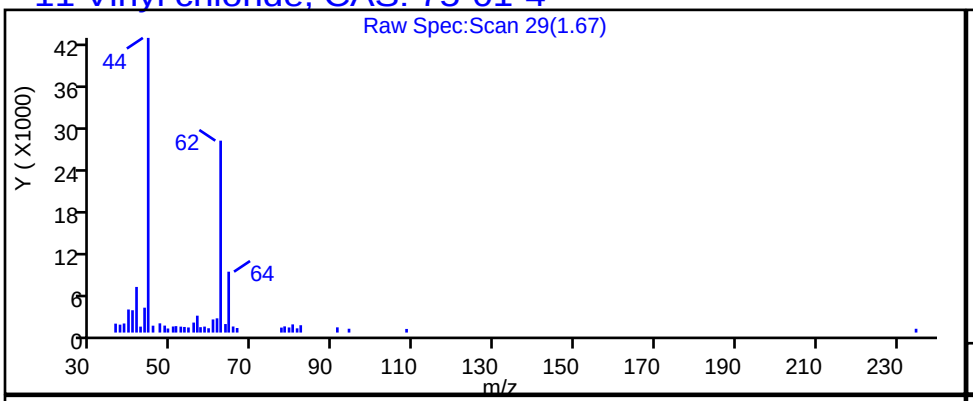


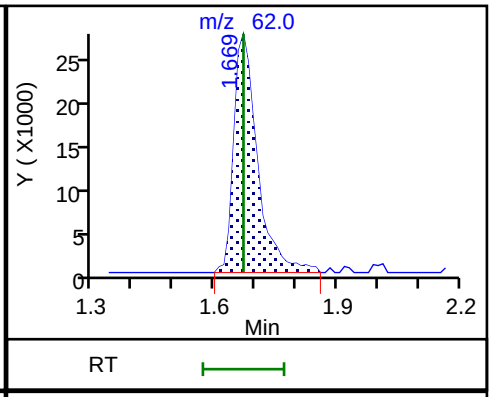
Eurofins TestAmerica, Canton

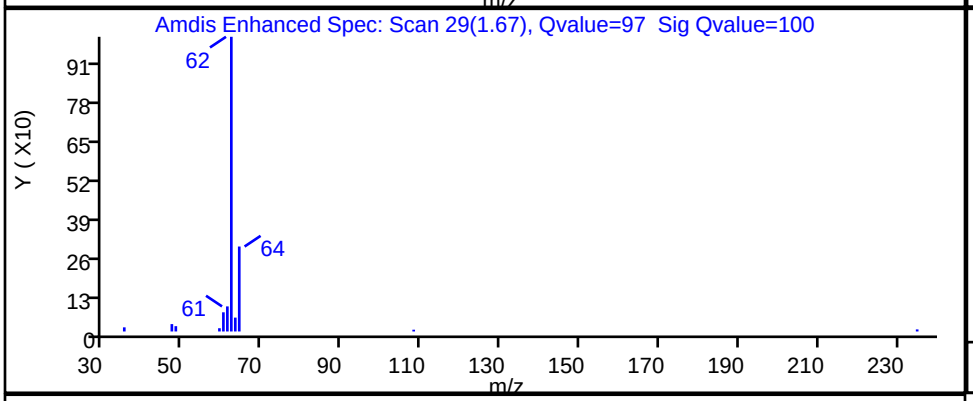
Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1309.D

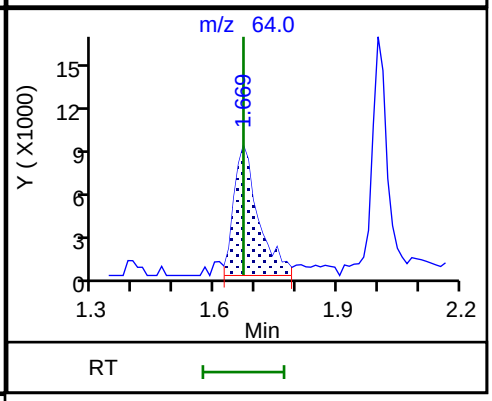
Injection Date:	03-Dec-2021 18:56:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-10	Lab Sample ID:	240-160744-10		
Client ID:	SL-10_112321				
Operator ID:	43582	ALS Bottle#:	21	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

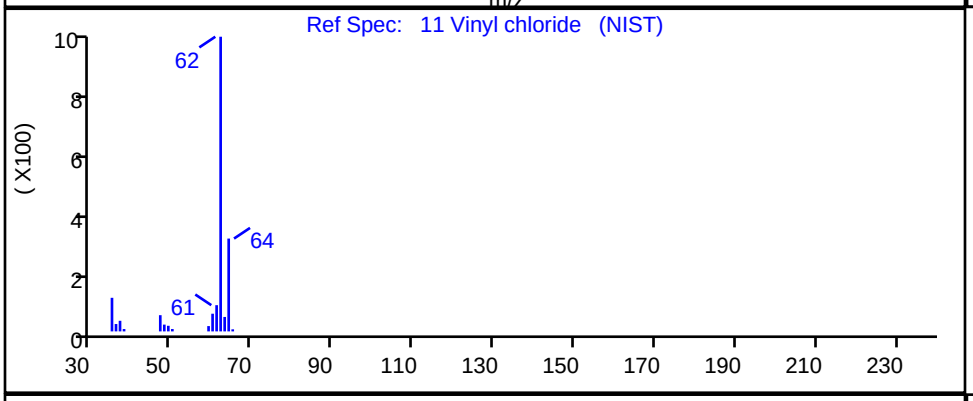
11 Vinyl chloride, CAS: 75-01-4

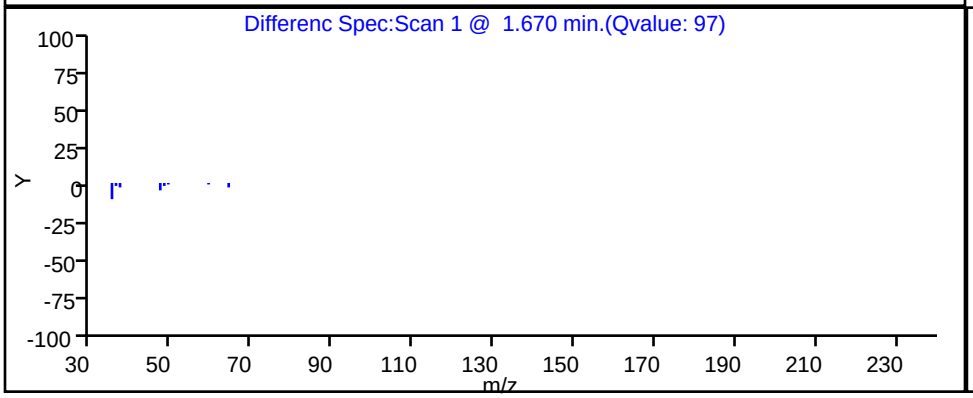


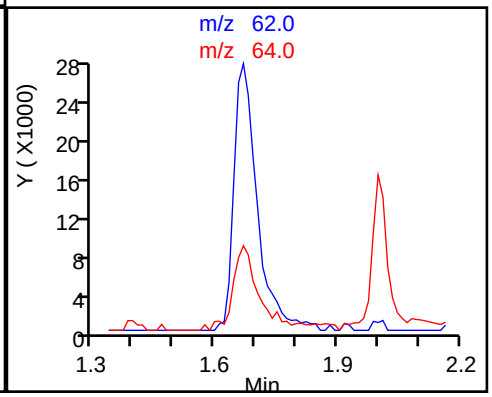












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-11_112321 Lab Sample ID: 240-160744-11

Matrix: Water Lab File ID: UXC1310.D

Analysis Method: 8260B Date Collected: 11/23/2021 14:25

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 19:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.8		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	88		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1310.D
Lims ID: 240-160744-E-11
Client ID: SL-11_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 19:18:30 ALS Bottle#: 22 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-050
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1542945	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1032554	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	531880	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.444	4.432	0.012	93	343341	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	450446	11.1	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1116356	8.82	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	89	357626	8.36	
11 Vinyl chloride	62	1.669	1.669	0.000	98	76706	1.69	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	7
41 cis-1,2-Dichloroethene	96	4.052	4.041	0.011	81	131697	2.80	
60 Trichloroethene	130	5.309	5.298	0.011	93	14877	0.3271	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

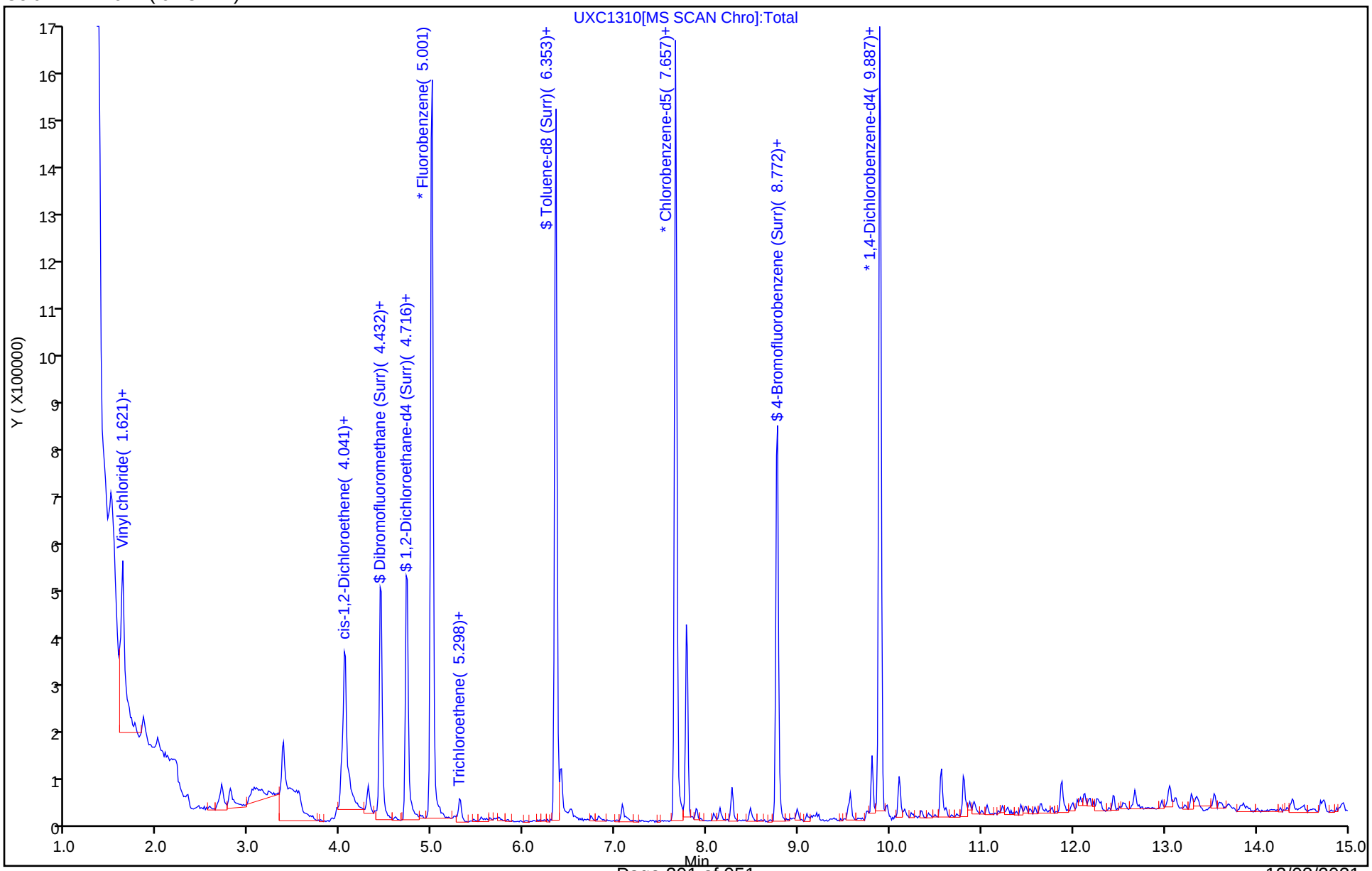
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1310.D

Injection Date:	03-Dec-2021 19:18:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-11	Lab Sample ID:	240-160744-11	Worklist Smp#:	50
Client ID:	SL-11_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1310.D
Lims ID: 240-160744-E-11
Client ID: SL-11_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 19:18:30 ALS Bottle#: 22 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-050
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.52	95.20
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.87
$ 6 Toluene-d8 (Surr)	10.0	8.82	88.22
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.36	83.55

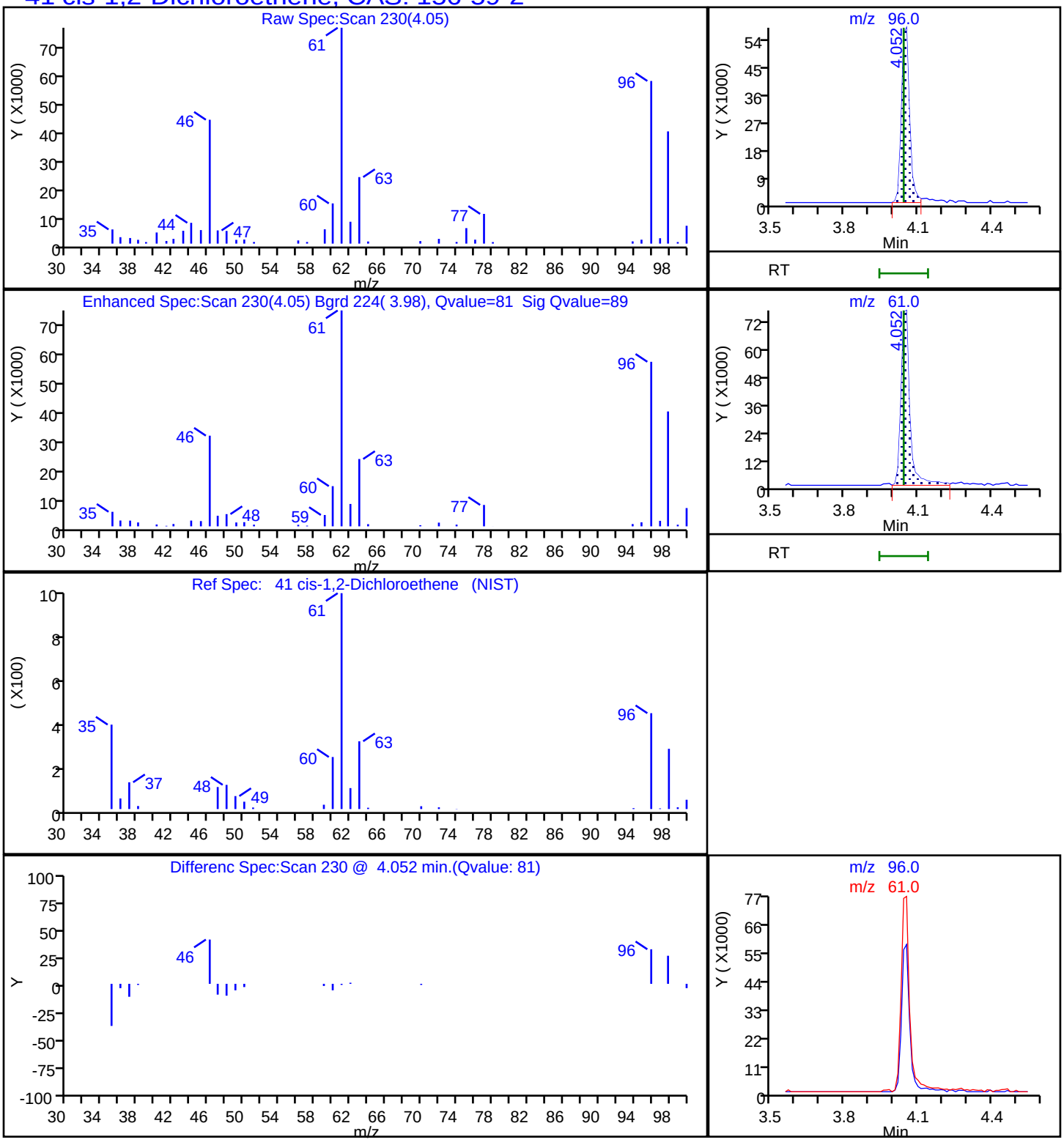
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1310.D

Injection Date:	03-Dec-2021 19:18:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-11	Lab Sample ID:	240-160744-11		
Client ID:	SL-11_112321				
Operator ID:	43582	ALS Bottle#:	22	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



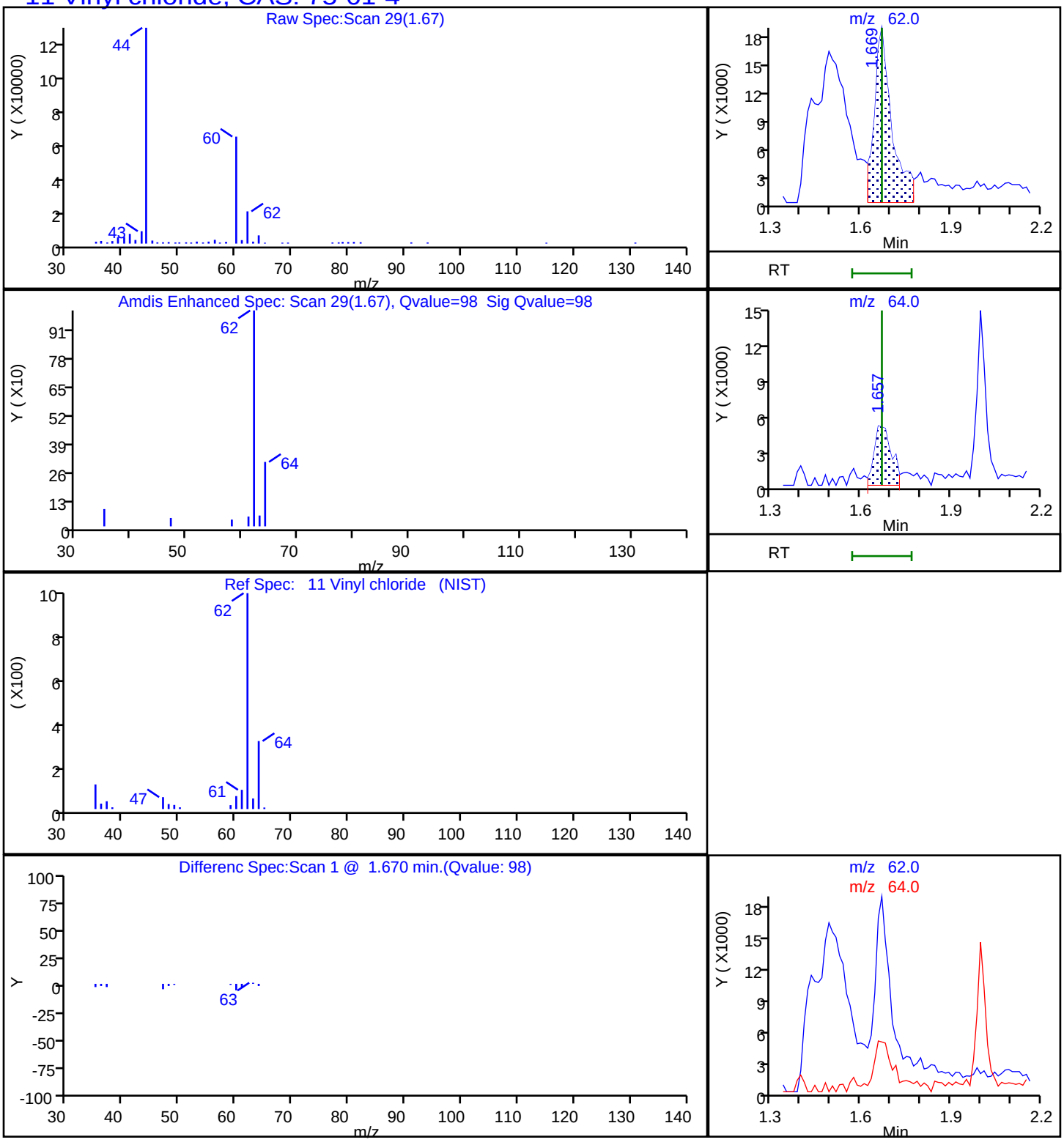
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1310.D

Injection Date:	03-Dec-2021 19:18:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-E-11	Lab Sample ID:	240-160744-11		
Client ID:	SL-11_112321				
Operator ID:	43582	ALS Bottle#:	22	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-12_112321 Lab Sample ID: 240-160744-12

Matrix: Water Lab File ID: UXC1311.D

Analysis Method: 8260B Date Collected: 11/23/2021 14:45

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 19:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.8		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.72	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		62-137
460-00-4	4-Bromofluorobenzene (Surr)	77		56-136
2037-26-5	Toluene-d8 (Surr)	86		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1311.D
Lims ID: 240-160744-B-12
Client ID: SL-12_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 19:40:30 ALS Bottle#: 23 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-051
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:22

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1602622	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1088113	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	492064	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	92	352860	9.42	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	462802	11.0	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1150557	8.63	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	89	347310	7.70	
	11 Vinyl chloride	62	1.657	1.669	-0.012	97	33809	0.7185	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96		3.222				ND	
	41 cis-1,2-Dichloroethene	96	4.041	4.041	-0.001	81	88505	1.81	
	60 Trichloroethene	130		5.298				ND	7
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

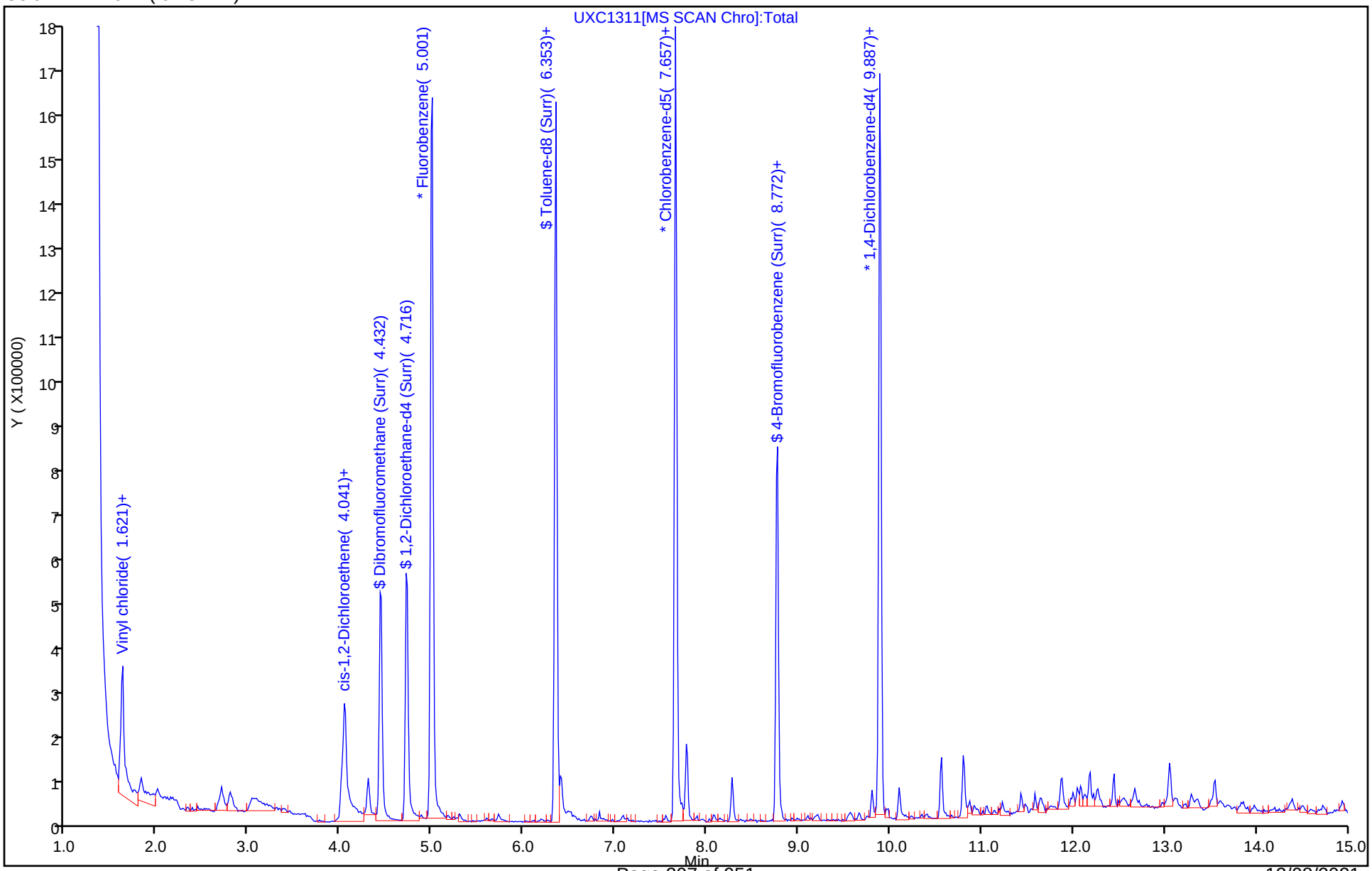
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1311.D

Injection Date:	03-Dec-2021 19:40:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-12	Lab Sample ID:	240-160744-12	Worklist Smp#:	51
Client ID:	SL-12_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1311.D				
Lims ID:	240-160744-B-12				
Client ID:	SL-12_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 19:40:30	ALS Bottle#:	23	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-051				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.42	94.20
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.67
$ 6 Toluene-d8 (Surr)	10.0	8.63	86.28
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.70	77.00

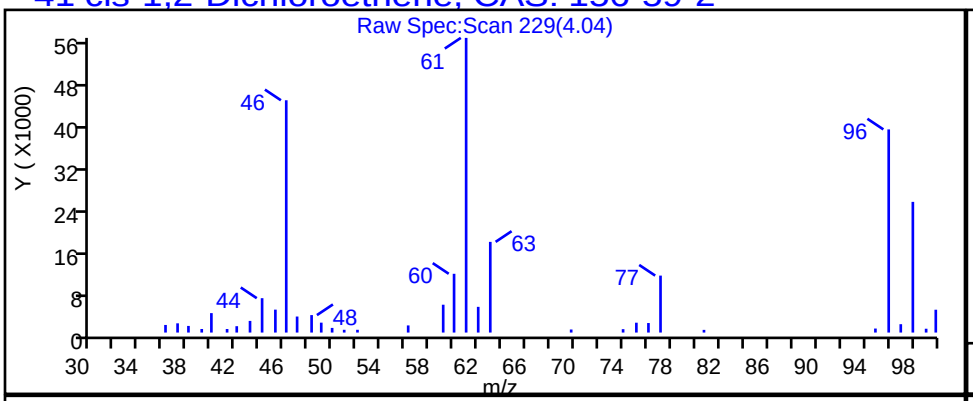
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

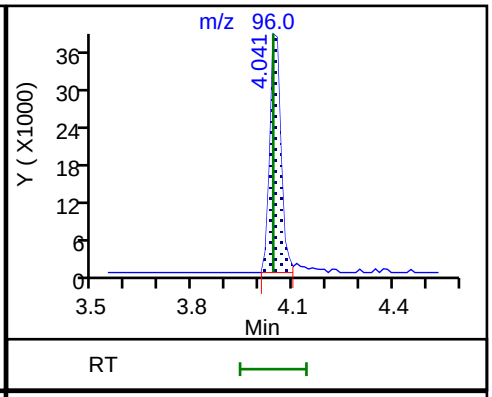
Eurofins TestAmerica, Canton

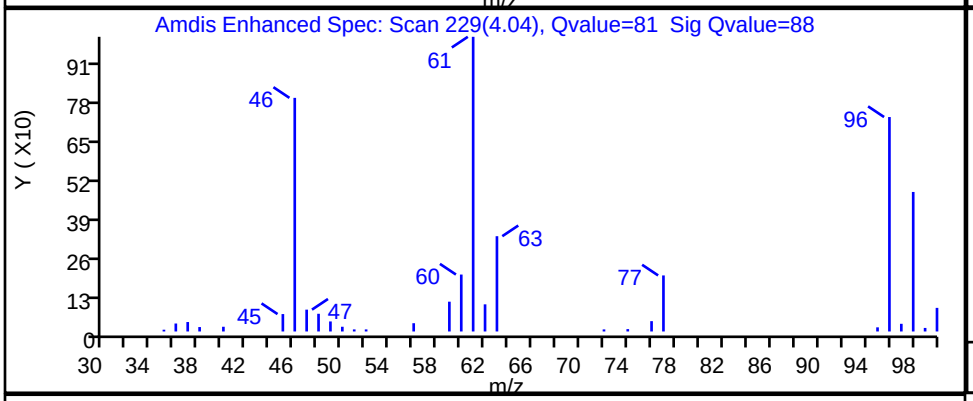
Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1311.D

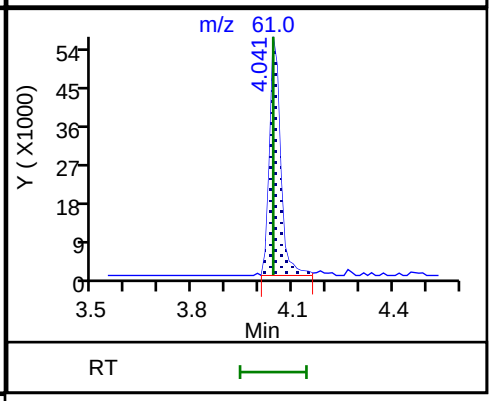
Injection Date:	03-Dec-2021 19:40:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-12	Lab Sample ID:	240-160744-12		
Client ID:	SL-12_112321				
Operator ID:	43582	ALS Bottle#:	23	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

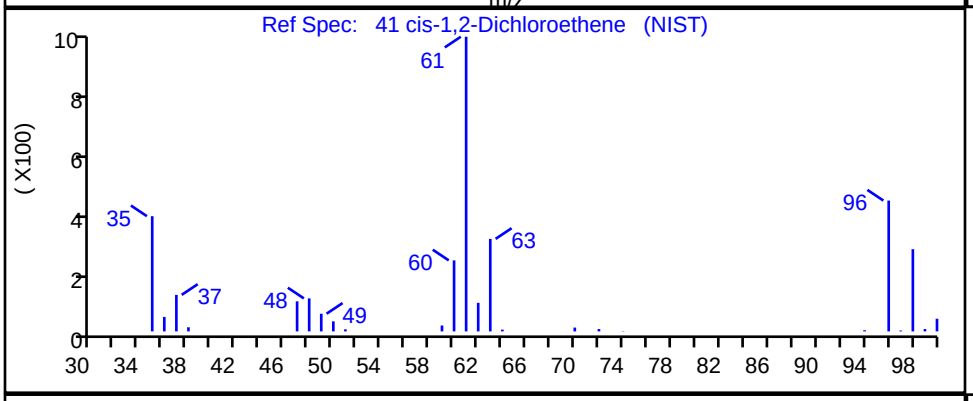
41 cis-1,2-Dichloroethene, CAS: 156-59-2

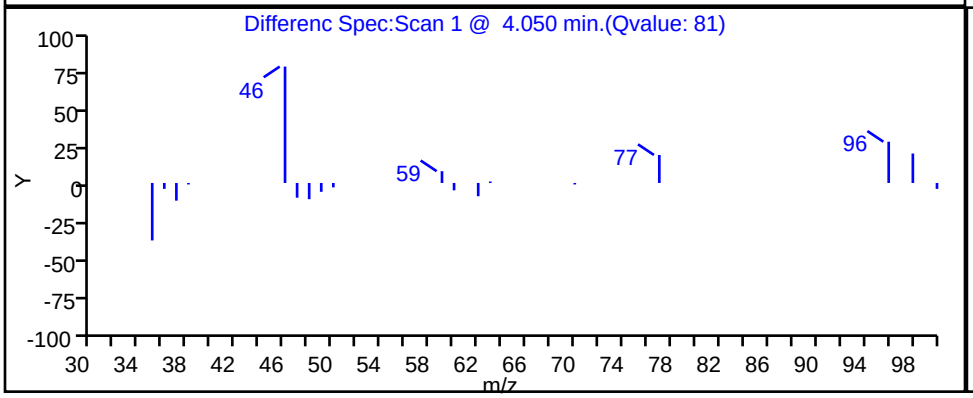


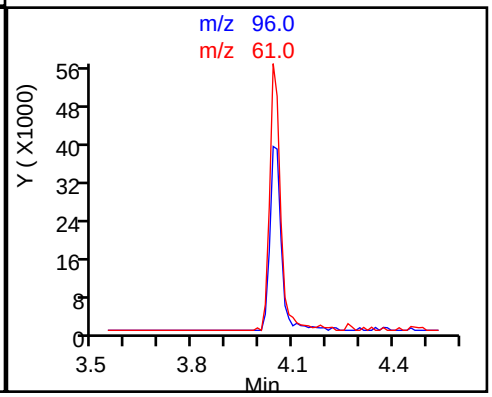












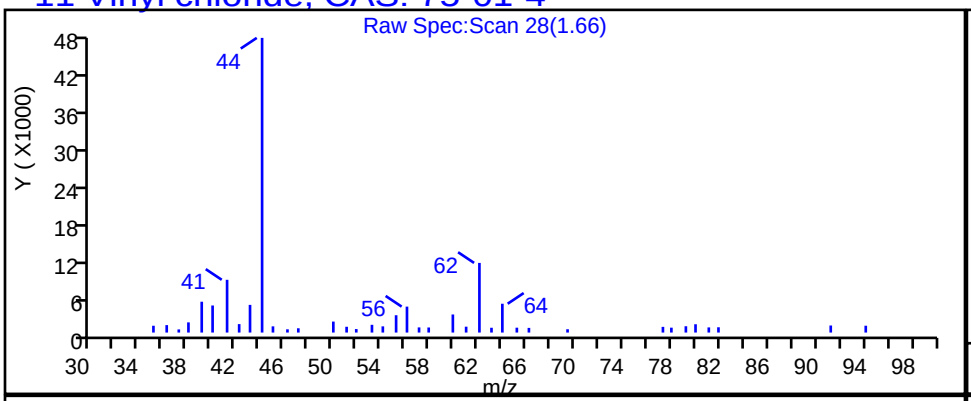
Report Date: 06-Dec-2021 12:55:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

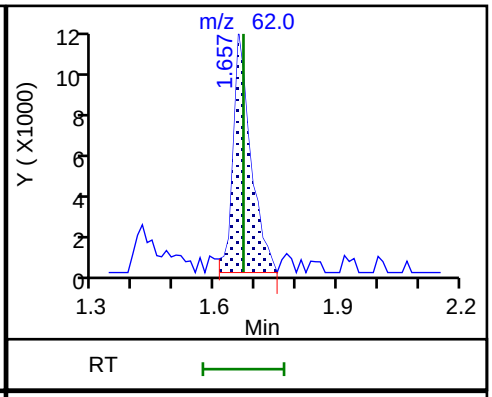
Eurofins TestAmerica, Canton

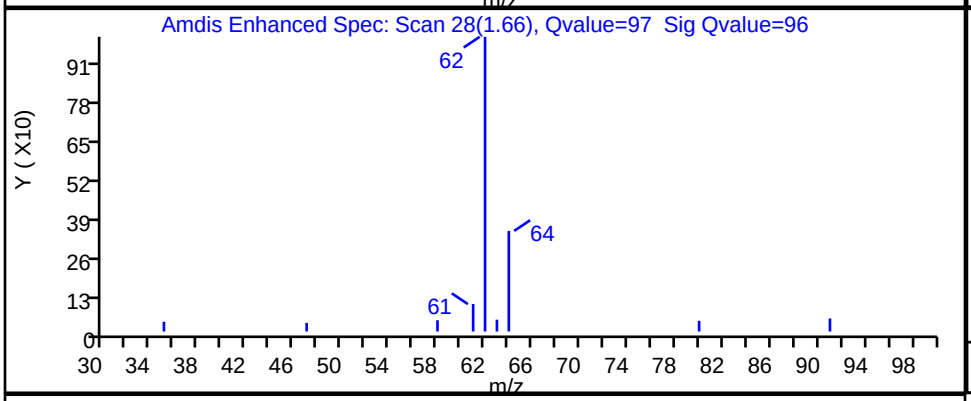
Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1311.D

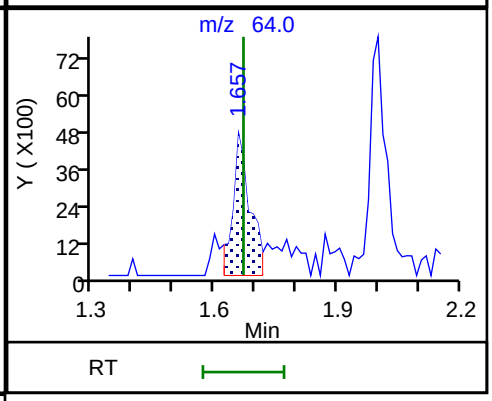
Injection Date:	03-Dec-2021 19:40:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-12	Lab Sample ID:	240-160744-12		
Client ID:	SL-12_112321				
Operator ID:	43582	ALS Bottle#:	23	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

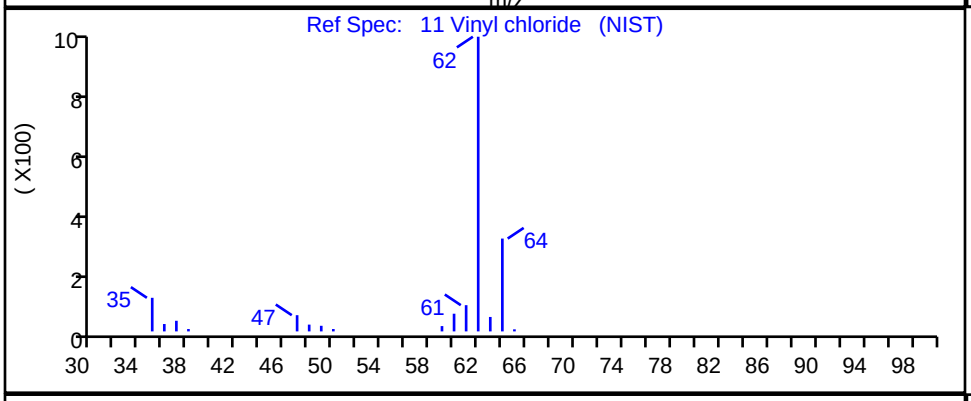
11 Vinyl chloride, CAS: 75-01-4

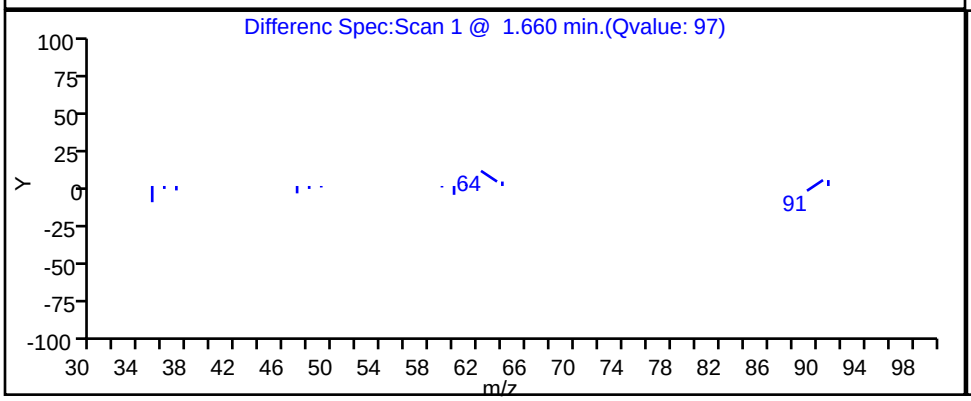


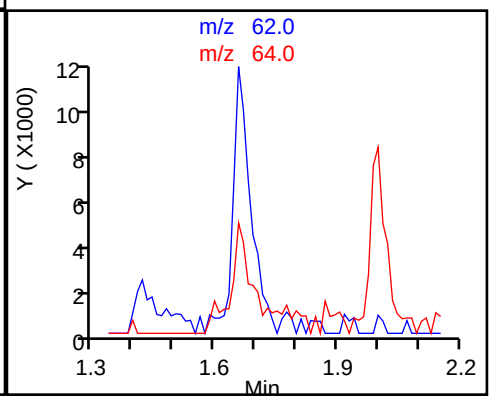












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: MH-1231_112421 Lab Sample ID: 240-160744-13

Matrix: Water Lab File ID: UXC1312.D

Analysis Method: 8260B Date Collected: 11/24/2021 08:55

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.9		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.89	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	86		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1312.D
Lims ID: 240-160744-B-13
Client ID: MH-1231_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 20:01:30 ALS Bottle#: 24 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-052
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1525274	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1016221	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	539204	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	333831	9.36	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	413725	10.3	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1067087	8.57	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	90	338128	8.03	
11 Vinyl chloride	62	1.669	1.669	0.000	96	39786	0.8884	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	7
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	80	182621	3.93	
60 Trichloroethene	130	5.309	5.298	0.011	87	7987	0.1776	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

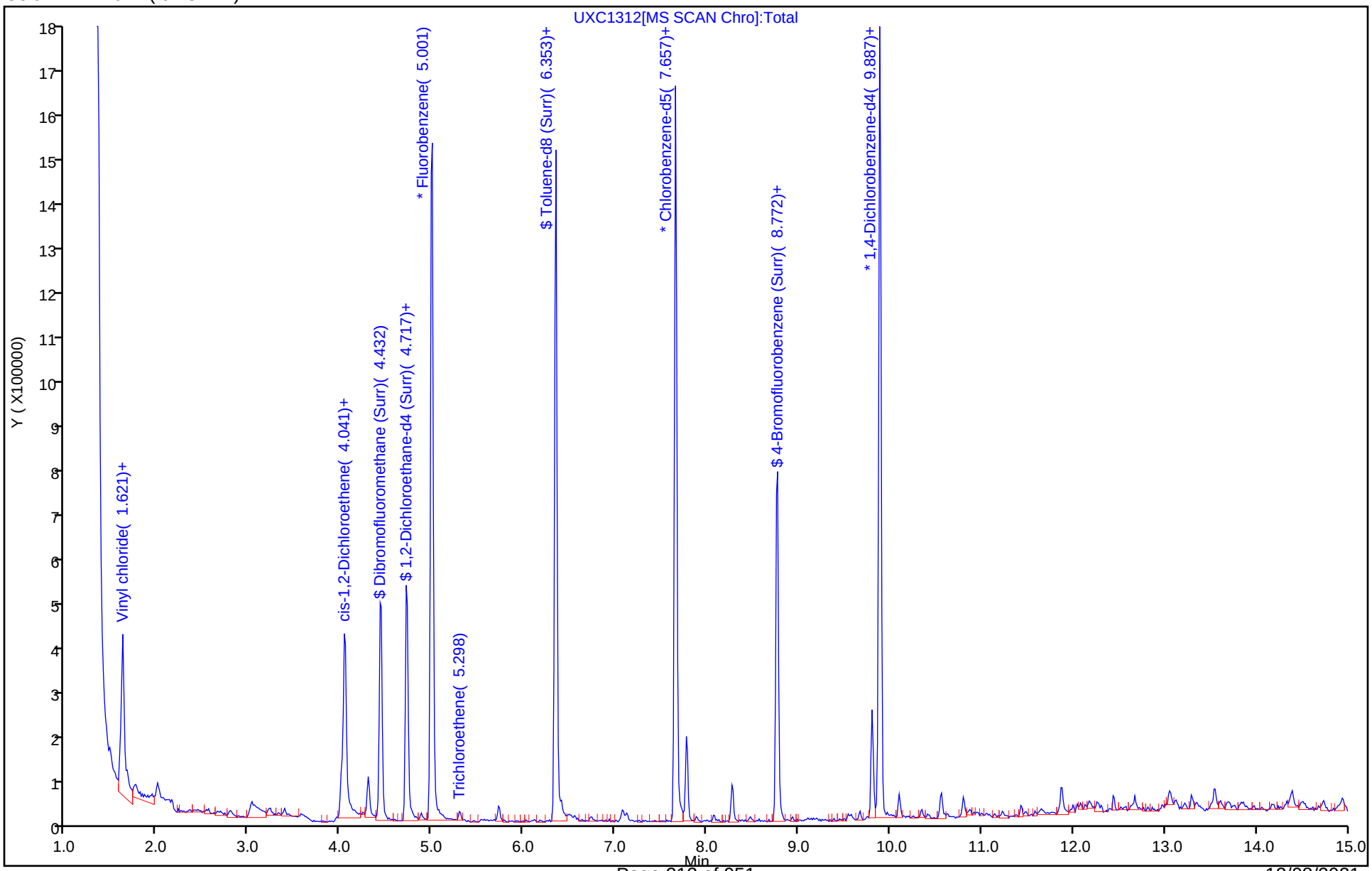
Report Date: 06-Dec-2021 12:55:58 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1312.D

Injection Date:	03-Dec-2021 20:01:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-13	Lab Sample ID:	240-160744-13	Worklist Smp#:	52
Client ID:	MH-1231_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1312.D				
Lims ID:	240-160744-B-13				
Client ID:	MH-1231_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 20:01:30	ALS Bottle#:	24	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-052				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

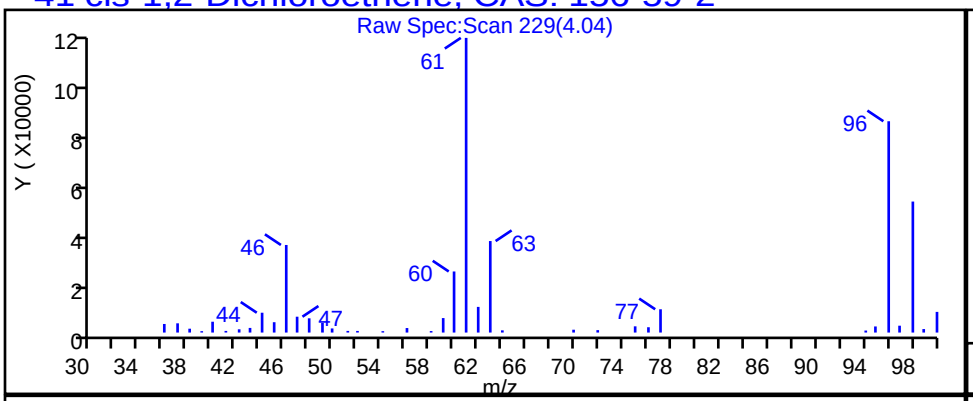
First Level Reviewer: evansle Date: 06-Dec-2021 12:51:30

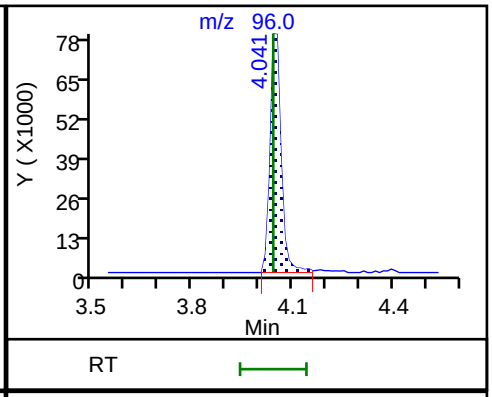
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.36	93.64
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.01
$ 6 Toluene-d8 (Surr)	10.0	8.57	85.68
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.03	80.27

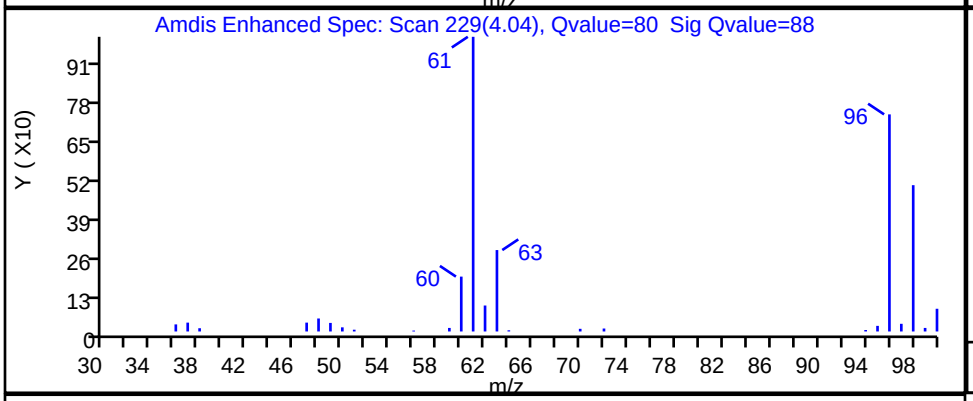
Eurofins TestAmerica, Canton

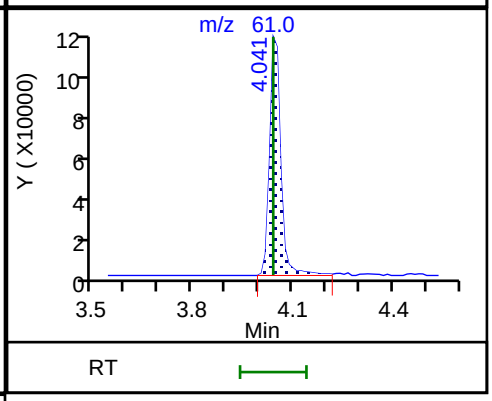
Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1312.D		
Injection Date:	03-Dec-2021 20:01:30	Instrument ID:	A3UX15
Lims ID:	240-160744-B-13	Lab Sample ID:	240-160744-13
Client ID:	MH-1231_112421		
Operator ID:	43582	ALS Bottle#:	24 Worklist Smp#: 52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_15	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

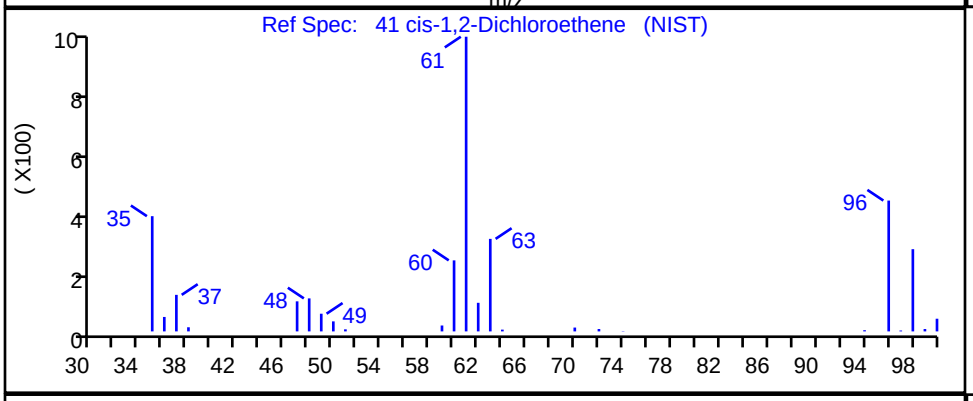
41 cis-1,2-Dichloroethene, CAS: 156-59-2

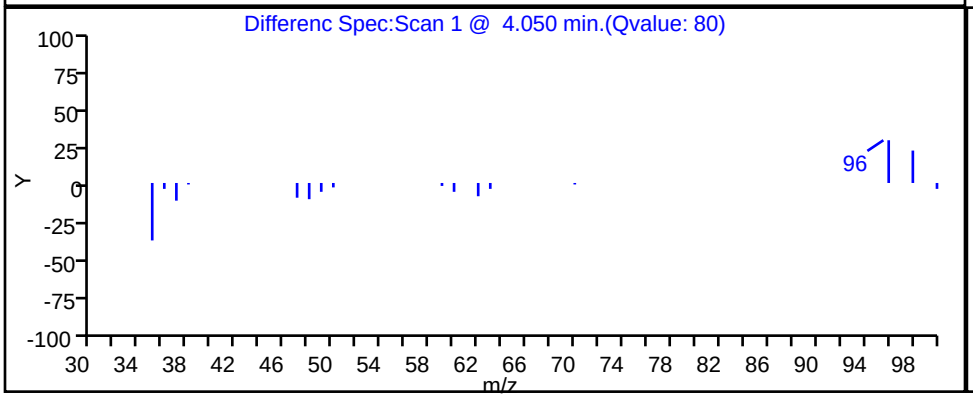


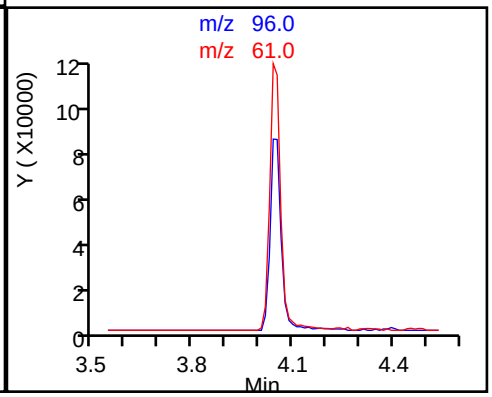








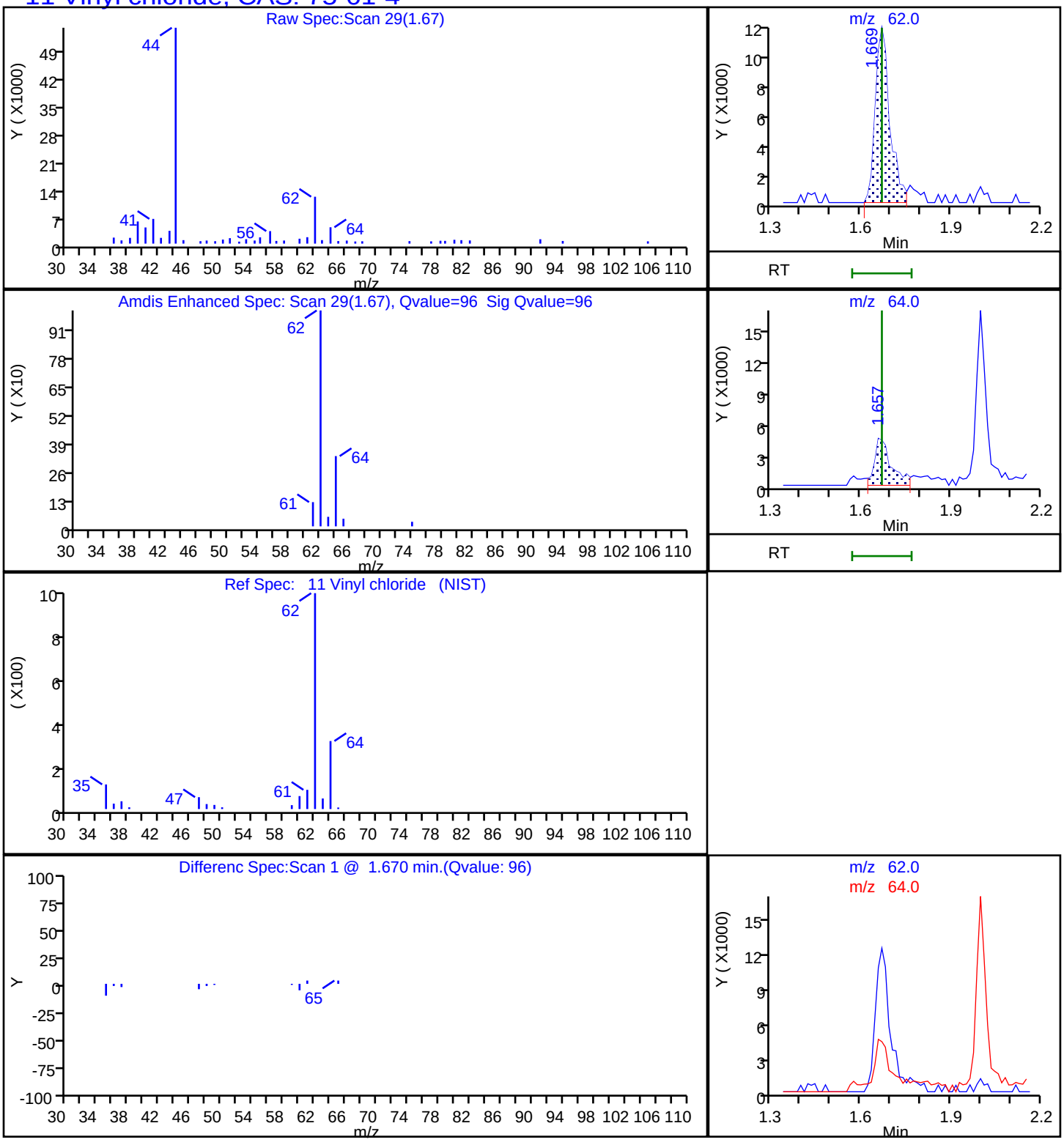




Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1312.D				
Injection Date:	03-Dec-2021 20:01:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-13	Lab Sample ID:	240-160744-13		
Client ID:	MH-1231_112421				
Operator ID:	43582	ALS Bottle#:	24	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-2_112421 Lab Sample ID: 240-160744-14

Matrix: Water Lab File ID: UXC1313.D

Analysis Method: 8260B Date Collected: 11/24/2021 09:40

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	84		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1313.D
Lims ID: 240-160744-B-14
Client ID: SL-2_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 20:23:30 ALS Bottle#: 25 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-053
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:39

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.001	5.001	0.000	99	1546913	10.0	
*	2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1281492	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	98	653907	10.0	
$	4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	338804	9.37	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	438512	10.8	
$	6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1311791	8.35	
$	7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	87	479628	9.03	
	11 Vinyl chloride	62	1.669	1.669	0.000	98	126235	2.78	
	19 1,1-Dichloroethene	96		2.606				ND	
	32 trans-1,2-Dichloroethene	96		3.222				ND	7
	41 cis-1,2-Dichloroethene	96	4.053	4.041	0.011	83	245497	5.21	
	60 Trichloroethene	130	5.298	5.298	0.000	88	4752	0.1042	
	76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

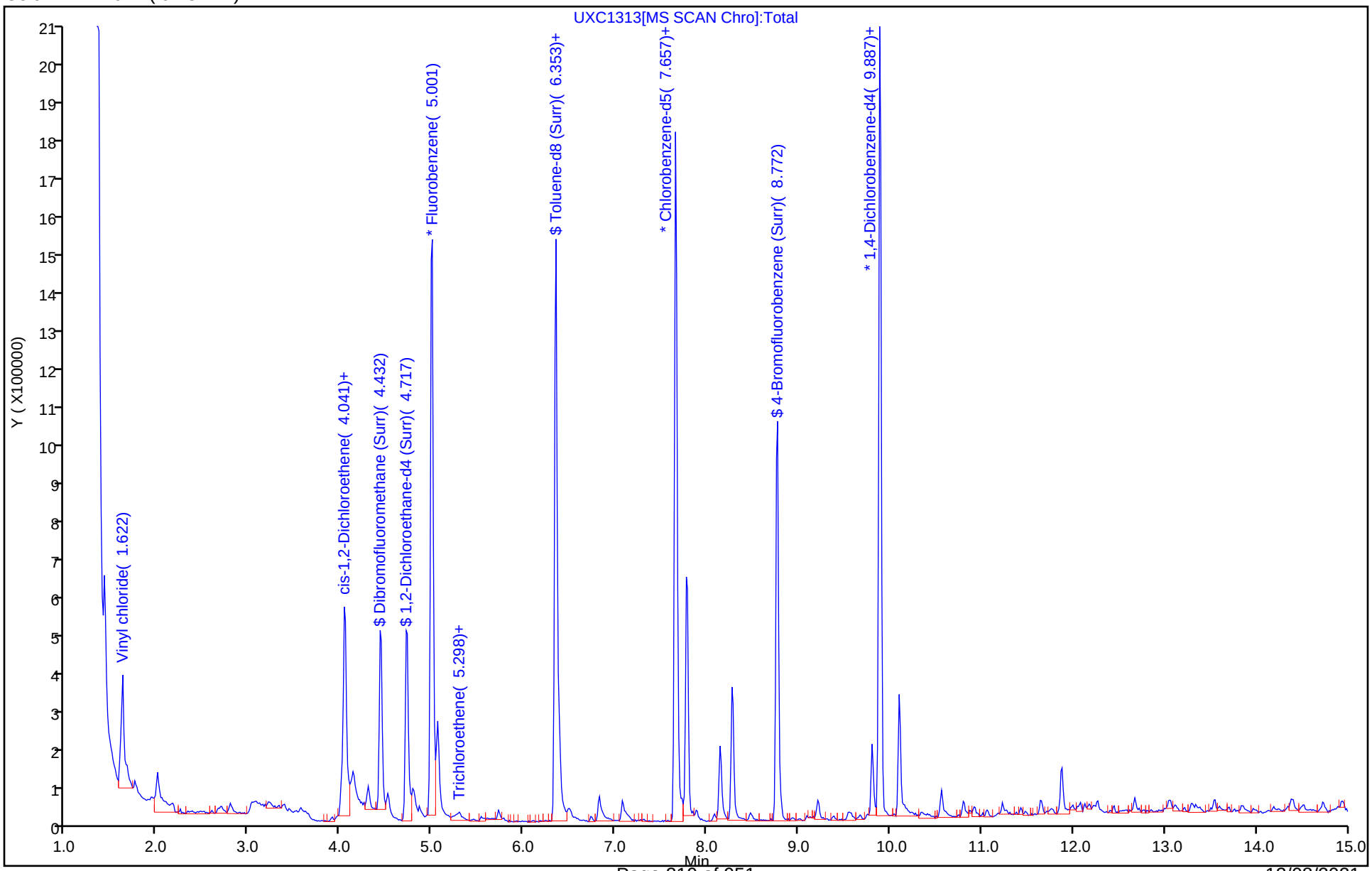
Report Date: 06-Dec-2021 12:55:59 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1313.D

Injection Date:	03-Dec-2021 20:23:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-14	Lab Sample ID:	240-160744-14	Worklist Smp#:	53
Client ID:	SL-2_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1313.D
Lims ID: 240-160744-B-14
Client ID: SL-2_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 20:23:30 ALS Bottle#: 25 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-053
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.37	93.70
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.66
$ 6 Toluene-d8 (Surr)	10.0	8.35	83.53
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.03	90.29

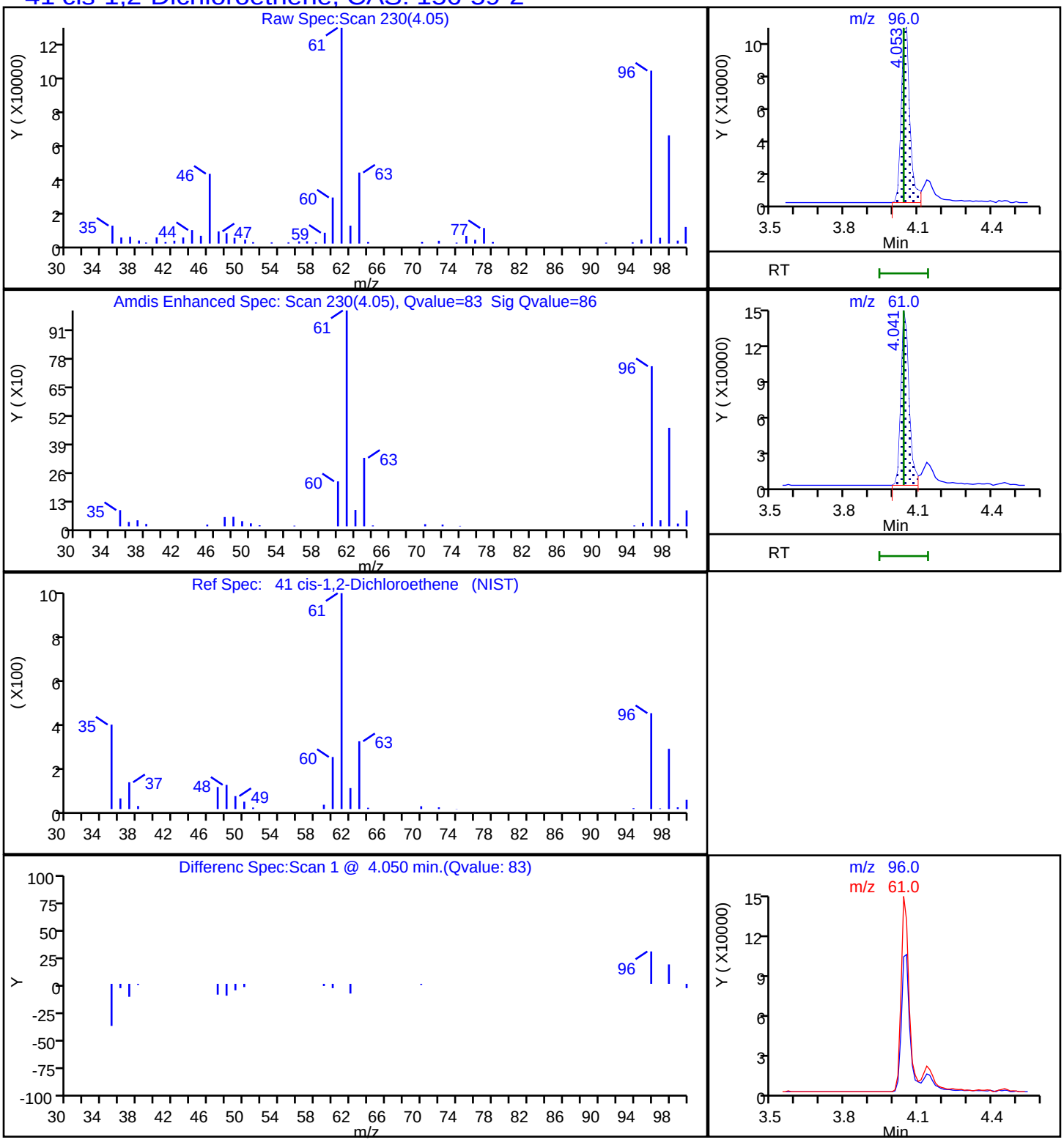
Report Date: 06-Dec-2021 12:55:59 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1313.D

Injection Date:	03-Dec-2021 20:23:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-14	Lab Sample ID:	240-160744-14		
Client ID:	SL-2_112421				
Operator ID:	43582	ALS Bottle#:	25	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



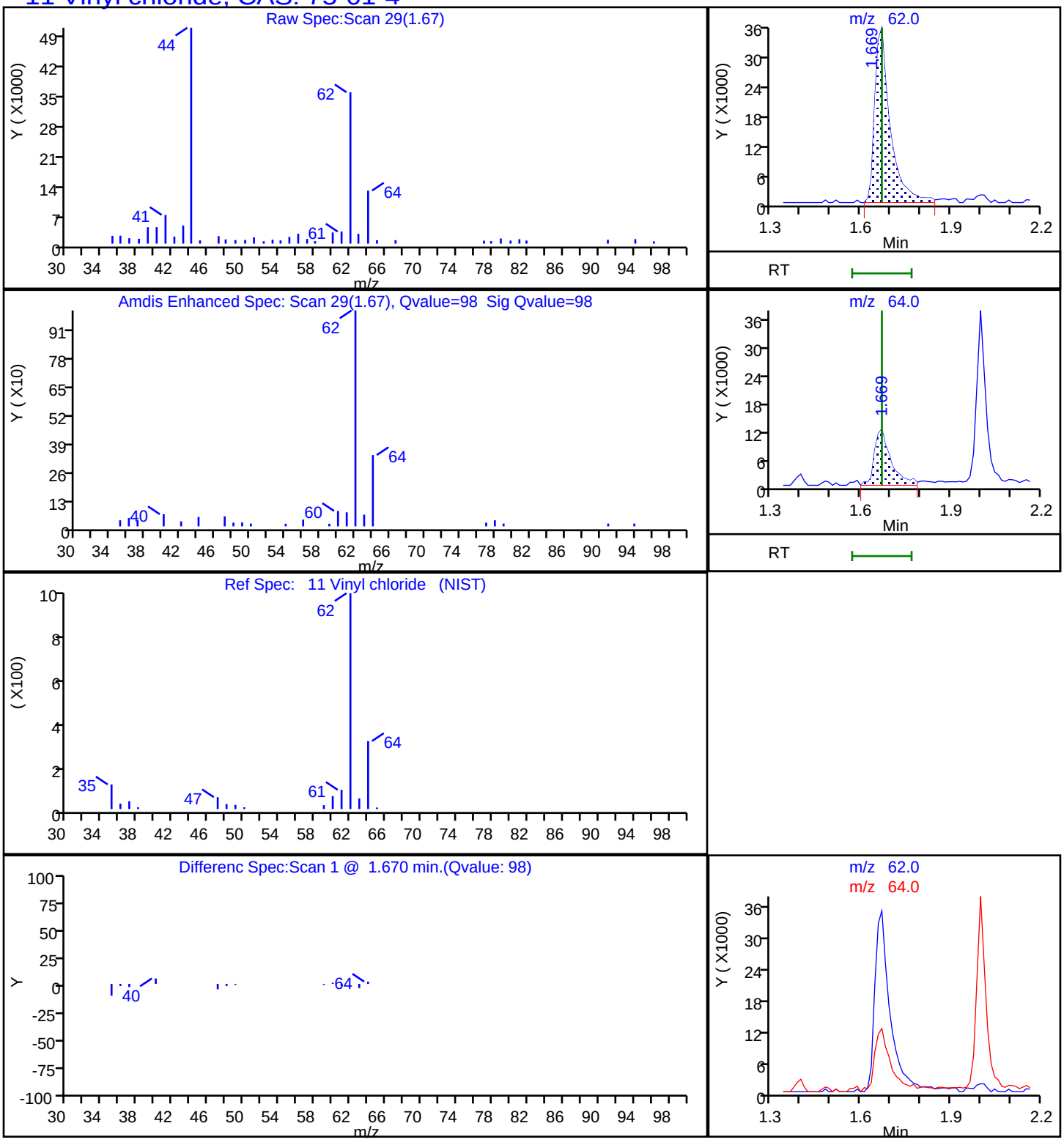
Report Date: 06-Dec-2021 12:55:59 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1313.D

Injection Date:	03-Dec-2021 20:23:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-14	Lab Sample ID:	240-160744-14		
Client ID:	SL-2_112421				
Operator ID:	43582	ALS Bottle#:	25	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-3_112421 Lab Sample ID: 240-160744-15

Matrix: Water Lab File ID: UXC1314.D

Analysis Method: 8260B Date Collected: 11/24/2021 10:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.4		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	87		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1314.D				
Lims ID:	240-160744-B-15				
Client ID:	SL-3_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 20:45:30	ALS Bottle#:	26	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-054				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				
First Level Reviewer: evansle		Date:	06-Dec-2021 12:51:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1614566	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1063394	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	98	546259	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	92	339198	8.99	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	99	450392	10.6	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1129452	8.67	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	86	379476	8.61	
11 Vinyl chloride	62	1.669	1.669	0.000	97	107753	2.27	
19 1,1-Dichloroethene	96		2.606				ND	
32 trans-1,2-Dichloroethene	96		3.222				ND	
41 cis-1,2-Dichloroethene	96	4.052	4.041	0.011	81	214864	4.37	
60 Trichloroethene	130	5.298	5.298	0.000	95	10410	0.2187	
76 Tetrachloroethene	164		6.899				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

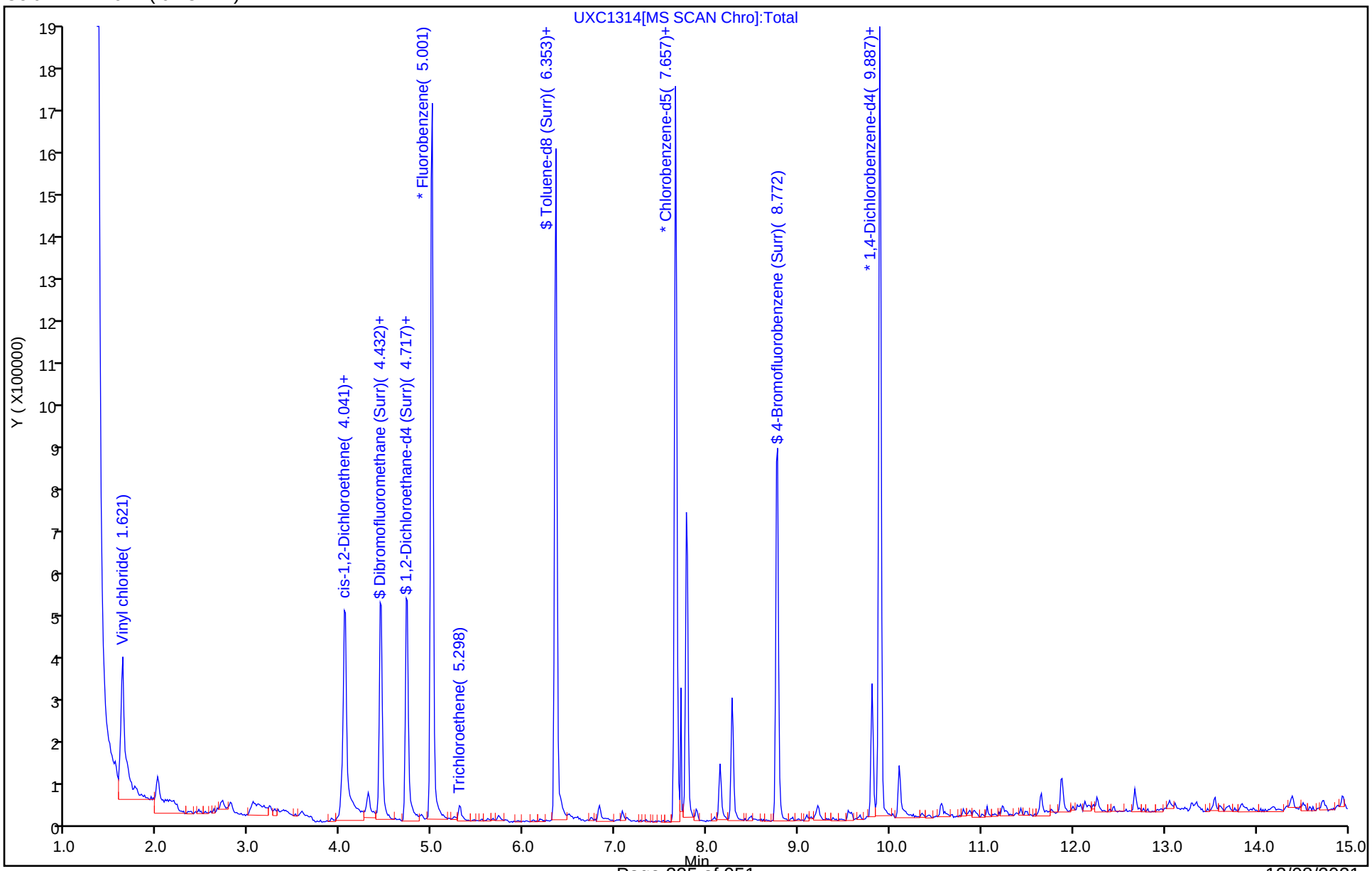
Report Date: 06-Dec-2021 12:56:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1314.D

Injection Date:	03-Dec-2021 20:45:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-B-15	Lab Sample ID:	240-160744-15	Worklist Smp#:	54
Client ID:	SL-3_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1314.D				
Lims ID:	240-160744-B-15				
Client ID:	SL-3_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 20:45:30	ALS Bottle#:	26	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115737-054				
Misc. Info.:	C211203A,8260LLUX15,,43582				
Operator ID:	43582	Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:21	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 12:51:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.99	89.88
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.94
$ 6 Toluene-d8 (Surr)	10.0	8.67	86.67
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.61	86.08

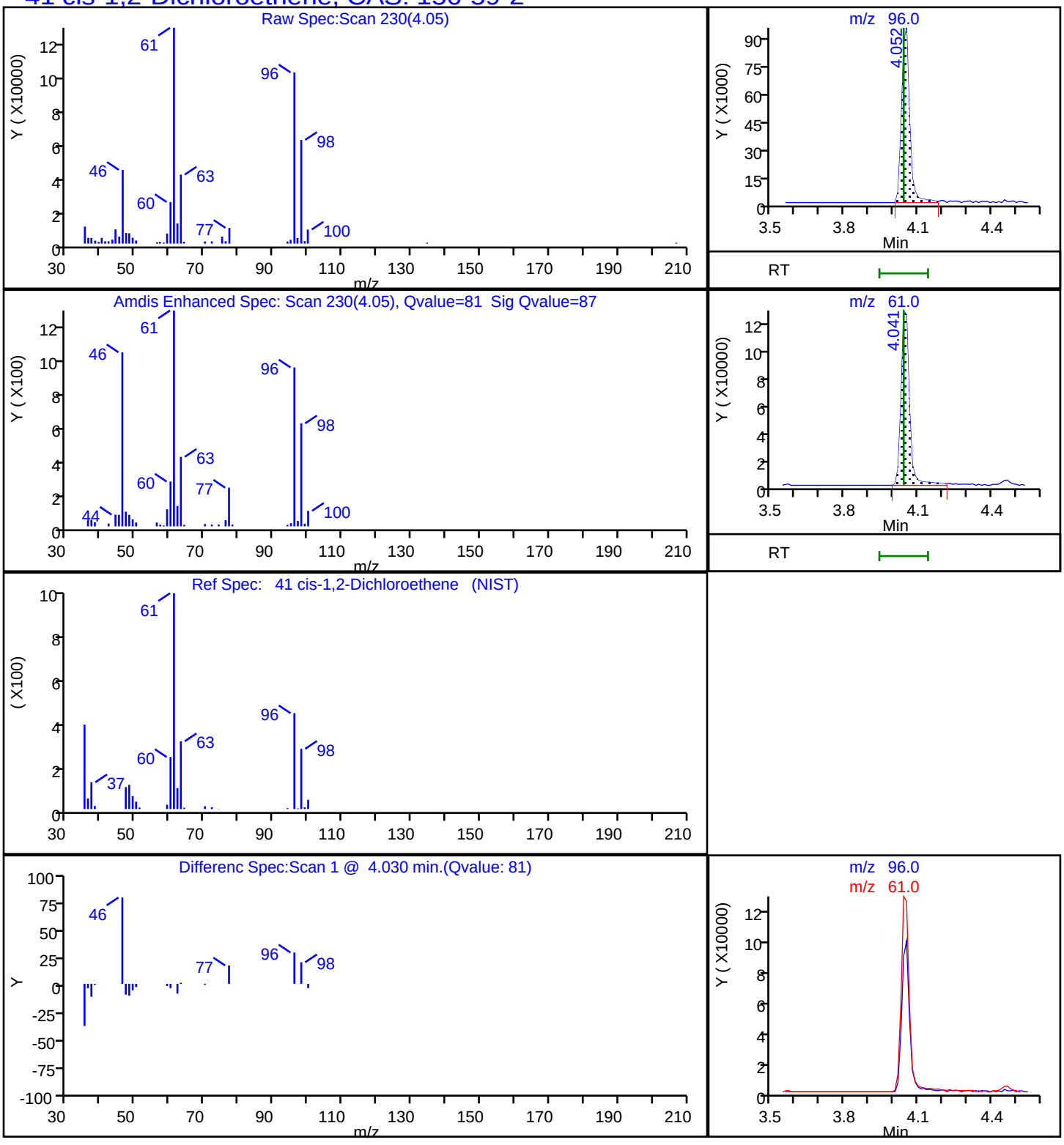
Report Date: 06-Dec-2021 12:56:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1314.D

Injection Date:	03-Dec-2021 20:45:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-15	Lab Sample ID:	240-160744-15		
Client ID:	SL-3_112421				
Operator ID:	43582	ALS Bottle#:	26	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



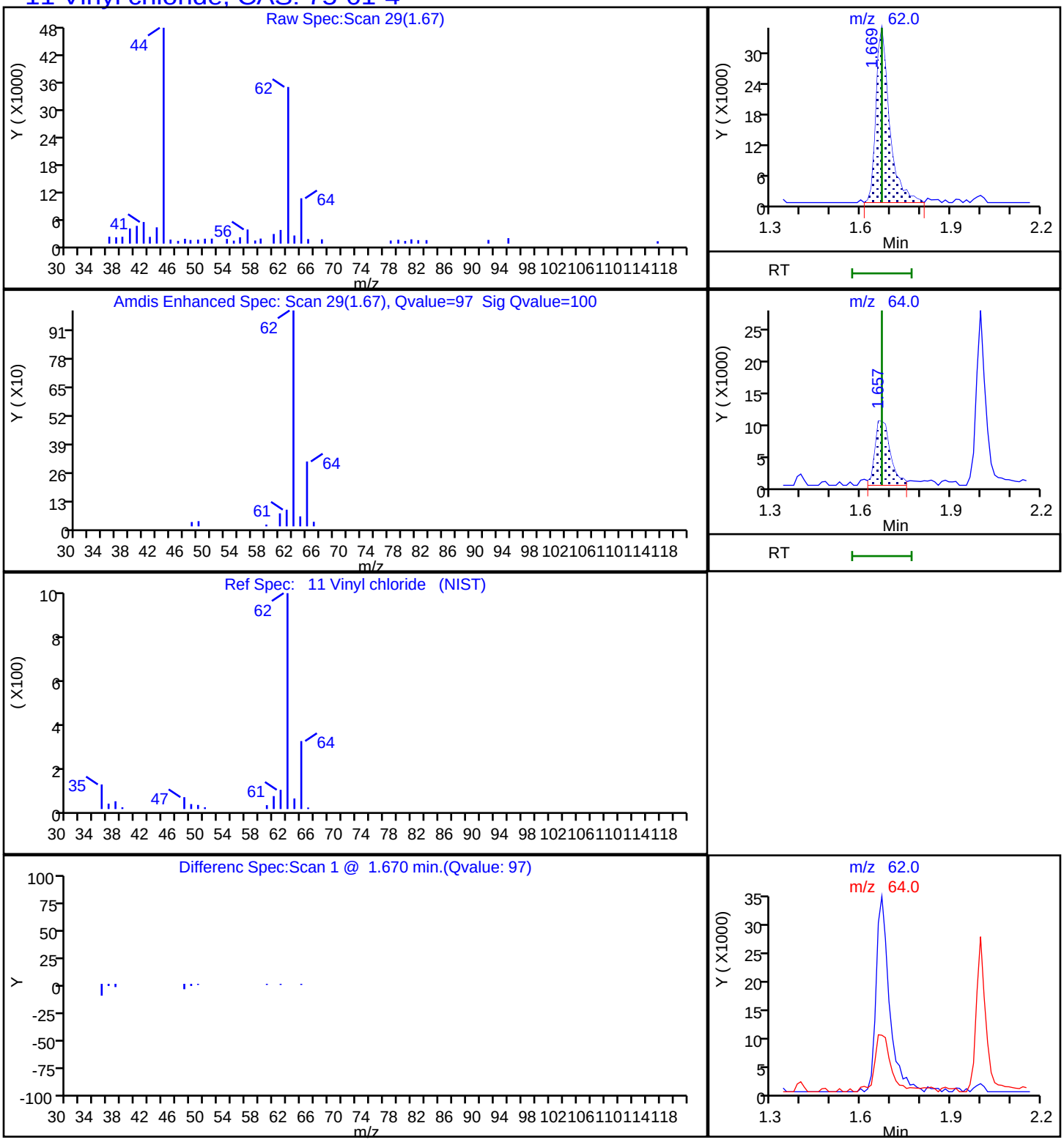
Report Date: 06-Dec-2021 12:56:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1314.D

Injection Date:	03-Dec-2021 20:45:30	Instrument ID:	A3UX15		
Lims ID:	240-160744-B-15	Lab Sample ID:	240-160744-15		
Client ID:	SL-3_112421				
Operator ID:	43582	ALS Bottle#:	26	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_15	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-4_112421 Lab Sample ID: 240-160744-16

Matrix: Water Lab File ID: UXJ2936.D

Analysis Method: 8260B Date Collected: 11/24/2021 12:10

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 17:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2936.D
Lims ID: 240-160744-E-16
Client ID: SL-4_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 17:10:30 ALS Bottle#: 18 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-044
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1814976	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1028288	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	520205	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	422750	18.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	542768	20.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1579651	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	411018	16.0	
14 Vinyl chloride	62	1.364	1.364	0.000	97	65875	2.92	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	105994	4.02	
60 Trichloroethene	130	4.984	4.985	-0.001	90	3428	0.1210	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

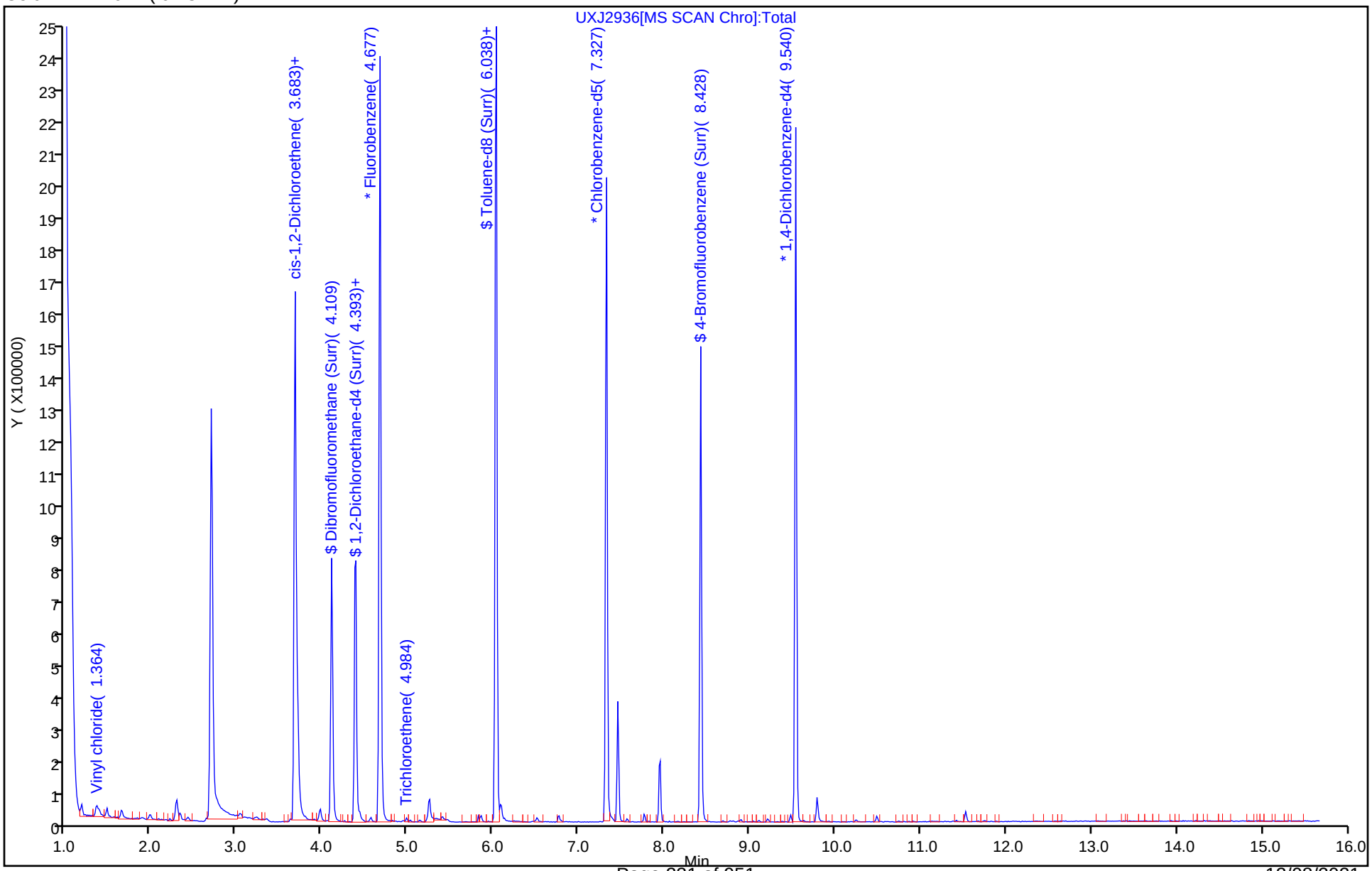
Report Date: 06-Dec-2021 07:54:43 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2936.D

Injection Date:	03-Dec-2021 17:10:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-16	Lab Sample ID:	240-160744-16	Worklist Smp#:	44
Client ID:	SL-4_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2936.D				
Lims ID:	240-160744-E-16				
Client ID:	SL-4_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 17:10:30	ALS Bottle#:	18	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-044				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.42
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.47
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.99
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.0	80.20

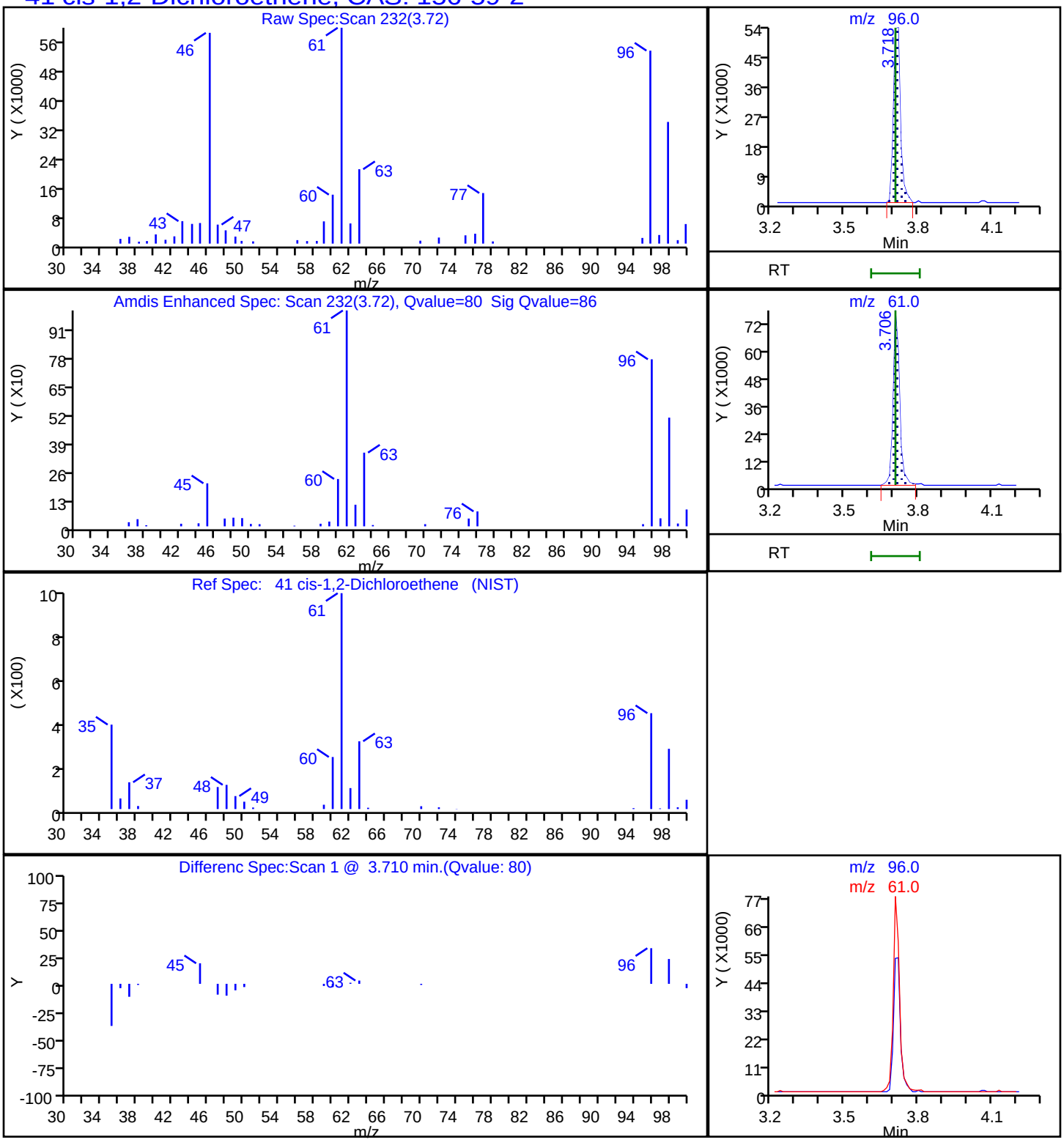
Report Date: 06-Dec-2021 07:54:43 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2936.D

Injection Date:	03-Dec-2021 17:10:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-16	Lab Sample ID:	240-160744-16		
Client ID:	SL-4_112421				
Operator ID:	043582	ALS Bottle#:	18	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

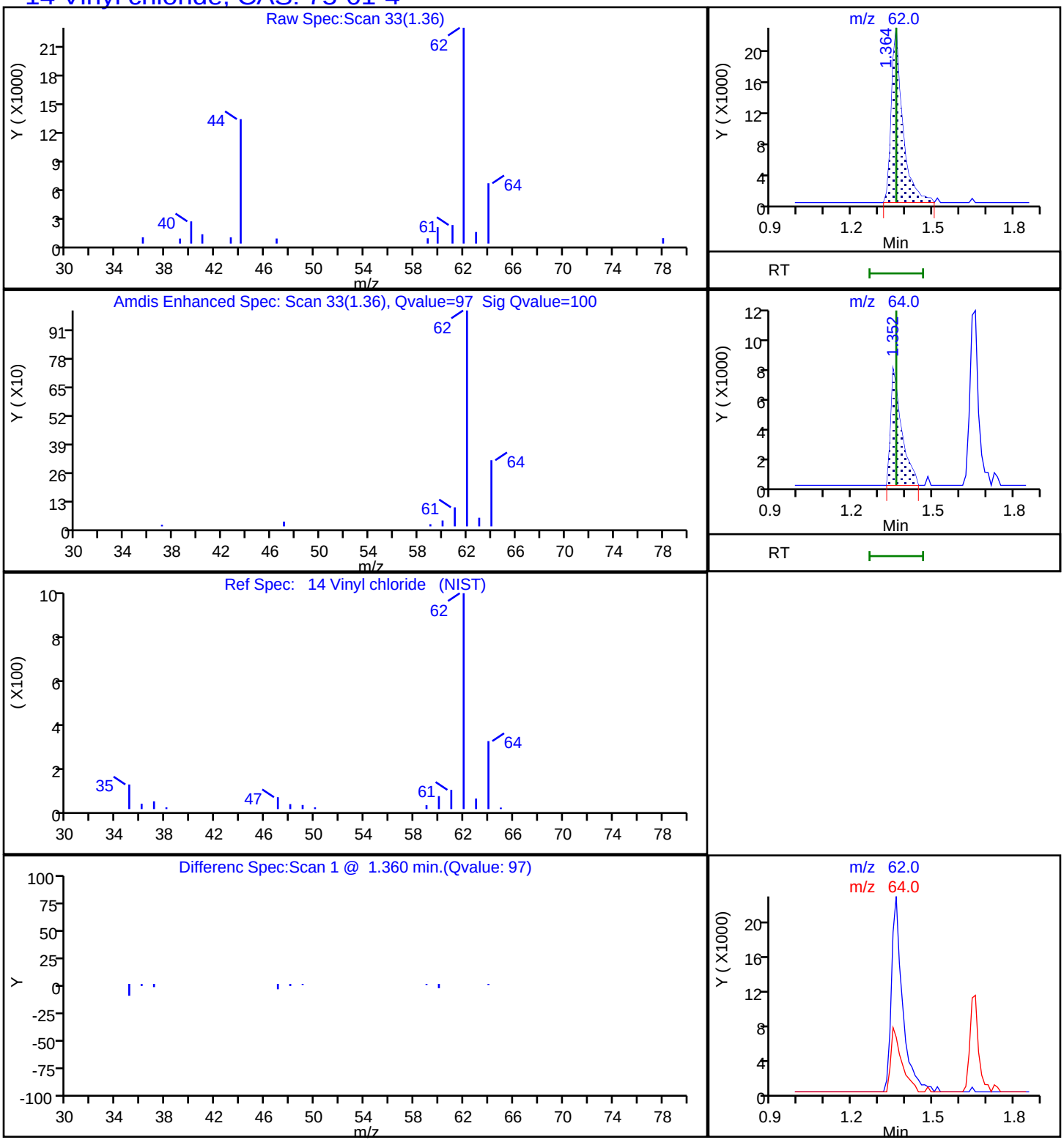


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2936.D

Injection Date:	03-Dec-2021 17:10:30	Instrument ID:	A3UX11
Lims ID:	240-160744-E-16	Lab Sample ID:	240-160744-16
Client ID:	SL-4_112421		
Operator ID:	043582	ALS Bottle#:	18 Worklist Smp#: 44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-19_112321 Lab Sample ID: 240-160744-17

Matrix: Water Lab File ID: UXJ2937.D

Analysis Method: 8260B Date Collected: 11/23/2021 15:20

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	75		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2937.D
Lims ID: 240-160744-E-17
Client ID: SL-19_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 17:32:30 ALS Bottle#: 19 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-045
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1871192	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	999394	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	505969	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	453659	19.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	572829	21.2	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1609134	22.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	375755	15.1	
14 Vinyl chloride	62		1.364				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.707				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added: 2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added: 0.00	Units:	Run Reagent

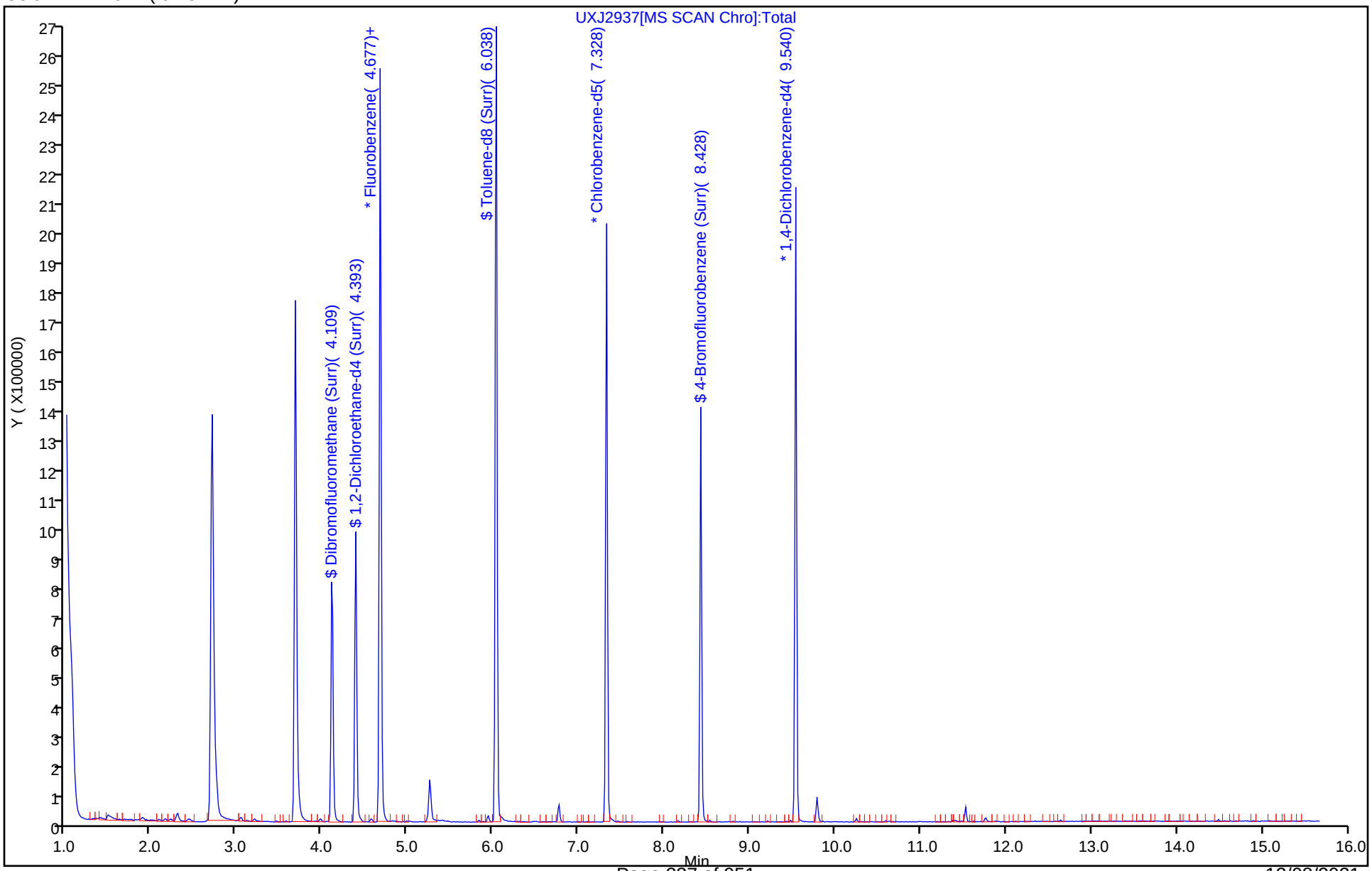
Report Date: 06-Dec-2021 07:54:44 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2937.D

Injection Date:	03-Dec-2021 17:32:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-17	Lab Sample ID:	240-160744-17	Worklist Smp#:	45
Client ID:	SL-19_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2937.D
Lims ID: 240-160744-E-17
Client ID: SL-19_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 17:32:30 ALS Bottle#: 19 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-045
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.0	95.16
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	105.92
$ 6 Toluene-d8 (Surr)	20.0	22.6	113.19
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.1	75.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-22_112321 Lab Sample ID: 240-160744-18

Matrix: Water Lab File ID: UXJ2938.D

Analysis Method: 8260B Date Collected: 11/23/2021 15:40

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 17:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2938.D				
Lims ID:	240-160744-E-18				
Client ID:	SL-22_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 17:54:30	ALS Bottle#:	20	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-046				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1739025	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	976296	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	498980	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	414725	18.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	99	527034	21.0	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1532356	22.1	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	379930	15.6	
	14 Vinyl chloride	62		1.364				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

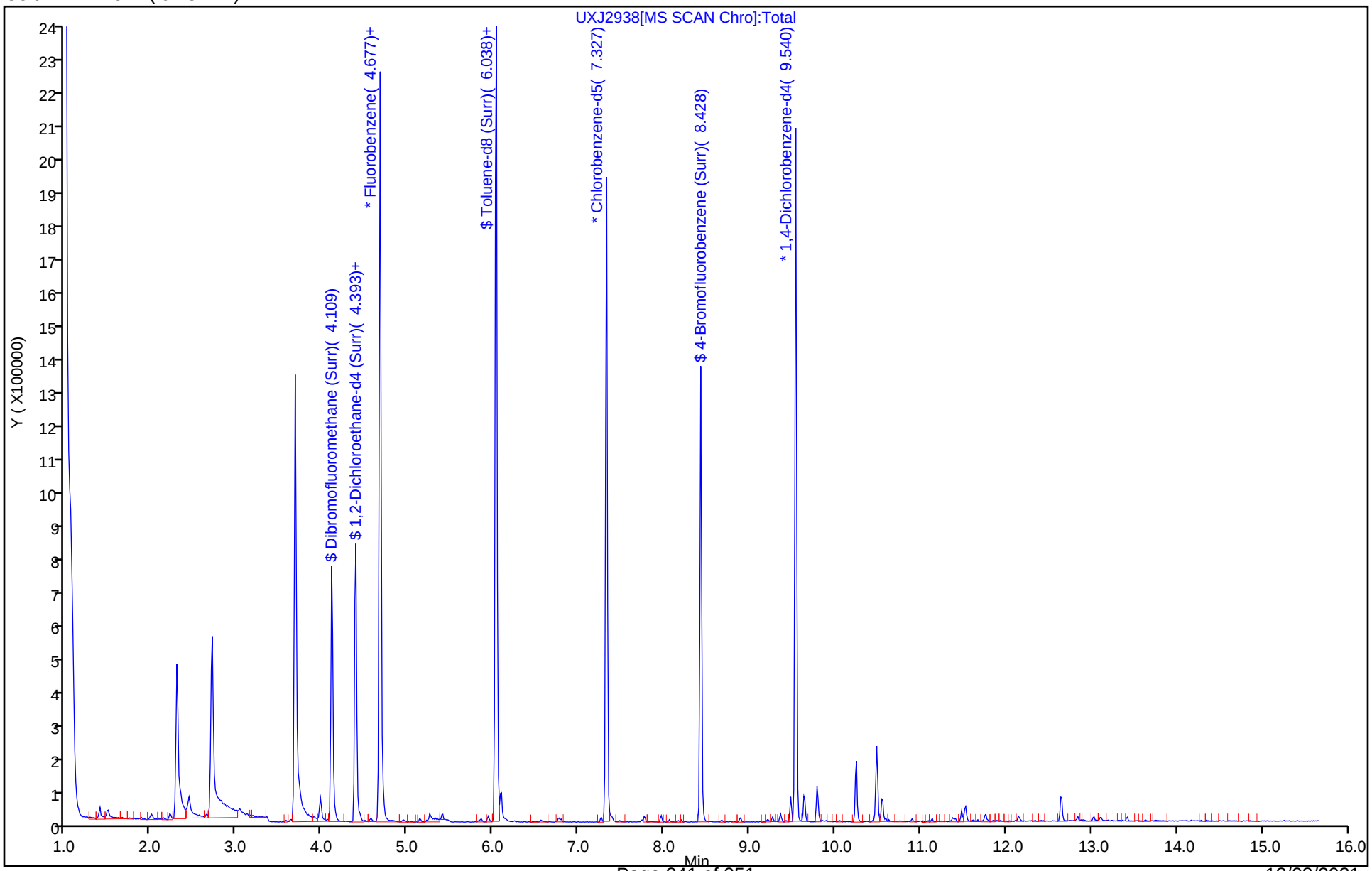
Report Date: 06-Dec-2021 07:54:44 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2938.D

Injection Date:	03-Dec-2021 17:54:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-18	Lab Sample ID:	240-160744-18	Worklist Smp#:	46
Client ID:	SL-22_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2938.D				
Lims ID:	240-160744-E-18				
Client ID:	SL-22_112321				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 17:54:30	ALS Bottle#:	20	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-046				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.60
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.0	104.86
$ 6 Toluene-d8 (Surr)	20.0	22.1	110.33
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.6	78.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-20_112321 Lab Sample ID: 240-160744-19

Matrix: Water Lab File ID: UXJ2939.D

Analysis Method: 8260B Date Collected: 11/23/2021 16:10

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 18:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.68	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2939.D
Lims ID: 240-160744-E-19
Client ID: SL-20_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 18:16:30 ALS Bottle#: 21 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-047
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1853349	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1029713	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	569933	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	96	432356	18.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	558176	20.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1586108	21.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	401729	15.7	
14 Vinyl chloride	62	1.376	1.364	0.012	93	15695	0.6818	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	83	37113	1.38	
60 Trichloroethene	130		4.985				ND	7
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

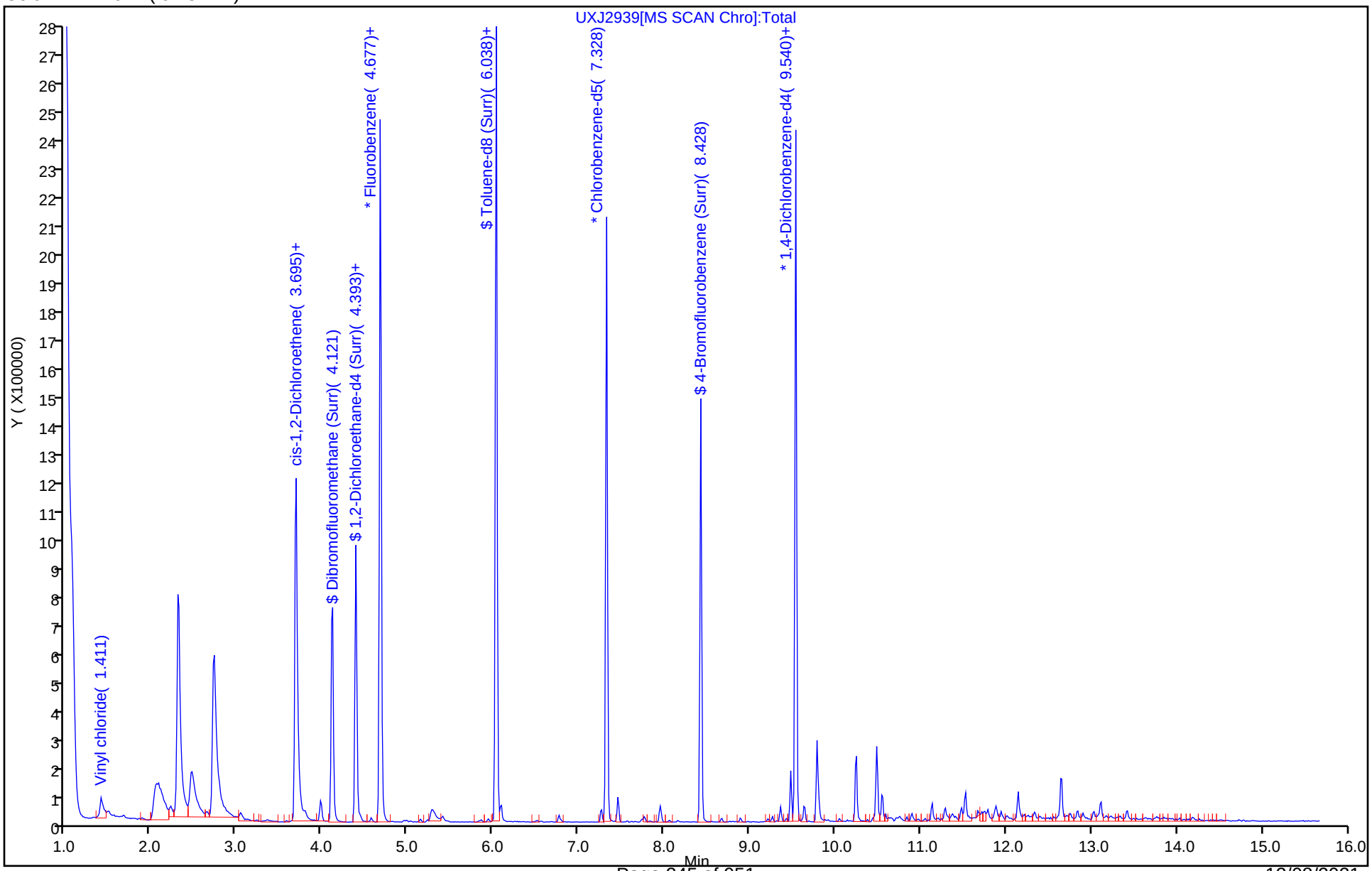
Report Date: 06-Dec-2021 07:54:45 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2939.D

Injection Date:	03-Dec-2021 18:16:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-19	Lab Sample ID:	240-160744-19	Worklist Smp#:	47
Client ID:	SL-20_112321				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2939.D
Lims ID: 240-160744-E-19
Client ID: SL-20_112321
Sample Type: Client
Inject. Date: 03-Dec-2021 18:16:30 ALS Bottle#: 21 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-047
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

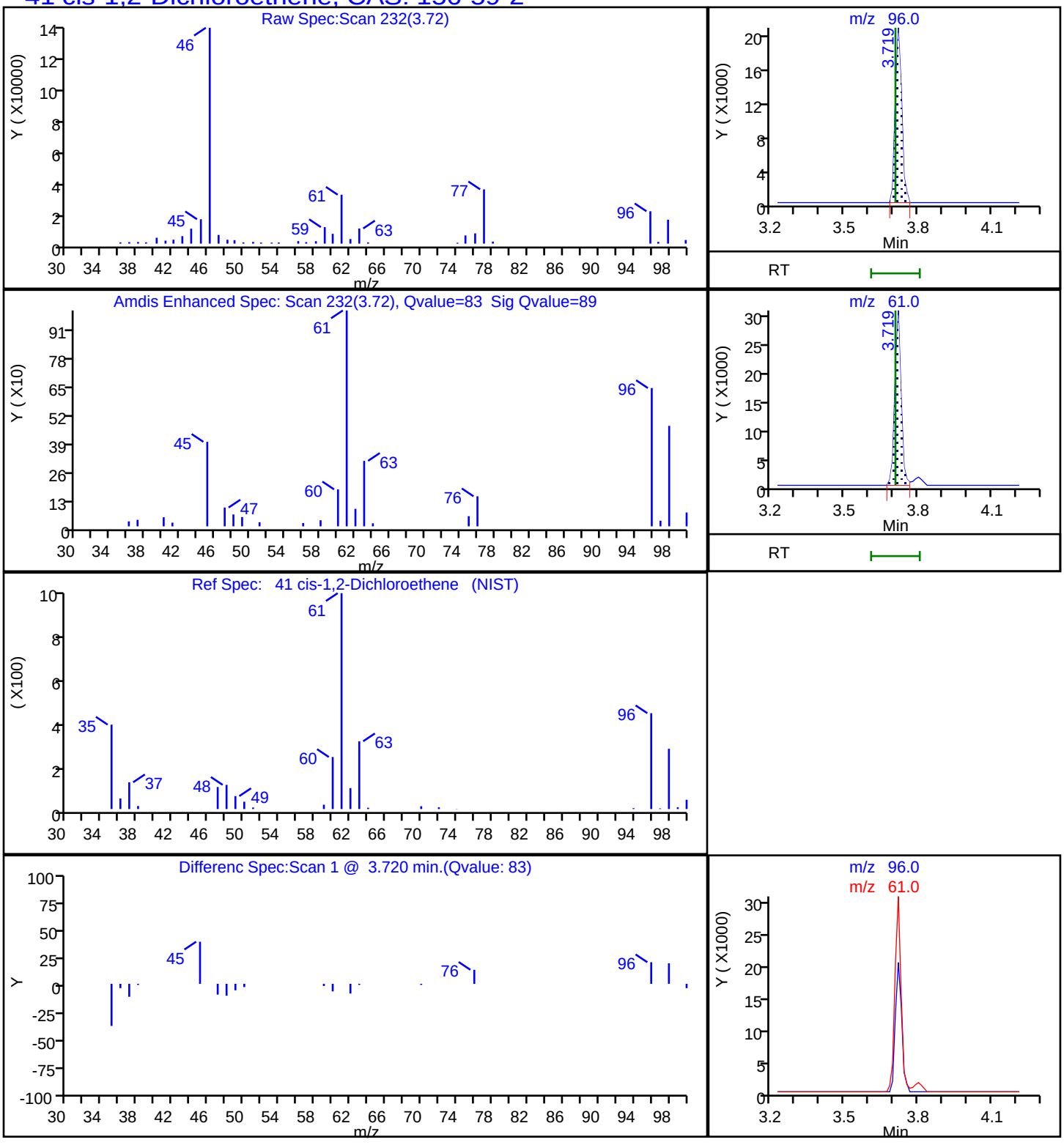
First Level Reviewer: evansle Date: 06-Dec-2021 07:51:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.56
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	104.20
$ 6 Toluene-d8 (Surr)	20.0	21.7	108.28
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.7	78.28

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2939.D				
Injection Date:	03-Dec-2021 18:16:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-19	Lab Sample ID:	240-160744-19		
Client ID:	SL-20_112321				
Operator ID:	043582	ALS Bottle#:	21	Worklist Smp#:	47
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

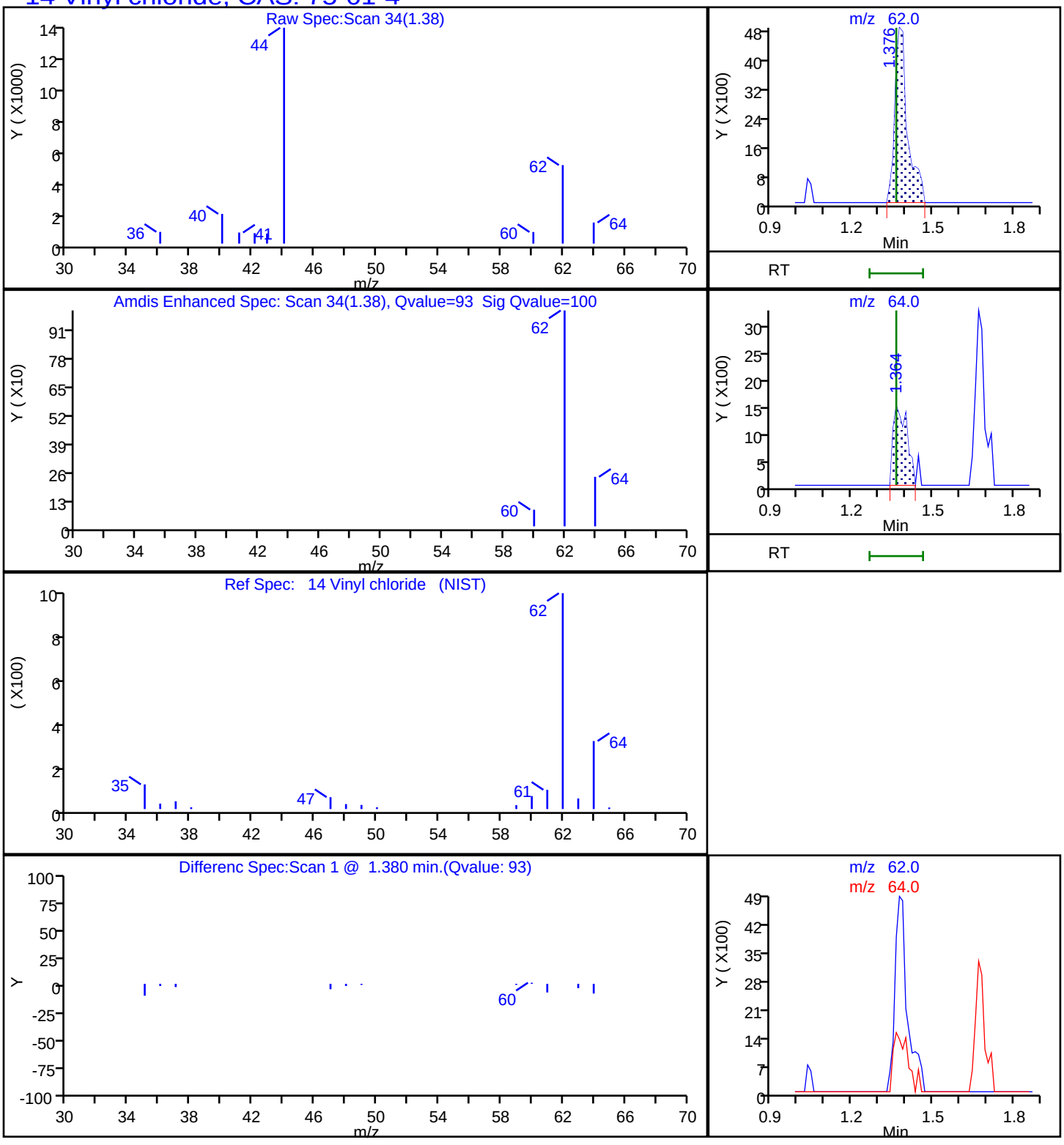


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2939.D

Injection Date:	03-Dec-2021 18:16:30	Instrument ID:	A3UX11
Lims ID:	240-160744-E-19	Lab Sample ID:	240-160744-19
Client ID:	SL-20_112321		
Operator ID:	043582	ALS Bottle#:	21 Worklist Smp#: 47
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-16_112421 Lab Sample ID: 240-160744-20

Matrix: Water Lab File ID: UXJ2940.D

Analysis Method: 8260B Date Collected: 11/24/2021 10:20

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 18:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2940.D
Lims ID: 240-160744-E-20
Client ID: SL-16_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 18:39:30 ALS Bottle#: 22 Worklist Smp#: 48
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-048
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:29

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1797665	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1012437	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	529376	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	426250	18.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	538812	20.7	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1564715	21.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	404810	16.0	
	14 Vinyl chloride	62	1.364	1.364	0.000	97	46288	2.07	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	95516	3.66	
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

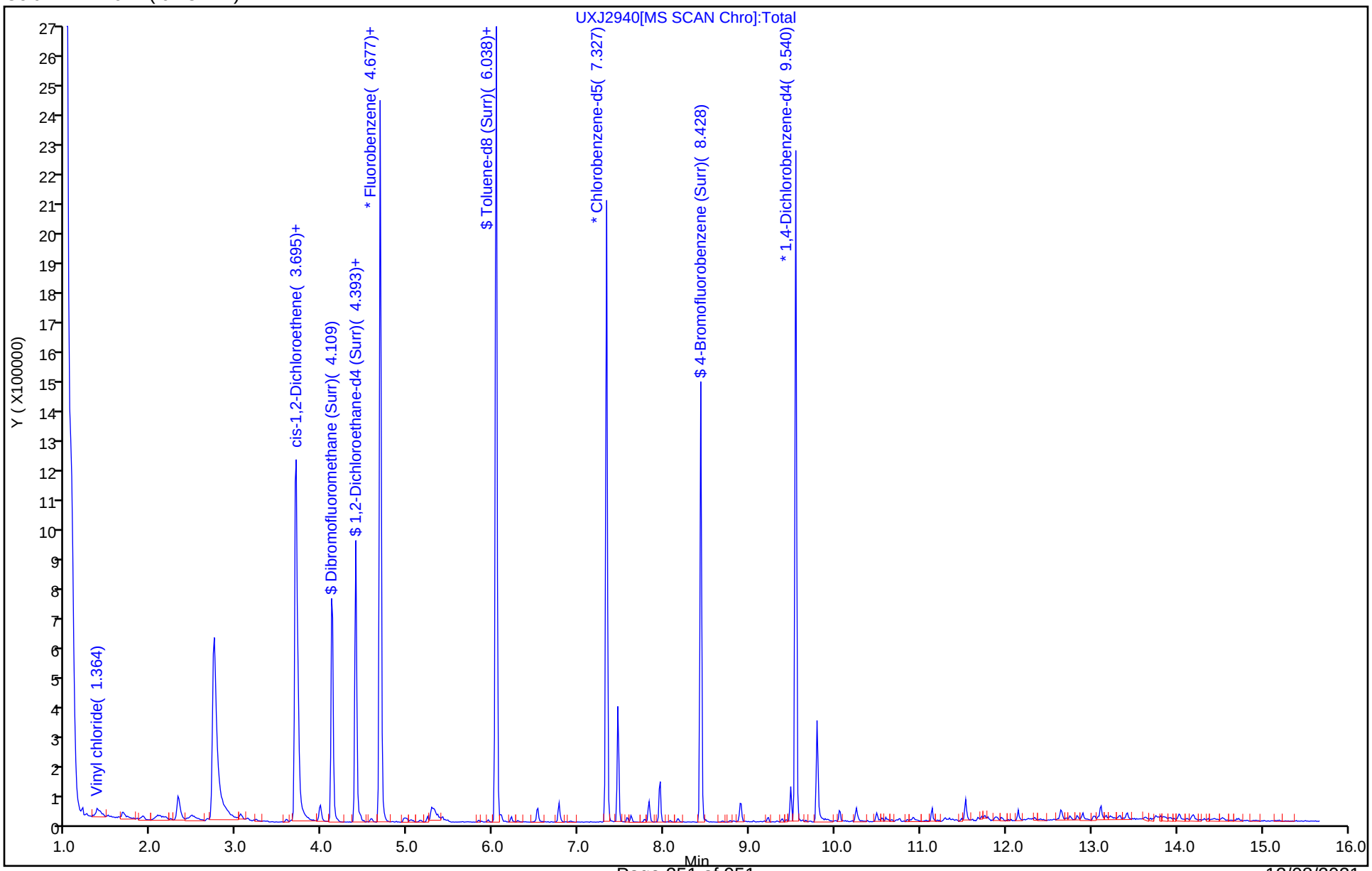
Report Date: 06-Dec-2021 07:54:45 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2940.D

Injection Date:	03-Dec-2021 18:39:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-20	Lab Sample ID:	240-160744-20	Worklist Smp#:	48
Client ID:	SL-16_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2940.D
Lims ID: 240-160744-E-20
Client ID: SL-16_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 18:39:30 ALS Bottle#: 22 Worklist Smp#: 48
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-048
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:29

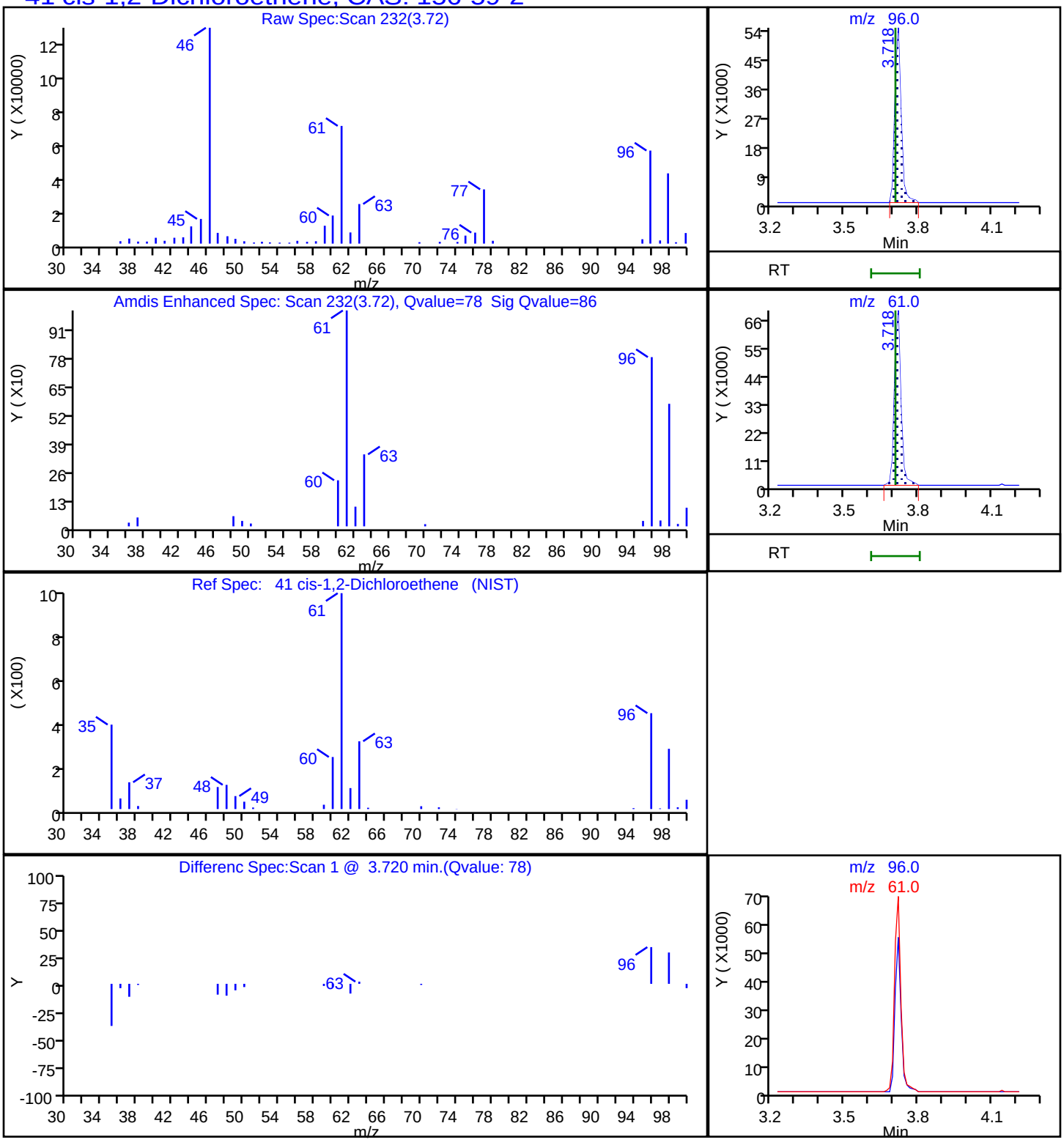
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.07
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.70
$ 6 Toluene-d8 (Surr)	20.0	21.7	108.64
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.0	80.23

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2940.D

Injection Date:	03-Dec-2021 18:39:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-20	Lab Sample ID:	240-160744-20		
Client ID:	SL-16_112421				
Operator ID:	043582	ALS Bottle#:	22	Worklist Smp#:	48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

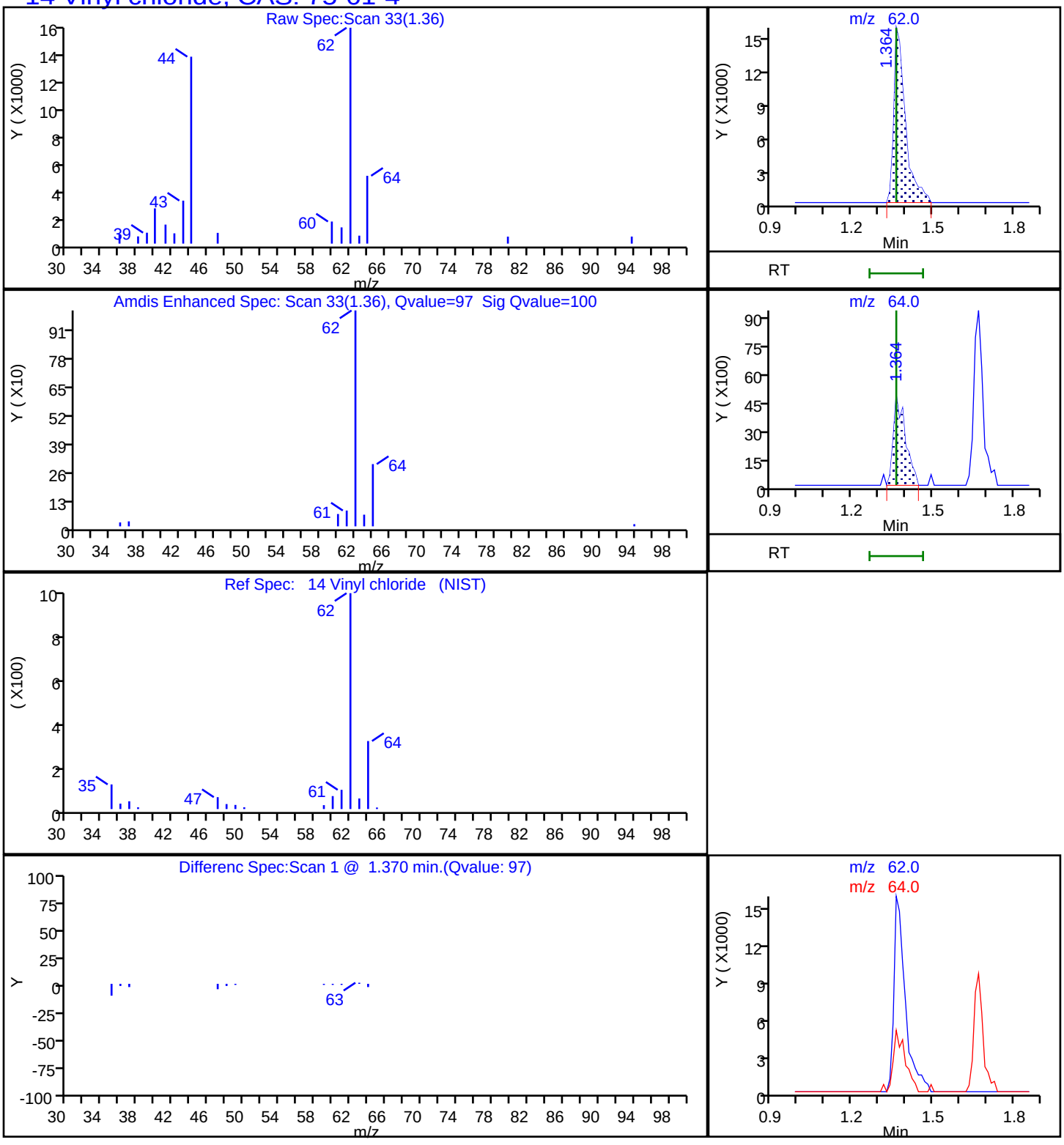


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2940.D

Injection Date:	03-Dec-2021 18:39:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-20	Lab Sample ID:	240-160744-20		
Client ID:	SL-16_112421				
Operator ID:	043582	ALS Bottle#:	22	Worklist Smp#:	48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-17_112421 Lab Sample ID: 240-160744-21

Matrix: Water Lab File ID: UXJ2941.D

Analysis Method: 8260B Date Collected: 11/24/2021 10:45

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 19:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	13		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	12		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		62-137
460-00-4	4-Bromofluorobenzene (Surr)	89		56-136
2037-26-5	Toluene-d8 (Surr)	117		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2941.D
Lims ID: 240-160744-E-21
Client ID: SL-17_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 19:01:30 ALS Bottle#: 23 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-049
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:38

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1684405	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	933742	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	462035	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	417359	19.5	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	99	516601	21.2	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1548591	23.3	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	413299	17.8	
	14 Vinyl chloride	62	1.364	1.364	0.000	98	247441	11.8	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	82	316174	12.9	
	60 Trichloroethene	130	4.984	4.985	-0.001	94	5400	0.2054	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

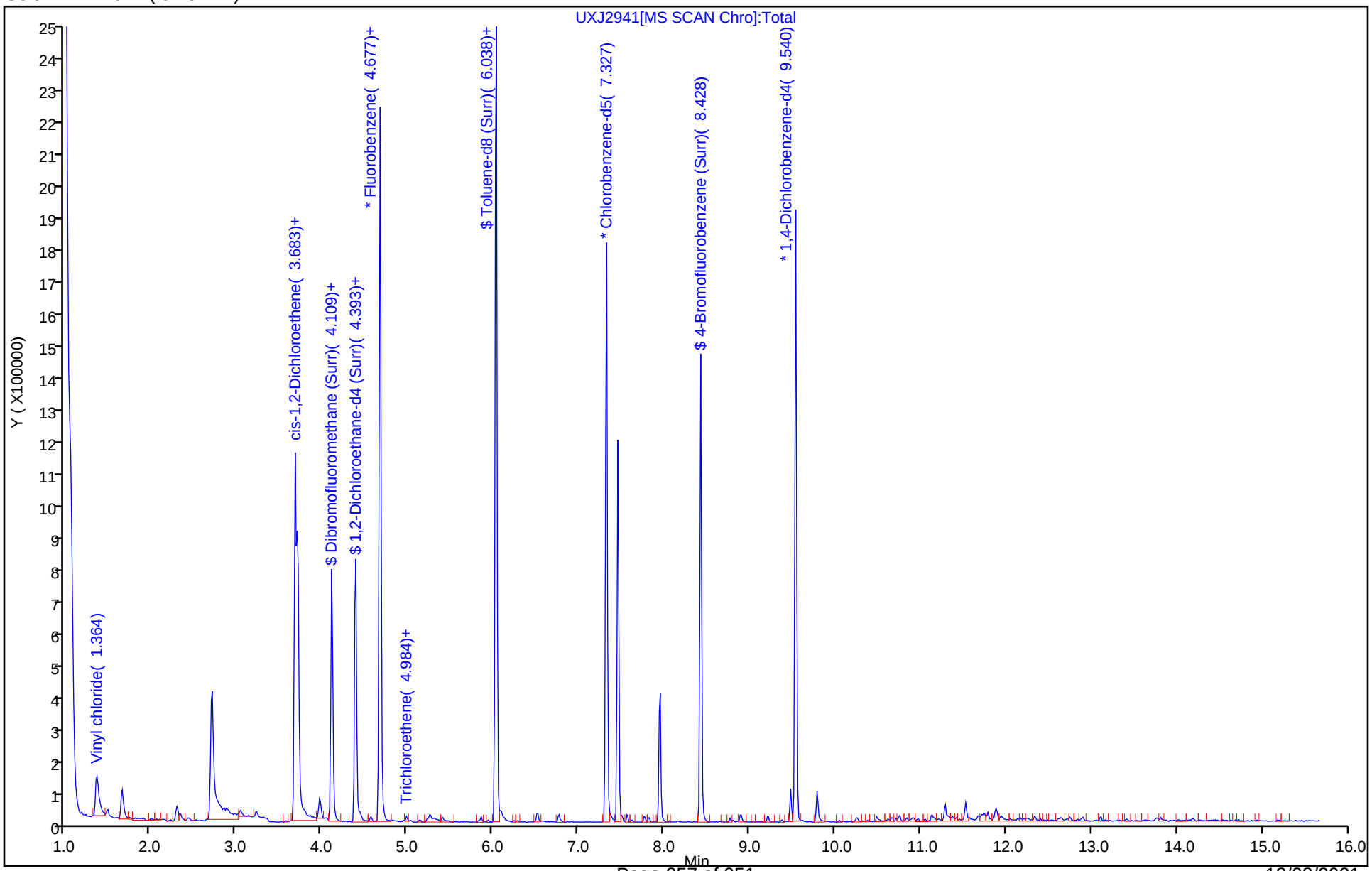
Report Date: 06-Dec-2021 07:54:46 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2941.D

Injection Date:	03-Dec-2021 19:01:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-21	Lab Sample ID:	240-160744-21	Worklist Smp#:	49
Client ID:	SL-17_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2941.D				
Lims ID:	240-160744-E-21				
Client ID:	SL-17_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 19:01:30	ALS Bottle#:	23	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-049				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 07:51:38

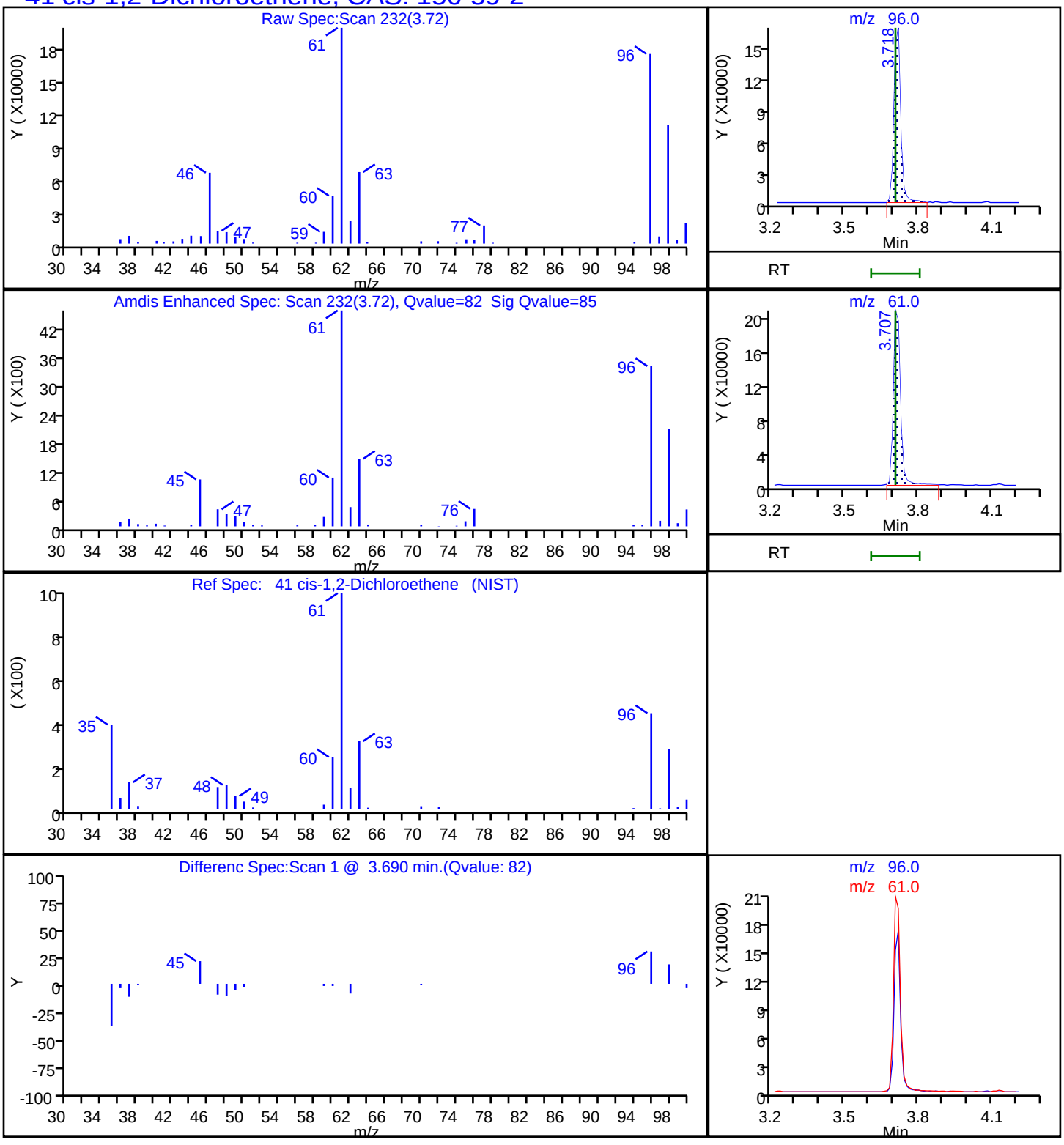
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.5	97.25
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.11
$ 6 Toluene-d8 (Surr)	20.0	23.3	116.59
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.8	88.81

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2941.D

Injection Date:	03-Dec-2021 19:01:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-21	Lab Sample ID:	240-160744-21		
Client ID:	SL-17_112421				
Operator ID:	043582	ALS Bottle#:	23	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

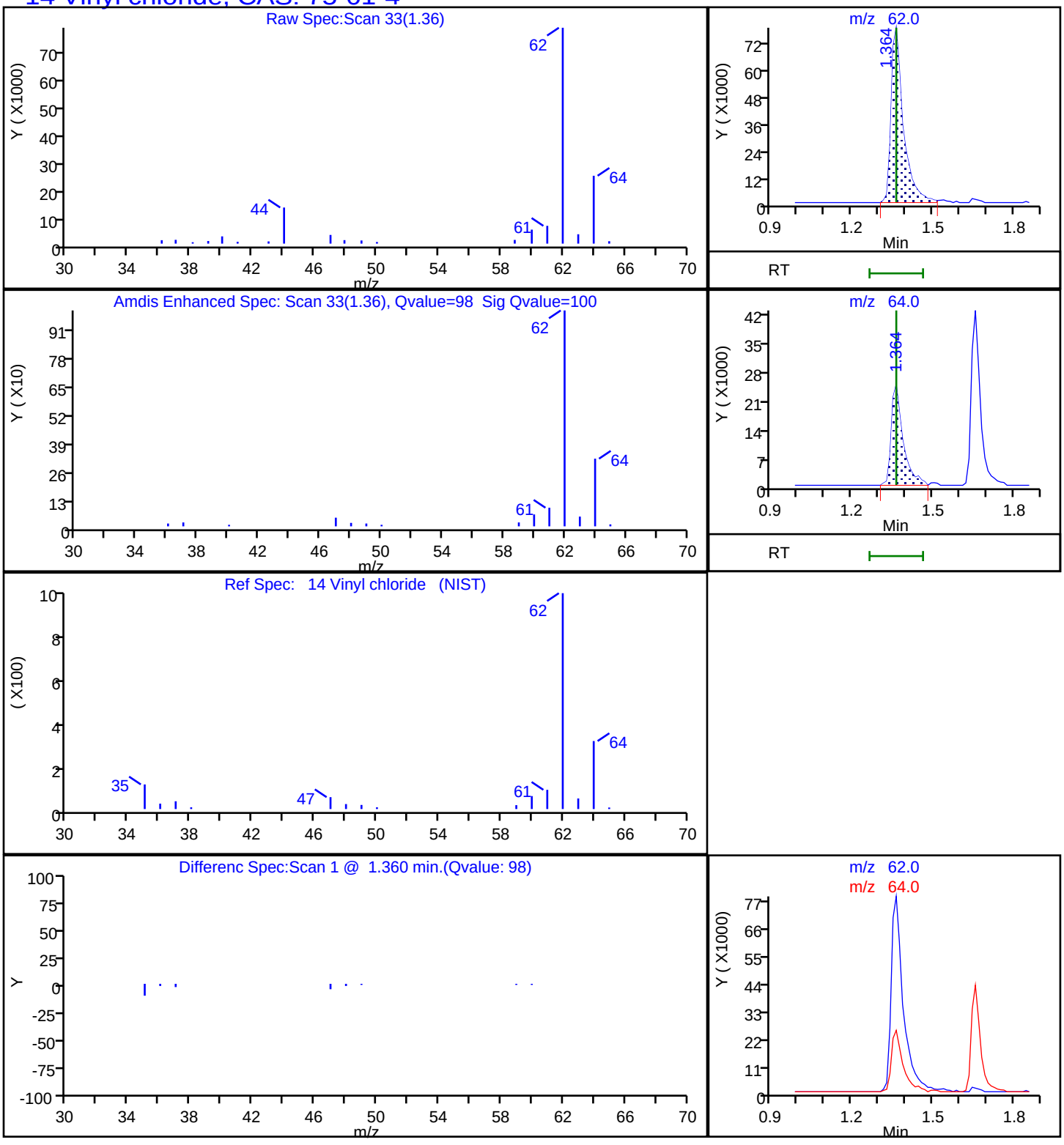


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2941.D

Injection Date:	03-Dec-2021 19:01:30	Instrument ID:	A3UX11
Lims ID:	240-160744-E-21	Lab Sample ID:	240-160744-21
Client ID:	SL-17_112421		
Operator ID:	043582	ALS Bottle#:	23 Worklist Smp#: 49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-21_112421 Lab Sample ID: 240-160744-22

Matrix: Water Lab File ID: UXJ2942.D

Analysis Method: 8260B Date Collected: 11/24/2021 12:50

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 19:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.96	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	75		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2942.D
Lims ID: 240-160744-E-22
Client ID: SL-21_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 19:23:30 ALS Bottle#: 24 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-050
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:52:06

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1914809	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1078452	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	558369	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	96	438266	18.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	546951	19.8	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1628599	21.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	401581	14.9	
	14 Vinyl chloride	62	1.364	1.364	0.000	92	7275	0.3059	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	26711	0.9603	
	60 Trichloroethene	130		4.985				ND	7
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

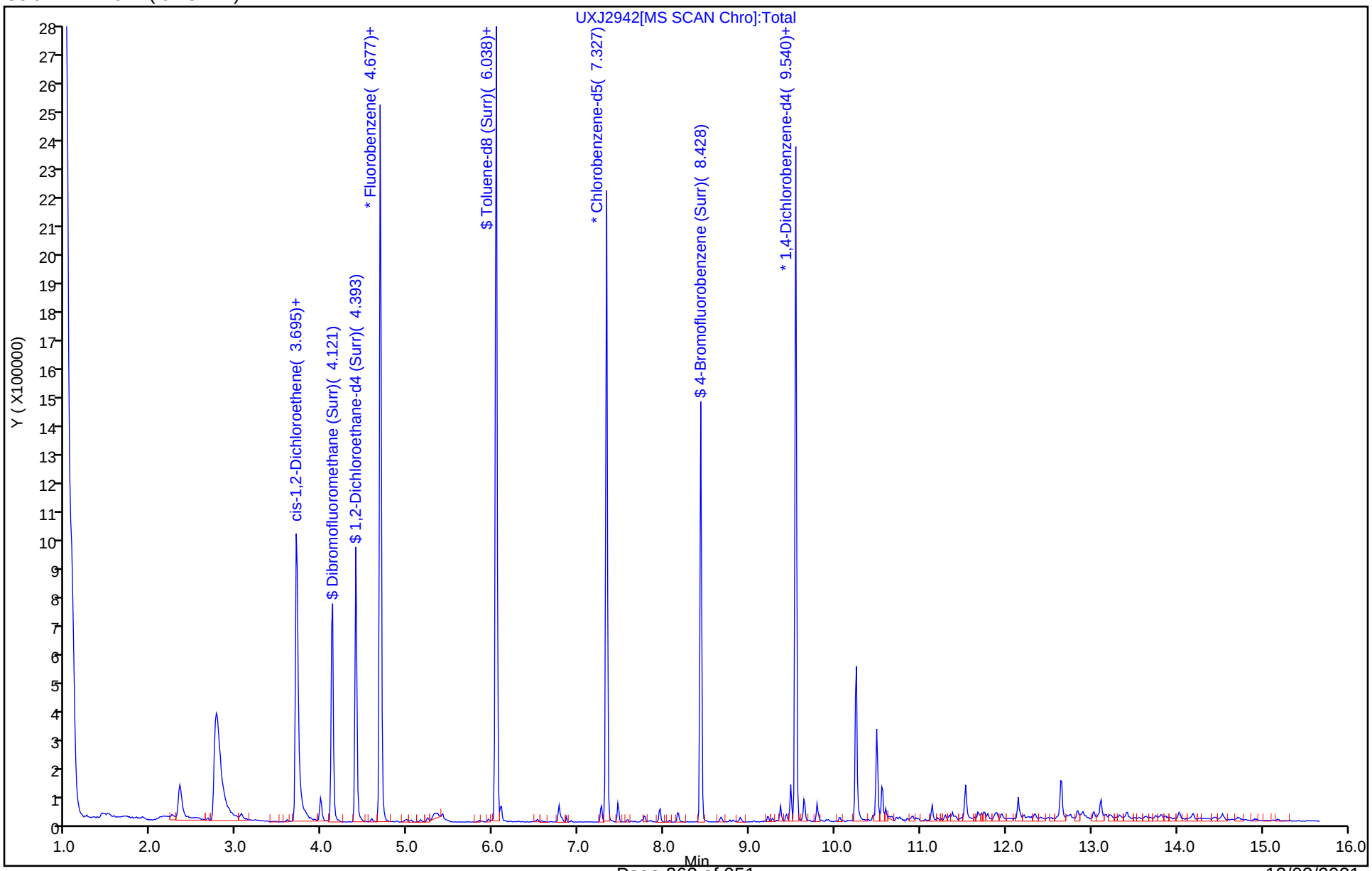
Report Date: 06-Dec-2021 07:54:46 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2942.D

Injection Date:	03-Dec-2021 19:23:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-22	Lab Sample ID:	240-160744-22	Worklist Smp#:	50
Client ID:	SL-21_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2942.D				
Lims ID:	240-160744-E-22				
Client ID:	SL-21_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 19:23:30	ALS Bottle#:	24	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-050				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 07:52:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.0	89.84
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.8	98.83
$ 6 Toluene-d8 (Surr)	20.0	21.2	106.16
$ 7 4-Bromofluorobenzene (Surr)	20.0	14.9	74.72

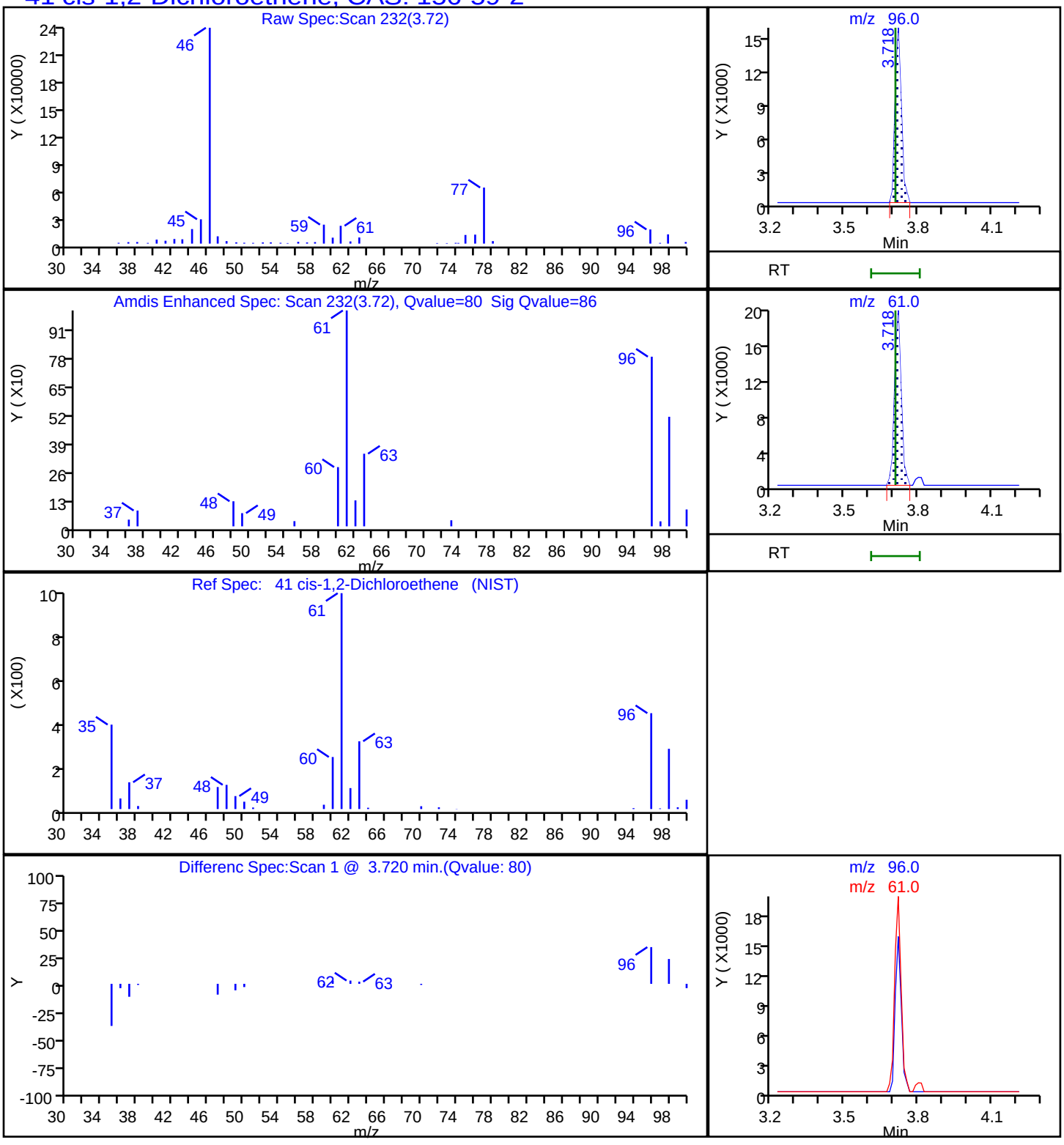
Report Date: 06-Dec-2021 07:54:47 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2942.D

Injection Date:	03-Dec-2021 19:23:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-22	Lab Sample ID:	240-160744-22		
Client ID:	SL-21_112421				
Operator ID:	043582	ALS Bottle#:	24	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-18_112421 Lab Sample ID: 240-160744-23

Matrix: Water Lab File ID: UXJ2943.D

Analysis Method: 8260B Date Collected: 11/24/2021 11:40

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 19:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2943.D
Lims ID: 240-160744-E-23
Client ID: SL-18_112421
Sample Type: Client
Inject. Date: 03-Dec-2021 19:45:30 ALS Bottle#: 25 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-051
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:52:17

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1756247	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	975460	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	479182	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	419736	18.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	525309	20.7	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1512380	21.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	396557	16.3	
	14 Vinyl chloride	62	1.376	1.364	0.012	97	40606	1.86	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	82	94205	3.69	
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

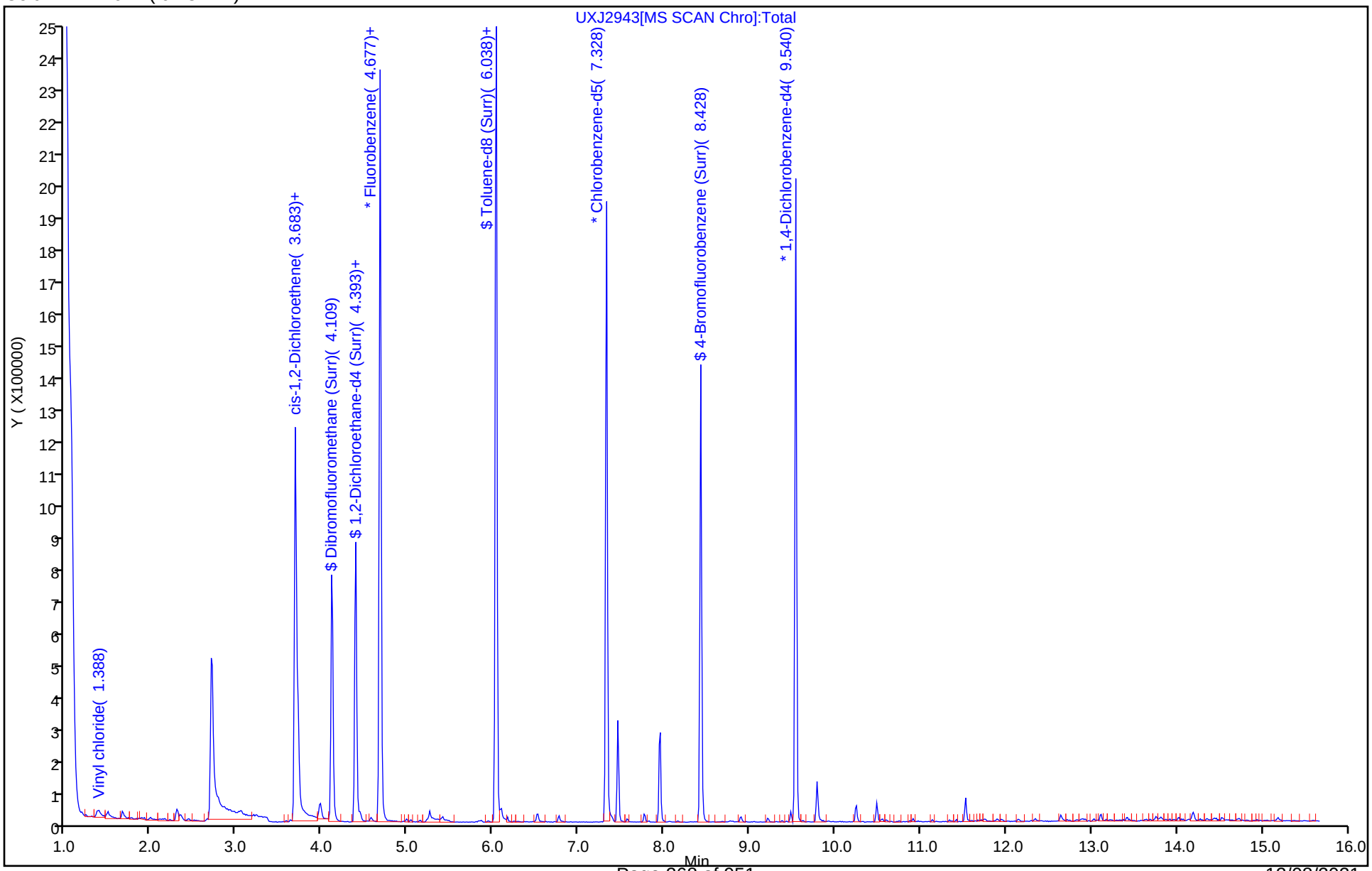
Report Date: 06-Dec-2021 07:54:47 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2943.D

Injection Date:	03-Dec-2021 19:45:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-23	Lab Sample ID:	240-160744-23	Worklist Smp#:	51
Client ID:	SL-18_112421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2943.D				
Lims ID:	240-160744-E-23				
Client ID:	SL-18_112421				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 19:45:30	ALS Bottle#:	25	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-051				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

First Level Reviewer: evansle Date: 06-Dec-2021 07:52:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.8	93.81
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.49
$ 6 Toluene-d8 (Surr)	20.0	21.8	108.99
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.3	81.57

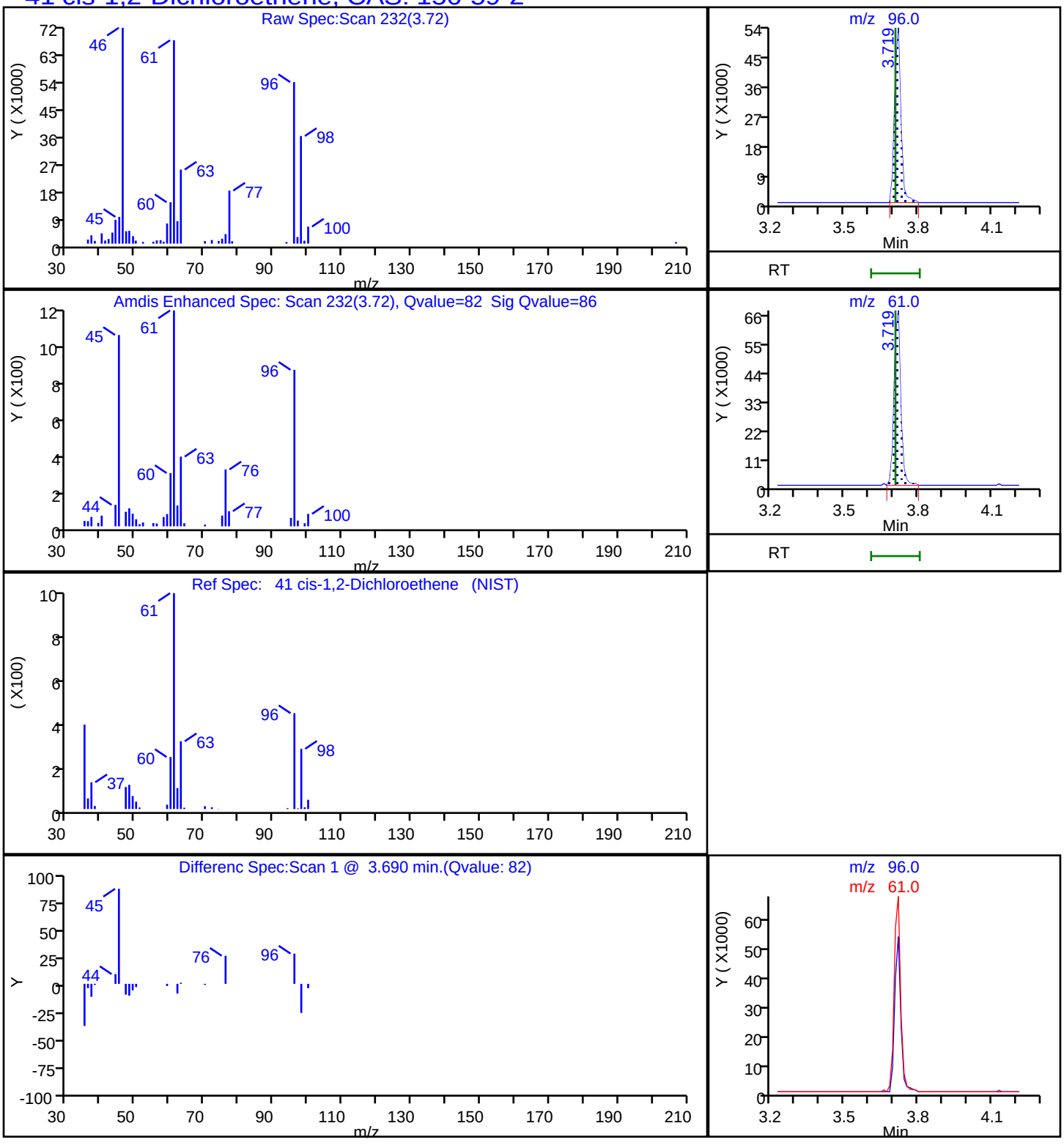
Report Date: 06-Dec-2021 07:54:47 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2943.D

Injection Date:	03-Dec-2021 19:45:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-23	Lab Sample ID:	240-160744-23		
Client ID:	SL-18_112421				
Operator ID:	043582	ALS Bottle#:	25	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



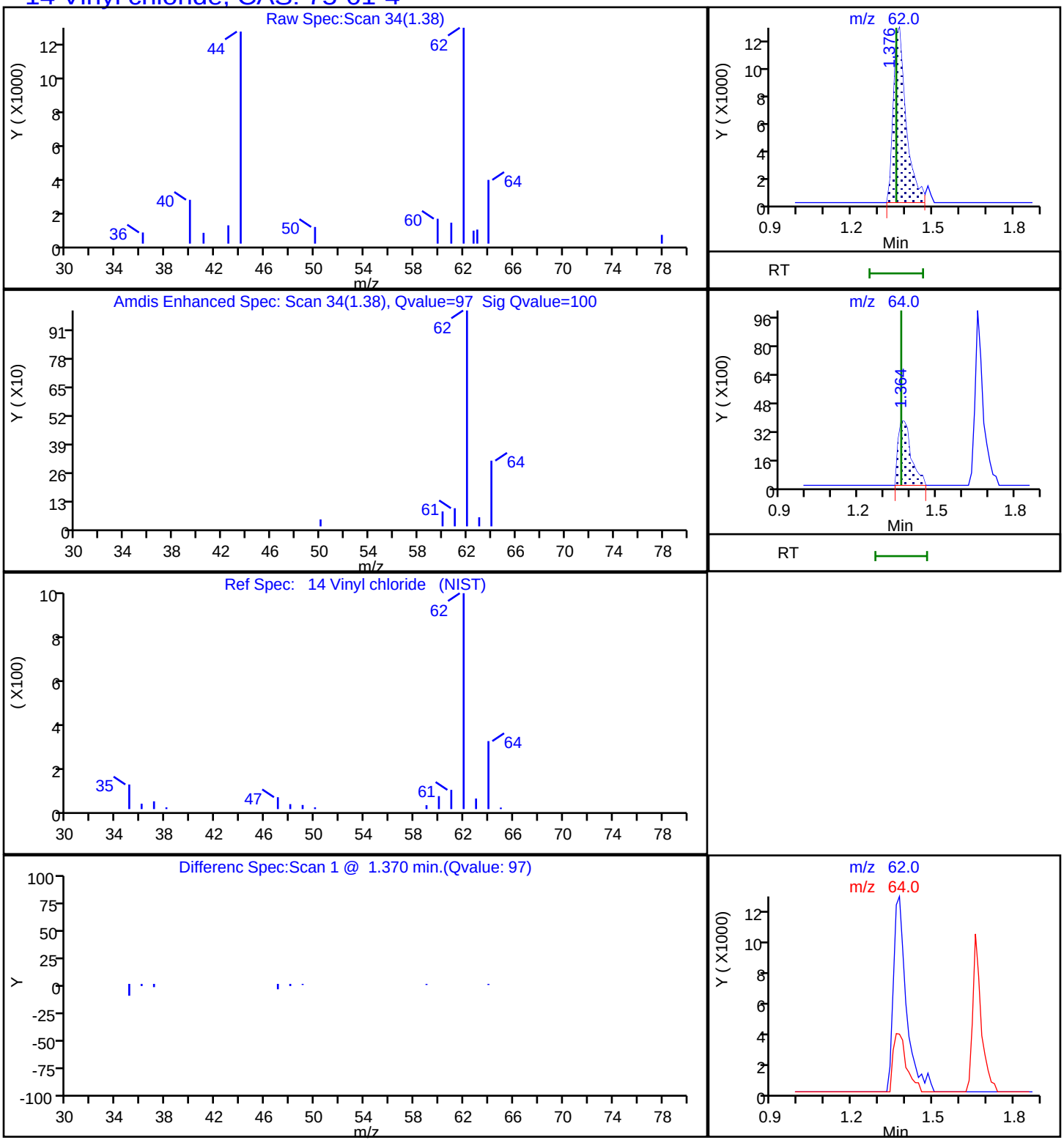
Report Date: 06-Dec-2021 07:54:47 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2943.D

Injection Date:	03-Dec-2021 19:45:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-23	Lab Sample ID:	240-160744-23		
Client ID:	SL-18_112421				
Operator ID:	043582	ALS Bottle#:	25	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-160744-24

Matrix: Water Lab File ID: UXJ2944.D

Analysis Method: 8260B Date Collected: 11/24/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.3		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	75		56-136
2037-26-5	Toluene-d8 (Surr)	105		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2944.D
Lims ID: 240-160744-E-24
Client ID: DUP-01
Sample Type: Client
Inject. Date: 03-Dec-2021 20:07:30 ALS Bottle#: 26 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-052
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:53:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1942541	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1094770	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	571894	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	436634	17.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	540556	19.3	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1634857	21.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	408445	15.0	
	14 Vinyl chloride	62	1.352	1.364	-0.012	96	30485	1.26	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	92958	3.29	
	60 Trichloroethene	130	4.985	4.985	0.000	90	4148	0.1368	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

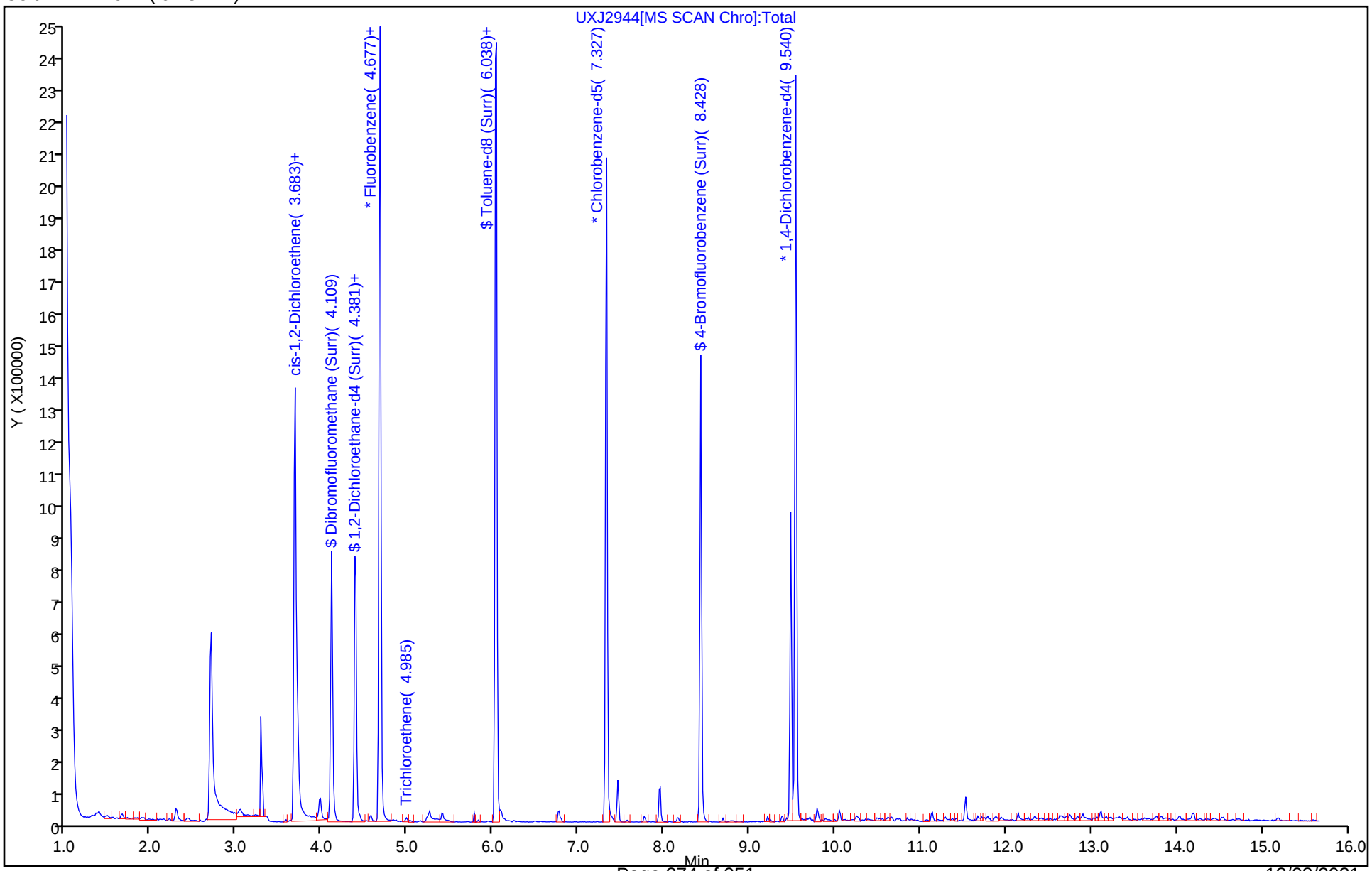
Report Date: 06-Dec-2021 07:54:48 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2944.D

Injection Date:	03-Dec-2021 20:07:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-24	Lab Sample ID:	240-160744-24	Worklist Smp#:	52
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2944.D
Lims ID: 240-160744-E-24
Client ID: DUP-01
Sample Type: Client
Inject. Date: 03-Dec-2021 20:07:30 ALS Bottle#: 26 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-052
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

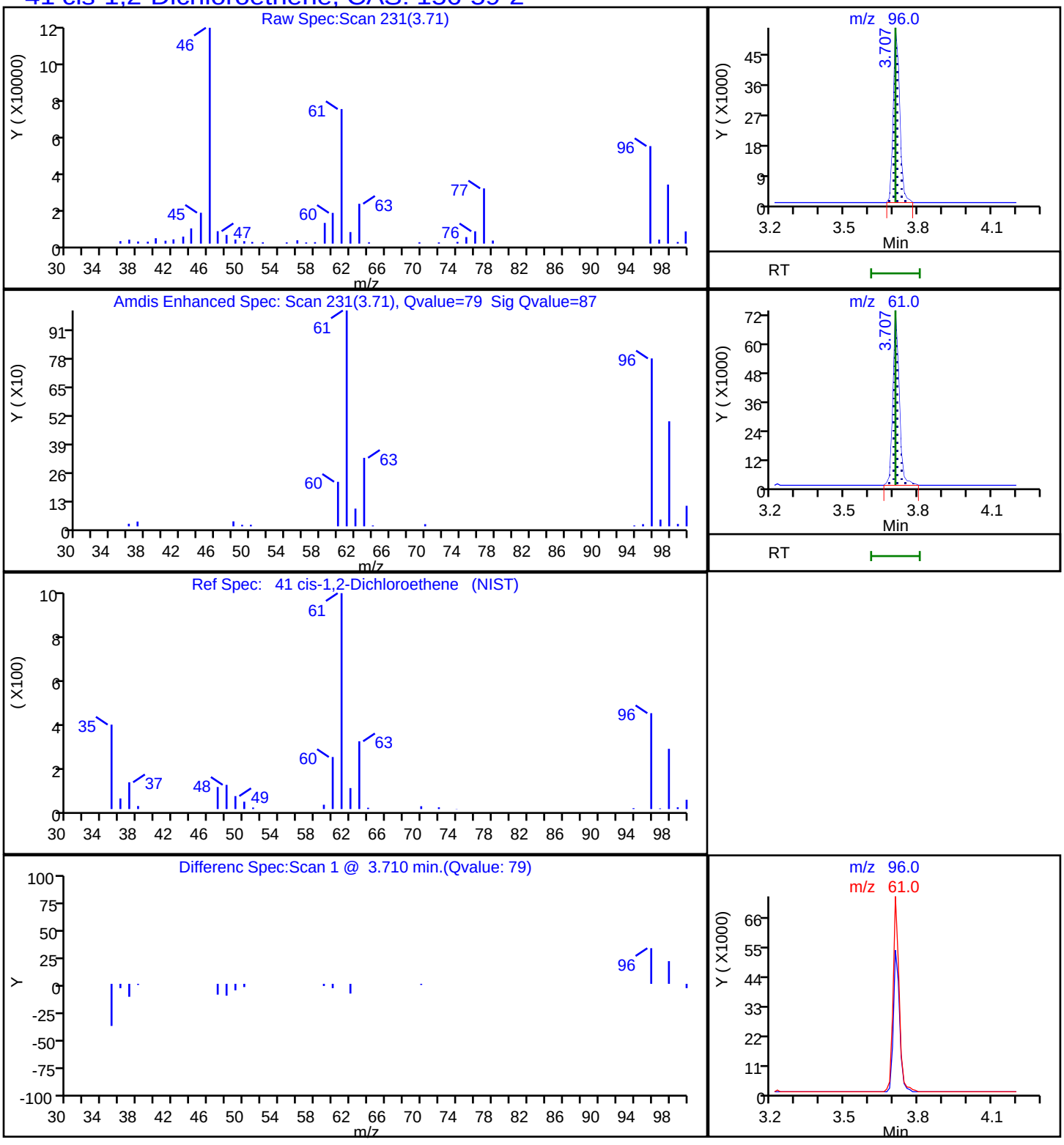
First Level Reviewer: evansle Date: 06-Dec-2021 07:53:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.6	88.22
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.28
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.98
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.0	74.86

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2944.D				
Injection Date:	03-Dec-2021 20:07:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-E-24	Lab Sample ID:	240-160744-24		
Client ID:	DUP-01				
Operator ID:	043582	ALS Bottle#:	26	Worklist Smp#:	52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

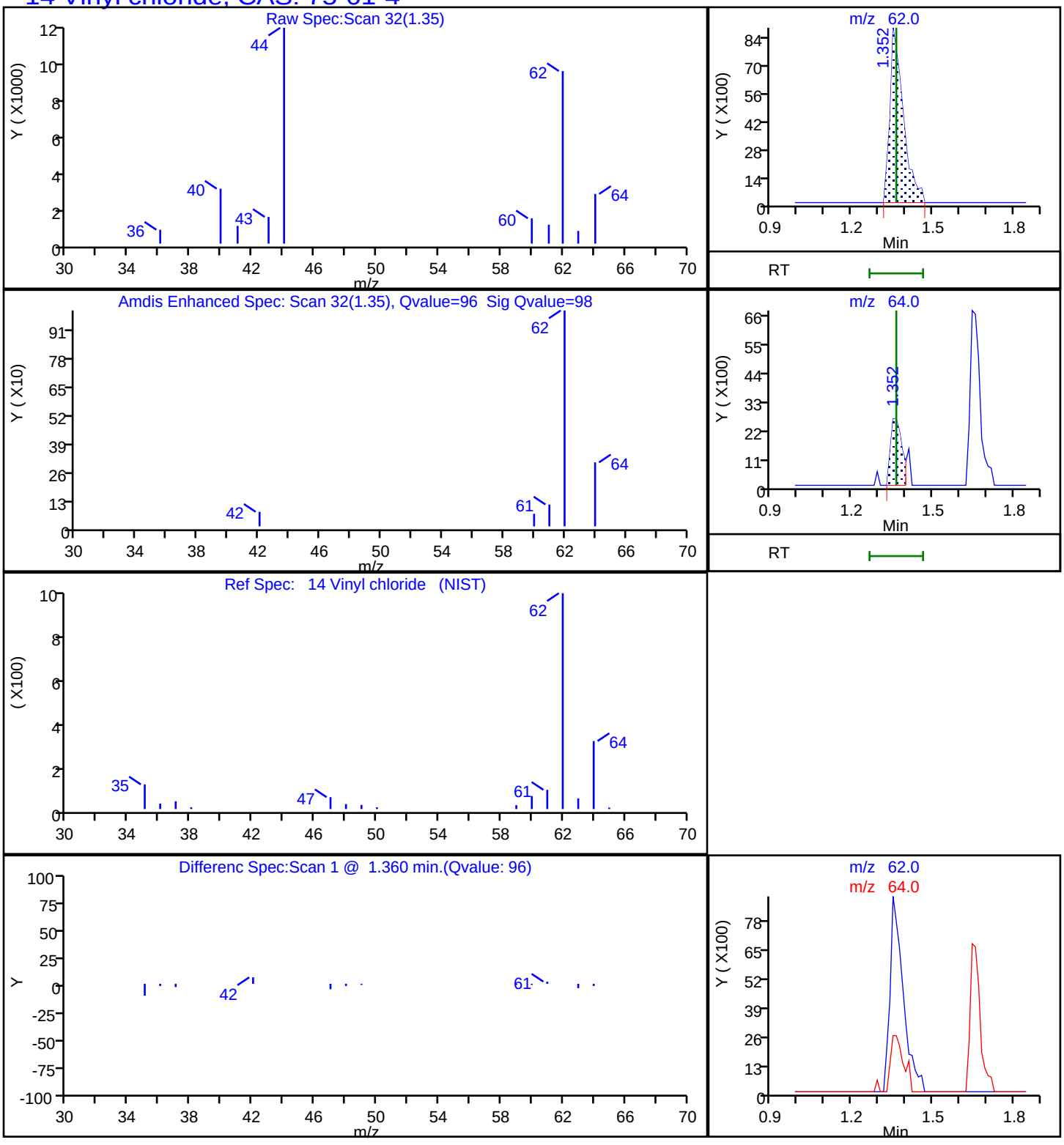


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2944.D

Injection Date:	03-Dec-2021 20:07:30	Instrument ID:	A3UX11
Lims ID:	240-160744-E-24	Lab Sample ID:	240-160744-24
Client ID:	DUP-01		
Operator ID:	043582	ALS Bottle#:	26 Worklist Smp#: 52
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 240-160744-25

Matrix: Water Lab File ID: UXJ2945.D

Analysis Method: 8260B Date Collected: 11/24/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.54	J	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	74		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2945.D				
Lims ID:	240-160744-B-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 20:30:30	ALS Bottle#:	27	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-053				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				
First Level Reviewer: evansle		Date:	06-Dec-2021 07:53:22		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1998602	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1095619	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	556800	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	452961	17.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	578946	20.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1680869	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	404433	14.8	
14 Vinyl chloride	62	1.364	1.364	0.000	92	10562	0.4255	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	34425	1.19	
60 Trichloroethene	130	4.985	4.985	0.000	92	16833	0.5395	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

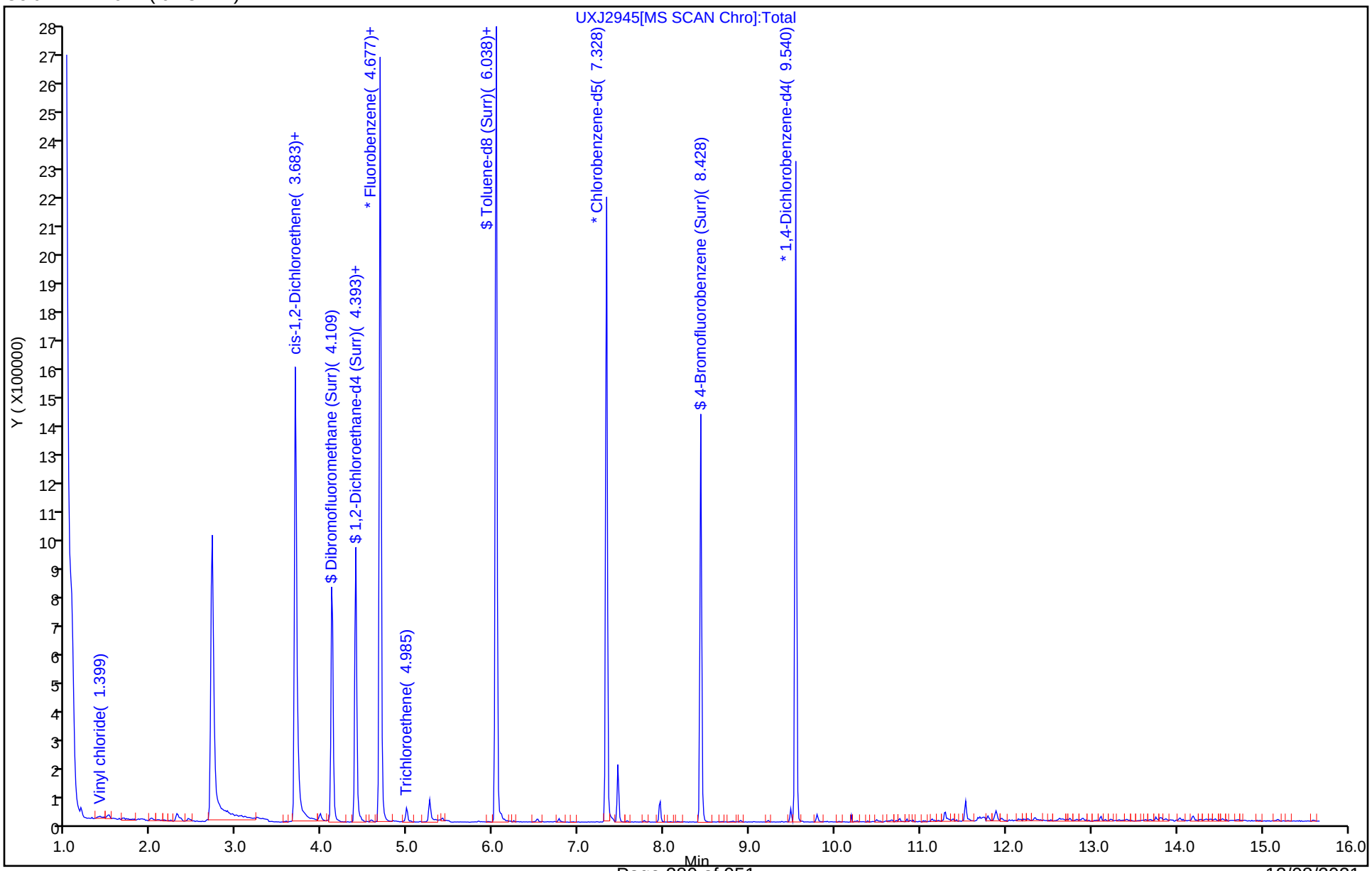
Report Date: 06-Dec-2021 07:54:48 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2945.D

Injection Date:	03-Dec-2021 20:30:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-B-25	Lab Sample ID:	240-160744-25	Worklist Smp#:	53
Client ID:	DUP-02				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2945.D				
Lims ID:	240-160744-B-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	03-Dec-2021 20:30:30	ALS Bottle#:	27	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115736-053				
Misc. Info.:	J211203A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 07:53:58	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

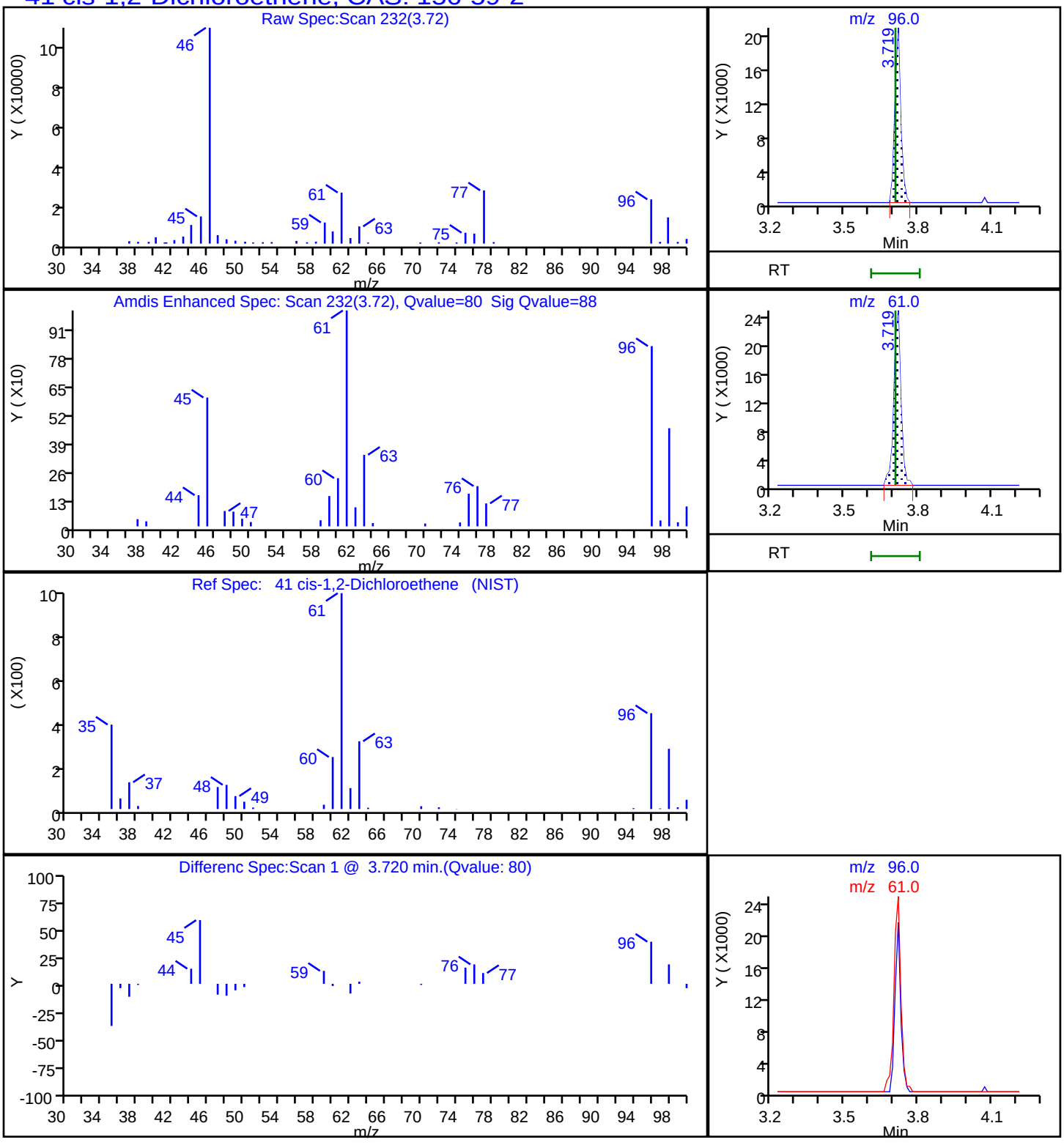
First Level Reviewer: evansle Date: 06-Dec-2021 07:53:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	88.96
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.0	100.23
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.85
$ 7 4-Bromofluorobenzene (Surr)	20.0	14.8	74.07

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2945.D				
Injection Date:	03-Dec-2021 20:30:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-B-25	Lab Sample ID:	240-160744-25		
Client ID:	DUP-02				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

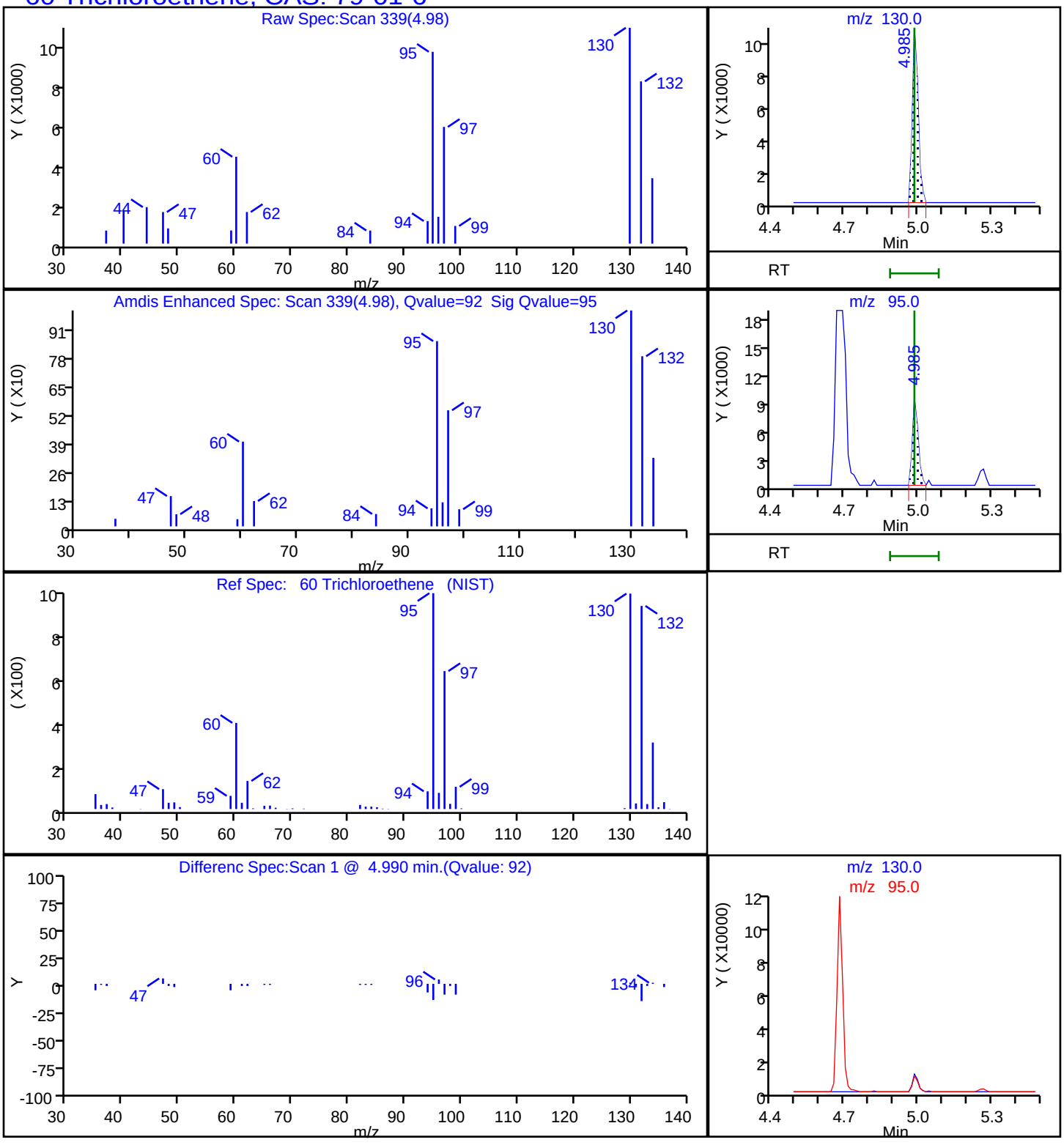


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2945.D

Injection Date:	03-Dec-2021 20:30:30	Instrument ID:	A3UX11		
Lims ID:	240-160744-B-25	Lab Sample ID:	240-160744-25		
Client ID:	DUP-02				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2512 0.2574	0.2630	0.2637	0.2825	0.2704	Ave		0.2647				4.1		15.0			
Chloromethane	0.2317 0.1795	0.2122	0.2145	0.2226	0.1904	Ave		0.2085			0.1000	9.5		15.0			
Butadiene	0.2185 0.2038	0.2386	0.2203	0.2293	0.2062	Ave		0.2195				6.1		15.0			
Vinyl chloride	0.2467 0.2324	0.2605	0.2509	0.2618	0.2383	Ave		0.2484				4.7		15.0			
Bromomethane	0.1925 0.1659	0.1837	0.1816	0.1885	0.1603	Ave		0.1787				7.2		15.0			
Chloroethane	0.1597 0.1350	0.1478	0.1485	0.1577	0.1331	Ave		0.1469				7.6		15.0			
Dichlorofluoromethane	0.3895 0.3237	0.3864	0.3789	0.3749	0.3313	Ave		0.3641				7.9		15.0			
Trichlorofluoromethane	0.4432 0.4077	0.4339	0.4149	0.4339	0.4138	Ave		0.4246				3.4		15.0			
Ethyl ether	0.1802 0.1784	0.1757	0.2069	0.2000	0.1935	Ave		0.1891				6.8		15.0			
Acrolein	0.0090 0.0070	0.0065	0.0066	0.0079	0.0069	Ave		0.0073				13.3		15.0			
1,1-Dichloroethene	0.2336 0.2259	0.2440	0.2449	0.2526	0.2380	Ave		0.2398				3.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1506 0.1905	0.1733	0.1811	0.2021	0.2001	Ave		0.1830				10.5		15.0			
Acetone	0.1334 0.0538	0.1138	0.0890	0.0752	0.0676	Qua	0.1389	0.0756	-0.000293						1.0000		0.9900
Iodomethane	0.4324 0.4064	0.4152	0.4520	0.4461	0.4232	Ave		0.4292				4.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6924 0.6702	0.7119	0.7310	0.7655	0.7122	Ave		0.7139				4.6		15.0			
3-Chloro-1-propene	0.1561 0.1574	0.1548	0.1690	0.1655	0.1624	Ave		0.1609				3.5		15.0			
Methyl acetate	0.1679 0.1457	0.1567	0.1644	0.1678	0.1581	Ave		0.1601				5.3		15.0			
Methylene Chloride	0.3069 0.2303	0.2685	0.2748	0.2613	0.2461	Ave		0.2646				9.9		15.0			
2-Methyl-2-propanol	0.0280 +++++	0.0341	0.0314	0.0327	0.0353	Ave		0.0323				8.8		15.0			
Acrylonitrile	0.0798 0.0742	0.0831	0.0833	0.0871	0.0826	Ave		0.0817				5.3		15.0			
trans-1,2-Dichloroethene	0.2891 0.2568	0.2767	0.3033	0.2904	0.2755	Ave		0.2819				5.7		15.0			
Methyl tert-butyl ether	0.6799 0.6510	0.6721	0.7103	0.7601	0.6909	Ave		0.6940				5.5		15.0			
Hexane	0.0543 0.0684	0.0590	0.0652	0.0680	0.0727	Ave		0.0646				10.5		15.0			
1,1-Dichloroethane	0.3844 0.3876	0.4141	0.4287	0.4377	0.4033	Ave		0.4093			0.1000	5.3		15.0			
Vinyl acetate	0.4385 0.4256	0.4185	0.4478	0.4841	0.4337	Ave		0.4414				5.3		15.0			
cis-1,2-Dichloroethene	0.2900 0.2615	0.2972	0.3080	0.3048	0.2817	Ave		0.2905				5.9		15.0			
2,2-Dichloropropane	0.0518 0.0653	0.0625	0.0731	0.0763	0.0711	Ave		0.0667				13.3		15.0			
2-Butanone (MEK)	0.1393 0.0931	0.1231	0.1225	0.1219	0.1027	Ave		0.1171				14.1		15.0			
Chlorobromomethane	0.1525 0.1295	0.1350	0.1572	0.1521	0.1440	Ave		0.1450				7.5		15.0			
Tetrahydrofuran	0.0736 0.0606	0.0682	0.0705	0.0714	0.0681	Ave		0.0687				6.5		15.0			
Chloroform	0.4465 0.4105	0.4407	0.4643	0.4673	0.4413	Ave		0.4451				4.6		15.0			
1,1,1-Trichloroethane	0.3738 0.3739	0.3928	0.3946	0.4175	0.3891	Ave		0.3903				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.2829 0.3325	0.3036	0.3192	0.3487	0.3553	Ave		0.3237				8.5		15.0			
1,1-Dichloropropene	0.3587 0.3323	0.3324	0.3641	0.3737	0.3564	Ave		0.3529				4.8		15.0			
Carbon tetrachloride	0.3214 0.3589	0.3393	0.3614	0.3946	0.3694	Ave		0.3575				7.0		15.0			
Isobutyl alcohol	0.0099 0.0096	0.0114	0.0133	0.0134	0.0127	Ave		0.0117				14.5		15.0			
Benzene	0.9683 0.9496	1.0018	1.0313	1.0676	0.9656	Ave		0.9974				4.5		15.0			
1,2-Dichloroethane	0.3000 0.2978	0.3312	0.3504	0.3463	0.3141	Ave		0.3233				7.1		15.0			
n-Heptane	0.0548 0.0611	0.0518	0.0587	0.0619	0.0591	Ave		0.0579				6.7		15.0			
Trichloroethene	0.3207 0.2794	0.3058	0.3425	0.3230	0.3019	Ave		0.3122				6.9		15.0			
Methylcyclohexane	0.2934 0.3724	0.3406	0.3477	0.3778	0.3843	Ave		0.3527				9.6		15.0			
1,2-Dichloropropane	0.2086 0.1921	0.2113	0.2109	0.2242	0.2038	Ave		0.2085				5.0		15.0			
Dibromomethane	0.1591 0.1363	0.1529	0.1561	0.1626	0.1473	Ave		0.1524				6.2		15.0			
1,4-Dioxane	0.0013 0.0019	0.0020	0.0035	0.0028	0.0029	Qua	-0.059	0.0039	-0.000002						0.9950		0.9900
Dichlorobromomethane	0.2924 0.2991	0.2858	0.3201	0.3334	0.3098	Ave		0.3068				5.8		15.0			
2-Chloroethyl vinyl ether	0.1392 0.1369	0.1536	0.1490	0.1654	0.1471	Ave		0.1485				7.0		15.0			
cis-1,3-Dichloropropene	0.3738 0.3581	0.3911	0.3814	0.4002	0.3727	Ave		0.3795				3.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1882 0.1904	0.2096	0.2155	0.2367	0.2094	Ave		0.2083				8.5		15.0			
Toluene	1.4677 1.4494	1.5201	1.5904	1.6184	1.4660	Ave		1.5187				4.7		15.0			
trans-1,3-Dichloropropene	0.4450 0.4729	0.5063	0.5231	0.5197	0.4896	Ave		0.4928				6.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.3251 0.4008	0.3575	0.4000	0.4303	0.4003	Ave		0.3857				9.8		15.0			
1,1,2-Trichloroethane	0.3028 0.2755	0.3046	0.3175	0.3238	0.2829	Ave		0.3012				6.3		15.0			
Tetrachloroethene	0.2944 0.3080	0.3235	0.3381	0.3495	0.3263	Ave		0.3233				6.2		15.0			
1,3-Dichloropropane	0.4802 0.4715	0.5170	0.5076	0.5517	0.4816	Ave		0.5016				6.0		15.0			
2-Hexanone	0.1928 0.2053	0.2082	0.2249	0.2372	0.2119	Ave		0.2134				7.3		15.0			
Chlorodibromomethane	0.2982 0.3414	0.3172	0.3352	0.3636	0.3415	Ave		0.3328				6.8		15.0			
Ethylene Dibromide	0.2992 0.2916	0.3275	0.3323	0.3492	0.2991	Ave		0.3165				7.3		15.0			
Chlorobenzene	0.9880 0.9276	0.9924	1.0409	1.0528	0.9535	Ave		0.9925			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3242 0.3202	0.3214	0.3392	0.3619	0.3294	Ave		0.3327				4.8		15.0			
Ethylbenzene	0.4780 0.5015	0.4859	0.5645	0.5795	0.5108	Ave		0.5200				8.1		15.0			
m-Xylene & p-Xylene	0.5934 0.6058	0.6376	0.6599	0.7052	0.6238	Ave		0.6376				6.4		15.0			
o-Xylene	0.5418 0.5612	0.5672	0.6215	0.6473	0.5828	Ave		0.5870				6.8		15.0			
Styrene	0.7650 0.8563	0.8225	0.8867	0.9293	0.8569	Ave		0.8528				6.6		15.0			
Bromoform	0.1263 0.2304	0.1685	0.2041	0.2270	0.2197	Lin1	-0.113	0.2313			0.1000				0.9990		0.9900
Isopropylbenzene	1.3133 1.4763	1.4762	1.5653	1.6732	1.4949	Ave		1.4999				7.9		15.0			
1,1,2,2-Tetrachloroethane	0.7171 0.7403	0.8072	0.7913	0.8434	0.7594	Ave		0.7764			0.3000	6.0		15.0			
Bromobenzene	0.8434 0.8086	0.8334	0.9146	0.9233	0.8387	Ave		0.8603				5.5		15.0			
1,2,3-Trichloropropane	0.3066 0.2601	0.3326	0.3009	0.3070	0.2793	Ave		0.2977				8.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2076 0.2248	0.1858	0.2339	0.2457	0.2294	Ave		0.2212				9.6		15.0			
N-Propylbenzene	0.8638 0.8936	0.8431	0.9611	1.0166	0.9160	Ave		0.9157				7.0		15.0			
2-Chlorotoluene	0.7410 0.7316	0.8054	0.8053	0.8365	0.7828	Ave		0.7837				5.2		15.0			
1,3,5-Trimethylbenzene	2.4462 2.4744	2.4266	2.5432	2.7773	2.5754	Ave		2.5405				5.1		15.0			
4-Chlorotoluene	0.8371 0.7380	0.8148	0.8637	0.8880	0.7897	Ave		0.8219				6.5		15.0			
tert-Butylbenzene	2.0236 2.1921	2.2177	2.4001	2.4622	2.2933	Ave		2.2648				6.9		15.0			
1,2,4-Trimethylbenzene	2.1832 2.4320	2.5314	2.5993	2.7780	2.5535	Ave		2.5129				7.9		15.0			
sec-Butylbenzene	2.5086 2.8887	2.8631	3.0145	3.1672	2.9984	Ave		2.9068				7.7		15.0			
1,3-Dichlorobenzene	1.5610 1.3797	1.6364	1.5925	1.6498	1.4798	Ave		1.5499				6.7		15.0			
4-Isopropyltoluene	2.1963 2.4943	2.4866	2.6436	2.7958	2.6531	Ave		2.5449				8.1		15.0			
1,4-Dichlorobenzene	1.6289 1.3914	1.5764	1.6560	1.6398	1.5282	Ave		1.5701				6.3		15.0			
1,2-Dichlorobenzene	1.4384 1.3188	1.5613	1.5695	1.5527	1.4318	Ave		1.4787				6.8		15.0			
n-Butylbenzene	1.7865 1.9154	1.9463	2.0665	2.1692	2.0573	Ave		1.9902				6.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1737 0.1787	0.2006	0.2037	0.2124	0.1986	Ave		0.1946				7.8		15.0			
1,2,4-Trichlorobenzene	0.9133 0.7565	0.9440	0.9400	0.9193	0.8866	Ave		0.8933				7.8		15.0			
Hexachlorobutadiene	0.3023 0.2329	0.3330	0.3390	0.3313	0.3087	Ave		0.3079				12.8		15.0			
Naphthalene	2.4801 2.3872	2.7045	2.8675	2.8661	2.8541	Ave		2.6932				7.9		15.0			
1,2,3-Trichlorobenzene	0.8703 0.7083	0.9406	0.8821	0.8807	0.8644	Ave		0.8577				9.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2759 0.2358	0.2627	0.2481	0.2597	0.2464	Ave		0.2548				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3230 0.2533	0.3151	0.2913	0.2904	0.2610	Ave		0.2890				9.7		15.0			
Toluene-d8 (Surr)	1.5591 1.2990	1.4814	1.4033	1.4755	1.3169	Ave		1.4225				7.1		15.0			
4-Bromofluorobenzene (Surr)	0.6103 0.4291	0.5208	0.4838	0.5054	0.4410	Ave		0.4984				13.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	15545 721258	31418	80613	164460	338735	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	14340 502904	25355	65579	129598	238538	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	13521 571062	28511	67351	133533	258402	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15264 651219	31125	76699	152409	298544	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	11910 464869	21942	55501	109770	200899	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	9885 378138	17658	45377	91798	166717	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	24102 907097	46164	115827	218267	415026	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	27428 1142489	51835	126814	252670	518477	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	11151 499751	20989	63254	116451	242452	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	2788 97712	3869	10031	22968	43331	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	14457 633100	29147	74855	147052	298144	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9322 533768	20704	55364	117673	250667	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	16505 301658	27191	54384	87518	169338	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	26756 1138640	49606	138148	259758	530219	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	42851 1877998	85053	223442	445715	892313	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	9657 441008	18496	51666	96370	203463	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	20775 816332	37455	100508	195357	396110	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	18990 645225	32083	83987	152159	308369	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	17313 +++++	40795	95943	190467	441997	10.0 +++++	20.0	50.0	100	200
Acrylonitrile	FB	Ave	49387 2079971	99328	254760	507306	1034581	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	17888 719544	33055	92696	169059	345215	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	42075 1824022	80293	217115	442599	865638	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	3359 191762	7051	19919	39610	91031	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	23786 1086189	49476	131033	254843	505328	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	27137 1192582	49994	136870	281858	543430	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	17946 732765	35504	94152	177452	352905	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	3204 183063	7464	22350	44411	89071	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	17238 521553	29417	74913	141932	257396	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	9438 362817	16126	48037	88584	180439	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	9114 339871	16287	43094	83099	170596	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	27629 1150137	52653	141913	272070	552954	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	23130 1047553	46927	120621	243120	487548	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	17507 931808	36267	97556	203020	445198	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	22199 931119	39708	111305	217609	446475	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	19888 1005638	40537	110470	229782	462865	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	11230 469468	24642	71782	140015	282518	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	59923 2660921	119695	315227	621645	1209746	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	18563 834572	39572	107089	201630	393564	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	3391 171246	6187	17935	36044	74044	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	19843 782934	36541	104678	188089	378293	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	18159 1043552	40688	106284	219959	481488	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	12909 538152	25247	64453	130547	255306	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	9846 381807	18262	47703	94687	184521	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	1561 107884	4800	21628	32269	72492	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	18093 838078	34149	97830	194130	388202	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	17224 767090	36692	91082	192632	368563	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	23129 1003327	46722	116575	233030	467002	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23297 1067188	50083	131752	275675	524791	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene	CBNZ d5	Ave	66435 2839911	131172	342544	674102	1305035	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20141 926501	43688	112670	216478	435826	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	14716 785342	30851	86162	179245	356343	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	13706 539869	26286	68391	134855	251827	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	13324 603539	27919	72821	145597	290477	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	21737 923814	44615	109339	229816	428737	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	17457 804351	35938	96869	197584	377295	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	13496 668910	27373	72196	151446	303982	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	13541 571287	28263	71577	145448	266234	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	44721 1817385	85638	224201	438529	848785	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	14675 627467	27733	73060	150727	293218	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	21634 982501	41926	121583	241366	454730	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	26859 1186930	55016	142126	293732	555344	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	24523 1099593	48945	133865	269611	518830	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	34628 1677750	70977	190984	387081	762818	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Lin1	5716 451459	14539	43950	94573	195621	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	59446 2892536	127385	337134	696938	1330791	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	15088 674085	32478	80391	168581	314210	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	17745 736292	33533	92916	184549	347047	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	6451 236888	13381	30569	61360	115557	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4369 204685	7477	23761	49109	94933	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	18175 813669	33926	97641	203203	379016	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	15591 666172	32406	81808	167202	323910	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	51470 2253201	97641	258368	555148	1065649	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	17614 672031	32785	87751	177509	326743	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	42578 1996174	89236	243838	492162	948917	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	45937 2214589	101857	264071	555283	1056574	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	52784 2630484	115205	306253	633082	1240690	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	32844 1256378	65846	161785	329769	612308	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	46211 2271314	100055	268571	558841	1097800	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	34274 1266972	63431	168239	327781	632325	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	30265 1200899	62822	159450	310374	592436	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	37590 1744132	78313	209941	433586	851264	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3654 162763	8071	20694	42452	82195	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	19216 688885	37983	95499	183760	366855	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	6361 212109	13398	34437	66215	127737	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	52184 2173823	108820	291314	572904	1180957	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	18312 645009	37847	89613	176040	357662	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	17076 660842	31381	75844	151229	308654	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19989 709889	37647	89035	169071	327027	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	70570 2545197	127833	302251	614578	1172369	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	27622 840665	44939	104195	210523	392550	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jan-2021 11:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-002
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:24 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 11:30:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1401011	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	82	979659	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	455301	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	660842	40.0	37.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	97	709889	40.0	35.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	2545197	40.0	36.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	99	840665	40.0	34.4	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	721258	40.0	38.9	
12 Chloromethane	50	1.293	1.293	0.000	99	502904	40.0	34.4	
13 Butadiene	54	1.352	1.352	0.000	96	571062	40.0	37.1	
14 Vinyl chloride	62	1.376	1.376	0.000	98	651219	40.0	37.4	
15 Bromomethane	94	1.589	1.589	0.000	91	464869	40.0	37.1	
16 Chloroethane	64	1.648	1.648	0.000	99	378138	40.0	36.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	907097	40.0	35.6	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	1142489	40.0	38.4	
19 Ethyl ether	59	2.062	2.062	0.000	86	499751	40.0	37.7	
20 Acrolein	56	2.157	2.157	0.001	99	97712	200.0	190.9	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	633100	40.0	37.7	
23 112TCTFE	151	2.275	2.275	0.000	91	533768	40.0	41.6	
24 Acetone	43	2.299	2.298	0.001	100	301658	80.0	80.0	
25 Iodomethane	142	2.358	2.358	0.000	98	1138640	40.0	37.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	1877998	40.0	37.6	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	441008	40.0	39.1	
29 Methyl acetate	43	2.571	2.571	0.000	96	816332	80.0	72.8	
30 Methylene Chloride	84	2.642	2.642	0.000	84	645225	40.0	34.8	
31 2-Methyl-2-propanol	59	2.772	2.784	-0.012	100	569636	400.0	251.8	
32 Acrylonitrile	53	2.843	2.855	-0.012	99	2079971	400.0	363.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	95	719544	40.0	36.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	1824022	40.0	37.5	
35 Hexane	86	3.115	3.115	0.000	89	191762	40.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.222	3.221	0.001	96	1086189	40.0	37.9	
37 Vinyl acetate	43	3.281	3.281	0.000	97	1192582	40.0	38.6	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	732765	40.0	36.0	
42 2,2-Dichloropropane	97	3.707	3.718	-0.011	64	183063	40.0	39.2	
43 2-Butanone (MEK)	43	3.730	3.742	-0.012	97	521553	80.0	63.6	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	362817	40.0	35.7	
49 Tetrahydrofuran	42	3.967	3.967	0.000	83	339871	80.0	70.6	
48 Chloroform	83	3.979	3.979	0.000	92	1150137	40.0	36.9	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	1047553	40.0	38.3	
51 Cyclohexane	56	4.180	4.180	0.000	83	931808	40.0	41.1	
53 1,1-Dichloropropene	75	4.263	4.275	-0.012	95	931119	40.0	37.7	
52 Carbon tetrachloride	117	4.275	4.275	0.000	96	1005638	40.0	40.2	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	469468	1000.0	816.8	
55 Benzene	78	4.440	4.440	0.000	94	2660921	40.0	38.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	834572	40.0	36.9	
58 n-Heptane	100	4.677	4.689	-0.012	83	171246	40.0	42.2	
60 Trichloroethene	130	4.985	4.985	0.000	95	782934	40.0	35.8	
62 Methylcyclohexane	83	5.150	5.150	0.000	88	1043552	40.0	42.2	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	538152	40.0	36.9	
64 Dibromomethane	93	5.269	5.269	0.000	94	381807	40.0	35.8	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	107884	800.0	771.7	
67 Dichlorobromomethane	83	5.399	5.411	-0.012	99	838078	40.0	39.0	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	767090	80.0	73.7	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	1003327	40.0	37.7	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	95	1067188	80.0	73.1	
72 Toluene	91	6.097	6.097	0.000	98	2839911	40.0	38.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	926501	40.0	38.4	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	785342	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	89	539869	40.0	36.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	603539	40.0	38.1	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	923814	40.0	37.6	
78 2-Hexanone	43	6.689	6.689	0.001	93	804351	80.0	77.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	668910	40.0	41.0	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	571287	40.0	36.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	1817385	40.0	37.4	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	627467	40.0	38.5	
86 Ethylbenzene	106	7.458	7.469	-0.011	98	982501	40.0	38.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	1186930	40.0	38.0	
89 o-Xylene	106	7.943	7.943	0.000	96	1099593	40.0	38.2	
88 Styrene	104	7.955	7.955	0.000	93	1677750	40.0	40.2	
90 Bromoform	173	8.120	8.120	0.000	97	451459	40.0	40.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	2892536	40.0	39.4	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	80	674085	40.0	38.1	
95 Bromobenzene	156	8.570	8.570	0.000	89	736292	40.0	37.6	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	82	236888	40.0	34.9	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	94	204685	40.0	40.6	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	813669	40.0	39.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	666172	40.0	37.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	2253201	40.0	39.0	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	672031	40.0	35.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	1996174	40.0	38.7	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	2214589	40.0	38.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	2630484	40.0	39.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	1256378	40.0	35.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	2271314	40.0	39.2	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	1266972	40.0	35.4	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	1200899	40.0	35.7	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	1744132	40.0	38.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	162763	40.0	36.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	688885	40.0	33.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	212109	40.0	30.3	
118 Naphthalene	128	11.753	11.753	0.000	96	2173823	40.0	35.5	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	645009	40.0	33.0	
S 129 Total BTEX	1				0		200.0	191.1	
S 128 Trihalomethanes, Total	1				0		160.0	157.2	
S 130 1,2-Dichloroethene, Total	96				0			72.4	
S 131 1,3-Dichloropropene, Total	75				0			76.1	
S 132 Xylenes, Total	106				0		80.0	76.2	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	32.00	Units: uL
VM50SS_STK_00086	Amount Added:	32.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	32.00	Units: uL
VMAROLISTDW_00376	Amount Added:	32.00	Units: uL

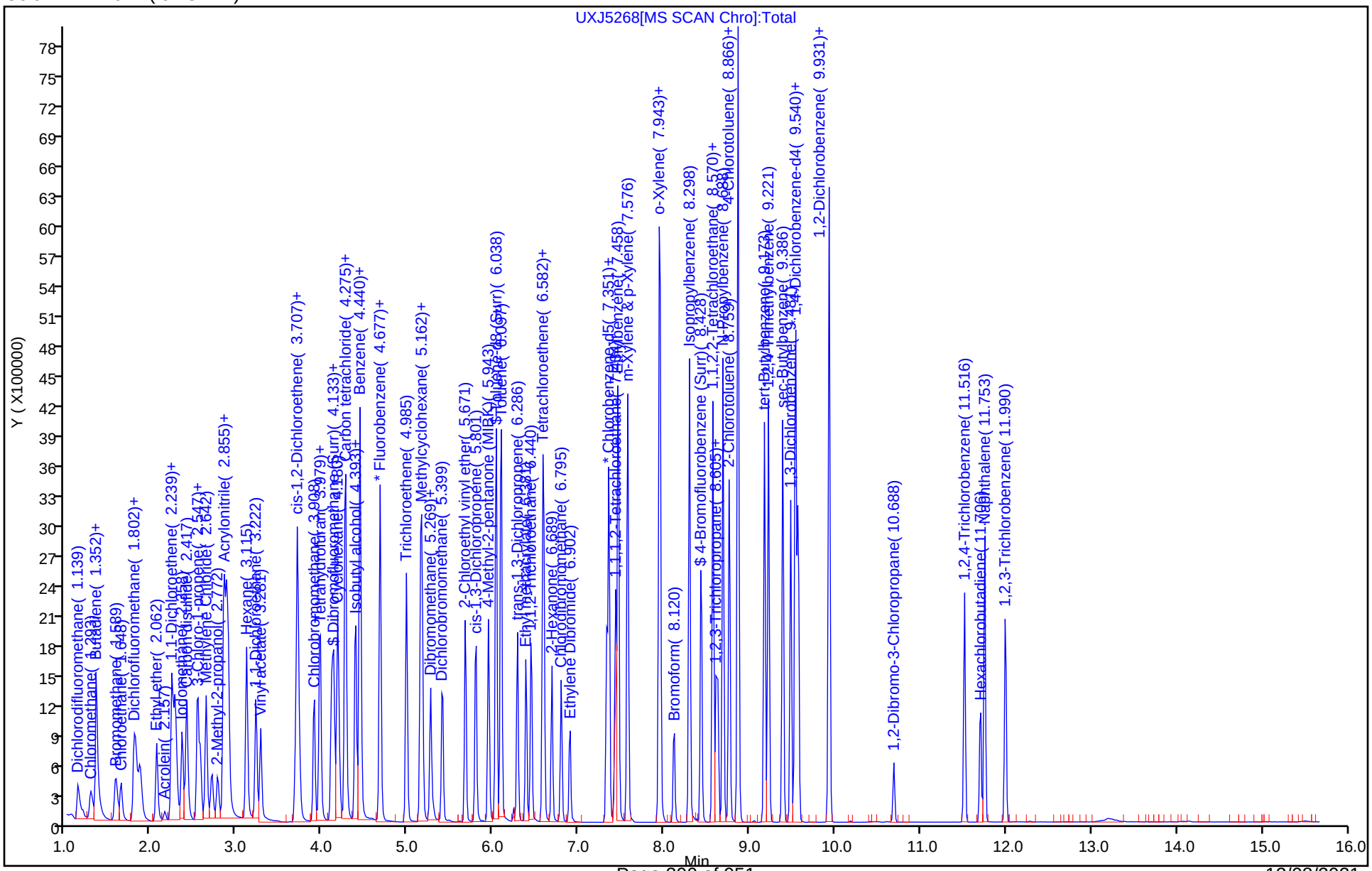
Report Date: 18-Jan-2021 09:24:25 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D

Injection Date:	15-Jan-2021 11:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jan-2021 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-003
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 12:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1252890	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	890220	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	96	413781	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	308654	20.0	19.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	327027	20.0	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1172369	20.0	18.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	392550	20.0	17.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	338735	20.0	20.4	
12 Chloromethane	50	1.305	1.293	0.012	99	238538	20.0	18.3	
13 Butadiene	54	1.364	1.352	0.012	97	258402	20.0	18.8	
14 Vinyl chloride	62	1.376	1.376	0.000	98	298544	20.0	19.2	
15 Bromomethane	94	1.589	1.589	0.000	92	200899	20.0	17.9	
16 Chloroethane	64	1.660	1.648	0.012	100	166717	20.0	18.1	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	415026	20.0	18.2	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	518477	20.0	19.5	
19 Ethyl ether	59	2.074	2.062	0.012	87	242452	20.0	20.5	
20 Acrolein	56	2.168	2.157	0.012	98	43331	100.0	94.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	298144	20.0	19.8	
23 112TCTFE	151	2.287	2.275	0.012	90	250667	20.0	21.9	
24 Acetone	43	2.310	2.298	0.012	100	169338	40.0	40.2	
25 Iodomethane	142	2.370	2.358	0.012	98	530219	20.0	19.7	
26 Carbon disulfide	76	2.429	2.417	0.012	99	892313	20.0	20.0	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	203463	20.0	20.2	
29 Methyl acetate	43	2.583	2.571	0.012	96	396110	40.0	39.5	
30 Methylene Chloride	84	2.654	2.642	0.012	84	308369	20.0	18.6	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	100	441997	200.0	218.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	1034581	200.0	202.1	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	95	345215	20.0	19.5	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	92	865638	20.0	19.9	
35 Hexane	86	3.127	3.115	0.012	89	91031	20.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	505328	20.0	19.7	
37 Vinyl acetate	43	3.293	3.281	0.012	97	543430	20.0	19.7	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	81	352905	20.0	19.4	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	69	89071	20.0	21.3	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	97	257396	40.0	35.1	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	180439	20.0	19.9	
49 Tetrahydrofuran	42	3.979	3.967	0.012	80	170596	40.0	39.6	
48 Chloroform	83	3.979	3.979	0.000	94	552954	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	487548	20.0	19.9	
51 Cyclohexane	56	4.192	4.180	0.012	84	445198	20.0	22.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	446475	20.0	20.2	
52 Carbon tetrachloride	117	4.275	4.275	0.000	89	462865	20.0	20.7	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	282518	500.0	540.9	
55 Benzene	78	4.440	4.440	0.000	94	1209746	20.0	19.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	393564	20.0	19.4	
58 n-Heptane	100	4.689	4.689	0.000	84	74044	20.0	20.4	
60 Trichloroethene	130	4.997	4.985	0.012	96	378293	20.0	19.3	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	481488	20.0	21.8	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	255306	20.0	19.5	
64 Dibromomethane	93	5.269	5.269	0.000	95	184521	20.0	19.3	
66 1,4-Dioxane	88	5.316	5.304	0.012	87	72492	400.0	417.9	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	388202	20.0	20.2	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	368563	40.0	39.6	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	467002	20.0	19.6	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	524791	40.0	40.2	
72 Toluene	91	6.097	6.097	0.000	98	1305035	20.0	19.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	435826	20.0	19.9	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	356343	20.0	20.8	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	251827	20.0	18.8	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	290477	20.0	20.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	428737	20.0	19.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	377295	40.0	39.7	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	303982	20.0	20.5	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	266234	20.0	18.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	848785	20.0	19.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	293218	20.0	19.8	
86 Ethylbenzene	106	7.470	7.469	0.001	97	454730	20.0	19.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	555344	20.0	19.6	
89 o-Xylene	106	7.943	7.943	0.000	96	518830	20.0	19.9	
88 Styrene	104	7.955	7.955	0.000	93	762818	20.0	20.1	
90 Bromoform	173	8.120	8.120	0.000	97	195621	20.0	19.5	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	1330791	20.0	19.9	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	79	314210	20.0	19.6	
95 Bromobenzene	156	8.570	8.570	0.000	88	347047	20.0	19.5	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	115557	20.0	18.8	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	94933	20.0	20.7	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	379016	20.0	20.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	323910	20.0	20.0	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	1065649	20.0	20.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	326743	20.0	19.2	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	948917	20.0	20.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	1056574	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.387	9.386	0.001	93	1240690	20.0	20.6	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	612308	20.0	19.1	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	1097800	20.0	20.8	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	632325	20.0	19.5	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	592436	20.0	19.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	851264	20.0	20.7	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	82195	20.0	20.4	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	366855	20.0	19.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	127737	20.0	20.1	
118 Naphthalene	128	11.753	11.753	0.000	96	1180957	20.0	21.2	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	357662	20.0	20.2	
S 129 Total BTEX	1				0		100.0	97.7	
S 128 Trihalomethanes, Total	1				0		80.0	80.0	
S 130 1,2-Dichloroethene, Total	96				0			38.9	
S 131 1,3-Dichloropropene, Total	75				0			39.5	
S 132 Xylenes, Total	106				0		40.0	39.4	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	16.00	Units: uL
VM50SS_STK_00086	Amount Added:	16.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	16.00	Units: uL
VMAROLISTDW_00376	Amount Added:	16.00	Units: uL

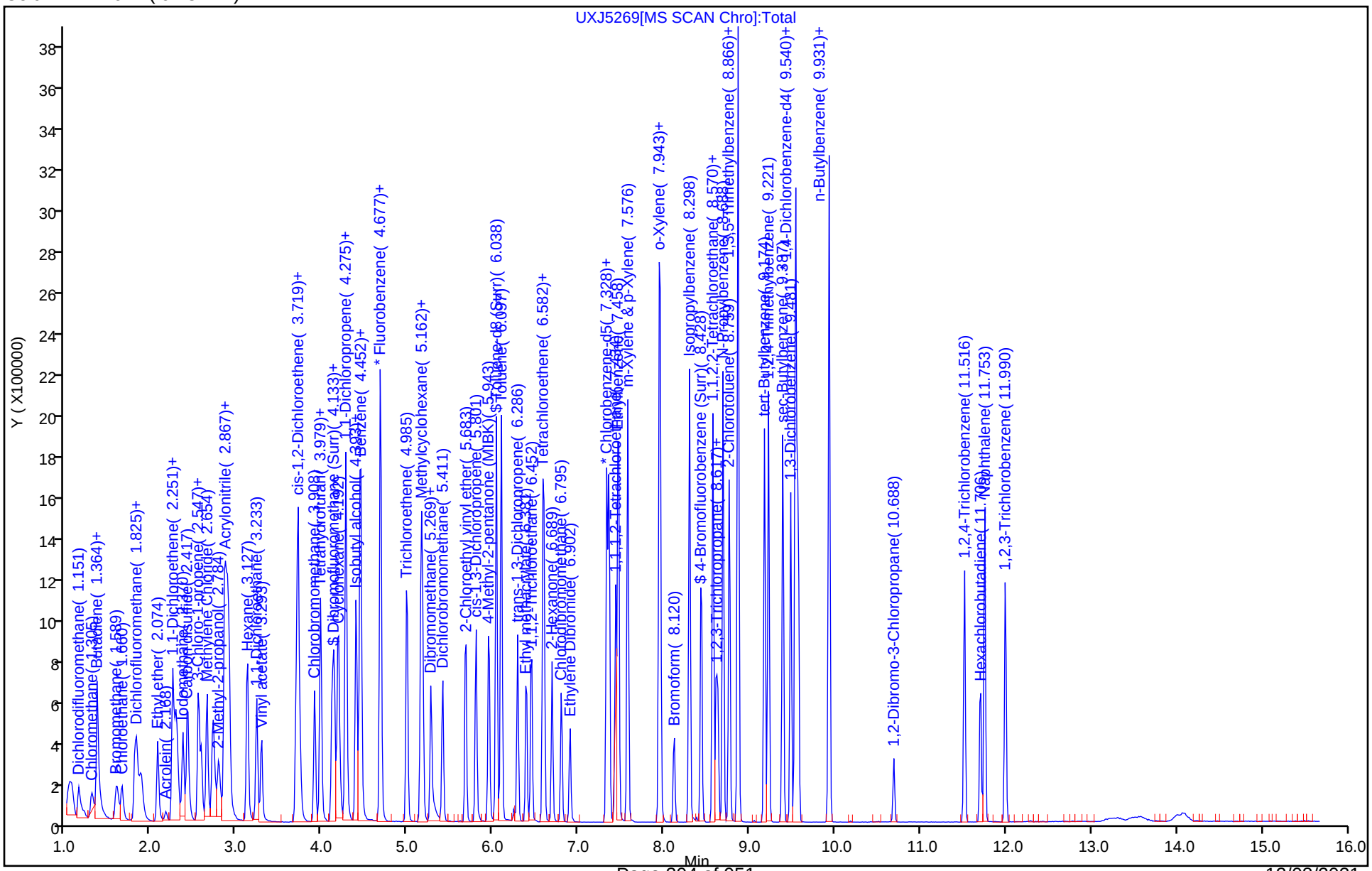
Report Date: 18-Jan-2021 09:24:33 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D

Injection Date:	15-Jan-2021 11:29:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 15-Jan-2021 11:51:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-004
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:18 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 09:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1164516	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	833065	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	399775	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	151229	10.0	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	169071	10.0	10.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	614578	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	210523	10.0	10.1	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	100	164460	10.0	10.7	
12 Chloromethane	50	1.293	1.293	0.000	100	129598	10.0	10.7	
13 Butadiene	54	1.352	1.352	0.000	97	133533	10.0	10.4	
14 Vinyl chloride	62	1.376	1.376	0.000	98	152409	10.0	10.5	
15 Bromomethane	94	1.589	1.589	0.000	91	109770	10.0	10.5	
16 Chloroethane	64	1.648	1.648	0.000	99	91798	10.0	10.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	218267	10.0	10.3	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	252670	10.0	10.2	
19 Ethyl ether	59	2.062	2.062	0.000	87	116451	10.0	10.6	
20 Acrolein	56	2.157	2.157	0.000	98	22968	50.0	54.0	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	147052	10.0	10.5	
23 112TCTFE	151	2.275	2.275	0.000	91	117673	10.0	11.0	
24 Acetone	43	2.298	2.298	0.000	100	87518	20.0	19.5	
25 Iodomethane	142	2.358	2.358	0.000	98	259758	10.0	10.4	
26 Carbon disulfide	76	2.417	2.417	0.000	99	445715	10.0	10.7	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	96370	10.0	10.3	
29 Methyl acetate	43	2.571	2.571	0.000	96	195357	20.0	21.0	
30 Methylene Chloride	84	2.642	2.642	0.000	84	152159	10.0	9.87	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	190467	100.0	101.3	
32 Acrylonitrile	53	2.855	2.855	0.000	98	507306	100.0	106.6	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	96	169059	10.0	10.3	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	442599	10.0	11.0	
35 Hexane	86	3.115	3.115	0.000	90	39610	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	97	254843	10.0	10.7	
37 Vinyl acetate	43	3.281	3.281	0.000	97	281858	10.0	11.0	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	177452	10.0	10.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	74	44411	10.0	11.4	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	141932	20.0	20.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	88584	10.0	10.5	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	83099	20.0	20.8	
48 Chloroform	83	3.979	3.979	0.000	94	272070	10.0	10.5	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	243120	10.0	10.7	
51 Cyclohexane	56	4.180	4.180	0.000	85	203020	10.0	10.8	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	229782	10.0	11.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	217609	10.0	10.6	
54 Isobutyl alcohol	41	4.393	4.393	0.000	91	140015	250.0	286.5	
55 Benzene	78	4.440	4.440	0.000	94	621645	10.0	10.7	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	201630	10.0	10.7	
58 n-Heptane	100	4.689	4.689	0.000	83	36044	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	188089	10.0	10.3	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	219959	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	130547	10.0	10.8	
64 Dibromomethane	93	5.269	5.269	0.000	92	94687	10.0	10.7	
66 1,4-Dioxane	88	5.304	5.304	0.000	85	32269	200.0	176.1	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	194130	10.0	10.9	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	192632	20.0	22.3	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	233030	10.0	10.5	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	275675	20.0	22.7	
72 Toluene	91	6.097	6.097	0.000	98	674102	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	216478	10.0	10.5	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	179245	10.0	11.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	134855	10.0	10.7	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	145597	10.0	10.8	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	229816	10.0	11.0	
78 2-Hexanone	43	6.689	6.689	0.000	92	197584	20.0	22.2	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	151446	10.0	10.9	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	145448	10.0	11.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	438529	10.0	10.6	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	150727	10.0	10.9	
86 Ethylbenzene	106	7.469	7.469	0.000	97	241366	10.0	11.1	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	293732	10.0	11.1	
89 o-Xylene	106	7.943	7.943	0.000	96	269611	10.0	11.0	
88 Styrene	104	7.955	7.955	0.000	92	387081	10.0	10.9	
90 Bromoform	173	8.120	8.120	0.000	97	94573	10.0	10.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	696938	10.0	11.2	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	168581	10.0	10.9	
95 Bromobenzene	156	8.570	8.570	0.000	87	184549	10.0	10.7	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	61360	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	49109	10.0	11.1	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	203203	10.0	11.1	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	167202	10.0	10.7	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	177509	10.0	10.8	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	555148	10.0	10.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	492162	10.0	10.9	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	555283	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	633082	10.0	10.9	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	329769	10.0	10.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	558841	10.0	11.0	
108 1,4-Dichlorobenzene	146	9.576	9.576	0.000	95	327781	10.0	10.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	433586	10.0	10.9	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	310374	10.0	10.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	42452	10.0	10.9	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	183760	10.0	10.3	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	66215	10.0	10.8	
118 Naphthalene	128	11.753	11.753	0.000	96	572904	10.0	10.6	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	176040	10.0	10.3	
S 129 Total BTEX	1				0		50.0	54.6	
S 128 Trihalomethanes, Total	1				0		40.0	42.6	
S 132 Xylenes, Total	106				0		20.0	22.1	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	8.00	Units: uL
VM50SS_STK_00086	Amount Added:	8.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	8.00	Units: uL
VMAROLISTDW_00376	Amount Added:	8.00	Units: uL

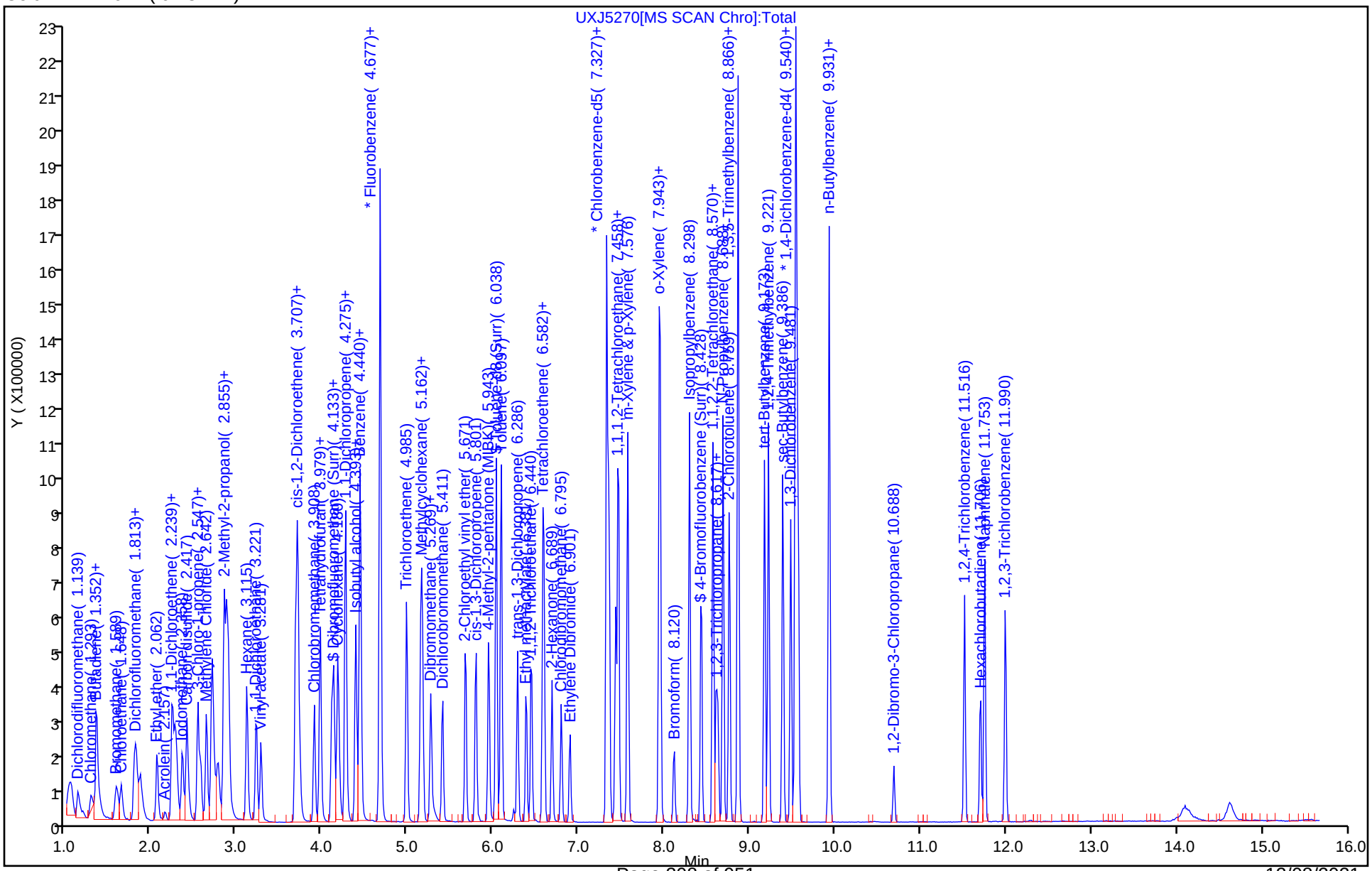
Report Date: 18-Jan-2021 09:24:18 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D

Injection Date:	15-Jan-2021 11:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jan-2021 12:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-005
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:38 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1222644	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	861537	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	406373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	75844	5.00	4.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	95	89035	5.00	5.04	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	302251	5.00	4.93	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	97	104195	5.00	4.85	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	98	80613	5.00	4.98	
12 Chloromethane	50	1.305	1.293	0.012	98	65579	5.00	5.15	
13 Butadiene	54	1.364	1.352	0.012	96	67351	5.00	5.02	
14 Vinyl chloride	62	1.387	1.376	0.011	98	76699	5.00	5.05	
15 Bromomethane	94	1.600	1.589	0.011	91	55501	5.00	5.08	
16 Chloroethane	64	1.660	1.648	0.012	99	45377	5.00	5.05	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	97	115827	5.00	5.20	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	98	126814	5.00	4.89	
19 Ethyl ether	59	2.074	2.062	0.012	87	63254	5.00	5.47	
20 Acrolein	56	2.168	2.157	0.012	94	10031	25.0	22.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	74855	5.00	5.11	
23 112TCTFE	151	2.287	2.275	0.012	91	55364	5.00	4.95	
24 Acetone	43	2.310	2.298	0.012	100	54384	10.0	10.3	
25 Iodomethane	142	2.370	2.358	0.012	98	138148	5.00	5.27	
26 Carbon disulfide	76	2.429	2.417	0.012	99	223442	5.00	5.12	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	84	51666	5.00	5.25	
29 Methyl acetate	43	2.583	2.571	0.012	95	100508	10.0	10.3	
30 Methylene Chloride	84	2.654	2.642	0.012	83	83987	5.00	5.19	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	95943	50.0	48.6	
32 Acrylonitrile	53	2.855	2.855	0.000	98	254760	50.0	51.0	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	92696	5.00	5.38	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	92	217115	5.00	5.12	
35 Hexane	86	3.127	3.115	0.012	88	19919	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	131033	5.00	5.24	
37 Vinyl acetate	43	3.293	3.281	0.012	97	136870	5.00	5.07	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	94152	5.00	5.30	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	70	22350	5.00	5.48	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	74913	10.0	10.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	81	48037	5.00	5.42	
49 Tetrahydrofuran	42	3.979	3.967	0.012	82	43094	10.0	10.3	
48 Chloroform	83	3.979	3.979	0.000	92	141913	5.00	5.22	
50 1,1,1-Trichloroethane	97	4.145	4.133	0.011	98	120621	5.00	5.06	
51 Cyclohexane	56	4.192	4.180	0.012	82	97556	5.00	4.93	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	111305	5.00	5.16	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	110470	5.00	5.05	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	71782	125.0	142.0	
55 Benzene	78	4.440	4.440	0.000	94	315227	5.00	5.17	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	107089	5.00	5.42	
58 n-Heptane	100	4.689	4.689	0.000	84	17935	5.00	5.07	
60 Trichloroethene	130	4.996	4.985	0.011	94	104678	5.00	5.48	
62 Methylcyclohexane	83	5.162	5.150	0.012	88	106284	5.00	4.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	64453	5.00	5.06	
64 Dibromomethane	93	5.269	5.269	0.000	94	47703	5.00	5.12	
66 1,4-Dioxane	88	5.316	5.304	0.012	86	21628	100.0	113.8	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	97830	5.00	5.22	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	91082	10.0	10.0	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	116575	5.00	5.02	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	131752	10.0	10.3	
72 Toluene	91	6.097	6.097	0.000	98	342544	5.00	5.24	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	112670	5.00	5.31	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	86162	5.00	5.19	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	88	68391	5.00	5.27	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	72821	5.00	5.23	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	89	109339	5.00	5.06	
78 2-Hexanone	43	6.689	6.689	0.001	91	96869	10.0	10.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	72196	5.00	5.04	
82 Ethylene Dibromide	107	6.902	6.901	0.001	100	71577	5.00	5.25	
84 Chlorobenzene	112	7.351	7.351	0.000	97	224201	5.00	5.24	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	73060	5.00	5.10	
86 Ethylbenzene	106	7.470	7.469	0.001	97	121583	5.00	5.43	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	142126	5.00	5.17	
89 o-Xylene	106	7.943	7.943	0.000	95	133865	5.00	5.29	
88 Styrene	104	7.955	7.955	0.000	94	190984	5.00	5.20	
90 Bromoform	173	8.120	8.120	0.000	96	43950	5.00	4.90	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	337134	5.00	5.22	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	80391	5.00	5.10	
95 Bromobenzene	156	8.570	8.570	0.000	88	92916	5.00	5.32	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	85	30569	5.00	5.05	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	82	23761	5.00	5.29	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	97641	5.00	5.25	
99 2-Chlorotoluene	126	8.759	8.759	0.000	96	81808	5.00	5.14	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	258368	5.00	5.01	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	87751	5.00	5.25	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	243838	5.00	5.30	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	264071	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	306253	5.00	5.19	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	161785	5.00	5.14	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	268571	5.00	5.19	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	168239	5.00	5.27	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	159450	5.00	5.31	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	209941	5.00	5.19	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	20694	5.00	5.23	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	95499	5.00	5.26	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	34437	5.00	5.51	
118 Naphthalene	128	11.753	11.753	0.000	96	291314	5.00	5.32	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	94	89613	5.00	5.14	
S 129 Total BTEX	1				0		25.0	26.3	
S 128 Trihalomethanes, Total	1				0		20.0	20.4	
S 130 1,2-Dichloroethene, Total	96				0			10.7	
S 131 1,3-Dichloropropene, Total	75				0			10.3	
S 132 Xylenes, Total	106				0		10.0	10.5	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	4.00	Units: uL
VM50SS_STK_00086	Amount Added:	4.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	4.00	Units: uL
VMAROLISTDW_00376	Amount Added:	4.00	Units: uL

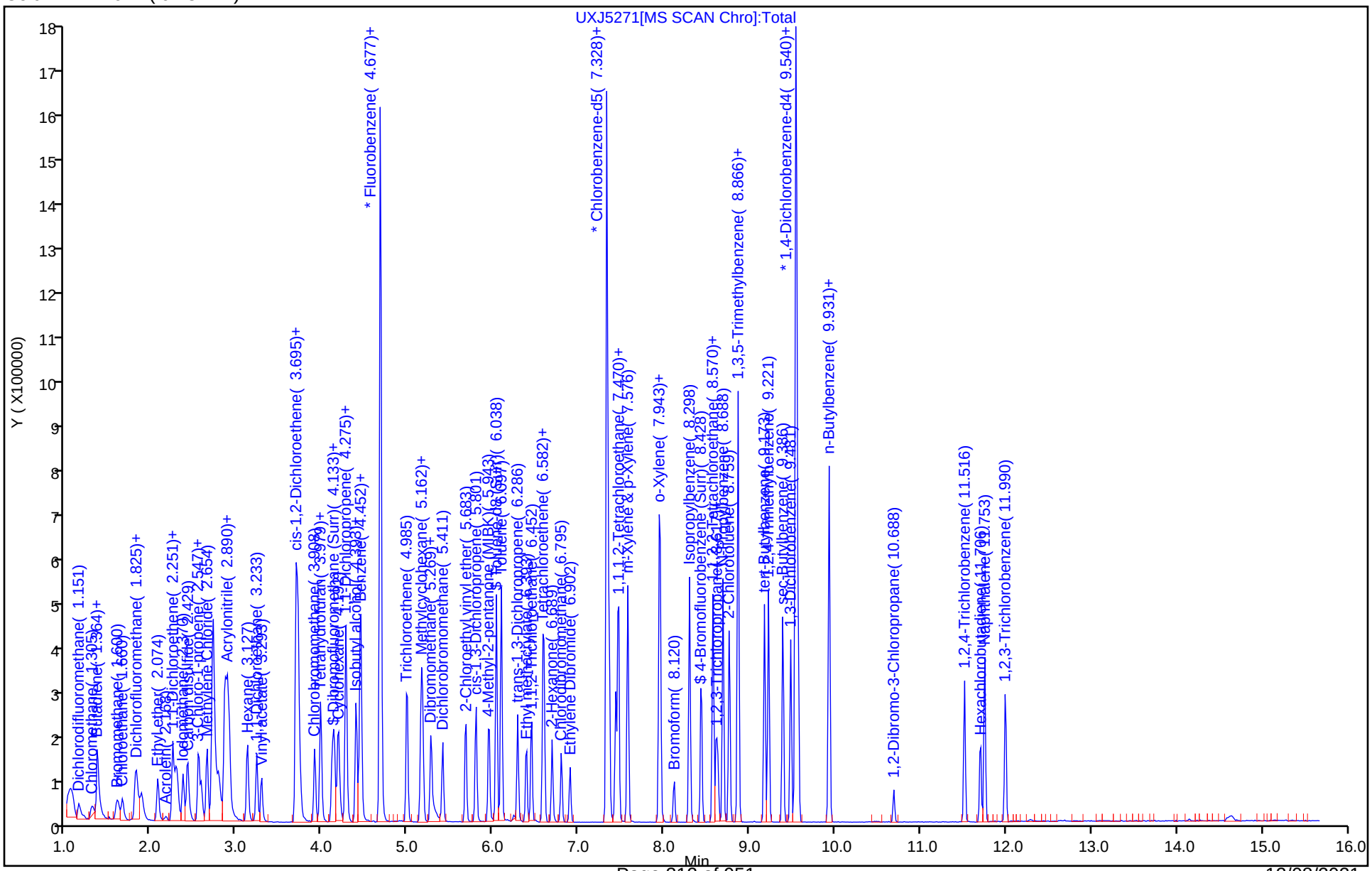
Report Date: 18-Jan-2021 09:24:39 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D

Injection Date:	15-Jan-2021 12:13:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jan-2021 12:36:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-006
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:45 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1194740	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	862909	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	402373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	31381	2.00	2.06	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	37647	2.00	2.18	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	91	127833	2.00	2.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	44939	2.00	2.09	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	31418	2.00	1.99	
12 Chloromethane	50	1.293	1.293	0.000	98	25355	2.00	2.04	
13 Butadiene	54	1.364	1.352	0.012	97	28511	2.00	2.17	
14 Vinyl chloride	62	1.375	1.376	-0.001	53	31125	2.00	2.10	
15 Bromomethane	94	1.588	1.589	-0.001	93	21942	2.00	2.05	
16 Chloroethane	64	1.648	1.648	0.000	99	17658	2.00	2.01	
17 Dichlorofluoromethane	67	1.801	1.802	-0.001	97	46164	2.00	2.12	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	51835	2.00	2.04	
19 Ethyl ether	59	2.074	2.062	0.012	88	20989	2.00	1.86	
20 Acrolein	56	2.168	2.157	0.012	92	3869	10.0	8.87	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	29147	2.00	2.03	
23 112TCTFE	151	2.287	2.275	0.012	91	20704	2.00	1.89	
24 Acetone	43	2.298	2.298	0.000	99	27191	4.00	4.25	
25 Iodomethane	142	2.369	2.358	0.011	97	49606	2.00	1.93	
26 Carbon disulfide	76	2.417	2.417	0.000	98	85053	2.00	1.99	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	88	18496	2.00	1.92	
29 Methyl acetate	43	2.582	2.571	0.011	95	37455	4.00	3.92	
30 Methylene Chloride	84	2.653	2.642	0.011	83	32083	2.00	2.03	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	40795	20.0	21.1	
32 Acrylonitrile	53	2.855	2.855	0.000	98	99328	20.0	20.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	33055	2.00	1.96	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	80293	2.00	1.94	
35 Hexane	86	3.127	3.115	0.012	91	7051	2.00	1.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	49476	2.00	2.02	
37 Vinyl acetate	43	3.281	3.281	0.000	96	49994	2.00	1.90	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	35504	2.00	2.05	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	7464	2.00	1.87	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	95	29417	4.00	4.21	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	16126	2.00	1.86	
49 Tetrahydrofuran	42	3.979	3.967	0.012	53	16287	4.00	3.97	
48 Chloroform	83	3.979	3.979	0.000	93	52653	2.00	1.98	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	46927	2.00	2.01	
51 Cyclohexane	56	4.180	4.180	0.000	80	36267	2.00	1.88	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	39708	2.00	1.88	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	40537	2.00	1.90	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	24642	50.0	48.7	
55 Benzene	78	4.440	4.440	0.000	94	119695	2.00	2.01	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	39572	2.00	2.05	
58 n-Heptane	100	4.689	4.689	0.000	71	6187	2.00	1.79	
60 Trichloroethene	130	4.985	4.985	0.000	94	36541	2.00	1.96	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	40688	2.00	1.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	25247	2.00	2.03	
64 Dibromomethane	93	5.269	5.269	-0.001	95	18262	2.00	2.01	
66 1,4-Dioxane	88	5.316	5.304	0.012	85	4800	40.0	36.6	
67 Dichlorobromomethane	83	5.411	5.411	-0.001	98	34149	2.00	1.86	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	36692	4.00	4.14	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	46722	2.00	2.06	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	50083	4.00	4.02	
72 Toluene	91	6.097	6.097	0.000	99	131172	2.00	2.00	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	43688	2.00	2.05	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	30851	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	26286	2.00	2.02	
76 Tetrachloroethene	164	6.582	6.582	0.000	95	27919	2.00	2.00	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	44615	2.00	2.06	
78 2-Hexanone	43	6.688	6.689	0.000	93	35938	4.00	3.90	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	27373	2.00	1.91	
82 Ethylene Dibromide	107	6.901	6.901	0.000	95	28263	2.00	2.07	
84 Chlorobenzene	112	7.351	7.351	0.000	97	85638	2.00	2.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	27733	2.00	1.93	
86 Ethylbenzene	106	7.469	7.469	0.000	97	41926	2.00	1.87	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	55016	2.00	2.00	
89 o-Xylene	106	7.943	7.943	0.000	96	48945	2.00	1.93	
88 Styrene	104	7.955	7.955	0.000	94	70977	2.00	1.93	
90 Bromoform	173	8.120	8.120	0.000	94	14539	2.00	1.95	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	127385	2.00	1.97	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	32478	2.00	2.08	
95 Bromobenzene	156	8.570	8.570	0.000	91	33533	2.00	1.94	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	85	13381	2.00	2.23	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	84	7477	2.00	1.68	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	33926	2.00	1.84	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	32406	2.00	2.06	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	97641	2.00	1.91	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	32785	2.00	1.98	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	89236	2.00	1.96	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	101857	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	115205	2.00	1.97	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	65846	2.00	2.11	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	100055	2.00	1.95	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	94	63431	2.00	2.01	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	62822	2.00	2.11	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	78313	2.00	1.96	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	8071	2.00	2.06	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	37983	2.00	2.11	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	94	13398	2.00	2.16	
118 Naphthalene	128	11.753	11.753	0.000	96	108820	2.00	2.01	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	37847	2.00	2.19	
S 129 Total BTEX	1				0		10.0	9.81	
S 128 Trihalomethanes, Total	1				0		8.00	7.70	
S 130 1,2-Dichloroethene, Total	96				0			4.01	
S 131 1,3-Dichloropropene, Total	75				0			4.12	
S 132 Xylenes, Total	106				0		4.00	3.93	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	1.60	Units: uL
VM50SS_STK_00086	Amount Added:	1.60	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	1.60	Units: uL
VMAROLISTDW_00376	Amount Added:	1.60	Units: uL

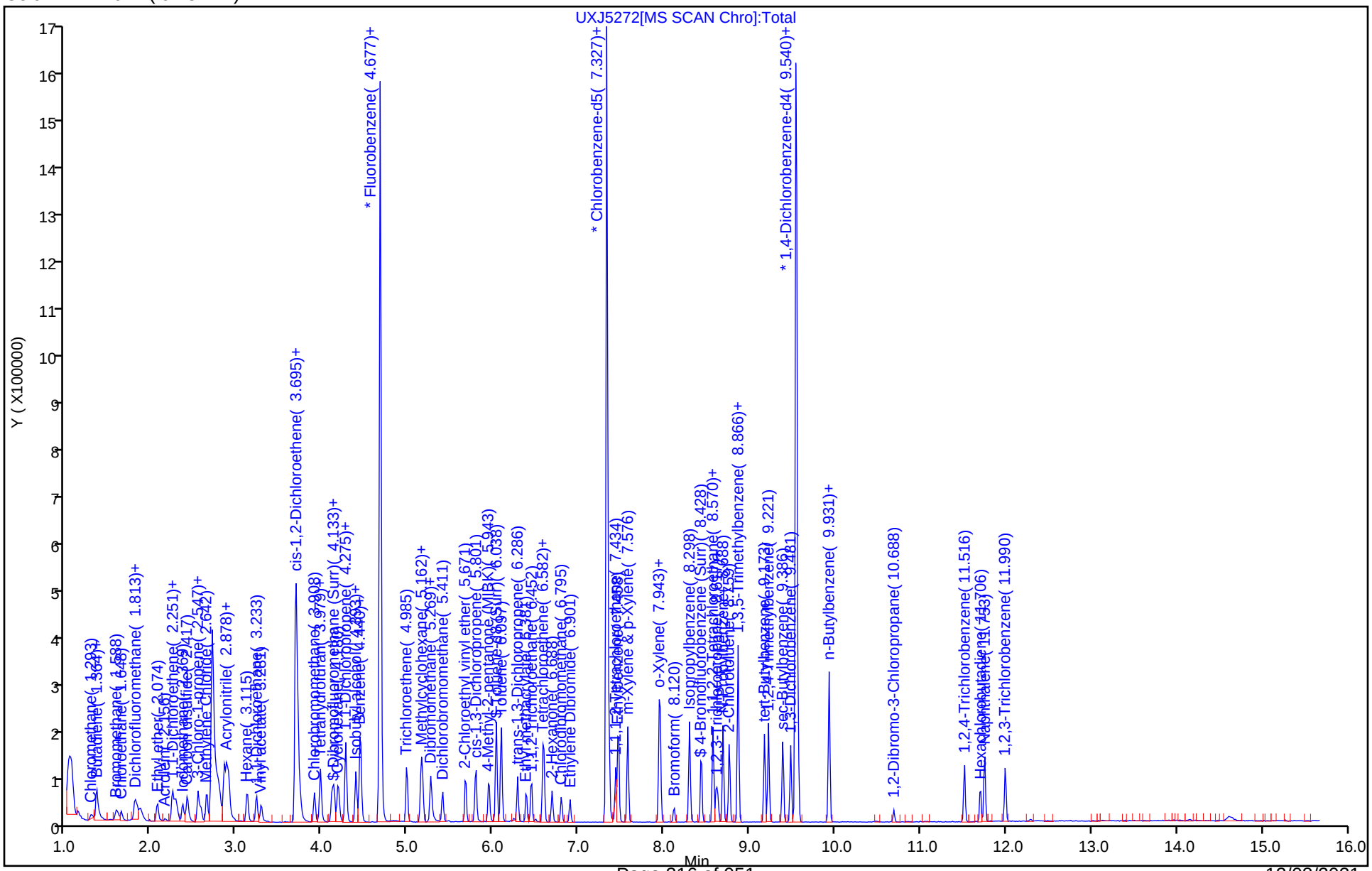
Report Date: 18-Jan-2021 09:24:45 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D

Injection Date:	15-Jan-2021 12:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jan-2021 12:58:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-007
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:50 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:48:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1237666	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	83	905264	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	93	420817	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	98	17076	1.00	1.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	19989	1.00	1.12	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	70570	1.00	1.10	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	27622	1.00	1.22	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	96	15545	1.00	0.9490	
12 Chloromethane	50	1.305	1.293	0.012	95	14340	1.00	1.11	
13 Butadiene	54	1.364	1.352	0.012	91	13521	1.00	1.00	
14 Vinyl chloride	62	1.376	1.376	0.000	59	15264	1.00	0.99	
15 Bromomethane	94	1.612	1.589	0.023	88	11910	1.00	1.08	
16 Chloroethane	64	1.660	1.648	0.012	97	9885	1.00	1.09	
17 Dichlorofluoromethane	67	1.825	1.802	0.023	95	24102	1.00	1.07	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	87	27428	1.00	1.04	M
19 Ethyl ether	59	2.074	2.062	0.012	85	11151	1.00	0.9528	
20 Acrolein	56	2.180	2.157	0.024	88	2788	5.00	6.17	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	14457	1.00	0.9741	
23 112TCTFE	151	2.287	2.275	0.012	83	9322	1.00	0.8234	
24 Acetone	43	2.310	2.298	0.012	97	16505	2.00	1.70	
25 Iodomethane	142	2.370	2.358	0.012	98	26756	1.00	1.01	
26 Carbon disulfide	76	2.429	2.417	0.012	98	42851	1.00	0.9700	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	83	9657	1.00	0.9701	
29 Methyl acetate	43	2.583	2.571	0.012	96	20775	2.00	2.10	
30 Methylene Chloride	84	2.654	2.642	0.012	87	18990	1.00	1.16	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	17313	10.0	8.66	
32 Acrylonitrile	53	2.855	2.855	0.000	98	49387	10.0	9.77	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	93	17888	1.00	1.03	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	94	42075	1.00	0.9796	
35 Hexane	86	3.127	3.115	0.012	91	3359	1.00	0.8403	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	97	23786	1.00	0.9391	
37 Vinyl acetate	43	3.292	3.281	0.011	98	27137	1.00	0.99	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	17946	1.00	1.00	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	64	3204	1.00	0.7765	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	17238	2.00	2.38	
46 Chlorobromomethane	128	3.920	3.908	0.012	80	9438	1.00	1.05	
49 Tetrahydrofuran	42	3.979	3.967	0.012	55	9114	2.00	2.14	
48 Chloroform	83	3.979	3.979	0.000	91	27629	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.144	4.133	0.011	96	23130	1.00	0.9577	
51 Cyclohexane	56	4.192	4.180	0.012	85	17507	1.00	0.8740	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	22199	1.00	1.02	
52 Carbon tetrachloride	117	4.286	4.275	0.011	82	19888	1.00	0.8989	
54 Isobutyl alcohol	41	4.405	4.393	0.012	57	11230	25.0	21.1	
55 Benzene	78	4.440	4.440	0.000	96	59923	1.00	0.9709	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	18563	1.00	0.9278	
58 n-Heptane	100	4.689	4.689	0.000	37	3391	1.00	0.9465	
60 Trichloroethene	130	4.996	4.985	0.011	96	19843	1.00	1.03	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	18159	1.00	0.8320	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	93	12909	1.00	1.00	
64 Dibromomethane	93	5.269	5.269	0.000	57	9846	1.00	1.04	
66 1,4-Dioxane	88	5.304	5.304	0.000	8	1561	20.0	22.0	
67 Dichlorobromomethane	83	5.411	5.411	0.000	98	18093	1.00	0.9531	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	17224	2.00	1.87	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	95	23129	1.00	0.9848	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	23297	2.00	1.81	
72 Toluene	91	6.097	6.097	0.000	98	66435	1.00	0.9665	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	20141	1.00	0.9030	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	14716	1.00	0.8430	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	85	13706	1.00	1.01	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	13324	1.00	0.9105	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	21737	1.00	0.9574	
78 2-Hexanone	43	6.689	6.689	0.001	92	17457	2.00	1.81	
80 Chlorodibromomethane	129	6.795	6.795	0.000	87	13496	1.00	0.8958	
82 Ethylene Dibromide	107	6.902	6.901	0.001	94	13541	1.00	0.9453	
84 Chlorobenzene	112	7.363	7.351	0.012	97	44721	1.00	1.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	87	14675	1.00	0.9744	
86 Ethylbenzene	106	7.470	7.469	0.001	97	21634	1.00	0.9191	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	26859	1.00	0.9307	
89 o-Xylene	106	7.943	7.943	0.000	95	24523	1.00	0.9230	
88 Styrene	104	7.955	7.955	0.000	91	34628	1.00	0.8971	
90 Bromoform	173	8.120	8.120	0.000	90	5716	1.00	1.03	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	59446	1.00	0.8756	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	76	15088	1.00	0.9236	
95 Bromobenzene	156	8.570	8.570	0.000	89	17745	1.00	0.9803	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	79	6451	1.00	1.03	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	4369	1.00	0.9387	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	18175	1.00	0.9433	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	15591	1.00	0.9454	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	86	51470	1.00	0.9629	
101 4-Chlorotoluene	126	8.866	8.866	0.000	97	17614	1.00	1.02	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	42578	1.00	0.8935	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	94	45937	1.00	0.8688	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	52784	1.00	0.8630	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	96	32844	1.00	1.01	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	95	46211	1.00	0.8630	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	93	34274	1.00	1.04	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	30265	1.00	0.9727	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	37590	1.00	0.8977	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	3654	1.00	0.8923	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	91	19216	1.00	1.02	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	88	6361	1.00	0.9820	
118 Naphthalene	128	11.753	11.753	0.000	96	52184	1.00	0.9209	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	18312	1.00	1.01	
S 129 Total BTEX	1				0		5.00	4.71	
S 128 Trihalomethanes, Total	1				0		4.00	3.89	
S 130 1,2-Dichloroethene, Total	96				0			2.02	
S 131 1,3-Dichloropropene, Total	75				0			1.89	
S 132 Xylenes, Total	106				0		2.00	1.85	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

VMRGAS_00369	Amount Added:	0.80	Units: uL
VM50SS_STK_00086	Amount Added:	0.80	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	0.80	Units: uL
VMAROLISTDW_00376	Amount Added:	0.80	Units: uL

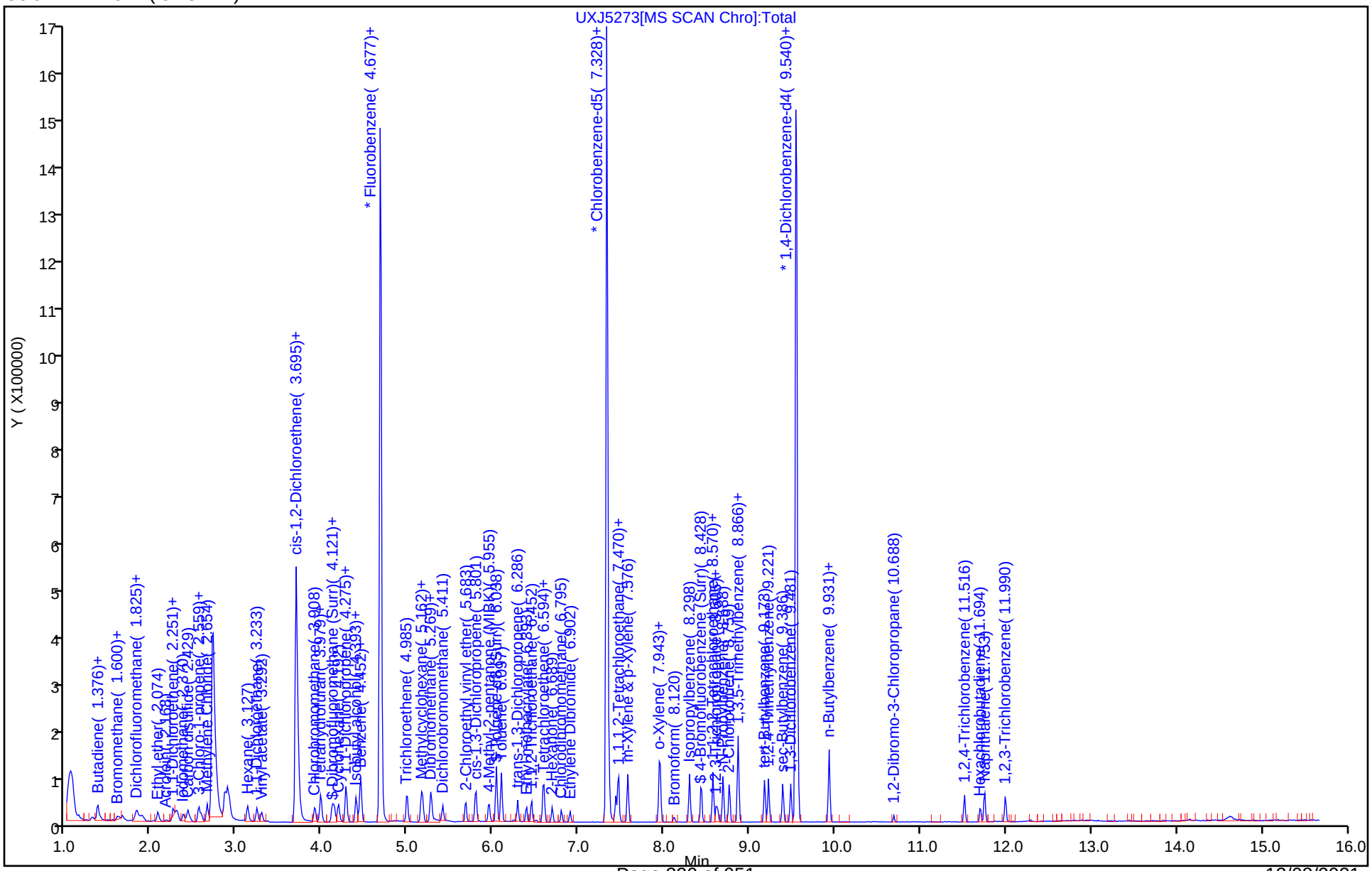
Report Date: 18-Jan-2021 09:24:51 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D

Injection Date:	15-Jan-2021 12:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

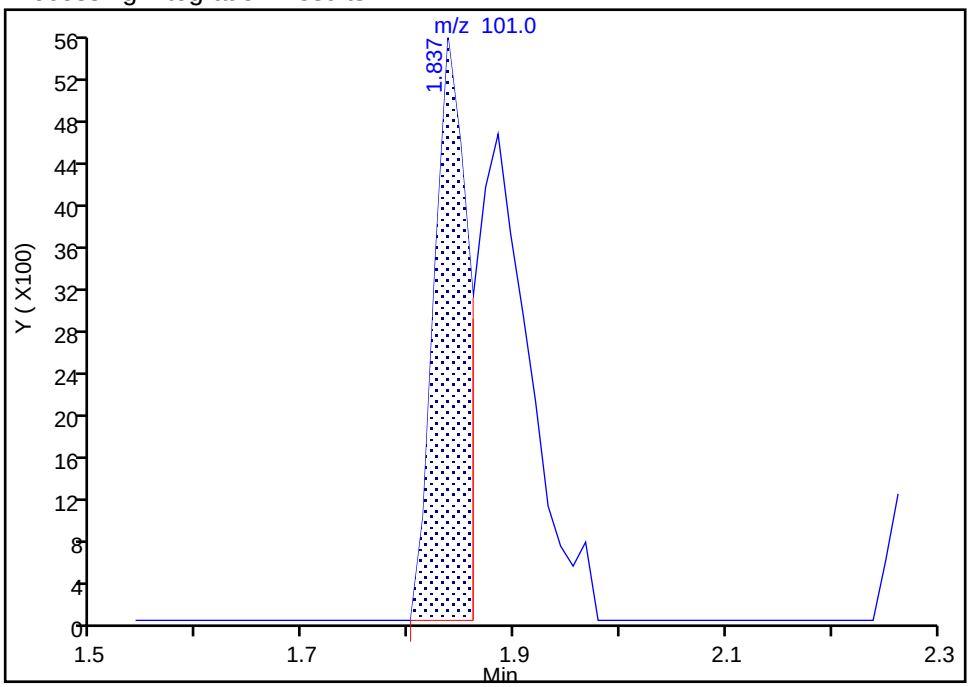
Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Injection Date: 15-Jan-2021 12:58:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 043582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

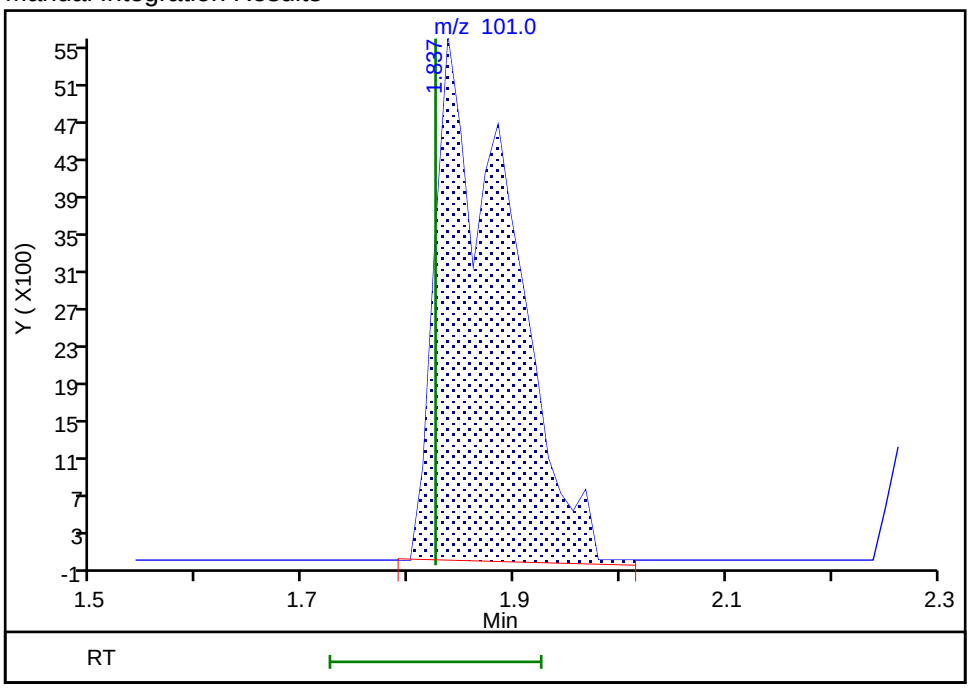
Processing Integration Results

RT: 1.84
Area: 12554
Amount: 0.752513
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 27428
Amount: 1.043907
Amount Units: ug/l



Reviewer: evansle, 18-Jan-2021 08:47:53
Audit Action: Manually Integrated Audit Reason: Split Peak

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

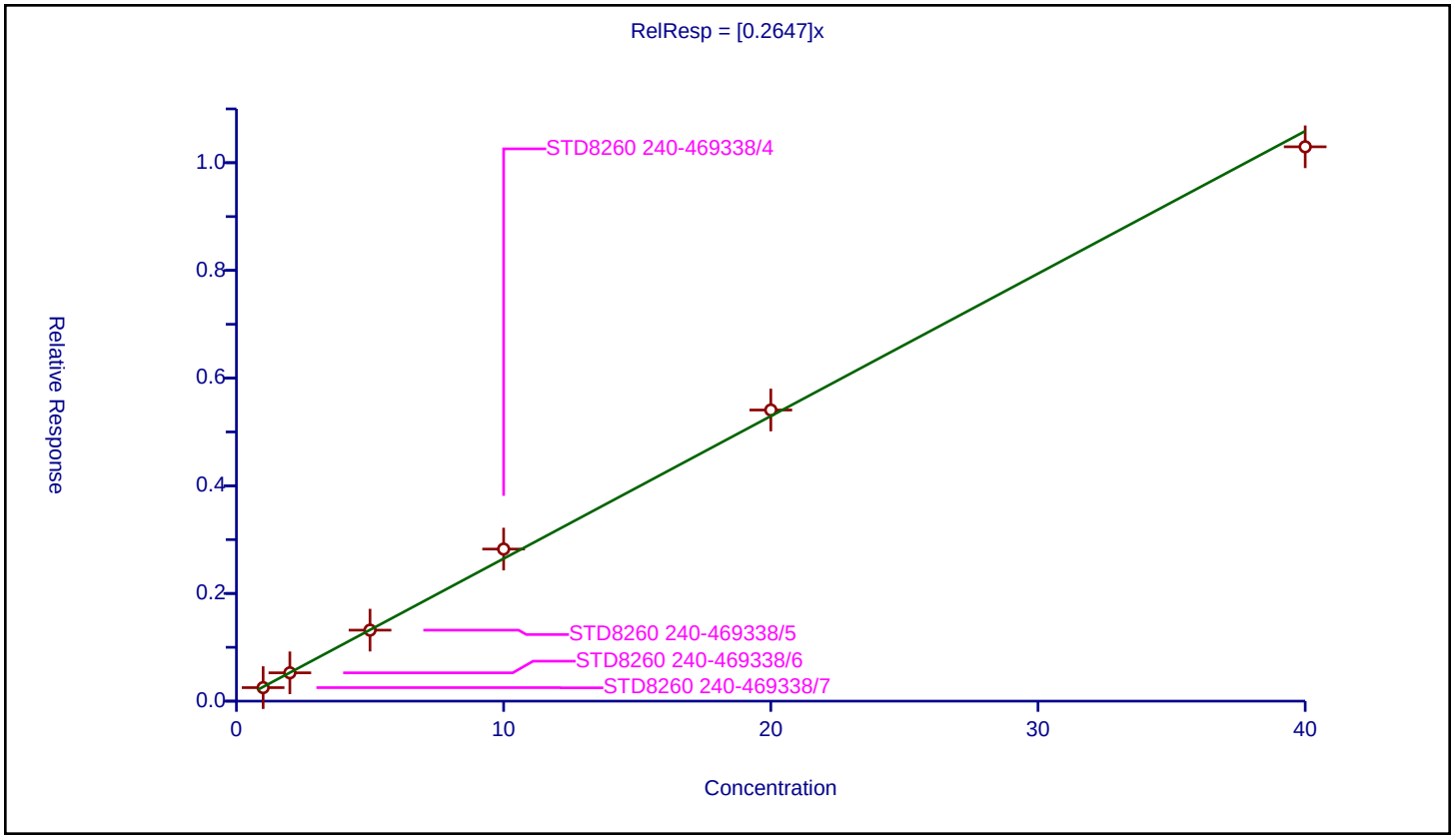
Curve Coefficients

Intercept:	0
Slope:	0.2647

Error Coefficients

Standard Error:	366000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.251199	20.0	1237666.0	0.251199	Y
2	STD8260 240-469338/6	2.0	0.525939	20.0	1194740.0	0.262969	Y
3	STD8260 240-469338/5	5.0	1.318667	20.0	1222644.0	0.263733	Y
4	STD8260 240-469338/4	10.0	2.824521	20.0	1164516.0	0.282452	Y
5	STD8260 240-469338/3	20.0	5.407258	20.0	1252890.0	0.270363	Y
6	STD8260 240-469338/2	40.0	10.29625	20.0	1401011.0	0.257406	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

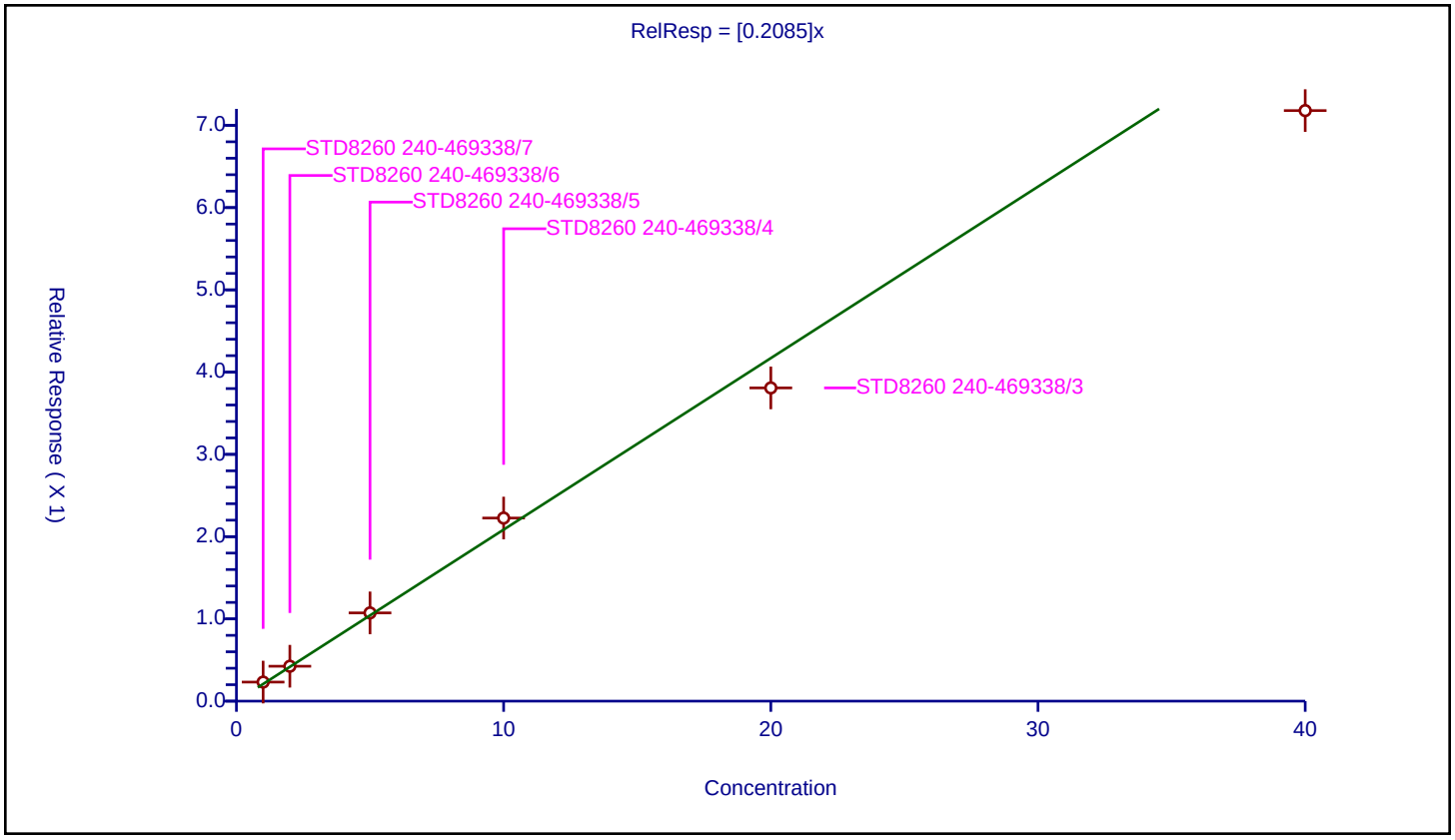
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	258000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.231726	20.0	1237666.0	0.231726	Y
2	STD8260 240-469338/6	2.0	0.424444	20.0	1194740.0	0.212222	Y
3	STD8260 240-469338/5	5.0	1.072741	20.0	1222644.0	0.214548	Y
4	STD8260 240-469338/4	10.0	2.225783	20.0	1164516.0	0.222578	Y
5	STD8260 240-469338/3	20.0	3.807804	20.0	1252890.0	0.19039	Y
6	STD8260 240-469338/2	40.0	7.179158	20.0	1401011.0	0.179479	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

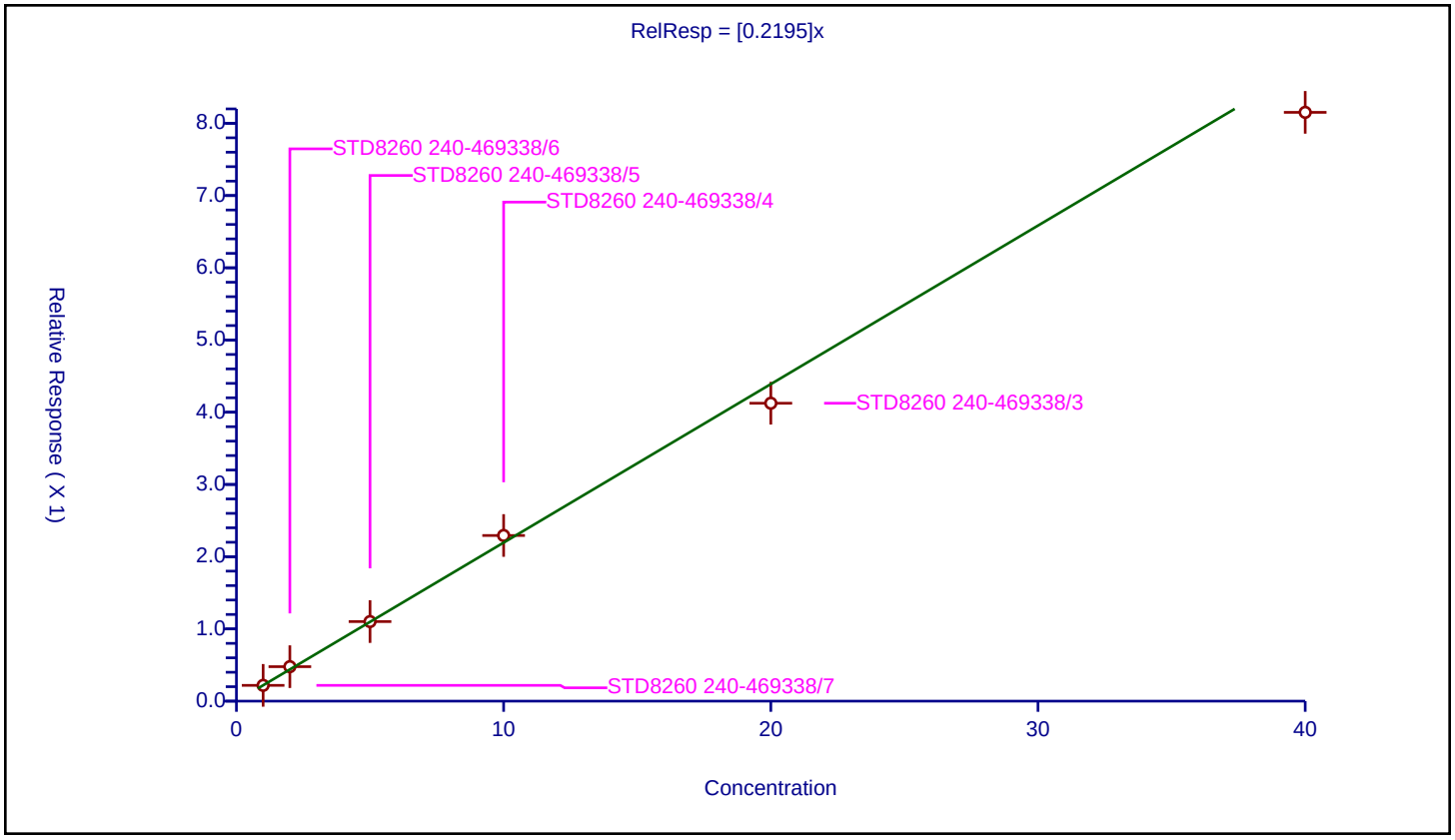
Curve Coefficients

Intercept:	0
Slope:	0.2195

Error Coefficients

Standard Error:	289000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.218492	20.0	1237666.0	0.218492	Y
2	STD8260 240-469338/6	2.0	0.477275	20.0	1194740.0	0.238638	Y
3	STD8260 240-469338/5	5.0	1.101727	20.0	1222644.0	0.220345	Y
4	STD8260 240-469338/4	10.0	2.293365	20.0	1164516.0	0.229336	Y
5	STD8260 240-469338/3	20.0	4.124895	20.0	1252890.0	0.206245	Y
6	STD8260 240-469338/2	40.0	8.152142	20.0	1401011.0	0.203804	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

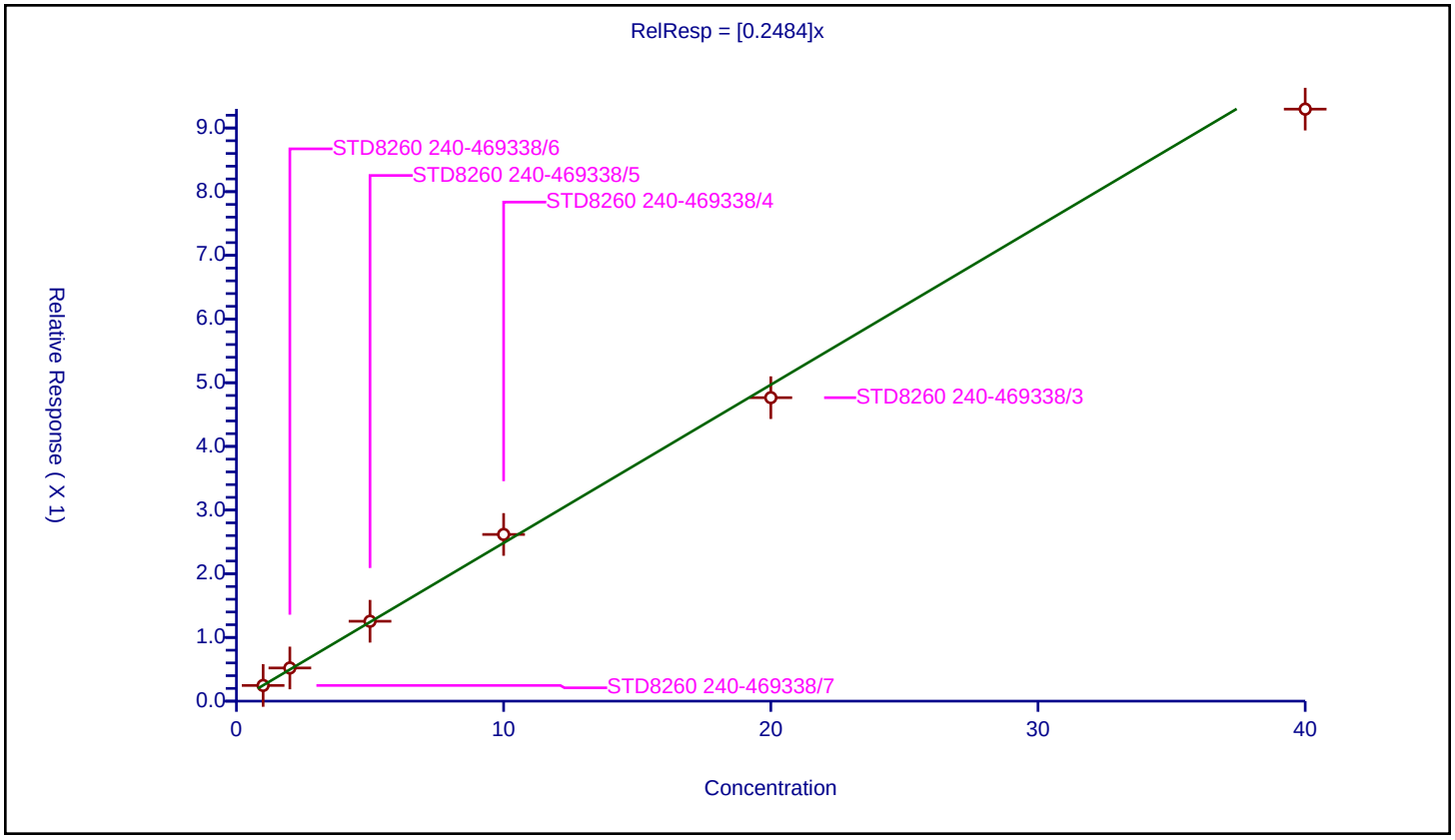
Curve Coefficients

Intercept:	0
Slope:	0.2484

Error Coefficients

Standard Error:	330000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.246658	20.0	1237666.0	0.246658	Y
2	STD8260 240-469338/6	2.0	0.521034	20.0	1194740.0	0.260517	Y
3	STD8260 240-469338/5	5.0	1.254642	20.0	1222644.0	0.250928	Y
4	STD8260 240-469338/4	10.0	2.617551	20.0	1164516.0	0.261755	Y
5	STD8260 240-469338/3	20.0	4.765686	20.0	1252890.0	0.238284	Y
6	STD8260 240-469338/2	40.0	9.296415	20.0	1401011.0	0.23241	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

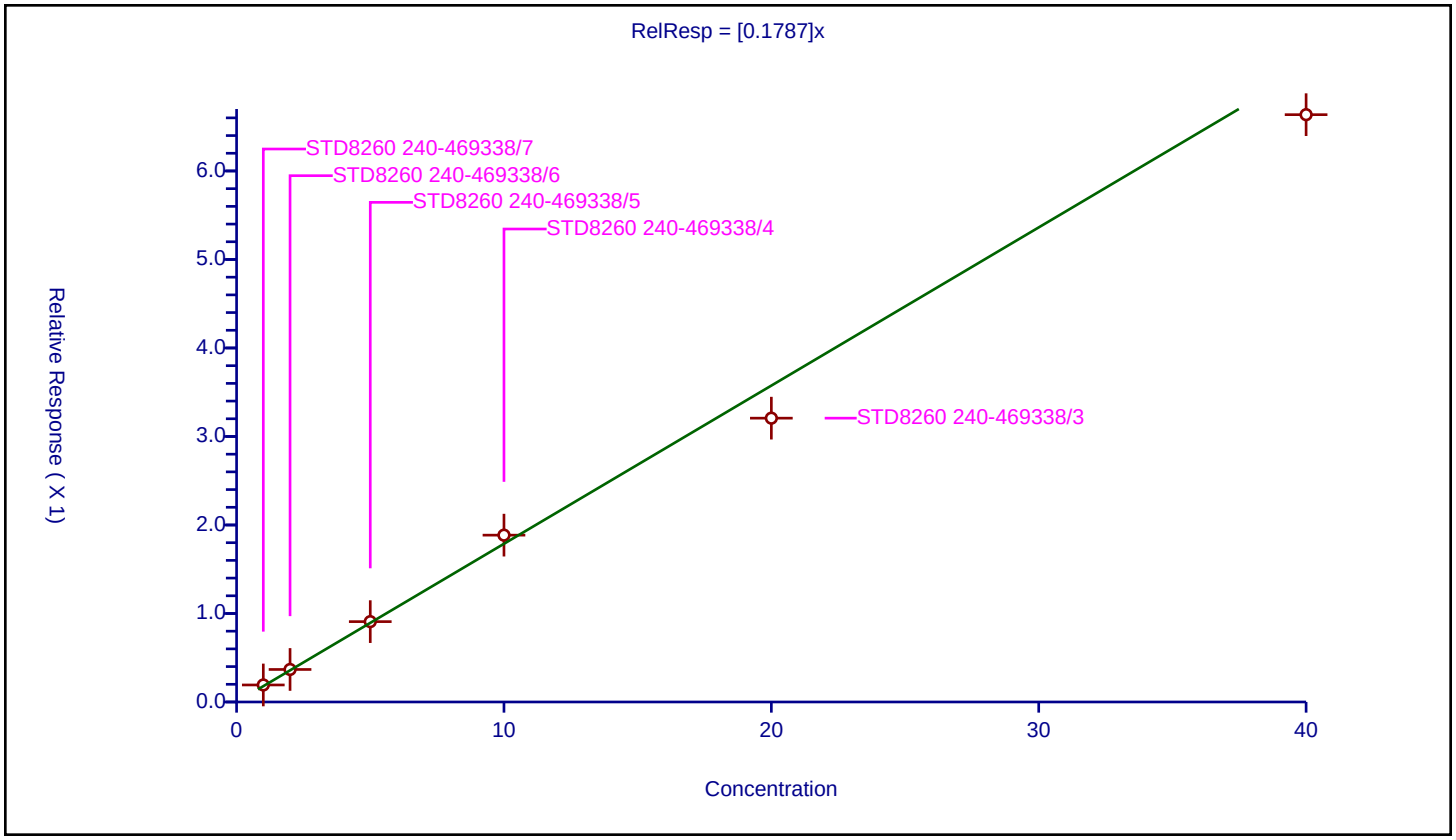
Curve Coefficients

Intercept:	0
Slope:	0.1787

Error Coefficients

Standard Error:	233000
Relative Standard Error:	7.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.192459	20.0	1237666.0	0.192459	Y
2	STD8260 240-469338/6	2.0	0.36731	20.0	1194740.0	0.183655	Y
3	STD8260 240-469338/5	5.0	0.907885	20.0	1222644.0	0.181577	Y
4	STD8260 240-469338/4	10.0	1.885247	20.0	1164516.0	0.188525	Y
5	STD8260 240-469338/3	20.0	3.206969	20.0	1252890.0	0.160348	Y
6	STD8260 240-469338/2	40.0	6.636193	20.0	1401011.0	0.165905	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

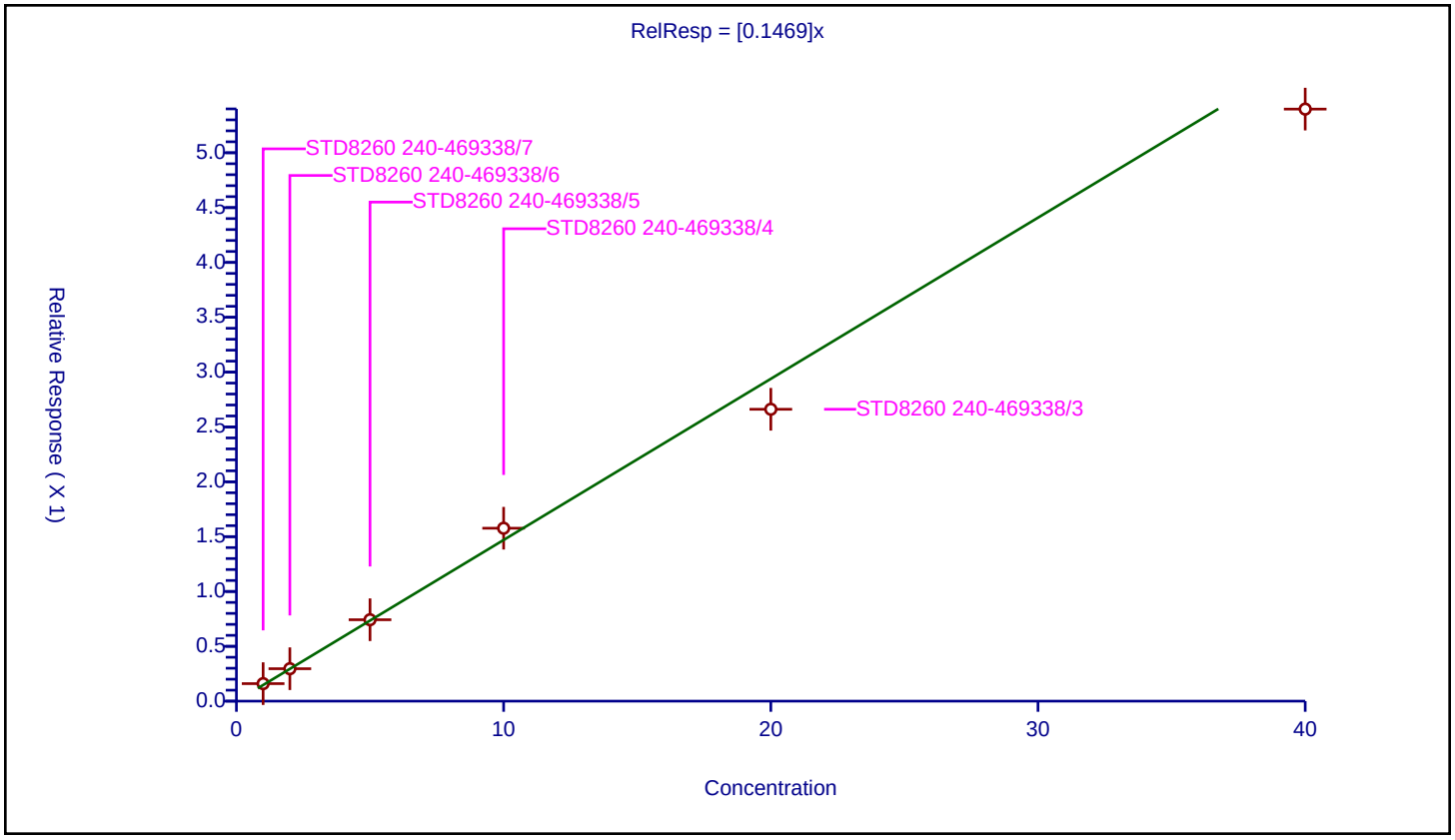
Curve Coefficients

Intercept:	0
Slope:	0.1469

Error Coefficients

Standard Error:	191000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159736	20.0	1237666.0	0.159736	Y
2	STD8260 240-469338/6	2.0	0.295596	20.0	1194740.0	0.147798	Y
3	STD8260 240-469338/5	5.0	0.742277	20.0	1222644.0	0.148455	Y
4	STD8260 240-469338/4	10.0	1.576586	20.0	1164516.0	0.157659	Y
5	STD8260 240-469338/3	20.0	2.661319	20.0	1252890.0	0.133066	Y
6	STD8260 240-469338/2	40.0	5.398073	20.0	1401011.0	0.134952	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

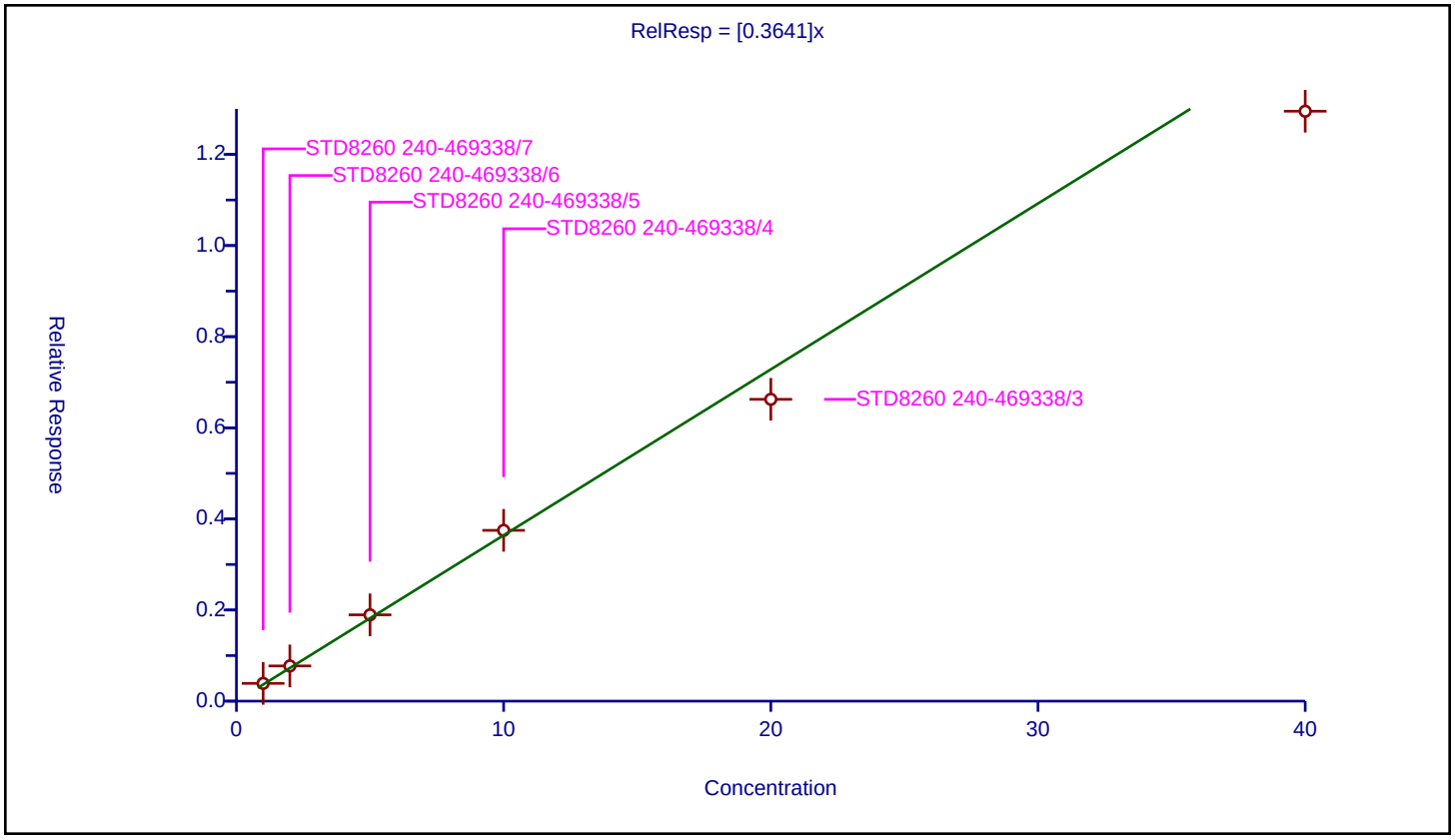
Curve Coefficients

Intercept:	0
Slope:	0.3641

Error Coefficients

Standard Error:	460000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.389475	20.0	1237666.0	0.389475	Y
2	STD8260 240-469338/6	2.0	0.772787	20.0	1194740.0	0.386394	Y
3	STD8260 240-469338/5	5.0	1.894697	20.0	1222644.0	0.378939	Y
4	STD8260 240-469338/4	10.0	3.74863	20.0	1164516.0	0.374863	Y
5	STD8260 240-469338/3	20.0	6.625099	20.0	1252890.0	0.331255	Y
6	STD8260 240-469338/2	40.0	12.949177	20.0	1401011.0	0.323729	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

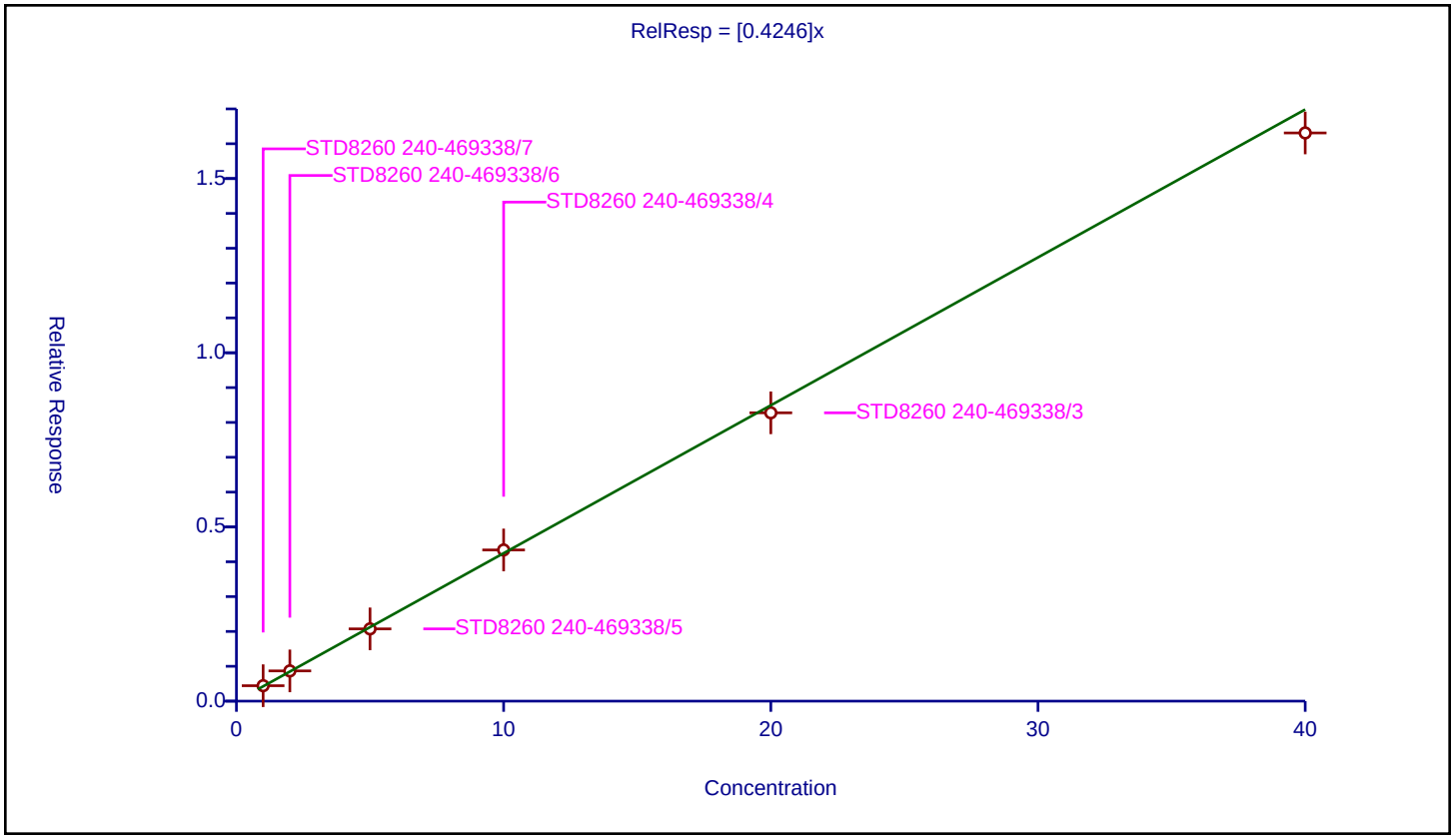
Curve Coefficients

Intercept:	0
Slope:	0.4246

Error Coefficients

Standard Error:	576000
Relative Standard Error:	3.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.443221	20.0	1237666.0	0.443221	Y
2	STD8260 240-469338/6	2.0	0.86772	20.0	1194740.0	0.43386	Y
3	STD8260 240-469338/5	5.0	2.074422	20.0	1222644.0	0.414884	Y
4	STD8260 240-469338/4	10.0	4.339485	20.0	1164516.0	0.433949	Y
5	STD8260 240-469338/3	20.0	8.276497	20.0	1252890.0	0.413825	Y
6	STD8260 240-469338/2	40.0	16.309494	20.0	1401011.0	0.407737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

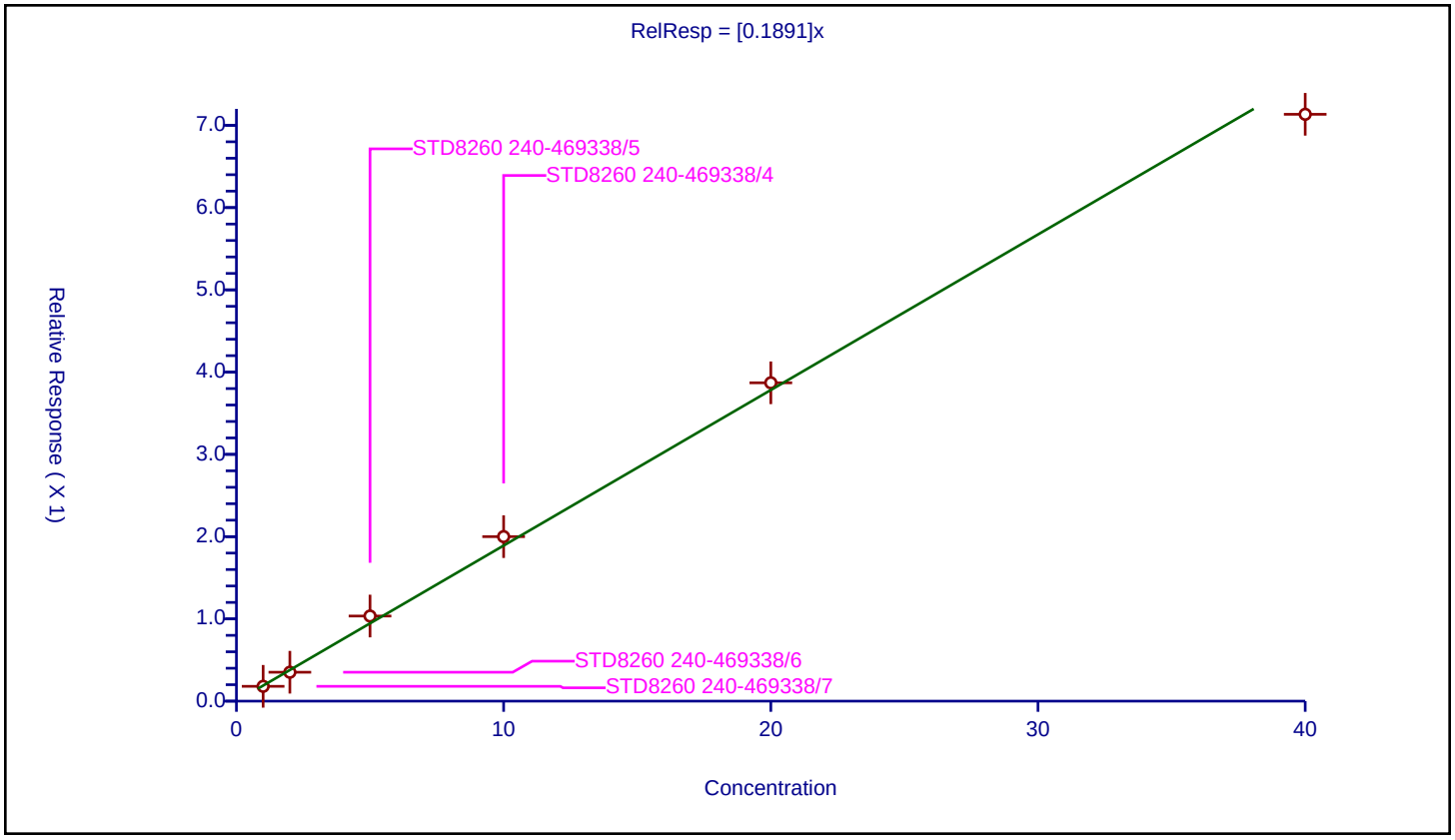
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	256000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.180194	20.0	1237666.0	0.180194	Y
2	STD8260 240-469338/6	2.0	0.351357	20.0	1194740.0	0.175678	Y
3	STD8260 240-469338/5	5.0	1.034708	20.0	1222644.0	0.206942	Y
4	STD8260 240-469338/4	10.0	1.99999	20.0	1164516.0	0.199999	Y
5	STD8260 240-469338/3	20.0	3.870284	20.0	1252890.0	0.193514	Y
6	STD8260 240-469338/2	40.0	7.134148	20.0	1401011.0	0.178354	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

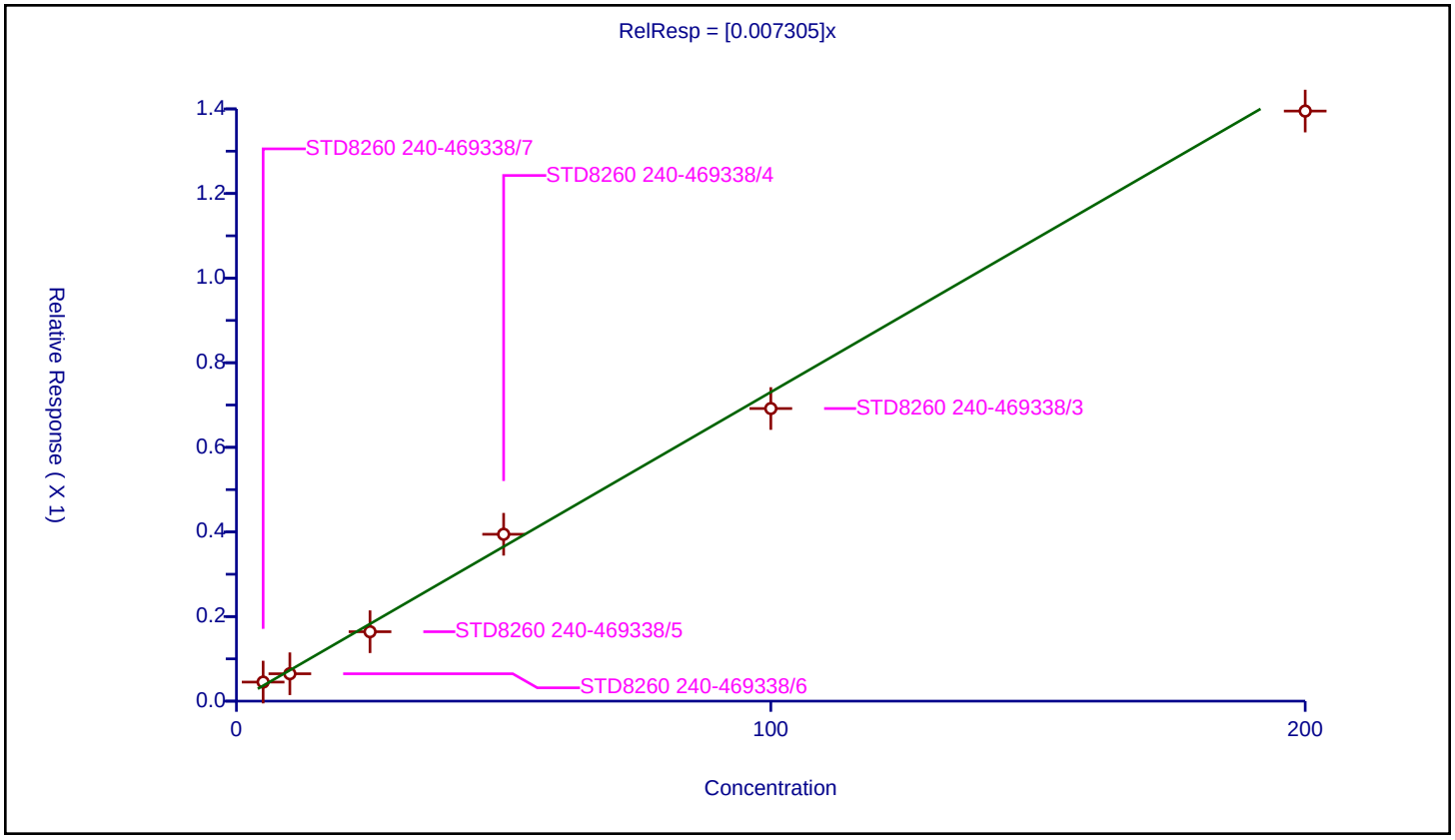
Curve Coefficients

Intercept:	0
Slope:	0.007305

Error Coefficients

Standard Error:	49100
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	5.0	0.045053	20.0	1237666.0	0.009011	Y
2	STD8260 240-469338/6	10.0	0.064767	20.0	1194740.0	0.006477	Y
3	STD8260 240-469338/5	25.0	0.164087	20.0	1222644.0	0.006563	Y
4	STD8260 240-469338/4	50.0	0.394464	20.0	1164516.0	0.007889	Y
5	STD8260 240-469338/3	100.0	0.691697	20.0	1252890.0	0.006917	Y
6	STD8260 240-469338/2	200.0	1.394878	20.0	1401011.0	0.006974	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

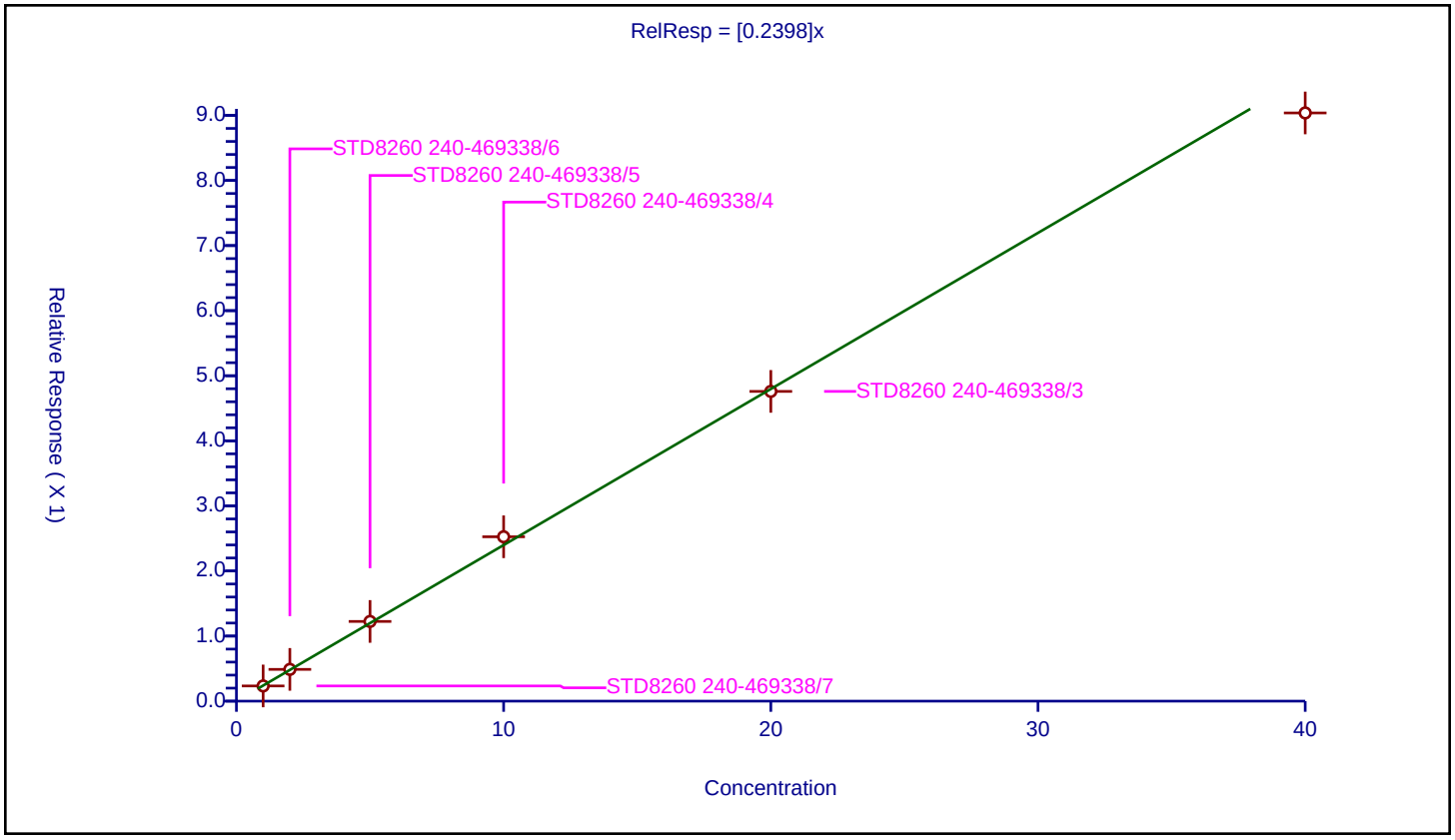
Curve Coefficients

Intercept:	0
Slope:	0.2398

Error Coefficients

Standard Error:	322000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.233617	20.0	1237666.0	0.233617	Y
2	STD8260 240-469338/6	2.0	0.487922	20.0	1194740.0	0.243961	Y
3	STD8260 240-469338/5	5.0	1.224477	20.0	1222644.0	0.244895	Y
4	STD8260 240-469338/4	10.0	2.525547	20.0	1164516.0	0.252555	Y
5	STD8260 240-469338/3	20.0	4.7593	20.0	1252890.0	0.237965	Y
6	STD8260 240-469338/2	40.0	9.037759	20.0	1401011.0	0.225944	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

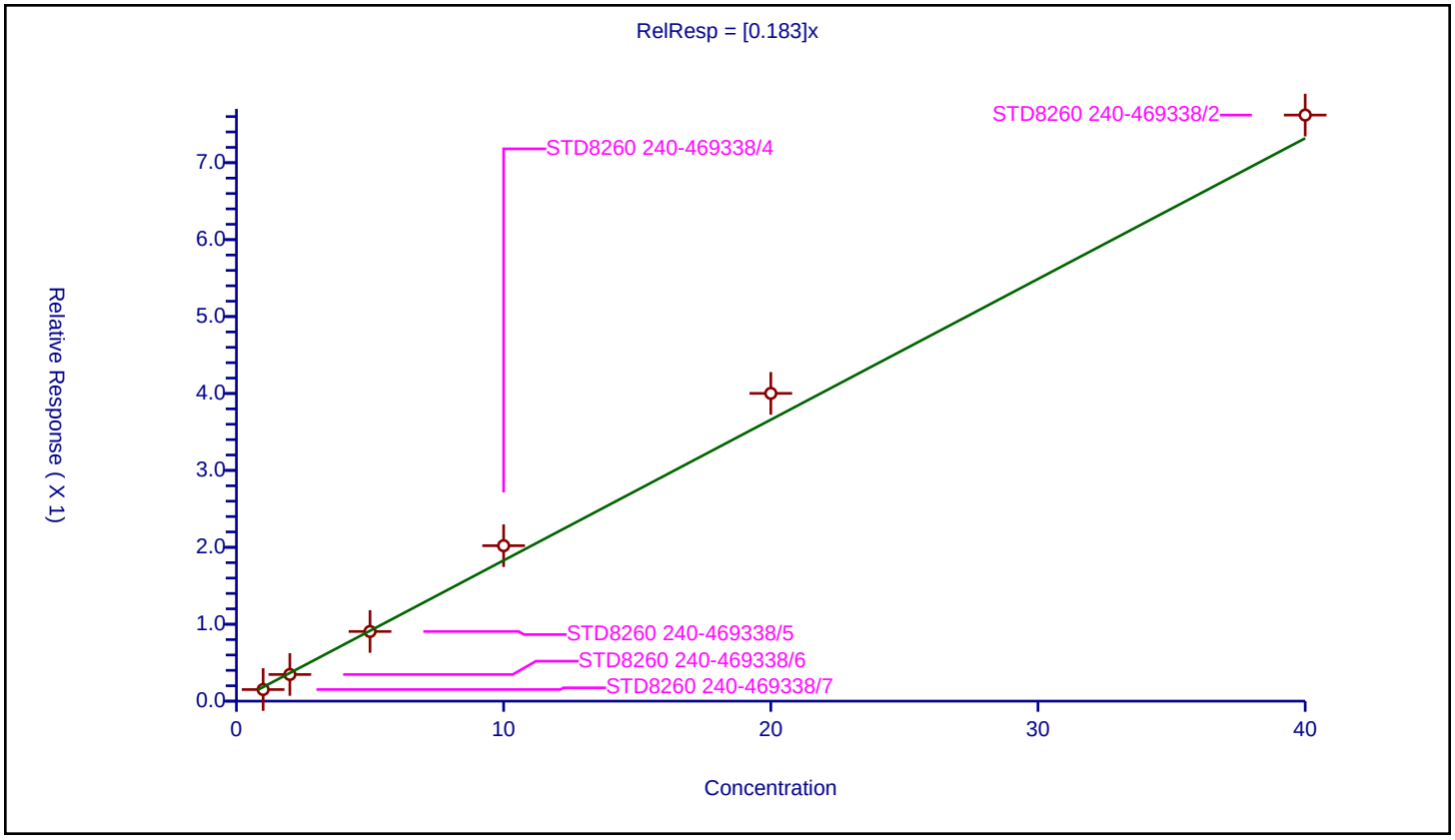
Curve Coefficients

Intercept:	0
Slope:	0.183

Error Coefficients

Standard Error:	270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.150638	20.0	1237666.0	0.150638	Y
2	STD8260 240-469338/6	2.0	0.346586	20.0	1194740.0	0.173293	Y
3	STD8260 240-469338/5	5.0	0.905644	20.0	1222644.0	0.181129	Y
4	STD8260 240-469338/4	10.0	2.020977	20.0	1164516.0	0.202098	Y
5	STD8260 240-469338/3	20.0	4.001421	20.0	1252890.0	0.200071	Y
6	STD8260 240-469338/2	40.0	7.619755	20.0	1401011.0	0.190494	Y



Calibration / Acetone

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

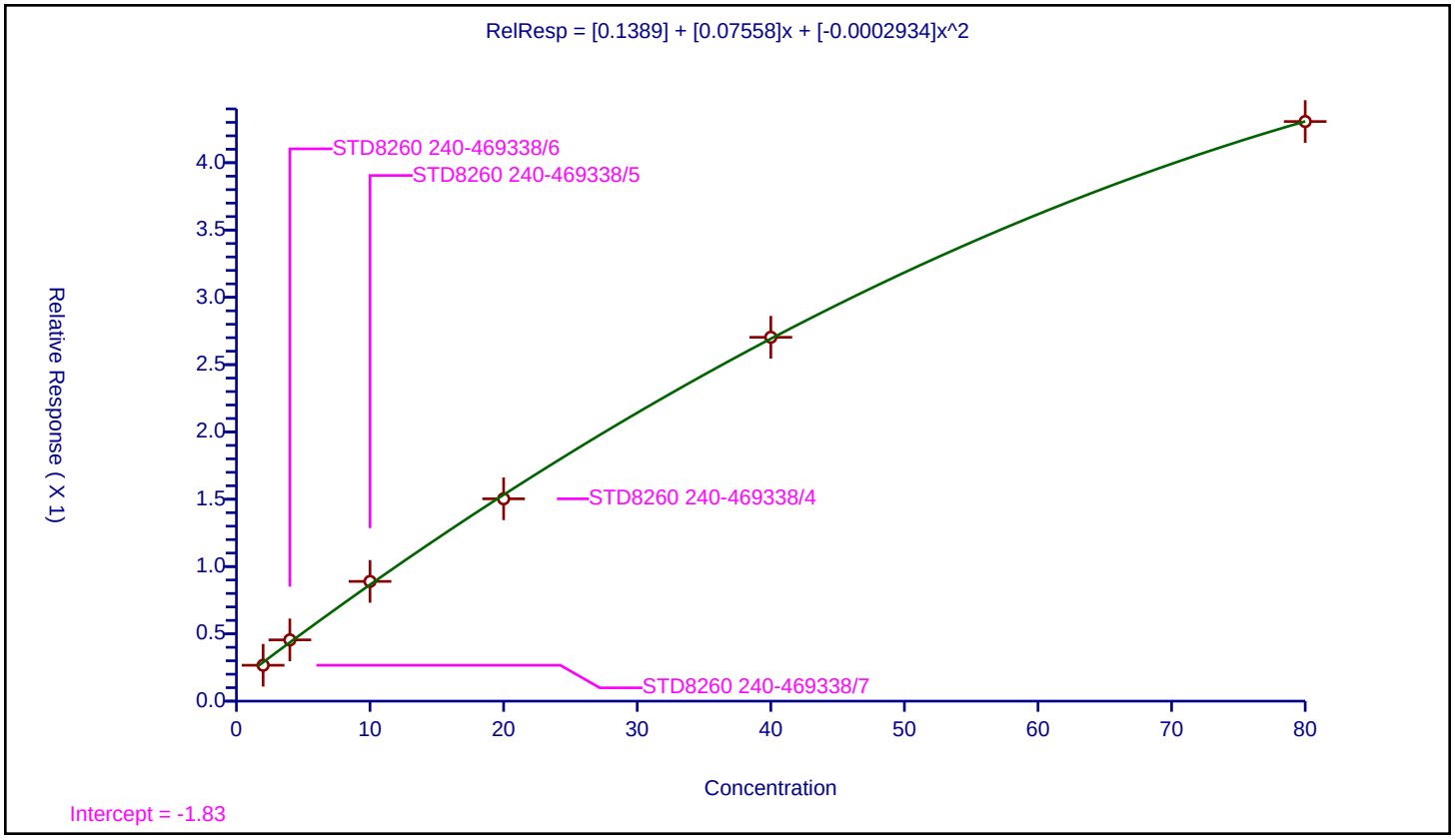
Curve Coefficients

Intercept:	0.1389
Slope:	0.07558
Second Order:	-0.0002934

Error Coefficients

Standard Error:	209000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.266712	20.0	1237666.0	0.133356	Y
2	STD8260 240-469338/6	4.0	0.455179	20.0	1194740.0	0.113795	Y
3	STD8260 240-469338/5	10.0	0.889613	20.0	1222644.0	0.088961	Y
4	STD8260 240-469338/4	20.0	1.503079	20.0	1164516.0	0.075154	Y
5	STD8260 240-469338/3	40.0	2.703158	20.0	1252890.0	0.067579	Y
6	STD8260 240-469338/2	80.0	4.30629	20.0	1401011.0	0.053829	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

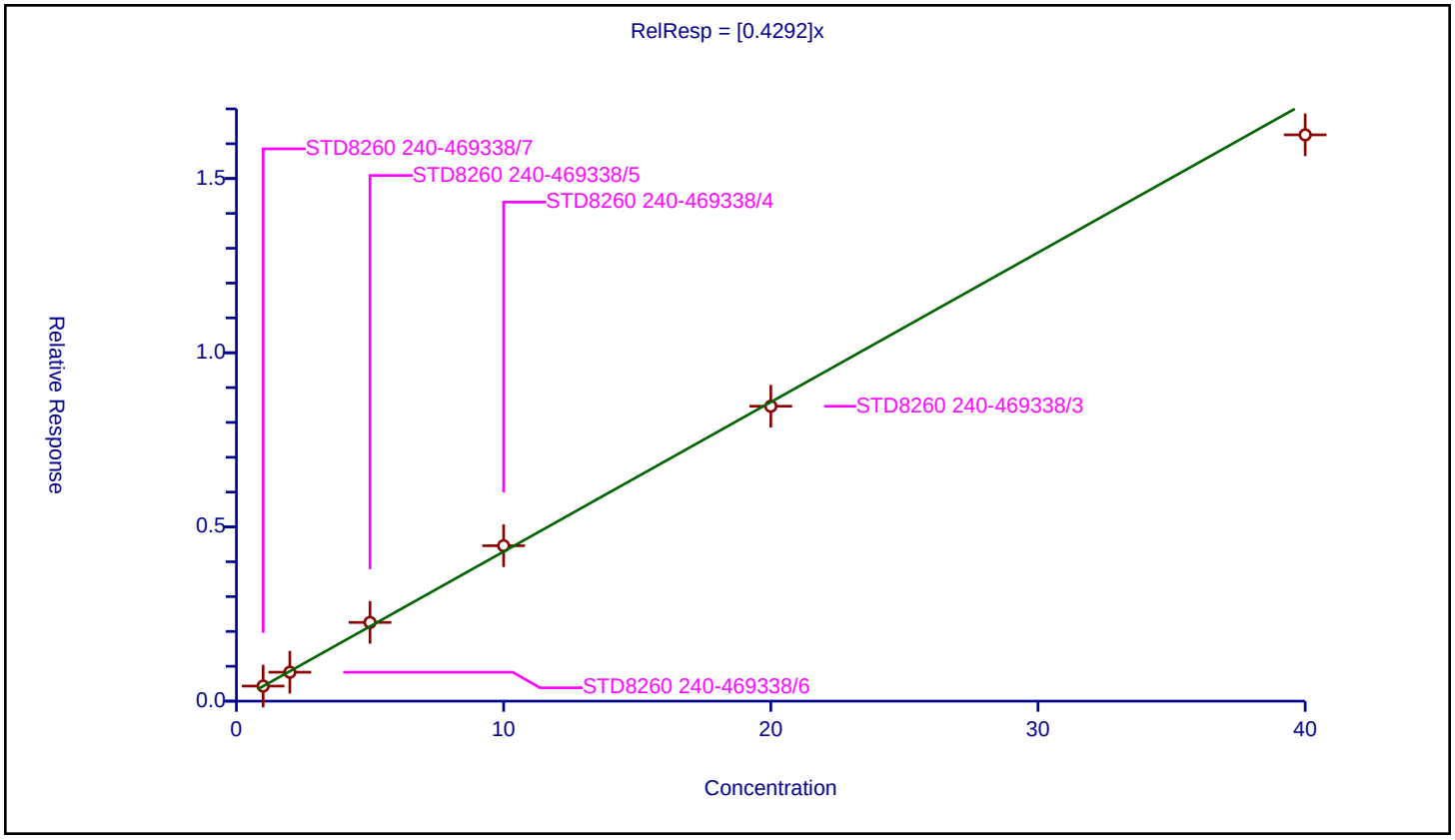
Curve Coefficients

Intercept:	0
Slope:	0.4292

Error Coefficients

Standard Error:	577000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.432362	20.0	1237666.0	0.432362	Y
2	STD8260 240-469338/6	2.0	0.830407	20.0	1194740.0	0.415203	Y
3	STD8260 240-469338/5	5.0	2.259824	20.0	1222644.0	0.451965	Y
4	STD8260 240-469338/4	10.0	4.461218	20.0	1164516.0	0.446122	Y
5	STD8260 240-469338/3	20.0	8.463935	20.0	1252890.0	0.423197	Y
6	STD8260 240-469338/2	40.0	16.254548	20.0	1401011.0	0.406364	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

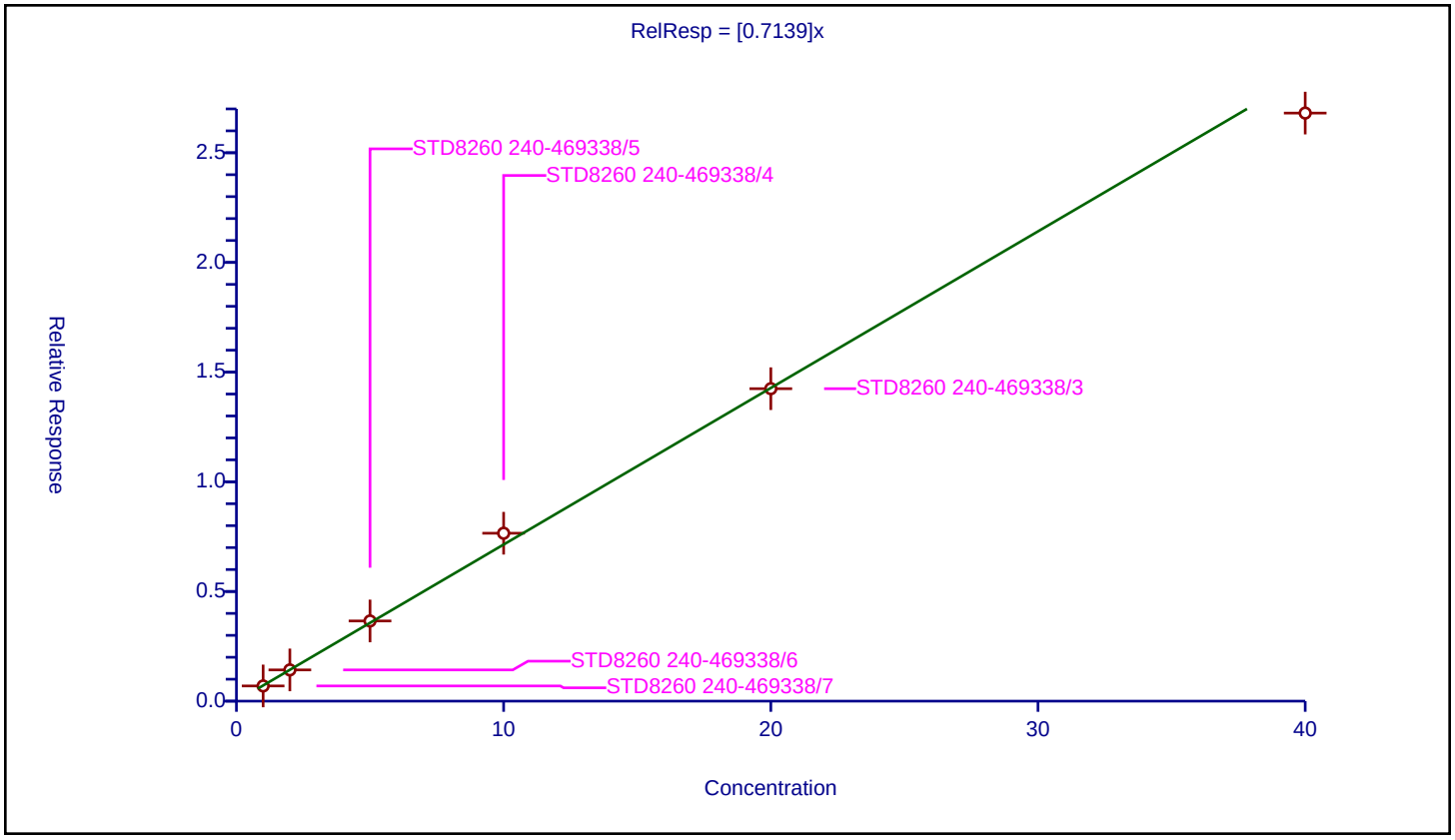
Curve Coefficients

Intercept:	0
Slope:	0.7139

Error Coefficients

Standard Error:	957000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.692449	20.0	1237666.0	0.692449	Y
2	STD8260 240-469338/6	2.0	1.423791	20.0	1194740.0	0.711895	Y
3	STD8260 240-469338/5	5.0	3.655062	20.0	1222644.0	0.731012	Y
4	STD8260 240-469338/4	10.0	7.65494	20.0	1164516.0	0.765494	Y
5	STD8260 240-469338/3	20.0	14.244076	20.0	1252890.0	0.712204	Y
6	STD8260 240-469338/2	40.0	26.809183	20.0	1401011.0	0.67023	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

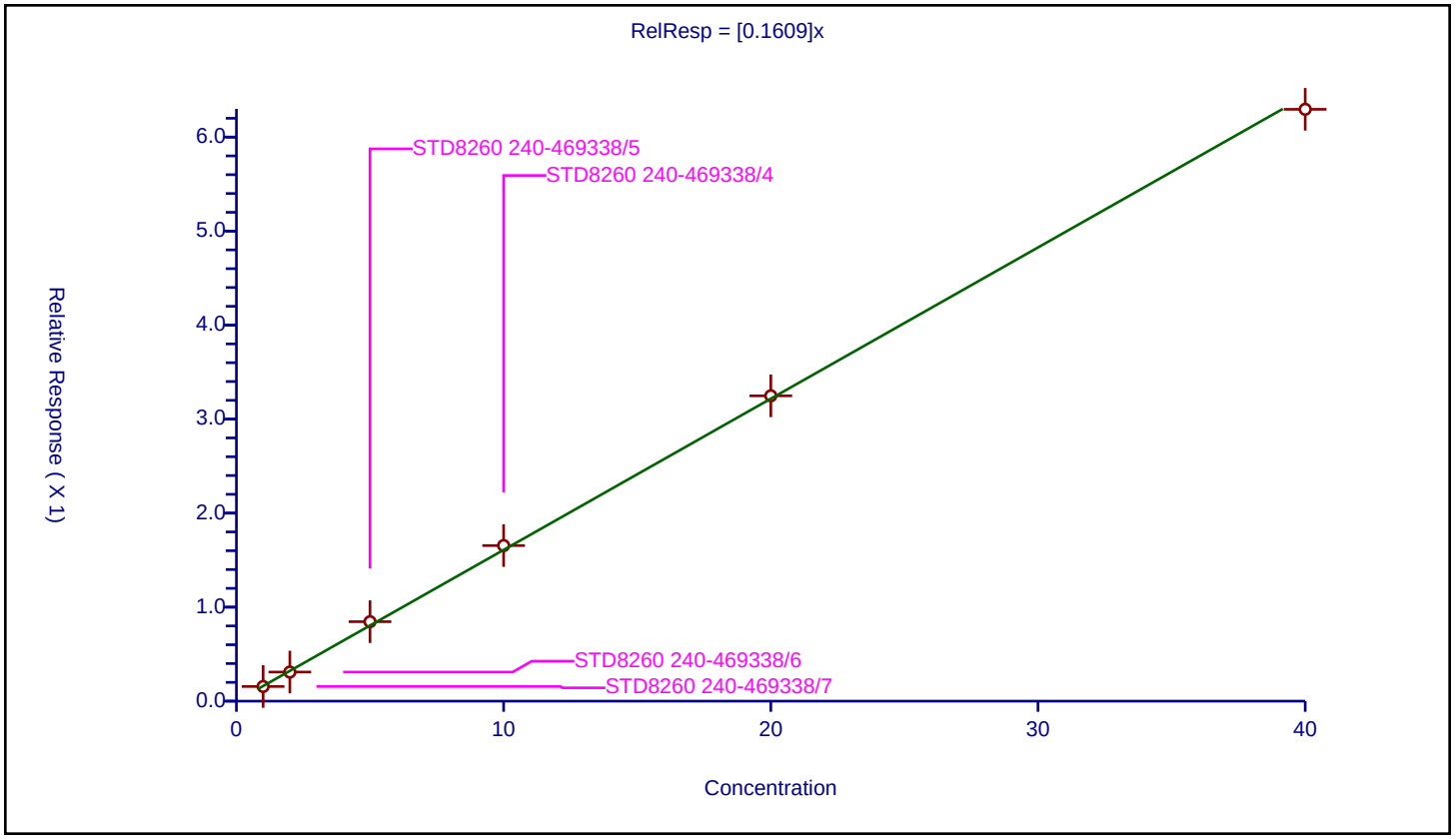
Curve Coefficients

Intercept:	0
Slope:	0.1609

Error Coefficients

Standard Error:	223000
Relative Standard Error:	3.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.156052	20.0	1237666.0	0.156052	Y
2	STD8260 240-469338/6	2.0	0.309624	20.0	1194740.0	0.154812	Y
3	STD8260 240-469338/5	5.0	0.845152	20.0	1222644.0	0.16903	Y
4	STD8260 240-469338/4	10.0	1.655108	20.0	1164516.0	0.165511	Y
5	STD8260 240-469338/3	20.0	3.247899	20.0	1252890.0	0.162395	Y
6	STD8260 240-469338/2	40.0	6.295568	20.0	1401011.0	0.157389	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

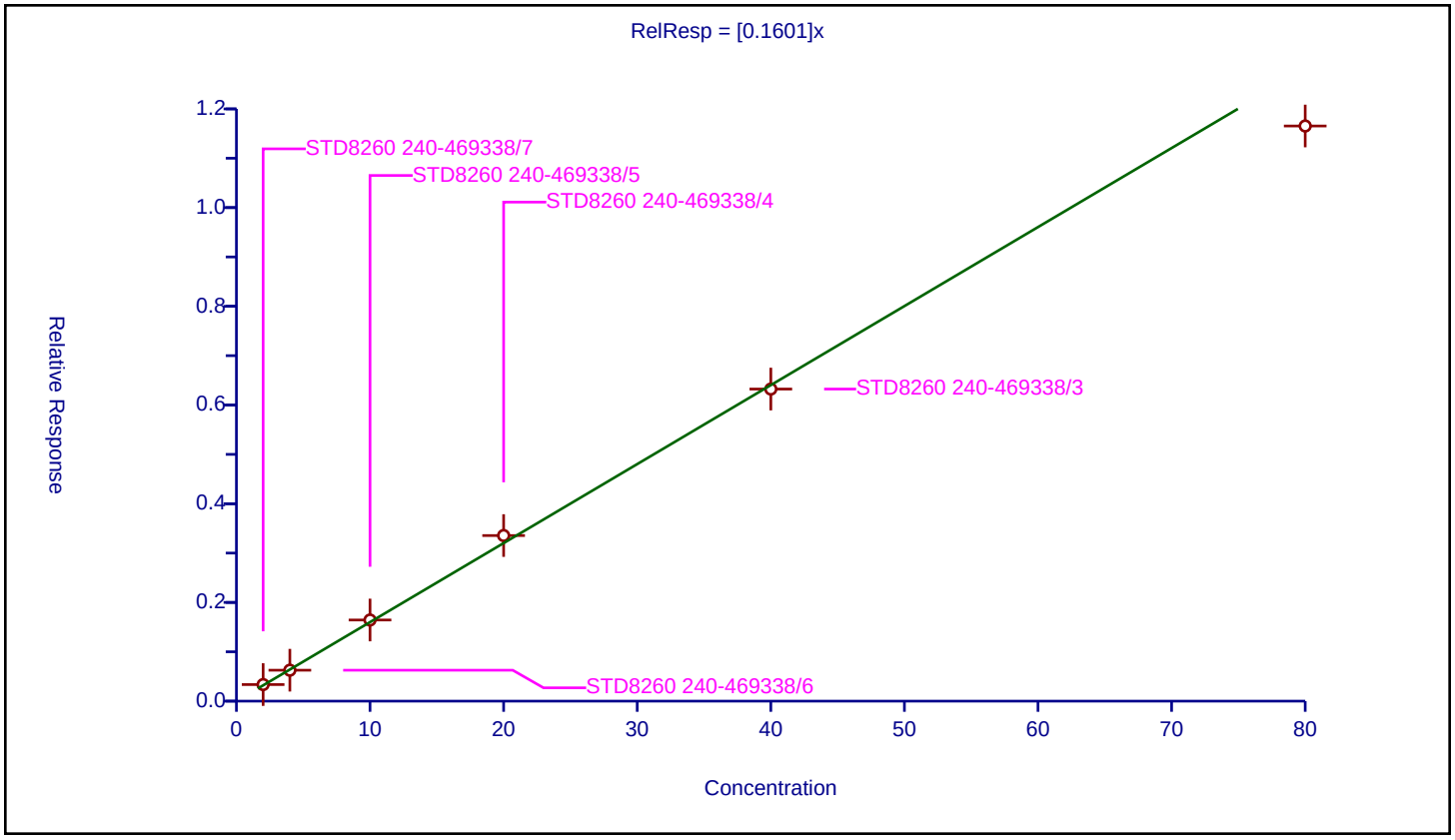
Curve Coefficients

Intercept:	0
Slope:	0.1601

Error Coefficients

Standard Error:	418000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.335713	20.0	1237666.0	0.167856	Y
2	STD8260 240-469338/6	4.0	0.626998	20.0	1194740.0	0.15675	Y
3	STD8260 240-469338/5	10.0	1.644109	20.0	1222644.0	0.164411	Y
4	STD8260 240-469338/4	20.0	3.355162	20.0	1164516.0	0.167758	Y
5	STD8260 240-469338/3	40.0	6.323141	20.0	1252890.0	0.158079	Y
6	STD8260 240-469338/2	80.0	11.65347	20.0	1401011.0	0.145668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

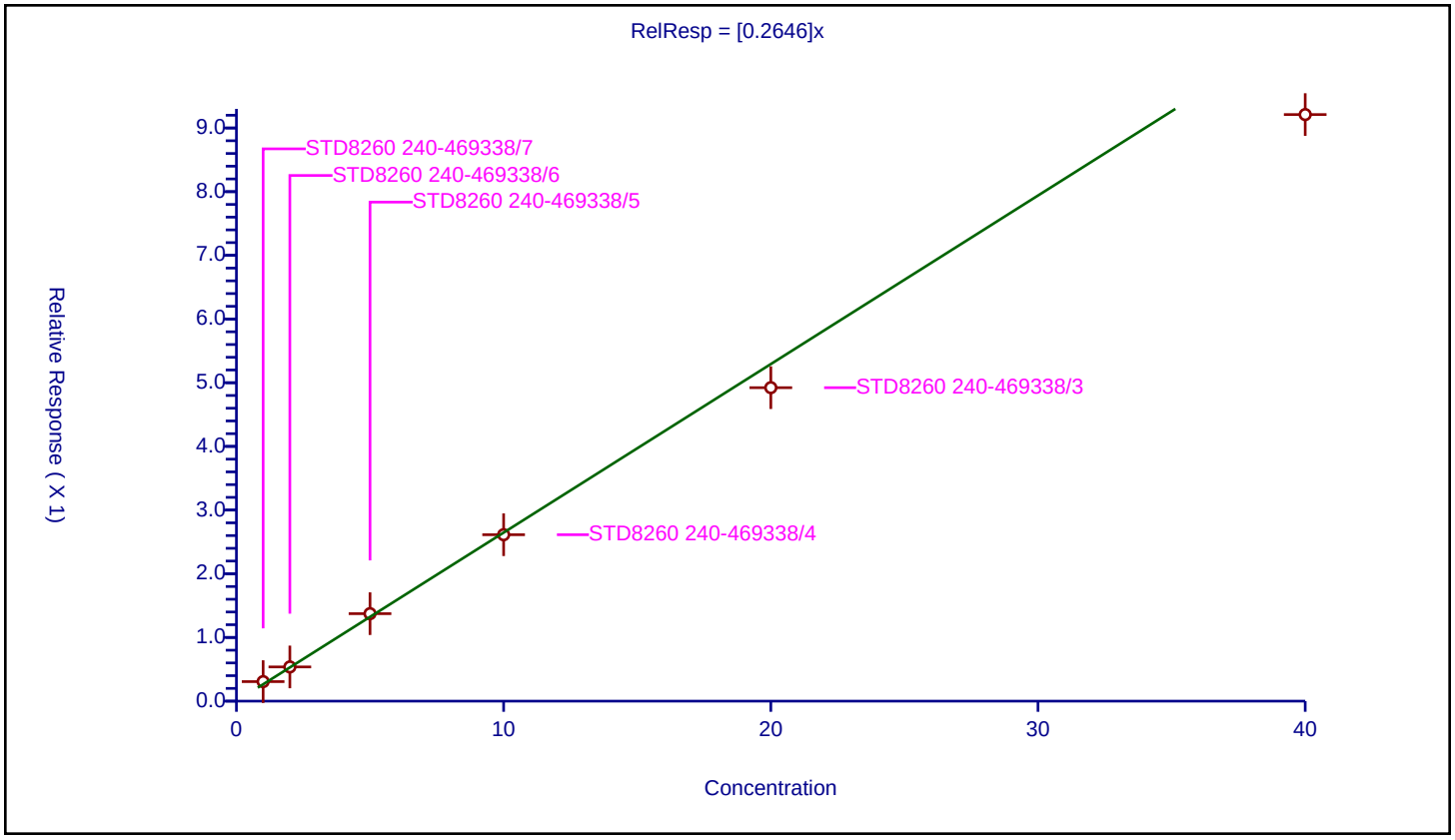
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	330000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306868	20.0	1237666.0	0.306868	Y
2	STD8260 240-469338/6	2.0	0.537071	20.0	1194740.0	0.268535	Y
3	STD8260 240-469338/5	5.0	1.373859	20.0	1222644.0	0.274772	Y
4	STD8260 240-469338/4	10.0	2.613257	20.0	1164516.0	0.261326	Y
5	STD8260 240-469338/3	20.0	4.922523	20.0	1252890.0	0.246126	Y
6	STD8260 240-469338/2	40.0	9.210848	20.0	1401011.0	0.230271	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

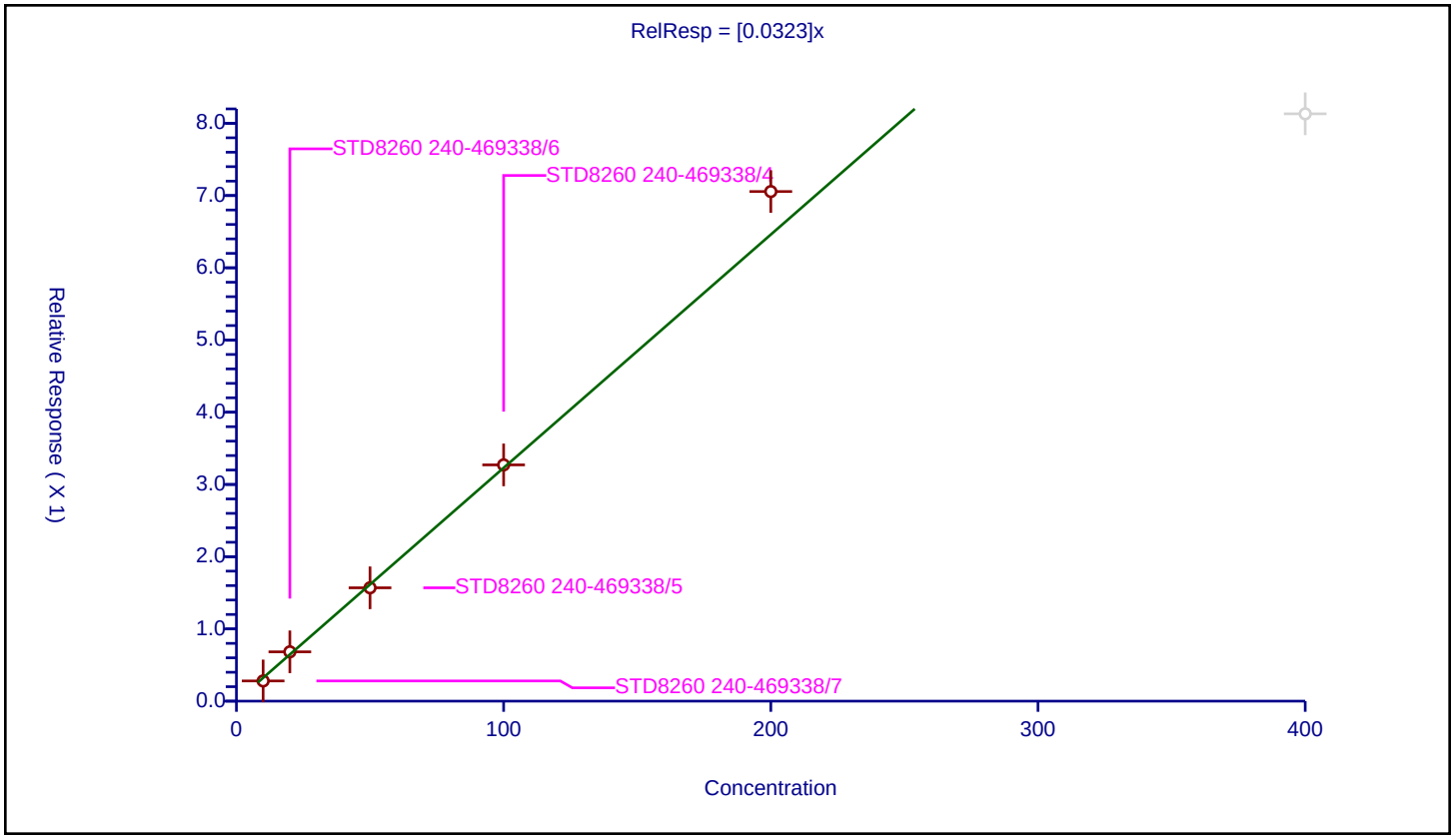
Curve Coefficients

Intercept:	0
Slope:	0.0323

Error Coefficients

Standard Error:	246000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.279769	20.0	1237666.0	0.027977	Y
2	STD8260 240-469338/6	20.0	0.68291	20.0	1194740.0	0.034146	Y
3	STD8260 240-469338/5	50.0	1.569435	20.0	1222644.0	0.031389	Y
4	STD8260 240-469338/4	100.0	3.271179	20.0	1164516.0	0.032712	Y
5	STD8260 240-469338/3	200.0	7.055639	20.0	1252890.0	0.035278	Y
6	STD8260 240-469338/2	400.0	8.131785	20.0	1401011.0	0.020329	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

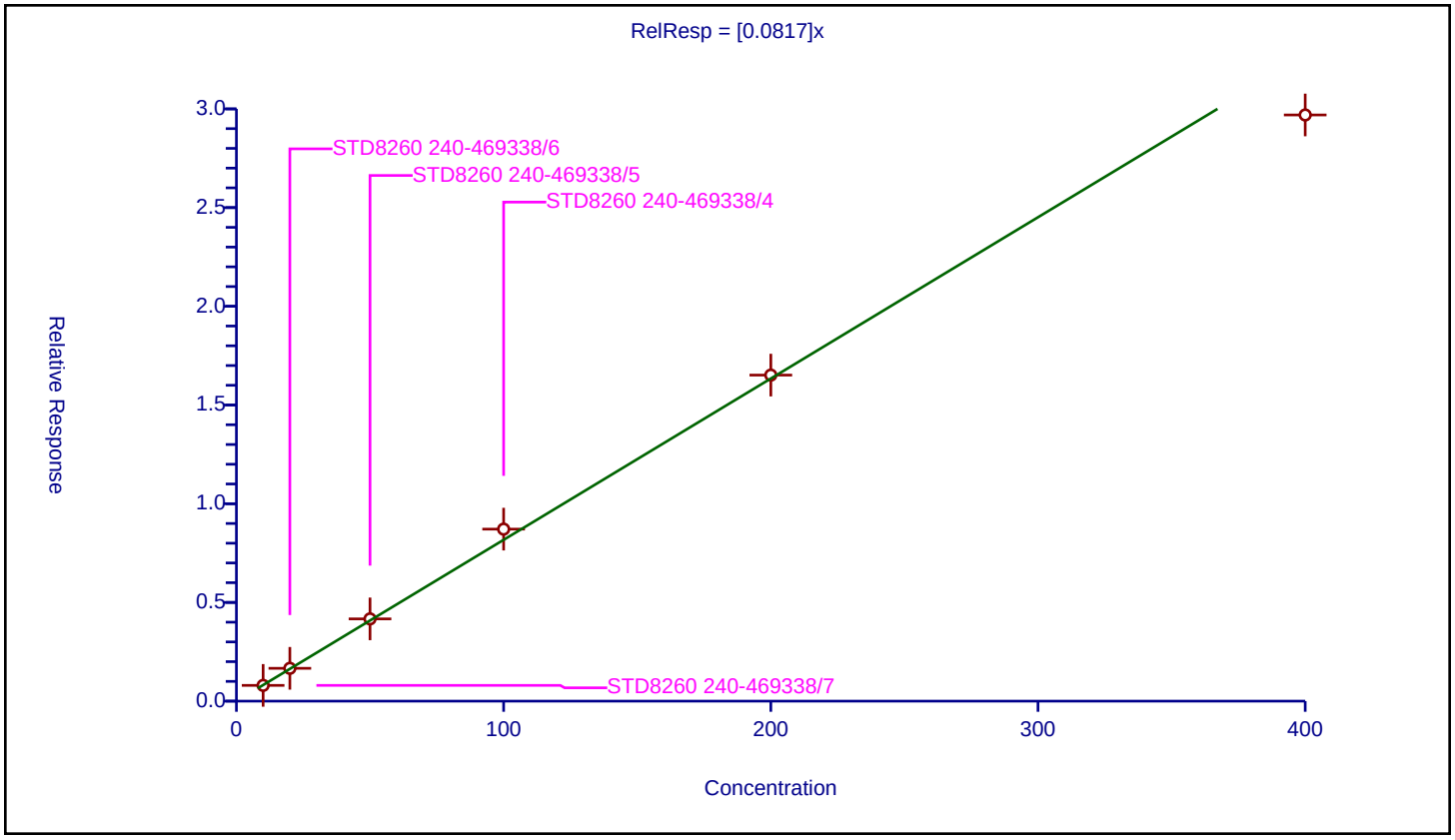
Curve Coefficients

Intercept:	0
Slope:	0.0817

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.798067	20.0	1237666.0	0.079807	Y
2	STD8260 240-469338/6	20.0	1.662755	20.0	1194740.0	0.083138	Y
3	STD8260 240-469338/5	50.0	4.167362	20.0	1222644.0	0.083347	Y
4	STD8260 240-469338/4	100.0	8.712736	20.0	1164516.0	0.087127	Y
5	STD8260 240-469338/3	200.0	16.515113	20.0	1252890.0	0.082576	Y
6	STD8260 240-469338/2	400.0	29.692429	20.0	1401011.0	0.074231	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

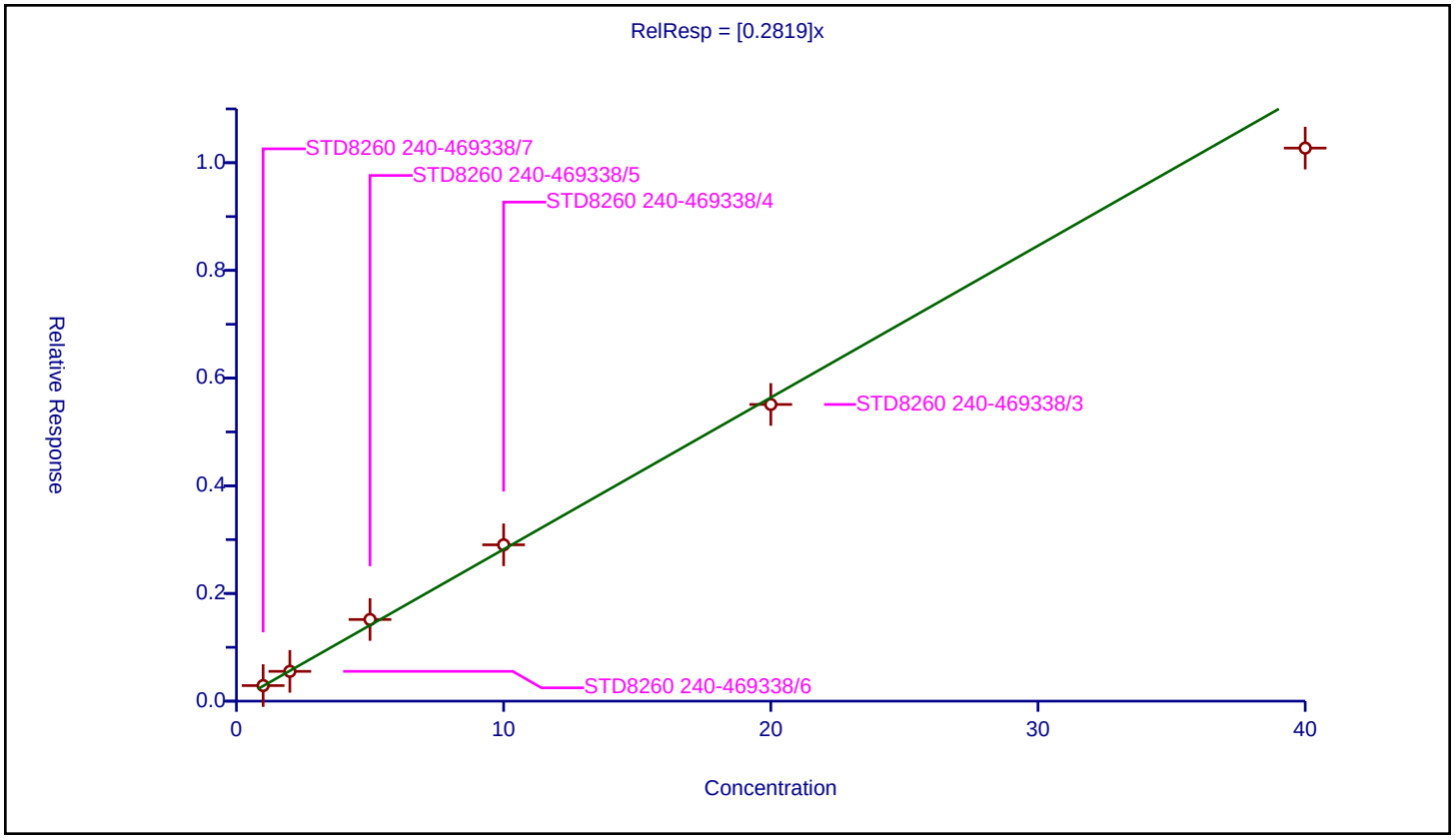
Curve Coefficients

Intercept:	0
Slope:	0.2819

Error Coefficients

Standard Error:	368000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.28906	20.0	1237666.0	0.28906	Y
2	STD8260 240-469338/6	2.0	0.553342	20.0	1194740.0	0.276671	Y
3	STD8260 240-469338/5	5.0	1.51632	20.0	1222644.0	0.303264	Y
4	STD8260 240-469338/4	10.0	2.903507	20.0	1164516.0	0.290351	Y
5	STD8260 240-469338/3	20.0	5.510699	20.0	1252890.0	0.275535	Y
6	STD8260 240-469338/2	40.0	10.271782	20.0	1401011.0	0.256795	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

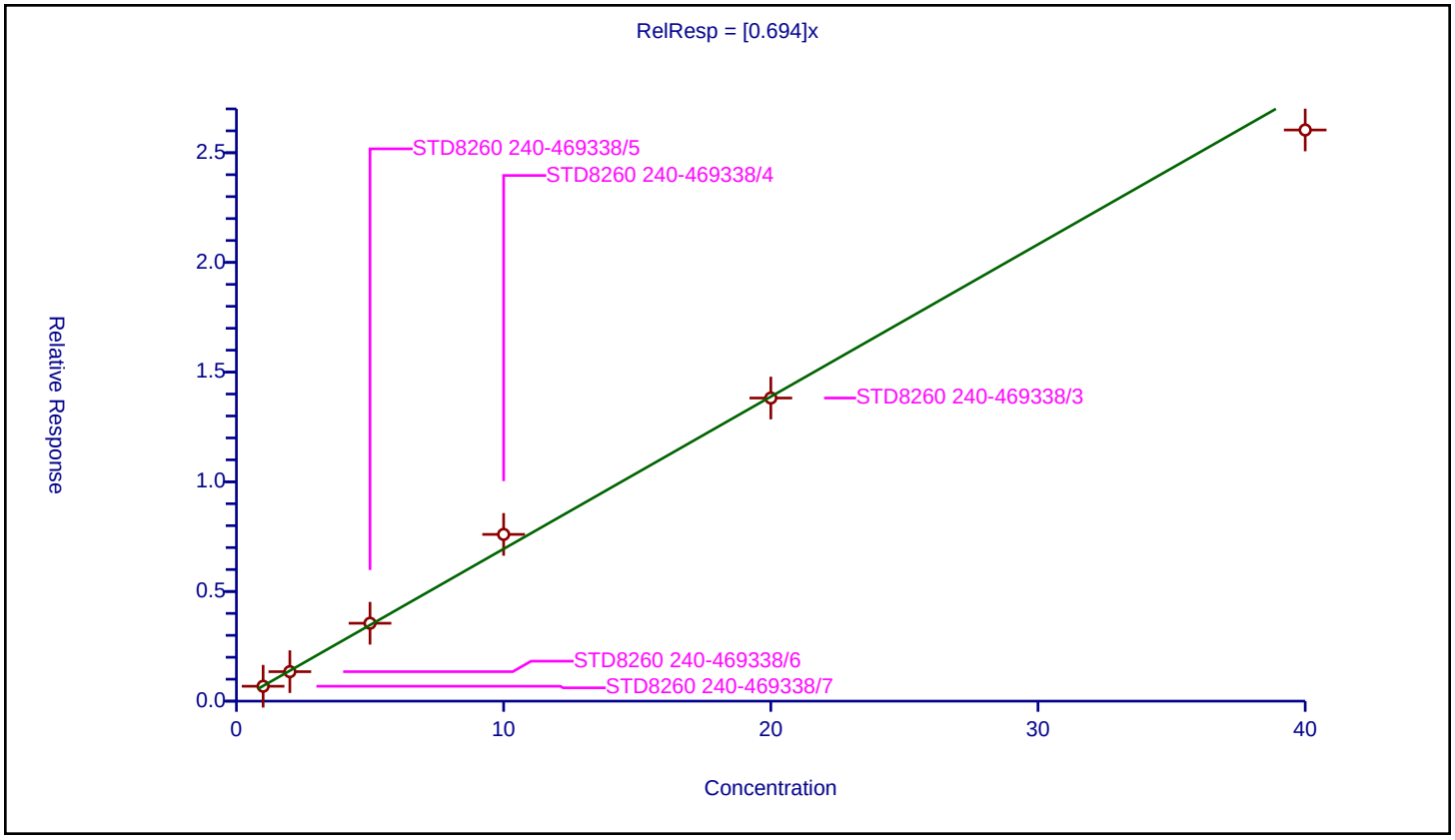
Curve Coefficients

Intercept:	0
Slope:	0.694

Error Coefficients

Standard Error:	930000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.679909	20.0	1237666.0	0.679909	Y
2	STD8260 240-469338/6	2.0	1.344108	20.0	1194740.0	0.672054	Y
3	STD8260 240-469338/5	5.0	3.551565	20.0	1222644.0	0.710313	Y
4	STD8260 240-469338/4	10.0	7.601424	20.0	1164516.0	0.760142	Y
5	STD8260 240-469338/3	20.0	13.81826	20.0	1252890.0	0.690913	Y
6	STD8260 240-469338/2	40.0	26.038654	20.0	1401011.0	0.650966	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

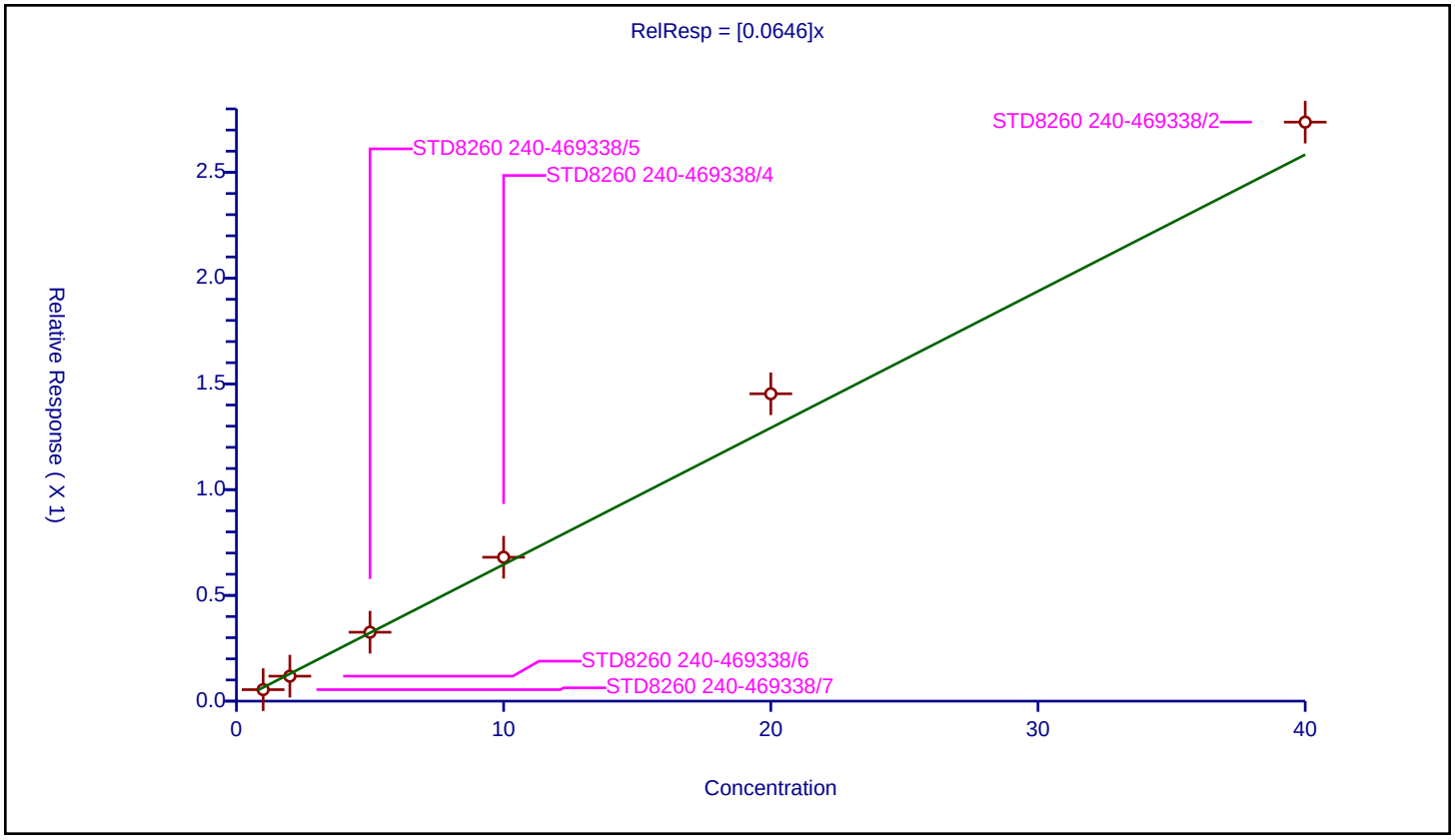
Curve Coefficients

Intercept:	0
Slope:	0.0646

Error Coefficients

Standard Error:	97000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.05428	20.0	1237666.0	0.05428	Y
2	STD8260 240-469338/6	2.0	0.118034	20.0	1194740.0	0.059017	Y
3	STD8260 240-469338/5	5.0	0.325835	20.0	1222644.0	0.065167	Y
4	STD8260 240-469338/4	10.0	0.680283	20.0	1164516.0	0.068028	Y
5	STD8260 240-469338/3	20.0	1.453136	20.0	1252890.0	0.072657	Y
6	STD8260 240-469338/2	40.0	2.73748	20.0	1401011.0	0.068437	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

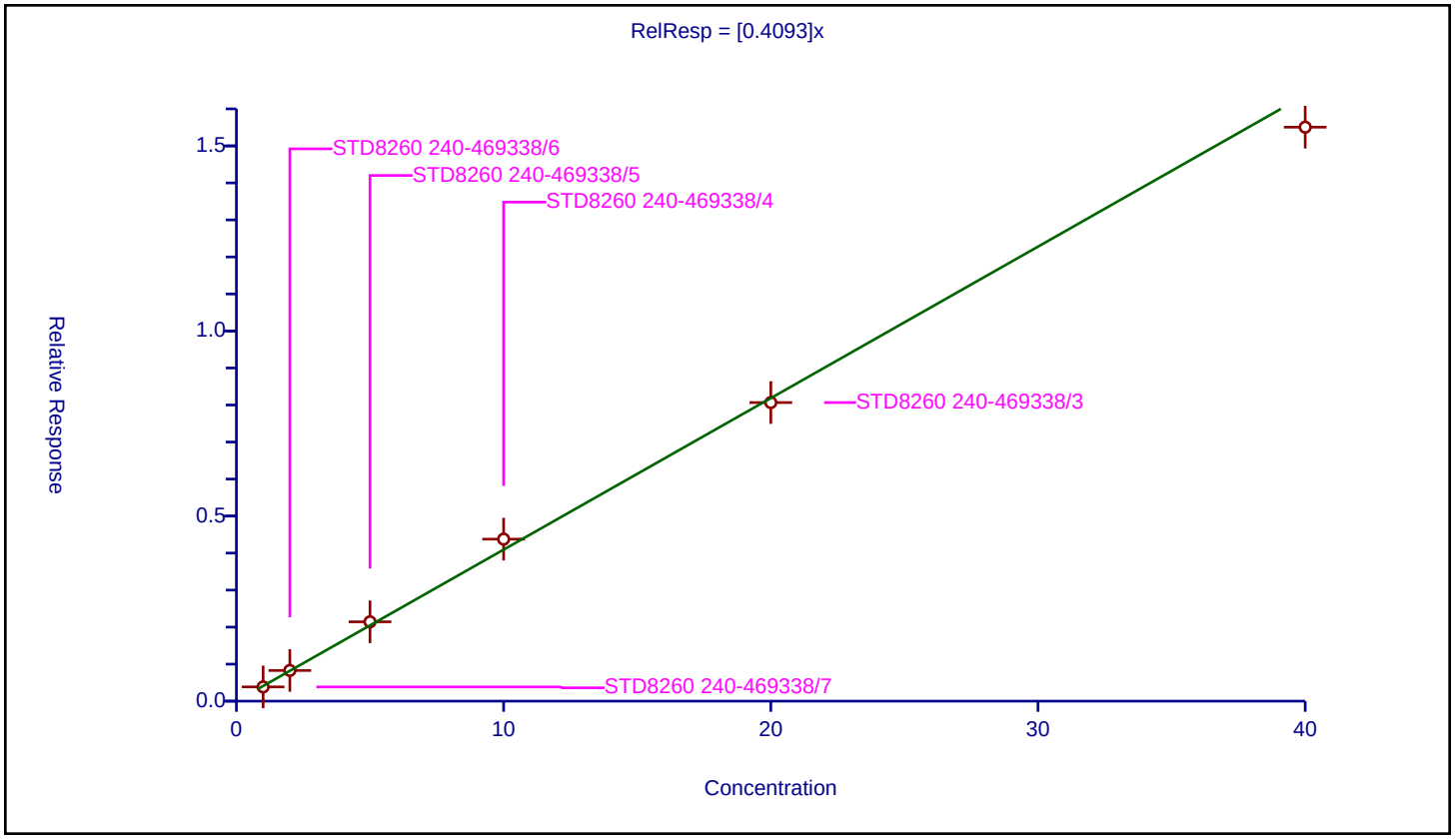
Curve Coefficients

Intercept:	0
Slope:	0.4093

Error Coefficients

Standard Error:	551000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.384369	20.0	1237666.0	0.384369	Y
2	STD8260 240-469338/6	2.0	0.82823	20.0	1194740.0	0.414115	Y
3	STD8260 240-469338/5	5.0	2.143437	20.0	1222644.0	0.428687	Y
4	STD8260 240-469338/4	10.0	4.376805	20.0	1164516.0	0.437681	Y
5	STD8260 240-469338/3	20.0	8.066598	20.0	1252890.0	0.40333	Y
6	STD8260 240-469338/2	40.0	15.505788	20.0	1401011.0	0.387645	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

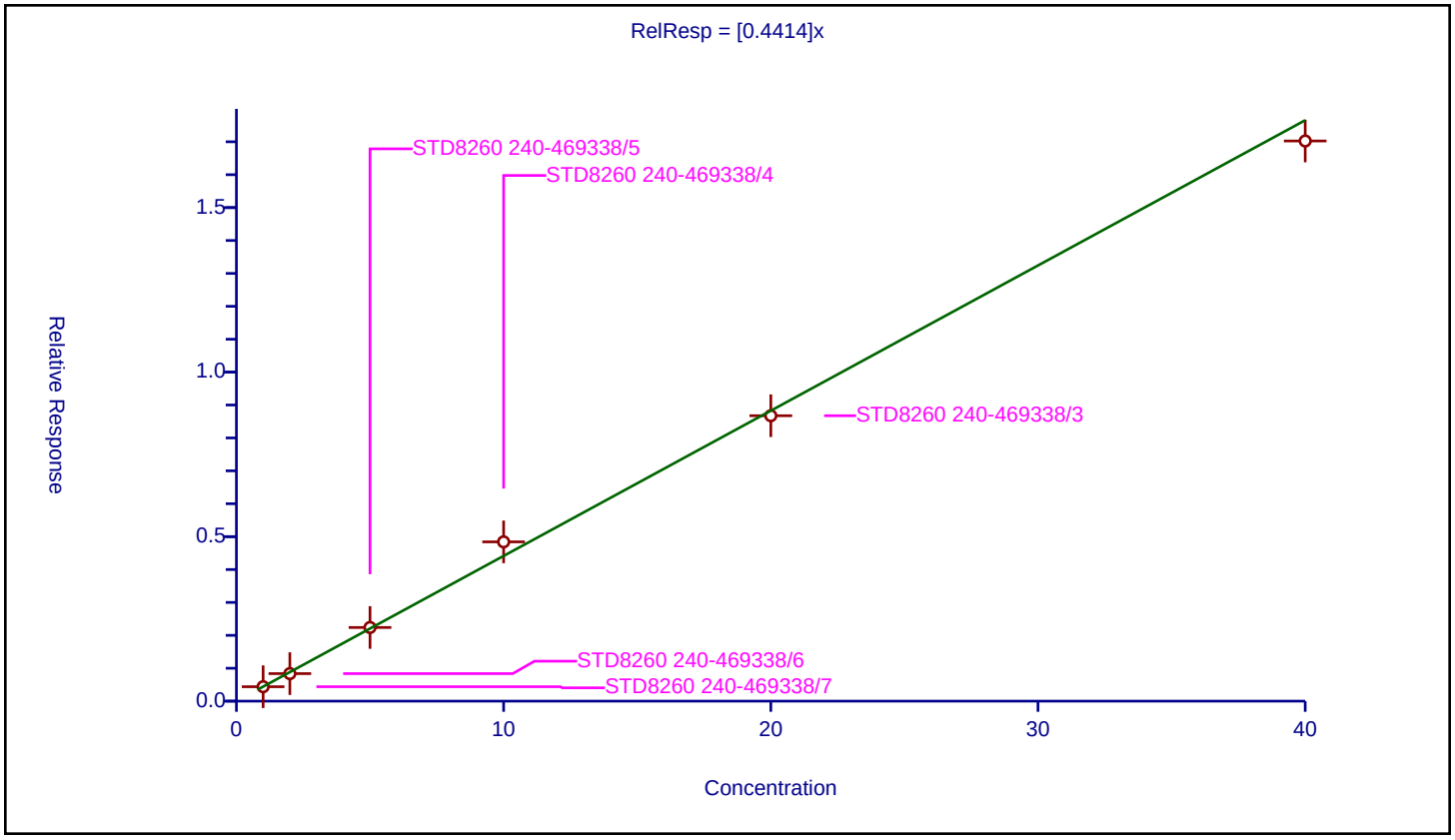
Curve Coefficients

Intercept:	0
Slope:	0.4414

Error Coefficients

Standard Error:	603000
Relative Standard Error:	5.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.438519	20.0	1237666.0	0.438519	Y
2	STD8260 240-469338/6	2.0	0.836902	20.0	1194740.0	0.418451	Y
3	STD8260 240-469338/5	5.0	2.238918	20.0	1222644.0	0.447784	Y
4	STD8260 240-469338/4	10.0	4.840775	20.0	1164516.0	0.484078	Y
5	STD8260 240-469338/3	20.0	8.674824	20.0	1252890.0	0.433741	Y
6	STD8260 240-469338/2	40.0	17.024592	20.0	1401011.0	0.425615	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

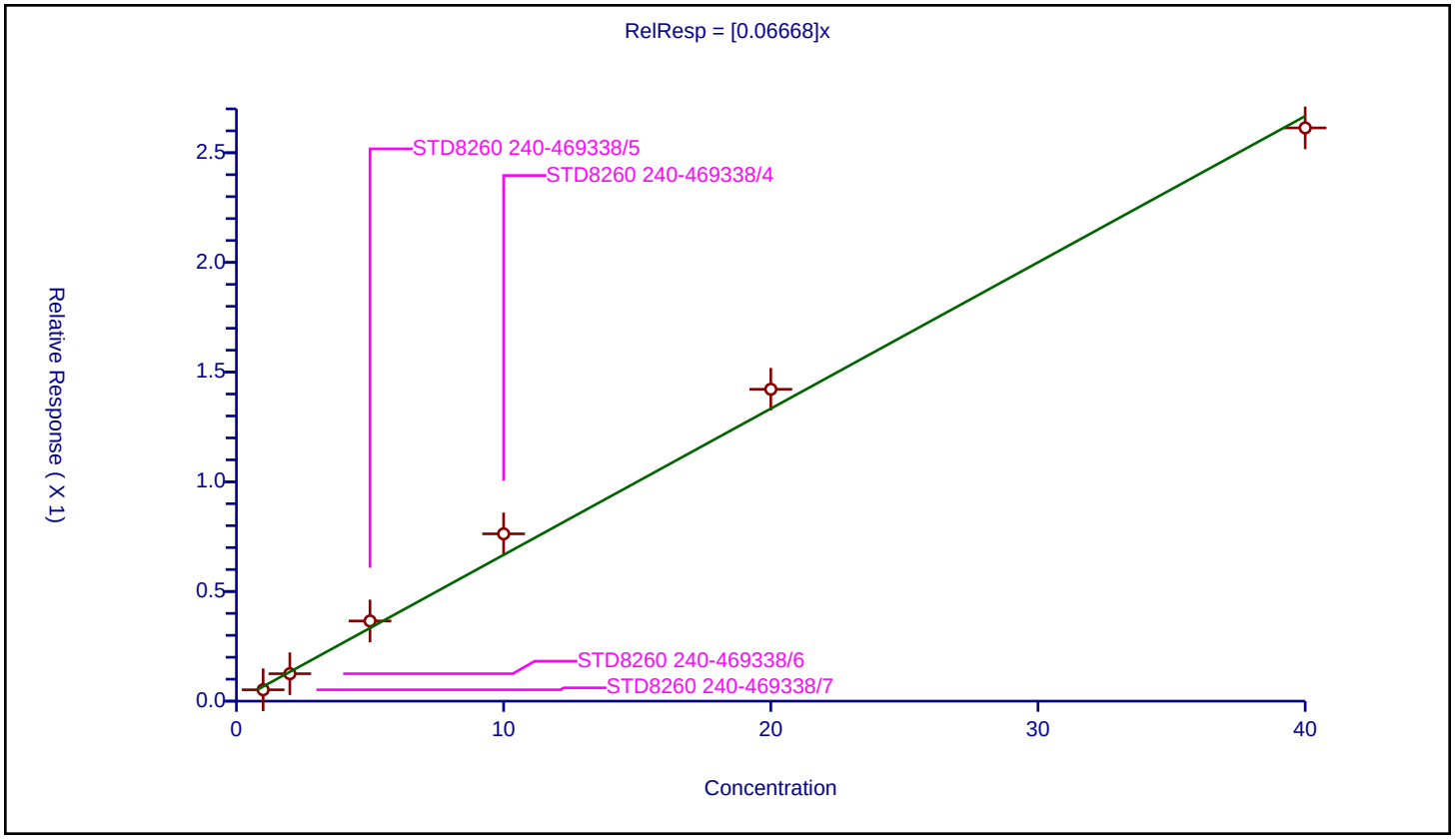
Curve Coefficients

Intercept:	0
Slope:	0.06668

Error Coefficients

Standard Error:	93800
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.051775	20.0	1237666.0	0.051775	Y
2	STD8260 240-469338/6	2.0	0.124948	20.0	1194740.0	0.062474	Y
3	STD8260 240-469338/5	5.0	0.365601	20.0	1222644.0	0.07312	Y
4	STD8260 240-469338/4	10.0	0.762737	20.0	1164516.0	0.076274	Y
5	STD8260 240-469338/3	20.0	1.421849	20.0	1252890.0	0.071092	Y
6	STD8260 240-469338/2	40.0	2.613299	20.0	1401011.0	0.065332	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

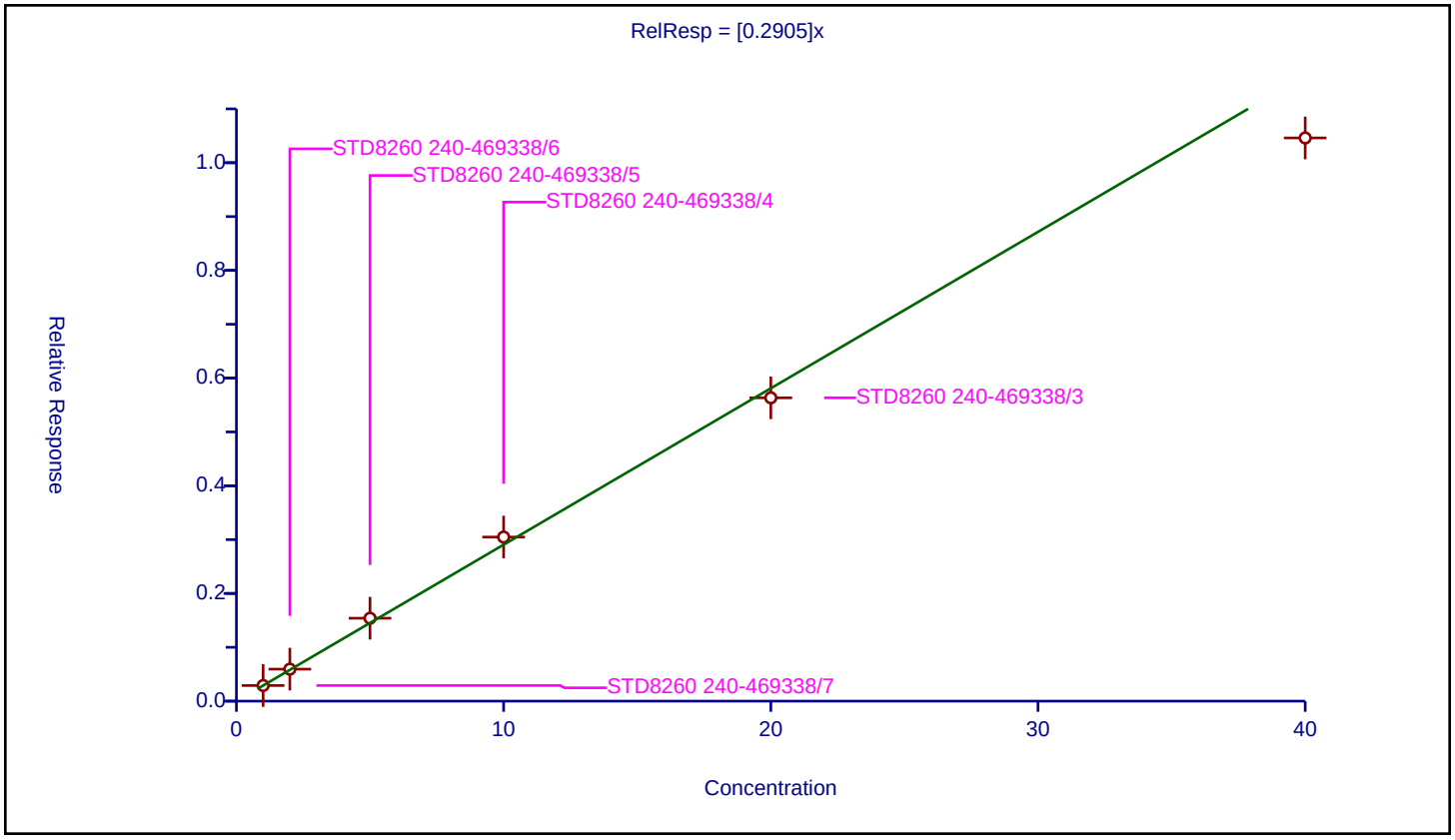
Curve Coefficients

Intercept:	0
Slope:	0.2905

Error Coefficients

Standard Error:	375000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.289997	20.0	1237666.0	0.289997	Y
2	STD8260 240-469338/6	2.0	0.594339	20.0	1194740.0	0.297169	Y
3	STD8260 240-469338/5	5.0	1.540138	20.0	1222644.0	0.308028	Y
4	STD8260 240-469338/4	10.0	3.047652	20.0	1164516.0	0.304765	Y
5	STD8260 240-469338/3	20.0	5.633455	20.0	1252890.0	0.281673	Y
6	STD8260 240-469338/2	40.0	10.460517	20.0	1401011.0	0.261513	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

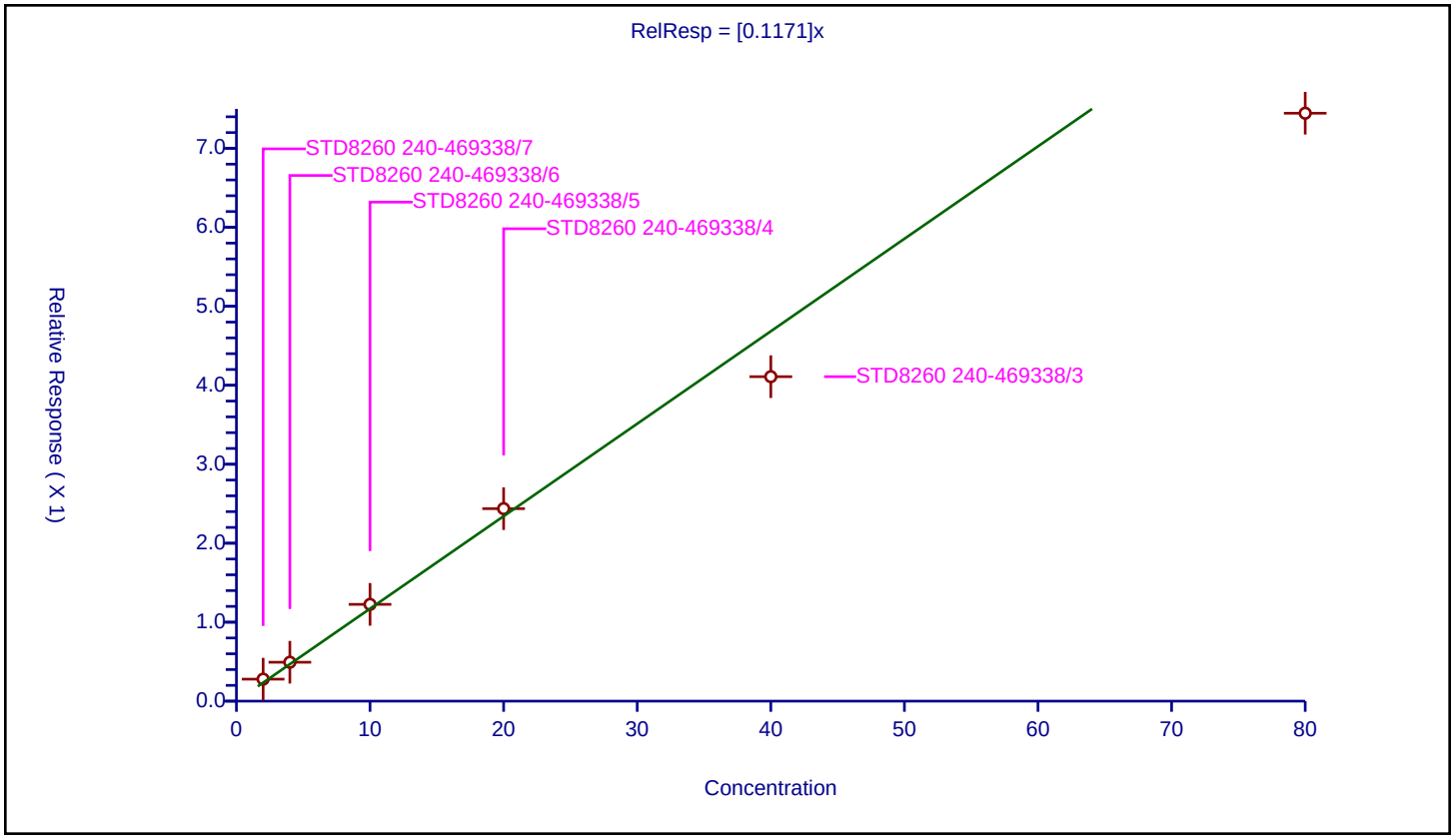
Curve Coefficients

Intercept:	0
Slope:	0.1171

Error Coefficients

Standard Error:	270000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.278557	20.0	1237666.0	0.139278	Y
2	STD8260 240-469338/6	4.0	0.492442	20.0	1194740.0	0.12311	Y
3	STD8260 240-469338/5	10.0	1.225426	20.0	1222644.0	0.122543	Y
4	STD8260 240-469338/4	20.0	2.437614	20.0	1164516.0	0.121881	Y
5	STD8260 240-469338/3	40.0	4.108836	20.0	1252890.0	0.102721	Y
6	STD8260 240-469338/2	80.0	7.445381	20.0	1401011.0	0.093067	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

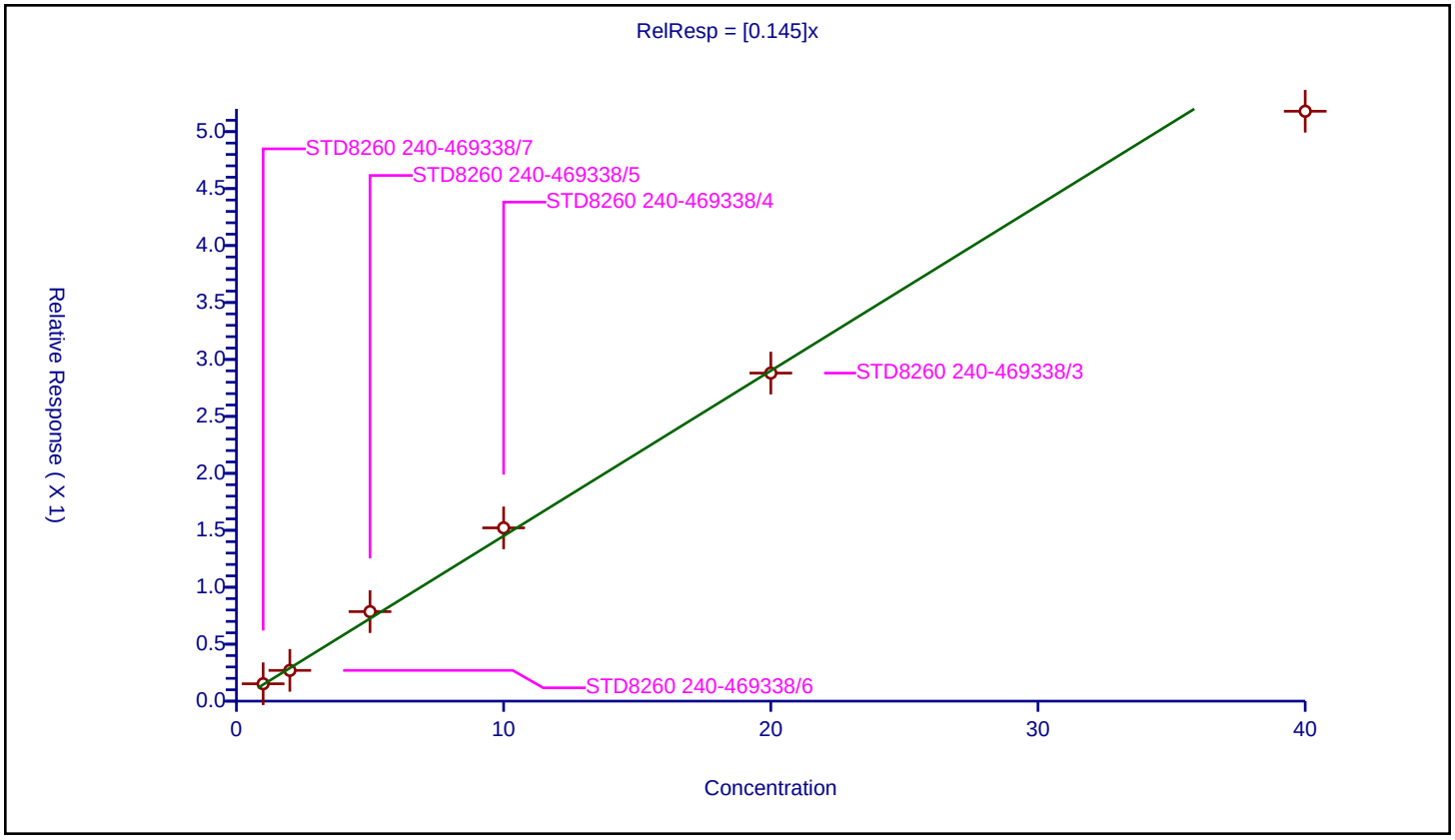
Curve Coefficients

Intercept:	0
Slope:	0.145

Error Coefficients

Standard Error:	187000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.152513	20.0	1237666.0	0.152513	Y
2	STD8260 240-469338/6	2.0	0.26995	20.0	1194740.0	0.134975	Y
3	STD8260 240-469338/5	5.0	0.785789	20.0	1222644.0	0.157158	Y
4	STD8260 240-469338/4	10.0	1.521387	20.0	1164516.0	0.152139	Y
5	STD8260 240-469338/3	20.0	2.880365	20.0	1252890.0	0.144018	Y
6	STD8260 240-469338/2	40.0	5.17936	20.0	1401011.0	0.129484	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

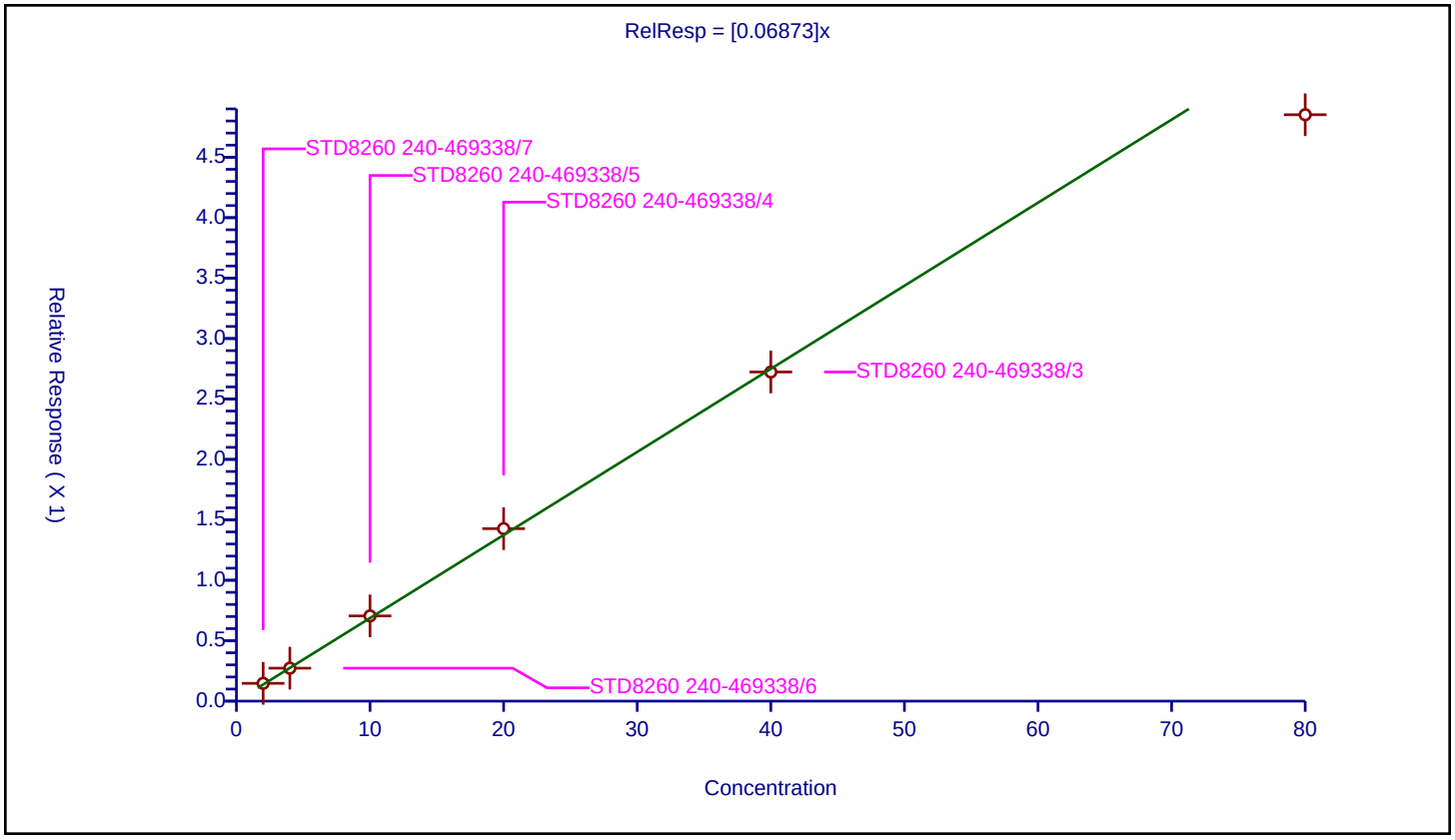
Curve Coefficients

Intercept:	0
Slope:	0.06873

Error Coefficients

Standard Error:	175000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.147277	20.0	1237666.0	0.073639	Y
2	STD8260 240-469338/6	4.0	0.272645	20.0	1194740.0	0.068161	Y
3	STD8260 240-469338/5	10.0	0.704931	20.0	1222644.0	0.070493	Y
4	STD8260 240-469338/4	20.0	1.427185	20.0	1164516.0	0.071359	Y
5	STD8260 240-469338/3	40.0	2.72324	20.0	1252890.0	0.068081	Y
6	STD8260 240-469338/2	80.0	4.851796	20.0	1401011.0	0.060647	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

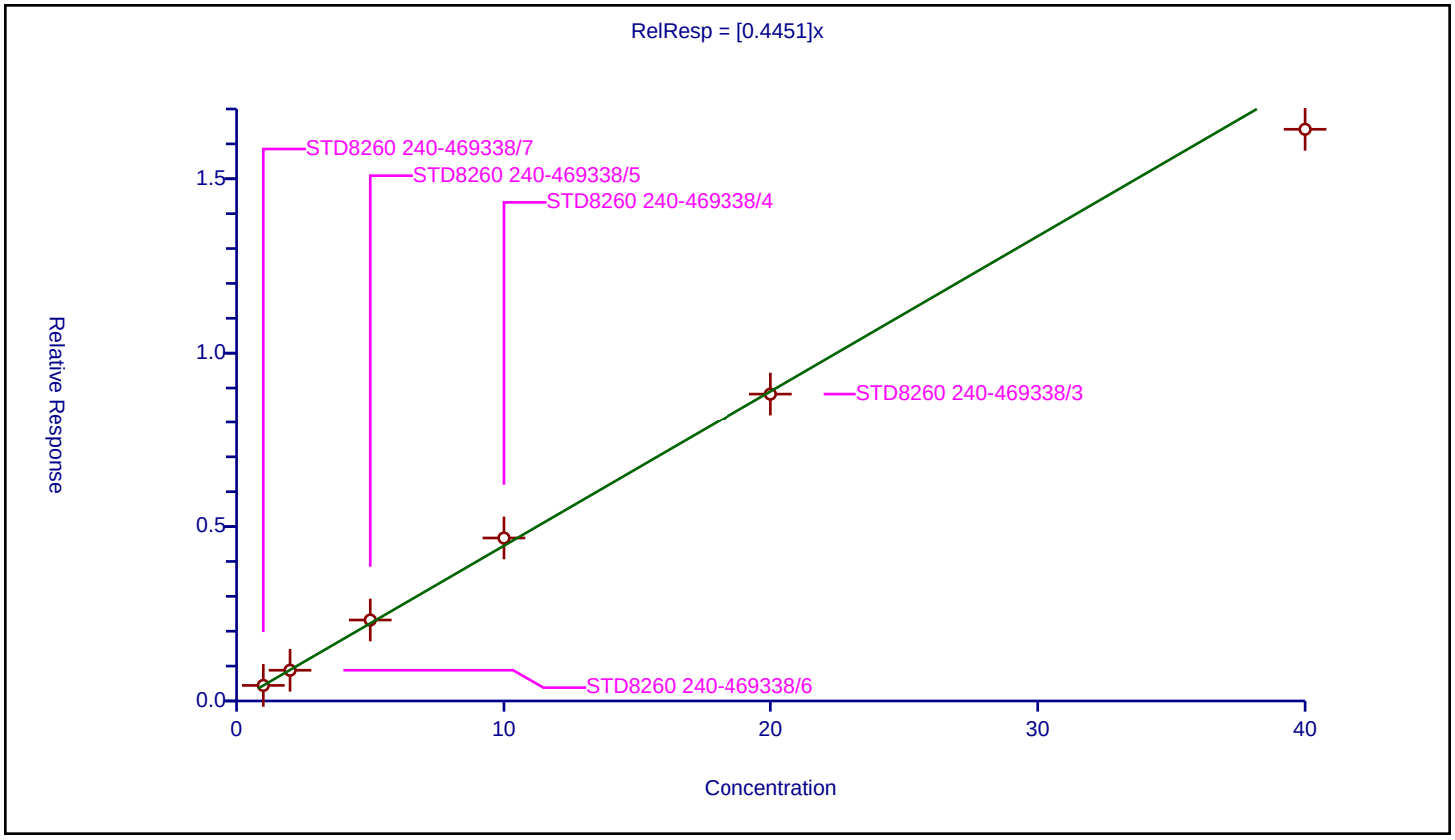
Curve Coefficients

Intercept:	0
Slope:	0.4451

Error Coefficients

Standard Error:	588000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.446469	20.0	1237666.0	0.446469	Y
2	STD8260 240-469338/6	2.0	0.881414	20.0	1194740.0	0.440707	Y
3	STD8260 240-469338/5	5.0	2.321412	20.0	1222644.0	0.464282	Y
4	STD8260 240-469338/4	10.0	4.672671	20.0	1164516.0	0.467267	Y
5	STD8260 240-469338/3	20.0	8.826856	20.0	1252890.0	0.441343	Y
6	STD8260 240-469338/2	40.0	16.418672	20.0	1401011.0	0.410467	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

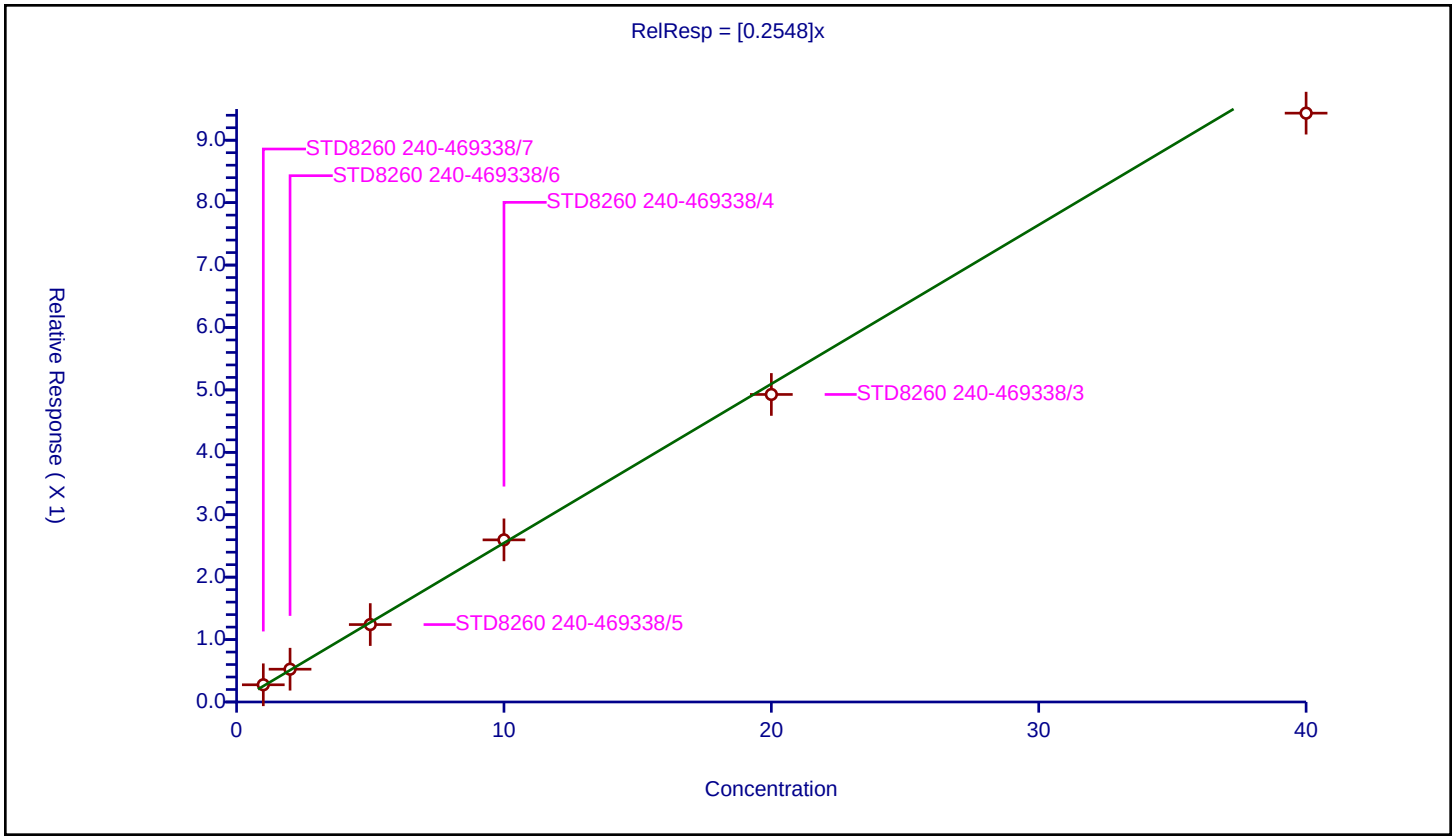
Curve Coefficients

Intercept:	0
Slope:	0.2548

Error Coefficients

Standard Error:	335000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.275939	20.0	1237666.0	0.275939	Y
2	STD8260 240-469338/6	2.0	0.525319	20.0	1194740.0	0.26266	Y
3	STD8260 240-469338/5	5.0	1.240655	20.0	1222644.0	0.248131	Y
4	STD8260 240-469338/4	10.0	2.597285	20.0	1164516.0	0.259729	Y
5	STD8260 240-469338/3	20.0	4.927073	20.0	1252890.0	0.246354	Y
6	STD8260 240-469338/2	40.0	9.433787	20.0	1401011.0	0.235845	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

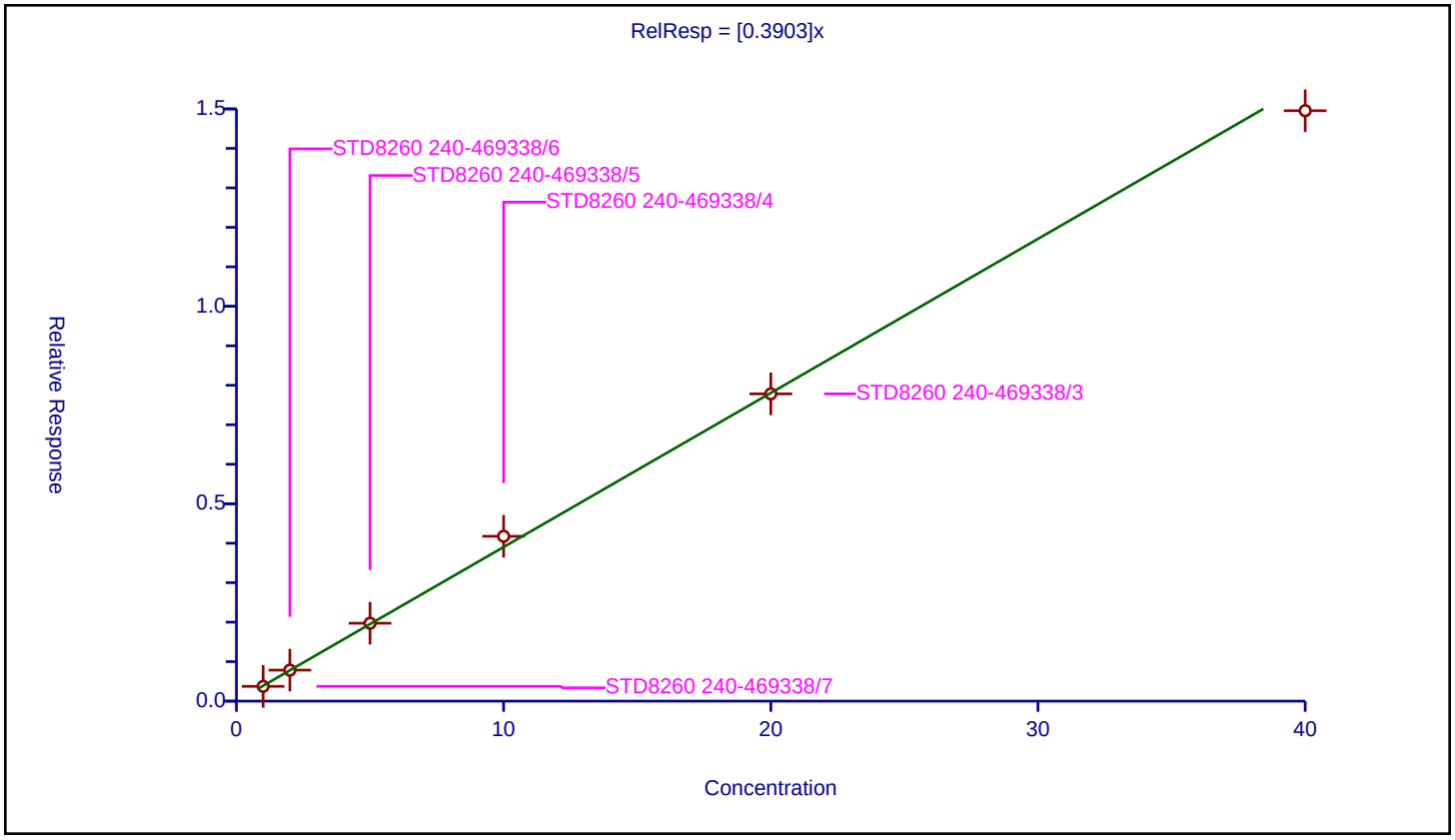
Curve Coefficients

Intercept:	0
Slope:	0.3903

Error Coefficients

Standard Error:	531000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373768	20.0	1237666.0	0.373768	Y
2	STD8260 240-469338/6	2.0	0.78556	20.0	1194740.0	0.39278	Y
3	STD8260 240-469338/5	5.0	1.973117	20.0	1222644.0	0.394623	Y
4	STD8260 240-469338/4	10.0	4.175469	20.0	1164516.0	0.417547	Y
5	STD8260 240-469338/3	20.0	7.782774	20.0	1252890.0	0.389139	Y
6	STD8260 240-469338/2	40.0	14.954244	20.0	1401011.0	0.373856	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

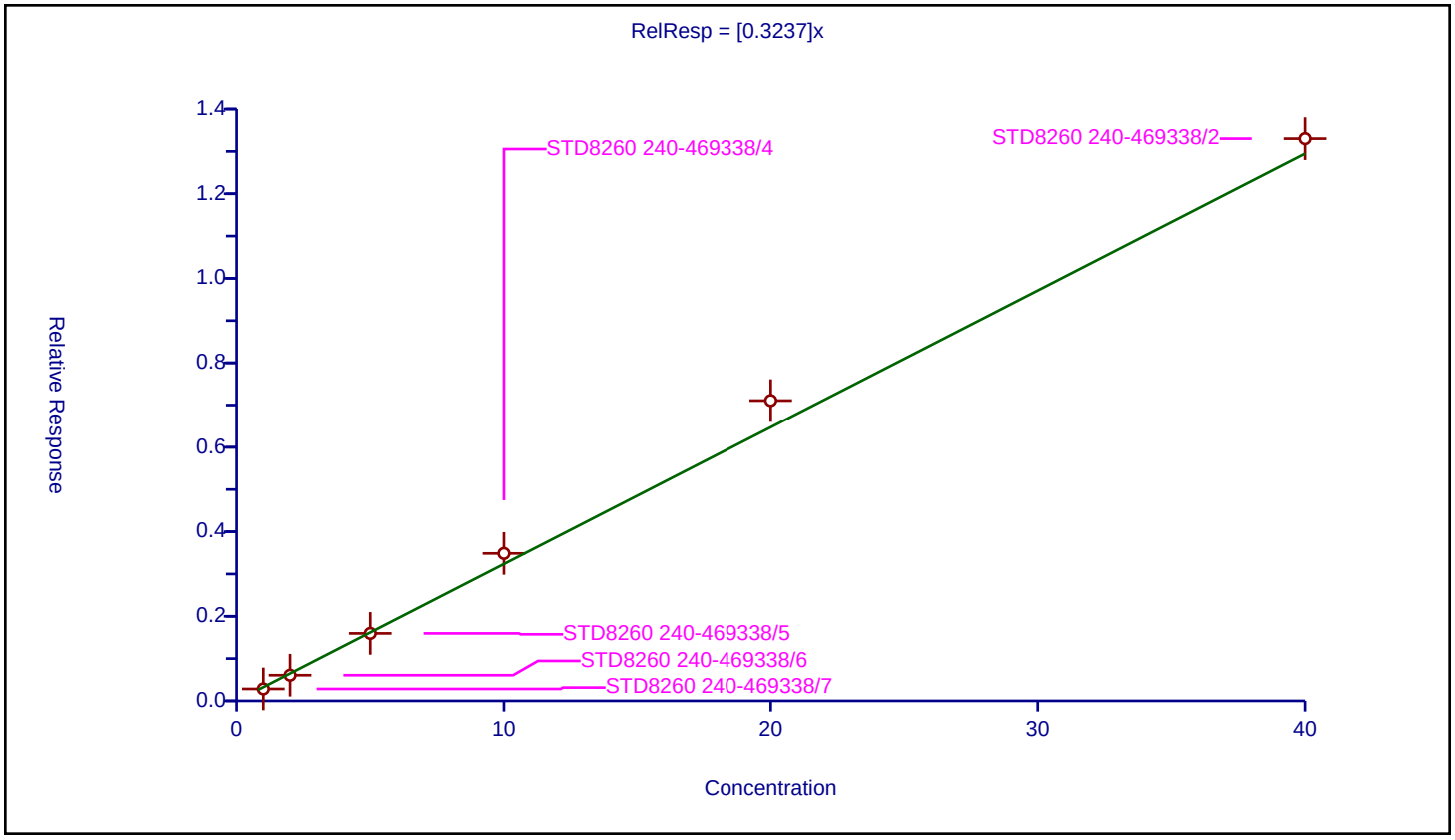
Curve Coefficients

Intercept:	0
Slope:	0.3237

Error Coefficients

Standard Error:	473000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.282903	20.0	1237666.0	0.282903	Y
2	STD8260 240-469338/6	2.0	0.607111	20.0	1194740.0	0.303556	Y
3	STD8260 240-469338/5	5.0	1.59582	20.0	1222644.0	0.319164	Y
4	STD8260 240-469338/4	10.0	3.48677	20.0	1164516.0	0.348677	Y
5	STD8260 240-469338/3	20.0	7.106737	20.0	1252890.0	0.355337	Y
6	STD8260 240-469338/2	40.0	13.301937	20.0	1401011.0	0.332548	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

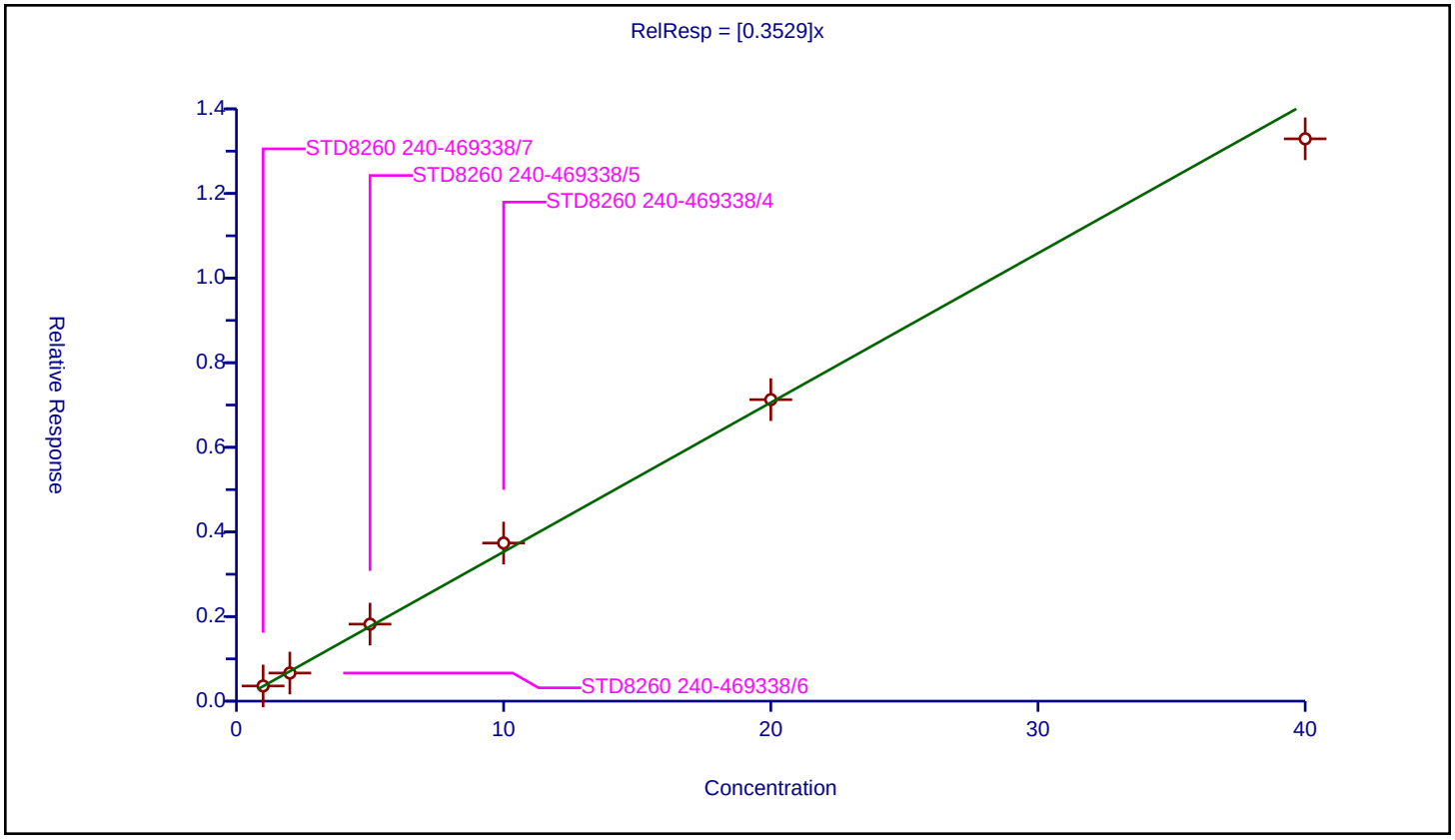
Curve Coefficients

Intercept:	0
Slope:	0.3529

Error Coefficients

Standard Error:	475000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.358724	20.0	1237666.0	0.358724	Y
2	STD8260 240-469338/6	2.0	0.664714	20.0	1194740.0	0.332357	Y
3	STD8260 240-469338/5	5.0	1.820726	20.0	1222644.0	0.364145	Y
4	STD8260 240-469338/4	10.0	3.737329	20.0	1164516.0	0.373733	Y
5	STD8260 240-469338/3	20.0	7.127122	20.0	1252890.0	0.356356	Y
6	STD8260 240-469338/2	40.0	13.292101	20.0	1401011.0	0.332303	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

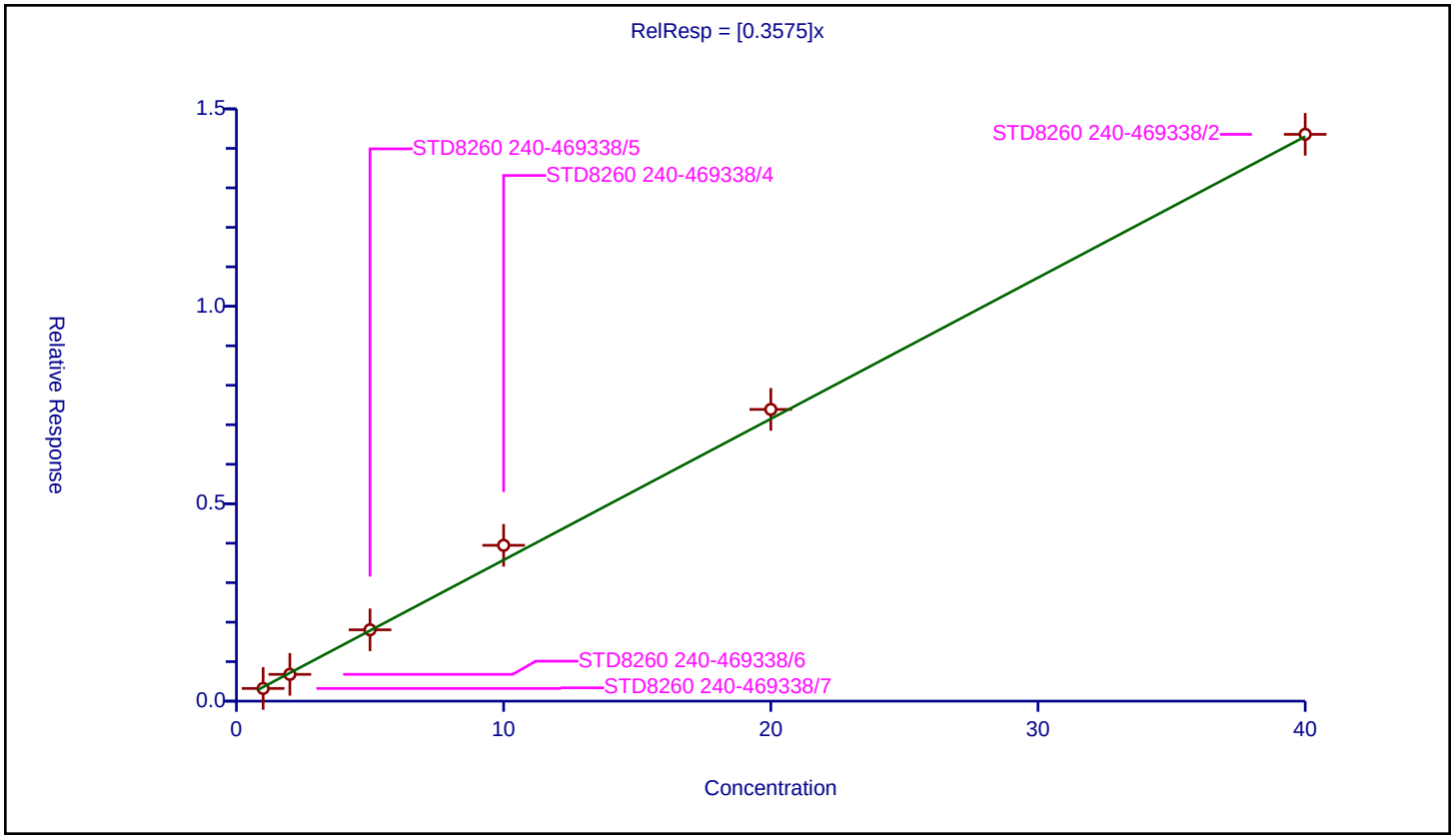
Curve Coefficients

Intercept:	0
Slope:	0.3575

Error Coefficients

Standard Error:	508000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.321379	20.0	1237666.0	0.321379	Y
2	STD8260 240-469338/6	2.0	0.678591	20.0	1194740.0	0.339296	Y
3	STD8260 240-469338/5	5.0	1.807067	20.0	1222644.0	0.361413	Y
4	STD8260 240-469338/4	10.0	3.946395	20.0	1164516.0	0.394639	Y
5	STD8260 240-469338/3	20.0	7.388757	20.0	1252890.0	0.369438	Y
6	STD8260 240-469338/2	40.0	14.35589	20.0	1401011.0	0.358897	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

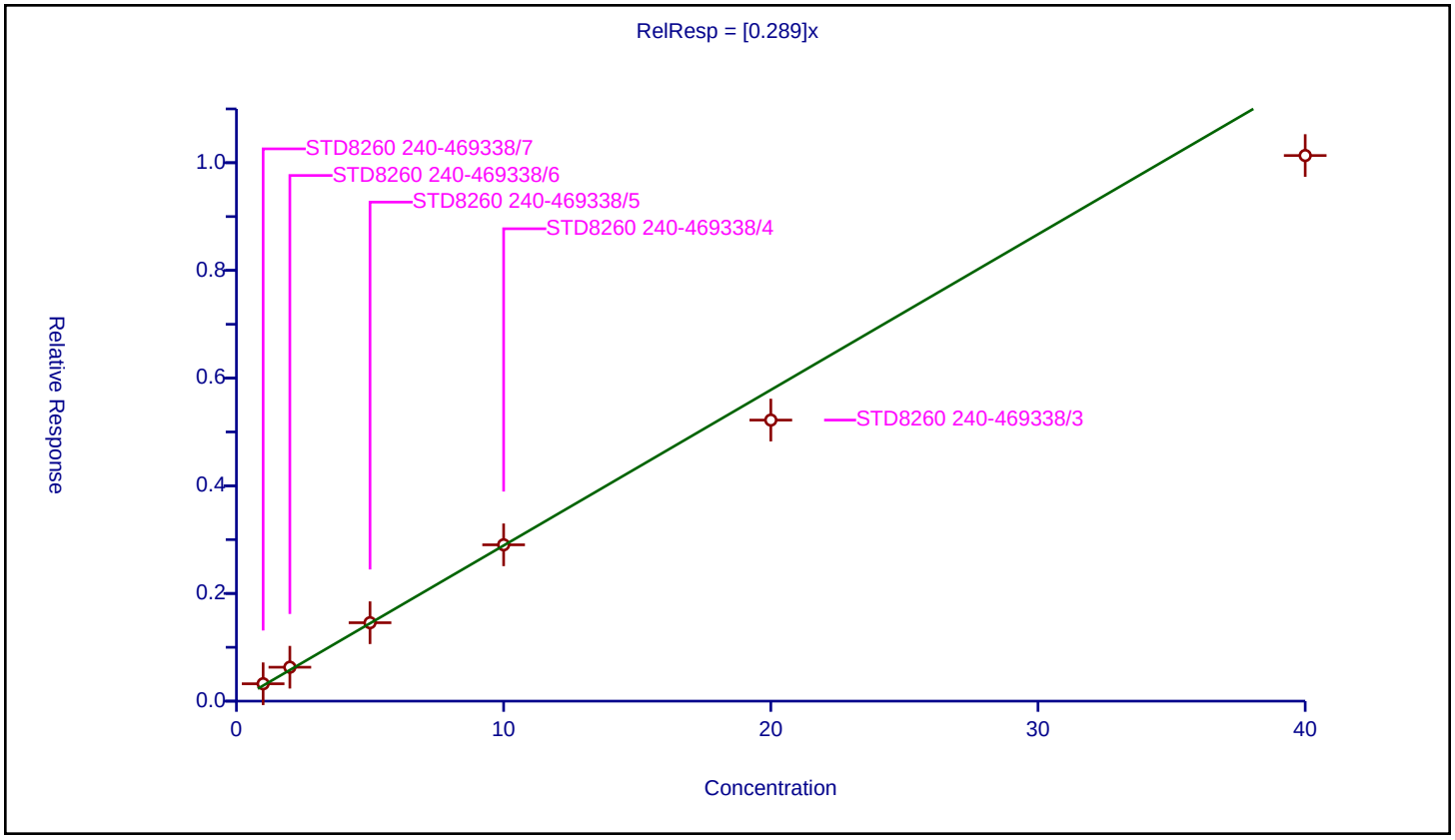
Curve Coefficients

Intercept:	0
Slope:	0.289

Error Coefficients

Standard Error:	360000
Relative Standard Error:	9.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.323011	20.0	1237666.0	0.323011	Y
2	STD8260 240-469338/6	2.0	0.630212	20.0	1194740.0	0.315106	Y
3	STD8260 240-469338/5	5.0	1.456434	20.0	1222644.0	0.291287	Y
4	STD8260 240-469338/4	10.0	2.903713	20.0	1164516.0	0.290371	Y
5	STD8260 240-469338/3	20.0	5.220363	20.0	1252890.0	0.261018	Y
6	STD8260 240-469338/2	40.0	10.133953	20.0	1401011.0	0.253349	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

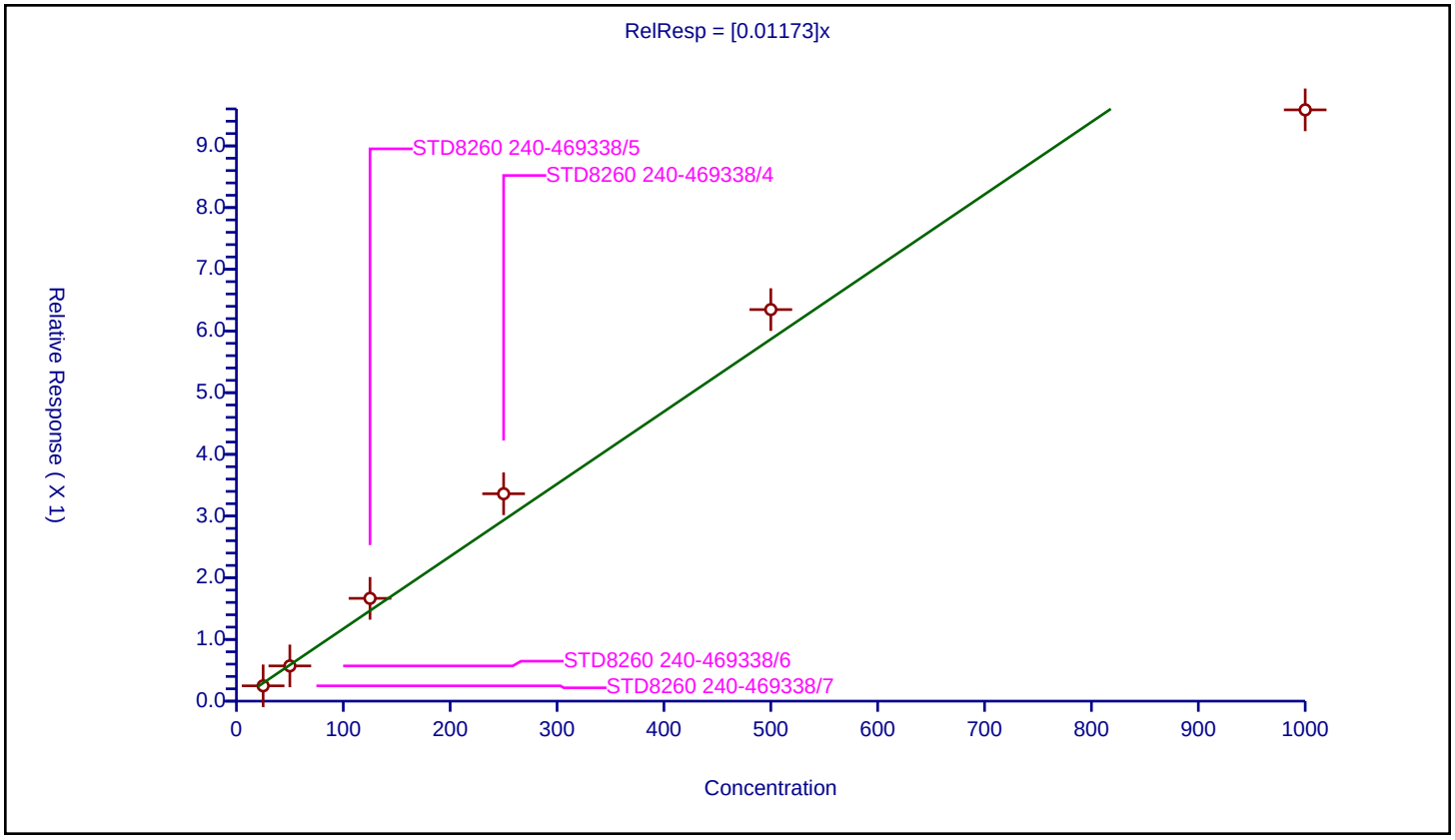
Curve Coefficients

Intercept:	0
Slope:	0.01173

Error Coefficients

Standard Error:	255000
Relative Standard Error:	14.5
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	25.0	0.248104	20.0	905264.0	0.009924	Y
2	STD8260 240-469338/6	50.0	0.571138	20.0	862909.0	0.011423	Y
3	STD8260 240-469338/5	125.0	1.666371	20.0	861537.0	0.013331	Y
4	STD8260 240-469338/4	250.0	3.361442	20.0	833065.0	0.013446	Y
5	STD8260 240-469338/3	500.0	6.34715	20.0	890220.0	0.012694	Y
6	STD8260 240-469338/2	1000.0	9.584315	20.0	979659.0	0.009584	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

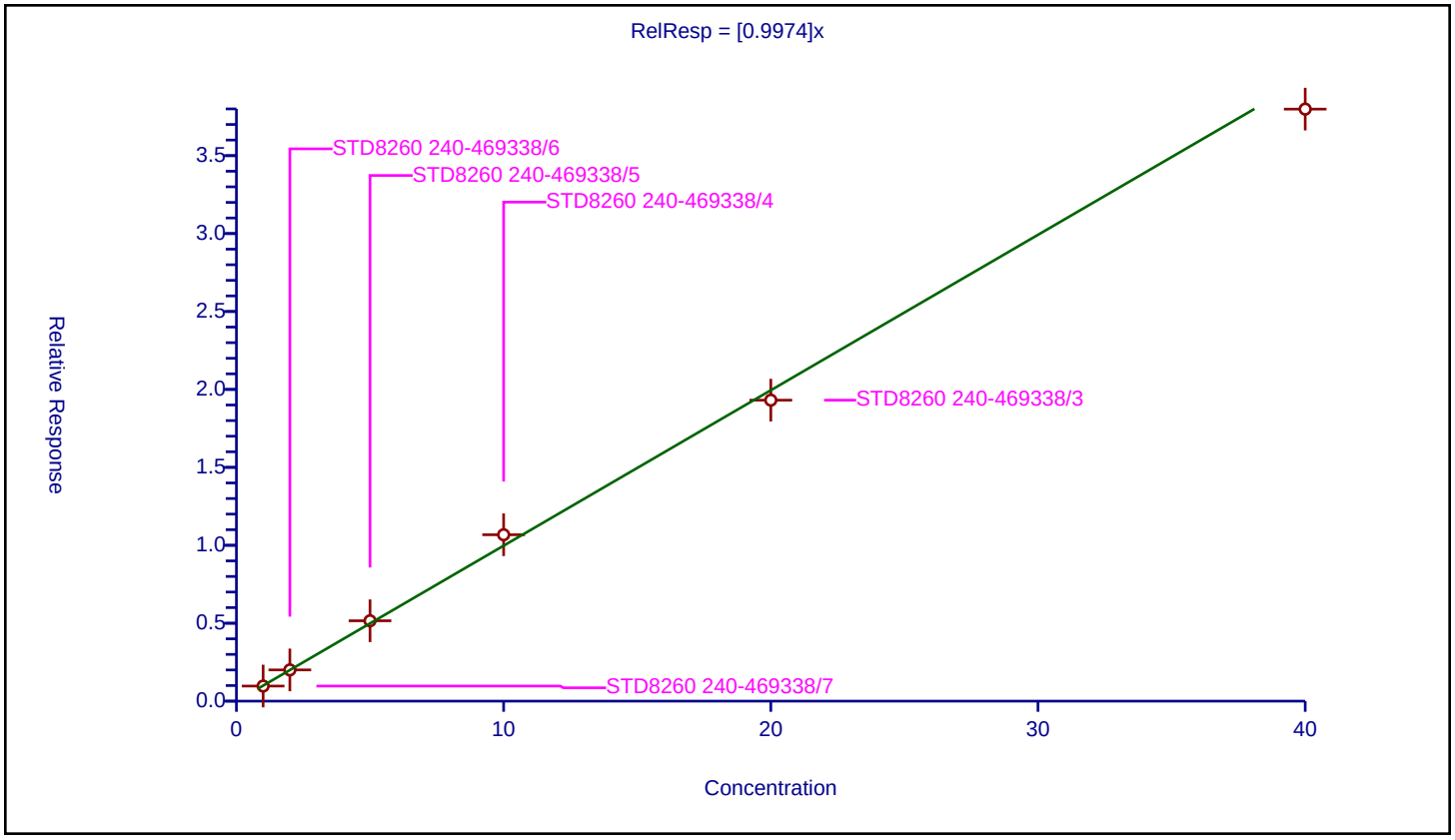
Curve Coefficients

Intercept:	0
Slope:	0.9974

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.968323	20.0	1237666.0	0.968323	Y
2	STD8260 240-469338/6	2.0	2.0037	20.0	1194740.0	1.00185	Y
3	STD8260 240-469338/5	5.0	5.156481	20.0	1222644.0	1.031296	Y
4	STD8260 240-469338/4	10.0	10.676453	20.0	1164516.0	1.067645	Y
5	STD8260 240-469338/3	20.0	19.311288	20.0	1252890.0	0.965564	Y
6	STD8260 240-469338/2	40.0	37.985726	20.0	1401011.0	0.949643	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

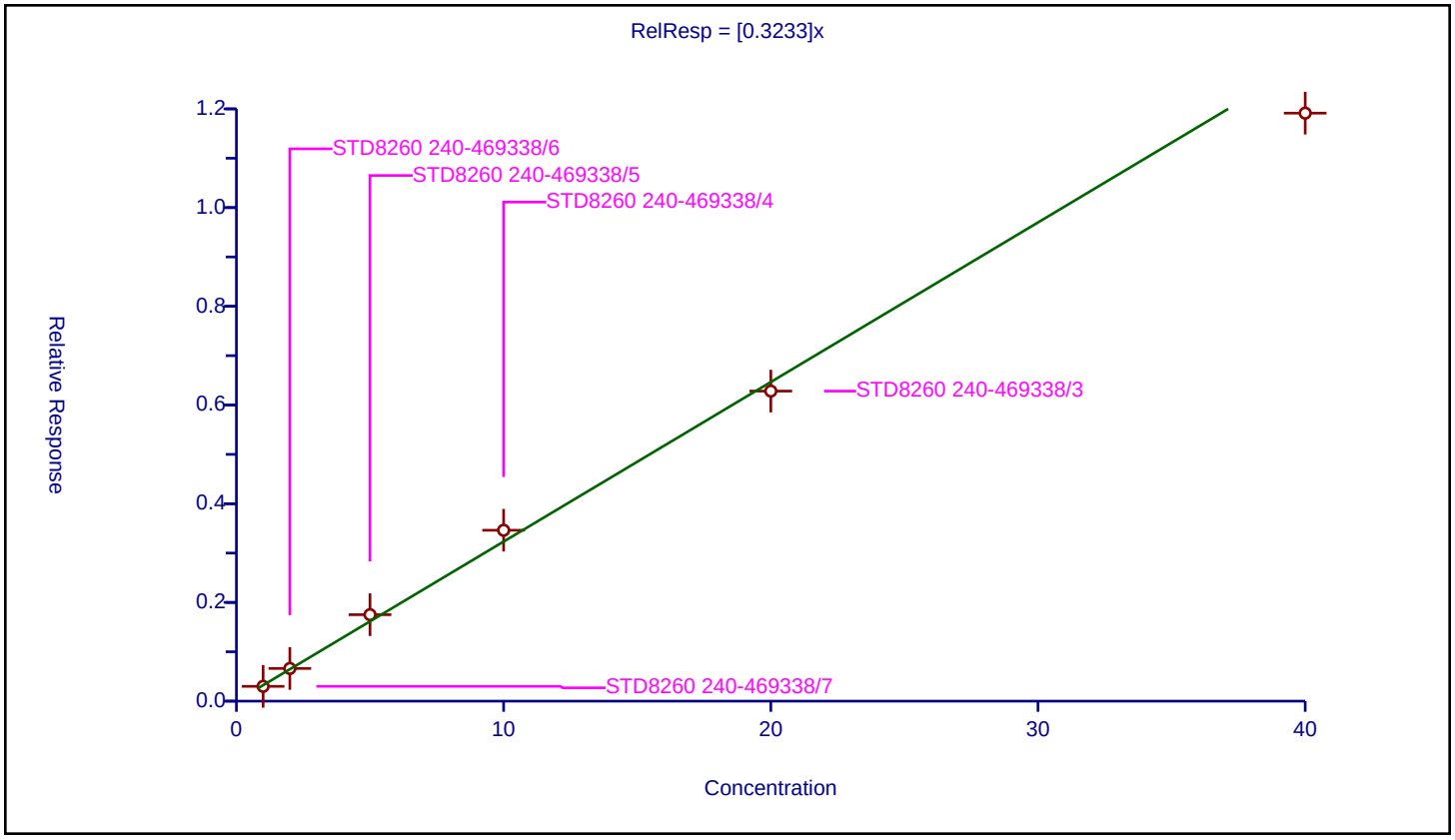
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	426000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299968	20.0	1237666.0	0.299968	Y
2	STD8260 240-469338/6	2.0	0.662437	20.0	1194740.0	0.331219	Y
3	STD8260 240-469338/5	5.0	1.751761	20.0	1222644.0	0.350352	Y
4	STD8260 240-469338/4	10.0	3.462898	20.0	1164516.0	0.34629	Y
5	STD8260 240-469338/3	20.0	6.282499	20.0	1252890.0	0.314125	Y
6	STD8260 240-469338/2	40.0	11.913854	20.0	1401011.0	0.297846	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

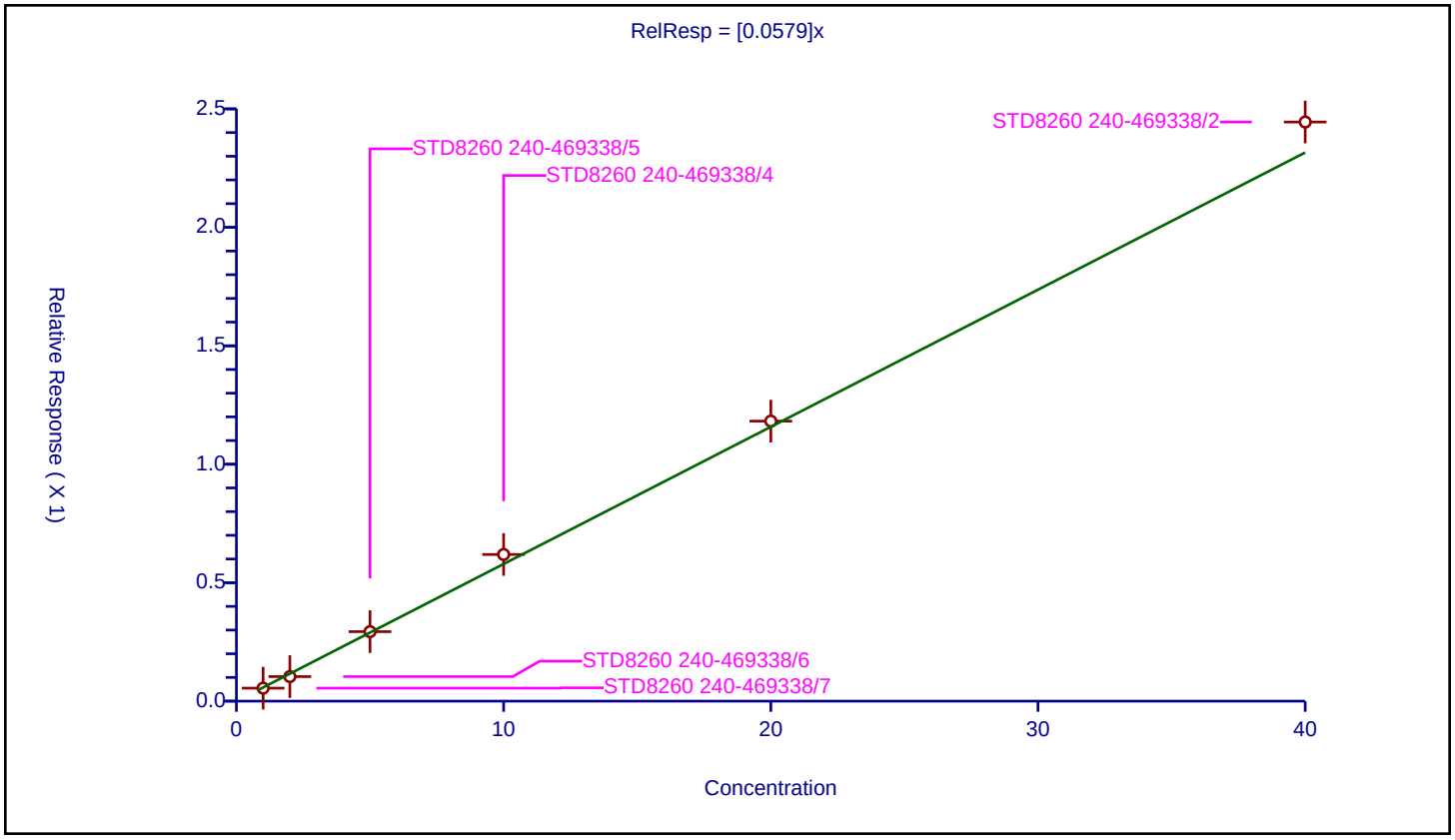
Curve Coefficients

Intercept:	0
Slope:	0.0579

Error Coefficients

Standard Error:	85400
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.054797	20.0	1237666.0	0.054797	Y
2	STD8260 240-469338/6	2.0	0.103571	20.0	1194740.0	0.051785	Y
3	STD8260 240-469338/5	5.0	0.293381	20.0	1222644.0	0.058676	Y
4	STD8260 240-469338/4	10.0	0.619038	20.0	1164516.0	0.061904	Y
5	STD8260 240-469338/3	20.0	1.181971	20.0	1252890.0	0.059099	Y
6	STD8260 240-469338/2	40.0	2.444606	20.0	1401011.0	0.061115	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

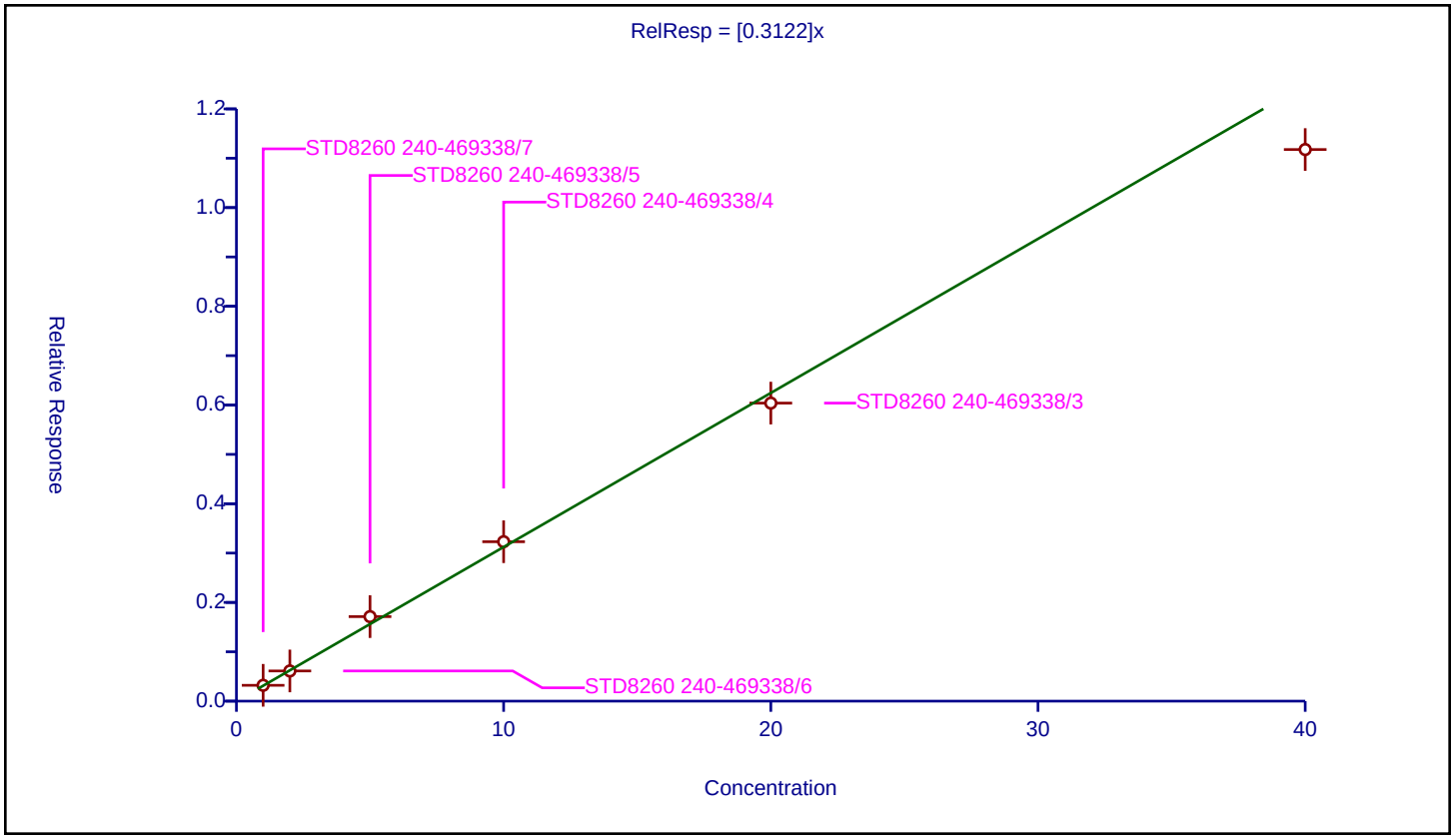
Curve Coefficients

Intercept:	0
Slope:	0.3122

Error Coefficients

Standard Error:	401000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.320652	20.0	1237666.0	0.320652	Y
2	STD8260 240-469338/6	2.0	0.611698	20.0	1194740.0	0.305849	Y
3	STD8260 240-469338/5	5.0	1.712322	20.0	1222644.0	0.342464	Y
4	STD8260 240-469338/4	10.0	3.230338	20.0	1164516.0	0.323034	Y
5	STD8260 240-469338/3	20.0	6.038726	20.0	1252890.0	0.301936	Y
6	STD8260 240-469338/2	40.0	11.1767	20.0	1401011.0	0.279418	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

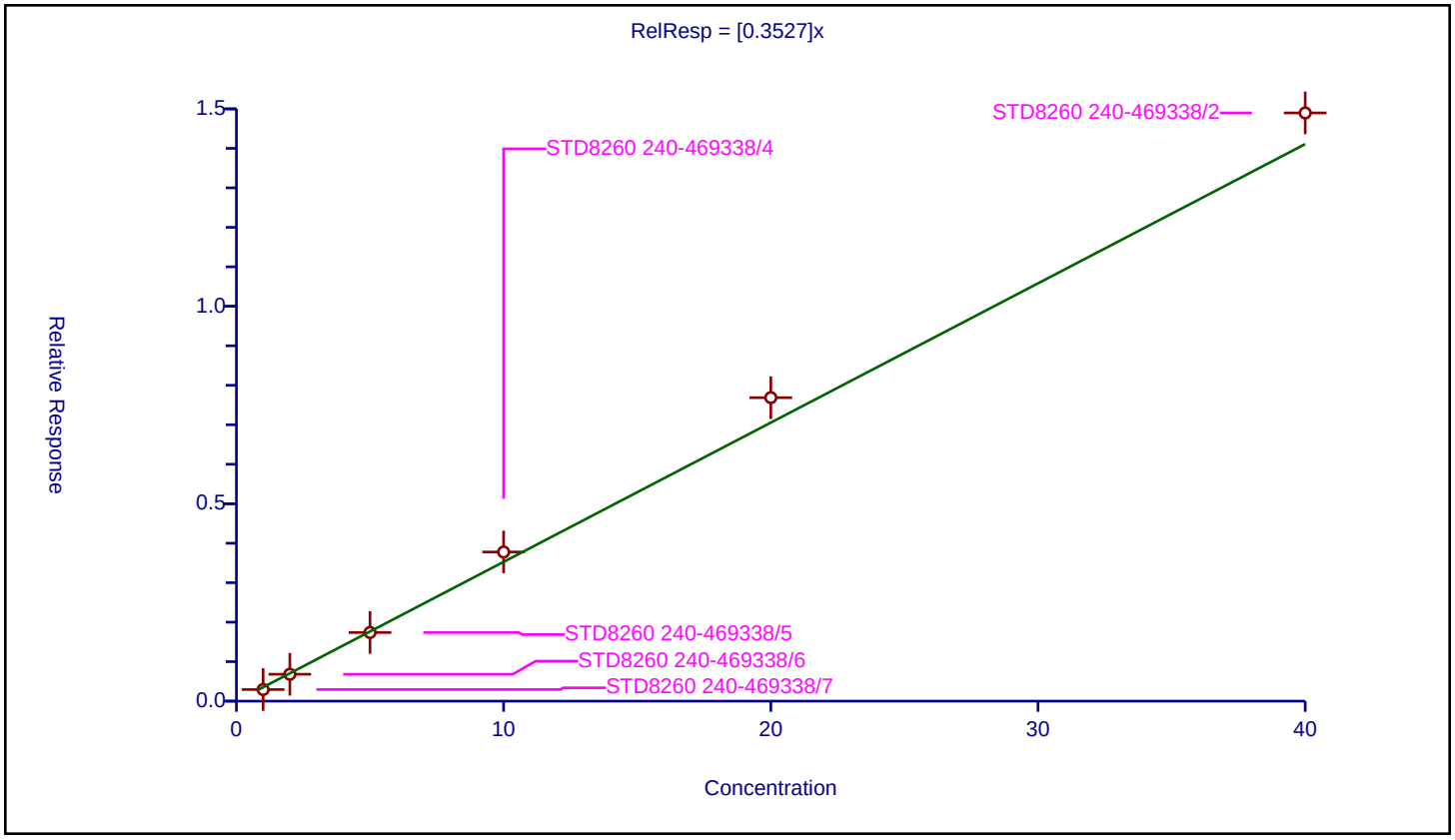
Curve Coefficients

Intercept:	0
Slope:	0.3527

Error Coefficients

Standard Error:	526000
Relative Standard Error:	9.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.293439	20.0	1237666.0	0.293439	Y
2	STD8260 240-469338/6	2.0	0.681119	20.0	1194740.0	0.340559	Y
3	STD8260 240-469338/5	5.0	1.738593	20.0	1222644.0	0.347719	Y
4	STD8260 240-469338/4	10.0	3.77769	20.0	1164516.0	0.377769	Y
5	STD8260 240-469338/3	20.0	7.686038	20.0	1252890.0	0.384302	Y
6	STD8260 240-469338/2	40.0	14.897128	20.0	1401011.0	0.372428	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

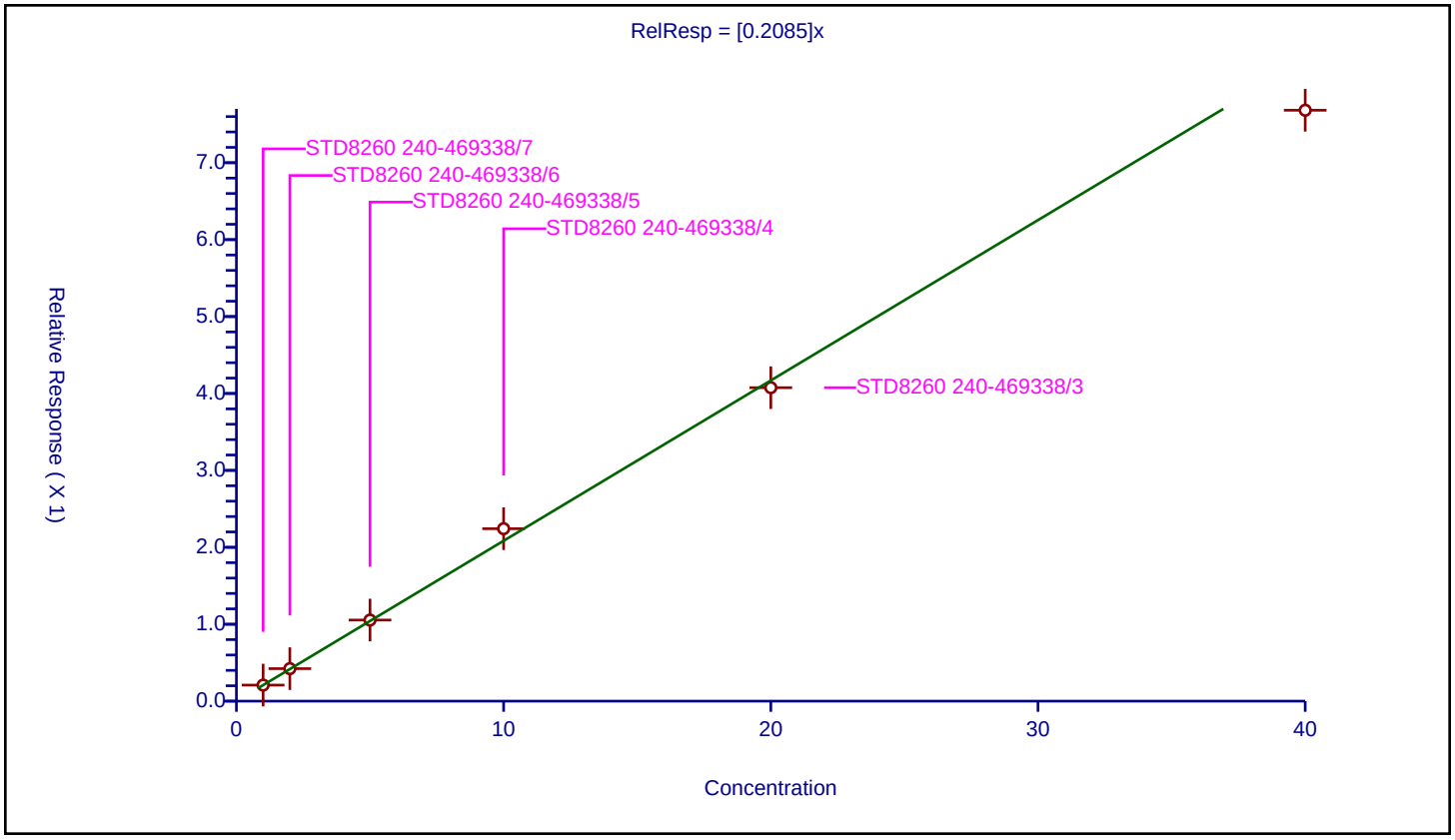
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	275000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.208602	20.0	1237666.0	0.208602	Y
2	STD8260 240-469338/6	2.0	0.422636	20.0	1194740.0	0.211318	Y
3	STD8260 240-469338/5	5.0	1.054322	20.0	1222644.0	0.210864	Y
4	STD8260 240-469338/4	10.0	2.242082	20.0	1164516.0	0.224208	Y
5	STD8260 240-469338/3	20.0	4.075474	20.0	1252890.0	0.203774	Y
6	STD8260 240-469338/2	40.0	7.682338	20.0	1401011.0	0.192058	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

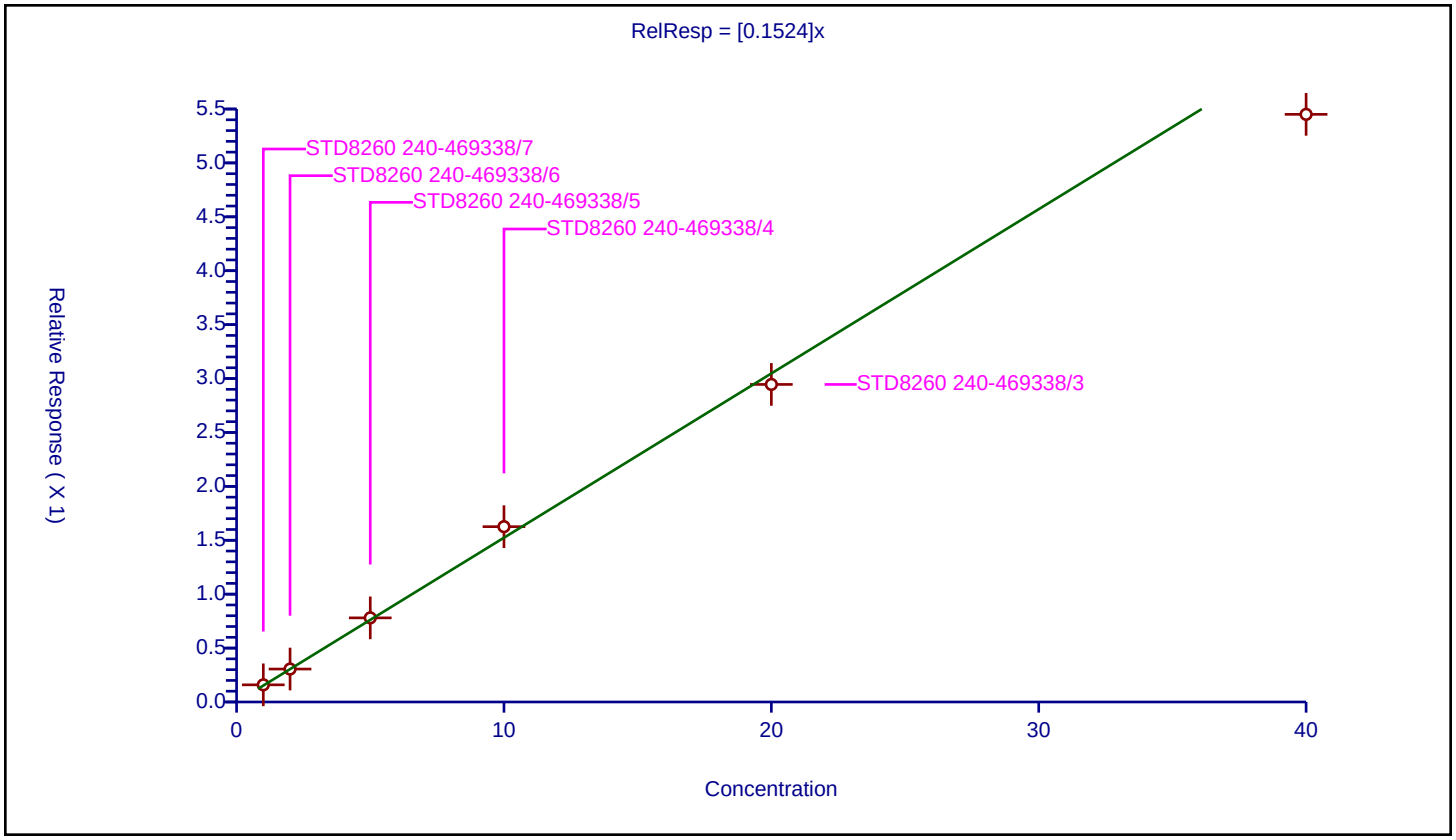
Curve Coefficients

Intercept:	0
Slope:	0.1524

Error Coefficients

Standard Error:	196000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159106	20.0	1237666.0	0.159106	Y
2	STD8260 240-469338/6	2.0	0.305707	20.0	1194740.0	0.152853	Y
3	STD8260 240-469338/5	5.0	0.780325	20.0	1222644.0	0.156065	Y
4	STD8260 240-469338/4	10.0	1.626204	20.0	1164516.0	0.16262	Y
5	STD8260 240-469338/3	20.0	2.945526	20.0	1252890.0	0.147276	Y
6	STD8260 240-469338/2	40.0	5.45045	20.0	1401011.0	0.136261	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

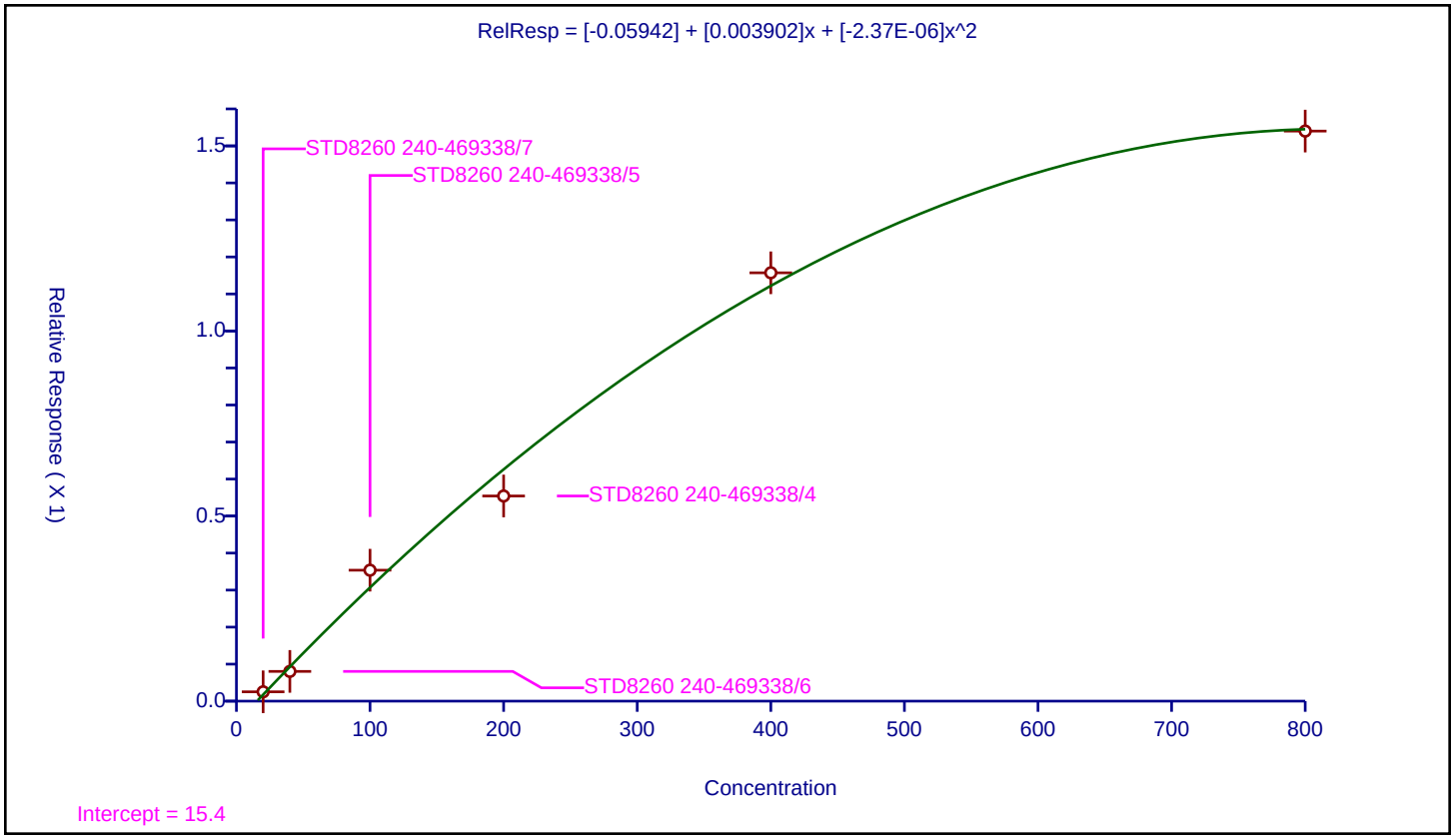
Curve Coefficients

Intercept:	-0.05942
Slope:	0.003902
Second Order:	-2.37E-06

Error Coefficients

Standard Error:	78400
Relative Standard Error:	13.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	20.0	0.025225	20.0	1237666.0	0.001261	Y
2	STD8260 240-469338/6	40.0	0.080352	20.0	1194740.0	0.002009	Y
3	STD8260 240-469338/5	100.0	0.353791	20.0	1222644.0	0.003538	Y
4	STD8260 240-469338/4	200.0	0.554204	20.0	1164516.0	0.002771	Y
5	STD8260 240-469338/3	400.0	1.157197	20.0	1252890.0	0.002893	Y
6	STD8260 240-469338/2	800.0	1.540088	20.0	1401011.0	0.001925	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

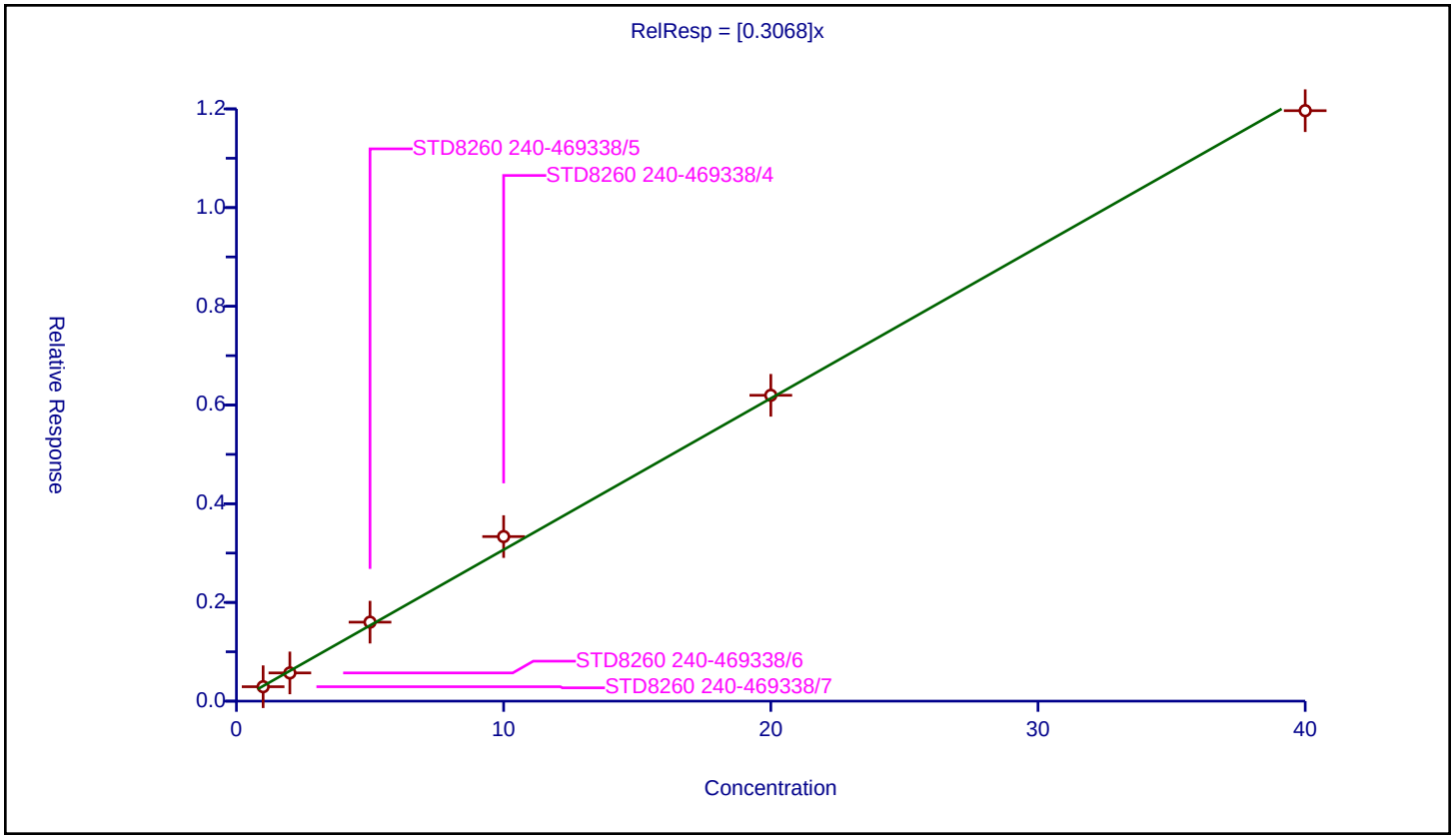
Curve Coefficients

Intercept:	0
Slope:	0.3068

Error Coefficients

Standard Error:	425000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.292373	20.0	1237666.0	0.292373	Y
2	STD8260 240-469338/6	2.0	0.571656	20.0	1194740.0	0.285828	Y
3	STD8260 240-469338/5	5.0	1.600302	20.0	1222644.0	0.32006	Y
4	STD8260 240-469338/4	10.0	3.334089	20.0	1164516.0	0.333409	Y
5	STD8260 240-469338/3	20.0	6.196905	20.0	1252890.0	0.309845	Y
6	STD8260 240-469338/2	40.0	11.963903	20.0	1401011.0	0.299098	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

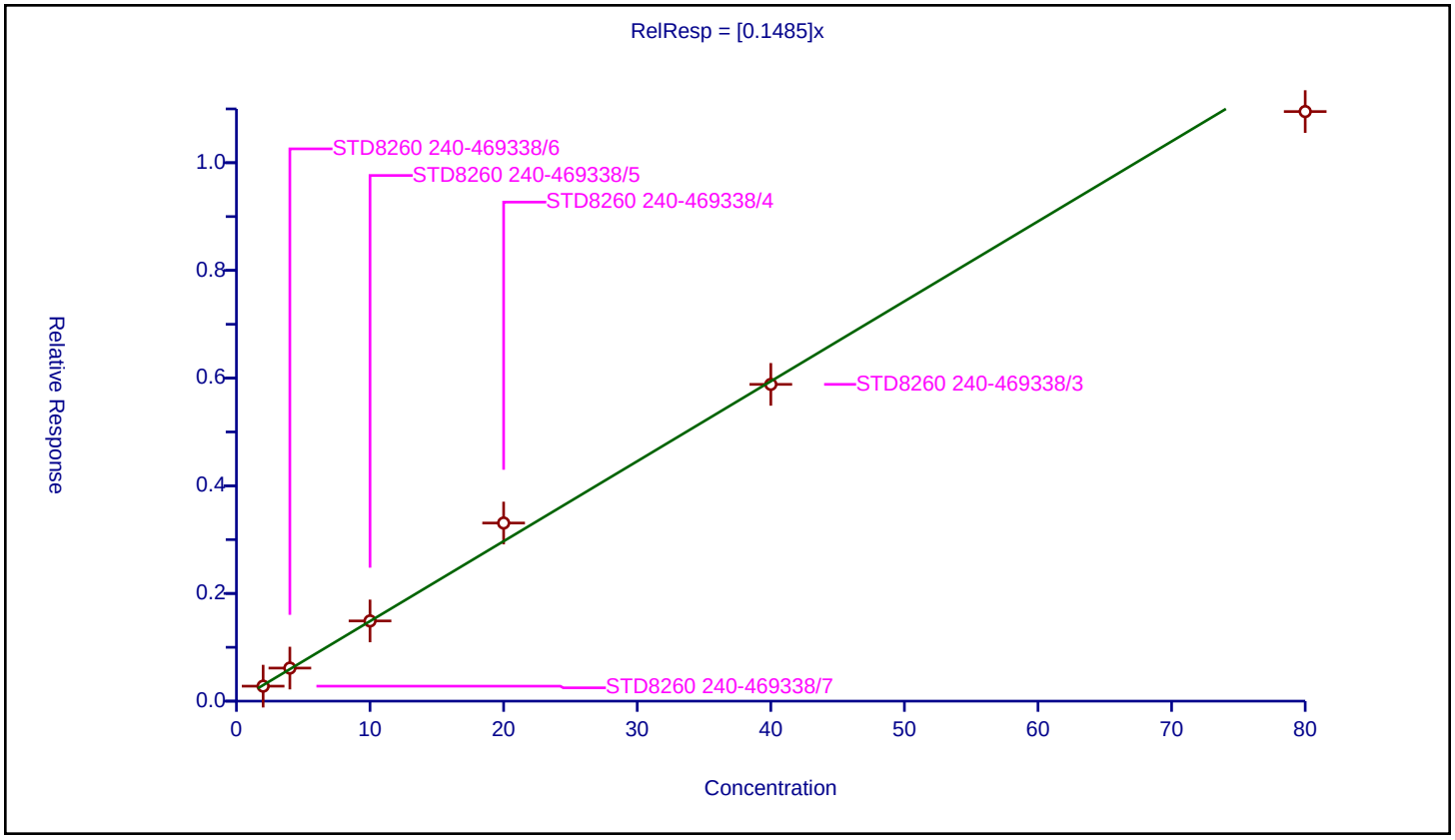
Curve Coefficients

Intercept:	0
Slope:	0.1485

Error Coefficients

Standard Error:	393000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.27833	20.0	1237666.0	0.139165	Y
2	STD8260 240-469338/6	4.0	0.614226	20.0	1194740.0	0.153556	Y
3	STD8260 240-469338/5	10.0	1.489919	20.0	1222644.0	0.148992	Y
4	STD8260 240-469338/4	20.0	3.308362	20.0	1164516.0	0.165418	Y
5	STD8260 240-469338/3	40.0	5.883406	20.0	1252890.0	0.147085	Y
6	STD8260 240-469338/2	80.0	10.950521	20.0	1401011.0	0.136882	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

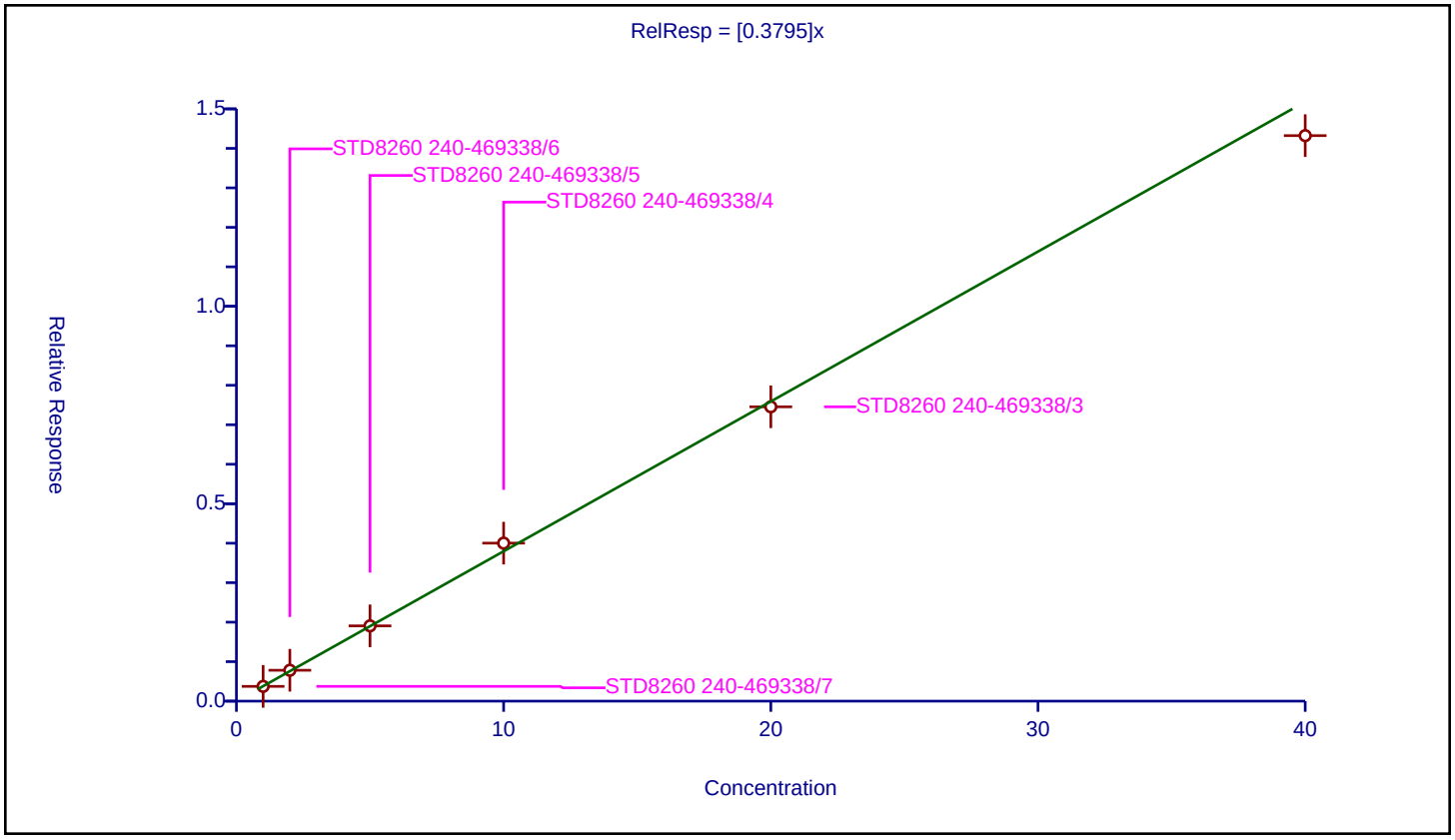
Curve Coefficients

Intercept:	0
Slope:	0.3795

Error Coefficients

Standard Error:	509000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373752	20.0	1237666.0	0.373752	Y
2	STD8260 240-469338/6	2.0	0.782128	20.0	1194740.0	0.391064	Y
3	STD8260 240-469338/5	5.0	1.906933	20.0	1222644.0	0.381387	Y
4	STD8260 240-469338/4	10.0	4.002178	20.0	1164516.0	0.400218	Y
5	STD8260 240-469338/3	20.0	7.454797	20.0	1252890.0	0.37274	Y
6	STD8260 240-469338/2	40.0	14.3229	20.0	1401011.0	0.358072	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

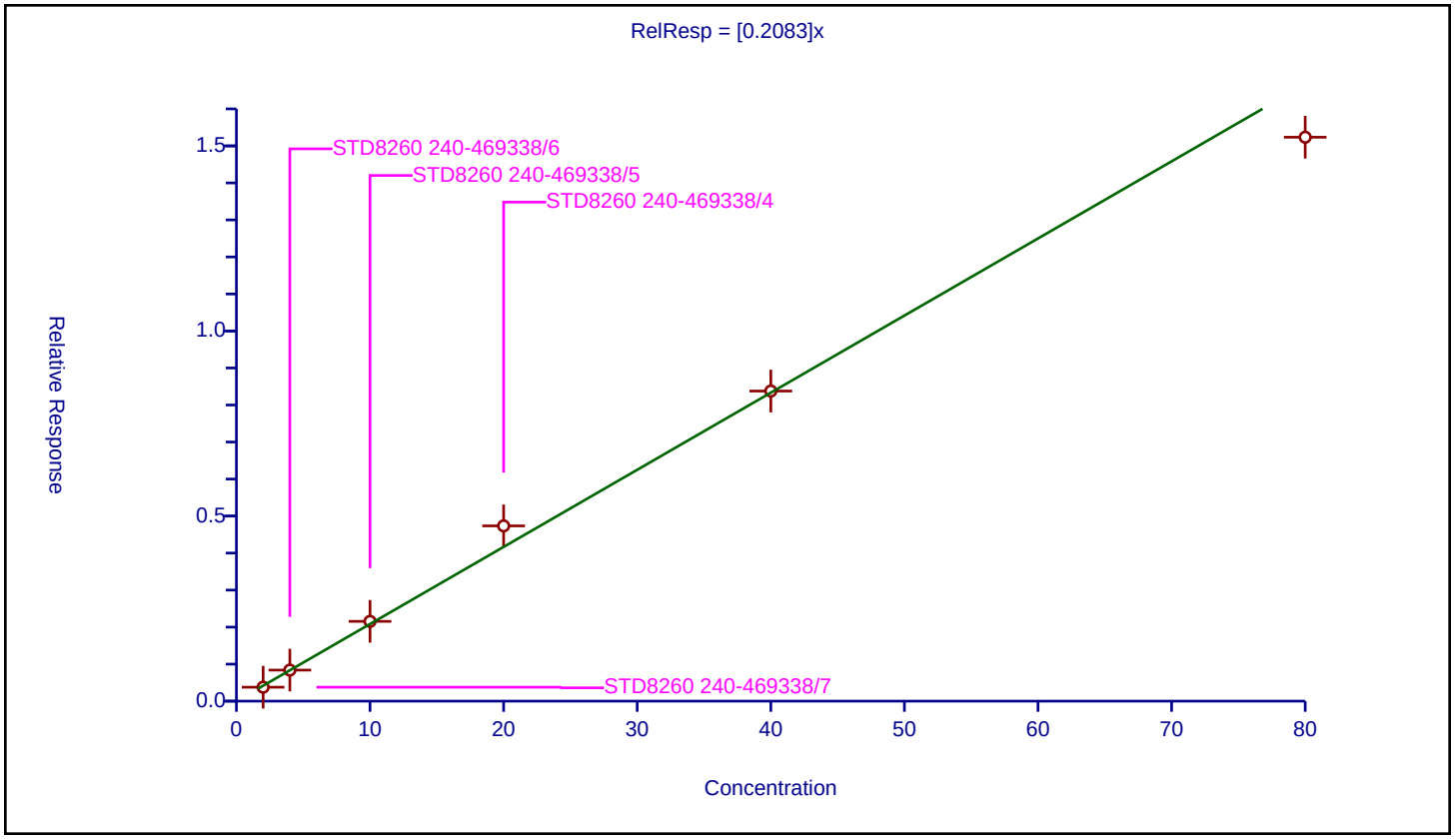
Curve Coefficients

Intercept:	0
Slope:	0.2083

Error Coefficients

Standard Error:	550000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.376467	20.0	1237666.0	0.188233	Y
2	STD8260 240-469338/6	4.0	0.838392	20.0	1194740.0	0.209598	Y
3	STD8260 240-469338/5	10.0	2.155198	20.0	1222644.0	0.21552	Y
4	STD8260 240-469338/4	20.0	4.734585	20.0	1164516.0	0.236729	Y
5	STD8260 240-469338/3	40.0	8.377288	20.0	1252890.0	0.209432	Y
6	STD8260 240-469338/2	80.0	15.234541	20.0	1401011.0	0.190432	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

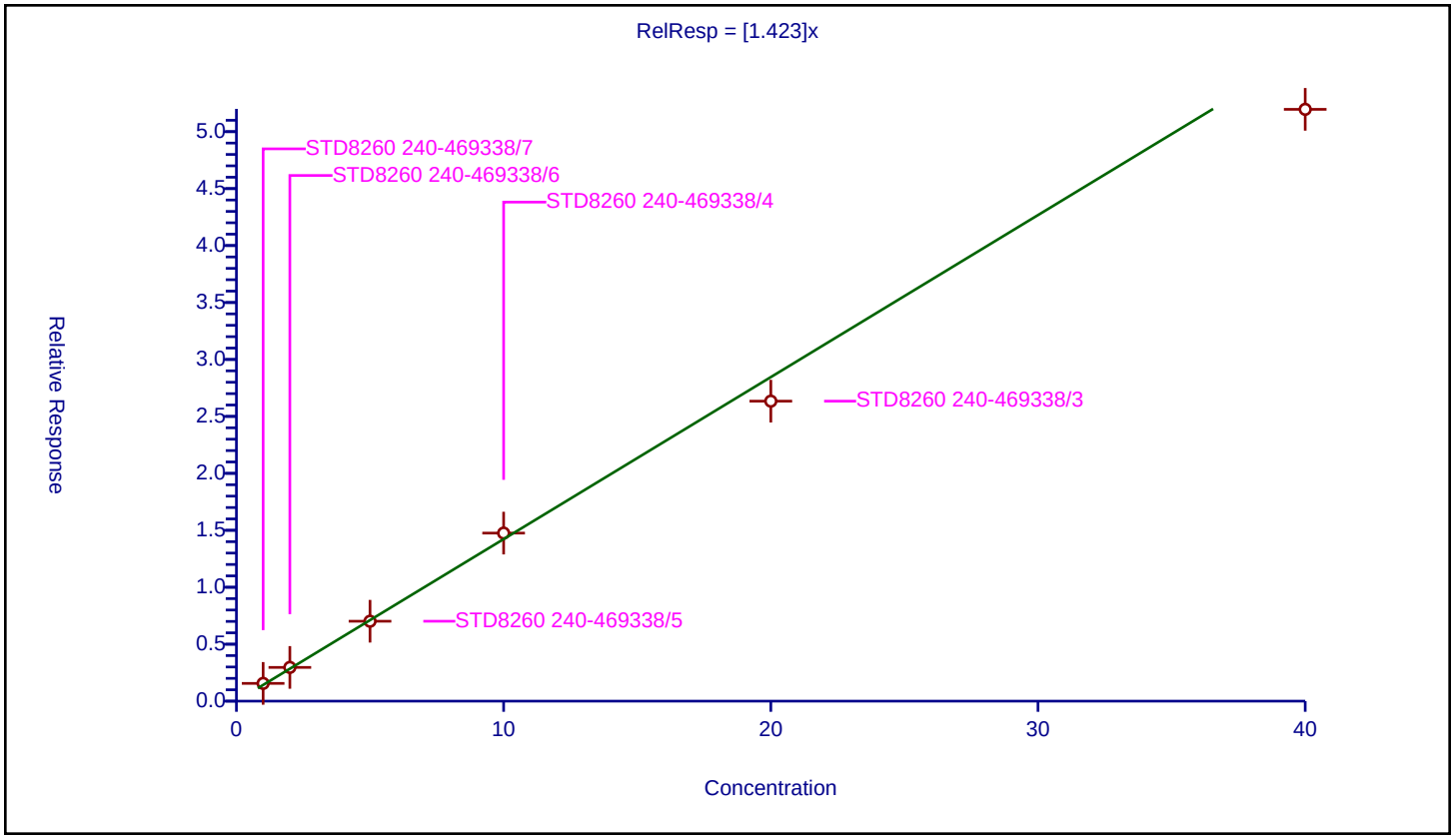
Curve Coefficients

Intercept:	0
Slope:	1.423

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.559103	20.0	905264.0	1.559103	Y
2	STD8260 240-469338/6	2.0	2.962838	20.0	862909.0	1.481419	Y
3	STD8260 240-469338/5	5.0	7.016553	20.0	861537.0	1.403311	Y
4	STD8260 240-469338/4	10.0	14.754623	20.0	833065.0	1.475462	Y
5	STD8260 240-469338/3	20.0	26.33886	20.0	890220.0	1.316943	Y
6	STD8260 240-469338/2	40.0	51.960876	20.0	979659.0	1.299022	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

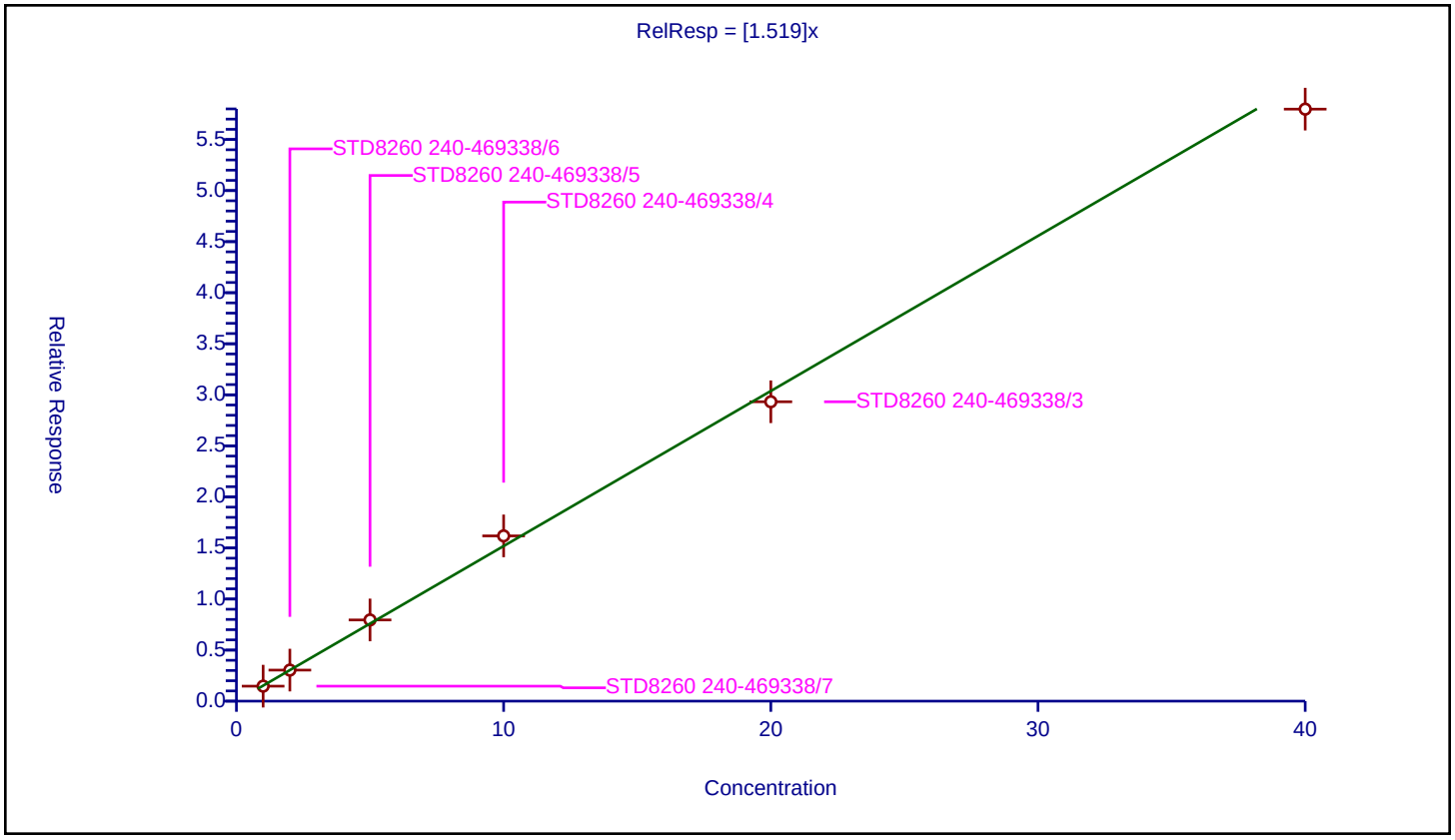
Curve Coefficients

Intercept:	0
Slope:	1.519

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.467749	20.0	905264.0	1.467749	Y
2	STD8260 240-469338/6	2.0	3.040228	20.0	862909.0	1.520114	Y
3	STD8260 240-469338/5	5.0	7.951928	20.0	861537.0	1.590386	Y
4	STD8260 240-469338/4	10.0	16.183659	20.0	833065.0	1.618366	Y
5	STD8260 240-469338/3	20.0	29.319382	20.0	890220.0	1.465969	Y
6	STD8260 240-469338/2	40.0	57.977541	20.0	979659.0	1.449439	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

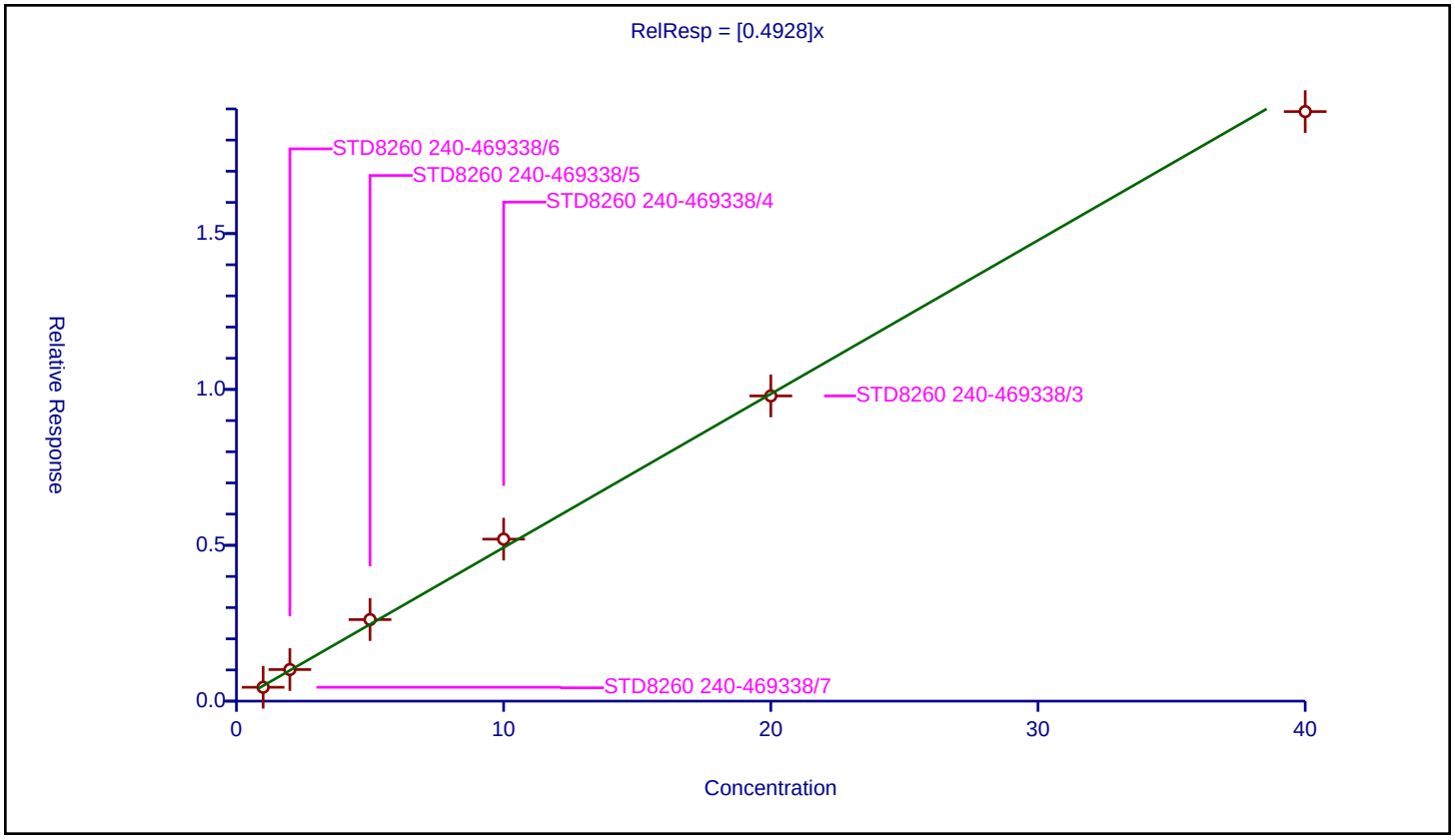
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.444975	20.0	905264.0	0.444975	Y
2	STD8260 240-469338/6	2.0	1.012575	20.0	862909.0	0.506287	Y
3	STD8260 240-469338/5	5.0	2.615558	20.0	861537.0	0.523112	Y
4	STD8260 240-469338/4	10.0	5.197145	20.0	833065.0	0.519715	Y
5	STD8260 240-469338/3	20.0	9.791422	20.0	890220.0	0.489571	Y
6	STD8260 240-469338/2	40.0	18.914765	20.0	979659.0	0.472869	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

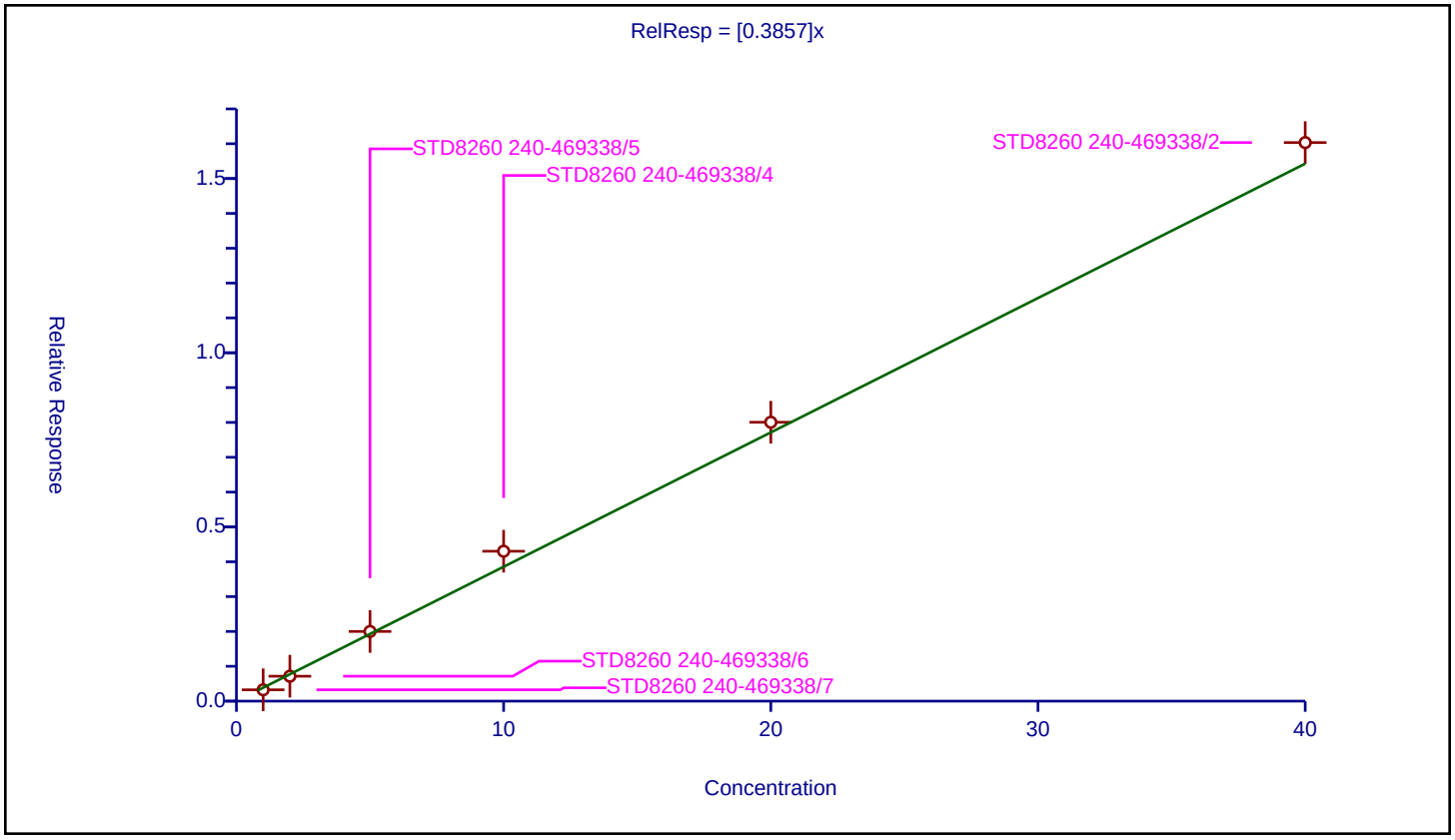
Curve Coefficients

Intercept:	0
Slope:	0.3857

Error Coefficients

Standard Error:	396000
Relative Standard Error:	9.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.325121	20.0	905264.0	0.325121	Y
2	STD8260 240-469338/6	2.0	0.715046	20.0	862909.0	0.357523	Y
3	STD8260 240-469338/5	5.0	2.000193	20.0	861537.0	0.400039	Y
4	STD8260 240-469338/4	10.0	4.303266	20.0	833065.0	0.430327	Y
5	STD8260 240-469338/3	20.0	8.005729	20.0	890220.0	0.400286	Y
6	STD8260 240-469338/2	40.0	16.032967	20.0	979659.0	0.400824	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

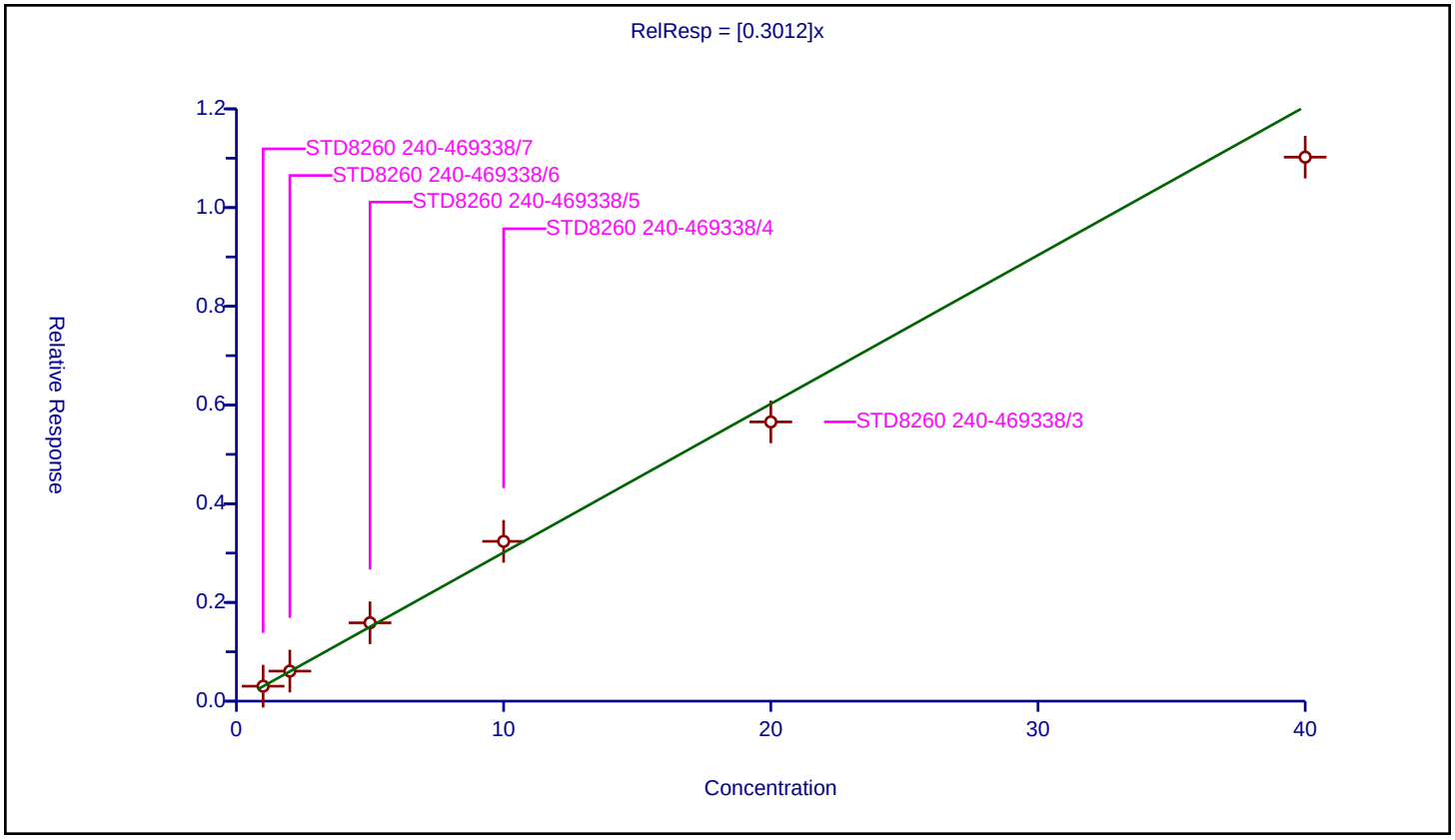
Curve Coefficients

Intercept:	0
Slope:	0.3012

Error Coefficients

Standard Error:	275000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302807	20.0	905264.0	0.302807	Y
2	STD8260 240-469338/6	2.0	0.609242	20.0	862909.0	0.304621	Y
3	STD8260 240-469338/5	5.0	1.587651	20.0	861537.0	0.31753	Y
4	STD8260 240-469338/4	10.0	3.237562	20.0	833065.0	0.323756	Y
5	STD8260 240-469338/3	20.0	5.657635	20.0	890220.0	0.282882	Y
6	STD8260 240-469338/2	40.0	11.02157	20.0	979659.0	0.275539	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

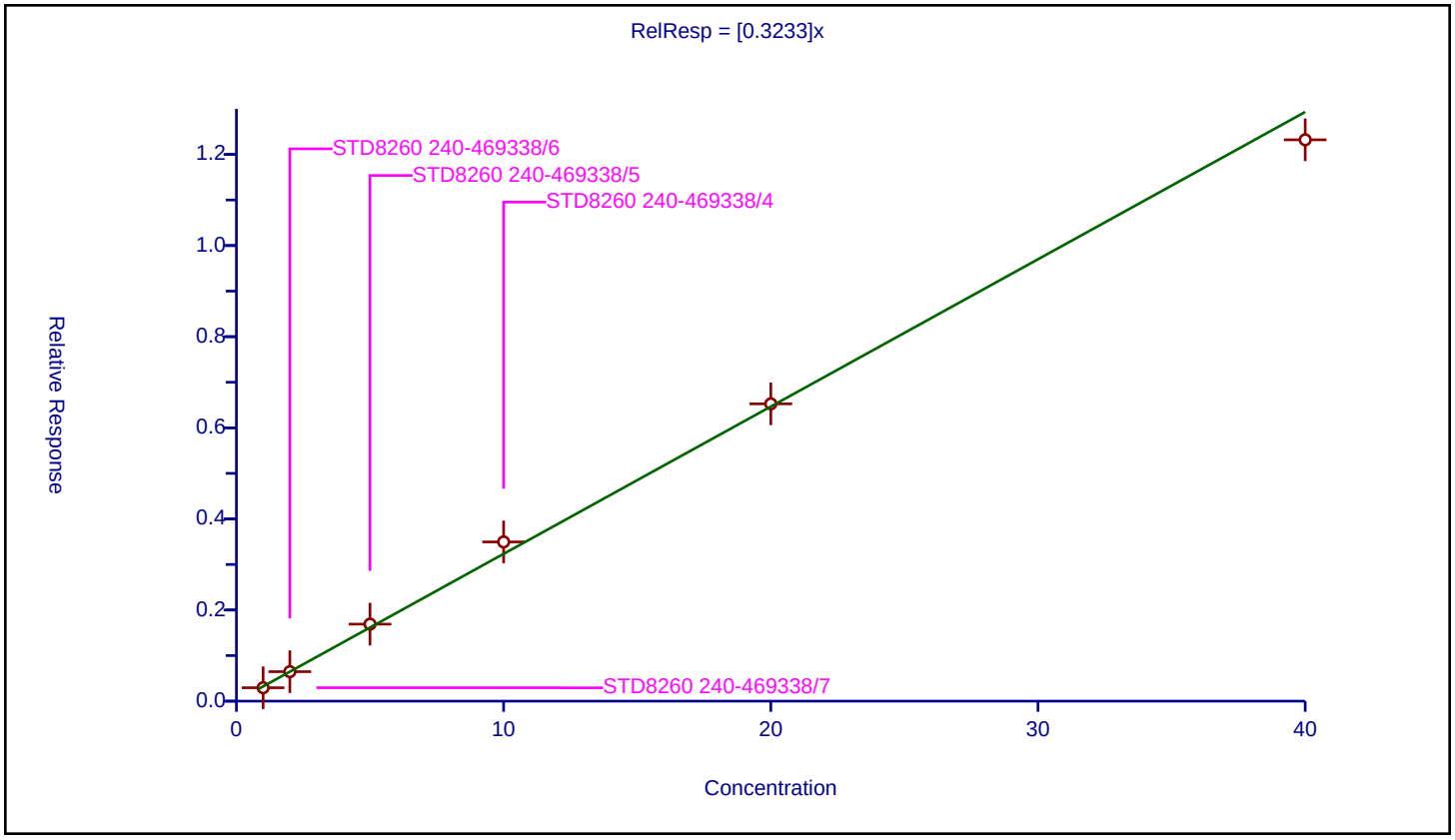
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	309000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.294367	20.0	905264.0	0.294367	Y
2	STD8260 240-469338/6	2.0	0.64709	20.0	862909.0	0.323545	Y
3	STD8260 240-469338/5	5.0	1.69049	20.0	861537.0	0.338098	Y
4	STD8260 240-469338/4	10.0	3.495454	20.0	833065.0	0.349545	Y
5	STD8260 240-469338/3	20.0	6.52596	20.0	890220.0	0.326298	Y
6	STD8260 240-469338/2	40.0	12.32141	20.0	979659.0	0.308035	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

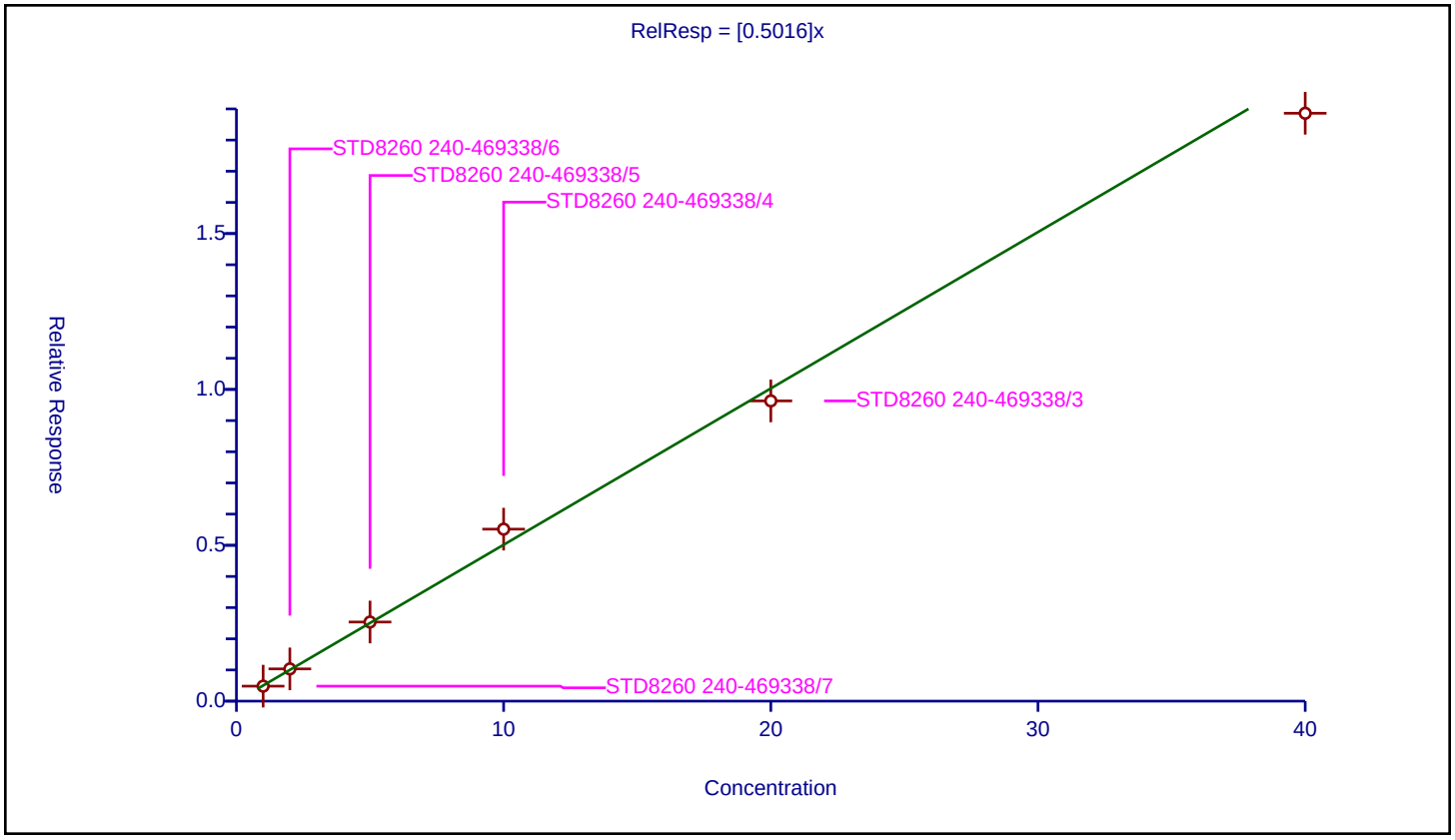
Curve Coefficients

Intercept:	0
Slope:	0.5016

Error Coefficients

Standard Error:	470000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.480236	20.0	905264.0	0.480236	Y
2	STD8260 240-469338/6	2.0	1.03406	20.0	862909.0	0.51703	Y
3	STD8260 240-469338/5	5.0	2.538231	20.0	861537.0	0.507646	Y
4	STD8260 240-469338/4	10.0	5.517361	20.0	833065.0	0.551736	Y
5	STD8260 240-469338/3	20.0	9.632158	20.0	890220.0	0.481608	Y
6	STD8260 240-469338/2	40.0	18.859909	20.0	979659.0	0.471498	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

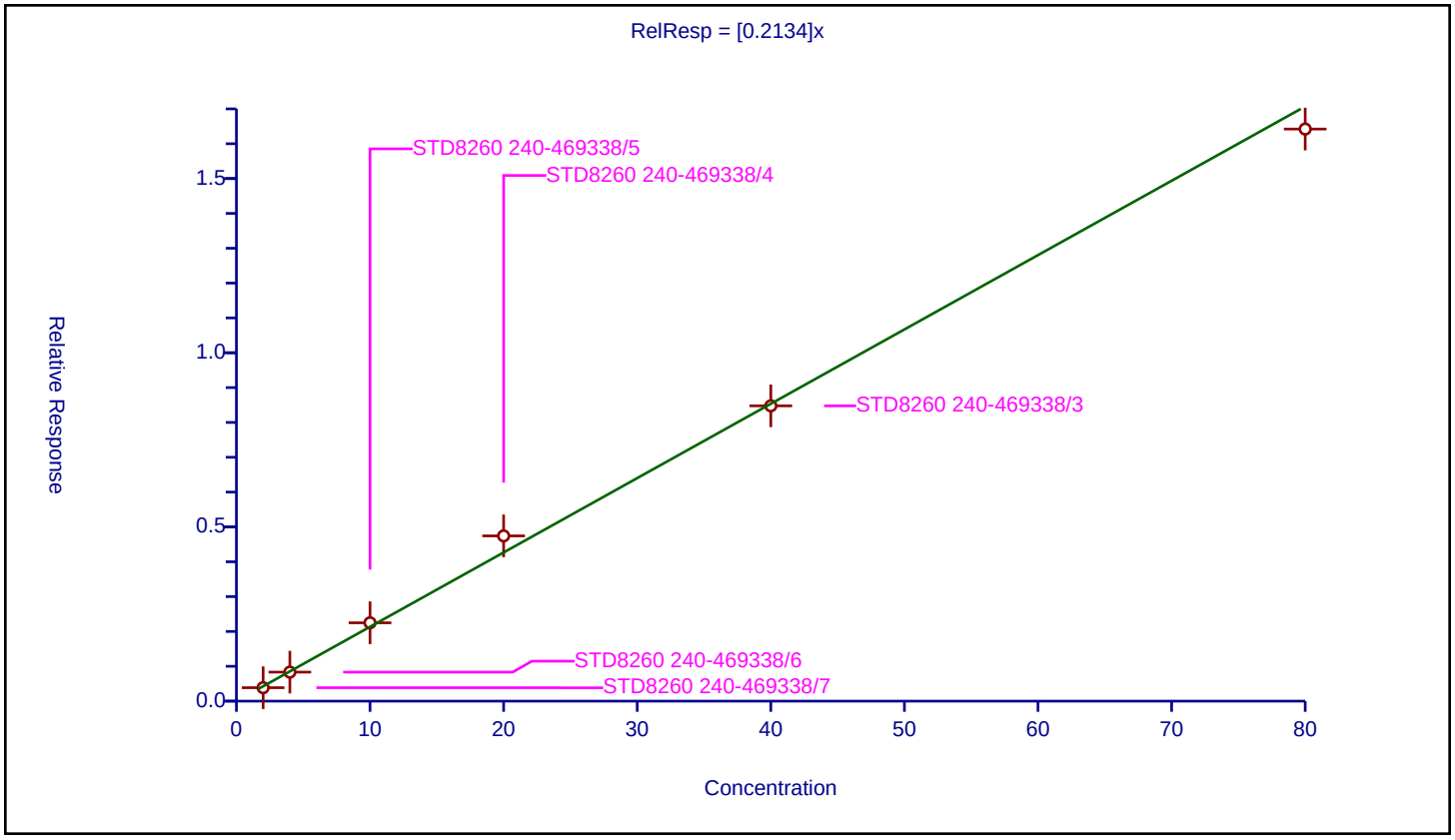
Curve Coefficients

Intercept:	0
Slope:	0.2134

Error Coefficients

Standard Error:	410000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.385678	20.0	905264.0	0.192839	Y
2	STD8260 240-469338/6	4.0	0.83295	20.0	862909.0	0.208237	Y
3	STD8260 240-469338/5	10.0	2.248748	20.0	861537.0	0.224875	Y
4	STD8260 240-469338/4	20.0	4.743543	20.0	833065.0	0.237177	Y
5	STD8260 240-469338/3	40.0	8.476444	20.0	890220.0	0.211911	Y
6	STD8260 240-469338/2	80.0	16.42104	20.0	979659.0	0.205263	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

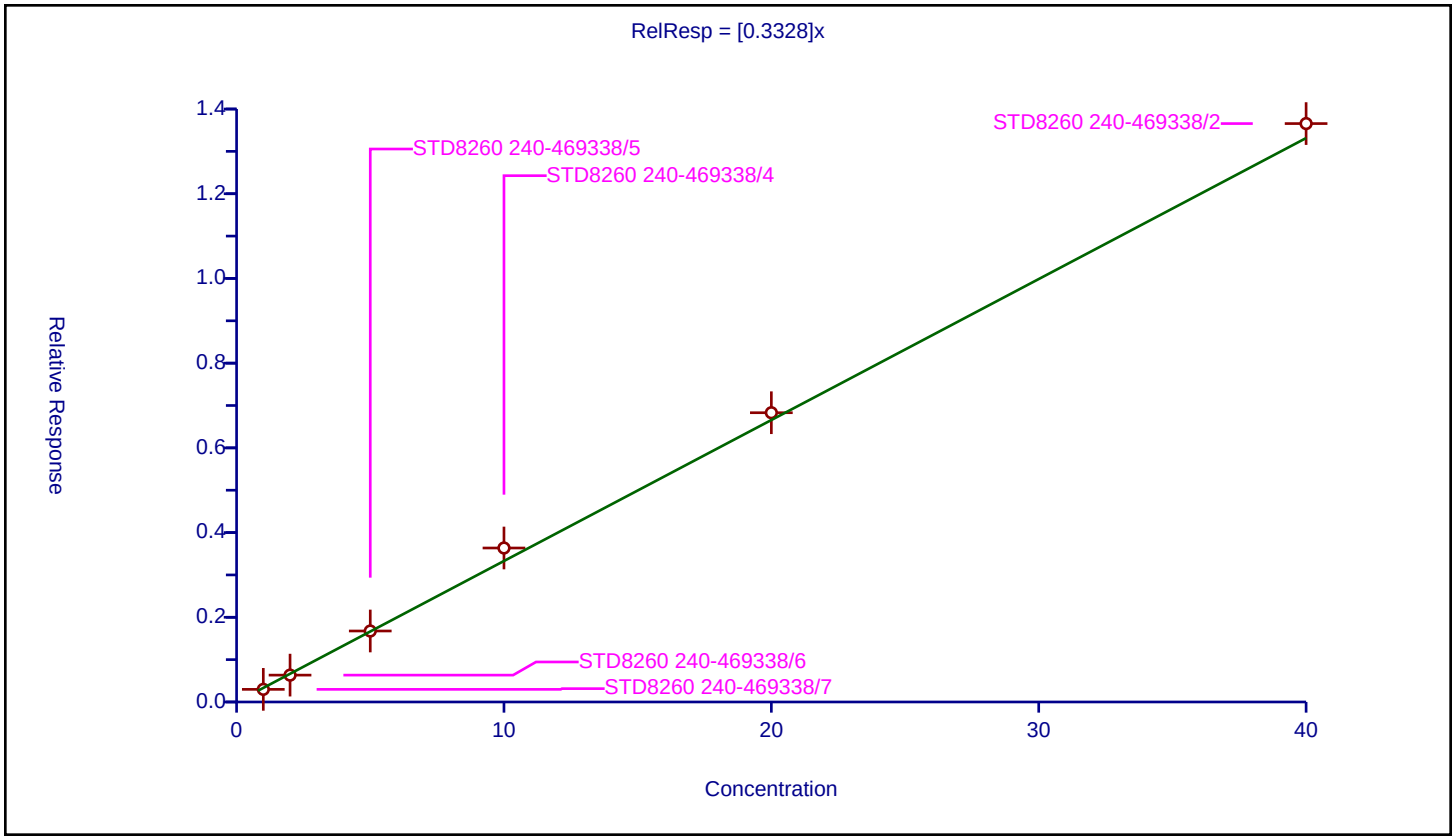
Curve Coefficients

Intercept:	0
Slope:	0.3328

Error Coefficients

Standard Error:	337000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.298167	20.0	905264.0	0.298167	Y
2	STD8260 240-469338/6	2.0	0.634435	20.0	862909.0	0.317218	Y
3	STD8260 240-469338/5	5.0	1.675981	20.0	861537.0	0.335196	Y
4	STD8260 240-469338/4	10.0	3.635875	20.0	833065.0	0.363587	Y
5	STD8260 240-469338/3	20.0	6.829368	20.0	890220.0	0.341468	Y
6	STD8260 240-469338/2	40.0	13.655976	20.0	979659.0	0.341399	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

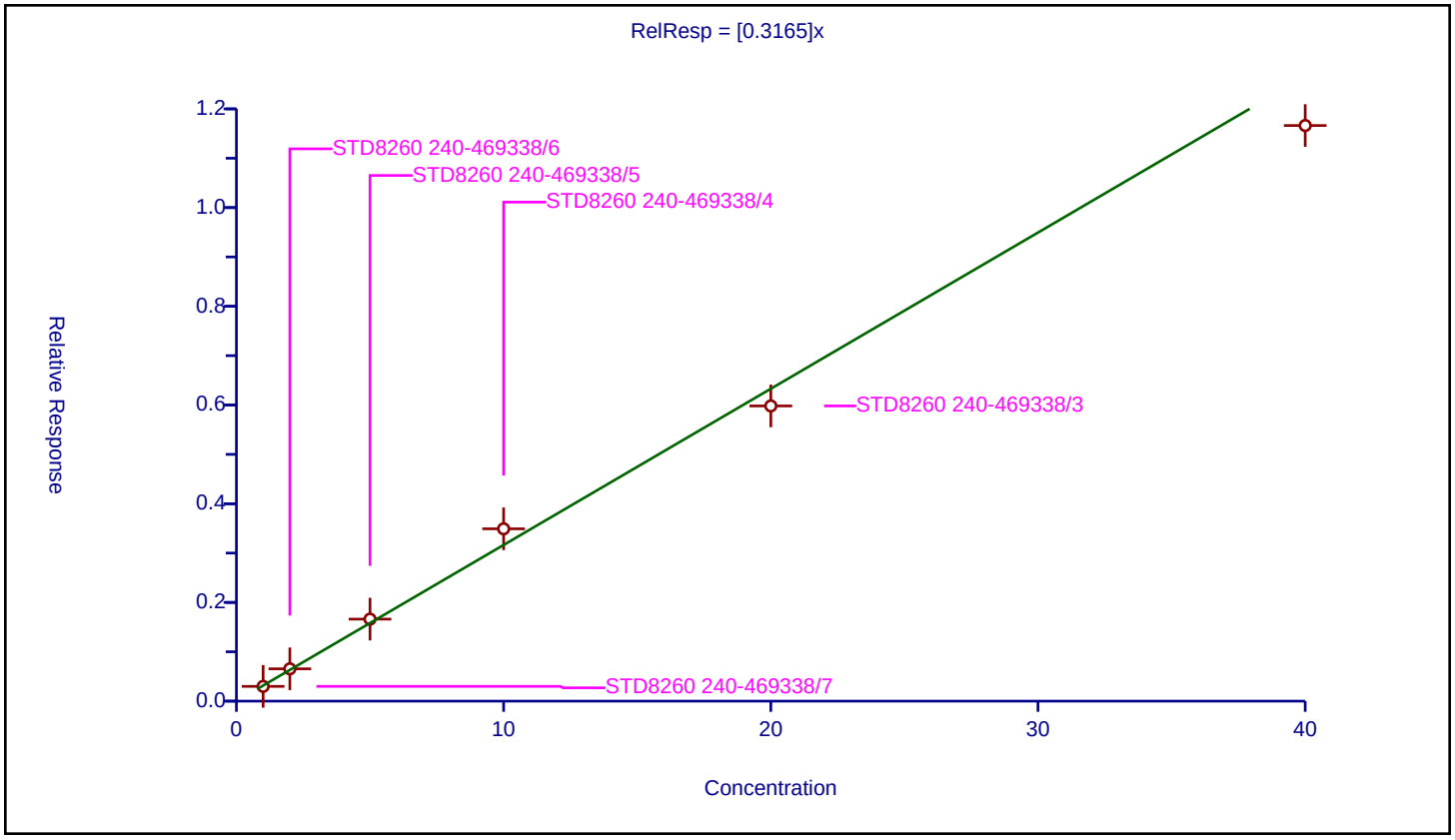
Curve Coefficients

Intercept:	0
Slope:	0.3165

Error Coefficients

Standard Error:	291000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299161	20.0	905264.0	0.299161	Y
2	STD8260 240-469338/6	2.0	0.655063	20.0	862909.0	0.327532	Y
3	STD8260 240-469338/5	5.0	1.661612	20.0	861537.0	0.332322	Y
4	STD8260 240-469338/4	10.0	3.491876	20.0	833065.0	0.349188	Y
5	STD8260 240-469338/3	20.0	5.981308	20.0	890220.0	0.299065	Y
6	STD8260 240-469338/2	40.0	11.662977	20.0	979659.0	0.291574	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

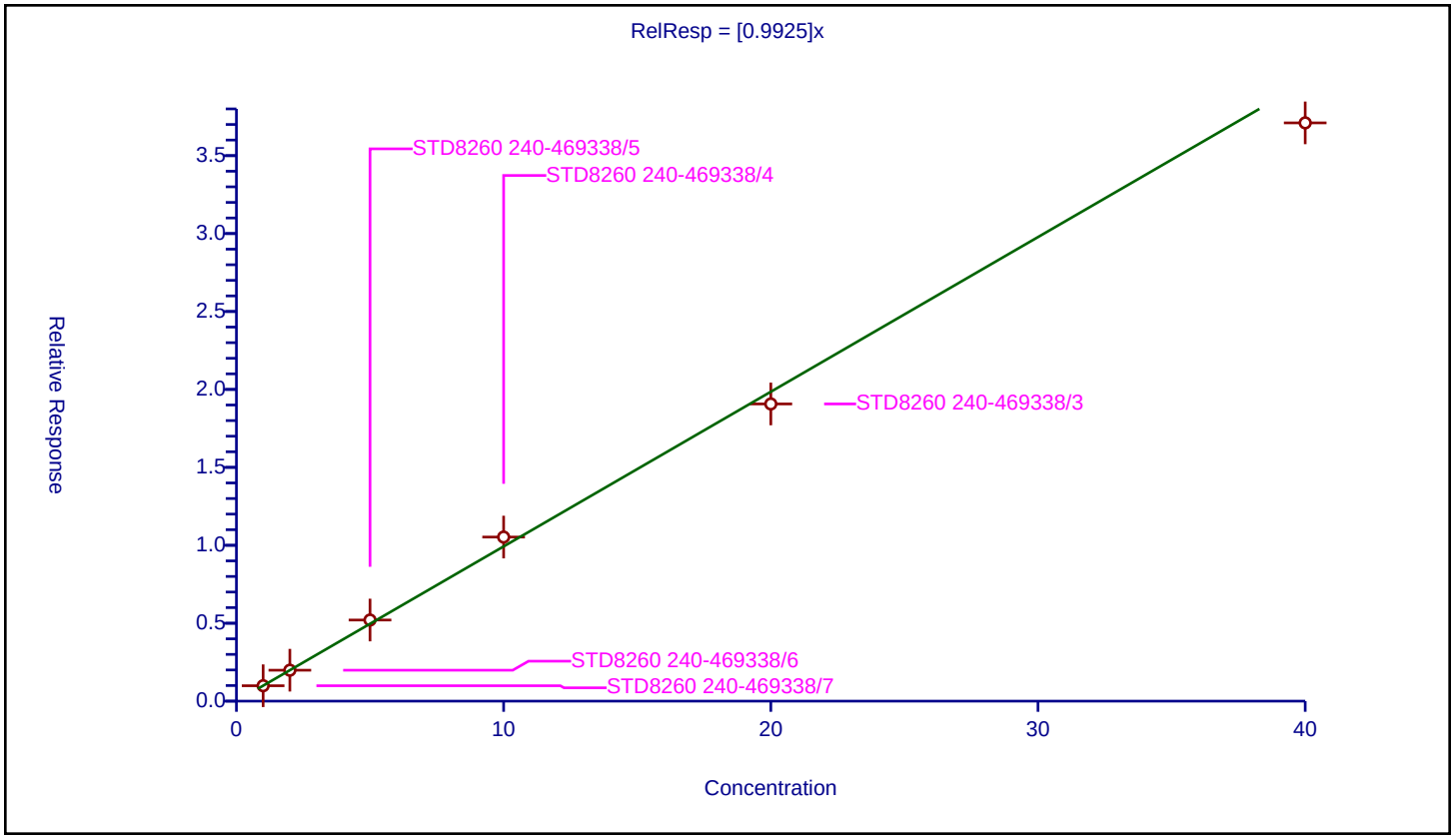
Curve Coefficients

Intercept:	0
Slope:	0.9925

Error Coefficients

Standard Error:	925000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.988021	20.0	905264.0	0.988021	Y
2	STD8260 240-469338/6	2.0	1.984867	20.0	862909.0	0.992434	Y
3	STD8260 240-469338/5	5.0	5.204675	20.0	861537.0	1.040935	Y
4	STD8260 240-469338/4	10.0	10.528086	20.0	833065.0	1.052809	Y
5	STD8260 240-469338/3	20.0	19.069107	20.0	890220.0	0.953455	Y
6	STD8260 240-469338/2	40.0	37.1024	20.0	979659.0	0.92756	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

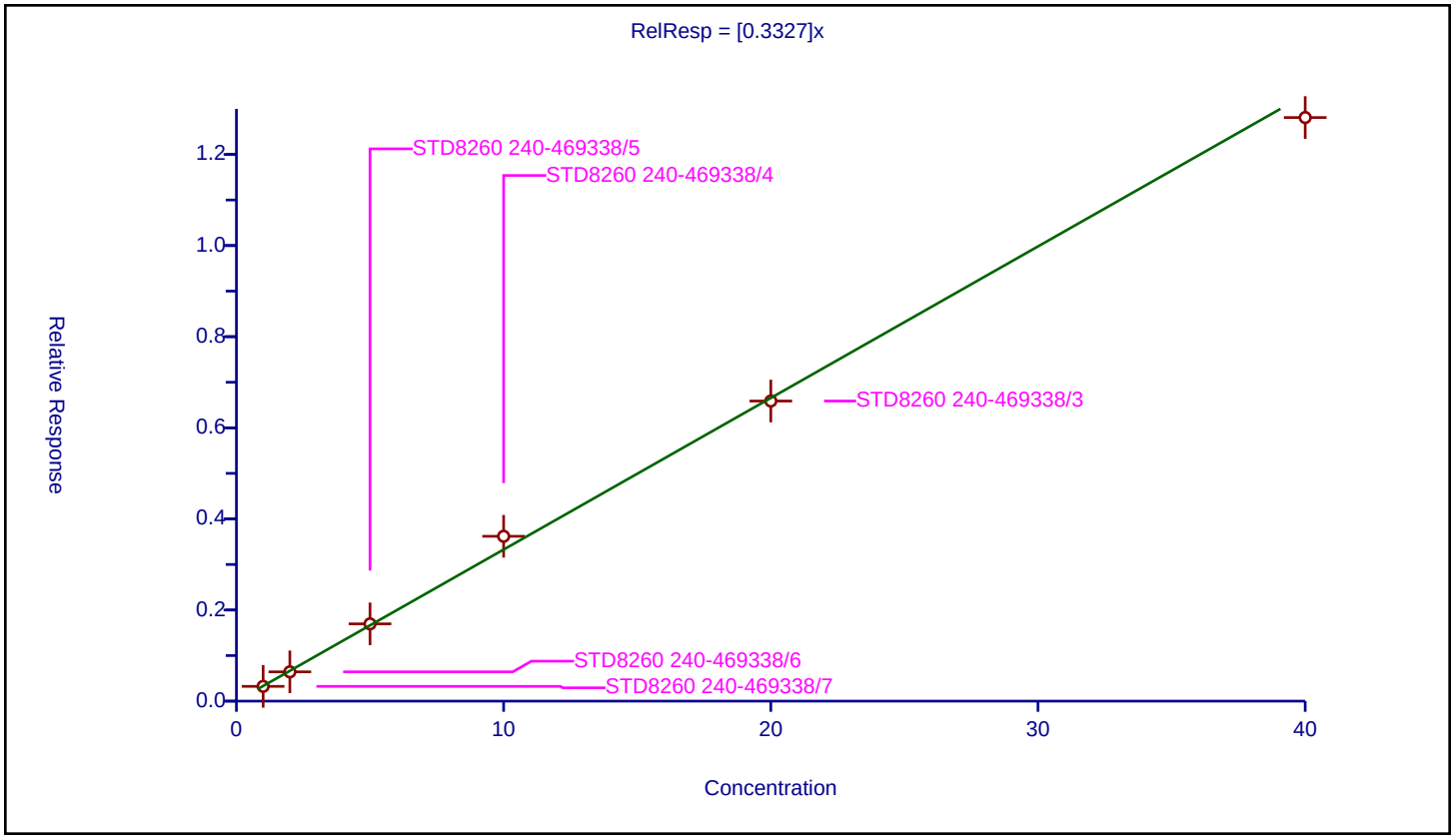
Curve Coefficients

Intercept:	0
Slope:	0.3327

Error Coefficients

Standard Error:	319000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.324215	20.0	905264.0	0.324215	Y
2	STD8260 240-469338/6	2.0	0.642779	20.0	862909.0	0.32139	Y
3	STD8260 240-469338/5	5.0	1.696039	20.0	861537.0	0.339208	Y
4	STD8260 240-469338/4	10.0	3.618613	20.0	833065.0	0.361861	Y
5	STD8260 240-469338/3	20.0	6.58754	20.0	890220.0	0.329377	Y
6	STD8260 240-469338/2	40.0	12.809906	20.0	979659.0	0.320248	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

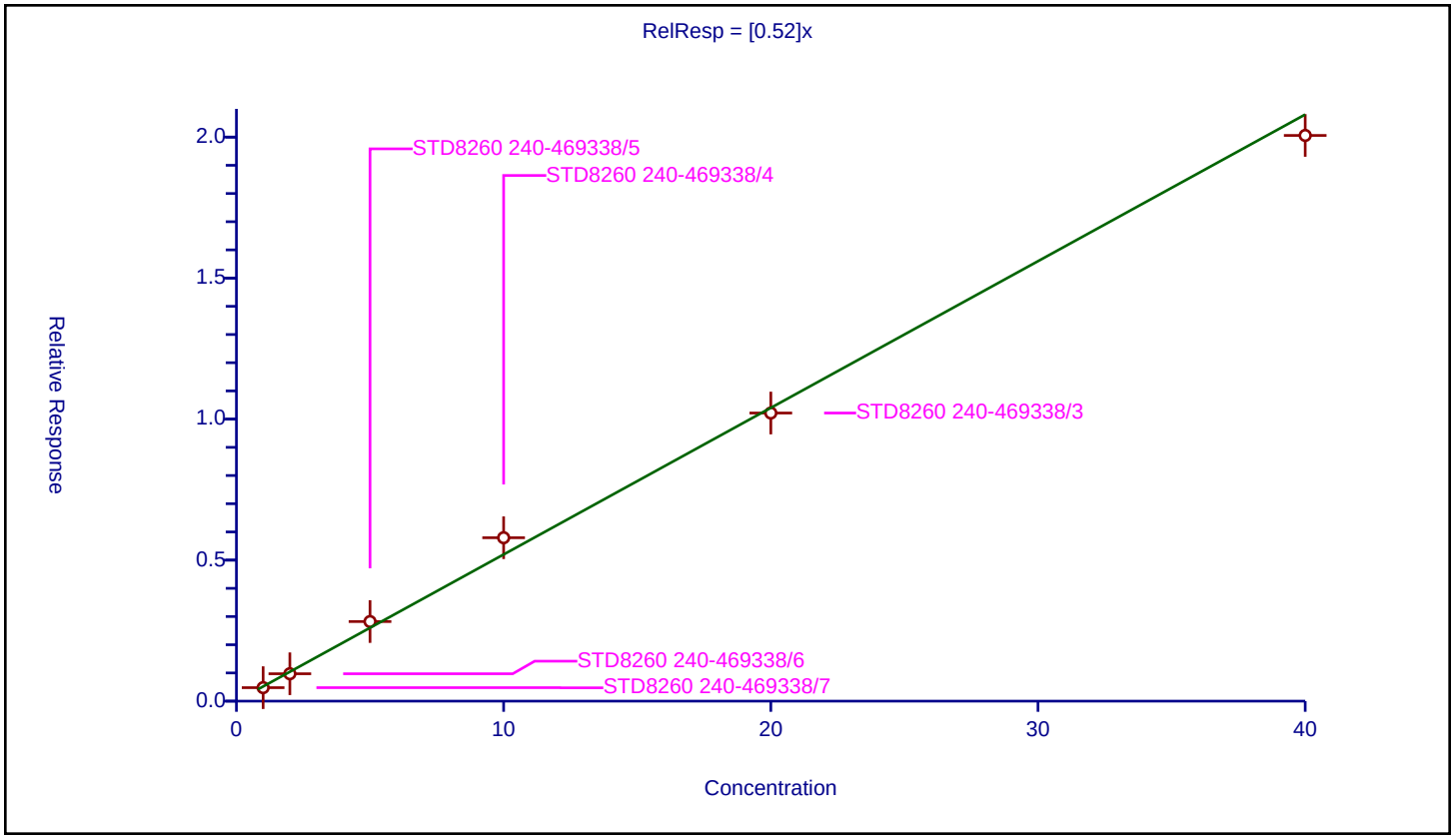
Curve Coefficients

Intercept:	0
Slope:	0.52

Error Coefficients

Standard Error:	499000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.47796	20.0	905264.0	0.47796	Y
2	STD8260 240-469338/6	2.0	0.971736	20.0	862909.0	0.485868	Y
3	STD8260 240-469338/5	5.0	2.822467	20.0	861537.0	0.564493	Y
4	STD8260 240-469338/4	10.0	5.79465	20.0	833065.0	0.579465	Y
5	STD8260 240-469338/3	20.0	10.216126	20.0	890220.0	0.510806	Y
6	STD8260 240-469338/2	40.0	20.05802	20.0	979659.0	0.501451	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

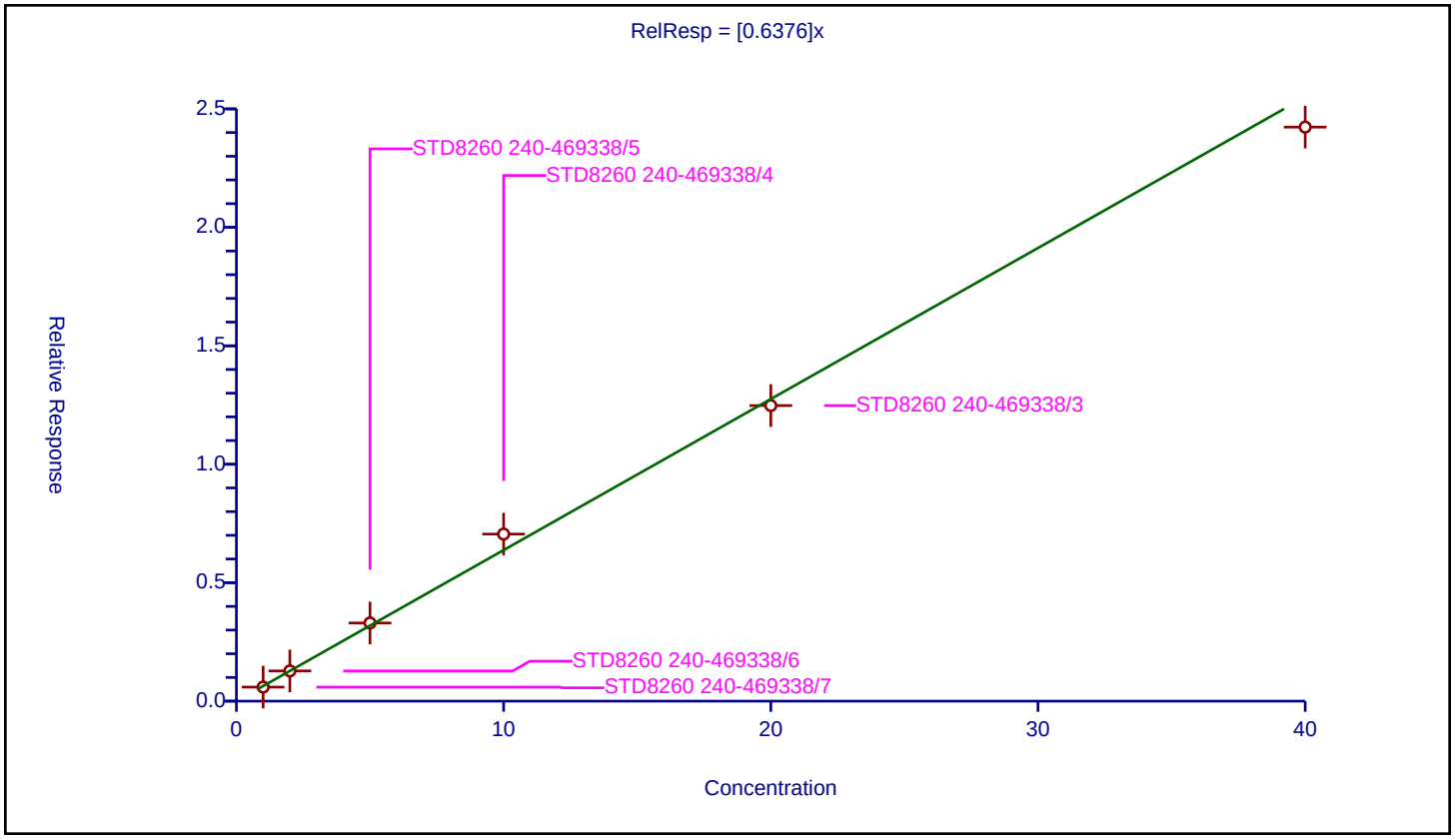
Curve Coefficients

Intercept:	0
Slope:	0.6376

Error Coefficients

Standard Error:	605000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.593396	20.0	905264.0	0.593396	Y
2	STD8260 240-469338/6	2.0	1.275129	20.0	862909.0	0.637564	Y
3	STD8260 240-469338/5	5.0	3.299359	20.0	861537.0	0.659872	Y
4	STD8260 240-469338/4	10.0	7.051839	20.0	833065.0	0.705184	Y
5	STD8260 240-469338/3	20.0	12.476556	20.0	890220.0	0.623828	Y
6	STD8260 240-469338/2	40.0	24.231493	20.0	979659.0	0.605787	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

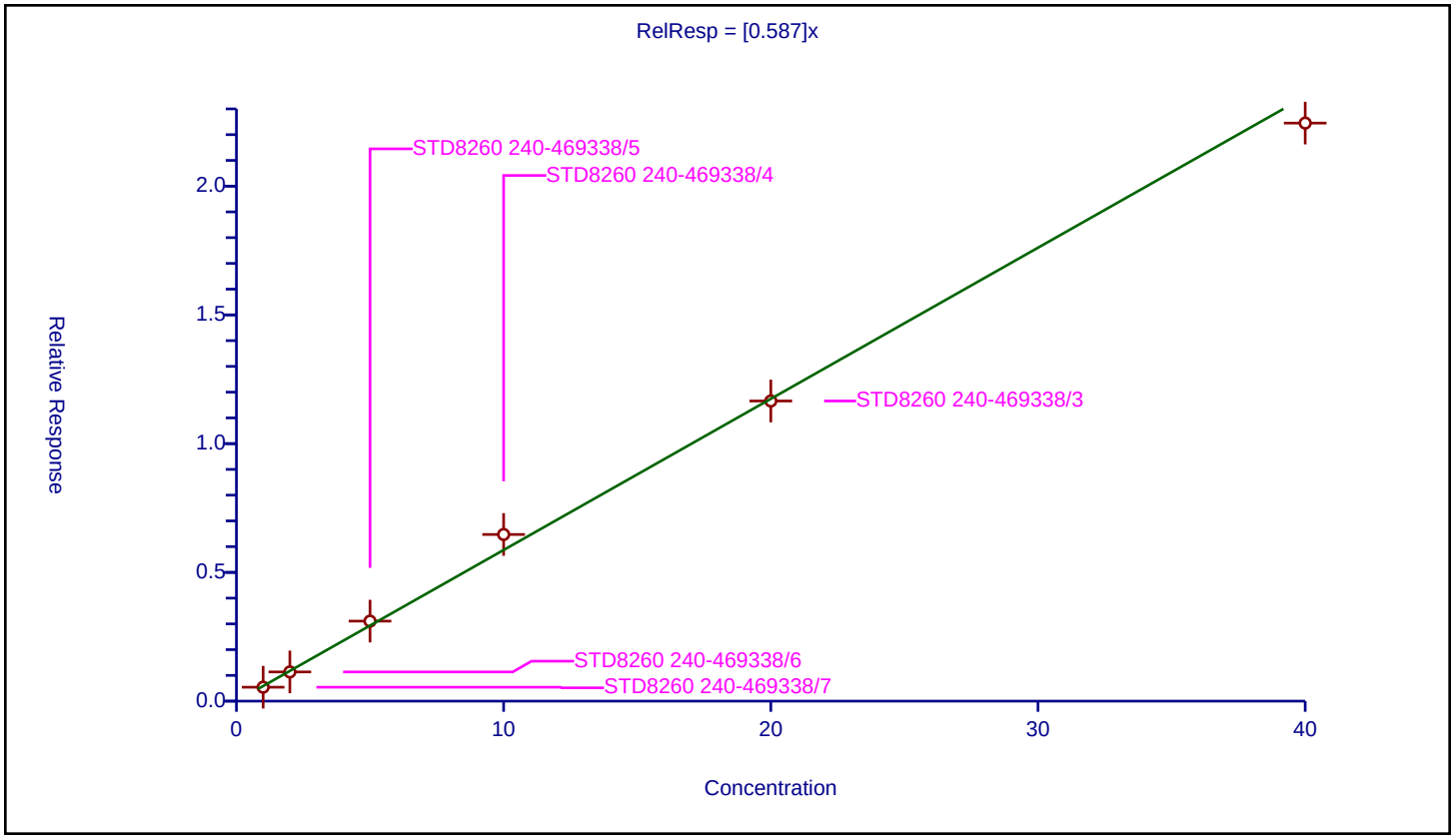
Curve Coefficients

Intercept:	0
Slope:	0.587

Error Coefficients

Standard Error:	561000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.541787	20.0	905264.0	0.541787	Y
2	STD8260 240-469338/6	2.0	1.134419	20.0	862909.0	0.567209	Y
3	STD8260 240-469338/5	5.0	3.107586	20.0	861537.0	0.621517	Y
4	STD8260 240-469338/4	10.0	6.472748	20.0	833065.0	0.647275	Y
5	STD8260 240-469338/3	20.0	11.65622	20.0	890220.0	0.582811	Y
6	STD8260 240-469338/2	40.0	22.448485	20.0	979659.0	0.561212	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

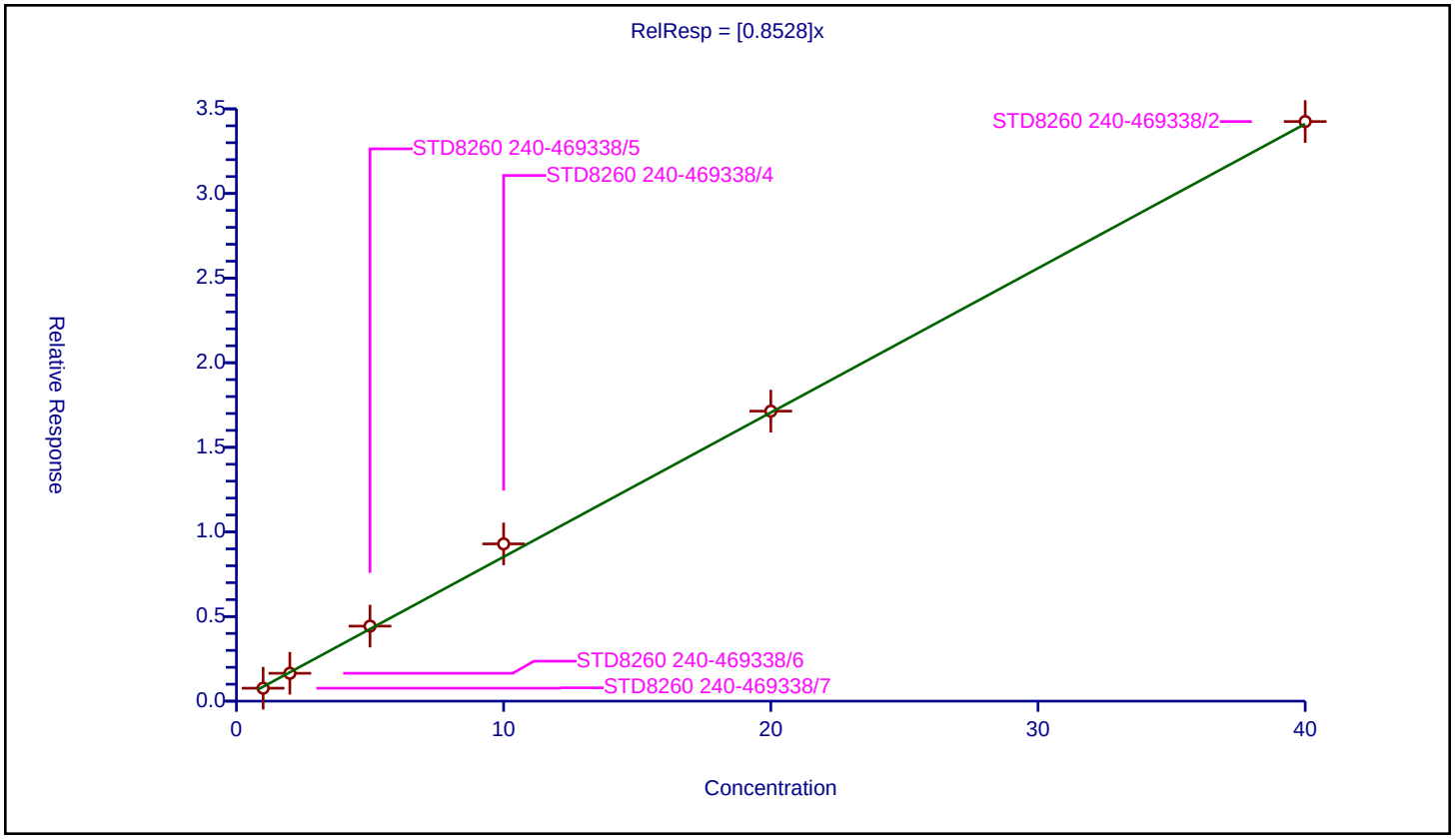
Curve Coefficients

Intercept:	0
Slope:	0.8528

Error Coefficients

Standard Error:	847000
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.765036	20.0	905264.0	0.765036	Y
2	STD8260 240-469338/6	2.0	1.645063	20.0	862909.0	0.822532	Y
3	STD8260 240-469338/5	5.0	4.433565	20.0	861537.0	0.886713	Y
4	STD8260 240-469338/4	10.0	9.292936	20.0	833065.0	0.929294	Y
5	STD8260 240-469338/3	20.0	17.137741	20.0	890220.0	0.856887	Y
6	STD8260 240-469338/2	40.0	34.251714	20.0	979659.0	0.856293	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

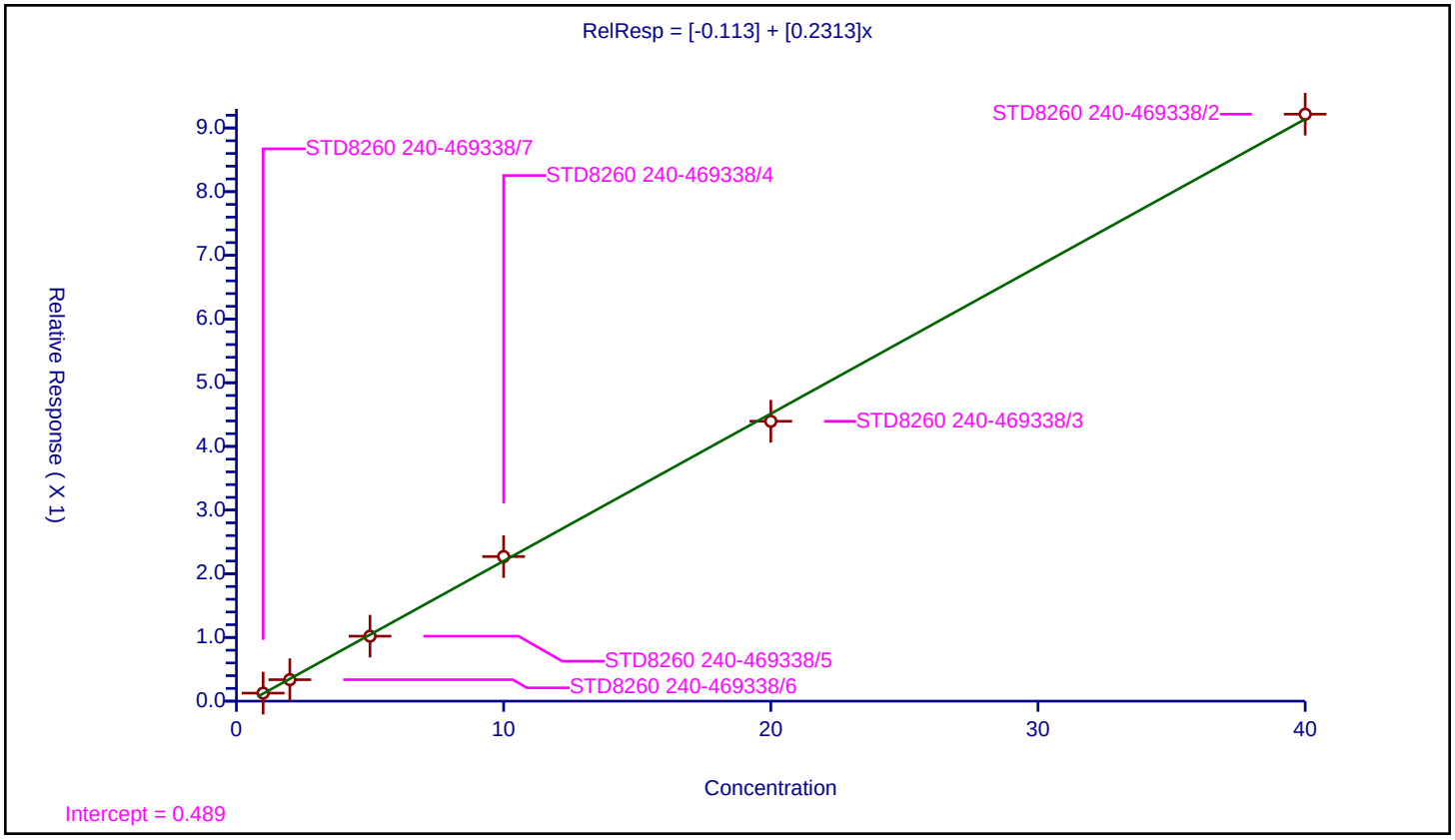
Curve Coefficients

Intercept:	-0.113
Slope:	0.2313

Error Coefficients

Standard Error:	252000
Relative Standard Error:	3.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.126284	20.0	905264.0	0.126284	Y
2	STD8260 240-469338/6	2.0	0.336976	20.0	862909.0	0.168488	Y
3	STD8260 240-469338/5	5.0	1.02027	20.0	861537.0	0.204054	Y
4	STD8260 240-469338/4	10.0	2.270483	20.0	833065.0	0.227048	Y
5	STD8260 240-469338/3	20.0	4.394891	20.0	890220.0	0.219745	Y
6	STD8260 240-469338/2	40.0	9.216656	20.0	979659.0	0.230416	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

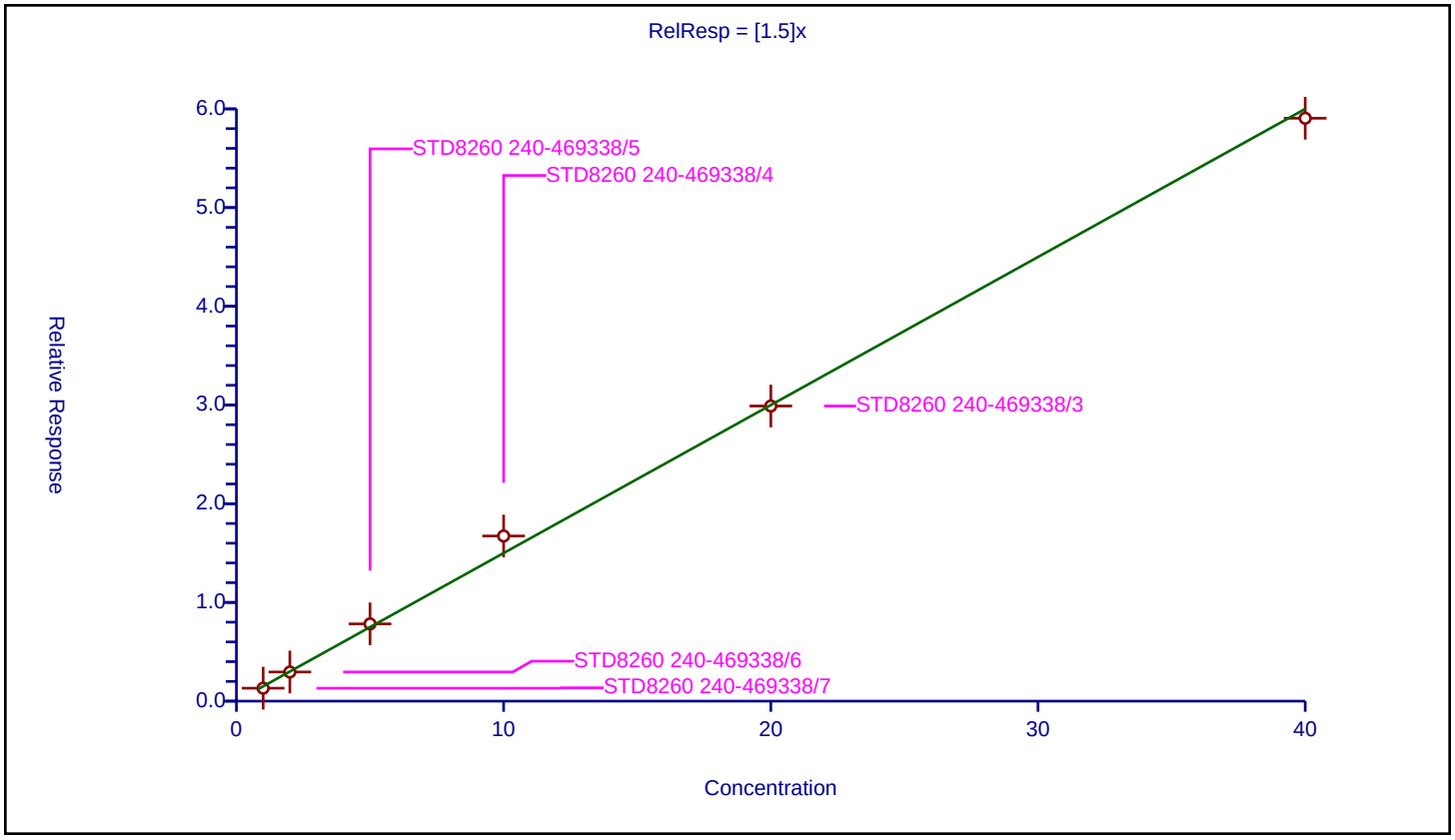
Curve Coefficients

Intercept:	0
Slope:	1.5

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.313341	20.0	905264.0	1.313341	Y
2	STD8260 240-469338/6	2.0	2.952455	20.0	862909.0	1.476228	Y
3	STD8260 240-469338/5	5.0	7.826338	20.0	861537.0	1.565268	Y
4	STD8260 240-469338/4	10.0	16.7319	20.0	833065.0	1.67319	Y
5	STD8260 240-469338/3	20.0	29.898025	20.0	890220.0	1.494901	Y
6	STD8260 240-469338/2	40.0	59.051895	20.0	979659.0	1.476297	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

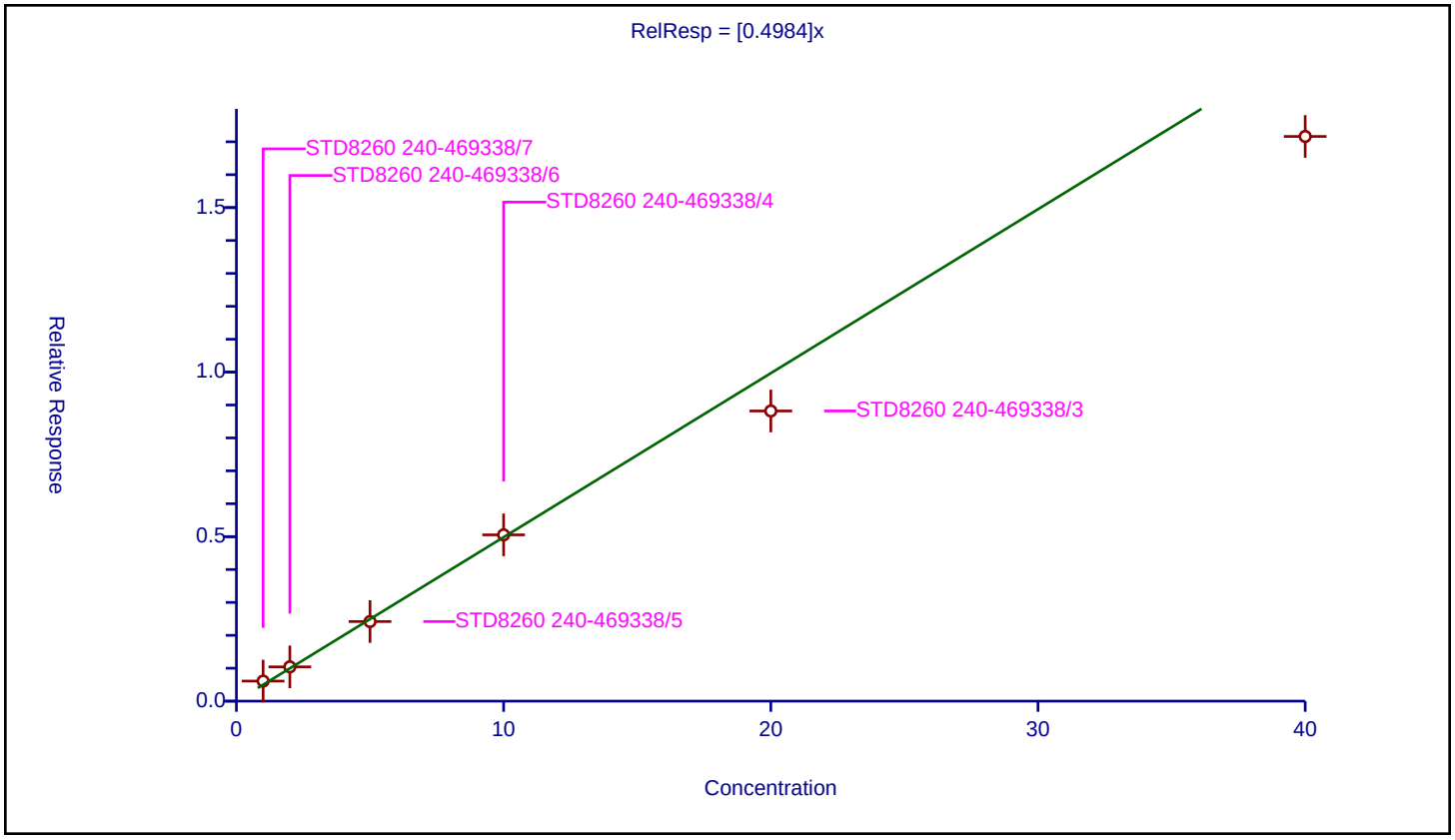
Curve Coefficients

Intercept:	0
Slope:	0.4984

Error Coefficients

Standard Error:	429000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.610253	20.0	905264.0	0.610253	Y
2	STD8260 240-469338/6	2.0	1.04157	20.0	862909.0	0.520785	Y
3	STD8260 240-469338/5	5.0	2.418817	20.0	861537.0	0.483763	Y
4	STD8260 240-469338/4	10.0	5.054179	20.0	833065.0	0.505418	Y
5	STD8260 240-469338/3	20.0	8.819168	20.0	890220.0	0.440958	Y
6	STD8260 240-469338/2	40.0	17.1624	20.0	979659.0	0.42906	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

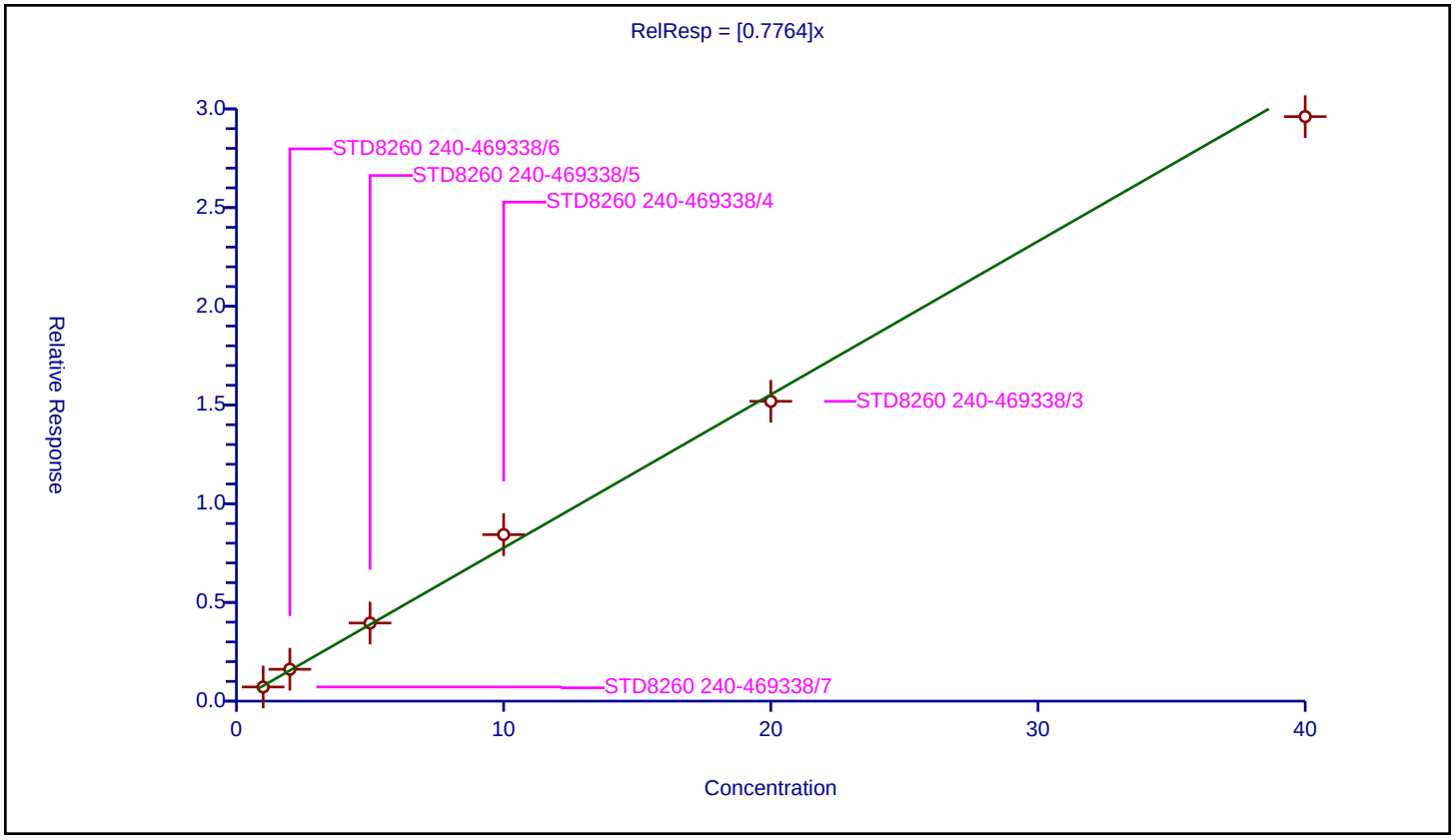
Curve Coefficients

Intercept:	0
Slope:	0.7764

Error Coefficients

Standard Error:	343000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.717081	20.0	420817.0	0.717081	Y
2	STD8260 240-469338/6	2.0	1.614323	20.0	402373.0	0.807162	Y
3	STD8260 240-469338/5	5.0	3.956513	20.0	406373.0	0.791303	Y
4	STD8260 240-469338/4	10.0	8.433794	20.0	399775.0	0.843379	Y
5	STD8260 240-469338/3	20.0	15.187261	20.0	413781.0	0.759363	Y
6	STD8260 240-469338/2	40.0	29.610521	20.0	455301.0	0.740263	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

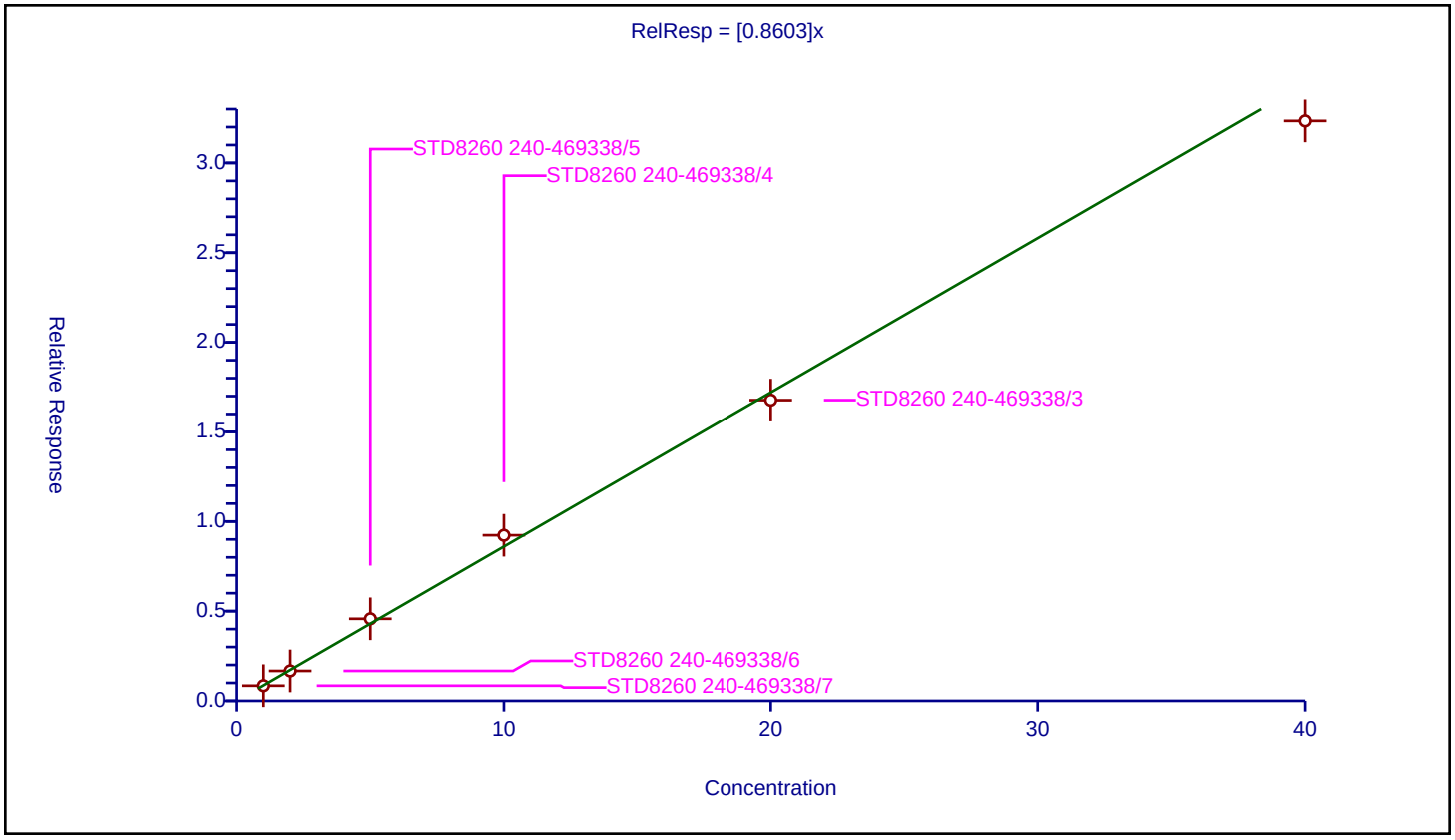
Curve Coefficients

Intercept:	0
Slope:	0.8603

Error Coefficients

Standard Error:	376000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.843359	20.0	420817.0	0.843359	Y
2	STD8260 240-469338/6	2.0	1.666762	20.0	402373.0	0.833381	Y
3	STD8260 240-469338/5	5.0	4.572942	20.0	406373.0	0.914588	Y
4	STD8260 240-469338/4	10.0	9.232643	20.0	399775.0	0.923264	Y
5	STD8260 240-469338/3	20.0	16.774429	20.0	413781.0	0.838721	Y
6	STD8260 240-469338/2	40.0	32.343087	20.0	455301.0	0.808577	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

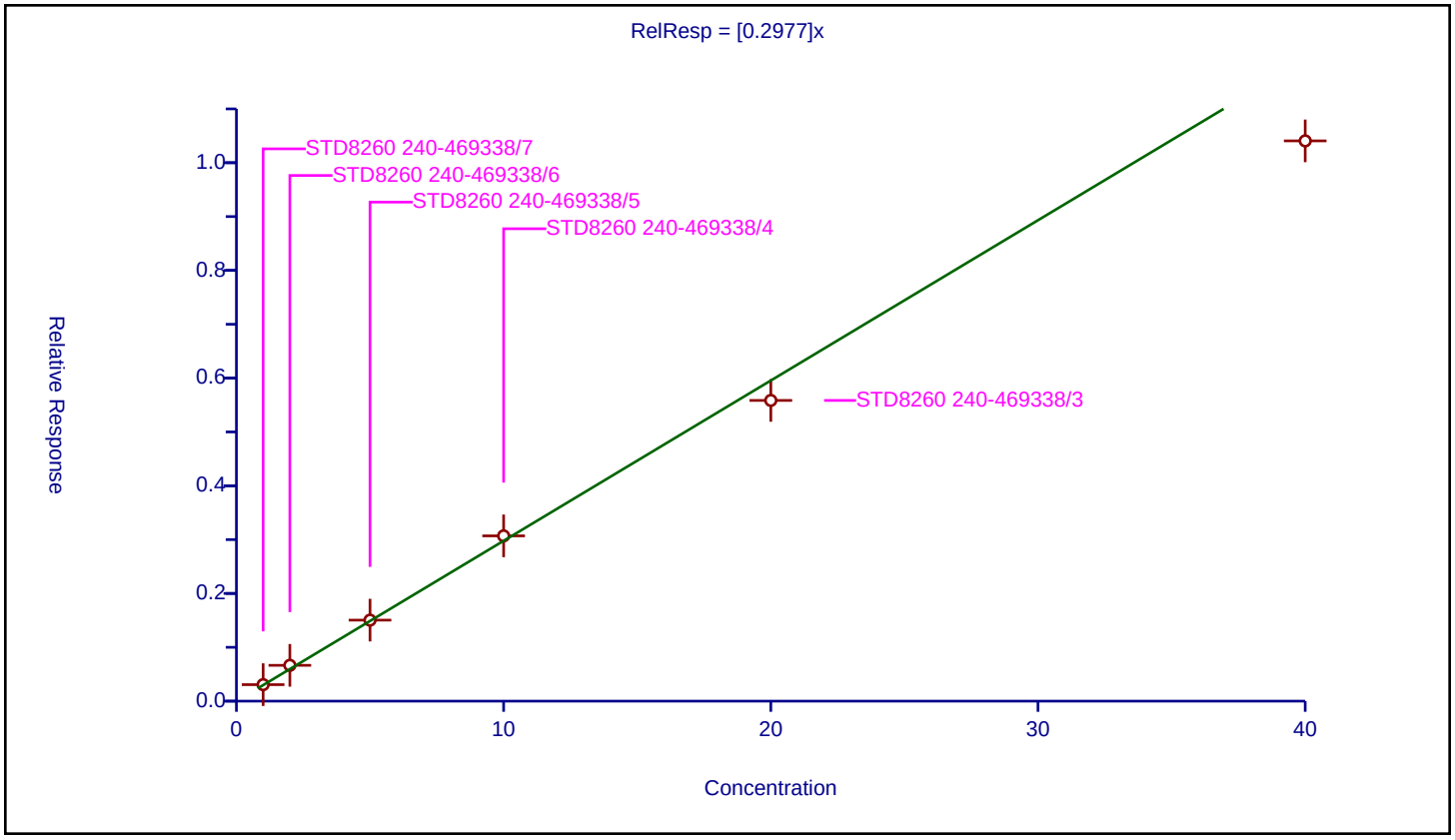
Curve Coefficients

Intercept:	0
Slope:	0.2977

Error Coefficients

Standard Error:	122000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306594	20.0	420817.0	0.306594	Y
2	STD8260 240-469338/6	2.0	0.665104	20.0	402373.0	0.332552	Y
3	STD8260 240-469338/5	5.0	1.50448	20.0	406373.0	0.300896	Y
4	STD8260 240-469338/4	10.0	3.069727	20.0	399775.0	0.306973	Y
5	STD8260 240-469338/3	20.0	5.585418	20.0	413781.0	0.279271	Y
6	STD8260 240-469338/2	40.0	10.405776	20.0	455301.0	0.260144	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

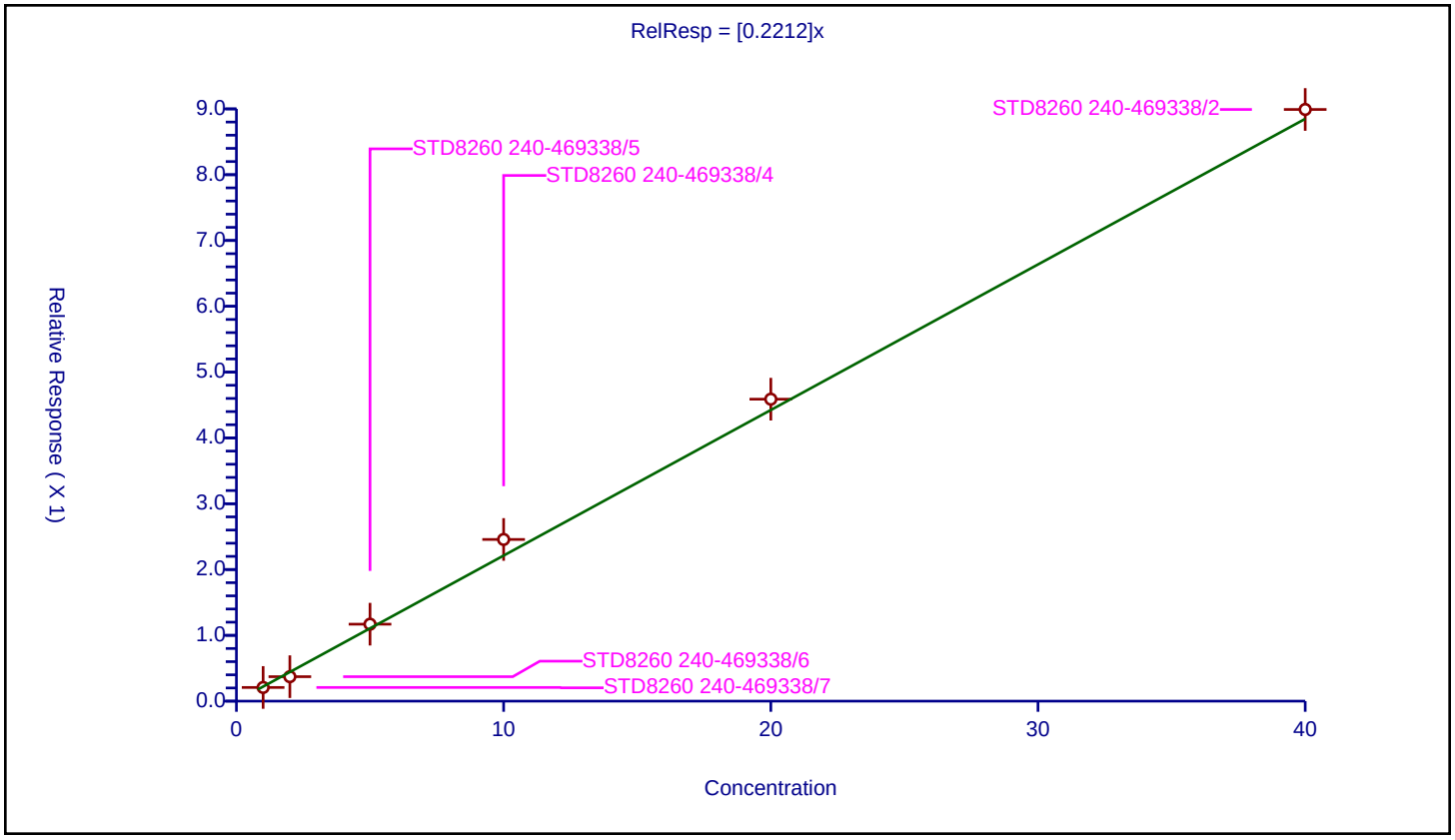
Curve Coefficients

Intercept:	0
Slope:	0.2212

Error Coefficients

Standard Error:	104000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.207644	20.0	420817.0	0.207644	Y
2	STD8260 240-469338/6	2.0	0.371645	20.0	402373.0	0.185823	Y
3	STD8260 240-469338/5	5.0	1.169418	20.0	406373.0	0.233884	Y
4	STD8260 240-469338/4	10.0	2.456832	20.0	399775.0	0.245683	Y
5	STD8260 240-469338/3	20.0	4.588563	20.0	413781.0	0.229428	Y
6	STD8260 240-469338/2	40.0	8.991195	20.0	455301.0	0.22478	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

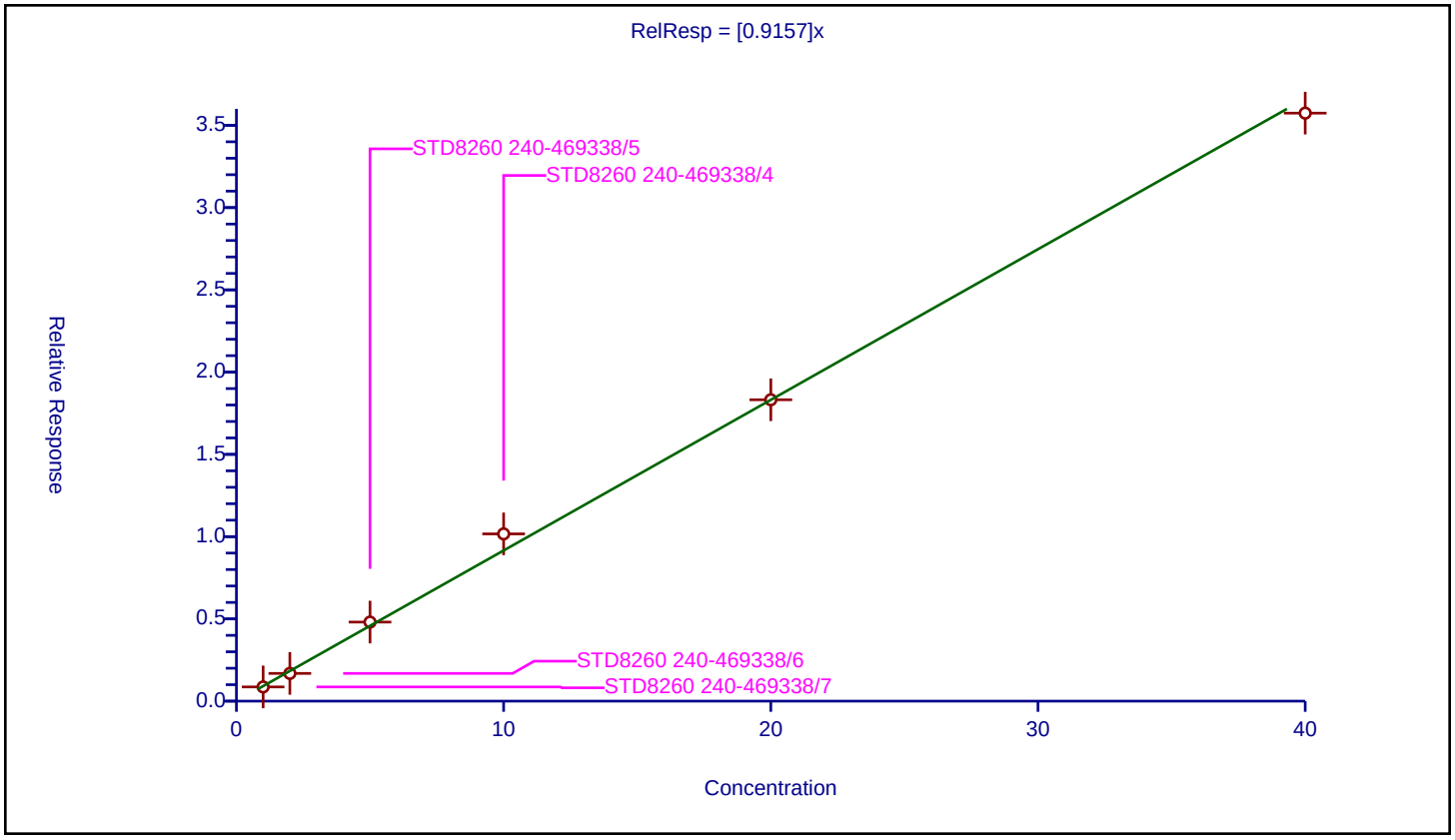
Curve Coefficients

Intercept:	0
Slope:	0.9157

Error Coefficients

Standard Error:	414000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.863796	20.0	420817.0	0.863796	Y
2	STD8260 240-469338/6	2.0	1.686296	20.0	402373.0	0.843148	Y
3	STD8260 240-469338/5	5.0	4.805487	20.0	406373.0	0.961097	Y
4	STD8260 240-469338/4	10.0	10.165868	20.0	399775.0	1.016587	Y
5	STD8260 240-469338/3	20.0	18.319643	20.0	413781.0	0.915982	Y
6	STD8260 240-469338/2	40.0	35.742026	20.0	455301.0	0.893551	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

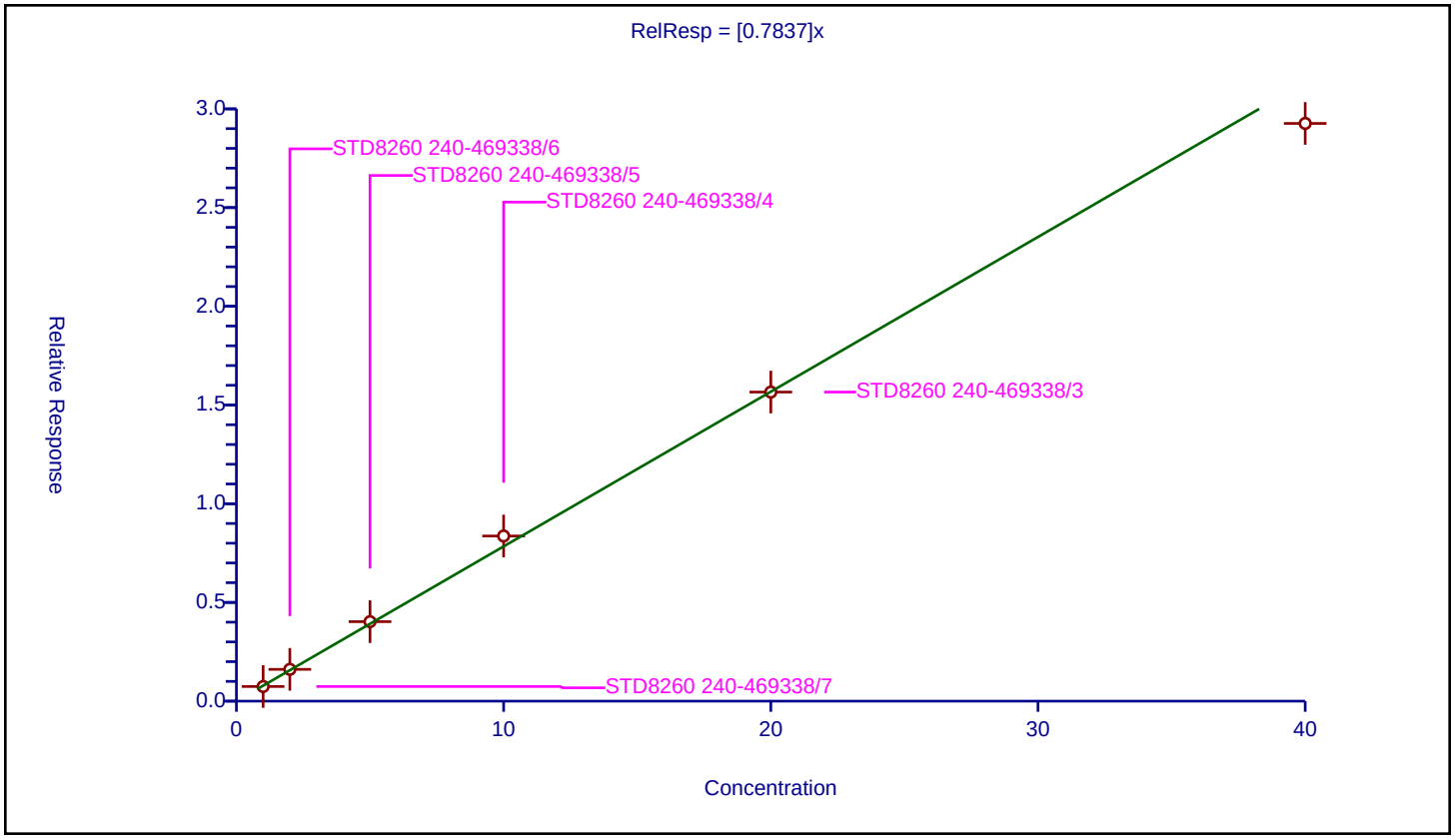
Curve Coefficients

Intercept:	0
Slope:	0.7837

Error Coefficients

Standard Error:	342000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.740987	20.0	420817.0	0.740987	Y
2	STD8260 240-469338/6	2.0	1.610744	20.0	402373.0	0.805372	Y
3	STD8260 240-469338/5	5.0	4.026252	20.0	406373.0	0.80525	Y
4	STD8260 240-469338/4	10.0	8.364805	20.0	399775.0	0.836481	Y
5	STD8260 240-469338/3	20.0	15.656108	20.0	413781.0	0.782805	Y
6	STD8260 240-469338/2	40.0	29.262927	20.0	455301.0	0.731573	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

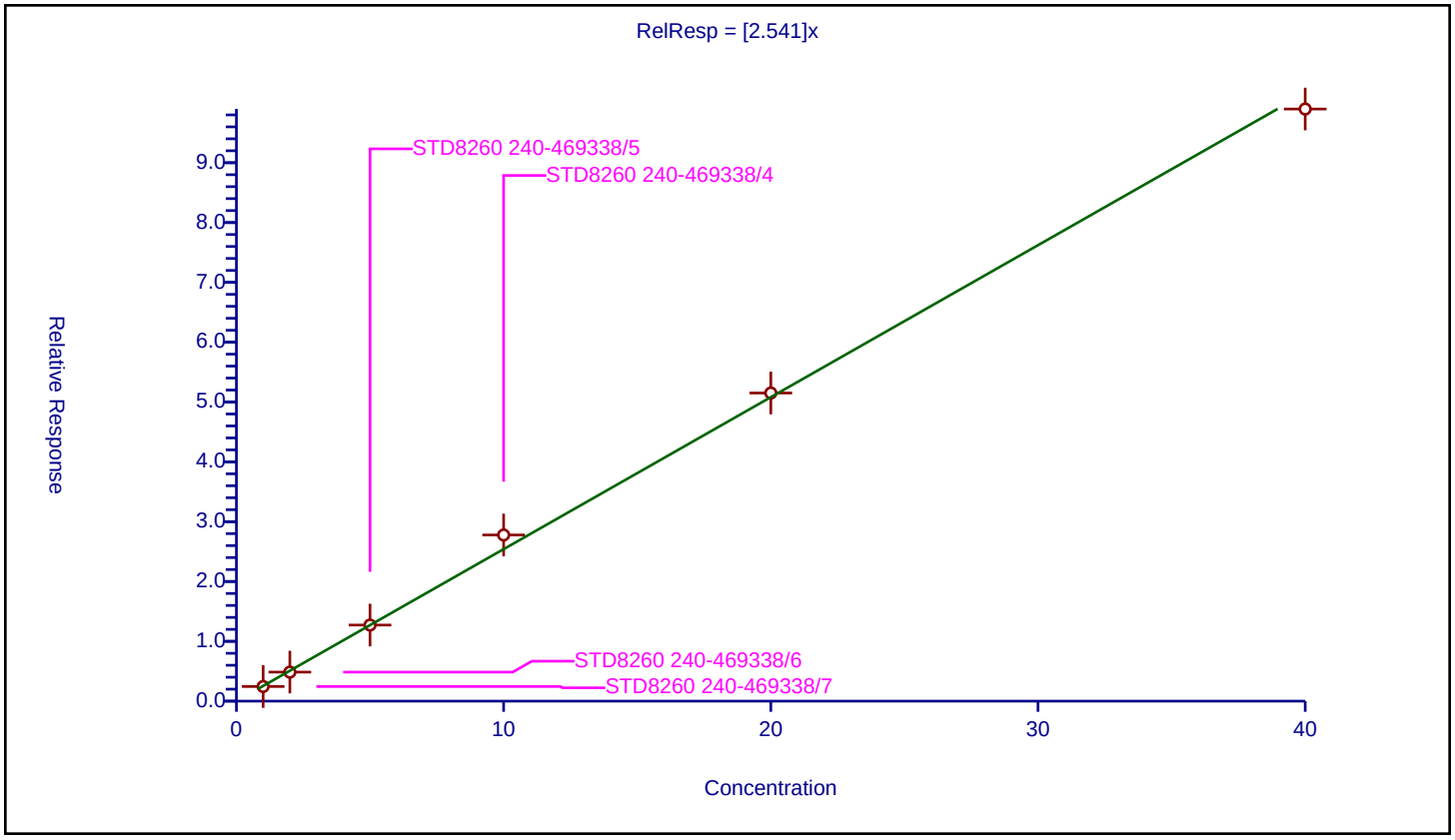
Curve Coefficients

Intercept:	0
Slope:	2.541

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.446194	20.0	420817.0	2.446194	Y
2	STD8260 240-469338/6	2.0	4.853258	20.0	402373.0	2.426629	Y
3	STD8260 240-469338/5	5.0	12.715805	20.0	406373.0	2.543161	Y
4	STD8260 240-469338/4	10.0	27.773022	20.0	399775.0	2.777302	Y
5	STD8260 240-469338/3	20.0	51.507875	20.0	413781.0	2.575394	Y
6	STD8260 240-469338/2	40.0	98.976326	20.0	455301.0	2.474408	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

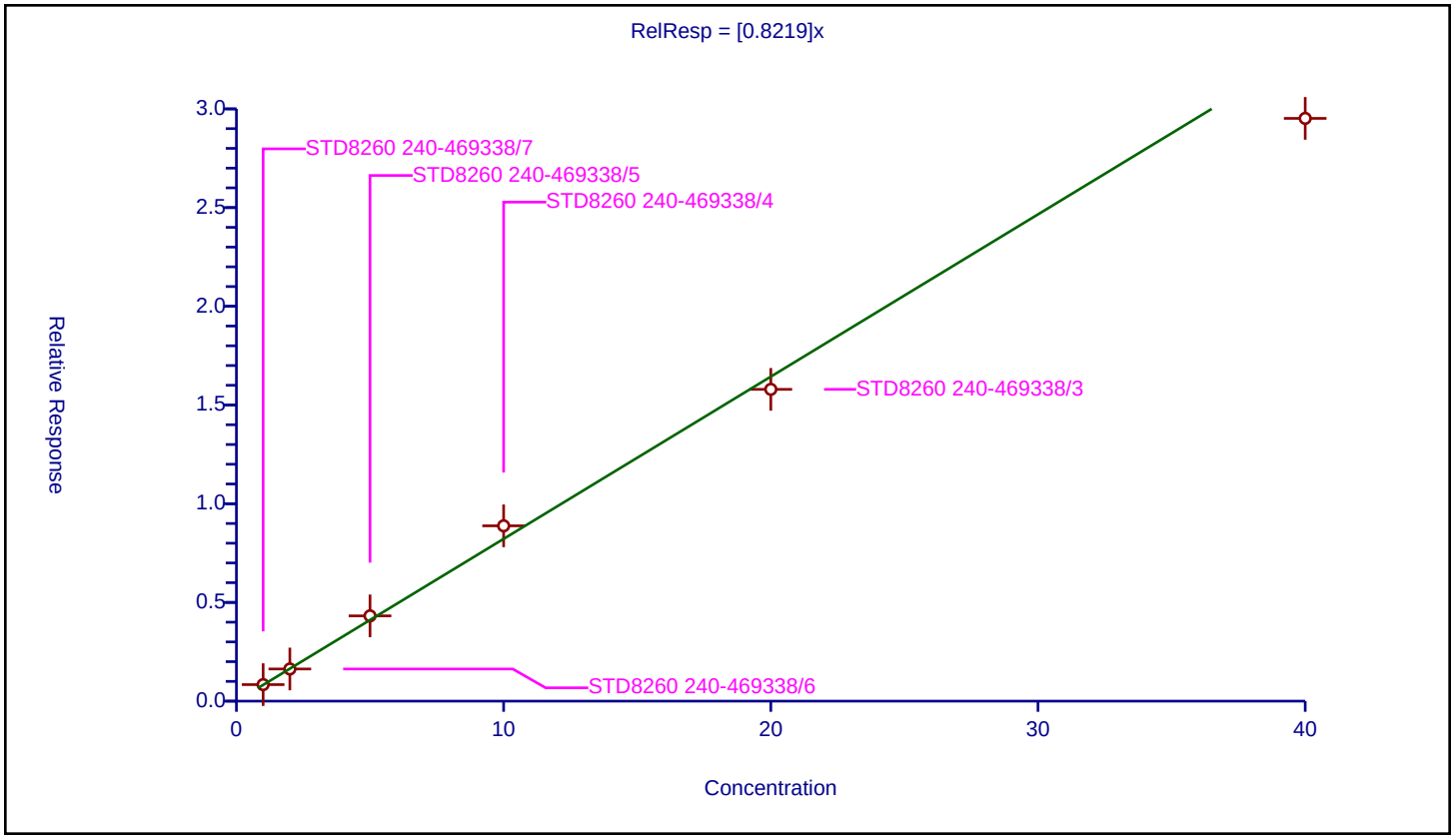
Curve Coefficients

Intercept:	0
Slope:	0.8219

Error Coefficients

Standard Error:	346000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.837133	20.0	420817.0	0.837133	Y
2	STD8260 240-469338/6	2.0	1.629583	20.0	402373.0	0.814791	Y
3	STD8260 240-469338/5	5.0	4.318742	20.0	406373.0	0.863748	Y
4	STD8260 240-469338/4	10.0	8.880445	20.0	399775.0	0.888045	Y
5	STD8260 240-469338/3	20.0	15.79304	20.0	413781.0	0.789652	Y
6	STD8260 240-469338/2	40.0	29.520295	20.0	455301.0	0.738007	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

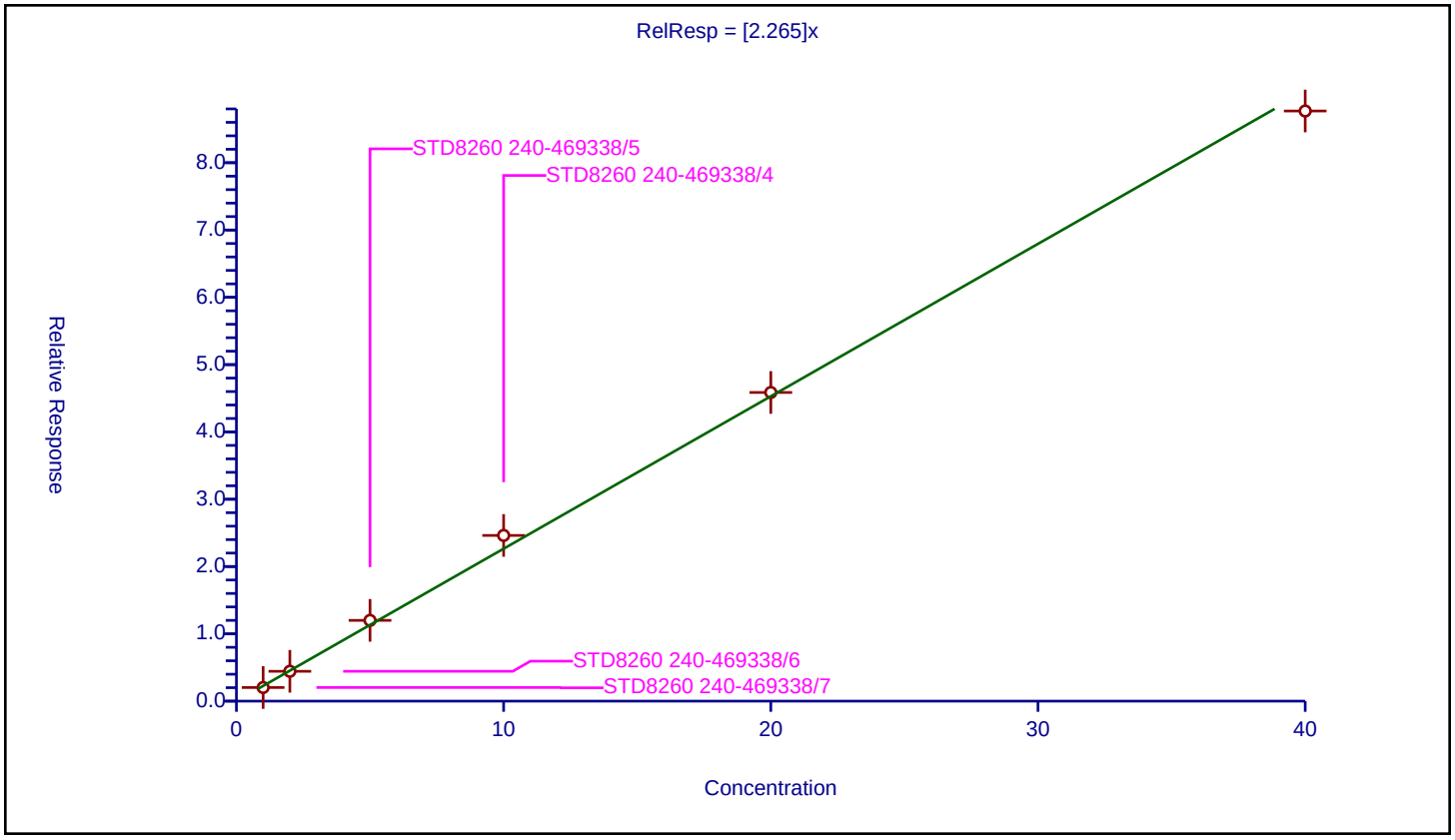
Curve Coefficients

Intercept:	0
Slope:	2.265

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.023587	20.0	420817.0	2.023587	Y
2	STD8260 240-469338/6	2.0	4.435486	20.0	402373.0	2.217743	Y
3	STD8260 240-469338/5	5.0	12.000699	20.0	406373.0	2.40014	Y
4	STD8260 240-469338/4	10.0	24.62195	20.0	399775.0	2.462195	Y
5	STD8260 240-469338/3	20.0	45.865663	20.0	413781.0	2.293283	Y
6	STD8260 240-469338/2	40.0	87.685904	20.0	455301.0	2.192148	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

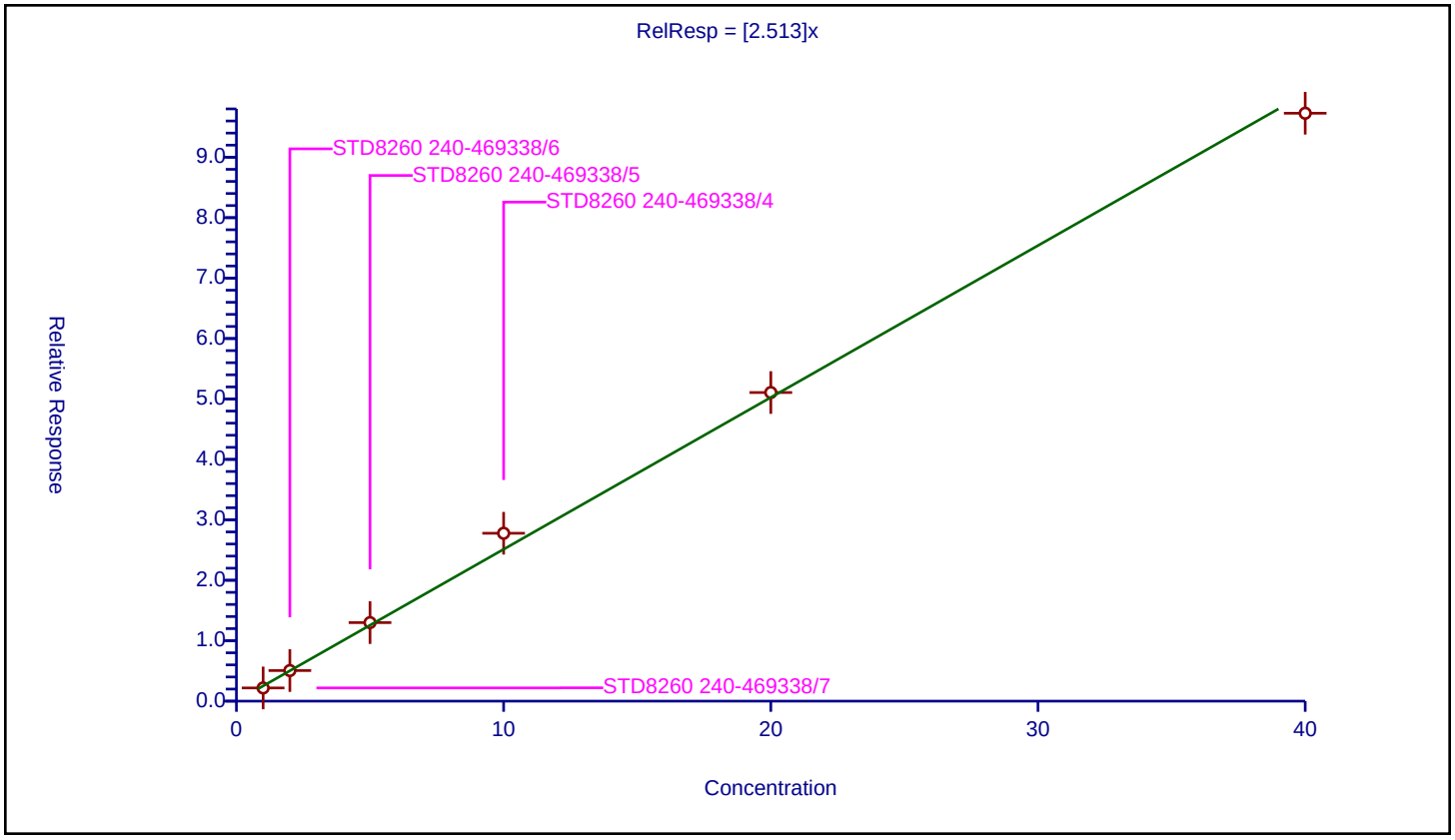
Curve Coefficients

Intercept:	0
Slope:	2.513

Error Coefficients

Standard Error:	1130000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.183229	20.0	420817.0	2.183229	Y
2	STD8260 240-469338/6	2.0	5.062815	20.0	402373.0	2.531407	Y
3	STD8260 240-469338/5	5.0	12.996484	20.0	406373.0	2.599297	Y
4	STD8260 240-469338/4	10.0	27.779776	20.0	399775.0	2.777978	Y
5	STD8260 240-469338/3	20.0	51.069237	20.0	413781.0	2.553462	Y
6	STD8260 240-469338/2	40.0	97.280217	20.0	455301.0	2.432005	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

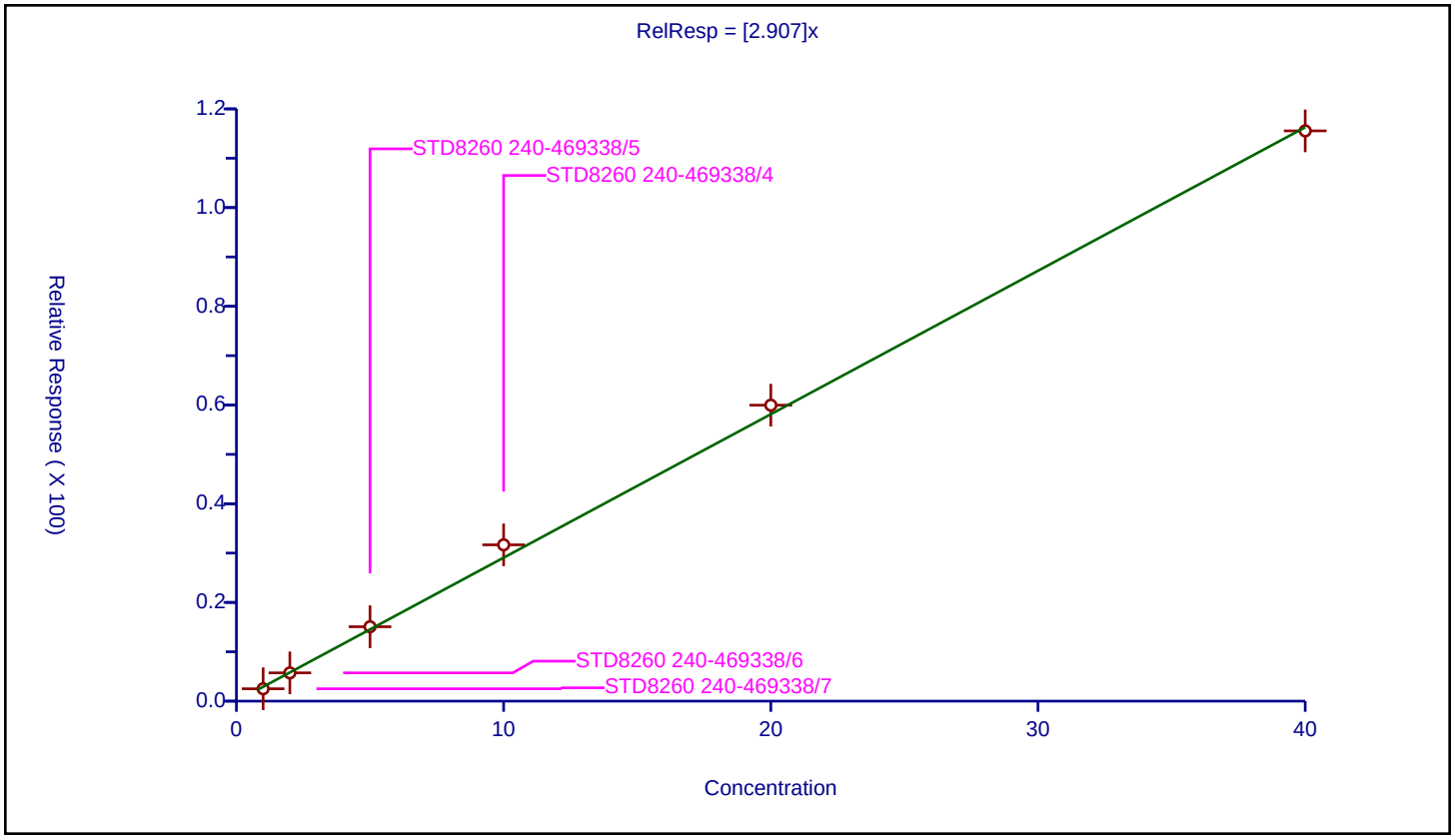
Curve Coefficients

Intercept:	0
Slope:	2.907

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.508644	20.0	420817.0	2.508644	Y
2	STD8260 240-469338/6	2.0	5.726279	20.0	402373.0	2.863139	Y
3	STD8260 240-469338/5	5.0	15.072507	20.0	406373.0	3.014501	Y
4	STD8260 240-469338/4	10.0	31.671915	20.0	399775.0	3.167192	Y
5	STD8260 240-469338/3	20.0	59.968437	20.0	413781.0	2.998422	Y
6	STD8260 240-469338/2	40.0	115.54923	20.0	455301.0	2.888731	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

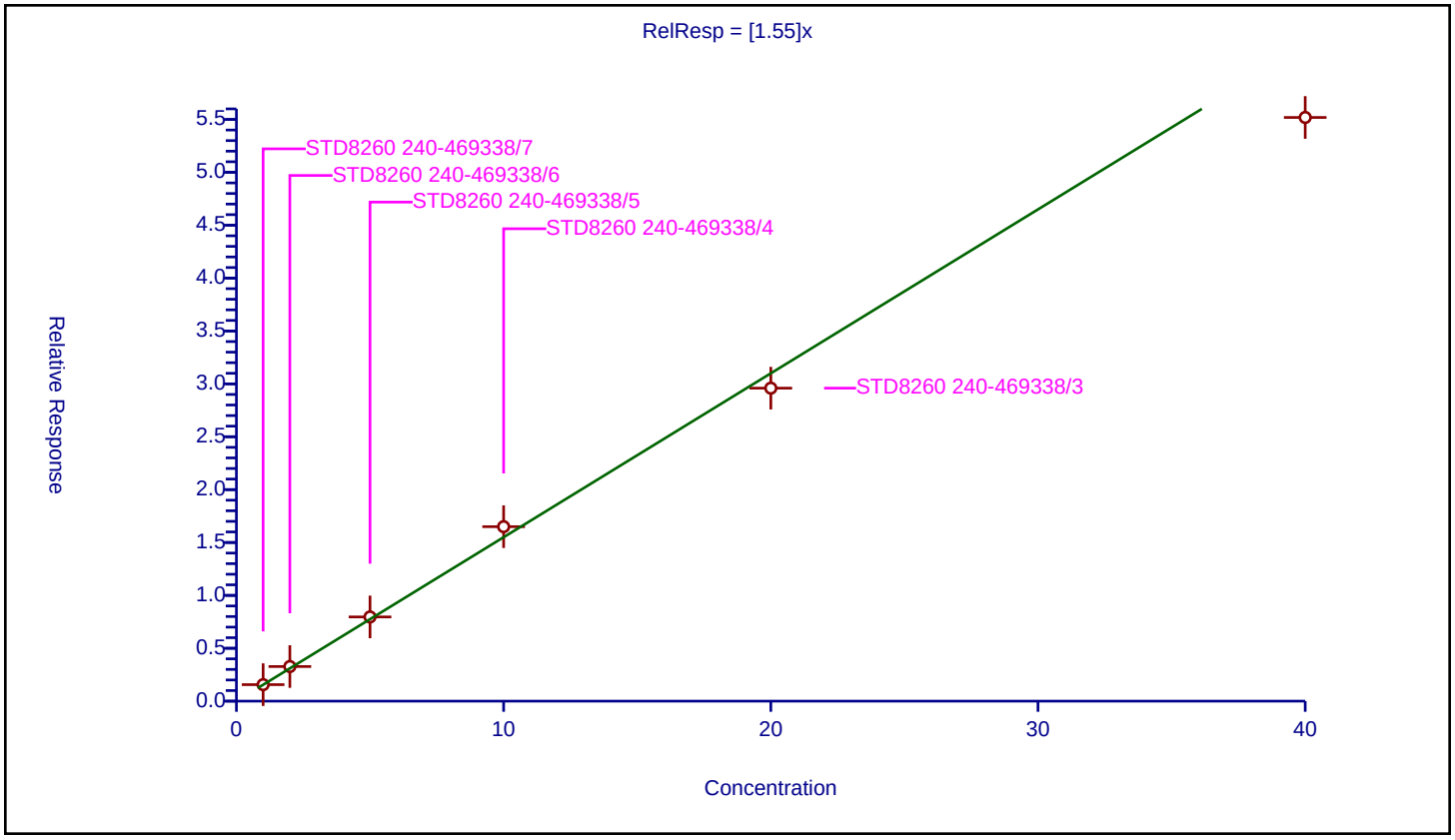
Curve Coefficients

Intercept:	0
Slope:	1.55

Error Coefficients

Standard Error:	647000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.560964	20.0	420817.0	1.560964	Y
2	STD8260 240-469338/6	2.0	3.272884	20.0	402373.0	1.636442	Y
3	STD8260 240-469338/5	5.0	7.962389	20.0	406373.0	1.592478	Y
4	STD8260 240-469338/4	10.0	16.49773	20.0	399775.0	1.649773	Y
5	STD8260 240-469338/3	20.0	29.595752	20.0	413781.0	1.479788	Y
6	STD8260 240-469338/2	40.0	55.188897	20.0	455301.0	1.379722	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

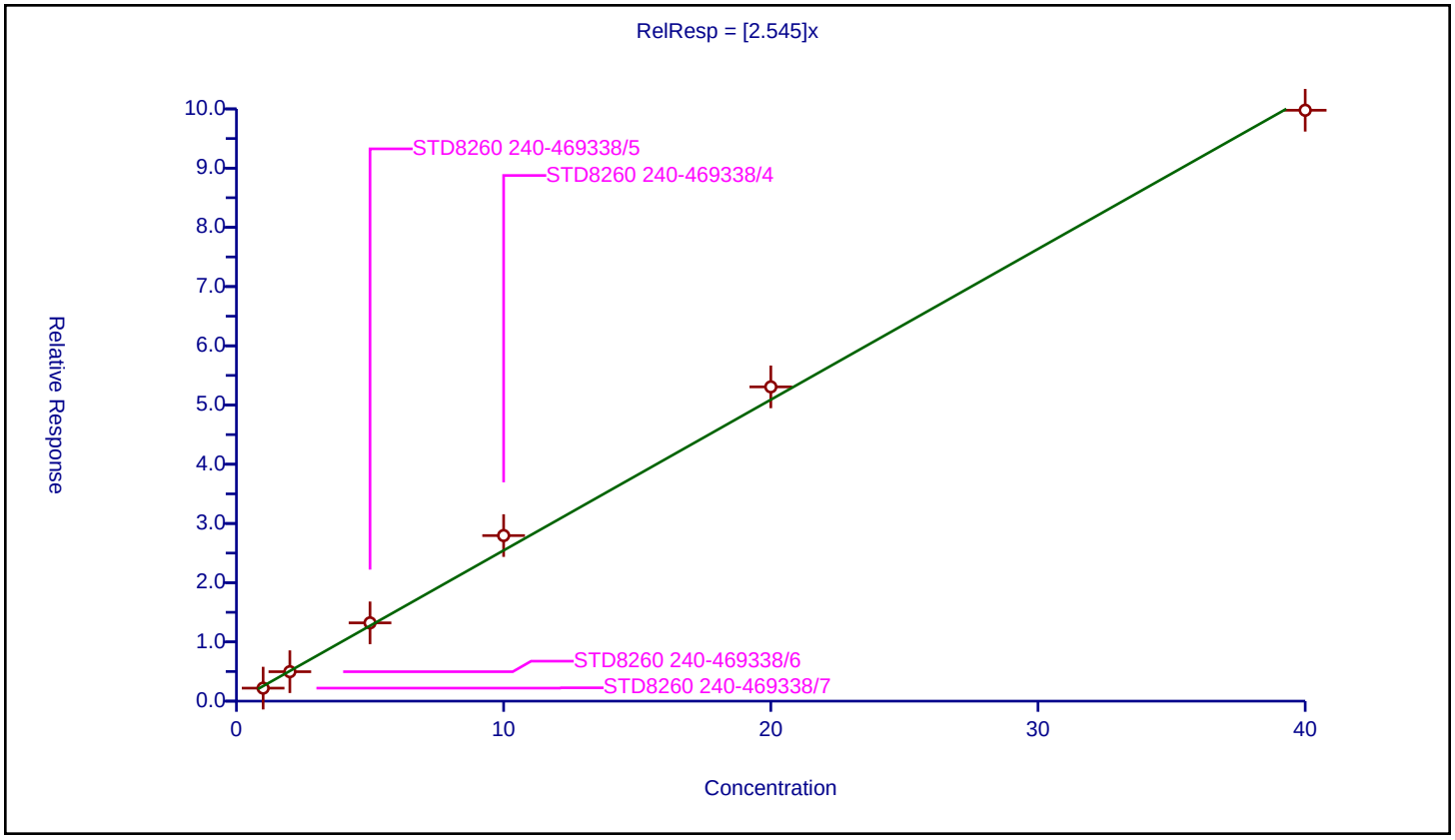
Curve Coefficients

Intercept:	0
Slope:	2.545

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.196252	20.0	420817.0	2.196252	Y
2	STD8260 240-469338/6	2.0	4.973246	20.0	402373.0	2.486623	Y
3	STD8260 240-469338/5	5.0	13.217955	20.0	406373.0	2.643591	Y
4	STD8260 240-469338/4	10.0	27.957776	20.0	399775.0	2.795778	Y
5	STD8260 240-469338/3	20.0	53.061885	20.0	413781.0	2.653094	Y
6	STD8260 240-469338/2	40.0	99.771975	20.0	455301.0	2.494299	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

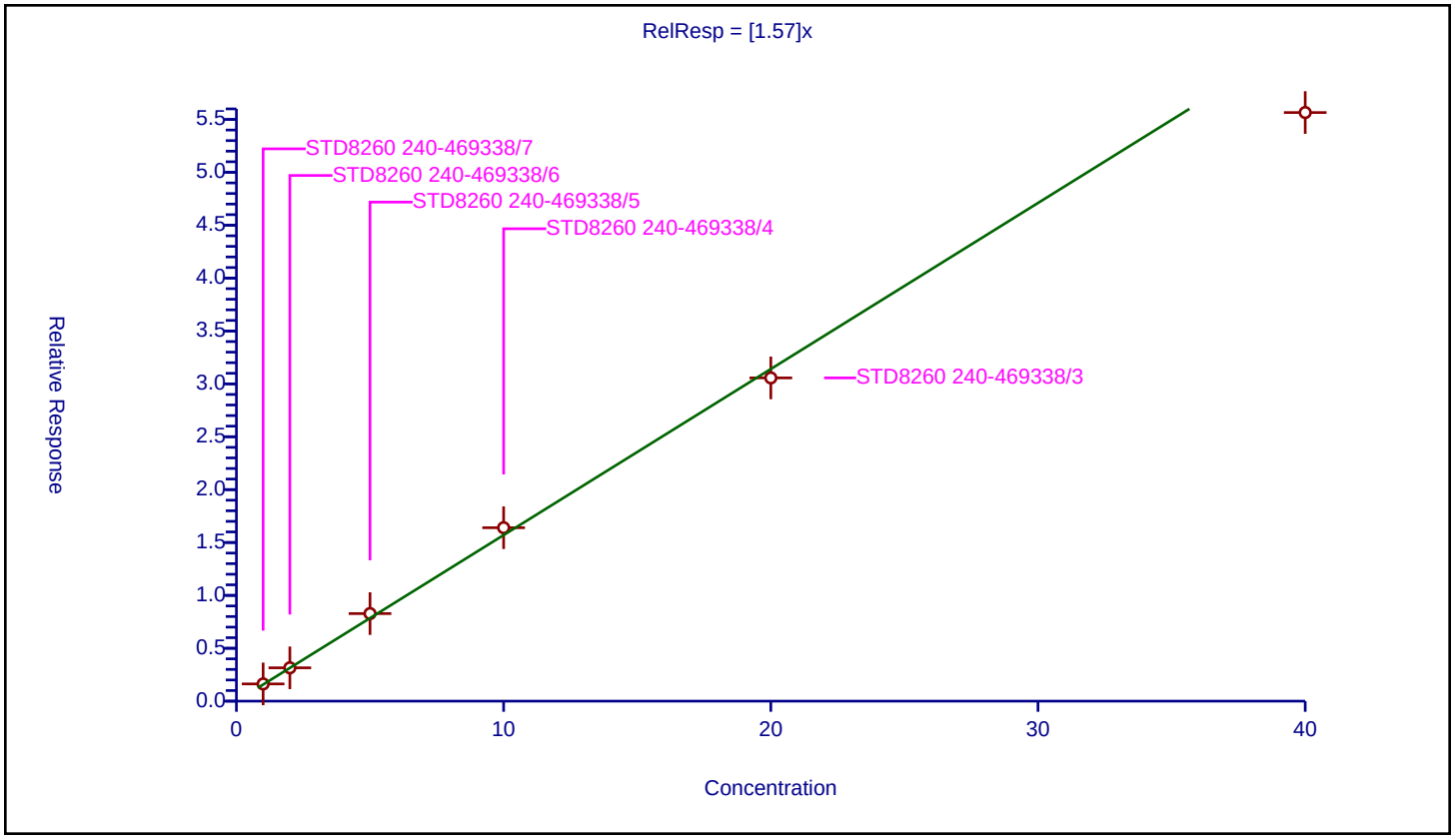
Curve Coefficients

Intercept:	0
Slope:	1.57

Error Coefficients

Standard Error:	655000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.628927	20.0	420817.0	1.628927	Y
2	STD8260 240-469338/6	2.0	3.152846	20.0	402373.0	1.576423	Y
3	STD8260 240-469338/5	5.0	8.280028	20.0	406373.0	1.656006	Y
4	STD8260 240-469338/4	10.0	16.398274	20.0	399775.0	1.639827	Y
5	STD8260 240-469338/3	20.0	30.563269	20.0	413781.0	1.528163	Y
6	STD8260 240-469338/2	40.0	55.654259	20.0	455301.0	1.391356	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

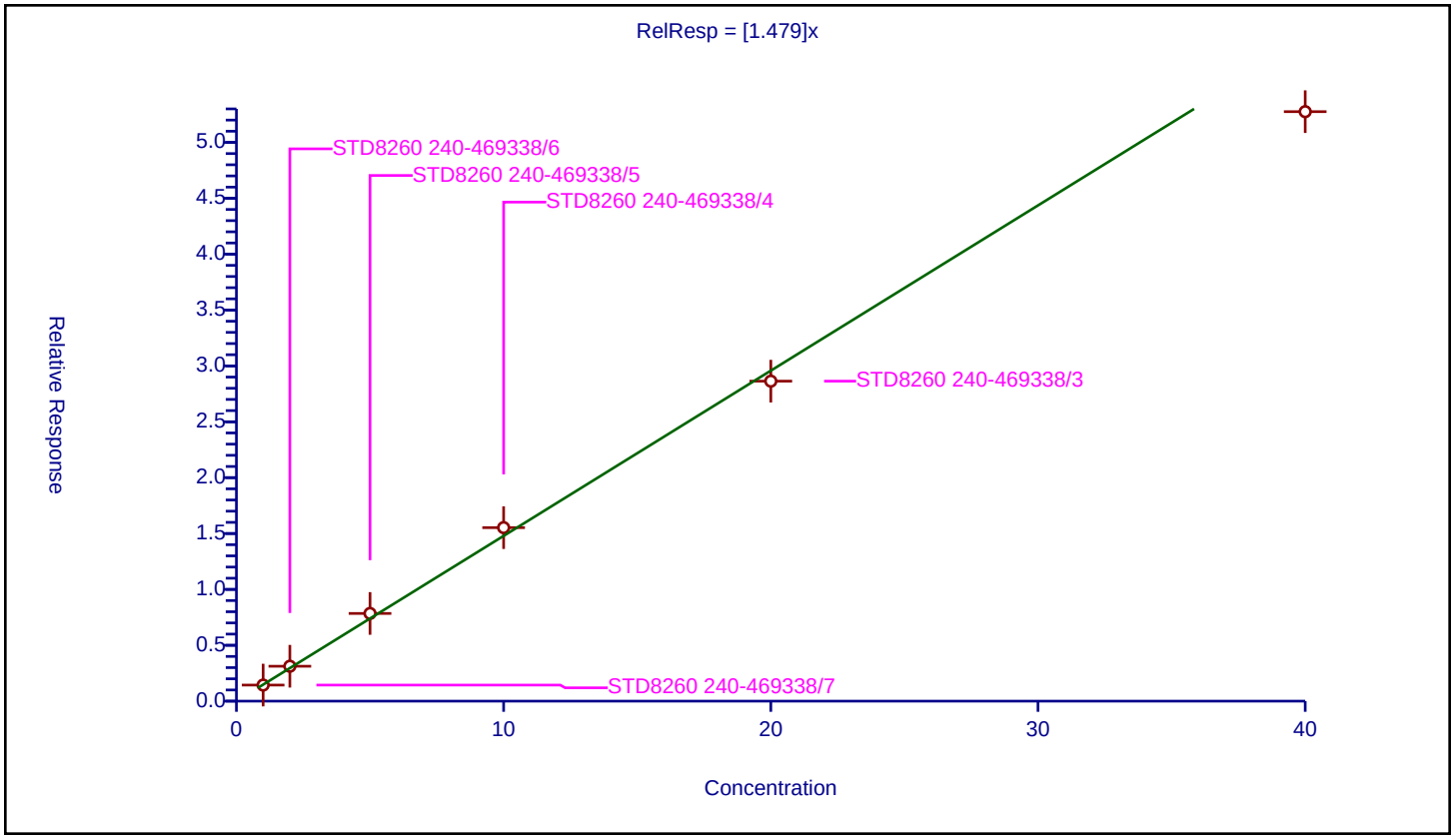
Curve Coefficients

Intercept:	0
Slope:	1.479

Error Coefficients

Standard Error:	620000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.438392	20.0	420817.0	1.438392	Y
2	STD8260 240-469338/6	2.0	3.122575	20.0	402373.0	1.561288	Y
3	STD8260 240-469338/5	5.0	7.84747	20.0	406373.0	1.569494	Y
4	STD8260 240-469338/4	10.0	15.527434	20.0	399775.0	1.552743	Y
5	STD8260 240-469338/3	20.0	28.635244	20.0	413781.0	1.431762	Y
6	STD8260 240-469338/2	40.0	52.751872	20.0	455301.0	1.318797	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

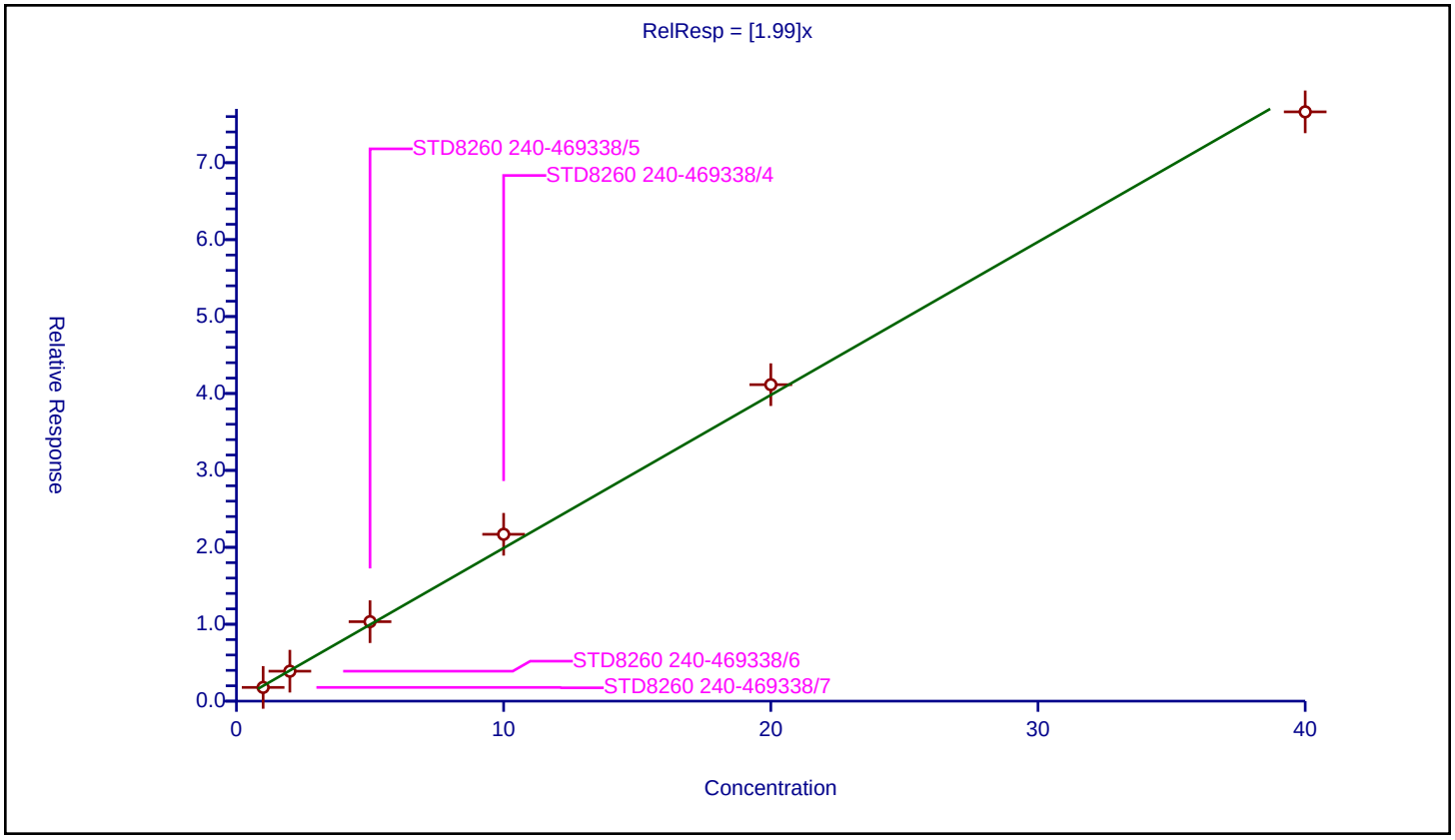
Curve Coefficients

Intercept:	0
Slope:	1.99

Error Coefficients

Standard Error:	895000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.786525	20.0	420817.0	1.786525	Y
2	STD8260 240-469338/6	2.0	3.892557	20.0	402373.0	1.946279	Y
3	STD8260 240-469338/5	5.0	10.332429	20.0	406373.0	2.066486	Y
4	STD8260 240-469338/4	10.0	21.691501	20.0	399775.0	2.16915	Y
5	STD8260 240-469338/3	20.0	41.14563	20.0	413781.0	2.057282	Y
6	STD8260 240-469338/2	40.0	76.614459	20.0	455301.0	1.915361	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

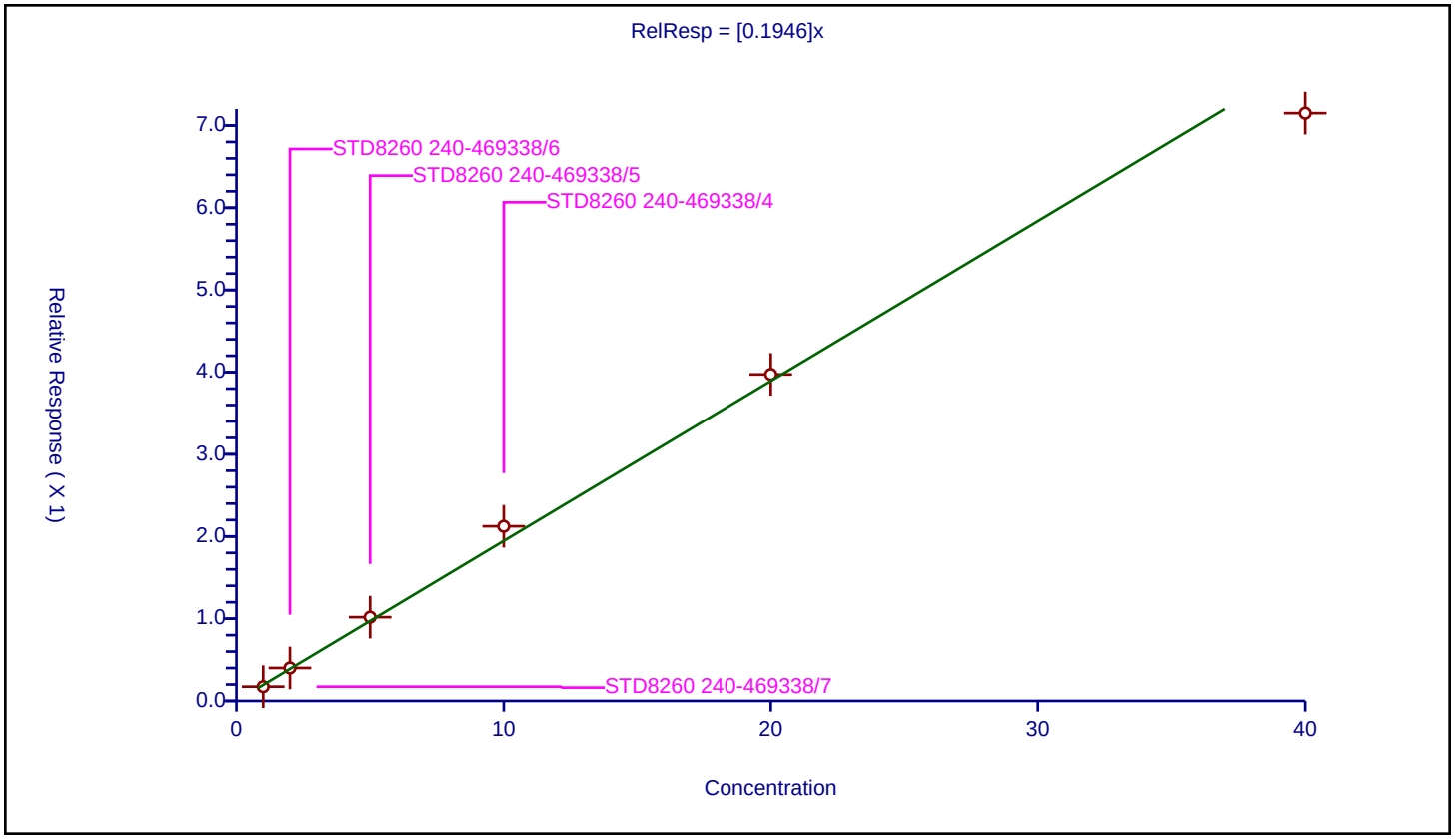
Curve Coefficients

Intercept:	0
Slope:	0.1946

Error Coefficients

Standard Error:	84300
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.173662	20.0	420817.0	0.173662	Y
2	STD8260 240-469338/6	2.0	0.40117	20.0	402373.0	0.200585	Y
3	STD8260 240-469338/5	5.0	1.018473	20.0	406373.0	0.203695	Y
4	STD8260 240-469338/4	10.0	2.123795	20.0	399775.0	0.212379	Y
5	STD8260 240-469338/3	20.0	3.972875	20.0	413781.0	0.198644	Y
6	STD8260 240-469338/2	40.0	7.149688	20.0	455301.0	0.178742	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

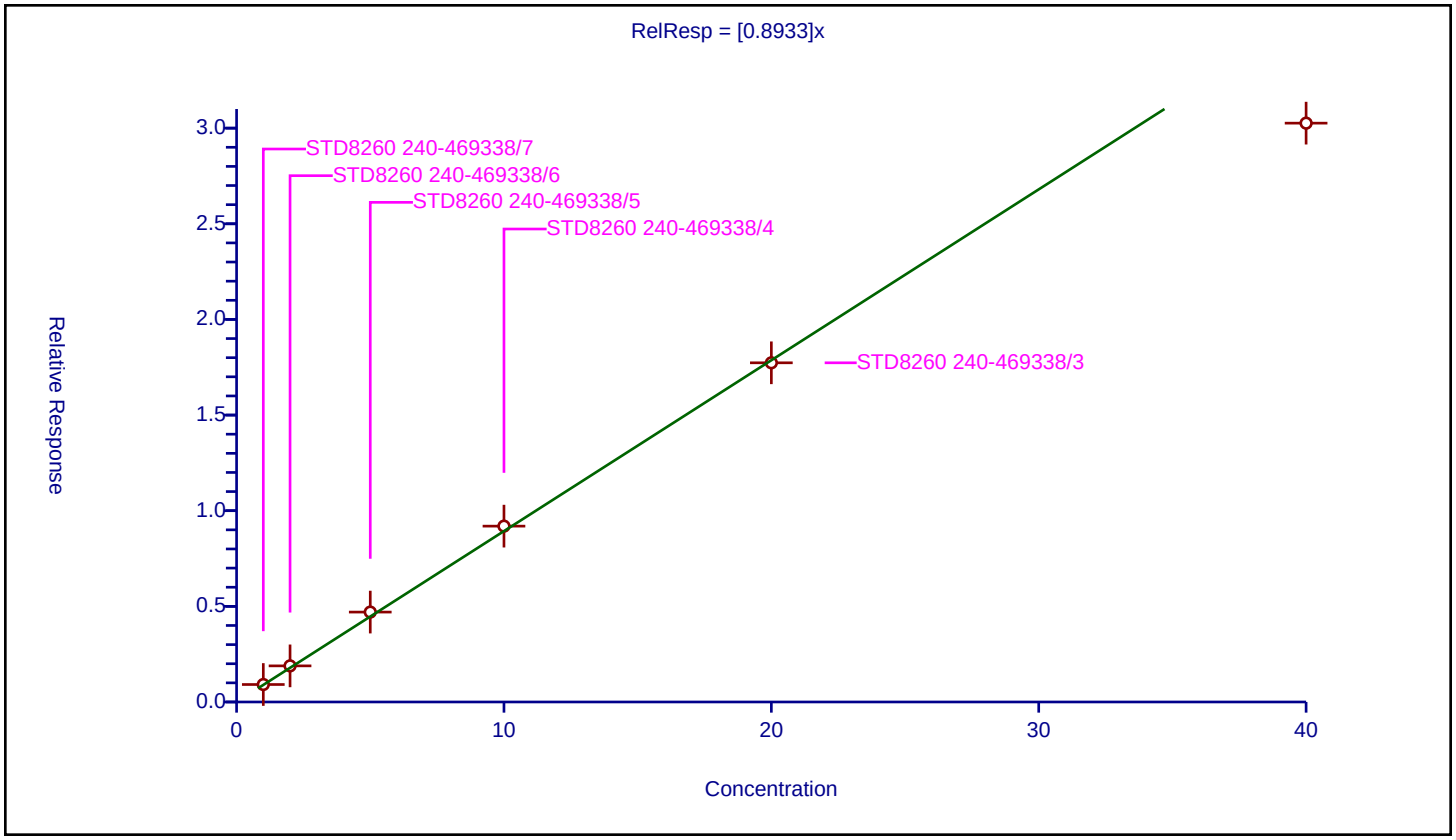
Curve Coefficients

Intercept:	0
Slope:	0.8933

Error Coefficients

Standard Error:	362000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.913271	20.0	420817.0	0.913271	Y
2	STD8260 240-469338/6	2.0	1.88795	20.0	402373.0	0.943975	Y
3	STD8260 240-469338/5	5.0	4.700066	20.0	406373.0	0.940013	Y
4	STD8260 240-469338/4	10.0	9.193171	20.0	399775.0	0.919317	Y
5	STD8260 240-469338/3	20.0	17.731844	20.0	413781.0	0.886592	Y
6	STD8260 240-469338/2	40.0	30.260641	20.0	455301.0	0.756516	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

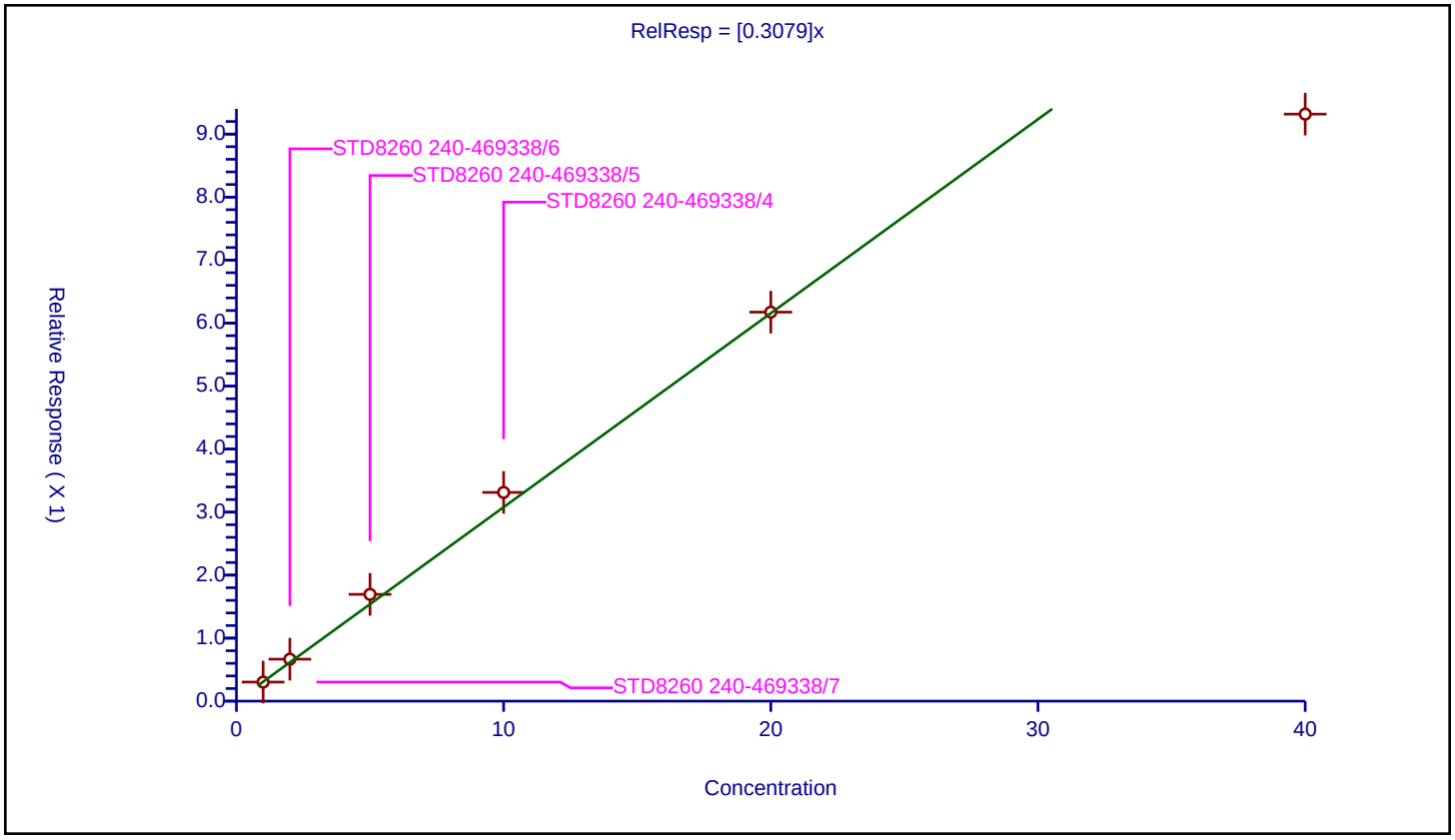
Curve Coefficients

Intercept:	0
Slope:	0.3079

Error Coefficients

Standard Error:	116000
Relative Standard Error:	12.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302317	20.0	420817.0	0.302317	Y
2	STD8260 240-469338/6	2.0	0.665949	20.0	402373.0	0.332975	Y
3	STD8260 240-469338/5	5.0	1.694847	20.0	406373.0	0.338969	Y
4	STD8260 240-469338/4	10.0	3.312613	20.0	399775.0	0.331261	Y
5	STD8260 240-469338/3	20.0	6.174136	20.0	413781.0	0.308707	Y
6	STD8260 240-469338/2	40.0	9.317309	20.0	455301.0	0.232933	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

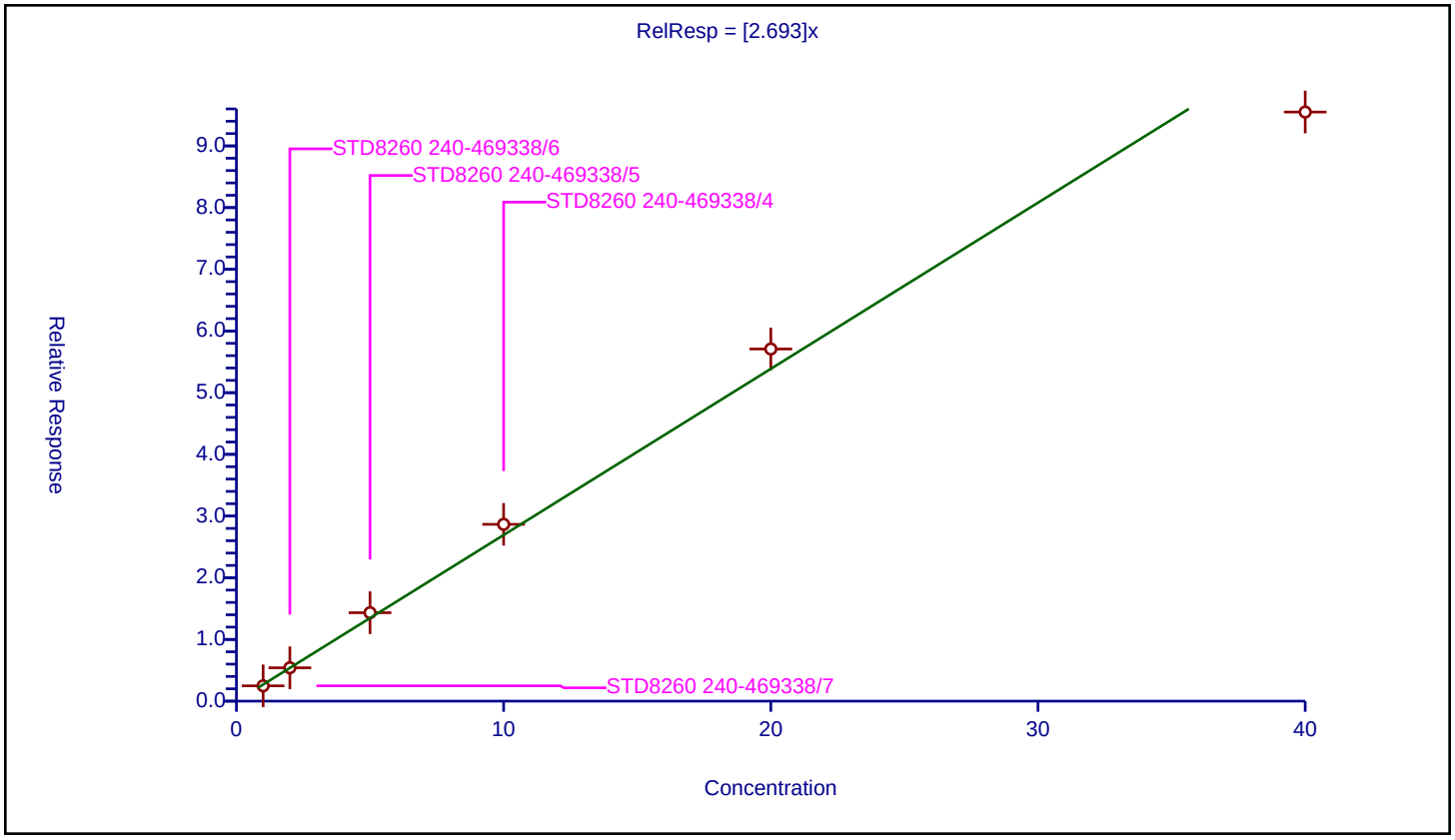
Curve Coefficients

Intercept:	0
Slope:	2.693

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.480128	20.0	420817.0	2.480128	Y
2	STD8260 240-469338/6	2.0	5.408912	20.0	402373.0	2.704456	Y
3	STD8260 240-469338/5	5.0	14.337271	20.0	406373.0	2.867454	Y
4	STD8260 240-469338/4	10.0	28.661322	20.0	399775.0	2.866132	Y
5	STD8260 240-469338/3	20.0	57.081258	20.0	413781.0	2.854063	Y
6	STD8260 240-469338/2	40.0	95.489489	20.0	455301.0	2.387237	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

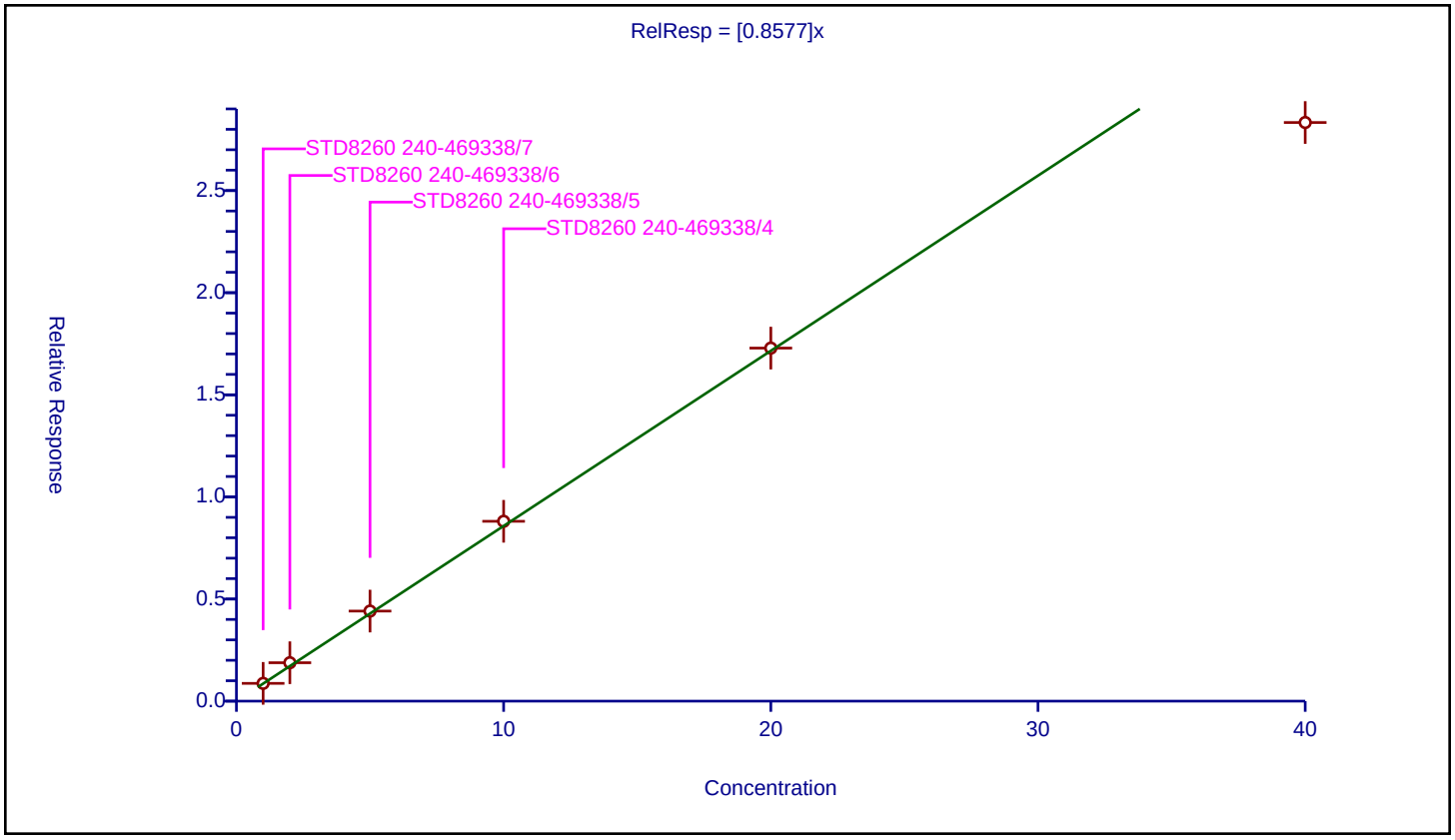
Curve Coefficients

Intercept:	0
Slope:	0.8577

Error Coefficients

Standard Error:	342000
Relative Standard Error:	9.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.870307	20.0	420817.0	0.870307	Y
2	STD8260 240-469338/6	2.0	1.88119	20.0	402373.0	0.940595	Y
3	STD8260 240-469338/5	5.0	4.410382	20.0	406373.0	0.882076	Y
4	STD8260 240-469338/4	10.0	8.806954	20.0	399775.0	0.880695	Y
5	STD8260 240-469338/3	20.0	17.287502	20.0	413781.0	0.864375	Y
6	STD8260 240-469338/2	40.0	28.3333	20.0	455301.0	0.708333	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3179 0.2856	0.3024	0.2990	0.3093	0.2937	Ave		0.3013				3.8		15.0			
Chloromethane	0.3871 0.3075	0.3410	0.3529	0.3559	0.3114	Ave		0.3426			0.1000	8.7		15.0			
Vinyl chloride	0.3105 0.2686	0.3356	0.2760	0.2664	0.3046	Ave		0.2936				9.5		15.0			
Butadiene	0.4584 0.3354	0.3649	0.3794	0.3693	0.3400	Ave		0.3746				11.9		15.0			
Bromomethane	0.2768 0.2260	0.2769	0.2353	0.2197	0.2414	Ave		0.2460				10.2		15.0			
Chloroethane	0.2500 0.1946	0.2244	0.2174	0.2026	0.2094	Ave		0.2164				9.0		15.0			
Dichlorofluoromethane	0.6535 0.5185	0.6173	0.5751	0.5610	0.5287	Ave		0.5757				9.0		15.0			
Trichlorofluoromethane	0.5721 0.4983	0.5300	0.5049	0.5023	0.5195	Ave		0.5212				5.3		15.0			
Ethyl ether	0.2699 0.2372	0.2623	0.2530	0.2461	0.2385	Ave		0.2512				5.2		15.0			
Acrolein	0.0123 0.0151	0.0265	0.0166	0.0157	0.0144	Lin	0.0400	0.0147							0.9980		0.9900
1,1-Dichloroethene	0.2595 0.2858	0.3045	0.2995	0.2904	0.2951	Ave		0.2891				5.5		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2193 0.2523	0.2341	0.2455	0.2413	0.2535	Ave		0.2410				5.3		15.0			
Acetone	0.0236 0.0187	0.0236	0.0180	0.0187	0.0188	Ave		0.0202				13.0		15.0			
Iodomethane	0.4069 0.4206	0.4383	0.4410	0.4405	0.5097	Ave		0.4428				8.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7748 0.7495	0.8943	0.7779	0.7790	0.8588	Ave		0.8057				7.1		15.0			
3-Chloro-1-propene	0.1523 0.1727	0.1717	0.1742	0.1728	0.1753	Ave		0.1698				5.1		15.0			
Methyl acetate	0.1303 0.1267	0.1239	0.1291	0.1258	0.1258	Ave		0.1269				1.9		15.0			
Methylene Chloride	0.2754 0.2543	0.2829	0.2711	0.2630	0.2675	Ave		0.2691				3.7		15.0			
2-Methyl-2-propanol	0.0139 0.0139	0.0139	0.0149	0.0145	0.0137	Ave		0.0141				3.2		15.0			
Acrylonitrile	0.0679 0.0681	0.0675	0.0685	0.0682	0.0670	Ave		0.0679				0.8		15.0			
Methyl tert-butyl ether	0.6990 0.7045	0.6881	0.7075	0.7039	0.7051	Ave		0.7014				1.0		15.0			
trans-1,2-Dichloroethene	0.3026 0.2717	0.2966	0.2890	0.2898	0.2827	Ave		0.2887				3.7		15.0			
Hexane	0.0635 0.0565	0.0591	0.0530	0.0577	0.0571	Ave		0.0578				6.0		15.0			
1,1-Dichloroethane	0.4664 0.4434	0.4651	0.4613	0.4568	0.4509	Ave		0.4573			0.1000	1.9		15.0			
Vinyl acetate	0.3496 0.4336	0.3537	0.3849	0.3975	0.4151	Ave		0.3891				8.6		15.0			
cis-1,2-Dichloroethene	0.3175 0.2885	0.3169	0.3097	0.2994	0.2972	Ave		0.3049				3.8		15.0			
2,2-Dichloropropane	0.0915 0.0867	0.0884	0.0888	0.0884	0.0896	Ave		0.0889				1.8		15.0			
2-Butanone (MEK)	0.0250 0.0203	0.0207	0.0206	0.0202	0.0199	Ave		0.0211				9.1		15.0			
Chlorobromomethane	0.1490 0.1374	0.1449	0.1452	0.1451	0.1425	Ave		0.1440				2.7		15.0			
Tetrahydrofuran	0.0654 0.0486	0.0574	0.0475	0.0490	0.0474	Ave		0.0526				14.0		15.0			
Chloroform	0.4702 0.4401	0.4549	0.4601	0.4542	0.4522	Ave		0.4553				2.2		15.0			
1,1,1-Trichloroethane	0.4008 0.4063	0.4114	0.4159	0.4099	0.4153	Ave		0.4100				1.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.4370 0.4135	0.4233	0.4223	0.4167	0.4262	Ave		0.4232				1.9		15.0			
1,1-Dichloropropene	0.3743 0.3536	0.3795	0.3718	0.3710	0.3626	Ave		0.3688				2.5		15.0			
Carbon tetrachloride	0.3477 0.3720	0.3559	0.3693	0.3681	0.3752	Ave		0.3647				2.9		15.0			
Isobutyl alcohol	0.0049 0.0043	0.0044	0.0045	0.0046	0.0042	Ave		0.0045				5.3		15.0			
Benzene	1.2010 1.0461	1.1411	1.0798	1.0653	1.0477	Ave		1.0968				5.6		15.0			
1,2-Dichloroethane	0.3411 0.3175	0.3231	0.3274	0.3265	0.3220	Ave		0.3263				2.5		15.0			
n-Heptane	0.0498 0.0480	0.0560	0.0483	0.0455	0.0492	Ave		0.0495				7.1		15.0			
Trichloroethene	0.3118 0.2826	0.3021	0.2966	0.2911	0.2845	Ave		0.2948				3.8		15.0			
Methylcyclohexane	0.3833 0.3620	0.3762	0.3566	0.3621	0.3694	Ave		0.3683				2.7		15.0			
1,2-Dichloropropane	0.2360 0.2274	0.2187	0.2263	0.2276	0.2272	Ave		0.2272				2.4		15.0			
Dibromomethane	0.1384 0.1274	0.1289	0.1310	0.1317	0.1301	Ave		0.1312				2.9		15.0			
1,4-Dioxane	0.0018 0.0009	0.0021	0.0018	0.0018	0.0016	Qua	-0.016	0.0023	-0.000002						0.9980		0.9900
Dichlorobromomethane	0.2759 0.3033	0.2804	0.2834	0.2964	0.2965	Ave		0.2893				3.8		15.0			
2-Chloroethyl vinyl ether	0.0711 0.0876	0.0746	0.0752	0.0804	0.0825	Ave		0.0786				7.7		15.0			
cis-1,3-Dichloropropene	0.2804 0.3428	0.2988	0.3091	0.3239	0.3343	Ave		0.3149				7.4		15.0			
4-Methyl-2-pentanone (MIBK)	0.1544 0.1523	0.1447	0.1540	0.1535	0.1510	Ave		0.1517				2.4		15.0			
Toluene	1.4749 1.4887	1.5001	1.4604	1.4518	1.4917	Ave		1.4780				1.3		15.0			
trans-1,3-Dichloropropene	0.3347 0.4117	0.3596	0.3694	0.3885	0.4080	Ave		0.3786				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.2809 0.2972	0.2641	0.2863	0.2828	0.3017	Ave		0.2855				4.7		15.0			
1,1,2-Trichloroethane	0.2563 0.2365	0.2382	0.2409	0.2401	0.2429	Ave		0.2425				2.9		15.0			
Tetrachloroethene	0.3037 0.3079	0.3201	0.3113	0.3119	0.3130	Ave		0.3113				1.8		15.0			
1,3-Dichloropropane	0.4197 0.4167	0.4153	0.4127	0.4196	0.4177	Ave		0.4170				0.7		15.0			
2-Hexanone	0.1501 0.1200	0.1443	0.1446	0.1397	0.1337	Ave		0.1387				7.7		15.0			
Chlorodibromomethane	0.2323 0.2923	0.2465	0.2649	0.2741	0.2887	Ave		0.2665				8.9		15.0			
Ethylene Dibromide	0.2344 0.2310	0.2379	0.2318	0.2314	0.2384	Ave		0.2342				1.4		15.0			
Chlorobenzene	0.9136 0.8959	0.8886	0.9073	0.8926	0.9138	Ave		0.9020			0.3000	1.2		15.0			
1,1,1,2-Tetrachloroethane	0.3709 0.3850	0.3637	0.3673	0.3752	0.3934	Ave		0.3759				3.0		15.0			
Ethylbenzene	0.4869 0.4992	0.4811	0.4884	0.4972	0.5040	Ave		0.4928				1.8		15.0			
m-Xylene & p-Xylene	1.1891 1.2048	1.1647	1.1868	1.1935	1.2334	Ave		1.1954				1.9		15.0			
o-Xylene	0.6311 0.6468	0.6392	0.6438	0.6364	0.6572	Ave		0.6424				1.4		15.0			
Styrene	0.7794 0.8791	0.7890	0.8297	0.8434	0.8787	Ave		0.8332				5.1		15.0			
Bromoform	0.1330 0.1936	0.1599	0.1548	0.1634	0.1838	Ave		0.1647			0.1000	13.1		15.0			
Isopropylbenzene	1.5146 1.6219	1.5392	1.5891	1.5922	1.6570	Ave		1.5857				3.3		15.0			
1,1,2,2-Tetrachloroethane	0.4957 0.5275	0.4849	0.5173	0.5132	0.5314	Ave		0.5117			0.3000	3.5		15.0			
Bromobenzene	0.7097 0.7040	0.7113	0.6942	0.7071	0.6981	Ave		0.7041				1.0		15.0			
1,2,3-Trichloropropane	0.1614 0.1668	0.1728	0.1633	0.1647	0.1668	Ave		0.1660				2.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.0847 0.1203	0.1398	0.0974	0.1090	0.1210	Lin1	-0.024	0.1194							0.9950		0.9900
N-Propylbenzene	0.6653 0.7317	0.6810	0.6868	0.6968	0.7241	Ave		0.6976				3.7		15.0			
2-Chlorotoluene	0.6141 0.6675	0.6391	0.6443	0.6600	0.6600	Ave		0.6475				3.0		15.0			
1,3,5-Trimethylbenzene	2.0712 2.3194	2.1346	2.1473	2.2049	2.2987	Ave		2.1960				4.4		15.0			
4-Chlorotoluene	2.0606 2.0977	2.0703	2.0407	2.0504	2.0938	Ave		2.0689				1.1		15.0			
tert-Butylbenzene	1.7730 1.9620	1.8289	1.8362	1.8968	1.9663	Ave		1.8772				4.2		15.0			
1,2,4-Trimethylbenzene	2.0752 2.3637	2.2175	2.2267	2.2798	2.3497	Ave		2.2521				4.7		15.0			
sec-Butylbenzene	2.3353 2.5702	2.4193	2.4140	2.5090	2.5980	Ave		2.4743				4.1		15.0			
1,3-Dichlorobenzene	1.3198 1.2859	1.3553	1.3336	1.3113	1.3072	Ave		1.3189				1.8		15.0			
4-Isopropyltoluene	2.0713 2.3030	2.2050	2.1642	2.2210	2.3142	Ave		2.2131				4.1		15.0			
1,4-Dichlorobenzene	1.4231 1.3122	1.4118	1.3771	1.3493	1.3452	Ave		1.3698				3.1		15.0			
n-Butylbenzene	1.7422 1.7773	1.8664	1.7621	1.7842	1.8219	Ave		1.7923				2.5		15.0			
1,2-Dichlorobenzene	1.3707 1.3458	1.3830	1.3899	1.3753	1.3705	Ave		1.3725				1.1		15.0			
1,2-Dibromo-3-Chloropropane	0.0946 0.1206	0.1171	0.1126	0.1149	0.1172	Ave		0.1128				8.3		15.0			
1,2,4-Trichlorobenzene	1.0114 0.9190	1.1387	1.0099	0.9964	0.9699	Ave		1.0075				7.2		15.0			
Hexachlorobutadiene	0.5947 0.3863	0.5965	0.4754	0.4514	0.4287	Lin1	0.2952	0.3966							0.9960		0.9900
Naphthalene	2.0025 2.1634	2.1584	2.1858	2.1964	2.1872	Ave		2.1490				3.4		15.0			
1,2,3-Trichlorobenzene	0.9724 0.8555	1.1085	0.9556	0.9345	0.9096	Ave		0.9560				8.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2421 0.2237	0.2290	0.2413	0.2339	0.2324	Ave		0.2337				3.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2760 0.2495	0.2670	0.2708	0.2600	0.2566	Ave		0.2633				3.7		15.0			
Toluene-d8 (Surr)	1.2309 1.2106	1.2019	1.2453	1.2250	1.2394	Ave		1.2255				1.4		15.0			
4-Bromofluorobenzene (Surr)	0.4300 0.3945	0.4096	0.4208	0.4175	0.4149	Ave		0.4145				2.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-476941/7	UXC5649.D
Level 2	STD8260 240-476941/6	UXC5648.D
Level 3	STD8260 240-476941/5	UXC5647.D
Level 4	STD8260 240-476941/4	UXC5646.D
Level 5	STD8260 240-476941/3	UXC5645.D
Level 6	STD8260 240-476941/2	UXC5644.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	47955 1985876	96788	236340	505763	1015755	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	58389 2137858	109132	278892	581954	1076987	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	46845 1867423	107404	218141	435655	1053493	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	69152 2331823	116788	299854	603954	1175768	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	41750 1571689	88628	185985	359282	834840	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	37706 1352876	71803	171841	331296	724185	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	98585 3604788	197535	454576	917387	1828501	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	86296 3464762	169605	399090	821375	1796517	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	40718 1648971	83944	199967	402519	824901	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Lin	9294 523416	42337	65464	127991	249680	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	39151 1987280	97460	236738	474847	1020497	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	33084 1754372	74912	194077	394578	876594	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	7111 259443	15117	28520	61024	129995	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	61380 2924204	140257	348537	720329	1762805	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	116874 5211254	286182	614828	1273944	2970031	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	22980 1200557	54960	137672	282597	606147	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	39316 1761410	79302	204142	411585	869993	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	41550 1768190	90541	214303	430176	925140	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	20999 966491	44457	117539	237680	475246	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	102496 4734494	216160	541571	1114638	2316749	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	105442 4898428	220217	559170	1151185	2438583	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	45650 1888831	94914	228419	473854	977825	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	9581 392577	18928	41895	94360	197372	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	70364 3082713	148843	364589	747006	1559420	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	52739 3014699	113199	304236	650063	1435718	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	47902 2005786	101403	244751	489671	1027988	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	13807 603120	28276	70219	144526	309943	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	7540 281791	13268	32640	66059	137808	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	22476 955220	46356	114745	237215	492922	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	19738 676139	36744	75127	160132	327685	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	70935 3059766	145589	363680	742858	1563762	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	60467 2825060	131645	328759	670415	1436238	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	65918 2874773	135465	333807	681490	1474122	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	56469 2458560	121447	293864	606744	1253974	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	52456 2586568	113888	291902	601989	1297566	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	18341 742762	35137	89469	186811	364589	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	181175 7273390	365182	853447	1742135	3623322	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	51453 2207739	103413	258800	533877	1113535	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	7518 334066	17934	38208	74441	170034	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	47038 1964997	96690	234414	476021	983943	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	57824 2517271	120389	281838	592186	1277610	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	35608 1581278	69979	178849	372280	785821	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	20875 885521	41243	103540	215335	449938	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	5574 120475	13582	28764	59463	110747	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	41626 2108837	89718	224007	484704	1025475	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	21442 1217878	47750	118901	263000	570636	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	42305 2383514	95626	244291	529695	1156157	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	46573 2117506	92610	243498	502124	1044731	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	148278	307593	756651	1573355	3370989	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			7004750					40.0				
trans-1,3-Dichloropropene	CBNZ d5	Ave	33643 1937105	73739	191368	420983	922042	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	28235 1398285	54155	148354	306515	681749	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	25770 1112850	48837	124819	260222	549002	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	30533 1448870	65641	161314	338041	707318	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	42197 1960760	85147	213808	454762	943985	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	30177 1128839	59188	149884	302863	604348	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	23357 1375317	50550	137225	297016	652498	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	23568 1087018	48784	120100	250735	538641	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	91842 4215604	182215	470075	967329	2065080	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	37283 1811750	74581	190281	406561	888983	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	48952 2348653	98654	253063	538828	1138861	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	119546	238816	614921	1293431	2787248	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5668949					40.0				
o-Xylene	CBNZ d5	Ave	63450 3043471	131067	333576	689690	1485220	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	78354 4136534	161777	429902	913969	1985697	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	13367 910703	32788	80220	177112	415352	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	152266 7631521	315606	823347	1725432	3744436	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	30042 1413960	58976	160683	328387	704816	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	43010 1887184	86512	215609	452432	925930	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	9782 447188	21011	50734	105370	221278	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	5133 322478	17008	30267	69740	160485	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	40320 1961209	82831	213311	445896	960393	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	37216 1789216	77726	200124	422328	875326	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	125526 6217268	259616	666934	1410902	3048822	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	124885	251801	633815	1311993	2777057	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5622899					40.0				
tert-Butylbenzene	DCBd 4	Ave	107456 5259257	222437	570303	1213704	2608022	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	125769 6336062	269709	691594	1458830	3116448	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	141534 6889593	294251	749769	1605451	3445811	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	79988 3446839	164834	414203	839103	1733837	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	125533 6173286	268187	672177	1421147	3069390	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	86247 3517407	171714	427734	863405	1784216	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	105585 4764027	226998	547299	1141647	2416429	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	83074 3607534	168210	431687	880005	1817774	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5731 323157	14241	34964	73534	155451	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	61295 2463296	138494	313669	637594	1286481	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Lin1	36040 1035440	72546	147661	288855	568587	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	121361	262519	678882	1405465	2900947	1.00	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 476941

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/16/2021 08:36 Calibration End Date: 03/16/2021 10:39 Calibration ID: 60823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
			5799160					40.0				
1,2,3-Trichlorobenzene	DCBd 4	Ave	58935 2293306	134820	296808	597963	1206461	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	36526 1555302	73272	190756	382556	803605	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	41633 1734501	85434	214048	425239	887545	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	123741 5696194	246447	645215	1327515	2800914	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	43228 1856230	83987	218006	452465	937497	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2021 08:36:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-002
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:38 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:13:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1738218	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1176310	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	87	670129	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	1555302	40.0	38.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	1734501	40.0	37.9	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	5696194	40.0	39.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	1856230	40.0	38.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1985876	40.0	37.9	
10 Chloromethane	50	1.574	1.574	0.000	99	2137858	40.0	35.9	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1867423	40.0	36.6	
12 Butadiene	54	1.669	1.681	-0.012	99	2331823	40.0	35.8	
13 Bromomethane	94	1.918	1.918	0.000	91	1571689	40.0	36.8	
14 Chloroethane	64	2.001	2.001	0.000	100	1352876	40.0	36.0	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	3604788	40.0	36.0	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	3464762	40.0	38.2	
17 Ethyl ether	59	2.404	2.416	-0.012	91	1648971	40.0	37.8	
18 Acrolein	56	2.523	2.523	0.000	99	523416	200.0	201.9	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1987280	40.0	39.5	
20 112TCTFE	151	2.629	2.629	0.000	95	1754372	40.0	41.9	
21 Acetone	58	2.653	2.653	0.000	100	259443	80.0	73.8	
22 Iodomethane	142	2.736	2.748	-0.012	98	2924204	40.0	38.0	
24 Carbon disulfide	76	2.796	2.796	0.000	100	5211254	40.0	37.2	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	1200557	40.0	40.7	
27 Methyl acetate	43	2.914	2.914	0.000	97	1761410	80.0	79.8	
28 Methylene Chloride	84	2.997	3.009	-0.012	92	1768190	40.0	37.8	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	99	966491	400.0	393.1	
30 Acrylonitrile	53	3.211	3.211	0.000	99	4734494	400.0	401.3	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	4898428	40.0	40.2	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	1888831	40.0	37.6	
34 Hexane	86	3.436	3.436	0.000	92	392577	40.0	39.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	3082713	40.0	38.8	
36 Vinyl acetate	43	3.602	3.602	0.000	97	3014699	40.0	44.6	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	99	281791	80.0	76.7	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	82	603120	40.0	39.0	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.011	82	2005786	40.0	37.8	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	955220	40.0	38.2	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	676139	80.0	74.0	
48 Chloroform	83	4.302	4.302	0.000	93	3059766	40.0	38.7	
49 1,1,1-Trichloroethane	97	4.456	4.468	-0.012	98	2825060	40.0	39.6	
50 Cyclohexane	56	4.503	4.503	0.000	90	2874773	40.0	39.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	95	2586568	40.0	40.8	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	2458560	40.0	38.4	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	742762	1000.0	955.2	
55 Benzene	78	4.764	4.776	-0.012	95	7273390	40.0	38.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	2207739	40.0	38.9	
58 n-Heptane	100	4.966	4.966	0.000	91	334066	40.0	38.8	
60 Trichloroethene	130	5.298	5.298	0.000	96	1964997	40.0	38.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	2517271	40.0	39.3	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	1581278	40.0	40.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	89	120475	800.0	492.5	
65 Dibromomethane	93	5.606	5.606	0.000	90	885521	40.0	38.8	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	2108837	40.0	41.9	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	93	1217878	80.0	89.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	96	2383514	40.0	43.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	2117506	80.0	80.3	
72 Toluene	91	6.412	6.412	0.000	98	7004750	40.0	40.3	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	1937105	40.0	43.5	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	1398285	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	1112850	40.0	39.0	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	1448870	40.0	39.6	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	1960760	40.0	40.0	
78 2-Hexanone	43	6.982	6.982	0.000	96	1128839	80.0	69.2	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	1375317	40.0	43.9	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	1087018	40.0	39.5	
84 Chlorobenzene	112	7.681	7.681	0.000	95	4215604	40.0	39.7	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	1811750	40.0	41.0	
86 Ethylbenzene	106	7.776	7.776	0.000	98	2348653	40.0	40.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	92	5668949	40.0	40.3	
88 o-Xylene	106	8.262	8.262	0.000	97	3043471	40.0	40.3	
89 Styrene	104	8.274	8.274	0.000	93	4136534	40.0	42.2	
90 Bromoform	173	8.464	8.464	0.000	98	910703	40.0	47.0	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	7631521	40.0	40.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	1413960	40.0	41.2	
95 Bromobenzene	156	8.914	8.914	0.000	91	1887184	40.0	40.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	447188	40.0	40.2	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	92	322478	40.0	40.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	1961209	40.0	42.0	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	1789216	40.0	41.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	6217268	40.0	42.2	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	5622899	40.0	40.6	
104 tert-Butylbenzene	119	9.507	9.496	0.011	91	5259257	40.0	41.8	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	6336062	40.0	42.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	6889593	40.0	41.6	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	3446839	40.0	39.0	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	6173286	40.0	41.6	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	3517407	40.0	38.3	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	4764027	40.0	39.7	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	3607534	40.0	39.2	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	323157	40.0	42.7	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	2463296	40.0	36.5	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	1035440	40.0	38.2	
119 Naphthalene	128	12.128	12.128	0.000	96	5799160	40.0	40.3	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	2293306	40.0	35.8	
S 127 1,2-Dichloroethene, Total	96				0			75.5	
S 128 1,3-Dichloropropene, Total	75				0			87.0	
S 129 Xylenes, Total	106				0		80.0	80.6	
S 130 Total BTEX	1				0		200.0	199.5	
S 131 Trihalomethanes, Total	1				0		160.0	171.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_stk_00086	Amount Added:	32.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	32.00	Units: uL
VMAROLISTDW_00384	Amount Added:	32.00	Units: uL
VMRGAS_00377	Amount Added:	32.00	Units: uL

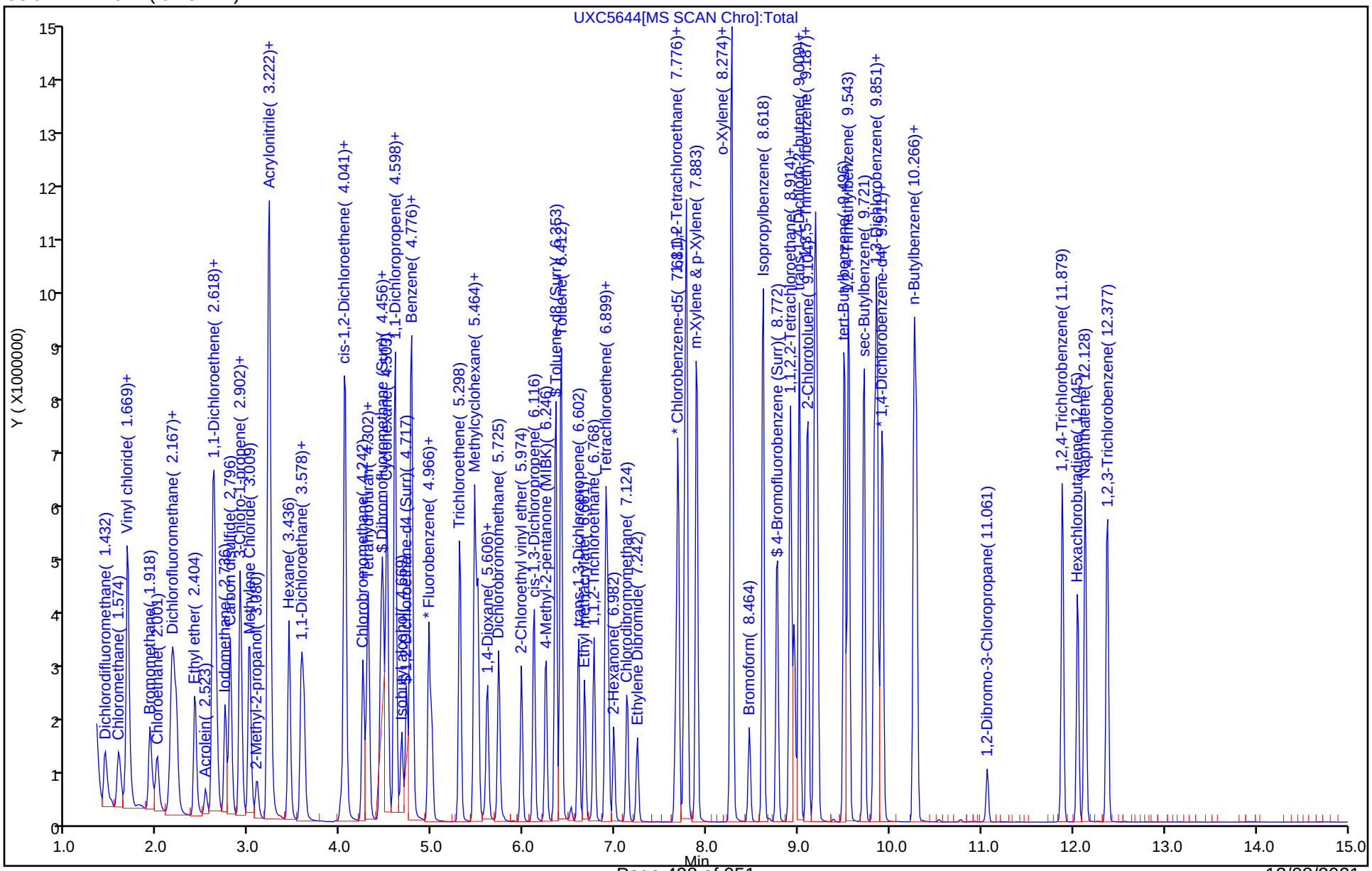
Report Date: 18-Mar-2021 09:00:39 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5644.D

Injection Date:	16-Mar-2021 08:36:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2021 08:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-003
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:45 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:18:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1729200	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1129906	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	663171	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	803605	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	887545	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	2800914	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	937497	20.0	20.0	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	1015755	20.0	19.5	
10 Chloromethane	50	1.574	1.574	0.000	99	1076987	20.0	18.2	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	1053493	20.0	20.7	
12 Butadiene	54	1.669	1.681	-0.012	99	1175768	20.0	18.2	
13 Bromomethane	94	1.918	1.918	0.000	90	834840	20.0	19.6	
14 Chloroethane	64	1.989	2.001	-0.012	100	724185	20.0	19.4	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	1828501	20.0	18.4	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	1796517	20.0	19.9	
17 Ethyl ether	59	2.404	2.416	-0.012	91	824901	20.0	19.0	
18 Acrolein	56	2.523	2.523	0.000	100	249680	100.0	95.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	1020497	20.0	20.4	
20 112TCTFE	151	2.629	2.629	0.000	92	876594	20.0	21.0	
21 Acetone	58	2.653	2.653	0.000	100	129995	40.0	37.2	
22 Iodomethane	142	2.736	2.748	-0.012	99	1762805	20.0	23.0	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	2970031	20.0	21.3	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	606147	20.0	20.6	
27 Methyl acetate	43	2.914	2.914	0.000	97	869993	40.0	39.6	
28 Methylene Chloride	84	3.009	3.009	0.000	92	925140	20.0	19.9	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	98	475246	200.0	194.3	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	2316749	200.0	197.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	2438583	20.0	20.1	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	977825	20.0	19.6	
34 Hexane	86	3.436	3.436	0.000	93	197372	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	1559420	20.0	19.7	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1435718	20.0	21.3	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	1027988	20.0	19.5	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	137808	40.0	37.7	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	83	309943	20.0	20.2	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	492922	20.0	19.8	
47 Tetrahydrofuran	42	4.278	4.278	0.000	86	327685	40.0	36.1	
48 Chloroform	83	4.301	4.302	-0.001	93	1563762	20.0	19.9	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	1436238	20.0	20.3	
50 Cyclohexane	56	4.503	4.503	0.000	90	1474122	20.0	20.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	1297566	20.0	20.6	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	1253974	20.0	19.7	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	364589	500.0	471.3	
55 Benzene	78	4.764	4.776	-0.012	95	3623322	20.0	19.1	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	1113535	20.0	19.7	
58 n-Heptane	100	4.966	4.966	0.000	90	170034	20.0	19.9	
60 Trichloroethene	130	5.298	5.298	0.000	96	983943	20.0	19.3	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	1277610	20.0	20.1	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	785821	20.0	20.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	37	110747	400.0	416.6	
65 Dibromomethane	93	5.606	5.606	0.000	91	449938	20.0	19.8	
67 Dichlorobromomethane	83	5.725	5.725	-0.001	99	1025475	20.0	20.5	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	570636	40.0	42.0	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	1156157	20.0	21.2	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	1044731	40.0	39.8	
72 Toluene	91	6.412	6.412	0.000	98	3370989	20.0	20.2	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	922042	20.0	21.6	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	681749	20.0	21.1	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	549002	20.0	20.0	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	707318	20.0	20.1	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	943985	20.0	20.0	
78 2-Hexanone	43	6.982	6.982	0.000	97	604348	40.0	38.6	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	652498	20.0	21.7	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	538641	20.0	20.4	
84 Chlorobenzene	112	7.681	7.681	0.000	95	2065080	20.0	20.3	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	95	888983	20.0	20.9	
86 Ethylbenzene	106	7.776	7.776	0.000	98	1138861	20.0	20.5	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	2787248	20.0	20.6	
88 o-Xylene	106	8.262	8.262	0.000	95	1485220	20.0	20.5	
89 Styrene	104	8.274	8.274	0.000	90	1985697	20.0	21.1	
90 Bromoform	173	8.464	8.464	0.000	98	415352	20.0	22.3	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	3744436	20.0	20.9	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	95	704816	20.0	20.8	
95 Bromobenzene	156	8.914	8.914	0.000	91	925930	20.0	19.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	221278	20.0	20.1	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	87	160485	20.0	20.5	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	960393	20.0	20.8	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	875326	20.0	20.4	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	3048822	20.0	20.9	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2777057	20.0	20.2	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	2608022	20.0	20.9	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	3116448	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	3445811	20.0	21.0	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	1733837	20.0	19.8	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	3069390	20.0	20.9	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	97	1784216	20.0	19.6	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	2416429	20.0	20.3	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	1817774	20.0	20.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	88	155451	20.0	20.8	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	1286481	20.0	19.3	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	568587	20.0	20.9	
119 Naphthalene	128	12.128	12.128	0.000	97	2900947	20.0	20.4	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	1206461	20.0	19.0	
S 127 1,2-Dichloroethene, Total	96				0			39.1	
S 128 1,3-Dichloropropene, Total	75				0			42.8	
S 129 Xylenes, Total	106				0		40.0	41.1	
S 130 Total BTEX	1				0		100.0	100.8	
S 131 Trihalomethanes, Total	1				0		80.0	84.3	

Reagents:

vm50ss_stk_00086	Amount Added:	16.00	Units: uL
VM50is_00086	Amount Added:	1.00	Units: uL
VMRPRIMW_00427	Amount Added:	16.00	Units: uL
VMAROLISTDW_00384	Amount Added:	16.00	Units: uL
VMRGAS_00377	Amount Added:	16.00	Units: uL

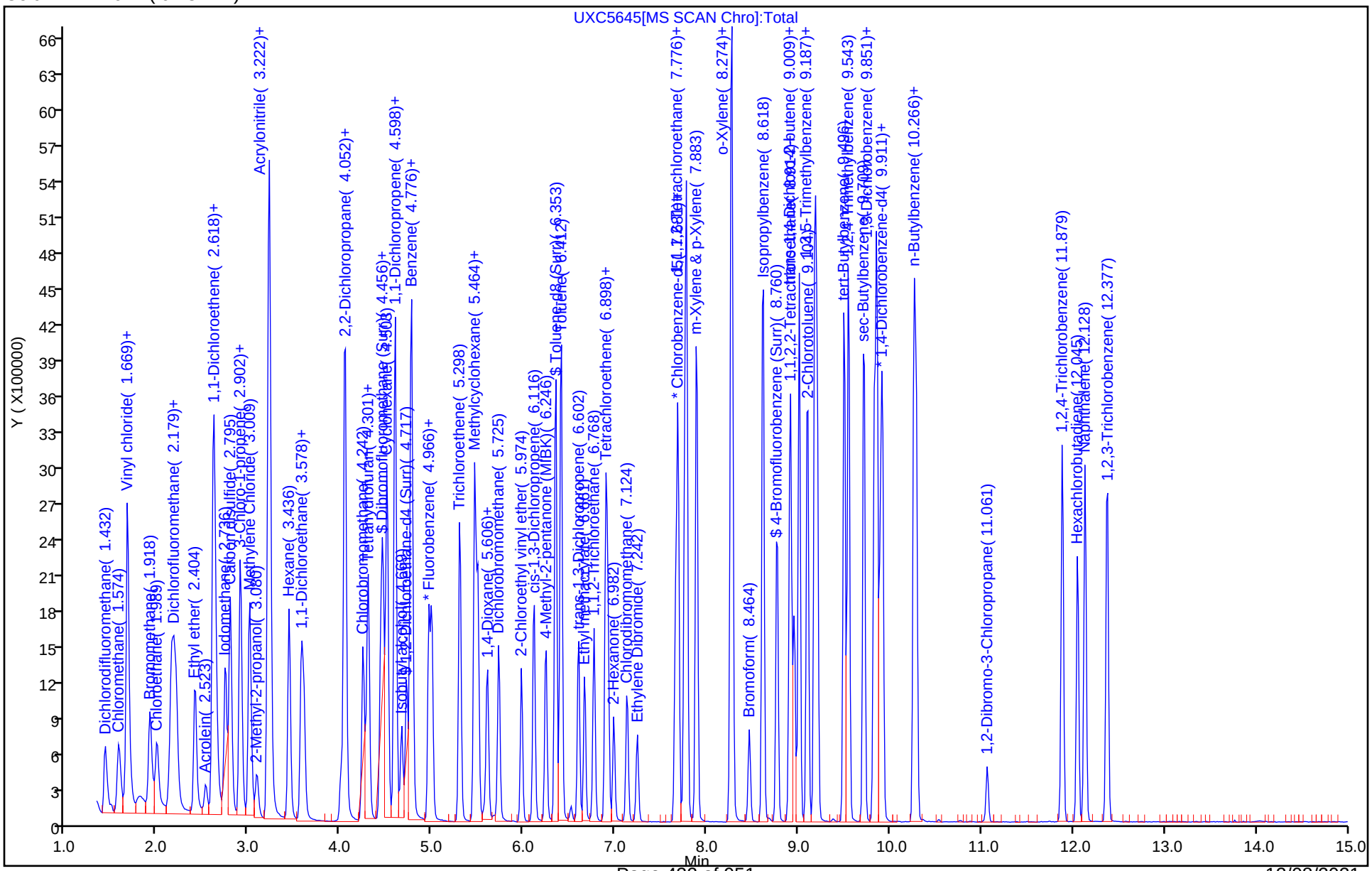
Report Date: 18-Mar-2021 09:00:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5645.D

Injection Date:	16-Mar-2021 08:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Mar-2021 09:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-004
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:51 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 10:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1635381	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	84	1083691	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	639882	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	382556	10.0	10.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	425239	10.0	9.88	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1327515	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	452465	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	505763	10.0	10.3	
10 Chloromethane	50	1.574	1.574	0.000	99	581954	10.0	10.4	
11 Vinyl chloride	62	1.669	1.669	0.000	97	435655	10.0	9.07	
12 Butadiene	54	1.681	1.681	0.000	99	603954	10.0	9.86	
13 Bromomethane	94	1.918	1.918	0.000	91	359282	10.0	8.93	
14 Chloroethane	64	2.001	2.001	0.000	100	331296	10.0	9.36	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	917387	10.0	9.74	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	97	821375	10.0	9.64	
17 Ethyl ether	59	2.416	2.416	0.000	90	402519	10.0	9.80	
18 Acrolein	56	2.523	2.523	0.000	99	127991	50.0	50.5	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	474847	10.0	10.0	
20 112TCTFE	151	2.629	2.629	0.000	93	394578	10.0	10.0	
21 Acetone	58	2.653	2.653	0.000	100	61024	20.0	18.5	
22 Iodomethane	142	2.748	2.748	0.000	98	720329	10.0	9.95	
24 Carbon disulfide	76	2.796	2.796	0.000	100	1273944	10.0	9.67	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	90	282597	10.0	10.2	
27 Methyl acetate	43	2.914	2.914	0.000	98	411585	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	430176	10.0	9.78	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	237680	100.0	102.8	
30 Acrylonitrile	53	3.211	3.211	0.000	99	1114638	100.0	100.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	97	1151185	10.0	10.0	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	473854	10.0	10.0	
34 Hexane	86	3.436	3.436	0.000	92	94360	10.0	9.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	747006	10.0	9.99	
36 Vinyl acetate	43	3.602	3.602	0.000	97	650063	10.0	10.2	
42 2,2-Dichloropropane	97	4.053	4.053	0.000	80	144526	10.0	9.94	
41 cis-1,2-Dichloroethene	96	4.053	4.053	0.000	82	489671	10.0	9.82	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	100	66059	20.0	19.1	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	237215	10.0	10.1	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	160132	20.0	18.6	
48 Chloroform	83	4.302	4.302	0.000	93	742858	10.0	9.98	
49 1,1,1-Trichloroethane	97	4.468	4.468	0.000	98	670415	10.0	10.0	
50 Cyclohexane	56	4.503	4.503	0.000	90	681490	10.0	9.85	
52 Carbon tetrachloride	117	4.598	4.598	0.000	93	601989	10.0	10.1	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	606744	10.0	10.1	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	186811	250.0	255.3	
55 Benzene	78	4.776	4.776	0.000	95	1742135	10.0	9.71	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	533877	10.0	10.0	
58 n-Heptane	100	4.966	4.966	0.000	91	74441	10.0	9.20	
60 Trichloroethene	130	5.298	5.298	0.000	97	476021	10.0	9.87	
62 Methylcyclohexane	83	5.464	5.464	0.000	88	592186	10.0	9.83	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	372280	10.0	10.0	
66 1,4-Dioxane	88	5.606	5.606	0.000	85	59463	200.0	191.9	
65 Dibromomethane	93	5.606	5.606	0.000	91	215335	10.0	10.0	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	484704	10.0	10.2	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	263000	20.0	20.5	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	529695	10.0	10.3	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	502124	20.0	20.2	
72 Toluene	91	6.412	6.412	0.000	98	1573355	10.0	9.82	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	420983	10.0	10.3	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	306515	10.0	9.91	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	260222	10.0	9.90	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	338041	10.0	10.0	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	454762	10.0	10.1	
78 2-Hexanone	43	6.982	6.982	0.000	97	302863	20.0	20.1	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	297016	10.0	10.3	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	250735	10.0	9.88	
84 Chlorobenzene	112	7.681	7.681	0.000	95	967329	10.0	9.90	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	406561	10.0	9.98	
86 Ethylbenzene	106	7.776	7.776	0.000	98	538828	10.0	10.1	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1293431	10.0	9.98	
88 o-Xylene	106	8.262	8.262	0.000	96	689690	10.0	9.91	
89 Styrene	104	8.274	8.274	0.000	93	913969	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	98	177112	10.0	9.92	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1725432	10.0	10.0	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	328387	10.0	10.0	
95 Bromobenzene	156	8.914	8.914	0.000	90	452432	10.0	10.0	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	105370	10.0	9.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	73	69740	10.0	9.32	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	445896	10.0	9.99	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	422328	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	1410902	10.0	10.0	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1311993	10.0	9.91	
104 tert-Butylbenzene	119	9.496	9.496	0.000	91	1213704	10.0	10.1	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1458830	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	1605451	10.0	10.1	
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	839103	10.0	9.94	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1421147	10.0	10.0	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	863405	10.0	9.85	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1141647	10.0	9.95	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	99	880005	10.0	10.0	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	87	73534	10.0	10.2	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	637594	10.0	9.89	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	288855	10.0	10.6	
119 Naphthalene	128	12.128	12.128	0.000	96	1405465	10.0	10.2	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	597963	10.0	9.77	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.5	
S 131 Trihalomethanes, Total	1				0		40.0	40.4	

QC Flag Legend

Processing Flags

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	8.00	Units: uL
VMAROLISTDW_00384	Amount Added:	8.00	Units: uL
VMRPRIMW_00427	Amount Added:	8.00	Units: uL
VMRGAS_00377	Amount Added:	8.00	Units: uL

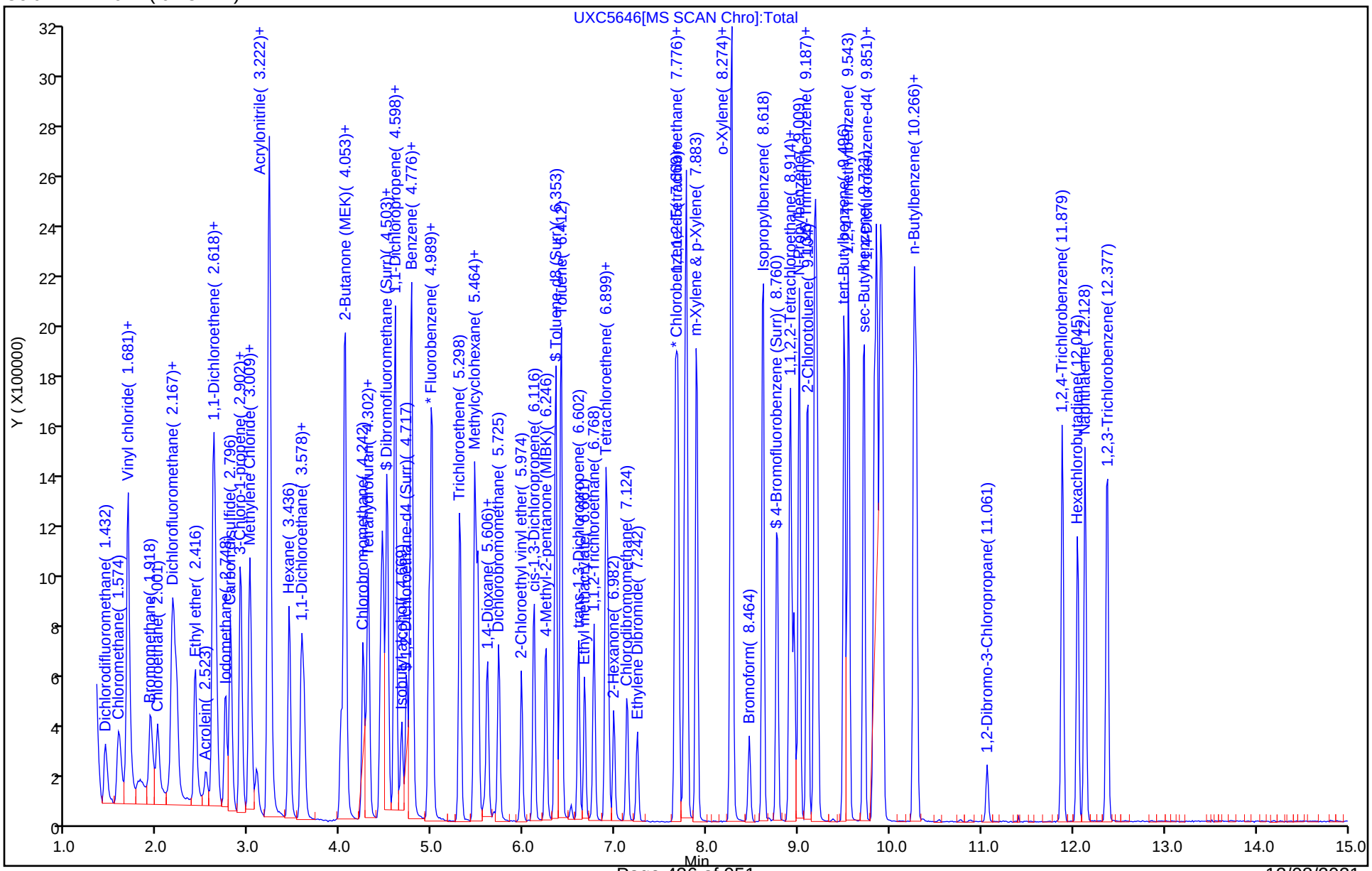
Report Date: 18-Mar-2021 09:00:52 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5646.D

Injection Date:	16-Mar-2021 09:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Mar-2021 09:42:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-005
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:00:57 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	100	1580769	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1036230	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	93	621189	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	190756	5.00	5.16	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	214048	5.00	5.14	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	645215	5.00	5.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	218006	5.00	5.08	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	236340	5.00	4.96	
10 Chloromethane	50	1.574	1.574	0.000	99	278892	5.00	5.15	
11 Vinyl chloride	62	1.669	1.669	0.000	98	218141	5.00	4.70	
12 Butadiene	54	1.681	1.681	0.000	99	299854	5.00	5.06	
13 Bromomethane	94	1.918	1.918	0.000	90	185985	5.00	4.78	
14 Chloroethane	64	2.001	2.001	0.000	100	171841	5.00	5.02	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	454576	5.00	5.00	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	399090	5.00	4.84	
17 Ethyl ether	59	2.416	2.416	0.000	90	199967	5.00	5.04	
18 Acrolein	56	2.523	2.523	0.000	98	65464	25.0	25.4	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	236738	5.00	5.18	
20 112TCTFE	151	2.629	2.629	0.000	93	194077	5.00	5.09	
21 Acetone	58	2.653	2.653	0.000	98	28520	10.0	8.92	
22 Iodomethane	142	2.736	2.748	-0.012	99	348537	5.00	4.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	614828	5.00	4.83	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	137672	5.00	5.13	
27 Methyl acetate	43	2.914	2.914	0.000	98	204142	10.0	10.2	
28 Methylene Chloride	84	3.009	3.009	0.000	92	214303	5.00	5.04	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	98	117539	50.0	52.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	98	541571	50.0	50.5	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	559170	5.00	5.04	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	228419	5.00	5.00	
34 Hexane	86	3.436	3.436	0.000	92	41895	5.00	4.58	
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	364589	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	97	304236	5.00	4.95	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	99	32640	10.0	9.77	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	81	70219	5.00	5.00	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	85	244751	5.00	5.08	
46 Chlorobromomethane	128	4.242	4.242	0.000	94	114745	5.00	5.04	
47 Tetrahydrofuran	42	4.278	4.278	0.000	88	75127	10.0	9.04	
48 Chloroform	83	4.301	4.302	-0.001	94	363680	5.00	5.05	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	328759	5.00	5.07	
50 Cyclohexane	56	4.503	4.503	0.000	90	333807	5.00	4.99	
52 Carbon tetrachloride	117	4.598	4.598	0.000	94	291902	5.00	5.06	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	293864	5.00	5.04	
53 Isobutyl alcohol	41	4.669	4.669	0.000	95	89469	125.0	126.5	
55 Benzene	78	4.776	4.776	0.000	95	853447	5.00	4.92	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	258800	5.00	5.02	
58 n-Heptane	100	4.966	4.966	0.000	91	38208	5.00	4.88	
60 Trichloroethene	130	5.298	5.298	0.000	96	234414	5.00	5.03	
62 Methylcyclohexane	83	5.464	5.464	0.000	89	281838	5.00	4.84	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	94	178849	5.00	4.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	38	28764	100.0	91.7	
65 Dibromomethane	93	5.606	5.606	0.000	90	103540	5.00	4.99	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	224007	5.00	4.90	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	93	118901	10.0	9.57	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	244291	5.00	4.91	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	243498	10.0	10.2	
72 Toluene	91	6.412	6.412	0.000	98	756651	5.00	4.94	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	191368	5.00	4.88	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	148354	5.00	5.01	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	92	124819	5.00	4.97	
76 Tetrachloroethene	164	6.898	6.899	-0.001	98	161314	5.00	5.00	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	213808	5.00	4.95	
78 2-Hexanone	43	6.981	6.982	-0.001	97	149884	10.0	10.4	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	137225	5.00	4.97	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	120100	5.00	4.95	
84 Chlorobenzene	112	7.681	7.681	0.000	97	470075	5.00	5.03	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	190281	5.00	4.88	
86 Ethylbenzene	106	7.776	7.776	0.000	98	253063	5.00	4.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	614921	5.00	4.96	
88 o-Xylene	106	8.262	8.262	0.000	96	333576	5.00	5.01	
89 Styrene	104	8.274	8.274	0.000	93	429902	5.00	4.98	
90 Bromoform	173	8.464	8.464	0.000	98	80220	5.00	4.70	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	823347	5.00	5.01	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	96	160683	5.00	5.06	
95 Bromobenzene	156	8.914	8.914	0.000	90	215609	5.00	4.93	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	85	50734	5.00	4.92	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	70	30267	5.00	4.28	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	213311	5.00	4.92	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	200124	5.00	4.98	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	666934	5.00	4.89	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	633815	5.00	4.93	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	570303	5.00	4.89	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	691594	5.00	4.94	
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	749769	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	98	414203	5.00	5.06	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	96	672177	5.00	4.89	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	427734	5.00	5.03	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	547299	5.00	4.92	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	431687	5.00	5.06	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	34964	5.00	4.99	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	313669	5.00	5.01	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	147661	5.00	5.25	
119 Naphthalene	128	12.128	12.128	0.000	96	678882	5.00	5.09	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	296808	5.00	5.00	
S 127 1,2-Dichloroethene, Total	96				0			10.1	
S 128 1,3-Dichloropropene, Total	75				0			9.79	
S 129 Xylenes, Total	106				0		10.0	9.97	
S 130 Total BTEX	1				0		25.0	24.8	
S 131 Trihalomethanes, Total	1				0		20.0	19.6	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	4.00	Units: uL
VMRPRIMW_00427	Amount Added:	4.00	Units: uL
VMRGAS_00377	Amount Added:	4.00	Units: uL
VMAROLISTDW_00384	Amount Added:	4.00	Units: uL

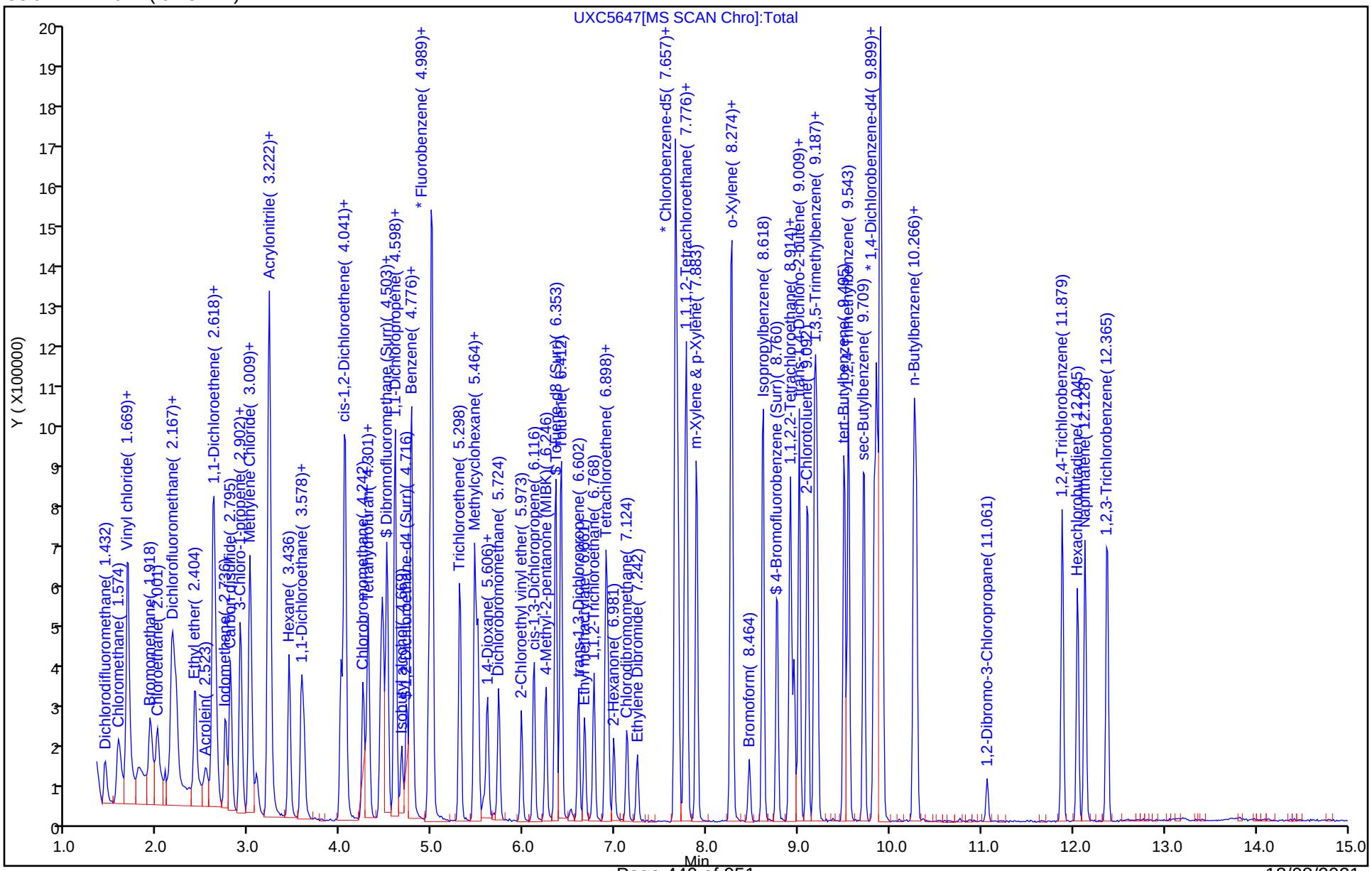
Report Date: 18-Mar-2021 09:00:58 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5647.D

Injection Date:	16-Mar-2021 09:42:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2021 10:17:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-006
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:02 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 11:41:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1600104	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1025239	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	608128	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	73272	2.00	1.96	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	85434	2.00	2.03	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	246447	2.00	1.96	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	83987	2.00	1.98	
9 Dichlorodifluoromethane	85	1.420	1.432	-0.012	99	96788	2.00	2.01	
10 Chloromethane	50	1.574	1.574	0.000	99	109132	2.00	1.99	
11 Vinyl chloride	62	1.657	1.669	-0.012	98	107404	2.00	2.29	
12 Butadiene	54	1.669	1.681	-0.012	99	116788	2.00	1.95	
13 Bromomethane	94	1.918	1.918	0.000	91	88628	2.00	2.25	
14 Chloroethane	64	1.989	2.001	-0.012	99	71803	2.00	2.07	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	197535	2.00	2.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	169605	2.00	2.03	
17 Ethyl ether	59	2.404	2.416	-0.012	89	83944	2.00	2.09	
18 Acrolein	56	2.523	2.523	0.000	97	42337	10.0	15.3	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	99	97460	2.00	2.11	
20 112TCTFE	151	2.617	2.629	-0.012	90	74912	2.00	1.94	
21 Acetone	58	2.653	2.653	0.000	97	15117	4.00	4.67	
22 Iodomethane	142	2.736	2.748	-0.012	99	140257	2.00	1.98	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	286182	2.00	2.22	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	87	54960	2.00	2.02	
27 Methyl acetate	43	2.914	2.914	0.000	97	79302	4.00	3.90	
28 Methylene Chloride	84	3.009	3.009	0.000	91	90541	2.00	2.10	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	97	44457	20.0	19.6	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	216160	20.0	19.9	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	95	220217	2.00	1.96	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	94	94914	2.00	2.05	
34 Hexane	86	3.436	3.436	0.000	93	18928	2.00	2.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	97	148843	2.00	2.03	
36 Vinyl acetate	43	3.602	3.602	0.000	97	113199	2.00	1.82	
41 cis-1,2-Dichloroethene	96	4.041	4.053	-0.012	81	101403	2.00	2.08	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	45	13268	4.00	3.93	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	76	28276	2.00	1.99	
46 Chlorobromomethane	128	4.242	4.242	0.000	93	46356	2.00	2.01	
47 Tetrahydrofuran	42	4.290	4.278	0.012	87	36744	4.00	4.37	
48 Chloroform	83	4.301	4.302	-0.001	93	145589	2.00	2.00	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	131645	2.00	2.01	
50 Cyclohexane	56	4.503	4.503	0.000	90	135465	2.00	2.00	
52 Carbon tetrachloride	117	4.598	4.598	0.000	96	113888	2.00	1.95	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	94	121447	2.00	2.06	
53 Isobutyl alcohol	41	4.669	4.669	0.000	91	35137	50.0	49.1	
55 Benzene	78	4.764	4.776	-0.012	95	365182	2.00	2.08	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	103413	2.00	1.98	
58 n-Heptane	100	4.965	4.966	-0.001	91	17934	2.00	2.26	
60 Trichloroethene	130	5.298	5.298	0.000	94	96690	2.00	2.05	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	120389	2.00	2.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	69979	2.00	1.92	
66 1,4-Dioxane	88	5.606	5.606	0.000	41	13582	40.0	44.9	
65 Dibromomethane	93	5.594	5.606	-0.012	89	41243	2.00	1.96	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	89718	2.00	1.94	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	91	47750	4.00	3.80	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	95626	2.00	1.90	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	96	92610	4.00	3.82	
72 Toluene	91	6.412	6.412	0.000	98	307593	2.00	2.03	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	93	73739	2.00	1.90	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	54155	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	48837	2.00	1.96	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	65641	2.00	2.06	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	90	85147	2.00	1.99	
78 2-Hexanone	43	6.981	6.982	-0.001	97	59188	4.00	4.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	50550	2.00	1.85	
82 Ethylene Dibromide	107	7.242	7.242	0.000	97	48784	2.00	2.03	
84 Chlorobenzene	112	7.681	7.681	0.000	95	182215	2.00	1.97	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	74581	2.00	1.94	
86 Ethylbenzene	106	7.776	7.776	0.000	98	98654	2.00	1.95	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	238816	2.00	1.95	
88 o-Xylene	106	8.262	8.262	0.000	96	131067	2.00	1.99	
89 Styrene	104	8.274	8.274	0.000	91	161777	2.00	1.89	
90 Bromoform	173	8.464	8.464	0.000	96	32788	2.00	1.94	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	315606	2.00	1.94	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	58976	2.00	1.90	
95 Bromobenzene	156	8.914	8.914	0.000	90	86512	2.00	2.02	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	87	21011	2.00	2.08	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	77	17008	2.00	2.54	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	82831	2.00	1.95	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	77726	2.00	1.97	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	95	259616	2.00	1.94	
102 4-Chlorotoluene	91	9.199	9.199	0.000	99	251801	2.00	2.00	
104 tert-Butylbenzene	119	9.507	9.496	0.011	90	222437	2.00	1.95	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	269709	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	94	294251	2.00	1.96	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	164834	2.00	2.06	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	268187	2.00	1.99	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	171714	2.00	2.06	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	226998	2.00	2.08	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	168210	2.00	2.02	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	82	14241	2.00	2.08	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	138494	2.00	2.26	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	95	72546	2.00	2.26	
119 Naphthalene	128	12.128	12.128	0.000	96	262519	2.00	2.01	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	95	134820	2.00	2.32	
S 127 1,2-Dichloroethene, Total	96				0			4.13	
S 128 1,3-Dichloropropene, Total	75				0			3.80	
S 129 Xylenes, Total	106				0		4.00	3.94	
S 130 Total BTEX	1				0		10.0	10.0	
S 131 Trihalomethanes, Total	1				0		8.00	7.73	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	1.60	Units: uL
VMRPRIMW_00427	Amount Added:	1.60	Units: uL
VMAROLISTDW_00384	Amount Added:	1.60	Units: uL
VMRGAS_00377	Amount Added:	1.60	Units: uL

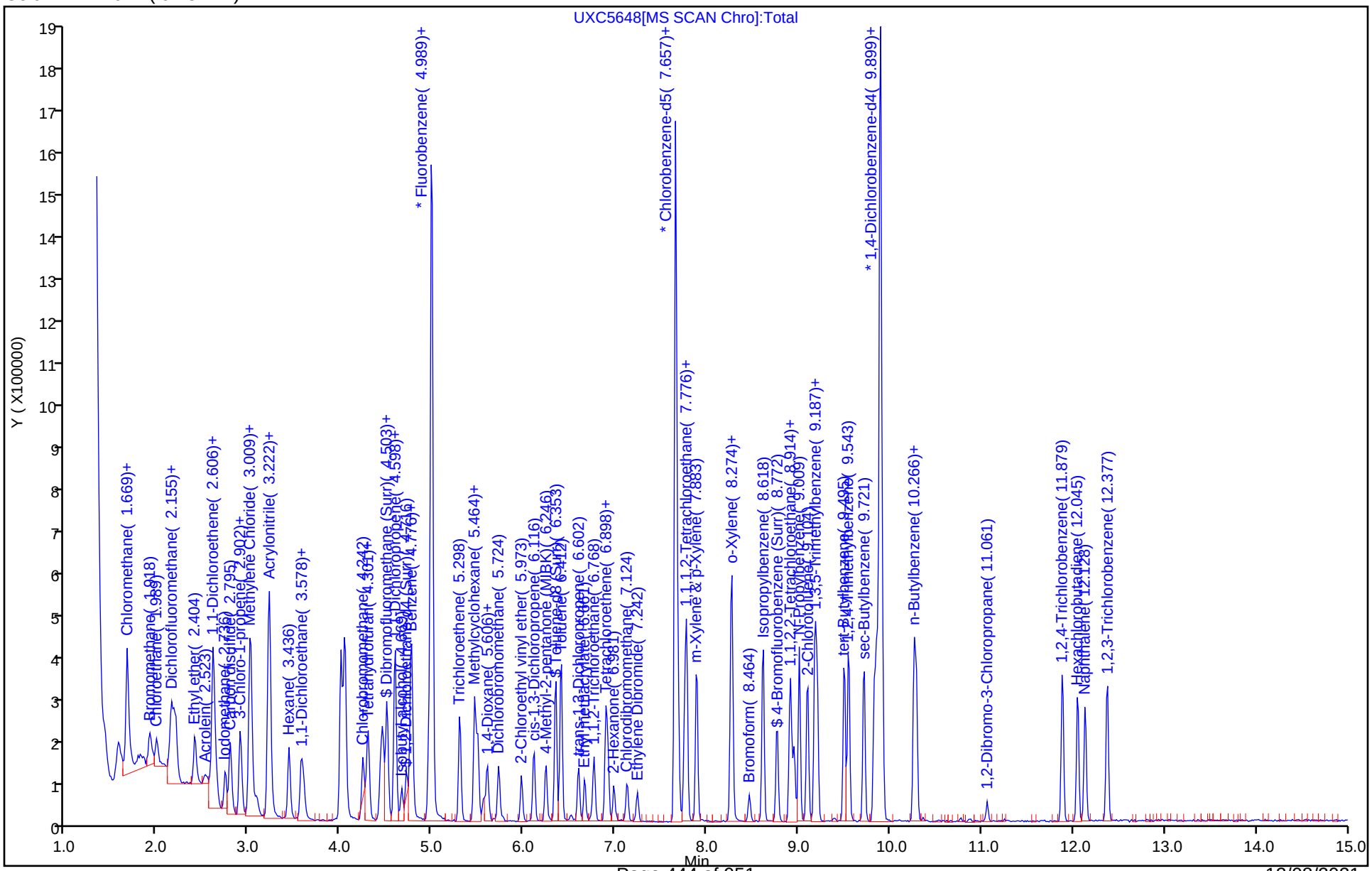
Report Date: 18-Mar-2021 09:01:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5648.D

Injection Date:	16-Mar-2021 10:17:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Mar-2021 10:39:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-007
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:01:07 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 12:42:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.989	5.001	-0.012	99	1508502	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1005314	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	606056	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	36526	1.00	1.04	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	41633	1.00	1.05	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	123741	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	95	43228	1.00	1.04	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	98	47955	1.00	1.06	
10 Chloromethane	50	1.574	1.574	0.000	98	58389	1.00	1.13	
11 Vinyl chloride	62	1.657	1.669	-0.012	78	46845	1.00	1.06	
12 Butadiene	54	1.669	1.681	-0.012	96	69152	1.00	1.22	
13 Bromomethane	94	1.918	1.918	0.000	91	41750	1.00	1.12	
14 Chloroethane	64	2.001	2.001	0.000	99	37706	1.00	1.16	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	98	98585	1.00	1.14	
16 Trichlorofluoromethane	101	2.191	2.191	0.000	98	86296	1.00	1.10	
17 Ethyl ether	59	2.404	2.416	-0.012	88	40718	1.00	1.07	
18 Acrolein	56	2.534	2.523	0.011	96	9294	5.00	1.47	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	98	39151	1.00	0.8976	
20 112TCTFE	151	2.629	2.629	0.000	91	33084	1.00	0.9100	
21 Acetone	58	2.653	2.653	0.000	99	7111	2.00	2.33	
22 Iodomethane	142	2.736	2.748	-0.012	99	61380	1.00	0.9189	
24 Carbon disulfide	76	2.795	2.796	-0.001	99	116874	1.00	0.9616	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	22980	1.00	0.8970	
27 Methyl acetate	43	2.914	2.914	0.000	97	39316	2.00	2.05	
28 Methylene Chloride	84	3.009	3.009	0.000	89	41550	1.00	1.02	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	96	20999	10.0	9.84	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	102496	10.0	10.0	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	105442	1.00	1.00	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	45650	1.00	1.05	
34 Hexane	86	3.436	3.436	0.000	91	9581	1.00	1.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.566	3.578	-0.012	96	70364	1.00	1.02	
36 Vinyl acetate	43	3.602	3.602	0.000	97	52739	1.00	0.8986	
42 2,2-Dichloropropane	97	4.041	4.053	-0.011	78	13807	1.00	1.03	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	81	47902	1.00	1.04	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	48	7540	2.00	2.37	
46 Chlorobromomethane	128	4.242	4.242	0.000	87	22476	1.00	1.03	
47 Tetrahydrofuran	42	4.290	4.278	0.012	85	19738	2.00	2.49	
48 Chloroform	83	4.301	4.302	-0.001	93	70935	1.00	1.03	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	97	60467	1.00	0.9778	
50 Cyclohexane	56	4.503	4.503	0.000	90	65918	1.00	1.03	
52 Carbon tetrachloride	117	4.598	4.598	0.000	92	52456	1.00	0.9535	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	93	56469	1.00	1.02	
53 Isobutyl alcohol	41	4.669	4.669	0.000	93	18341	25.0	27.2	
55 Benzene	78	4.764	4.776	-0.012	96	181175	1.00	1.09	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	96	51453	1.00	1.05	
58 n-Heptane	100	4.965	4.966	-0.001	92	7518	1.00	1.01	
60 Trichloroethene	130	5.298	5.298	0.000	95	47038	1.00	1.06	
62 Methylcyclohexane	83	5.464	5.464	0.000	90	57824	1.00	1.04	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	92	35608	1.00	1.04	
66 1,4-Dioxane	88	5.606	5.606	0.000	39	5574	20.0	23.1	
65 Dibromomethane	93	5.606	5.606	0.000	89	20875	1.00	1.05	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	98	41626	1.00	0.9538	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	21442	2.00	1.81	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	94	42305	1.00	0.8906	
71 4-Methyl-2-pentanone (MIBK)	43	6.234	6.246	-0.012	96	46573	2.00	2.04	
72 Toluene	91	6.412	6.412	0.000	98	148278	1.00	1.00	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	33643	1.00	0.8838	
74 Ethyl methacrylate	69	6.673	6.661	0.012	88	28235	1.00	0.9837	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	90	25770	1.00	1.06	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	30533	1.00	0.9755	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	42197	1.00	1.01	
78 2-Hexanone	43	6.981	6.982	-0.001	95	30177	2.00	2.16	
80 Chlorodibromomethane	129	7.124	7.124	0.000	89	23357	1.00	0.8719	
82 Ethylene Dibromide	107	7.242	7.242	0.000	99	23568	1.00	1.00	
84 Chlorobenzene	112	7.681	7.681	0.000	95	91842	1.00	1.01	
85 1,1,1,2-Tetrachloroethane	131	7.752	7.764	-0.012	92	37283	1.00	0.9866	
86 Ethylbenzene	106	7.776	7.776	0.000	98	48952	1.00	0.9881	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	95	119546	1.00	0.99	
88 o-Xylene	106	8.262	8.262	0.000	96	63450	1.00	0.9824	
89 Styrene	104	8.274	8.274	0.000	93	78354	1.00	0.9354	
90 Bromoform	173	8.464	8.464	0.000	96	13367	1.00	0.8071	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	152266	1.00	0.9552	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	-0.001	97	30042	1.00	0.9688	
95 Bromobenzene	156	8.914	8.914	0.000	90	43010	1.00	1.01	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	9782	1.00	0.9725	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	66	5133	1.00	0.9070	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	40320	1.00	0.9537	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	37216	1.00	0.9484	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	125526	1.00	0.9432	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	124885	1.00	1.00	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	92	107456	1.00	0.9445	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	125769	1.00	0.9214	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	141534	1.00	0.9438	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	96	79988	1.00	1.00	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	96	125533	1.00	0.9359	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	86247	1.00	1.04	
113 n-Butylbenzene	91	10.266	10.266	0.000	96	105585	1.00	0.9720	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	83074	1.00	1.00	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	79	5731	1.00	0.8382	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	93	61295	1.00	1.00	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	36040	1.00	0.7551	
119 Naphthalene	128	12.128	12.128	0.000	97	121361	1.00	0.9318	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	58935	1.00	1.02	
S 127 1,2-Dichloroethene, Total	96				0			2.09	
S 128 1,3-Dichloropropene, Total	75				0			1.77	
S 129 Xylenes, Total	106				0		2.00	1.98	
S 130 Total BTEX	1				0		5.00	5.06	
S 131 Trihalomethanes, Total	1				0		4.00	3.67	

Reagents:

VM50is_00086	Amount Added:	1.00	Units: uL
vm50ss_stk_00086	Amount Added:	0.80	Units: uL
VMRPRIMW_00427	Amount Added:	0.80	Units: uL
VMAROLISTDW_00384	Amount Added:	0.80	Units: uL
VMRGAS_00377	Amount Added:	0.80	Units: uL

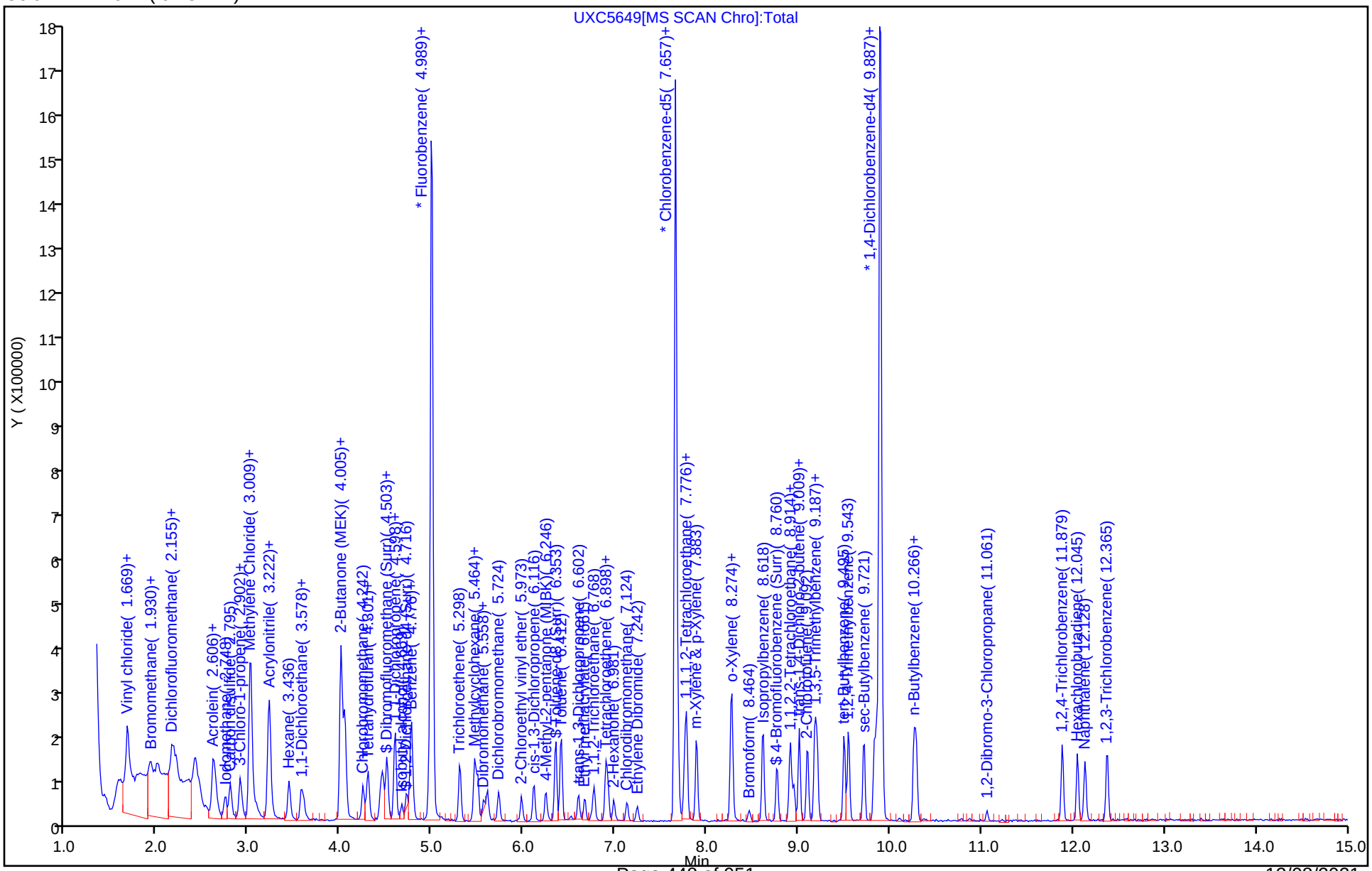
Report Date: 18-Mar-2021 09:01:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5649.D

Injection Date:	16-Mar-2021 10:39:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

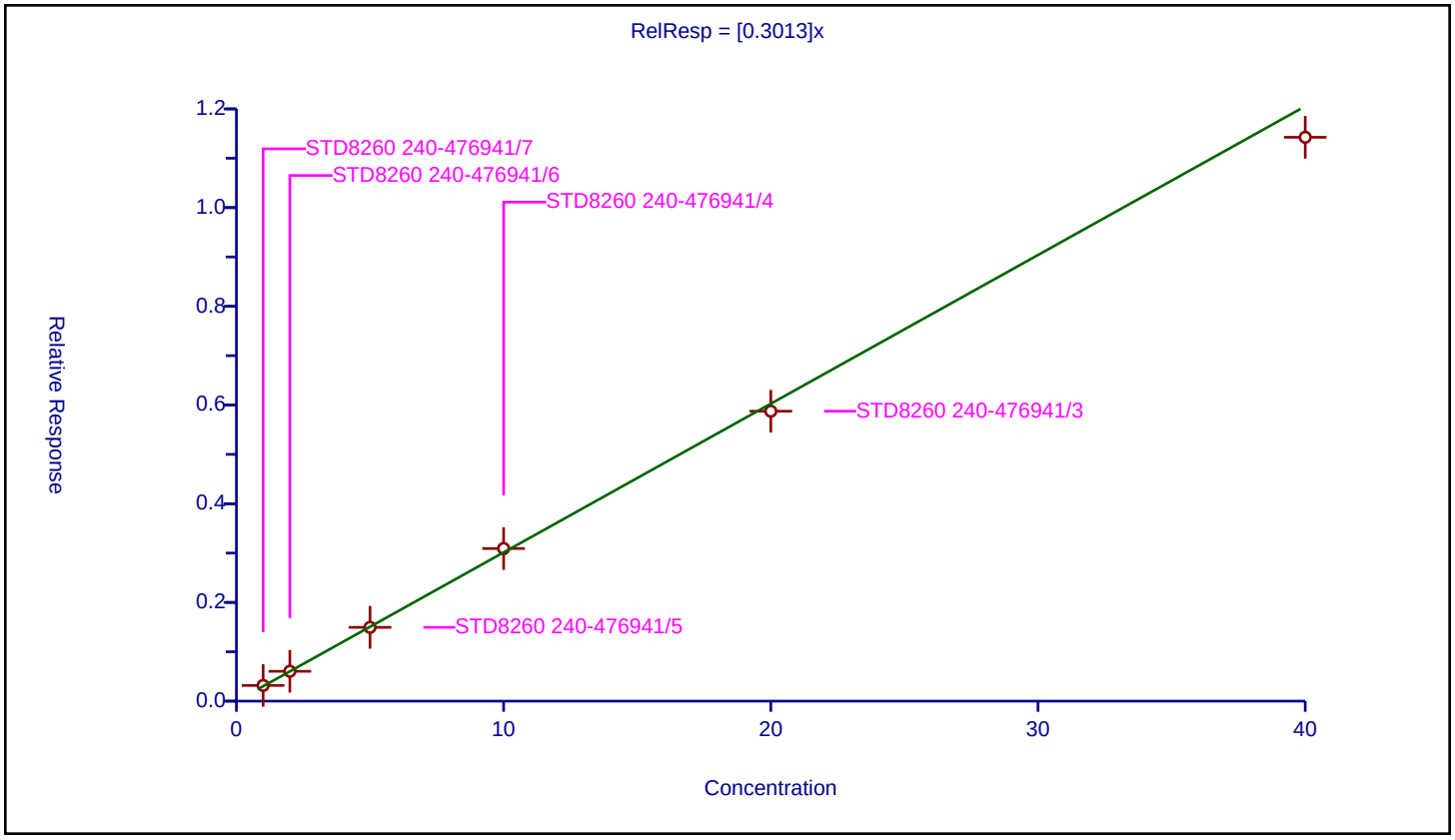
Curve Coefficients

Intercept:	0
Slope:	0.3013

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317898	10.0	1508502.0	0.317898	Y
2	STD8260 240-476941/6	2.0	0.604886	10.0	1600104.0	0.302443	Y
3	STD8260 240-476941/5	5.0	1.495095	10.0	1580769.0	0.299019	Y
4	STD8260 240-476941/4	10.0	3.092631	10.0	1635381.0	0.309263	Y
5	STD8260 240-476941/3	20.0	5.874133	10.0	1729200.0	0.293707	Y
6	STD8260 240-476941/2	40.0	11.424781	10.0	1738218.0	0.28562	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

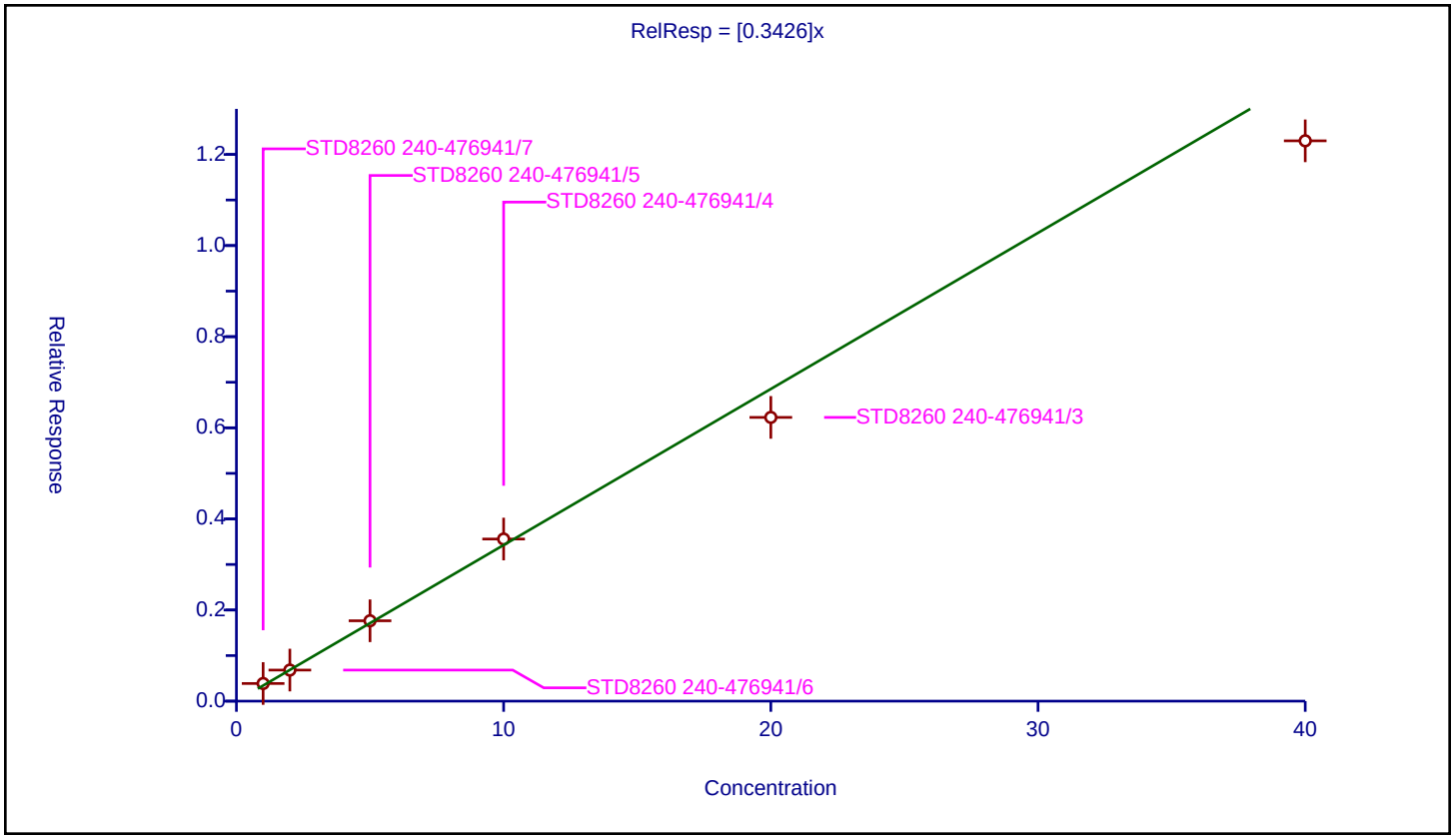
Curve Coefficients

Intercept:	0
Slope:	0.3426

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.387066	10.0	1508502.0	0.387066	Y
2	STD8260 240-476941/6	2.0	0.682031	10.0	1600104.0	0.341015	Y
3	STD8260 240-476941/5	5.0	1.764281	10.0	1580769.0	0.352856	Y
4	STD8260 240-476941/4	10.0	3.558522	10.0	1635381.0	0.355852	Y
5	STD8260 240-476941/3	20.0	6.228238	10.0	1729200.0	0.311412	Y
6	STD8260 240-476941/2	40.0	12.299136	10.0	1738218.0	0.307478	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

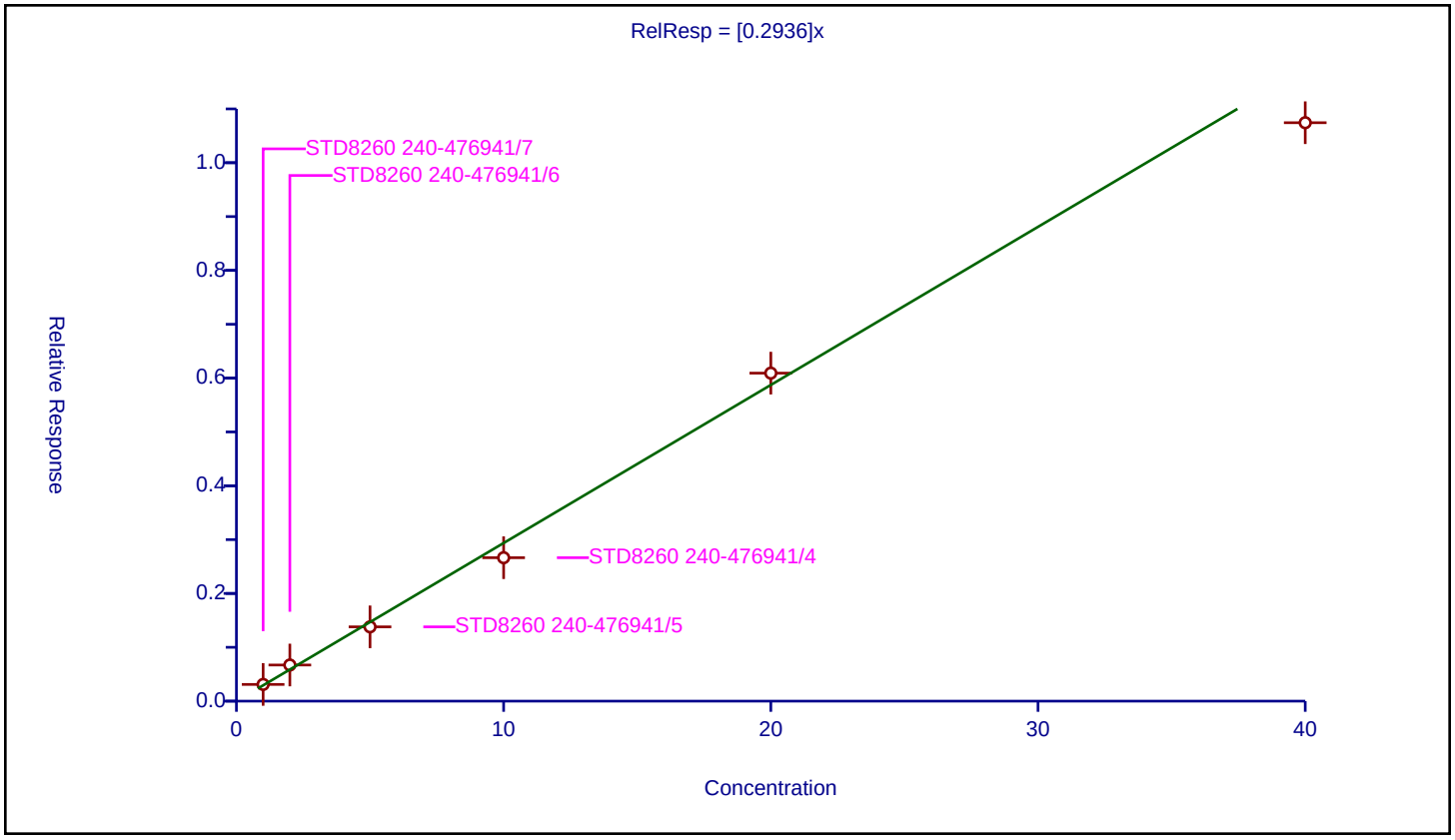
Curve Coefficients

Intercept:	0
Slope:	0.2936

Error Coefficients

Standard Error:	985000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.31054	10.0	1508502.0	0.31054	Y
2	STD8260 240-476941/6	2.0	0.671231	10.0	1600104.0	0.335616	Y
3	STD8260 240-476941/5	5.0	1.379968	10.0	1580769.0	0.275994	Y
4	STD8260 240-476941/4	10.0	2.663936	10.0	1635381.0	0.266394	Y
5	STD8260 240-476941/3	20.0	6.092372	10.0	1729200.0	0.304619	Y
6	STD8260 240-476941/2	40.0	10.743319	10.0	1738218.0	0.268583	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

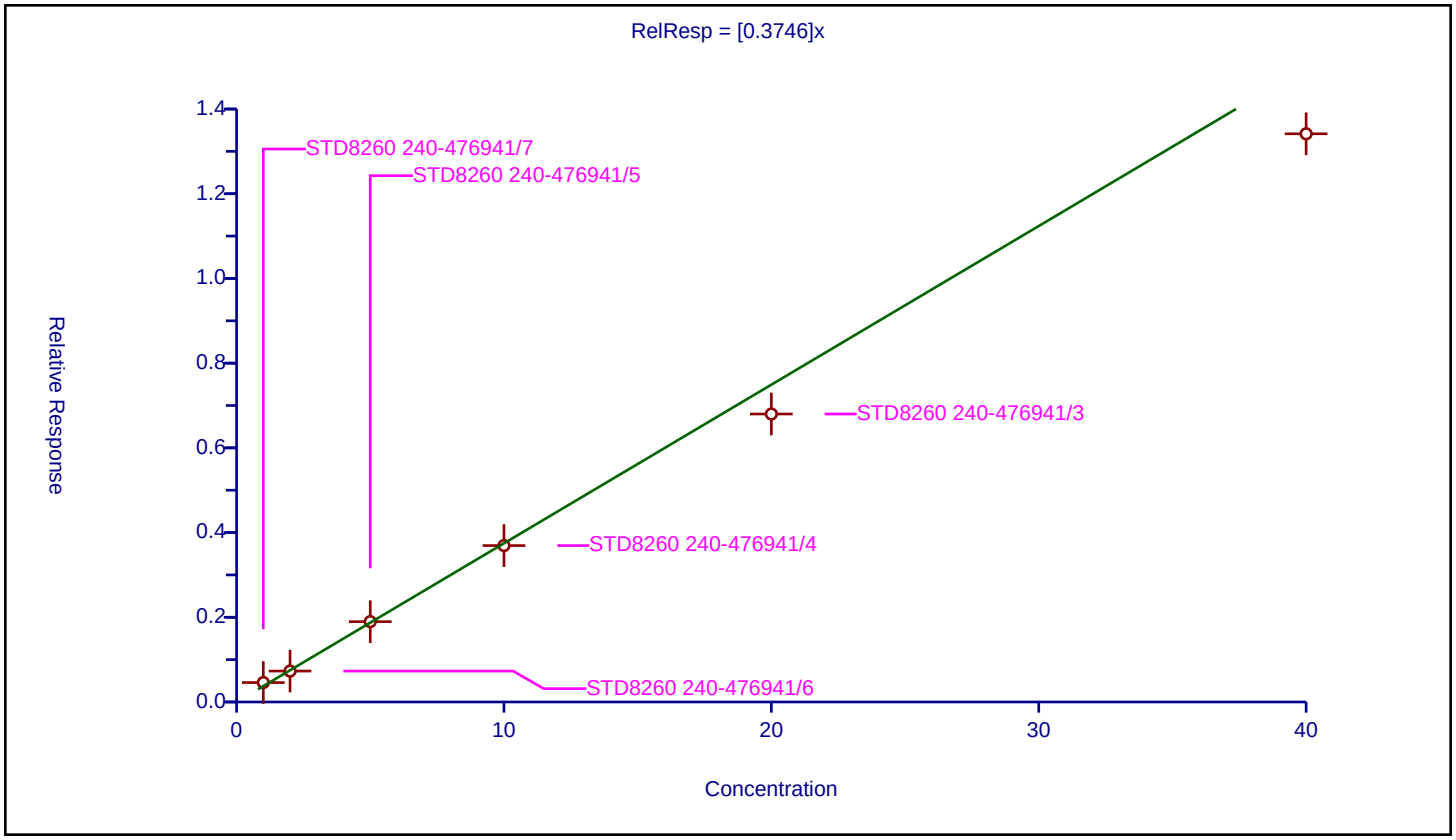
Curve Coefficients

Intercept:	0
Slope:	0.3746

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	11.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.458415	10.0	1508502.0	0.458415	Y
2	STD8260 240-476941/6	2.0	0.729878	10.0	1600104.0	0.364939	Y
3	STD8260 240-476941/5	5.0	1.896887	10.0	1580769.0	0.379377	Y
4	STD8260 240-476941/4	10.0	3.693048	10.0	1635381.0	0.369305	Y
5	STD8260 240-476941/3	20.0	6.799491	10.0	1729200.0	0.339975	Y
6	STD8260 240-476941/2	40.0	13.41502	10.0	1738218.0	0.335376	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

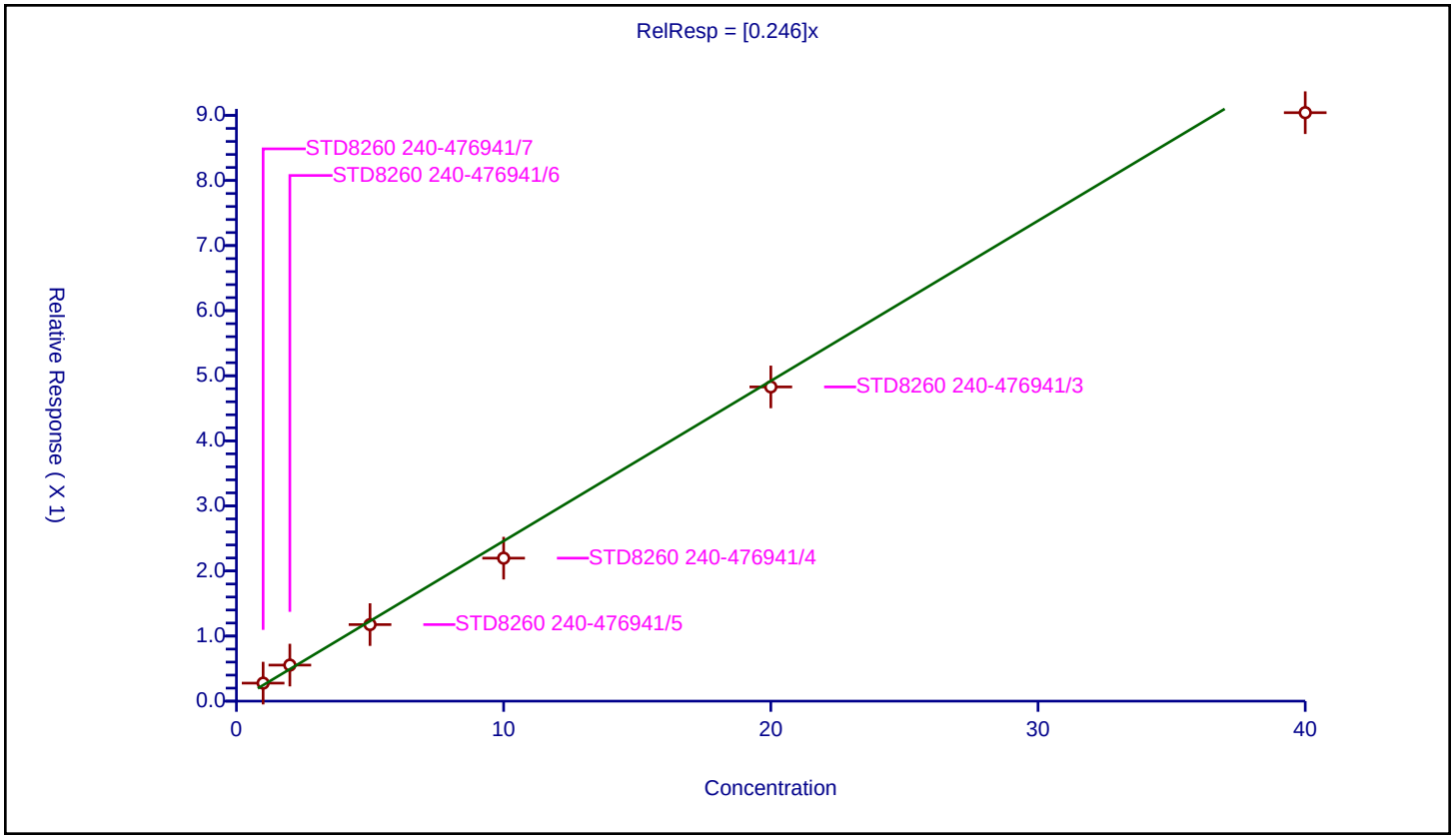
Curve Coefficients

Intercept:	0
Slope:	0.246

Error Coefficients

Standard Error:	817000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.276765	10.0	1508502.0	0.276765	Y
2	STD8260 240-476941/6	2.0	0.553889	10.0	1600104.0	0.276944	Y
3	STD8260 240-476941/5	5.0	1.176548	10.0	1580769.0	0.23531	Y
4	STD8260 240-476941/4	10.0	2.196931	10.0	1635381.0	0.219693	Y
5	STD8260 240-476941/3	20.0	4.827897	10.0	1729200.0	0.241395	Y
6	STD8260 240-476941/2	40.0	9.041956	10.0	1738218.0	0.226049	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

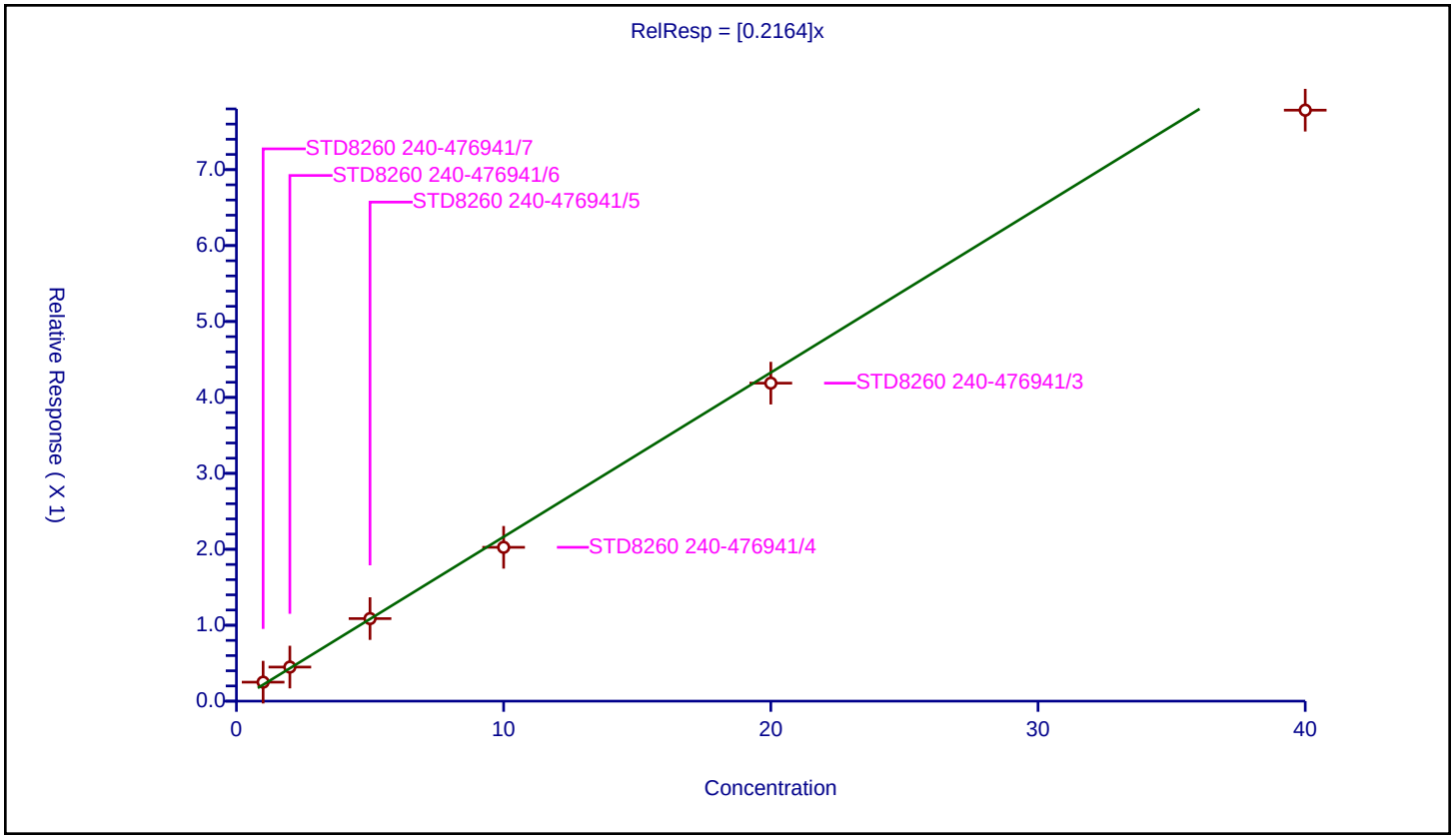
Curve Coefficients

Intercept:	0
Slope:	0.2164

Error Coefficients

Standard Error:	707000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.249957	10.0	1508502.0	0.249957	Y
2	STD8260 240-476941/6	2.0	0.44874	10.0	1600104.0	0.22437	Y
3	STD8260 240-476941/5	5.0	1.087072	10.0	1580769.0	0.217414	Y
4	STD8260 240-476941/4	10.0	2.025803	10.0	1635381.0	0.20258	Y
5	STD8260 240-476941/3	20.0	4.187977	10.0	1729200.0	0.209399	Y
6	STD8260 240-476941/2	40.0	7.78312	10.0	1738218.0	0.194578	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

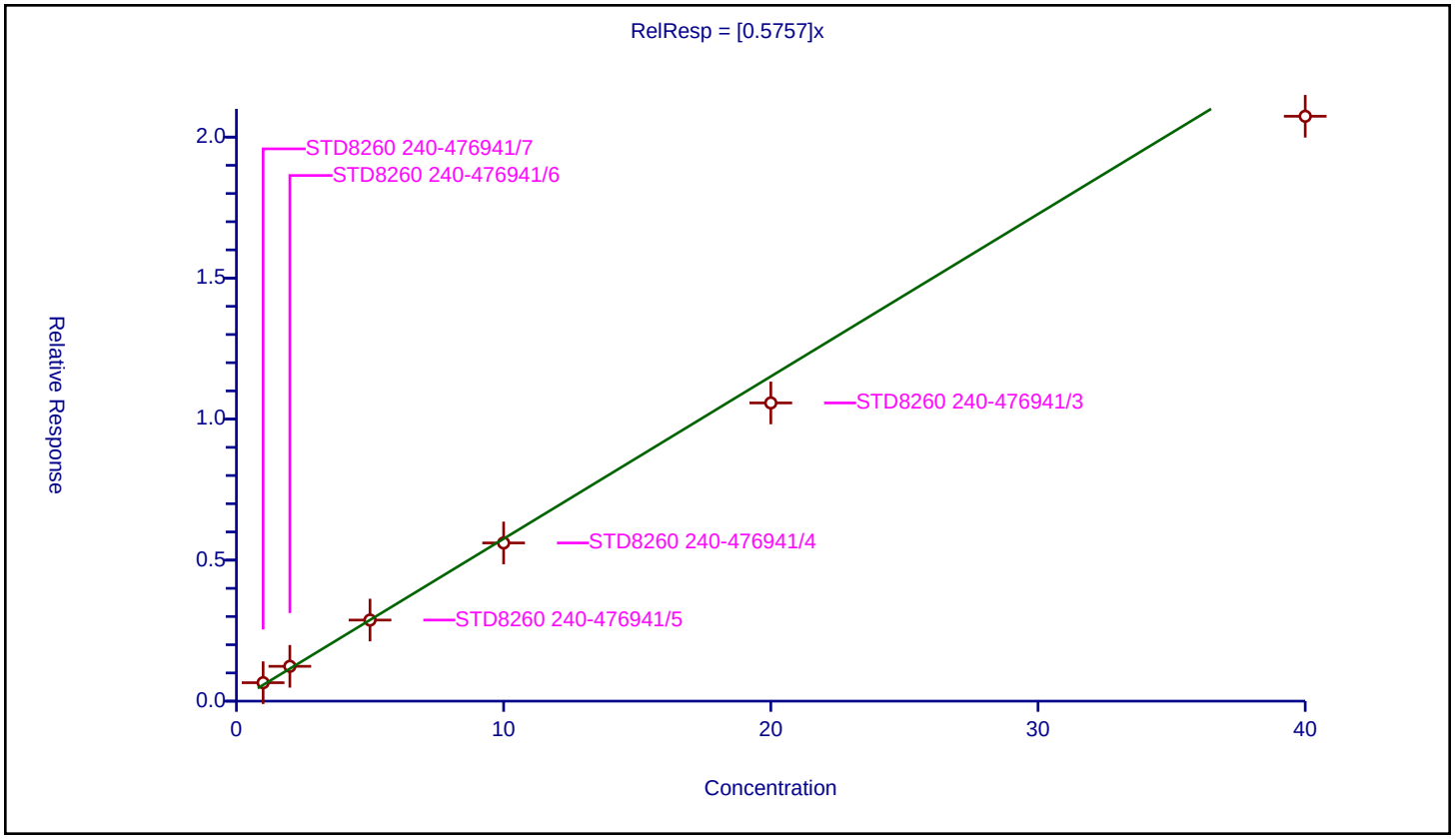
Curve Coefficients

Intercept:	0
Slope:	0.5757

Error Coefficients

Standard Error:	1870000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.653529	10.0	1508502.0	0.653529	Y
2	STD8260 240-476941/6	2.0	1.234514	10.0	1600104.0	0.617257	Y
3	STD8260 240-476941/5	5.0	2.875664	10.0	1580769.0	0.575133	Y
4	STD8260 240-476941/4	10.0	5.609622	10.0	1635381.0	0.560962	Y
5	STD8260 240-476941/3	20.0	10.57426	10.0	1729200.0	0.528713	Y
6	STD8260 240-476941/2	40.0	20.738411	10.0	1738218.0	0.51846	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

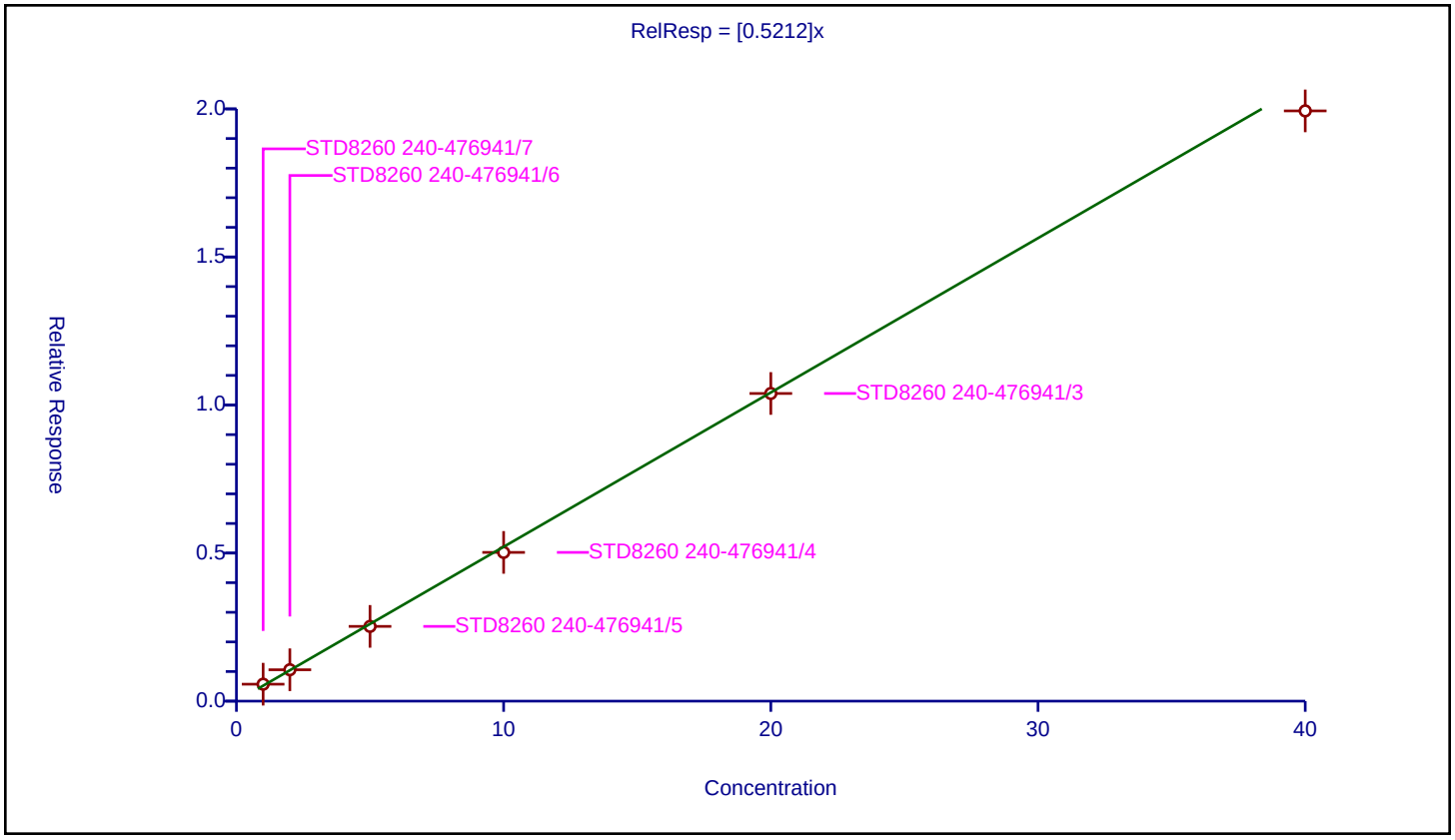
Curve Coefficients

Intercept:	0
Slope:	0.5212

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.572064	10.0	1508502.0	0.572064	Y
2	STD8260 240-476941/6	2.0	1.059962	10.0	1600104.0	0.529981	Y
3	STD8260 240-476941/5	5.0	2.524657	10.0	1580769.0	0.504931	Y
4	STD8260 240-476941/4	10.0	5.02253	10.0	1635381.0	0.502253	Y
5	STD8260 240-476941/3	20.0	10.389296	10.0	1729200.0	0.519465	Y
6	STD8260 240-476941/2	40.0	19.932839	10.0	1738218.0	0.498321	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

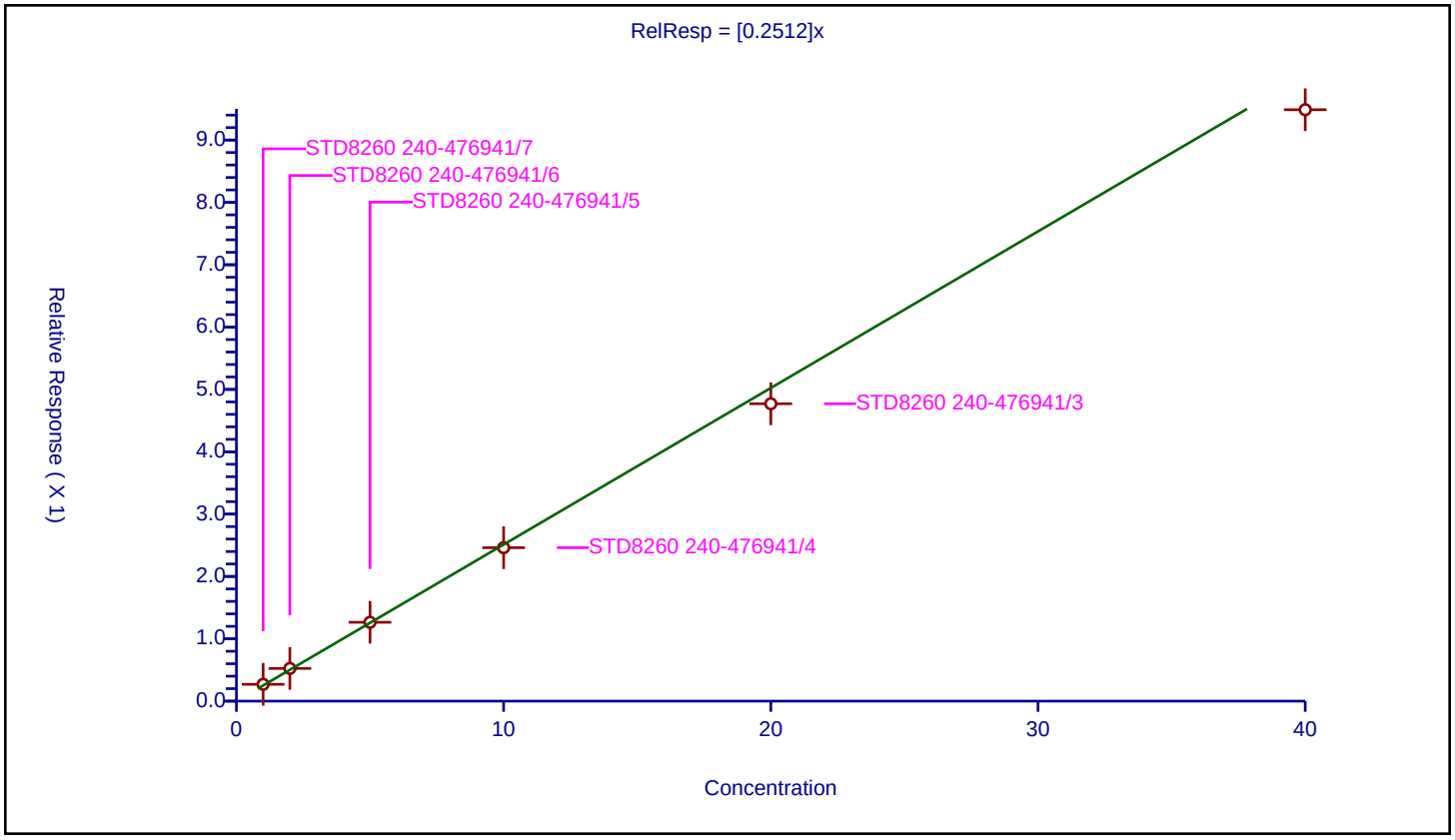
Curve Coefficients

Intercept:	0
Slope:	0.2512

Error Coefficients

Standard Error:	850000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.269923	10.0	1508502.0	0.269923	Y
2	STD8260 240-476941/6	2.0	0.524616	10.0	1600104.0	0.262308	Y
3	STD8260 240-476941/5	5.0	1.264998	10.0	1580769.0	0.253	Y
4	STD8260 240-476941/4	10.0	2.461316	10.0	1635381.0	0.246132	Y
5	STD8260 240-476941/3	20.0	4.77042	10.0	1729200.0	0.238521	Y
6	STD8260 240-476941/2	40.0	9.48656	10.0	1738218.0	0.237164	Y



Calibration / Acrolein

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

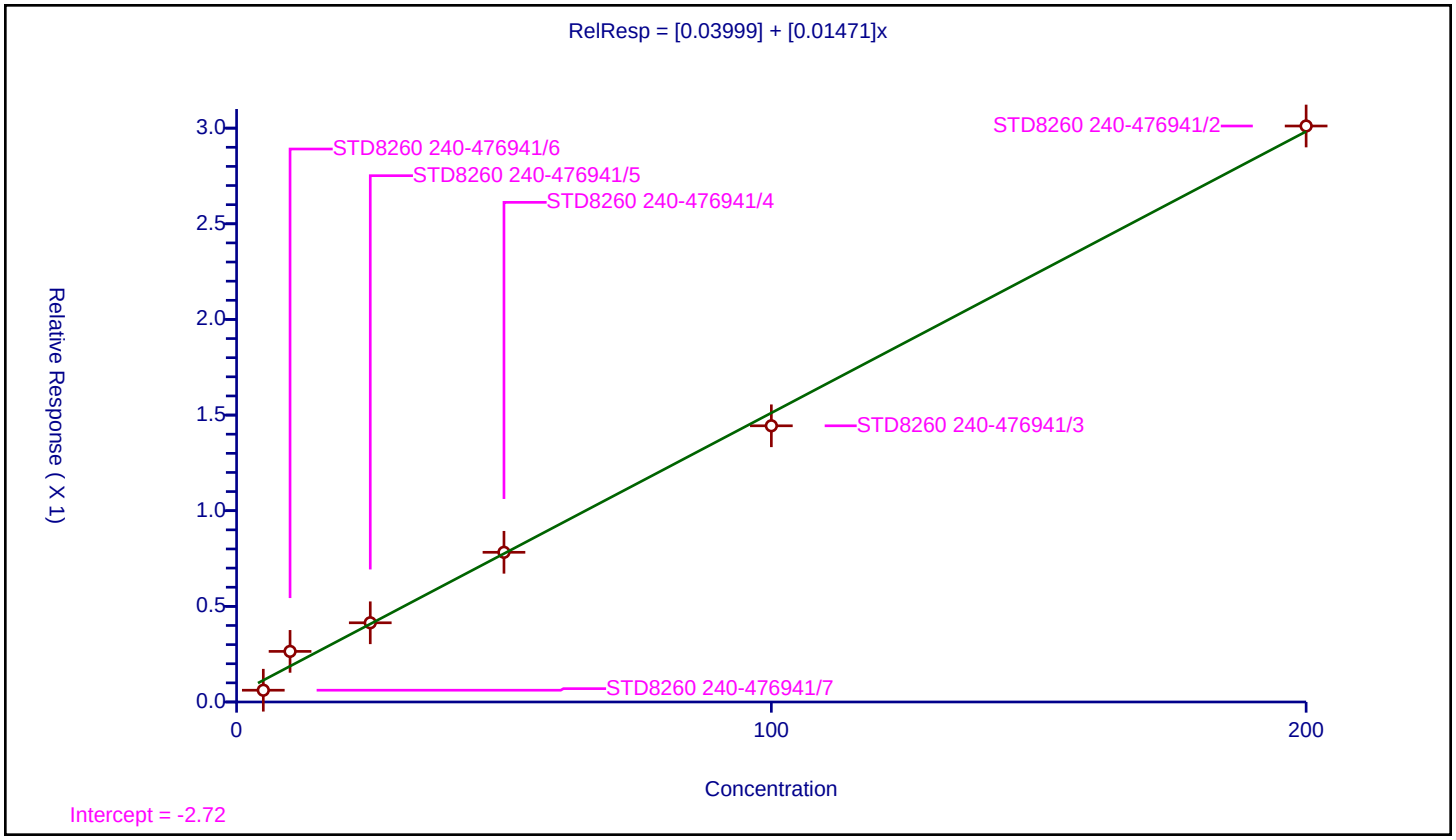
Curve Coefficients

Intercept:	0.03999
Slope:	0.01471

Error Coefficients

Standard Error:	300000
Relative Standard Error:	44.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	5.0	0.061611	10.0	1508502.0	0.012322	Y
2	STD8260 240-476941/6	10.0	0.264589	10.0	1600104.0	0.026459	Y
3	STD8260 240-476941/5	25.0	0.414128	10.0	1580769.0	0.016565	Y
4	STD8260 240-476941/4	50.0	0.782637	10.0	1635381.0	0.015653	Y
5	STD8260 240-476941/3	100.0	1.443905	10.0	1729200.0	0.014439	Y
6	STD8260 240-476941/2	200.0	3.011222	10.0	1738218.0	0.015056	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

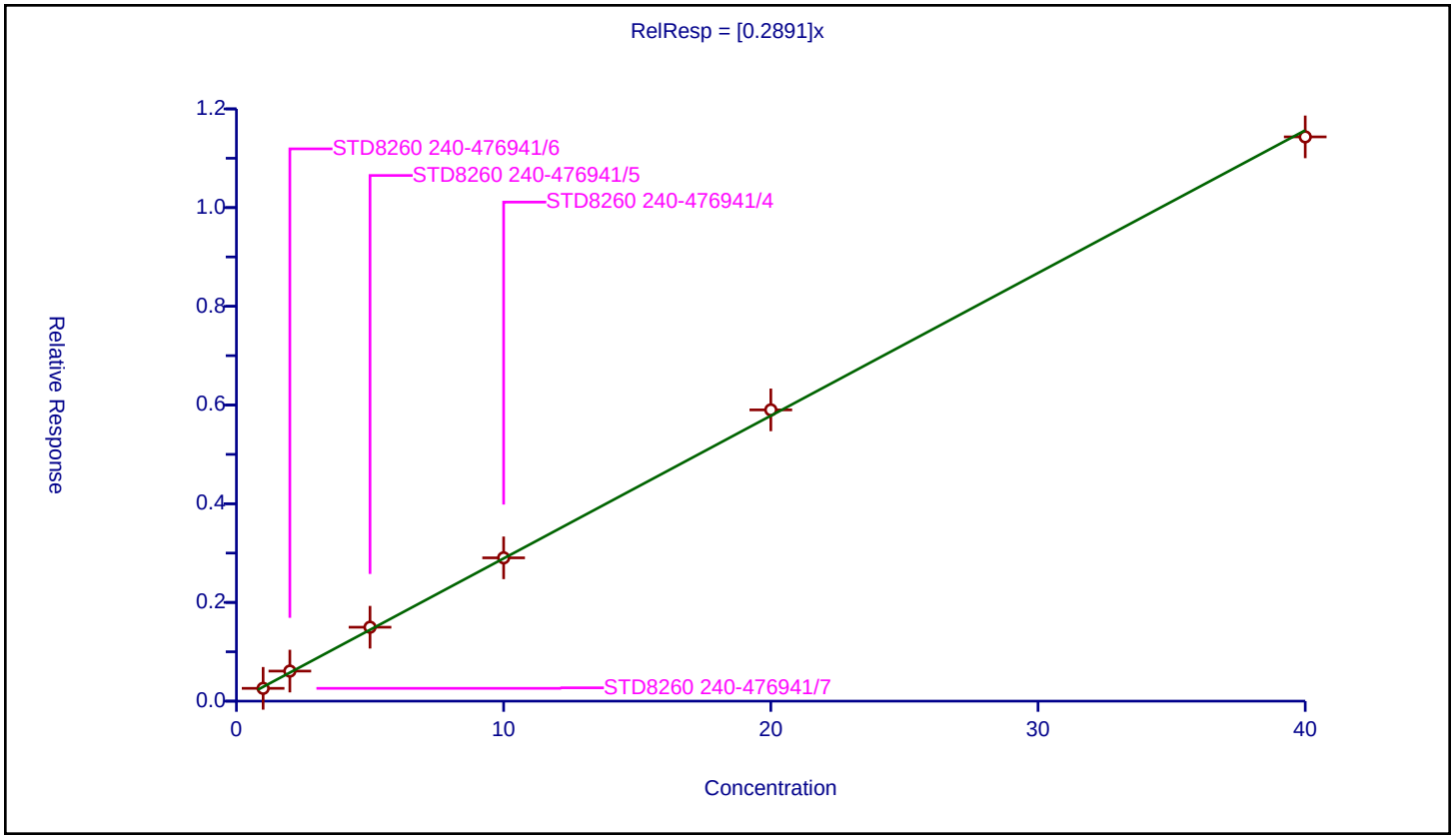
Curve Coefficients

Intercept:	0
Slope:	0.2891

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.259536	10.0	1508502.0	0.259536	Y
2	STD8260 240-476941/6	2.0	0.609085	10.0	1600104.0	0.304543	Y
3	STD8260 240-476941/5	5.0	1.497613	10.0	1580769.0	0.299523	Y
4	STD8260 240-476941/4	10.0	2.903586	10.0	1635381.0	0.290359	Y
5	STD8260 240-476941/3	20.0	5.901556	10.0	1729200.0	0.295078	Y
6	STD8260 240-476941/2	40.0	11.432858	10.0	1738218.0	0.285821	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

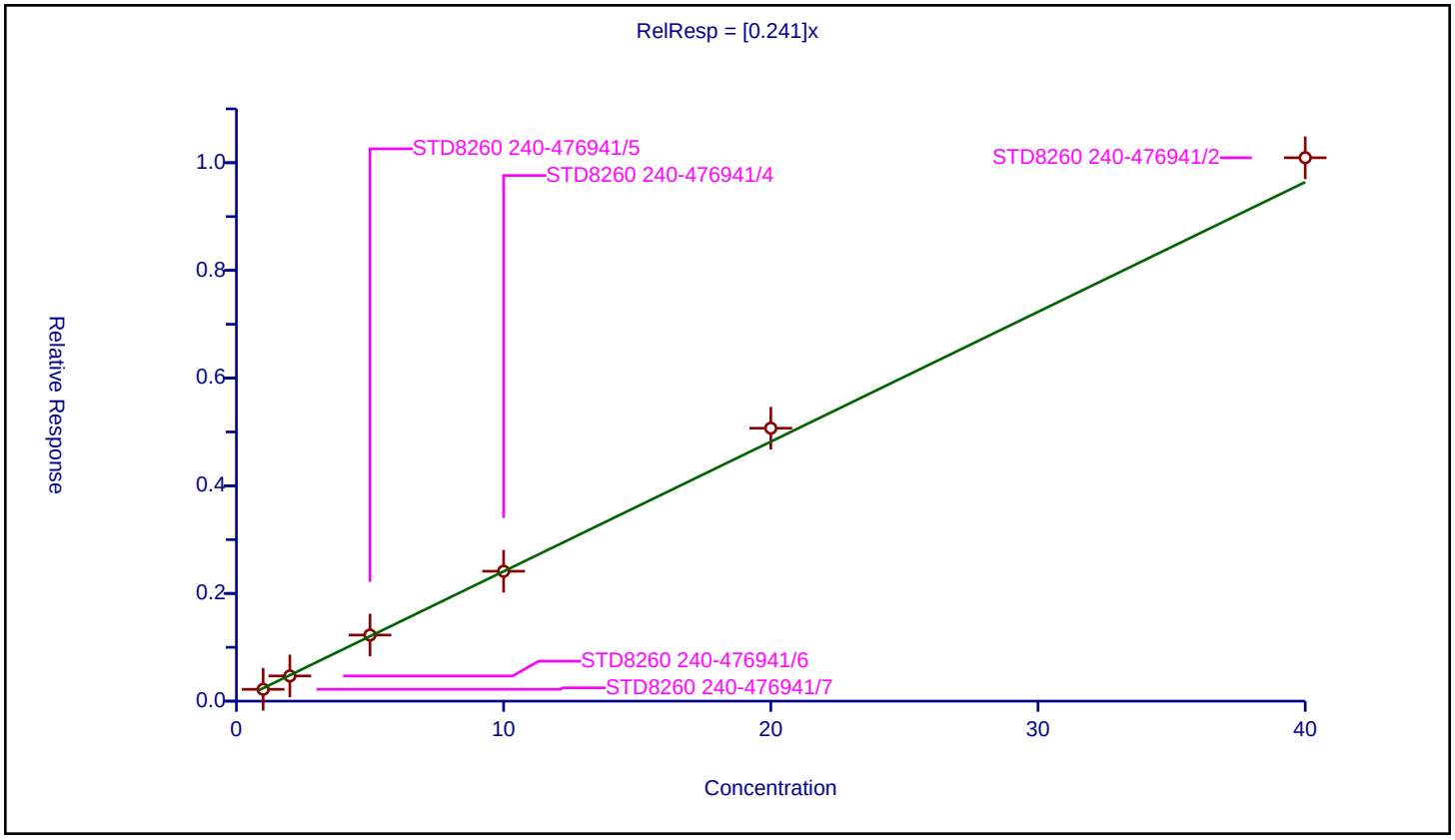
Curve Coefficients

Intercept:	0
Slope:	0.241

Error Coefficients

Standard Error:	900000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.219317	10.0	1508502.0	0.219317	Y
2	STD8260 240-476941/6	2.0	0.46817	10.0	1600104.0	0.234085	Y
3	STD8260 240-476941/5	5.0	1.227738	10.0	1580769.0	0.245548	Y
4	STD8260 240-476941/4	10.0	2.412759	10.0	1635381.0	0.241276	Y
5	STD8260 240-476941/3	20.0	5.069362	10.0	1729200.0	0.253468	Y
6	STD8260 240-476941/2	40.0	10.092934	10.0	1738218.0	0.252323	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

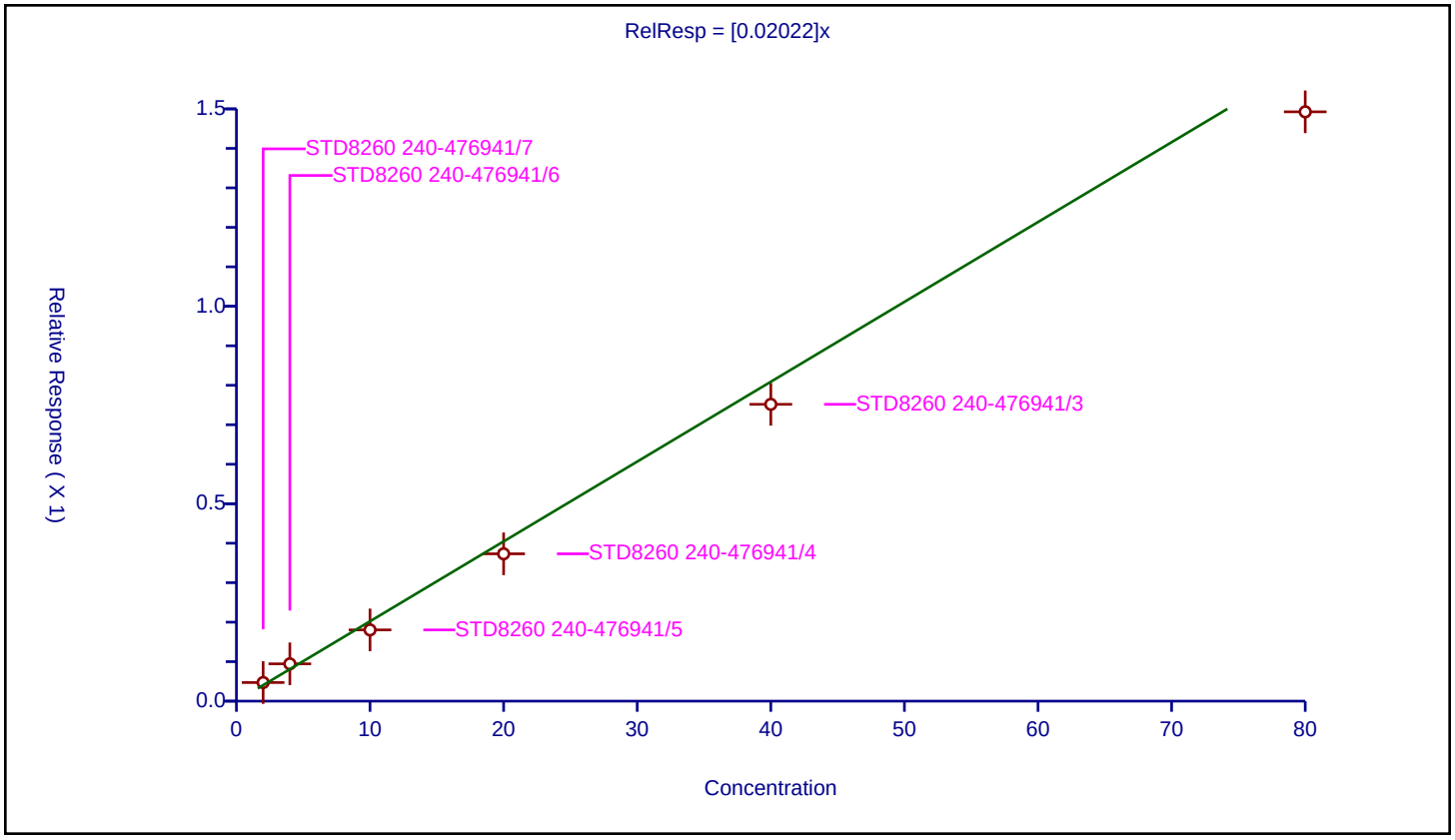
Curve Coefficients

Intercept:	0
Slope:	0.02022

Error Coefficients

Standard Error:	133000
Relative Standard Error:	13.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.047139	10.0	1508502.0	0.02357	Y
2	STD8260 240-476941/6	4.0	0.094475	10.0	1600104.0	0.023619	Y
3	STD8260 240-476941/5	10.0	0.180419	10.0	1580769.0	0.018042	Y
4	STD8260 240-476941/4	20.0	0.373149	10.0	1635381.0	0.018657	Y
5	STD8260 240-476941/3	40.0	0.751764	10.0	1729200.0	0.018794	Y
6	STD8260 240-476941/2	80.0	1.49258	10.0	1738218.0	0.018657	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

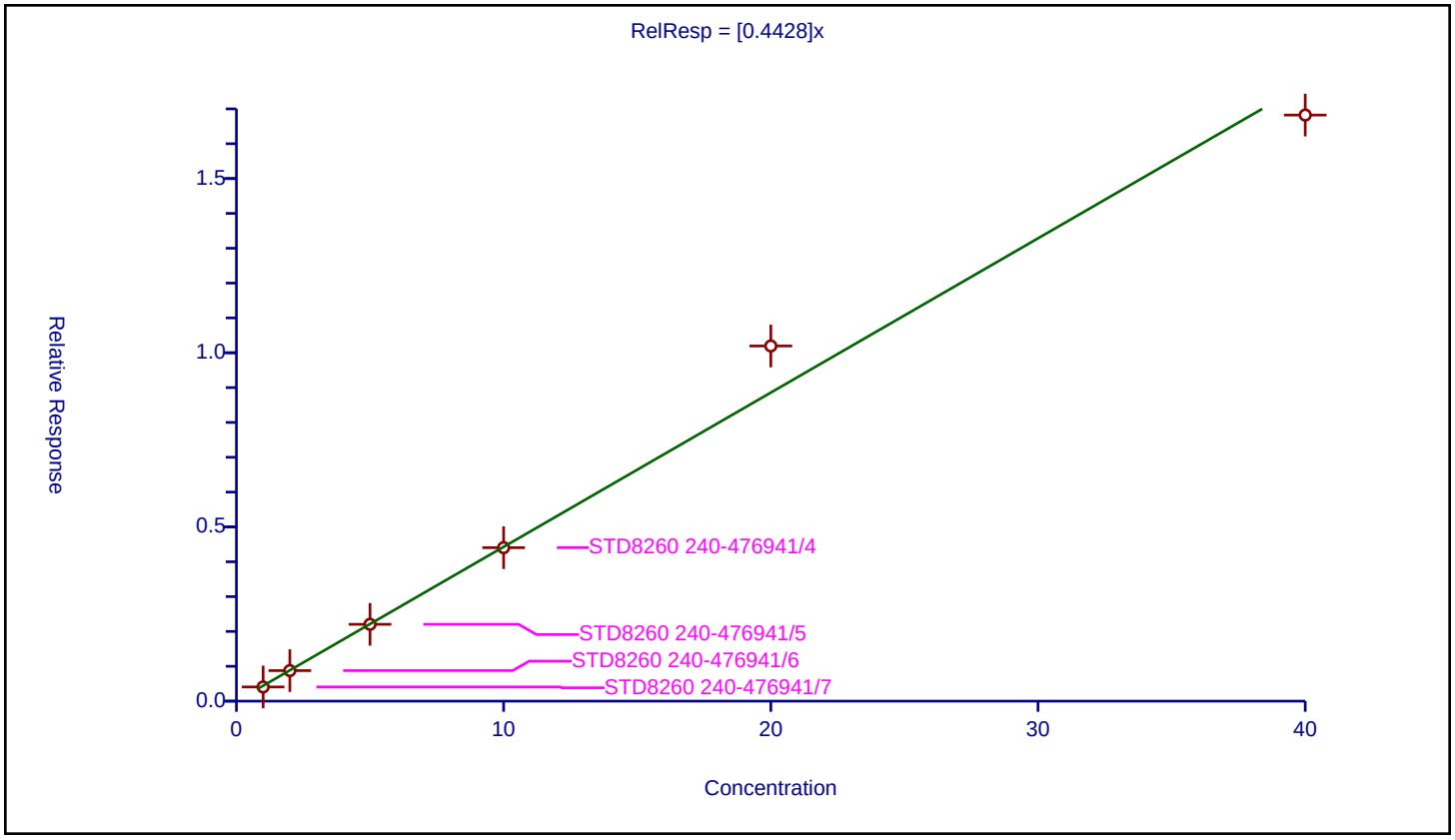
Curve Coefficients

Intercept:	0
Slope:	0.4428

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	8.0
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.406894	10.0	1508502.0	0.406894	Y
2	STD8260 240-476941/6	2.0	0.876549	10.0	1600104.0	0.438275	Y
3	STD8260 240-476941/5	5.0	2.204857	10.0	1580769.0	0.440971	Y
4	STD8260 240-476941/4	10.0	4.404656	10.0	1635381.0	0.440466	Y
5	STD8260 240-476941/3	20.0	10.194338	10.0	1729200.0	0.509717	Y
6	STD8260 240-476941/2	40.0	16.822999	10.0	1738218.0	0.420575	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

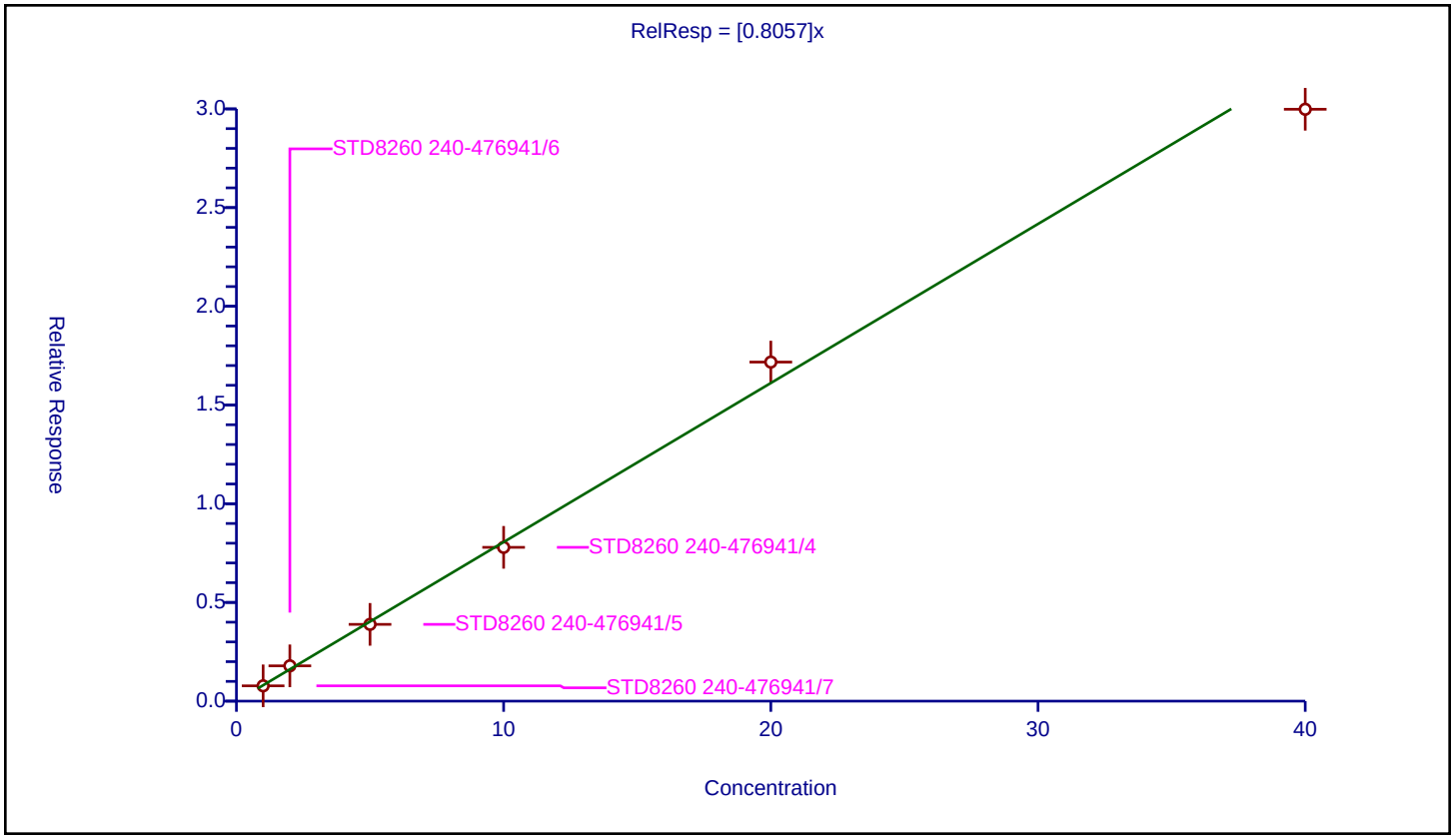
Curve Coefficients

Intercept:	0
Slope:	0.8057

Error Coefficients

Standard Error:	2760000
Relative Standard Error:	7.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.774769	10.0	1508502.0	0.774769	Y
2	STD8260 240-476941/6	2.0	1.788521	10.0	1600104.0	0.894261	Y
3	STD8260 240-476941/5	5.0	3.889423	10.0	1580769.0	0.777885	Y
4	STD8260 240-476941/4	10.0	7.789891	10.0	1635381.0	0.778989	Y
5	STD8260 240-476941/3	20.0	17.175752	10.0	1729200.0	0.858788	Y
6	STD8260 240-476941/2	40.0	29.98044	10.0	1738218.0	0.749511	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

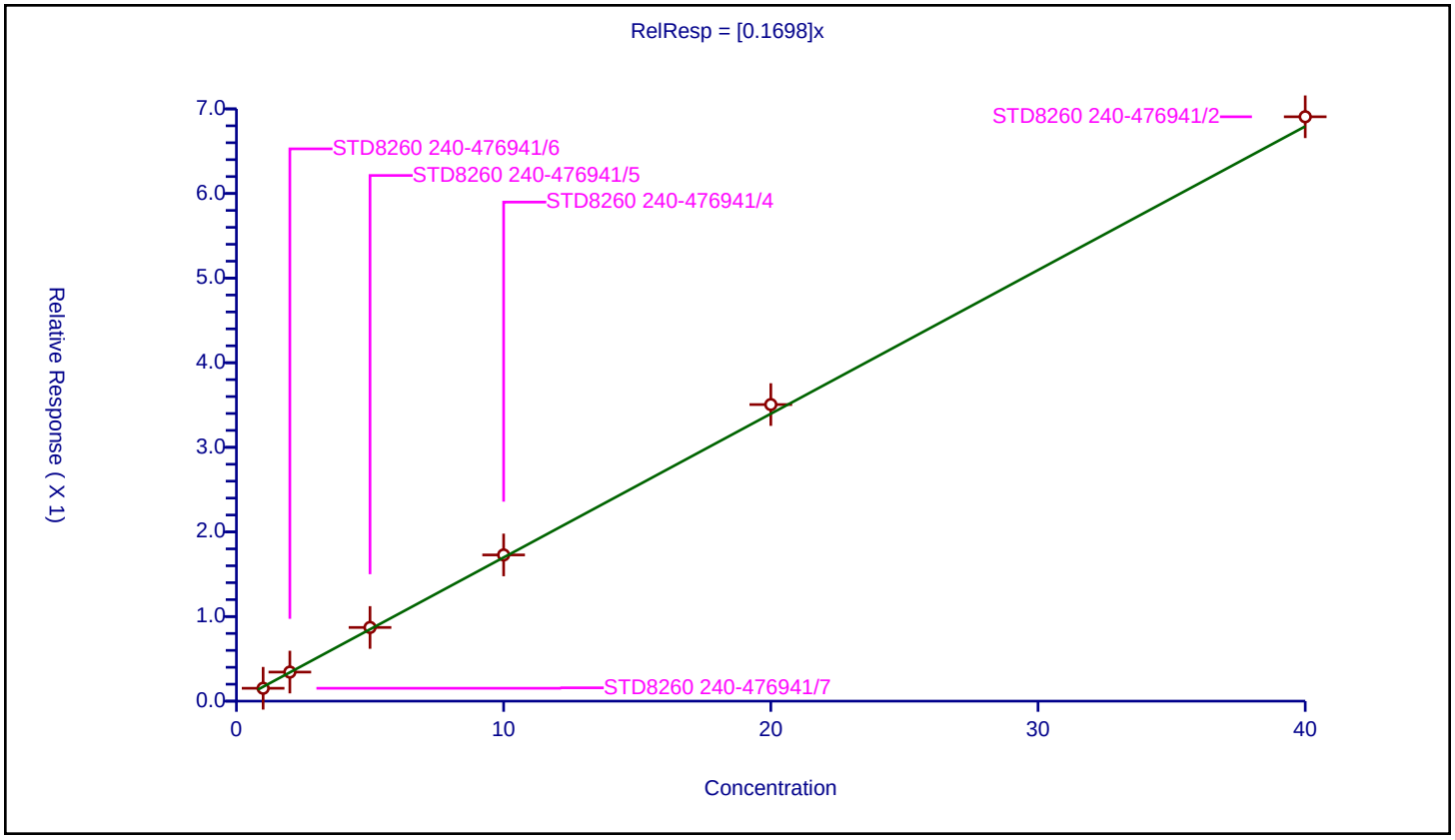
Curve Coefficients

Intercept:	0
Slope:	0.1698

Error Coefficients

Standard Error:	618000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.152337	10.0	1508502.0	0.152337	Y
2	STD8260 240-476941/6	2.0	0.343478	10.0	1600104.0	0.171739	Y
3	STD8260 240-476941/5	5.0	0.870918	10.0	1580769.0	0.174184	Y
4	STD8260 240-476941/4	10.0	1.728019	10.0	1635381.0	0.172802	Y
5	STD8260 240-476941/3	20.0	3.505361	10.0	1729200.0	0.175268	Y
6	STD8260 240-476941/2	40.0	6.906826	10.0	1738218.0	0.172671	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

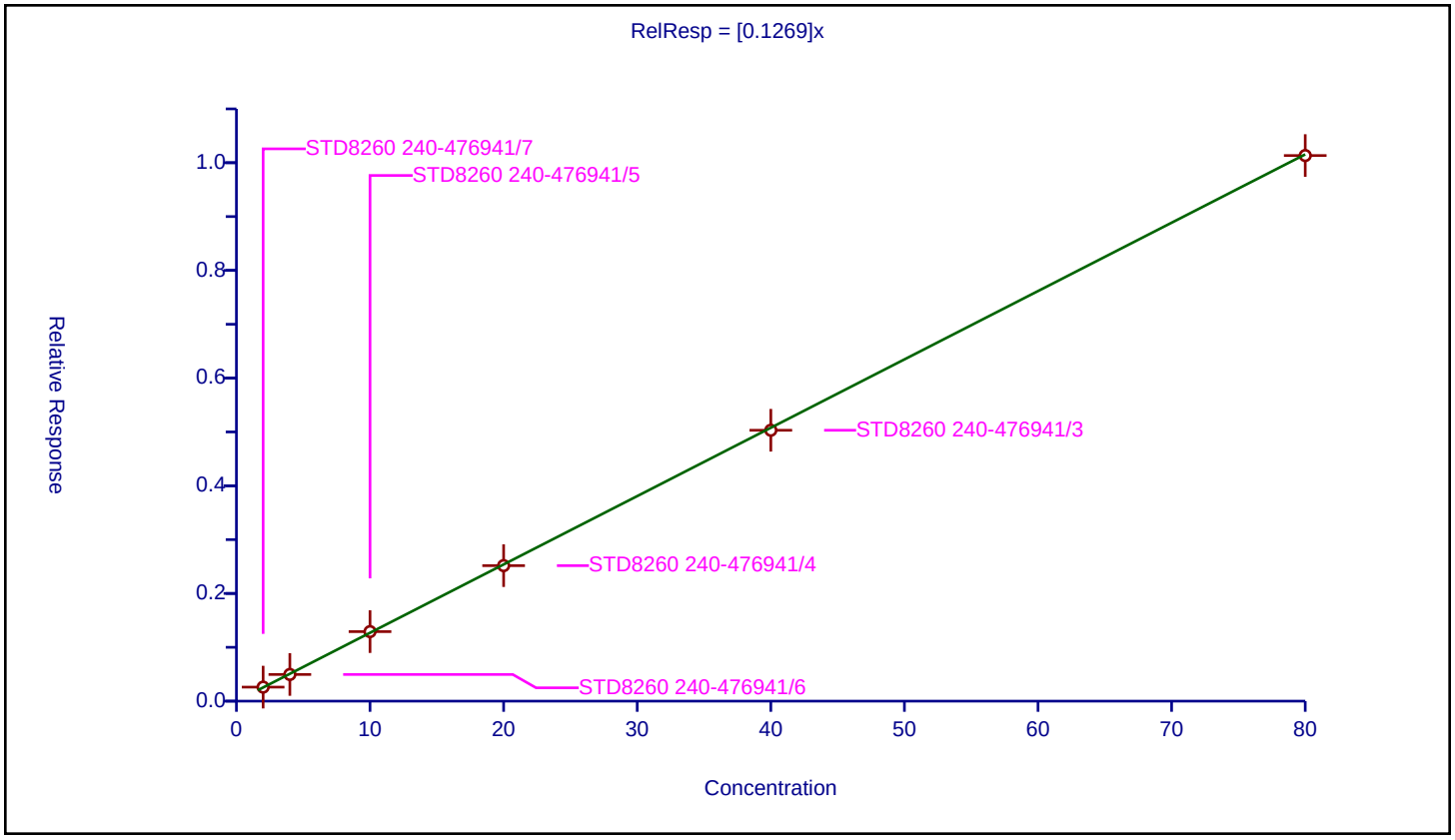
Curve Coefficients

Intercept:	0
Slope:	0.1269

Error Coefficients

Standard Error:	903000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.260629	10.0	1508502.0	0.130315	Y
2	STD8260 240-476941/6	4.0	0.495605	10.0	1600104.0	0.123901	Y
3	STD8260 240-476941/5	10.0	1.291409	10.0	1580769.0	0.129141	Y
4	STD8260 240-476941/4	20.0	2.516753	10.0	1635381.0	0.125838	Y
5	STD8260 240-476941/3	40.0	5.031188	10.0	1729200.0	0.12578	Y
6	STD8260 240-476941/2	80.0	10.133424	10.0	1738218.0	0.126668	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

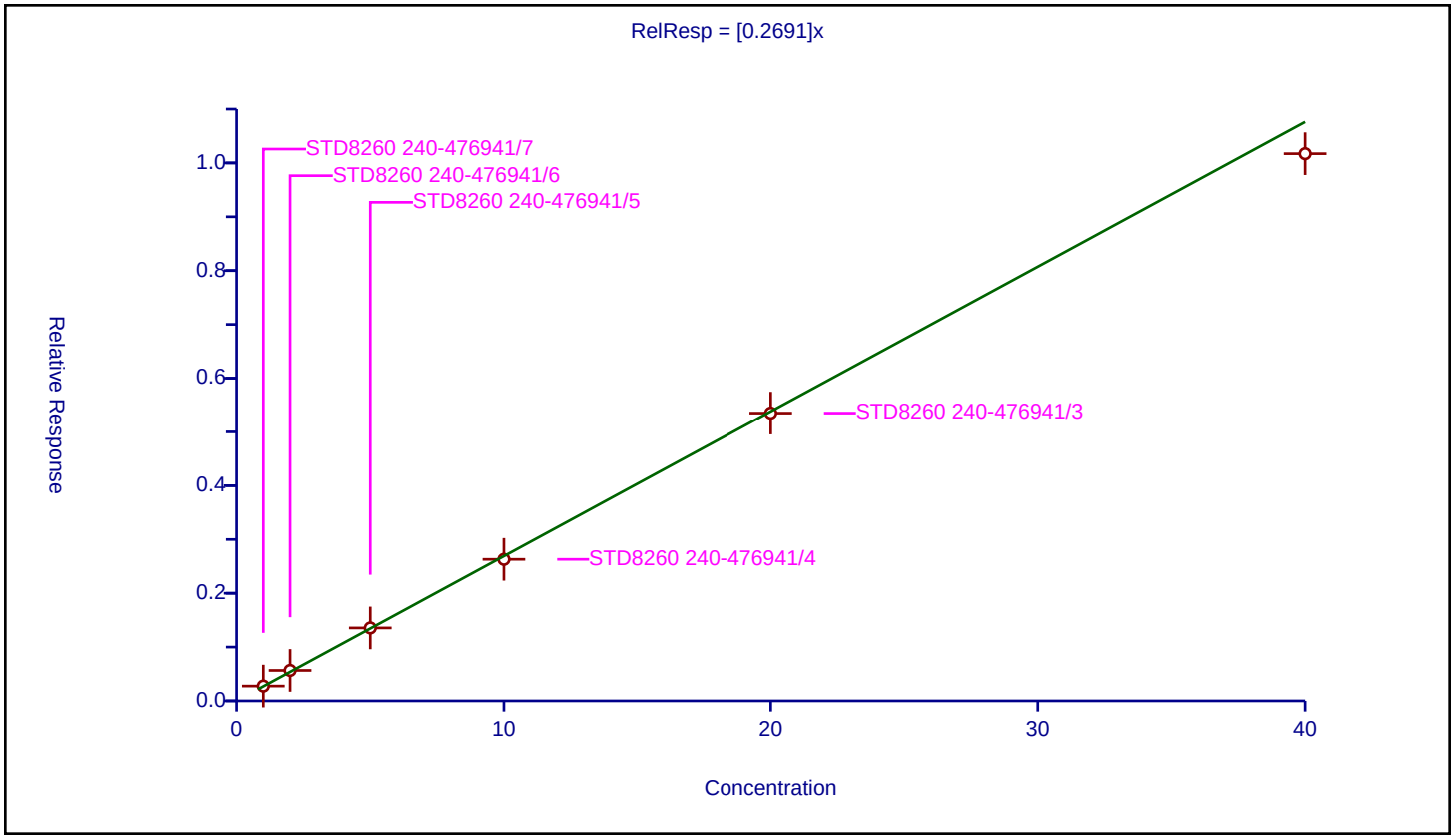
Curve Coefficients

Intercept:	0
Slope:	0.2691

Error Coefficients

Standard Error:	919000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275439	10.0	1508502.0	0.275439	Y
2	STD8260 240-476941/6	2.0	0.565844	10.0	1600104.0	0.282922	Y
3	STD8260 240-476941/5	5.0	1.355688	10.0	1580769.0	0.271138	Y
4	STD8260 240-476941/4	10.0	2.630433	10.0	1635381.0	0.263043	Y
5	STD8260 240-476941/3	20.0	5.350104	10.0	1729200.0	0.267505	Y
6	STD8260 240-476941/2	40.0	10.172429	10.0	1738218.0	0.254311	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

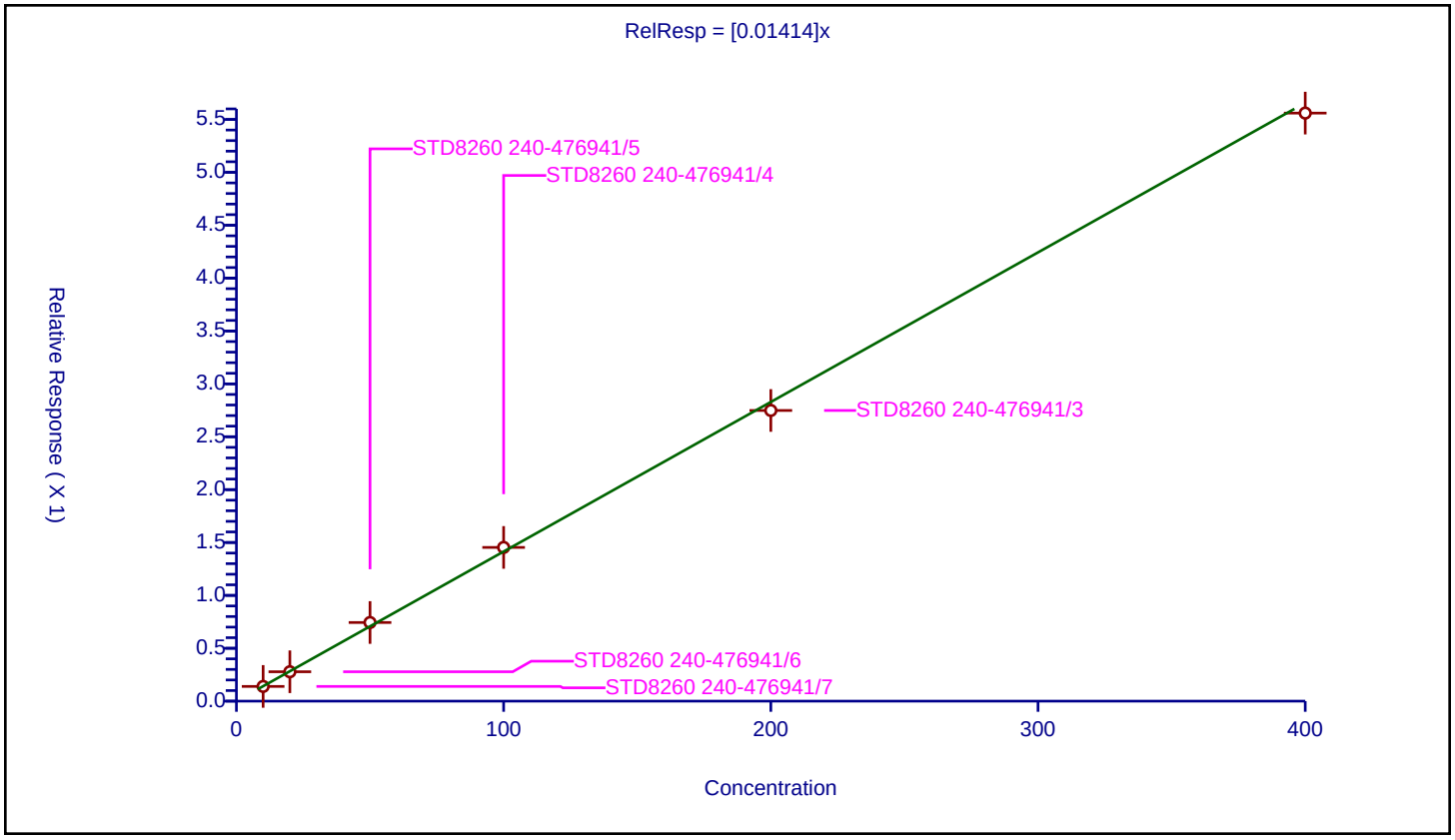
Curve Coefficients

Intercept:	0
Slope:	0.01414

Error Coefficients

Standard Error:	497000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.139204	10.0	1508502.0	0.01392	Y
2	STD8260 240-476941/6	20.0	0.277838	10.0	1600104.0	0.013892	Y
3	STD8260 240-476941/5	50.0	0.743556	10.0	1580769.0	0.014871	Y
4	STD8260 240-476941/4	100.0	1.453362	10.0	1635381.0	0.014534	Y
5	STD8260 240-476941/3	200.0	2.748358	10.0	1729200.0	0.013742	Y
6	STD8260 240-476941/2	400.0	5.56024	10.0	1738218.0	0.013901	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

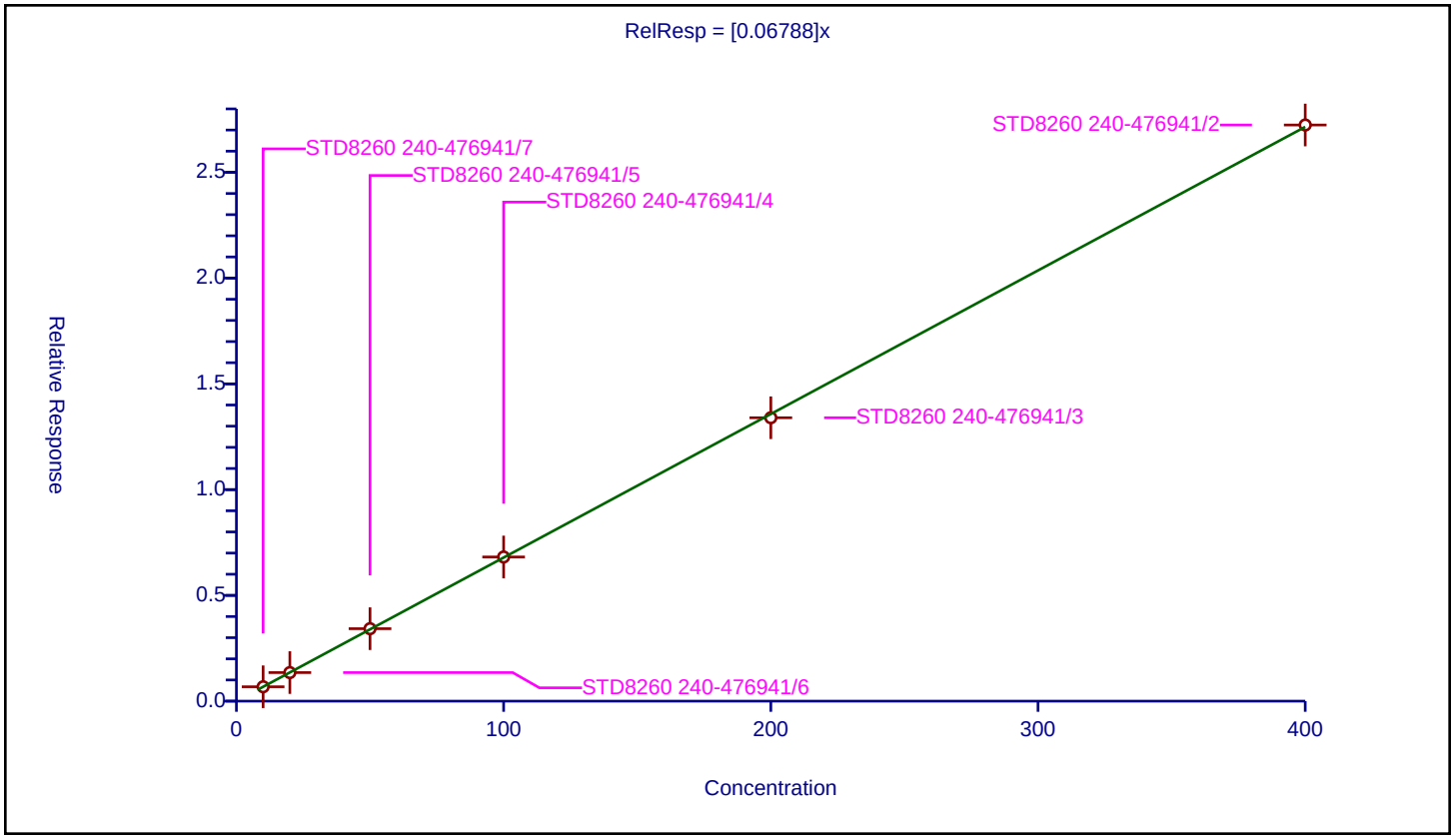
Curve Coefficients

Intercept:	0
Slope:	0.06788

Error Coefficients

Standard Error:	2420000
Relative Standard Error:	0.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	10.0	0.679456	10.0	1508502.0	0.067946	Y
2	STD8260 240-476941/6	20.0	1.350912	10.0	1600104.0	0.067546	Y
3	STD8260 240-476941/5	50.0	3.425997	10.0	1580769.0	0.06852	Y
4	STD8260 240-476941/4	100.0	6.81577	10.0	1635381.0	0.068158	Y
5	STD8260 240-476941/3	200.0	13.397808	10.0	1729200.0	0.066989	Y
6	STD8260 240-476941/2	400.0	27.237631	10.0	1738218.0	0.068094	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

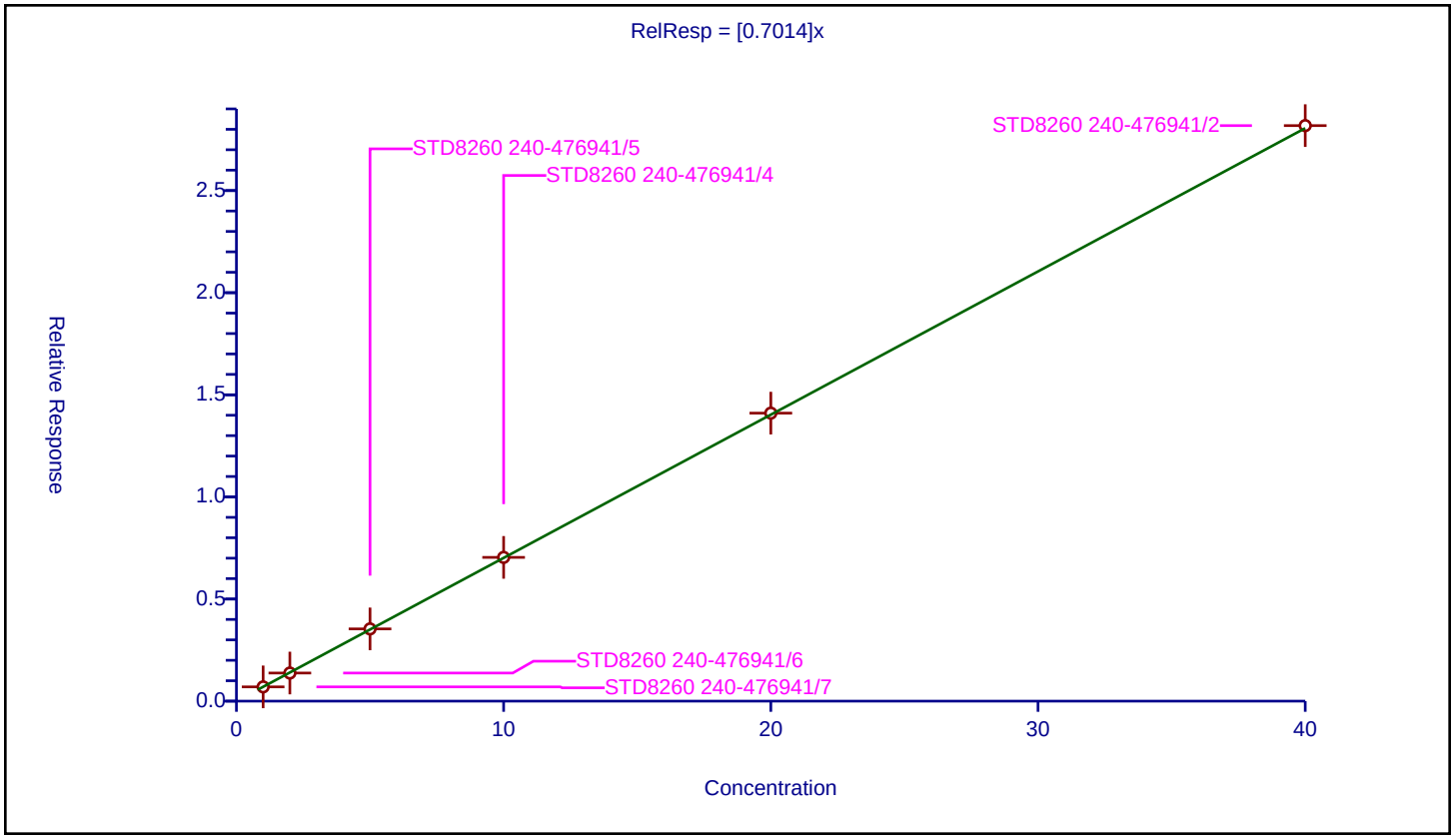
Curve Coefficients

Intercept:	0
Slope:	0.7014

Error Coefficients

Standard Error:	2520000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.698985	10.0	1508502.0	0.698985	Y
2	STD8260 240-476941/6	2.0	1.376267	10.0	1600104.0	0.688133	Y
3	STD8260 240-476941/5	5.0	3.537329	10.0	1580769.0	0.707466	Y
4	STD8260 240-476941/4	10.0	7.039247	10.0	1635381.0	0.703925	Y
5	STD8260 240-476941/3	20.0	14.102377	10.0	1729200.0	0.705119	Y
6	STD8260 240-476941/2	40.0	28.180746	10.0	1738218.0	0.704519	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

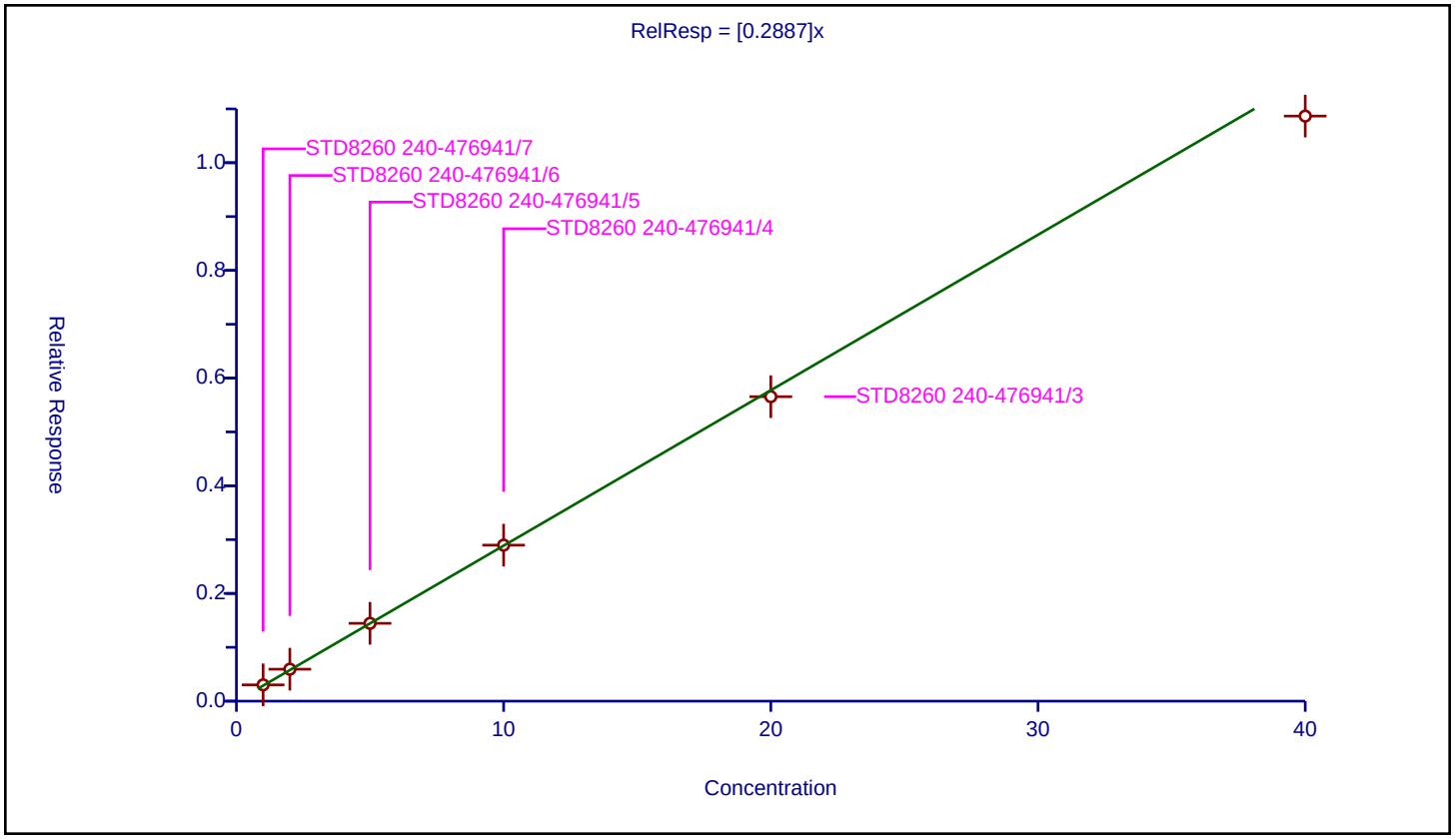
Curve Coefficients

Intercept:	0
Slope:	0.2887

Error Coefficients

Standard Error:	981000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.302618	10.0	1508502.0	0.302618	Y
2	STD8260 240-476941/6	2.0	0.593174	10.0	1600104.0	0.296587	Y
3	STD8260 240-476941/5	5.0	1.444987	10.0	1580769.0	0.288997	Y
4	STD8260 240-476941/4	10.0	2.897514	10.0	1635381.0	0.289751	Y
5	STD8260 240-476941/3	20.0	5.654783	10.0	1729200.0	0.282739	Y
6	STD8260 240-476941/2	40.0	10.866479	10.0	1738218.0	0.271662	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

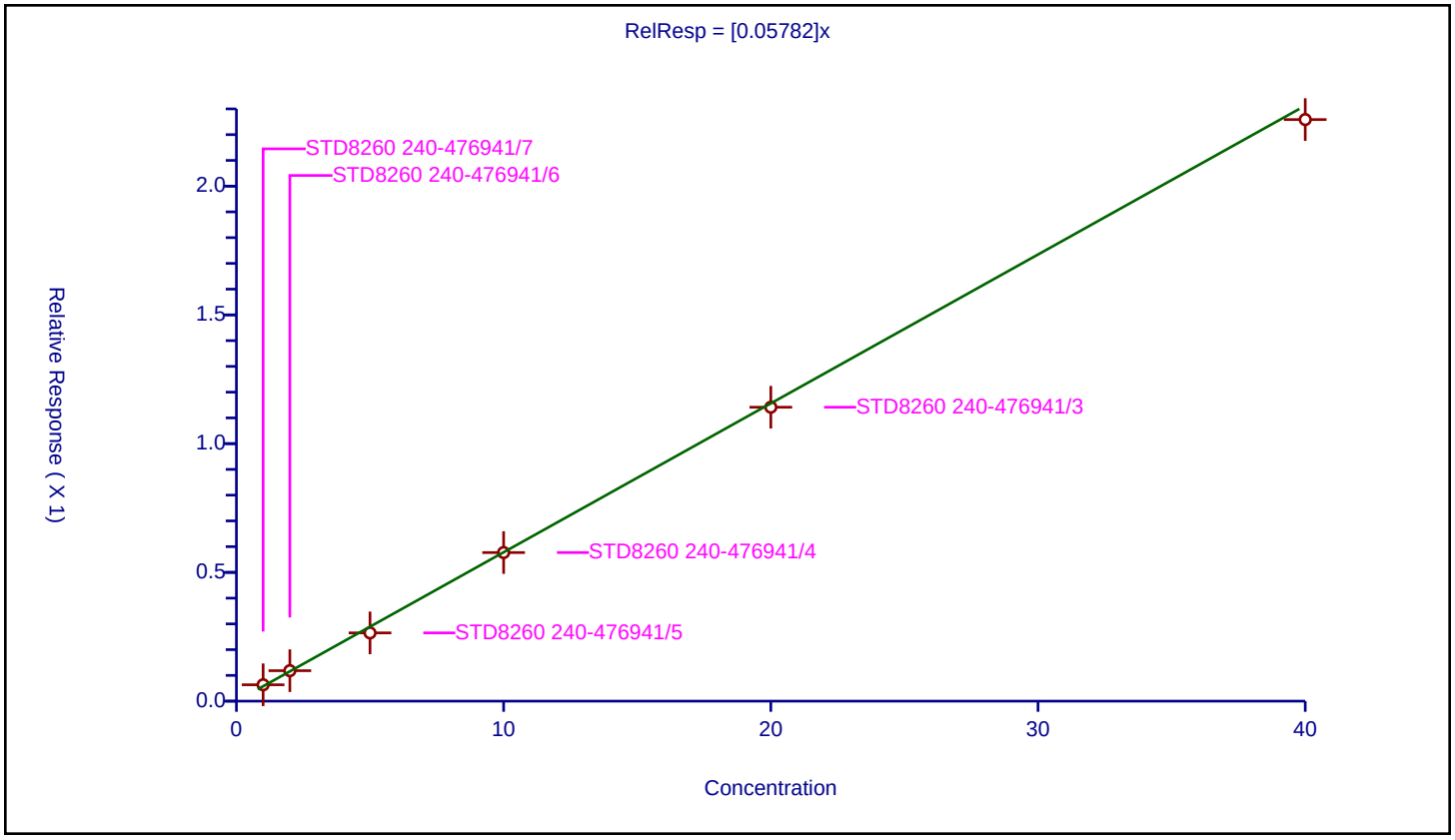
Curve Coefficients

Intercept:	0
Slope:	0.05782

Error Coefficients

Standard Error:	202000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.063513	10.0	1508502.0	0.063513	Y
2	STD8260 240-476941/6	2.0	0.118292	10.0	1600104.0	0.059146	Y
3	STD8260 240-476941/5	5.0	0.265029	10.0	1580769.0	0.053006	Y
4	STD8260 240-476941/4	10.0	0.576991	10.0	1635381.0	0.057699	Y
5	STD8260 240-476941/3	20.0	1.141406	10.0	1729200.0	0.05707	Y
6	STD8260 240-476941/2	40.0	2.258503	10.0	1738218.0	0.056463	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

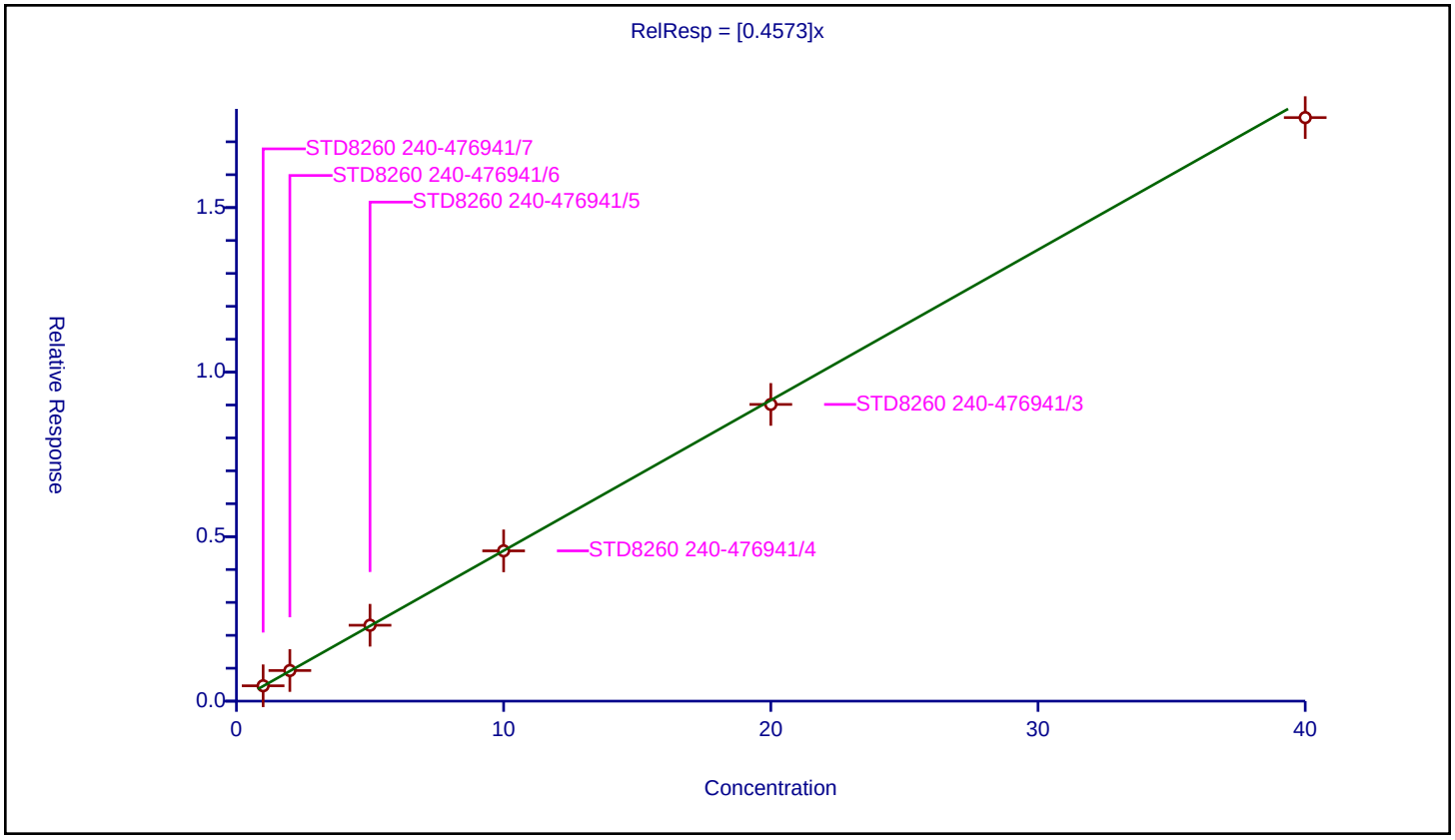
Curve Coefficients

Intercept:	0
Slope:	0.4573

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.466449	10.0	1508502.0	0.466449	Y
2	STD8260 240-476941/6	2.0	0.930208	10.0	1600104.0	0.465104	Y
3	STD8260 240-476941/5	5.0	2.306403	10.0	1580769.0	0.461281	Y
4	STD8260 240-476941/4	10.0	4.56778	10.0	1635381.0	0.456778	Y
5	STD8260 240-476941/3	20.0	9.018159	10.0	1729200.0	0.450908	Y
6	STD8260 240-476941/2	40.0	17.734904	10.0	1738218.0	0.443373	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

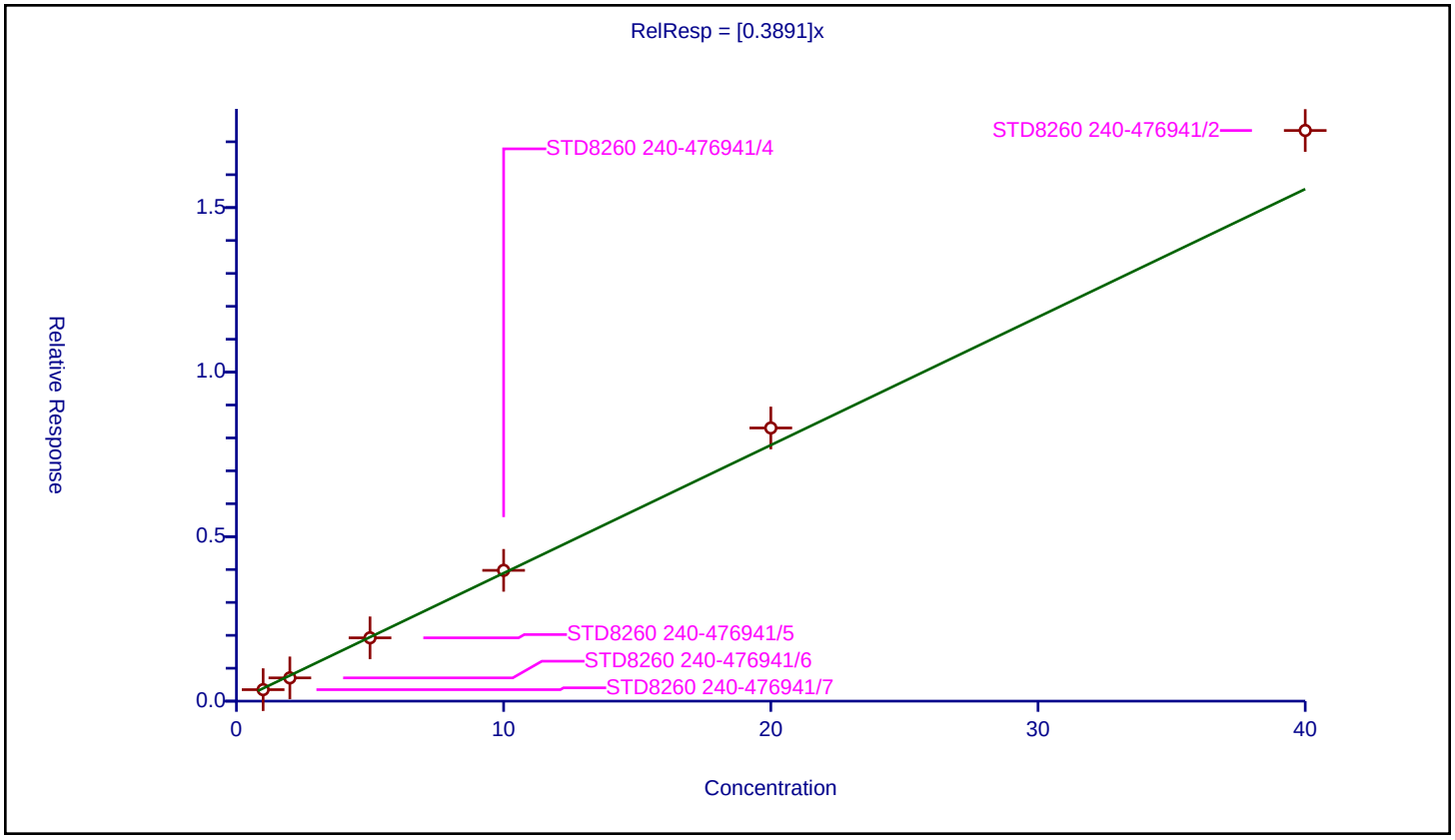
Curve Coefficients

Intercept:	0
Slope:	0.3891

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.349612	10.0	1508502.0	0.349612	Y
2	STD8260 240-476941/6	2.0	0.707448	10.0	1600104.0	0.353724	Y
3	STD8260 240-476941/5	5.0	1.924608	10.0	1580769.0	0.384922	Y
4	STD8260 240-476941/4	10.0	3.974994	10.0	1635381.0	0.397499	Y
5	STD8260 240-476941/3	20.0	8.302787	10.0	1729200.0	0.415139	Y
6	STD8260 240-476941/2	40.0	17.343619	10.0	1738218.0	0.43359	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

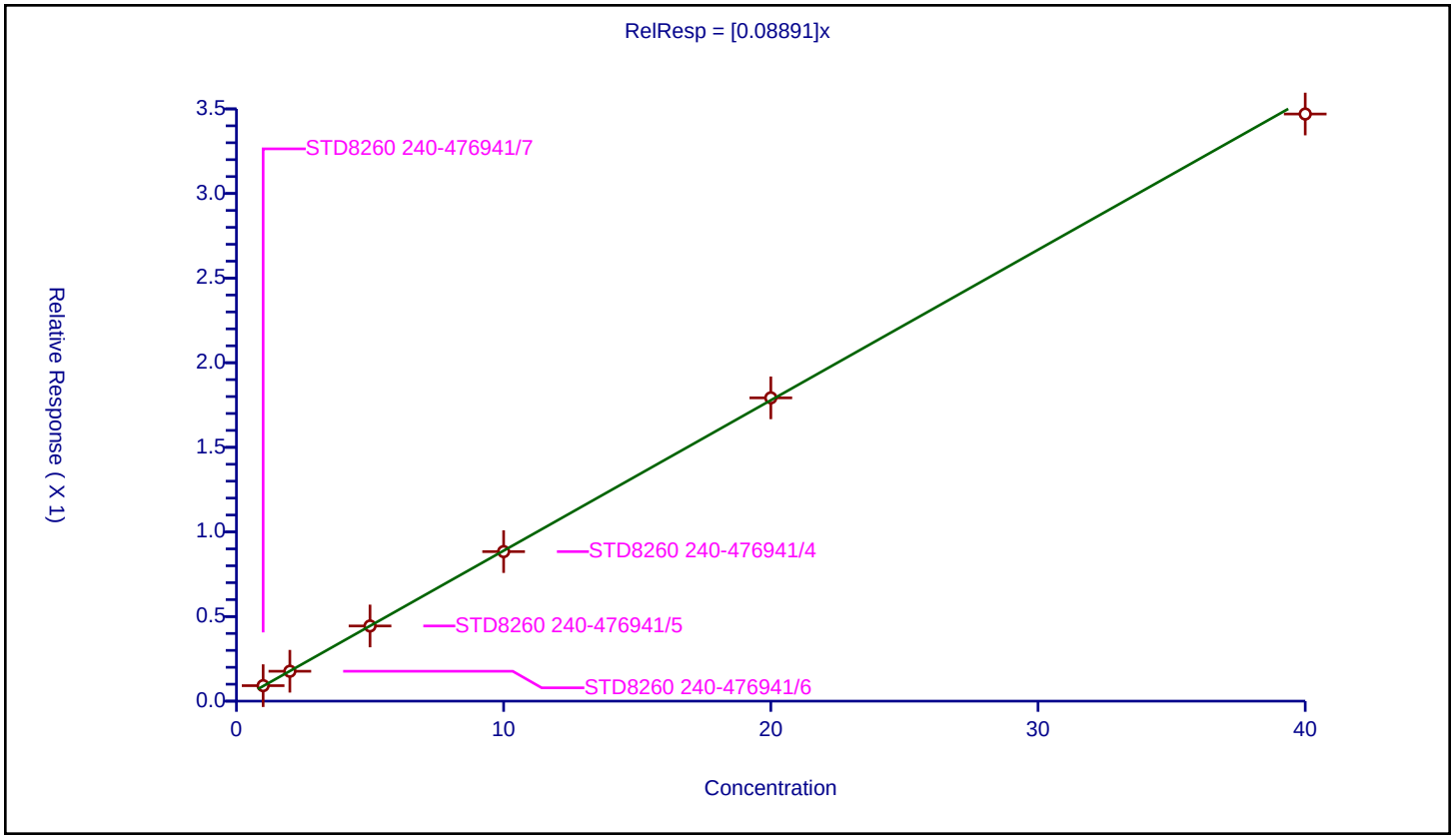
Curve Coefficients

Intercept:	0
Slope:	0.08891

Error Coefficients

Standard Error:	312000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.091528	10.0	1508502.0	0.091528	Y
2	STD8260 240-476941/6	2.0	0.176714	10.0	1600104.0	0.088357	Y
3	STD8260 240-476941/5	5.0	0.444208	10.0	1580769.0	0.088842	Y
4	STD8260 240-476941/4	10.0	0.883745	10.0	1635381.0	0.088375	Y
5	STD8260 240-476941/3	20.0	1.792407	10.0	1729200.0	0.08962	Y
6	STD8260 240-476941/2	40.0	3.46976	10.0	1738218.0	0.086744	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

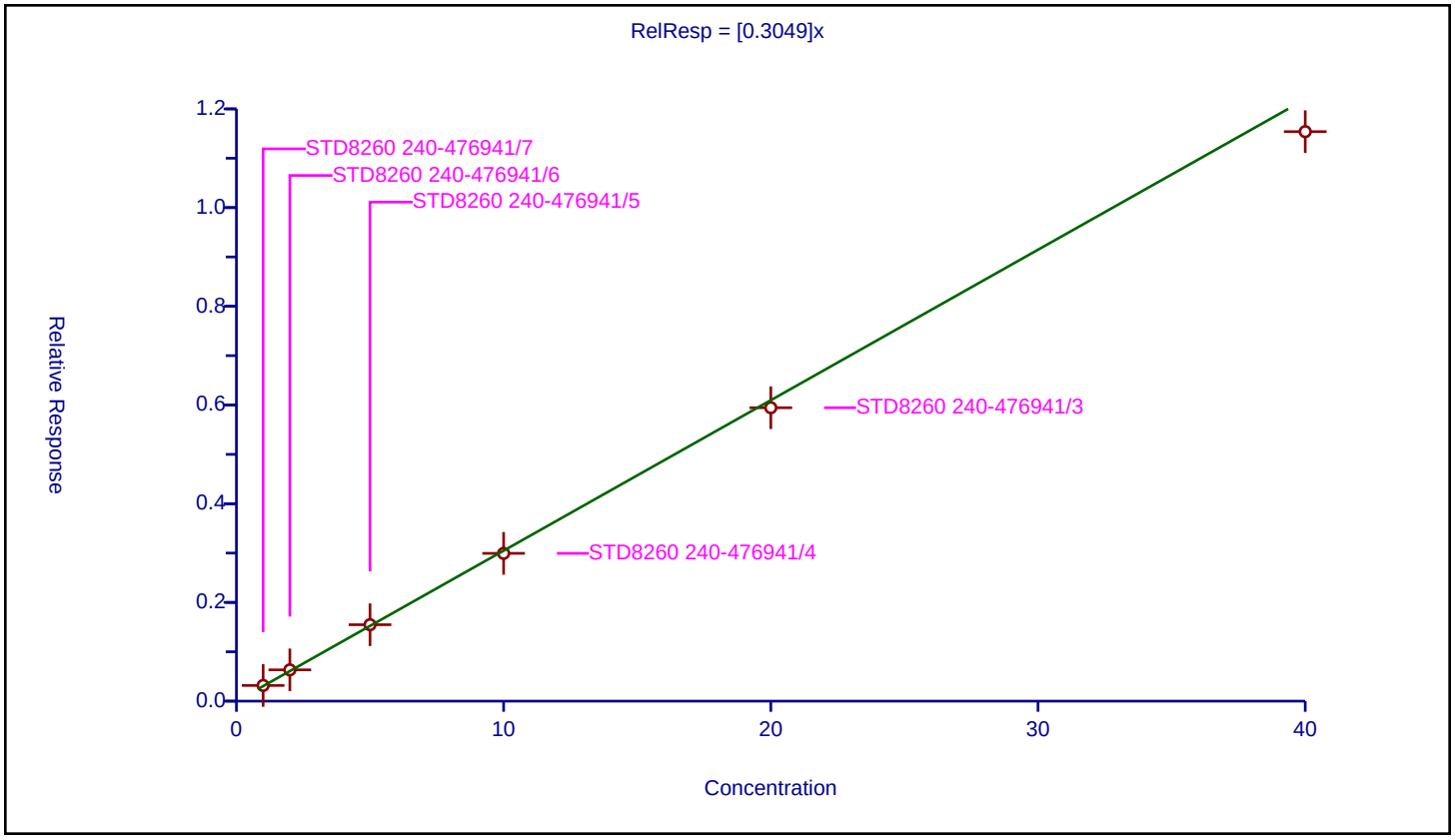
Curve Coefficients

Intercept:	0
Slope:	0.3049

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.317547	10.0	1508502.0	0.317547	Y
2	STD8260 240-476941/6	2.0	0.633728	10.0	1600104.0	0.316864	Y
3	STD8260 240-476941/5	5.0	1.548303	10.0	1580769.0	0.309661	Y
4	STD8260 240-476941/4	10.0	2.994232	10.0	1635381.0	0.299423	Y
5	STD8260 240-476941/3	20.0	5.944876	10.0	1729200.0	0.297244	Y
6	STD8260 240-476941/2	40.0	11.539324	10.0	1738218.0	0.288483	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

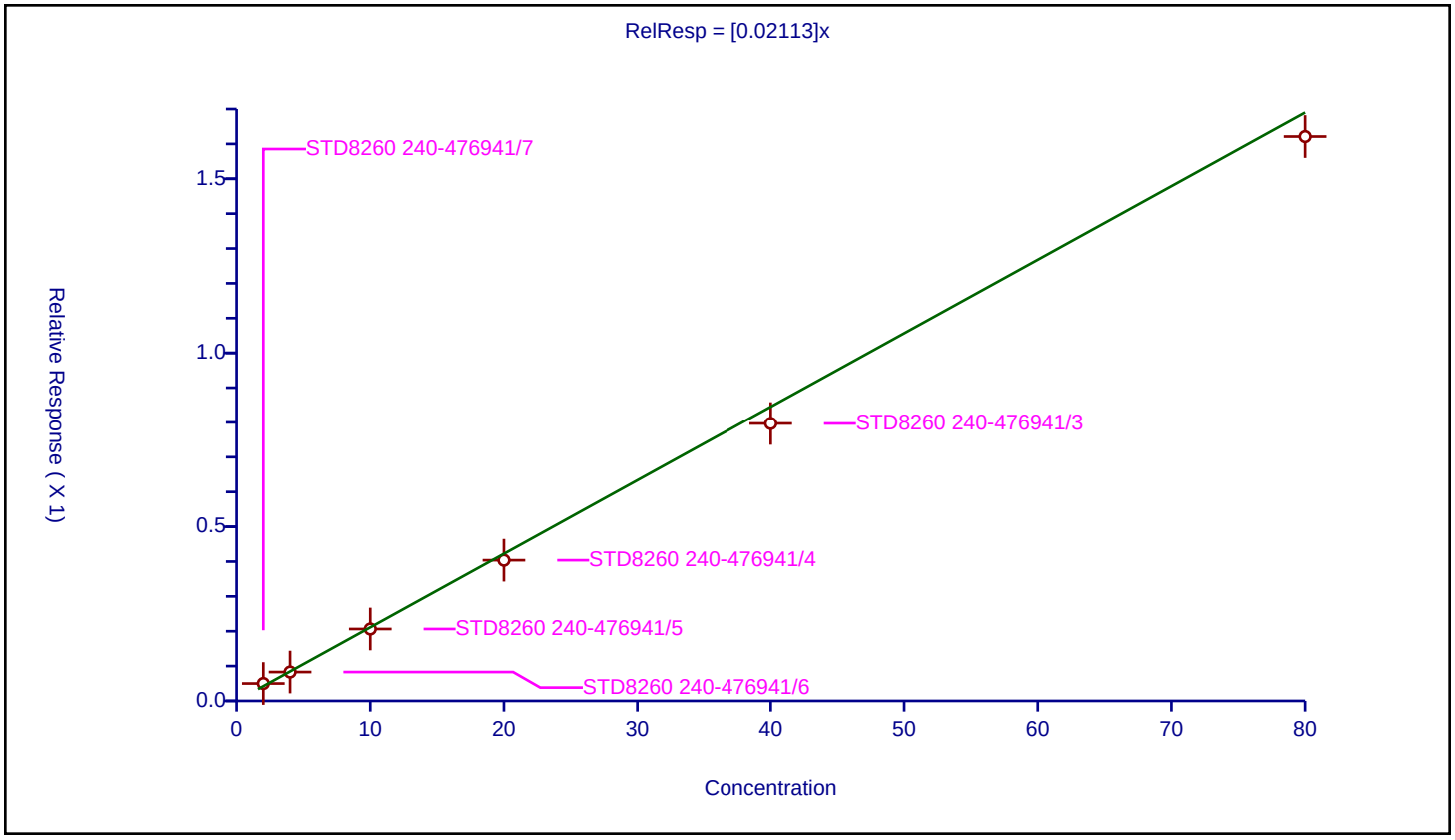
Curve Coefficients

Intercept:	0
Slope:	0.02113

Error Coefficients

Standard Error:	144000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.049983	10.0	1508502.0	0.024992	Y
2	STD8260 240-476941/6	4.0	0.08292	10.0	1600104.0	0.02073	Y
3	STD8260 240-476941/5	10.0	0.206482	10.0	1580769.0	0.020648	Y
4	STD8260 240-476941/4	20.0	0.403936	10.0	1635381.0	0.020197	Y
5	STD8260 240-476941/3	40.0	0.796947	10.0	1729200.0	0.019924	Y
6	STD8260 240-476941/2	80.0	1.621149	10.0	1738218.0	0.020264	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

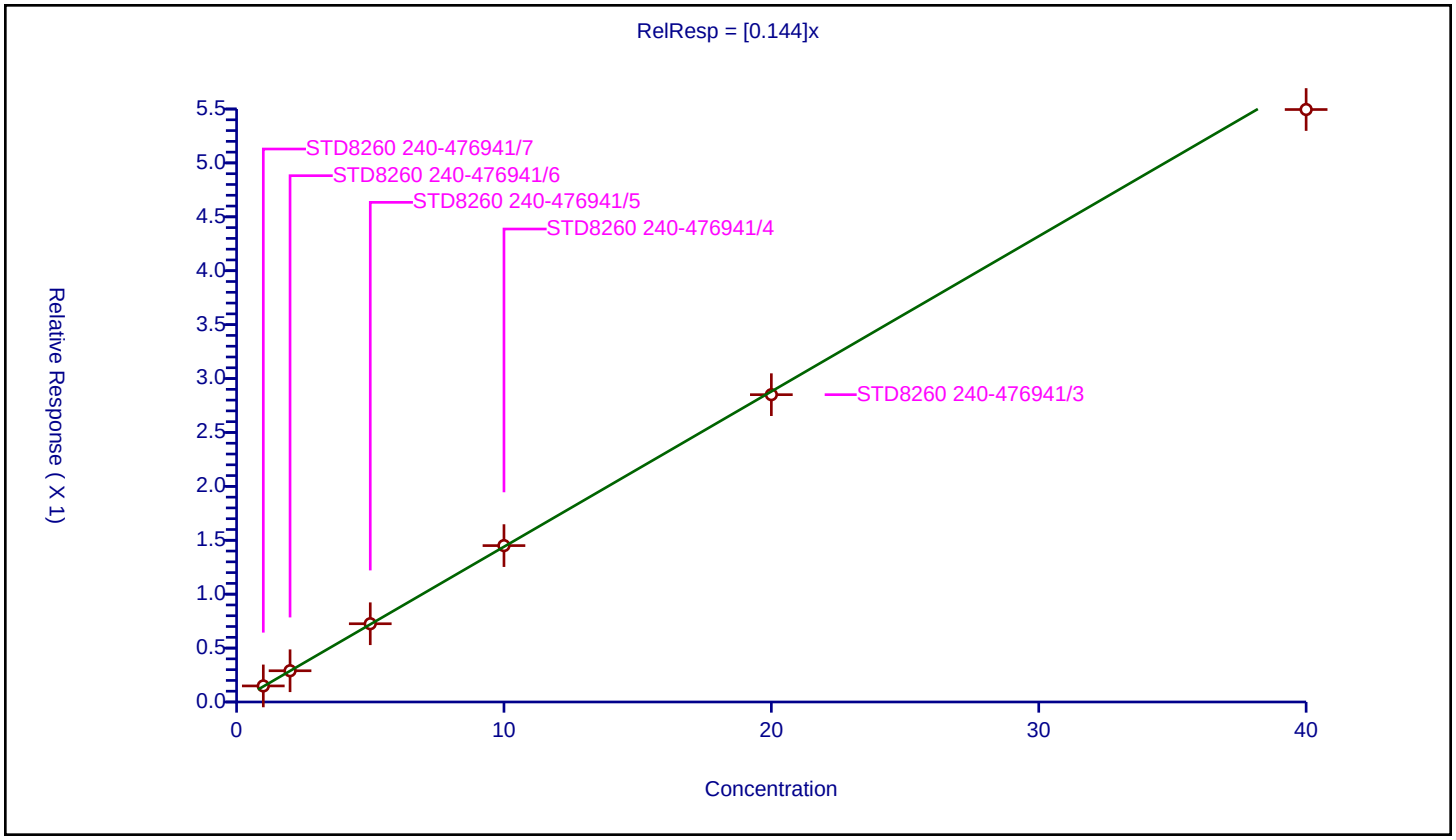
Curve Coefficients

Intercept:	0
Slope:	0.144

Error Coefficients

Standard Error:	495000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.148995	10.0	1508502.0	0.148995	Y
2	STD8260 240-476941/6	2.0	0.289706	10.0	1600104.0	0.144853	Y
3	STD8260 240-476941/5	5.0	0.725881	10.0	1580769.0	0.145176	Y
4	STD8260 240-476941/4	10.0	1.450518	10.0	1635381.0	0.145052	Y
5	STD8260 240-476941/3	20.0	2.850578	10.0	1729200.0	0.142529	Y
6	STD8260 240-476941/2	40.0	5.495398	10.0	1738218.0	0.137385	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

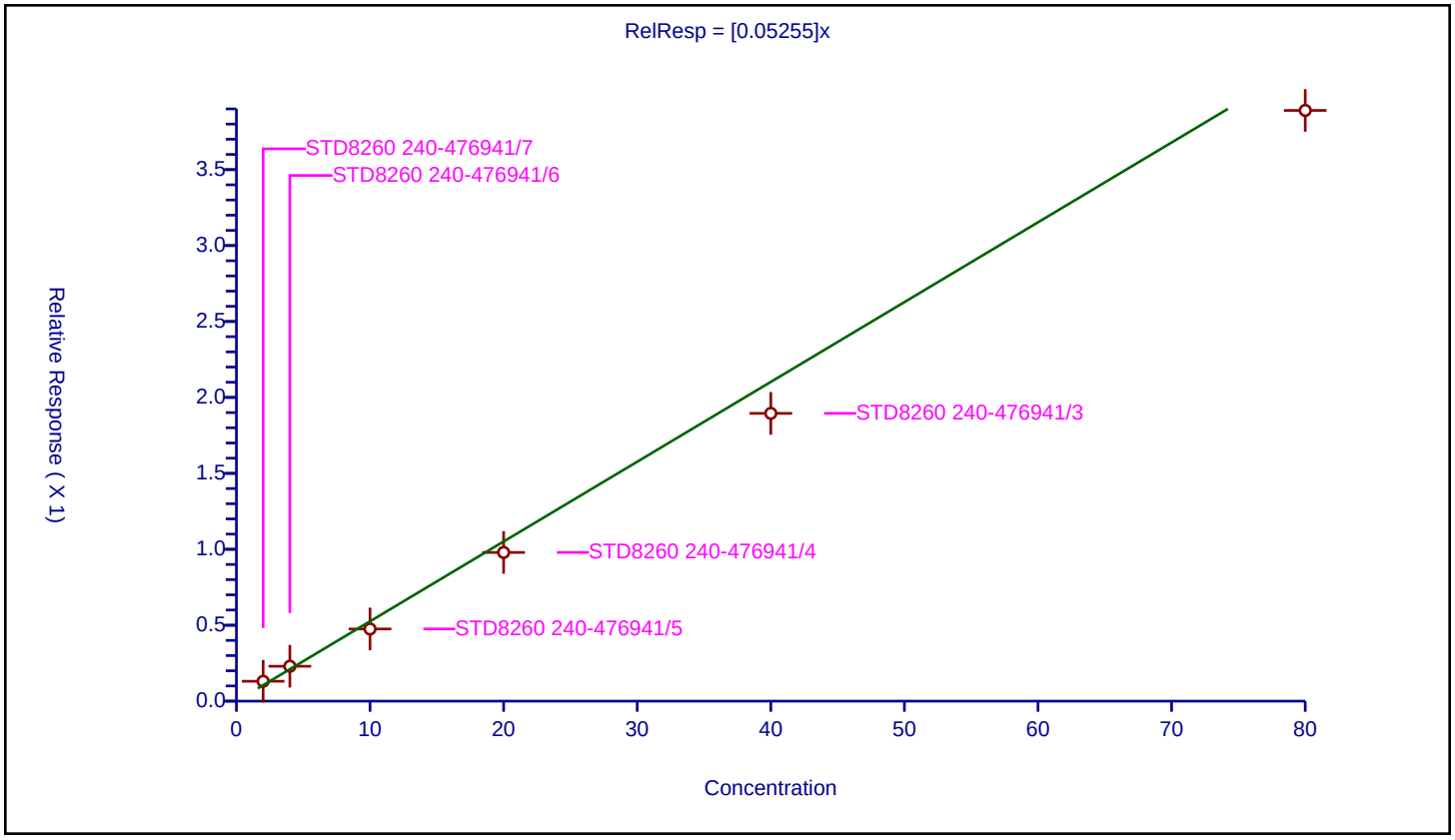
Curve Coefficients

Intercept:	0
Slope:	0.05255

Error Coefficients

Standard Error:	346000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.130845	10.0	1508502.0	0.065423	Y
2	STD8260 240-476941/6	4.0	0.229635	10.0	1600104.0	0.057409	Y
3	STD8260 240-476941/5	10.0	0.475256	10.0	1580769.0	0.047526	Y
4	STD8260 240-476941/4	20.0	0.979172	10.0	1635381.0	0.048959	Y
5	STD8260 240-476941/3	40.0	1.895009	10.0	1729200.0	0.047375	Y
6	STD8260 240-476941/2	80.0	3.88984	10.0	1738218.0	0.048623	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

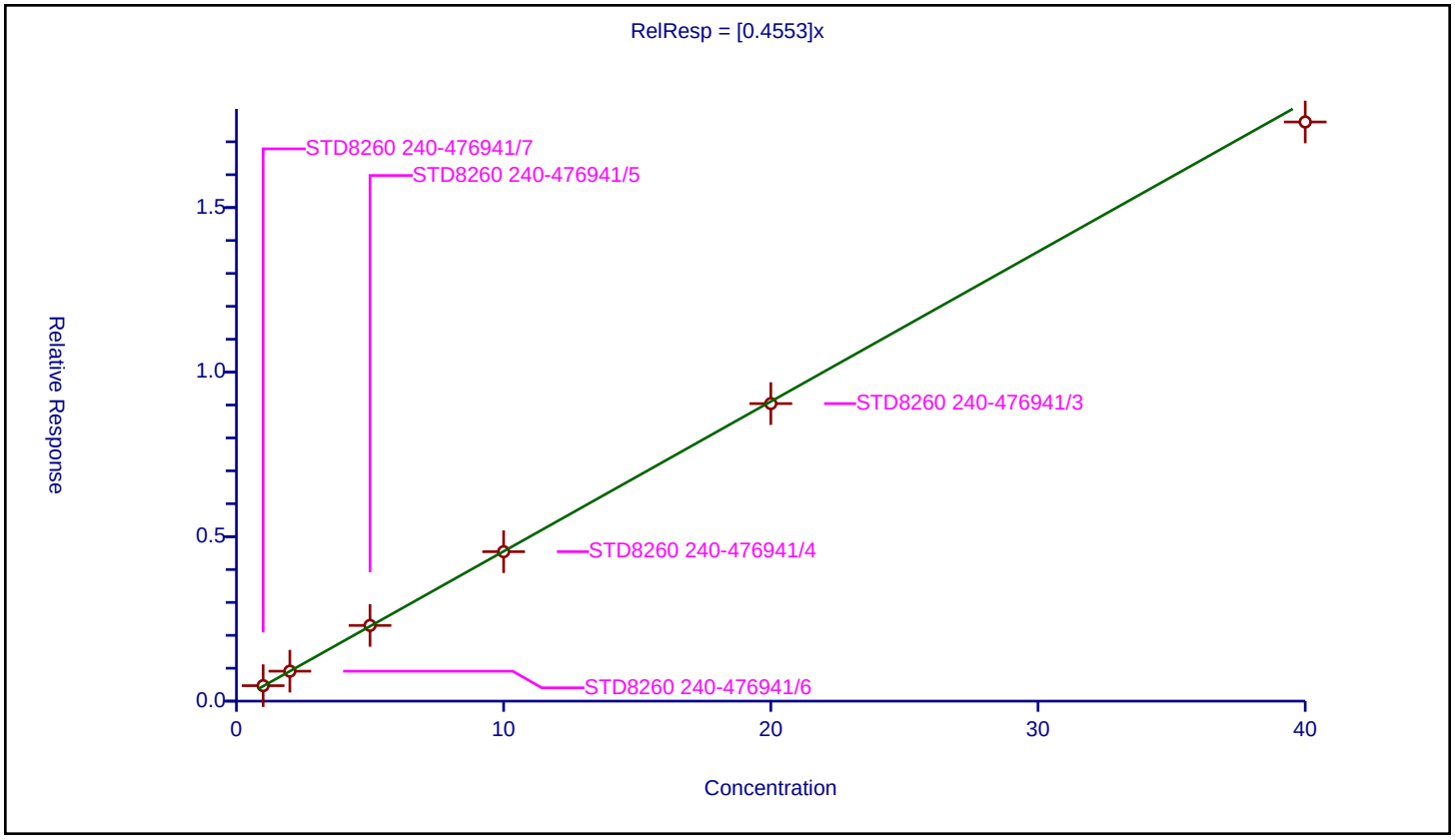
Curve Coefficients

Intercept:	0
Slope:	0.4553

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.470235	10.0	1508502.0	0.470235	Y
2	STD8260 240-476941/6	2.0	0.909872	10.0	1600104.0	0.454936	Y
3	STD8260 240-476941/5	5.0	2.300652	10.0	1580769.0	0.46013	Y
4	STD8260 240-476941/4	10.0	4.542415	10.0	1635381.0	0.454242	Y
5	STD8260 240-476941/3	20.0	9.043269	10.0	1729200.0	0.452163	Y
6	STD8260 240-476941/2	40.0	17.60289	10.0	1738218.0	0.440072	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

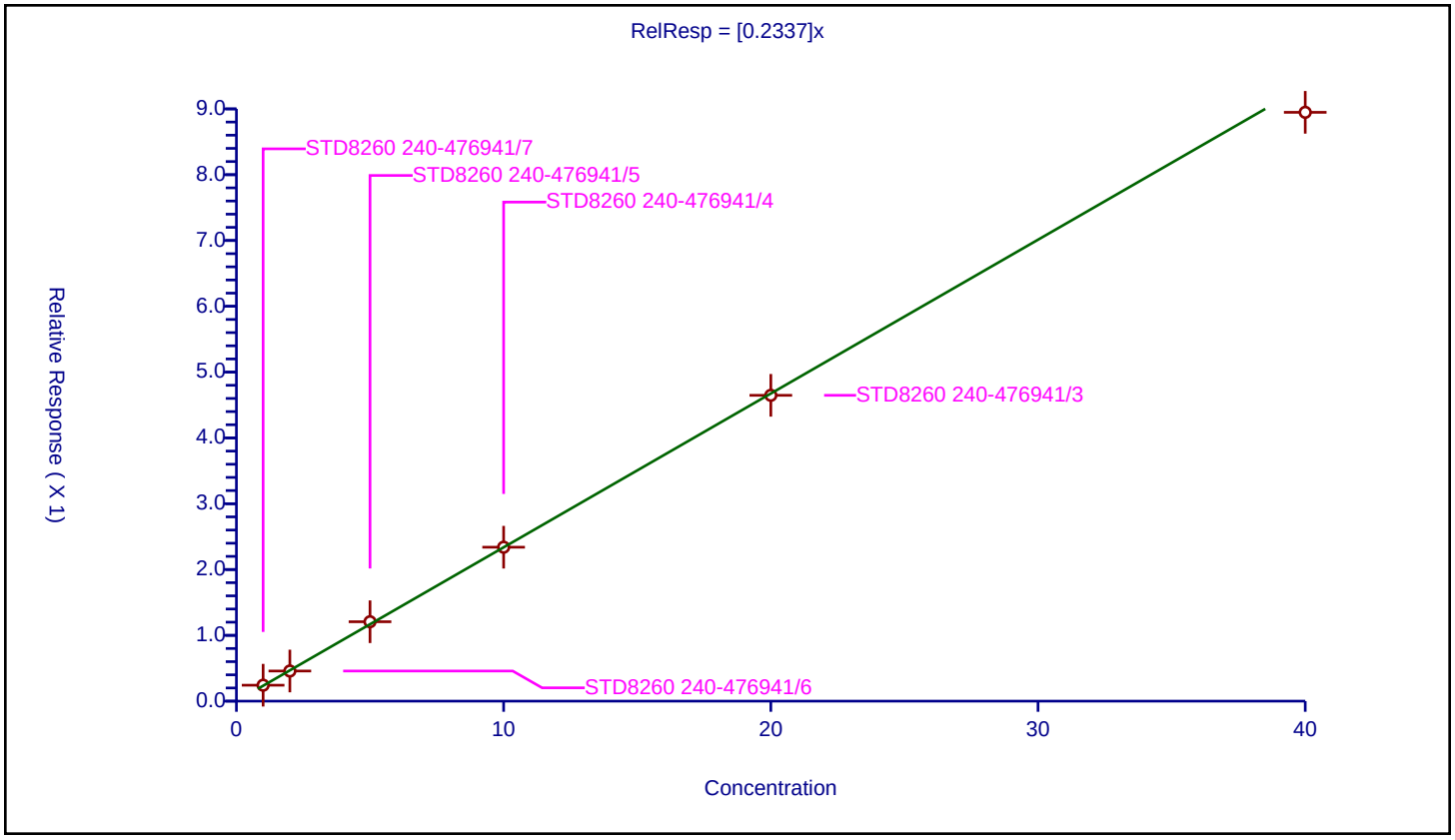
Curve Coefficients

Intercept:	0
Slope:	0.2337

Error Coefficients

Standard Error:	807000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.242134	10.0	1508502.0	0.242134	Y
2	STD8260 240-476941/6	2.0	0.45792	10.0	1600104.0	0.22896	Y
3	STD8260 240-476941/5	5.0	1.206729	10.0	1580769.0	0.241346	Y
4	STD8260 240-476941/4	10.0	2.339247	10.0	1635381.0	0.233925	Y
5	STD8260 240-476941/3	20.0	4.647265	10.0	1729200.0	0.232363	Y
6	STD8260 240-476941/2	40.0	8.947681	10.0	1738218.0	0.223692	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

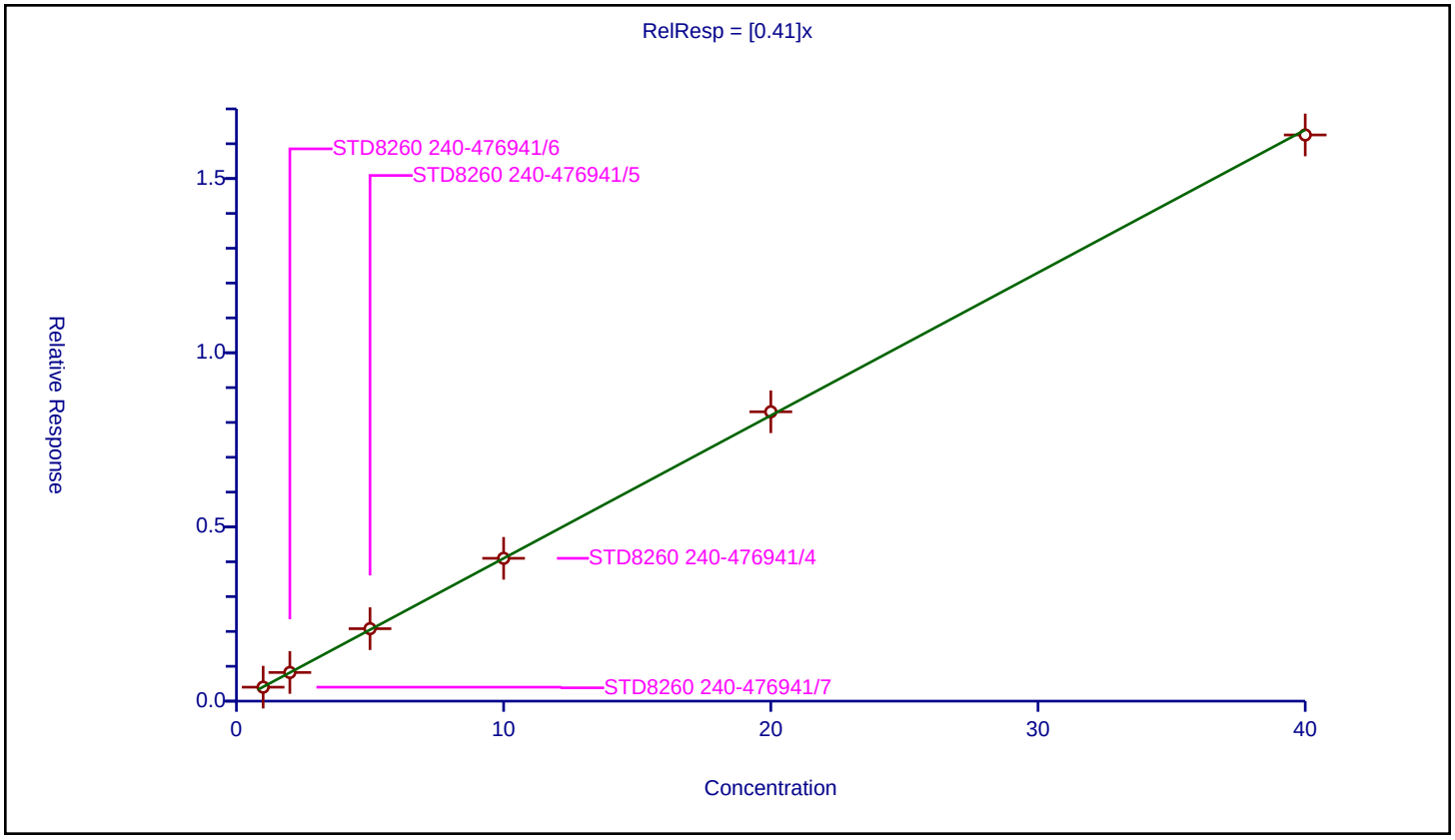
Curve Coefficients

Intercept:	0
Slope:	0.41

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.400841	10.0	1508502.0	0.400841	Y
2	STD8260 240-476941/6	2.0	0.822728	10.0	1600104.0	0.411364	Y
3	STD8260 240-476941/5	5.0	2.079741	10.0	1580769.0	0.415948	Y
4	STD8260 240-476941/4	10.0	4.099442	10.0	1635381.0	0.409944	Y
5	STD8260 240-476941/3	20.0	8.305795	10.0	1729200.0	0.41529	Y
6	STD8260 240-476941/2	40.0	16.252622	10.0	1738218.0	0.406316	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

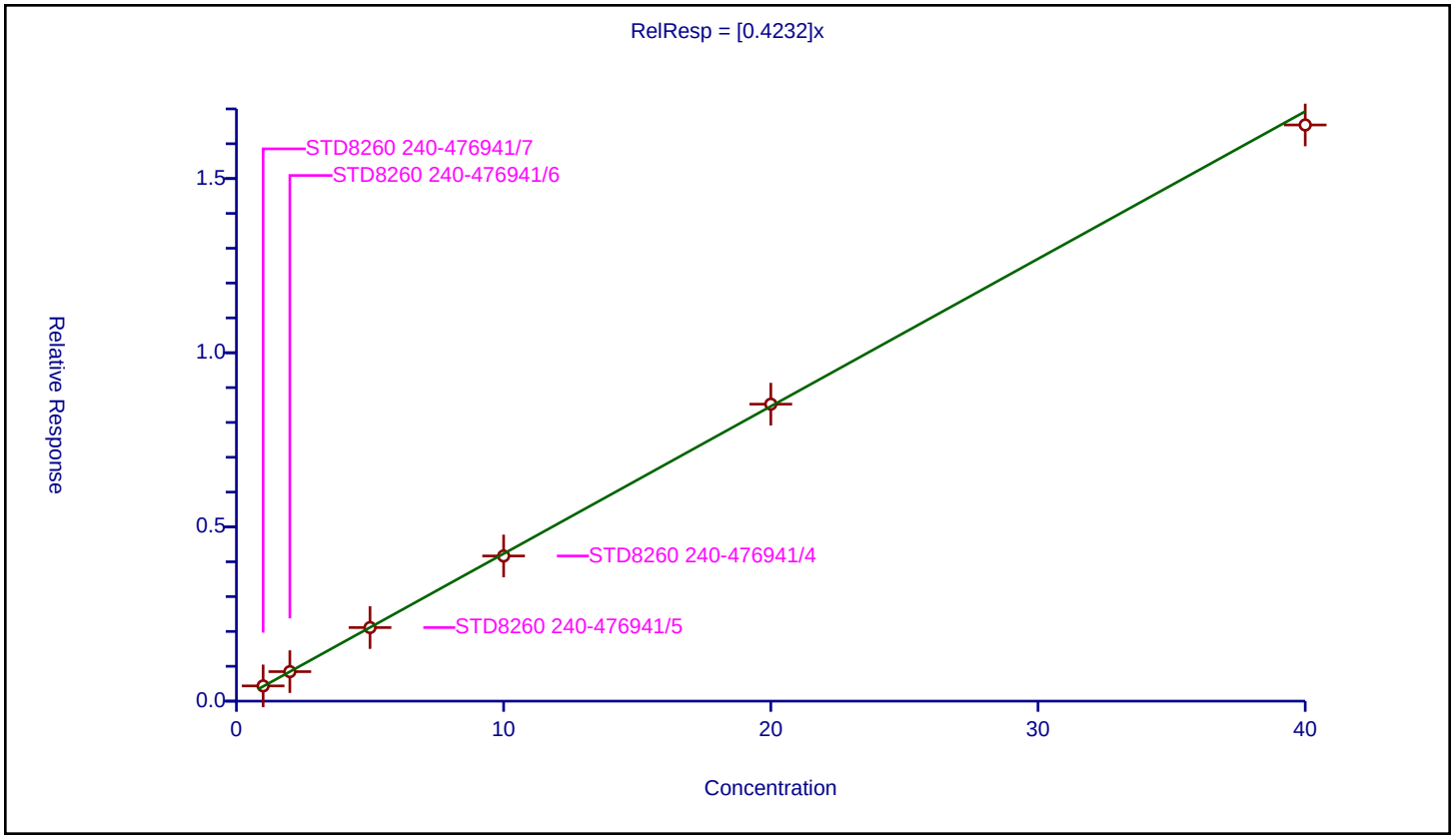
Curve Coefficients

Intercept:	0
Slope:	0.4232

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.436977	10.0	1508502.0	0.436977	Y
2	STD8260 240-476941/6	2.0	0.846601	10.0	1600104.0	0.423301	Y
3	STD8260 240-476941/5	5.0	2.111675	10.0	1580769.0	0.422335	Y
4	STD8260 240-476941/4	10.0	4.167163	10.0	1635381.0	0.416716	Y
5	STD8260 240-476941/3	20.0	8.524879	10.0	1729200.0	0.426244	Y
6	STD8260 240-476941/2	40.0	16.538622	10.0	1738218.0	0.413466	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

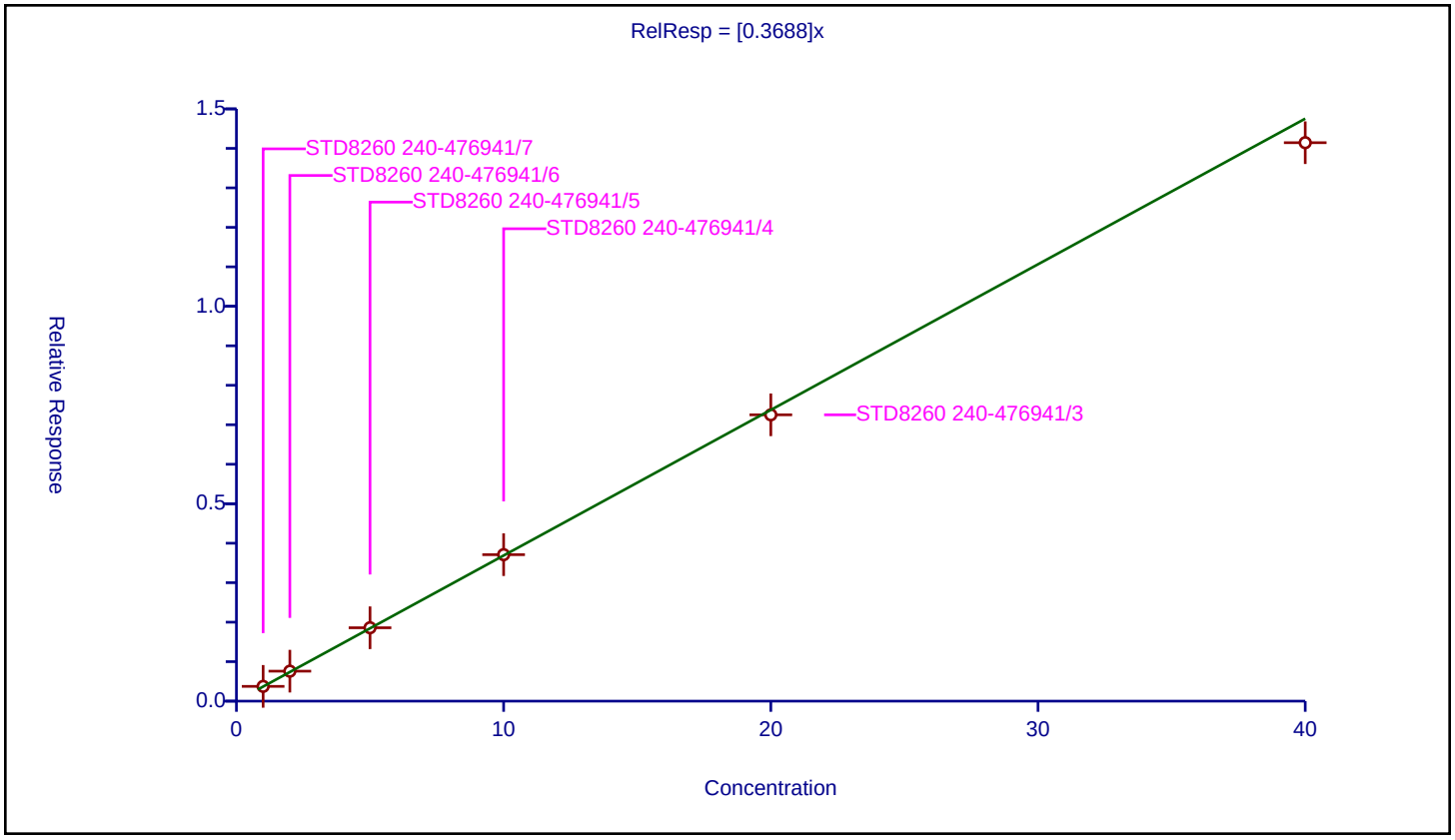
Curve Coefficients

Intercept:	0
Slope:	0.3688

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.374338	10.0	1508502.0	0.374338	Y
2	STD8260 240-476941/6	2.0	0.758994	10.0	1600104.0	0.379497	Y
3	STD8260 240-476941/5	5.0	1.858994	10.0	1580769.0	0.371799	Y
4	STD8260 240-476941/4	10.0	3.710108	10.0	1635381.0	0.371011	Y
5	STD8260 240-476941/3	20.0	7.251758	10.0	1729200.0	0.362588	Y
6	STD8260 240-476941/2	40.0	14.144141	10.0	1738218.0	0.353604	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

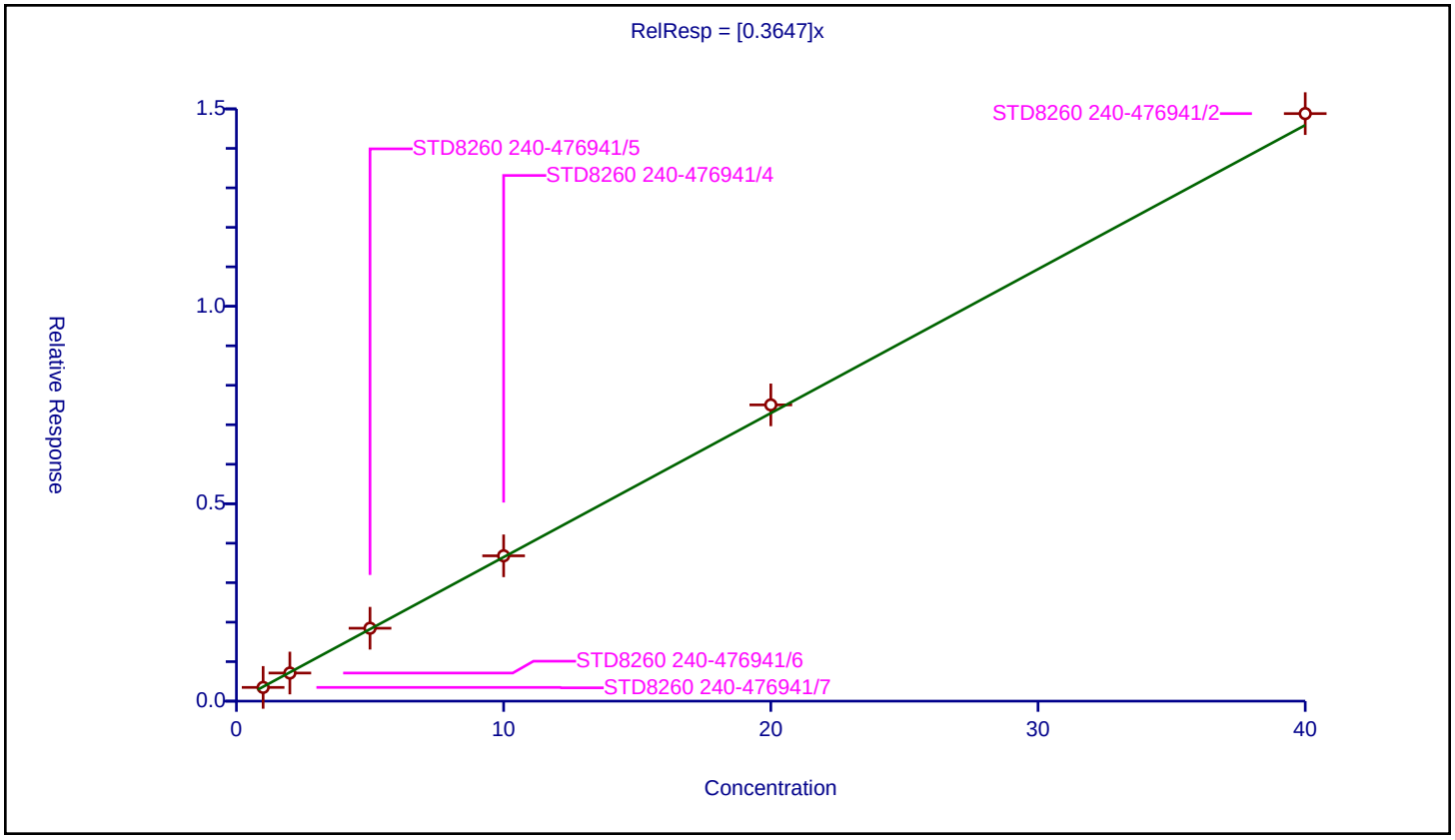
Curve Coefficients

Intercept:	0
Slope:	0.3647

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.347736	10.0	1508502.0	0.347736	Y
2	STD8260 240-476941/6	2.0	0.711754	10.0	1600104.0	0.355877	Y
3	STD8260 240-476941/5	5.0	1.846582	10.0	1580769.0	0.369316	Y
4	STD8260 240-476941/4	10.0	3.681032	10.0	1635381.0	0.368103	Y
5	STD8260 240-476941/3	20.0	7.503851	10.0	1729200.0	0.375193	Y
6	STD8260 240-476941/2	40.0	14.880573	10.0	1738218.0	0.372014	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

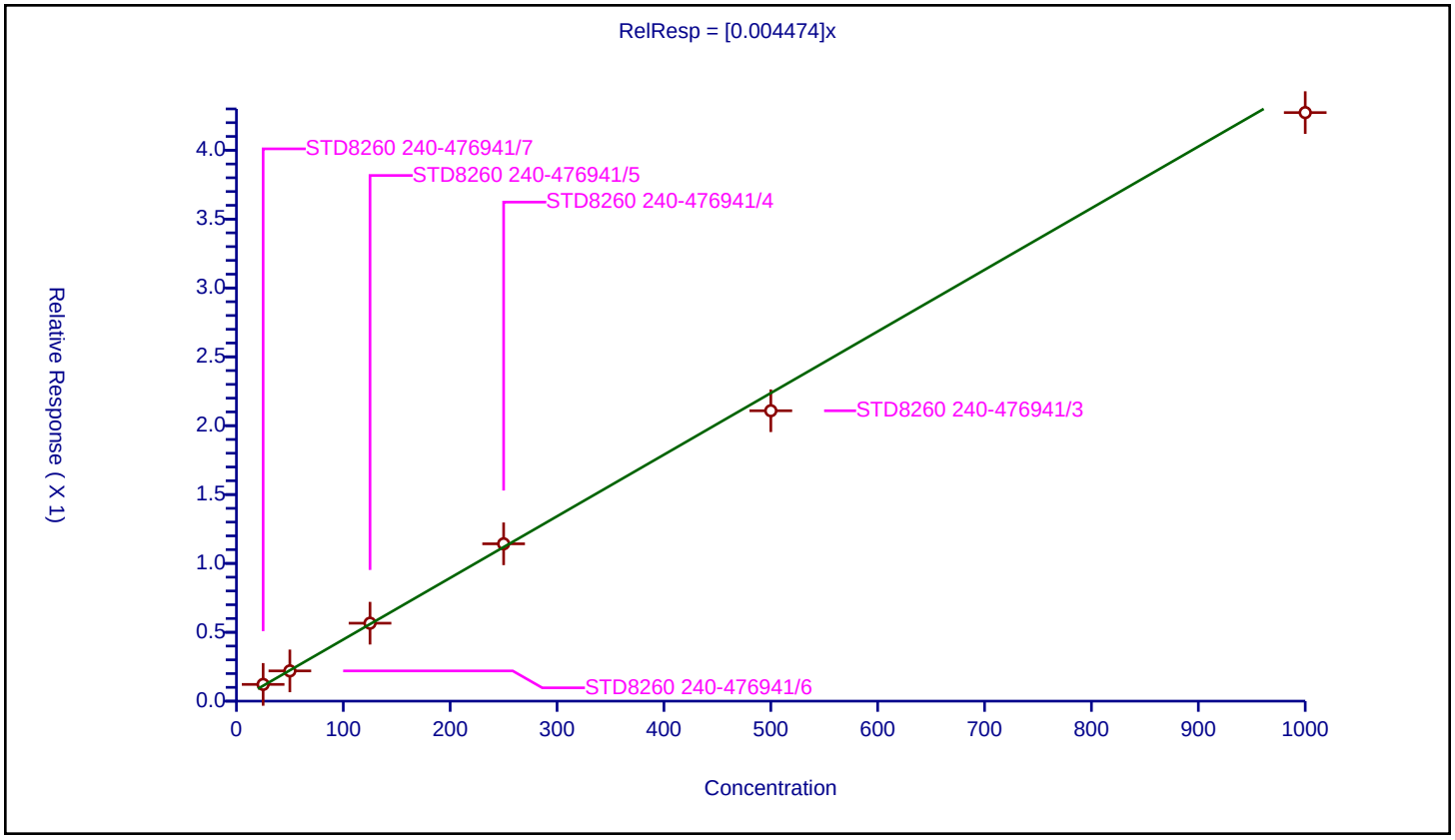
Curve Coefficients

Intercept:	0
Slope:	0.004474

Error Coefficients

Standard Error:	382000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	25.0	0.121584	10.0	1508502.0	0.004863	Y
2	STD8260 240-476941/6	50.0	0.219592	10.0	1600104.0	0.004392	Y
3	STD8260 240-476941/5	125.0	0.565984	10.0	1580769.0	0.004528	Y
4	STD8260 240-476941/4	250.0	1.142309	10.0	1635381.0	0.004569	Y
5	STD8260 240-476941/3	500.0	2.108426	10.0	1729200.0	0.004217	Y
6	STD8260 240-476941/2	1000.0	4.273123	10.0	1738218.0	0.004273	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

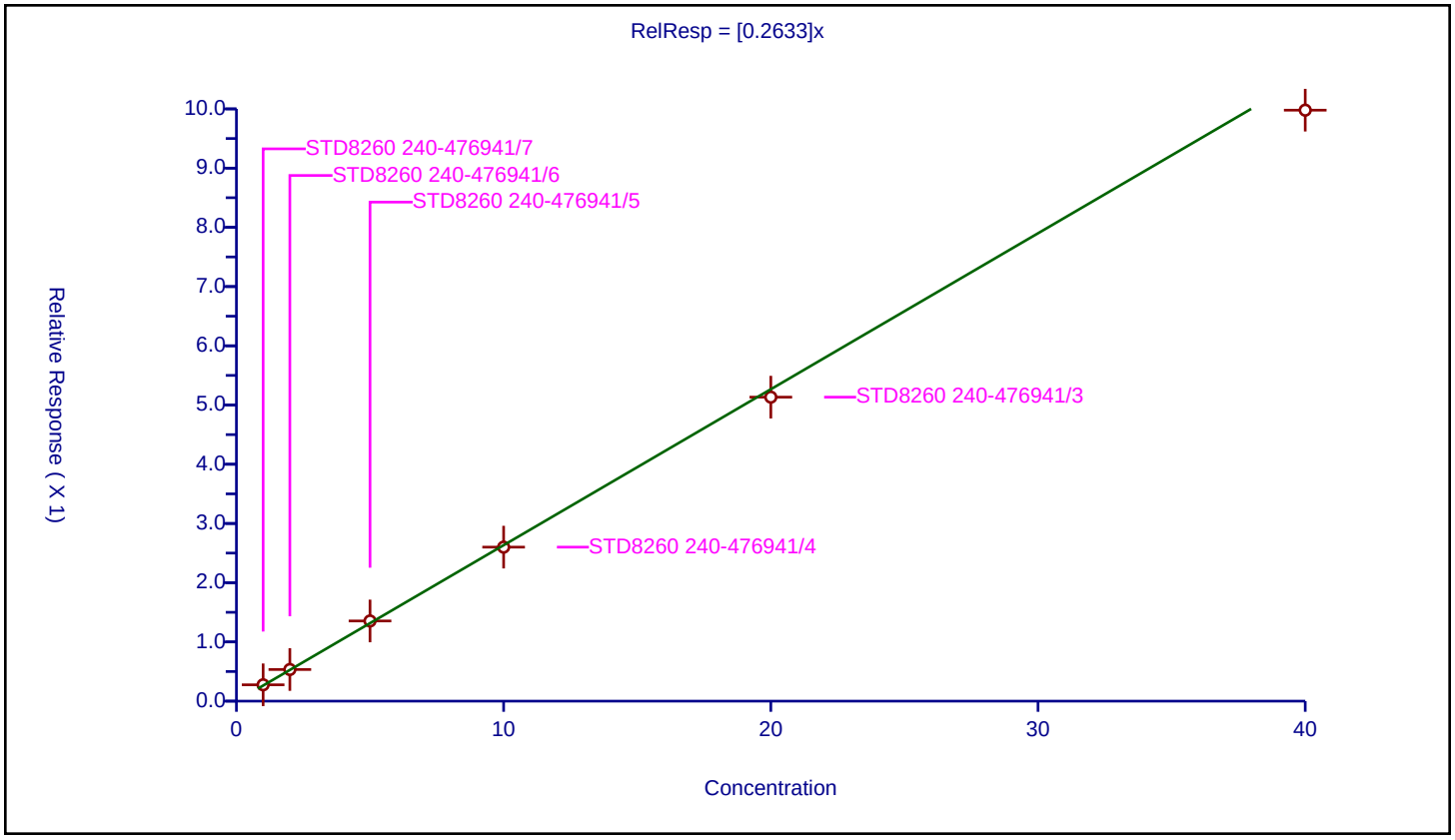
Curve Coefficients

Intercept:	0
Slope:	0.2633

Error Coefficients

Standard Error:	898000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275989	10.0	1508502.0	0.275989	Y
2	STD8260 240-476941/6	2.0	0.533928	10.0	1600104.0	0.266964	Y
3	STD8260 240-476941/5	5.0	1.354075	10.0	1580769.0	0.270815	Y
4	STD8260 240-476941/4	10.0	2.600244	10.0	1635381.0	0.260024	Y
5	STD8260 240-476941/3	20.0	5.132691	10.0	1729200.0	0.256635	Y
6	STD8260 240-476941/2	40.0	9.978616	10.0	1738218.0	0.249465	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

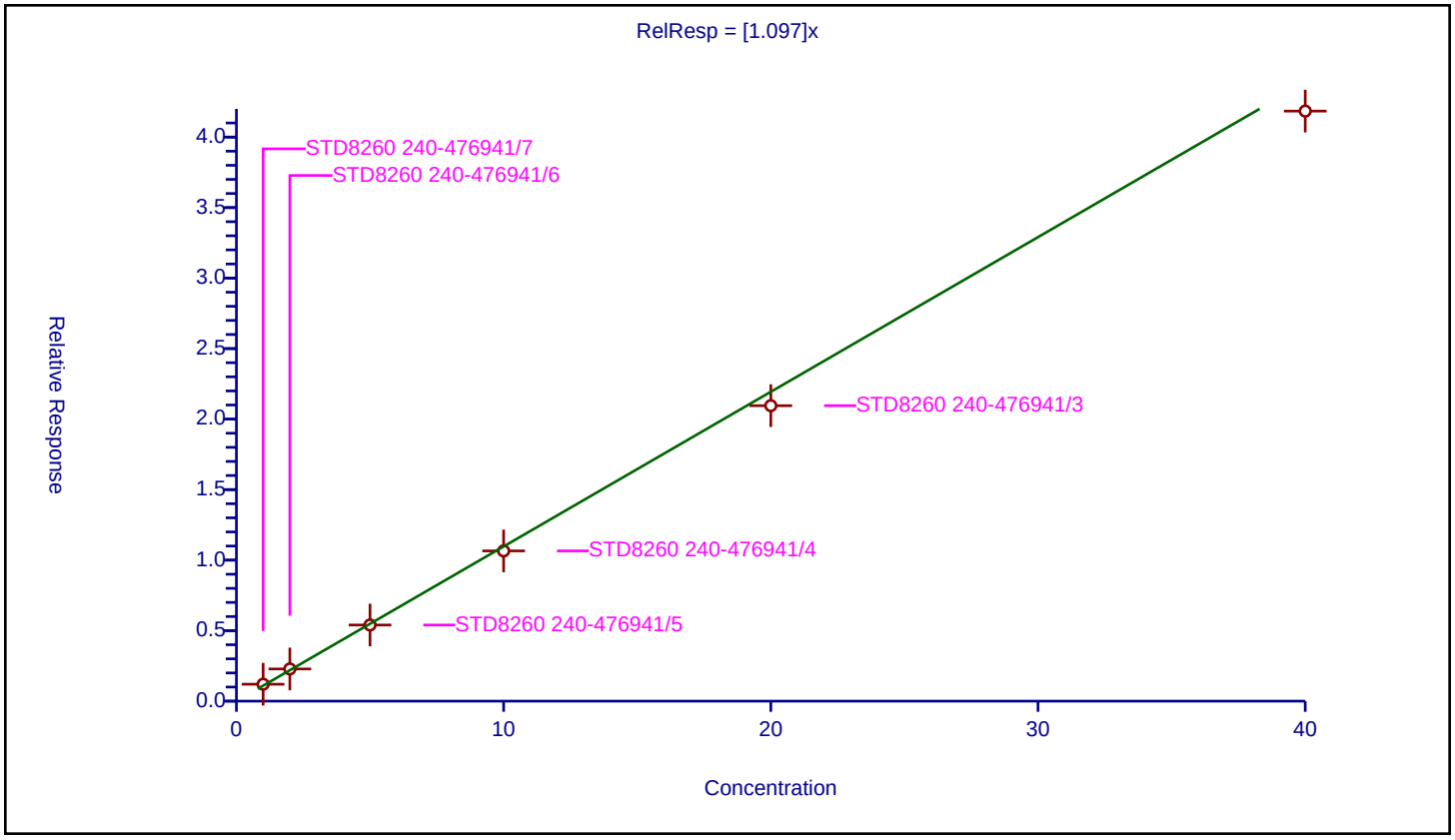
Curve Coefficients

Intercept:	0
Slope:	1.097

Error Coefficients

Standard Error:	3740000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.201026	10.0	1508502.0	1.201026	Y
2	STD8260 240-476941/6	2.0	2.282239	10.0	1600104.0	1.14112	Y
3	STD8260 240-476941/5	5.0	5.398936	10.0	1580769.0	1.079787	Y
4	STD8260 240-476941/4	10.0	10.652778	10.0	1635381.0	1.065278	Y
5	STD8260 240-476941/3	20.0	20.953747	10.0	1729200.0	1.047687	Y
6	STD8260 240-476941/2	40.0	41.843946	10.0	1738218.0	1.046099	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

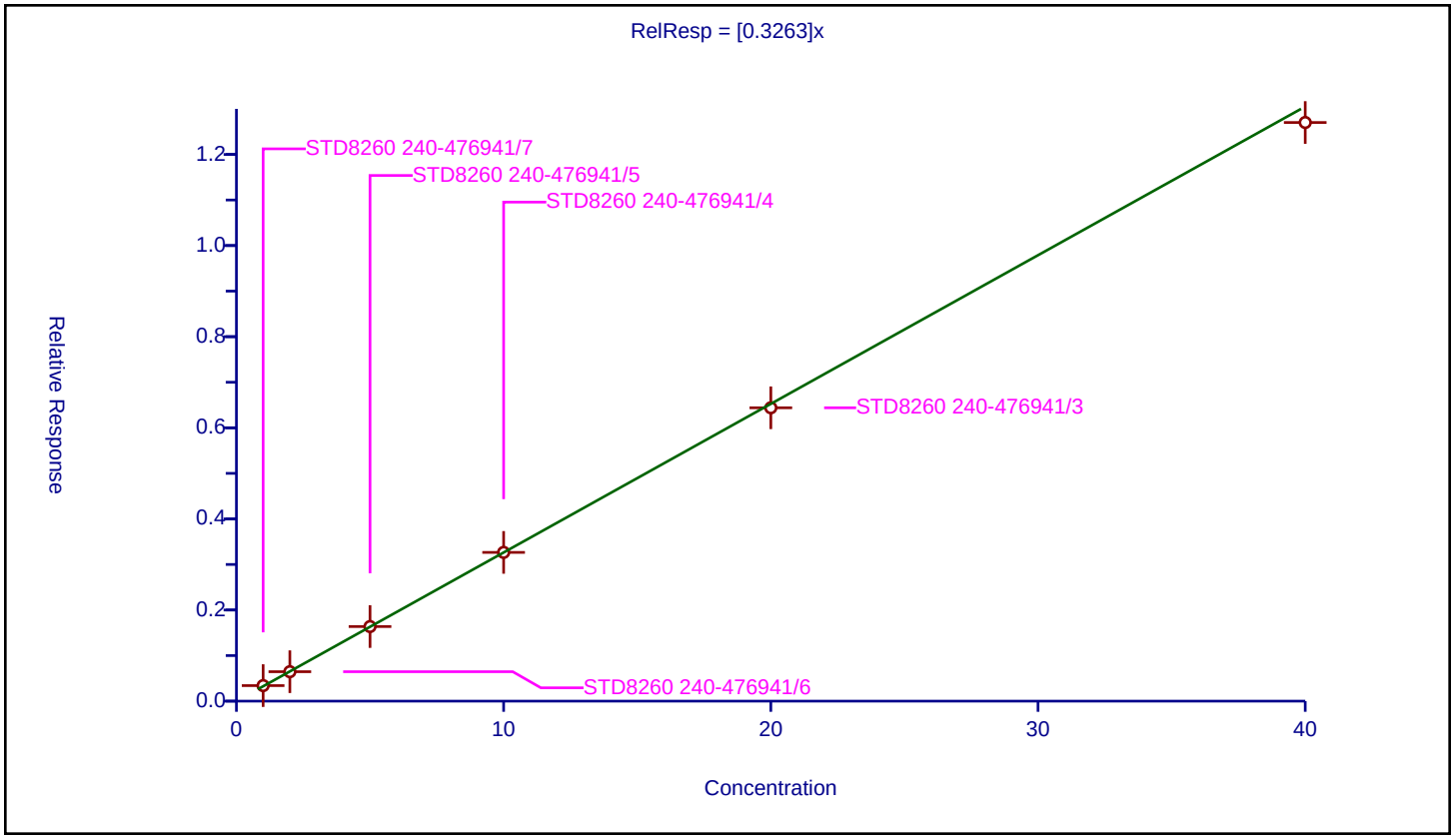
Curve Coefficients

Intercept:	0
Slope:	0.3263

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.341087	10.0	1508502.0	0.341087	Y
2	STD8260 240-476941/6	2.0	0.646289	10.0	1600104.0	0.323145	Y
3	STD8260 240-476941/5	5.0	1.637178	10.0	1580769.0	0.327436	Y
4	STD8260 240-476941/4	10.0	3.264542	10.0	1635381.0	0.326454	Y
5	STD8260 240-476941/3	20.0	6.439596	10.0	1729200.0	0.32198	Y
6	STD8260 240-476941/2	40.0	12.701163	10.0	1738218.0	0.317529	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

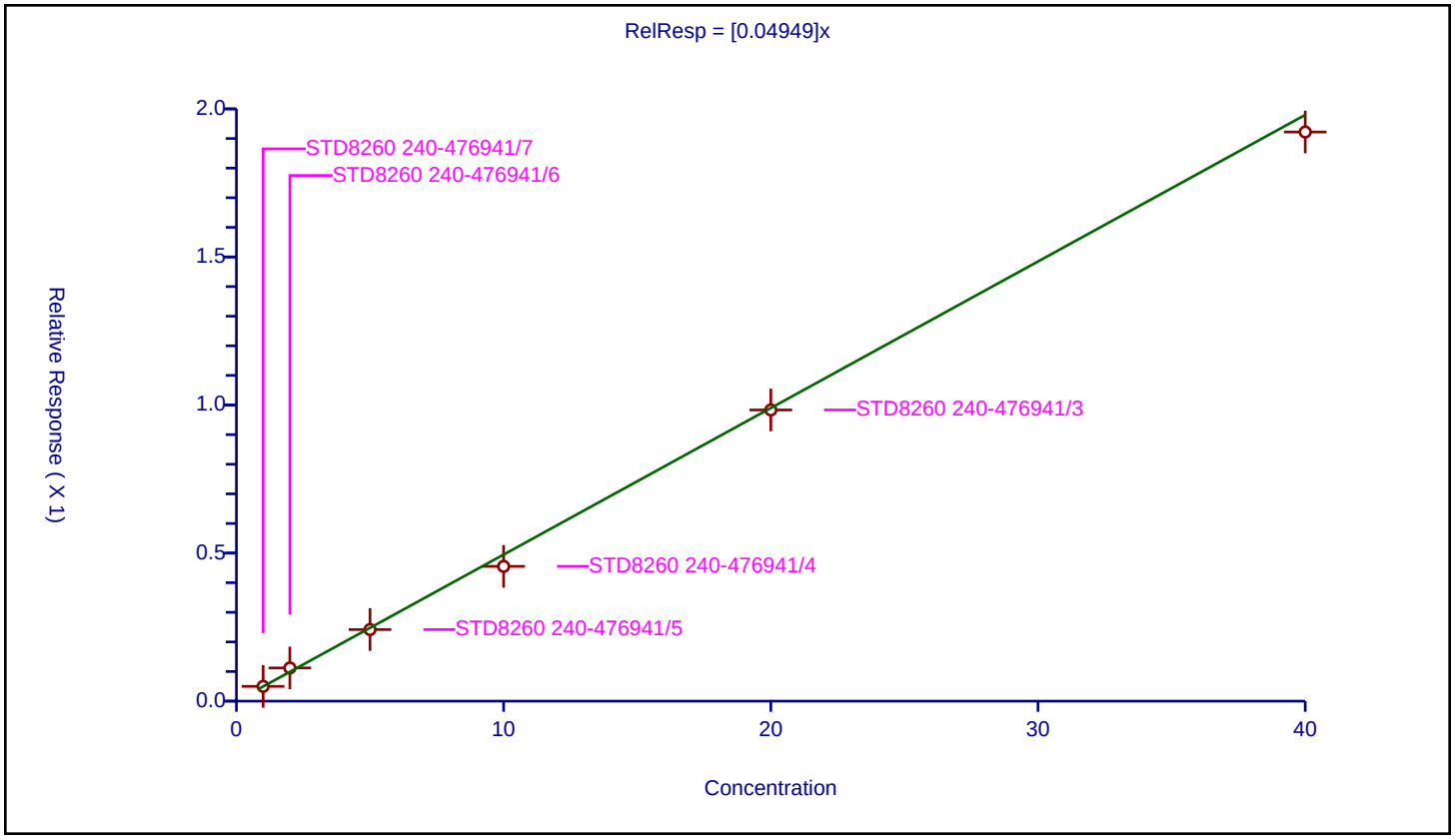
Curve Coefficients

Intercept:	0
Slope:	0.04949

Error Coefficients

Standard Error:	172000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.049838	10.0	1508502.0	0.049838	Y
2	STD8260 240-476941/6	2.0	0.11208	10.0	1600104.0	0.05604	Y
3	STD8260 240-476941/5	5.0	0.241705	10.0	1580769.0	0.048341	Y
4	STD8260 240-476941/4	10.0	0.455191	10.0	1635381.0	0.045519	Y
5	STD8260 240-476941/3	20.0	0.98331	10.0	1729200.0	0.049166	Y
6	STD8260 240-476941/2	40.0	1.921888	10.0	1738218.0	0.048047	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

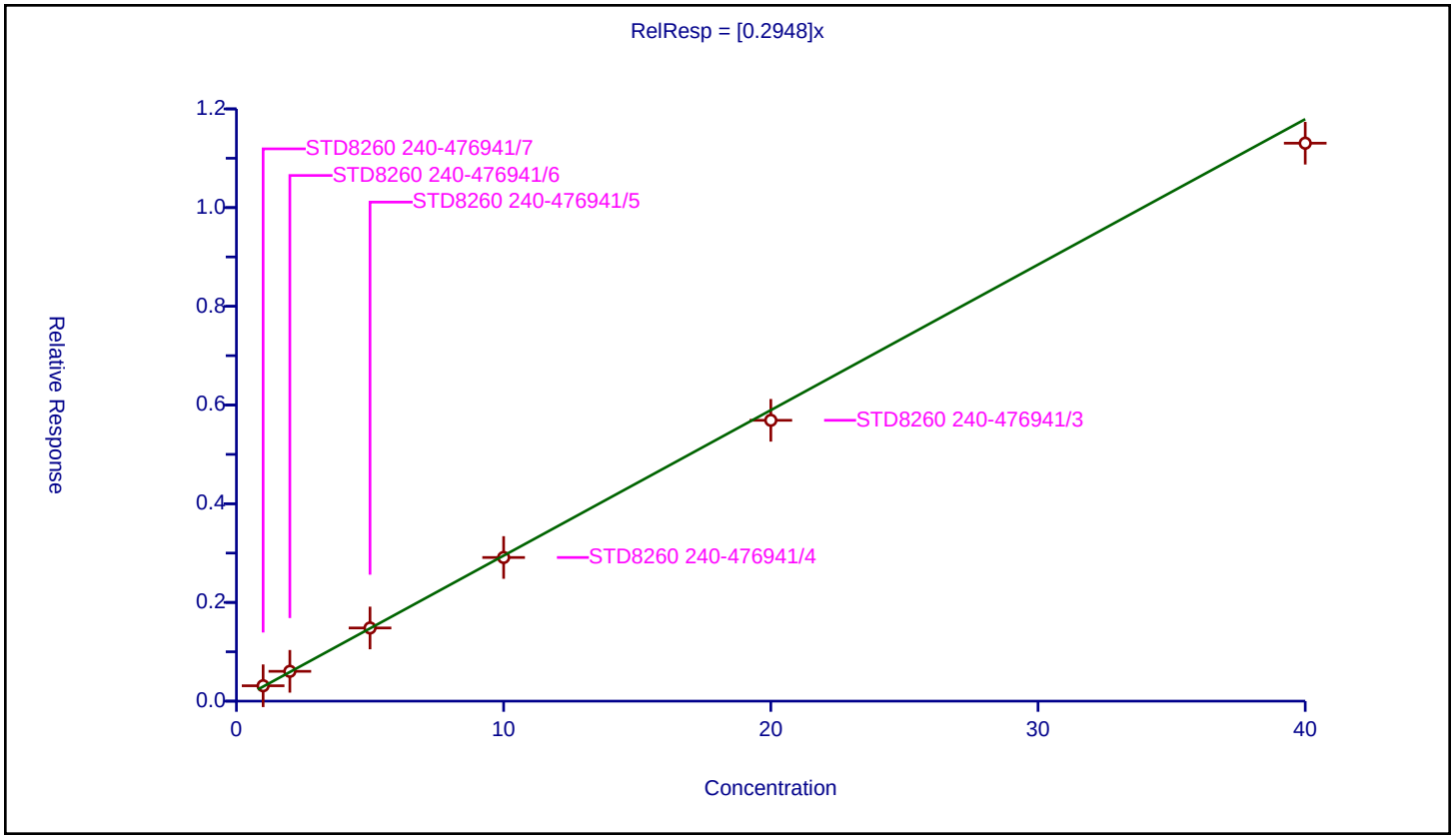
Curve Coefficients

Intercept:	0
Slope:	0.2948

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.311819	10.0	1508502.0	0.311819	Y
2	STD8260 240-476941/6	2.0	0.604273	10.0	1600104.0	0.302137	Y
3	STD8260 240-476941/5	5.0	1.482911	10.0	1580769.0	0.296582	Y
4	STD8260 240-476941/4	10.0	2.910765	10.0	1635381.0	0.291077	Y
5	STD8260 240-476941/3	20.0	5.690163	10.0	1729200.0	0.284508	Y
6	STD8260 240-476941/2	40.0	11.304664	10.0	1738218.0	0.282617	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

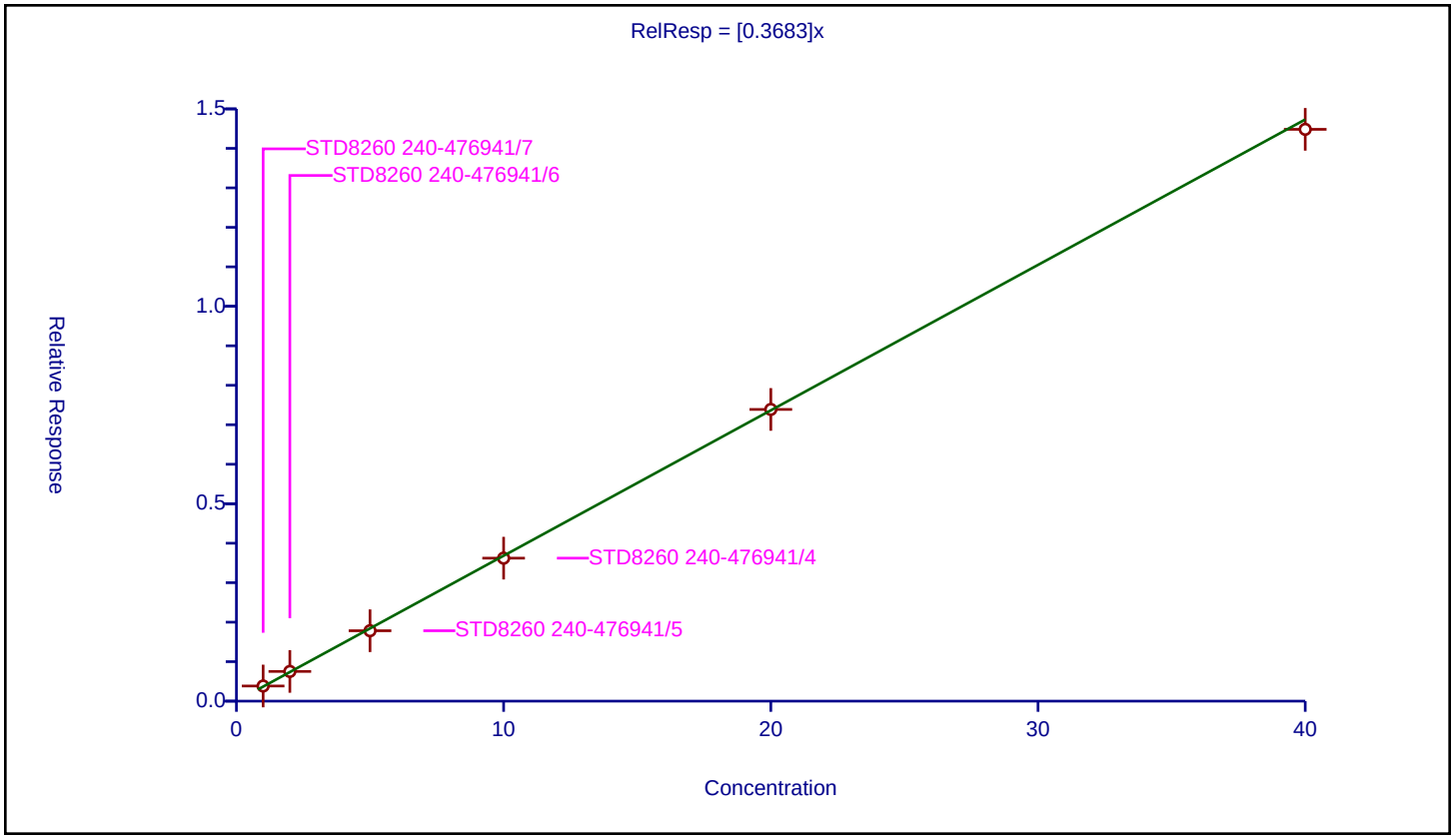
Curve Coefficients

Intercept:	0
Slope:	0.3683

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.383321	10.0	1508502.0	0.383321	Y
2	STD8260 240-476941/6	2.0	0.752382	10.0	1600104.0	0.376191	Y
3	STD8260 240-476941/5	5.0	1.782917	10.0	1580769.0	0.356583	Y
4	STD8260 240-476941/4	10.0	3.621089	10.0	1635381.0	0.362109	Y
5	STD8260 240-476941/3	20.0	7.388446	10.0	1729200.0	0.369422	Y
6	STD8260 240-476941/2	40.0	14.481906	10.0	1738218.0	0.362048	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

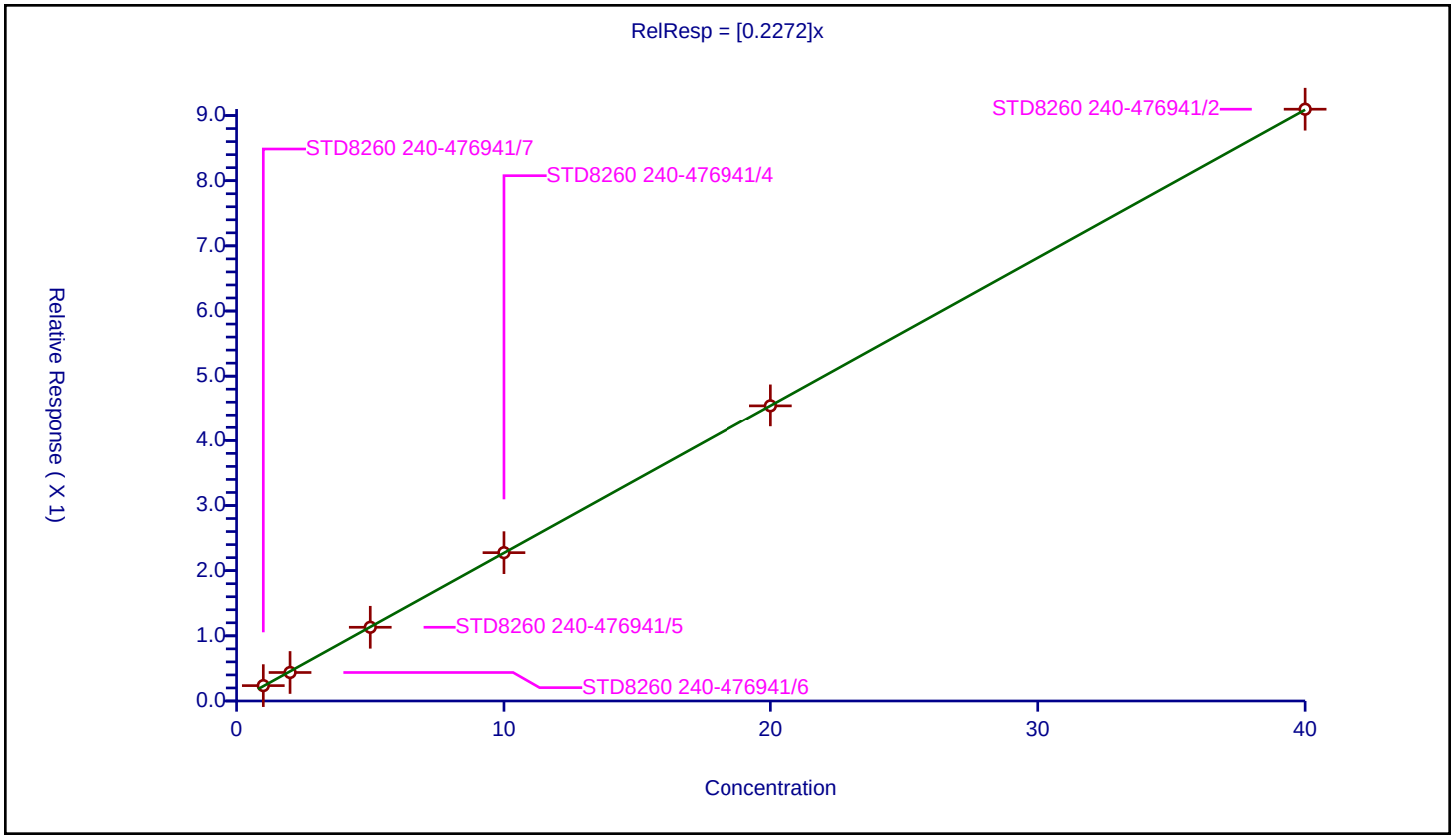
Curve Coefficients

Intercept:	0
Slope:	0.2272

Error Coefficients

Standard Error:	812000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.236049	10.0	1508502.0	0.236049	Y
2	STD8260 240-476941/6	2.0	0.43734	10.0	1600104.0	0.21867	Y
3	STD8260 240-476941/5	5.0	1.131405	10.0	1580769.0	0.226281	Y
4	STD8260 240-476941/4	10.0	2.276411	10.0	1635381.0	0.227641	Y
5	STD8260 240-476941/3	20.0	4.544419	10.0	1729200.0	0.227221	Y
6	STD8260 240-476941/2	40.0	9.097121	10.0	1738218.0	0.227428	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

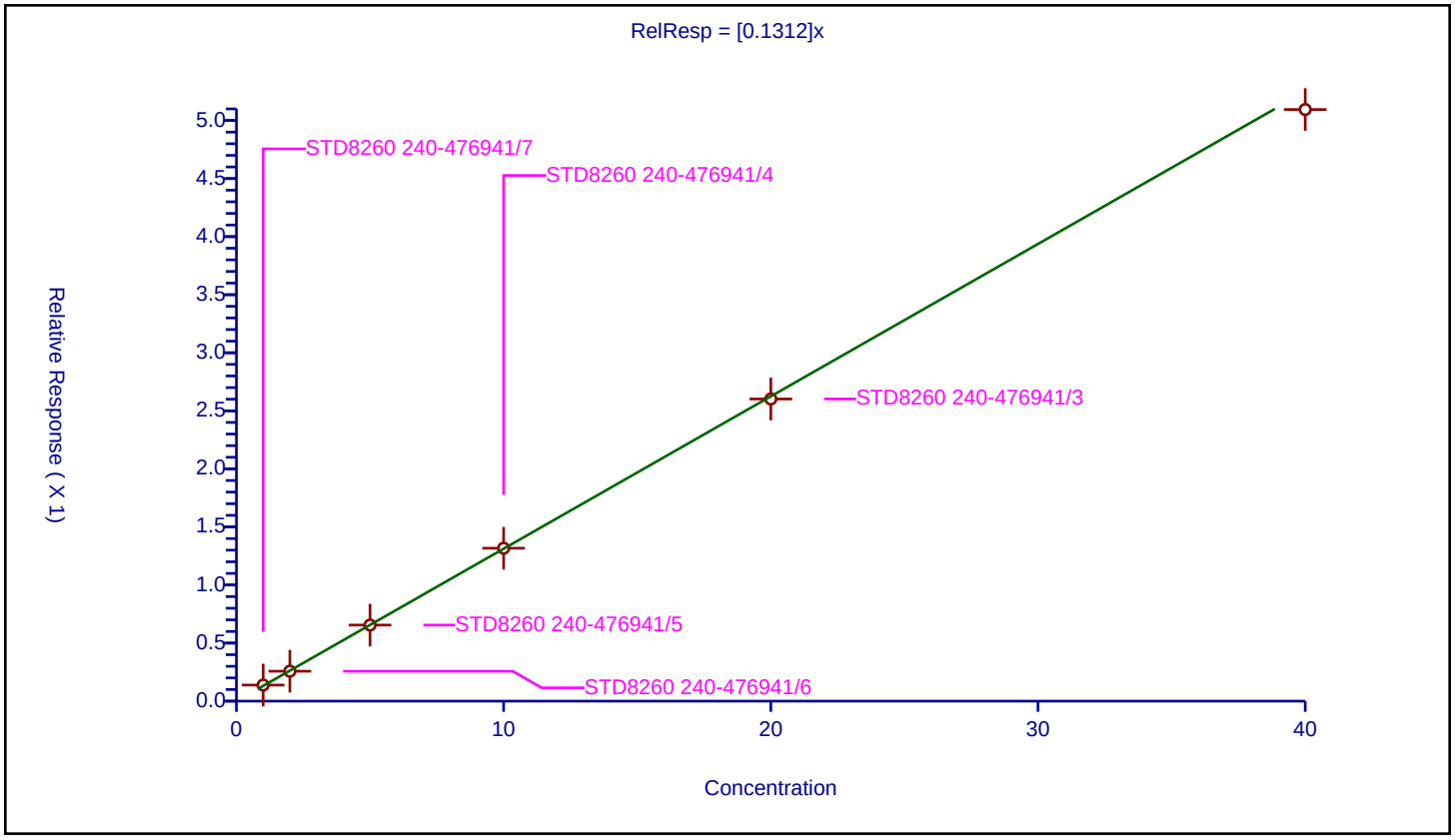
Curve Coefficients

Intercept:	0
Slope:	0.1312

Error Coefficients

Standard Error:	457000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.138382	10.0	1508502.0	0.138382	Y
2	STD8260 240-476941/6	2.0	0.257752	10.0	1600104.0	0.128876	Y
3	STD8260 240-476941/5	5.0	0.654998	10.0	1580769.0	0.131	Y
4	STD8260 240-476941/4	10.0	1.316727	10.0	1635381.0	0.131673	Y
5	STD8260 240-476941/3	20.0	2.602001	10.0	1729200.0	0.1301	Y
6	STD8260 240-476941/2	40.0	5.094419	10.0	1738218.0	0.12736	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

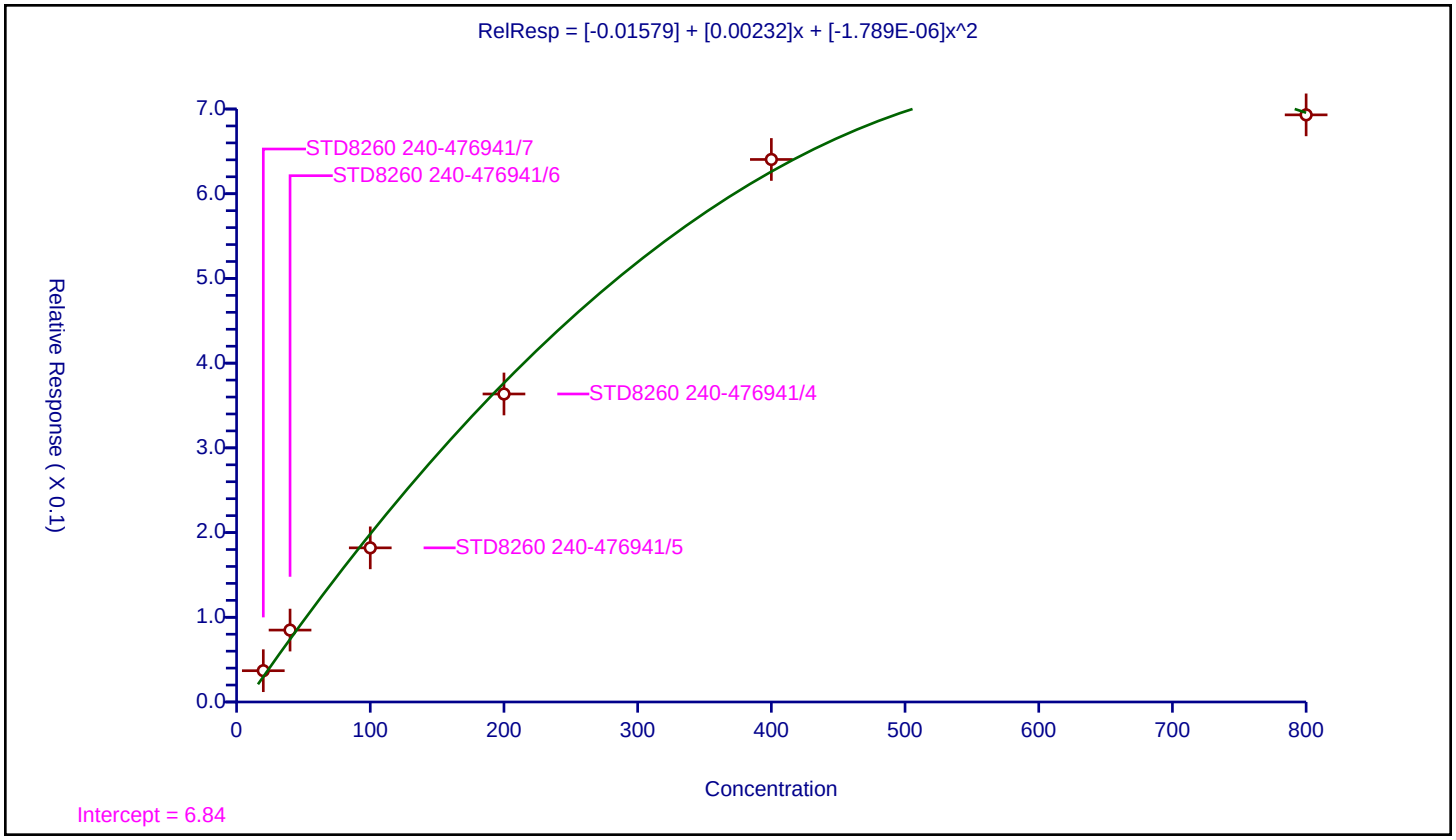
Curve Coefficients

Intercept:	-0.01579
Slope:	0.00232
Second Order:	-1.789E-06

Error Coefficients

Standard Error:	102000
Relative Standard Error:	25.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	20.0	0.036951	10.0	1508502.0	0.001848	Y
2	STD8260 240-476941/6	40.0	0.084882	10.0	1600104.0	0.002122	Y
3	STD8260 240-476941/5	100.0	0.181962	10.0	1580769.0	0.00182	Y
4	STD8260 240-476941/4	200.0	0.363603	10.0	1635381.0	0.001818	Y
5	STD8260 240-476941/3	400.0	0.640452	10.0	1729200.0	0.001601	Y
6	STD8260 240-476941/2	800.0	0.693095	10.0	1738218.0	0.000866	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

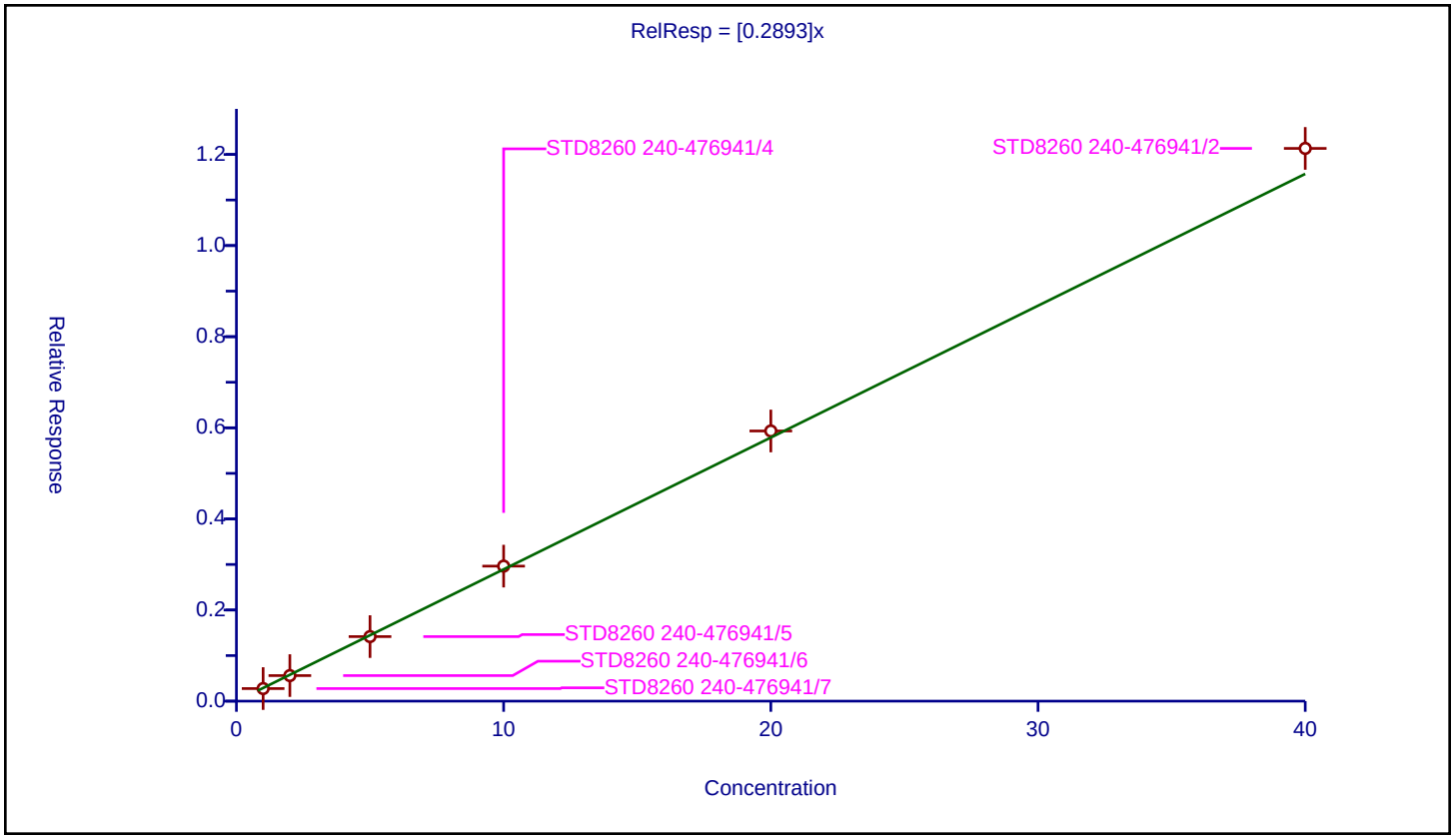
Curve Coefficients

Intercept:	0
Slope:	0.2893

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.275943	10.0	1508502.0	0.275943	Y
2	STD8260 240-476941/6	2.0	0.560701	10.0	1600104.0	0.280351	Y
3	STD8260 240-476941/5	5.0	1.417076	10.0	1580769.0	0.283415	Y
4	STD8260 240-476941/4	10.0	2.96386	10.0	1635381.0	0.296386	Y
5	STD8260 240-476941/3	20.0	5.930344	10.0	1729200.0	0.296517	Y
6	STD8260 240-476941/2	40.0	12.132178	10.0	1738218.0	0.303304	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

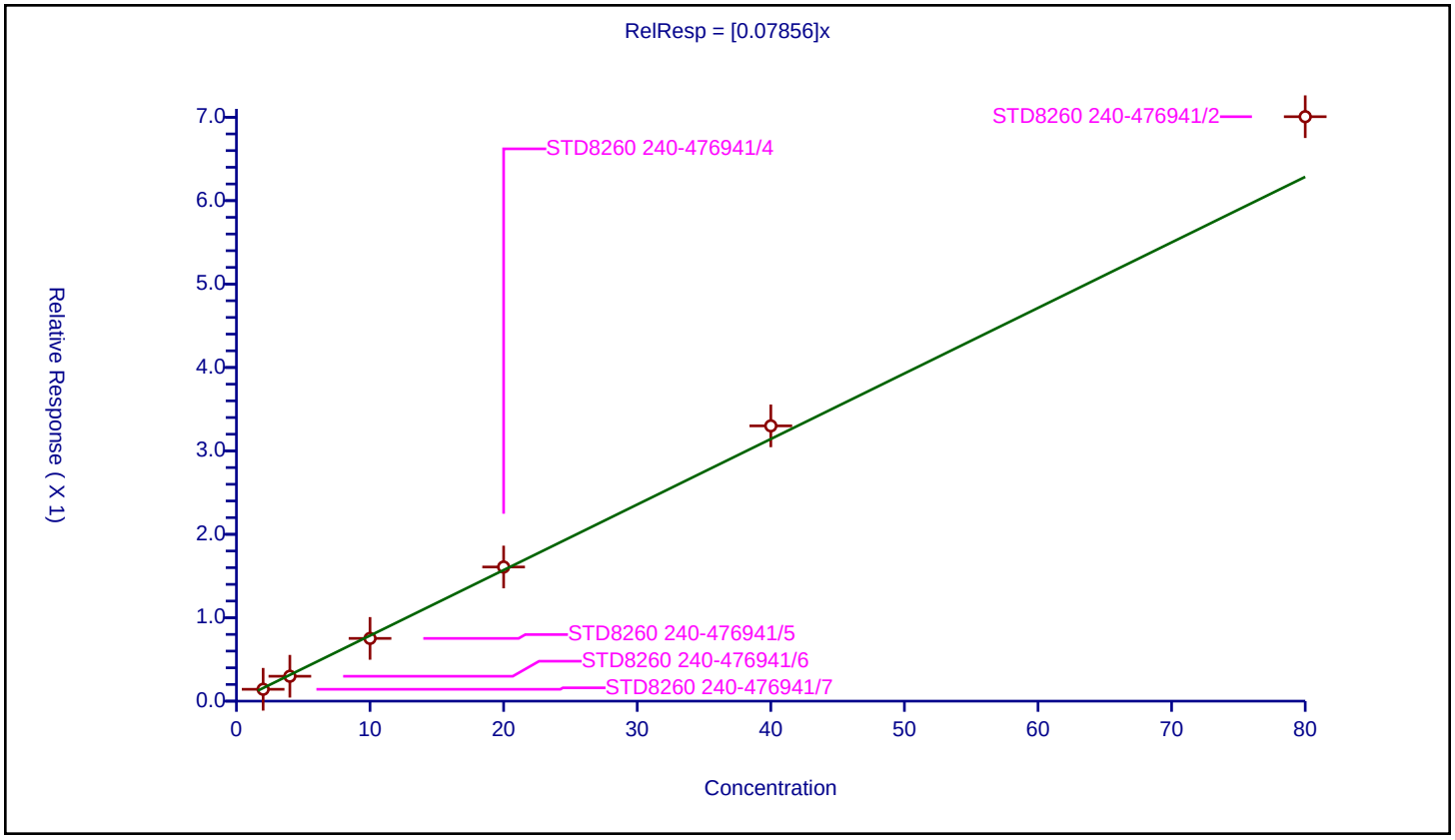
Curve Coefficients

Intercept:	0
Slope:	0.07856

Error Coefficients

Standard Error:	616000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.142141	10.0	1508502.0	0.071071	Y
2	STD8260 240-476941/6	4.0	0.298418	10.0	1600104.0	0.074605	Y
3	STD8260 240-476941/5	10.0	0.752172	10.0	1580769.0	0.075217	Y
4	STD8260 240-476941/4	20.0	1.608188	10.0	1635381.0	0.080409	Y
5	STD8260 240-476941/3	40.0	3.3	10.0	1729200.0	0.0825	Y
6	STD8260 240-476941/2	80.0	7.006474	10.0	1738218.0	0.087581	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

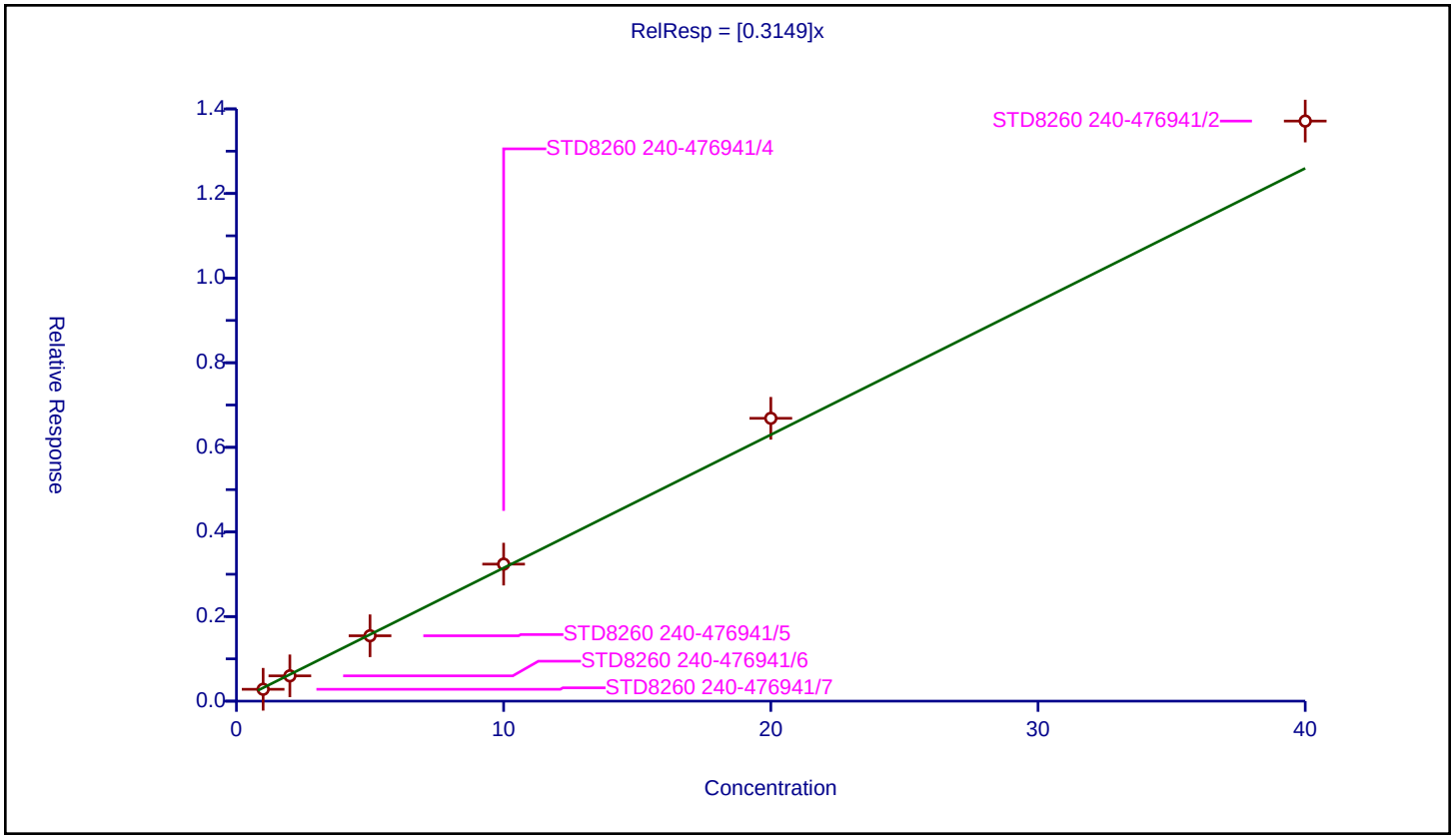
Curve Coefficients

Intercept:	0
Slope:	0.3149

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280444	10.0	1508502.0	0.280444	Y
2	STD8260 240-476941/6	2.0	0.597624	10.0	1600104.0	0.298812	Y
3	STD8260 240-476941/5	5.0	1.545393	10.0	1580769.0	0.309079	Y
4	STD8260 240-476941/4	10.0	3.23897	10.0	1635381.0	0.323897	Y
5	STD8260 240-476941/3	20.0	6.68608	10.0	1729200.0	0.334304	Y
6	STD8260 240-476941/2	40.0	13.7124	10.0	1738218.0	0.34281	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

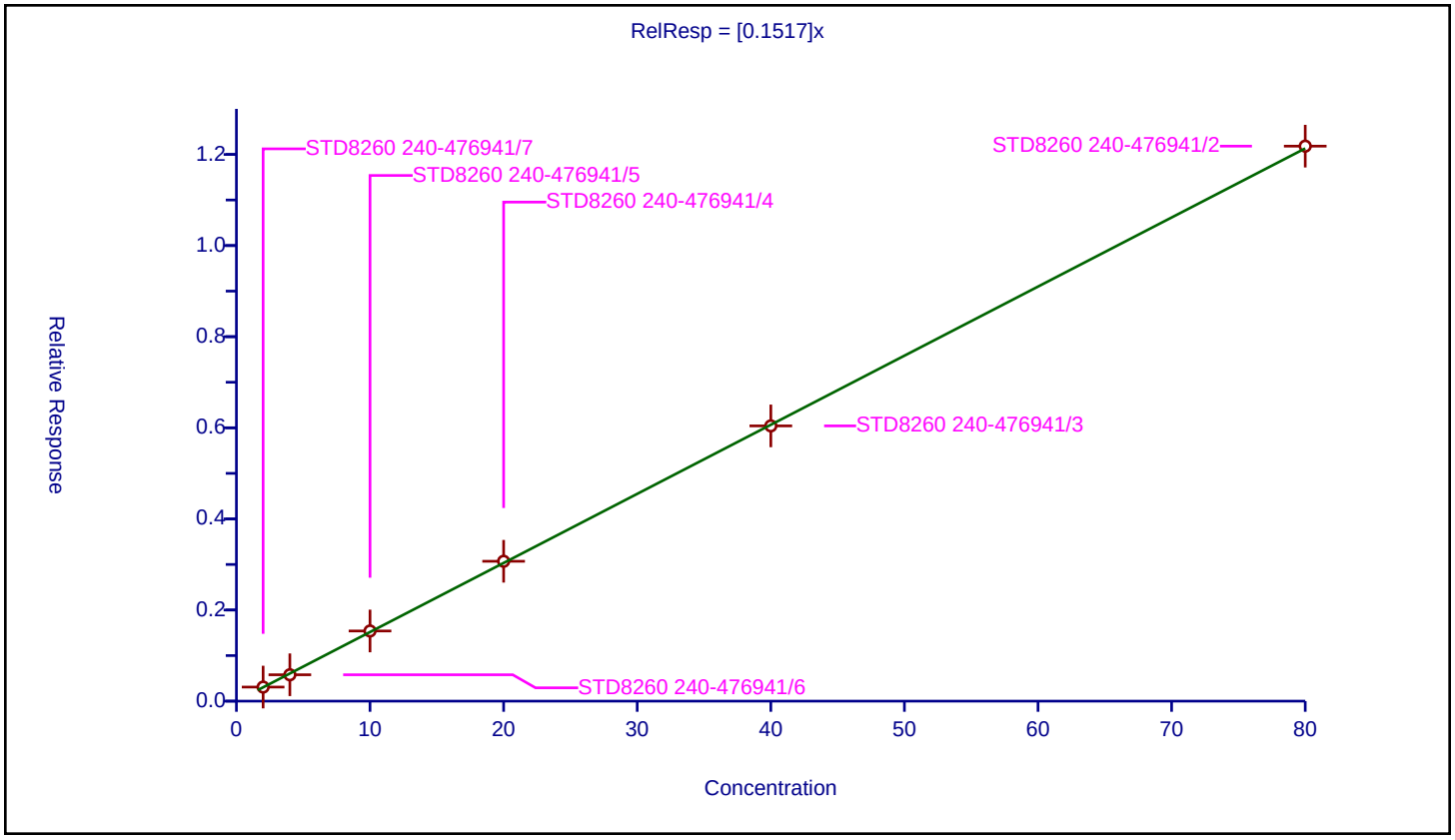
Curve Coefficients

Intercept:	0
Slope:	0.1517

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.308737	10.0	1508502.0	0.154368	Y
2	STD8260 240-476941/6	4.0	0.578775	10.0	1600104.0	0.144694	Y
3	STD8260 240-476941/5	10.0	1.540377	10.0	1580769.0	0.154038	Y
4	STD8260 240-476941/4	20.0	3.070379	10.0	1635381.0	0.153519	Y
5	STD8260 240-476941/3	40.0	6.041701	10.0	1729200.0	0.151043	Y
6	STD8260 240-476941/2	80.0	12.182051	10.0	1738218.0	0.152276	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

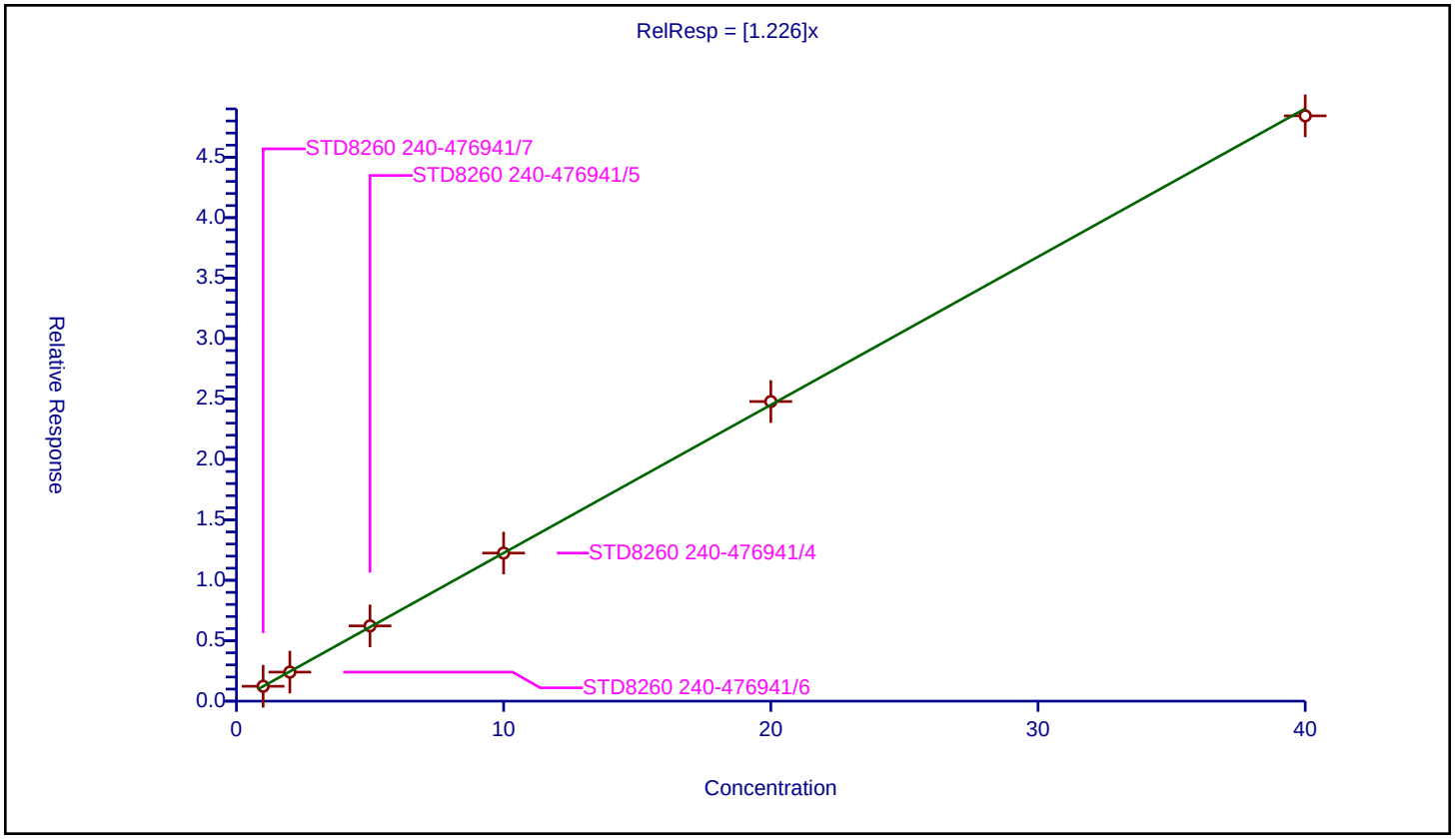
Curve Coefficients

Intercept:	0
Slope:	1.226

Error Coefficients

Standard Error:	2920000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.230869	10.0	1005314.0	1.230869	Y
2	STD8260 240-476941/6	2.0	2.4038	10.0	1025239.0	1.2019	Y
3	STD8260 240-476941/5	5.0	6.226562	10.0	1036230.0	1.245312	Y
4	STD8260 240-476941/4	10.0	12.24994	10.0	1083691.0	1.224994	Y
5	STD8260 240-476941/3	20.0	24.788912	10.0	1129906.0	1.239446	Y
6	STD8260 240-476941/2	40.0	48.424259	10.0	1176310.0	1.210606	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

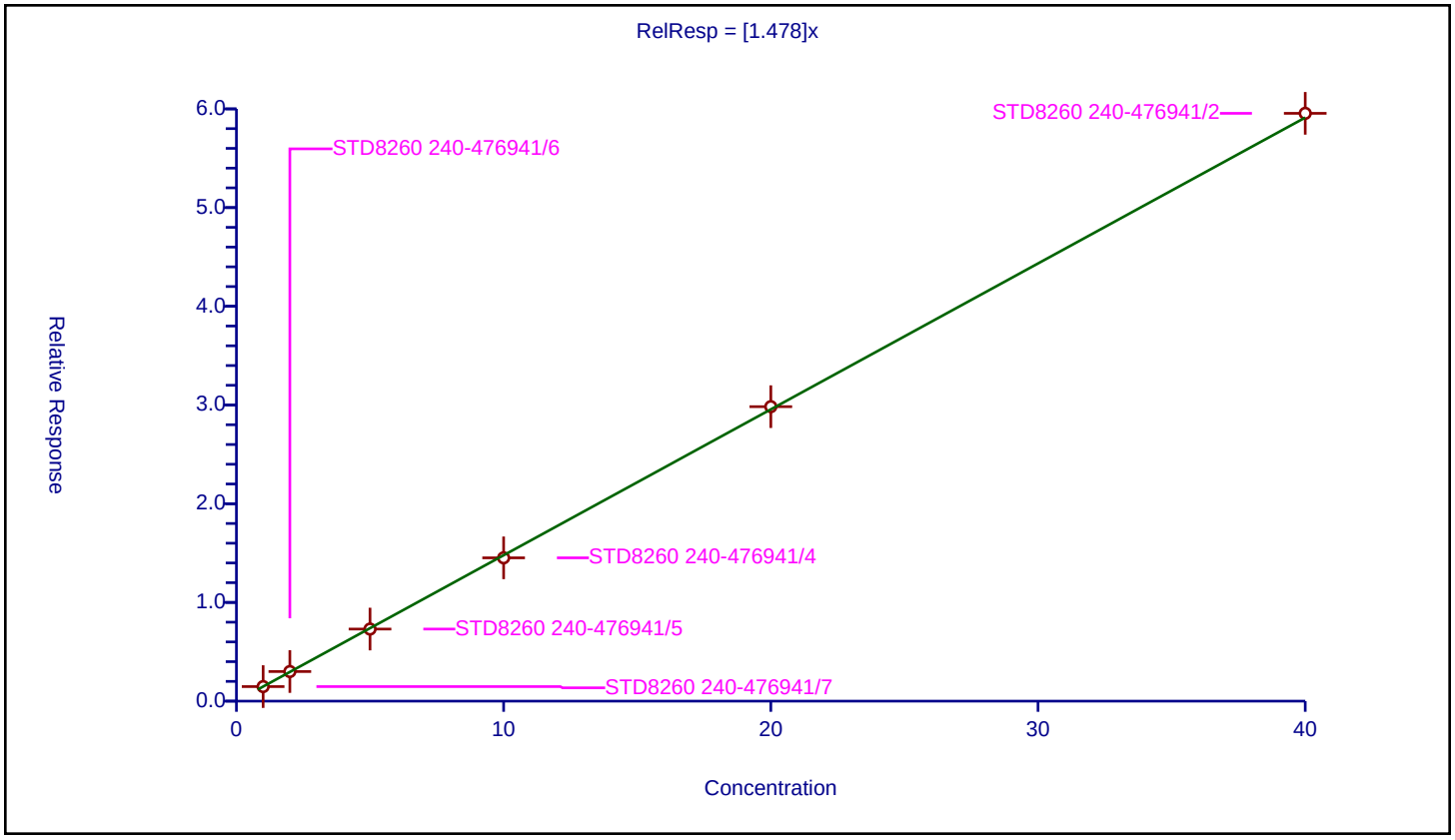
Curve Coefficients

Intercept:	0
Slope:	1.478

Error Coefficients

Standard Error:	3570000
Relative Standard Error:	1.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.474942	10.0	1005314.0	1.474942	Y
2	STD8260 240-476941/6	2.0	3.000208	10.0	1025239.0	1.500104	Y
3	STD8260 240-476941/5	5.0	7.30196	10.0	1036230.0	1.460392	Y
4	STD8260 240-476941/4	10.0	14.518484	10.0	1083691.0	1.451848	Y
5	STD8260 240-476941/3	20.0	29.834243	10.0	1129906.0	1.491712	Y
6	STD8260 240-476941/2	40.0	59.548503	10.0	1176310.0	1.488713	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

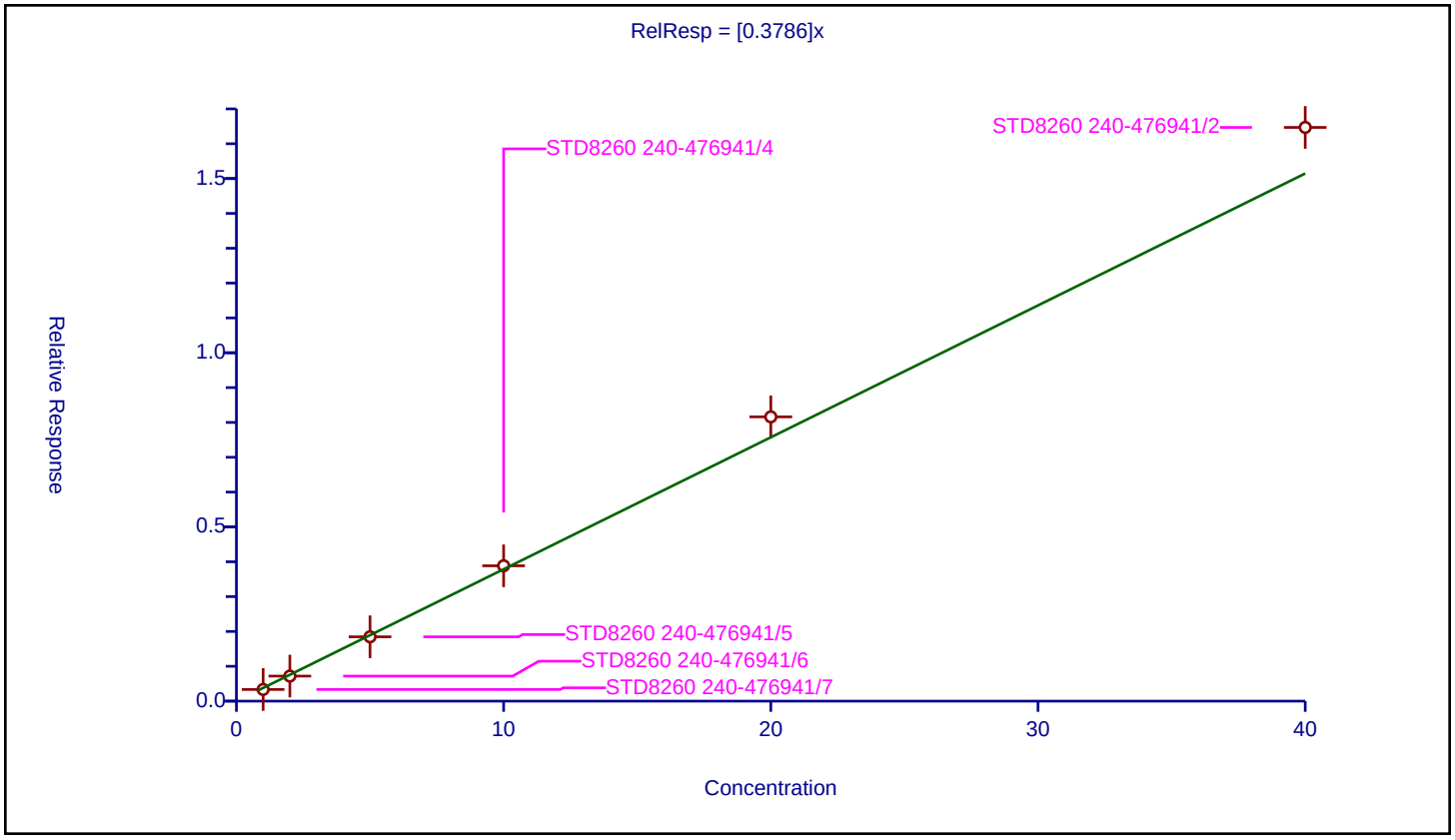
Curve Coefficients

Intercept:	0
Slope:	0.3786

Error Coefficients

Standard Error:	982000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.334652	10.0	1005314.0	0.334652	Y
2	STD8260 240-476941/6	2.0	0.719237	10.0	1025239.0	0.359619	Y
3	STD8260 240-476941/5	5.0	1.846771	10.0	1036230.0	0.369354	Y
4	STD8260 240-476941/4	10.0	3.884714	10.0	1083691.0	0.388471	Y
5	STD8260 240-476941/3	20.0	8.160343	10.0	1129906.0	0.408017	Y
6	STD8260 240-476941/2	40.0	16.46764	10.0	1176310.0	0.411691	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

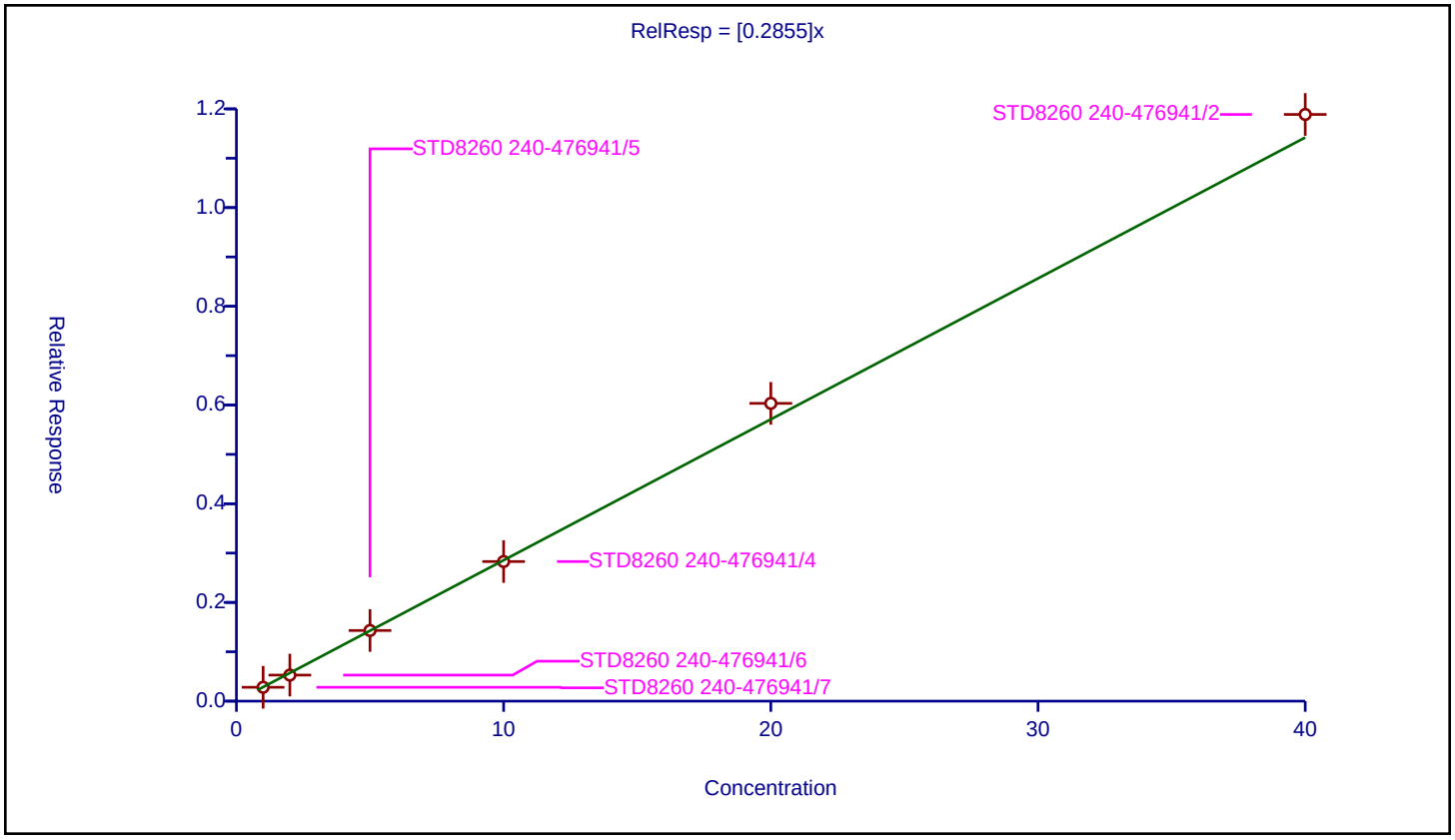
Curve Coefficients

Intercept:	0
Slope:	0.2855

Error Coefficients

Standard Error:	713000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.280858	10.0	1005314.0	0.280858	Y
2	STD8260 240-476941/6	2.0	0.528218	10.0	1025239.0	0.264109	Y
3	STD8260 240-476941/5	5.0	1.431671	10.0	1036230.0	0.286334	Y
4	STD8260 240-476941/4	10.0	2.828435	10.0	1083691.0	0.282844	Y
5	STD8260 240-476941/3	20.0	6.033679	10.0	1129906.0	0.301684	Y
6	STD8260 240-476941/2	40.0	11.887045	10.0	1176310.0	0.297176	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

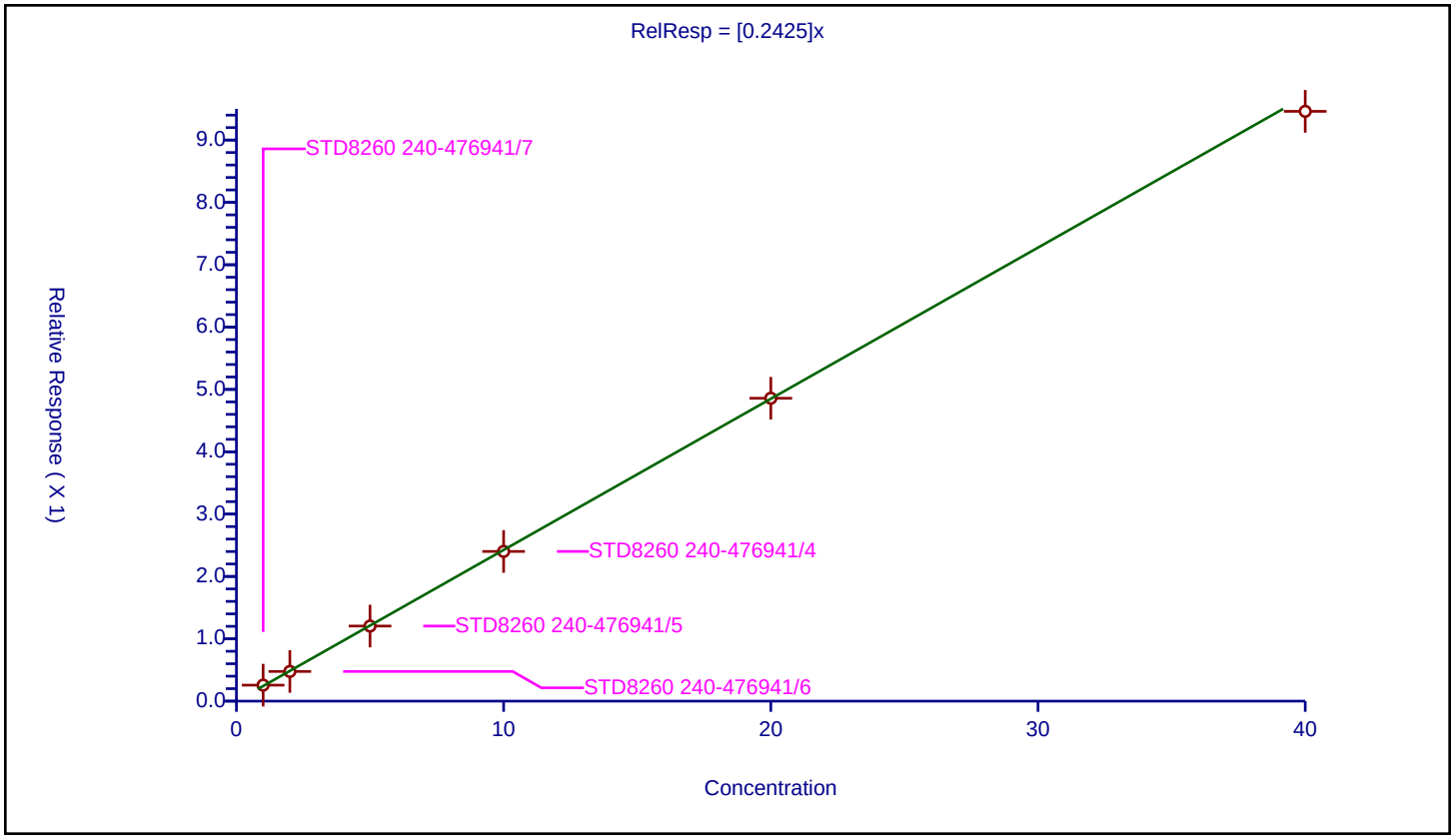
Curve Coefficients

Intercept:	0
Slope:	0.2425

Error Coefficients

Standard Error:	570000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.256338	10.0	1005314.0	0.256338	Y
2	STD8260 240-476941/6	2.0	0.476347	10.0	1025239.0	0.238174	Y
3	STD8260 240-476941/5	5.0	1.204549	10.0	1036230.0	0.24091	Y
4	STD8260 240-476941/4	10.0	2.401256	10.0	1083691.0	0.240126	Y
5	STD8260 240-476941/3	20.0	4.858829	10.0	1129906.0	0.242941	Y
6	STD8260 240-476941/2	40.0	9.460516	10.0	1176310.0	0.236513	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

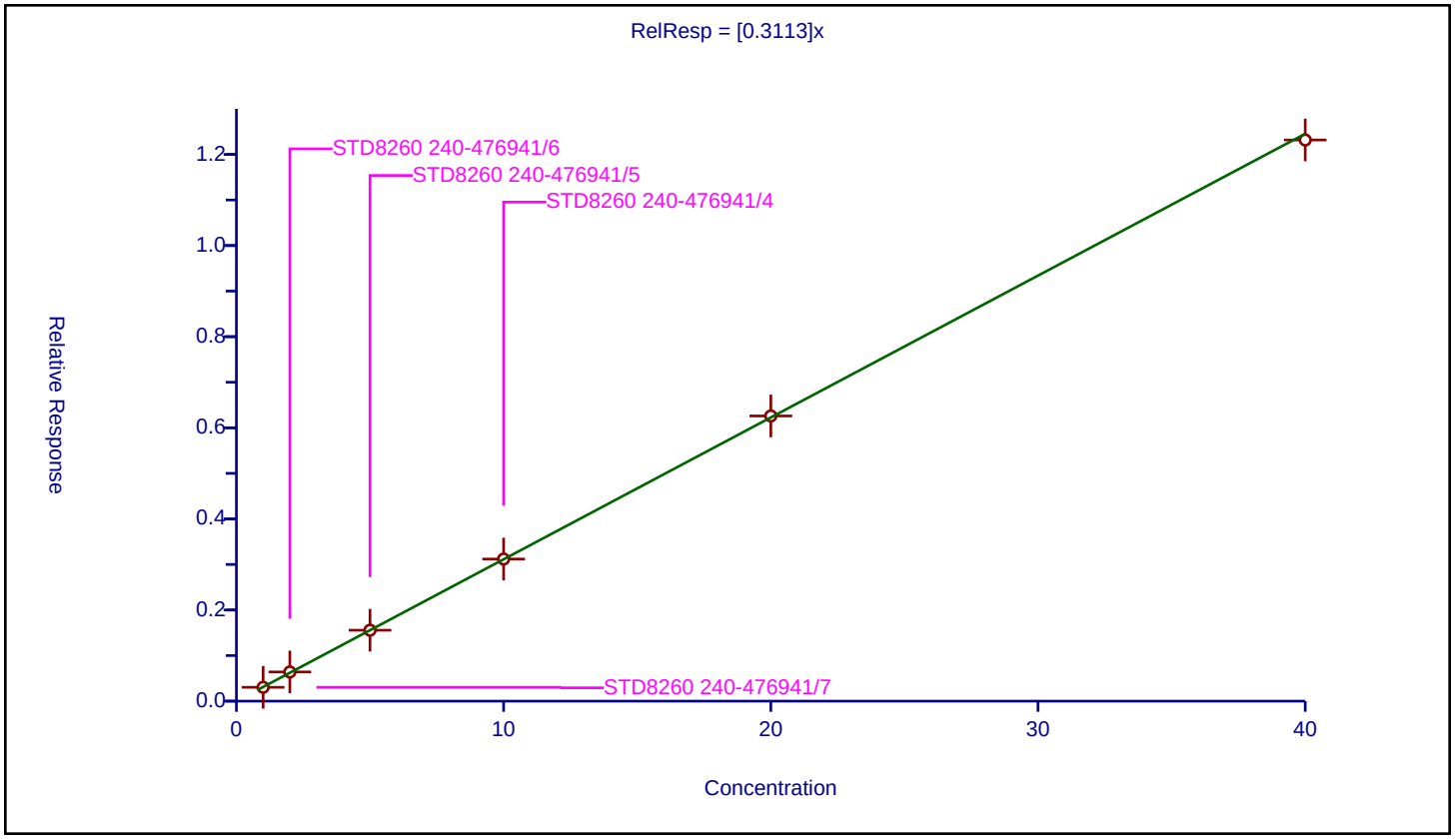
Curve Coefficients

Intercept:	0
Slope:	0.3113

Error Coefficients

Standard Error:	741000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.303716	10.0	1005314.0	0.303716	Y
2	STD8260 240-476941/6	2.0	0.640251	10.0	1025239.0	0.320125	Y
3	STD8260 240-476941/5	5.0	1.556739	10.0	1036230.0	0.311348	Y
4	STD8260 240-476941/4	10.0	3.119349	10.0	1083691.0	0.311935	Y
5	STD8260 240-476941/3	20.0	6.259972	10.0	1129906.0	0.312999	Y
6	STD8260 240-476941/2	40.0	12.317076	10.0	1176310.0	0.307927	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

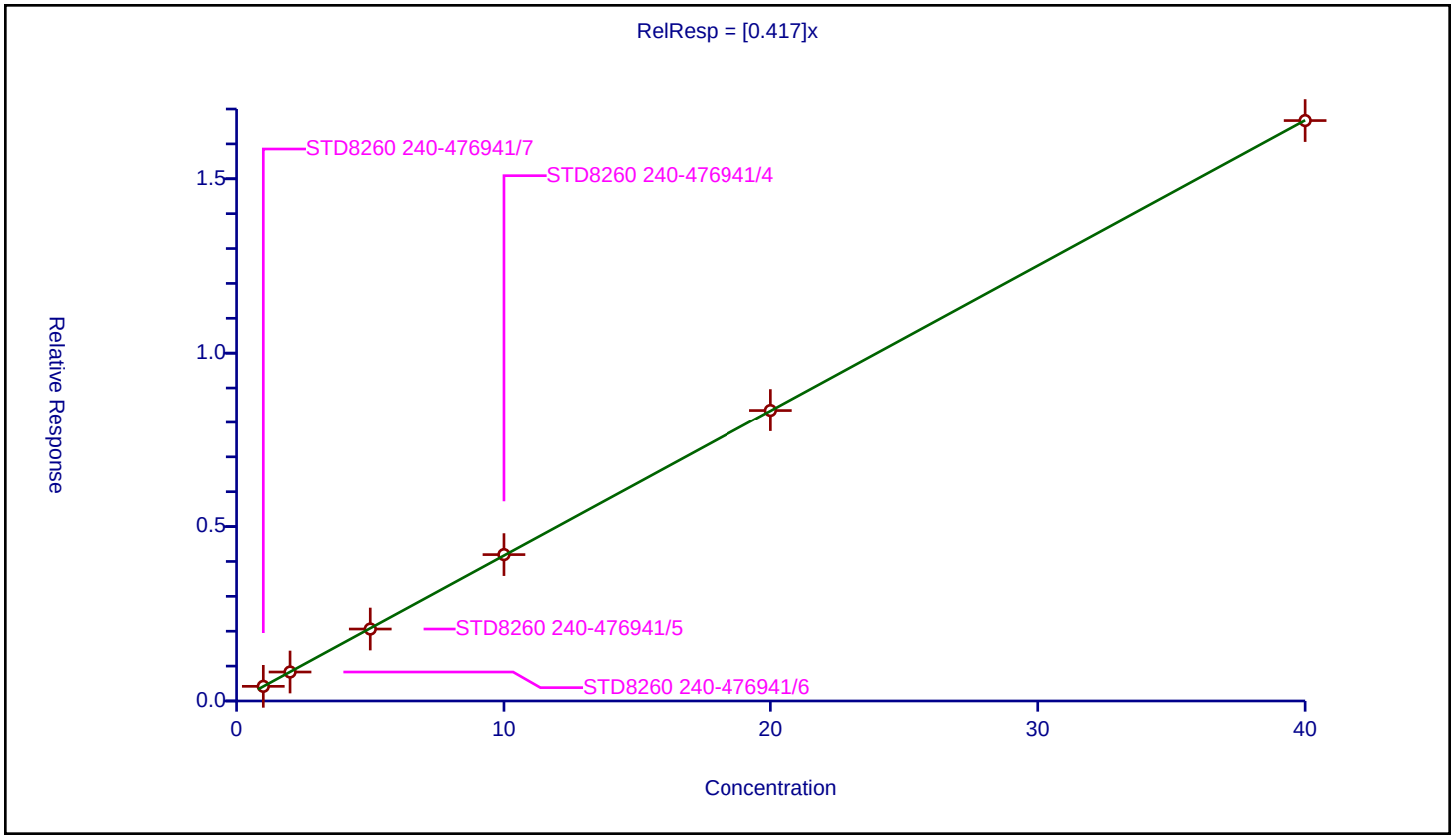
Curve Coefficients

Intercept:	0
Slope:	0.417

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	0.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.41974	10.0	1005314.0	0.41974	Y
2	STD8260 240-476941/6	2.0	0.830509	10.0	1025239.0	0.415254	Y
3	STD8260 240-476941/5	5.0	2.063326	10.0	1036230.0	0.412665	Y
4	STD8260 240-476941/4	10.0	4.196418	10.0	1083691.0	0.419642	Y
5	STD8260 240-476941/3	20.0	8.354545	10.0	1129906.0	0.417727	Y
6	STD8260 240-476941/2	40.0	16.668735	10.0	1176310.0	0.416718	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

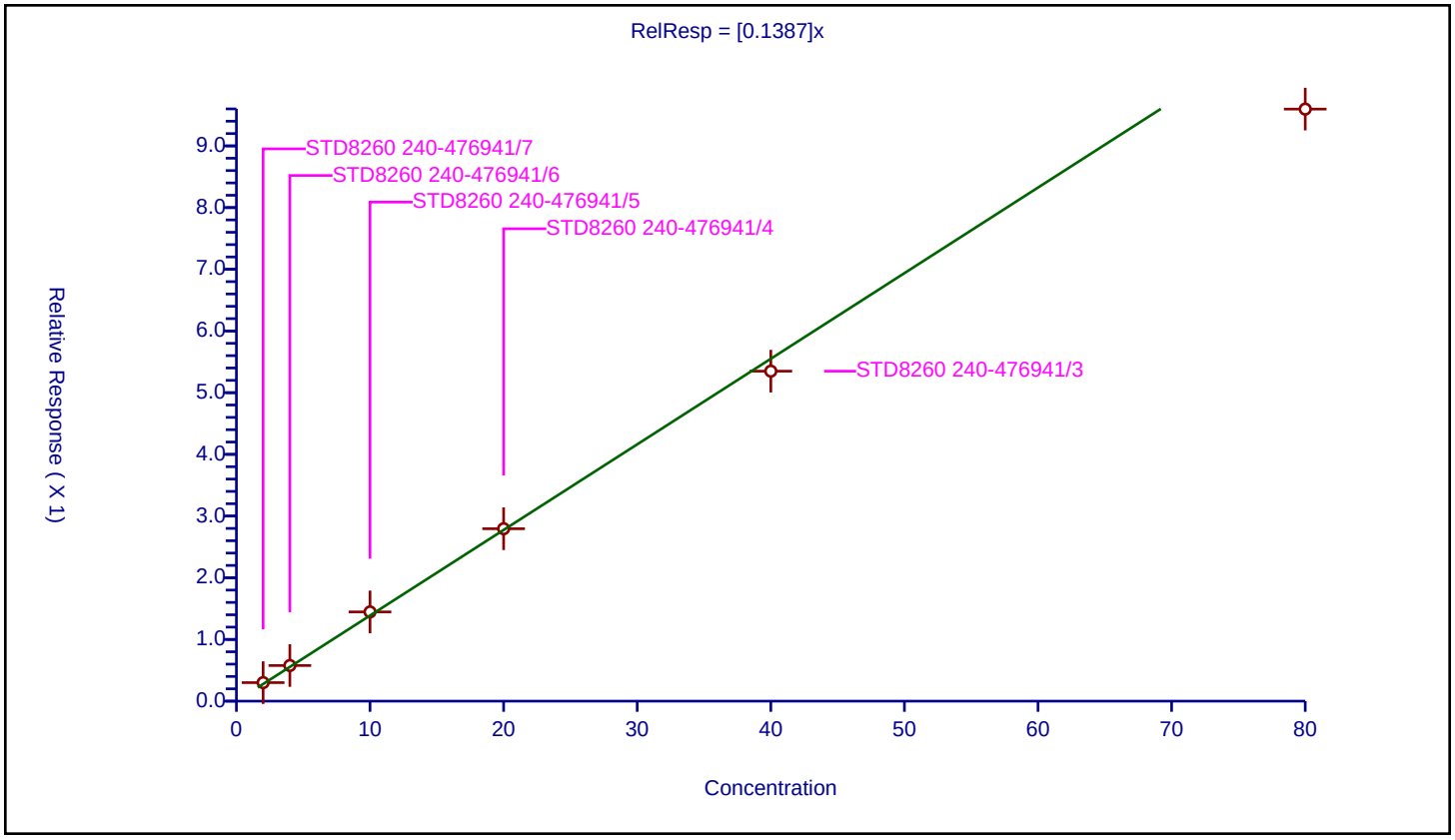
Curve Coefficients

Intercept:	0
Slope:	0.1387

Error Coefficients

Standard Error:	593000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	2.0	0.300175	10.0	1005314.0	0.150087	Y
2	STD8260 240-476941/6	4.0	0.577309	10.0	1025239.0	0.144327	Y
3	STD8260 240-476941/5	10.0	1.446436	10.0	1036230.0	0.144644	Y
4	STD8260 240-476941/4	20.0	2.794736	10.0	1083691.0	0.139737	Y
5	STD8260 240-476941/3	40.0	5.348657	10.0	1129906.0	0.133716	Y
6	STD8260 240-476941/2	80.0	9.596441	10.0	1176310.0	0.119956	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

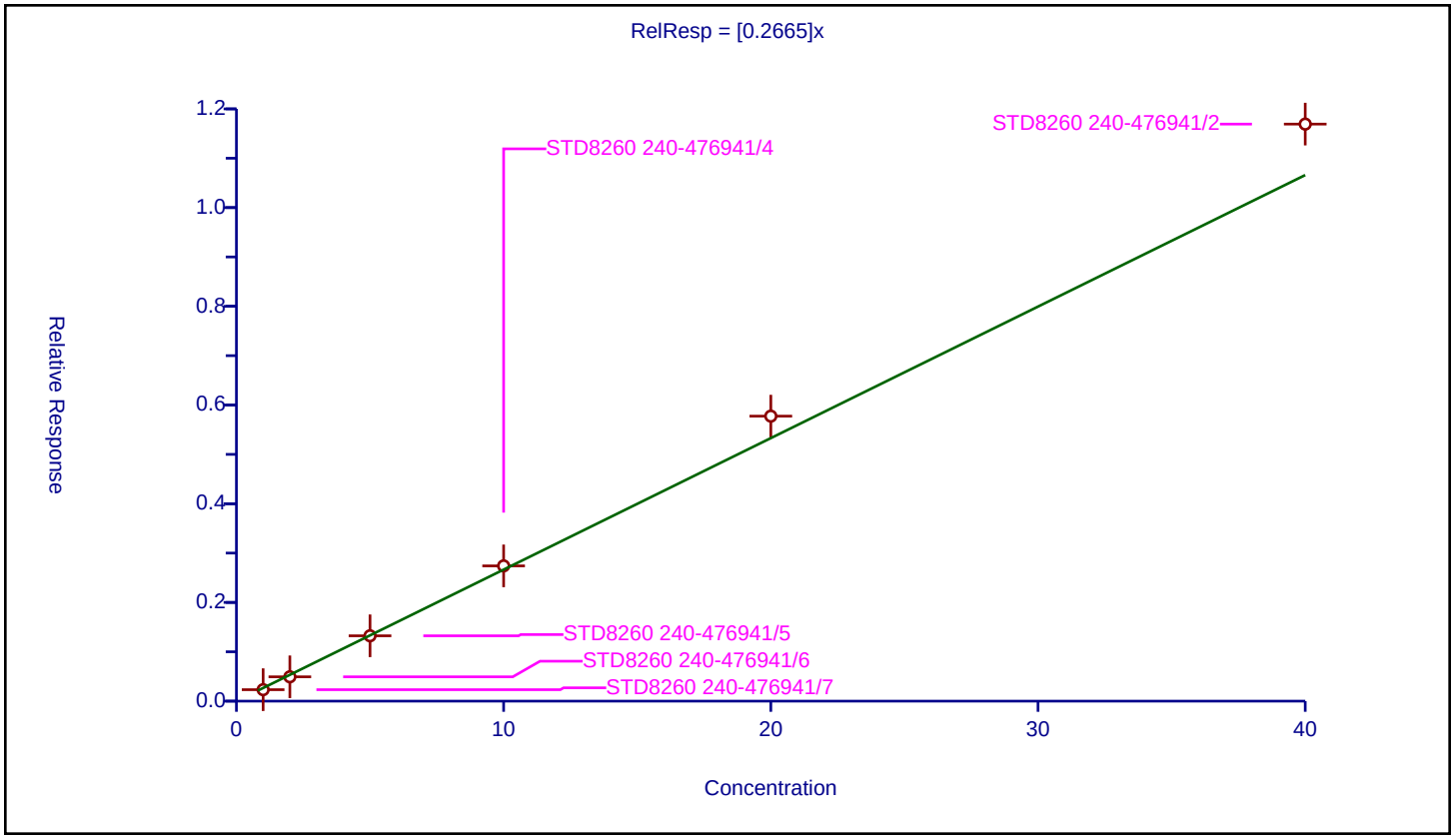
Curve Coefficients

Intercept:	0
Slope:	0.2665

Error Coefficients

Standard Error:	697000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.232335	10.0	1005314.0	0.232335	Y
2	STD8260 240-476941/6	2.0	0.493056	10.0	1025239.0	0.246528	Y
3	STD8260 240-476941/5	5.0	1.324272	10.0	1036230.0	0.264854	Y
4	STD8260 240-476941/4	10.0	2.740781	10.0	1083691.0	0.274078	Y
5	STD8260 240-476941/3	20.0	5.774799	10.0	1129906.0	0.28874	Y
6	STD8260 240-476941/2	40.0	11.69179	10.0	1176310.0	0.292295	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

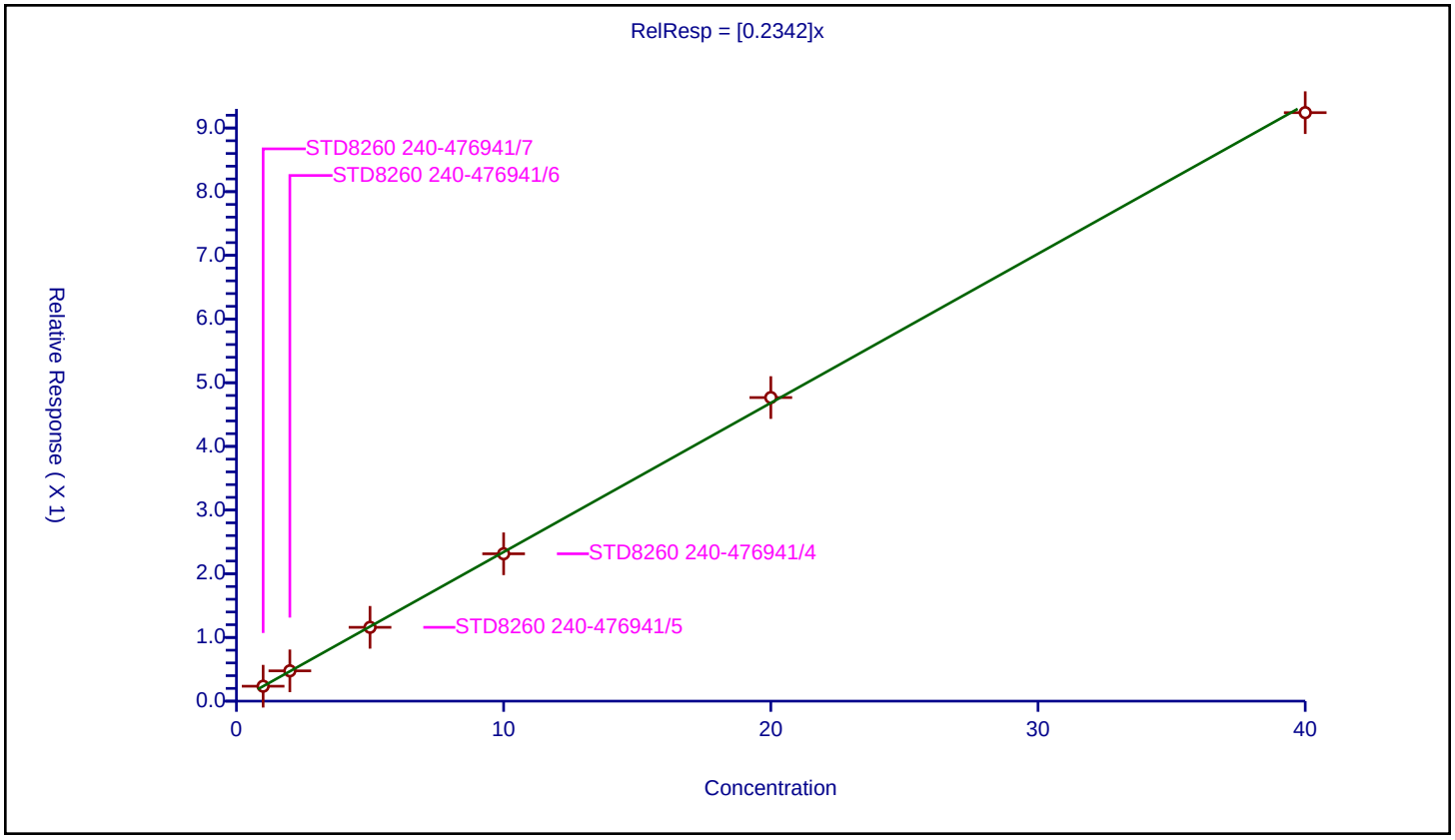
Curve Coefficients

Intercept:	0
Slope:	0.2342

Error Coefficients

Standard Error:	557000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.234434	10.0	1005314.0	0.234434	Y
2	STD8260 240-476941/6	2.0	0.475831	10.0	1025239.0	0.237915	Y
3	STD8260 240-476941/5	5.0	1.159009	10.0	1036230.0	0.231802	Y
4	STD8260 240-476941/4	10.0	2.313713	10.0	1083691.0	0.231371	Y
5	STD8260 240-476941/3	20.0	4.767131	10.0	1129906.0	0.238357	Y
6	STD8260 240-476941/2	40.0	9.240914	10.0	1176310.0	0.231023	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

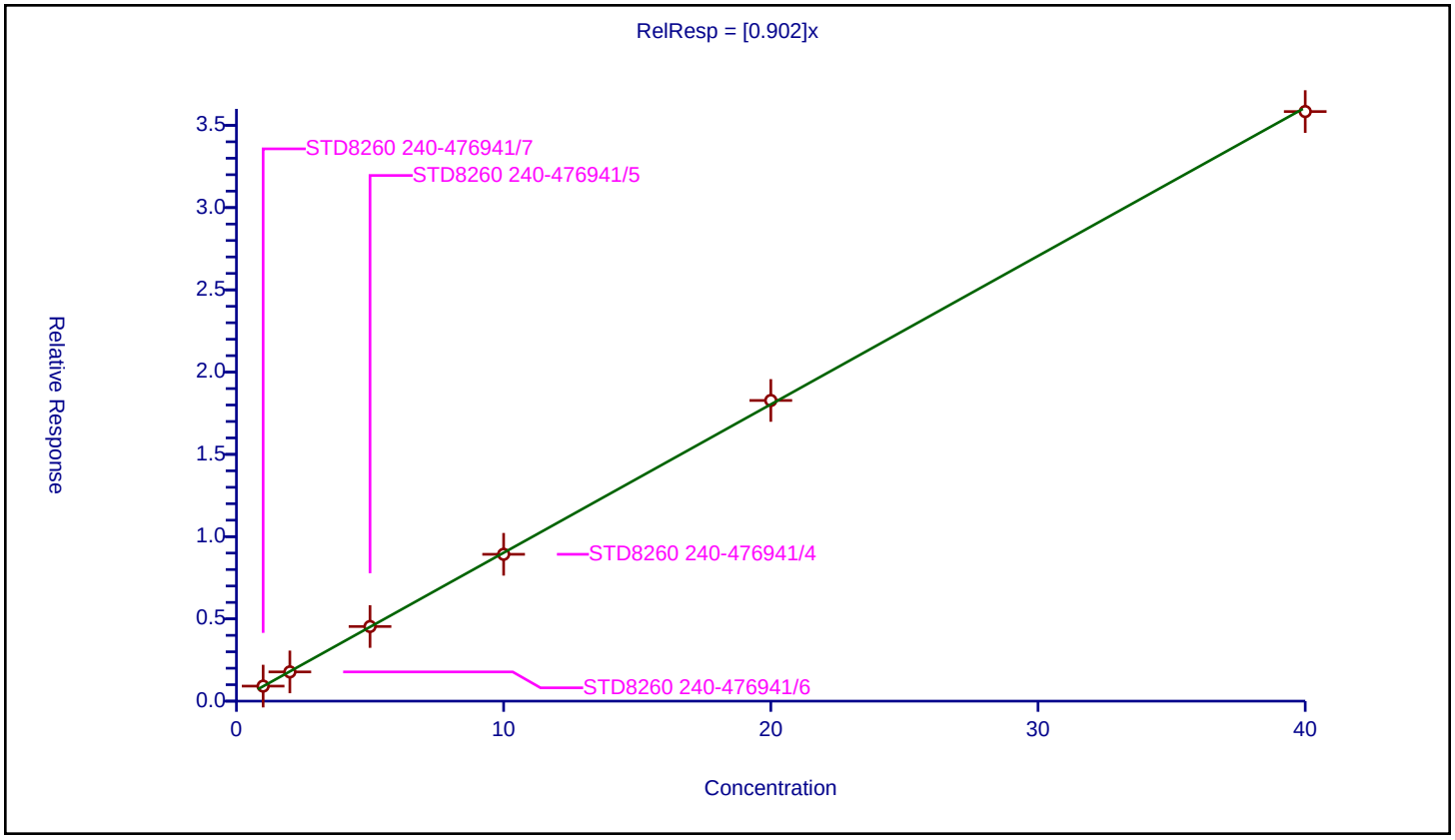
Curve Coefficients

Intercept:	0
Slope:	0.902

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.913565	10.0	1005314.0	0.913565	Y
2	STD8260 240-476941/6	2.0	1.777293	10.0	1025239.0	0.888646	Y
3	STD8260 240-476941/5	5.0	4.536396	10.0	1036230.0	0.907279	Y
4	STD8260 240-476941/4	10.0	8.926244	10.0	1083691.0	0.892624	Y
5	STD8260 240-476941/3	20.0	18.276565	10.0	1129906.0	0.913828	Y
6	STD8260 240-476941/2	40.0	35.837526	10.0	1176310.0	0.895938	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

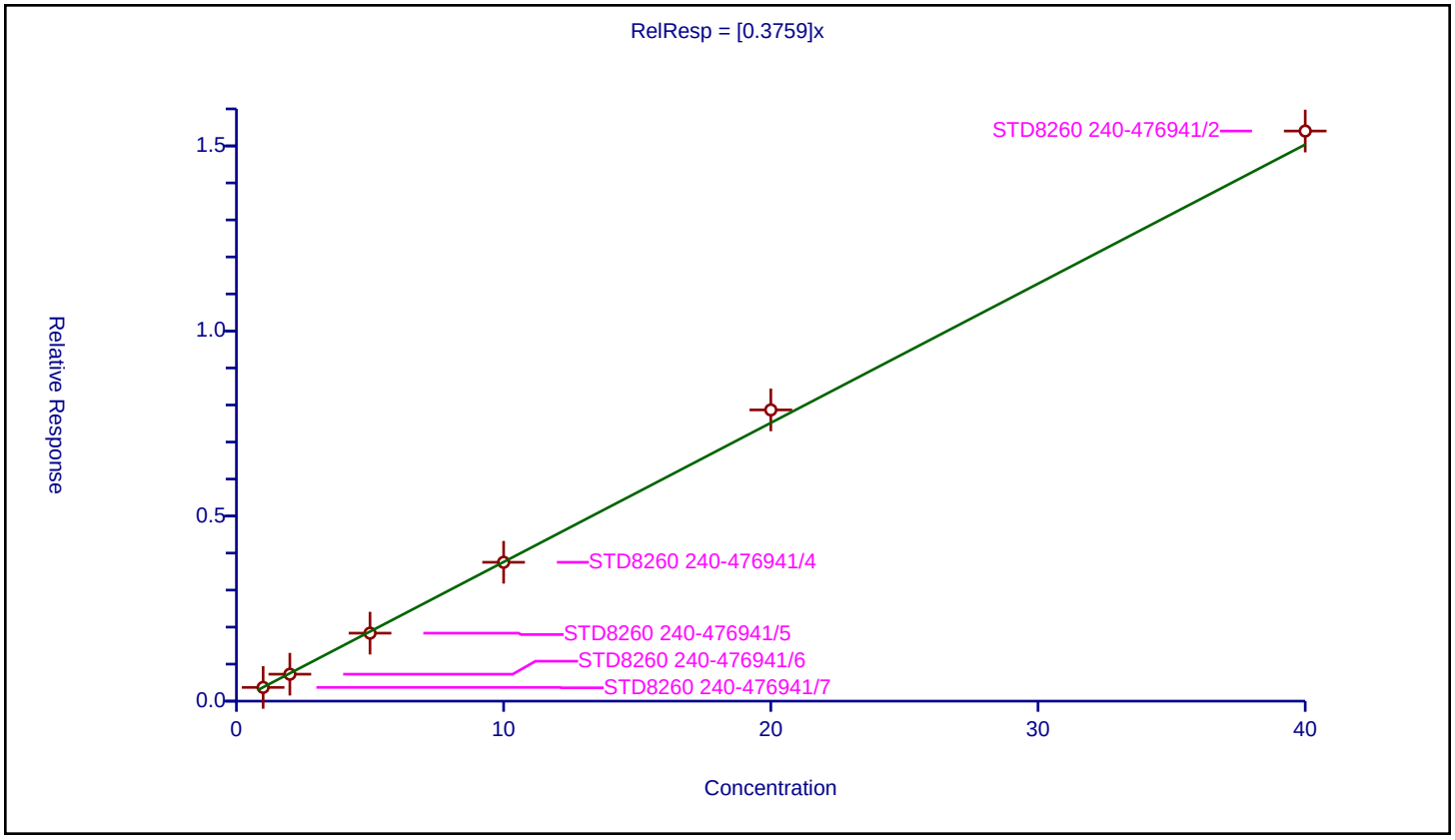
Curve Coefficients

Intercept:	0
Slope:	0.3759

Error Coefficients

Standard Error:	925000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.370859	10.0	1005314.0	0.370859	Y
2	STD8260 240-476941/6	2.0	0.72745	10.0	1025239.0	0.363725	Y
3	STD8260 240-476941/5	5.0	1.836282	10.0	1036230.0	0.367256	Y
4	STD8260 240-476941/4	10.0	3.751632	10.0	1083691.0	0.375163	Y
5	STD8260 240-476941/3	20.0	7.867761	10.0	1129906.0	0.393388	Y
6	STD8260 240-476941/2	40.0	15.401977	10.0	1176310.0	0.385049	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

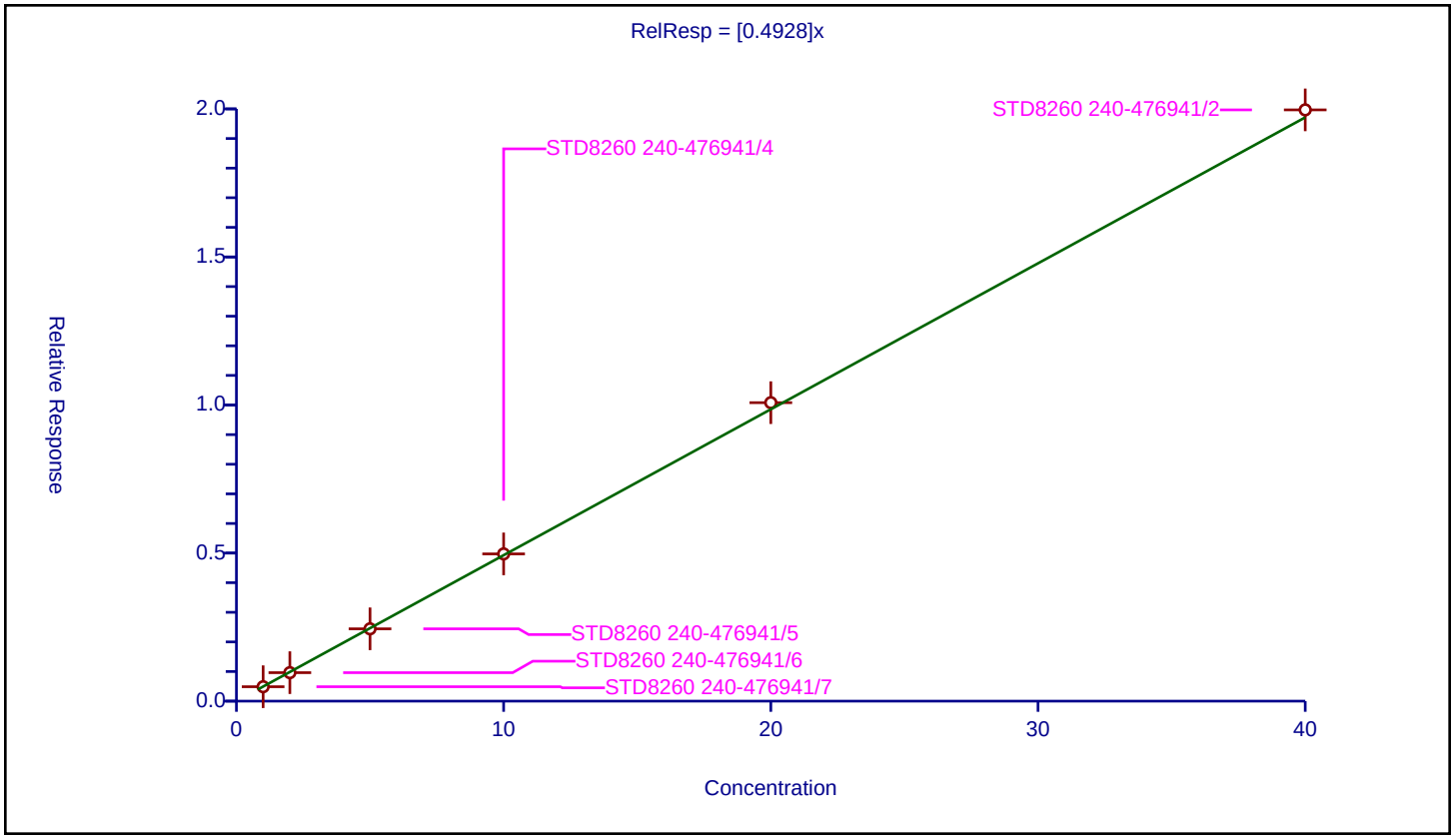
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.486932	10.0	1005314.0	0.486932	Y
2	STD8260 240-476941/6	2.0	0.962254	10.0	1025239.0	0.481127	Y
3	STD8260 240-476941/5	5.0	2.442151	10.0	1036230.0	0.48843	Y
4	STD8260 240-476941/4	10.0	4.972155	10.0	1083691.0	0.497216	Y
5	STD8260 240-476941/3	20.0	10.079254	10.0	1129906.0	0.503963	Y
6	STD8260 240-476941/2	40.0	19.966276	10.0	1176310.0	0.499157	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

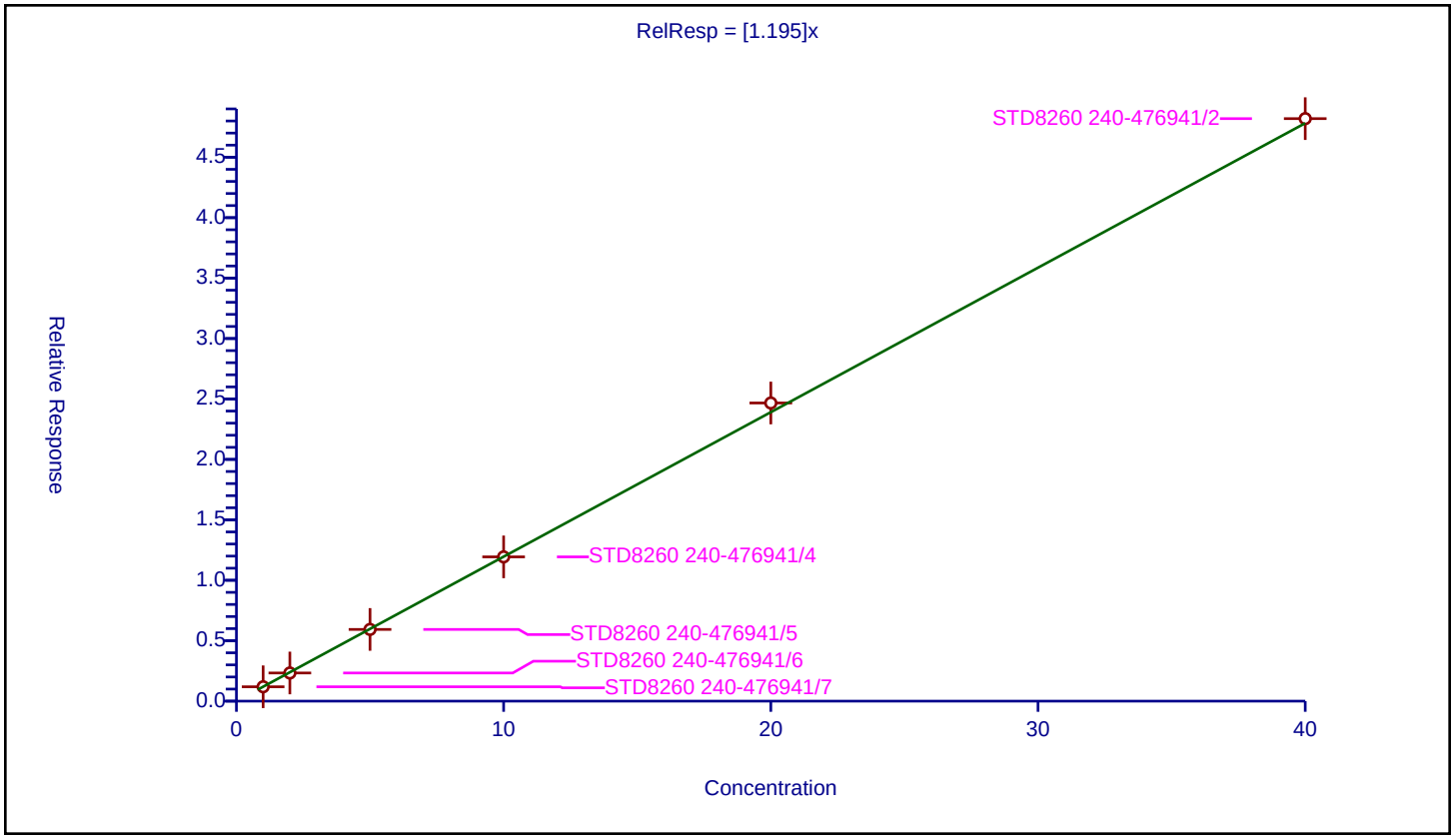
Curve Coefficients

Intercept:	0
Slope:	1.195

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.189141	10.0	1005314.0	1.189141	Y
2	STD8260 240-476941/6	2.0	2.329369	10.0	1025239.0	1.164685	Y
3	STD8260 240-476941/5	5.0	5.934213	10.0	1036230.0	1.186843	Y
4	STD8260 240-476941/4	10.0	11.935423	10.0	1083691.0	1.193542	Y
5	STD8260 240-476941/3	20.0	24.667964	10.0	1129906.0	1.233398	Y
6	STD8260 240-476941/2	40.0	48.192645	10.0	1176310.0	1.204816	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

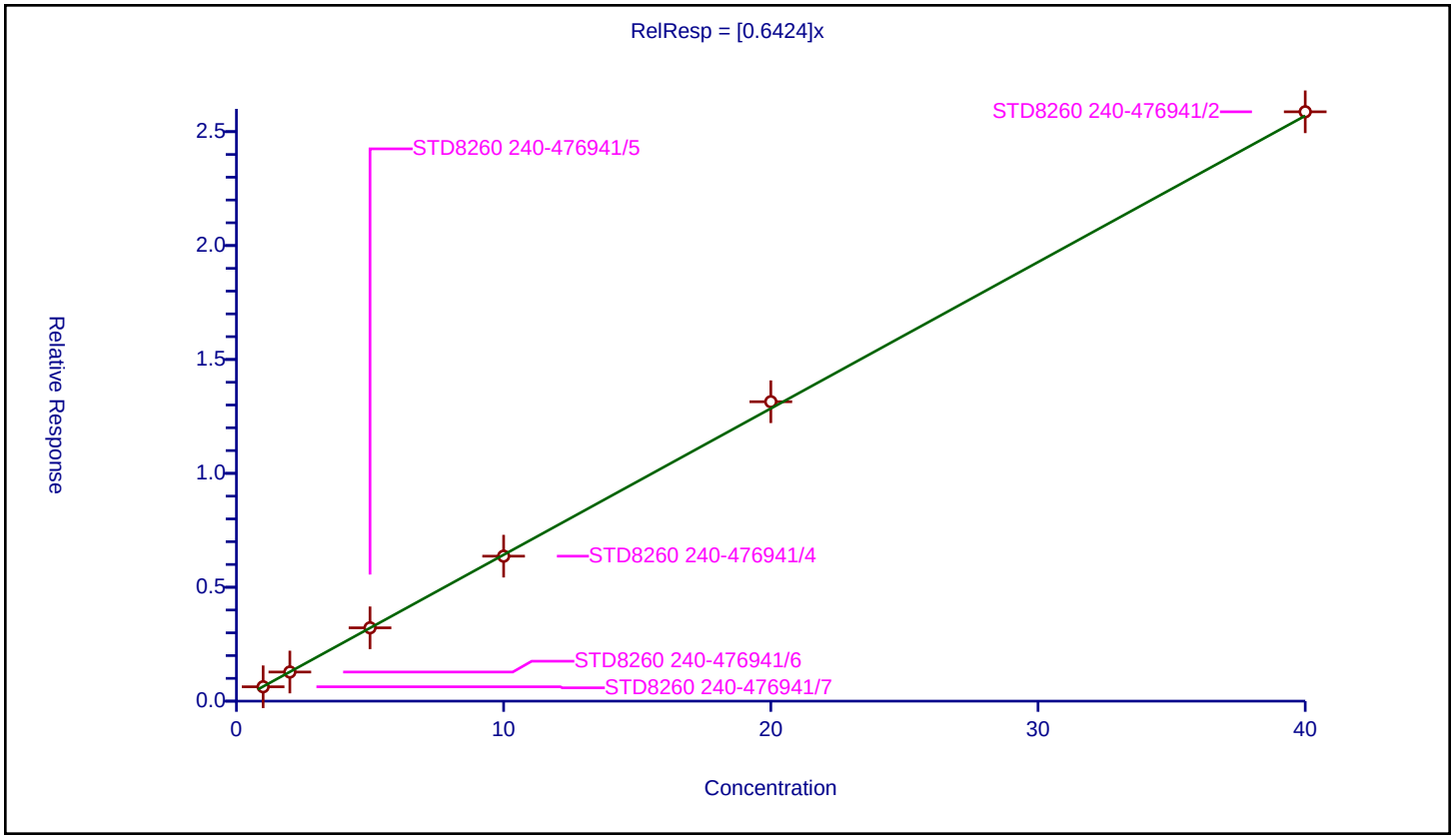
Curve Coefficients

Intercept:	0
Slope:	0.6424

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.631146	10.0	1005314.0	0.631146	Y
2	STD8260 240-476941/6	2.0	1.278404	10.0	1025239.0	0.639202	Y
3	STD8260 240-476941/5	5.0	3.219131	10.0	1036230.0	0.643826	Y
4	STD8260 240-476941/4	10.0	6.364268	10.0	1083691.0	0.636427	Y
5	STD8260 240-476941/3	20.0	13.144633	10.0	1129906.0	0.657232	Y
6	STD8260 240-476941/2	40.0	25.873035	10.0	1176310.0	0.646826	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

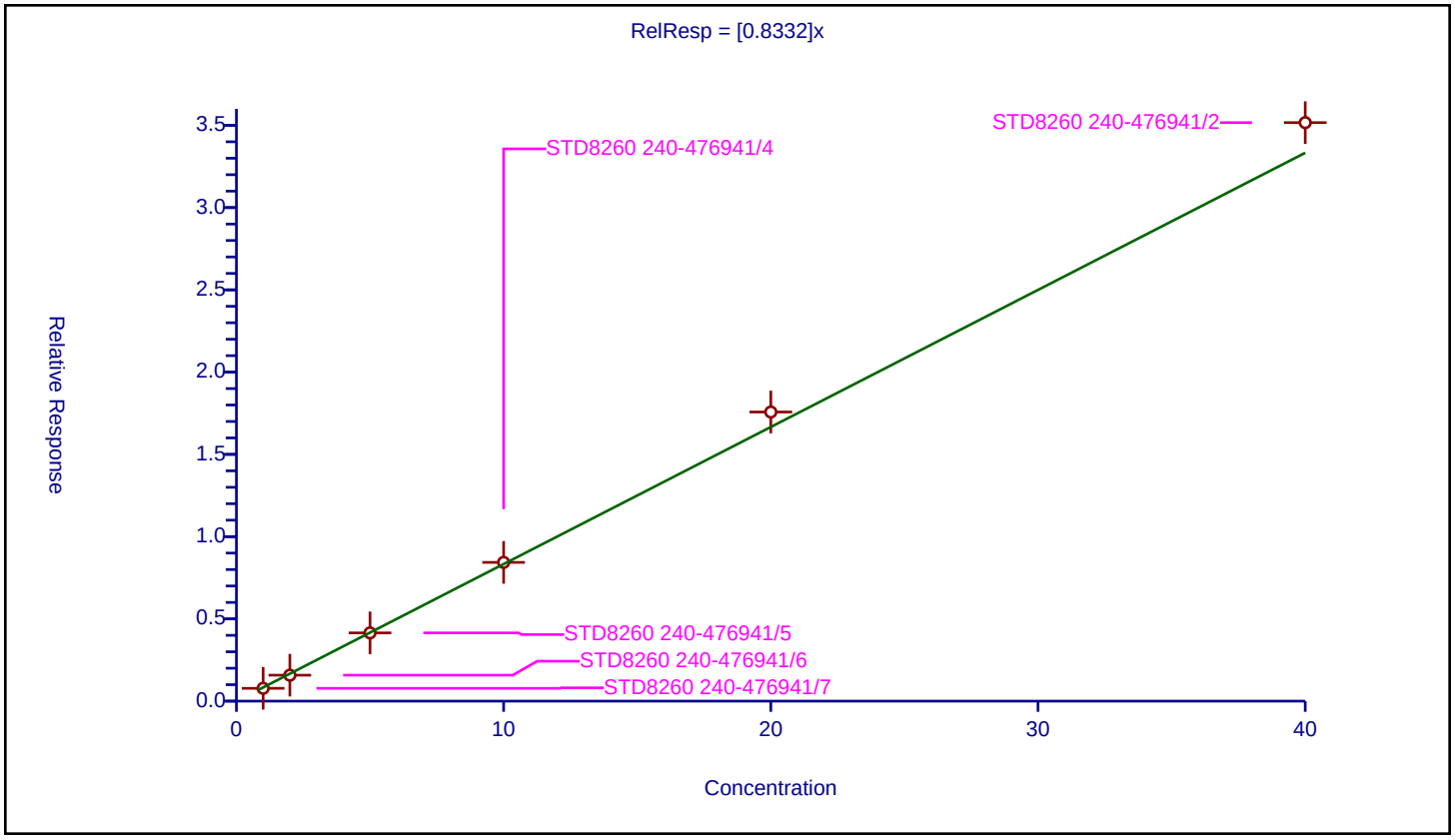
Curve Coefficients

Intercept:	0
Slope:	0.8332

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.779398	10.0	1005314.0	0.779398	Y
2	STD8260 240-476941/6	2.0	1.577944	10.0	1025239.0	0.788972	Y
3	STD8260 240-476941/5	5.0	4.148712	10.0	1036230.0	0.829742	Y
4	STD8260 240-476941/4	10.0	8.433852	10.0	1083691.0	0.843385	Y
5	STD8260 240-476941/3	20.0	17.574002	10.0	1129906.0	0.8787	Y
6	STD8260 240-476941/2	40.0	35.165339	10.0	1176310.0	0.879133	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

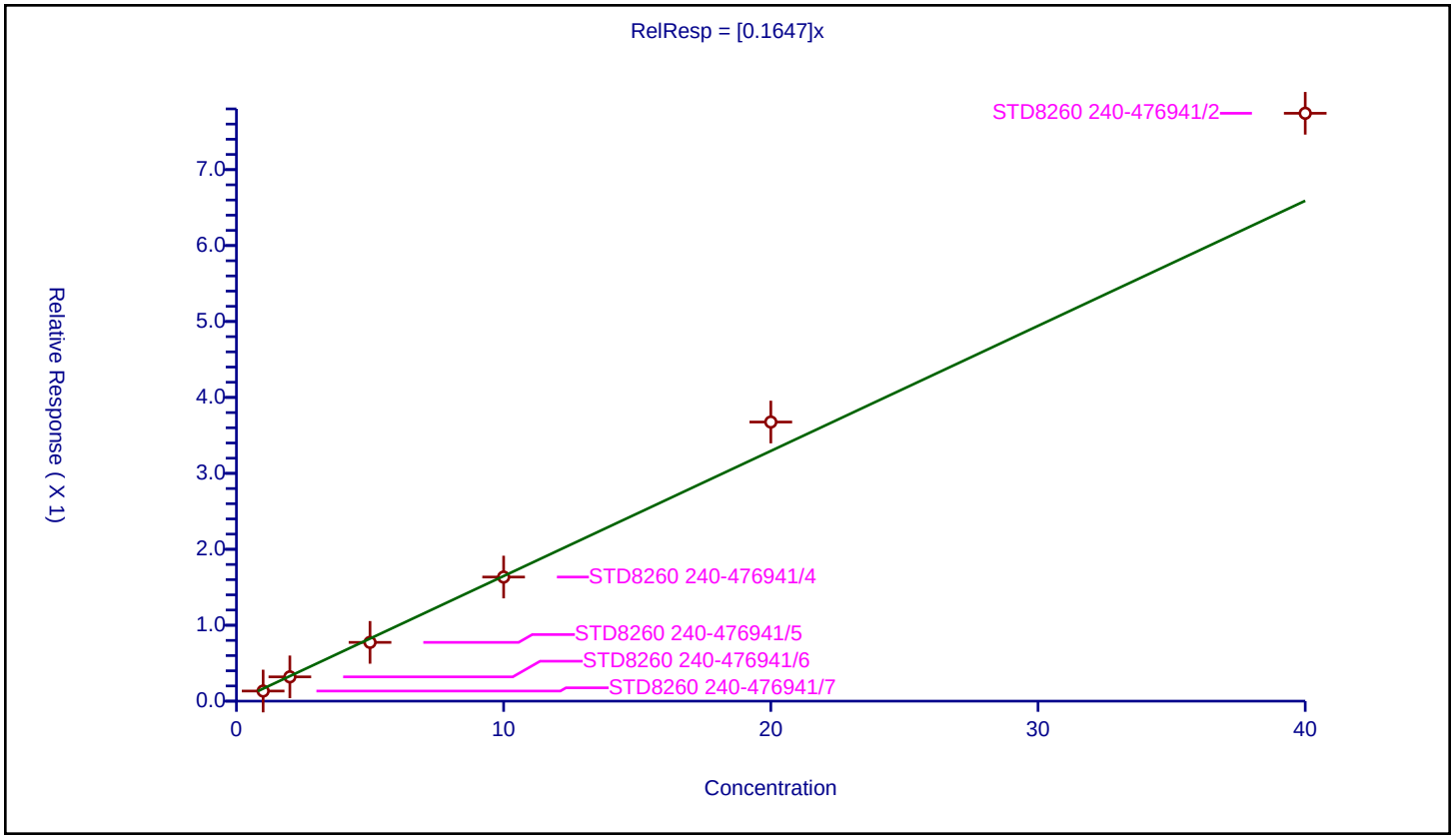
Curve Coefficients

Intercept:	0
Slope:	0.1647

Error Coefficients

Standard Error:	456000
Relative Standard Error:	13.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.132963	10.0	1005314.0	0.132963	Y
2	STD8260 240-476941/6	2.0	0.319808	10.0	1025239.0	0.159904	Y
3	STD8260 240-476941/5	5.0	0.774152	10.0	1036230.0	0.15483	Y
4	STD8260 240-476941/4	10.0	1.63434	10.0	1083691.0	0.163434	Y
5	STD8260 240-476941/3	20.0	3.675987	10.0	1129906.0	0.183799	Y
6	STD8260 240-476941/2	40.0	7.742032	10.0	1176310.0	0.193551	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

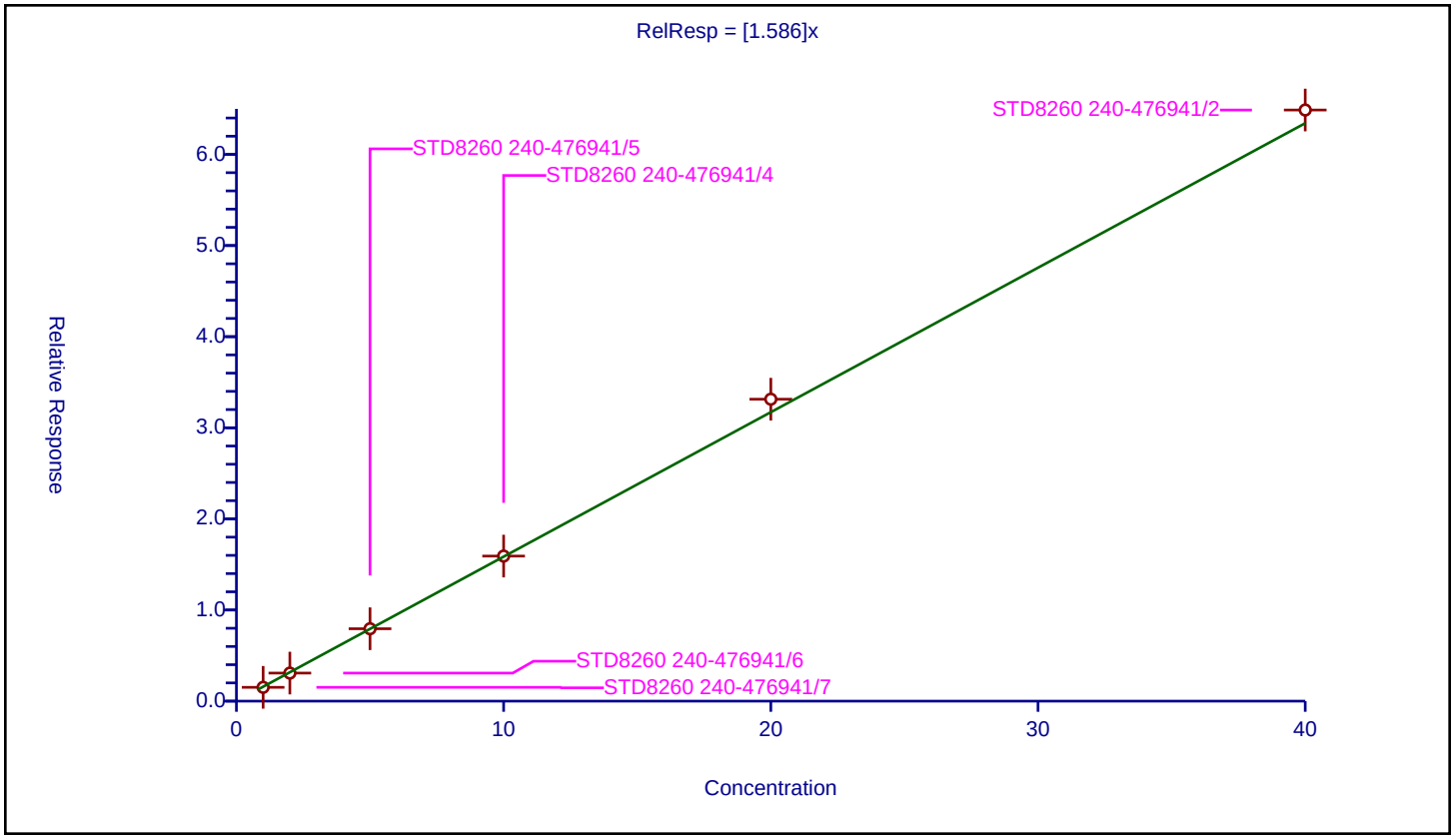
Curve Coefficients

Intercept:	0
Slope:	1.586

Error Coefficients

Standard Error:	3900000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.514611	10.0	1005314.0	1.514611	Y
2	STD8260 240-476941/6	2.0	3.078365	10.0	1025239.0	1.539183	Y
3	STD8260 240-476941/5	5.0	7.945601	10.0	1036230.0	1.58912	Y
4	STD8260 240-476941/4	10.0	15.921808	10.0	1083691.0	1.592181	Y
5	STD8260 240-476941/3	20.0	33.139358	10.0	1129906.0	1.656968	Y
6	STD8260 240-476941/2	40.0	64.876784	10.0	1176310.0	1.62192	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

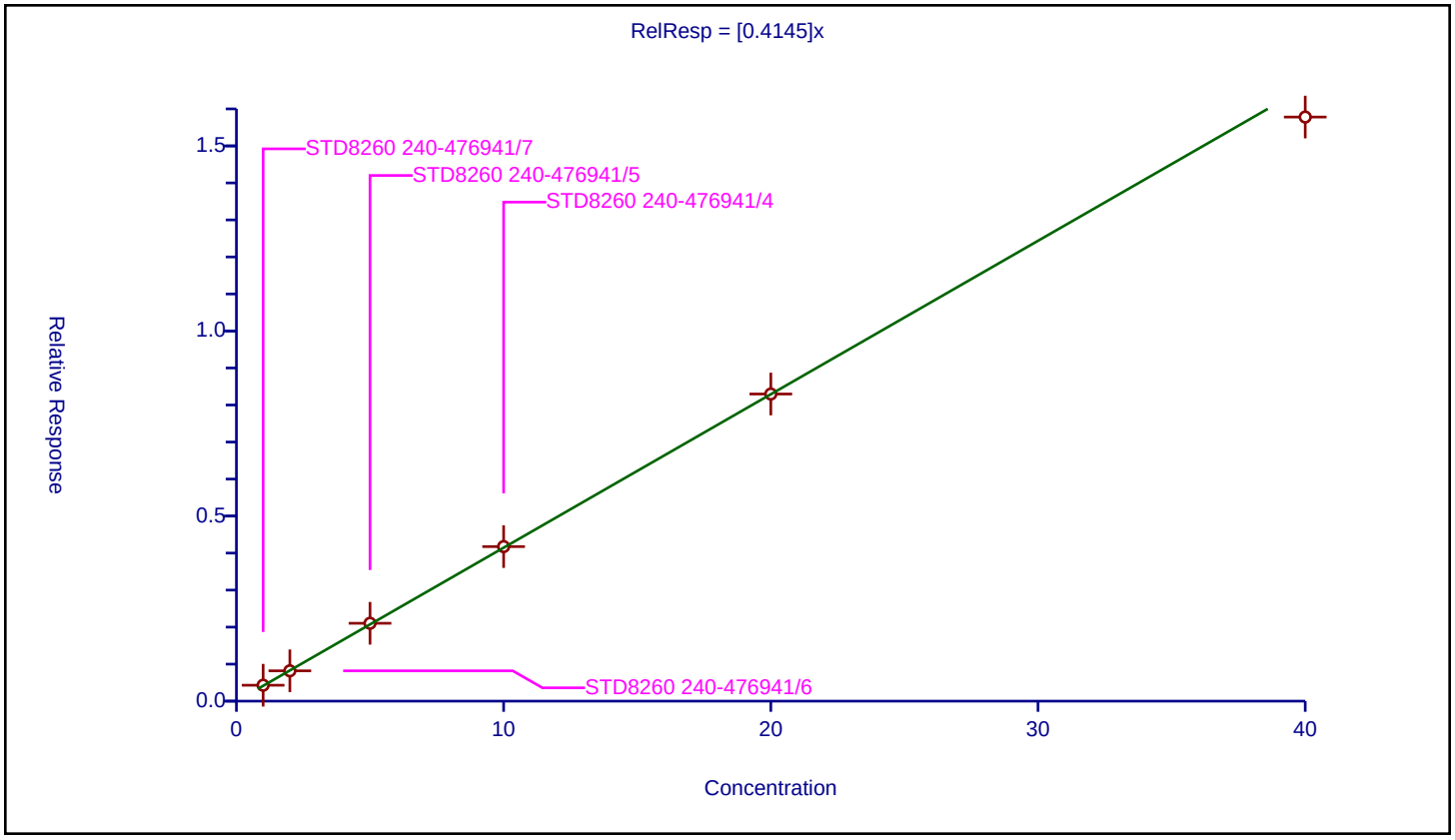
Curve Coefficients

Intercept:	0
Slope:	0.4145

Error Coefficients

Standard Error:	958000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.429995	10.0	1005314.0	0.429995	Y
2	STD8260 240-476941/6	2.0	0.819194	10.0	1025239.0	0.409597	Y
3	STD8260 240-476941/5	5.0	2.103838	10.0	1036230.0	0.420768	Y
4	STD8260 240-476941/4	10.0	4.175222	10.0	1083691.0	0.417522	Y
5	STD8260 240-476941/3	20.0	8.297124	10.0	1129906.0	0.414856	Y
6	STD8260 240-476941/2	40.0	15.780109	10.0	1176310.0	0.394503	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

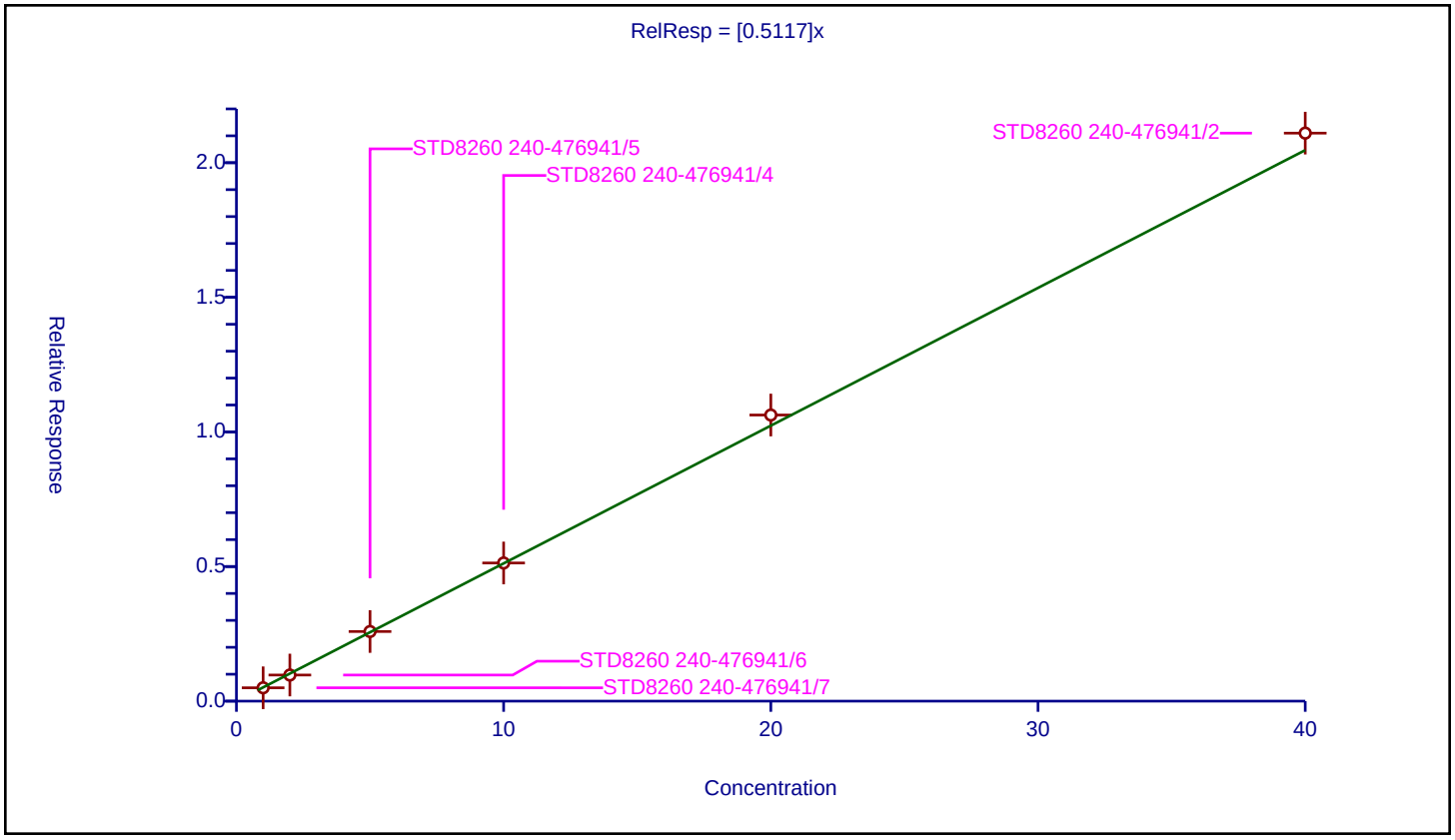
Curve Coefficients

Intercept:	0
Slope:	0.5117

Error Coefficients

Standard Error:	726000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.495697	10.0	606056.0	0.495697	Y
2	STD8260 240-476941/6	2.0	0.969796	10.0	608128.0	0.484898	Y
3	STD8260 240-476941/5	5.0	2.586701	10.0	621189.0	0.51734	Y
4	STD8260 240-476941/4	10.0	5.131993	10.0	639882.0	0.513199	Y
5	STD8260 240-476941/3	20.0	10.627968	10.0	663171.0	0.531398	Y
6	STD8260 240-476941/2	40.0	21.099818	10.0	670129.0	0.527495	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

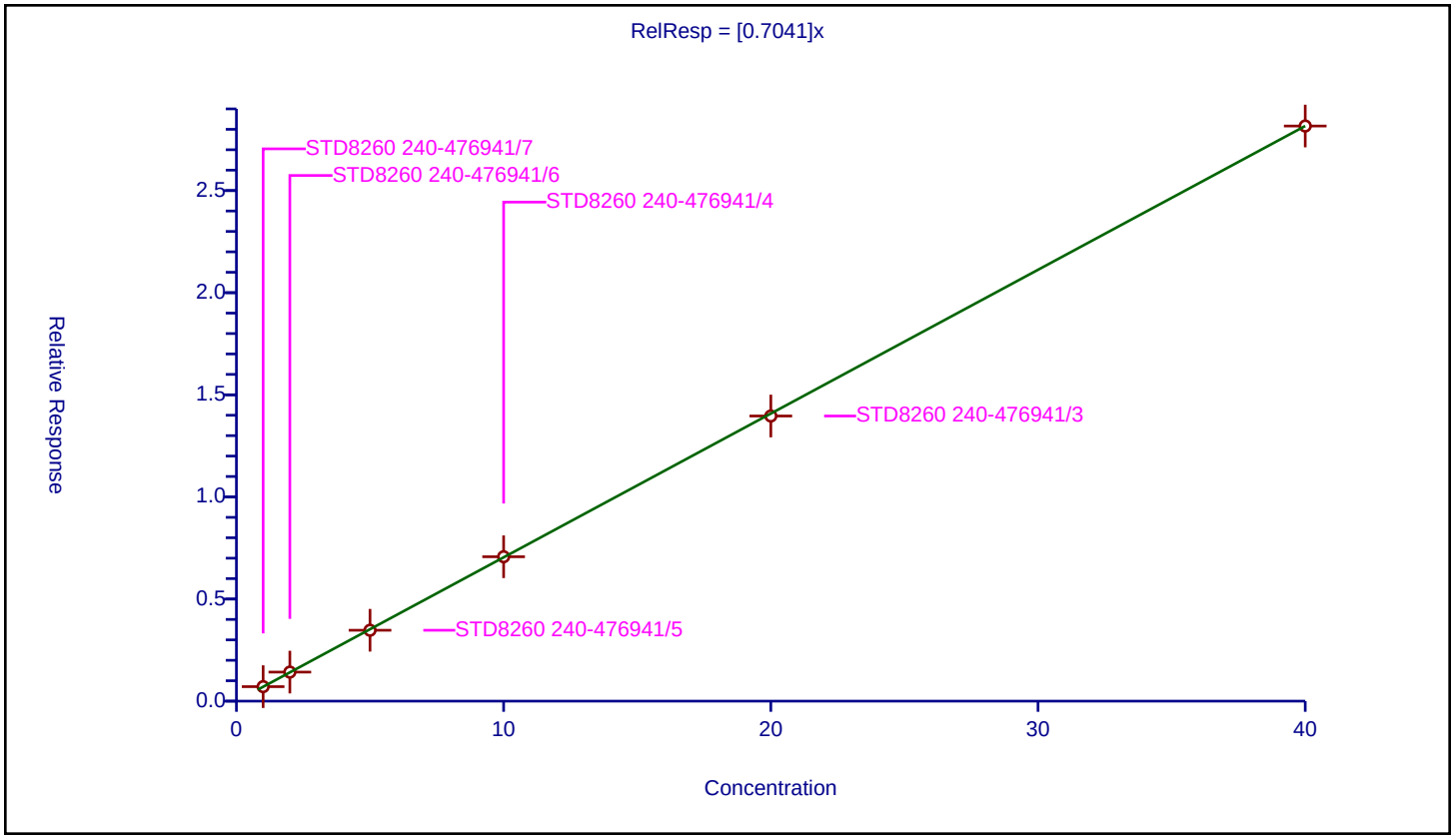
Curve Coefficients

Intercept:	0
Slope:	0.7041

Error Coefficients

Standard Error:	967000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.70967	10.0	606056.0	0.70967	Y
2	STD8260 240-476941/6	2.0	1.422595	10.0	608128.0	0.711298	Y
3	STD8260 240-476941/5	5.0	3.470908	10.0	621189.0	0.694182	Y
4	STD8260 240-476941/4	10.0	7.070554	10.0	639882.0	0.707055	Y
5	STD8260 240-476941/3	20.0	13.962161	10.0	663171.0	0.698108	Y
6	STD8260 240-476941/2	40.0	28.161503	10.0	670129.0	0.704038	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

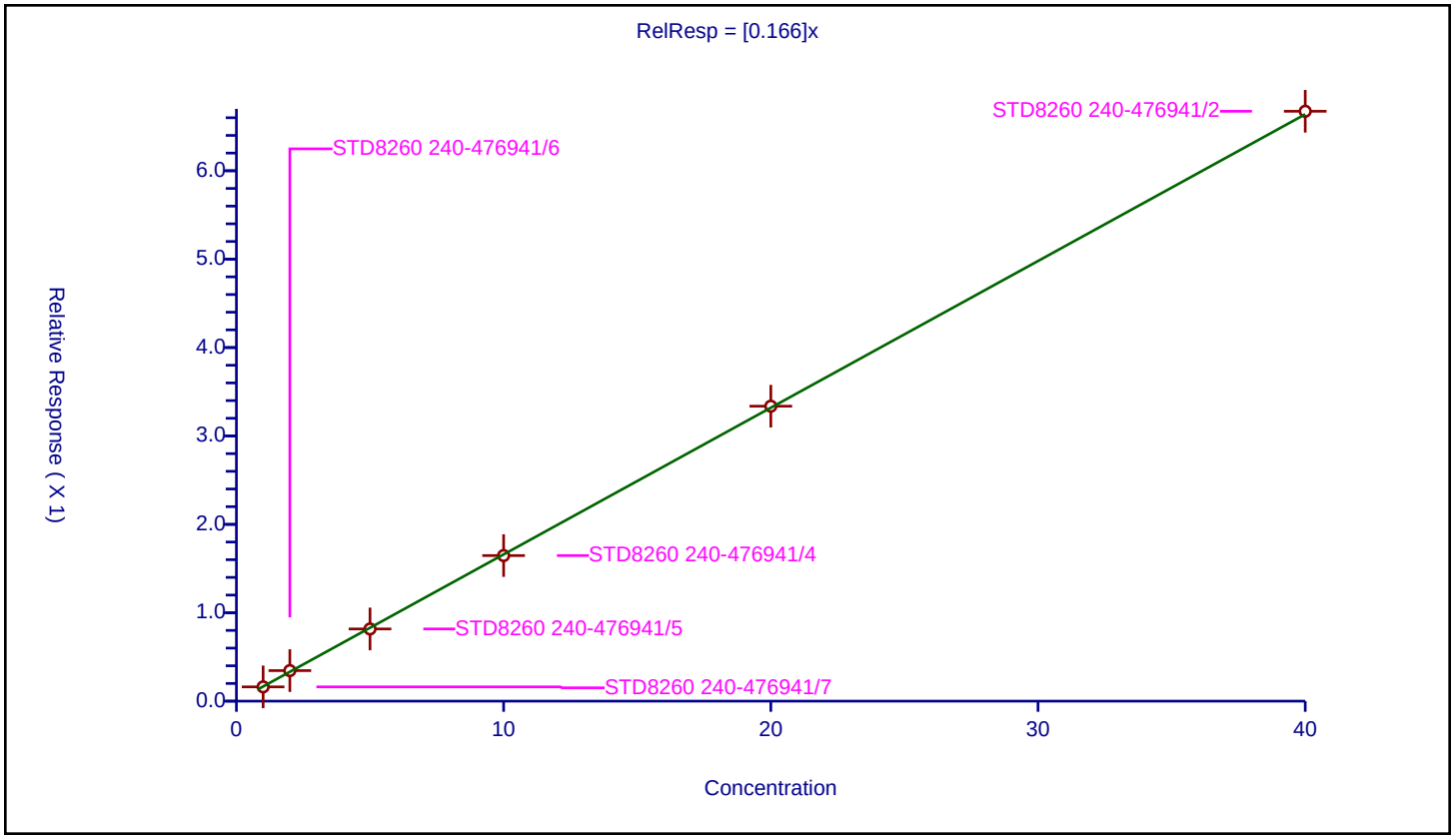
Curve Coefficients

Intercept:	0
Slope:	0.166

Error Coefficients

Standard Error:	229000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.161404	10.0	606056.0	0.161404	Y
2	STD8260 240-476941/6	2.0	0.345503	10.0	608128.0	0.172751	Y
3	STD8260 240-476941/5	5.0	0.816724	10.0	621189.0	0.163345	Y
4	STD8260 240-476941/4	10.0	1.64671	10.0	639882.0	0.164671	Y
5	STD8260 240-476941/3	20.0	3.336666	10.0	663171.0	0.166833	Y
6	STD8260 240-476941/2	40.0	6.673163	10.0	670129.0	0.166829	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

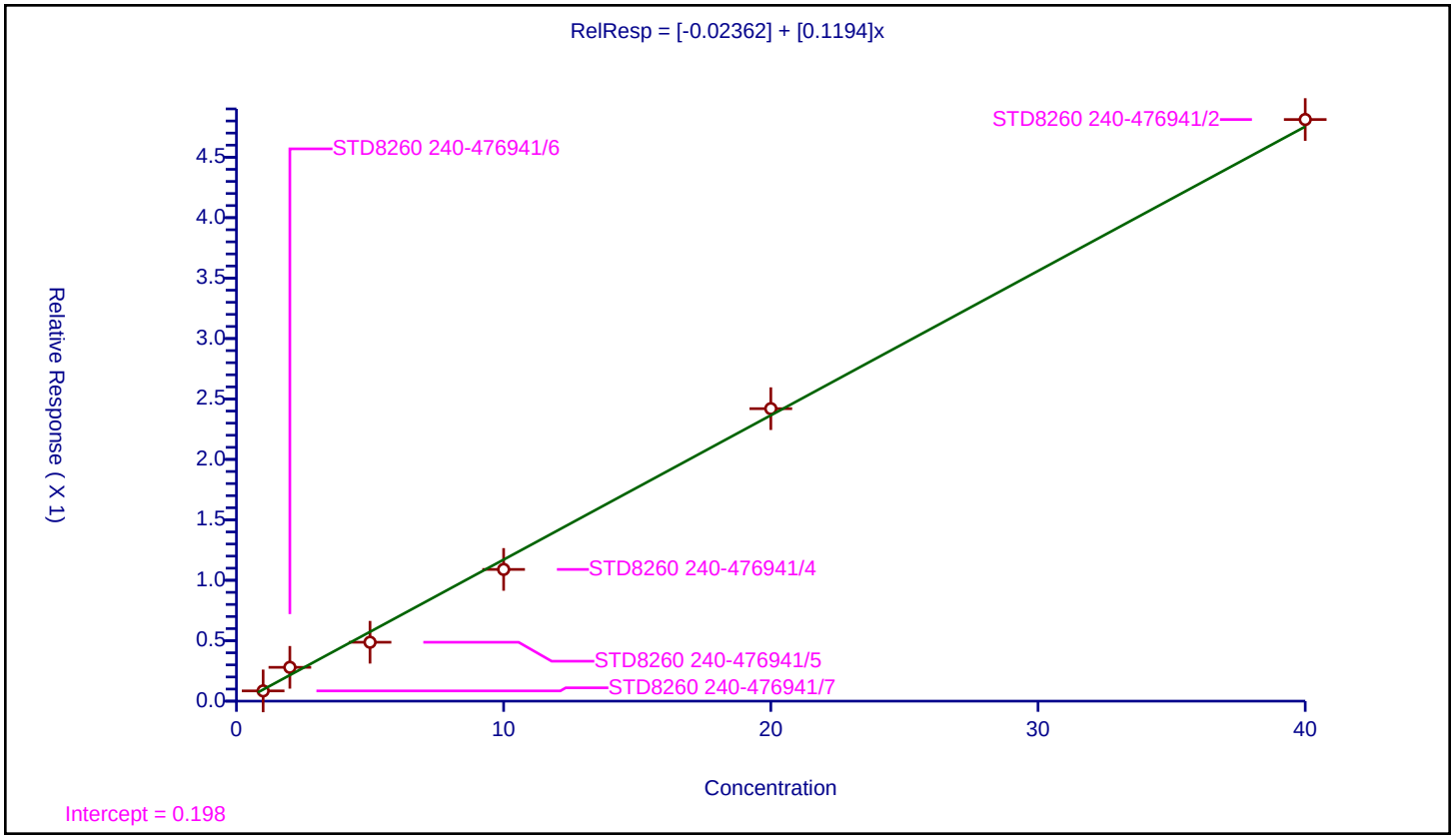
Curve Coefficients

Intercept:	-0.02362
Slope:	0.1194

Error Coefficients

Standard Error:	184000
Relative Standard Error:	16.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.084695	10.0	606056.0	0.084695	Y
2	STD8260 240-476941/6	2.0	0.279678	10.0	608128.0	0.139839	Y
3	STD8260 240-476941/5	5.0	0.487243	10.0	621189.0	0.097449	Y
4	STD8260 240-476941/4	10.0	1.089888	10.0	639882.0	0.108989	Y
5	STD8260 240-476941/3	20.0	2.419964	10.0	663171.0	0.120998	Y
6	STD8260 240-476941/2	40.0	4.812178	10.0	670129.0	0.120304	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

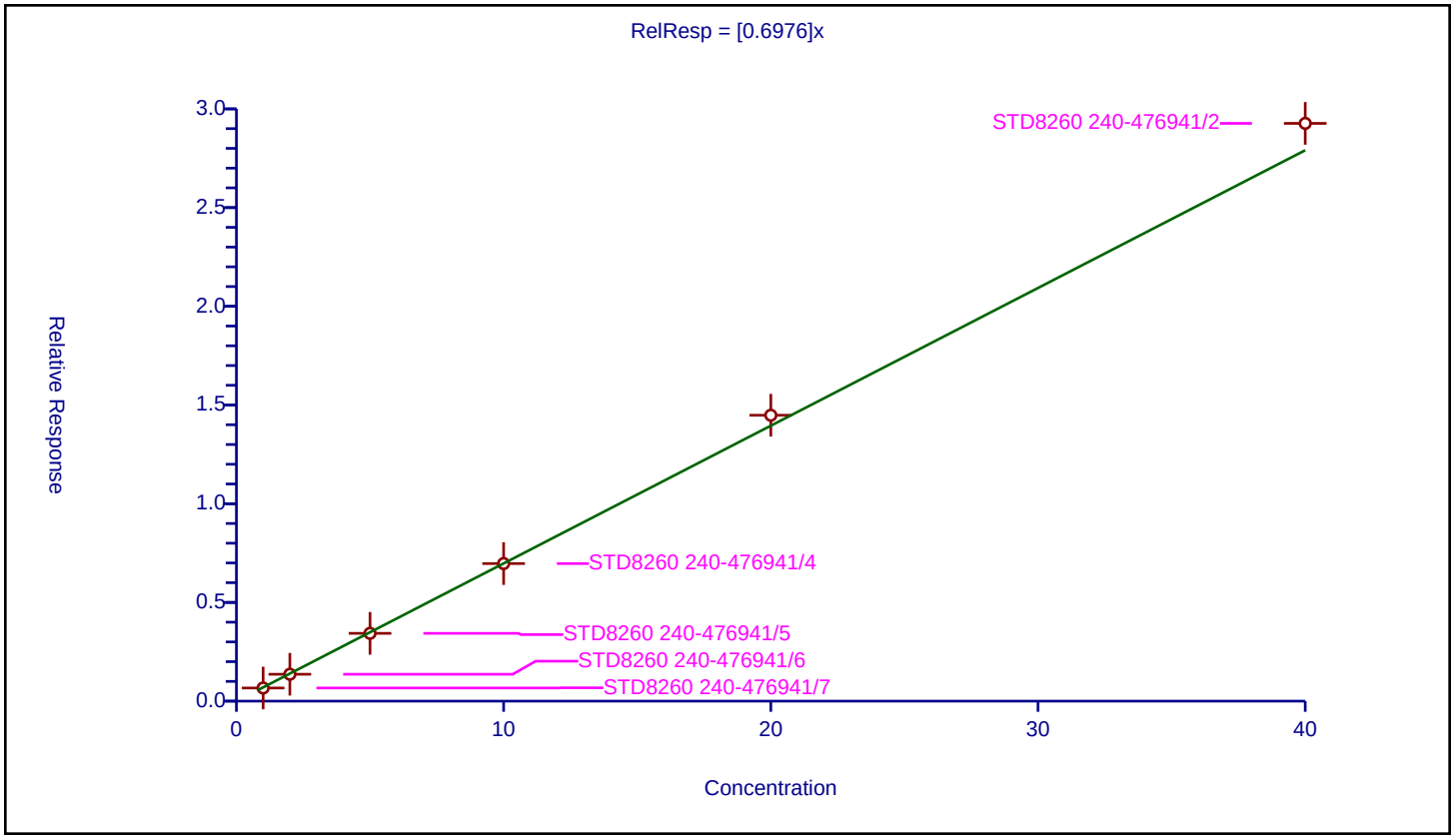
Curve Coefficients

Intercept:	0
Slope:	0.6976

Error Coefficients

Standard Error:	1000000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.665285	10.0	606056.0	0.665285	Y
2	STD8260 240-476941/6	2.0	1.362065	10.0	608128.0	0.681033	Y
3	STD8260 240-476941/5	5.0	3.433915	10.0	621189.0	0.686783	Y
4	STD8260 240-476941/4	10.0	6.96841	10.0	639882.0	0.696841	Y
5	STD8260 240-476941/3	20.0	14.48183	10.0	663171.0	0.724092	Y
6	STD8260 240-476941/2	40.0	29.266141	10.0	670129.0	0.731654	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

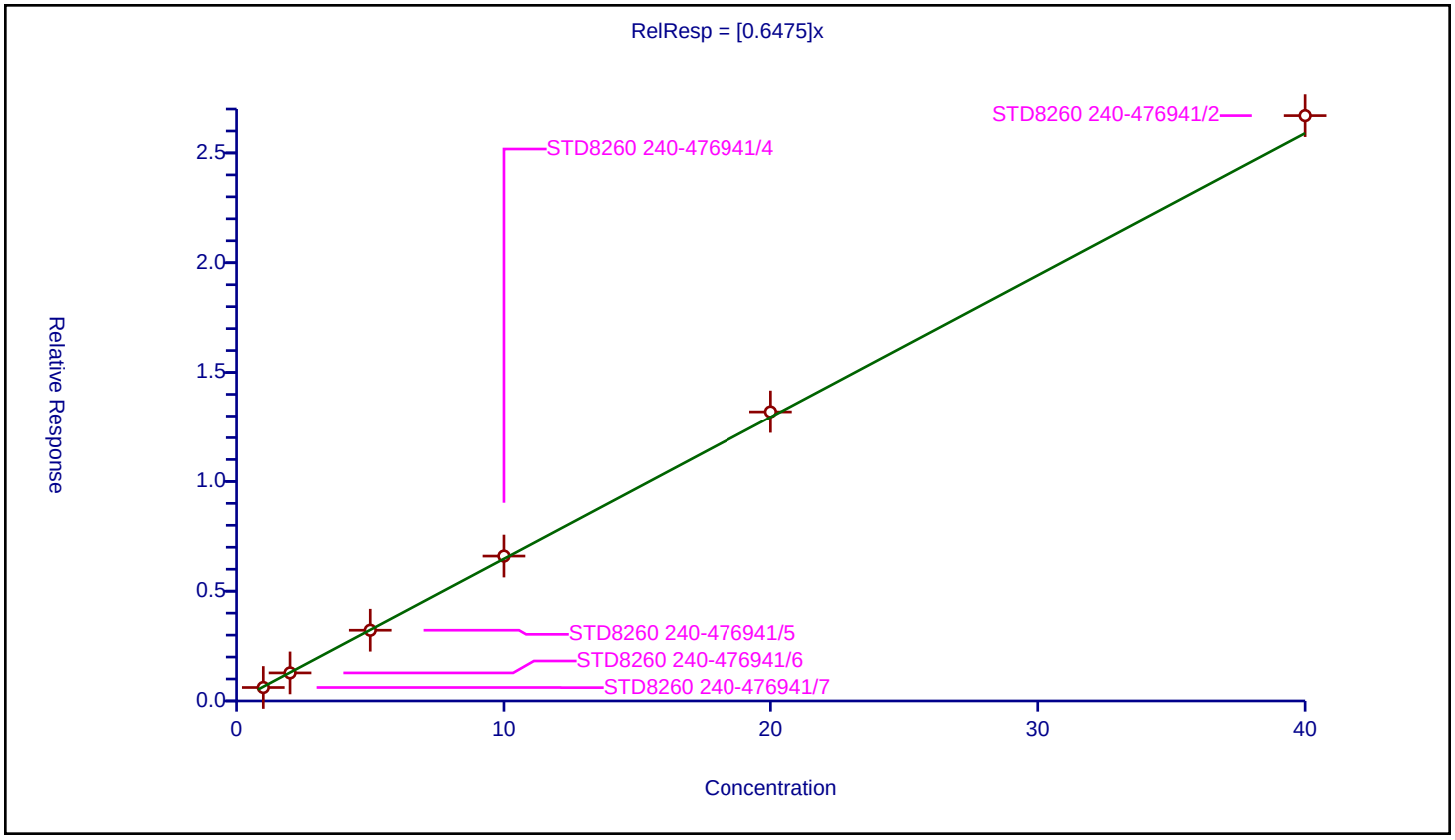
Curve Coefficients

Intercept:	0
Slope:	0.6475

Error Coefficients

Standard Error:	916000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.614069	10.0	606056.0	0.614069	Y
2	STD8260 240-476941/6	2.0	1.278119	10.0	608128.0	0.63906	Y
3	STD8260 240-476941/5	5.0	3.221628	10.0	621189.0	0.644326	Y
4	STD8260 240-476941/4	10.0	6.600092	10.0	639882.0	0.660009	Y
5	STD8260 240-476941/3	20.0	13.199099	10.0	663171.0	0.659955	Y
6	STD8260 240-476941/2	40.0	26.699576	10.0	670129.0	0.667489	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

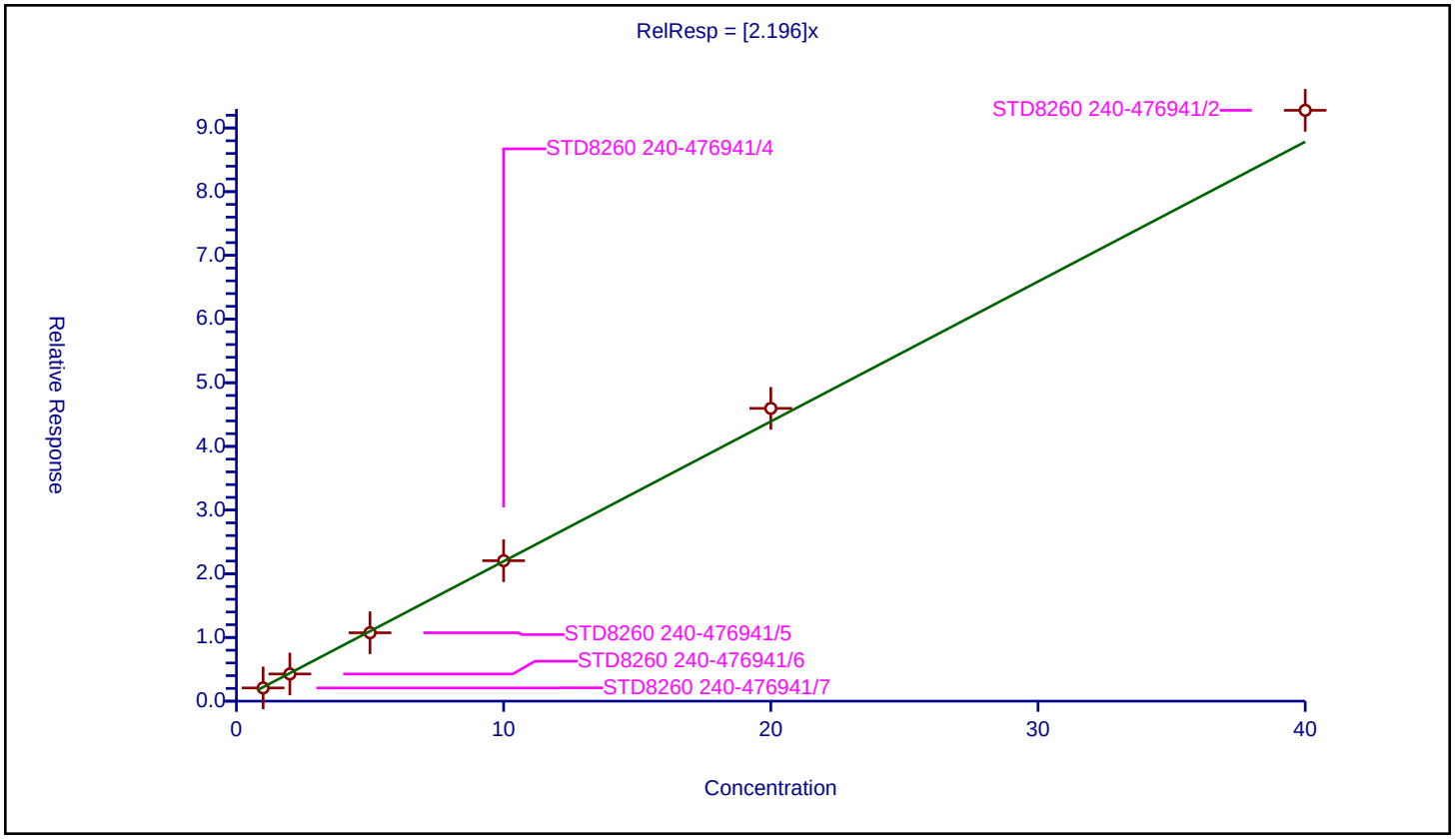
Curve Coefficients

Intercept:	0
Slope:	2.196

Error Coefficients

Standard Error:	3180000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.071195	10.0	606056.0	2.071195	Y
2	STD8260 240-476941/6	2.0	4.269101	10.0	608128.0	2.134551	Y
3	STD8260 240-476941/5	5.0	10.73641	10.0	621189.0	2.147282	Y
4	STD8260 240-476941/4	10.0	22.049409	10.0	639882.0	2.204941	Y
5	STD8260 240-476941/3	20.0	45.973391	10.0	663171.0	2.29867	Y
6	STD8260 240-476941/2	40.0	92.777182	10.0	670129.0	2.31943	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

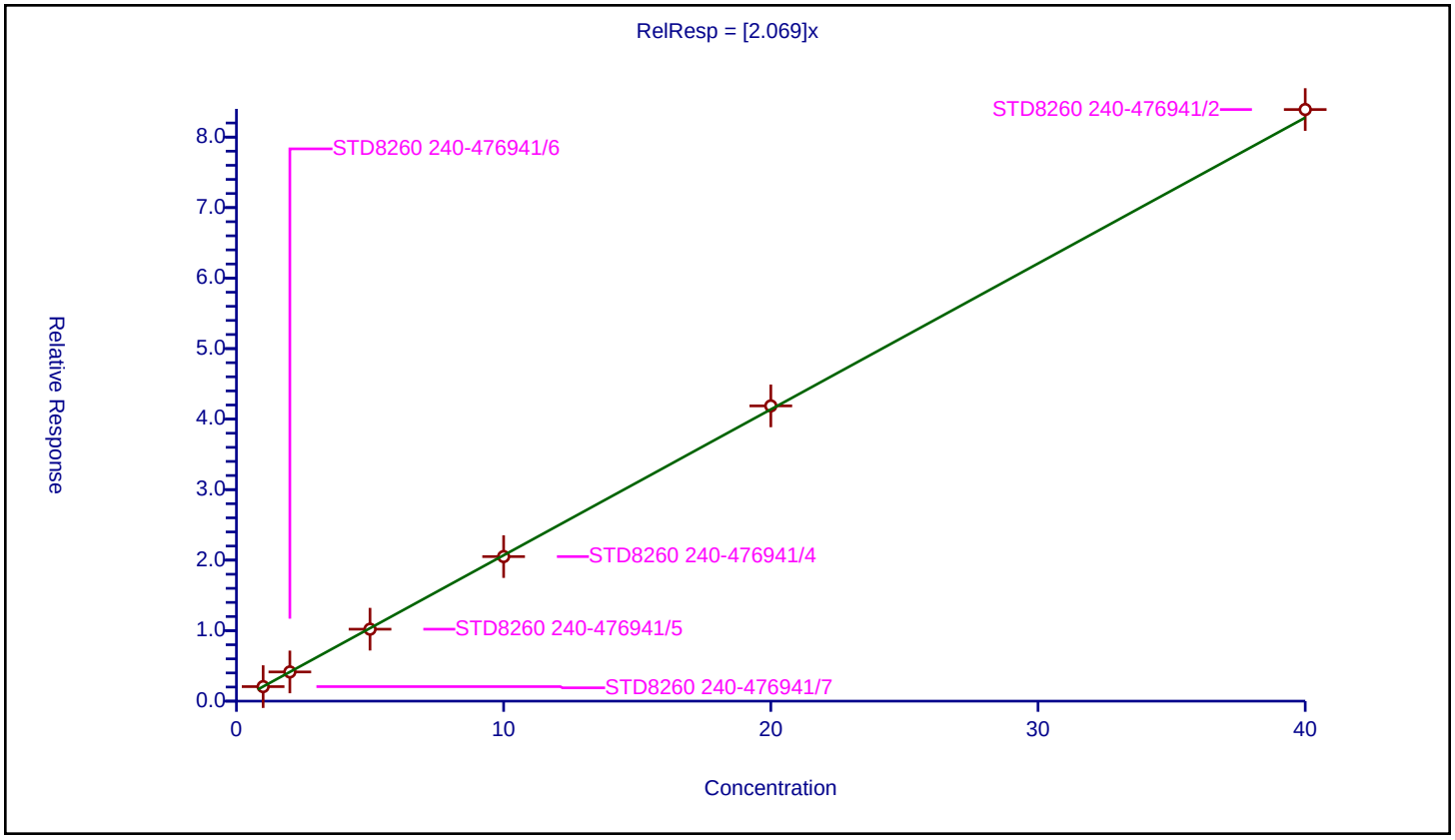
Curve Coefficients

Intercept:	0
Slope:	2.069

Error Coefficients

Standard Error:	2880000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.060618	10.0	606056.0	2.060618	Y
2	STD8260 240-476941/6	2.0	4.140592	10.0	608128.0	2.070296	Y
3	STD8260 240-476941/5	5.0	10.203255	10.0	621189.0	2.040651	Y
4	STD8260 240-476941/4	10.0	20.503671	10.0	639882.0	2.050367	Y
5	STD8260 240-476941/3	20.0	41.875429	10.0	663171.0	2.093771	Y
6	STD8260 240-476941/2	40.0	83.90771	10.0	670129.0	2.097693	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

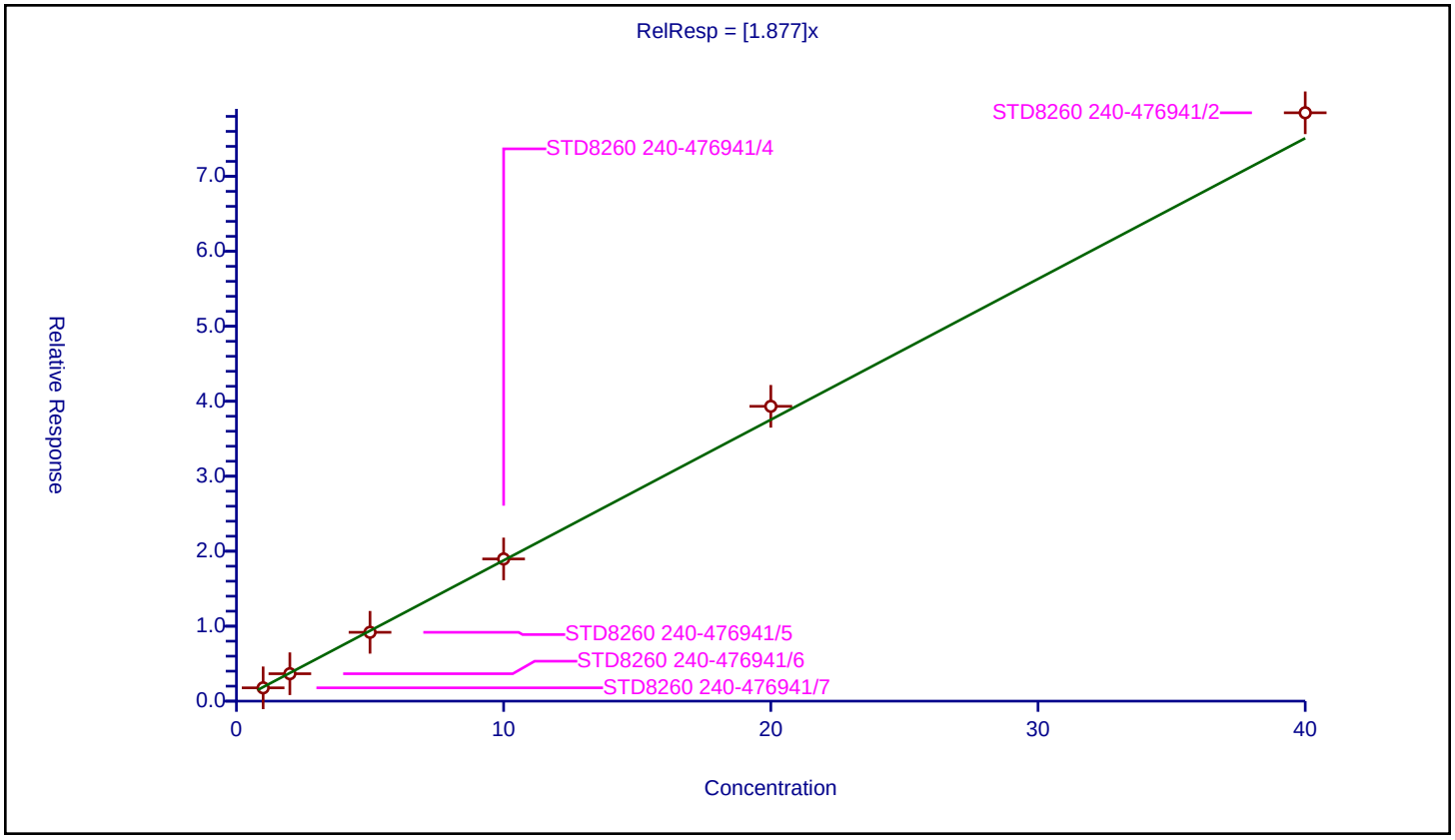
Curve Coefficients

Intercept:	0
Slope:	1.877

Error Coefficients

Standard Error:	2700000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.773037	10.0	606056.0	1.773037	Y
2	STD8260 240-476941/6	2.0	3.657733	10.0	608128.0	1.828867	Y
3	STD8260 240-476941/5	5.0	9.180829	10.0	621189.0	1.836166	Y
4	STD8260 240-476941/4	10.0	18.967622	10.0	639882.0	1.896762	Y
5	STD8260 240-476941/3	20.0	39.326539	10.0	663171.0	1.966327	Y
6	STD8260 240-476941/2	40.0	78.481263	10.0	670129.0	1.962032	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

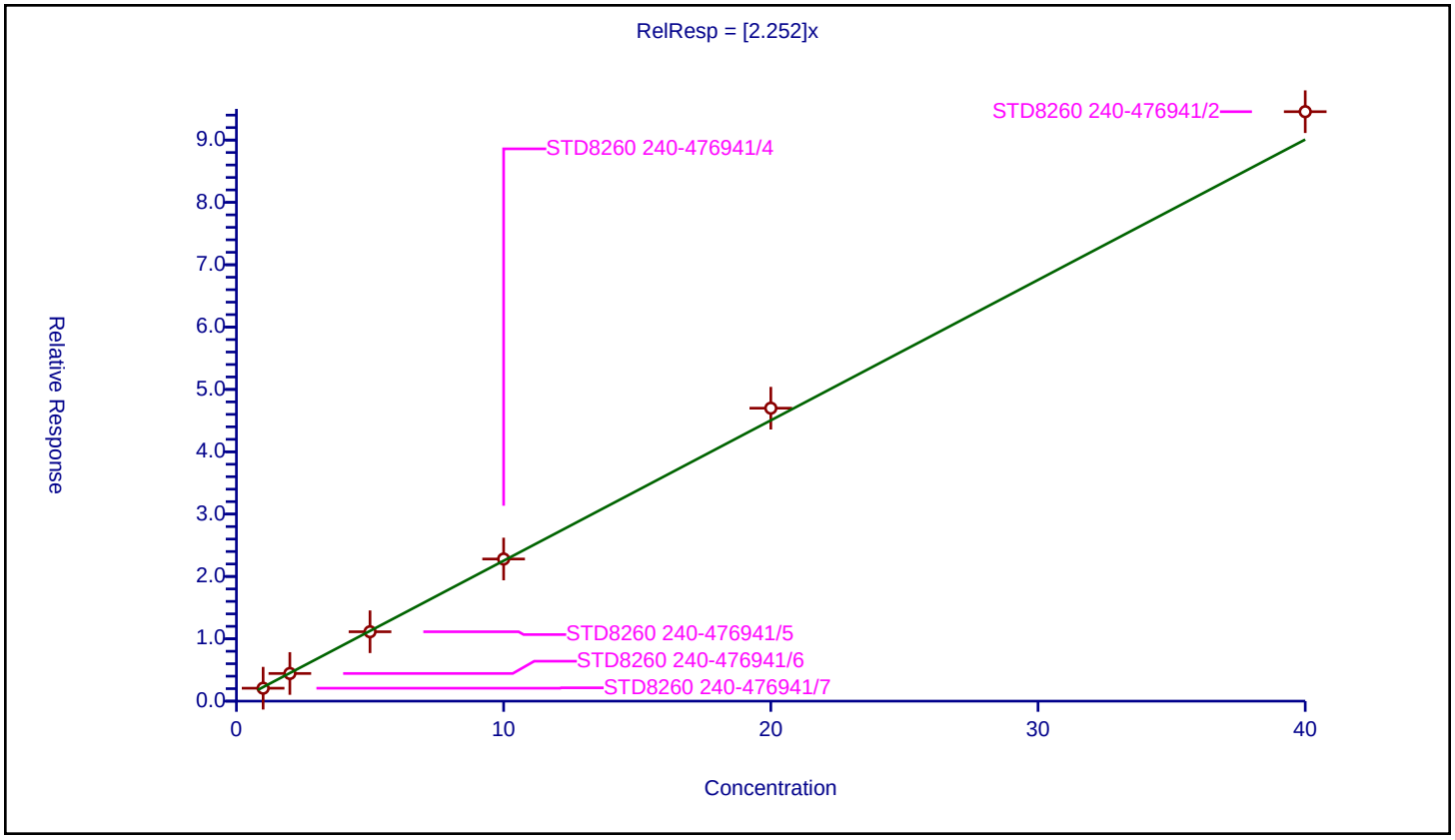
Curve Coefficients

Intercept:	0
Slope:	2.252

Error Coefficients

Standard Error:	3240000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.075204	10.0	606056.0	2.075204	Y
2	STD8260 240-476941/6	2.0	4.43507	10.0	608128.0	2.217535	Y
3	STD8260 240-476941/5	5.0	11.133391	10.0	621189.0	2.226678	Y
4	STD8260 240-476941/4	10.0	22.798422	10.0	639882.0	2.279842	Y
5	STD8260 240-476941/3	20.0	46.993128	10.0	663171.0	2.349656	Y
6	STD8260 240-476941/2	40.0	94.549885	10.0	670129.0	2.363747	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

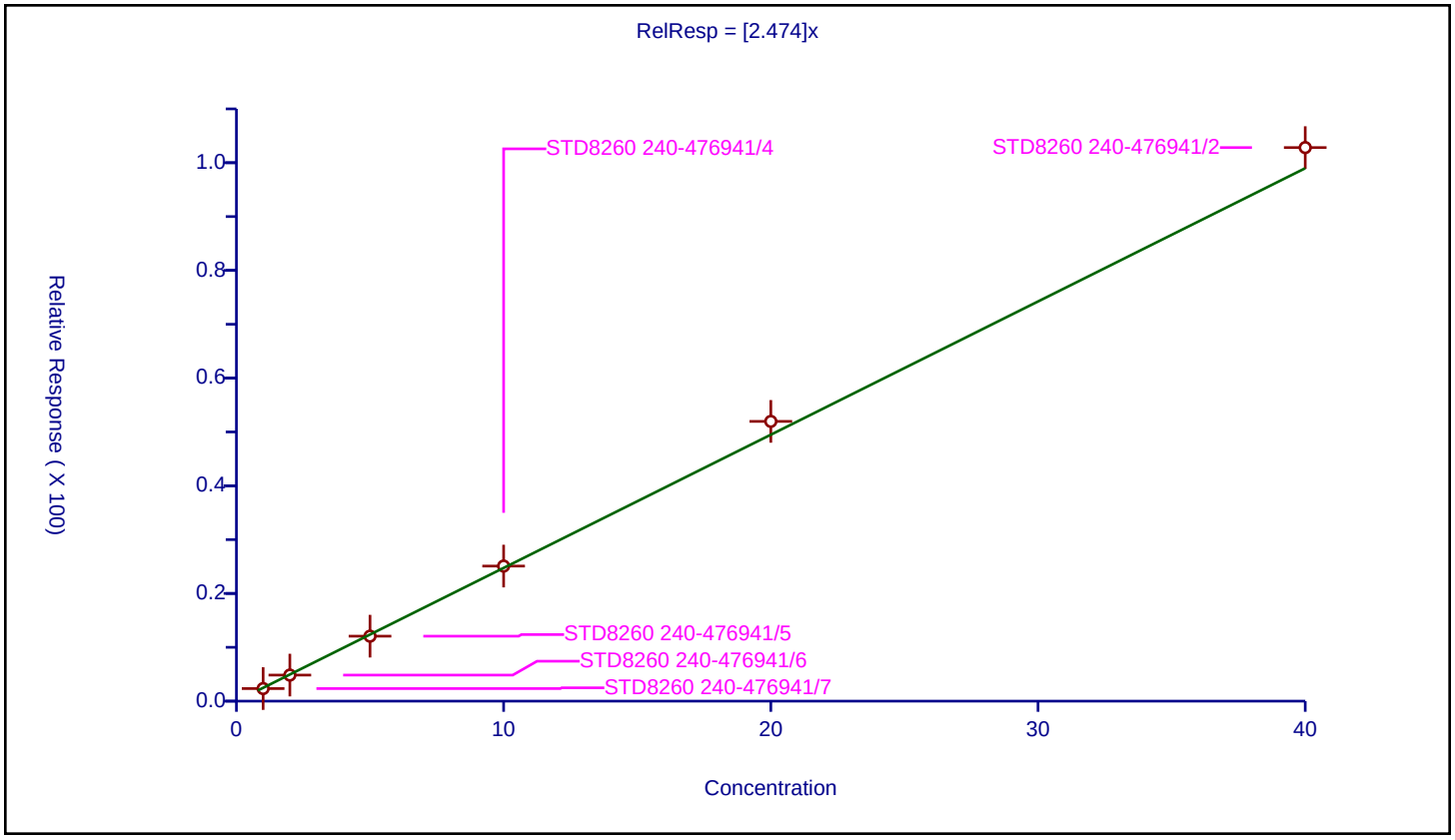
Curve Coefficients

Intercept:	0
Slope:	2.474

Error Coefficients

Standard Error:	3540000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.335329	10.0	606056.0	2.335329	Y
2	STD8260 240-476941/6	2.0	4.838636	10.0	608128.0	2.419318	Y
3	STD8260 240-476941/5	5.0	12.069901	10.0	621189.0	2.41398	Y
4	STD8260 240-476941/4	10.0	25.089798	10.0	639882.0	2.50898	Y
5	STD8260 240-476941/3	20.0	51.959615	10.0	663171.0	2.597981	Y
6	STD8260 240-476941/2	40.0	102.809952	10.0	670129.0	2.570249	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

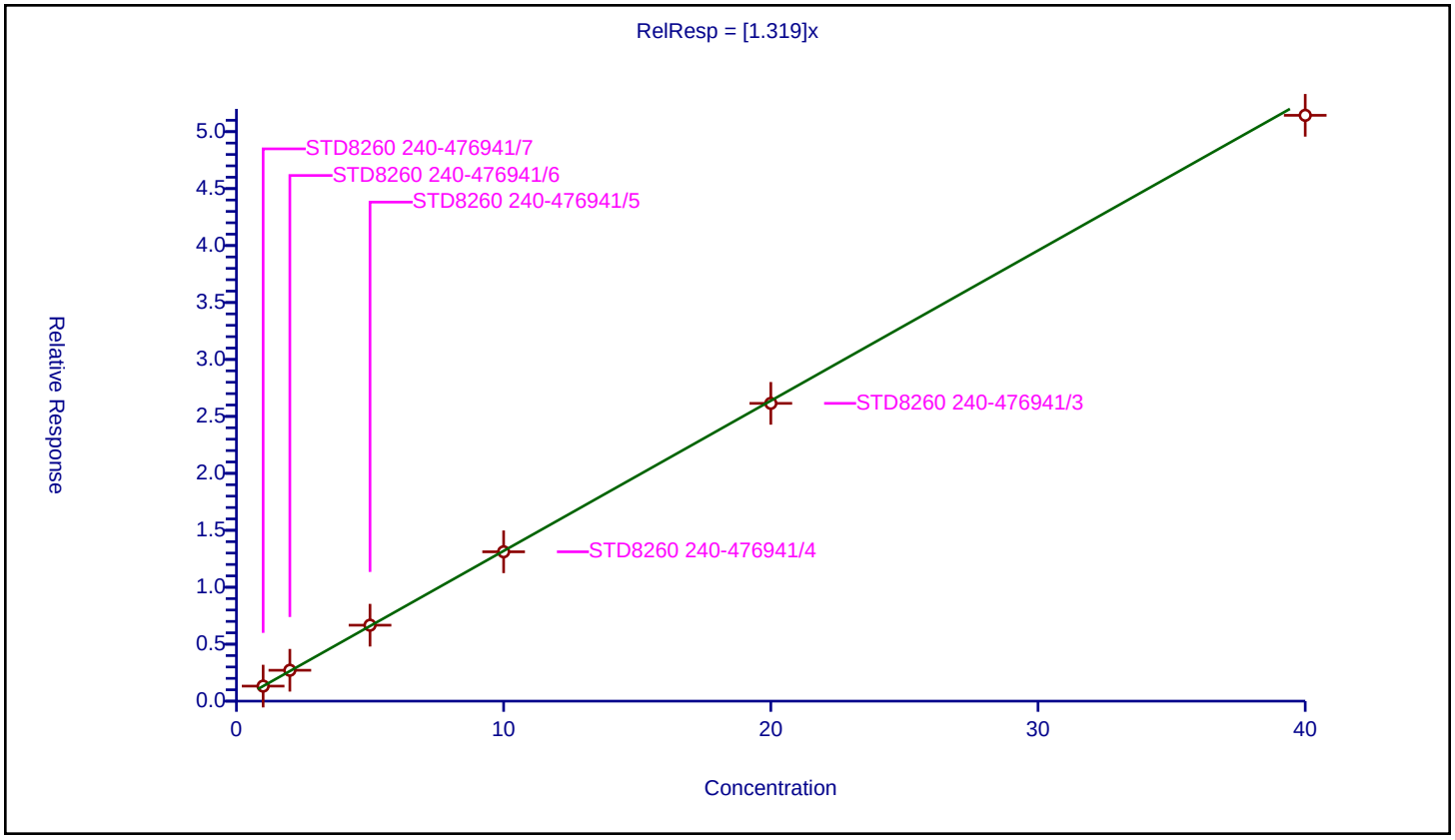
Curve Coefficients

Intercept:	0
Slope:	1.319

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.319812	10.0	606056.0	1.319812	Y
2	STD8260 240-476941/6	2.0	2.710515	10.0	608128.0	1.355257	Y
3	STD8260 240-476941/5	5.0	6.667906	10.0	621189.0	1.333581	Y
4	STD8260 240-476941/4	10.0	13.113402	10.0	639882.0	1.31134	Y
5	STD8260 240-476941/3	20.0	26.144644	10.0	663171.0	1.307232	Y
6	STD8260 240-476941/2	40.0	51.435455	10.0	670129.0	1.285886	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

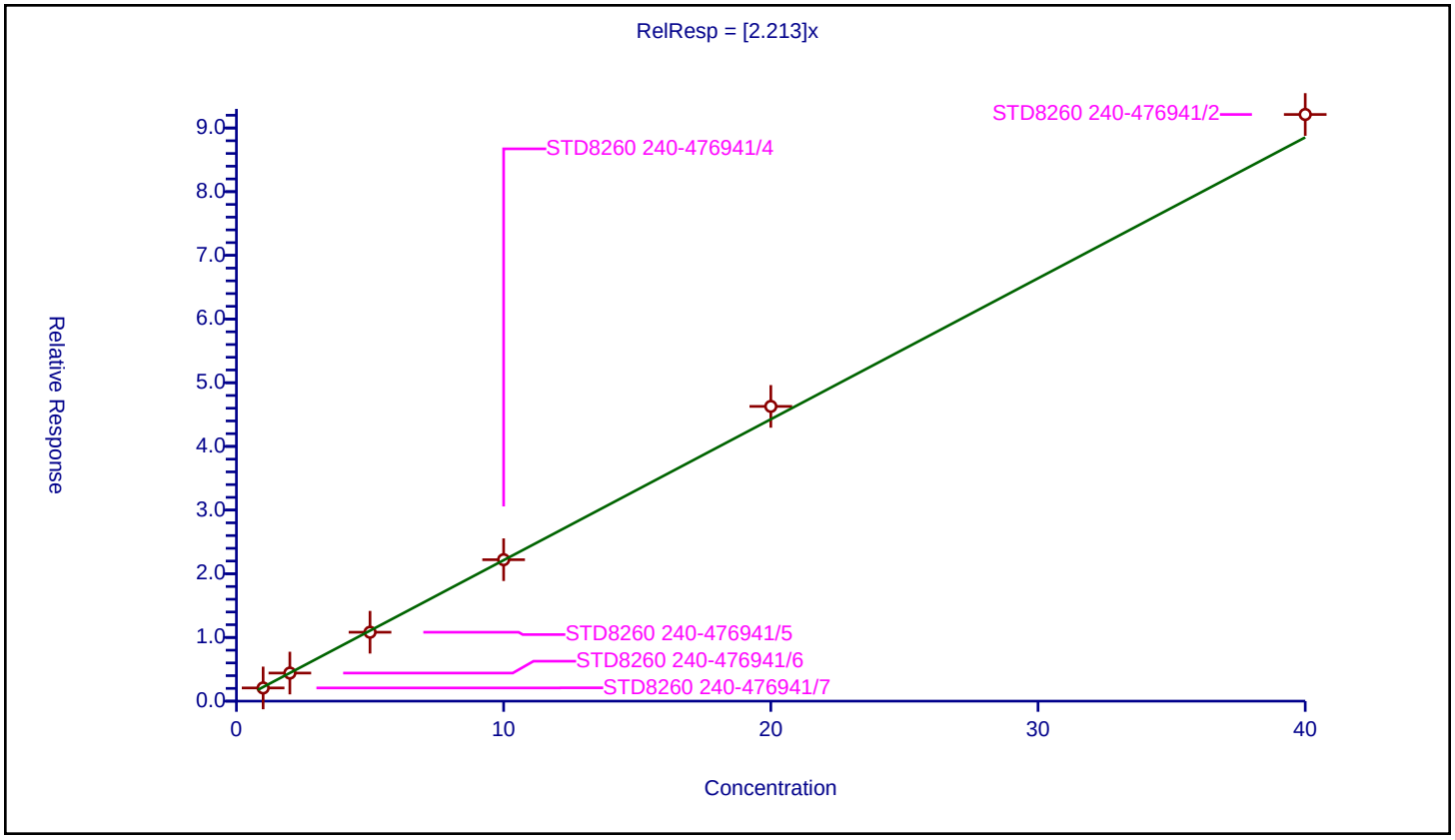
Curve Coefficients

Intercept:	0
Slope:	2.213

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.07131	10.0	606056.0	2.07131	Y
2	STD8260 240-476941/6	2.0	4.410042	10.0	608128.0	2.205021	Y
3	STD8260 240-476941/5	5.0	10.820813	10.0	621189.0	2.164163	Y
4	STD8260 240-476941/4	10.0	22.209517	10.0	639882.0	2.220952	Y
5	STD8260 240-476941/3	20.0	46.283538	10.0	663171.0	2.314177	Y
6	STD8260 240-476941/2	40.0	92.12086	10.0	670129.0	2.303022	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

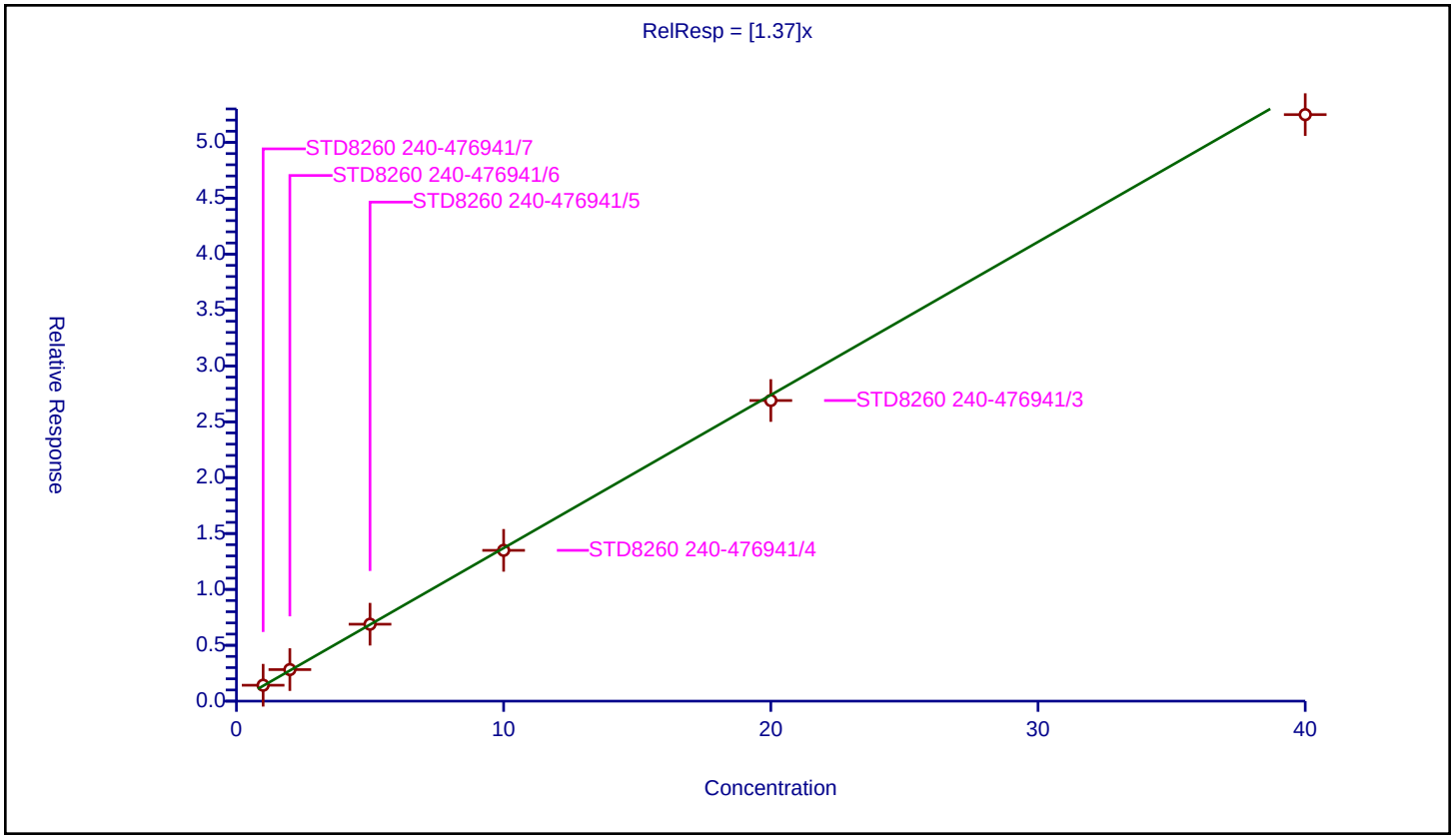
Curve Coefficients

Intercept:	0
Slope:	1.37

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.423086	10.0	606056.0	1.423086	Y
2	STD8260 240-476941/6	2.0	2.823649	10.0	608128.0	1.411824	Y
3	STD8260 240-476941/5	5.0	6.88573	10.0	621189.0	1.377146	Y
4	STD8260 240-476941/4	10.0	13.493191	10.0	639882.0	1.349319	Y
5	STD8260 240-476941/3	20.0	26.904313	10.0	663171.0	1.345216	Y
6	STD8260 240-476941/2	40.0	52.488506	10.0	670129.0	1.312213	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

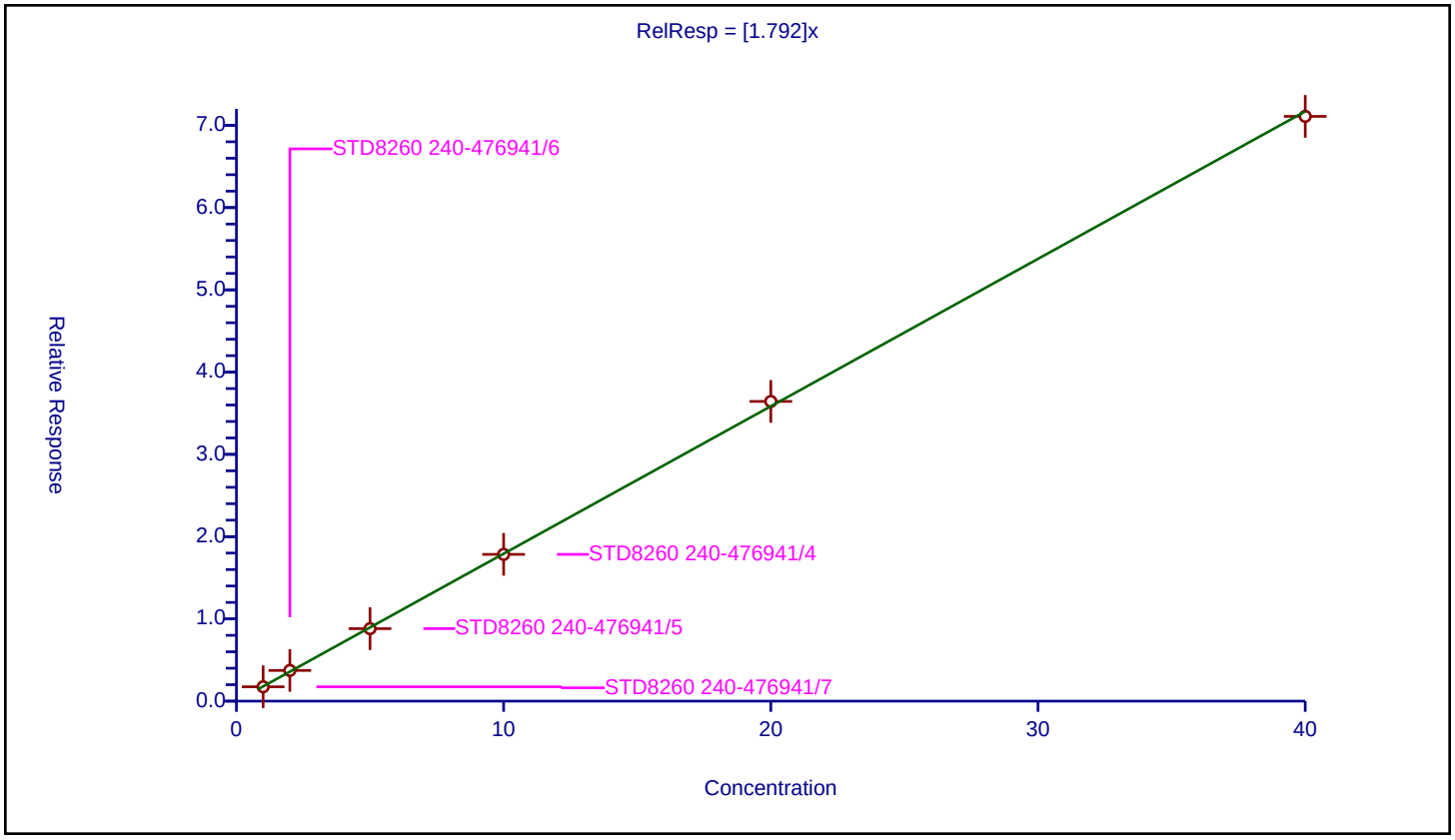
Curve Coefficients

Intercept:	0
Slope:	1.792

Error Coefficients

Standard Error:	2460000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.742166	10.0	606056.0	1.742166	Y
2	STD8260 240-476941/6	2.0	3.732734	10.0	608128.0	1.866367	Y
3	STD8260 240-476941/5	5.0	8.810507	10.0	621189.0	1.762101	Y
4	STD8260 240-476941/4	10.0	17.841524	10.0	639882.0	1.784152	Y
5	STD8260 240-476941/3	20.0	36.437495	10.0	663171.0	1.821875	Y
6	STD8260 240-476941/2	40.0	71.091193	10.0	670129.0	1.77728	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

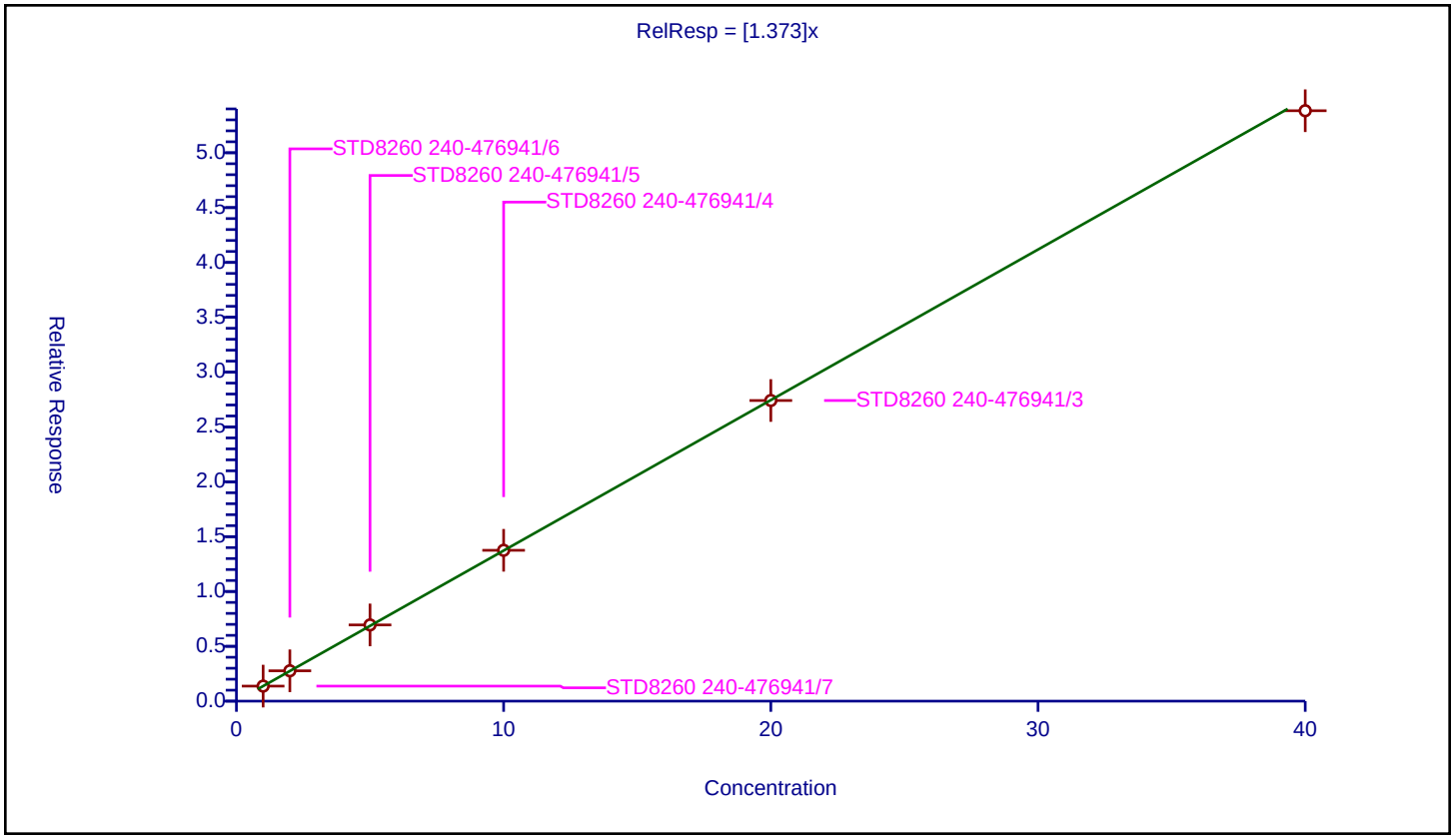
Curve Coefficients

Intercept:	0
Slope:	1.373

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.370731	10.0	606056.0	1.370731	Y
2	STD8260 240-476941/6	2.0	2.76603	10.0	608128.0	1.383015	Y
3	STD8260 240-476941/5	5.0	6.949366	10.0	621189.0	1.389873	Y
4	STD8260 240-476941/4	10.0	13.752614	10.0	639882.0	1.375261	Y
5	STD8260 240-476941/3	20.0	27.410336	10.0	663171.0	1.370517	Y
6	STD8260 240-476941/2	40.0	53.833426	10.0	670129.0	1.345836	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

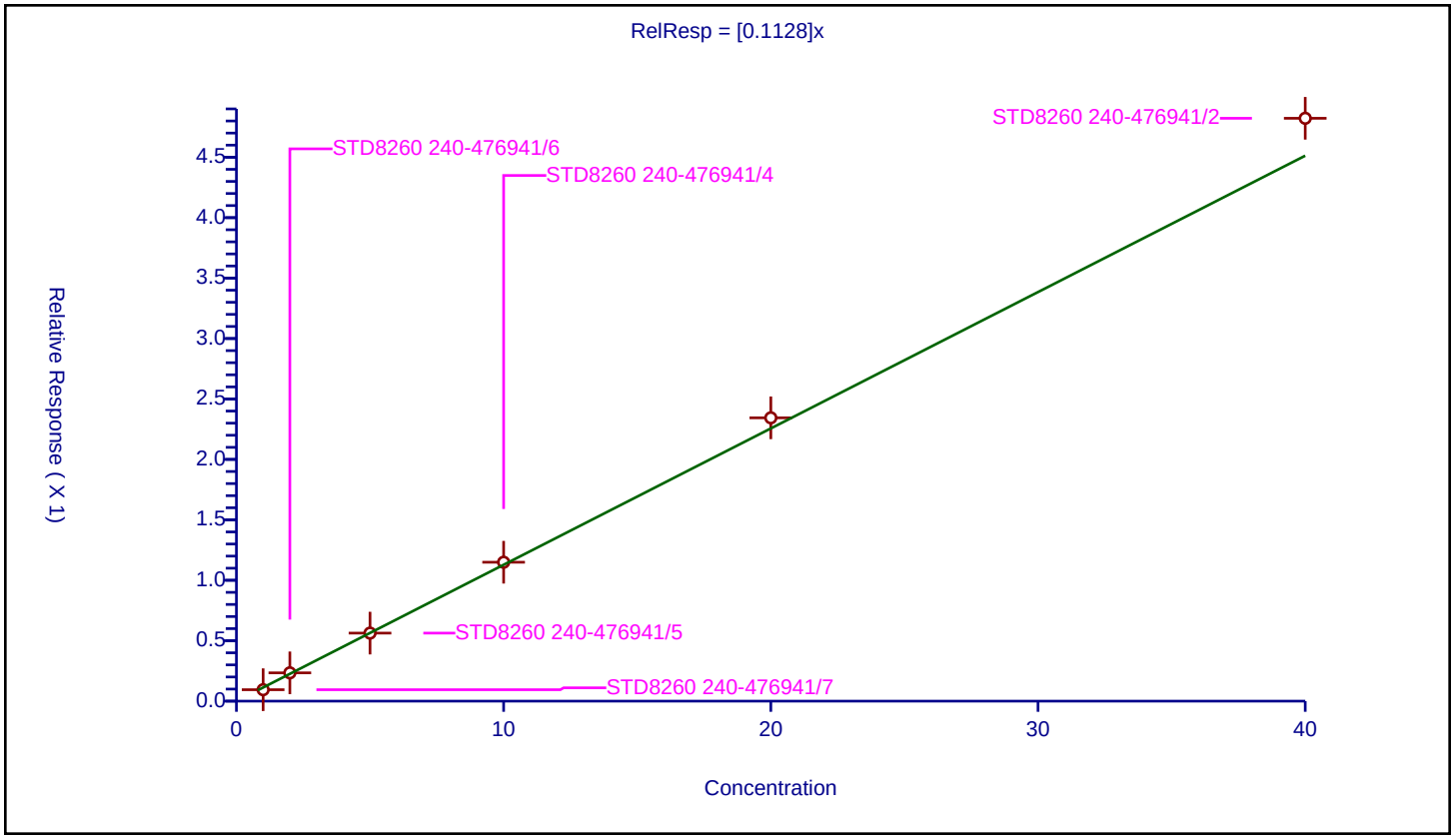
Curve Coefficients

Intercept:	0
Slope:	0.1128

Error Coefficients

Standard Error:	165000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.094562	10.0	606056.0	0.094562	Y
2	STD8260 240-476941/6	2.0	0.234178	10.0	608128.0	0.117089	Y
3	STD8260 240-476941/5	5.0	0.562856	10.0	621189.0	0.112571	Y
4	STD8260 240-476941/4	10.0	1.149181	10.0	639882.0	0.114918	Y
5	STD8260 240-476941/3	20.0	2.344056	10.0	663171.0	0.117203	Y
6	STD8260 240-476941/2	40.0	4.82231	10.0	670129.0	0.120558	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

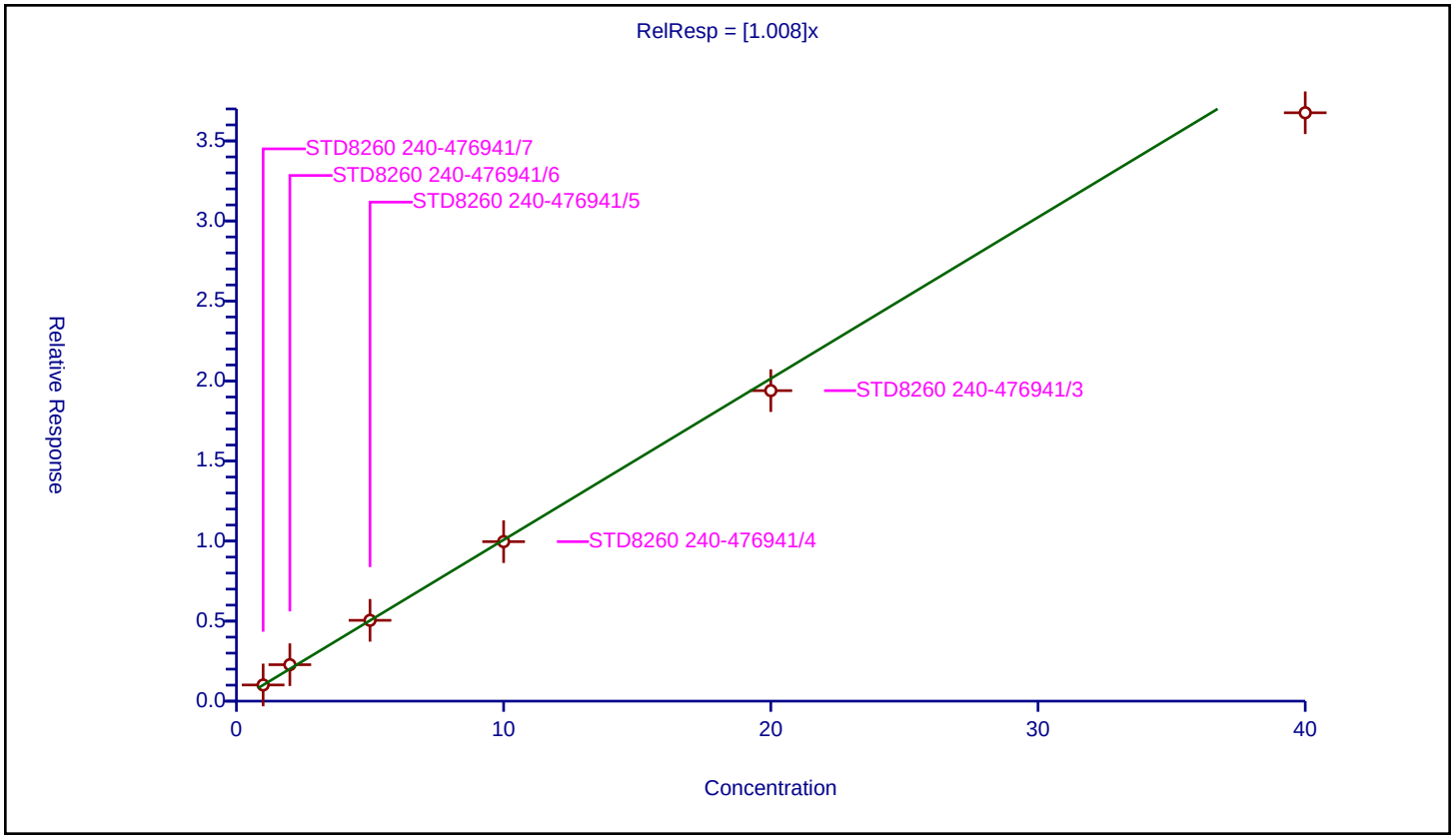
Curve Coefficients

Intercept:	0
Slope:	1.008

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	1.011375	10.0	606056.0	1.011375	Y
2	STD8260 240-476941/6	2.0	2.277382	10.0	608128.0	1.138691	Y
3	STD8260 240-476941/5	5.0	5.049494	10.0	621189.0	1.009899	Y
4	STD8260 240-476941/4	10.0	9.964243	10.0	639882.0	0.996424	Y
5	STD8260 240-476941/3	20.0	19.398933	10.0	663171.0	0.969947	Y
6	STD8260 240-476941/2	40.0	36.758535	10.0	670129.0	0.918963	Y



Calibration / Hexachlorobutadiene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

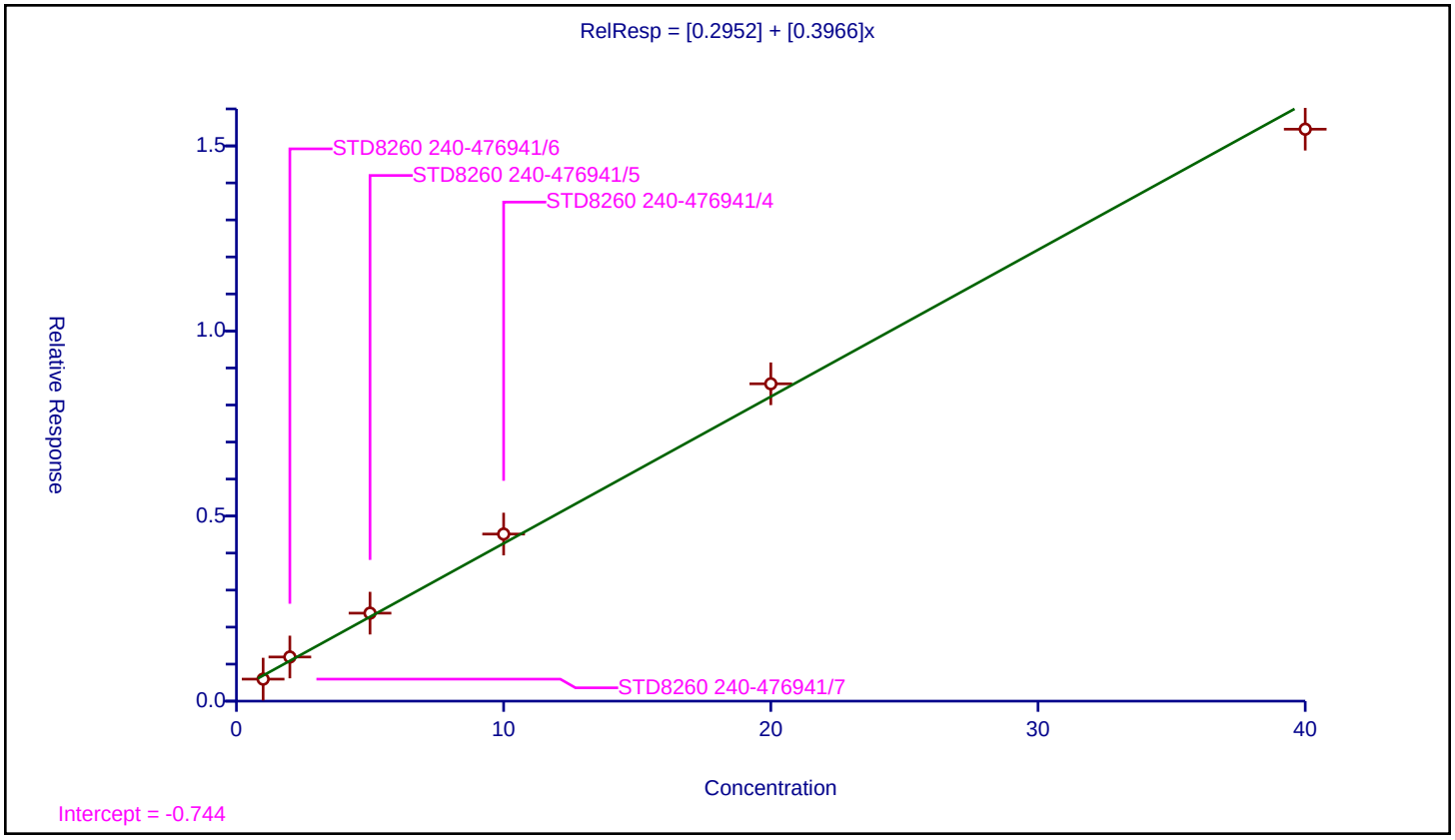
Curve Coefficients

Intercept:	0.2952
Slope:	0.3966

Error Coefficients

Standard Error:	614000
Relative Standard Error:	14.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.594665	10.0	606056.0	0.594665	Y
2	STD8260 240-476941/6	2.0	1.19294	10.0	608128.0	0.59647	Y
3	STD8260 240-476941/5	5.0	2.37707	10.0	621189.0	0.475414	Y
4	STD8260 240-476941/4	10.0	4.514192	10.0	639882.0	0.451419	Y
5	STD8260 240-476941/3	20.0	8.573762	10.0	663171.0	0.428688	Y
6	STD8260 240-476941/2	40.0	15.451353	10.0	670129.0	0.386284	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

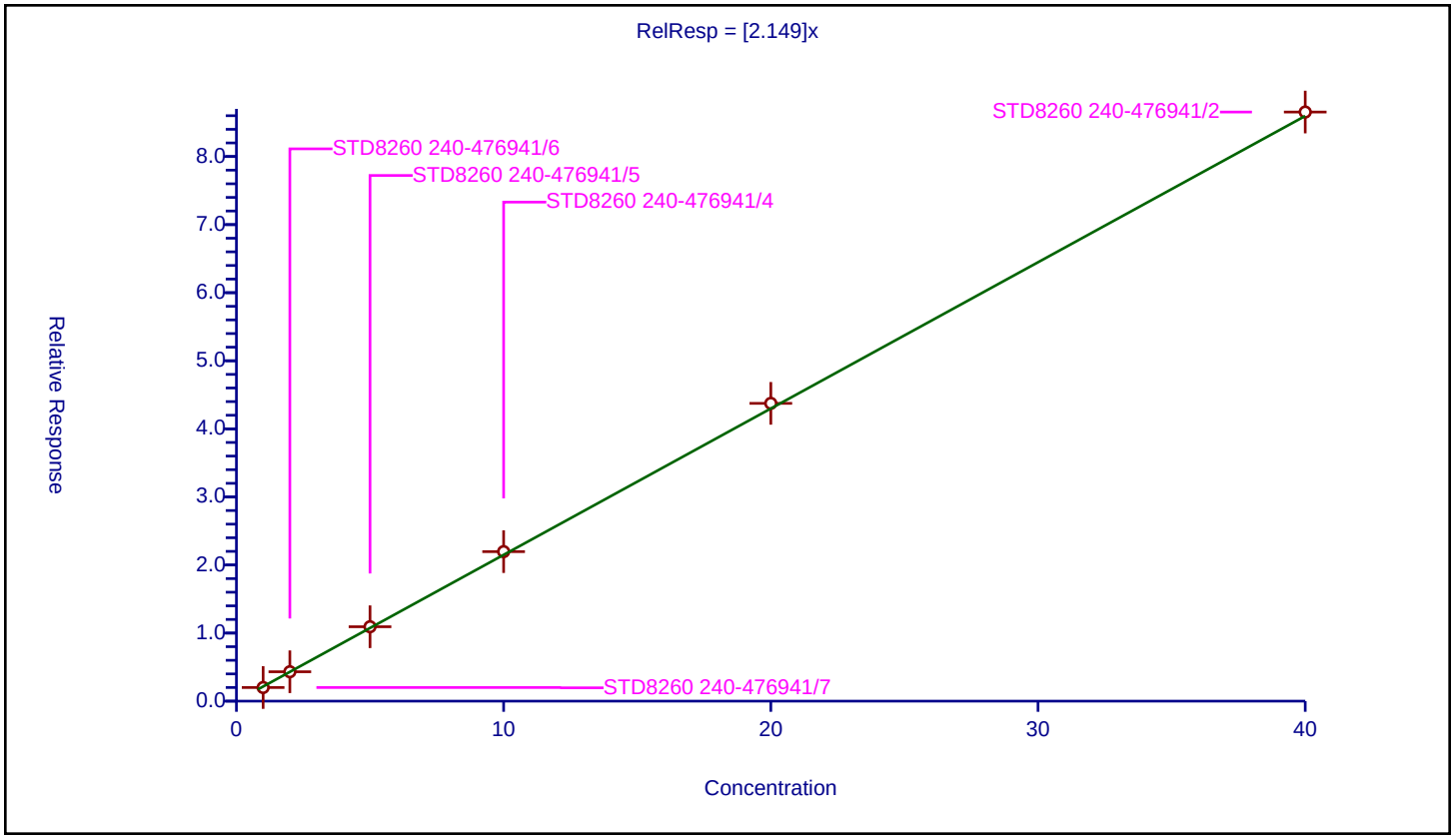
Curve Coefficients

Intercept:	0
Slope:	2.149

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	2.002472	10.0	606056.0	2.002472	Y
2	STD8260 240-476941/6	2.0	4.316838	10.0	608128.0	2.158419	Y
3	STD8260 240-476941/5	5.0	10.928751	10.0	621189.0	2.18575	Y
4	STD8260 240-476941/4	10.0	21.96444	10.0	639882.0	2.196444	Y
5	STD8260 240-476941/3	20.0	43.743574	10.0	663171.0	2.187179	Y
6	STD8260 240-476941/2	40.0	86.537965	10.0	670129.0	2.163449	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

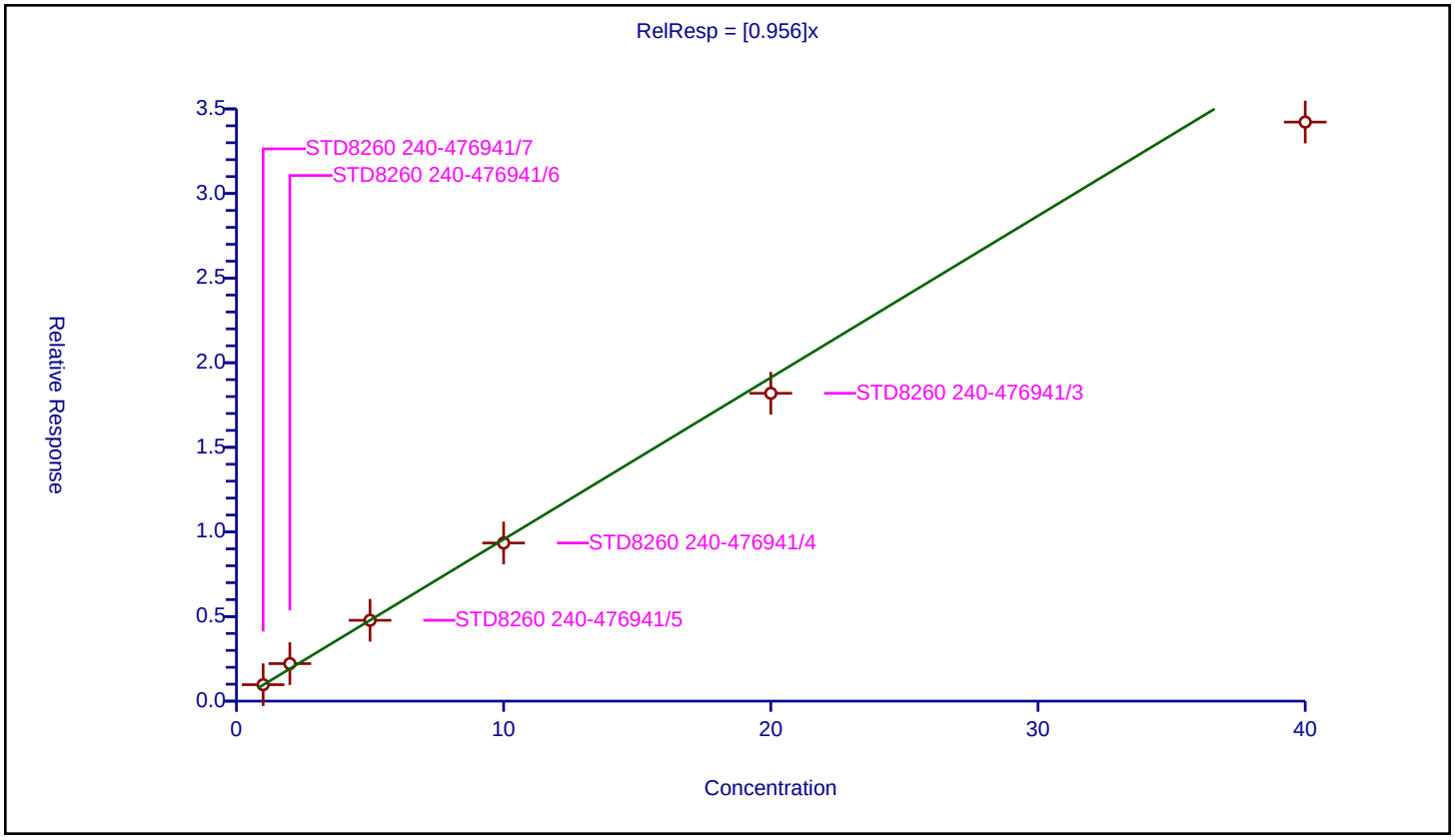
Curve Coefficients

Intercept:	0
Slope:	0.956

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-476941/7	1.0	0.972435	10.0	606056.0	0.972435	Y
2	STD8260 240-476941/6	2.0	2.216967	10.0	608128.0	1.108484	Y
3	STD8260 240-476941/5	5.0	4.778063	10.0	621189.0	0.955613	Y
4	STD8260 240-476941/4	10.0	9.344895	10.0	639882.0	0.934489	Y
5	STD8260 240-476941/3	20.0	18.192306	10.0	663171.0	0.909615	Y
6	STD8260 240-476941/2	40.0	34.221859	10.0	670129.0	0.855546	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.3204		0.0121	0.0100	21.0	50.0
Chloromethane	Ave	0.2085	0.2316	0.1000	0.0111	0.0100	11.1	50.0
Butadiene	Ave	0.2195	0.2175		0.00991	0.0100	-0.9	50.0
Vinyl chloride	Ave	0.2484	0.2737		0.0110	0.0100	10.2	20.0
Bromomethane	Ave	0.1787	0.1948		0.0109	0.0100	9.0	50.0
Chloroethane	Ave	0.1469	0.1634		0.0111	0.0100	11.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3916		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.4398		0.0104	0.0100	3.6	50.0
Ethyl ether	Ave	0.1891	0.2067		0.0109	0.0100	9.3	50.0
Acrolein	Ave	0.0073	0.0087		0.0595	0.0500	19.0	50.0
1,1-Dichloroethene	Ave	0.2398	0.2587		0.0108	0.0100	7.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.2103		0.0115	0.0100	15.0	50.0
Acetone	Qua		0.0663		0.0168	0.0200	-16.0	50.0
Iodomethane	Ave	0.4292	0.4457		0.0104	0.0100	3.8	50.0
Carbon disulfide	Ave	0.7139	0.7183		0.0101	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1609	0.1661		0.0103	0.0100	3.3	50.0
Methyl acetate	Ave	0.1601	0.1572		0.0196	0.0200	-1.8	50.0
Methylene Chloride	Ave	0.2646	0.2601		0.00983	0.0100	-1.7	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0282		0.0874	0.100	-12.6	50.0
Acrylonitrile	Ave	0.0817	0.0808		0.0989	0.100	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2923		0.0104	0.0100	3.7	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7137		0.0103	0.0100	2.8	50.0
Hexane	Ave	0.0646	0.0732		0.0113	0.0100	13.4	20.0
1,1-Dichloroethane	Ave	0.4093	0.4326	0.1000	0.0106	0.0100	5.7	50.0
Vinyl acetate	Ave	0.4414	0.4244		0.00962	0.0100	-3.8	50.0
2,2-Dichloropropane	Ave	0.0667	0.0739		0.0111	0.0100	10.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2973		0.0102	0.0100	2.3	50.0
2-Butanone (MEK)	Ave	0.1171	0.1005		0.0172	0.0200	-14.2	50.0
Chlorobromomethane	Ave	0.1450	0.1423		0.00981	0.0100	-1.9	50.0
Chloroform	Ave	0.4451	0.4453		0.0100	0.0100	0.0	20.0
Tetrahydrofuran	Ave	0.0687	0.0660		0.0192	0.0200	-4.0	50.0
1,1,1-Trichloroethane	Ave	0.3903	0.3971		0.0102	0.0100	1.8	50.0
Cyclohexane	Ave	0.3237	0.3509		0.0108	0.0100	8.4	50.0
1,1-Dichloropropene	Ave	0.3529	0.3538		0.0100	0.0100	0.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3627		0.0101	0.0100	1.5	50.0
Isobutyl alcohol	Ave	0.0117	0.0112		0.239	0.250	-4.5	50.0
Benzene	Ave	0.997	1.008		0.0101	0.0100	1.1	50.0
1,2-Dichloroethane	Ave	0.3233	0.3310		0.0102	0.0100	2.4	50.0
n-Heptane	Ave	0.0579	0.0622		0.0107	0.0100	7.4	50.0
Trichloroethene	Ave	0.3122	0.3144		0.0101	0.0100	0.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3828		0.0109	0.0100	8.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2201		0.0106	0.0100	5.6	20.0
Dibromomethane	Ave	0.1524	0.1520		0.00997	0.0100	-0.3	50.0
1,4-Dioxane	Qua		0.0023		0.145	0.200	-27.3	50.0
Dichlorobromomethane	Ave	0.3068	0.3197		0.0104	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1498		0.0101	0.0100	0.9	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3793		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2083		0.0200	0.0200	-0.0	50.0
Toluene	Ave	1.519	1.513		0.00997	0.0100	-0.3	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4614		0.00936	0.0100	-6.4	50.0
Ethyl methacrylate	Ave	0.3857	0.3929		0.0102	0.0100	1.9	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3015		0.0100	0.0100	0.1	50.0
Tetrachloroethene	Ave	0.3233	0.3416		0.0106	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.5016	0.5097		0.0102	0.0100	1.6	50.0
2-Hexanone	Ave	0.2134	0.2222		0.0208	0.0200	4.1	50.0
Chlorodibromomethane	Ave	0.3328	0.3379		0.0102	0.0100	1.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3176		0.0100	0.0100	0.3	50.0
Chlorobenzene	Ave	0.9925	1.006	0.3000	0.0101	0.0100	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3394		0.0102	0.0100	2.0	50.0
Ethylbenzene	Ave	0.5200	0.5412		0.0104	0.0100	4.1	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6567		0.0103	0.0100	3.0	50.0
o-Xylene	Ave	0.5870	0.6377		0.0109	0.0100	8.6	50.0
Styrene	Ave	0.8528	0.8951		0.0105	0.0100	5.0	50.0
Bromoform	Lin1		0.1995	0.1000	0.00911	0.0100	-8.9	50.0
Isopropylbenzene	Ave	1.500	1.585		0.0106	0.0100	5.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.7796	0.3000	0.0100	0.0100	0.4	50.0
Bromobenzene	Ave	0.8603	0.8714		0.0101	0.0100	1.3	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2926		0.00983	0.0100	-1.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.2175		0.00983	0.0100	-1.7	50.0
N-Propylbenzene	Ave	0.9157	0.9721		0.0106	0.0100	6.2	50.0
2-Chlorotoluene	Ave	0.7837	0.8108		0.0103	0.0100	3.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.608		0.0103	0.0100	2.7	50.0
4-Chlorotoluene	Ave	0.8219	0.8306		0.0101	0.0100	1.1	50.0
tert-Butylbenzene	Ave	2.265	2.342		0.0103	0.0100	3.4	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.663		0.0106	0.0100	6.0	50.0
sec-Butylbenzene	Ave	2.907	3.132		0.0108	0.0100	7.8	50.0
1,3-Dichlorobenzene	Ave	1.550	1.593		0.0103	0.0100	2.8	50.0
4-Isopropyltoluene	Ave	2.545	2.724		0.0107	0.0100	7.0	50.0
1,4-Dichlorobenzene	Ave	1.570	1.620		0.0103	0.0100	3.2	50.0
1,2-Dichlorobenzene	Ave	1.479	1.496		0.0101	0.0100	1.1	50.0
n-Butylbenzene	Ave	1.990	2.014		0.0101	0.0100	1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2078		0.0107	0.0100	6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8965		0.0100	0.0100	0.4	50.0
Hexachlorobutadiene	Ave	0.3079	0.2781		0.00903	0.0100	-9.7	50.0
Naphthalene	Ave	2.693	2.701		0.0100	0.0100	0.3	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.8686		0.0101	0.0100	1.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2556		0.0201	0.0200	0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2786		0.0193	0.0200	-3.6	50.0
Toluene-d8 (Surr)	Ave	1.423	1.364		0.0192	0.0200	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4637		0.0186	0.0200	-6.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 13:20:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-014
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:50:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1139518	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	814816	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	388972	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	291259	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	317501	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1111224	20.0	19.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	377864	20.0	18.6	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	182533	10.0	12.1	
12 Chloromethane	50	1.305	1.293	0.012	99	131974	10.0	11.1	
13 Butadiene	54	1.364	1.352	0.012	95	123899	10.0	9.91	
14 Vinyl chloride	62	1.376	1.376	0.000	98	155927	10.0	11.0	
15 Bromomethane	94	1.600	1.589	0.011	90	110983	10.0	10.9	
16 Chloroethane	64	1.648	1.648	0.000	99	93120	10.0	11.1	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	98	223097	10.0	10.8	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	96	250556	10.0	10.4	
19 Ethyl ether	59	2.074	2.062	0.012	87	117780	10.0	10.9	
20 Acrolein	56	2.168	2.157	0.012	98	24774	50.0	59.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	147377	10.0	10.8	
23 112TCTFE	151	2.287	2.275	0.012	90	119846	10.0	11.5	
24 Acetone	43	2.299	2.298	0.001	100	75504	20.0	16.8	
25 Iodomethane	142	2.370	2.358	0.012	98	253950	10.0	10.4	
26 Carbon disulfide	76	2.429	2.417	0.012	99	409283	10.0	10.1	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	94654	10.0	10.3	
29 Methyl acetate	43	2.583	2.571	0.012	96	179186	20.0	19.6	
30 Methylene Chloride	84	2.654	2.642	0.012	86	148216	10.0	9.83	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	160833	100.0	87.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	460333	100.0	98.9	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	166535	10.0	10.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	406634	10.0	10.3	
35 Hexane	86	3.127	3.115	0.012	88	41725	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	246486	10.0	10.6	
37 Vinyl acetate	43	3.293	3.281	0.012	97	241829	10.0	9.62	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	169379	10.0	10.2	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	72	42131	10.0	11.1	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	114545	20.0	17.2	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	81061	10.0	9.81	
49 Tetrahydrofuran	42	3.979	3.967	0.012	83	75213	20.0	19.2	
48 Chloroform	83	3.979	3.979	0.000	93	253696	10.0	10.0	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	226278	10.0	10.2	
51 Cyclohexane	56	4.192	4.180	0.012	83	199902	10.0	10.8	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	201601	10.0	10.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	206652	10.0	10.1	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	114166	250.0	238.8	
55 Benzene	78	4.440	4.440	0.000	95	574397	10.0	10.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	188586	10.0	10.2	
58 n-Heptane	100	4.689	4.689	0.000	82	35418	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	179111	10.0	10.1	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	218131	10.0	10.9	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	125385	10.0	10.6	
64 Dibromomethane	93	5.269	5.269	0.000	92	86580	10.0	9.97	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	26089	200.0	145.4	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	182159	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	85339	10.0	10.1	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	216118	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	237362	20.0	20.0	
72 Toluene	91	6.097	6.097	0.000	99	616594	10.0	9.97	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	91	187970	10.0	9.36	
74 Ethyl methacrylate	69	6.393	6.381	0.012	85	160062	10.0	10.2	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	89	122846	10.0	10.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	139184	10.0	10.6	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	207644	10.0	10.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	181066	20.0	20.8	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	137672	10.0	10.2	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	129379	10.0	10.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	409667	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	138267	10.0	10.2	
86 Ethylbenzene	106	7.470	7.469	0.001	97	220495	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	267564	10.0	10.3	
89 o-Xylene	106	7.943	7.943	0.000	95	259795	10.0	10.9	
88 Styrene	104	7.955	7.955	0.000	94	364651	10.0	10.5	
90 Bromoform	173	8.120	8.120	0.000	97	81292	10.0	9.11	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	645571	10.0	10.6	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	151615	10.0	10.0	
95 Bromobenzene	156	8.570	8.570	0.000	91	169468	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	56911	10.0	9.83	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	77	42300	10.0	9.83	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	189067	10.0	10.6	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	157698	10.0	10.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	507306	10.0	10.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	161531	10.0	10.1	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	455517	10.0	10.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	517914	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	609221	10.0	10.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	309806	10.0	10.3	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	529687	10.0	10.7	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	315092	10.0	10.3	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	290856	10.0	10.1	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	391670	10.0	10.1	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	40406	10.0	10.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	95	174348	10.0	10.0	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	54094	10.0	9.03	
118 Naphthalene	128	11.753	11.753	0.000	96	525229	10.0	10.0	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	168935	10.0	10.1	
S 129 Total BTEX	1				0		50.0	51.6	
S 128 Trihalomethanes, Total	1				0		40.0	39.7	
S 132 Xylenes, Total	106				0		20.0	21.2	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00382	Amount Added:	8.00	Units: uL	
VMFASAW_00359	Amount Added:	8.00	Units: uL	
VMFASGW_00391	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

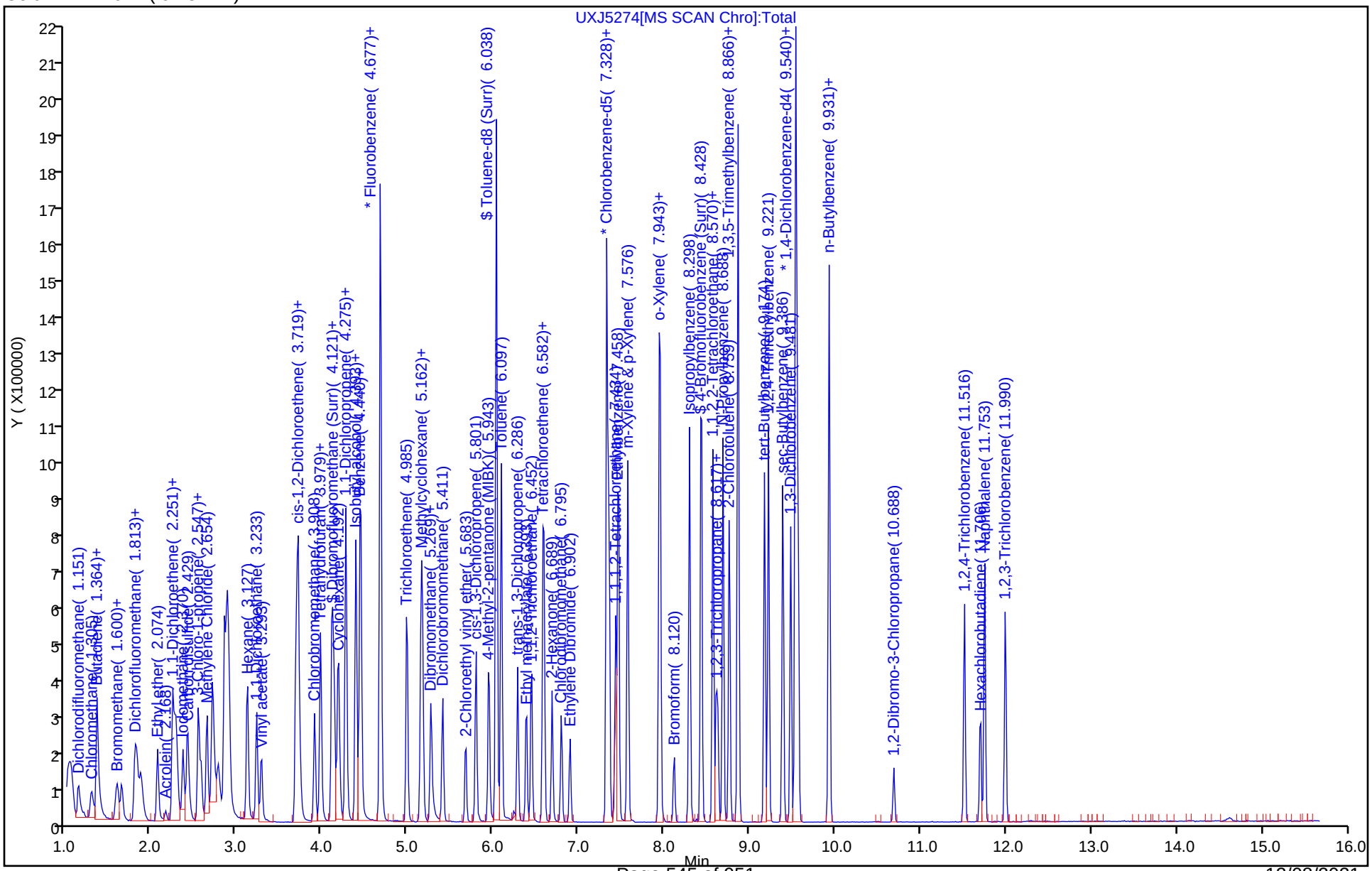
Report Date: 18-Jan-2021 09:31:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D

Injection Date:	15-Jan-2021 13:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2548	0.2367		0.0186	0.0200	-7.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2719		0.0188	0.0200	-5.9	50.0
Toluene-d8 (Surr)	Ave	1.423	1.305		0.0183	0.0200	-8.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4431		0.0178	0.0200	-11.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

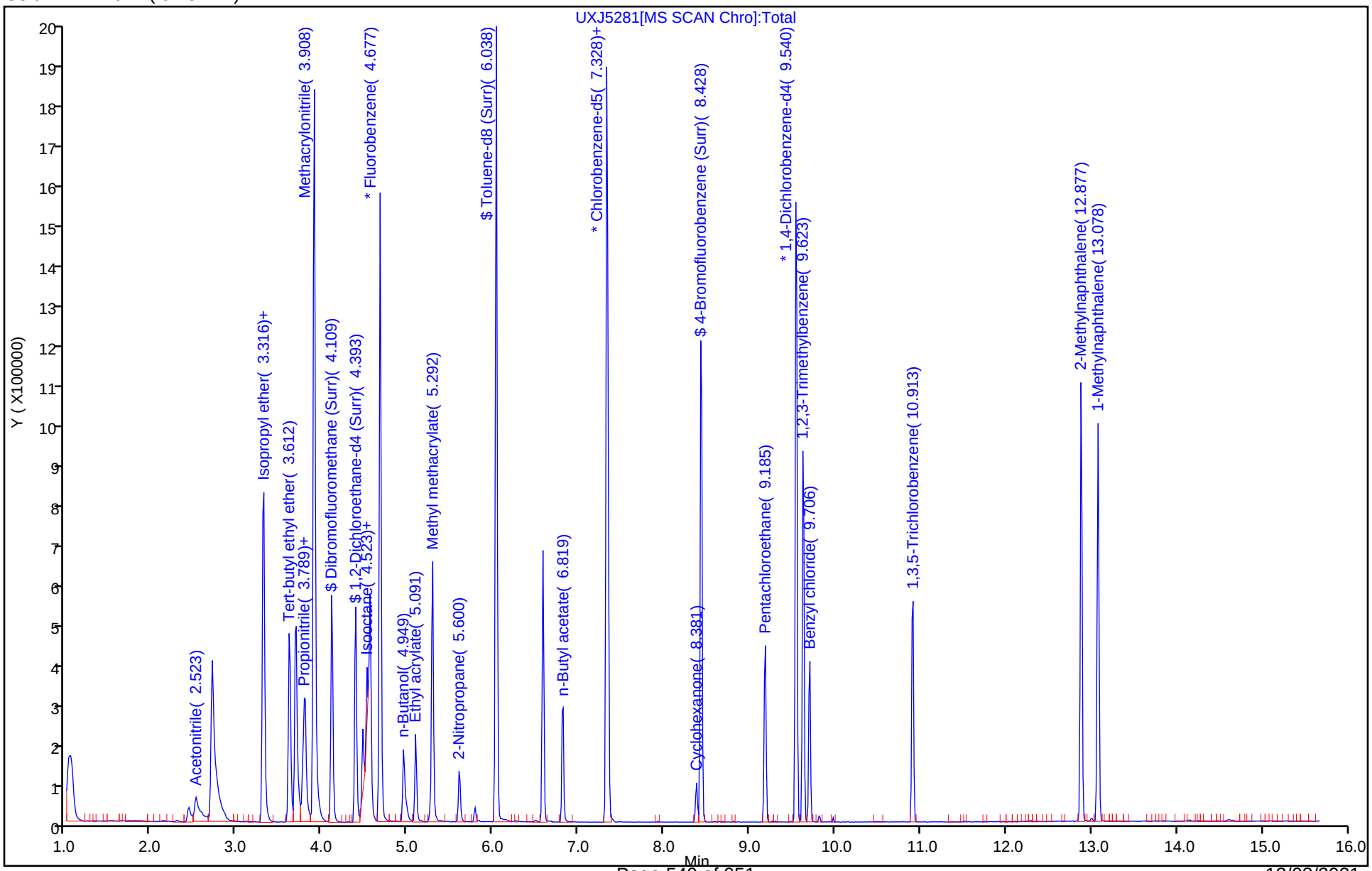
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 13:42

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 15:33

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0243		0.112	0.100	12.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3560	0.3676		0.0103	0.0100	3.3	50.0
Isopropyl ether	Ave	0.2182	0.2176		0.00997	0.0100	-0.3	50.0
Tert-butyl ethyl ether	Ave	0.6105	0.6145		0.0101	0.0100	0.7	50.0
Propionitrile	Ave	0.0327	0.0329		0.101	0.100	0.9	50.0
Ethyl acetate	Ave	0.2110	0.2208		0.0209	0.0200	4.7	50.0
Methacrylonitrile	Ave	0.1278	0.1289		0.101	0.100	0.9	50.0
Tert-amyl methyl ether	Ave	0.6525	0.6551		0.0100	0.0100	0.4	50.0
n-Butanol	Ave	0.0112	0.0108		0.240	0.250	-4.0	50.0
Ethyl acrylate	Ave	0.2791	0.2897		0.0104	0.0100	3.8	50.0
Methyl methacrylate	Ave	0.1775	0.1876		0.0211	0.0200	5.7	50.0
2-Nitropropane	Ave	0.0615	0.0576		0.0187	0.0200	-6.4	50.0
n-Butyl acetate	Ave	0.2958	0.3050		0.0103	0.0100	3.1	50.0
1-Chlorohexane	Ave	0.4822	0.4843		0.0100	0.0100	0.4	50.0
Cyclohexanone	Ave	0.0212	0.0192		0.0904	0.100	-9.6	50.0
Pentachloroethane	Ave	0.1300	0.0945		0.0145	0.0200	-27.3	50.0
1,2,3-Trimethylbenzene	Ave	2.497	2.446		0.00980	0.0100	-2.0	50.0
Benzyl chloride	Ave	0.3080	0.2891		0.00939	0.0100	-6.1	50.0
1,3,5-Trichlorobenzene	Ave	0.9535	0.8699		0.00912	0.0100	-8.8	50.0
2-Methylnaphthalene	Ave	1.501	1.191		0.0159	0.0200	-20.7	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

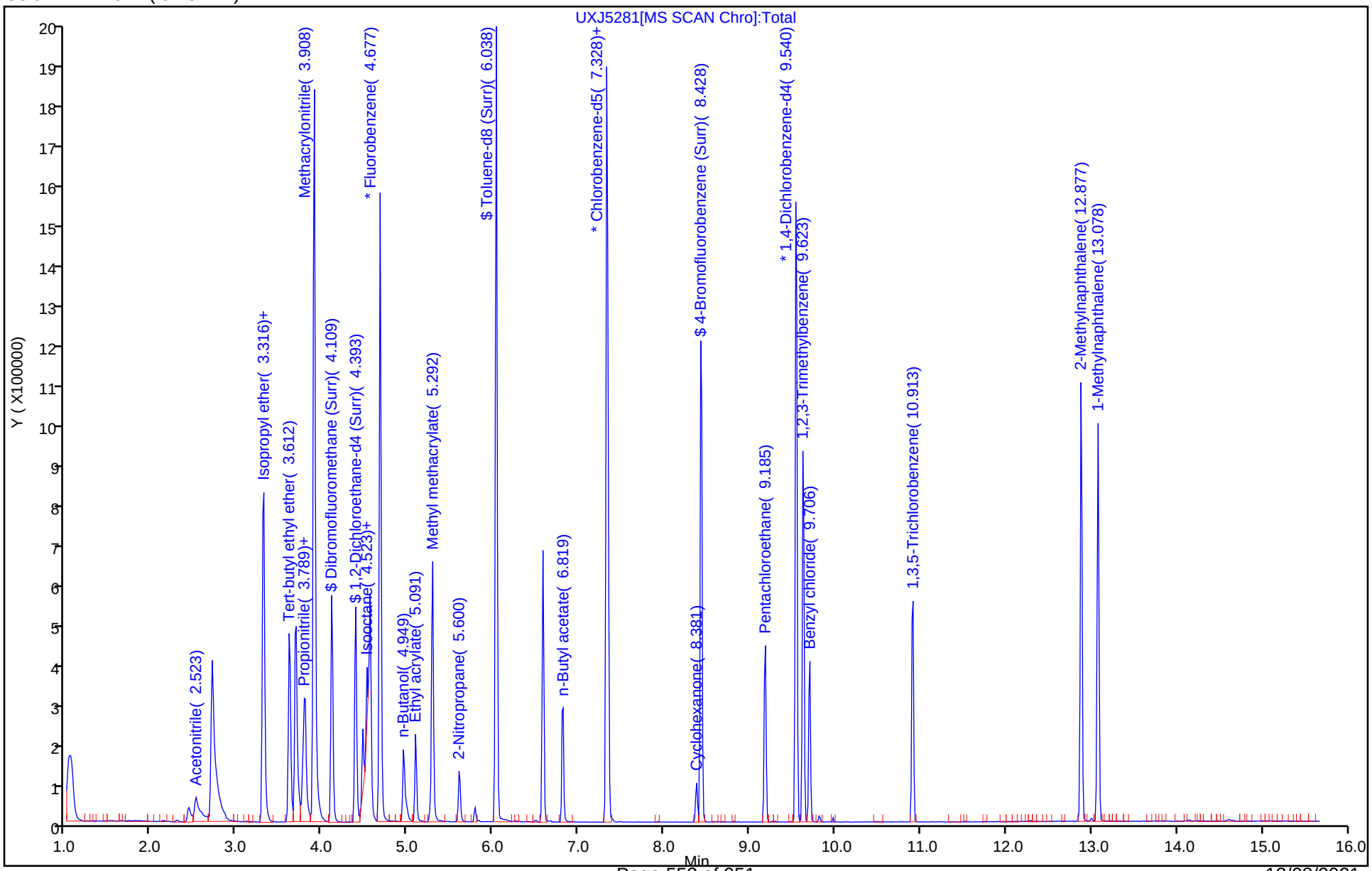
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515506/2 Calibration Date: 12/03/2021 10:54

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2919.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2065		0.00780	0.0100	-22.0	50.0
Chloromethane	Ave	0.2085	0.2276	0.1000	0.0109	0.0100	9.2	50.0
Vinyl chloride	Ave	0.2484	0.2449		0.00986	0.0100	-1.4	20.0
Butadiene	Ave	0.2195	0.2491		0.0113	0.0100	13.5	50.0
Bromomethane	Ave	0.1787	0.1501		0.00839	0.0100	-16.1	50.0
Chloroethane	Ave	0.1469	0.1595		0.0109	0.0100	8.6	50.0
Dichlorofluoromethane	Ave	0.3641	0.3513		0.00965	0.0100	-3.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.3228		0.00760	0.0100	-24.0	50.0
Ethyl ether	Ave	0.1891	0.2527		0.0134	0.0100	33.6	50.0
Acrolein	Ave	0.0073	0.0166		0.113	0.0500	126.8*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2411		0.0101	0.0100	0.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1706		0.00932	0.0100	-6.8	50.0
Acetone	Qua		0.1381		0.0413	0.0200	106.7*	50.0
Iodomethane	Ave	0.4292	0.3806		0.00887	0.0100	-11.3	50.0
Carbon disulfide	Ave	0.7139	0.7431		0.0104	0.0100	4.1	50.0
3-Chloro-1-propene	Ave	0.1609	0.1678		0.0104	0.0100	4.3	50.0
Methyl acetate	Ave	0.1601	0.3056		0.0382	0.0200	90.9*	50.0
Methylene Chloride	Ave	0.2646	0.2800		0.0106	0.0100	5.8	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0449		0.139	0.100	39.0	50.0
Acrylonitrile	Ave	0.0817	0.1532		0.188	0.100	87.5*	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2856		0.0101	0.0100	1.3	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7569		0.0109	0.0100	9.1	50.0
Hexane	Ave	0.0646	0.0713		0.0110	0.0100	10.3	20.0
1,1-Dichloroethane	Ave	0.4093	0.5047	0.1000	0.0123	0.0100	23.3	50.0
Vinyl acetate	Ave	0.4414	0.6916		0.0157	0.0100	56.7*	50.0
2,2-Dichloropropane	Ave	0.0667	0.0671		0.0101	0.0100	0.7	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2919		0.0100	0.0100	0.5	50.0
2-Butanone (MEK)	Ave	0.1171	0.2096		0.0358	0.0200	79.0*	50.0
Chlorobromomethane	Ave	0.1450	0.1331		0.00918	0.0100	-8.2	50.0
Tetrahydrofuran	Ave	0.0687	0.1350		0.0393	0.0200	96.4*	50.0
Chloroform	Ave	0.4451	0.4440		0.00998	0.0100	-0.2	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3951		0.0101	0.0100	1.2	50.0
Cyclohexane	Ave	0.3237	0.4439		0.0137	0.0100	37.1	50.0
1,1-Dichloropropene	Ave	0.3529	0.3811		0.0108	0.0100	8.0	50.0
Carbon tetrachloride	Ave	0.3575	0.3478		0.00973	0.0100	-2.7	50.0
Isobutyl alcohol	Ave	0.0117	0.0281		0.599	0.250	139.5*	50.0
Benzene	Ave	0.997	1.132		0.0113	0.0100	13.5	50.0
1,2-Dichloroethane	Ave	0.3233	0.3472		0.0107	0.0100	7.4	50.0
n-Heptane	Ave	0.0579	0.0659		0.0114	0.0100	13.8	50.0
Trichloroethene	Ave	0.3122	0.2677		0.00857	0.0100	-14.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515506/2 Calibration Date: 12/03/2021 10:54

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2919.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.4004		0.0114	0.0100	13.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2551		0.0122	0.0100	22.4*	20.0
Dibromomethane	Ave	0.1524	0.1395		0.00916	0.0100	-8.4	50.0
1,4-Dioxane	Qua		0.0040		0.263	0.200	31.4	50.0
Dichlorobromomethane	Ave	0.3068	0.2864		0.00933	0.0100	-6.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1622		0.0218	0.0200	9.2	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3469		0.00914	0.0100	-8.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.3387		0.0325	0.0200	62.6*	50.0
Toluene	Ave	1.519	1.870		0.0123	0.0100	23.2*	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.5298		0.0108	0.0100	7.5	50.0
Ethyl methacrylate	Ave	0.3857	0.5349		0.0139	0.0100	38.7	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3326		0.0110	0.0100	10.4	50.0
Tetrachloroethene	Ave	0.3233	0.3608		0.0112	0.0100	11.6	50.0
1,3-Dichloropropane	Ave	0.5016	0.6337		0.0126	0.0100	26.3	50.0
2-Hexanone	Ave	0.2134	0.4003		0.0375	0.0200	87.6*	50.0
Chlorodibromomethane	Ave	0.3328	0.3175		0.00954	0.0100	-4.6	50.0
Ethylene Dibromide	Ave	0.3165	0.3378		0.0107	0.0100	6.8	50.0
Chlorobenzene	Ave	0.9925	1.003	0.3000	0.0101	0.0100	1.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3363		0.0101	0.0100	1.1	50.0
Ethylbenzene	Ave	0.5200	0.5420		0.0104	0.0100	4.2	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6457		0.0101	0.0100	1.3	50.0
o-Xylene	Ave	0.5870	0.5918		0.0101	0.0100	0.8	50.0
Styrene	Ave	0.8528	0.9639		0.0113	0.0100	13.0	50.0
Bromoform	Lin1		0.2239	0.1000	0.0102	0.0100	1.7	50.0
Isopropylbenzene	Ave	1.500	1.513		0.0101	0.0100	0.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.9097	0.3000	0.0117	0.0100	17.2	50.0
Bromobenzene	Ave	0.8603	0.7127		0.00828	0.0100	-17.2	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2728		0.00916	0.0100	-8.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.2078		0.00939	0.0100	-6.1	50.0
N-Propylbenzene	Ave	0.9157	0.7454		0.00814	0.0100	-18.6	50.0
2-Chlorotoluene	Ave	0.7837	0.6683		0.00853	0.0100	-14.7	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.151		0.00847	0.0100	-15.3	50.0
4-Chlorotoluene	Ave	0.8219	0.6951		0.00846	0.0100	-15.4	50.0
tert-Butylbenzene	Ave	2.265	1.700		0.00751	0.0100	-24.9	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.234		0.00889	0.0100	-11.1	50.0
sec-Butylbenzene	Ave	2.907	2.534		0.00872	0.0100	-12.8	50.0
1,3-Dichlorobenzene	Ave	1.550	1.344		0.00867	0.0100	-13.3	50.0
4-Isopropyltoluene	Ave	2.545	2.220		0.00872	0.0100	-12.8	50.0
1,4-Dichlorobenzene	Ave	1.570	1.397		0.00890	0.0100	-11.0	50.0
1,2-Dichlorobenzene	Ave	1.479	1.293		0.00874	0.0100	-12.6	50.0
n-Butylbenzene	Ave	1.990	1.859		0.00934	0.0100	-6.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515506/2 Calibration Date: 12/03/2021 10:54

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2919.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2001		0.0103	0.0100	2.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.6731		0.00754	0.0100	-24.6	50.0
Hexachlorobutadiene	Ave	0.3079	0.3000		0.00974	0.0100	-2.6	50.0
Naphthalene	Ave	2.693	1.710		0.00635	0.0100	-36.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.5755		0.00671	0.0100	-32.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2254		0.0177	0.0200	-11.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2798		0.0194	0.0200	-3.2	50.0
Toluene-d8 (Surr)	Ave	1.423	1.559		0.0219	0.0200	9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4246		0.0170	0.0200	-14.8	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2919.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Dec-2021 10:54:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-002
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:56 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2315480	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1279340	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	717852	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	521806	20.0	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	647780	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	1994257	20.0	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	543247	20.0	17.0	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	239103	10.0	7.80	
12 Chloromethane	50	1.293	1.293	0.000	98	263547	10.0	10.9	
14 Vinyl chloride	62	1.364	1.364	0.000	72	283476	10.0	9.86	
13 Butadiene	54	1.376	1.376	0.000	97	288362	10.0	11.3	
15 Bromomethane	94	1.612	1.612	0.000	91	173724	10.0	8.39	
16 Chloroethane	64	1.671	1.671	0.000	99	184675	10.0	10.9	
17 Dichlorofluoromethane	67	1.825	1.825	0.000	97	406684	10.0	9.65	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	373688	10.0	7.60	
19 Ethyl ether	59	2.062	2.062	0.000	94	292546	10.0	13.4	
20 Acrolein	56	2.157	2.157	0.000	99	95920	50.0	113.4	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	98	279102	10.0	10.1	
23 112TCTFE	151	2.299	2.299	0.000	90	197491	10.0	9.32	
24 Acetone	43	2.299	2.299	0.000	100	319784	20.0	41.3	
25 Iodomethane	142	2.370	2.370	0.000	98	440661	10.0	8.87	
26 Carbon disulfide	76	2.417	2.417	0.000	99	860357	10.0	10.4	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	90	194324	10.0	10.4	
29 Methyl acetate	43	2.571	2.571	0.000	98	707497	20.0	38.2	
30 Methylene Chloride	84	2.642	2.642	0.000	94	324214	10.0	10.6	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	97	519944	100.0	139.0	
32 Acrylonitrile	53	2.843	2.843	0.000	100	1773773	100.0	187.5	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	99	330639	10.0	10.1	
34 Methyl tert-butyl ether	73	2.890	2.890	0.000	97	876279	10.0	10.9	
35 Hexane	86	3.115	3.115	0.000	95	82520	10.0	11.0	
36 1,1-Dichloroethane	63	3.222	3.222	0.000	96	584275	10.0	12.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 Vinyl acetate	43	3.281	3.281	0.000	97	800718	10.0	15.7	
42 2,2-Dichloropropane	97	3.707	3.707	0.000	89	77732	10.0	10.1	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	337929	10.0	10.0	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	485409	20.0	35.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	98	154093	10.0	9.18	
49 Tetrahydrofuran	42	3.955	3.955	0.000	89	312604	20.0	39.3	
48 Chloroform	83	3.979	3.979	0.000	94	514083	10.0	9.98	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	457436	10.0	10.1	
51 Cyclohexane	56	4.180	4.180	0.000	92	513931	10.0	13.7	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	94	441179	10.0	10.8	
52 Carbon tetrachloride	117	4.275	4.275	0.000	84	402614	10.0	9.73	
54 Isobutyl alcohol	41	4.381	4.381	0.000	85	449407	250.0	598.8	
55 Benzene	78	4.440	4.440	0.000	96	1310520	10.0	11.3	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	401998	10.0	10.7	
58 n-Heptane	100	4.677	4.677	0.000	91	76285	10.0	11.4	
60 Trichloroethene	130	4.985	4.985	0.000	97	309960	10.0	8.57	
62 Methylcyclohexane	83	5.150	5.150	0.000	92	463508	10.0	11.4	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	295382	10.0	12.2	
64 Dibromomethane	93	5.269	5.269	0.000	93	161555	10.0	9.16	
66 1,4-Dioxane	88	5.304	5.304	0.000	95	92881	200.0	262.8	
67 Dichlorobromomethane	83	5.399	5.399	0.000	99	331524	10.0	9.33	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	375638	20.0	21.8	
70 cis-1,3-Dichloropropene	75	5.789	5.789	0.000	95	401594	10.0	9.14	
71 4-Methyl-2-pentanone (MIBK)	43	5.931	5.931	0.000	98	784198	20.0	32.5	
72 Toluene	91	6.085	6.085	0.000	98	1196457	10.0	12.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	93	338904	10.0	10.8	
74 Ethyl methacrylate	69	6.381	6.381	0.000	89	342177	10.0	13.9	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	212771	10.0	11.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	230768	10.0	11.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	92	405371	10.0	12.6	
78 2-Hexanone	43	6.677	6.677	0.000	98	512102	20.0	37.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	91	203112	10.0	9.54	
82 Ethylene Dibromide	107	6.890	6.890	0.000	99	216112	10.0	10.7	
84 Chlorobenzene	112	7.351	7.351	0.000	95	641885	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	215136	10.0	10.1	
86 Ethylbenzene	106	7.458	7.458	0.000	98	346674	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.564	7.564	0.000	97	413027	10.0	10.1	
89 o-Xylene	106	7.943	7.943	0.000	97	378531	10.0	10.1	
88 Styrene	104	7.955	7.955	0.000	96	616585	10.0	11.3	
90 Bromoform	173	8.109	8.109	0.000	95	143246	10.0	10.2	
91 Isopropylbenzene	105	8.286	8.286	0.000	96	967881	10.0	10.1	
95 Bromobenzene	156	8.570	8.570	0.000	88	255790	10.0	8.28	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	326504	10.0	11.7	
96 1,2,3-Trichloropropane	110	8.606	8.606	0.000	86	97911	10.0	9.16	
97 trans-1,4-Dichloro-2-butene	53	8.617	8.617	0.000	85	74592	10.0	9.39	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	267541	10.0	8.14	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	239882	10.0	8.53	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	95	771992	10.0	8.47	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	249484	10.0	8.46	
103 tert-Butylbenzene	119	9.174	9.174	0.000	93	610255	10.0	7.51	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	97	801797	10.0	8.89	
105 sec-Butylbenzene	105	9.387	9.387	0.000	94	909487	10.0	8.72	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	99	482417	10.0	8.67	
107 4-Isopropyltoluene	119	9.529	9.529	0.000	97	796837	10.0	8.72	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	501333	10.0	8.90	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	95	463934	10.0	8.74	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	667109	10.0	9.34	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	92	71812	10.0	10.3	
116 1,2,4-Trichlorobenzene	180	11.505	11.505	0.000	93	241593	10.0	7.54	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	107673	10.0	9.74	
118 Naphthalene	128	11.741	11.741	0.000	97	613918	10.0	6.35	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	206577	10.0	6.71	
S 129 Total BTEX	1				0		50.0	54.3	
S 128 Trihalomethanes, Total	1				0		40.0	39.0	
S 132 Xylenes, Total	106				0		20.0	20.2	

Reagents:

VMAROLISTDW_00418	Amount Added:	8.00	Units: uL	
VMRGAS_00409	Amount Added:	8.00	Units: uL	
VMRPRIMW_00462	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

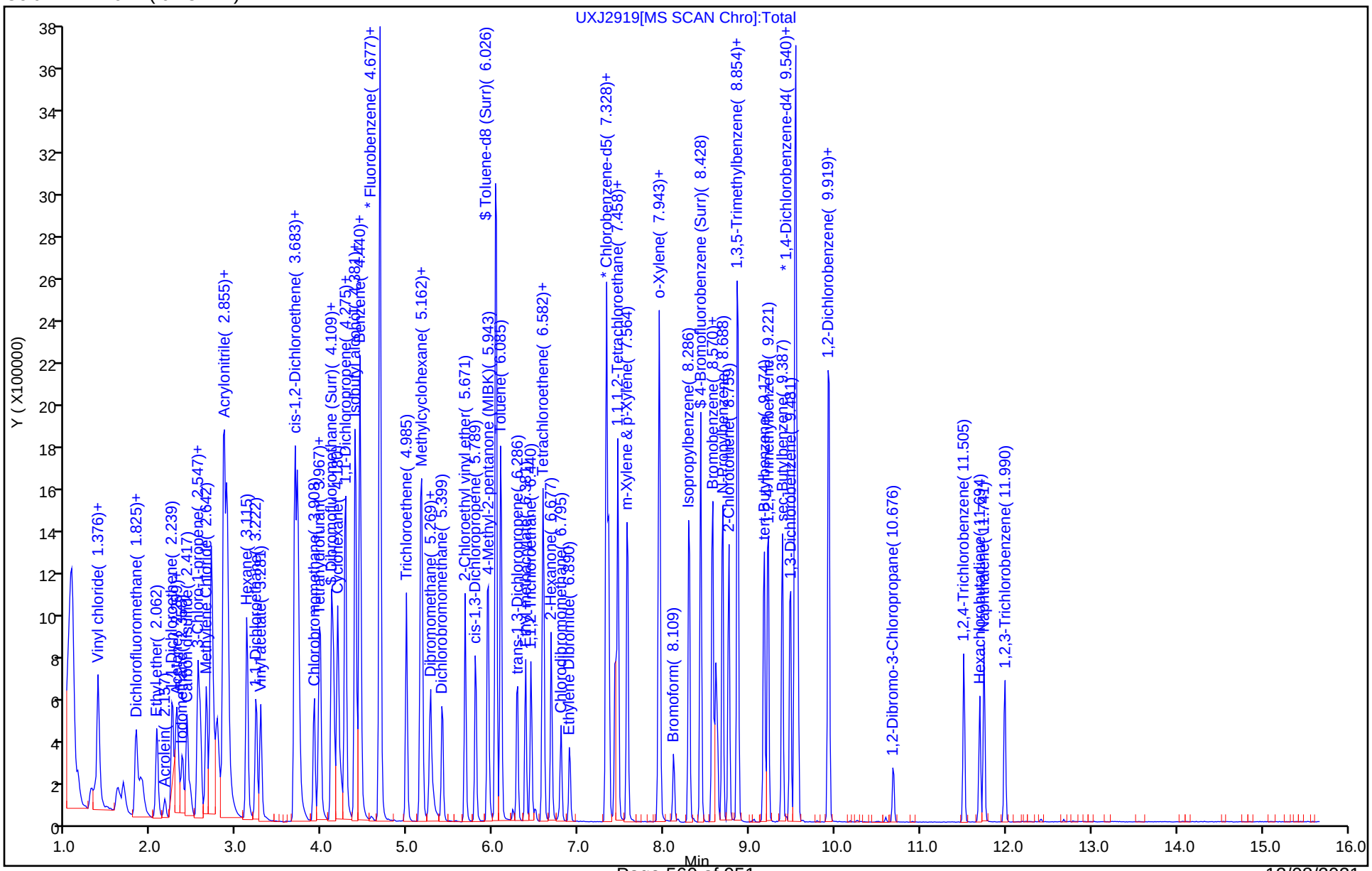
Report Date: 06-Dec-2021 07:53:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2919.D

Injection Date:	03-Dec-2021 10:54:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515635/2 Calibration Date: 12/06/2021 10:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2951.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2158		0.00815	0.0100	-18.5	50.0
Chloromethane	Ave	0.2085	0.2649	0.1000	0.0127	0.0100	27.1	50.0
Butadiene	Ave	0.2195	0.2973		0.0135	0.0100	35.4	50.0
Vinyl chloride	Ave	0.2484	0.2608		0.0105	0.0100	5.0	20.0
Bromomethane	Ave	0.1787	0.1583		0.00885	0.0100	-11.5	50.0
Chloroethane	Ave	0.1469	0.1605		0.0109	0.0100	9.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3514		0.00965	0.0100	-3.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.3433		0.00808	0.0100	-19.2	50.0
Ethyl ether	Ave	0.1891	0.2656		0.0140	0.0100	40.4	50.0
Acrolein	Ave	0.0073	0.0215		0.147	0.0500	194.0*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2400		0.0100	0.0100	0.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1708		0.00934	0.0100	-6.6	50.0
Acetone	Qua		0.1238		0.0359	0.0200	79.7*	50.0
Iodomethane	Ave	0.4292	0.3847		0.00896	0.0100	-10.4	50.0
Carbon disulfide	Ave	0.7139	0.7104		0.00995	0.0100	-0.5	50.0
3-Chloro-1-propene	Ave	0.1609	0.1722		0.0107	0.0100	7.0	50.0
Methyl acetate	Ave	0.1601	0.3003		0.0375	0.0200	87.6*	50.0
Methylene Chloride	Ave	0.2646	0.2759		0.0104	0.0100	4.2	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0424		0.131	0.100	31.2	50.0
Acrylonitrile	Ave	0.0817	0.1476		0.181	0.100	80.6*	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2936		0.0104	0.0100	4.1	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7593		0.0109	0.0100	9.4	50.0
Hexane	Ave	0.0646	0.0701		0.0109	0.0100	8.6	20.0
1,1-Dichloroethane	Ave	0.4093	0.5136	0.1000	0.0125	0.0100	25.5	50.0
Vinyl acetate	Ave	0.4414	0.6840		0.0155	0.0100	55.0*	50.0
2,2-Dichloropropane	Ave	0.0667	0.0751		0.0113	0.0100	12.7	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2922		0.0101	0.0100	0.6	50.0
2-Butanone (MEK)	Ave	0.1171	0.2019		0.0345	0.0200	72.4*	50.0
Chlorobromomethane	Ave	0.1450	0.1417		0.00977	0.0100	-2.3	50.0
Tetrahydrofuran	Ave	0.0687	0.1350		0.0393	0.0200	96.4*	50.0
Chloroform	Ave	0.4451	0.4641		0.0104	0.0100	4.3	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3873		0.00992	0.0100	-0.8	50.0
Cyclohexane	Ave	0.3237	0.4443		0.0137	0.0100	37.2	50.0
1,1-Dichloropropene	Ave	0.3529	0.3991		0.0113	0.0100	13.1	50.0
Carbon tetrachloride	Ave	0.3575	0.3481		0.00974	0.0100	-2.6	50.0
Isobutyl alcohol	Ave	0.0117	0.0284		0.605	0.250	142.1*	50.0
Benzene	Ave	0.997	1.136		0.0114	0.0100	13.9	50.0
1,2-Dichloroethane	Ave	0.3233	0.3559		0.0110	0.0100	10.1	50.0
n-Heptane	Ave	0.0579	0.0592		0.0102	0.0100	2.2	50.0
Trichloroethene	Ave	0.3122	0.2718		0.00871	0.0100	-12.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515635/2 Calibration Date: 12/06/2021 10:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2951.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3783		0.0107	0.0100	7.3	50.0
1,2-Dichloropropane	Ave	0.2085	0.2568		0.0123	0.0100	23.2*	20.0
Dibromomethane	Ave	0.1524	0.1488		0.00977	0.0100	-2.3	50.0
1,4-Dioxane	Qua		0.0036		0.235	0.200	17.4	50.0
Dichlorobromomethane	Ave	0.3068	0.2844		0.00927	0.0100	-7.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1698		0.0229	0.0200	14.3	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3587		0.00945	0.0100	-5.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.3431		0.0329	0.0200	64.7*	50.0
Toluene	Ave	1.519	1.859		0.0122	0.0100	22.4*	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.5299		0.0108	0.0100	7.5	50.0
Ethyl methacrylate	Ave	0.3857	0.5547		0.0144	0.0100	43.8	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3320		0.0110	0.0100	10.2	50.0
Tetrachloroethene	Ave	0.3233	0.3561		0.0110	0.0100	10.1	50.0
1,3-Dichloropropane	Ave	0.5016	0.6287		0.0125	0.0100	25.3	50.0
2-Hexanone	Ave	0.2134	0.4279		0.0401	0.0200	100.5*	50.0
Chlorodibromomethane	Ave	0.3328	0.3144		0.00945	0.0100	-5.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3421		0.0108	0.0100	8.1	50.0
Chlorobenzene	Ave	0.9925	1.017	0.3000	0.0102	0.0100	2.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3439		0.0103	0.0100	3.4	50.0
Ethylbenzene	Ave	0.5200	0.5448		0.0105	0.0100	4.8	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6573		0.0103	0.0100	3.1	50.0
o-Xylene	Ave	0.5870	0.6164		0.0105	0.0100	5.0	50.0
Styrene	Ave	0.8528	0.9729		0.0114	0.0100	14.1	50.0
Bromoform	Lin1		0.2292	0.1000	0.0104	0.0100	4.0	50.0
Isopropylbenzene	Ave	1.500	1.549		0.0103	0.0100	3.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.9367	0.3000	0.0121	0.0100	20.6	50.0
Bromobenzene	Ave	0.8603	0.7296		0.00848	0.0100	-15.2	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2894		0.00972	0.0100	-2.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1634		0.00738	0.0100	-26.2	50.0
N-Propylbenzene	Ave	0.9157	0.7554		0.00825	0.0100	-17.5	50.0
2-Chlorotoluene	Ave	0.7837	0.6608		0.00843	0.0100	-15.7	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.188		0.00861	0.0100	-13.9	50.0
4-Chlorotoluene	Ave	0.8219	0.7000		0.00852	0.0100	-14.8	50.0
tert-Butylbenzene	Ave	2.265	1.783		0.00787	0.0100	-21.3	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.266		0.00902	0.0100	-9.8	50.0
sec-Butylbenzene	Ave	2.907	2.581		0.00888	0.0100	-11.2	50.0
1,3-Dichlorobenzene	Ave	1.550	1.412		0.00911	0.0100	-8.9	50.0
4-Isopropyltoluene	Ave	2.545	2.278		0.00895	0.0100	-10.5	50.0
1,4-Dichlorobenzene	Ave	1.570	1.448		0.00922	0.0100	-7.8	50.0
1,2-Dichlorobenzene	Ave	1.479	1.383		0.00935	0.0100	-6.5	50.0
n-Butylbenzene	Ave	1.990	1.939		0.00974	0.0100	-2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515635/2 Calibration Date: 12/06/2021 10:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ2951.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2206		0.0113	0.0100	13.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.7848		0.00879	0.0100	-12.1	50.0
Hexachlorobutadiene	Ave	0.3079	0.3367		0.0109	0.0100	9.4	50.0
Naphthalene	Ave	2.693	2.181		0.00810	0.0100	-19.0	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.7296		0.00851	0.0100	-14.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2243		0.0176	0.0200	-12.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2784		0.0193	0.0200	-3.7	50.0
Toluene-d8 (Surr)	Ave	1.423	1.569		0.0221	0.0200	10.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4324		0.0174	0.0200	-13.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2951.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Dec-2021 10:08:30 ALS Bottle#: 3 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-002
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:55 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 06-Dec-2021 10:49:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2113080	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	1185380	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	670766	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	473875	20.0	17.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	588241	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1860404	20.0	22.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	512506	20.0	17.4	
10 Dichlorodifluoromethane	85	1.151	1.151	0.000	99	228028	10.0	8.15	
12 Chloromethane	50	1.304	1.304	0.000	98	279930	10.0	12.7	
14 Vinyl chloride	62	1.364	1.364	0.000	76	275568	10.0	10.5	
13 Butadiene	54	1.364	1.364	0.000	93	314080	10.0	13.5	
15 Bromomethane	94	1.612	1.612	0.000	91	167216	10.0	8.85	
16 Chloroethane	64	1.659	1.659	0.000	100	169603	10.0	10.9	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	98	371270	10.0	9.65	
18 Trichlorofluoromethane	101	1.837	1.837	0.000	98	362661	10.0	8.08	
19 Ethyl ether	59	2.074	2.074	0.000	93	280588	10.0	14.0	
20 Acrolein	56	2.168	2.168	0.000	98	113467	50.0	147.0	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	98	253536	10.0	10.0	
23 112TCTFE	151	2.287	2.287	0.000	92	180467	10.0	9.34	
24 Acetone	43	2.298	2.298	0.000	99	261566	20.0	35.9	
25 Iodomethane	142	2.369	2.369	0.000	97	406501	10.0	8.96	
26 Carbon disulfide	76	2.429	2.429	0.000	99	750542	10.0	9.95	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	91	181903	10.0	10.7	
29 Methyl acetate	43	2.582	2.582	0.000	98	634468	20.0	37.5	
30 Methylene Chloride	84	2.653	2.653	0.000	93	291450	10.0	10.4	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	98	447768	100.0	131.2	
32 Acrylonitrile	53	2.855	2.855	0.000	98	1559166	100.0	180.6	
33 trans-1,2-Dichloroethene	96	2.890	2.890	0.000	99	310197	10.0	10.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	96	802195	10.0	10.9	
35 Hexane	86	3.127	3.127	0.000	94	74089	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	542609	10.0	12.5	
37 Vinyl acetate	43	3.281	3.281	0.000	98	722671	10.0	15.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	79381	10.0	11.3	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	84	308698	10.0	10.1	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	426565	20.0	34.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	96	149672	10.0	9.77	
49 Tetrahydrofuran	42	3.967	3.967	0.000	87	285168	20.0	39.3	
48 Chloroform	83	3.979	3.979	0.000	94	490371	10.0	10.4	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	409213	10.0	9.92	
51 Cyclohexane	56	4.192	4.192	0.000	91	469389	10.0	13.7	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	421613	10.0	11.3	
52 Carbon tetrachloride	117	4.275	4.275	0.000	82	367782	10.0	9.74	
54 Isobutyl alcohol	41	4.393	4.393	0.000	82	420893	250.0	605.2	
55 Benzene	78	4.440	4.440	0.000	96	1200510	10.0	11.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	376017	10.0	11.0	
58 n-Heptane	100	4.689	4.689	0.000	90	62520	10.0	10.2	
60 Trichloroethene	130	4.985	4.985	0.000	97	287179	10.0	8.71	
62 Methylcyclohexane	83	5.162	5.162	0.000	92	399693	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	97	271362	10.0	12.3	
64 Dibromomethane	93	5.268	5.268	0.000	94	157261	10.0	9.77	
66 1,4-Dioxane	88	5.304	5.304	0.000	96	76687	200.0	234.7	
67 Dichlorobromomethane	83	5.410	5.410	0.000	99	300506	10.0	9.27	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	358846	20.0	22.9	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	95	378957	10.0	9.45	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	97	725070	20.0	32.9	
72 Toluene	91	6.097	6.097	0.000	98	1101672	10.0	12.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	94	314043	10.0	10.8	
74 Ethyl methacrylate	69	6.381	6.381	0.000	90	328751	10.0	14.4	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	196801	10.0	11.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	211067	10.0	11.0	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	92	372628	10.0	12.5	
78 2-Hexanone	43	6.677	6.677	0.000	97	507252	20.0	40.1	
80 Chlorodibromomethane	129	6.795	6.795	0.000	91	186343	10.0	9.45	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	202750	10.0	10.8	
84 Chlorobenzene	112	7.351	7.351	0.000	95	602885	10.0	10.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	203852	10.0	10.3	
86 Ethylbenzene	106	7.458	7.458	0.000	99	322870	10.0	10.5	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	389547	10.0	10.3	
89 o-Xylene	106	7.943	7.943	0.000	96	365309	10.0	10.5	
88 Styrene	104	7.955	7.955	0.000	95	576625	10.0	11.4	
90 Bromoform	173	8.108	8.108	0.000	96	135866	10.0	10.4	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	918262	10.0	10.3	
95 Bromobenzene	156	8.570	8.570	0.000	90	244695	10.0	8.48	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	88	314139	10.0	12.1	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	86	97073	10.0	9.72	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	54788	10.0	7.38	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	253333	10.0	8.25	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	221625	10.0	8.43	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	94	733959	10.0	8.61	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	234769	10.0	8.52	
103 tert-Butylbenzene	119	9.173	9.173	0.000	92	598065	10.0	7.87	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	760094	10.0	9.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	865676	10.0	8.88	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	473486	10.0	9.11	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	98	763884	10.0	8.95	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	95	485475	10.0	9.22	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	95	463832	10.0	9.35	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	650265	10.0	9.74	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	86	73989	10.0	11.3	
116 1,2,4-Trichlorobenzene	180	11.504	11.504	0.000	94	263210	10.0	8.79	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	112936	10.0	10.9	
118 Naphthalene	128	11.741	11.741	0.000	97	731489	10.0	8.10	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	244679	10.0	8.51	
S 129 Total BTEX	1				0		50.0	54.9	
S 128 Trihalomethanes, Total	1				0		40.0	39.5	
S 132 Xylenes, Total	106				0		20.0	20.8	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00419	Amount Added:	8.00	Units: uL	
VMRGAS_00410	Amount Added:	8.00	Units: uL	
VMRPRIMW_00462	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

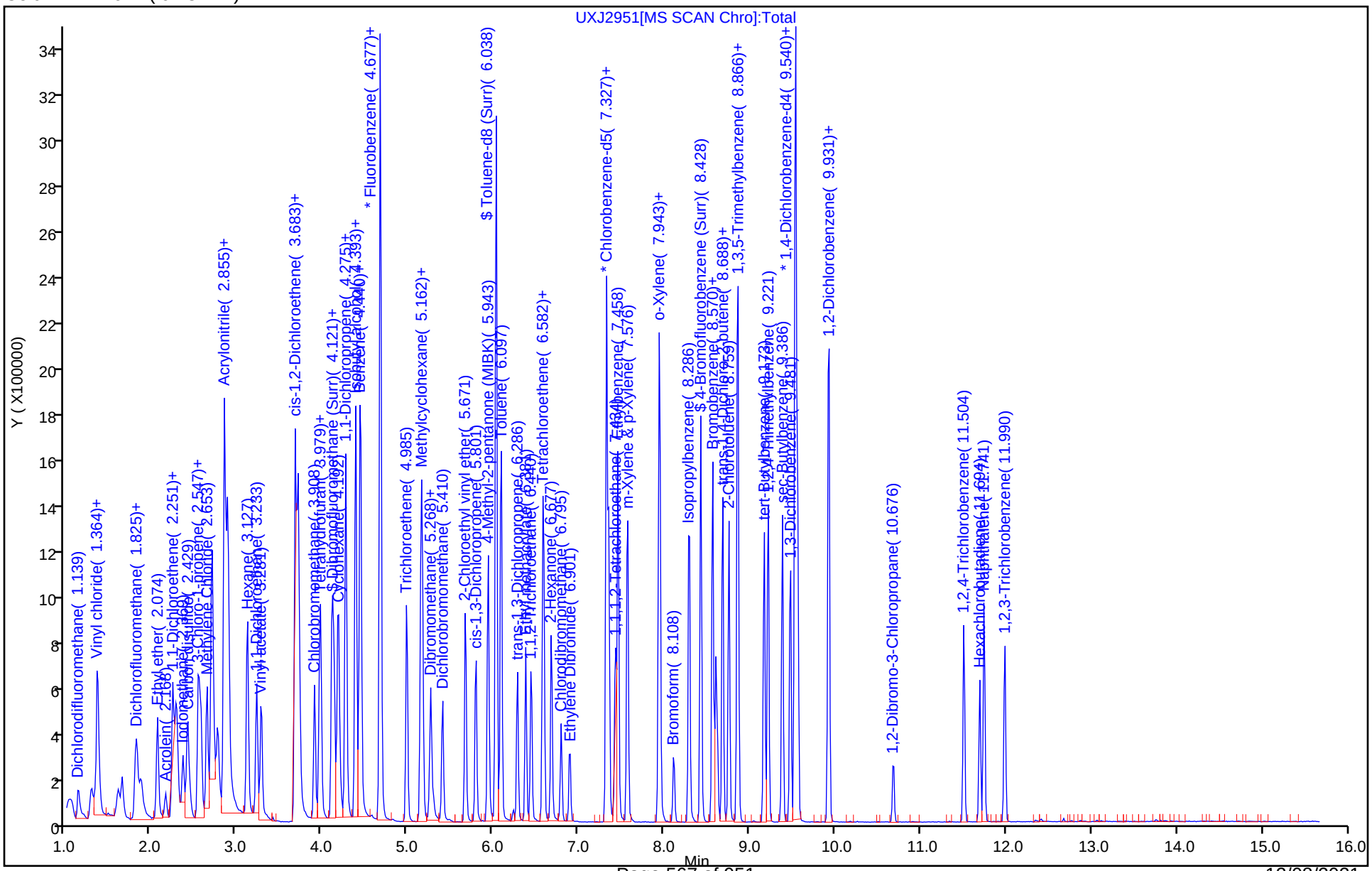
Report Date: 07-Dec-2021 08:25:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2951.D

Injection Date:	06-Dec-2021 10:08:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3162		0.0105	0.0100	4.9	50.0
Chloromethane	Ave	0.3426	0.3320	0.1000	0.00969	0.0100	-3.1	50.0
Vinyl chloride	Ave	0.2936	0.2920		0.00994	0.0100	-0.6	20.0
Butadiene	Ave	0.3746	0.3489		0.00932	0.0100	-6.8	50.0
Bromomethane	Ave	0.2460	0.2290		0.00931	0.0100	-6.9	50.0
Chloroethane	Ave	0.2164	0.2012		0.00930	0.0100	-7.0	50.0
Dichlorofluoromethane	Ave	0.5757	0.5490		0.00954	0.0100	-4.6	50.0
Trichlorofluoromethane	Ave	0.5212	0.5235		0.0100	0.0100	0.5	50.0
Ethyl ether	Ave	0.2512	0.2446		0.00974	0.0100	-2.6	50.0
Acrolein	Lin		0.0072		0.0217	0.0500	-56.5*	50.0
1,1-Dichloroethene	Ave	0.2891	0.2948		0.0102	0.0100	2.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.2477		0.0103	0.0100	2.8	50.0
Acetone	Ave	0.0202	0.0217		0.0215	0.0200	7.4	50.0
Iodomethane	Ave	0.4428	0.4952		0.0112	0.0100	11.8	50.0
Carbon disulfide	Ave	0.8057	0.7778		0.00965	0.0100	-3.5	50.0
3-Chloro-1-propene	Ave	0.1698	0.1619		0.00953	0.0100	-4.7	50.0
Methyl acetate	Ave	0.1269	0.1257		0.0198	0.0200	-1.0	50.0
Methylene Chloride	Ave	0.2691	0.2551		0.00948	0.0100	-5.2	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0135		0.0952	0.100	-4.8	50.0
Acrylonitrile	Ave	0.0679	0.0654		0.0964	0.100	-3.6	50.0
Methyl tert-butyl ether	Ave	0.7014	0.6922		0.00987	0.0100	-1.3	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.2782		0.00964	0.0100	-3.6	50.0
Hexane	Ave	0.0578	0.0516		0.00893	0.0100	-10.7	20.0
1,1-Dichloroethane	Ave	0.4573	0.4471	0.1000	0.00978	0.0100	-2.2	50.0
Vinyl acetate	Ave	0.3891	0.3568		0.00917	0.0100	-8.3	50.0
2,2-Dichloropropane	Ave	0.0889	0.0893		0.0100	0.0100	0.5	50.0
2-Butanone (MEK)	Ave	0.0211	0.0211		0.0200	0.0200	0.0	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3083		0.0101	0.0100	1.1	50.0
Chlorobromomethane	Ave	0.1440	0.1399		0.00971	0.0100	-2.9	50.0
Tetrahydrofuran	Ave	0.0526	0.0498		0.0189	0.0200	-5.3	50.0
Chloroform	Ave	0.4553	0.4511		0.00991	0.0100	-0.9	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.4200		0.0102	0.0100	2.4	50.0
Cyclohexane	Ave	0.4232	0.4079		0.00964	0.0100	-3.6	50.0
1,1-Dichloropropene	Ave	0.3688	0.3540		0.00960	0.0100	-4.0	50.0
Carbon tetrachloride	Ave	0.3647	0.3645		0.00999	0.0100	-0.0	50.0
Isobutyl alcohol	Ave	0.0045	0.0045		0.250	0.250	-0.0	50.0
Benzene	Ave	1.097	1.041		0.00949	0.0100	-5.1	50.0
1,2-Dichloroethane	Ave	0.3263	0.3199		0.00981	0.0100	-1.9	50.0
n-Heptane	Ave	0.0495	0.0427		0.00864	0.0100	-13.6	50.0
Trichloroethene	Ave	0.2948	0.2849		0.00966	0.0100	-3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3434		0.00933	0.0100	-6.7	50.0
1,2-Dichloropropane	Ave	0.2272	0.2268		0.00998	0.0100	-0.2	20.0
1,4-Dioxane	Qua		0.0008		0.0759	0.200	-62.0*	50.0
Dibromomethane	Ave	0.1312	0.1315		0.0100	0.0100	0.2	50.0
Dichlorobromomethane	Ave	0.2893	0.2932		0.0101	0.0100	1.4	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.0771		0.00982	0.0100	-1.8	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3147		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1567		0.0207	0.0200	3.4	50.0
Toluene	Ave	1.478	1.427		0.00966	0.0100	-3.4	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.3485		0.00920	0.0100	-8.0	50.0
Ethyl methacrylate	Ave	0.2855	0.2734		0.00958	0.0100	-4.2	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.2384		0.00983	0.0100	-1.7	50.0
Tetrachloroethene	Ave	0.3113	0.3026		0.00972	0.0100	-2.8	50.0
1,3-Dichloropropane	Ave	0.4170	0.4070		0.00976	0.0100	-2.4	50.0
2-Hexanone	Ave	0.1387	0.1422		0.0205	0.0200	2.5	50.0
Chlorodibromomethane	Ave	0.2665	0.2652		0.00995	0.0100	-0.5	50.0
Ethylene Dibromide	Ave	0.2342	0.2240		0.00957	0.0100	-4.3	50.0
Chlorobenzene	Ave	0.9020	0.8871	0.3000	0.00983	0.0100	-1.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3822		0.0102	0.0100	1.7	50.0
Ethylbenzene	Ave	0.4928	0.4906		0.00996	0.0100	-0.4	20.0
m-Xylene & p-Xylene	Ave	1.195	1.180		0.00987	0.0100	-1.3	50.0
o-Xylene	Ave	0.6424	0.6426		0.0100	0.0100	0.0	50.0
Styrene	Ave	0.8332	0.8410		0.0101	0.0100	0.9	50.0
Bromoform	Ave	0.1647	0.1612	0.1000	0.00979	0.0100	-2.1	50.0
Isopropylbenzene	Ave	1.586	1.602		0.0101	0.0100	1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.5091	0.3000	0.00995	0.0100	-0.5	50.0
Bromobenzene	Ave	0.7041	0.7006		0.00995	0.0100	-0.5	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.1703		0.0103	0.0100	2.6	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1015		0.00870	0.0100	-13.0	50.0
N-Propylbenzene	Ave	0.6976	0.6962		0.00998	0.0100	-0.2	50.0
2-Chlorotoluene	Ave	0.6475	0.6591		0.0102	0.0100	1.8	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.185		0.00995	0.0100	-0.5	50.0
4-Chlorotoluene	Ave	2.069	2.053		0.00992	0.0100	-0.8	50.0
tert-Butylbenzene	Ave	1.877	1.840		0.00980	0.0100	-2.0	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.297		0.0102	0.0100	2.0	50.0
sec-Butylbenzene	Ave	2.474	2.409		0.00974	0.0100	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.319	1.302		0.00987	0.0100	-1.3	50.0
4-Isopropyltoluene	Ave	2.213	2.161		0.00977	0.0100	-2.3	50.0
1,4-Dichlorobenzene	Ave	1.370	1.339		0.00978	0.0100	-2.2	50.0
n-Butylbenzene	Ave	1.792	1.672		0.00933	0.0100	-6.7	50.0
1,2-Dichlorobenzene	Ave	1.373	1.340		0.00976	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-476941/14 Calibration Date: 03/16/2021 11:01

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5650.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.1117		0.00990	0.0100	-1.0	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.9456		0.00939	0.0100	-6.1	50.0
Hexachlorobutadiene	Lin1		0.3990		0.00932	0.0100	-6.8	50.0
Naphthalene	Ave	2.149	2.141		0.00996	0.0100	-0.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.8985		0.00940	0.0100	-6.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2236		0.00957	0.0100	-4.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2484		0.00943	0.0100	-5.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.185		0.00967	0.0100	-3.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4194		0.0101	0.0100	1.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 11:01:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-014
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

First Level Reviewer: evansle Date: 16-Mar-2021 13:17:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1567389	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	86	1054688	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.898	9.899	-0.001	92	623148	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	350444	10.0	9.57	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	389325	10.0	9.43	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1249416	10.0	9.67	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	442373	10.0	10.1	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	495659	10.0	10.5	
10 Chloromethane	50	1.574	1.574	0.000	99	520359	10.0	9.69	
11 Vinyl chloride	62	1.669	1.669	0.000	98	457630	10.0	9.94	
12 Butadiene	54	1.681	1.681	0.000	99	546882	10.0	9.32	
13 Bromomethane	94	1.930	1.918	0.012	91	358879	10.0	9.31	
14 Chloroethane	64	2.001	2.001	0.000	100	315290	10.0	9.30	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	860500	10.0	9.54	
16 Trichlorofluoromethane	101	2.190	2.191	-0.001	98	820589	10.0	10.0	
17 Ethyl ether	59	2.416	2.416	0.000	90	383408	10.0	9.74	
18 Acrolein	56	2.534	2.523	0.011	96	56412	50.0	21.7	
19 1,1-Dichloroethene	96	2.617	2.606	0.011	98	462079	10.0	10.2	
20 112TCTFE	151	2.629	2.629	0.000	93	388305	10.0	10.3	
21 Acetone	58	2.653	2.653	0.000	98	68104	20.0	21.5	
22 Iodomethane	142	2.748	2.748	0.000	99	776173	10.0	11.2	
24 Carbon disulfide	76	2.795	2.796	-0.001	100	1219081	10.0	9.65	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	89	253795	10.0	9.53	
27 Methyl acetate	43	2.914	2.914	0.000	97	394009	20.0	19.8	
28 Methylene Chloride	84	3.009	3.009	0.000	92	399883	10.0	9.48	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	97	211021	100.0	95.2	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	1025302	100.0	96.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1084905	10.0	9.87	
32 trans-1,2-Dichloroethene	96	3.234	3.222	0.012	96	436028	10.0	9.64	
34 Hexane	86	3.436	3.436	0.000	93	80909	10.0	8.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,1-Dichloroethane	63	3.578	3.578	0.000	96	700751	10.0	9.78	
36 Vinyl acetate	43	3.602	3.602	0.000	97	559271	10.0	9.17	
42 2,2-Dichloropropane	97	4.052	4.053	0.000	82	140009	10.0	10.0	
41 cis-1,2-Dichloroethene	96	4.052	4.053	0.000	82	483248	10.0	10.1	
40 2-Butanone (MEK)	72	4.052	4.053	0.000	98	66266	20.0	20.0	
46 Chlorobromomethane	128	4.242	4.242	0.000	92	219218	10.0	9.71	
47 Tetrahydrofuran	42	4.278	4.278	0.000	89	156037	20.0	18.9	
48 Chloroform	83	4.301	4.302	-0.001	93	707088	10.0	9.91	
49 1,1,1-Trichloroethane	97	4.467	4.468	-0.001	98	658226	10.0	10.2	
50 Cyclohexane	56	4.503	4.503	0.000	90	639283	10.0	9.64	
52 Carbon tetrachloride	117	4.598	4.598	0.000	97	571263	10.0	10.0	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	95	554900	10.0	9.60	
53 Isobutyl alcohol	41	4.669	4.669	0.000	94	175205	250.0	249.9	
55 Benzene	78	4.776	4.776	0.000	95	1630870	10.0	9.49	
56 1,2-Dichloroethane	62	4.787	4.788	-0.001	98	501437	10.0	9.81	
58 n-Heptane	100	4.965	4.966	-0.001	89	67003	10.0	8.64	
60 Trichloroethene	130	5.309	5.298	0.011	96	446561	10.0	9.66	
62 Methylcyclohexane	83	5.463	5.464	-0.001	87	538310	10.0	9.33	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	93	355502	10.0	9.98	
66 1,4-Dioxane	88	5.606	5.606	0.000	31	23519	200.0	75.9	
65 Dibromomethane	93	5.606	5.606	0.000	89	206169	10.0	10.0	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	459603	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	120867	10.0	9.82	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	493282	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	491361	20.0	20.7	
72 Toluene	91	6.412	6.412	0.000	98	1505186	10.0	9.66	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	367547	10.0	9.20	
74 Ethyl methacrylate	69	6.661	6.661	0.000	88	288347	10.0	9.58	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	251484	10.0	9.83	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	319194	10.0	9.72	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	429296	10.0	9.76	
78 2-Hexanone	43	6.981	6.982	-0.001	96	299921	20.0	20.5	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	279748	10.0	9.95	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	236269	10.0	9.57	
84 Chlorobenzene	112	7.681	7.681	0.000	99	935597	10.0	9.83	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	94	403079	10.0	10.2	
86 Ethylbenzene	106	7.776	7.776	0.000	98	517466	10.0	9.96	
87 m-Xylene & p-Xylene	91	7.883	7.883	0.000	93	1244371	10.0	9.87	
88 o-Xylene	106	8.262	8.262	0.000	97	677724	10.0	10.0	
89 Styrene	104	8.274	8.274	0.000	94	887028	10.0	10.1	
90 Bromoform	173	8.464	8.464	0.000	97	170025	10.0	9.79	
91 Isopropylbenzene	105	8.618	8.618	0.000	95	1690078	10.0	10.1	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	96	317225	10.0	9.95	
95 Bromobenzene	156	8.914	8.914	0.000	89	436574	10.0	9.95	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	86	106115	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	81	63245	10.0	8.70	
98 N-Propylbenzene	120	9.009	9.009	0.000	98	433860	10.0	9.98	
99 2-Chlorotoluene	126	9.104	9.104	0.000	98	410722	10.0	10.2	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	1361735	10.0	9.95	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	1279373	10.0	9.92	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	91	1146514	10.0	9.80	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	96	1431299	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 sec-Butylbenzene	105	9.721	9.721	0.000	93	1501320	10.0	9.74	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	98	811165	10.0	9.87	
109 4-Isopropyltoluene	119	9.863	9.851	0.012	97	1346833	10.0	9.77	
110 1,4-Dichlorobenzene	146	9.922	9.922	0.000	96	834590	10.0	9.78	
113 n-Butylbenzene	91	10.266	10.266	0.000	97	1041656	10.0	9.33	
114 1,2-Dichlorobenzene	146	10.290	10.290	0.000	98	834752	10.0	9.76	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	86	69628	10.0	9.90	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	589242	10.0	9.39	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	94	248610	10.0	9.32	
119 Naphthalene	128	12.128	12.128	0.000	97	1333933	10.0	9.96	
120 1,2,3-Trichlorobenzene	180	12.377	12.377	0.000	96	559905	10.0	9.40	
S 129 Xylenes, Total	106				0		20.0	19.9	
S 130 Total BTEX	1				0		50.0	49.0	
S 131 Trihalomethanes, Total	1				0		40.0	39.8	

QC Flag Legend

Processing Flags

Reagents:

VMFASAW_00366	Amount Added:	8.00	Units: uL	
VMFASGW_00399	Amount Added:	8.00	Units: uL	
VMFASPW_00390	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

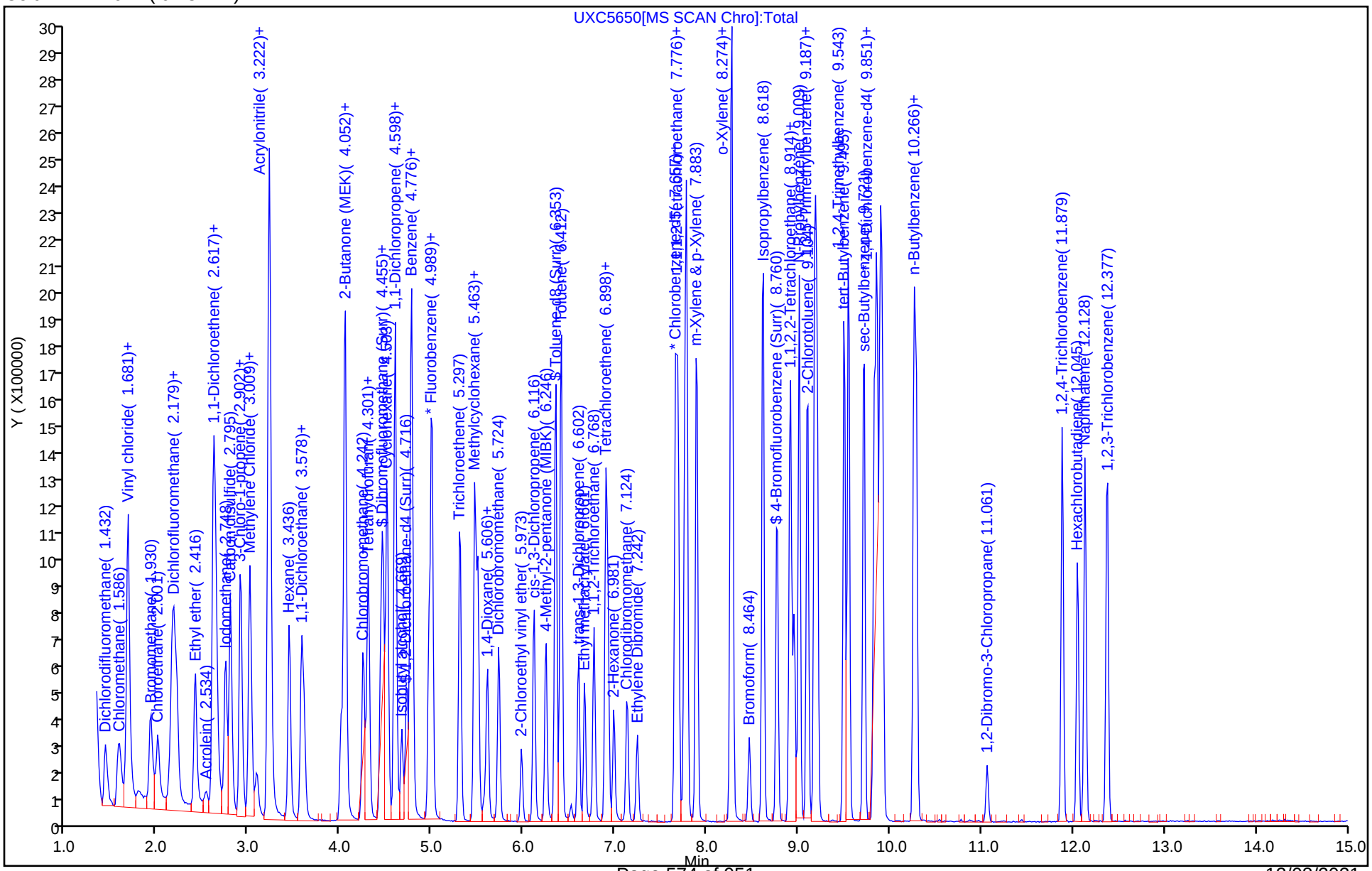
Report Date: 18-Mar-2021 09:02:21 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5650.D

Injection Date:	16-Mar-2021 11:01:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2337	0.2225		0.00952	0.0100	-4.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2492		0.00946	0.0100	-5.4	50.0
Toluene-d8 (Surr)	Ave	1.226	1.118		0.00912	0.0100	-8.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.3942		0.00951	0.0100	-4.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

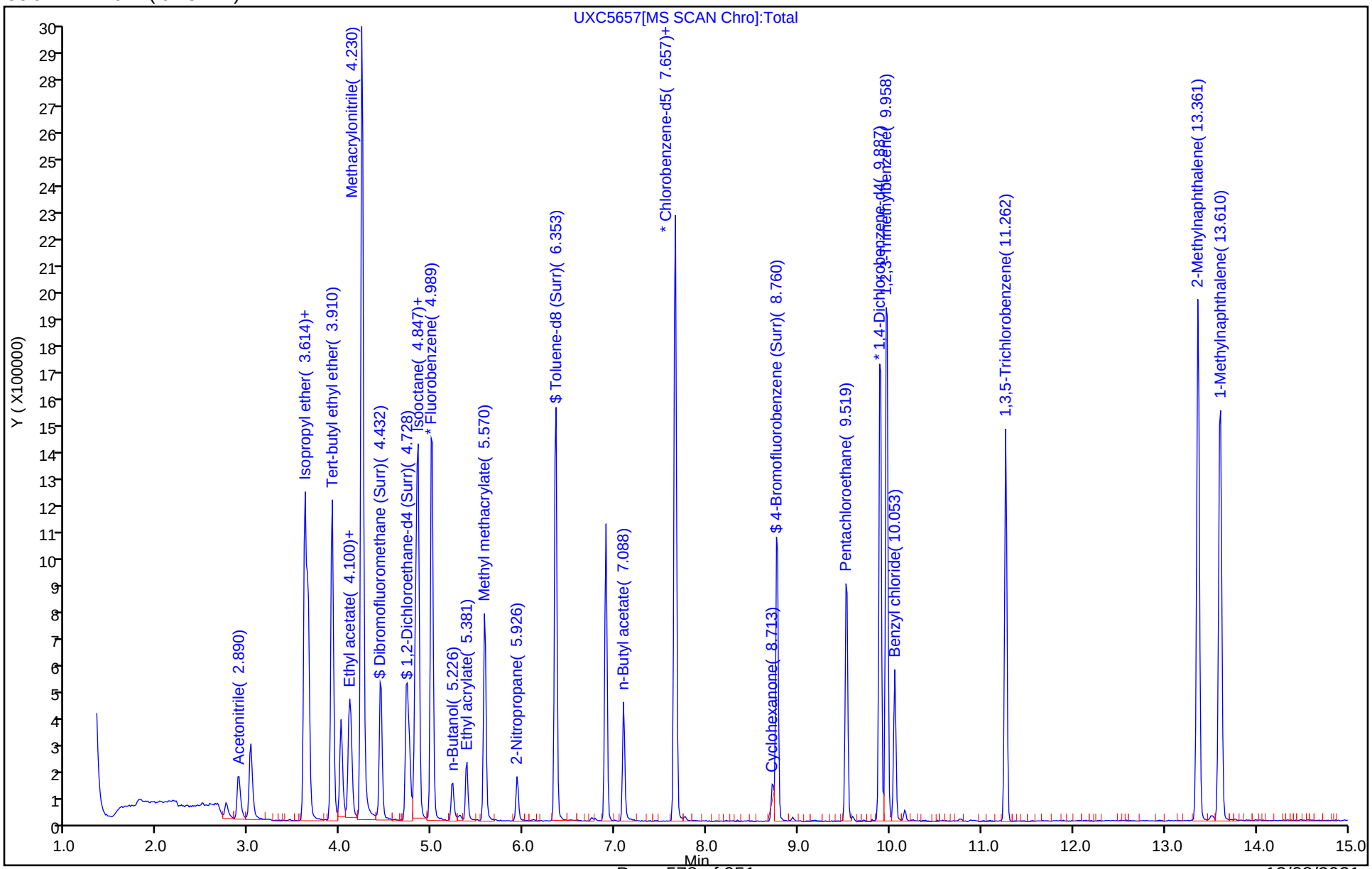
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-476941/15 Calibration Date: 03/16/2021 13:34

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 11:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 13:12

Lab File ID: UXC5657.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0180	0.0164		0.0909	0.100	-9.1	50.0
Isopropyl ether	Ave	0.2240	0.2138		0.00955	0.0100	-4.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4022	0.3508		0.00872	0.0100	-12.8	50.0
Tert-butyl ethyl ether	Ave	0.7237	0.6928		0.00957	0.0100	-4.3	50.0
Ethyl acetate	Ave	0.1508	0.1399		0.0186	0.0200	-7.2	50.0
Propionitrile	Ave	0.0231	0.0223		0.0965	0.100	-3.5	50.0
Methacrylonitrile	Ave	0.1091	0.1079		0.0989	0.100	-1.1	50.0
Tert-amyl methyl ether	Ave	0.6734	0.6581		0.00977	0.0100	-2.3	50.0
n-Butanol	Ave	0.0032	0.0027		0.210	0.250	-16.0	50.0
Ethyl acrylate	Ave	0.1660	0.1646		0.00992	0.0100	-0.8	50.0
Methyl methacrylate	Ave	0.1247	0.1254		0.0201	0.0200	0.6	50.0
2-Nitropropane	Ave	0.0367	0.0371		0.0202	0.0200	1.2	50.0
n-Butyl acetate	Ave	0.2211	0.2201		0.00995	0.0100	-0.5	50.0
1-Chlorohexane	Ave	0.3516	0.3290		0.00936	0.0100	-6.4	50.0
Cyclohexanone	Ave	0.0139	0.0129		0.0928	0.100	-7.2	50.0
Pentachloroethane	Qua		0.1025		0.0113	0.0200	-43.3	50.0
1,2,3-Trimethylbenzene	Ave	2.318	2.339		0.0101	0.0100	0.9	50.0
Benzyl chloride	Lin1		0.1676		0.00810	0.0100	-19.0	50.0
1,3,5-Trichlorobenzene	Ave	1.033	0.9570		0.00926	0.0100	-7.4	50.0
2-Methylnaphthalene	Ave	1.199	1.114		0.0186	0.0200	-7.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2021 13:34:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0107311-015
Misc. Info.: C210316A-IC,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Mar-2021 09:02:17 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1642

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1522004	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	85	1034257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.899	9.899	0.000	94	604775	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	94	338696	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	100	379316	10.0	9.46	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1156047	10.0	9.12	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	96	407723	10.0	9.51	
25 Acetonitrile	41	2.890	2.890	0.000	99	249511	100.0	90.9	
37 Isopropyl ether	87	3.614	3.614	0.000	92	325479	10.0	9.55	
38 2-Chloro-1,3-butadiene	53	3.649	3.649	0.000	93	533875	10.0	8.72	
39 Tert-butyl ethyl ether	59	3.910	3.910	0.000	97	1054503	10.0	9.57	
43 Ethyl acetate	43	4.088	4.088	0.000	100	426002	20.0	18.6	
44 Propionitrile	54	4.112	4.112	0.000	99	339954	100.0	96.5	
45 Methacrylonitrile	41	4.230	4.230	0.000	93	1641896	100.0	98.9	
54 Isooctane	57	4.823	4.823	0.000	97	686371	10.0	8.00	
57 Tert-amyl methyl ether	73	4.847	4.847	0.000	98	1001678	10.0	9.77	
59 n-Butanol	56	5.215	5.226	-0.011	86	103032	250.0	210.0	
61 Ethyl acrylate	55	5.381	5.381	0.000	99	250500	10.0	9.92	
64 Methyl methacrylate	41	5.570	5.570	0.000	89	381748	20.0	20.1	
68 2-Nitropropane	41	5.926	5.926	0.000	98	113010	20.0	20.2	
79 n-Butyl acetate	43	7.088	7.088	0.000	97	334991	10.0	9.95	
83 1-Chlorohexane	91	7.646	7.646	0.000	98	340245	10.0	9.36	
92 Cyclohexanone	55	8.713	8.713	0.000	92	77883	100.0	92.8	
105 Pentachloroethane	167	9.531	9.531	0.000	96	211931	20.0	11.3	
111 1,2,3-Trimethylbenzene	105	9.970	9.970	0.000	98	1414631	10.0	10.1	
112 Benzyl chloride	126	10.053	10.053	0.000	98	101362	10.0	8.10	
116 1,3,5-Trichlorobenzene	180	11.262	11.262	0.000	98	578799	10.0	9.26	
121 2-Methylnaphthalene	142	13.361	13.361	0.000	93	1347865	20.0	18.6	
122 1-Methylnaphthalene	142	13.610	13.610	0.000	93	1177496	20.0	18.2	

Reagents:

VMFASA9W_00312	Amount Added:	8.00	Units: uL	
vm50ss_stk_00086	Amount Added:	1.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00086	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00189	Amount Added:	0.00	Units:	Run Reagent

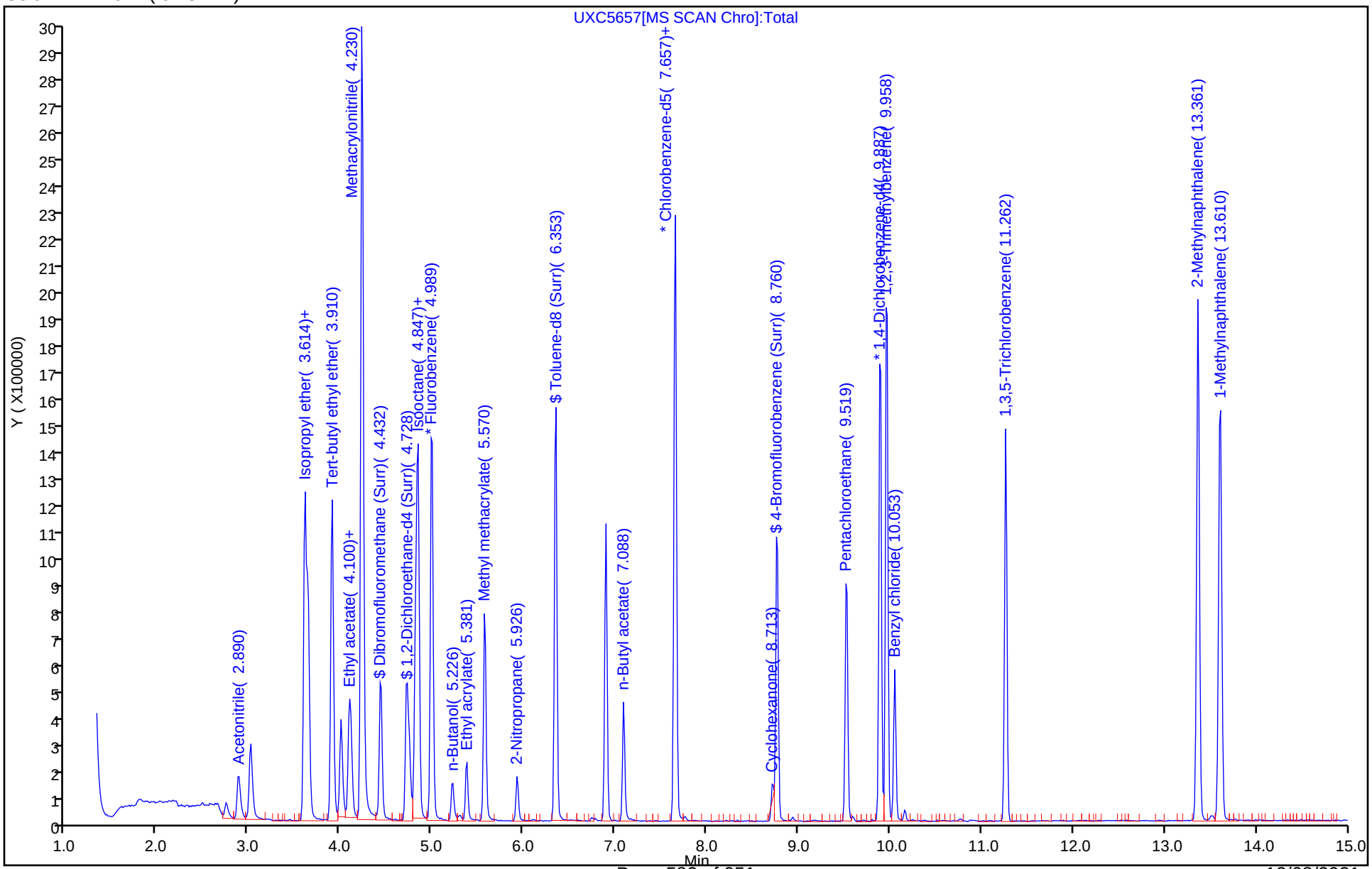
Report Date: 18-Mar-2021 09:02:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5657.D

Injection Date:	16-Mar-2021 13:34:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515508/2 Calibration Date: 12/03/2021 10:58

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC1289.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3013	0.3566		0.0118	0.0100	18.3	50.0
Chloromethane	Ave	0.3426	0.3322	0.1000	0.00969	0.0100	-3.1	50.0
Butadiene	Ave	0.3746	0.3249		0.00868	0.0100	-13.2	50.0
Vinyl chloride	Ave	0.2936	0.2748		0.00936	0.0100	-6.4	20.0
Bromomethane	Ave	0.2460	0.1843		0.00749	0.0100	-25.1	50.0
Chloroethane	Ave	0.2164	0.1716		0.00793	0.0100	-20.7	50.0
Dichlorofluoromethane	Ave	0.5757	0.4530		0.00787	0.0100	-21.3	50.0
Trichlorofluoromethane	Ave	0.5212	0.3345		0.00642	0.0100	-35.8	50.0
Ethyl ether	Ave	0.2512	0.2223		0.00885	0.0100	-11.5	50.0
Acrolein	Lin		0.0124		0.0395	0.0500	-21.0	50.0
1,1-Dichloroethene	Ave	0.2891	0.2328		0.00805	0.0100	-19.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2410	0.1803		0.00748	0.0100	-25.2	50.0
Acetone	Ave	0.0202	0.0244		0.0242	0.0200	20.8	50.0
Iodomethane	Ave	0.4428	0.4381		0.00989	0.0100	-1.1	50.0
Carbon disulfide	Ave	0.8057	0.7873		0.00977	0.0100	-2.3	50.0
3-Chloro-1-propene	Ave	0.1698	0.1951		0.0115	0.0100	14.9	50.0
Methyl acetate	Ave	0.1269	0.2064		0.0325	0.0200	62.6*	50.0
Methylene Chloride	Ave	0.2691	0.3644		0.0135	0.0100	35.4	50.0
2-Methyl-2-propanol	Ave	0.0141	0.0147		0.104	0.100	3.8	50.0
Acrylonitrile	Ave	0.0679	0.1144		0.169	0.100	68.5*	50.0
Methyl tert-butyl ether	Ave	0.7014	0.7427		0.0106	0.0100	5.9	50.0
trans-1,2-Dichloroethene	Ave	0.2887	0.3306		0.0115	0.0100	14.5	50.0
Hexane	Ave	0.0578	0.0590		0.0102	0.0100	2.0	20.0
1,1-Dichloroethane	Ave	0.4573	0.5841	0.1000	0.0128	0.0100	27.7	50.0
Vinyl acetate	Ave	0.3891	0.4726		0.0121	0.0100	21.5	50.0
2,2-Dichloropropane	Ave	0.0889	0.0791		0.00890	0.0100	-11.0	50.0
cis-1,2-Dichloroethene	Ave	0.3049	0.3492		0.0115	0.0100	14.5	50.0
2-Butanone (MEK)	Ave	0.0211	0.0287		0.0271	0.0200	35.7	50.0
Chlorobromomethane	Ave	0.1440	0.1601		0.0111	0.0100	11.2	50.0
Tetrahydrofuran	Ave	0.0526	0.0679		0.0258	0.0200	29.2	50.0
Chloroform	Ave	0.4553	0.5570		0.0122	0.0100	22.3*	20.0
1,1,1-Trichloroethane	Ave	0.4100	0.4148		0.0101	0.0100	1.2	50.0
Cyclohexane	Ave	0.4232	0.4718		0.0111	0.0100	11.5	50.0
1,1-Dichloropropene	Ave	0.3688	0.4176		0.0113	0.0100	13.2	50.0
Carbon tetrachloride	Ave	0.3647	0.3494		0.00958	0.0100	-4.2	50.0
Isobutyl alcohol	Ave	0.0045	0.0070		0.392	0.250	56.7*	50.0
Benzene	Ave	1.097	1.369		0.0125	0.0100	24.8	50.0
1,2-Dichloroethane	Ave	0.3263	0.4257		0.0130	0.0100	30.5	50.0
n-Heptane	Ave	0.0495	0.0418		0.00844	0.0100	-15.6	50.0
Trichloroethene	Ave	0.2948	0.2970		0.0101	0.0100	0.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515508/2 Calibration Date: 12/03/2021 10:58

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC1289.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3683	0.3361		0.00913	0.0100	-8.7	50.0
1,2-Dichloropropane	Ave	0.2272	0.3097		0.0136	0.0100	36.3*	20.0
1,4-Dioxane	Qua		0.0013		0.131	0.200	-34.4	50.0
Dibromomethane	Ave	0.1312	0.1604		0.0122	0.0100	22.2	50.0
Dichlorobromomethane	Ave	0.2893	0.3226		0.0111	0.0100	11.5	50.0
2-Chloroethyl vinyl ether	Ave	0.0786	0.1265		0.0322	0.0200	61.0*	50.0
cis-1,3-Dichloropropene	Ave	0.3149	0.3688		0.0117	0.0100	17.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1517	0.1887		0.0249	0.0200	24.4	50.0
Toluene	Ave	1.478	1.945		0.0132	0.0100	31.6*	20.0
trans-1,3-Dichloropropene	Ave	0.3786	0.4661		0.0123	0.0100	23.1	50.0
Ethyl methacrylate	Ave	0.2855	0.3760		0.0132	0.0100	31.7	50.0
1,1,2-Trichloroethane	Ave	0.2425	0.3614		0.0149	0.0100	49.0	50.0
Tetrachloroethene	Ave	0.3113	0.3332		0.0107	0.0100	7.0	50.0
1,3-Dichloropropane	Ave	0.4170	0.6603		0.0158	0.0100	58.4*	50.0
2-Hexanone	Ave	0.1387	0.1848		0.0266	0.0200	33.2	50.0
Chlorodibromomethane	Ave	0.2665	0.2892		0.0109	0.0100	8.5	50.0
Ethylene Dibromide	Ave	0.2342	0.3232		0.0138	0.0100	38.0	50.0
Chlorobenzene	Ave	0.9020	1.165	0.3000	0.0129	0.0100	29.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3759	0.3752		0.00998	0.0100	-0.2	50.0
Ethylbenzene	Ave	0.4928	0.5871		0.0119	0.0100	19.1	20.0
m-Xylene & p-Xylene	Ave	1.195	1.513		0.0127	0.0100	26.6	50.0
o-Xylene	Ave	0.6424	0.6949		0.0108	0.0100	8.2	50.0
Styrene	Ave	0.8332	1.186		0.0142	0.0100	42.4	50.0
Bromoform	Ave	0.1647	0.1537	0.1000	0.00933	0.0100	-6.7	50.0
Isopropylbenzene	Ave	1.586	1.560		0.00984	0.0100	-1.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5117	0.8237	0.3000	0.0161	0.0100	61.0*	50.0
Bromobenzene	Ave	0.7041	0.7797		0.0111	0.0100	10.7	50.0
1,2,3-Trichloropropane	Ave	0.1660	0.2562		0.0154	0.0100	54.4*	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.2106		0.0178	0.0100	78.3*	50.0
N-Propylbenzene	Ave	0.6976	0.7715		0.0111	0.0100	10.6	50.0
2-Chlorotoluene	Ave	0.6475	0.7189		0.0111	0.0100	11.0	50.0
1,3,5-Trimethylbenzene	Ave	2.196	2.404		0.0109	0.0100	9.5	50.0
4-Chlorotoluene	Ave	2.069	2.811		0.0136	0.0100	35.8	50.0
tert-Butylbenzene	Ave	1.877	1.664		0.00886	0.0100	-11.4	50.0
1,2,4-Trimethylbenzene	Ave	2.252	2.565		0.0114	0.0100	13.9	50.0
sec-Butylbenzene	Ave	2.474	2.322		0.00938	0.0100	-6.2	50.0
1,3-Dichlorobenzene	Ave	1.319	1.468		0.0111	0.0100	11.3	50.0
4-Isopropyltoluene	Ave	2.213	2.069		0.00935	0.0100	-6.5	50.0
1,4-Dichlorobenzene	Ave	1.370	1.543		0.0113	0.0100	12.6	50.0
n-Butylbenzene	Ave	1.792	1.552		0.00866	0.0100	-13.4	50.0
1,2-Dichlorobenzene	Ave	1.373	1.464		0.0107	0.0100	6.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515508/2 Calibration Date: 12/03/2021 10:58

Instrument ID: A3UX15 Calib Start Date: 03/16/2021 08:36

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2021 10:39

Lab File ID: UXC1289.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1128	0.0837		0.00742	0.0100	-25.8	50.0
1,2,4-Trichlorobenzene	Ave	1.008	0.5258		0.00522	0.0100	-47.8	50.0
Hexachlorobutadiene	Lin1		0.2314		0.00509	0.0100	-49.1	50.0
Naphthalene	Ave	2.149	1.256		0.00584	0.0100	-41.6	50.0
1,2,3-Trichlorobenzene	Ave	0.9560	0.5073		0.00531	0.0100	-46.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.1965		0.00841	0.0100	-15.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2633	0.2562		0.00973	0.0100	-2.7	50.0
Toluene-d8 (Surr)	Ave	1.226	1.228		0.0100	0.0100	0.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4145	0.4099		0.00989	0.0100	-1.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1289.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Dec-2021 10:58:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-002
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Sublist: chrom-8260_15*sub83

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:18 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2319217	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.658	7.658	0.000	86	1527066	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	94	867928	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	455665	10.0	8.41	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	0.000	99	594169	10.0	9.73	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1875369	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	87	626020	10.0	9.89	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	827068	10.0	11.8	
10 Chloromethane	50	1.574	1.574	0.000	100	770357	10.0	9.69	
11 Vinyl chloride	62	1.669	1.669	0.000	98	637347	10.0	9.36	
12 Butadiene	54	1.669	1.669	0.000	96	753604	10.0	8.68	
13 Bromomethane	94	1.930	1.930	0.000	92	427338	10.0	7.49	
14 Chloroethane	64	2.001	2.001	0.000	99	398074	10.0	7.93	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	1050705	10.0	7.87	
16 Trichlorofluoromethane	101	2.203	2.203	0.000	100	775818	10.0	6.42	
17 Ethyl ether	59	2.416	2.416	0.000	91	515608	10.0	8.85	
18 Acrolein	56	2.523	2.523	0.000	98	144118	50.0	39.5	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	539977	10.0	8.05	
20 112TCTFE	151	2.630	2.630	0.000	95	418093	10.0	7.48	
21 Acetone	58	2.653	2.653	0.000	100	113307	20.0	24.2	
22 Iodomethane	142	2.736	2.736	0.000	98	1015962	10.0	9.89	
24 Carbon disulfide	76	2.796	2.796	0.000	99	1825945	10.0	9.77	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	91	452396	10.0	11.5	
27 Methyl acetate	43	2.914	2.914	0.000	98	957554	20.0	32.5	
28 Methylene Chloride	84	2.997	2.997	0.000	94	845185	10.0	13.5	
29 2-Methyl-2-propanol	59	3.080	3.080	0.000	90	340340	100.0	103.8	
30 Acrylonitrile	53	3.211	3.211	0.000	100	2652900	100.0	168.5	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1722471	10.0	10.6	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	100	766834	10.0	11.5	
34 Hexane	86	3.436	3.436	0.000	93	136778	10.0	10.2	
35 1,1-Dichloroethane	63	3.566	3.566	0.000	96	1354607	10.0	12.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.602	3.602	0.000	97	1096157	10.0	12.1	
42 2,2-Dichloropropane	97	4.041	4.041	0.000	84	183498	10.0	8.90	
41 cis-1,2-Dichloroethene	96	4.041	4.041	0.000	83	809760	10.0	11.5	
40 2-Butanone (MEK)	72	4.053	4.053	0.000	100	132993	20.0	27.1	
46 Chlorobromomethane	128	4.242	4.242	0.000	97	371231	10.0	11.1	
47 Tetrahydrofuran	42	4.290	4.290	0.000	87	314878	20.0	25.8	
48 Chloroform	83	4.302	4.302	0.000	93	1291737	10.0	12.2	
49 1,1,1-Trichloroethane	97	4.456	4.456	0.000	98	961920	10.0	10.1	
50 Cyclohexane	56	4.503	4.503	0.000	90	1094185	10.0	11.1	
52 Carbon tetrachloride	117	4.598	4.598	0.000	85	810373	10.0	9.58	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	96	968391	10.0	11.3	
53 Isobutyl alcohol	41	4.669	4.669	0.000	90	406407	250.0	391.7	
55 Benzene	78	4.764	4.764	0.000	95	3175322	10.0	12.5	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	98	987336	10.0	13.0	
58 n-Heptane	100	4.966	4.966	0.000	88	96870	10.0	8.44	
60 Trichloroethene	130	5.298	5.298	0.000	99	688763	10.0	10.1	
62 Methylcyclohexane	83	5.464	5.464	0.000	91	779388	10.0	9.13	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	718376	10.0	13.6	
66 1,4-Dioxane	88	5.606	5.606	0.000	33	59813	200.0	131.2	
65 Dibromomethane	93	5.606	5.606	0.000	97	372019	10.0	12.2	
67 Dichlorobromomethane	83	5.725	5.725	0.000	99	748117	10.0	11.1	
69 2-Chloroethyl vinyl ether	63	5.974	5.974	0.000	92	586853	20.0	32.2	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	855274	10.0	11.7	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	875256	20.0	24.9	
72 Toluene	91	6.412	6.412	0.000	98	2970816	10.0	13.2	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	711723	10.0	12.3	
74 Ethyl methacrylate	69	6.661	6.661	0.000	89	574128	10.0	13.2	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	93	551818	10.0	14.9	
76 Tetrachloroethene	164	6.899	6.899	0.000	97	508843	10.0	10.7	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	1008352	10.0	15.8	
78 2-Hexanone	43	6.982	6.982	0.000	96	564377	20.0	26.6	
80 Chlorodibromomethane	129	7.124	7.124	0.000	90	441644	10.0	10.9	
82 Ethylene Dibromide	107	7.242	7.242	0.000	97	493565	10.0	13.8	
84 Chlorobenzene	112	7.681	7.681	0.000	94	1778882	10.0	12.9	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	93	572918	10.0	9.98	
86 Ethylbenzene	106	7.776	7.776	0.000	99	896495	10.0	11.9	
87 m-Xylene & p-Xylene	91	7.895	7.895	0.000	92	2310861	10.0	12.7	
88 o-Xylene	106	8.262	8.262	0.000	95	1061092	10.0	10.8	
89 Styrene	104	8.274	8.274	0.000	93	1811510	10.0	14.2	
90 Bromoform	173	8.464	8.464	0.000	96	234781	10.0	9.33	
91 Isopropylbenzene	105	8.618	8.618	0.000	96	2382372	10.0	9.84	
94 1,1,2,2-Tetrachloroethane	83	8.903	8.903	0.000	94	714950	10.0	16.1	
95 Bromobenzene	156	8.915	8.915	0.000	96	676707	10.0	11.1	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	85	222349	10.0	15.4	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	72	182774	10.0	17.8	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	669583	10.0	11.1	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	623930	10.0	11.1	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	94	2086650	10.0	10.9	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2439384	10.0	13.6	
104 tert-Butylbenzene	119	9.496	9.496	0.000	93	1444269	10.0	8.86	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	94	2226401	10.0	11.4	
107 sec-Butylbenzene	105	9.709	9.709	0.000	95	2014996	10.0	9.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,3-Dichlorobenzene	146	9.828	9.828	0.000	97	1273973	10.0	11.1	
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1795517	10.0	9.35	
110 1,4-Dichlorobenzene	146	9.911	9.911	0.000	93	1338820	10.0	11.3	
113 n-Butylbenzene	91	10.255	10.255	0.000	98	1347173	10.0	8.66	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	96	1271028	10.0	10.7	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	76	72683	10.0	7.42	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	456386	10.0	5.22	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	200831	10.0	5.09	
119 Naphthalene	128	12.128	12.128	0.000	97	1090138	10.0	5.84	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	440306	10.0	5.31	
S 129 Xylenes, Total	106				0		20.0	23.5	
S 130 Total BTEX	1				0		50.0	61.0	
S 131 Trihalomethanes, Total	1				0		40.0	43.6	

Reagents:

VMAROLISTDW_00418	Amount Added:	8.00	Units: uL	
VMRGAS_00409	Amount Added:	8.00	Units: uL	
VMRPRIMW_00462	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

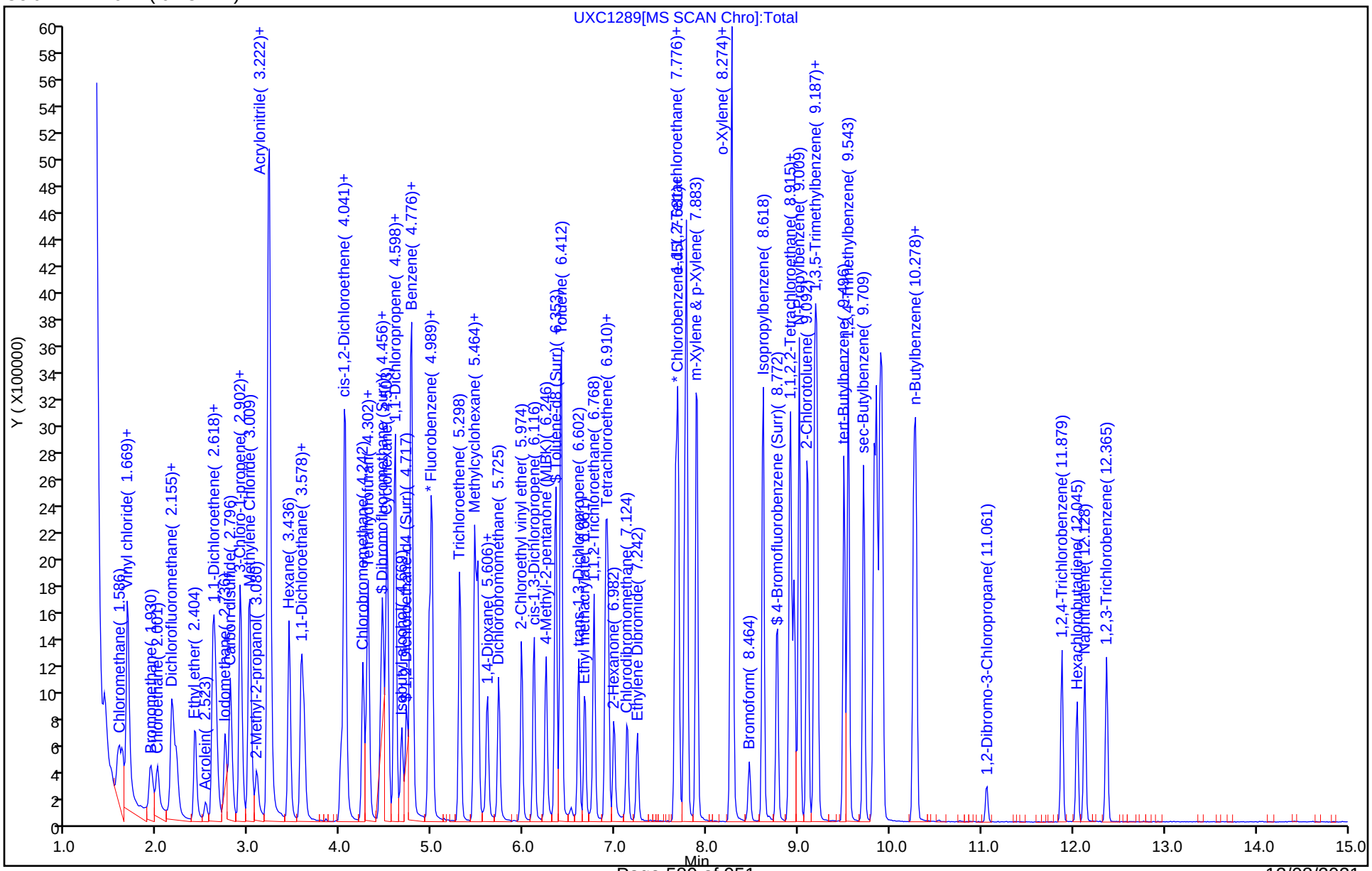
Report Date: 06-Dec-2021 12:55:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1289.D

Injection Date:	03-Dec-2021 10:58:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jan-2021 10:36:30	ALS Bottle#:	4	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211015A-IC,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Jan-2021 09:28:08	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1641				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.350	4.350	0.000	0	393211	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

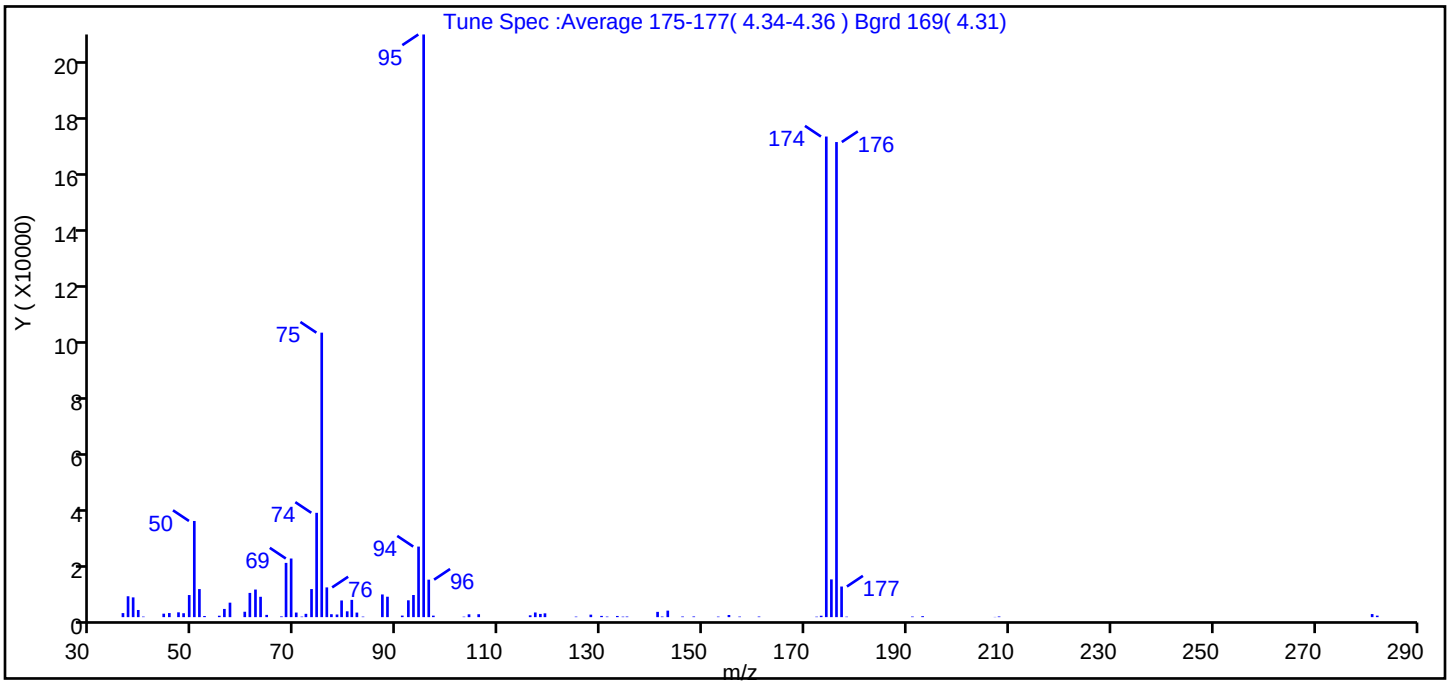
VMBFB_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D
Injection Date: 15-Jan-2021 10:36:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.5
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	82.5
175	5 to 9% of m/z 174	6.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	81.5 (98.9)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D\8260_11.rslt\spectra.d
Injection Date: 15-Jan-2021 10:36:30
Spectrum: Tune Spec :Average 175-177(4.34-4.36) Bgrd 169(4.31)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1457	67.00	272	93.00	7966	143.00	2347
37.00	7520	68.00	19528	94.00	25400	146.00	229
38.00	7112	69.00	21104	95.00	209728	148.00	248
39.00	2576	70.00	1651	96.00	13491	153.00	194
40.00	196	71.00	196	97.00	539	155.00	774
44.00	1250	72.00	1197	103.00	169	157.00	207
45.00	1468	73.00	10110	104.00	1019	161.00	223
47.00	1730	74.00	37552	106.00	1050	172.00	174
48.00	1410	75.00	102400	116.00	659	173.00	502
49.00	7954	76.00	10706	117.00	1675	174.00	172992
50.00	34616	77.00	1056	118.00	1161	175.00	13587
51.00	10108	78.00	952	119.00	1367	176.00	171008
52.00	407	79.00	6005	125.00	193	177.00	11023
55.00	505	80.00	2102	128.00	895	178.00	172
56.00	2954	81.00	6216	130.00	450	191.00	226
57.00	5212	82.00	1644	131.00	207	193.00	350
60.00	1944	83.00	190	133.00	424	207.00	72
61.00	8722	87.00	8167	134.00	185	208.00	245
62.00	9935	88.00	7351	135.00	224	281.00	1116
63.00	7326	91.00	558	141.00	1904	282.00	543
64.00	815	92.00	6063	142.00	222		

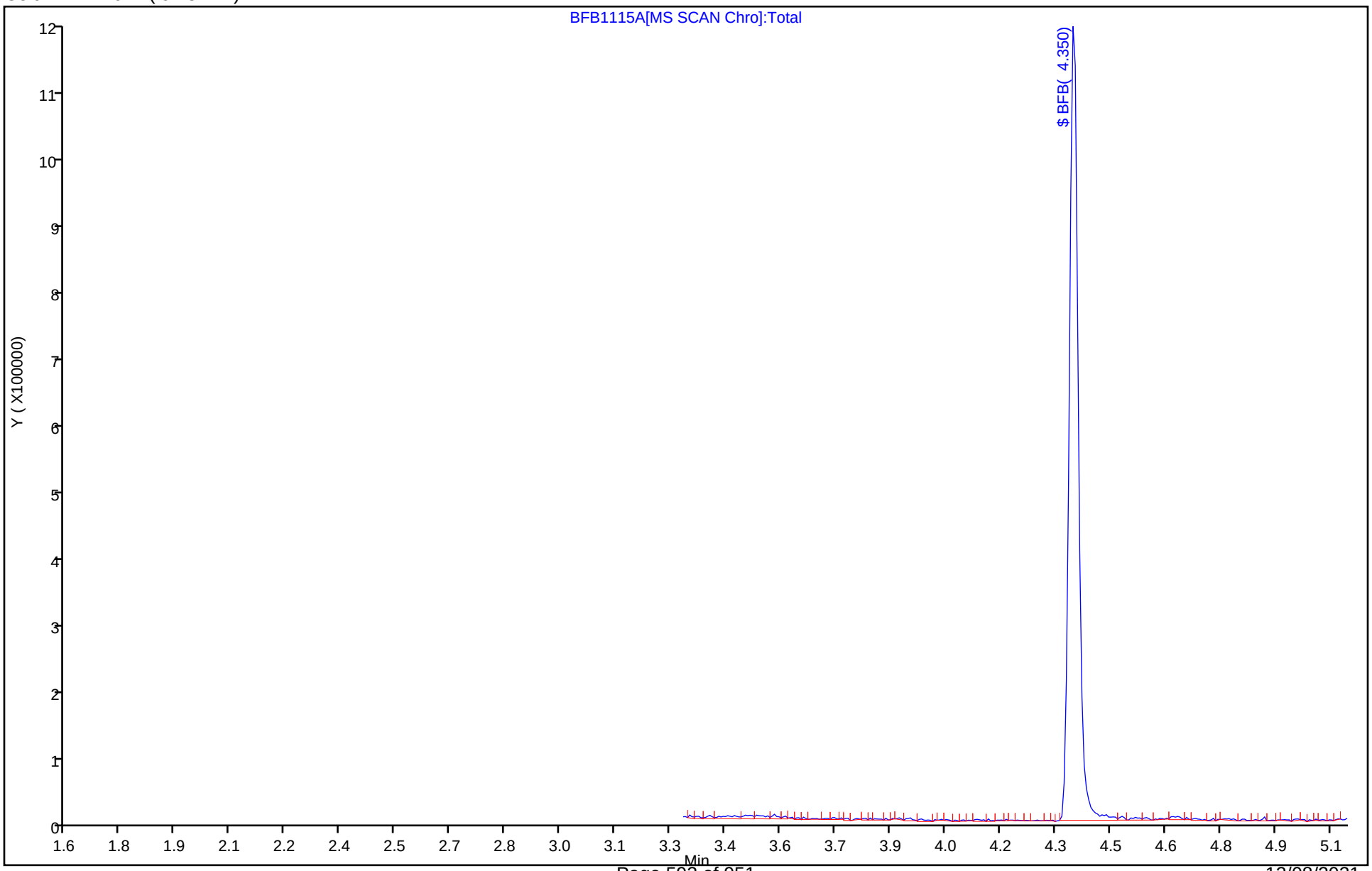
Report Date: 18-Jan-2021 09:28:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D

Injection Date:	15-Jan-2021 10:36:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\BFB1203.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Dec-2021 10:30:30 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: J211203A,BFBUX11,,43582
Operator ID: Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:54 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.344	4.344	0.000	0	827126	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

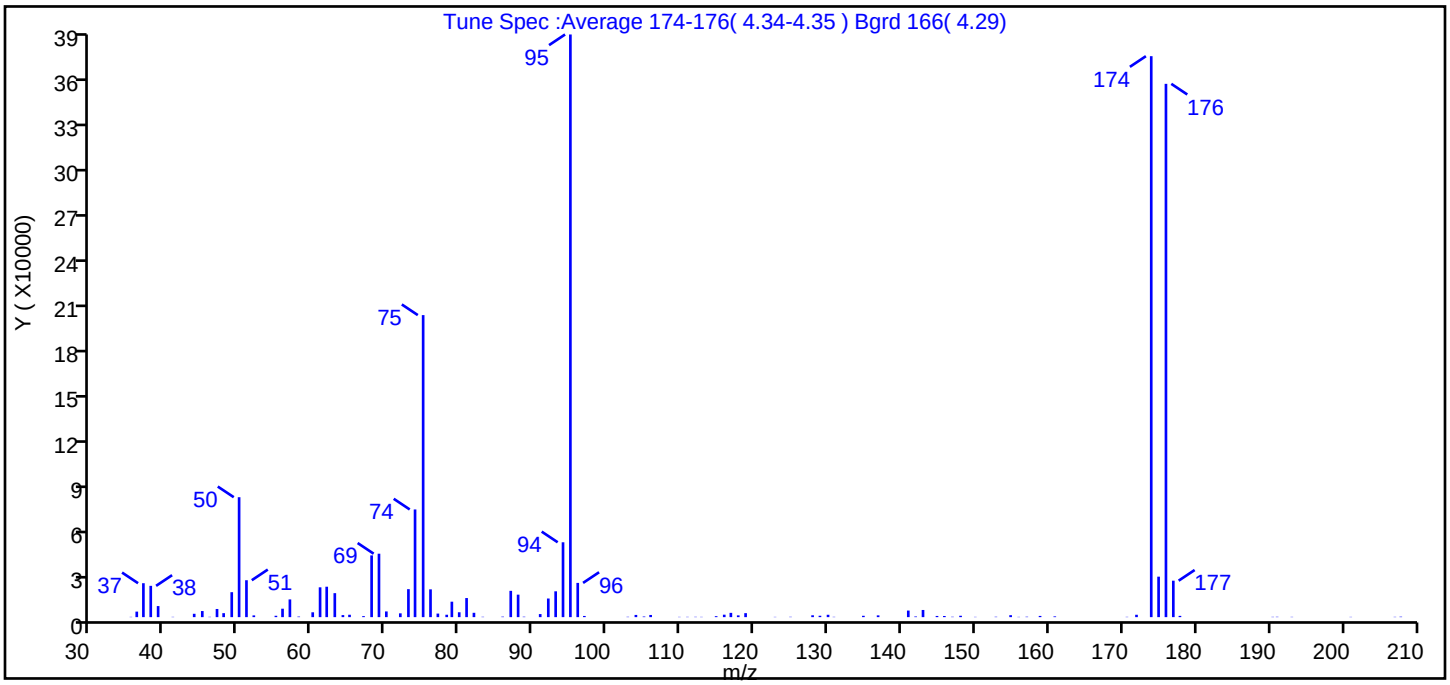
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\BFB1203.D
Injection Date: 03-Dec-2021 10:30:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.6
75	30 to 60% of m/z 95	51.8
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	96.3
175	5 to 9% of m/z 174	6.9 (7.2)
176	Greater than 95% but less than 101% of m/z 174	91.5 (95.1)
177	5 to 9% of m/z 176	6.3 (6.8)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\BFB1203.D\8260_11.rslt\spectra.d
Injection Date: 03-Dec-2021 10:30:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 166(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	181	67.00	660	96.00	22416	143.00	4694
36.00	3625	68.00	40424	97.00	775	145.00	776
37.00	22216	69.00	41544	103.00	231	146.00	746
38.00	20496	70.00	3744	104.00	1448	147.00	253
39.00	7249	72.00	2494	105.00	404	148.00	909
41.00	185	73.00	18328	106.00	1425	150.00	181
44.00	2199	74.00	70512	110.00	181	153.00	261
45.00	3992	75.00	197760	111.00	196	155.00	1284
46.00	204	76.00	18200	112.00	215	156.00	177
47.00	5345	77.00	2338	113.00	179	157.00	282
48.00	2607	78.00	1574	115.00	630	159.00	800
49.00	16344	79.00	10119	116.00	1609	161.00	492
50.00	78528	80.00	3190	117.00	2801	171.00	200
51.00	24168	81.00	12502	118.00	1156	172.00	1559
52.00	1147	82.00	2847	119.00	2616	174.00	367296
55.00	902	83.00	230	123.00	170	175.00	26504
56.00	5525	86.00	325	125.00	223	176.00	349184
57.00	11612	87.00	17224	128.00	1219	177.00	23872
58.00	370	88.00	14726	129.00	920	178.00	840
60.00	3177	89.00	285	130.00	1551	190.00	197
61.00	19528	91.00	2008	131.00	202	191.00	238
62.00	19920	92.00	12200	135.00	884	193.00	189
63.00	15706	93.00	16912	137.00	1161	201.00	173
64.00	1344	94.00	49016	141.00	4307	207.00	199
65.00	1576	95.00	381504	142.00	434	208.00	301

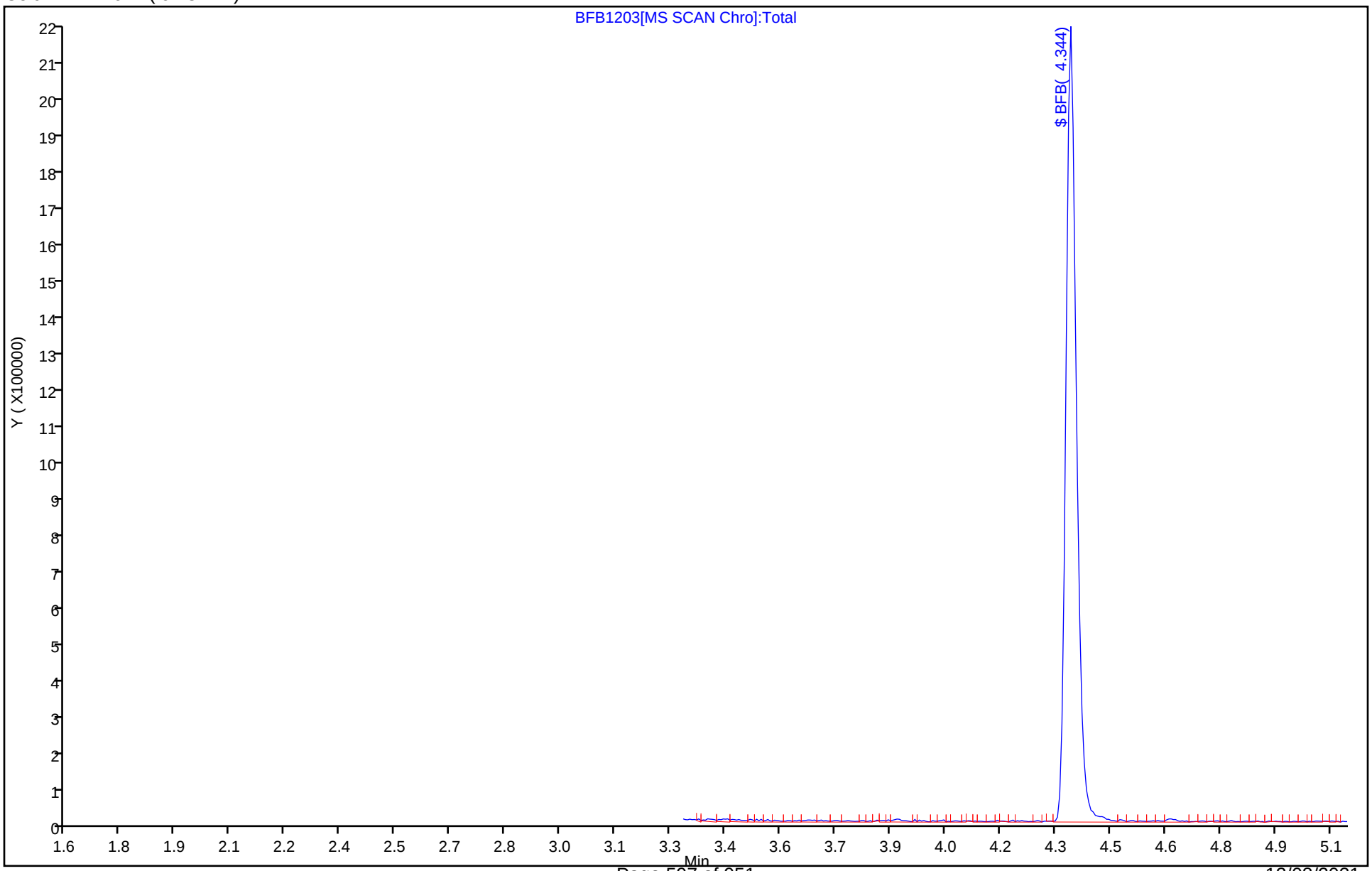
Report Date: 06-Dec-2021 07:53:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\BFB1203.D

Injection Date:	03-Dec-2021 10:30:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\BFB1206.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	06-Dec-2021 09:00:30	ALS Bottle#:	30	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211206A,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	07-Dec-2021 08:25:54	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1684				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.344	4.344	0.000	0	872962	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

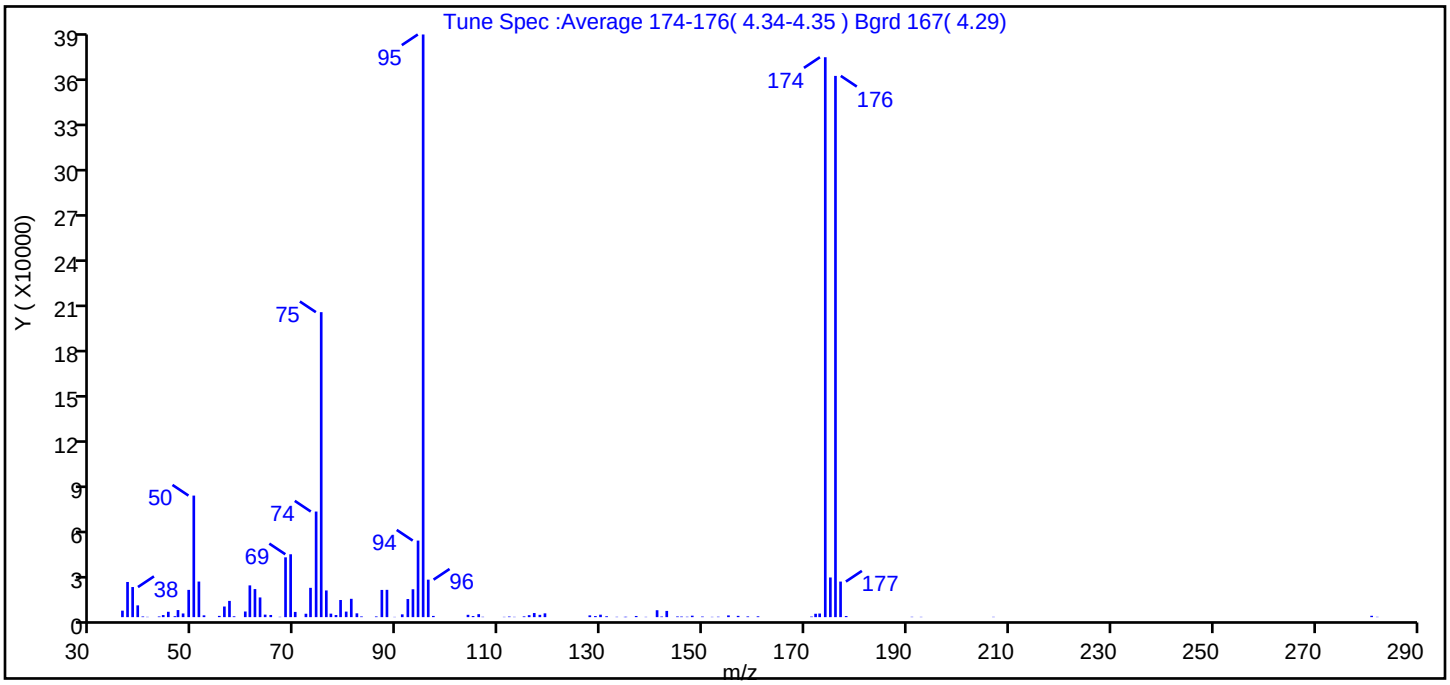
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\BFB1206.D
Injection Date: 06-Dec-2021 09:00:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.9
75	30 to 60% of m/z 95	52.3
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	96.1
175	5 to 9% of m/z 174	6.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	92.9 (96.7)
177	5 to 9% of m/z 176	6.1 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\BFB1206.D\8260_11.rslt\spectra.d
Injection Date: 06-Dec-2021 09:00:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 167(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4290	67.00	218	97.00	808	146.00	387
37.00	23256	68.00	39544	104.00	1544	147.00	277
38.00	19904	69.00	41576	105.00	724	148.00	960
39.00	7788	70.00	3458	106.00	1978	150.00	387
40.00	446	72.00	2250	107.00	240	152.00	194
41.00	199	73.00	19384	111.00	193	153.00	279
43.00	444	74.00	69832	112.00	413	155.00	1144
44.00	1381	75.00	201664	113.00	201	157.00	848
45.00	3545	76.00	17656	115.00	507	159.00	491
46.00	632	77.00	2319	116.00	1306	161.00	555
47.00	4687	78.00	1388	117.00	2721	171.00	382
48.00	2433	79.00	11340	118.00	1513	172.00	2242
49.00	18032	80.00	3675	119.00	2512	173.00	2391
50.00	80376	81.00	12119	128.00	1169	174.00	370240
51.00	23536	82.00	2517	129.00	719	175.00	26232
52.00	1188	83.00	465	130.00	1624	176.00	357888
55.00	828	86.00	474	131.00	587	177.00	23528
56.00	7032	87.00	17992	133.00	226	178.00	722
57.00	10740	88.00	18056	135.00	182	191.00	229
58.00	558	89.00	168	135.00	234	193.00	188
60.00	3734	91.00	1842	137.00	770	207.00	201
61.00	21000	92.00	11976	139.00	201	281.00	900
62.00	18560	93.00	18440	141.00	4571	282.00	203
63.00	13025	94.00	50624	142.00	415		
64.00	1666	95.00	385280	143.00	4117		
65.00	1432	96.00	24792	145.00	465		

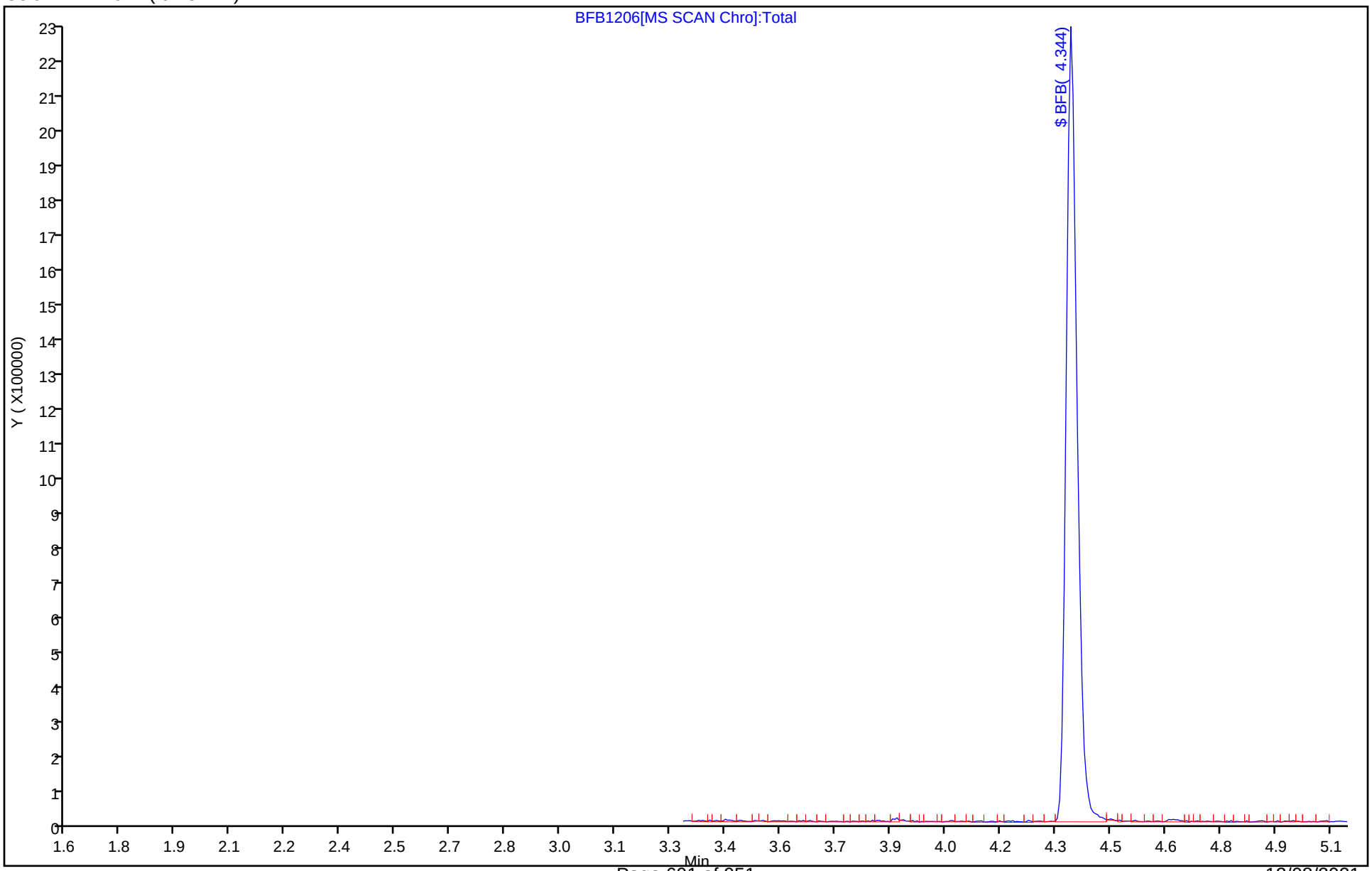
Report Date: 07-Dec-2021 08:25:54 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\BFB1206.D

Injection Date:	06-Dec-2021 09:00:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Mar-2021 07:33:30	ALS Bottle#:	22	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C210316A-IC,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Mar-2021 09:02:03	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1642				
First Level Reviewer: evansle		Date:	16-Mar-2021 09:13:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	12980962	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

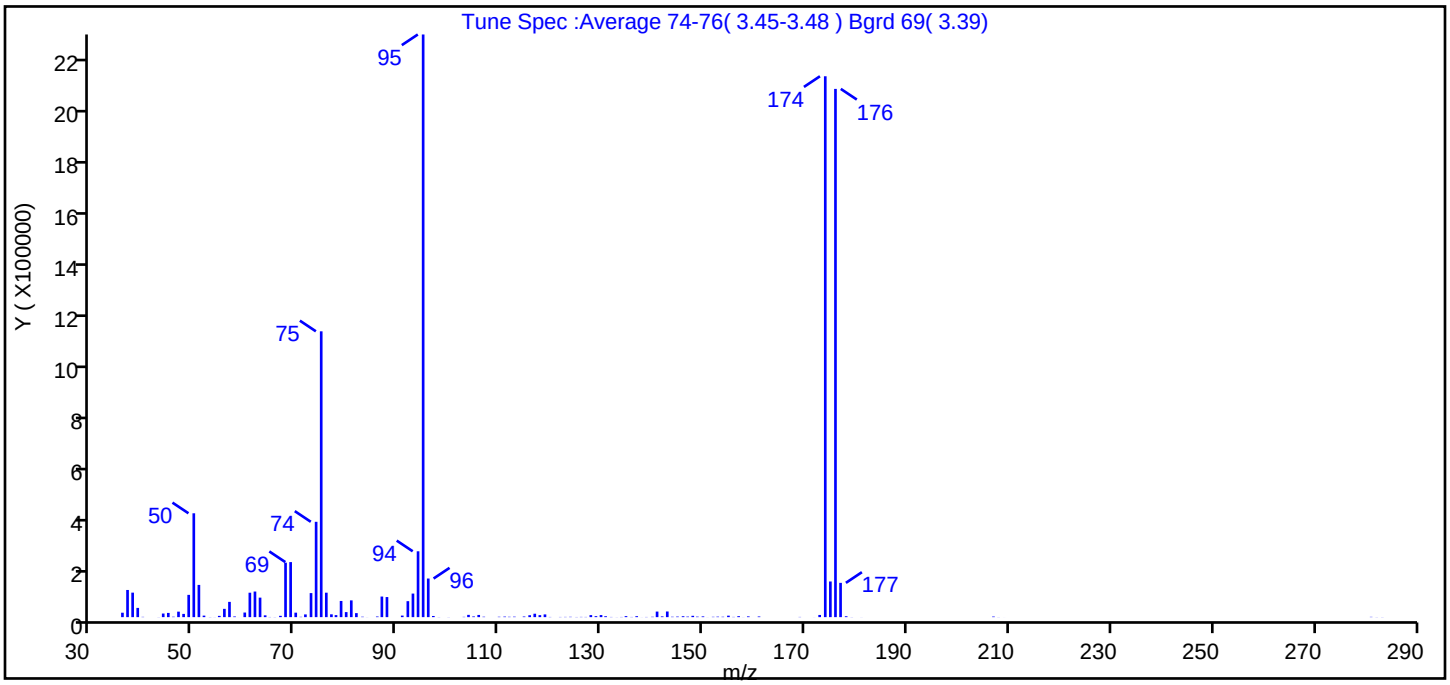
vmbfb_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D
Injection Date: 16-Mar-2021 07:33:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 22 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	92.8
175	5 to 9% of m/z 174	6.1 (6.6)
176	Greater than 95% but less than 101% of m/z 174	90.7 (97.7)
177	5 to 9% of m/z 176	5.9 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D\8260_15.rslt\spectra.d
Injection Date: 16-Mar-2021 07:33:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 69(3.39)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16880	71.00	1192	112.00	1398	147.00	2065
37.00	103512	72.00	10425	113.00	1810	148.00	5062
38.00	93368	73.00	91640	115.00	2423	149.00	1937
39.00	35200	74.00	363264	116.00	7263	150.00	2821
40.00	1066	75.00	1089024	117.00	13025	151.00	170
43.00	361	76.00	93176	118.00	7601	152.00	1293
44.00	13749	77.00	10749	119.00	10428	153.00	1876
45.00	16087	78.00	7751	120.00	739	154.00	1489
46.00	1615	79.00	61672	122.00	737	155.00	5638
47.00	20936	80.00	19224	123.00	917	156.00	889
48.00	12364	81.00	63848	124.00	1253	157.00	3652
49.00	84896	82.00	15314	125.00	632	158.00	202
50.00	395712	83.00	1583	126.00	938	159.00	2845
51.00	122808	84.00	213	127.00	784	161.00	2540
52.00	5792	86.00	2435	128.00	7717	169.00	809
53.00	502	87.00	78456	129.00	3744	172.00	179
54.00	245	88.00	76536	130.00	7922	173.00	8353
55.00	4829	91.00	5917	131.00	3474	174.00	2060800
56.00	31600	92.00	60880	132.00	744	175.00	135872
57.00	58176	93.00	89824	133.00	288	176.00	2012672
58.00	2588	94.00	250944	134.00	724	177.00	130672
59.00	93	95.00	2220032	135.00	3865	178.00	3355
60.00	17568	96.00	147136	136.00	743	179.00	386
61.00	93088	97.00	4411	137.00	3697	181.00	204
62.00	97576	98.00	401	138.00	176	207.00	2206
63.00	74344	100.00	351	139.00	728	208.00	343
64.00	6883	103.00	1109	140.00	1437	209.00	84
65.00	642	104.00	8683	141.00	21232	281.00	1098
66.00	418	105.00	2675	142.00	2849	282.00	371
67.00	4988	106.00	8403	143.00	21520	283.00	376
68.00	207552	107.00	1621	144.00	1519		
69.00	209728	110.00	1489	145.00	2150		
70.00	17056	111.00	2088	146.00	3420		

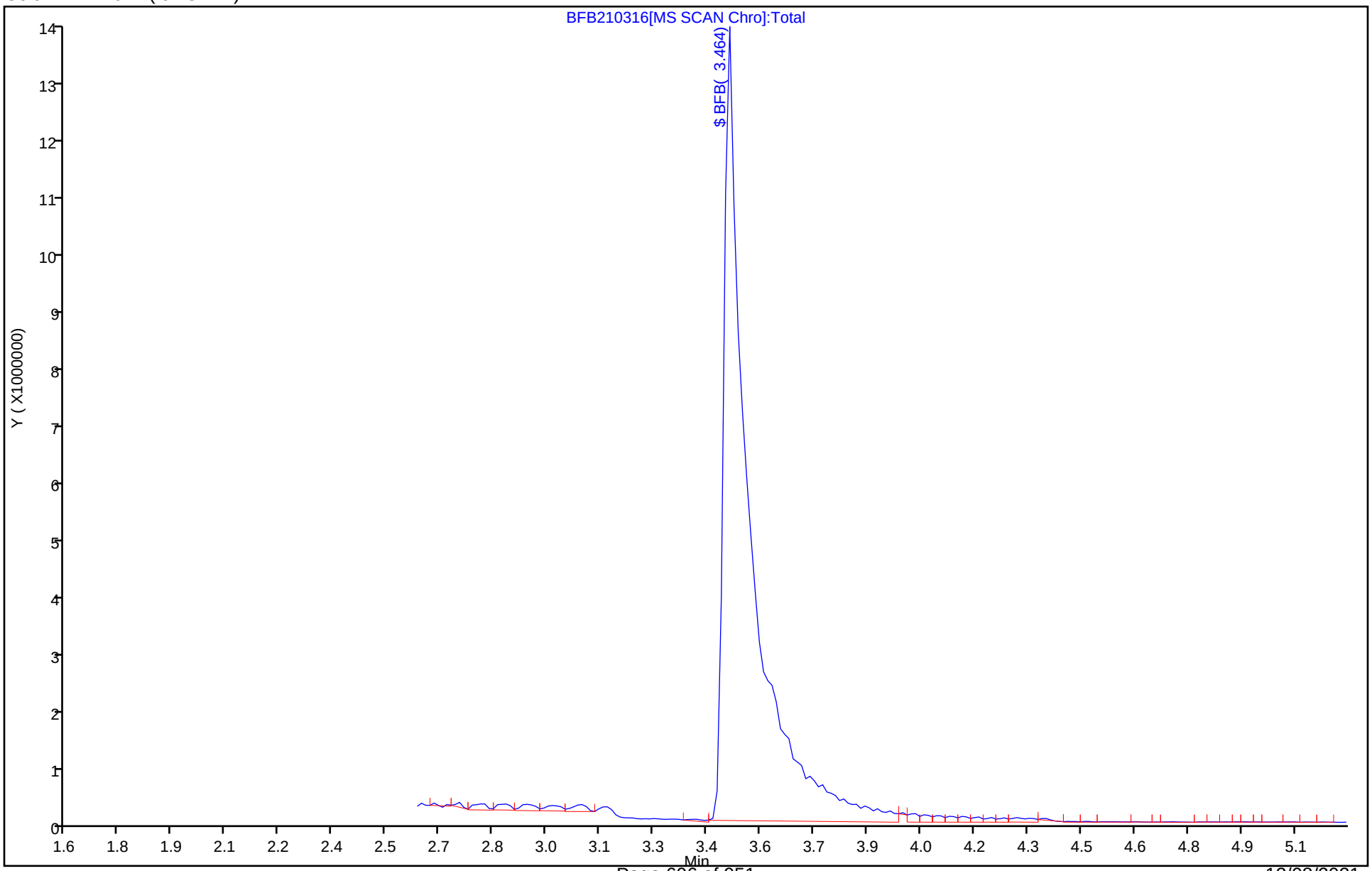
Report Date: 18-Mar-2021 09:02:03 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\BFB210316.D

Injection Date:	16-Mar-2021 07:33:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\BFB1203.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Dec-2021 10:32:30	ALS Bottle#:	31	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	C211203A,BFBUX15,,43582				
Operator ID:		Instrument ID:	A3UX15		
Method:	\\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	06-Dec-2021 12:55:17	Calib Date:	16-Mar-2021 13:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1652				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.464	3.464	0.000	0	14680587	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

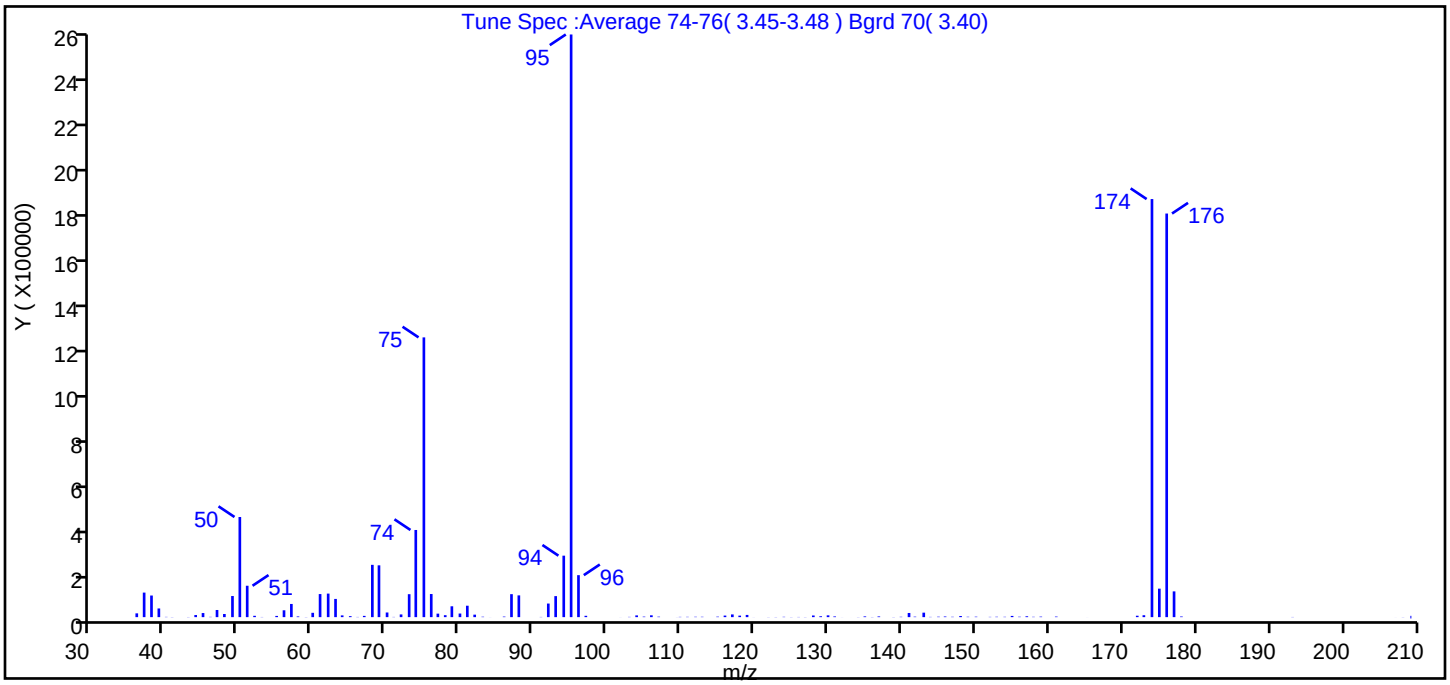
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\BFB1203.D
Injection Date: 03-Dec-2021 10:32:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 31 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	48.0
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	71.8
175	5 to 9% of m/z 174	4.9 (6.8)
176	Greater than 95% but less than 101% of m/z 174	69.3 (96.5)
177	5 to 9% of m/z 176	4.4 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\BFB1203.D\8260_15.rslt\spectra.d
Injection Date: 03-Dec-2021 10:32:30
Spectrum: Tune Spec :Average 74-76(3.45-3.48) Bgrd 70(3.40)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	16768	69.00	229184	107.00	2032	142.00	2118
37.00	108592	70.00	20560	110.00	250	143.00	19832
38.00	95632	71.00	938	110.00	1182	144.00	1066
39.00	38424	72.00	11999	111.00	1353	145.00	1925
40.00	1136	73.00	101536	112.00	1634	146.00	2847
41.00	613	74.00	385536	113.00	1601	147.00	1544
43.00	659	75.00	1237504	115.00	2133	148.00	4942
44.00	9286	76.00	102288	116.00	6922	149.00	1639
45.00	18128	77.00	15497	117.00	12009	150.00	2010
46.00	1202	78.00	8623	118.00	6696	152.00	1160
47.00	31624	79.00	48048	119.00	9796	153.00	1704
48.00	13922	80.00	15994	120.00	212	154.00	1461
49.00	93416	81.00	50536	122.00	463	155.00	5408
50.00	443008	82.00	11000	123.00	640	156.00	1875
51.00	138880	83.00	1812	124.00	1437	157.00	3837
52.00	5914	84.00	201	125.00	521	158.00	1482
53.00	752	86.00	2403	126.00	818	159.00	2283
55.00	5421	87.00	101656	127.00	573	161.00	2496
56.00	30344	88.00	96264	128.00	7302	165.00	114
57.00	58320	91.00	891	129.00	3912	172.00	6253
58.00	3096	92.00	60144	130.00	7958	173.00	8443
59.00	612	93.00	93024	131.00	3088	174.00	1849344
60.00	19176	94.00	271936	132.00	183	175.00	126008
61.00	102088	95.00	2577408	133.00	37	176.00	1785344
62.00	104176	96.00	185728	134.00	474	177.00	113944
63.00	80576	97.00	5933	135.00	3255	178.00	2810
64.00	7724	102.00	193	136.00	643	193.00	787
65.00	4336	103.00	1108	137.00	3108	207.00	128
66.00	862	104.00	7726	139.00	580	208.00	448
67.00	5600	105.00	2282	140.00	1477	209.00	2
68.00	231360	106.00	8124	141.00	18432		

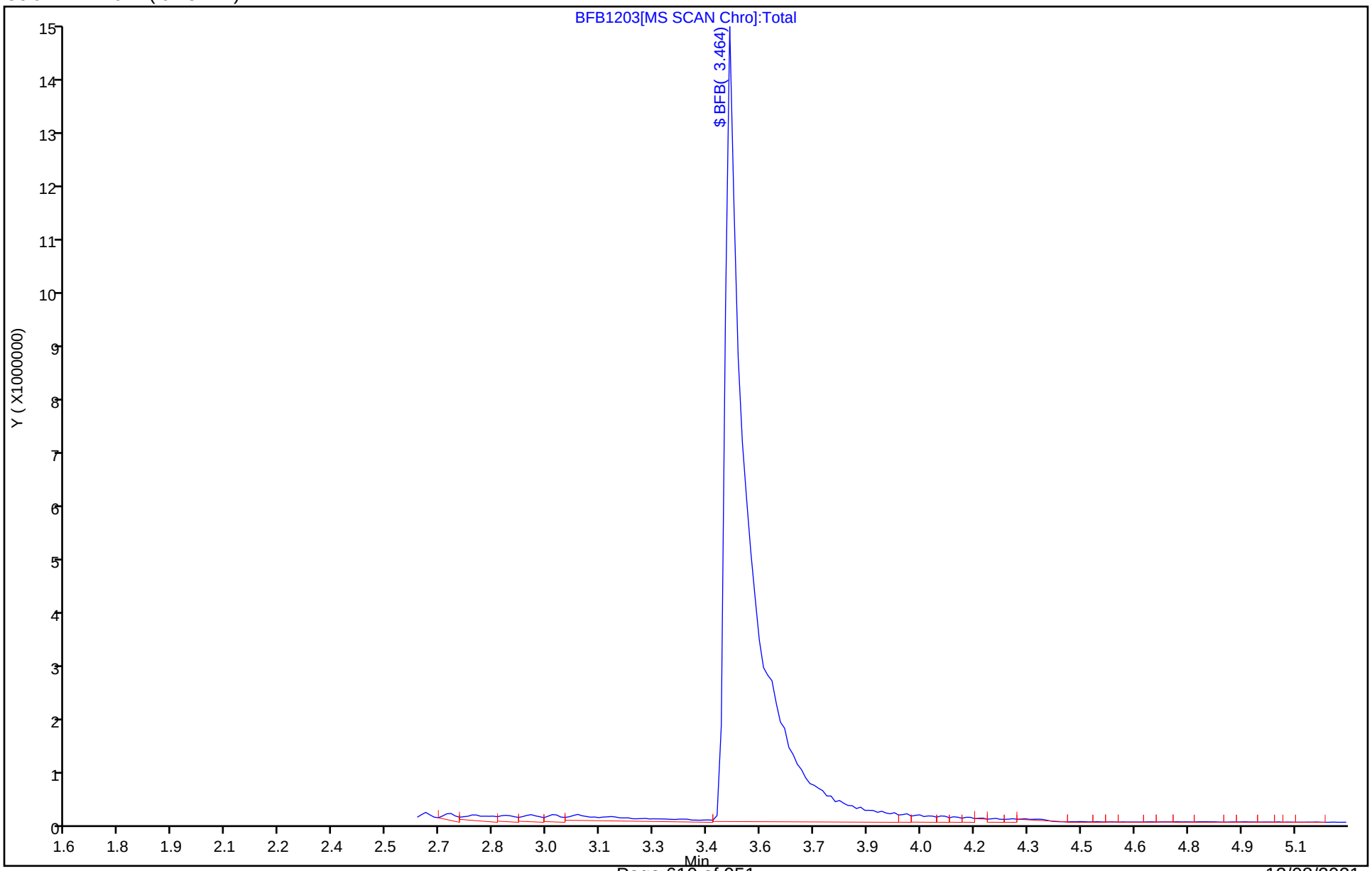
Report Date: 06-Dec-2021 12:55:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\BFB1203.D

Injection Date:	03-Dec-2021 10:32:30	Instrument ID:	A3UX15	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-515506/6

Matrix: Water Lab File ID: UXJ2924.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	78		56-136
2037-26-5	Toluene-d8 (Surr)	111		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2924.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Dec-2021 12:45:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-006
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 03-Dec-2021 13:19:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1859911	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	1019887	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	503240	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	443810	20.0	18.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	560835	20.0	20.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1605331	20.0	22.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	394376	20.0	15.5	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.139					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.293					ND	
14 Vinyl chloride	62		1.364					ND	
13 Butadiene	54		1.376					ND	
15 Bromomethane	94		1.612					ND	7
16 Chloroethane	64		1.671					ND	
17 Dichlorofluoromethane	67		1.825					ND	
18 Trichlorofluoromethane	101		1.825					ND	
19 Ethyl ether	59		2.062					ND	
20 Acrolein	56		2.157					ND	
21 1,1-Dichloroethene	96		2.239					ND	
23 112TCTFE	151		2.299					ND	
24 Acetone	43		2.299					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.370					ND	
26 Carbon disulfide	76		2.417					ND	
27 Acetonitrile	41		2.523					ND	
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.571					ND	
30 Methylene Chloride	84	2.654	2.642	0.012	87	9250		0.3758	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.843					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.878					ND	
34 Methyl tert-butyl ether	73		2.890					ND	
35 Hexane	86		3.115					ND	
36 1,1-Dichloroethane	63		3.222					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.316					ND	
39 Isopropyl ether	87		3.316					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
42 2,2-Dichloropropane	97		3.707					ND	
41 cis-1,2-Dichloroethene	96		3.707					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.778					ND	U
45 Ethyl acetate	43		3.789					ND	
47 Methacrylonitrile	41		3.908					ND	
46 Chlorobromomethane	128		3.908					ND	
49 Tetrahydrofuran	42		3.955					ND	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.133					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.275					ND	
52 Carbon tetrachloride	117		4.275					ND	
54 Isobutyl alcohol	41		4.381					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.559					ND	
58 n-Heptane	100		4.677					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.985					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.174					ND	
64 Dibromomethane	93		5.269					ND	
65 Methyl methacrylate	41		5.280					ND	
66 1,4-Dioxane	88		5.304					ND	
67 Dichlorobromomethane	83		5.399					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.789					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.931					ND	
72 Toluene	91		6.085					ND	7
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.890					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.458					ND	
87 m-Xylene & p-Xylene	106		7.564					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.955					ND	
90 Bromoform	173		8.109					ND	
91 Isopropylbenzene	105		8.286					ND	
93 Cyclohexanone	55		8.369					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
95 Bromobenzene	156		8.570					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
96 1,2,3-Trichloropropane	110		8.606					ND	
97 trans-1,4-Dichloro-2-butene	53		8.617					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.866					ND	
102 Pentachloroethane	167		9.173					ND	
103 tert-Butylbenzene	119		9.174					ND	
104 1,2,4-Trimethylbenzene	105		9.221					ND	
105 sec-Butylbenzene	105		9.387					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.529					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
112 1,2-Dichlorobenzene	146		9.919					ND	
111 n-Butylbenzene	91		9.931					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180	10.901	10.901	0.000	92	3235		0.1348	
116 1,2,4-Trichlorobenzene	180		11.505					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	7
119 1,2,3-Trichlorobenzene	180		11.990					ND	
120 2-Methylnaphthalene	142	12.865	12.877	-0.012	94	28610		0.7577	
127 1-Methylnaphthalene	142	13.067	13.066	0.001	91	31498		0.9167	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

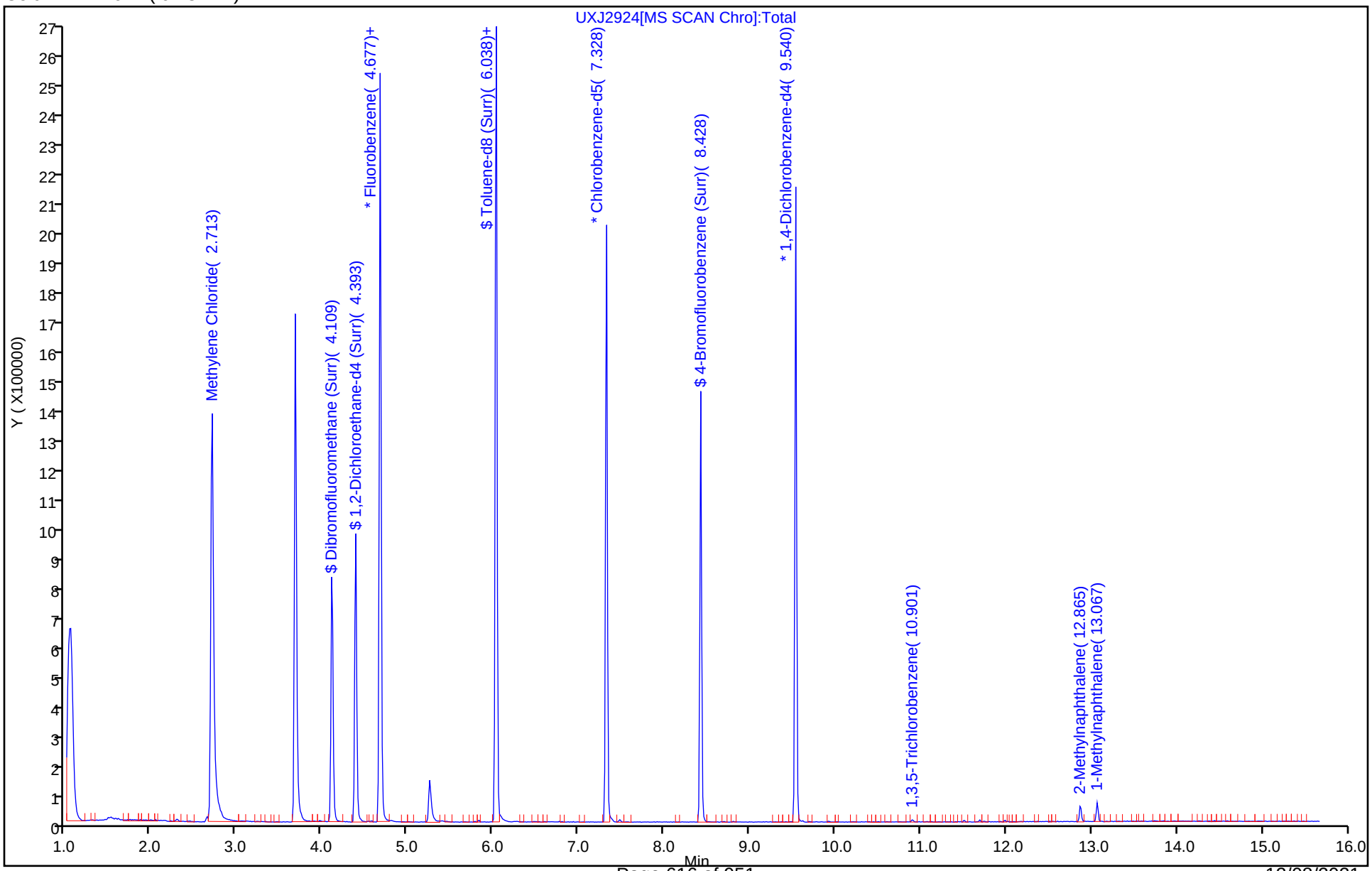
Report Date: 06-Dec-2021 07:54:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2924.D

Injection Date:	03-Dec-2021 12:45:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2924.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Dec-2021 12:45:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-006
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 03-Dec-2021 13:19:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.66
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.33
$ 6 Toluene-d8 (Surr)	20.0	22.1	110.65
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.5	77.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-515508/7

Matrix: Water Lab File ID: UXC1294.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 12:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		62-137
460-00-4	4-Bromofluorobenzene (Surr)	75		56-136
2037-26-5	Toluene-d8 (Surr)	88		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1294.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Dec-2021 12:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-007
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:21:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2095663	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1450454	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	97	595759	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	461142	10.0	9.41	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.717	4.717	-0.001	100	651629	10.0	11.8	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1571504	10.0	8.84	
$ 7 4-Bromofluorobenzene (Surr)	95	8.772	8.760	0.012	89	449821	10.0	7.48	
9 Dichlorodifluoromethane	85		1.432					ND	
10 Chloromethane	50		1.574					ND	
11 Vinyl chloride	62		1.669					ND	
12 Butadiene	54		1.669					ND	
13 Bromomethane	94		1.930					ND	
14 Chloroethane	64		2.001					ND	
15 Dichlorofluoromethane	67		2.155					ND	
16 Trichlorofluoromethane	101		2.203					ND	
17 Ethyl ether	59		2.416					ND	
18 Acrolein	56		2.523					ND	
19 1,1-Dichloroethene	96		2.606					ND	
20 112TCTFE	151		2.630					ND	
21 Acetone	58	2.665	2.653	0.012	96	4638		1.09	
22 Iodomethane	142		2.736					ND	
24 Carbon disulfide	76		2.796					ND	7
23 Methylal	45		2.872					ND	
25 Acetonitrile	41		2.890					ND	
26 3-Chloro-1-propene	76		2.902					ND	
27 Methyl acetate	43		2.914					ND	
28 Methylene Chloride	84	3.009	2.997	0.012	96	19022		0.3374	
29 2-Methyl-2-propanol	59		3.080					ND	U
30 Acrylonitrile	53		3.211					ND	
31 Methyl tert-butyl ether	73		3.222					ND	
32 trans-1,2-Dichloroethene	96		3.222					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	86		3.436					ND	
33 Chlorodifluoromethane TIC	51		3.441					ND	
35 1,1-Dichloroethane	63		3.566					ND	
36 Vinyl acetate	43		3.602					ND	
37 Isopropyl ether	87		3.614					ND	
38 2-Chloro-1,3-butadiene	53		3.649					ND	
39 Tert-butyl ethyl ether	59		3.910					ND	
42 2,2-Dichloropropane	97		4.041					ND	
41 cis-1,2-Dichloroethene	96		4.041					ND	
40 2-Butanone (MEK)	72		4.053					ND	
43 Ethyl acetate	43		4.100					ND	
44 Propionitrile	54		4.112					ND	U
45 Methacrylonitrile	41		4.230					ND	
46 Chlorobromomethane	128		4.242					ND	
47 Tetrahydrofuran	42		4.290					ND	
48 Chloroform	83		4.302					ND	
49 1,1,1-Trichloroethane	97		4.456					ND	
50 Cyclohexane	56		4.503					ND	
52 Carbon tetrachloride	117		4.598					ND	
51 1,1-Dichloropropene	75		4.598					ND	
53 Isobutyl alcohol	41		4.669					ND	
55 Benzene	78		4.764					ND	
56 1,2-Dichloroethane	62		4.788					ND	
54 Isooctane	57	4.823	4.823	0.000	44	3794		0.0321	
57 Tert-amyl methyl ether	73		4.847					ND	
58 n-Heptane	100		4.966					ND	
59 n-Butanol	56		5.226					ND	
60 Trichloroethene	130		5.298					ND	
61 Ethyl acrylate	55		5.381					ND	
62 Methylcyclohexane	83		5.464					ND	
63 1,2-Dichloropropane	63		5.499					ND	
64 Methyl methacrylate	41		5.570					ND	
66 1,4-Dioxane	88		5.606					ND	
65 Dibromomethane	93		5.606					ND	
67 Dichlorobromomethane	83		5.725					ND	
68 2-Nitropropane	41		5.926					ND	
69 2-Chloroethyl vinyl ether	63		5.974					ND	
70 cis-1,3-Dichloropropene	75		6.116					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.246					ND	
72 Toluene	91		6.412					ND	7
73 trans-1,3-Dichloropropene	75		6.602					ND	
74 Ethyl methacrylate	69		6.661					ND	
75 1,1,2-Trichloroethane	97		6.768					ND	
76 Tetrachloroethene	164		6.899					ND	
77 1,3-Dichloropropane	76		6.922					ND	
78 2-Hexanone	43		6.982					ND	
79 n-Butyl acetate	43		7.088					ND	
80 Chlorodibromomethane	129		7.124					ND	
82 Ethylene Dibromide	107		7.242					ND	
81 Tetrahydrothiophene	60		7.292					ND	
83 1-Chlorohexane	91		7.646					ND	7
84 Chlorobenzene	112		7.681					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.764					ND	
86 Ethylbenzene	106		7.776					ND	
87 m-Xylene & p-Xylene	91		7.895					ND	
88 o-Xylene	106		8.262					ND	
89 Styrene	104		8.274					ND	
90 Bromoform	173		8.464					ND	
91 Isopropylbenzene	105		8.618					ND	
92 Cyclohexanone	55		8.713					ND	
93 1,4-Dichlorobutane	55		8.881					ND	
94 1,1,2,2-Tetrachloroethane	83		8.903					ND	
95 Bromobenzene	156		8.915					ND	
96 1,2,3-Trichloropropane	110		8.950					ND	
97 trans-1,4-Dichloro-2-butene	53		8.962					ND	
98 N-Propylbenzene	120		9.009					ND	
99 2-Chlorotoluene	126		9.104					ND	
101 1,3,5-Trimethylbenzene	105		9.175					ND	
102 4-Chlorotoluene	91		9.199					ND	
100 3-Ethyltoluene	105		9.324					ND	
104 tert-Butylbenzene	119		9.496					ND	
105 Pentachloroethane	167		9.519					ND	
106 1,2,4-Trimethylbenzene	105		9.543					ND	
103 2-Ethyltoluene	105		9.609					ND	
107 sec-Butylbenzene	105		9.709					ND	
108 1,3-Dichlorobenzene	146		9.828					ND	
109 4-Isopropyltoluene	119		9.851					ND	
110 1,4-Dichlorobenzene	146		9.911					ND	
111 1,2,3-Trimethylbenzene	105		9.958					ND	
112 Benzyl chloride	126		10.053					ND	
113 n-Butylbenzene	91		10.255					ND	
114 1,2-Dichlorobenzene	146		10.278					ND	
115 1,2-Dibromo-3-Chloropropane	157		11.061					ND	
116 1,3,5-Trichlorobenzene	180		11.262					ND	
117 1,2,4-Trichlorobenzene	180		11.879					ND	
118 Hexachlorobutadiene	225		12.045					ND	
119 Naphthalene	128		12.128					ND	
120 1,2,3-Trichlorobenzene	180		12.365					ND	
121 2-Methylnaphthalene	142	13.349	13.361	-0.012	89	7891		0.1104	
122 1-Methylnaphthalene	142	13.599	13.599	0.000	86	8770		0.1377	
123 Epichlorohydrin	1		0.000					ND	
125 Propene oxide	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Total BTEX	1		0.000					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

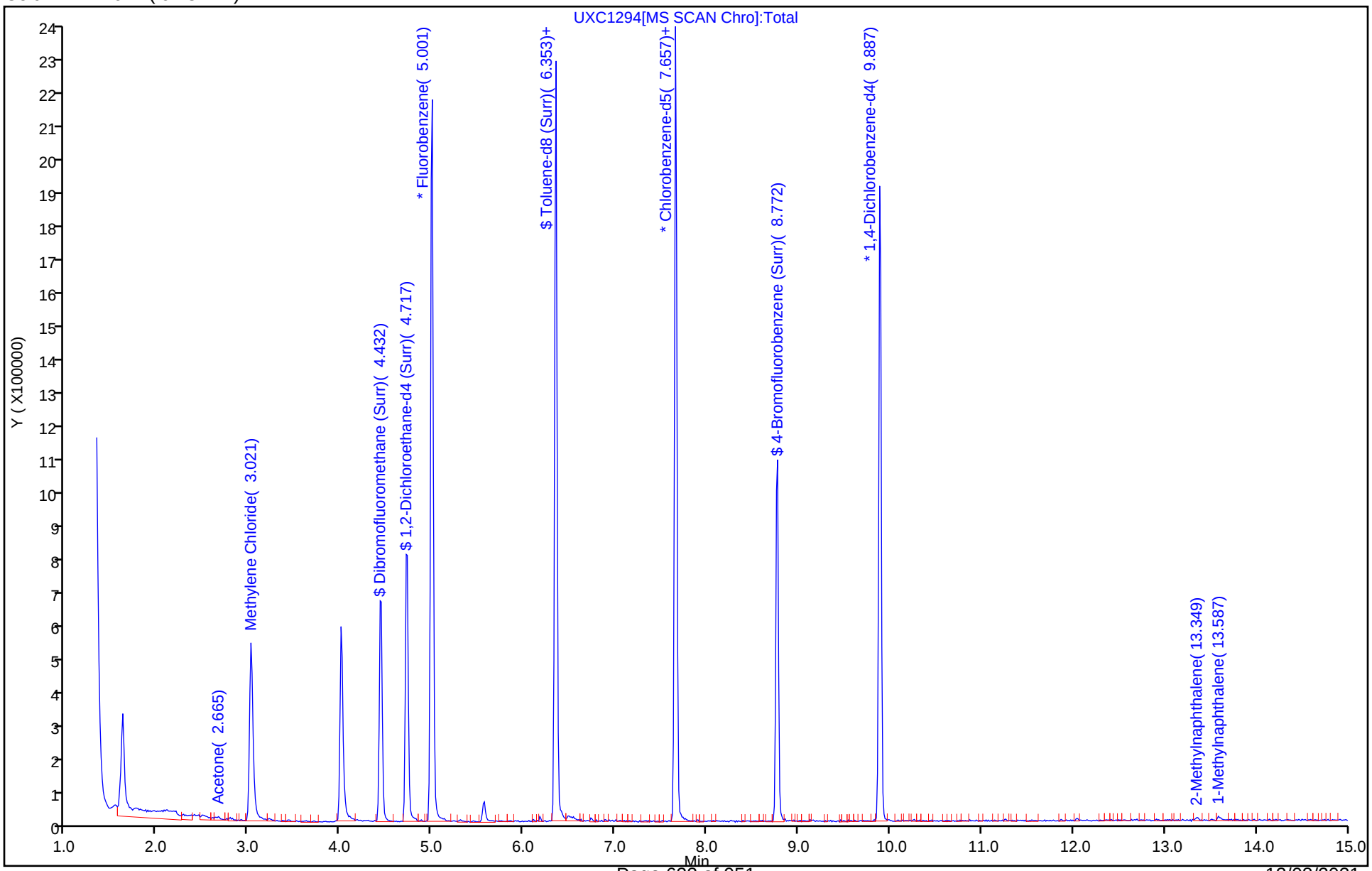
Report Date: 06-Dec-2021 12:55:29 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1294.D

Injection Date:	03-Dec-2021 12:47:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1294.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Dec-2021 12:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-007
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:21:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.41	94.14
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.8	118.09
$ 6 Toluene-d8 (Surr)	10.0	8.84	88.41
$ 7 4-Bromofluorobenzene (Surr)	10.0	7.48	74.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-515635/6

Matrix: Water Lab File ID: UXJ2955.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 11:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	114		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2955.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Dec-2021 11:36:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-006
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 06-Dec-2021 12:00:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1954161	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1079078	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	556901	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	463240	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	589185	20.0	20.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1743098	20.0	22.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	453846	20.0	16.9	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.151					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.304					ND	
14 Vinyl chloride	62		1.364					ND	
13 Butadiene	54		1.364					ND	
15 Bromomethane	94		1.612					ND	
16 Chloroethane	64		1.659					ND	
17 Dichlorofluoromethane	67		1.813					ND	
18 Trichlorofluoromethane	101		1.837					ND	
19 Ethyl ether	59		2.074					ND	
20 Acrolein	56		2.168					ND	
21 1,1-Dichloroethene	96		2.251					ND	
23 112TCTFE	151		2.287					ND	
24 Acetone	43		2.298					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.369					ND	
26 Carbon disulfide	76		2.429					ND	7
27 Acetonitrile	41		2.523					ND	
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.582					ND	
30 Methylene Chloride	84	2.642	2.653	-0.011	88	5702		0.2205	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.855					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.890					ND	
34 Methyl tert-butyl ether	73		2.902					ND	
35 Hexane	86		3.127					ND	
36 1,1-Dichloroethane	63		3.233					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.316					ND	
39 Isopropyl ether	87		3.316					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
42 2,2-Dichloropropane	97		3.718					ND	
41 cis-1,2-Dichloroethene	96		3.718					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.778					ND	U
45 Ethyl acetate	43		3.789					ND	
47 Methacrylonitrile	41		3.908					ND	
46 Chlorobromomethane	128		3.908					ND	
49 Tetrahydrofuran	42		3.967					ND	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.133					ND	
51 Cyclohexane	56		4.192					ND	
53 1,1-Dichloropropene	75		4.275					ND	
52 Carbon tetrachloride	117		4.275					ND	
54 Isobutyl alcohol	41		4.393					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.558					ND	
58 n-Heptane	100		4.689					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.985					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.162					ND	
63 1,2-Dichloropropane	63		5.174					ND	
64 Dibromomethane	93		5.268					ND	
65 Methyl methacrylate	41		5.280					ND	
66 1,4-Dioxane	88		5.304					ND	
67 Dichlorobromomethane	83		5.410					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.801					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.943					ND	
72 Toluene	91		6.097					ND	
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.901					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351				ND		
85 1,1,1,2-Tetrachloroethane	131		7.434				ND		
86 Ethylbenzene	106		7.458				ND		
87 m-Xylene & p-Xylene	106		7.576				ND		
89 o-Xylene	106		7.943				ND		
88 Styrene	104		7.955				ND		
90 Bromoform	173		8.108				ND		
91 Isopropylbenzene	105		8.298				ND		
93 Cyclohexanone	55		8.369				ND		
92 1,4-Dichlorobutane	55		8.381				ND		
95 Bromobenzene	156		8.570				ND		
94 1,1,2,2-Tetrachloroethane	83		8.570				ND		
96 1,2,3-Trichloropropane	110		8.605				ND		
97 trans-1,4-Dichloro-2-butene	53		8.629				ND		
98 N-Propylbenzene	120		8.688				ND		
99 2-Chlorotoluene	126		8.759				ND		
100 1,3,5-Trimethylbenzene	105		8.854				ND		
101 4-Chlorotoluene	126		8.866				ND		
102 Pentachloroethane	167		9.173				ND		
103 tert-Butylbenzene	119		9.173				ND		
104 1,2,4-Trimethylbenzene	105		9.221				ND		
105 sec-Butylbenzene	105		9.386				ND		
106 1,3-Dichlorobenzene	146		9.481				ND		
107 4-Isopropyltoluene	119		9.528				ND		
108 1,4-Dichlorobenzene	146		9.564				ND		
109 1,2,3-Trimethylbenzene	105		9.623				ND		
110 Benzyl chloride	126		9.694				ND		
112 1,2-Dichlorobenzene	146		9.919				ND		
111 n-Butylbenzene	91		9.931				ND		
113 1,3-Diethylbenzene TIC	1		10.000				ND		
114 1,2-Dibromo-3-Chloropropane	157		10.688				ND		
115 1,3,5-Trichlorobenzene	180		10.901				ND		U
116 1,2,4-Trichlorobenzene	180		11.504				ND		
117 Hexachlorobutadiene	225		11.694				ND		
118 Naphthalene	128		11.741				ND		7
119 1,2,3-Trichlorobenzene	180		11.990				ND		U
120 2-Methylnaphthalene	142	12.877	12.877	0.000	96	41967		1.00	
127 1-Methylnaphthalene	142	13.067	13.066	0.001	94	43725		1.15	
121 Epichlorohydrin	1		-0.500				ND		
122 Ethylene oxide	1		-0.500				ND		
123 Propene oxide	1		-0.500				ND		
124 3-Ethyltoluene	1		-0.500				ND		
125 2-Ethyltoluene	1		-0.500				ND		
S 129 Total BTEX	1		-0.500				ND		
S 128 Trihalomethanes, Total	1		-0.500				ND		
S 130 1,2-Dichloroethene, Total	96		0.640				ND		
S 131 1,3-Dichloropropene, Total	75		6.260				ND		
S 132 Xylenes, Total	106		16.030				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

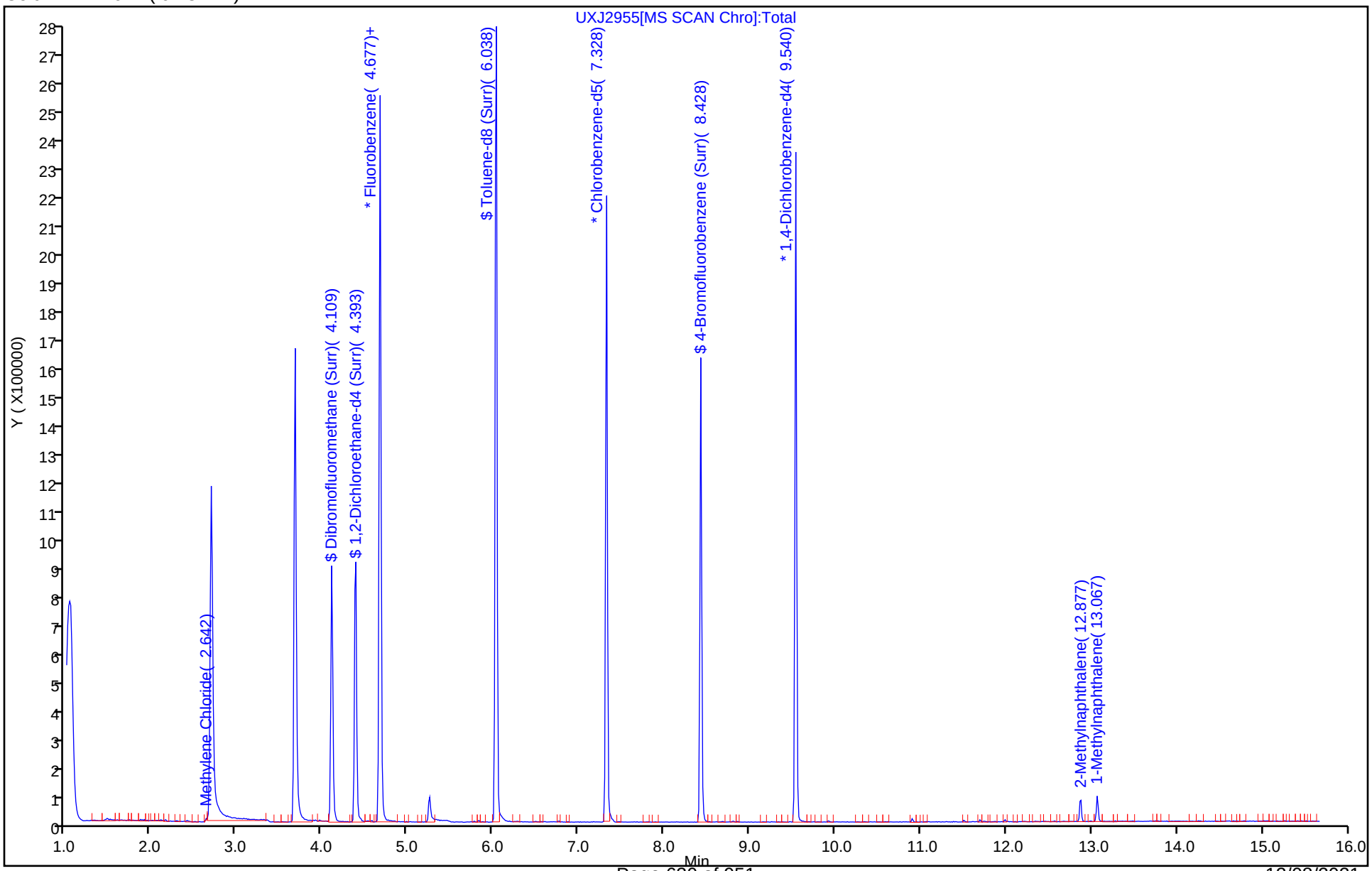
Report Date: 07-Dec-2021 08:26:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2955.D

Injection Date:	06-Dec-2021 11:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2955.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Dec-2021 11:36:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-006
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 06-Dec-2021 12:00:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.04
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.32
$ 6 Toluene-d8 (Surr)	20.0	22.7	113.55
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.9	84.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-515506/4

Matrix: Water Lab File ID: UXJ2920.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 11:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.08		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.97		1.0	0.46
127-18-4	Tetrachloroethene	10.4		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.51
79-01-6	Trichloroethene	8.50		1.0	0.44
75-01-4	Vinyl chloride	10.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	114		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2920.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Dec-2021 11:16:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-004
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1997890	20.0	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1124783	20.0	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	644744	20.0	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	467072	20.0	18.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	600017	20.0	20.8	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1821137	20.0	22.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	503484	20.0	18.0	
	10 Dichlorodifluoromethane	85	1.139	1.139	0.000	100	194458	10.0	7.35	
	12 Chloromethane	50	1.293	1.293	0.000	99	268065	10.0	12.9	
	14 Vinyl chloride	62	1.352	1.364	-0.012	98	260528	10.0	10.5	
	13 Butadiene	54	1.364	1.376	-0.012	95	285571	10.0	13.0	
	15 Bromomethane	94	1.612	1.612	0.000	91	159134	10.0	8.91	
	16 Chloroethane	64	1.648	1.671	-0.023	99	172198	10.0	11.7	
	17 Dichlorofluoromethane	67	1.813	1.825	-0.012	97	370857	10.0	10.2	
	18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	337666	10.0	7.96	
	19 Ethyl ether	59	2.062	2.062	0.000	93	270259	10.0	14.3	
	20 Acrolein	56	2.157	2.157	-0.001	99	148466	50.0	203.4	E
	21 1,1-Dichloroethene	96	2.239	2.239	0.000	97	217557	10.0	9.08	
	23 112TCTFE	151	2.287	2.299	-0.012	93	146982	10.0	8.04	
	24 Acetone	43	2.299	2.299	-0.001	100	259706	20.0	38.2	
	25 Iodomethane	142	2.370	2.370	0.000	99	371586	10.0	8.67	
	26 Carbon disulfide	76	2.417	2.417	0.000	100	654577	10.0	9.18	
	28 3-Chloro-1-propene	76	2.547	2.547	0.000	91	177813	10.0	11.1	
	29 Methyl acetate	43	2.571	2.571	0.000	98	621004	20.0	38.8	
	30 Methylene Chloride	84	2.642	2.642	0.000	92	271758	10.0	10.3	
	31 2-Methyl-2-propanol	59	2.772	2.772	0.000	97	474511	100.0	147.1	
	32 Acrylonitrile	53	2.855	2.843	0.012	99	1517699	100.0	186.0	
	33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	98	286597	10.0	10.2	
	34 Methyl tert-butyl ether	73	2.890	2.890	0.000	97	750762	10.0	10.8	
	35 Hexane	86	3.115	3.115	0.000	95	62723	10.0	9.72	
	36 1,1-Dichloroethane	63	3.221	3.222	-0.001	96	491466	10.0	12.0	
	37 Vinyl acetate	43	3.281	3.281	0.000	97	642187	10.0	14.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	3.718	3.707	0.011	69	65937	10.0	9.90	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	84	289429	10.0	9.97	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	427138	20.0	36.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	97	132016	10.0	9.11	
49 Tetrahydrofuran	42	3.955	3.955	0.000	91	275462	20.0	40.1	
48 Chloroform	83	3.979	3.979	0.000	94	447816	10.0	10.1	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	351061	10.0	9.00	
51 Cyclohexane	56	4.180	4.180	0.000	91	365606	10.0	11.3	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	94	353307	10.0	10.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	82	311822	10.0	8.73	
54 Isobutyl alcohol	41	4.381	4.381	0.000	86	397236	250.0	602.0	
55 Benzene	78	4.440	4.440	0.000	96	1143583	10.0	11.5	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	355490	10.0	11.0	
58 n-Heptane	100	4.677	4.677	0.000	90	51153	10.0	8.84	
60 Trichloroethene	130	4.985	4.985	0.000	96	265191	10.0	8.50	
62 Methylcyclohexane	83	5.150	5.150	0.000	92	316677	10.0	8.99	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	249930	10.0	12.0	
64 Dibromomethane	93	5.269	5.269	0.000	96	147240	10.0	9.67	
66 1,4-Dioxane	88	5.292	5.304	-0.012	92	69366	200.0	223.6	
67 Dichlorobromomethane	83	5.399	5.399	0.000	99	285605	10.0	9.32	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	168766	10.0	11.4	
70 cis-1,3-Dichloropropene	75	5.789	5.789	0.000	95	326323	10.0	8.61	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.931	0.012	97	690287	20.0	33.2	
72 Toluene	91	6.085	6.085	0.000	98	1041173	10.0	12.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	94	289063	10.0	10.4	
74 Ethyl methacrylate	69	6.381	6.381	0.000	90	302119	10.0	13.9	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	192965	10.0	11.4	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	189007	10.0	10.4	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	91	352186	10.0	12.5	
78 2-Hexanone	43	6.677	6.677	0.000	97	484432	20.0	40.4	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	172247	10.0	9.20	
82 Ethylene Dibromide	107	6.890	6.890	0.000	99	189551	10.0	10.6	
84 Chlorobenzene	112	7.351	7.351	0.000	95	564932	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	96	188265	10.0	10.1	
86 Ethylbenzene	106	7.458	7.458	0.000	98	300491	10.0	10.3	
87 m-Xylene & p-Xylene	106	7.564	7.564	0.000	98	357866	10.0	9.98	
89 o-Xylene	106	7.943	7.943	0.000	97	334517	10.0	10.1	
88 Styrene	104	7.955	7.955	0.000	95	547597	10.0	11.4	
90 Bromoform	173	8.108	8.109	-0.001	96	119018	10.0	9.64	
91 Isopropylbenzene	105	8.286	8.286	0.000	96	824329	10.0	9.77	
95 Bromobenzene	156	8.570	8.570	0.000	92	227755	10.0	8.21	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	94	309084	10.0	12.3	
96 1,2,3-Trichloropropane	110	8.605	8.606	-0.001	87	91344	10.0	9.52	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.617	0.012	76	37782	10.0	5.30	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	227671	10.0	7.71	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	211329	10.0	8.36	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	93	694851	10.0	8.48	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	227622	10.0	8.59	
103 tert-Butylbenzene	119	9.173	9.174	-0.001	93	538667	10.0	7.38	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	97	714813	10.0	8.82	
105 sec-Butylbenzene	105	9.386	9.387	-0.001	94	791244	10.0	8.44	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	99	448329	10.0	8.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.528	9.529	0.000	97	686000	10.0	8.36	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	471412	10.0	9.31	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	95	431119	10.0	9.04	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	570937	10.0	8.90	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	94	67694	10.0	10.8	
116 1,2,4-Trichlorobenzene	180	11.505	11.505	-0.001	93	259129	10.0	9.00	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	104897	10.0	10.6	
118 Naphthalene	128	11.741	11.741	0.000	97	697121	10.0	8.03	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	94	244926	10.0	8.86	
S 129 Total BTEX	1				0		50.0	54.1	
S 128 Trihalomethanes, Total	1				0		40.0	38.2	
S 132 Xylenes, Total	106				0		20.0	20.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

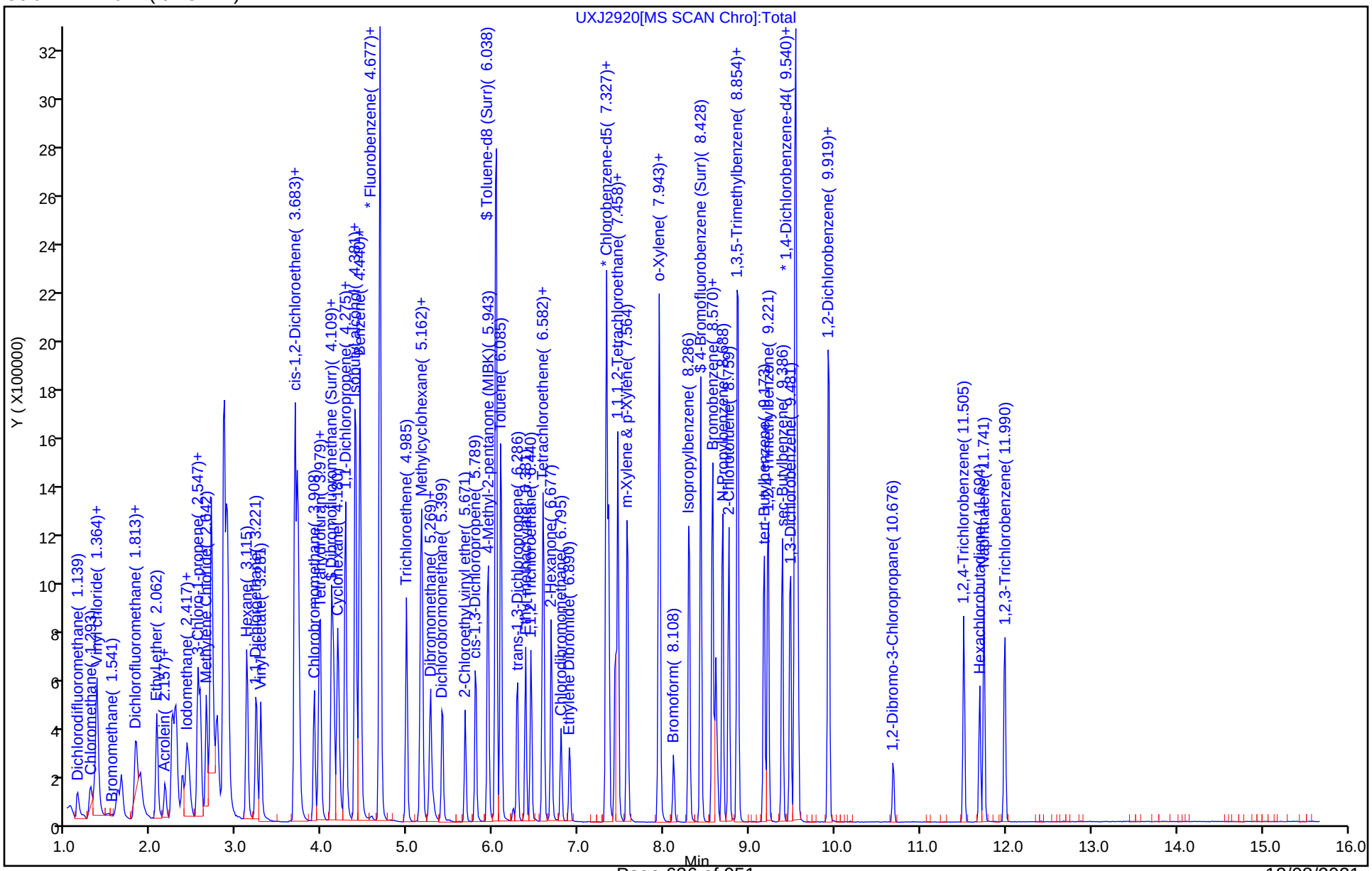
Report Date: 06-Dec-2021 07:53:59 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2920.D

Injection Date:	03-Dec-2021 11:16:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2920.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Dec-2021 11:16:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-004
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	91.76
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	103.91
$ 6 Toluene-d8 (Surr)	20.0	22.8	113.82
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.0	89.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-515508/4

Matrix: Water Lab File ID: UXC1290.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 11:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	7.33		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.1		1.0	0.46
127-18-4	Tetrachloroethene	9.85		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.3		1.0	0.51
79-01-6	Trichloroethene	8.99		1.0	0.44
75-01-4	Vinyl chloride	8.69		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	102		56-136
2037-26-5	Toluene-d8 (Surr)	102		78-122
1868-53-7	Dibromofluoromethane (Surr)	82		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1290.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Dec-2021 11:20:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-004
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2470310	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1589865	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	863041	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	471280	10.0	8.16	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	635986	10.0	9.78	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	93	1984140	10.0	10.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	86	672255	10.0	10.2	
9 Dichlorodifluoromethane	85	1.432	1.432	0.000	99	733633	10.0	9.86	
10 Chloromethane	50	1.574	1.574	0.000	99	753579	10.0	8.90	
11 Vinyl chloride	62	1.669	1.669	0.000	98	630056	10.0	8.69	
12 Butadiene	54	1.669	1.669	0.000	100	683300	10.0	7.38	
13 Bromomethane	94	1.930	1.930	0.000	89	386658	10.0	6.36	
14 Chloroethane	64	2.001	2.001	0.000	100	379262	10.0	7.10	
15 Dichlorofluoromethane	67	2.155	2.155	0.000	97	964235	10.0	6.78	
16 Trichlorofluoromethane	101	2.202	2.203	-0.001	99	743183	10.0	5.77	
17 Ethyl ether	59	2.416	2.416	0.000	91	510249	10.0	8.22	
18 Acrolein	56	2.523	2.523	0.000	100	308539	50.0	82.2	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	523354	10.0	7.33	
20 112TCTFE	151	2.629	2.630	-0.001	95	390965	10.0	6.57	
21 Acetone	58	2.653	2.653	0.000	100	110224	20.0	22.1	
22 Iodomethane	142	2.736	2.736	0.000	98	997099	10.0	9.12	
24 Carbon disulfide	76	2.795	2.796	-0.001	99	1842735	10.0	9.26	
26 3-Chloro-1-propene	76	2.902	2.902	0.000	91	452289	10.0	10.8	
27 Methyl acetate	43	2.914	2.914	0.000	98	993234	20.0	31.7	
28 Methylene Chloride	84	3.009	2.997	0.012	94	795222	10.0	12.0	
29 2-Methyl-2-propanol	59	3.092	3.080	0.012	90	346255	100.0	99.1	
30 Acrylonitrile	53	3.210	3.211	-0.001	99	2589620	100.0	154.4	
31 Methyl tert-butyl ether	73	3.222	3.222	0.000	96	1680219	10.0	9.70	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	98	734511	10.0	10.3	
34 Hexane	86	3.436	3.436	0.000	95	131821	10.0	9.23	
35 1,1-Dichloroethane	63	3.578	3.566	0.012	97	1296369	10.0	11.5	
36 Vinyl acetate	43	3.602	3.602	0.000	97	1058861	10.0	11.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	4.052	4.041	0.011	84	168725	10.0	7.68	
41 cis-1,2-Dichloroethene	96	4.052	4.041	0.011	83	763857	10.0	10.1	
40 2-Butanone (MEK)	72	4.052	4.053	-0.001	99	143677	20.0	27.5	
46 Chlorobromomethane	128	4.242	4.242	0.000	97	344310	10.0	9.68	
47 Tetrahydrofuran	42	4.290	4.290	0.000	87	305185	20.0	23.5	
48 Chloroform	83	4.301	4.302	-0.001	93	1238517	10.0	11.0	
49 1,1,1-Trichloroethane	97	4.467	4.456	0.011	98	902310	10.0	8.91	
50 Cyclohexane	56	4.503	4.503	0.000	92	1045951	10.0	10.0	
52 Carbon tetrachloride	117	4.598	4.598	0.000	83	772092	10.0	8.57	
51 1,1-Dichloropropene	75	4.598	4.598	0.000	96	952413	10.0	10.5	
53 Isobutyl alcohol	41	4.669	4.669	0.000	92	438706	250.0	397.0	
55 Benzene	78	4.776	4.764	0.012	95	3123876	10.0	11.5	
56 1,2-Dichloroethane	62	4.788	4.788	0.000	97	960415	10.0	11.9	
58 n-Heptane	100	4.965	4.966	-0.001	88	98060	10.0	8.02	
60 Trichloroethene	130	5.298	5.298	0.000	98	654436	10.0	8.99	
62 Methylcyclohexane	83	5.464	5.464	0.000	93	735610	10.0	8.09	
63 1,2-Dichloropropane	63	5.499	5.499	0.000	95	711352	10.0	12.7	
66 1,4-Dioxane	88	5.606	5.606	0.000	97	80446	200.0	169.2	
65 Dibromomethane	93	5.606	5.606	0.000	96	369665	10.0	11.4	
67 Dichlorobromomethane	83	5.724	5.725	-0.001	99	726831	10.0	10.2	
69 2-Chloroethyl vinyl ether	63	5.973	5.974	-0.001	92	274332	10.0	14.1	
70 cis-1,3-Dichloropropene	75	6.116	6.116	0.000	95	827891	10.0	10.6	
71 4-Methyl-2-pentanone (MIBK)	43	6.246	6.246	0.000	97	888316	20.0	23.7	
72 Toluene	91	6.412	6.412	0.000	98	2904546	10.0	12.4	
73 trans-1,3-Dichloropropene	75	6.602	6.602	0.000	94	729468	10.0	12.1	
74 Ethyl methacrylate	69	6.673	6.661	0.012	89	611326	10.0	13.5	
75 1,1,2-Trichloroethane	97	6.768	6.768	0.000	91	568742	10.0	14.8	
76 Tetrachloroethene	164	6.898	6.899	-0.001	97	487736	10.0	9.85	
77 1,3-Dichloropropane	76	6.922	6.922	0.000	91	1011254	10.0	15.3	
78 2-Hexanone	43	6.981	6.982	-0.001	96	603326	20.0	27.4	
80 Chlorodibromomethane	129	7.136	7.124	0.012	90	450493	10.0	10.6	
82 Ethylene Dibromide	107	7.242	7.242	0.000	98	493138	10.0	13.2	
84 Chlorobenzene	112	7.681	7.681	0.000	93	1734768	10.0	12.1	
85 1,1,1,2-Tetrachloroethane	131	7.764	7.764	0.000	93	548056	10.0	9.17	
86 Ethylbenzene	106	7.776	7.776	0.000	99	860713	10.0	11.0	
87 m-Xylene & p-Xylene	91	7.883	7.895	-0.012	92	2260893	10.0	11.9	
88 o-Xylene	106	8.262	8.262	0.000	95	1034897	10.0	10.1	
89 Styrene	104	8.274	8.274	0.000	93	1714431	10.0	12.9	
90 Bromoform	173	8.464	8.464	0.000	96	230425	10.0	8.80	
91 Isopropylbenzene	105	8.618	8.618	0.000	96	2239228	10.0	8.88	
94 1,1,2,2-Tetrachloroethane	83	8.902	8.903	-0.001	95	685241	10.0	15.5	
95 Bromobenzene	156	8.914	8.915	-0.001	95	656019	10.0	10.8	
96 1,2,3-Trichloropropane	110	8.950	8.950	0.000	87	218381	10.0	15.2	
97 trans-1,4-Dichloro-2-butene	53	8.962	8.962	0.000	74	169139	10.0	16.6	
98 N-Propylbenzene	120	9.009	9.009	0.000	99	640075	10.0	10.6	
99 2-Chlorotoluene	126	9.104	9.104	0.000	99	599847	10.0	10.7	
101 1,3,5-Trimethylbenzene	105	9.175	9.175	0.000	92	1991220	10.0	10.5	
102 4-Chlorotoluene	91	9.199	9.199	0.000	98	2338593	10.0	13.1	
104 tert-Butylbenzene	119	9.495	9.496	-0.001	93	1353116	10.0	8.35	
106 1,2,4-Trimethylbenzene	105	9.543	9.543	0.000	95	2082757	10.0	10.7	
107 sec-Butylbenzene	105	9.709	9.709	0.000	94	1931385	10.0	9.04	
108 1,3-Dichlorobenzene	146	9.827	9.828	-0.001	97	1167330	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Isopropyltoluene	119	9.851	9.851	0.000	97	1695560	10.0	8.88	
110 1,4-Dichlorobenzene	146	9.910	9.911	-0.001	93	1264152	10.0	10.7	
113 n-Butylbenzene	91	10.254	10.255	-0.001	98	1209640	10.0	7.82	
114 1,2-Dichlorobenzene	146	10.278	10.278	0.000	97	1192563	10.0	10.1	
115 1,2-Dibromo-3-Chloropropane	157	11.061	11.061	0.000	77	71482	10.0	7.34	
117 1,2,4-Trichlorobenzene	180	11.879	11.879	0.000	94	425779	10.0	4.90	
118 Hexachlorobutadiene	225	12.045	12.045	0.000	97	192511	10.0	4.88	
119 Naphthalene	128	12.128	12.128	0.000	97	1034459	10.0	5.58	
120 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	437052	10.0	5.30	
S 129 Xylenes, Total	106				0		20.0	22.0	
S 130 Total BTEX	1				0		50.0	56.9	
S 131 Trihalomethanes, Total	1				0		40.0	40.6	

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

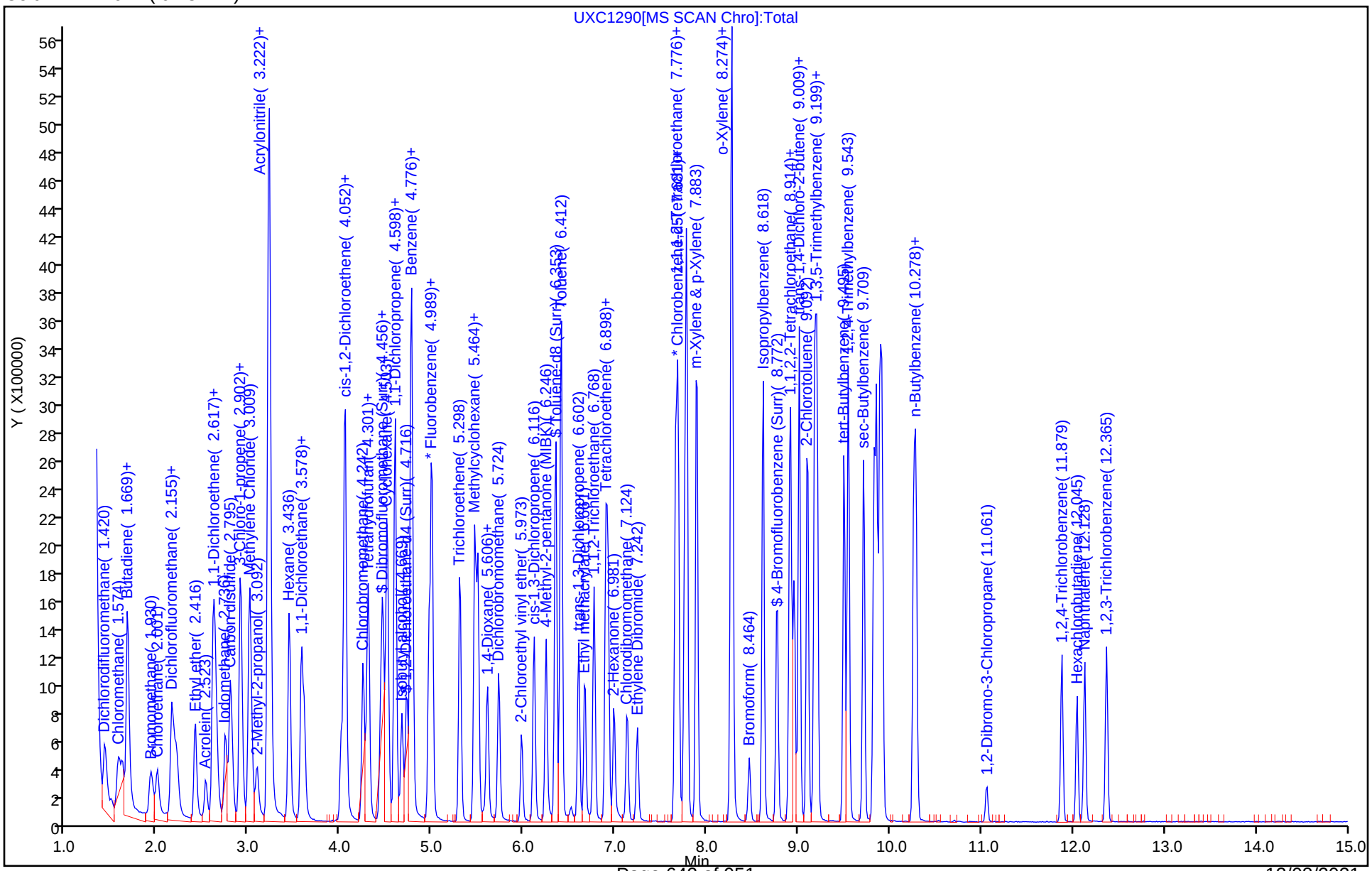
Report Date: 06-Dec-2021 12:55:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1290.D

Injection Date:	03-Dec-2021 11:20:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1290.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Dec-2021 11:20:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-004
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.16	81.62
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.78	97.77
$ 6 Toluene-d8 (Surr)	10.0	10.2	101.83
$ 7 4-Bromofluorobenzene (Surr)	10.0	10.2	102.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-515635/4

Matrix: Water Lab File ID: UXJ2950.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 09:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.0		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.99		1.0	0.46
127-18-4	Tetrachloroethene	11.0		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.1		1.0	0.51
79-01-6	Trichloroethene	8.85		1.0	0.44
75-01-4	Vinyl chloride	9.66		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	116		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2950.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Dec-2021 09:46:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-004
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2139978	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	1161436	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	638286	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	507379	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	613048	20.0	19.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1913839	20.0	23.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	500669	20.0	17.3	
10 Dichlorodifluoromethane	85	1.151	1.151	0.000	99	194320	10.0	6.86	
12 Chloromethane	50	1.305	1.304	0.001	98	270888	10.0	12.1	
14 Vinyl chloride	62	1.364	1.364	0.000	97	256732	10.0	9.66	
13 Butadiene	54	1.376	1.364	0.012	94	263663	10.0	11.2	
15 Bromomethane	94	1.612	1.612	0.000	91	168298	10.0	8.80	
16 Chloroethane	64	1.671	1.659	0.012	99	170749	10.0	10.9	
17 Dichlorofluoromethane	67	1.825	1.813	0.012	97	373883	10.0	9.60	
18 Trichlorofluoromethane	101	1.837	1.837	0.000	97	347559	10.0	7.65	
19 Ethyl ether	59	2.074	2.074	0.000	93	294709	10.0	14.6	
20 Acrolein	56	2.168	2.168	0.000	99	179181	50.0	229.2	E
21 1,1-Dichloroethene	96	2.251	2.251	0.000	96	256691	10.0	10.0	
23 112TCTFE	151	2.299	2.287	0.012	94	177966	10.0	9.09	
24 Acetone	43	2.299	2.298	0.001	100	247966	20.0	33.1	
25 Iodomethane	142	2.370	2.369	0.001	98	422904	10.0	9.21	
26 Carbon disulfide	76	2.429	2.429	0.000	100	772621	10.0	10.1	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	91	191789	10.0	11.1	
29 Methyl acetate	43	2.583	2.582	0.001	98	671048	20.0	39.2	
30 Methylene Chloride	84	2.654	2.653	0.001	95	292693	10.0	10.3	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	98	472890	100.0	136.8	
32 Acrylonitrile	53	2.855	2.855	0.000	98	1544646	100.0	176.7	
33 trans-1,2-Dichloroethene	96	2.890	2.890	0.000	99	305574	10.0	10.1	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	97	824419	10.0	11.1	
35 Hexane	86	3.127	3.127	0.000	93	72590	10.0	10.5	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	548853	10.0	12.5	
37 Vinyl acetate	43	3.281	3.281	0.000	97	668317	10.0	14.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	97	3.719	3.718	0.001	67	72566	10.0	10.2	
41 cis-1,2-Dichloroethene	96	3.719	3.718	0.001	82	310533	10.0	9.99	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	438321	20.0	35.0	
46 Chlorobromomethane	128	3.908	3.908	0.000	96	145601	10.0	9.38	
49 Tetrahydrofuran	42	3.967	3.967	0.000	89	285453	20.0	38.8	
48 Chloroform	83	3.979	3.979	0.000	94	486893	10.0	10.2	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	403045	10.0	9.65	
51 Cyclohexane	56	4.180	4.192	-0.012	92	465309	10.0	13.4	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	400336	10.0	10.6	
52 Carbon tetrachloride	117	4.275	4.275	0.000	86	366589	10.0	9.58	
54 Isobutyl alcohol	41	4.393	4.393	0.000	83	430156	250.0	631.3	
55 Benzene	78	4.440	4.440	0.000	96	1219069	10.0	11.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	377386	10.0	10.9	
58 n-Heptane	100	4.689	4.689	0.000	91	59704	10.0	9.64	
60 Trichloroethene	130	4.985	4.985	0.001	97	295782	10.0	8.85	
62 Methylcyclohexane	83	5.162	5.162	0.000	93	394467	10.0	10.5	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	96	274966	10.0	12.3	
64 Dibromomethane	93	5.269	5.268	0.001	93	148972	10.0	9.14	
66 1,4-Dioxane	88	5.304	5.304	0.000	93	81537	200.0	247.9	
67 Dichlorobromomethane	83	5.411	5.410	0.001	98	299915	10.0	9.14	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	173425	10.0	10.9	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	96	370831	10.0	9.13	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	97	736450	20.0	33.0	
72 Toluene	91	6.097	6.097	0.000	98	1083991	10.0	12.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	94	323169	10.0	11.3	
74 Ethyl methacrylate	69	6.381	6.381	0.000	89	340946	10.0	15.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	198067	10.0	11.3	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	207183	10.0	11.0	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	92	371381	10.0	12.7	
78 2-Hexanone	43	6.677	6.677	0.000	98	520478	20.0	42.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	193503	10.0	10.0	
82 Ethylene Dibromide	107	6.902	6.901	0.001	97	209373	10.0	11.4	
84 Chlorobenzene	112	7.351	7.351	0.000	95	598681	10.0	10.4	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	202732	10.0	10.5	
86 Ethylbenzene	106	7.458	7.458	0.000	98	308636	10.0	10.2	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	372488	10.0	10.1	
89 o-Xylene	106	7.943	7.943	0.000	96	355617	10.0	10.4	
88 Styrene	104	7.955	7.955	0.000	95	567323	10.0	11.5	
90 Bromoform	173	8.109	8.108	0.001	96	138755	10.0	10.8	
91 Isopropylbenzene	105	8.298	8.298	0.000	96	848892	10.0	9.75	
95 Bromobenzene	156	8.570	8.570	0.000	89	240530	10.0	8.76	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	88	311169	10.0	12.6	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	86	93388	10.0	9.83	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	61697	10.0	8.74	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	240487	10.0	8.23	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	220263	10.0	8.81	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	96	693410	10.0	8.55	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	231418	10.0	8.82	
103 tert-Butylbenzene	119	9.173	9.173	0.000	92	559027	10.0	7.73	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	97	728917	10.0	9.09	
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	811982	10.0	8.75	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	451076	10.0	9.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	706789	10.0	8.70	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	475829	10.0	9.50	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	95	444510	10.0	9.42	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	608966	10.0	9.59	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	72645	10.0	11.7	
116 1,2,4-Trichlorobenzene	180	11.505	11.504	0.001	94	255519	10.0	8.96	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	109882	10.0	11.2	
118 Naphthalene	128	11.741	11.741	0.000	97	719771	10.0	8.37	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	243504	10.0	8.90	
S 129 Total BTEX	1				0		50.0	54.4	
S 128 Trihalomethanes, Total	1				0		40.0	40.2	
S 132 Xylenes, Total	106				0		20.0	20.5	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00401	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

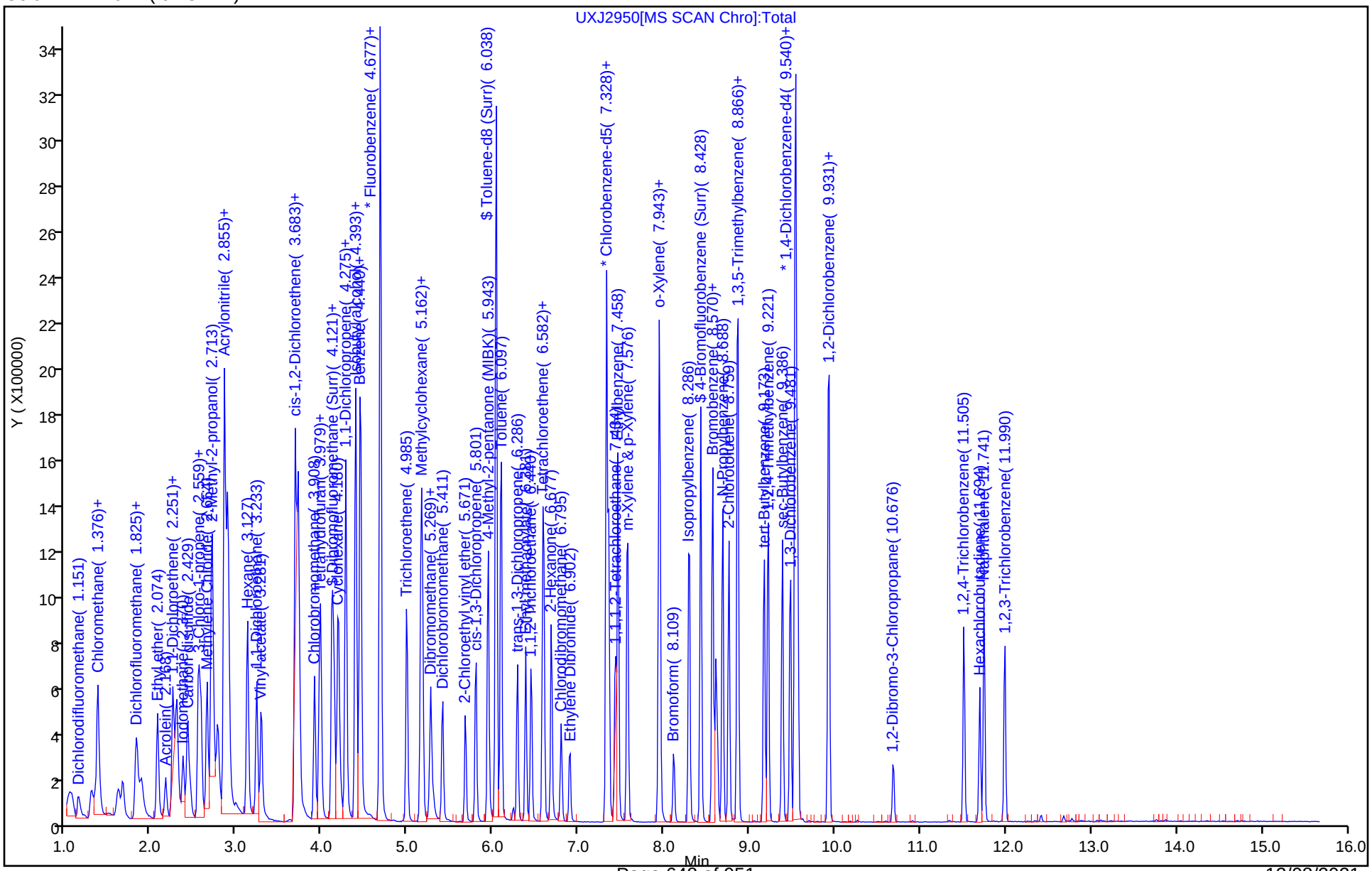
Report Date: 07-Dec-2021 08:25:59 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2950.D

Injection Date:	06-Dec-2021 09:46:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2950.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Dec-2021 09:46:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115758-004
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.06
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.8	99.12
$ 6 Toluene-d8 (Surr)	20.0	23.2	115.84
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-3_112421 MS Lab Sample ID: 240-160744-15 MS

Matrix: Water Lab File ID: UXC1315.D

Analysis Method: 8260B Date Collected: 11/24/2021 10:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 21:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.26		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	13.3		1.0	0.46
127-18-4	Tetrachloroethene	7.02		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.95		1.0	0.51
79-01-6	Trichloroethene	8.06		1.0	0.44
75-01-4	Vinyl chloride	10.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-137
460-00-4	4-Bromofluorobenzene (Surr)	98		56-136
2037-26-5	Toluene-d8 (Surr)	96		78-122
1868-53-7	Dibromofluoromethane (Surr)	81		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1315.D
Lims ID: 240-160744-D-15 MS
Client ID:
Sample Type: MS
Inject. Date: 03-Dec-2021 21:07:30 ALS Bottle#: 27 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-055
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 13:06:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	1890703	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	87	1232815	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	714672	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	357994	10.0	8.10	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	100	430465	10.0	8.65	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1449998	10.0	9.60	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	86	500801	10.0	9.80	
11 Vinyl chloride	62	1.669	1.669	0.000	97	584088	10.0	10.5	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	97	451374	10.0	8.26	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	97	542956	10.0	9.95	
41 cis-1,2-Dichloroethene	96	4.052	4.041	0.011	83	765358	10.0	13.3	
60 Trichloroethene	130	5.297	5.298	-0.001	98	449157	10.0	8.06	
76 Tetrachloroethene	164	6.898	6.899	-0.001	95	269483	10.0	7.02	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

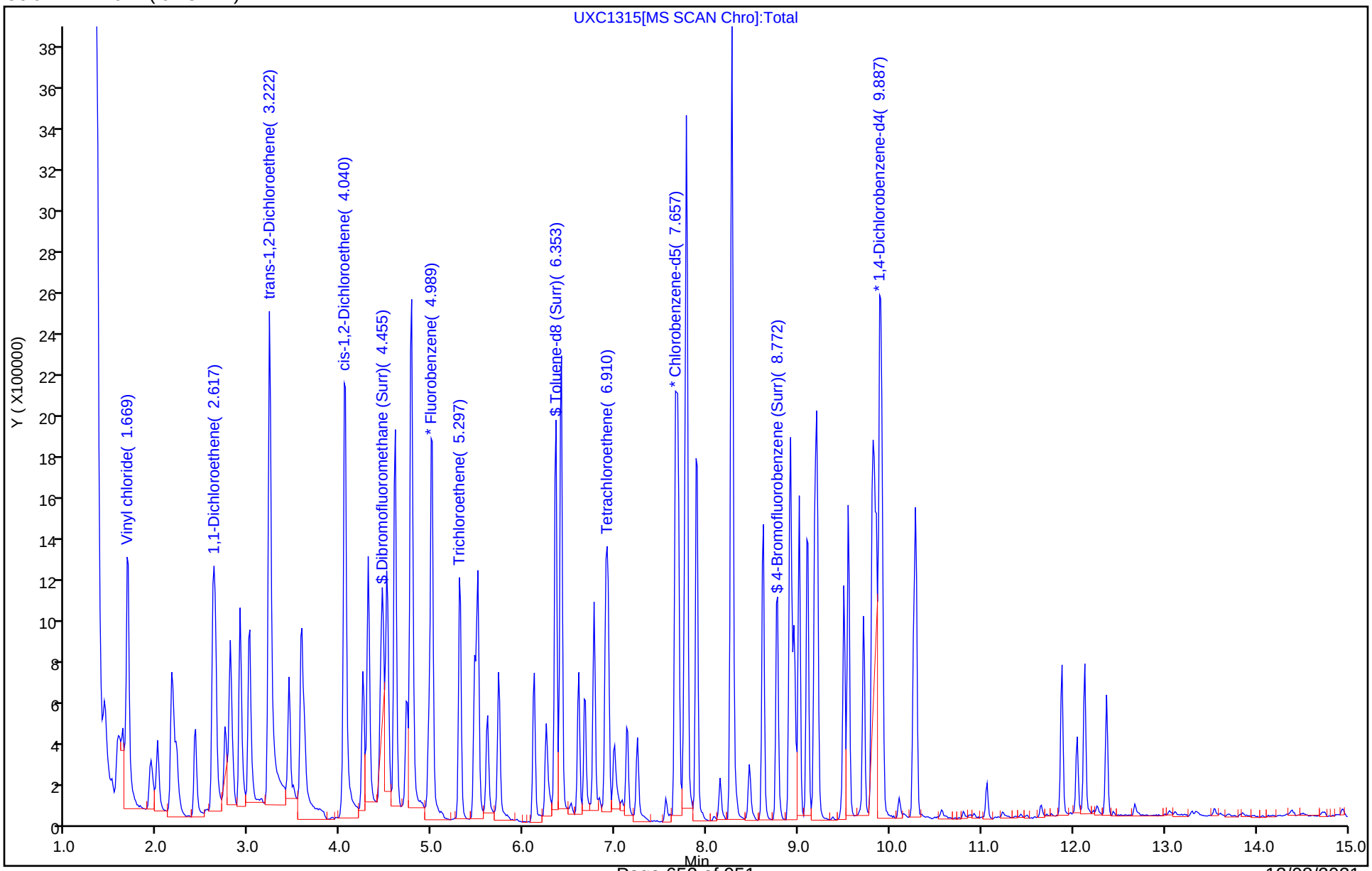
Report Date: 06-Dec-2021 13:06:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1315.D

Injection Date:	03-Dec-2021 21:07:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-D-15 MS			Worklist Smp#:	55
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1315.D
Lims ID: 240-160744-D-15 MS
Client ID:
Sample Type: MS
Inject. Date: 03-Dec-2021 21:07:30 ALS Bottle#: 27 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-055
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 13:06:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.10	81.01
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.65	86.46
$ 6 Toluene-d8 (Surr)	10.0	9.60	95.97
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.80	97.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-02 MS Lab Sample ID: 240-160744-25 MS

Matrix: Water Lab File ID: UXJ2946.D

Analysis Method: 8260B Date Collected: 11/24/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.3		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	12.1		1.0	0.46
127-18-4	Tetrachloroethene	9.52		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.91		1.0	0.51
79-01-6	Trichloroethene	8.73		1.0	0.44
75-01-4	Vinyl chloride	11.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	119		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2946.D
Lims ID: 240-160744-F-25 MS
Client ID:
Sample Type: MS
Inject. Date: 03-Dec-2021 20:51:30 ALS Bottle#: 28 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-054
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1969973	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1059232	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	584814	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	462846	20.0	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	568147	20.0	20.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1792844	20.0	23.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	472563	20.0	17.9	
14 Vinyl chloride	62	1.375	1.364	0.011	88	286796	10.0	11.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	95	243797	10.0	10.3	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	98	275224	10.0	9.91	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	82	347351	10.0	12.1	
60 Trichloroethene	130	4.984	4.985	-0.001	96	268460	10.0	8.73	
76 Tetrachloroethene	164	6.582	6.582	0.000	96	163011	10.0	9.52	

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

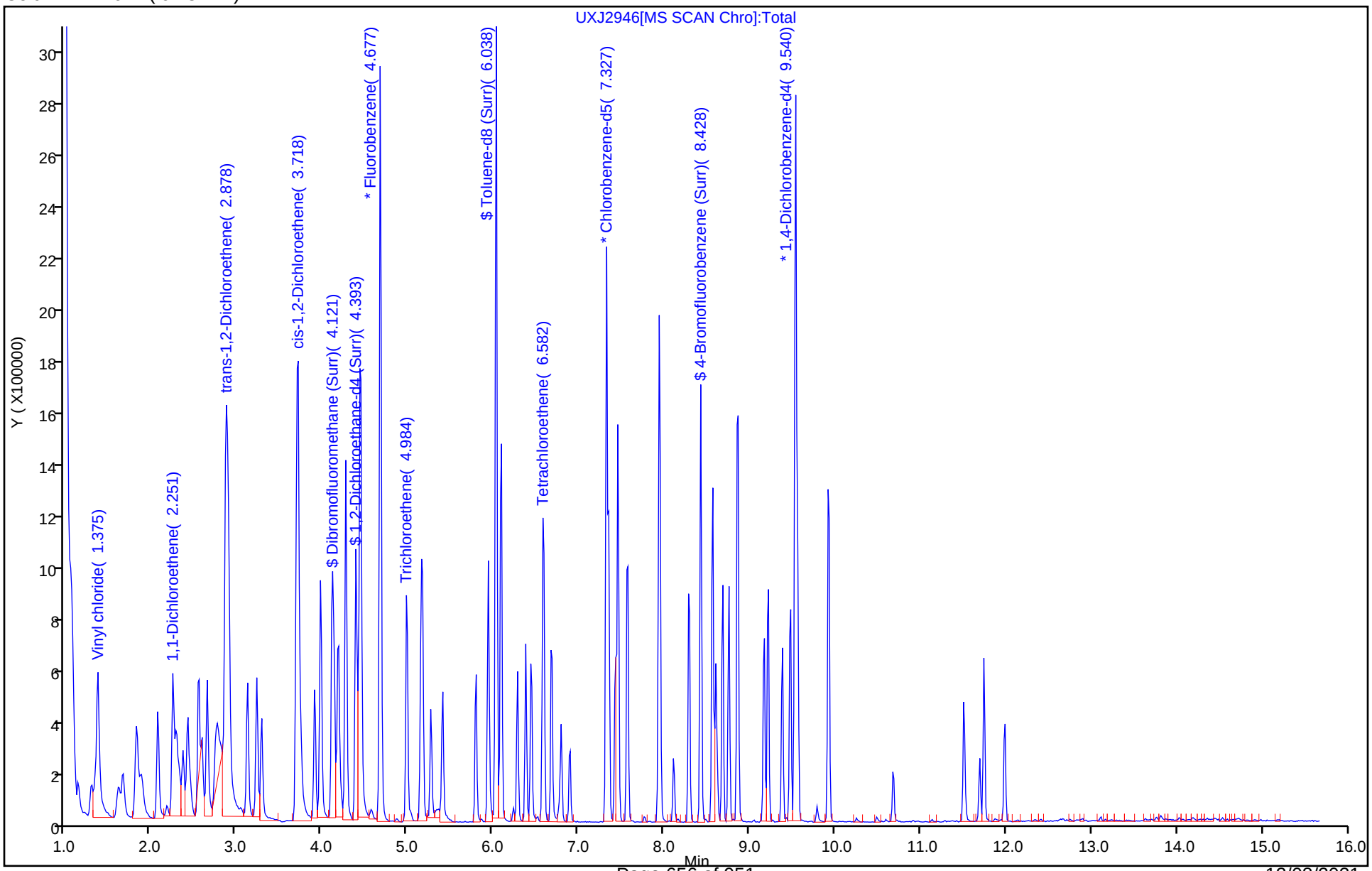
Report Date: 06-Dec-2021 07:54:49 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2946.D

Injection Date:	03-Dec-2021 20:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-F-25 MS			Worklist Smp#:	54
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2946.D
Lims ID: 240-160744-F-25 MS
Client ID:
Sample Type: MS
Inject. Date: 03-Dec-2021 20:51:30 ALS Bottle#: 28 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-054
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.22
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.0	99.79
$ 6 Toluene-d8 (Surr)	20.0	23.8	118.98
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.9	89.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-160670-C-5 MS

Matrix: Water Lab File ID: UXJ2978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 20:06

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	45.8		5.0	2.5
156-59-2	cis-1,2-Dichloroethene	47.4		5.0	2.3
127-18-4	Tetrachloroethene	40.2		5.0	2.2
156-60-5	trans-1,2-Dichloroethene	45.4		5.0	2.6
79-01-6	Trichloroethene	37.6		5.0	2.2
75-01-4	Vinyl chloride	52.0		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	85		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2978.D
Lims ID: 240-160670-C-5 MS
Client ID:
Sample Type: MS
Inject. Date: 06-Dec-2021 20:06:30 ALS Bottle#: 30 Worklist Smp#: 66
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0115758-066
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2053864	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1145964	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	653402	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	467357	20.0	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	579641	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1777532	20.0	21.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	485996	20.0	17.0	
10 Dichlorodifluoromethane	85	1.151	1.151	0.000	99	139806	10.0	5.14	
12 Chloromethane	50	1.304	1.304	0.000	97	269639	10.0	12.6	
14 Vinyl chloride	62	1.375	1.364	0.011	96	265439	10.0	10.4	
15 Bromomethane	94	1.612	1.612	0.000	90	161681	10.0	8.81	
16 Chloroethane	64	1.671	1.659	0.012	100	170449	10.0	11.3	
18 Trichlorofluoromethane	101	1.837	1.837	0.000	97	288018	10.0	6.61	
19 Ethyl ether	59	2.074	2.074	0.000	95	293369	10.0	15.1	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	97	225647	10.0	9.16	
23 112TCTFE	151	2.298	2.287	0.011	92	125147	10.0	6.66	
24 Acetone	43	2.298	2.298	0.000	100	246584	20.0	34.6	
26 Carbon disulfide	76	2.429	2.429	0.000	99	676861	10.0	9.23	
29 Methyl acetate	43	2.582	2.582	0.000	98	577723	20.0	35.1	
30 Methylene Chloride	84	2.653	2.653	0.000	95	268293	10.0	9.87	
33 trans-1,2-Dichloroethene	96	2.890	2.890	0.000	99	263157	10.0	9.09	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	97	1380718	10.0	19.4	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	482277	10.0	11.5	
41 cis-1,2-Dichloroethene	96	3.718	3.718	0.000	83	282597	10.0	9.47	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	387328	20.0	32.2	
49 Tetrahydrofuran	42	3.967	3.967	0.000	89	263473	20.0	37.3	
48 Chloroform	83	3.979	3.979	0.000	94	439109	10.0	9.61	
50 1,1,1-Trichloroethane	97	4.144	4.133	0.011	98	342162	10.0	8.54	
51 Cyclohexane	56	4.192	4.192	0.000	91	307218	10.0	9.24	
52 Carbon tetrachloride	117	4.275	4.275	0.000	93	281846	10.0	7.68	
55 Benzene	78	4.440	4.440	0.000	96	2773842	10.0	27.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	352085	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
60 Trichloroethene	130	4.985	4.985	0.000	97	240866	10.0	7.51	
62 Methylcyclohexane	83	5.162	5.162	0.000	90	245452	10.0	6.78	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	96	248259	10.0	11.6	
67 Dichlorobromomethane	83	5.410	5.410	0.000	98	264477	10.0	8.40	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	96	303571	10.0	7.79	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	97	618996	20.0	28.9	
72 Toluene	91	6.097	6.097	0.000	98	897480	10.0	10.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	94	265855	10.0	9.42	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	175136	10.0	10.1	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	148896	10.0	8.04	
78 2-Hexanone	43	6.677	6.677	0.000	98	467562	20.0	38.2	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	164507	10.0	8.63	
82 Ethylene Dibromide	107	6.901	6.901	0.000	99	173434	10.0	9.56	
84 Chlorobenzene	112	7.351	7.351	0.000	95	496023	10.0	8.72	
86 Ethylbenzene	106	7.458	7.458	0.000	99	239003	10.0	8.02	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	292276	10.0	8.00	
89 o-Xylene	106	7.943	7.943	0.000	97	288273	10.0	8.57	
88 Styrene	104	7.955	7.955	0.000	95	459746	10.0	9.41	
90 Bromoform	173	8.108	8.108	0.000	96	115326	10.0	9.19	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	627646	10.0	7.30	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	95	281502	10.0	11.1	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	99	361270	10.0	7.13	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	97	378275	10.0	7.37	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	97	374157	10.0	7.74	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	55044	10.0	8.66	
116 1,2,4-Trichlorobenzene	180	11.504	11.504	0.000	94	171711	10.0	5.88	
S 132 Xylenes, Total	106				0		20.0	16.6	

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00401	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

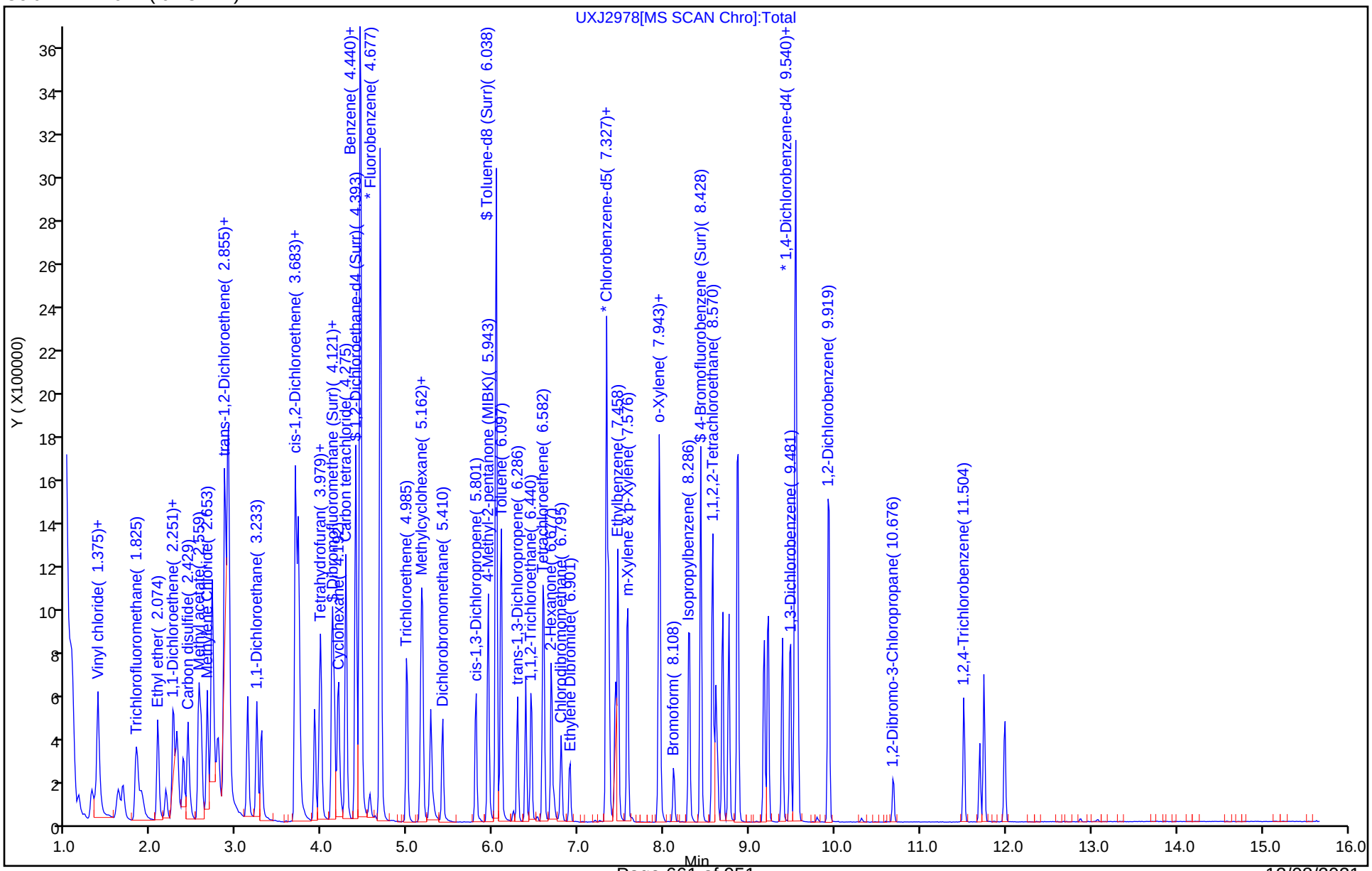
Report Date: 07-Dec-2021 08:26:35 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2978.D

Injection Date:	06-Dec-2021 20:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160670-C-5 MS			Worklist Smp#:	66
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2978.D
Lims ID: 240-160670-C-5 MS
Client ID:
Sample Type: MS
Inject. Date: 06-Dec-2021 20:06:30 ALS Bottle#: 30 Worklist Smp#: 66
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0115758-066
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.9	89.31
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.5	97.65
$ 6 Toluene-d8 (Surr)	20.0	21.8	109.04
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.0	85.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-3_112421 MSD Lab Sample ID: 240-160744-15 MSD

Matrix: Water Lab File ID: UXC1316.D

Analysis Method: 8260B Date Collected: 11/24/2021 10:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 21:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	7.64		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	13.1		1.0	0.46
127-18-4	Tetrachloroethene	7.75		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.6		1.0	0.51
79-01-6	Trichloroethene	8.36		1.0	0.44
75-01-4	Vinyl chloride	11.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	104		56-136
2037-26-5	Toluene-d8 (Surr)	99		78-122
1868-53-7	Dibromofluoromethane (Surr)	78		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1316.D
Lims ID: 240-160744-E-15 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Dec-2021 21:29:30 ALS Bottle#: 28 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-056
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:57:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.001	5.001	0.000	99	2029454	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.657	7.657	0.000	88	1265455	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.887	9.887	0.000	95	750468	10.0	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.432	4.432	0.000	93	371248	10.0	7.83	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.716	4.717	-0.001	99	511225	10.0	9.57	
$ 6 Toluene-d8 (Surr)	98	6.353	6.353	0.000	94	1530678	10.0	9.87	
$ 7 4-Bromofluorobenzene (Surr)	95	8.760	8.760	0.000	86	542989	10.0	10.4	
11 Vinyl chloride	62	1.669	1.669	0.000	98	666204	10.0	11.2	
19 1,1-Dichloroethene	96	2.606	2.606	0.000	96	448083	10.0	7.64	
32 trans-1,2-Dichloroethene	96	3.222	3.222	0.000	96	618921	10.0	10.6	
41 cis-1,2-Dichloroethene	96	4.040	4.041	-0.001	83	809284	10.0	13.1	
60 Trichloroethene	130	5.297	5.298	-0.001	99	499977	10.0	8.36	
76 Tetrachloroethene	164	6.898	6.899	-0.001	95	305467	10.0	7.75	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	1.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

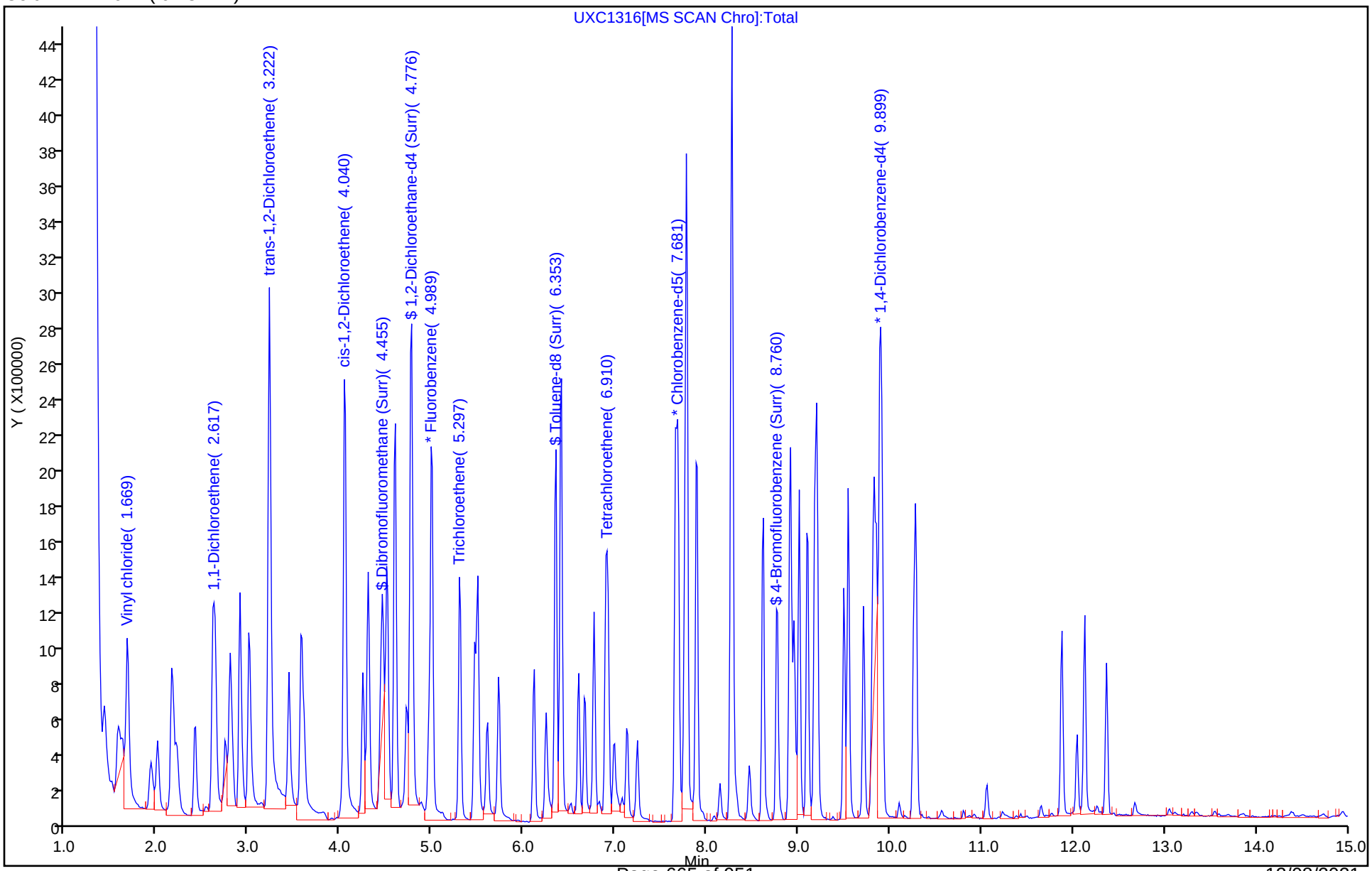
Report Date: 06-Dec-2021 12:57:37 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1316.D

Injection Date:	03-Dec-2021 21:29:30	Instrument ID:	A3UX15	Operator ID:	43582
Lims ID:	240-160744-E-15 MSD			Worklist Smp#:	56
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_15	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\UXC1316.D
Lims ID: 240-160744-E-15 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Dec-2021 21:29:30 ALS Bottle#: 28 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115737-056
Misc. Info.: C211203A,8260LLUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15

Method: \\chromfs\Canton\ChromData\A3UX15\20211203-115737.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 12:55:21 Calib Date: 16-Mar-2021 13:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX15\20210316-107311.b\UXC5656.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 12:57:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	7.83	78.26
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.57	95.67
$ 6 Toluene-d8 (Surr)	10.0	9.87	98.70
$ 7 4-Bromofluorobenzene (Surr)	10.0	10.4	103.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-02 MSD Lab Sample ID: 240-160744-25 MSD

Matrix: Water Lab File ID: UXJ2947.D

Analysis Method: 8260B Date Collected: 11/24/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/03/2021 21:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	8.70		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.7		1.0	0.46
127-18-4	Tetrachloroethene	9.41		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.07		1.0	0.51
79-01-6	Trichloroethene	8.24		1.0	0.44
75-01-4	Vinyl chloride	11.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	83		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	85		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2947.D
Lims ID: 240-160744-E-25 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Dec-2021 21:14:30 ALS Bottle#: 29 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-055
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:54:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	98	2022122	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1122949	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	622038	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	437322	20.0	17.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	537224	20.0	18.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1737520	20.0	21.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	466233	20.0	16.7	
14 Vinyl chloride	62	1.364	1.364	0.000	97	294964	10.0	11.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	211011	10.0	8.70	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	98	258459	10.0	9.07	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	83	313503	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	260015	10.0	8.24	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	170912	10.0	9.41	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00400	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

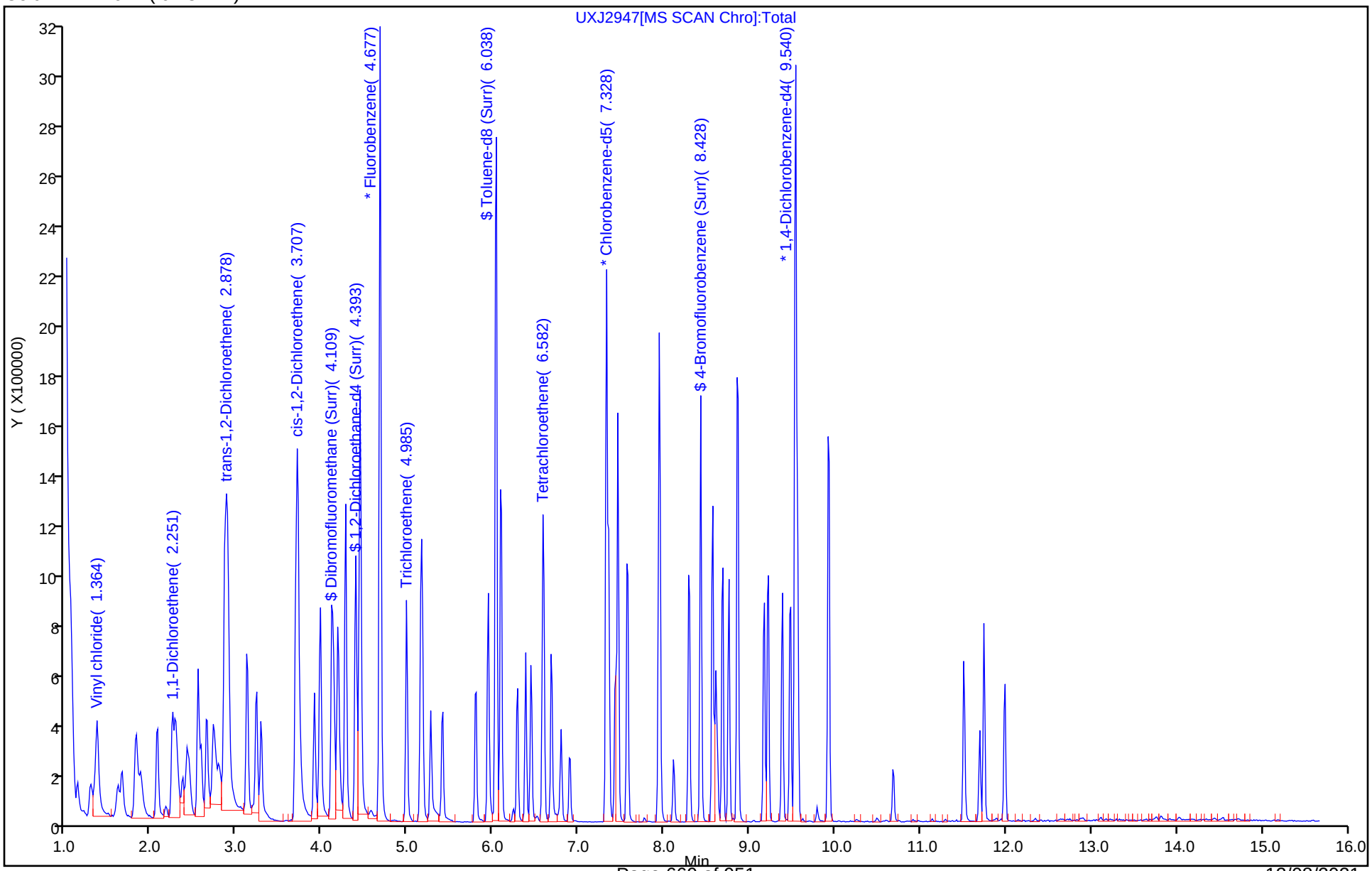
Report Date: 06-Dec-2021 07:54:49 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2947.D

Injection Date:	03-Dec-2021 21:14:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160744-E-25 MSD			Worklist Smp#:	55
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\UXJ2947.D
Lims ID: 240-160744-E-25 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Dec-2021 21:14:30 ALS Bottle#: 29 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115736-055
Misc. Info.: J211203A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211203-115736.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Dec-2021 07:53:58 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1652

First Level Reviewer: evansle Date: 06-Dec-2021 07:54:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.0	84.89
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	91.92
$ 6 Toluene-d8 (Surr)	20.0	21.8	108.77
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.7	83.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-160670-C-5 MSD

Matrix: Water Lab File ID: UXJ2979.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/06/2021 20:28

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	46.7		5.0	2.5
156-59-2	cis-1,2-Dichloroethene	46.2		5.0	2.3
127-18-4	Tetrachloroethene	47.2		5.0	2.2
156-60-5	trans-1,2-Dichloroethene	47.1		5.0	2.6
79-01-6	Trichloroethene	39.2		5.0	2.2
75-01-4	Vinyl chloride	54.1		5.0	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	89		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2979.D
Lims ID: 240-160670-C-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Dec-2021 20:28:30 ALS Bottle#: 31 Worklist Smp#: 67
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0115758-067
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 07-Dec-2021 08:26:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2048967	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	1142048	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	651105	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	459899	20.0	17.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	584791	20.0	19.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	1831117	20.0	22.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	504836	20.0	17.7	
10 Dichlorodifluoromethane	85	1.139	1.151	-0.012	99	177396	10.0	6.54	
12 Chloromethane	50	1.293	1.304	-0.011	99	288673	10.0	13.5	
14 Vinyl chloride	62	1.364	1.364	0.000	82	275189	10.0	10.8	
15 Bromomethane	94	1.612	1.612	0.000	90	170972	10.0	9.34	
16 Chloroethane	64	1.660	1.659	0.001	99	177135	10.0	11.8	
18 Trichlorofluoromethane	101	1.825	1.837	-0.012	97	330351	10.0	7.59	
19 Ethyl ether	59	2.062	2.074	-0.012	94	285390	10.0	14.7	
21 1,1-Dichloroethene	96	2.251	2.251	0.000	97	229281	10.0	9.33	
23 112TCTFE	151	2.287	2.287	0.000	95	149419	10.0	7.97	
24 Acetone	43	2.299	2.298	0.001	100	247189	20.0	34.8	
26 Carbon disulfide	76	2.429	2.429	0.000	99	680725	10.0	9.31	
29 Methyl acetate	43	2.571	2.582	-0.011	98	617192	20.0	37.6	
30 Methylene Chloride	84	2.654	2.653	0.001	94	258829	10.0	9.55	
33 trans-1,2-Dichloroethene	96	2.878	2.890	-0.012	99	271931	10.0	9.41	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	96	1414880	10.0	19.9	
36 1,1-Dichloroethane	63	3.233	3.233	0.000	96	487656	10.0	11.6	
41 cis-1,2-Dichloroethene	96	3.719	3.718	0.001	83	274922	10.0	9.24	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	399639	20.0	33.3	
49 Tetrahydrofuran	42	3.955	3.967	-0.012	89	272906	20.0	38.8	
48 Chloroform	83	3.979	3.979	0.000	94	433095	10.0	9.50	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	349738	10.0	8.75	
51 Cyclohexane	56	4.180	4.192	-0.012	92	371445	10.0	11.2	
52 Carbon tetrachloride	117	4.275	4.275	0.000	86	318014	10.0	8.68	
55 Benzene	78	4.440	4.440	0.000	96	2821091	10.0	27.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	360644	10.0	10.9	
60 Trichloroethene	130	4.985	4.985	0.001	97	250903	10.0	7.84	
62 Methylcyclohexane	83	5.150	5.162	-0.012	94	293547	10.0	8.12	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	248617	10.0	11.6	
67 Dichlorobromomethane	83	5.411	5.410	0.001	98	269078	10.0	8.56	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	96	307914	10.0	7.92	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	97	649543	20.0	30.4	
72 Toluene	91	6.085	6.097	-0.012	98	966528	10.0	11.1	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	93	273552	10.0	9.72	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	178298	10.0	10.4	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	174284	10.0	9.44	
78 2-Hexanone	43	6.677	6.677	0.000	98	485012	20.0	39.8	
80 Chlorodibromomethane	129	6.795	6.795	0.000	91	174881	10.0	9.20	
82 Ethylene Dibromide	107	6.890	6.901	-0.011	98	184378	10.0	10.2	
84 Chlorobenzene	112	7.351	7.351	0.000	95	529606	10.0	9.34	
86 Ethylbenzene	106	7.458	7.458	0.000	98	261825	10.0	8.82	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	329774	10.0	9.06	
89 o-Xylene	106	7.943	7.943	0.000	96	317833	10.0	9.48	
88 Styrene	104	7.955	7.955	0.000	95	492907	10.0	10.1	
90 Bromoform	173	8.109	8.108	0.001	96	121583	10.0	9.69	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	743403	10.0	8.68	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	95	297395	10.0	11.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	99	391342	10.0	7.76	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	97	423169	10.0	8.28	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	96	401815	10.0	8.35	
114 1,2-Dibromo-3-Chloropropane	157	10.676	10.688	-0.012	92	62444	10.0	9.86	
116 1,2,4-Trichlorobenzene	180	11.505	11.504	0.001	93	202309	10.0	6.96	
S 132 Xylenes, Total	106				0		20.0	18.5	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00425	Amount Added:	8.00	Units: uL	
VMFASAW_00401	Amount Added:	8.00	Units: uL	
VMFASGW_00436	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00088	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent

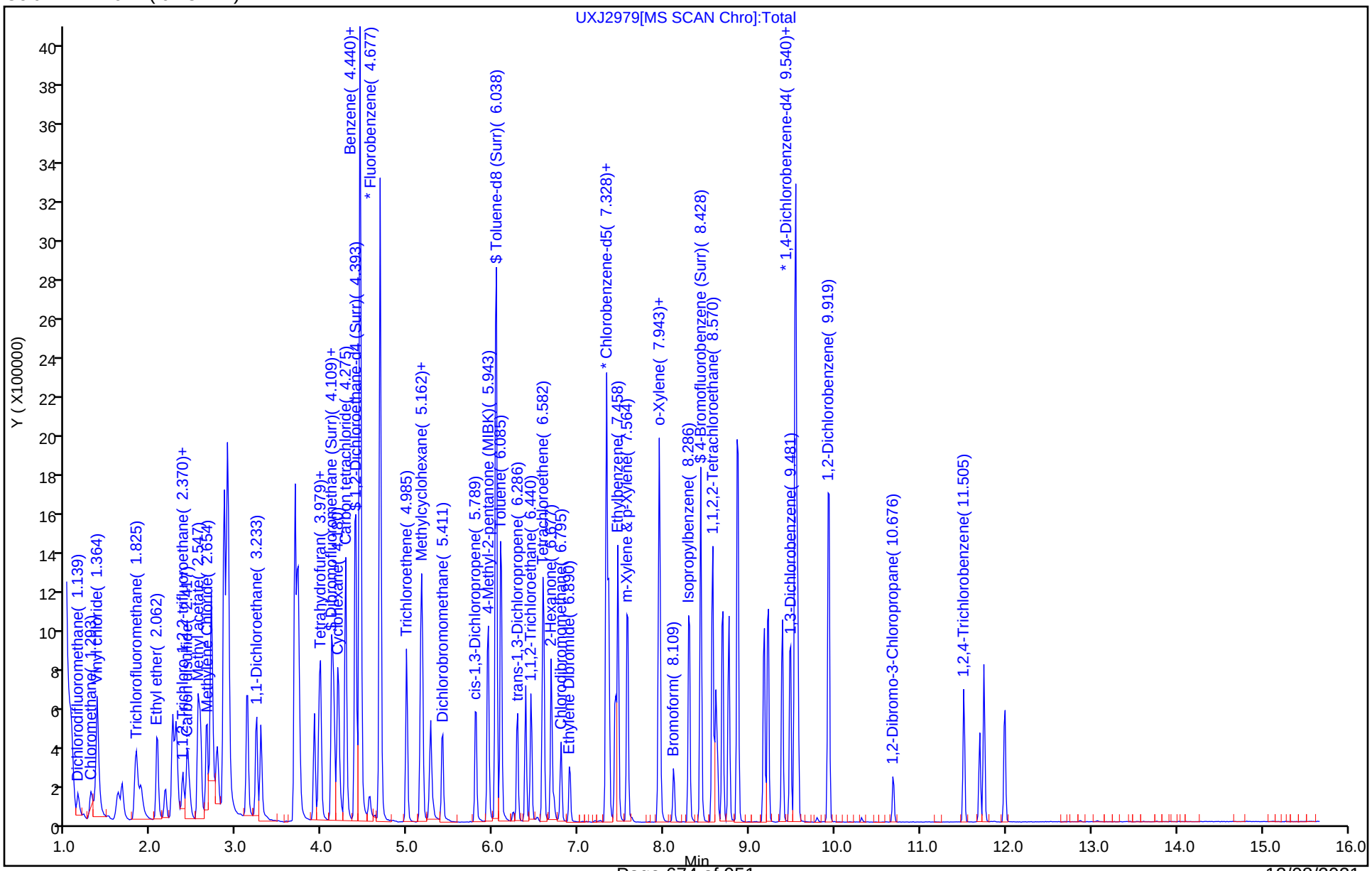
Report Date: 07-Dec-2021 08:26:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2979.D

Injection Date:	06-Dec-2021 20:28:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-160670-C-5 MSD			Worklist Smp#:	67
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	31
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\UXJ2979.D
Lims ID: 240-160670-C-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Dec-2021 20:28:30 ALS Bottle#: 31 Worklist Smp#: 67
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 240-0115758-067
Misc. Info.: J211206A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211206-115758.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 07-Dec-2021 08:25:57 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1684

First Level Reviewer: evansle Date: 07-Dec-2021 08:26:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.6	88.10
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.7	98.75
$ 6 Toluene-d8 (Surr)	20.0	22.5	112.71
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.70

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX11 Start Date: 01/15/2021 10:36

Analysis Batch Number: 469338 End Date: 01/15/2021 15:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-469338/1		01/15/2021 10:36	1	BFB1115A.D	DB-624 0.18(mm)
STD8260 240-469338/2 IC		01/15/2021 11:06	1	UXJ5268.D	DB-624 0.18(mm)
STD8260 240-469338/3 IC		01/15/2021 11:29	1	UXJ5269.D	DB-624 0.18(mm)
STD8260 240-469338/4 ICIS		01/15/2021 11:51	1	UXJ5270.D	DB-624 0.18(mm)
STD8260 240-469338/5 IC		01/15/2021 12:13	1	UXJ5271.D	DB-624 0.18(mm)
STD8260 240-469338/6 IC		01/15/2021 12:36	1	UXJ5272.D	DB-624 0.18(mm)
STD8260 240-469338/7 IC		01/15/2021 12:58	1	UXJ5273.D	DB-624 0.18(mm)
ICV 240-469338/14		01/15/2021 13:20	1	UXJ5274.D	DB-624 0.18(mm)
STD6 240-469338/8 IC		01/15/2021 13:42	1		DB-624 0.18(mm)
STD5 240-469338/9 IC		01/15/2021 14:05	1		DB-624 0.18(mm)
STD4 240-469338/10 IC		01/15/2021 14:26	1		DB-624 0.18(mm)
STD3 240-469338/11 IC		01/15/2021 14:48	1		DB-624 0.18(mm)
STD2 240-469338/12 IC		01/15/2021 15:10	1		DB-624 0.18(mm)
STD1 240-469338/13 IC		01/15/2021 15:33	1		DB-624 0.18(mm)
ICV 240-469338/15		01/15/2021 15:55	1	UXJ5281.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX15 Start Date: 03/16/2021 07:33

Analysis Batch Number: 476941 End Date: 03/16/2021 13:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-476941/1		03/16/2021 07:33	1	BFB210316.D	DB-624 0.18(mm)
STD8260 240-476941/2 IC		03/16/2021 08:36	1	UXC5644.D	DB-624 0.18(mm)
STD8260 240-476941/3 IC		03/16/2021 08:58	1	UXC5645.D	DB-624 0.18(mm)
STD8260 240-476941/4 ICIS		03/16/2021 09:20	1	UXC5646.D	DB-624 0.18(mm)
STD8260 240-476941/5 IC		03/16/2021 09:42	1	UXC5647.D	DB-624 0.18(mm)
STD8260 240-476941/6 IC		03/16/2021 10:17	1	UXC5648.D	DB-624 0.18(mm)
STD8260 240-476941/7 IC		03/16/2021 10:39	1	UXC5649.D	DB-624 0.18(mm)
ICV 240-476941/14		03/16/2021 11:01	1	UXC5650.D	DB-624 0.18(mm)
STD 240-476941/8 IC		03/16/2021 11:23	1		DB-624 0.18(mm)
STD 240-476941/9 IC		03/16/2021 11:45	1		DB-624 0.18(mm)
STD 240-476941/10 IC		03/16/2021 12:06	1		DB-624 0.18(mm)
STD 240-476941/11 IC		03/16/2021 12:28	1		DB-624 0.18(mm)
STD 240-476941/12 IC		03/16/2021 12:50	1		DB-624 0.18(mm)
STD 240-476941/13 IC		03/16/2021 13:12	1		DB-624 0.18(mm)
ICV 240-476941/15		03/16/2021 13:34	1	UXC5657.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX11 Start Date: 12/03/2021 10:30

Analysis Batch Number: 515506 End Date: 12/03/2021 21:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-515506/1		12/03/2021 10:30	1	BFB1203.D	DB-624 0.18(mm)
CCVIS 240-515506/2		12/03/2021 10:54	1	UXJ2919.D	DB-624 0.18(mm)
LCS 240-515506/4		12/03/2021 11:16	1	UXJ2920.D	DB-624 0.18(mm)
CCV 240-515506/3		12/03/2021 11:39	1	UXJ2921.D	DB-624 0.18(mm)
ZZZZZ		12/03/2021 12:01	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 12:23	1		DB-624 0.18(mm)
MB 240-515506/6		12/03/2021 12:45	1	UXJ2924.D	DB-624 0.18(mm)
ZZZZZ		12/03/2021 13:07	3.33		DB-624 0.18(mm)
ZZZZZ		12/03/2021 13:51	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 14:13	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 14:35	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 14:57	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 15:42	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 16:04	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 16:26	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 16:48	1		DB-624 0.18(mm)
240-160744-16	SL-4_112421	12/03/2021 17:10	1	UXJ2936.D	DB-624 0.18(mm)
240-160744-17	SL-19_112321	12/03/2021 17:32	1	UXJ2937.D	DB-624 0.18(mm)
240-160744-18	SL-22_112321	12/03/2021 17:54	1	UXJ2938.D	DB-624 0.18(mm)
240-160744-19	SL-20_112321	12/03/2021 18:16	1	UXJ2939.D	DB-624 0.18(mm)
240-160744-20	SL-16_112421	12/03/2021 18:39	1	UXJ2940.D	DB-624 0.18(mm)
240-160744-21	SL-17_112421	12/03/2021 19:01	1	UXJ2941.D	DB-624 0.18(mm)
240-160744-22	SL-21_112421	12/03/2021 19:23	1	UXJ2942.D	DB-624 0.18(mm)
240-160744-23	SL-18_112421	12/03/2021 19:45	1	UXJ2943.D	DB-624 0.18(mm)
240-160744-24	DUP-01	12/03/2021 20:07	1	UXJ2944.D	DB-624 0.18(mm)
240-160744-25	DUP-02	12/03/2021 20:30	1	UXJ2945.D	DB-624 0.18(mm)
240-160744-25 MS	DUP-02 MS	12/03/2021 20:51	1	UXJ2946.D	DB-624 0.18(mm)
240-160744-25 MSD	DUP-02 MSD	12/03/2021 21:14	1	UXJ2947.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX15 Start Date: 12/03/2021 10:32

Analysis Batch Number: 515508 End Date: 12/03/2021 21:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-515508/1		12/03/2021 10:32	1	BFB1203.D	DB-624 0.18(mm)
CCVIS 240-515508/2		12/03/2021 10:58	1	UXC1289.D	DB-624 0.18(mm)
LCS 240-515508/4		12/03/2021 11:20	1	UXC1290.D	DB-624 0.18(mm)
CCV 240-515508/3		12/03/2021 11:42	1	UXC1291.D	DB-624 0.18(mm)
ZZZZZ		12/03/2021 12:04	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 12:25	1		DB-624 0.18(mm)
MB 240-515508/7		12/03/2021 12:47	1	UXC1294.D	DB-624 0.18(mm)
ZZZZZ		12/03/2021 13:09	5		DB-624 0.18(mm)
ZZZZZ		12/03/2021 13:31	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 13:53	1		DB-624 0.18(mm)
ZZZZZ		12/03/2021 14:15	4		DB-624 0.18(mm)
ZZZZZ		12/03/2021 14:37	1		DB-624 0.18(mm)
240-160744-1	TRIP BLANK	12/03/2021 14:58	1	UXC1300.D	DB-624 0.18(mm)
240-160744-2	SL-15_112321	12/03/2021 15:20	1	UXC1301.D	DB-624 0.18(mm)
240-160744-3	SL-14_112321	12/03/2021 15:42	1	UXC1302.D	DB-624 0.18(mm)
240-160744-4	SL-13_112321	12/03/2021 16:04	1	UXC1303.D	DB-624 0.18(mm)
240-160744-7	SL-5_112321	12/03/2021 17:51	1	UXC1306.D	DB-624 0.18(mm)
240-160744-9	SL-9_112321	12/03/2021 18:34	1	UXC1308.D	DB-624 0.18(mm)
240-160744-10	SL-10_112321	12/03/2021 18:56	1	UXC1309.D	DB-624 0.18(mm)
240-160744-11	SL-11_112321	12/03/2021 19:18	1	UXC1310.D	DB-624 0.18(mm)
240-160744-12	SL-12_112321	12/03/2021 19:40	1	UXC1311.D	DB-624 0.18(mm)
240-160744-13	MH-1231_112421	12/03/2021 20:01	1	UXC1312.D	DB-624 0.18(mm)
240-160744-14	SL-2_112421	12/03/2021 20:23	1	UXC1313.D	DB-624 0.18(mm)
240-160744-15	SL-3_112421	12/03/2021 20:45	1	UXC1314.D	DB-624 0.18(mm)
240-160744-15 MS	SL-3_112421 MS	12/03/2021 21:07	1	UXC1315.D	DB-624 0.18(mm)
240-160744-15 MSD	SL-3_112421 MSD	12/03/2021 21:29	1	UXC1316.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX11 Start Date: 12/06/2021 09:00

Analysis Batch Number: 515635 End Date: 12/06/2021 20:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-515635/1		12/06/2021 09:00	1	BFB1206.D	DB-624 0.18(mm)
LCS 240-515635/4		12/06/2021 09:46	1	UXJ2950.D	DB-624 0.18(mm)
CCVIS 240-515635/2		12/06/2021 10:08	1	UXJ2951.D	DB-624 0.18(mm)
CCV 240-515635/3		12/06/2021 10:30	1	UXJ2952.D	DB-624 0.18(mm)
ZZZZZ		12/06/2021 10:52	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 11:14	1		DB-624 0.18(mm)
MB 240-515635/6		12/06/2021 11:36	1	UXJ2955.D	DB-624 0.18(mm)
ZZZZZ		12/06/2021 12:43	5		DB-624 0.18(mm)
ZZZZZ		12/06/2021 13:05	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 13:27	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 13:49	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 14:11	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 14:34	1		DB-624 0.18(mm)
240-160744-5	SL-7_112321	12/06/2021 14:56	2	UXJ2964.D	DB-624 0.18(mm)
240-160744-6	SL-6_112321	12/06/2021 15:18	1	UXJ2965.D	DB-624 0.18(mm)
240-160744-8	SL-8_112321	12/06/2021 15:40	1	UXJ2966.D	DB-624 0.18(mm)
ZZZZZ		12/06/2021 16:02	400		DB-624 0.18(mm)
ZZZZZ		12/06/2021 16:25	400		DB-624 0.18(mm)
ZZZZZ		12/06/2021 16:47	400		DB-624 0.18(mm)
ZZZZZ		12/06/2021 17:09	40		DB-624 0.18(mm)
ZZZZZ		12/06/2021 17:31	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 17:54	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 18:16	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 18:38	500		DB-624 0.18(mm)
ZZZZZ		12/06/2021 19:00	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 19:22	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 19:44	1		DB-624 0.18(mm)
240-160670-C-5 MS		12/06/2021 20:06	5	UXJ2978.D	DB-624 0.18(mm)
240-160670-C-5 MSD		12/06/2021 20:28	5	UXJ2979.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00086	VM50SS_STK 00086	VMAROLISTDW 00376	VMBFB 00026
BFB 240-469338/1		8260B		5 mL	5 mL				1 uL
STD8260 240-469338/2 IC		8260B		5 mL	5 mL	2 uL	32 uL	32 uL	
STD8260 240-469338/3 IC		8260B		5 mL	5 mL	2 uL	16 uL	16 uL	
STD8260 240-469338/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL	8 uL	
STD8260 240-469338/5 IC		8260B		5 mL	5 mL	2 uL	4 uL	4 uL	
STD8260 240-469338/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL	1.6 uL	
STD8260 240-469338/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL	0.8 uL	
ICV 240-469338/14		8260B		5 mL	5 mL	2 uL	2 uL		
ICV 240-469338/15		8260B		5 mL	5 mL	2 uL	2 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00305	VMFASAW 00359	VMFASGW 00391	VMFASPW 00382	VMRGAS 00369	VMRPRIMW 00419
BFB 240-469338/1		8260B							
STD8260 240-469338/2 IC		8260B						32 uL	32 uL
STD8260 240-469338/3 IC		8260B						16 uL	16 uL
STD8260 240-469338/4 ICIS		8260B						8 uL	8 uL
STD8260 240-469338/5 IC		8260B						4 uL	4 uL
STD8260 240-469338/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-469338/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-469338/14		8260B			8 uL	8 uL	8 uL		
ICV 240-469338/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	hc907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50is 00086	vm50ss_stk 00086	VMAROLISTDW 00384	vmbfb 00026
BFB 240-476941/1		8260B		5 mL	5 mL				1 uL
STD8260 240-476941/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-476941/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-476941/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-476941/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-476941/6 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-476941/7 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-476941/14		8260B		5 mL	5 mL	1 uL	1 uL		
ICV 240-476941/15		8260B		5 mL	5 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00312	VMFASAW 00366	VMFASGW 00399	VMFASPW 00390	VMRGAS 00377	VMRPRIMW 00427
BFB 240-476941/1		8260B							
STD8260 240-476941/2 IC		8260B						32 uL	32 uL
STD8260 240-476941/3 IC		8260B						16 uL	16 uL
STD8260 240-476941/4 ICIS		8260B						8 uL	8 uL
STD8260 240-476941/5 IC		8260B						4 uL	4 uL
STD8260 240-476941/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-476941/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-476941/14		8260B			8 uL	8 uL	8 uL		
ICV 240-476941/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 476941 Batch Start Date: 03/16/21 07:33 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515506 Batch Start Date: 12/03/21 10:30 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-515506/1		8260B		5 mL	5 mL				
CCVIS 240-515506/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-515506/3		8260B		5 mL	5 mL		2 uL		
LCS 240-515506/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-515506/6		8260B		5 mL	5 mL			2 uL	2 uL
240-160744-E-16	SL-4_112421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-17	SL-19_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-18	SL-22_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-19	SL-20_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-20	SL-16_112421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-21	SL-17_112421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-22	SL-21_112421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-23	SL-18_112421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-24	DUP-01	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-B-25	DUP-02	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-F-25 MS	DUP-02	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-E-25 MSD	DUP-02	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00418	vmbfb 00029	VMFASAW 00400	VMFASGW 00436	VMFASPW 00425	VMRA9W 00417
BFB 240-515506/1		8260B			1 uL				
CCVIS 240-515506/2		8260B		8 uL					
CCV 240-515506/3		8260B							8 uL
LCS 240-515506/4		8260B				8 uL	8 uL	8 uL	
MB 240-515506/6		8260B							
240-160744-E-16	SL-4_112421	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515506 Batch Start Date: 12/03/21 10:30 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00418	vmbfb 00029	VMFASAW 00400	VMFASGW 00436	VMFASPW 00425	VMRA9W 00417
240-160744-E-17	SL-19_112321	8260B	T						
240-160744-E-18	SL-22_112321	8260B	T						
240-160744-E-19	SL-20_112321	8260B	T						
240-160744-E-20	SL-16_112421	8260B	T						
240-160744-E-21	SL-17_112421	8260B	T						
240-160744-E-22	SL-21_112421	8260B	T						
240-160744-E-23	SL-18_112421	8260B	T						
240-160744-E-24	DUP-01	8260B	T						
240-160744-B-25	DUP-02	8260B	T						
240-160744-F-25 MS	DUP-02	8260B	T			8 uL	8 uL	8 uL	
240-160744-E-25 MSD	DUP-02	8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00409	VMRPRIMW 00462				
BFB 240-515506/1		8260B							
CCVIS 240-515506/2		8260B		8 uL	8 uL				
CCV 240-515506/3		8260B							
LCS 240-515506/4		8260B							
MB 240-515506/6		8260B							
240-160744-E-16	SL-4_112421	8260B	T						
240-160744-E-17	SL-19_112321	8260B	T						
240-160744-E-18	SL-22_112321	8260B	T						
240-160744-E-19	SL-20_112321	8260B	T						
240-160744-E-20	SL-16_112421	8260B	T						
240-160744-E-21	SL-17_112421	8260B	T						
240-160744-E-22	SL-21_112421	8260B	T						
240-160744-E-23	SL-18_112421	8260B	T						
240-160744-E-24	DUP-01	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515506 Batch Start Date: 12/03/21 10:30 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00409	VMRPRIMW 00462				
240-160744-B-25	DUP-02	8260B	T						
240-160744-F-25 MS	DUP-02	8260B	T						
240-160744-E-25 MSD	DUP-02	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515508 Batch Start Date: 12/03/21 10:32 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is 00089	VM50IS 00090	vm50ss_stk 00088	VMAROLISTDW 00418
BFB 240-515508/1		8260B		5 mL	5 mL				
CCVIS 240-515508/2		8260B		5 mL	5 mL		1 uL	1 uL	8 uL
CCV 240-515508/3		8260B		5 mL	5 mL	1 uL			
LCS 240-515508/4		8260B		5 mL	5 mL		1 uL	1 uL	
MB 240-515508/7		8260B		5 mL	5 mL		1 uL	1 uL	
240-160744-B-1	TRIP BLANK	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-2	SL-15_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-3	SL-14_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-4	SL-13_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-7	SL-5_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-9	SL-9_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-10	SL-10_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-11	SL-11_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-12	SL-12_112321	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-13	MH-1231_112421	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-14	SL-2_112421	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-B-15	SL-3_112421	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-D-15 MS	SL-3_112421	8260B	T	5 mL	5 mL		1 uL	1 uL	
240-160744-E-15 MSD	SL-3_112421	8260B	T	5 mL	5 mL		1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00029	VMFASAW 00400	VMFASGW 00436	VMFASPW 00425	VMRA9W 00417	VMRGAS 00409
BFB 240-515508/1		8260B		1 uL					
CCVIS 240-515508/2		8260B							8 uL
CCV 240-515508/3		8260B						8 uL	
LCS 240-515508/4		8260B			8 uL	8 uL	8 uL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515508 Batch Start Date: 12/03/21 10:32 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00029	VMFASAW 00400	VMFASGW 00436	VMFASPW 00425	VMRA9W 00417	VMRGAS 00409
MB 240-515508/7		8260B							
240-160744-B-1	TRIP BLANK	8260B	T						
240-160744-B-2	SL-15_112321	8260B	T						
240-160744-B-3	SL-14_112321	8260B	T						
240-160744-E-4	SL-13_112321	8260B	T						
240-160744-E-7	SL-5_112321	8260B	T						
240-160744-E-9	SL-9_112321	8260B	T						
240-160744-E-10	SL-10_112321	8260B	T						
240-160744-E-11	SL-11_112321	8260B	T						
240-160744-B-12	SL-12_112321	8260B	T						
240-160744-B-13	MH-1231_112421	8260B	T						
240-160744-B-14	SL-2_112421	8260B	T						
240-160744-B-15	SL-3_112421	8260B	T						
240-160744-D-15 MS	SL-3_112421	8260B	T		8 uL	8 uL	8 uL		
240-160744-E-15 MSD	SL-3_112421	8260B	T		8 uL	8 uL	8 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00462					
BFB 240-515508/1		8260B							
CCVIS 240-515508/2		8260B		8 uL					
CCV 240-515508/3		8260B							
LCS 240-515508/4		8260B							
MB 240-515508/7		8260B							
240-160744-B-1	TRIP BLANK	8260B	T						
240-160744-B-2	SL-15_112321	8260B	T						
240-160744-B-3	SL-14_112321	8260B	T						
240-160744-E-4	SL-13_112321	8260B	T						
240-160744-E-7	SL-5_112321	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515508 Batch Start Date: 12/03/21 10:32 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00462					
240-160744-E-9	SL-9_112321	8260B	T						
240-160744-E-10	SL-10_112321	8260B	T						
240-160744-E-11	SL-11_112321	8260B	T						
240-160744-B-12	SL-12_112321	8260B	T						
240-160744-B-13	MH-1231_112421	8260B	T						
240-160744-B-14	SL-2_112421	8260B	T						
240-160744-B-15	SL-3_112421	8260B	T						
240-160744-D-15 MS	SL-3_112421	8260B	T						
240-160744-E-15 MSD	SL-3_112421	8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515635 Batch Start Date: 12/06/21 09:00 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00088
BFB 240-515635/1		8260B		5 mL	5 mL				
CCVIS 240-515635/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-515635/3		8260B		5 mL	5 mL		2 uL		
LCS 240-515635/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-515635/6		8260B		5 mL	5 mL			2 uL	2 uL
240-160744-B-5	SL-7_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-D-6	SL-6_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160744-B-8	SL-8_112321	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160670-C-5 MS		8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-160670-C-5 MSD		8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00419	vmbfb 00029	VMFASAW 00401	VMFASGW 00436	VMFASPW 00425	VMRA9W 00417
BFB 240-515635/1		8260B			1 uL				
CCVIS 240-515635/2		8260B		8 uL					
CCV 240-515635/3		8260B							8 uL
LCS 240-515635/4		8260B				8 uL	8 uL	8 uL	
MB 240-515635/6		8260B							
240-160744-B-5	SL-7_112321	8260B	T						
240-160744-D-6	SL-6_112321	8260B	T						
240-160744-B-8	SL-8_112321	8260B	T						
240-160670-C-5 MS		8260B	T			8 uL	8 uL	8 uL	
240-160670-C-5 MSD		8260B	T			8 uL	8 uL	8 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00410	VMRPRIMW 00462				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515635 Batch Start Date: 12/06/21 09:00 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00410	VMRPRIMW 00462				
BFB 240-515635/1		8260B							
CCVIS 240-515635/2		8260B		8 uL	8 uL				
CCV 240-515635/3		8260B							
LCS 240-515635/4		8260B							
MB 240-515635/6		8260B							
240-160744-B-5	SL-7_112321	8260B	T						
240-160744-D-6	SL-6_112321	8260B	T						
240-160744-B-8	SL-8_112321	8260B	T						
240-160670-C-5 MS		8260B	T						
240-160670-C-5 MSD		8260B	T						

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-15_112321	240-160744-2	97
SL-14_112321	240-160744-3	96
SL-13_112321	240-160744-4	94
SL-7_112321	240-160744-5	101
SL-6_112321	240-160744-6	100
SL-5_112321	240-160744-7	99
SL-8_112321	240-160744-8	103
SL-9_112321	240-160744-9	103
SL-10_112321	240-160744-10	100
SL-11_112321	240-160744-11	101
SL-12_112321	240-160744-12	101
MH-1231_112421	240-160744-13	99
SL-2_112421	240-160744-14	102
SL-3_112421	240-160744-15	101
SL-4_112421	240-160744-16	102
SL-19_112321	240-160744-17	100
SL-22_112321	240-160744-18	100
SL-20_112321	240-160744-19	100
SL-16_112421	240-160744-20	102
SL-17_112421	240-160744-21	103
SL-21_112421	240-160744-22	102
SL-18_112421	240-160744-23	100
DUP-01	240-160744-24	96
DUP-02	240-160744-25	100
	MB 240-514943/5	99
	MB 240-515124/5	103
	LCS 240-514943/4	99
	LCS 240-515124/4	101
SL-13_112321 MS	240-160744-4 MS	100
	240-160738-A-1 MS	103
SL-13_112321 MSD	240-160744-4 MSD	101
	240-160738-A-1 MSD	103

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202588.D

Lab ID: LCS 240-514943/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	9.54	95	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202618.D

Lab ID: LCS 240-515124/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	9.54	95	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202595.D

Lab ID: 240-160744-4 MS Client ID: SL-13_112321 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	10.2	102	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202627.D

Lab ID: 240-160738-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	32	42.6	104	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202596.D

Lab ID: 240-160744-4 MSD Client ID: SL-13_112321 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	9.79	98	4	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202628.D

Lab ID: 240-160738-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	39.6	74	7	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: 202589.D Lab Sample ID: MB 240-514943/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 11/29/2021 20:32

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-514943/4	202588.D	11/29/2021 20:08
SL-15_112321	240-160744-2	202592.D	11/29/2021 21:44
SL-14_112321	240-160744-3	202593.D	11/29/2021 22:08
SL-13_112321	240-160744-4	202594.D	11/29/2021 22:32
SL-13_112321 MS	240-160744-4 MS	202595.D	11/29/2021 22:56
SL-13_112321 MSD	240-160744-4 MSD	202596.D	11/29/2021 23:20
SL-7_112321	240-160744-5	202597.D	11/29/2021 23:44
SL-6_112321	240-160744-6	202598.D	11/30/2021 00:07
SL-5_112321	240-160744-7	202599.D	11/30/2021 00:31
SL-8_112321	240-160744-8	202600.D	11/30/2021 00:55
SL-9_112321	240-160744-9	202601.D	11/30/2021 01:19
SL-10_112321	240-160744-10	202602.D	11/30/2021 01:43
SL-11_112321	240-160744-11	202603.D	11/30/2021 02:07
SL-12_112321	240-160744-12	202604.D	11/30/2021 02:31
MH-1231_112421	240-160744-13	202605.D	11/30/2021 02:55
SL-2_112421	240-160744-14	202606.D	11/30/2021 03:19
SL-3_112421	240-160744-15	202607.D	11/30/2021 03:43
SL-4_112421	240-160744-16	202608.D	11/30/2021 04:07
SL-19_112321	240-160744-17	202609.D	11/30/2021 04:31
SL-22_112321	240-160744-18	202610.D	11/30/2021 04:54
SL-20_112321	240-160744-19	202611.D	11/30/2021 05:18
SL-16_112421	240-160744-20	202612.D	11/30/2021 05:42
SL-17_112421	240-160744-21	202613.D	11/30/2021 06:06
SL-21_112421	240-160744-22	202614.D	11/30/2021 06:30

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: 202619.D Lab Sample ID: MB 240-515124/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 11/30/2021 19:13

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-515124/4	202618.D	11/30/2021 18:49
SL-18_112421	240-160744-23	202623.D	11/30/2021 20:48
DUP-01	240-160744-24	202624.D	11/30/2021 21:12
DUP-02	240-160744-25	202625.D	11/30/2021 21:36
	240-160738-A-1 MS	202627.D	11/30/2021 22:24
	240-160738-A-1 MSD	202628.D	11/30/2021 22:48

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB20126.D BFB Injection Date: 09/09/2021

Instrument ID: A3UX20 BFB Injection Time: 13:33

Analysis Batch No.: 503003

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.3	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	68.0	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	66.1	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-503003/3	201661.D	09/09/2021	14:25
	IC 240-503003/4	201662.D	09/09/2021	14:49
	IC 240-503003/5	201663.D	09/09/2021	15:14
	IC 240-503003/6	201664.D	09/09/2021	15:38
	ICIS 240-503003/7	201665.D	09/09/2021	16:03
	IC 240-503003/8	201666.D	09/09/2021	16:27
	IC 240-503003/9	201667.D	09/09/2021	16:52
	IC 240-503003/10	201668.D	09/09/2021	17:16
	ICV 240-503003/12	201670.D	09/09/2021	18:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB20169.D BFB Injection Date: 11/29/2021

Instrument ID: A3UX20 BFB Injection Time: 19:24

Analysis Batch No.: 514943

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.0	
75	30.0 - 60.0 % of mass 95	52.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	62.1	
175	5.0 - 9.0 % of mass 174	4.4	(7.1) 1
176	95.0 - 101.0 % of mass 174	59.1	(95.2) 1
177	5.0 - 9.0 % of mass 176	3.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-514943/3	202587.D	11/29/2021	19:44
	LCS 240-514943/4	202588.D	11/29/2021	20:08
	MB 240-514943/5	202589.D	11/29/2021	20:32
SL-15_112321	240-160744-2	202592.D	11/29/2021	21:44
SL-14_112321	240-160744-3	202593.D	11/29/2021	22:08
SL-13_112321	240-160744-4	202594.D	11/29/2021	22:32
SL-13_112321 MS	240-160744-4 MS	202595.D	11/29/2021	22:56
SL-13_112321 MSD	240-160744-4 MSD	202596.D	11/29/2021	23:20
SL-7_112321	240-160744-5	202597.D	11/29/2021	23:44
SL-6_112321	240-160744-6	202598.D	11/30/2021	0:07
SL-5_112321	240-160744-7	202599.D	11/30/2021	0:31
SL-8_112321	240-160744-8	202600.D	11/30/2021	0:55
SL-9_112321	240-160744-9	202601.D	11/30/2021	1:19
SL-10_112321	240-160744-10	202602.D	11/30/2021	1:43
SL-11_112321	240-160744-11	202603.D	11/30/2021	2:07
SL-12_112321	240-160744-12	202604.D	11/30/2021	2:31
MH-1231_112421	240-160744-13	202605.D	11/30/2021	2:55
SL-2_112421	240-160744-14	202606.D	11/30/2021	3:19
SL-3_112421	240-160744-15	202607.D	11/30/2021	3:43
SL-4_112421	240-160744-16	202608.D	11/30/2021	4:07
SL-19_112321	240-160744-17	202609.D	11/30/2021	4:31
SL-22_112321	240-160744-18	202610.D	11/30/2021	4:54
SL-20_112321	240-160744-19	202611.D	11/30/2021	5:18
SL-16_112421	240-160744-20	202612.D	11/30/2021	5:42
SL-17_112421	240-160744-21	202613.D	11/30/2021	6:06
SL-21_112421	240-160744-22	202614.D	11/30/2021	6:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab File ID: BFB20170.D BFB Injection Date: 11/30/2021

Instrument ID: A3UX20 BFB Injection Time: 17:44

Analysis Batch No.: 515124

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.1	
75	30.0 - 60.0 % of mass 95	54.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	59.1	
175	5.0 - 9.0 % of mass 174	4.3	(7.2) 1
176	95.0 - 101.0 % of mass 174	57.4	(97.1) 1
177	5.0 - 9.0 % of mass 176	3.8	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-515124/3	202617.D	11/30/2021	18:25
	LCS 240-515124/4	202618.D	11/30/2021	18:49
	MB 240-515124/5	202619.D	11/30/2021	19:13
SL-18_112421	240-160744-23	202623.D	11/30/2021	20:48
DUP-01	240-160744-24	202624.D	11/30/2021	21:12
DUP-02	240-160744-25	202625.D	11/30/2021	21:36
	240-160738-A-1 MS	202627.D	11/30/2021	22:24
	240-160738-A-1 MSD	202628.D	11/30/2021	22:48

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: ICIS 240-503003/7 Date Analyzed: 09/09/2021 16:03

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201665.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3376203	7.44	100508	8.19		
UPPER LIMIT		6752406	7.94	201016	8.69		
LOWER LIMIT		1688102	6.94	50254	7.69		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-514943/3		2674320	7.42	81425	8.18		
CCVIS 240-515124/3		2655926	7.42	77269	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: CCVIS 240-514943/3 Date Analyzed: 11/29/2021 19:44

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 202587.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2674320	7.42	81425	8.18		
UPPER LIMIT		5348640	7.92	162850	8.68		
LOWER LIMIT		1337160	6.92	40713	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-514943/4		2729634	7.44	80810	8.18		
MB 240-514943/5		2687376	7.42	79928	8.18		
240-160744-2	SL-15_112321	2735974	7.44	79589	8.18		
240-160744-3	SL-14_112321	2726544	7.44	73762	8.18		
240-160744-4	SL-13_112321	2640627	7.42	75767	8.18		
240-160744-4 MS	SL-13_112321 MS	2723171	7.42	76740	8.18		
240-160744-4 MSD	SL-13_112321 MSD	2778618	7.44	82016	8.18		
240-160744-5	SL-7_112321	2612071	7.42	71964	8.18		
240-160744-6	SL-6_112321	2738997	7.44	78284	8.18		
240-160744-7	SL-5_112321	2664621	7.42	73069	8.18		
240-160744-8	SL-8_112321	2580077	7.42	74412	8.18		
240-160744-9	SL-9_112321	2631345	7.42	77736	8.18		
240-160744-10	SL-10_112321	2592902	7.42	75077	8.18		
240-160744-11	SL-11_112321	2674847	7.42	80019	8.18		
240-160744-12	SL-12_112321	2638427	7.42	75824	8.18		
240-160744-13	MH-1231_112421	2741166	7.44	79290	8.18		
240-160744-14	SL-2_112421	2628215	7.44	79625	8.18		
240-160744-15	SL-3_112421	2596500	7.42	73672	8.18		
240-160744-16	SL-4_112421	2651940	7.42	76927	8.18		
240-160744-17	SL-19_112321	2719315	7.42	84536	8.18		
240-160744-18	SL-22_112321	2598427	7.42	74075	8.18		
240-160744-19	SL-20_112321	2446442	7.42	77351	8.18		
240-160744-20	SL-16_112421	2602200	7.42	76994	8.18		
240-160744-21	SL-17_112421	2665054	7.42	81303	8.18		
240-160744-22	SL-21_112421	2657292	7.44	86196	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Sample No.: CCVIS 240-515124/3 Date Analyzed: 11/30/2021 18:25

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 202617.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2655926	7.42	77269	8.18		
UPPER LIMIT		5311852	7.92	154538	8.68		
LOWER LIMIT		1327963	6.92	38635	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-515124/4		2736507	7.42	78612	8.18		
MB 240-515124/5		2727173	7.42	83453	8.18		
240-160744-23	SL-18_112421	2581058	7.42	67946	8.18		
240-160744-24	DUP-01	2603611	7.44	66159	8.18		
240-160744-25	DUP-02	2532965	7.42	69322	8.18		
240-160738-A-1 MS		2614011	7.42	74061	8.18		
240-160738-A-1 MSD		2638538	7.44	81155	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-15_112321 Lab Sample ID: 240-160744-2

Matrix: Water Lab File ID: 202592.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 09:30

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 21:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202592.D				
Lims ID:	240-160744-C-2				
Client ID:	SL-15_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 21:44:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:12:08		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	849914	9.73	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2735974	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	79589	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

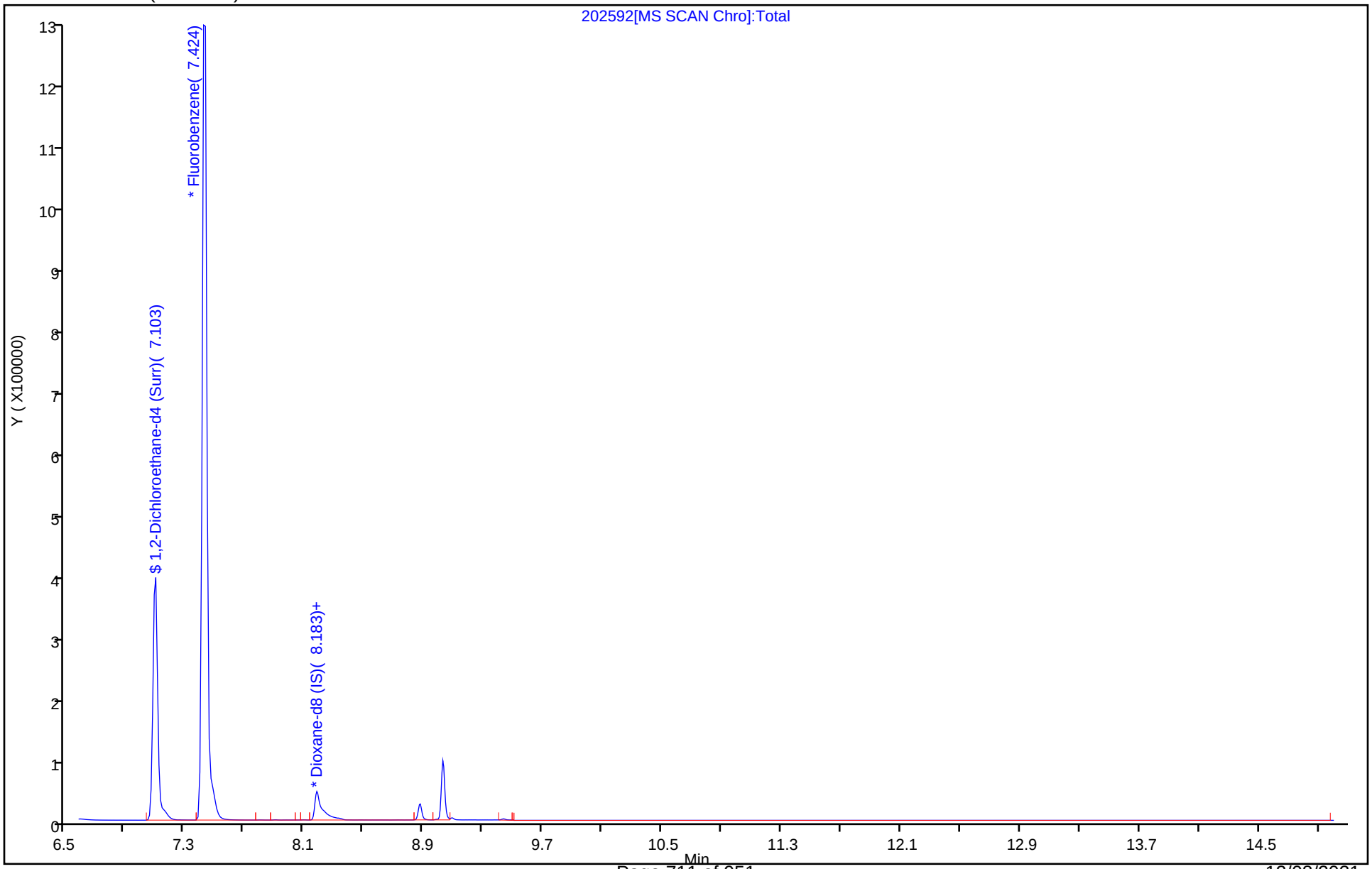
Report Date: 30-Nov-2021 18:20:32 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202592.D

Injection Date:	29-Nov-2021 21:44:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-2	Lab Sample ID:	240-160744-2	Worklist Smp#:	8
Client ID:	SL-15_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202592.D				
Lims ID:	240-160744-C-2				
Client ID:	SL-15_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 21:44:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.73	97.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-14_112321 Lab Sample ID: 240-160744-3

Matrix: Water Lab File ID: 202593.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 09:55

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 22:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202593.D				
Lims ID:	240-160744-C-3				
Client ID:	SL-14_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 22:08:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:12:12		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	834174	9.58	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2726544	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	73762	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

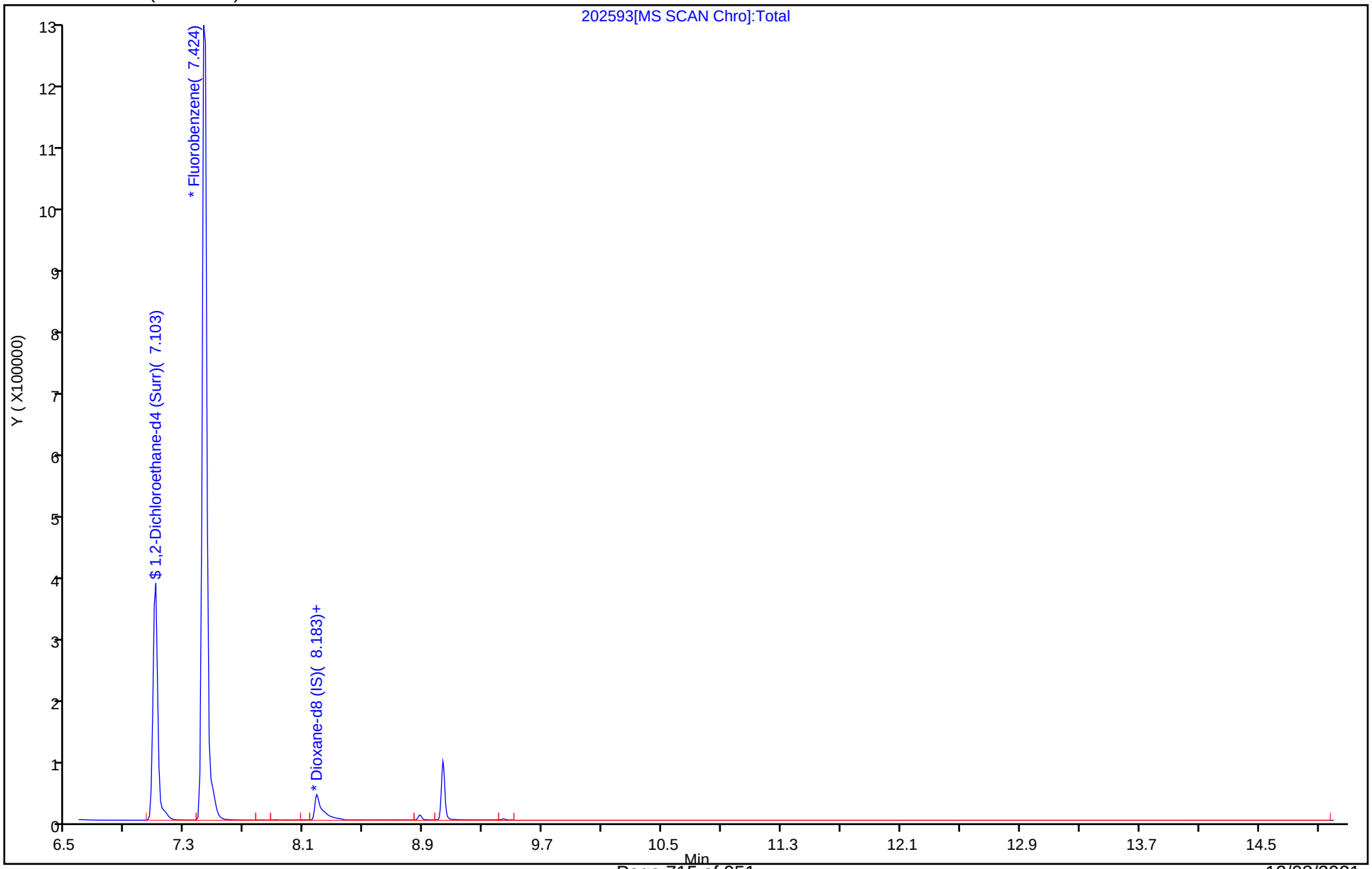
Report Date: 30-Nov-2021 18:20:33 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202593.D

Injection Date:	29-Nov-2021 22:08:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-3	Lab Sample ID:	240-160744-3	Worklist Smp#:	9
Client ID:	SL-14_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202593.D				
Lims ID:	240-160744-C-3				
Client ID:	SL-14_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 22:08:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.58	95.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-13_112321 Lab Sample ID: 240-160744-4

Matrix: Water Lab File ID: 202594.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 10:20

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 22:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202594.D				
Lims ID:	240-160744-C-4				
Client ID:	SL-13_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 22:32:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:12:15		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	796260	9.44	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2640627	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	75767	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

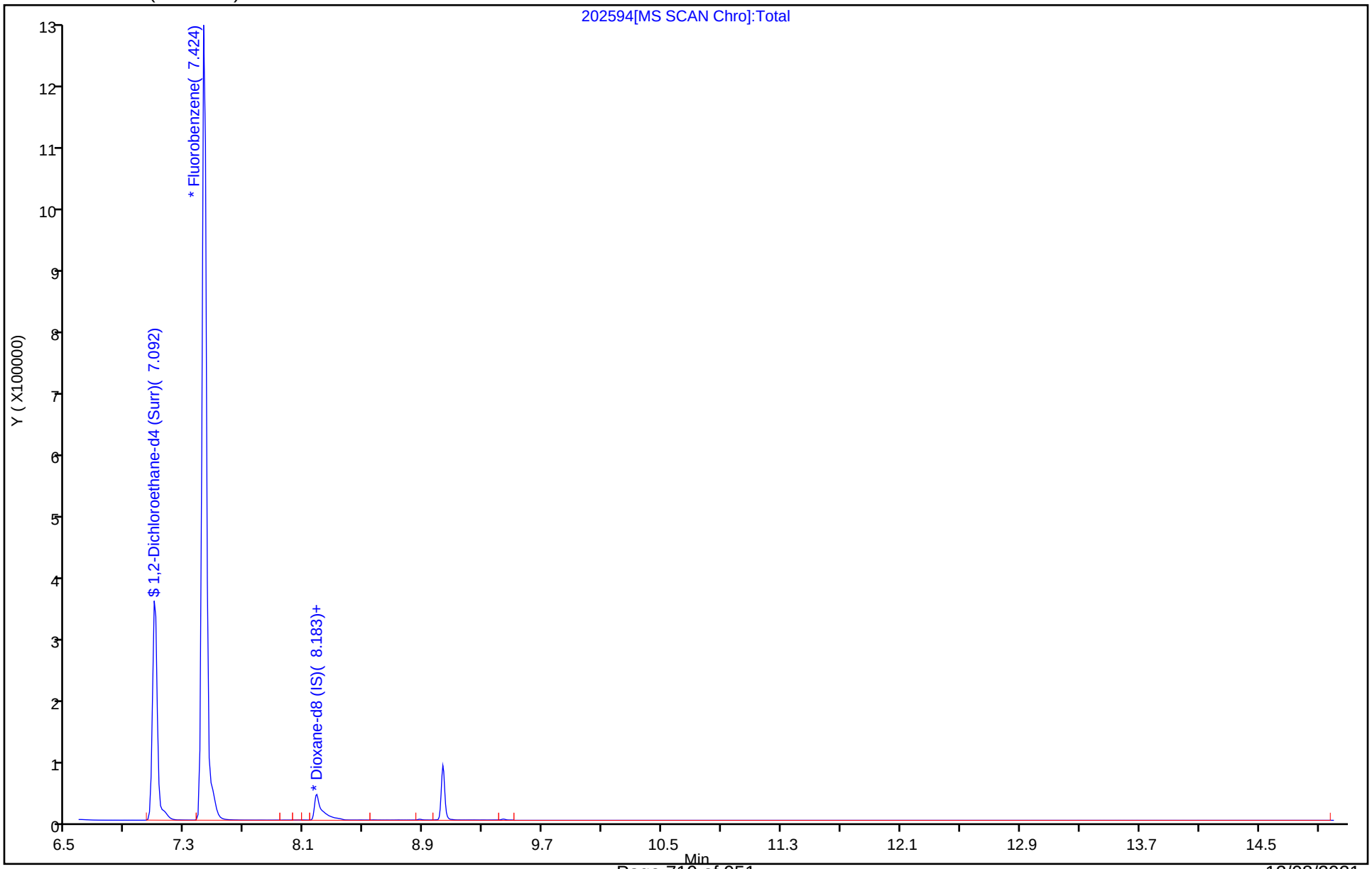
Report Date: 30-Nov-2021 18:20:33 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202594.D

Injection Date:	29-Nov-2021 22:32:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-4	Lab Sample ID:	240-160744-4	Worklist Smp#:	10
Client ID:	SL-13_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202594.D				
Lims ID:	240-160744-C-4				
Client ID:	SL-13_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 22:32:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.44	94.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-7_112321 Lab Sample ID: 240-160744-5

Matrix: Water Lab File ID: 202597.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 10:55

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 23:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	12		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202597.D				
Lims ID:	240-160744-C-5				
Client ID:	SL-7_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 23:44:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:13:19		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	841876	10.1	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2612071	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	71964	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	51	7227	12.3	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

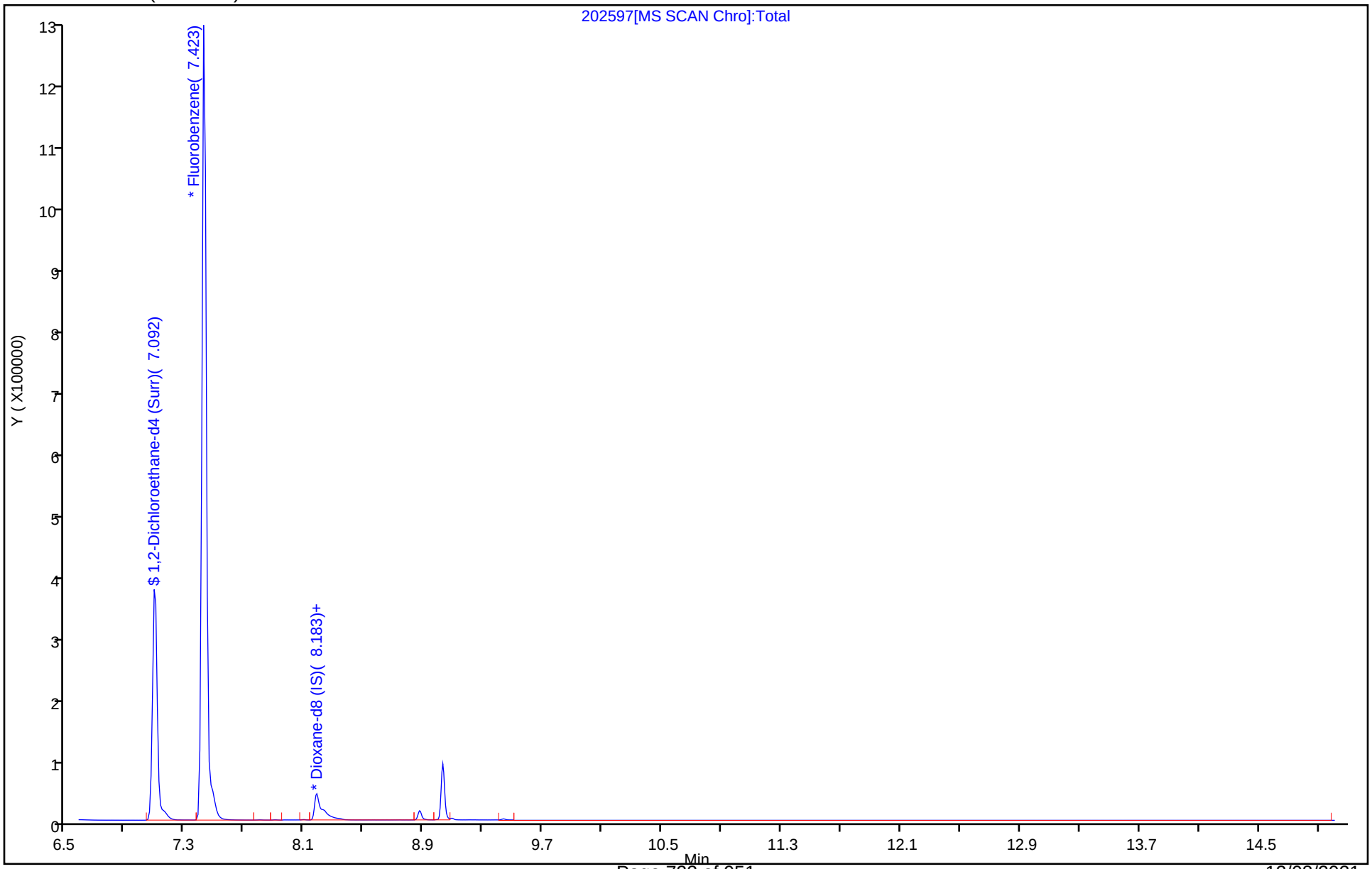
Report Date: 30-Nov-2021 18:20:34 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202597.D

Injection Date:	29-Nov-2021 23:44:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-5	Lab Sample ID:	240-160744-5	Worklist Smp#:	13
Client ID:	SL-7_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202597.D				
Lims ID:	240-160744-C-5				
Client ID:	SL-7_112321				
Sample Type:	Client				
Inject. Date:	29-Nov-2021 23:44:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:13:19

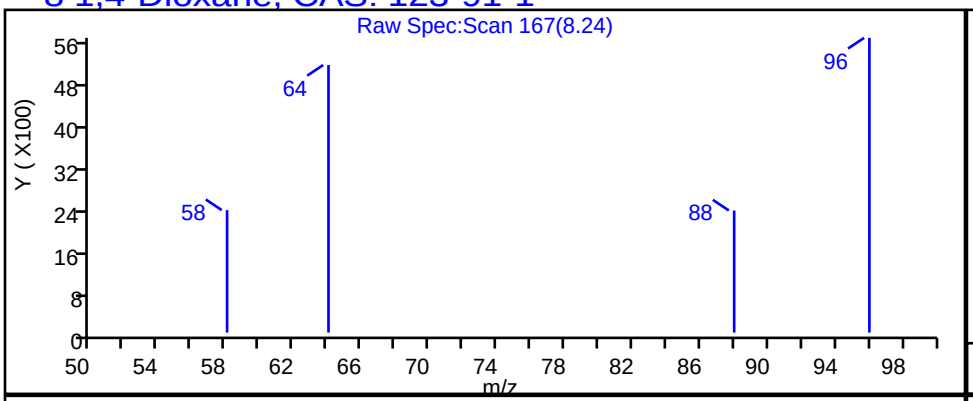
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.92

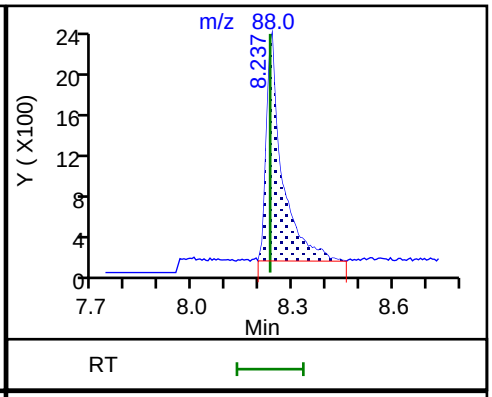
Eurofins TestAmerica, Canton

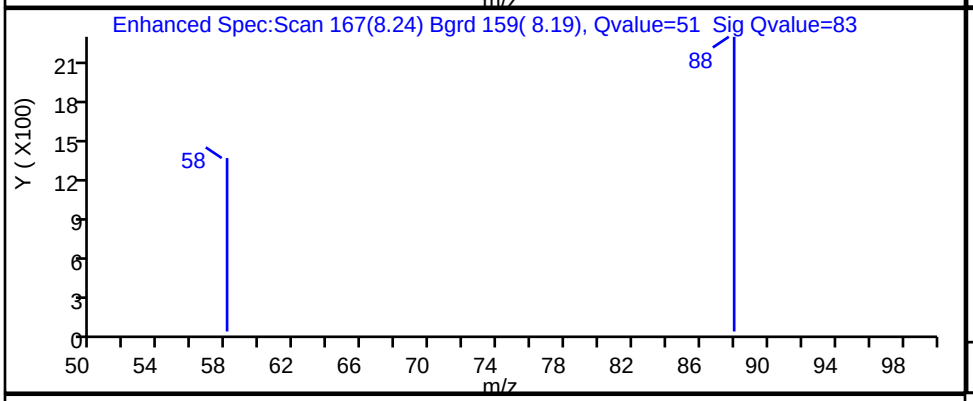
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202597.D

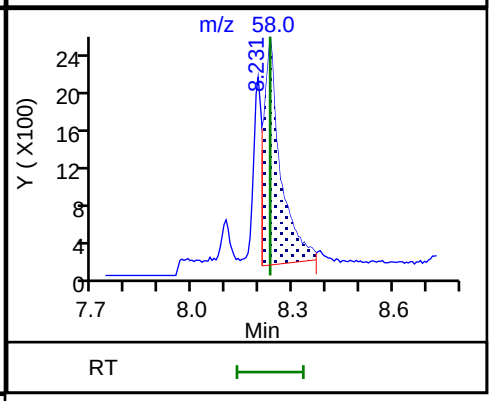
Injection Date:	29-Nov-2021 23:44:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-5	Lab Sample ID:	240-160744-5		
Client ID:	SL-7_112321				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

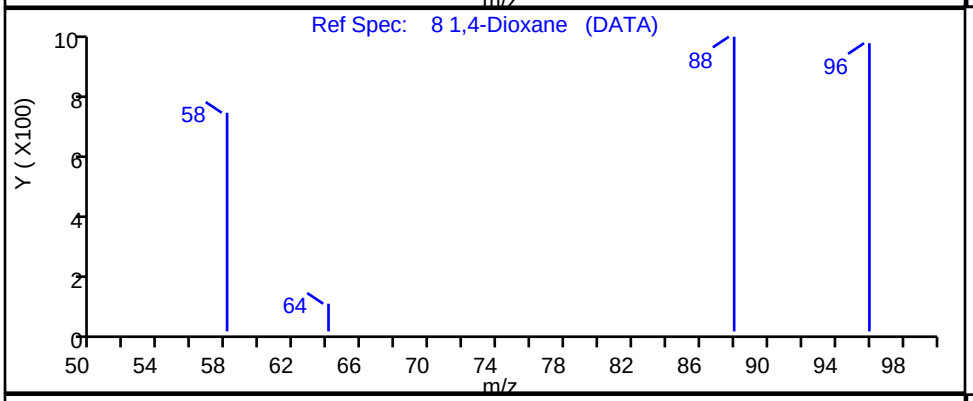
8 1,4-Dioxane, CAS: 123-91-1

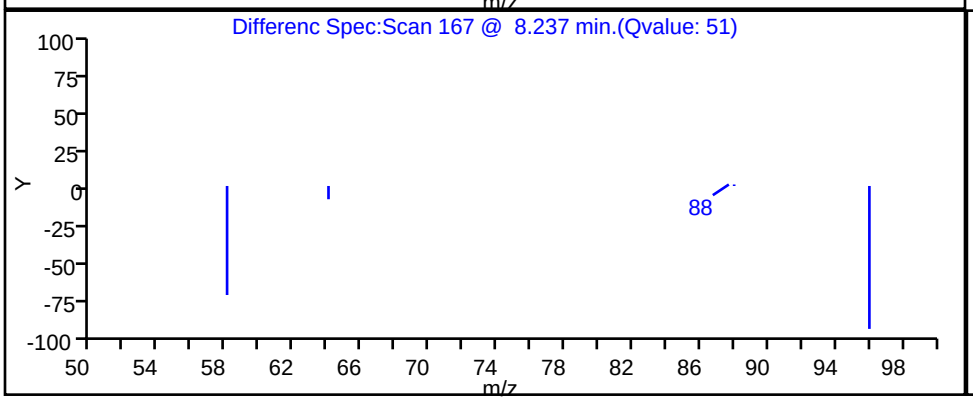


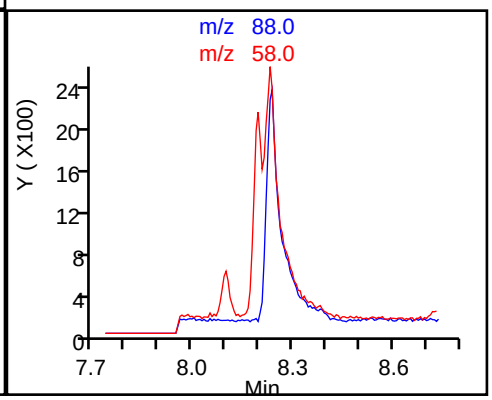












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

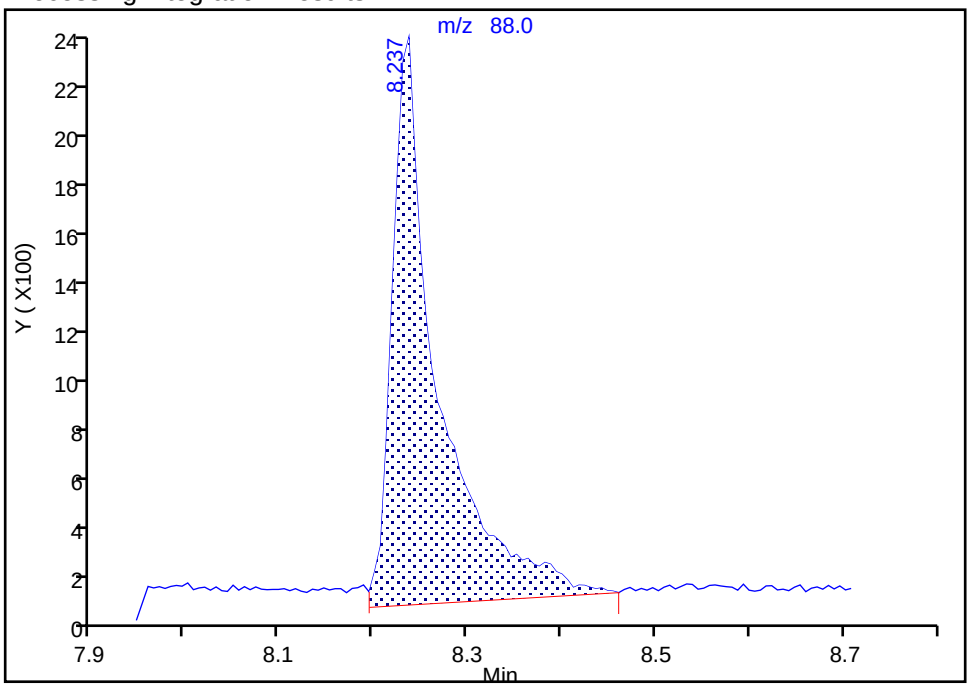
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202597.D				
Injection Date:	29-Nov-2021 23:44:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-5	Lab Sample ID:	240-160744-5		
Client ID:	SL-7_112321				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

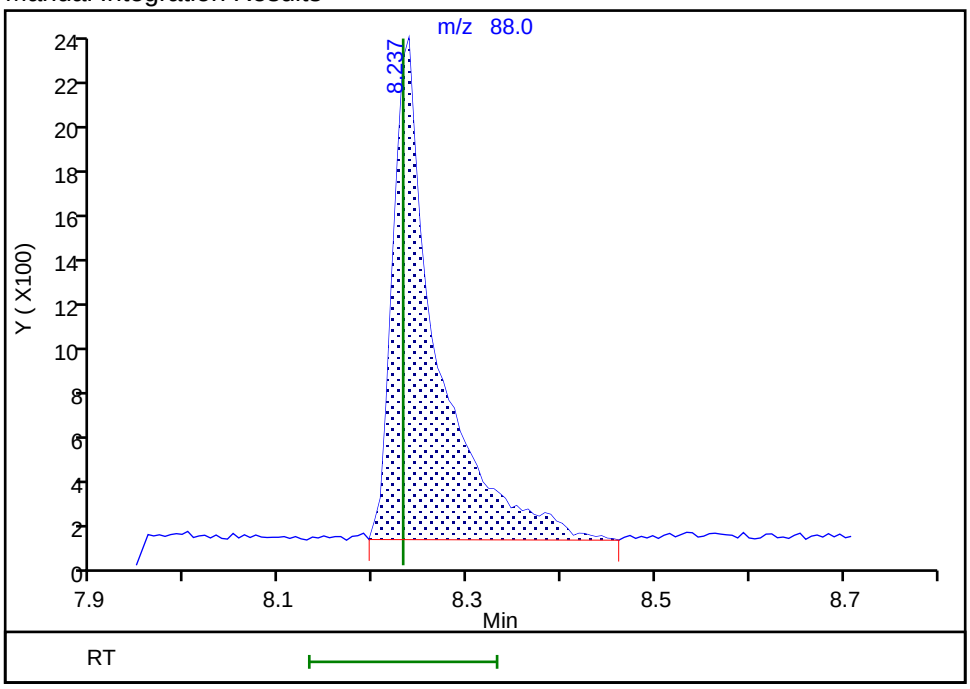
Processing Integration Results

RT: 8.24
Area: 7732
Amount: 13.164527
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7227
Amount: 12.304713
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:13:10

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-6_112321 Lab Sample ID: 240-160744-6

Matrix: Water Lab File ID: 202598.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 11:15

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 00:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.2	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202598.D				
Lims ID:	240-160744-C-6				
Client ID:	SL-6_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:07:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:13:31		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	877969	10.0	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2738997	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	78284	200.0	
8 1,4-Dioxane	88	8.244	8.231	0.013	25	797	1.25	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

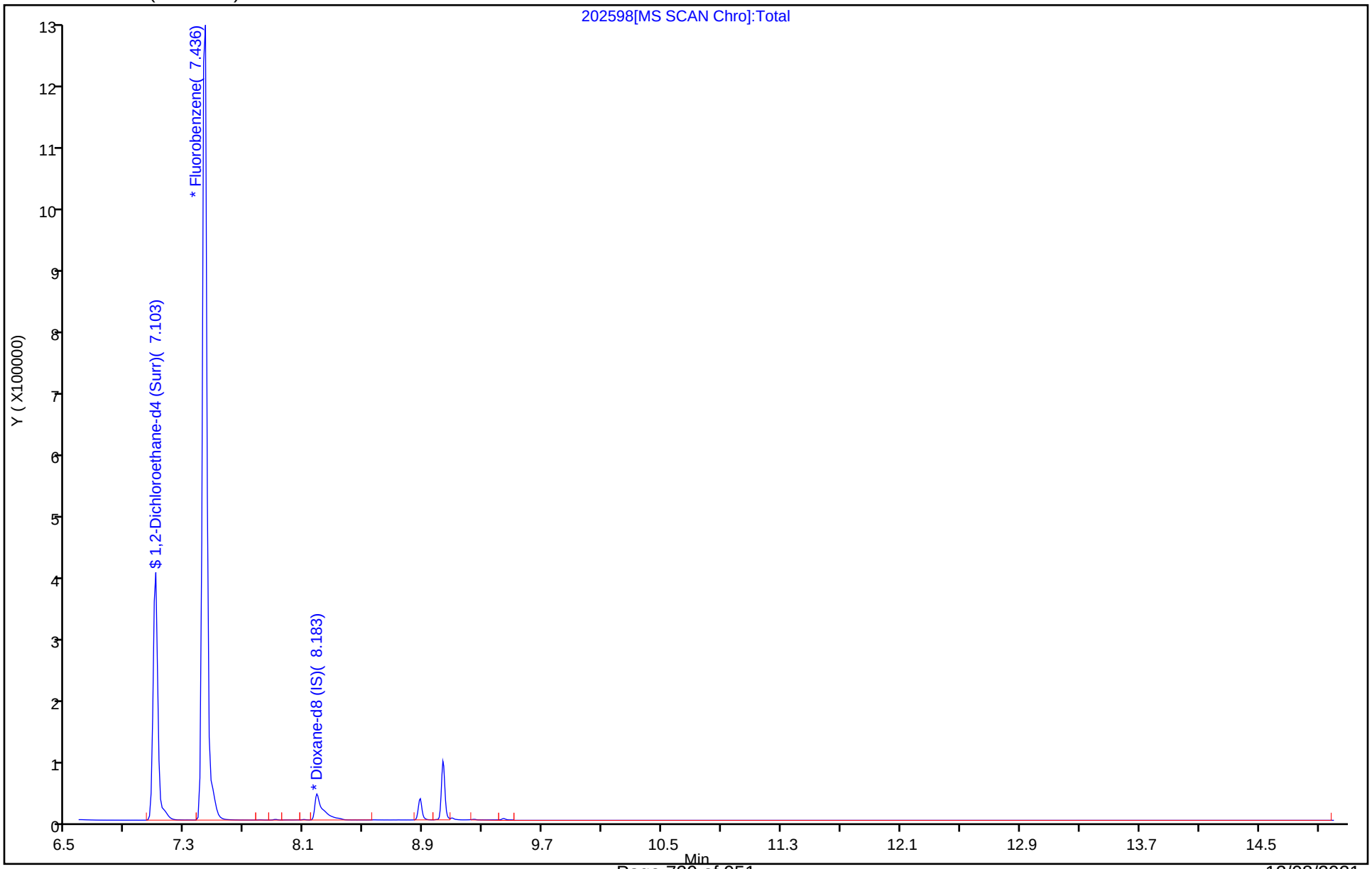
Report Date: 30-Nov-2021 18:20:35 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202598.D

Injection Date:	30-Nov-2021 00:07:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-6	Lab Sample ID:	240-160744-6	Worklist Smp#:	14
Client ID:	SL-6_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202598.D				
Lims ID:	240-160744-C-6				
Client ID:	SL-6_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:07:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:13:31

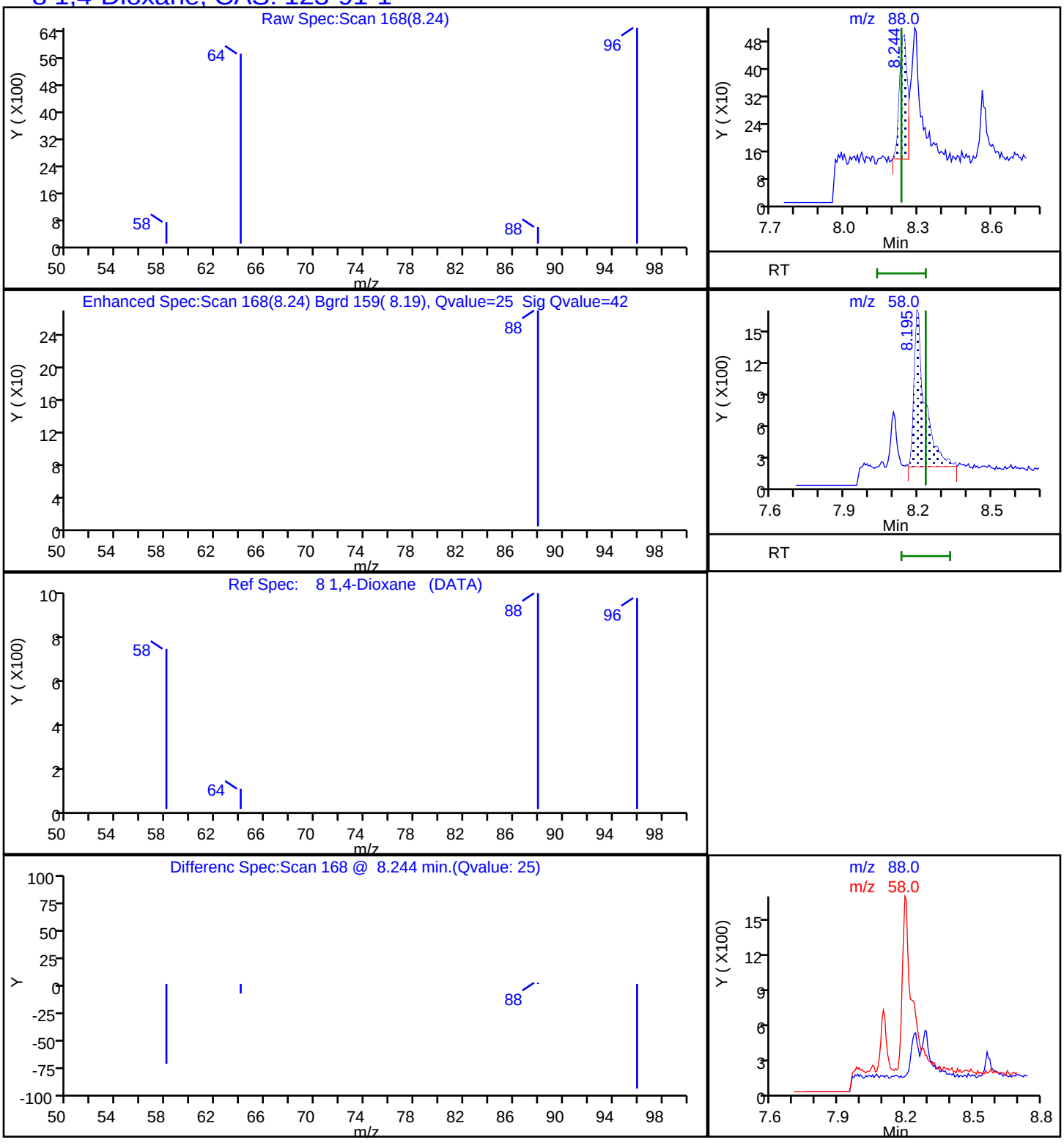
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.37

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202598.D

Injection Date:	30-Nov-2021 00:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-6	Lab Sample ID:	240-160744-6		
Client ID:	SL-6_112321				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

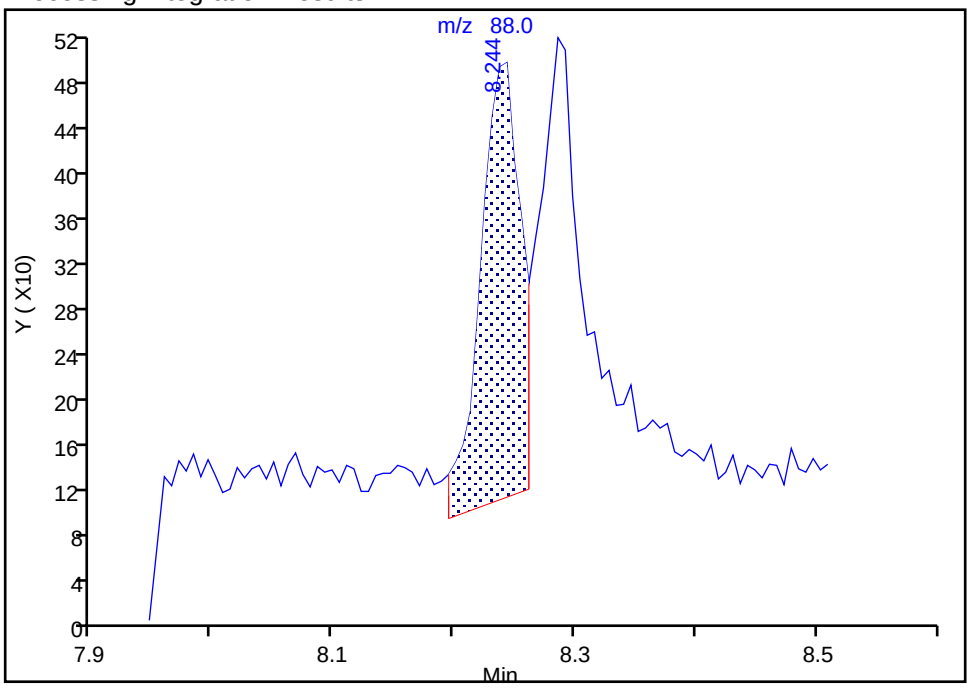
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202598.D				
Injection Date:	30-Nov-2021 00:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-6	Lab Sample ID:	240-160744-6		
Client ID:	SL-6_112321				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

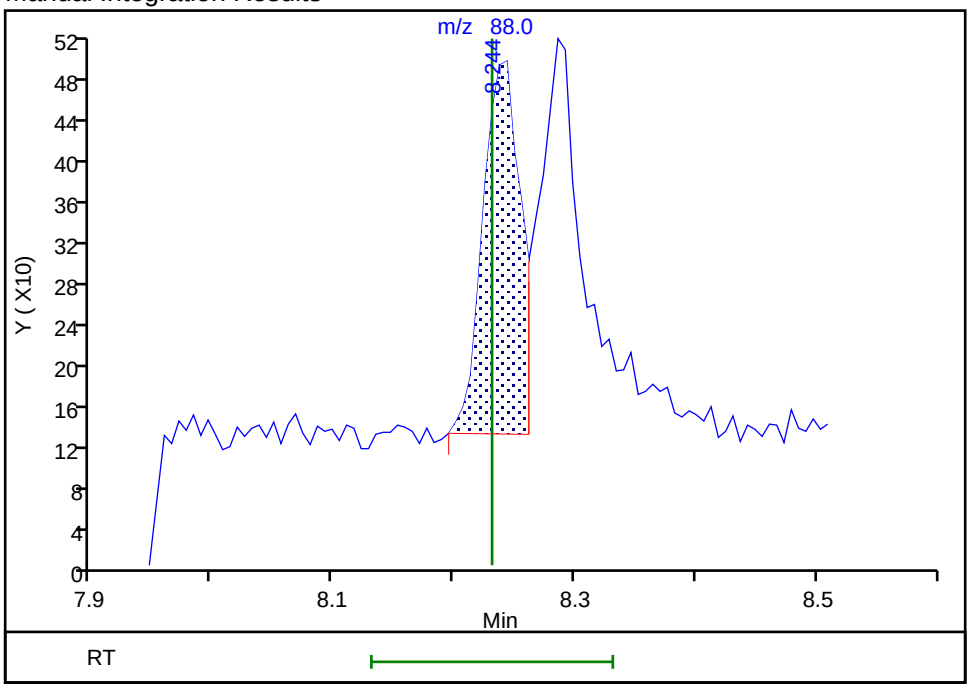
Processing Integration Results

RT: 8.24
Area: 908
Amount: 1.421155
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 797
Amount: 1.247424
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:15:04

Audit Action: Split an Integrated Peak Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-5_112321 Lab Sample ID: 240-160744-7

Matrix: Water Lab File ID: 202599.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 12:55

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 00:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	14		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202599.D				
Lims ID:	240-160744-C-7				
Client ID:	SL-5_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:31:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:15:38		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	841602	9.89	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2664621	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	73069	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	49	8091	13.6	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

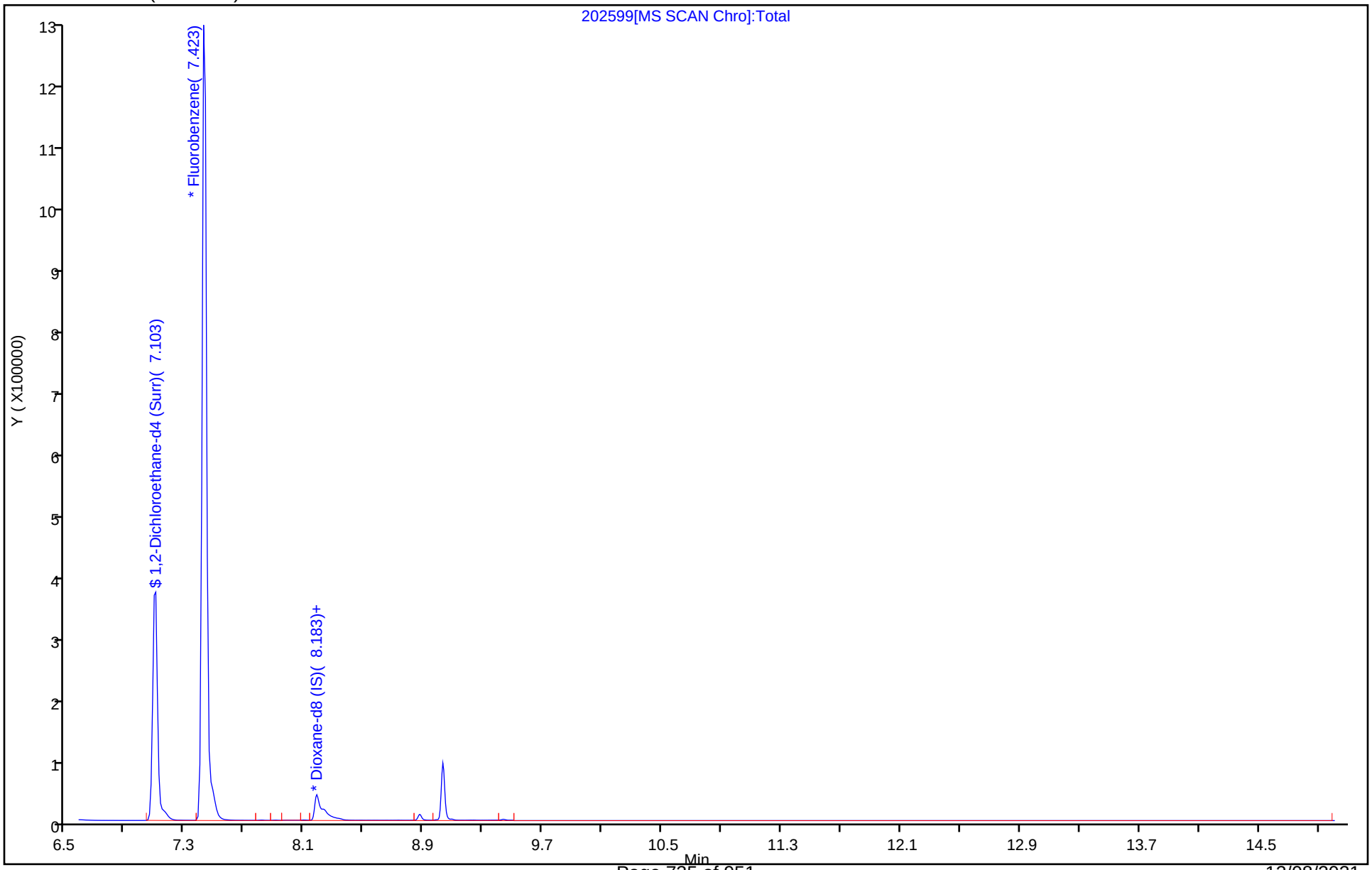
Report Date: 30-Nov-2021 18:20:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202599.D

Injection Date:	30-Nov-2021 00:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-7	Lab Sample ID:	240-160744-7	Worklist Smp#:	15
Client ID:	SL-5_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202599.D				
Lims ID:	240-160744-C-7				
Client ID:	SL-5_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:31:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

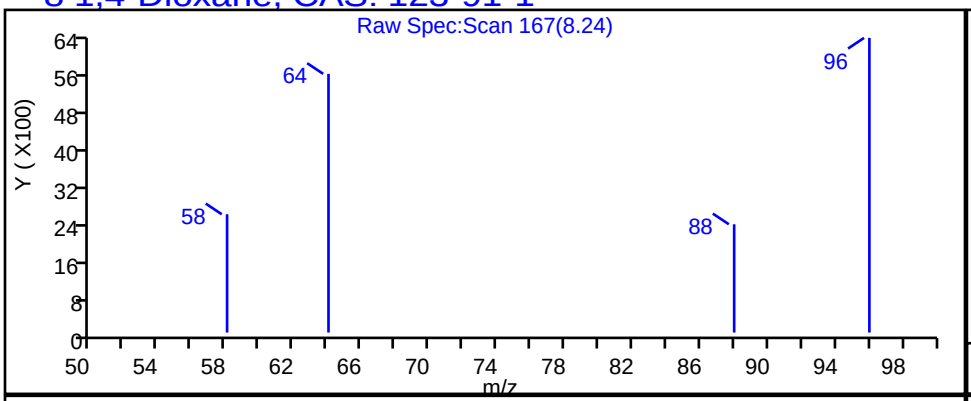
First Level Reviewer: seymourc Date: 30-Nov-2021 18:15:38

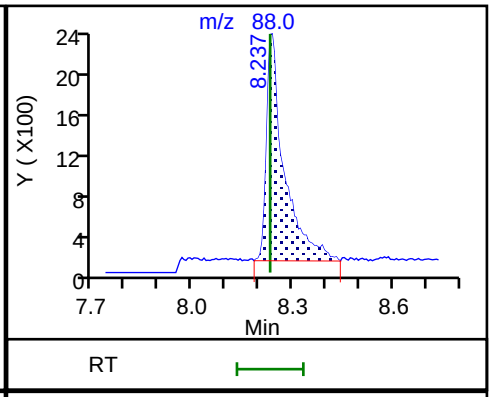
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.89	98.90

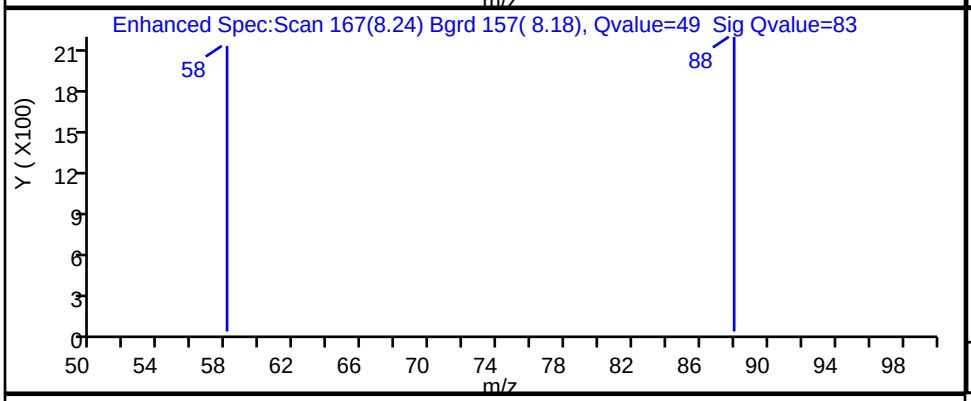
Eurofins TestAmerica, Canton

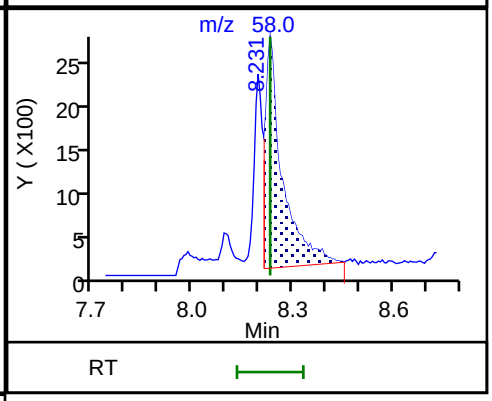
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202599.D				
Injection Date:	30-Nov-2021 00:31:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-7	Lab Sample ID:	240-160744-7		
Client ID:	SL-5_112321				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

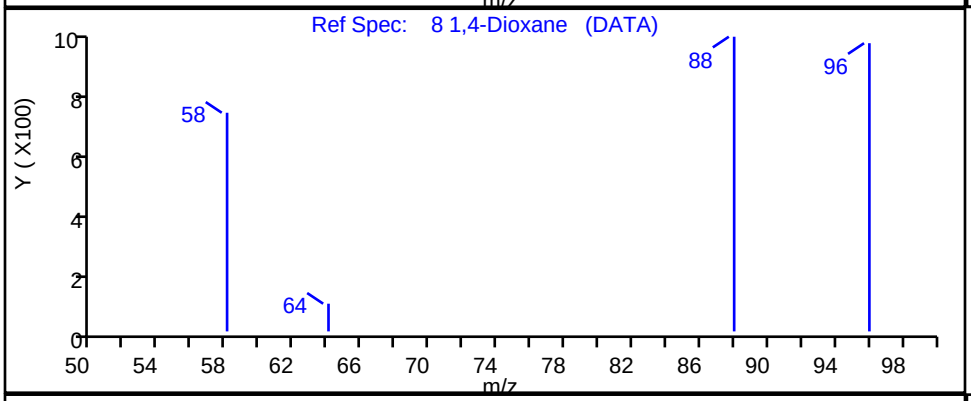
8 1,4-Dioxane, CAS: 123-91-1

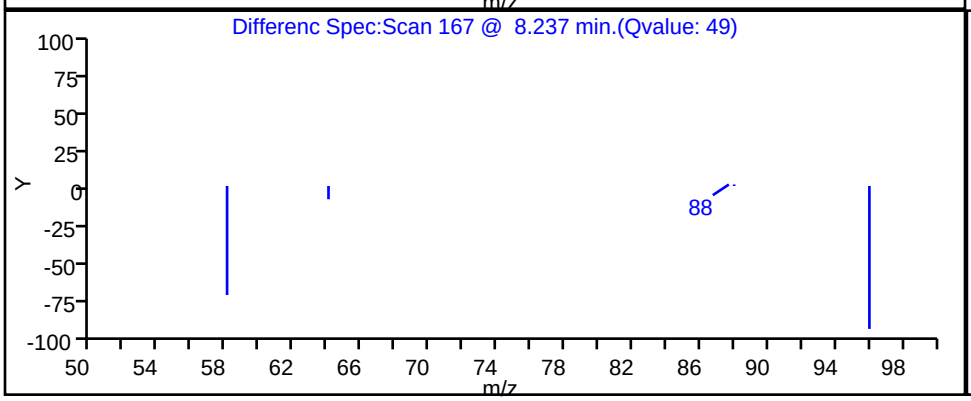


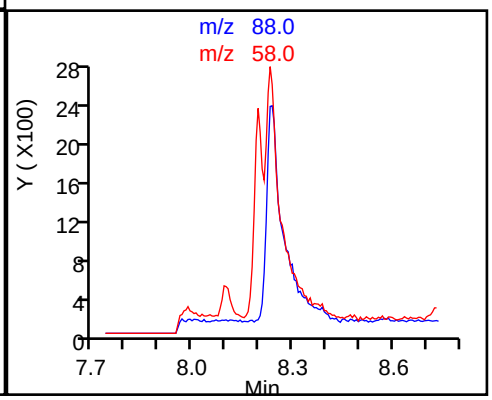












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

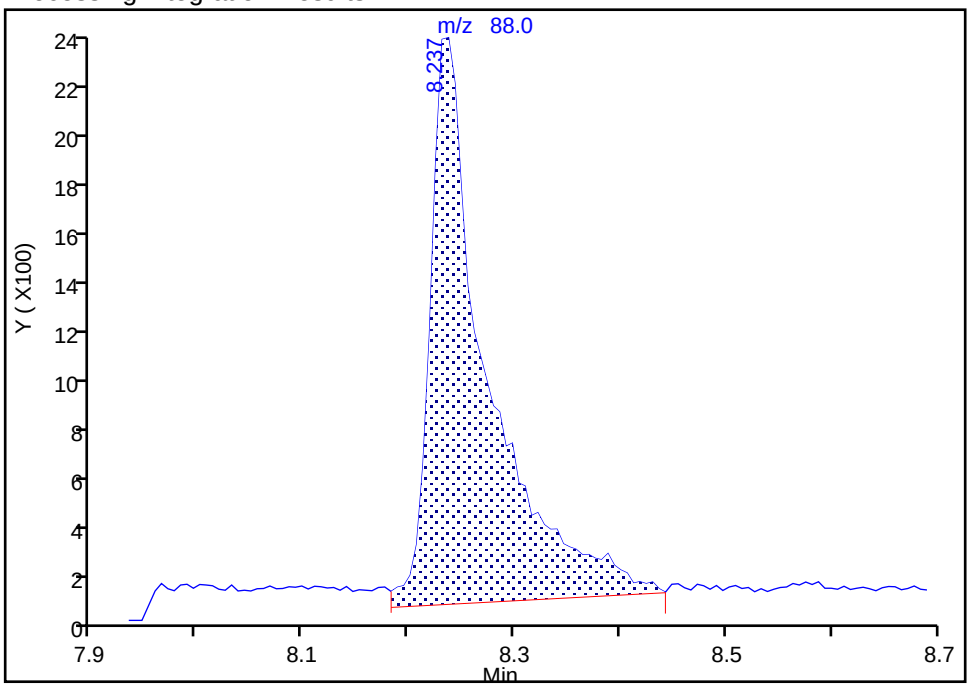
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202599.D				
Injection Date:	30-Nov-2021 00:31:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-7	Lab Sample ID:	240-160744-7		
Client ID:	SL-5_112321				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

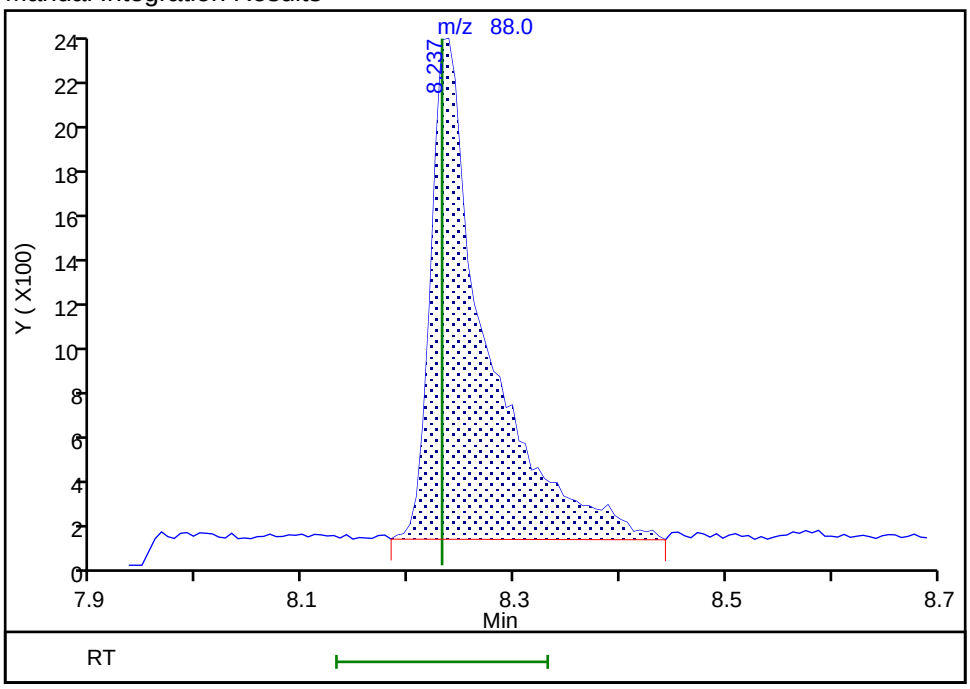
Processing Integration Results

RT: 8.24
Area: 8617
Amount: 14.449461
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8091
Amount: 13.567435
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:15:32

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-8_112321 Lab Sample ID: 240-160744-8

Matrix: Water Lab File ID: 202600.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 13:20

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 00:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	23		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202600.D				
Lims ID:	240-160744-A-8				
Client ID:	SL-8_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:55:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:15:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	845449	10.3	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2580077	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	74412	200.0	
8 1,4-Dioxane	88	8.232	8.231	0.001	48	14027	23.1	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

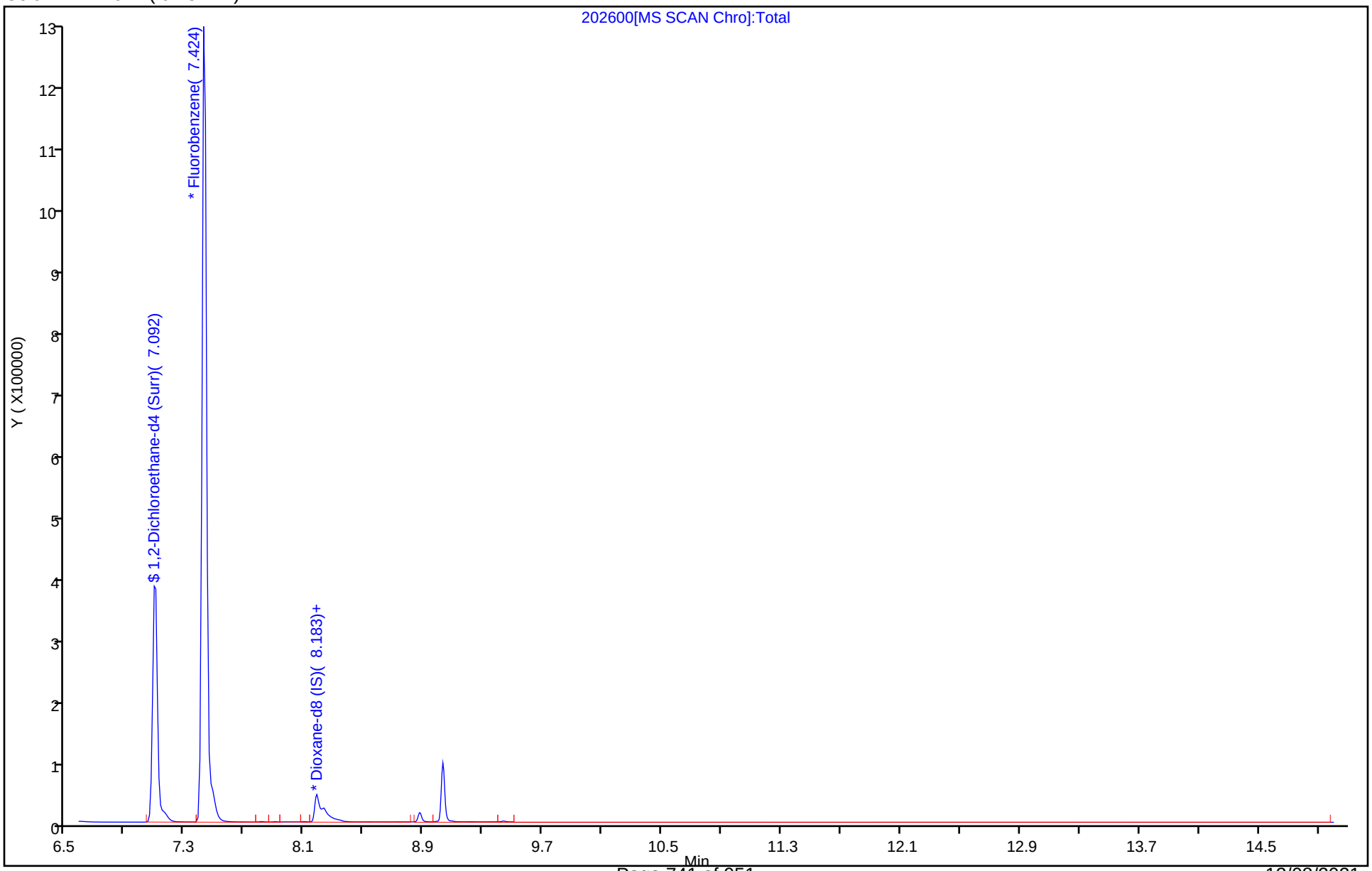
Report Date: 30-Nov-2021 18:20:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202600.D

Injection Date:	30-Nov-2021 00:55:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-8	Lab Sample ID:	240-160744-8	Worklist Smp#:	16
Client ID:	SL-8_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202600.D				
Lims ID:	240-160744-A-8				
Client ID:	SL-8_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 00:55:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:15:42

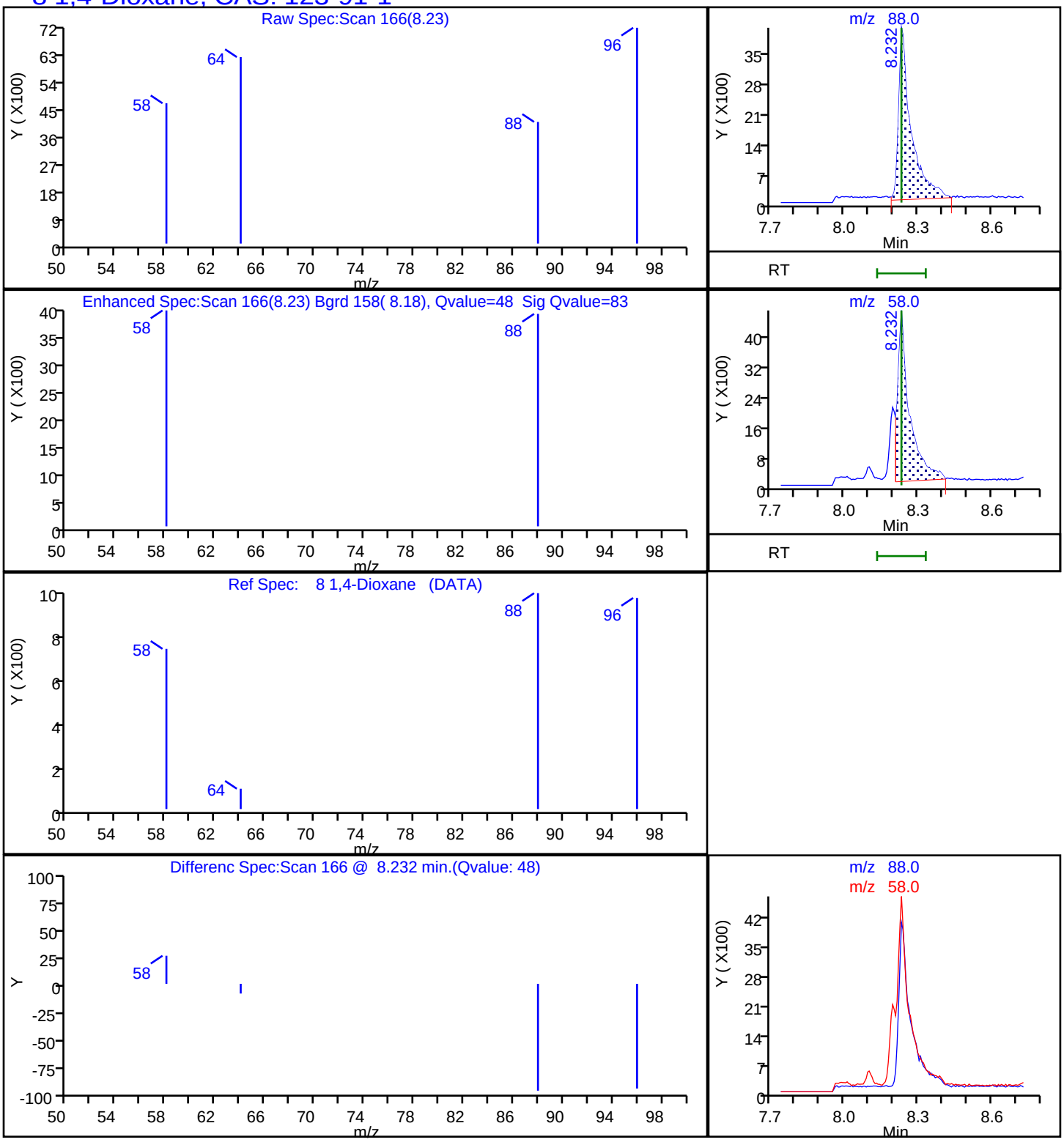
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.61

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202600.D

Injection Date:	30-Nov-2021 00:55:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-8	Lab Sample ID:	240-160744-8		
Client ID:	SL-8_112321				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-9_112321 Lab Sample ID: 240-160744-9

Matrix: Water Lab File ID: 202601.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 13:35

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 01:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	19		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202601.D
Lims ID: 240-160744-A-9
Client ID: SL-9_112321
Sample Type: Client
Inject. Date: 30-Nov-2021 01:19:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-017
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 30-Nov-2021 18:16:00

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	863831	10.3	
*	7 Fluorobenzene	96	7.424	7.423	0.001	100	2631345	10.0	
*	9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	77736	200.0	
	8 1,4-Dioxane	88	8.238	8.231	0.007	50	11909	18.8	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added: 0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added: 1.00	Units: uL	Run Reagent

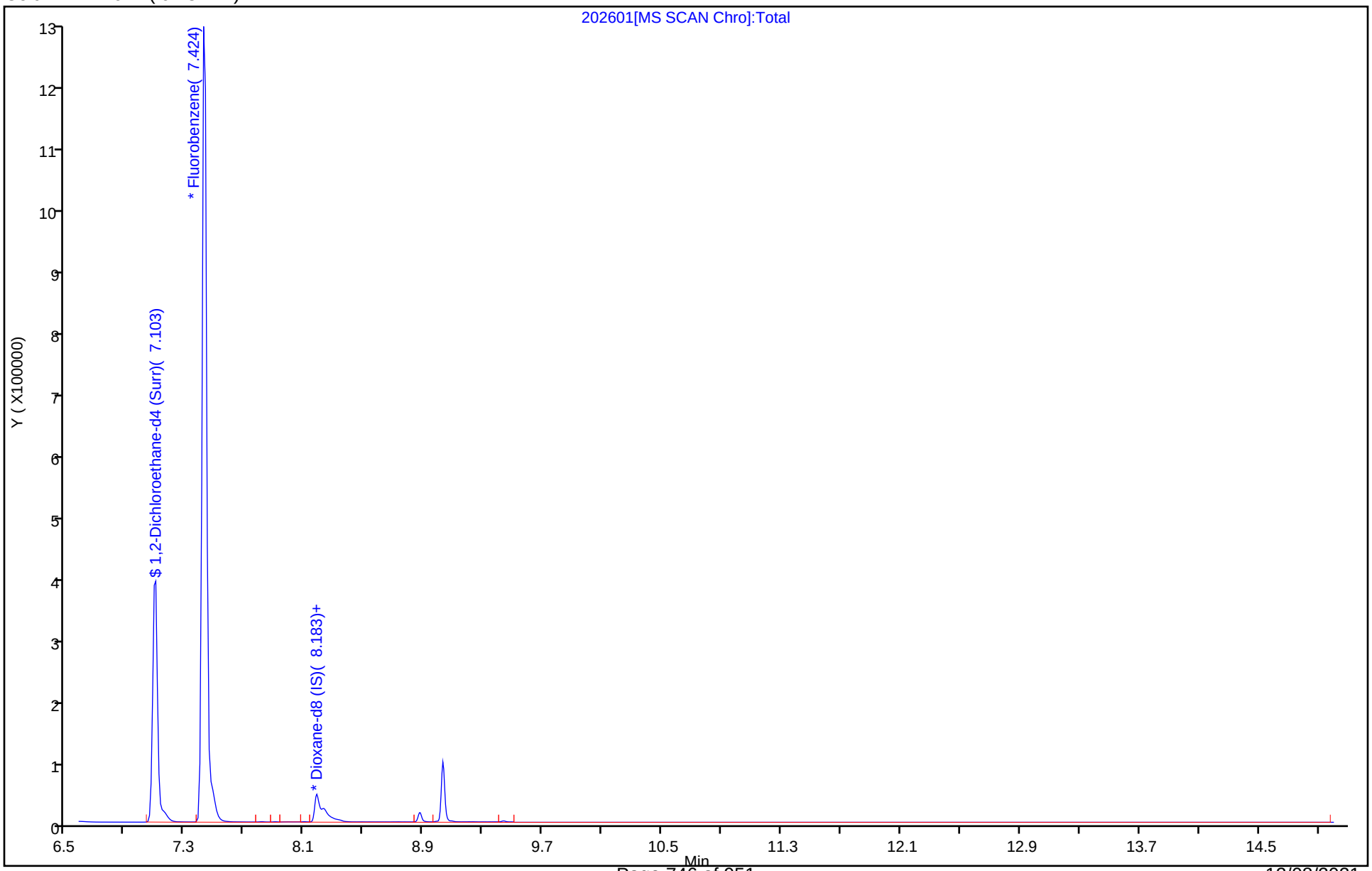
Report Date: 30-Nov-2021 18:20:36 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202601.D

Injection Date:	30-Nov-2021 01:19:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-9	Lab Sample ID:	240-160744-9	Worklist Smp#:	17
Client ID:	SL-9_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202601.D				
Lims ID:	240-160744-A-9				
Client ID:	SL-9_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 01:19:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:16:00

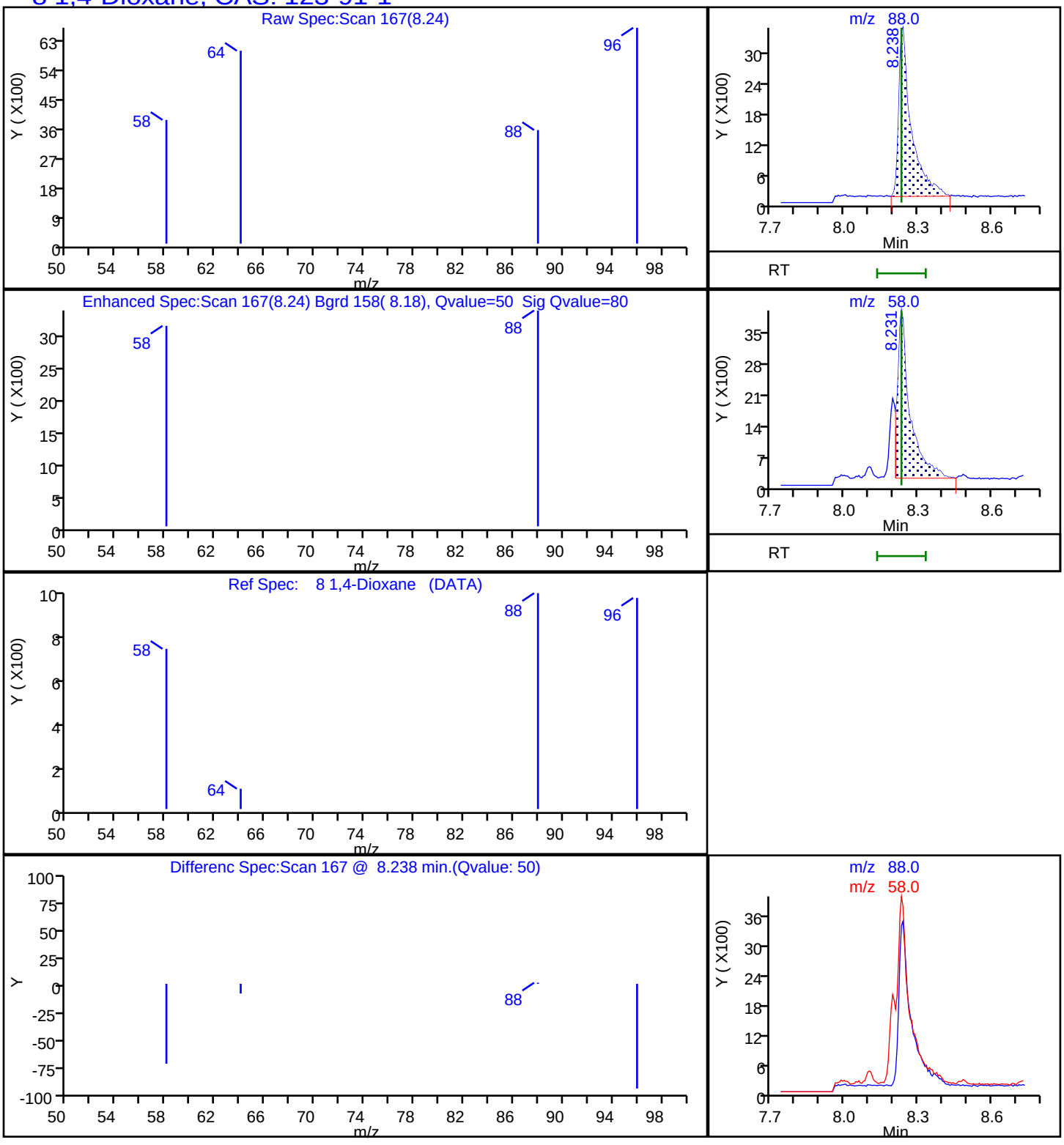
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.80

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202601.D

Injection Date:	30-Nov-2021 01:19:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-9	Lab Sample ID:	240-160744-9		
Client ID:	SL-9_112321				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

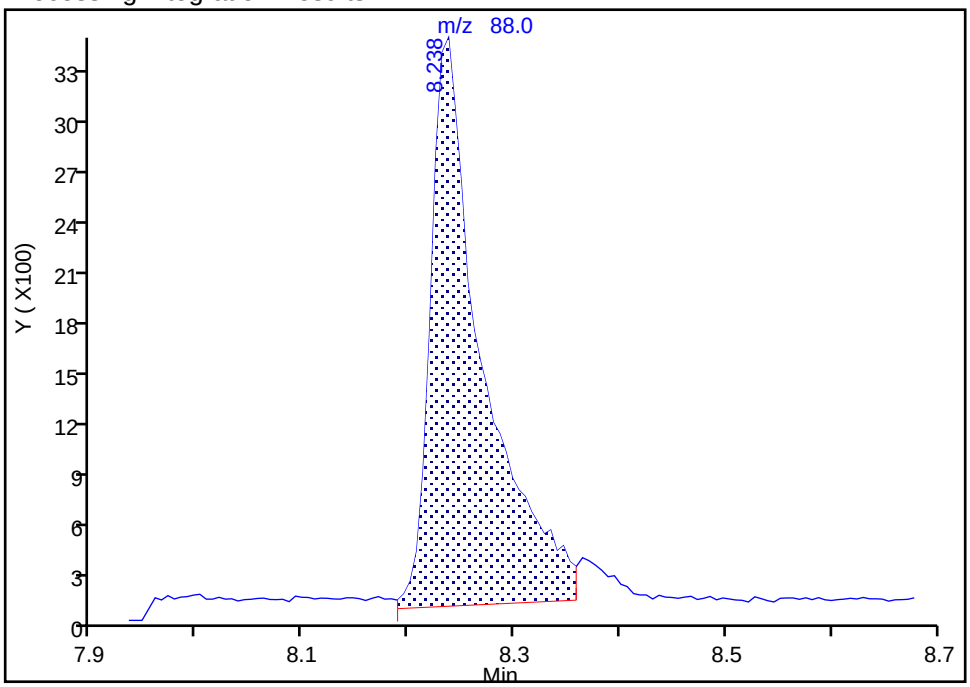
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202601.D				
Injection Date:	30-Nov-2021 01:19:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-9	Lab Sample ID:	240-160744-9		
Client ID:	SL-9_112321				
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

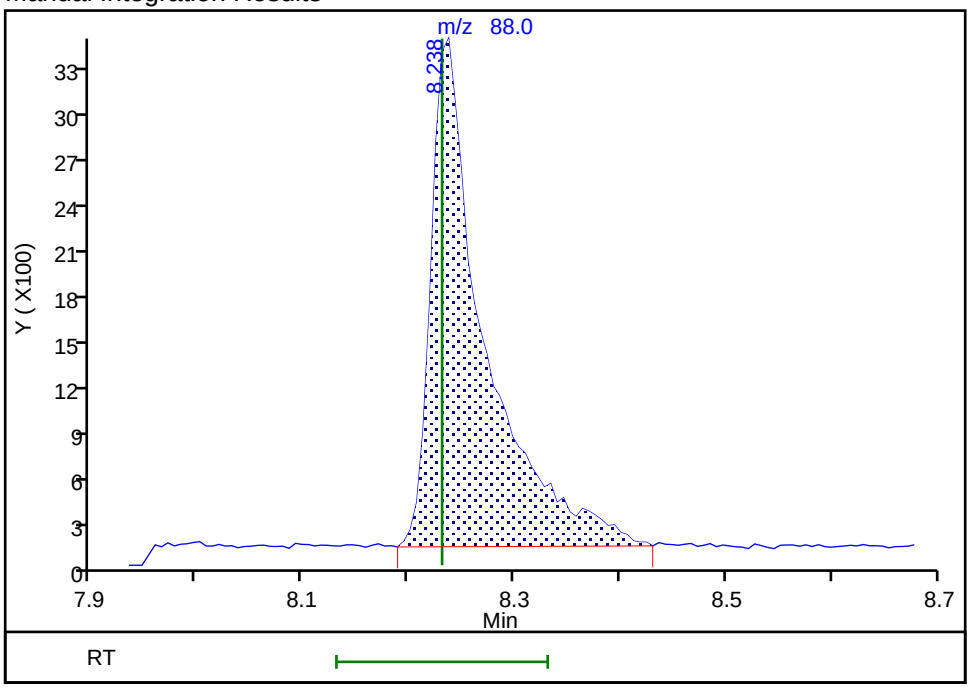
Processing Integration Results

RT: 8.24
Area: 11704
Amount: 18.447641
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 11909
Amount: 18.770759
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:15:55

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-10_112321 Lab Sample ID: 240-160744-10

Matrix: Water Lab File ID: 202602.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 14:00

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 01:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	19		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202602.D				
Lims ID:	240-160744-A-10				
Client ID:	SL-10_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 01:43:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:16:34		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	829757	10.0	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2592902	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	75077	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	54	11567	18.9	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

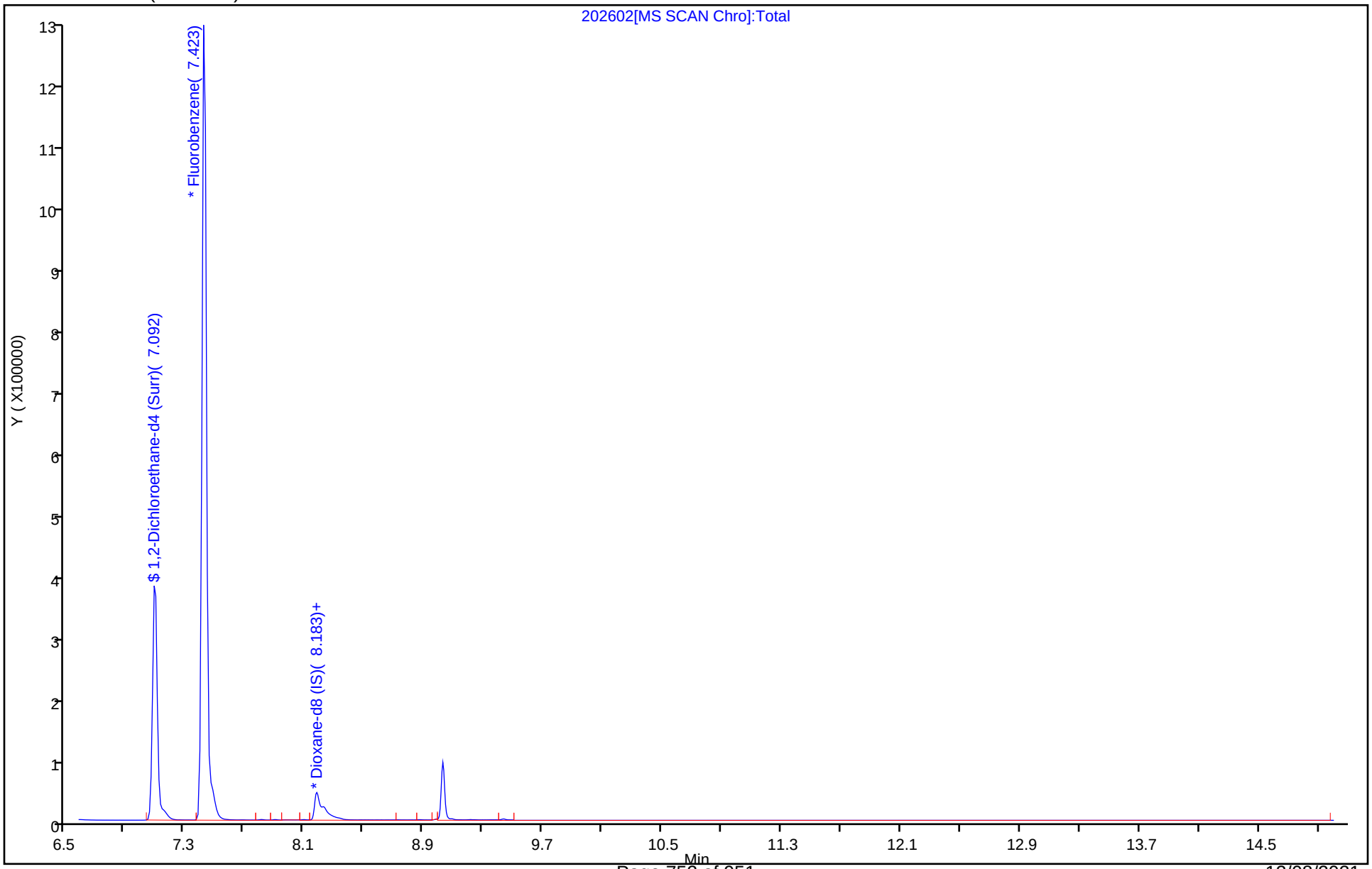
Report Date: 30-Nov-2021 18:20:37 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202602.D

Injection Date:	30-Nov-2021 01:43:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-10	Lab Sample ID:	240-160744-10	Worklist Smp#:	18
Client ID:	SL-10_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202602.D				
Lims ID:	240-160744-A-10				
Client ID:	SL-10_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 01:43:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:16:34

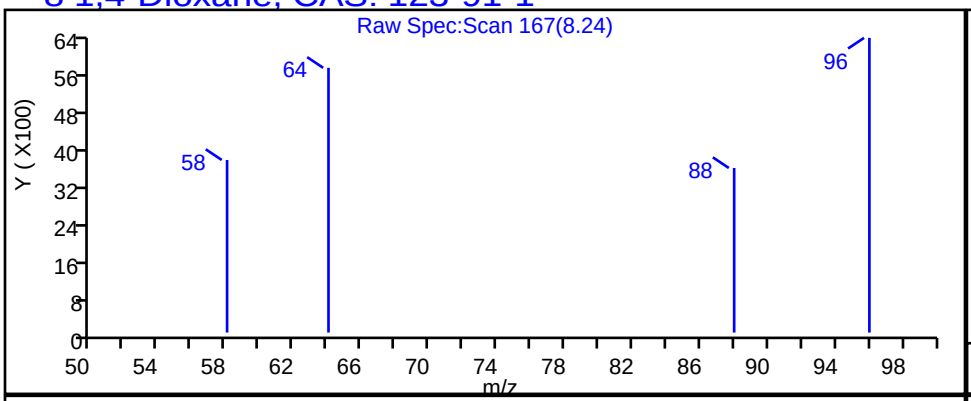
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.21

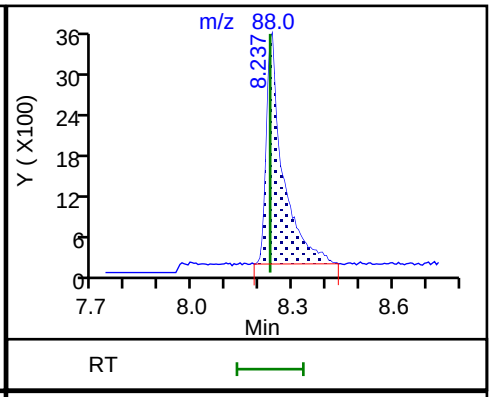
Eurofins TestAmerica, Canton

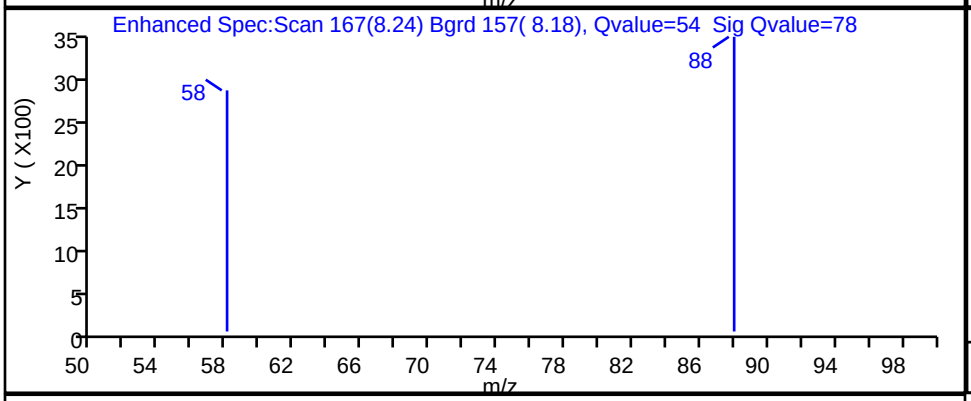
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202602.D

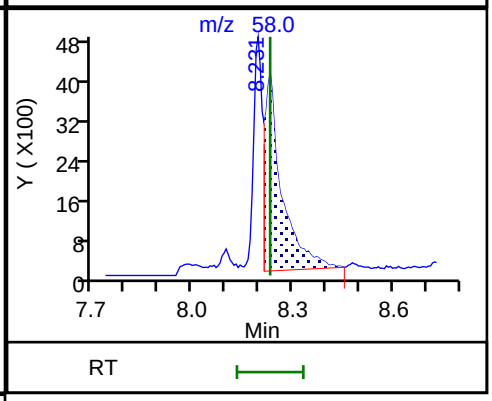
Injection Date:	30-Nov-2021 01:43:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-10	Lab Sample ID:	240-160744-10		
Client ID:	SL-10_112321				
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

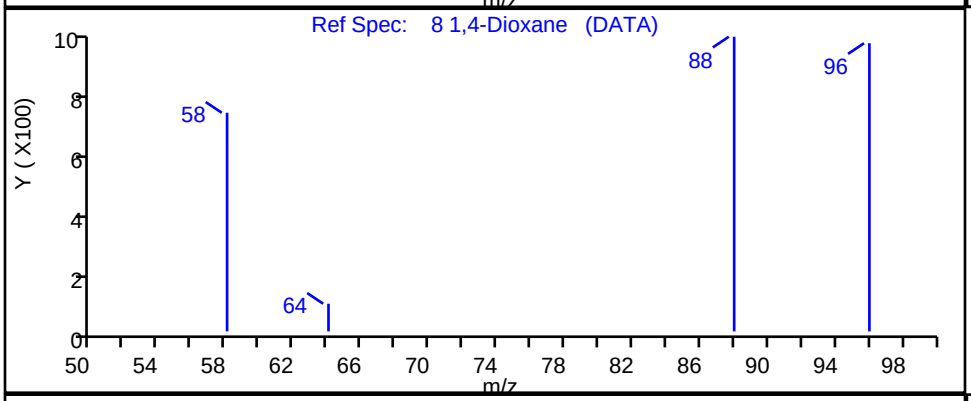
8 1,4-Dioxane, CAS: 123-91-1

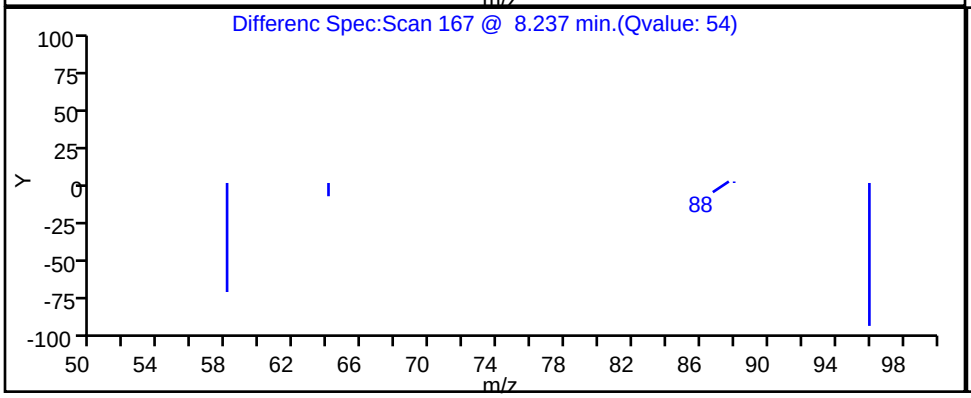


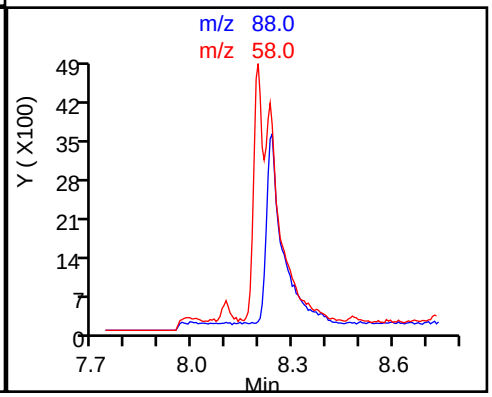












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

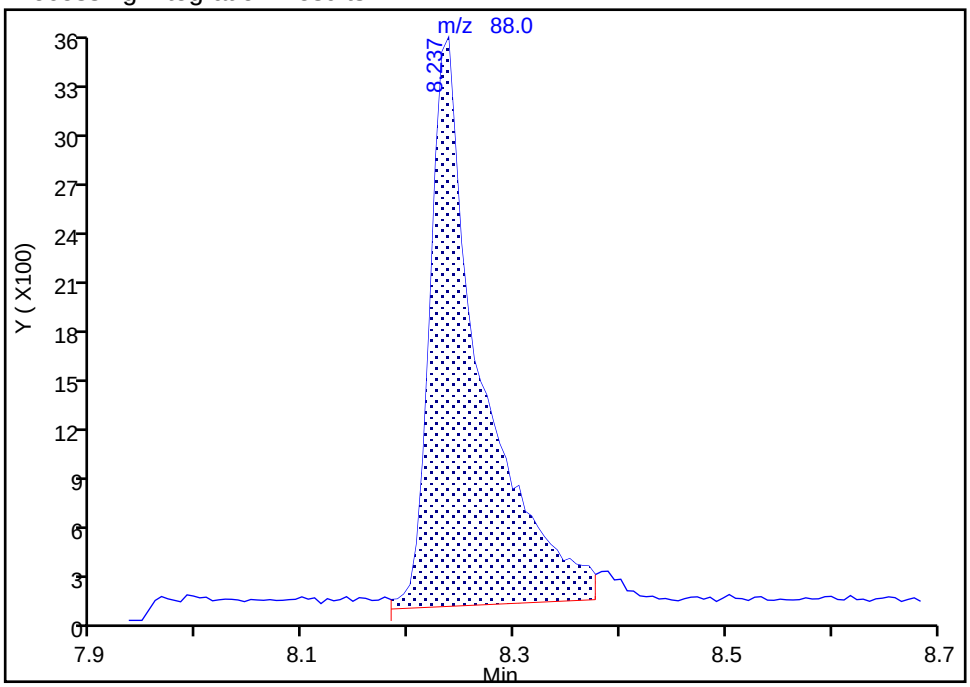
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202602.D				
Injection Date:	30-Nov-2021 01:43:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-10	Lab Sample ID:	240-160744-10		
Client ID:	SL-10_112321				
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

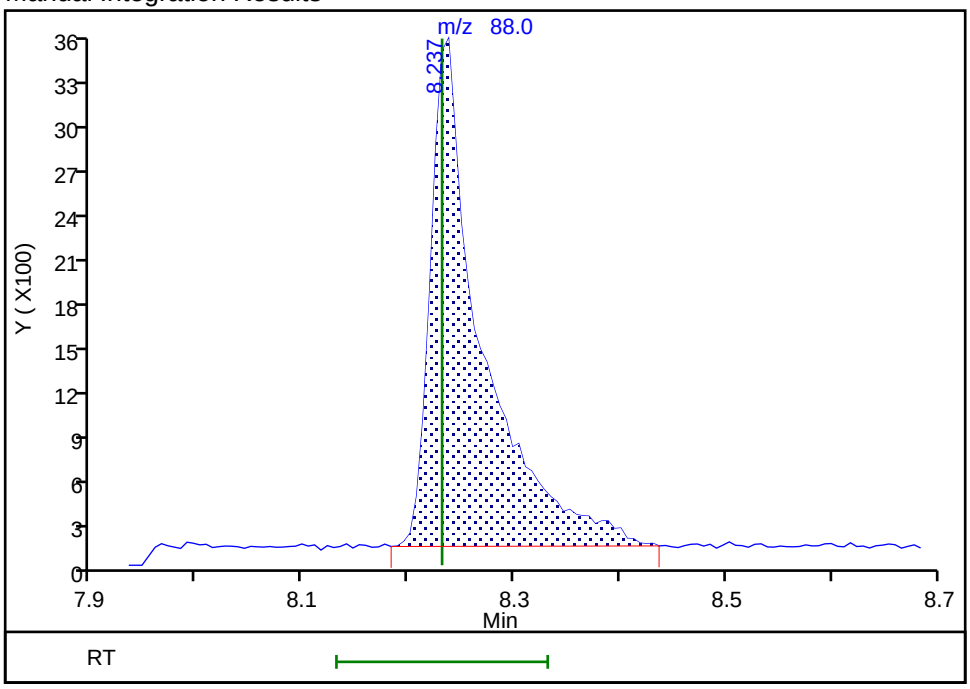
Processing Integration Results

RT: 8.24
Area: 11664
Amount: 19.035721
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 11567
Amount: 18.877416
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:16:27

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-11_112321 Lab Sample ID: 240-160744-11

Matrix: Water Lab File ID: 202603.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 14:25

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 02:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	18		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202603.D				
Lims ID:	240-160744-C-11				
Client ID:	SL-11_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:07:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:16:51		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	861141	10.1	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2674847	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	80019	200.0	
8 1,4-Dioxane	88	8.231	8.231	0.000	55	11978	18.3	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

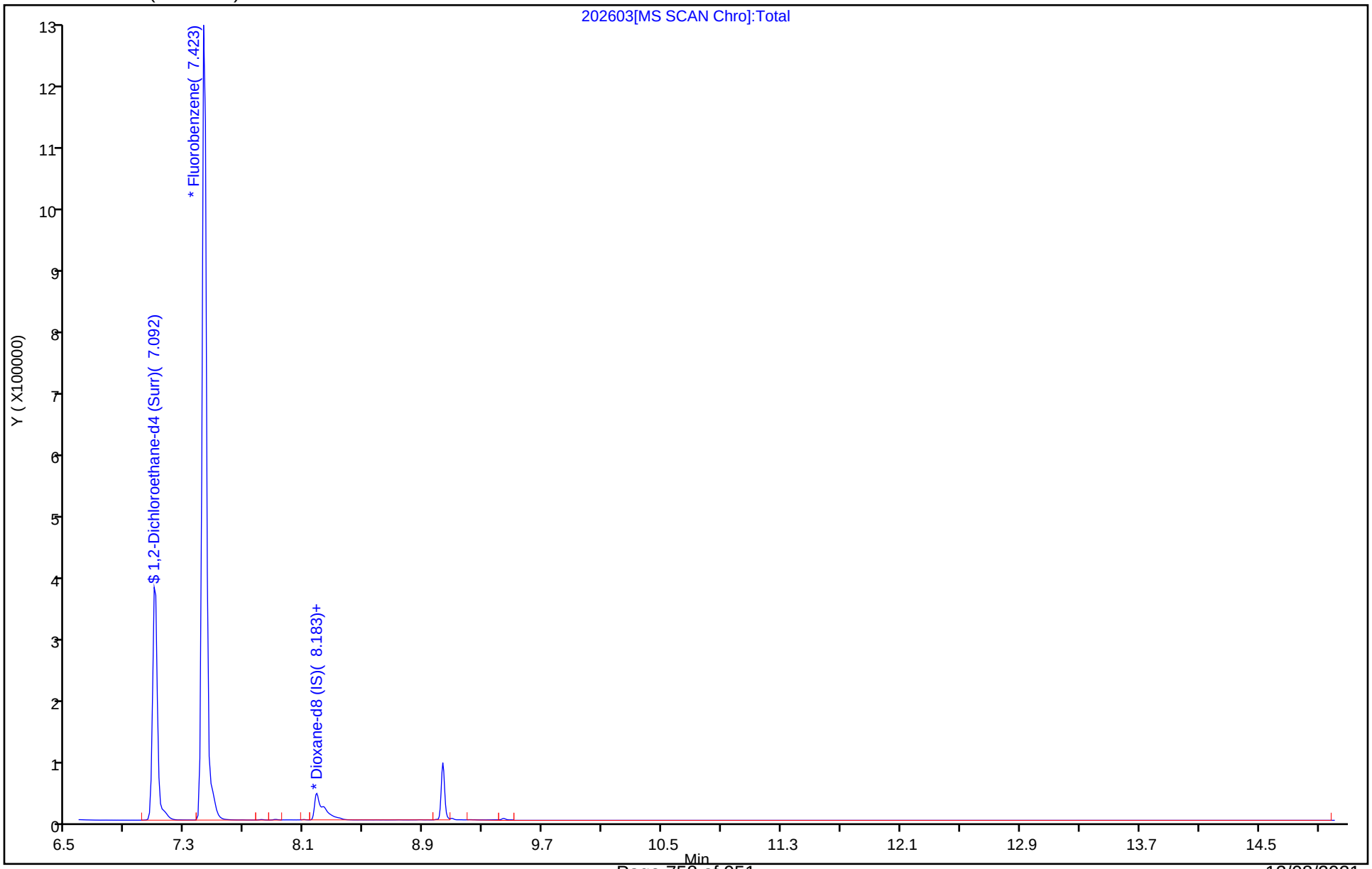
Report Date: 30-Nov-2021 18:20:37 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202603.D

Injection Date:	30-Nov-2021 02:07:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-11	Lab Sample ID:	240-160744-11	Worklist Smp#:	19
Client ID:	SL-11_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202603.D				
Lims ID:	240-160744-C-11				
Client ID:	SL-11_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:07:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:16:51

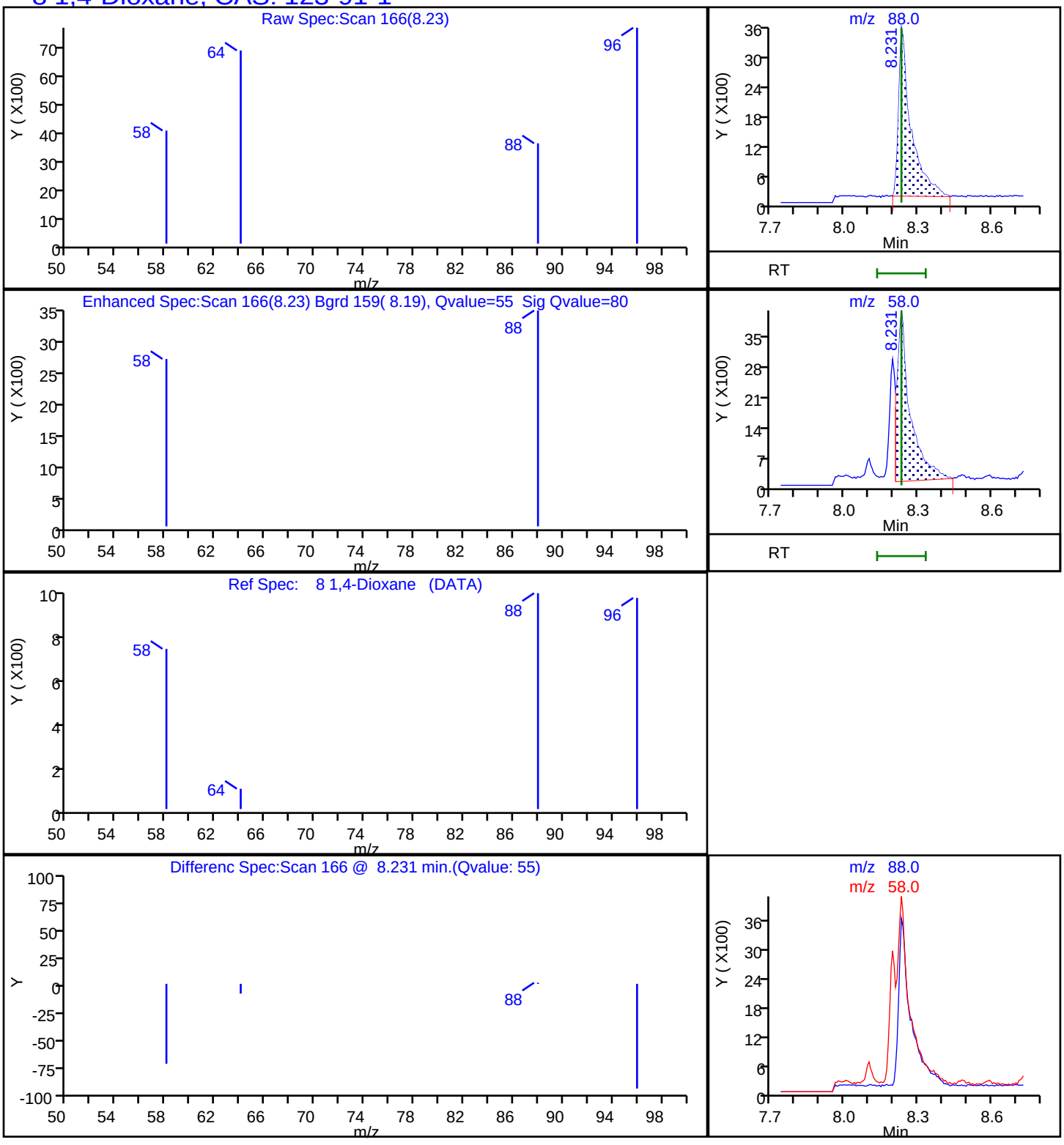
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.81

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202603.D

Injection Date:	30-Nov-2021 02:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-11	Lab Sample ID:	240-160744-11		
Client ID:	SL-11_112321				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Canton

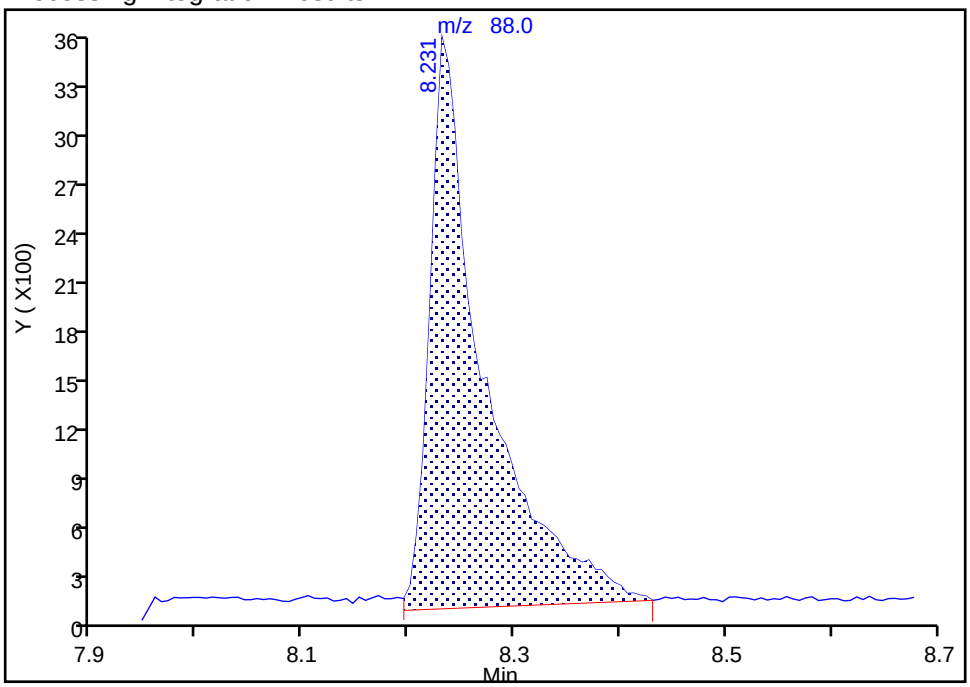
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202603.D				
Injection Date:	30-Nov-2021 02:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-11	Lab Sample ID:	240-160744-11		
Client ID:	SL-11_112321				
Operator ID:	434006	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

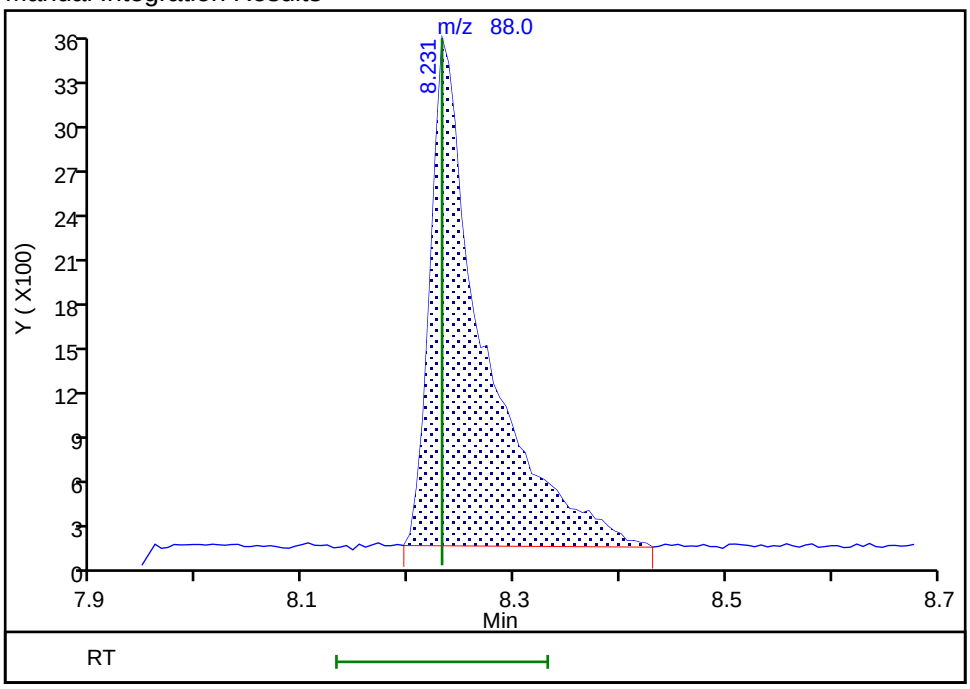
Processing Integration Results

RT: 8.23
Area: 12500
Amount: 19.140162
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 11978
Amount: 18.340869
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:16:47
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-12_112321 Lab Sample ID: 240-160744-12

Matrix: Water Lab File ID: 202604.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 14:45

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 02:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	13		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202604.D				
Lims ID:	240-160744-A-12				
Client ID:	SL-12_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:31:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:17:08		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	850056	10.1	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2638427	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	75824	200.0	
8 1,4-Dioxane	88	8.238	8.231	0.007	55	7757	12.5	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

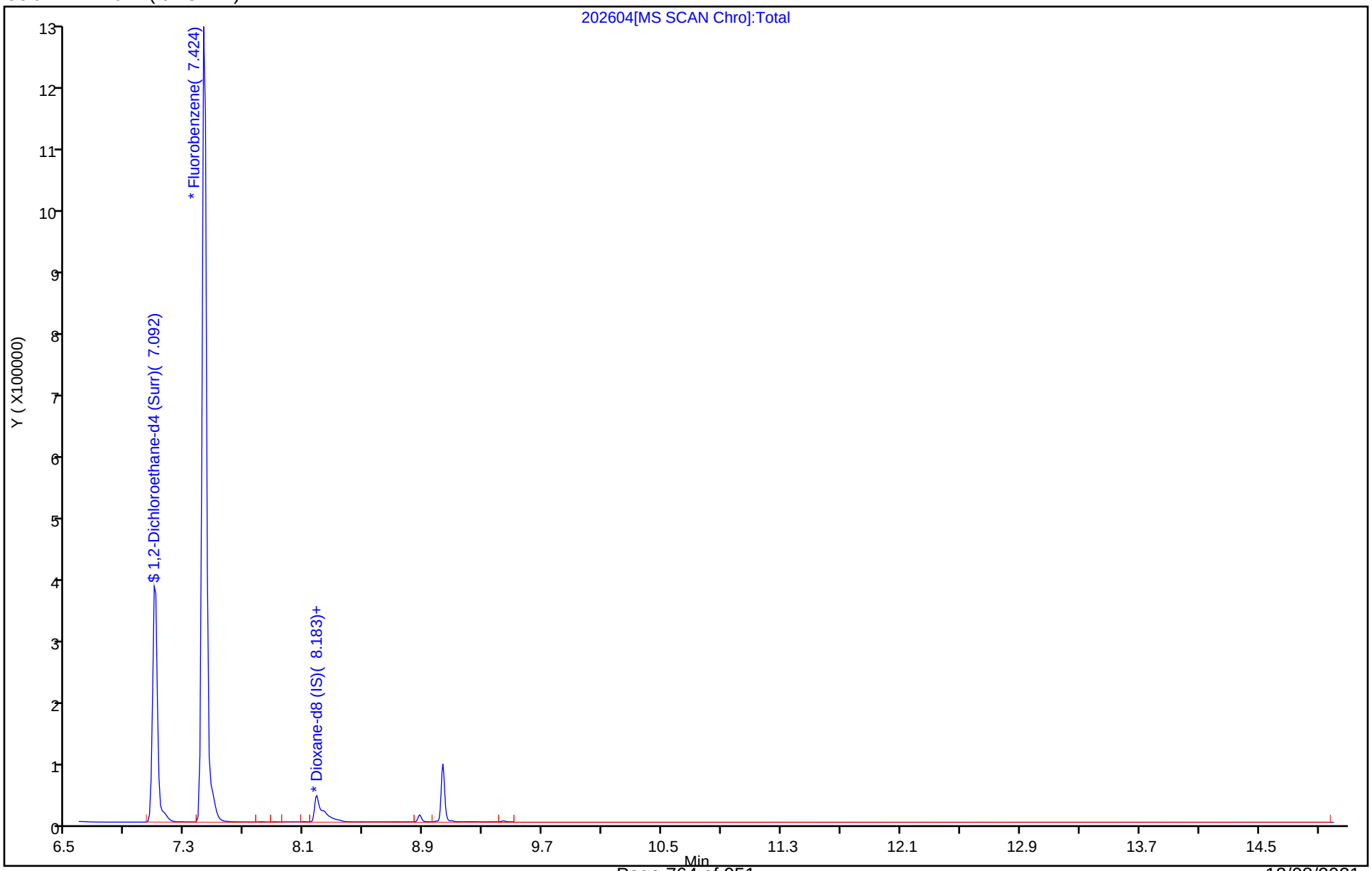
Report Date: 30-Nov-2021 18:20:37 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202604.D

Injection Date:	30-Nov-2021 02:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-12	Lab Sample ID:	240-160744-12	Worklist Smp#:	20
Client ID:	SL-12_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202604.D				
Lims ID:	240-160744-A-12				
Client ID:	SL-12_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:31:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:17:08

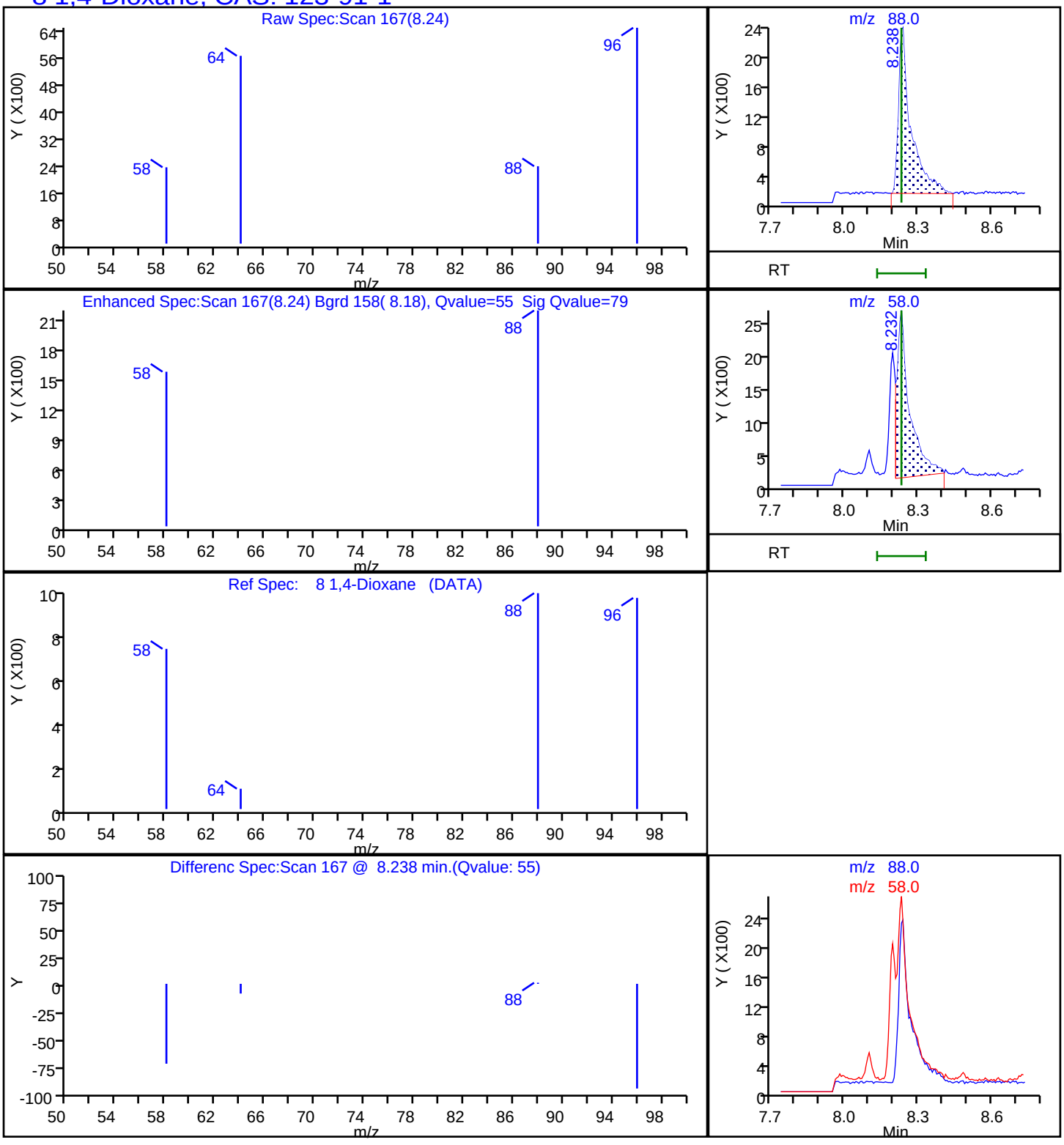
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.89

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202604.D

Injection Date:	30-Nov-2021 02:31:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-12	Lab Sample ID:	240-160744-12		
Client ID:	SL-12_112321				
Operator ID:	434006	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

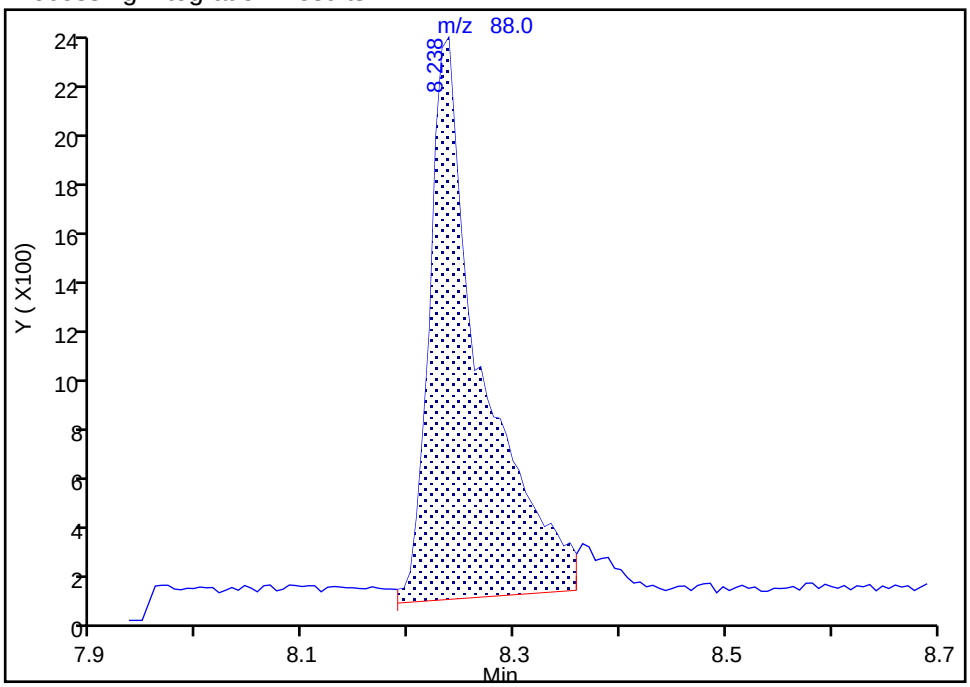
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202604.D				
Injection Date:	30-Nov-2021 02:31:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-12	Lab Sample ID:	240-160744-12		
Client ID:	SL-12_112321				
Operator ID:	434006	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

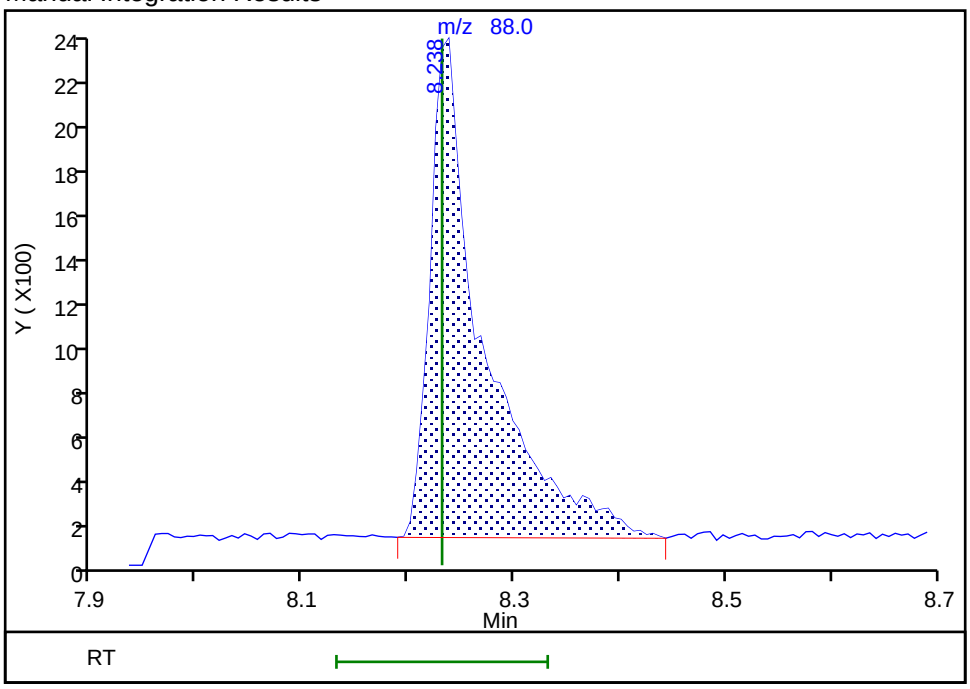
Processing Integration Results

RT: 8.24
Area: 7657
Amount: 12.373161
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7757
Amount: 12.534754
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:17:04

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: MH-1231_112421 Lab Sample ID: 240-160744-13

Matrix: Water Lab File ID: 202605.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 08:55

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 02:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202605.D				
Lims ID:	240-160744-A-13				
Client ID:	MH-1231_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:55:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:17:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	869001	9.93	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2741166	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	79290	200.0	
8 1,4-Dioxane	88	8.238	8.231	0.007	25	2808	4.34	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

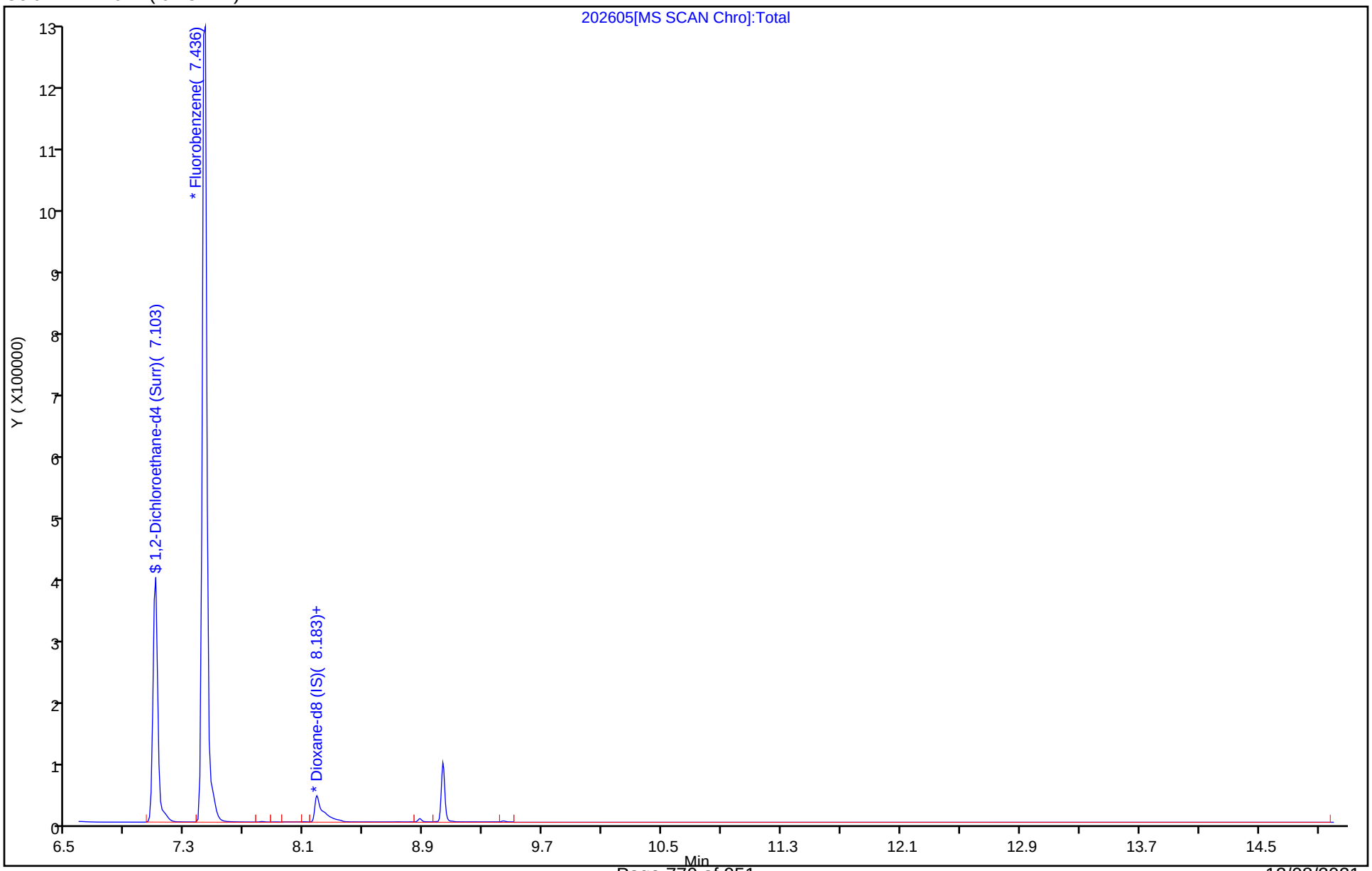
Report Date: 30-Nov-2021 18:20:38 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202605.D

Injection Date:	30-Nov-2021 02:55:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-13	Lab Sample ID:	240-160744-13	Worklist Smp#:	21
Client ID:	MH-1231_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202605.D				
Lims ID:	240-160744-A-13				
Client ID:	MH-1231_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 02:55:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:17:42

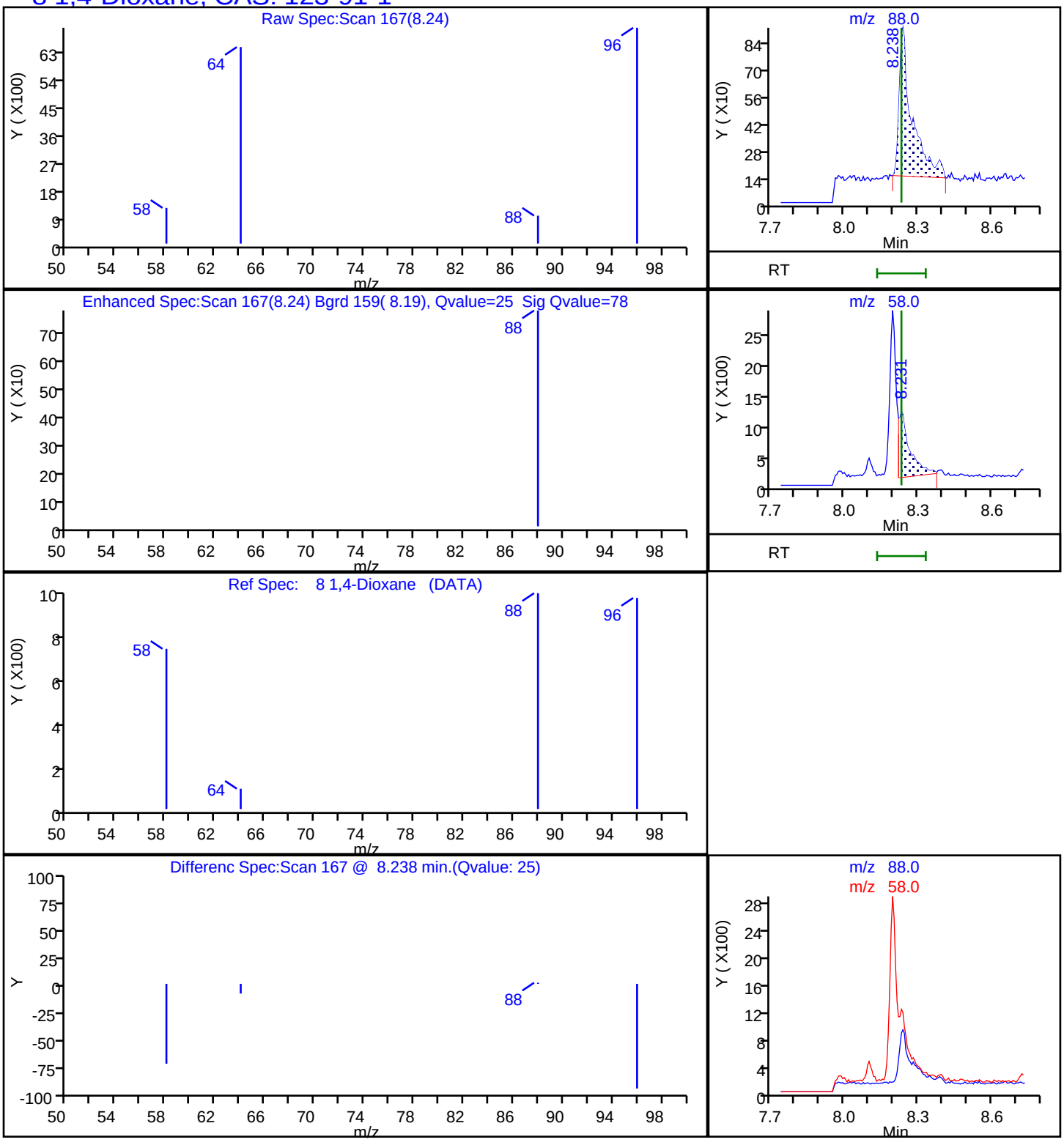
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.93	99.27

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202605.D

Injection Date:	30-Nov-2021 02:55:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-13	Lab Sample ID:	240-160744-13		
Client ID:	MH-1231_112421				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Canton

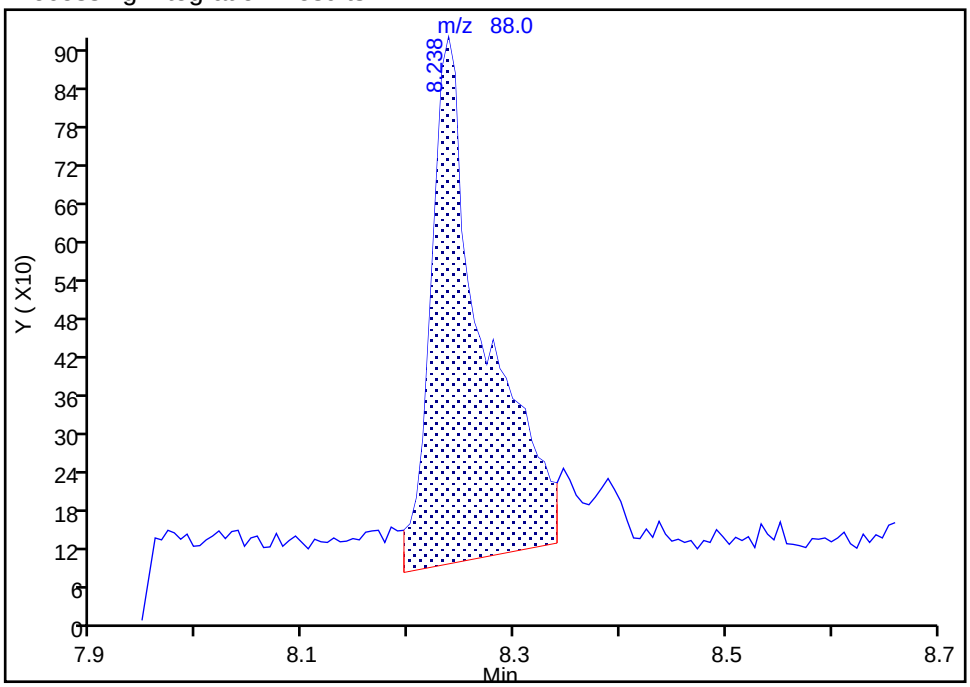
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202605.D				
Injection Date:	30-Nov-2021 02:55:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-13	Lab Sample ID:	240-160744-13		
Client ID:	MH-1231_112421				
Operator ID:	434006	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

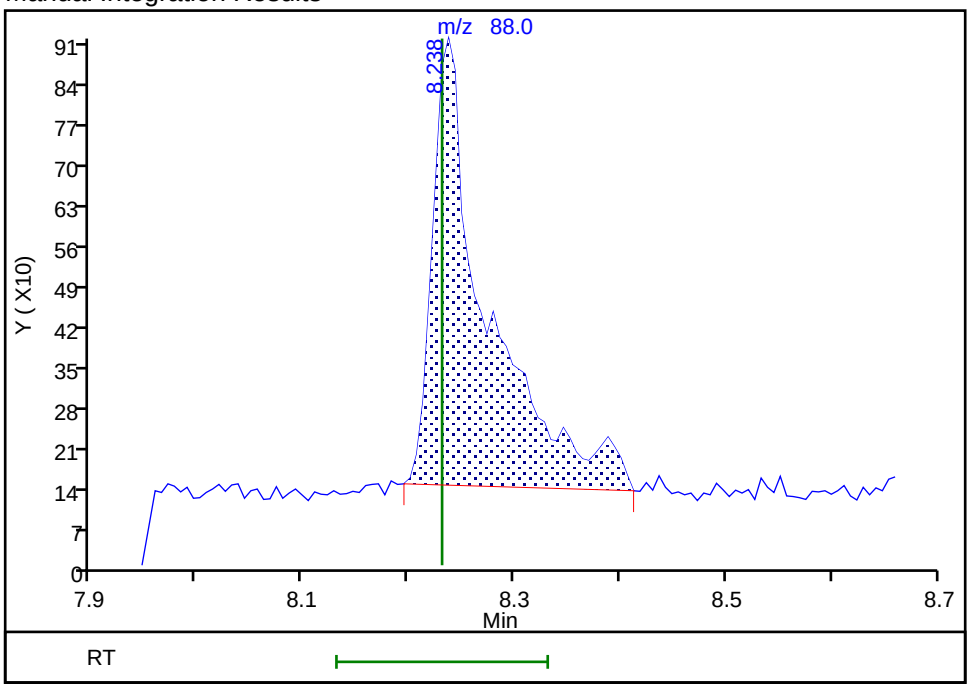
Processing Integration Results

RT: 8.24
Area: 2891
Amount: 4.467437
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2808
Amount: 4.339177
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:17:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-2_112421 Lab Sample ID: 240-160744-14

Matrix: Water Lab File ID: 202606.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 09:40

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 03:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	7.0		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202606.D				
Lims ID:	240-160744-C-14				
Client ID:	SL-2_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 03:19:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:18:02		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	856921	10.2	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2628215	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	79625	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	25	4566	7.03	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

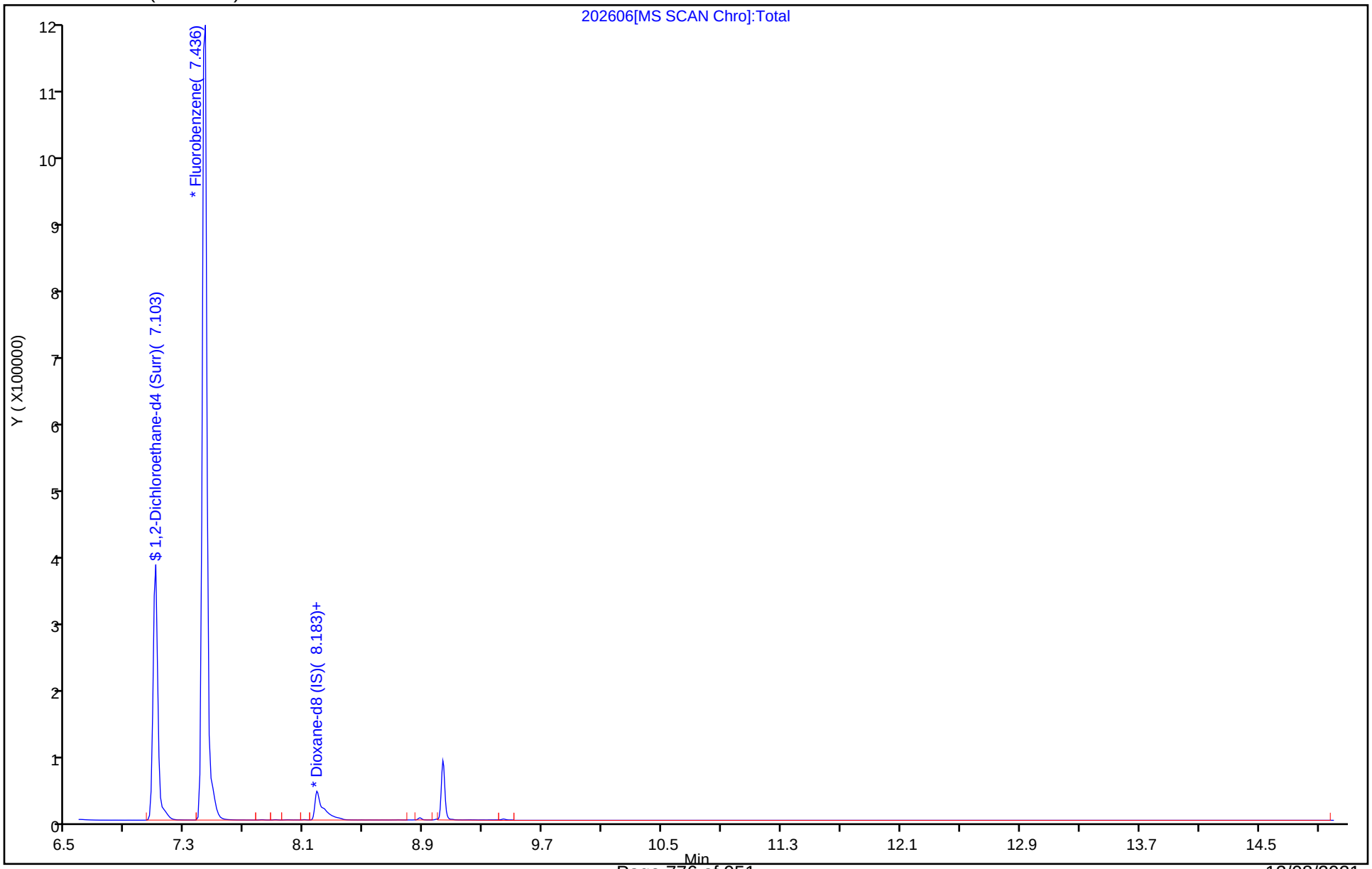
Report Date: 30-Nov-2021 18:20:38 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202606.D

Injection Date:	30-Nov-2021 03:19:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-14	Lab Sample ID:	240-160744-14	Worklist Smp#:	22
Client ID:	SL-2_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202606.D				
Lims ID:	240-160744-C-14				
Client ID:	SL-2_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 03:19:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

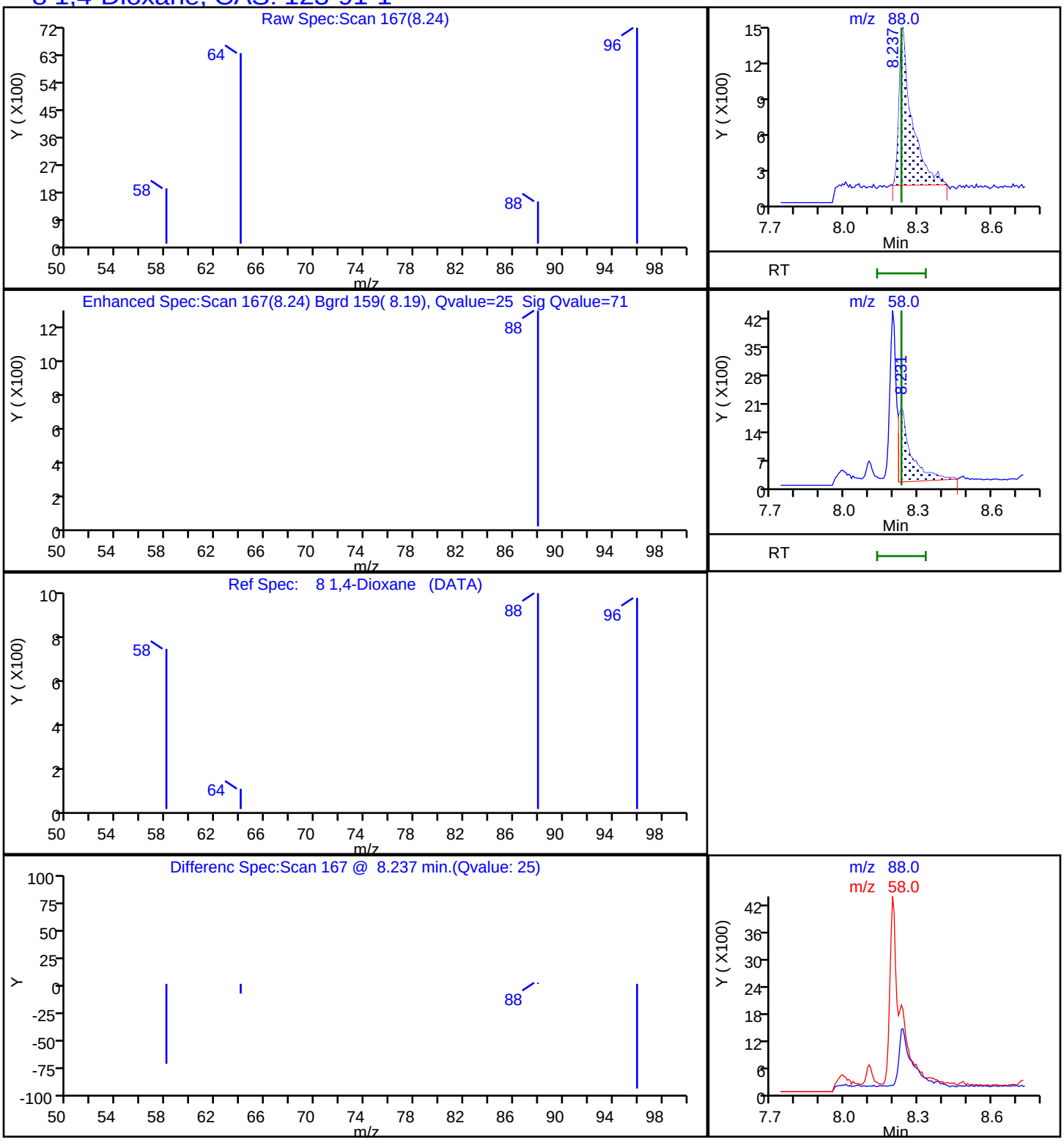
First Level Reviewer: seymourc Date: 30-Nov-2021 18:18:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.10

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202606.D				
Injection Date:	30-Nov-2021 03:19:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-14	Lab Sample ID:	240-160744-14		
Client ID:	SL-2_112421				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

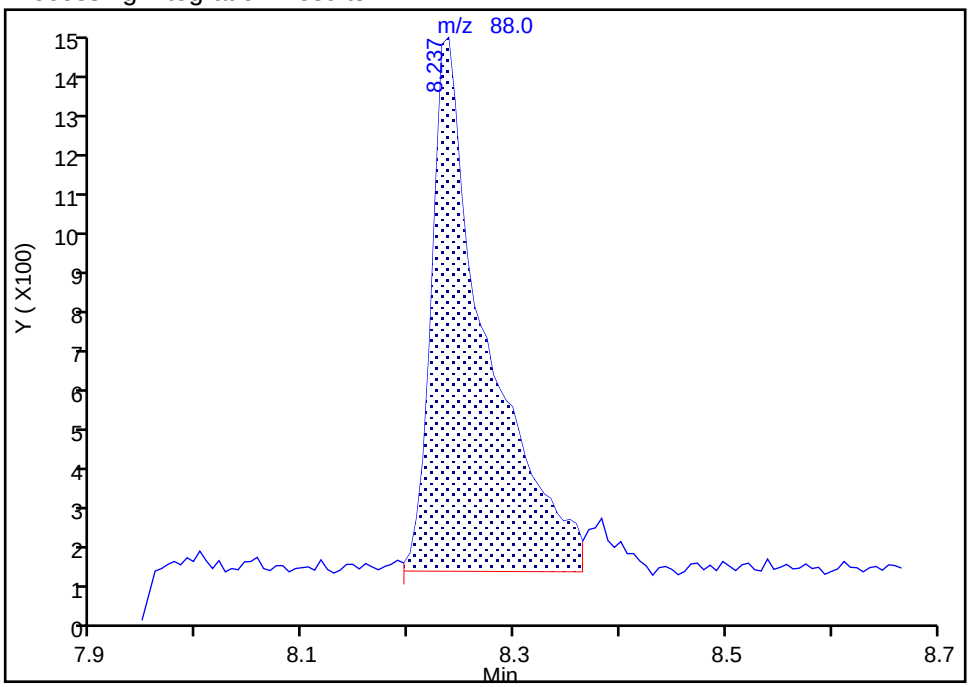
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202606.D				
Injection Date:	30-Nov-2021 03:19:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-14	Lab Sample ID:	240-160744-14		
Client ID:	SL-2_112421				
Operator ID:	434006	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

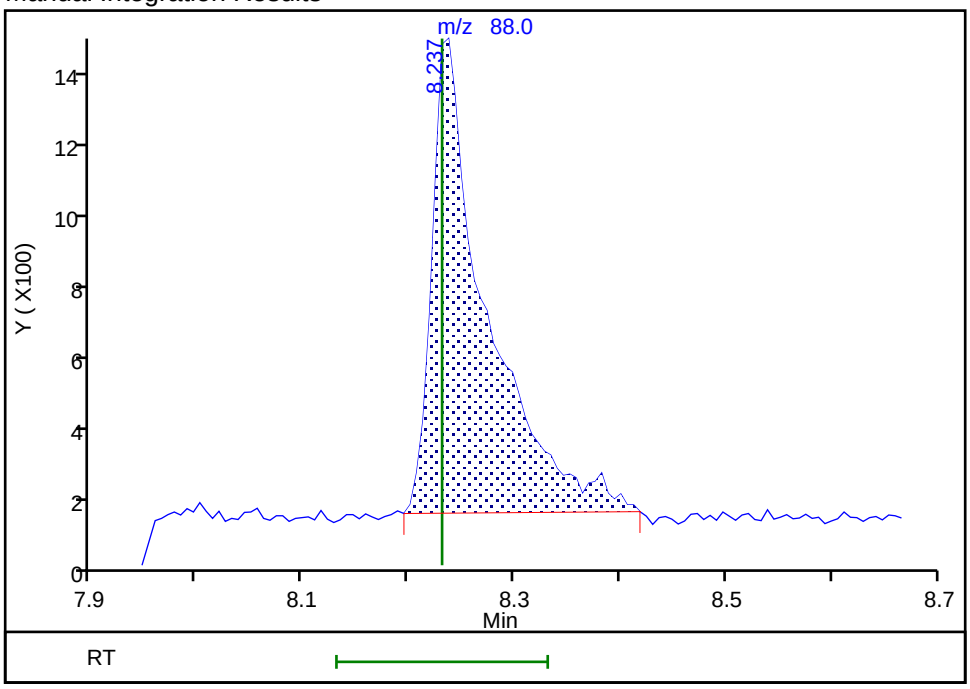
Processing Integration Results

RT: 8.24
Area: 4641
Amount: 7.141523
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4566
Amount: 7.026114
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:17:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-3_112421 Lab Sample ID: 240-160744-15

Matrix: Water Lab File ID: 202607.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 10:00

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 03:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	16		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202607.D				
Lims ID:	240-160744-C-15				
Client ID:	SL-3_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 03:43:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:18:25		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	835680	10.1	
*	7 Fluorobenzene	96	7.424	7.423	0.001	100	2596500	10.0	
*	9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	73672	200.0	
	8 1,4-Dioxane	88	8.238	8.231	0.007	53	9453	15.7	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

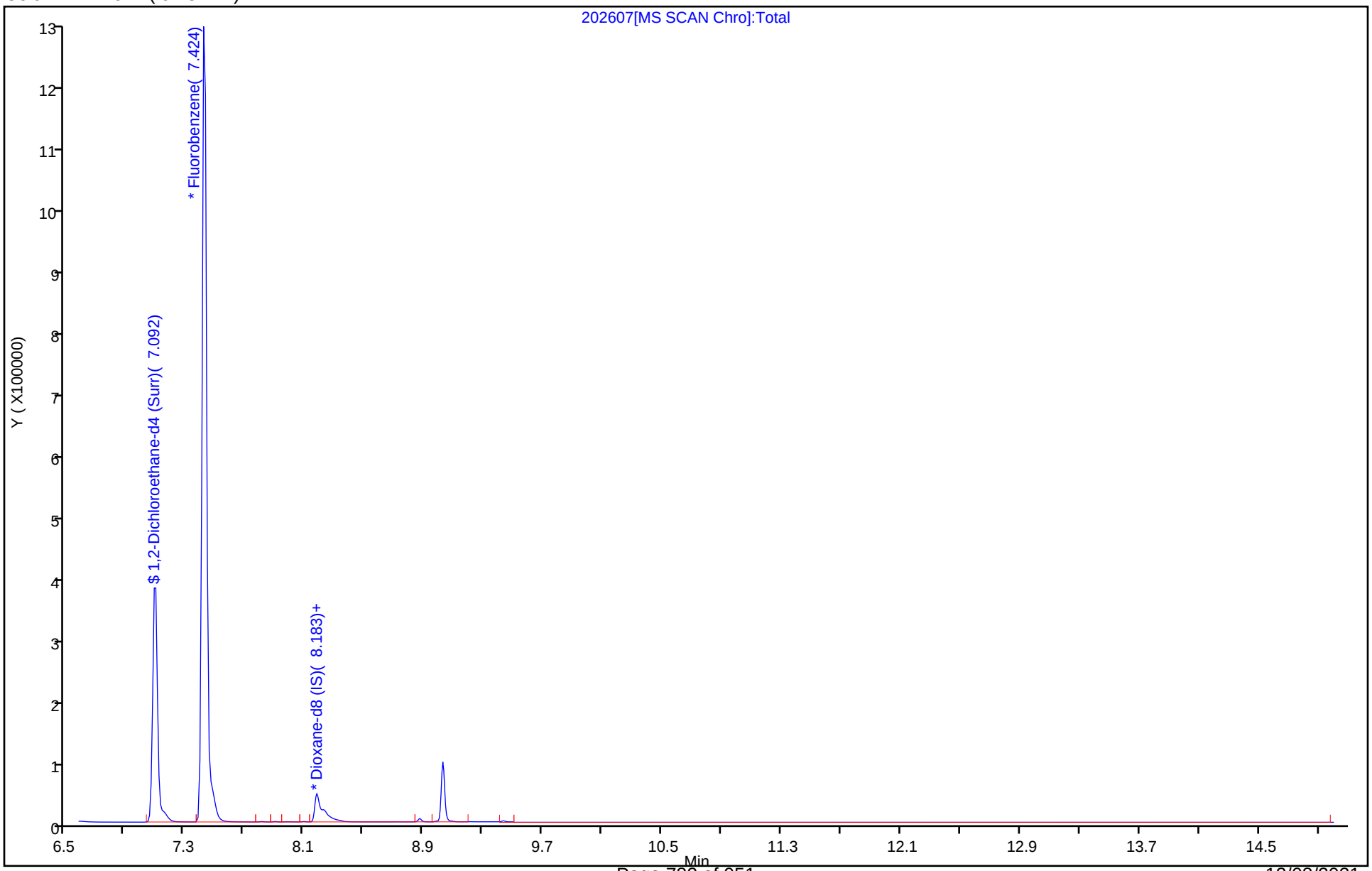
Report Date: 30-Nov-2021 18:20:39 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202607.D

Injection Date:	30-Nov-2021 03:43:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-15	Lab Sample ID:	240-160744-15	Worklist Smp#:	23
Client ID:	SL-3_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202607.D				
Lims ID:	240-160744-C-15				
Client ID:	SL-3_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 03:43:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:18:25

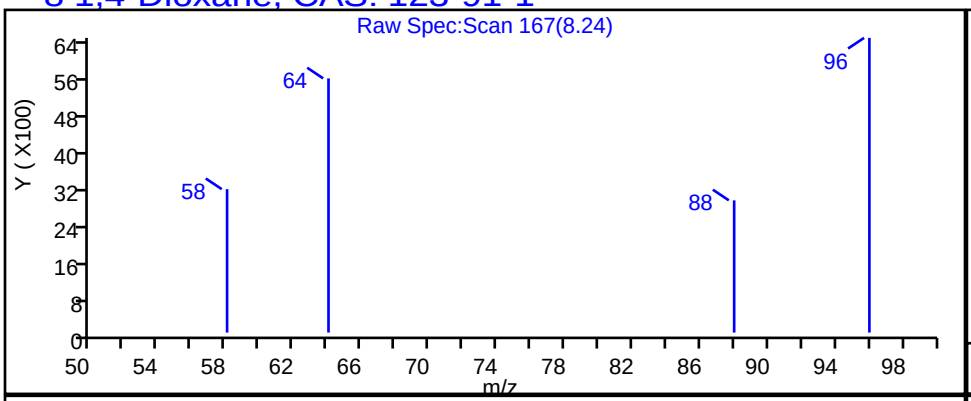
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.78

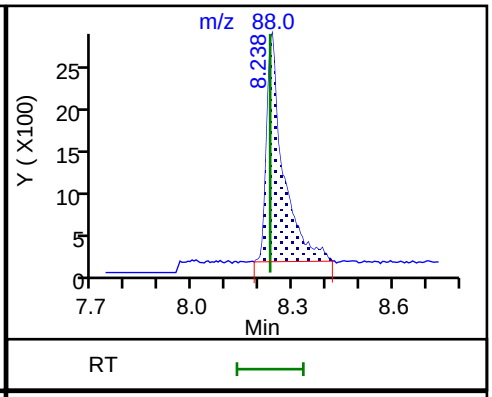
Eurofins TestAmerica, Canton

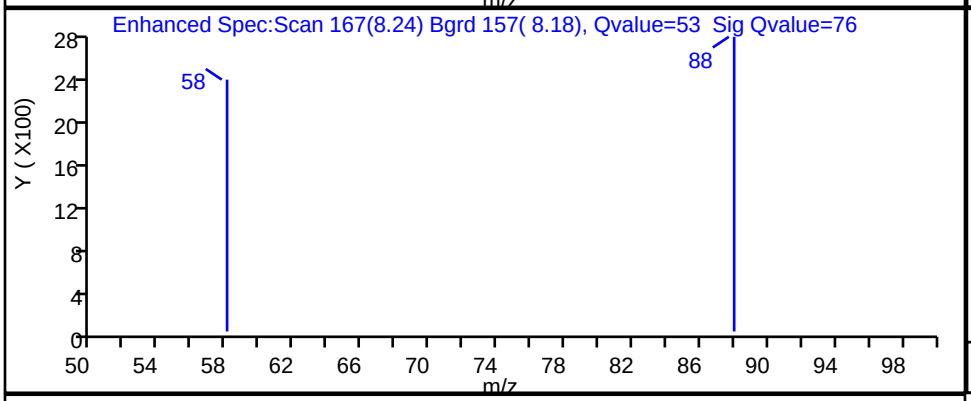
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202607.D

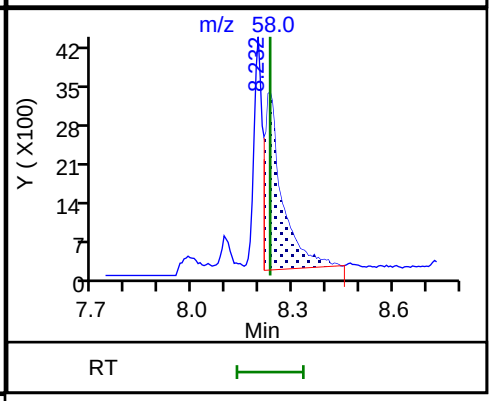
Injection Date:	30-Nov-2021 03:43:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-15	Lab Sample ID:	240-160744-15		
Client ID:	SL-3_112421				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

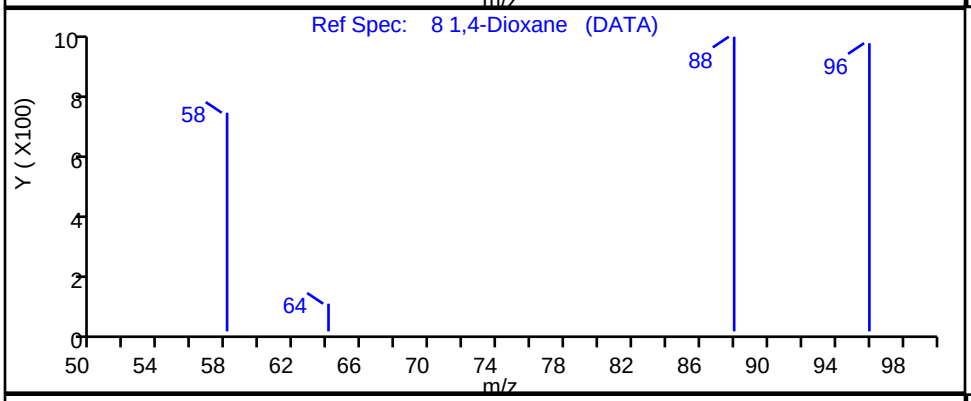
8 1,4-Dioxane, CAS: 123-91-1

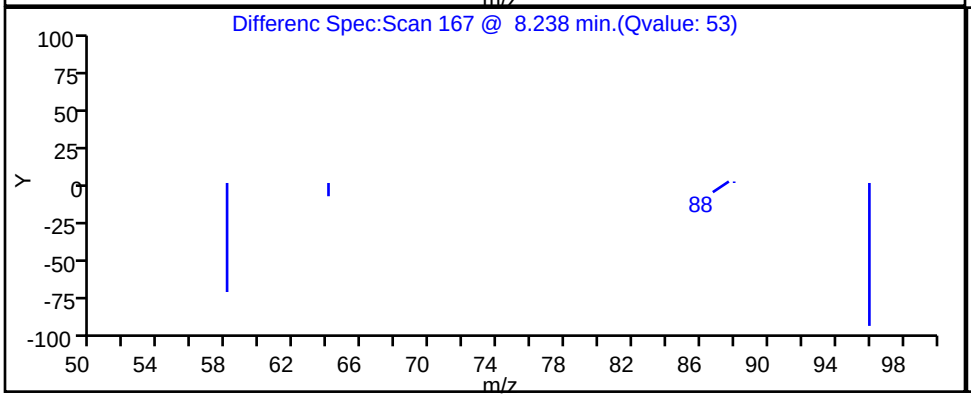


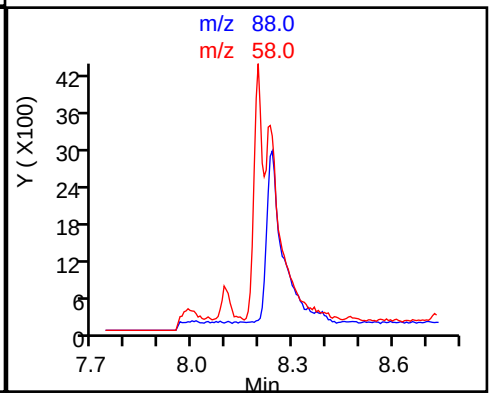












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

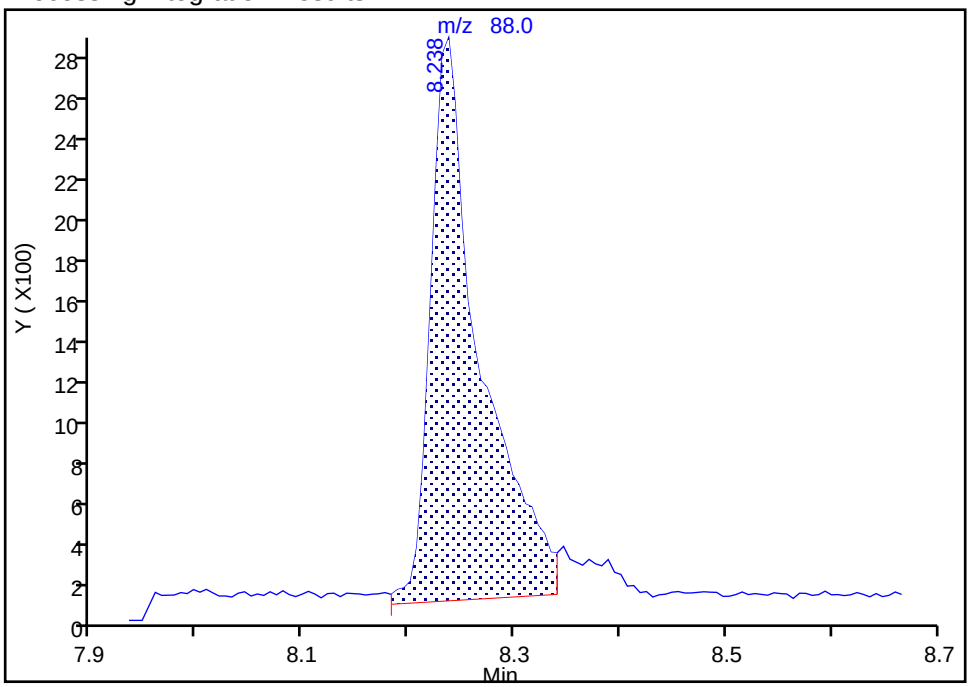
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202607.D				
Injection Date:	30-Nov-2021 03:43:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-15	Lab Sample ID:	240-160744-15		
Client ID:	SL-3_112421				
Operator ID:	434006	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

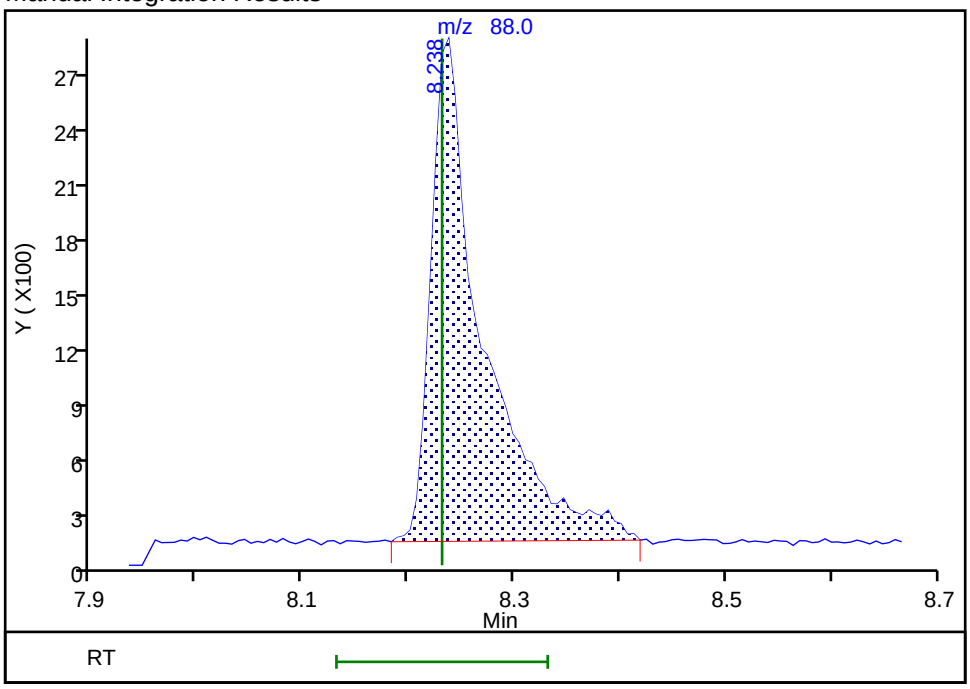
Processing Integration Results

RT: 8.24
Area: 9155
Amount: 15.225957
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 9453
Amount: 15.721570
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:18:18

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-4_112421 Lab Sample ID: 240-160744-16

Matrix: Water Lab File ID: 202608.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 12:10

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 04:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202608.D				
Lims ID:	240-160744-C-16				
Client ID:	SL-4_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:07:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:18:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	863958	10.2	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2651940	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	76927	200.0	
8 1,4-Dioxane	88	8.238	8.231	0.007	46	3257	5.19	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

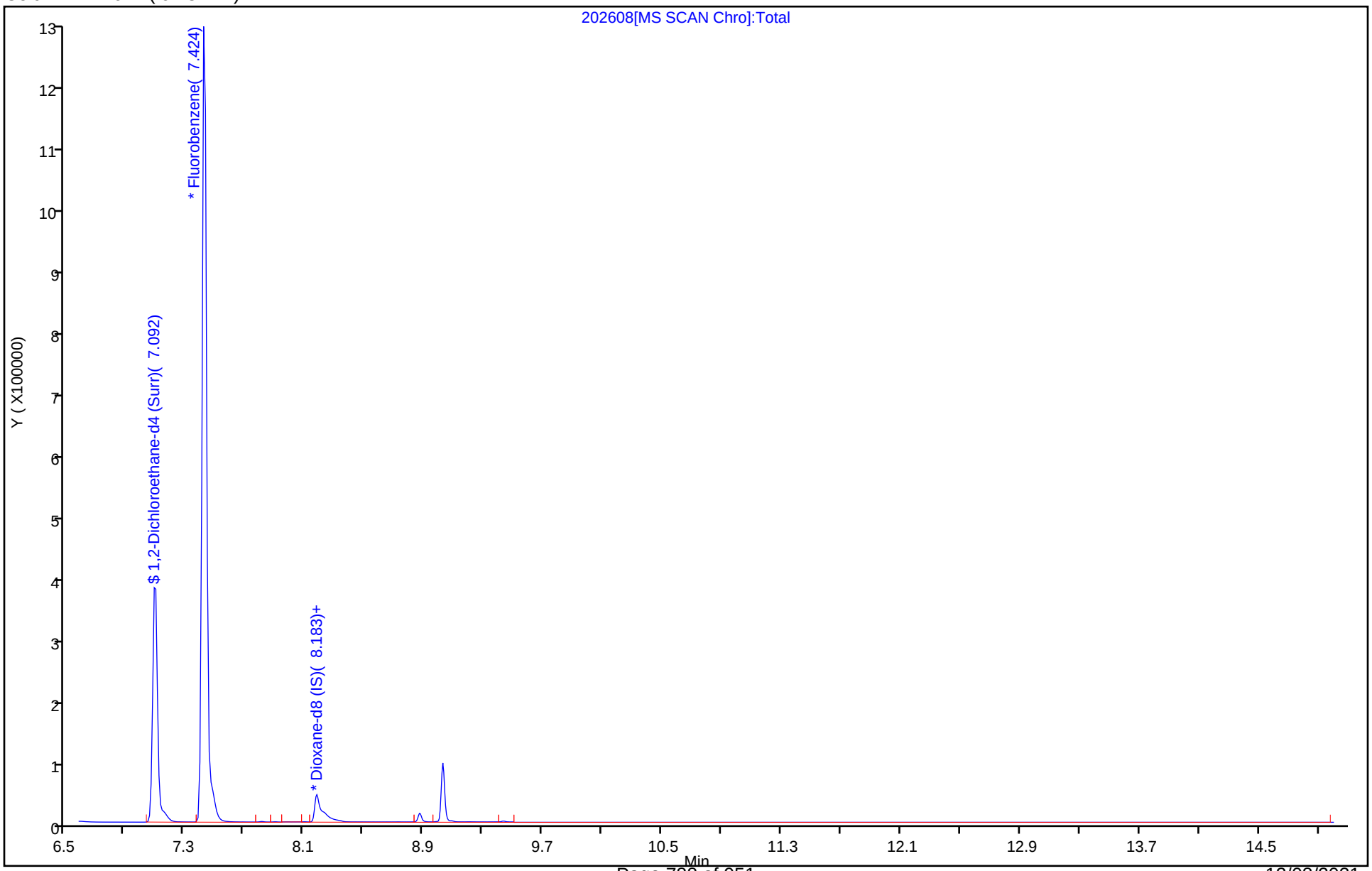
Report Date: 30-Nov-2021 18:20:39 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202608.D

Injection Date:	30-Nov-2021 04:07:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-16	Lab Sample ID:	240-160744-16	Worklist Smp#:	24
Client ID:	SL-4_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202608.D				
Lims ID:	240-160744-C-16				
Client ID:	SL-4_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:07:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:18:42

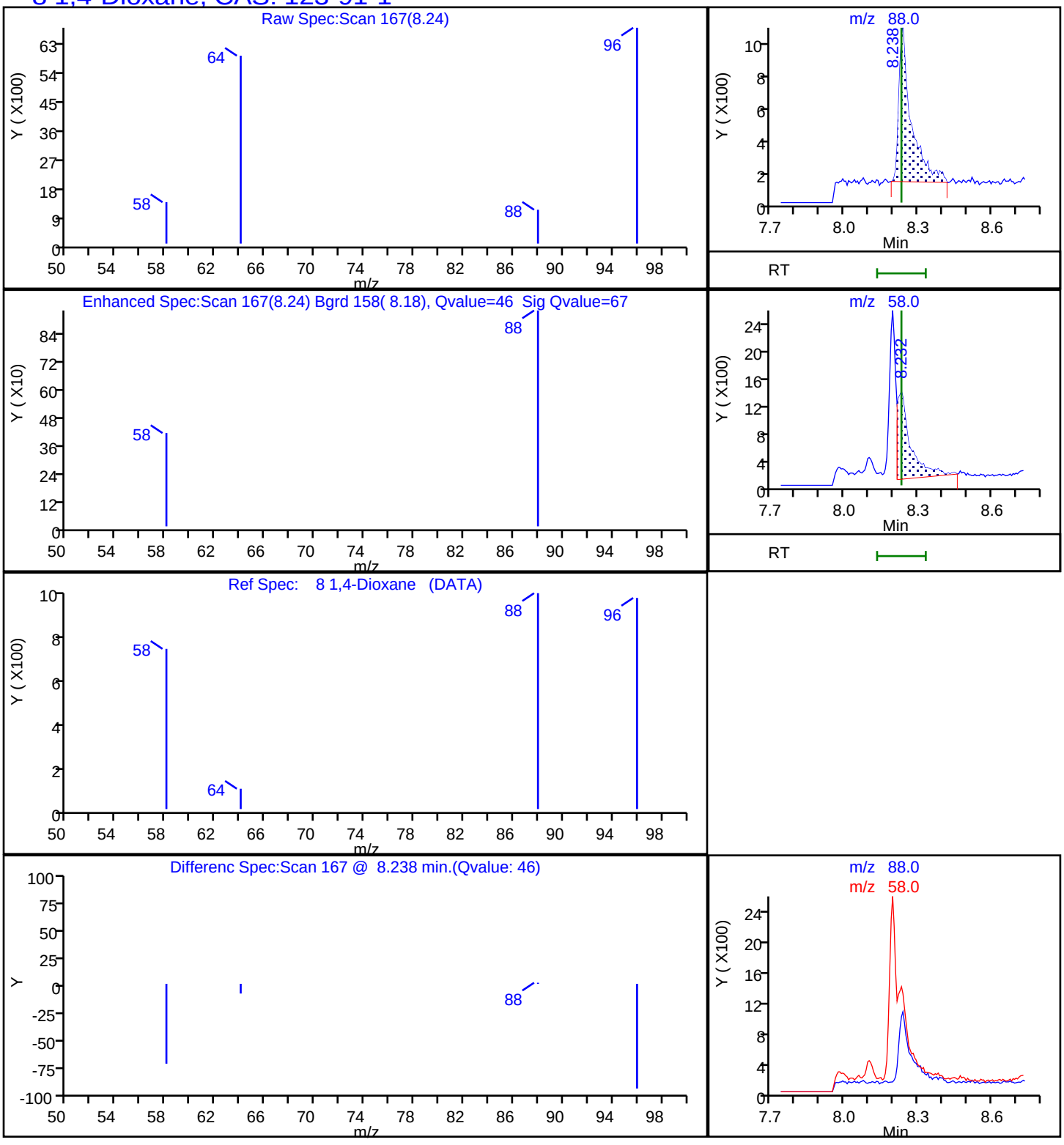
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.01

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202608.D

Injection Date:	30-Nov-2021 04:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-16	Lab Sample ID:	240-160744-16		
Client ID:	SL-4_112421				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

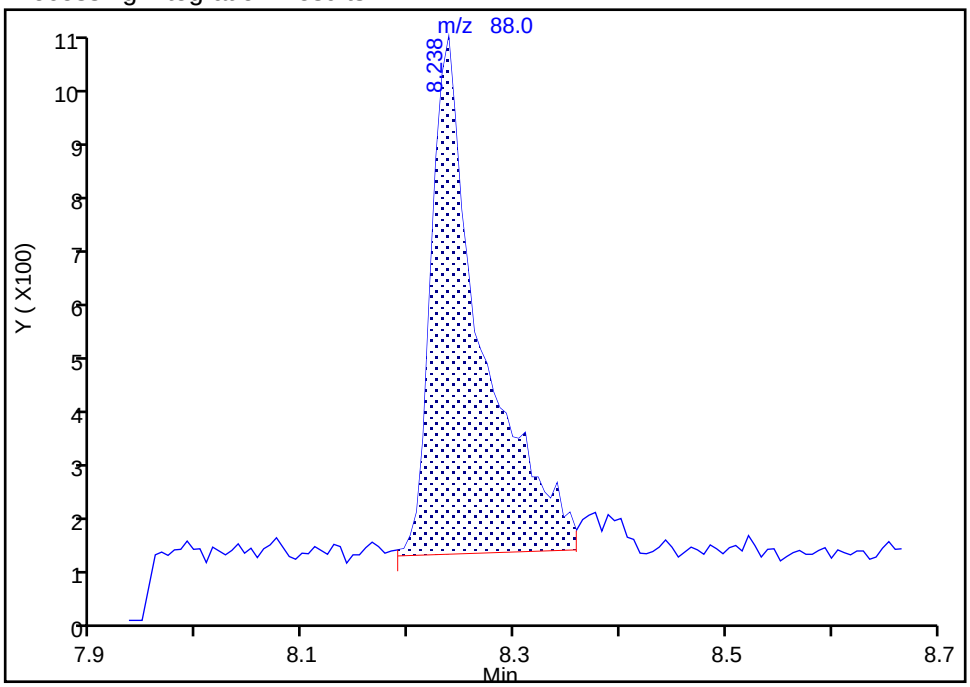
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202608.D				
Injection Date:	30-Nov-2021 04:07:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-16	Lab Sample ID:	240-160744-16		
Client ID:	SL-4_112421				
Operator ID:	434006	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

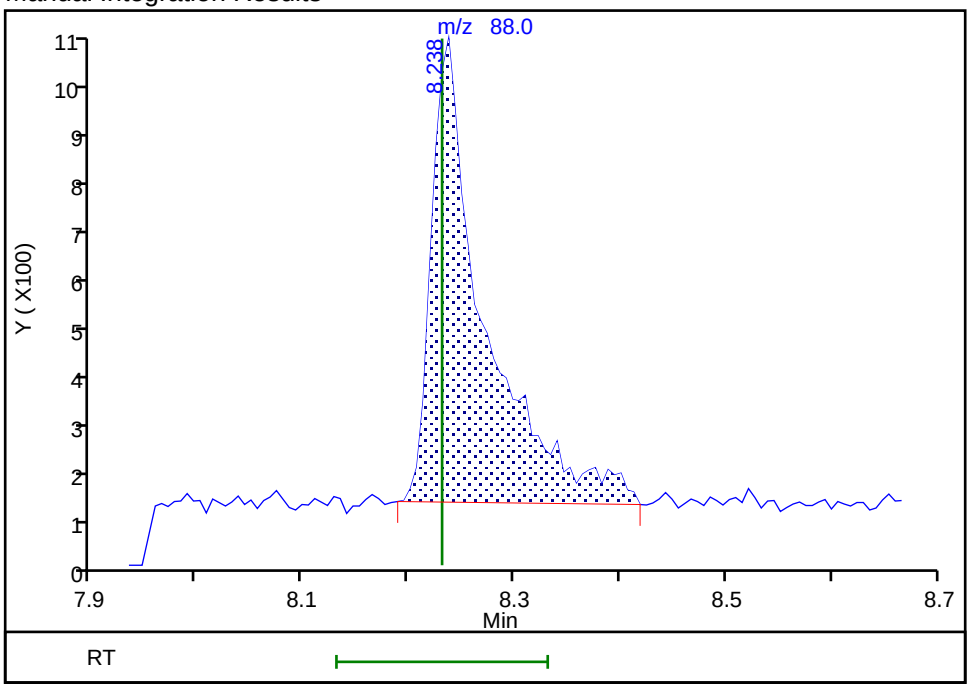
Processing Integration Results

RT: 8.24
Area: 3116
Amount: 4.963035
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 3257
Amount: 5.187614
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:18:39

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-19_112321 Lab Sample ID: 240-160744-17

Matrix: Water Lab File ID: 202609.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 15:20

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 04:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202609.D				
Lims ID:	240-160744-C-17				
Client ID:	SL-19_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:31:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:18:49		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	872018	10.0	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2719315	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	84536	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

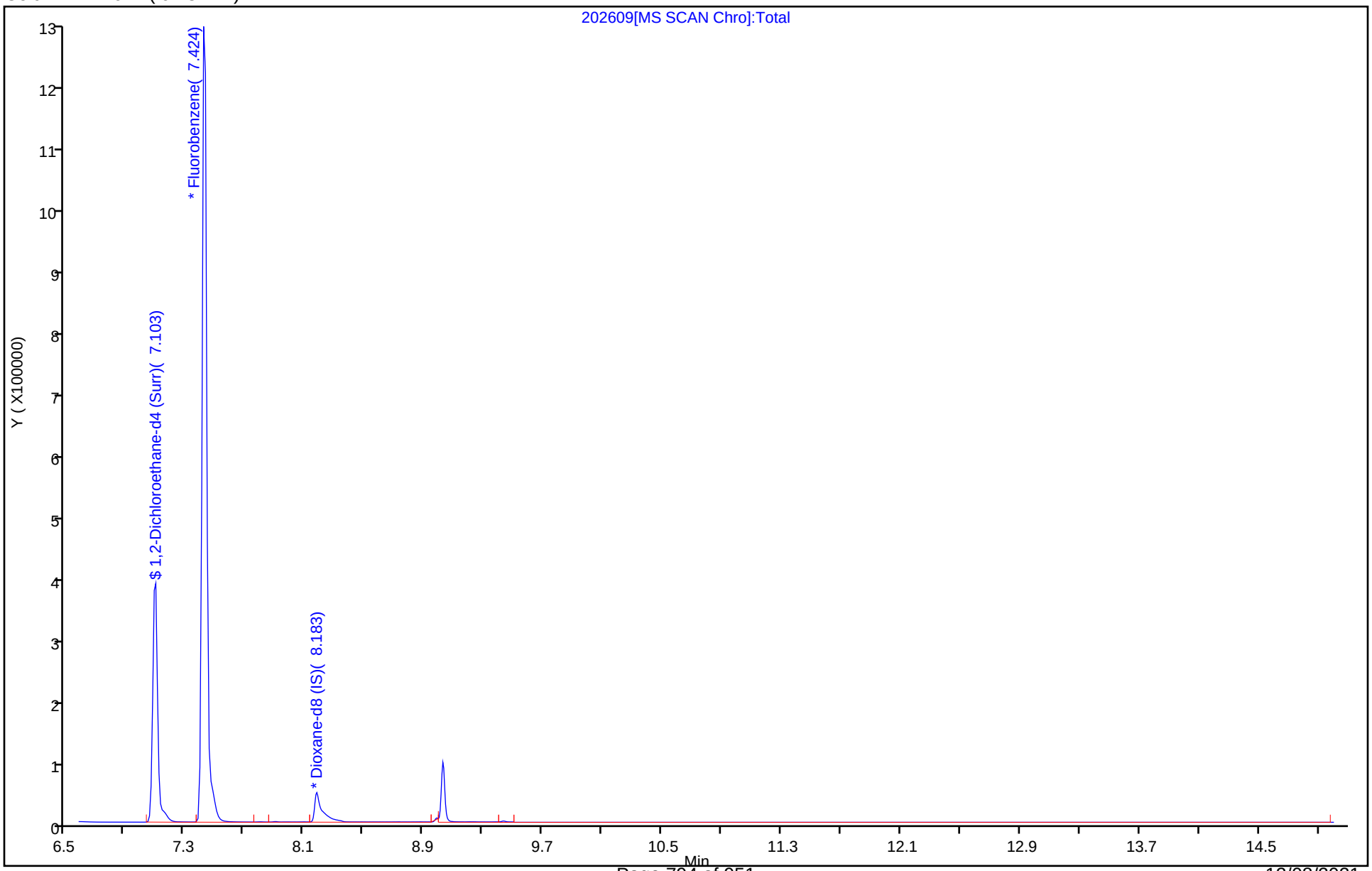
Report Date: 30-Nov-2021 18:20:40 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202609.D

Injection Date:	30-Nov-2021 04:31:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-17	Lab Sample ID:	240-160744-17	Worklist Smp#:	25
Client ID:	SL-19_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202609.D				
Lims ID:	240-160744-C-17				
Client ID:	SL-19_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:31:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:18:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.42

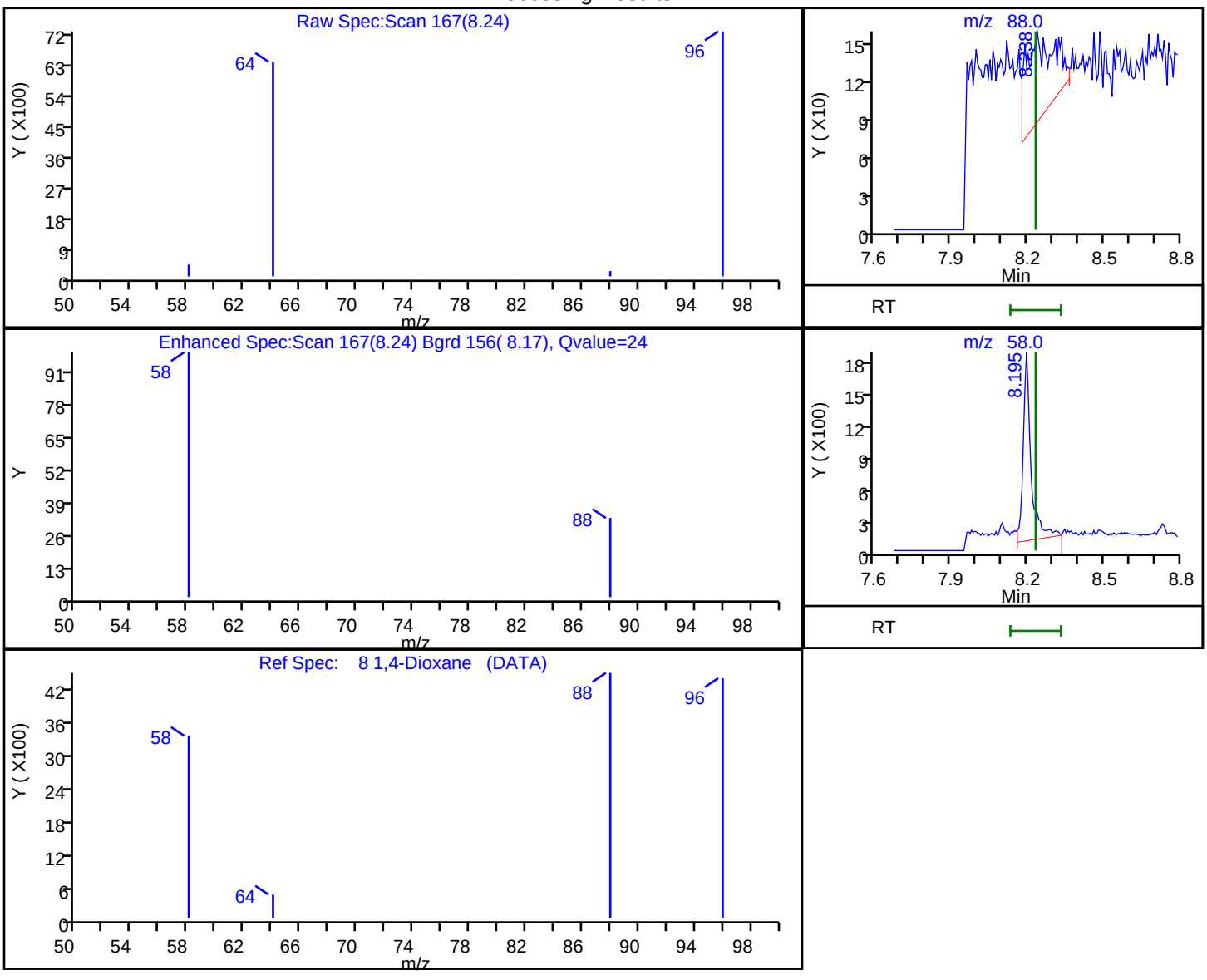
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202609.D				
Injection Date:	30-Nov-2021 04:31:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-17	Lab Sample ID:	240-160744-17		
Client ID:	SL-19_112321				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
8.24	88.00	505	0.731945
8.20	58.00	3710	

Reviewer: seymourc, 30-Nov-2021 18:18:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-22_112321 Lab Sample ID: 240-160744-18

Matrix: Water Lab File ID: 202610.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 15:40

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 04:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202610.D				
Lims ID:	240-160744-C-18				
Client ID:	SL-22_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:54:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:18:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	829188	10.0	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2598427	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	74075	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added: 0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added: 1.00	Units: uL	Run Reagent

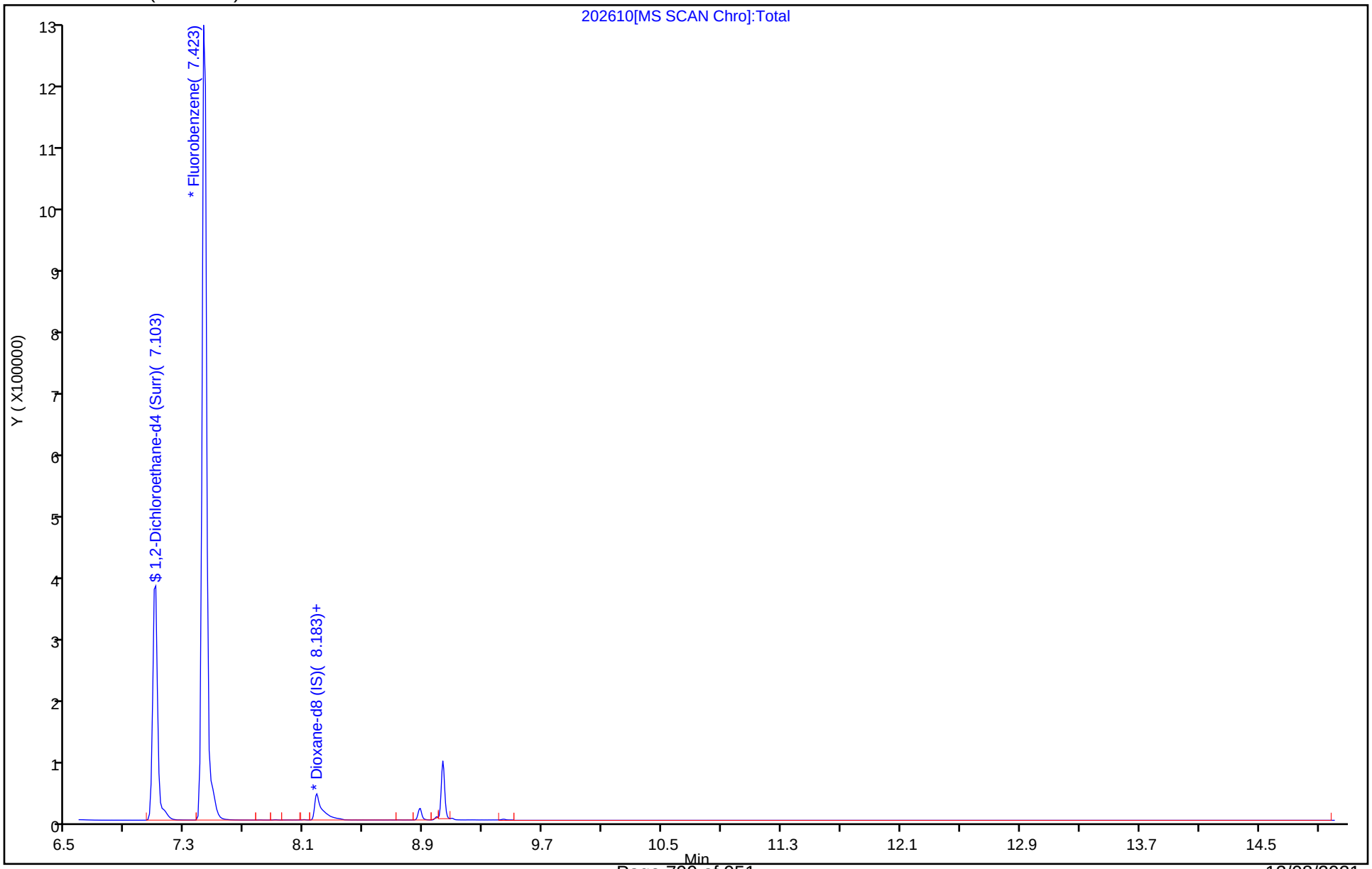
Report Date: 30-Nov-2021 18:20:40 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202610.D

Injection Date:	30-Nov-2021 04:54:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-18	Lab Sample ID:	240-160744-18	Worklist Smp#:	26
Client ID:	SL-22_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202610.D				
Lims ID:	240-160744-C-18				
Client ID:	SL-22_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 04:54:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:18:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-20_112321 Lab Sample ID: 240-160744-19

Matrix: Water Lab File ID: 202611.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 16:10

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202611.D				
Lims ID:	240-160744-C-19				
Client ID:	SL-20_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 05:18:30	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-027				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:19:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	781357	10.0	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2446442	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	77351	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	25	6071	9.62	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

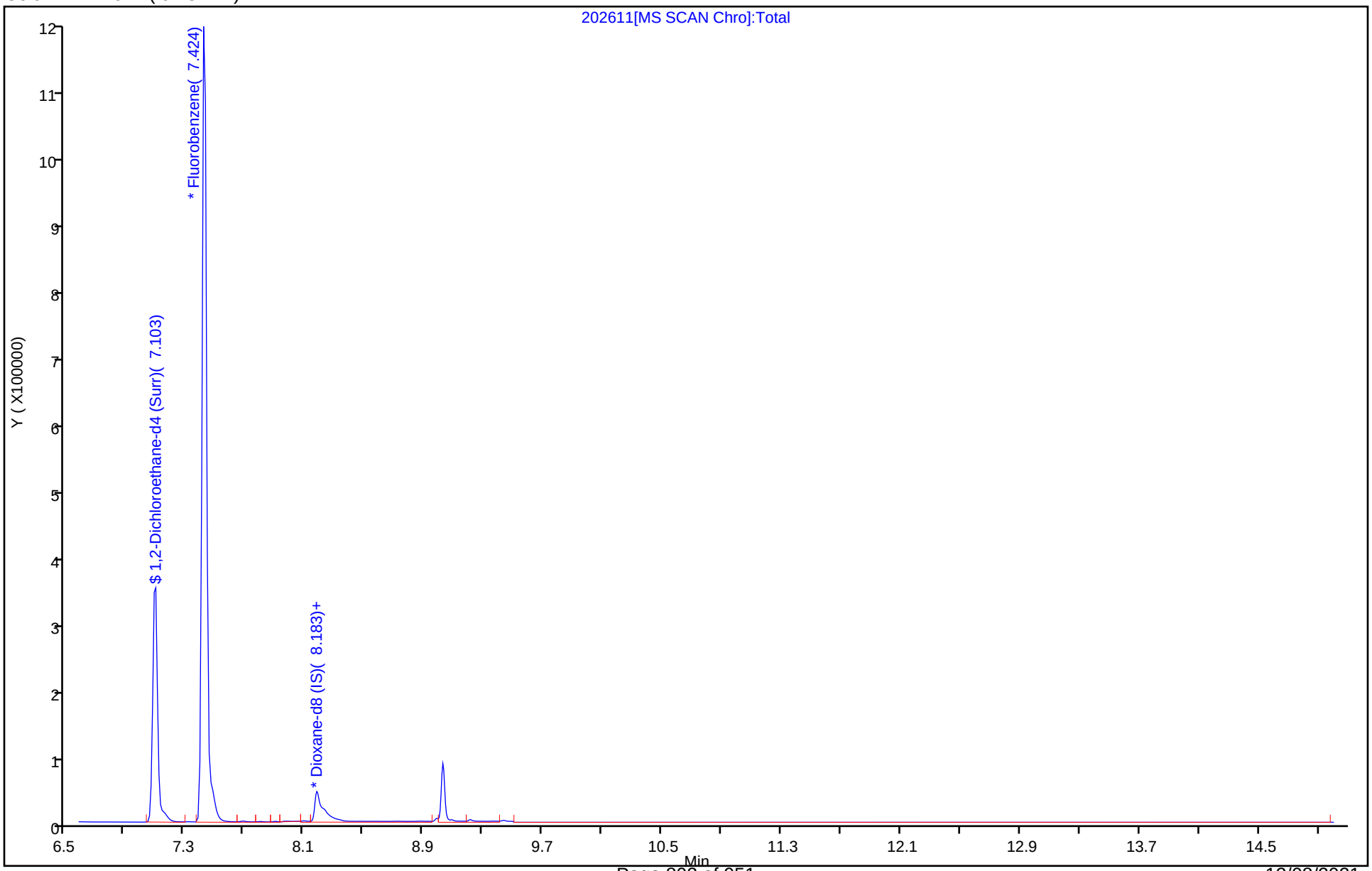
Report Date: 30-Nov-2021 18:20:41 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202611.D

Injection Date:	30-Nov-2021 05:18:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-C-19	Lab Sample ID:	240-160744-19	Worklist Smp#:	27
Client ID:	SL-20_112321				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202611.D				
Lims ID:	240-160744-C-19				
Client ID:	SL-20_112321				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 05:18:30	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-027				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:19:09

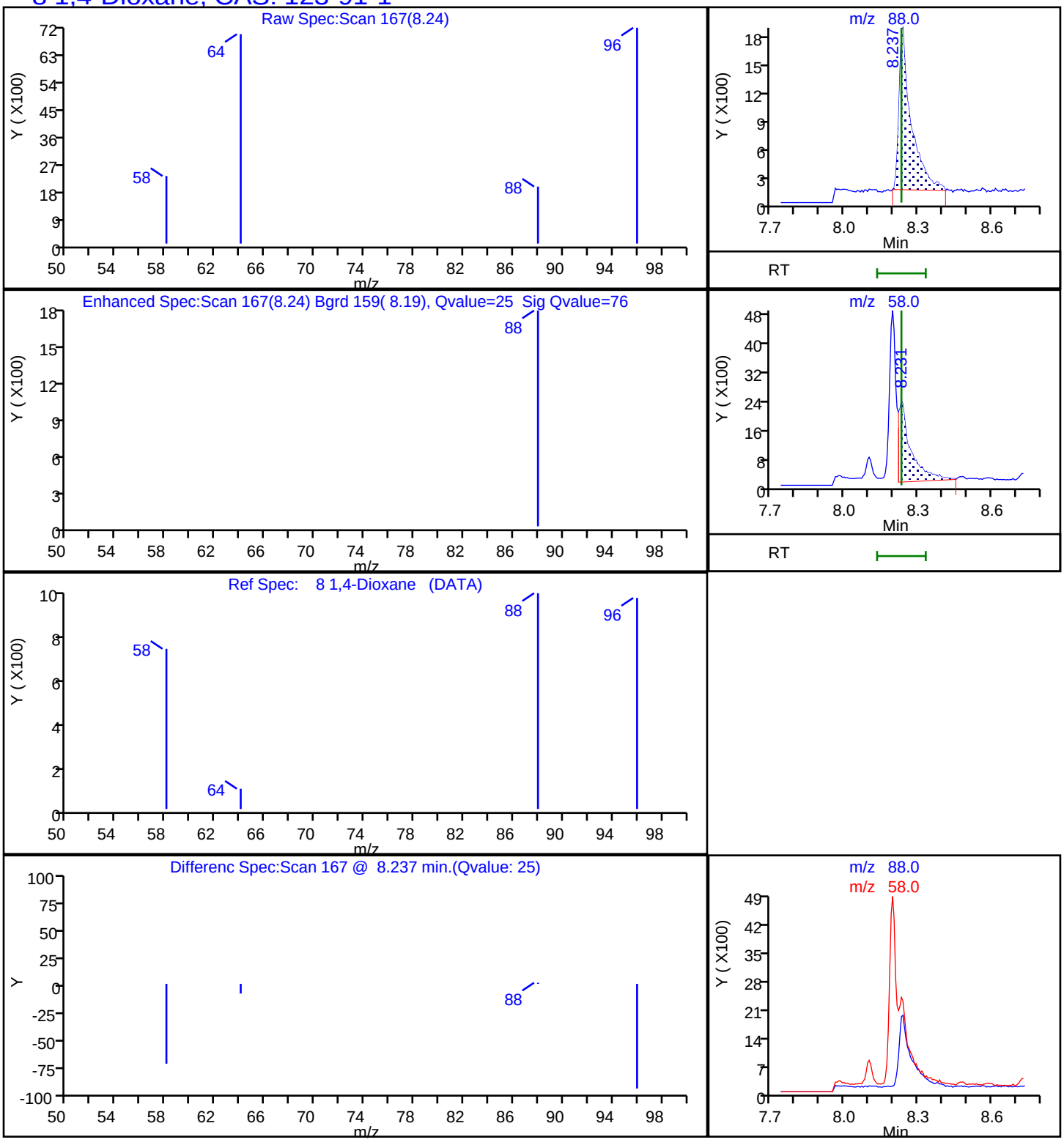
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.01

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202611.D

Injection Date:	30-Nov-2021 05:18:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-19	Lab Sample ID:	240-160744-19		
Client ID:	SL-20_112321				
Operator ID:	434006	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

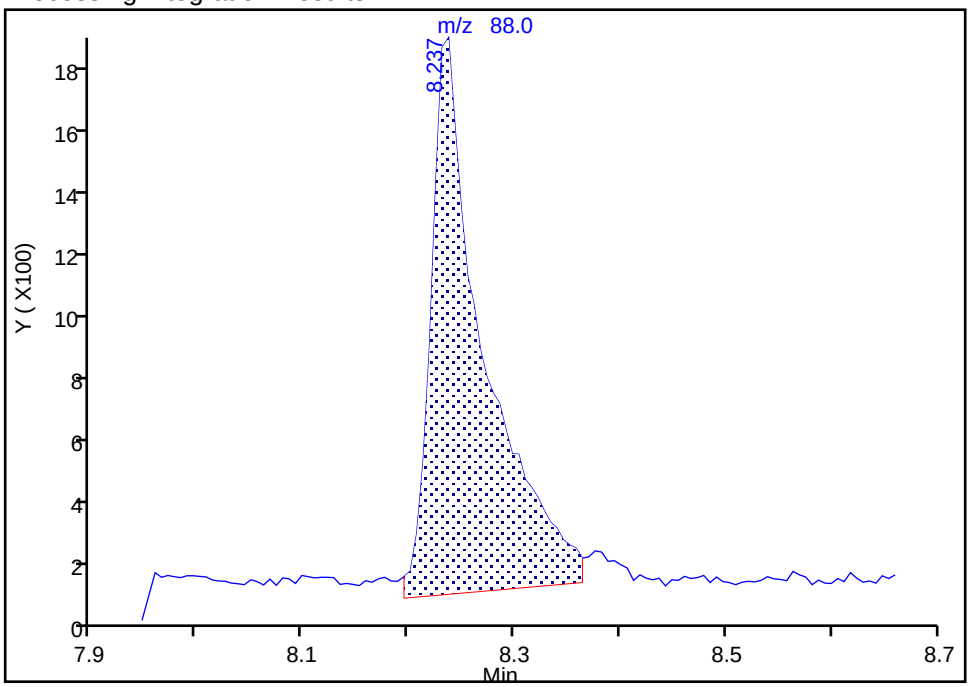
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202611.D				
Injection Date:	30-Nov-2021 05:18:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-C-19	Lab Sample ID:	240-160744-19		
Client ID:	SL-20_112321				
Operator ID:	434006	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

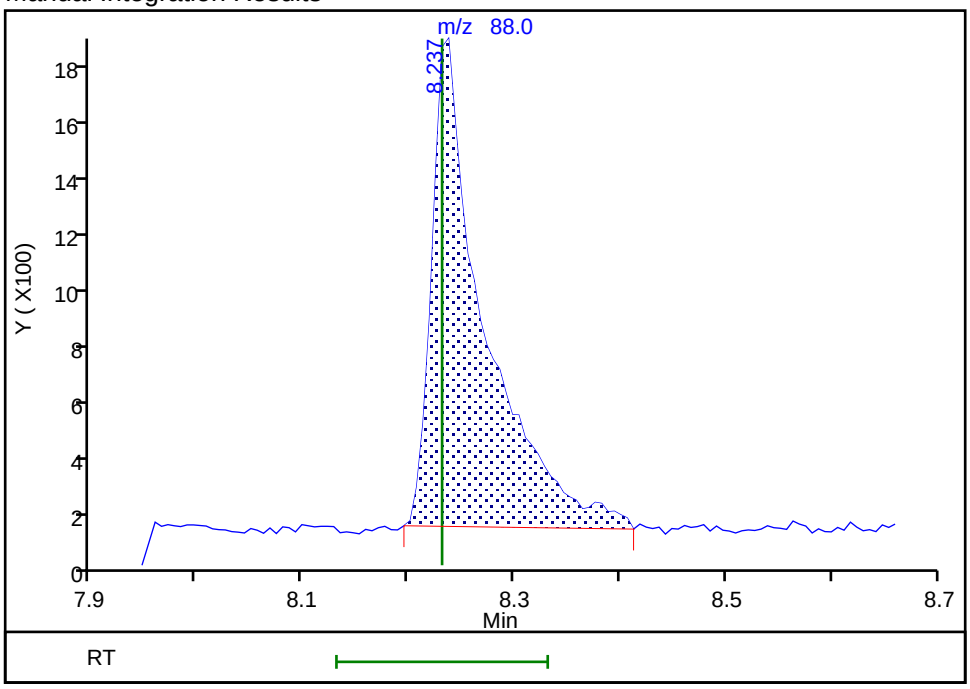
Processing Integration Results

RT: 8.24
Area: 6318
Amount: 10.007887
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6071
Amount: 9.616633
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:19:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-16_112421 Lab Sample ID: 240-160744-20

Matrix: Water Lab File ID: 202612.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 10:20

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 05:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	19		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202612.D				
Lims ID:	240-160744-A-20				
Client ID:	SL-16_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 05:42:30	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-028				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:19:24		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	844584	10.2	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2602200	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	76994	200.0	
8 1,4-Dioxane	88	8.232	8.231	0.001	50	12080	19.2	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

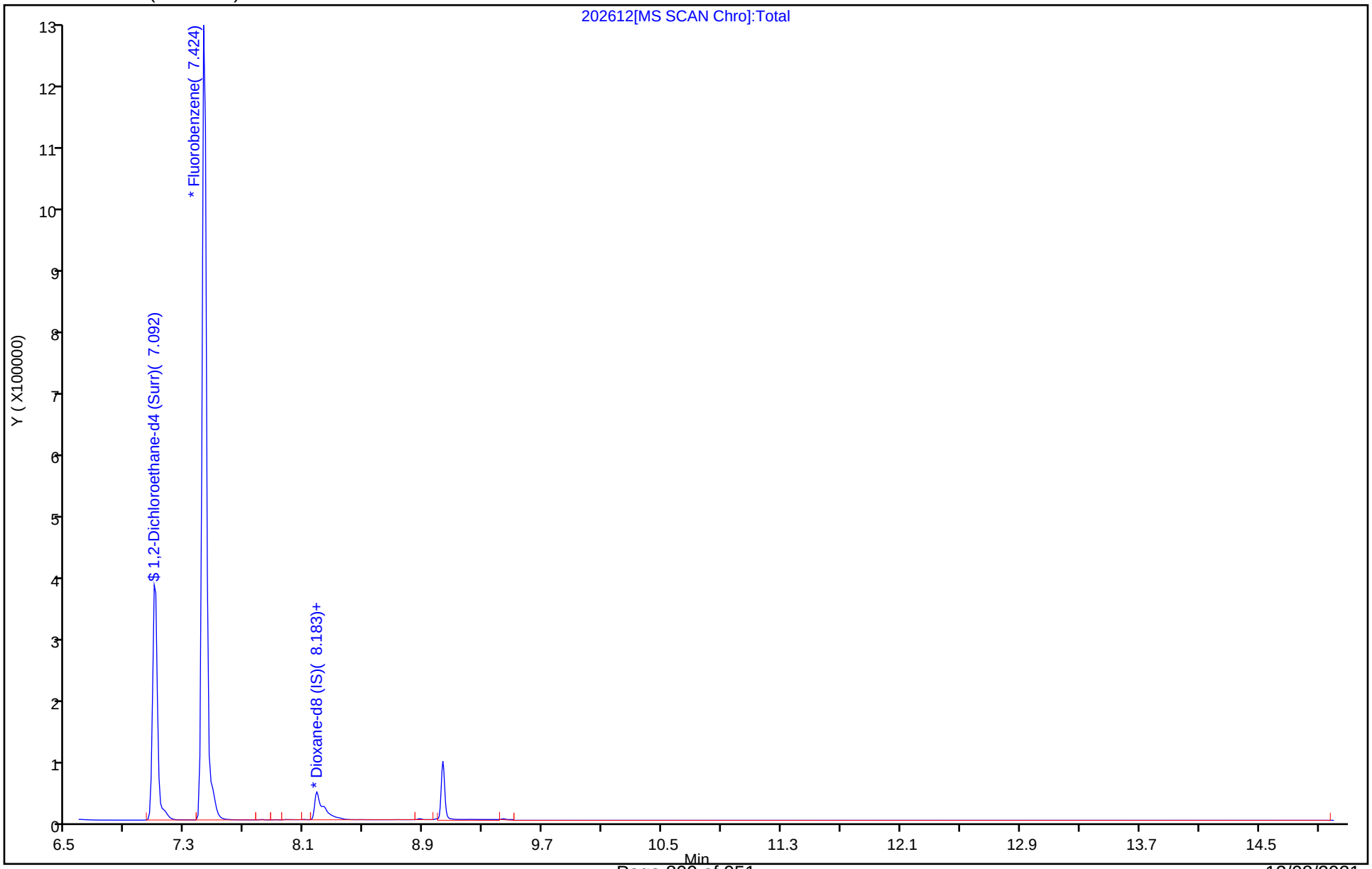
Report Date: 30-Nov-2021 18:20:41 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202612.D

Injection Date:	30-Nov-2021 05:42:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-20	Lab Sample ID:	240-160744-20	Worklist Smp#:	28
Client ID:	SL-16_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202612.D				
Lims ID:	240-160744-A-20				
Client ID:	SL-16_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 05:42:30	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-028				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:19:24

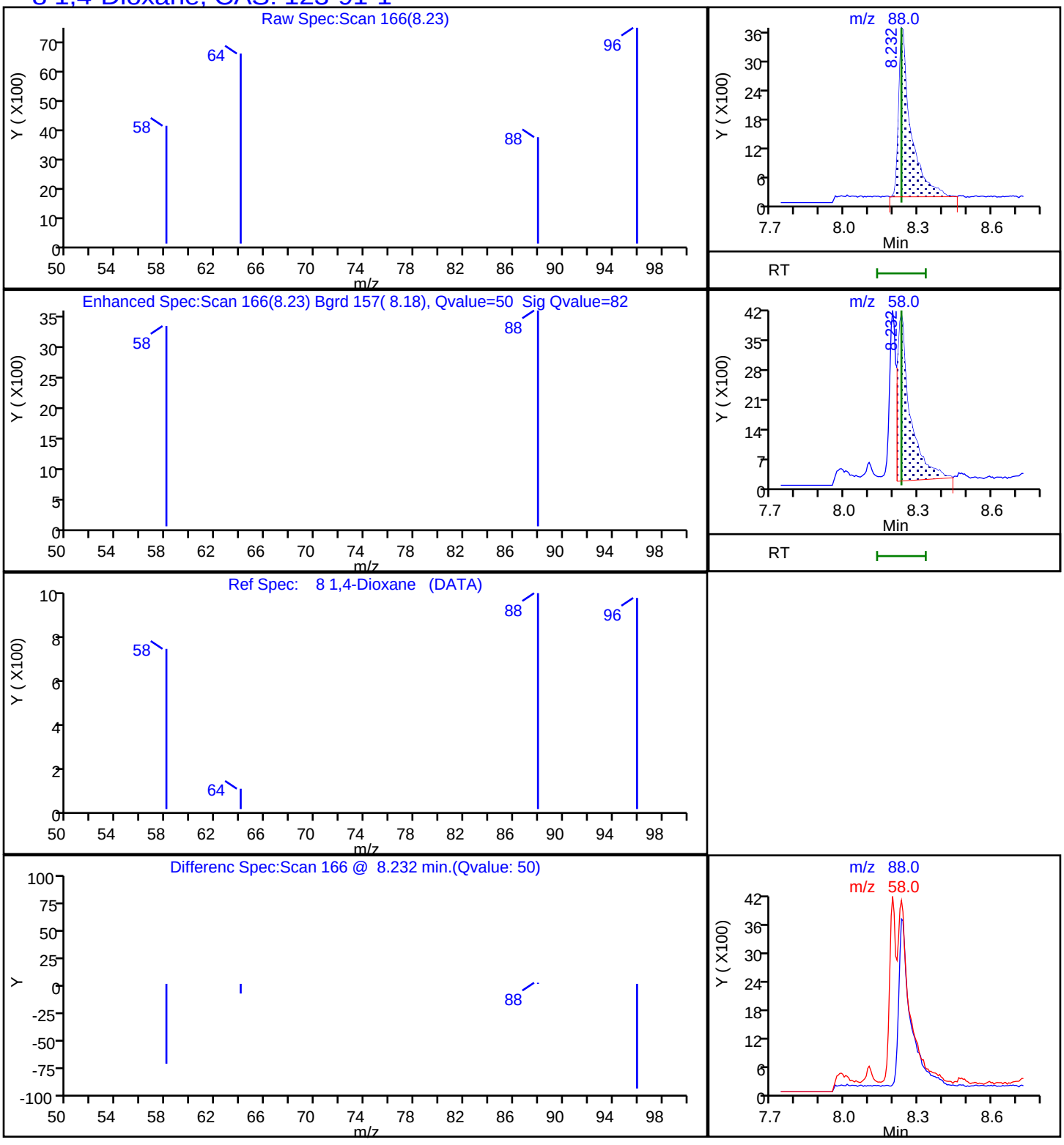
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.63

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202612.D

Injection Date:	30-Nov-2021 05:42:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-20	Lab Sample ID:	240-160744-20		
Client ID:	SL-16_112421				
Operator ID:	434006	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

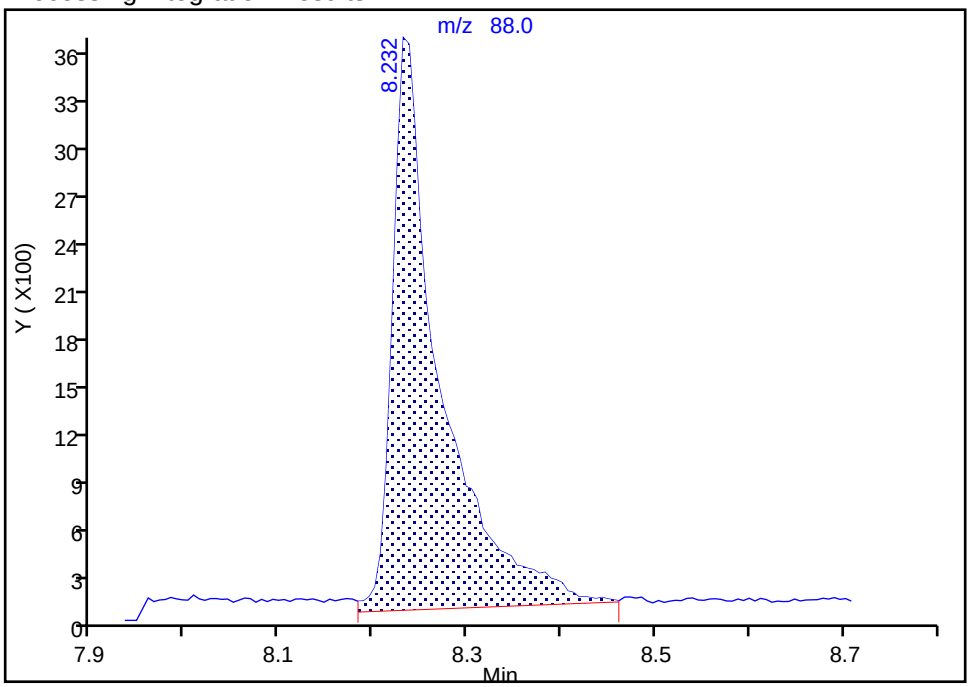
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202612.D				
Injection Date:	30-Nov-2021 05:42:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-20	Lab Sample ID:	240-160744-20		
Client ID:	SL-16_112421				
Operator ID:	434006	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

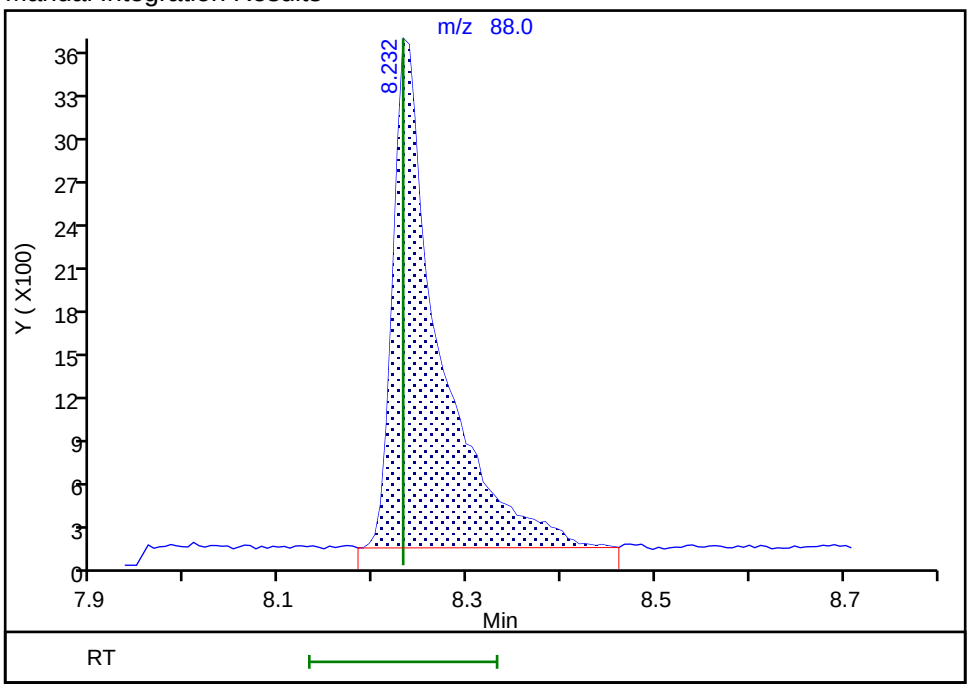
Processing Integration Results

RT: 8.23
Area: 12719
Amount: 20.240666
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 12080
Amount: 19.223779
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:19:20

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-17_112421 Lab Sample ID: 240-160744-21

Matrix: Water Lab File ID: 202613.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 10:45

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 06:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	28		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202613.D				
Lims ID:	240-160744-A-21				
Client ID:	SL-17_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 06:06:30	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-029				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:19:45		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	880208	10.3	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2665054	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	81303	200.0	
8 1,4-Dioxane	88	8.232	8.231	0.001	46	18828	28.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

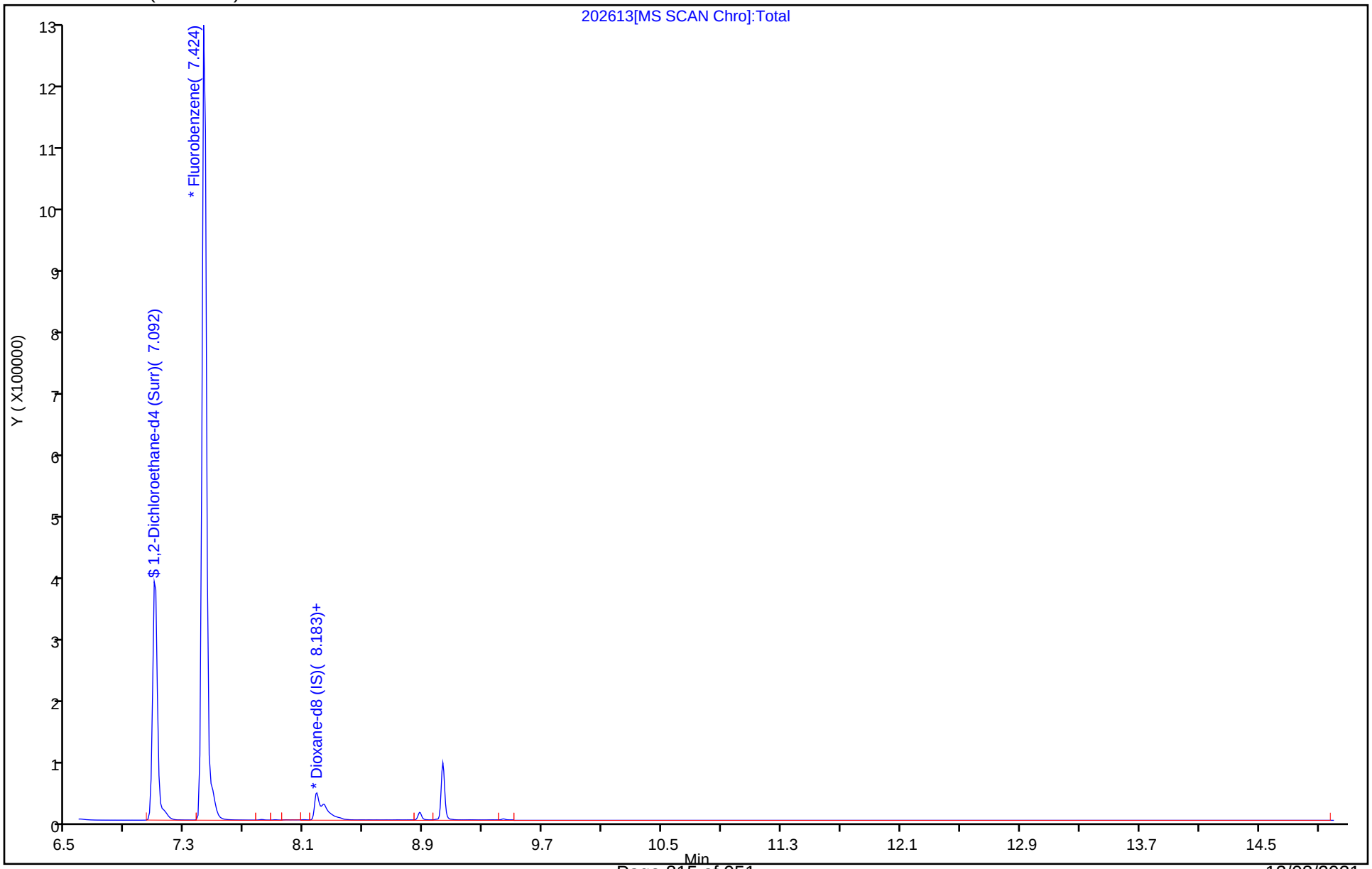
Report Date: 30-Nov-2021 18:20:41 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202613.D

Injection Date:	30-Nov-2021 06:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-21	Lab Sample ID:	240-160744-21	Worklist Smp#:	29
Client ID:	SL-17_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202613.D				
Lims ID:	240-160744-A-21				
Client ID:	SL-17_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 06:06:30	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-029				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:19:45

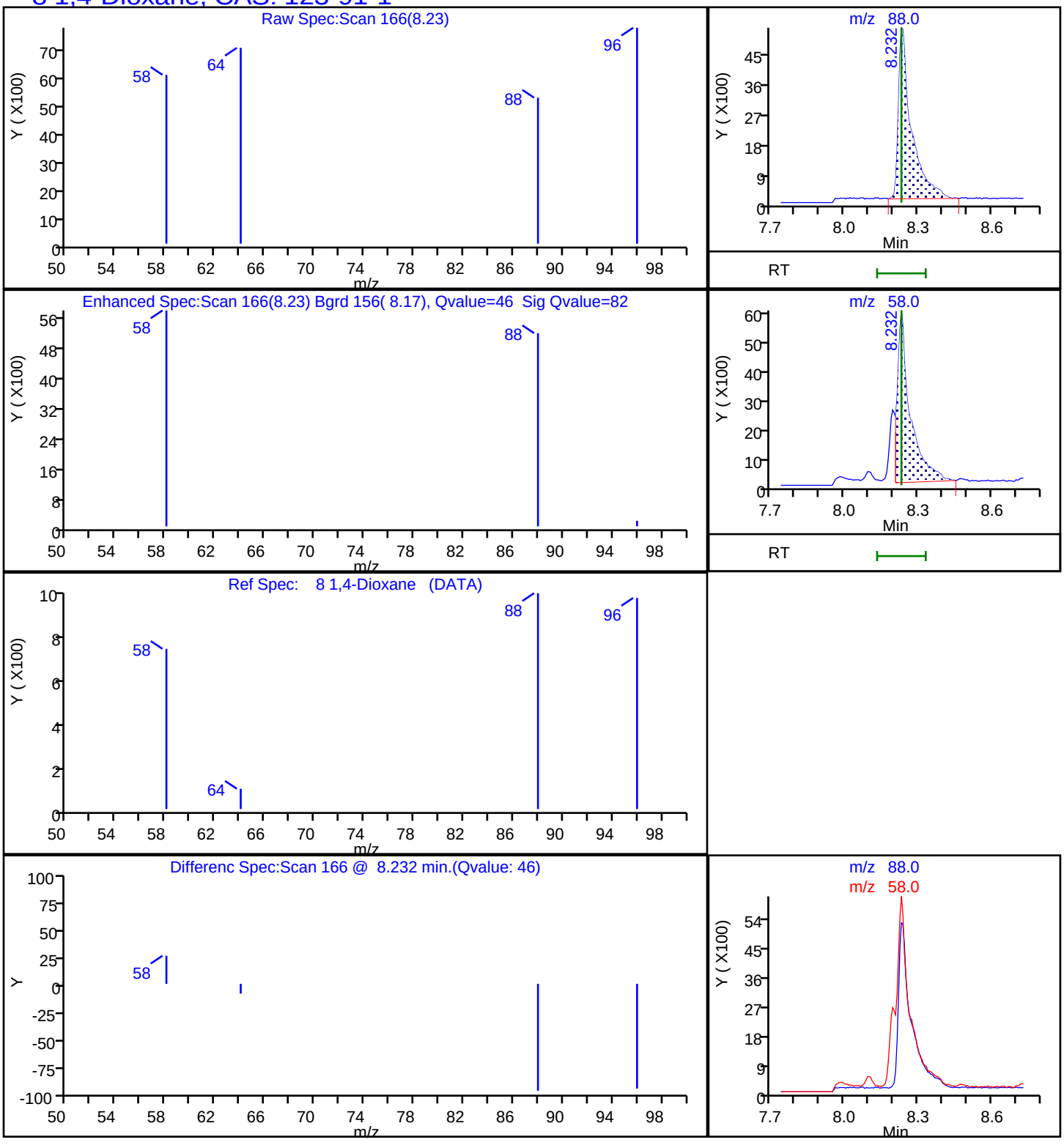
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.42

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202613.D

Injection Date:	30-Nov-2021 06:06:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-21	Lab Sample ID:	240-160744-21		
Client ID:	SL-17_112421				
Operator ID:	434006	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

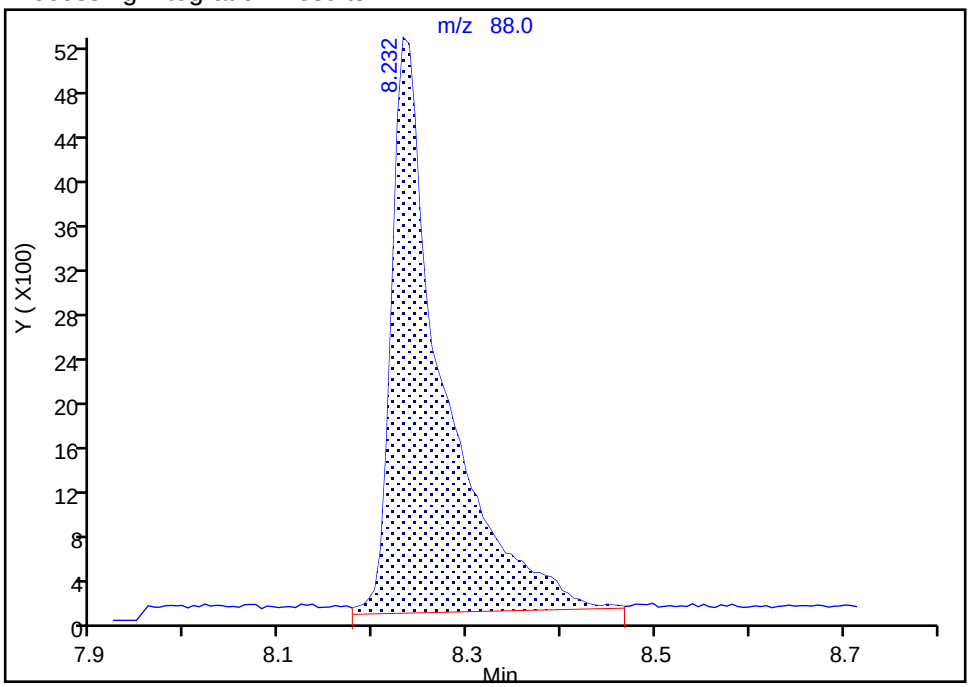
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202613.D				
Injection Date:	30-Nov-2021 06:06:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-21	Lab Sample ID:	240-160744-21		
Client ID:	SL-17_112421				
Operator ID:	434006	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

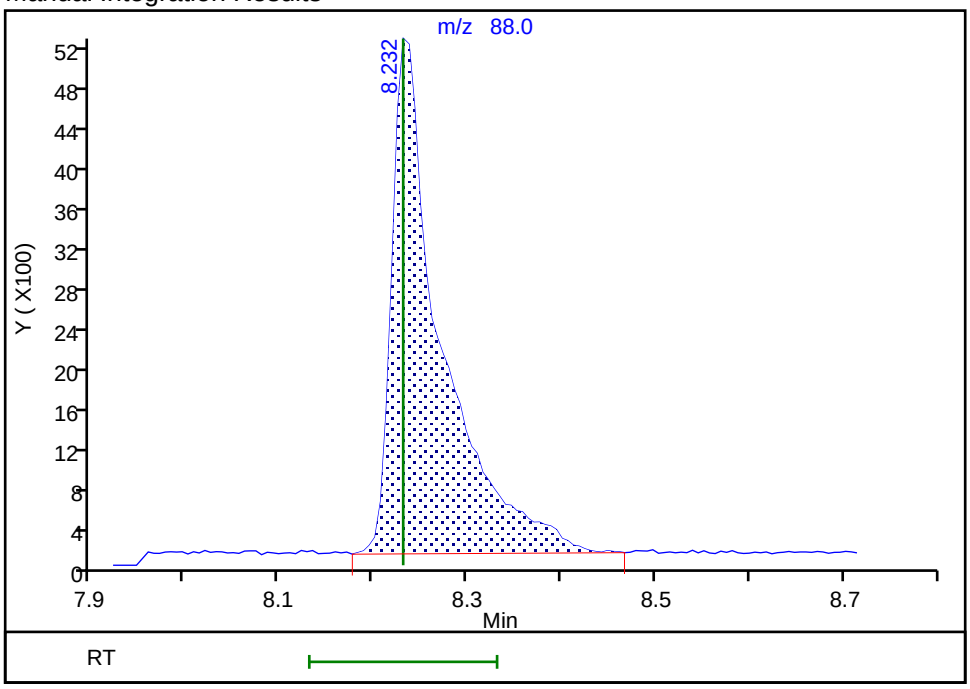
Processing Integration Results

RT: 8.23
Area: 19459
Amount: 29.325314
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 18828
Amount: 28.374377
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:19:40

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-21_112421 Lab Sample ID: 240-160744-22

Matrix: Water Lab File ID: 202614.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 12:50

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 06:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.9		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202614.D				
Lims ID:	240-160744-A-22				
Client ID:	SL-21_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 06:30:30	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-030				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:20:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	868729	10.2	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2657292	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	86196	200.0	
8 1,4-Dioxane	88	8.238	8.231	0.007	25	2754	3.91	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

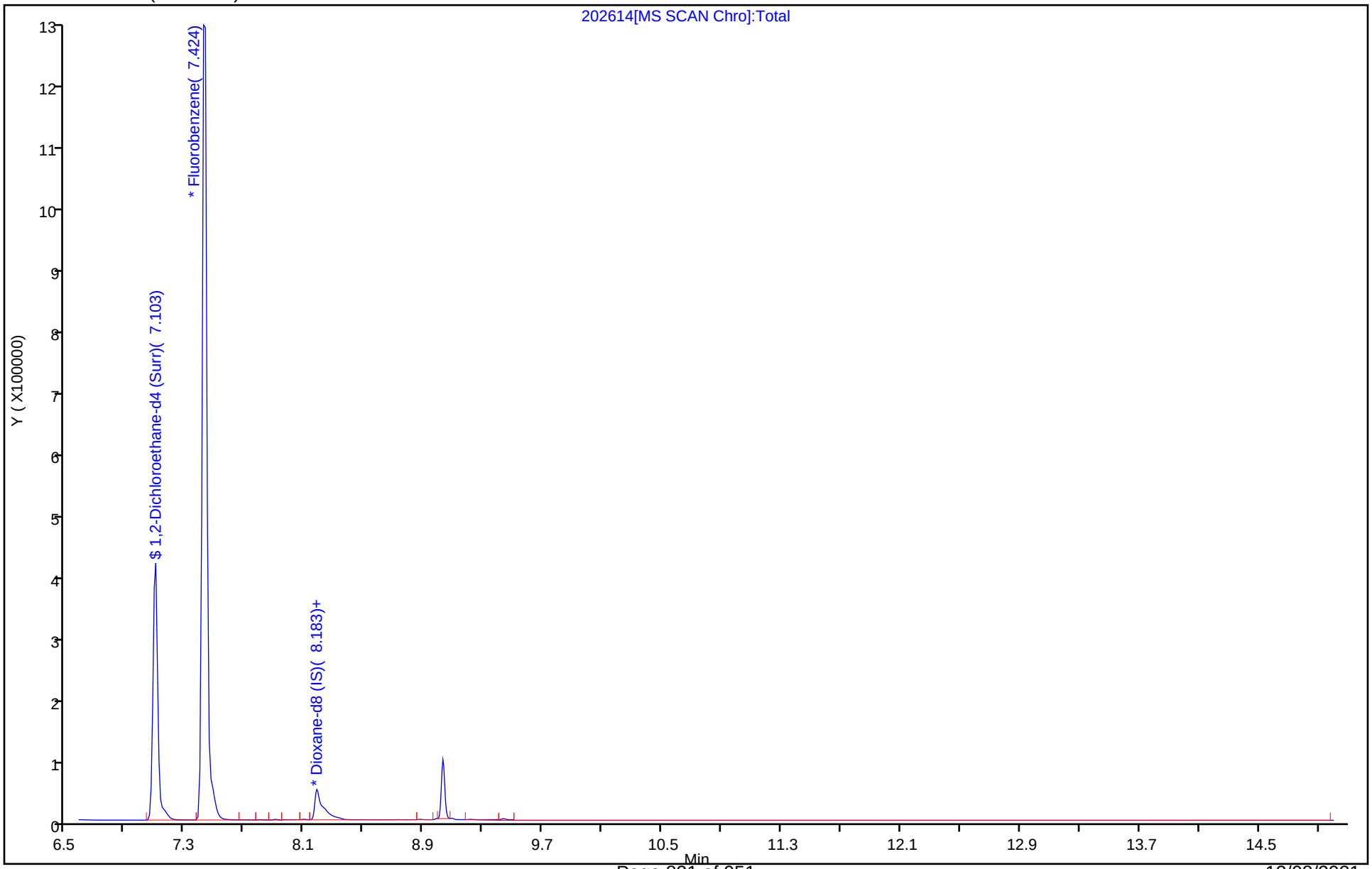
Report Date: 30-Nov-2021 18:20:42 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202614.D

Injection Date:	30-Nov-2021 06:30:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-22	Lab Sample ID:	240-160744-22	Worklist Smp#:	30
Client ID:	SL-21_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202614.D				
Lims ID:	240-160744-A-22				
Client ID:	SL-21_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 06:30:30	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-030				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:20:01

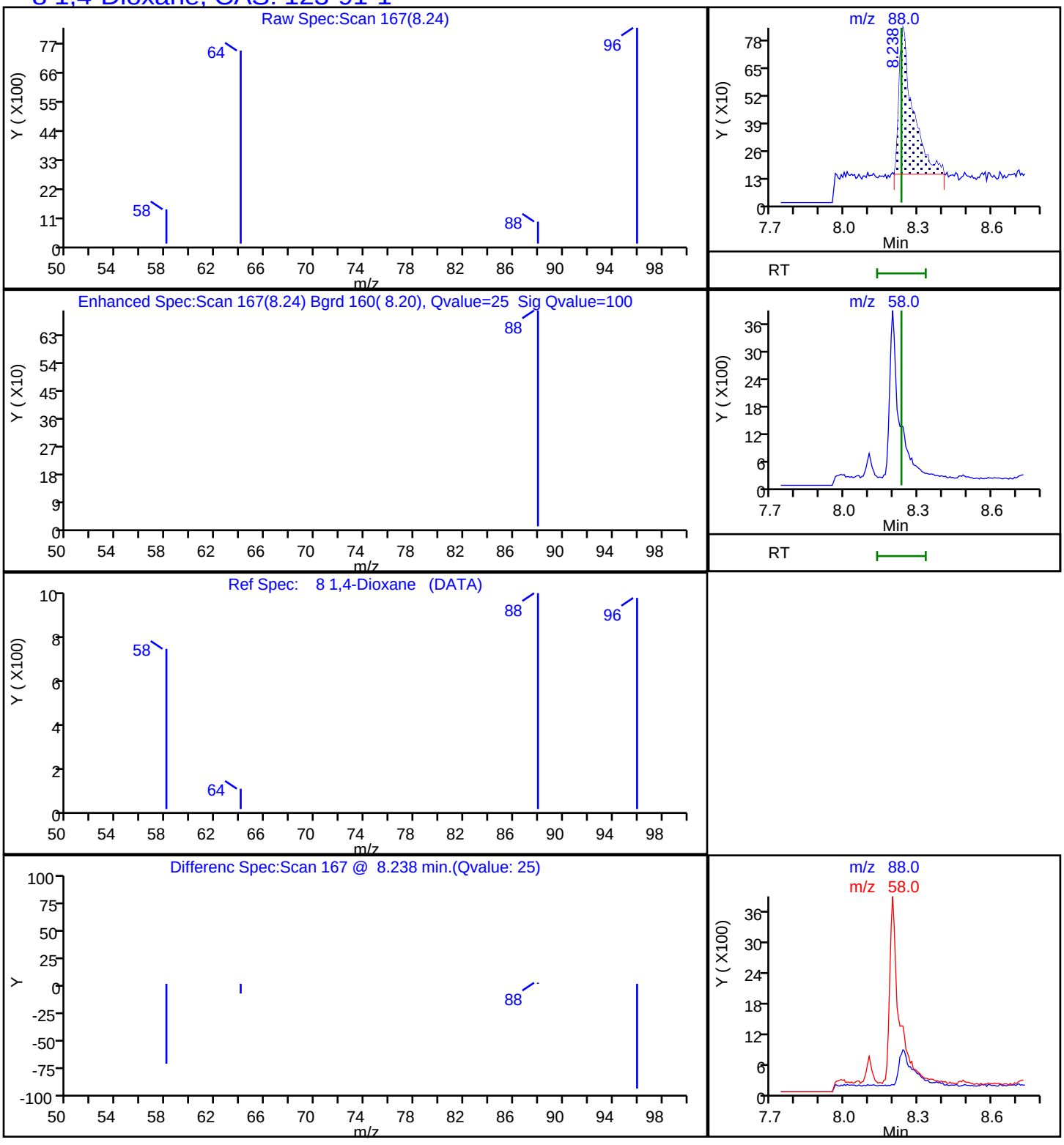
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.37

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202614.D

Injection Date:	30-Nov-2021 06:30:30	Instrument ID:	A3UX20
Lims ID:	240-160744-A-22	Lab Sample ID:	240-160744-22
Client ID:	SL-21_112421		
Operator ID:	434006	ALS Bottle#:	29 Worklist Smp#: 30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Canton

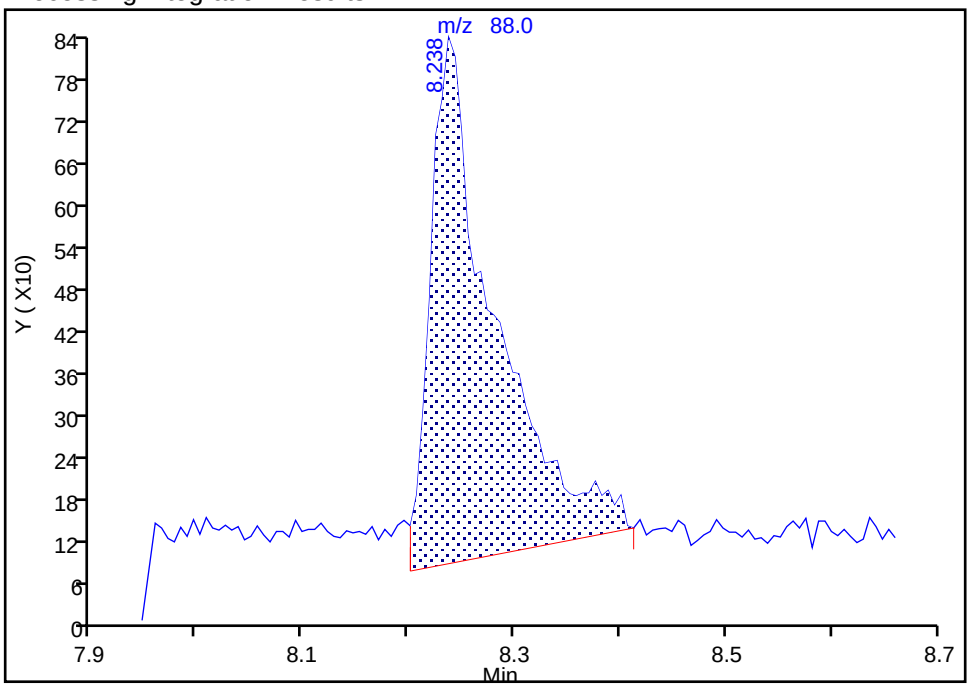
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202614.D				
Injection Date:	30-Nov-2021 06:30:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-22	Lab Sample ID:	240-160744-22		
Client ID:	SL-21_112421				
Operator ID:	434006	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

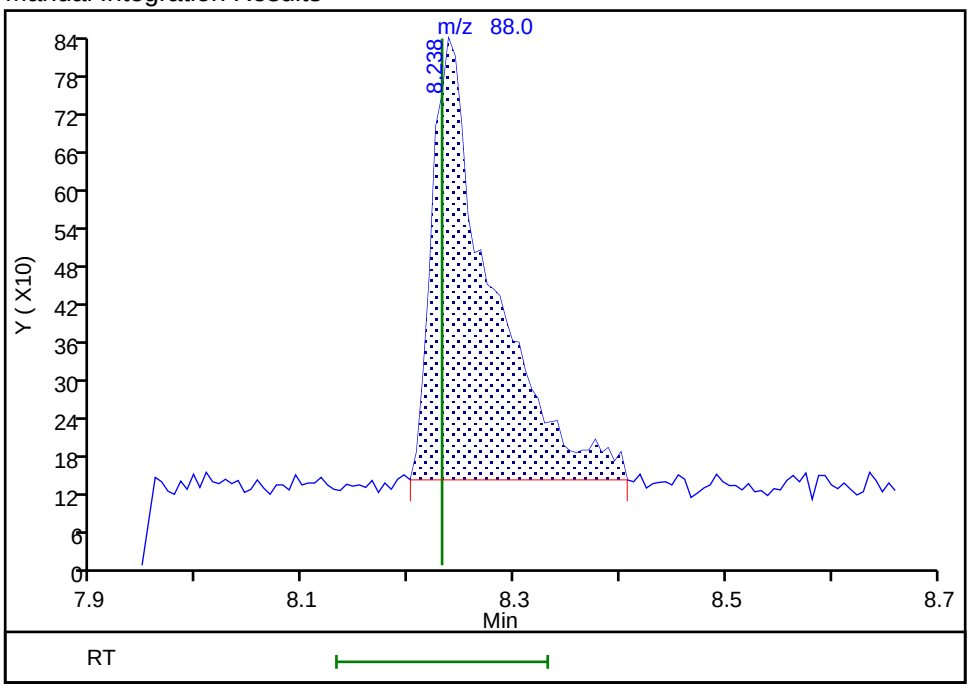
Processing Integration Results

RT: 8.24
Area: 3197
Amount: 4.544481
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2754
Amount: 3.914764
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:19:57
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-18_112421 Lab Sample ID: 240-160744-23

Matrix: Water Lab File ID: 202623.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 11:40

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	13		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202623.D				
Lims ID:	240-160744-A-23				
Client ID:	SL-18_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 20:48:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				
First Level Reviewer: seymourc		Date:	01-Dec-2021 16:00:18		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	822863	9.98	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2581058	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	67946	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	54	7204	13.0	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

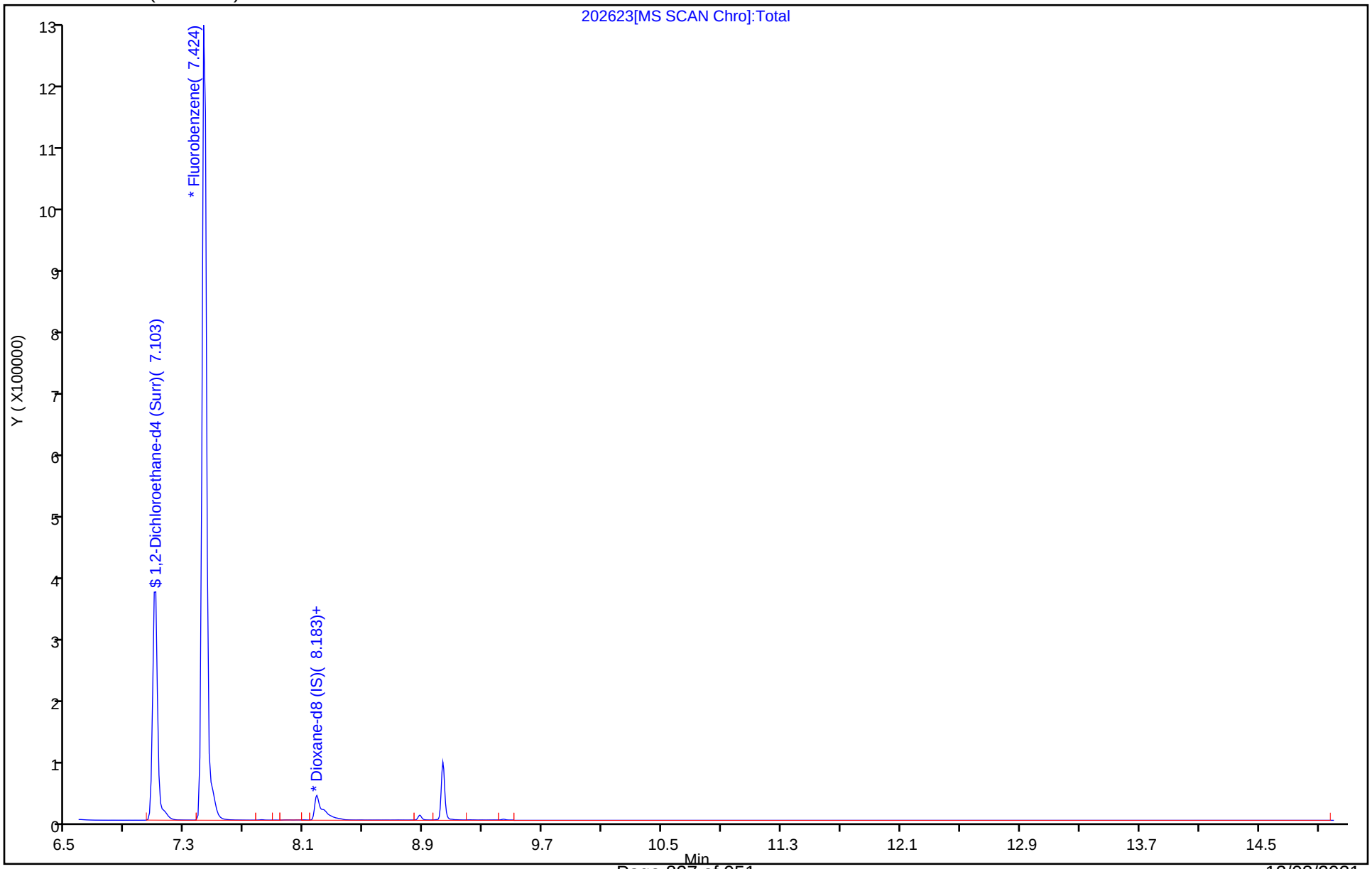
Report Date: 01-Dec-2021 16:02:14 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202623.D

Injection Date:	30-Nov-2021 20:48:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-23	Lab Sample ID:	240-160744-23	Worklist Smp#:	9
Client ID:	SL-18_112421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202623.D				
Lims ID:	240-160744-A-23				
Client ID:	SL-18_112421				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 20:48:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 01-Dec-2021 16:00:18

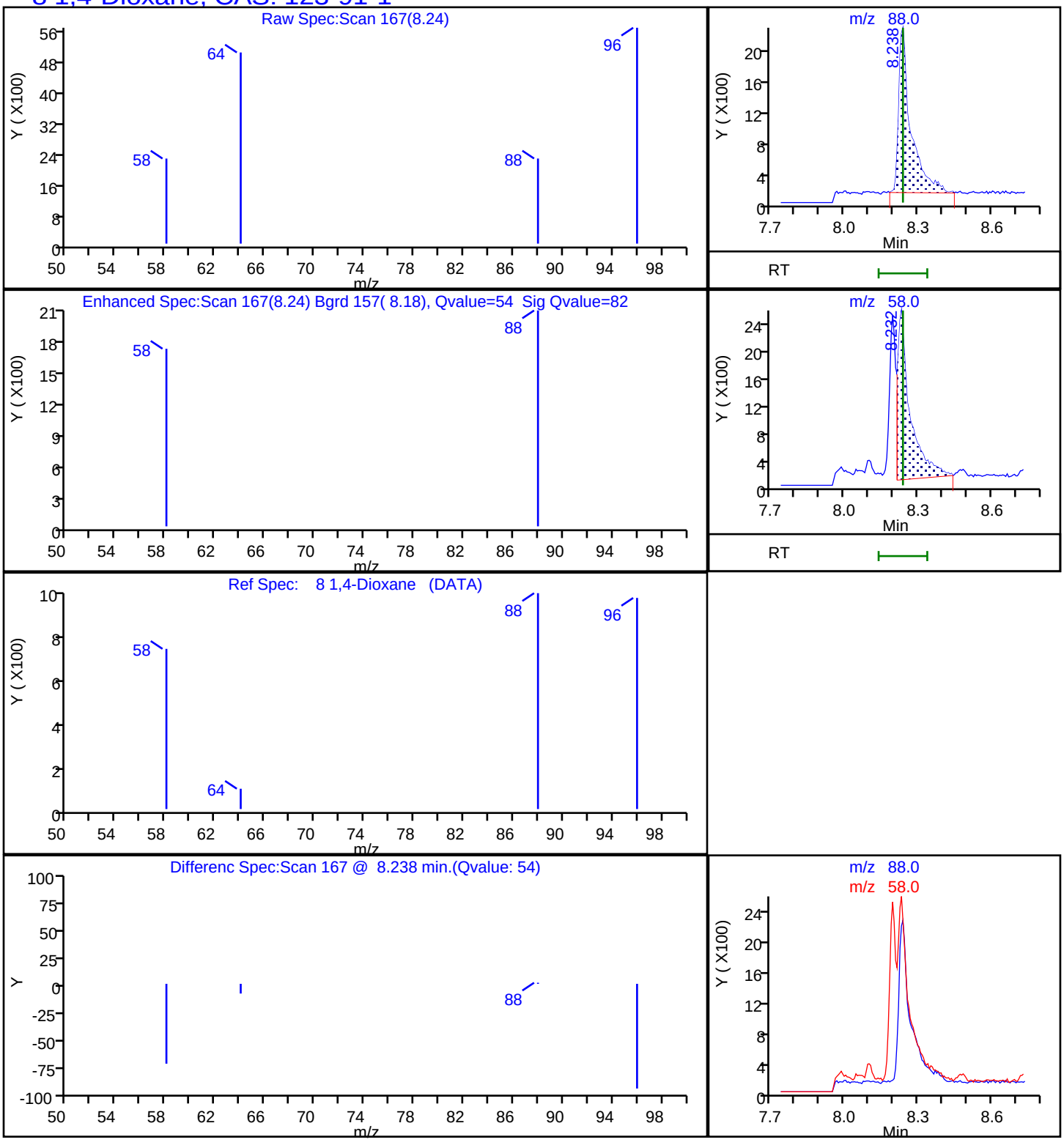
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.98	99.83

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202623.D

Injection Date:	30-Nov-2021 20:48:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-23	Lab Sample ID:	240-160744-23		
Client ID:	SL-18_112421				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

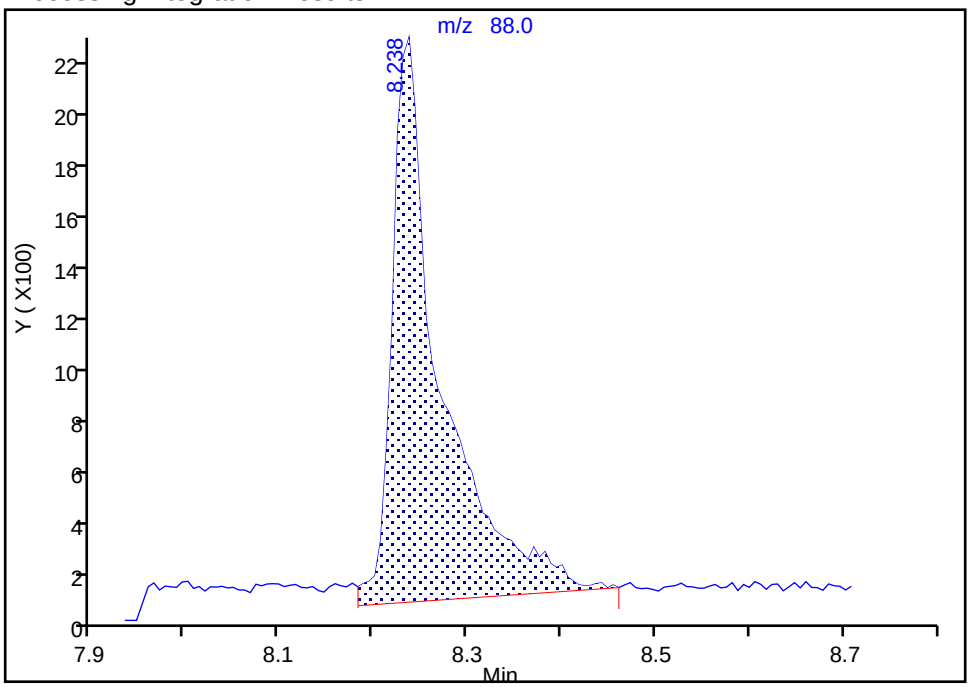
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202623.D				
Injection Date:	30-Nov-2021 20:48:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-23	Lab Sample ID:	240-160744-23		
Client ID:	SL-18_112421				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

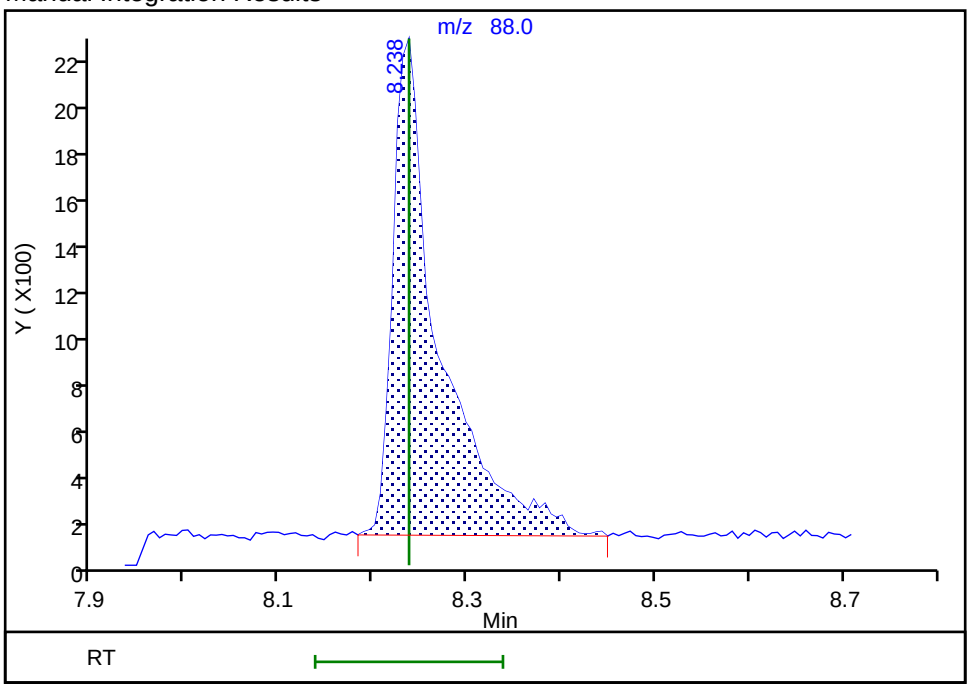
Processing Integration Results

RT: 8.24
Area: 7803
Amount: 14.071048
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7204
Amount: 12.990879
Amount Units: ug/l



Reviewer: seymourc, 01-Dec-2021 16:00:14

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-160744-24

Matrix: Water Lab File ID: 202624.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 21:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202624.D				
Lims ID:	240-160744-A-24				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 21:12:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				
First Level Reviewer: seymourc		Date:	01-Dec-2021 16:00:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	794796	9.56	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2603611	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	66159	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	52	4939	9.15	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

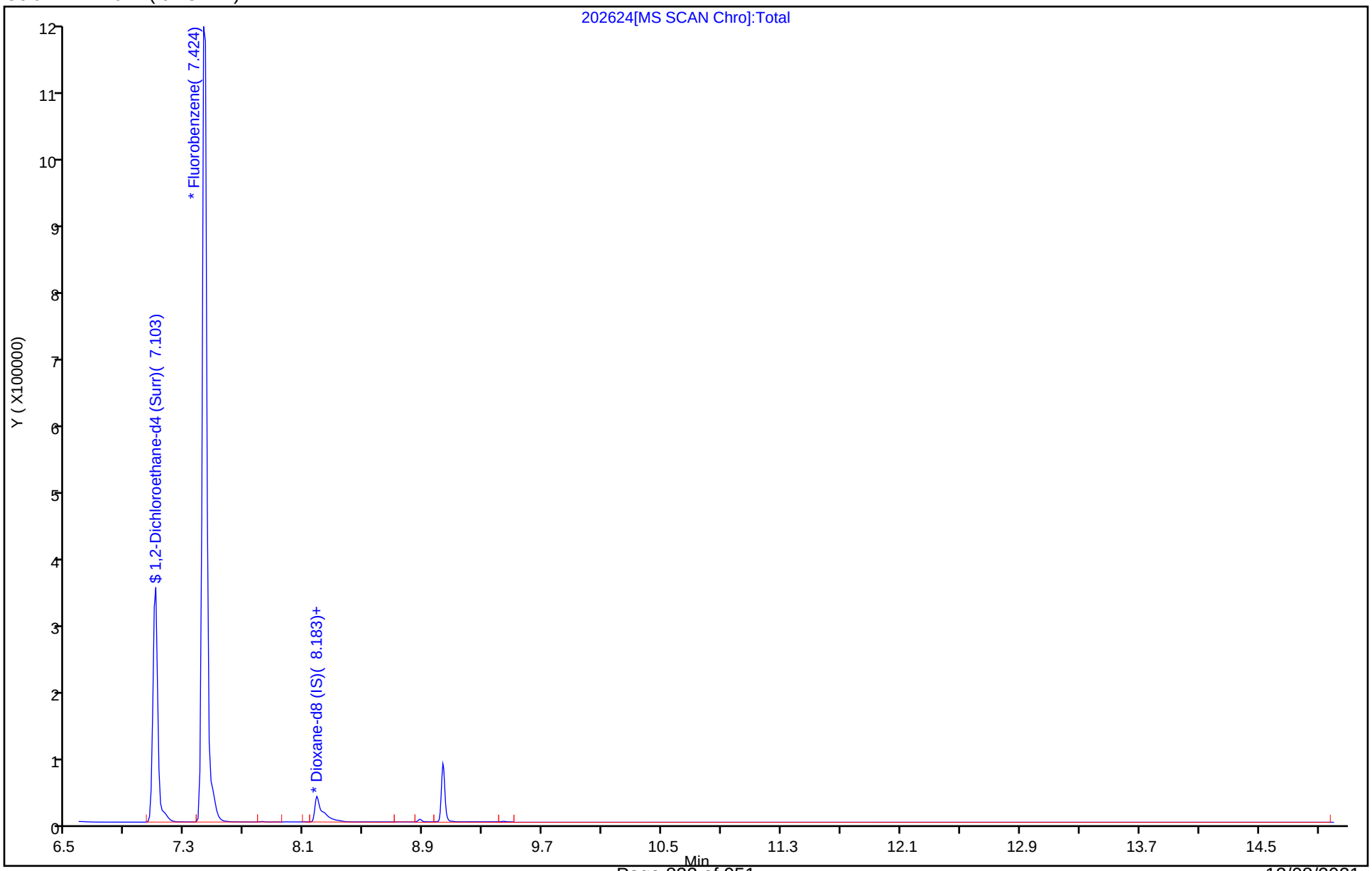
Report Date: 01-Dec-2021 16:02:14 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202624.D

Injection Date:	30-Nov-2021 21:12:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-24	Lab Sample ID:	240-160744-24	Worklist Smp#:	10
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202624.D				
Lims ID:	240-160744-A-24				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 21:12:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 01-Dec-2021 16:00:32

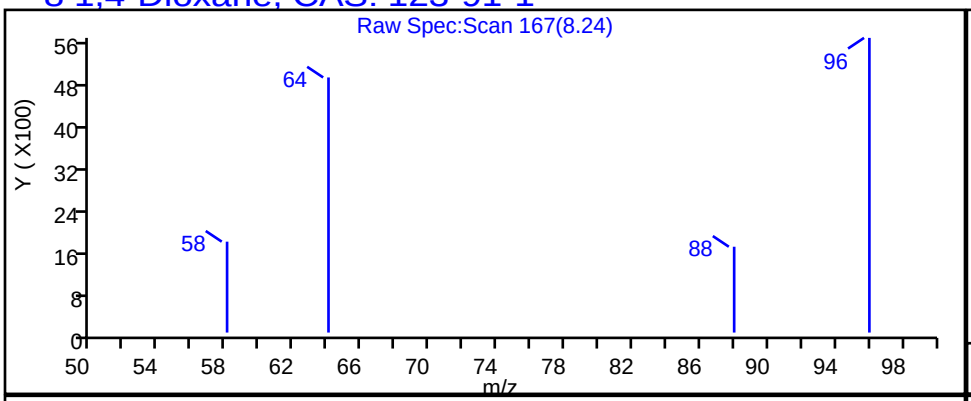
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.56	95.59

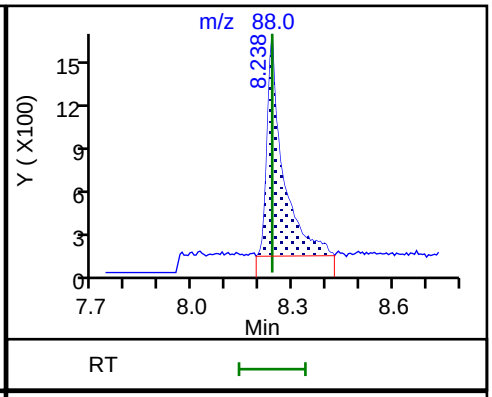
Eurofins TestAmerica, Canton

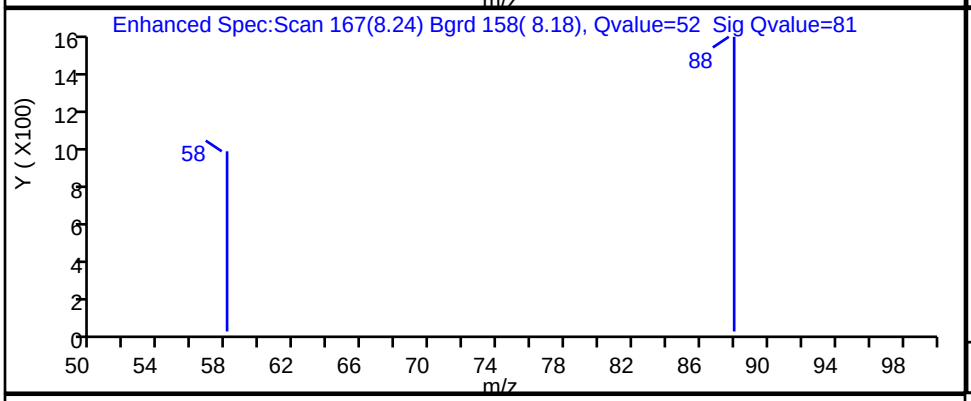
Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202624.D

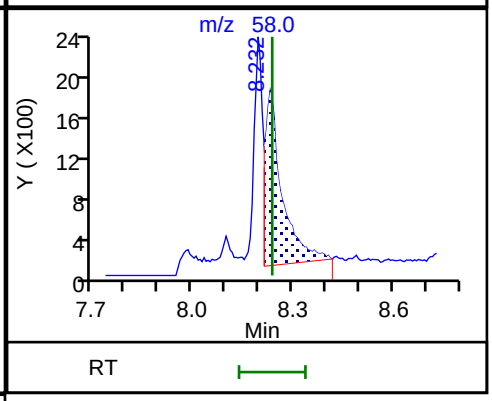
Injection Date:	30-Nov-2021 21:12:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-24	Lab Sample ID:	240-160744-24		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

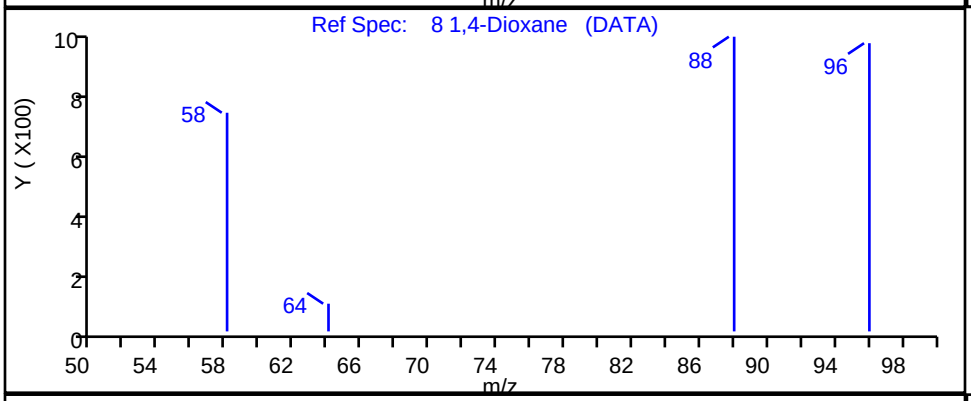
8 1,4-Dioxane, CAS: 123-91-1

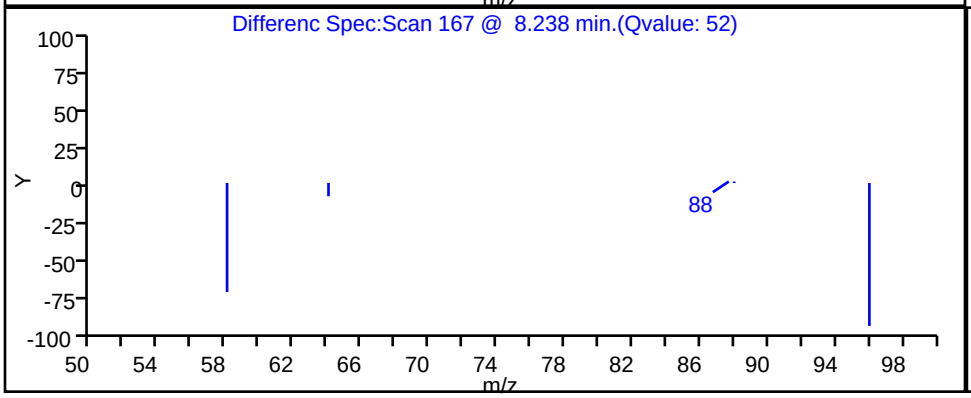


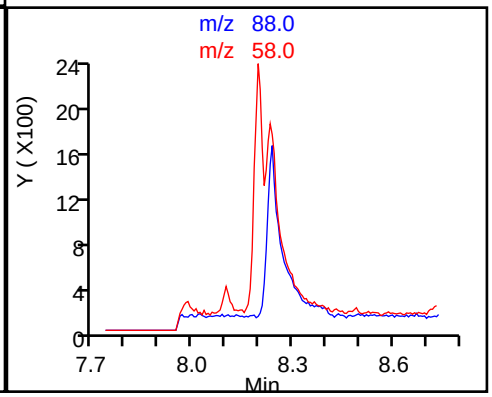












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

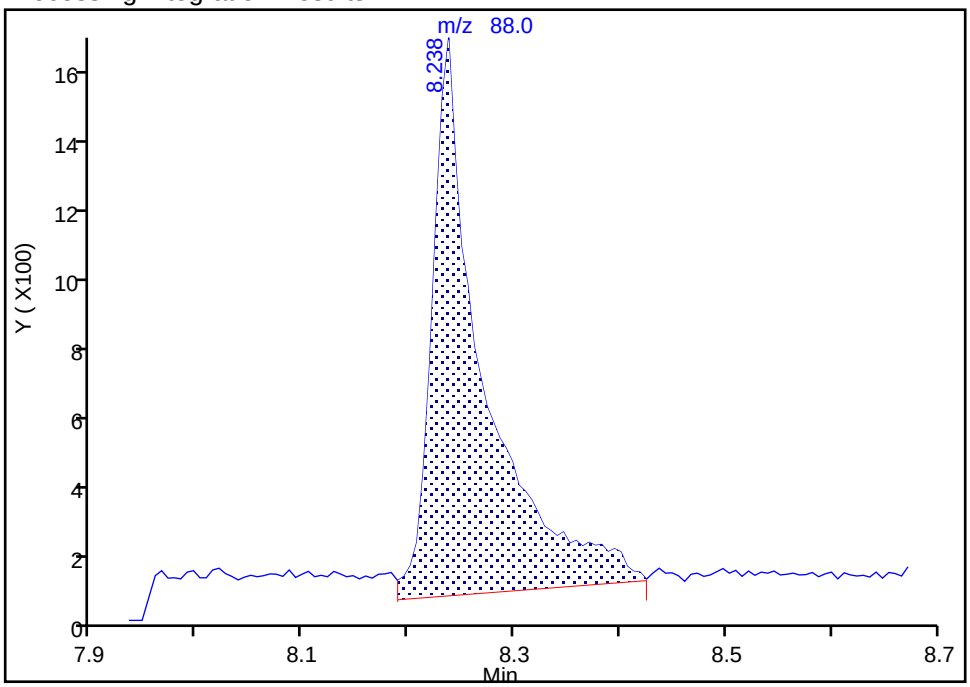
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202624.D				
Injection Date:	30-Nov-2021 21:12:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-24	Lab Sample ID:	240-160744-24		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

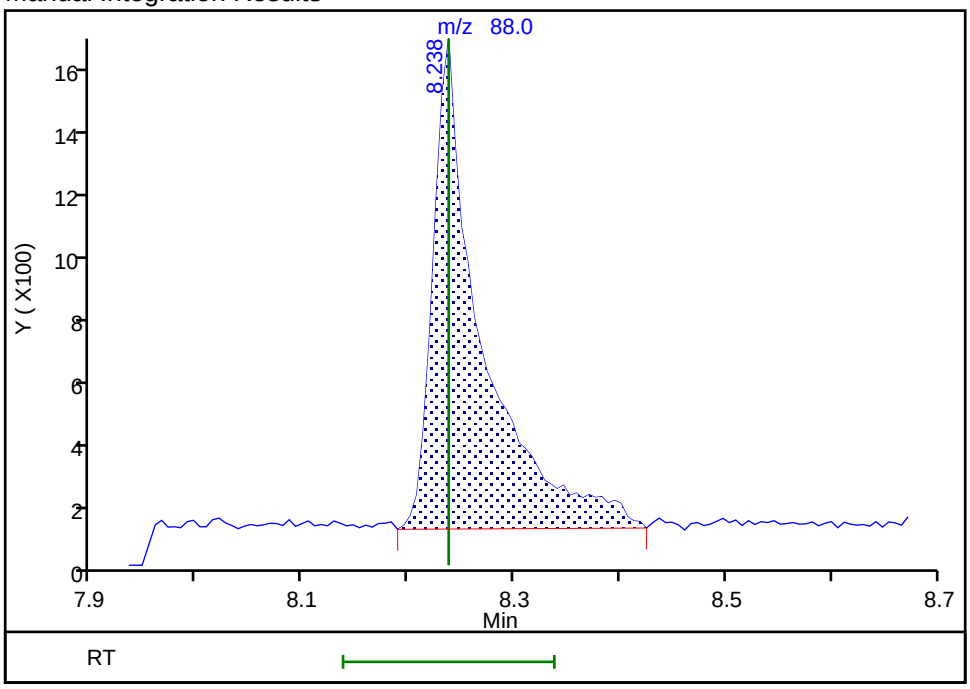
Processing Integration Results

RT: 8.24
Area: 5359
Amount: 9.924841
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4939
Amount: 9.147003
Amount Units: ug/l



Reviewer: seymourc, 01-Dec-2021 16:00:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 240-160744-25

Matrix: Water Lab File ID: 202625.D

Analysis Method: 8260B SIM Date Collected: 11/24/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 21:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202625.D				
Lims ID:	240-160744-A-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 21:36:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				
First Level Reviewer: seymourc		Date:	01-Dec-2021 16:00:50		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	809806	10.0	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2532965	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	69322	200.0	
8 1,4-Dioxane	88	8.231	8.238	-0.007	32	3027	5.35	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

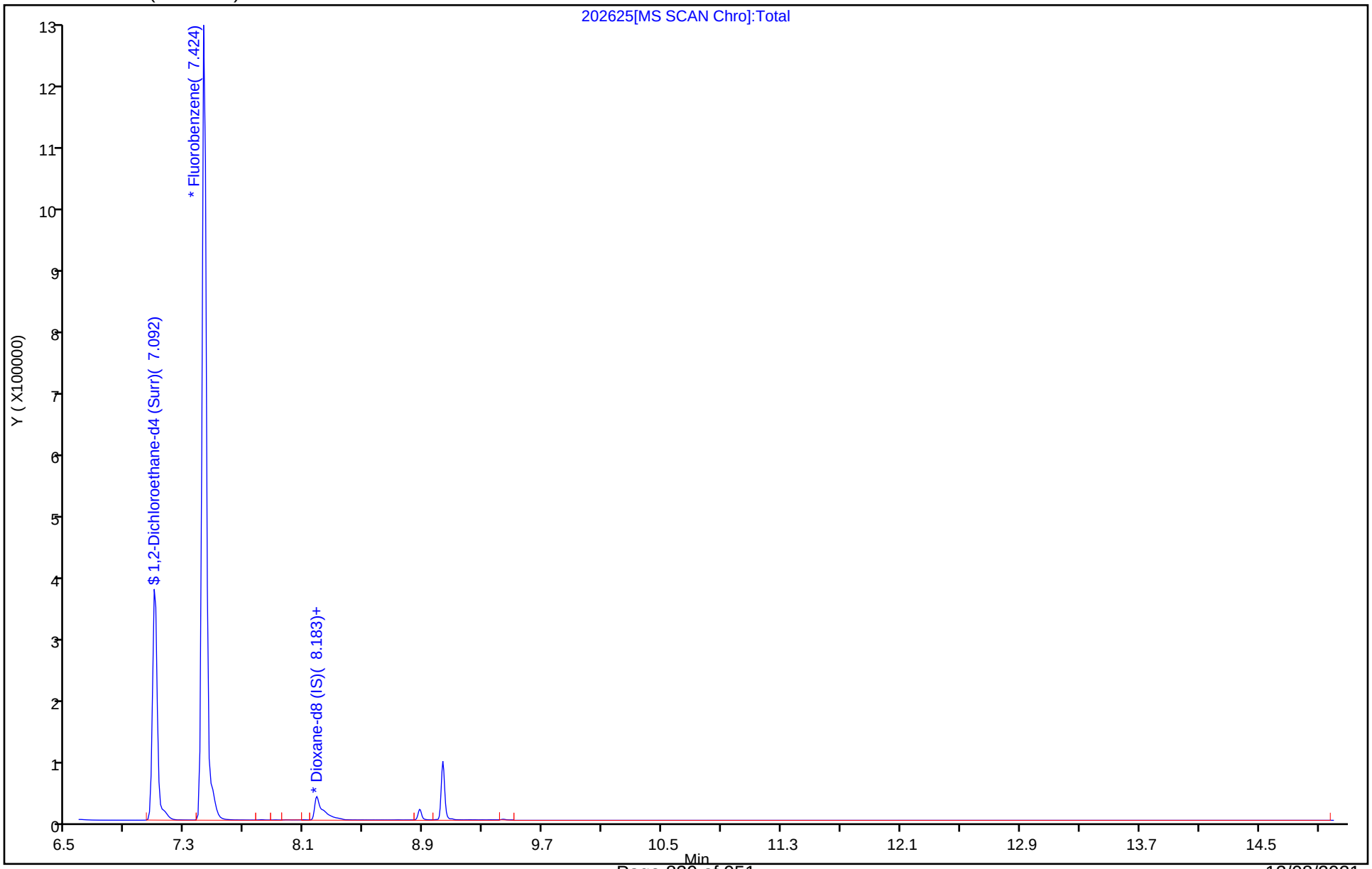
Report Date: 01-Dec-2021 16:02:15 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202625.D

Injection Date:	30-Nov-2021 21:36:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-A-25	Lab Sample ID:	240-160744-25	Worklist Smp#:	11
Client ID:	DUP-02				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202625.D				
Lims ID:	240-160744-A-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	30-Nov-2021 21:36:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

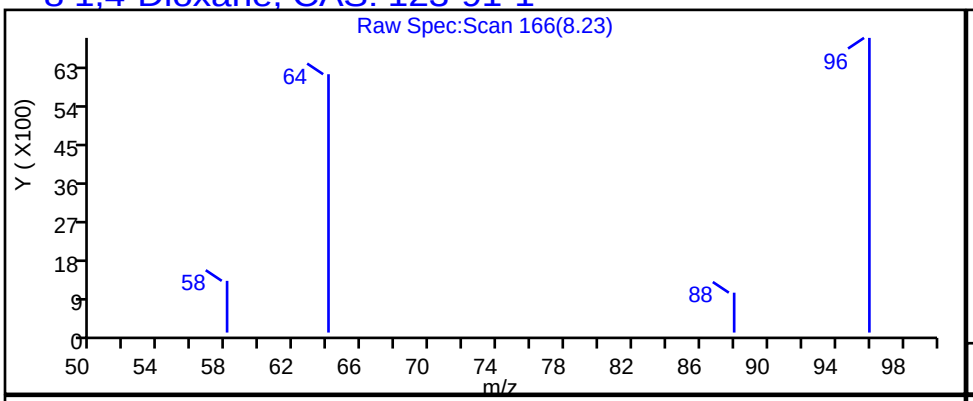
First Level Reviewer: seymourc Date: 01-Dec-2021 16:00:50

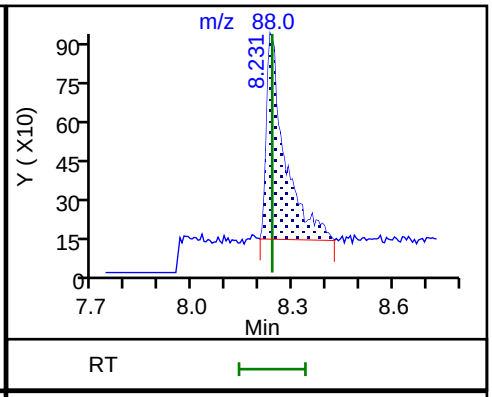
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.11

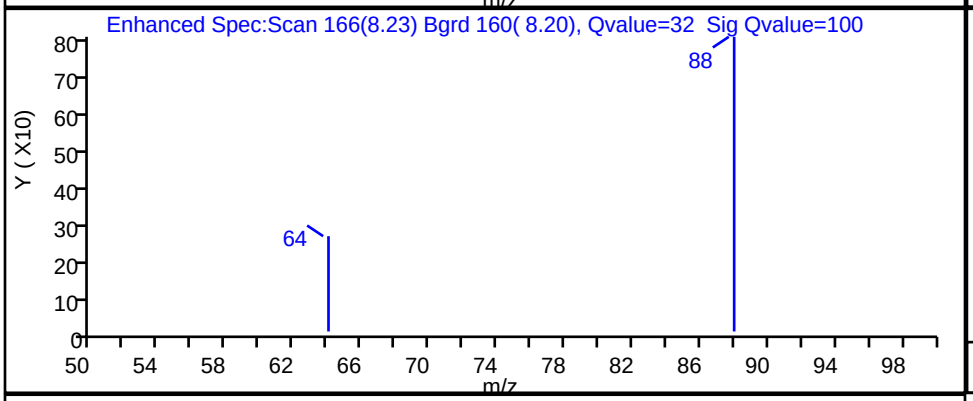
Eurofins TestAmerica, Canton

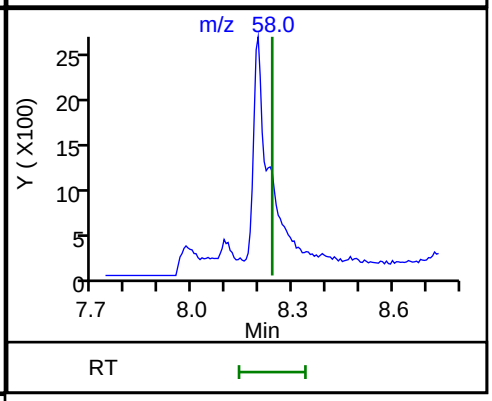
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202625.D				
Injection Date:	30-Nov-2021 21:36:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-25	Lab Sample ID:	240-160744-25		
Client ID:	DUP-02				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

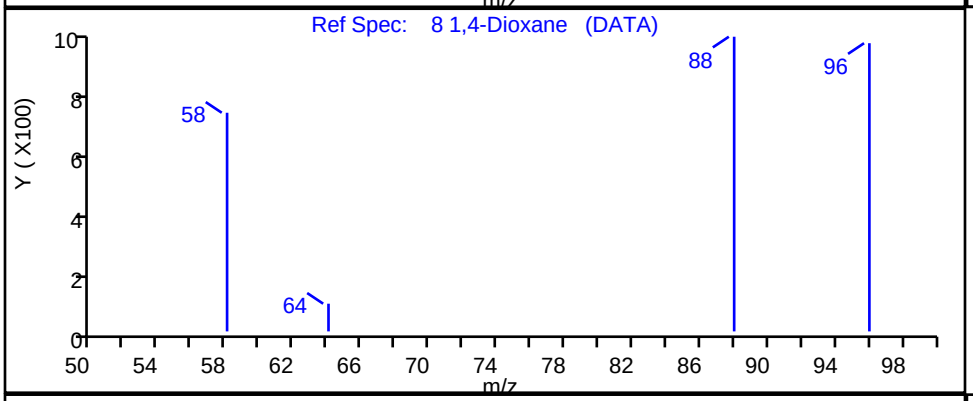
8 1,4-Dioxane, CAS: 123-91-1

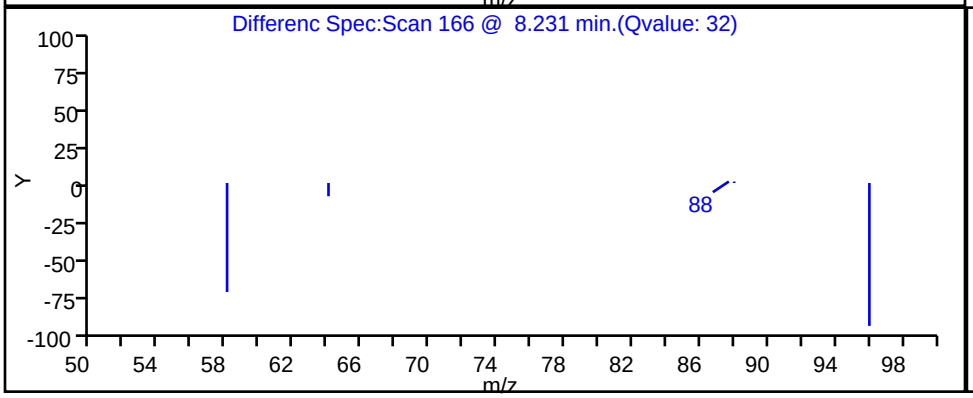


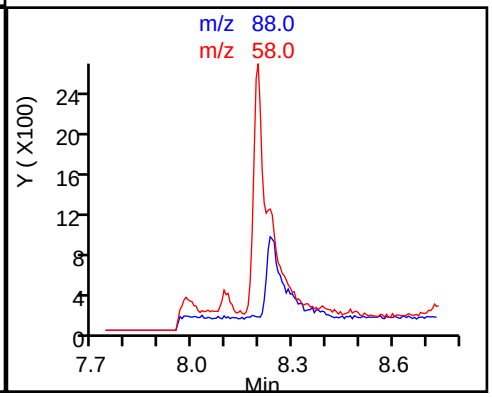












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

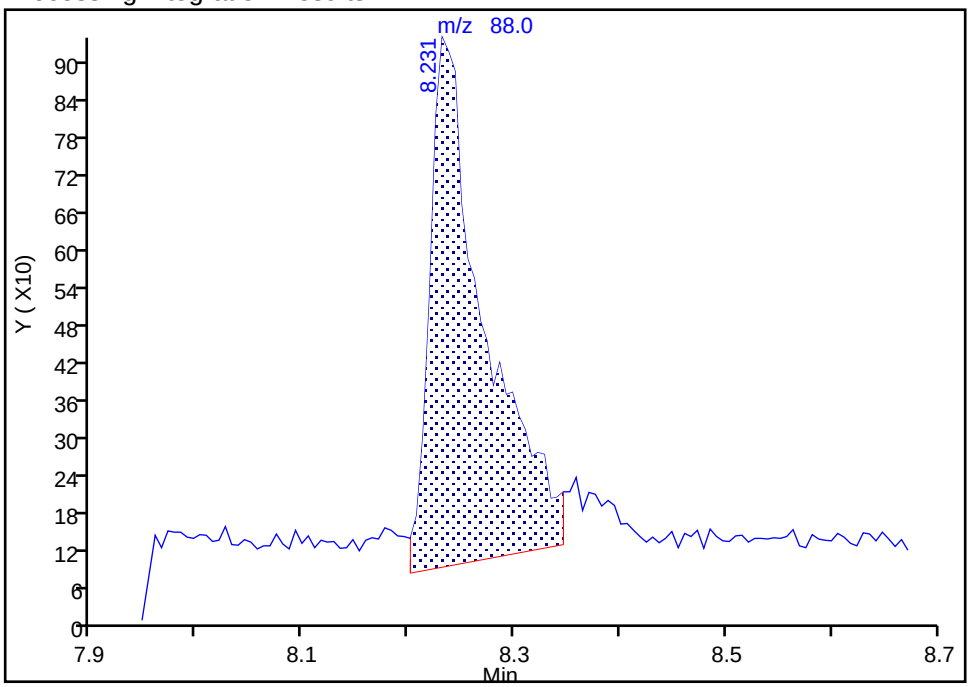
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202625.D				
Injection Date:	30-Nov-2021 21:36:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-A-25	Lab Sample ID:	240-160744-25		
Client ID:	DUP-02				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

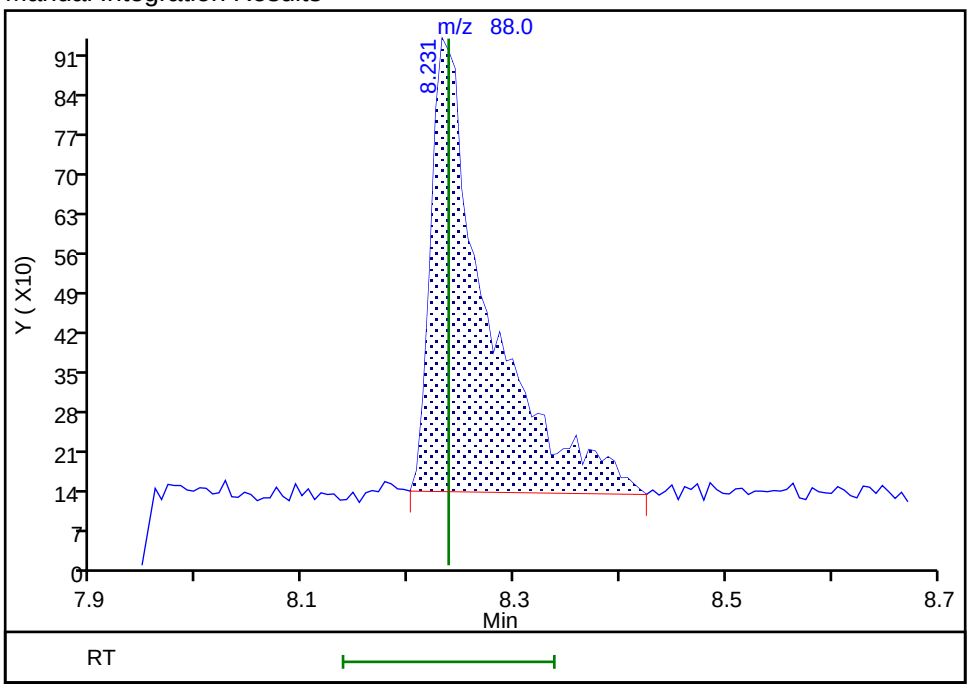
Processing Integration Results

RT: 8.23
Area: 3073
Amount: 5.431505
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 3027
Amount: 5.350201
Amount Units: ug/l



Reviewer: seymourc, 01-Dec-2021 16:00:42

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 1.5375	1.8357 1.5662	1.7028 1.5384	1.6415	1.6040	Ave		1.6323				6.6		35.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3150	0.3083 0.3197	0.3159 0.3393	0.3206	0.3166	Ave		0.3193				3.0		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Ave	+++++ 36824	1616 77285	4129 162137	8243	16121	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 2674197	99153 5574700	260453 11798688	541364	1068809	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	09-Sep-2021 14:25:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:15		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	60669	0.5000	0.5822	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3263223	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	94647	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	40	1001	1.00	1.30	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.15	Units: uL
vm50ss_00453	Amount Added:	0.15	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

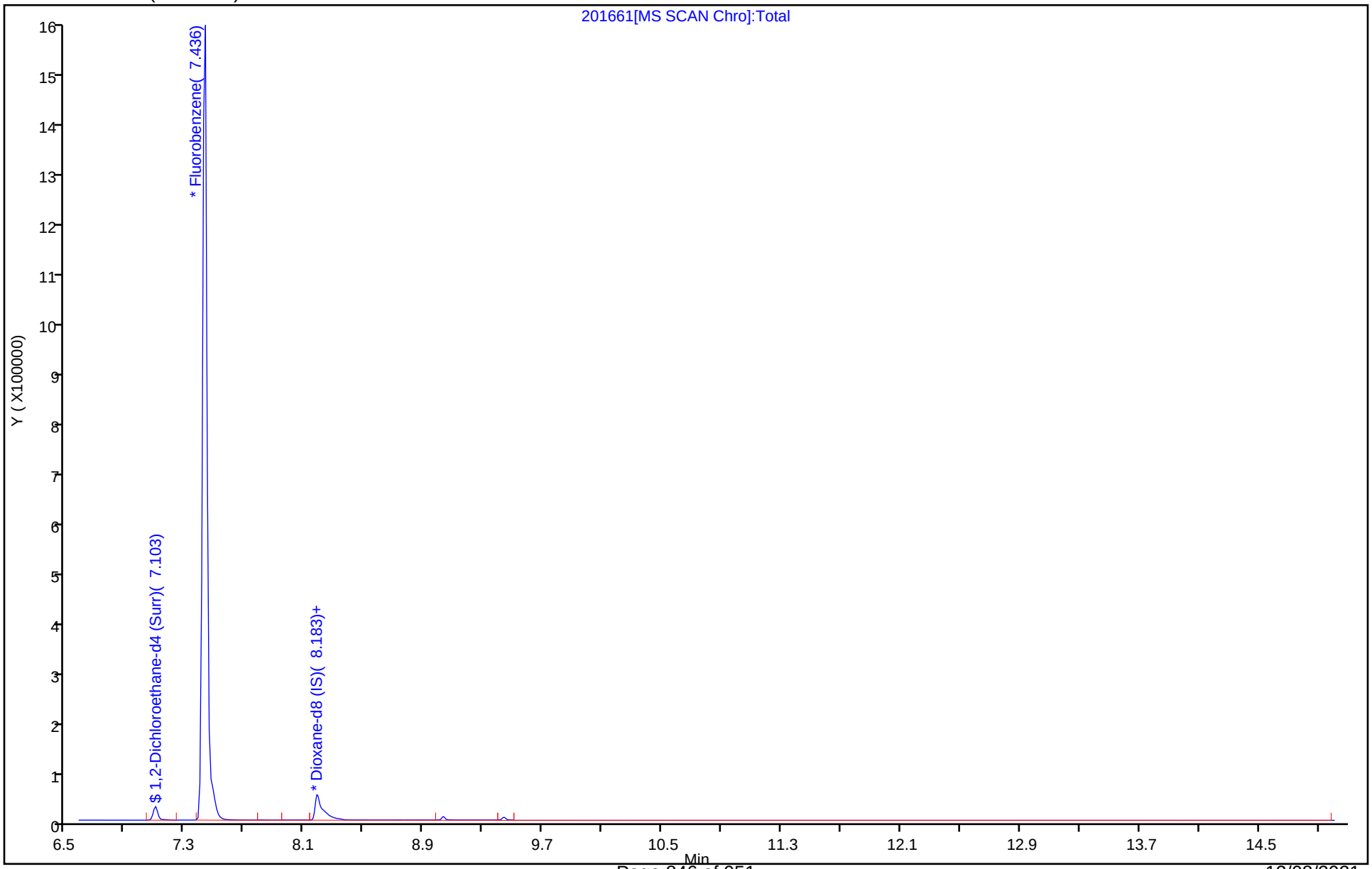
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D

Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

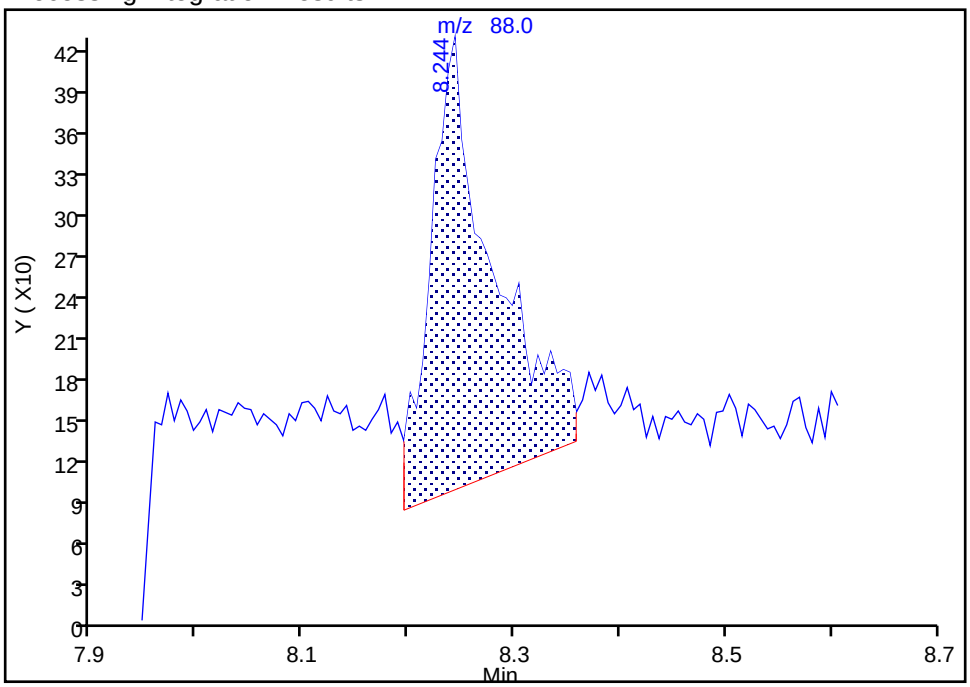
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

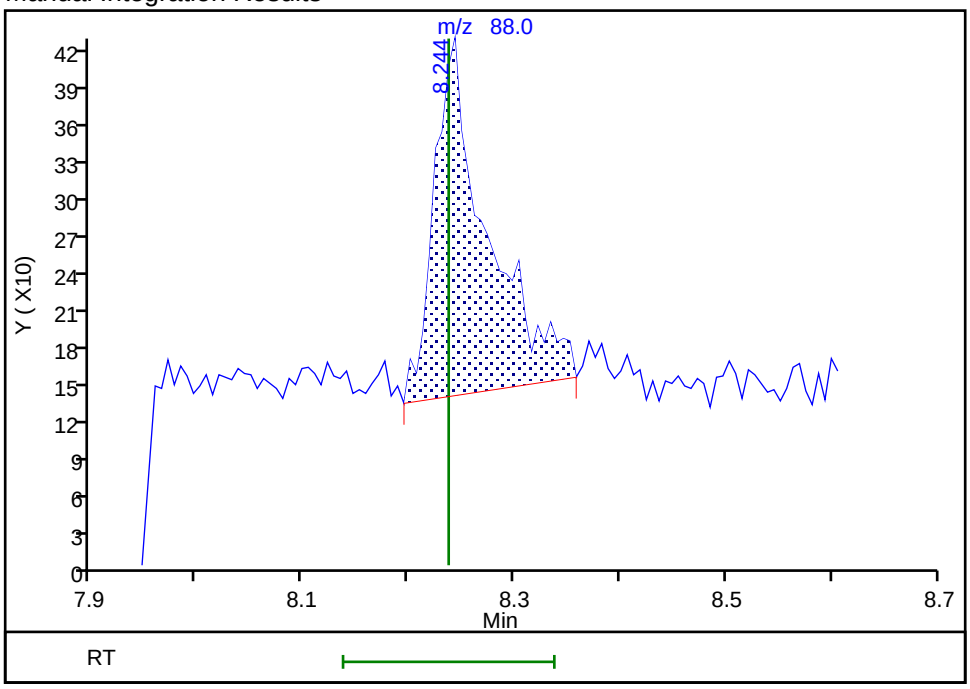
Processing Integration Results

RT: 8.24
Area: 1361
Amount: 1.197683
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1001
Amount: 1.295854
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:10:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	09-Sep-2021 14:49:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:35		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	99153	1.00	0.9655	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3215764	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	88032	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	49	1616	2.00	2.25	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.30	Units: uL
vm50ss_00453	Amount Added:	0.30	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

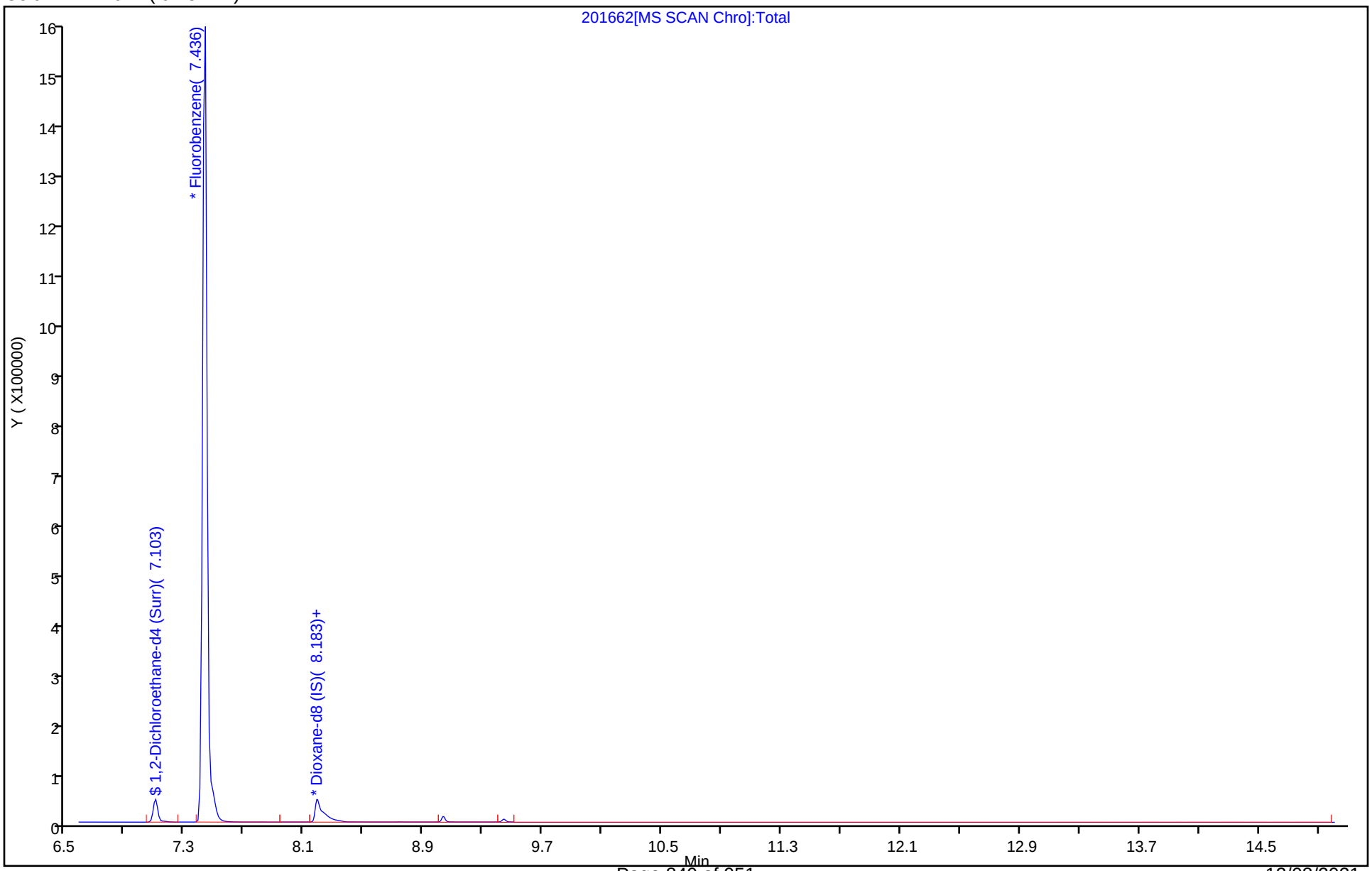
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D

Injection Date:	09-Sep-2021 14:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

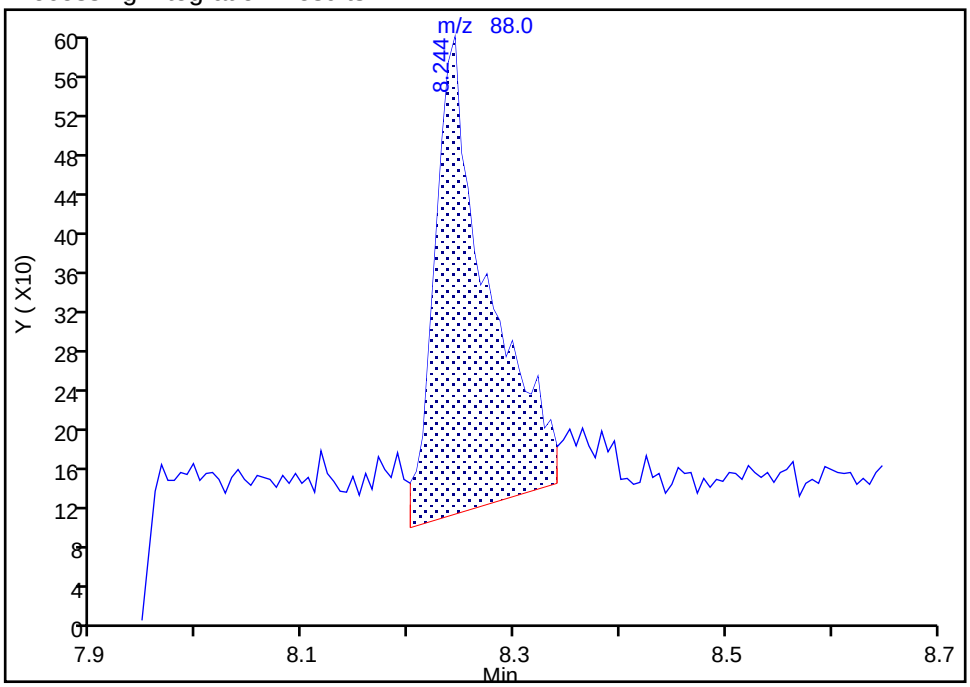
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D				
Injection Date:	09-Sep-2021 14:49:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

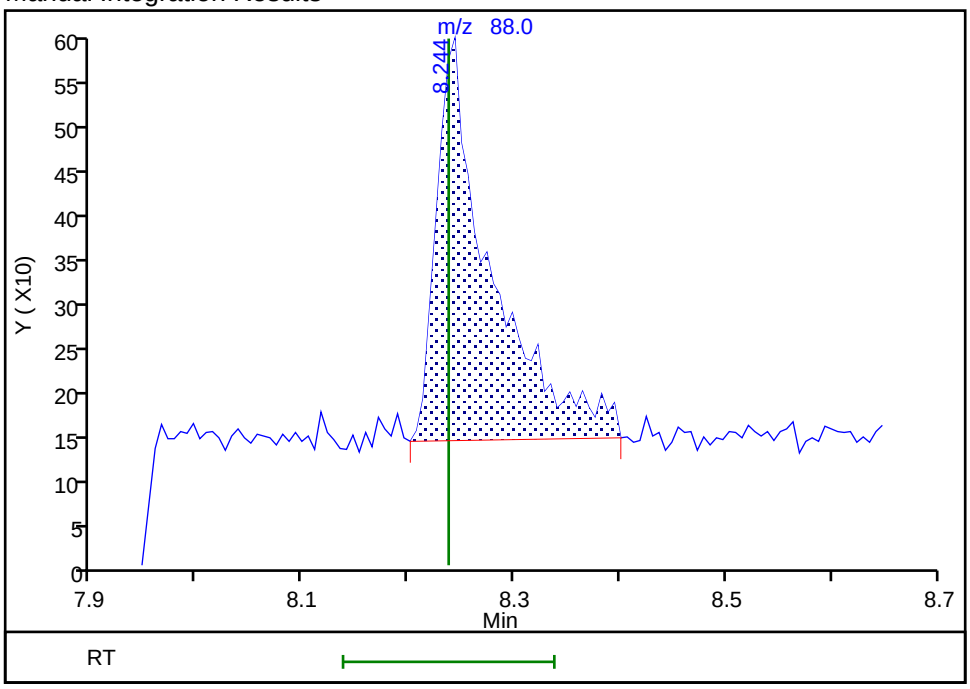
Processing Integration Results

RT: 8.24
Area: 1696
Amount: 1.906648
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1616
Amount: 2.249207
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:11:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Sep-2021 15:14:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-005
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 16:51:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	260453	2.50	2.47	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3297506	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	96993	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	55	4129	5.00	5.22	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 0.75 Units: uL
vm50ss_00453 Amount Added: 0.75 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

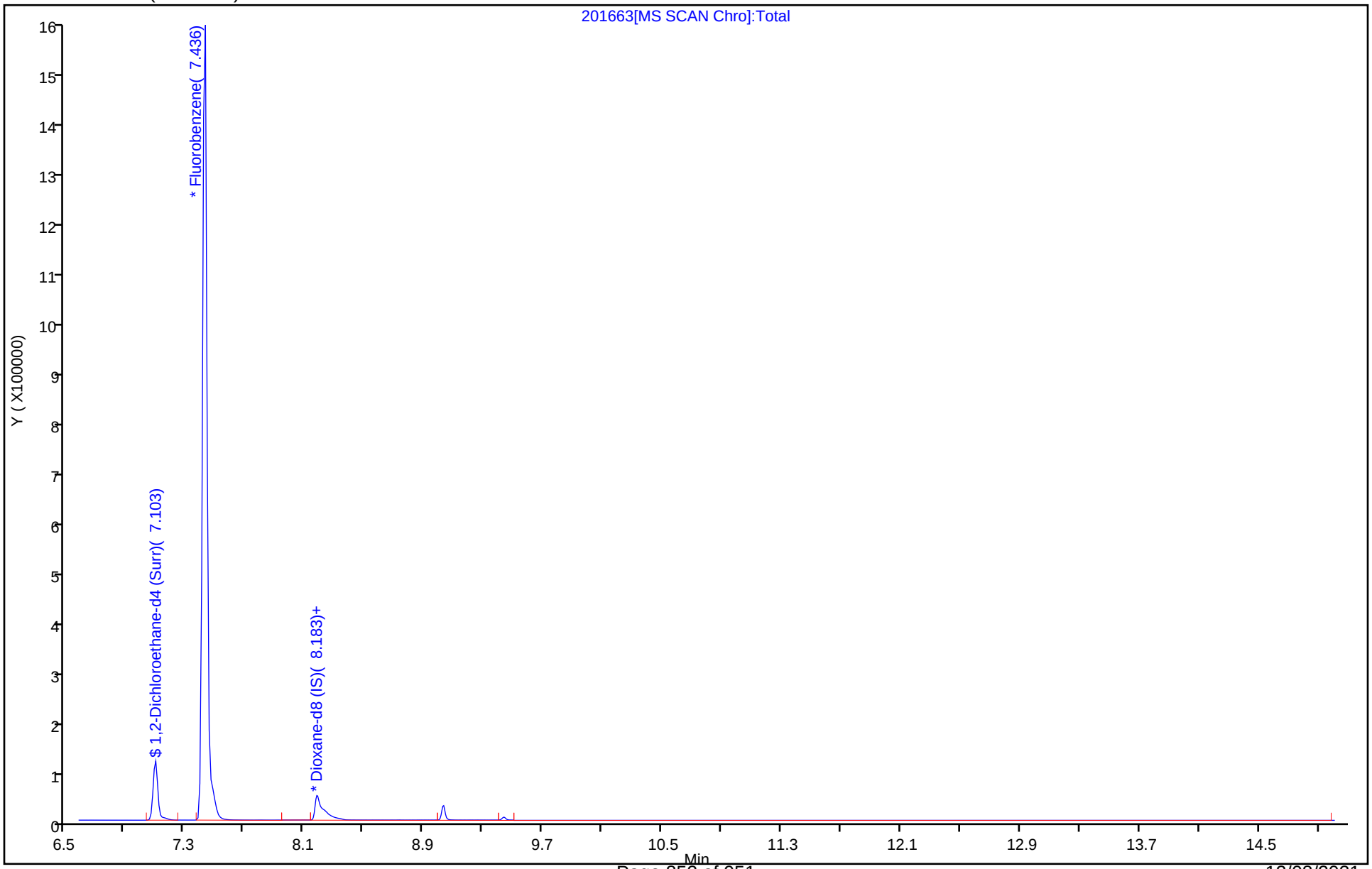
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D

Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

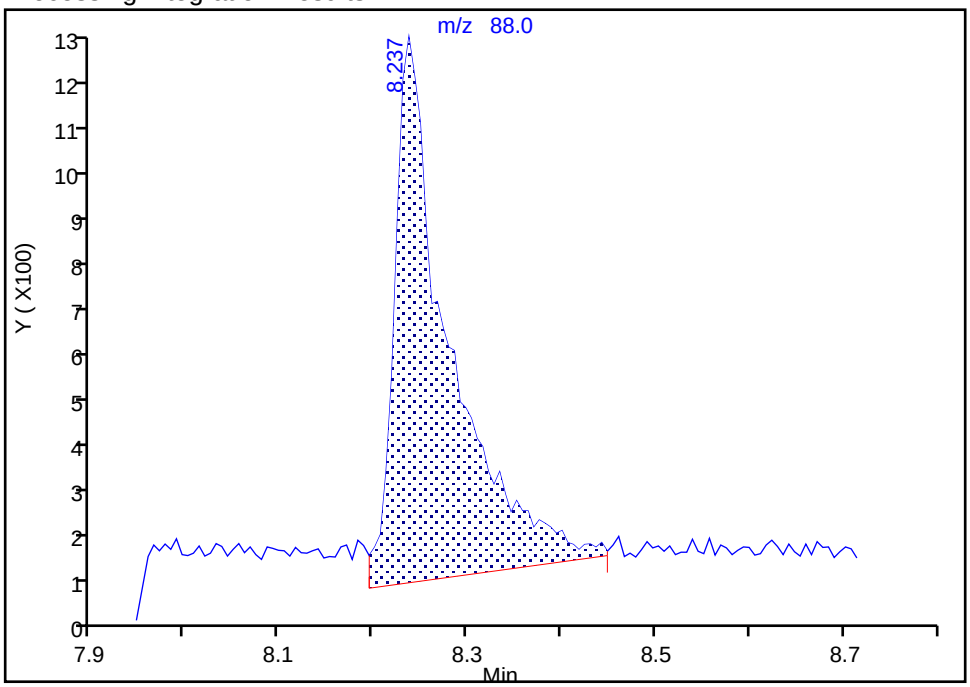
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D
Injection Date: 09-Sep-2021 15:14:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

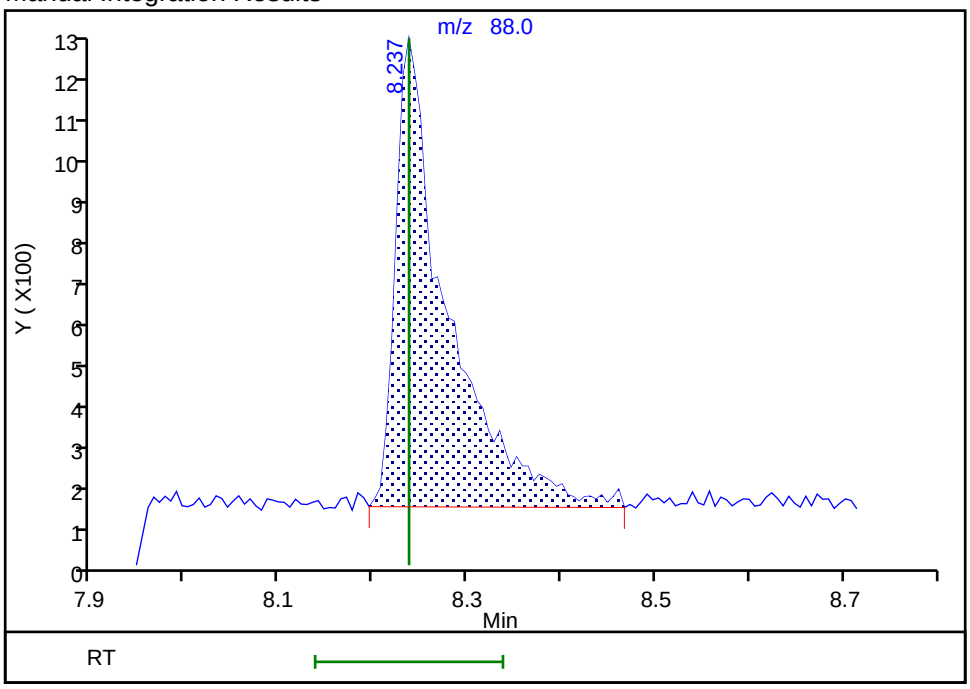
Processing Integration Results

RT: 8.24
Area: 4620
Amount: 5.267691
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4129
Amount: 5.215948
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:51:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Sep-2021 15:38:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-006
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 16:52:56

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	541364	5.00	5.02	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3377511	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	100431	200.0	200.0	
	8 1,4-Dioxane	88	8.237	8.238	-0.001	51	8243	10.0	10.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	1.50	Units: uL
vmdioxanew_00264	Amount Added:	1.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

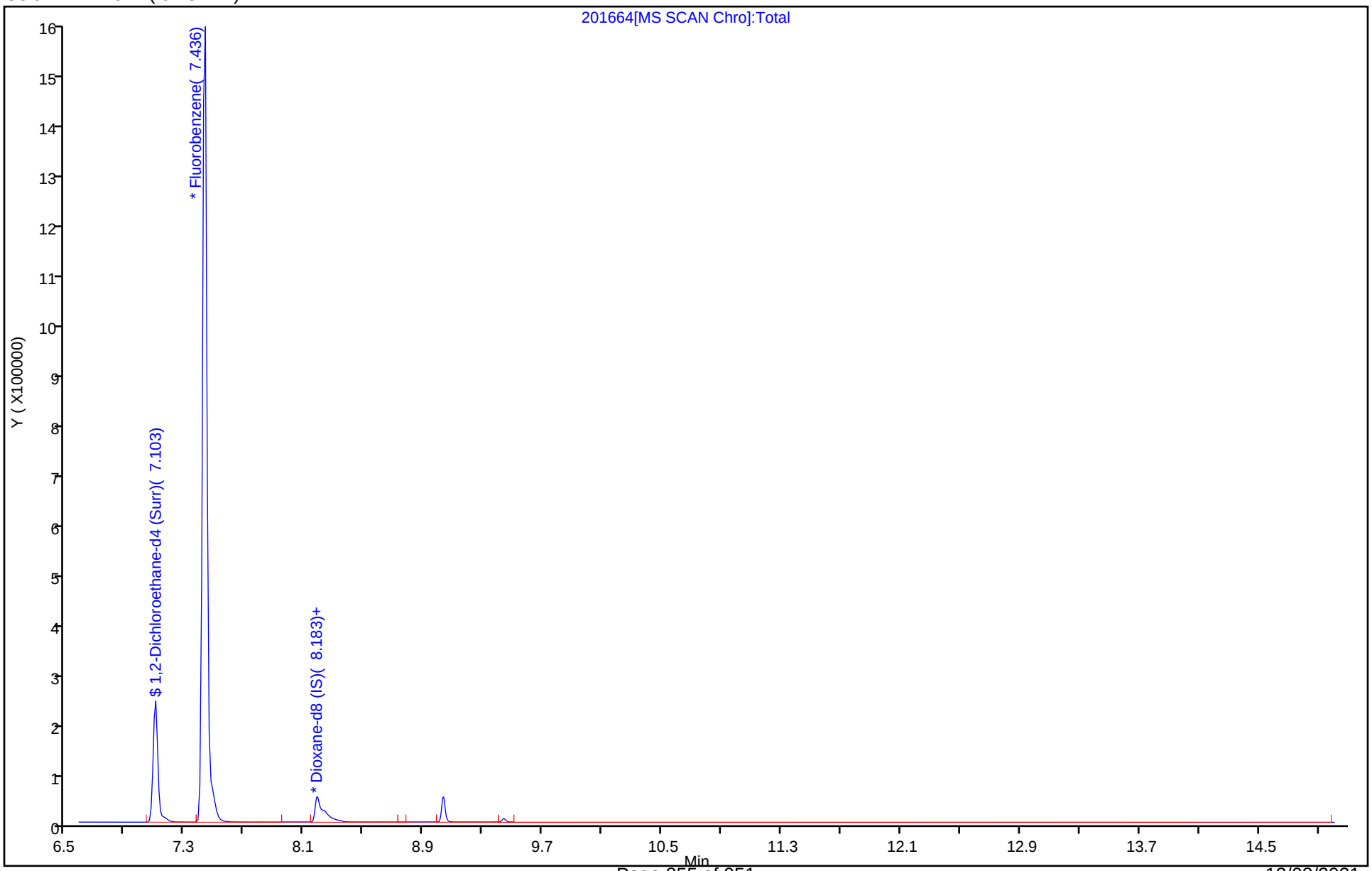
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D

Injection Date:	09-Sep-2021 15:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

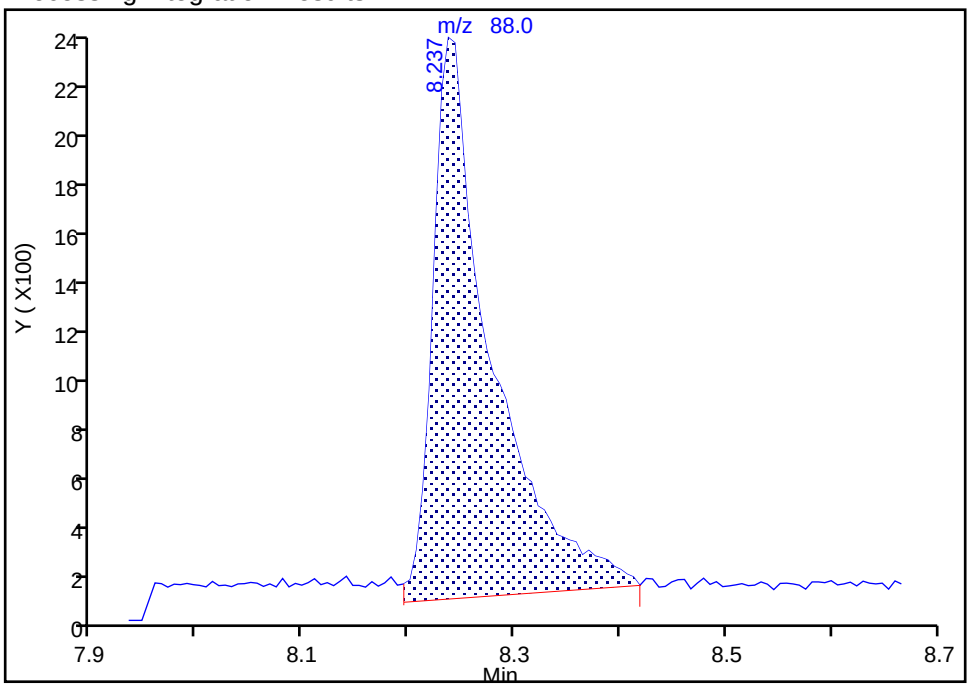
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Injection Date: 09-Sep-2021 15:38:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

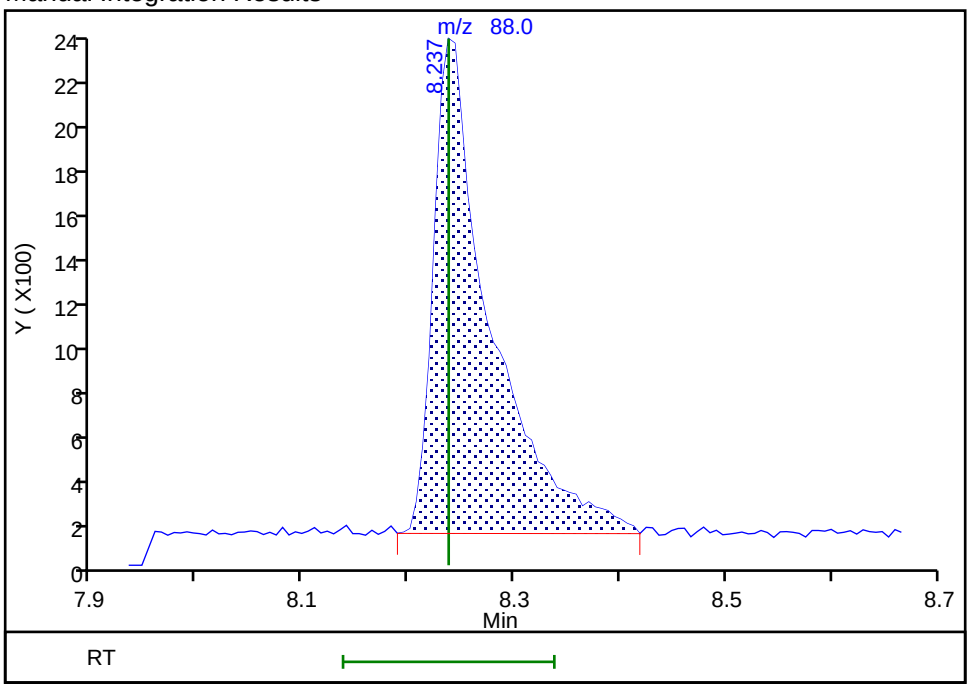
Processing Integration Results

RT: 8.24
Area: 8718
Amount: 9.782476
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8243
Amount: 10.056486
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:52:21
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D				
Lims ID:	ICIS				
Client ID:					
Sample Type:	ICIS	Calib Level:	5		
Inject. Date:	09-Sep-2021 16:03:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-007				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:49:17		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1068809	10.0	9.91	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3376203	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	96	100508	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.238	0.000	49	16121	20.0	19.7	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	3.00	Units: uL
vm50ss_00453	Amount Added:	3.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

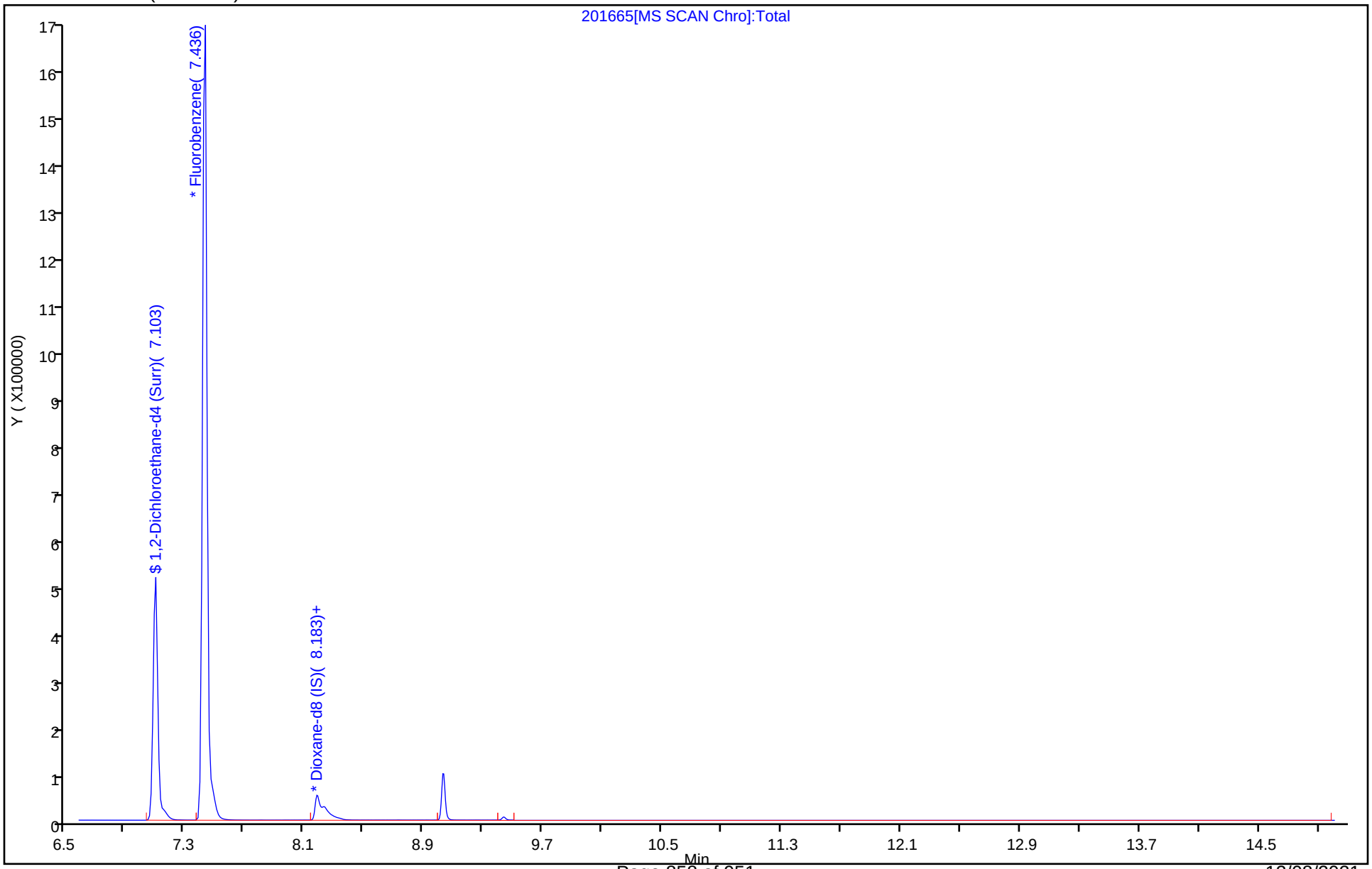
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D

Injection Date:	09-Sep-2021 16:03:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



12/08/2021

Eurofins TestAmerica, Canton

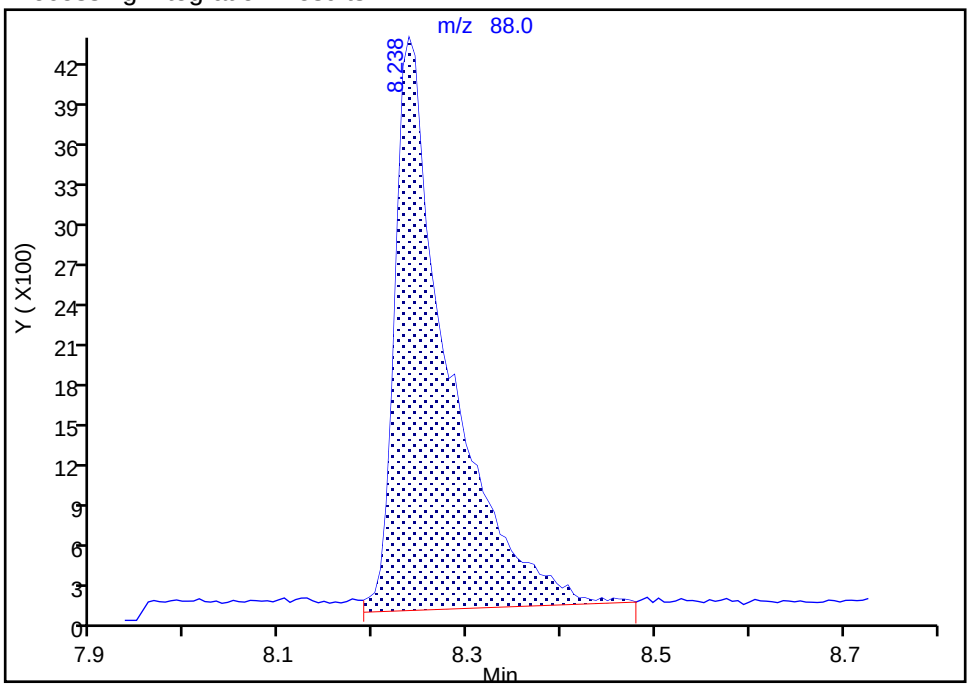
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Injection Date: 09-Sep-2021 16:03:30 Instrument ID: A3UX20
Lims ID: ICIS
Client ID:
Operator ID: 434006 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

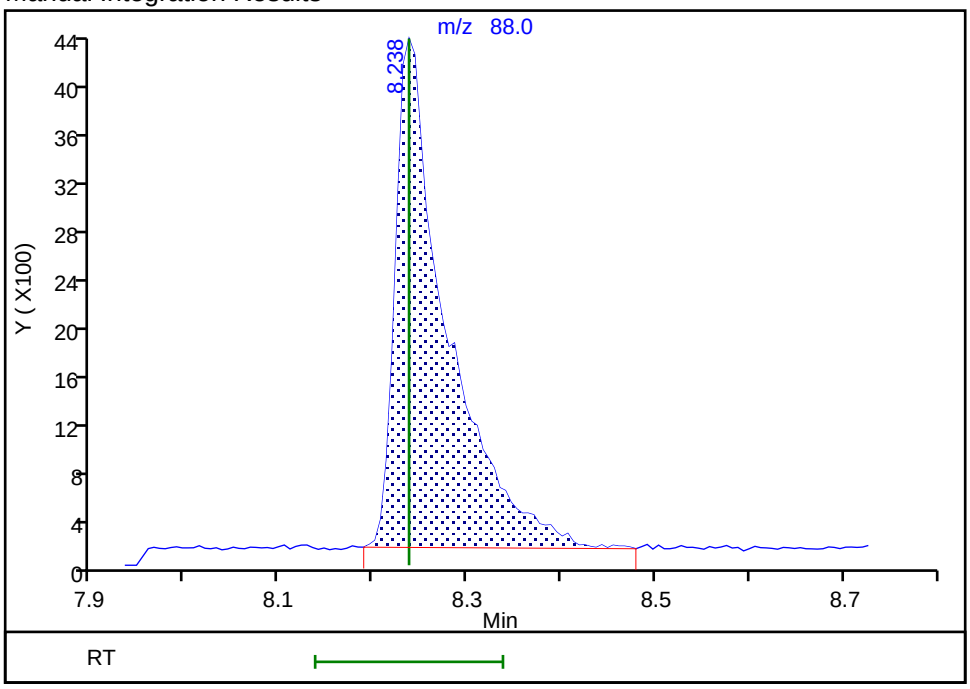
Processing Integration Results

RT: 8.24
Area: 16911
Amount: 19.131260
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 16121
Amount: 19.652602
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	09-Sep-2021 16:27:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:19	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:54:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	2674197	25.0	24.7	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3395321	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.189	-0.006	92	95801	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	36824	50.0	47.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	7.50	Units: uL
vmdioxanew_00264	Amount Added:	7.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

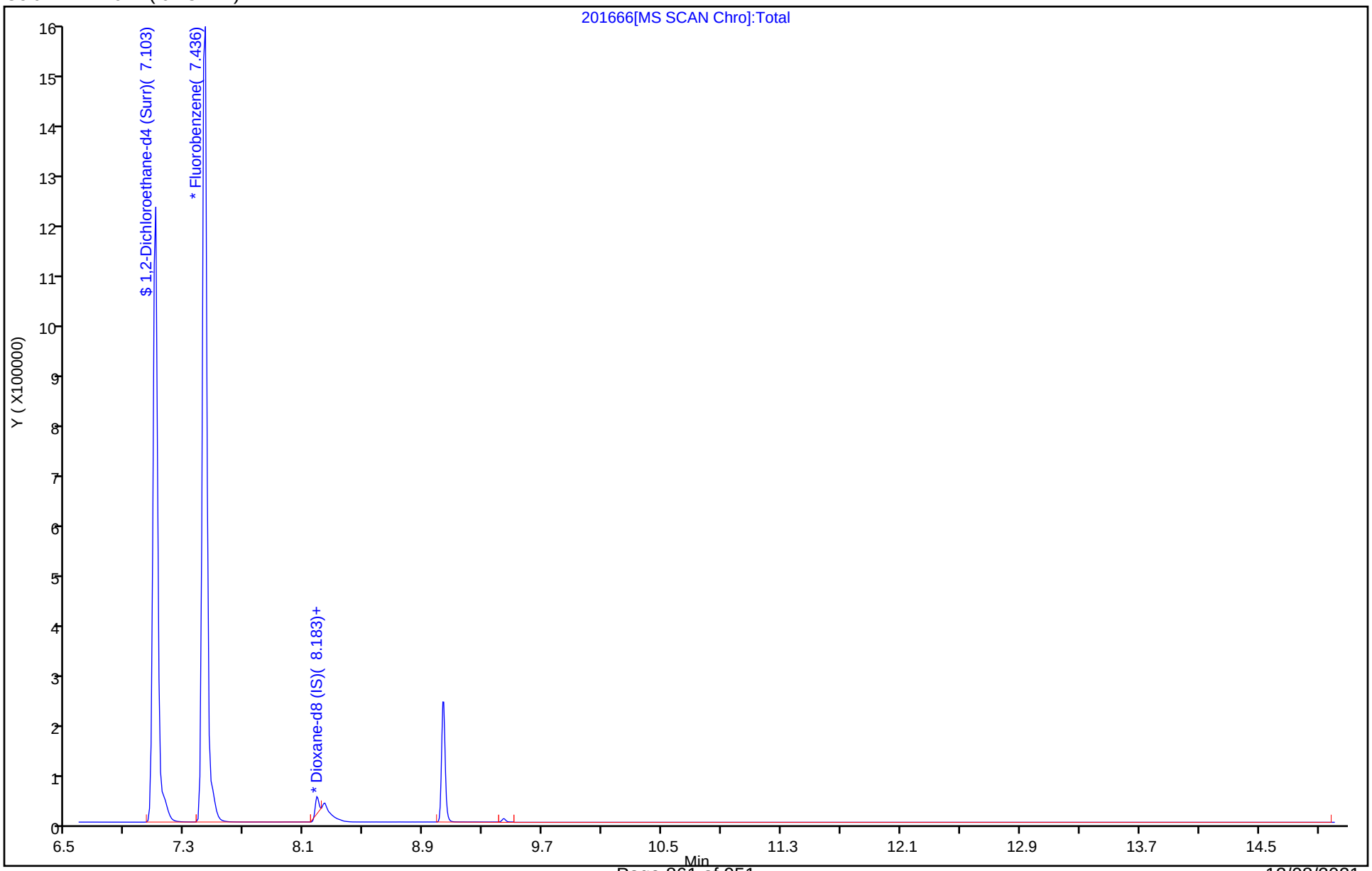
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D

Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

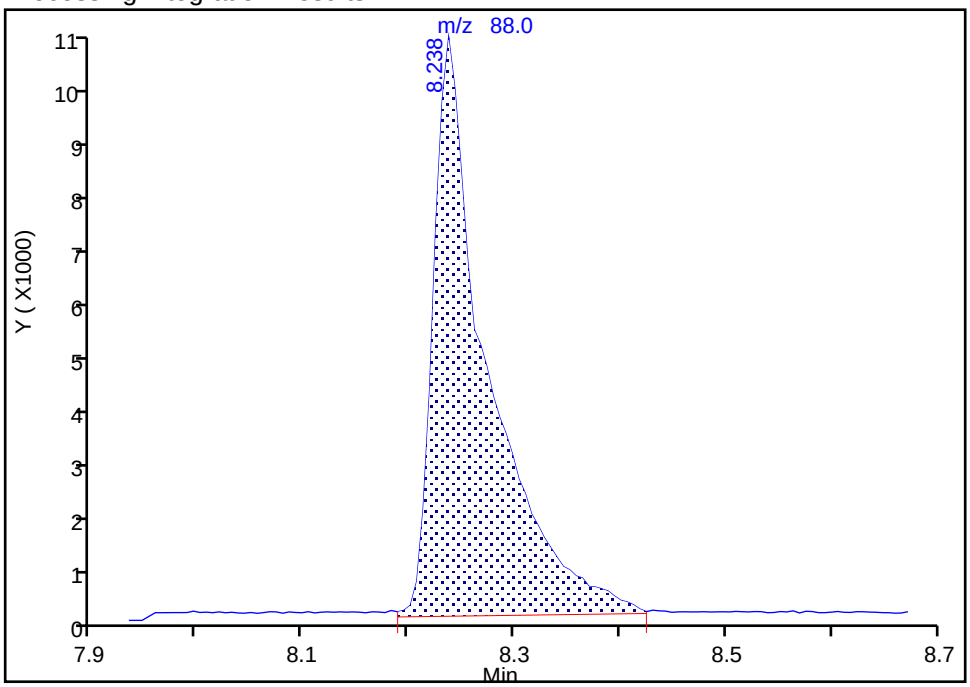
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

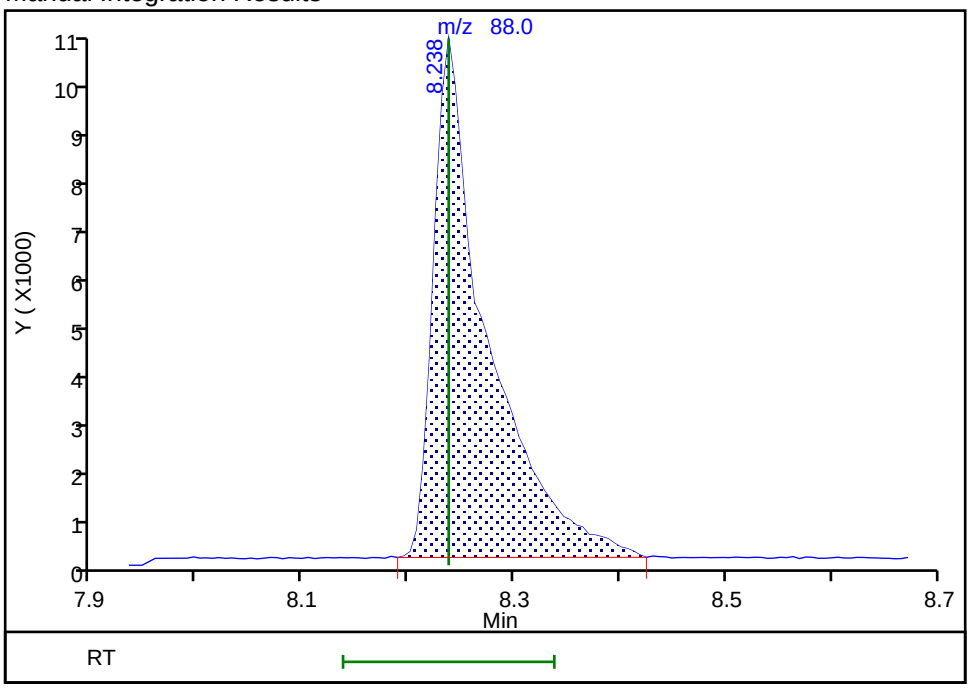
Processing Integration Results

RT: 8.24
Area: 37744
Amount: 45.133538
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 36824
Amount: 47.096609
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Sep-2021 16:52:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-009
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:19 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 17:40:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	5574700	50.0	50.1	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3487222	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	98689	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	77285	100.0	96.0	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 15.00 Units: uL
vm50ss_00453 Amount Added: 15.00 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

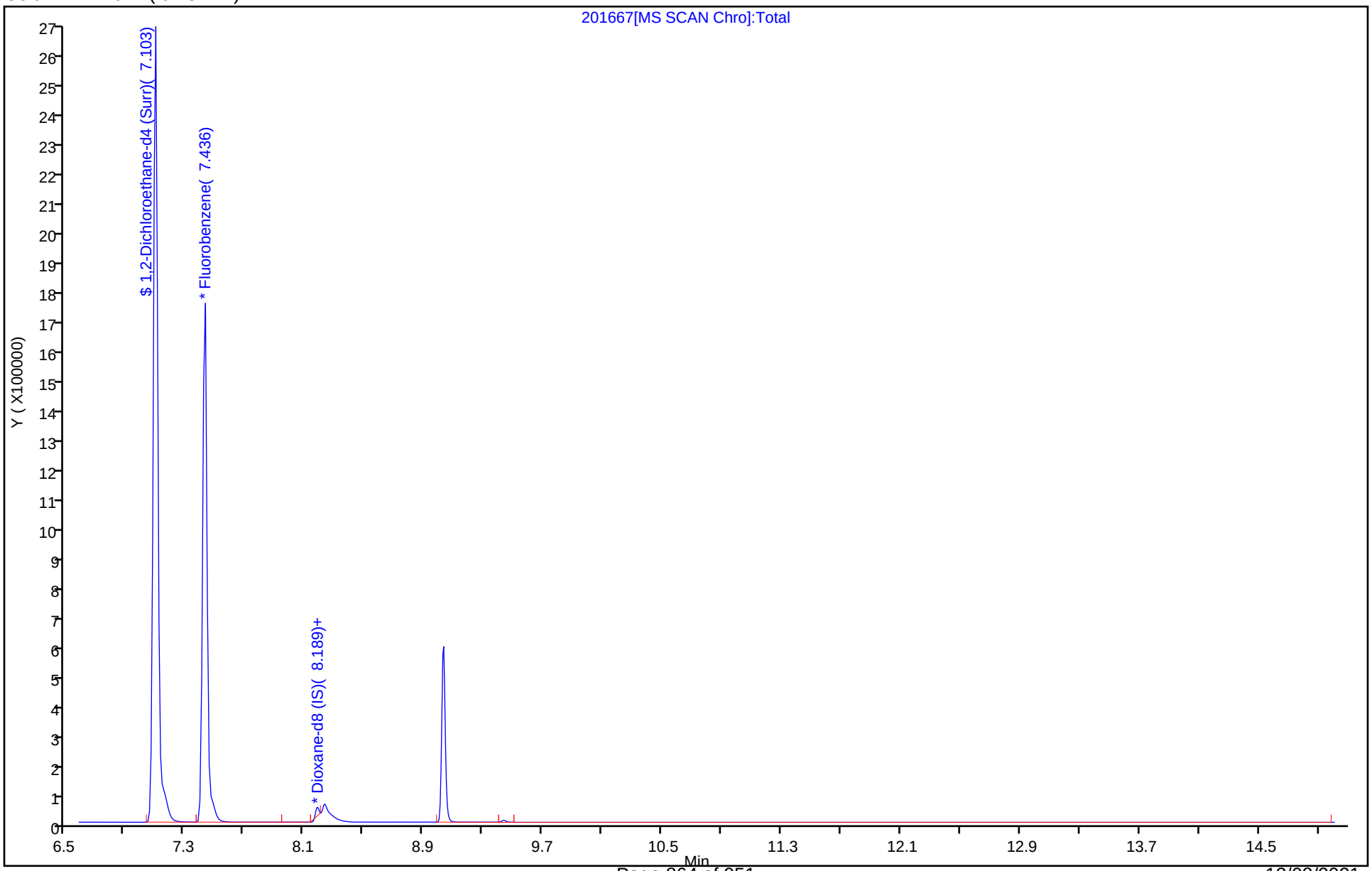
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D

Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

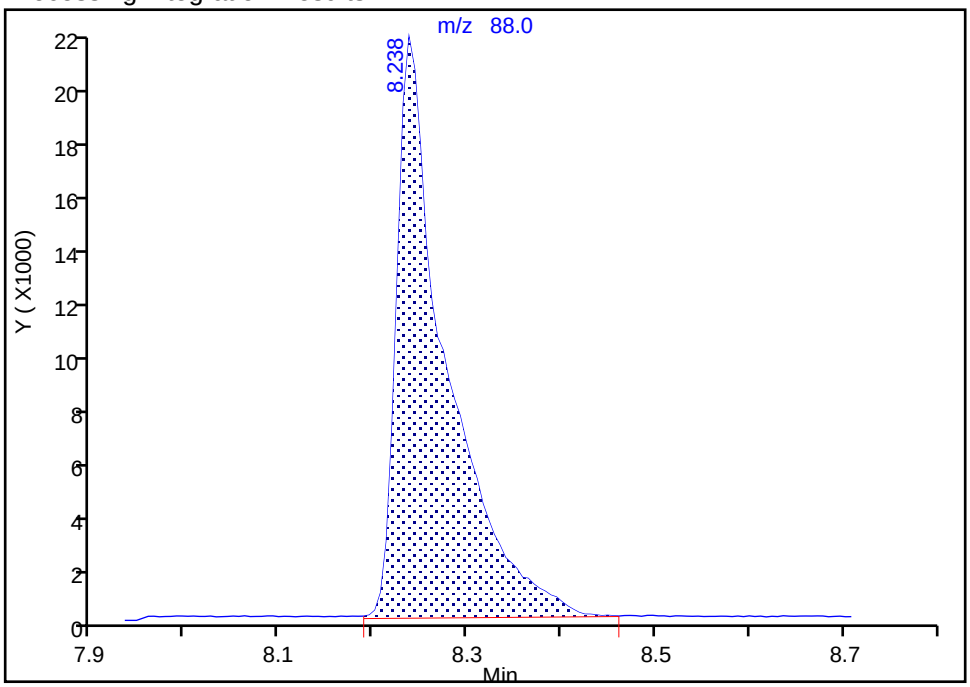
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D				
Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

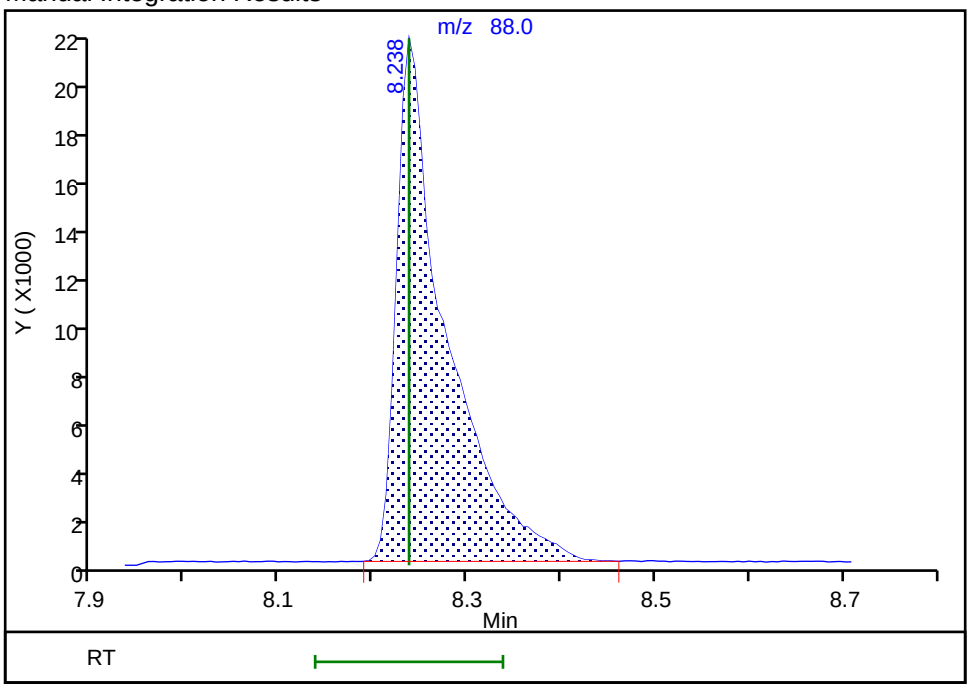
Processing Integration Results

RT: 8.24
Area: 78168
Amount: 96.896781
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 77285
Amount: 95.952255
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 17:41:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	09-Sep-2021 17:16:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:20	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:40:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	11798688	100.0	106.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3477775	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	105393	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	162137	200.0	188.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_00453	Amount Added:	30.00	Units: uL
vmdioxanew_00264	Amount Added:	30.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

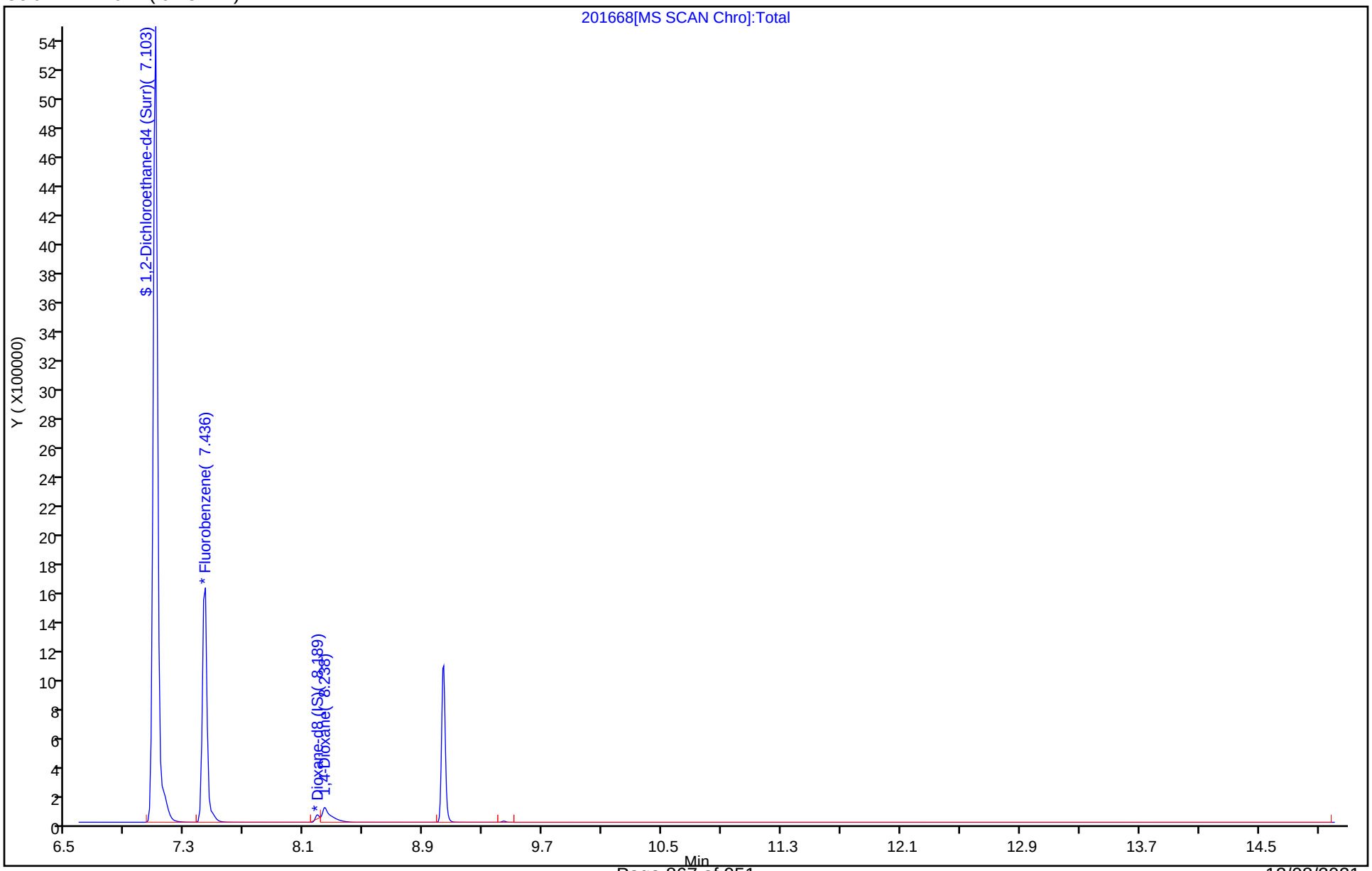
Report Date: 09-Sep-2021 17:49:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Injection Date:	09-Sep-2021 17:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

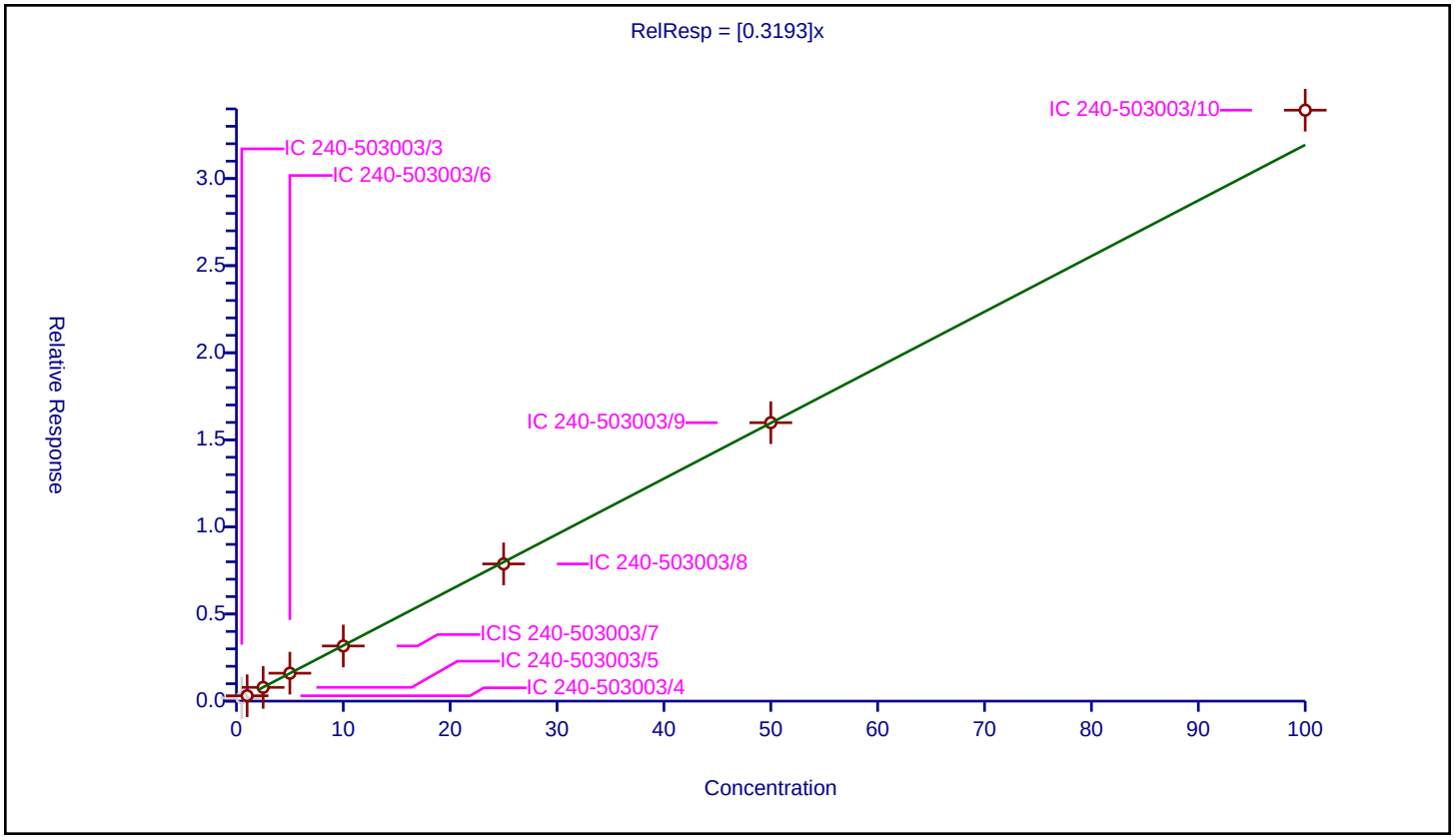
Curve Coefficients

Intercept:	0
Slope:	0.3193

Error Coefficients

Standard Error:	5460000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	0.5	0.185917	10.0	3263223.0	0.371835	N
2	IC 240-503003/4	1.0	0.308334	10.0	3215764.0	0.308334	Y
3	IC 240-503003/5	2.5	0.789848	10.0	3297506.0	0.315939	Y
4	IC 240-503003/6	5.0	1.602849	10.0	3377511.0	0.32057	Y
5	ICIS 240-503003/7	10.0	3.165713	10.0	3376203.0	0.316571	Y
6	IC 240-503003/8	25.0	7.876124	10.0	3395321.0	0.315045	Y
7	IC 240-503003/9	50.0	15.986077	10.0	3487222.0	0.319722	Y
8	IC 240-503003/10	100.0	33.925967	10.0	3477775.0	0.33926	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

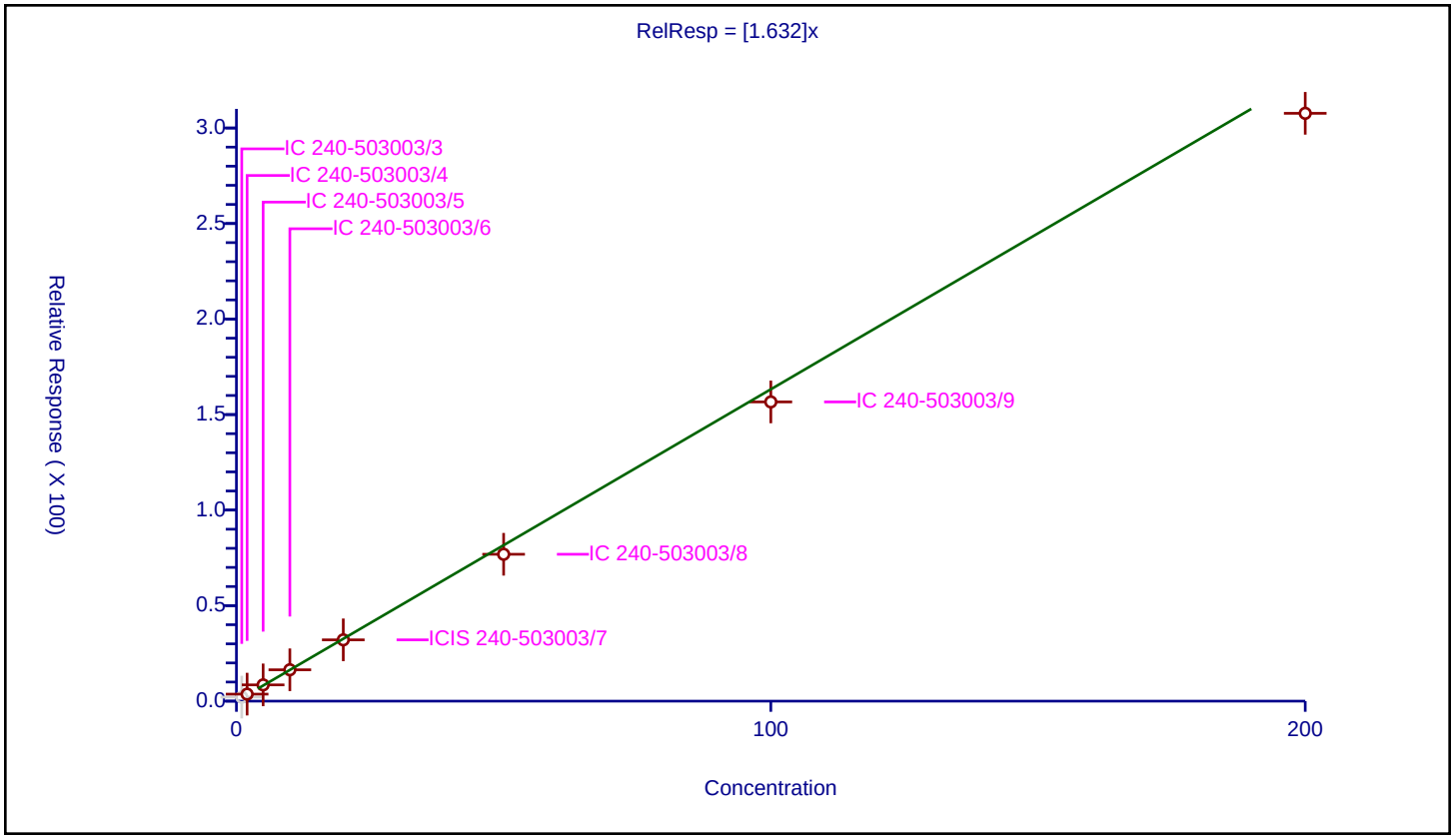
Curve Coefficients

Intercept:	0
Slope:	1.632

Error Coefficients

Standard Error:	75100
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	1.0	2.115228	200.0	94647.0	2.115228	N
2	IC 240-503003/4	2.0	3.671392	200.0	88032.0	1.835696	Y
3	IC 240-503003/5	5.0	8.514016	200.0	96993.0	1.702803	Y
4	IC 240-503003/6	10.0	16.41525	200.0	100431.0	1.641525	Y
5	ICIS 240-503003/7	20.0	32.079038	200.0	100508.0	1.603952	Y
6	IC 240-503003/8	50.0	76.876024	200.0	95801.0	1.53752	Y
7	IC 240-503003/9	100.0	156.623332	200.0	98689.0	1.566233	Y
8	IC 240-503003/10	200.0	307.680776	200.0	105393.0	1.538404	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: ICV 240-503003/12 Calibration Date: 09/09/2021 18:06

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 201670.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.559		0.00955	0.0100	-4.5	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2641		0.00827	0.0100	-17.3	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	09-Sep-2021 18:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:37:00	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1666				
First Level Reviewer: seymourc		Date:	09-Sep-2021 18:34:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	893369	10.0	8.27	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3382724	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	94434	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	54	7360	10.0	9.55	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00275	Amount Added:	3.00	Units: uL	
vm150IS20_00012	Amount Added:	1.00	Units: uL	Run Reagent
vm150SS20_00003	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00201	Amount Added:	0.00	Units:	Run Reagent

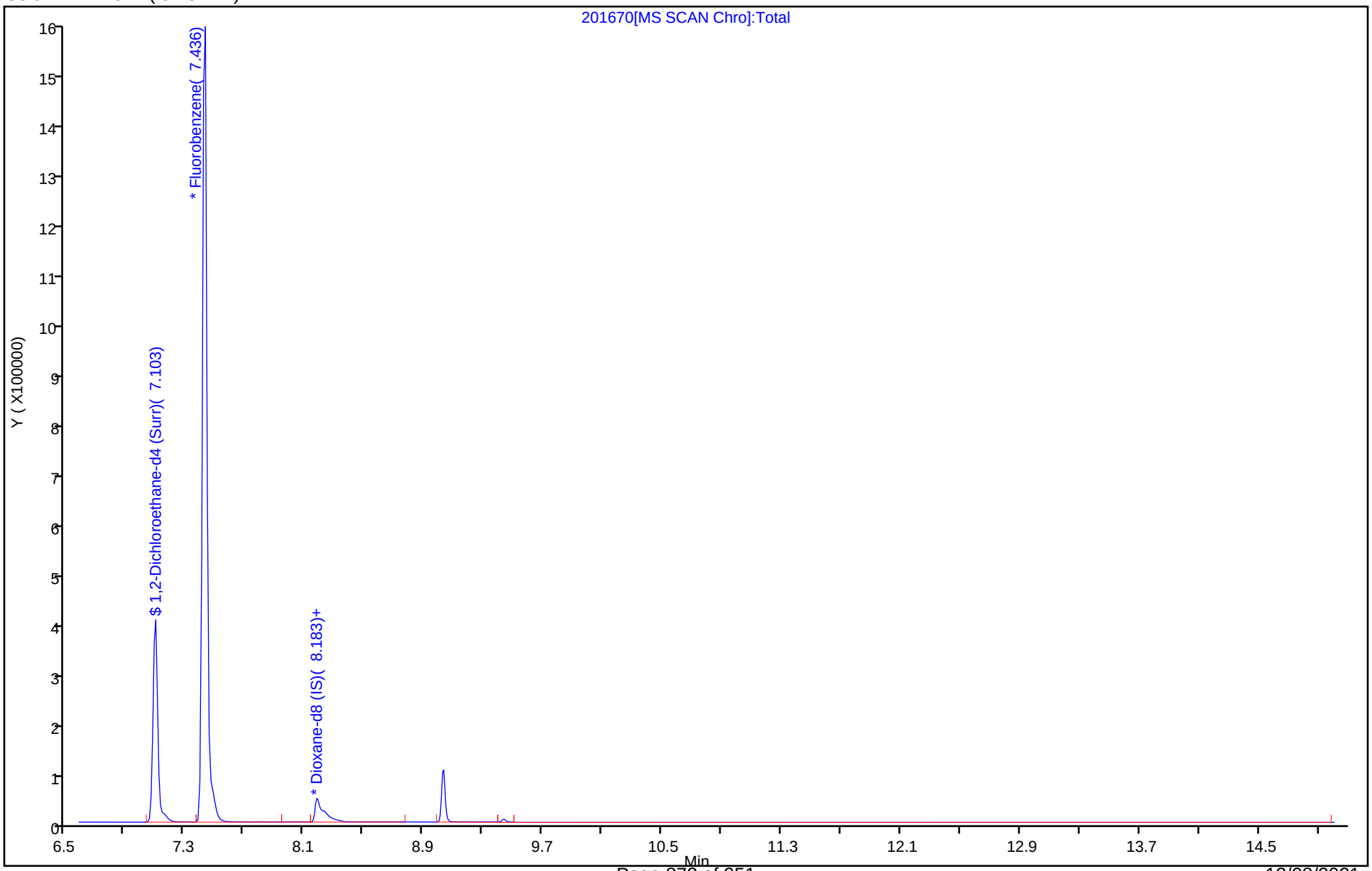
Report Date: 10-Sep-2021 15:14:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D

Injection Date:	09-Sep-2021 18:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

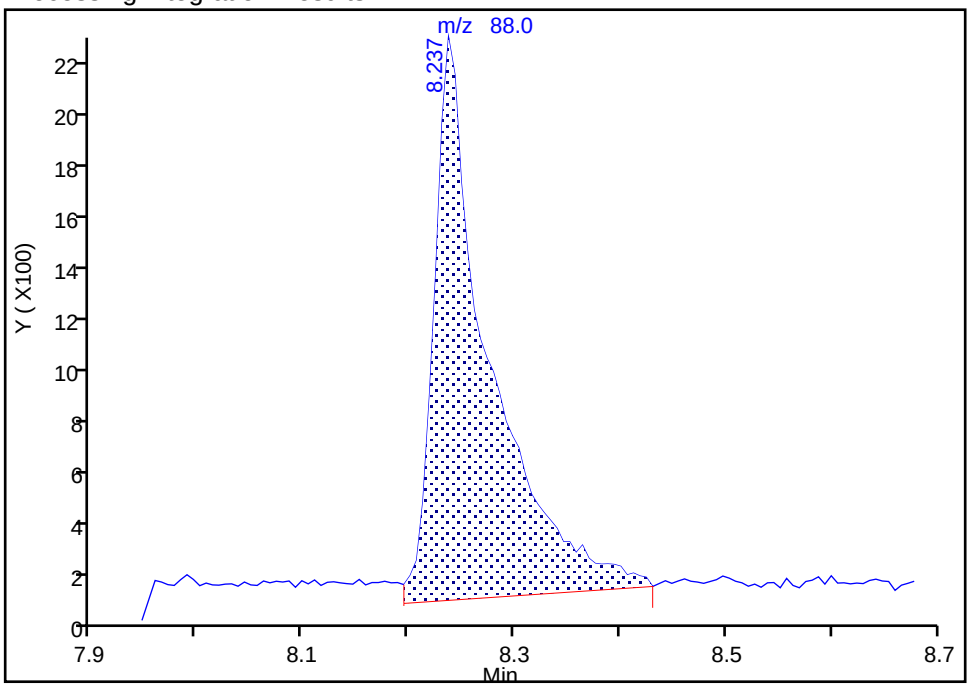
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D				
Injection Date:	09-Sep-2021 18:06:30	Instrument ID:	A3UX20		
Lims ID:	ICV				
Client ID:					
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

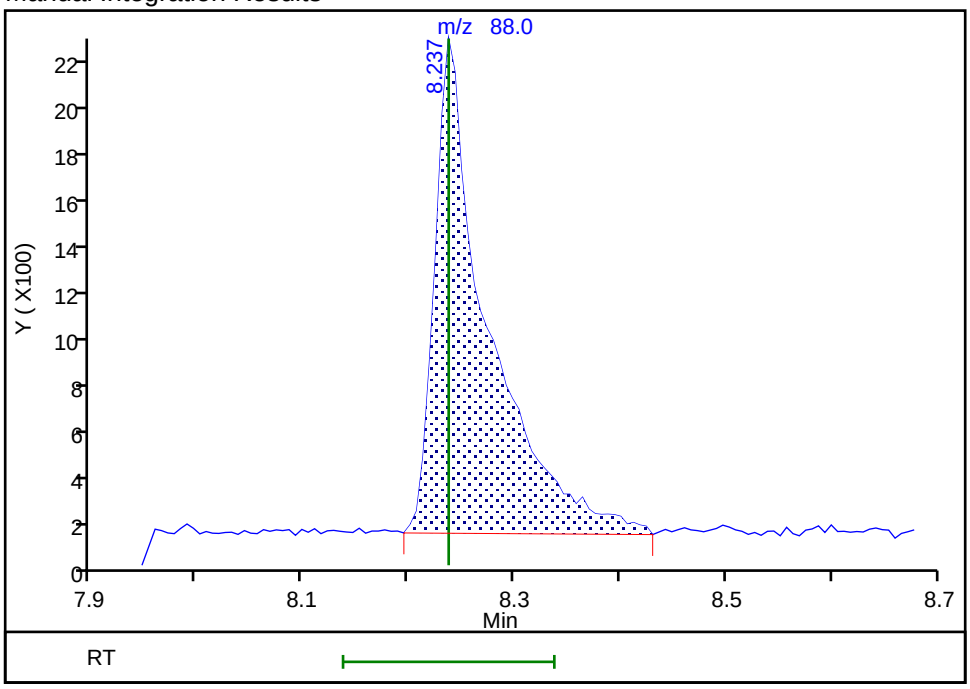
Processing Integration Results

RT: 8.24
Area: 7881
Amount: 10.225432
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7360
Amount: 9.549445
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 18:34:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-514943/3 Calibration Date: 11/29/2021 19:44

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 202587.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.509		0.0185	0.0200	-7.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3197		0.0100	0.0100	0.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202587.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 29-Nov-2021 19:44:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-003
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 29-Nov-2021 20:12:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	854855	10.0	10.0	
* 7 Fluorobenzene	96	7.423	7.423	0.000	100	2674320	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	81425	200.0	200.0	
8 1,4-Dioxane	88	8.231	8.231	0.000	48	12288	20.0	18.5	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00273	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

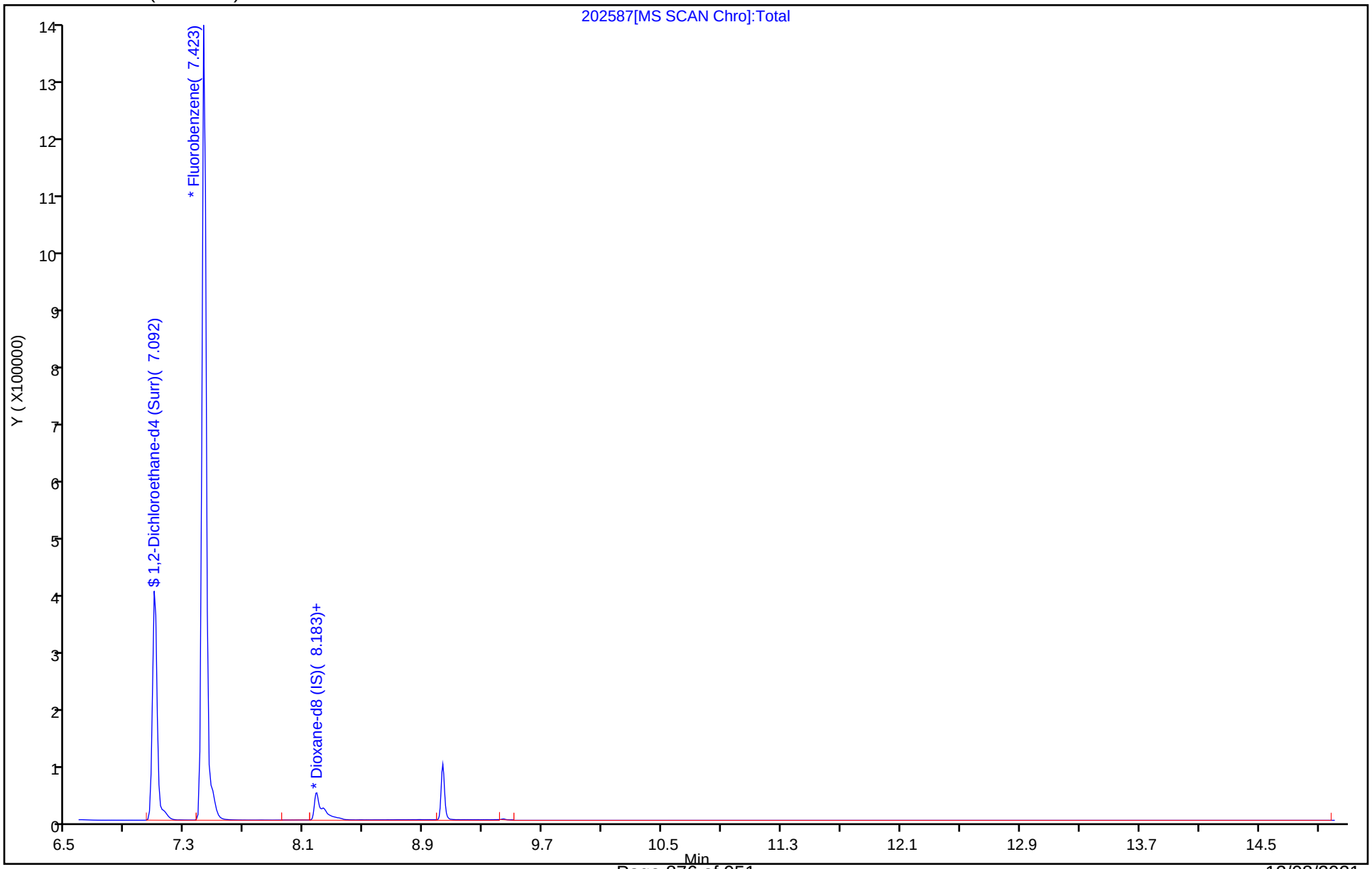
Report Date: 30-Nov-2021 18:20:30 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202587.D

Injection Date:	29-Nov-2021 19:44:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

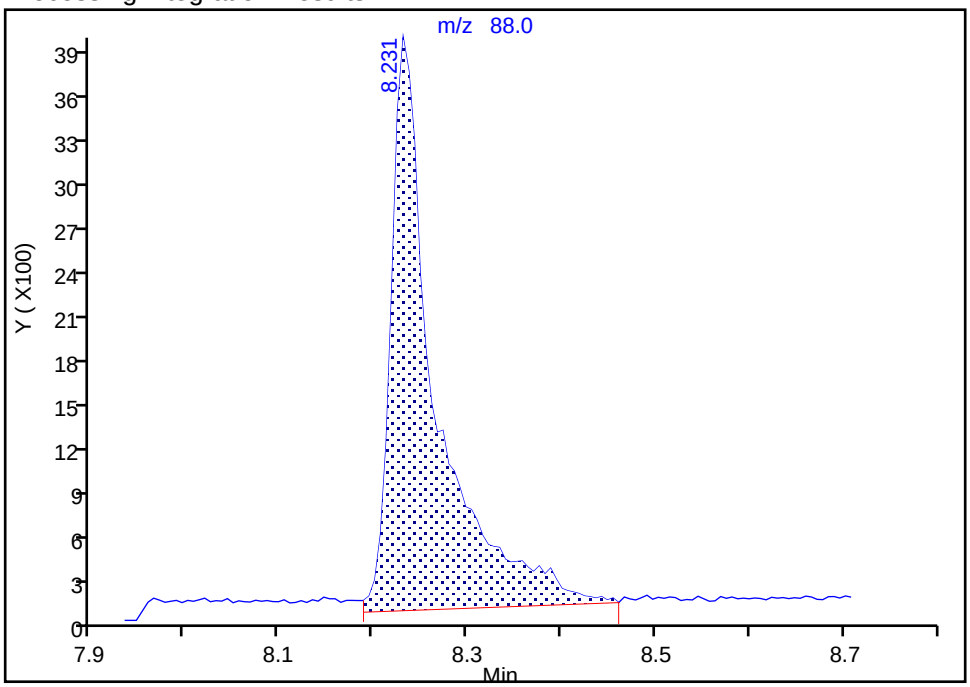
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202587.D
Injection Date: 29-Nov-2021 19:44:30 Instrument ID: A3UX20
Lims ID: CCVIS
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

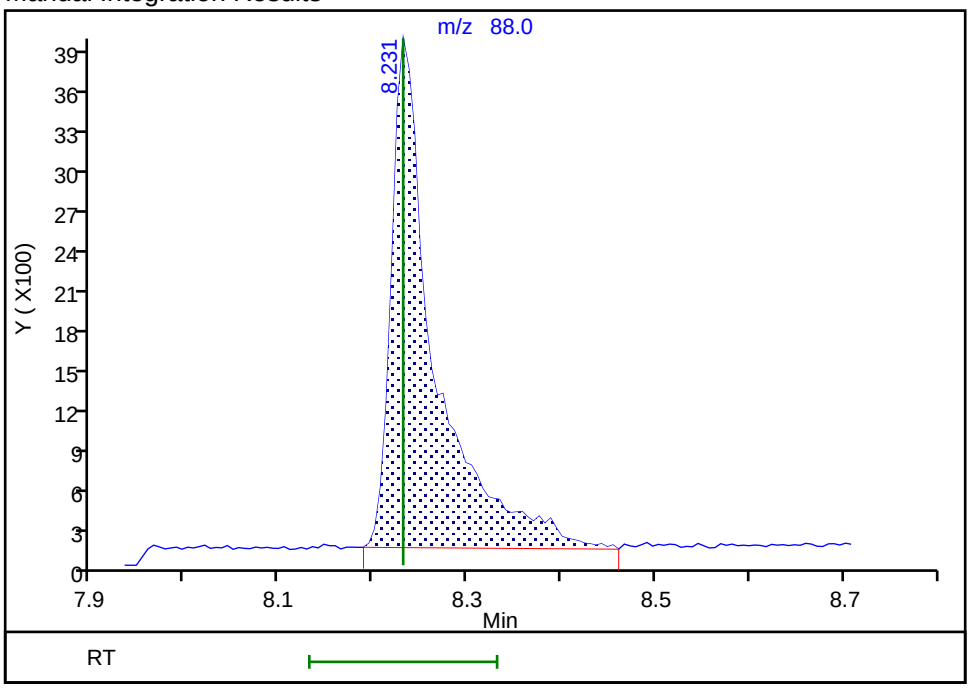
Processing Integration Results

RT: 8.23
Area: 12946
Amount: 19.480790
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 12288
Amount: 18.490649
Amount Units: ug/l



Reviewer: seymourc, 29-Nov-2021 20:12:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Lab Sample ID: CCVIS 240-515124/3 Calibration Date: 11/30/2021 18:25

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 202617.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.491		0.0183	0.0200	-8.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3228		0.0101	0.0100	1.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202617.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Nov-2021 18:25:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115646-003
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 01-Dec-2021 16:02:17 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: seymourc Date: 30-Nov-2021 19:08:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	857298	10.0	10.1	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2655926	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	77269	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	11524	20.0	18.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00273	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

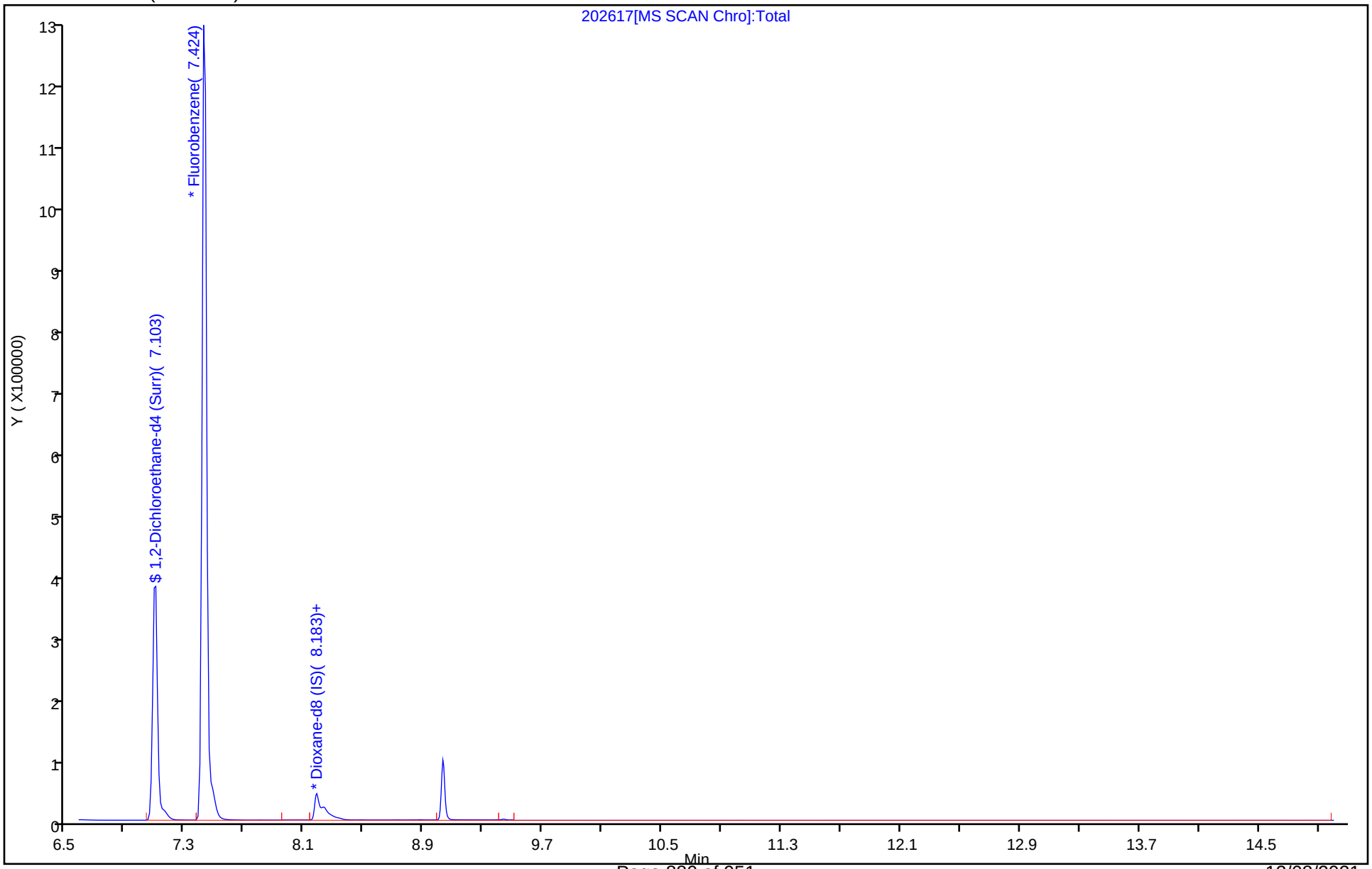
Report Date: 01-Dec-2021 16:02:17 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202617.D

Injection Date:	30-Nov-2021 18:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

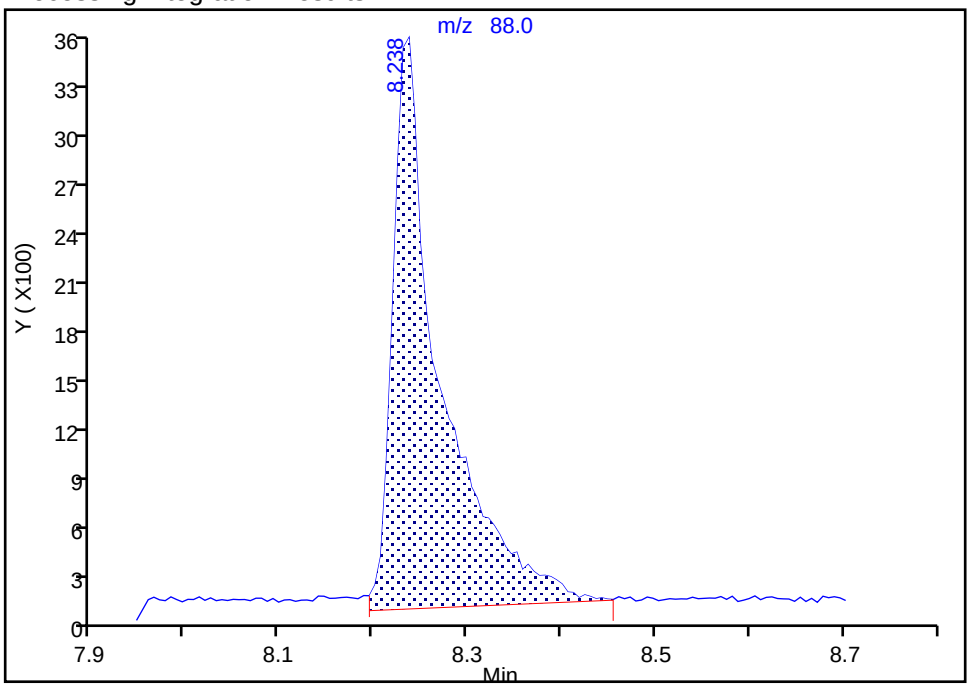
Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202617.D
Injection Date: 30-Nov-2021 18:25:30 Instrument ID: A3UX20
Lims ID: CCVIS
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

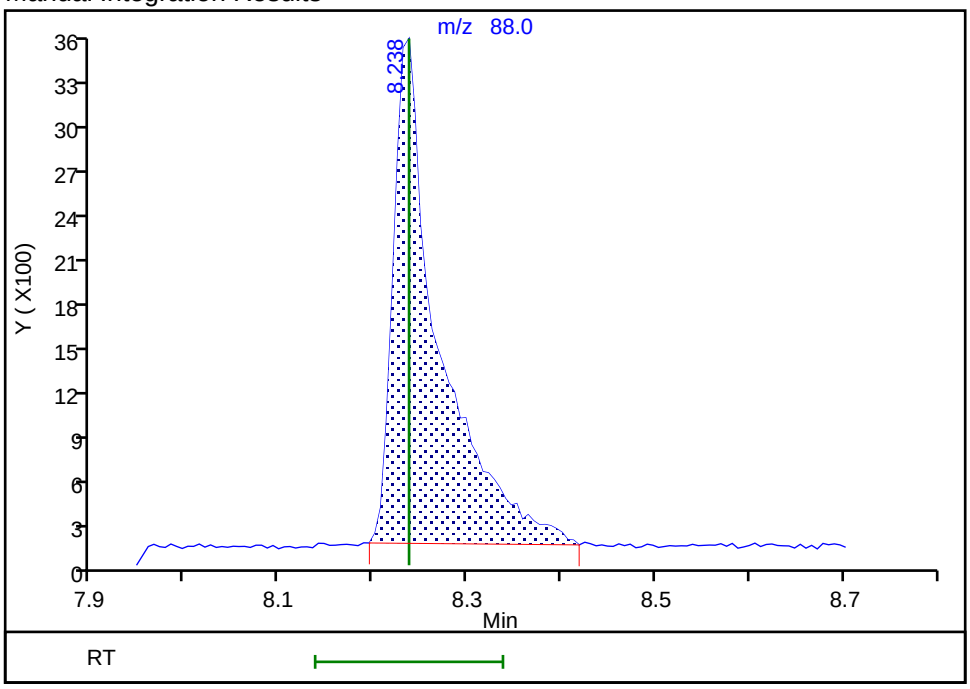
Processing Integration Results

RT: 8.24
Area: 12348
Amount: 19.580332
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 11524
Amount: 18.273708
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 19:00:10
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Sep-2021 13:33:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:29 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 15:10:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	994347	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

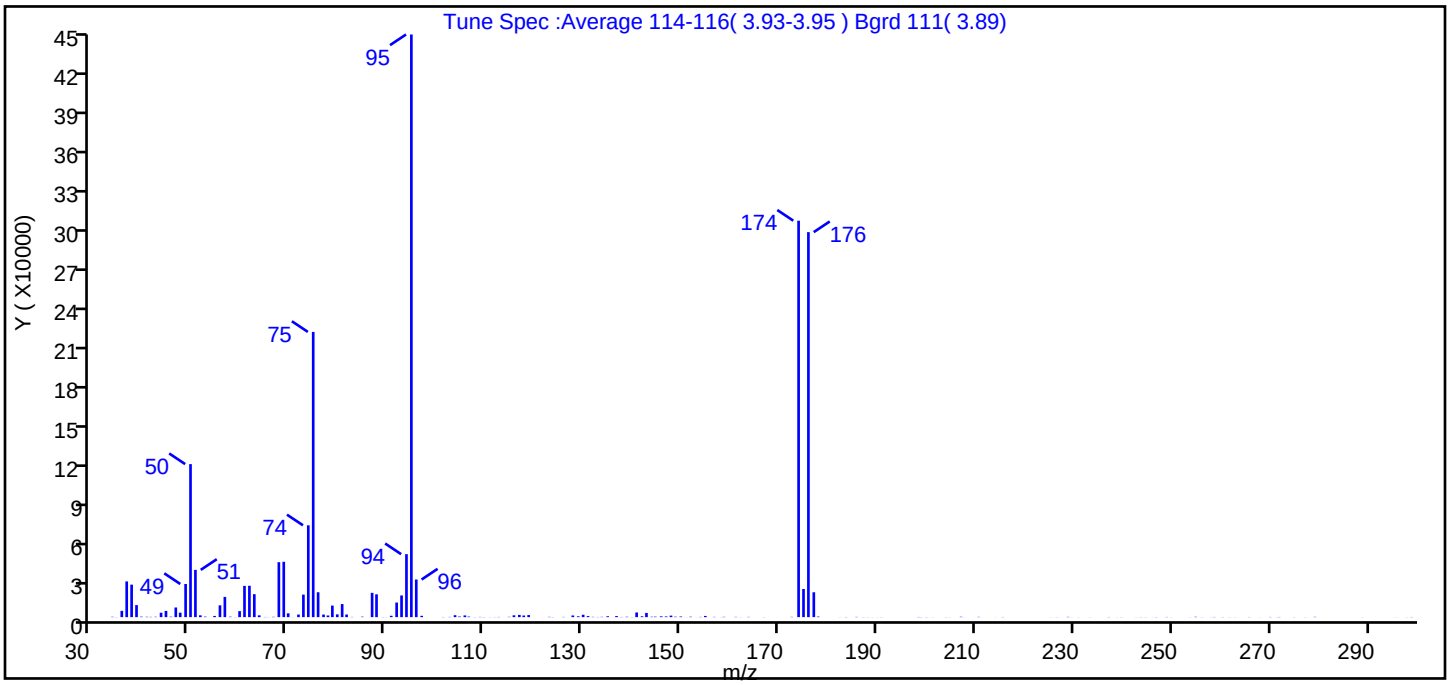
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Injection Date: 09-Sep-2021 13:33:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	68.0
175	5 to 9% of m/z 174	4.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	66.1 (97.1)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	256	80.00	2103	135.00	668	201.00	55
35.00	86	81.00	9949	137.00	827	204.00	78
36.00	4779	82.00	2003	138.00	143	205.00	60
37.00	27144	83.00	168	139.00	299	207.00	277
38.00	24712	85.00	349	140.00	100	208.00	34
39.00	9159	87.00	18480	141.00	3566	211.00	203
40.00	362	88.00	17352	142.00	626	214.00	50
41.00	277	89.00	103	143.00	3194	216.00	120
42.00	206	90.00	57	144.00	298	225.00	54
43.00	269	91.00	1044	145.00	366	227.00	79
44.00	3367	92.00	11093	146.00	611	229.00	209
45.00	4727	93.00	16488	147.00	529	230.00	53
46.00	338	94.00	47864	148.00	1161	231.00	54
47.00	7337	95.00	442816	149.00	328	233.00	56
48.00	3399	96.00	28600	150.00	472	237.00	123
49.00	25192	97.00	1012	151.00	41	239.00	53
50.00	116304	102.00	123	152.00	311	240.00	84
51.00	35920	103.00	171	153.00	38	243.00	51
52.00	1379	104.00	1466	154.00	184	244.00	89
53.00	392	105.00	453	155.00	919	245.00	74
55.00	917	106.00	1305	157.00	192	246.00	54
56.00	8982	107.00	417	158.00	61	247.00	108
57.00	15386	108.00	86	159.00	228	249.00	145
58.00	343	109.00	166	161.00	192	250.00	54
59.00	72	110.00	113	162.00	67	254.00	59
60.00	4577	111.00	70	164.00	180	255.00	260
61.00	23744	112.00	91	167.00	77	256.00	73
62.00	23856	113.00	159	170.00	20	258.00	67
63.00	17464	115.00	229	173.00	205	259.00	146
64.00	1361	116.00	1389	174.00	301312	260.00	114
65.00	141	117.00	1709	175.00	21384	262.00	77
66.00	76	118.00	1227	176.00	292608	263.00	60
67.00	238	119.00	1583	177.00	18904	266.00	126

Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	41776	122.00	24	178.00	412	268.00	53
69.00	42072	123.00	216	182.00	67	270.00	152
70.00	2909	124.00	108	184.00	125	272.00	68
71.00	46	126.00	169	186.00	193	272.00	142
72.00	1983	127.00	15	187.00	87	275.00	79
73.00	17120	128.00	1271	188.00	79	277.00	64
74.00	69792	129.00	629	189.00	50	279.00	219
75.00	216768	130.00	1823	190.00	50	289.00	58
76.00	18920	131.00	784	191.00	81	296.00	59
77.00	1972	132.00	215	198.00	129	298.00	63
78.00	1260	133.00	137	199.00	112	299.00	127
79.00	8784	134.00	230	200.00	98		

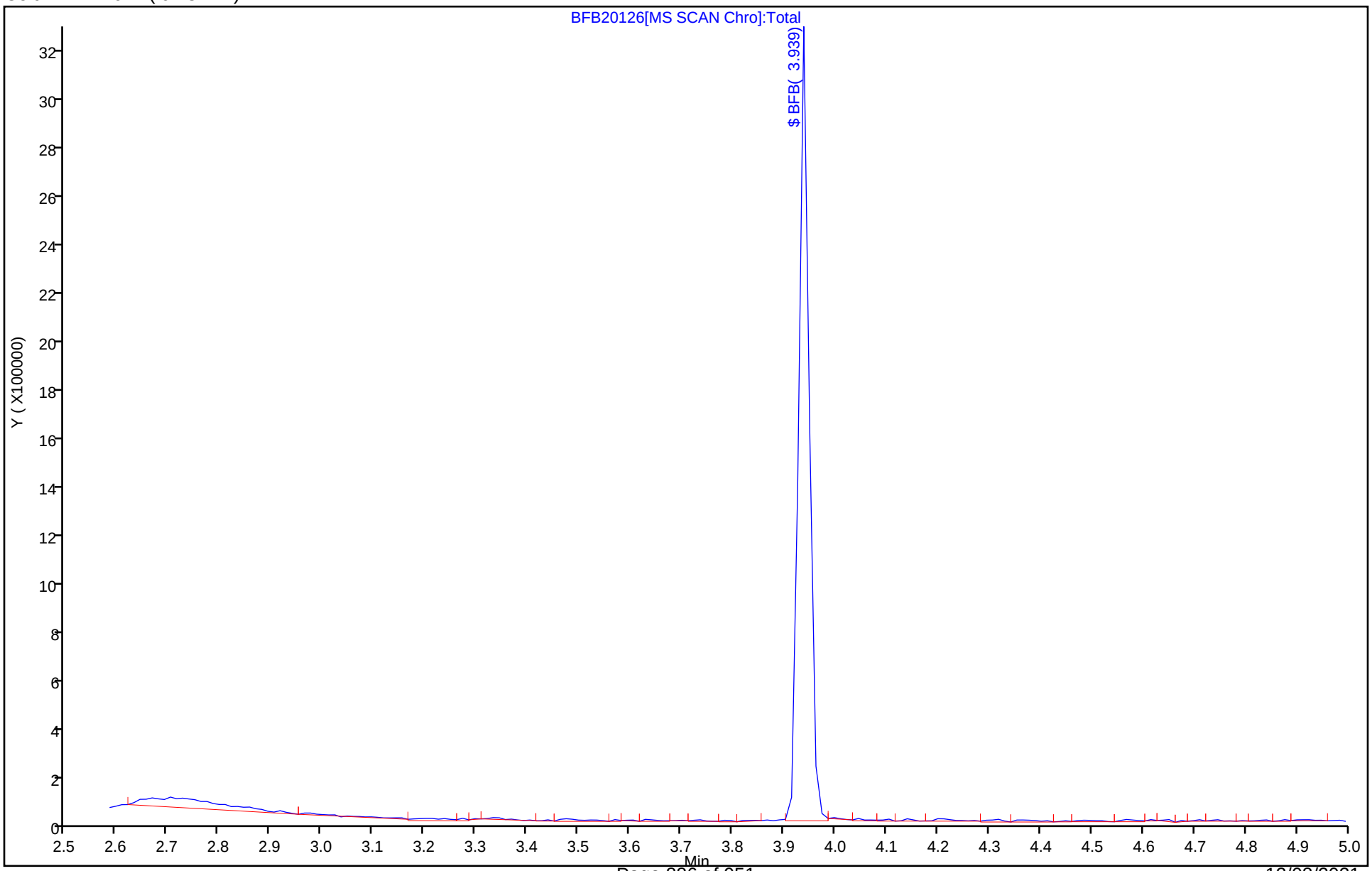
Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D

Injection Date:	09-Sep-2021 13:33:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\BFB20169.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 29-Nov-2021 19:24:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0115597-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:42 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 29-Nov-2021 20:12:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.927	3.927	0.000	0	1881762	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

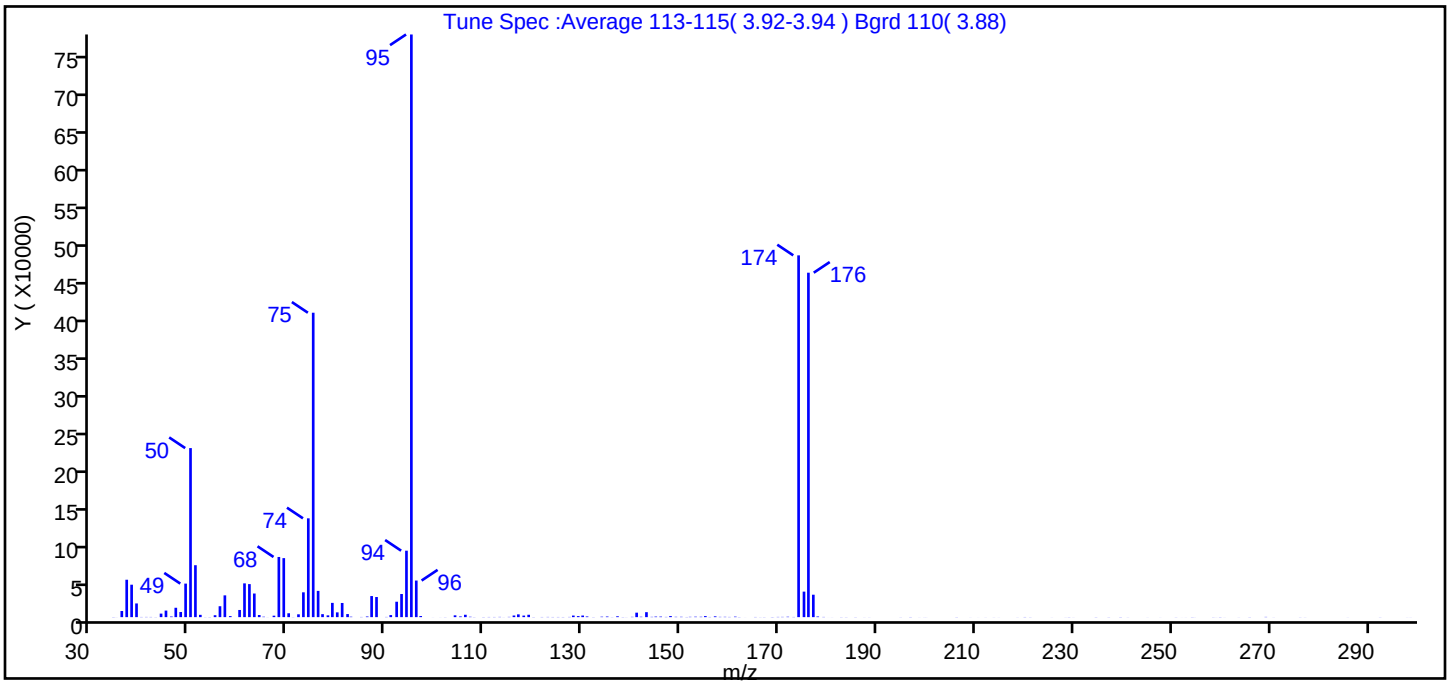
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\BFB20169.D
Injection Date: 29-Nov-2021 19:24:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	29.0
75	30 to 60% of m/z 95	52.2
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	62.1
175	5 to 9% of m/z 174	4.4 (7.1)
176	Greater than 95% but less than 101% of m/z 174	59.1 (95.2)
177	5 to 9% of m/z 176	3.9 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\BFB20169.D\8260SIM_20.rslt\spectra.d
Injection Date: 29-Nov-2021 19:24:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 187

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	187	82.00	4098	137.00	1145	187.00	64
35.00	57	83.00	591	138.00	170	188.00	74
36.00	8175	85.00	249	139.00	76	195.00	101
37.00	49832	86.00	858	140.00	391	197.00	199
38.00	43216	87.00	28096	141.00	5964	199.00	62
39.00	18248	88.00	26800	142.00	527	200.00	58
40.00	237	90.00	268	143.00	6623	200.00	53
41.00	272	91.00	2722	144.00	378	206.00	152
42.00	245	92.00	20544	145.00	745	209.00	53
43.00	131	93.00	30824	146.00	743	211.00	35
44.00	4716	94.00	88528	147.00	281	212.00	66
45.00	8734	95.00	776256	148.00	1424	214.00	72
46.00	819	96.00	48760	149.00	427	215.00	51
47.00	12493	97.00	1457	150.00	452	219.00	74
48.00	6824	100.00	52	151.00	203	220.00	209
49.00	44688	101.00	56	152.00	414	221.00	121
50.00	225216	102.00	120	153.00	598	224.00	4
51.00	69184	104.00	2408	154.00	506	226.00	56
52.00	3075	105.00	917	155.00	1404	228.00	69
53.00	116	106.00	3178	156.00	243	229.00	147
54.00	187	107.00	505	157.00	1059	230.00	58
55.00	2562	108.00	146	158.00	363	235.00	162
56.00	14543	110.00	196	159.00	422	237.00	137
57.00	29024	111.00	235	160.00	275	240.00	189
58.00	1363	112.00	228	161.00	677	241.00	83
60.00	9550	113.00	312	162.00	184	245.00	54
61.00	45000	114.00	68	163.00	41	248.00	51
62.00	44016	115.00	331	165.00	226	251.00	116
63.00	31472	116.00	2181	166.00	97	252.00	30
64.00	2836	117.00	3692	167.00	142	253.00	51
65.00	557	118.00	2075	169.00	163	254.00	154
66.00	69	119.00	3166	169.00	75	255.00	65
67.00	1942	120.00	178	170.00	288	258.00	120

Report Date: 30-Nov-2021 18:20:42 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\BFB20169.D\8260SIM_20.rslt\spectra.d
Injection Date: 29-Nov-2021 19:24:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 187

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	80168	122.00	222	171.00	328	259.00	51
69.00	78624	123.00	277	172.00	524	260.00	180
70.00	5166	124.00	214	173.00	242	261.00	55
71.00	138	125.00	228	174.00	481984	264.00	67
72.00	3772	126.00	201	175.00	34008	266.00	151
73.00	33072	127.00	271	176.00	458880	269.00	312
74.00	131648	128.00	2104	177.00	29888	271.00	69
75.00	405568	129.00	1362	178.00	834	276.00	108
76.00	34992	130.00	2135	179.00	276	277.00	77
77.00	3991	131.00	915	180.00	22	286.00	59
78.00	2385	132.00	162	181.00	53	292.00	115
79.00	19000	134.00	605	183.00	137	298.00	53
80.00	6365	135.00	828	184.00	124	299.00	60
81.00	18864	136.00	134	186.00	144		

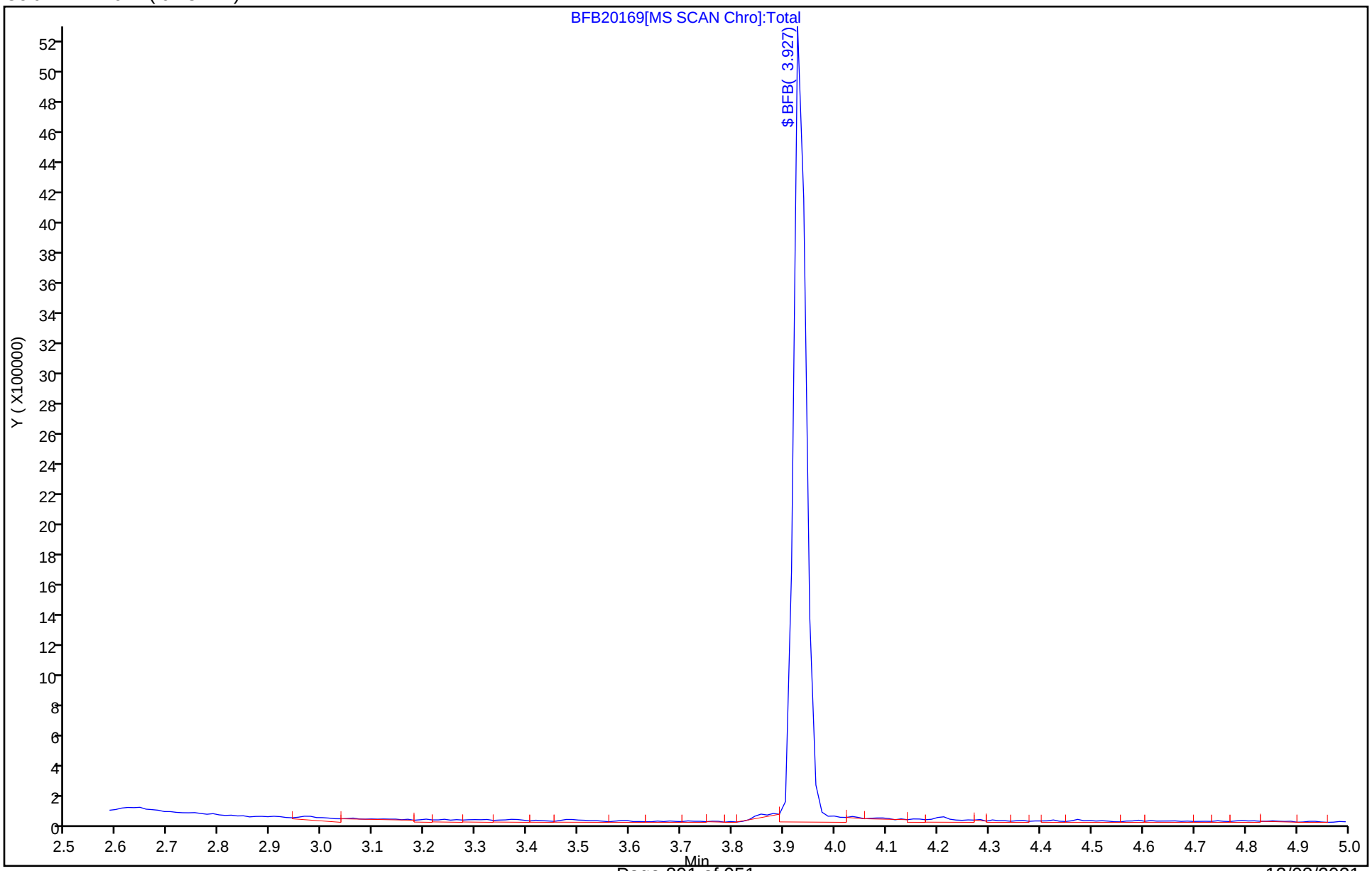
Report Date: 30-Nov-2021 18:20:42 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\BFB20169.D

Injection Date:	29-Nov-2021 19:24:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\BFB20170.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Nov-2021 17:44:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0115646-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 01-Dec-2021 16:02:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: seymourc Date: 30-Nov-2021 18:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.927	3.927	0.000	0	1621162	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

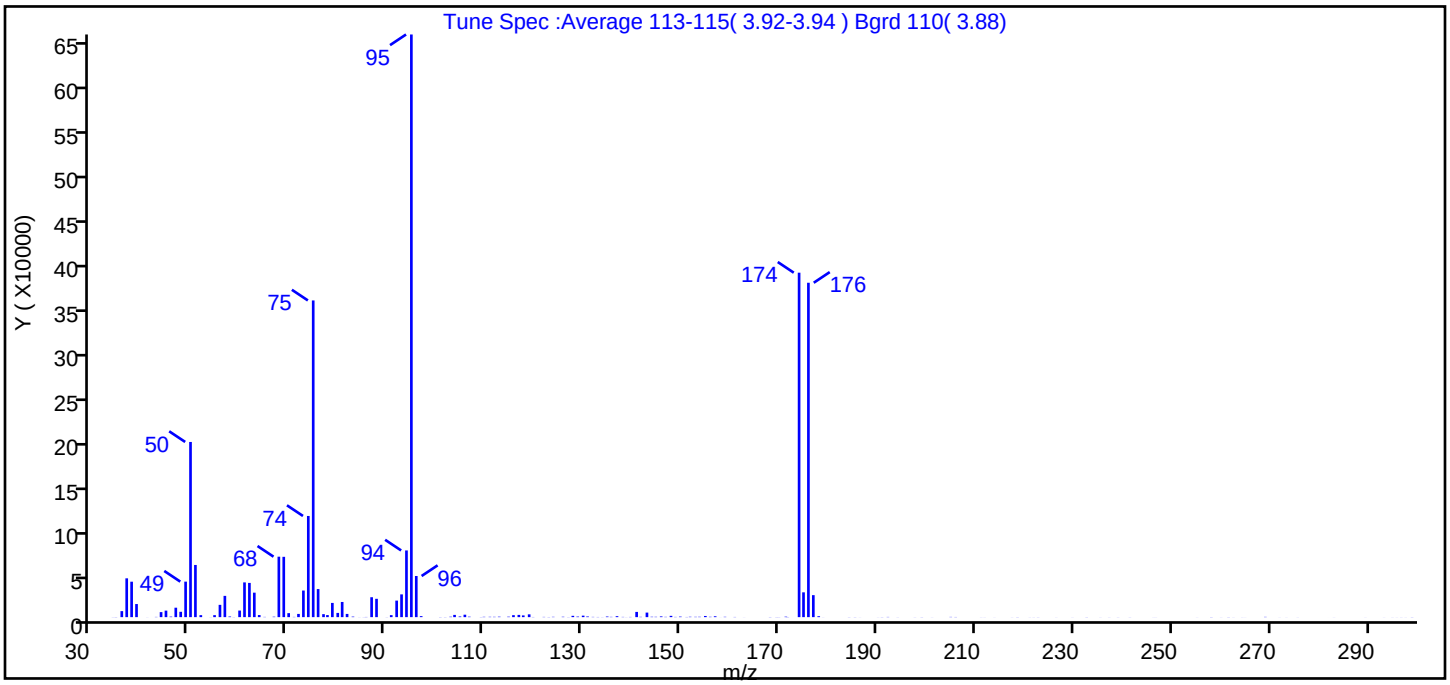
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\BFB20170.D
Injection Date: 30-Nov-2021 17:44:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.1
75	30 to 60% of m/z 95	54.4
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	59.1
175	5 to 9% of m/z 174	4.3 (7.2)
176	Greater than 95% but less than 101% of m/z 174	57.4 (97.1)
177	5 to 9% of m/z 176	3.8 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\BFB20170.D\8260SIM_20.rslt\spectra.d
Injection Date: 30-Nov-2021 17:44:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 177

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	94	82.00	3619	135.00	690	198.00	79
35.00	158	83.00	593	136.00	314	199.00	120
36.00	6775	84.00	75	137.00	1091	201.00	62
37.00	43672	85.00	96	138.00	261	205.00	266
38.00	39888	86.00	208	139.00	73	206.00	191
39.00	14746	87.00	22408	140.00	231	211.00	65
41.00	61	88.00	20624	141.00	5895	212.00	58
43.00	260	90.00	101	142.00	328	214.00	50
44.00	5663	91.00	2243	143.00	5118	218.00	63
45.00	7327	92.00	18608	144.00	430	219.00	127
46.00	590	93.00	25608	145.00	379	221.00	64
47.00	10619	94.00	75048	146.00	834	222.00	68
48.00	6004	95.00	655616	147.00	316	223.00	95
49.00	39960	96.00	46296	148.00	1459	226.00	55
50.00	197120	97.00	1122	149.00	245	230.00	61
51.00	58712	101.00	160	150.00	601	233.00	120
52.00	2236	102.00	137	151.00	191	236.00	65
53.00	6	103.00	462	152.00	426	237.00	72
54.00	86	104.00	2522	153.00	351	239.00	81
55.00	2254	105.00	735	154.00	407	242.00	89
56.00	13830	106.00	2747	155.00	1307	246.00	51
57.00	23936	107.00	517	156.00	390	247.00	56
58.00	712	109.00	146	157.00	964	255.00	53
59.00	111	110.00	364	158.00	36	258.00	147
60.00	7395	111.00	381	159.00	376	260.00	60
61.00	39088	112.00	354	161.00	210	262.00	126
62.00	38520	113.00	524	163.00	53	263.00	59
63.00	27544	115.00	518	168.00	164	264.00	61
64.00	2345	116.00	2224	170.00	127	265.00	40
65.00	256	117.00	2528	170.00	111	269.00	298
67.00	492	118.00	1952	171.00	521	272.00	52
68.00	68024	119.00	3141	172.00	164	273.00	50
69.00	67872	120.00	185	174.00	387584	276.00	58

Report Date: 01-Dec-2021 16:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\BFB20170.D\8260SIM_20.rslt\spectra.d
Injection Date: 30-Nov-2021 17:44:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 177

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	4491	122.00	263	175.00	27912	282.00	13
71.00	260	123.00	168	176.00	376256	283.00	53
72.00	3634	124.00	351	177.00	24752	290.00	51
73.00	29944	126.00	434	178.00	1006	293.00	51
74.00	113840	127.00	131	179.00	61	295.00	58
75.00	356352	128.00	1476	184.00	114	296.00	51
76.00	31600	129.00	632	186.00	114	297.00	71
77.00	3359	130.00	1676	186.00	53	298.00	55
78.00	2319	131.00	735	190.00	58	299.00	128
79.00	16000	132.00	279	191.00	128		
80.00	4757	133.00	197	192.00	235		
81.00	17072	134.00	94	194.00	76		

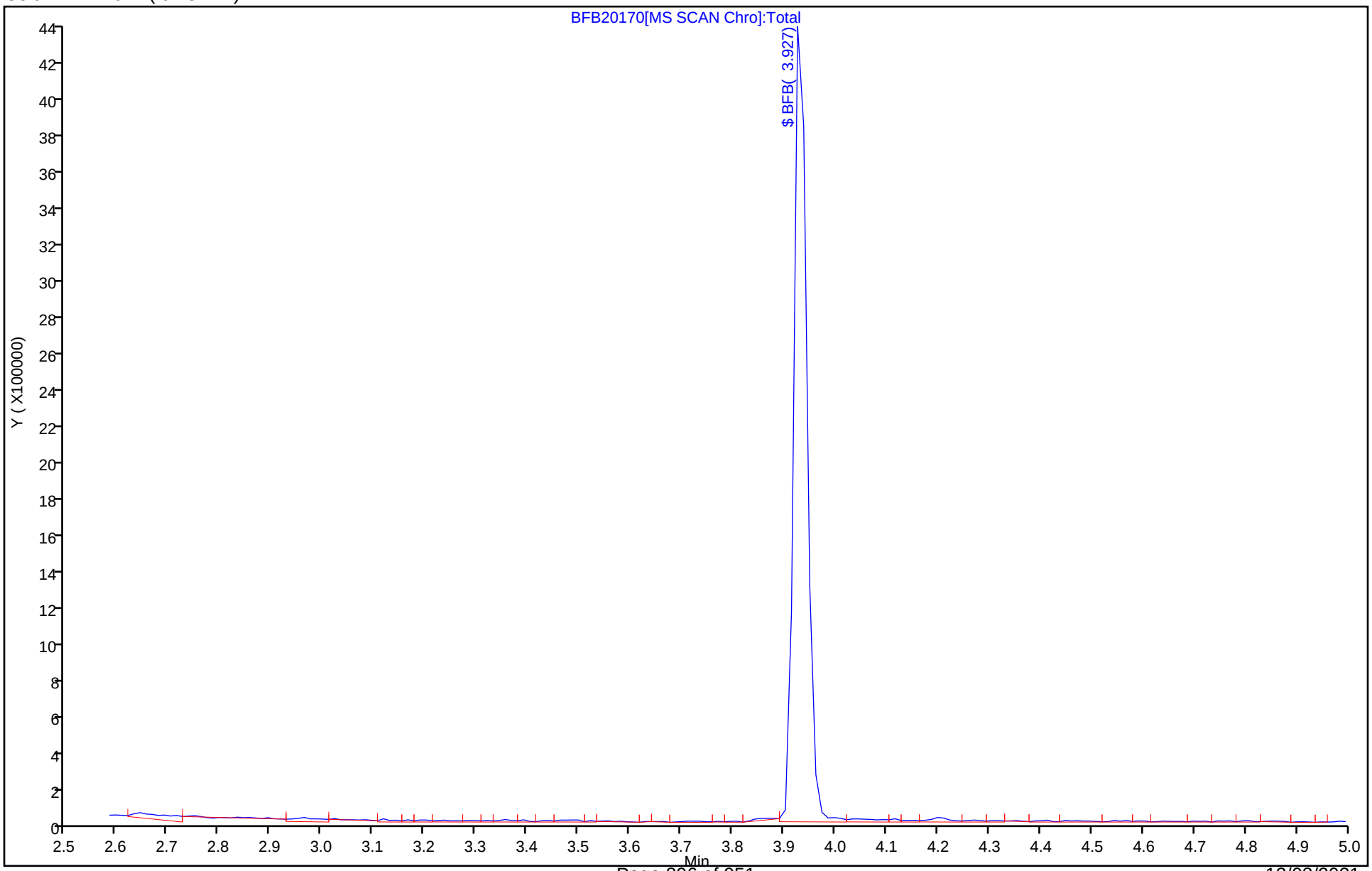
Report Date: 01-Dec-2021 16:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\BFB20170.D

Injection Date:	30-Nov-2021 17:44:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-514943/5

Matrix: Water Lab File ID: 202589.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 20:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202589.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 29-Nov-2021 20:32:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 29-Nov-2021 20:59:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	99	846212	10.0	9.86	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2687376	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	79928	200.0	200.0	
8 1,4-Dioxane	88	8.231	8.231	0.000	25	82		0.1257	7M

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

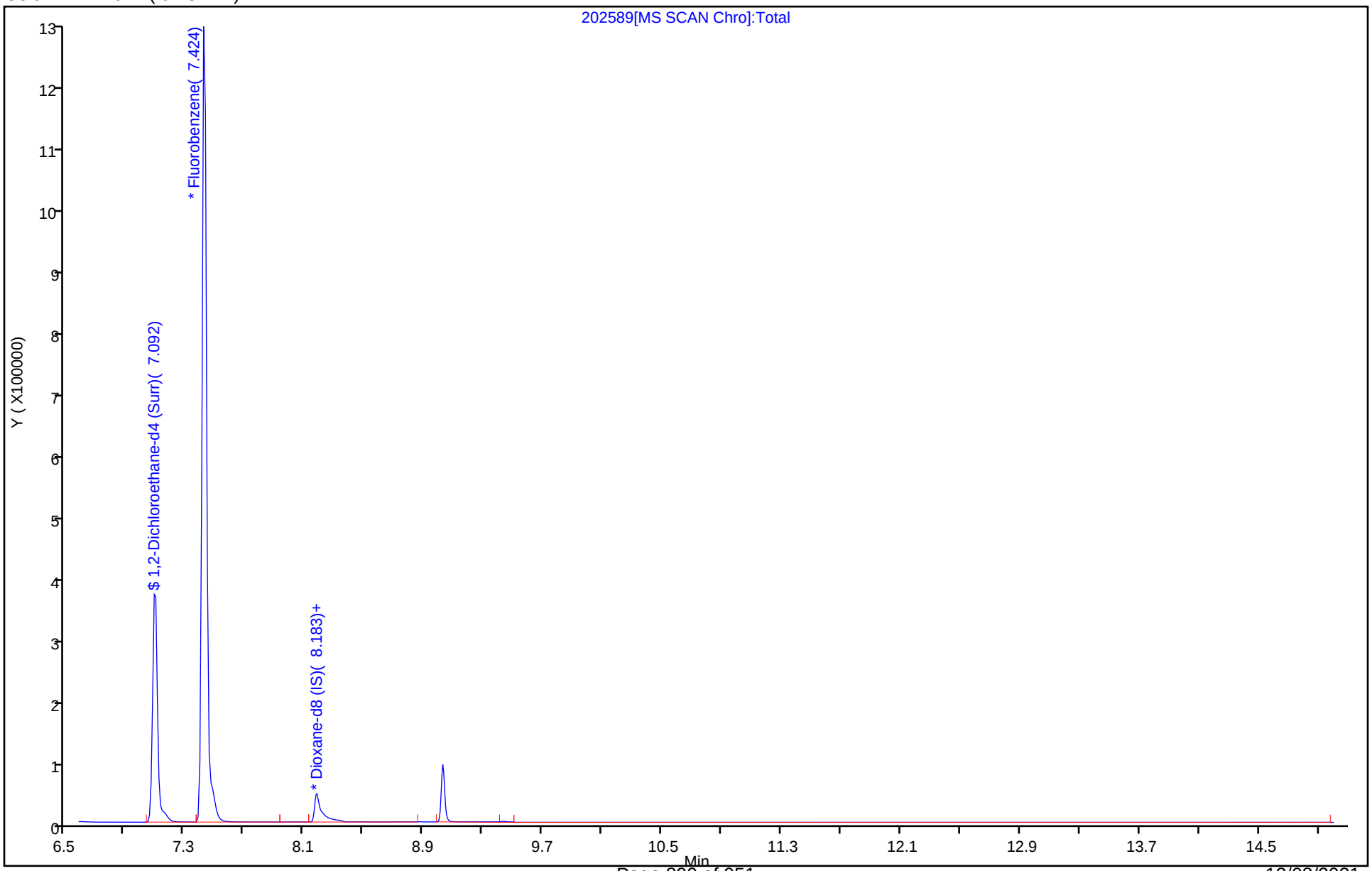
Report Date: 30-Nov-2021 18:20:31 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202589.D

Injection Date:	29-Nov-2021 20:32:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202589.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	29-Nov-2021 20:32:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 29-Nov-2021 20:59:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

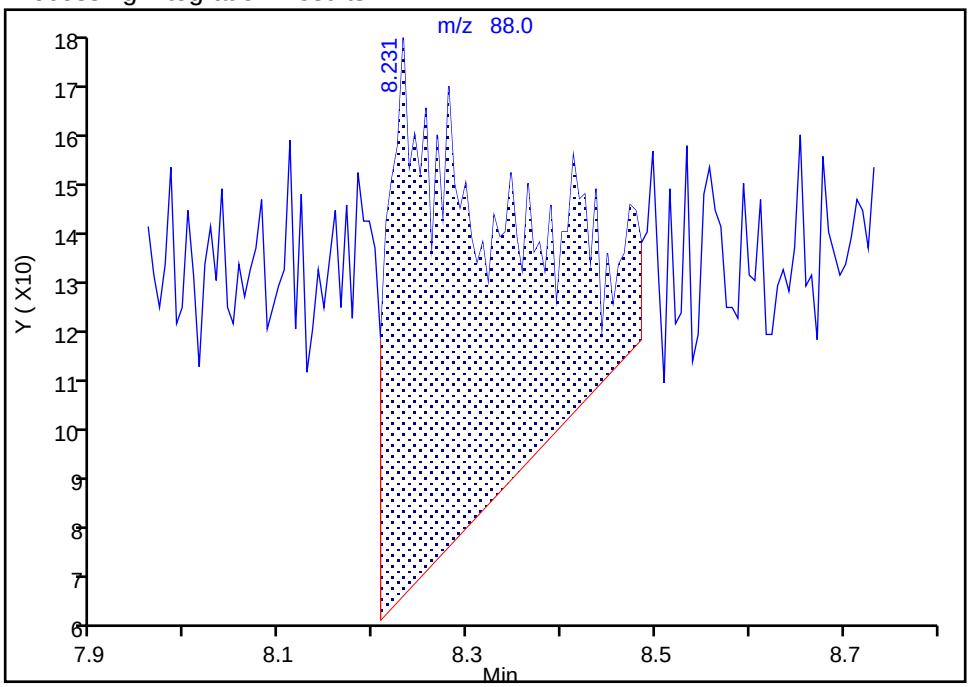
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202589.D
Injection Date: 29-Nov-2021 20:32:30 Instrument ID: A3UX20
Lims ID: MB
Client ID:
Operator ID: 434006 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

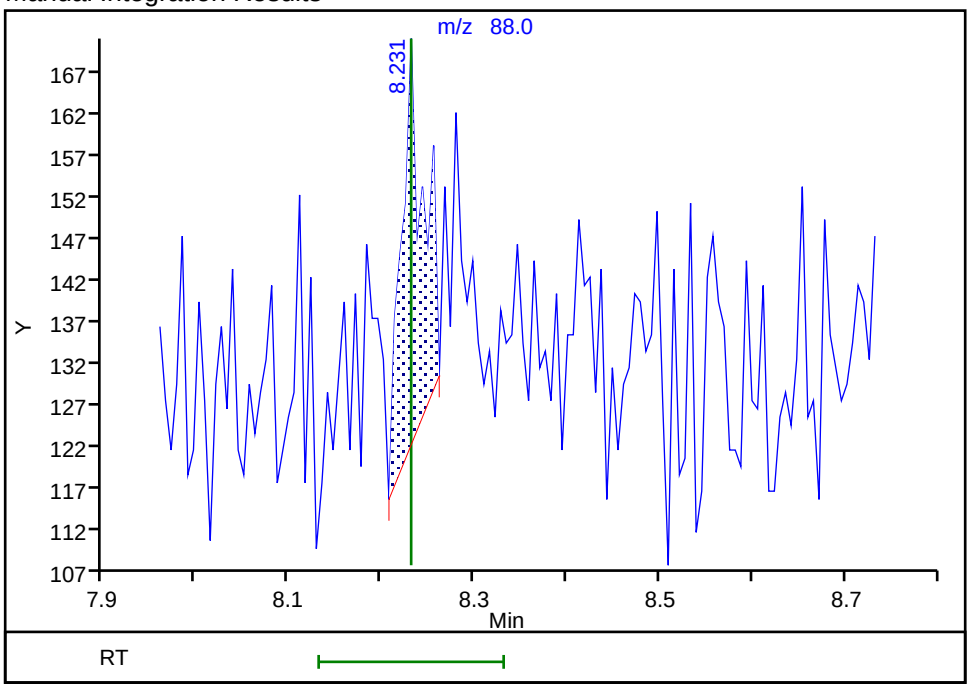
Processing Integration Results

RT: 8.23
Area: 829
Amount: 1.270821
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 82
Amount: 0.125702
Amount Units: ug/l



Reviewer: seymourc, 29-Nov-2021 20:58:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-515124/5

Matrix: Water Lab File ID: 202619.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 19:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202619.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Nov-2021 19:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115646-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 01-Dec-2021 16:02:17 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: seymourc Date: 30-Nov-2021 19:53:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	900824	10.0	10.3	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2727173	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	83453	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

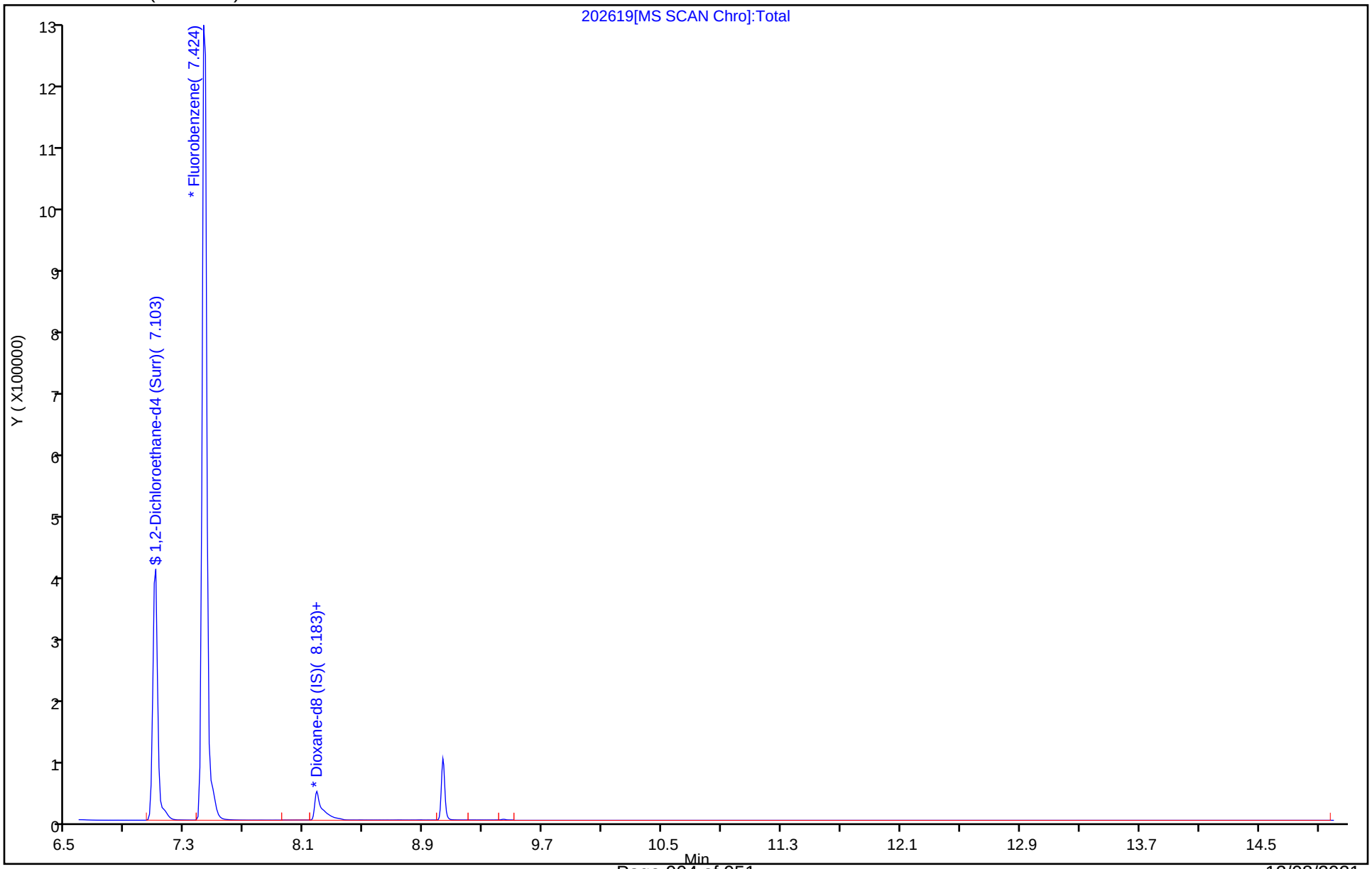
Report Date: 01-Dec-2021 16:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202619.D

Injection Date:	30-Nov-2021 19:13:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202619.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Nov-2021 19:13:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:02:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 30-Nov-2021 19:53:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-514943/4

Matrix: Water Lab File ID: 202588.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 20:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.54		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202588.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Nov-2021 20:08:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 29-Nov-2021 20:58:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	860866	10.0	9.88	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2729634	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	80810	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.231	0.007	50	6294	10.0	9.54	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

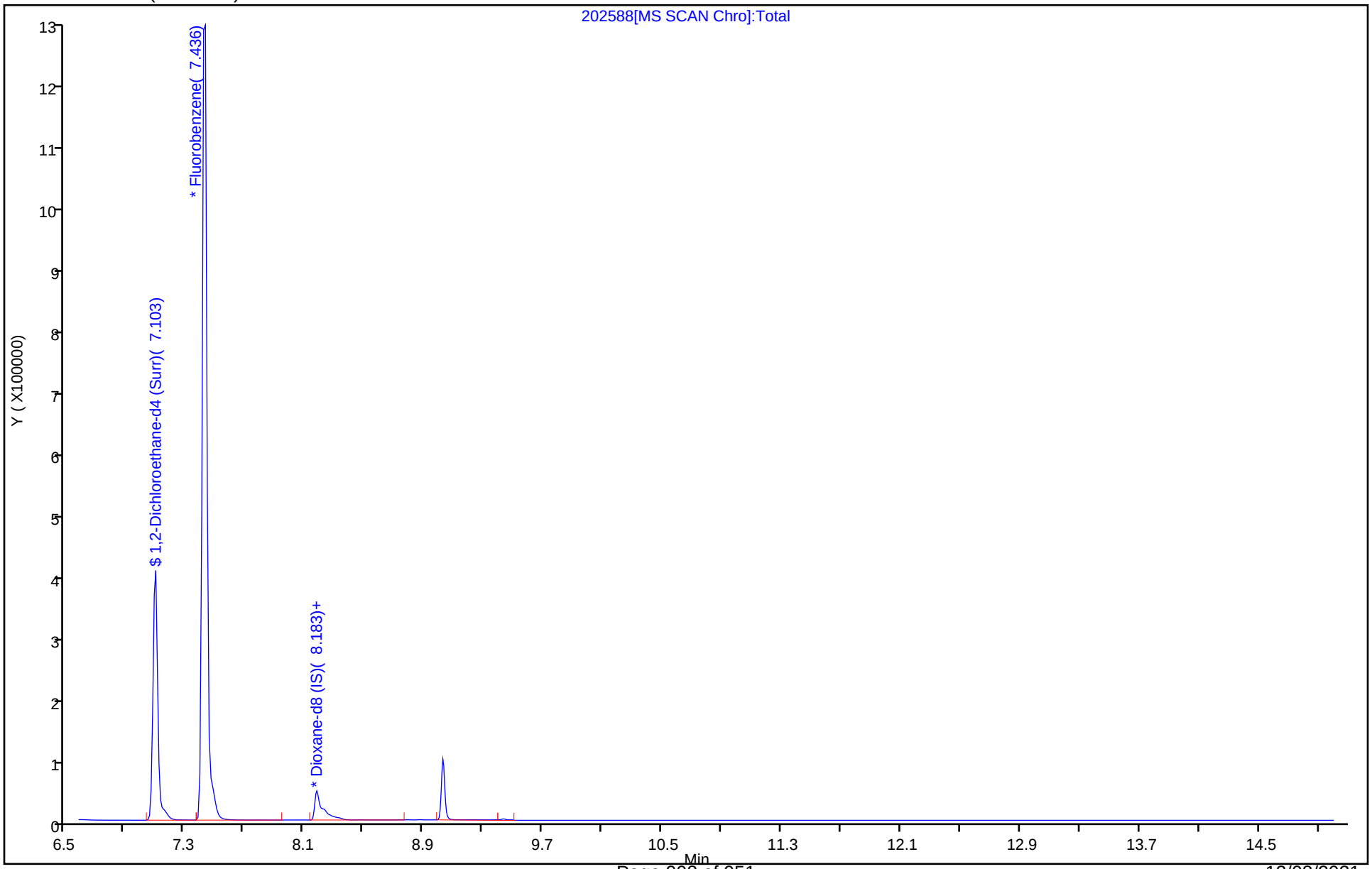
Report Date: 30-Nov-2021 18:20:31 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202588.D

Injection Date:	29-Nov-2021 20:08:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202588.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	29-Nov-2021 20:08:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 29-Nov-2021 20:58:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.88	98.76

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

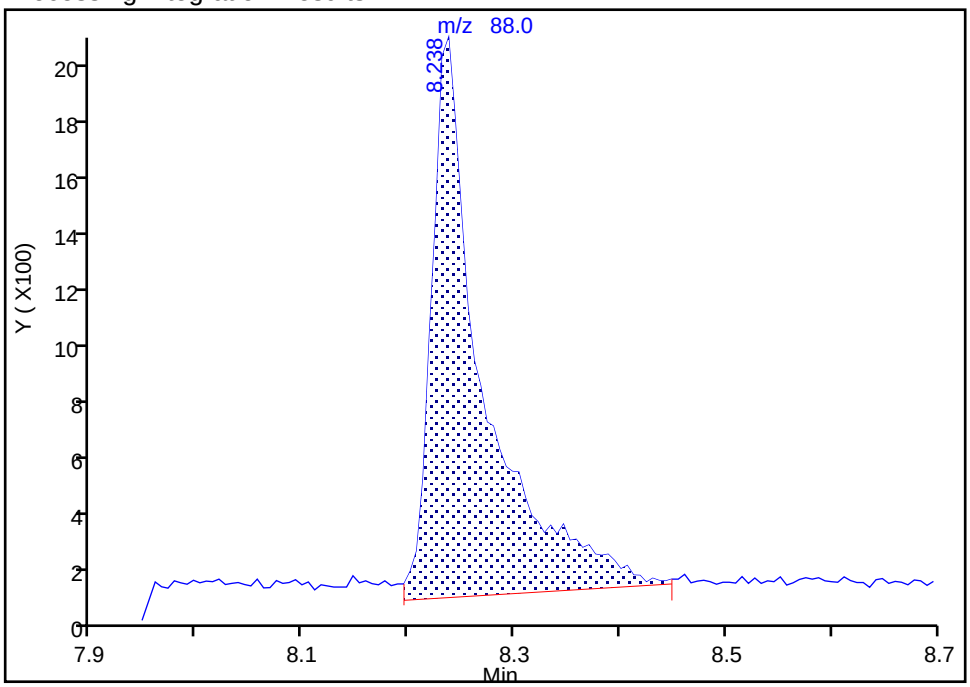
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202588.D
Injection Date: 29-Nov-2021 20:08:30 Instrument ID: A3UX20
Lims ID: LCS
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

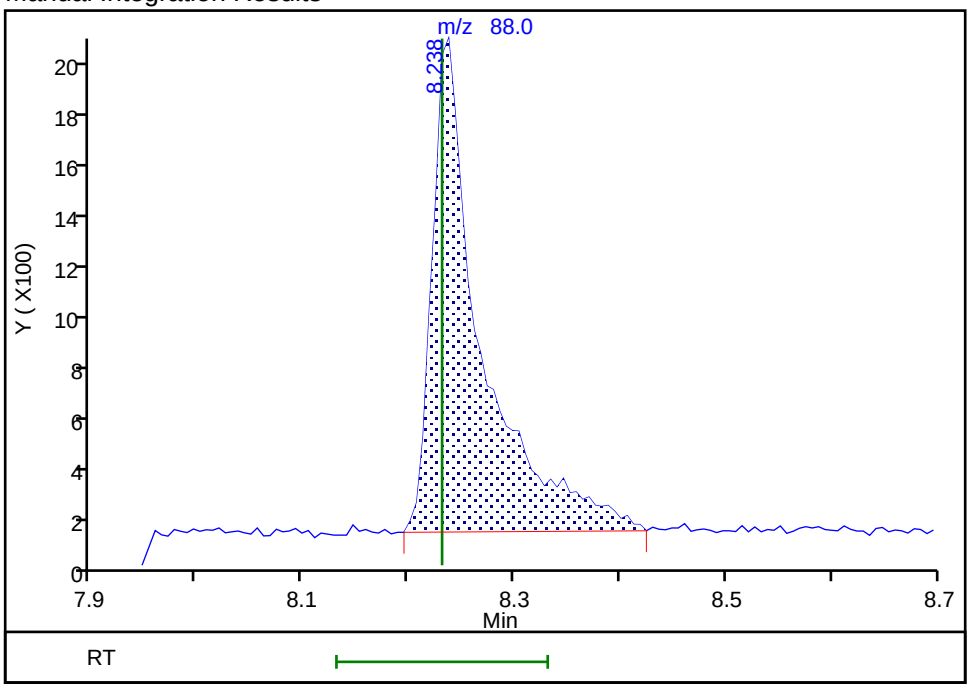
Processing Integration Results

RT: 8.24
Area: 6810
Amount: 10.325491
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6294
Amount: 9.543119
Amount Units: ug/l



Reviewer: seymourc, 29-Nov-2021 20:58:35
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-515124/4

Matrix: Water Lab File ID: 202618.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.54		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202618.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Nov-2021 18:49:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115646-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 01-Dec-2021 16:02:17 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: seymourc Date: 30-Nov-2021 19:08:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	880696	10.0	10.1	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2736507	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	78612	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	48	6118	10.0	9.54	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

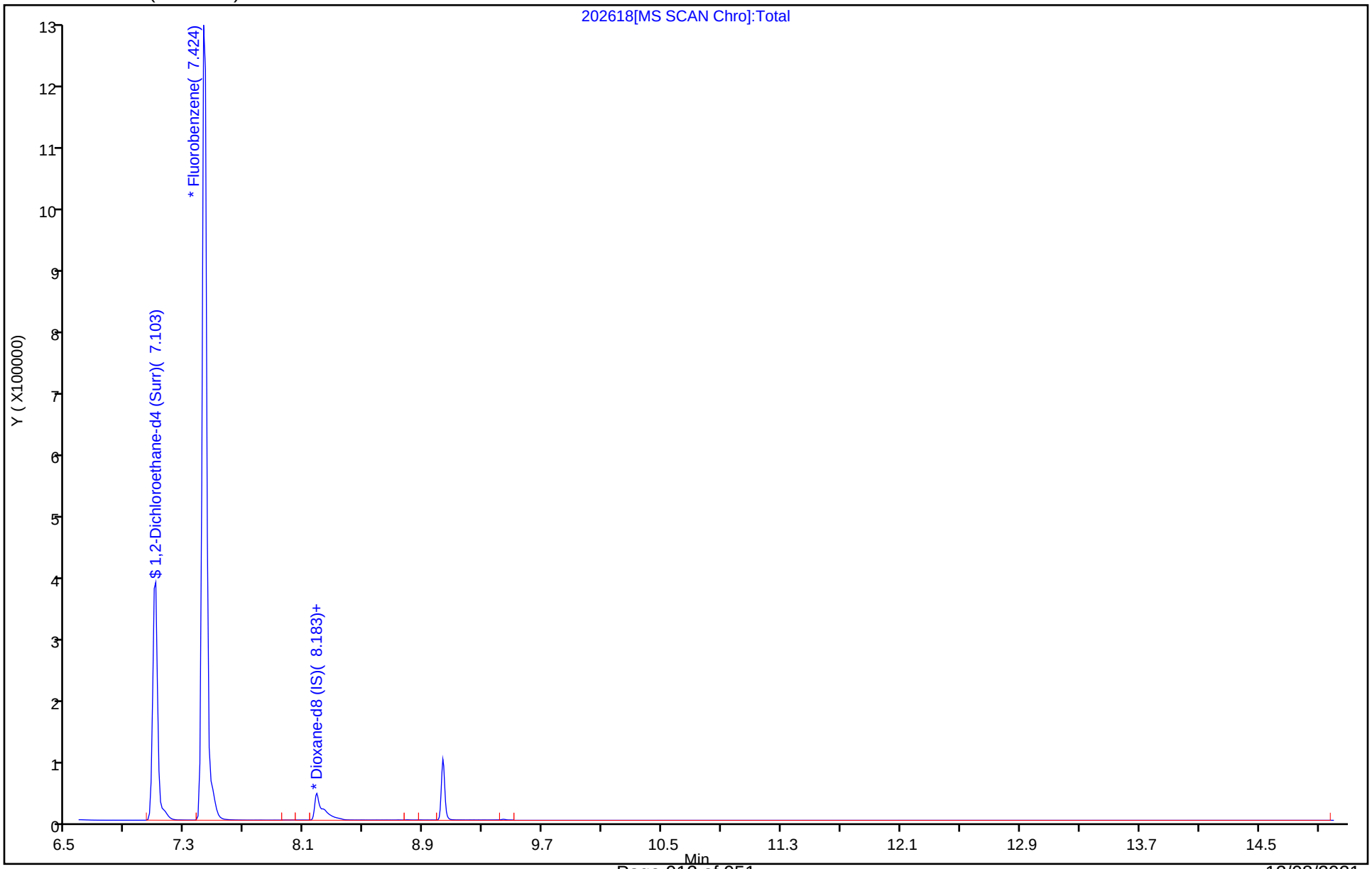
Report Date: 01-Dec-2021 16:02:17 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202618.D

Injection Date:	30-Nov-2021 18:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202618.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	30-Nov-2021 18:49:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:02:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 30-Nov-2021 19:08:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.78

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

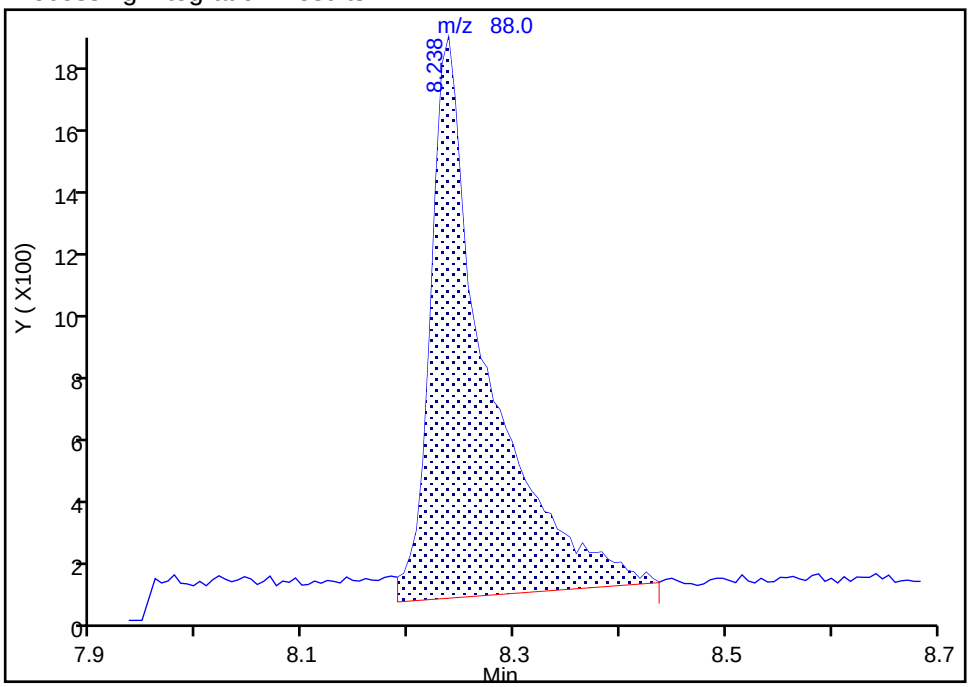
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202618.D				
Injection Date:	30-Nov-2021 18:49:30	Instrument ID:	A3UX20		
Lims ID:	LCS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

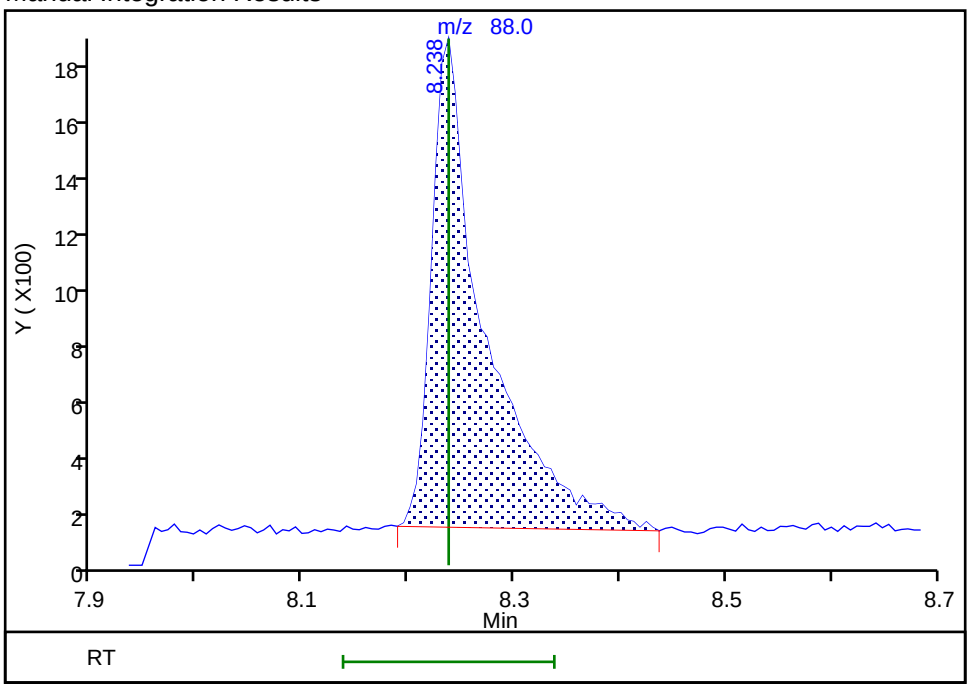
Processing Integration Results

RT: 8.24
Area: 6726
Amount: 10.483269
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6118
Amount: 9.535629
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 19:08:39

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-13_112321 MS Lab Sample ID: 240-160744-4 MS

Matrix: Water Lab File ID: 202595.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 10:20

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 22:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202595.D
Lims ID: 240-160744-B-4 MS
Client ID:
Sample Type: MS
Inject. Date: 29-Nov-2021 22:56:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-011
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.092	0.000	100	869188	10.0	10.0	
* 7 Fluorobenzene	96	7.424	7.423	0.001	100	2723171	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	76740	200.0	200.0	
8 1,4-Dioxane	88	8.232	8.231	0.001	47	6411	10.0	10.2	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

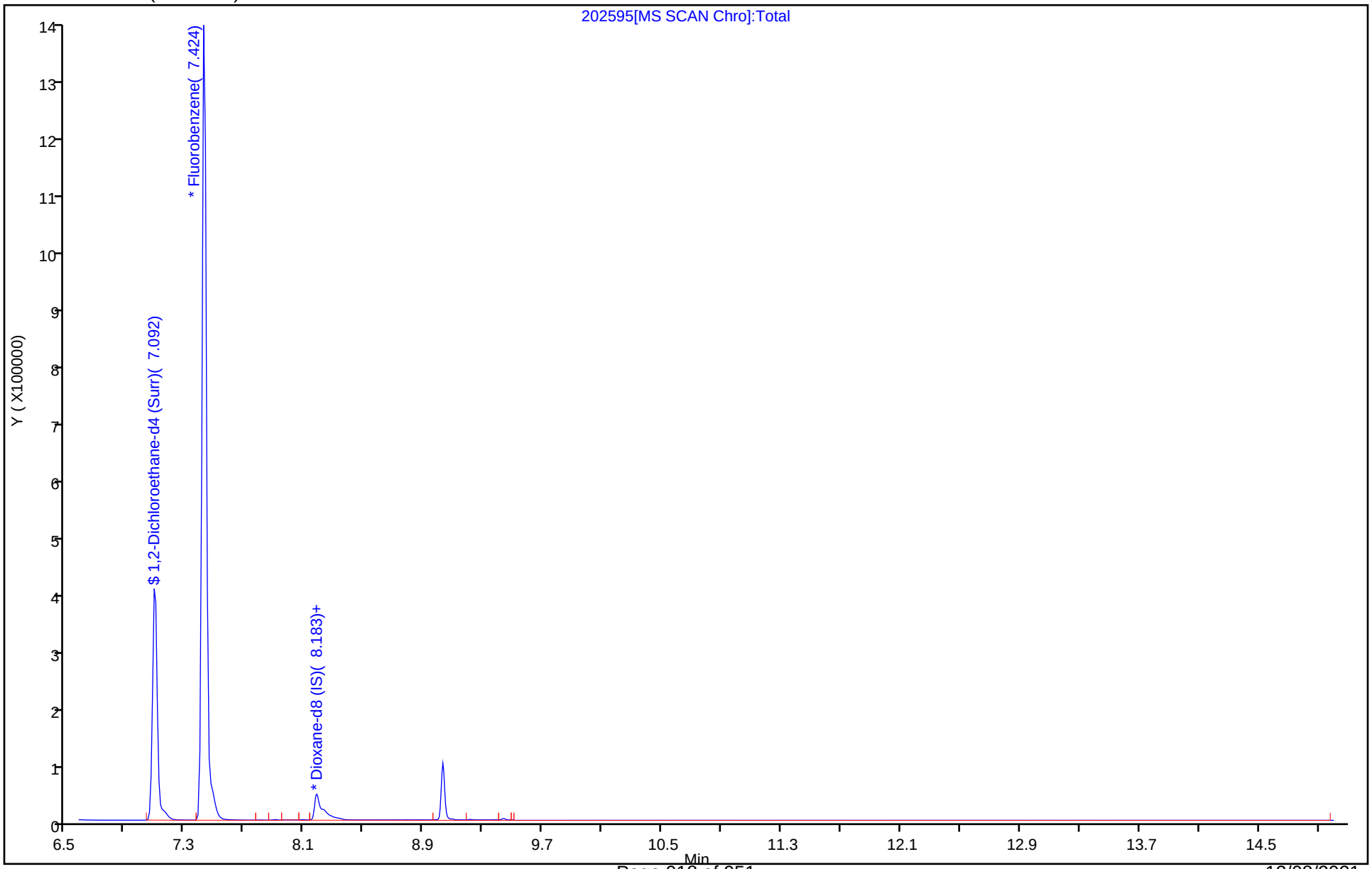
Report Date: 30-Nov-2021 18:20:33 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202595.D

Injection Date:	29-Nov-2021 22:56:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-B-4 MS			Worklist Smp#:	11
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202595.D				
Lims ID:	240-160744-B-4 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	29-Nov-2021 22:56:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.95

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

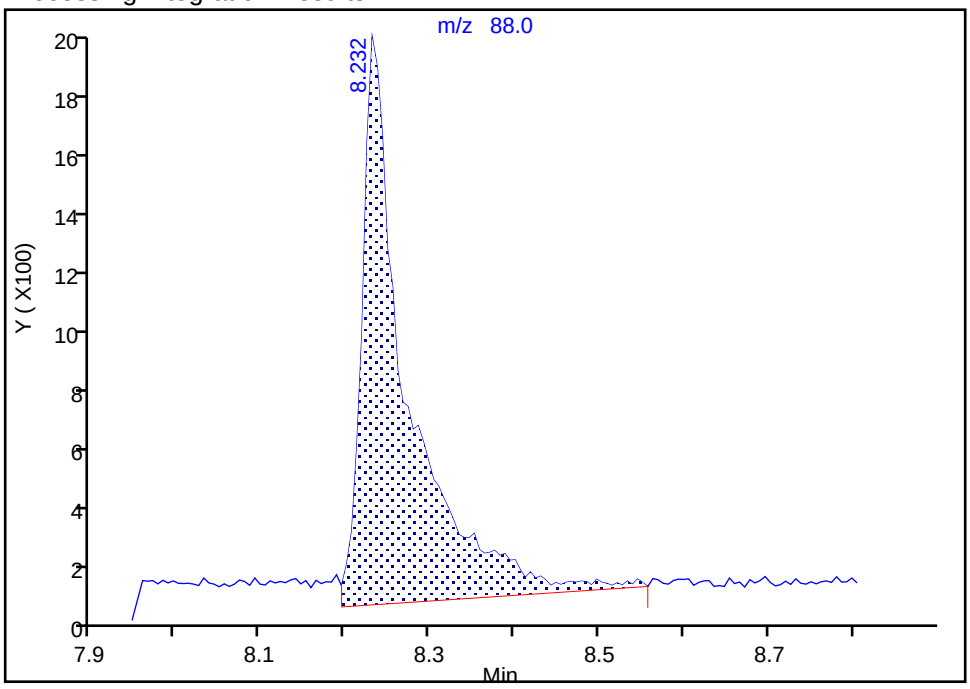
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202595.D				
Injection Date:	29-Nov-2021 22:56:30	Instrument ID:	A3UX20		
Lims ID:	240-160744-B-4 MS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

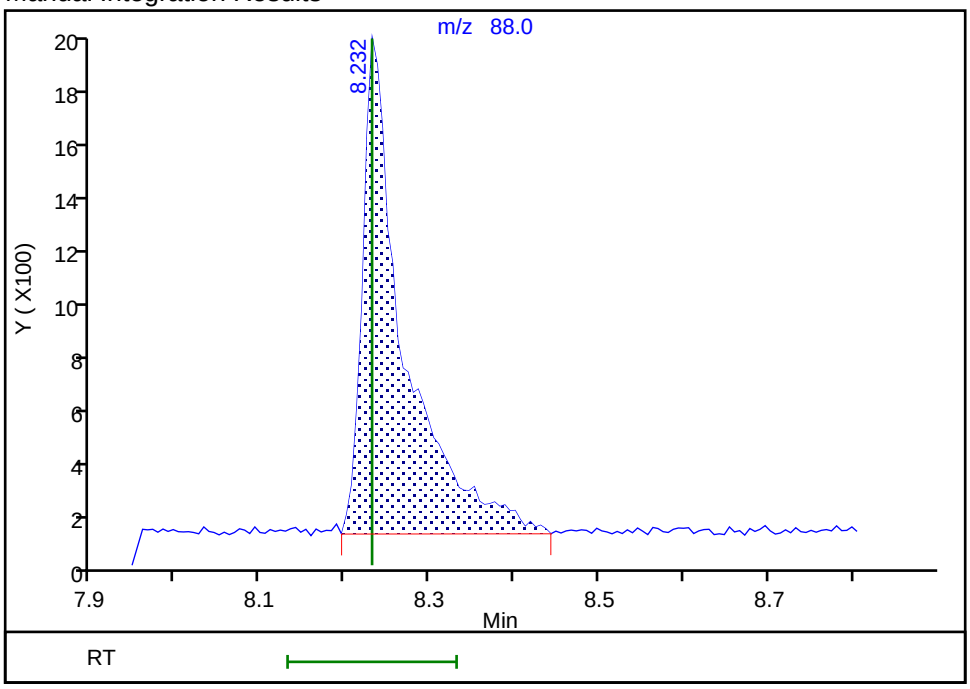
Processing Integration Results

RT: 8.23
Area: 7307
Amount: 11.666646
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 6411
Amount: 10.236057
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:12:27

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-160738-A-1 MS

Matrix: Water Lab File ID: 202627.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	42.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202627.D
Lims ID: 240-160738-A-1 MS
Client ID:
Sample Type: MS
Inject. Date: 30-Nov-2021 22:24:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115646-013
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 01-Dec-2021 16:01:55 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: seymourc Date: 01-Dec-2021 16:01:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	860678	10.0	10.3	
* 7 Fluorobenzene	96	7.424	7.424	0.000	100	2614011	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	74061	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	48	25776	10.0	42.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

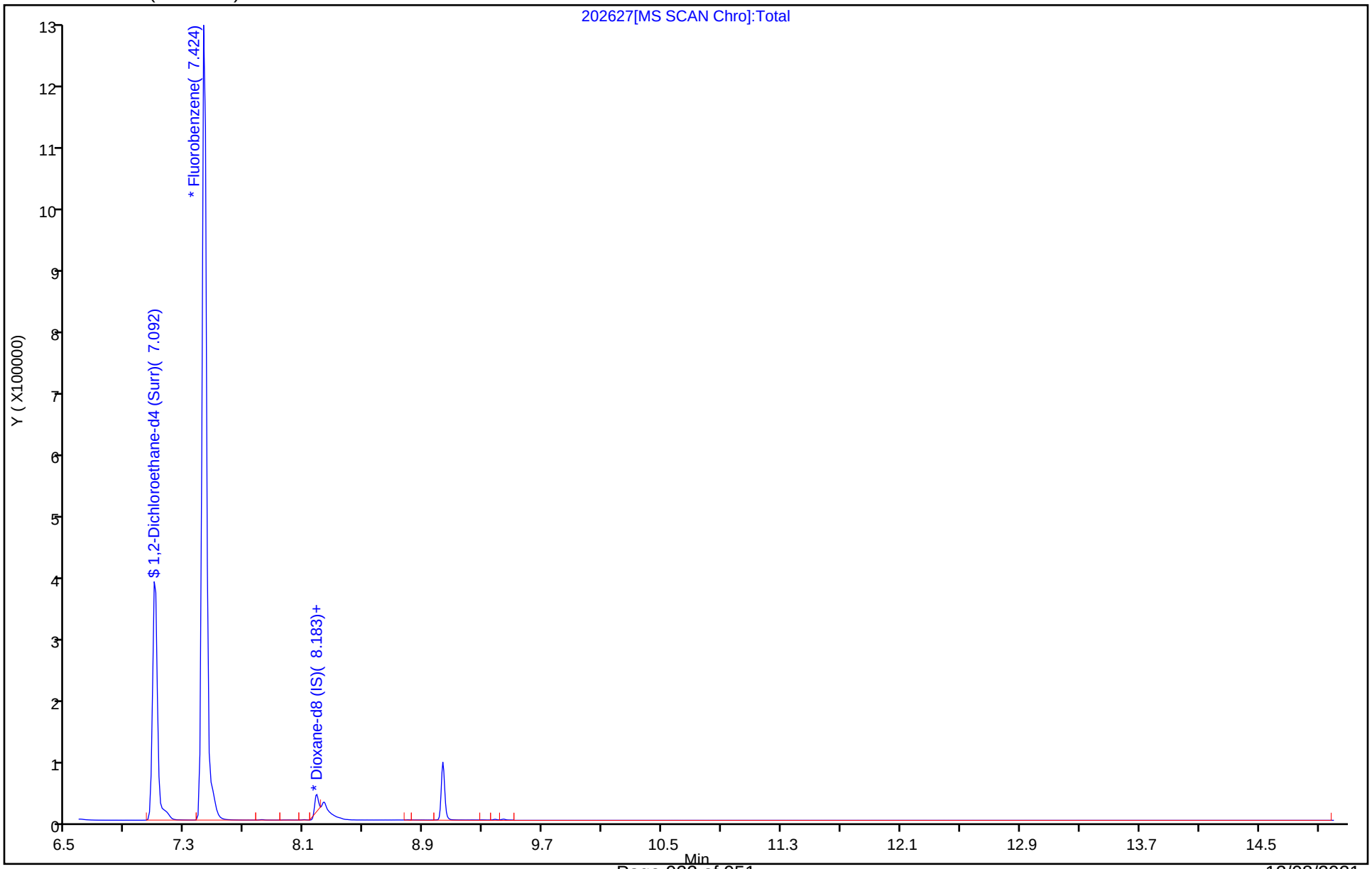
Report Date: 01-Dec-2021 16:02:16 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202627.D

Injection Date:	30-Nov-2021 22:24:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160738-A-1 MS			Worklist Smp#:	13
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202627.D				
Lims ID:	240-160738-A-1 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	30-Nov-2021 22:24:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 01-Dec-2021 16:01:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.10

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

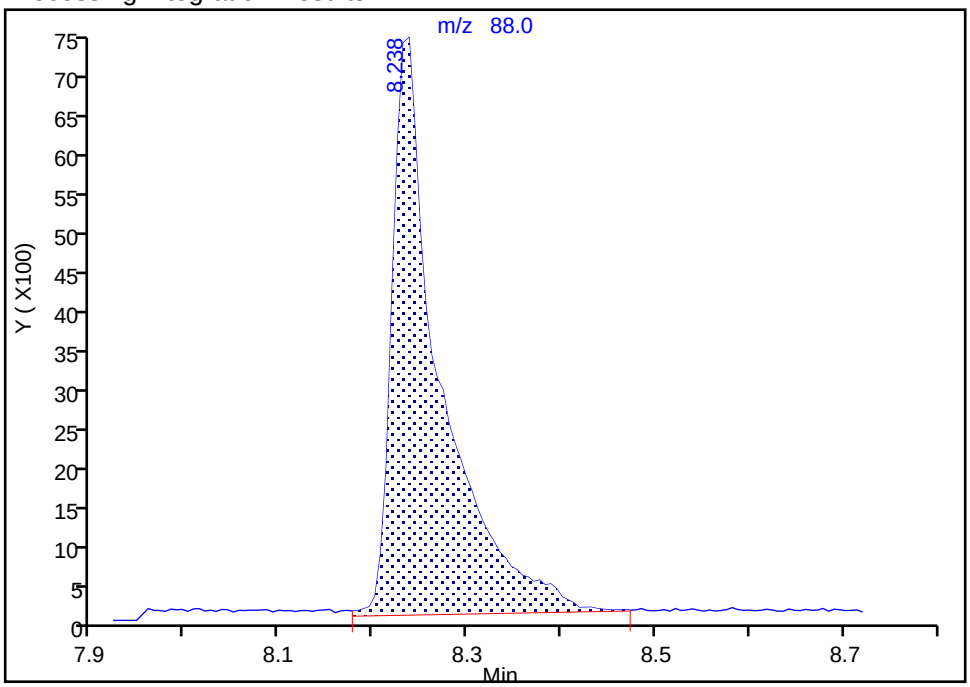
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202627.D				
Injection Date:	30-Nov-2021 22:24:30	Instrument ID:	A3UX20		
Lims ID:	240-160738-A-1 MS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

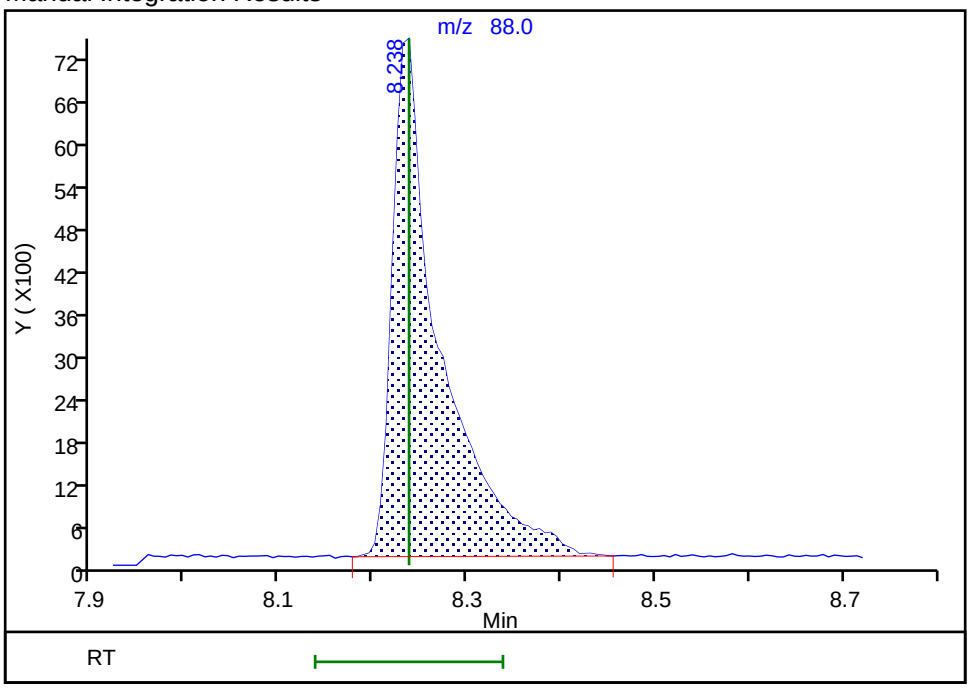
Processing Integration Results

RT: 8.24
Area: 26493
Amount: 43.829881
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 25776
Amount: 42.643680
Amount Units: ug/l



Reviewer: seymourc, 01-Dec-2021 16:01:31

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: SL-13_112321 MSD Lab Sample ID: 240-160744-4 MSD

Matrix: Water Lab File ID: 202596.D

Analysis Method: 8260B SIM Date Collected: 11/23/2021 10:20

Sample wt/vol: 15(mL) Date Analyzed: 11/29/2021 23:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 514943 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.79		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202596.D
Lims ID: 240-160744-B-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 29-Nov-2021 23:20:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115596-012
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 30-Nov-2021 18:20:30 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: seymourc Date: 30-Nov-2021 18:12:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.092	0.011	100	894426	10.0	10.1	
* 7 Fluorobenzene	96	7.436	7.423	0.013	100	2778618	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	82016	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.231	0.006	47	6551	10.0	9.79	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

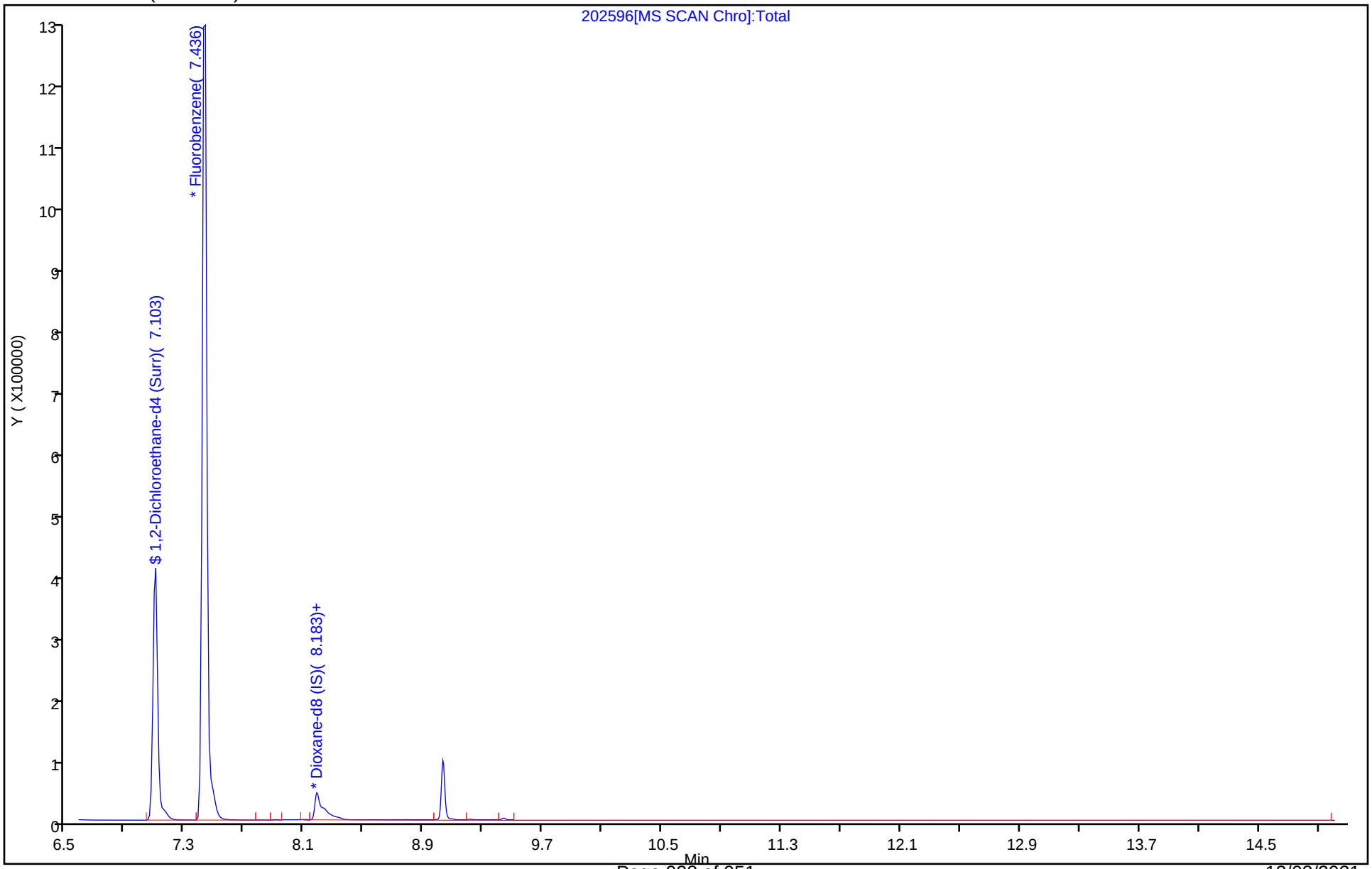
Report Date: 30-Nov-2021 18:20:34 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202596.D

Injection Date:	29-Nov-2021 23:20:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160744-B-4 MSD			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202596.D				
Lims ID:	240-160744-B-4 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	29-Nov-2021 23:20:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115596-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	30-Nov-2021 18:20:30	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1675				
First Level Reviewer: seymourc		Date:	30-Nov-2021 18:12:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.80

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

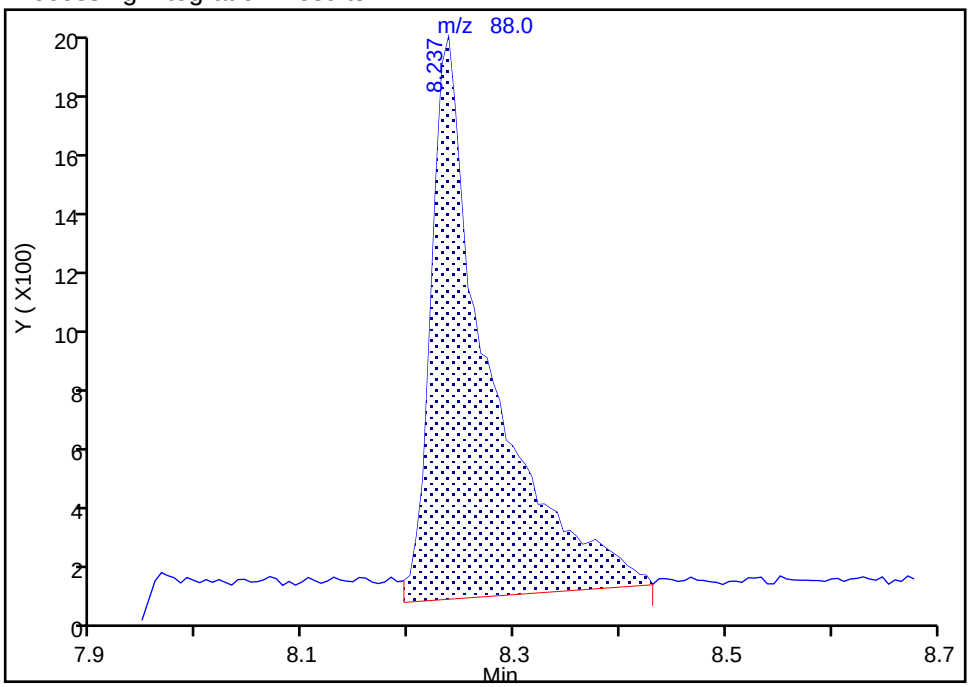
Data File: \\chromfs\Canton\ChromData\A3UX20\20211129-115596.b\202596.D
Injection Date: 29-Nov-2021 23:20:30 Instrument ID: A3UX20
Lims ID: 240-160744-B-4 MSD
Client ID:
Operator ID: 434006 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

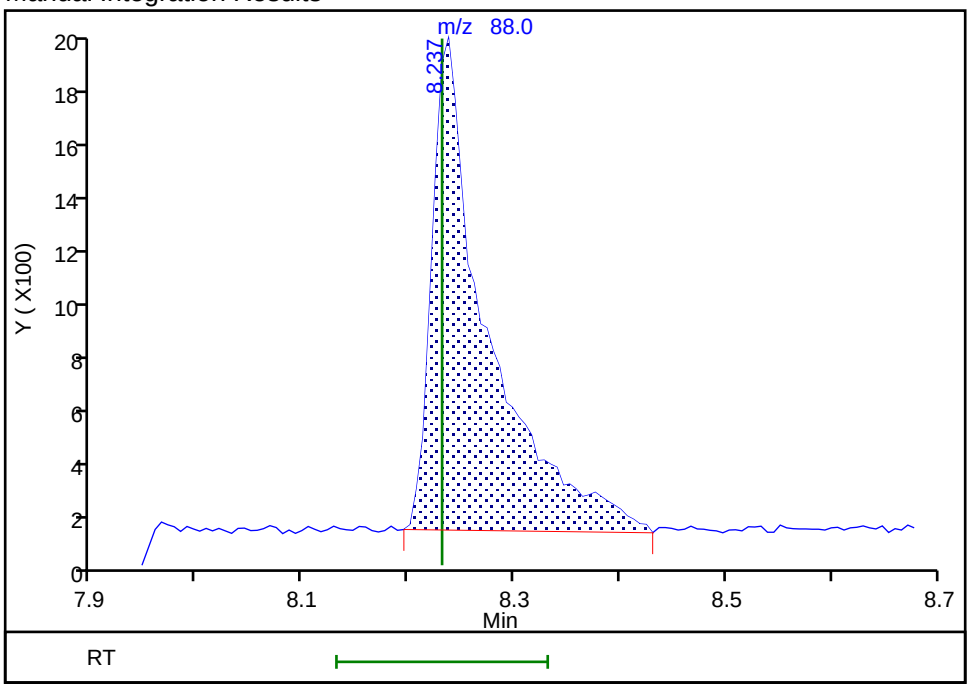
Processing Integration Results

RT: 8.24
Area: 7073
Amount: 10.566564
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6551
Amount: 9.786733
Amount Units: ug/l



Reviewer: seymourc, 30-Nov-2021 18:12:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-160738-A-1 MSD

Matrix: Water Lab File ID: 202628.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 11/30/2021 22:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 515124 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	39.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202628.D				
Lims ID:	240-160738-A-1 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	30-Nov-2021 22:48:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				
First Level Reviewer: seymourc		Date:	01-Dec-2021 16:01:55		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	869366	10.0	10.3	
* 7 Fluorobenzene	96	7.436	7.424	0.012	100	2638538	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	81155	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	47	26241	10.0	39.6	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vmdiox_spike_00285	Amount Added:	3.00	Units: uL	
vm150SS20_00004	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00195	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

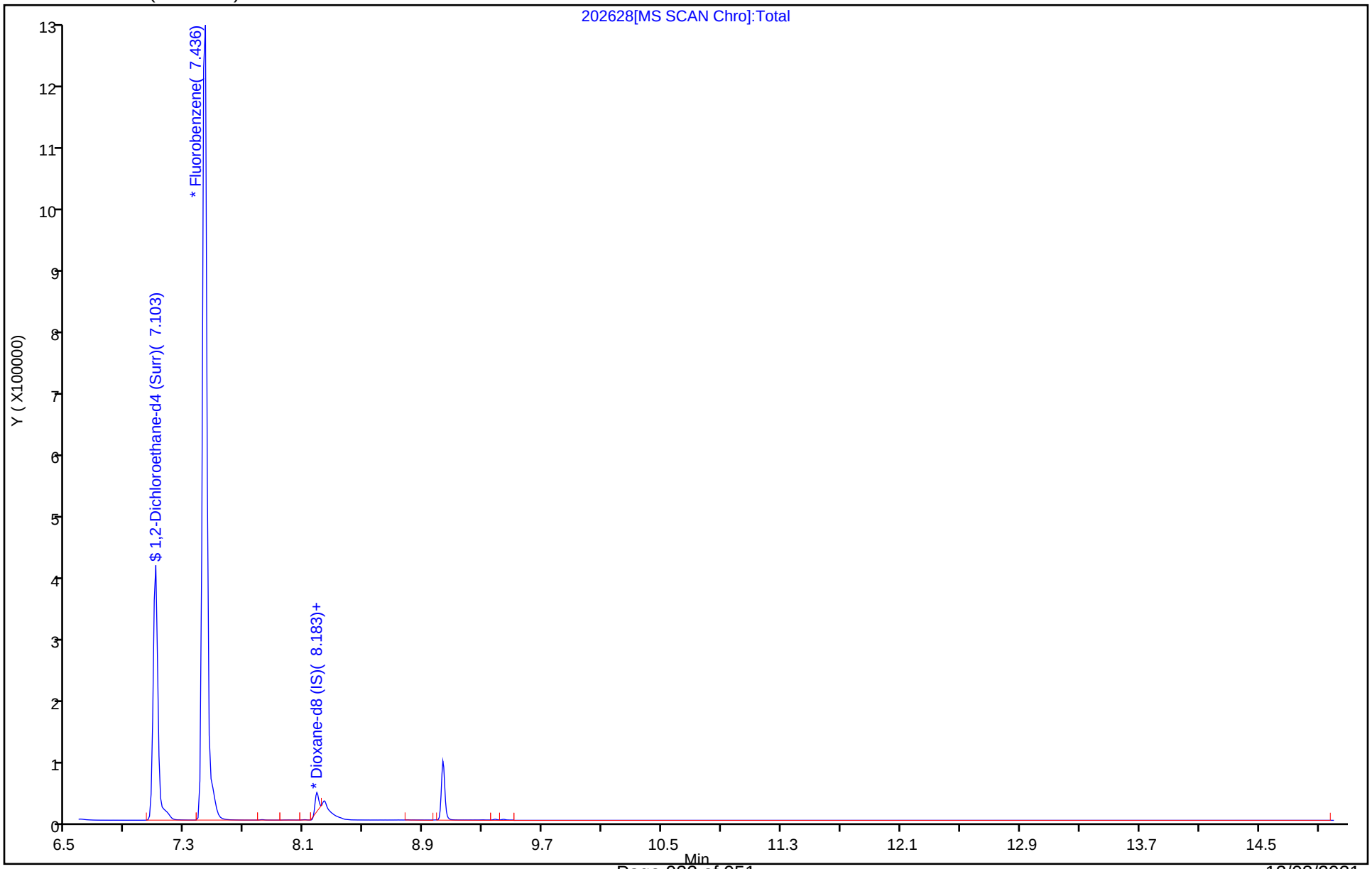
Report Date: 01-Dec-2021 16:02:16 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202628.D

Injection Date:	30-Nov-2021 22:48:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-160738-A-1 MSD			Worklist Smp#:	14
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202628.D				
Lims ID:	240-160738-A-1 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	30-Nov-2021 22:48:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0115646-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	01-Dec-2021 16:01:55	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1604				

First Level Reviewer: seymourc Date: 01-Dec-2021 16:01:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.17

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

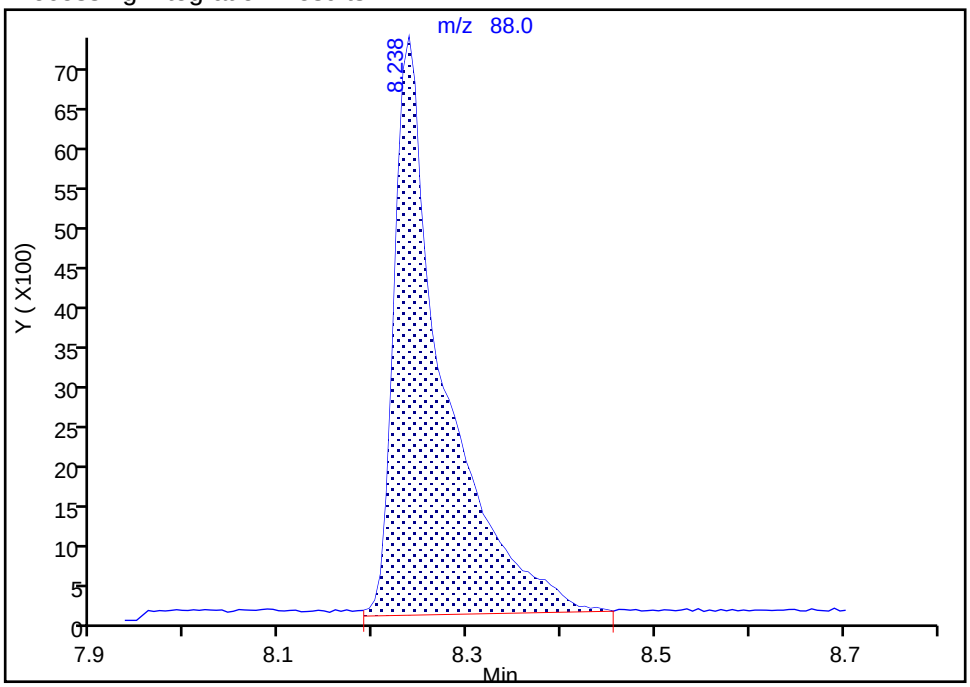
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211130-115646.b\202628.D				
Injection Date:	30-Nov-2021 22:48:30	Instrument ID:	A3UX20		
Lims ID:	240-160738-A-1 MSD				
Client ID:					
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

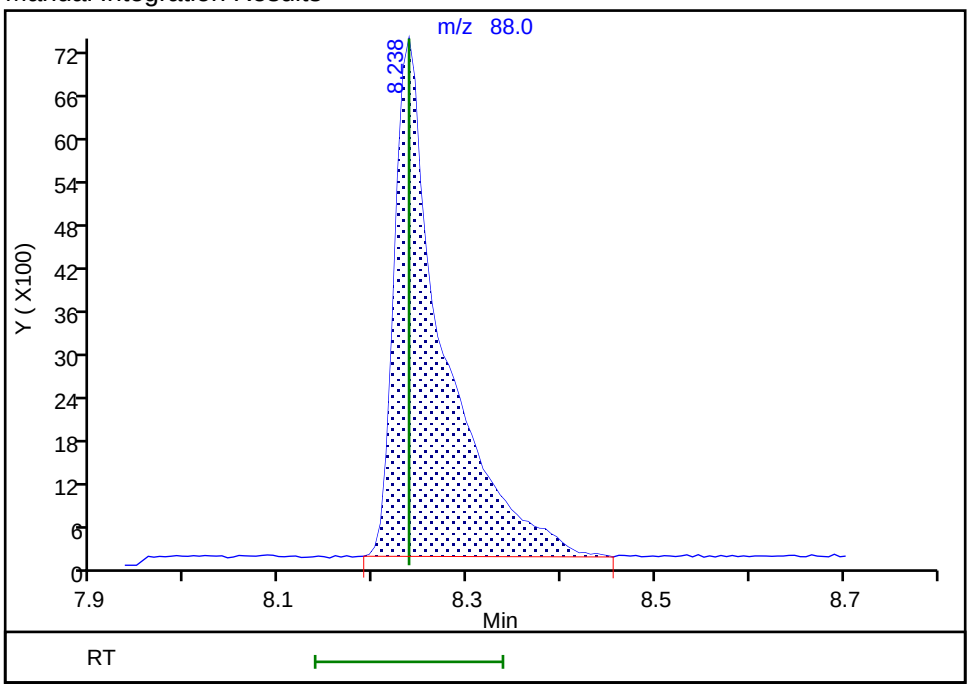
Processing Integration Results

RT: 8.24
Area: 26828
Amount: 40.504356
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 26241
Amount: 39.618116
Amount Units: ug/l



Reviewer: seymourc, 01-Dec-2021 16:01:49

Audit Action: Manually Integrated Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Start Date: 09/09/2021 13:33

Analysis Batch Number: 503003 End Date: 09/09/2021 18:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-503003/1		09/09/2021 13:33	1	BFB20126.D	DB-624 0.18(mm)
IC 240-503003/3		09/09/2021 14:25	1	201661.D	DB-624 0.18(mm)
IC 240-503003/4		09/09/2021 14:49	1	201662.D	DB-624 0.18(mm)
IC 240-503003/5		09/09/2021 15:14	1	201663.D	DB-624 0.18(mm)
IC 240-503003/6		09/09/2021 15:38	1	201664.D	DB-624 0.18(mm)
ICIS 240-503003/7		09/09/2021 16:03	1	201665.D	DB-624 0.18(mm)
IC 240-503003/8		09/09/2021 16:27	1	201666.D	DB-624 0.18(mm)
IC 240-503003/9		09/09/2021 16:52	1	201667.D	DB-624 0.18(mm)
IC 240-503003/10		09/09/2021 17:16	1	201668.D	DB-624 0.18(mm)
ICV 240-503003/12		09/09/2021 18:06	1	201670.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Start Date: 11/29/2021 19:24

Analysis Batch Number: 514943 End Date: 11/30/2021 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-514943/1		11/29/2021 19:24	1	BFB20169.D	DB-624 0.18(mm)
CCVIS 240-514943/3		11/29/2021 19:44	1	202587.D	DB-624 0.18(mm)
LCS 240-514943/4		11/29/2021 20:08	1	202588.D	DB-624 0.18(mm)
MB 240-514943/5		11/29/2021 20:32	1	202589.D	DB-624 0.18(mm)
ZZZZZ		11/29/2021 20:56	1		DB-624 0.18(mm)
ZZZZZ		11/29/2021 21:20	2		DB-624 0.18(mm)
240-160744-2	SL-15_112321	11/29/2021 21:44	1	202592.D	DB-624 0.18(mm)
240-160744-3	SL-14_112321	11/29/2021 22:08	1	202593.D	DB-624 0.18(mm)
240-160744-4	SL-13_112321	11/29/2021 22:32	1	202594.D	DB-624 0.18(mm)
240-160744-4 MS	SL-13_112321 MS	11/29/2021 22:56	1	202595.D	DB-624 0.18(mm)
240-160744-4 MSD	SL-13_112321 MSD	11/29/2021 23:20	1	202596.D	DB-624 0.18(mm)
240-160744-5	SL-7_112321	11/29/2021 23:44	1	202597.D	DB-624 0.18(mm)
240-160744-6	SL-6_112321	11/30/2021 00:07	1	202598.D	DB-624 0.18(mm)
240-160744-7	SL-5_112321	11/30/2021 00:31	1	202599.D	DB-624 0.18(mm)
240-160744-8	SL-8_112321	11/30/2021 00:55	1	202600.D	DB-624 0.18(mm)
240-160744-9	SL-9_112321	11/30/2021 01:19	1	202601.D	DB-624 0.18(mm)
240-160744-10	SL-10_112321	11/30/2021 01:43	1	202602.D	DB-624 0.18(mm)
240-160744-11	SL-11_112321	11/30/2021 02:07	1	202603.D	DB-624 0.18(mm)
240-160744-12	SL-12_112321	11/30/2021 02:31	1	202604.D	DB-624 0.18(mm)
240-160744-13	MH-1231_112421	11/30/2021 02:55	1	202605.D	DB-624 0.18(mm)
240-160744-14	SL-2_112421	11/30/2021 03:19	1	202606.D	DB-624 0.18(mm)
240-160744-15	SL-3_112421	11/30/2021 03:43	1	202607.D	DB-624 0.18(mm)
240-160744-16	SL-4_112421	11/30/2021 04:07	1	202608.D	DB-624 0.18(mm)
240-160744-17	SL-19_112321	11/30/2021 04:31	1	202609.D	DB-624 0.18(mm)
240-160744-18	SL-22_112321	11/30/2021 04:54	1	202610.D	DB-624 0.18(mm)
240-160744-19	SL-20_112321	11/30/2021 05:18	1	202611.D	DB-624 0.18(mm)
240-160744-20	SL-16_112421	11/30/2021 05:42	1	202612.D	DB-624 0.18(mm)
240-160744-21	SL-17_112421	11/30/2021 06:06	1	202613.D	DB-624 0.18(mm)
240-160744-22	SL-21_112421	11/30/2021 06:30	1	202614.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Instrument ID: A3UX20 Start Date: 11/30/2021 17:44

Analysis Batch Number: 515124 End Date: 11/30/2021 22:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-515124/1		11/30/2021 17:44	1	BFB20170.D	DB-624 0.18(mm)
CCVIS 240-515124/3		11/30/2021 18:25	1	202617.D	DB-624 0.18(mm)
LCS 240-515124/4		11/30/2021 18:49	1	202618.D	DB-624 0.18(mm)
MB 240-515124/5		11/30/2021 19:13	1	202619.D	DB-624 0.18(mm)
ZZZZZ		11/30/2021 19:37	1		DB-624 0.18(mm)
ZZZZZ		11/30/2021 20:00	1		DB-624 0.18(mm)
ZZZZZ		11/30/2021 20:24	1		DB-624 0.18(mm)
240-160744-23	SL-18_112421	11/30/2021 20:48	1	202623.D	DB-624 0.18(mm)
240-160744-24	DUP-01	11/30/2021 21:12	1	202624.D	DB-624 0.18(mm)
240-160744-25	DUP-02	11/30/2021 21:36	1	202625.D	DB-624 0.18(mm)
ZZZZZ		11/30/2021 22:00	1		DB-624 0.18(mm)
240-160738-A-1 MS		11/30/2021 22:24	1	202627.D	DB-624 0.18(mm)
240-160738-A-1 MSD		11/30/2021 22:48	1	202628.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00012	vm150SS20 00003	vm50ss 00453	vmbfb 00027
BFB 240-503003/1		8260B SIM		5 mL	5 mL				1 uL
IC 240-503003/3		8260B SIM		15 mL	15 mL	1 uL		0.15 uL	
IC 240-503003/4		8260B SIM		15 mL	15 mL	1 uL		0.3 uL	
IC 240-503003/5		8260B SIM		15 mL	15 mL	1 uL		0.75 uL	
IC 240-503003/6		8260B SIM		15 mL	15 mL	1 uL		1.5 uL	
ICIS 240-503003/7		8260B SIM		15 mL	15 mL	1 uL		3 uL	
IC 240-503003/8		8260B SIM		15 mL	15 mL	1 uL		7.5 uL	
IC 240-503003/9		8260B SIM		15 mL	15 mL	1 uL		15 uL	
IC 240-503003/10		8260B SIM		15 mL	15 mL	1 uL		30 uL	
ICV 240-503003/12		8260B SIM		15 mL	15 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00275	vmdioxanew 00264				
BFB 240-503003/1		8260B SIM							
IC 240-503003/3		8260B SIM			0.15 uL				
IC 240-503003/4		8260B SIM			0.3 uL				
IC 240-503003/5		8260B SIM			0.75 uL				
IC 240-503003/6		8260B SIM			1.5 uL				
ICIS 240-503003/7		8260B SIM			3 uL				
IC 240-503003/8		8260B SIM			7.5 uL				
IC 240-503003/9		8260B SIM			15 uL				
IC 240-503003/10		8260B SIM			30 uL				
ICV 240-503003/12		8260B SIM		3 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 514943 Batch Start Date: 11/29/21 19:24 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00017	vm150SS20 00004	vmbfb 00029
BFB 240-514943/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-514943/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-514943/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-514943/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-160744-C-2	SL-15_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-3	SL-14_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-4	SL-13_112321	8260B SIM	T	15 mL	15 mL	6 SU	1 uL	1 uL	
240-160744-B-4 MS	SL-13_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-B-4 MSD	SL-13_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-5	SL-7_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-6	SL-6_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-7	SL-5_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-8	SL-8_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-9	SL-9_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-10	SL-10_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-11	SL-11_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-12	SL-12_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-13	MH-1231_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-14	SL-2_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-15	SL-3_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-16	SL-4_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-17	SL-19_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-18	SL-22_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-C-19	SL-20_112321	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-20	SL-16_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-21	SL-17_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-22	SL-21_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 514943 Batch Start Date: 11/29/21 19:24 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00285	vmdioxanew 00273				
BFB 240-514943/1		8260B SIM							
CCVIS 240-514943/3		8260B SIM			3 uL				
LCS 240-514943/4		8260B SIM		3 uL					
MB 240-514943/5		8260B SIM							
240-160744-C-2	SL-15_112321	8260B SIM	T						
240-160744-C-3	SL-14_112321	8260B SIM	T						
240-160744-C-4	SL-13_112321	8260B SIM	T						
240-160744-B-4 MS	SL-13_112321	8260B SIM	T	3 uL					
240-160744-B-4 MSD	SL-13_112321	8260B SIM	T	3 uL					
240-160744-C-5	SL-7_112321	8260B SIM	T						
240-160744-C-6	SL-6_112321	8260B SIM	T						
240-160744-C-7	SL-5_112321	8260B SIM	T						
240-160744-A-8	SL-8_112321	8260B SIM	T						
240-160744-A-9	SL-9_112321	8260B SIM	T						
240-160744-A-10	SL-10_112321	8260B SIM	T						
240-160744-C-11	SL-11_112321	8260B SIM	T						
240-160744-A-12	SL-12_112321	8260B SIM	T						
240-160744-A-13	MH-1231_112421	8260B SIM	T						
240-160744-C-14	SL-2_112421	8260B SIM	T						
240-160744-C-15	SL-3_112421	8260B SIM	T						
240-160744-C-16	SL-4_112421	8260B SIM	T						
240-160744-C-17	SL-19_112321	8260B SIM	T						
240-160744-C-18	SL-22_112321	8260B SIM	T						
240-160744-C-19	SL-20_112321	8260B SIM	T						
240-160744-A-20	SL-16_112421	8260B SIM	T						
240-160744-A-21	SL-17_112421	8260B SIM	T						
240-160744-A-22	SL-21_112421	8260B SIM	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 514943 Batch Start Date: 11/29/21 19:24 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Batch Notes	
pH Indicator ID	HC157843

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515124 Batch Start Date: 11/30/21 17:44 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00017	vm150SS20 00004	vmbfb 00029
BFB 240-515124/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-515124/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-515124/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-515124/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-160744-A-23	SL-18_112421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-24	DUP-01	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160744-A-25	DUP-02	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160738-A-1 MS		8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-160738-A-1 MSD		8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00285	vmdioxanew 00273				
BFB 240-515124/1		8260B SIM							
CCVIS 240-515124/3		8260B SIM			3 uL				
LCS 240-515124/4		8260B SIM		3 uL					
MB 240-515124/5		8260B SIM							
240-160744-A-23	SL-18_112421	8260B SIM	T						
240-160744-A-24	DUP-01	8260B SIM	T						
240-160744-A-25	DUP-02	8260B SIM	T						
240-160738-A-1 MS		8260B SIM	T	3 uL					
240-160738-A-1 MSD		8260B SIM	T	3 uL					

Batch Notes	
pH Indicator ID	HC157843

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-160744-1

SDG No.:

Batch Number: 515124 Batch Start Date: 11/30/21 17:44 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 3 COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Andrew Banitt, Samantha Hindle	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☒ 3 days ☐ day; 3 day		Walk-in client: Lab sampling:
Phone: 248-994-2240	Method of Shipment/Carrier:			Job/SDG No:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-15_112321	11/23/21	0930		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-14_112321	11/23/21	0955		X						6					N	G	X	X	X	X	X	X	X	
SL-13_112321	11/23/21	1020		X						6					N	G	X	X	X	X	X	X	X	
SL-7_112321	11/23/21	1055		X						6					N	G	X	X	X	X	X	X	X	
SL-6_112321	11/23/21	1115		X						6					N	G	X	X	X	X	X	X	X	
SL-5_112321	11/23/21	1255		X						6					N	G	X	X	X	X	X	X	X	
SL-8_112321	11/23/21	1320		X						6					N	G	X	X	X	X	X	X	X	
SL-9_112321	11/23/21	1335		X						6					N	G	X	X	X	X	X	X	X	
SL-10_112321	11/23/21	1400		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Andrew Banitt	Arcadis	11/24/21 1550		ETA	11/24/21 1550
	ETA	11/24/21 1550	Cold Storage	ETA	11/24/21 1550
Cold Storage to Hold	ETA	11/26/21 1005	Adam Gemus	ETA	11-27-21 0820

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240-160744 Chain of Custody

12/08/2021

MICHIGAN

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	2 of 3 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Andrew Banitt, Samantha Hindle	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☒ 3 days		Walk-in client:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day		Lab sampling:
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
SL-11_112321	11/23/21	1425		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12_112321	11/23/21	1445		X						6					N	G	X	X	X	X	X	X	X					
MH-1231_112421	11/24/21	0855		X						6					N	G	X	X	X	X	X	X	X					
SL-2_112421	11/24/21	0940		X						6					N	G	X	X	X	X	X	X	X					
SL-3_112421	11/24/21	1000		X						6					N	G	X	X	X	X	X	X	X					
SL-4_112421	11/24/21	1210		X						6					N	G	X	X	X	X	X	X	X					
SL-19_112321	11/23/21	1520		X						6					N	G	X	X	X	X	X	X	X					
SL-22_112321	11/23/21	1540		X						6					N	G	X	X	X	X	X	X	X					
SL-20_112321	11/23/21	1610		X						6					N	G	X	X	X	X	X	X	X					
SL-16_112421	11/24/21	1020		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	11/24/21 1550		ETA	11/24/21 1550
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	11/24/21 1550	Cold Storage	ETA	11/24/21 1550
Relinquished by: Cold storage to TA	Company: ETA	Date/Time: 11-26-21 1005	Received in Laboratory by:	Company: ETA	Date/Time: 11/27/21 0900

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MICHIGAN 100

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	3 of 3 COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Andrew Banitt, Samantha Hindle	TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☒ 3 days ☐ — 3 day		Walk-in client: Lab sampling: Job/SDG No:
Phone: 248-994-2240	Method of Shipment/Carrier:			
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
SL-17_112421	11/24/21	1045		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-21_112421	11/24/21	1250		X						6					N	G	X	X	X	X	X	X	X					
SL-18_112421	11/24/21	1140		X						6					N	G	X	X	X	X	X	X	X					
DUP-01	11/24/21	--		X						6					N	G	X	X	X	X	X	X	X					
DUP-02	11/24/21	--		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	11/24/21 1550		ETA	11/24/21 1550
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	11/24/21 1550	Cold Storage	ETA	11/24/21 1550
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	ETA	11-26-21 1005		ETA	11-27-21 0820

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12/08/2021

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 160744**
Canton Facility

Client Arcadis Site Name

Cooler unpacked by:

Cooler Received on 11-27-21 Opened on 11-27-21

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # NA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF +0.2°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1ea	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC157842
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 010420IG	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

Received an extra Trip Blank vial, not listed on CoC.
Trip Blank does not receive 1,4-Dioxane, per project manager.

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login #: 160744

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	**IR-14** IR-15	2.3	2.4	**Wet Ice** Blue Ice Dry Ice Water None
TA Client Box Other	**IR-14** IR-15	1.9	2.0	**Wet Ice** Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
				☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

ANALYTICAL REPORT

Job Number: 240-161553-1

Job Description: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
12/27/2021 8:51 AM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
12/27/2021

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-161553-1

Comments
No additional comments.

Receipt
The samples were received on 12/18/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 3.0º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-161553-1

No Detections.

Client Sample ID: SL-4_121421 — Lab Sample ID: 240-161553-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.5		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.0		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-18_121421 — Lab Sample ID: 240-161553-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.0		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-17_121421 — Lab Sample ID: 240-161553-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.6		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	6.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	5.7		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-16_121421 — Lab Sample ID: 240-161553-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	5.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-3_121421 — Lab Sample ID: 240-161553-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-2_121421 — Lab Sample ID: 240-161553-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.6		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.9		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	3.9		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MH-1231_121421 — Lab Sample ID: 240-161553-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	14		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-21_121421 — Lab Sample ID: 240-161553-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.86	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.84	J	1.0	0.46	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-20_121421 — Lab Sample ID: 240-161553-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.74	J	1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: SL-22_121421 — Lab Sample ID: 240-161553-11

No Detections.

Client Sample ID: SL-15_121621 — Lab Sample ID: 240-161553-12

No Detections.

Client Sample ID: SL-14_121621 — Lab Sample ID: 240-161553-13

No Detections.

Client Sample ID: SL-13_121621 — Lab Sample ID: 240-161553-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.49	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-7_121621 — Lab Sample ID: 240-161553-15

No Detections.

Client Sample ID: SL-6_121621 — Lab Sample ID: 240-161553-16

No Detections.

Client Sample ID: SL-5_121621 — Lab Sample ID: 240-161553-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-8_121621 — Lab Sample ID: 240-161553-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-9_121621 — Lab Sample ID: 240-161553-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	3.4		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-10_121621 — Lab Sample ID: 240-161553-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.6		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-11_121621
Lab Sample ID: 240-161553-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.5		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-12_121621
Lab Sample ID: 240-161553-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	0.72	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: SL-19_121621
Lab Sample ID: 240-161553-23

No Detections.

Client Sample ID: DUP-01
Lab Sample ID: 240-161553-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.1		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	4.9		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.9		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-02
Lab Sample ID: 240-161553-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	10		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	22		1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	0.55	J	1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	23		1.0	0.45	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-161553-1

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 14:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 14:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 14:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*12/20/21 14:20*	*1*
4-Bromofluorobenzene (Surr)	*75*		*56 - 136*		*12/20/21 14:20*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*12/20/21 14:20*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*12/20/21 14:20*	*1*

Client Sample ID: SL-4_121421 — Lab Sample ID: 240-161553-2

Date Collected: 12/14/21 09:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		2.0	0.86	ug/L			12/20/21 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 120*		*12/20/21 22:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 14:43	1
cis-1,2-Dichloroethene	**5.5**		1.0	0.46	ug/L			12/20/21 14:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 14:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:43	1
Vinyl chloride	**4.0**		1.0	0.45	ug/L			12/20/21 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*12/20/21 14:43*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*12/20/21 14:43*	*1*
Toluene-d8 (Surr)	*115*		*78 - 122*		*12/20/21 14:43*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*12/20/21 14:43*	*1*

Client Sample ID: SL-18_121421 — Lab Sample ID: 240-161553-3

Date Collected: 12/14/21 10:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.1**		2.0	0.86	ug/L			12/20/21 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*12/20/21 23:05*	*1*

Client Sample ID: SL-18_121421 — Lab Sample ID: 240-161553-3

Date Collected: 12/14/21 10:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 15:05	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			12/20/21 15:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 15:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:05	1
Vinyl chloride	**4.0**		1.0	0.45	ug/L			12/20/21 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*12/20/21 15:05*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*12/20/21 15:05*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*12/20/21 15:05*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*12/20/21 15:05*	*1*

Client Sample ID: SL-17_121421 — Lab Sample ID: 240-161553-4

Date Collected: 12/14/21 10:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.6**		2.0	0.86	ug/L			12/20/21 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*12/20/21 23:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 15:27	1
cis-1,2-Dichloroethene	**6.7**		1.0	0.46	ug/L			12/20/21 15:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 15:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:27	1
Vinyl chloride	**5.7**		1.0	0.45	ug/L			12/20/21 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*12/20/21 15:27*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*12/20/21 15:27*	*1*
Toluene-d8 (Surr)	*115*		*78 - 122*		*12/20/21 15:27*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*12/20/21 15:27*	*1*

Client Sample ID: SL-16_121421 — Lab Sample ID: 240-161553-5

Date Collected: 12/14/21 10:45 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			12/20/21 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*12/20/21 23:52*	*1*

Client Sample ID: SL-16_121421 — Lab Sample ID: 240-161553-5

Date Collected: 12/14/21 10:45 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 15:49	1
cis-1,2-Dichloroethene	**5.0**		1.0	0.46	ug/L			12/20/21 15:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 15:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:49	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			12/20/21 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*12/20/21 15:49*	*1*
4-Bromofluorobenzene (Surr)	*76*		*56 - 136*		*12/20/21 15:49*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*12/20/21 15:49*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*12/20/21 15:49*	*1*

Client Sample ID: SL-3_121421 — Lab Sample ID: 240-161553-6

Date Collected: 12/14/21 11:15 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			12/21/21 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 120*		*12/21/21 00:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 16:11	1
cis-1,2-Dichloroethene	**6.0**		1.0	0.46	ug/L			12/20/21 16:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 16:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:11	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			12/20/21 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*12/20/21 16:11*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*12/20/21 16:11*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*12/20/21 16:11*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/20/21 16:11*	*1*

Client Sample ID: SL-2_121421 — Lab Sample ID: 240-161553-7

Date Collected: 12/14/21 11:45 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.6**		2.0	0.86	ug/L			12/21/21 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*12/21/21 00:40*	*1*

Client Sample ID: SL-2_121421 — Lab Sample ID: 240-161553-7

Date Collected: 12/14/21 11:45 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 16:33	1
cis-1,2-Dichloroethene	**4.9**		1.0	0.46	ug/L			12/20/21 16:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 16:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:33	1
Vinyl chloride	**3.9**		1.0	0.45	ug/L			12/20/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/20/21 16:33*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*12/20/21 16:33*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/20/21 16:33*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/20/21 16:33*	*1*

Client Sample ID: MH-1231_121421 — Lab Sample ID: 240-161553-8

Date Collected: 12/14/21 12:10 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			12/21/21 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*12/21/21 01:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 16:55	1
cis-1,2-Dichloroethene	**17**		1.0	0.46	ug/L			12/20/21 16:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 16:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:55	1
Vinyl chloride	**14**		1.0	0.45	ug/L			12/20/21 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*12/20/21 16:55*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*12/20/21 16:55*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*12/20/21 16:55*	*1*
Dibromofluoromethane (Surr)	*81*		*73 - 120*		*12/20/21 16:55*	*1*

Client Sample ID: SL-21_121421 — Lab Sample ID: 240-161553-9

Date Collected: 12/14/21 13:40 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.86**	**J**	2.0	0.86	ug/L			12/21/21 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*12/21/21 01:27*	*1*

Client Sample ID: SL-21_121421 — Lab Sample ID: 240-161553-9

Date Collected: 12/14/21 13:40 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 17:17	1
cis-1,2-Dichloroethene	**0.84**	**J**	1.0	0.46	ug/L			12/20/21 17:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 17:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 17:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 17:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*12/20/21 17:17*	*1*
4-Bromofluorobenzene (Surr)	*79*		*56 - 136*		*12/20/21 17:17*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*12/20/21 17:17*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 120*		*12/20/21 17:17*	*1*

Client Sample ID: SL-20_121421 — Lab Sample ID: 240-161553-10

Date Collected: 12/14/21 14:05 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*12/21/21 01:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 17:40	1
cis-1,2-Dichloroethene	**0.74**	**J**	1.0	0.46	ug/L			12/20/21 17:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 17:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 17:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 17:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*12/20/21 17:40*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*12/20/21 17:40*	*1*
Toluene-d8 (Surr)	*112*		*78 - 122*		*12/20/21 17:40*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/20/21 17:40*	*1*

Client Sample ID: SL-22_121421 — Lab Sample ID: 240-161553-11

Date Collected: 12/14/21 14:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*12/21/21 03:03*	*1*

Client Sample ID: SL-22_121421 — Lab Sample ID: 240-161553-11

Date Collected: 12/14/21 14:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 18:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 18:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 18:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:02	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*12/20/21 18:02*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*12/20/21 18:02*	*1*
Toluene-d8 (Surr)	*111*		*78 - 122*		*12/20/21 18:02*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/20/21 18:02*	*1*

Client Sample ID: SL-15_121621 — Lab Sample ID: 240-161553-12

Date Collected: 12/16/21 08:20 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*12/21/21 03:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 18:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 18:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 18:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*12/20/21 18:24*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*12/20/21 18:24*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*12/20/21 18:24*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*12/20/21 18:24*	*1*

Client Sample ID: SL-14_121621 — Lab Sample ID: 240-161553-13

Date Collected: 12/16/21 08:35 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*12/21/21 03:51*	*1*

Client Sample ID: SL-14_121621 — Lab Sample ID: 240-161553-13

Date Collected: 12/16/21 08:35 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 18:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 18:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 18:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 18:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/20/21 18:46*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*12/20/21 18:46*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/20/21 18:46*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*12/20/21 18:46*	*1*

Client Sample ID: SL-13_121621 — Lab Sample ID: 240-161553-14

Date Collected: 12/16/21 08:50 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*12/21/21 04:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 19:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 19:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 19:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:08	1
Vinyl chloride	**0.49**	**J**	1.0	0.45	ug/L			12/20/21 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/20/21 19:08*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*12/20/21 19:08*	*1*
Toluene-d8 (Surr)	*114*		*78 - 122*		*12/20/21 19:08*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*12/20/21 19:08*	*1*

Client Sample ID: SL-7_121621 — Lab Sample ID: 240-161553-15

Date Collected: 12/16/21 09:05 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 04:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*12/21/21 04:38*	*1*

Client Sample ID: SL-7_121621 — Lab Sample ID: 240-161553-15

Date Collected: 12/16/21 09:05 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 19:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 19:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 19:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*12/20/21 19:31*	*1*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*		*12/20/21 19:31*	*1*
Toluene-d8 (Surr)	*113*		*78 - 122*		*12/20/21 19:31*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*12/20/21 19:31*	*1*

Client Sample ID: SL-6_121621 — Lab Sample ID: 240-161553-16

Date Collected: 12/16/21 09:35 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*12/21/21 05:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 19:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 19:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 19:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 19:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*12/20/21 19:53*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*12/20/21 19:53*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/20/21 19:53*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*12/20/21 19:53*	*1*

Client Sample ID: SL-5_121621 — Lab Sample ID: 240-161553-17

Date Collected: 12/16/21 09:55 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			12/21/21 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*12/21/21 05:26*	*1*

Client Sample ID: SL-5_121621 — Lab Sample ID: 240-161553-17

Date Collected: 12/16/21 09:55 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 20:15	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			12/20/21 20:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 20:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 20:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 20:15	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			12/20/21 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*12/20/21 20:15*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*12/20/21 20:15*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*12/20/21 20:15*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*12/20/21 20:15*	*1*

Client Sample ID: SL-8_121621 — Lab Sample ID: 240-161553-18

Date Collected: 12/16/21 10:10 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			12/21/21 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*12/21/21 05:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 20:37	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			12/20/21 20:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 20:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 20:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 20:37	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			12/20/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*12/20/21 20:37*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*12/20/21 20:37*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*12/20/21 20:37*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/20/21 20:37*	*1*

Client Sample ID: SL-9_121621 — Lab Sample ID: 240-161553-19

Date Collected: 12/16/21 10:20 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			12/21/21 06:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*12/21/21 06:14*	*1*

Client Sample ID: SL-9_121621 — Lab Sample ID: 240-161553-19

Date Collected: 12/16/21 10:20 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 21:00	1
cis-1,2-Dichloroethene	**3.4**		1.0	0.46	ug/L			12/20/21 21:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 21:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 21:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 21:00	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			12/20/21 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/20/21 21:00*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*12/20/21 21:00*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*12/20/21 21:00*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*12/20/21 21:00*	*1*

Client Sample ID: SL-10_121621 — Lab Sample ID: 240-161553-20

Date Collected: 12/16/21 10:35 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.6**		2.0	0.86	ug/L			12/21/21 06:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*12/21/21 06:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 21:22	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			12/20/21 21:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 21:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 21:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 21:22	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			12/20/21 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*12/20/21 21:22*	*1*
4-Bromofluorobenzene (Surr)	*85*		*56 - 136*		*12/20/21 21:22*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*12/20/21 21:22*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*12/20/21 21:22*	*1*

Client Sample ID: SL-11_121621 — Lab Sample ID: 240-161553-21

Date Collected: 12/16/21 10:50 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.5**		2.0	0.86	ug/L			12/21/21 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*12/21/21 07:02*	*1*

Client Sample ID: SL-11_121621 — Lab Sample ID: 240-161553-21

Date Collected: 12/16/21 10:50 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 14:19	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			12/20/21 14:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 14:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:19	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			12/20/21 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*12/20/21 14:19*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*12/20/21 14:19*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*12/20/21 14:19*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*12/20/21 14:19*	*1*

Client Sample ID: SL-12_121621 — Lab Sample ID: 240-161553-22

Date Collected: 12/16/21 11:05 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.8**	**J**	2.0	0.86	ug/L			12/21/21 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*12/21/21 07:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 14:45	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			12/20/21 14:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 14:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 14:45	1
Vinyl chloride	**0.72**	**J**	1.0	0.45	ug/L			12/20/21 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*12/20/21 14:45*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*12/20/21 14:45*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*12/20/21 14:45*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*12/20/21 14:45*	*1*

Client Sample ID: SL-19_121621 — Lab Sample ID: 240-161553-23

Date Collected: 12/16/21 11:15 — **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*		*12/21/21 21:06*	*1*

Client Sample ID: SL-19_121621 — Lab Sample ID: 240-161553-23

Date Collected: 12/16/21 11:15 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 15:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 15:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 15:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 15:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*12/20/21 15:10*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*12/20/21 15:10*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*12/20/21 15:10*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*12/20/21 15:10*	*1*

Client Sample ID: DUP-01 — Lab Sample ID: 240-161553-24

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.1**		2.0	0.86	ug/L			12/21/21 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*		*12/21/21 22:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 16:25	1
cis-1,2-Dichloroethene	**4.9**		1.0	0.46	ug/L			12/20/21 16:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 16:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:25	1
Vinyl chloride	**2.9**		1.0	0.45	ug/L			12/20/21 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*12/20/21 16:25*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*12/20/21 16:25*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*12/20/21 16:25*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*12/20/21 16:25*	*1*

Client Sample ID: DUP-02 — Lab Sample ID: 240-161553-25

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**10**		2.0	0.86	ug/L			12/21/21 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*12/21/21 22:45*	*1*

Client Sample ID: DUP-02
Date Collected: 12/14/21 00:00
Date Received: 12/18/21 08:00

Lab Sample ID: 240-161553-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 16:50	1
cis-1,2-Dichloroethene	**22**		1.0	0.46	ug/L			12/20/21 16:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 16:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 16:50	1
Trichloroethene	**0.55**	**J**	1.0	0.44	ug/L			12/20/21 16:50	1
Vinyl chloride	**23**		1.0	0.45	ug/L			12/20/21 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 137*		*12/20/21 16:50*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*12/20/21 16:50*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*12/20/21 16:50*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*12/20/21 16:50*	*1*

Default Detection Limits

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-161506-B-27 MS	Matrix Spike	100	107	96	105
240-161506-B-27 MSD	Matrix Spike Duplicate	103	106	97	110
240-161553-1	TRIP BLANK	96	75	103	87
240-161553-2	SL-4_121421	100	81	115	92
240-161553-3	SL-18_121421	94	80	103	89
240-161553-4	SL-17_121421	100	91	115	95
240-161553-5	SL-16_121421	89	76	102	84
240-161553-6	SL-3_121421	96	86	106	91
240-161553-7	SL-2_121421	98	86	109	91
240-161553-8	MH-1231_121421	89	81	100	81
240-161553-9	SL-21_121421	92	79	102	85
240-161553-10	SL-20_121421	94	84	112	91
240-161553-11	SL-22_121421	94	84	111	91
240-161553-12	SL-15_121621	97	82	110	89
240-161553-13	SL-14_121621	98	81	109	92
240-161553-14	SL-13_121621	98	86	114	93
240-161553-15	SL-7_121621	99	86	113	94
240-161553-16	SL-6_121621	97	83	109	92
240-161553-17	SL-5_121621	99	84	106	89
240-161553-18	SL-8_121621	97	82	106	90
240-161553-19	SL-9_121621	98	83	109	91
240-161553-20	SL-10_121621	98	85	110	89
240-161553-20 MS	SL-10_121621	97	90	107	88
240-161553-20 MSD	SL-10_121621	96	88	106	83
240-161553-21	SL-11_121621	101	101	96	101
240-161553-22	SL-12_121621	97	102	98	97
240-161553-23	SL-19_121621	95	100	96	105
240-161553-24	DUP-01	100	103	95	102
240-161553-25	DUP-02	86	100	101	97
LCS 240-517187/4	Lab Control Sample	96	88	114	90
LCS 240-517192/5	Lab Control Sample	97	102	97	100
MB 240-517187/6	Method Blank	97	79	108	90
MB 240-517192/7	Method Blank	100	94	99	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-161553-2	SL-4_121421	96
240-161553-3	SL-18_121421	101
240-161553-4	SL-17_121421	102
240-161553-5	SL-16_121421	100

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-161553-6	SL-3_121421	97						
240-161553-7	SL-2_121421	99						
240-161553-8	MH-1231_121421	102						
240-161553-9	SL-21_121421	101						
240-161553-10	SL-20_121421	101						
240-161553-10 MS	SL-20_121421	103						
240-161553-10 MSD	SL-20_121421	102						
240-161553-11	SL-22_121421	101						
240-161553-12	SL-15_121621	103						
240-161553-13	SL-14_121621	100						
240-161553-14	SL-13_121621	102						
240-161553-15	SL-7_121621	103						
240-161553-16	SL-6_121621	103						
240-161553-17	SL-5_121621	102						
240-161553-18	SL-8_121621	104						
240-161553-19	SL-9_121621	103						
240-161553-20	SL-10_121621	101						
240-161553-21	SL-11_121621	102						
240-161553-22	SL-12_121621	103						
240-161553-23	SL-19_121621	89						
240-161553-23 MS	SL-19_121621	91						
240-161553-23 MSD	SL-19_121621	91						
240-161553-24	DUP-01	89						
240-161553-25	DUP-02	88						
LCS 240-517240/4	Lab Control Sample	99						
LCS 240-517292/4	Lab Control Sample	89						
MB 240-517240/5	Method Blank	100						
MB 240-517292/5	Method Blank	89						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-517187/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 13:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 13:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 13:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 13:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*12/20/21 13:58*	*1*
4-Bromofluorobenzene (Surr)	*79*		*56 - 136*		*12/20/21 13:58*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*12/20/21 13:58*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*12/20/21 13:58*	*1*

Lab Sample ID: LCS 240-517187/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.5		ug/L		105	63 - 134
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	77 - 123
Tetrachloroethene	10.0	11.3		ug/L		113	76 - 123
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	75 - 124
Trichloroethene	10.0	9.06		ug/L		91	70 - 122
Vinyl chloride	10.0	11.4		ug/L		114	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*
Toluene-d8 (Surr)	*114*		*78 - 122*
Dibromofluoromethane (Surr)	*90*		*73 - 120*

Lab Sample ID: 240-161553-20 MS **Client Sample ID: SL-10_121621**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	56 - 135
cis-1,2-Dichloroethene	2.8		10.0	12.2		ug/L		93	66 - 128
Tetrachloroethene	1.0	U	10.0	9.27		ug/L		93	62 - 131
trans-1,2-Dichloroethene	1.0	U	10.0	9.55		ug/L		95	56 - 136
Trichloroethene	1.0	U	10.0	8.96		ug/L		90	61 - 124
Vinyl chloride	2.3		10.0	14.8		ug/L		125	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*107*		*78 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-161553-20 MS — **Client Sample ID: SL-10_121621**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517187

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*88*		*73 - 120*

Lab Sample ID: 240-161553-20 MSD — **Client Sample ID: SL-10_121621**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	9.08		ug/L		91	56 - 135	14	26
cis-1,2-Dichloroethene	2.8		10.0	12.0		ug/L		92	66 - 128	1	14
Tetrachloroethene	1.0	U	10.0	8.94		ug/L		89	62 - 131	4	20
trans-1,2-Dichloroethene	1.0	U	10.0	9.26		ug/L		93	56 - 136	3	15
Trichloroethene	1.0	U	10.0	8.80		ug/L		88	61 - 124	2	15
Vinyl chloride	2.3		10.0	14.6		ug/L		124	43 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*
Toluene-d8 (Surr)	*106*		*78 - 122*
Dibromofluoromethane (Surr)	*83*		*73 - 120*

Lab Sample ID: MB 240-517192/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			12/20/21 12:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			12/20/21 12:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 12:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			12/20/21 12:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			12/20/21 12:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			12/20/21 12:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*12/20/21 12:40*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*12/20/21 12:40*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*12/20/21 12:40*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*12/20/21 12:40*	*1*

Lab Sample ID: LCS 240-517192/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			25.0	28.8		ug/L		115	63 - 134		
cis-1,2-Dichloroethene			25.0	26.9		ug/L		107	77 - 123		
Tetrachloroethene			25.0	27.0		ug/L		108	76 - 123		
trans-1,2-Dichloroethene			25.0	27.8		ug/L		111	75 - 124		
Trichloroethene			25.0	29.3		ug/L		117	70 - 122		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-517192/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			25.0	28.1		ug/L		113	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*97*		*78 - 122*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-517240/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/20/21 21:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*12/20/21 21:29*	*1*

Lab Sample ID: LCS 240-517240/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517240

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.84		ug/L		98	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*

Lab Sample ID: 240-161553-10 MS — **Client Sample ID: SL-20_121421**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	11.2		ug/L		112	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*

Lab Sample ID: 240-161553-10 MSD — **Client Sample ID: SL-20_121421**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 517240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.6		ug/L		106	51 - 153	5	16

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-161553-10 MSD **Client Sample ID: SL-20_121421**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517240

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 120

Lab Sample ID: MB 240-517292/5 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			12/21/21 20:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 120		12/21/21 20:16	1

Lab Sample ID: LCS 240-517292/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517292

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.6		ug/L		106	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		66 - 120

Lab Sample ID: 240-161553-23 MS **Client Sample ID: SL-19_121621**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		66 - 120

Lab Sample ID: 240-161553-23 MSD **Client Sample ID: SL-19_121621**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 517292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	51 - 153	0	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		66 - 120

GC/MS VOA

Analysis Batch: 517187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-161553-1	TRIP BLANK	Total/NA	Water	8260B	
240-161553-2	SL-4_121421	Total/NA	Water	8260B	
240-161553-3	SL-18_121421	Total/NA	Water	8260B	
240-161553-4	SL-17_121421	Total/NA	Water	8260B	
240-161553-5	SL-16_121421	Total/NA	Water	8260B	
240-161553-6	SL-3_121421	Total/NA	Water	8260B	
240-161553-7	SL-2_121421	Total/NA	Water	8260B	
240-161553-8	MH-1231_121421	Total/NA	Water	8260B	
240-161553-9	SL-21_121421	Total/NA	Water	8260B	
240-161553-10	SL-20_121421	Total/NA	Water	8260B	
240-161553-11	SL-22_121421	Total/NA	Water	8260B	
240-161553-12	SL-15_121621	Total/NA	Water	8260B	
240-161553-13	SL-14_121621	Total/NA	Water	8260B	
240-161553-14	SL-13_121621	Total/NA	Water	8260B	
240-161553-15	SL-7_121621	Total/NA	Water	8260B	
240-161553-16	SL-6_121621	Total/NA	Water	8260B	
240-161553-17	SL-5_121621	Total/NA	Water	8260B	
240-161553-18	SL-8_121621	Total/NA	Water	8260B	
240-161553-19	SL-9_121621	Total/NA	Water	8260B	
240-161553-20	SL-10_121621	Total/NA	Water	8260B	
MB 240-517187/6	Method Blank	Total/NA	Water	8260B	
LCS 240-517187/4	Lab Control Sample	Total/NA	Water	8260B	
240-161553-20 MS	SL-10_121621	Total/NA	Water	8260B	
240-161553-20 MSD	SL-10_121621	Total/NA	Water	8260B	

Analysis Batch: 517192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-161553-21	SL-11_121621	Total/NA	Water	8260B	
240-161553-22	SL-12_121621	Total/NA	Water	8260B	
240-161553-23	SL-19_121621	Total/NA	Water	8260B	
240-161553-24	DUP-01	Total/NA	Water	8260B	
240-161553-25	DUP-02	Total/NA	Water	8260B	
MB 240-517192/7	Method Blank	Total/NA	Water	8260B	
LCS 240-517192/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 517240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-161553-2	SL-4_121421	Total/NA	Water	8260B SIM	
240-161553-3	SL-18_121421	Total/NA	Water	8260B SIM	
240-161553-4	SL-17_121421	Total/NA	Water	8260B SIM	
240-161553-5	SL-16_121421	Total/NA	Water	8260B SIM	
240-161553-6	SL-3_121421	Total/NA	Water	8260B SIM	
240-161553-7	SL-2_121421	Total/NA	Water	8260B SIM	
240-161553-8	MH-1231_121421	Total/NA	Water	8260B SIM	
240-161553-9	SL-21_121421	Total/NA	Water	8260B SIM	
240-161553-10	SL-20_121421	Total/NA	Water	8260B SIM	
240-161553-11	SL-22_121421	Total/NA	Water	8260B SIM	
240-161553-12	SL-15_121621	Total/NA	Water	8260B SIM	
240-161553-13	SL-14_121621	Total/NA	Water	8260B SIM	
240-161553-14	SL-13_121621	Total/NA	Water	8260B SIM	
240-161553-15	SL-7_121621	Total/NA	Water	8260B SIM	

GC/MS VOA (Continued)

Analysis Batch: 517240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-161553-16	SL-6_121621	Total/NA	Water	8260B SIM	
240-161553-17	SL-5_121621	Total/NA	Water	8260B SIM	
240-161553-18	SL-8_121621	Total/NA	Water	8260B SIM	
240-161553-19	SL-9_121621	Total/NA	Water	8260B SIM	
240-161553-20	SL-10_121621	Total/NA	Water	8260B SIM	
240-161553-21	SL-11_121621	Total/NA	Water	8260B SIM	
240-161553-22	SL-12_121621	Total/NA	Water	8260B SIM	
MB 240-517240/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-517240/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-161553-10 MS	SL-20_121421	Total/NA	Water	8260B SIM	
240-161553-10 MSD	SL-20_121421	Total/NA	Water	8260B SIM	

Analysis Batch: 517292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-161553-23	SL-19_121621	Total/NA	Water	8260B SIM	
240-161553-24	DUP-01	Total/NA	Water	8260B SIM	
240-161553-25	DUP-02	Total/NA	Water	8260B SIM	
MB 240-517292/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-517292/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-161553-23 MS	SL-19_121621	Total/NA	Water	8260B SIM	
240-161553-23 MSD	SL-19_121621	Total/NA	Water	8260B SIM	

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-161553-1

Date Collected: 12/14/21 00:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 14:20	LEE	TAL CAN

Client Sample ID: SL-4_121421 — Lab Sample ID: 240-161553-2

Date Collected: 12/14/21 09:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 14:43	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/20/21 22:41	CS	TAL CAN

Client Sample ID: SL-18_121421 — Lab Sample ID: 240-161553-3

Date Collected: 12/14/21 10:00 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 15:05	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/20/21 23:05	CS	TAL CAN

Client Sample ID: SL-17_121421 — Lab Sample ID: 240-161553-4

Date Collected: 12/14/21 10:25 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 15:27	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/20/21 23:28	CS	TAL CAN

Client Sample ID: SL-16_121421 — Lab Sample ID: 240-161553-5

Date Collected: 12/14/21 10:45 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 15:49	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/20/21 23:52	CS	TAL CAN

Client Sample ID: SL-3_121421 — Lab Sample ID: 240-161553-6

Date Collected: 12/14/21 11:15 **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 16:11	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 00:16	CS	TAL CAN

Client Sample ID: SL-2_121421 — Lab Sample ID: 240-161553-7

Date Collected: 12/14/21 11:45 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 16:33	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 00:40	CS	TAL CAN

Client Sample ID: MH-1231_121421 — Lab Sample ID: 240-161553-8

Date Collected: 12/14/21 12:10 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 16:55	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 01:04	CS	TAL CAN

Client Sample ID: SL-21_121421 — Lab Sample ID: 240-161553-9

Date Collected: 12/14/21 13:40 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 17:17	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 01:27	CS	TAL CAN

Client Sample ID: SL-20_121421 — Lab Sample ID: 240-161553-10

Date Collected: 12/14/21 14:05 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 17:40	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 01:51	CS	TAL CAN

Client Sample ID: SL-22_121421 — Lab Sample ID: 240-161553-11

Date Collected: 12/14/21 14:25 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 18:02	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 03:03	CS	TAL CAN

Client Sample ID: SL-15_121621 — Lab Sample ID: 240-161553-12

Date Collected: 12/16/21 08:20 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 18:24	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 03:27	CS	TAL CAN

Client Sample ID: SL-14_121621 — Lab Sample ID: 240-161553-13

Date Collected: 12/16/21 08:35 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 18:46	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 03:51	CS	TAL CAN

Client Sample ID: SL-13_121621 — Lab Sample ID: 240-161553-14

Date Collected: 12/16/21 08:50 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 19:08	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 04:15	CS	TAL CAN

Client Sample ID: SL-7_121621 — Lab Sample ID: 240-161553-15

Date Collected: 12/16/21 09:05 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 19:31	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 04:38	CS	TAL CAN

Client Sample ID: SL-6_121621 — Lab Sample ID: 240-161553-16

Date Collected: 12/16/21 09:35 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 19:53	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 05:02	CS	TAL CAN

Client Sample ID: SL-5_121621 — Lab Sample ID: 240-161553-17

Date Collected: 12/16/21 09:55 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 20:15	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 05:26	CS	TAL CAN

Client Sample ID: SL-8_121621 — Lab Sample ID: 240-161553-18

Date Collected: 12/16/21 10:10 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 20:37	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 05:50	CS	TAL CAN

Client Sample ID: SL-9_121621 — Lab Sample ID: 240-161553-19
Date Collected: 12/16/21 10:20 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 21:00	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 06:14	CS	TAL CAN

Client Sample ID: SL-10_121621 — Lab Sample ID: 240-161553-20
Date Collected: 12/16/21 10:35 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517187	12/20/21 21:22	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 06:38	CS	TAL CAN

Client Sample ID: SL-11_121621 — Lab Sample ID: 240-161553-21
Date Collected: 12/16/21 10:50 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517192	12/20/21 14:19	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 07:02	CS	TAL CAN

Client Sample ID: SL-12_121621 — Lab Sample ID: 240-161553-22
Date Collected: 12/16/21 11:05 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517192	12/20/21 14:45	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	517240	12/21/21 07:26	CS	TAL CAN

Client Sample ID: SL-19_121621 — Lab Sample ID: 240-161553-23
Date Collected: 12/16/21 11:15 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517192	12/20/21 15:10	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	517292	12/21/21 21:06	CS	TAL CAN

Client Sample ID: DUP-01 — Lab Sample ID: 240-161553-24
Date Collected: 12/14/21 00:00 — **Matrix: Water**
Date Received: 12/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517192	12/20/21 16:25	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	517292	12/21/21 22:20	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-02
Date Collected: 12/14/21 00:00
Date Received: 12/18/21 08:00

Lab Sample ID: 240-161553-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	517192	12/20/21 16:50	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	517292	12/21/21 22:45	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-18-10	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-161553-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-161553-1	TRIP BLANK	Water	12/14/21 00:00	12/18/21 08:00
240-161553-2	SL-4_121421	Water	12/14/21 09:25	12/18/21 08:00
240-161553-3	SL-18_121421	Water	12/14/21 10:00	12/18/21 08:00
240-161553-4	SL-17_121421	Water	12/14/21 10:25	12/18/21 08:00
240-161553-5	SL-16_121421	Water	12/14/21 10:45	12/18/21 08:00
240-161553-6	SL-3_121421	Water	12/14/21 11:15	12/18/21 08:00
240-161553-7	SL-2_121421	Water	12/14/21 11:45	12/18/21 08:00
240-161553-8	MH-1231_121421	Water	12/14/21 12:10	12/18/21 08:00
240-161553-9	SL-21_121421	Water	12/14/21 13:40	12/18/21 08:00
240-161553-10	SL-20_121421	Water	12/14/21 14:05	12/18/21 08:00
240-161553-11	SL-22_121421	Water	12/14/21 14:25	12/18/21 08:00
240-161553-12	SL-15_121621	Water	12/16/21 08:20	12/18/21 08:00
240-161553-13	SL-14_121621	Water	12/16/21 08:35	12/18/21 08:00
240-161553-14	SL-13_121621	Water	12/16/21 08:50	12/18/21 08:00
240-161553-15	SL-7_121621	Water	12/16/21 09:05	12/18/21 08:00
240-161553-16	SL-6_121621	Water	12/16/21 09:35	12/18/21 08:00
240-161553-17	SL-5_121621	Water	12/16/21 09:55	12/18/21 08:00
240-161553-18	SL-8_121621	Water	12/16/21 10:10	12/18/21 08:00
240-161553-19	SL-9_121621	Water	12/16/21 10:20	12/18/21 08:00
240-161553-20	SL-10_121621	Water	12/16/21 10:35	12/18/21 08:00
240-161553-21	SL-11_121621	Water	12/16/21 10:50	12/18/21 08:00
240-161553-22	SL-12_121621	Water	12/16/21 11:05	12/18/21 08:00
240-161553-23	SL-19_121621	Water	12/16/21 11:15	12/18/21 08:00
240-161553-24	DUP-01	Water	12/14/21 00:00	12/18/21 08:00
240-161553-25	DUP-02	Water	12/14/21 00:00	12/18/21 08:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 469338

Lab Sample ID: STD8260 240-469338/7 IC Client Sample ID:

Date Analyzed: 01/15/21 12:58 Lab File ID: UXJ5273.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.84	Split Peak	evansle	01/18/21 08:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Analysis Batch Number: 498110

Lab Sample ID: IC 240-498110/9 Client Sample ID:

Date Analyzed: 08/04/21 16:09 Lab File ID: 230131.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.97	Poor chromatography	macenczaks	08/05/21 09:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Analysis Batch Number: 517192

Lab Sample ID: MB 240-517192/7 Client Sample ID:

Date Analyzed: 12/20/21 12:40 Lab File ID: 231385.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene		Invalid Compound ID	macenczaks	12/20/21 14:10

Lab Sample ID: 240-161553-23 Client Sample ID: SL-19_121621

Date Analyzed: 12/20/21 15:10 Lab File ID: 231391.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene		Invalid Compound ID	macenczaks	12/21/21 09:07

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/3 Client Sample ID:

Date Analyzed: 09/09/21 14:25 Lab File ID: 201661.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:10

Lab Sample ID: IC 240-503003/4 Client Sample ID:

Date Analyzed: 09/09/21 14:49 Lab File ID: 201662.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 15:11

Lab Sample ID: IC 240-503003/5 Client Sample ID:

Date Analyzed: 09/09/21 15:14 Lab File ID: 201663.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:51

Lab Sample ID: IC 240-503003/6 Client Sample ID:

Date Analyzed: 09/09/21 15:38 Lab File ID: 201664.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:52

Lab Sample ID: ICIS 240-503003/7 Client Sample ID:

Date Analyzed: 09/09/21 16:03 Lab File ID: 201665.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 503003

Lab Sample ID: IC 240-503003/8 Client Sample ID:

Date Analyzed: 09/09/21 16:27 Lab File ID: 201666.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 16:53

Lab Sample ID: IC 240-503003/9 Client Sample ID:

Date Analyzed: 09/09/21 16:52 Lab File ID: 201667.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 17:41

Lab Sample ID: ICV 240-503003/12 Client Sample ID:

Date Analyzed: 09/09/21 18:06 Lab File ID: 201670.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	09/09/21 18:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 517240

Lab Sample ID: CCVIS 240-517240/3 Client Sample ID:

Date Analyzed: 12/20/21 20:41 Lab File ID: 202700.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/20/21 21:27

Lab Sample ID: LCS 240-517240/4 Client Sample ID:

Date Analyzed: 12/20/21 21:05 Lab File ID: 202701.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/20/21 21:27

Lab Sample ID: 240-161553-2 Client Sample ID: SL-4_121421

Date Analyzed: 12/20/21 22:41 Lab File ID: 202705.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:14

Lab Sample ID: 240-161553-3 Client Sample ID: SL-18_121421

Date Analyzed: 12/20/21 23:05 Lab File ID: 202706.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:15

Lab Sample ID: 240-161553-4 Client Sample ID: SL-17_121421

Date Analyzed: 12/20/21 23:28 Lab File ID: 202707.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 517240

Lab Sample ID: 240-161553-5 Client Sample ID: SL-16_121421

Date Analyzed: 12/20/21 23:52 Lab File ID: 202708.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:16

Lab Sample ID: 240-161553-6 Client Sample ID: SL-3_121421

Date Analyzed: 12/21/21 00:16 Lab File ID: 202709.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:16

Lab Sample ID: 240-161553-7 Client Sample ID: SL-2_121421

Date Analyzed: 12/21/21 00:40 Lab File ID: 202710.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:17

Lab Sample ID: 240-161553-8 Client Sample ID: MH-1231_121421

Date Analyzed: 12/21/21 01:04 Lab File ID: 202711.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:17

Lab Sample ID: 240-161553-9 Client Sample ID: SL-21_121421

Date Analyzed: 12/21/21 01:27 Lab File ID: 202712.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 517240

Lab Sample ID: 240-161553-10 Client Sample ID: SL-20_121421

Date Analyzed: 12/21/21 01:51 Lab File ID: 202713.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.23	Poor chromatography	seymourc	12/21/21 18:20

Lab Sample ID: 240-161553-10 MS Client Sample ID: SL-20_121421 MS

Date Analyzed: 12/21/21 02:15 Lab File ID: 202714.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:21

Lab Sample ID: 240-161553-10 MSD Client Sample ID: SL-20_121421 MSD

Date Analyzed: 12/21/21 02:39 Lab File ID: 202715.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:21

Lab Sample ID: 240-161553-17 Client Sample ID: SL-5_121621

Date Analyzed: 12/21/21 05:26 Lab File ID: 202722.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:23

Lab Sample ID: 240-161553-18 Client Sample ID: SL-8_121621

Date Analyzed: 12/21/21 05:50 Lab File ID: 202723.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Analysis Batch Number: 517240

Lab Sample ID: 240-161553-19 Client Sample ID: SL-9_121621

Date Analyzed: 12/21/21 06:14 Lab File ID: 202724.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:23

Lab Sample ID: 240-161553-20 Client Sample ID: SL-10_121621

Date Analyzed: 12/21/21 06:38 Lab File ID: 202725.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:24

Lab Sample ID: 240-161553-21 Client Sample ID: SL-11_121621

Date Analyzed: 12/21/21 07:02 Lab File ID: 202726.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:25

Lab Sample ID: 240-161553-22 Client Sample ID: SL-12_121621

Date Analyzed: 12/21/21 07:26 Lab File ID: 202727.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.24	Poor chromatography	seymourc	12/21/21 18:25

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm125UX21_IS_00006							1,2-Dichloroethane-d4 (Surr)	
							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							4-Bromofluorobenzene (Surr)	
							BFB	
							Dibromofluoromethane (Surr)	
							Tentatively Identified Compound	
							Toluene-d8 (Surr)	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					VM568718_00021	5 mL	1,4-Dichlorobenzene-d4	125 ug/mL
							Chlorobenzene-d5	125 ug/mL
							Fluorobenzene	125 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm125UX21_IS_00012							1,2-Dichloroethane-d4 (Surr)	
							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							4-Bromofluorobenzene (Surr)	
							BFB	
							Dibromofluoromethane (Surr)	
							Tentatively Identified Compound	
							Toluene-d8 (Surr)	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					VM568718_00023	5 mL	1,4-Dichlorobenzene-d4	125 ug/mL
							Chlorobenzene-d5	125 ug/mL
							Fluorobenzene	125 ug/mL
.VM568718_00023	01/31/26		restek, Lot A0168626		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm125UX21_SS_00001	12/02/21	06/02/21	MEOH, Lot +232960000273166JL	100 mL	VM567650_00035	5 mL	1,2-Dichloroethane-d4 (Surr)	125 ug/mL
							4-Bromofluorobenzene (Surr)	125 ug/mL
							Dibromofluoromethane (Surr)	125 ug/mL
							Toluene-d8 (Surr)	125 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm125UX21_SS_00002	04/11/22	10/11/21	MEOH, Lot +232960000273166JL	100 mL	VM567650_00036	5 mL	1,2-Dichloroethane-d4 (Surr)	125 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromofluorobenzene (Surr)	125 ug/mL
							Dibromofluoromethane (Surr)	125 ug/mL
							Toluene-d8 (Surr)	125 ug/mL
.VM567650_00036	01/31/25		Restek, Lot A0156891		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm150IS20_00012	11/24/21	08/24/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00021	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150IS20_00017	02/23/22	11/23/21	MEOH, Lot +232960000273166JL	5 mL	VM568718_00023	3 mL	Dioxane-d8 (IS)	3000000 ug/m3 PUF
							Fluorobenzene	150000 ug/m3 PUF
.VM568718_00023	01/31/26		restek, Lot A0168626		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm150SS20_00003	11/25/21	08/25/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm150SS20_00005	06/06/22	12/06/21	MEOH, Lot +232960000273166JL	50 mL	VM567650_00035	3 mL	1,2-Dichloroethane-d4 (Surr)	150 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm25UX18IS_00003	10/29/21	04/29/21	MEOH, Lot +232960000273166JL	100 mL	VM568718_00021	10 mL	Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene	25 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm25UX18IS_00004	05/01/22	11/01/21	MEOH, Lot +232960000273166JL	100 mL	VM568718_00023	10 mL	Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene	25 ug/mL
.VM568718_00023	01/31/26		restek, Lot A0168626		(Purchased Reagent)		Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene	250 ug/mL
vm25UX18SS_00004	01/30/22	07/30/21	MEOH, Lot +232960000273166JL	100 mL	VM567650_00035	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VM50IS_00086	05/27/21	11/27/20	MEOH, Lot 177891	50 mL	VM568718_00019	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00019	12/31/24		restek, Lot A0156016		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_00089	12/28/21	06/28/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00090	03/22/22	09/22/21	MEOH, Lot 177891	50 mL	VM568718_00021	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00021	07/31/25		restek, Lot A0162545		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50ss_00450	08/10/21	08/03/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00453	09/10/21	09/03/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm50ss_00456	10/28/21	10/21/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
vm50ss_00459	12/08/21	12/01/21	MEOH, Lot na	5 mL	vm50ss_stk_00088	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00088	12/18/21	06/18/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VM50SS_STK_00086	03/28/21	09/28/20	MEOH, Lot 0000230446	200 mL	VM567650_00033	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00033	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00090	06/20/22	12/20/21	MEOH, Lot 0000273166	200 mL	VM567650_00035	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00035	11/30/23		Restek, Lot A0143613		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00376	01/21/21	01/14/21	MEOH, Lot na	5 mL	VMACROLSTD_00091	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00091	02/07/21	01/07/21	MEOH, Lot 0000258810	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00403	08/09/21	08/02/21	MEOH, Lot na	5 mL	VMACROLSTD_00098	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00098	09/02/21	08/02/21	MEOH, Lot 0000273166	20 mL	VM568720_00041	0.25 mL	Acrolein	250 ug/mL
..VM568720_00041	07/31/22		restek, Lot A0168111		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00419	12/13/21	12/06/21	MEOH, Lot na	5 mL	VMACROLSTD_00102	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00102	01/06/22	12/06/21	MEOH, Lot 0000273166	20 mL	VM568720_00041	0.25 mL	Acrolein	250 ug/mL
..VM568720_00041	07/31/22		restek, Lot A0168111		(Purchased Reagent)		Acrolein	20000 ug/mL
VMBFB_00026							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00027							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00029							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vmdiox_spike_00275	09/10/21	09/03/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22	NSI Soln, Inc., Lot 210419			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00280	10/21/21	10/14/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00026	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00026	12/03/21	09/03/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22	NSI Soln, Inc., Lot 210419			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdiox_spike_00287	12/27/21	12/20/21	MEOH, Lot na	1 mL	VMSIMSTOSPIKE_00027	1 mL	1,4-Dioxane	50 ug/mL
.VMSIMSTOSPIKE_00027	03/06/22	12/06/21	MEOH, Lot +232960000273166JL	100 mL	VMNSIMIX2_00010	100 uL	1,4-Dioxane	50 ug/mL
..VMNSIMIX2_00010	04/30/22	NSI Soln, Inc., Lot 210419			(Purchased Reagent)		1,4-Dioxane	50000 ug/mL
vmdioxanew_00264	09/14/21	09/07/21	MEOH, Lot na	1 mL	vmdioxane_00033	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00033	10/01/21	07/01/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24	Restek, Lot A0151797			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00268	10/21/21	10/14/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24	Restek, Lot A0151797			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
vmdioxanew_00275	12/27/21	12/20/21	MEOH, Lot na	1 mL	vmdioxane_00034	1 mL	1,4-Dioxane	100 ug/mL
.vmdioxane_00034	01/06/22	10/06/21	MEOH, Lot +232960000273166JL	50 mL	VM30287_00016	2.5 mL	1,4-Dioxane	100 ug/mL
..VM30287_00016	08/31/24	Restek, Lot A0151797			(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
VMFASGW_00391	01/15/21	01/08/21	MEOH, Lot NA	5 mL	VMFASG_00102	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00102	02/08/21	01/08/21	MEOH, Lot 0000258810	100 mL	vm569722S_00008	2 mL	Vinyl chloride	50 ug/mL
..vm569722S_00008	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00436	12/10/21	12/03/21	MEOH, Lot NA	5 mL	VMFASG_00113	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00113	12/17/21	11/17/21	MEOH, Lot 0000273166	50 mL	vm569722S_00010	1 mL	Vinyl chloride	50 ug/mL
..vm569722S_00010	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASGW_00438	12/27/21	12/20/21	MEOH, Lot NA	5 mL	VMFASG_00114	5 mL	Vinyl chloride	50 ug/mL
.VMFASG_00114	01/20/22	12/20/21	MEOH, Lot 0000273166	50 mL	vm569722S_00010	1 mL	Vinyl chloride	50 ug/mL
..vm569722S_00010	04/30/23	Restek, Lot A0159768			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMFASPW_00382	01/18/21	01/11/21	MEOH, Lot n/a	5 mL	VMRFASP_00072	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00072	06/30/21	12/31/20	MEOH, Lot 0000258810	100 mL	VM571992S_00007	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00007	06/30/21	Restek, Lot A0144202			(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00425	12/08/21	12/01/21	MEOH, Lot n/a	5 mL	VMRFASP_00080	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00080	06/01/22	12/01/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00427	12/24/21	12/17/21	MEOH, Lot n/a	5 mL	VMRFASP_00080	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRFASP_00080	06/01/22	12/01/21	MEOH, Lot 0000273166	100 mL	VM571992S_00008	2 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992S_00008	06/30/23		Restek, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRGAS_00369	01/15/21	01/08/21	MEOH, Lot 0000258810	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00394	08/04/21	07/28/21	MEOH, Lot 0000273166	10 mL	vm569722_00019	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00019	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00410	12/13/21	12/06/21	MEOH, Lot 0000273166	10 mL	vm569722_00020	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00020	04/30/24		Restek, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00411	12/21/21	12/14/21	MEOH, Lot 0000273166	10 mL	vm569722_00020	0.2 mL	Vinyl chloride	50 ug/mL
.vm569722_00020	04/30/24		Restek, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
VMRPRIMW_00419	01/21/21	01/14/21	MEOH, Lot NA	5 mL	VMRPRIM_00048	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00048	02/28/21	11/28/20	MEOH, Lot 0000258810	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00004	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00004	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00446	08/09/21	08/02/21	MEOH, Lot NA	5 mL	VMRPRIM_00052	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00052	10/31/21	08/02/21	MEOH, Lot 0000273166	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00009	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00025	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00005	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00009	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569724_00025	10/31/21		Restek, Lot A0160321		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00005	10/31/22		Restek, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00462	12/09/21	12/02/21	MEOH, Lot NA	5 mL	VMRPRIM_00054	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00054	02/28/22	11/16/21	MEOH, Lot 0000273166	50 mL	VM569721_00007	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00009	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00026	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00005	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00007	09/30/22		Restek, Lot A0152956		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00009	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00026	07/31/22		Restek, Lot A0168154		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00005	10/31/22		Restek, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00464	12/27/21	12/20/21	MEOH, Lot NA	5 mL	VMRPRIM_00054	5 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00054	02/28/22	11/16/21	MEOH, Lot 0000273166	50 mL	VM571992_00005	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM571992_00005	10/31/22		Restek, Lot A0159680		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM30287_00016

Rec: 2/13/20
VM30287_0016

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30287 **Lot No.:** A0151797

Description : 1,4-Dioxane Standard

1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBK6493) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 43.0214 µg/mL +/- 44.2703 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00033

VM567650_00033 Rec: 4/9/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 +/- 140.5314 +/- 143.8196	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 +/- 140.3828 +/- 143.6676	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 +/- 140.8538 +/- 144.1496	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 +/- 140.2734 +/- 143.5557	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00035

Rec: 12/4/19
VM567650_00035

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00036

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0156891

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2025 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,510.9 µg/mL	+/- 14.5986 µg/mL +/- 140.7837 µg/mL +/- 144.0778 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,510.2 µg/mL	+/- 14.5945 µg/mL +/- 140.7444 µg/mL +/- 144.0377 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot I-21928) **Purity** 99%	2,513.0 µg/mL	+/- 14.6105 µg/mL +/- 140.8986 µg/mL +/- 144.1955 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,514.4 µg/mL	+/- 14.6186 µg/mL +/- 140.9771 µg/mL +/- 144.2758 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

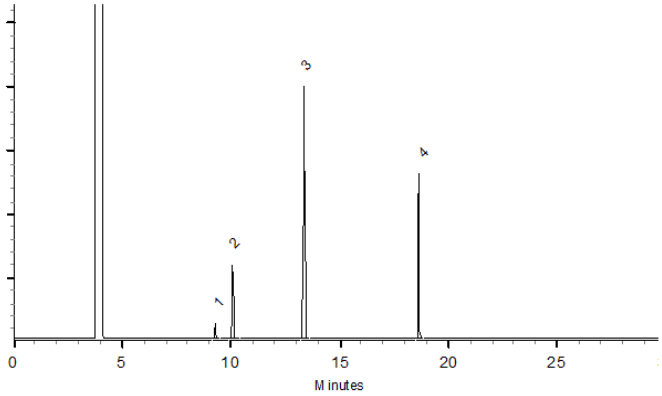
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 19-Jan-2020 **Balance:** B251644995

[redacted]

Date Passed: 21-Jan-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00019

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0156016

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2024 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,002.2 µg/mL	+/- 29.0815 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.0965 µg/mL	Unstressed
	Purity 98%		+/- 110.2100 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	251.8 µg/mL	+/- 1.4674 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3920 µg/mL	Unstressed
	Purity 99%		+/- 5.5487 µg/mL	Stressed
4	1,4-Dioxane-d8	5,003.8 µg/mL	+/- 29.0907 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19942)		+/- 107.1305 µg/mL	Unstressed
	Purity 99%		+/- 110.2450 µg/mL	Stressed
5	Chlorobenzene-d5	250.8 µg/mL	+/- 1.4613 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/- 5.3695 µg/mL	Unstressed
	Purity 99%		+/- 5.5256 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	250.5 µg/mL	+/- 1.4595 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.3631 µg/mL	Unstressed
	Purity 99%		+/- 5.5189 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

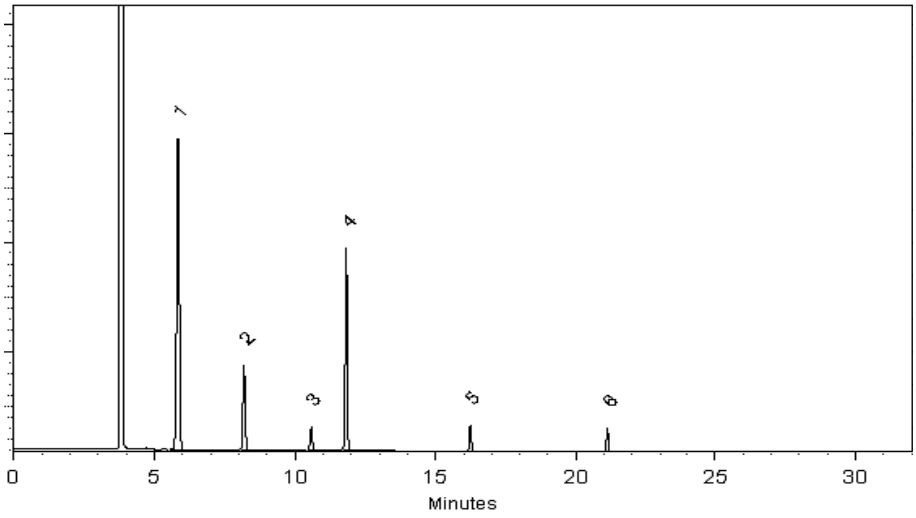
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[redacted]

Date Mixed: 20-Dec-2019 **Balance:** B707717271

[redacted]

Date Passed: 23-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VM568718_00021

Rec: 12/2/20
VM568718_00021

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0162545

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
2	2-Butanone-d5	1,252.7 µg/mL	+/- 7.2833 µg/mL	Gravimetric
	CAS # 24313-50-6 (Lot M-276)		+/- 26.8205 µg/mL	Unstressed
	Purity 99%		+/- 27.6002 µg/mL	Stressed
3	Fluorobenzene	250.8 µg/mL	+/- 1.4615 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 5.3706 µg/mL	Unstressed
	Purity 99%		+/- 5.5267 µg/mL	Stressed
4	1,4-Dioxane-d8	5,010.4 µg/mL	+/- 29.1309 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I19942-0122JM)		+/- 107.2733 µg/mL	Unstressed
	Purity 99%		+/- 110.3919 µg/mL	Stressed
5	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4569 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 5.3534 µg/mL	Unstressed
	Purity 99%		+/- 5.5090 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4	252.4 µg/mL	+/- 1.4709 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 5.4048 µg/mL	Unstressed
	Purity 99%		+/- 5.5619 µg/mL	Stressed

Reagent

VM568718_00023

Rec: 4/16/21 (39)

VM568718_00023

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0168626

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,000.5 µg/mL	+/- 29.0733 µg/mL		Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0613 µg/mL		Unstressed
	Purity 99%			+/- 110.1738 µg/mL		Stressed
2	2-Butanone-d5		1,256.6 µg/mL	+/- 7.3060 µg/mL		Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.9040 µg/mL		Unstressed
	Purity 99%			+/- 27.6861 µg/mL		Stressed
3	Fluorobenzene		251.0 µg/mL	+/- 1.4627 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3749 µg/mL		Unstressed
	Purity 99%			+/- 5.5311 µg/mL		Stressed
4	1,4-Dioxane-d8		5,003.4 µg/mL	+/- 29.0902 µg/mL		Gravimetric
	CAS # 17647-74-4	(Lot I19942-0122JM)		+/- 107.1234 µg/mL		Unstressed
	Purity 99%			+/- 110.2377 µg/mL		Stressed
5	Chlorobenzene-d5		250.6 µg/mL	+/- 1.4604 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 5.3663 µg/mL		Unstressed
	Purity 99%			+/- 5.5222 µg/mL		Stressed
6	1,4-Dichlorobenzene-d4		250.9 µg/mL	+/- 1.4621 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)		+/- 5.3727 µg/mL		Unstressed
	Purity 99%			+/- 5.5289 µg/mL		Stressed

Reagent

VM568720_00039

Rec: 4/7/20
VM568720_00039

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0156861

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,752.0 µg/mL	+/- 115.6523	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019-1219)		+/- 394.5922	µg/mL	Unstressed
	Purity 99%		+/- 885.2572	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00041

Rec'd 7/7/21 VM568720 — 00041

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0168111

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,912.5 µg/mL	+/- 116.5921 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot RP200811)		+/- 397.7985 µg/mL	Unstressed
	Purity 99%		+/- 892.4506 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00007

Rec: 2-21-20

VM569721_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0152956

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 (Lot SHBK6362) **Purity** 99%	12,546.0 µg/mL	+/- 73.4596 +/- 757.0057 +/- 758.8027	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBK5945) **Purity** 99%	12,564.0 µg/mL	+/- 73.5650 +/- 758.0918 +/- 759.8914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBK5017) **Purity** 99%	12,558.0 µg/mL	+/- 73.5299 +/- 757.7297 +/- 759.5285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCD9048) **Purity** 99%	12,562.0 µg/mL	+/- 73.5533 +/- 757.9711 +/- 759.7704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00017

Rec: 6/29/20
VM569722-00017

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 +/- 140.5076 +/- 143.7858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 +/- 140.4038 +/- 143.6799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 +/- 140.4890 +/- 143.7623	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 +/- 140.5681 +/- 143.8406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 +/- 140.4450 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 +/- 140.5555 +/- 143.8274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4 µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)		+/-	140.4203	µg/mL	Unstressed
	Purity 99%			+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

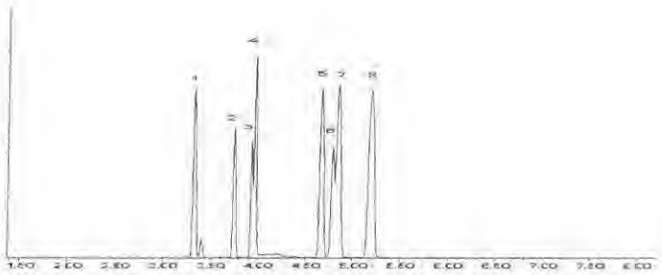
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

vm569722_00019

Rec: 1/20/21
VMS69722_00019

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,502.3 µg/mL	+/- 16.4178 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5076 µg/mL	Unstressed
	Purity 99%		+/- 143.7858 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.6 µg/mL	+/- 16.3299 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.4038 µg/mL	Unstressed
	Purity 99%		+/- 143.6799 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 17.2154 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4890 µg/mL	Unstressed
	Purity 99%		+/- 143.7623 µg/mL	Stressed
4	1,3-Butadiene	2,500.7 µg/mL	+/- 17.6652 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.5681 µg/mL	Unstressed
	Purity 99%		+/- 143.8406 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.2 µg/mL	+/- 16.4034 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4450 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/- 17.7279 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5555 µg/mL	Unstressed
	Purity 99%		+/- 143.8274 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 8582700)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

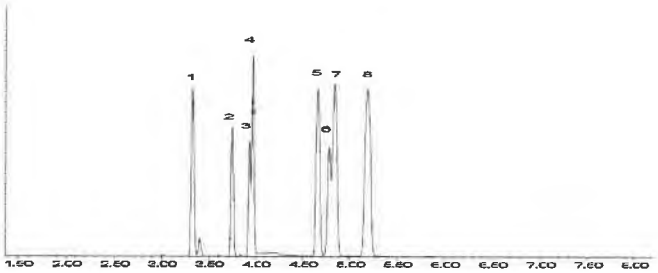
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Mar-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

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vm569722_00020

VM569722_00020 Rcld 10/6/21

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

Reagent

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vm569722S_00008

Rec: 7/17/20
VM569722S-00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

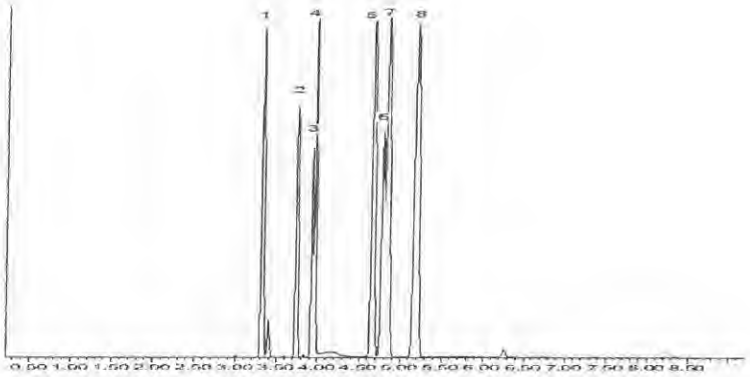
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00010

Rec: 1/26-21
VM569722S-00010

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0159768

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	2,501.8 µg/mL	+/- 19.9803 µg/mL +/- 140.9385 µg/mL +/- 144.2054 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,510.1 µg/mL	+/- 18.7758 µg/mL +/- 141.2337 µg/mL +/- 144.5155 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.3 µg/mL	+/- 19.4159 µg/mL +/- 141.7727 µg/mL +/- 145.0634 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,510.8 µg/mL	+/- 17.5328 µg/mL +/- 141.1137 µg/mL +/- 144.4001 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot 00017022) **Purity** 99%	2,506.4 µg/mL	+/- 23.4232 µg/mL +/- 141.7223 µg/mL +/- 144.9835 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,523.5 µg/mL	+/- 21.4589 µg/mL +/- 142.3524 µg/mL +/- 145.6434 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,496.5 µg/mL	+/-	17.7311	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	140.3462	µg/mL	Unstressed
	Purity 99%			+/-	143.6131	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

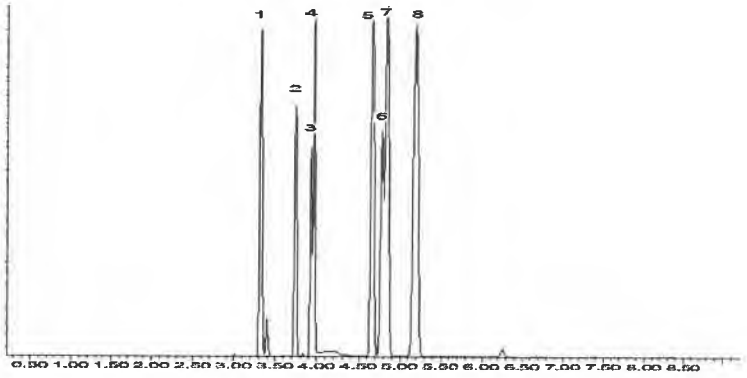
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 09-Apr-2020 **Balance:** 1127510105

Fong-Yun Lo - QC Analyst

Date Passed: 24-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.5253	µg/mL	Unstressed
	Purity 99%		+/- 55.0814	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723_00009

Rec: 2-21-20

VM569723_00009

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 53.5253 +/- 55.0814	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00025

Rec: 12/2/20
VM569724_00025

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0160321

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%		+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00026

VM569724_00026 Rc'd 10/29/21

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0168154

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,038.0 µg/mL	+/- 29.4986	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot RD200601)		+/- 303.9849	µg/mL	Unstressed
	Purity 99%		+/- 304.7065	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00004

VM571992-00004 Rec: 2-21-20

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBJ2110)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
25	n-Heptane (C7)		2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBJ2424)		+/- 150.9341	µg/mL	Unstressed
	Purity 99%			+/- 151.2925	µg/mL	Stressed
26	1,2-Dichloroethane		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot SHBJ0707)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed
27	Benzene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBJ5344)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed
28	Trichloroethene		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBH1955V)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
29	Methylcyclohexane		2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)		+/- 150.9341	µg/mL	Unstressed
	Purity 99%			+/- 151.2925	µg/mL	Stressed
30	1,2-Dichloropropane		2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%			+/- 151.2244	µg/mL	Stressed
31	1,4-Dioxane		50,001.1 µg/mL	+/- 290.6957	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBJ7415)		+/- 3,016.7880	µg/mL	Unstressed
	Purity 99%			+/- 3,023.9503	µg/mL	Stressed
32	Dibromomethane		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.4 µg/mL	+/- 14.5432	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 25076)		+/- 150.9190	µg/mL	Unstressed
	Purity 99%			+/- 151.2773	µg/mL	Stressed
34	Toluene		2,500.1 µg/mL	+/- 14.5359	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBJ5659)		+/- 150.8436	µg/mL	Unstressed
	Purity 99%			+/- 151.2017	µg/mL	Stressed
35	Ethyl methacrylate		2,502.8 µg/mL	+/- 14.5512	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot 69796APV)		+/- 151.0020	µg/mL	Unstressed
	Purity 99%			+/- 151.3605	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.6 µg/mL	+/- 14.5387	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot C797620)		+/- 150.8718	µg/mL	Unstressed
	Purity 98%			+/- 151.2300	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.4 µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)		+/- 150.8587	µg/mL	Unstressed
	Purity 99%			+/- 151.2169	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed
39	Tetrachloroethene		2,501.0 µg/mL	+/- 14.5410	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBH9691)		+/- 150.8964	µg/mL	Unstressed
	Purity 99%			+/- 151.2547	µg/mL	Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4 µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5 µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1 µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0 µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

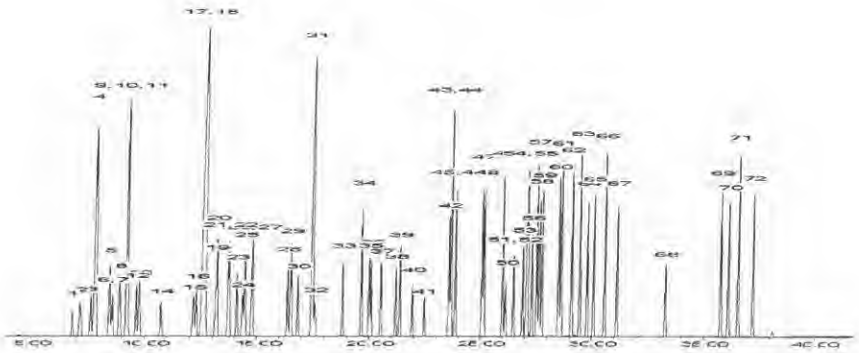
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00005

Rc'd 4/19/21 VM571992_00005

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Testing Laboratory
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571992S_00007

VMS71992S-00007 Rec; 2-21-20

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CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 +/- 151.8598 +/- 152.2203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 +/- 1,508.4071 +/- 1,511.9883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 +/- 301.8129 +/- 302.5295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 +/- 151.5400 +/- 151.8998	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10206360)	2,502.4 µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,253.7 µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01)	2,504.2 µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-lH)	2,505.2 µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 97%	(Lot 5461400)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 99%	(Lot GUHZN)	2,505.7 µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,514.2 µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC)	2,503.7 µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

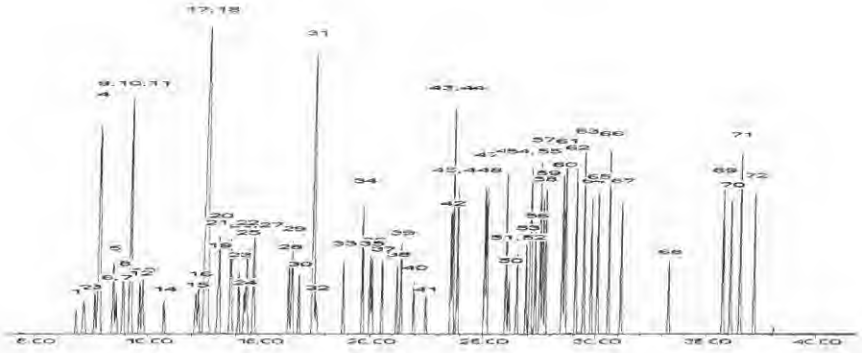
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM571992S_00008

Rec'd 6/10/21 VM571992 00008

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Solution Order	Compound	Nominal Concentration (weight/volume)	Expanded Uncertainty (95% CL, k=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	(Lot F23X068)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	(Lot 18342)	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	(Lot 7692300)	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	(Lot HGCHN)	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	(Lot UCNEL)	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 99%	(Lot Y25A027)	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 99%	(Lot H3HGC)	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

VMNSIMIX2_00010

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Certificate of Analysis

8620 Extra Mix 2

Catalog Number: Q-3383
Lot Number: 210419
Manufacture Date: 04/19/2021
Expiration: 04/30/2022
Solvent: 1:1 Methanol:Water
Hazards: Irritant, Toxic

Analyte	CAS	Analyte Purity	Gravimetric Concentration (ug/mL)
Epichlorohydrin	106-89-8	99.9%	9998.2 ± 93.1
Propylene oxide	75-56-9	99.0%	9998.4 ± 93.1
1,4-Dioxane	123-91-1	100.0%	49998.7 ± 465.5
Ethylene Oxide	75-21-8	99.5%	25016.8 ± 232.9

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at www.anab.org.

Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at -10°C to -20°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

Method: This CRM was verified Volumetrically and Analytically.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

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Catalog Number: Q-3383
Lot Number: 210419

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our standards is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogenous.

Ken Grzybowski

Ken Grzybowski, Organics Department Manager

Mark Hammersla

Mark Hammersla, President

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-161553-1	87	96	103	75
SL-4_121421	240-161553-2	92	100	115	81
SL-18_121421	240-161553-3	89	94	103	80
SL-17_121421	240-161553-4	95	100	115	91
SL-16_121421	240-161553-5	84	89	102	76
SL-3_121421	240-161553-6	91	96	106	86
SL-2_121421	240-161553-7	91	98	109	86
MH-1231_121421	240-161553-8	81	89	100	81
SL-21_121421	240-161553-9	85	92	102	79
SL-20_121421	240-161553-10	91	94	112	84
SL-22_121421	240-161553-11	91	94	111	84
SL-15_121621	240-161553-12	89	97	110	82
SL-14_121621	240-161553-13	92	98	109	81
SL-13_121621	240-161553-14	93	98	114	86
SL-7_121621	240-161553-15	94	99	113	86
SL-6_121621	240-161553-16	92	97	109	83
SL-5_121621	240-161553-17	89	99	106	84
SL-8_121621	240-161553-18	90	97	106	82
SL-9_121621	240-161553-19	91	98	109	83
SL-10_121621	240-161553-20	89	98	110	85
SL-11_121621	240-161553-21	101	101	96	101
SL-12_121621	240-161553-22	97	97	98	102
SL-19_121621	240-161553-23	105	95	96	100
DUP-01	240-161553-24	102	100	95	103
DUP-02	240-161553-25	97	86	101	100
	MB 240-517187/6	90	97	108	79
	MB 240-517192/7	98	100	99	94
	LCS 240-517187/4	90	96	114	88
	LCS 240-517192/5	100	97	97	102
SL-10_121621 MS	240-161553-20 MS	88	97	107	90
	240-161506-B-27 MS	105	100	96	107
SL-10_121621 MSD	240-161553-20 MSD	83	96	106	88
	240-161506-B-27 MSD	110	103	97	106

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-137
TOL = Toluene-d8 (Surr)	78-122
BFB = 4-Bromofluorobenzene (Surr)	56-136

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3206.D

Lab ID: LCS 240-517187/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	10.5	105	63-134	
cis-1,2-Dichloroethene	10.0	10.3	103	77-123	
Tetrachloroethene	10.0	11.3	113	76-123	
trans-1,2-Dichloroethene	10.0	10.2	102	75-124	
Trichloroethene	10.0	9.06	91	70-122	
Vinyl chloride	10.0	11.4	114	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 231383.D

Lab ID: LCS 240-517192/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	25.0	28.8	115	63-134	
cis-1,2-Dichloroethene	25.0	26.9	107	77-123	
Tetrachloroethene	25.0	27.0	108	76-123	
trans-1,2-Dichloroethene	25.0	27.8	111	75-124	
Trichloroethene	25.0	29.3	117	70-122	
Vinyl chloride	25.0	28.1	113	60-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3231.D

Lab ID: 240-161553-20 MS Client ID: SL-10_121621 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	10.0	1.0 U	10.4	104	56-135	
cis-1,2-Dichloroethene	10.0	2.8	12.2	93	66-128	
Tetrachloroethene	10.0	1.0 U	9.27	93	62-131	
trans-1,2-Dichloroethene	10.0	1.0 U	9.55	95	56-136	
Trichloroethene	10.0	1.0 U	8.96	90	61-124	
Vinyl chloride	10.0	2.3	14.8	125	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 231396.D

Lab ID: 240-161506-B-27 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	200	8.0 U	250	125	56-135	
cis-1,2-Dichloroethene	200	8.0 U	225	112	66-128	
Tetrachloroethene	200	8.0 U	203	101	62-131	
trans-1,2-Dichloroethene	200	8.0 U	224	112	56-136	
Trichloroethene	200	8.0 U	264	132	61-124	F1
Vinyl chloride	200	400	635	119	43-157	E

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3232.D

Lab ID: 240-161553-20 MSD Client ID: SL-10_121621 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	10.0	9.08	91	14	26	56-135	
cis-1,2-Dichloroethene	10.0	12.0	92	1	14	66-128	
Tetrachloroethene	10.0	8.94	89	4	20	62-131	
trans-1,2-Dichloroethene	10.0	9.26	93	3	15	56-136	
Trichloroethene	10.0	8.80	88	2	15	61-124	
Vinyl chloride	10.0	14.6	124	1	24	43-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 231397.D

Lab ID: 240-161506-B-27 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	200	251	126	0	26	56-135	
cis-1,2-Dichloroethene	200	238	119	6	14	66-128	
Tetrachloroethene	200	210	105	3	20	62-131	
trans-1,2-Dichloroethene	200	242	121	8	15	56-136	
Trichloroethene	200	267	134	1	15	61-124	F1
Vinyl chloride	200	632	118	1	24	43-157	E

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: 231385.D Lab Sample ID: MB 240-517192/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX23 Date Analyzed: 12/20/2021 12:40

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-517192/5	231383.D	12/20/2021 11:49
SL-11_121621	240-161553-21	231389.D	12/20/2021 14:19
SL-12_121621	240-161553-22	231390.D	12/20/2021 14:45
SL-19_121621	240-161553-23	231391.D	12/20/2021 15:10
DUP-01	240-161553-24	231394.D	12/20/2021 16:25
DUP-02	240-161553-25	231395.D	12/20/2021 16:50
	240-161506-B-27 MS	231396.D	12/20/2021 17:15
	240-161506-B-27 MSD	231397.D	12/20/2021 17:40

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: UXJ3210.D Lab Sample ID: MB 240-517187/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 12/20/2021 13:58

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-517187/4	UXJ3206.D	12/20/2021 12:30
TRIP BLANK	240-161553-1	UXJ3211.D	12/20/2021 14:20
SL-4_121421	240-161553-2	UXJ3212.D	12/20/2021 14:43
SL-18_121421	240-161553-3	UXJ3213.D	12/20/2021 15:05
SL-17_121421	240-161553-4	UXJ3214.D	12/20/2021 15:27
SL-16_121421	240-161553-5	UXJ3215.D	12/20/2021 15:49
SL-3_121421	240-161553-6	UXJ3216.D	12/20/2021 16:11
SL-2_121421	240-161553-7	UXJ3217.D	12/20/2021 16:33
MH-1231_121421	240-161553-8	UXJ3218.D	12/20/2021 16:55
SL-21_121421	240-161553-9	UXJ3219.D	12/20/2021 17:17
SL-20_121421	240-161553-10	UXJ3220.D	12/20/2021 17:40
SL-22_121421	240-161553-11	UXJ3221.D	12/20/2021 18:02
SL-15_121621	240-161553-12	UXJ3222.D	12/20/2021 18:24
SL-14_121621	240-161553-13	UXJ3223.D	12/20/2021 18:46
SL-13_121621	240-161553-14	UXJ3224.D	12/20/2021 19:08
SL-7_121621	240-161553-15	UXJ3225.D	12/20/2021 19:31
SL-6_121621	240-161553-16	UXJ3226.D	12/20/2021 19:53
SL-5_121621	240-161553-17	UXJ3227.D	12/20/2021 20:15
SL-8_121621	240-161553-18	UXJ3228.D	12/20/2021 20:37
SL-9_121621	240-161553-19	UXJ3229.D	12/20/2021 21:00
SL-10_121621	240-161553-20	UXJ3230.D	12/20/2021 21:22
SL-10_121621 MS	240-161553-20 MS	UXJ3231.D	12/20/2021 21:44
SL-10_121621 MSD	240-161553-20 MSD	UXJ3232.D	12/20/2021 22:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB1115A.D BFB Injection Date: 01/15/2021

Instrument ID: A3UX11 BFB Injection Time: 10:36

Analysis Batch No.: 469338

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	82.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.9) 1
176	95.0 - 101.0 % of mass 174	81.5	(98.9) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-469338/2	UXJ5268.D	01/15/2021	11:06
	STD8260 240-469338/3	UXJ5269.D	01/15/2021	11:29
	STD8260 240-469338/4	UXJ5270.D	01/15/2021	11:51
	STD8260 240-469338/5	UXJ5271.D	01/15/2021	12:13
	STD8260 240-469338/6	UXJ5272.D	01/15/2021	12:36
	STD8260 240-469338/7	UXJ5273.D	01/15/2021	12:58
	ICV 240-469338/14	UXJ5274.D	01/15/2021	13:20
	ICV 240-469338/15	UXJ5281.D	01/15/2021	15:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB1220.D BFB Injection Date: 12/20/2021

Instrument ID: A3UX11 BFB Injection Time: 11:08

Analysis Batch No.: 517187

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	49.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	Greater than 50% of mass 95	96.0	
175	5.0 - 9.0 % of mass 174	6.9	(7.2) 1
176	95.0 - 101.0 % of mass 174	93.3	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-517187/2	UXJ3205.D	12/20/2021	12:08
	LCS 240-517187/4	UXJ3206.D	12/20/2021	12:30
	CCV 240-517187/3	UXJ3207.D	12/20/2021	12:52
	MB 240-517187/6	UXJ3210.D	12/20/2021	13:58
TRIP BLANK	240-161553-1	UXJ3211.D	12/20/2021	14:20
SL-4_121421	240-161553-2	UXJ3212.D	12/20/2021	14:43
SL-18_121421	240-161553-3	UXJ3213.D	12/20/2021	15:05
SL-17_121421	240-161553-4	UXJ3214.D	12/20/2021	15:27
SL-16_121421	240-161553-5	UXJ3215.D	12/20/2021	15:49
SL-3_121421	240-161553-6	UXJ3216.D	12/20/2021	16:11
SL-2_121421	240-161553-7	UXJ3217.D	12/20/2021	16:33
MH-1231_121421	240-161553-8	UXJ3218.D	12/20/2021	16:55
SL-21_121421	240-161553-9	UXJ3219.D	12/20/2021	17:17
SL-20_121421	240-161553-10	UXJ3220.D	12/20/2021	17:40
SL-22_121421	240-161553-11	UXJ3221.D	12/20/2021	18:02
SL-15_121621	240-161553-12	UXJ3222.D	12/20/2021	18:24
SL-14_121621	240-161553-13	UXJ3223.D	12/20/2021	18:46
SL-13_121621	240-161553-14	UXJ3224.D	12/20/2021	19:08
SL-7_121621	240-161553-15	UXJ3225.D	12/20/2021	19:31
SL-6_121621	240-161553-16	UXJ3226.D	12/20/2021	19:53
SL-5_121621	240-161553-17	UXJ3227.D	12/20/2021	20:15
SL-8_121621	240-161553-18	UXJ3228.D	12/20/2021	20:37
SL-9_121621	240-161553-19	UXJ3229.D	12/20/2021	21:00
SL-10_121621	240-161553-20	UXJ3230.D	12/20/2021	21:22
SL-10_121621 MS	240-161553-20 MS	UXJ3231.D	12/20/2021	21:44
SL-10_121621 MSD	240-161553-20 MSD	UXJ3232.D	12/20/2021	22:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB23018.D BFB Injection Date: 08/04/2021

Instrument ID: A3UX23 BFB Injection Time: 12:53

Analysis Batch No.: 498110

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.5	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	67.5	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	65.4	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-498110/3	230125.D	08/04/2021	13:39
	IC 240-498110/4	230126.D	08/04/2021	14:04
	IC 240-498110/5	230127.D	08/04/2021	14:29
	IC 240-498110/6	230128.D	08/04/2021	14:54
	ICIS 240-498110/7	230129.D	08/04/2021	15:19
	IC 240-498110/8	230130.D	08/04/2021	15:44
	IC 240-498110/9	230131.D	08/04/2021	16:09

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB23019.D BFB Injection Date: 08/05/2021

Instrument ID: A3UX23 BFB Injection Time: 11:25

Analysis Batch No.: 498246

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.7	
75	30.0 - 60.0 % of mass 95	48.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	69.2	
175	5.0 - 9.0 % of mass 174	4.9	(7.1) 1
176	95.0 - 101.0 % of mass 174	67.0	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 240-498246/12	230147.D	08/05/2021	15:56

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB23080.D BFB Injection Date: 12/06/2021

Instrument ID: A3UX23 BFB Injection Time: 15:02

Analysis Batch No.: 515735

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.8	
75	30.0 - 60.0 % of mass 95	44.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	72.7	
175	5.0 - 9.0 % of mass 174	5.1	(7.0) 1
176	95.0 - 101.0 % of mass 174	69.4	(95.4) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-515735/3	231301.D	12/06/2021	15:47
	IC 240-515735/4	231302.D	12/06/2021	16:12
	IC 240-515735/5	231303.D	12/06/2021	16:37
	IC 240-515735/6	231304.D	12/06/2021	17:02
	ICIS 240-515735/7	231305.D	12/06/2021	17:27
	IC 240-515735/8	231306.D	12/06/2021	17:52
	IC 240-515735/9	231307.D	12/06/2021	18:17
	ICV 240-515735/12	231310.D	12/06/2021	19:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB23086.D BFB Injection Date: 12/20/2021

Instrument ID: A3UX23 BFB Injection Time: 10:14

Analysis Batch No.: 517192

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.8	
75	30.0 - 60.0 % of mass 95	43.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.8) 1
174	Greater than 50% of mass 95	73.9	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.5	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-517192/3	231381.D	12/20/2021	10:59
	CCV 240-517192/4	231382.D	12/20/2021	11:24
	LCS 240-517192/5	231383.D	12/20/2021	11:49
	MB 240-517192/7	231385.D	12/20/2021	12:40
SL-11_121621	240-161553-21	231389.D	12/20/2021	14:19
SL-12_121621	240-161553-22	231390.D	12/20/2021	14:45
SL-19_121621	240-161553-23	231391.D	12/20/2021	15:10
DUP-01	240-161553-24	231394.D	12/20/2021	16:25
DUP-02	240-161553-25	231395.D	12/20/2021	16:50
	240-161506-B-27 MS	231396.D	12/20/2021	17:15
	240-161506-B-27 MSD	231397.D	12/20/2021	17:40

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: STD8260 240-469338/4 Date Analyzed: 01/15/2021 11:51

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5270.D Heated Purge: (Y/N) N

Calibration ID: 60081

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1164516	4.68	833065	7.33	399775	9.55
UPPER LIMIT		2329032	5.18	1666130	7.83	799550	10.05
LOWER LIMIT		582258	4.18	416533	6.83	199888	9.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-469338/14		1139518	4.68	814816	7.33	388972	9.55
ICV 240-469338/15		1208129	4.68	881966	7.33	428396	9.54
CCVIS 240-517187/2		2232479	4.68	1246053	7.33	692960	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: CCVIS 240-517187/2 Date Analyzed: 12/20/2021 12:08

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3205.D Heated Purge: (Y/N) N

Calibration ID: 60084

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2232479	4.68	1246053	7.33	692960	9.54
UPPER LIMIT		4464958	5.18	2492106	7.83	1385920	10.04
LOWER LIMIT		1116240	4.18	623027	6.83	346480	9.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-517187/4		2244634	4.68	1222718	7.33	714468	9.54
CCV 240-517187/3		2229644	4.68	1233776	7.33	645608	9.54
MB 240-517187/6		2132343	4.68	1164011	7.33	631823	9.54
240-161553-1	TRIP BLANK	2116122	4.68	1219558	7.33	638768	9.54
240-161553-2	SL-4_121421	2073954	4.68	1097911	7.33	582371	9.54
240-161553-3	SL-18_121421	2005935	4.68	1126843	7.33	585317	9.54
240-161553-4	SL-17_121421	1900339	4.68	1042656	7.33	589353	9.54
240-161553-5	SL-16_121421	2047185	4.68	1218840	7.33	626447	9.54
240-161553-6	SL-3_121421	1994911	4.68	1147894	7.33	631122	9.54
240-161553-7	SL-2_121421	1977892	4.68	1116362	7.33	614676	9.54
240-161553-8	MH-1231_121421	2024935	4.68	1245625	7.33	710619	9.54
240-161553-9	SL-21_121421	1969255	4.68	1198154	7.33	625900	9.54
240-161553-10	SL-20_121421	1961455	4.68	1135779	7.33	604427	9.54
240-161553-11	SL-22_121421	2037561	4.68	1183727	7.33	625345	9.54
240-161553-12	SL-15_121621	2128336	4.68	1235902	7.33	682410	9.54
240-161553-13	SL-14_121621	2068633	4.68	1162564	7.33	624128	9.54
240-161553-14	SL-13_121621	2159577	4.68	1213330	7.33	638909	9.54
240-161553-15	SL-7_121621	2095839	4.68	1142943	7.33	592166	9.54
240-161553-16	SL-6_121621	2070823	4.68	1181793	7.33	646214	9.54
240-161553-17	SL-5_121621	2053434	4.68	1235188	7.33	657653	9.54
240-161553-18	SL-8_121621	2129247	4.68	1187943	7.33	666205	9.54
240-161553-19	SL-9_121621	2084527	4.68	1193616	7.33	625296	9.54
240-161553-20	SL-10_121621	1988740	4.68	1158112	7.33	598889	9.54
240-161553-20 MS	SL-10_121621 MS	2063484	4.68	1250060	7.33	699660	9.54
240-161553-20 MSD	SL-10_121621 MSD	2151769	4.68	1314772	7.33	725775	9.54

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: ICIS 240-515735/7 Date Analyzed: 12/06/2021 17:27

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 231305.D Heated Purge: (Y/N) N

Calibration ID: 63539

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2022141	6.28	1335703	9.46	655295	11.78
UPPER LIMIT		4044282	6.78	2671406	9.96	1310590	12.28
LOWER LIMIT		1011071	5.78	667852	8.96	327648	11.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-515735/12		2190926	6.28	1462020	9.46	709265	11.78
CCVIS 240-517192/3		1972393	6.28	1424849	9.45	687424	11.78

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: CCVIS 240-517192/3 Date Analyzed: 12/20/2021 10:59

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 231381.D Heated Purge: (Y/N) N

Calibration ID: 63539

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1972393	6.28	1424849	9.45	687424	11.78
UPPER LIMIT		3944786	6.78	2849698	9.95	1374848	12.28
LOWER LIMIT		986197	5.78	712425	8.95	343712	11.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-517192/4		1831642	6.28	1300645	9.45	574675	11.78
LCS 240-517192/5		2010067	6.28	1429648	9.45	673314	11.78
MB 240-517192/7		1872370	6.28	1273998	9.46	551828	11.78
240-161553-21	SL-11_121621	1452423	6.28	1019309	9.46	549704	11.78
240-161553-22	SL-12_121621	1532012	6.29	1078513	9.46	552260	11.78
240-161553-23	SL-19_121621	1519211	6.28	1057526	9.46	528214	11.78
240-161553-24	DUP-01	1589860	6.28	1103731	9.46	553329	11.78
240-161553-25	DUP-02	1526545	6.28	1045096	9.46	522920	11.78
240-161506-B-27 MS		1721334	6.29	1243128	9.46	648680	11.78
240-161506-B-27 MSD		1809292	6.28	1268325	9.46	658411	11.78

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-161553-1

Matrix: Water Lab File ID: UXJ3211.D

Analysis Method: 8260B Date Collected: 12/14/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 14:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	75		56-136
2037-26-5	Toluene-d8 (Surr)	103		78-122
1868-53-7	Dibromofluoromethane (Surr)	87		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3211.D				
Lims ID:	240-161553-A-1				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 14:20:30	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-008				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:09	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				
First Level Reviewer: evansle		Date:	21-Dec-2021 08:54:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2116122	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	84	1219558	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	638768	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	470769	17.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	589051	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1793795	20.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	453216	14.9	
14 Vinyl chloride	62		1.352				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96		3.707				ND	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

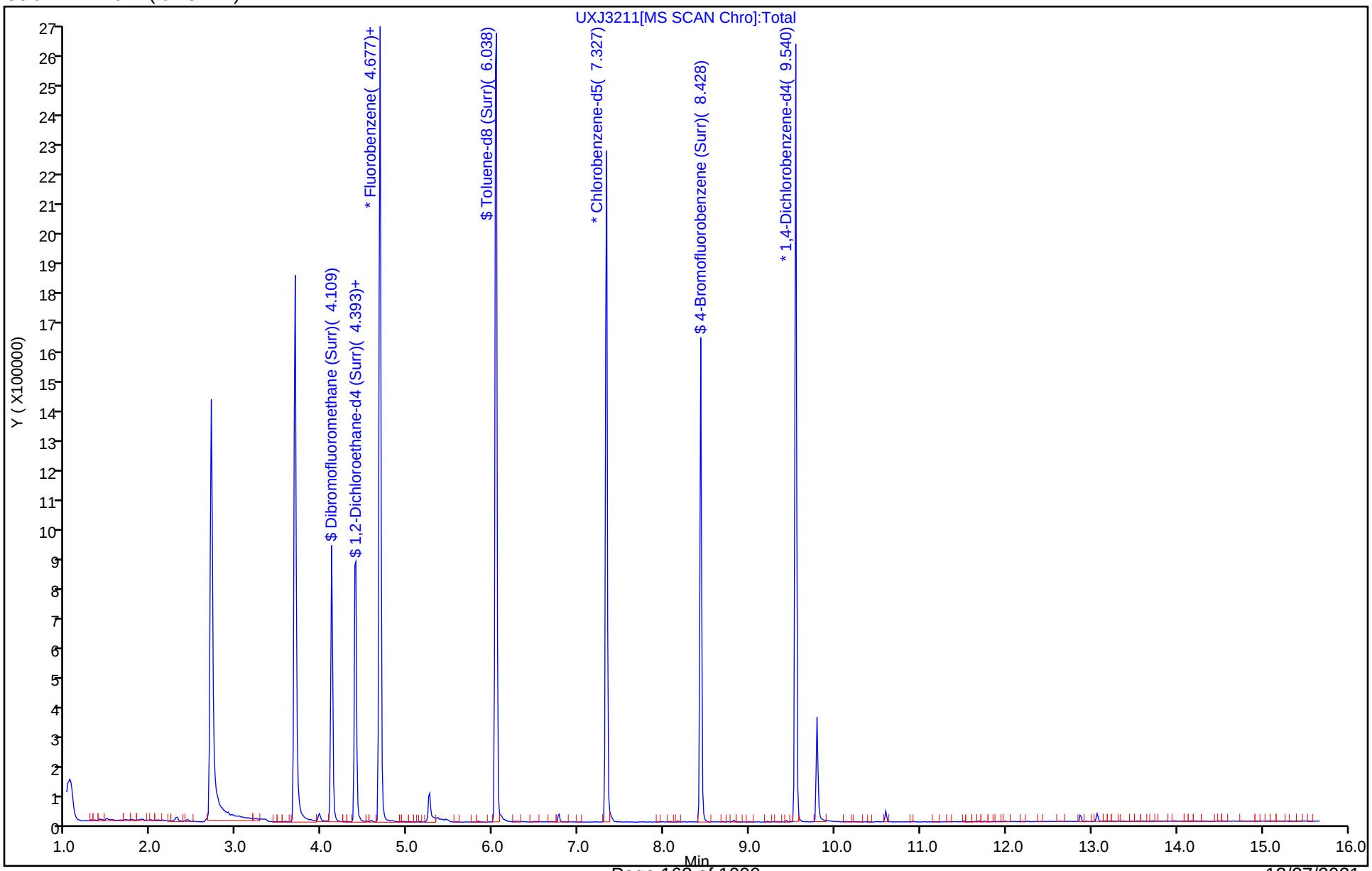
Report Date: 21-Dec-2021 09:02:17 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3211.D

Injection Date:	20-Dec-2021 14:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-A-1	Lab Sample ID:	240-161553-1	Worklist Smp#:	8
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3211.D
Lims ID: 240-161553-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 20-Dec-2021 14:20:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-008
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:54:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.5	87.32
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.31
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.40
$ 7 4-Bromofluorobenzene (Surr)	20.0	14.9	74.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-4_121421 Lab Sample ID: 240-161553-2

Matrix: Water Lab File ID: UXJ3212.D

Analysis Method: 8260B Date Collected: 12/14/2021 09:25

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 14:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.0		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	115		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3212.D
Lims ID: 240-161553-E-2
Client ID: SL-4_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 14:43:30 ALS Bottle#: 9 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-038
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:54:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2073954	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	1097911	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	582371	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	486792	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	596512	19.9	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1799334	23.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	442238	16.2	
14 Vinyl chloride	62	1.376	1.352	0.024	98	102607	3.98	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	165237	5.48	
60 Trichloroethene	130	4.985	4.985	0.000	94	5044	0.1558	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

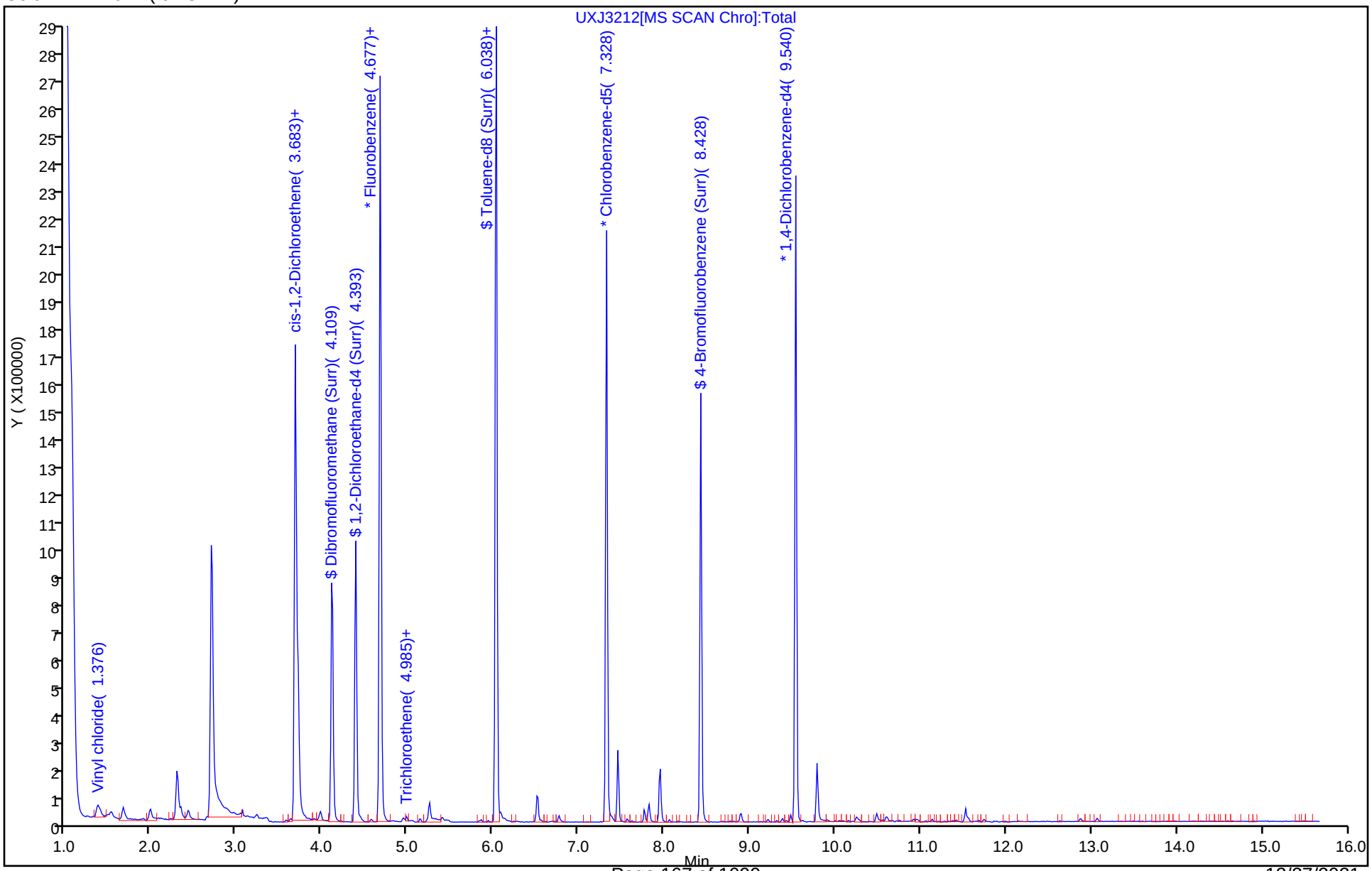
Report Date: 21-Dec-2021 09:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3212.D

Injection Date:	20-Dec-2021 14:43:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-E-2	Lab Sample ID:	240-161553-2	Worklist Smp#:	38
Client ID:	SL-4_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3212.D				
Lims ID:	240-161553-E-2				
Client ID:	SL-4_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 14:43:30	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-038				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:09	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: evansle Date: 21-Dec-2021 08:54:46

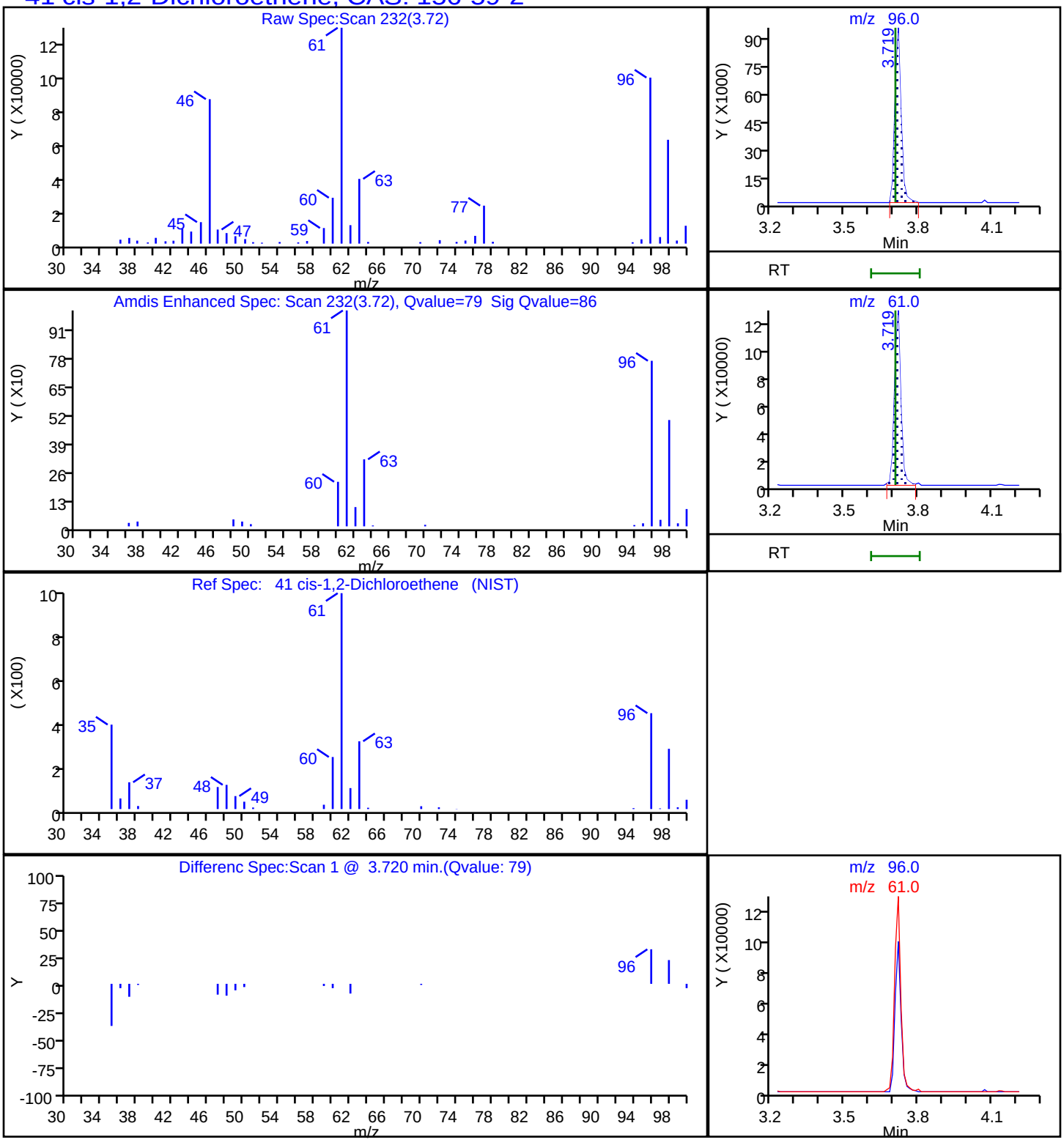
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.13
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.9	99.51
$ 6 Toluene-d8 (Surr)	20.0	23.0	115.21
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.2	80.82

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3212.D

Injection Date:	20-Dec-2021 14:43:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-E-2	Lab Sample ID:	240-161553-2		
Client ID:	SL-4_121421				
Operator ID:	043582	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



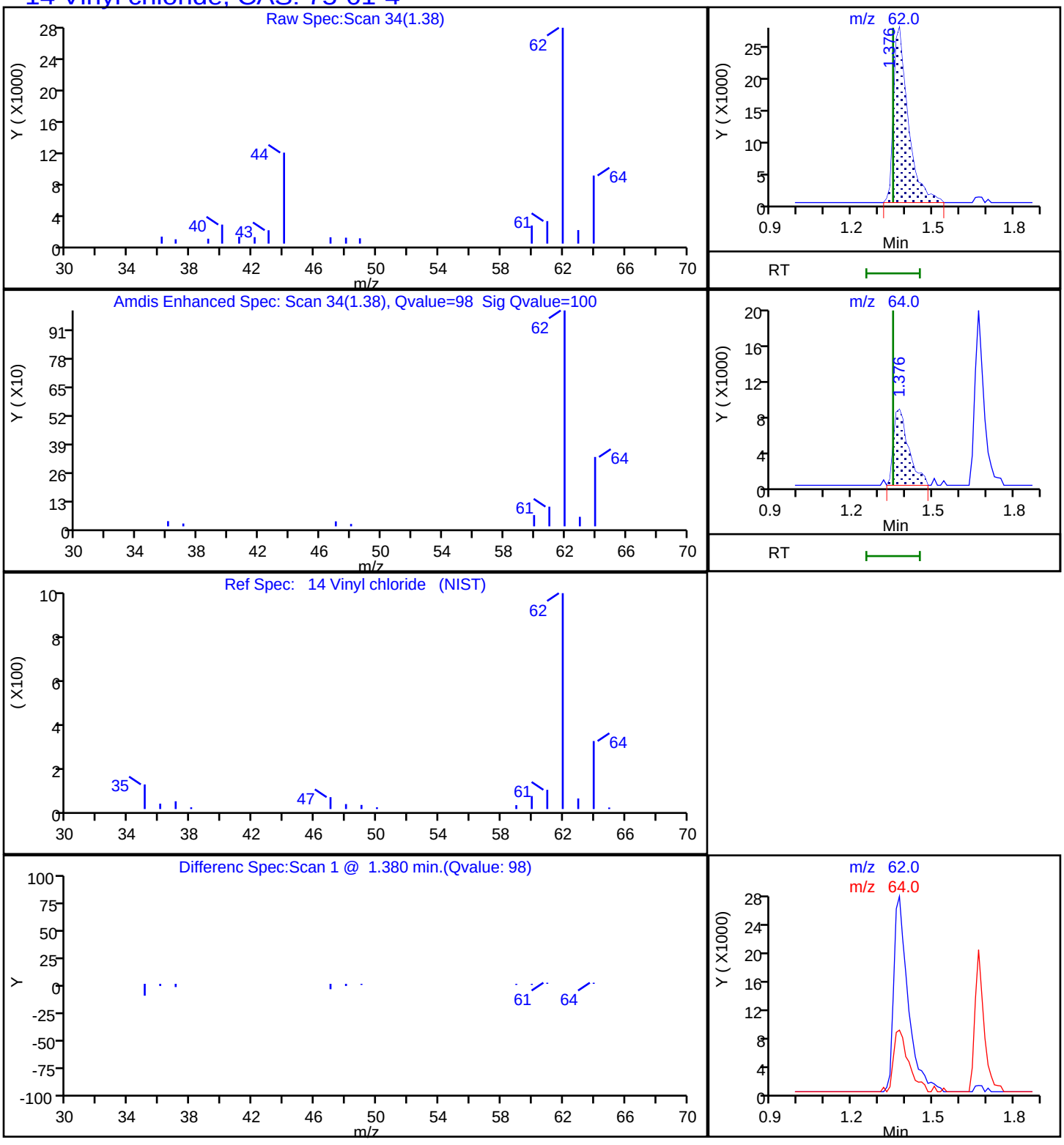
Report Date: 21-Dec-2021 09:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3212.D

Injection Date:	20-Dec-2021 14:43:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-E-2	Lab Sample ID:	240-161553-2		
Client ID:	SL-4_121421				
Operator ID:	043582	ALS Bottle#:	9	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-18_121421 Lab Sample ID: 240-161553-3

Matrix: Water Lab File ID: UXJ3213.D

Analysis Method: 8260B Date Collected: 12/14/2021 10:00

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 15:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.0		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	80		56-136
2037-26-5	Toluene-d8 (Surr)	103		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3213.D
Lims ID: 240-161553-B-3
Client ID: SL-18_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:05:30 ALS Bottle#: 10 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-039
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:54:54

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	2005935	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1126843	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	585317	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	455681	17.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	543089	18.7	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1656062	20.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	446771	15.9	
	14 Vinyl chloride	62	1.364	1.352	0.012	98	100168	4.02	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	79	148635	5.10	
	60 Trichloroethene	130	4.985	4.985	0.000	91	4966	0.1586	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

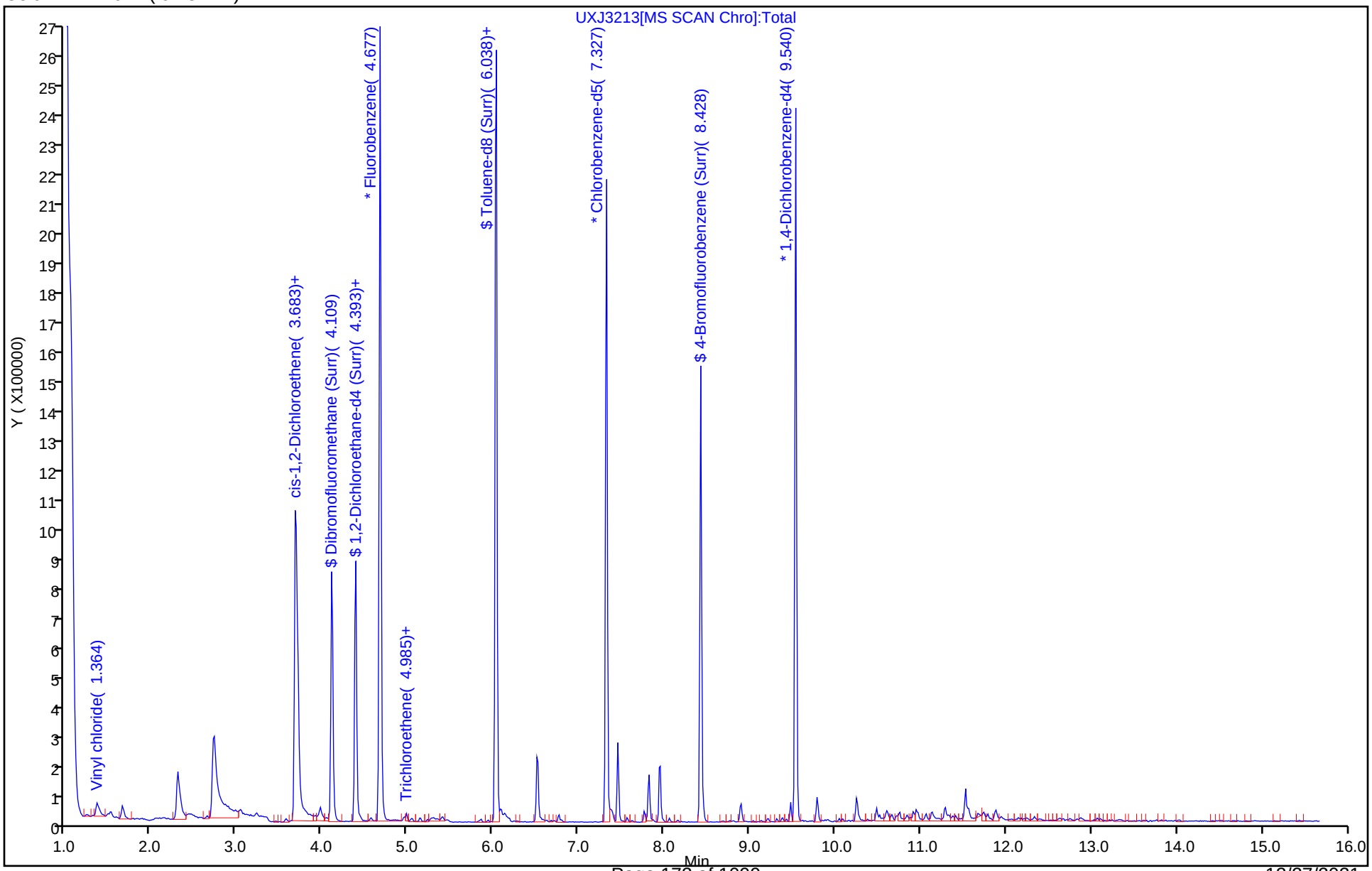
Report Date: 21-Dec-2021 09:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3213.D

Injection Date:	20-Dec-2021 15:05:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-3	Lab Sample ID:	240-161553-3	Worklist Smp#:	39
Client ID:	SL-18_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3213.D
Lims ID: 240-161553-B-3
Client ID: SL-18_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:05:30 ALS Bottle#: 10 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-039
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:54:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	89.16
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.67
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.31
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.9	79.55

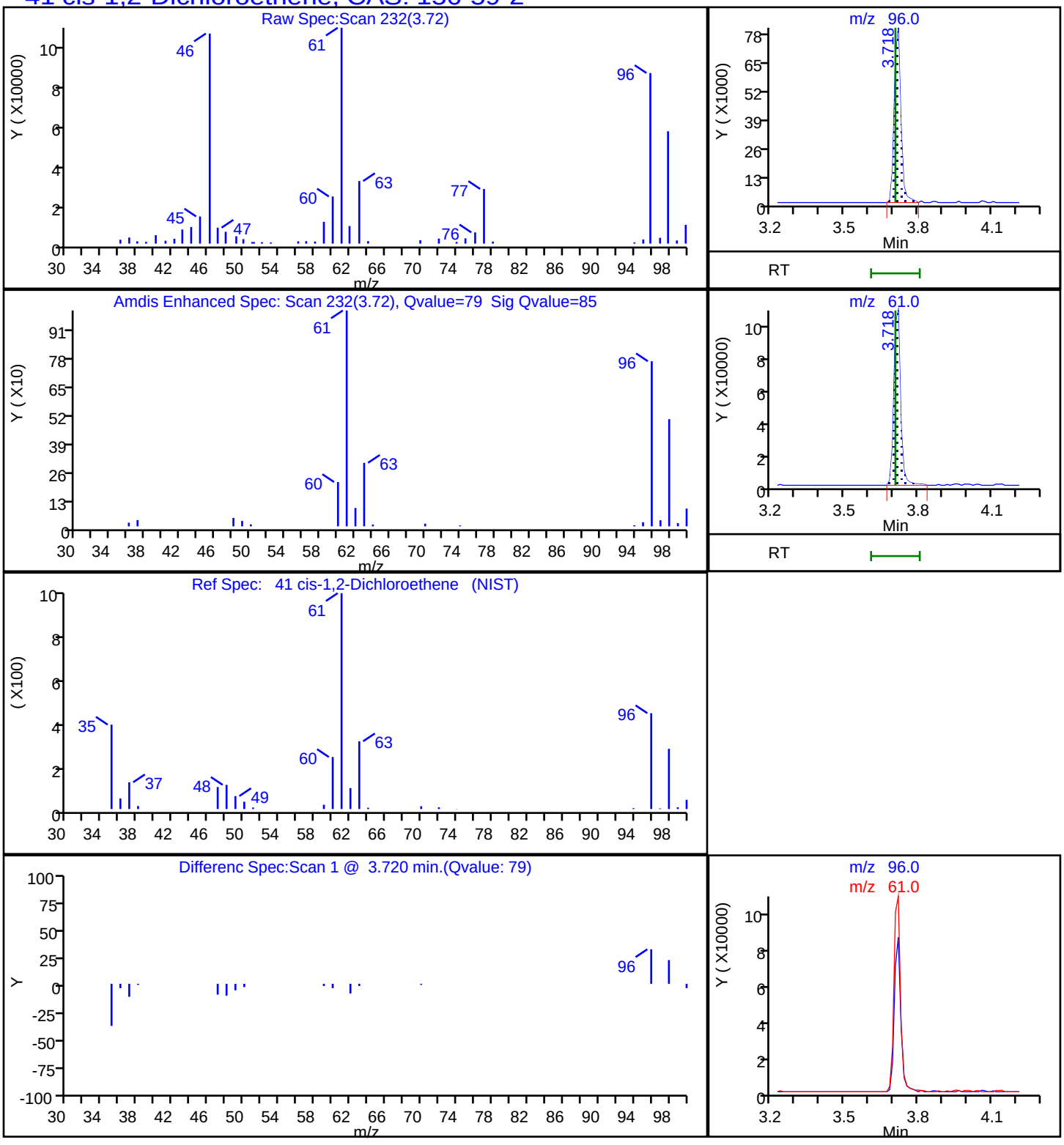
Report Date: 21-Dec-2021 09:02:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3213.D

Injection Date:	20-Dec-2021 15:05:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-3	Lab Sample ID:	240-161553-3		
Client ID:	SL-18_121421				
Operator ID:	043582	ALS Bottle#:	10	Worklist Smp#:	39
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

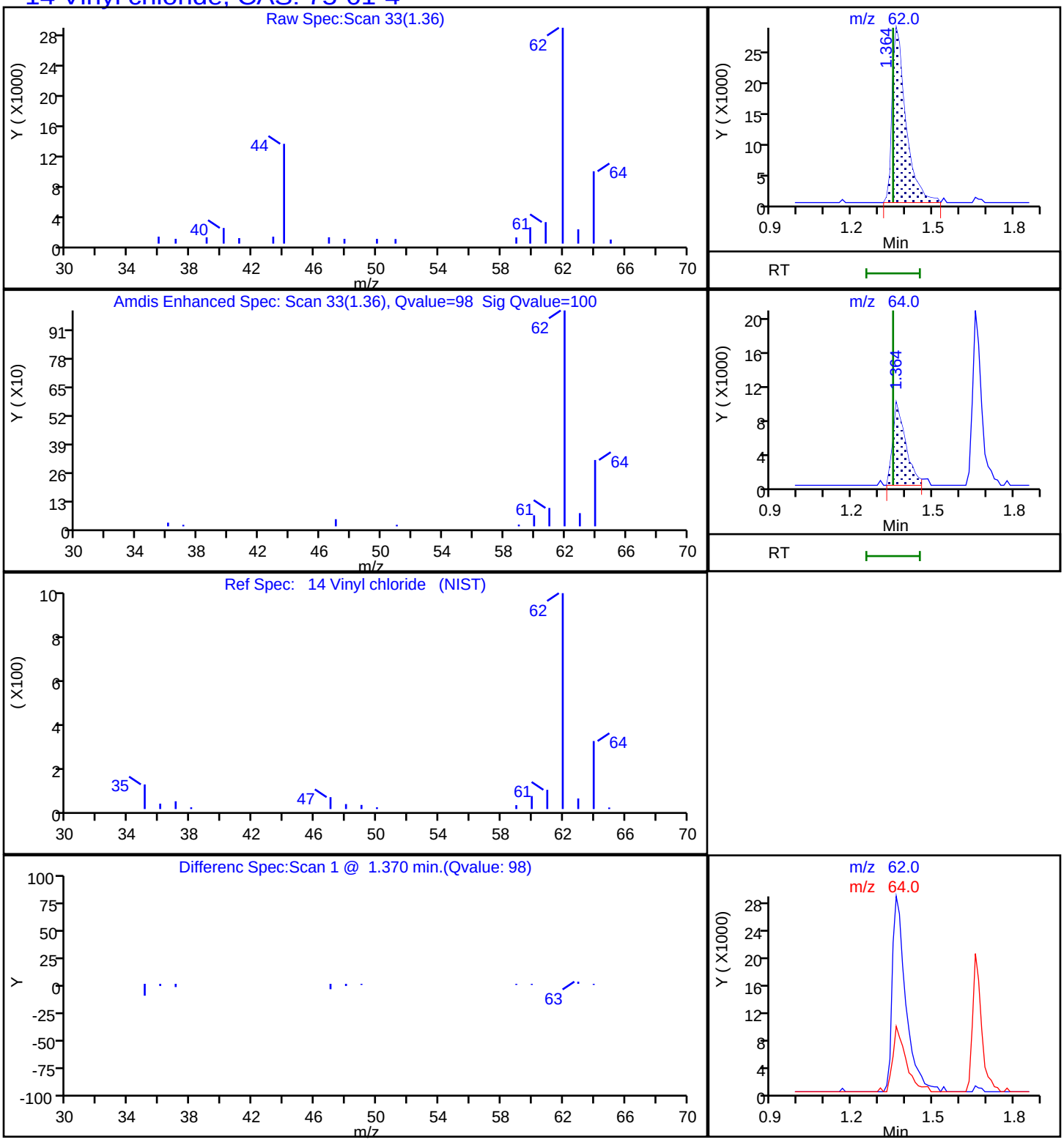


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3213.D

Injection Date:	20-Dec-2021 15:05:30	Instrument ID:	A3UX11
Lims ID:	240-161553-B-3	Lab Sample ID:	240-161553-3
Client ID:	SL-18_121421		
Operator ID:	043582	ALS Bottle#:	10 Worklist Smp#: 39
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-17_121421 Lab Sample ID: 240-161553-4

Matrix: Water Lab File ID: UXJ3214.D

Analysis Method: 8260B Date Collected: 12/14/2021 10:25

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 15:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	6.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	5.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	91		56-136
2037-26-5	Toluene-d8 (Surr)	115		78-122
1868-53-7	Dibromofluoromethane (Surr)	95		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3214.D
Lims ID: 240-161553-B-4
Client ID: SL-17_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:27:30 ALS Bottle#: 11 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-040
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:03

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1900339	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1042656	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	589353	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	461122	19.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	548609	20.0	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1705285	23.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	473300	18.2	
	14 Vinyl chloride	62	1.364	1.352	0.012	98	134415	5.69	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	183695	6.65	
	60 Trichloroethene	130	4.985	4.985	0.000	79	3923	0.1322	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

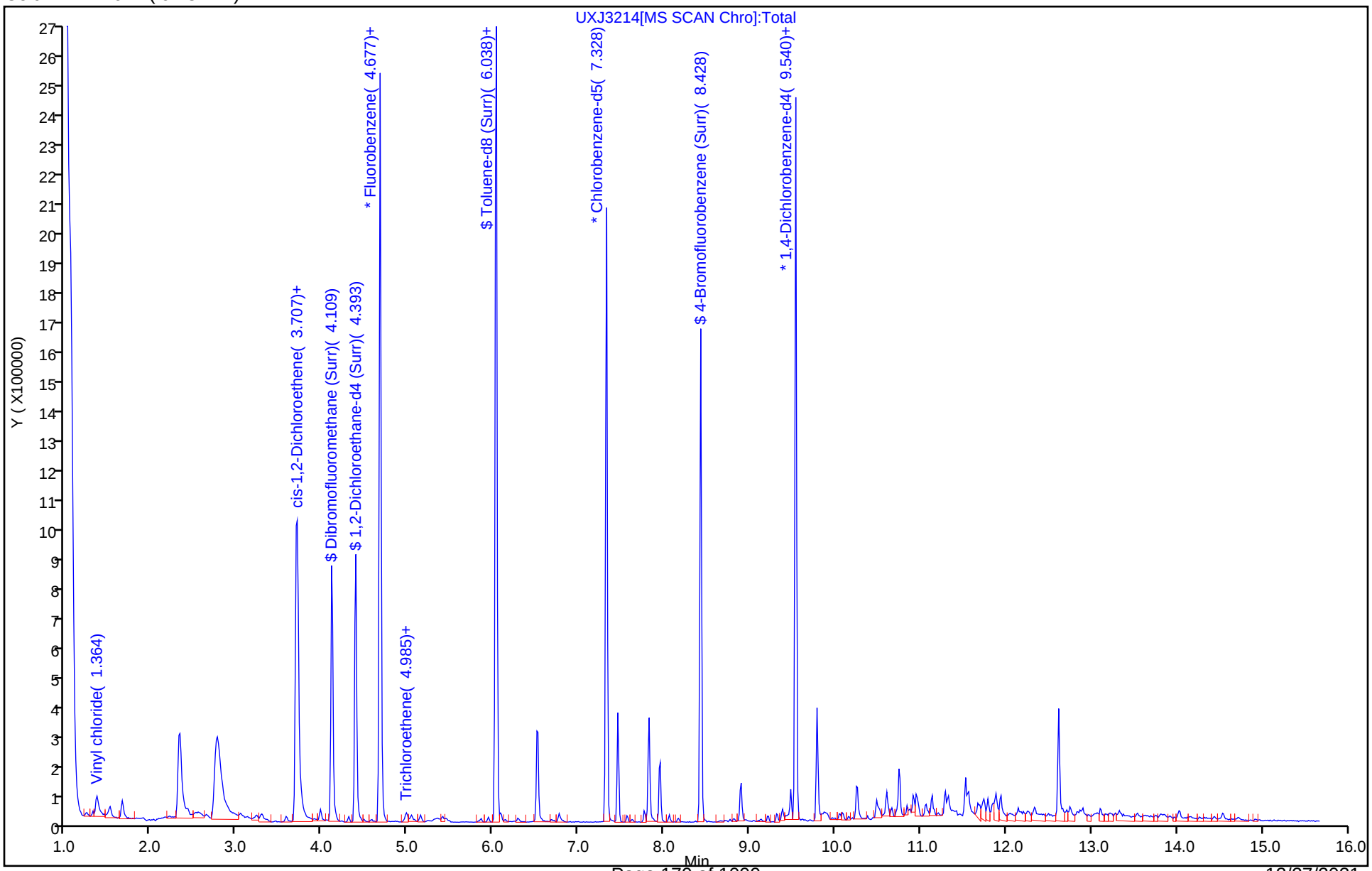
Report Date: 21-Dec-2021 09:02:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3214.D

Injection Date:	20-Dec-2021 15:27:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-4	Lab Sample ID:	240-161553-4	Worklist Smp#:	40
Client ID:	SL-17_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3214.D
Lims ID: 240-161553-B-4
Client ID: SL-17_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:27:30 ALS Bottle#: 11 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-040
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.0	95.24
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.0	99.88
$ 6 Toluene-d8 (Surr)	20.0	23.0	114.97
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.2	91.08

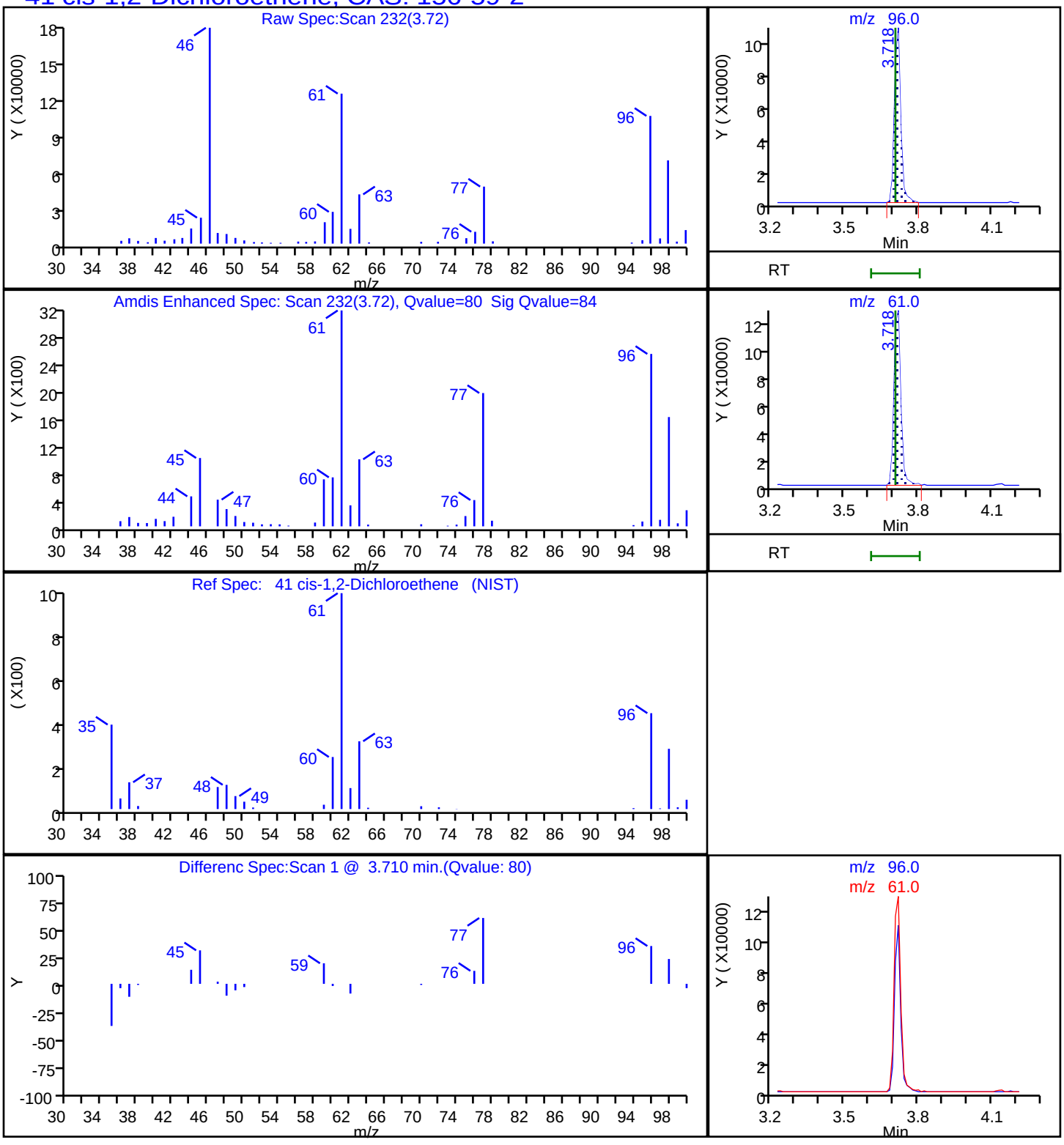
Report Date: 21-Dec-2021 09:02:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3214.D

Injection Date:	20-Dec-2021 15:27:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-4	Lab Sample ID:	240-161553-4		
Client ID:	SL-17_121421				
Operator ID:	043582	ALS Bottle#:	11	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

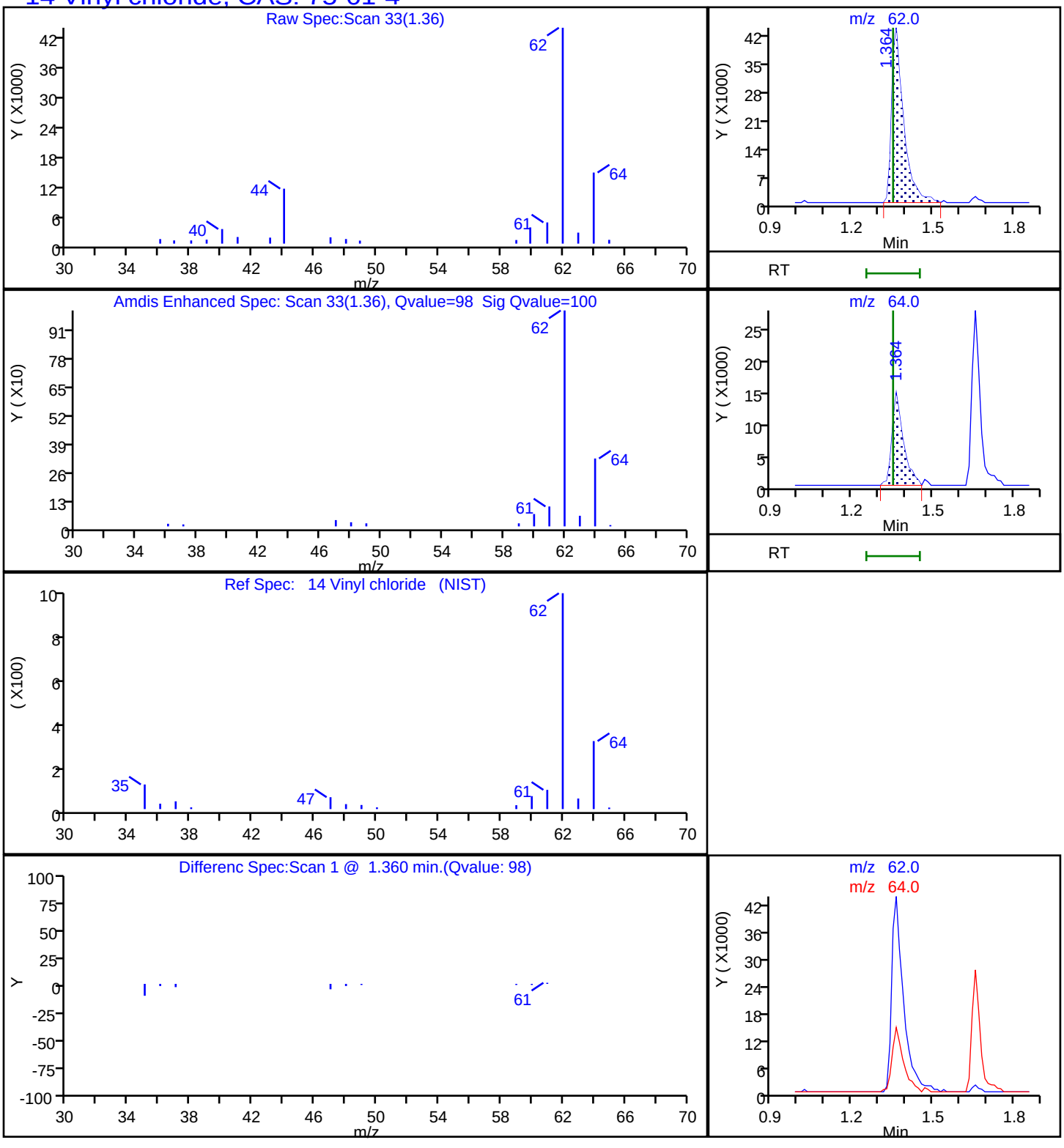


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3214.D

Injection Date:	20-Dec-2021 15:27:30	Instrument ID:	A3UX11
Lims ID:	240-161553-B-4	Lab Sample ID:	240-161553-4
Client ID:	SL-17_121421		
Operator ID:	043582	ALS Bottle#:	11 Worklist Smp#: 40
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-16_121421 Lab Sample ID: 240-161553-5

Matrix: Water Lab File ID: UXJ3215.D

Analysis Method: 8260B Date Collected: 12/14/2021 10:45

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	5.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-137
460-00-4	4-Bromofluorobenzene (Surr)	76		56-136
2037-26-5	Toluene-d8 (Surr)	102		78-122
1868-53-7	Dibromofluoromethane (Surr)	84		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3215.D
Lims ID: 240-161553-B-5
Client ID: SL-16_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:49:30 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-041
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2047185	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1218840	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	626447	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	440450	16.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	523923	17.7	
$ 6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	1762579	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	463622	15.3	
14 Vinyl chloride	62	1.364	1.352	0.012	98	89033	3.50	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	7
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	81	150034	5.05	
60 Trichloroethene	130	4.985	4.985	0.000	92	3931	0.1230	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

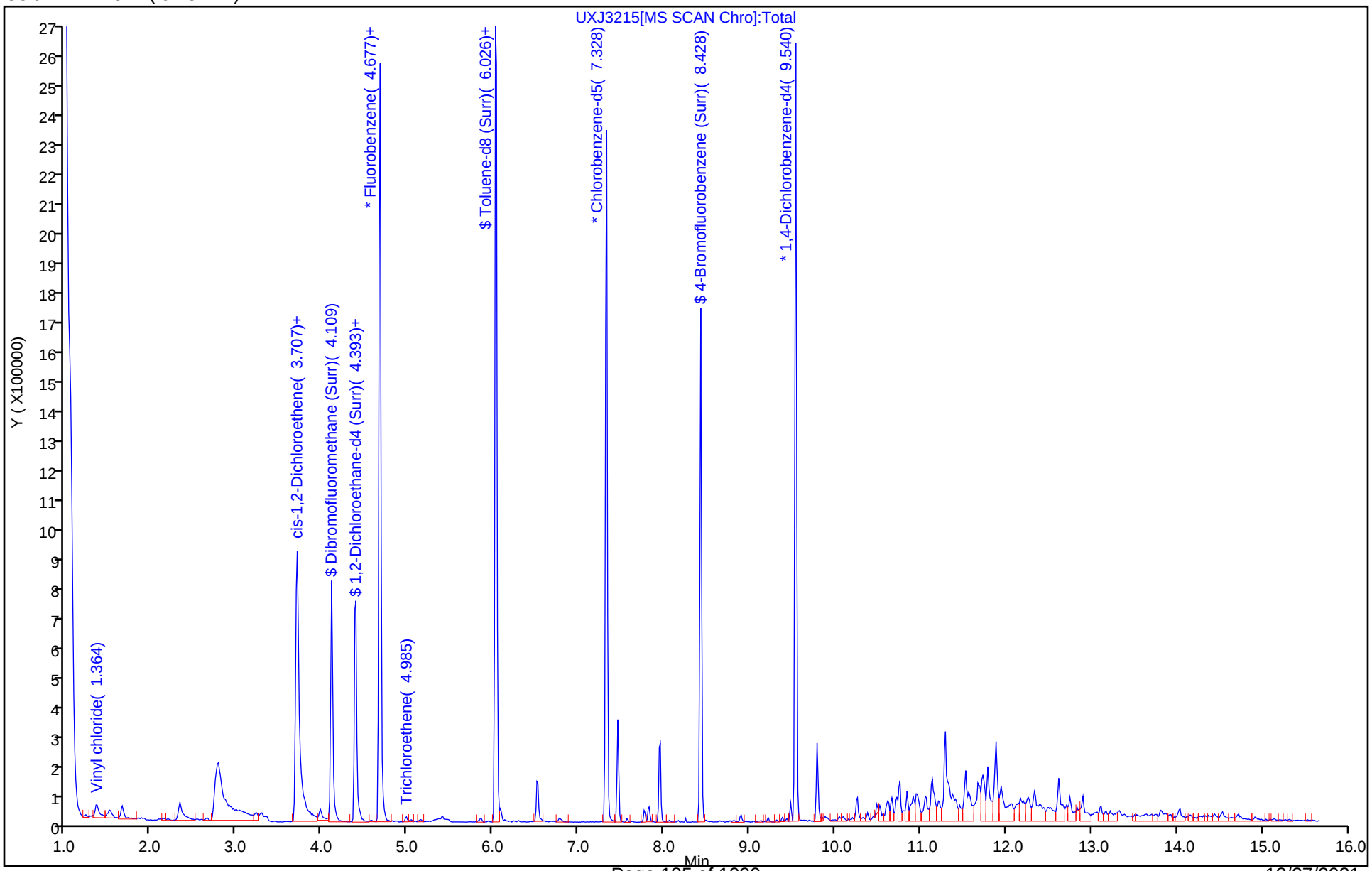
Report Date: 21-Dec-2021 09:02:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3215.D

Injection Date:	20-Dec-2021 15:49:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-5	Lab Sample ID:	240-161553-5	Worklist Smp#:	41
Client ID:	SL-16_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3215.D
Lims ID: 240-161553-B-5
Client ID: SL-16_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:49:30 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-041
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:18

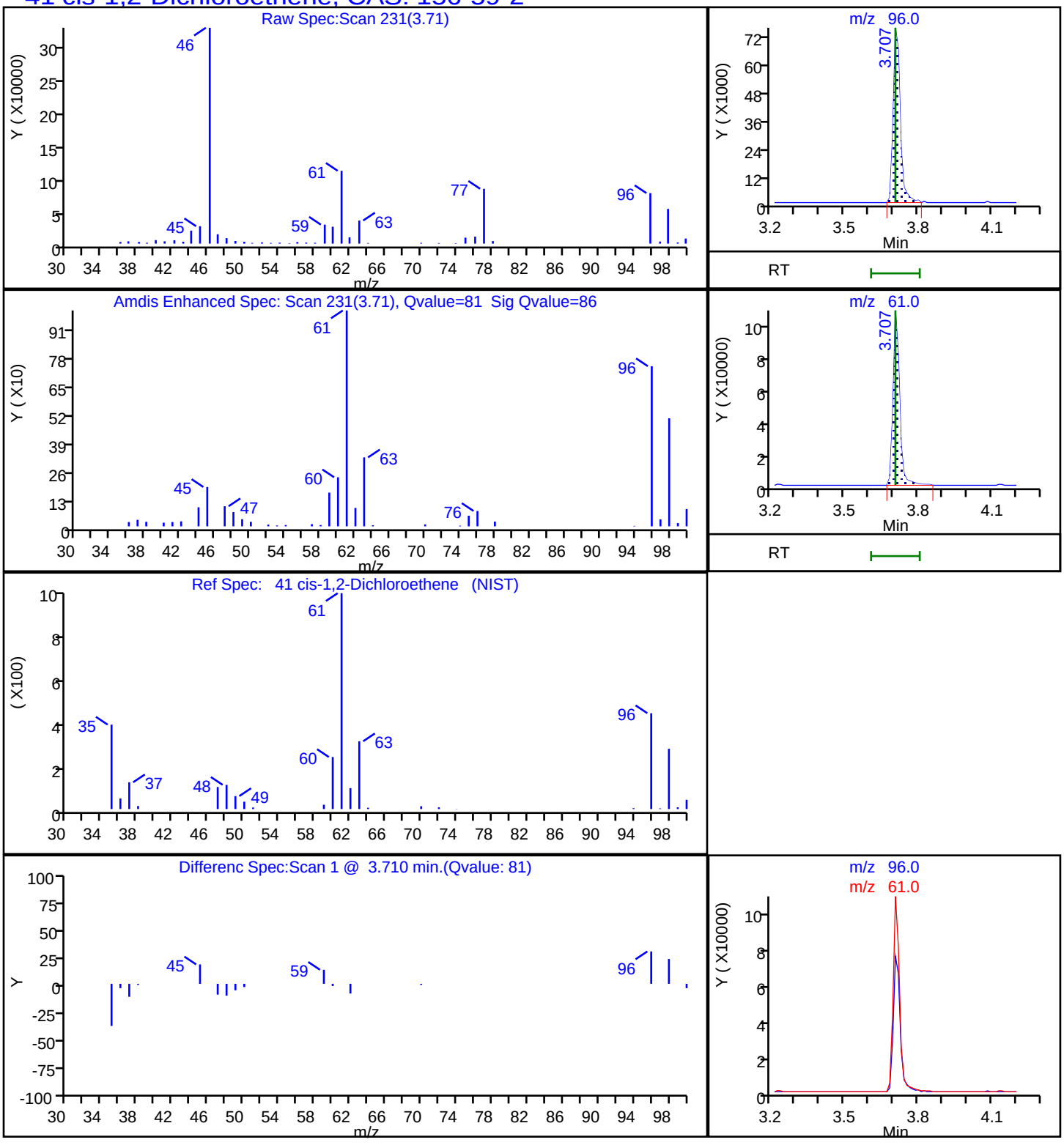
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	16.9	84.45
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.7	88.55
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.66
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.3	76.32

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3215.D

Injection Date:	20-Dec-2021 15:49:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-5	Lab Sample ID:	240-161553-5		
Client ID:	SL-16_121421				
Operator ID:	043582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



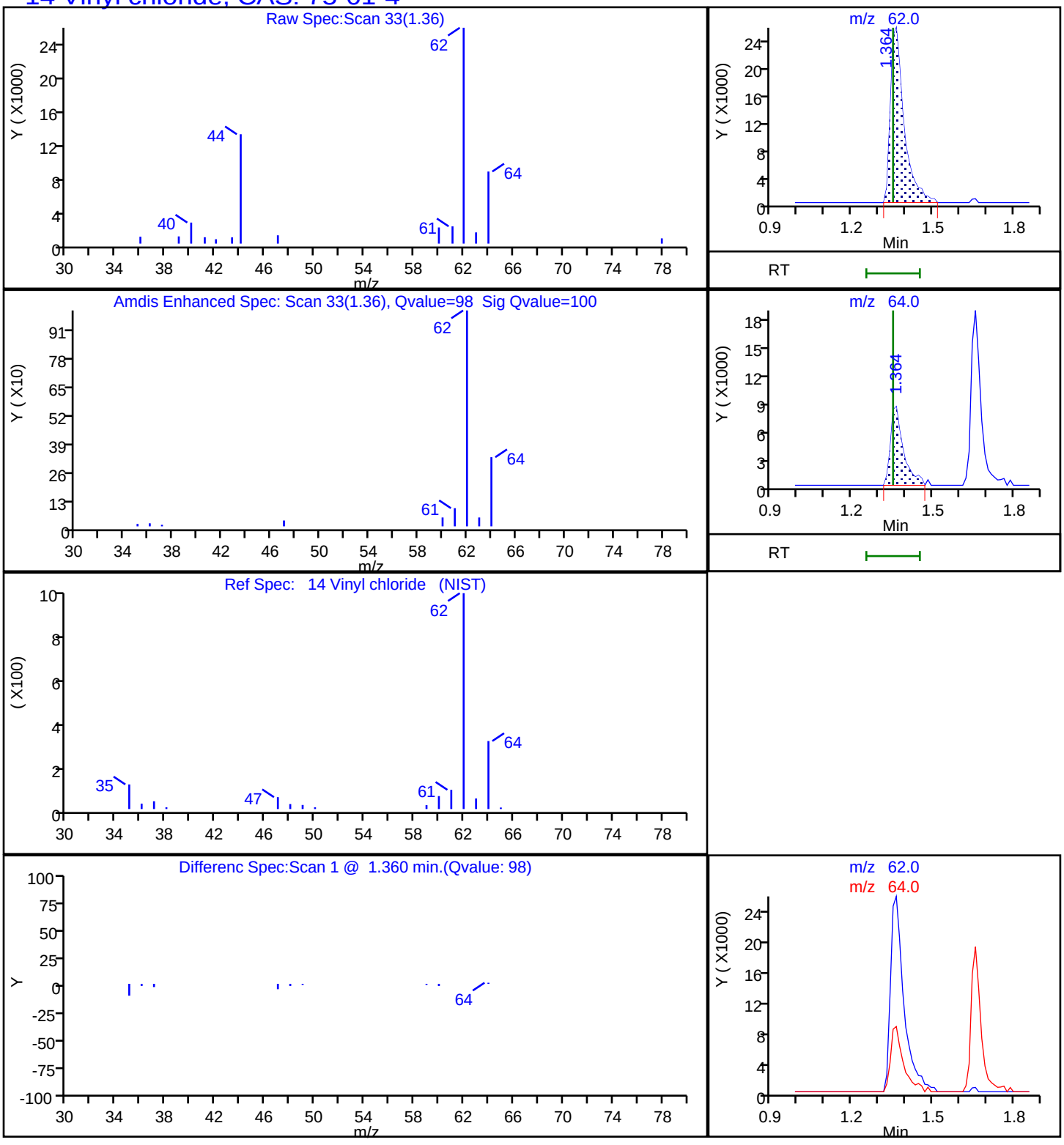
Report Date: 21-Dec-2021 09:02:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3215.D

Injection Date:	20-Dec-2021 15:49:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-5	Lab Sample ID:	240-161553-5		
Client ID:	SL-16_121421				
Operator ID:	043582	ALS Bottle#:	12	Worklist Smp#:	41
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-3_121421 Lab Sample ID: 240-161553-6

Matrix: Water Lab File ID: UXJ3216.D

Analysis Method: 8260B Date Collected: 12/14/2021 11:15

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 16:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	6.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3216.D
Lims ID: 240-161553-B-6
Client ID: SL-3_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 16:11:30 ALS Bottle#: 13 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-042
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:28

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1994911	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1147894	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	631122	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	464051	18.3	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	555898	19.3	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1734018	21.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	489968	17.1	
	14 Vinyl chloride	62	1.364	1.352	0.012	97	111314	4.49	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	81	175215	6.05	
	60 Trichloroethene	130	4.984	4.985	-0.001	90	5456	0.1752	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

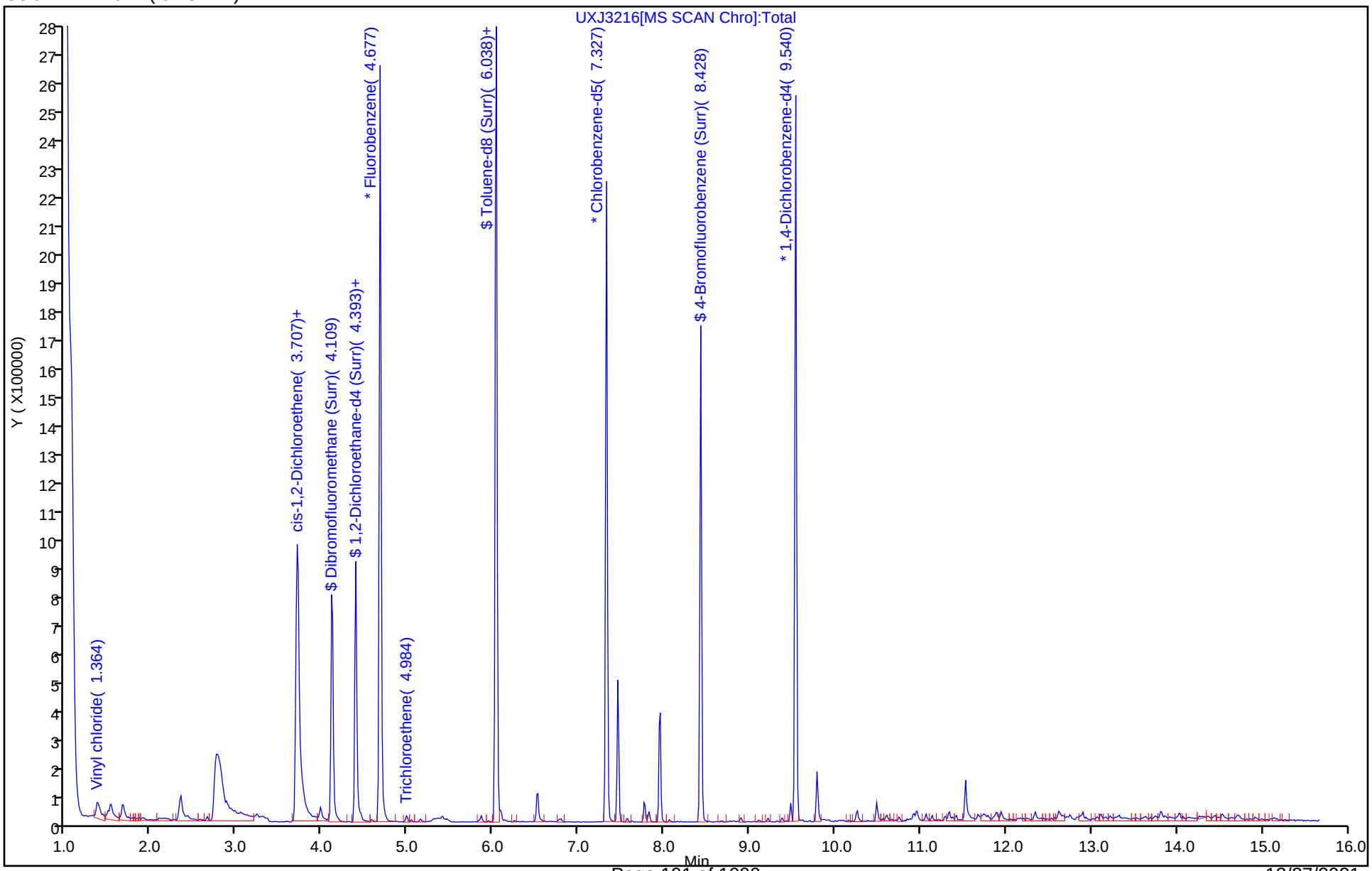
Report Date: 21-Dec-2021 09:02:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3216.D

Injection Date:	20-Dec-2021 16:11:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-6	Lab Sample ID:	240-161553-6	Worklist Smp#:	42
Client ID:	SL-3_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3216.D				
Lims ID:	240-161553-B-6				
Client ID:	SL-3_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 16:11:30	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-042				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:09	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.30
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.41
$ 6 Toluene-d8 (Surr)	20.0	21.2	106.19
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.1	85.65

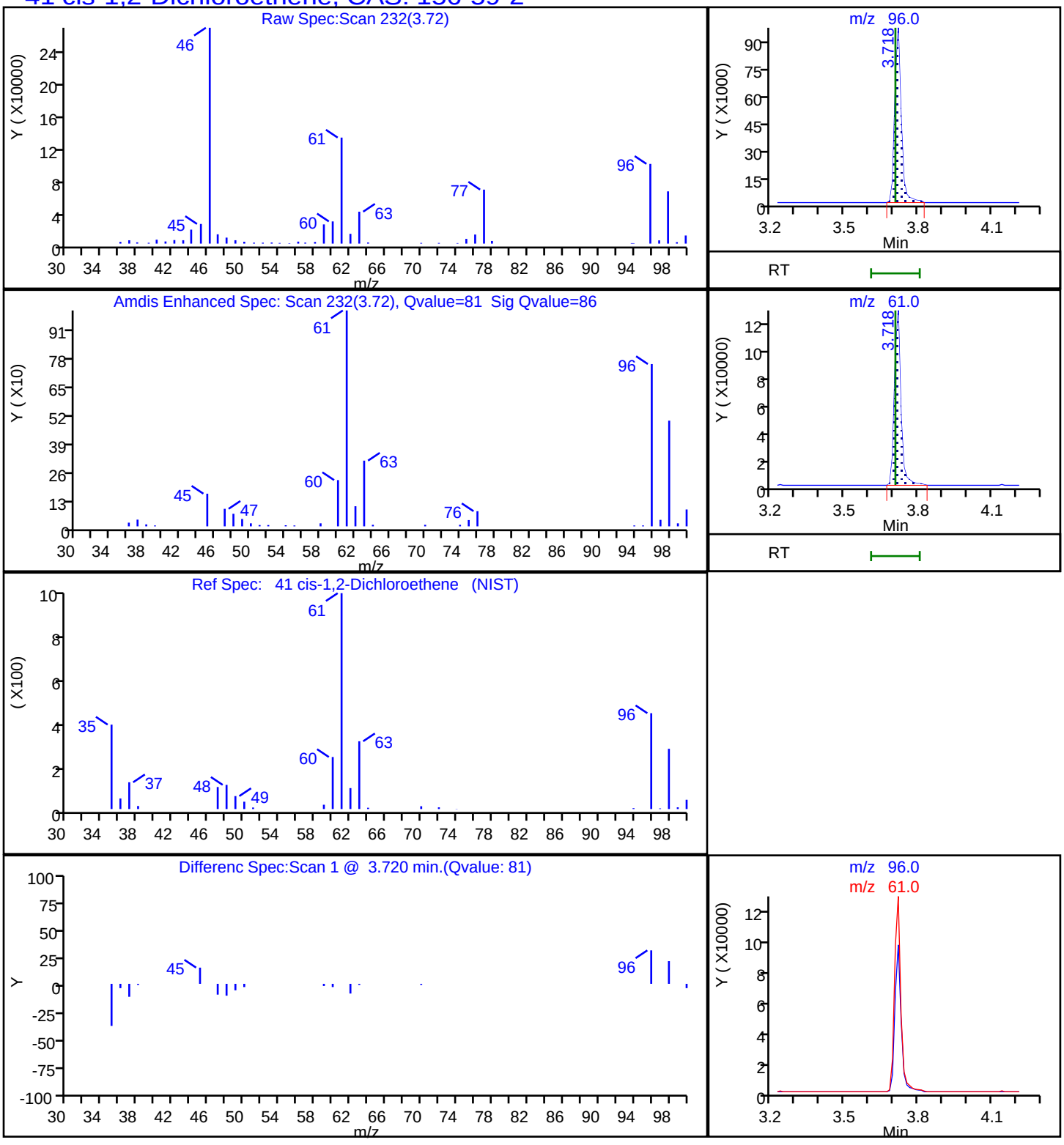
Report Date: 21-Dec-2021 09:02:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3216.D

Injection Date:	20-Dec-2021 16:11:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-6	Lab Sample ID:	240-161553-6		
Client ID:	SL-3_121421				
Operator ID:	043582	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

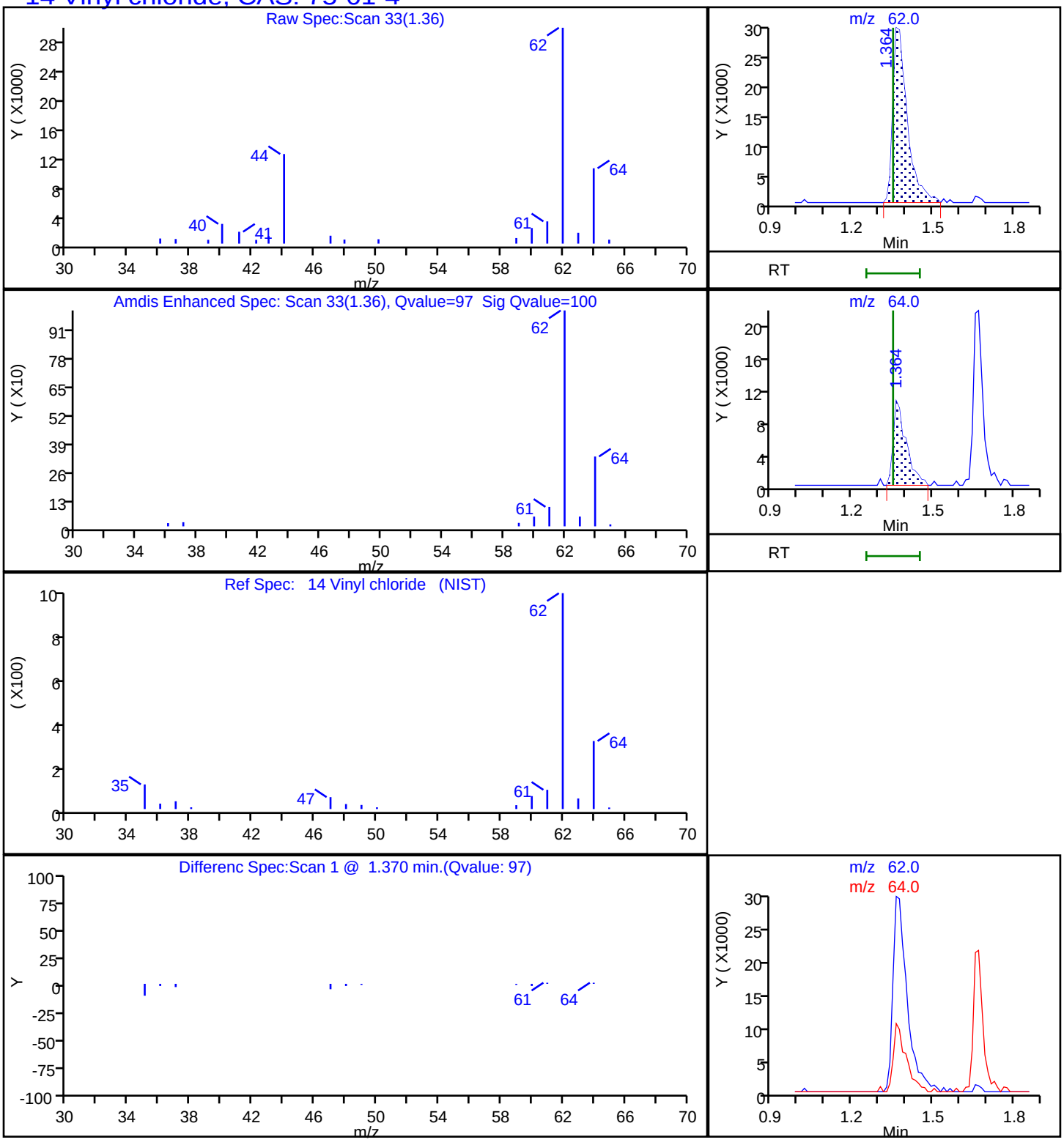


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3216.D

Injection Date:	20-Dec-2021 16:11:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-6	Lab Sample ID:	240-161553-6		
Client ID:	SL-3_121421				
Operator ID:	043582	ALS Bottle#:	13	Worklist Smp#:	42
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-2_121421 Lab Sample ID: 240-161553-7

Matrix: Water Lab File ID: UXJ3217.D

Analysis Method: 8260B Date Collected: 12/14/2021 11:45

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.9		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3217.D
Lims ID: 240-161553-B-7
Client ID: SL-2_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 16:33:30 ALS Bottle#: 14 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-043
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:35

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1977892	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1116362	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	614676	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	459363	18.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	560171	19.6	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1734500	21.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	477787	17.2	
	14 Vinyl chloride	62	1.364	1.352	0.012	98	96421	3.92	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	7
	41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	139861	4.87	
	60 Trichloroethene	130	4.985	4.985	0.000	88	4701	0.1522	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

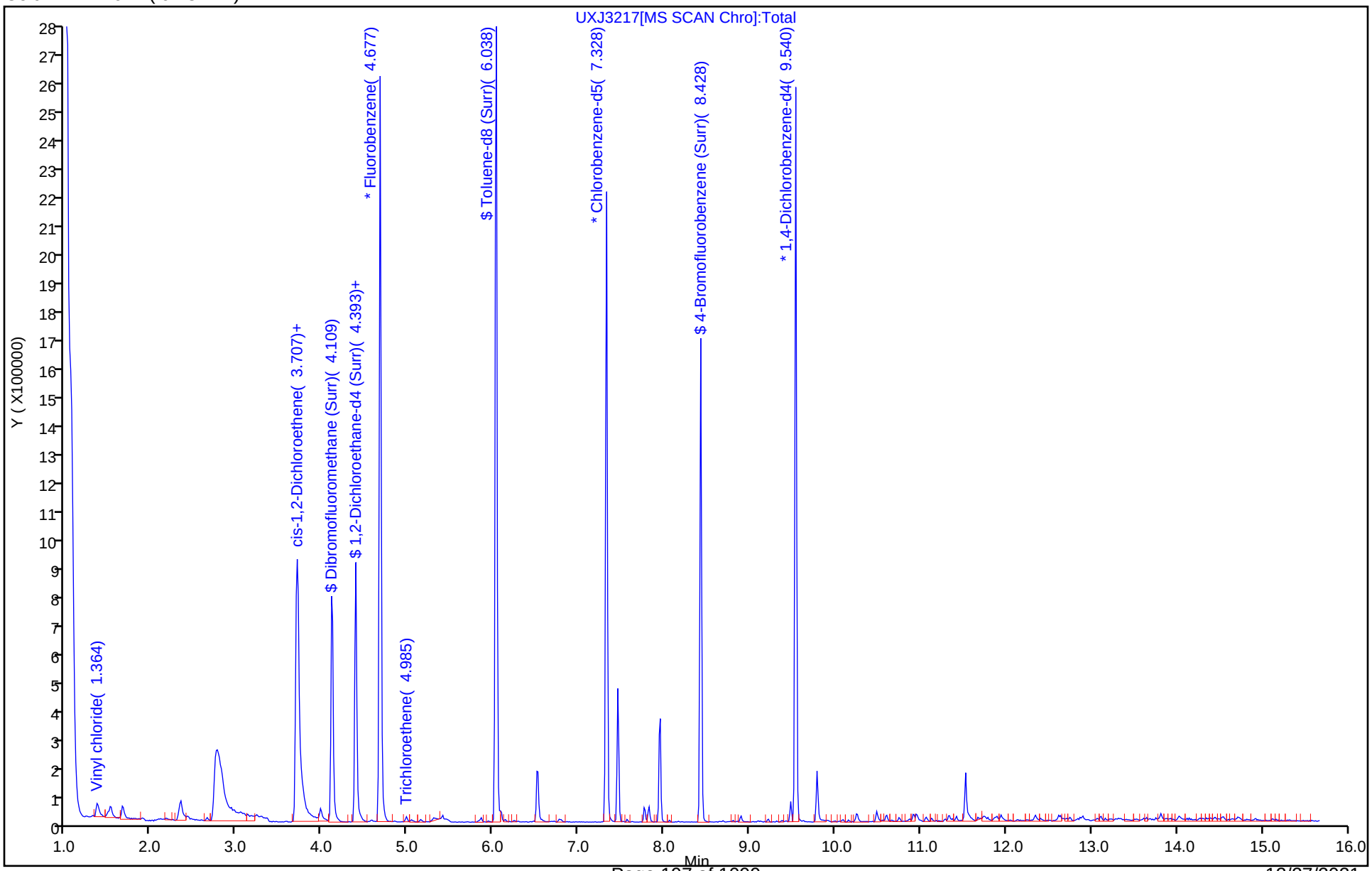
Report Date: 21-Dec-2021 09:02:21 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3217.D

Injection Date:	20-Dec-2021 16:33:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-7	Lab Sample ID:	240-161553-7	Worklist Smp#:	43
Client ID:	SL-2_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3217.D
Lims ID: 240-161553-B-7
Client ID: SL-2_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 16:33:30 ALS Bottle#: 14 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-043
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.2	91.16
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.6	97.99
$ 6 Toluene-d8 (Surr)	20.0	21.8	109.22
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.2	85.88

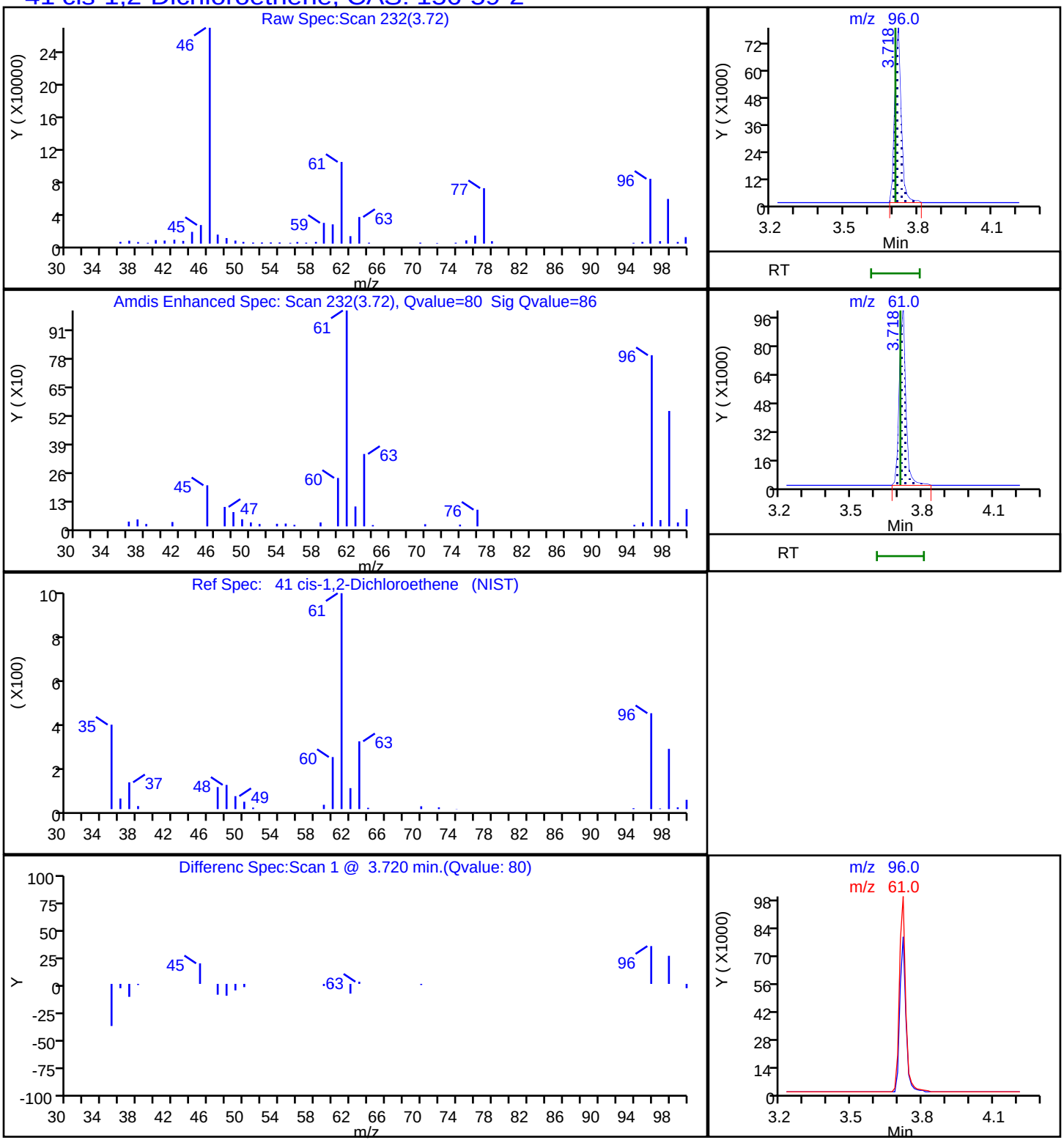
Report Date: 21-Dec-2021 09:02:21 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3217.D

Injection Date:	20-Dec-2021 16:33:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-7	Lab Sample ID:	240-161553-7		
Client ID:	SL-2_121421				
Operator ID:	043582	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

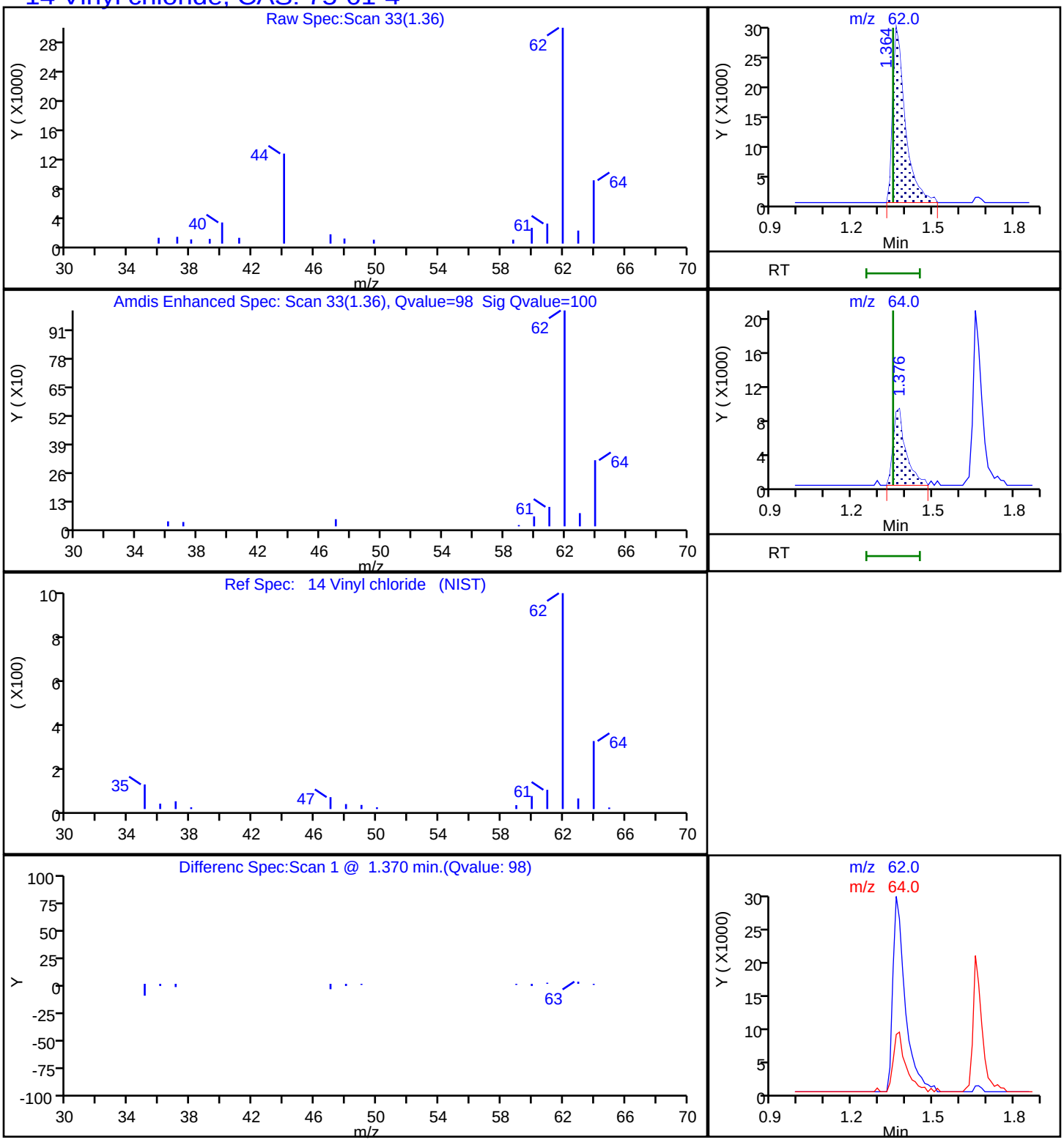


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3217.D

Injection Date:	20-Dec-2021 16:33:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-7	Lab Sample ID:	240-161553-7		
Client ID:	SL-2_121421				
Operator ID:	043582	ALS Bottle#:	14	Worklist Smp#:	43
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: MH-1231_121421 Lab Sample ID: 240-161553-8

Matrix: Water Lab File ID: UXJ3218.D

Analysis Method: 8260B Date Collected: 12/14/2021 12:10

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 16:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	17		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	14		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	100		78-122
1868-53-7	Dibromofluoromethane (Surr)	81		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3218.D
Lims ID: 240-161553-B-8
Client ID: MH-1231_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 16:55:30 ALS Bottle#: 15 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-044
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2024935	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1245625	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	710619	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	418241	16.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	518946	17.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1772029	20.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	505573	16.3	
14 Vinyl chloride	62	1.352	1.352	0.000	98	345562	13.7	
21 1,1-Dichloroethene	96		2.239				ND	7
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	91	3983	0.1395	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	80	487505	16.6	
60 Trichloroethene	130	4.985	4.985	0.000	96	9750	0.3084	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

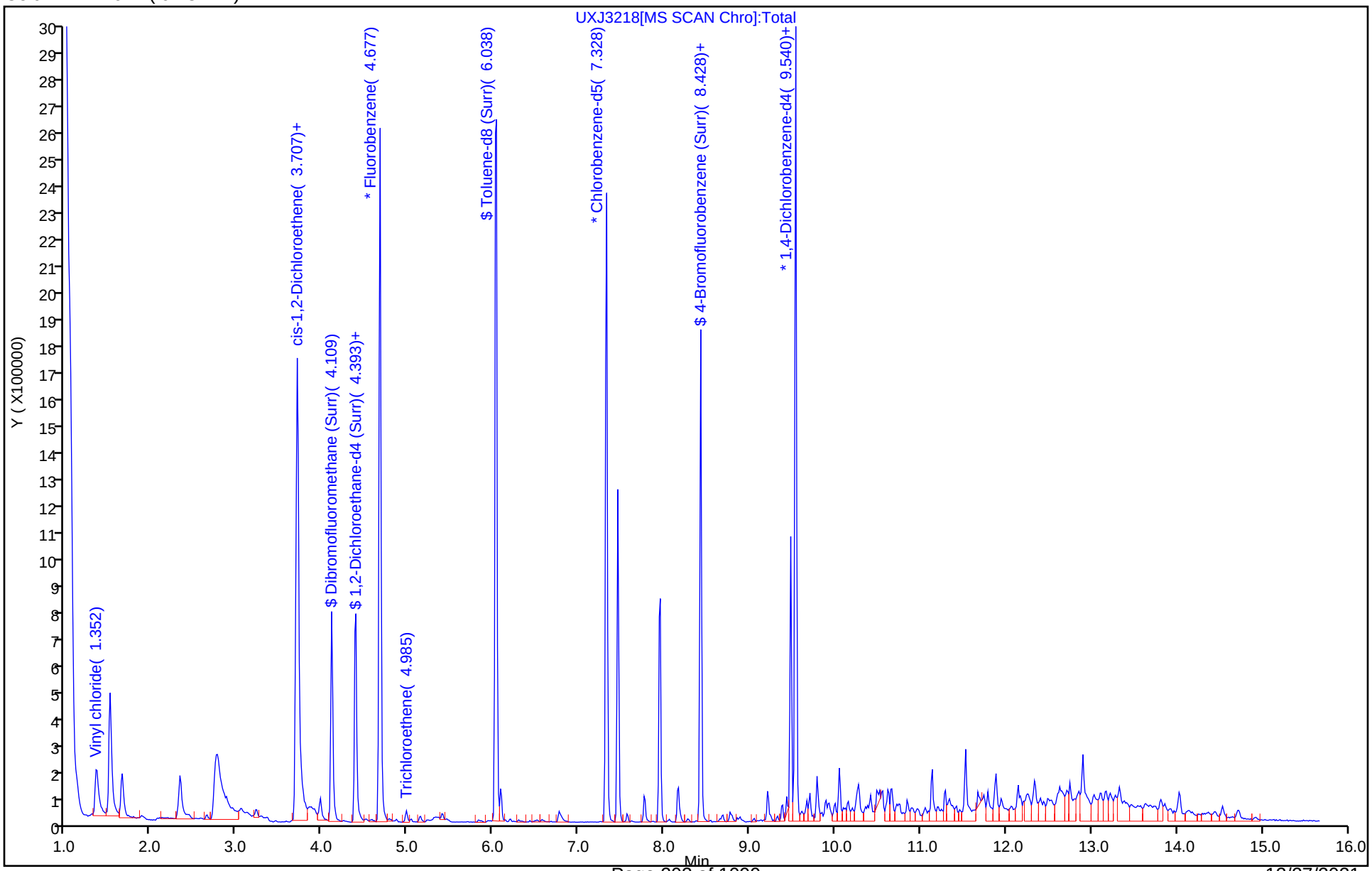
Report Date: 21-Dec-2021 09:02:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3218.D

Injection Date:	20-Dec-2021 16:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-8	Lab Sample ID:	240-161553-8	Worklist Smp#:	44
Client ID:	MH-1231_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3218.D
Lims ID: 240-161553-B-8
Client ID: MH-1231_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 16:55:30 ALS Bottle#: 15 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-044
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	16.2	81.07
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.7	88.67
$ 6 Toluene-d8 (Surr)	20.0	20.0	100.00
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.3	81.44

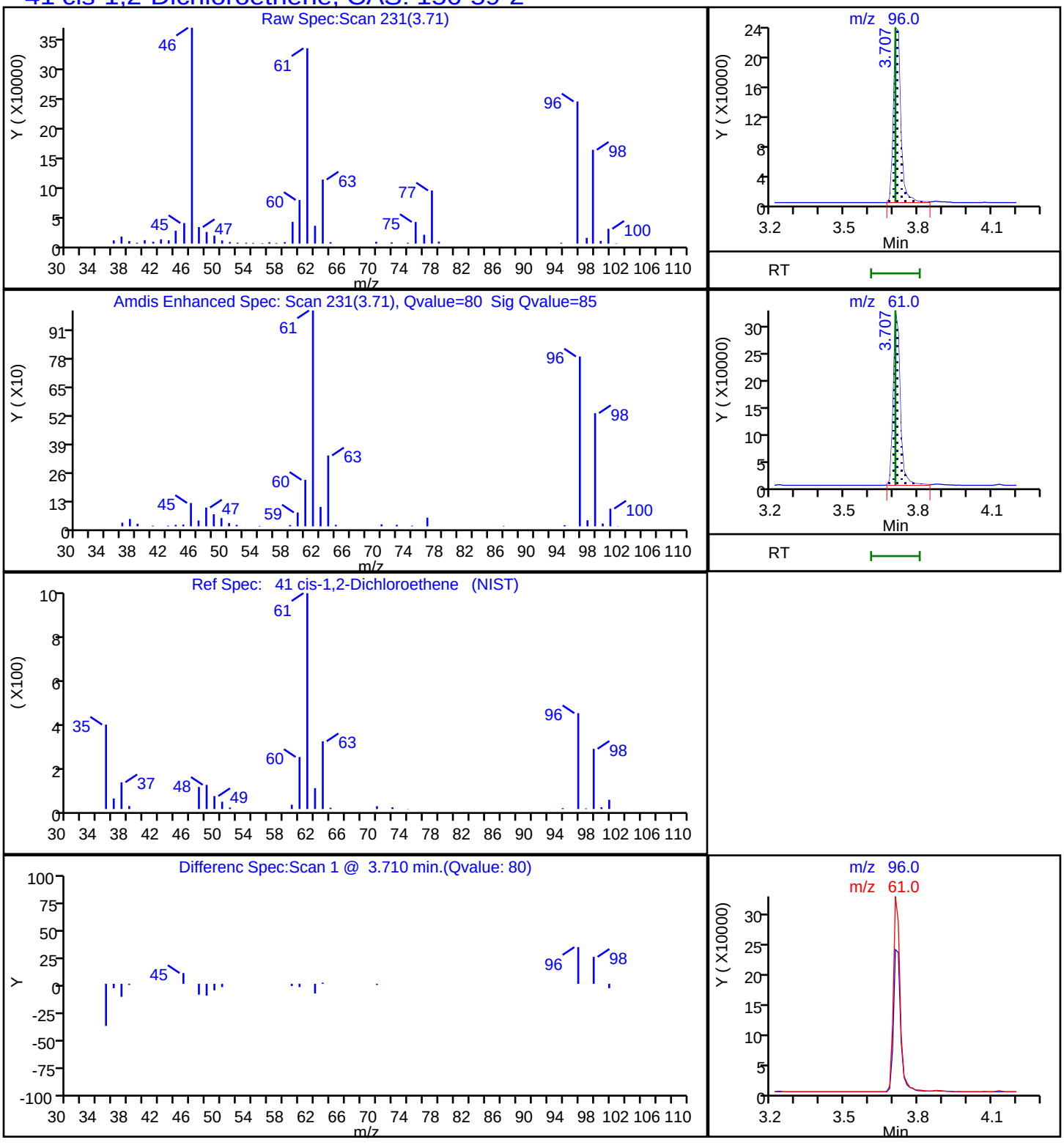
Report Date: 21-Dec-2021 09:02:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3218.D

Injection Date:	20-Dec-2021 16:55:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-8	Lab Sample ID:	240-161553-8		
Client ID:	MH-1231_121421				
Operator ID:	043582	ALS Bottle#:	15	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



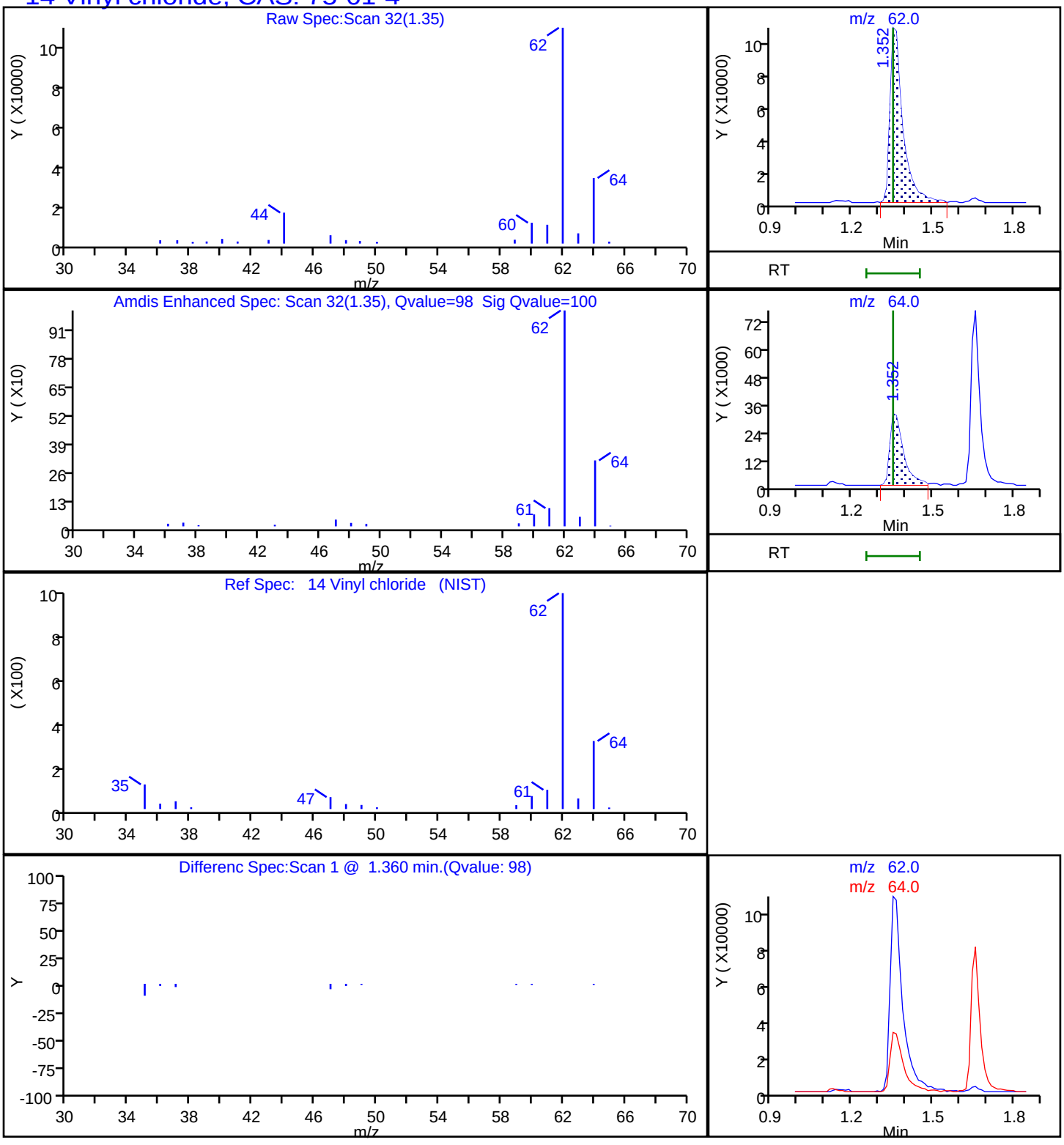
Report Date: 21-Dec-2021 09:02:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3218.D

Injection Date:	20-Dec-2021 16:55:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-8	Lab Sample ID:	240-161553-8		
Client ID:	MH-1231_121421				
Operator ID:	043582	ALS Bottle#:	15	Worklist Smp#:	44
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-21_121421 Lab Sample ID: 240-161553-9

Matrix: Water Lab File ID: UXJ3219.D

Analysis Method: 8260B Date Collected: 12/14/2021 13:40

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.84	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-137
460-00-4	4-Bromofluorobenzene (Surr)	79		56-136
2037-26-5	Toluene-d8 (Surr)	102		78-122
1868-53-7	Dibromofluoromethane (Surr)	85		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3219.D
Lims ID: 240-161553-B-9
Client ID: SL-21_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 17:17:30 ALS Bottle#: 16 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-045
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:55:57

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	1969255	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1198154	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	625900	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	426976	17.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	524104	18.4	
$	6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	1745034	20.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	474573	15.9	
	14 Vinyl chloride	62	1.364	1.352	0.012	88	10854	0.4437	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	81	23921	0.8362	
	60 Trichloroethene	130		4.985				ND	7
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

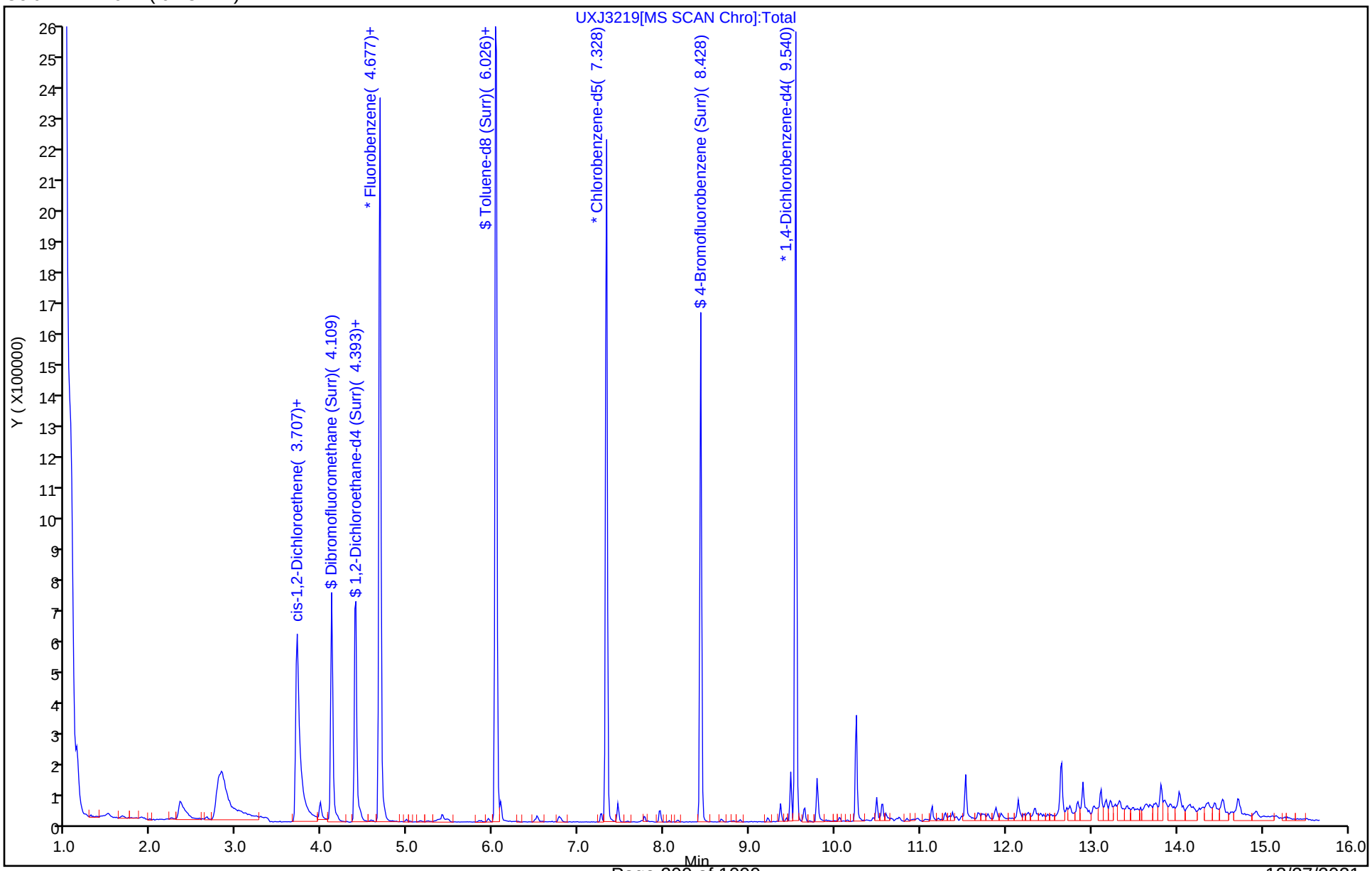
Report Date: 21-Dec-2021 09:02:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3219.D

Injection Date:	20-Dec-2021 17:17:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-9	Lab Sample ID:	240-161553-9	Worklist Smp#:	45
Client ID:	SL-21_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3219.D
Lims ID: 240-161553-B-9
Client ID: SL-21_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 17:17:30 ALS Bottle#: 16 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-045
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

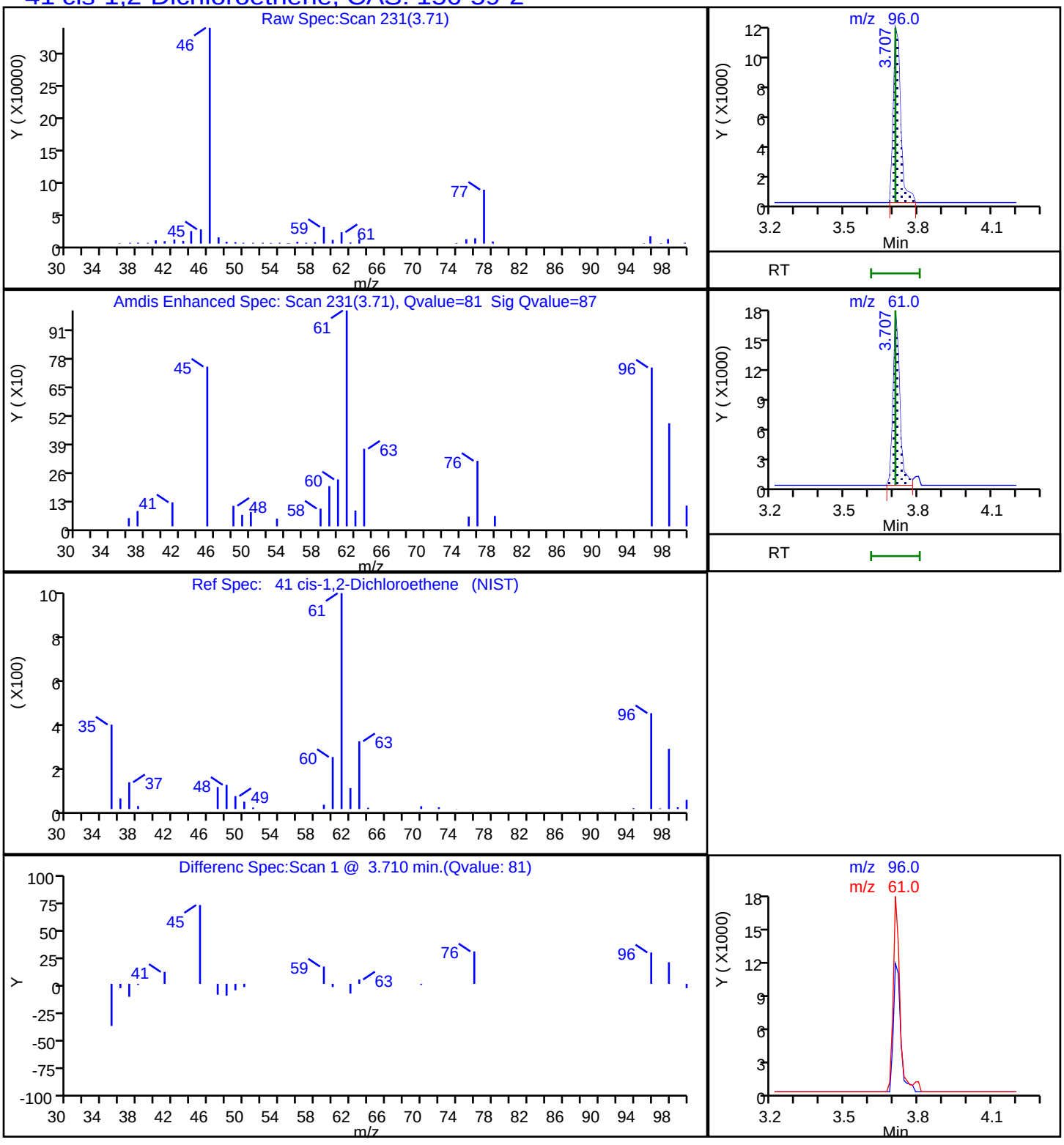
First Level Reviewer: evansle Date: 21-Dec-2021 08:55:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.0	85.10
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	92.08
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.38
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.9	79.48

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3219.D				
Injection Date:	20-Dec-2021 17:17:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-9	Lab Sample ID:	240-161553-9		
Client ID:	SL-21_121421				
Operator ID:	043582	ALS Bottle#:	16	Worklist Smp#:	45
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-20_121421 Lab Sample ID: 240-161553-10

Matrix: Water Lab File ID: UXJ3220.D

Analysis Method: 8260B Date Collected: 12/14/2021 14:05

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 17:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.74	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	112		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3220.D
Lims ID: 240-161553-B-10
Client ID: SL-20_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 17:40:30 ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-046
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:56:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1961455	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1135779	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	604427	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	453177	18.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	530361	18.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1814104	22.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	473133	16.7	
14 Vinyl chloride	62	1.387	1.352	0.035	95	9094	0.3733	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	76	20945	0.7351	
60 Trichloroethene	130		4.985				ND	7
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

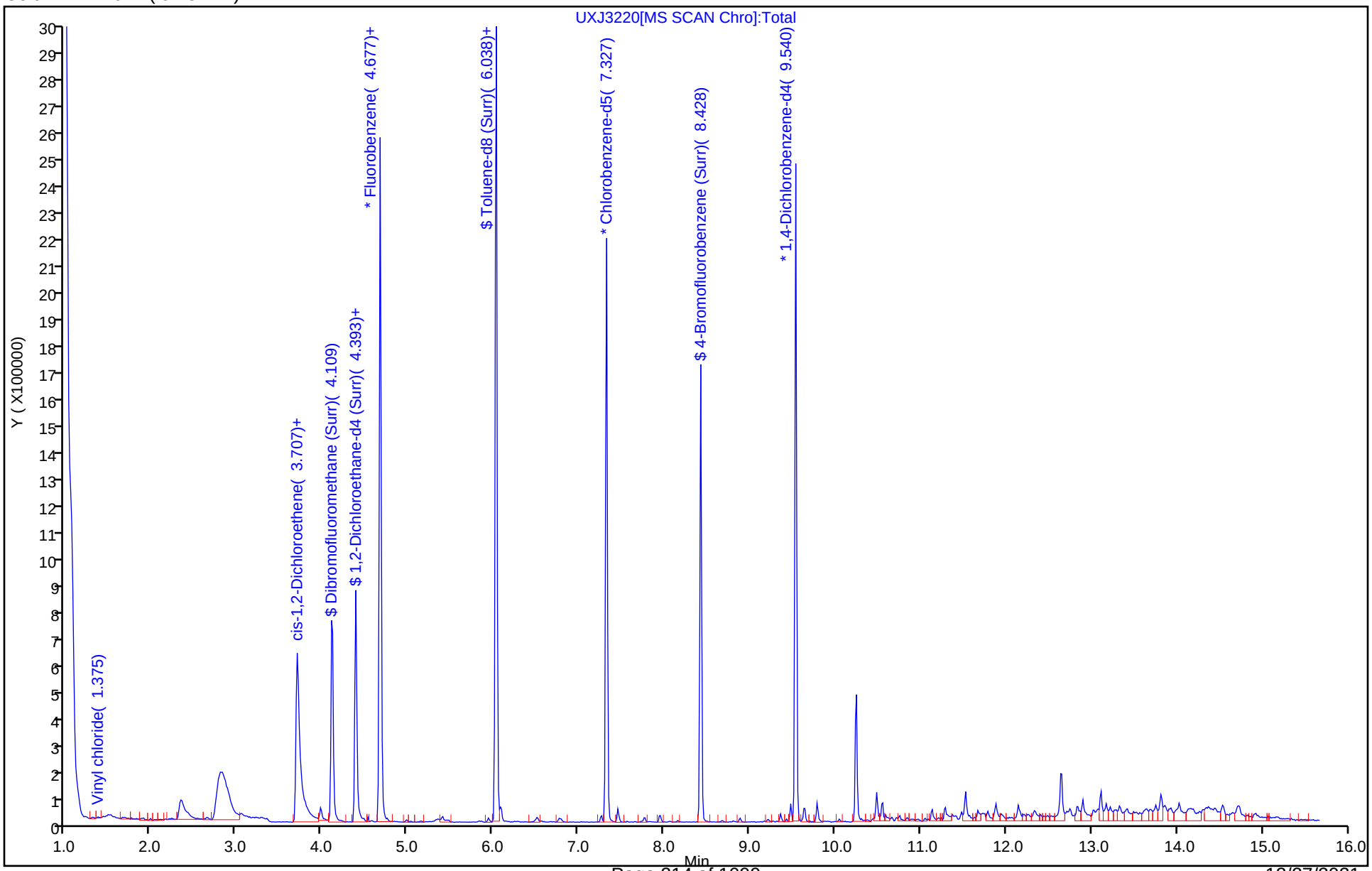
Report Date: 21-Dec-2021 09:02:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3220.D

Injection Date:	20-Dec-2021 17:40:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-10	Lab Sample ID:	240-161553-10	Worklist Smp#:	46
Client ID:	SL-20_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3220.D
Lims ID: 240-161553-B-10
Client ID: SL-20_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 17:40:30 ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-046
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

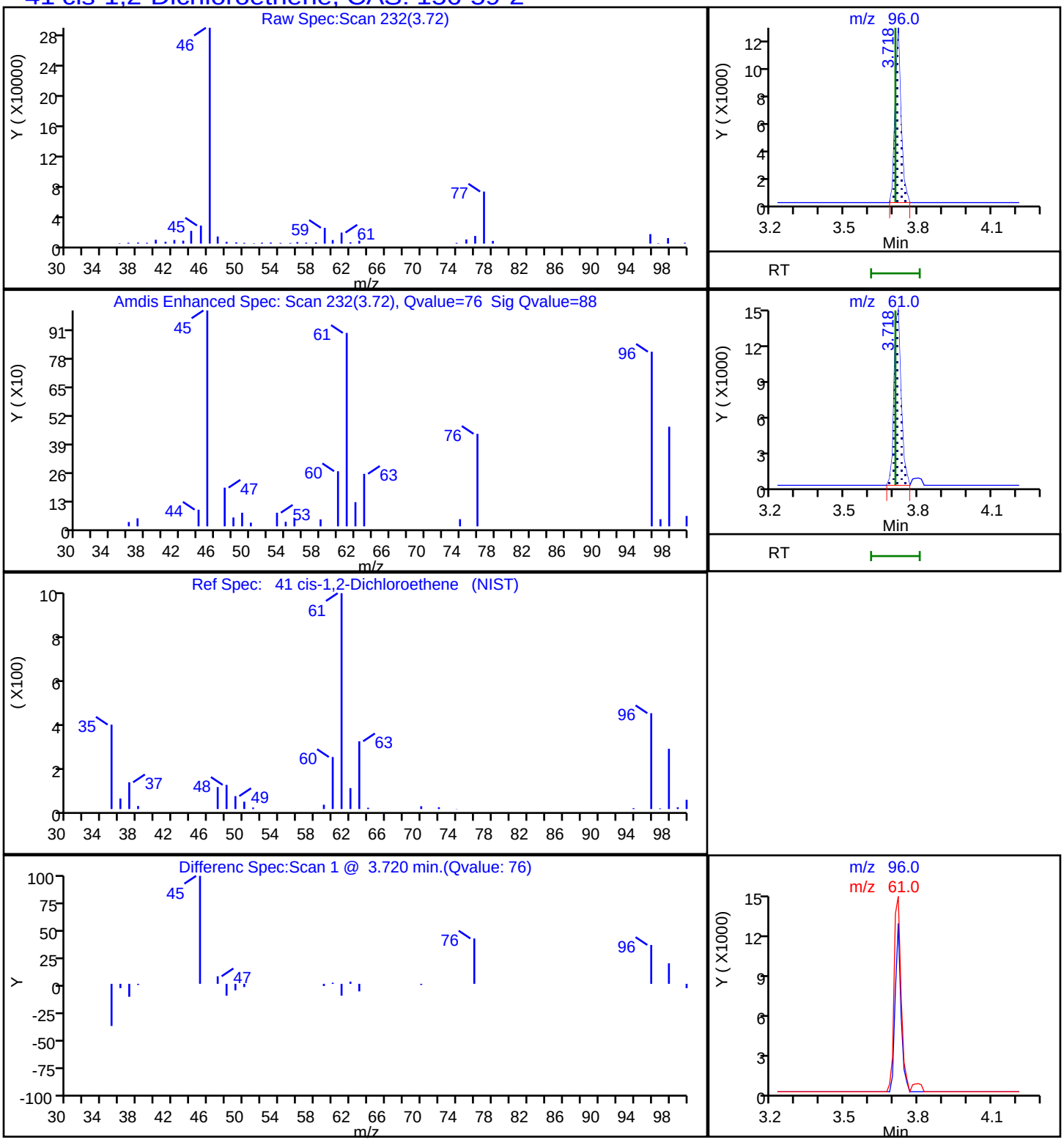
First Level Reviewer: evansle Date: 21-Dec-2021 08:56:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.68
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.55
$ 6 Toluene-d8 (Surr)	20.0	22.5	112.28
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.7	83.59

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3220.D				
Injection Date:	20-Dec-2021 17:40:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-10	Lab Sample ID:	240-161553-10		
Client ID:	SL-20_121421				
Operator ID:	043582	ALS Bottle#:	17	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-22_121421 Lab Sample ID: 240-161553-11

Matrix: Water Lab File ID: UXJ3221.D

Analysis Method: 8260B Date Collected: 12/14/2021 14:25

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 18:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	111		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3221.D
Lims ID: 240-161553-B-11
Client ID: SL-22_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 18:02:30 ALS Bottle#: 18 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-047
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	2037561	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1183727	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	625345	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	471982	18.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	554216	18.8	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1868214	22.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	497319	16.9	
	14 Vinyl chloride	62		1.352				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	7
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

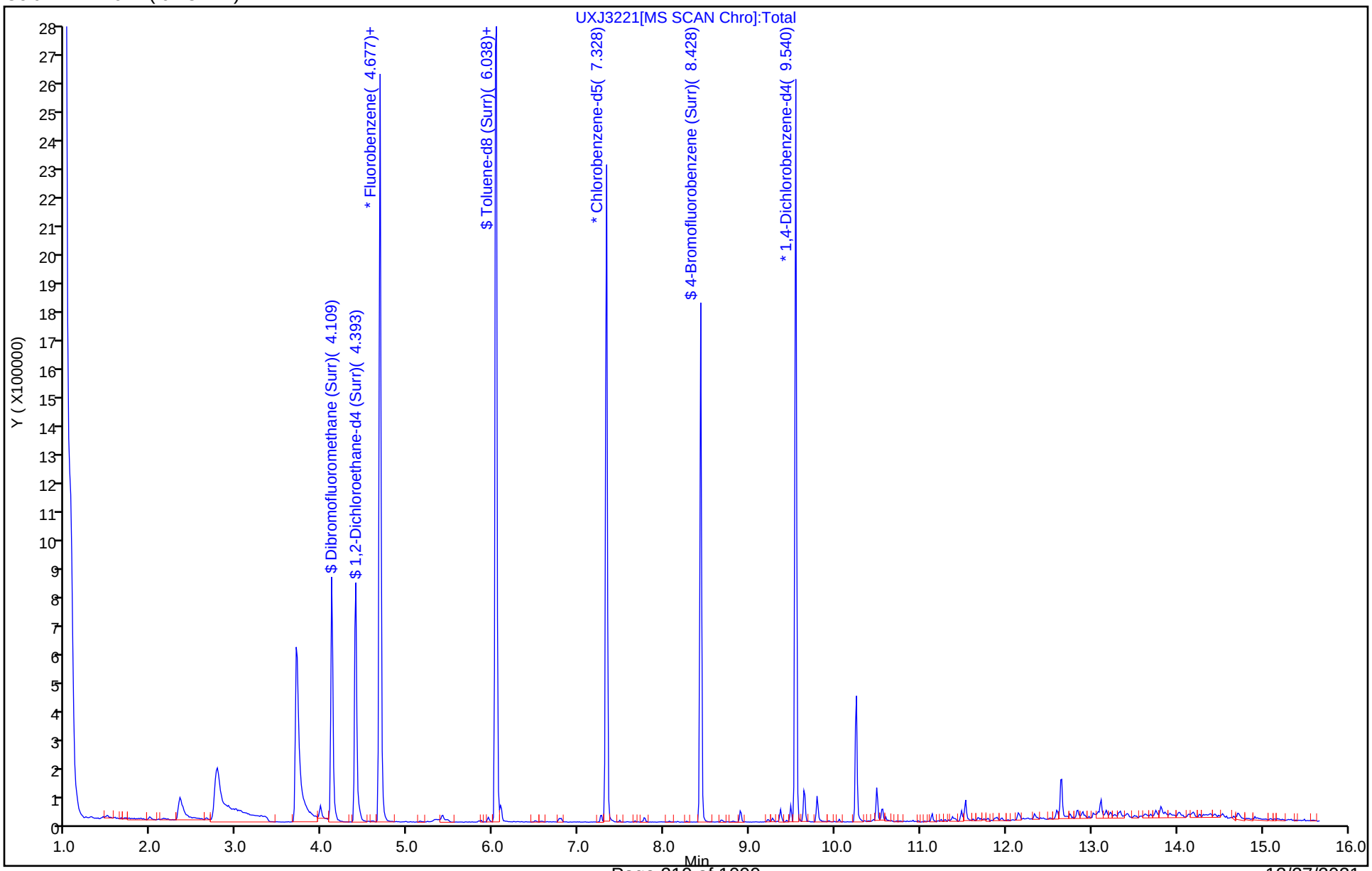
Report Date: 21-Dec-2021 09:02:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3221.D

Injection Date:	20-Dec-2021 18:02:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-11	Lab Sample ID:	240-161553-11	Worklist Smp#:	47
Client ID:	SL-22_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3221.D
Lims ID: 240-161553-B-11
Client ID: SL-22_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 18:02:30 ALS Bottle#: 18 Worklist Smp#: 47
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-047
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.2	90.92
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	94.11
$ 6 Toluene-d8 (Surr)	20.0	22.2	110.95
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.9	84.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-15_121621 Lab Sample ID: 240-161553-12

Matrix: Water Lab File ID: UXJ3222.D

Analysis Method: 8260B Date Collected: 12/16/2021 08:20

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 18:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3222.D
Lims ID: 240-161553-B-12
Client ID: SL-15_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 18:24:30 ALS Bottle#: 19 Worklist Smp#: 48
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-048
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	2128336	20.0	
*	2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1235902	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	682410	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	484077	17.9	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	596718	19.4	
$	6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	1926148	21.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	506223	16.4	
	14 Vinyl chloride	62		1.352				ND	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96		3.707				ND	7
	60 Trichloroethene	130		4.985				ND	
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

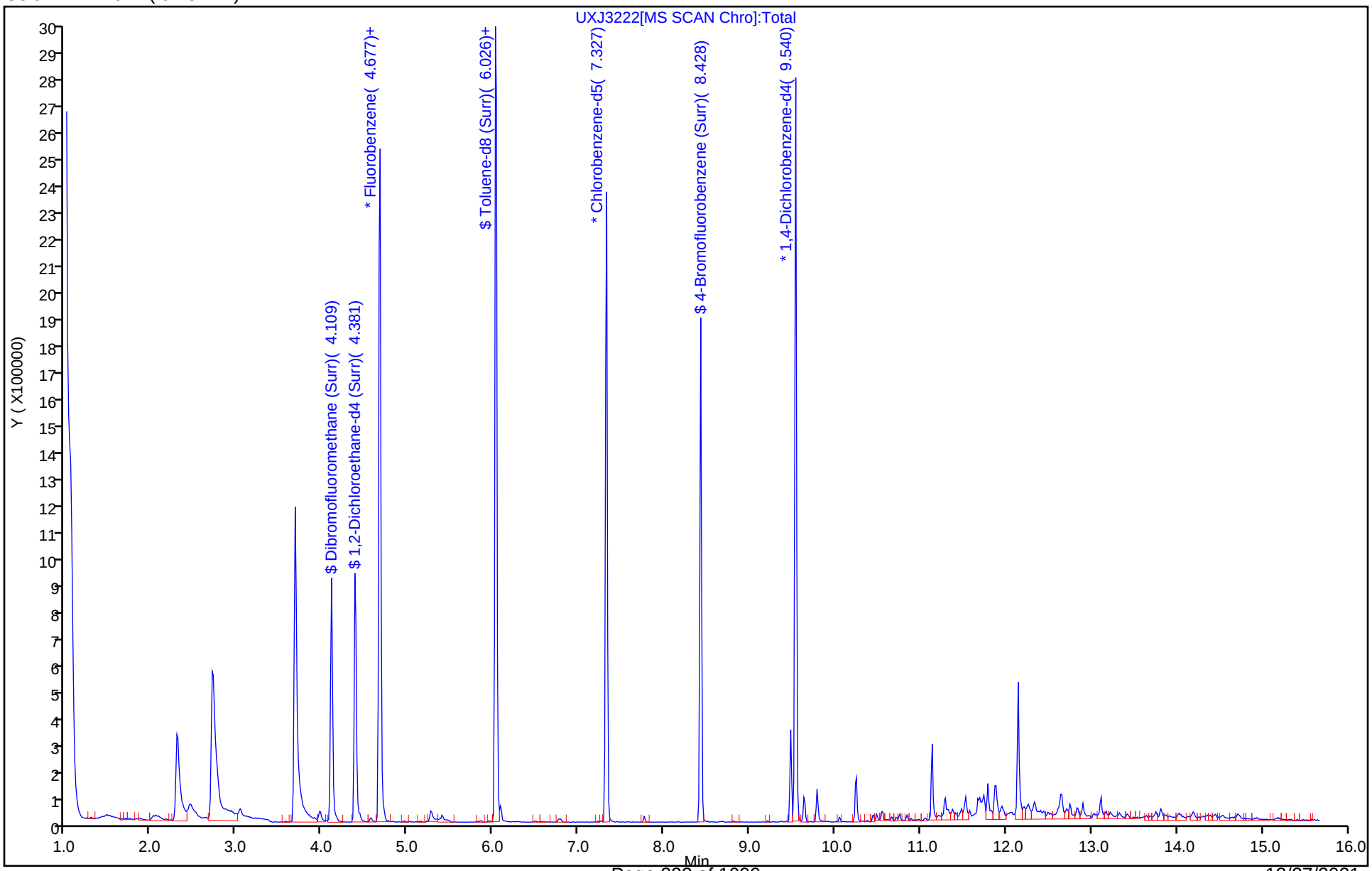
Report Date: 21-Dec-2021 09:02:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3222.D

Injection Date:	20-Dec-2021 18:24:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-12	Lab Sample ID:	240-161553-12	Worklist Smp#:	48
Client ID:	SL-15_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3222.D				
Lims ID:	240-161553-B-12				
Client ID:	SL-15_121621				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 18:24:30	ALS Bottle#:	19	Worklist Smp#:	48
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-048				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:09	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.9	89.27
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.4	97.01
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.56
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.4	82.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-14_121621 Lab Sample ID: 240-161553-13

Matrix: Water Lab File ID: UXJ3223.D

Analysis Method: 8260B Date Collected: 12/16/2021 08:35

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 18:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	81		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3223.D
Lims ID: 240-161553-B-13
Client ID: SL-14_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 18:46:30 ALS Bottle#: 20 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-049
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2068633	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1162564	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	624128	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	483655	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	585852	19.6	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1809092	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	95	472154	16.3	
14 Vinyl chloride	62		1.352				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	73	5371	0.1787	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

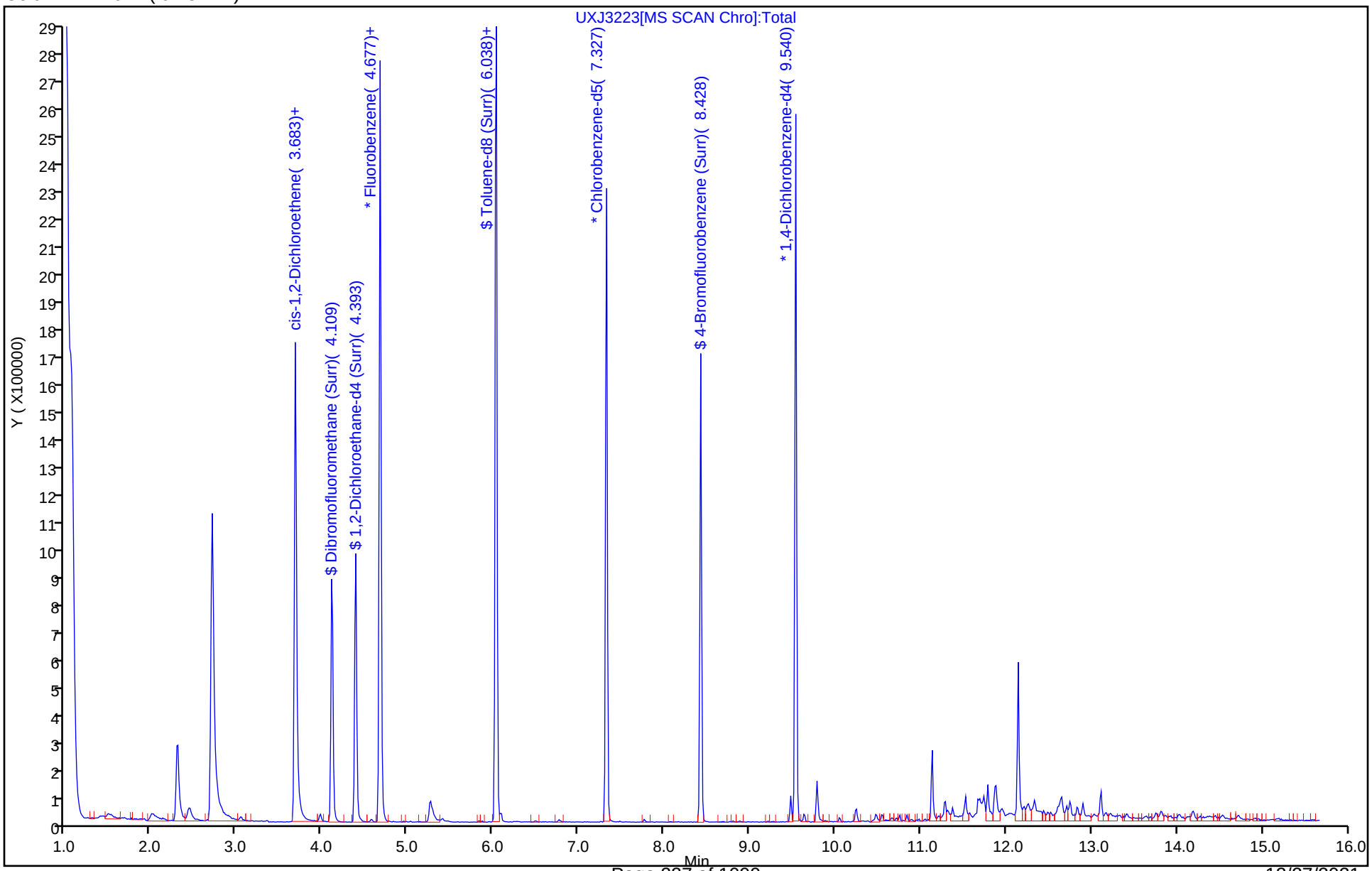
Report Date: 21-Dec-2021 09:02:25 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3223.D

Injection Date:	20-Dec-2021 18:46:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-13	Lab Sample ID:	240-161553-13	Worklist Smp#:	49
Client ID:	SL-14_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3223.D				
Lims ID:	240-161553-B-13				
Client ID:	SL-14_121621				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 18:46:30	ALS Bottle#:	20	Worklist Smp#:	49
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-049				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:09	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	91.77
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.6	97.99
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.39
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.3	81.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-13_121621 Lab Sample ID: 240-161553-14

Matrix: Water Lab File ID: UXJ3224.D

Analysis Method: 8260B Date Collected: 12/16/2021 08:50

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 19:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.49	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	114		78-122
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3224.D
Lims ID: 240-161553-B-14
Client ID: SL-13_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 19:08:30 ALS Bottle#: 21 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-050
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:56:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2159577	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1213330	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	638909	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	513071	18.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	609298	19.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1970725	22.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	518843	17.2	
14 Vinyl chloride	62	1.364	1.352	0.012	32	13229	0.4932	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.011	77	8656	0.2759	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

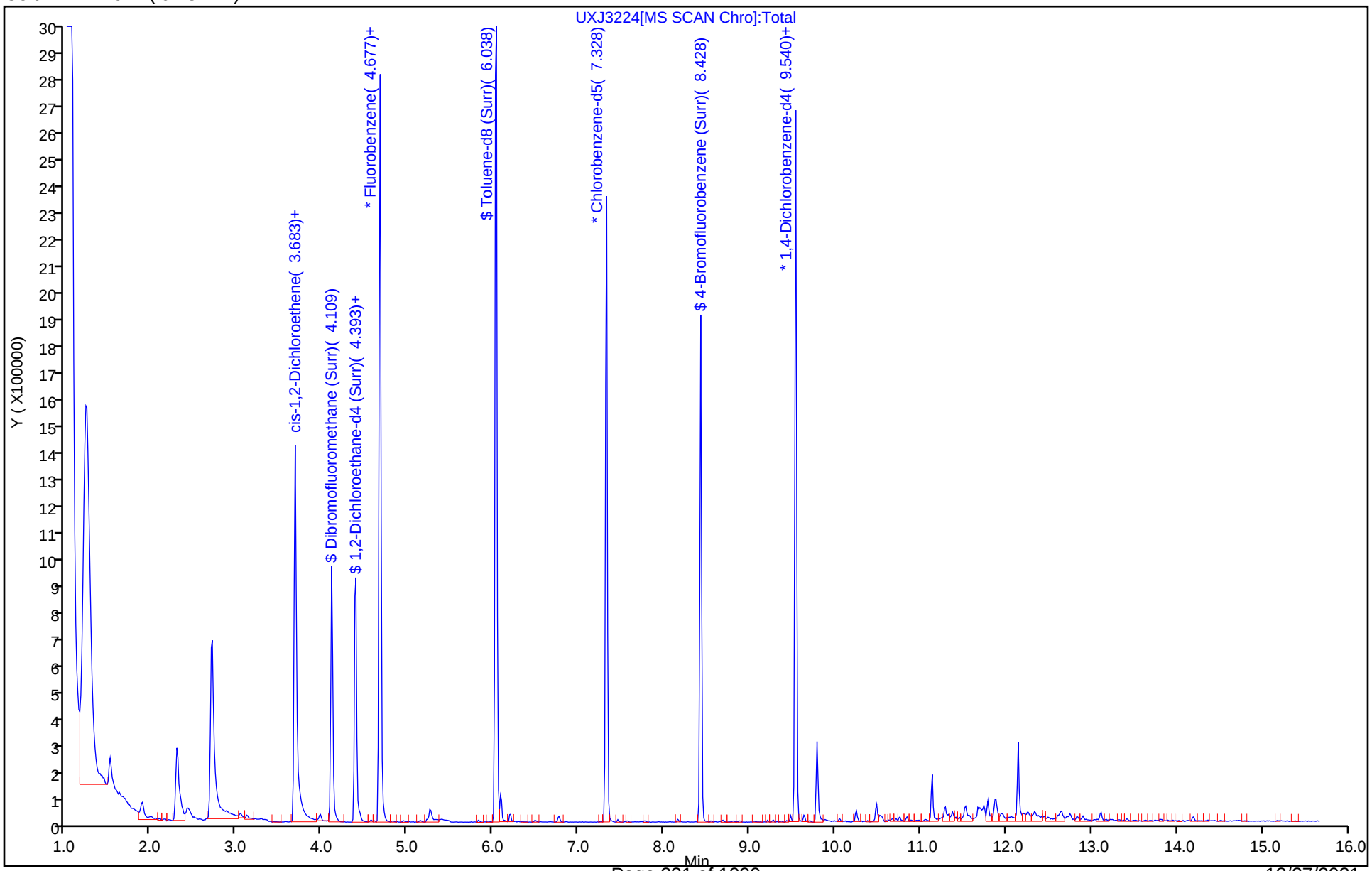
Report Date: 21-Dec-2021 09:02:26 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3224.D

Injection Date:	20-Dec-2021 19:08:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-14	Lab Sample ID:	240-161553-14	Worklist Smp#:	50
Client ID:	SL-13_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3224.D
Lims ID: 240-161553-B-14
Client ID: SL-13_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 19:08:30 ALS Bottle#: 21 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-050
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:56:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.7	93.25
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.5	97.62
$ 6 Toluene-d8 (Surr)	20.0	22.8	114.18
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.2	85.80

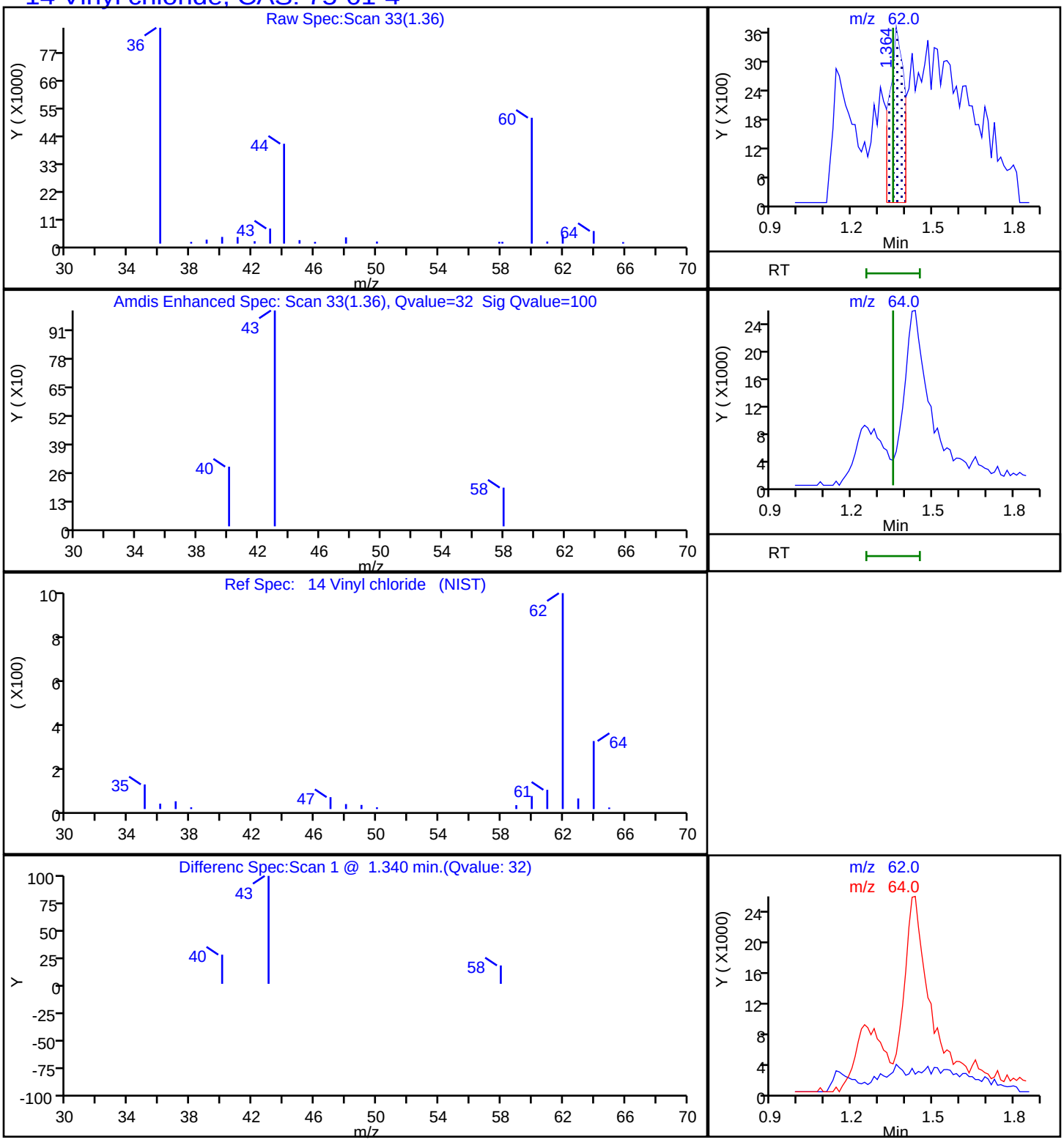
Report Date: 21-Dec-2021 09:02:26 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3224.D

Injection Date:	20-Dec-2021 19:08:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-14	Lab Sample ID:	240-161553-14		
Client ID:	SL-13_121621				
Operator ID:	043582	ALS Bottle#:	21	Worklist Smp#:	50
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-7_121621 Lab Sample ID: 240-161553-15

Matrix: Water Lab File ID: UXJ3225.D

Analysis Method: 8260B Date Collected: 12/16/2021 09:05

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 19:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	86		56-136
2037-26-5	Toluene-d8 (Surr)	113		78-122
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3225.D
Lims ID: 240-161553-B-15
Client ID: SL-7_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 19:31:30 ALS Bottle#: 22 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-051
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Dec-2021 20:24:38 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 09:02:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2095839	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1142943	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	592166	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	503898	18.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	600909	19.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1844243	22.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	489964	17.2	
14 Vinyl chloride	62	1.399	1.352	0.047	31	2986	0.1147	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.011	80	7517	0.2469	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

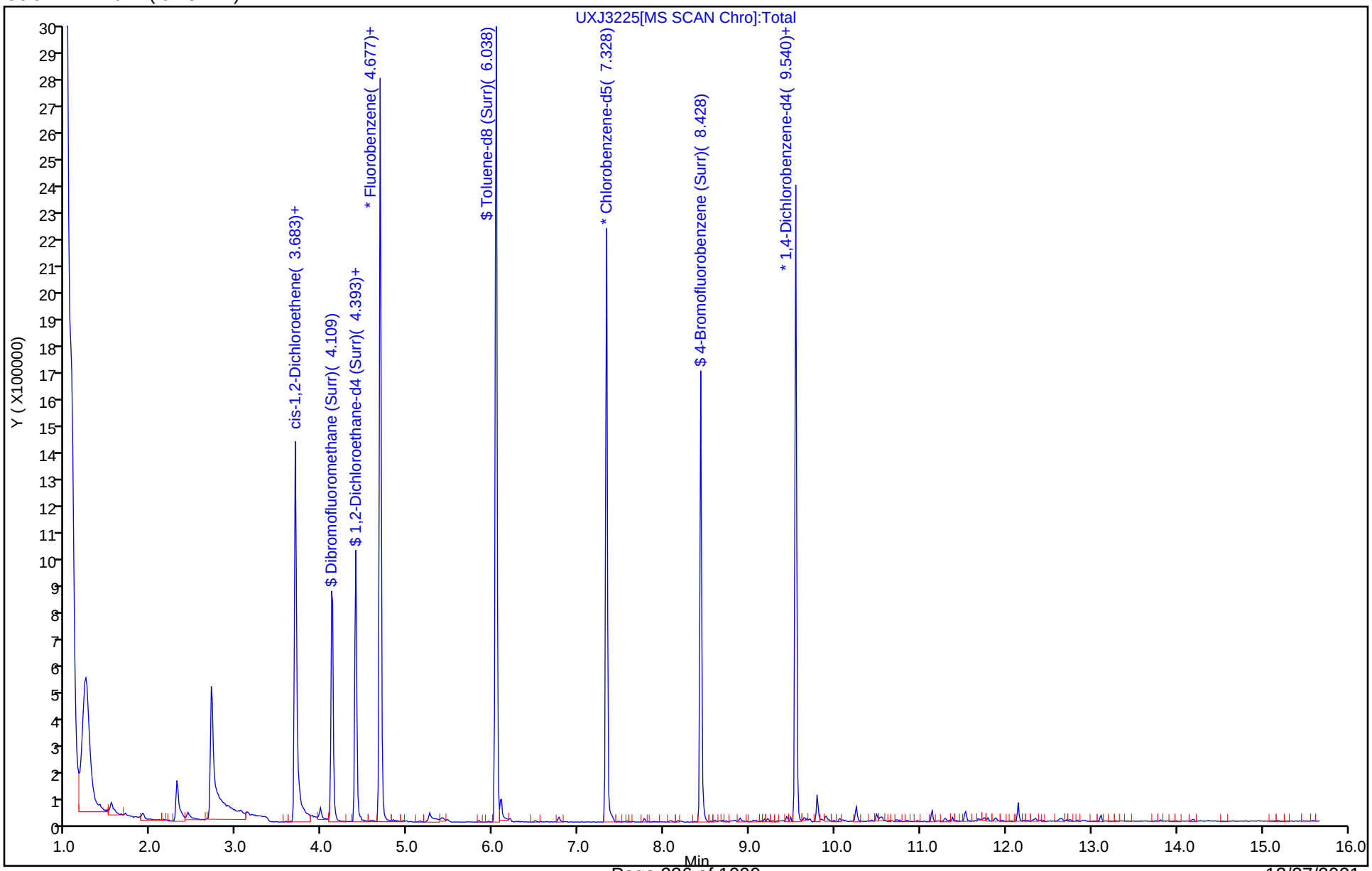
Report Date: 21-Dec-2021 09:02:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3225.D

Injection Date:	20-Dec-2021 19:31:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-15	Lab Sample ID:	240-161553-15	Worklist Smp#:	51
Client ID:	SL-7_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3225.D				
Lims ID:	240-161553-B-15				
Client ID:	SL-7_121621				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 19:31:30	ALS Bottle#:	22	Worklist Smp#:	51
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116119-051				
Misc. Info.:	J211220A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	20-Dec-2021 20:24:38	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

First Level Reviewer: evansle Date: 21-Dec-2021 09:02:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.9	94.37
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.8	99.20
$ 6 Toluene-d8 (Surr)	20.0	22.7	113.43
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.2	86.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-6_121621 Lab Sample ID: 240-161553-16

Matrix: Water Lab File ID: UXJ3226.D

Analysis Method: 8260B Date Collected: 12/16/2021 09:35

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 19:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	83		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3226.D
Lims ID: 240-161553-B-16
Client ID: SL-6_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 19:53:30 ALS Bottle#: 23 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-052
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2070823	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1181793	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	646214	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	483525	18.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	579056	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1828999	21.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	487810	16.6	
14 Vinyl chloride	62		1.352				ND	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	77	5084	0.1690	
60 Trichloroethene	130		4.985				ND	
76 Tetrachloroethene	164		6.582				ND	

Reagents:

vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent
VM50IS_00090	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added: 2.00	Units: uL	Run Reagent

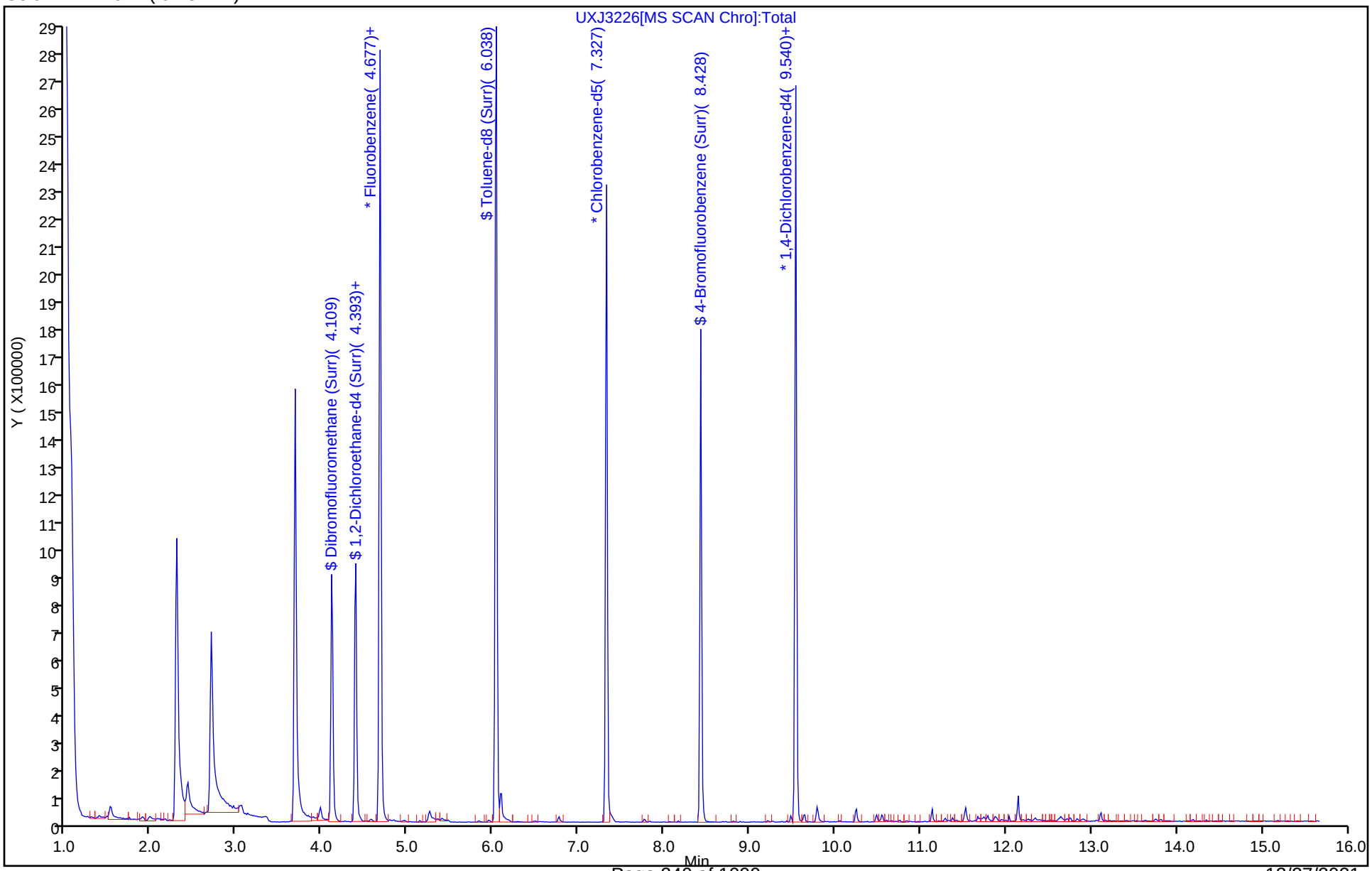
Report Date: 21-Dec-2021 09:02:26 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3226.D

Injection Date:	20-Dec-2021 19:53:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-16	Lab Sample ID:	240-161553-16	Worklist Smp#:	52
Client ID:	SL-6_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3226.D
Lims ID: 240-161553-B-16
Client ID: SL-6_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 19:53:30 ALS Bottle#: 23 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-052
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.65
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.75
$ 6 Toluene-d8 (Surr)	20.0	21.8	108.79
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.6	82.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-5_121621 Lab Sample ID: 240-161553-17

Matrix: Water Lab File ID: UXJ3227.D

Analysis Method: 8260B Date Collected: 12/16/2021 09:55

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 20:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.7		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		62-137
460-00-4	4-Bromofluorobenzene (Surr)	84		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3227.D
Lims ID: 240-161553-B-17
Client ID: SL-5_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 20:15:30 ALS Bottle#: 24 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-053
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2053434	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1235188	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	657653	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	467824	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	585359	19.7	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1861048	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	519582	16.9	
14 Vinyl chloride	62	1.352	1.352	0.000	96	43832	1.72	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	76	66072	2.22	
60 Trichloroethene	130		4.985				ND	7
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

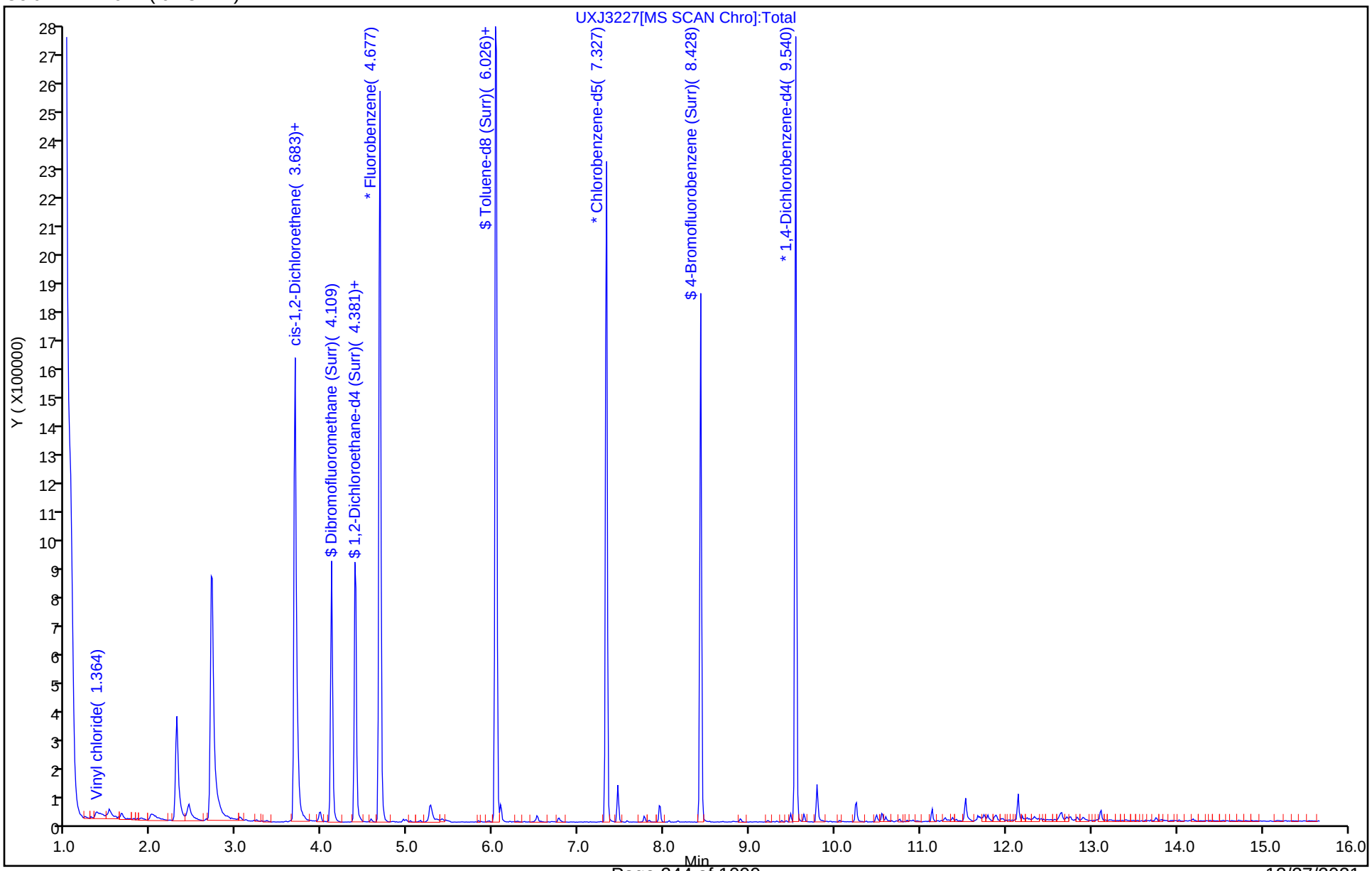
Report Date: 21-Dec-2021 09:02:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3227.D

Injection Date:	20-Dec-2021 20:15:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-17	Lab Sample ID:	240-161553-17	Worklist Smp#:	53
Client ID:	SL-5_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3227.D
Lims ID: 240-161553-B-17
Client ID: SL-5_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 20:15:30 ALS Bottle#: 24 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-053
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.9	89.42
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.7	98.63
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.92
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.9	84.40

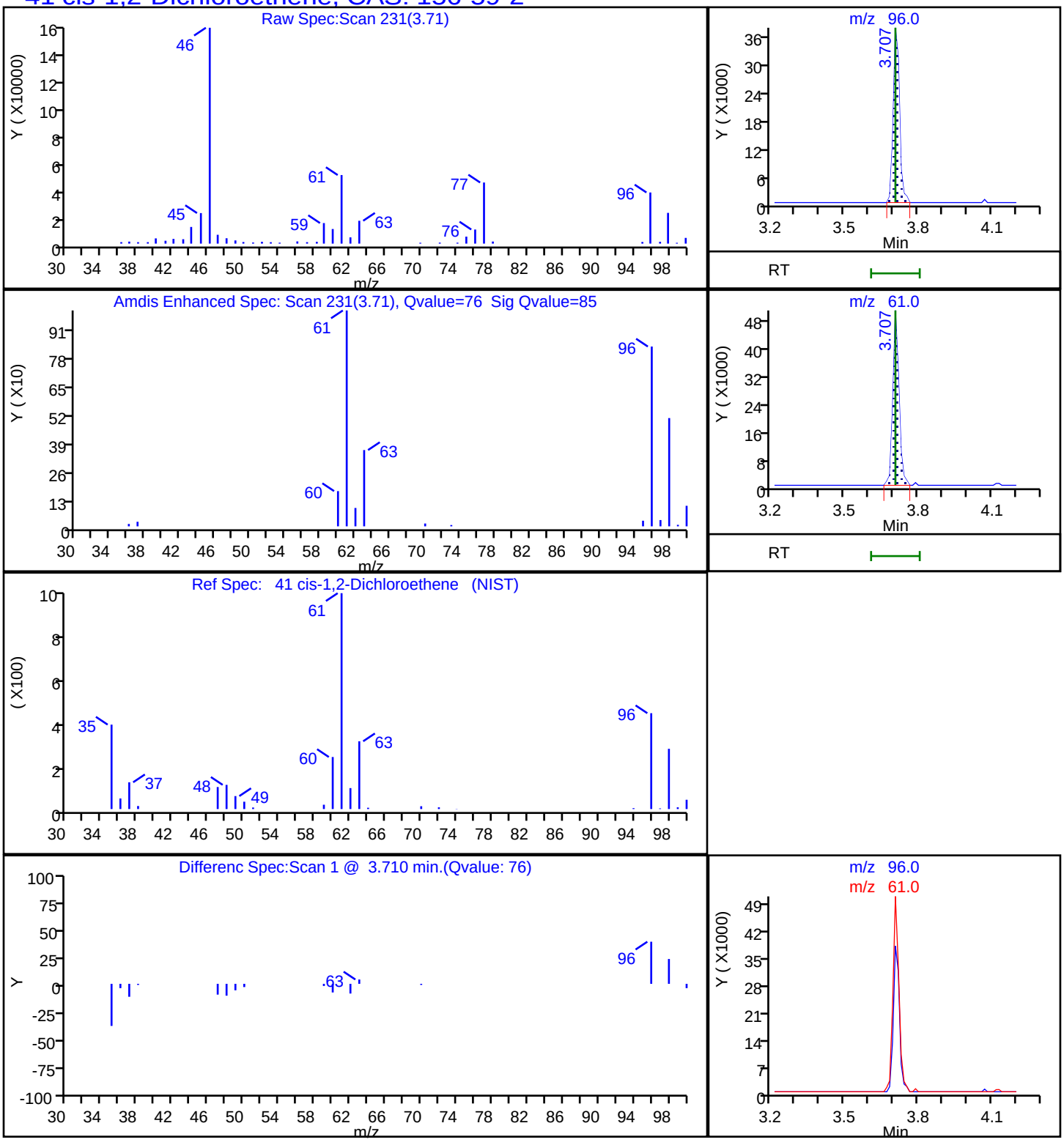
Report Date: 21-Dec-2021 09:02:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3227.D

Injection Date:	20-Dec-2021 20:15:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-17	Lab Sample ID:	240-161553-17		
Client ID:	SL-5_121621				
Operator ID:	043582	ALS Bottle#:	24	Worklist Smp#:	53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

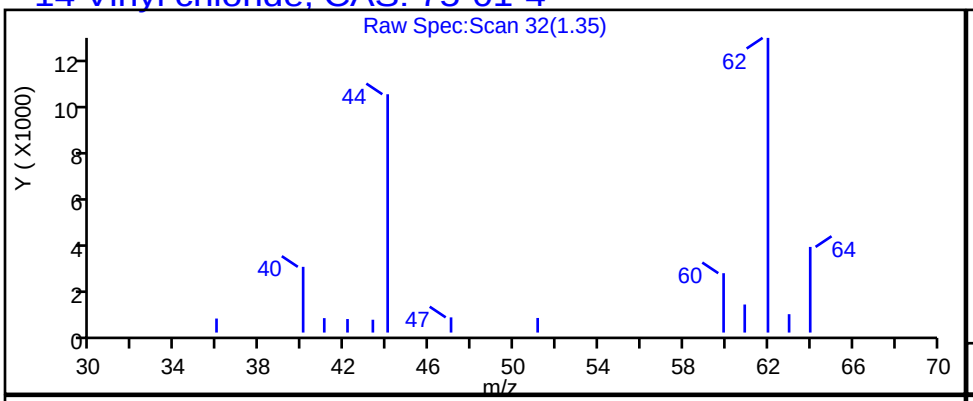


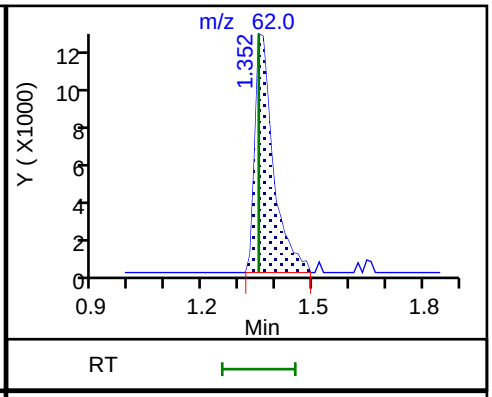
Eurofins TestAmerica, Canton

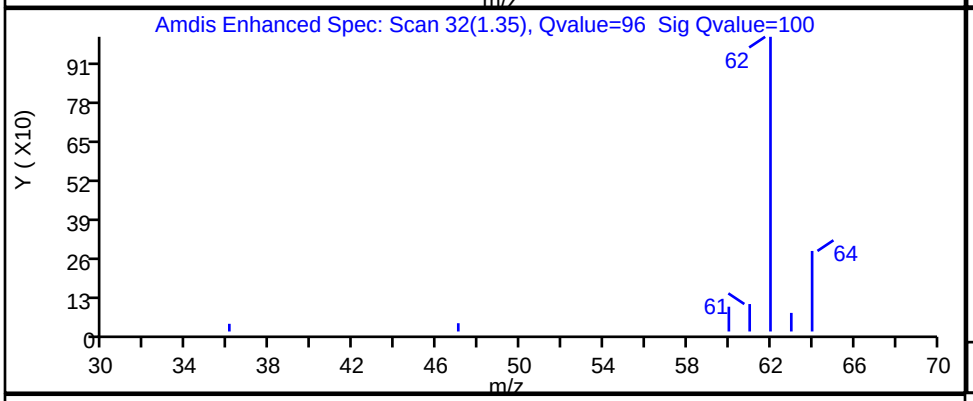
Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3227.D

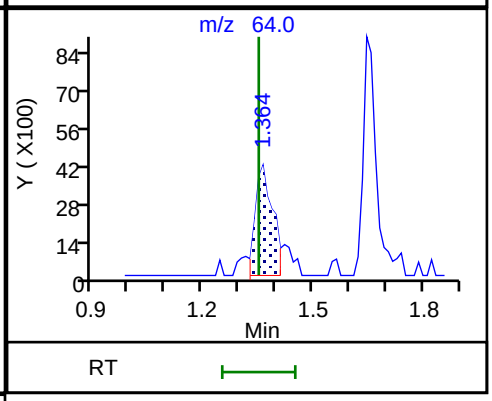
Injection Date:	20-Dec-2021 20:15:30	Instrument ID:	A3UX11
Lims ID:	240-161553-B-17	Lab Sample ID:	240-161553-17
Client ID:	SL-5_121621		
Operator ID:	043582	ALS Bottle#:	24 Worklist Smp#: 53
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

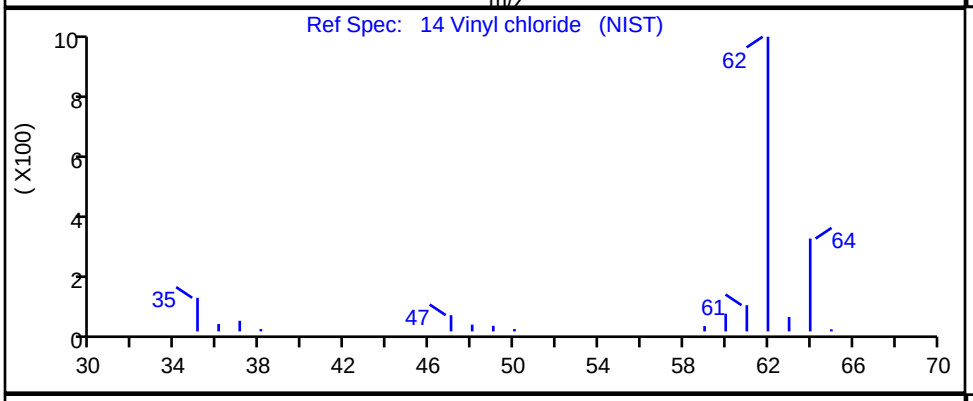
14 Vinyl chloride, CAS: 75-01-4

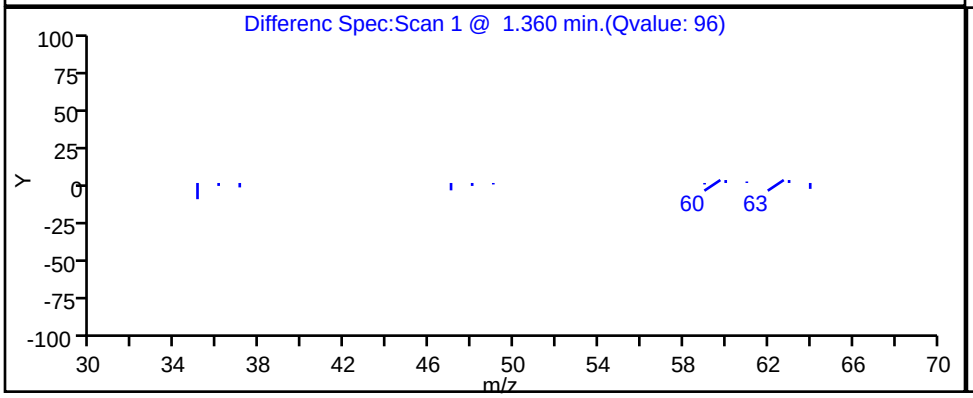


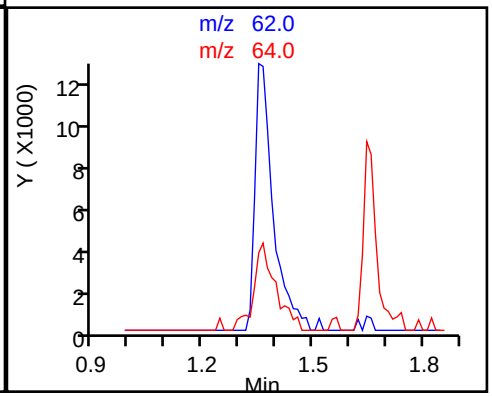












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-8_121621 Lab Sample ID: 240-161553-18

Matrix: Water Lab File ID: UXJ3228.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:10

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 20:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	82		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3228.D
Lims ID: 240-161553-B-18
Client ID: SL-8_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 20:37:30 ALS Bottle#: 25 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-054
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	2129247	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1187943	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	666205	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	490453	18.1	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	595222	19.3	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1789999	21.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	486147	16.4	
	14 Vinyl chloride	62	1.376	1.352	0.024	97	48262	1.82	
	21 1,1-Dichloroethene	96		2.239				ND	
	33 trans-1,2-Dichloroethene	96		2.878				ND	
	41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	78757	2.55	
	60 Trichloroethene	130		4.985				ND	7
	76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

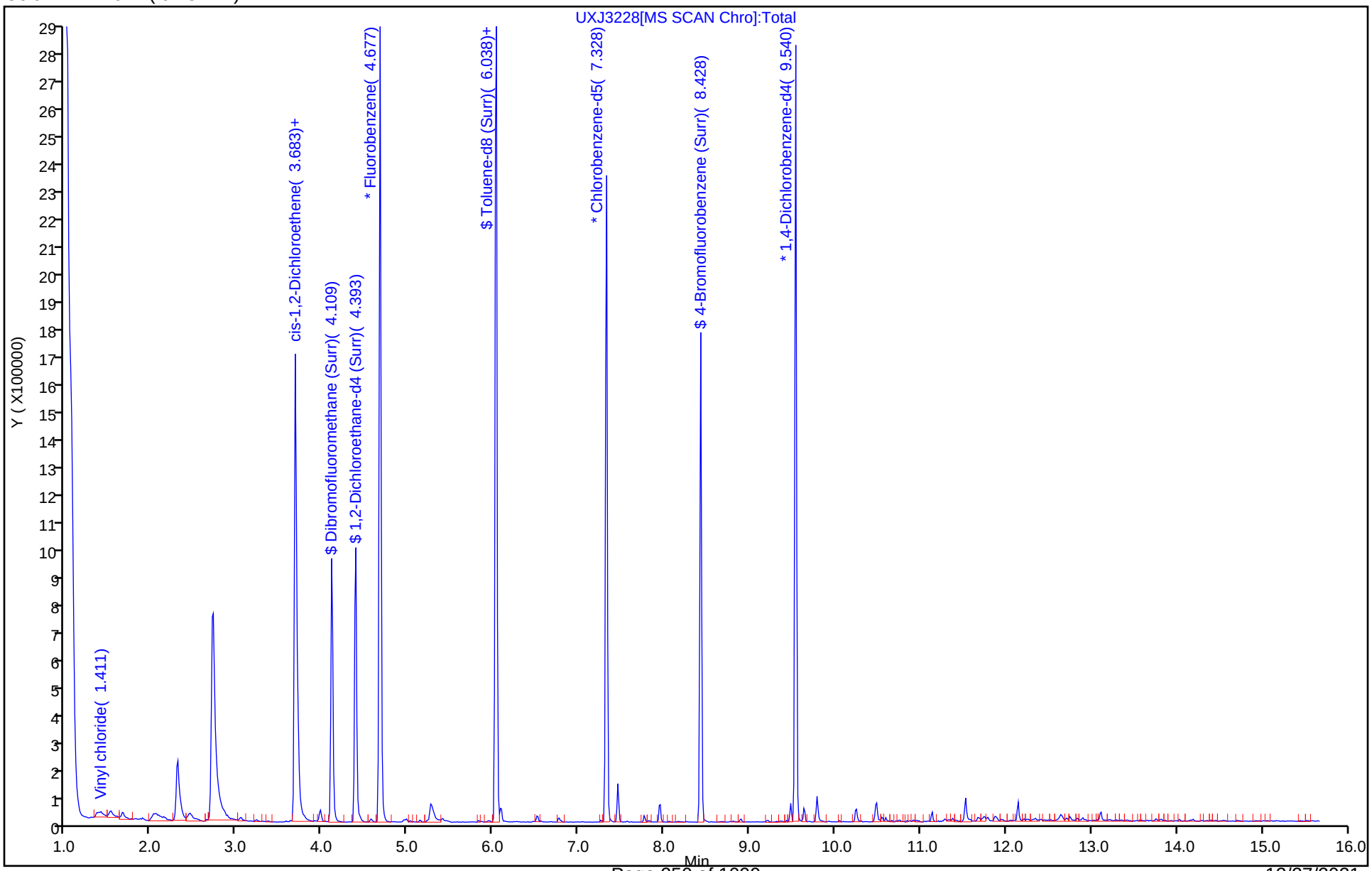
Report Date: 21-Dec-2021 09:02:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3228.D

Injection Date:	20-Dec-2021 20:37:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-18	Lab Sample ID:	240-161553-18	Worklist Smp#:	54
Client ID:	SL-8_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3228.D
Lims ID: 240-161553-B-18
Client ID: SL-8_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 20:37:30 ALS Bottle#: 25 Worklist Smp#: 54
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-054
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.41
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.72
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.92
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.4	82.11

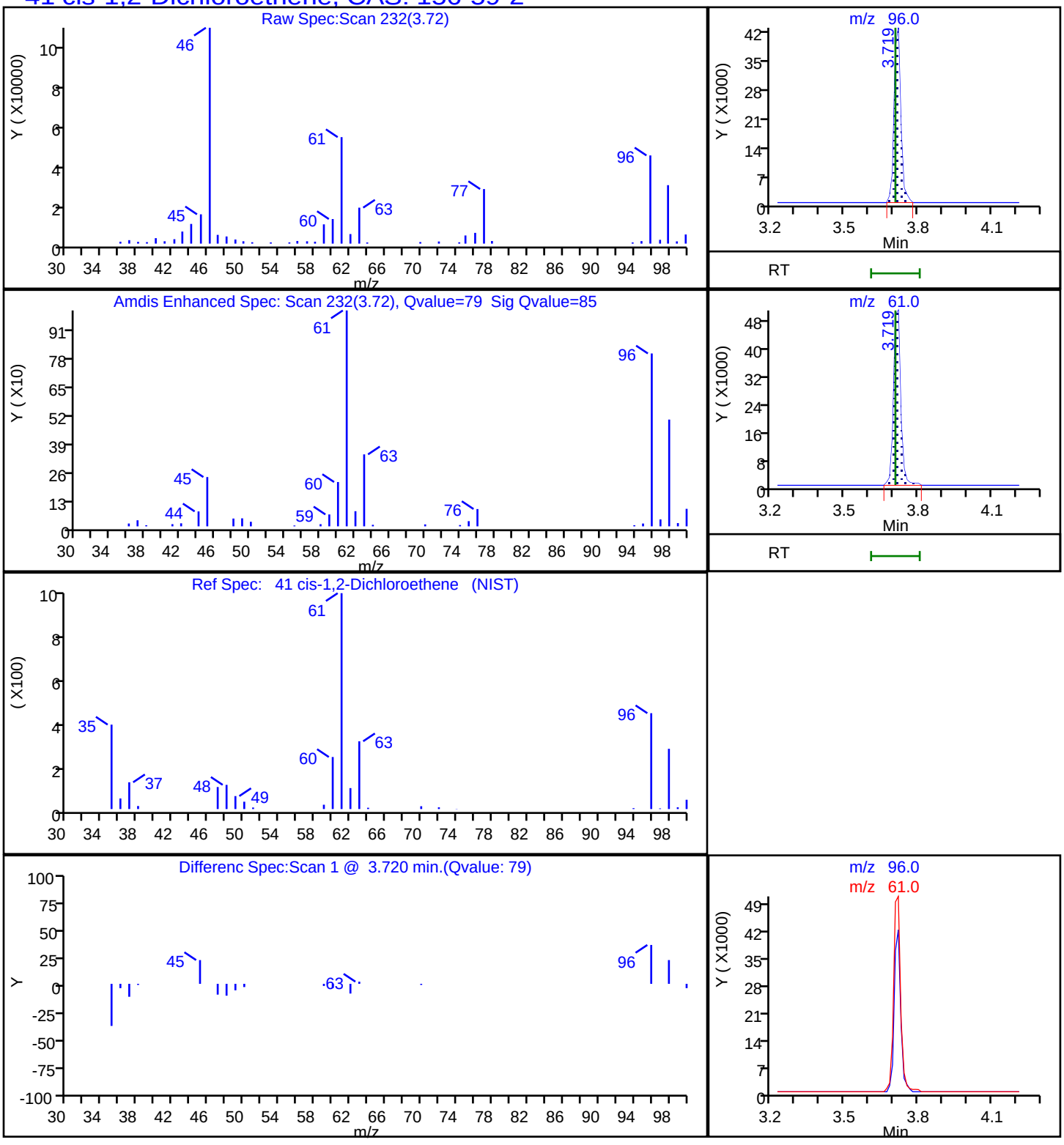
Report Date: 21-Dec-2021 09:02:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3228.D

Injection Date:	20-Dec-2021 20:37:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-18	Lab Sample ID:	240-161553-18		
Client ID:	SL-8_121621				
Operator ID:	043582	ALS Bottle#:	25	Worklist Smp#:	54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2

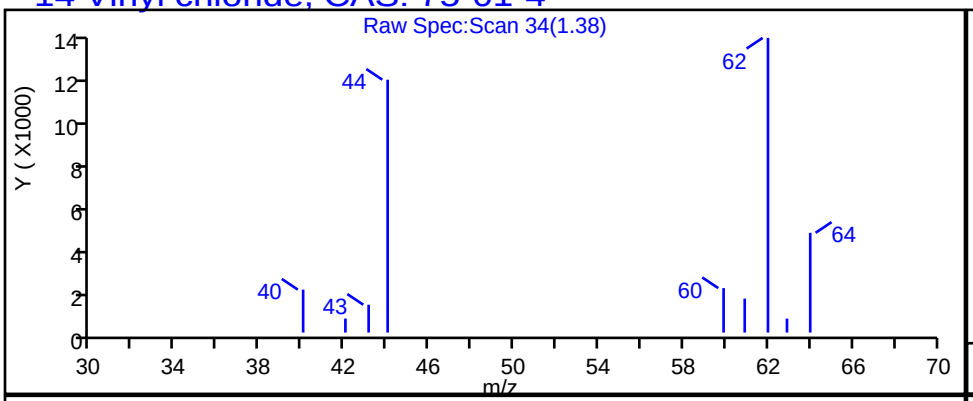


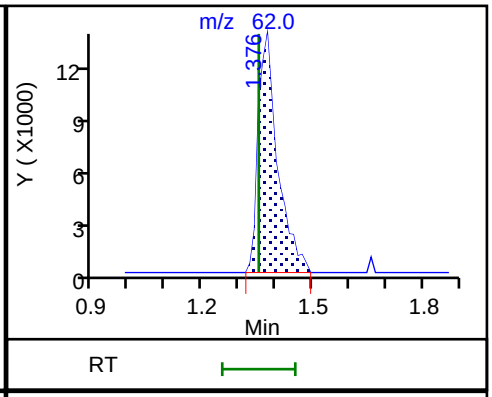
Eurofins TestAmerica, Canton

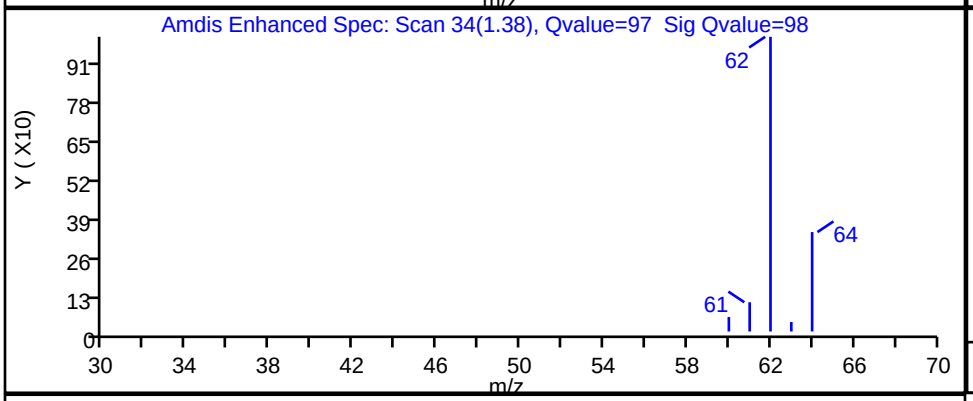
Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3228.D

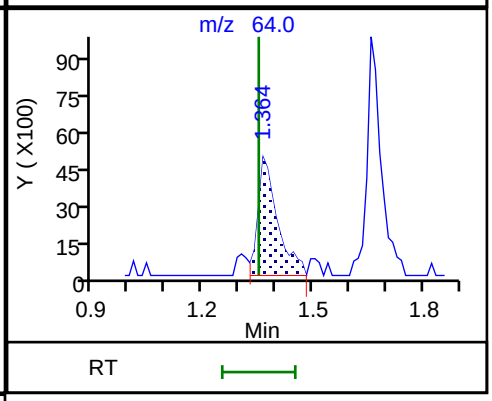
Injection Date:	20-Dec-2021 20:37:30	Instrument ID:	A3UX11
Lims ID:	240-161553-B-18	Lab Sample ID:	240-161553-18
Client ID:	SL-8_121621		
Operator ID:	043582	ALS Bottle#:	25 Worklist Smp#: 54
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

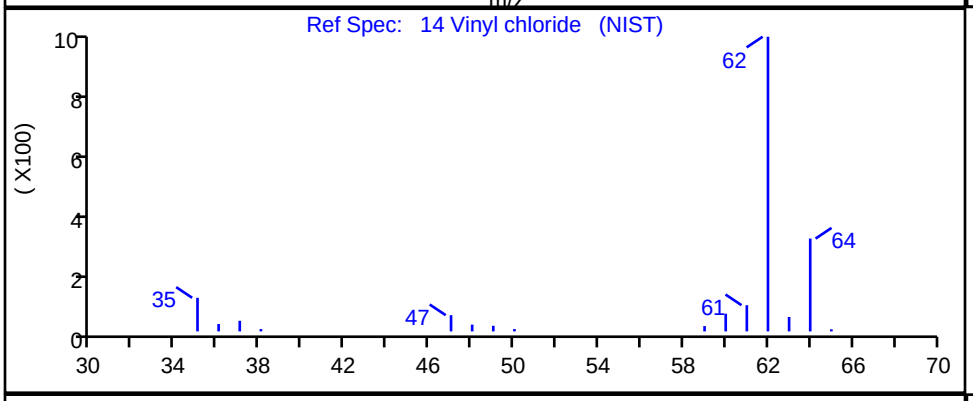
14 Vinyl chloride, CAS: 75-01-4

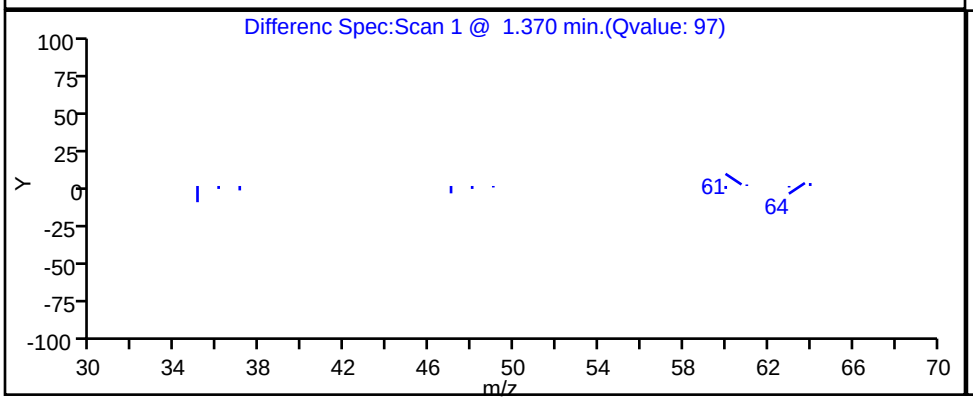


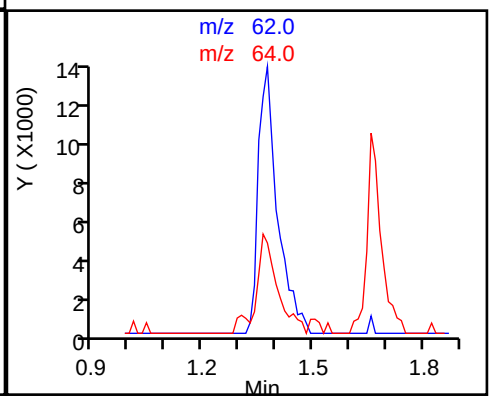












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-9_121621 Lab Sample ID: 240-161553-19

Matrix: Water Lab File ID: UXJ3229.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:20

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 21:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.4		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.5		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	83		56-136
2037-26-5	Toluene-d8 (Surr)	109		78-122
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3229.D
Lims ID: 240-161553-B-19
Client ID: SL-9_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 21:00:30 ALS Bottle#: 26 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-055
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2084527	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1193616	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	625296	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	481030	18.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	591976	19.7	
$ 6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	1844349	21.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	492429	16.6	
14 Vinyl chloride	62	1.364	1.352	0.012	96	65251	2.52	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	102876	3.40	
60 Trichloroethene	130		4.985				ND	7
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

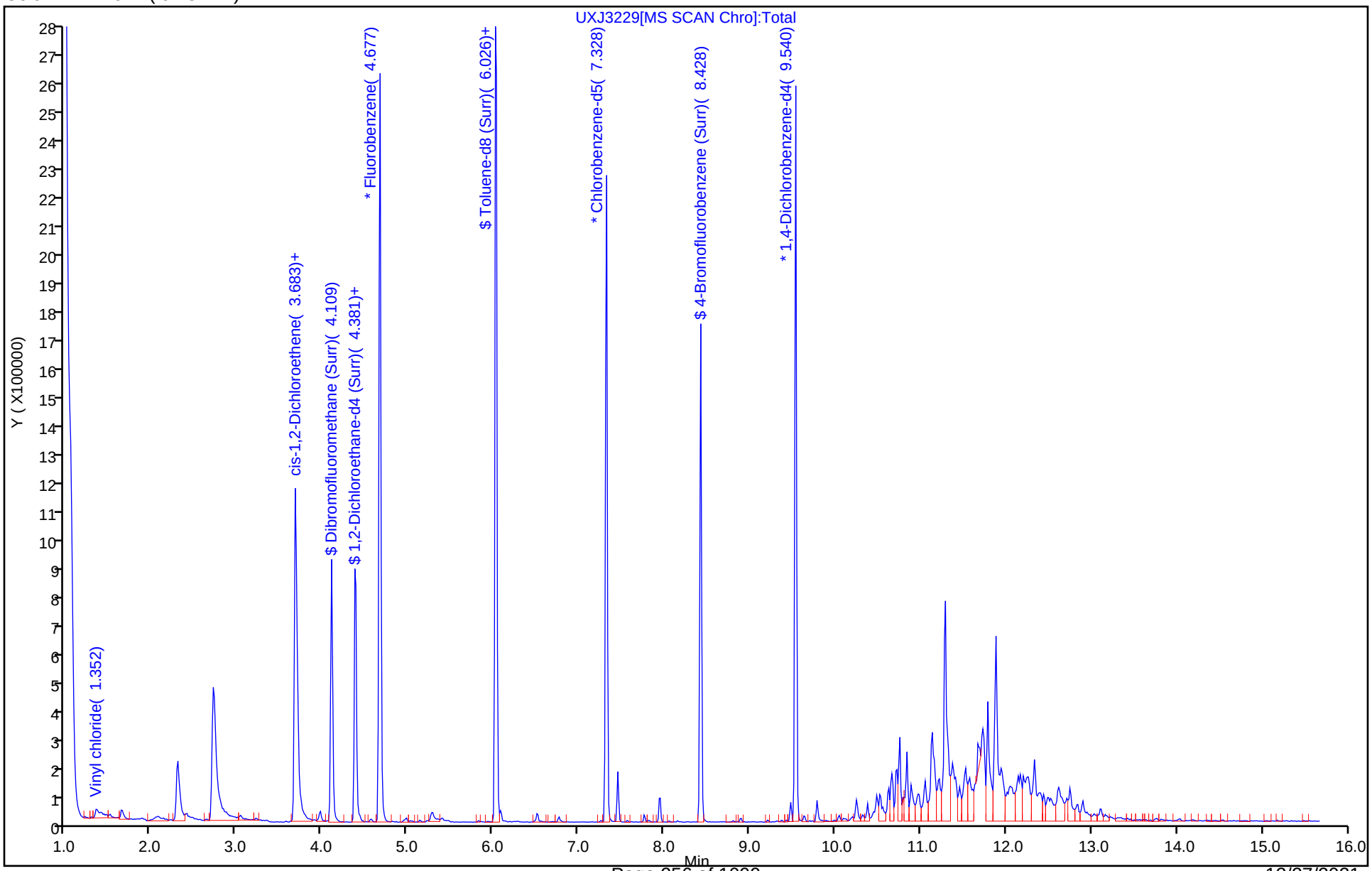
Report Date: 21-Dec-2021 09:02:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3229.D

Injection Date:	20-Dec-2021 21:00:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-19	Lab Sample ID:	240-161553-19	Worklist Smp#:	55
Client ID:	SL-9_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3229.D
Lims ID: 240-161553-B-19
Client ID: SL-9_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 21:00:30 ALS Bottle#: 26 Worklist Smp#: 55
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-055
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

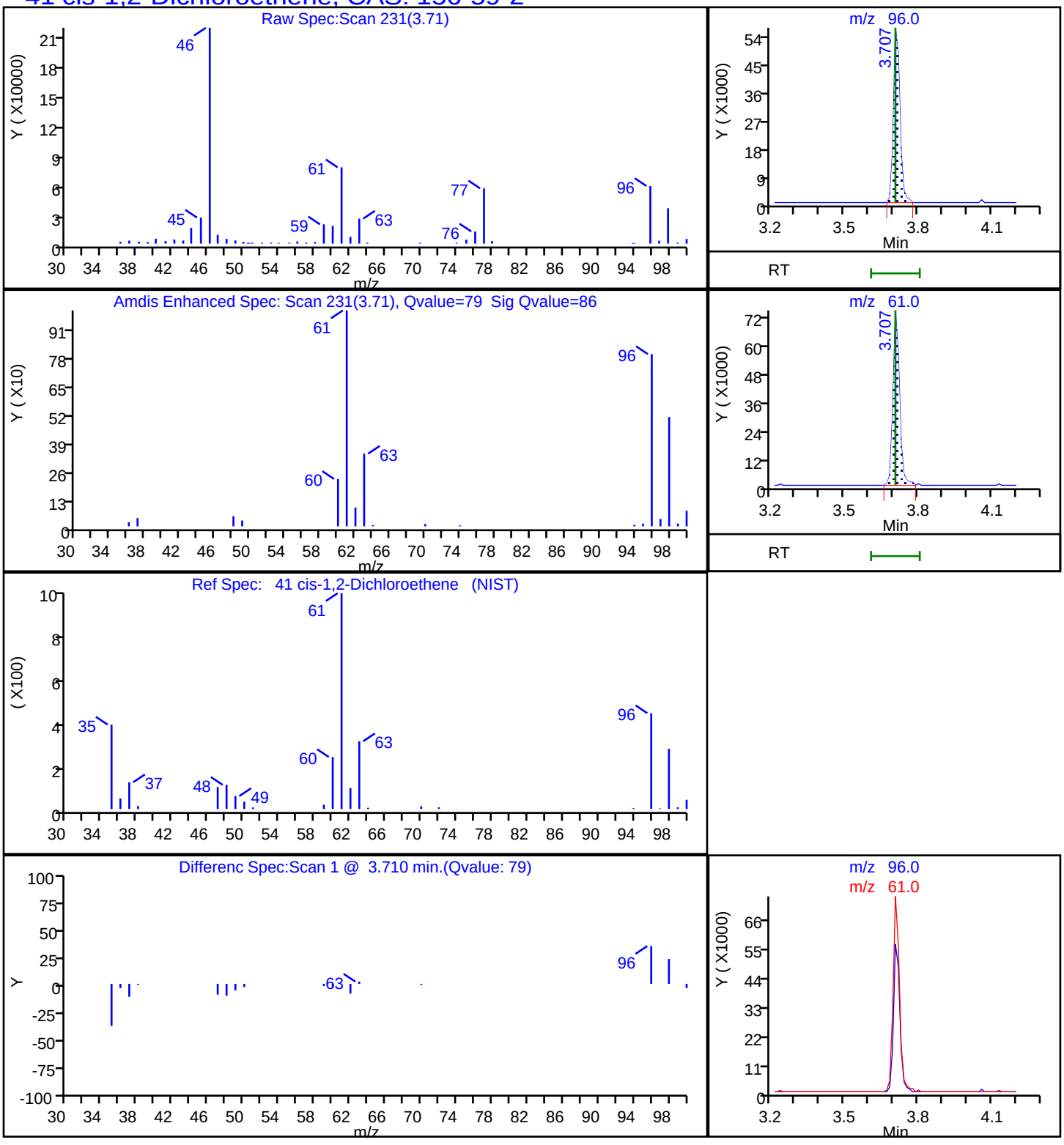
First Level Reviewer: evansle Date: 21-Dec-2021 08:58:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.57
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.7	98.26
$ 6 Toluene-d8 (Surr)	20.0	21.7	108.62
$ 7 4-Bromofluorobenzene (Surr)	20.0	16.6	82.78

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3229.D				
Injection Date:	20-Dec-2021 21:00:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-19	Lab Sample ID:	240-161553-19		
Client ID:	SL-9_121621				
Operator ID:	043582	ALS Bottle#:	26	Worklist Smp#:	55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



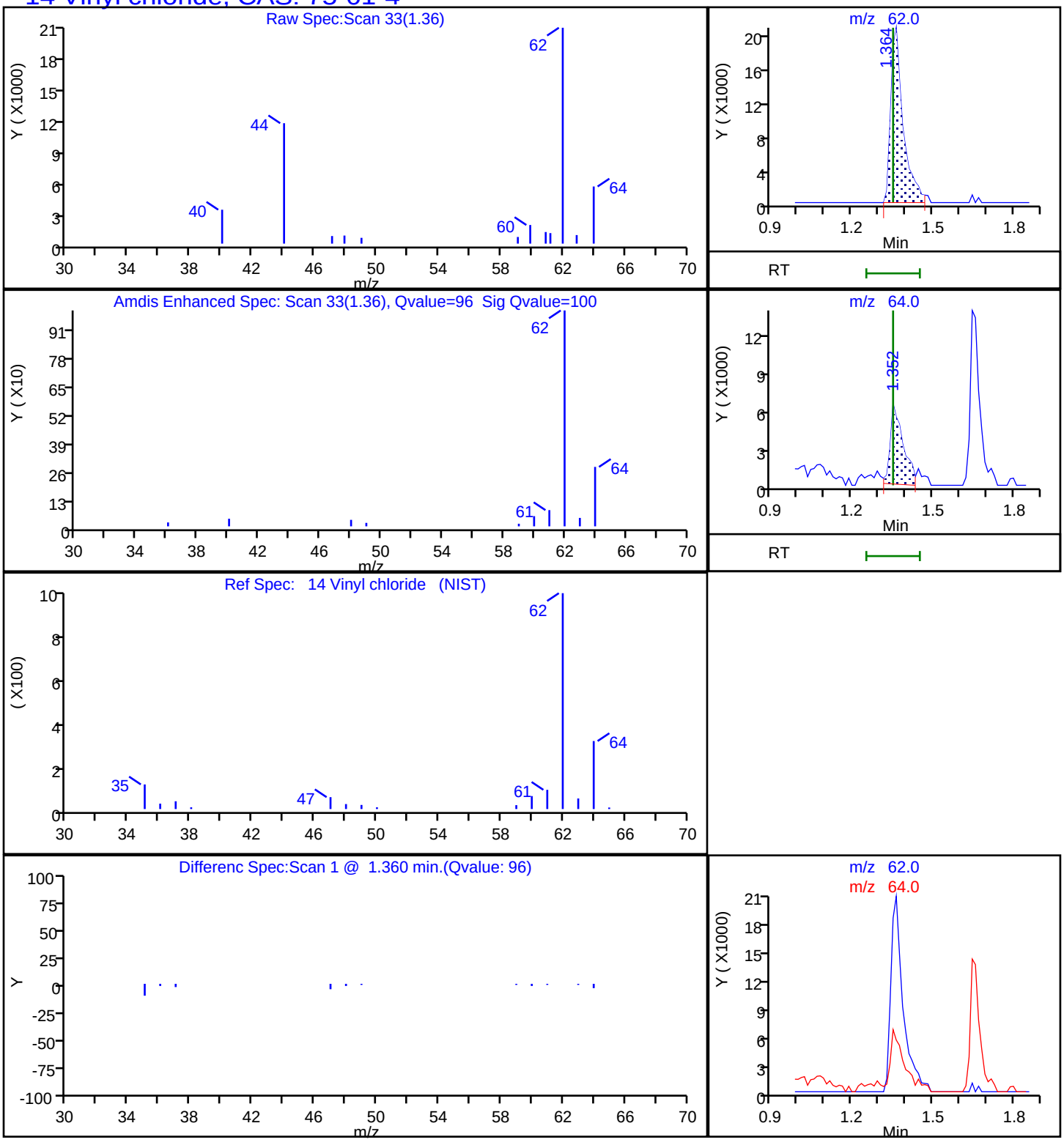
Report Date: 21-Dec-2021 09:02:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3229.D

Injection Date:	20-Dec-2021 21:00:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-19	Lab Sample ID:	240-161553-19		
Client ID:	SL-9_121621				
Operator ID:	043582	ALS Bottle#:	26	Worklist Smp#:	55
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-10_121621 Lab Sample ID: 240-161553-20

Matrix: Water Lab File ID: UXJ3230.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:35

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 21:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.8		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-137
460-00-4	4-Bromofluorobenzene (Surr)	85		56-136
2037-26-5	Toluene-d8 (Surr)	110		78-122
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3230.D
Lims ID: 240-161553-B-20
Client ID: SL-10_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 21:22:30 ALS Bottle#: 27 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-056
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 21-Dec-2021 08:58:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1988740	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1158112	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	94	598889	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	451933	17.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	564091	19.6	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1814261	22.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	491754	17.0	
14 Vinyl chloride	62	1.364	1.352	0.012	97	56258	2.28	
21 1,1-Dichloroethene	96		2.239				ND	
33 trans-1,2-Dichloroethene	96		2.878				ND	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	81	82208	2.85	
60 Trichloroethene	130	4.996	4.985	0.011	88	3512	0.1131	
76 Tetrachloroethene	164		6.582				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

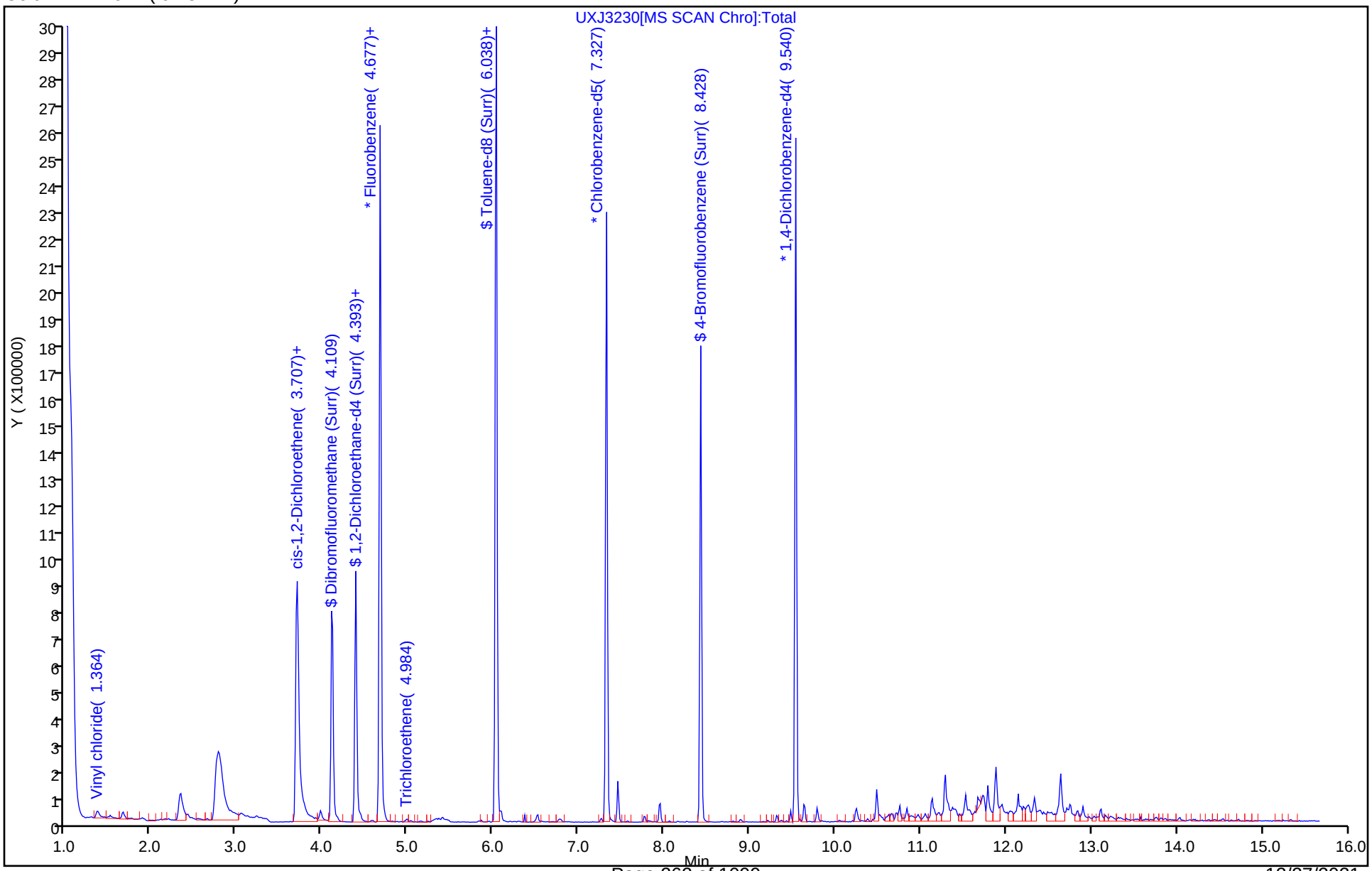
Report Date: 21-Dec-2021 09:02:29 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3230.D

Injection Date:	20-Dec-2021 21:22:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-B-20	Lab Sample ID:	240-161553-20	Worklist Smp#:	56
Client ID:	SL-10_121621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3230.D
Lims ID: 240-161553-B-20
Client ID: SL-10_121621
Sample Type: Client
Inject. Date: 20-Dec-2021 21:22:30 ALS Bottle#: 27 Worklist Smp#: 56
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-056
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

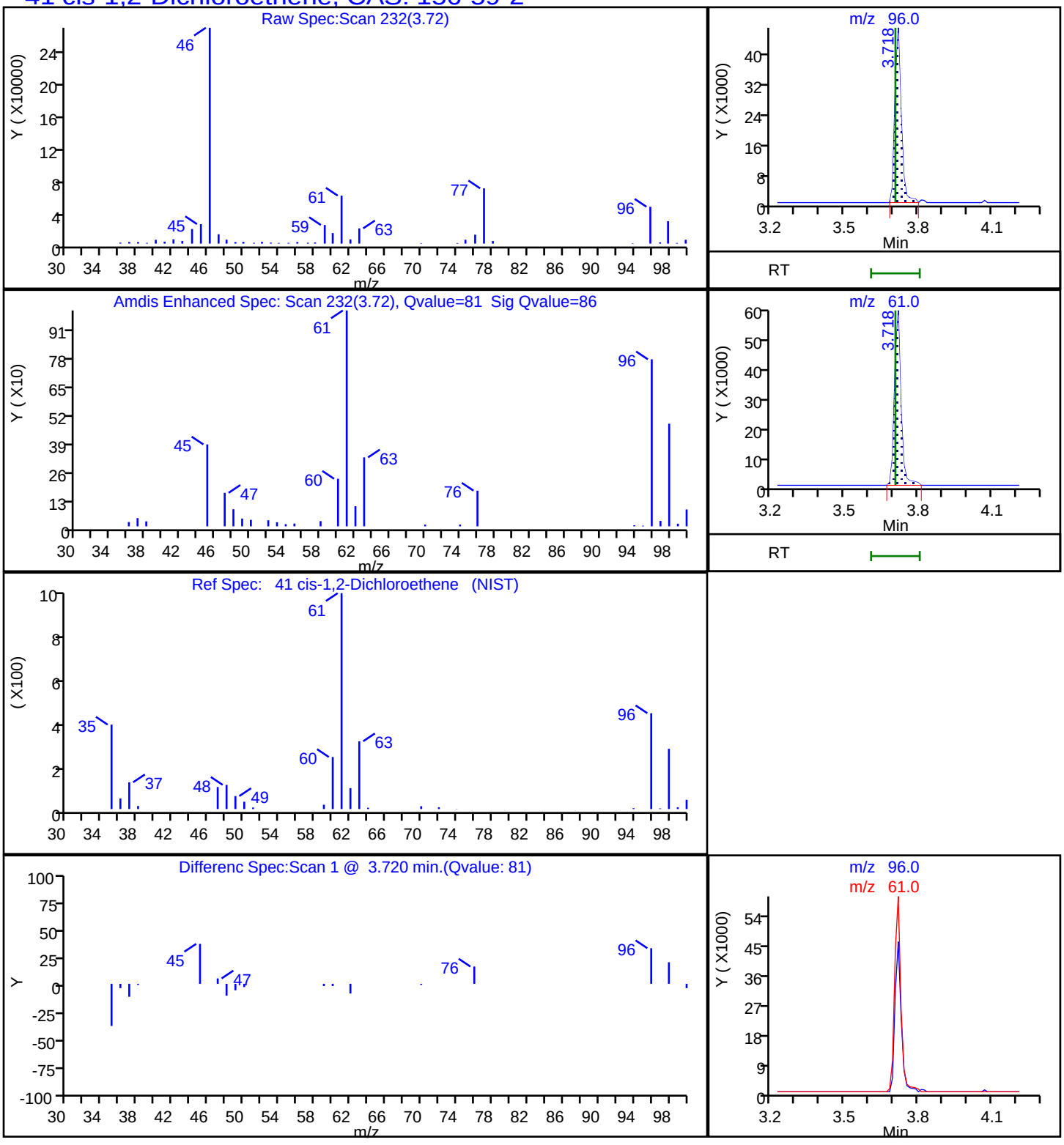
First Level Reviewer: evansle Date: 21-Dec-2021 08:58:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	89.19
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.6	98.14
$ 6 Toluene-d8 (Surr)	20.0	22.0	110.12
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.0	85.20

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3230.D				
Injection Date:	20-Dec-2021 21:22:30	Instrument ID:	A3UX11		
Lims ID:	240-161553-B-20	Lab Sample ID:	240-161553-20		
Client ID:	SL-10_121621				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	56
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



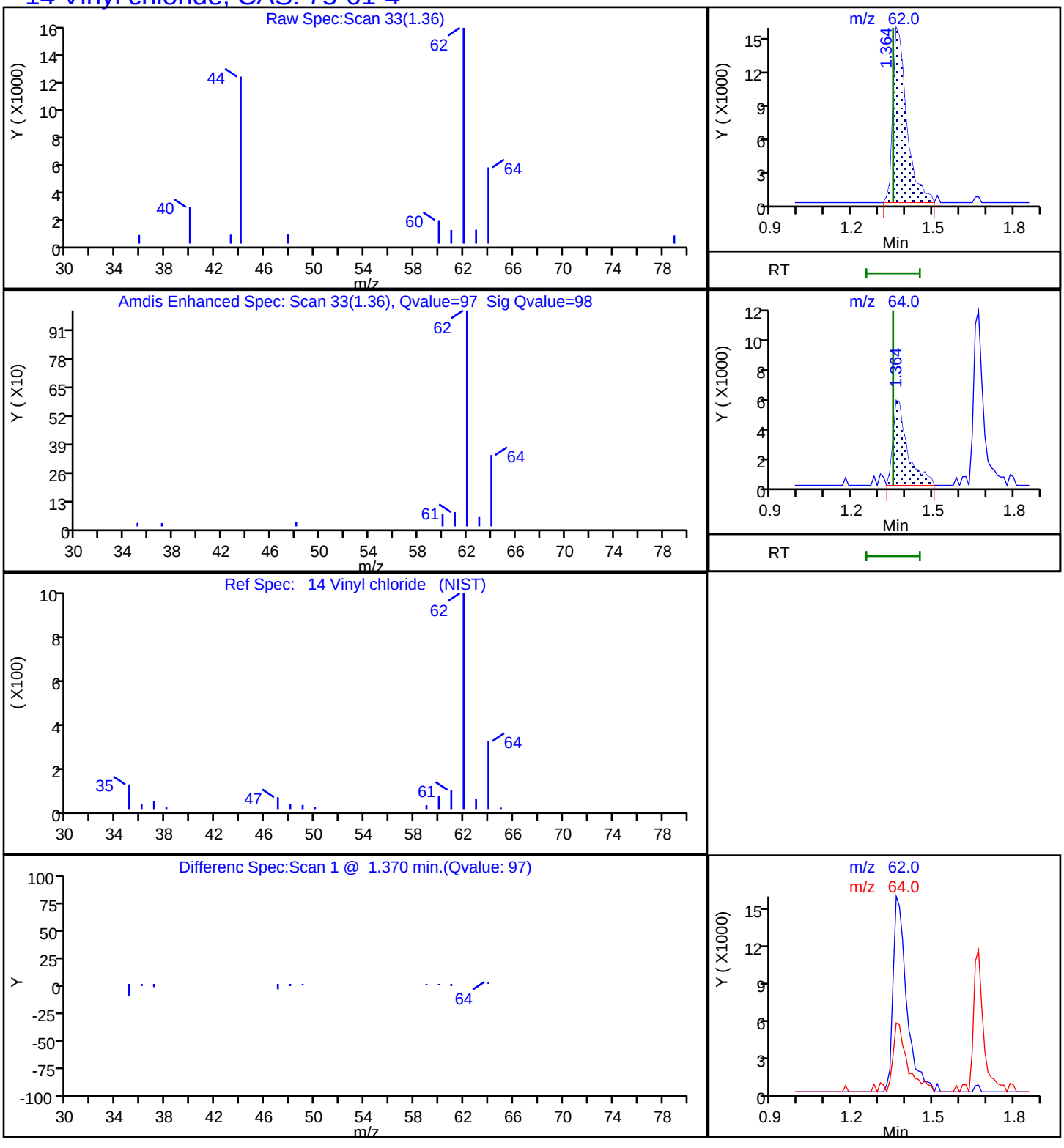
Report Date: 21-Dec-2021 09:02:29 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3230.D

Injection Date:	20-Dec-2021 21:22:30	Instrument ID:	A3UX11
Lims ID:	240-161553-B-20	Lab Sample ID:	240-161553-20
Client ID:	SL-10_121621		
Operator ID:	043582	ALS Bottle#:	27 Worklist Smp#: 56
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_11	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

14 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-11_121621 Lab Sample ID: 240-161553-21

Matrix: Water Lab File ID: 231389.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:50

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		62-137
460-00-4	4-Bromofluorobenzene (Surr)	101		56-136
2037-26-5	Toluene-d8 (Surr)	96		78-122
1868-53-7	Dibromofluoromethane (Surr)	101		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231389.D
Lims ID: 240-161553-E-21
Client ID: SL-11_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 14:19:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-011
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	99	1452423	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1019309	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	549704	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	92	380368	27.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	517424	27.8	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	1458624	26.3	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	437949	27.7	
11 Vinyl chloride	62	1.394	1.382	0.012	97	36816	1.90	
19 1,1-Dichloroethene	96		2.447				ND	
32 trans-1,2-Dichloroethene	96		3.346				ND	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	86	42515	2.48	
58 Trichloroethene	130	6.707	6.707	0.000	93	4416	0.2970	
75 Tetrachloroethene	164		8.624				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

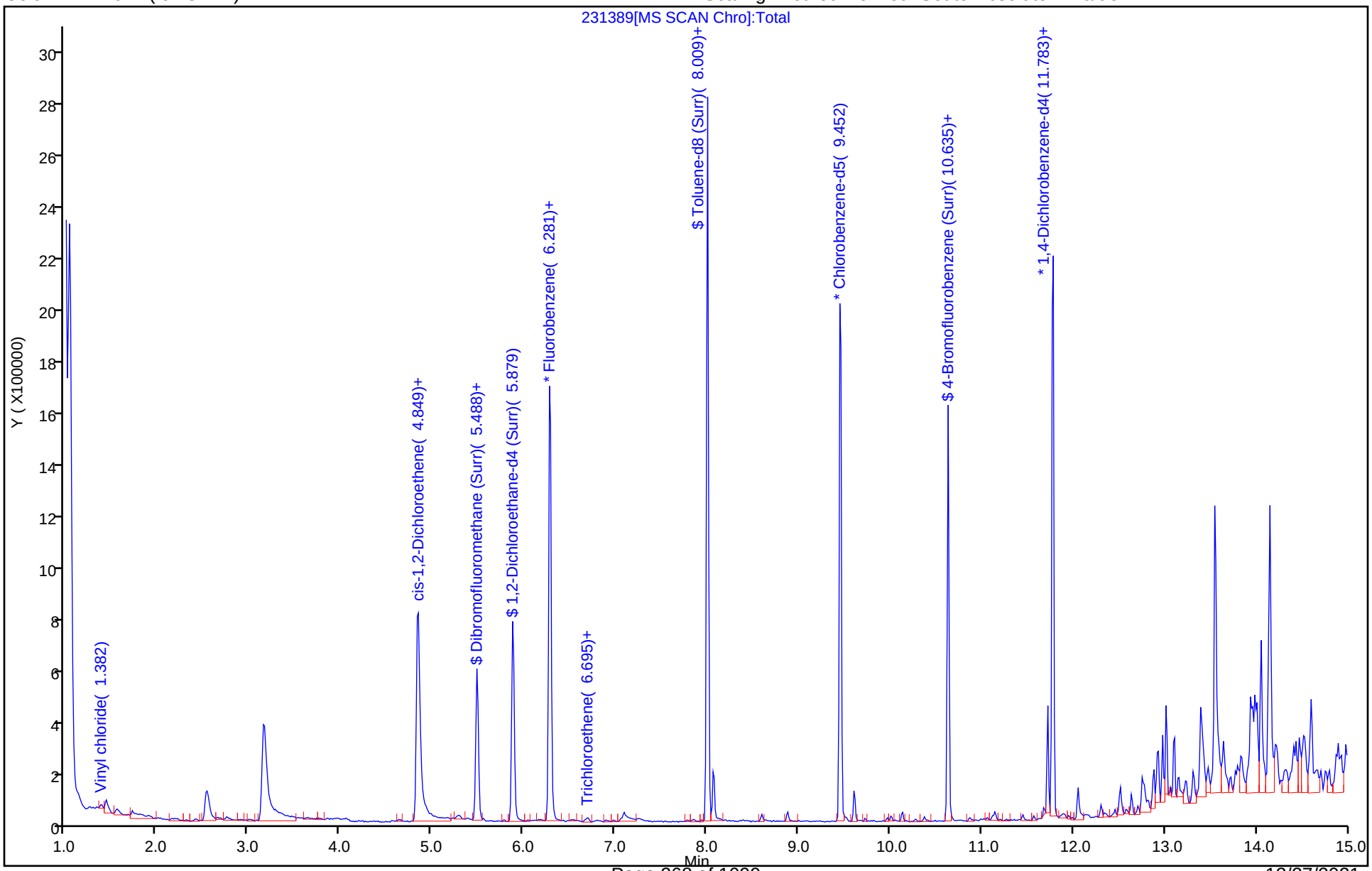
Report Date: 21-Dec-2021 09:18:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231389.D

Injection Date:	20-Dec-2021 14:19:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161553-E-21	Lab Sample ID:	240-161553-21	Worklist Smp#:	11
Client ID:	SL-11_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231389.D
Lims ID: 240-161553-E-21
Client ID: SL-11_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 14:19:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-011
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

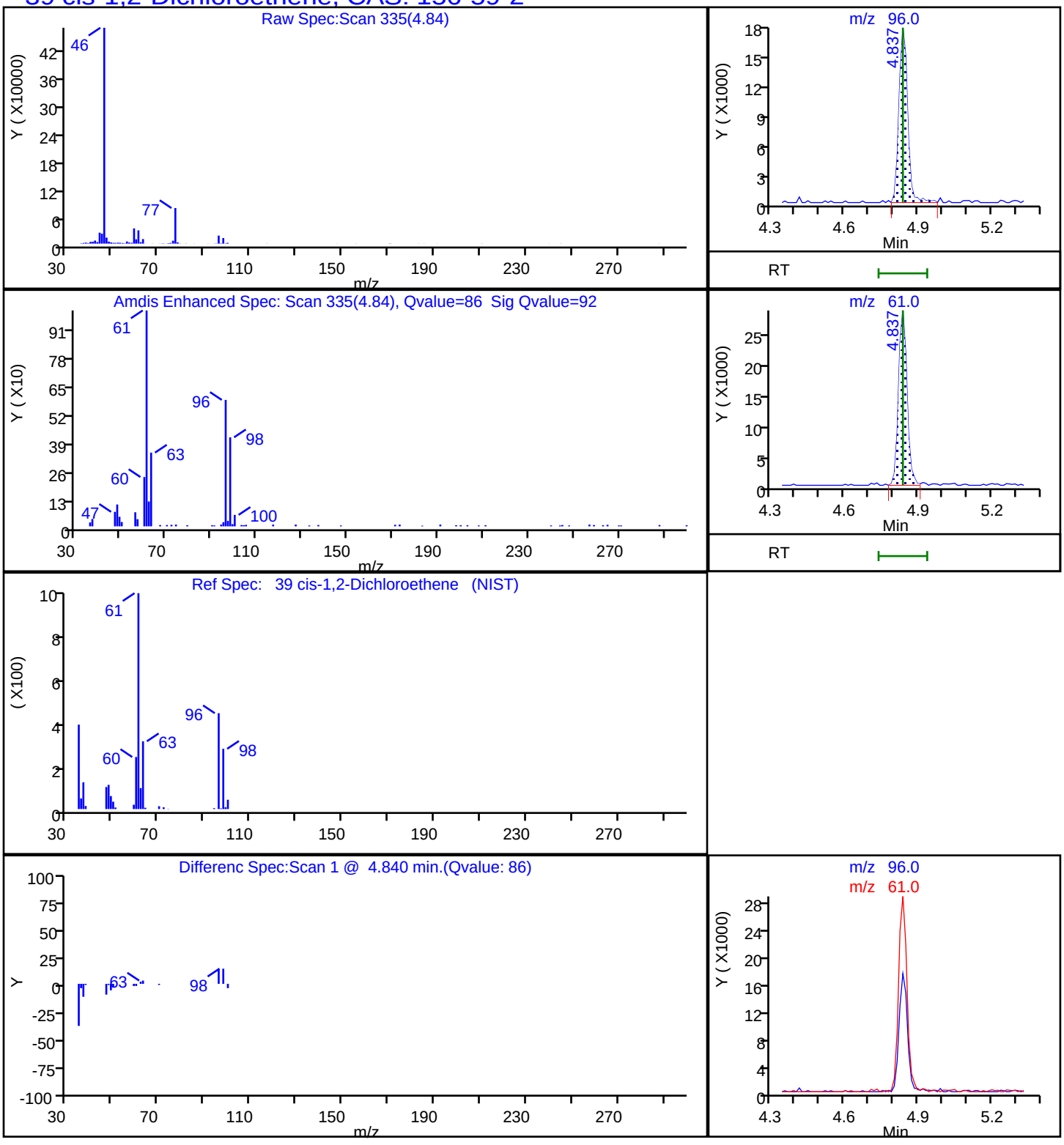
First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	27.9	101.46
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	27.8	101.12
$ 6 Toluene-d8 (Surr)	27.5	26.3	95.53
$ 7 4-Bromofluorobenzene (Surr)	27.5	27.7	100.86

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231389.D				
Injection Date:	20-Dec-2021 14:19:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-E-21	Lab Sample ID:	240-161553-21		
Client ID:	SL-11_121421				
Operator ID:	002808	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2



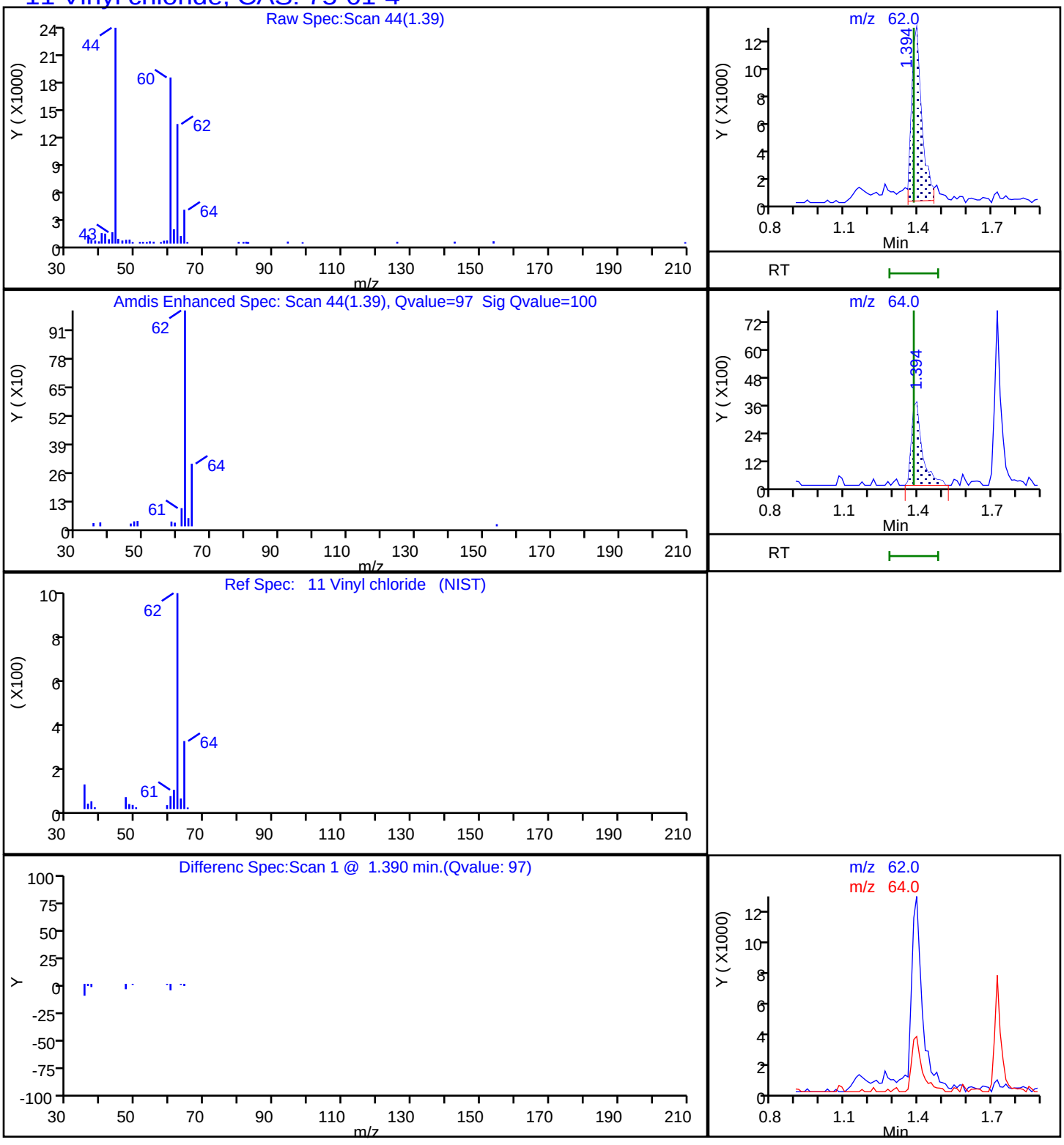
Report Date: 21-Dec-2021 09:18:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231389.D

Injection Date:	20-Dec-2021 14:19:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-E-21	Lab Sample ID:	240-161553-21		
Client ID:	SL-11_121421				
Operator ID:	002808	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-12_121621 Lab Sample ID: 240-161553-22

Matrix: Water Lab File ID: 231390.D

Analysis Method: 8260B Date Collected: 12/16/2021 11:05

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.72	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	102		56-136
2037-26-5	Toluene-d8 (Surr)	98		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231390.D
Lims ID: 240-161553-F-22
Client ID: SL-12_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-012
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.281	0.012	99	1532012	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1078513	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	95	552260	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	384043	26.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.879	-0.001	97	521373	26.6	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	1575661	26.8	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	469656	28.1	
11 Vinyl chloride	62	1.382	1.382	0.000	96	14692	0.7177	
19 1,1-Dichloroethene	96		2.447				ND	
32 trans-1,2-Dichloroethene	96		3.346				ND	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	85	26822	1.48	
58 Trichloroethene	130		6.707				ND	
75 Tetrachloroethene	164		8.624				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

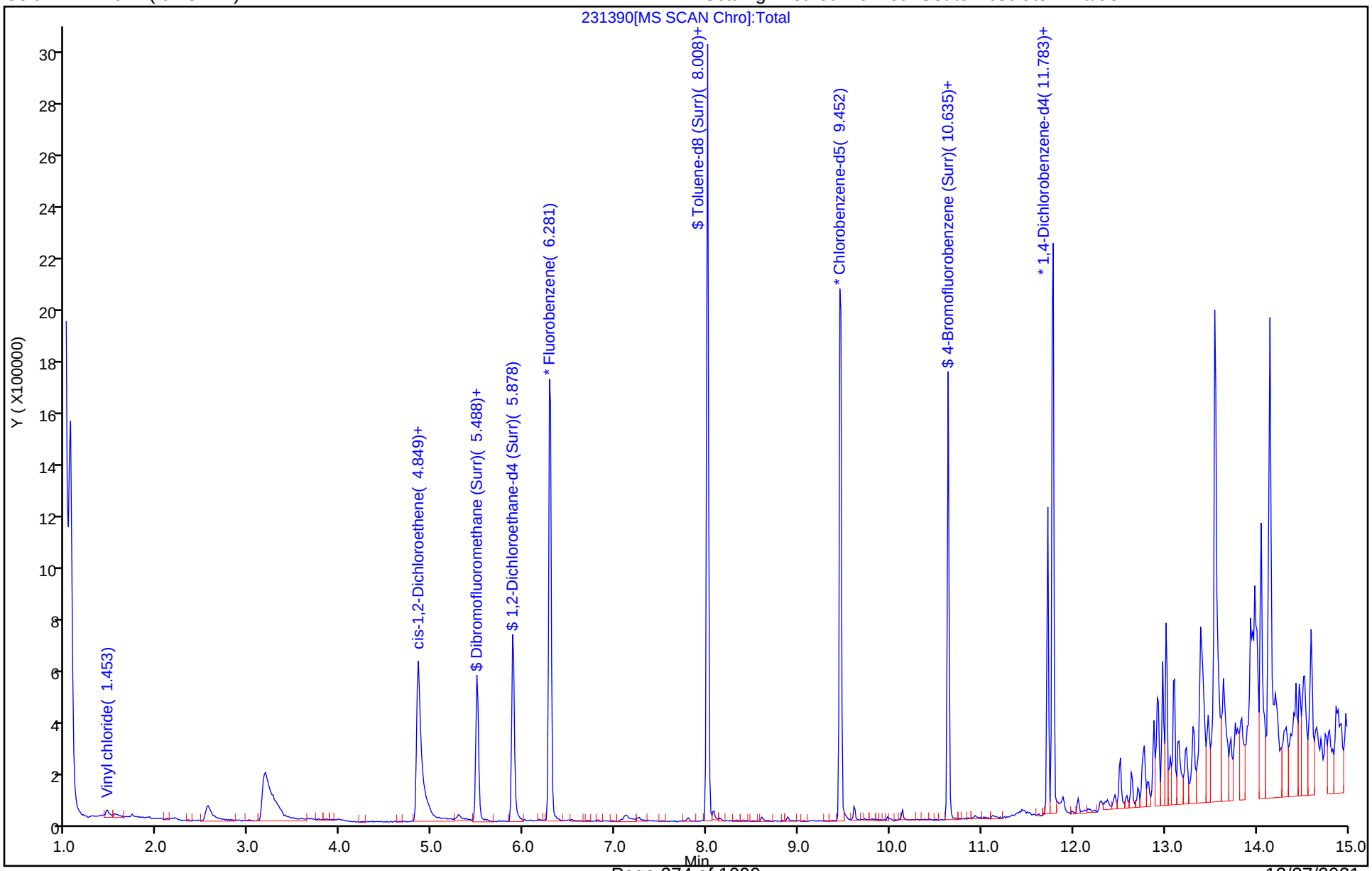
Report Date: 21-Dec-2021 09:18:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231390.D

Injection Date:	20-Dec-2021 14:45:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161553-F-22	Lab Sample ID:	240-161553-22	Worklist Smp#:	12
Client ID:	SL-12_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231390.D
Lims ID: 240-161553-F-22
Client ID: SL-12_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-012
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

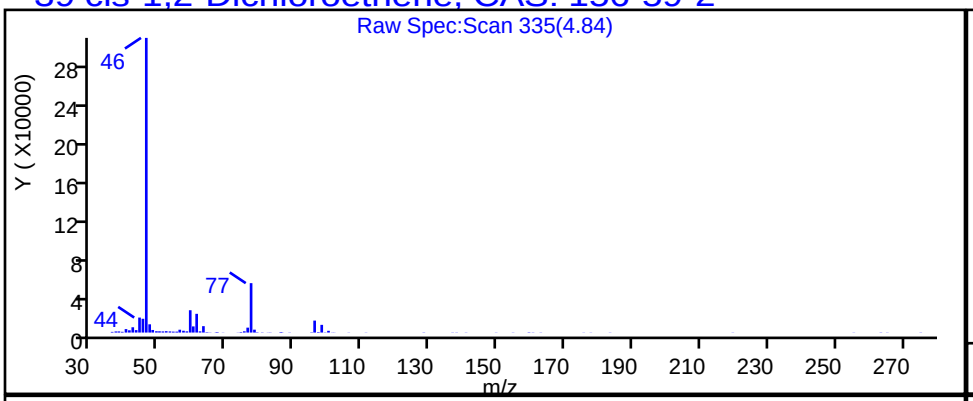
First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:31

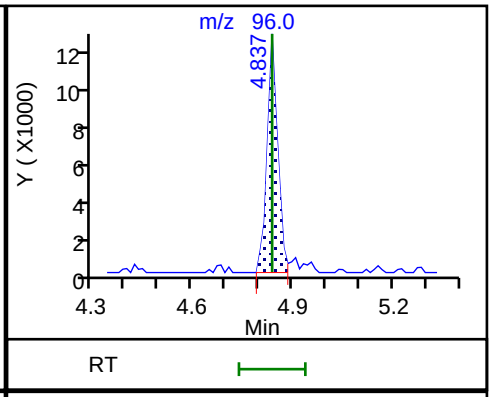
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	26.7	97.12
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	26.6	96.60
$ 6 Toluene-d8 (Surr)	27.5	26.8	97.53
$ 7 4-Bromofluorobenzene (Surr)	27.5	28.1	102.22

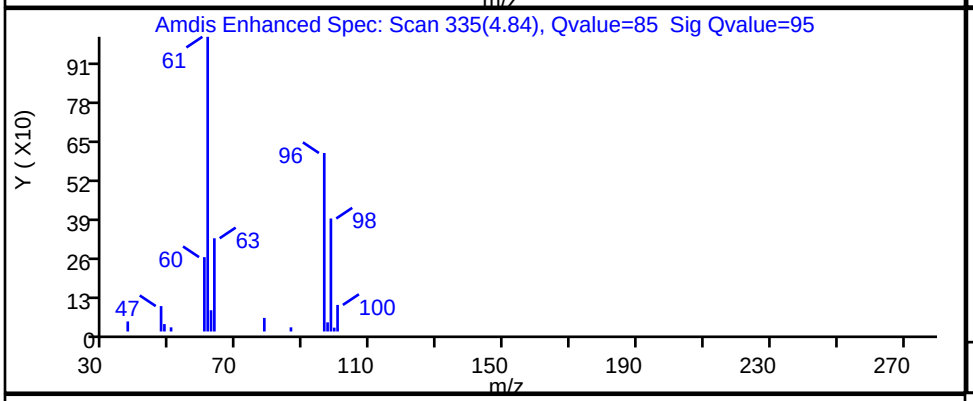
Eurofins TestAmerica, Canton

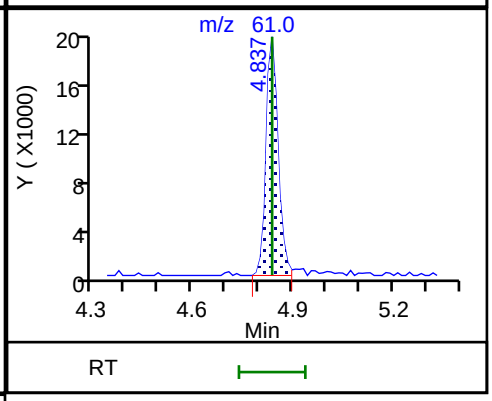
Data File:	\\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231390.D				
Injection Date:	20-Dec-2021 14:45:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-F-22	Lab Sample ID:	240-161553-22		
Client ID:	SL-12_121421				
Operator ID:	002808	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

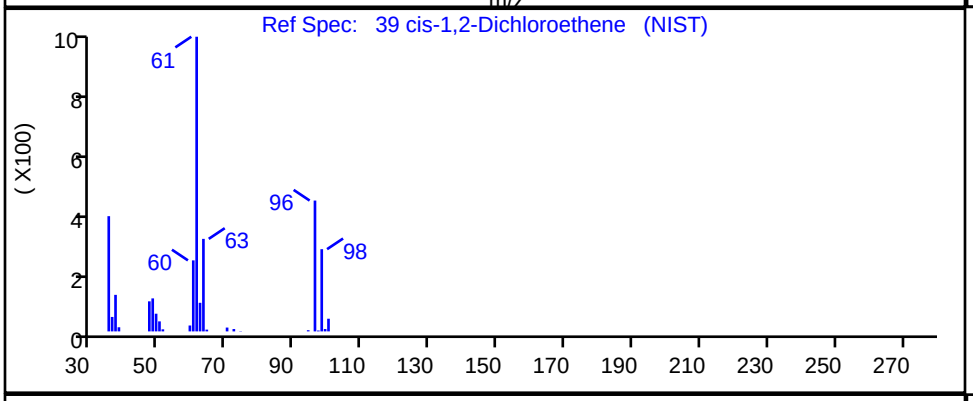
39 cis-1,2-Dichloroethene, CAS: 156-59-2

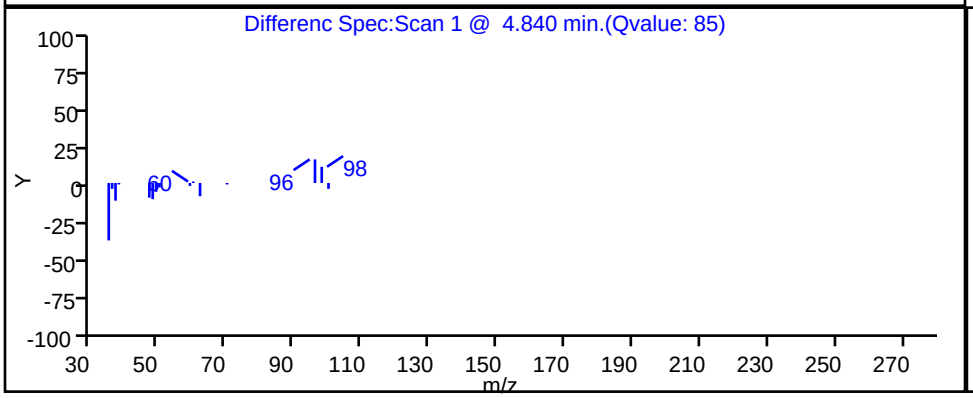


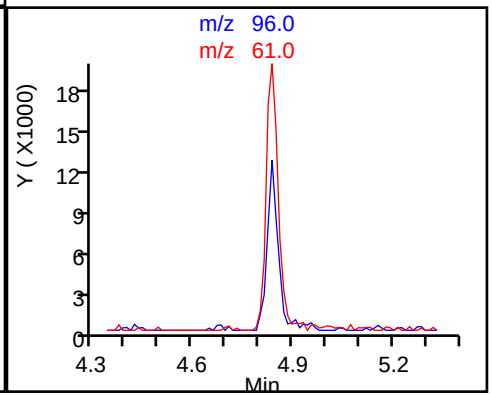










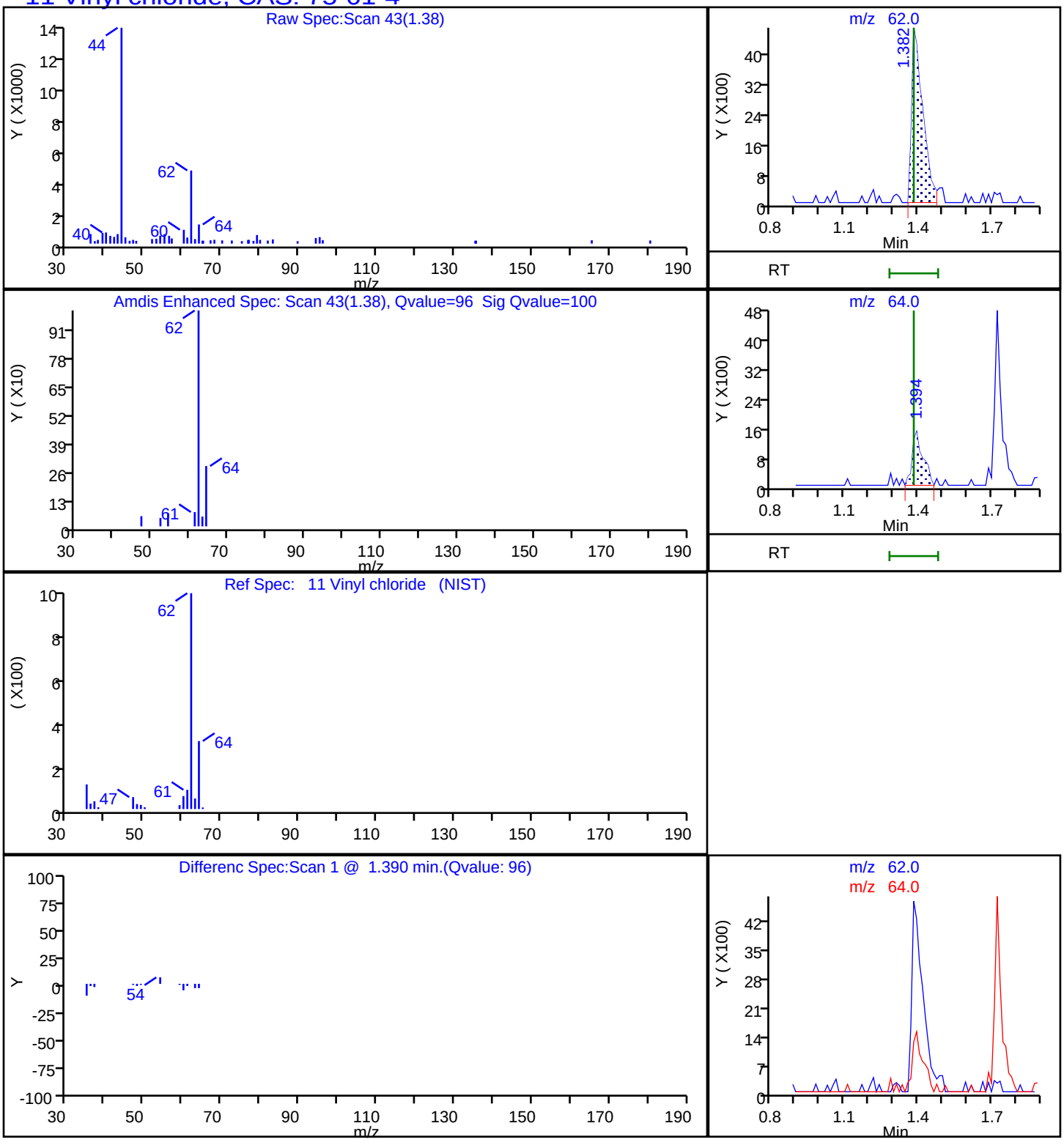


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231390.D

Injection Date:	20-Dec-2021 14:45:30	Instrument ID:	A3UX23
Lims ID:	240-161553-F-22	Lab Sample ID:	240-161553-22
Client ID:	SL-12_121421		
Operator ID:	002808	ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_23	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-19_121621 Lab Sample ID: 240-161553-23

Matrix: Water Lab File ID: 231391.D

Analysis Method: 8260B Date Collected: 12/16/2021 11:15

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-137
460-00-4	4-Bromofluorobenzene (Surr)	100		56-136
2037-26-5	Toluene-d8 (Surr)	96		78-122
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231391.D
Lims ID: 240-161553-B-23
Client ID: SL-19_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:10:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-013
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1519211	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1057526	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	528214	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	410850	28.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	508817	26.1	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	1520086	26.4	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	450071	27.5	
11 Vinyl chloride	62		1.382				ND	
19 1,1-Dichloroethene	96		2.447				ND	
32 trans-1,2-Dichloroethene	96		3.346				ND	
39 cis-1,2-Dichloroethene	96		4.837				ND	U
58 Trichloroethene	130		6.707				ND	
75 Tetrachloroethene	164		8.624				ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

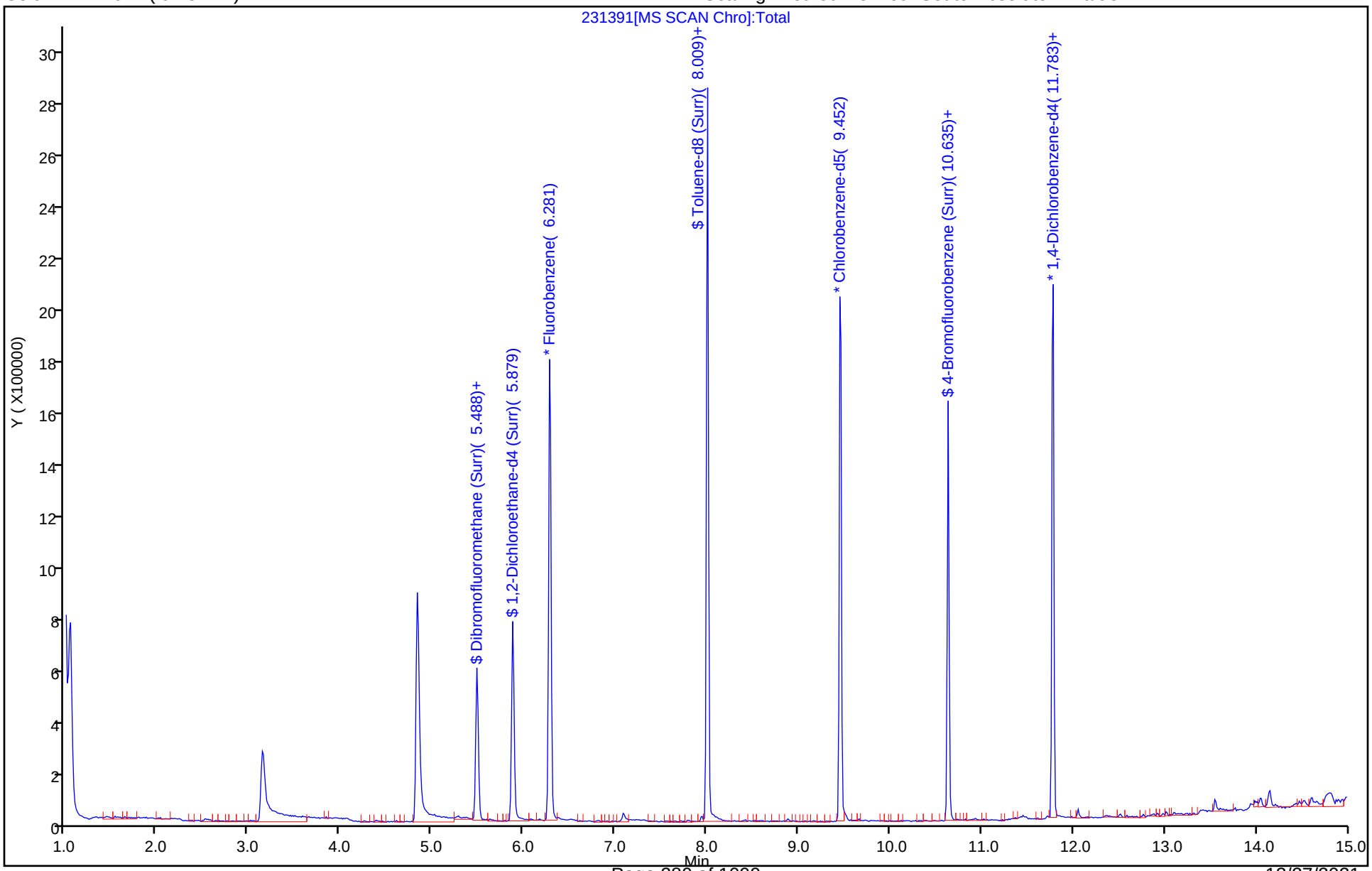
Report Date: 21-Dec-2021 09:18:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231391.D

Injection Date:	20-Dec-2021 15:10:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161553-B-23	Lab Sample ID:	240-161553-23	Worklist Smp#:	13
Client ID:	SL-19_121421				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231391.D
Lims ID: 240-161553-B-23
Client ID: SL-19_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 15:10:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-013
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:07:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	28.8	104.77
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	26.1	95.06
$ 6 Toluene-d8 (Surr)	27.5	26.4	95.95
$ 7 4-Bromofluorobenzene (Surr)	27.5	27.5	99.90

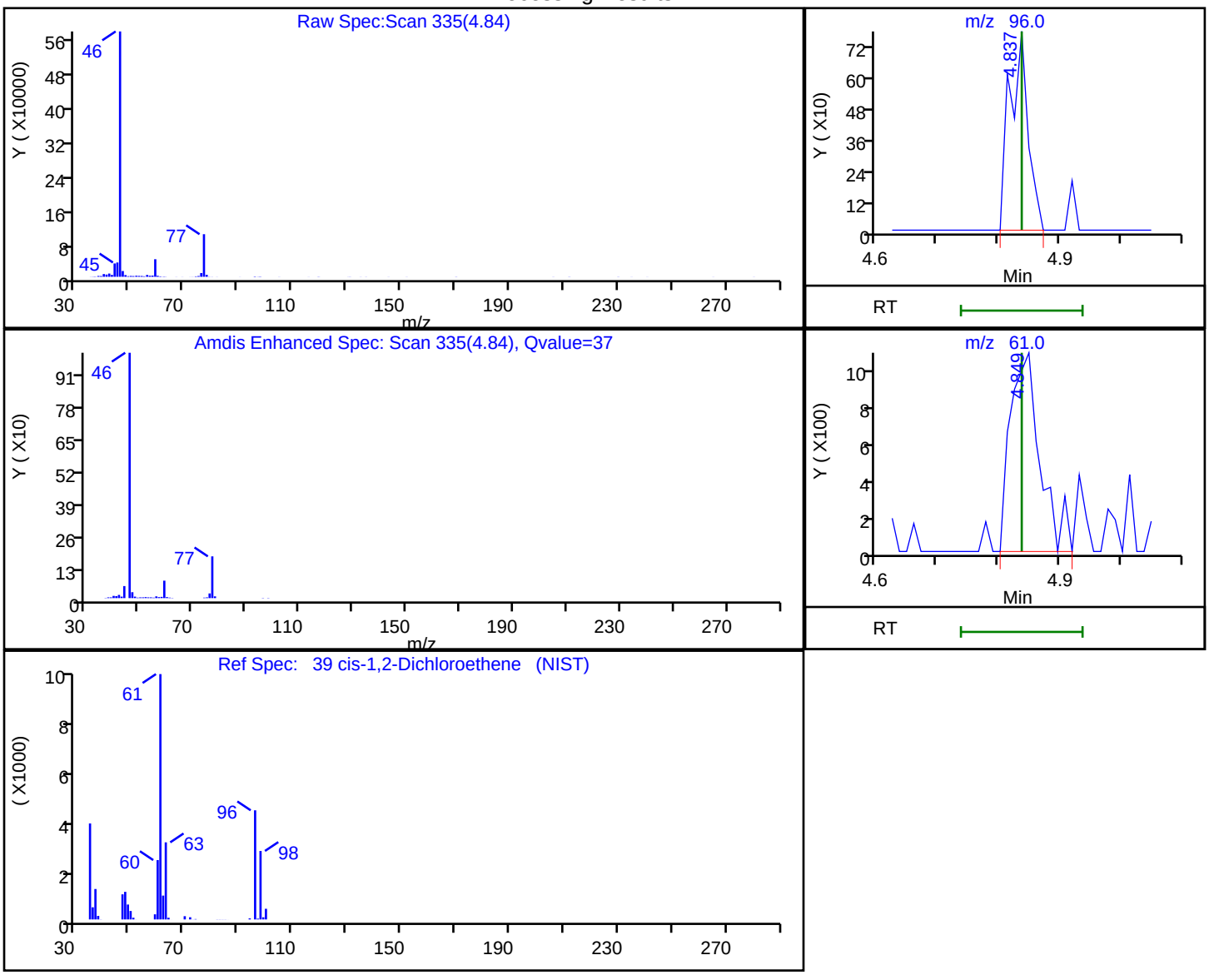
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231391.D				
Injection Date:	20-Dec-2021 15:10:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-B-23	Lab Sample ID:	240-161553-23		
Client ID:	SL-19_121421				
Operator ID:	002808	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
4.84	96.00	1620	0.090185
4.85	61.00	3620	

Reviewer: macenczaks, 21-Dec-2021 09:07:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-161553-24

Matrix: Water Lab File ID: 231394.D

Analysis Method: 8260B Date Collected: 12/14/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 16:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	4.9		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	103		56-136
2037-26-5	Toluene-d8 (Surr)	95		78-122
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231394.D
Lims ID: 240-161553-B-24
Client ID: DUP-01
Sample Type: Client
Inject. Date: 20-Dec-2021 16:25:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-016
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:14:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	99	1589860	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1103731	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	553329	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	416796	27.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	558436	27.4	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	-0.001	95	1569223	26.1	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	484957	28.4	
11 Vinyl chloride	62	1.382	1.382	0.000	97	62507	2.94	
19 1,1-Dichloroethene	96		2.447				ND	
32 trans-1,2-Dichloroethene	96		3.346				ND	7
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	86	92358	4.91	
58 Trichloroethene	130	6.707	6.707	0.000	88	3025	0.1858	
75 Tetrachloroethene	164		8.624				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

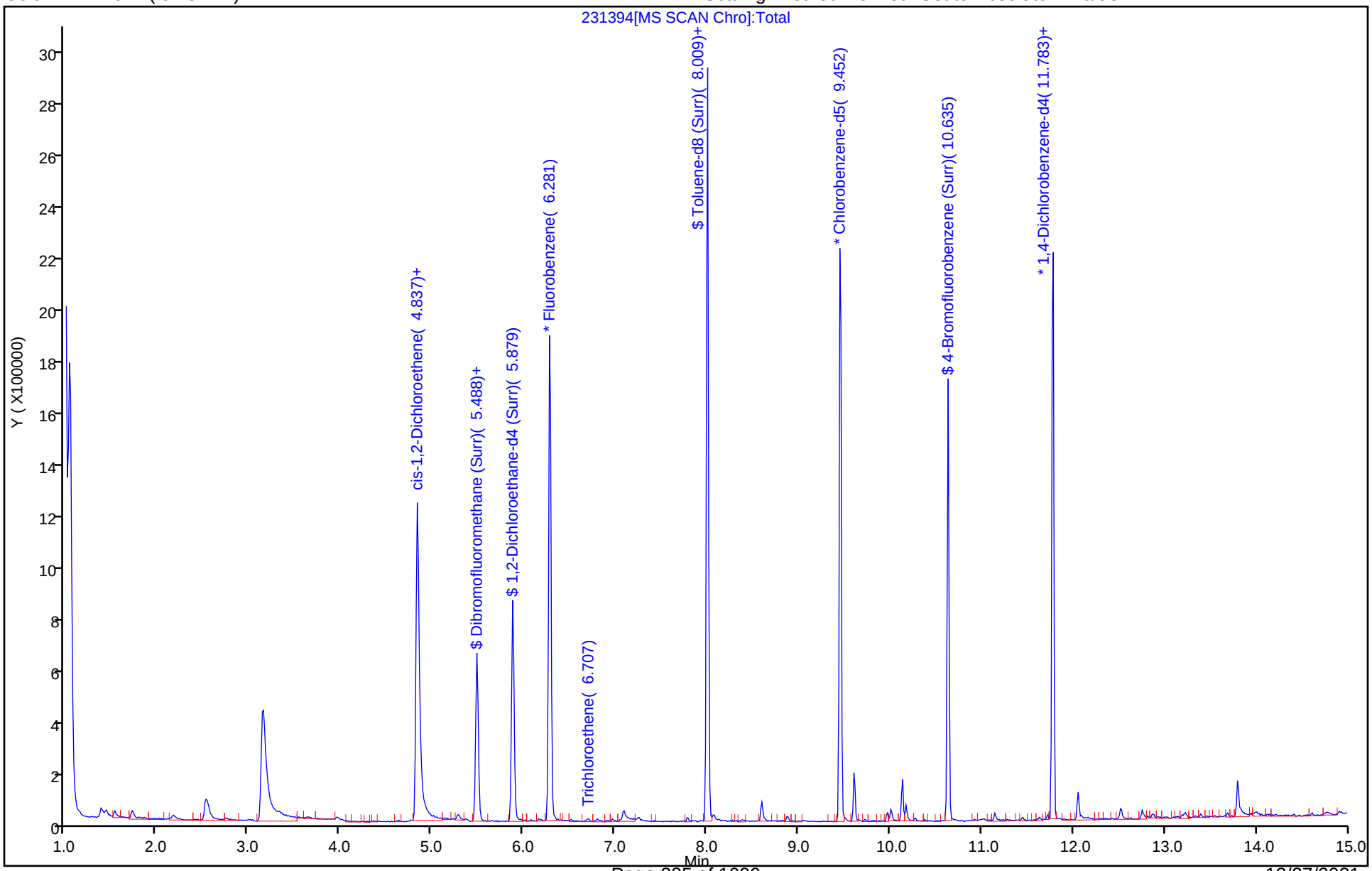
Report Date: 21-Dec-2021 09:18:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231394.D

Injection Date:	20-Dec-2021 16:25:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161553-B-24	Lab Sample ID:	240-161553-24	Worklist Smp#:	16
Client ID:	DUP-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231394.D
Lims ID: 240-161553-B-24
Client ID: DUP-01
Sample Type: Client
Inject. Date: 20-Dec-2021 16:25:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-016
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:14:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	27.9	101.56
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	27.4	99.70
$ 6 Toluene-d8 (Surr)	27.5	26.1	94.91
$ 7 4-Bromofluorobenzene (Surr)	27.5	28.4	103.14

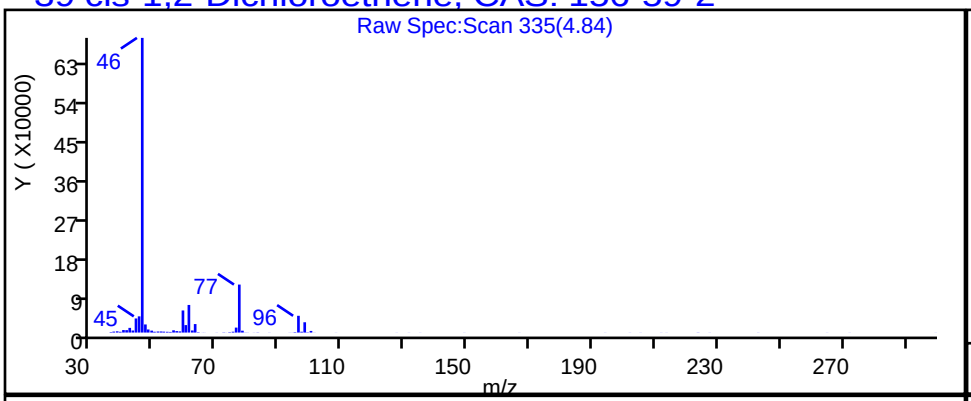
Report Date: 21-Dec-2021 09:18:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

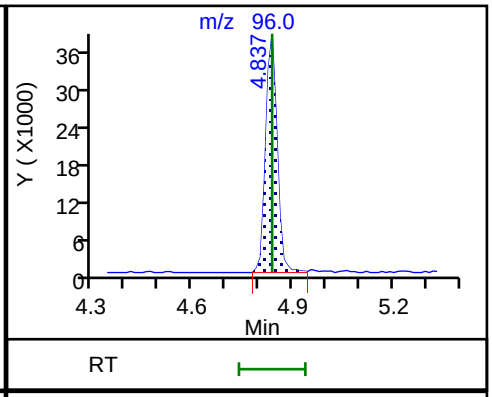
Eurofins TestAmerica, Canton

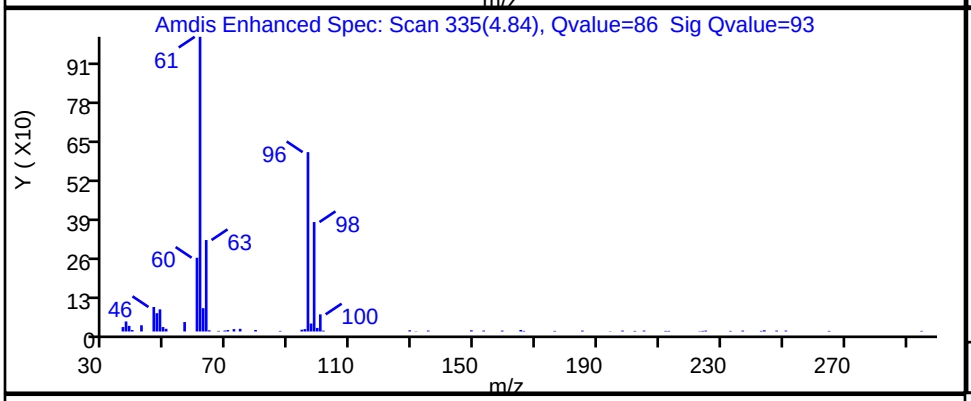
Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231394.D

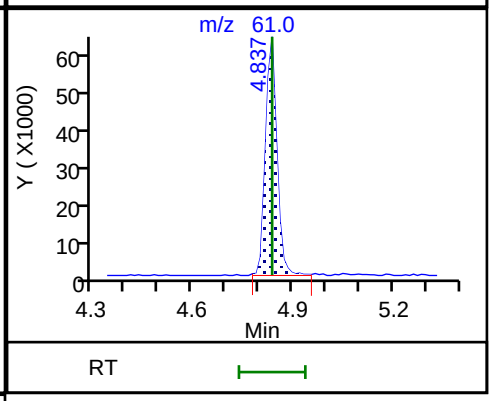
Injection Date:	20-Dec-2021 16:25:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-B-24	Lab Sample ID:	240-161553-24		
Client ID:	DUP-01				
Operator ID:	002808	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

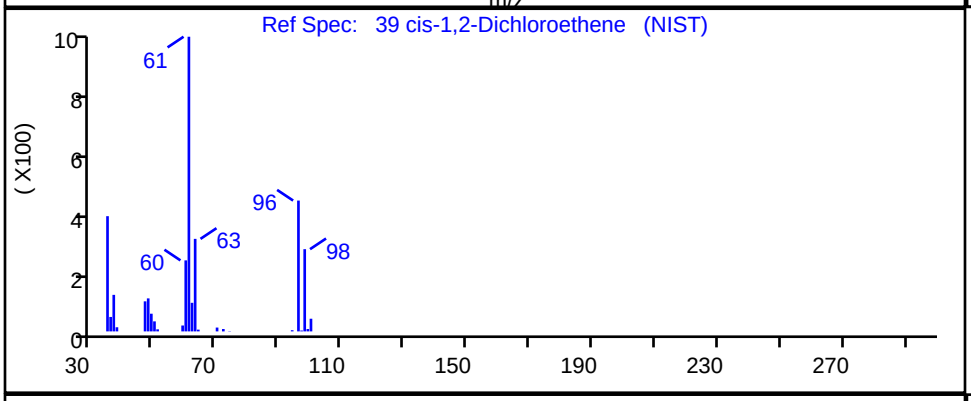
39 cis-1,2-Dichloroethene, CAS: 156-59-2

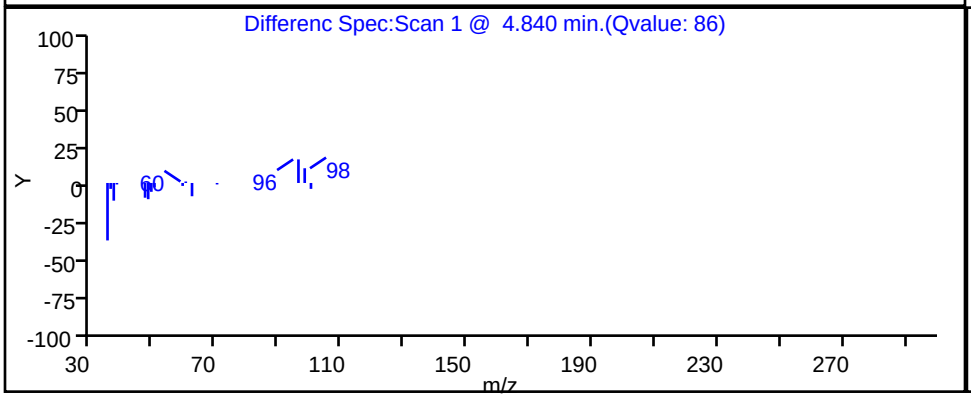


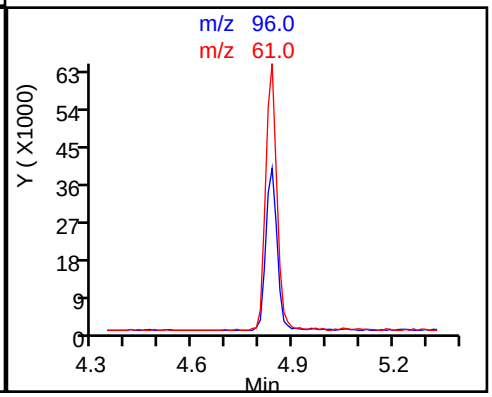










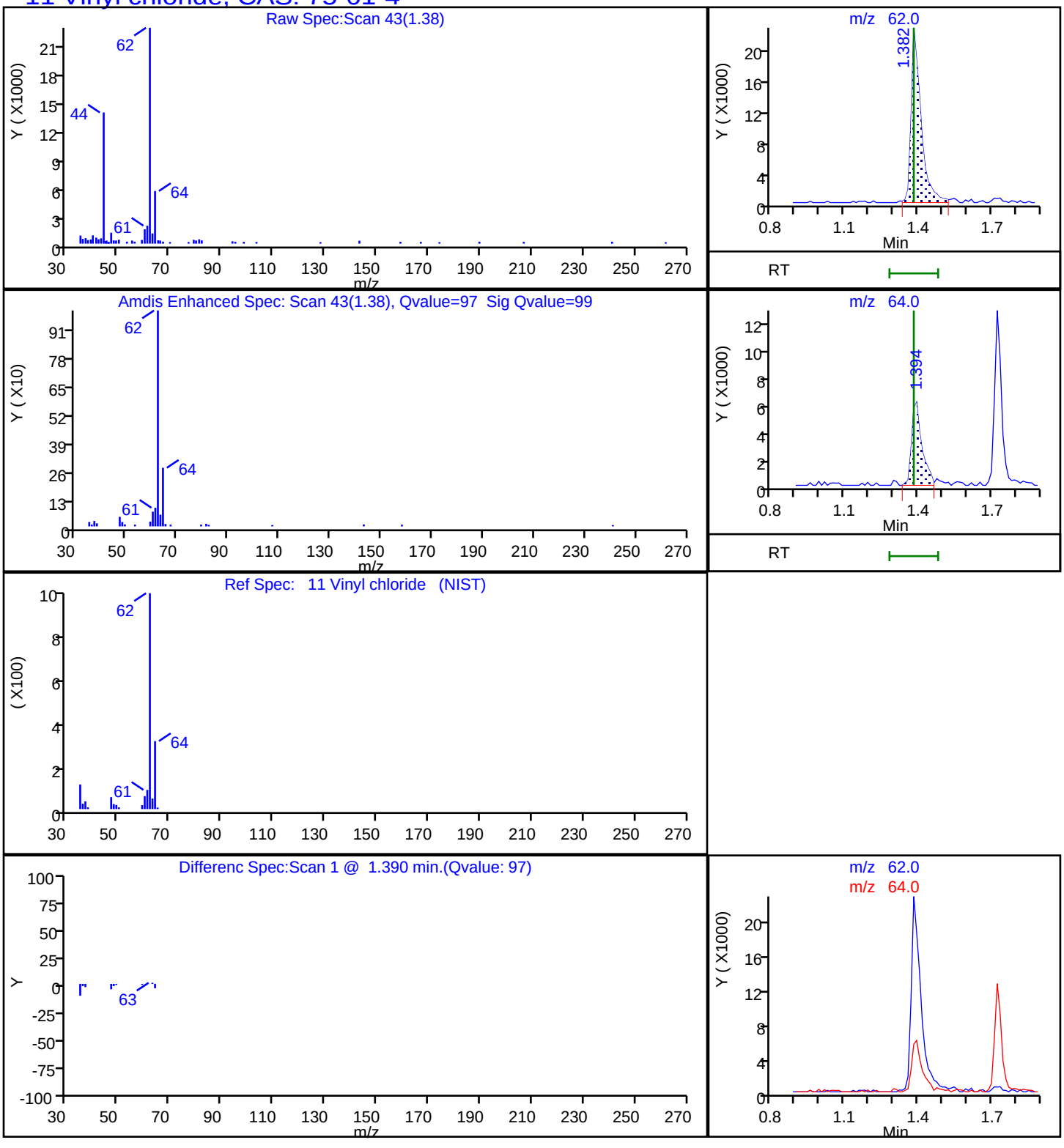


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231394.D

Injection Date:	20-Dec-2021 16:25:30	Instrument ID:	A3UX23
Lims ID:	240-161553-B-24	Lab Sample ID:	240-161553-24
Client ID:	DUP-01		
Operator ID:	002808	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_23	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

11 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 240-161553-25

Matrix: Water Lab File ID: 231395.D

Analysis Method: 8260B Date Collected: 12/14/2021 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 16:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	22		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.55	J	1.0	0.44
75-01-4	Vinyl chloride	23		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-137
460-00-4	4-Bromofluorobenzene (Surr)	100		56-136
2037-26-5	Toluene-d8 (Surr)	101		78-122
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D
Lims ID: 240-161553-B-25
Client ID: DUP-02
Sample Type: Client
Inject. Date: 20-Dec-2021 16:50:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-017
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:15:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	99	1526545	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1045096	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	522920	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	380316	26.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.879	-0.001	96	462794	23.7	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	1576585	27.7	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	445568	27.5	
11 Vinyl chloride	62	1.382	1.382	0.000	97	462632	22.7	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	66	1820	0.1462	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	94	3837	0.2255	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	86	402732	22.3	
58 Trichloroethene	130	6.695	6.707	-0.012	93	8653	0.5536	
75 Tetrachloroethene	164		8.624				ND	

QC Flag Legend

Processing Flags

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

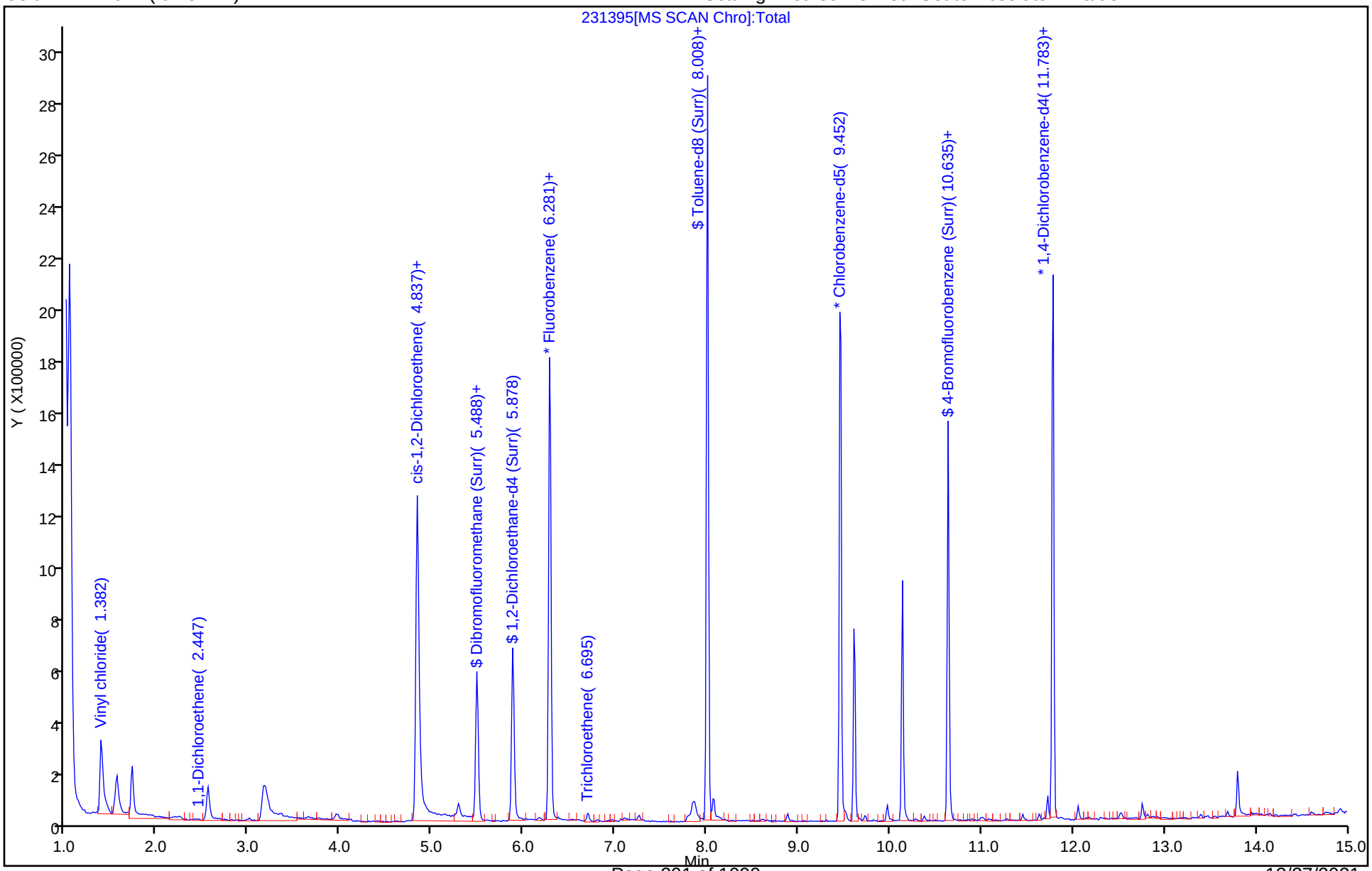
Report Date: 21-Dec-2021 09:18:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D

Injection Date:	20-Dec-2021 16:50:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161553-B-25	Lab Sample ID:	240-161553-25	Worklist Smp#:	17
Client ID:	DUP-02				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D
Lims ID: 240-161553-B-25
Client ID: DUP-02
Sample Type: Client
Inject. Date: 20-Dec-2021 16:50:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-017
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:15:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	26.5	96.52
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	23.7	86.05
$ 6 Toluene-d8 (Surr)	27.5	27.7	100.70
$ 7 4-Bromofluorobenzene (Surr)	27.5	27.5	100.08

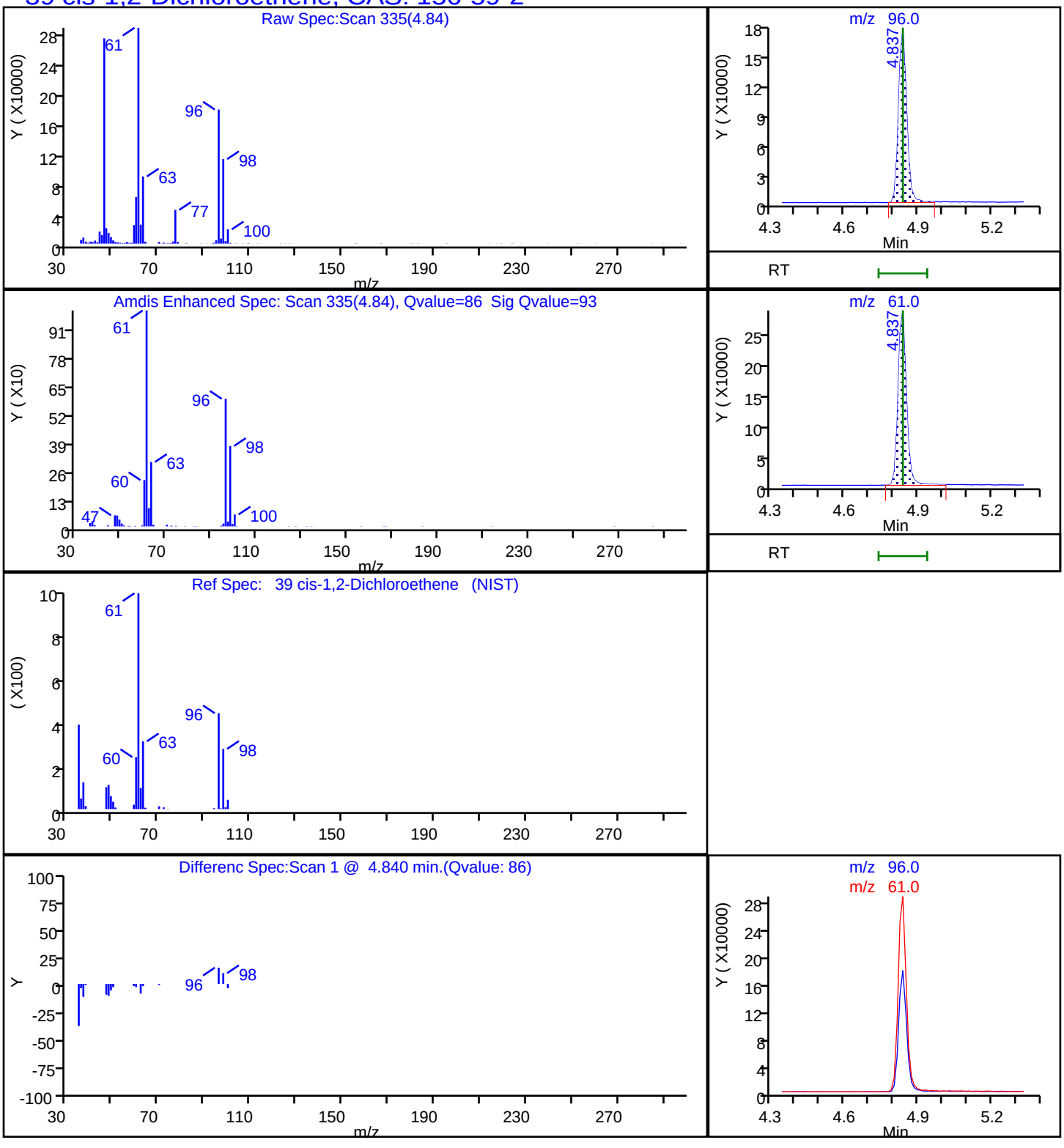
Report Date: 21-Dec-2021 09:18:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D

Injection Date:	20-Dec-2021 16:50:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-B-25	Lab Sample ID:	240-161553-25		
Client ID:	DUP-02				
Operator ID:	002808	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2

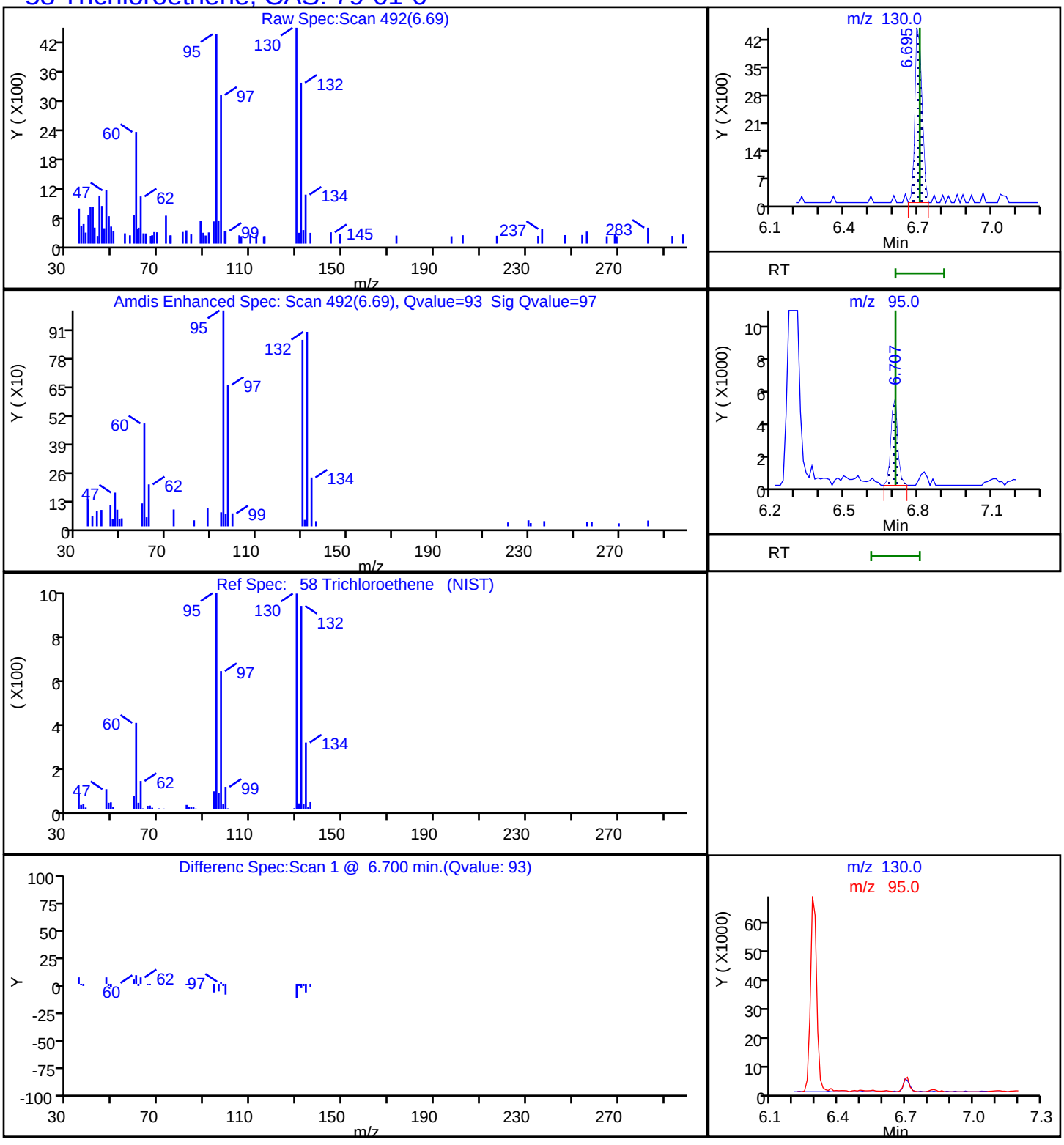


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D

Injection Date:	20-Dec-2021 16:50:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-B-25	Lab Sample ID:	240-161553-25		
Client ID:	DUP-02				
Operator ID:	002808	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



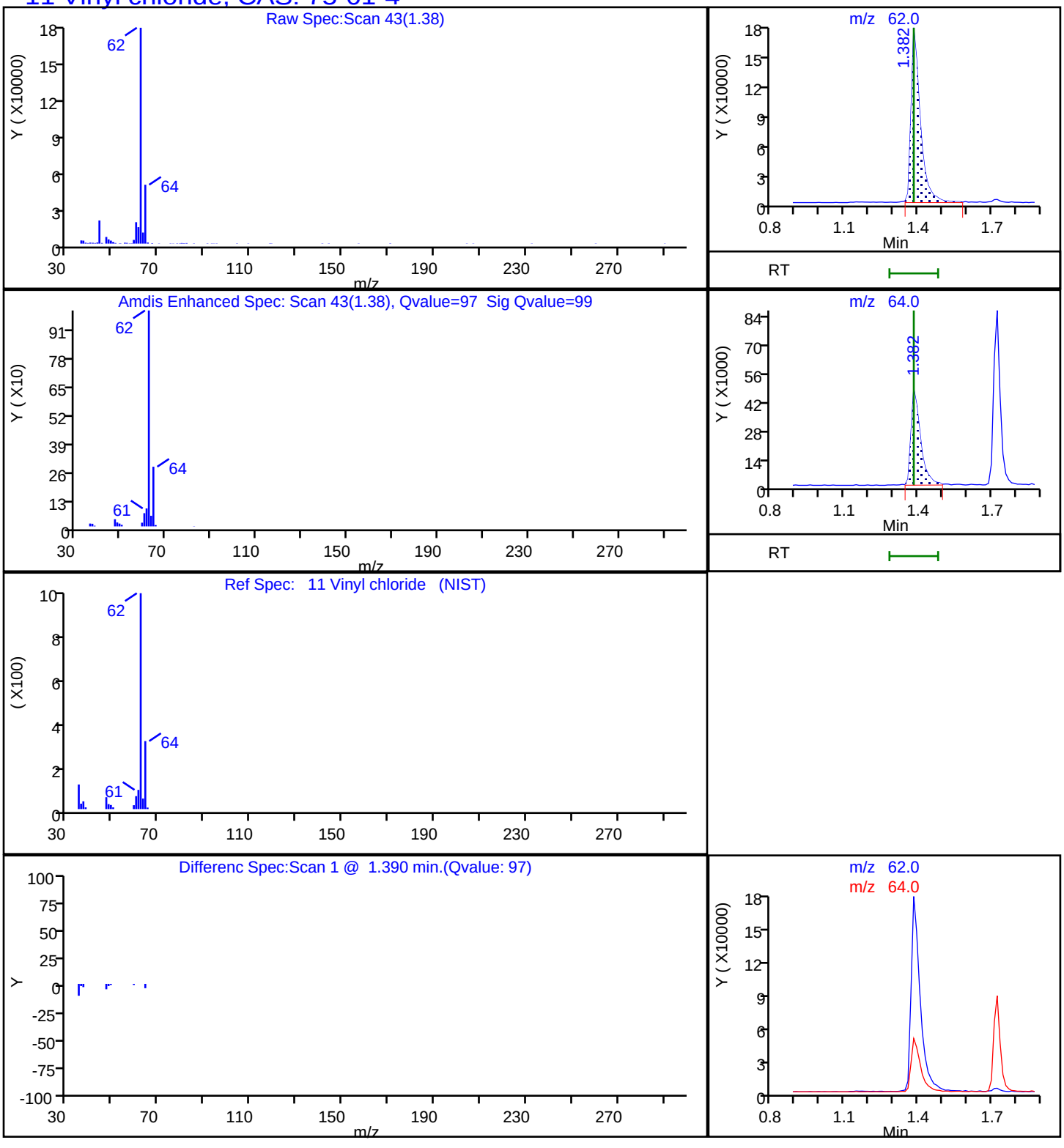
Report Date: 21-Dec-2021 09:18:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231395.D

Injection Date:	20-Dec-2021 16:50:30	Instrument ID:	A3UX23		
Lims ID:	240-161553-B-25	Lab Sample ID:	240-161553-25		
Client ID:	DUP-02				
Operator ID:	002808	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Vinyl chloride, CAS: 75-01-4



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2512 0.2574	0.2630	0.2637	0.2825	0.2704	Ave		0.2647				4.1		15.0			
Chloromethane	0.2317 0.1795	0.2122	0.2145	0.2226	0.1904	Ave		0.2085			0.1000	9.5		15.0			
Butadiene	0.2185 0.2038	0.2386	0.2203	0.2293	0.2062	Ave		0.2195				6.1		15.0			
Vinyl chloride	0.2467 0.2324	0.2605	0.2509	0.2618	0.2383	Ave		0.2484				4.7		15.0			
Bromomethane	0.1925 0.1659	0.1837	0.1816	0.1885	0.1603	Ave		0.1787				7.2		15.0			
Chloroethane	0.1597 0.1350	0.1478	0.1485	0.1577	0.1331	Ave		0.1469				7.6		15.0			
Dichlorofluoromethane	0.3895 0.3237	0.3864	0.3789	0.3749	0.3313	Ave		0.3641				7.9		15.0			
Trichlorofluoromethane	0.4432 0.4077	0.4339	0.4149	0.4339	0.4138	Ave		0.4246				3.4		15.0			
Ethyl ether	0.1802 0.1784	0.1757	0.2069	0.2000	0.1935	Ave		0.1891				6.8		15.0			
Acrolein	0.0090 0.0070	0.0065	0.0066	0.0079	0.0069	Ave		0.0073				13.3		15.0			
1,1-Dichloroethene	0.2336 0.2259	0.2440	0.2449	0.2526	0.2380	Ave		0.2398				3.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1506 0.1905	0.1733	0.1811	0.2021	0.2001	Ave		0.1830				10.5		15.0			
Acetone	0.1334 0.0538	0.1138	0.0890	0.0752	0.0676	Qua	0.1389	0.0756	-0.000293						1.0000		0.9900
Iodomethane	0.4324 0.4064	0.4152	0.4520	0.4461	0.4232	Ave		0.4292				4.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6924 0.6702	0.7119	0.7310	0.7655	0.7122	Ave		0.7139				4.6		15.0			
3-Chloro-1-propene	0.1561 0.1574	0.1548	0.1690	0.1655	0.1624	Ave		0.1609				3.5		15.0			
Methyl acetate	0.1679 0.1457	0.1567	0.1644	0.1678	0.1581	Ave		0.1601				5.3		15.0			
Methylene Chloride	0.3069 0.2303	0.2685	0.2748	0.2613	0.2461	Ave		0.2646				9.9		15.0			
2-Methyl-2-propanol	0.0280 +++++	0.0341	0.0314	0.0327	0.0353	Ave		0.0323				8.8		15.0			
Acrylonitrile	0.0798 0.0742	0.0831	0.0833	0.0871	0.0826	Ave		0.0817				5.3		15.0			
trans-1,2-Dichloroethene	0.2891 0.2568	0.2767	0.3033	0.2904	0.2755	Ave		0.2819				5.7		15.0			
Methyl tert-butyl ether	0.6799 0.6510	0.6721	0.7103	0.7601	0.6909	Ave		0.6940				5.5		15.0			
Hexane	0.0543 0.0684	0.0590	0.0652	0.0680	0.0727	Ave		0.0646				10.5		15.0			
1,1-Dichloroethane	0.3844 0.3876	0.4141	0.4287	0.4377	0.4033	Ave		0.4093			0.1000	5.3		15.0			
Vinyl acetate	0.4385 0.4256	0.4185	0.4478	0.4841	0.4337	Ave		0.4414				5.3		15.0			
cis-1,2-Dichloroethene	0.2900 0.2615	0.2972	0.3080	0.3048	0.2817	Ave		0.2905				5.9		15.0			
2,2-Dichloropropane	0.0518 0.0653	0.0625	0.0731	0.0763	0.0711	Ave		0.0667				13.3		15.0			
2-Butanone (MEK)	0.1393 0.0931	0.1231	0.1225	0.1219	0.1027	Ave		0.1171				14.1		15.0			
Chlorobromomethane	0.1525 0.1295	0.1350	0.1572	0.1521	0.1440	Ave		0.1450				7.5		15.0			
Tetrahydrofuran	0.0736 0.0606	0.0682	0.0705	0.0714	0.0681	Ave		0.0687				6.5		15.0			
Chloroform	0.4465 0.4105	0.4407	0.4643	0.4673	0.4413	Ave		0.4451				4.6		15.0			
1,1,1-Trichloroethane	0.3738 0.3739	0.3928	0.3946	0.4175	0.3891	Ave		0.3903				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	0.2829 0.3325	0.3036	0.3192	0.3487	0.3553	Ave		0.3237				8.5		15.0			
1,1-Dichloropropene	0.3587 0.3323	0.3324	0.3641	0.3737	0.3564	Ave		0.3529				4.8		15.0			
Carbon tetrachloride	0.3214 0.3589	0.3393	0.3614	0.3946	0.3694	Ave		0.3575				7.0		15.0			
Isobutyl alcohol	0.0099 0.0096	0.0114	0.0133	0.0134	0.0127	Ave		0.0117				14.5		15.0			
Benzene	0.9683 0.9496	1.0018	1.0313	1.0676	0.9656	Ave		0.9974				4.5		15.0			
1,2-Dichloroethane	0.3000 0.2978	0.3312	0.3504	0.3463	0.3141	Ave		0.3233				7.1		15.0			
n-Heptane	0.0548 0.0611	0.0518	0.0587	0.0619	0.0591	Ave		0.0579				6.7		15.0			
Trichloroethene	0.3207 0.2794	0.3058	0.3425	0.3230	0.3019	Ave		0.3122				6.9		15.0			
Methylcyclohexane	0.2934 0.3724	0.3406	0.3477	0.3778	0.3843	Ave		0.3527				9.6		15.0			
1,2-Dichloropropane	0.2086 0.1921	0.2113	0.2109	0.2242	0.2038	Ave		0.2085				5.0		15.0			
Dibromomethane	0.1591 0.1363	0.1529	0.1561	0.1626	0.1473	Ave		0.1524				6.2		15.0			
1,4-Dioxane	0.0013 0.0019	0.0020	0.0035	0.0028	0.0029	Qua	-0.059	0.0039	-0.000002						0.9950		0.9900
Dichlorobromomethane	0.2924 0.2991	0.2858	0.3201	0.3334	0.3098	Ave		0.3068				5.8		15.0			
2-Chloroethyl vinyl ether	0.1392 0.1369	0.1536	0.1490	0.1654	0.1471	Ave		0.1485				7.0		15.0			
cis-1,3-Dichloropropene	0.3738 0.3581	0.3911	0.3814	0.4002	0.3727	Ave		0.3795				3.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1882 0.1904	0.2096	0.2155	0.2367	0.2094	Ave		0.2083				8.5		15.0			
Toluene	1.4677 1.4494	1.5201	1.5904	1.6184	1.4660	Ave		1.5187				4.7		15.0			
trans-1,3-Dichloropropene	0.4450 0.4729	0.5063	0.5231	0.5197	0.4896	Ave		0.4928				6.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl methacrylate	0.3251 0.4008	0.3575	0.4000	0.4303	0.4003	Ave		0.3857				9.8		15.0			
1,1,2-Trichloroethane	0.3028 0.2755	0.3046	0.3175	0.3238	0.2829	Ave		0.3012				6.3		15.0			
Tetrachloroethene	0.2944 0.3080	0.3235	0.3381	0.3495	0.3263	Ave		0.3233				6.2		15.0			
1,3-Dichloropropane	0.4802 0.4715	0.5170	0.5076	0.5517	0.4816	Ave		0.5016				6.0		15.0			
2-Hexanone	0.1928 0.2053	0.2082	0.2249	0.2372	0.2119	Ave		0.2134				7.3		15.0			
Chlorodibromomethane	0.2982 0.3414	0.3172	0.3352	0.3636	0.3415	Ave		0.3328				6.8		15.0			
Ethylene Dibromide	0.2992 0.2916	0.3275	0.3323	0.3492	0.2991	Ave		0.3165				7.3		15.0			
Chlorobenzene	0.9880 0.9276	0.9924	1.0409	1.0528	0.9535	Ave		0.9925			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3242 0.3202	0.3214	0.3392	0.3619	0.3294	Ave		0.3327				4.8		15.0			
Ethylbenzene	0.4780 0.5015	0.4859	0.5645	0.5795	0.5108	Ave		0.5200				8.1		15.0			
m-Xylene & p-Xylene	0.5934 0.6058	0.6376	0.6599	0.7052	0.6238	Ave		0.6376				6.4		15.0			
o-Xylene	0.5418 0.5612	0.5672	0.6215	0.6473	0.5828	Ave		0.5870				6.8		15.0			
Styrene	0.7650 0.8563	0.8225	0.8867	0.9293	0.8569	Ave		0.8528				6.6		15.0			
Bromoform	0.1263 0.2304	0.1685	0.2041	0.2270	0.2197	Lin1	-0.113	0.2313			0.1000				0.9990		0.9900
Isopropylbenzene	1.3133 1.4763	1.4762	1.5653	1.6732	1.4949	Ave		1.4999				7.9		15.0			
1,1,2,2-Tetrachloroethane	0.7171 0.7403	0.8072	0.7913	0.8434	0.7594	Ave		0.7764			0.3000	6.0		15.0			
Bromobenzene	0.8434 0.8086	0.8334	0.9146	0.9233	0.8387	Ave		0.8603				5.5		15.0			
1,2,3-Trichloropropane	0.3066 0.2601	0.3326	0.3009	0.3070	0.2793	Ave		0.2977				8.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.2076 0.2248	0.1858	0.2339	0.2457	0.2294	Ave		0.2212				9.6		15.0			
N-Propylbenzene	0.8638 0.8936	0.8431	0.9611	1.0166	0.9160	Ave		0.9157				7.0		15.0			
2-Chlorotoluene	0.7410 0.7316	0.8054	0.8053	0.8365	0.7828	Ave		0.7837				5.2		15.0			
1,3,5-Trimethylbenzene	2.4462 2.4744	2.4266	2.5432	2.7773	2.5754	Ave		2.5405				5.1		15.0			
4-Chlorotoluene	0.8371 0.7380	0.8148	0.8637	0.8880	0.7897	Ave		0.8219				6.5		15.0			
tert-Butylbenzene	2.0236 2.1921	2.2177	2.4001	2.4622	2.2933	Ave		2.2648				6.9		15.0			
1,2,4-Trimethylbenzene	2.1832 2.4320	2.5314	2.5993	2.7780	2.5535	Ave		2.5129				7.9		15.0			
sec-Butylbenzene	2.5086 2.8887	2.8631	3.0145	3.1672	2.9984	Ave		2.9068				7.7		15.0			
1,3-Dichlorobenzene	1.5610 1.3797	1.6364	1.5925	1.6498	1.4798	Ave		1.5499				6.7		15.0			
4-Isopropyltoluene	2.1963 2.4943	2.4866	2.6436	2.7958	2.6531	Ave		2.5449				8.1		15.0			
1,4-Dichlorobenzene	1.6289 1.3914	1.5764	1.6560	1.6398	1.5282	Ave		1.5701				6.3		15.0			
1,2-Dichlorobenzene	1.4384 1.3188	1.5613	1.5695	1.5527	1.4318	Ave		1.4787				6.8		15.0			
n-Butylbenzene	1.7865 1.9154	1.9463	2.0665	2.1692	2.0573	Ave		1.9902				6.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1737 0.1787	0.2006	0.2037	0.2124	0.1986	Ave		0.1946				7.8		15.0			
1,2,4-Trichlorobenzene	0.9133 0.7565	0.9440	0.9400	0.9193	0.8866	Ave		0.8933				7.8		15.0			
Hexachlorobutadiene	0.3023 0.2329	0.3330	0.3390	0.3313	0.3087	Ave		0.3079				12.8		15.0			
Naphthalene	2.4801 2.3872	2.7045	2.8675	2.8661	2.8541	Ave		2.6932				7.9		15.0			
1,2,3-Trichlorobenzene	0.8703 0.7083	0.9406	0.8821	0.8807	0.8644	Ave		0.8577				9.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2759 0.2358	0.2627	0.2481	0.2597	0.2464	Ave		0.2548				5.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3230 0.2533	0.3151	0.2913	0.2904	0.2610	Ave		0.2890				9.7		15.0			
Toluene-d8 (Surr)	1.5591 1.2990	1.4814	1.4033	1.4755	1.3169	Ave		1.4225				7.1		15.0			
4-Bromofluorobenzene (Surr)	0.6103 0.4291	0.5208	0.4838	0.5054	0.4410	Ave		0.4984				13.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-469338/7	UXJ5273.D
Level 2	STD8260 240-469338/6	UXJ5272.D
Level 3	STD8260 240-469338/5	UXJ5271.D
Level 4	STD8260 240-469338/4	UXJ5270.D
Level 5	STD8260 240-469338/3	UXJ5269.D
Level 6	STD8260 240-469338/2	UXJ5268.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	15545 721258	31418	80613	164460	338735	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	14340 502904	25355	65579	129598	238538	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	13521 571062	28511	67351	133533	258402	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15264 651219	31125	76699	152409	298544	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	11910 464869	21942	55501	109770	200899	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	9885 378138	17658	45377	91798	166717	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	24102 907097	46164	115827	218267	415026	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	27428 1142489	51835	126814	252670	518477	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	11151 499751	20989	63254	116451	242452	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	2788 97712	3869	10031	22968	43331	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	14457 633100	29147	74855	147052	298144	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	9322 533768	20704	55364	117673	250667	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	16505 301658	27191	54384	87518	169338	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	26756 1138640	49606	138148	259758	530219	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	42851 1877998	85053	223442	445715	892313	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	9657 441008	18496	51666	96370	203463	1.00 40.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	20775 816332	37455	100508	195357	396110	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	18990 645225	32083	83987	152159	308369	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	17313 +++++	40795	95943	190467	441997	10.0 +++++	20.0	50.0	100	200
Acrylonitrile	FB	Ave	49387 2079971	99328	254760	507306	1034581	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	17888 719544	33055	92696	169059	345215	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	42075 1824022	80293	217115	442599	865638	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	3359 191762	7051	19919	39610	91031	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	23786 1086189	49476	131033	254843	505328	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	27137 1192582	49994	136870	281858	543430	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	17946 732765	35504	94152	177452	352905	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	3204 183063	7464	22350	44411	89071	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	17238 521553	29417	74913	141932	257396	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	9438 362817	16126	48037	88584	180439	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	9114 339871	16287	43094	83099	170596	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	27629 1150137	52653	141913	272070	552954	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	23130 1047553	46927	120621	243120	487548	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	17507 931808	36267	97556	203020	445198	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	22199 931119	39708	111305	217609	446475	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	19888 1005638	40537	110470	229782	462865	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	11230 469468	24642	71782	140015	282518	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	59923 2660921	119695	315227	621645	1209746	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	18563 834572	39572	107089	201630	393564	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	3391 171246	6187	17935	36044	74044	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	19843 782934	36541	104678	188089	378293	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	18159 1043552	40688	106284	219959	481488	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	12909 538152	25247	64453	130547	255306	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	9846 381807	18262	47703	94687	184521	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	1561 107884	4800	21628	32269	72492	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	18093 838078	34149	97830	194130	388202	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	17224 767090	36692	91082	192632	368563	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	23129 1003327	46722	116575	233030	467002	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23297 1067188	50083	131752	275675	524791	2.00 80.0	4.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene	CBNZ d5	Ave	66435 2839911	131172	342544	674102	1305035	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20141 926501	43688	112670	216478	435826	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	14716 785342	30851	86162	179245	356343	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	13706 539869	26286	68391	134855	251827	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	13324 603539	27919	72821	145597	290477	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	21737 923814	44615	109339	229816	428737	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	17457 804351	35938	96869	197584	377295	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	13496 668910	27373	72196	151446	303982	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	13541 571287	28263	71577	145448	266234	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	44721 1817385	85638	224201	438529	848785	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	14675 627467	27733	73060	150727	293218	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	21634 982501	41926	121583	241366	454730	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	26859 1186930	55016	142126	293732	555344	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	24523 1099593	48945	133865	269611	518830	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	34628 1677750	70977	190984	387081	762818	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Lin1	5716 451459	14539	43950	94573	195621	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	59446 2892536	127385	337134	696938	1330791	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	15088 674085	32478	80391	168581	314210	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	17745 736292	33533	92916	184549	347047	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	6451 236888	13381	30569	61360	115557	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4369 204685	7477	23761	49109	94933	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	18175 813669	33926	97641	203203	379016	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	15591 666172	32406	81808	167202	323910	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	51470 2253201	97641	258368	555148	1065649	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	17614 672031	32785	87751	177509	326743	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	42578 1996174	89236	243838	492162	948917	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	45937 2214589	101857	264071	555283	1056574	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	52784 2630484	115205	306253	633082	1240690	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	32844 1256378	65846	161785	329769	612308	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	46211 2271314	100055	268571	558841	1097800	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	34274 1266972	63431	168239	327781	632325	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	30265 1200899	62822	159450	310374	592436	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	37590 1744132	78313	209941	433586	851264	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3654 162763	8071	20694	42452	82195	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	19216 688885	37983	95499	183760	366855	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	6361 212109	13398	34437	66215	127737	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 469338

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2021 11:06 Calibration End Date: 01/15/2021 12:58 Calibration ID: 60081

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	52184 2173823	108820	291314	572904	1180957	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	18312 645009	37847	89613	176040	357662	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	17076 660842	31381	75844	151229	308654	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19989 709889	37647	89035	169071	327027	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	70570 2545197	127833	302251	614578	1172369	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	27622 840665	44939	104195	210523	392550	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jan-2021 11:06:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-002
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:24 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 11:30:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1401011	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	82	979659	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	455301	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	660842	40.0	37.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.393	-0.012	97	709889	40.0	35.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	2545197	40.0	36.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	99	840665	40.0	34.4	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	721258	40.0	38.9	
12 Chloromethane	50	1.293	1.293	0.000	99	502904	40.0	34.4	
13 Butadiene	54	1.352	1.352	0.000	96	571062	40.0	37.1	
14 Vinyl chloride	62	1.376	1.376	0.000	98	651219	40.0	37.4	
15 Bromomethane	94	1.589	1.589	0.000	91	464869	40.0	37.1	
16 Chloroethane	64	1.648	1.648	0.000	99	378138	40.0	36.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	907097	40.0	35.6	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	1142489	40.0	38.4	
19 Ethyl ether	59	2.062	2.062	0.000	86	499751	40.0	37.7	
20 Acrolein	56	2.157	2.157	0.001	99	97712	200.0	190.9	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	633100	40.0	37.7	
23 112TCTFE	151	2.275	2.275	0.000	91	533768	40.0	41.6	
24 Acetone	43	2.299	2.298	0.001	100	301658	80.0	80.0	
25 Iodomethane	142	2.358	2.358	0.000	98	1138640	40.0	37.9	
26 Carbon disulfide	76	2.417	2.417	0.000	99	1877998	40.0	37.6	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	441008	40.0	39.1	
29 Methyl acetate	43	2.571	2.571	0.000	96	816332	80.0	72.8	
30 Methylene Chloride	84	2.642	2.642	0.000	84	645225	40.0	34.8	
31 2-Methyl-2-propanol	59	2.772	2.784	-0.012	100	569636	400.0	251.8	
32 Acrylonitrile	53	2.843	2.855	-0.012	99	2079971	400.0	363.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	95	719544	40.0	36.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	1824022	40.0	37.5	
35 Hexane	86	3.115	3.115	0.000	89	191762	40.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.222	3.221	0.001	96	1086189	40.0	37.9	
37 Vinyl acetate	43	3.281	3.281	0.000	97	1192582	40.0	38.6	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	79	732765	40.0	36.0	
42 2,2-Dichloropropane	97	3.707	3.718	-0.011	64	183063	40.0	39.2	
43 2-Butanone (MEK)	43	3.730	3.742	-0.012	97	521553	80.0	63.6	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	362817	40.0	35.7	
49 Tetrahydrofuran	42	3.967	3.967	0.000	83	339871	80.0	70.6	
48 Chloroform	83	3.979	3.979	0.000	92	1150137	40.0	36.9	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	1047553	40.0	38.3	
51 Cyclohexane	56	4.180	4.180	0.000	83	931808	40.0	41.1	
53 1,1-Dichloropropene	75	4.263	4.275	-0.012	95	931119	40.0	37.7	
52 Carbon tetrachloride	117	4.275	4.275	0.000	96	1005638	40.0	40.2	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	469468	1000.0	816.8	
55 Benzene	78	4.440	4.440	0.000	94	2660921	40.0	38.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	834572	40.0	36.9	
58 n-Heptane	100	4.677	4.689	-0.012	83	171246	40.0	42.2	
60 Trichloroethene	130	4.985	4.985	0.000	95	782934	40.0	35.8	
62 Methylcyclohexane	83	5.150	5.150	0.000	88	1043552	40.0	42.2	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	538152	40.0	36.9	
64 Dibromomethane	93	5.269	5.269	0.000	94	381807	40.0	35.8	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	107884	800.0	771.7	
67 Dichlorobromomethane	83	5.399	5.411	-0.012	99	838078	40.0	39.0	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	767090	80.0	73.7	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	1003327	40.0	37.7	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	95	1067188	80.0	73.1	
72 Toluene	91	6.097	6.097	0.000	98	2839911	40.0	38.2	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	926501	40.0	38.4	
74 Ethyl methacrylate	69	6.381	6.381	0.000	86	785342	40.0	41.6	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	89	539869	40.0	36.6	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	603539	40.0	38.1	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	923814	40.0	37.6	
78 2-Hexanone	43	6.689	6.689	0.001	93	804351	80.0	77.0	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	668910	40.0	41.0	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	571287	40.0	36.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	1817385	40.0	37.4	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	627467	40.0	38.5	
86 Ethylbenzene	106	7.458	7.469	-0.011	98	982501	40.0	38.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	1186930	40.0	38.0	
89 o-Xylene	106	7.943	7.943	0.000	96	1099593	40.0	38.2	
88 Styrene	104	7.955	7.955	0.000	93	1677750	40.0	40.2	
90 Bromoform	173	8.120	8.120	0.000	97	451459	40.0	40.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	2892536	40.0	39.4	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	80	674085	40.0	38.1	
95 Bromobenzene	156	8.570	8.570	0.000	89	736292	40.0	37.6	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	82	236888	40.0	34.9	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	94	204685	40.0	40.6	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	813669	40.0	39.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	666172	40.0	37.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	2253201	40.0	39.0	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	672031	40.0	35.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	1996174	40.0	38.7	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	2214589	40.0	38.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	2630484	40.0	39.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	1256378	40.0	35.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	2271314	40.0	39.2	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	1266972	40.0	35.4	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	1200899	40.0	35.7	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	1744132	40.0	38.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	162763	40.0	36.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	688885	40.0	33.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	212109	40.0	30.3	
118 Naphthalene	128	11.753	11.753	0.000	96	2173823	40.0	35.5	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	645009	40.0	33.0	
S 129 Total BTEX	1				0		200.0	191.1	
S 128 Trihalomethanes, Total	1				0		160.0	157.2	
S 130 1,2-Dichloroethene, Total	96				0			72.4	
S 131 1,3-Dichloropropene, Total	75				0			76.1	
S 132 Xylenes, Total	106				0		80.0	76.2	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	32.00	Units: uL
VM50SS_STK_00086	Amount Added:	32.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	32.00	Units: uL
VMAROLISTDW_00376	Amount Added:	32.00	Units: uL

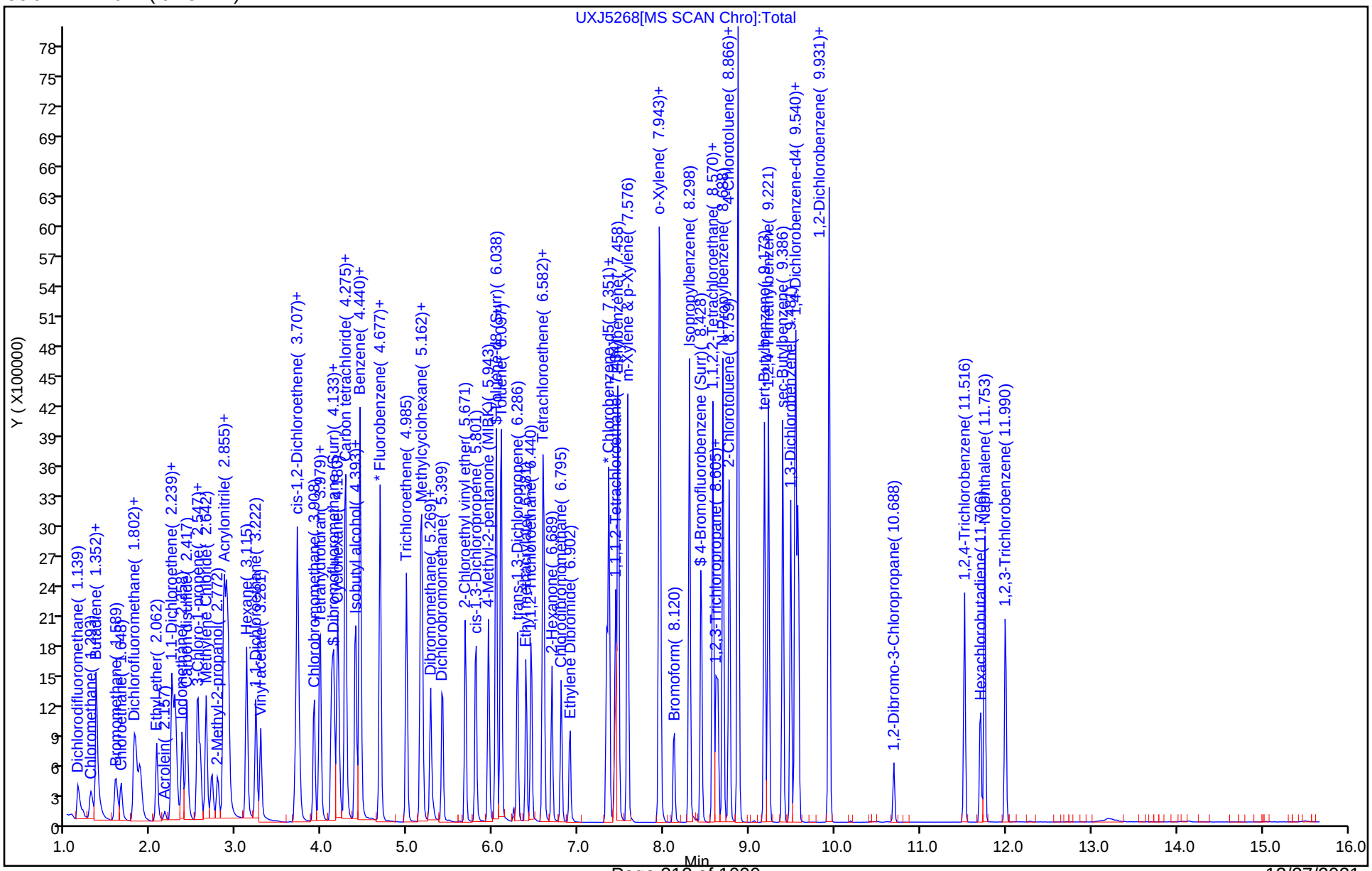
Report Date: 18-Jan-2021 09:24:25 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5268.D

Injection Date:	15-Jan-2021 11:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jan-2021 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-003
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:32 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 15-Jan-2021 12:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1252890	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	84	890220	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	96	413781	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	308654	20.0	19.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	327027	20.0	18.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1172369	20.0	18.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	392550	20.0	17.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	338735	20.0	20.4	
12 Chloromethane	50	1.305	1.293	0.012	99	238538	20.0	18.3	
13 Butadiene	54	1.364	1.352	0.012	97	258402	20.0	18.8	
14 Vinyl chloride	62	1.376	1.376	0.000	98	298544	20.0	19.2	
15 Bromomethane	94	1.589	1.589	0.000	92	200899	20.0	17.9	
16 Chloroethane	64	1.660	1.648	0.012	100	166717	20.0	18.1	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	415026	20.0	18.2	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	97	518477	20.0	19.5	
19 Ethyl ether	59	2.074	2.062	0.012	87	242452	20.0	20.5	
20 Acrolein	56	2.168	2.157	0.012	98	43331	100.0	94.7	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	298144	20.0	19.8	
23 112TCTFE	151	2.287	2.275	0.012	90	250667	20.0	21.9	
24 Acetone	43	2.310	2.298	0.012	100	169338	40.0	40.2	
25 Iodomethane	142	2.370	2.358	0.012	98	530219	20.0	19.7	
26 Carbon disulfide	76	2.429	2.417	0.012	99	892313	20.0	20.0	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	203463	20.0	20.2	
29 Methyl acetate	43	2.583	2.571	0.012	96	396110	40.0	39.5	
30 Methylene Chloride	84	2.654	2.642	0.012	84	308369	20.0	18.6	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	100	441997	200.0	218.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	1034581	200.0	202.1	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	95	345215	20.0	19.5	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	92	865638	20.0	19.9	
35 Hexane	86	3.127	3.115	0.012	89	91031	20.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	505328	20.0	19.7	
37 Vinyl acetate	43	3.293	3.281	0.012	97	543430	20.0	19.7	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	81	352905	20.0	19.4	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	69	89071	20.0	21.3	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	97	257396	40.0	35.1	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	180439	20.0	19.9	
49 Tetrahydrofuran	42	3.979	3.967	0.012	80	170596	40.0	39.6	
48 Chloroform	83	3.979	3.979	0.000	94	552954	20.0	19.8	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	487548	20.0	19.9	
51 Cyclohexane	56	4.192	4.180	0.012	84	445198	20.0	22.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	446475	20.0	20.2	
52 Carbon tetrachloride	117	4.275	4.275	0.000	89	462865	20.0	20.7	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	282518	500.0	540.9	
55 Benzene	78	4.440	4.440	0.000	94	1209746	20.0	19.4	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	393564	20.0	19.4	
58 n-Heptane	100	4.689	4.689	0.000	84	74044	20.0	20.4	
60 Trichloroethene	130	4.997	4.985	0.012	96	378293	20.0	19.3	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	481488	20.0	21.8	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	255306	20.0	19.5	
64 Dibromomethane	93	5.269	5.269	0.000	95	184521	20.0	19.3	
66 1,4-Dioxane	88	5.316	5.304	0.012	87	72492	400.0	417.9	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	388202	20.0	20.2	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	368563	40.0	39.6	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	467002	20.0	19.6	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	524791	40.0	40.2	
72 Toluene	91	6.097	6.097	0.000	98	1305035	20.0	19.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	435826	20.0	19.9	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	356343	20.0	20.8	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	251827	20.0	18.8	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	290477	20.0	20.2	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	428737	20.0	19.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	377295	40.0	39.7	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	303982	20.0	20.5	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	266234	20.0	18.9	
84 Chlorobenzene	112	7.351	7.351	0.000	97	848785	20.0	19.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	293218	20.0	19.8	
86 Ethylbenzene	106	7.470	7.469	0.001	97	454730	20.0	19.6	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	98	555344	20.0	19.6	
89 o-Xylene	106	7.943	7.943	0.000	96	518830	20.0	19.9	
88 Styrene	104	7.955	7.955	0.000	93	762818	20.0	20.1	
90 Bromoform	173	8.120	8.120	0.000	97	195621	20.0	19.5	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	1330791	20.0	19.9	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	79	314210	20.0	19.6	
95 Bromobenzene	156	8.570	8.570	0.000	88	347047	20.0	19.5	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	115557	20.0	18.8	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	78	94933	20.0	20.7	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	379016	20.0	20.0	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	323910	20.0	20.0	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	1065649	20.0	20.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	326743	20.0	19.2	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	948917	20.0	20.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	1056574	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.387	9.386	0.001	93	1240690	20.0	20.6	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	612308	20.0	19.1	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	1097800	20.0	20.8	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	632325	20.0	19.5	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	592436	20.0	19.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	851264	20.0	20.7	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	82195	20.0	20.4	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	366855	20.0	19.9	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	127737	20.0	20.1	
118 Naphthalene	128	11.753	11.753	0.000	96	1180957	20.0	21.2	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	97	357662	20.0	20.2	
S 129 Total BTEX	1				0		100.0	97.7	
S 128 Trihalomethanes, Total	1				0		80.0	80.0	
S 130 1,2-Dichloroethene, Total	96				0			38.9	
S 131 1,3-Dichloropropene, Total	75				0			39.5	
S 132 Xylenes, Total	106				0		40.0	39.4	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	16.00	Units: uL
VM50SS_STK_00086	Amount Added:	16.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	16.00	Units: uL
VMAROLISTDW_00376	Amount Added:	16.00	Units: uL

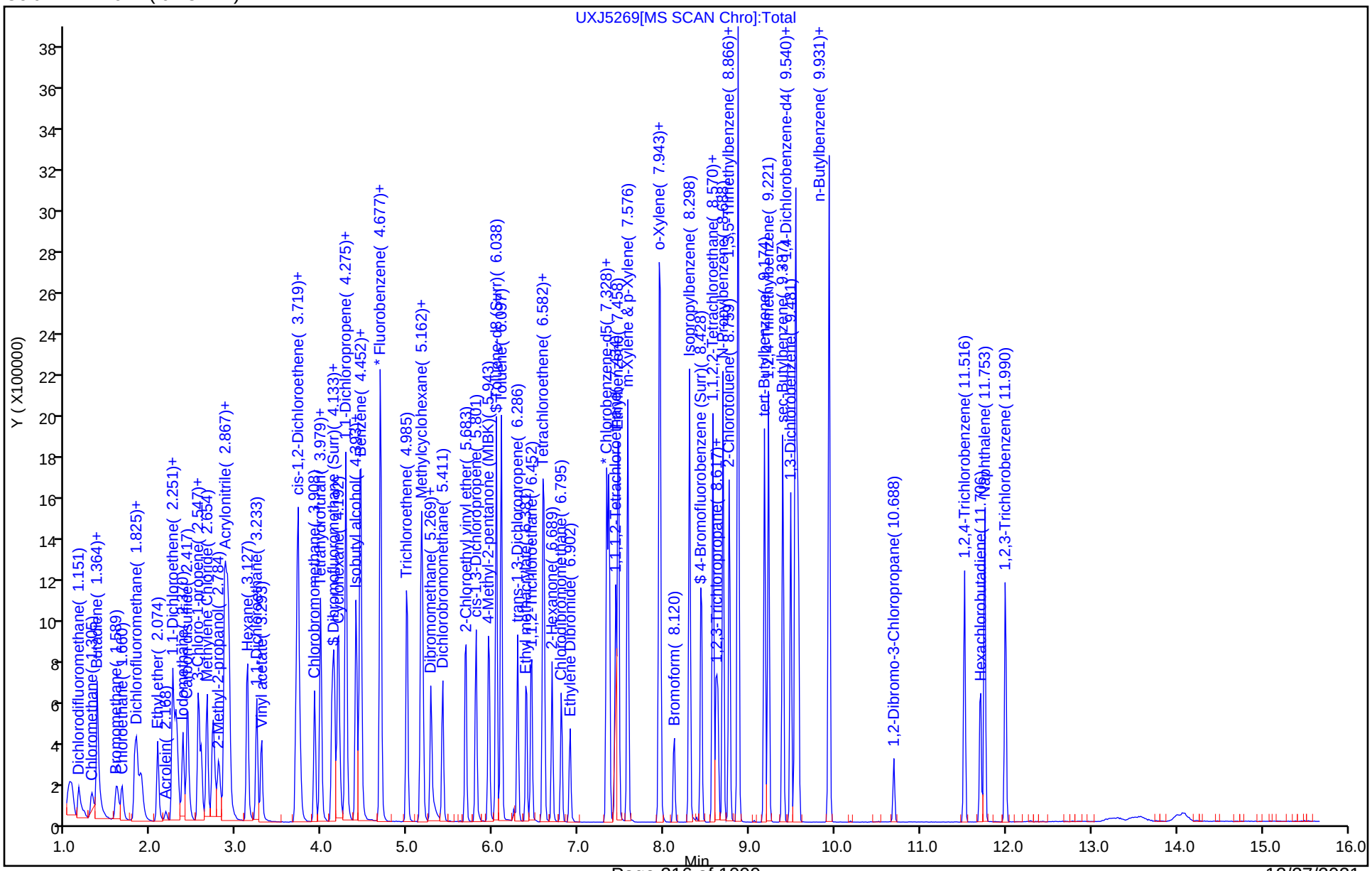
Report Date: 18-Jan-2021 09:24:33 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5269.D

Injection Date:	15-Jan-2021 11:29:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 15-Jan-2021 11:51:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-004
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:18 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 09:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1164516	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	83	833065	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	399775	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	151229	10.0	10.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	97	169071	10.0	10.0	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	614578	10.0	10.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	210523	10.0	10.1	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	100	164460	10.0	10.7	
12 Chloromethane	50	1.293	1.293	0.000	100	129598	10.0	10.7	
13 Butadiene	54	1.352	1.352	0.000	97	133533	10.0	10.4	
14 Vinyl chloride	62	1.376	1.376	0.000	98	152409	10.0	10.5	
15 Bromomethane	94	1.589	1.589	0.000	91	109770	10.0	10.5	
16 Chloroethane	64	1.648	1.648	0.000	99	91798	10.0	10.7	
17 Dichlorofluoromethane	67	1.802	1.802	0.000	97	218267	10.0	10.3	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	252670	10.0	10.2	
19 Ethyl ether	59	2.062	2.062	0.000	87	116451	10.0	10.6	
20 Acrolein	56	2.157	2.157	0.000	98	22968	50.0	54.0	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	96	147052	10.0	10.5	
23 112TCTFE	151	2.275	2.275	0.000	91	117673	10.0	11.0	
24 Acetone	43	2.298	2.298	0.000	100	87518	20.0	19.5	
25 Iodomethane	142	2.358	2.358	0.000	98	259758	10.0	10.4	
26 Carbon disulfide	76	2.417	2.417	0.000	99	445715	10.0	10.7	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	87	96370	10.0	10.3	
29 Methyl acetate	43	2.571	2.571	0.000	96	195357	20.0	21.0	
30 Methylene Chloride	84	2.642	2.642	0.000	84	152159	10.0	9.87	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	190467	100.0	101.3	
32 Acrylonitrile	53	2.855	2.855	0.000	98	507306	100.0	106.6	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	96	169059	10.0	10.3	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	442599	10.0	11.0	
35 Hexane	86	3.115	3.115	0.000	90	39610	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	97	254843	10.0	10.7	
37 Vinyl acetate	43	3.281	3.281	0.000	97	281858	10.0	11.0	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	177452	10.0	10.5	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	74	44411	10.0	11.4	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	141932	20.0	20.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	88584	10.0	10.5	
49 Tetrahydrofuran	42	3.967	3.967	0.000	81	83099	20.0	20.8	
48 Chloroform	83	3.979	3.979	0.000	94	272070	10.0	10.5	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	97	243120	10.0	10.7	
51 Cyclohexane	56	4.180	4.180	0.000	85	203020	10.0	10.8	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	229782	10.0	11.0	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	217609	10.0	10.6	
54 Isobutyl alcohol	41	4.393	4.393	0.000	91	140015	250.0	286.5	
55 Benzene	78	4.440	4.440	0.000	94	621645	10.0	10.7	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	98	201630	10.0	10.7	
58 n-Heptane	100	4.689	4.689	0.000	83	36044	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	188089	10.0	10.3	
62 Methylcyclohexane	83	5.150	5.150	0.000	87	219959	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	130547	10.0	10.8	
64 Dibromomethane	93	5.269	5.269	0.000	92	94687	10.0	10.7	
66 1,4-Dioxane	88	5.304	5.304	0.000	85	32269	200.0	176.1	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	194130	10.0	10.9	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	93	192632	20.0	22.3	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	233030	10.0	10.5	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	275675	20.0	22.7	
72 Toluene	91	6.097	6.097	0.000	98	674102	10.0	10.7	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	216478	10.0	10.5	
74 Ethyl methacrylate	69	6.381	6.381	0.000	85	179245	10.0	11.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	134855	10.0	10.7	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	145597	10.0	10.8	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	87	229816	10.0	11.0	
78 2-Hexanone	43	6.689	6.689	0.000	92	197584	20.0	22.2	
80 Chlorodibromomethane	129	6.795	6.795	0.000	88	151446	10.0	10.9	
82 Ethylene Dibromide	107	6.901	6.901	0.000	98	145448	10.0	11.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	438529	10.0	10.6	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	150727	10.0	10.9	
86 Ethylbenzene	106	7.469	7.469	0.000	97	241366	10.0	11.1	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	293732	10.0	11.1	
89 o-Xylene	106	7.943	7.943	0.000	96	269611	10.0	11.0	
88 Styrene	104	7.955	7.955	0.000	92	387081	10.0	10.9	
90 Bromoform	173	8.120	8.120	0.000	97	94573	10.0	10.3	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	696938	10.0	11.2	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	168581	10.0	10.9	
95 Bromobenzene	156	8.570	8.570	0.000	87	184549	10.0	10.7	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	83	61360	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	49109	10.0	11.1	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	203203	10.0	11.1	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	167202	10.0	10.7	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	177509	10.0	10.8	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	555148	10.0	10.9	
103 tert-Butylbenzene	119	9.173	9.173	0.000	90	492162	10.0	10.9	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	555283	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	633082	10.0	10.9	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	329769	10.0	10.6	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	558841	10.0	11.0	
108 1,4-Dichlorobenzene	146	9.576	9.576	0.000	95	327781	10.0	10.4	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	433586	10.0	10.9	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	310374	10.0	10.5	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	42452	10.0	10.9	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	183760	10.0	10.3	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	66215	10.0	10.8	
118 Naphthalene	128	11.753	11.753	0.000	96	572904	10.0	10.6	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	176040	10.0	10.3	
S 129 Total BTEX	1				0		50.0	54.6	
S 128 Trihalomethanes, Total	1				0		40.0	42.6	
S 132 Xylenes, Total	106				0		20.0	22.1	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	8.00	Units: uL
VM50SS_STK_00086	Amount Added:	8.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	8.00	Units: uL
VMAROLISTDW_00376	Amount Added:	8.00	Units: uL

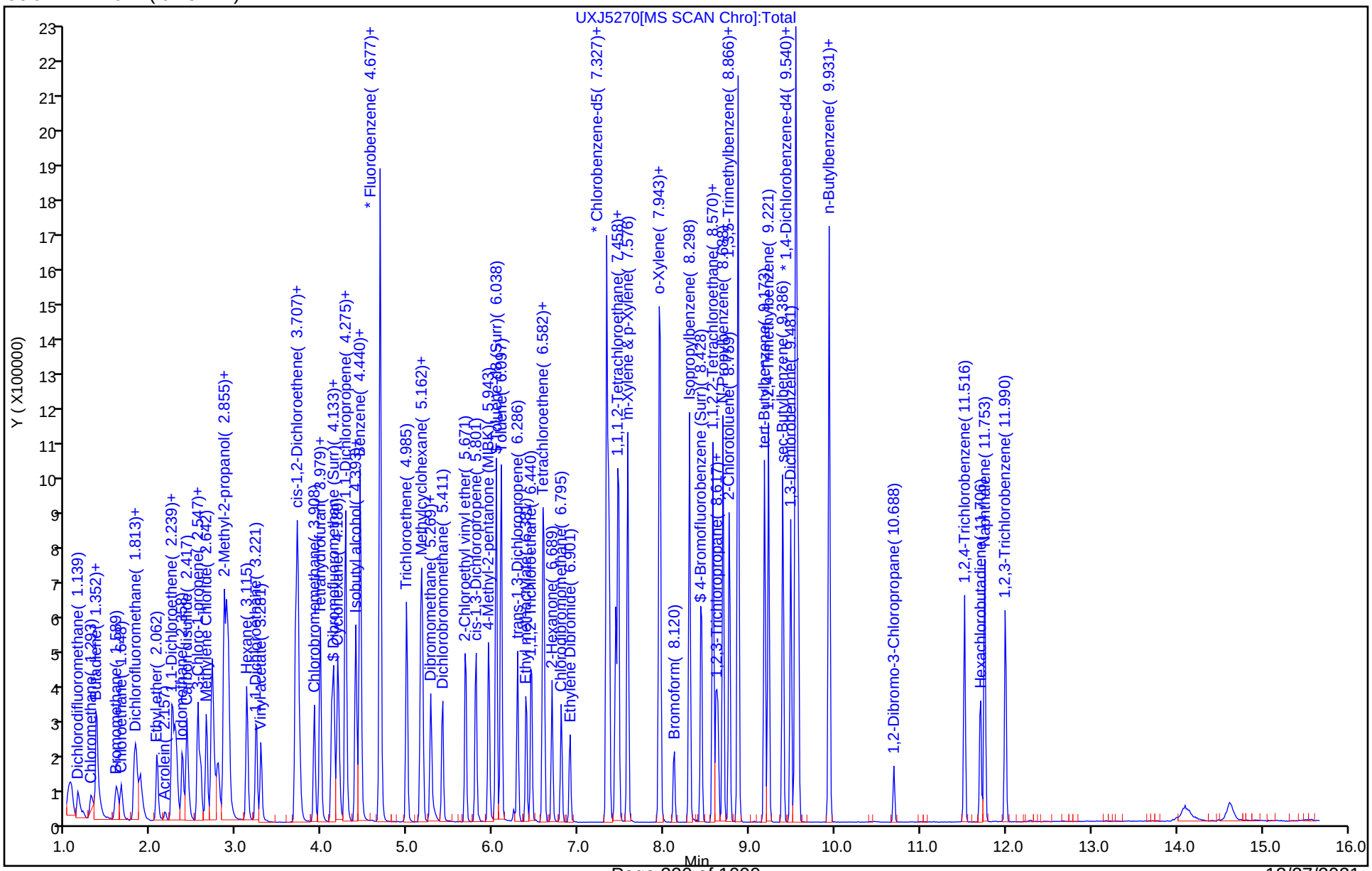
Report Date: 18-Jan-2021 09:24:18 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5270.D

Injection Date:	15-Jan-2021 11:51:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jan-2021 12:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-005
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:38 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1222644	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	85	861537	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	95	406373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	75844	5.00	4.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	95	89035	5.00	5.04	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	302251	5.00	4.93	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	97	104195	5.00	4.85	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	98	80613	5.00	4.98	
12 Chloromethane	50	1.305	1.293	0.012	98	65579	5.00	5.15	
13 Butadiene	54	1.364	1.352	0.012	96	67351	5.00	5.02	
14 Vinyl chloride	62	1.387	1.376	0.011	98	76699	5.00	5.05	
15 Bromomethane	94	1.600	1.589	0.011	91	55501	5.00	5.08	
16 Chloroethane	64	1.660	1.648	0.012	99	45377	5.00	5.05	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	97	115827	5.00	5.20	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	98	126814	5.00	4.89	
19 Ethyl ether	59	2.074	2.062	0.012	87	63254	5.00	5.47	
20 Acrolein	56	2.168	2.157	0.012	94	10031	25.0	22.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	74855	5.00	5.11	
23 112TCTFE	151	2.287	2.275	0.012	91	55364	5.00	4.95	
24 Acetone	43	2.310	2.298	0.012	100	54384	10.0	10.3	
25 Iodomethane	142	2.370	2.358	0.012	98	138148	5.00	5.27	
26 Carbon disulfide	76	2.429	2.417	0.012	99	223442	5.00	5.12	
28 3-Chloro-1-propene	76	2.559	2.547	0.012	84	51666	5.00	5.25	
29 Methyl acetate	43	2.583	2.571	0.012	95	100508	10.0	10.3	
30 Methylene Chloride	84	2.654	2.642	0.012	83	83987	5.00	5.19	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	95943	50.0	48.6	
32 Acrylonitrile	53	2.855	2.855	0.000	98	254760	50.0	51.0	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	92696	5.00	5.38	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	92	217115	5.00	5.12	
35 Hexane	86	3.127	3.115	0.012	88	19919	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	131033	5.00	5.24	
37 Vinyl acetate	43	3.293	3.281	0.012	97	136870	5.00	5.07	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	79	94152	5.00	5.30	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	70	22350	5.00	5.48	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	74913	10.0	10.5	
46 Chlorobromomethane	128	3.908	3.908	0.000	81	48037	5.00	5.42	
49 Tetrahydrofuran	42	3.979	3.967	0.012	82	43094	10.0	10.3	
48 Chloroform	83	3.979	3.979	0.000	92	141913	5.00	5.22	
50 1,1,1-Trichloroethane	97	4.145	4.133	0.011	98	120621	5.00	5.06	
51 Cyclohexane	56	4.192	4.180	0.012	82	97556	5.00	4.93	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	111305	5.00	5.16	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	110470	5.00	5.05	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	71782	125.0	142.0	
55 Benzene	78	4.440	4.440	0.000	94	315227	5.00	5.17	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	107089	5.00	5.42	
58 n-Heptane	100	4.689	4.689	0.000	84	17935	5.00	5.07	
60 Trichloroethene	130	4.996	4.985	0.011	94	104678	5.00	5.48	
62 Methylcyclohexane	83	5.162	5.150	0.012	88	106284	5.00	4.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	64453	5.00	5.06	
64 Dibromomethane	93	5.269	5.269	0.000	94	47703	5.00	5.12	
66 1,4-Dioxane	88	5.316	5.304	0.012	86	21628	100.0	113.8	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	97830	5.00	5.22	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	93	91082	10.0	10.0	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	116575	5.00	5.02	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	131752	10.0	10.3	
72 Toluene	91	6.097	6.097	0.000	98	342544	5.00	5.24	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	112670	5.00	5.31	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	86162	5.00	5.19	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	88	68391	5.00	5.27	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	72821	5.00	5.23	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	89	109339	5.00	5.06	
78 2-Hexanone	43	6.689	6.689	0.001	91	96869	10.0	10.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	72196	5.00	5.04	
82 Ethylene Dibromide	107	6.902	6.901	0.001	100	71577	5.00	5.25	
84 Chlorobenzene	112	7.351	7.351	0.000	97	224201	5.00	5.24	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	73060	5.00	5.10	
86 Ethylbenzene	106	7.470	7.469	0.001	97	121583	5.00	5.43	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	142126	5.00	5.17	
89 o-Xylene	106	7.943	7.943	0.000	95	133865	5.00	5.29	
88 Styrene	104	7.955	7.955	0.000	94	190984	5.00	5.20	
90 Bromoform	173	8.120	8.120	0.000	96	43950	5.00	4.90	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	337134	5.00	5.22	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	80391	5.00	5.10	
95 Bromobenzene	156	8.570	8.570	0.000	88	92916	5.00	5.32	
96 1,2,3-Trichloropropane	110	8.606	8.605	0.001	85	30569	5.00	5.05	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	82	23761	5.00	5.29	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	97641	5.00	5.25	
99 2-Chlorotoluene	126	8.759	8.759	0.000	96	81808	5.00	5.14	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	258368	5.00	5.01	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	87751	5.00	5.25	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	243838	5.00	5.30	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	264071	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	306253	5.00	5.19	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	161785	5.00	5.14	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	268571	5.00	5.19	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	96	168239	5.00	5.27	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	159450	5.00	5.31	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	209941	5.00	5.19	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	20694	5.00	5.23	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	93	95499	5.00	5.26	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	34437	5.00	5.51	
118 Naphthalene	128	11.753	11.753	0.000	96	291314	5.00	5.32	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	94	89613	5.00	5.14	
S 129 Total BTEX	1				0		25.0	26.3	
S 128 Trihalomethanes, Total	1				0		20.0	20.4	
S 130 1,2-Dichloroethene, Total	96				0			10.7	
S 131 1,3-Dichloropropene, Total	75				0			10.3	
S 132 Xylenes, Total	106				0		10.0	10.5	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	4.00	Units: uL
VM50SS_STK_00086	Amount Added:	4.00	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	4.00	Units: uL
VMAROLISTDW_00376	Amount Added:	4.00	Units: uL

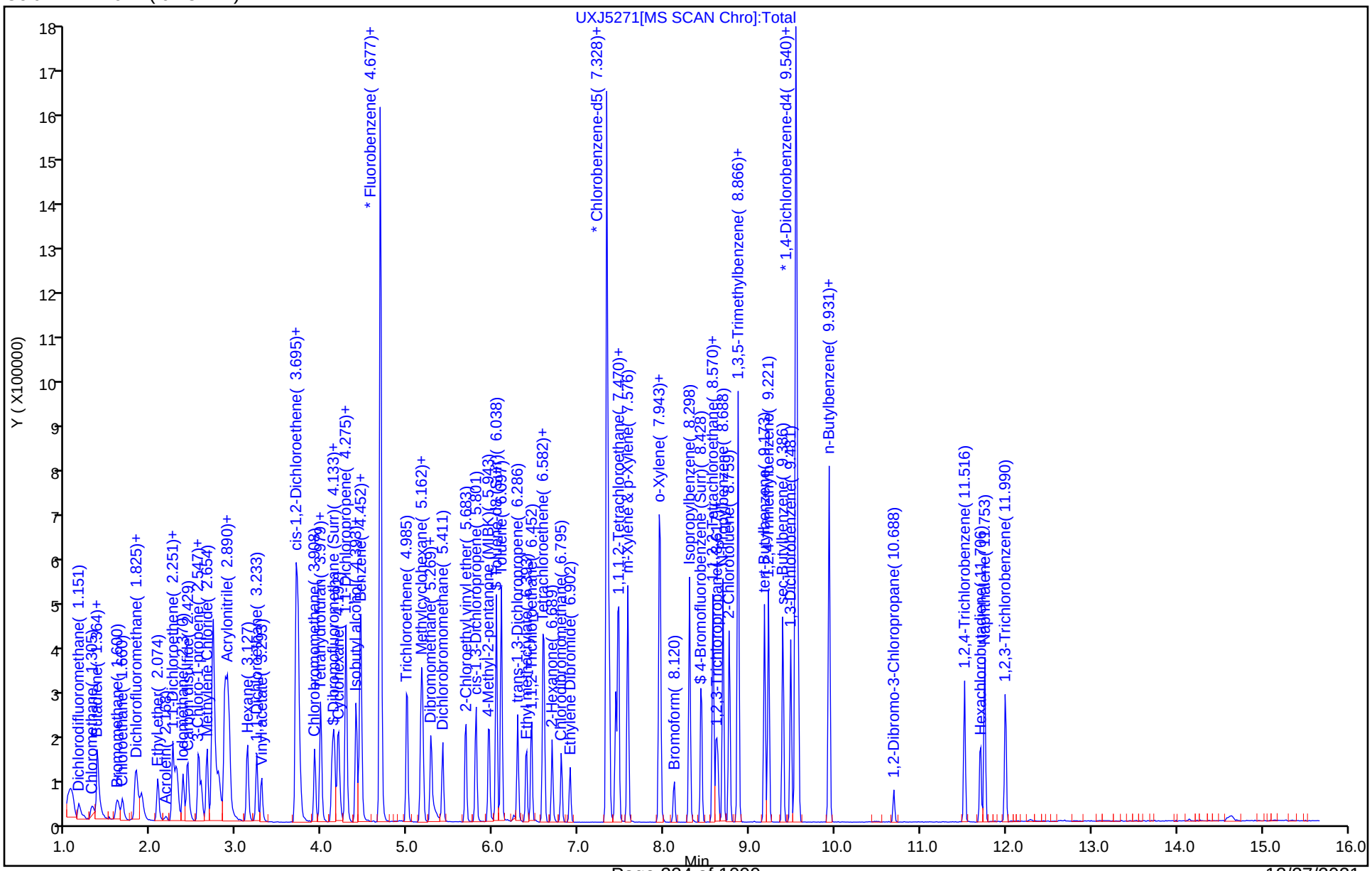
Report Date: 18-Jan-2021 09:24:39 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5271.D

Injection Date:	15-Jan-2021 12:13:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jan-2021 12:36:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-006
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:45 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:49:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1194740	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	84	862909	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	402373	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	95	31381	2.00	2.06	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	37647	2.00	2.18	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	91	127833	2.00	2.08	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	96	44939	2.00	2.09	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	98	31418	2.00	1.99	
12 Chloromethane	50	1.293	1.293	0.000	98	25355	2.00	2.04	
13 Butadiene	54	1.364	1.352	0.012	97	28511	2.00	2.17	
14 Vinyl chloride	62	1.375	1.376	-0.001	53	31125	2.00	2.10	
15 Bromomethane	94	1.588	1.589	-0.001	93	21942	2.00	2.05	
16 Chloroethane	64	1.648	1.648	0.000	99	17658	2.00	2.01	
17 Dichlorofluoromethane	67	1.801	1.802	-0.001	97	46164	2.00	2.12	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	51835	2.00	2.04	
19 Ethyl ether	59	2.074	2.062	0.012	88	20989	2.00	1.86	
20 Acrolein	56	2.168	2.157	0.012	92	3869	10.0	8.87	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	94	29147	2.00	2.03	
23 112TCTFE	151	2.287	2.275	0.012	91	20704	2.00	1.89	
24 Acetone	43	2.298	2.298	0.000	99	27191	4.00	4.25	
25 Iodomethane	142	2.369	2.358	0.011	97	49606	2.00	1.93	
26 Carbon disulfide	76	2.417	2.417	0.000	98	85053	2.00	1.99	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	88	18496	2.00	1.92	
29 Methyl acetate	43	2.582	2.571	0.011	95	37455	4.00	3.92	
30 Methylene Chloride	84	2.653	2.642	0.011	83	32083	2.00	2.03	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	40795	20.0	21.1	
32 Acrylonitrile	53	2.855	2.855	0.000	98	99328	20.0	20.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	94	33055	2.00	1.96	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	94	80293	2.00	1.94	
35 Hexane	86	3.127	3.115	0.012	91	7051	2.00	1.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	49476	2.00	2.02	
37 Vinyl acetate	43	3.281	3.281	0.000	96	49994	2.00	1.90	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	78	35504	2.00	2.05	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	71	7464	2.00	1.87	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	95	29417	4.00	4.21	
46 Chlorobromomethane	128	3.908	3.908	0.000	84	16126	2.00	1.86	
49 Tetrahydrofuran	42	3.979	3.967	0.012	53	16287	4.00	3.97	
48 Chloroform	83	3.979	3.979	0.000	93	52653	2.00	1.98	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	46927	2.00	2.01	
51 Cyclohexane	56	4.180	4.180	0.000	80	36267	2.00	1.88	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	39708	2.00	1.88	
52 Carbon tetrachloride	117	4.275	4.275	0.000	91	40537	2.00	1.90	
54 Isobutyl alcohol	41	4.393	4.393	0.000	92	24642	50.0	48.7	
55 Benzene	78	4.440	4.440	0.000	94	119695	2.00	2.01	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	39572	2.00	2.05	
58 n-Heptane	100	4.689	4.689	0.000	71	6187	2.00	1.79	
60 Trichloroethene	130	4.985	4.985	0.000	94	36541	2.00	1.96	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	40688	2.00	1.93	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	94	25247	2.00	2.03	
64 Dibromomethane	93	5.269	5.269	-0.001	95	18262	2.00	2.01	
66 1,4-Dioxane	88	5.316	5.304	0.012	85	4800	40.0	36.6	
67 Dichlorobromomethane	83	5.411	5.411	-0.001	98	34149	2.00	1.86	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	36692	4.00	4.14	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	46722	2.00	2.06	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	50083	4.00	4.02	
72 Toluene	91	6.097	6.097	0.000	99	131172	2.00	2.00	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	90	43688	2.00	2.05	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	30851	2.00	1.85	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	90	26286	2.00	2.02	
76 Tetrachloroethene	164	6.582	6.582	0.000	95	27919	2.00	2.00	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	86	44615	2.00	2.06	
78 2-Hexanone	43	6.688	6.689	0.000	93	35938	4.00	3.90	
80 Chlorodibromomethane	129	6.795	6.795	0.000	89	27373	2.00	1.91	
82 Ethylene Dibromide	107	6.901	6.901	0.000	95	28263	2.00	2.07	
84 Chlorobenzene	112	7.351	7.351	0.000	97	85638	2.00	2.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	27733	2.00	1.93	
86 Ethylbenzene	106	7.469	7.469	0.000	97	41926	2.00	1.87	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	55016	2.00	2.00	
89 o-Xylene	106	7.943	7.943	0.000	96	48945	2.00	1.93	
88 Styrene	104	7.955	7.955	0.000	94	70977	2.00	1.93	
90 Bromoform	173	8.120	8.120	0.000	94	14539	2.00	1.95	
91 Isopropylbenzene	105	8.298	8.298	0.000	94	127385	2.00	1.97	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	81	32478	2.00	2.08	
95 Bromobenzene	156	8.570	8.570	0.000	91	33533	2.00	1.94	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	85	13381	2.00	2.23	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	84	7477	2.00	1.68	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	33926	2.00	1.84	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	32406	2.00	2.06	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	87	97641	2.00	1.91	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	32785	2.00	1.98	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	89236	2.00	1.96	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	101857	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	115205	2.00	1.97	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	65846	2.00	2.11	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	96	100055	2.00	1.95	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	94	63431	2.00	2.01	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	98	62822	2.00	2.11	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	78313	2.00	1.96	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	87	8071	2.00	2.06	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	94	37983	2.00	2.11	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	94	13398	2.00	2.16	
118 Naphthalene	128	11.753	11.753	0.000	96	108820	2.00	2.01	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	37847	2.00	2.19	
S 129 Total BTEX	1				0		10.0	9.81	
S 128 Trihalomethanes, Total	1				0		8.00	7.70	
S 130 1,2-Dichloroethene, Total	96				0			4.01	
S 131 1,3-Dichloropropene, Total	75				0			4.12	
S 132 Xylenes, Total	106				0		4.00	3.93	

QC Flag Legend

Processing Flags

Reagents:

VMRGAS_00369	Amount Added:	1.60	Units: uL
VM50SS_STK_00086	Amount Added:	1.60	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	1.60	Units: uL
VMAROLISTDW_00376	Amount Added:	1.60	Units: uL

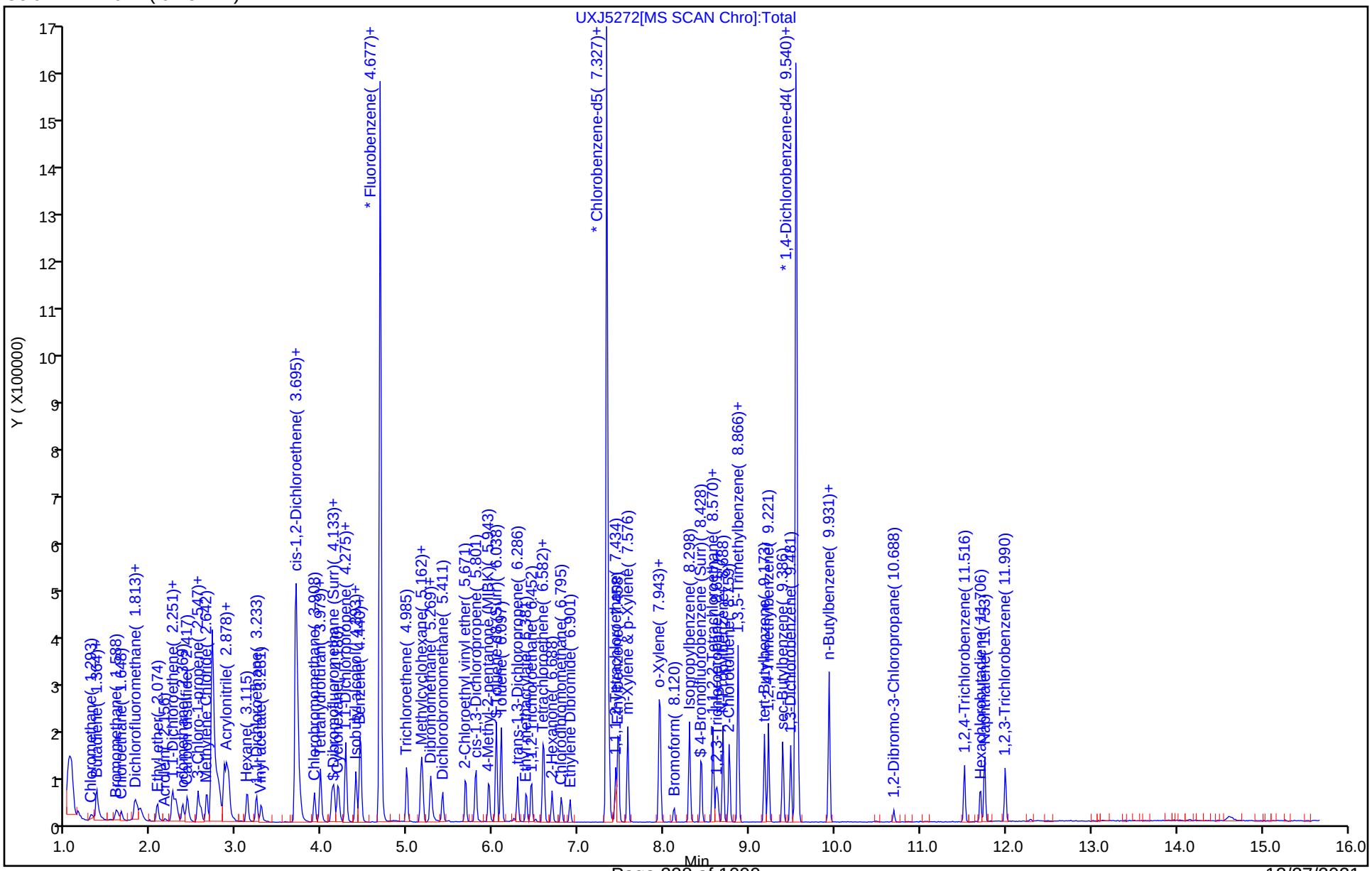
Report Date: 18-Jan-2021 09:24:45 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5272.D

Injection Date:	15-Jan-2021 12:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jan-2021 12:58:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-007
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:24:50 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:48:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	100	1237666	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.327	0.001	83	905264	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	93	420817	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.121	4.109	0.012	98	17076	1.00	1.08	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	19989	1.00	1.12	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	93	70570	1.00	1.10	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	27622	1.00	1.22	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	96	15545	1.00	0.9490	
12 Chloromethane	50	1.305	1.293	0.012	95	14340	1.00	1.11	
13 Butadiene	54	1.364	1.352	0.012	91	13521	1.00	1.00	
14 Vinyl chloride	62	1.376	1.376	0.000	59	15264	1.00	0.99	
15 Bromomethane	94	1.612	1.589	0.023	88	11910	1.00	1.08	
16 Chloroethane	64	1.660	1.648	0.012	97	9885	1.00	1.09	
17 Dichlorofluoromethane	67	1.825	1.802	0.023	95	24102	1.00	1.07	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	87	27428	1.00	1.04	M
19 Ethyl ether	59	2.074	2.062	0.012	85	11151	1.00	0.9528	
20 Acrolein	56	2.180	2.157	0.024	88	2788	5.00	6.17	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	14457	1.00	0.9741	
23 112TCTFE	151	2.287	2.275	0.012	83	9322	1.00	0.8234	
24 Acetone	43	2.310	2.298	0.012	97	16505	2.00	1.70	
25 Iodomethane	142	2.370	2.358	0.012	98	26756	1.00	1.01	
26 Carbon disulfide	76	2.429	2.417	0.012	98	42851	1.00	0.9700	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	83	9657	1.00	0.9701	
29 Methyl acetate	43	2.583	2.571	0.012	96	20775	2.00	2.10	
30 Methylene Chloride	84	2.654	2.642	0.012	87	18990	1.00	1.16	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	17313	10.0	8.66	
32 Acrylonitrile	53	2.855	2.855	0.000	98	49387	10.0	9.77	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	93	17888	1.00	1.03	
34 Methyl tert-butyl ether	73	2.914	2.902	0.012	94	42075	1.00	0.9796	
35 Hexane	86	3.127	3.115	0.012	91	3359	1.00	0.8403	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	97	23786	1.00	0.9391	
37 Vinyl acetate	43	3.292	3.281	0.011	98	27137	1.00	0.99	
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	80	17946	1.00	1.00	
42 2,2-Dichloropropane	97	3.718	3.718	0.000	64	3204	1.00	0.7765	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	100	17238	2.00	2.38	
46 Chlorobromomethane	128	3.920	3.908	0.012	80	9438	1.00	1.05	
49 Tetrahydrofuran	42	3.979	3.967	0.012	55	9114	2.00	2.14	
48 Chloroform	83	3.979	3.979	0.000	91	27629	1.00	1.00	
50 1,1,1-Trichloroethane	97	4.144	4.133	0.011	96	23130	1.00	0.9577	
51 Cyclohexane	56	4.192	4.180	0.012	85	17507	1.00	0.8740	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	96	22199	1.00	1.02	
52 Carbon tetrachloride	117	4.286	4.275	0.011	82	19888	1.00	0.8989	
54 Isobutyl alcohol	41	4.405	4.393	0.012	57	11230	25.0	21.1	
55 Benzene	78	4.440	4.440	0.000	96	59923	1.00	0.9709	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	96	18563	1.00	0.9278	
58 n-Heptane	100	4.689	4.689	0.000	37	3391	1.00	0.9465	
60 Trichloroethene	130	4.996	4.985	0.011	96	19843	1.00	1.03	
62 Methylcyclohexane	83	5.162	5.150	0.012	86	18159	1.00	0.8320	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	93	12909	1.00	1.00	
64 Dibromomethane	93	5.269	5.269	0.000	57	9846	1.00	1.04	
66 1,4-Dioxane	88	5.304	5.304	0.000	8	1561	20.0	22.0	
67 Dichlorobromomethane	83	5.411	5.411	0.000	98	18093	1.00	0.9531	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	17224	2.00	1.87	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	95	23129	1.00	0.9848	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	94	23297	2.00	1.81	
72 Toluene	91	6.097	6.097	0.000	98	66435	1.00	0.9665	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	89	20141	1.00	0.9030	
74 Ethyl methacrylate	69	6.393	6.381	0.012	86	14716	1.00	0.8430	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	85	13706	1.00	1.01	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	13324	1.00	0.9105	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	21737	1.00	0.9574	
78 2-Hexanone	43	6.689	6.689	0.001	92	17457	2.00	1.81	
80 Chlorodibromomethane	129	6.795	6.795	0.000	87	13496	1.00	0.8958	
82 Ethylene Dibromide	107	6.902	6.901	0.001	94	13541	1.00	0.9453	
84 Chlorobenzene	112	7.363	7.351	0.012	97	44721	1.00	1.00	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	87	14675	1.00	0.9744	
86 Ethylbenzene	106	7.470	7.469	0.001	97	21634	1.00	0.9191	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	96	26859	1.00	0.9307	
89 o-Xylene	106	7.943	7.943	0.000	95	24523	1.00	0.9230	
88 Styrene	104	7.955	7.955	0.000	91	34628	1.00	0.8971	
90 Bromoform	173	8.120	8.120	0.000	90	5716	1.00	1.03	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	59446	1.00	0.8756	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	76	15088	1.00	0.9236	
95 Bromobenzene	156	8.570	8.570	0.000	89	17745	1.00	0.9803	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	79	6451	1.00	1.03	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	79	4369	1.00	0.9387	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	18175	1.00	0.9433	
99 2-Chlorotoluene	126	8.759	8.759	0.000	98	15591	1.00	0.9454	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	86	51470	1.00	0.9629	
101 4-Chlorotoluene	126	8.866	8.866	0.000	97	17614	1.00	1.02	
103 tert-Butylbenzene	119	9.173	9.173	0.000	91	42578	1.00	0.8935	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	94	45937	1.00	0.8688	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	52784	1.00	0.8630	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	96	32844	1.00	1.01	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	95	46211	1.00	0.8630	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	93	34274	1.00	1.04	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	30265	1.00	0.9727	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	37590	1.00	0.8977	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	89	3654	1.00	0.8923	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	91	19216	1.00	1.02	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	88	6361	1.00	0.9820	
118 Naphthalene	128	11.753	11.753	0.000	96	52184	1.00	0.9209	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	18312	1.00	1.01	
S 129 Total BTEX	1				0		5.00	4.71	
S 128 Trihalomethanes, Total	1				0		4.00	3.89	
S 130 1,2-Dichloroethene, Total	96				0			2.02	
S 131 1,3-Dichloropropene, Total	75				0			1.89	
S 132 Xylenes, Total	106				0		2.00	1.85	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

VMRGAS_00369	Amount Added:	0.80	Units: uL
VM50SS_STK_00086	Amount Added:	0.80	Units: uL
VM50IS_00086	Amount Added:	2.00	Units: uL
VMRPRIMW_00419	Amount Added:	0.80	Units: uL
VMAROLISTDW_00376	Amount Added:	0.80	Units: uL

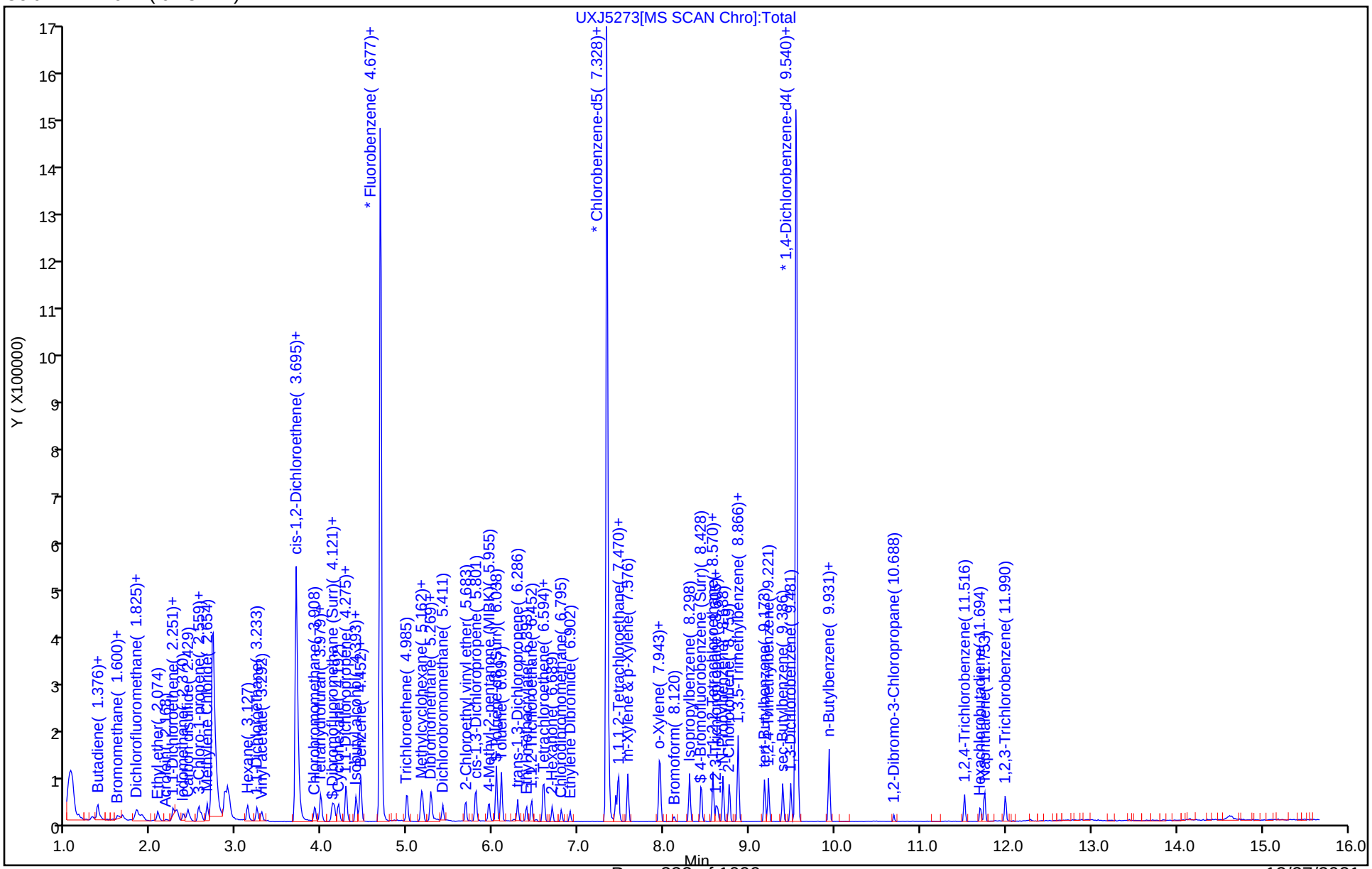
Report Date: 18-Jan-2021 09:24:51 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D

Injection Date:	15-Jan-2021 12:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

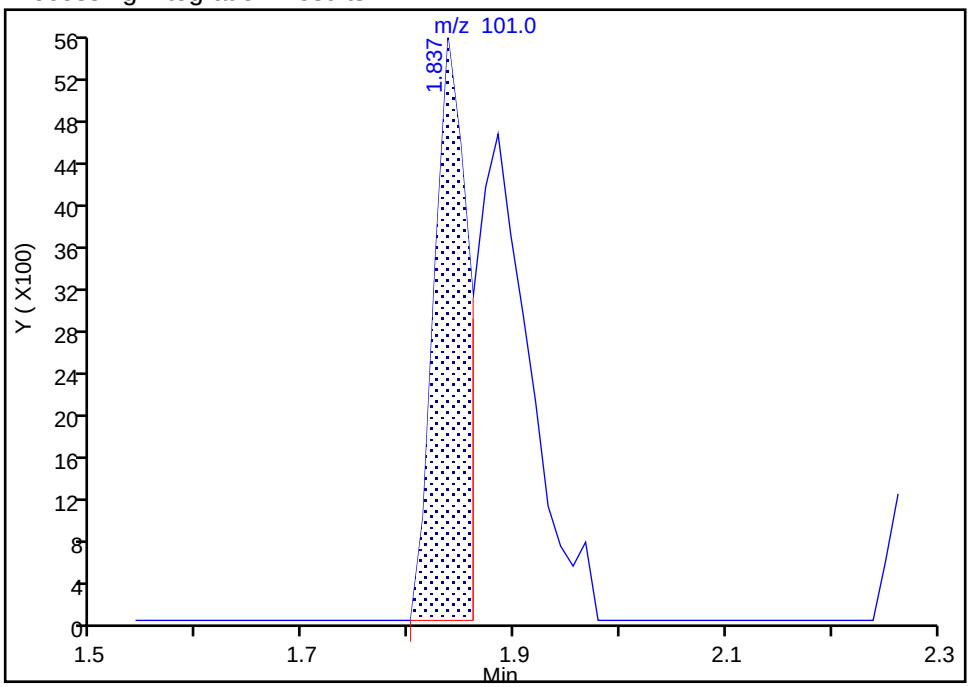
Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5273.D
Injection Date: 15-Jan-2021 12:58:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 043582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

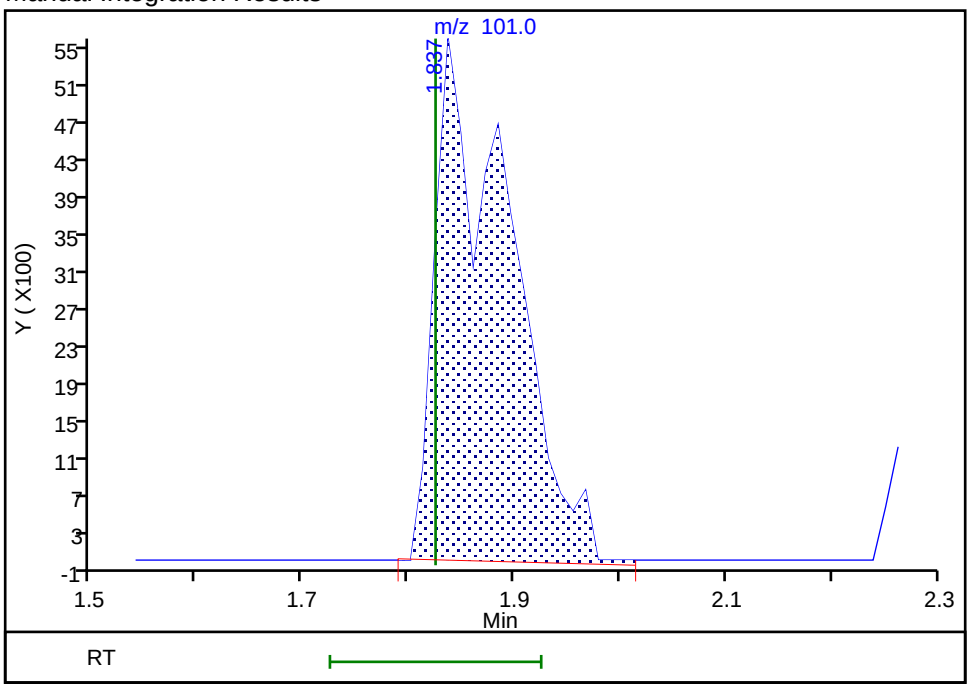
Processing Integration Results

RT: 1.84
Area: 12554
Amount: 0.752513
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 27428
Amount: 1.043907
Amount Units: ug/l



Reviewer: evansle, 18-Jan-2021 08:47:53
Audit Action: Manually Integrated Audit Reason: Split Peak

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

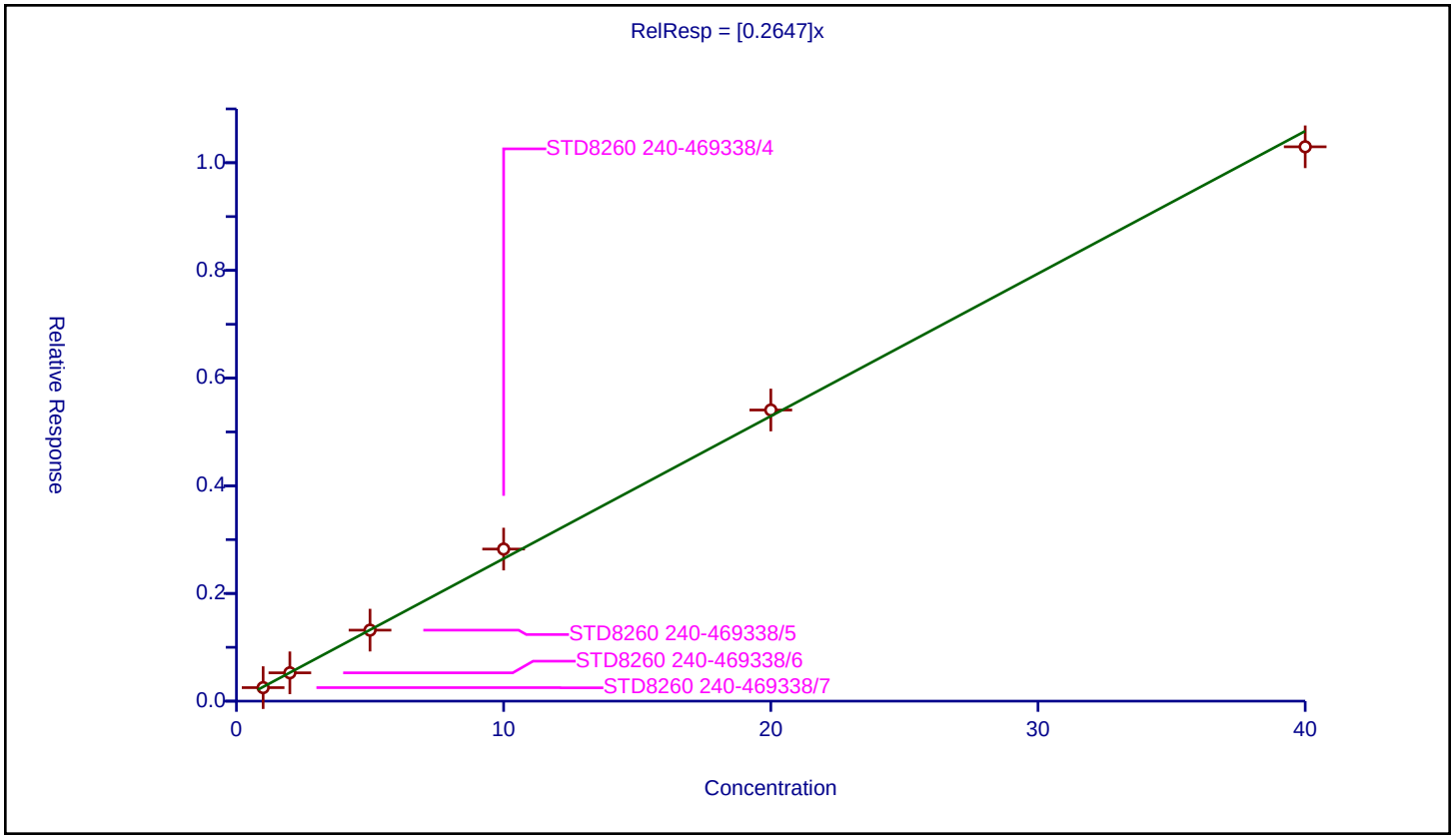
Curve Coefficients

Intercept:	0
Slope:	0.2647

Error Coefficients

Standard Error:	366000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.251199	20.0	1237666.0	0.251199	Y
2	STD8260 240-469338/6	2.0	0.525939	20.0	1194740.0	0.262969	Y
3	STD8260 240-469338/5	5.0	1.318667	20.0	1222644.0	0.263733	Y
4	STD8260 240-469338/4	10.0	2.824521	20.0	1164516.0	0.282452	Y
5	STD8260 240-469338/3	20.0	5.407258	20.0	1252890.0	0.270363	Y
6	STD8260 240-469338/2	40.0	10.29625	20.0	1401011.0	0.257406	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

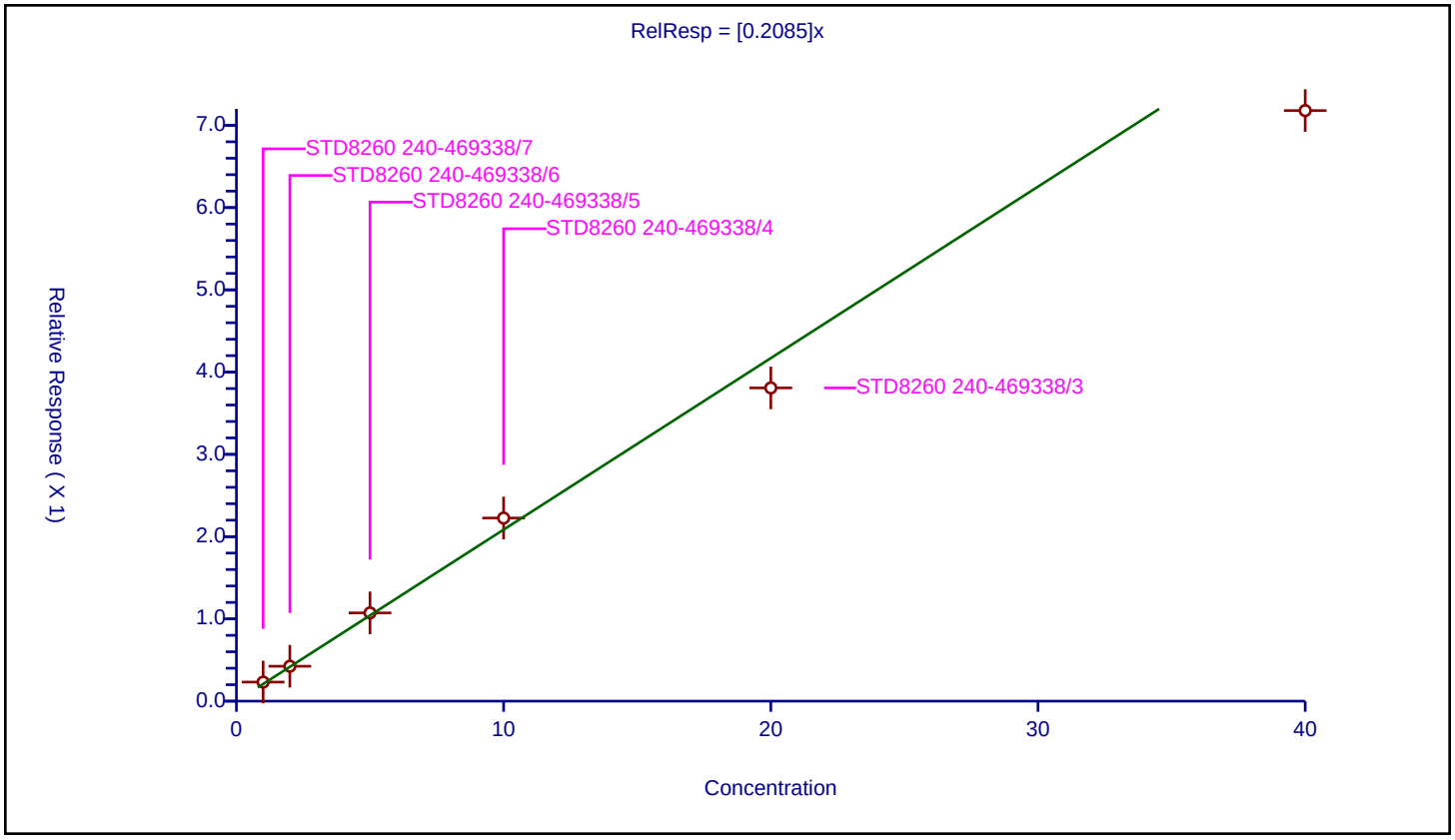
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	258000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.231726	20.0	1237666.0	0.231726	Y
2	STD8260 240-469338/6	2.0	0.424444	20.0	1194740.0	0.212222	Y
3	STD8260 240-469338/5	5.0	1.072741	20.0	1222644.0	0.214548	Y
4	STD8260 240-469338/4	10.0	2.225783	20.0	1164516.0	0.222578	Y
5	STD8260 240-469338/3	20.0	3.807804	20.0	1252890.0	0.19039	Y
6	STD8260 240-469338/2	40.0	7.179158	20.0	1401011.0	0.179479	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

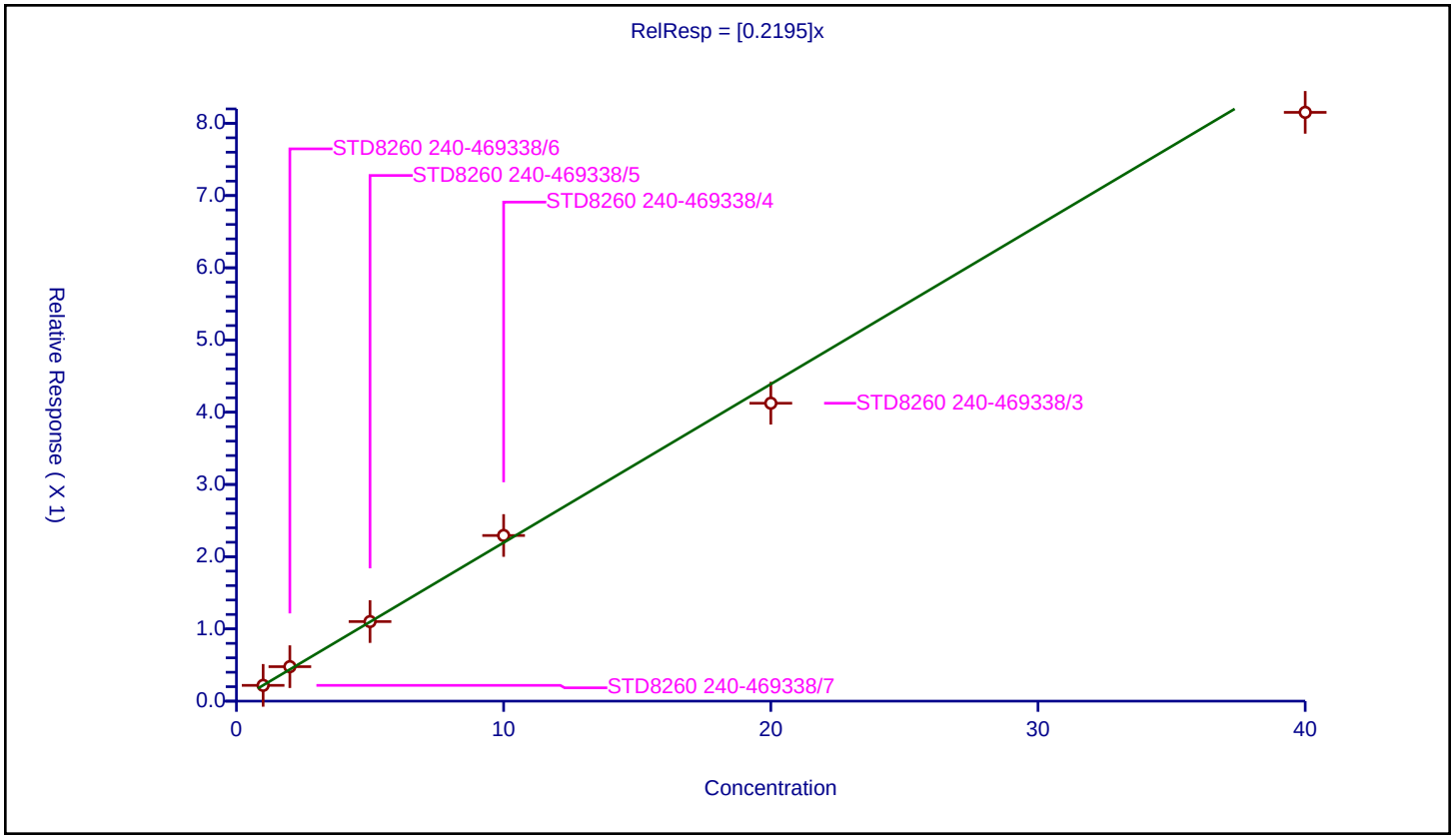
Curve Coefficients

Intercept:	0
Slope:	0.2195

Error Coefficients

Standard Error:	289000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.218492	20.0	1237666.0	0.218492	Y
2	STD8260 240-469338/6	2.0	0.477275	20.0	1194740.0	0.238638	Y
3	STD8260 240-469338/5	5.0	1.101727	20.0	1222644.0	0.220345	Y
4	STD8260 240-469338/4	10.0	2.293365	20.0	1164516.0	0.229336	Y
5	STD8260 240-469338/3	20.0	4.124895	20.0	1252890.0	0.206245	Y
6	STD8260 240-469338/2	40.0	8.152142	20.0	1401011.0	0.203804	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

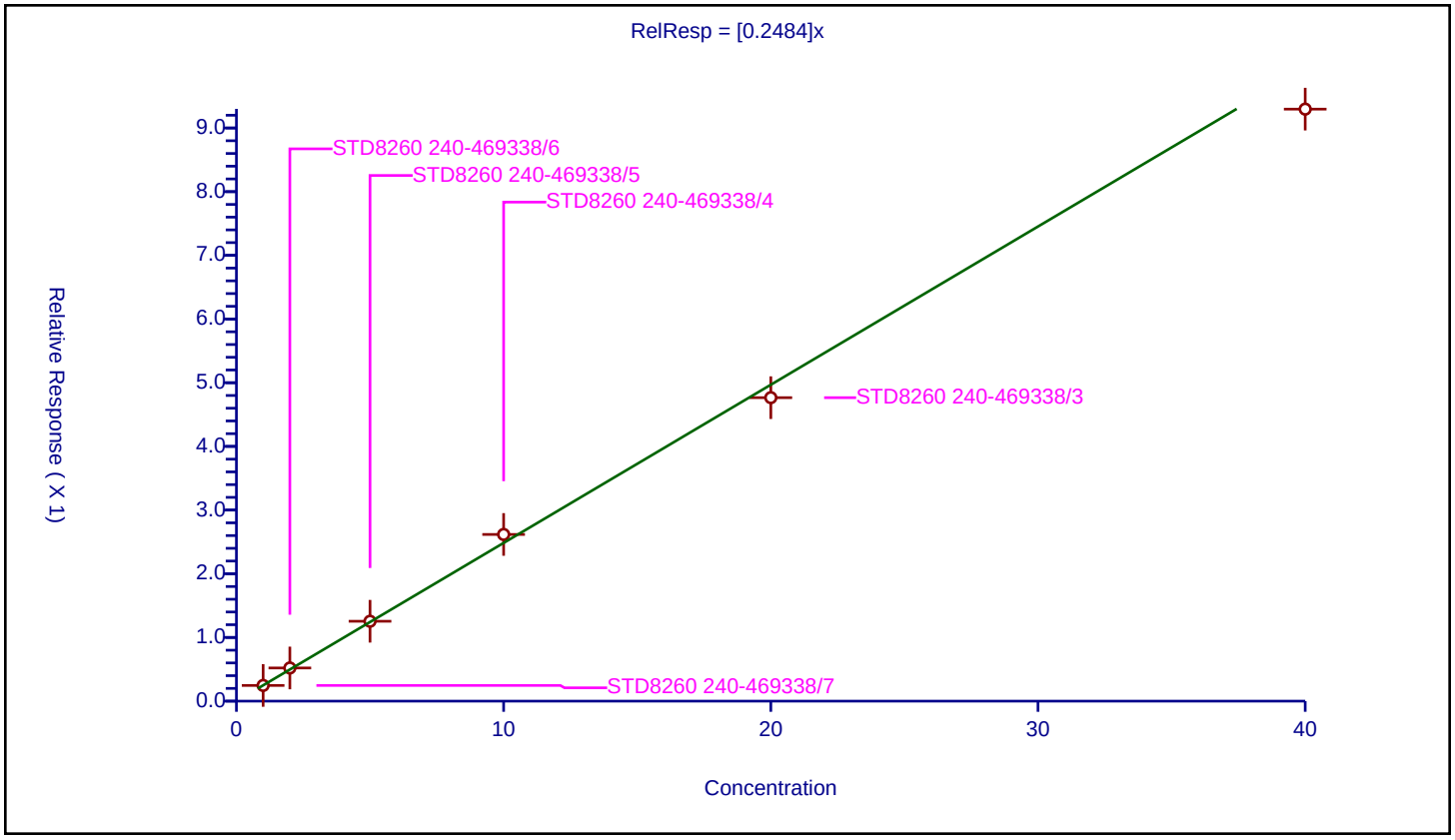
Curve Coefficients

Intercept:	0
Slope:	0.2484

Error Coefficients

Standard Error:	330000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.246658	20.0	1237666.0	0.246658	Y
2	STD8260 240-469338/6	2.0	0.521034	20.0	1194740.0	0.260517	Y
3	STD8260 240-469338/5	5.0	1.254642	20.0	1222644.0	0.250928	Y
4	STD8260 240-469338/4	10.0	2.617551	20.0	1164516.0	0.261755	Y
5	STD8260 240-469338/3	20.0	4.765686	20.0	1252890.0	0.238284	Y
6	STD8260 240-469338/2	40.0	9.296415	20.0	1401011.0	0.23241	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

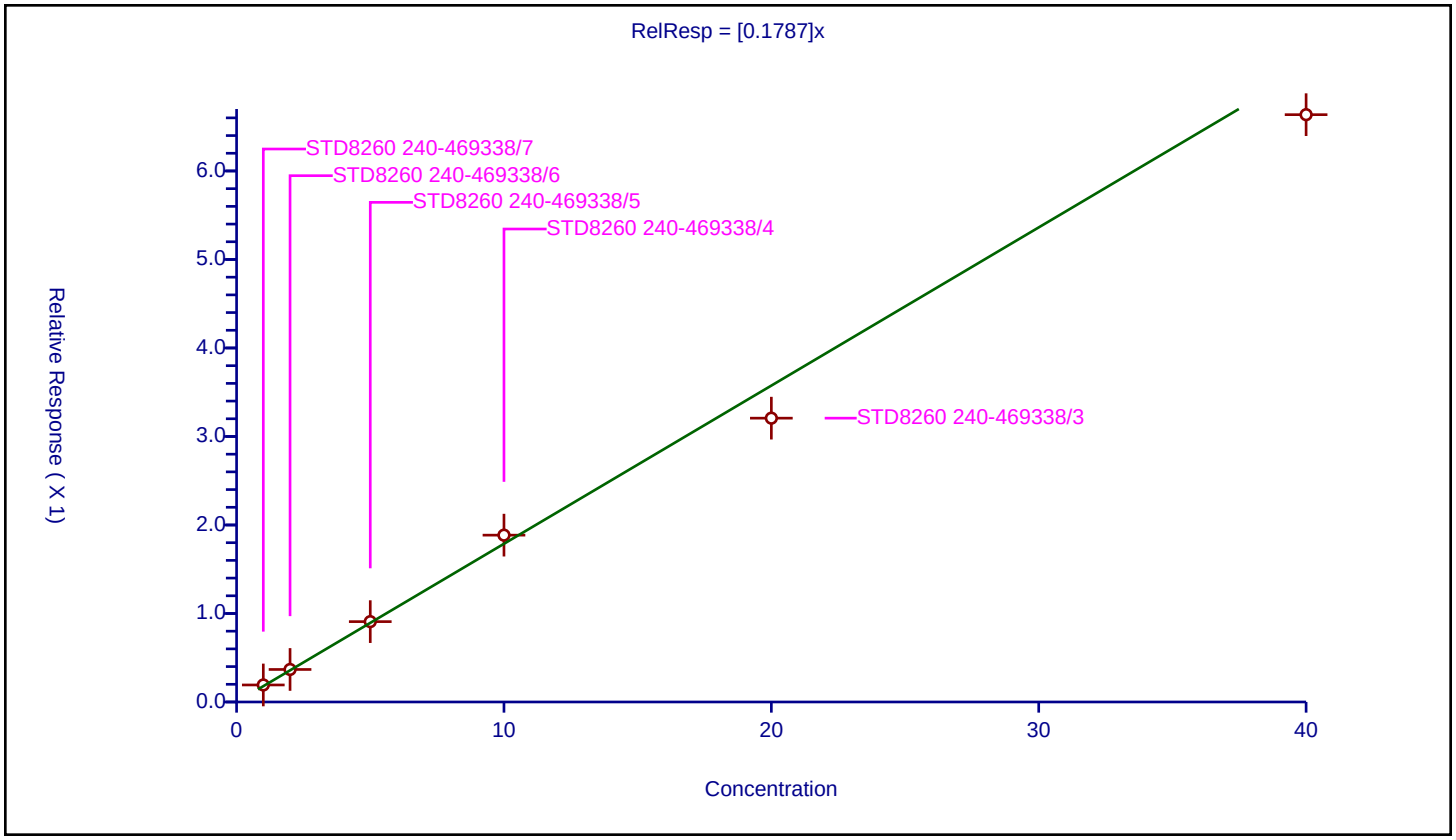
Curve Coefficients

Intercept:	0
Slope:	0.1787

Error Coefficients

Standard Error:	233000
Relative Standard Error:	7.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.192459	20.0	1237666.0	0.192459	Y
2	STD8260 240-469338/6	2.0	0.36731	20.0	1194740.0	0.183655	Y
3	STD8260 240-469338/5	5.0	0.907885	20.0	1222644.0	0.181577	Y
4	STD8260 240-469338/4	10.0	1.885247	20.0	1164516.0	0.188525	Y
5	STD8260 240-469338/3	20.0	3.206969	20.0	1252890.0	0.160348	Y
6	STD8260 240-469338/2	40.0	6.636193	20.0	1401011.0	0.165905	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

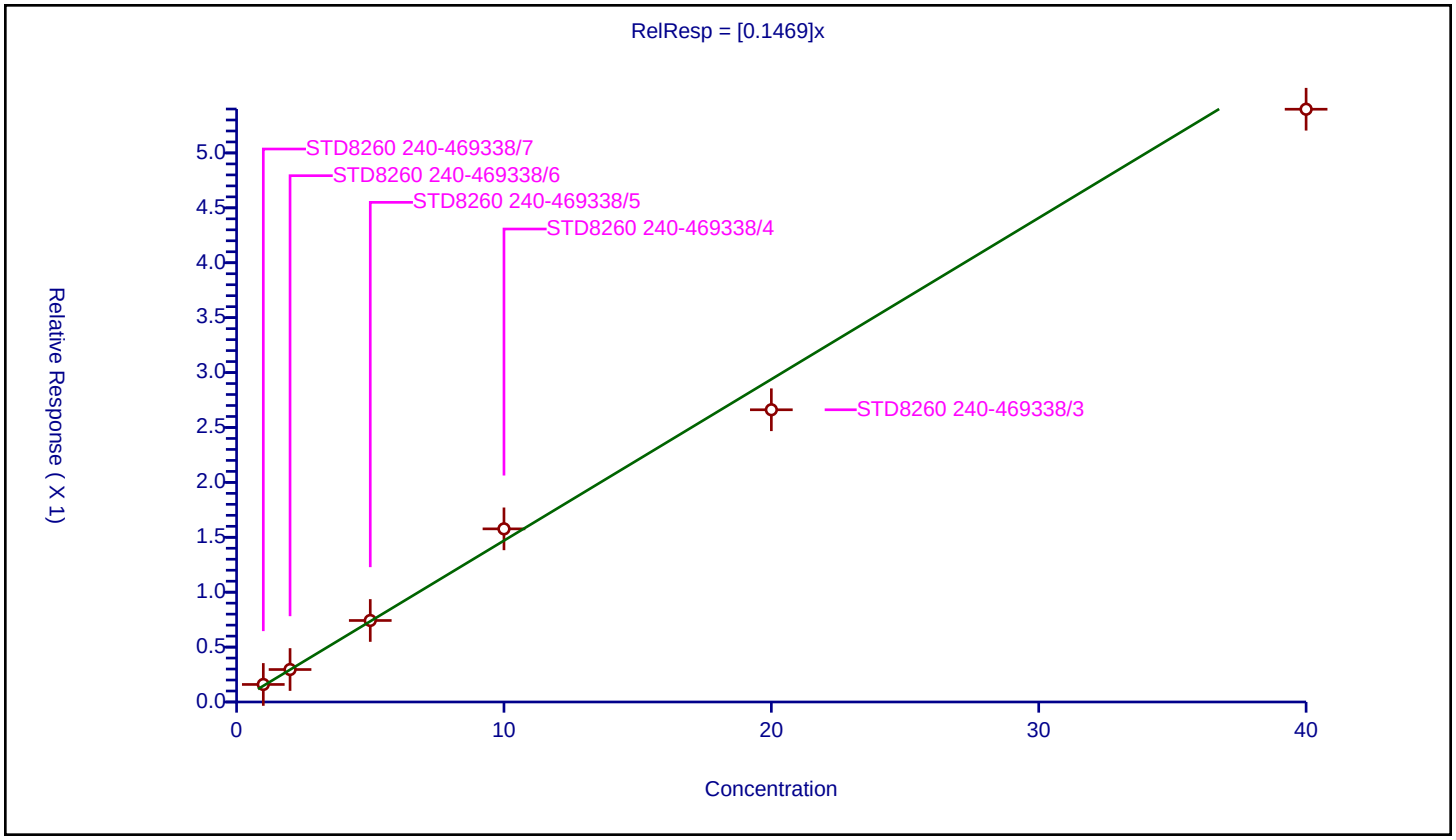
Curve Coefficients

Intercept:	0
Slope:	0.1469

Error Coefficients

Standard Error:	191000
Relative Standard Error:	7.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159736	20.0	1237666.0	0.159736	Y
2	STD8260 240-469338/6	2.0	0.295596	20.0	1194740.0	0.147798	Y
3	STD8260 240-469338/5	5.0	0.742277	20.0	1222644.0	0.148455	Y
4	STD8260 240-469338/4	10.0	1.576586	20.0	1164516.0	0.157659	Y
5	STD8260 240-469338/3	20.0	2.661319	20.0	1252890.0	0.133066	Y
6	STD8260 240-469338/2	40.0	5.398073	20.0	1401011.0	0.134952	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

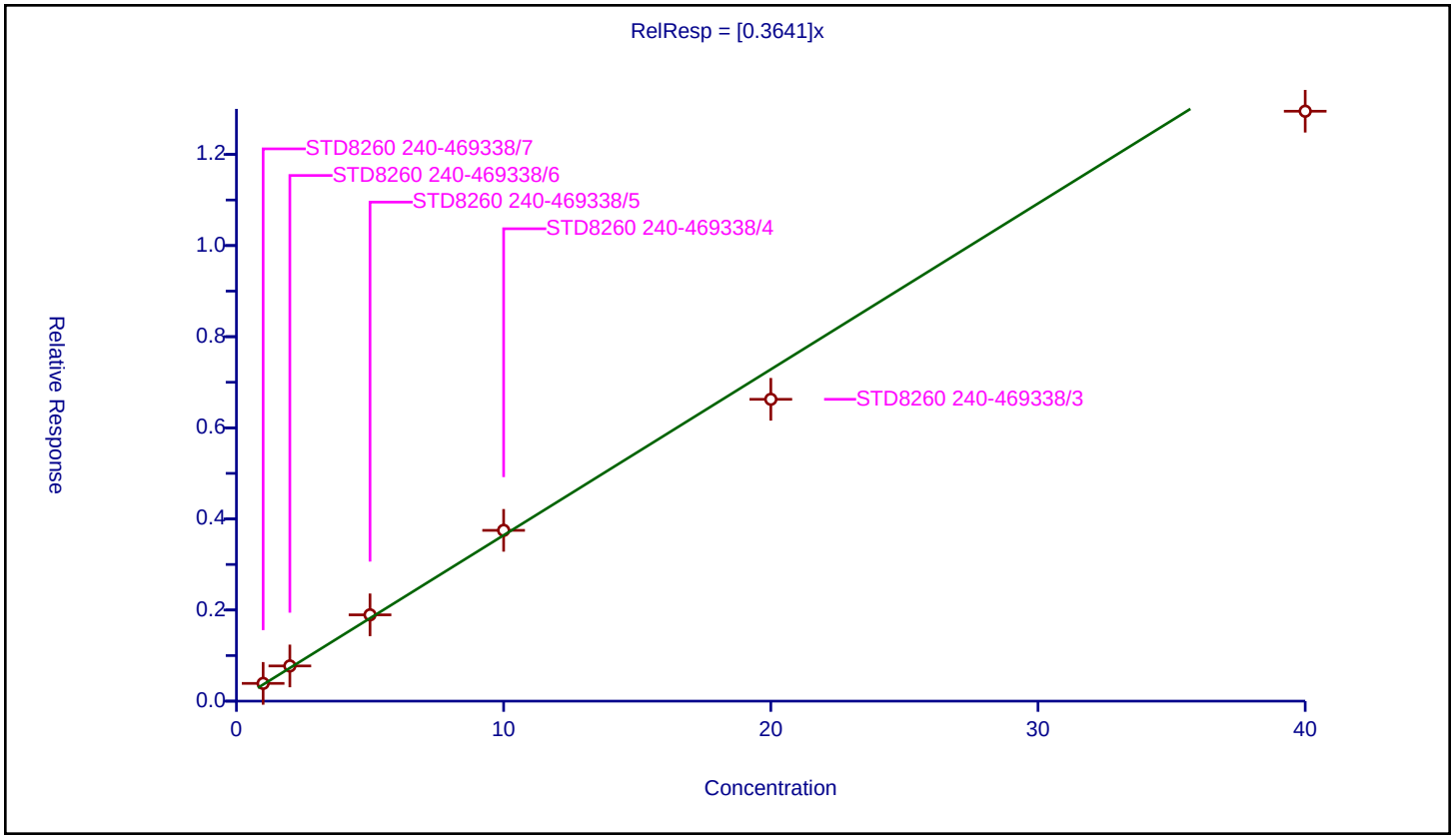
Curve Coefficients

Intercept:	0
Slope:	0.3641

Error Coefficients

Standard Error:	460000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.389475	20.0	1237666.0	0.389475	Y
2	STD8260 240-469338/6	2.0	0.772787	20.0	1194740.0	0.386394	Y
3	STD8260 240-469338/5	5.0	1.894697	20.0	1222644.0	0.378939	Y
4	STD8260 240-469338/4	10.0	3.74863	20.0	1164516.0	0.374863	Y
5	STD8260 240-469338/3	20.0	6.625099	20.0	1252890.0	0.331255	Y
6	STD8260 240-469338/2	40.0	12.949177	20.0	1401011.0	0.323729	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

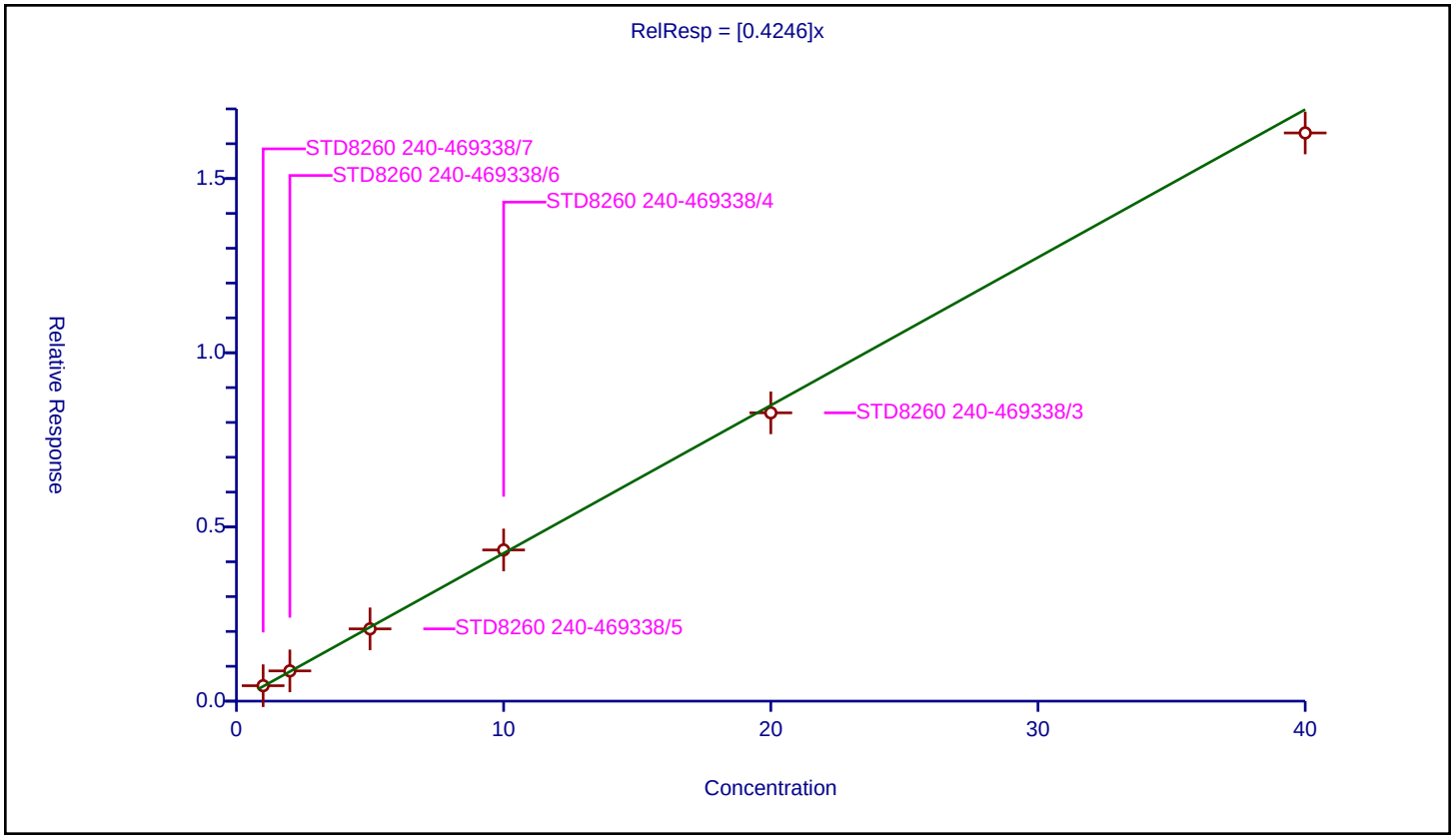
Curve Coefficients

Intercept:	0
Slope:	0.4246

Error Coefficients

Standard Error:	576000
Relative Standard Error:	3.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.443221	20.0	1237666.0	0.443221	Y
2	STD8260 240-469338/6	2.0	0.86772	20.0	1194740.0	0.43386	Y
3	STD8260 240-469338/5	5.0	2.074422	20.0	1222644.0	0.414884	Y
4	STD8260 240-469338/4	10.0	4.339485	20.0	1164516.0	0.433949	Y
5	STD8260 240-469338/3	20.0	8.276497	20.0	1252890.0	0.413825	Y
6	STD8260 240-469338/2	40.0	16.309494	20.0	1401011.0	0.407737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

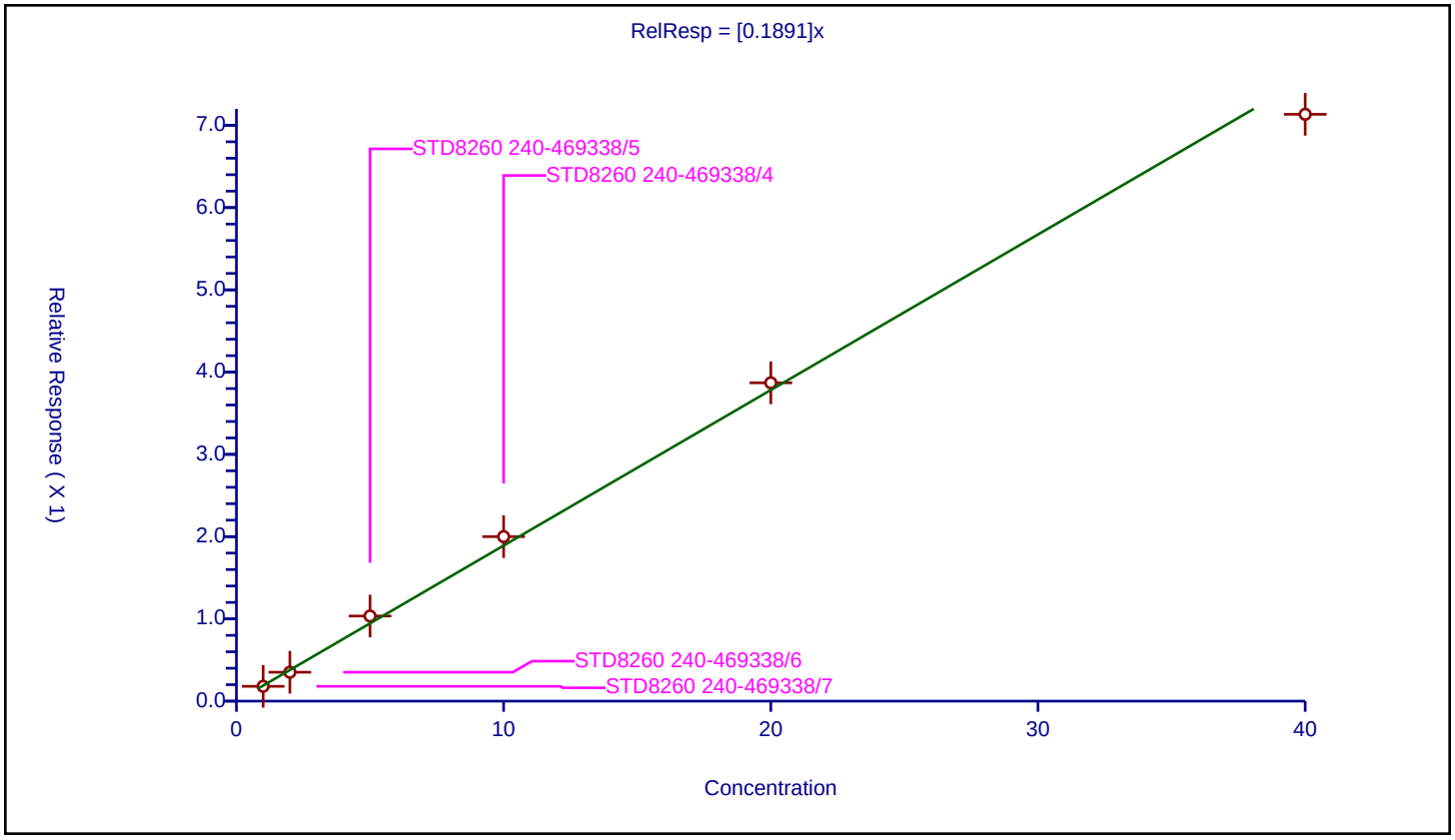
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	256000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.180194	20.0	1237666.0	0.180194	Y
2	STD8260 240-469338/6	2.0	0.351357	20.0	1194740.0	0.175678	Y
3	STD8260 240-469338/5	5.0	1.034708	20.0	1222644.0	0.206942	Y
4	STD8260 240-469338/4	10.0	1.99999	20.0	1164516.0	0.199999	Y
5	STD8260 240-469338/3	20.0	3.870284	20.0	1252890.0	0.193514	Y
6	STD8260 240-469338/2	40.0	7.134148	20.0	1401011.0	0.178354	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

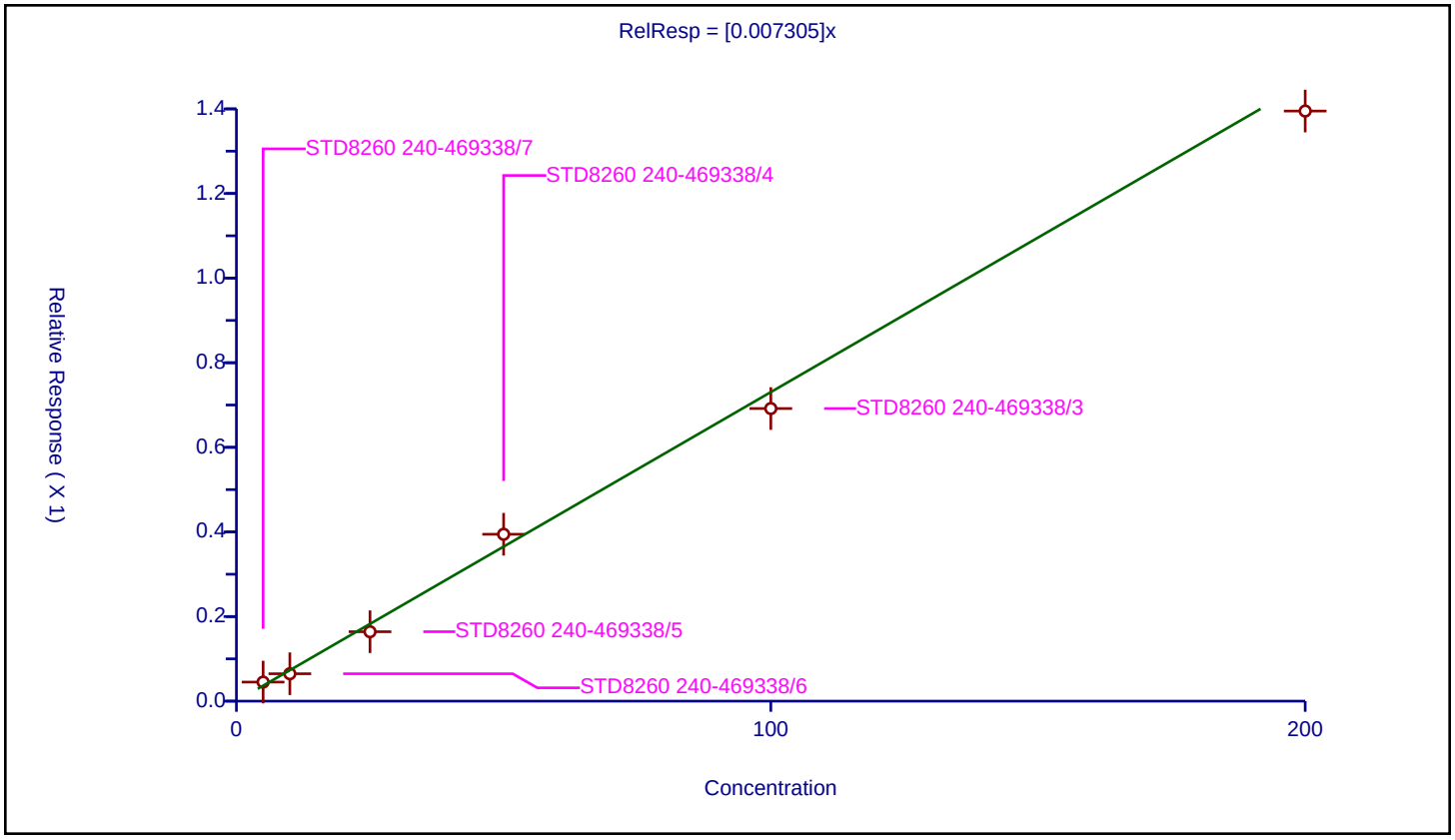
Curve Coefficients

Intercept:	0
Slope:	0.007305

Error Coefficients

Standard Error:	49100
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	5.0	0.045053	20.0	1237666.0	0.009011	Y
2	STD8260 240-469338/6	10.0	0.064767	20.0	1194740.0	0.006477	Y
3	STD8260 240-469338/5	25.0	0.164087	20.0	1222644.0	0.006563	Y
4	STD8260 240-469338/4	50.0	0.394464	20.0	1164516.0	0.007889	Y
5	STD8260 240-469338/3	100.0	0.691697	20.0	1252890.0	0.006917	Y
6	STD8260 240-469338/2	200.0	1.394878	20.0	1401011.0	0.006974	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

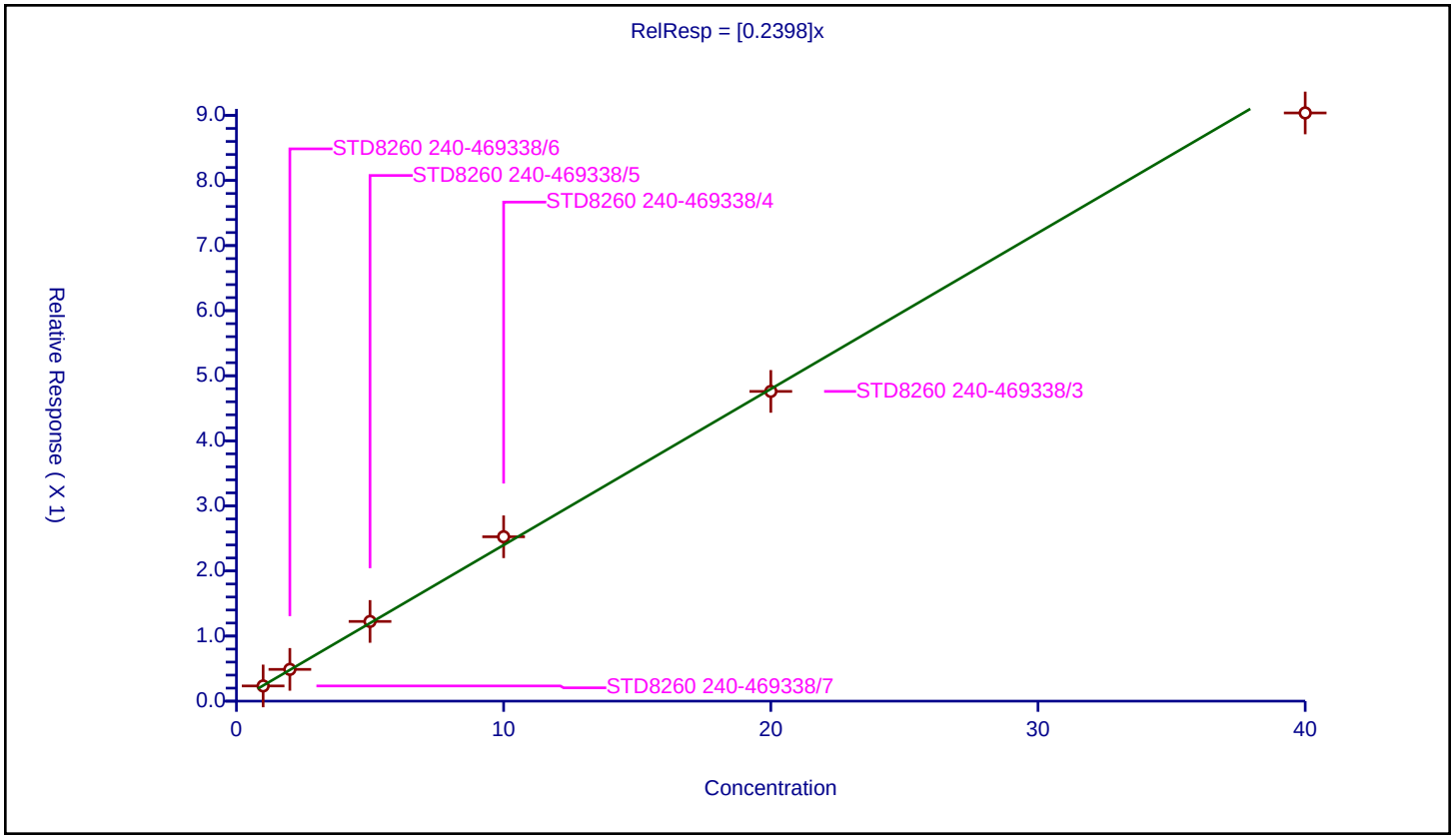
Curve Coefficients

Intercept:	0
Slope:	0.2398

Error Coefficients

Standard Error:	322000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.233617	20.0	1237666.0	0.233617	Y
2	STD8260 240-469338/6	2.0	0.487922	20.0	1194740.0	0.243961	Y
3	STD8260 240-469338/5	5.0	1.224477	20.0	1222644.0	0.244895	Y
4	STD8260 240-469338/4	10.0	2.525547	20.0	1164516.0	0.252555	Y
5	STD8260 240-469338/3	20.0	4.7593	20.0	1252890.0	0.237965	Y
6	STD8260 240-469338/2	40.0	9.037759	20.0	1401011.0	0.225944	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

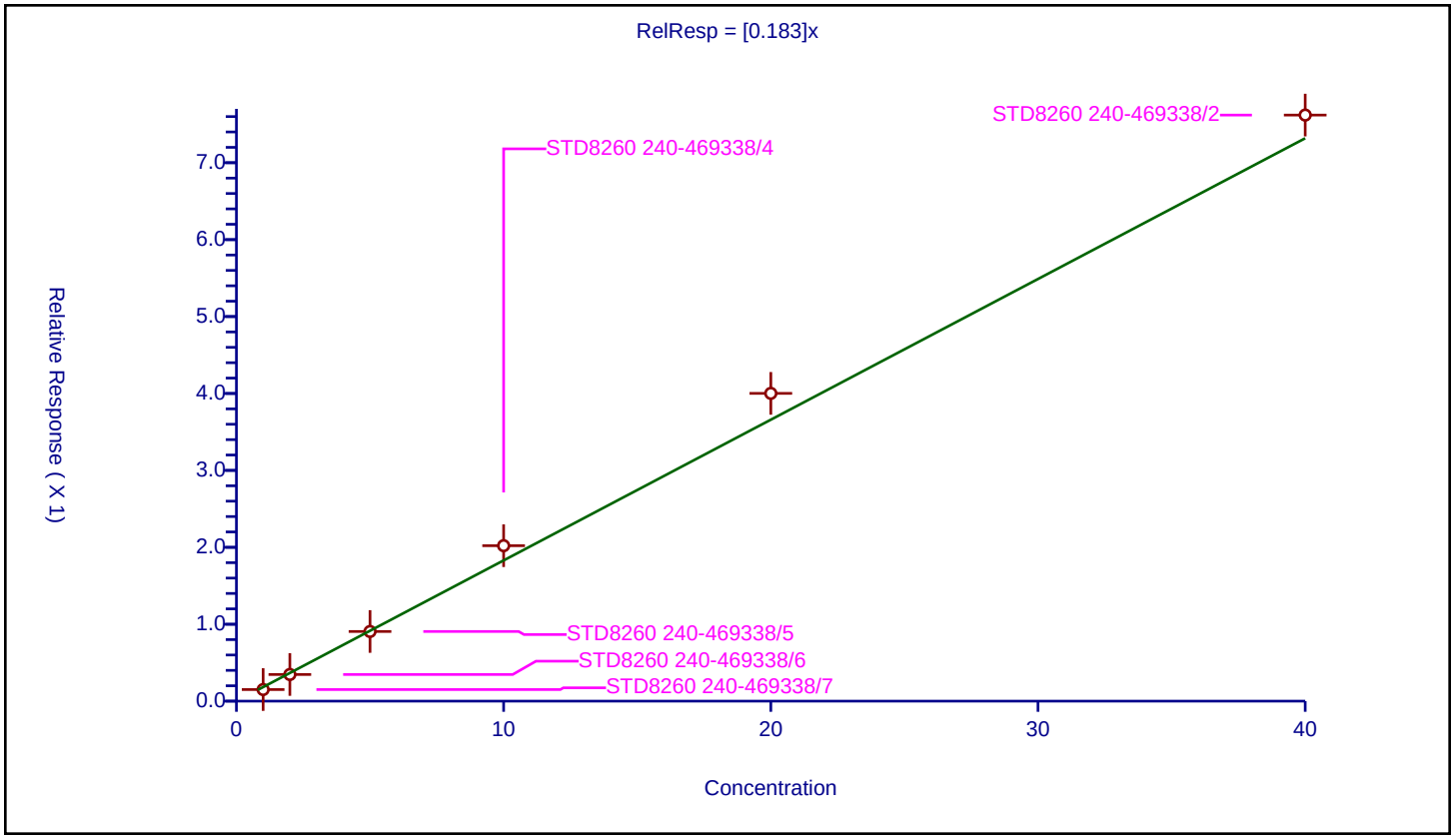
Curve Coefficients

Intercept:	0
Slope:	0.183

Error Coefficients

Standard Error:	270000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.150638	20.0	1237666.0	0.150638	Y
2	STD8260 240-469338/6	2.0	0.346586	20.0	1194740.0	0.173293	Y
3	STD8260 240-469338/5	5.0	0.905644	20.0	1222644.0	0.181129	Y
4	STD8260 240-469338/4	10.0	2.020977	20.0	1164516.0	0.202098	Y
5	STD8260 240-469338/3	20.0	4.001421	20.0	1252890.0	0.200071	Y
6	STD8260 240-469338/2	40.0	7.619755	20.0	1401011.0	0.190494	Y



Calibration / Acetone

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

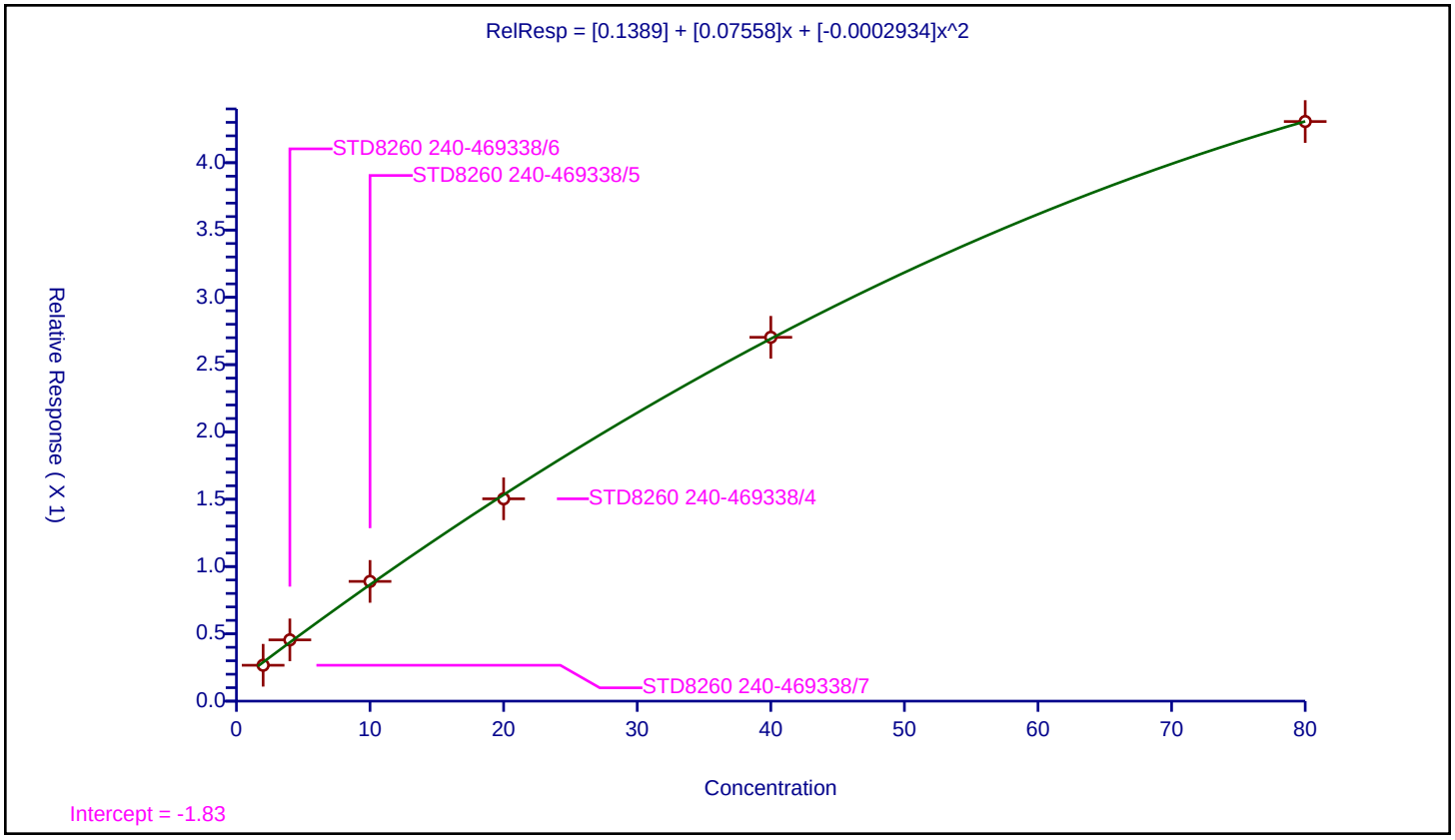
Curve Coefficients

Intercept:	0.1389
Slope:	0.07558
Second Order:	-0.0002934

Error Coefficients

Standard Error:	209000
Relative Standard Error:	9.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.266712	20.0	1237666.0	0.133356	Y
2	STD8260 240-469338/6	4.0	0.455179	20.0	1194740.0	0.113795	Y
3	STD8260 240-469338/5	10.0	0.889613	20.0	1222644.0	0.088961	Y
4	STD8260 240-469338/4	20.0	1.503079	20.0	1164516.0	0.075154	Y
5	STD8260 240-469338/3	40.0	2.703158	20.0	1252890.0	0.067579	Y
6	STD8260 240-469338/2	80.0	4.30629	20.0	1401011.0	0.053829	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

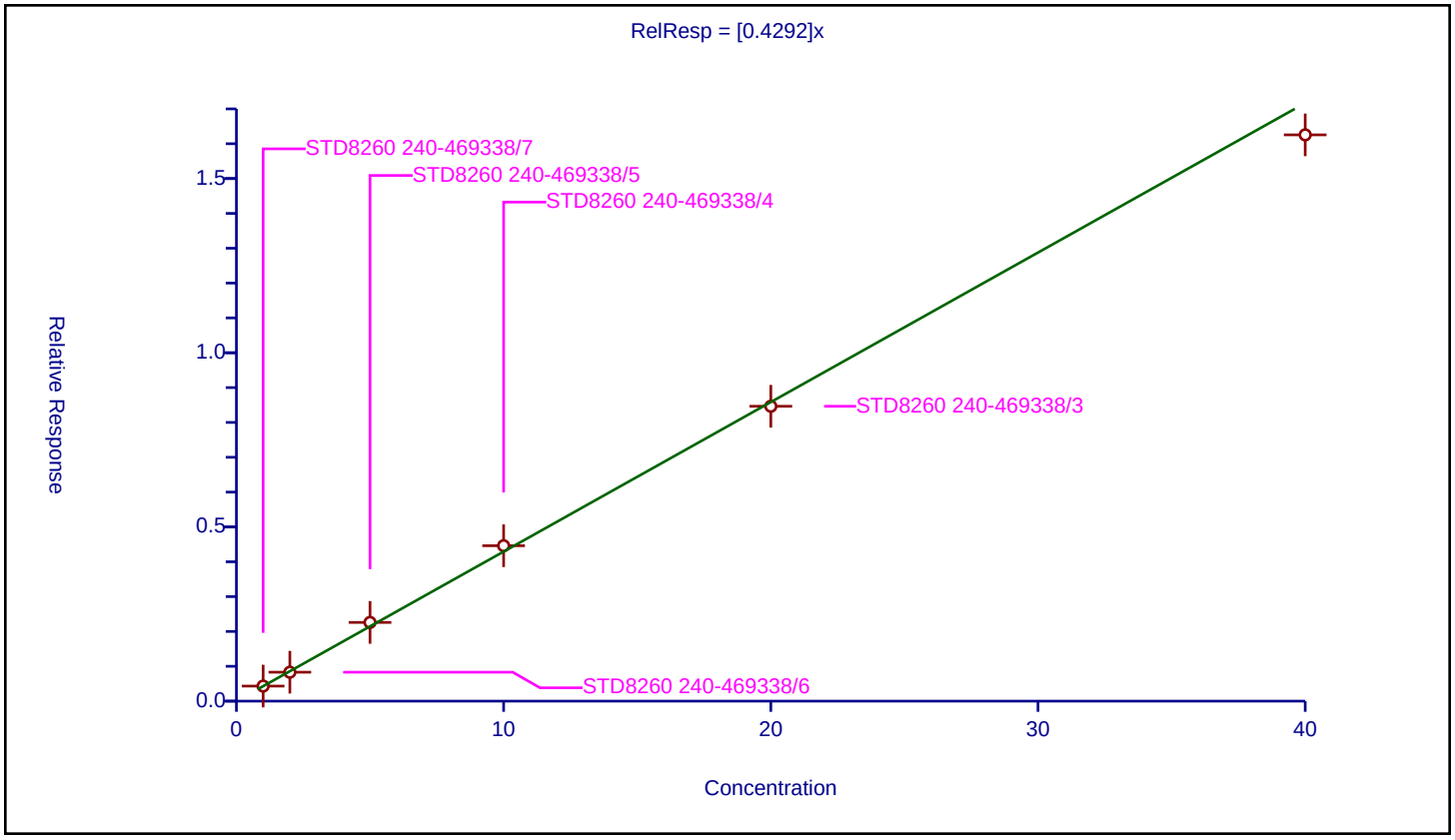
Curve Coefficients

Intercept:	0
Slope:	0.4292

Error Coefficients

Standard Error:	577000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.432362	20.0	1237666.0	0.432362	Y
2	STD8260 240-469338/6	2.0	0.830407	20.0	1194740.0	0.415203	Y
3	STD8260 240-469338/5	5.0	2.259824	20.0	1222644.0	0.451965	Y
4	STD8260 240-469338/4	10.0	4.461218	20.0	1164516.0	0.446122	Y
5	STD8260 240-469338/3	20.0	8.463935	20.0	1252890.0	0.423197	Y
6	STD8260 240-469338/2	40.0	16.254548	20.0	1401011.0	0.406364	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

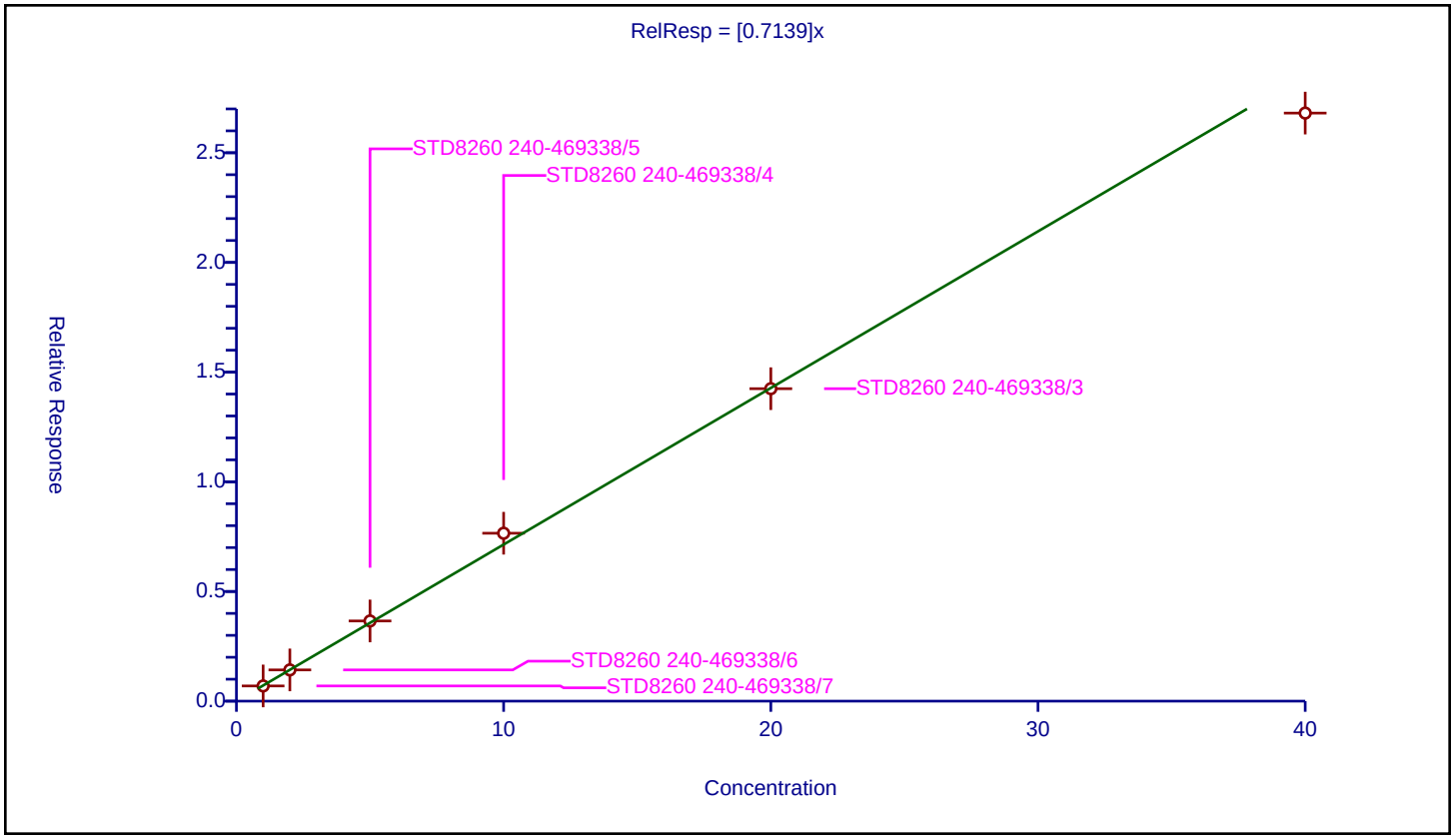
Curve Coefficients

Intercept:	0
Slope:	0.7139

Error Coefficients

Standard Error:	957000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.692449	20.0	1237666.0	0.692449	Y
2	STD8260 240-469338/6	2.0	1.423791	20.0	1194740.0	0.711895	Y
3	STD8260 240-469338/5	5.0	3.655062	20.0	1222644.0	0.731012	Y
4	STD8260 240-469338/4	10.0	7.65494	20.0	1164516.0	0.765494	Y
5	STD8260 240-469338/3	20.0	14.244076	20.0	1252890.0	0.712204	Y
6	STD8260 240-469338/2	40.0	26.809183	20.0	1401011.0	0.67023	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

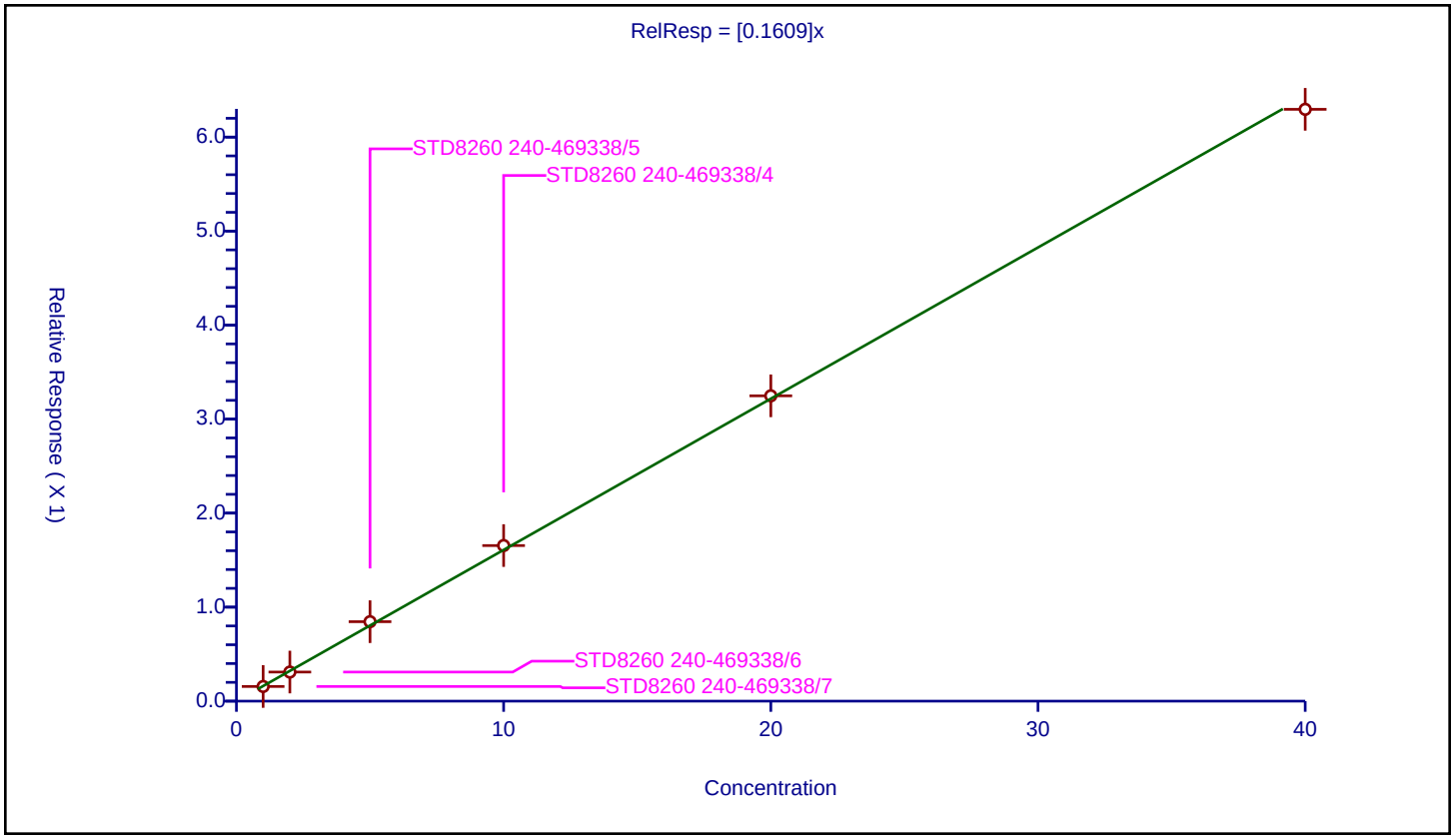
Curve Coefficients

Intercept:	0
Slope:	0.1609

Error Coefficients

Standard Error:	223000
Relative Standard Error:	3.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.156052	20.0	1237666.0	0.156052	Y
2	STD8260 240-469338/6	2.0	0.309624	20.0	1194740.0	0.154812	Y
3	STD8260 240-469338/5	5.0	0.845152	20.0	1222644.0	0.16903	Y
4	STD8260 240-469338/4	10.0	1.655108	20.0	1164516.0	0.165511	Y
5	STD8260 240-469338/3	20.0	3.247899	20.0	1252890.0	0.162395	Y
6	STD8260 240-469338/2	40.0	6.295568	20.0	1401011.0	0.157389	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

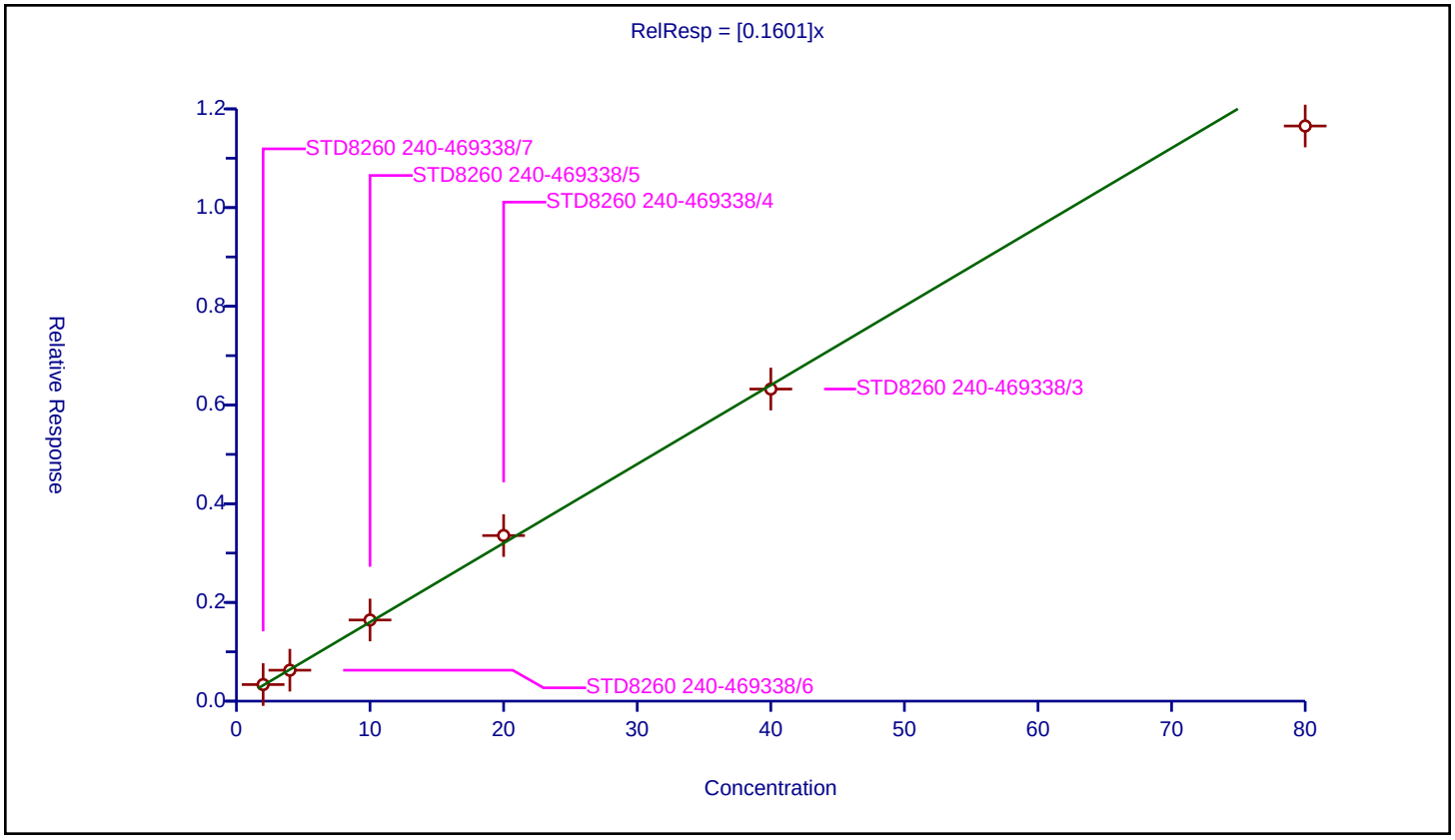
Curve Coefficients

Intercept:	0
Slope:	0.1601

Error Coefficients

Standard Error:	418000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.335713	20.0	1237666.0	0.167856	Y
2	STD8260 240-469338/6	4.0	0.626998	20.0	1194740.0	0.15675	Y
3	STD8260 240-469338/5	10.0	1.644109	20.0	1222644.0	0.164411	Y
4	STD8260 240-469338/4	20.0	3.355162	20.0	1164516.0	0.167758	Y
5	STD8260 240-469338/3	40.0	6.323141	20.0	1252890.0	0.158079	Y
6	STD8260 240-469338/2	80.0	11.65347	20.0	1401011.0	0.145668	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

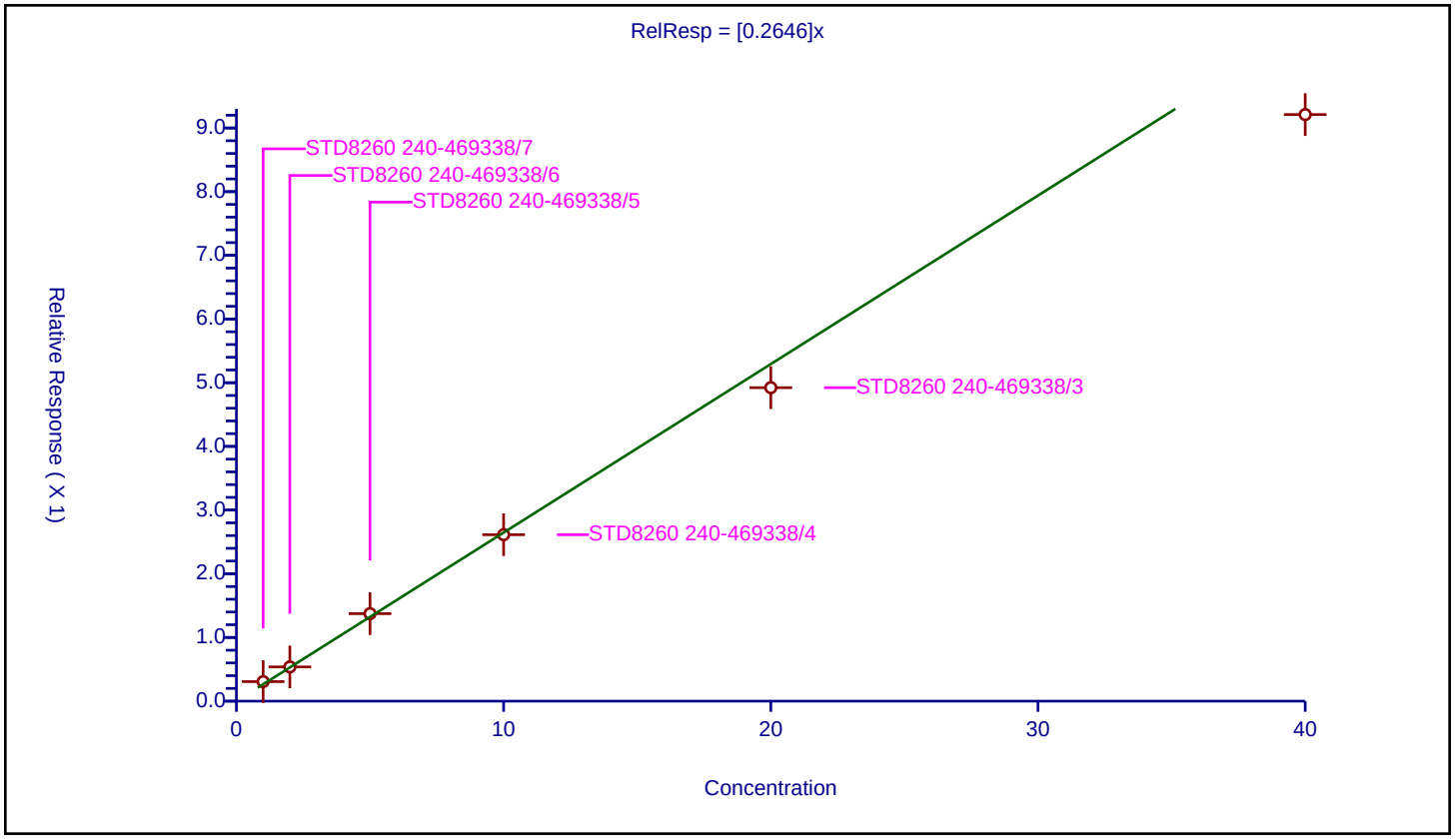
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	330000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306868	20.0	1237666.0	0.306868	Y
2	STD8260 240-469338/6	2.0	0.537071	20.0	1194740.0	0.268535	Y
3	STD8260 240-469338/5	5.0	1.373859	20.0	1222644.0	0.274772	Y
4	STD8260 240-469338/4	10.0	2.613257	20.0	1164516.0	0.261326	Y
5	STD8260 240-469338/3	20.0	4.922523	20.0	1252890.0	0.246126	Y
6	STD8260 240-469338/2	40.0	9.210848	20.0	1401011.0	0.230271	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

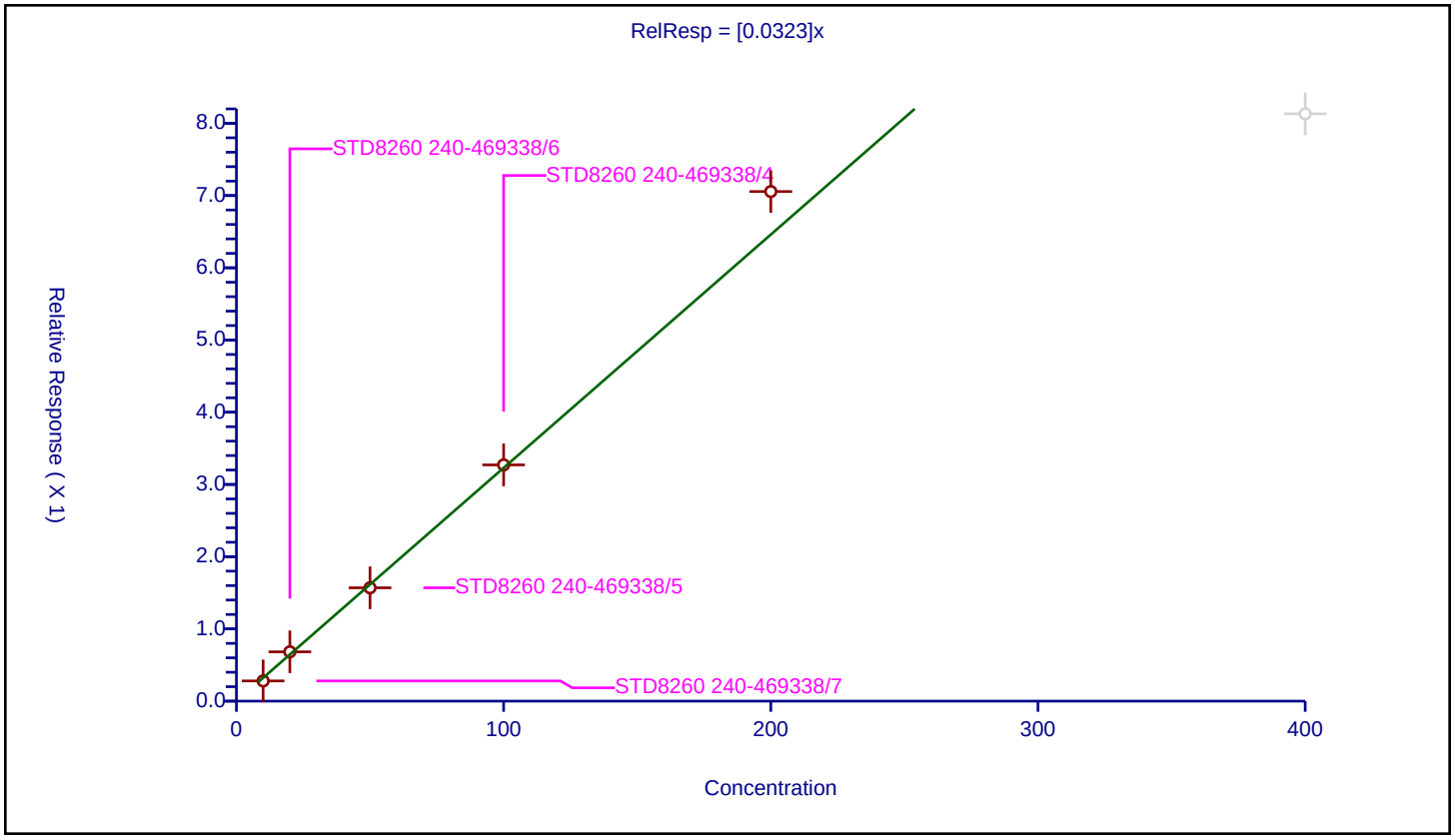
Curve Coefficients

Intercept:	0
Slope:	0.0323

Error Coefficients

Standard Error:	246000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.279769	20.0	1237666.0	0.027977	Y
2	STD8260 240-469338/6	20.0	0.68291	20.0	1194740.0	0.034146	Y
3	STD8260 240-469338/5	50.0	1.569435	20.0	1222644.0	0.031389	Y
4	STD8260 240-469338/4	100.0	3.271179	20.0	1164516.0	0.032712	Y
5	STD8260 240-469338/3	200.0	7.055639	20.0	1252890.0	0.035278	Y
6	STD8260 240-469338/2	400.0	8.131785	20.0	1401011.0	0.020329	N



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

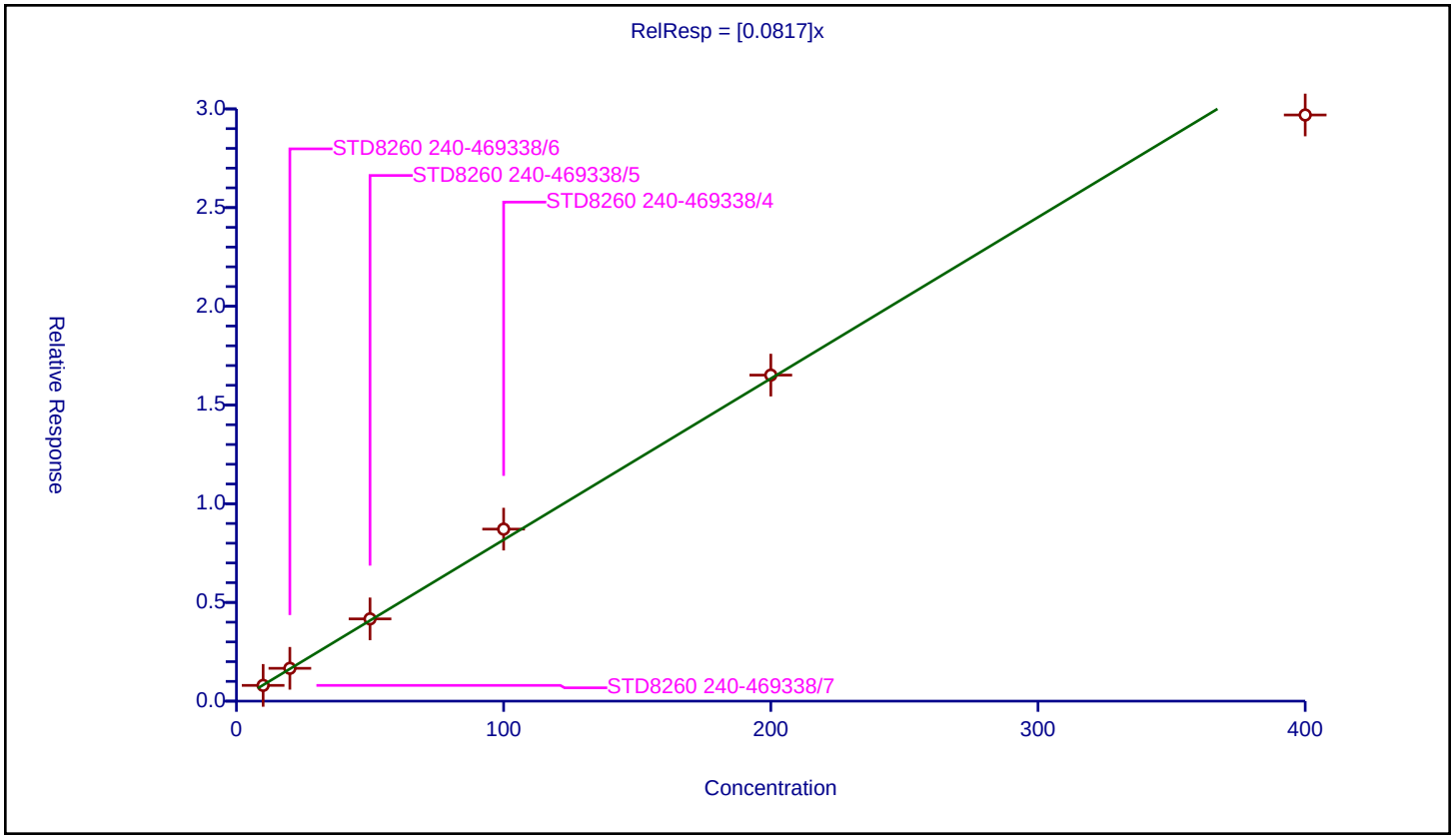
Curve Coefficients

Intercept:	0
Slope:	0.0817

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	10.0	0.798067	20.0	1237666.0	0.079807	Y
2	STD8260 240-469338/6	20.0	1.662755	20.0	1194740.0	0.083138	Y
3	STD8260 240-469338/5	50.0	4.167362	20.0	1222644.0	0.083347	Y
4	STD8260 240-469338/4	100.0	8.712736	20.0	1164516.0	0.087127	Y
5	STD8260 240-469338/3	200.0	16.515113	20.0	1252890.0	0.082576	Y
6	STD8260 240-469338/2	400.0	29.692429	20.0	1401011.0	0.074231	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

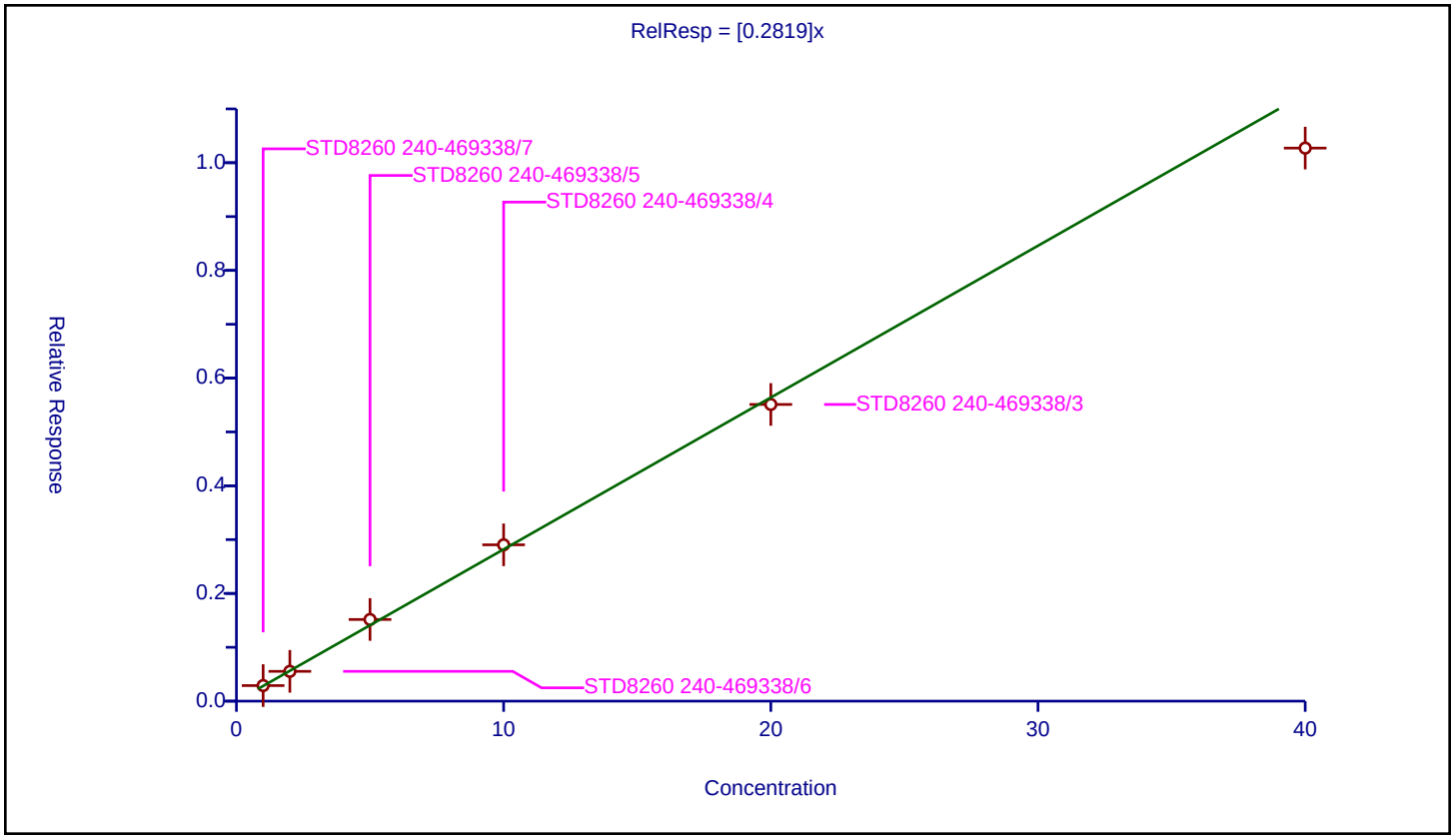
Curve Coefficients

Intercept:	0
Slope:	0.2819

Error Coefficients

Standard Error:	368000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.28906	20.0	1237666.0	0.28906	Y
2	STD8260 240-469338/6	2.0	0.553342	20.0	1194740.0	0.276671	Y
3	STD8260 240-469338/5	5.0	1.51632	20.0	1222644.0	0.303264	Y
4	STD8260 240-469338/4	10.0	2.903507	20.0	1164516.0	0.290351	Y
5	STD8260 240-469338/3	20.0	5.510699	20.0	1252890.0	0.275535	Y
6	STD8260 240-469338/2	40.0	10.271782	20.0	1401011.0	0.256795	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

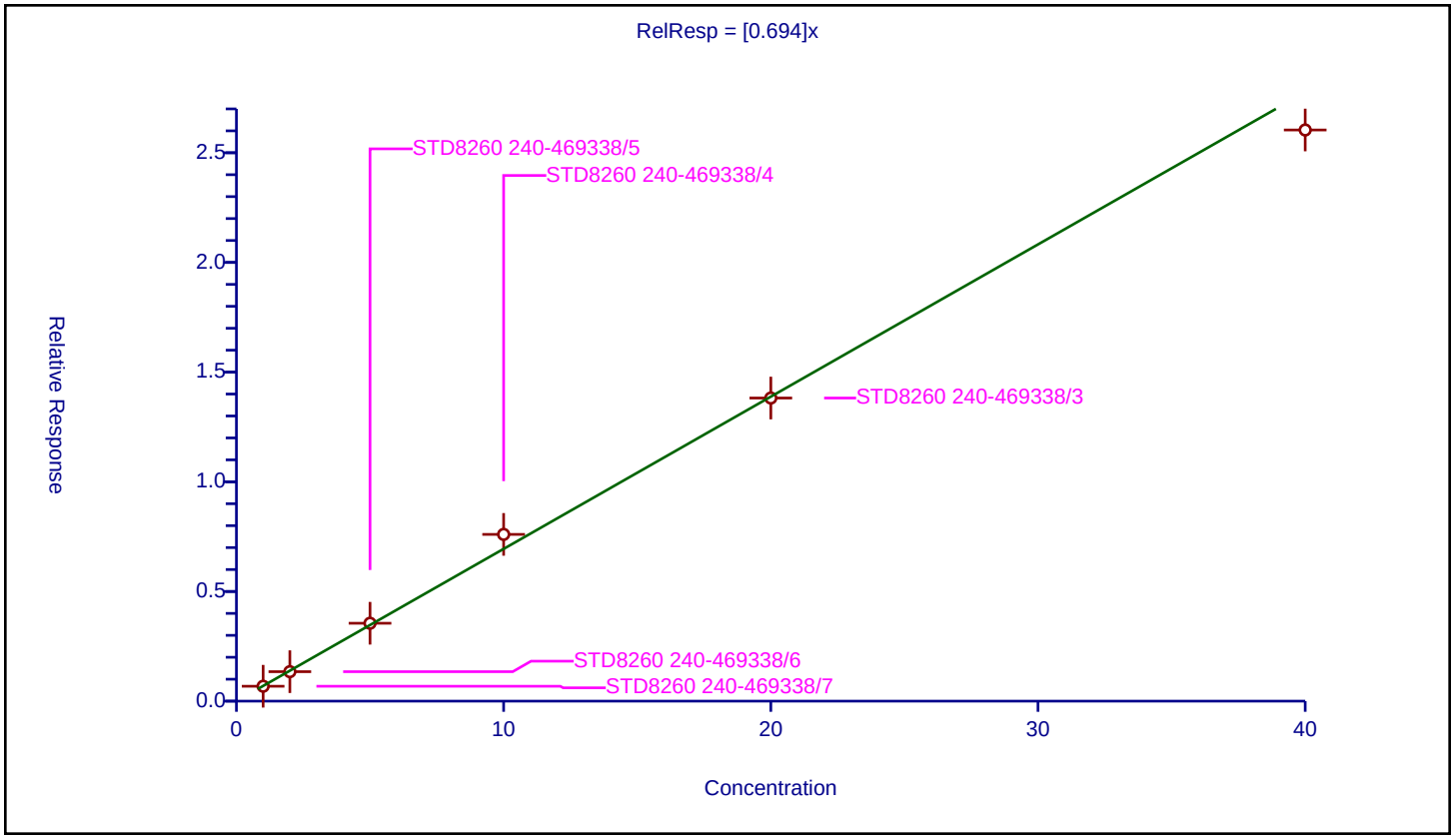
Curve Coefficients

Intercept:	0
Slope:	0.694

Error Coefficients

Standard Error:	930000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.679909	20.0	1237666.0	0.679909	Y
2	STD8260 240-469338/6	2.0	1.344108	20.0	1194740.0	0.672054	Y
3	STD8260 240-469338/5	5.0	3.551565	20.0	1222644.0	0.710313	Y
4	STD8260 240-469338/4	10.0	7.601424	20.0	1164516.0	0.760142	Y
5	STD8260 240-469338/3	20.0	13.81826	20.0	1252890.0	0.690913	Y
6	STD8260 240-469338/2	40.0	26.038654	20.0	1401011.0	0.650966	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

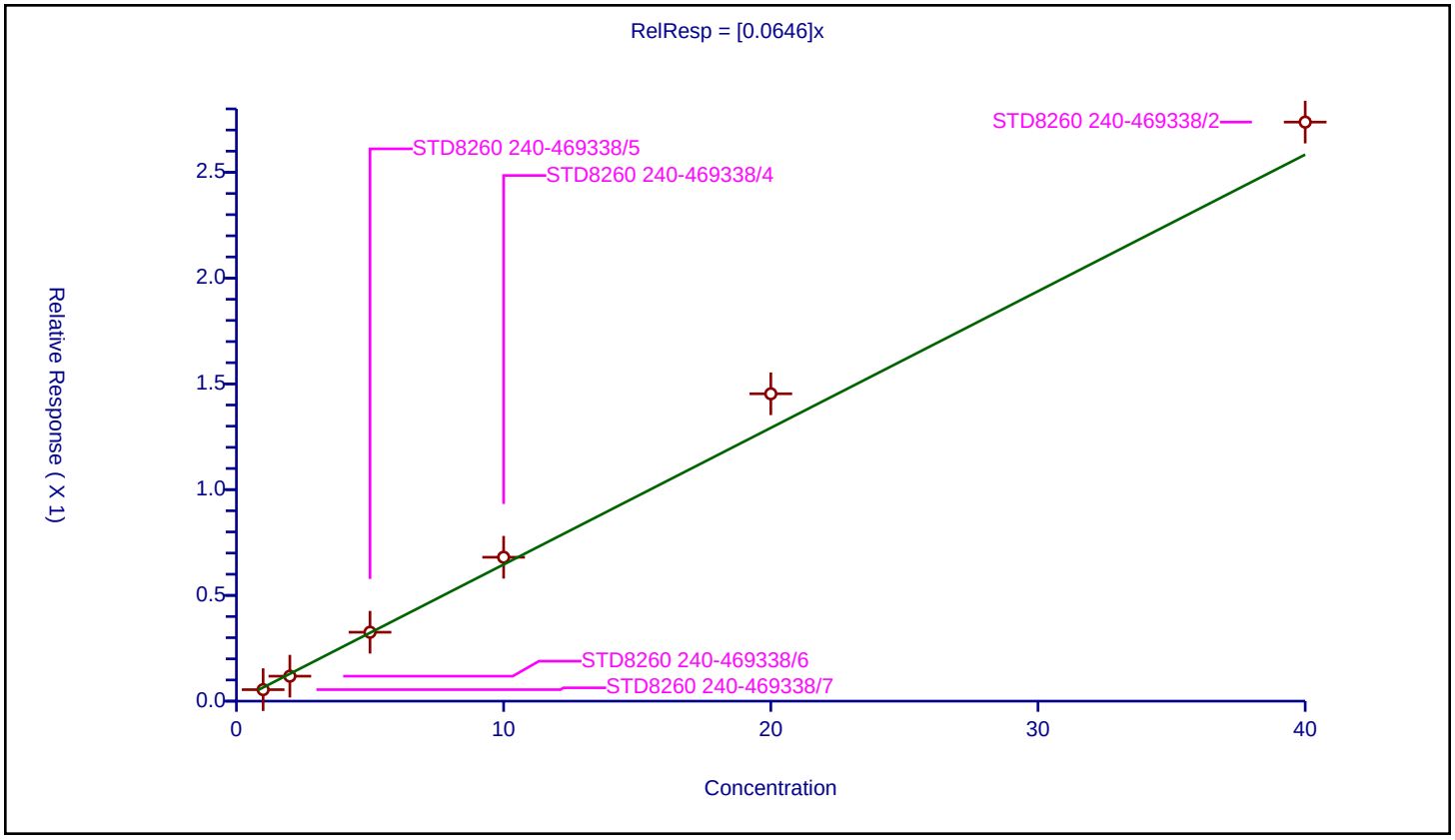
Curve Coefficients

Intercept:	0
Slope:	0.0646

Error Coefficients

Standard Error:	97000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.05428	20.0	1237666.0	0.05428	Y
2	STD8260 240-469338/6	2.0	0.118034	20.0	1194740.0	0.059017	Y
3	STD8260 240-469338/5	5.0	0.325835	20.0	1222644.0	0.065167	Y
4	STD8260 240-469338/4	10.0	0.680283	20.0	1164516.0	0.068028	Y
5	STD8260 240-469338/3	20.0	1.453136	20.0	1252890.0	0.072657	Y
6	STD8260 240-469338/2	40.0	2.73748	20.0	1401011.0	0.068437	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

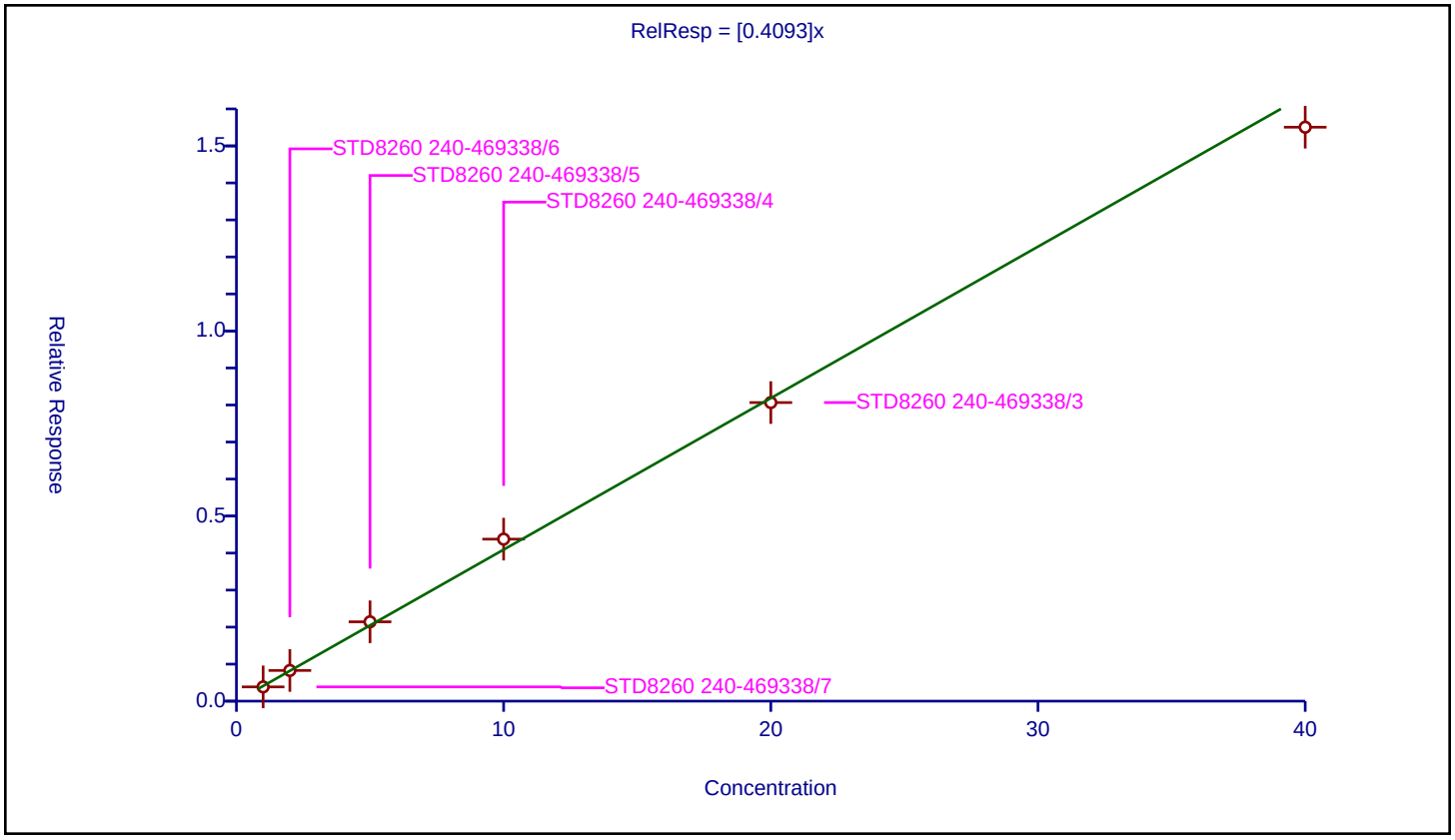
Curve Coefficients

Intercept:	0
Slope:	0.4093

Error Coefficients

Standard Error:	551000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.384369	20.0	1237666.0	0.384369	Y
2	STD8260 240-469338/6	2.0	0.82823	20.0	1194740.0	0.414115	Y
3	STD8260 240-469338/5	5.0	2.143437	20.0	1222644.0	0.428687	Y
4	STD8260 240-469338/4	10.0	4.376805	20.0	1164516.0	0.437681	Y
5	STD8260 240-469338/3	20.0	8.066598	20.0	1252890.0	0.40333	Y
6	STD8260 240-469338/2	40.0	15.505788	20.0	1401011.0	0.387645	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

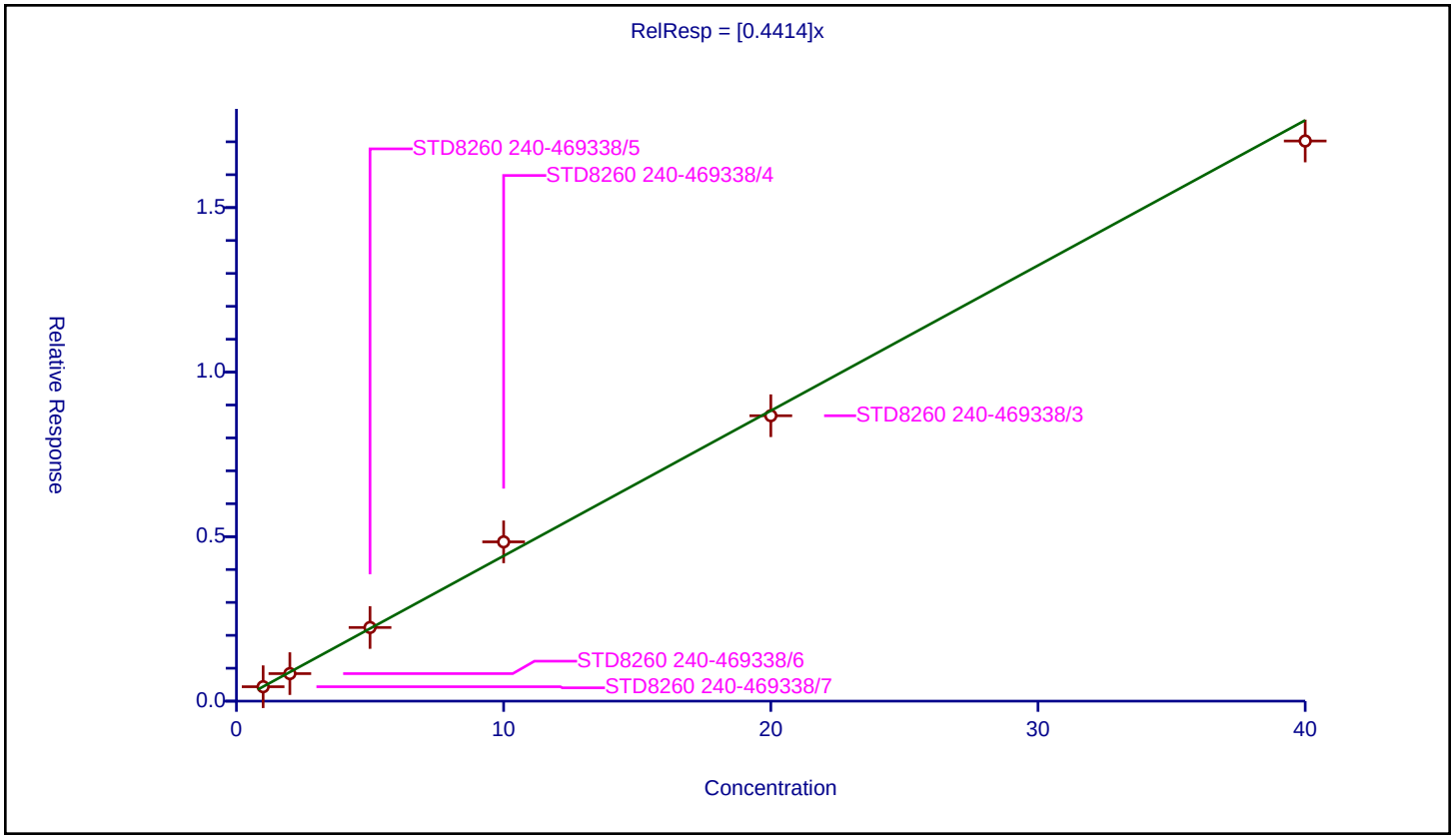
Curve Coefficients

Intercept:	0
Slope:	0.4414

Error Coefficients

Standard Error:	603000
Relative Standard Error:	5.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.438519	20.0	1237666.0	0.438519	Y
2	STD8260 240-469338/6	2.0	0.836902	20.0	1194740.0	0.418451	Y
3	STD8260 240-469338/5	5.0	2.238918	20.0	1222644.0	0.447784	Y
4	STD8260 240-469338/4	10.0	4.840775	20.0	1164516.0	0.484078	Y
5	STD8260 240-469338/3	20.0	8.674824	20.0	1252890.0	0.433741	Y
6	STD8260 240-469338/2	40.0	17.024592	20.0	1401011.0	0.425615	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

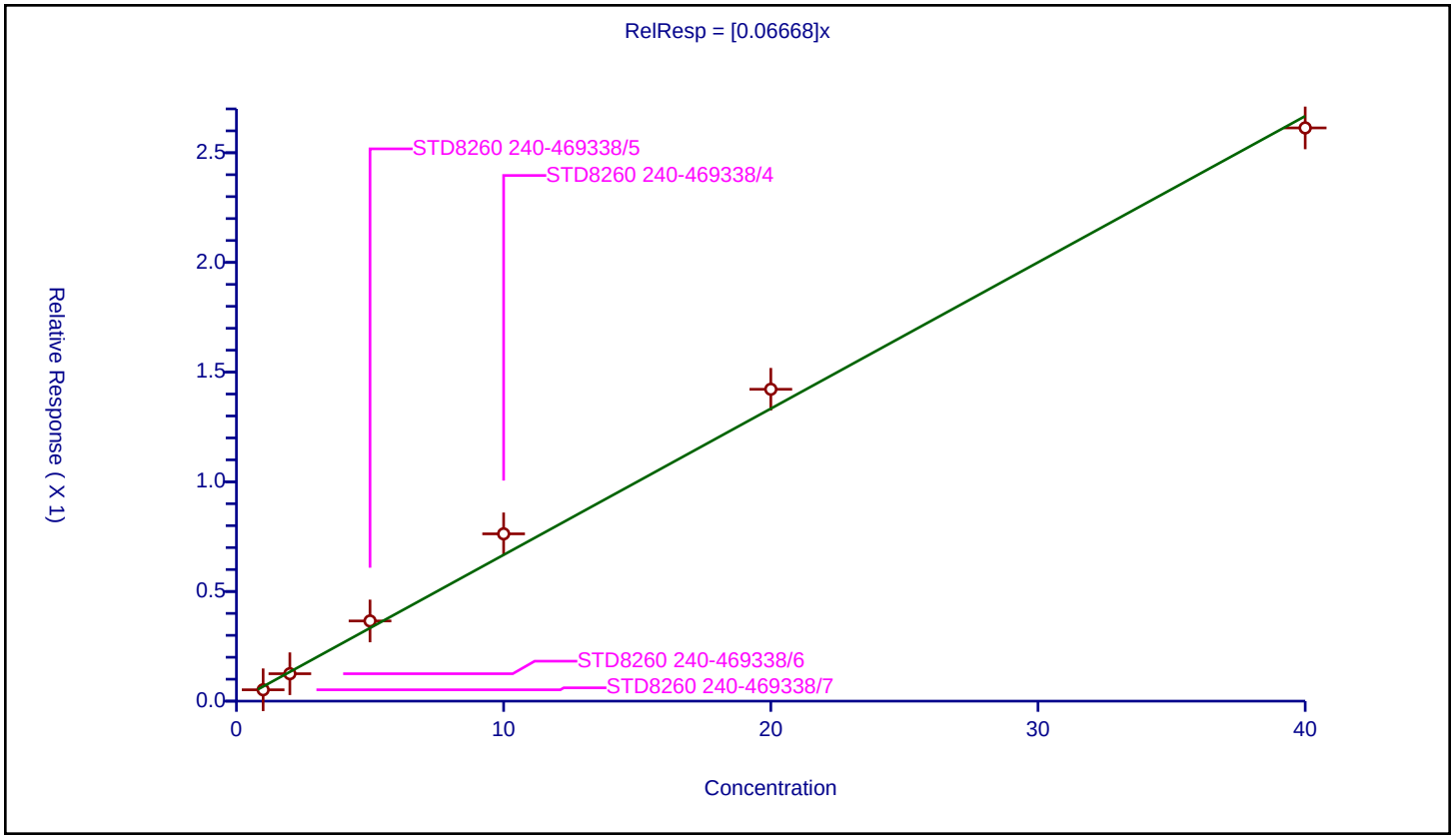
Curve Coefficients

Intercept:	0
Slope:	0.06668

Error Coefficients

Standard Error:	93800
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.051775	20.0	1237666.0	0.051775	Y
2	STD8260 240-469338/6	2.0	0.124948	20.0	1194740.0	0.062474	Y
3	STD8260 240-469338/5	5.0	0.365601	20.0	1222644.0	0.07312	Y
4	STD8260 240-469338/4	10.0	0.762737	20.0	1164516.0	0.076274	Y
5	STD8260 240-469338/3	20.0	1.421849	20.0	1252890.0	0.071092	Y
6	STD8260 240-469338/2	40.0	2.613299	20.0	1401011.0	0.065332	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

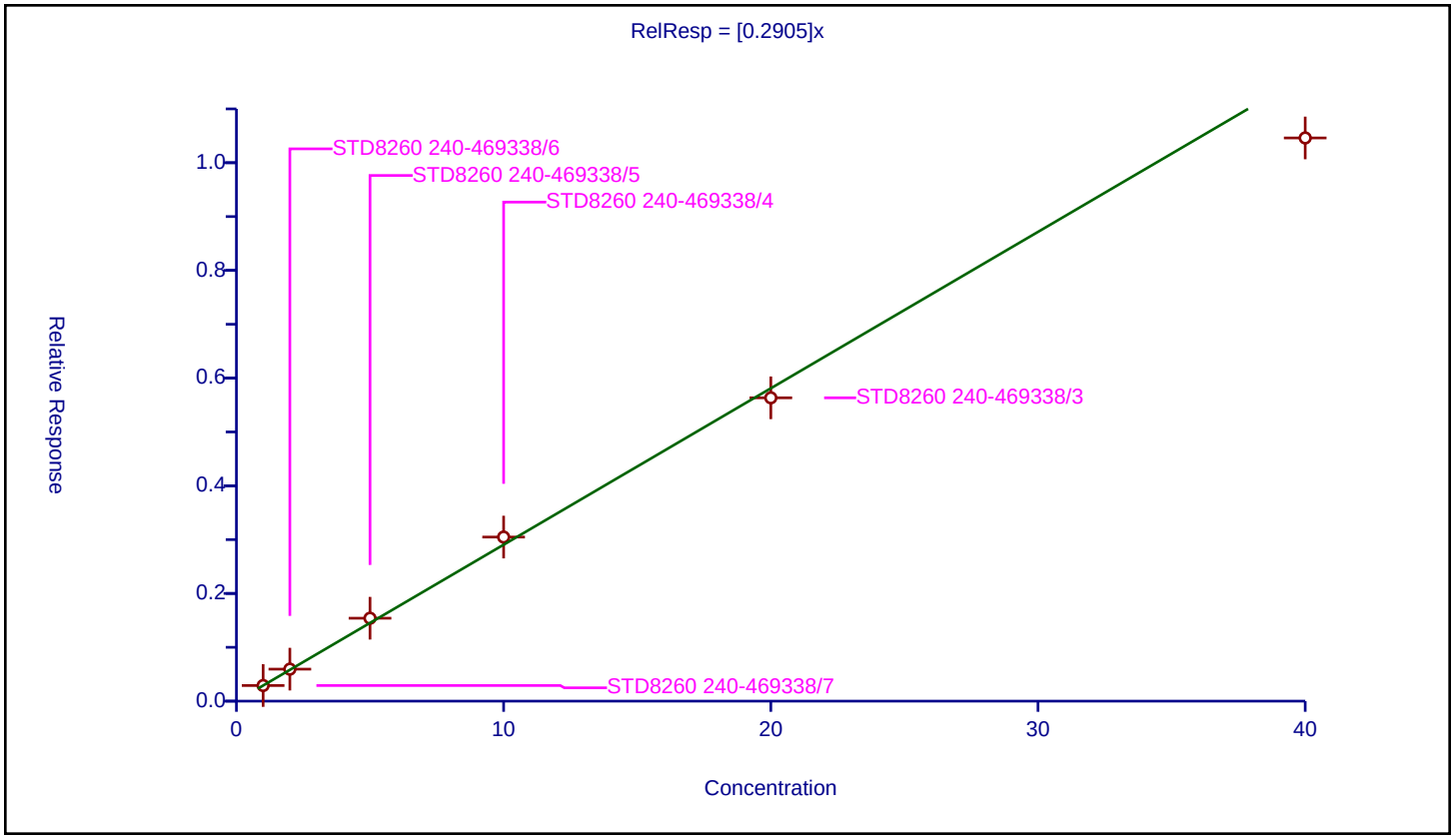
Curve Coefficients

Intercept:	0
Slope:	0.2905

Error Coefficients

Standard Error:	375000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.289997	20.0	1237666.0	0.289997	Y
2	STD8260 240-469338/6	2.0	0.594339	20.0	1194740.0	0.297169	Y
3	STD8260 240-469338/5	5.0	1.540138	20.0	1222644.0	0.308028	Y
4	STD8260 240-469338/4	10.0	3.047652	20.0	1164516.0	0.304765	Y
5	STD8260 240-469338/3	20.0	5.633455	20.0	1252890.0	0.281673	Y
6	STD8260 240-469338/2	40.0	10.460517	20.0	1401011.0	0.261513	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

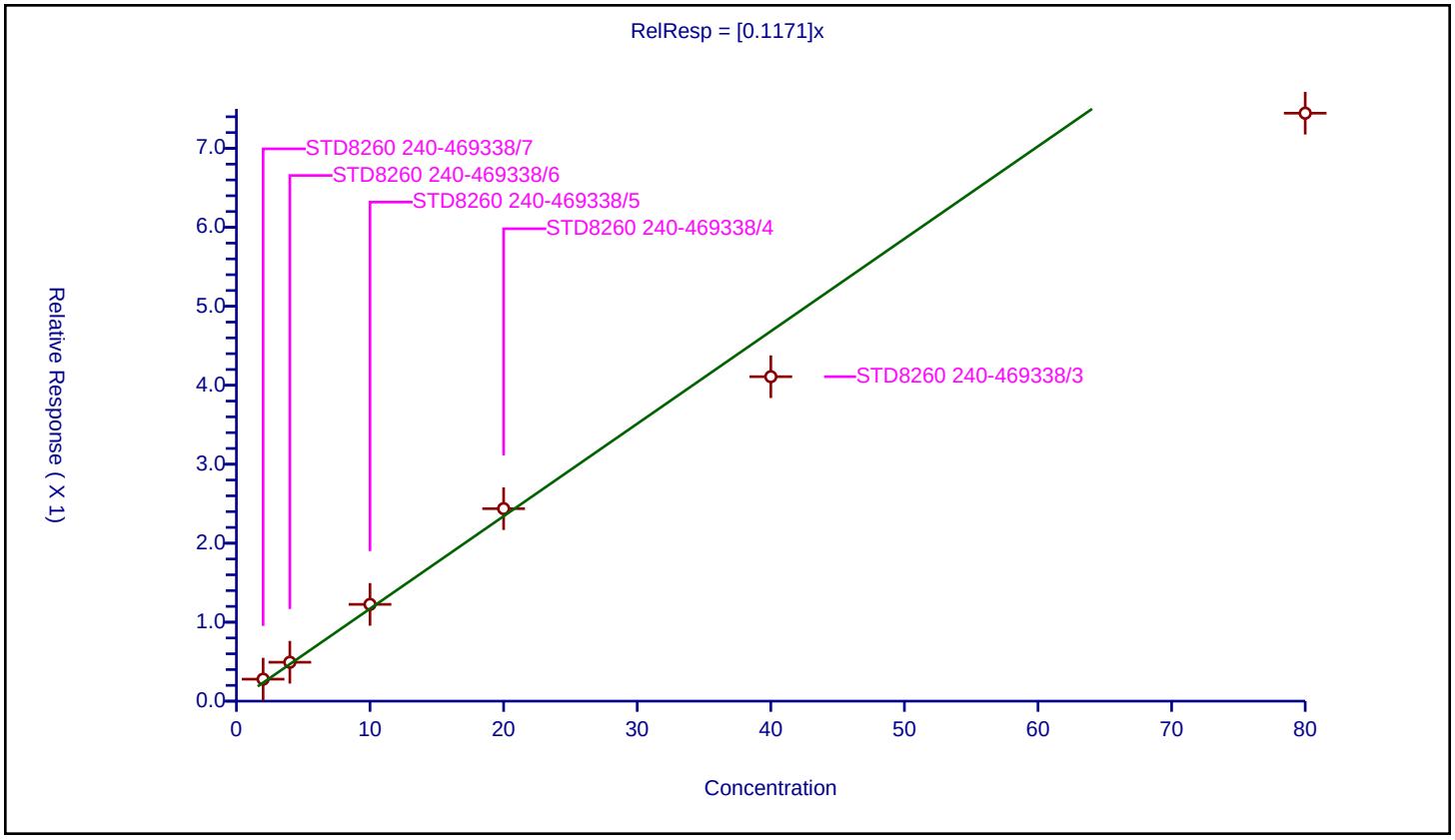
Curve Coefficients

Intercept:	0
Slope:	0.1171

Error Coefficients

Standard Error:	270000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.278557	20.0	1237666.0	0.139278	Y
2	STD8260 240-469338/6	4.0	0.492442	20.0	1194740.0	0.12311	Y
3	STD8260 240-469338/5	10.0	1.225426	20.0	1222644.0	0.122543	Y
4	STD8260 240-469338/4	20.0	2.437614	20.0	1164516.0	0.121881	Y
5	STD8260 240-469338/3	40.0	4.108836	20.0	1252890.0	0.102721	Y
6	STD8260 240-469338/2	80.0	7.445381	20.0	1401011.0	0.093067	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

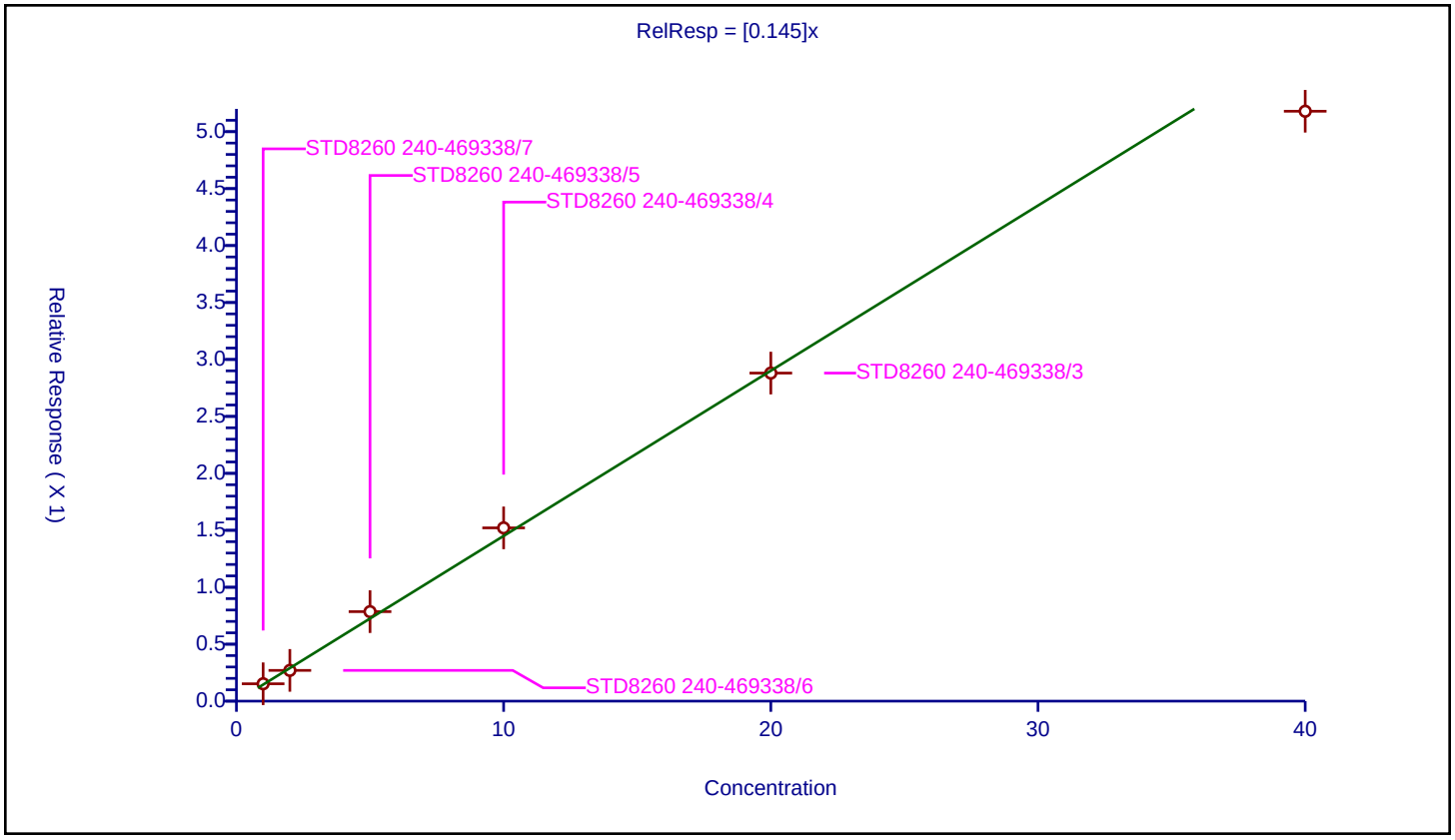
Curve Coefficients

Intercept:	0
Slope:	0.145

Error Coefficients

Standard Error:	187000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.152513	20.0	1237666.0	0.152513	Y
2	STD8260 240-469338/6	2.0	0.26995	20.0	1194740.0	0.134975	Y
3	STD8260 240-469338/5	5.0	0.785789	20.0	1222644.0	0.157158	Y
4	STD8260 240-469338/4	10.0	1.521387	20.0	1164516.0	0.152139	Y
5	STD8260 240-469338/3	20.0	2.880365	20.0	1252890.0	0.144018	Y
6	STD8260 240-469338/2	40.0	5.17936	20.0	1401011.0	0.129484	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

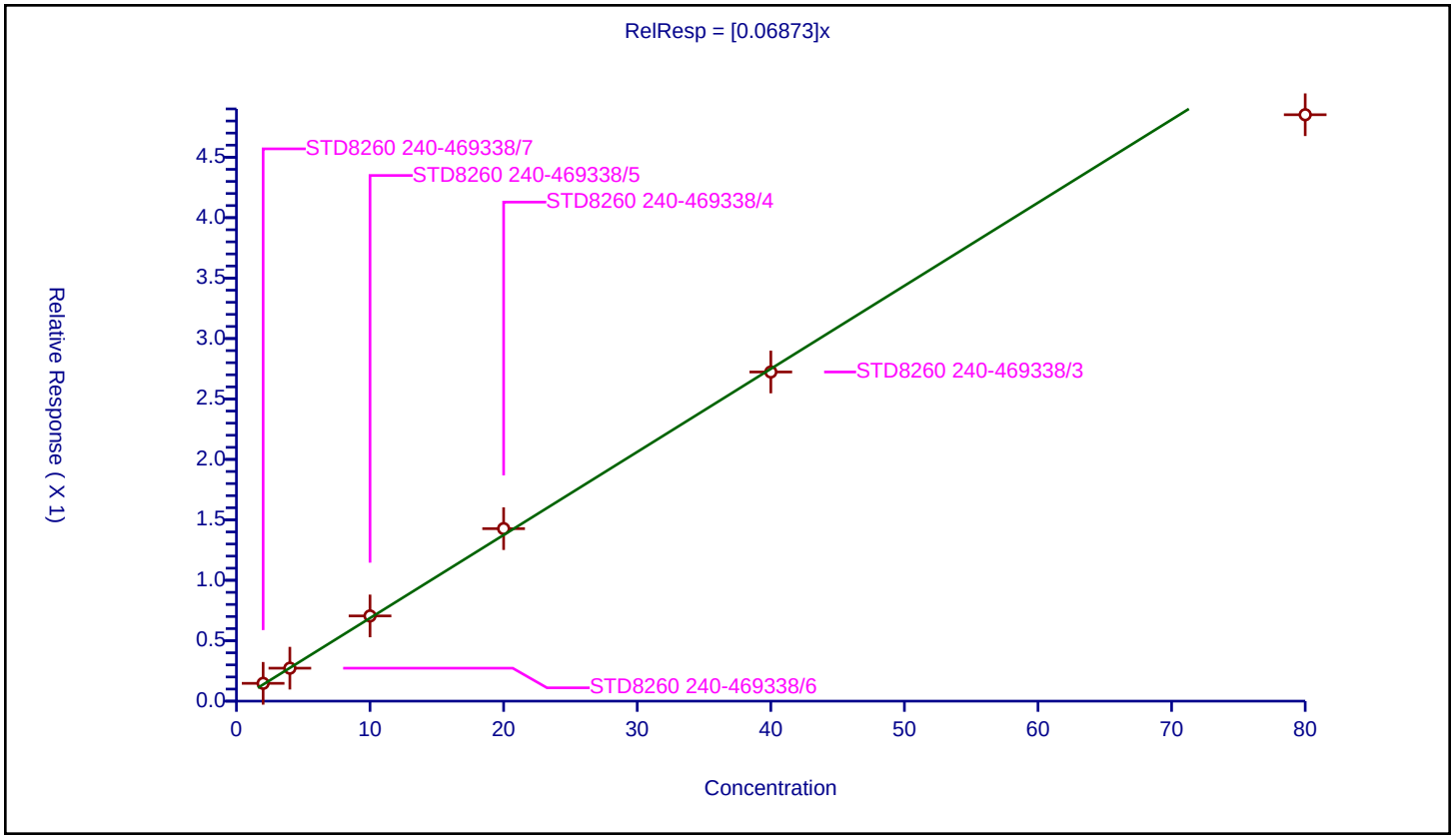
Curve Coefficients

Intercept:	0
Slope:	0.06873

Error Coefficients

Standard Error:	175000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.147277	20.0	1237666.0	0.073639	Y
2	STD8260 240-469338/6	4.0	0.272645	20.0	1194740.0	0.068161	Y
3	STD8260 240-469338/5	10.0	0.704931	20.0	1222644.0	0.070493	Y
4	STD8260 240-469338/4	20.0	1.427185	20.0	1164516.0	0.071359	Y
5	STD8260 240-469338/3	40.0	2.72324	20.0	1252890.0	0.068081	Y
6	STD8260 240-469338/2	80.0	4.851796	20.0	1401011.0	0.060647	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

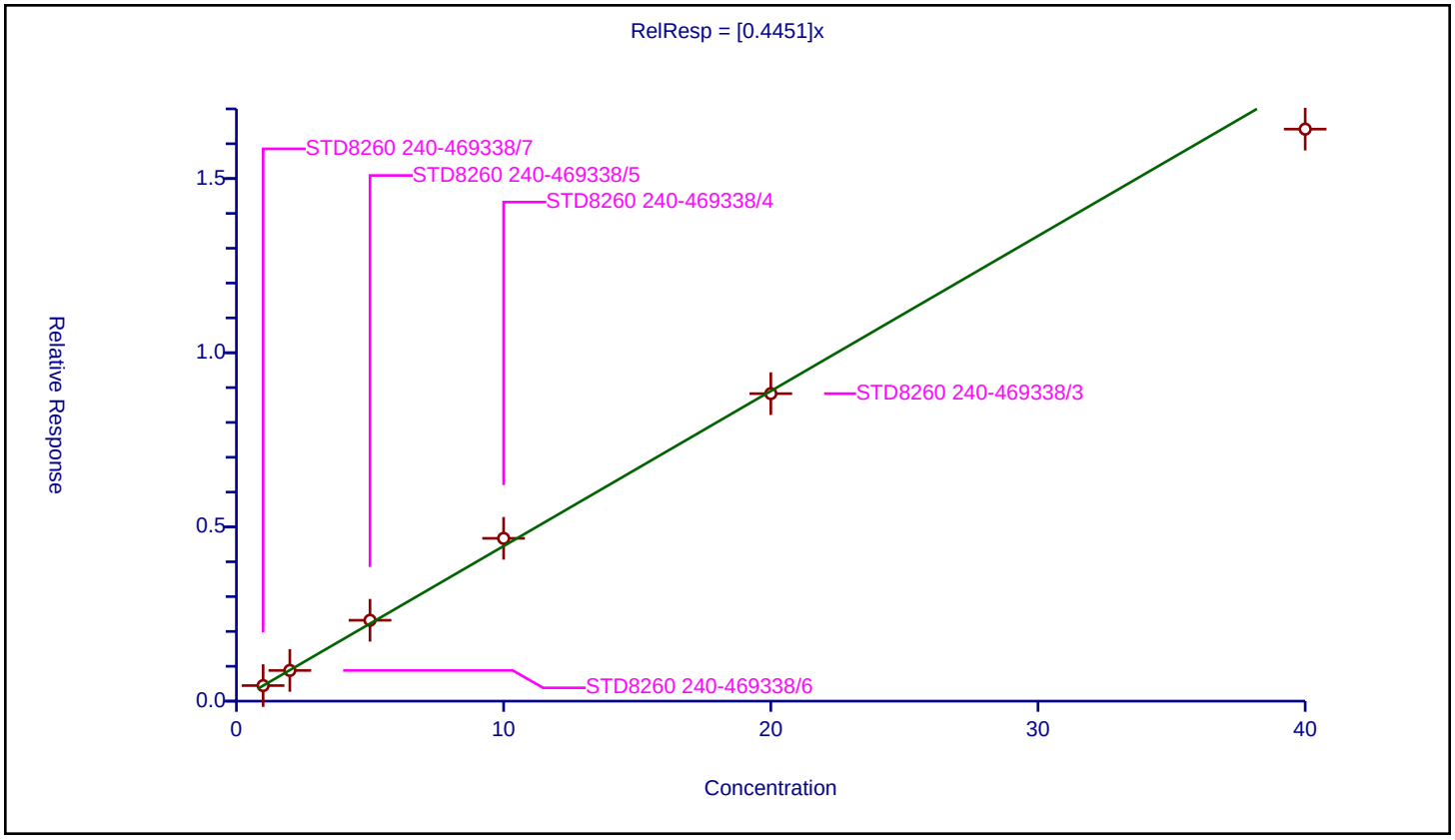
Curve Coefficients

Intercept:	0
Slope:	0.4451

Error Coefficients

Standard Error:	588000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.446469	20.0	1237666.0	0.446469	Y
2	STD8260 240-469338/6	2.0	0.881414	20.0	1194740.0	0.440707	Y
3	STD8260 240-469338/5	5.0	2.321412	20.0	1222644.0	0.464282	Y
4	STD8260 240-469338/4	10.0	4.672671	20.0	1164516.0	0.467267	Y
5	STD8260 240-469338/3	20.0	8.826856	20.0	1252890.0	0.441343	Y
6	STD8260 240-469338/2	40.0	16.418672	20.0	1401011.0	0.410467	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

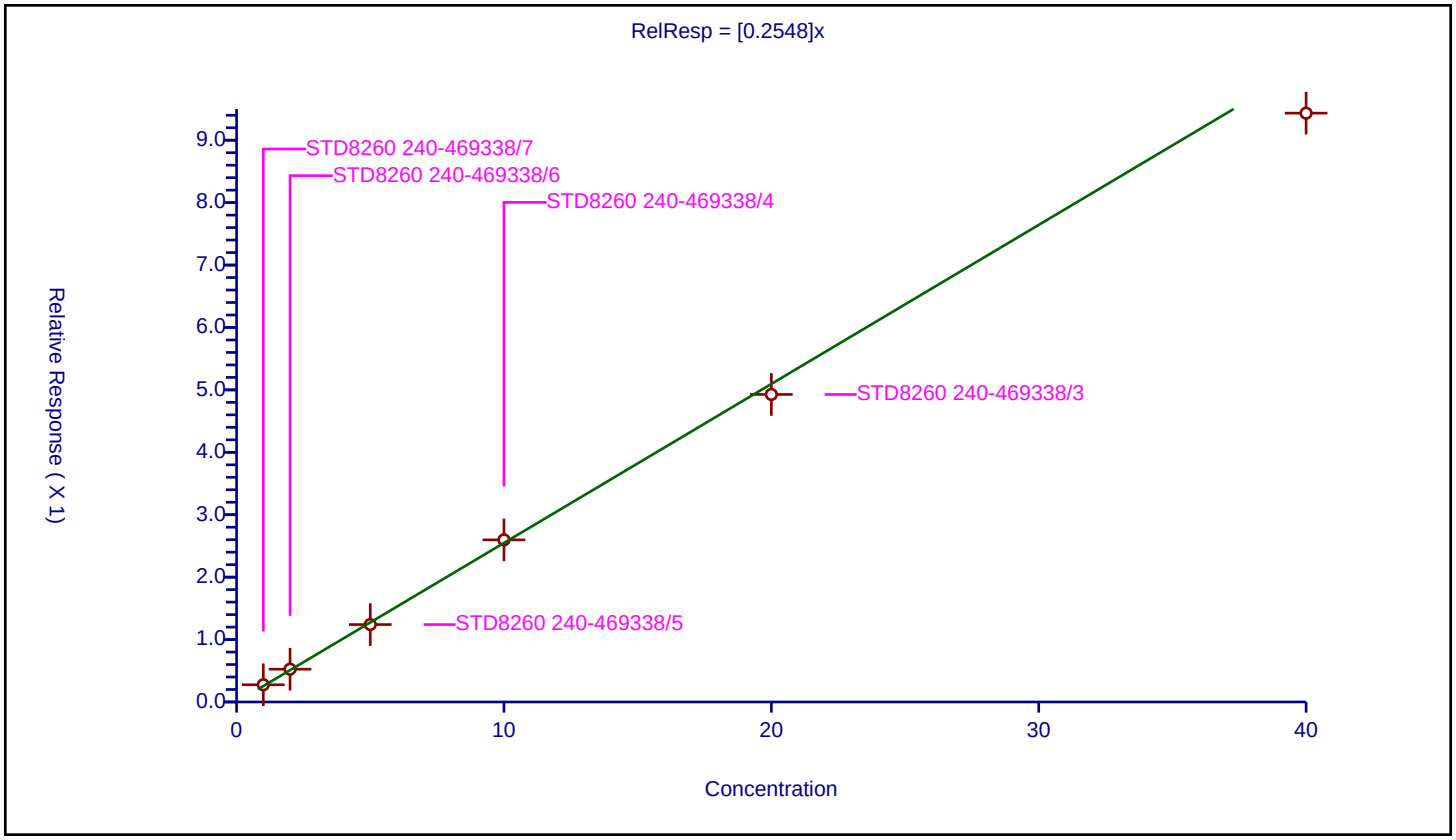
Curve Coefficients

Intercept:	0
Slope:	0.2548

Error Coefficients

Standard Error:	335000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.275939	20.0	1237666.0	0.275939	Y
2	STD8260 240-469338/6	2.0	0.525319	20.0	1194740.0	0.26266	Y
3	STD8260 240-469338/5	5.0	1.240655	20.0	1222644.0	0.248131	Y
4	STD8260 240-469338/4	10.0	2.597285	20.0	1164516.0	0.259729	Y
5	STD8260 240-469338/3	20.0	4.927073	20.0	1252890.0	0.246354	Y
6	STD8260 240-469338/2	40.0	9.433787	20.0	1401011.0	0.235845	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

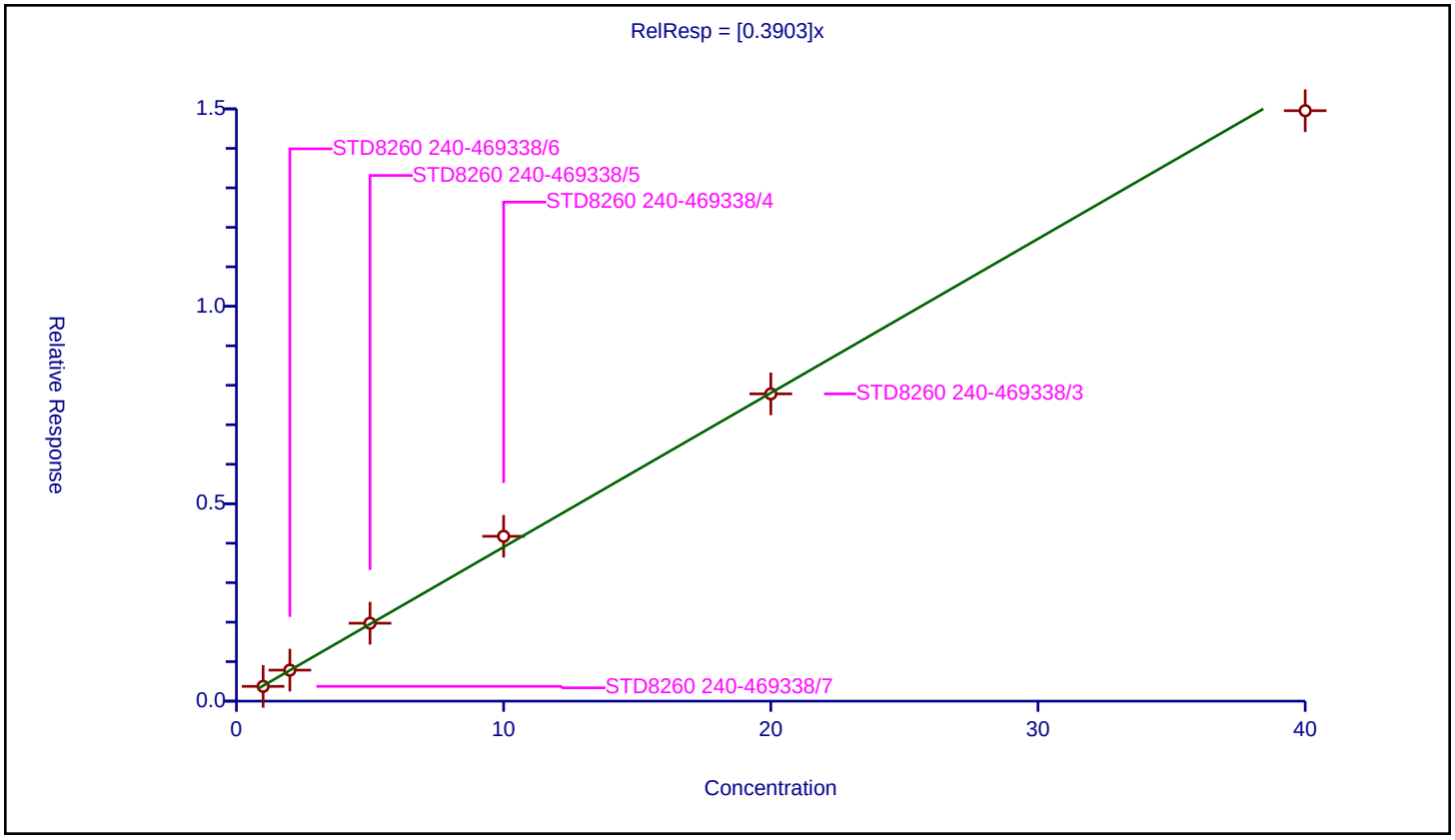
Curve Coefficients

Intercept:	0
Slope:	0.3903

Error Coefficients

Standard Error:	531000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373768	20.0	1237666.0	0.373768	Y
2	STD8260 240-469338/6	2.0	0.78556	20.0	1194740.0	0.39278	Y
3	STD8260 240-469338/5	5.0	1.973117	20.0	1222644.0	0.394623	Y
4	STD8260 240-469338/4	10.0	4.175469	20.0	1164516.0	0.417547	Y
5	STD8260 240-469338/3	20.0	7.782774	20.0	1252890.0	0.389139	Y
6	STD8260 240-469338/2	40.0	14.954244	20.0	1401011.0	0.373856	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

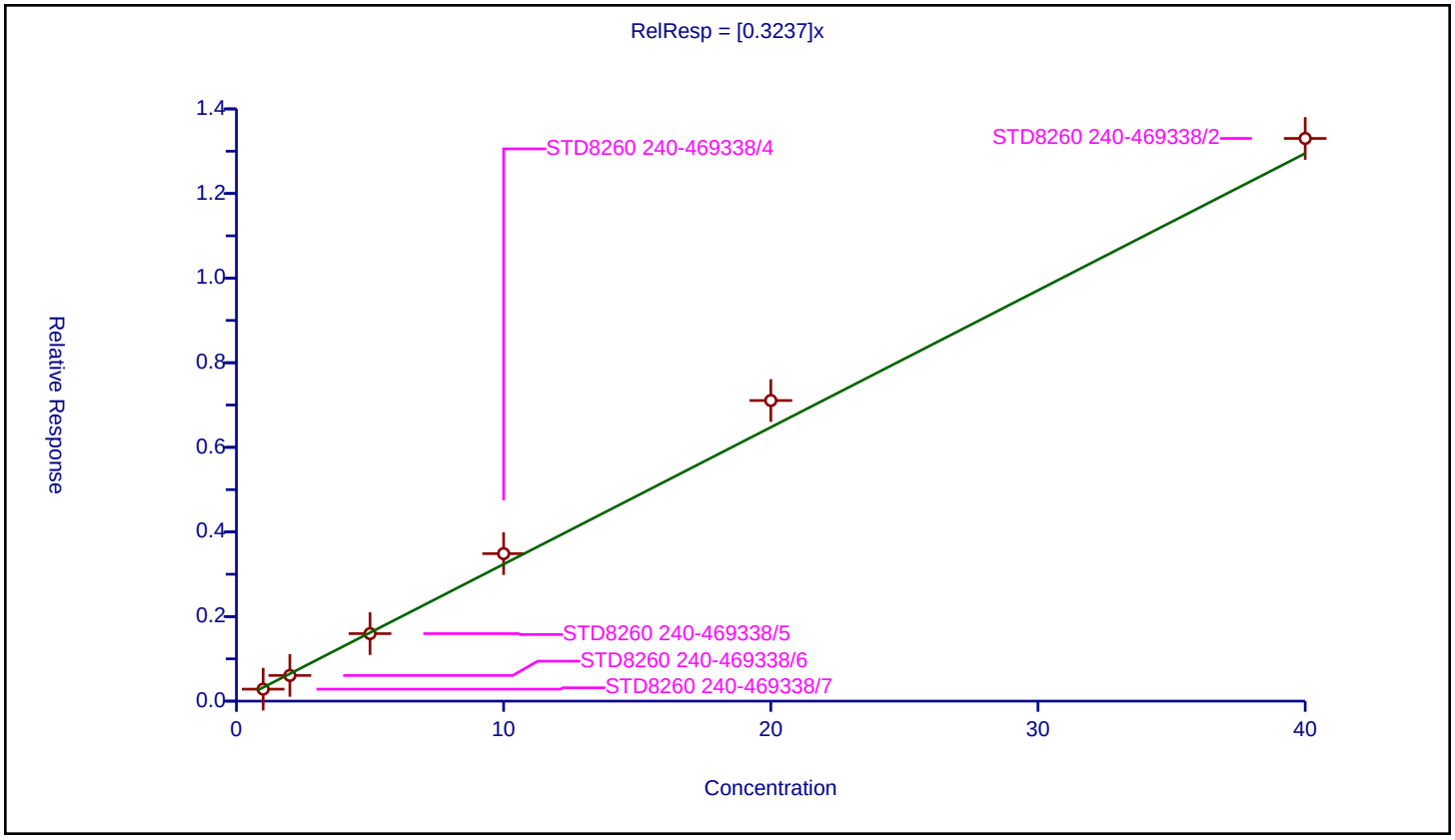
Curve Coefficients

Intercept:	0
Slope:	0.3237

Error Coefficients

Standard Error:	473000
Relative Standard Error:	8.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.282903	20.0	1237666.0	0.282903	Y
2	STD8260 240-469338/6	2.0	0.607111	20.0	1194740.0	0.303556	Y
3	STD8260 240-469338/5	5.0	1.59582	20.0	1222644.0	0.319164	Y
4	STD8260 240-469338/4	10.0	3.48677	20.0	1164516.0	0.348677	Y
5	STD8260 240-469338/3	20.0	7.106737	20.0	1252890.0	0.355337	Y
6	STD8260 240-469338/2	40.0	13.301937	20.0	1401011.0	0.332548	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

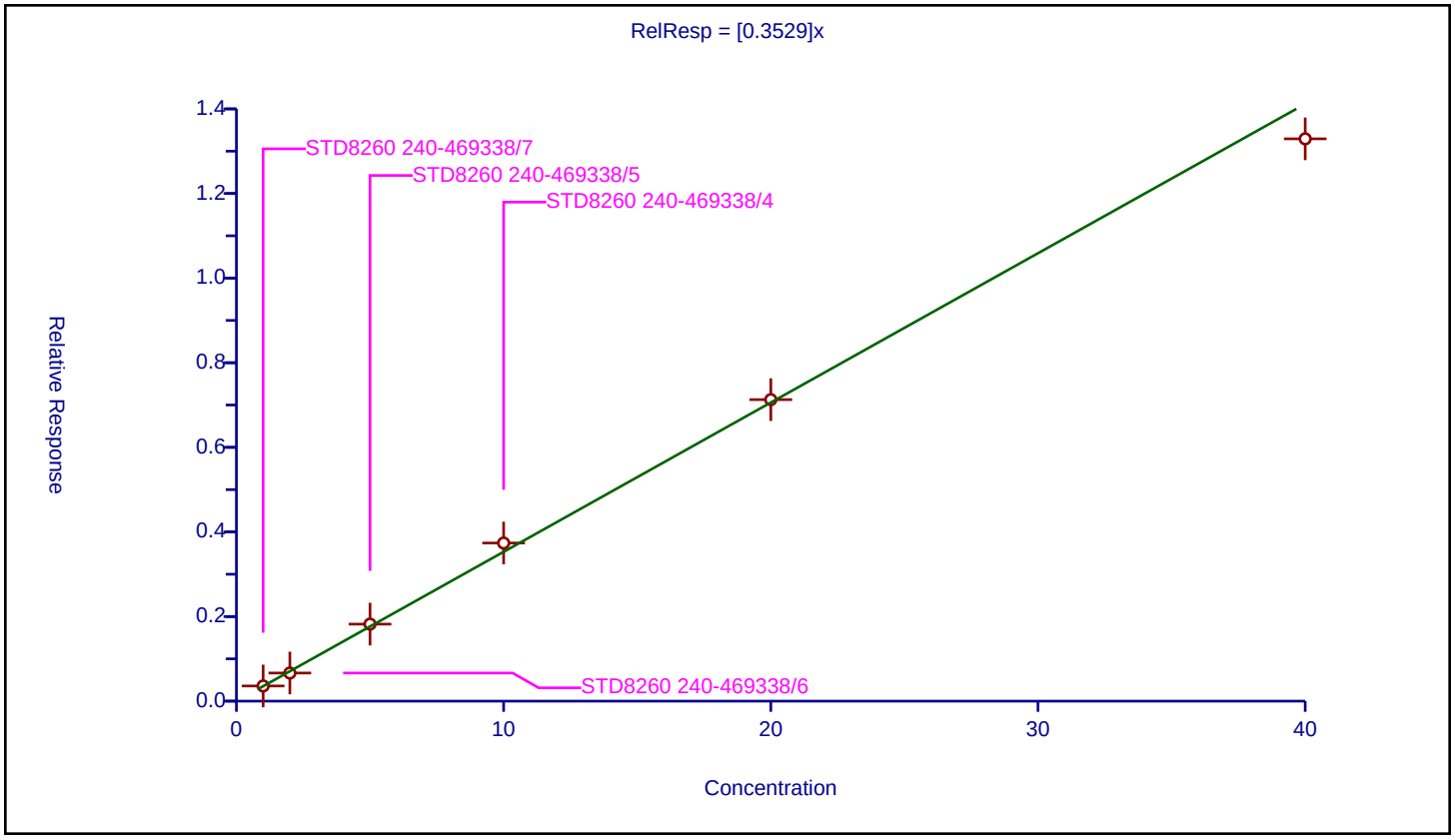
Curve Coefficients

Intercept:	0
Slope:	0.3529

Error Coefficients

Standard Error:	475000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.358724	20.0	1237666.0	0.358724	Y
2	STD8260 240-469338/6	2.0	0.664714	20.0	1194740.0	0.332357	Y
3	STD8260 240-469338/5	5.0	1.820726	20.0	1222644.0	0.364145	Y
4	STD8260 240-469338/4	10.0	3.737329	20.0	1164516.0	0.373733	Y
5	STD8260 240-469338/3	20.0	7.127122	20.0	1252890.0	0.356356	Y
6	STD8260 240-469338/2	40.0	13.292101	20.0	1401011.0	0.332303	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

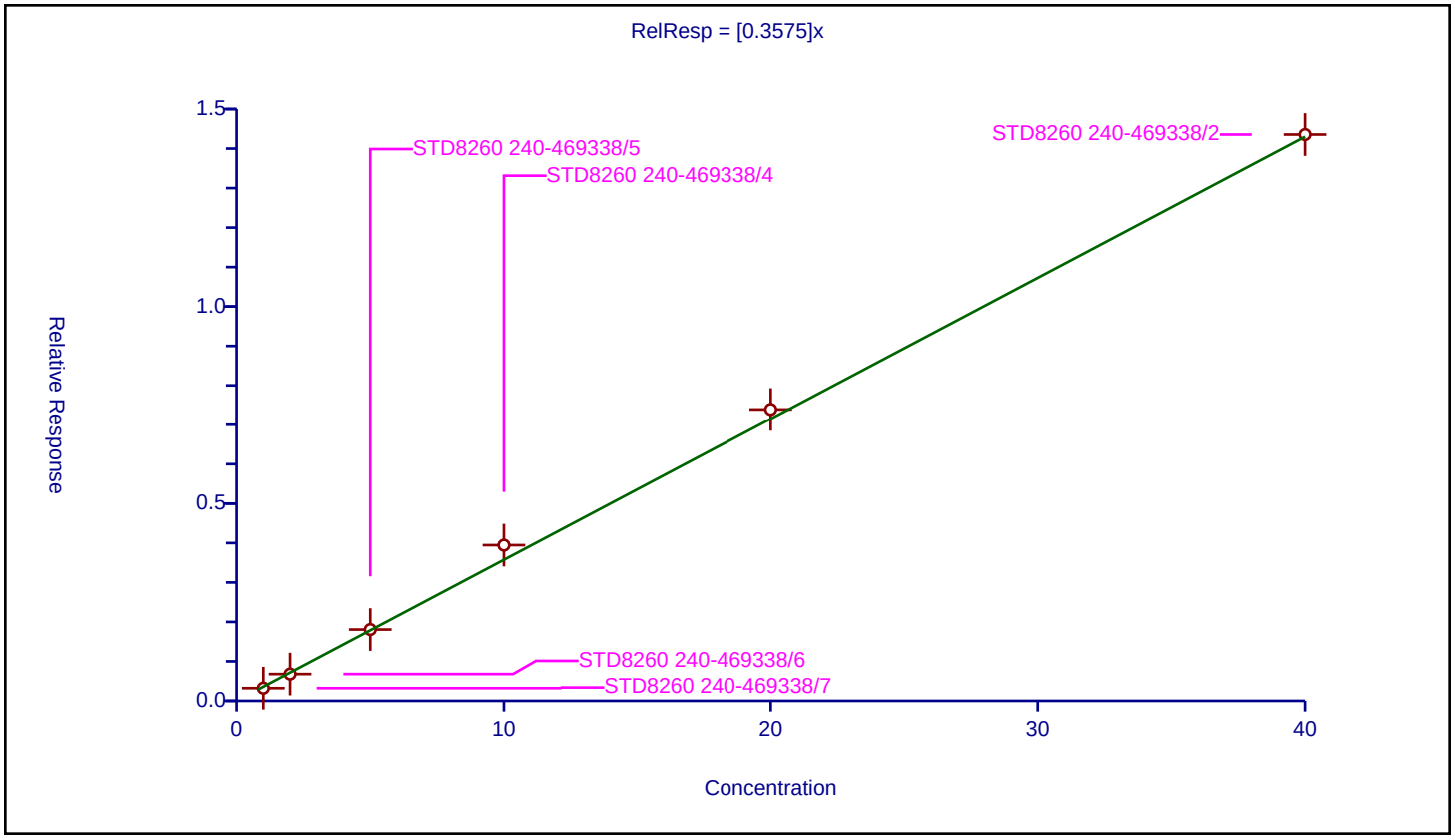
Curve Coefficients

Intercept:	0
Slope:	0.3575

Error Coefficients

Standard Error:	508000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.321379	20.0	1237666.0	0.321379	Y
2	STD8260 240-469338/6	2.0	0.678591	20.0	1194740.0	0.339296	Y
3	STD8260 240-469338/5	5.0	1.807067	20.0	1222644.0	0.361413	Y
4	STD8260 240-469338/4	10.0	3.946395	20.0	1164516.0	0.394639	Y
5	STD8260 240-469338/3	20.0	7.388757	20.0	1252890.0	0.369438	Y
6	STD8260 240-469338/2	40.0	14.35589	20.0	1401011.0	0.358897	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

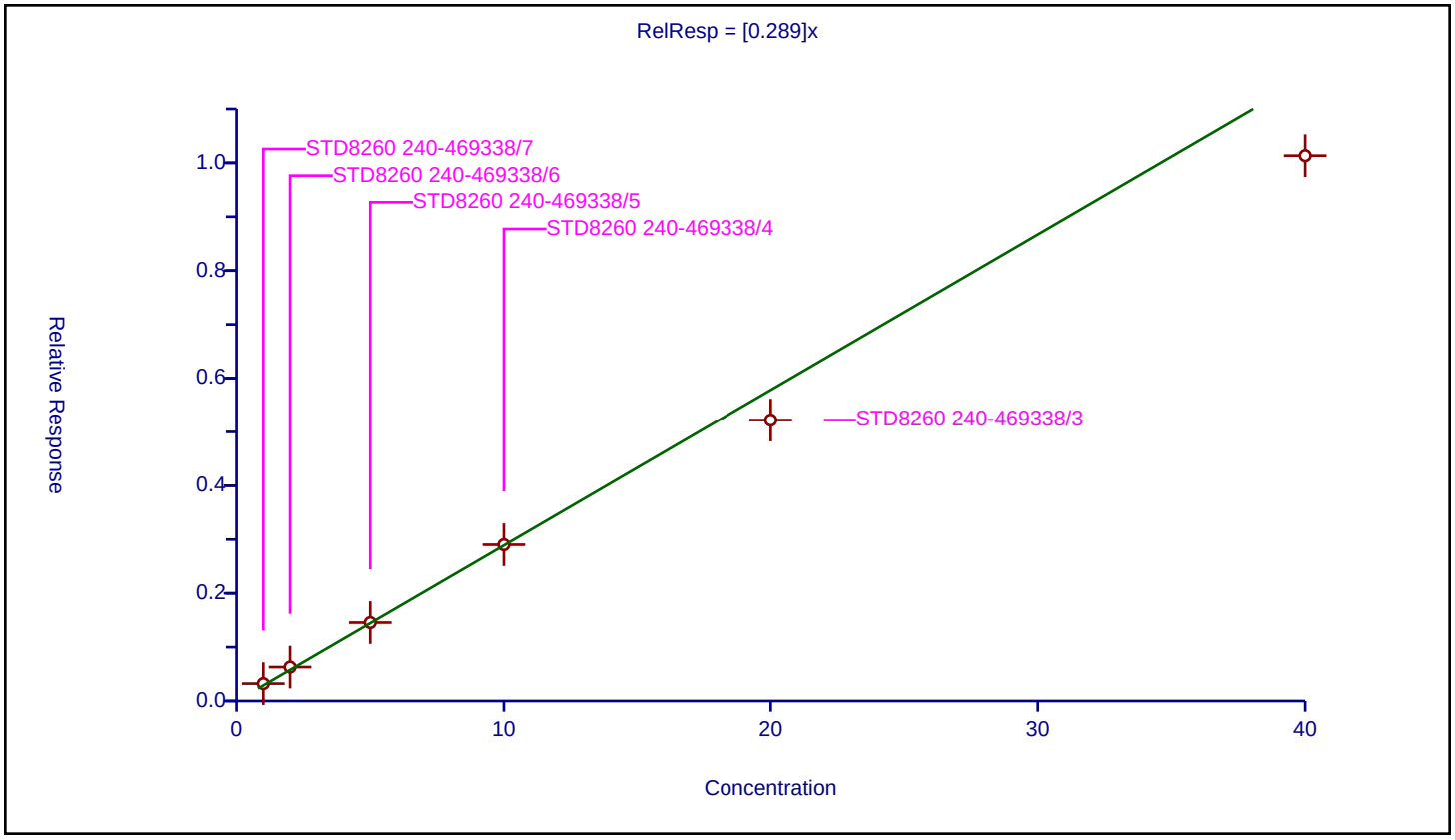
Curve Coefficients

Intercept:	0
Slope:	0.289

Error Coefficients

Standard Error:	360000
Relative Standard Error:	9.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.323011	20.0	1237666.0	0.323011	Y
2	STD8260 240-469338/6	2.0	0.630212	20.0	1194740.0	0.315106	Y
3	STD8260 240-469338/5	5.0	1.456434	20.0	1222644.0	0.291287	Y
4	STD8260 240-469338/4	10.0	2.903713	20.0	1164516.0	0.290371	Y
5	STD8260 240-469338/3	20.0	5.220363	20.0	1252890.0	0.261018	Y
6	STD8260 240-469338/2	40.0	10.133953	20.0	1401011.0	0.253349	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

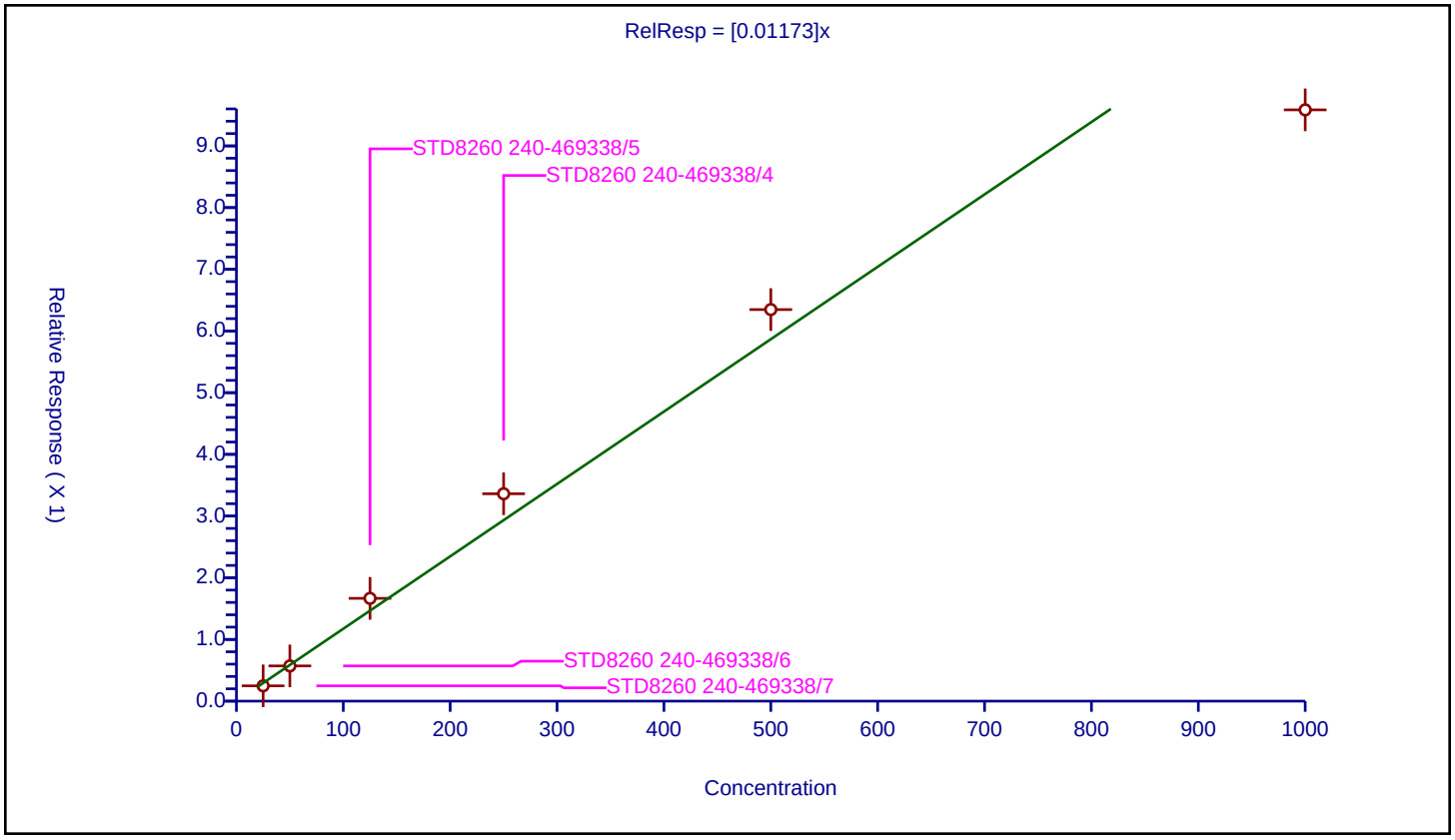
Curve Coefficients

Intercept:	0
Slope:	0.01173

Error Coefficients

Standard Error:	255000
Relative Standard Error:	14.5
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	25.0	0.248104	20.0	905264.0	0.009924	Y
2	STD8260 240-469338/6	50.0	0.571138	20.0	862909.0	0.011423	Y
3	STD8260 240-469338/5	125.0	1.666371	20.0	861537.0	0.013331	Y
4	STD8260 240-469338/4	250.0	3.361442	20.0	833065.0	0.013446	Y
5	STD8260 240-469338/3	500.0	6.34715	20.0	890220.0	0.012694	Y
6	STD8260 240-469338/2	1000.0	9.584315	20.0	979659.0	0.009584	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

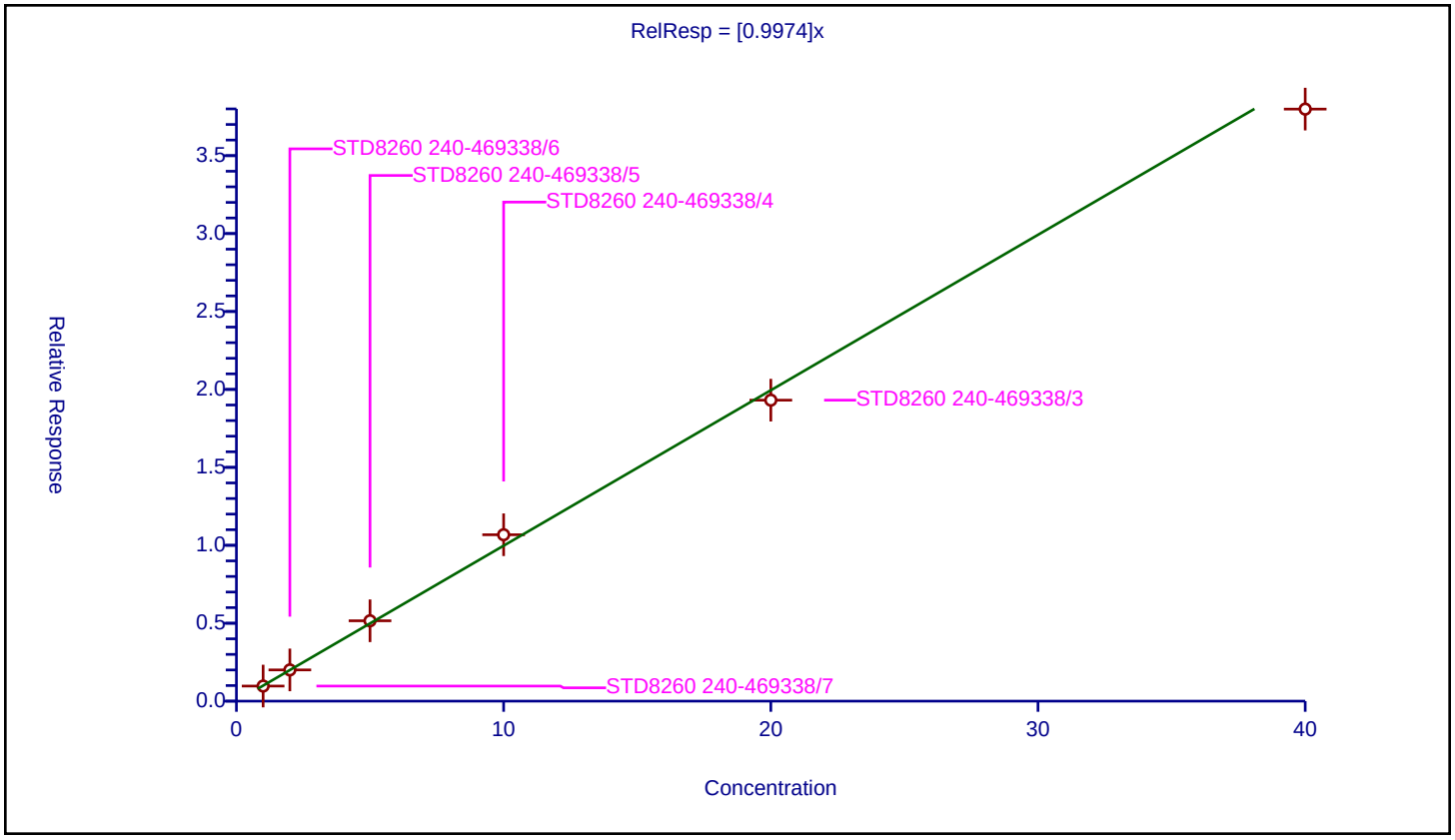
Curve Coefficients

Intercept:	0
Slope:	0.9974

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	4.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.968323	20.0	1237666.0	0.968323	Y
2	STD8260 240-469338/6	2.0	2.0037	20.0	1194740.0	1.00185	Y
3	STD8260 240-469338/5	5.0	5.156481	20.0	1222644.0	1.031296	Y
4	STD8260 240-469338/4	10.0	10.676453	20.0	1164516.0	1.067645	Y
5	STD8260 240-469338/3	20.0	19.311288	20.0	1252890.0	0.965564	Y
6	STD8260 240-469338/2	40.0	37.985726	20.0	1401011.0	0.949643	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

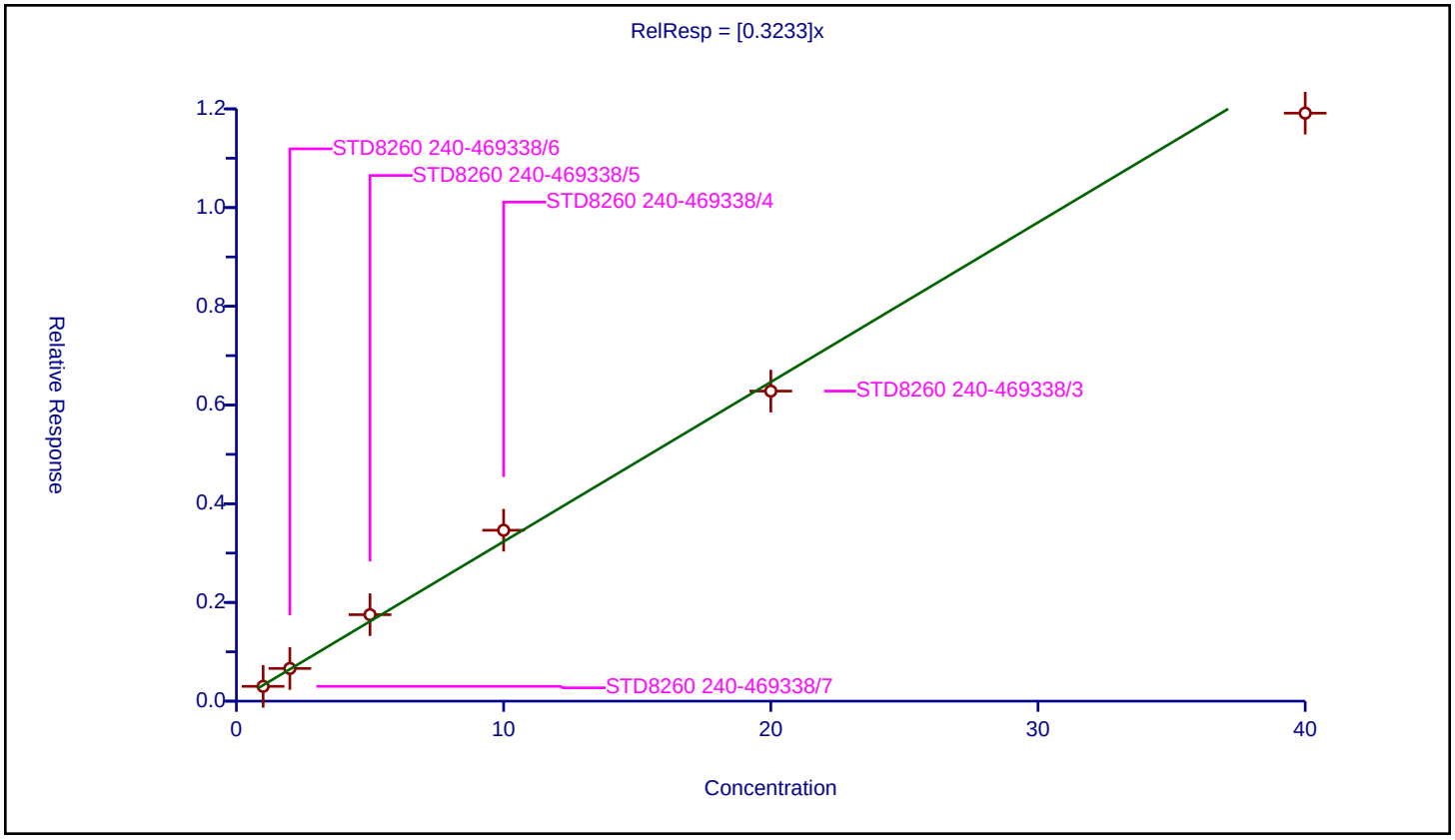
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	426000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299968	20.0	1237666.0	0.299968	Y
2	STD8260 240-469338/6	2.0	0.662437	20.0	1194740.0	0.331219	Y
3	STD8260 240-469338/5	5.0	1.751761	20.0	1222644.0	0.350352	Y
4	STD8260 240-469338/4	10.0	3.462898	20.0	1164516.0	0.34629	Y
5	STD8260 240-469338/3	20.0	6.282499	20.0	1252890.0	0.314125	Y
6	STD8260 240-469338/2	40.0	11.913854	20.0	1401011.0	0.297846	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

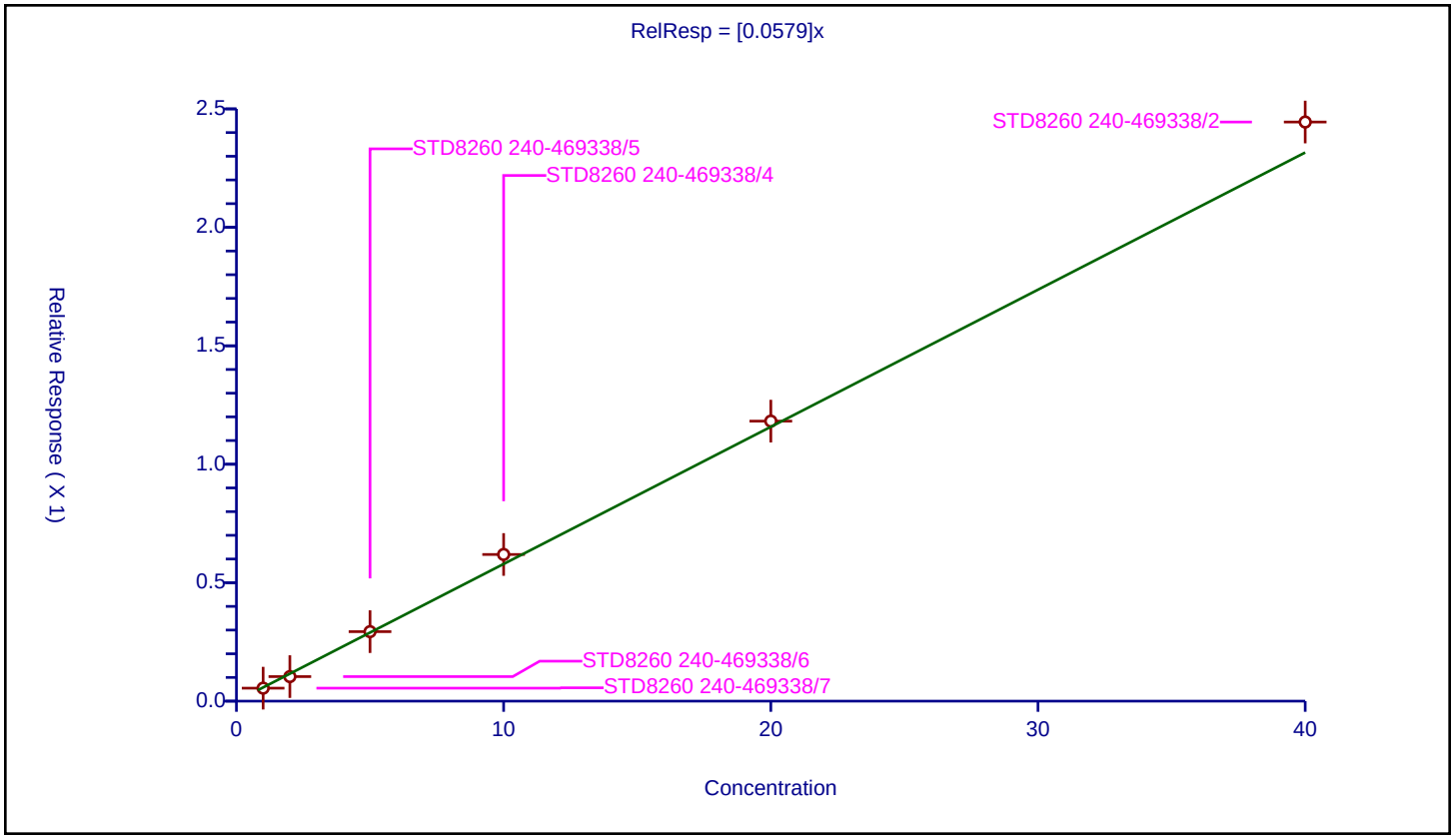
Curve Coefficients

Intercept:	0
Slope:	0.0579

Error Coefficients

Standard Error:	85400
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.054797	20.0	1237666.0	0.054797	Y
2	STD8260 240-469338/6	2.0	0.103571	20.0	1194740.0	0.051785	Y
3	STD8260 240-469338/5	5.0	0.293381	20.0	1222644.0	0.058676	Y
4	STD8260 240-469338/4	10.0	0.619038	20.0	1164516.0	0.061904	Y
5	STD8260 240-469338/3	20.0	1.181971	20.0	1252890.0	0.059099	Y
6	STD8260 240-469338/2	40.0	2.444606	20.0	1401011.0	0.061115	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

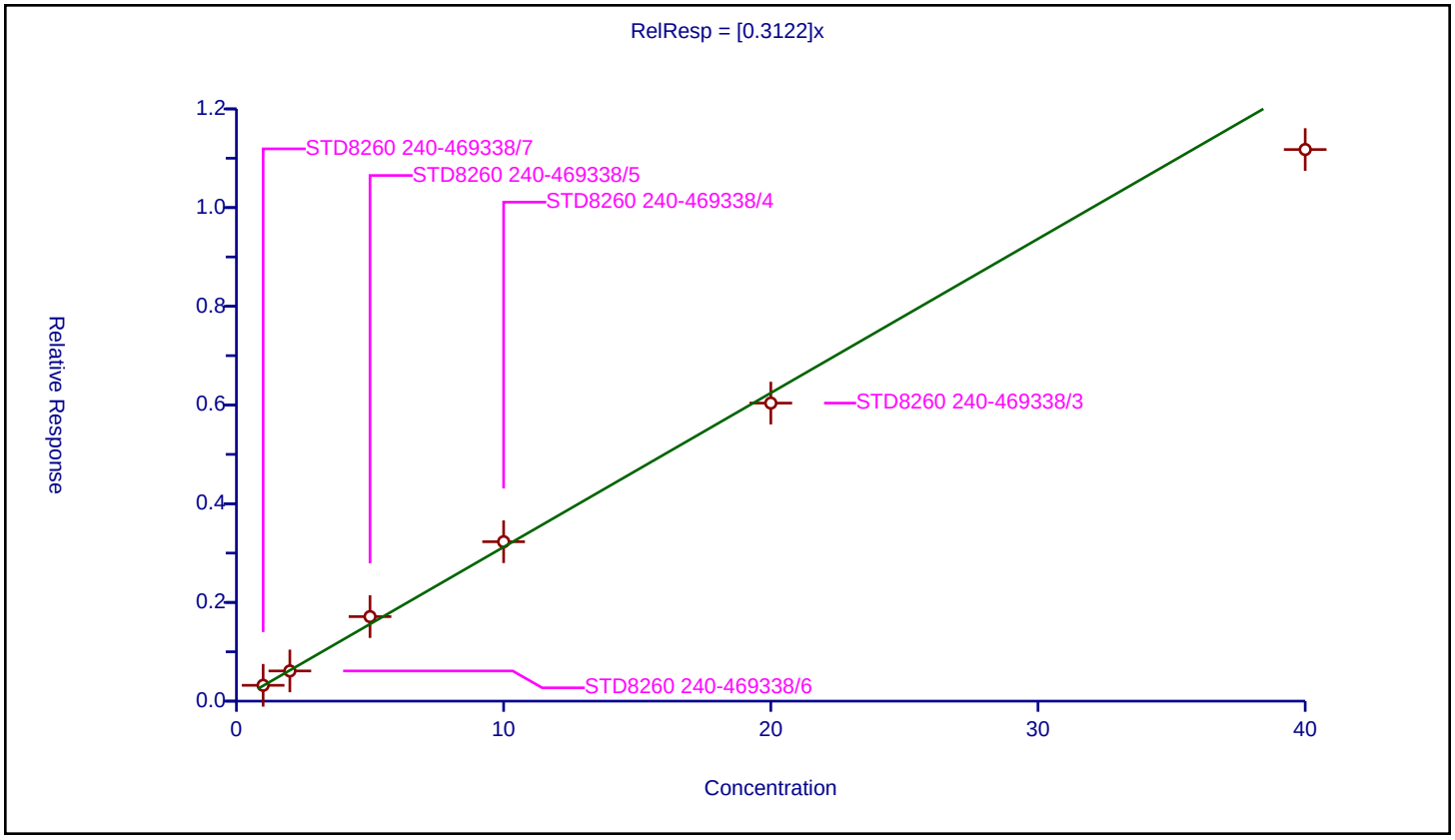
Curve Coefficients

Intercept:	0
Slope:	0.3122

Error Coefficients

Standard Error:	401000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.320652	20.0	1237666.0	0.320652	Y
2	STD8260 240-469338/6	2.0	0.611698	20.0	1194740.0	0.305849	Y
3	STD8260 240-469338/5	5.0	1.712322	20.0	1222644.0	0.342464	Y
4	STD8260 240-469338/4	10.0	3.230338	20.0	1164516.0	0.323034	Y
5	STD8260 240-469338/3	20.0	6.038726	20.0	1252890.0	0.301936	Y
6	STD8260 240-469338/2	40.0	11.1767	20.0	1401011.0	0.279418	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

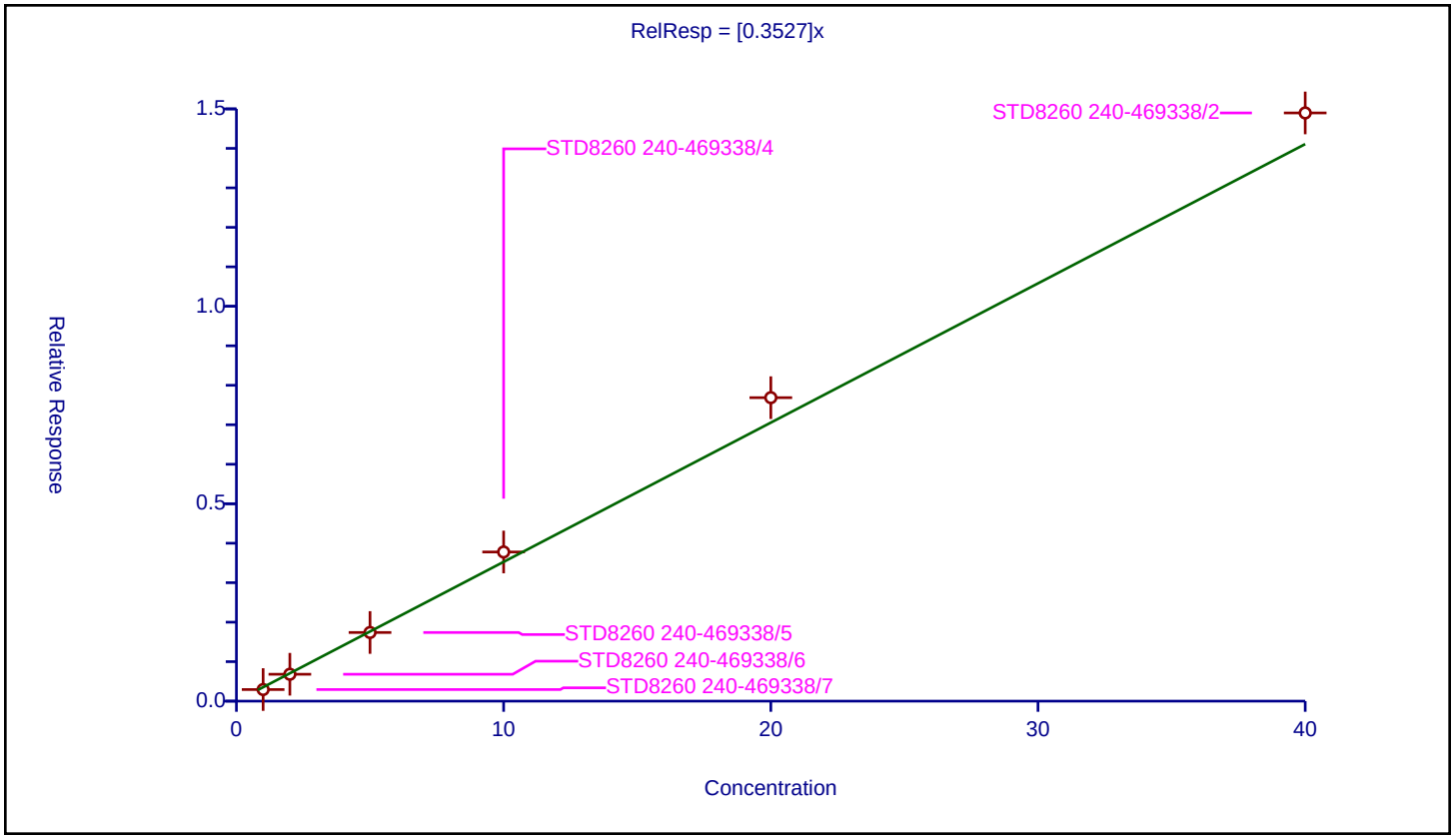
Curve Coefficients

Intercept:	0
Slope:	0.3527

Error Coefficients

Standard Error:	526000
Relative Standard Error:	9.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.293439	20.0	1237666.0	0.293439	Y
2	STD8260 240-469338/6	2.0	0.681119	20.0	1194740.0	0.340559	Y
3	STD8260 240-469338/5	5.0	1.738593	20.0	1222644.0	0.347719	Y
4	STD8260 240-469338/4	10.0	3.77769	20.0	1164516.0	0.377769	Y
5	STD8260 240-469338/3	20.0	7.686038	20.0	1252890.0	0.384302	Y
6	STD8260 240-469338/2	40.0	14.897128	20.0	1401011.0	0.372428	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

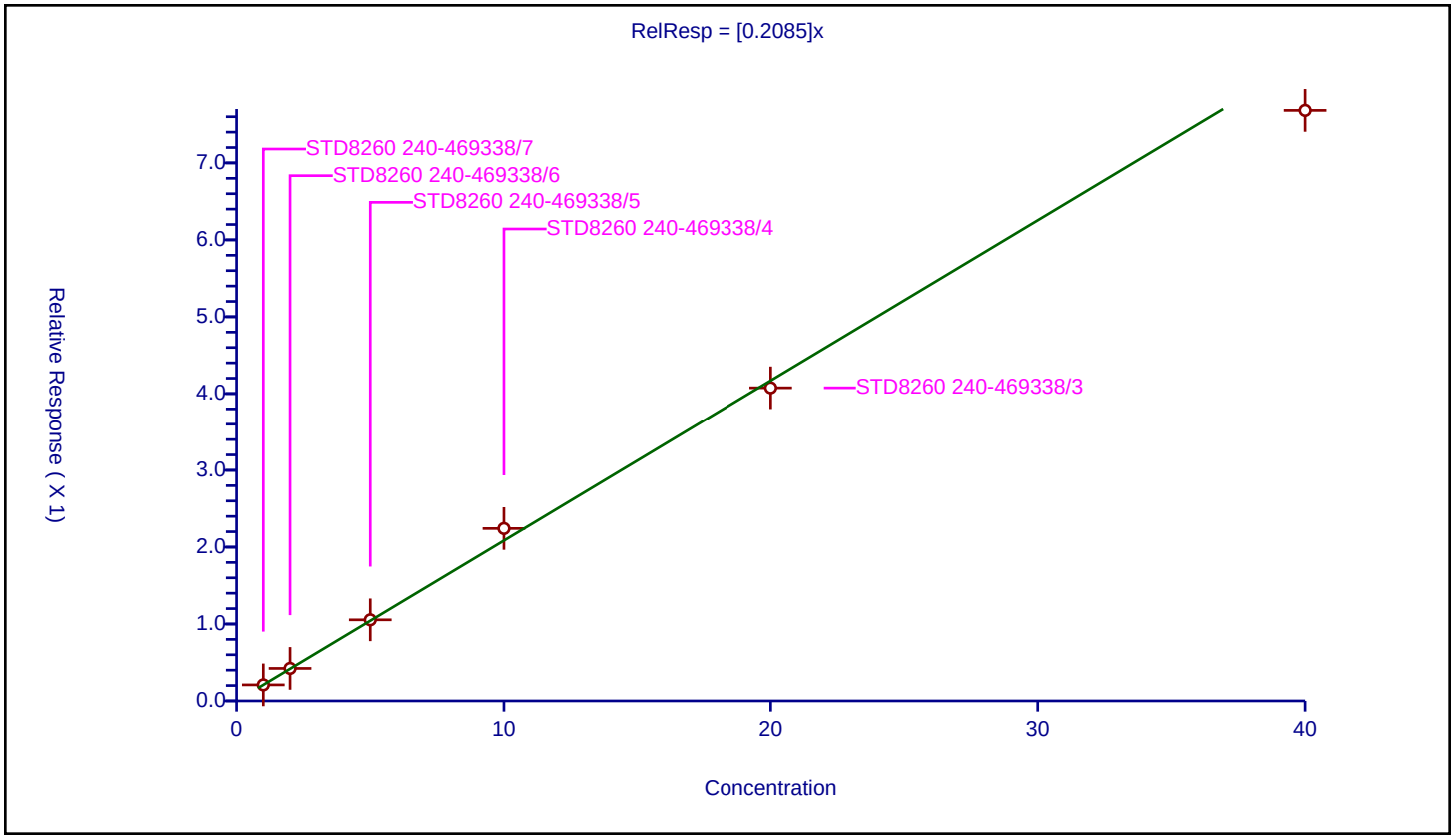
Curve Coefficients

Intercept:	0
Slope:	0.2085

Error Coefficients

Standard Error:	275000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.208602	20.0	1237666.0	0.208602	Y
2	STD8260 240-469338/6	2.0	0.422636	20.0	1194740.0	0.211318	Y
3	STD8260 240-469338/5	5.0	1.054322	20.0	1222644.0	0.210864	Y
4	STD8260 240-469338/4	10.0	2.242082	20.0	1164516.0	0.224208	Y
5	STD8260 240-469338/3	20.0	4.075474	20.0	1252890.0	0.203774	Y
6	STD8260 240-469338/2	40.0	7.682338	20.0	1401011.0	0.192058	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

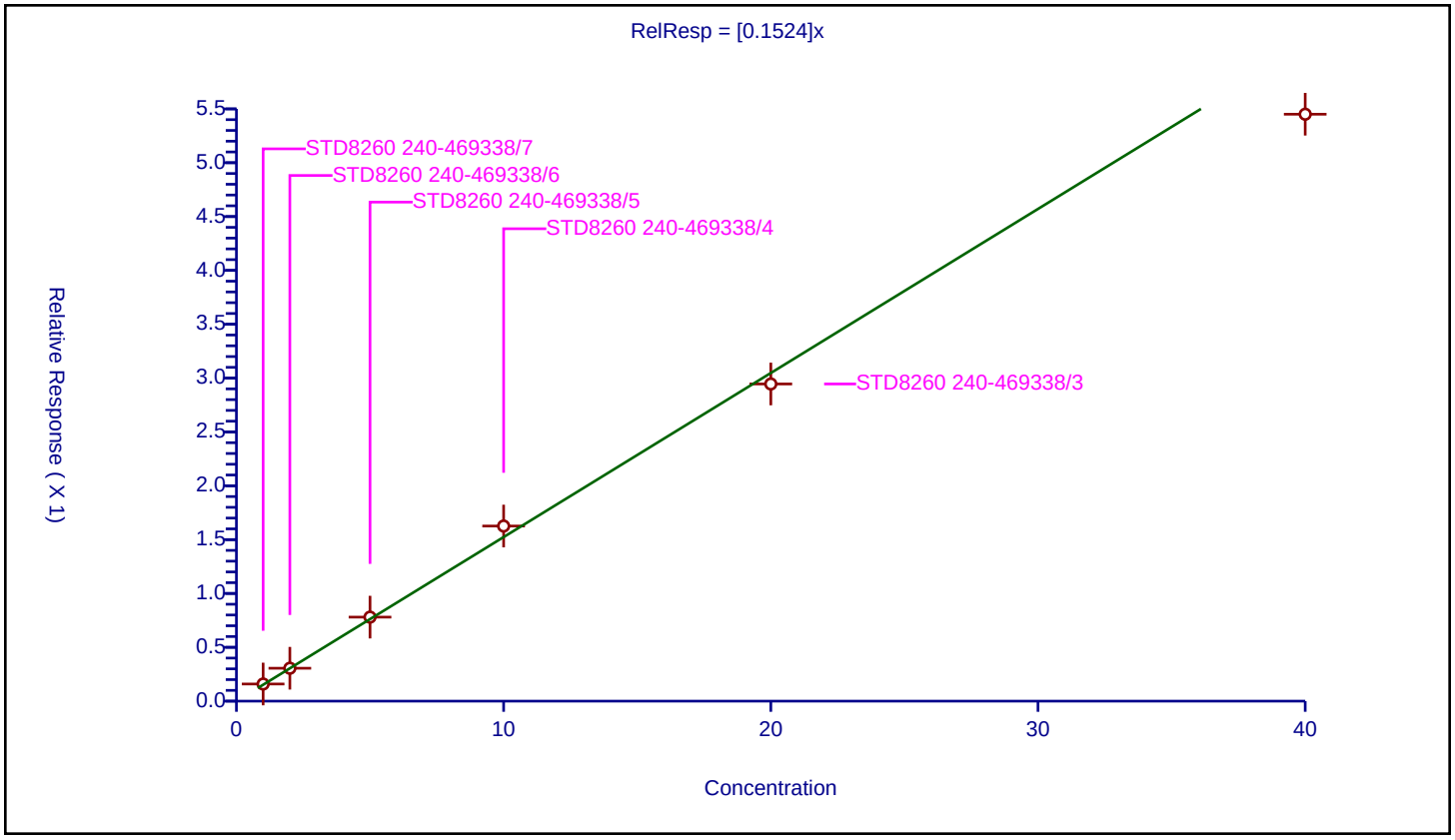
Curve Coefficients

Intercept:	0
Slope:	0.1524

Error Coefficients

Standard Error:	196000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.159106	20.0	1237666.0	0.159106	Y
2	STD8260 240-469338/6	2.0	0.305707	20.0	1194740.0	0.152853	Y
3	STD8260 240-469338/5	5.0	0.780325	20.0	1222644.0	0.156065	Y
4	STD8260 240-469338/4	10.0	1.626204	20.0	1164516.0	0.16262	Y
5	STD8260 240-469338/3	20.0	2.945526	20.0	1252890.0	0.147276	Y
6	STD8260 240-469338/2	40.0	5.45045	20.0	1401011.0	0.136261	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

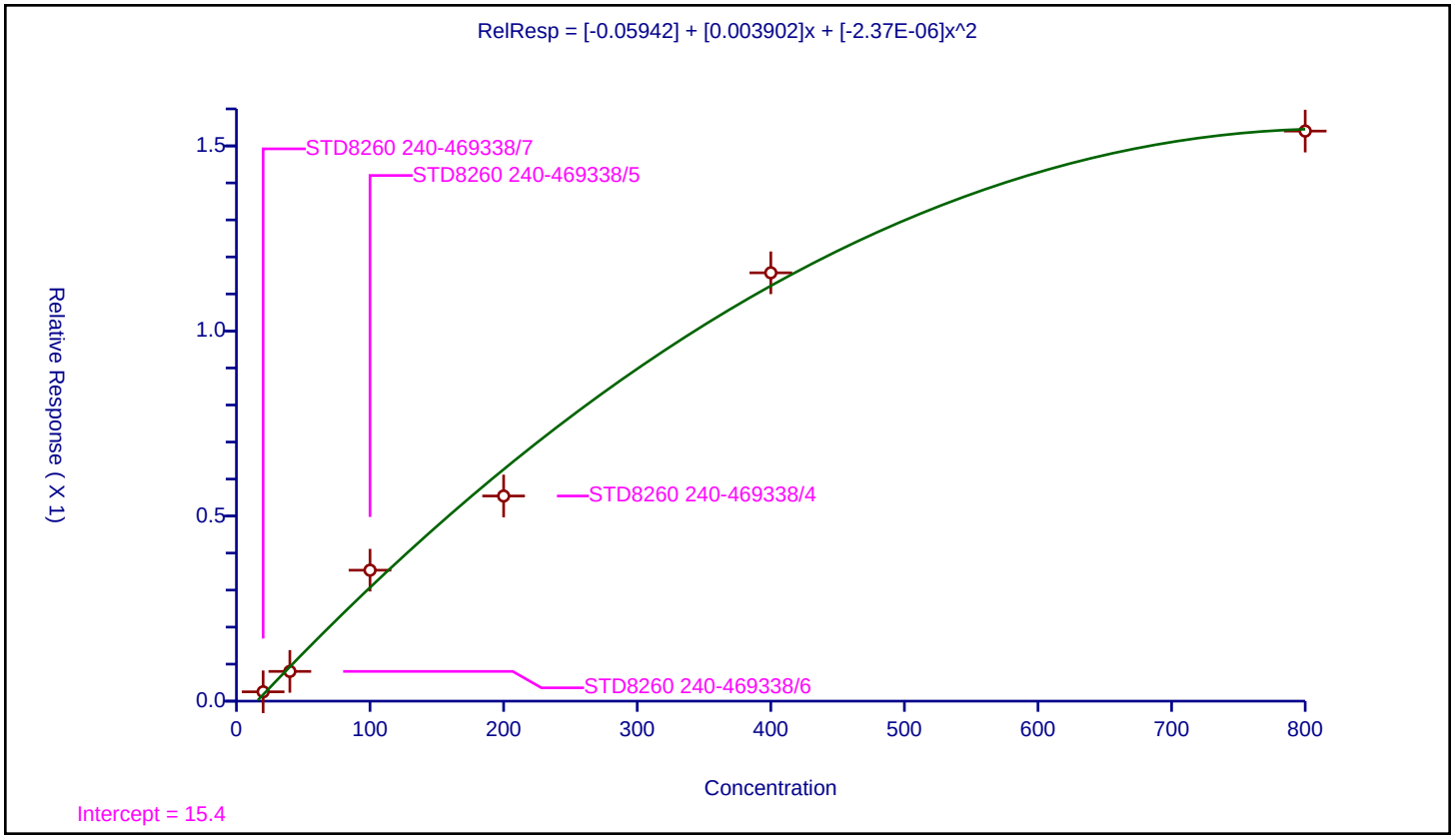
Curve Coefficients

Intercept:	-0.05942
Slope:	0.003902
Second Order:	-2.37E-06

Error Coefficients

Standard Error:	78400
Relative Standard Error:	13.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	20.0	0.025225	20.0	1237666.0	0.001261	Y
2	STD8260 240-469338/6	40.0	0.080352	20.0	1194740.0	0.002009	Y
3	STD8260 240-469338/5	100.0	0.353791	20.0	1222644.0	0.003538	Y
4	STD8260 240-469338/4	200.0	0.554204	20.0	1164516.0	0.002771	Y
5	STD8260 240-469338/3	400.0	1.157197	20.0	1252890.0	0.002893	Y
6	STD8260 240-469338/2	800.0	1.540088	20.0	1401011.0	0.001925	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

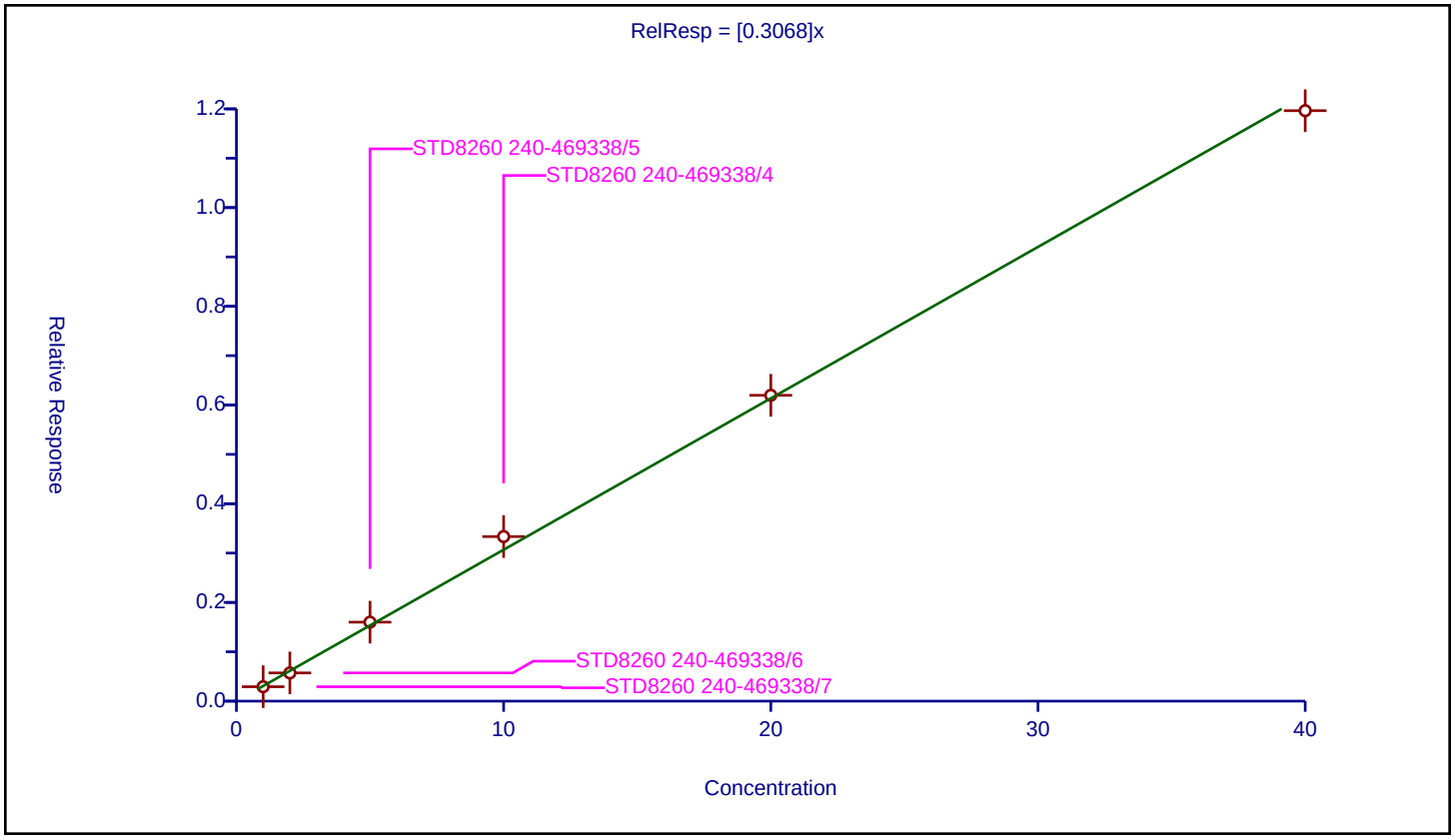
Curve Coefficients

Intercept:	0
Slope:	0.3068

Error Coefficients

Standard Error:	425000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.292373	20.0	1237666.0	0.292373	Y
2	STD8260 240-469338/6	2.0	0.571656	20.0	1194740.0	0.285828	Y
3	STD8260 240-469338/5	5.0	1.600302	20.0	1222644.0	0.32006	Y
4	STD8260 240-469338/4	10.0	3.334089	20.0	1164516.0	0.333409	Y
5	STD8260 240-469338/3	20.0	6.196905	20.0	1252890.0	0.309845	Y
6	STD8260 240-469338/2	40.0	11.963903	20.0	1401011.0	0.299098	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

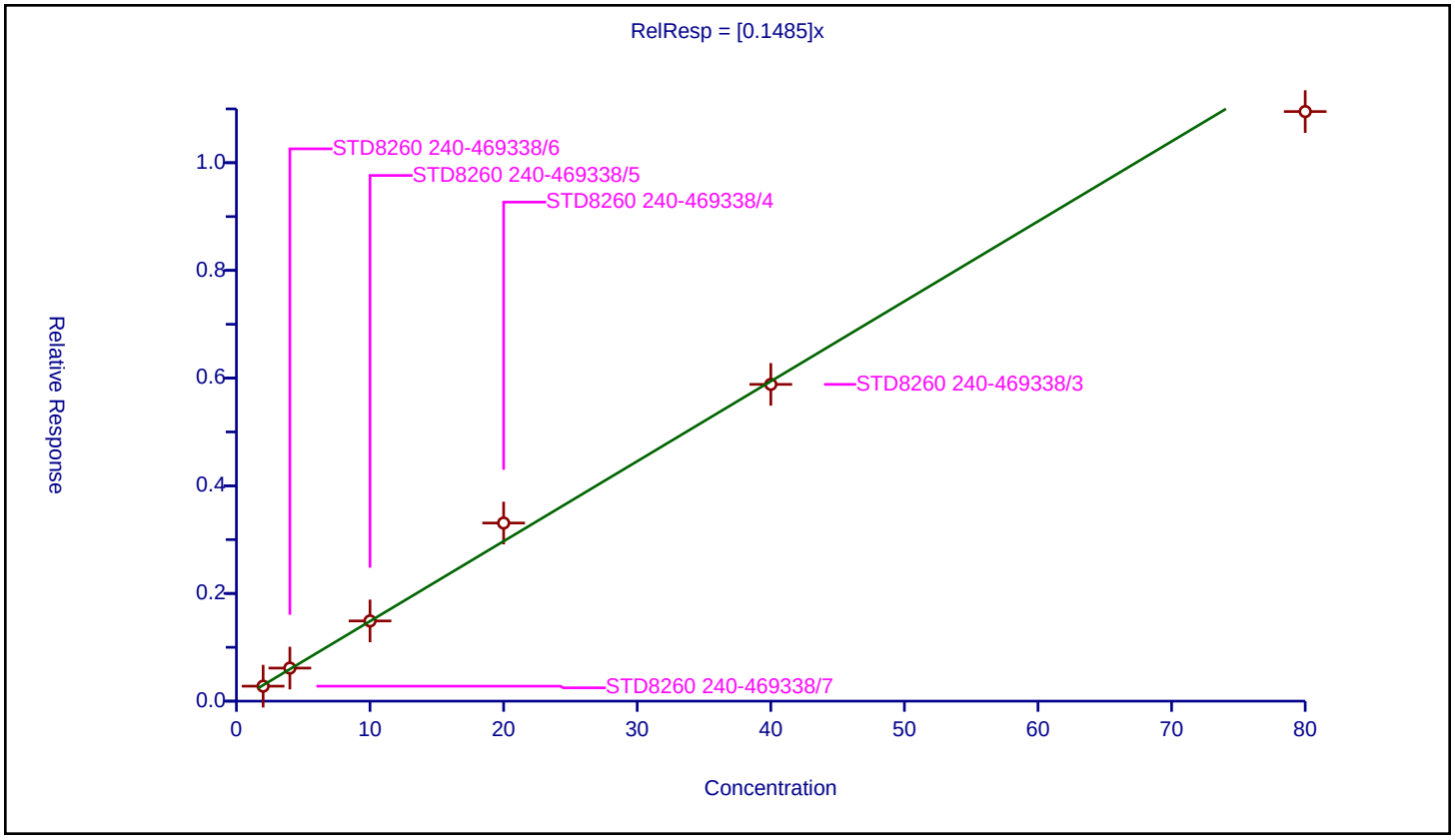
Curve Coefficients

Intercept:	0
Slope:	0.1485

Error Coefficients

Standard Error:	393000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.27833	20.0	1237666.0	0.139165	Y
2	STD8260 240-469338/6	4.0	0.614226	20.0	1194740.0	0.153556	Y
3	STD8260 240-469338/5	10.0	1.489919	20.0	1222644.0	0.148992	Y
4	STD8260 240-469338/4	20.0	3.308362	20.0	1164516.0	0.165418	Y
5	STD8260 240-469338/3	40.0	5.883406	20.0	1252890.0	0.147085	Y
6	STD8260 240-469338/2	80.0	10.950521	20.0	1401011.0	0.136882	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

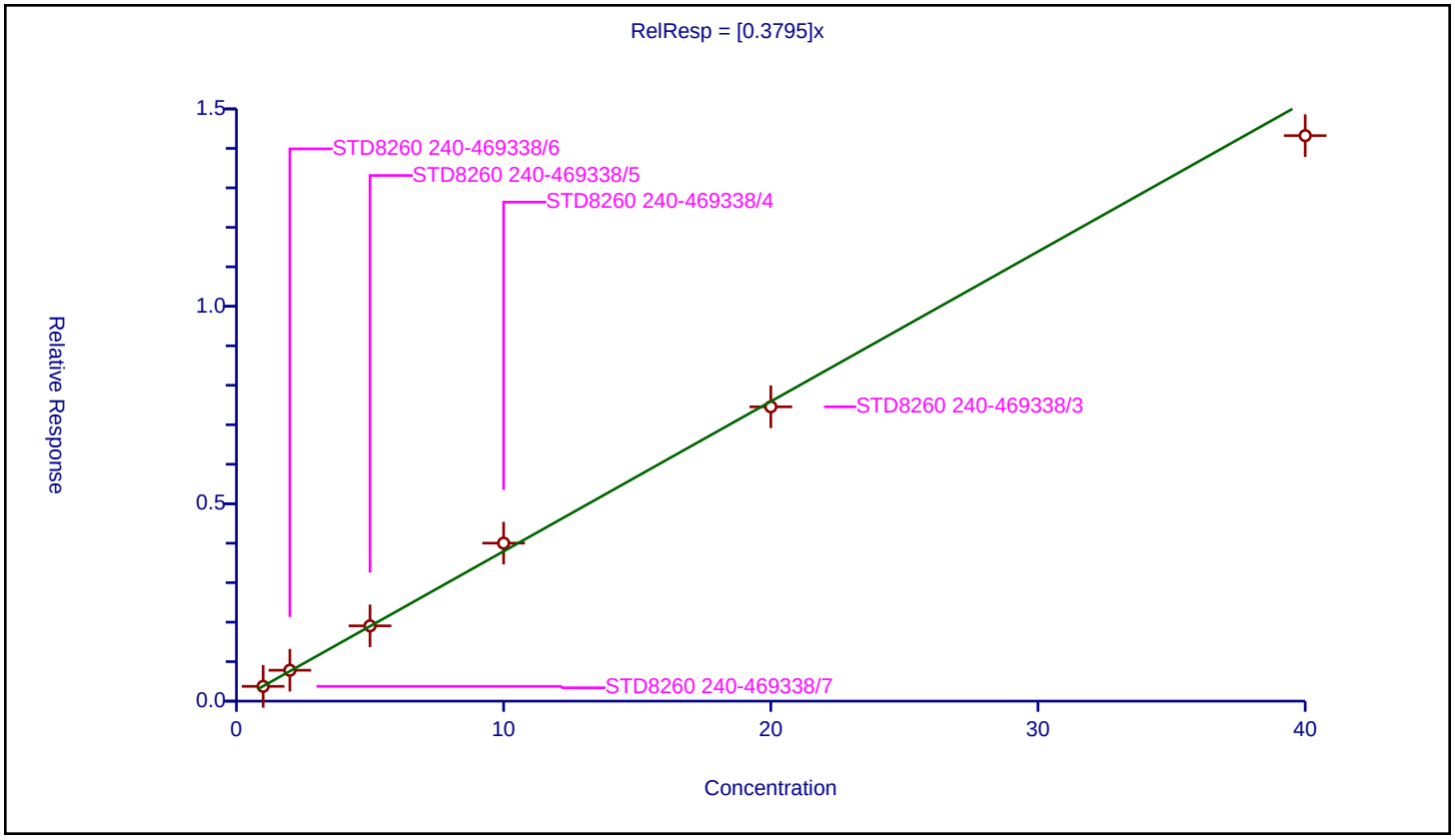
Curve Coefficients

Intercept:	0
Slope:	0.3795

Error Coefficients

Standard Error:	509000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.373752	20.0	1237666.0	0.373752	Y
2	STD8260 240-469338/6	2.0	0.782128	20.0	1194740.0	0.391064	Y
3	STD8260 240-469338/5	5.0	1.906933	20.0	1222644.0	0.381387	Y
4	STD8260 240-469338/4	10.0	4.002178	20.0	1164516.0	0.400218	Y
5	STD8260 240-469338/3	20.0	7.454797	20.0	1252890.0	0.37274	Y
6	STD8260 240-469338/2	40.0	14.3229	20.0	1401011.0	0.358072	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

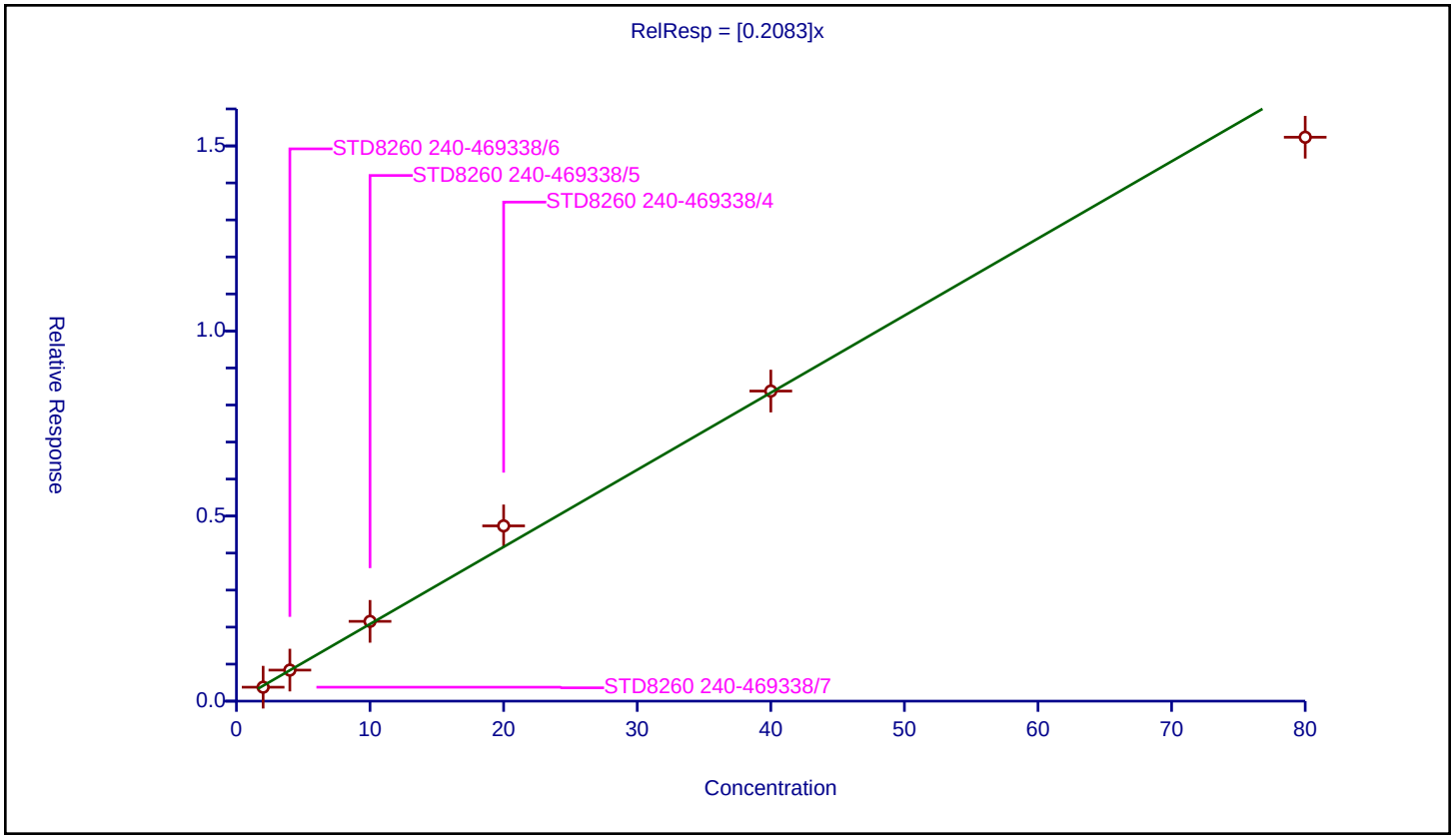
Curve Coefficients

Intercept:	0
Slope:	0.2083

Error Coefficients

Standard Error:	550000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.376467	20.0	1237666.0	0.188233	Y
2	STD8260 240-469338/6	4.0	0.838392	20.0	1194740.0	0.209598	Y
3	STD8260 240-469338/5	10.0	2.155198	20.0	1222644.0	0.21552	Y
4	STD8260 240-469338/4	20.0	4.734585	20.0	1164516.0	0.236729	Y
5	STD8260 240-469338/3	40.0	8.377288	20.0	1252890.0	0.209432	Y
6	STD8260 240-469338/2	80.0	15.234541	20.0	1401011.0	0.190432	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

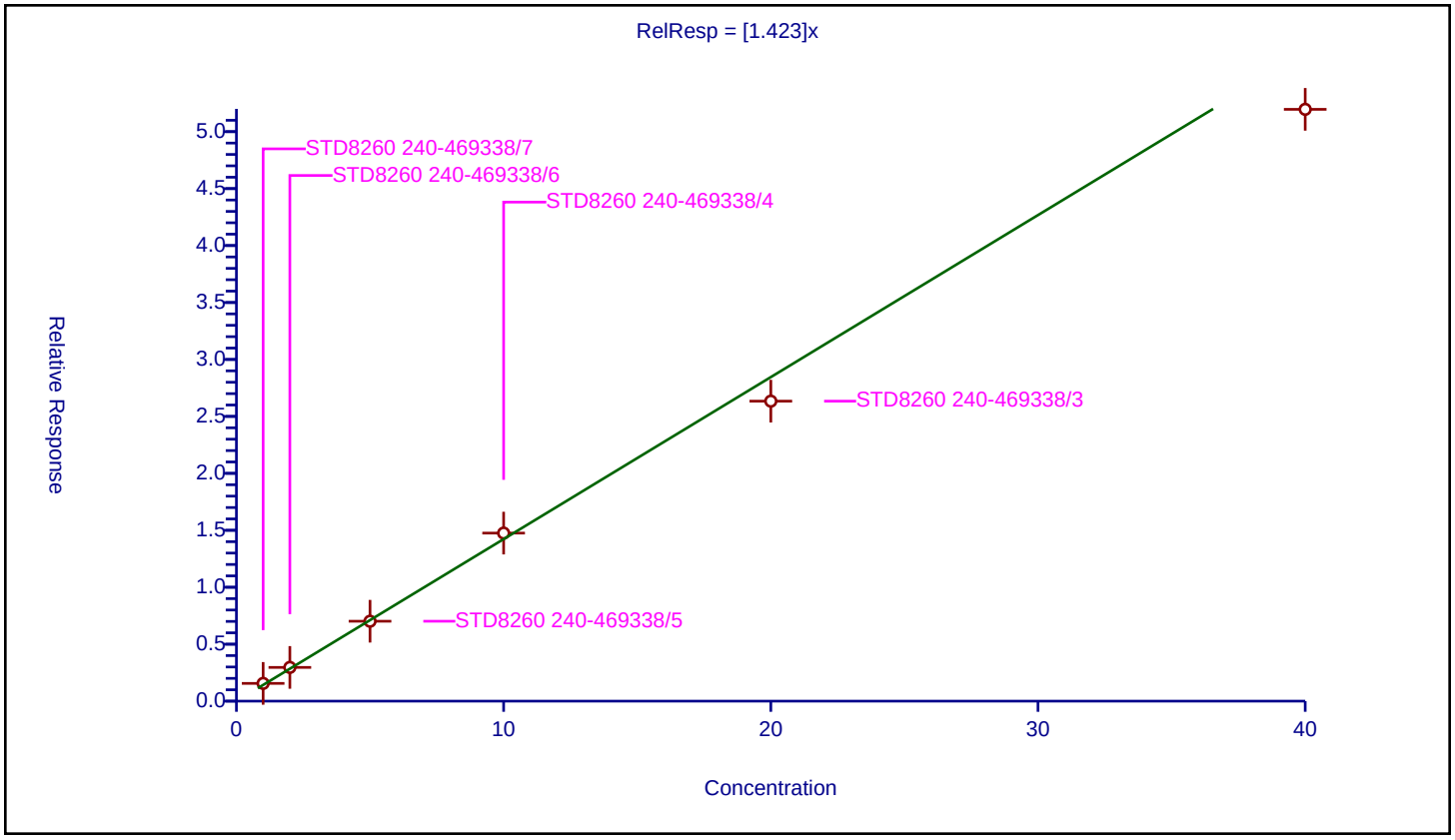
Curve Coefficients

Intercept:	0
Slope:	1.423

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.559103	20.0	905264.0	1.559103	Y
2	STD8260 240-469338/6	2.0	2.962838	20.0	862909.0	1.481419	Y
3	STD8260 240-469338/5	5.0	7.016553	20.0	861537.0	1.403311	Y
4	STD8260 240-469338/4	10.0	14.754623	20.0	833065.0	1.475462	Y
5	STD8260 240-469338/3	20.0	26.33886	20.0	890220.0	1.316943	Y
6	STD8260 240-469338/2	40.0	51.960876	20.0	979659.0	1.299022	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

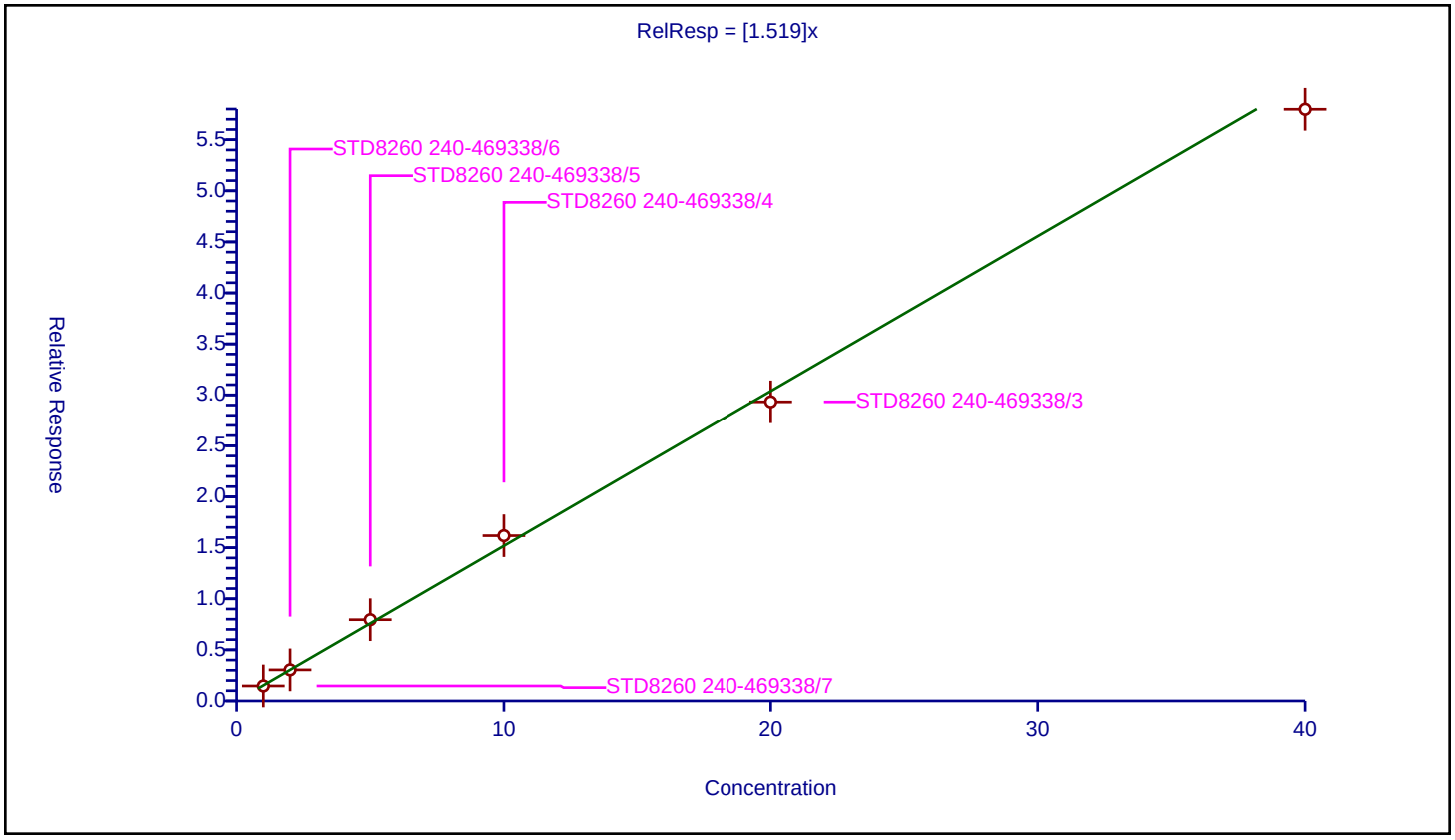
Curve Coefficients

Intercept:	0
Slope:	1.519

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.467749	20.0	905264.0	1.467749	Y
2	STD8260 240-469338/6	2.0	3.040228	20.0	862909.0	1.520114	Y
3	STD8260 240-469338/5	5.0	7.951928	20.0	861537.0	1.590386	Y
4	STD8260 240-469338/4	10.0	16.183659	20.0	833065.0	1.618366	Y
5	STD8260 240-469338/3	20.0	29.319382	20.0	890220.0	1.465969	Y
6	STD8260 240-469338/2	40.0	57.977541	20.0	979659.0	1.449439	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

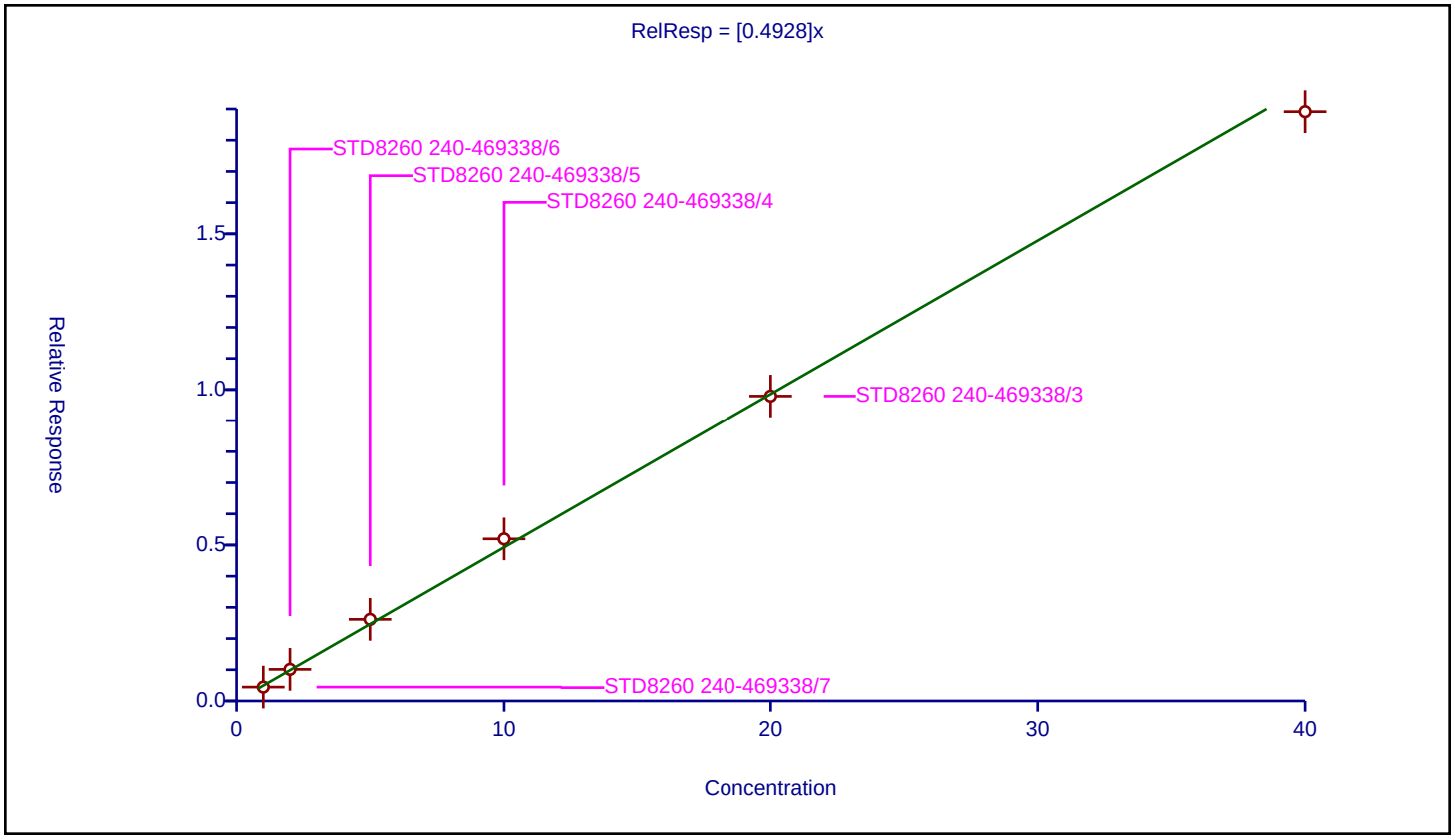
Curve Coefficients

Intercept:	0
Slope:	0.4928

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.444975	20.0	905264.0	0.444975	Y
2	STD8260 240-469338/6	2.0	1.012575	20.0	862909.0	0.506287	Y
3	STD8260 240-469338/5	5.0	2.615558	20.0	861537.0	0.523112	Y
4	STD8260 240-469338/4	10.0	5.197145	20.0	833065.0	0.519715	Y
5	STD8260 240-469338/3	20.0	9.791422	20.0	890220.0	0.489571	Y
6	STD8260 240-469338/2	40.0	18.914765	20.0	979659.0	0.472869	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

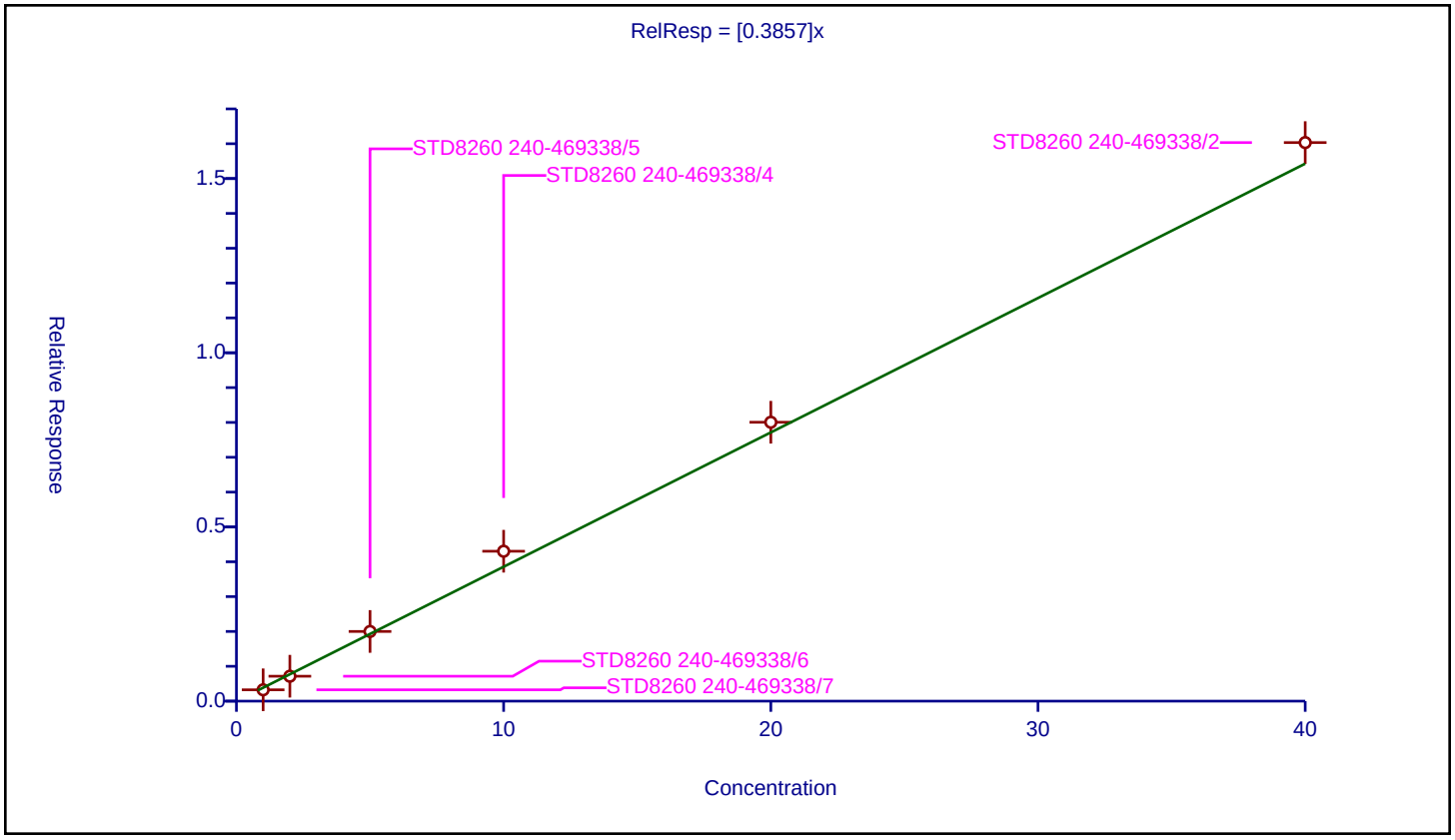
Curve Coefficients

Intercept:	0
Slope:	0.3857

Error Coefficients

Standard Error:	396000
Relative Standard Error:	9.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.325121	20.0	905264.0	0.325121	Y
2	STD8260 240-469338/6	2.0	0.715046	20.0	862909.0	0.357523	Y
3	STD8260 240-469338/5	5.0	2.000193	20.0	861537.0	0.400039	Y
4	STD8260 240-469338/4	10.0	4.303266	20.0	833065.0	0.430327	Y
5	STD8260 240-469338/3	20.0	8.005729	20.0	890220.0	0.400286	Y
6	STD8260 240-469338/2	40.0	16.032967	20.0	979659.0	0.400824	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

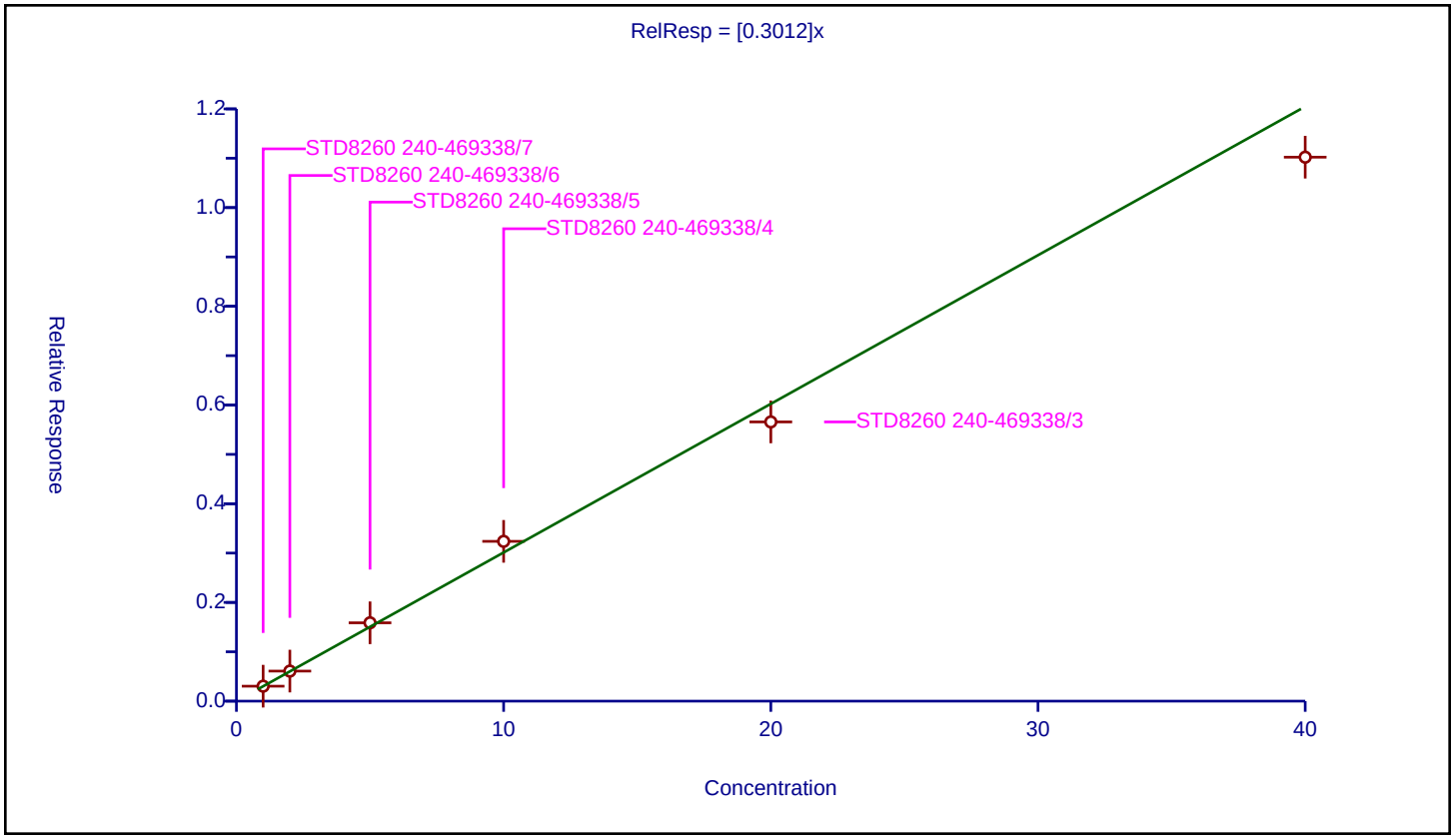
Curve Coefficients

Intercept:	0
Slope:	0.3012

Error Coefficients

Standard Error:	275000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302807	20.0	905264.0	0.302807	Y
2	STD8260 240-469338/6	2.0	0.609242	20.0	862909.0	0.304621	Y
3	STD8260 240-469338/5	5.0	1.587651	20.0	861537.0	0.31753	Y
4	STD8260 240-469338/4	10.0	3.237562	20.0	833065.0	0.323756	Y
5	STD8260 240-469338/3	20.0	5.657635	20.0	890220.0	0.282882	Y
6	STD8260 240-469338/2	40.0	11.02157	20.0	979659.0	0.275539	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

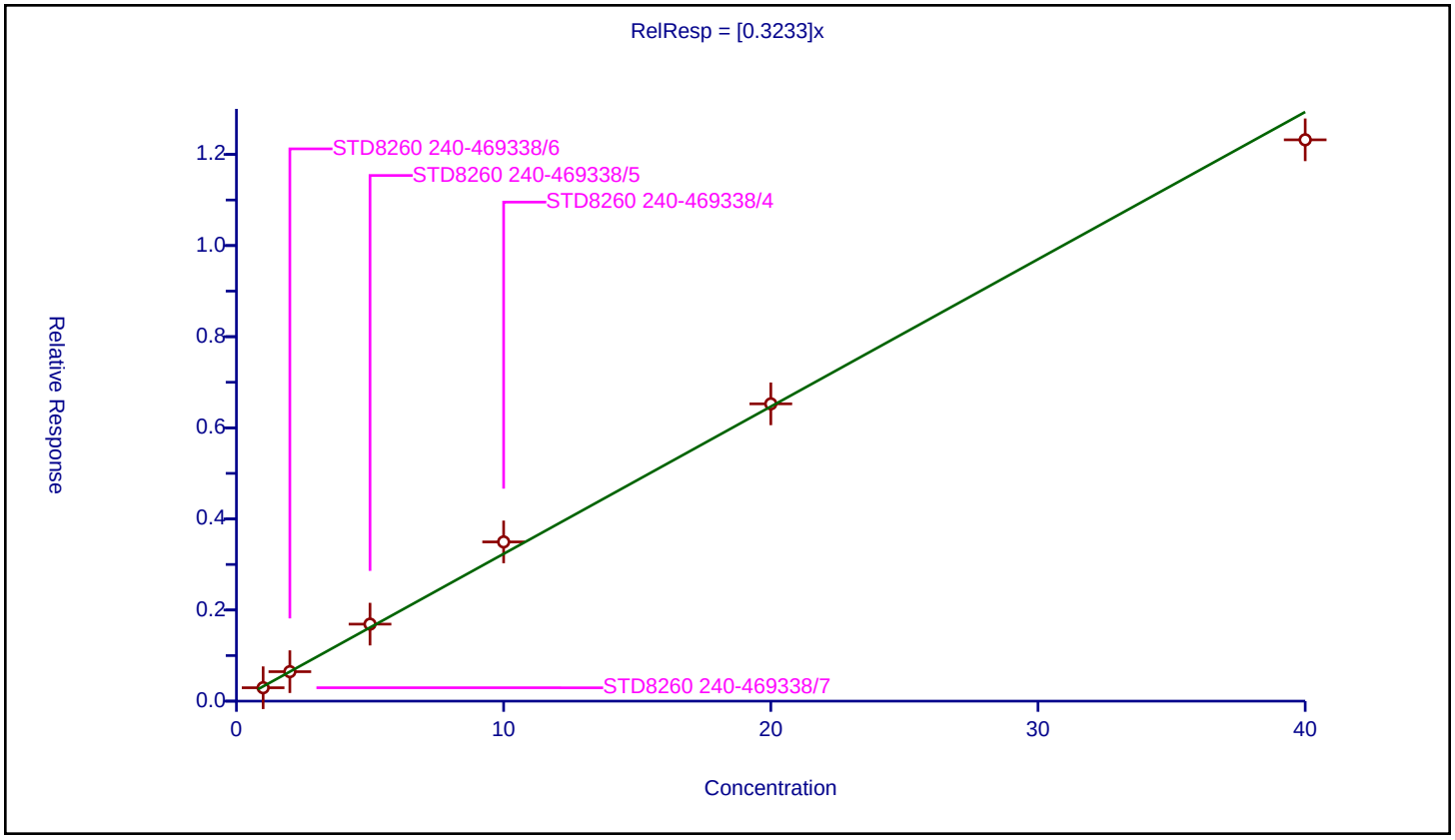
Curve Coefficients

Intercept:	0
Slope:	0.3233

Error Coefficients

Standard Error:	309000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.294367	20.0	905264.0	0.294367	Y
2	STD8260 240-469338/6	2.0	0.64709	20.0	862909.0	0.323545	Y
3	STD8260 240-469338/5	5.0	1.69049	20.0	861537.0	0.338098	Y
4	STD8260 240-469338/4	10.0	3.495454	20.0	833065.0	0.349545	Y
5	STD8260 240-469338/3	20.0	6.52596	20.0	890220.0	0.326298	Y
6	STD8260 240-469338/2	40.0	12.32141	20.0	979659.0	0.308035	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

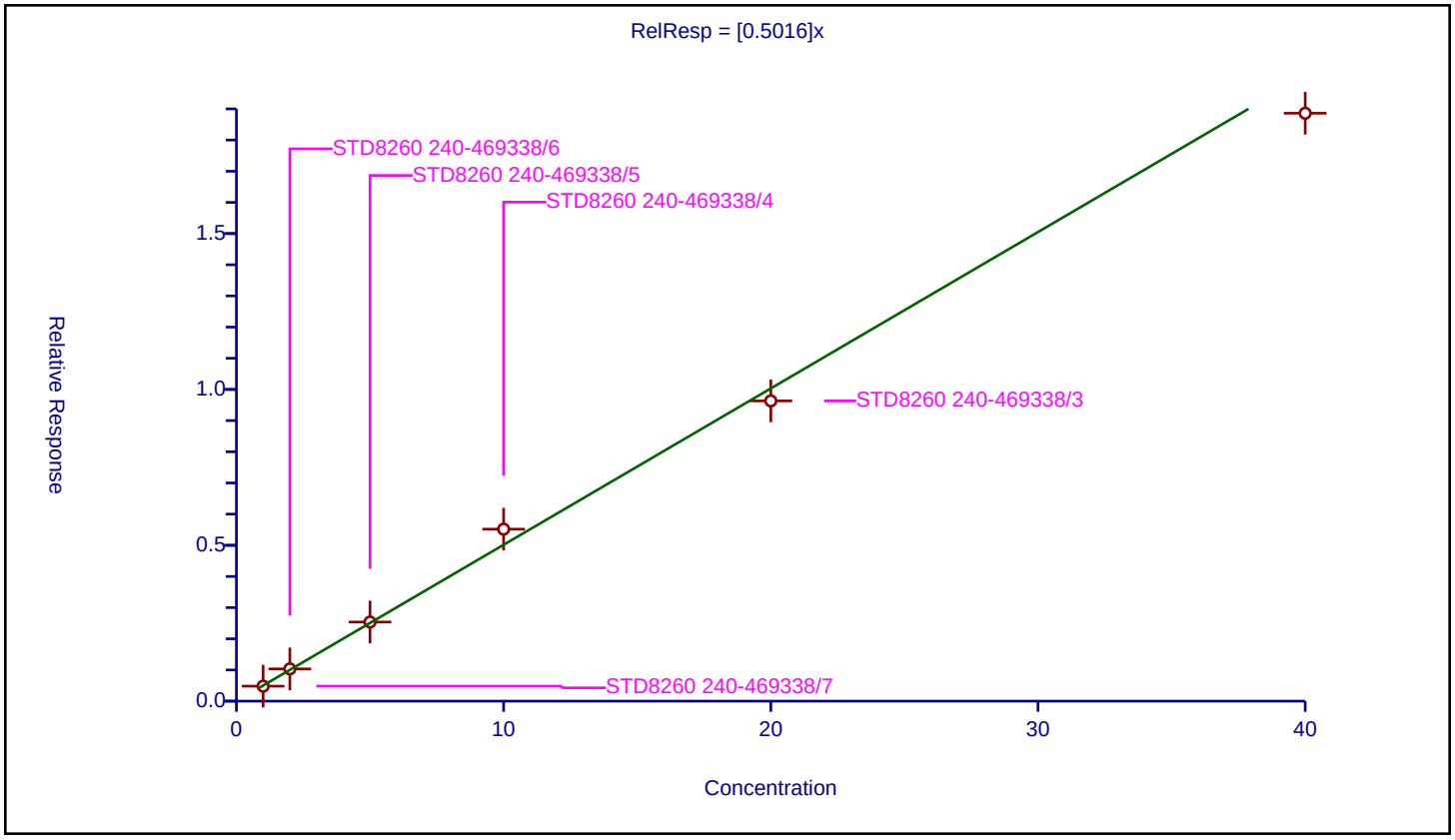
Curve Coefficients

Intercept:	0
Slope:	0.5016

Error Coefficients

Standard Error:	470000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.480236	20.0	905264.0	0.480236	Y
2	STD8260 240-469338/6	2.0	1.03406	20.0	862909.0	0.51703	Y
3	STD8260 240-469338/5	5.0	2.538231	20.0	861537.0	0.507646	Y
4	STD8260 240-469338/4	10.0	5.517361	20.0	833065.0	0.551736	Y
5	STD8260 240-469338/3	20.0	9.632158	20.0	890220.0	0.481608	Y
6	STD8260 240-469338/2	40.0	18.859909	20.0	979659.0	0.471498	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

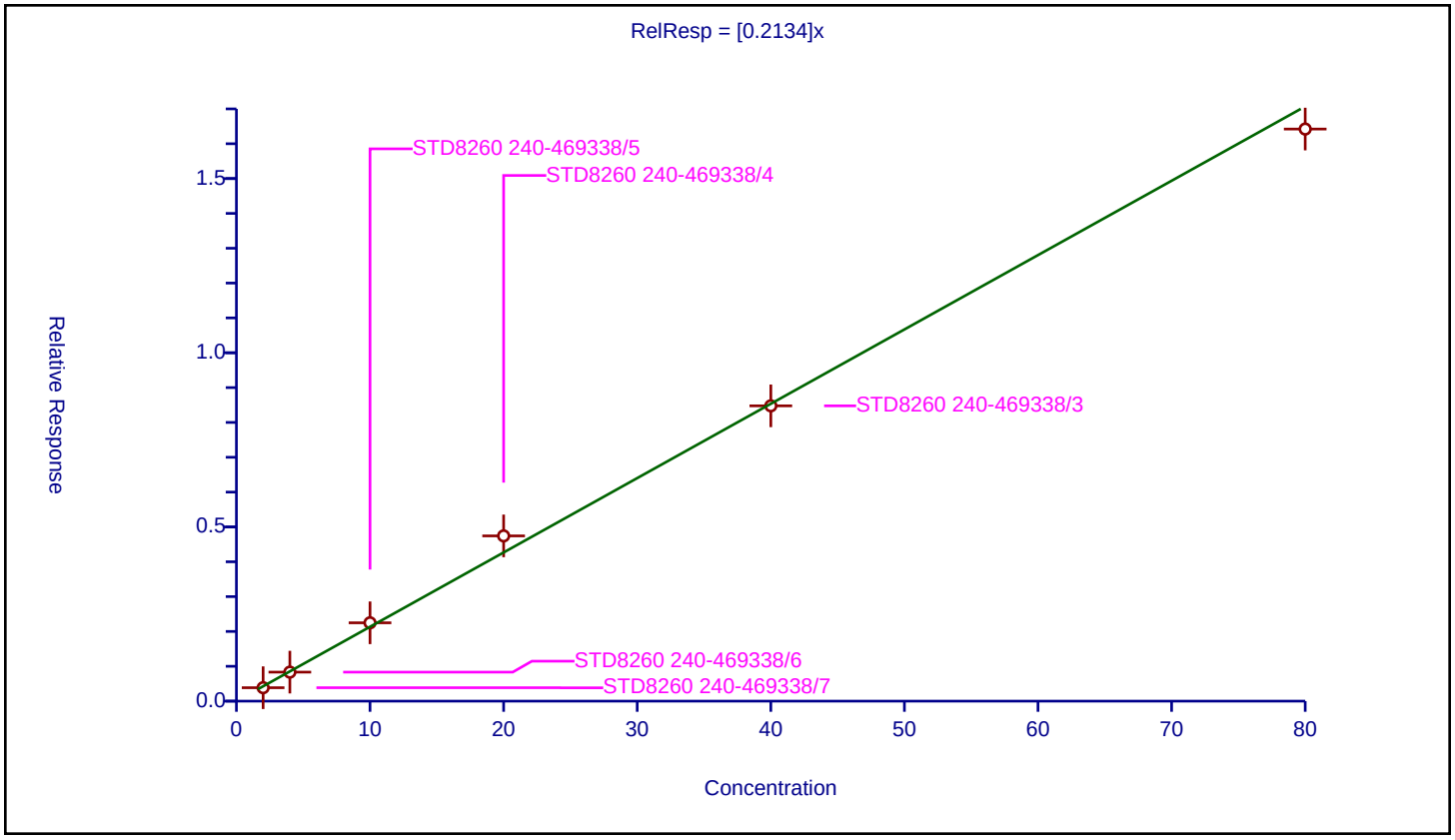
Curve Coefficients

Intercept:	0
Slope:	0.2134

Error Coefficients

Standard Error:	410000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	2.0	0.385678	20.0	905264.0	0.192839	Y
2	STD8260 240-469338/6	4.0	0.83295	20.0	862909.0	0.208237	Y
3	STD8260 240-469338/5	10.0	2.248748	20.0	861537.0	0.224875	Y
4	STD8260 240-469338/4	20.0	4.743543	20.0	833065.0	0.237177	Y
5	STD8260 240-469338/3	40.0	8.476444	20.0	890220.0	0.211911	Y
6	STD8260 240-469338/2	80.0	16.42104	20.0	979659.0	0.205263	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

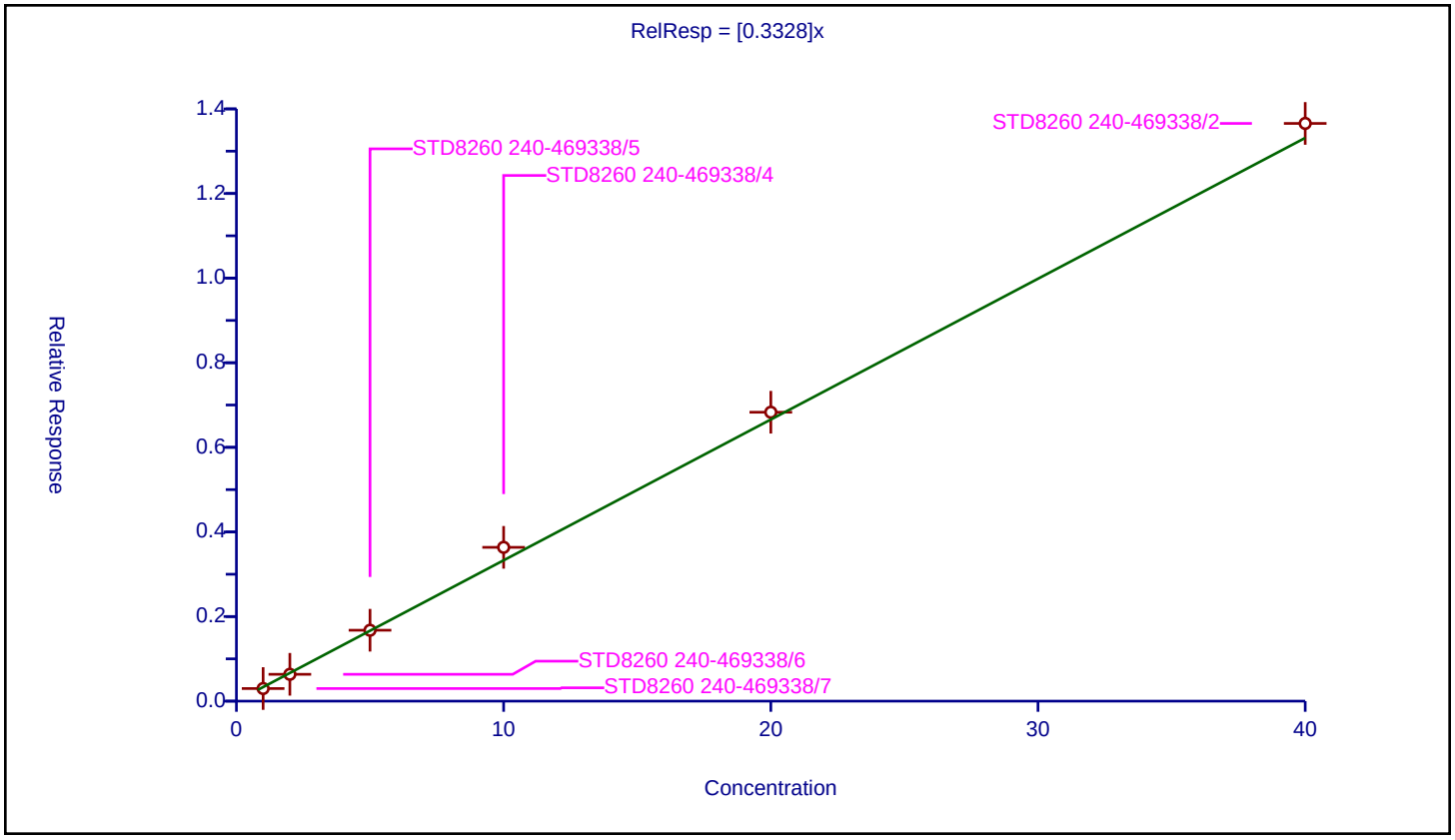
Curve Coefficients

Intercept:	0
Slope:	0.3328

Error Coefficients

Standard Error:	337000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.298167	20.0	905264.0	0.298167	Y
2	STD8260 240-469338/6	2.0	0.634435	20.0	862909.0	0.317218	Y
3	STD8260 240-469338/5	5.0	1.675981	20.0	861537.0	0.335196	Y
4	STD8260 240-469338/4	10.0	3.635875	20.0	833065.0	0.363587	Y
5	STD8260 240-469338/3	20.0	6.829368	20.0	890220.0	0.341468	Y
6	STD8260 240-469338/2	40.0	13.655976	20.0	979659.0	0.341399	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

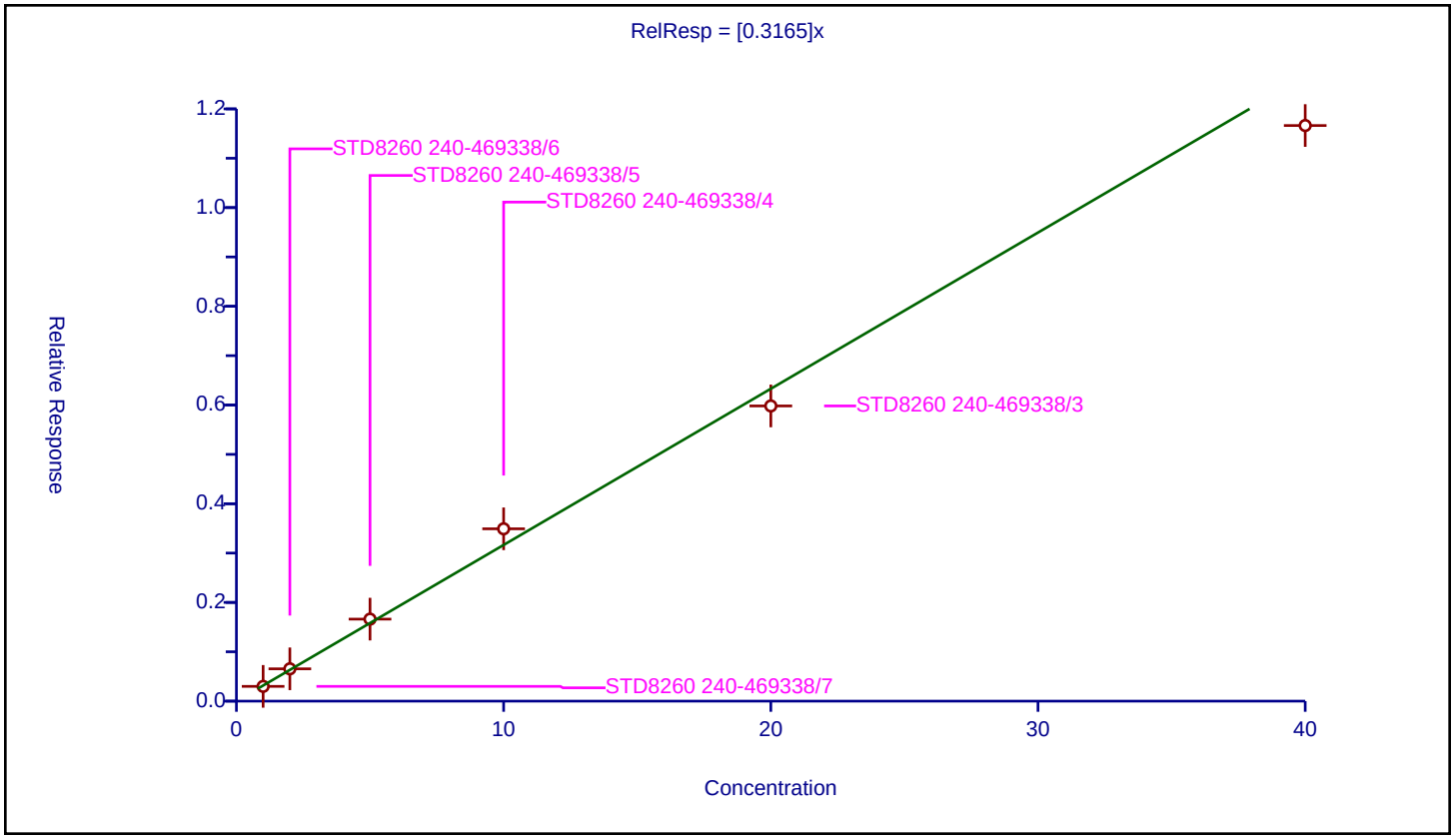
Curve Coefficients

Intercept:	0
Slope:	0.3165

Error Coefficients

Standard Error:	291000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.299161	20.0	905264.0	0.299161	Y
2	STD8260 240-469338/6	2.0	0.655063	20.0	862909.0	0.327532	Y
3	STD8260 240-469338/5	5.0	1.661612	20.0	861537.0	0.332322	Y
4	STD8260 240-469338/4	10.0	3.491876	20.0	833065.0	0.349188	Y
5	STD8260 240-469338/3	20.0	5.981308	20.0	890220.0	0.299065	Y
6	STD8260 240-469338/2	40.0	11.662977	20.0	979659.0	0.291574	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

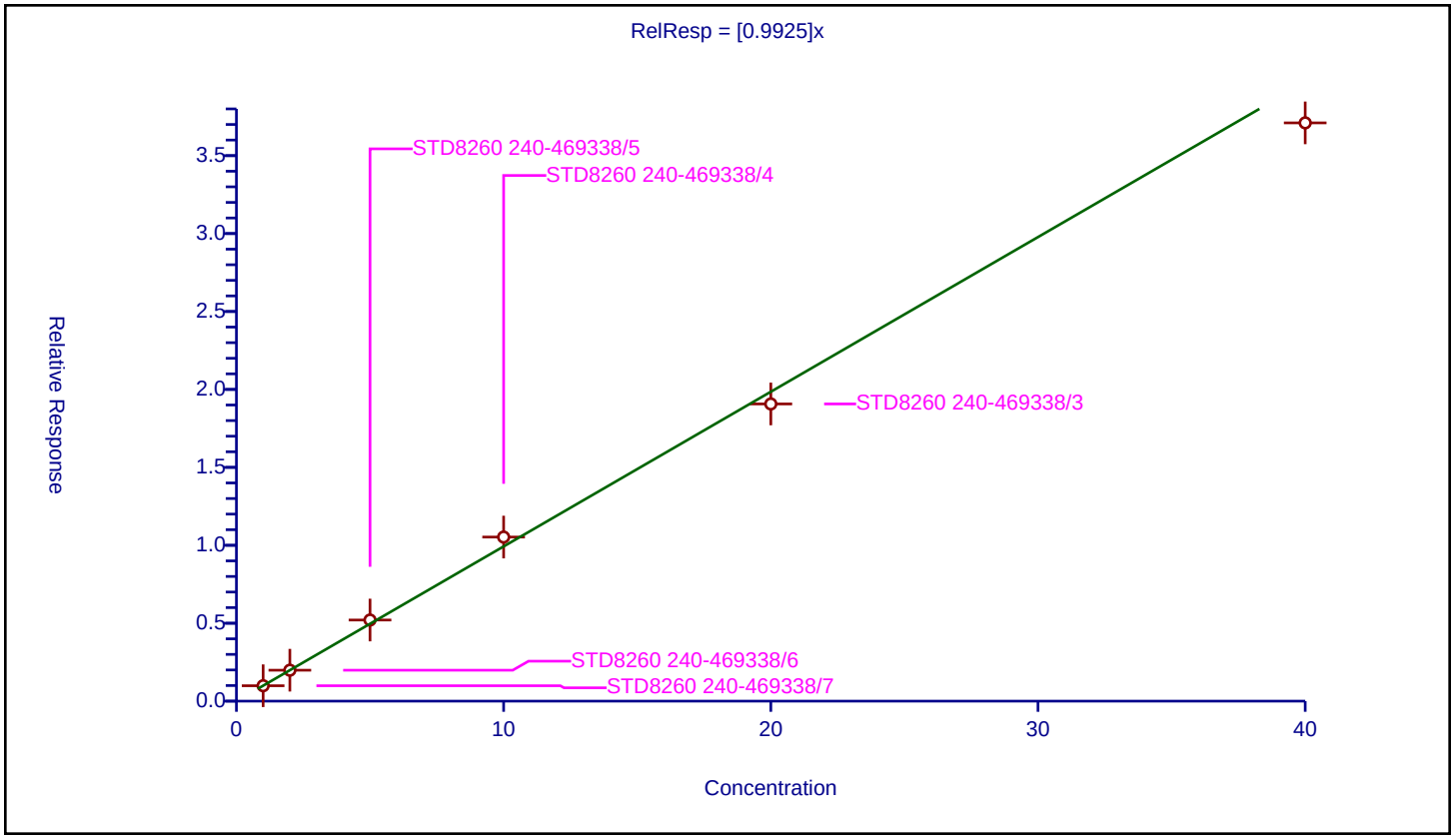
Curve Coefficients

Intercept:	0
Slope:	0.9925

Error Coefficients

Standard Error:	925000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.988021	20.0	905264.0	0.988021	Y
2	STD8260 240-469338/6	2.0	1.984867	20.0	862909.0	0.992434	Y
3	STD8260 240-469338/5	5.0	5.204675	20.0	861537.0	1.040935	Y
4	STD8260 240-469338/4	10.0	10.528086	20.0	833065.0	1.052809	Y
5	STD8260 240-469338/3	20.0	19.069107	20.0	890220.0	0.953455	Y
6	STD8260 240-469338/2	40.0	37.1024	20.0	979659.0	0.92756	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

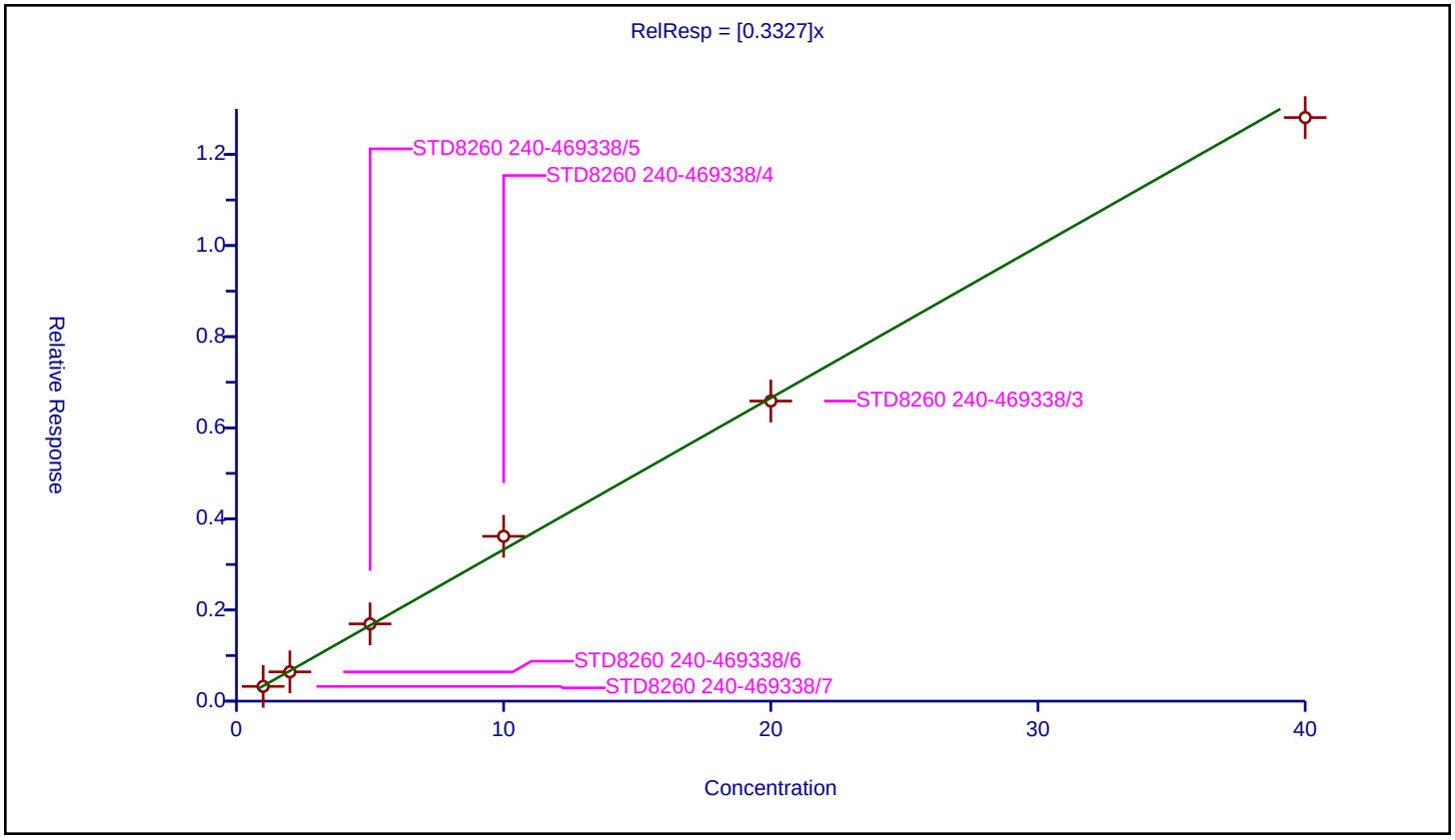
Curve Coefficients

Intercept:	0
Slope:	0.3327

Error Coefficients

Standard Error:	319000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.324215	20.0	905264.0	0.324215	Y
2	STD8260 240-469338/6	2.0	0.642779	20.0	862909.0	0.32139	Y
3	STD8260 240-469338/5	5.0	1.696039	20.0	861537.0	0.339208	Y
4	STD8260 240-469338/4	10.0	3.618613	20.0	833065.0	0.361861	Y
5	STD8260 240-469338/3	20.0	6.58754	20.0	890220.0	0.329377	Y
6	STD8260 240-469338/2	40.0	12.809906	20.0	979659.0	0.320248	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

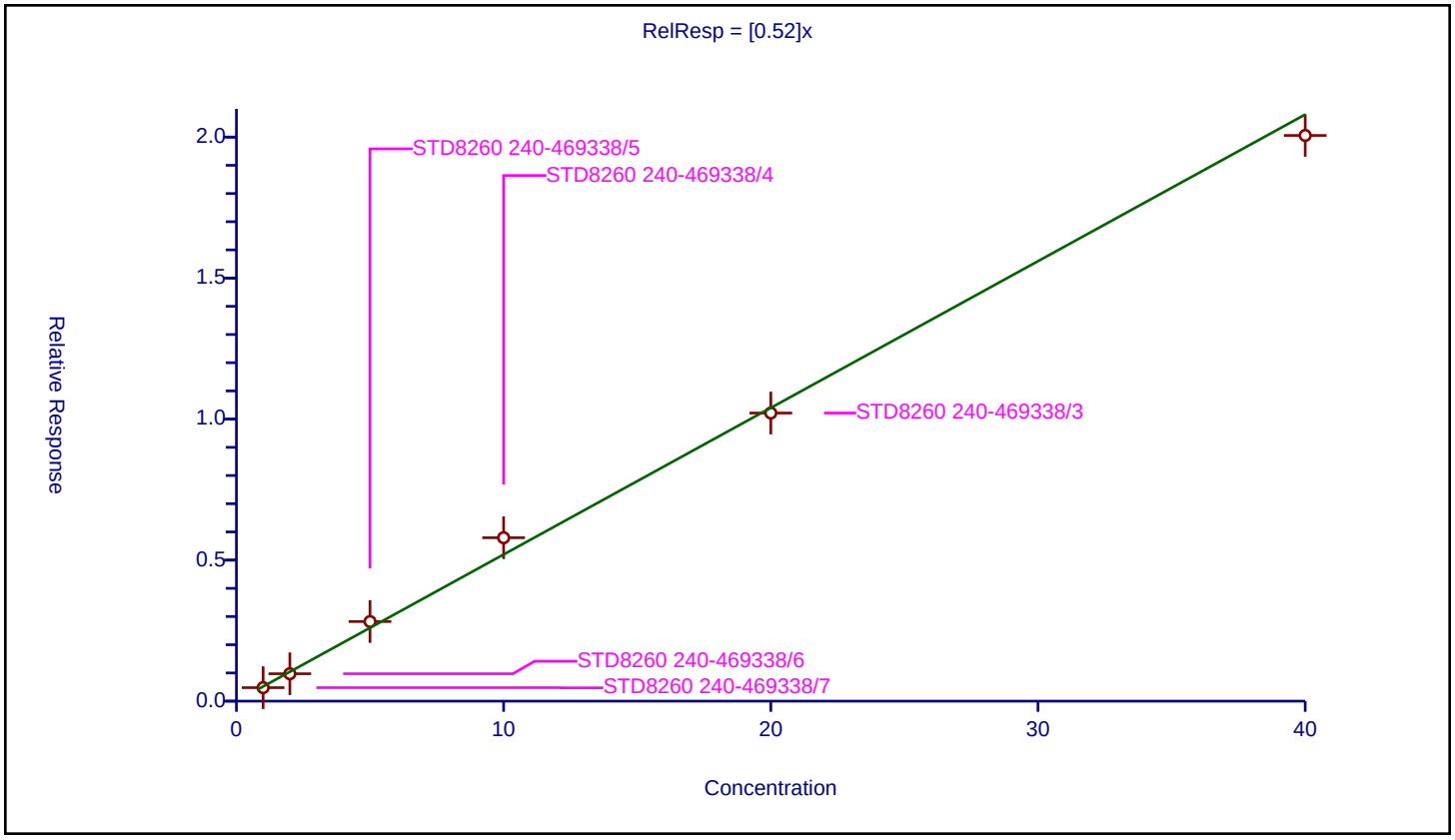
Curve Coefficients

Intercept:	0
Slope:	0.52

Error Coefficients

Standard Error:	499000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.47796	20.0	905264.0	0.47796	Y
2	STD8260 240-469338/6	2.0	0.971736	20.0	862909.0	0.485868	Y
3	STD8260 240-469338/5	5.0	2.822467	20.0	861537.0	0.564493	Y
4	STD8260 240-469338/4	10.0	5.79465	20.0	833065.0	0.579465	Y
5	STD8260 240-469338/3	20.0	10.216126	20.0	890220.0	0.510806	Y
6	STD8260 240-469338/2	40.0	20.05802	20.0	979659.0	0.501451	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

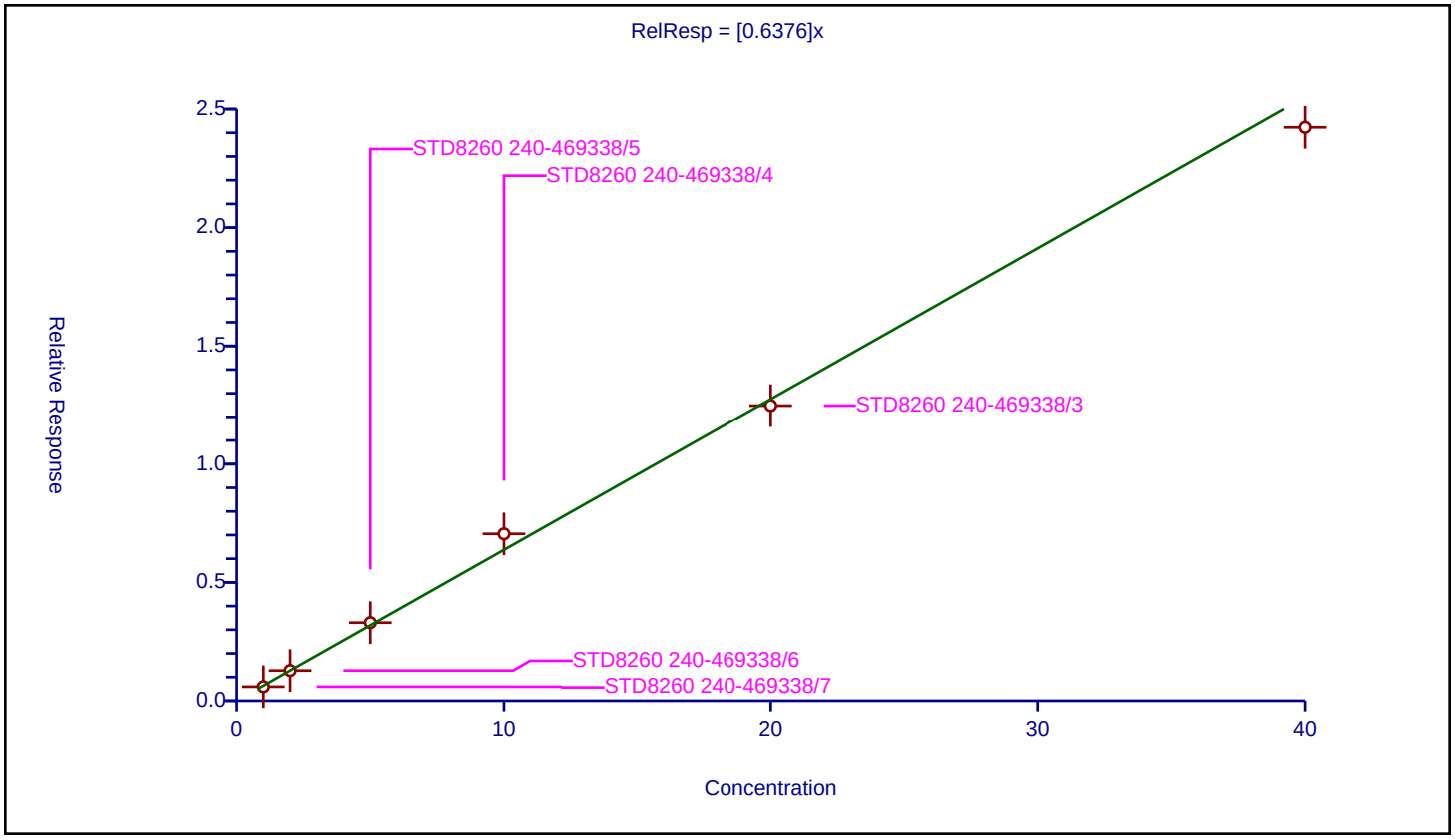
Curve Coefficients

Intercept:	0
Slope:	0.6376

Error Coefficients

Standard Error:	605000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.593396	20.0	905264.0	0.593396	Y
2	STD8260 240-469338/6	2.0	1.275129	20.0	862909.0	0.637564	Y
3	STD8260 240-469338/5	5.0	3.299359	20.0	861537.0	0.659872	Y
4	STD8260 240-469338/4	10.0	7.051839	20.0	833065.0	0.705184	Y
5	STD8260 240-469338/3	20.0	12.476556	20.0	890220.0	0.623828	Y
6	STD8260 240-469338/2	40.0	24.231493	20.0	979659.0	0.605787	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

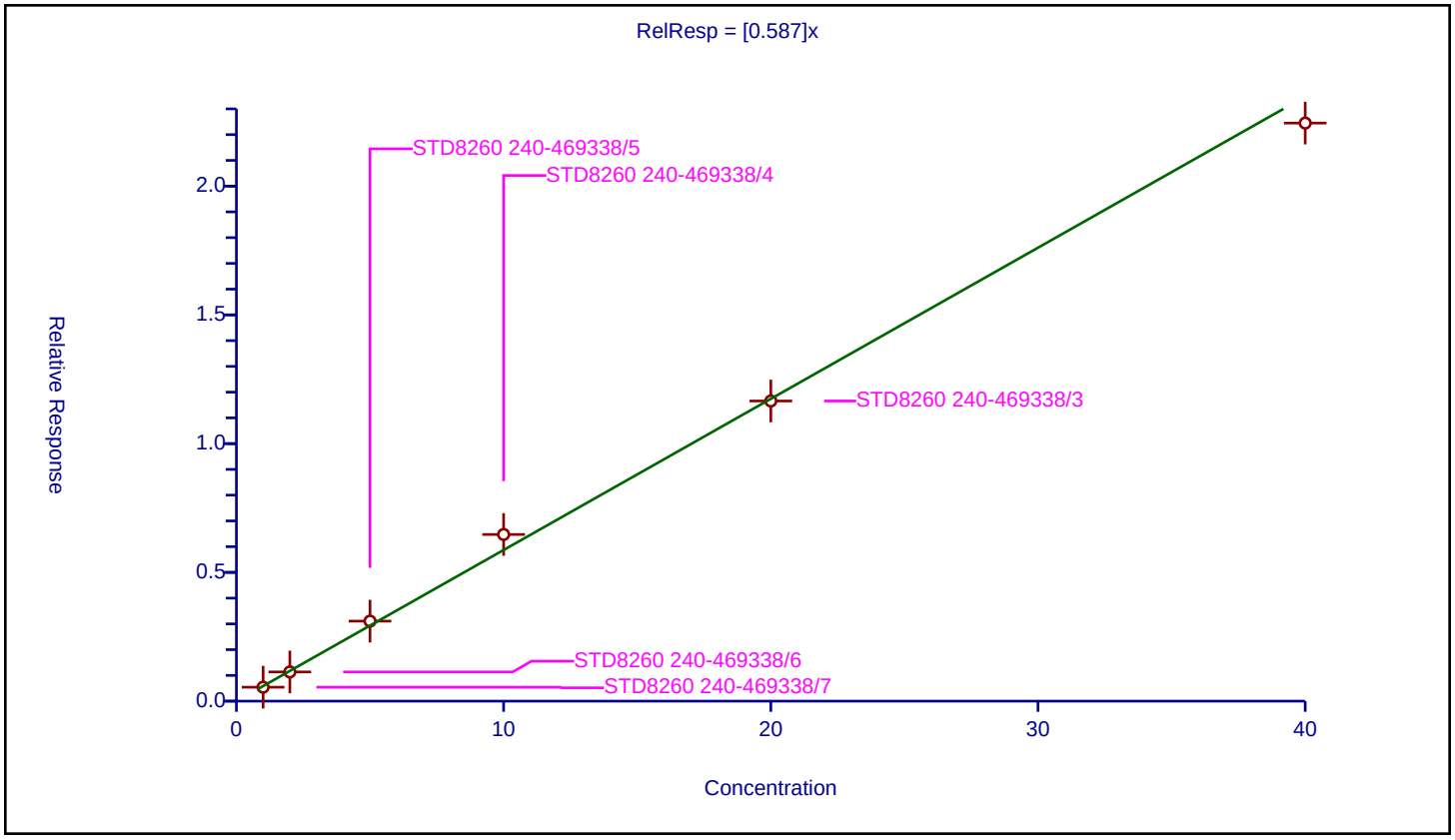
Curve Coefficients

Intercept:	0
Slope:	0.587

Error Coefficients

Standard Error:	561000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.541787	20.0	905264.0	0.541787	Y
2	STD8260 240-469338/6	2.0	1.134419	20.0	862909.0	0.567209	Y
3	STD8260 240-469338/5	5.0	3.107586	20.0	861537.0	0.621517	Y
4	STD8260 240-469338/4	10.0	6.472748	20.0	833065.0	0.647275	Y
5	STD8260 240-469338/3	20.0	11.65622	20.0	890220.0	0.582811	Y
6	STD8260 240-469338/2	40.0	22.448485	20.0	979659.0	0.561212	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

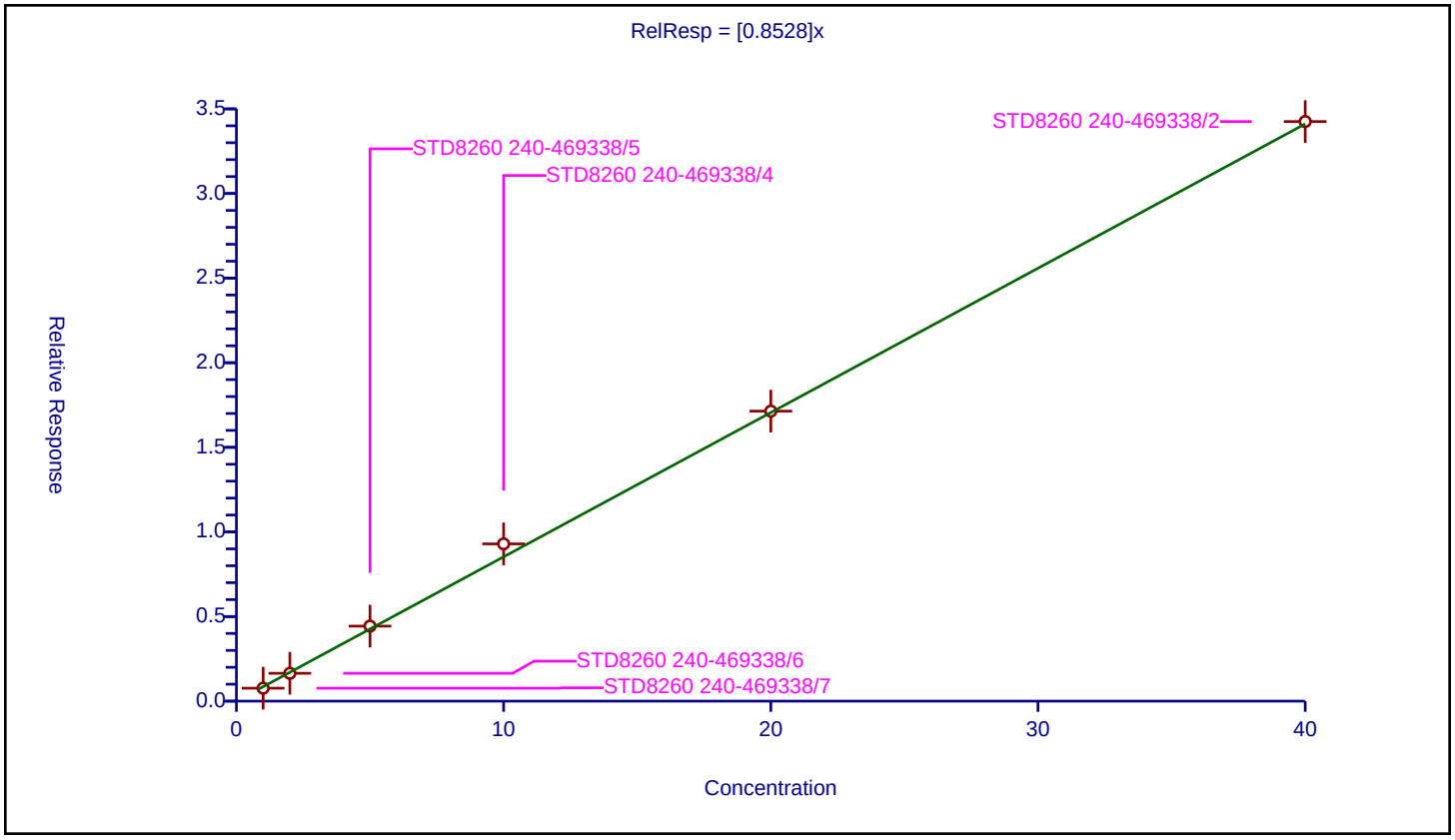
Curve Coefficients

Intercept:	0
Slope:	0.8528

Error Coefficients

Standard Error:	847000
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.765036	20.0	905264.0	0.765036	Y
2	STD8260 240-469338/6	2.0	1.645063	20.0	862909.0	0.822532	Y
3	STD8260 240-469338/5	5.0	4.433565	20.0	861537.0	0.886713	Y
4	STD8260 240-469338/4	10.0	9.292936	20.0	833065.0	0.929294	Y
5	STD8260 240-469338/3	20.0	17.137741	20.0	890220.0	0.856887	Y
6	STD8260 240-469338/2	40.0	34.251714	20.0	979659.0	0.856293	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

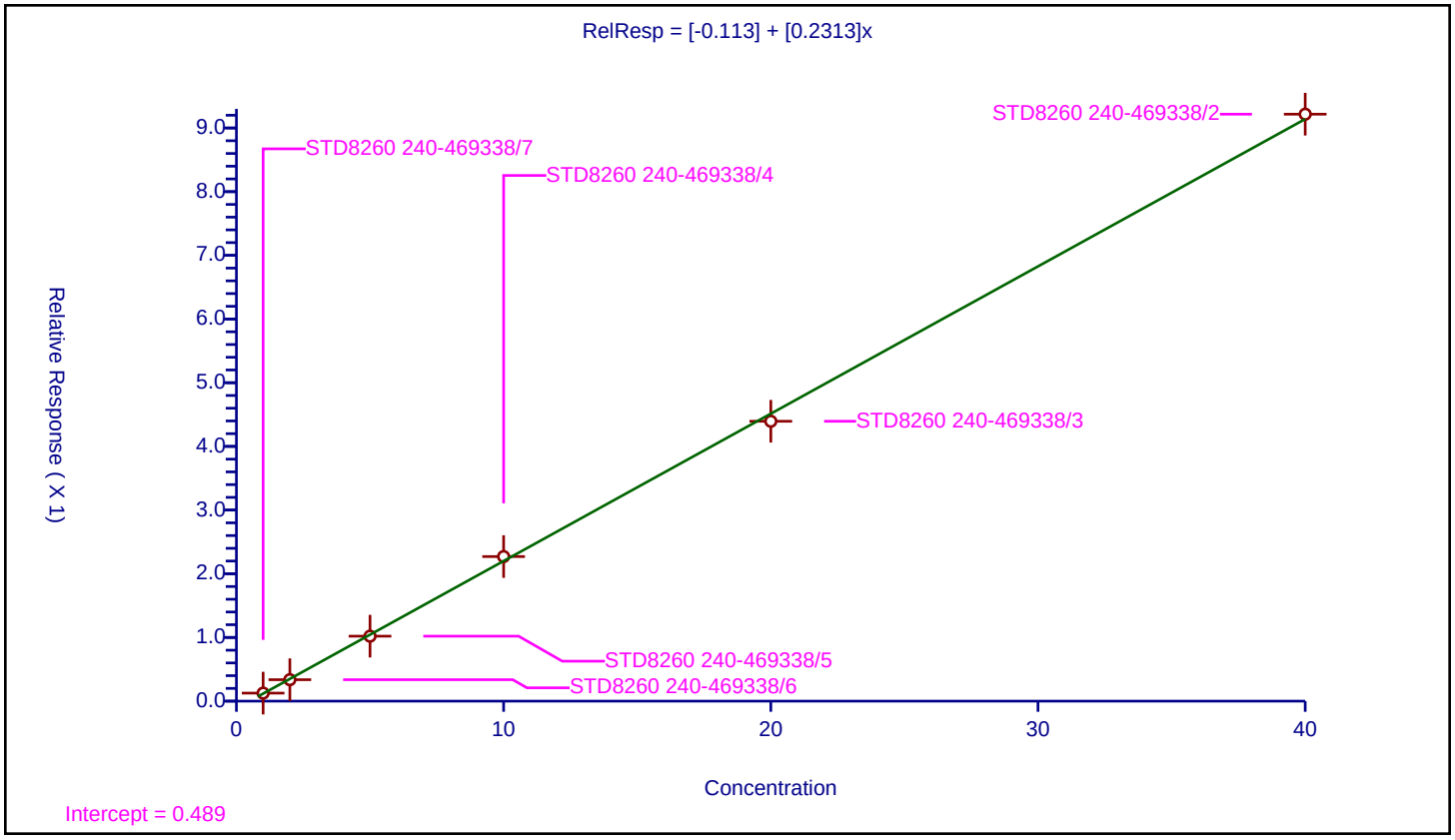
Curve Coefficients

Intercept:	-0.113
Slope:	0.2313

Error Coefficients

Standard Error:	252000
Relative Standard Error:	3.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.126284	20.0	905264.0	0.126284	Y
2	STD8260 240-469338/6	2.0	0.336976	20.0	862909.0	0.168488	Y
3	STD8260 240-469338/5	5.0	1.02027	20.0	861537.0	0.204054	Y
4	STD8260 240-469338/4	10.0	2.270483	20.0	833065.0	0.227048	Y
5	STD8260 240-469338/3	20.0	4.394891	20.0	890220.0	0.219745	Y
6	STD8260 240-469338/2	40.0	9.216656	20.0	979659.0	0.230416	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

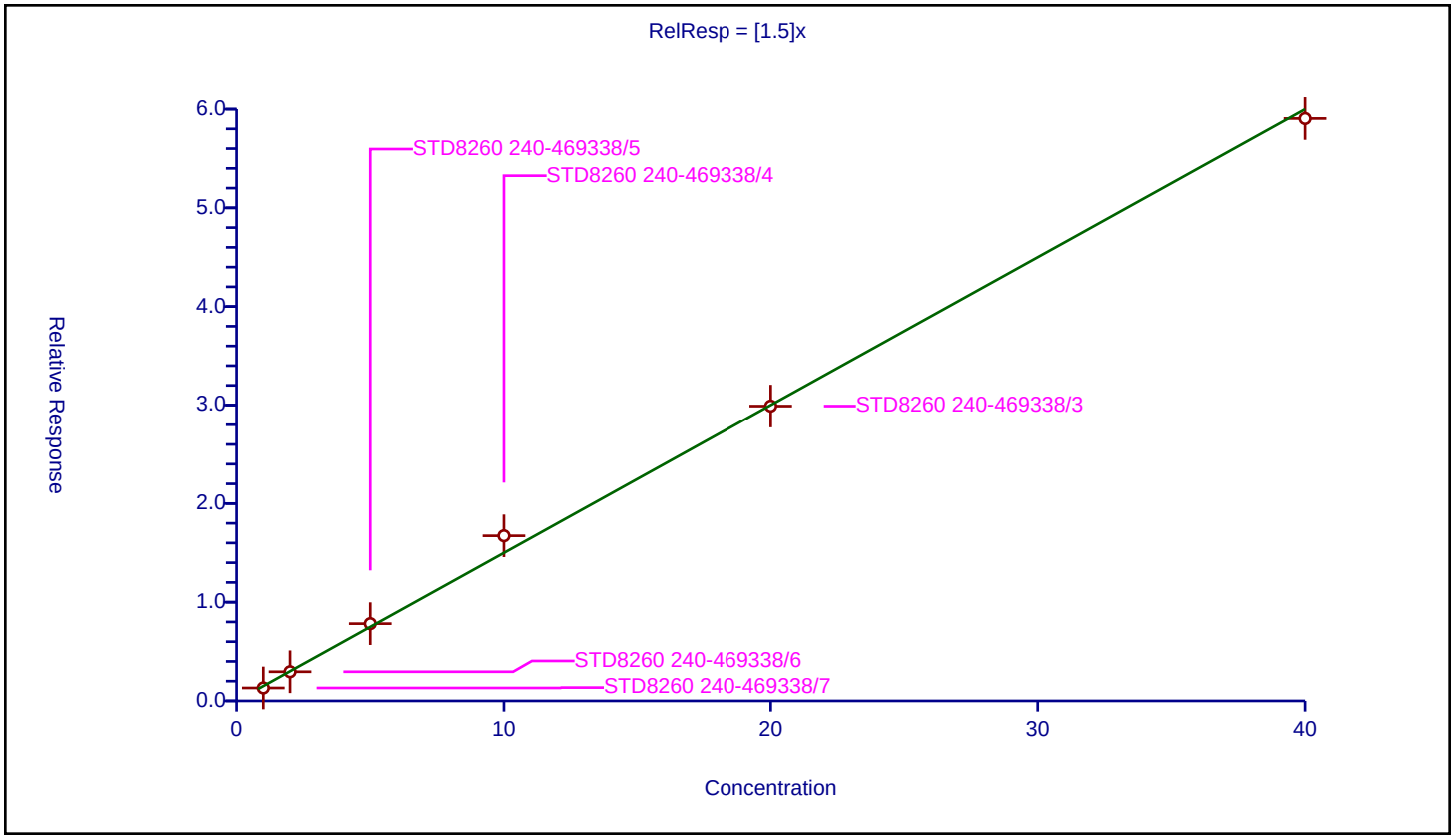
Curve Coefficients

Intercept:	0
Slope:	1.5

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.313341	20.0	905264.0	1.313341	Y
2	STD8260 240-469338/6	2.0	2.952455	20.0	862909.0	1.476228	Y
3	STD8260 240-469338/5	5.0	7.826338	20.0	861537.0	1.565268	Y
4	STD8260 240-469338/4	10.0	16.7319	20.0	833065.0	1.67319	Y
5	STD8260 240-469338/3	20.0	29.898025	20.0	890220.0	1.494901	Y
6	STD8260 240-469338/2	40.0	59.051895	20.0	979659.0	1.476297	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

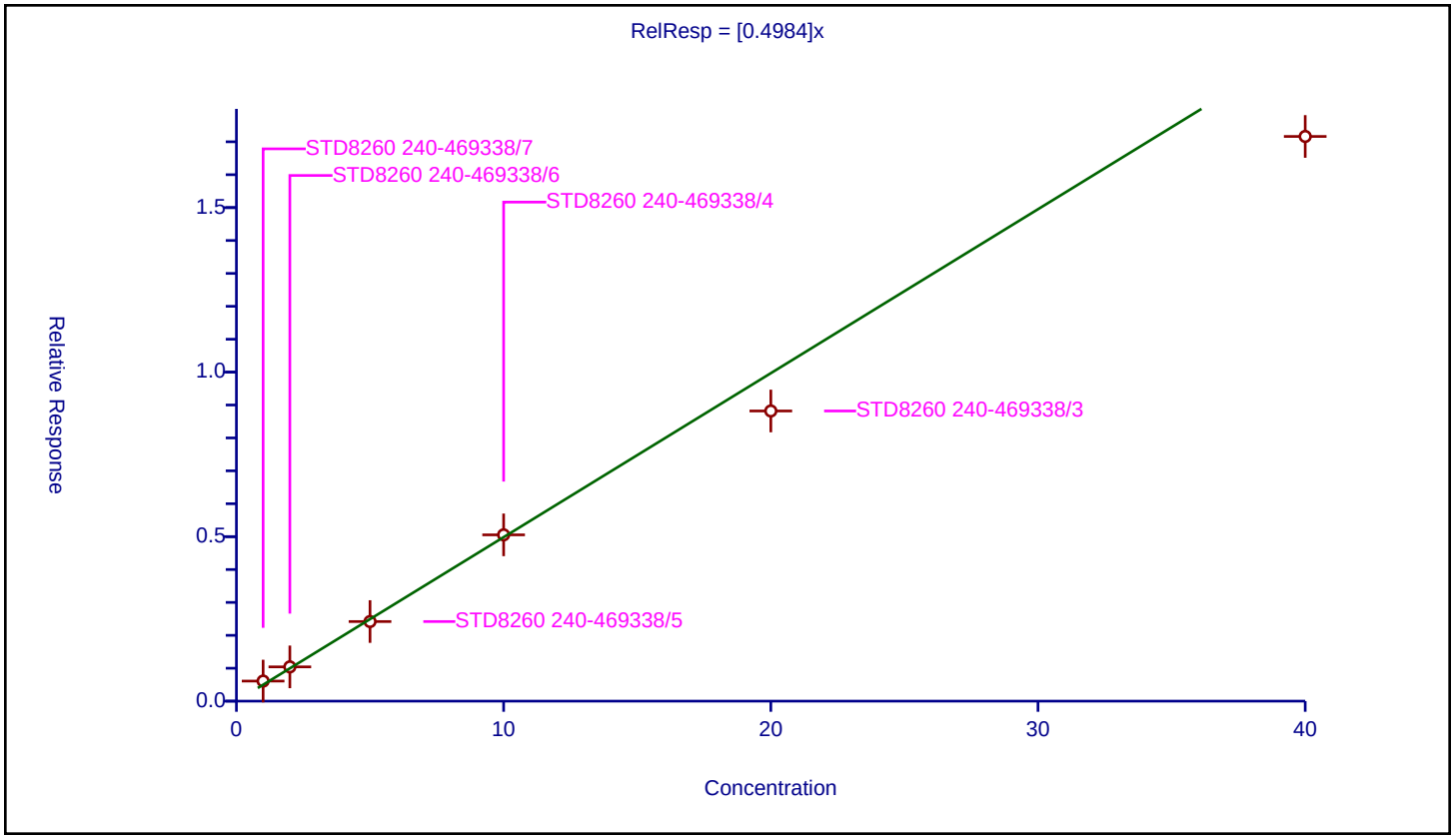
Curve Coefficients

Intercept:	0
Slope:	0.4984

Error Coefficients

Standard Error:	429000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.610253	20.0	905264.0	0.610253	Y
2	STD8260 240-469338/6	2.0	1.04157	20.0	862909.0	0.520785	Y
3	STD8260 240-469338/5	5.0	2.418817	20.0	861537.0	0.483763	Y
4	STD8260 240-469338/4	10.0	5.054179	20.0	833065.0	0.505418	Y
5	STD8260 240-469338/3	20.0	8.819168	20.0	890220.0	0.440958	Y
6	STD8260 240-469338/2	40.0	17.1624	20.0	979659.0	0.42906	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

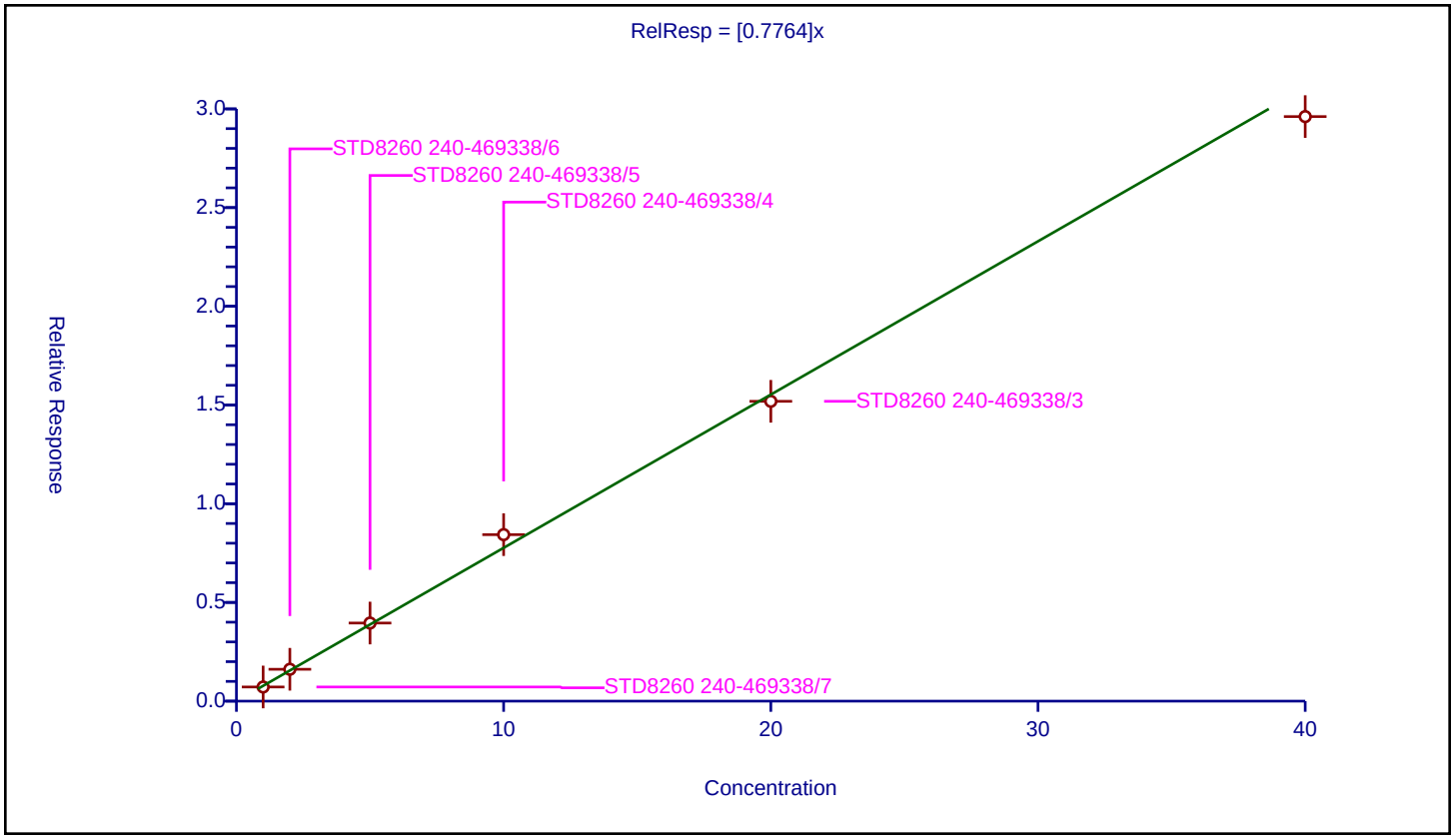
Curve Coefficients

Intercept:	0
Slope:	0.7764

Error Coefficients

Standard Error:	343000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.717081	20.0	420817.0	0.717081	Y
2	STD8260 240-469338/6	2.0	1.614323	20.0	402373.0	0.807162	Y
3	STD8260 240-469338/5	5.0	3.956513	20.0	406373.0	0.791303	Y
4	STD8260 240-469338/4	10.0	8.433794	20.0	399775.0	0.843379	Y
5	STD8260 240-469338/3	20.0	15.187261	20.0	413781.0	0.759363	Y
6	STD8260 240-469338/2	40.0	29.610521	20.0	455301.0	0.740263	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

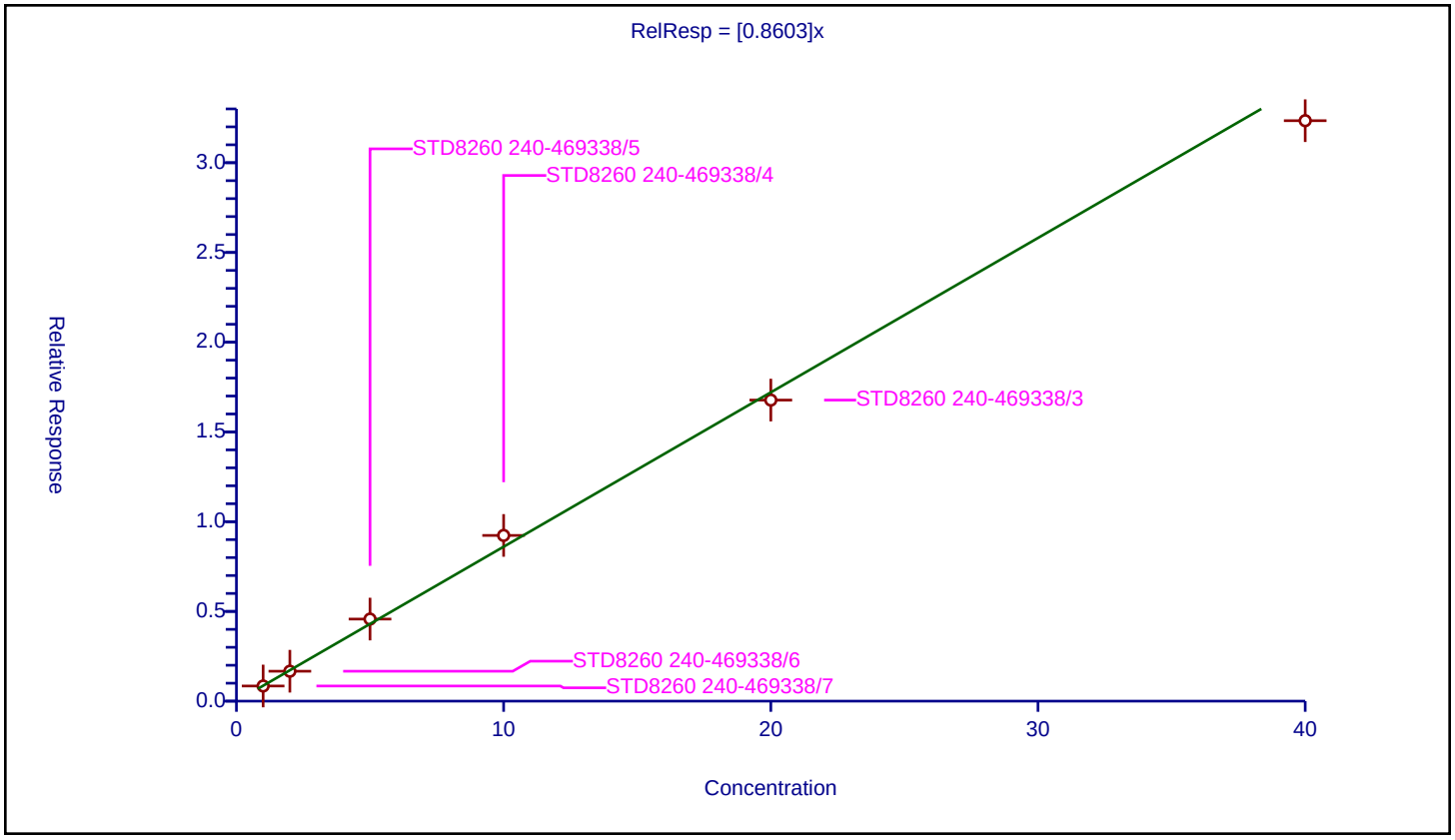
Curve Coefficients

Intercept:	0
Slope:	0.8603

Error Coefficients

Standard Error:	376000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.843359	20.0	420817.0	0.843359	Y
2	STD8260 240-469338/6	2.0	1.666762	20.0	402373.0	0.833381	Y
3	STD8260 240-469338/5	5.0	4.572942	20.0	406373.0	0.914588	Y
4	STD8260 240-469338/4	10.0	9.232643	20.0	399775.0	0.923264	Y
5	STD8260 240-469338/3	20.0	16.774429	20.0	413781.0	0.838721	Y
6	STD8260 240-469338/2	40.0	32.343087	20.0	455301.0	0.808577	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

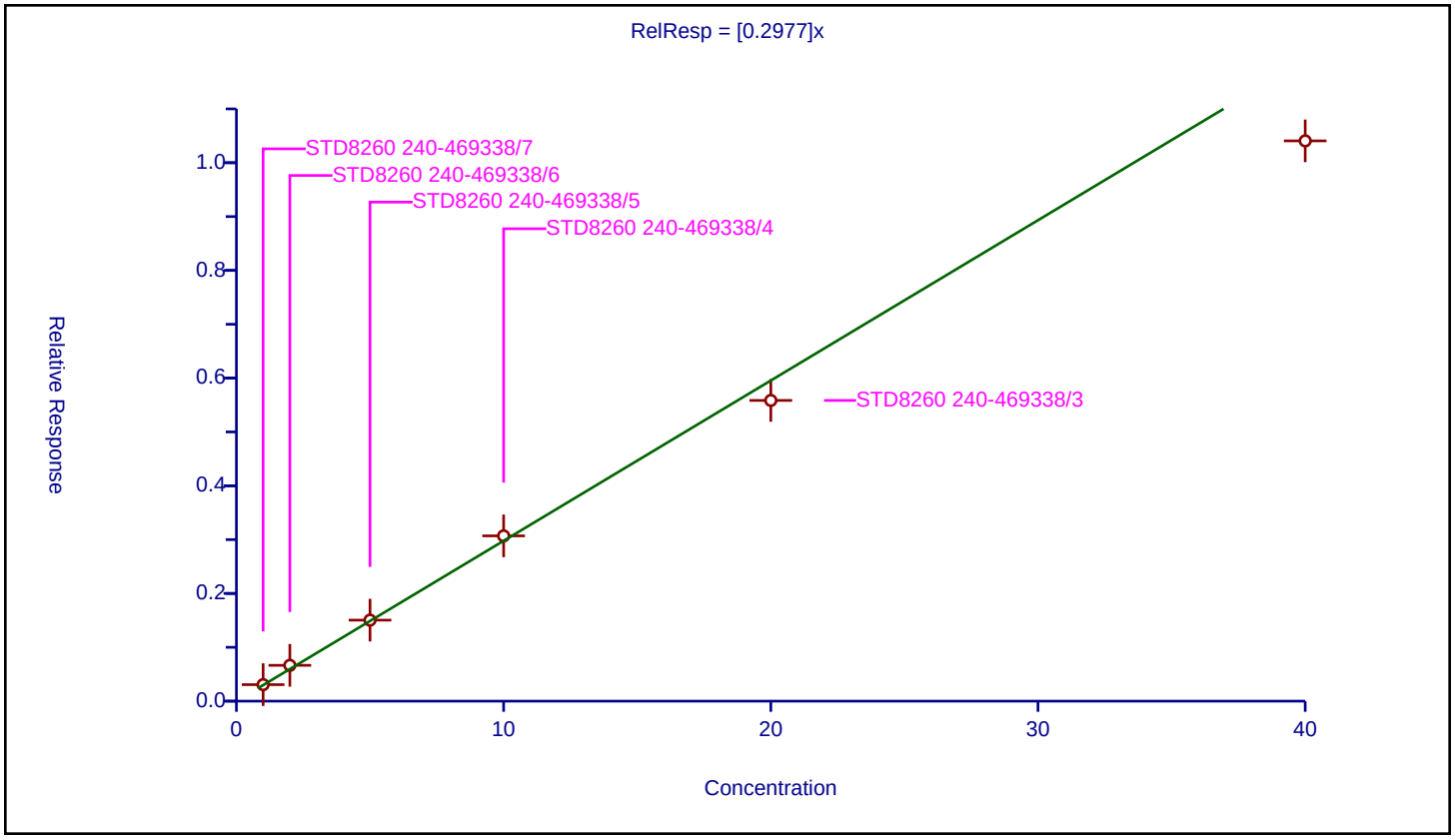
Curve Coefficients

Intercept:	0
Slope:	0.2977

Error Coefficients

Standard Error:	122000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.306594	20.0	420817.0	0.306594	Y
2	STD8260 240-469338/6	2.0	0.665104	20.0	402373.0	0.332552	Y
3	STD8260 240-469338/5	5.0	1.50448	20.0	406373.0	0.300896	Y
4	STD8260 240-469338/4	10.0	3.069727	20.0	399775.0	0.306973	Y
5	STD8260 240-469338/3	20.0	5.585418	20.0	413781.0	0.279271	Y
6	STD8260 240-469338/2	40.0	10.405776	20.0	455301.0	0.260144	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

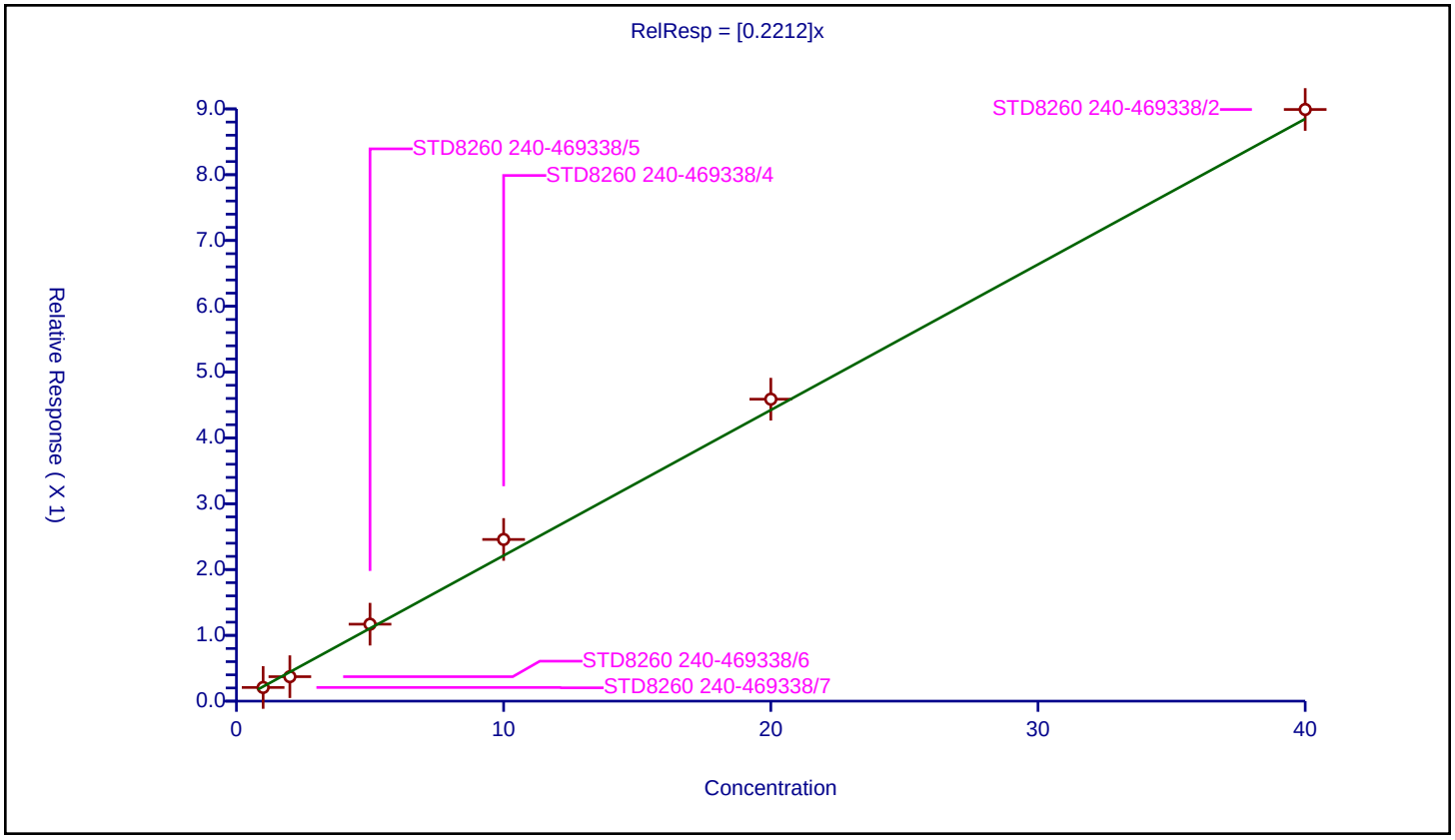
Curve Coefficients

Intercept:	0
Slope:	0.2212

Error Coefficients

Standard Error:	104000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.207644	20.0	420817.0	0.207644	Y
2	STD8260 240-469338/6	2.0	0.371645	20.0	402373.0	0.185823	Y
3	STD8260 240-469338/5	5.0	1.169418	20.0	406373.0	0.233884	Y
4	STD8260 240-469338/4	10.0	2.456832	20.0	399775.0	0.245683	Y
5	STD8260 240-469338/3	20.0	4.588563	20.0	413781.0	0.229428	Y
6	STD8260 240-469338/2	40.0	8.991195	20.0	455301.0	0.22478	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

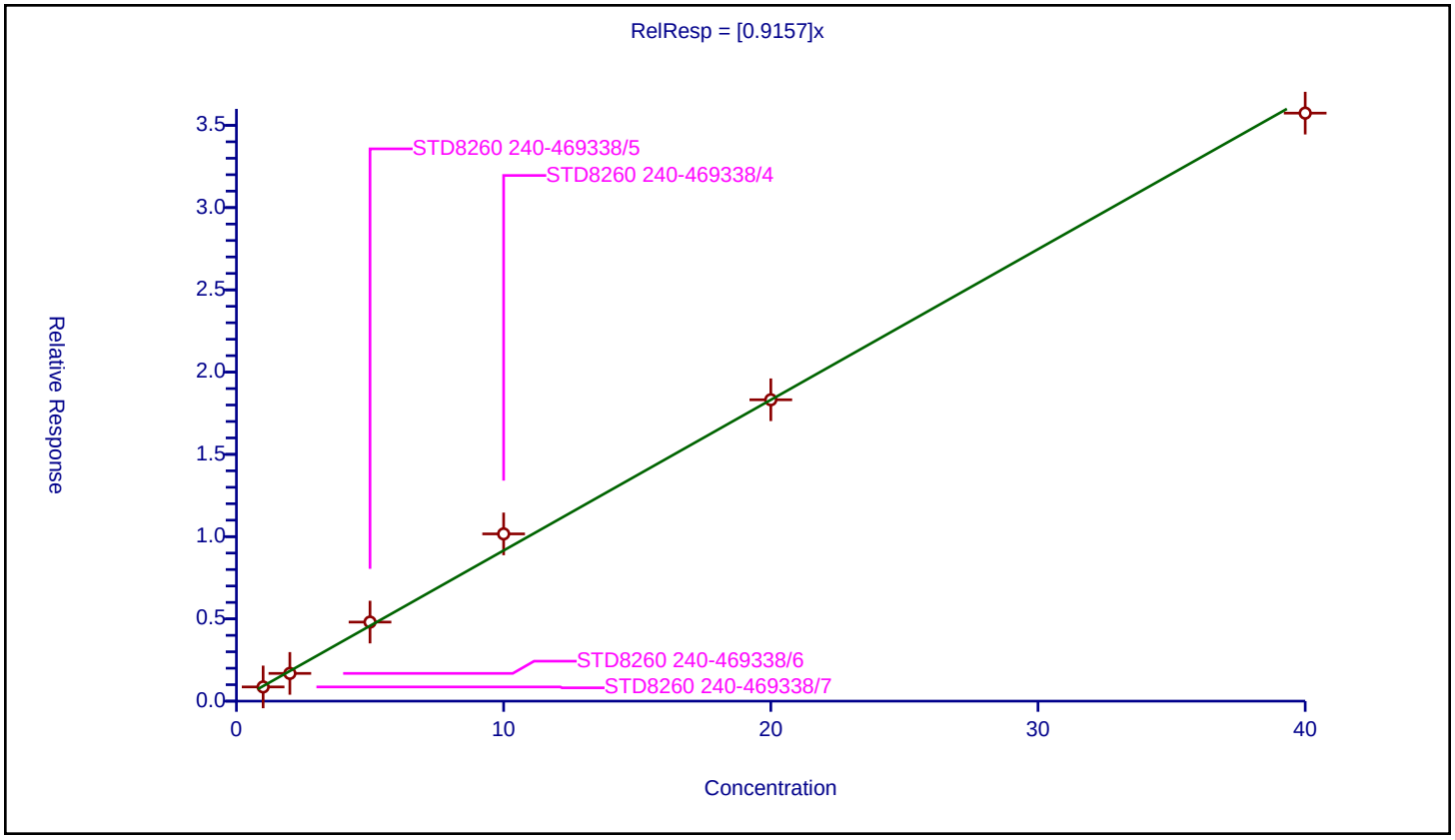
Curve Coefficients

Intercept:	0
Slope:	0.9157

Error Coefficients

Standard Error:	414000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.863796	20.0	420817.0	0.863796	Y
2	STD8260 240-469338/6	2.0	1.686296	20.0	402373.0	0.843148	Y
3	STD8260 240-469338/5	5.0	4.805487	20.0	406373.0	0.961097	Y
4	STD8260 240-469338/4	10.0	10.165868	20.0	399775.0	1.016587	Y
5	STD8260 240-469338/3	20.0	18.319643	20.0	413781.0	0.915982	Y
6	STD8260 240-469338/2	40.0	35.742026	20.0	455301.0	0.893551	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

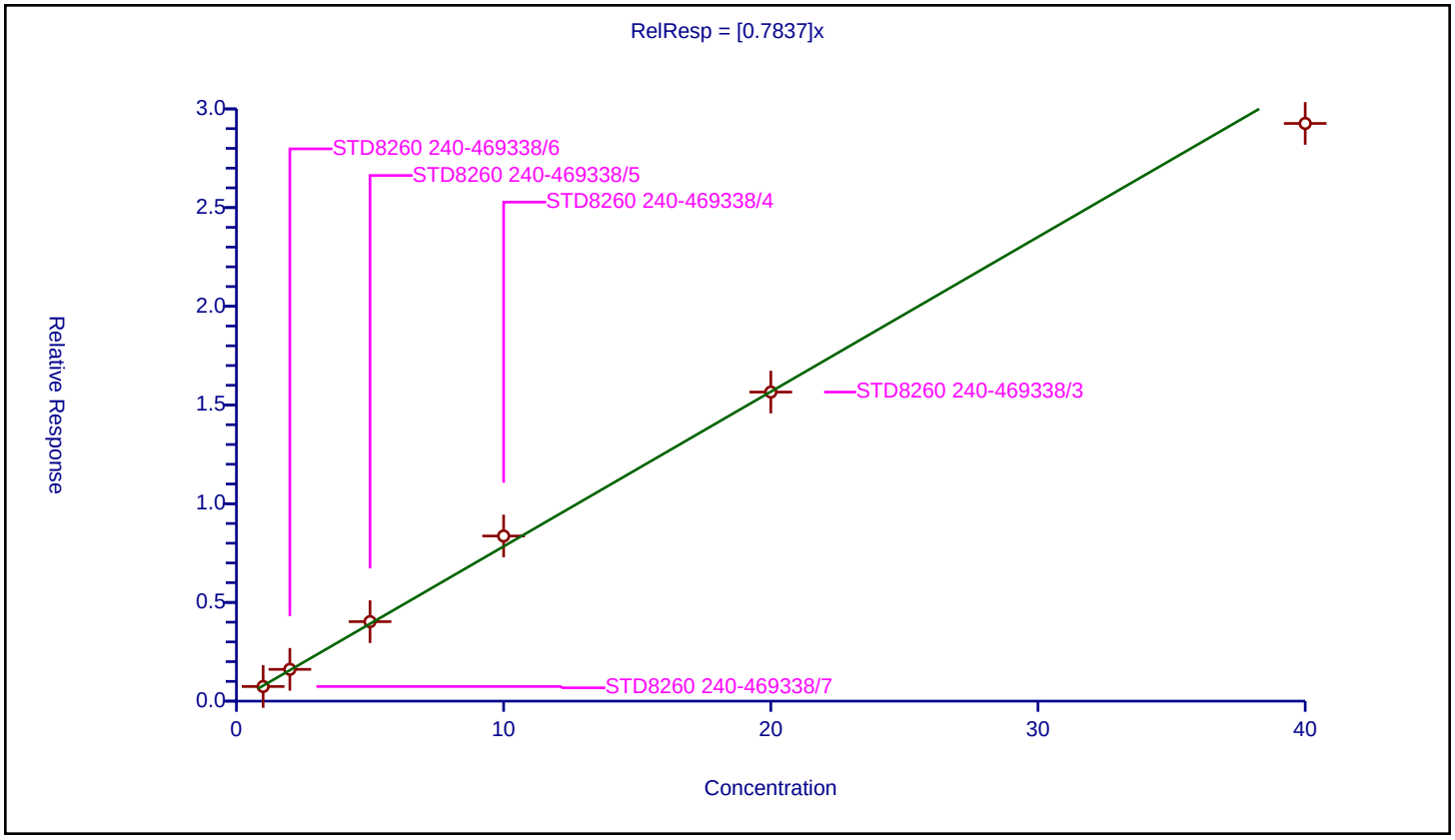
Curve Coefficients

Intercept:	0
Slope:	0.7837

Error Coefficients

Standard Error:	342000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.740987	20.0	420817.0	0.740987	Y
2	STD8260 240-469338/6	2.0	1.610744	20.0	402373.0	0.805372	Y
3	STD8260 240-469338/5	5.0	4.026252	20.0	406373.0	0.80525	Y
4	STD8260 240-469338/4	10.0	8.364805	20.0	399775.0	0.836481	Y
5	STD8260 240-469338/3	20.0	15.656108	20.0	413781.0	0.782805	Y
6	STD8260 240-469338/2	40.0	29.262927	20.0	455301.0	0.731573	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

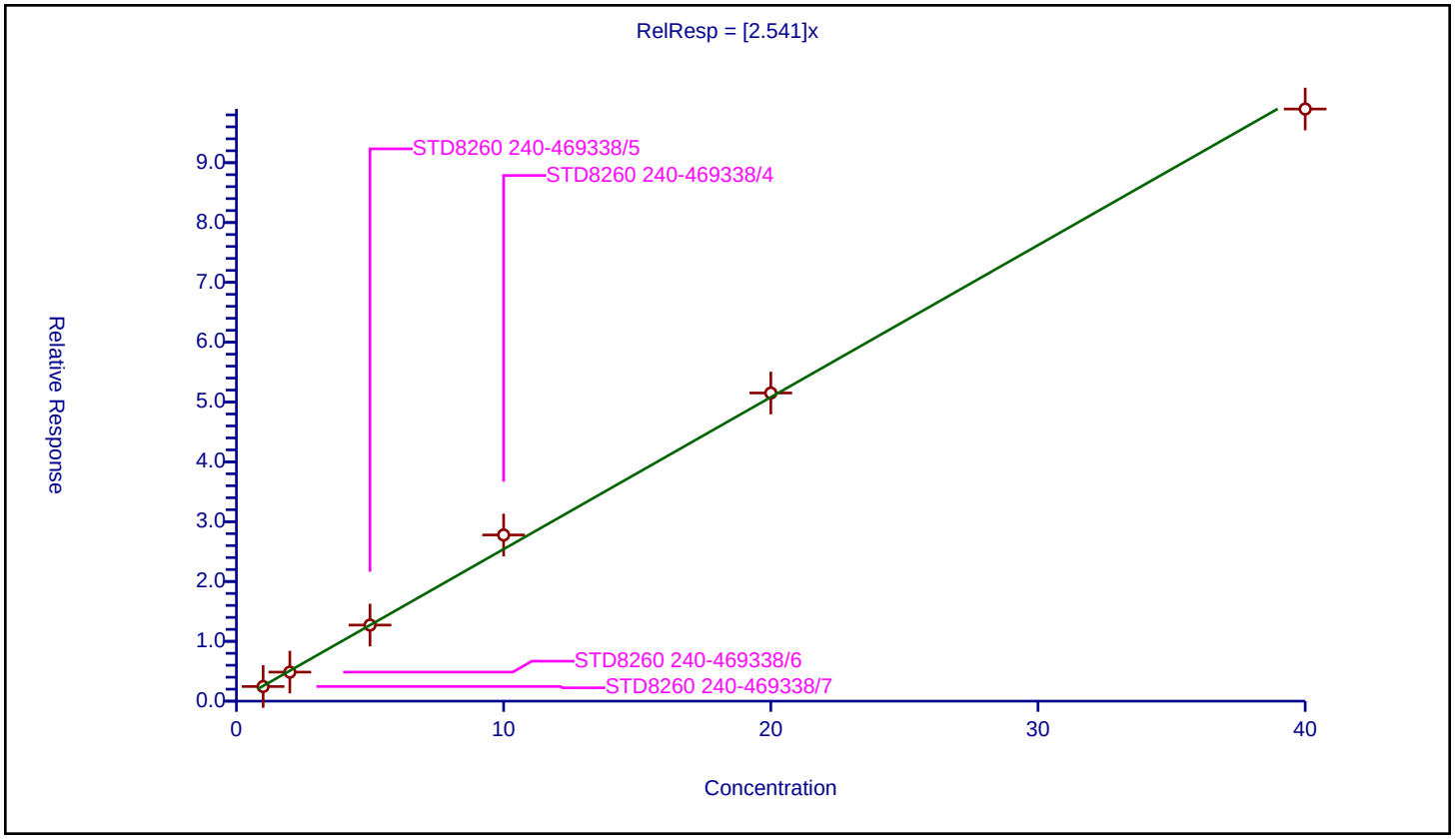
Curve Coefficients

Intercept:	0
Slope:	2.541

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.446194	20.0	420817.0	2.446194	Y
2	STD8260 240-469338/6	2.0	4.853258	20.0	402373.0	2.426629	Y
3	STD8260 240-469338/5	5.0	12.715805	20.0	406373.0	2.543161	Y
4	STD8260 240-469338/4	10.0	27.773022	20.0	399775.0	2.777302	Y
5	STD8260 240-469338/3	20.0	51.507875	20.0	413781.0	2.575394	Y
6	STD8260 240-469338/2	40.0	98.976326	20.0	455301.0	2.474408	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

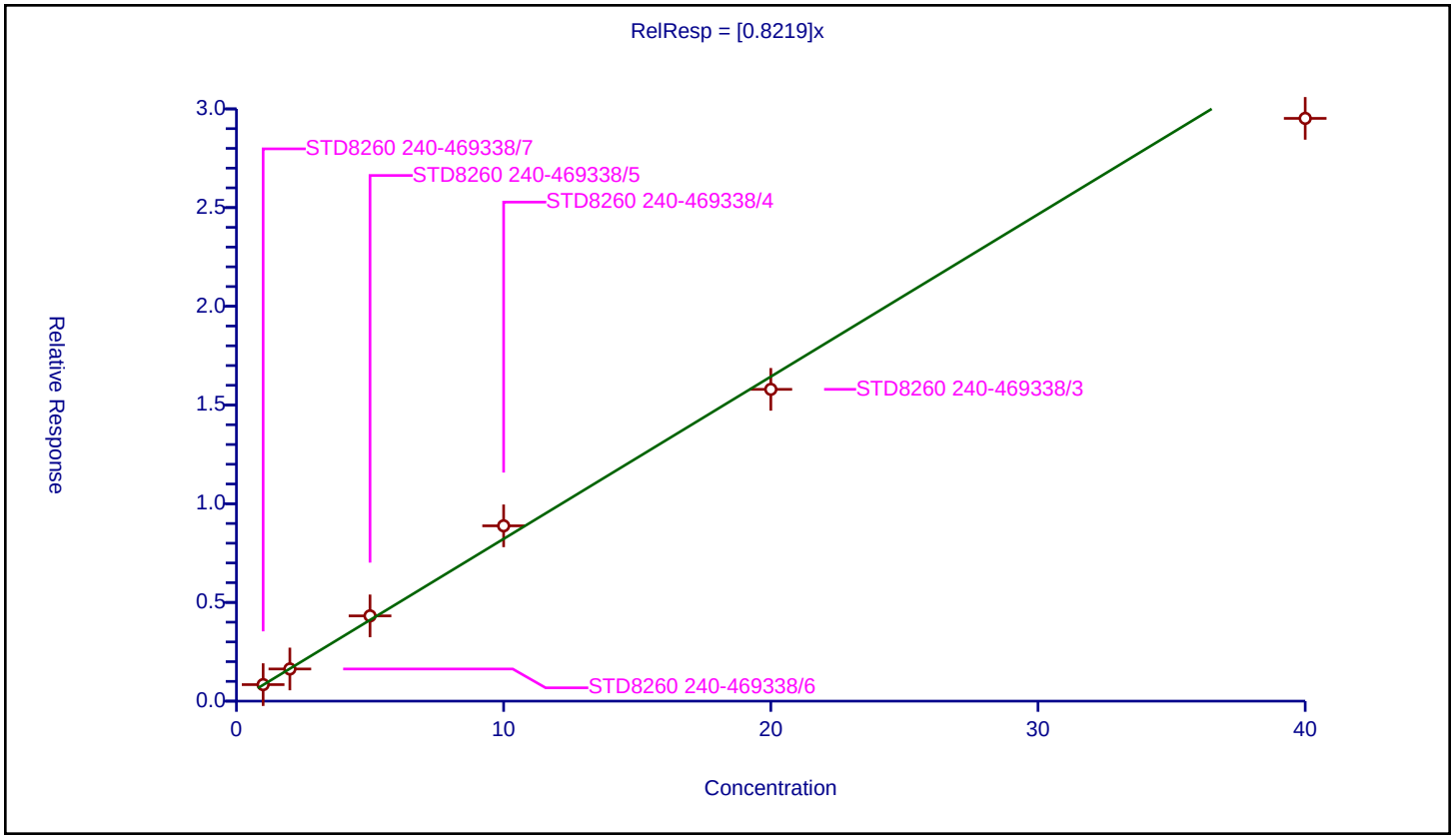
Curve Coefficients

Intercept:	0
Slope:	0.8219

Error Coefficients

Standard Error:	346000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.837133	20.0	420817.0	0.837133	Y
2	STD8260 240-469338/6	2.0	1.629583	20.0	402373.0	0.814791	Y
3	STD8260 240-469338/5	5.0	4.318742	20.0	406373.0	0.863748	Y
4	STD8260 240-469338/4	10.0	8.880445	20.0	399775.0	0.888045	Y
5	STD8260 240-469338/3	20.0	15.79304	20.0	413781.0	0.789652	Y
6	STD8260 240-469338/2	40.0	29.520295	20.0	455301.0	0.738007	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

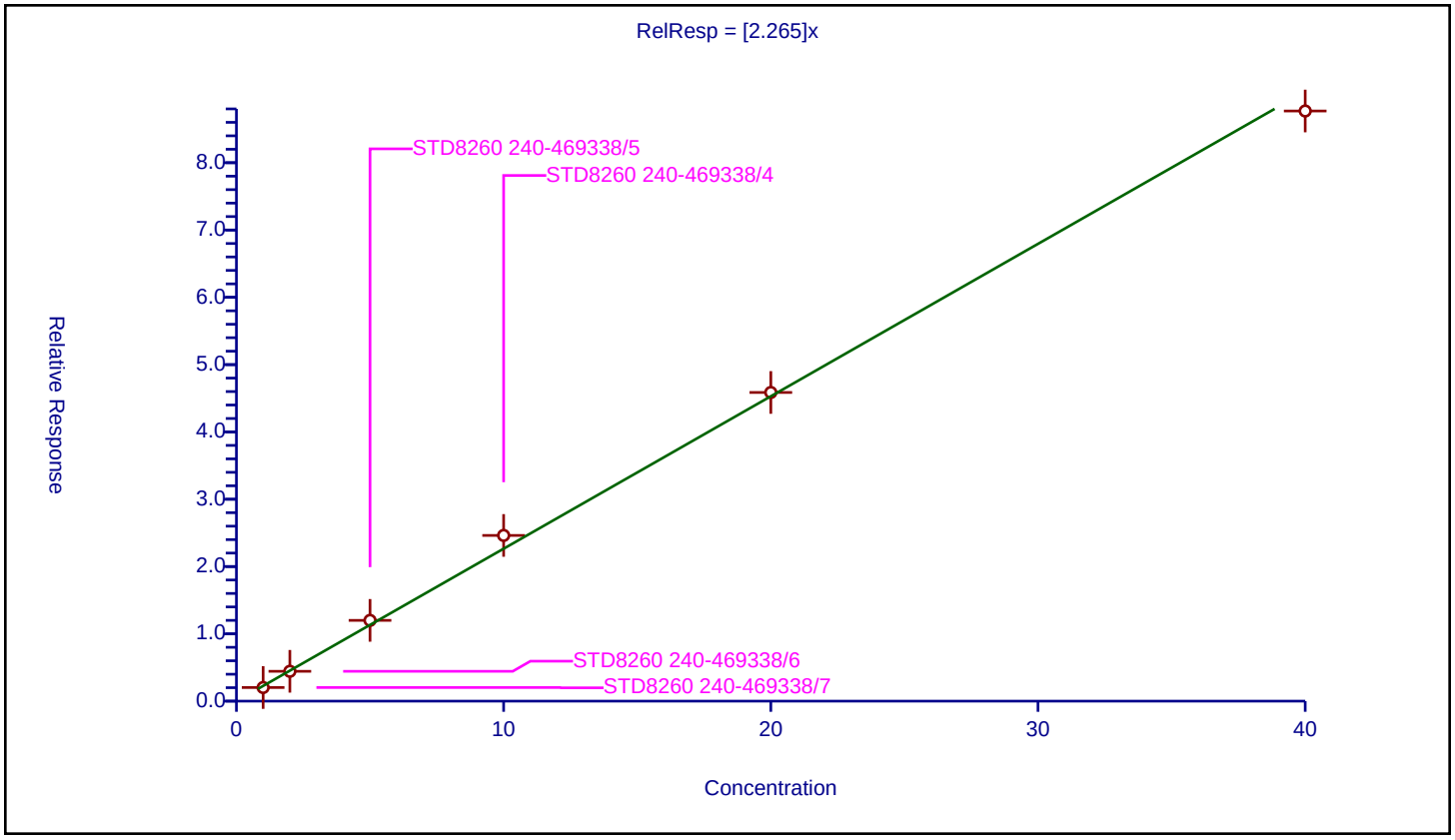
Curve Coefficients

Intercept:	0
Slope:	2.265

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.023587	20.0	420817.0	2.023587	Y
2	STD8260 240-469338/6	2.0	4.435486	20.0	402373.0	2.217743	Y
3	STD8260 240-469338/5	5.0	12.000699	20.0	406373.0	2.40014	Y
4	STD8260 240-469338/4	10.0	24.62195	20.0	399775.0	2.462195	Y
5	STD8260 240-469338/3	20.0	45.865663	20.0	413781.0	2.293283	Y
6	STD8260 240-469338/2	40.0	87.685904	20.0	455301.0	2.192148	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

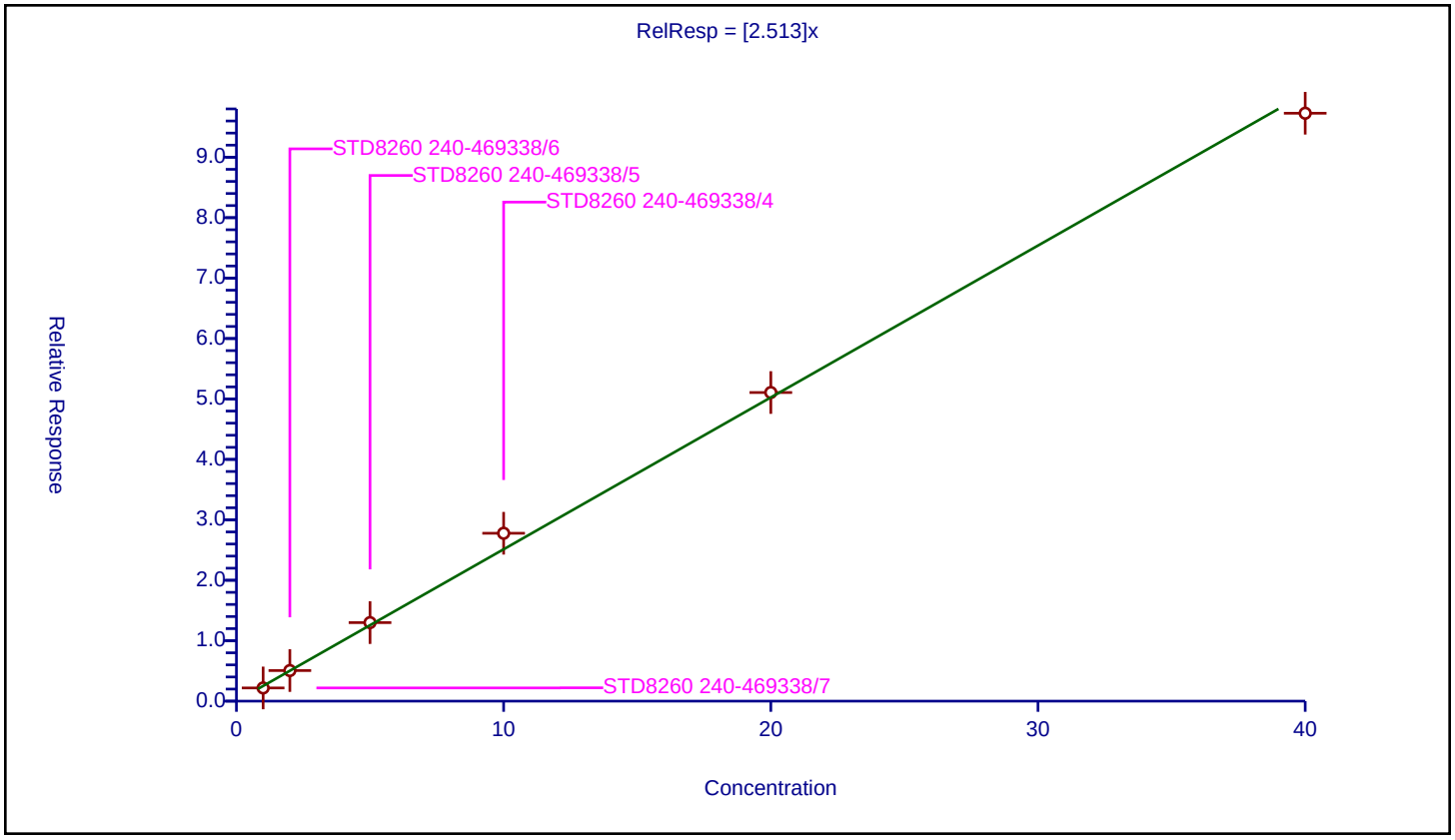
Curve Coefficients

Intercept:	0
Slope:	2.513

Error Coefficients

Standard Error:	1130000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.183229	20.0	420817.0	2.183229	Y
2	STD8260 240-469338/6	2.0	5.062815	20.0	402373.0	2.531407	Y
3	STD8260 240-469338/5	5.0	12.996484	20.0	406373.0	2.599297	Y
4	STD8260 240-469338/4	10.0	27.779776	20.0	399775.0	2.777978	Y
5	STD8260 240-469338/3	20.0	51.069237	20.0	413781.0	2.553462	Y
6	STD8260 240-469338/2	40.0	97.280217	20.0	455301.0	2.432005	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

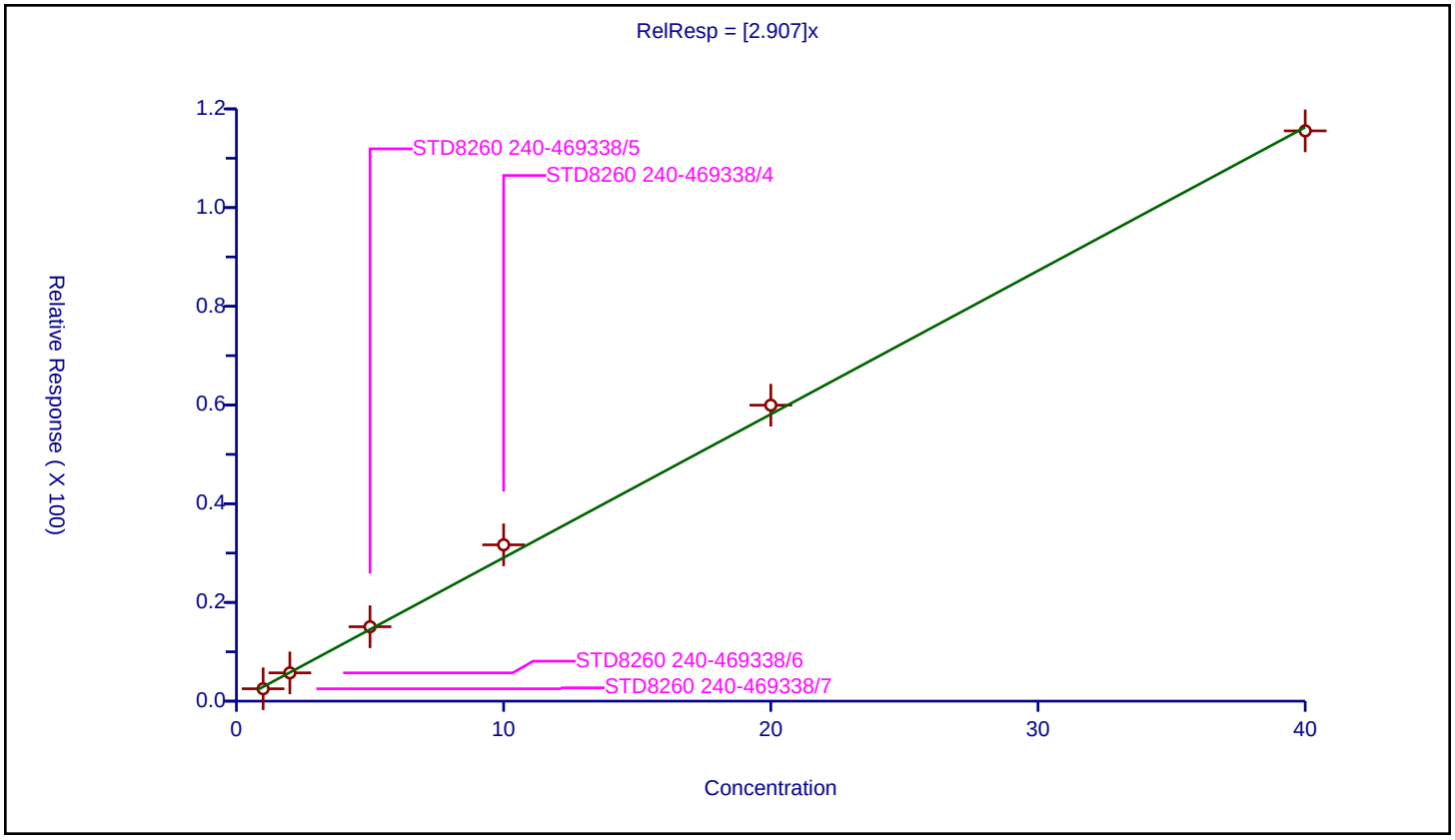
Curve Coefficients

Intercept:	0
Slope:	2.907

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.508644	20.0	420817.0	2.508644	Y
2	STD8260 240-469338/6	2.0	5.726279	20.0	402373.0	2.863139	Y
3	STD8260 240-469338/5	5.0	15.072507	20.0	406373.0	3.014501	Y
4	STD8260 240-469338/4	10.0	31.671915	20.0	399775.0	3.167192	Y
5	STD8260 240-469338/3	20.0	59.968437	20.0	413781.0	2.998422	Y
6	STD8260 240-469338/2	40.0	115.54923	20.0	455301.0	2.888731	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

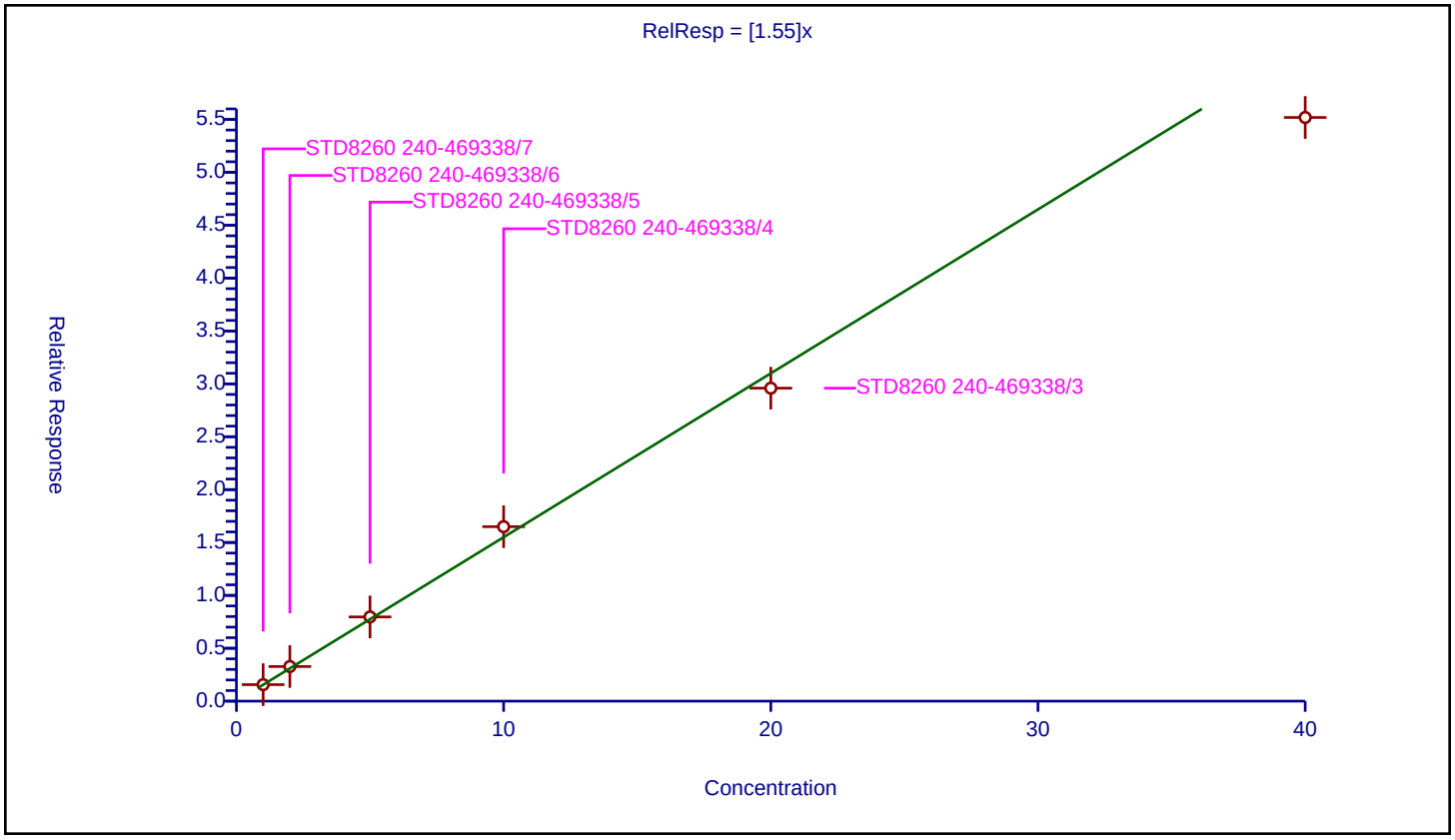
Curve Coefficients

Intercept:	0
Slope:	1.55

Error Coefficients

Standard Error:	647000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.560964	20.0	420817.0	1.560964	Y
2	STD8260 240-469338/6	2.0	3.272884	20.0	402373.0	1.636442	Y
3	STD8260 240-469338/5	5.0	7.962389	20.0	406373.0	1.592478	Y
4	STD8260 240-469338/4	10.0	16.49773	20.0	399775.0	1.649773	Y
5	STD8260 240-469338/3	20.0	29.595752	20.0	413781.0	1.479788	Y
6	STD8260 240-469338/2	40.0	55.188897	20.0	455301.0	1.379722	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

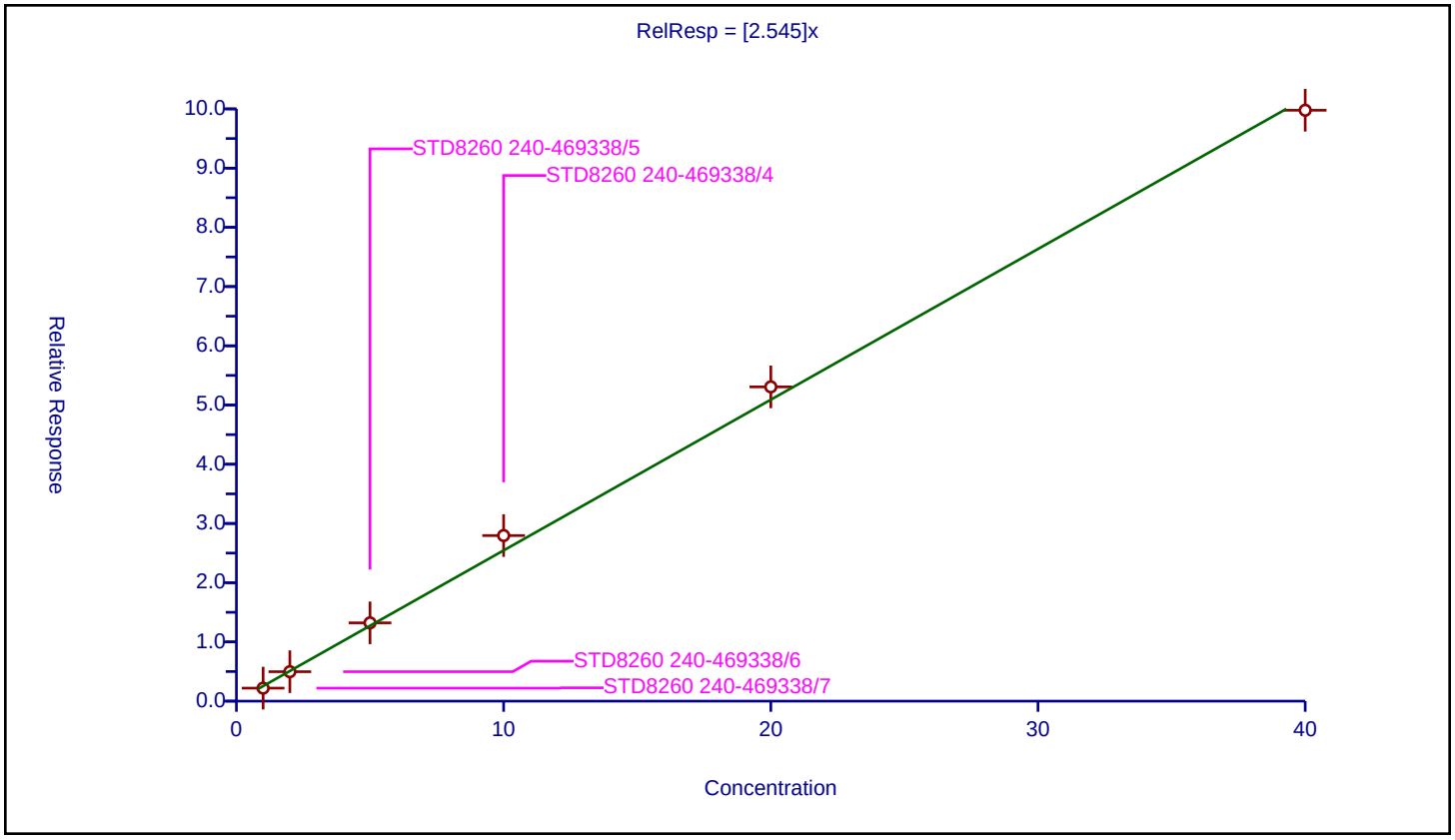
Curve Coefficients

Intercept:	0
Slope:	2.545

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.196252	20.0	420817.0	2.196252	Y
2	STD8260 240-469338/6	2.0	4.973246	20.0	402373.0	2.486623	Y
3	STD8260 240-469338/5	5.0	13.217955	20.0	406373.0	2.643591	Y
4	STD8260 240-469338/4	10.0	27.957776	20.0	399775.0	2.795778	Y
5	STD8260 240-469338/3	20.0	53.061885	20.0	413781.0	2.653094	Y
6	STD8260 240-469338/2	40.0	99.771975	20.0	455301.0	2.494299	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

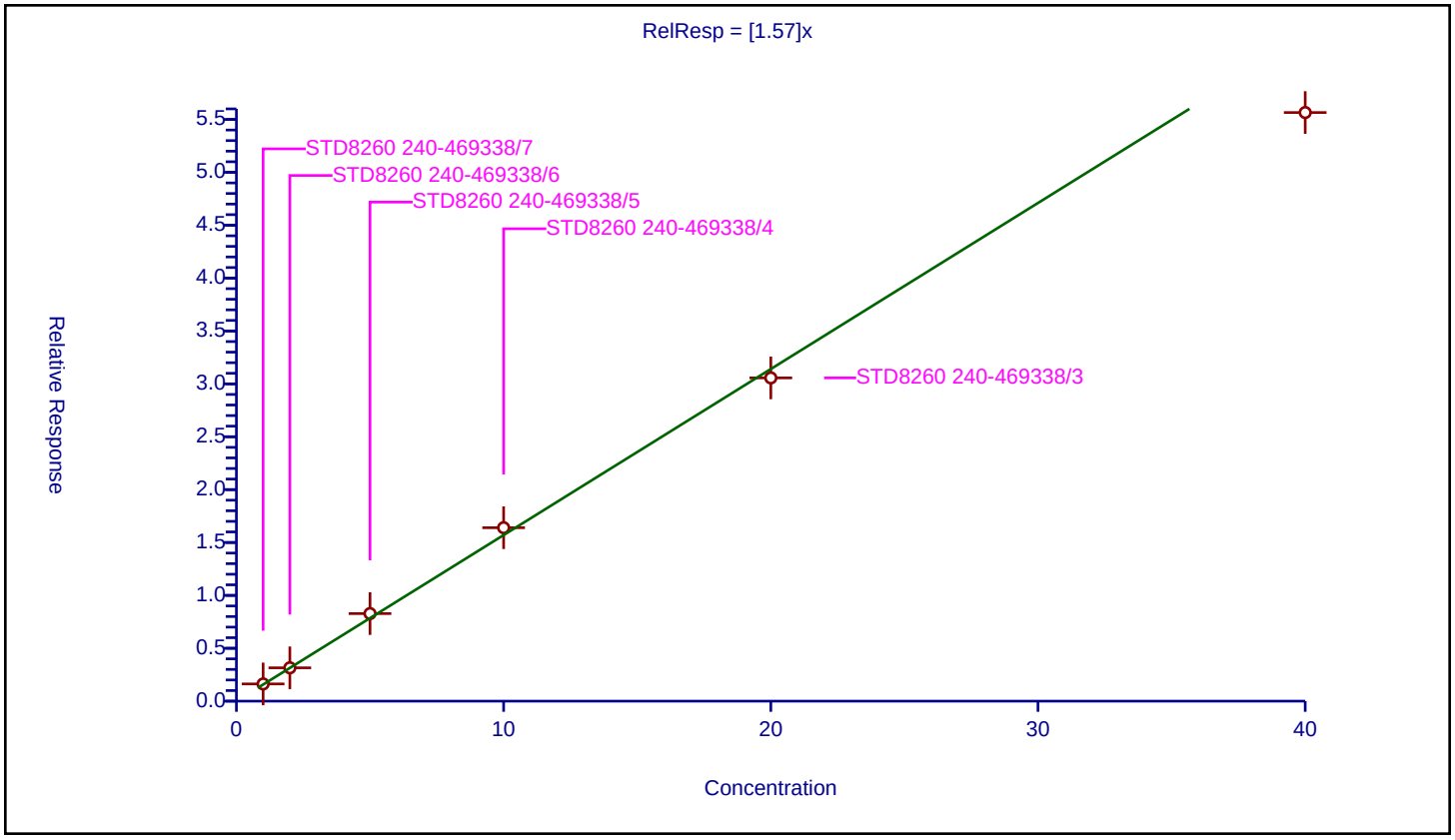
Curve Coefficients

Intercept:	0
Slope:	1.57

Error Coefficients

Standard Error:	655000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.628927	20.0	420817.0	1.628927	Y
2	STD8260 240-469338/6	2.0	3.152846	20.0	402373.0	1.576423	Y
3	STD8260 240-469338/5	5.0	8.280028	20.0	406373.0	1.656006	Y
4	STD8260 240-469338/4	10.0	16.398274	20.0	399775.0	1.639827	Y
5	STD8260 240-469338/3	20.0	30.563269	20.0	413781.0	1.528163	Y
6	STD8260 240-469338/2	40.0	55.654259	20.0	455301.0	1.391356	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

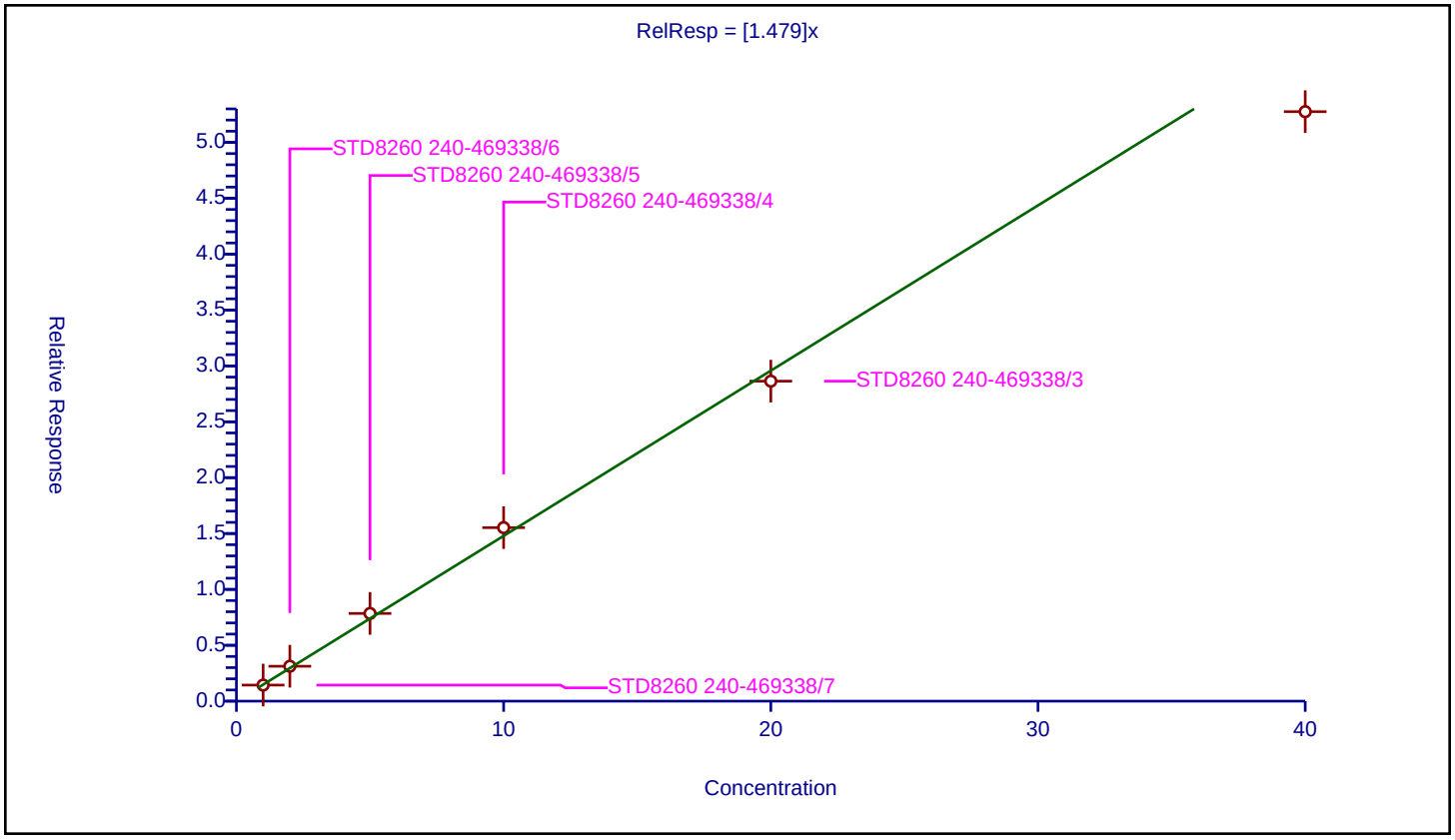
Curve Coefficients

Intercept:	0
Slope:	1.479

Error Coefficients

Standard Error:	620000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.438392	20.0	420817.0	1.438392	Y
2	STD8260 240-469338/6	2.0	3.122575	20.0	402373.0	1.561288	Y
3	STD8260 240-469338/5	5.0	7.84747	20.0	406373.0	1.569494	Y
4	STD8260 240-469338/4	10.0	15.527434	20.0	399775.0	1.552743	Y
5	STD8260 240-469338/3	20.0	28.635244	20.0	413781.0	1.431762	Y
6	STD8260 240-469338/2	40.0	52.751872	20.0	455301.0	1.318797	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

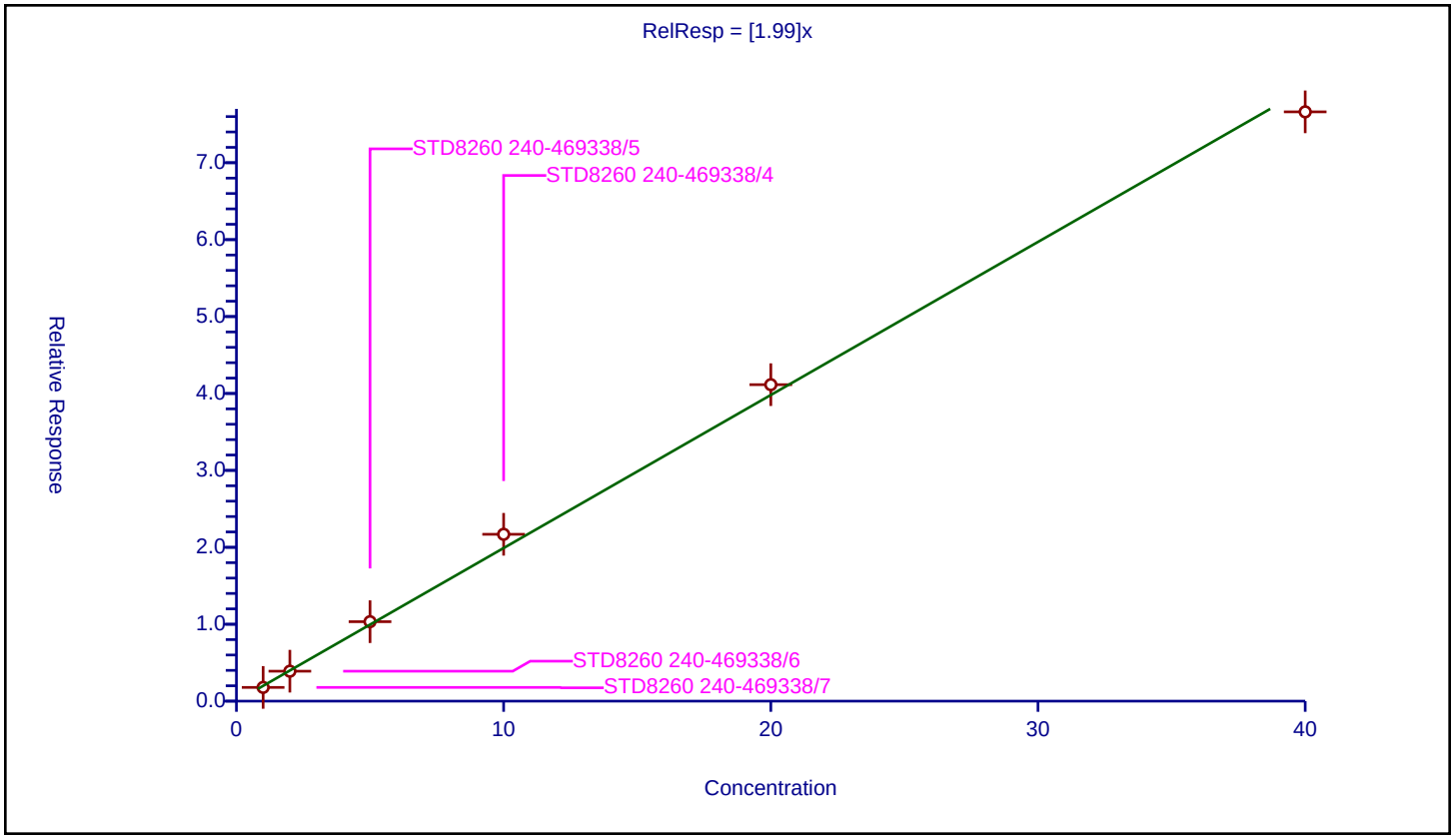
Curve Coefficients

Intercept:	0
Slope:	1.99

Error Coefficients

Standard Error:	895000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	1.786525	20.0	420817.0	1.786525	Y
2	STD8260 240-469338/6	2.0	3.892557	20.0	402373.0	1.946279	Y
3	STD8260 240-469338/5	5.0	10.332429	20.0	406373.0	2.066486	Y
4	STD8260 240-469338/4	10.0	21.691501	20.0	399775.0	2.16915	Y
5	STD8260 240-469338/3	20.0	41.14563	20.0	413781.0	2.057282	Y
6	STD8260 240-469338/2	40.0	76.614459	20.0	455301.0	1.915361	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

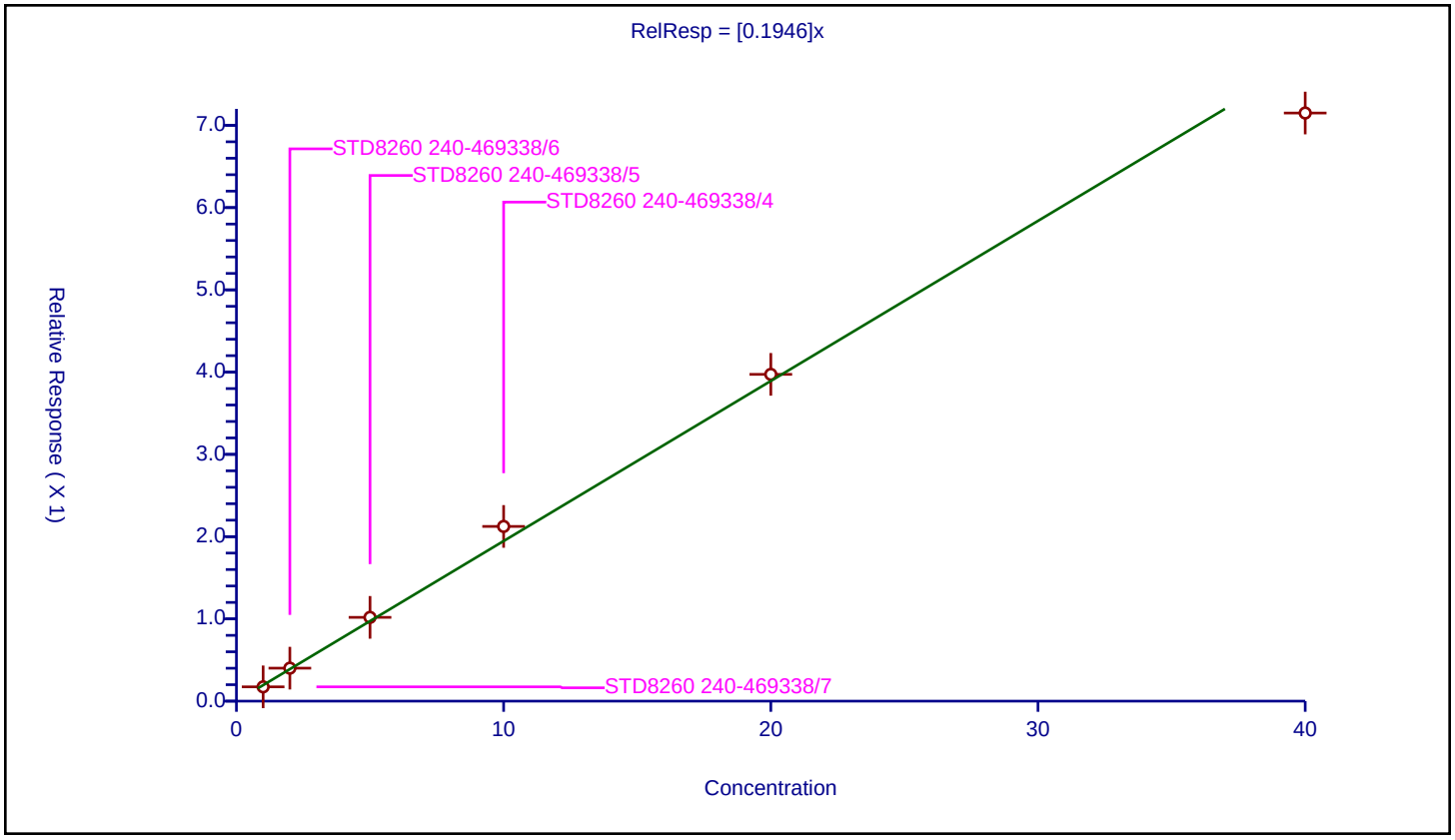
Curve Coefficients

Intercept:	0
Slope:	0.1946

Error Coefficients

Standard Error:	84300
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.173662	20.0	420817.0	0.173662	Y
2	STD8260 240-469338/6	2.0	0.40117	20.0	402373.0	0.200585	Y
3	STD8260 240-469338/5	5.0	1.018473	20.0	406373.0	0.203695	Y
4	STD8260 240-469338/4	10.0	2.123795	20.0	399775.0	0.212379	Y
5	STD8260 240-469338/3	20.0	3.972875	20.0	413781.0	0.198644	Y
6	STD8260 240-469338/2	40.0	7.149688	20.0	455301.0	0.178742	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

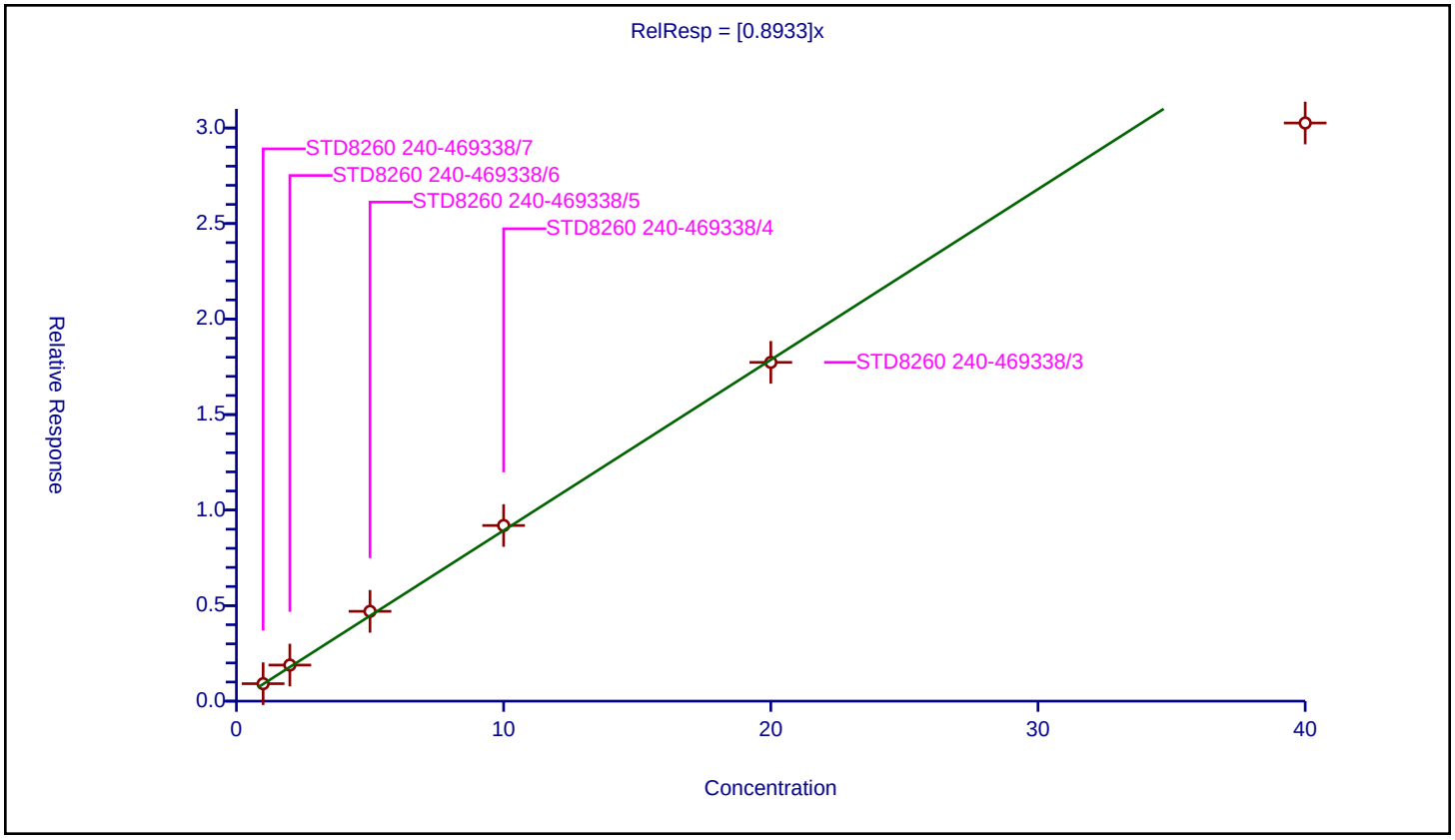
Curve Coefficients

Intercept:	0
Slope:	0.8933

Error Coefficients

Standard Error:	362000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.913271	20.0	420817.0	0.913271	Y
2	STD8260 240-469338/6	2.0	1.88795	20.0	402373.0	0.943975	Y
3	STD8260 240-469338/5	5.0	4.700066	20.0	406373.0	0.940013	Y
4	STD8260 240-469338/4	10.0	9.193171	20.0	399775.0	0.919317	Y
5	STD8260 240-469338/3	20.0	17.731844	20.0	413781.0	0.886592	Y
6	STD8260 240-469338/2	40.0	30.260641	20.0	455301.0	0.756516	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

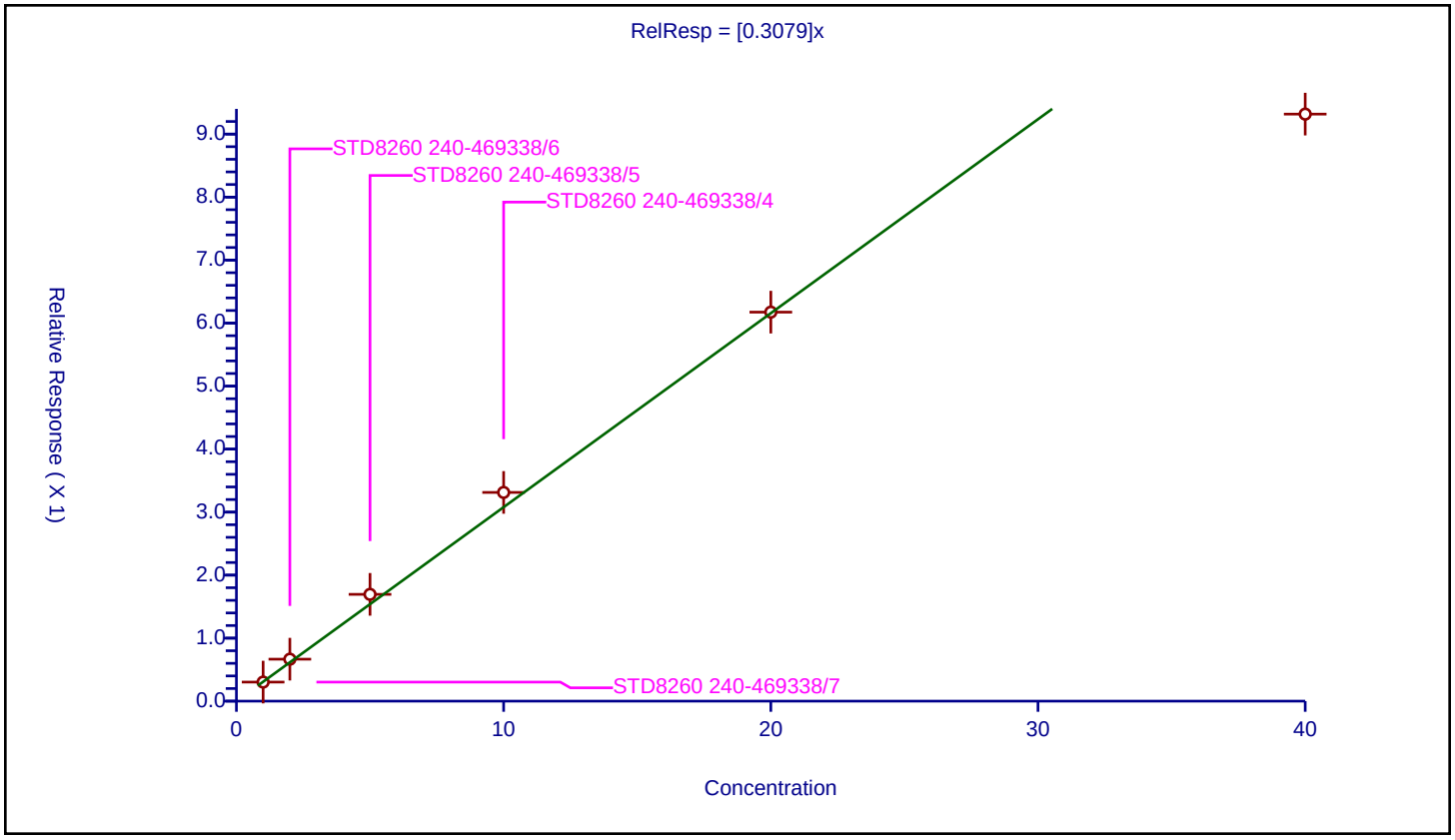
Curve Coefficients

Intercept:	0
Slope:	0.3079

Error Coefficients

Standard Error:	116000
Relative Standard Error:	12.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.302317	20.0	420817.0	0.302317	Y
2	STD8260 240-469338/6	2.0	0.665949	20.0	402373.0	0.332975	Y
3	STD8260 240-469338/5	5.0	1.694847	20.0	406373.0	0.338969	Y
4	STD8260 240-469338/4	10.0	3.312613	20.0	399775.0	0.331261	Y
5	STD8260 240-469338/3	20.0	6.174136	20.0	413781.0	0.308707	Y
6	STD8260 240-469338/2	40.0	9.317309	20.0	455301.0	0.232933	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

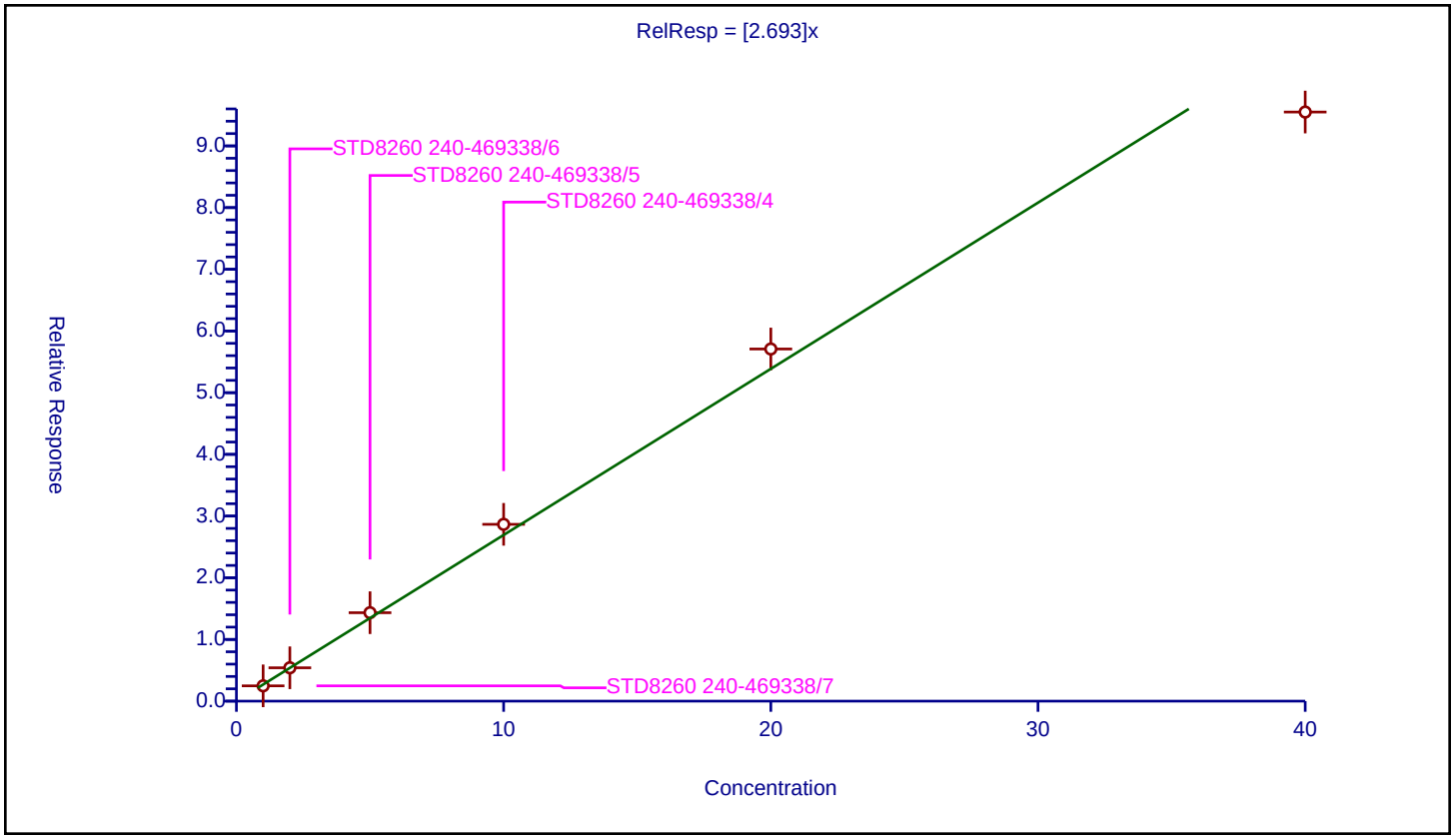
Curve Coefficients

Intercept:	0
Slope:	2.693

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	7.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	2.480128	20.0	420817.0	2.480128	Y
2	STD8260 240-469338/6	2.0	5.408912	20.0	402373.0	2.704456	Y
3	STD8260 240-469338/5	5.0	14.337271	20.0	406373.0	2.867454	Y
4	STD8260 240-469338/4	10.0	28.661322	20.0	399775.0	2.866132	Y
5	STD8260 240-469338/3	20.0	57.081258	20.0	413781.0	2.854063	Y
6	STD8260 240-469338/2	40.0	95.489489	20.0	455301.0	2.387237	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

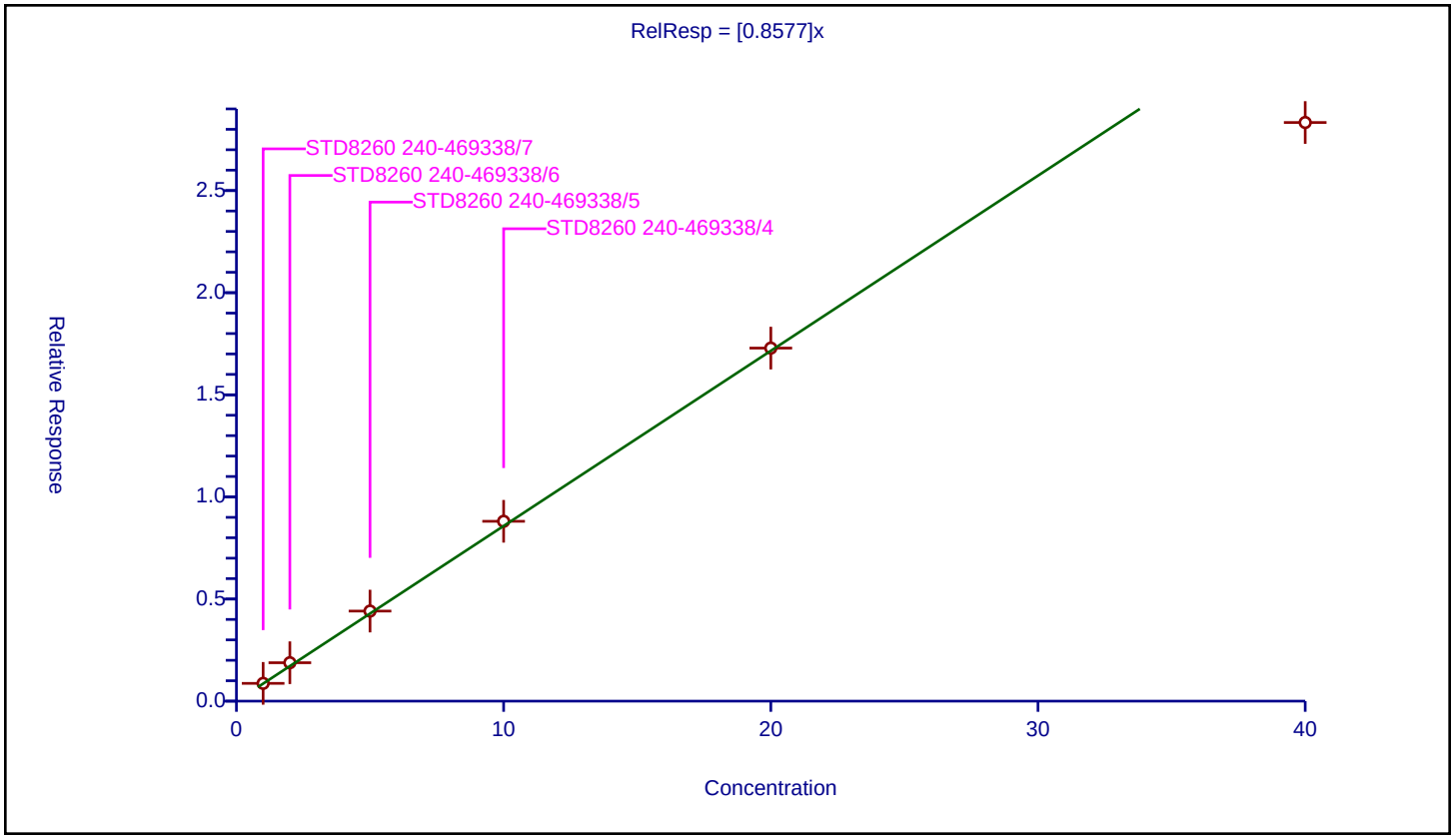
Curve Coefficients

Intercept:	0
Slope:	0.8577

Error Coefficients

Standard Error:	342000
Relative Standard Error:	9.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD8260 240-469338/7	1.0	0.870307	20.0	420817.0	0.870307	Y
2	STD8260 240-469338/6	2.0	1.88119	20.0	402373.0	0.940595	Y
3	STD8260 240-469338/5	5.0	4.410382	20.0	406373.0	0.882076	Y
4	STD8260 240-469338/4	10.0	8.806954	20.0	399775.0	0.880695	Y
5	STD8260 240-469338/3	20.0	17.287502	20.0	413781.0	0.864375	Y
6	STD8260 240-469338/2	40.0	28.3333	20.0	455301.0	0.708333	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-498110/3	230125.D
Level 2	IC 240-498110/4	230126.D
Level 3	IC 240-498110/5	230127.D
Level 4	IC 240-498110/6	230128.D
Level 5	ICIS 240-498110/7	230129.D
Level 6	IC 240-498110/8	230130.D
Level 7	IC 240-498110/9	230131.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2448	0.2539 0.2323	0.2737	0.2506	0.2437	Ave		0.2498				5.5		15.0			
Chloromethane	0.5617 0.4972	0.5954 0.4713	0.5550	0.5402	0.5017	Ave		0.5318			0.1000	8.2		15.0			
Vinyl chloride	0.2861 0.3445	0.3652 0.3275	0.3610	0.3562	0.3351	Ave		0.3394				8.0		15.0			
Butadiene	0.3525 0.3966	0.4563 0.3858	0.4404	0.4194	0.4015	Ave		0.4075				8.5		15.0			
Bromomethane	0.1636 0.1389	0.1771 0.1188	0.1657	0.1611	0.1403	Ave		0.1522				13.3		15.0			
Chloroethane	0.1976 0.1581	0.2342 +++++	0.2128	0.1915	0.1721	Ave		0.1944				14.1		15.0			
Dichlorofluoromethane	0.4383 0.3634	0.4474 0.3290	0.4316	0.4032	0.3755	Ave		0.3983				11.1		15.0			
Trichlorofluoromethane	0.2139 0.2815	0.2892 0.2667	0.3027	0.3083	0.2816	Ave		0.2777				11.3		15.0			
Ethyl ether	0.3859 0.3229	0.3577 0.3159	0.3672	0.3442	0.3572	Ave		0.3501				7.0		15.0			
Acrolein	0.0771 0.0724	0.0726 0.0714	0.0766	0.0703	0.0735	Ave		0.0734				3.5		15.0			
1,1-Dichloroethene	0.1832 0.2276	0.2300 0.2186	0.2385	0.2371	0.2334	Ave		0.2241				8.6		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1062 0.1559	0.1533 0.1518	0.1551	0.1564	0.1493	Ave		0.1469				12.3		15.0			
Acetone	+++++ 0.0340	0.0607 0.0325	0.0498	0.0344	0.0339	Lin1	0.0729	0.0326							0.9940		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Iodomethane	0.2818 0.3028	0.2937 0.2978	0.3030	0.3038	0.2971	Ave		0.2972				2.6		15.0			
Carbon disulfide	0.6042 0.8054	0.7514 0.7817	0.7716	0.7947	0.7787	Ave		0.7554				9.1		15.0			
3-Chloro-1-propene	0.8539 0.7569	0.7787 0.7514	0.7629	0.7893	0.7773	Ave		0.7815				4.4		15.0			
Methyl acetate	0.5061 0.4512	0.3996 0.4459	0.4523	0.4410	0.4543	Ave		0.4501				6.9		15.0			
Methylene Chloride	+++++ 0.2732	0.3663 0.2678	0.2966	0.2835	0.2720	Ave		0.2932				12.7		15.0			
2-Methyl-2-propanol	0.0400 0.0322	0.0374 0.0351	0.0355	0.0333	0.0320	Ave		0.0351				8.3		15.0			
Acrylonitrile	0.1842 0.2021	0.1645 0.2012	0.1919	0.1961	0.1998	Ave		0.1914				7.0		15.0			
trans-1,2-Dichloroethene	0.2204 0.2843	0.2879 0.2814	0.2813	0.2856	0.2823	Ave		0.2747				8.8		15.0			
Methyl tert-butyl ether	0.7702 0.7446	0.6352 0.7505	0.7326	0.7450	0.7752	Ave		0.7362				6.4		15.0			
Hexane	+++++ 0.6201	0.5548 0.6029	0.5966	0.6365	0.6344	Ave		0.6076				5.0		15.0			
1,1-Dichloroethane	0.6505 0.6558	0.6041 0.6445	0.6722	0.6759	0.6666	Ave		0.6528			0.1000	3.7		15.0			
Vinyl acetate	0.9048 0.9802	0.7859 1.0353	0.8901	0.9772	0.9758	Ave		0.9356				8.8		15.0			
2,2-Dichloropropane	0.0407 0.0531	0.0610 0.0525	0.0555	0.0546	0.0550	Ave		0.0532				11.6		15.0			
cis-1,2-Dichloroethene	0.2903 0.2913	0.2937 0.2856	0.2920	0.2959	0.2924	Ave		0.2916				1.1		15.0			
2-Butanone (MEK)	0.0564 0.0471	0.0567 0.0457	0.0473	0.0464	0.0474	Ave		0.0496				9.7		15.0			
Chlorobromomethane	0.1217 0.1222	0.1324 0.1228	0.1197	0.1284	0.1274	Ave		0.1249				3.6		15.0			
Tetrahydrofuran	0.2248 0.1932	0.1979 0.1860	0.1775	0.1827	0.1928	Ave		0.1935				8.0		15.0			
Chloroform	0.4428 0.4642	0.4337 0.4577	0.4759	0.4754	0.4700	Ave		0.4599				3.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	0.2691 0.3394	0.3336 0.3293	0.3374	0.3483	0.3449	Ave		0.3289				8.2		15.0			
Cyclohexane	+++++ 0.7018	0.6668 0.6852	0.7185	0.7268	0.7105	Ave		0.7016				3.2		15.0			
Carbon tetrachloride	0.1907 0.2514	0.2416 0.2422	0.2513	0.2496	0.2592	Ave		0.2408				9.5		15.0			
1,1-Dichloropropene	0.2784 0.4019	0.3875 0.3957	0.4014	0.4070	0.4095	Ave		0.3830				12.2		15.0			
Benzene	1.0123 1.1916	1.1261 1.1769	1.1619	1.1693	1.1756	Ave		1.1448				5.4		15.0			
1,2-Dichloroethane	0.4882 0.4679	0.4435 0.4598	0.4736	0.4811	0.4700	Ave		0.4691				3.1		15.0			
Isobutyl alcohol	0.0214 0.0201	0.0205 0.0186	0.0202	0.0199	0.0210	Ave		0.0202				4.5		15.0			
n-Heptane	+++++ 0.0645	0.0628 0.0660	0.0658	0.0649	0.0679	Ave		0.0653				2.6		15.0			
Trichloroethene	0.2066 0.2530	0.2319 0.2503	0.2418	0.2502	0.2564	Ave		0.2415				7.2		15.0			
Methylcyclohexane	+++++ 0.4547	0.3862 0.4446	0.4259	0.4568	0.4614	Ave		0.4383				6.5		15.0			
1,2-Dichloropropane	0.3018 0.3502	0.3217 0.3454	0.3399	0.3484	0.3496	Ave		0.3367				5.4		15.0			
Dibromomethane	0.1414 0.1519	0.1467 0.1561	0.1532	0.1525	0.1546	Ave		0.1509				3.4		15.0			
1,4-Dioxane	+++++ 0.0030	0.0022 0.0029	0.0032	0.0029	0.0030	Ave		0.0029				11.4		15.0			
Dichlorobromomethane	0.2696 0.3146	0.2663 0.3155	0.3088	0.3088	0.3164	Ave		0.3000				7.4		15.0			
2-Chloroethyl vinyl ether	+++++ 0.2545	0.1666 0.2467	0.2050	0.2249	0.2451	Ave		0.2238				14.9		15.0			
cis-1,3-Dichloropropene	0.3214 0.4409	0.3377 0.4343	0.3702	0.3911	0.4159	Ave		0.3873				12.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.4937 0.6006	0.4489 0.5825	0.5343	0.5682	0.6098	Ave		0.5483				10.8		15.0			
Toluene	1.5423 1.8594	1.7535 1.8768	1.7865	1.8640	1.8647	Ave		1.7925				6.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	+++++ 0.6176	0.4296 0.6411	0.5339	0.5712	0.6196	Ave		0.5688				13.8		15.0			
Ethyl methacrylate	+++++ 0.6591	0.3588 0.6712	0.4826	0.5986	0.6533	Lin1	-0.424	0.6672							0.9980		0.9900
1,1,2-Trichloroethane	0.3504 0.3655	0.3586 0.3719	0.3690	0.3708	0.3738	Ave		0.3657				2.3		15.0			
Tetrachloroethene	0.2402 0.2800	0.2582 0.2864	0.2940	0.2819	0.2797	Ave		0.2743				6.8		15.0			
1,3-Dichloropropane	0.6297 0.6879	0.6087 0.6943	0.6806	0.7008	0.6947	Ave		0.6710				5.4		15.0			
2-Hexanone	0.5163 0.6946	0.5134 0.6810	0.5945	0.6653	0.7298	Ave		0.6278				13.9		15.0			
Chlorodibromomethane	0.2751 0.3322	0.2627 0.3441	0.2959	0.3185	0.3313	Ave		0.3085				10.1		15.0			
Ethylene Dibromide	0.3452 0.3746	0.3081 0.3690	0.3369	0.3676	0.3715	Ave		0.3533				6.9		15.0			
Chlorobenzene	0.9458 0.9966	0.9149 1.0096	0.9796	0.9909	1.0044	Ave		0.9774			0.3000	3.6		15.0			
1,1,1,2-Tetrachloroethane	0.2558 0.3000	0.2490 0.3034	0.2996	0.3091	0.3150	Ave		0.2903				9.1		15.0			
Ethylbenzene	0.4392 0.5634	0.4936 0.5682	0.5347	0.5602	0.5723	Ave		0.5331				9.3		15.0			
m-Xylene & p-Xylene	0.4585 0.6756	0.5404 0.6776	0.6093	0.6755	0.6731	Ave		0.6157				14.0		15.0			
o-Xylene	0.5247 0.6429	0.5304 0.6481	0.5891	0.6484	0.6468	Ave		0.6043				9.4		15.0			
Styrene	0.6551 1.0711	0.6860 1.1008	0.8738	1.0056	1.0413	Lin1	-0.326	1.0759							0.9980		0.9900
Bromoform	+++++ 0.2287	0.1624 0.2348	0.1894	0.2096	0.2199	Ave		0.2075			0.1000	13.1		15.0			
Isopropylbenzene	+++++ 1.6274	1.2519 1.6573	1.5058	1.6347	1.6267	Ave		1.5506				10.0		15.0			
Bromobenzene	0.7189 0.7338	0.6974 0.7359	0.7521	0.7588	0.7449	Ave		0.7346				2.8		15.0			
1,1,2,2-Tetrachloroethane	1.0263 1.0794	1.0239 1.0638	1.1075	1.1376	1.1392	Ave		1.0825			0.3000	4.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichloropropane	0.2844 0.3103	0.3522 0.3098	0.3131	0.3334	0.3387	Ave		0.3203				7.1		15.0			
trans-1,4-Dichloro-2-butene	0.5335 0.5346	0.5092 0.4981	0.4905	0.5249	0.5607	Ave		0.5216				4.6		15.0			
N-Propylbenzene	+++++ 0.8756	0.6831 0.8930	0.9023	0.9518	0.9352	Ave		0.8735				11.1		15.0			
2-Chlorotoluene	0.6013 0.7219	0.6897 0.7367	0.7321	0.7510	0.7520	Ave		0.7121				7.5		15.0			
1,3,5-Trimethylbenzene	+++++ 2.7075	2.1536 2.6744	2.6641	2.8072	2.8086	Ave		2.6359				9.3		15.0			
4-Chlorotoluene	0.6194 0.7557	0.6610 0.7538	0.7812	0.7659	0.7757	Ave		0.7304				8.7		15.0			
tert-Butylbenzene	+++++ 2.1974	1.7035 2.2329	2.0398	2.2097	2.2325	Ave		2.1026				9.9		15.0			
1,2,4-Trimethylbenzene	+++++ 2.7908	1.9656 2.7277	2.6699	2.8121	2.7951	Ave		2.6269				12.5		15.0			
sec-Butylbenzene	+++++ 3.4185	2.6359 3.3620	3.2848	3.3774	3.3982	Ave		3.2461				9.3		15.0			
1,3-Dichlorobenzene	1.2383 1.3407	1.2635 1.3608	1.3797	1.3174	1.3372	Ave		1.3197				3.9		15.0			
4-Isopropyltoluene	+++++ 2.7432	2.0983 2.7141	2.6677	2.7437	2.7747	Ave		2.6236				9.9		15.0			
1,4-Dichlorobenzene	1.3652 1.4161	1.3218 1.3854	1.4205	1.3981	1.4081	Ave		1.3879				2.5		15.0			
1,2-Dichlorobenzene	1.2563 1.2806	1.2215 1.2926	1.3401	1.3330	1.3209	Ave		1.2921				3.3		15.0			
n-Butylbenzene	+++++ 2.7173	2.0929 2.5982	2.5562	2.7360	2.7284	Ave		2.5715				9.6		15.0			
1,2-Dibromo-3-Chloropropane	0.2405 0.2120	0.1992 0.2173	0.2138	0.2023	0.2182	Ave		0.2147				6.3		15.0			
1,2,4-Trichlorobenzene	0.8511 0.8234	0.8674 0.8205	0.8467	0.8608	0.8446	Ave		0.8449				2.1		15.0			
Hexachlorobutadiene	0.3514 0.3987	0.4630 0.3987	0.4320	0.4413	0.4129	Ave		0.4140				8.7		15.0			
Naphthalene	2.3503 2.8751	2.1401 2.8938	2.7451	2.9231	2.9551	Ave		2.6975				11.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.8683 0.7920	0.7414 0.7847	0.8862	0.8552	0.8215	Ave		0.8213				6.3		15.0			
Dibromofluoromethane (Surr)	0.2287 0.2157	0.2163 0.2129	0.2130	0.2202	0.2185	Ave		0.2179				2.5		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3736 0.3329	0.3485 0.3332	0.3525	0.3492	0.3442	Ave		0.3477				4.0		15.0			
Toluene-d8 (Surr)	1.4085 1.4817	1.4217 1.5219	1.4772	1.4923	1.5255	Ave		1.4756				3.1		15.0			
4-Bromofluorobenzene (Surr)	0.4741 0.4508	0.4563 0.4621	0.4404	0.4418	0.4523	Ave		0.4540				2.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-498110/3	230125.D
Level 2	IC 240-498110/4	230126.D
Level 3	IC 240-498110/5	230127.D
Level 4	IC 240-498110/6	230128.D
Level 5	ICIS 240-498110/7	230129.D
Level 6	IC 240-498110/8	230130.D
Level 7	IC 240-498110/9	230131.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 501278	12137 672072	67914	160158	326565	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Chloromethane	FB	Ave	13632 1017980	28466 1363531	137716	345289	672292	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Vinyl chloride	FB	Ave	6942 705385	17459 947328	89579	227680	449062	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Butadiene	FB	Ave	8554 812080	21814 1116089	109280	268089	538015	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Bromomethane	FB	Ave	3971 284471	8466 343619	41122	102966	187994	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Chloroethane	FB	Ave	4796 323688	11195 +++++	52812	122368	230678	0.500 37.5	1.00 +++++	5.00	12.5	25.0
Dichlorofluoromethane	FB	Ave	10636 744130	21389 951852	107081	257726	503253	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Trichlorofluoromethane	FB	Ave	5192 576371	13828 771534	75107	197026	377367	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Ethyl ether	FB	Ave	9364 661116	17102 913781	91100	219971	478734	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Acrolein	FB	Ave	9350 741273	17351 1032760	95063	224747	492683	2.50 188	5.00 250	25.0	62.5	125
1,1-Dichloroethene	FB	Ave	4446 465946	10998 632300	59190	151564	312718	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2578 319262	7329 439281	38472	99955	200096	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Acetone	FB	Lin1	+++++ 139065	5800 187899	24712	44031	90744	+++++ 75.0	2.00 100	10.0	25.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	6839 619947	14041 861578	75185	194190	398188	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Carbon disulfide	FB	Ave	14662 1649037	35923 2261454	191443	507928	1043578	0.500 37.5	1.00 50.0	5.00	12.5	25.0
3-Chloro-1-propene	FB	Ave	20724 1549650	37226 2173660	189287	504484	1041635	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methyl acetate	FB	Ave	24564 1847799	38207 2579888	224454	563756	1217516	1.00 75.0	2.00 100	10.0	25.0	50.0
Methylene Chloride	FB	Ave	+++++ 559296	17514 774598	73600	181195	364479	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
2-Methyl-2-propanol	FB	Ave	9716 658804	17884 1015272	88099	212797	428817	5.00 375	10.0 500	50.0	125	250
Acrylonitrile	FB	Ave	44703 4138600	78645 5819653	476155	1253081	2676961	5.00 375	10.0 500	50.0	125	250
trans-1,2-Dichloroethene	FB	Ave	5349 582077	13762 814188	69801	182569	378246	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methyl tert-butyl ether	FB	Ave	18692 1524628	30367 2171085	181789	476180	1038864	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Hexane	FB	Ave	+++++ 1269712	26526 1744274	148027	406804	850180	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,1-Dichloroethane	FB	Ave	15787 1342699	28879 1864601	166785	432023	893322	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Vinyl acetate	FB	Ave	21957 2006863	37571 2995097	220850	624614	1307717	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2,2-Dichloropropane	FB	Ave	988 108640	2915 151913	13765	34893	73719	0.500 37.5	1.00 50.0	5.00	12.5	25.0
cis-1,2-Dichloroethene	FB	Ave	7045 596524	14042 826335	72441	189156	391824	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2-Butanone (MEK)	FB	Ave	2737 192808	5424 264376	23477	59288	127046	1.00 75.0	2.00 100	10.0	25.0	50.0
Chlorobromomethane	FB	Ave	2954 250271	6328 355173	29699	82054	170787	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Tetrahydrofuran	FB	Ave	10911 790984	18918 1075930	88066	233520	516694	1.00 75.0	2.00 100	10.0	25.0	50.0
Chloroform	FB	Ave	10746 950485	20734 1324092	118079	303826	629832	0.500 37.5	1.00 50.0	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	6530 694868	15951 952580	83723	222633	462136	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Cyclohexane	FB	Ave	+++++ 1436951	31877 1982301	178266	464523	952174	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Carbon tetrachloride	FB	Ave	4628 514684	11549 700746	62354	159518	347300	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,1-Dichloropropene	FB	Ave	6756 822827	18524 1144748	99606	260107	548802	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Benzene	FB	Ave	24566 2439813	53836 3404574	288309	747385	1575475	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloroethane	FB	Ave	11847 957919	21202 1330216	117501	307473	629817	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Isobutyl alcohol	FB	Ave	12980 1026887	24474 1341648	125613	317690	701972	12.5 938	25.0 1250	125	313	625
n-Heptane	FB	Ave	+++++ 131969	3004 190871	16339	41461	90983	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Trichloroethene	FB	Ave	5015 517979	11089 724223	60007	159900	343637	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methylcyclohexane	FB	Ave	+++++ 931012	18464 1286125	105679	291969	618340	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloropropane	FB	Ave	7325 716936	15378 999350	84329	222703	468548	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Dibromomethane	FB	Ave	3431 311075	7013 451683	38003	97499	207226	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,4-Dioxane	FB	Ave	+++++ 124222	2145 168308	15813	36874	80580	+++++ 750	20.0 1000	100	250	500
Dichlorobromomethane	FB	Ave	6543 644174	12730 912692	76632	197348	424004	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 1042320	15932 1427628	101735	287433	656958	+++++ 75.0	2.00 100	10.0	25.0	50.0
cis-1,3-Dichloropropene	FB	Ave	7799 902668	16147 1256498	91847	249963	557294	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23964 2459369	42926 3370131	265129	726377	1634282	1.00 75.0	2.00 100	10.0	25.0	50.0
Toluene	CBNZ d5	Ave	20703	47953	255106	689732	1458438	0.500	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			2315325	3209165				37.5	50.0			
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++	11747	76237	211371	484619	+++++	1.00	5.00	12.5	25.0
			769061	1096246				37.5	50.0			
Ethyl methacrylate	CBNZ d5	Lin1	+++++	9813	68917	221487	510958	+++++	1.00	5.00	12.5	25.0
			820742	1147628				37.5	50.0			
1,1,2-Trichloroethane	CBNZ d5	Ave	4703	9807	52694	137210	292365	0.500	1.00	5.00	12.5	25.0
			455094	635974				37.5	50.0			
Tetrachloroethene	CBNZ d5	Ave	3224	7062	41976	104307	218735	0.500	1.00	5.00	12.5	25.0
			348688	489681				37.5	50.0			
1,3-Dichloropropane	CBNZ d5	Ave	8453	16646	97190	259325	543301	0.500	1.00	5.00	12.5	25.0
			856568	1187117				37.5	50.0			
2-Hexanone	CBNZ d5	Ave	13861	28081	169779	492381	1141561	1.00	2.00	10.0	25.0	50.0
			1729904	2328760				75.0	100			
Chlorodibromomethane	CBNZ d5	Ave	3693	7185	42249	117860	259121	0.500	1.00	5.00	12.5	25.0
			413660	588317				37.5	50.0			
Ethylene Dibromide	CBNZ d5	Ave	4633	8426	48100	136013	290570	0.500	1.00	5.00	12.5	25.0
			466488	630921				37.5	50.0			
Chlorobenzene	CBNZ d5	Ave	12695	25020	139874	366643	785582	0.500	1.00	5.00	12.5	25.0
			1241005	1726224				37.5	50.0			
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3433	6808	42776	114362	246402	0.500	1.00	5.00	12.5	25.0
			373598	518828				37.5	50.0			
Ethylbenzene	CBNZ d5	Ave	5896	13499	76355	207291	447606	0.500	1.00	5.00	12.5	25.0
			701599	971509				37.5	50.0			
m-Xylene & p-Xylene	CBNZ d5	Ave	6155	14779	87009	249967	526415	0.500	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			841259	1158685				37.5	50.0			
o-Xylene	CBNZ d5	Ave	7043	14505	84113	239918	505896	0.500	1.00	5.00	12.5	25.0
			800592	1108128				37.5	50.0			
Styrene	CBNZ d5	Lin1	8793	18760	124774	372104	814454	0.500	1.00	5.00	12.5	25.0
			1333819	1882282				37.5	50.0			
Bromoform	CBNZ d5	Ave	+++++	4440	27050	77542	171988	+++++	1.00	5.00	12.5	25.0
			284795	401404				37.5	50.0			
Isopropylbenzene	CBNZ d5	Ave	+++++	34235	215016	604882	1272276	+++++	1.00	5.00	12.5	25.0
			2026458	2833813				37.5	50.0			
Bromobenzene	DCBd 4	Ave	4419	8698	48974	130399	269973	0.500	1.00	5.00	12.5	25.0
			439896	616513				37.5	50.0			
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6308	12769	72110	195504	412853	0.500	1.00	5.00	12.5	25.0
			647103	891262				37.5	50.0			
1,2,3-Trichloropropane	DCBd 4	Ave	1748	4393	20388	57293	122753	0.500	1.00	5.00	12.5	25.0
			186043	259538				37.5	50.0			
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3279	6350	31941	90201	203191	0.500	1.00	5.00	12.5	25.0
			320510	417264				37.5	50.0			
N-Propylbenzene	DCBd 4	Ave	+++++	8519	58750	163566	338938	+++++	1.00	5.00	12.5	25.0
			524914	748153				37.5	50.0			
2-Chlorotoluene	DCBd 4	Ave	3696	8601	47672	129057	272530	0.500	1.00	5.00	12.5	25.0
			432753	617203				37.5	50.0			
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++	26858	173465	482417	1017880	+++++	1.00	5.00	12.5	25.0
			1623147	2240546				37.5	50.0			
4-Chlorotoluene	DCBd 4	Ave	3807	8243	50867	131623	281133	0.500	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			453024	631561				37.5	50.0			
tert-Butylbenzene	DCBd 4	Ave	+++++	21245	132819	379736	809096	+++++	1.00	5.00	12.5	25.0
			1317345	1870707				37.5	50.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++	24513	173847	483257	1012984	+++++	1.00	5.00	12.5	25.0
			1673095	2285191				37.5	50.0			
sec-Butylbenzene	DCBd 4	Ave	+++++	32873	213885	580419	1231533	+++++	1.00	5.00	12.5	25.0
			2049365	2816648				37.5	50.0			
1,3-Dichlorobenzene	DCBd 4	Ave	7611	15757	89838	226403	484618	0.500	1.00	5.00	12.5	25.0
			803776	1140087				37.5	50.0			
4-Isopropyltoluene	DCBd 4	Ave	+++++	26168	173701	471502	1005584	+++++	1.00	5.00	12.5	25.0
			1644554	2273788				37.5	50.0			
1,4-Dichlorobenzene	DCBd 4	Ave	8391	16485	92494	240268	510326	0.500	1.00	5.00	12.5	25.0
			848944	1160641				37.5	50.0			
1,2-Dichlorobenzene	DCBd 4	Ave	7722	15234	87257	229070	478694	0.500	1.00	5.00	12.5	25.0
			767748	1082894				37.5	50.0			
n-Butylbenzene	DCBd 4	Ave	+++++	26101	166444	470181	988799	+++++	1.00	5.00	12.5	25.0
			1629048	2176713				37.5	50.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1478	2484	13920	34761	79081	0.500	1.00	5.00	12.5	25.0
			127089	182018				37.5	50.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	5231	10817	55130	147934	306074	0.500	1.00	5.00	12.5	25.0
			493635	687377				37.5	50.0			
Hexachlorobutadiene	DCBd 4	Ave	2160	5774	28129	75845	149652	0.500	1.00	5.00	12.5	25.0
			239024	334021				37.5	50.0			
Naphthalene	DCBd 4	Ave	14446	26690	178744	502342	1070971	0.500	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 498110

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/04/2021 13:39 Calibration End Date: 08/04/2021 16:09 Calibration ID: 62328

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1723603	2424375				37.5	50.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	5337 474818	9246 657432	57700	146969	297711	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Dibromofluoromethane (Surr)	FB	Ave	5551 441615	10340 616034	52843	140711	292750	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	9067 681655	16663 963984	87476	223173	461240	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	18907 1845023	38880 2602361	210931	552190	1193107	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	6364 561342	12477 790174	62880	163465	353773	0.500 37.5	1.00 50.0	5.00	12.5	25.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230125.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Aug-2021 13:39:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-003
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:36:47 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 04-Aug-2021 16:55:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	97	1334766	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	93	738268	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	338057	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	90	5551	0.5000	0.5249	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.878	0.000	97	9067	0.5000	0.5372	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	95	18907	0.5000	0.4773	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	81	6364	0.5000	0.5222	
9 Dichlorodifluoromethane	85	1.145	1.133	0.012	95	4212	0.5000	0.3474	
10 Chloromethane	50	1.299	1.299	0.000	97	13632	0.5000	0.5281	
11 Vinyl chloride	62	1.382	1.382	0.000	70	6942	0.5000	0.4214	
12 Butadiene	54	1.406	1.394	0.012	95	8554	0.5000	0.4325	
13 Bromomethane	94	1.666	1.654	0.012	86	3971	0.5000	0.5375	
14 Chloroethane	64	1.725	1.725	0.000	93	4796	0.5000	0.5083	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	10636	0.5000	0.5501	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	37	5192	0.5000	0.3852	
17 Ethyl ether	59	2.234	2.234	0.000	95	9364	0.5000	0.5510	
18 Acrolein	56	2.352	2.352	0.000	96	9350	2.50	2.62	
19 1,1-Dichloroethene	96	2.435	2.447	-0.012	92	4446	0.5000	0.4088	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	89	2578	0.5000	0.3617	
21 Acetone	58	2.530	2.530	0.000	97	5503	1.00	1.24	
23 Iodomethane	142	2.613	2.601	0.012	99	6839	0.5000	0.4742	
24 Carbon disulfide	76	2.636	2.660	-0.024	99	14662	0.5000	0.3999	
26 3-Chloro-1-propene	41	2.849	2.837	0.012	87	20724	0.5000	0.5464	
27 Methyl acetate	43	2.920	2.920	0.000	99	24564	1.00	1.12	
28 Methylene Chloride	84	2.991	2.991	0.000	90	17408	0.5000	1.22	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	93	9716	5.00	5.71	
30 Acrylonitrile	53	3.334	3.334	0.000	96	44703	5.00	4.81	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	45	5349	0.5000	0.4011	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	93	18692	0.5000	0.5231	
33 Hexane	57	3.772	3.772	0.000	95	7803	0.5000	0.2646	
34 1,1-Dichloroethane	63	3.961	3.961	0.000	96	15787	0.5000	0.4982	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	21957	0.5000	0.4835	
41 2,2-Dichloropropane	97	4.837	4.825	0.012	64	988	0.5000	0.3827	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	87	7045	0.5000	0.4977	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	97	2737	1.00	1.14	
45 Chlorobromomethane	128	5.145	5.145	0.000	87	2954	0.5000	0.4871	
46 Tetrahydrofuran	42	5.275	5.263	0.012	91	10911	1.00	1.16	
47 Chloroform	83	5.299	5.287	0.012	93	10746	0.5000	0.4814	
48 1,1,1-Trichloroethane	97	5.476	5.488	-0.012	91	6530	0.5000	0.4091	
49 Cyclohexane	56	5.547	5.535	0.012	94	8693	0.5000	0.2553	
51 Carbon tetrachloride	117	5.689	5.689	0.000	72	4628	0.5000	0.3959	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	85	6756	0.5000	0.3634	
54 Benzene	78	5.938	5.938	0.000	95	24566	0.5000	0.4421	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	94	11847	0.5000	0.5203	
52 Isobutyl alcohol	41	6.020	6.020	0.000	93	12980	12.5	13.2	
56 n-Heptane	100	6.328	6.328	0.000	84	570	0.5000	0.1798	
58 Trichloroethene	130	6.707	6.707	0.000	94	5015	0.5000	0.4279	
60 Methylcyclohexane	83	6.908	6.908	0.000	93	5682	0.5000	0.2671	
61 1,2-Dichloropropane	63	6.943	6.943	0.000	87	7325	0.5000	0.4482	
63 Dibromomethane	93	7.062	7.062	0.000	85	3431	0.5000	0.4684	
64 1,4-Dioxane	88	7.145	7.145	0.000	93	1783	10.0	12.8	
65 Dichlorobromomethane	83	7.263	7.263	0.000	94	6543	0.5000	0.4493	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	87	8546	1.00	0.7867	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	87	7799	0.5000	0.4148	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	97	23964	1.00	0.9005	
70 Toluene	91	8.079	8.079	0.000	96	20703	0.5000	0.4302	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	86	5865	0.5000	0.3841	
72 Ethyl methacrylate	69	8.458	8.458	0.000	88	5636	0.5000	0.9504	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	88	4703	0.5000	0.4790	
75 Tetrachloroethene	164	8.635	8.635	0.000	93	3224	0.5000	0.4378	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	91	8453	0.5000	0.4693	
76 2-Hexanone	43	8.801	8.789	0.012	97	13861	1.00	0.8224	
78 Chlorodibromomethane	129	8.884	8.884	0.000	88	3693	0.5000	0.4458	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	4633	0.5000	0.4885	
82 Chlorobenzene	112	9.487	9.487	0.000	93	12695	0.5000	0.4838	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	87	3433	0.5000	0.4406	
84 Ethylbenzene	106	9.618	9.618	0.000	98	5896	0.5000	0.4120	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	93	6155	0.5000	0.3724	
86 o-Xylene	106	10.126	10.126	0.000	96	7043	0.5000	0.4341	
87 Styrene	104	10.138	10.138	0.000	92	8793	0.5000	0.6074	
88 Bromoform	173	10.304	10.304	0.000	72	1930	0.5000	0.3465	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	14140	0.5000	0.3397	
93 Bromobenzene	156	10.777	10.777	0.000	92	4419	0.5000	0.4894	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.801	-0.012	93	6308	0.5000	0.4740	
95 1,2,3-Trichloropropane	110	10.836	10.825	0.011	91	1748	0.5000	0.4440	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	63	3279	0.5000	0.5114	
96 N-Propylbenzene	120	10.907	10.907	0.000	98	3326	0.5000	0.3097	
97 2-Chlorotoluene	126	10.978	10.978	0.000	93	3696	0.5000	0.4222	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	3807	0.5000	0.4240	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	74	10559	0.5000	0.3259	
102 tert-Butylbenzene	119	11.404	11.404	0.000	95	7483	0.5000	0.2895	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	98	9527	0.5000	0.2950	
105 sec-Butylbenzene	105	11.617	11.617	0.000	95	11956	0.5000	0.2996	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	97	7611	0.5000	0.4692	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	46	10464	0.5000	0.3244	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	91	8391	0.5000	0.4918	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	91	7722	0.5000	0.4861	
111 n-Butylbenzene	91	12.174	12.174	0.000	97	9512	0.5000	0.3009	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	64	1478	0.5000	0.5599	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	5231	0.5000	0.5036	
116 Hexachlorobutadiene	225	13.948	13.960	-0.012	83	2160	0.5000	0.4244	
117 Naphthalene	128	14.008	14.008	0.000	97	14446	0.5000	0.4356	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	95	5337	0.5000	0.5286	
S 134 Trihalomethanes, Total	1				0		2.00	1.72	
S 158 Total BTEX	1				0		2.50	2.09	
S 131 1,2-Dichloroethene, Total	96				0			0.8989	
S 132 1,3-Dichloropropene, Total	75				0			0.7989	
S 133 Xylenes, Total	106				0		1.00	0.8065	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	0.40	Units: uL
VMRGAS_00394	Amount Added:	0.40	Units: uL
VMRPRIMW_00446	Amount Added:	0.40	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	0.40	Units: uL

Report Date: 11-Aug-2021 11:36:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230125.D

Injection Date: 04-Aug-2021 13:39:30 Instrument ID: A3UX23 Operator ID: 002808

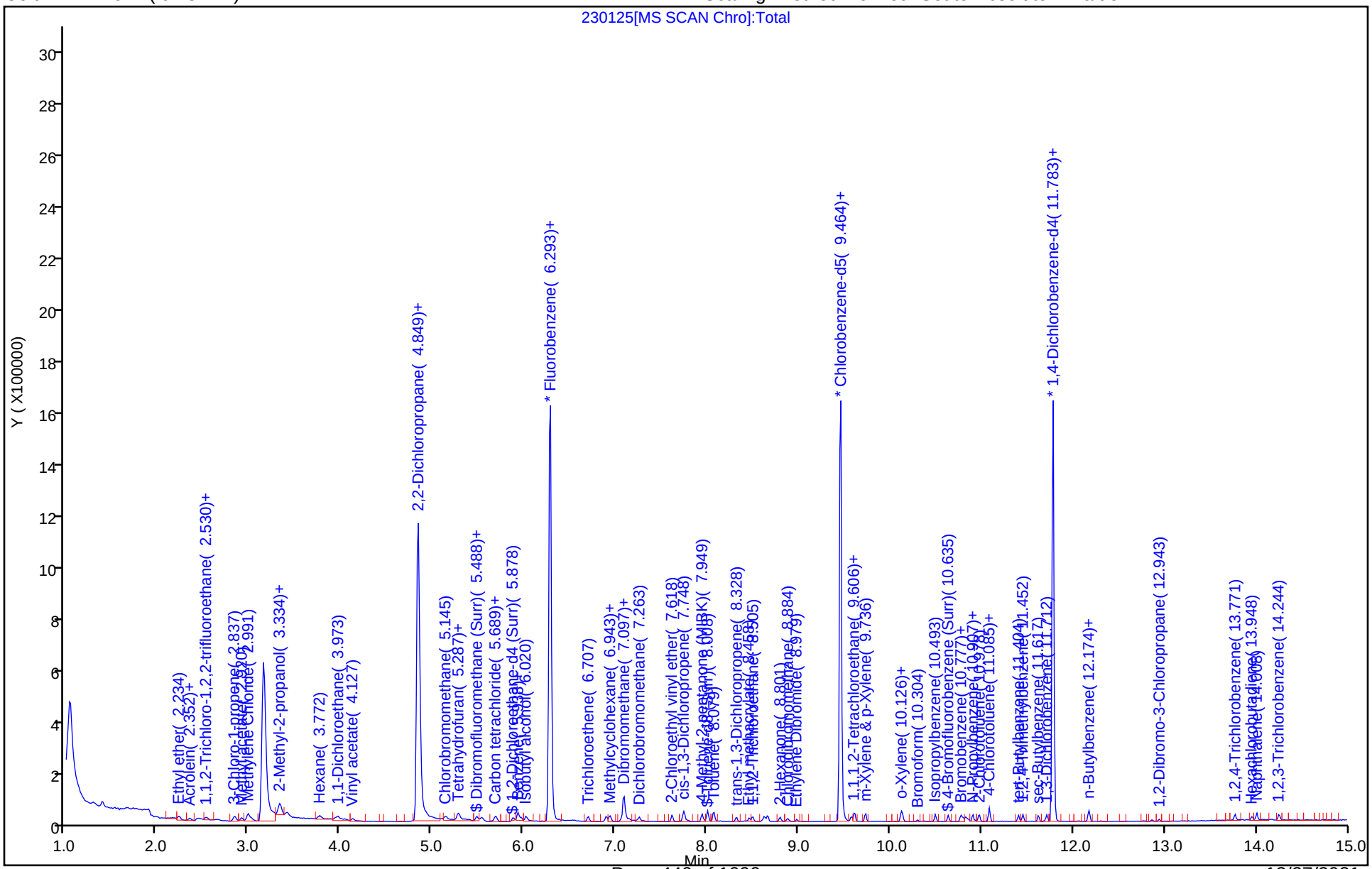
Lims ID: IC Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260_23 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230126.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Aug-2021 14:04:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-004
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:36:53 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 04-Aug-2021 16:55:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1314729	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	93	752034	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	342961	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	84	10340	1.00	0.99	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.878	0.000	97	16663	1.00	1.00	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	38880	1.00	0.9635	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	80	12477	1.00	1.01	
9 Dichlorodifluoromethane	85	1.133	1.133	0.000	97	12137	1.00	1.02	
10 Chloromethane	50	1.287	1.299	-0.012	99	28466	1.00	1.12	
11 Vinyl chloride	62	1.382	1.382	0.000	96	17459	1.00	1.08	
12 Butadiene	54	1.394	1.394	0.000	97	21814	1.00	1.12	
13 Bromomethane	94	1.654	1.654	0.000	91	8466	1.00	1.16	
14 Chloroethane	64	1.725	1.725	0.000	95	11195	1.00	1.20	
15 Dichlorofluoromethane	67	1.914	1.926	-0.012	73	21389	1.00	1.12	
16 Trichlorofluoromethane	101	1.938	1.974	-0.036	54	13828	1.00	1.04	
17 Ethyl ether	59	2.234	2.234	0.000	94	17102	1.00	1.02	
18 Acrolein	56	2.352	2.352	0.000	97	17351	5.00	4.94	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	92	10998	1.00	1.03	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	94	7329	1.00	1.04	
21 Acetone	58	2.530	2.530	0.000	97	5800	2.00	1.49	
23 Iodomethane	142	2.589	2.601	-0.012	96	14041	1.00	0.9884	
24 Carbon disulfide	76	2.660	2.660	0.000	99	35923	1.00	0.99	
26 3-Chloro-1-propene	41	2.837	2.837	0.000	88	37226	1.00	1.00	
27 Methyl acetate	43	2.920	2.920	0.000	100	38207	2.00	1.78	
28 Methylene Chloride	84	2.991	2.991	0.000	90	17514	1.00	1.25	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	89	17884	10.0	10.7	
30 Acrylonitrile	53	3.334	3.334	0.000	98	78645	10.0	8.60	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	91	13762	1.00	1.05	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	85	30367	1.00	0.8628	
33 Hexane	57	3.760	3.772	-0.012	94	26526	1.00	0.9132	
34 1,1-Dichloroethane	63	3.961	3.961	0.000	95	28879	1.00	0.9253	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	37571	1.00	0.8400	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	66	2915	1.00	1.15	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	14042	1.00	1.01	
40 2-Butanone (MEK)	72	4.944	4.932	0.012	96	5424	2.00	2.29	
45 Chlorobromomethane	128	5.145	5.145	0.000	85	6328	1.00	1.06	
46 Tetrahydrofuran	42	5.275	5.263	0.012	93	18918	2.00	2.04	
47 Chloroform	83	5.287	5.287	0.000	93	20734	1.00	0.9429	
48 1,1,1-Trichloroethane	97	5.476	5.488	-0.012	94	15951	1.00	1.01	
49 Cyclohexane	56	5.535	5.535	0.000	93	31877	1.00	0.9504	
51 Carbon tetrachloride	117	5.689	5.689	0.000	92	11549	1.00	1.00	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	87	18524	1.00	1.01	
54 Benzene	78	5.938	5.938	0.000	95	53836	1.00	0.9836	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	94	21202	1.00	0.9453	
52 Isobutyl alcohol	41	6.020	6.020	0.000	92	24474	25.0	25.3	
56 n-Heptane	100	6.328	6.328	0.000	91	3004	1.00	0.9620	
58 Trichloroethene	130	6.707	6.707	0.000	93	11089	1.00	0.9605	
60 Methylcyclohexane	83	6.896	6.908	-0.012	94	18464	1.00	0.8812	
61 1,2-Dichloropropane	63	6.943	6.943	0.000	96	15378	1.00	0.9553	
63 Dibromomethane	93	7.062	7.062	0.000	89	7013	1.00	0.9719	
64 1,4-Dioxane	88	7.145	7.145	0.000	87	2145	20.0	15.6	
65 Dichlorobromomethane	83	7.263	7.263	0.000	94	12730	1.00	0.8876	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	89	15932	2.00	1.49	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	85	16147	1.00	0.8719	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	97	42926	2.00	1.64	
70 Toluene	91	8.079	8.079	0.000	97	47953	1.00	0.9783	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	93	11747	1.00	0.7551	
72 Ethyl methacrylate	69	8.458	8.458	0.000	89	9813	1.00	1.17	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	91	9807	1.00	0.9806	
75 Tetrachloroethene	164	8.635	8.635	0.000	94	7062	1.00	0.9413	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	92	16646	1.00	0.9072	
76 2-Hexanone	43	8.801	8.789	0.012	97	28081	2.00	1.64	
78 Chlorodibromomethane	129	8.884	8.884	0.000	85	7185	1.00	0.8515	
80 Ethylene Dibromide	107	8.979	8.979	0.000	100	8426	1.00	0.8722	
82 Chlorobenzene	112	9.487	9.487	0.000	90	25020	1.00	0.9361	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	85	6808	1.00	0.8577	
84 Ethylbenzene	106	9.606	9.618	-0.012	98	13499	1.00	0.9260	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	96	14779	1.00	0.8777	
86 o-Xylene	106	10.126	10.126	0.000	97	14505	1.00	0.8777	
87 Styrene	104	10.138	10.138	0.000	91	18760	1.00	0.9406	
88 Bromoform	173	10.304	10.304	0.000	92	4440	1.00	0.7826	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	34235	1.00	0.8073	
93 Bromobenzene	156	10.777	10.777	0.000	96	8698	1.00	0.9495	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.801	-0.012	96	12769	1.00	0.9458	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	91	4393	1.00	1.10	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	61	6350	1.00	0.9761	
96 N-Propylbenzene	120	10.907	10.907	0.000	99	8519	1.00	0.7820	
97 2-Chlorotoluene	126	10.978	10.978	0.000	94	8601	1.00	0.9685	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	8243	1.00	0.9049	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	79	26858	1.00	0.8170	
102 tert-Butylbenzene	119	11.404	11.404	0.000	95	21245	1.00	0.8102	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	24513	1.00	0.7483	
105 sec-Butylbenzene	105	11.617	11.617	0.000	96	32873	1.00	0.8120	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	92	15757	1.00	0.9574	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	64	26168	1.00	0.7998	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	90	16485	1.00	0.9524	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	90	15234	1.00	0.9453	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	26101	1.00	0.8139	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	70	2484	1.00	0.9275	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	93	10817	1.00	1.03	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	93	5774	1.00	1.12	
117 Naphthalene	128	14.008	14.008	0.000	97	26690	1.00	0.7934	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	94	9246	1.00	0.9027	
S 134 Trihalomethanes, Total	1				0		4.00	3.46	
S 158 Total BTEX	1				0		5.00	4.64	
S 131 1,2-Dichloroethene, Total	96				0			2.05	
S 132 1,3-Dichloropropene, Total	75				0			1.63	
S 133 Xylenes, Total	106				0		2.00	1.76	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	0.80	Units: uL
VMRGAS_00394	Amount Added:	0.80	Units: uL
VMRPRIMW_00446	Amount Added:	0.80	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	0.80	Units: uL

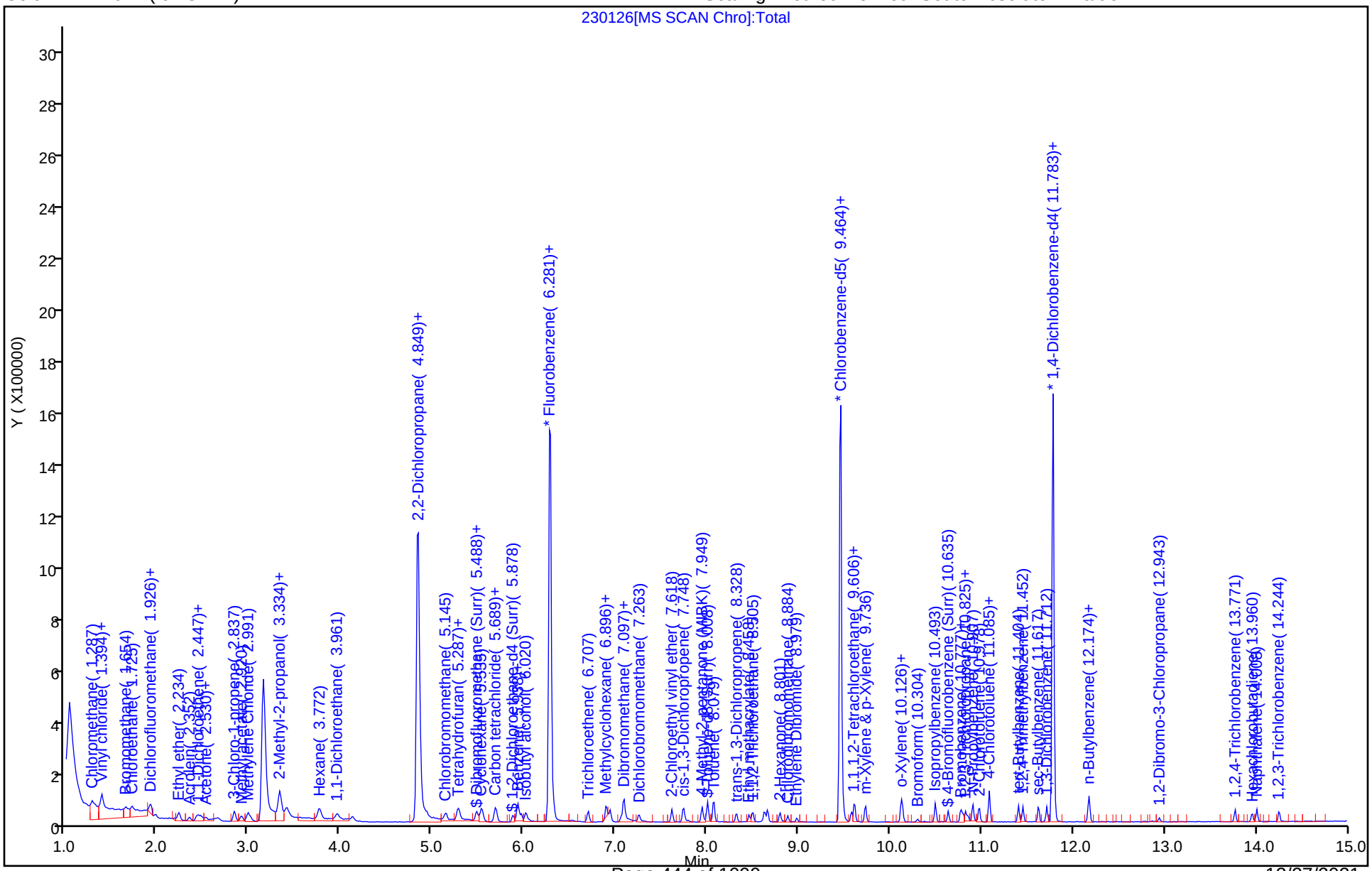
Report Date: 11-Aug-2021 11:36:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230126.D

Injection Date:	04-Aug-2021 14:04:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230127.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Aug-2021 14:29:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-005
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:36:58 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 04-Aug-2021 16:56:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1364692	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	92	785363	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	358121	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	52843	5.00	4.89	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.878	0.001	97	87476	5.00	5.07	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	210931	5.00	5.01	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	83	62880	5.00	4.85	
9 Dichlorodifluoromethane	85	1.145	1.133	0.012	98	67914	5.00	5.48	
10 Chloromethane	50	1.299	1.299	0.000	99	137716	5.00	5.22	
11 Vinyl chloride	62	1.382	1.382	0.000	97	89579	5.00	5.32	
12 Butadiene	54	1.394	1.394	0.000	98	109280	5.00	5.40	
13 Bromomethane	94	1.666	1.654	0.012	88	41122	5.00	5.44	
14 Chloroethane	64	1.725	1.725	0.000	97	52812	5.00	5.47	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	107081	5.00	5.42	
16 Trichlorofluoromethane	101	1.986	1.974	0.012	93	75107	5.00	5.45	
17 Ethyl ether	59	2.234	2.234	0.000	96	91100	5.00	5.24	
18 Acrolein	56	2.352	2.352	0.000	99	95063	25.0	26.1	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	90	59190	5.00	5.32	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	95	38472	5.00	5.28	
21 Acetone	58	2.542	2.530	0.012	99	24712	10.0	13.1	
23 Iodomethane	142	2.601	2.601	0.000	97	75185	5.00	5.10	
24 Carbon disulfide	76	2.660	2.660	0.000	99	191443	5.00	5.11	
26 3-Chloro-1-propene	41	2.837	2.837	0.000	89	189287	5.00	4.88	
27 Methyl acetate	43	2.920	2.920	0.000	100	224454	10.0	10.0	
28 Methylene Chloride	84	2.991	2.991	0.000	91	73600	5.00	5.06	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	91	88099	50.0	50.6	
30 Acrylonitrile	53	3.334	3.334	0.000	99	476155	50.0	50.1	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	69801	5.00	5.12	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	91	181789	5.00	4.98	
33 Hexane	57	3.772	3.772	0.000	97	148027	5.00	4.91	
34 1,1-Dichloroethane	63	3.962	3.961	0.001	96	166785	5.00	5.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	220850	5.00	4.76	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	69	13765	5.00	5.21	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	91	72441	5.00	5.01	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	97	23477	10.0	9.54	
45 Chlorobromomethane	128	5.157	5.145	0.012	83	29699	5.00	4.79	
46 Tetrahydrofuran	42	5.275	5.263	0.012	93	88066	10.0	9.17	
47 Chloroform	83	5.287	5.287	0.000	96	118079	5.00	5.17	
48 1,1,1-Trichloroethane	97	5.488	5.488	0.000	95	83723	5.00	5.13	
49 Cyclohexane	56	5.535	5.535	0.000	92	178266	5.00	5.12	
51 Carbon tetrachloride	117	5.689	5.689	0.000	95	62354	5.00	5.22	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	88	99606	5.00	5.24	
54 Benzene	78	5.938	5.938	0.000	97	288309	5.00	5.07	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	117501	5.00	5.05	
52 Isobutyl alcohol	41	6.021	6.020	0.001	94	125613	125.0	125.2	
56 n-Heptane	100	6.328	6.328	0.000	96	16339	5.00	5.04	
58 Trichloroethene	130	6.707	6.707	0.000	93	60007	5.00	5.01	
60 Methylcyclohexane	83	6.908	6.908	0.000	98	105679	5.00	4.86	
61 1,2-Dichloropropane	63	6.944	6.943	0.001	95	84329	5.00	5.05	
63 Dibromomethane	93	7.062	7.062	0.000	95	38003	5.00	5.07	
64 1,4-Dioxane	88	7.145	7.145	0.000	90	15813	100.0	110.7	
65 Dichlorobromomethane	83	7.263	7.263	0.000	95	76632	5.00	5.15	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	88	101735	10.0	9.16	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	86	91847	5.00	4.78	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	97	265129	10.0	9.74	
70 Toluene	91	8.079	8.079	0.000	96	255106	5.00	4.98	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	96	76237	5.00	4.69	
72 Ethyl methacrylate	69	8.458	8.458	0.000	91	68917	5.00	4.25	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	92	52694	5.00	5.05	
75 Tetrachloroethene	164	8.624	8.635	-0.011	92	41976	5.00	5.36	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	94	97190	5.00	5.07	
76 2-Hexanone	43	8.801	8.789	0.012	99	169779	10.0	9.47	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	42249	5.00	4.79	
80 Ethylene Dibromide	107	8.979	8.979	0.000	99	48100	5.00	4.77	
82 Chlorobenzene	112	9.488	9.487	0.001	90	139874	5.00	5.01	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	92	42776	5.00	5.16	
84 Ethylbenzene	106	9.618	9.618	0.000	98	76355	5.00	5.02	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	95	87009	5.00	4.95	
86 o-Xylene	106	10.127	10.126	0.001	99	84113	5.00	4.87	
87 Styrene	104	10.138	10.138	0.000	93	124774	5.00	4.36	
88 Bromoform	173	10.304	10.304	0.000	94	27050	5.00	4.57	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	215016	5.00	4.86	
93 Bromobenzene	156	10.777	10.777	0.000	96	48974	5.00	5.12	
92 1,1,2,2-Tetrachloroethane	83	10.801	10.801	0.000	95	72110	5.00	5.12	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	90	20388	5.00	4.89	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	71	31941	5.00	4.70	
96 N-Propylbenzene	120	10.908	10.907	0.001	100	58750	5.00	5.16	
97 2-Chlorotoluene	126	10.979	10.978	0.001	94	47672	5.00	5.14	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	50867	5.00	5.35	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	84	173465	5.00	5.05	
102 tert-Butylbenzene	119	11.405	11.404	0.000	95	132819	5.00	4.85	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	98	173847	5.00	5.08	
105 sec-Butylbenzene	105	11.618	11.617	0.001	97	213885	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	94	89838	5.00	5.23	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	96	173701	5.00	5.08	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	92	92494	5.00	5.12	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	94	87257	5.00	5.19	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	166444	5.00	4.97	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	67	13920	5.00	4.98	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	55130	5.00	5.01	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	96	28129	5.00	5.22	
117 Naphthalene	128	14.008	14.008	0.000	97	178744	5.00	5.09	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	95	57700	5.00	5.39	
S 134 Trihalomethanes, Total	1				0		20.0	19.7	
S 158 Total BTEX	1				0		25.0	24.9	
S 131 1,2-Dichloroethene, Total	96				0			10.1	
S 132 1,3-Dichloropropene, Total	75				0			9.47	
S 133 Xylenes, Total	106				0		10.0	9.82	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	4.00	Units: uL
VMRGAS_00394	Amount Added:	4.00	Units: uL
VMRPRIMW_00446	Amount Added:	4.00	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	4.00	Units: uL

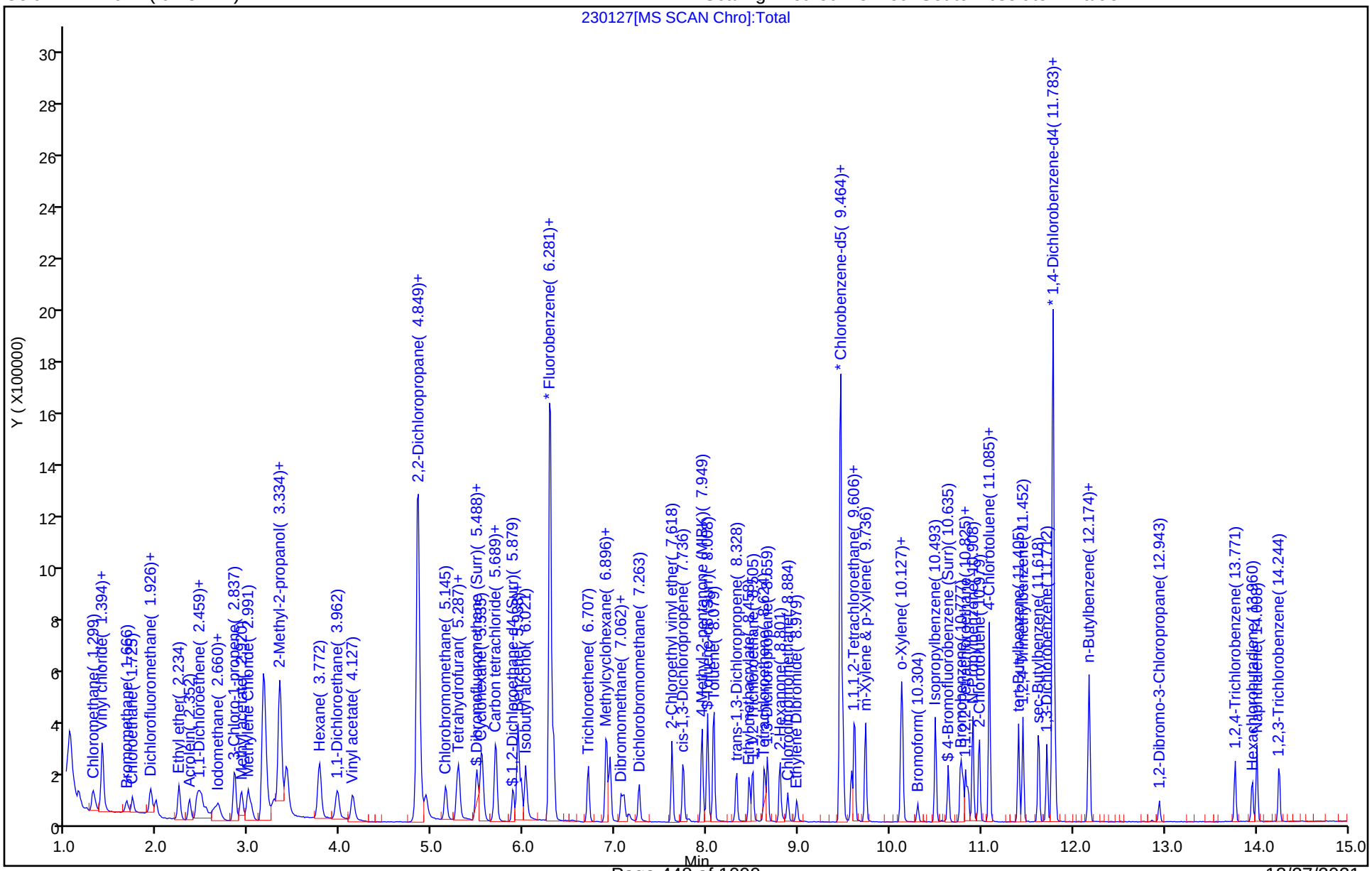
Report Date: 11-Aug-2021 11:36:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230127.D

Injection Date:	04-Aug-2021 14:29:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230128.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Aug-2021 14:54:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-006
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:37:04 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 04-Aug-2021 16:57:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1406146	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	93	814062	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	378073	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	140711	12.5	12.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.878	0.001	96	223173	12.5	12.6	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	552190	12.5	12.6	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	84	163465	12.5	12.2	
9 Dichlorodifluoromethane	85	1.145	1.133	0.012	98	160158	12.5	12.5	
10 Chloromethane	50	1.299	1.299	0.000	99	345289	12.5	12.7	
11 Vinyl chloride	62	1.382	1.382	0.000	97	227680	12.5	13.1	
12 Butadiene	54	1.394	1.394	0.000	98	268089	12.5	12.9	
13 Bromomethane	94	1.654	1.654	0.000	91	102966	12.5	13.2	
14 Chloroethane	64	1.725	1.725	0.000	96	122368	12.5	12.3	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	257726	12.5	12.7	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	97	197026	12.5	13.9	
17 Ethyl ether	59	2.234	2.234	0.000	98	219971	12.5	12.3	
18 Acrolein	56	2.352	2.352	0.000	99	224747	62.5	59.9	
19 1,1-Dichloroethene	96	2.435	2.447	-0.012	90	151564	12.5	13.2	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	95	99955	12.5	13.3	
21 Acetone	58	2.530	2.530	0.000	99	44031	25.0	24.2	
23 Iodomethane	142	2.601	2.601	0.000	98	194190	12.5	12.8	
24 Carbon disulfide	76	2.660	2.660	0.000	99	507928	12.5	13.2	
26 3-Chloro-1-propene	41	2.837	2.837	0.000	89	504484	12.5	12.6	
27 Methyl acetate	43	2.920	2.920	0.000	100	563756	25.0	24.5	
28 Methylene Chloride	84	2.991	2.991	0.000	91	181195	12.5	12.1	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	95	212797	125.0	118.7	
30 Acrylonitrile	53	3.334	3.334	0.000	98	1253081	125.0	128.0	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	89	182569	12.5	13.0	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	92	476180	12.5	12.6	
33 Hexane	57	3.772	3.772	0.000	96	406804	12.5	13.1	
34 1,1-Dichloroethane	63	3.962	3.961	0.001	96	432023	12.5	12.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	624614	12.5	13.1	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	73	34893	12.5	12.8	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	189156	12.5	12.7	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	97	59288	25.0	23.4	
45 Chlorobromomethane	128	5.145	5.145	0.000	88	82054	12.5	12.8	
46 Tetrahydrofuran	42	5.263	5.263	0.000	94	233520	25.0	23.6	
47 Chloroform	83	5.287	5.287	0.000	96	303826	12.5	12.9	
48 1,1,1-Trichloroethane	97	5.488	5.488	0.000	95	222633	12.5	13.2	
49 Cyclohexane	56	5.535	5.535	0.000	93	464523	12.5	12.9	
51 Carbon tetrachloride	117	5.689	5.689	0.000	93	159518	12.5	13.0	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	88	260107	12.5	13.3	
54 Benzene	78	5.938	5.938	0.000	96	747385	12.5	12.8	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	307473	12.5	12.8	
52 Isobutyl alcohol	41	6.021	6.020	0.000	94	317690	312.5	307.2	
56 n-Heptane	100	6.328	6.328	0.000	97	41461	12.5	12.4	
58 Trichloroethene	130	6.707	6.707	0.000	93	159900	12.5	12.9	
60 Methylcyclohexane	83	6.908	6.908	0.000	97	291969	12.5	13.0	
61 1,2-Dichloropropane	63	6.943	6.943	0.000	97	222703	12.5	12.9	
63 Dibromomethane	93	7.062	7.062	0.000	97	97499	12.5	12.6	
64 1,4-Dioxane	88	7.145	7.145	0.000	90	36874	250.0	250.6	
65 Dichlorobromomethane	83	7.263	7.263	0.000	96	197348	12.5	12.9	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	287433	25.0	25.1	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	87	249963	12.5	12.6	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	98	726377	25.0	25.9	
70 Toluene	91	8.079	8.079	0.000	97	689732	12.5	13.0	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	95	211371	12.5	12.6	
72 Ethyl methacrylate	69	8.458	8.458	0.000	92	221487	12.5	11.8	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	93	137210	12.5	12.7	
75 Tetrachloroethene	164	8.636	8.635	0.001	94	104307	12.5	12.8	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	94	259325	12.5	13.1	
76 2-Hexanone	43	8.801	8.789	0.012	99	492381	25.0	26.5	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	117860	12.5	12.9	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	136013	12.5	13.0	
82 Chlorobenzene	112	9.488	9.487	0.001	89	366643	12.5	12.7	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	93	114362	12.5	13.3	
84 Ethylbenzene	106	9.618	9.618	0.000	99	207291	12.5	13.1	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	96	249967	12.5	13.7	
86 o-Xylene	106	10.127	10.126	0.001	98	239918	12.5	13.4	
87 Styrene	104	10.138	10.138	0.000	94	372104	12.5	12.0	
88 Bromoform	173	10.304	10.304	0.000	96	77542	12.5	12.6	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	604882	12.5	13.2	
93 Bromobenzene	156	10.777	10.777	0.000	96	130399	12.5	12.9	
92 1,1,2,2-Tetrachloroethane	83	10.801	10.801	0.000	95	195504	12.5	13.1	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	90	57293	12.5	13.0	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	72	90201	12.5	12.6	
96 N-Propylbenzene	120	10.908	10.907	0.001	100	163566	12.5	13.6	
97 2-Chlorotoluene	126	10.979	10.978	0.000	95	129057	12.5	13.2	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	131623	12.5	13.1	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	84	482417	12.5	13.3	
102 tert-Butylbenzene	119	11.404	11.404	0.000	96	379736	12.5	13.1	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	483257	12.5	13.4	
105 sec-Butylbenzene	105	11.617	11.617	0.000	97	580419	12.5	13.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	94	226403	12.5	12.5	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	97	471502	12.5	13.1	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	93	240268	12.5	12.6	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	93	229070	12.5	12.9	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	470181	12.5	13.3	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	71	34761	12.5	11.8	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	147934	12.5	12.7	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	96	75845	12.5	13.3	
117 Naphthalene	128	14.008	14.008	0.000	97	502342	12.5	13.5	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	94	146969	12.5	13.0	
S 134 Trihalomethanes, Total	1				0		50.0	51.3	
S 158 Total BTEX	1				0		62.5	66.0	
S 131 1,2-Dichloroethene, Total	96				0			25.7	
S 132 1,3-Dichloropropene, Total	75				0			25.2	
S 133 Xylenes, Total	106				0		25.0	27.1	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	10.00	Units: uL
VMRPRIMW_00446	Amount Added:	10.00	Units: uL
VMRGAS_00394	Amount Added:	10.00	Units: uL
vm50ss_00450	Amount Added:	10.00	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL

Report Date: 11-Aug-2021 11:37:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230128.D

Injection Date: 04-Aug-2021 14:54:30 Instrument ID: A3UX23 Operator ID: 002808

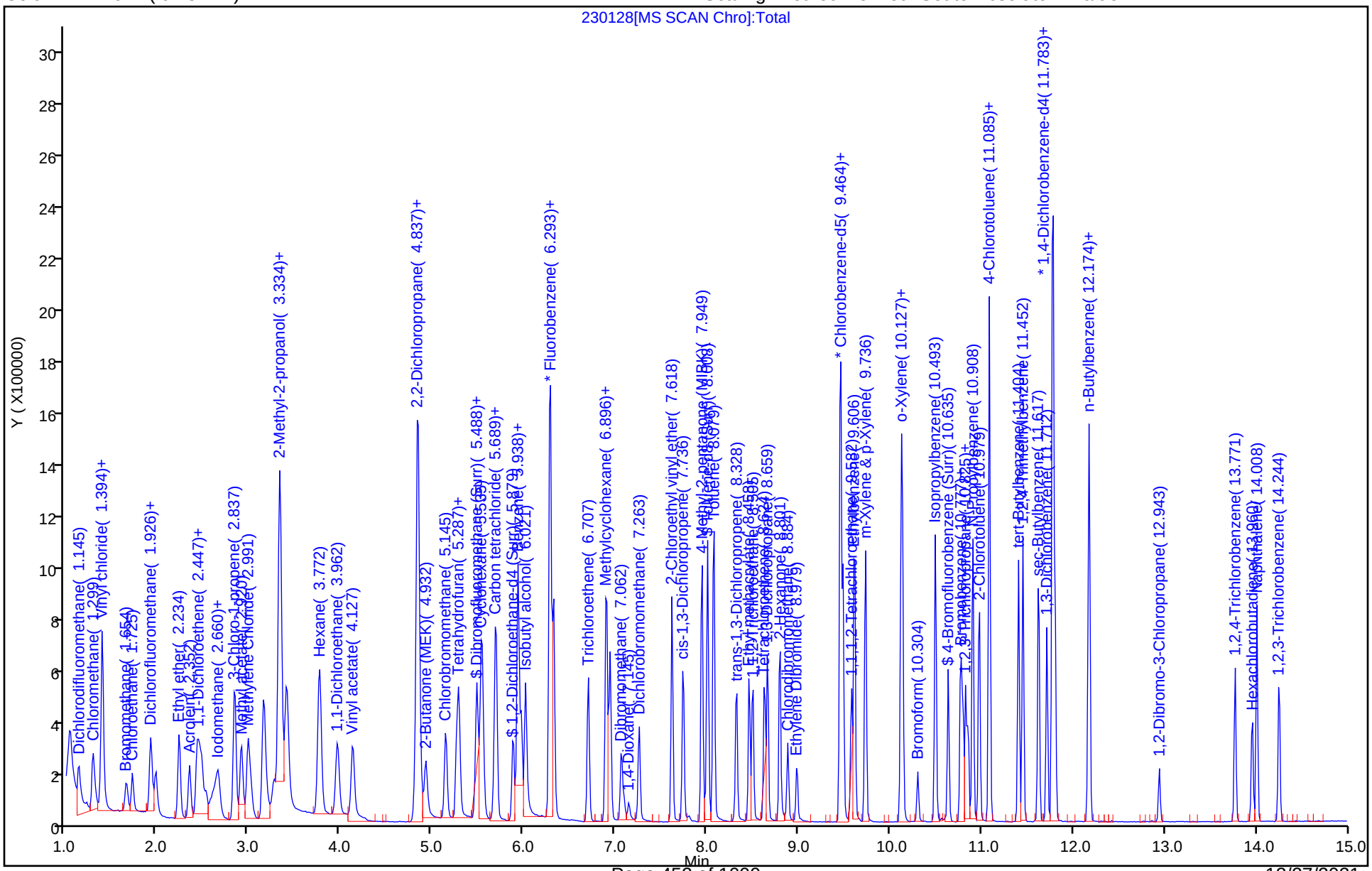
Lims ID: IC Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260_23 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230129.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 04-Aug-2021 15:19:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-007
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:37:10 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 04-Aug-2021 17:03:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1474114	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	91	860331	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	398650	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	94	292750	25.0	25.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.878	0.000	96	461240	25.0	24.7	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	1193107	25.0	25.8	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	83	353773	25.0	24.9	
9 Dichlorodifluoromethane	85	1.133	1.133	0.000	98	326565	25.0	24.4	
10 Chloromethane	50	1.299	1.299	0.000	99	672292	25.0	23.6	
11 Vinyl chloride	62	1.382	1.382	0.000	98	449062	25.0	24.7	
12 Butadiene	54	1.394	1.394	0.000	99	538015	25.0	24.6	
13 Bromomethane	94	1.654	1.654	0.000	90	187994	25.0	23.0	
14 Chloroethane	64	1.725	1.725	0.000	96	230678	25.0	22.1	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	503253	25.0	23.6	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	97	377367	25.0	25.4	
17 Ethyl ether	59	2.234	2.234	0.000	98	478734	25.0	25.5	
18 Acrolein	56	2.352	2.352	0.000	99	492683	125.0	125.2	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	90	312718	25.0	26.0	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	95	200096	25.0	25.4	
21 Acetone	58	2.530	2.530	0.000	99	90744	50.0	49.8	
23 Iodomethane	142	2.601	2.601	0.000	98	398188	25.0	25.0	
24 Carbon disulfide	76	2.660	2.660	0.000	99	1043578	25.0	25.8	
26 3-Chloro-1-propene	41	2.837	2.837	0.000	89	1041635	25.0	24.9	
27 Methyl acetate	43	2.920	2.920	0.000	100	1217516	50.0	50.5	
28 Methylene Chloride	84	2.991	2.991	0.000	91	364479	25.0	23.2	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	92	428817	250.0	228.1	
30 Acrylonitrile	53	3.334	3.334	0.000	98	2676961	250.0	260.9	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	378246	25.0	25.7	
31 Methyl tert-butyl ether	73	3.405	3.405	0.000	93	1038864	25.0	26.3	
33 Hexane	57	3.772	3.772	0.000	96	850180	25.0	26.1	
34 1,1-Dichloroethane	63	3.961	3.961	0.000	96	893322	25.0	25.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	1307717	25.0	26.1	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	85	73719	25.0	25.9	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	391824	25.0	25.1	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	97	127046	50.0	47.8	
45 Chlorobromomethane	128	5.145	5.145	0.000	84	170787	25.0	25.5	
46 Tetrahydrofuran	42	5.263	5.263	0.000	94	516694	50.0	49.8	
47 Chloroform	83	5.287	5.287	0.000	96	629832	25.0	25.5	
48 1,1,1-Trichloroethane	97	5.488	5.488	0.000	96	462136	25.0	26.2	
49 Cyclohexane	56	5.535	5.535	0.000	93	952174	25.0	25.3	
51 Carbon tetrachloride	117	5.689	5.689	0.000	95	347300	25.0	26.9	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	88	548802	25.0	26.7	
54 Benzene	78	5.938	5.938	0.000	97	1575475	25.0	25.7	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	629817	25.0	25.0	
52 Isobutyl alcohol	41	6.020	6.020	0.000	95	701972	625.0	647.5	
56 n-Heptane	100	6.328	6.328	0.000	96	90983	25.0	26.0	
58 Trichloroethene	130	6.707	6.707	0.000	94	343637	25.0	26.5	
60 Methylcyclohexane	83	6.908	6.908	0.000	94	618340	25.0	26.3	
61 1,2-Dichloropropane	63	6.943	6.943	0.000	98	468548	25.0	26.0	
63 Dibromomethane	93	7.062	7.062	0.000	97	207226	25.0	25.6	
64 1,4-Dioxane	88	7.145	7.145	0.000	89	80580	500.0	522.5	
65 Dichlorobromomethane	83	7.263	7.263	0.000	96	424004	25.0	26.4	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	89	656958	50.0	54.8	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	87	557294	25.0	26.8	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	98	1634282	50.0	55.6	
70 Toluene	91	8.079	8.079	0.000	96	1458438	25.0	26.0	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	96	484619	25.0	27.2	
72 Ethyl methacrylate	69	8.458	8.458	0.000	94	510958	25.0	25.1	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	94	292365	25.0	25.6	
75 Tetrachloroethene	164	8.635	8.635	0.000	95	218735	25.0	25.5	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	95	543301	25.0	25.9	
76 2-Hexanone	43	8.789	8.789	0.000	99	1141561	50.0	58.1	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	259121	25.0	26.8	
80 Ethylene Dibromide	107	8.979	8.979	0.000	99	290570	25.0	26.3	
82 Chlorobenzene	112	9.487	9.487	0.000	90	785582	25.0	25.7	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	94	246402	25.0	27.1	
84 Ethylbenzene	106	9.618	9.618	0.000	98	447606	25.0	26.8	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	96	526415	25.0	27.3	
86 o-Xylene	106	10.126	10.126	0.000	98	505896	25.0	26.8	
87 Styrene	104	10.138	10.138	0.000	93	814454	25.0	24.5	
88 Bromoform	173	10.304	10.304	0.000	96	171988	25.0	26.5	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	1272276	25.0	26.2	
93 Bromobenzene	156	10.777	10.777	0.000	97	269973	25.0	25.4	
92 1,1,2,2-Tetrachloroethane	83	10.801	10.801	0.000	95	412853	25.0	26.3	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	122753	25.0	26.4	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	78	203191	25.0	26.9	
96 N-Propylbenzene	120	10.907	10.907	0.000	100	338938	25.0	26.8	
97 2-Chlorotoluene	126	10.978	10.978	0.000	95	272530	25.0	26.4	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	281133	25.0	26.6	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	83	1017880	25.0	26.6	
102 tert-Butylbenzene	119	11.404	11.404	0.000	95	809096	25.0	26.5	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1012984	25.0	26.6	
105 sec-Butylbenzene	105	11.617	11.617	0.000	96	1231533	25.0	26.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	95	484618	25.0	25.3	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	1005584	25.0	26.4	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	92	510326	25.0	25.4	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	93	478694	25.0	25.6	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	988799	25.0	26.5	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	72	79081	25.0	25.4	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	306074	25.0	25.0	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	96	149652	25.0	24.9	
117 Naphthalene	128	14.008	14.008	0.000	97	1070971	25.0	27.4	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	95	297711	25.0	25.0	
S 134 Trihalomethanes, Total	1				0		100.0	105.3	
S 158 Total BTEX	1				0		125.0	132.6	
S 133 Xylenes, Total	106				0		50.0	54.1	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	20.00	Units: uL
VMRGAS_00394	Amount Added:	20.00	Units: uL
VMRPRIMW_00446	Amount Added:	20.00	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	20.00	Units: uL

Report Date: 11-Aug-2021 11:37:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230129.D

Injection Date: 04-Aug-2021 15:19:30 Instrument ID: A3UX23 Operator ID: 002808

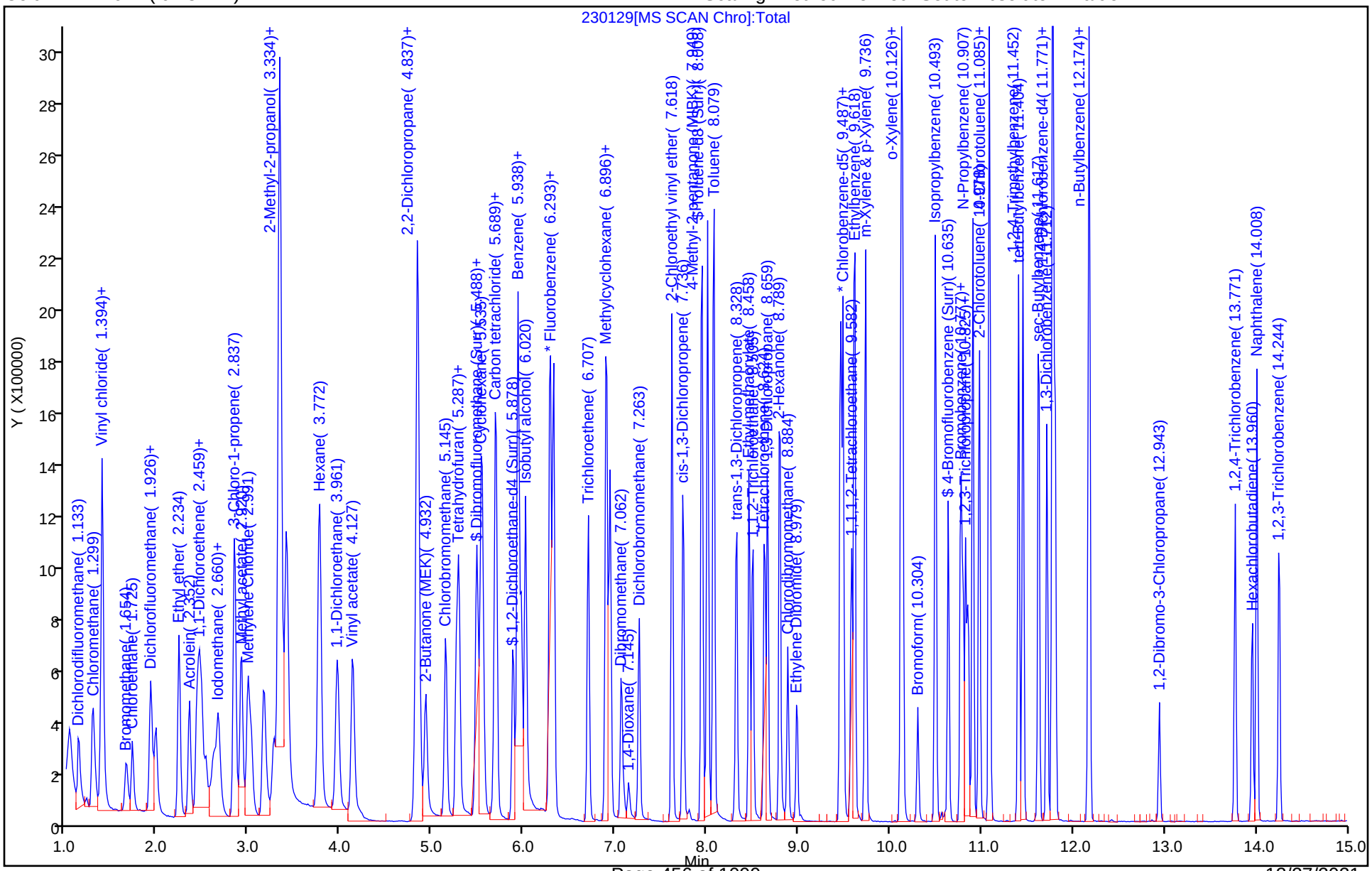
Lims ID: ICIS Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260_23 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230130.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Aug-2021 15:44:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-008
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:37:15 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 05-Aug-2021 09:03:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1501472	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	90	913170	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	94	439634	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	95	441615	37.5	37.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.890	5.878	0.012	97	681655	37.5	35.9	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	95	1845023	37.5	37.7	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	84	561342	37.5	37.2	
9 Dichlorodifluoromethane	85	1.145	1.133	0.012	98	501278	37.5	36.7	
10 Chloromethane	50	1.299	1.299	0.000	99	1017980	37.5	35.1	
11 Vinyl chloride	62	1.382	1.382	0.000	98	705385	37.5	38.1	
12 Butadiene	54	1.394	1.394	0.000	98	812080	37.5	36.5	
13 Bromomethane	94	1.654	1.654	0.000	91	284471	37.5	34.2	
14 Chloroethane	64	1.725	1.725	0.000	96	323688	37.5	30.5	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	744130	37.5	34.2	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	97	576371	37.5	38.0	
17 Ethyl ether	59	2.234	2.234	0.000	97	661116	37.5	34.6	
18 Acrolein	56	2.352	2.352	0.000	99	741273	187.5	184.9	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	90	465946	37.5	38.1	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.482	0.000	95	319262	37.5	39.8	
21 Acetone	58	2.530	2.530	0.000	99	139065	75.0	76.0	
23 Iodomethane	142	2.601	2.601	0.000	98	619947	37.5	38.2	
24 Carbon disulfide	76	2.660	2.660	0.000	99	1649037	37.5	40.0	
26 3-Chloro-1-propene	41	2.837	2.837	0.000	89	1549650	37.5	36.3	
27 Methyl acetate	43	2.920	2.920	0.000	100	1847799	75.0	75.2	
28 Methylene Chloride	84	3.003	2.991	0.012	92	559296	37.5	34.9	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	93	658804	375.0	344.0	
30 Acrylonitrile	53	3.334	3.334	0.000	99	4138600	375.0	396.1	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	582077	37.5	38.8	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	94	1524628	37.5	37.9	
33 Hexane	57	3.772	3.772	0.000	96	1269712	37.5	38.3	
34 1,1-Dichloroethane	63	3.962	3.961	0.001	96	1342699	37.5	37.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.139	4.127	0.012	96	2006863	37.5	39.3	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	84	108640	37.5	37.4	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	596524	37.5	37.5	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	97	192808	75.0	71.2	
45 Chlorobromomethane	128	5.145	5.145	0.000	84	250271	37.5	36.7	
46 Tetrahydrofuran	42	5.263	5.263	0.000	95	790984	75.0	74.9	
47 Chloroform	83	5.287	5.287	0.000	96	950485	37.5	37.8	
48 1,1,1-Trichloroethane	97	5.488	5.488	0.000	96	694868	37.5	38.7	
49 Cyclohexane	56	5.547	5.535	0.012	93	1436951	37.5	37.5	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	514684	37.5	39.1	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	88	822827	37.5	39.3	
54 Benzene	78	5.938	5.938	0.000	96	2439813	37.5	39.0	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	957919	37.5	37.4	
52 Isobutyl alcohol	41	6.020	6.020	0.000	95	1026887	937.5	930.0	
56 n-Heptane	100	6.328	6.328	0.000	97	131969	37.5	37.0	
58 Trichloroethene	130	6.707	6.707	0.000	94	517979	37.5	39.3	
60 Methylcyclohexane	83	6.908	6.908	0.000	97	931012	37.5	38.9	
61 1,2-Dichloropropane	63	6.943	6.943	0.000	97	716936	37.5	39.0	
63 Dibromomethane	93	7.062	7.062	0.000	97	311075	37.5	37.8	
64 1,4-Dioxane	88	7.145	7.145	0.000	90	124222	750.0	790.7	
65 Dichlorobromomethane	83	7.263	7.263	0.000	96	644174	37.5	39.3	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	89	1042320	75.0	85.3	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	88	902668	37.5	42.7	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	98	2459369	75.0	82.2	
70 Toluene	91	8.079	8.079	0.000	96	2315325	37.5	38.9	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	97	769061	37.5	40.7	
72 Ethyl methacrylate	69	8.458	8.458	0.000	93	820742	37.5	37.7	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	93	455094	37.5	37.5	
75 Tetrachloroethene	164	8.636	8.635	0.001	95	348688	37.5	38.3	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	96	856568	37.5	38.4	
76 2-Hexanone	43	8.789	8.789	0.000	99	1729904	75.0	83.0	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	413660	37.5	40.4	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	466488	37.5	39.8	
82 Chlorobenzene	112	9.487	9.487	0.000	90	1241005	37.5	38.2	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	373598	37.5	38.8	
84 Ethylbenzene	106	9.618	9.618	0.000	98	701599	37.5	39.6	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	96	841259	37.5	41.1	
86 o-Xylene	106	10.126	10.126	0.000	97	800592	37.5	39.9	
87 Styrene	104	10.138	10.138	0.000	93	1333819	37.5	37.6	
88 Bromoform	173	10.304	10.304	0.000	97	284795	37.5	41.3	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	2026458	37.5	39.4	
93 Bromobenzene	156	10.777	10.777	0.000	97	439896	37.5	37.5	
92 1,1,2,2-Tetrachloroethane	83	10.801	10.801	0.000	94	647103	37.5	37.4	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	90	186043	37.5	36.3	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	81	320510	37.5	38.4	
96 N-Propylbenzene	120	10.907	10.907	0.000	100	524914	37.5	37.6	
97 2-Chlorotoluene	126	10.978	10.978	0.000	95	432753	37.5	38.0	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	453024	37.5	38.8	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	85	1623147	37.5	38.5	
102 tert-Butylbenzene	119	11.404	11.404	0.000	96	1317345	37.5	39.2	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1673095	37.5	39.8	
105 sec-Butylbenzene	105	11.629	11.617	0.012	95	2049365	37.5	39.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	96	803776	37.5	38.1	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	96	1644554	37.5	39.2	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	93	848944	37.5	38.3	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	94	767748	37.5	37.2	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	1629048	37.5	39.6	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	74	127089	37.5	37.0	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	493635	37.5	36.5	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	96	239024	37.5	36.1	
117 Naphthalene	128	14.008	14.008	0.000	97	1723603	37.5	40.0	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	95	474818	37.5	36.2	
S 134 Trihalomethanes, Total	1				0		150.0	158.9	
S 158 Total BTEX	1				0		187.5	198.6	
S 131 1,2-Dichloroethene, Total	96				0			76.3	
S 132 1,3-Dichloropropene, Total	75				0			83.4	
S 133 Xylenes, Total	106				0		75.0	81.0	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00403	Amount Added:	30.00	Units: uL
VMRGAS_00394	Amount Added:	30.00	Units: uL
VMRPRIMW_00446	Amount Added:	30.00	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	30.00	Units: uL

Report Date: 11-Aug-2021 11:37:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230130.D

Injection Date: 04-Aug-2021 15:44:30 Instrument ID: A3UX23 Operator ID: 002808

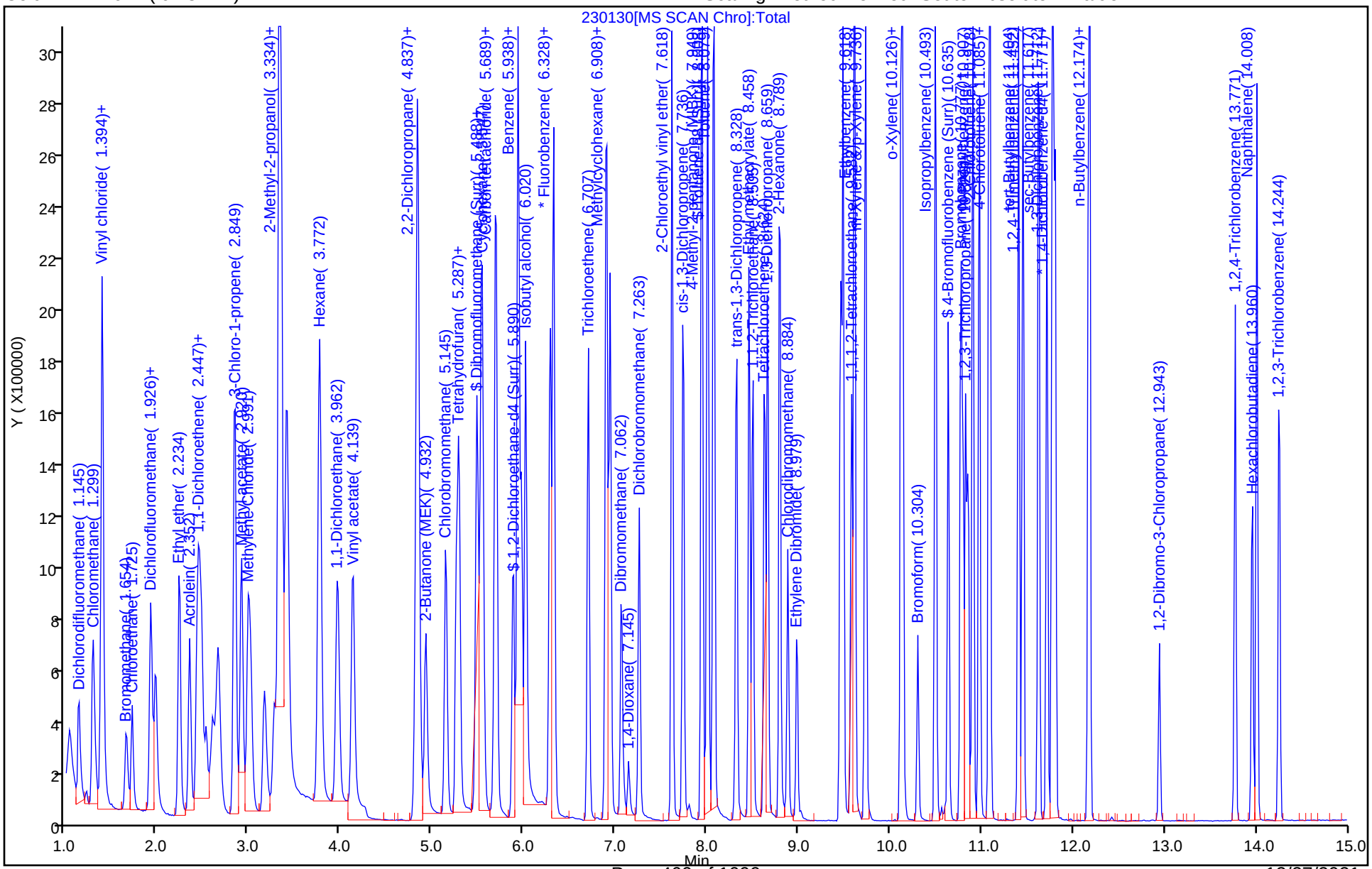
Lims ID: IC Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260_23 Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Aug-2021 16:09:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-009
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 11:37:20 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 05-Aug-2021 09:04:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1591111	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	90	940439	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	460780	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	616034	50.0	48.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.878	0.001	96	963984	50.0	47.9	
$ 6 Toluene-d8 (Surr)	98	8.009	8.008	0.000	95	2602361	50.0	51.6	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	85	790174	50.0	50.9	
9 Dichlorodifluoromethane	85	1.145	1.133	0.012	98	672072	50.0	46.5	
10 Chloromethane	50	1.299	1.299	0.000	99	1363531	50.0	44.3	
11 Vinyl chloride	62	1.382	1.382	0.000	98	947328	50.0	48.2	
12 Butadiene	54	1.406	1.394	0.012	98	1116089	50.0	47.3	
13 Bromomethane	94	1.654	1.654	0.000	91	343619	50.0	39.0	
14 Chloroethane	64	1.725	1.725	0.000	96	403942	50.0	35.9	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	951852	50.0	41.3	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	97	771534	50.0	48.0	M
17 Ethyl ether	59	2.234	2.234	0.000	97	913781	50.0	45.1	
18 Acrolein	56	2.352	2.352	0.000	99	1032760	250.0	243.1	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	91	632300	50.0	48.8	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.482	0.001	95	439281	50.0	51.7	
21 Acetone	58	2.530	2.530	0.000	99	187899	100.0	97.5	
23 Iodomethane	142	2.601	2.601	0.000	98	861578	50.0	50.1	
24 Carbon disulfide	76	2.660	2.660	0.000	100	2261454	50.0	51.7	
26 3-Chloro-1-propene	41	2.849	2.837	0.012	90	2173660	50.0	48.1	
27 Methyl acetate	43	2.920	2.920	0.000	100	2579888	100.0	99.1	
28 Methylene Chloride	84	3.003	2.991	0.012	92	774598	50.0	45.7	
29 2-Methyl-2-propanol	59	3.275	3.275	0.000	94	1015272	500.0	500.3	
30 Acrylonitrile	53	3.335	3.334	0.001	99	5819653	500.0	525.6	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	814188	50.0	51.2	
31 Methyl tert-butyl ether	73	3.417	3.405	0.012	95	2171085	50.0	51.0	
33 Hexane	57	3.772	3.772	0.000	96	1744274	50.0	49.6	
34 1,1-Dichloroethane	63	3.962	3.961	0.001	96	1864601	50.0	49.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.139	4.127	0.012	96	2995097	50.0	55.3	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	90	151913	50.0	49.4	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	88	826335	50.0	49.0	
40 2-Butanone (MEK)	72	4.932	4.932	0.000	98	264376	100.0	92.2	
45 Chlorobromomethane	128	5.145	5.145	0.000	85	355173	50.0	49.1	
46 Tetrahydrofuran	42	5.263	5.263	0.000	95	1075930	100.0	96.1	
47 Chloroform	83	5.299	5.287	0.012	97	1324092	50.0	49.8	
48 1,1,1-Trichloroethane	97	5.488	5.488	0.000	95	952580	50.0	50.1	
49 Cyclohexane	56	5.547	5.535	0.012	92	1982301	50.0	48.8	
51 Carbon tetrachloride	117	5.689	5.689	0.000	95	700746	50.0	50.3	
50 1,1-Dichloropropene	75	5.701	5.701	0.000	88	1144748	50.0	51.7	
54 Benzene	78	5.938	5.938	0.000	96	3404574	50.0	51.4	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	1330216	50.0	49.0	
52 Isobutyl alcohol	41	6.021	6.020	0.001	96	1341648	1250.0	1146.6	
56 n-Heptane	100	6.328	6.328	0.000	96	190871	50.0	50.5	
58 Trichloroethene	130	6.707	6.707	0.000	95	724223	50.0	51.8	
60 Methylcyclohexane	83	6.908	6.908	0.000	97	1286125	50.0	50.7	
61 1,2-Dichloropropane	63	6.944	6.943	0.001	98	999350	50.0	51.3	
63 Dibromomethane	93	7.062	7.062	0.000	96	451683	50.0	51.7	
64 1,4-Dioxane	88	7.145	7.145	0.000	91	168308	1000.0	1011.0	
65 Dichlorobromomethane	83	7.263	7.263	0.000	96	912692	50.0	52.6	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	89	1427628	100.0	110.2	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	88	1256498	50.0	56.1	
69 4-Methyl-2-pentanone (MIBK)	43	7.949	7.949	0.000	98	3370131	100.0	106.2	
70 Toluene	91	8.080	8.079	0.000	96	3209165	50.0	52.4	
71 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	97	1096246	50.0	56.4	
72 Ethyl methacrylate	69	8.458	8.458	0.000	93	1147628	50.0	50.9	
73 1,1,2-Trichloroethane	97	8.505	8.505	0.000	93	635974	50.0	50.9	
75 Tetrachloroethene	164	8.636	8.635	0.001	94	489681	50.0	52.2	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	96	1187117	50.0	51.7	
76 2-Hexanone	43	8.789	8.789	0.000	99	2328760	100.0	108.5	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	588317	50.0	55.8	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	630921	50.0	52.2	
82 Chlorobenzene	112	9.488	9.487	0.001	91	1726224	50.0	51.6	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	518828	50.0	52.3	
84 Ethylbenzene	106	9.618	9.618	0.000	98	971509	50.0	53.3	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	96	1158685	50.0	55.0	
86 o-Xylene	106	10.127	10.126	0.001	98	1108128	50.0	53.6	
87 Styrene	104	10.138	10.138	0.000	95	1882282	50.0	51.5	
88 Bromoform	173	10.304	10.304	0.000	97	401404	50.0	56.6	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	2833813	50.0	53.4	
93 Bromobenzene	156	10.777	10.777	0.000	97	616513	50.0	50.1	
92 1,1,2,2-Tetrachloroethane	83	10.801	10.801	0.000	94	891262	50.0	49.1	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	259538	50.0	48.4	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	82	417264	50.0	47.7	
96 N-Propylbenzene	120	10.908	10.907	0.001	100	748153	50.0	51.1	
97 2-Chlorotoluene	126	10.979	10.978	0.001	96	617203	50.0	51.7	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	631561	50.0	51.6	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	86	2240546	50.0	50.7	
102 tert-Butylbenzene	119	11.405	11.404	0.001	95	1870707	50.0	53.1	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	2285191	50.0	51.9	
105 sec-Butylbenzene	105	11.629	11.617	0.012	94	2816648	50.0	51.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	96	1140087	50.0	51.6	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	2273788	50.0	51.7	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	95	1160641	50.0	49.9	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	95	1082894	50.0	50.0	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	2176713	50.0	50.5	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	75	182018	50.0	50.6	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	687377	50.0	48.6	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	96	334021	50.0	48.2	
117 Naphthalene	128	14.008	14.008	0.000	97	2424375	50.0	53.6	
118 1,2,3-Trichlorobenzene	180	14.256	14.256	0.000	94	657432	50.0	47.8	
S 134 Trihalomethanes, Total	1				0		200.0	214.7	
S 158 Total BTEX	1				0		250.0	265.7	
S 131 1,2-Dichloroethene, Total	96				0			100.2	
S 132 1,3-Dichloropropene, Total	75				0			112.4	
S 133 Xylenes, Total	106				0		100.0	108.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

VMAROLISTDW_00403	Amount Added:	40.00	Units: uL
VMRGAS_00394	Amount Added:	40.00	Units: uL
VMRPRIMW_00446	Amount Added:	40.00	Units: uL
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL
vm50ss_00450	Amount Added:	40.00	Units: uL

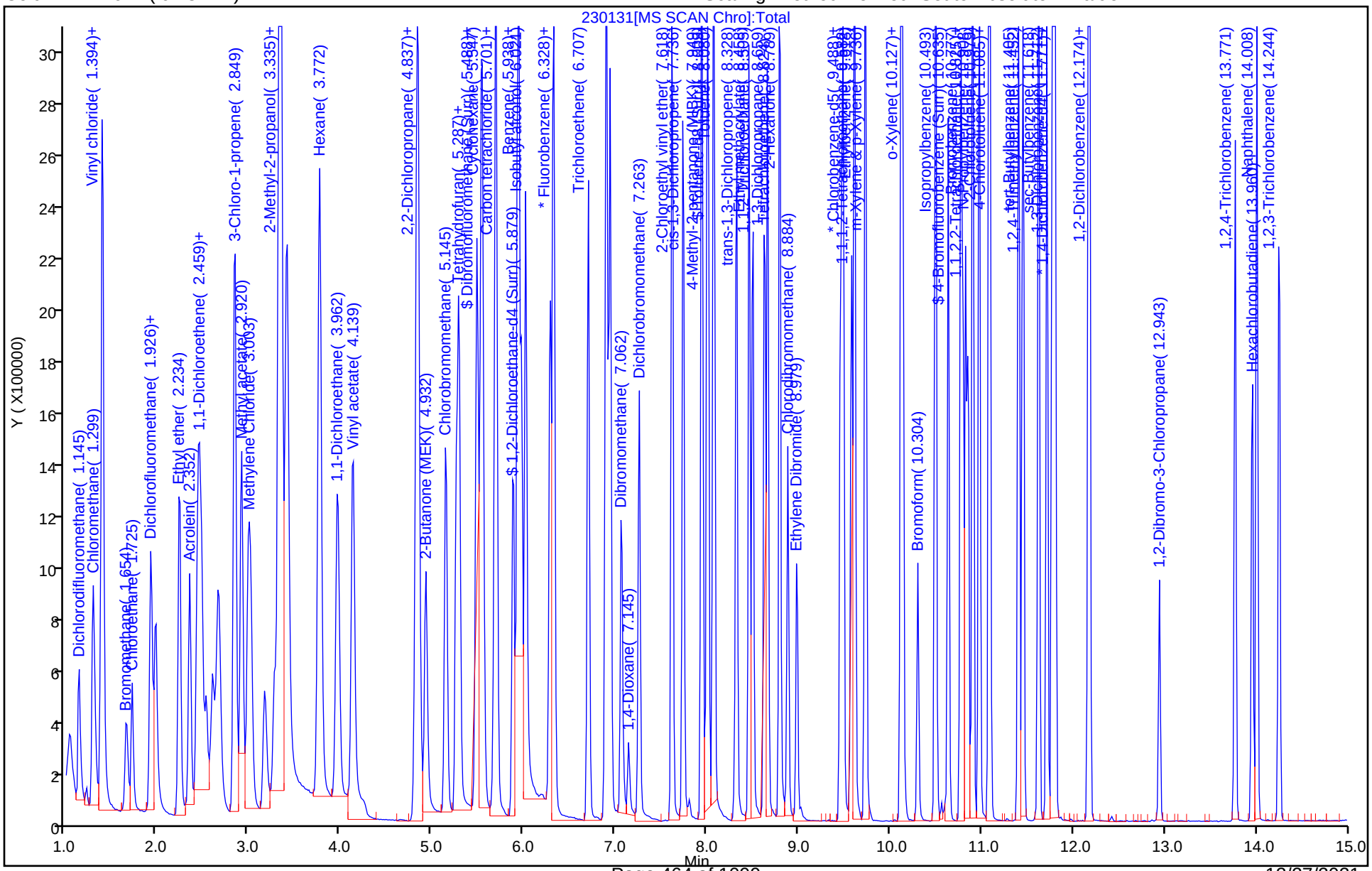
Report Date: 11-Aug-2021 11:37:21 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Injection Date:	04-Aug-2021 16:09:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton

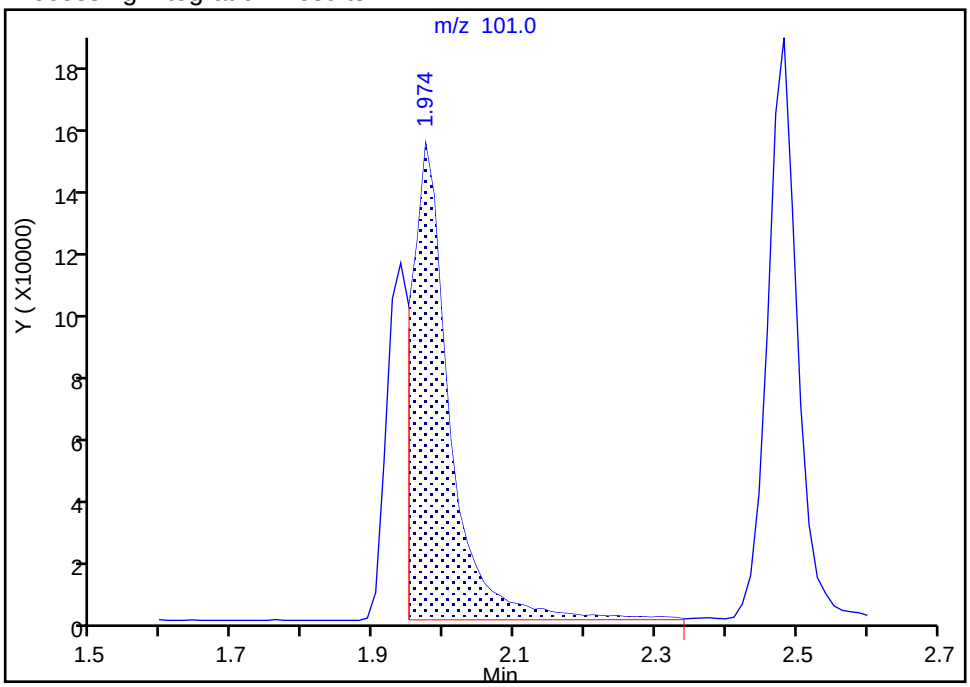
Data File:	\\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D				
Injection Date:	04-Aug-2021 16:09:30	Instrument ID:	A3UX23		
Lims ID:	IC				
Client ID:					
Operator ID:	002808	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

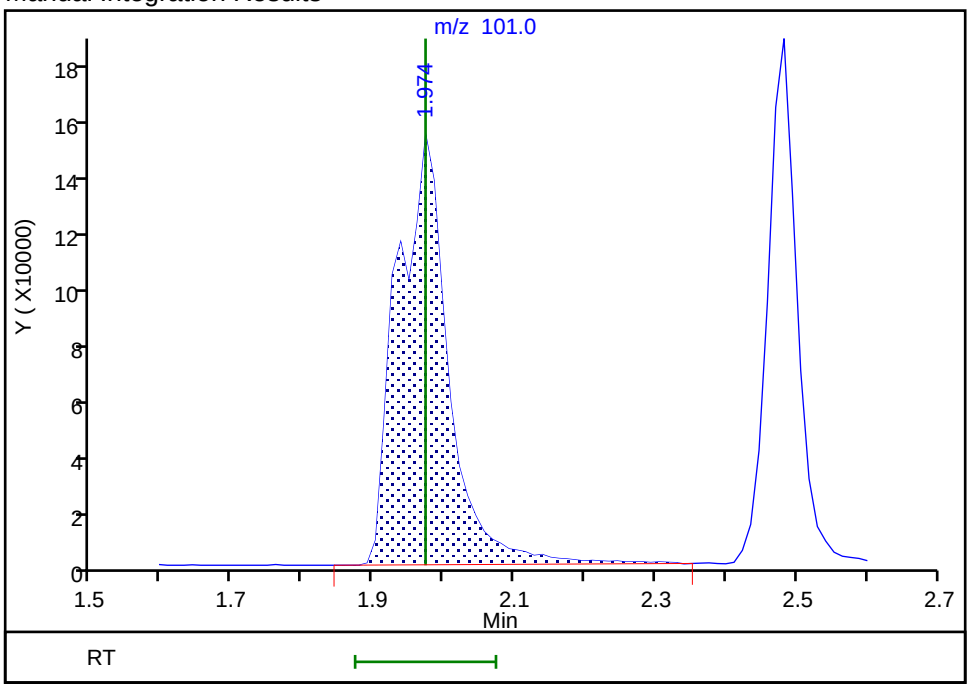
Processing Integration Results

RT: 1.97
Area: 578045
Amount: 37.257736
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 771534
Amount: 48.018028
Amount Units: ug/l



Reviewer: macenczaks, 05-Aug-2021 09:03:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

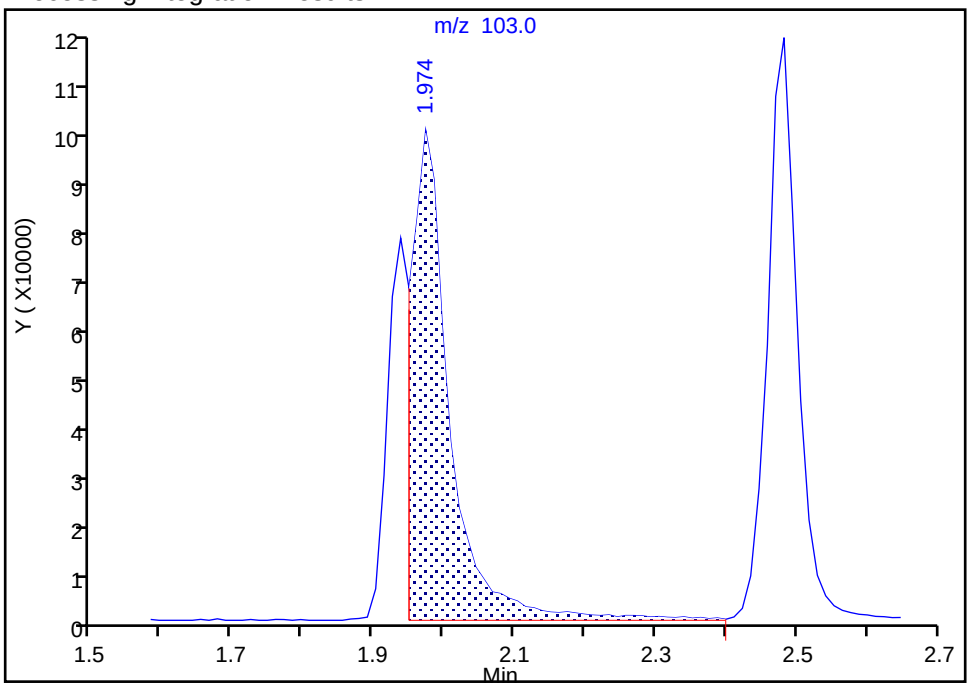
Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D
Injection Date: 04-Aug-2021 16:09:30 Instrument ID: A3UX23
Lims ID: IC
Client ID:
Operator ID: 002808 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_23 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 2

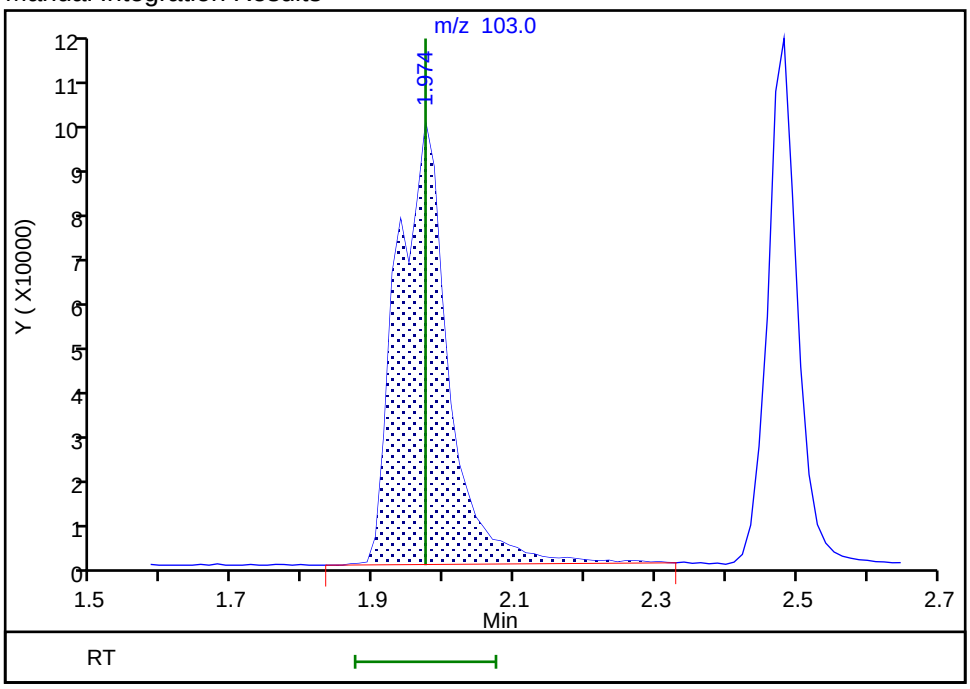
Processing Integration Results

RT: 1.97
Area: 377466
Amount: 37.257736
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 493979
Amount: 48.018028
Amount Units: ug/l



Reviewer: macenczaks, 05-Aug-2021 09:03:44
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

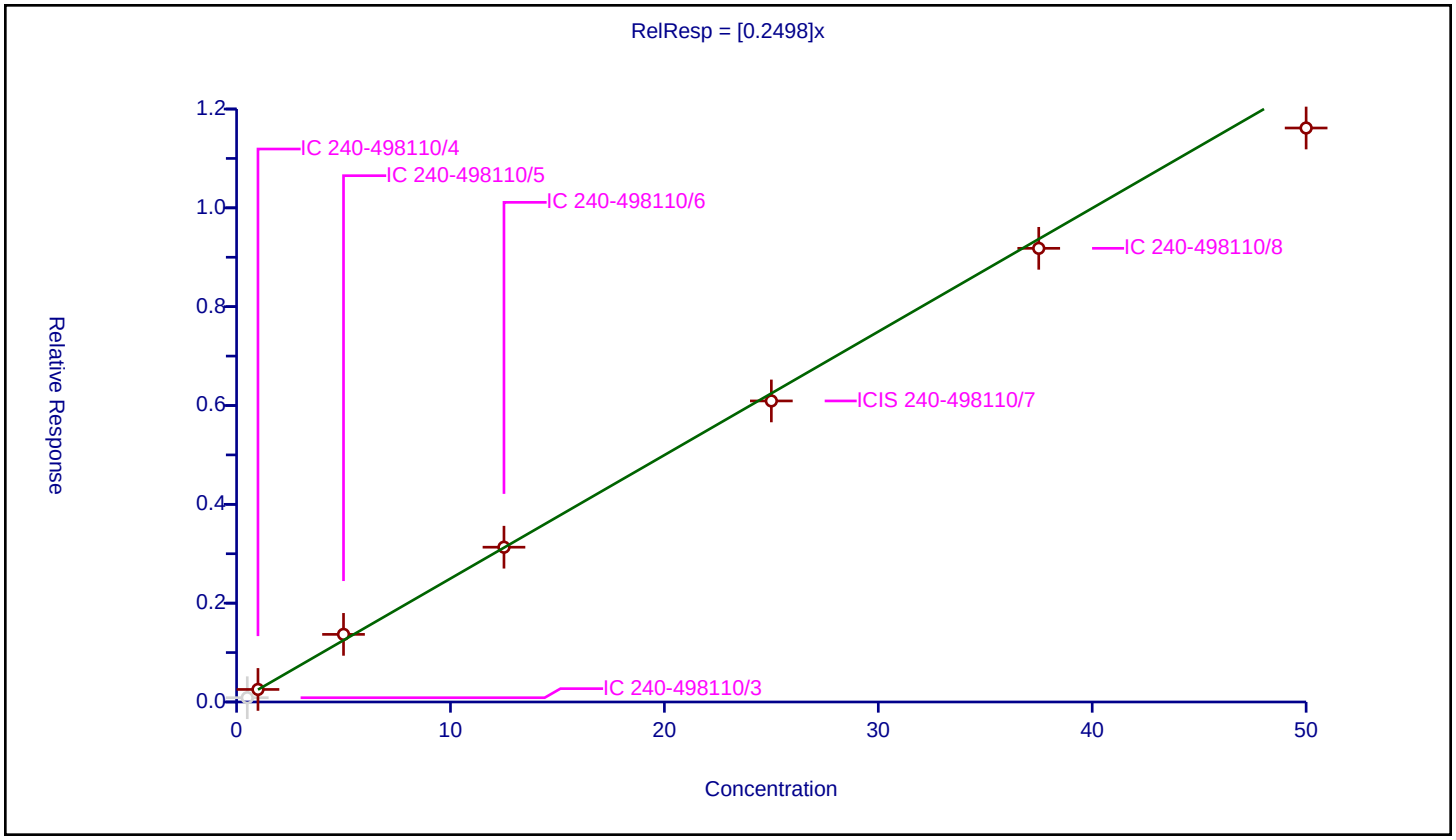
Curve Coefficients

Intercept:	0
Slope:	0.2498

Error Coefficients

Standard Error:	410000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.086779	27.5	1334766.0	0.173559	N
2	IC 240-498110/4	1.0	0.253868	27.5	1314729.0	0.253868	Y
3	IC 240-498110/5	5.0	1.36854	27.5	1364692.0	0.273708	Y
4	IC 240-498110/6	12.5	3.13221	27.5	1406146.0	0.250577	Y
5	ICIS 240-498110/7	25.0	6.092159	27.5	1474114.0	0.243686	Y
6	IC 240-498110/8	37.5	9.181087	27.5	1501472.0	0.244829	Y
7	IC 240-498110/9	50.0	11.61577	27.5	1591111.0	0.232315	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

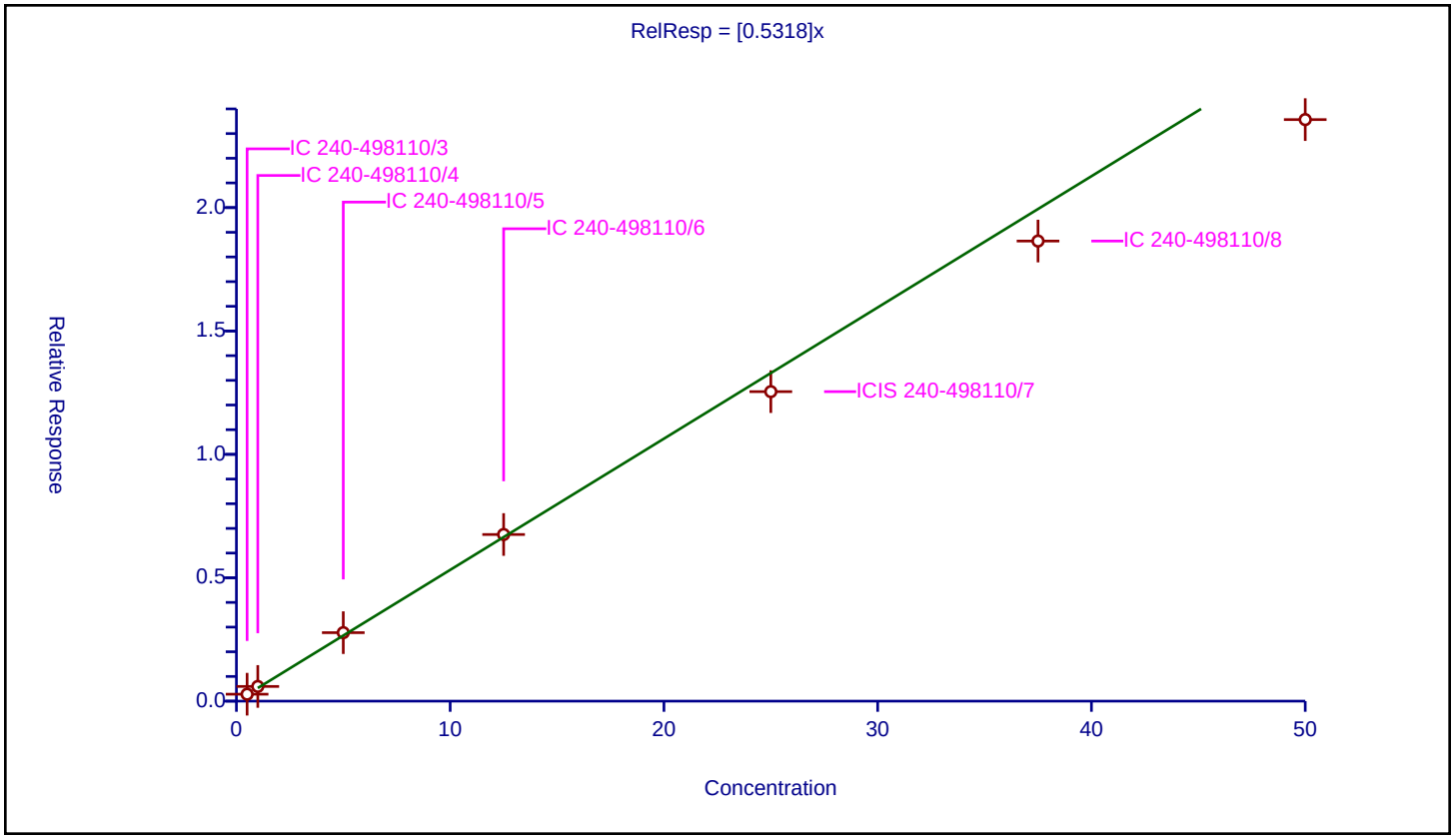
Curve Coefficients

Intercept:	0
Slope:	0.5318

Error Coefficients

Standard Error:	762000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.280858	27.5	1334766.0	0.561716	Y
2	IC 240-498110/4	1.0	0.595419	27.5	1314729.0	0.595419	Y
3	IC 240-498110/5	5.0	2.775124	27.5	1364692.0	0.555025	Y
4	IC 240-498110/6	12.5	6.752818	27.5	1406146.0	0.540225	Y
5	ICIS 240-498110/7	25.0	12.541791	27.5	1474114.0	0.501672	Y
6	IC 240-498110/8	37.5	18.64467	27.5	1501472.0	0.497191	Y
7	IC 240-498110/9	50.0	23.566616	27.5	1591111.0	0.471332	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

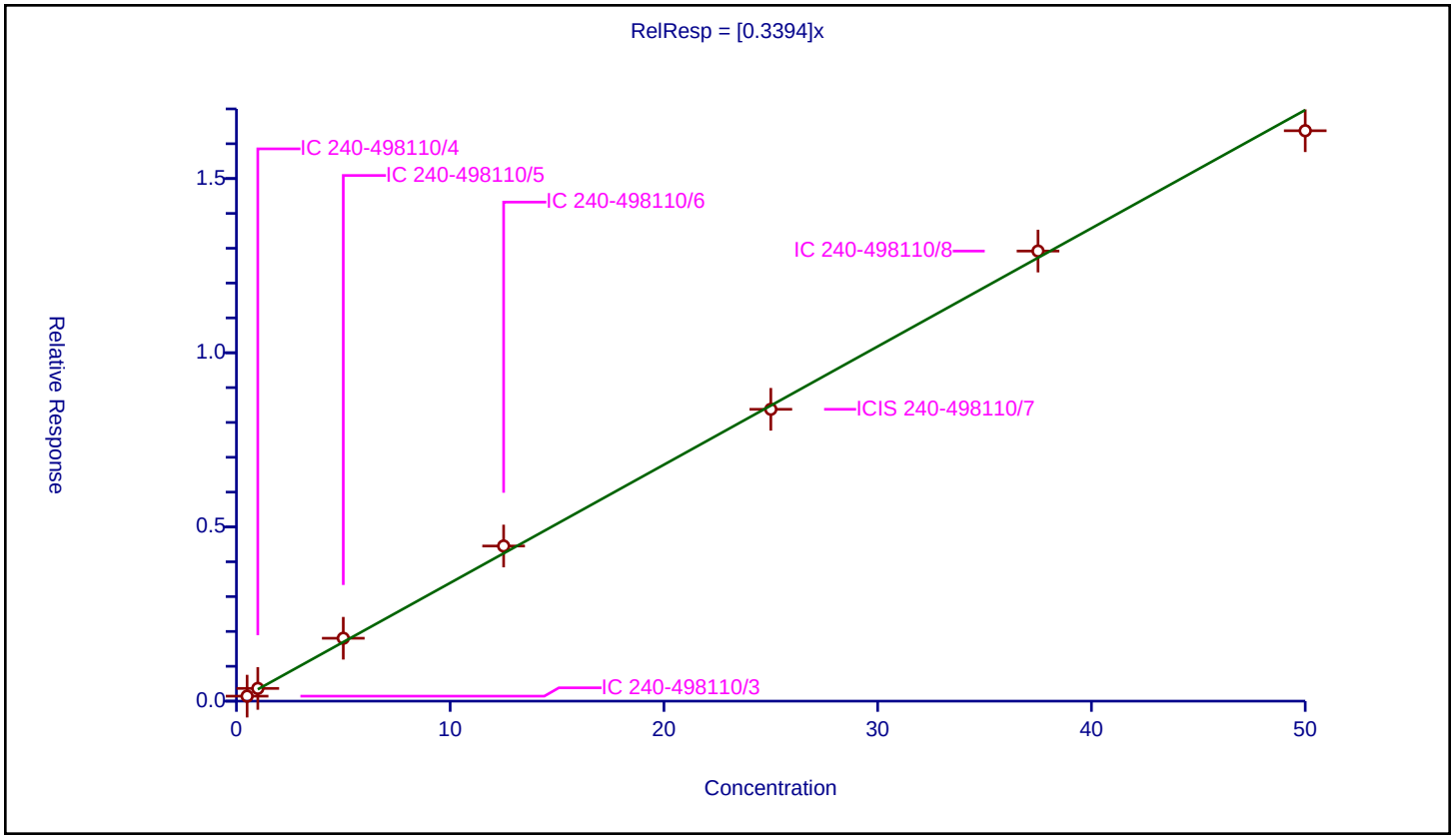
Curve Coefficients

Intercept:	0
Slope:	0.3394

Error Coefficients

Standard Error:	525000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.143025	27.5	1334766.0	0.28605	Y
2	IC 240-498110/4	1.0	0.365187	27.5	1314729.0	0.365187	Y
3	IC 240-498110/5	5.0	1.805112	27.5	1364692.0	0.361022	Y
4	IC 240-498110/6	12.5	4.452738	27.5	1406146.0	0.356219	Y
5	ICIS 240-498110/7	25.0	8.377374	27.5	1474114.0	0.335095	Y
6	IC 240-498110/8	37.5	12.91938	27.5	1501472.0	0.344517	Y
7	IC 240-498110/9	50.0	16.373163	27.5	1591111.0	0.327463	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

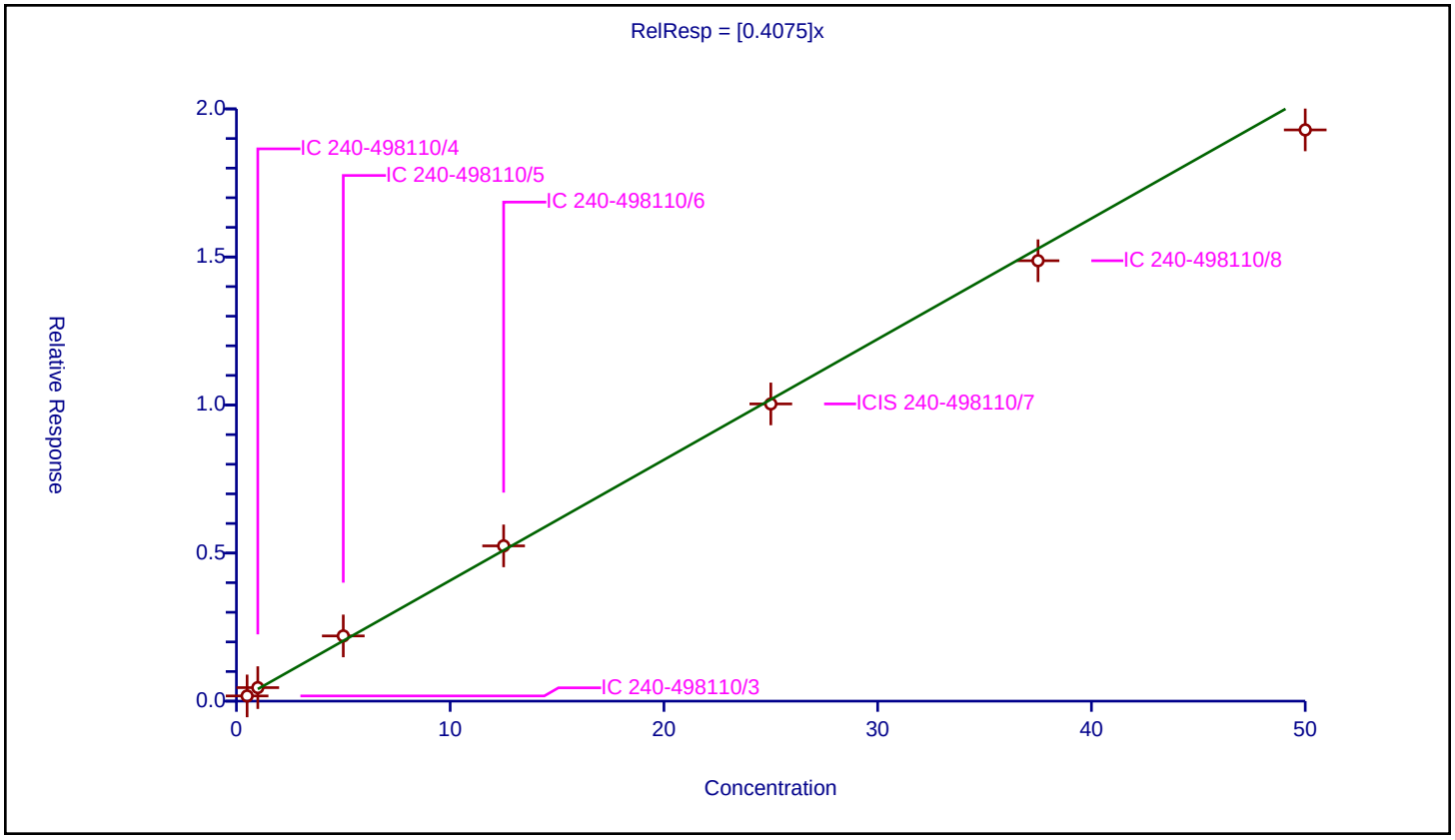
Curve Coefficients

Intercept:	0
Slope:	0.4075

Error Coefficients

Standard Error:	616000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.176237	27.5	1334766.0	0.352474	Y
2	IC 240-498110/4	1.0	0.45628	27.5	1314729.0	0.45628	Y
3	IC 240-498110/5	5.0	2.202109	27.5	1364692.0	0.440422	Y
4	IC 240-498110/6	12.5	5.243017	27.5	1406146.0	0.419441	Y
5	ICIS 240-498110/7	25.0	10.036817	27.5	1474114.0	0.401473	Y
6	IC 240-498110/8	37.5	14.873537	27.5	1501472.0	0.396628	Y
7	IC 240-498110/9	50.0	19.289947	27.5	1591111.0	0.385799	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

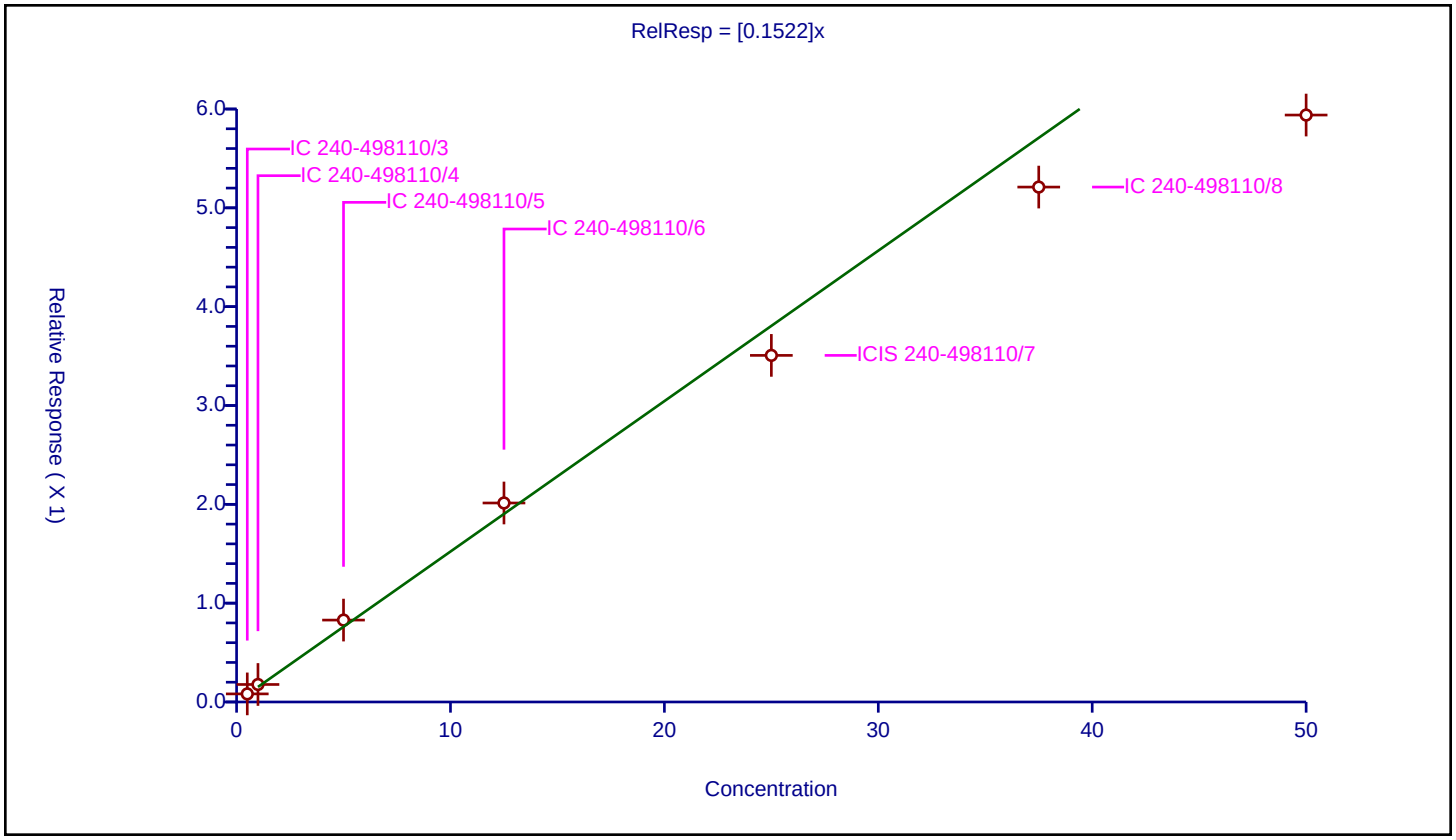
Curve Coefficients

Intercept:	0
Slope:	0.1522

Error Coefficients

Standard Error:	203000
Relative Standard Error:	13.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.081814	27.5	1334766.0	0.163628	Y
2	IC 240-498110/4	1.0	0.177082	27.5	1314729.0	0.177082	Y
3	IC 240-498110/5	5.0	0.828652	27.5	1364692.0	0.16573	Y
4	IC 240-498110/6	12.5	2.013706	27.5	1406146.0	0.161097	Y
5	ICIS 240-498110/7	25.0	3.50708	27.5	1474114.0	0.140283	Y
6	IC 240-498110/8	37.5	5.210189	27.5	1501472.0	0.138938	Y
7	IC 240-498110/9	50.0	5.938946	27.5	1591111.0	0.118779	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

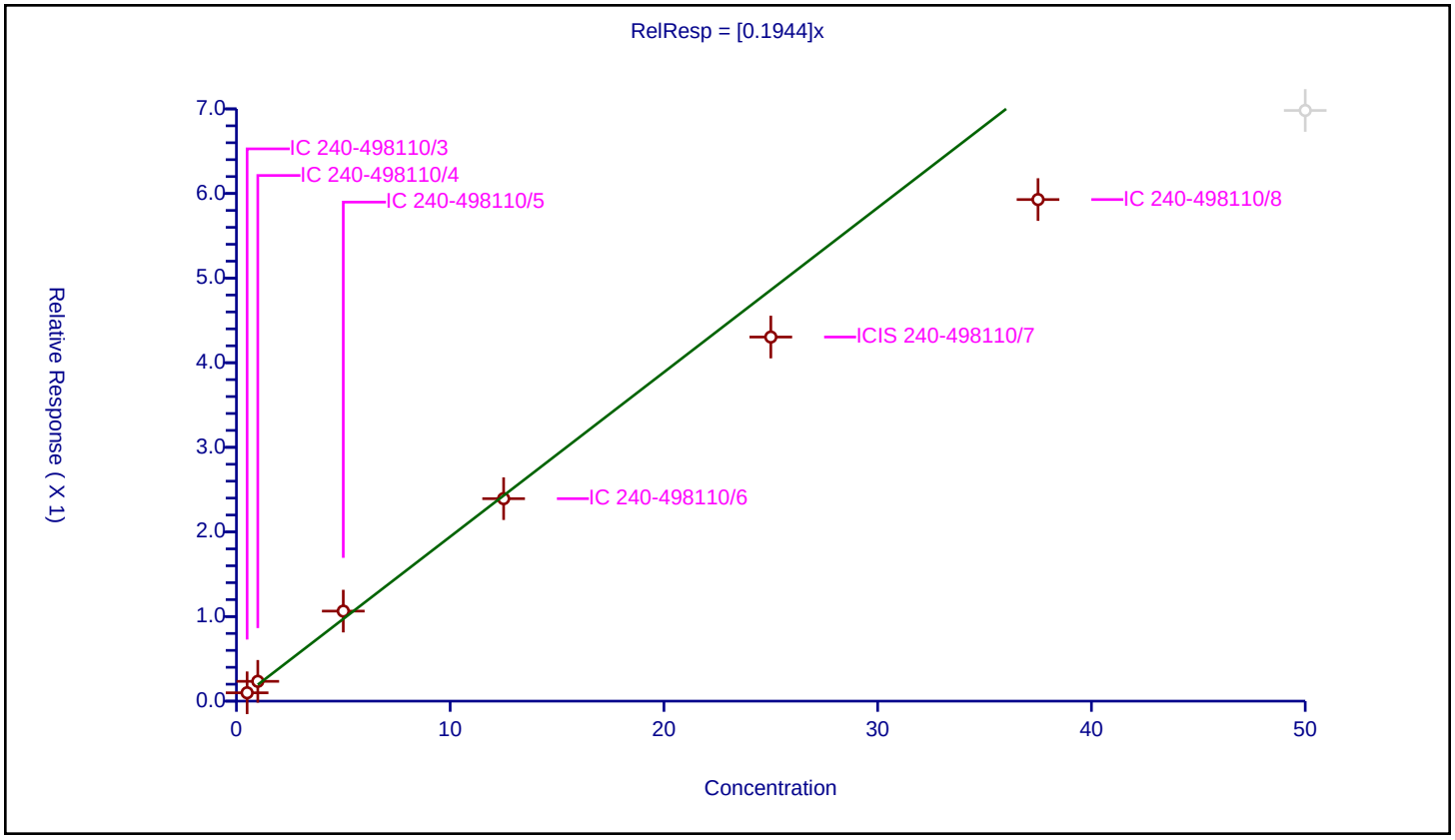
Curve Coefficients

Intercept:	0
Slope:	0.1944

Error Coefficients

Standard Error:	188000
Relative Standard Error:	14.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.098811	27.5	1334766.0	0.197623	Y
2	IC 240-498110/4	1.0	0.234164	27.5	1314729.0	0.234164	Y
3	IC 240-498110/5	5.0	1.064218	27.5	1364692.0	0.212844	Y
4	IC 240-498110/6	12.5	2.393151	27.5	1406146.0	0.191452	Y
5	ICIS 240-498110/7	25.0	4.303361	27.5	1474114.0	0.172134	Y
6	IC 240-498110/8	37.5	5.928462	27.5	1501472.0	0.158092	Y
7	IC 240-498110/9	50.0	6.98154	27.5	1591111.0	0.139631	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

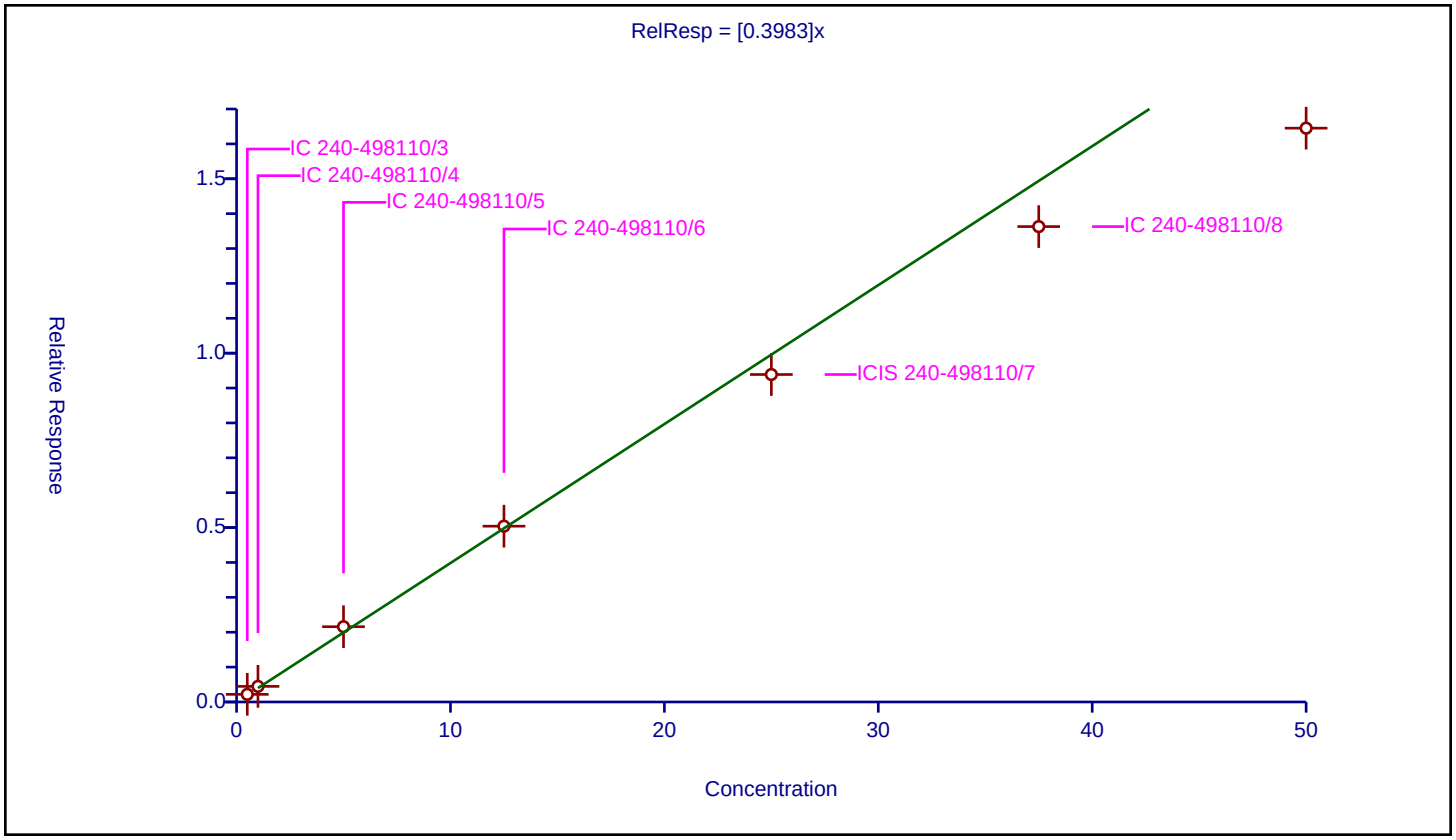
Curve Coefficients

Intercept:	0
Slope:	0.3983

Error Coefficients

Standard Error:	546000
Relative Standard Error:	11.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.219132	27.5	1334766.0	0.438264	Y
2	IC 240-498110/4	1.0	0.447391	27.5	1314729.0	0.447391	Y
3	IC 240-498110/5	5.0	2.157796	27.5	1364692.0	0.431559	Y
4	IC 240-498110/6	12.5	5.040348	27.5	1406146.0	0.403228	Y
5	ICIS 240-498110/7	25.0	9.388322	27.5	1474114.0	0.375533	Y
6	IC 240-498110/8	37.5	13.629009	27.5	1501472.0	0.36344	Y
7	IC 240-498110/9	50.0	16.451354	27.5	1591111.0	0.329027	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

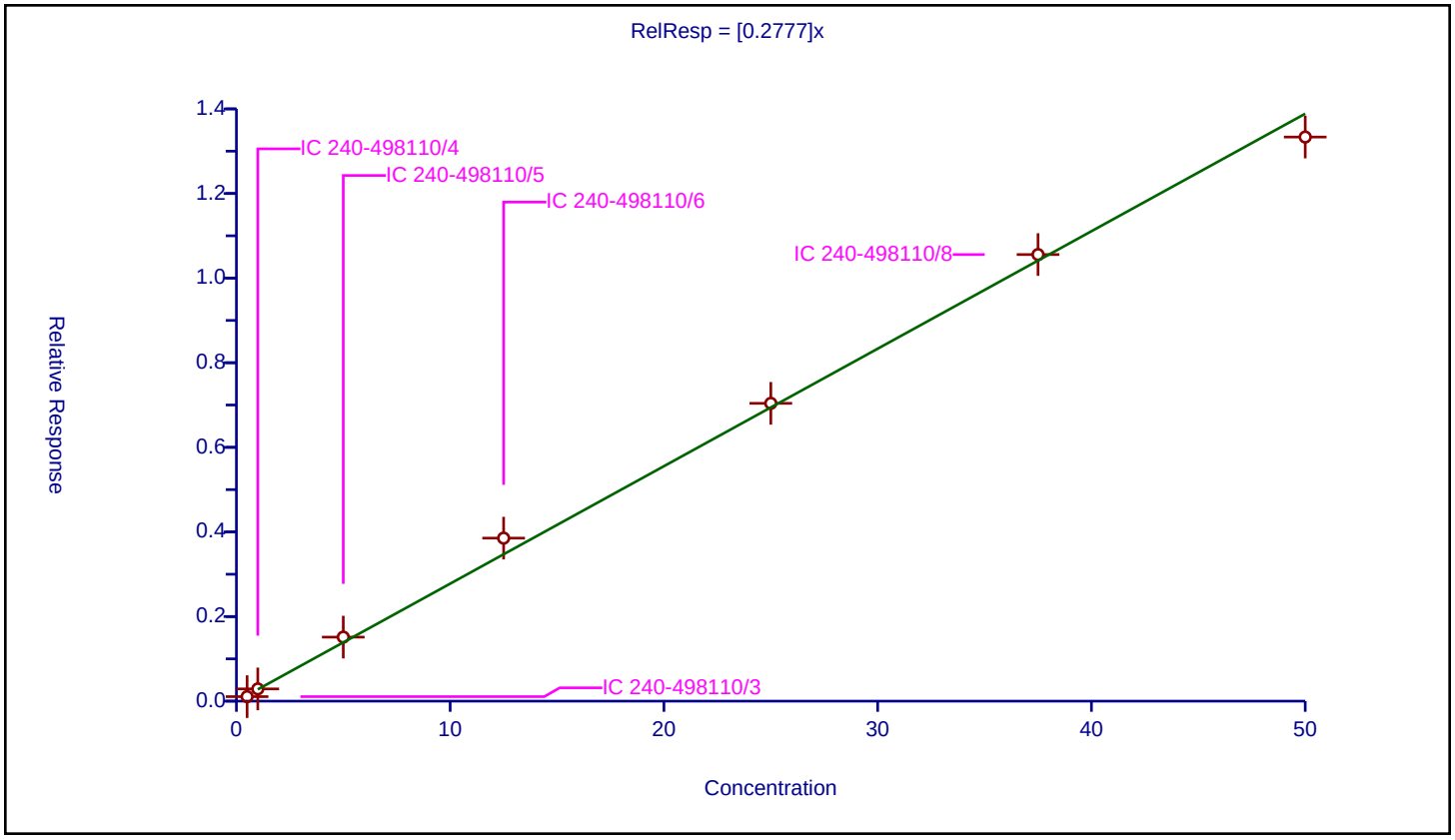
Curve Coefficients

Intercept:	0
Slope:	0.2777

Error Coefficients

Standard Error:	431000
Relative Standard Error:	11.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.10697	27.5	1334766.0	0.21394	Y
2	IC 240-498110/4	1.0	0.289238	27.5	1314729.0	0.289238	Y
3	IC 240-498110/5	5.0	1.513486	27.5	1364692.0	0.302697	Y
4	IC 240-498110/6	12.5	3.853238	27.5	1406146.0	0.308259	Y
5	ICIS 240-498110/7	25.0	7.039885	27.5	1474114.0	0.281595	Y
6	IC 240-498110/8	37.5	10.556442	27.5	1501472.0	0.281505	Y
7	IC 240-498110/9	50.0	13.334824	27.5	1591111.0	0.266696	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

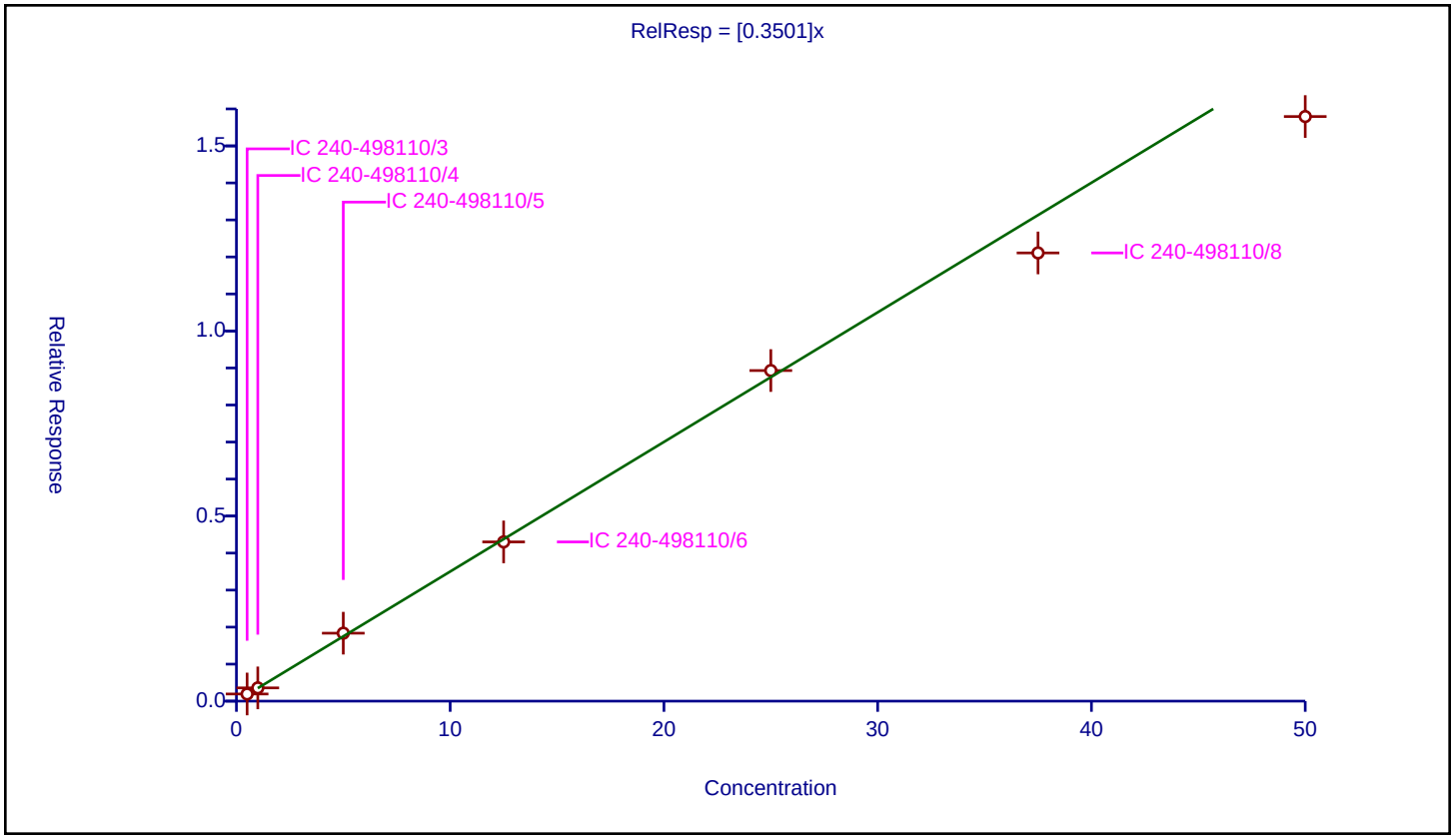
Curve Coefficients

Intercept:	0
Slope:	0.3501

Error Coefficients

Standard Error:	510000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.192925	27.5	1334766.0	0.38585	Y
2	IC 240-498110/4	1.0	0.35772	27.5	1314729.0	0.35772	Y
3	IC 240-498110/5	5.0	1.835762	27.5	1364692.0	0.367152	Y
4	IC 240-498110/6	12.5	4.301973	27.5	1406146.0	0.344158	Y
5	ICIS 240-498110/7	25.0	8.930914	27.5	1474114.0	0.357237	Y
6	IC 240-498110/8	37.5	12.108577	27.5	1501472.0	0.322895	Y
7	IC 240-498110/9	50.0	15.793353	27.5	1591111.0	0.315867	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

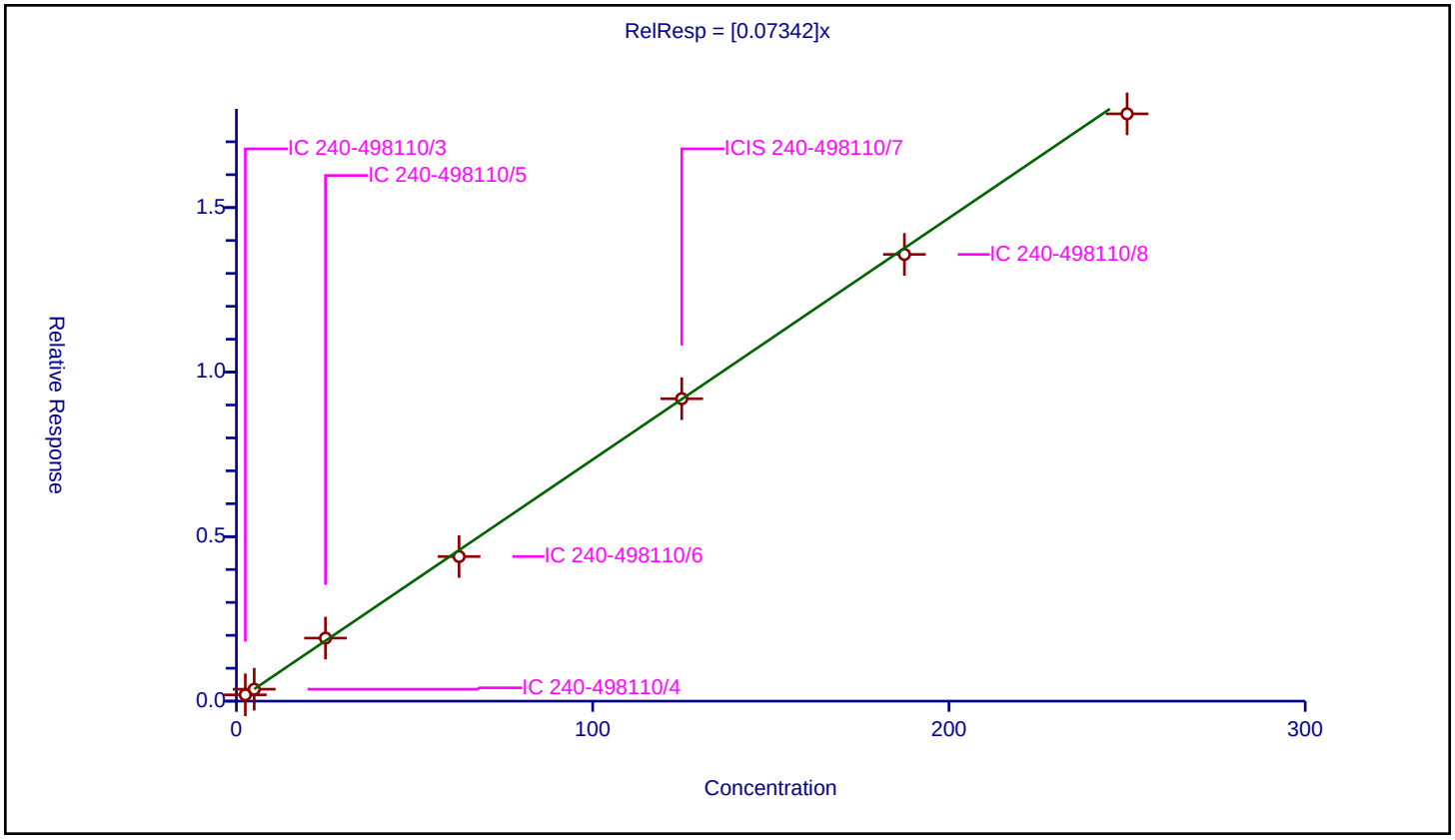
Curve Coefficients

Intercept:	0
Slope:	0.07342

Error Coefficients

Standard Error:	565000
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	2.5	0.192637	27.5	1334766.0	0.077055	Y
2	IC 240-498110/4	5.0	0.362928	27.5	1314729.0	0.072586	Y
3	IC 240-498110/5	25.0	1.915621	27.5	1364692.0	0.076625	Y
4	IC 240-498110/6	62.5	4.395378	27.5	1406146.0	0.070326	Y
5	ICIS 240-498110/7	125.0	9.191136	27.5	1474114.0	0.073529	Y
6	IC 240-498110/8	187.5	13.576682	27.5	1501472.0	0.072409	Y
7	IC 240-498110/9	250.0	17.849729	27.5	1591111.0	0.071399	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

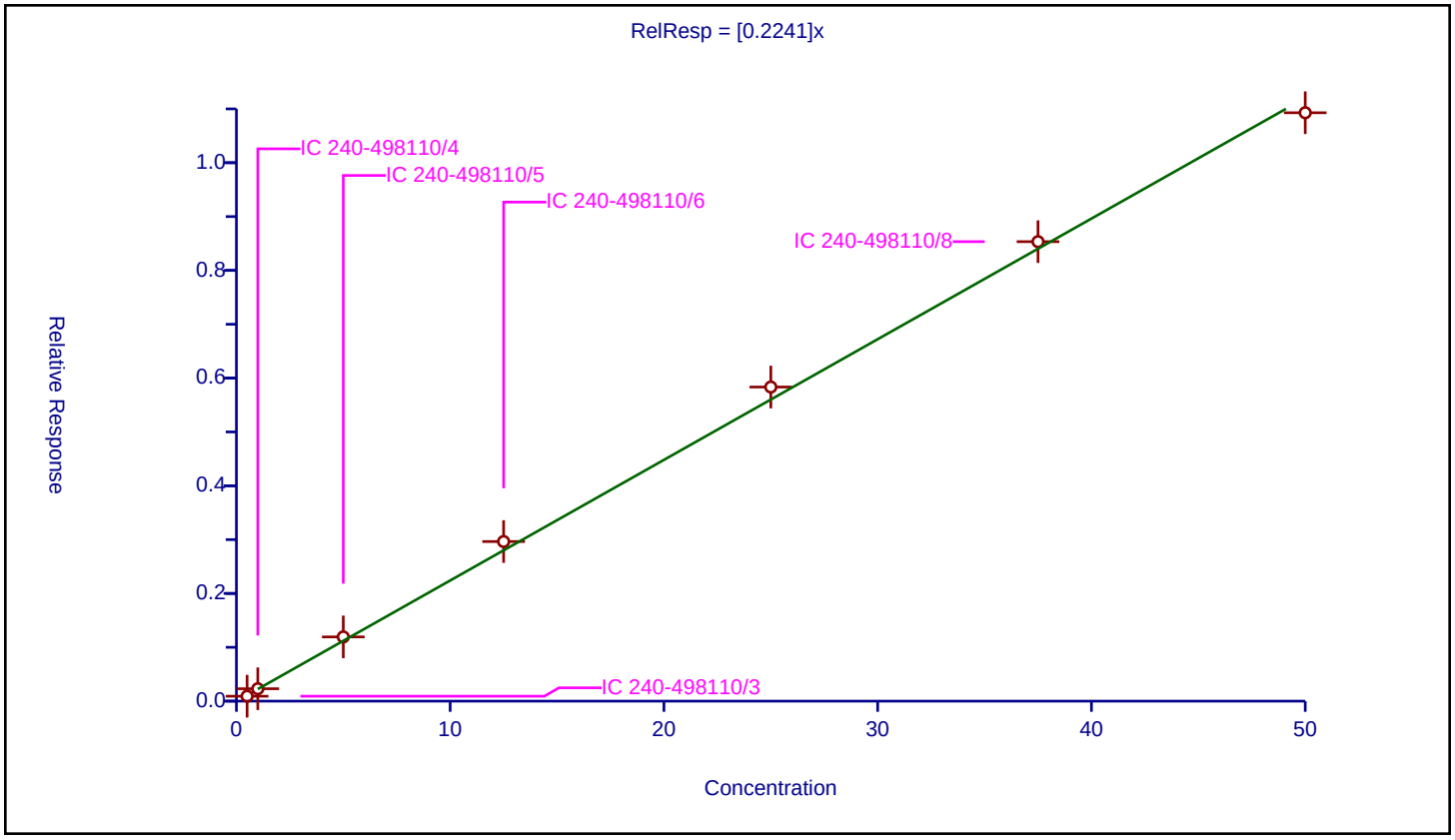
Curve Coefficients

Intercept:	0
Slope:	0.2241

Error Coefficients

Standard Error:	351000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.0916	27.5	1334766.0	0.183201	Y
2	IC 240-498110/4	1.0	0.230044	27.5	1314729.0	0.230044	Y
3	IC 240-498110/5	5.0	1.192742	27.5	1364692.0	0.238548	Y
4	IC 240-498110/6	12.5	2.964137	27.5	1406146.0	0.237131	Y
5	ICIS 240-498110/7	25.0	5.83384	27.5	1474114.0	0.233354	Y
6	IC 240-498110/8	37.5	8.533969	27.5	1501472.0	0.227572	Y
7	IC 240-498110/9	50.0	10.92837	27.5	1591111.0	0.218567	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

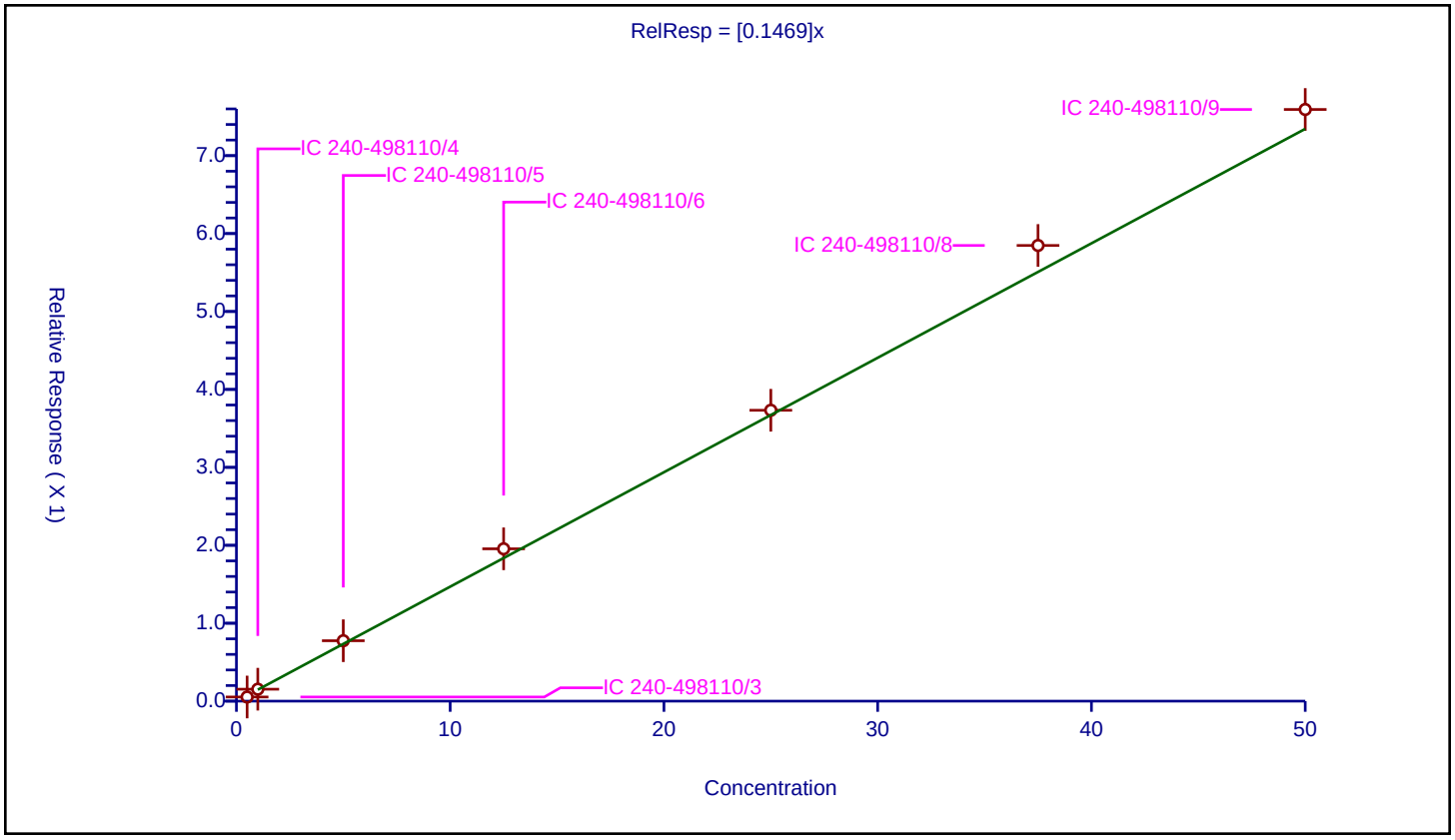
Curve Coefficients

Intercept:	0
Slope:	0.1469

Error Coefficients

Standard Error:	240000
Relative Standard Error:	12.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.053114	27.5	1334766.0	0.106228	Y
2	IC 240-498110/4	1.0	0.1533	27.5	1314729.0	0.1533	Y
3	IC 240-498110/5	5.0	0.775252	27.5	1364692.0	0.15505	Y
4	IC 240-498110/6	12.5	1.95482	27.5	1406146.0	0.156386	Y
5	ICIS 240-498110/7	25.0	3.732846	27.5	1474114.0	0.149314	Y
6	IC 240-498110/8	37.5	5.847398	27.5	1501472.0	0.155931	Y
7	IC 240-498110/9	50.0	7.592322	27.5	1591111.0	0.151846	Y



Calibration / Acetone

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

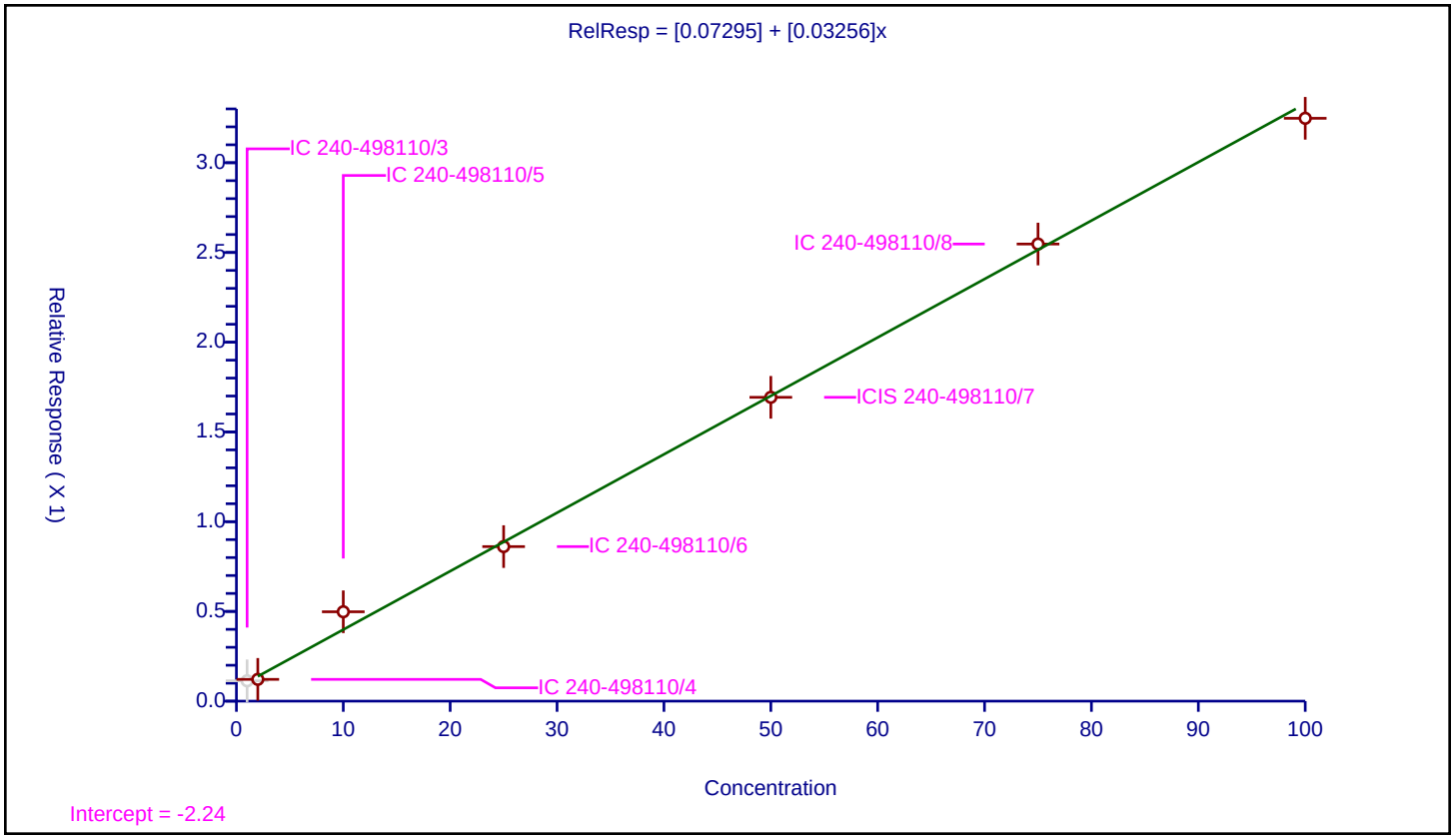
Curve Coefficients

Intercept:	0.07295
Slope:	0.03256

Error Coefficients

Standard Error:	128000
Relative Standard Error:	20.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.113378	27.5	1334766.0	0.113378	N
2	IC 240-498110/4	2.0	0.121318	27.5	1314729.0	0.060659	Y
3	IC 240-498110/5	10.0	0.497973	27.5	1364692.0	0.049797	Y
4	IC 240-498110/6	25.0	0.861114	27.5	1406146.0	0.034445	Y
5	ICIS 240-498110/7	50.0	1.692854	27.5	1474114.0	0.033857	Y
6	IC 240-498110/8	75.0	2.547026	27.5	1501472.0	0.03396	Y
7	IC 240-498110/9	100.0	3.247556	27.5	1591111.0	0.032476	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

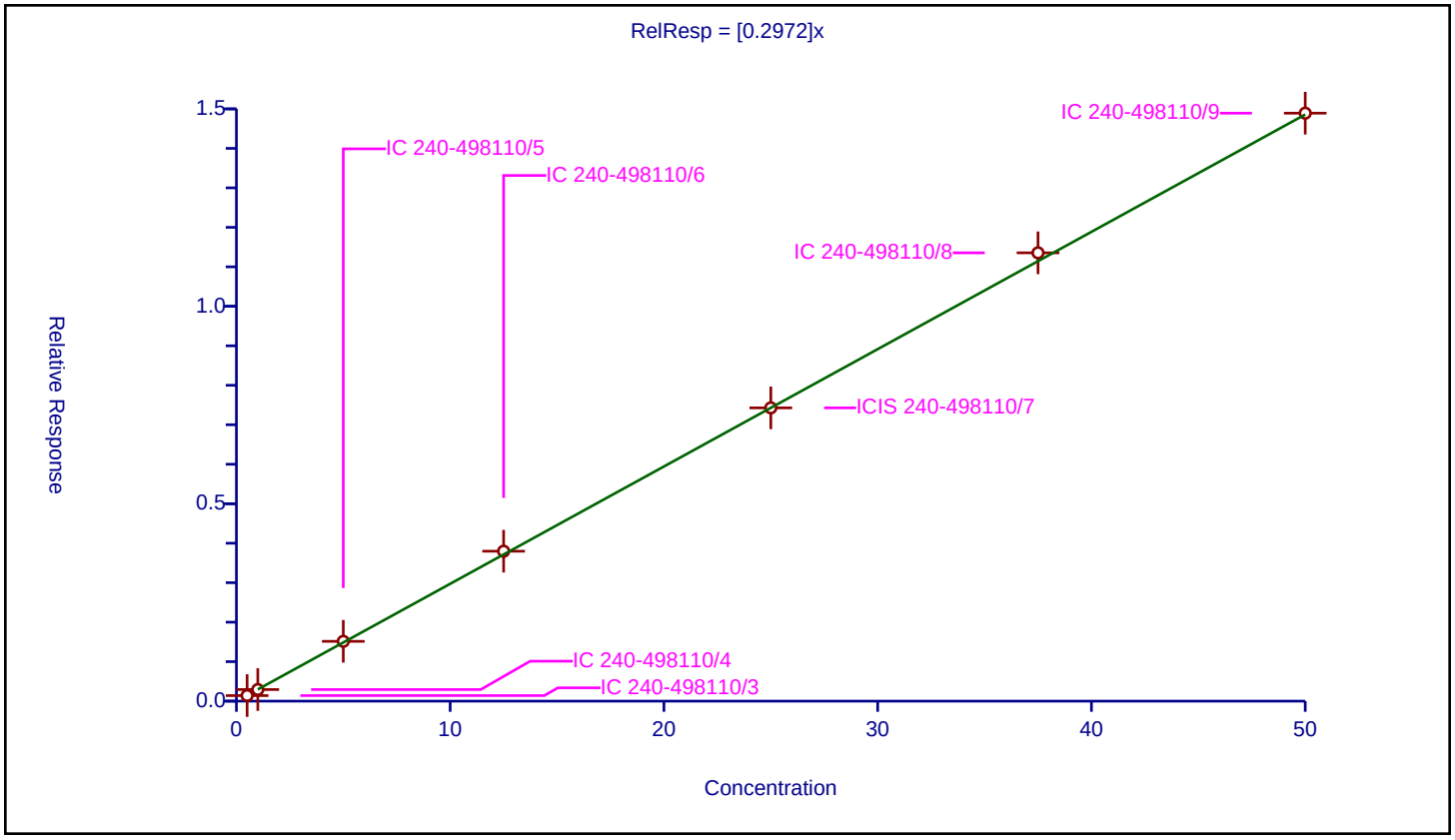
Curve Coefficients

Intercept:	0
Slope:	0.2972

Error Coefficients

Standard Error:	471000
Relative Standard Error:	2.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.140903	27.5	1334766.0	0.281806	Y
2	IC 240-498110/4	1.0	0.293694	27.5	1314729.0	0.293694	Y
3	IC 240-498110/5	5.0	1.515058	27.5	1364692.0	0.303012	Y
4	IC 240-498110/6	12.5	3.797774	27.5	1406146.0	0.303822	Y
5	ICIS 240-498110/7	25.0	7.428306	27.5	1474114.0	0.297132	Y
6	IC 240-498110/8	37.5	11.354552	27.5	1501472.0	0.302788	Y
7	IC 240-498110/9	50.0	14.891101	27.5	1591111.0	0.297822	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

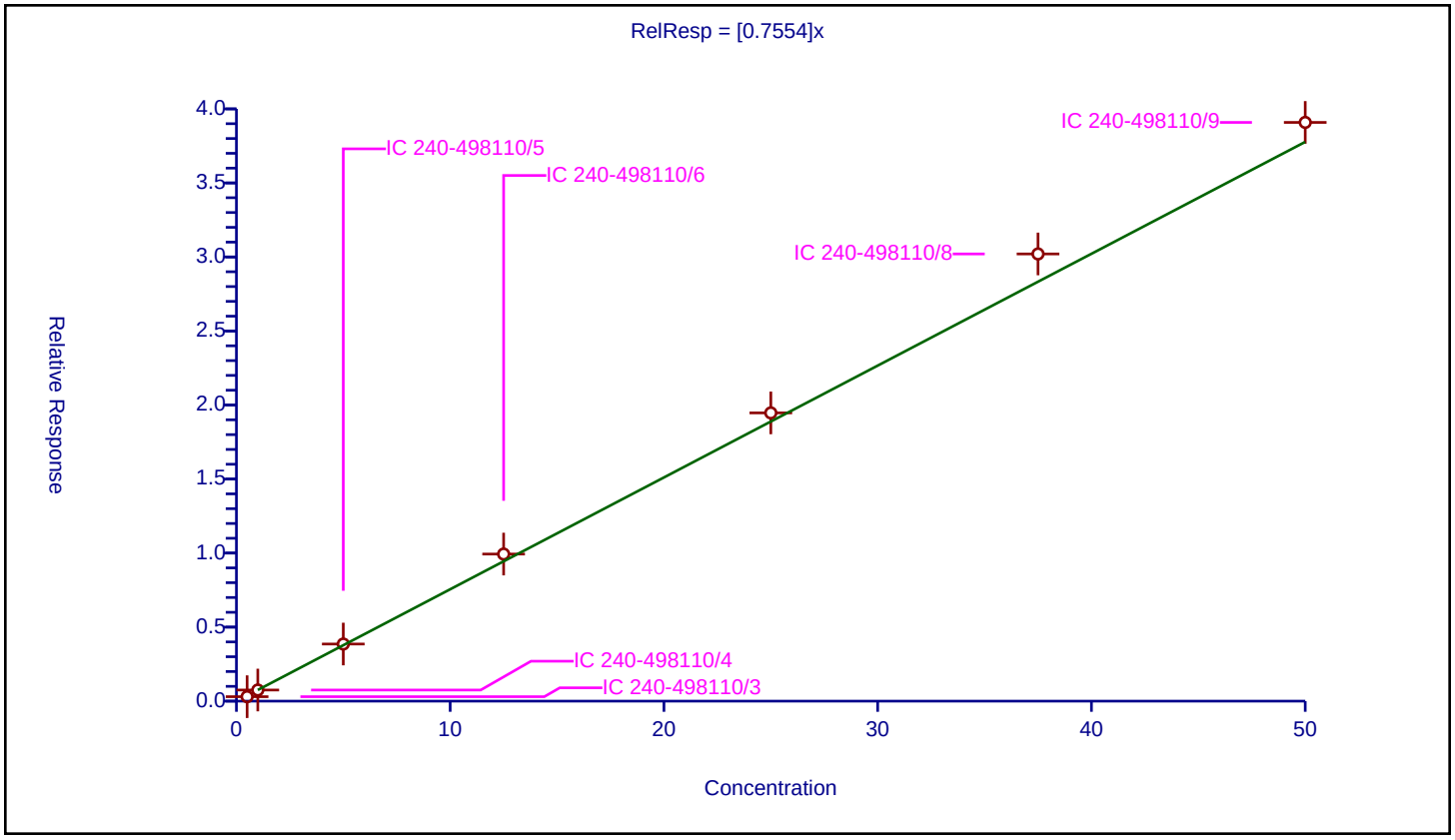
Curve Coefficients

Intercept:	0
Slope:	0.7554

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.302079	27.5	1334766.0	0.604158	Y
2	IC 240-498110/4	1.0	0.751396	27.5	1314729.0	0.751396	Y
3	IC 240-498110/5	5.0	3.857781	27.5	1364692.0	0.771556	Y
4	IC 240-498110/6	12.5	9.933549	27.5	1406146.0	0.794684	Y
5	ICIS 240-498110/7	25.0	19.468233	27.5	1474114.0	0.778729	Y
6	IC 240-498110/8	37.5	30.202706	27.5	1501472.0	0.805405	Y
7	IC 240-498110/9	50.0	39.085887	27.5	1591111.0	0.781718	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

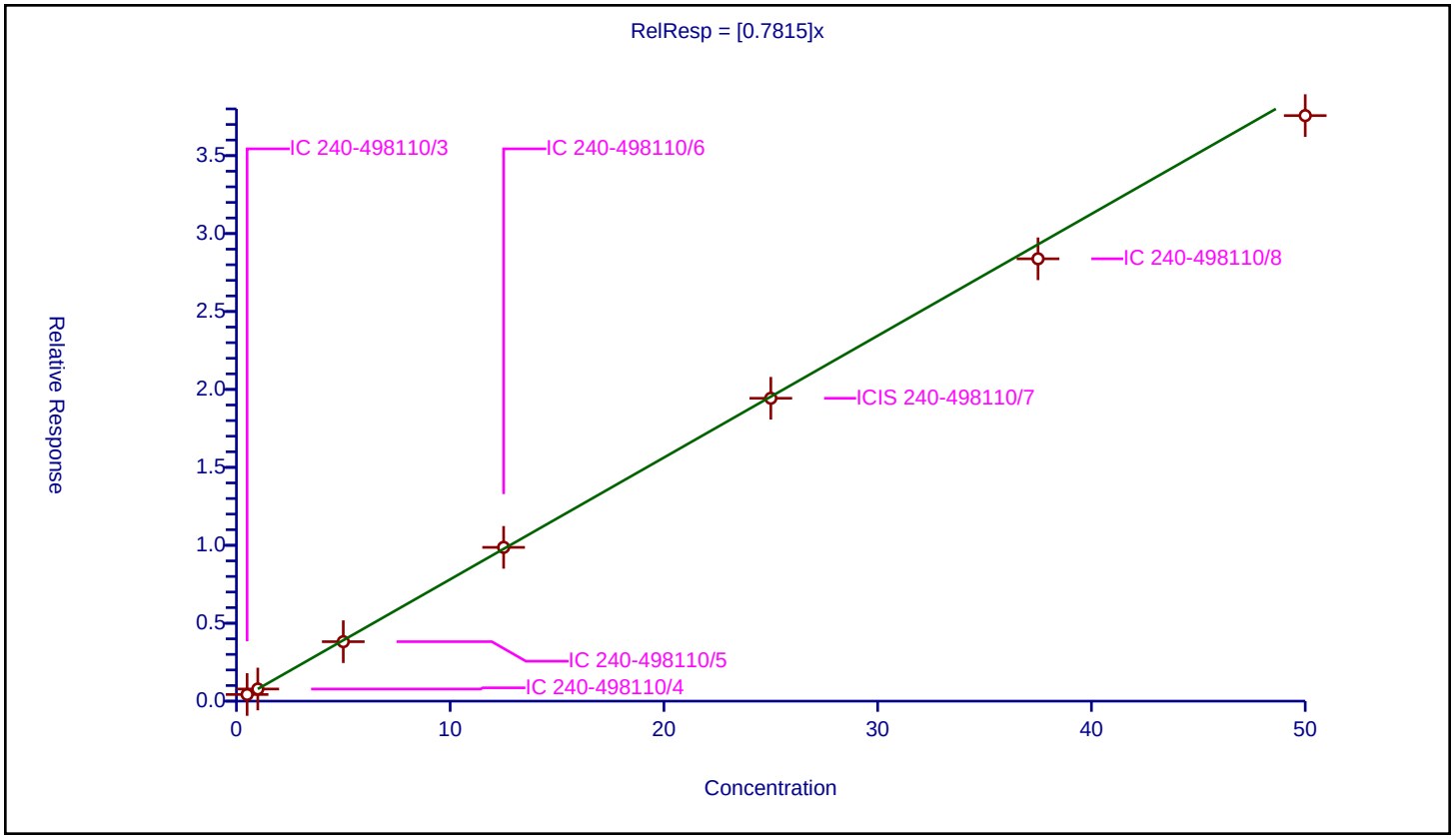
Curve Coefficients

Intercept:	0
Slope:	0.7815

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.426974	27.5	1334766.0	0.853947	Y
2	IC 240-498110/4	1.0	0.778651	27.5	1314729.0	0.778651	Y
3	IC 240-498110/5	5.0	3.814335	27.5	1364692.0	0.762867	Y
4	IC 240-498110/6	12.5	9.866195	27.5	1406146.0	0.789296	Y
5	ICIS 240-498110/7	25.0	19.431986	27.5	1474114.0	0.777279	Y
6	IC 240-498110/8	37.5	28.382397	27.5	1501472.0	0.756864	Y
7	IC 240-498110/9	50.0	37.568498	27.5	1591111.0	0.75137	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

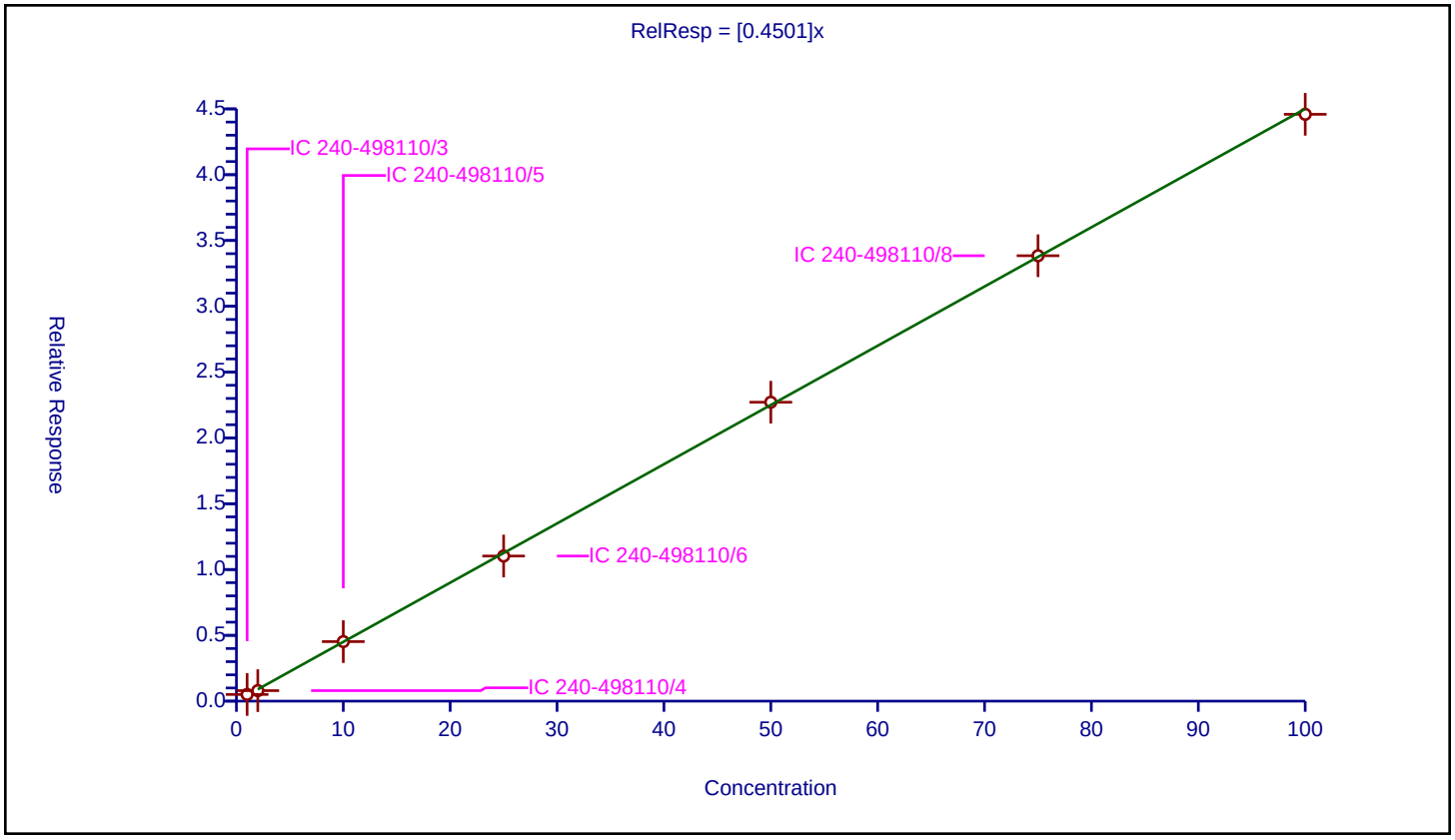
Curve Coefficients

Intercept:	0
Slope:	0.4501

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.506089	27.5	1334766.0	0.506089	Y
2	IC 240-498110/4	2.0	0.79917	27.5	1314729.0	0.399585	Y
3	IC 240-498110/5	10.0	4.522988	27.5	1364692.0	0.452299	Y
4	IC 240-498110/6	25.0	11.025377	27.5	1406146.0	0.441015	Y
5	ICIS 240-498110/7	50.0	22.713094	27.5	1474114.0	0.454262	Y
6	IC 240-498110/8	75.0	33.843104	27.5	1501472.0	0.451241	Y
7	IC 240-498110/9	100.0	44.589548	27.5	1591111.0	0.445895	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

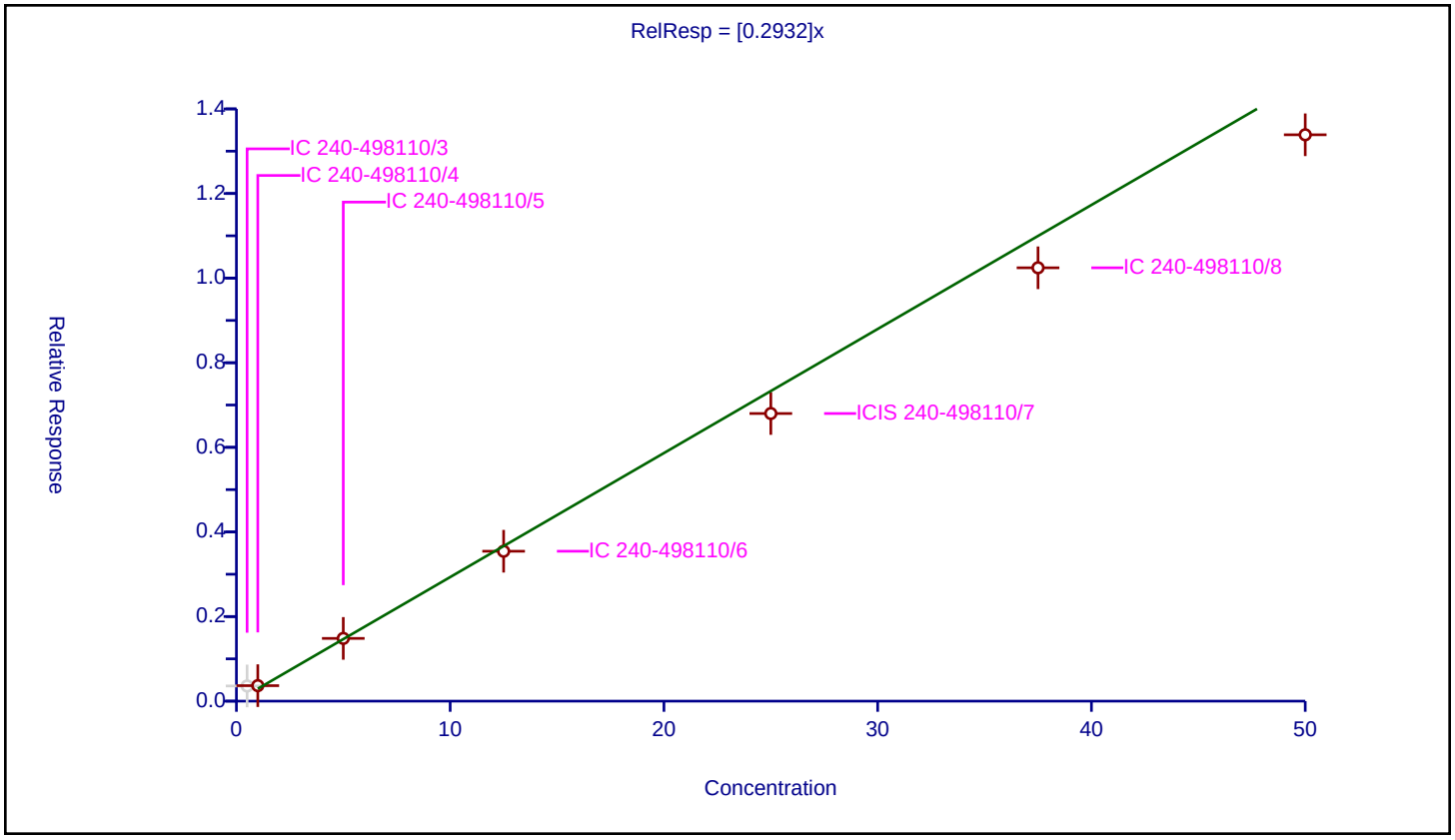
Curve Coefficients

Intercept:	0
Slope:	0.2932

Error Coefficients

Standard Error:	466000
Relative Standard Error:	12.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.358655	27.5	1334766.0	0.717309	N
2	IC 240-498110/4	1.0	0.366338	27.5	1314729.0	0.366338	Y
3	IC 240-498110/5	5.0	1.483119	27.5	1364692.0	0.296624	Y
4	IC 240-498110/6	12.5	3.543631	27.5	1406146.0	0.28349	Y
5	ICIS 240-498110/7	25.0	6.799455	27.5	1474114.0	0.271978	Y
6	IC 240-498110/8	37.5	10.243708	27.5	1501472.0	0.273166	Y
7	IC 240-498110/9	50.0	13.387781	27.5	1591111.0	0.267756	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

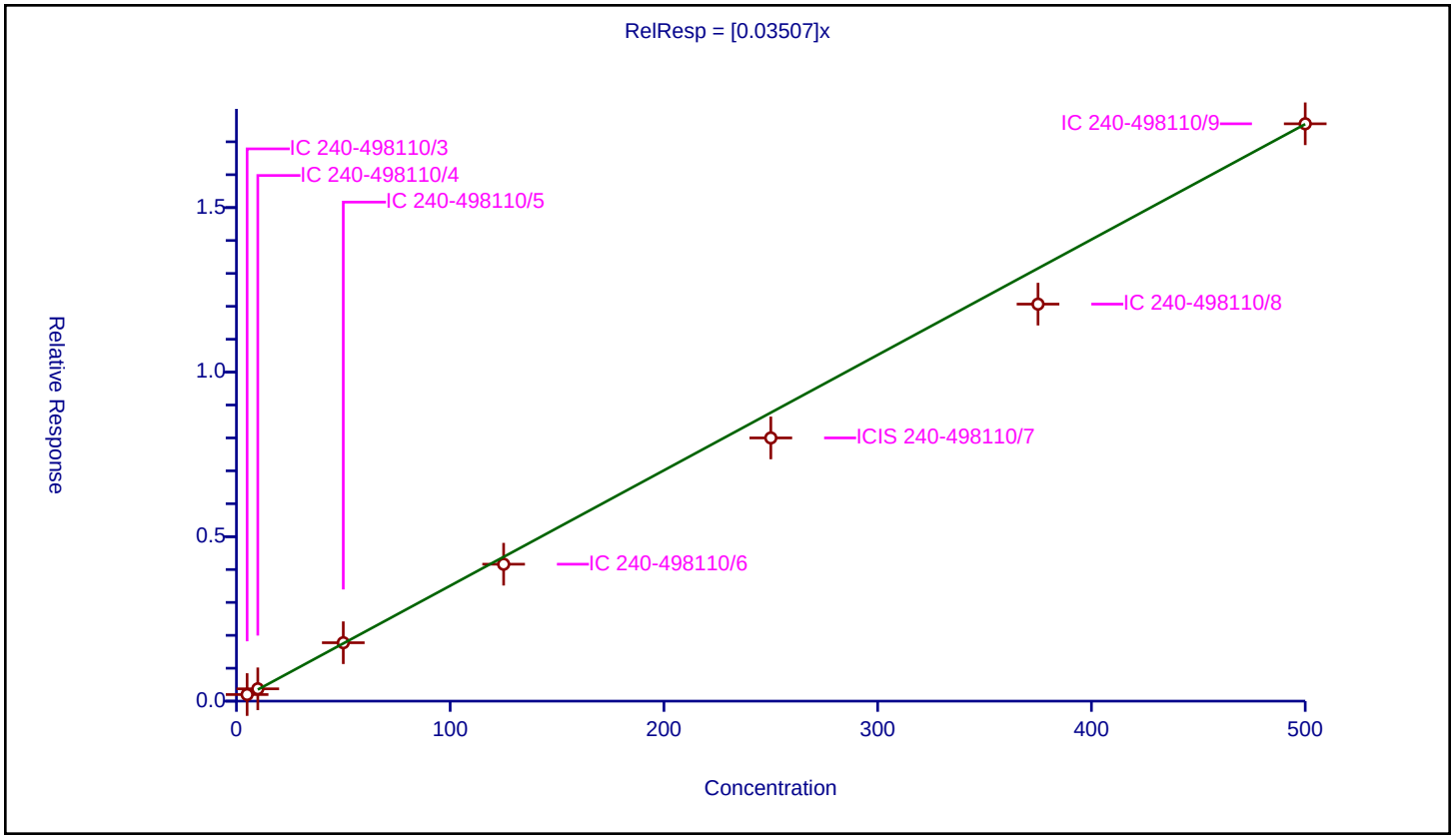
Curve Coefficients

Intercept:	0
Slope:	0.03507

Error Coefficients

Standard Error:	533000
Relative Standard Error:	8.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	5.0	0.200177	27.5	1334766.0	0.040035	Y
2	IC 240-498110/4	10.0	0.374077	27.5	1314729.0	0.037408	Y
3	IC 240-498110/5	50.0	1.775289	27.5	1364692.0	0.035506	Y
4	IC 240-498110/6	125.0	4.161671	27.5	1406146.0	0.033293	Y
5	ICIS 240-498110/7	250.0	7.999698	27.5	1474114.0	0.031999	Y
6	IC 240-498110/8	375.0	12.066232	27.5	1501472.0	0.032177	Y
7	IC 240-498110/9	500.0	17.547475	27.5	1591111.0	0.035095	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

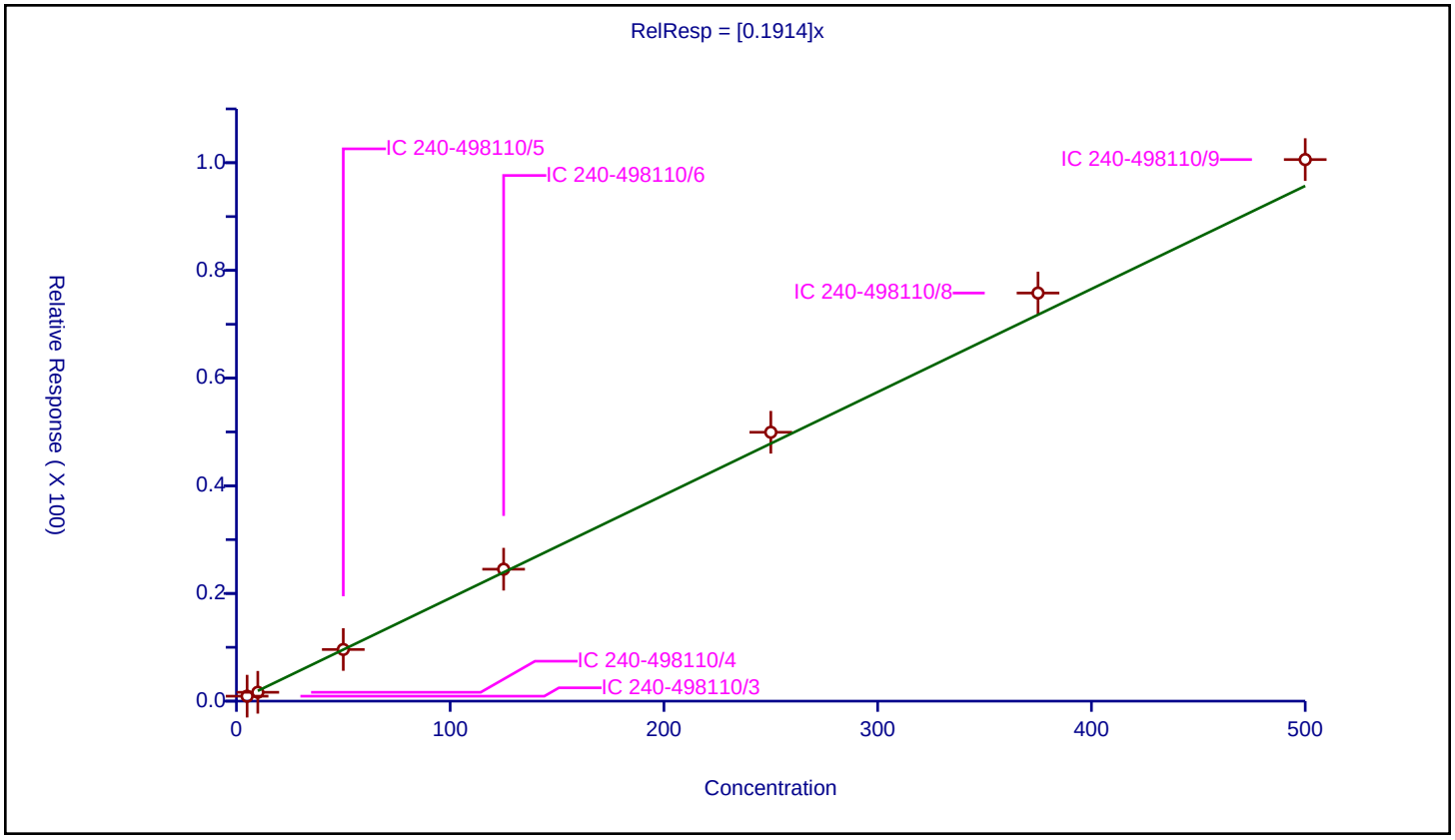
Curve Coefficients

Intercept:	0
Slope:	0.1914

Error Coefficients

Standard Error:	3160000
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	5.0	0.92101	27.5	1334766.0	0.184202	Y
2	IC 240-498110/4	10.0	1.645006	27.5	1314729.0	0.164501	Y
3	IC 240-498110/5	50.0	9.595031	27.5	1364692.0	0.191901	Y
4	IC 240-498110/6	125.0	24.506508	27.5	1406146.0	0.196052	Y
5	ICIS 240-498110/7	250.0	49.93944	27.5	1474114.0	0.199758	Y
6	IC 240-498110/8	375.0	75.799948	27.5	1501472.0	0.202133	Y
7	IC 240-498110/9	500.0	100.584093	27.5	1591111.0	0.201168	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

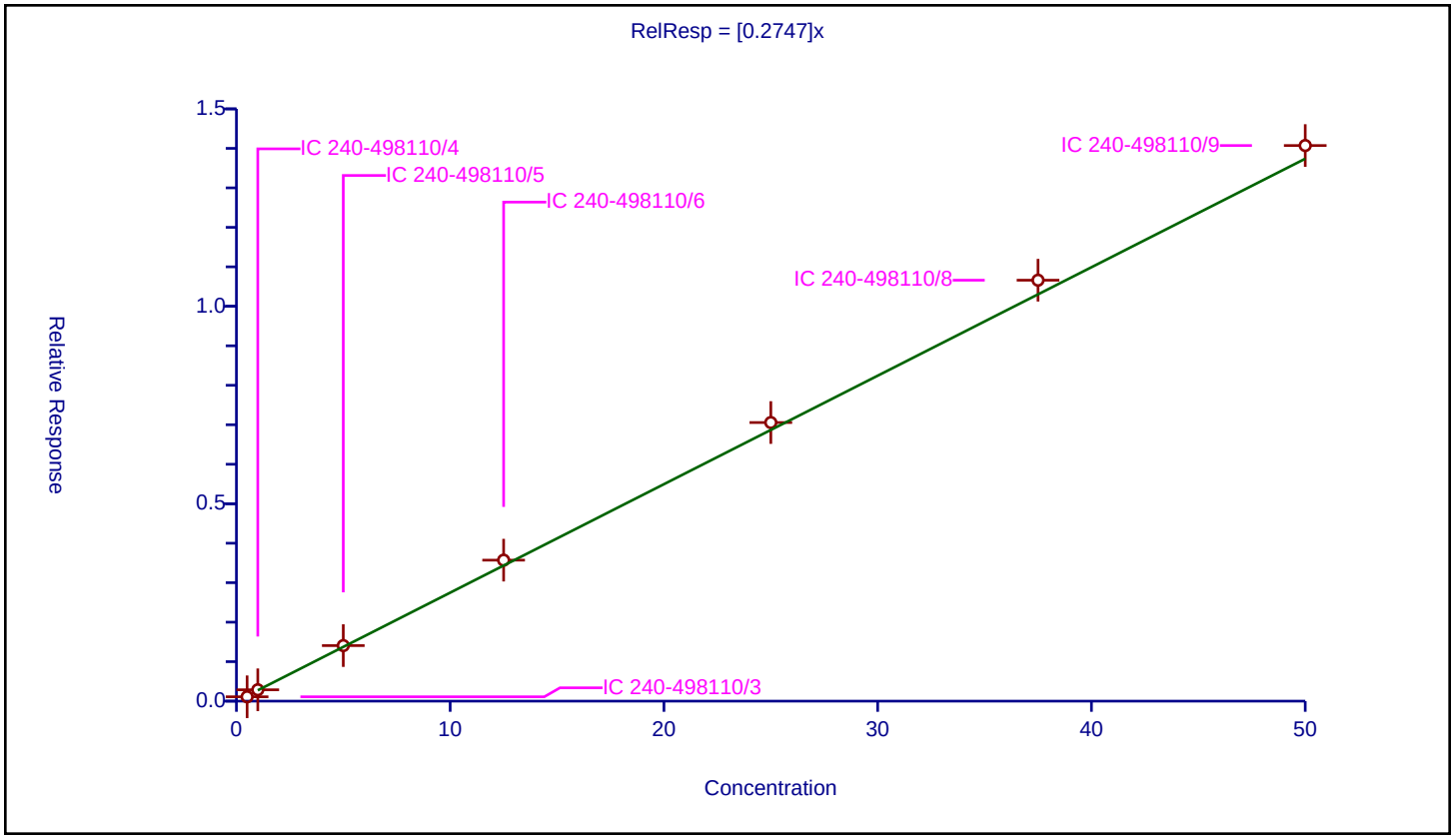
Curve Coefficients

Intercept:	0
Slope:	0.2747

Error Coefficients

Standard Error:	444000
Relative Standard Error:	8.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.110205	27.5	1334766.0	0.220409	Y
2	IC 240-498110/4	1.0	0.287858	27.5	1314729.0	0.287858	Y
3	IC 240-498110/5	5.0	1.406565	27.5	1364692.0	0.281313	Y
4	IC 240-498110/6	12.5	3.570502	27.5	1406146.0	0.28564	Y
5	ICIS 240-498110/7	25.0	7.056283	27.5	1474114.0	0.282251	Y
6	IC 240-498110/8	37.5	10.66095	27.5	1501472.0	0.284292	Y
7	IC 240-498110/9	50.0	14.072035	27.5	1591111.0	0.281441	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

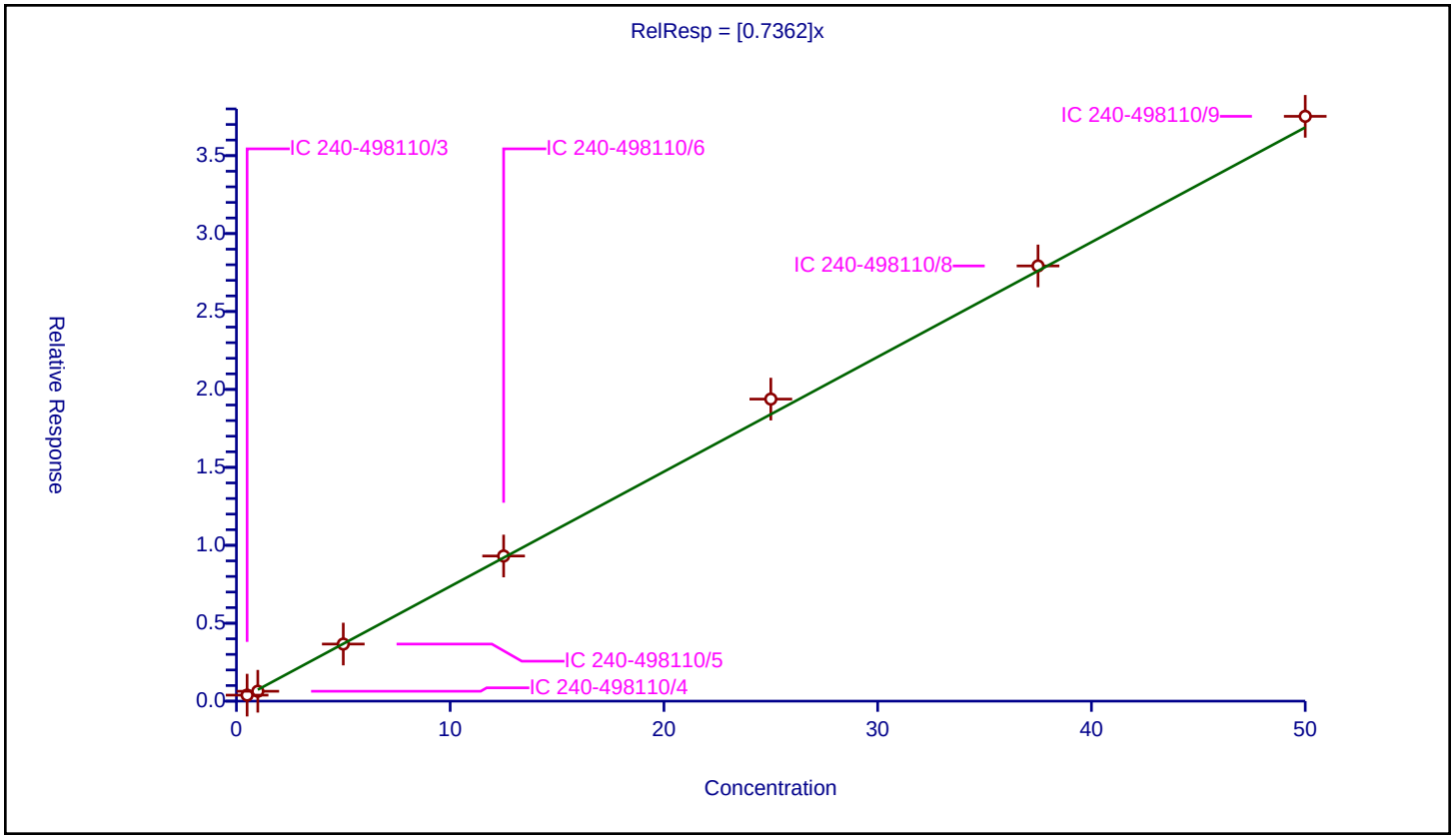
Curve Coefficients

Intercept:	0
Slope:	0.7362

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	6.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.385109	27.5	1334766.0	0.770217	Y
2	IC 240-498110/4	1.0	0.635182	27.5	1314729.0	0.635182	Y
3	IC 240-498110/5	5.0	3.663242	27.5	1364692.0	0.732648	Y
4	IC 240-498110/6	12.5	9.312653	27.5	1406146.0	0.745012	Y
5	ICIS 240-498110/7	25.0	19.380292	27.5	1474114.0	0.775212	Y
6	IC 240-498110/8	37.5	27.92411	27.5	1501472.0	0.744643	Y
7	IC 240-498110/9	50.0	37.523993	27.5	1591111.0	0.75048	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

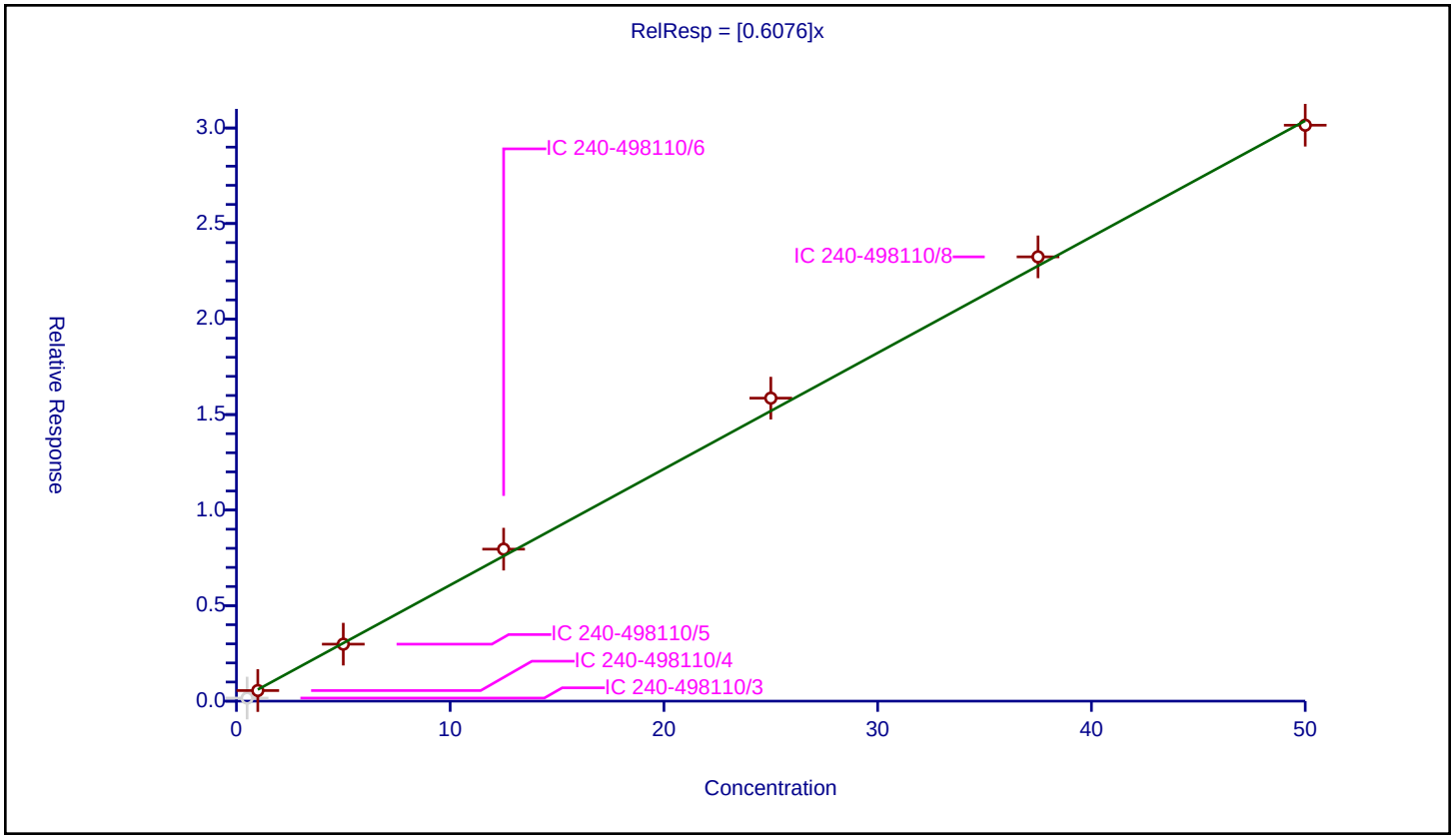
Curve Coefficients

Intercept:	0
Slope:	0.6076

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.160764	27.5	1334766.0	0.321528	N
2	IC 240-498110/4	1.0	0.554841	27.5	1314729.0	0.554841	Y
3	IC 240-498110/5	5.0	2.982902	27.5	1364692.0	0.59658	Y
4	IC 240-498110/6	12.5	7.955867	27.5	1406146.0	0.636469	Y
5	ICIS 240-498110/7	25.0	15.860341	27.5	1474114.0	0.634414	Y
6	IC 240-498110/8	37.5	23.255232	27.5	1501472.0	0.62014	Y
7	IC 240-498110/9	50.0	30.147196	27.5	1591111.0	0.602944	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

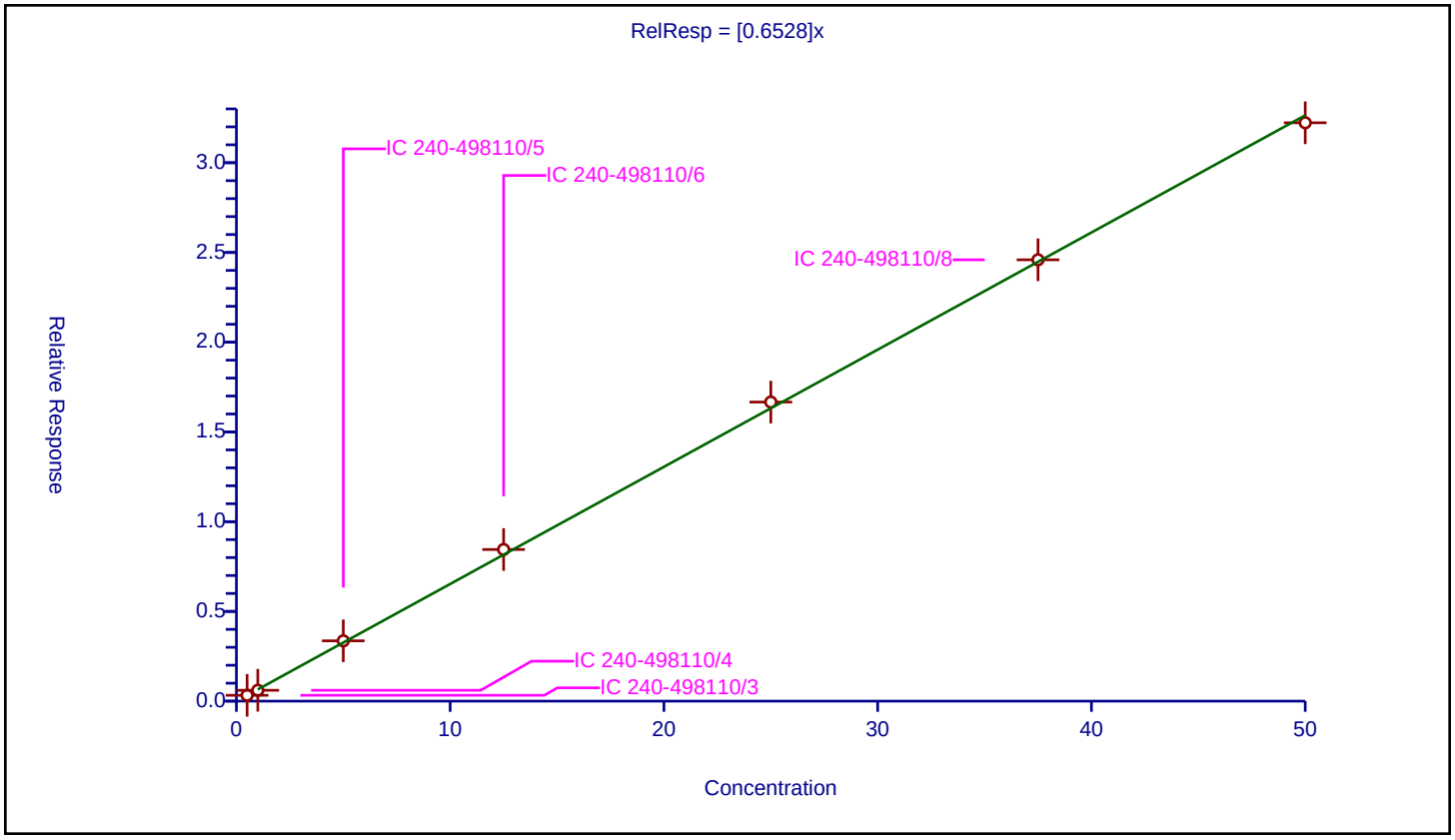
Curve Coefficients

Intercept:	0
Slope:	0.6528

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.325257	27.5	1334766.0	0.650515	Y
2	IC 240-498110/4	1.0	0.604058	27.5	1314729.0	0.604058	Y
3	IC 240-498110/5	5.0	3.360896	27.5	1364692.0	0.672179	Y
4	IC 240-498110/6	12.5	8.449075	27.5	1406146.0	0.675926	Y
5	ICIS 240-498110/7	25.0	16.665166	27.5	1474114.0	0.666607	Y
6	IC 240-498110/8	37.5	24.592015	27.5	1501472.0	0.655787	Y
7	IC 240-498110/9	50.0	32.22687	27.5	1591111.0	0.644537	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

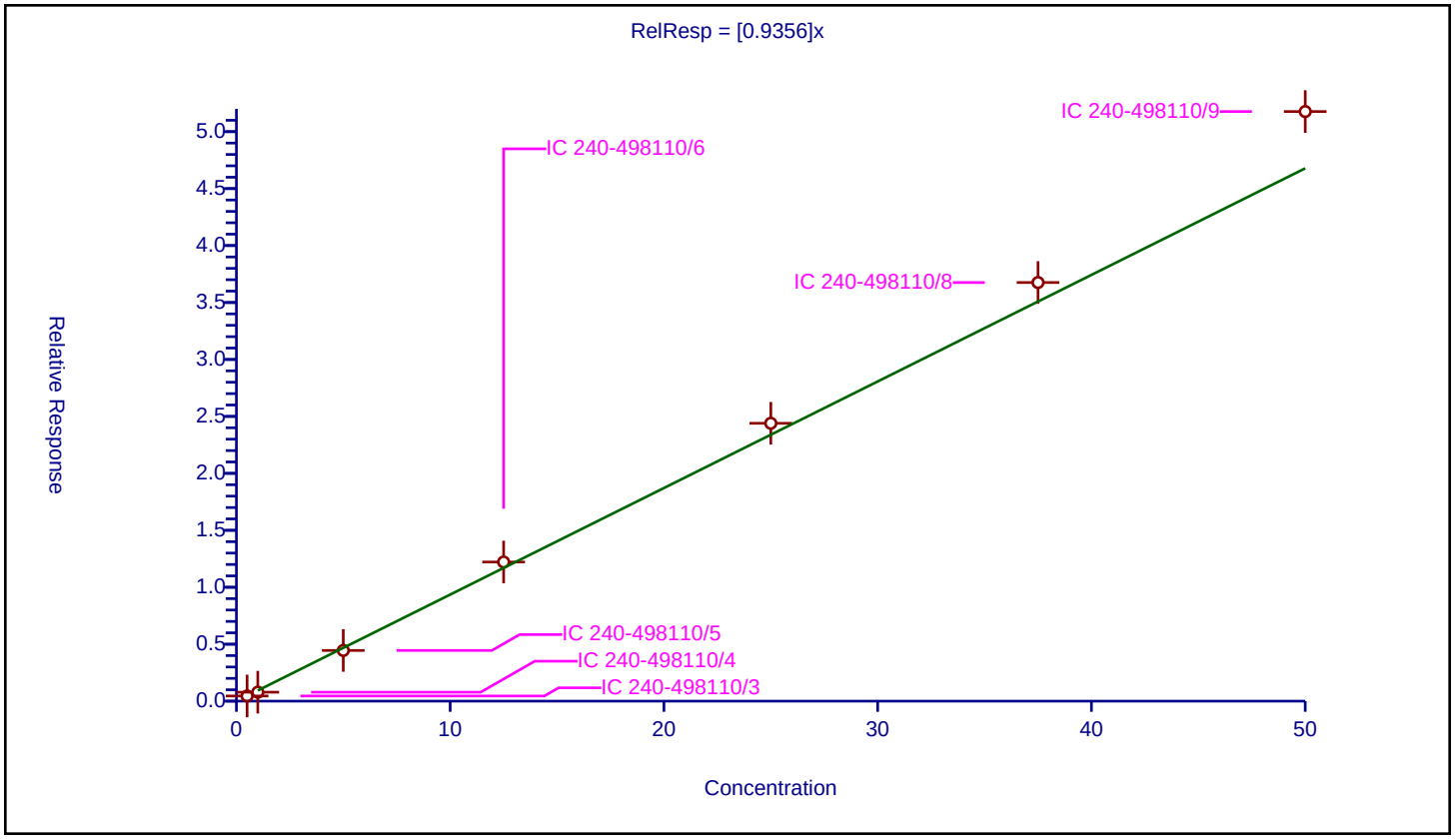
Curve Coefficients

Intercept:	0
Slope:	0.9356

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	8.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.452377	27.5	1334766.0	0.904754	Y
2	IC 240-498110/4	1.0	0.785867	27.5	1314729.0	0.785867	Y
3	IC 240-498110/5	5.0	4.450363	27.5	1364692.0	0.890073	Y
4	IC 240-498110/6	12.5	12.215577	27.5	1406146.0	0.977246	Y
5	ICIS 240-498110/7	25.0	24.395818	27.5	1474114.0	0.975833	Y
6	IC 240-498110/8	37.5	36.756418	27.5	1501472.0	0.980171	Y
7	IC 240-498110/9	50.0	51.765821	27.5	1591111.0	1.035316	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

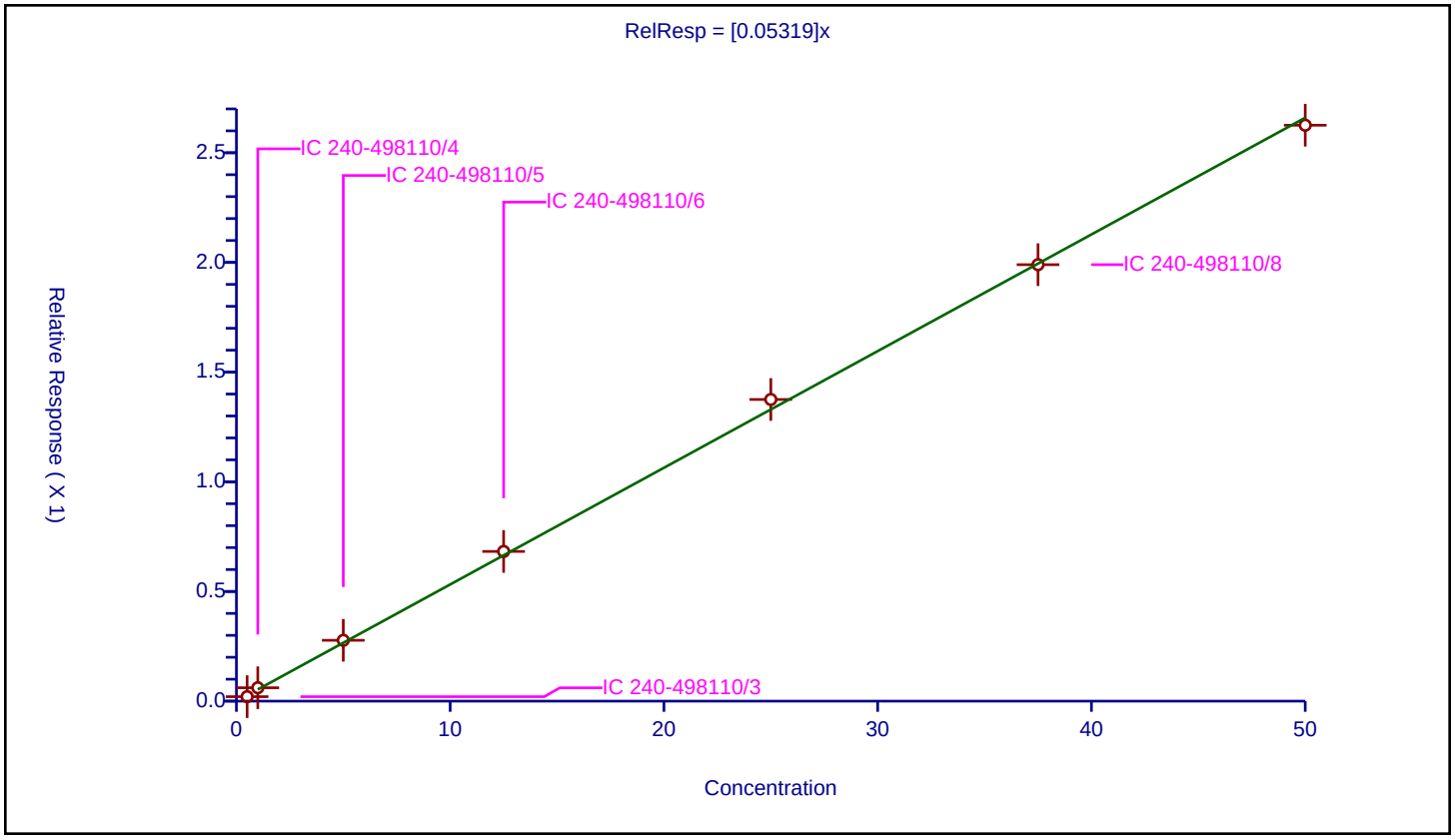
Curve Coefficients

Intercept:	0
Slope:	0.05319

Error Coefficients

Standard Error:	83400
Relative Standard Error:	11.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.020356	27.5	1334766.0	0.040711	Y
2	IC 240-498110/4	1.0	0.060973	27.5	1314729.0	0.060973	Y
3	IC 240-498110/5	5.0	0.277379	27.5	1364692.0	0.055476	Y
4	IC 240-498110/6	12.5	0.682402	27.5	1406146.0	0.054592	Y
5	ICIS 240-498110/7	25.0	1.375248	27.5	1474114.0	0.05501	Y
6	IC 240-498110/8	37.5	1.989781	27.5	1501472.0	0.053061	Y
7	IC 240-498110/9	50.0	2.625591	27.5	1591111.0	0.052512	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

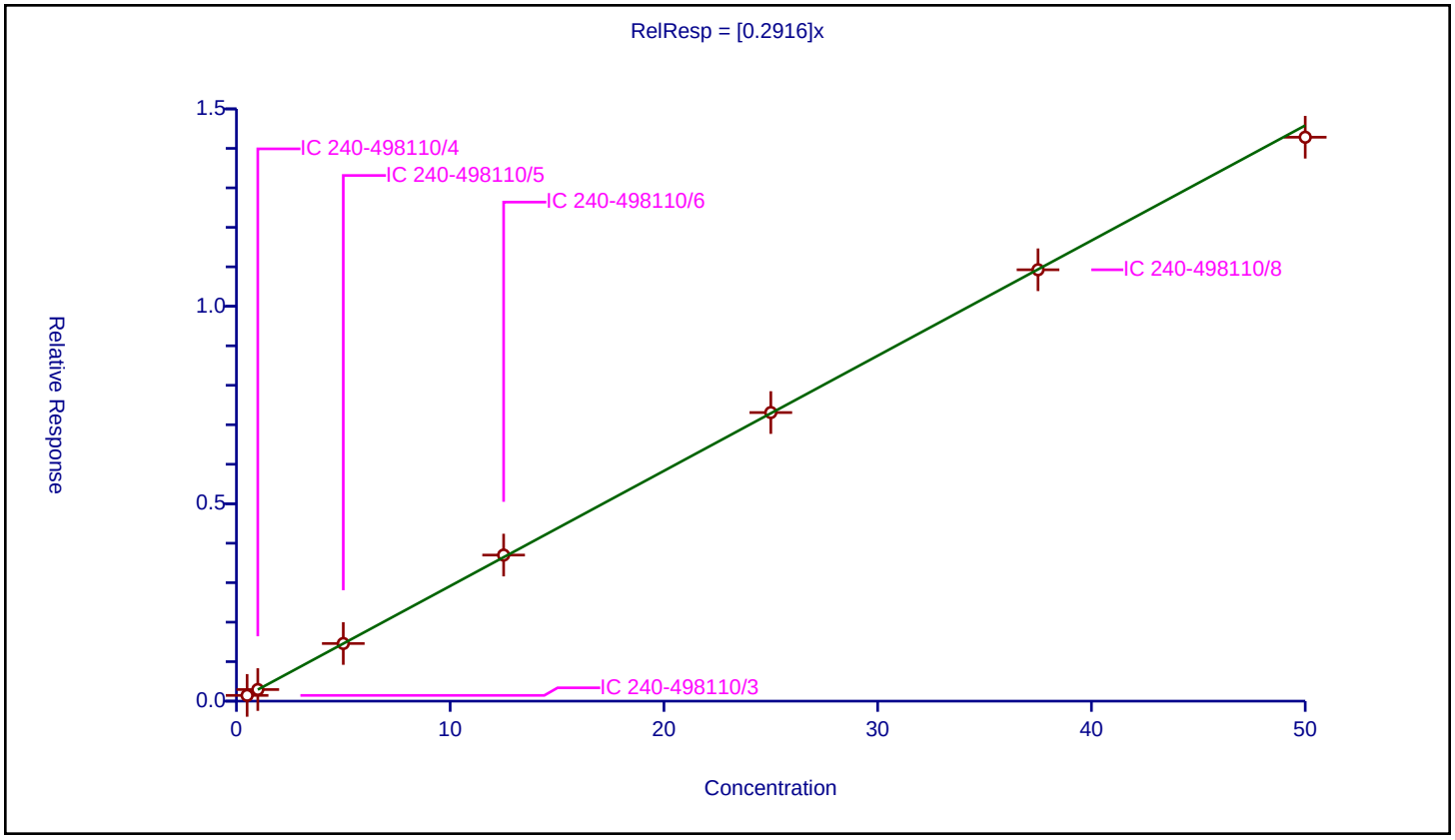
Curve Coefficients

Intercept:	0
Slope:	0.2916

Error Coefficients

Standard Error:	453000
Relative Standard Error:	1.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.145147	27.5	1334766.0	0.290294	Y
2	IC 240-498110/4	1.0	0.293715	27.5	1314729.0	0.293715	Y
3	IC 240-498110/5	5.0	1.459763	27.5	1364692.0	0.291953	Y
4	IC 240-498110/6	12.5	3.699324	27.5	1406146.0	0.295946	Y
5	ICIS 240-498110/7	25.0	7.309584	27.5	1474114.0	0.292383	Y
6	IC 240-498110/8	37.5	10.925552	27.5	1501472.0	0.291348	Y
7	IC 240-498110/9	50.0	14.281978	27.5	1591111.0	0.28564	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

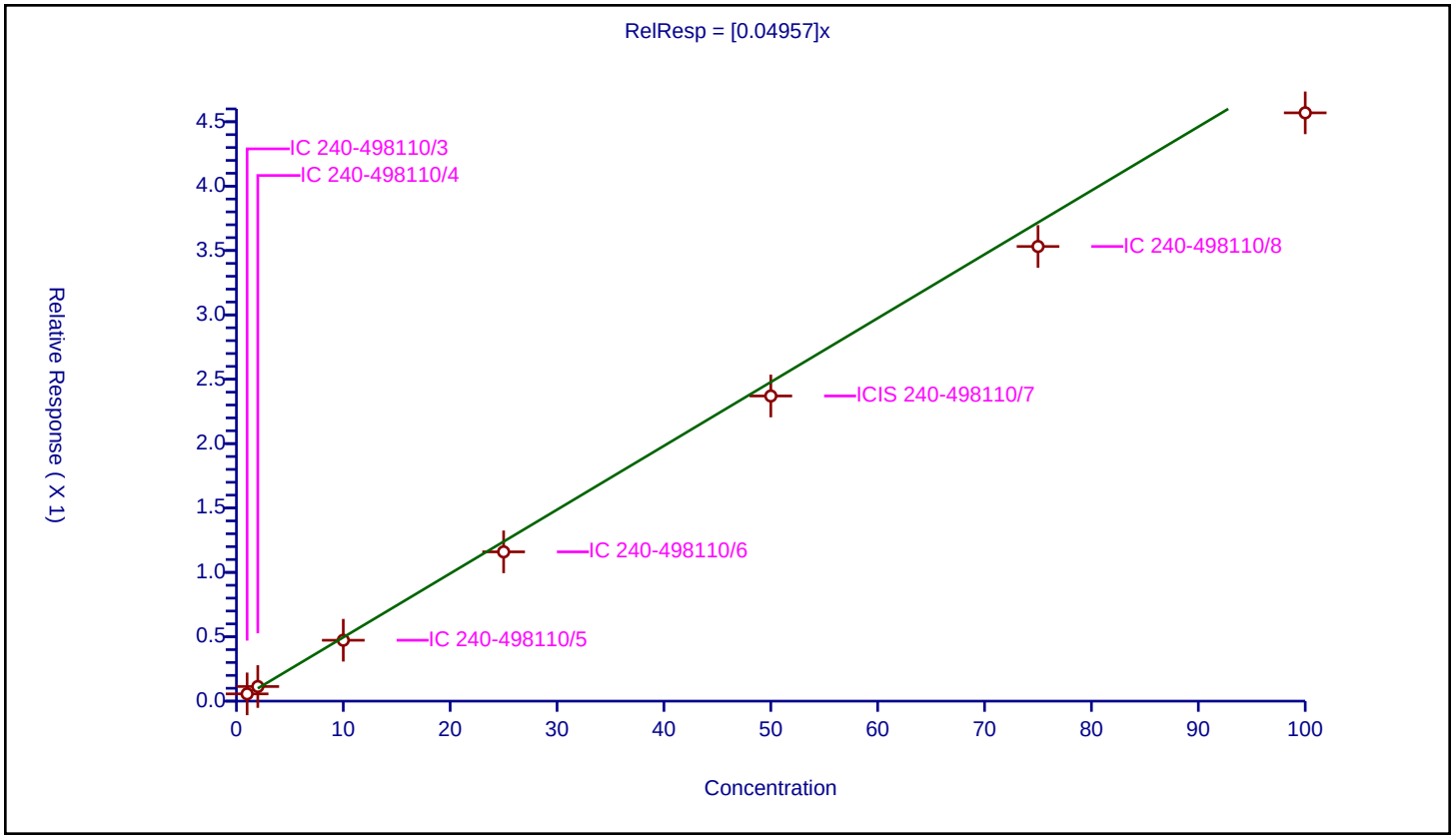
Curve Coefficients

Intercept:	0
Slope:	0.04957

Error Coefficients

Standard Error:	146000
Relative Standard Error:	9.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.05639	27.5	1334766.0	0.05639	Y
2	IC 240-498110/4	2.0	0.113453	27.5	1314729.0	0.056727	Y
3	IC 240-498110/5	10.0	0.473087	27.5	1364692.0	0.047309	Y
4	IC 240-498110/6	25.0	1.159496	27.5	1406146.0	0.04638	Y
5	ICIS 240-498110/7	50.0	2.370078	27.5	1474114.0	0.047402	Y
6	IC 240-498110/8	75.0	3.531348	27.5	1501472.0	0.047085	Y
7	IC 240-498110/9	100.0	4.569348	27.5	1591111.0	0.045693	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

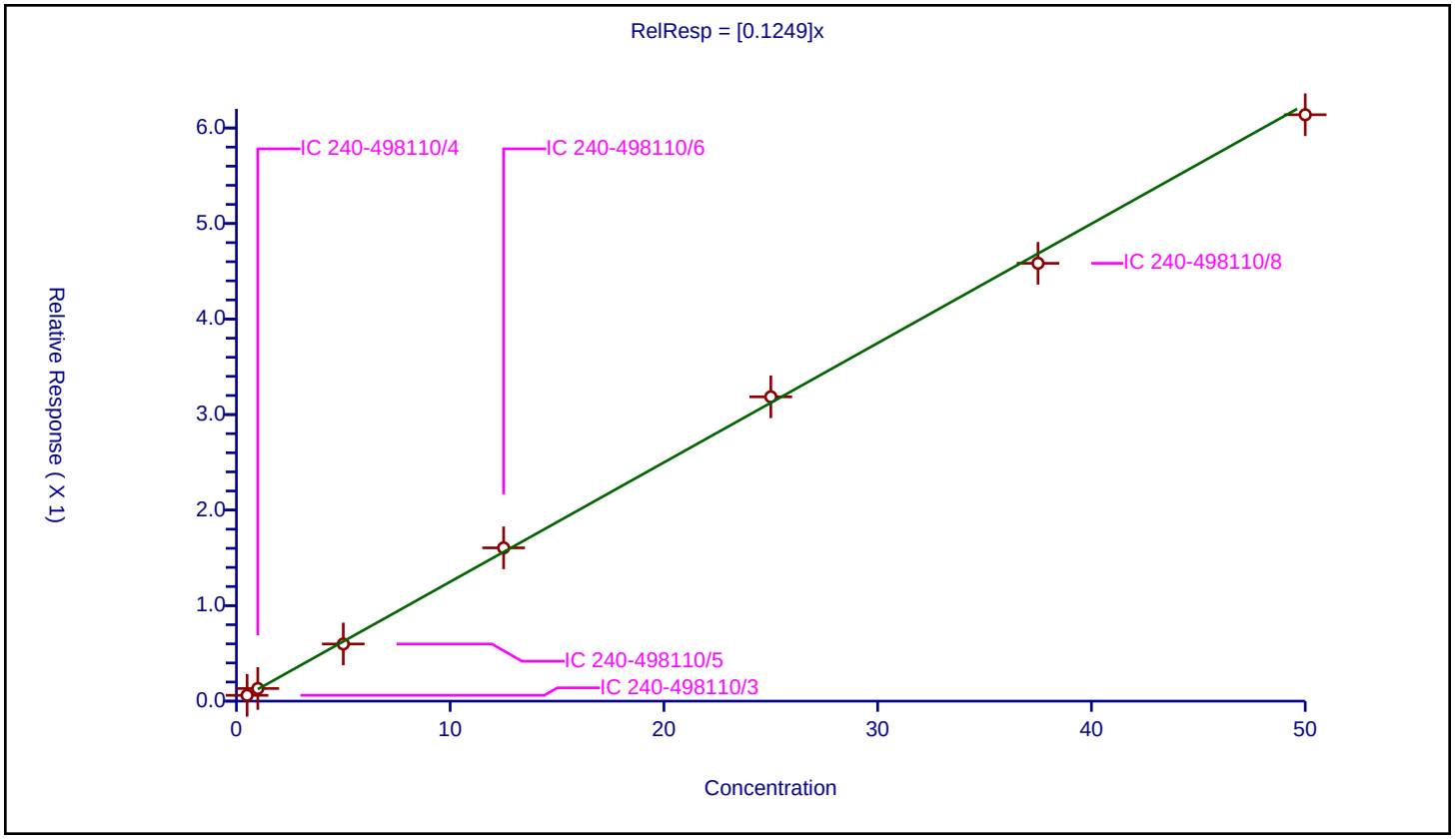
Curve Coefficients

Intercept:	0
Slope:	0.1249

Error Coefficients

Standard Error:	194000
Relative Standard Error:	3.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.060861	27.5	1334766.0	0.121722	Y
2	IC 240-498110/4	1.0	0.132362	27.5	1314729.0	0.132362	Y
3	IC 240-498110/5	5.0	0.598467	27.5	1364692.0	0.119693	Y
4	IC 240-498110/6	12.5	1.60473	27.5	1406146.0	0.128378	Y
5	ICIS 240-498110/7	25.0	3.186078	27.5	1474114.0	0.127443	Y
6	IC 240-498110/8	37.5	4.583803	27.5	1501472.0	0.122235	Y
7	IC 240-498110/9	50.0	6.13864	27.5	1591111.0	0.122773	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

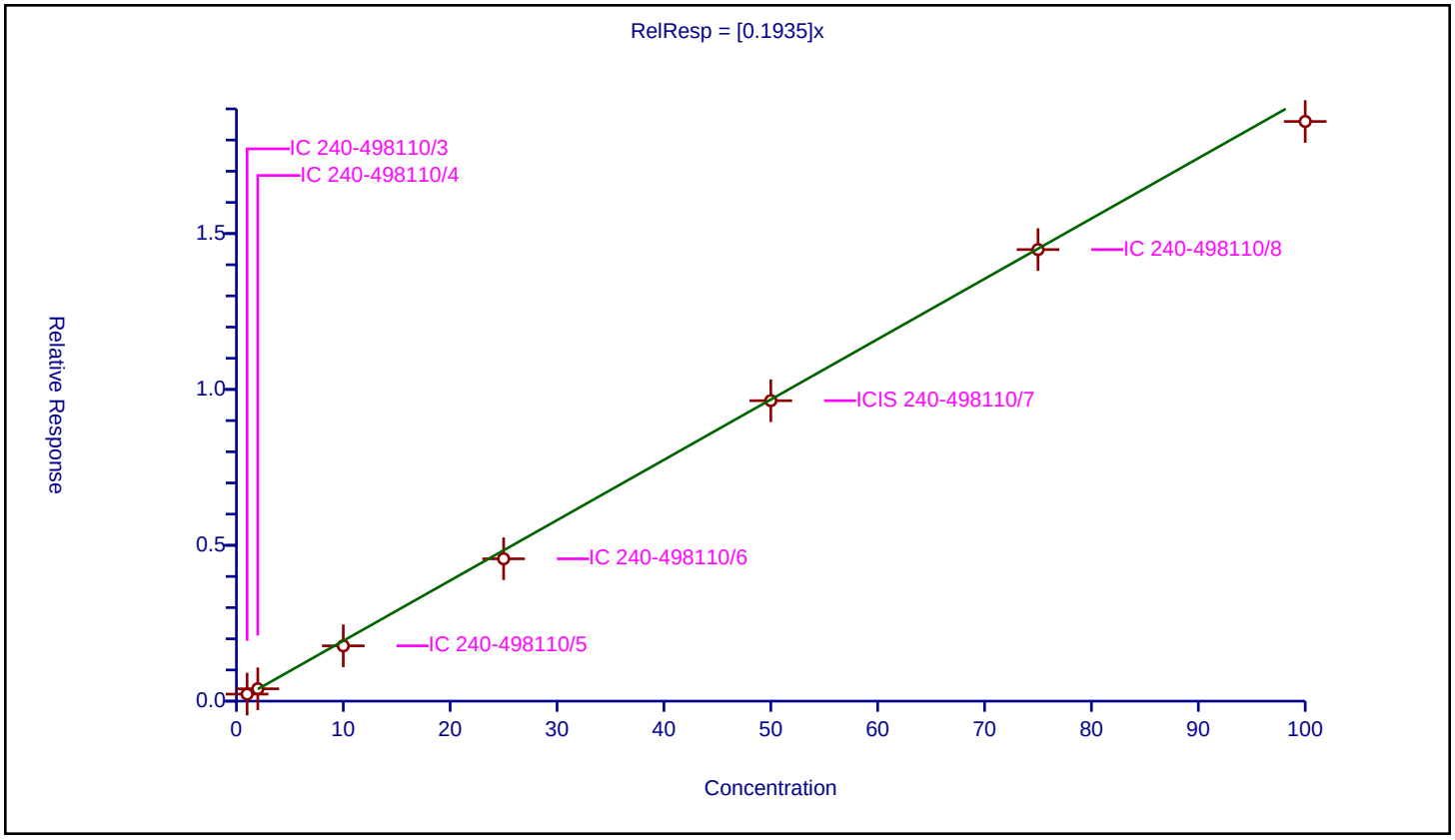
Curve Coefficients

Intercept:	0
Slope:	0.1935

Error Coefficients

Standard Error:	593000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.224798	27.5	1334766.0	0.224798	Y
2	IC 240-498110/4	2.0	0.395705	27.5	1314729.0	0.197853	Y
3	IC 240-498110/5	10.0	1.774624	27.5	1364692.0	0.177462	Y
4	IC 240-498110/6	25.0	4.566951	27.5	1406146.0	0.182678	Y
5	ICIS 240-498110/7	50.0	9.639068	27.5	1474114.0	0.192781	Y
6	IC 240-498110/8	75.0	14.487157	27.5	1501472.0	0.193162	Y
7	IC 240-498110/9	100.0	18.595858	27.5	1591111.0	0.185959	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

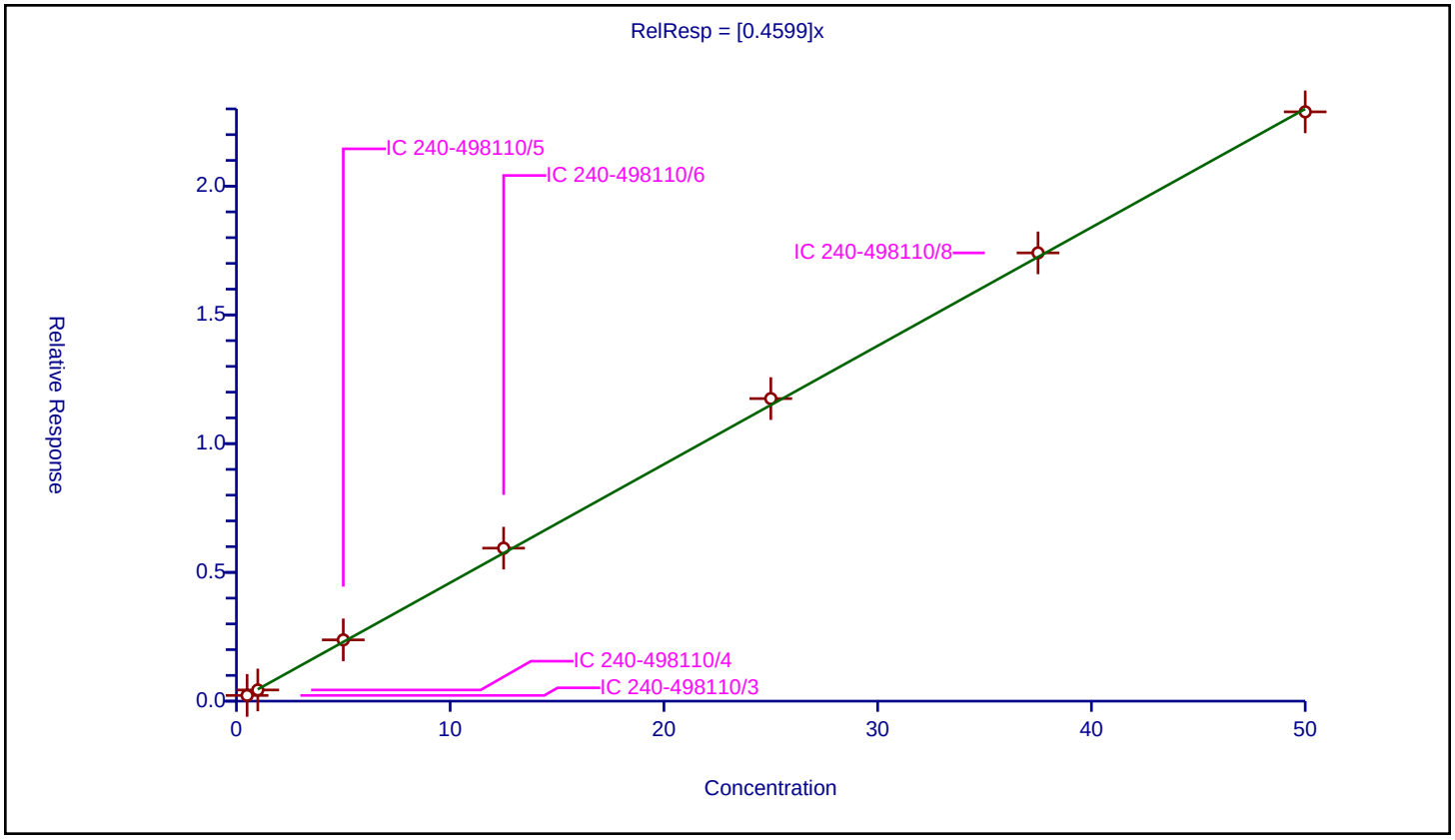
Curve Coefficients

Intercept:	0
Slope:	0.4599

Error Coefficients

Standard Error:	726000
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.221398	27.5	1334766.0	0.442797	Y
2	IC 240-498110/4	1.0	0.43369	27.5	1314729.0	0.43369	Y
3	IC 240-498110/5	5.0	2.379418	27.5	1364692.0	0.475884	Y
4	IC 240-498110/6	12.5	5.941926	27.5	1406146.0	0.475354	Y
5	ICIS 240-498110/7	25.0	11.749688	27.5	1474114.0	0.469988	Y
6	IC 240-498110/8	37.5	17.408475	27.5	1501472.0	0.464226	Y
7	IC 240-498110/9	50.0	22.884972	27.5	1591111.0	0.457699	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

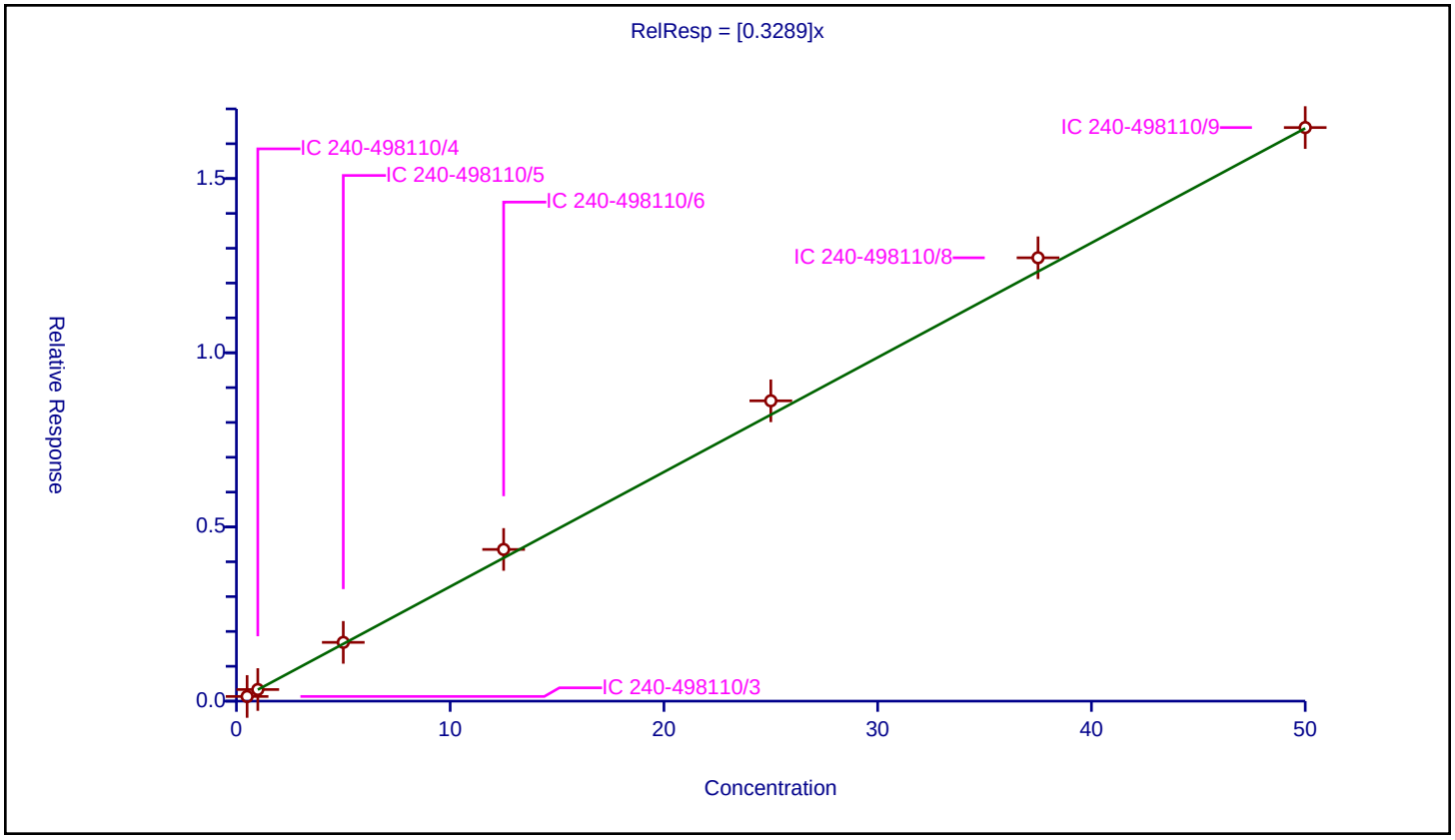
Curve Coefficients

Intercept:	0
Slope:	0.3289

Error Coefficients

Standard Error:	526000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.134537	27.5	1334766.0	0.269073	Y
2	IC 240-498110/4	1.0	0.333645	27.5	1314729.0	0.333645	Y
3	IC 240-498110/5	5.0	1.687108	27.5	1364692.0	0.337422	Y
4	IC 240-498110/6	12.5	4.354034	27.5	1406146.0	0.348323	Y
5	ICIS 240-498110/7	25.0	8.621274	27.5	1474114.0	0.344851	Y
6	IC 240-498110/8	37.5	12.726757	27.5	1501472.0	0.33938	Y
7	IC 240-498110/9	50.0	16.463936	27.5	1591111.0	0.329279	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

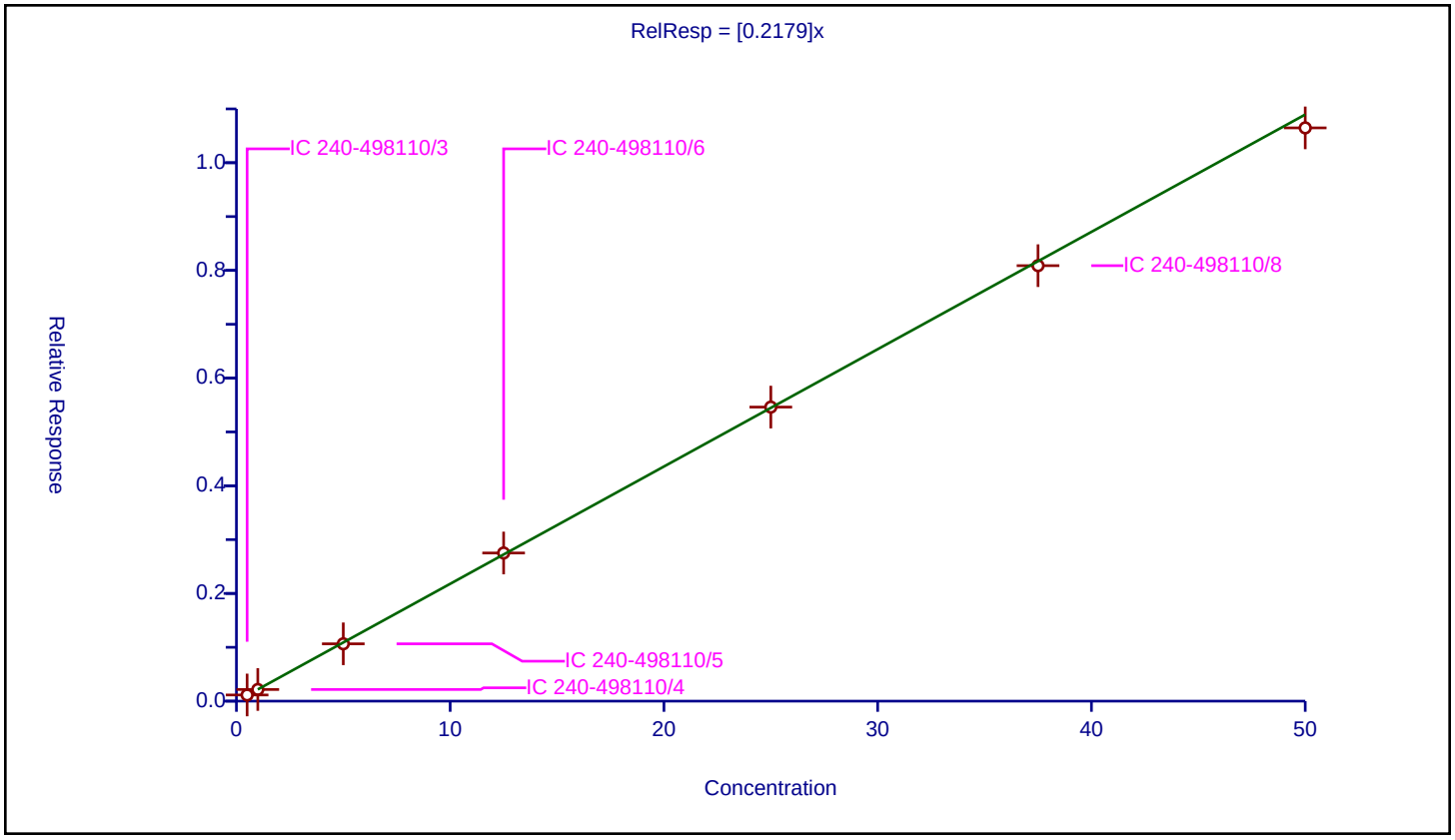
Curve Coefficients

Intercept:	0
Slope:	0.2179

Error Coefficients

Standard Error:	337000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.114366	27.5	1334766.0	0.228733	Y
2	IC 240-498110/4	1.0	0.21628	27.5	1314729.0	0.21628	Y
3	IC 240-498110/5	5.0	1.064843	27.5	1364692.0	0.212969	Y
4	IC 240-498110/6	12.5	2.751885	27.5	1406146.0	0.220151	Y
5	ICIS 240-498110/7	25.0	5.461331	27.5	1474114.0	0.218453	Y
6	IC 240-498110/8	37.5	8.088338	27.5	1501472.0	0.215689	Y
7	IC 240-498110/9	50.0	10.647236	27.5	1591111.0	0.212945	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

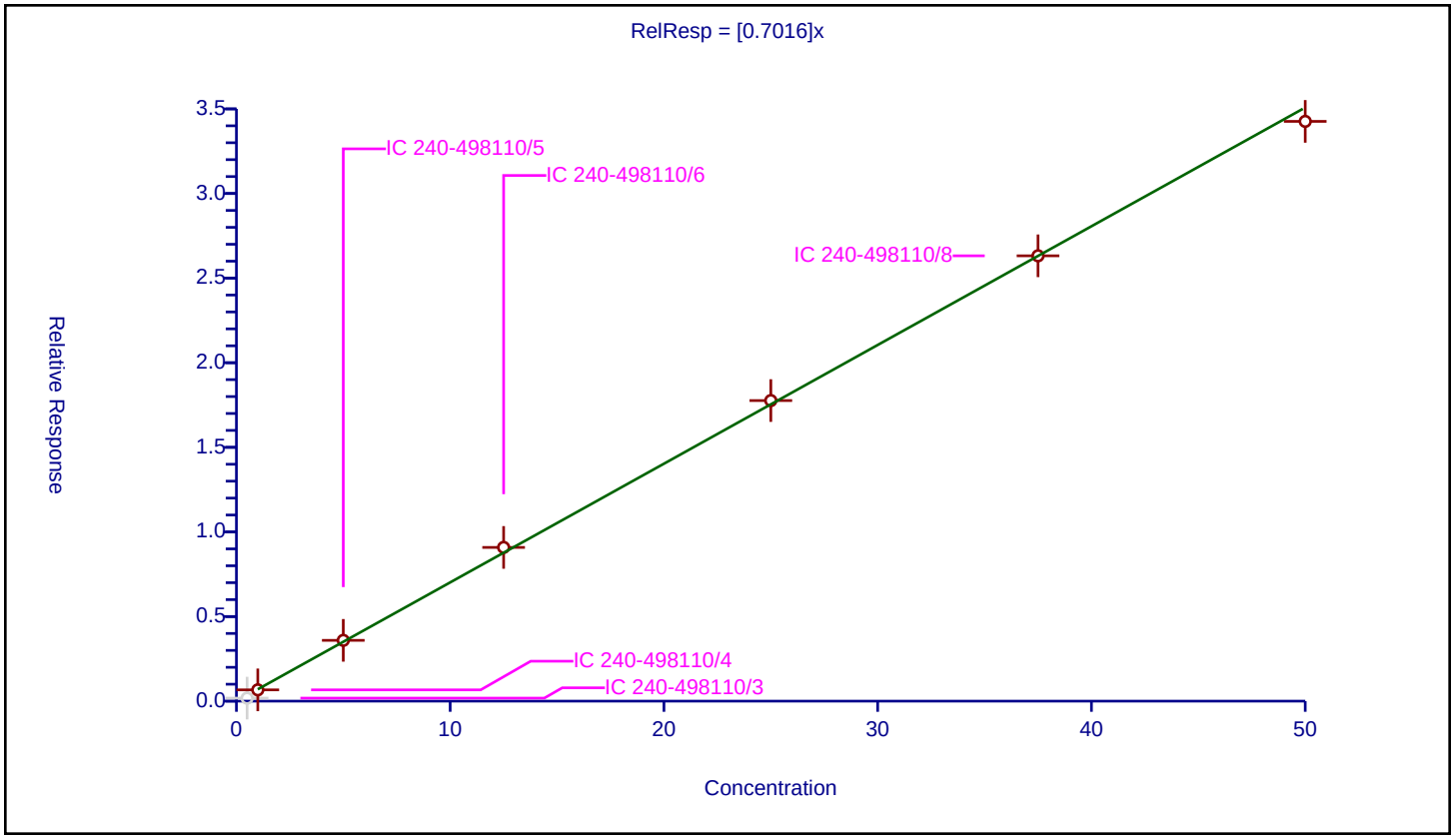
Curve Coefficients

Intercept:	0
Slope:	0.7016

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	3.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.179101	27.5	1334766.0	0.358201	N
2	IC 240-498110/4	1.0	0.666767	27.5	1314729.0	0.666767	Y
3	IC 240-498110/5	5.0	3.59225	27.5	1364692.0	0.71845	Y
4	IC 240-498110/6	12.5	9.084677	27.5	1406146.0	0.726774	Y
5	ICIS 240-498110/7	25.0	17.763066	27.5	1474114.0	0.710523	Y
6	IC 240-498110/8	37.5	26.318275	27.5	1501472.0	0.701821	Y
7	IC 240-498110/9	50.0	34.26114	27.5	1591111.0	0.685223	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

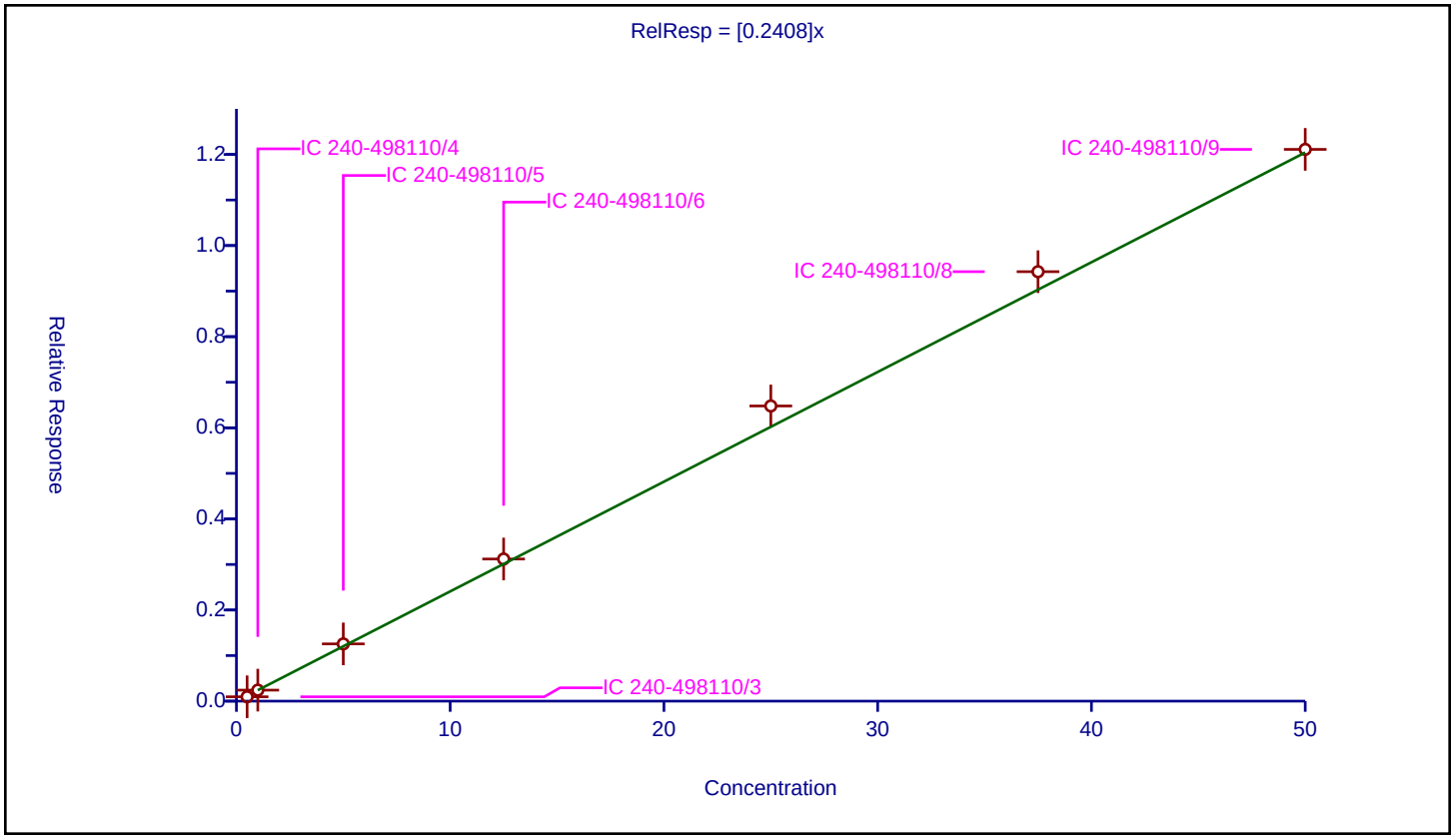
Curve Coefficients

Intercept:	0
Slope:	0.2408

Error Coefficients

Standard Error:	389000
Relative Standard Error:	9.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.09535	27.5	1334766.0	0.1907	Y
2	IC 240-498110/4	1.0	0.241569	27.5	1314729.0	0.241569	Y
3	IC 240-498110/5	5.0	1.2565	27.5	1364692.0	0.2513	Y
4	IC 240-498110/6	12.5	3.119694	27.5	1406146.0	0.249576	Y
5	ICIS 240-498110/7	25.0	6.478977	27.5	1474114.0	0.259159	Y
6	IC 240-498110/8	37.5	9.426623	27.5	1501472.0	0.251377	Y
7	IC 240-498110/9	50.0	12.111358	27.5	1591111.0	0.242227	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

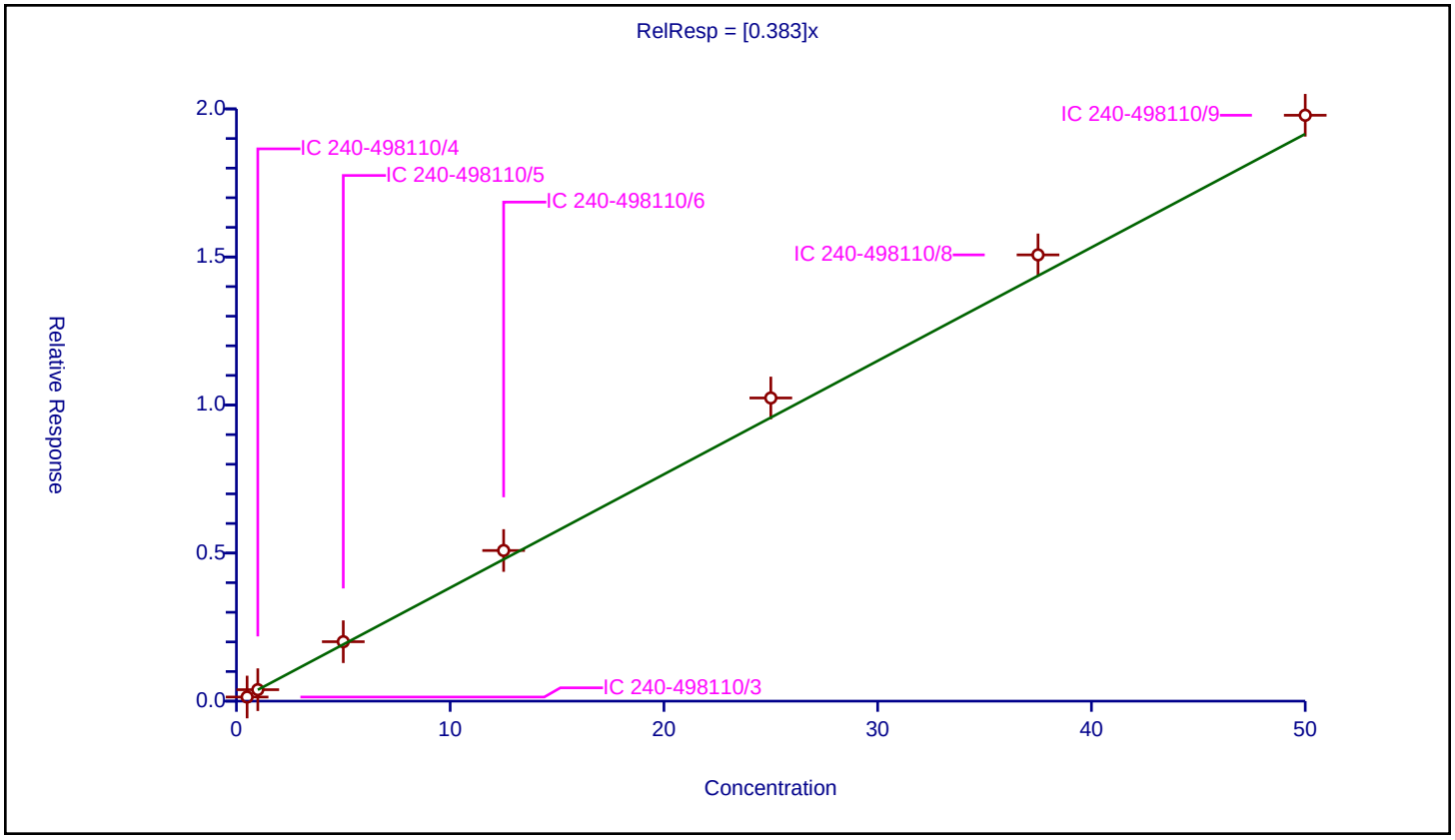
Curve Coefficients

Intercept:	0
Slope:	0.383

Error Coefficients

Standard Error:	628000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.139193	27.5	1334766.0	0.278386	Y
2	IC 240-498110/4	1.0	0.387464	27.5	1314729.0	0.387464	Y
3	IC 240-498110/5	5.0	2.007167	27.5	1364692.0	0.401433	Y
4	IC 240-498110/6	12.5	5.086913	27.5	1406146.0	0.406953	Y
5	ICIS 240-498110/7	25.0	10.238051	27.5	1474114.0	0.409522	Y
6	IC 240-498110/8	37.5	15.070373	27.5	1501472.0	0.401877	Y
7	IC 240-498110/9	50.0	19.785276	27.5	1591111.0	0.395706	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

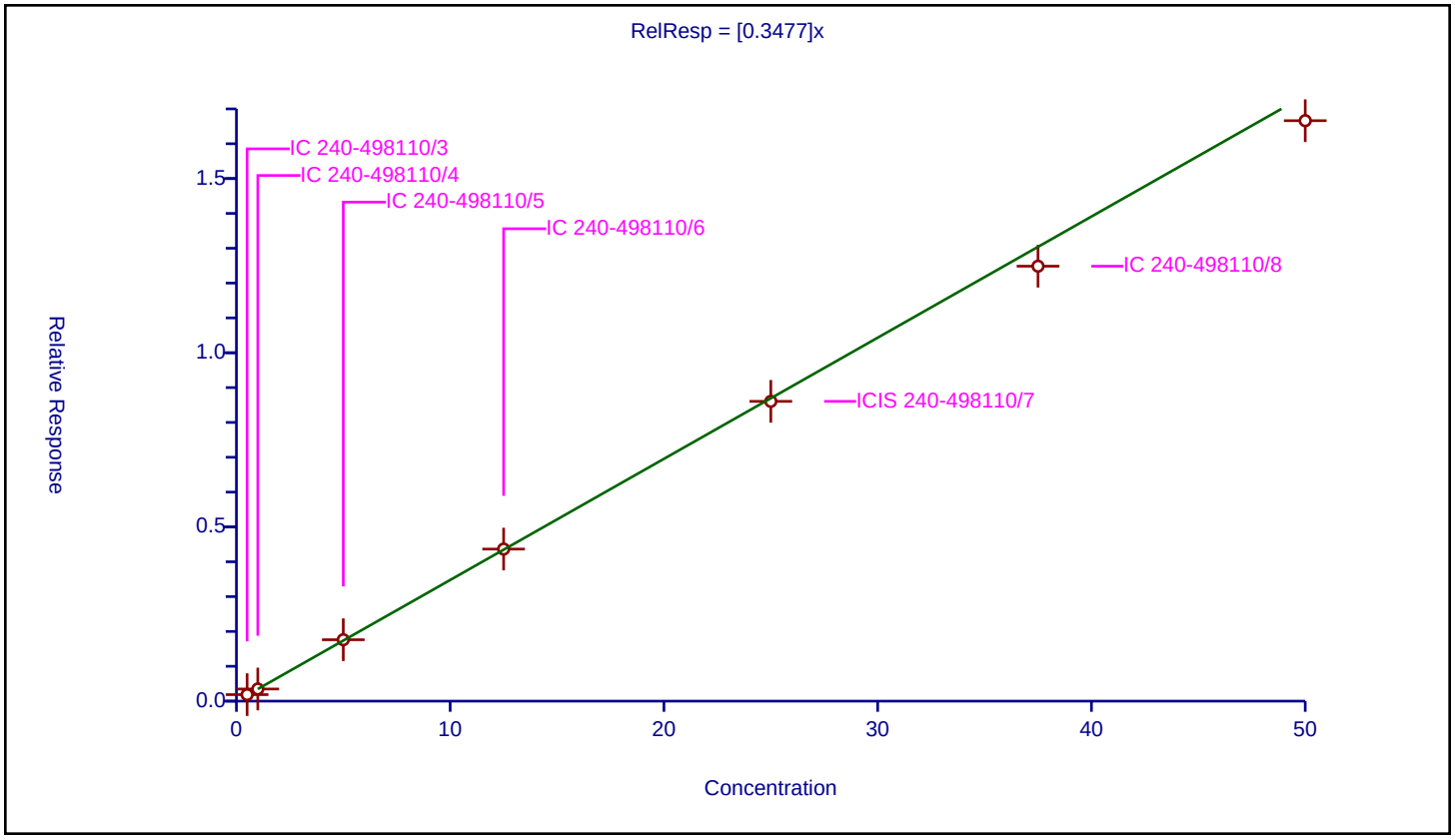
Curve Coefficients

Intercept:	0
Slope:	0.3477

Error Coefficients

Standard Error:	527000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.186806	27.5	1334766.0	0.373612	Y
2	IC 240-498110/4	1.0	0.348538	27.5	1314729.0	0.348538	Y
3	IC 240-498110/5	5.0	1.762735	27.5	1364692.0	0.352547	Y
4	IC 240-498110/6	12.5	4.364595	27.5	1406146.0	0.349168	Y
5	ICIS 240-498110/7	25.0	8.604558	27.5	1474114.0	0.344182	Y
6	IC 240-498110/8	37.5	12.484757	27.5	1501472.0	0.332927	Y
7	IC 240-498110/9	50.0	16.661037	27.5	1591111.0	0.333221	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

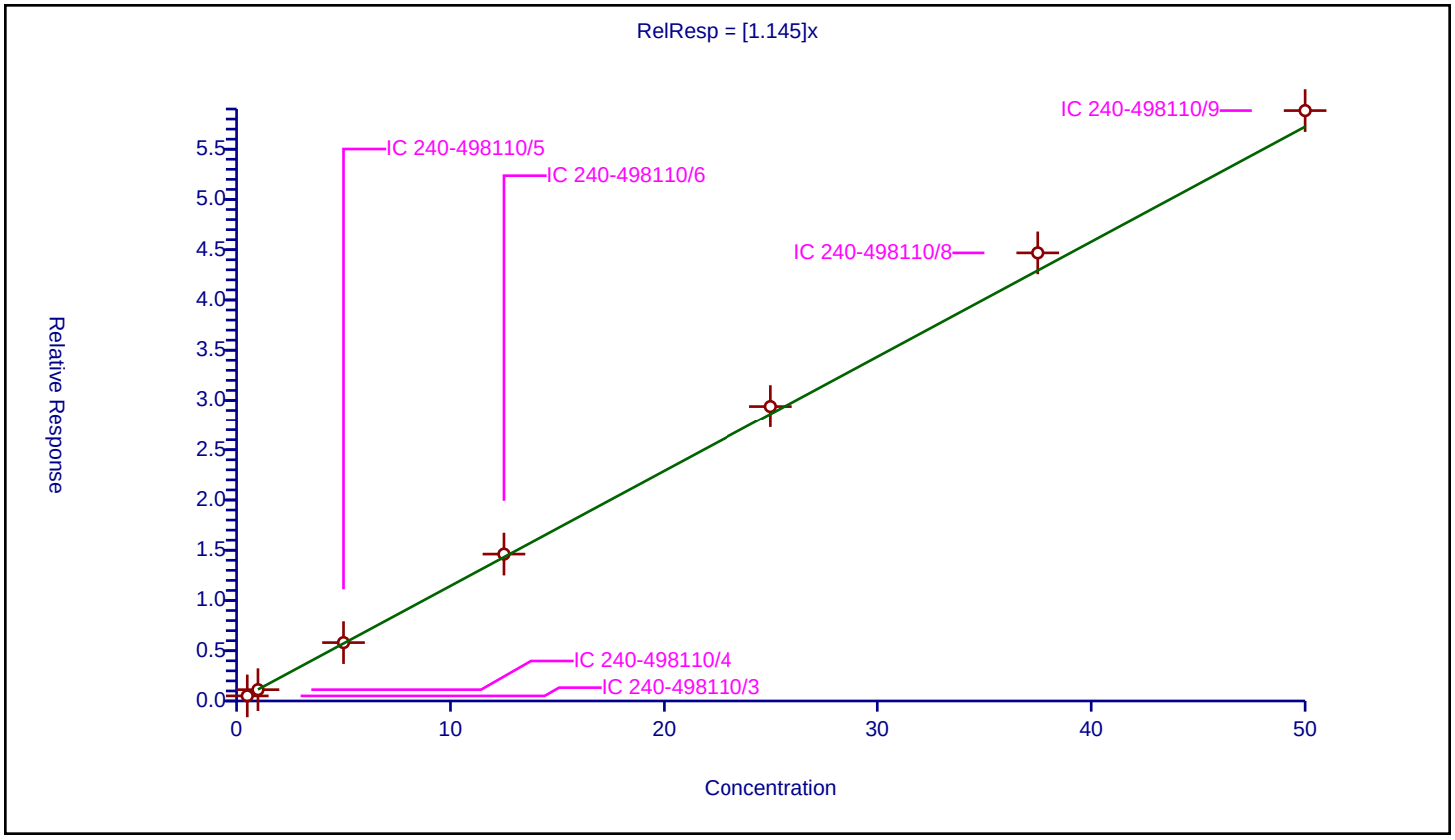
Curve Coefficients

Intercept:	0
Slope:	1.145

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	5.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.50613	27.5	1334766.0	1.01226	Y
2	IC 240-498110/4	1.0	1.12608	27.5	1314729.0	1.12608	Y
3	IC 240-498110/5	5.0	5.809734	27.5	1364692.0	1.161947	Y
4	IC 240-498110/6	12.5	14.61661	27.5	1406146.0	1.169329	Y
5	ICIS 240-498110/7	25.0	29.390917	27.5	1474114.0	1.175637	Y
6	IC 240-498110/8	37.5	44.686053	27.5	1501472.0	1.191628	Y
7	IC 240-498110/9	50.0	58.843025	27.5	1591111.0	1.176861	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

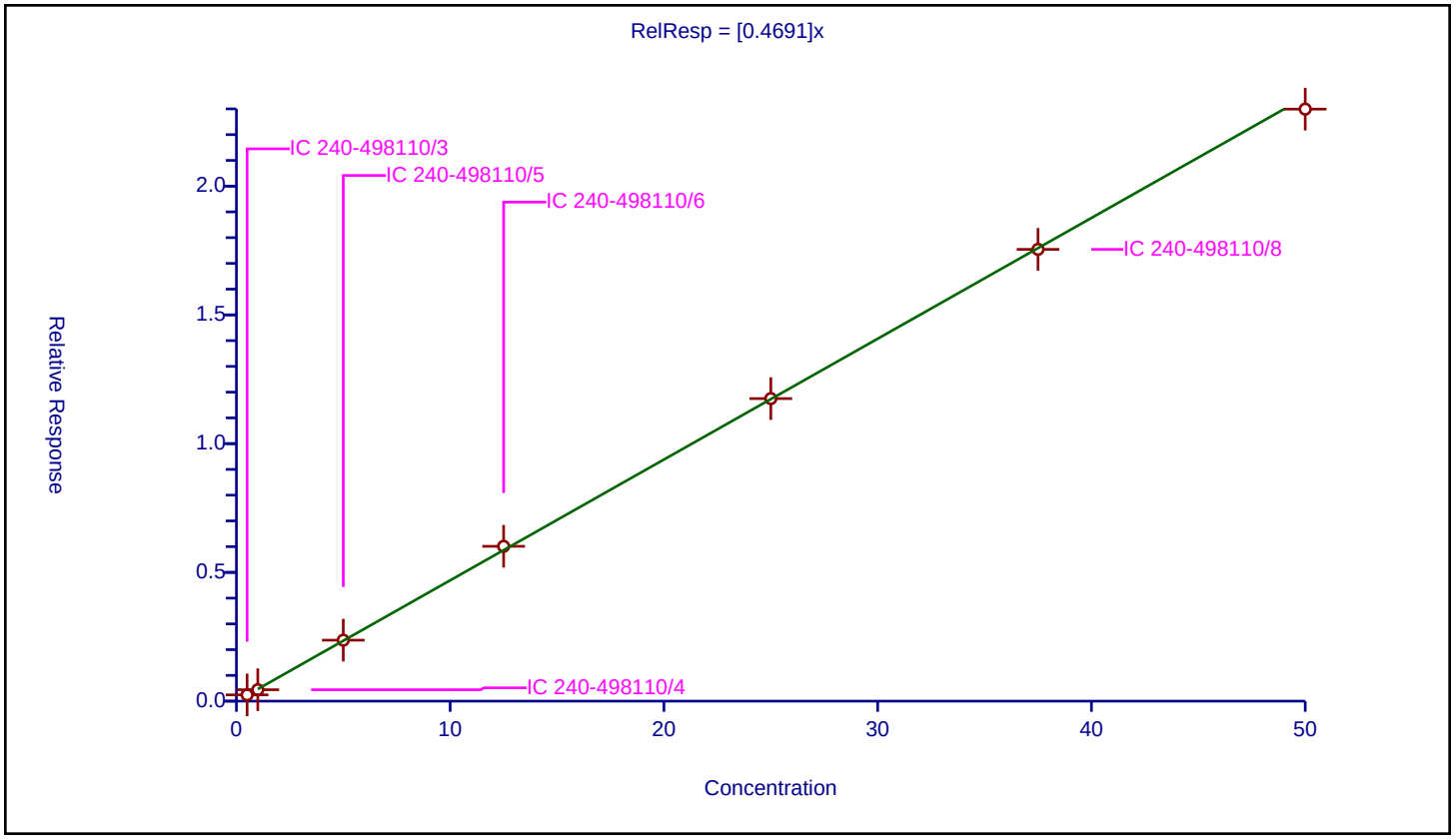
Curve Coefficients

Intercept:	0
Slope:	0.4691

Error Coefficients

Standard Error:	729000
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.244082	27.5	1334766.0	0.488164	Y
2	IC 240-498110/4	1.0	0.443479	27.5	1314729.0	0.443479	Y
3	IC 240-498110/5	5.0	2.367771	27.5	1364692.0	0.473554	Y
4	IC 240-498110/6	12.5	6.01325	27.5	1406146.0	0.48106	Y
5	ICIS 240-498110/7	25.0	11.749408	27.5	1474114.0	0.469976	Y
6	IC 240-498110/8	37.5	17.544631	27.5	1501472.0	0.467857	Y
7	IC 240-498110/9	50.0	22.990816	27.5	1591111.0	0.459816	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

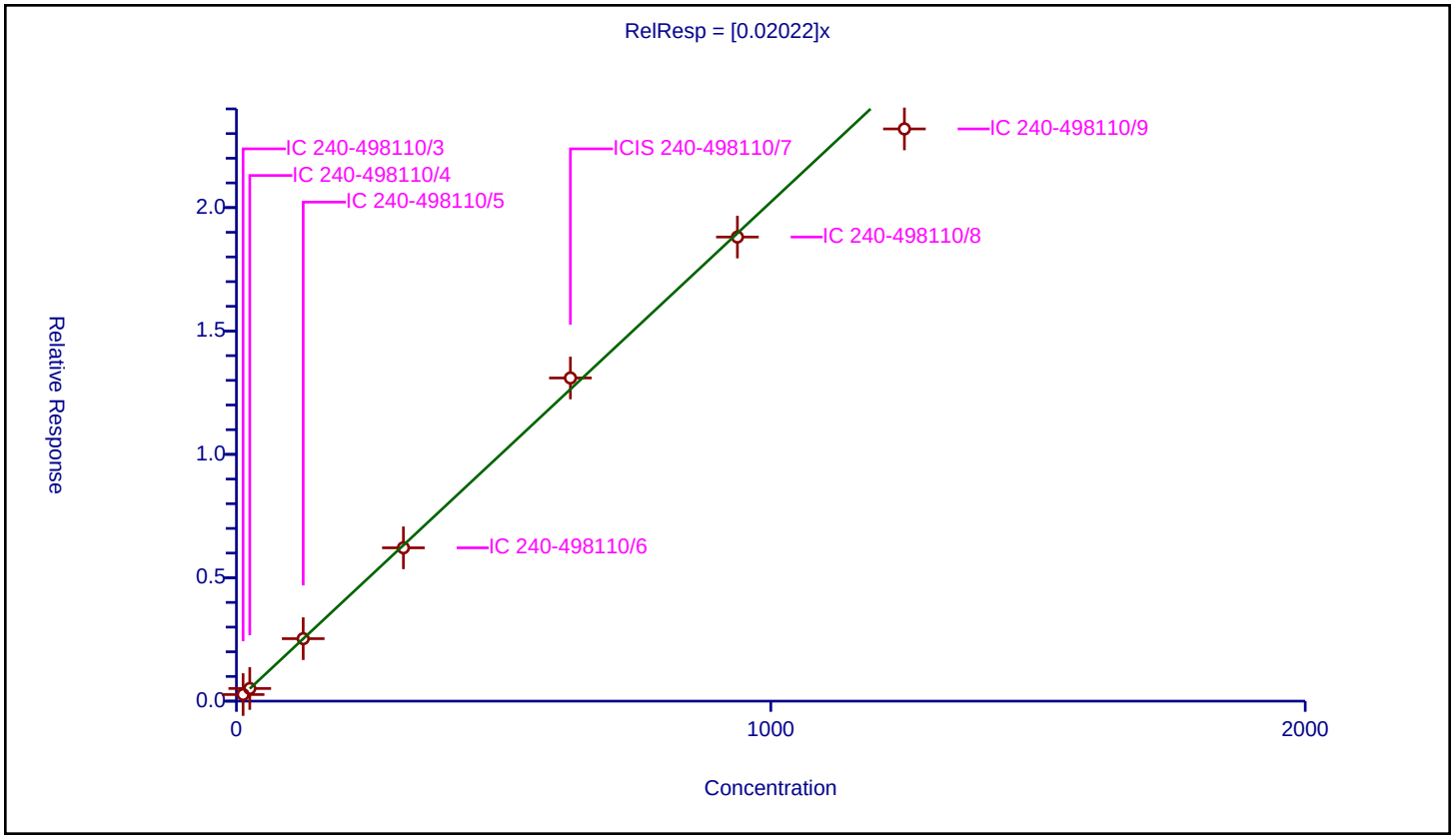
Curve Coefficients

Intercept:	0
Slope:	0.02022

Error Coefficients

Standard Error:	760000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	12.5	0.267425	27.5	1334766.0	0.021394	Y
2	IC 240-498110/4	25.0	0.511919	27.5	1314729.0	0.020477	Y
3	IC 240-498110/5	125.0	2.531236	27.5	1364692.0	0.02025	Y
4	IC 240-498110/6	312.5	6.213064	27.5	1406146.0	0.019882	Y
5	ICIS 240-498110/7	625.0	13.09548	27.5	1474114.0	0.020953	Y
6	IC 240-498110/8	937.5	18.807805	27.5	1501472.0	0.020062	Y
7	IC 240-498110/9	1250.0	23.188401	27.5	1591111.0	0.018551	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

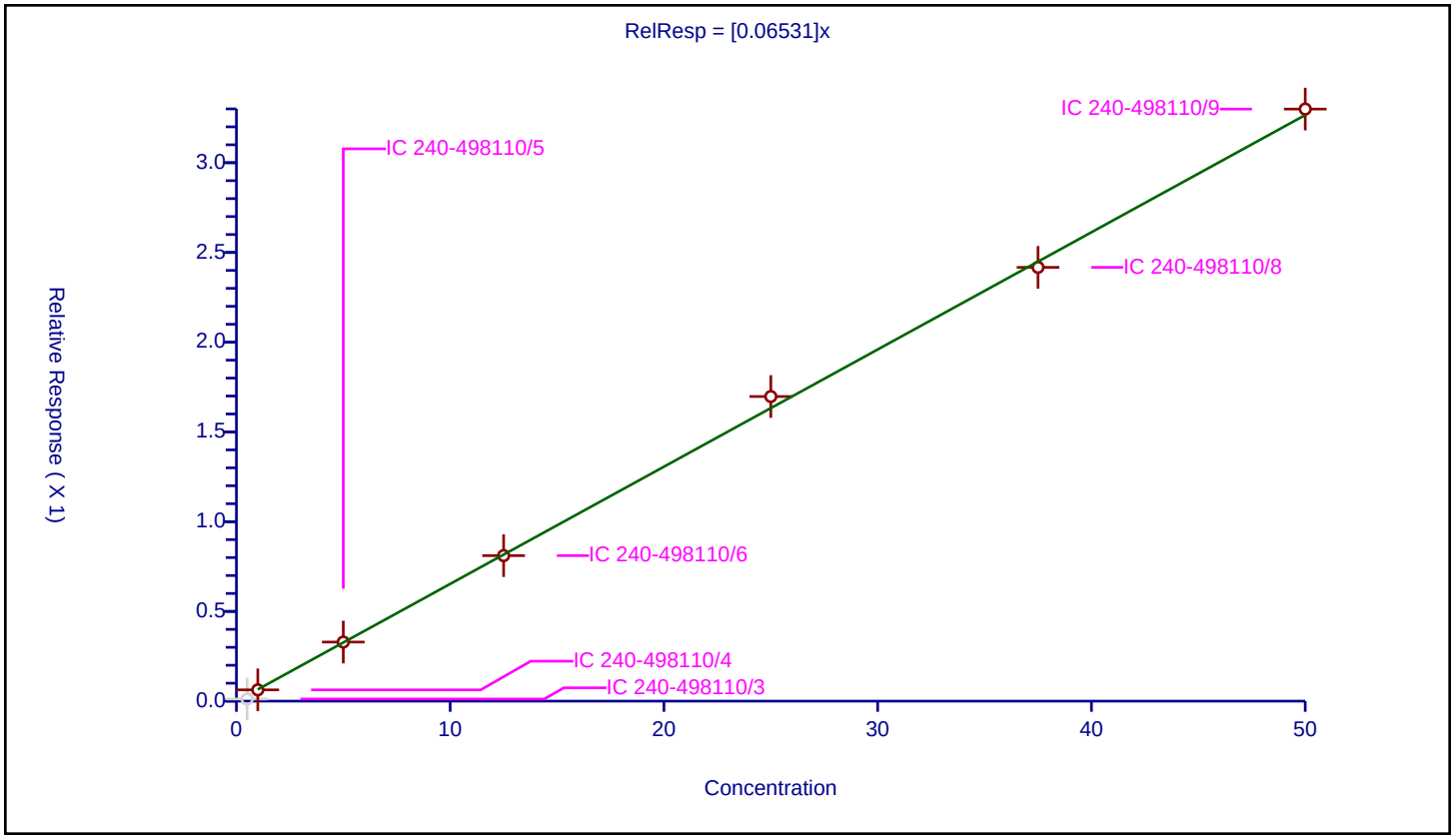
Curve Coefficients

Intercept:	0
Slope:	0.06531

Error Coefficients

Standard Error:	113000
Relative Standard Error:	2.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.011744	27.5	1334766.0	0.023487	N
2	IC 240-498110/4	1.0	0.062834	27.5	1314729.0	0.062834	Y
3	IC 240-498110/5	5.0	0.329248	27.5	1364692.0	0.06585	Y
4	IC 240-498110/6	12.5	0.810853	27.5	1406146.0	0.064868	Y
5	ICIS 240-498110/7	25.0	1.697313	27.5	1474114.0	0.067893	Y
6	IC 240-498110/8	37.5	2.41706	27.5	1501472.0	0.064455	Y
7	IC 240-498110/9	50.0	3.298923	27.5	1591111.0	0.065978	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

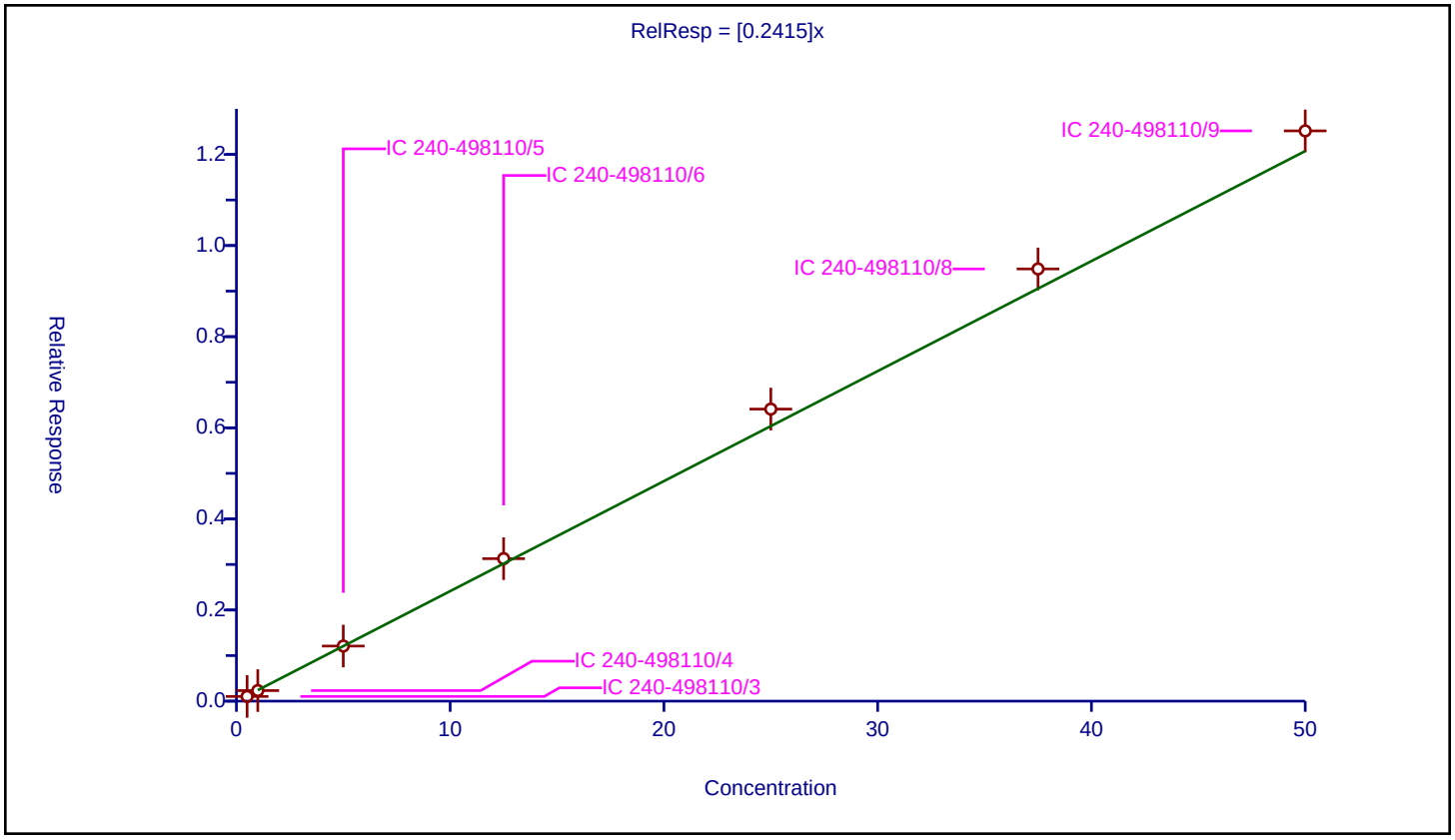
Curve Coefficients

Intercept:	0
Slope:	0.2415

Error Coefficients

Standard Error:	396000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.103323	27.5	1334766.0	0.206647	Y
2	IC 240-498110/4	1.0	0.231947	27.5	1314729.0	0.231947	Y
3	IC 240-498110/5	5.0	1.209205	27.5	1364692.0	0.241841	Y
4	IC 240-498110/6	12.5	3.127165	27.5	1406146.0	0.250173	Y
5	ICIS 240-498110/7	25.0	6.410642	27.5	1474114.0	0.256426	Y
6	IC 240-498110/8	37.5	9.486972	27.5	1501472.0	0.252986	Y
7	IC 240-498110/9	50.0	12.517123	27.5	1591111.0	0.250342	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

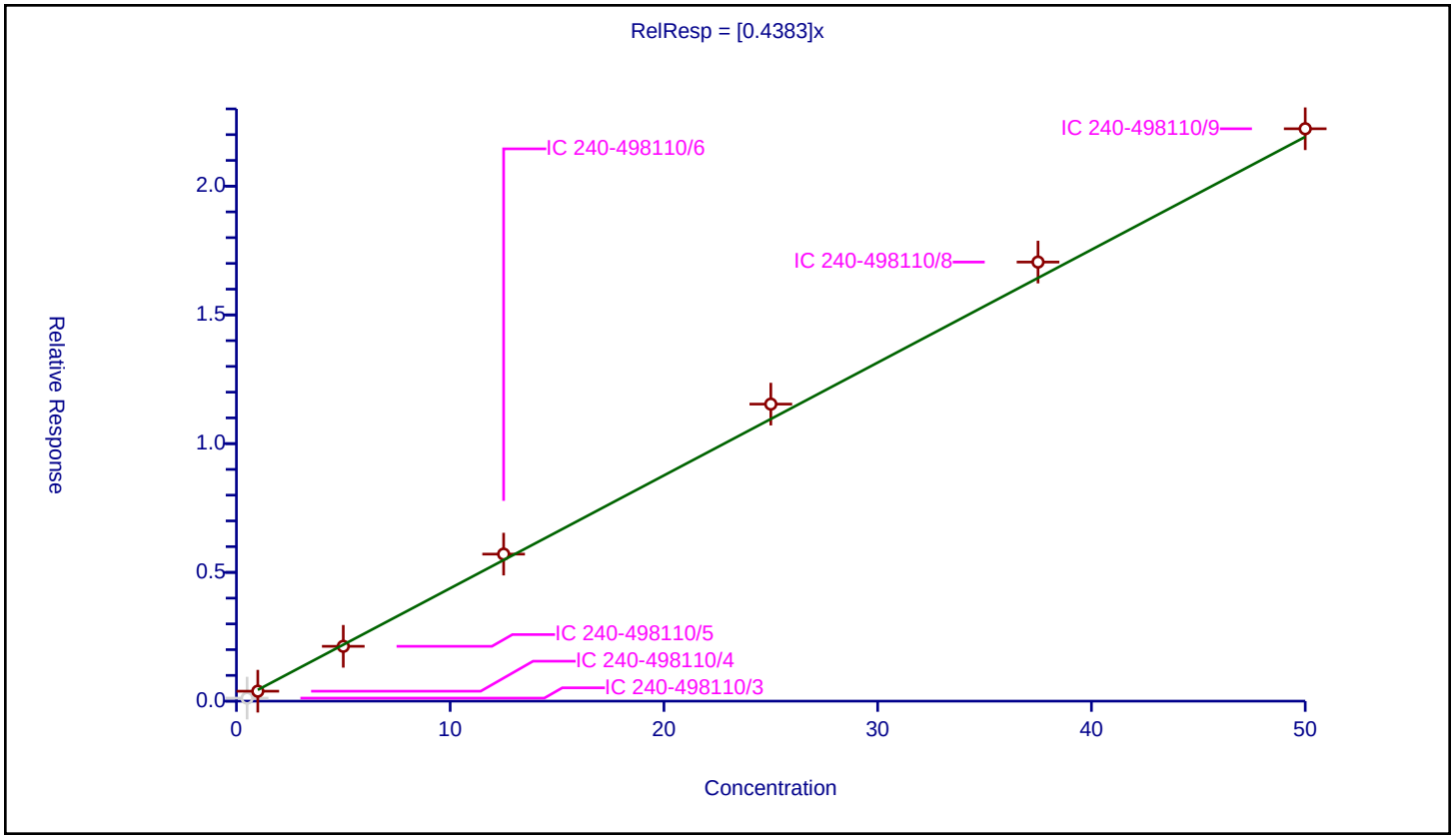
Curve Coefficients

Intercept:	0
Slope:	0.4383

Error Coefficients

Standard Error:	775000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.117065	27.5	1334766.0	0.234131	N
2	IC 240-498110/4	1.0	0.386209	27.5	1314729.0	0.386209	Y
3	IC 240-498110/5	5.0	2.129545	27.5	1364692.0	0.425909	Y
4	IC 240-498110/6	12.5	5.710038	27.5	1406146.0	0.456803	Y
5	ICIS 240-498110/7	25.0	11.535302	27.5	1474114.0	0.461412	Y
6	IC 240-498110/8	37.5	17.05182	27.5	1501472.0	0.454715	Y
7	IC 240-498110/9	50.0	22.228768	27.5	1591111.0	0.444575	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

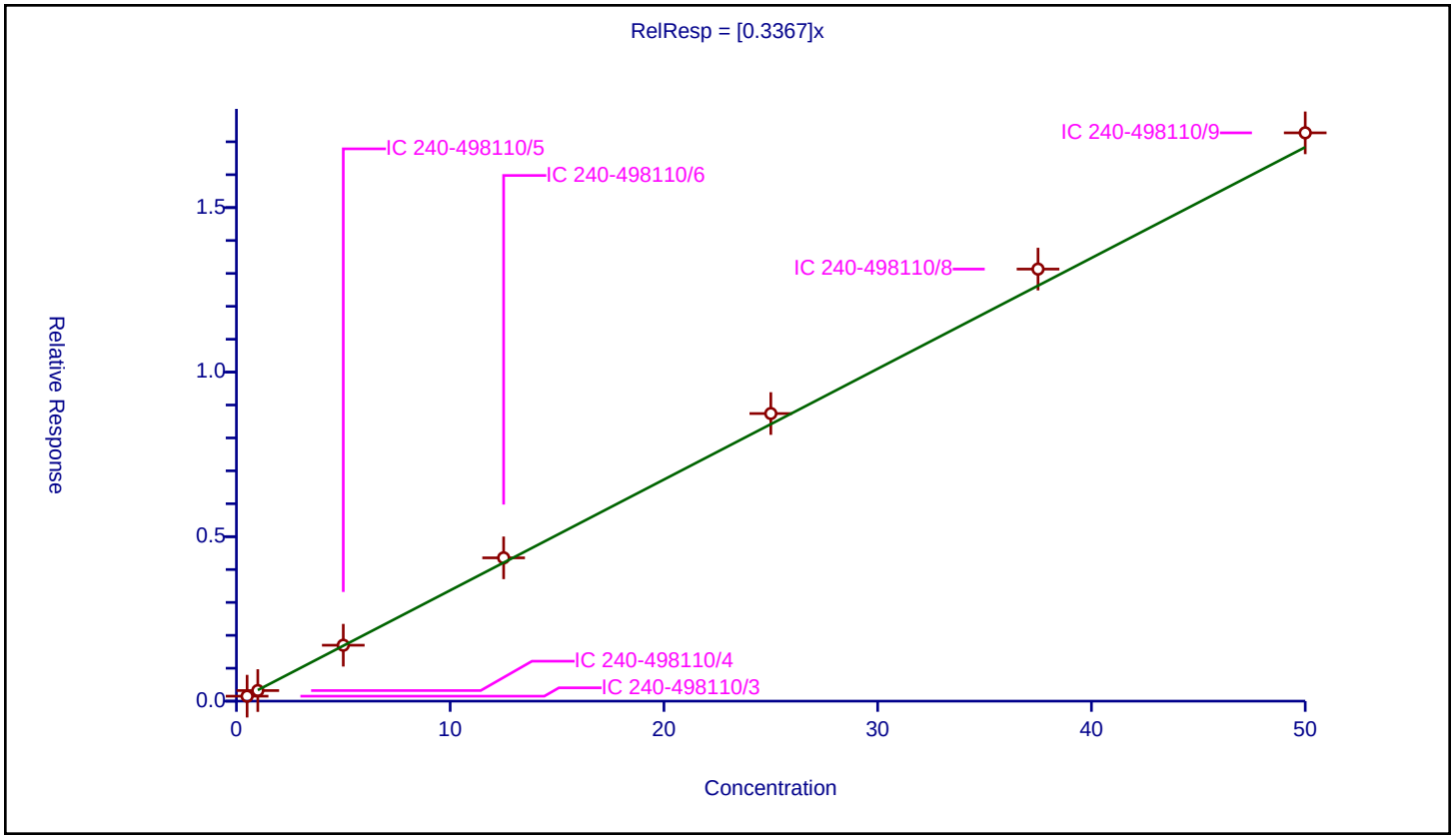
Curve Coefficients

Intercept:	0
Slope:	0.3367

Error Coefficients

Standard Error:	546000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.150916	27.5	1334766.0	0.301832	Y
2	IC 240-498110/4	1.0	0.321659	27.5	1314729.0	0.321659	Y
3	IC 240-498110/5	5.0	1.699319	27.5	1364692.0	0.339864	Y
4	IC 240-498110/6	12.5	4.355403	27.5	1406146.0	0.348432	Y
5	ICIS 240-498110/7	25.0	8.740891	27.5	1474114.0	0.349636	Y
6	IC 240-498110/8	37.5	13.130941	27.5	1501472.0	0.350158	Y
7	IC 240-498110/9	50.0	17.272286	27.5	1591111.0	0.345446	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

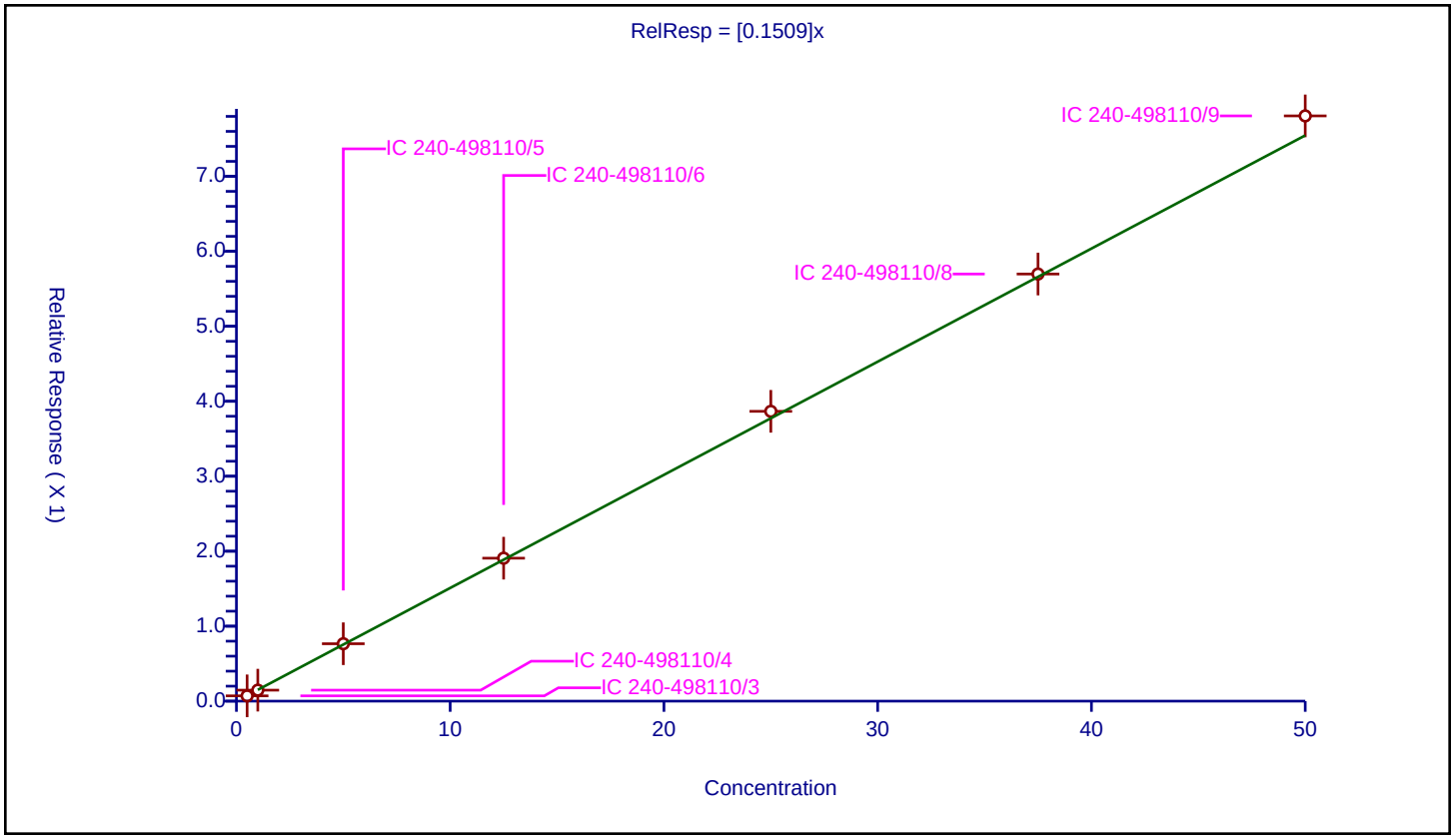
Curve Coefficients

Intercept:	0
Slope:	0.1509

Error Coefficients

Standard Error:	243000
Relative Standard Error:	3.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.070688	27.5	1334766.0	0.141377	Y
2	IC 240-498110/4	1.0	0.14669	27.5	1314729.0	0.14669	Y
3	IC 240-498110/5	5.0	0.765801	27.5	1364692.0	0.15316	Y
4	IC 240-498110/6	12.5	1.906788	27.5	1406146.0	0.152543	Y
5	ICIS 240-498110/7	25.0	3.865858	27.5	1474114.0	0.154634	Y
6	IC 240-498110/8	37.5	5.697451	27.5	1501472.0	0.151932	Y
7	IC 240-498110/9	50.0	7.806673	27.5	1591111.0	0.156133	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

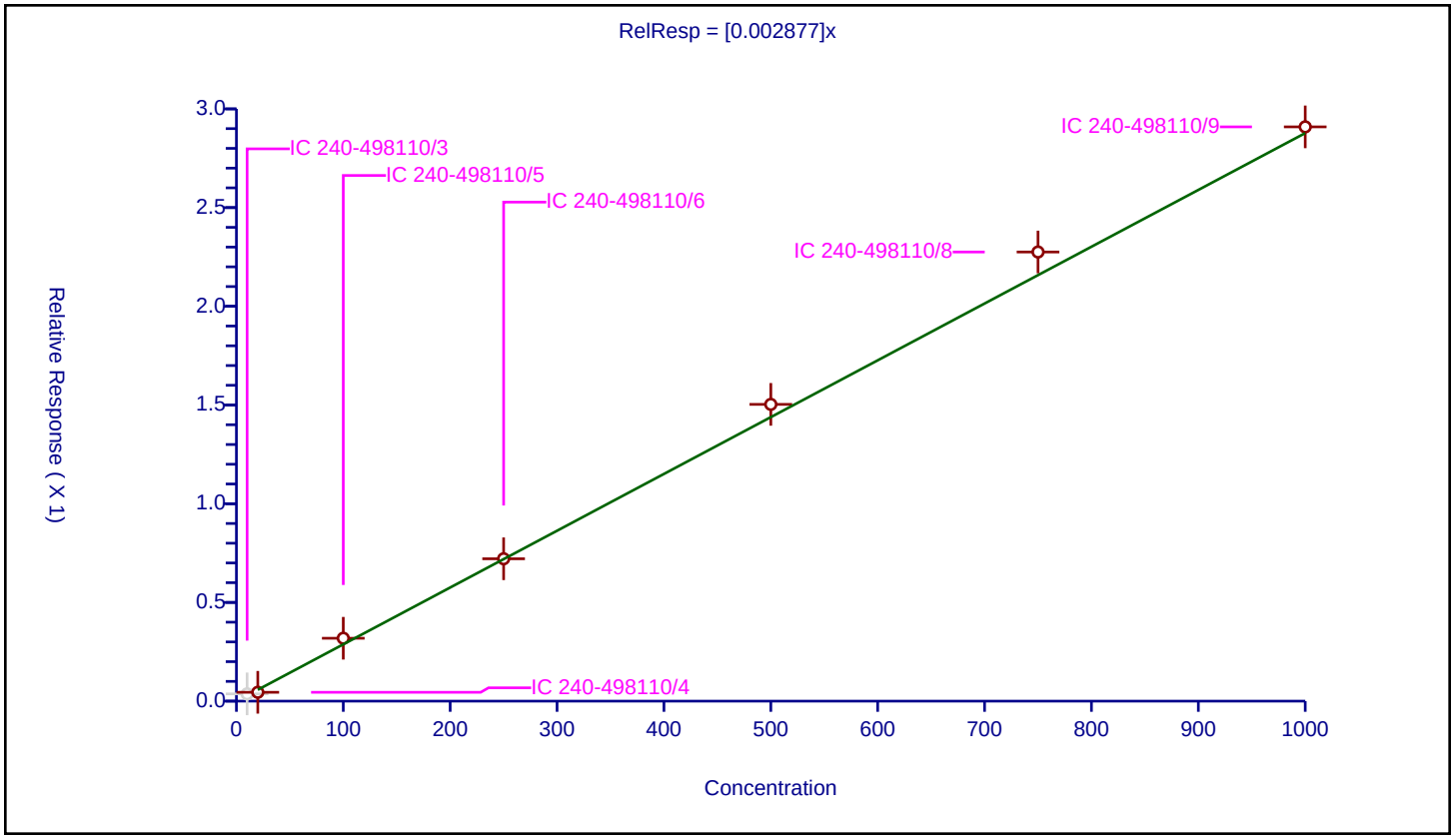
Curve Coefficients

Intercept:	0
Slope:	0.002877

Error Coefficients

Standard Error:	102000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	10.0	0.036735	27.5	1334766.0	0.003673	N
2	IC 240-498110/4	20.0	0.044867	27.5	1314729.0	0.002243	Y
3	IC 240-498110/5	100.0	0.318649	27.5	1364692.0	0.003186	Y
4	IC 240-498110/6	250.0	0.721145	27.5	1406146.0	0.002885	Y
5	ICIS 240-498110/7	500.0	1.503242	27.5	1474114.0	0.003006	Y
6	IC 240-498110/8	750.0	2.275171	27.5	1501472.0	0.003034	Y
7	IC 240-498110/9	1000.0	2.908955	27.5	1591111.0	0.002909	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

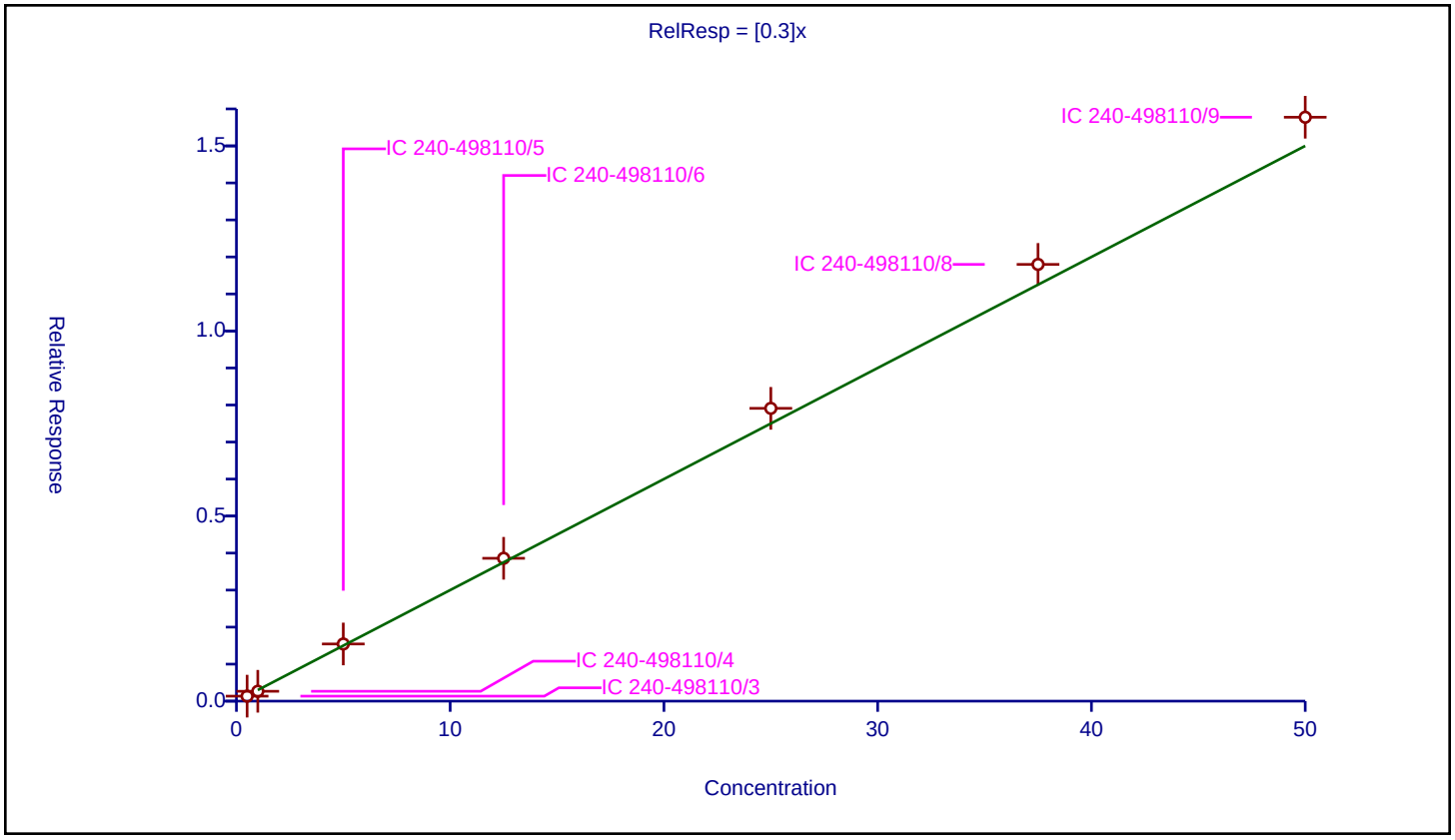
Curve Coefficients

Intercept:	0
Slope:	0.3

Error Coefficients

Standard Error:	495000
Relative Standard Error:	7.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.134805	27.5	1334766.0	0.269609	Y
2	IC 240-498110/4	1.0	0.266272	27.5	1314729.0	0.266272	Y
3	IC 240-498110/5	5.0	1.544217	27.5	1364692.0	0.308843	Y
4	IC 240-498110/6	12.5	3.859535	27.5	1406146.0	0.308763	Y
5	ICIS 240-498110/7	25.0	7.909911	27.5	1474114.0	0.316396	Y
6	IC 240-498110/8	37.5	11.798279	27.5	1501472.0	0.314621	Y
7	IC 240-498110/9	50.0	15.774531	27.5	1591111.0	0.315491	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

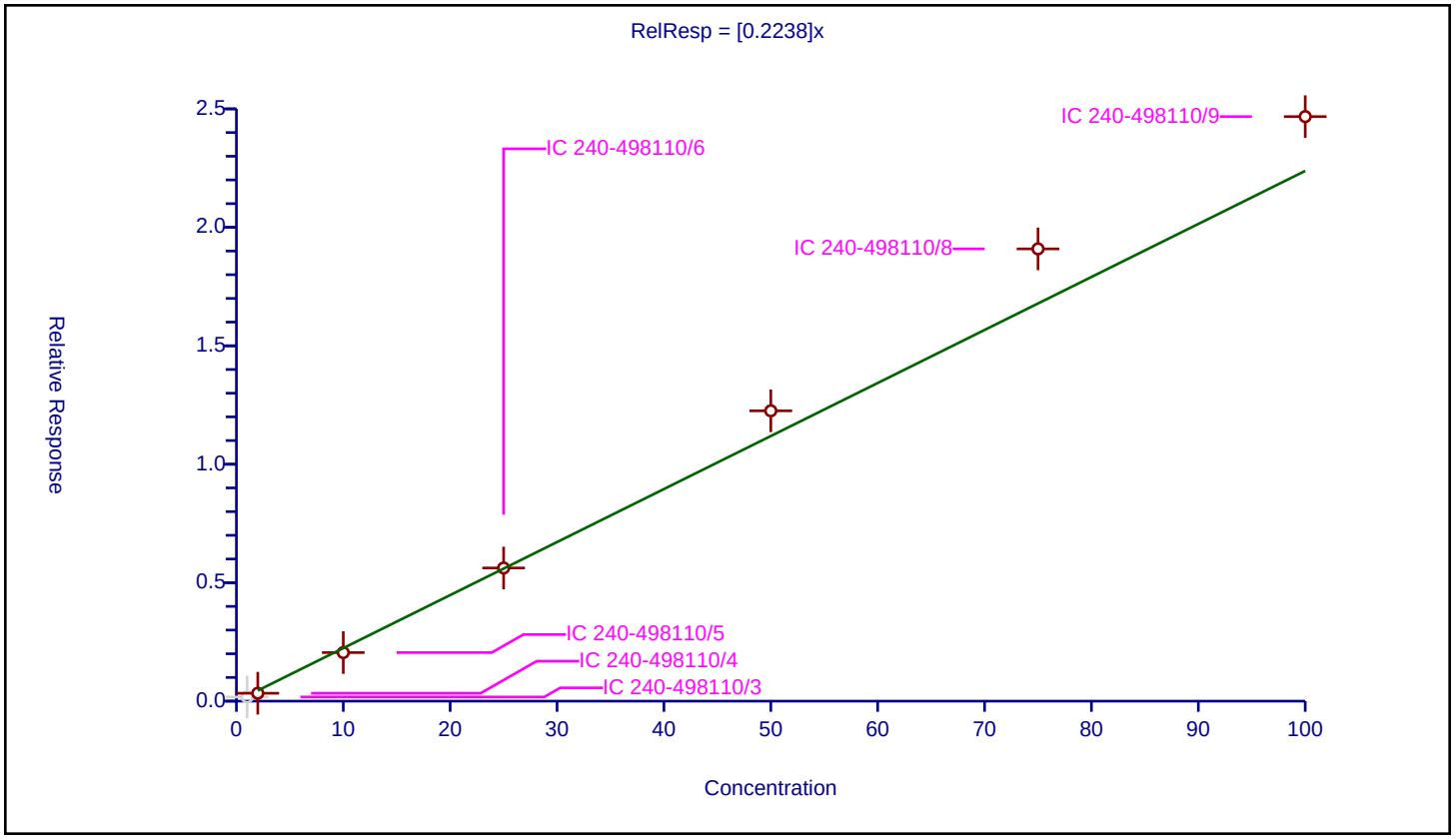
Curve Coefficients

Intercept:	0
Slope:	0.2238

Error Coefficients

Standard Error:	854000
Relative Standard Error:	14.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.176072	27.5	1334766.0	0.176072	N
2	IC 240-498110/4	2.0	0.333247	27.5	1314729.0	0.166624	Y
3	IC 240-498110/5	10.0	2.050069	27.5	1364692.0	0.205007	Y
4	IC 240-498110/6	25.0	5.621328	27.5	1406146.0	0.224853	Y
5	ICIS 240-498110/7	50.0	12.255731	27.5	1474114.0	0.245115	Y
6	IC 240-498110/8	75.0	19.090466	27.5	1501472.0	0.25454	Y
7	IC 240-498110/9	100.0	24.674438	27.5	1591111.0	0.246744	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

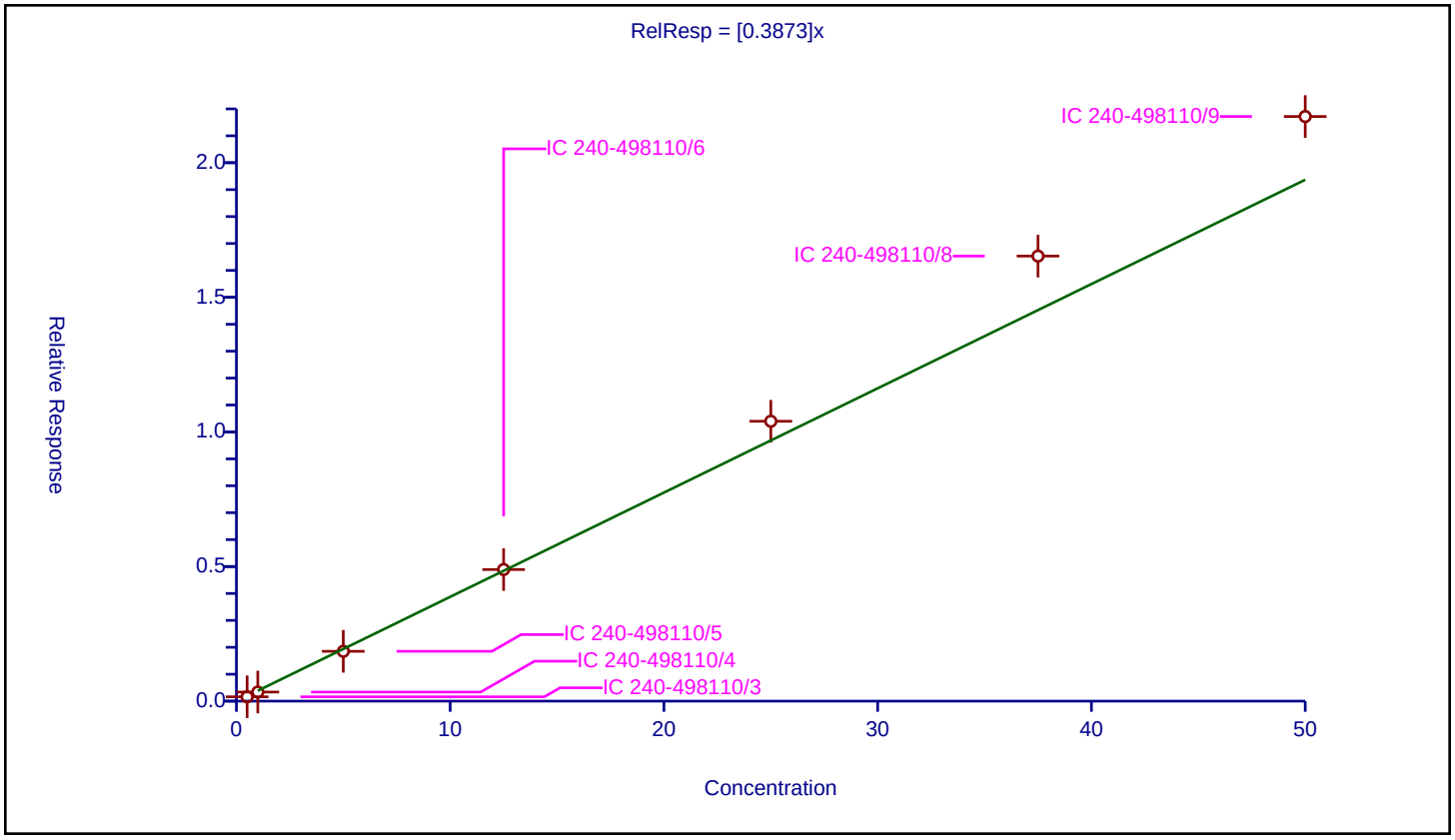
Curve Coefficients

Intercept:	0
Slope:	0.3873

Error Coefficients

Standard Error:	680000
Relative Standard Error:	12.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.160682	27.5	1334766.0	0.321363	Y
2	IC 240-498110/4	1.0	0.337745	27.5	1314729.0	0.337745	Y
3	IC 240-498110/5	5.0	1.850815	27.5	1364692.0	0.370163	Y
4	IC 240-498110/6	12.5	4.888527	27.5	1406146.0	0.391082	Y
5	ICIS 240-498110/7	25.0	10.396472	27.5	1474114.0	0.415859	Y
6	IC 240-498110/8	37.5	16.532689	27.5	1501472.0	0.440872	Y
7	IC 240-498110/9	50.0	21.716709	27.5	1591111.0	0.434334	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

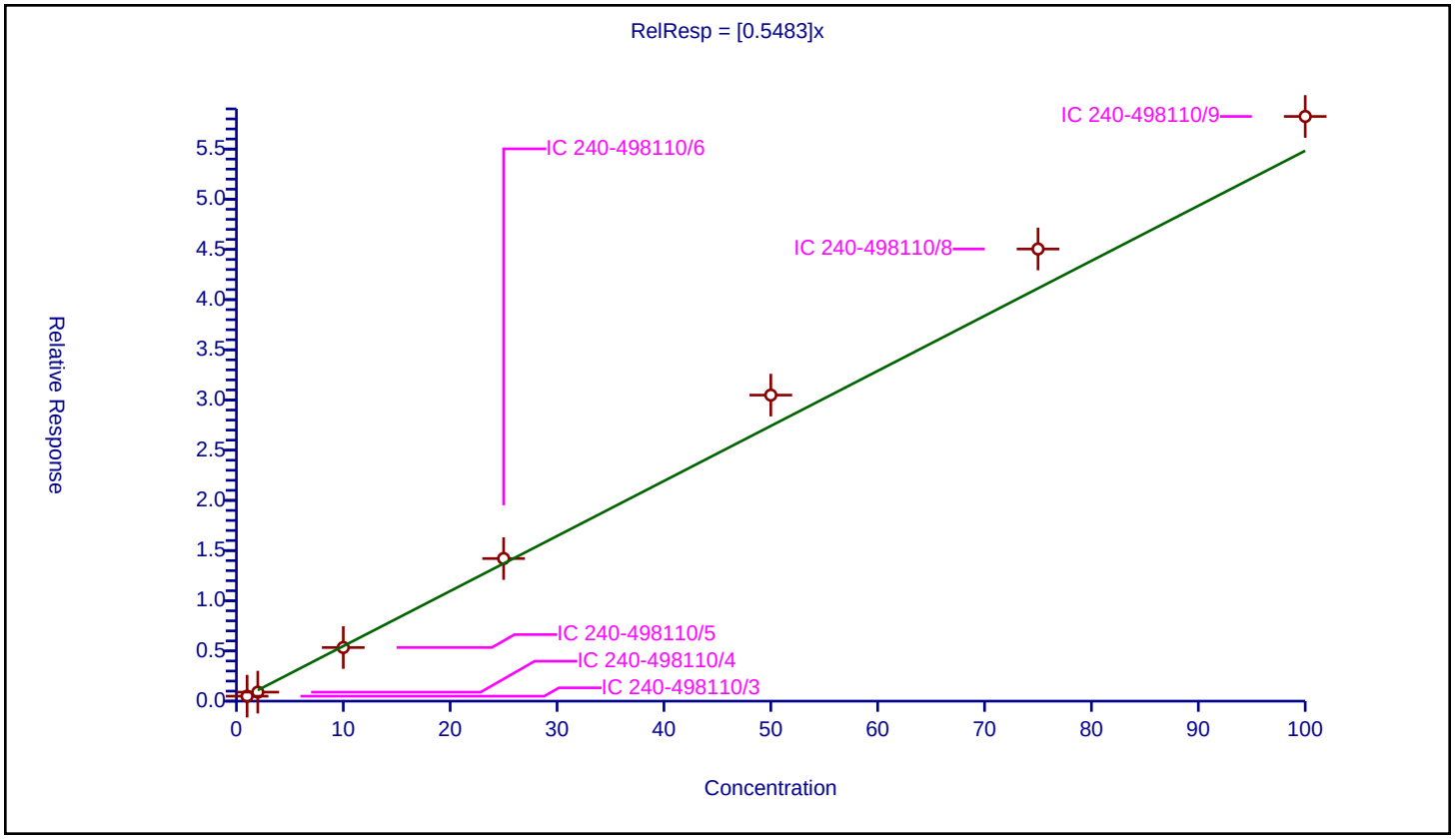
Curve Coefficients

Intercept:	0
Slope:	0.5483

Error Coefficients

Standard Error:	1860000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.493727	27.5	1334766.0	0.493727	Y
2	IC 240-498110/4	2.0	0.897877	27.5	1314729.0	0.448939	Y
3	IC 240-498110/5	10.0	5.342632	27.5	1364692.0	0.534263	Y
4	IC 240-498110/6	25.0	14.205756	27.5	1406146.0	0.56823	Y
5	ICIS 240-498110/7	50.0	30.487978	27.5	1474114.0	0.60976	Y
6	IC 240-498110/8	75.0	45.044228	27.5	1501472.0	0.60059	Y
7	IC 240-498110/9	100.0	58.247729	27.5	1591111.0	0.582477	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

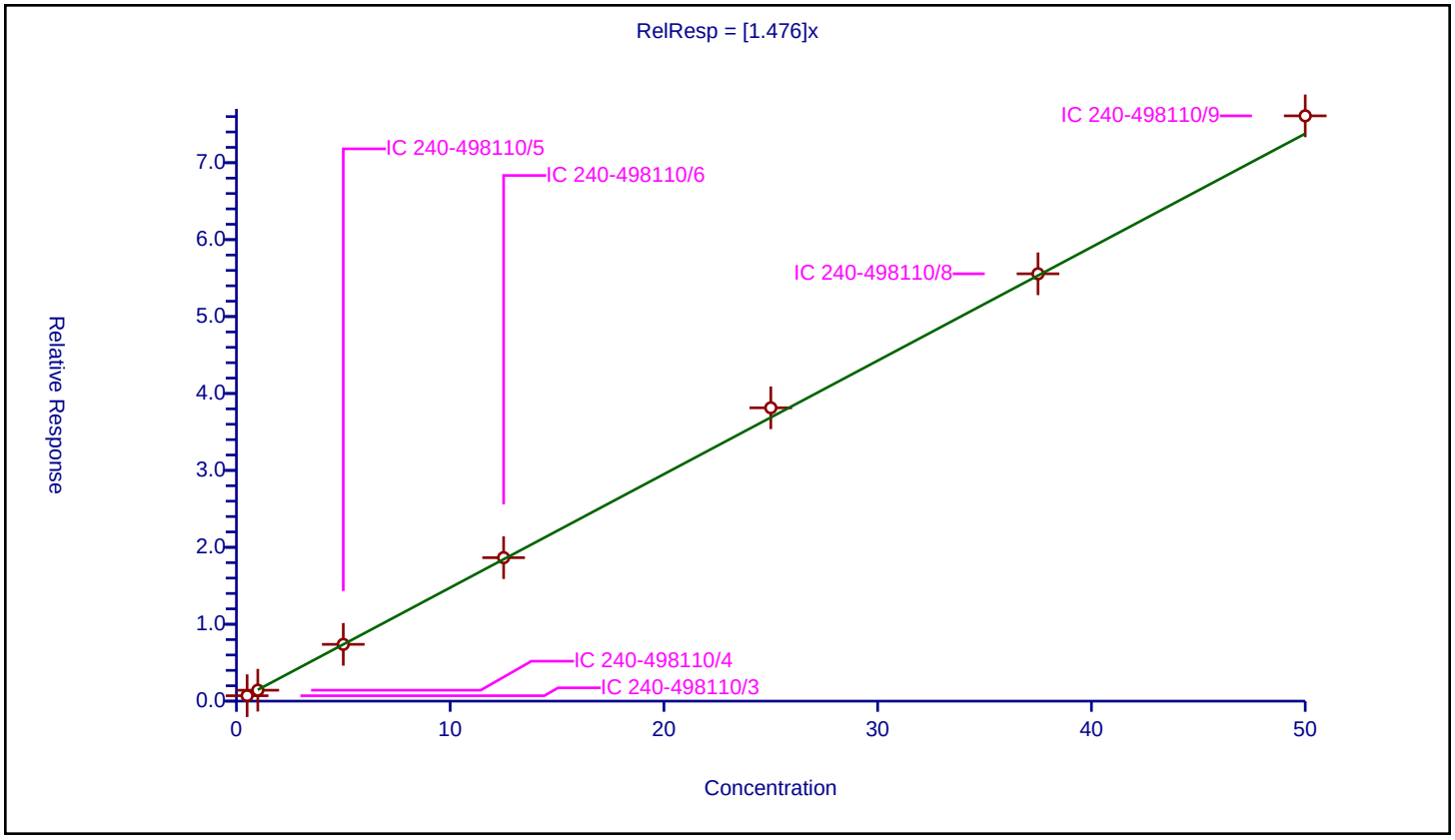
Curve Coefficients

Intercept:	0
Slope:	1.476

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	3.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.704273	27.5	738268.0	1.408547	Y
2	IC 240-498110/4	1.0	1.421744	27.5	752034.0	1.421744	Y
3	IC 240-498110/5	5.0	7.385887	27.5	785363.0	1.477177	Y
4	IC 240-498110/6	12.5	18.653647	27.5	814062.0	1.492292	Y
5	ICIS 240-498110/7	25.0	38.136999	27.5	860331.0	1.52548	Y
6	IC 240-498110/8	37.5	55.562636	27.5	913170.0	1.48167	Y
7	IC 240-498110/9	50.0	76.097363	27.5	940439.0	1.521947	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

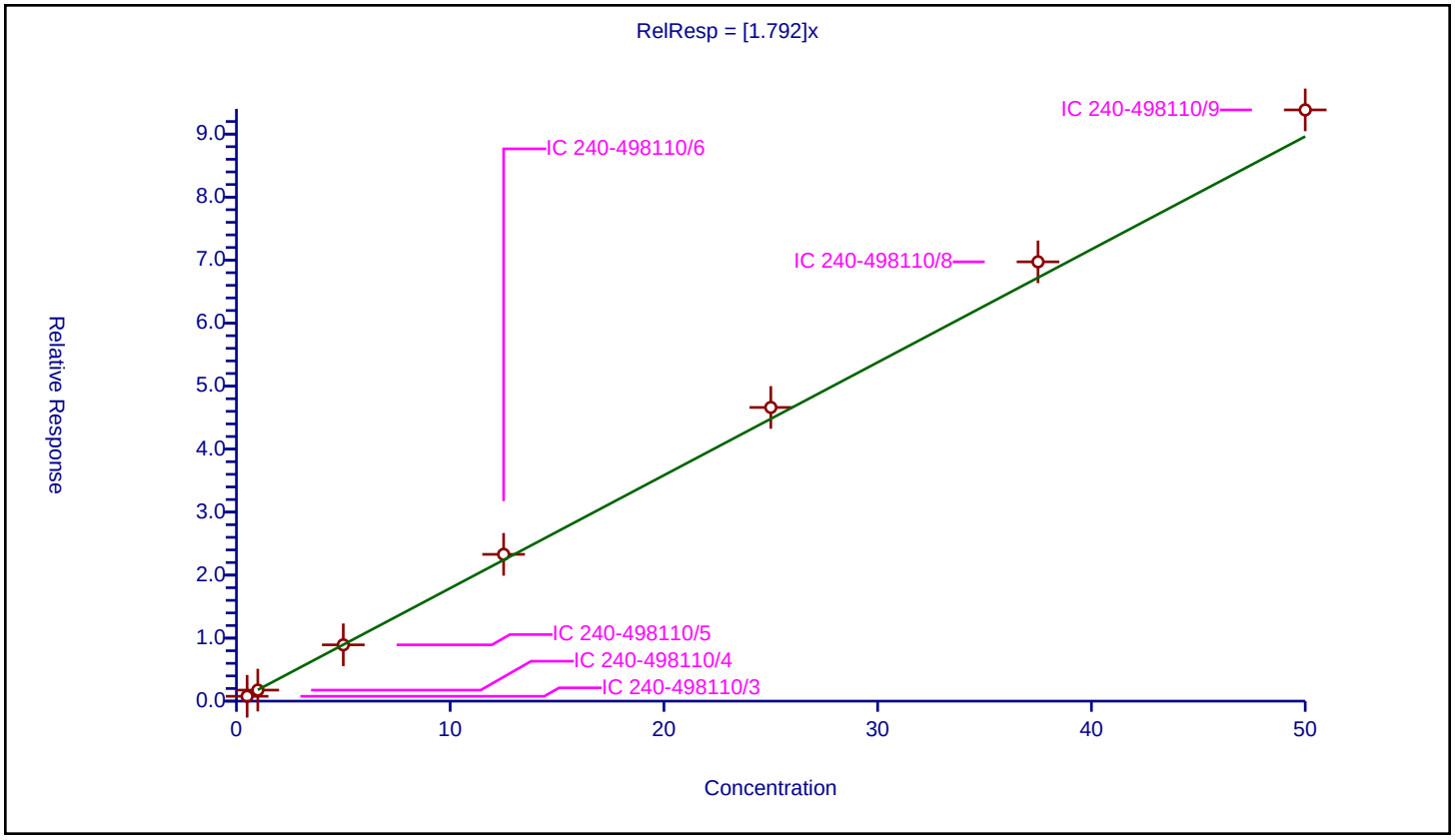
Curve Coefficients

Intercept:	0
Slope:	1.792

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.771173	27.5	738268.0	1.542346	Y
2	IC 240-498110/4	1.0	1.753521	27.5	752034.0	1.753521	Y
3	IC 240-498110/5	5.0	8.932704	27.5	785363.0	1.786541	Y
4	IC 240-498110/6	12.5	23.299982	27.5	814062.0	1.863999	Y
5	ICIS 240-498110/7	25.0	46.618156	27.5	860331.0	1.864726	Y
6	IC 240-498110/8	37.5	69.725722	27.5	913170.0	1.859353	Y
7	IC 240-498110/9	50.0	93.84132	27.5	940439.0	1.876826	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

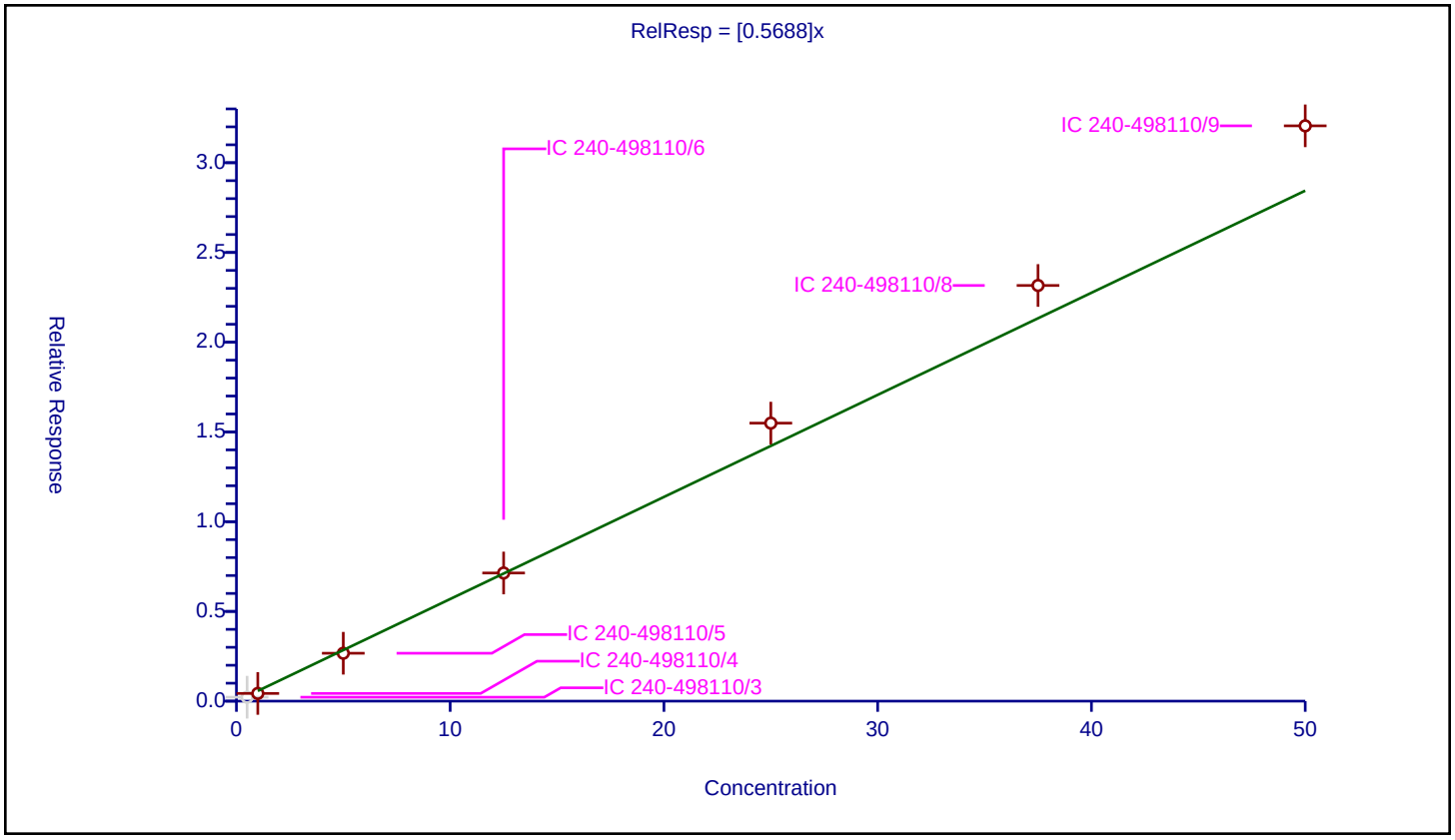
Curve Coefficients

Intercept:	0
Slope:	0.5688

Error Coefficients

Standard Error:	645000
Relative Standard Error:	13.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.218467	27.5	738268.0	0.436935	N
2	IC 240-498110/4	1.0	0.429558	27.5	752034.0	0.429558	Y
3	IC 240-498110/5	5.0	2.669489	27.5	785363.0	0.533898	Y
4	IC 240-498110/6	12.5	7.140368	27.5	814062.0	0.571229	Y
5	ICIS 240-498110/7	25.0	15.490576	27.5	860331.0	0.619623	Y
6	IC 240-498110/8	37.5	23.160176	27.5	913170.0	0.617605	Y
7	IC 240-498110/9	50.0	32.056056	27.5	940439.0	0.641121	Y



Calibration / Ethyl methacrylate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

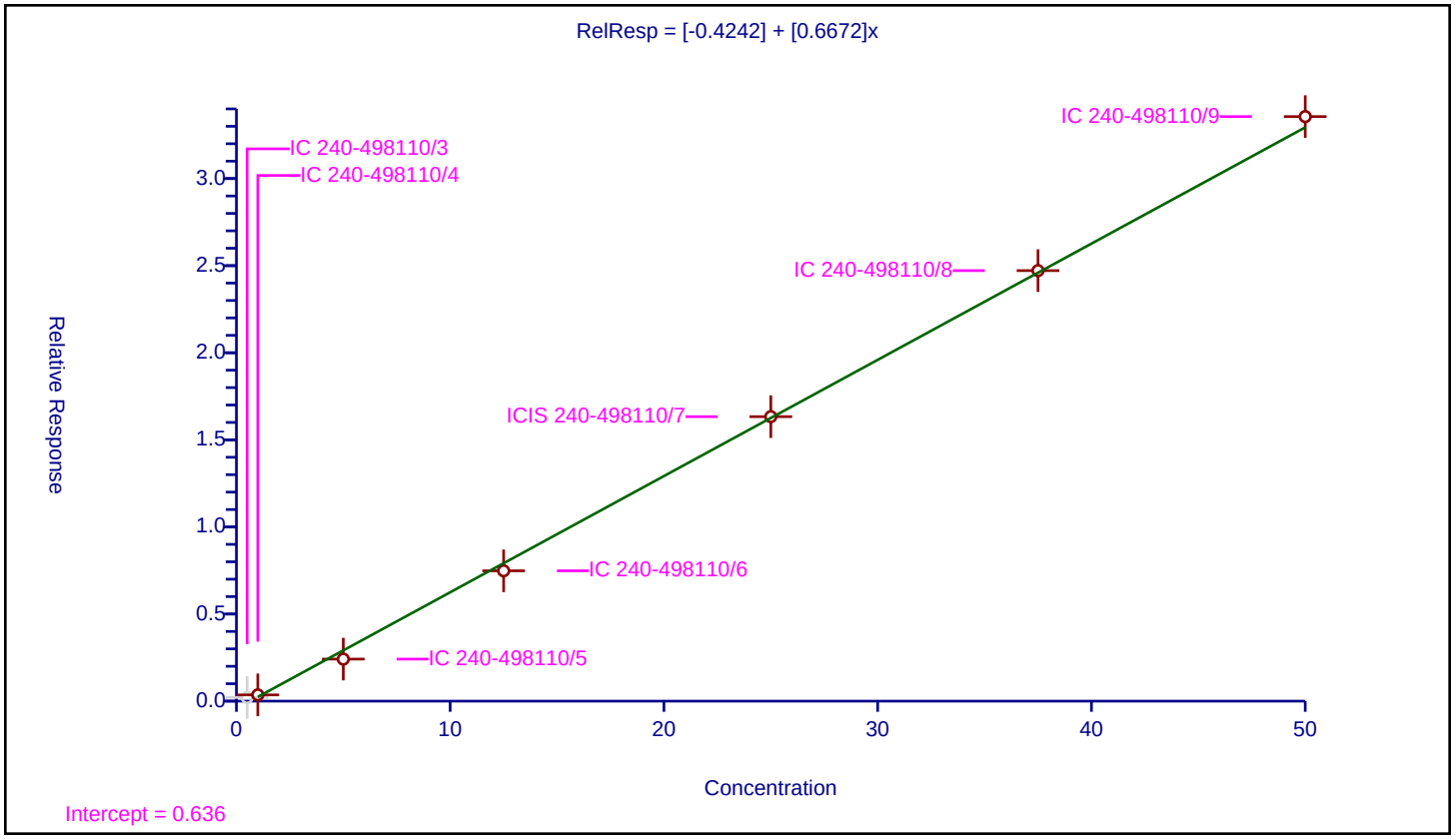
Curve Coefficients

Intercept:	-0.4242
Slope:	0.6672

Error Coefficients

Standard Error:	759000
Relative Standard Error:	11.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.209937	27.5	738268.0	0.419875	N
2	IC 240-498110/4	1.0	0.358837	27.5	752034.0	0.358837	Y
3	IC 240-498110/5	5.0	2.413174	27.5	785363.0	0.482635	Y
4	IC 240-498110/6	12.5	7.482099	27.5	814062.0	0.598568	Y
5	ICIS 240-498110/7	25.0	16.332487	27.5	860331.0	0.653299	Y
6	IC 240-498110/8	37.5	24.716542	27.5	913170.0	0.659108	Y
7	IC 240-498110/9	50.0	33.558551	27.5	940439.0	0.671171	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

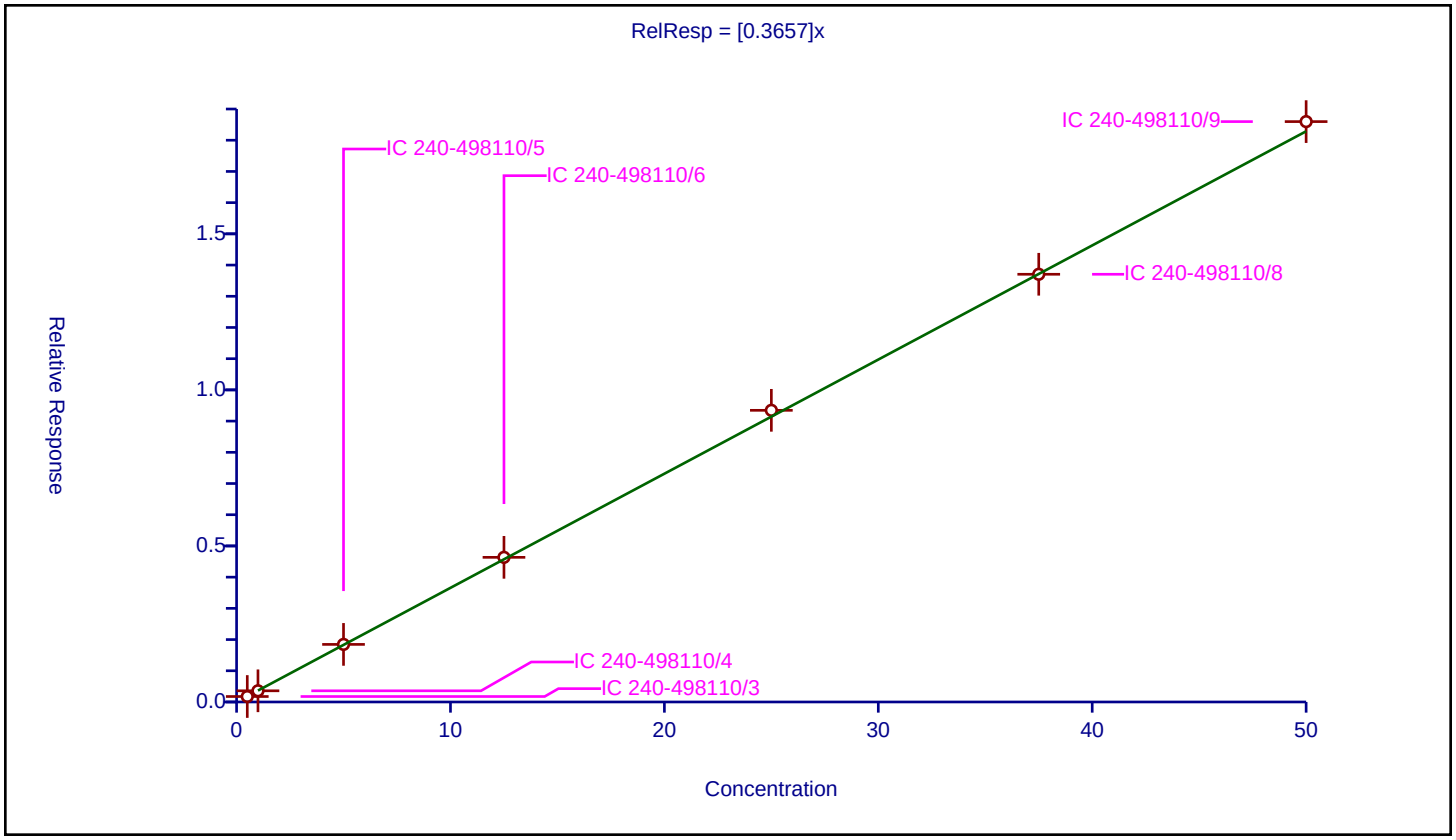
Curve Coefficients

Intercept:	0
Slope:	0.3657

Error Coefficients

Standard Error:	346000
Relative Standard Error:	2.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.175184	27.5	738268.0	0.350367	Y
2	IC 240-498110/4	1.0	0.358617	27.5	752034.0	0.358617	Y
3	IC 240-498110/5	5.0	1.845115	27.5	785363.0	0.369023	Y
4	IC 240-498110/6	12.5	4.63512	27.5	814062.0	0.37081	Y
5	ICIS 240-498110/7	25.0	9.345284	27.5	860331.0	0.373811	Y
6	IC 240-498110/8	37.5	13.705099	27.5	913170.0	0.365469	Y
7	IC 240-498110/9	50.0	18.596937	27.5	940439.0	0.371939	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

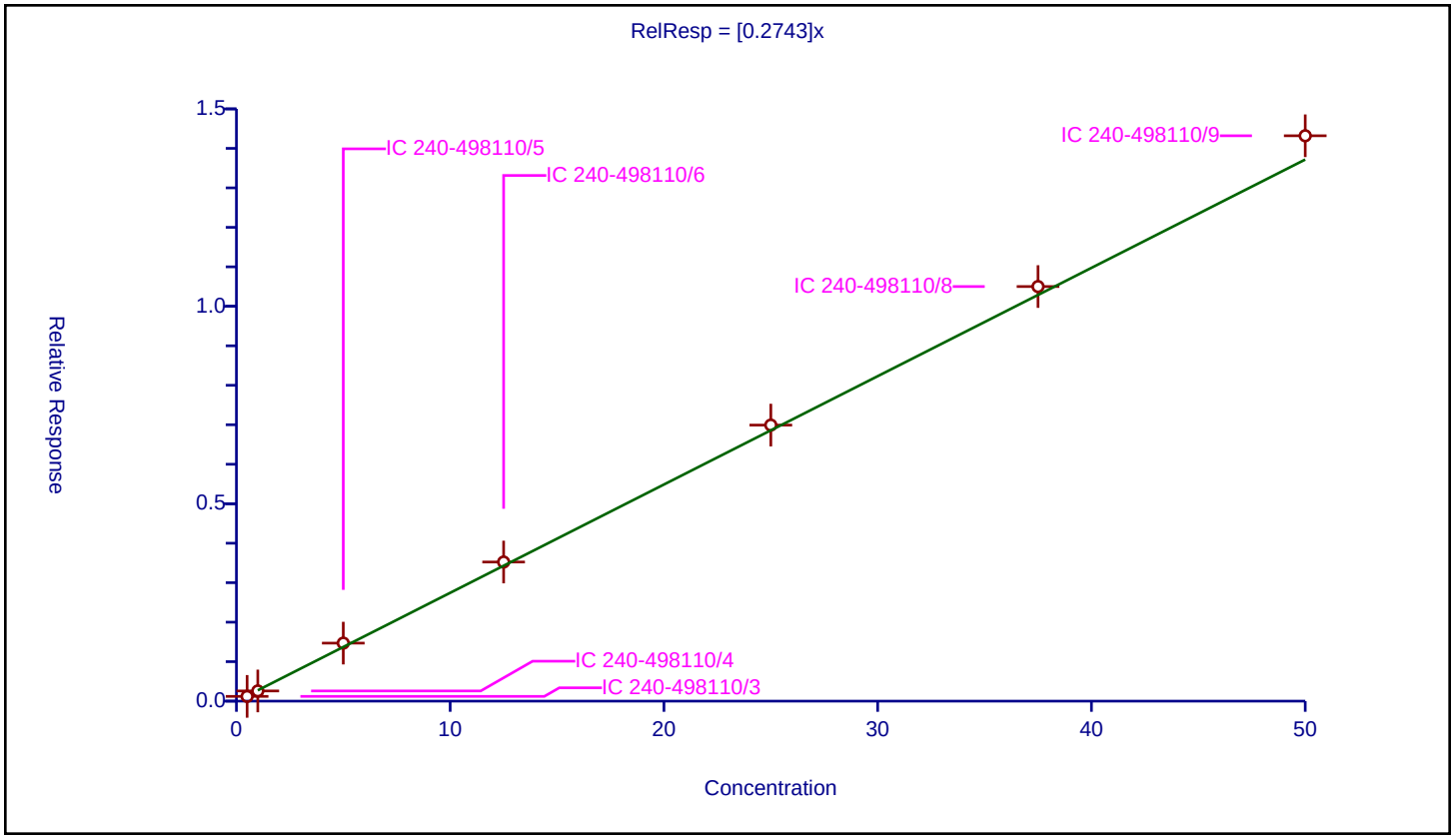
Curve Coefficients

Intercept:	0
Slope:	0.2743

Error Coefficients

Standard Error:	265000
Relative Standard Error:	6.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.120092	27.5	738268.0	0.240184	Y
2	IC 240-498110/4	1.0	0.25824	27.5	752034.0	0.25824	Y
3	IC 240-498110/5	5.0	1.469817	27.5	785363.0	0.293963	Y
4	IC 240-498110/6	12.5	3.523617	27.5	814062.0	0.281889	Y
5	ICIS 240-498110/7	25.0	6.991742	27.5	860331.0	0.27967	Y
6	IC 240-498110/8	37.5	10.500695	27.5	913170.0	0.280019	Y
7	IC 240-498110/9	50.0	14.319087	27.5	940439.0	0.286382	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

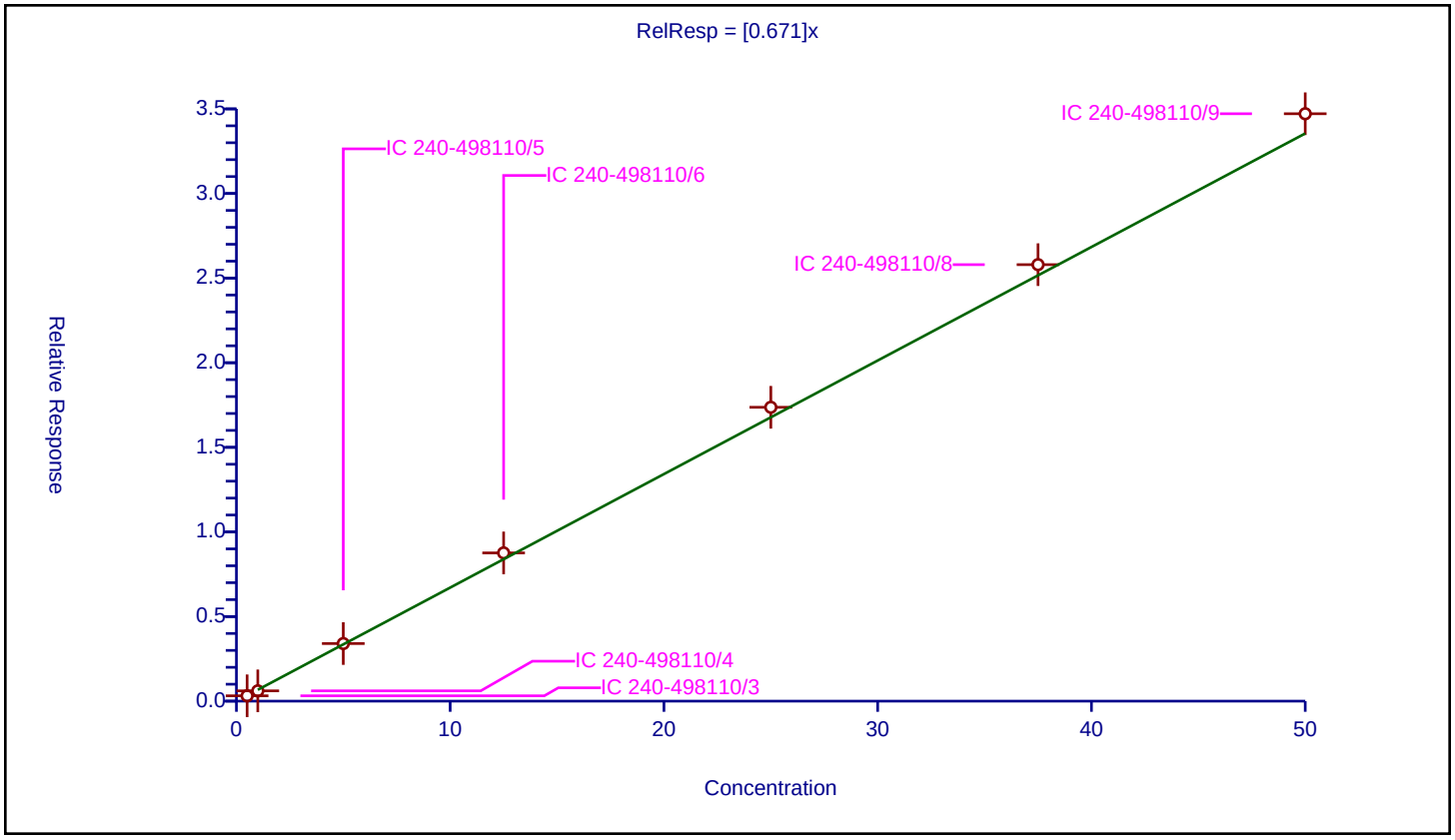
Curve Coefficients

Intercept:	0
Slope:	0.671

Error Coefficients

Standard Error:	647000
Relative Standard Error:	5.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.314869	27.5	738268.0	0.629737	Y
2	IC 240-498110/4	1.0	0.608703	27.5	752034.0	0.608703	Y
3	IC 240-498110/5	5.0	3.403172	27.5	785363.0	0.680634	Y
4	IC 240-498110/6	12.5	8.760312	27.5	814062.0	0.700825	Y
5	ICIS 240-498110/7	25.0	17.366313	27.5	860331.0	0.694653	Y
6	IC 240-498110/8	37.5	25.795438	27.5	913170.0	0.687878	Y
7	IC 240-498110/9	50.0	34.713275	27.5	940439.0	0.694265	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

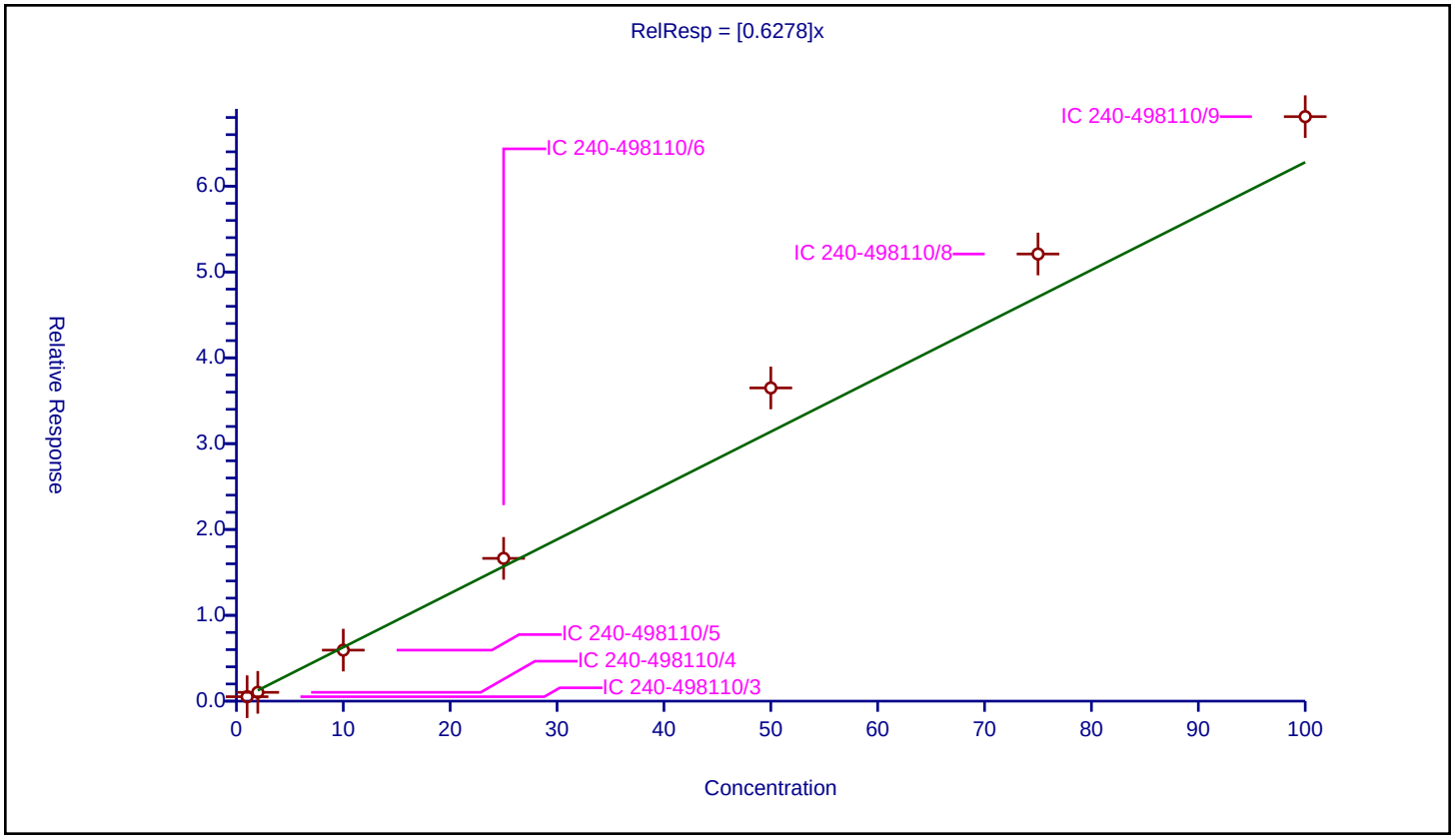
Curve Coefficients

Intercept:	0
Slope:	0.6278

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	13.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	1.0	0.516313	27.5	738268.0	0.516313	Y
2	IC 240-498110/4	2.0	1.026852	27.5	752034.0	0.513426	Y
3	IC 240-498110/5	10.0	5.944923	27.5	785363.0	0.594492	Y
4	IC 240-498110/6	25.0	16.633226	27.5	814062.0	0.665329	Y
5	ICIS 240-498110/7	50.0	36.48936	27.5	860331.0	0.729787	Y
6	IC 240-498110/8	75.0	52.095842	27.5	913170.0	0.694611	Y
7	IC 240-498110/9	100.0	68.096814	27.5	940439.0	0.680968	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

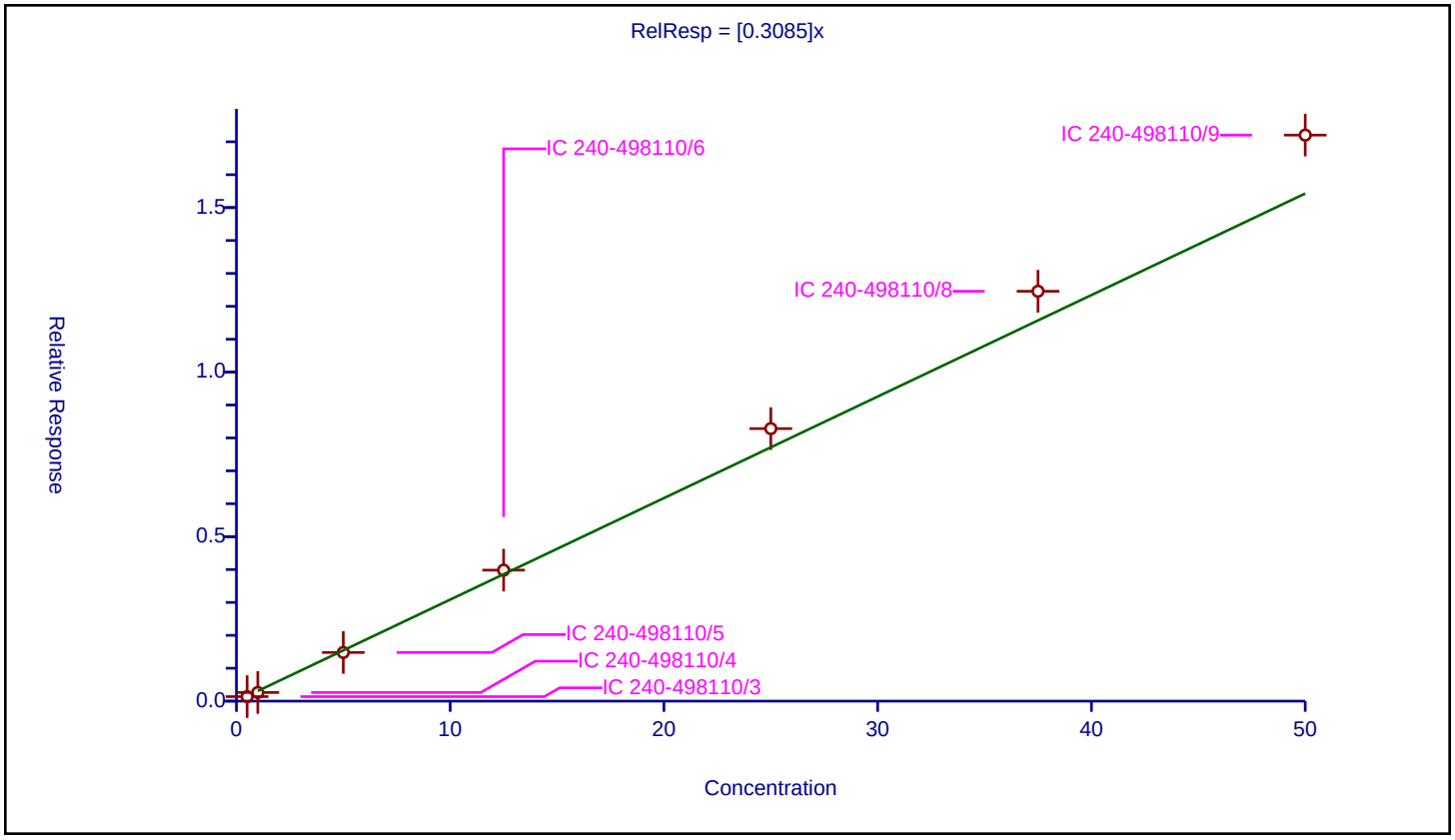
Curve Coefficients

Intercept:	0
Slope:	0.3085

Error Coefficients

Standard Error:	316000
Relative Standard Error:	10.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.137562	27.5	738268.0	0.275124	Y
2	IC 240-498110/4	1.0	0.262737	27.5	752034.0	0.262737	Y
3	IC 240-498110/5	5.0	1.479376	27.5	785363.0	0.295875	Y
4	IC 240-498110/6	12.5	3.981454	27.5	814062.0	0.318516	Y
5	ICIS 240-498110/7	25.0	8.282658	27.5	860331.0	0.331306	Y
6	IC 240-498110/8	37.5	12.457319	27.5	913170.0	0.332195	Y
7	IC 240-498110/9	50.0	17.203367	27.5	940439.0	0.344067	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

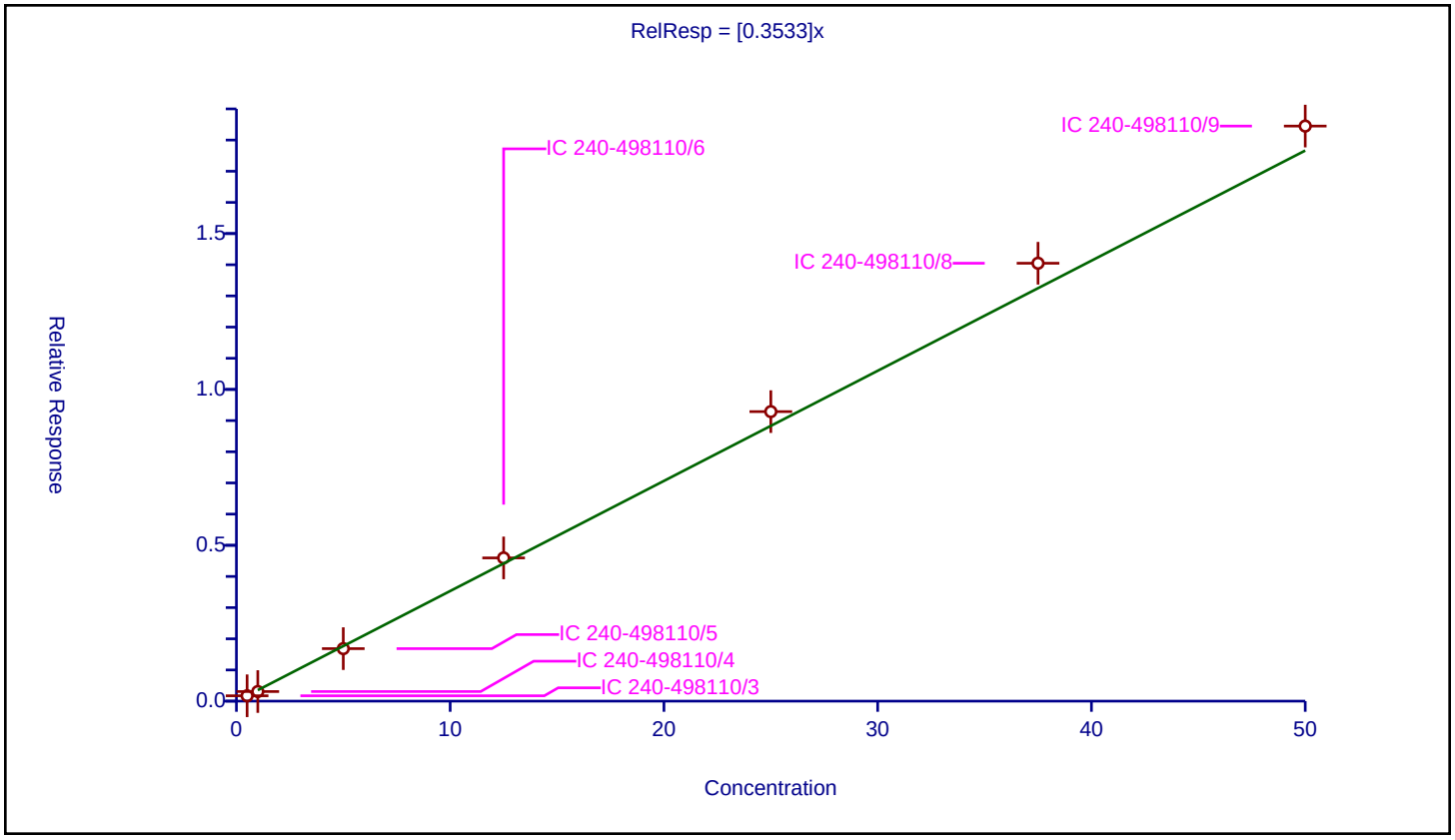
Curve Coefficients

Intercept:	0
Slope:	0.3533

Error Coefficients

Standard Error:	347000
Relative Standard Error:	6.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.172576	27.5	738268.0	0.345152	Y
2	IC 240-498110/4	1.0	0.308118	27.5	752034.0	0.308118	Y
3	IC 240-498110/5	5.0	1.684253	27.5	785363.0	0.336851	Y
4	IC 240-498110/6	12.5	4.594684	27.5	814062.0	0.367575	Y
5	ICIS 240-498110/7	25.0	9.287908	27.5	860331.0	0.371516	Y
6	IC 240-498110/8	37.5	14.048228	27.5	913170.0	0.374619	Y
7	IC 240-498110/9	50.0	18.449179	27.5	940439.0	0.368984	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

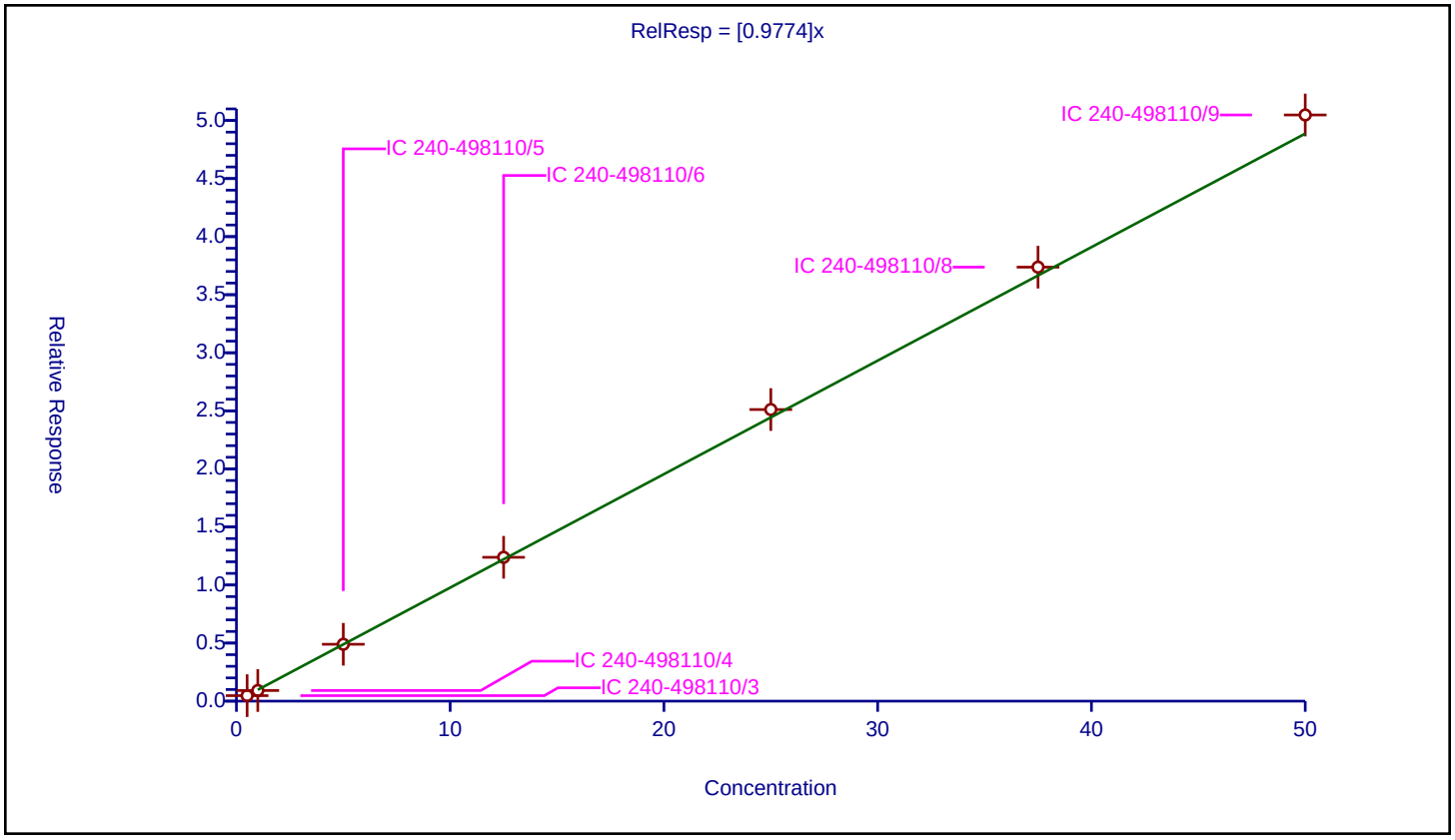
Curve Coefficients

Intercept:	0
Slope:	0.9774

Error Coefficients

Standard Error:	939000
Relative Standard Error:	3.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.47288	27.5	738268.0	0.945761	Y
2	IC 240-498110/4	1.0	0.914919	27.5	752034.0	0.914919	Y
3	IC 240-498110/5	5.0	4.89778	27.5	785363.0	0.979556	Y
4	IC 240-498110/6	12.5	12.385644	27.5	814062.0	0.990852	Y
5	ICIS 240-498110/7	25.0	25.11069	27.5	860331.0	1.004428	Y
6	IC 240-498110/8	37.5	37.37271	27.5	913170.0	0.996606	Y
7	IC 240-498110/9	50.0	50.47766	27.5	940439.0	1.009553	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

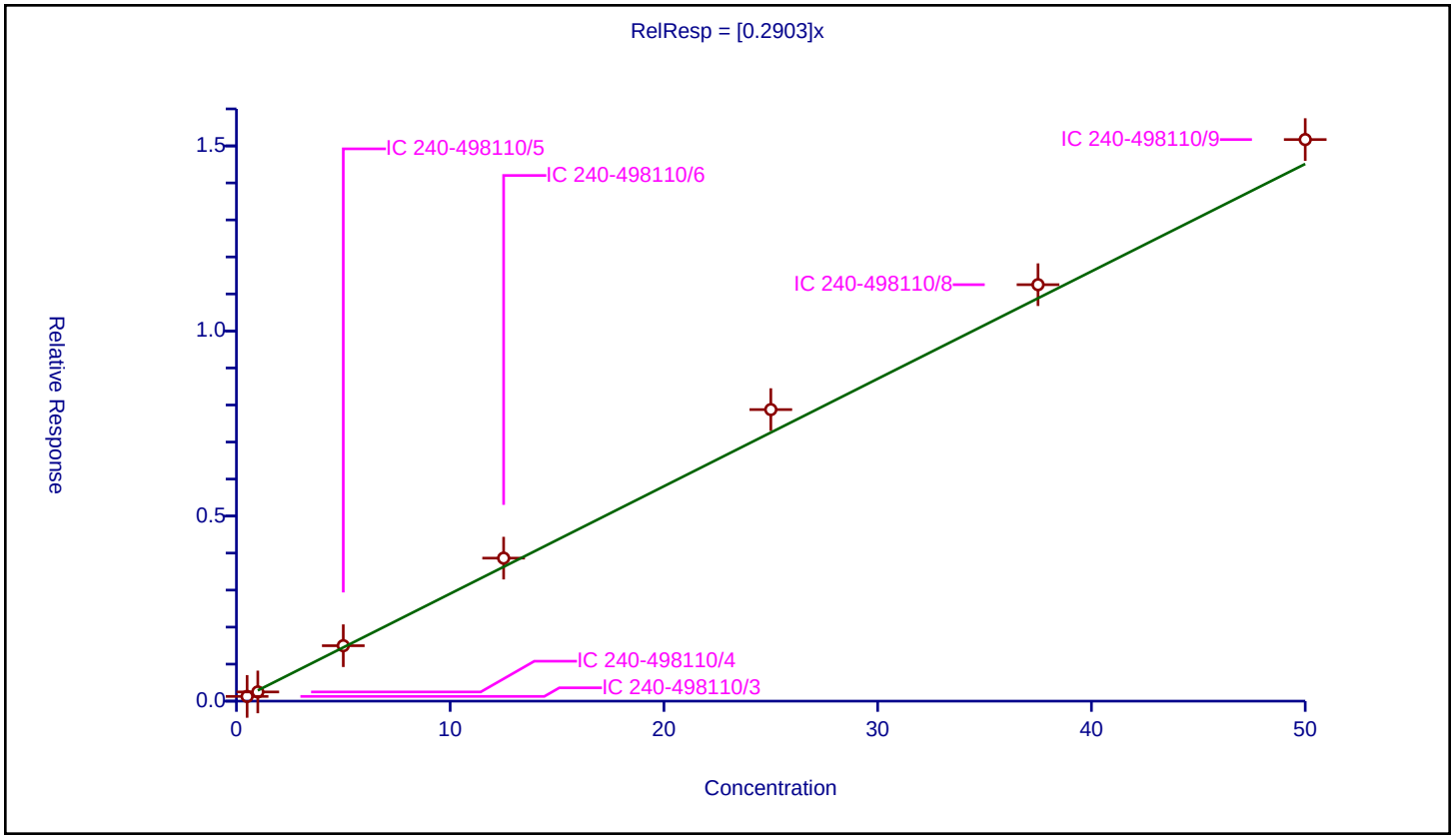
Curve Coefficients

Intercept:	0
Slope:	0.2903

Error Coefficients

Standard Error:	284000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.127877	27.5	738268.0	0.255754	Y
2	IC 240-498110/4	1.0	0.248952	27.5	752034.0	0.248952	Y
3	IC 240-498110/5	5.0	1.49783	27.5	785363.0	0.299566	Y
4	IC 240-498110/6	12.5	3.863287	27.5	814062.0	0.309063	Y
5	ICIS 240-498110/7	25.0	7.876102	27.5	860331.0	0.315044	Y
6	IC 240-498110/8	37.5	11.250857	27.5	913170.0	0.300023	Y
7	IC 240-498110/9	50.0	15.171393	27.5	940439.0	0.303428	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

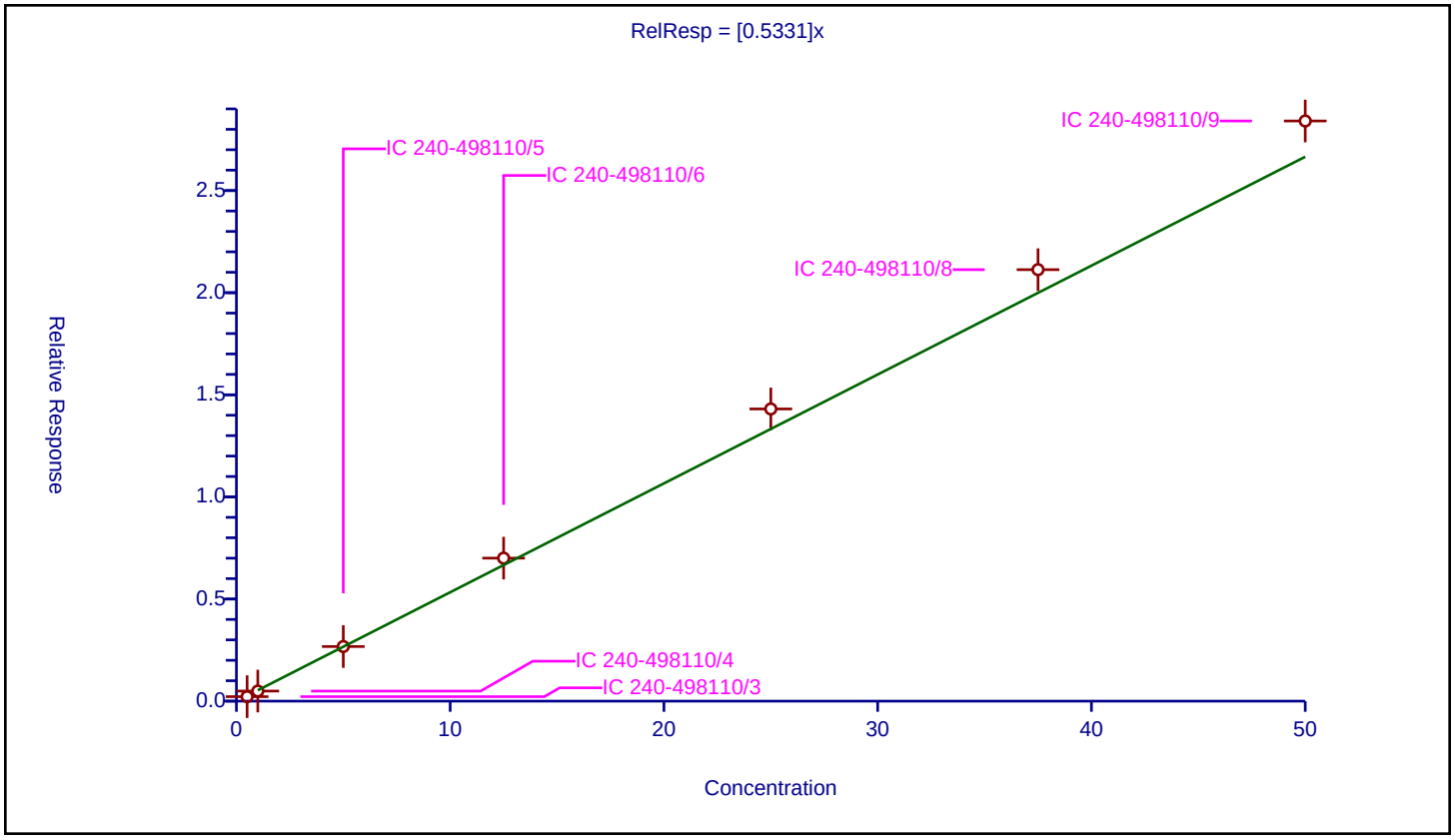
Curve Coefficients

Intercept:	0
Slope:	0.5331

Error Coefficients

Standard Error:	530000
Relative Standard Error:	9.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.219622	27.5	738268.0	0.439244	Y
2	IC 240-498110/4	1.0	0.493625	27.5	752034.0	0.493625	Y
3	IC 240-498110/5	5.0	2.67362	27.5	785363.0	0.534724	Y
4	IC 240-498110/6	12.5	7.002541	27.5	814062.0	0.560203	Y
5	ICIS 240-498110/7	25.0	14.307476	27.5	860331.0	0.572299	Y
6	IC 240-498110/8	37.5	21.128566	27.5	913170.0	0.563428	Y
7	IC 240-498110/9	50.0	28.408538	27.5	940439.0	0.568171	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

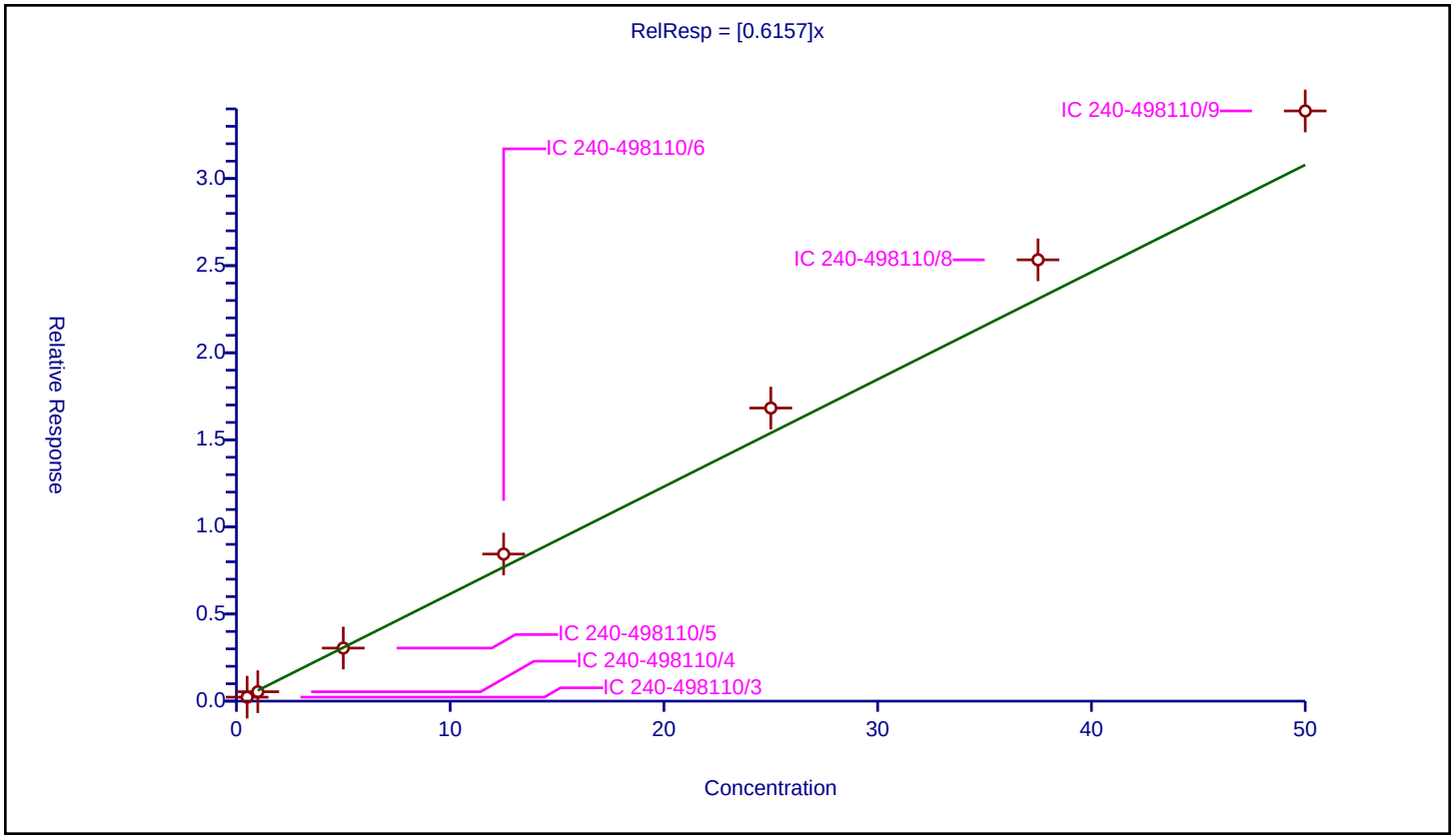
Curve Coefficients

Intercept:	0
Slope:	0.6157

Error Coefficients

Standard Error:	632000
Relative Standard Error:	14.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.22927	27.5	738268.0	0.458539	Y
2	IC 240-498110/4	1.0	0.540431	27.5	752034.0	0.540431	Y
3	IC 240-498110/5	5.0	3.046677	27.5	785363.0	0.609335	Y
4	IC 240-498110/6	12.5	8.444188	27.5	814062.0	0.675535	Y
5	ICIS 240-498110/7	25.0	16.826562	27.5	860331.0	0.673062	Y
6	IC 240-498110/8	37.5	25.334409	27.5	913170.0	0.675584	Y
7	IC 240-498110/9	50.0	33.881876	27.5	940439.0	0.677638	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

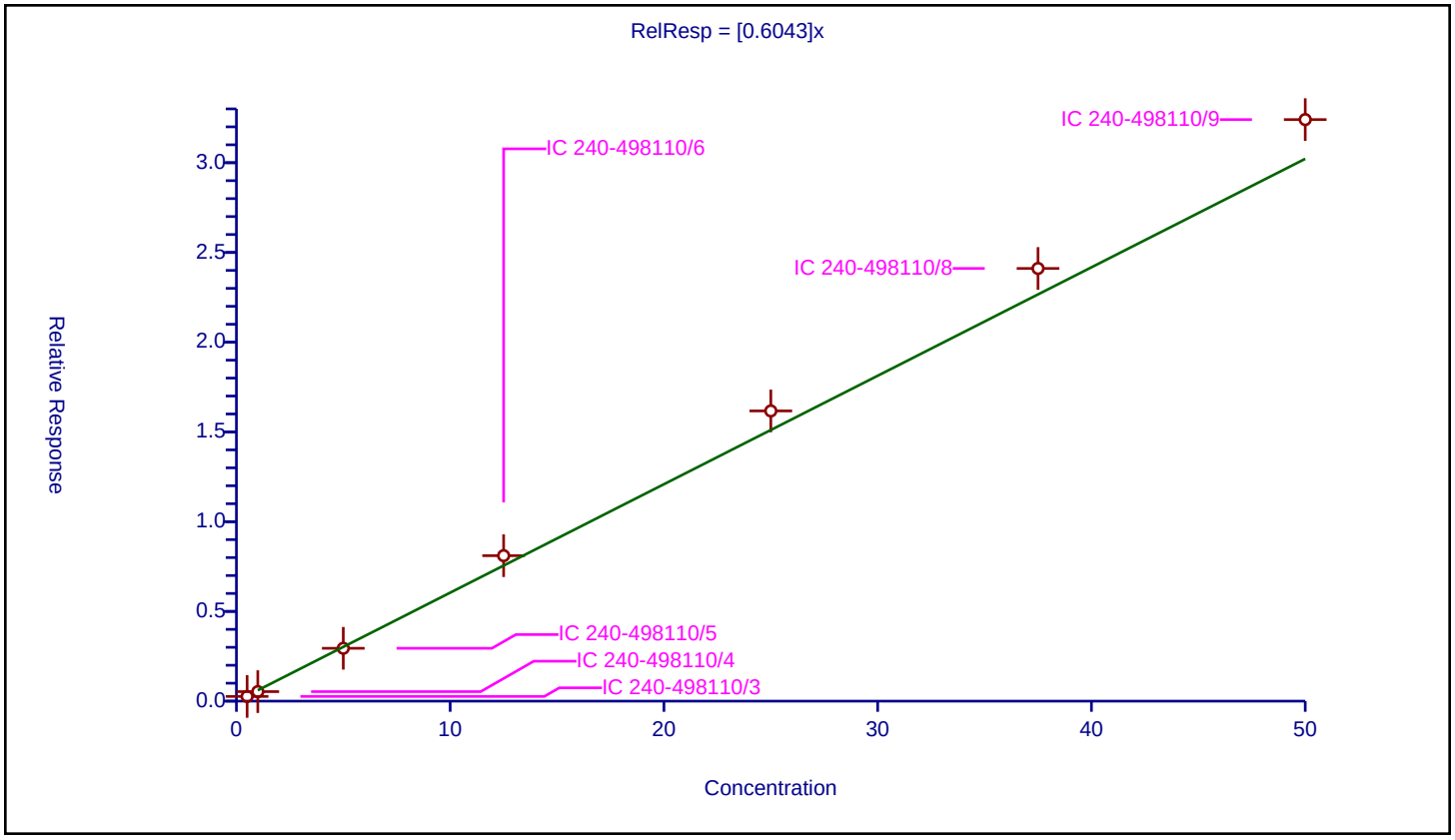
Curve Coefficients

Intercept:	0
Slope:	0.6043

Error Coefficients

Standard Error:	604000
Relative Standard Error:	9.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.262347	27.5	738268.0	0.524694	Y
2	IC 240-498110/4	1.0	0.530412	27.5	752034.0	0.530412	Y
3	IC 240-498110/5	5.0	2.945272	27.5	785363.0	0.589054	Y
4	IC 240-498110/6	12.5	8.104721	27.5	814062.0	0.648378	Y
5	ICIS 240-498110/7	25.0	16.170683	27.5	860331.0	0.646827	Y
6	IC 240-498110/8	37.5	24.109728	27.5	913170.0	0.642926	Y
7	IC 240-498110/9	50.0	32.403505	27.5	940439.0	0.64807	Y



Calibration / Styrene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

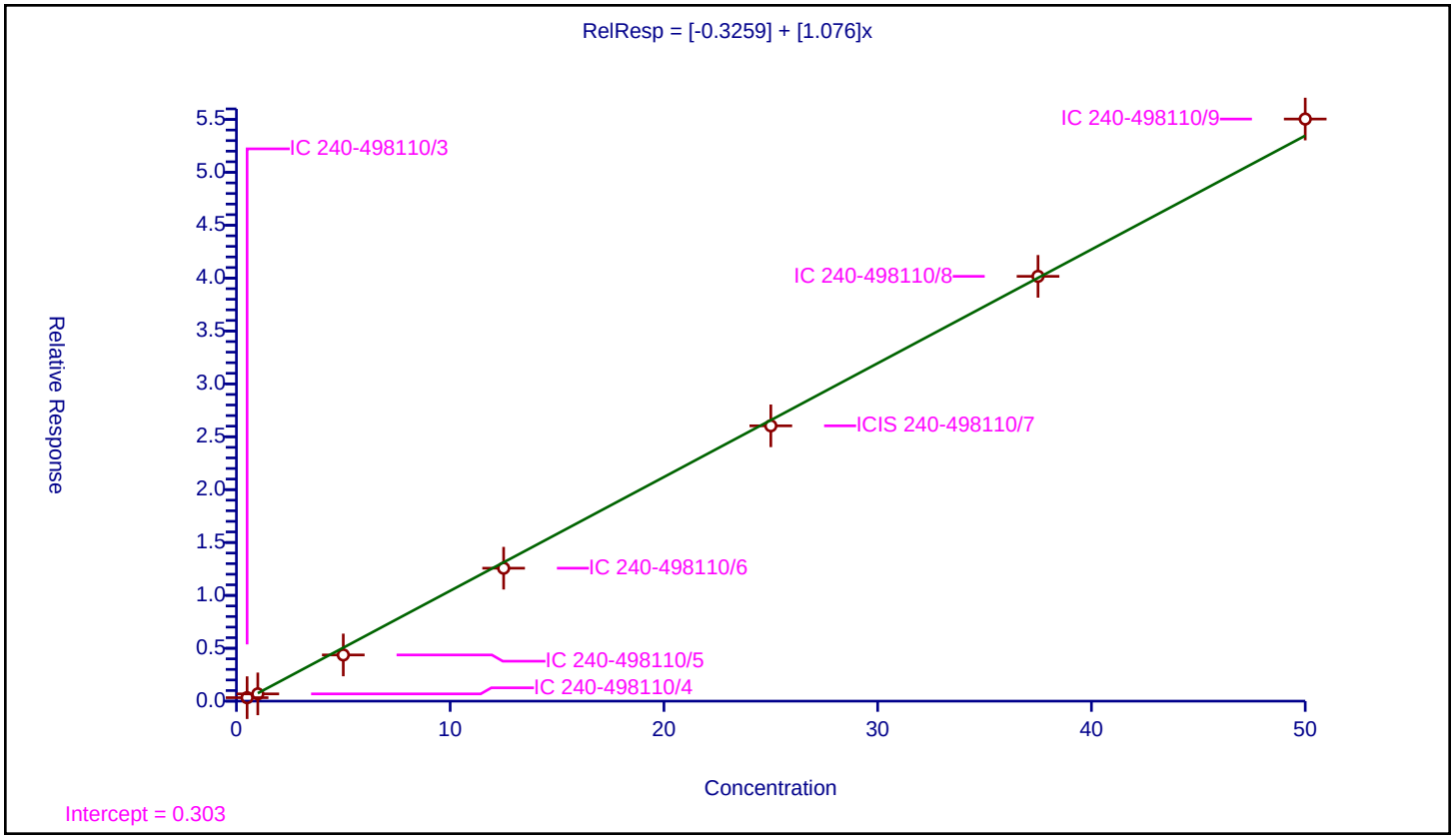
Curve Coefficients

Intercept:	-0.3259
Slope:	1.076

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	11.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.327533	27.5	738268.0	0.655067	Y
2	IC 240-498110/4	1.0	0.686006	27.5	752034.0	0.686006	Y
3	IC 240-498110/5	5.0	4.369043	27.5	785363.0	0.873809	Y
4	IC 240-498110/6	12.5	12.570124	27.5	814062.0	1.00561	Y
5	ICIS 240-498110/7	25.0	26.033567	27.5	860331.0	1.041343	Y
6	IC 240-498110/8	37.5	40.167792	27.5	913170.0	1.071141	Y
7	IC 240-498110/9	50.0	55.041055	27.5	940439.0	1.100821	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

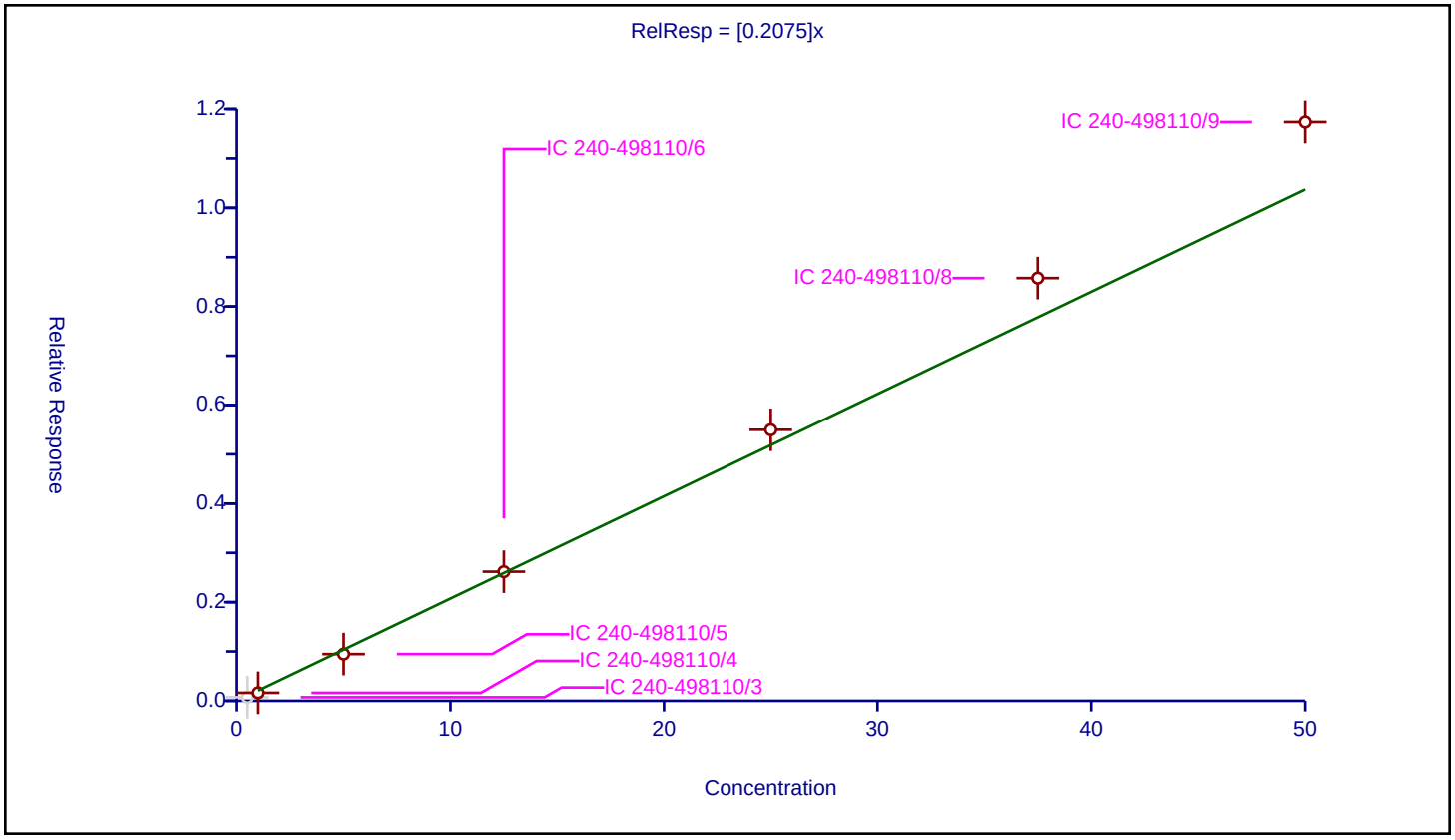
Curve Coefficients

Intercept:	0
Slope:	0.2075

Error Coefficients

Standard Error:	236000
Relative Standard Error:	13.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.071891	27.5	738268.0	0.143782	N
2	IC 240-498110/4	1.0	0.16236	27.5	752034.0	0.16236	Y
3	IC 240-498110/5	5.0	0.947173	27.5	785363.0	0.189435	Y
4	IC 240-498110/6	12.5	2.619463	27.5	814062.0	0.209557	Y
5	ICIS 240-498110/7	25.0	5.4975	27.5	860331.0	0.2199	Y
6	IC 240-498110/8	37.5	8.576566	27.5	913170.0	0.228708	Y
7	IC 240-498110/9	50.0	11.73772	27.5	940439.0	0.234754	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

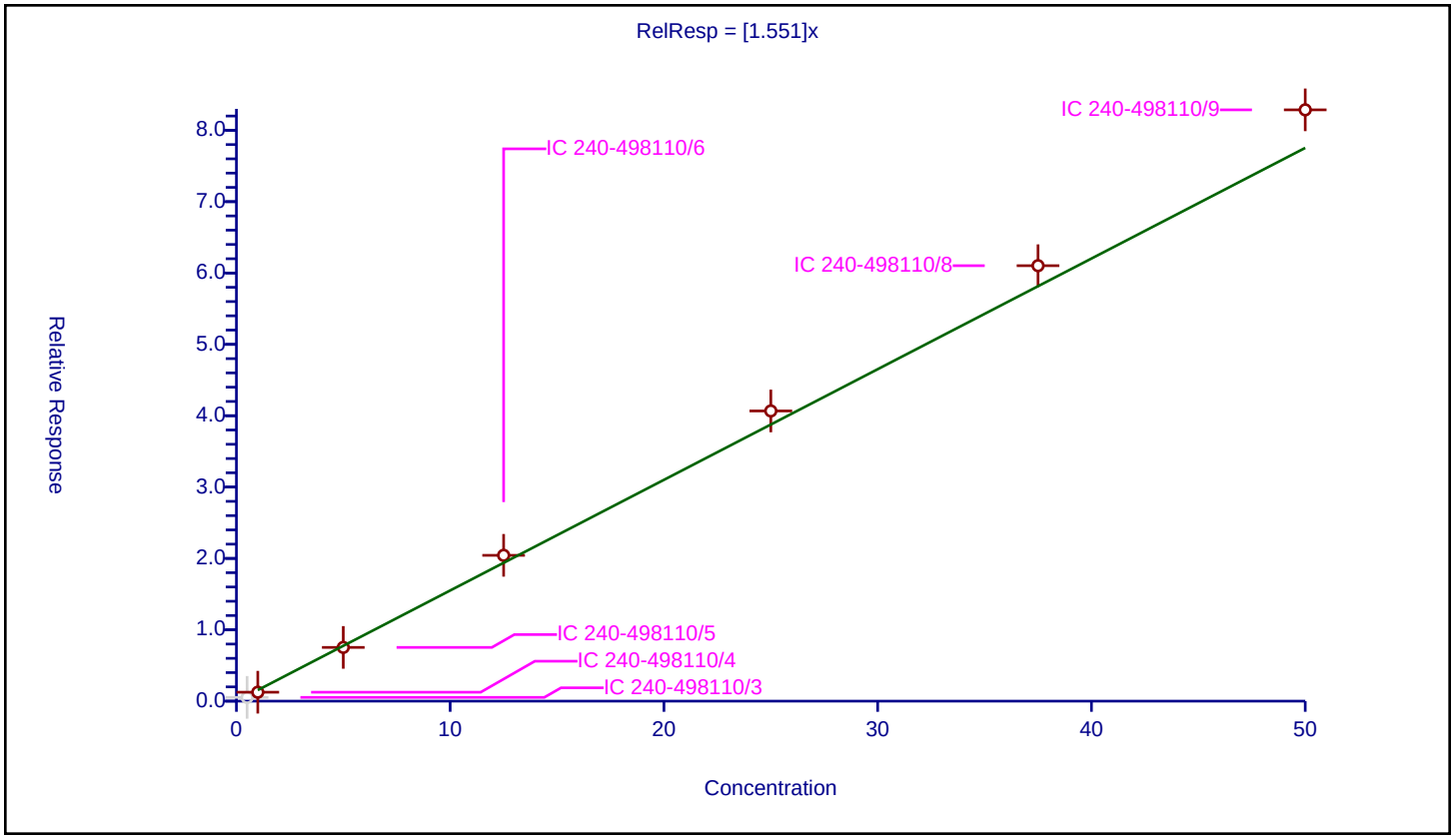
Curve Coefficients

Intercept:	0
Slope:	1.551

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	10.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.526706	27.5	738268.0	1.053411	N
2	IC 240-498110/4	1.0	1.251888	27.5	752034.0	1.251888	Y
3	IC 240-498110/5	5.0	7.528926	27.5	785363.0	1.505785	Y
4	IC 240-498110/6	12.5	20.433646	27.5	814062.0	1.634692	Y
5	ICIS 240-498110/7	25.0	40.667592	27.5	860331.0	1.626704	Y
6	IC 240-498110/8	37.5	61.026528	27.5	913170.0	1.627374	Y
7	IC 240-498110/9	50.0	82.865404	27.5	940439.0	1.657308	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

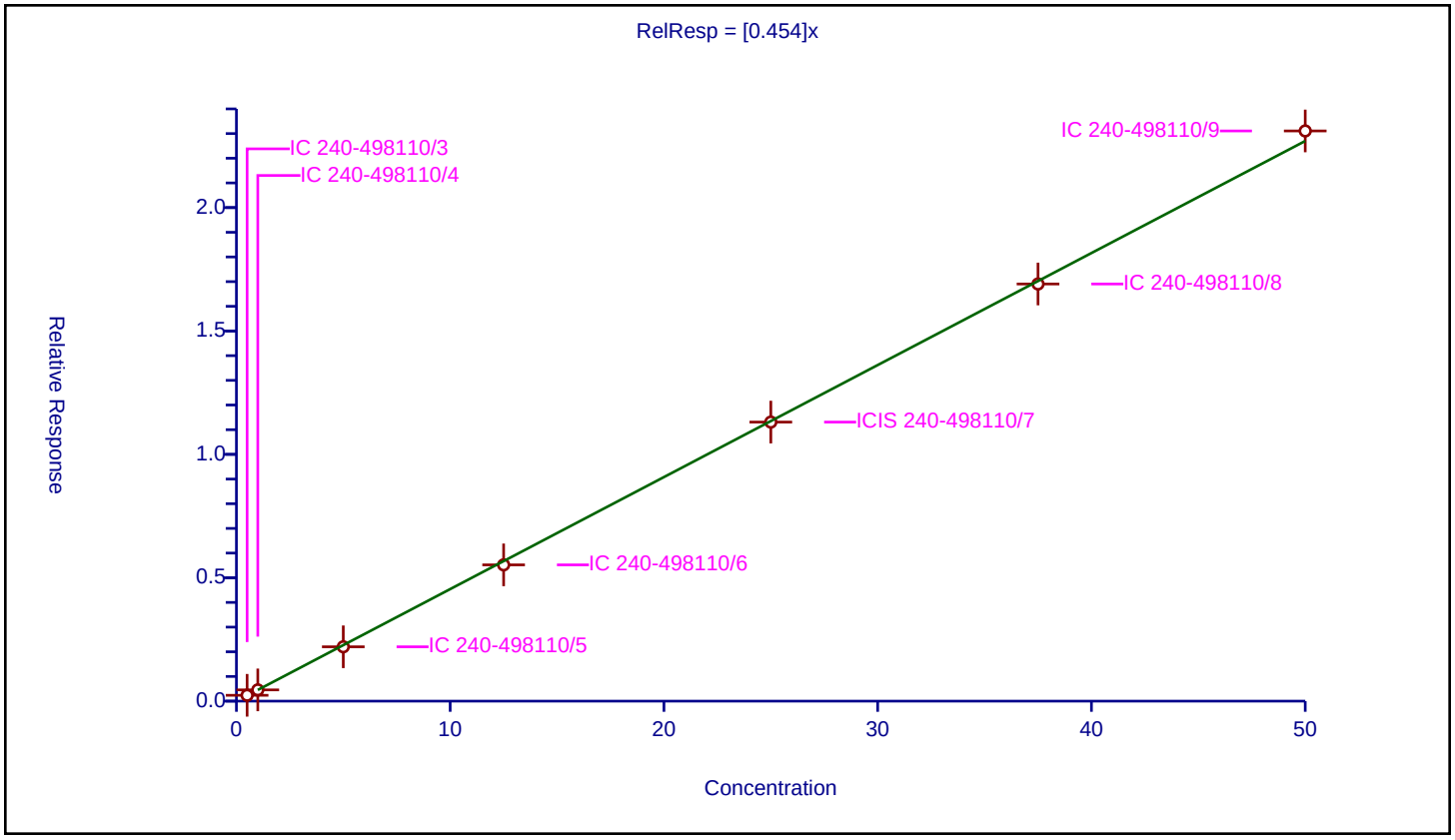
Curve Coefficients

Intercept:	0
Slope:	0.454

Error Coefficients

Standard Error:	427000
Relative Standard Error:	2.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.237055	27.5	738268.0	0.47411	Y
2	IC 240-498110/4	1.0	0.456253	27.5	752034.0	0.456253	Y
3	IC 240-498110/5	5.0	2.201784	27.5	785363.0	0.440357	Y
4	IC 240-498110/6	12.5	5.522046	27.5	814062.0	0.441764	Y
5	ICIS 240-498110/7	25.0	11.308156	27.5	860331.0	0.452326	Y
6	IC 240-498110/8	37.5	16.904744	27.5	913170.0	0.450793	Y
7	IC 240-498110/9	50.0	23.106002	27.5	940439.0	0.46212	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

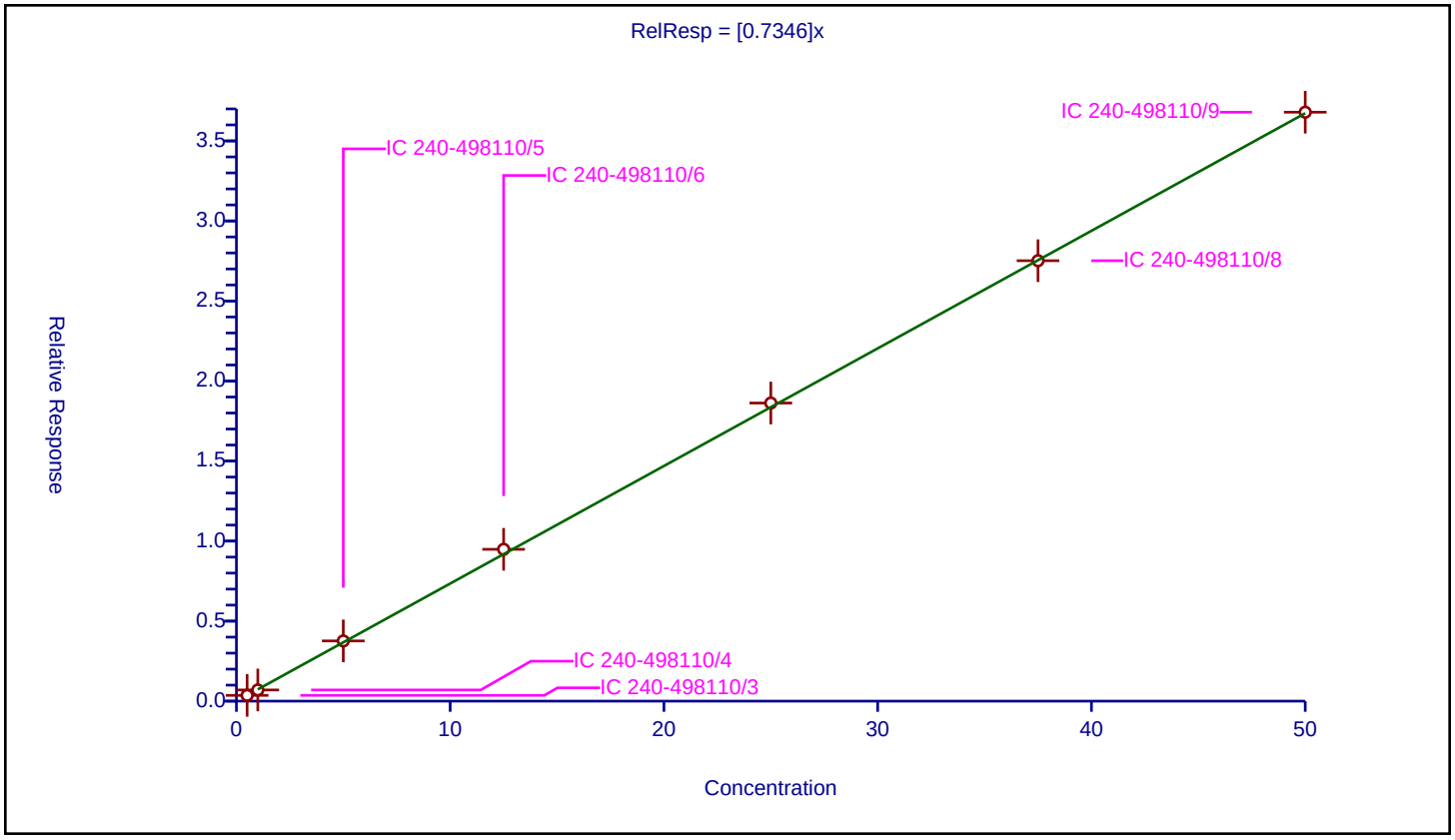
Curve Coefficients

Intercept:	0
Slope:	0.7346

Error Coefficients

Standard Error:	333000
Relative Standard Error:	2.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.359473	27.5	338057.0	0.718947	Y
2	IC 240-498110/4	1.0	0.697441	27.5	342961.0	0.697441	Y
3	IC 240-498110/5	5.0	3.760698	27.5	358121.0	0.75214	Y
4	IC 240-498110/6	12.5	9.484868	27.5	378073.0	0.758789	Y
5	ICIS 240-498110/7	25.0	18.623498	27.5	398650.0	0.74494	Y
6	IC 240-498110/8	37.5	27.516389	27.5	439634.0	0.73377	Y
7	IC 240-498110/9	50.0	36.794365	27.5	460780.0	0.735887	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

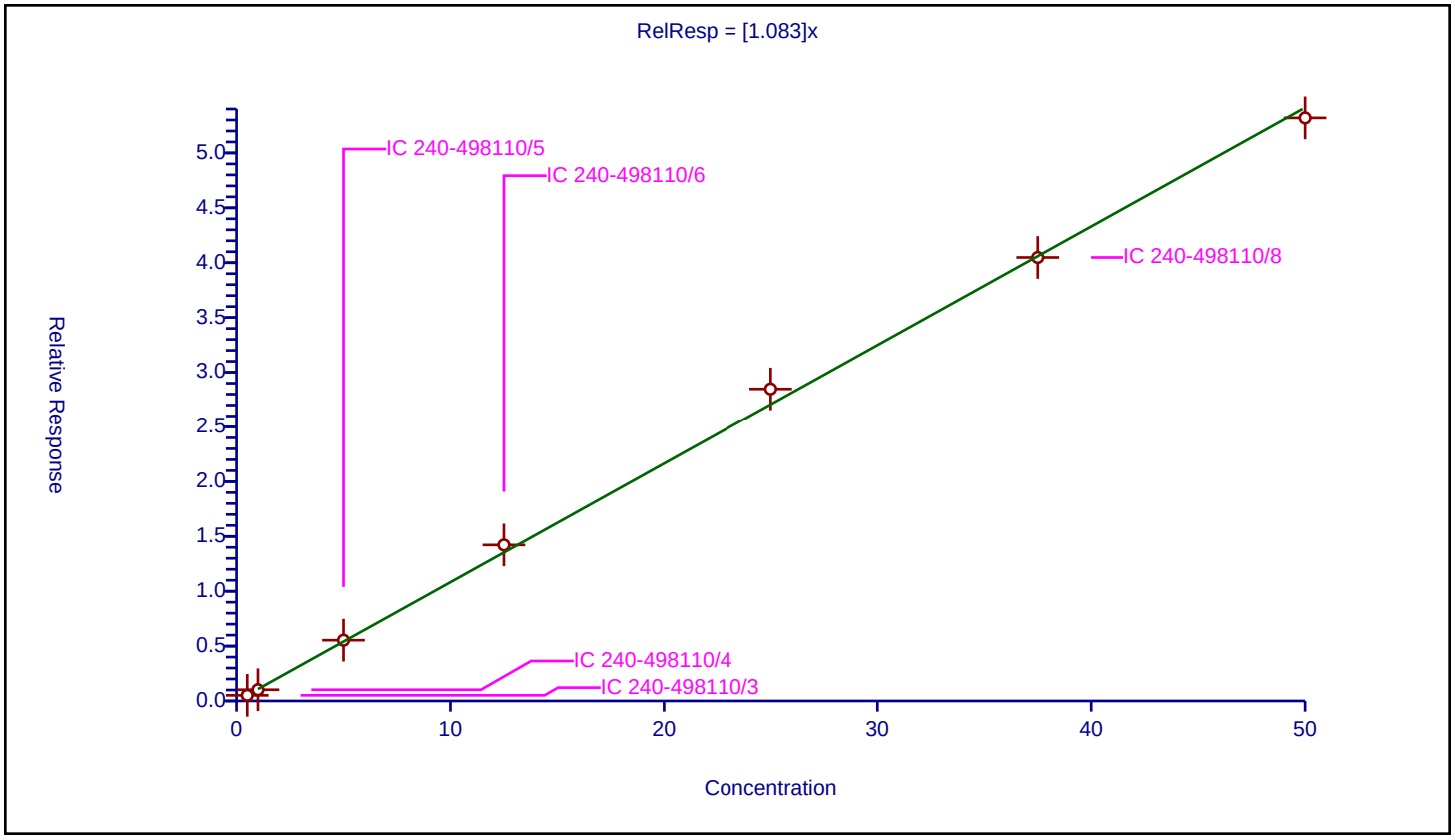
Curve Coefficients

Intercept:	0
Slope:	1.083

Error Coefficients

Standard Error:	488000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.513138	27.5	338057.0	1.026277	Y
2	IC 240-498110/4	1.0	1.02387	27.5	342961.0	1.02387	Y
3	IC 240-498110/5	5.0	5.537304	27.5	358121.0	1.107461	Y
4	IC 240-498110/6	12.5	14.220428	27.5	378073.0	1.137634	Y
5	ICIS 240-498110/7	25.0	28.479763	27.5	398650.0	1.139191	Y
6	IC 240-498110/8	37.5	40.477608	27.5	439634.0	1.079403	Y
7	IC 240-498110/9	50.0	53.191773	27.5	460780.0	1.063835	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

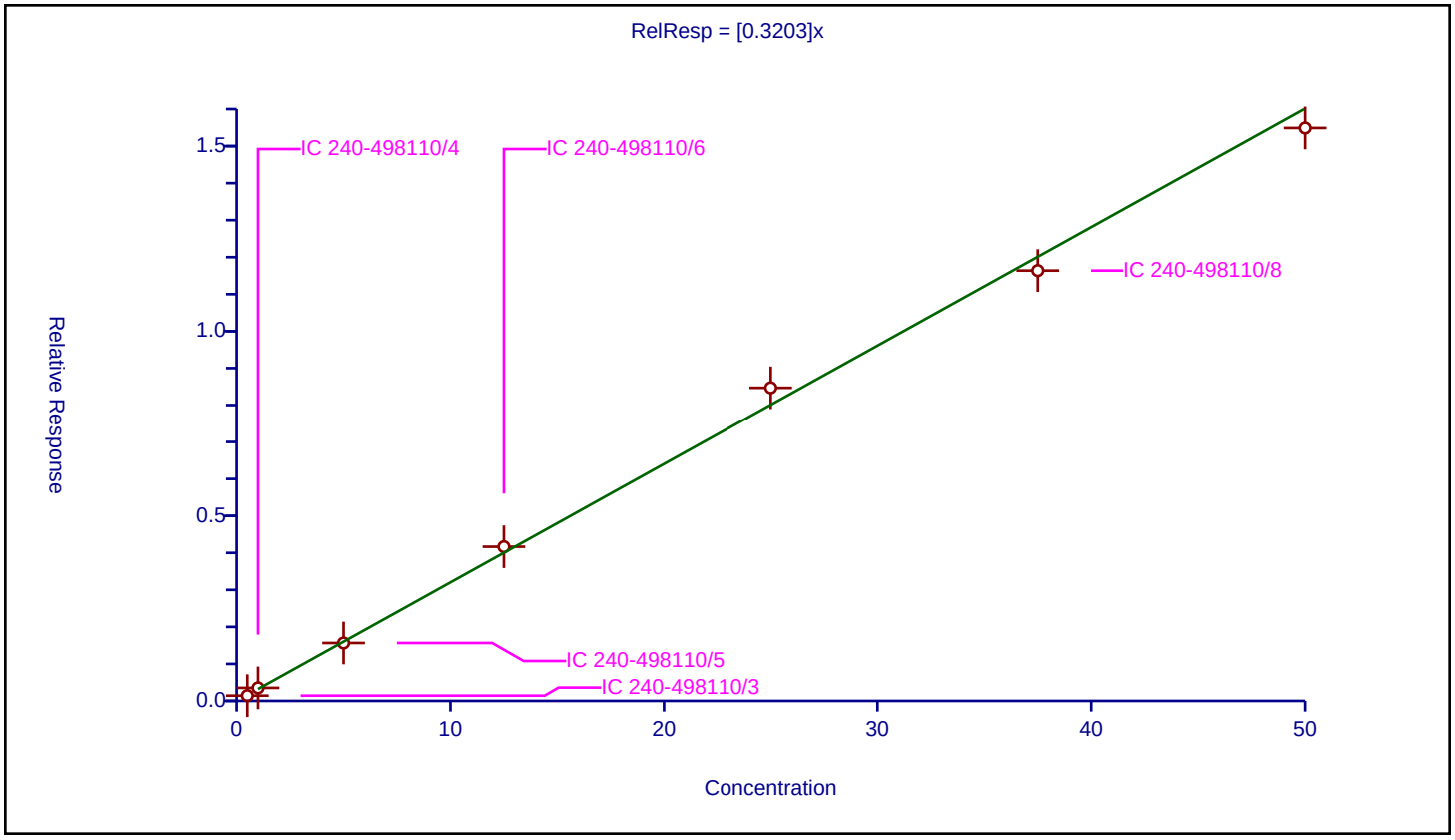
Curve Coefficients

Intercept:	0
Slope:	0.3203

Error Coefficients

Standard Error:	142000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.142195	27.5	338057.0	0.28439	Y
2	IC 240-498110/4	1.0	0.352249	27.5	342961.0	0.352249	Y
3	IC 240-498110/5	5.0	1.565588	27.5	358121.0	0.313118	Y
4	IC 240-498110/6	12.5	4.167337	27.5	378073.0	0.333387	Y
5	ICIS 240-498110/7	25.0	8.467848	27.5	398650.0	0.338714	Y
6	IC 240-498110/8	37.5	11.637368	27.5	439634.0	0.31033	Y
7	IC 240-498110/9	50.0	15.489594	27.5	460780.0	0.309792	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

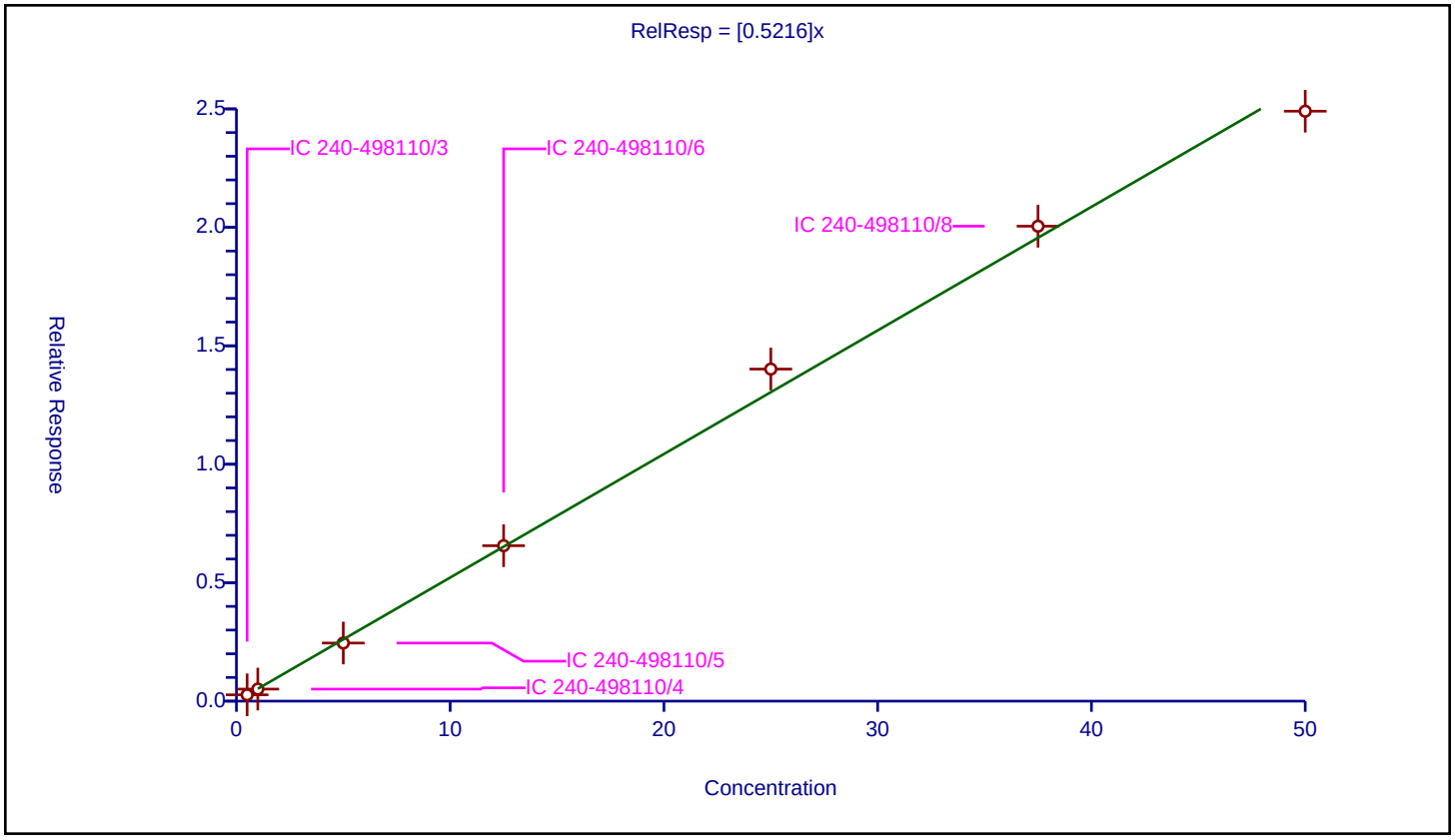
Curve Coefficients

Intercept:	0
Slope:	0.5216

Error Coefficients

Standard Error:	234000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.266738	27.5	338057.0	0.533475	Y
2	IC 240-498110/4	1.0	0.509169	27.5	342961.0	0.509169	Y
3	IC 240-498110/5	5.0	2.452739	27.5	358121.0	0.490548	Y
4	IC 240-498110/6	12.5	6.560975	27.5	378073.0	0.524878	Y
5	ICIS 240-498110/7	25.0	14.016688	27.5	398650.0	0.560668	Y
6	IC 240-498110/8	37.5	20.048552	27.5	439634.0	0.534628	Y
7	IC 240-498110/9	50.0	24.902904	27.5	460780.0	0.498058	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

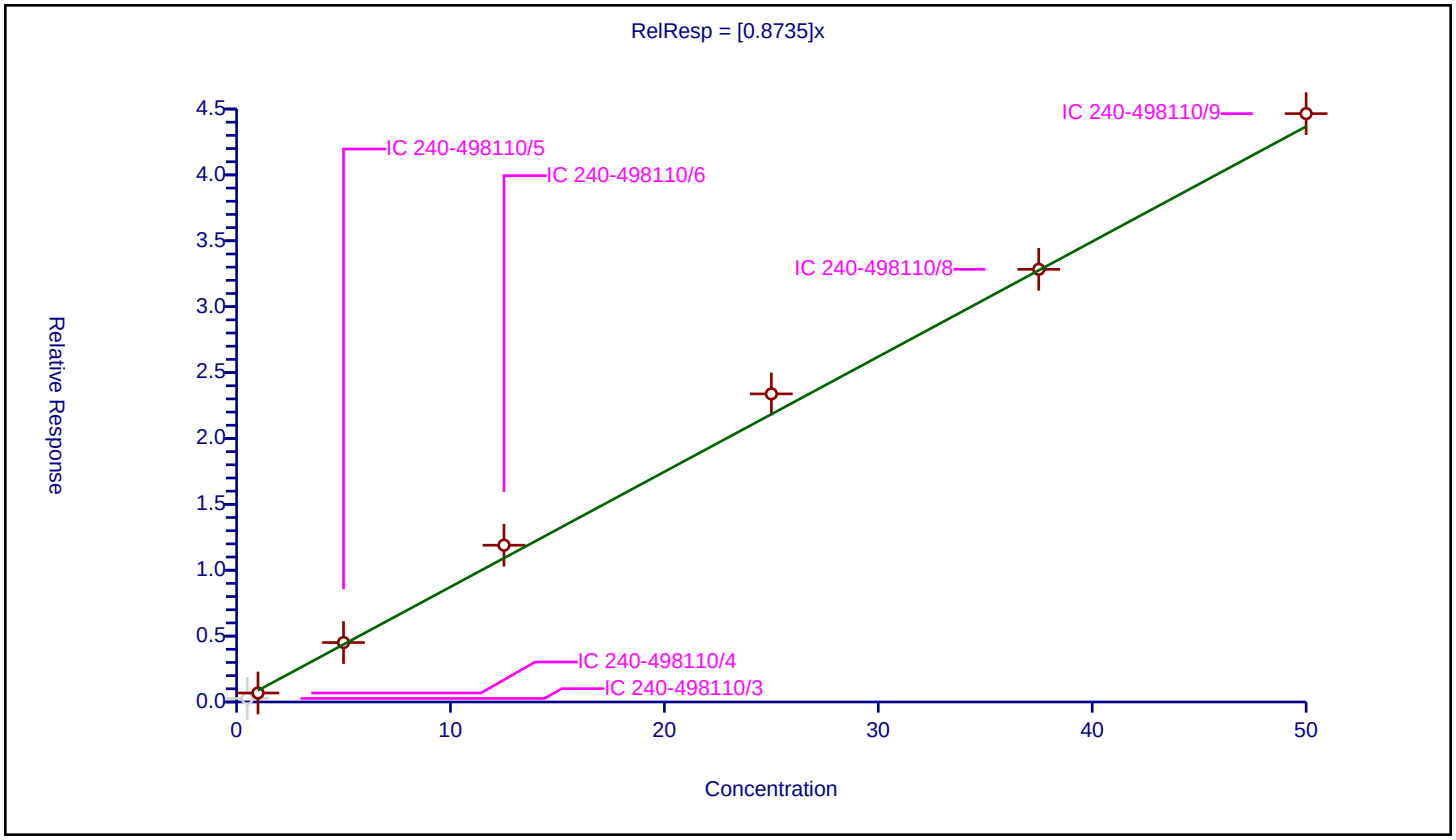
Curve Coefficients

Intercept:	0
Slope:	0.8735

Error Coefficients

Standard Error:	443000
Relative Standard Error:	11.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.270561	27.5	338057.0	0.541122	N
2	IC 240-498110/4	1.0	0.683088	27.5	342961.0	0.683088	Y
3	IC 240-498110/5	5.0	4.511394	27.5	358121.0	0.902279	Y
4	IC 240-498110/6	12.5	11.897345	27.5	378073.0	0.951788	Y
5	ICIS 240-498110/7	25.0	23.380898	27.5	398650.0	0.935236	Y
6	IC 240-498110/8	37.5	32.834437	27.5	439634.0	0.875585	Y
7	IC 240-498110/9	50.0	44.650826	27.5	460780.0	0.893017	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

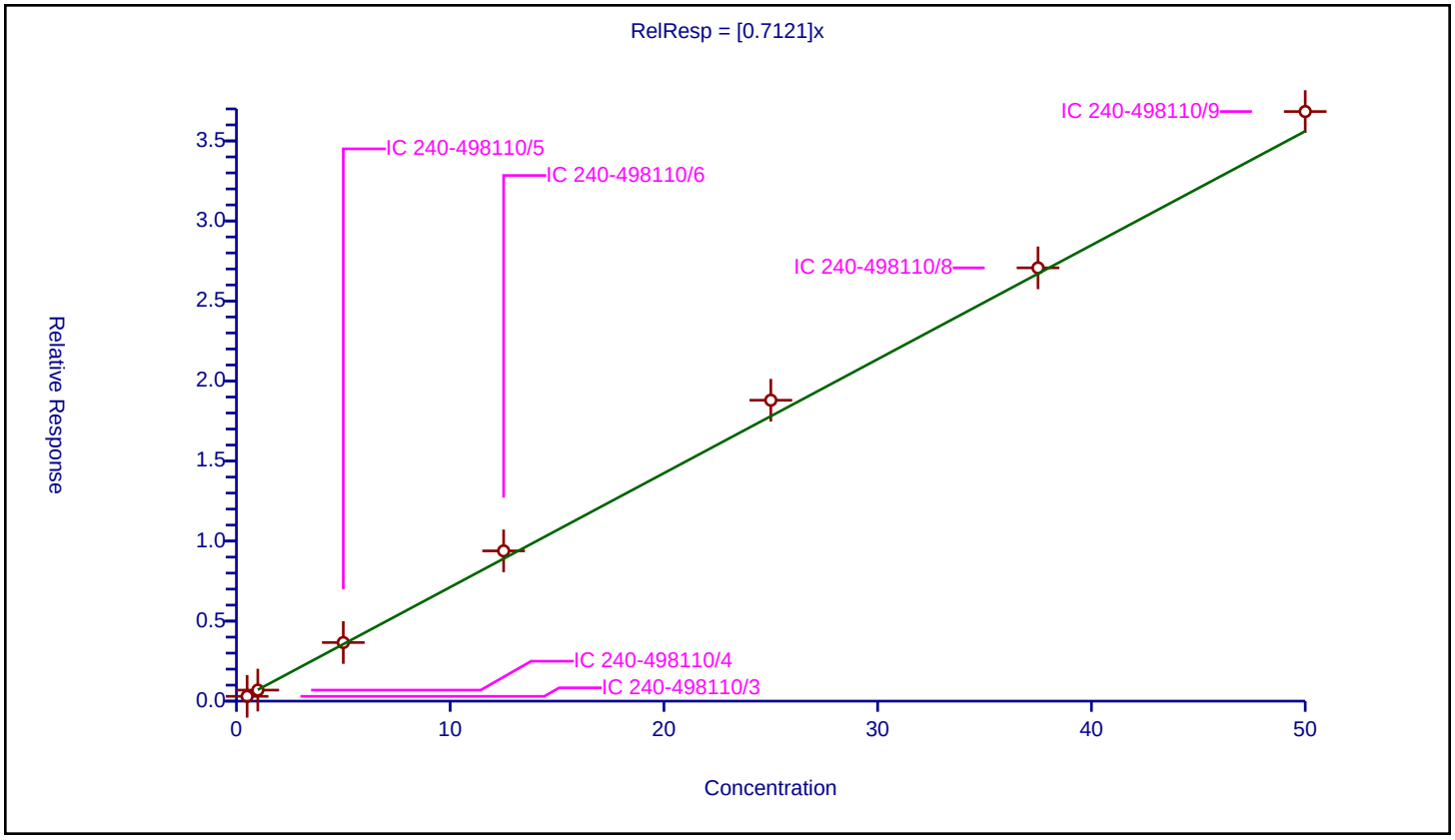
Curve Coefficients

Intercept:	0
Slope:	0.7121

Error Coefficients

Standard Error:	332000
Relative Standard Error:	7.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.300659	27.5	338057.0	0.601319	Y
2	IC 240-498110/4	1.0	0.689663	27.5	342961.0	0.689663	Y
3	IC 240-498110/5	5.0	3.660718	27.5	358121.0	0.732144	Y
4	IC 240-498110/6	12.5	9.387255	27.5	378073.0	0.75098	Y
5	ICIS 240-498110/7	25.0	18.799887	27.5	398650.0	0.751995	Y
6	IC 240-498110/8	37.5	27.069579	27.5	439634.0	0.721855	Y
7	IC 240-498110/9	50.0	36.835545	27.5	460780.0	0.736711	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

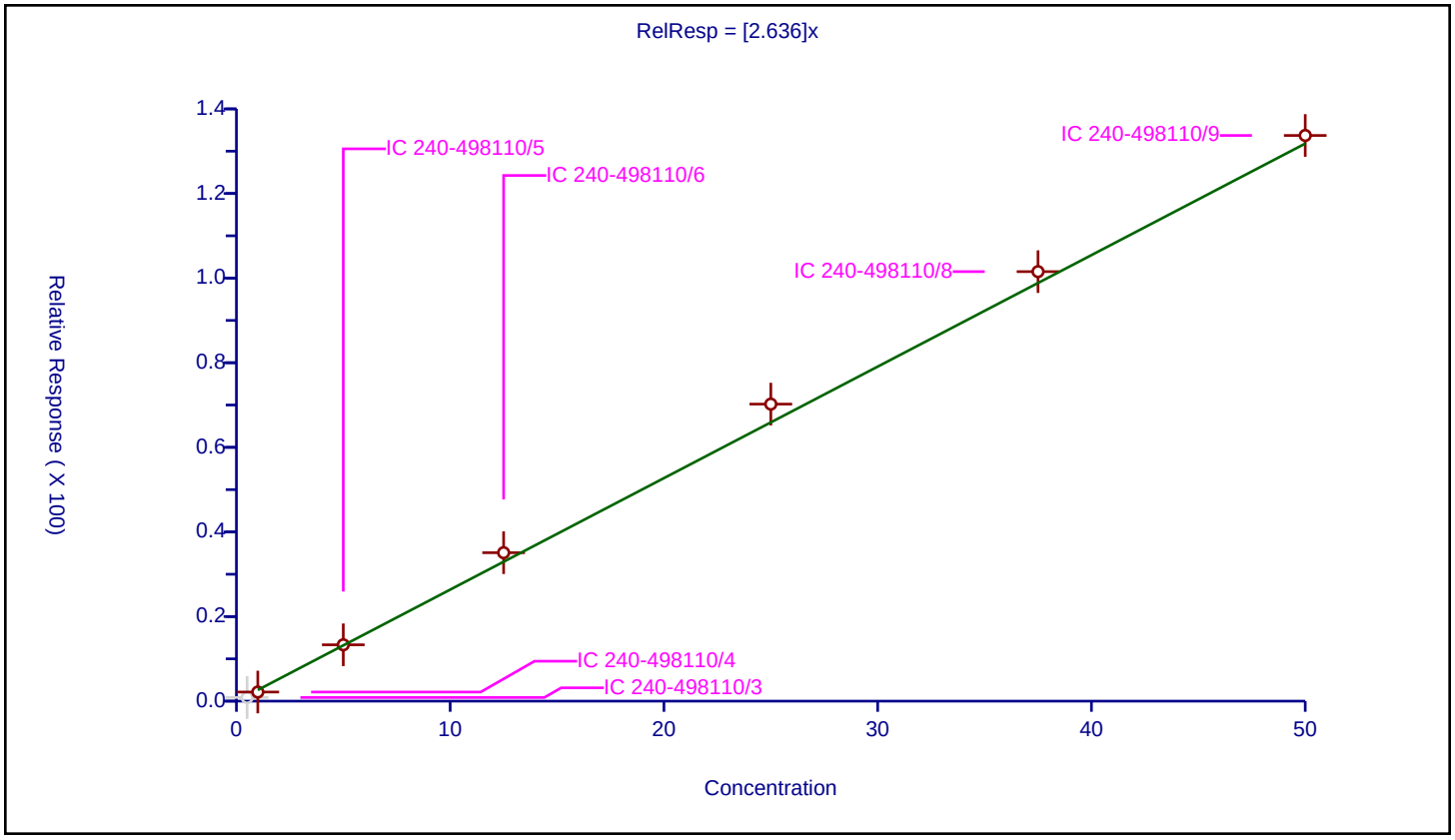
Curve Coefficients

Intercept:	0
Slope:	2.636

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	9.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.858945	27.5	338057.0	1.717891	N
2	IC 240-498110/4	1.0	2.153583	27.5	342961.0	2.153583	Y
3	IC 240-498110/5	5.0	13.320323	27.5	358121.0	2.664065	Y
4	IC 240-498110/6	12.5	35.089698	27.5	378073.0	2.807176	Y
5	ICIS 240-498110/7	25.0	70.21623	27.5	398650.0	2.808649	Y
6	IC 240-498110/8	37.5	101.531143	27.5	439634.0	2.707497	Y
7	IC 240-498110/9	50.0	133.718944	27.5	460780.0	2.674379	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

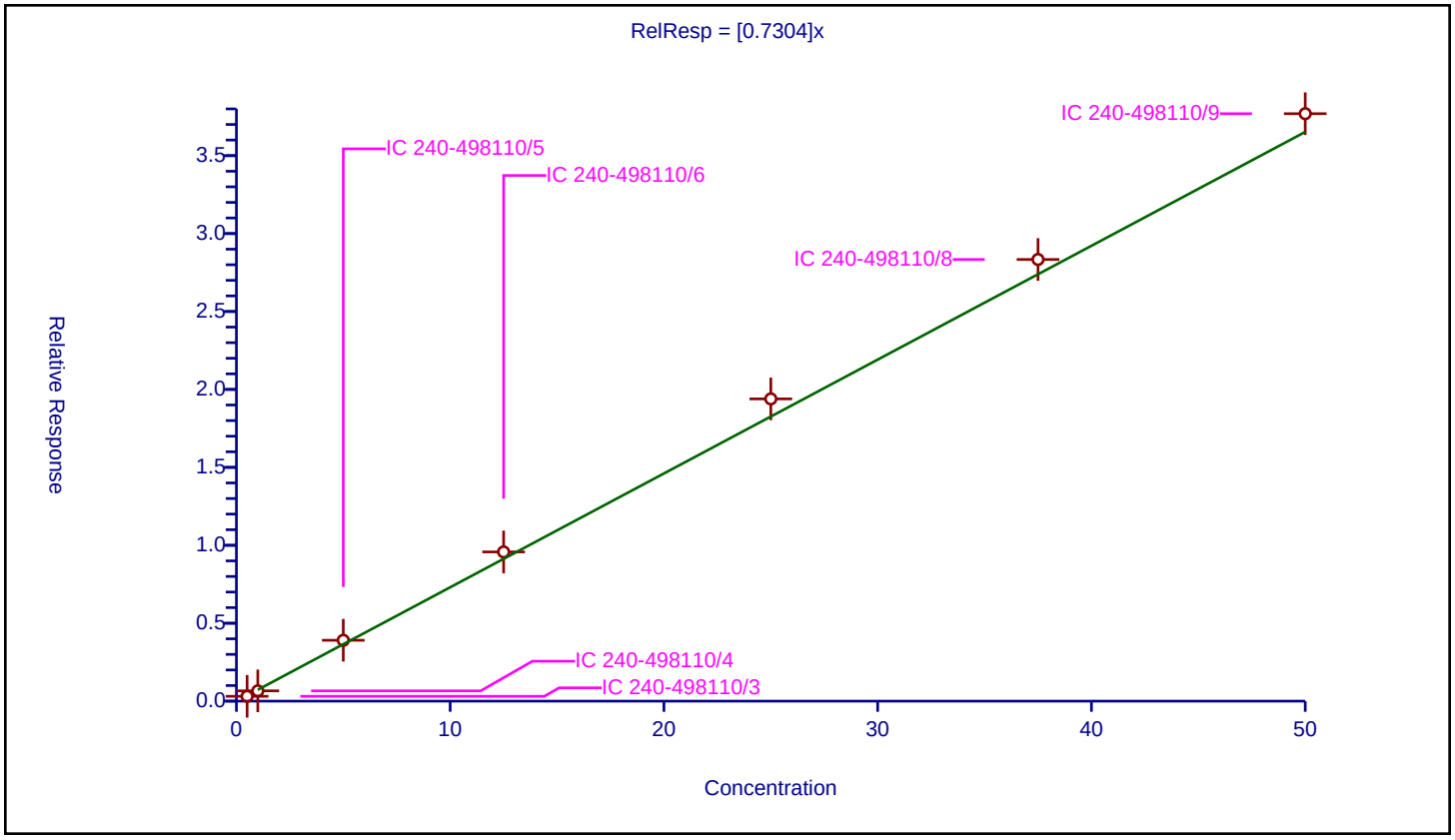
Curve Coefficients

Intercept:	0
Slope:	0.7304

Error Coefficients

Standard Error:	342000
Relative Standard Error:	8.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.309689	27.5	338057.0	0.619378	Y
2	IC 240-498110/4	1.0	0.660957	27.5	342961.0	0.660957	Y
3	IC 240-498110/5	5.0	3.906061	27.5	358121.0	0.781212	Y
4	IC 240-498110/6	12.5	9.573898	27.5	378073.0	0.765912	Y
5	ICIS 240-498110/7	25.0	19.393346	27.5	398650.0	0.775734	Y
6	IC 240-498110/8	37.5	28.337572	27.5	439634.0	0.755669	Y
7	IC 240-498110/9	50.0	37.692451	27.5	460780.0	0.753849	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

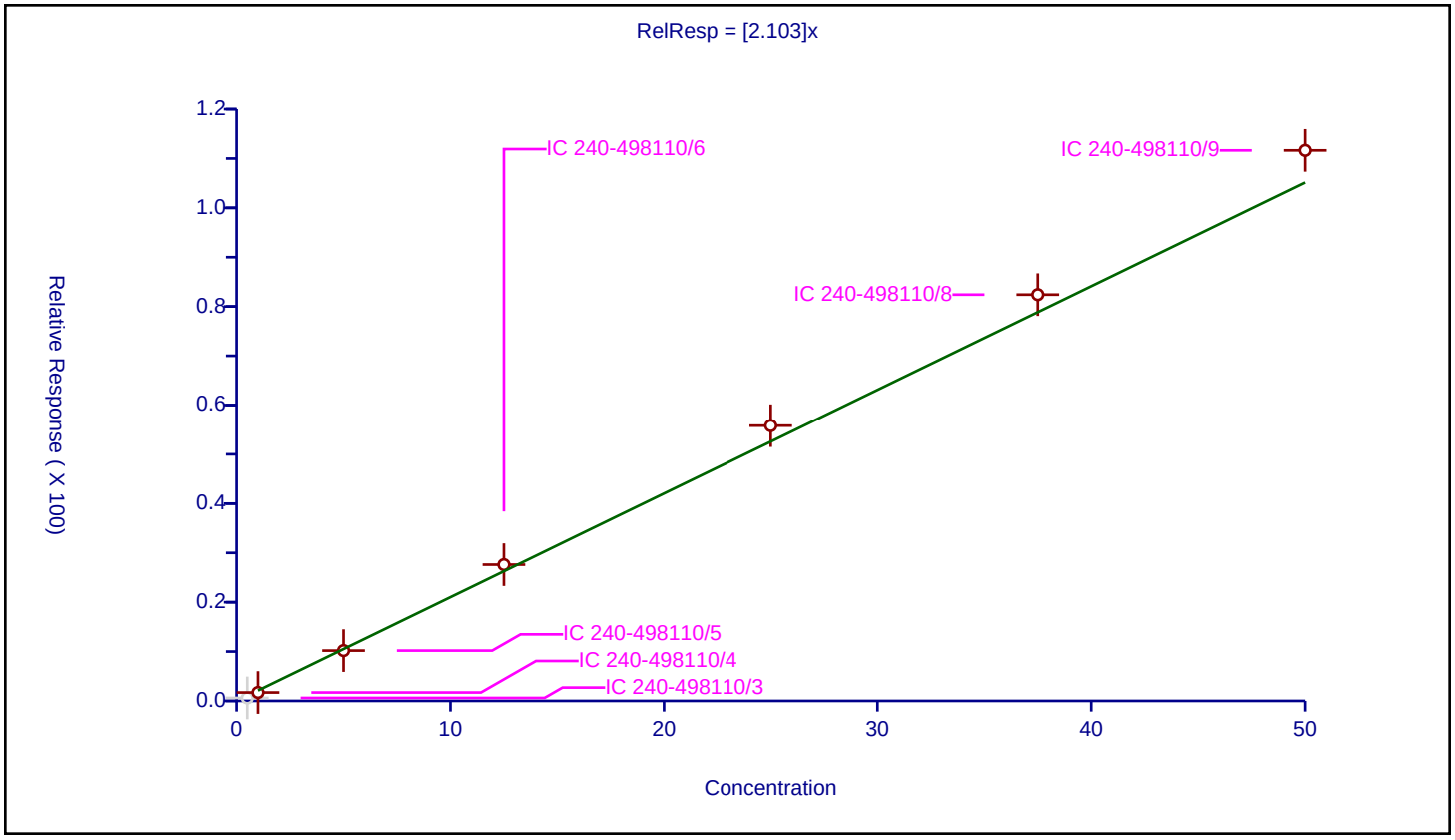
Curve Coefficients

Intercept:	0
Slope:	2.103

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	9.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.608721	27.5	338057.0	1.217443	N
2	IC 240-498110/4	1.0	1.70351	27.5	342961.0	1.70351	Y
3	IC 240-498110/5	5.0	10.19913	27.5	358121.0	2.039826	Y
4	IC 240-498110/6	12.5	27.620962	27.5	378073.0	2.209677	Y
5	ICIS 240-498110/7	25.0	55.813721	27.5	398650.0	2.232549	Y
6	IC 240-498110/8	37.5	82.402606	27.5	439634.0	2.197403	Y
7	IC 240-498110/9	50.0	111.646431	27.5	460780.0	2.232929	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

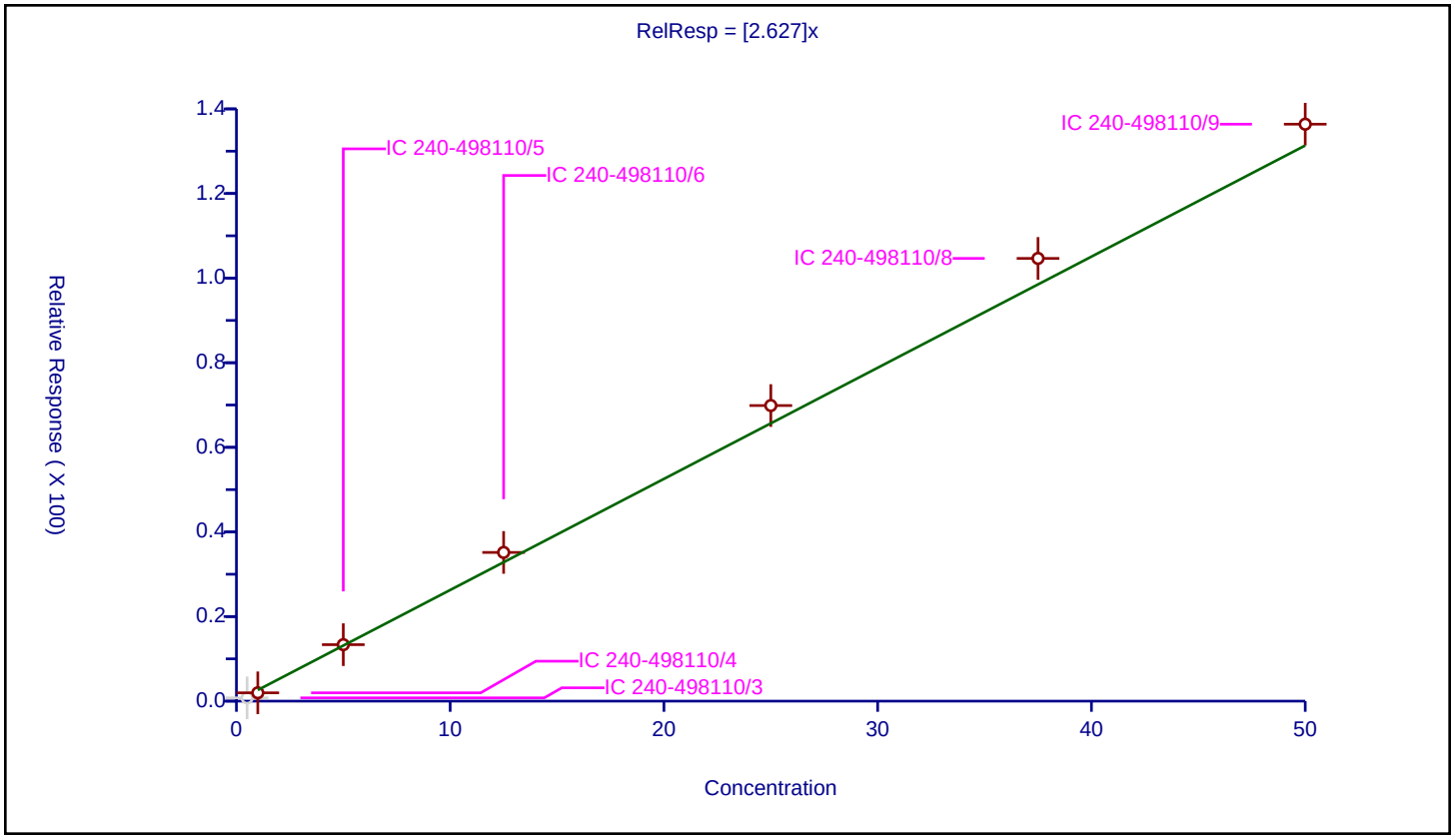
Curve Coefficients

Intercept:	0
Slope:	2.627

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	12.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.774995	27.5	338057.0	1.54999	N
2	IC 240-498110/4	1.0	1.965551	27.5	342961.0	1.965551	Y
3	IC 240-498110/5	5.0	13.349657	27.5	358121.0	2.669931	Y
4	IC 240-498110/6	12.5	35.150798	27.5	378073.0	2.812064	Y
5	ICIS 240-498110/7	25.0	69.87849	27.5	398650.0	2.79514	Y
6	IC 240-498110/8	37.5	104.655492	27.5	439634.0	2.790813	Y
7	IC 240-498110/9	50.0	136.383421	27.5	460780.0	2.727668	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

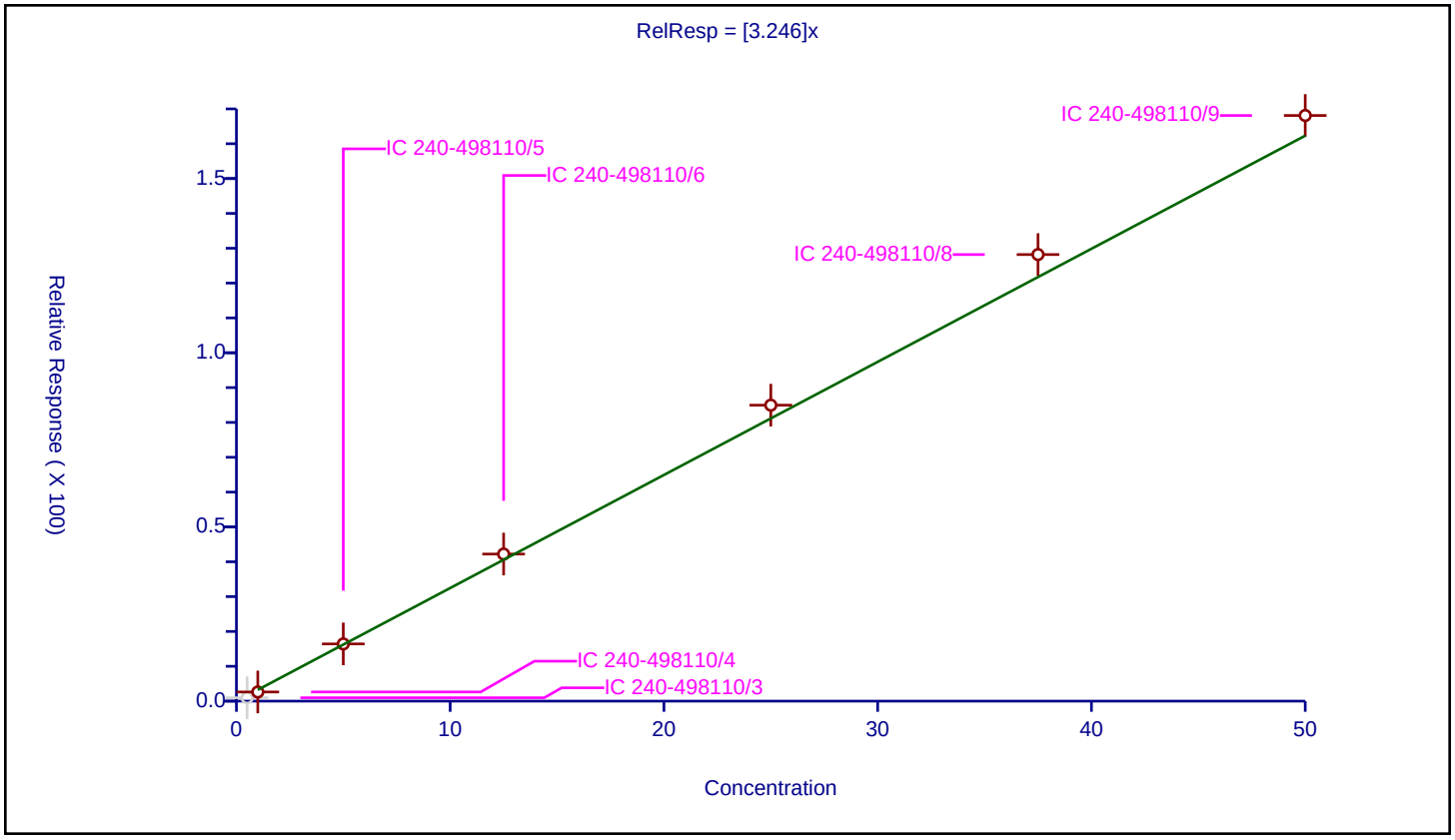
Curve Coefficients

Intercept:	0
Slope:	3.246

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	9.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.972587	27.5	338057.0	1.945175	N
2	IC 240-498110/4	1.0	2.63589	27.5	342961.0	2.63589	Y
3	IC 240-498110/5	5.0	16.424163	27.5	358121.0	3.284833	Y
4	IC 240-498110/6	12.5	42.218097	27.5	378073.0	3.377448	Y
5	ICIS 240-498110/7	25.0	84.954616	27.5	398650.0	3.398185	Y
6	IC 240-498110/8	37.5	128.191945	27.5	439634.0	3.418452	Y
7	IC 240-498110/9	50.0	168.101524	27.5	460780.0	3.36203	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

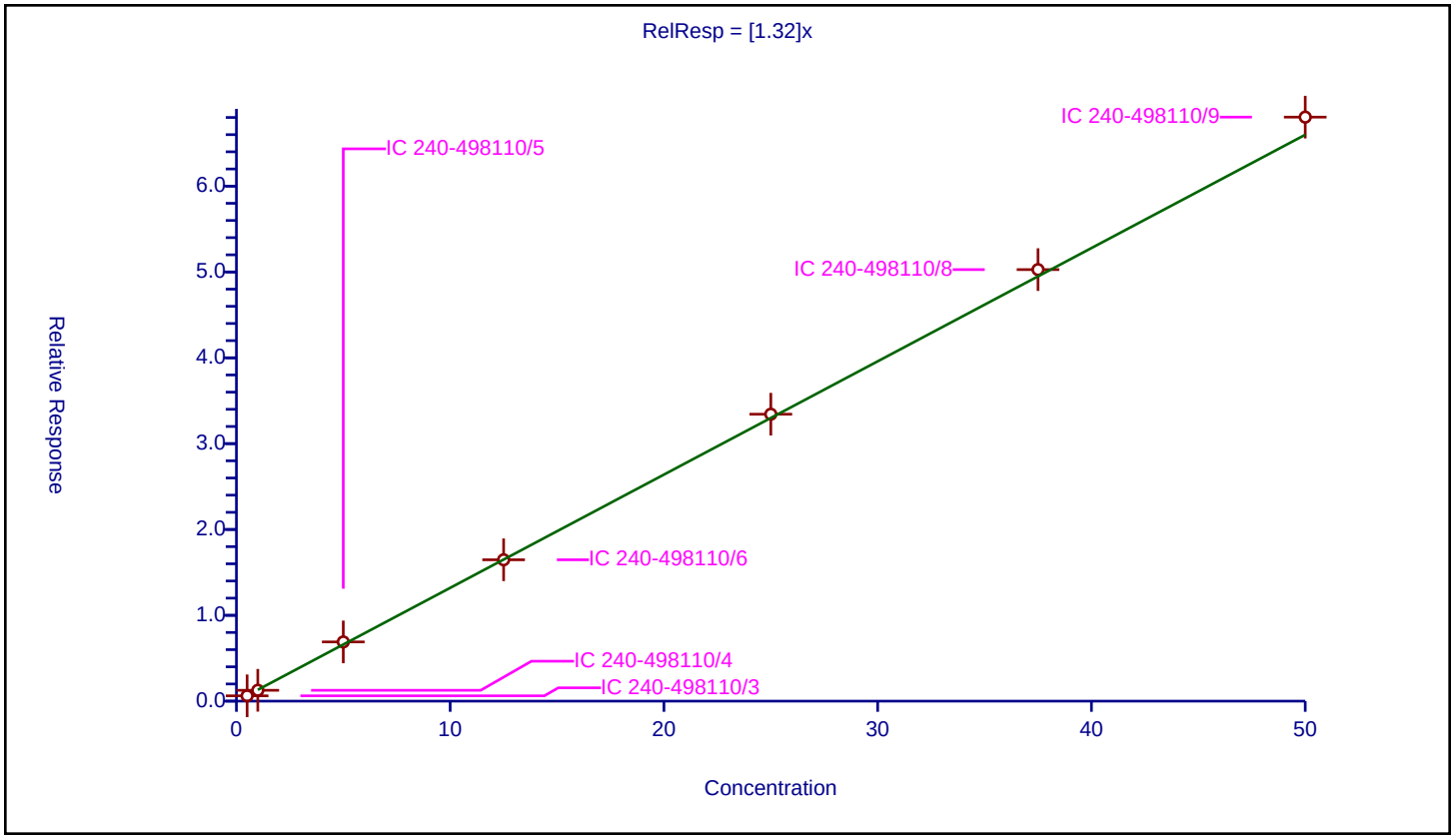
Curve Coefficients

Intercept:	0
Slope:	1.32

Error Coefficients

Standard Error:	611000
Relative Standard Error:	3.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.619134	27.5	338057.0	1.238268	Y
2	IC 240-498110/4	1.0	1.26346	27.5	342961.0	1.26346	Y
3	IC 240-498110/5	5.0	6.898632	27.5	358121.0	1.379726	Y
4	IC 240-498110/6	12.5	16.467937	27.5	378073.0	1.317435	Y
5	ICIS 240-498110/7	25.0	33.430315	27.5	398650.0	1.337213	Y
6	IC 240-498110/8	37.5	50.277822	27.5	439634.0	1.340742	Y
7	IC 240-498110/9	50.0	68.041999	27.5	460780.0	1.36084	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

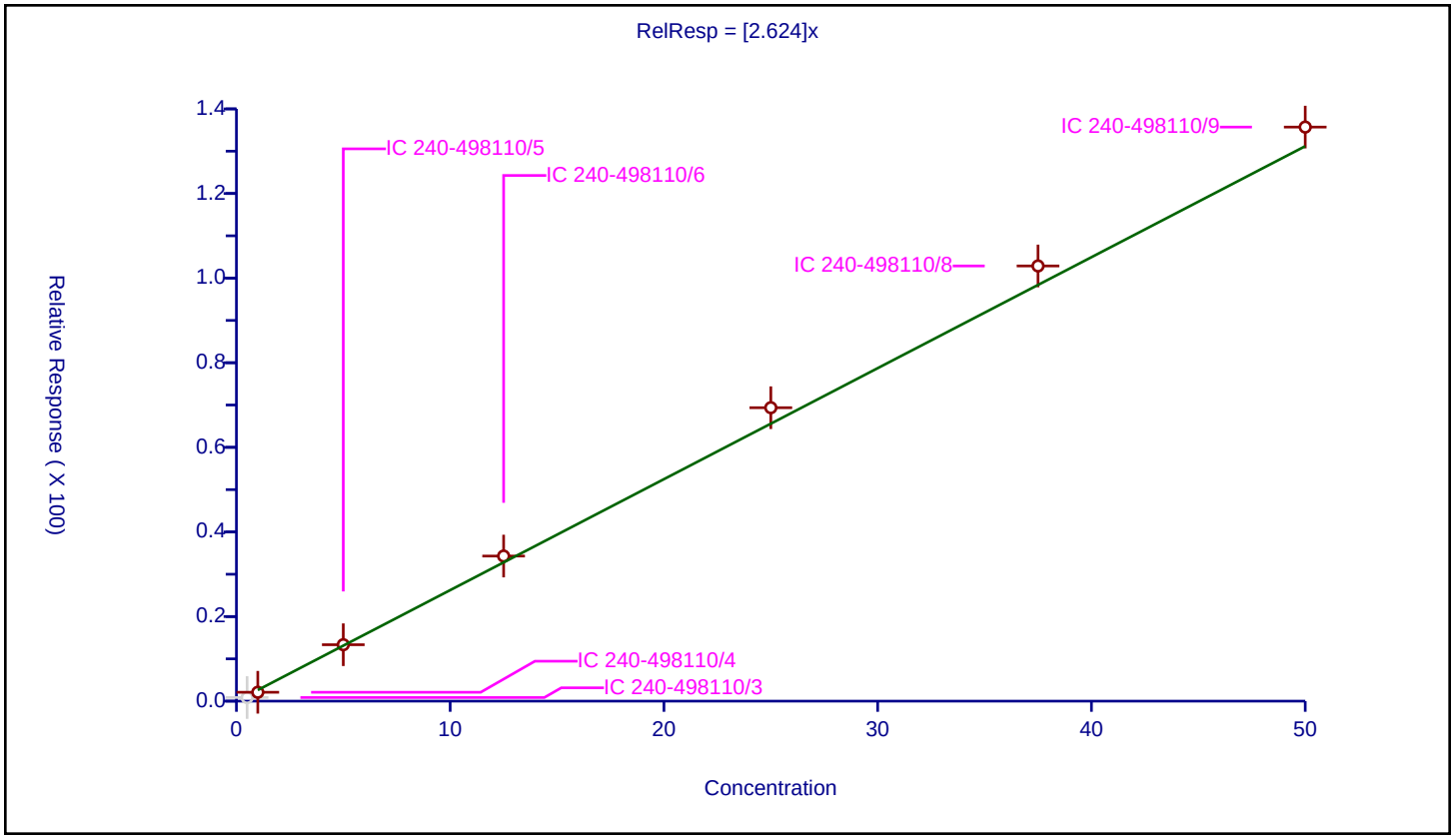
Curve Coefficients

Intercept:	0
Slope:	2.624

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	9.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.851217	27.5	338057.0	1.702435	N
2	IC 240-498110/4	1.0	2.098256	27.5	342961.0	2.098256	Y
3	IC 240-498110/5	5.0	13.338446	27.5	358121.0	2.667689	Y
4	IC 240-498110/6	12.5	34.295771	27.5	378073.0	2.743662	Y
5	ICIS 240-498110/7	25.0	69.368017	27.5	398650.0	2.774721	Y
6	IC 240-498110/8	37.5	102.870194	27.5	439634.0	2.743205	Y
7	IC 240-498110/9	50.0	135.702873	27.5	460780.0	2.714057	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

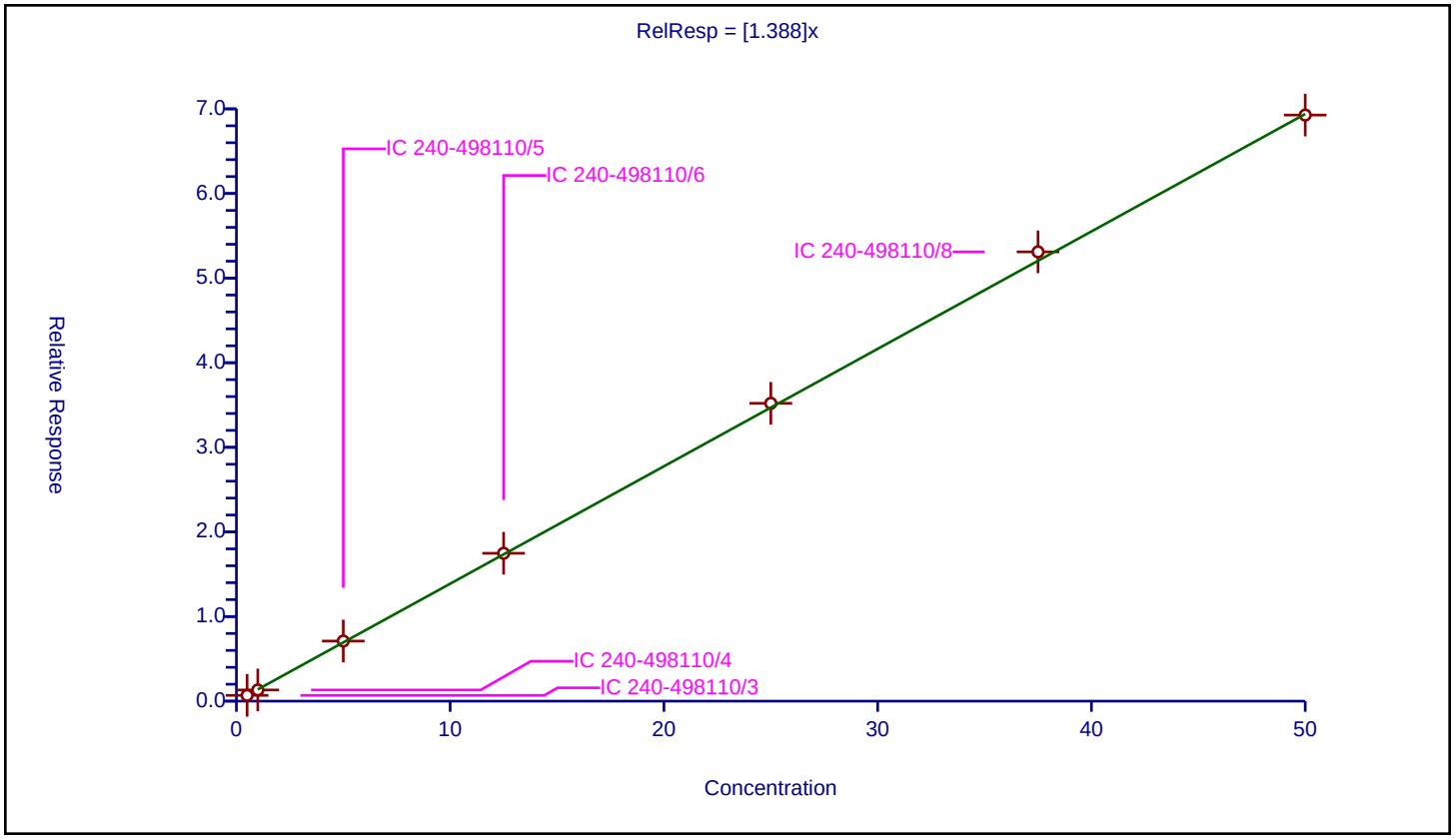
Curve Coefficients

Intercept:	0
Slope:	1.388

Error Coefficients

Standard Error:	632000
Relative Standard Error:	2.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.682585	27.5	338057.0	1.365169	Y
2	IC 240-498110/4	1.0	1.321834	27.5	342961.0	1.321834	Y
3	IC 240-498110/5	5.0	7.102585	27.5	358121.0	1.420517	Y
4	IC 240-498110/6	12.5	17.47644	27.5	378073.0	1.398115	Y
5	ICIS 240-498110/7	25.0	35.203725	27.5	398650.0	1.408149	Y
6	IC 240-498110/8	37.5	53.103172	27.5	439634.0	1.416085	Y
7	IC 240-498110/9	50.0	69.268691	27.5	460780.0	1.385374	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

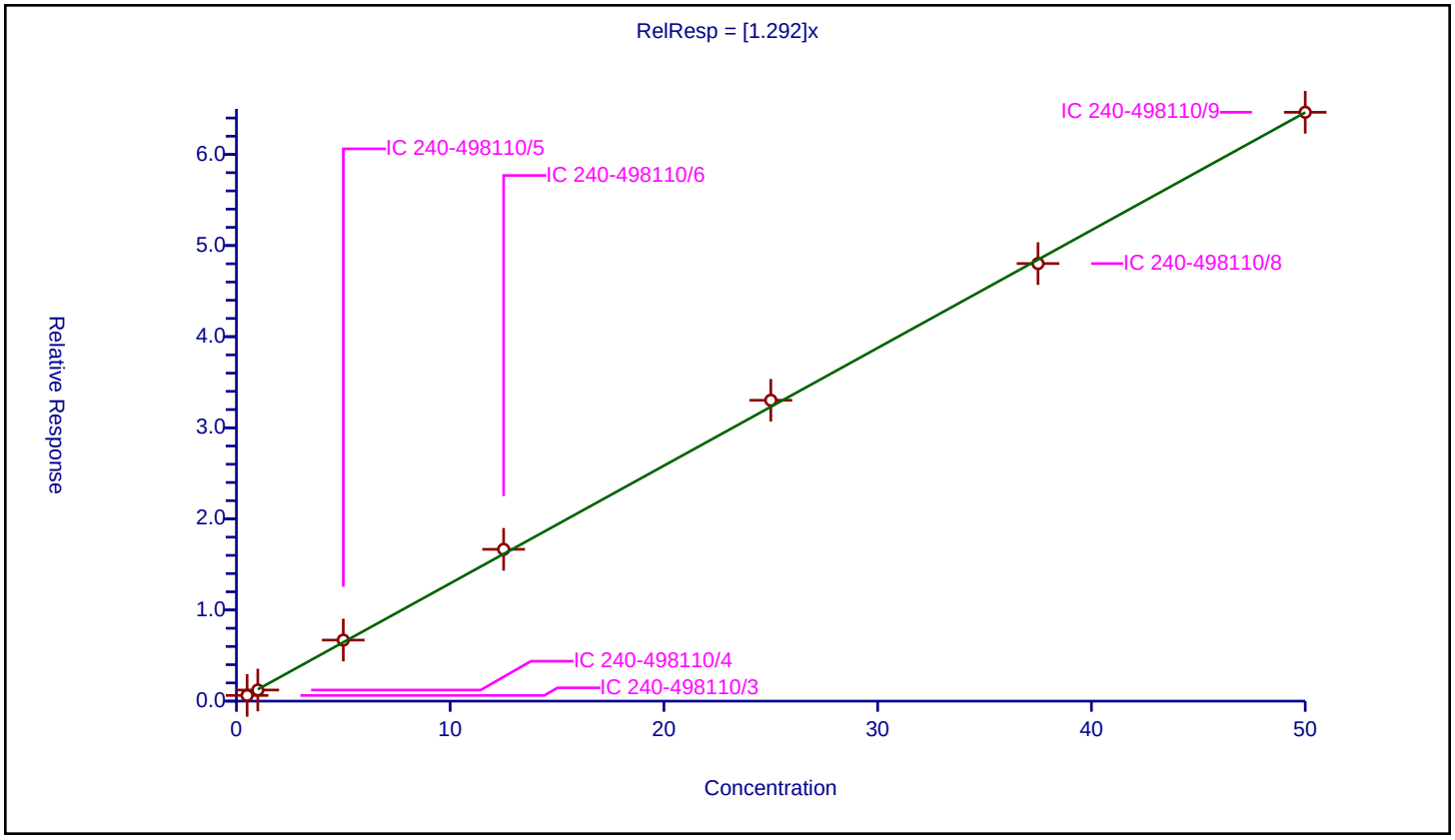
Curve Coefficients

Intercept:	0
Slope:	1.292

Error Coefficients

Standard Error:	585000
Relative Standard Error:	3.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.628163	27.5	338057.0	1.256327	Y
2	IC 240-498110/4	1.0	1.221524	27.5	342961.0	1.221524	Y
3	IC 240-498110/5	5.0	6.700438	27.5	358121.0	1.340088	Y
4	IC 240-498110/6	12.5	16.661928	27.5	378073.0	1.332954	Y
5	ICIS 240-498110/7	25.0	33.021661	27.5	398650.0	1.320866	Y
6	IC 240-498110/8	37.5	48.024197	27.5	439634.0	1.280645	Y
7	IC 240-498110/9	50.0	64.628641	27.5	460780.0	1.292573	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

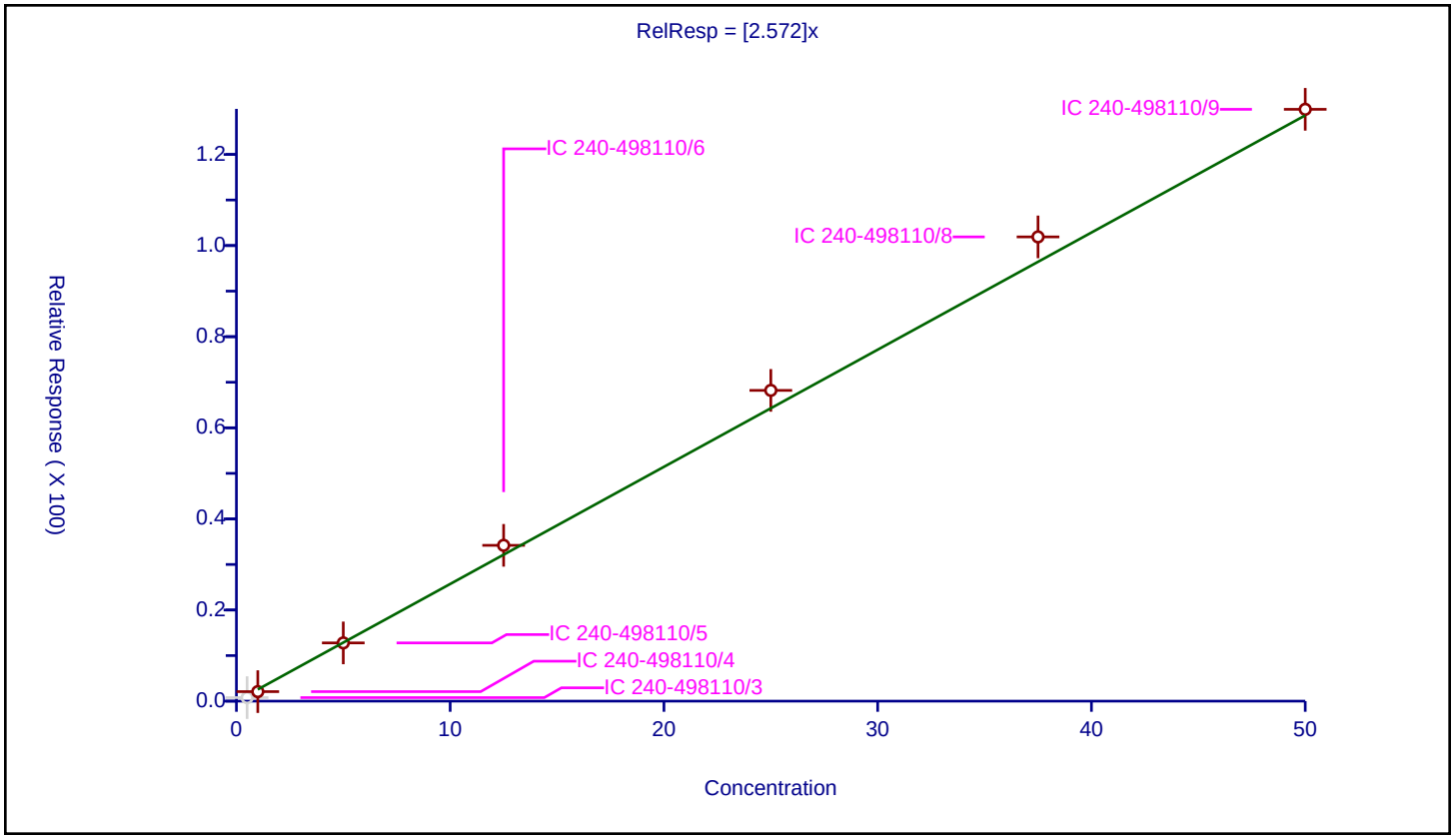
Curve Coefficients

Intercept:	0
Slope:	2.572

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	9.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.773775	27.5	338057.0	1.54755	N
2	IC 240-498110/4	1.0	2.092884	27.5	342961.0	2.092884	Y
3	IC 240-498110/5	5.0	12.781183	27.5	358121.0	2.556237	Y
4	IC 240-498110/6	12.5	34.199685	27.5	378073.0	2.735975	Y
5	ICIS 240-498110/7	25.0	68.21014	27.5	398650.0	2.728406	Y
6	IC 240-498110/8	37.5	101.900262	27.5	439634.0	2.71734	Y
7	IC 240-498110/9	50.0	129.909301	27.5	460780.0	2.598186	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

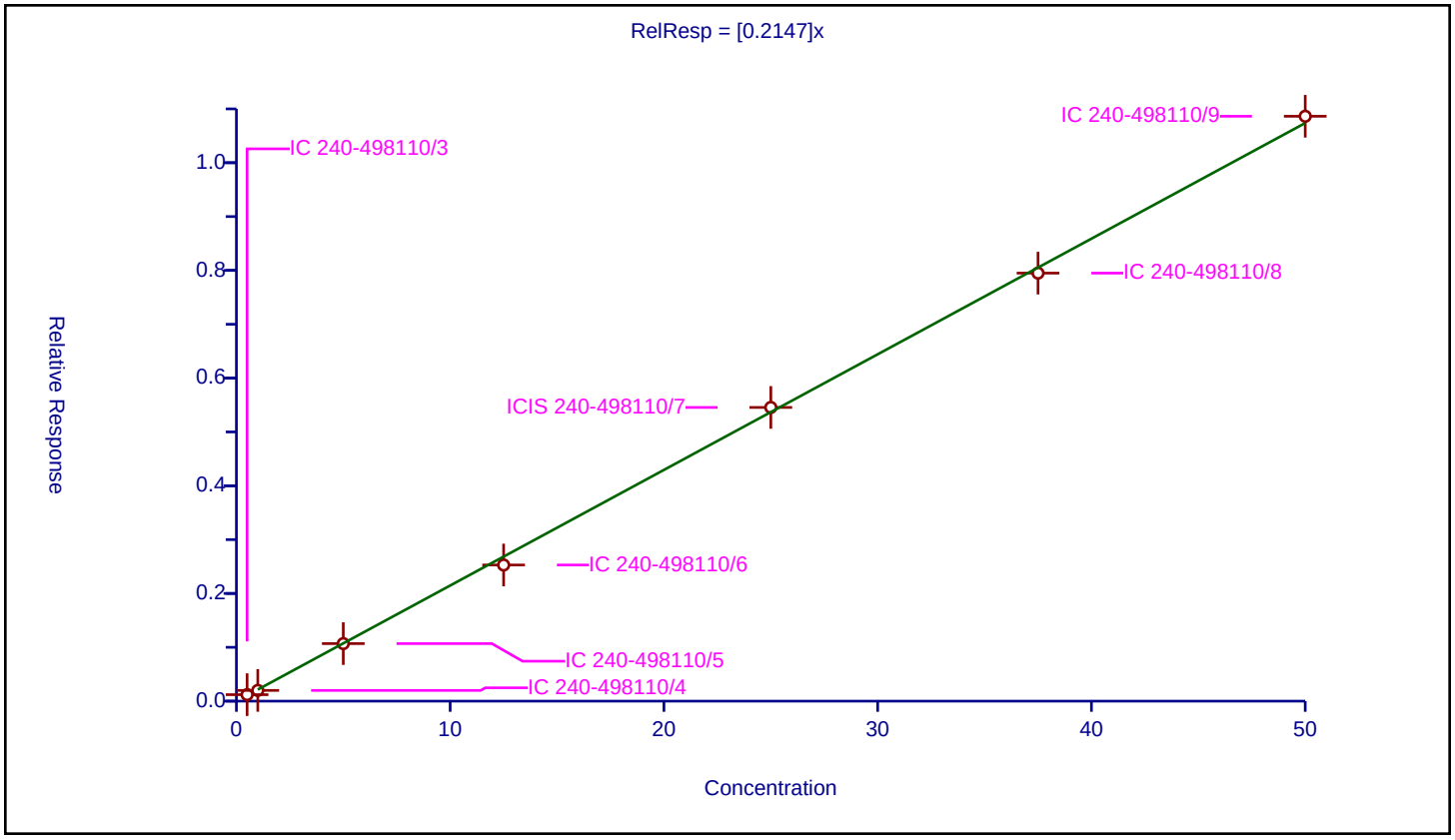
Curve Coefficients

Intercept:	0
Slope:	0.2147

Error Coefficients

Standard Error:	97400
Relative Standard Error:	6.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.120231	27.5	338057.0	0.240462	Y
2	IC 240-498110/4	1.0	0.199177	27.5	342961.0	0.199177	Y
3	IC 240-498110/5	5.0	1.068912	27.5	358121.0	0.213782	Y
4	IC 240-498110/6	12.5	2.52842	27.5	378073.0	0.202274	Y
5	ICIS 240-498110/7	25.0	5.45523	27.5	398650.0	0.218209	Y
6	IC 240-498110/8	37.5	7.949675	27.5	439634.0	0.211991	Y
7	IC 240-498110/9	50.0	10.863091	27.5	460780.0	0.217262	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

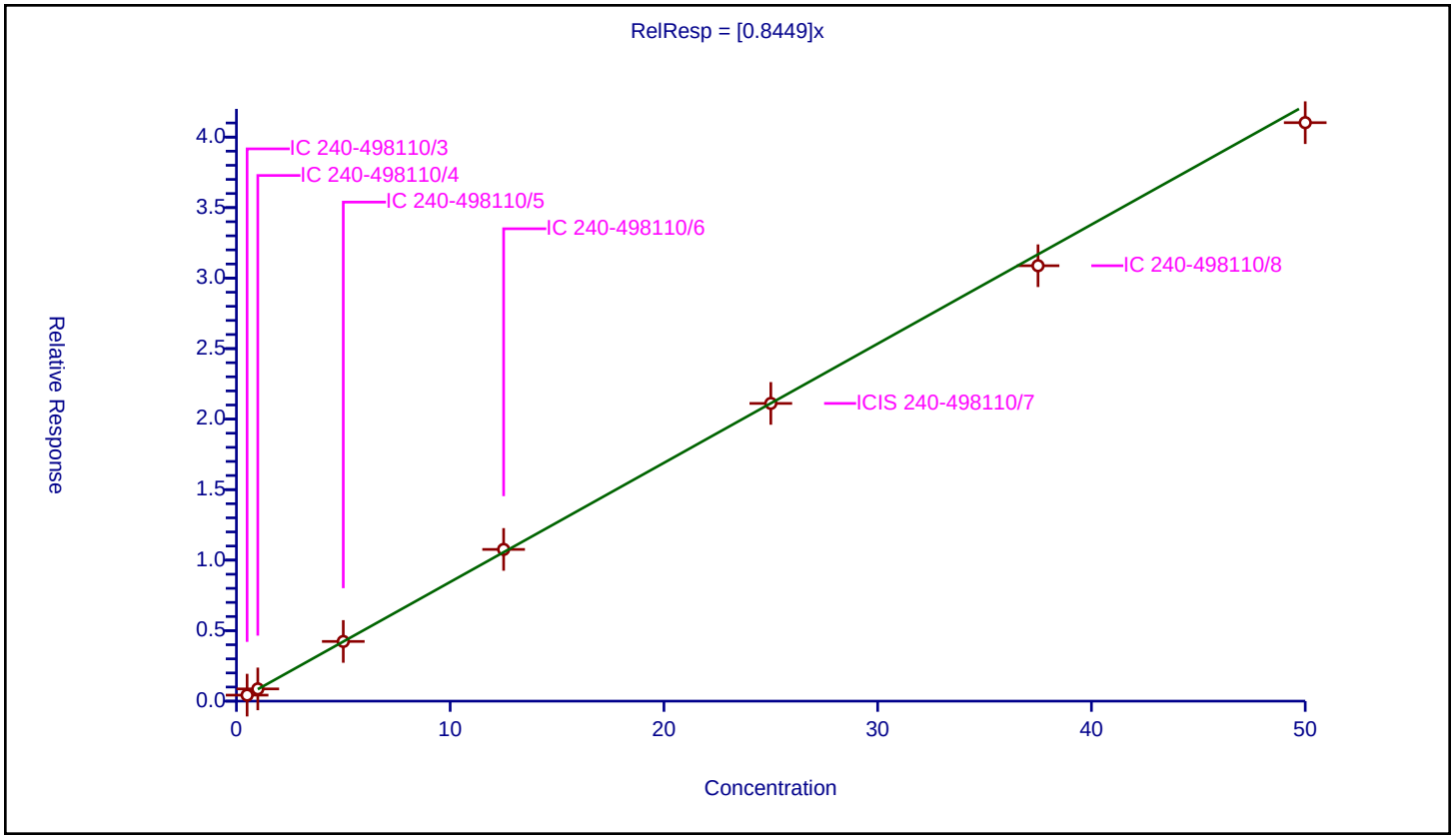
Curve Coefficients

Intercept:	0
Slope:	0.8449

Error Coefficients

Standard Error:	373000
Relative Standard Error:	2.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.425527	27.5	338057.0	0.851055	Y
2	IC 240-498110/4	1.0	0.867351	27.5	342961.0	0.867351	Y
3	IC 240-498110/5	5.0	4.233416	27.5	358121.0	0.846683	Y
4	IC 240-498110/6	12.5	10.760316	27.5	378073.0	0.860825	Y
5	ICIS 240-498110/7	25.0	21.113847	27.5	398650.0	0.844554	Y
6	IC 240-498110/8	37.5	30.877872	27.5	439634.0	0.82341	Y
7	IC 240-498110/9	50.0	41.023628	27.5	460780.0	0.820473	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

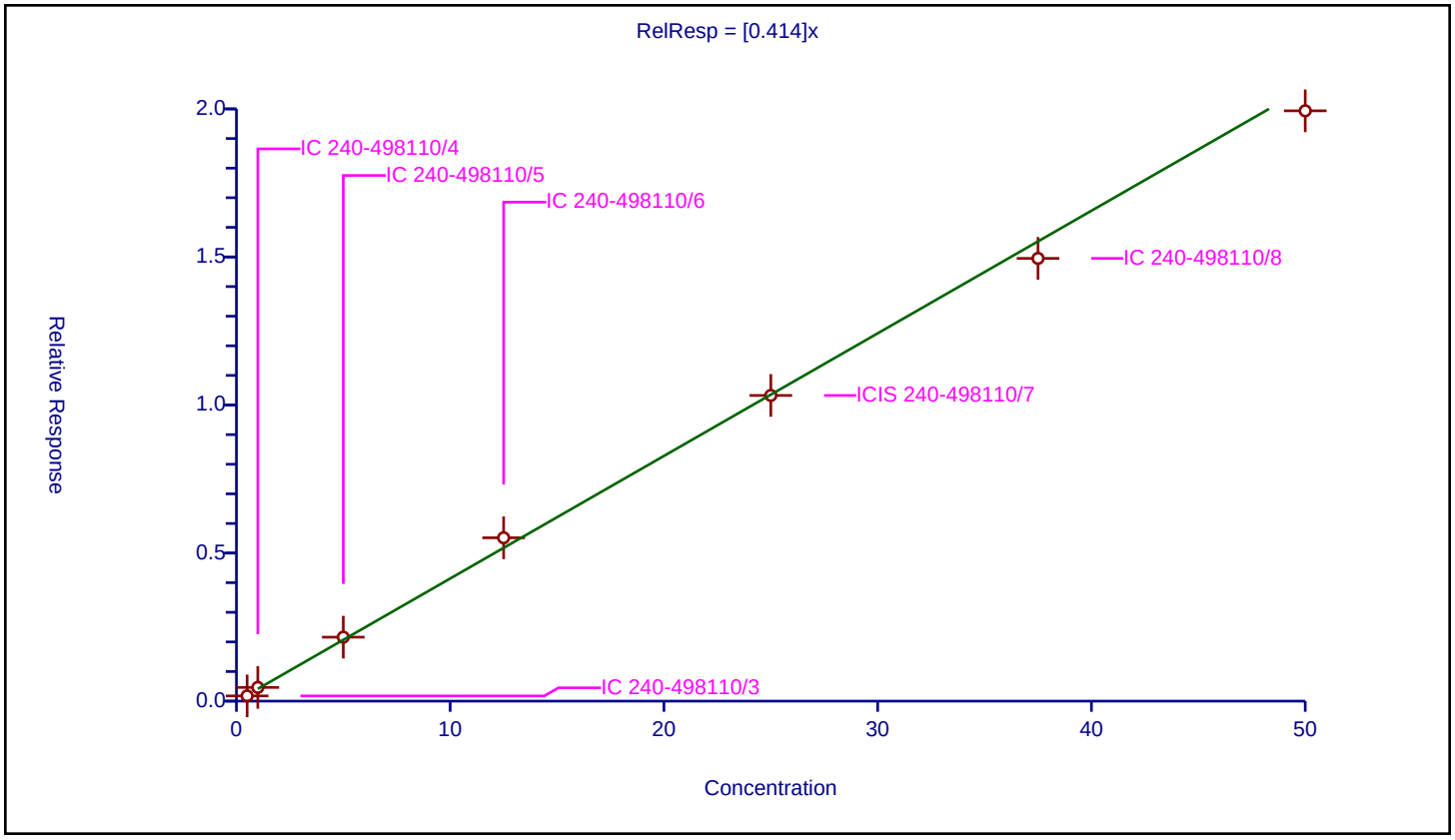
Curve Coefficients

Intercept:	0
Slope:	0.414

Error Coefficients

Standard Error:	182000
Relative Standard Error:	8.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.17571	27.5	338057.0	0.35142	Y
2	IC 240-498110/4	1.0	0.462983	27.5	342961.0	0.462983	Y
3	IC 240-498110/5	5.0	2.160017	27.5	358121.0	0.432003	Y
4	IC 240-498110/6	12.5	5.516759	27.5	378073.0	0.441341	Y
5	ICIS 240-498110/7	25.0	10.323417	27.5	398650.0	0.412937	Y
6	IC 240-498110/8	37.5	14.951437	27.5	439634.0	0.398705	Y
7	IC 240-498110/9	50.0	19.934844	27.5	460780.0	0.398697	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

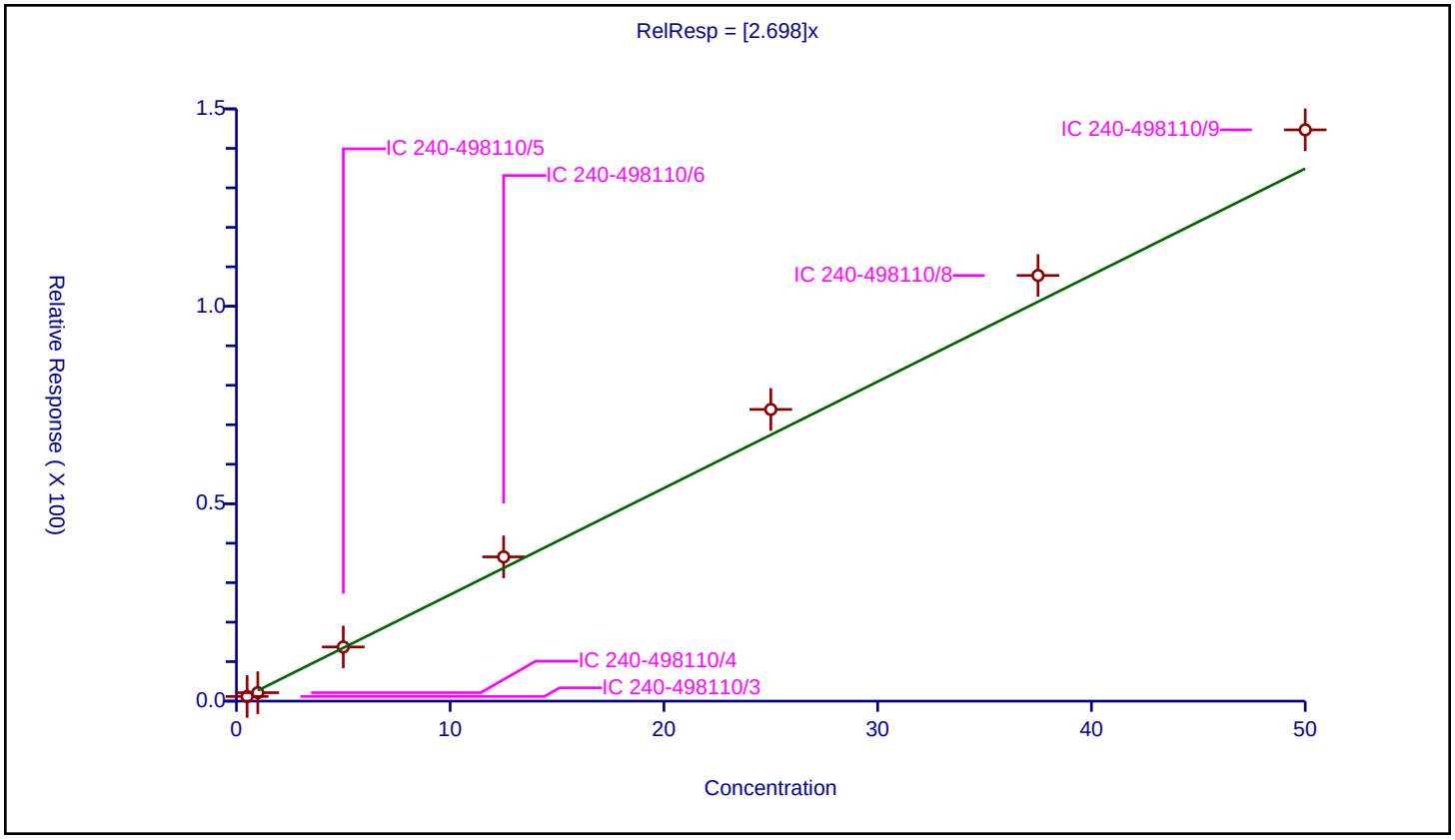
Curve Coefficients

Intercept:	0
Slope:	2.698

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	11.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	1.175142	27.5	338057.0	2.350284	Y
2	IC 240-498110/4	1.0	2.140112	27.5	342961.0	2.140112	Y
3	IC 240-498110/5	5.0	13.725696	27.5	358121.0	2.745139	Y
4	IC 240-498110/6	12.5	36.538989	27.5	378073.0	2.923119	Y
5	ICIS 240-498110/7	25.0	73.878597	27.5	398650.0	2.955144	Y
6	IC 240-498110/8	37.5	107.81487	27.5	439634.0	2.875063	Y
7	IC 240-498110/9	50.0	144.690118	27.5	460780.0	2.893802	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

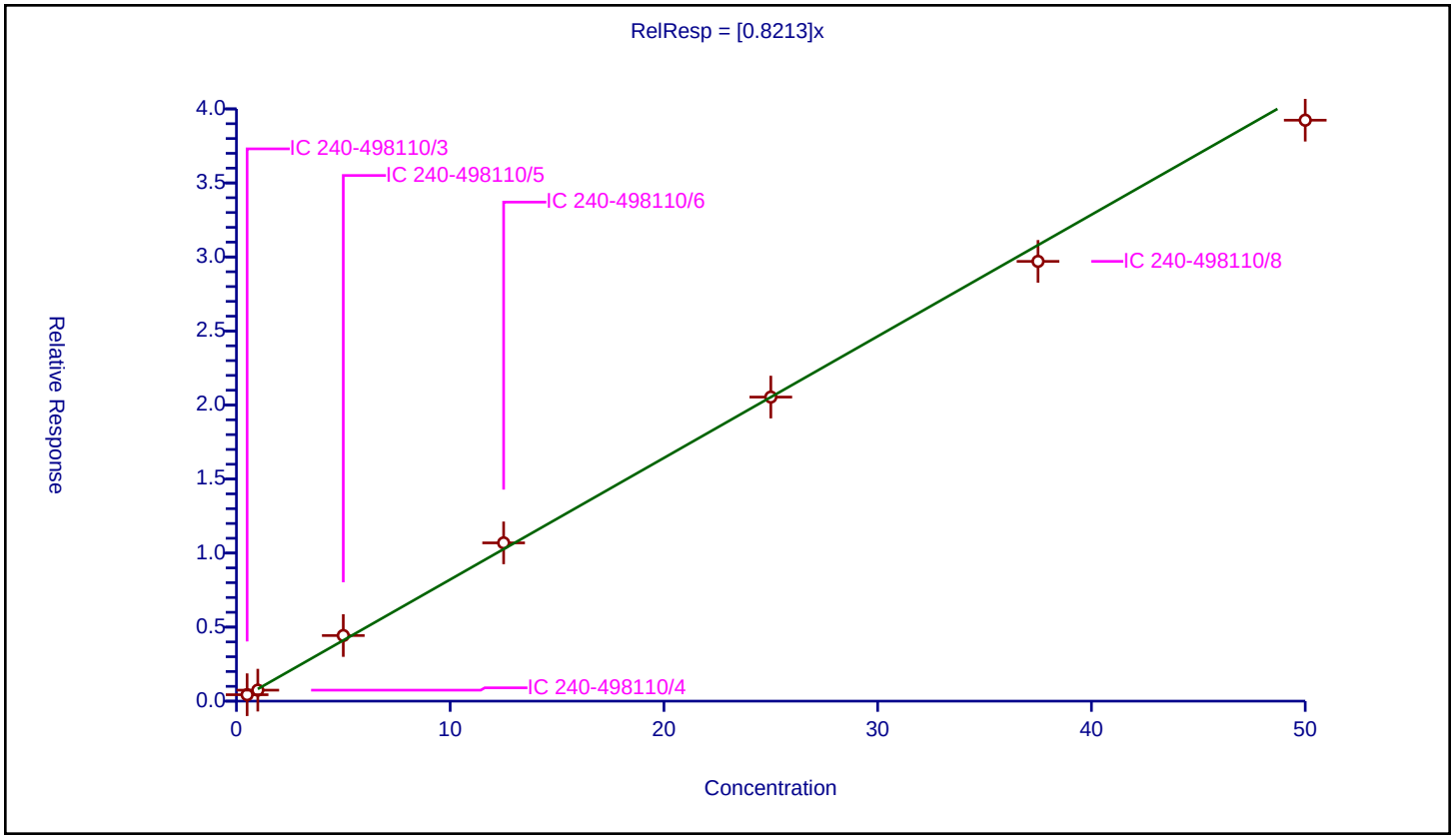
Curve Coefficients

Intercept:	0
Slope:	0.8213

Error Coefficients

Standard Error:	359000
Relative Standard Error:	6.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-498110/3	0.5	0.43415	27.5	338057.0	0.8683	Y
2	IC 240-498110/4	1.0	0.741382	27.5	342961.0	0.741382	Y
3	IC 240-498110/5	5.0	4.430765	27.5	358121.0	0.886153	Y
4	IC 240-498110/6	12.5	10.690125	27.5	378073.0	0.85521	Y
5	ICIS 240-498110/7	25.0	20.536943	27.5	398650.0	0.821478	Y
6	IC 240-498110/8	37.5	29.700831	27.5	439634.0	0.792022	Y
7	IC 240-498110/9	50.0	39.236469	27.5	460780.0	0.784729	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-515735/3	231301.D
Level 2	IC 240-515735/4	231302.D
Level 3	IC 240-515735/5	231303.D
Level 4	IC 240-515735/6	231304.D
Level 5	ICIS 240-515735/7	231305.D
Level 6	IC 240-515735/8	231306.D
Level 7	IC 240-515735/9	231307.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2420	0.2447 0.2334	0.2808	0.2684	0.2590	Ave		0.2547				7.0		15.0			
Chloromethane	0.6323 0.5333	0.6965 0.5077	0.6522	0.5917	0.5540	Ave		0.5954			0.1000	11.5		15.0			
Vinyl chloride	0.2853 0.3577	0.4202 0.3414	0.4121	0.3821	0.3733	Ave		0.3675				12.4		15.0			
Butadiene	0.4333 0.4884	0.5591 0.4685	0.5606	0.5474	0.5222	Ave		0.5113				9.6		15.0			
Bromomethane	0.1613 0.1323	0.1877 +++++	0.1835	0.1670	0.1458	Ave		0.1629				13.1		15.0			
Chloroethane	0.1717 0.1524	0.2136 +++++	0.1997	0.1864	0.1722	Ave		0.1827				12.0		15.0			
Dichlorofluoromethane	0.4252 0.3720	0.4794 0.3486	0.4687	0.4349	0.3965	Ave		0.4179				11.6		15.0			
Trichlorofluoromethane	+++++ 0.3532	0.3824 0.3318	0.4077	0.4032	0.3788	Ave		0.3762				7.8		15.0			
Ethyl ether	0.4150 0.3886	0.3554 0.3802	0.3824	0.4263	0.3828	Ave		0.3901				6.1		15.0			
Acrolein	0.0537 0.0517	0.0487 0.0476	0.0492	0.0509	0.0524	Ave		0.0506				4.4		15.0			
1,1-Dichloroethene	0.1796 0.2333	0.2215 0.2207	0.2392	0.2447	0.2309	Ave		0.2243				9.6		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1344 0.1649	0.1878 0.1604	0.1786	0.1723	0.1686	Ave		0.1667				10.1		15.0			
Acetone	0.1138 0.0524	0.0841 0.0488	0.0563	0.0533	0.0537	Lin1	0.0658	0.0502							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Iodomethane	0.3166 0.3375	0.3370 0.3366	0.3663	0.3622	0.3430	Ave		0.3427				4.9		15.0			
Carbon disulfide	+++++ 0.6975	0.5847 0.6973	0.6668	0.6785	0.6893	Ave		0.6690				6.4		15.0			
3-Chloro-1-propene	0.6066 0.6779	0.5132 0.6564	0.5994	0.6839	0.6868	Ave		0.6320				10.1		15.0			
Methyl acetate	0.4543 0.4715	0.4321 0.4443	0.4394	0.4765	0.4700	Ave		0.4554				3.8		15.0			
Methylene Chloride	+++++ 0.2681	0.3566 0.2566	0.2951	0.2949	0.2742	Ave		0.2909				12.2		15.0			
2-Methyl-2-propanol	0.0474 0.0451	0.0393 0.0419	0.0440	0.0478	0.0491	Ave		0.0450				7.8		15.0			
Acrylonitrile	0.2238 0.2547	0.2228 0.2365	0.2282	0.2571	0.2533	Ave		0.2395				6.4		15.0			
trans-1,2-Dichloroethene	0.2844 0.3166	0.2854 0.3061	0.3153	0.3231	0.3144	Ave		0.3065				5.1		15.0			
Methyl tert-butyl ether	0.7443 0.7831	0.6857 0.7745	0.7144	0.7940	0.7692	Ave		0.7522				5.3		15.0			
Hexane	+++++ 0.6052	0.5606 0.6062	0.5672	0.6132	0.6255	Ave		0.5963				4.4		15.0			
1,1-Dichloroethane	0.6484 0.6895	0.6351 0.6753	0.6933	0.7237	0.7063	Ave		0.6817			0.1000	4.6		15.0			
Vinyl acetate	0.7478 0.9321	0.7385 0.8323	0.7922	0.8961	1.0240	Ave		0.8518				12.3		15.0			
2,2-Dichloropropane	0.0432 0.0577	0.0653 0.0539	0.0591	0.0606	0.0572	Ave		0.0567				12.2		15.0			
cis-1,2-Dichloroethene	0.3375 0.3265	0.3024 0.3234	0.3152	0.3409	0.3303	Ave		0.3252				4.1		15.0			
2-Butanone (MEK)	0.0602 0.0496	0.0532 0.0461	0.0511	0.0491	0.0487	Ave		0.0511				8.9		15.0			
Chlorobromomethane	0.1381 0.1573	0.1483 0.1538	0.1611	0.1667	0.1607	Ave		0.1551				6.1		15.0			
Tetrahydrofuran	0.1658 0.1919	0.1847 0.1820	0.1699	0.1888	0.1912	Ave		0.1820				5.7		15.0			
Chloroform	0.5040 0.4829	0.4511 0.4720	0.4697	0.5079	0.4906	Ave		0.4826				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	0.2801 0.3543	0.3045 0.3501	0.3334	0.3689	0.3568	Ave		0.3354				9.6		15.0			
Cyclohexane	+++++ 0.7205	0.6213 0.7057	0.7011	0.7638	0.7564	Ave		0.7115				7.2		15.0			
1,1-Dichloropropene	0.2672 0.3954	0.3409 0.3915	0.3813	0.3994	0.4028	Ave		0.3684				13.4		15.0			
Carbon tetrachloride	0.2089 0.3137	0.2630 0.3059	0.2831	0.3197	0.3103	Ave		0.2864				13.8		15.0			
Benzene	1.1208 1.2211	1.1134 1.2129	1.1719	1.2619	1.2600	Ave		1.1946				5.1		15.0			
1,2-Dichloroethane	0.4768 0.4813	0.4892 0.4831	0.4830	0.5095	0.4955	Ave		0.4883				2.3		15.0			
Isobutyl alcohol	0.0169 0.0203	0.0166 0.0181	0.0197	0.0213	0.0213	Ave		0.0192				10.3		15.0			
n-Heptane	0.0575 0.0678	0.0686 0.0693	0.0678	0.0682	0.0698	Ave		0.0670				6.4		15.0			
Trichloroethene	0.2349 0.2922	0.2648 0.2981	0.2883	0.2984	0.2943	Ave		0.2816				8.4		15.0			
Methylcyclohexane	+++++ 0.4764	0.3583 0.4631	0.4298	0.4826	0.4924	Ave		0.4504				11.1		15.0			
1,2-Dichloropropane	0.3291 0.3661	0.3467 0.3701	0.3556	0.3884	0.3840	Ave		0.3629				5.8		15.0			
Dibromomethane	0.1777 0.1699	0.1547 0.1672	0.1692	0.1736	0.1762	Ave		0.1698				4.5		15.0			
1,4-Dioxane	0.0031 0.0034	0.0036 0.0033	0.0037	0.0038	0.0036	Ave		0.0035				7.5		15.0			
Dichlorobromomethane	0.2612 0.3155	0.2531 0.3204	0.2745	0.3021	0.3185	Ave		0.2922				9.8		15.0			
2-Chloroethyl vinyl ether	0.1544 0.2485	0.1561 0.2583	0.1973	0.2367	0.2542	Lin1	-0.159	0.2534							0.9980		0.9900
cis-1,3-Dichloropropene	0.2538 0.4182	0.2799 0.4289	0.3381	0.3993	0.4192	Lin1	-0.125	0.4226							0.9990		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.5506	0.3708 0.5347	0.4734	0.5441	0.5529	Ave		0.5044				14.2		15.0			
Toluene	1.4849 1.8238	1.5970 1.8421	1.7530	1.8544	1.8696	Ave		1.7464				8.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	0.2751 0.5564	0.3617 0.5733	0.4366	0.5102	0.5452	Lin1	-0.196	0.5596							0.9980		0.9900
Ethyl methacrylate	+++++ 0.5842	0.2993 0.6085	0.4123	0.5329	0.5811	Lin1	-0.419	0.5984							0.9970		0.9900
1,1,2-Trichloroethane	0.3389 0.3750	0.3765 0.3705	0.3704	0.3894	0.3830	Ave		0.3719				4.3		15.0			
Tetrachloroethene	0.2520 0.2947	0.3084 0.2989	0.2938	0.3048	0.3096	Ave		0.2946				6.7		15.0			
1,3-Dichloropropane	0.5683 0.6411	0.5814 0.6554	0.6375	0.6465	0.6609	Ave		0.6273				5.9		15.0			
2-Hexanone	0.3310 0.5550	0.3287 0.5456	0.4828	0.5385	0.5528	Lin1	-0.317	0.5526							0.9990		0.9900
Chlorodibromomethane	0.2329 0.3414	0.2204 0.3557	0.2984	0.3253	0.3496	Lin1	-0.095	0.3490							0.9990		0.9900
Ethylene Dibromide	0.2933 0.3785	0.3012 0.3787	0.3622	0.3675	0.3858	Ave		0.3524				10.9		15.0			
Chlorobenzene	1.0363 1.0383	1.0383 1.0537	1.0242	1.0714	1.0678	Ave		1.0472			0.3000	1.7		15.0			
1,1,1,2-Tetrachloroethane	0.3005 0.3454	0.2794 0.3459	0.3053	0.3528	0.3535	Ave		0.3261				9.3		15.0			
Ethylbenzene	0.4051 0.5674	0.4586 0.5755	0.5379	0.5921	0.5901	Ave		0.5324				13.6		15.0			
m-Xylene & p-Xylene	+++++ 0.6871	0.5220 0.6967	0.6154	0.7175	0.7191	Ave		0.6596				11.7		15.0			
o-Xylene	+++++ 0.6641	0.4828 0.6748	0.5953	0.6846	0.6848	Ave		0.6311				12.7		15.0			
Styrene	0.5372 1.0846	0.6168 1.1111	0.9197	1.0477	1.1135	Lin1	-0.388	1.1054							0.9990		0.9900
Bromoform	0.1421 0.2011	0.1384 0.2098	0.1556	0.1830	0.1925	Lin1	-0.056	0.2016			0.1000				0.9970		0.9900
Isopropylbenzene	0.8354 1.7137	1.0551 1.7132	1.4777	1.7126	1.7603	Lin1	-0.557	1.7346							0.9990		0.9900
Bromobenzene	0.7089 0.7719	0.6999 0.8027	0.7054	0.7408	0.7992	Ave		0.7470				6.0		15.0			
1,1,2,2-Tetrachloroethane	1.0442 1.0715	0.9778 1.0533	1.0395	1.0833	1.1031	Ave		1.0532			0.3000	3.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichloropropane	0.3380 0.3090	0.3607 0.3125	0.3062	0.3197	0.3228	Ave		0.3241				6.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.4135	0.2696 0.4272	0.3203	0.3838	0.4102	Lin1	-0.219	0.4206							0.9980		0.9900
N-Propylbenzene	+++++ 0.9392	0.6614 0.9500	0.8389	0.9801	0.9762	Ave		0.8910				13.9		15.0			
2-Chlorotoluene	+++++ 0.7840	0.7530 0.8043	0.7483	0.8141	0.8215	Ave		0.7875				4.0		15.0			
1,3,5-Trimethylbenzene	1.1874 2.7920	1.6270 2.8463	2.4177	2.7698	2.8951	Lin1	-1.026	2.8556							0.9990		0.9900
4-Chlorotoluene	+++++ 0.8002	0.6361 0.8305	0.7736	0.8236	0.8299	Ave		0.7823				9.6		15.0			
tert-Butylbenzene	1.0357 2.2610	1.3853 2.3008	1.7396	2.1872	2.3661	Lin1	-0.845	2.3029							0.9980		0.9900
1,2,4-Trimethylbenzene	1.2164 2.8283	1.5610 2.8844	2.4859	2.8601	2.9171	Lin1	-1.046	2.8964							0.9990		0.9900
sec-Butylbenzene	1.3721 3.5782	2.1553 3.5994	3.0367	3.5389	3.6922	Lin1	-1.329	3.6351							0.9990		0.9900
1,3-Dichlorobenzene	1.2280 1.4687	1.3558 1.5190	1.4502	1.5267	1.5373	Ave		1.4408				7.8		15.0			
4-Isopropyltoluene	1.4505 2.9685	1.9815 3.0053	2.6271	3.0189	3.1097	Lin1	-0.920	3.0368							0.9990		0.9900
1,4-Dichlorobenzene	1.4806 1.5288	1.5441 1.5751	1.5289	1.5853	1.5511	Ave		1.5420				2.2		15.0			
1,2-Dichlorobenzene	1.3414 1.4899	1.3312 1.4882	1.4454	1.5175	1.5350	Ave		1.4498				5.7		15.0			
n-Butylbenzene	1.3335 2.7824	1.7581 2.7534	2.3780	2.7921	2.8989	Lin1	-0.890	2.8132							0.9990		0.9900
1,2-Dibromo-3-Chloropropane	0.2218 0.2376	0.2197 0.2255	0.2013	0.2139	0.2231	Ave		0.2204				5.0		15.0			
1,2,4-Trichlorobenzene	0.7769 0.9728	0.7781 0.9453	0.8579	0.9833	1.0061	Ave		0.9029				10.8		15.0			
Hexachlorobutadiene	0.3287 0.3861	0.4694 0.3643	0.3979	0.4190	0.4136	Ave		0.3970				11.2		15.0			
Naphthalene	1.8033 3.7960	2.0720 3.5498	2.9432	3.7021	3.8071	Lin1	-1.277	3.7104							0.9980		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	+++++ 0.9690	0.8509 0.9152	0.9508	1.0429	1.0139	Ave		0.9571				7.2		15.0			
Dibromofluoromethane (Surr)	0.2901 0.2574	0.2387 0.2505	0.2501	0.2618	0.2582	Ave		0.2581				6.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3732 0.3404	0.3503 0.3347	0.3602	0.3617	0.3456	Ave		0.3523				3.8		15.0			
Toluene-d8 (Surr)	1.4916 1.4902	1.4858 1.5143	1.4437	1.5325	1.5280	Ave		1.4980				2.0		15.0			
4-Bromofluorobenzene (Surr)	0.4486 0.4324	0.3803 0.4380	0.4214	0.4244	0.4369	Ave		0.4260				5.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-515735/3	231301.D
Level 2	IC 240-515735/4	231302.D
Level 3	IC 240-515735/5	231303.D
Level 4	IC 240-515735/6	231304.D
Level 5	ICIS 240-515735/7	231305.D
Level 6	IC 240-515735/8	231306.D
Level 7	IC 240-515735/9	231307.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 690159	15594 972195	88698	227470	476211	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Chloromethane	FB	Ave	21841 1521103	44384 2114898	206001	501367	1018416	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Vinyl chloride	FB	Ave	9857 1020157	26780 1422301	130169	323761	686166	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Butadiene	FB	Ave	14968 1392874	35629 1951350	177060	463888	959972	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Bromomethane	FB	Ave	5571 377264	11963 +++++	57964	141499	267961	0.500 37.5	1.00 +++++	5.00	12.5	25.0
Chloroethane	FB	Ave	5930 434683	13609 +++++	63084	157990	316509	0.500 37.5	1.00 +++++	5.00	12.5	25.0
Dichlorofluoromethane	FB	Ave	14688 1061078	30552 1452227	148022	368547	728840	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Trichlorofluoromethane	FB	Ave	+++++ 1007490	24367 1382005	128776	341651	696418	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Ethyl ether	FB	Ave	14336 1108316	22650 1583632	120773	361223	703663	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Acrolein	FB	Ave	9283 736796	15502 991020	77694	215858	481412	2.50 188	5.00 250	25.0	62.5	125
1,1-Dichloroethene	FB	Ave	6204 665394	14116 919149	75549	207399	424405	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	4643 470251	11967 668312	56403	145994	309879	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Acetone	FB	Lin1	7864 298863	10723 406755	35586	90374	197327	1.00 75.0	2.00 100	10.0	25.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Iodomethane	FB	Ave	10938 962505	21475 1402128	115685	306955	630486	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Carbon disulfide	FB	Ave	+++++ 1989467	37262 2904436	210609	574959	1267173	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
3-Chloro-1-propene	FB	Ave	20955 1933410	32706 2734361	189317	579577	1262511	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methyl acetate	FB	Ave	31388 2689518	55069 3701632	277551	807501	1728104	1.00 75.0	2.00 100	10.0	25.0	50.0
Methylene Chloride	FB	Ave	+++++ 764653	22726 1068753	93214	249939	504041	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
2-Methyl-2-propanol	FB	Ave	16371 1287427	25022 1743806	139078	405209	903422	5.00 375	10.0 500	50.0	125	250
Acrylonitrile	FB	Ave	77303 7264465	141971 9849533	720850	2178513	4656247	5.00 375	10.0 500	50.0	125	250
trans-1,2-Dichloroethene	FB	Ave	9826 902963	18187 1274926	99573	273831	578024	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methyl tert-butyl ether	FB	Ave	25710 2233448	43694 3225978	225629	672852	1414073	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Hexane	FB	Ave	+++++ 1726041	35723 2525257	179144	519591	1149887	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,1-Dichloroethane	FB	Ave	22399 1966546	40472 2812926	218972	613255	1298411	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Vinyl acetate	FB	Ave	25831 2658593	47062 3467125	250195	759311	1882398	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2,2-Dichloropropane	FB	Ave	1492 164490	4161 224337	18664	51373	105106	0.500 37.5	1.00 50.0	5.00	12.5	25.0
cis-1,2-Dichloroethene	FB	Ave	11657 931339	19271 1346967	99547	288858	607208	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2-Butanone (MEK)	FB	Ave	4158 283043	6775 384412	32283	83163	179046	1.00 75.0	2.00 100	10.0	25.0	50.0
Chlorobromomethane	FB	Ave	4772 448740	9448 640536	50878	141238	295454	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Tetrahydrofuran	FB	Ave	11455 1094785	23542 1515896	107316	319991	702887	1.00 75.0	2.00 100	10.0	25.0	50.0
Chloroform	FB	Ave	17410 1377311	28749 1966181	148358	430423	901889	0.500 37.5	1.00 50.0	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1-Trichloroethane	FB	Ave	9677 1010514	19402 1458422	105303	312568	655951	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Cyclohexane	FB	Ave	+++++ 2055033	39595 2939449	221425	647267	1390499	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,1-Dichloropropene	FB	Ave	9231 1127733	21724 1630878	120446	338465	740476	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Carbon tetrachloride	FB	Ave	7216 894655	16757 1274110	89415	270908	570392	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Benzene	FB	Ave	38717 3482800	70951 5052497	370150	1069325	2316303	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloroethane	FB	Ave	16472 1372734	31173 2012205	152564	431790	910792	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Isobutyl alcohol	FB	Ave	14622 1445823	26470 1885514	155579	450320	981108	12.5 938	25.0 1250	125	313	625
n-Heptane	FB	Ave	1985 193415	4371 288597	21400	57778	128293	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Trichloroethene	FB	Ave	8115 833398	16875 1241750	91055	252843	540998	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Methylcyclohexane	FB	Ave	+++++ 1358819	22836 1929196	135737	408947	905168	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloropropane	FB	Ave	11368 1044066	22095 1541791	112324	329091	705915	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Dibromomethane	FB	Ave	6138 484664	9857 696472	53431	147091	323985	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,4-Dioxane	FB	Ave	2108 196534	4597 271556	23563	63990	132949	10.0 750	20.0 1000	100	250	500
Dichlorobromomethane	FB	Ave	9023 899896	16128 1334759	86690	256001	585542	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2-Chloroethyl vinyl ether	FB	Lin1	10670 1417337	19901 2152129	124655	401115	934715	1.00 75.0	2.00 100	10.0	25.0	50.0
cis-1,3-Dichloropropene	FB	Lin1	8769 1192914	17837 1786477	106782	338392	770633	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++ 3140804	47263 4454387	299031	922131	2032742	+++++ 75.0	2.00 100	10.0	25.0	50.0
Toluene	CBNZ d5	Ave	33140	66808	356198	1021315	2270227	0.500	1.00	5.00	12.5	25.0

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			3392967	5013047				37.5	50.0			
trans-1,3-Dichloropropene	CBNZ d5	Lin1	6139 1035190	15131 1560148	88717	280984	662020	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Ethyl methacrylate	CBNZ d5	Lin1	+++++ 1086781	12522 1656077	83770	293481	705604	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,1,2-Trichloroethane	CBNZ d5	Ave	7563 697669	15749 1008228	75255	214473	465070	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Tetrachloroethene	CBNZ d5	Ave	5625 548320	12903 813353	59708	167855	375995	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,3-Dichloropropane	CBNZ d5	Ave	12682 1192767	24323 1783531	129543	356062	802464	0.500 37.5	1.00 50.0	5.00	12.5	25.0
2-Hexanone	CBNZ d5	Lin1	14774 2064846	27498 2969611	196219	593214	1342508	1.00 75.0	2.00 100	10.0	25.0	50.0
Chlorodibromomethane	CBNZ d5	Lin1	5198 635170	9220 968049	60635	179172	424544	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Ethylene Dibromide	CBNZ d5	Ave	6545 704112	12598 1030544	73599	202396	468486	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Chlorobenzene	CBNZ d5	Ave	23127 1931564	43434 2867623	208119	590081	1296643	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6707 642532	11688 941440	62033	194331	429306	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Ethylbenzene	CBNZ d5	Ave	9040 1055644	19186 1566067	109300	326114	716573	0.500 37.5	1.00 50.0	5.00	12.5	25.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++	21837	125049	395174	873208	+++++	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1278173	1895935				37.5	50.0			
o-Xylene	CBNZ d5	Ave	+++++ 1235566	20197 1836494	120961	377034	831546	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Styrene	CBNZ d5	Lin1	11989 2017819	25804 3023736	186883	577057	1352104	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Bromoform	CBNZ d5	Lin1	3172 374032	5791 571072	31616	100762	233691	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Isopropylbenzene	CBNZ d5	Lin1	18643 3188058	44139 4662241	300255	943213	2137526	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Bromobenzene	DCBd 4	Ave	7362 701644	14134 1038294	73785	203722	476111	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10844 974041	19747 1362537	108728	297923	657133	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2,3-Trichloropropane	DCBd 4	Ave	3510 280925	7285 404229	32028	87930	192288	0.500 37.5	1.00 50.0	5.00	12.5	25.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 375855	5444 552597	33499	105558	244375	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
N-Propylbenzene	DCBd 4	Ave	+++++ 853730	13357 1228877	87754	269550	581535	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 712702	15207 1040458	78268	223895	489402	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
1,3,5-Trimethylbenzene	DCBd 4	Lin1	12331 2537970	32857 3681884	252895	761757	1724656	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Chlorotoluene	DCBd 4	Ave	+++++	12845	80917	226499	494408	+++++	1.00	5.00	12.5	25.0

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			727425	1074326				37.5	50.0			
tert-Butylbenzene	DCBd 4	Lin1	10755 2055255	27976 2976287	181965	601515	1409554	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2,4-Trimethylbenzene	DCBd 4	Lin1	12632 2570914	31523 3731223	260022	786597	1737784	0.500 37.5	1.00 50.0	5.00	12.5	25.0
sec-Butylbenzene	DCBd 4	Lin1	14249 3252597	43525 4656022	317640	973264	2199514	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,3-Dichlorobenzene	DCBd 4	Ave	12752 1335091	27380 1964931	151690	419866	915834	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Isopropyltoluene	DCBd 4	Lin1	15063 2698394	40015 3887624	274796	830247	1852540	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,4-Dichlorobenzene	DCBd 4	Ave	15376 1389693	31183 2037532	159921	436003	924028	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichlorobenzene	DCBd 4	Ave	13930 1354296	26883 1925072	151185	417330	914462	0.500 37.5	1.00 50.0	5.00	12.5	25.0
n-Butylbenzene	DCBd 4	Lin1	13848 2529262	35504 3561775	248736	767879	1726969	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2303 216020	4437 291702	21061	58827	132902	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8068 884326	15713 1222846	89741	270438	599335	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Hexachlorobutadiene	DCBd 4	Ave	3413 350924	9479 471193	41622	115220	246394	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Naphthalene	DCBd 4	Lin1	18727	41844	307863	1018150	2268001	0.500	1.00	5.00	12.5	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 515735

SDG No.:

Instrument ID: A3UX23 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2021 15:47 Calibration End Date: 12/06/2021 18:17 Calibration ID: 63539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			3450574	4591906				37.5	50.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 880815	17184 1183865	99457	286807	603979	+++++ 37.5	1.00 50.0	5.00	12.5	25.0
Dibromofluoromethane (Surr)	FB	Ave	10022 734161	15212 1043470	79002	221864	474564	0.500 37.5	1.00 50.0	5.00	12.5	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	12893 970977	22322 1394316	113758	306519	635332	0.500 37.5	1.00 50.0	5.00	12.5	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	33288 2772290	62154 4120987	293339	844062	1855468	0.500 37.5	1.00 50.0	5.00	12.5	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	10012 804412	15910 1191826	85633	233738	530565	0.500 37.5	1.00 50.0	5.00	12.5	25.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231301.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Dec-2021 15:47:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-003
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:51:55 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:28:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1899933	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	87	1227454	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	571162	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	92	10022	0.5000	0.5620	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	96	12893	0.5000	0.5297	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	94	33288	0.5000	0.4979	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	10012	0.5000	0.5265	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	98	5626	0.5000	0.3197	
10 Chloromethane	50	1.299	1.299	0.000	99	21841	0.5000	0.5310	
11 Vinyl chloride	62	1.394	1.394	0.000	58	9857	0.5000	0.3883	
12 Butadiene	54	1.406	1.406	0.000	90	14968	0.5000	0.4237	
13 Bromomethane	94	1.690	1.666	0.024	84	5571	0.5000	0.4949	
14 Chloroethane	64	1.725	1.725	0.000	94	5930	0.5000	0.4699	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	14688	0.5000	0.5087	
16 Trichlorofluoromethane	101	1.938	1.986	-0.048	39	9245	0.5000	0.3557	
17 Ethyl ether	59	2.234	2.234	0.000	97	14336	0.5000	0.5319	
18 Acrolein	56	2.352	2.352	0.000	97	9283	2.50	2.66	
19 1,1-Dichloroethene	96	2.459	2.459	0.000	93	6204	0.5000	0.4004	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.494	2.483	0.011	88	4643	0.5000	0.4031	
21 Acetone	58	2.530	2.530	0.000	97	7864	1.00	0.9552	
23 Iodomethane	142	2.613	2.601	0.012	97	10938	0.5000	0.4619	
24 Carbon disulfide	76	2.672	2.684	-0.012	98	15372	0.5000	0.3326	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	91	20955	0.5000	0.4799	
27 Methyl acetate	43	2.909	2.909	0.000	99	31388	1.00	1.00	
28 Methylene Chloride	84	3.015	3.015	0.000	92	16587	0.5000	0.8252	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	92	16371	5.00	5.27	
30 Acrylonitrile	53	3.323	3.335	-0.012	100	77303	5.00	4.67	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	9826	0.5000	0.4641	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	94	25710	0.5000	0.4948	
33 Hexane	57	3.760	3.761	-0.001	93	10941	0.5000	0.2656	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	95	22399	0.5000	0.4756	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	25831	0.5000	0.4389	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	40	1492	0.5000	0.3809	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	38	11657	0.5000	0.5189	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	4158	1.00	1.18	
45 Chlorobromomethane	128	5.145	5.145	0.000	86	4772	0.5000	0.4452	
46 Tetrahydrofuran	42	5.275	5.251	0.024	85	11455	1.00	0.9108	
47 Chloroform	83	5.287	5.287	0.000	96	17410	0.5000	0.5221	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	83	9677	0.5000	0.4176	
49 Cyclohexane	56	5.535	5.535	0.000	95	12618	0.5000	0.2567	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	91	9231	0.5000	0.3627	
51 Carbon tetrachloride	117	5.689	5.689	0.000	76	7216	0.5000	0.3647	
54 Benzene	78	5.938	5.938	0.000	97	38717	0.5000	0.4691	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	16472	0.5000	0.4882	
52 Isobutyl alcohol	41	6.021	6.009	0.012	93	14622	12.5	11.0	
56 n-Heptane	100	6.316	6.328	-0.012	91	1985	0.5000	0.4289	
58 Trichloroethene	130	6.695	6.707	-0.012	93	8115	0.5000	0.4172	
60 Methylcyclohexane	83	6.896	6.896	0.000	86	7118	0.5000	0.2287	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	96	11368	0.5000	0.4535	
63 Dibromomethane	93	7.062	7.062	0.000	94	6138	0.5000	0.5233	
64 1,4-Dioxane	88	7.145	7.145	0.000	62	2108	10.0	8.72	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	9023	0.5000	0.4470	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	10670	1.00	1.24	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	86	8769	0.5000	0.5960	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	98	25086	1.00	0.7198	
70 Toluene	91	8.068	8.068	0.000	97	33140	0.5000	0.4251	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	92	6139	0.5000	0.5955	
72 Ethyl methacrylate	69	8.458	8.458	0.000	87	6007	0.5000	0.9247	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	91	7563	0.5000	0.4556	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	5625	0.5000	0.4277	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	93	12682	0.5000	0.4529	
76 2-Hexanone	43	8.789	8.790	-0.001	95	14774	1.00	1.17	
78 Chlorodibromomethane	129	8.884	8.884	0.000	92	5198	0.5000	0.6052	
80 Ethylene Dibromide	107	8.979	8.979	0.000	99	6545	0.5000	0.4161	
82 Chlorobenzene	112	9.488	9.488	0.000	94	23127	0.5000	0.4948	
83 1,1,1,2-Tetrachloroethane	131	9.570	9.582	-0.012	89	6707	0.5000	0.4607	
84 Ethylbenzene	106	9.618	9.606	0.012	98	9040	0.5000	0.3804	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	94	9267	0.5000	0.3147	
86 o-Xylene	106	10.115	10.127	-0.012	96	9163	0.5000	0.3253	
87 Styrene	104	10.138	10.138	0.000	92	11989	0.5000	0.5943	
88 Bromoform	173	10.304	10.304	0.000	88	3172	0.5000	0.6306	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	18643	0.5000	0.5617	
93 Bromobenzene	156	10.777	10.777	0.000	95	7362	0.5000	0.4745	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	91	10844	0.5000	0.4957	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	92	3510	0.5000	0.5214	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	61	3346	0.5000	0.9036	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	4970	0.5000	0.2686	
97 2-Chlorotoluene	126	10.979	10.979	0.000	95	5237	0.5000	0.3202	
100 4-Chlorotoluene	126	11.085	11.085	0.000	96	5689	0.5000	0.3501	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	76	12331	0.5000	0.5671	
102 tert-Butylbenzene	119	11.405	11.405	0.000	95	10755	0.5000	0.5918	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	96	12632	0.5000	0.5712	
105 sec-Butylbenzene	105	11.618	11.618	0.000	94	14249	0.5000	0.5542	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	93	12752	0.5000	0.4261	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	48	15063	0.5000	0.5417	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	92	15376	0.5000	0.4801	
112 1,2-Dichlorobenzene	146	12.162	12.174	-0.012	97	13930	0.5000	0.4626	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	13848	0.5000	0.5533	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	74	2303	0.5000	0.5030	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	92	8068	0.5000	0.4302	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	94	3413	0.5000	0.4140	
117 Naphthalene	128	14.008	14.008	0.000	96	18727	0.5000	0.5872	
118 1,2,3-Trichlorobenzene	180	14.244	14.244	0.000	90	6695	0.5000	0.3368	
S 134 Trihalomethanes, Total	1				0		2.00	2.20	
S 158 Total BTEX	1				0		2.50	1.91	
S 131 1,2-Dichloroethene, Total	96				0			0.9830	
S 132 1,3-Dichloropropene, Total	75				0			1.19	
S 133 Xylenes, Total	106				0		1.00	0.6400	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00419	Amount Added:	0.40	Units: uL
VMRGAS_00410	Amount Added:	0.40	Units: uL
VMRPRIMW_00462	Amount Added:	0.40	Units: uL
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	0.40	Units: uL

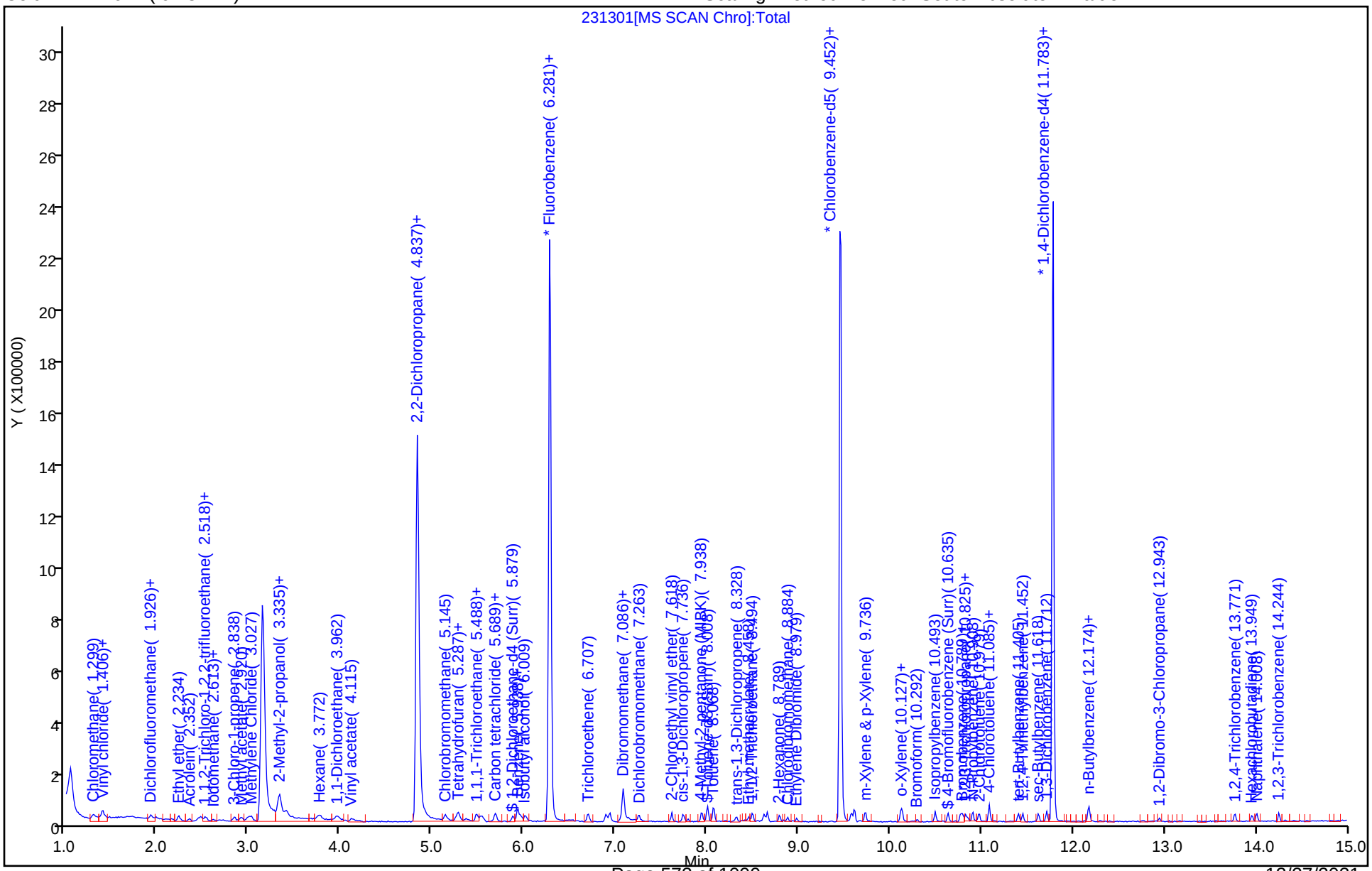
Report Date: 10-Dec-2021 08:51:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231301.D

Injection Date:	06-Dec-2021 15:47:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231302.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Dec-2021 16:12:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-004
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:51:59 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:29:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1752449	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	88	1150387	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	95	555355	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	90	15212	1.00	0.9248	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	96	22322	1.00	0.99	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	62154	1.00	0.99	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	90	15910	1.00	0.8928	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	97	15594	1.00	0.9606	
10 Chloromethane	50	1.299	1.299	0.000	99	44384	1.00	1.17	
11 Vinyl chloride	62	1.382	1.394	-0.012	77	26780	1.00	1.14	
12 Butadiene	54	1.406	1.406	0.000	93	35629	1.00	1.09	
13 Bromomethane	94	1.666	1.666	0.000	88	11963	1.00	1.15	
14 Chloroethane	64	1.725	1.725	0.000	96	13609	1.00	1.17	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	95	30552	1.00	1.15	
16 Trichlorofluoromethane	101	1.974	1.986	-0.012	79	24367	1.00	1.02	
17 Ethyl ether	59	2.234	2.234	0.000	95	22650	1.00	0.9112	
18 Acrolein	56	2.352	2.352	0.000	99	15502	5.00	4.81	
19 1,1-Dichloroethene	96	2.447	2.459	-0.012	91	14116	1.00	0.9877	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.471	2.483	-0.012	92	11967	1.00	1.13	
21 Acetone	58	2.530	2.530	0.000	98	10723	2.00	2.04	
23 Iodomethane	142	2.601	2.601	0.000	99	21475	1.00	0.9832	
24 Carbon disulfide	76	2.684	2.684	0.000	100	37262	1.00	0.8740	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	89	32706	1.00	0.8120	
27 Methyl acetate	43	2.920	2.909	0.011	100	55069	2.00	1.90	
28 Methylene Chloride	84	3.003	3.015	-0.012	95	22726	1.00	1.23	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	93	25022	10.0	8.74	
30 Acrylonitrile	53	3.323	3.335	-0.012	99	141971	10.0	9.30	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	91	18187	1.00	0.9312	
31 Methyl tert-butyl ether	73	3.406	3.406	0.000	93	43694	1.00	0.9116	
33 Hexane	57	3.772	3.761	0.011	90	35723	1.00	0.9401	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	40472	1.00	0.9317	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	47062	1.00	0.8670	
41 2,2-Dichloropropane	97	4.826	4.825	0.001	40	4161	1.00	1.15	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	38	19271	1.00	0.9300	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	97	6775	2.00	2.08	
45 Chlorobromomethane	128	5.145	5.145	0.000	86	9448	1.00	0.9557	
46 Tetrahydrofuran	42	5.263	5.251	0.012	92	23542	2.00	2.03	
47 Chloroform	83	5.287	5.287	0.000	96	28749	1.00	0.9348	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	93	19402	1.00	0.9076	
49 Cyclohexane	56	5.536	5.535	0.001	89	39595	1.00	0.8733	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	90	21724	1.00	0.9254	
51 Carbon tetrachloride	117	5.689	5.689	0.000	94	16757	1.00	0.9183	
54 Benzene	78	5.938	5.938	0.000	99	70951	1.00	0.9320	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	31173	1.00	1.00	
52 Isobutyl alcohol	41	6.009	6.009	0.000	94	26470	25.0	21.7	
56 n-Heptane	100	6.328	6.328	0.000	92	4371	1.00	1.02	
58 Trichloroethene	130	6.707	6.707	0.000	93	16875	1.00	0.9405	
60 Methylcyclohexane	83	6.896	6.896	0.000	94	22836	1.00	0.7956	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	95	22095	1.00	0.9555	
63 Dibromomethane	93	7.062	7.062	0.000	93	9857	1.00	0.9110	
64 1,4-Dioxane	88	7.145	7.145	0.000	91	4597	20.0	20.6	
65 Dichlorobromomethane	83	7.263	7.263	0.000	95	16128	1.00	0.8662	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	91	19901	2.00	1.86	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	89	17837	1.00	0.9580	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	47263	2.00	1.47	
70 Toluene	91	8.080	8.068	0.012	97	66808	1.00	0.9145	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	95	15131	1.00	1.00	
72 Ethyl methacrylate	69	8.458	8.458	0.000	92	12522	1.00	1.20	
73 1,1,2-Trichloroethane	97	8.506	8.494	0.012	88	15749	1.00	1.01	
75 Tetrachloroethene	164	8.624	8.624	0.000	91	12903	1.00	1.05	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	97	24323	1.00	0.9269	
76 2-Hexanone	43	8.790	8.790	0.000	96	27498	2.00	1.76	
78 Chlorodibromomethane	129	8.884	8.884	0.000	93	9220	1.00	0.9031	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	12598	1.00	0.8545	
82 Chlorobenzene	112	9.488	9.488	0.000	96	43434	1.00	0.99	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	94	11688	1.00	0.8567	
84 Ethylbenzene	106	9.606	9.606	0.000	98	19186	1.00	0.8615	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	21837	1.00	0.7914	
86 o-Xylene	106	10.127	10.127	0.000	96	20197	1.00	0.7651	
87 Styrene	104	10.139	10.138	0.000	95	25804	1.00	0.9093	
88 Bromoform	173	10.304	10.304	0.000	96	5791	1.00	0.9647	
89 Isopropylbenzene	105	10.493	10.493	0.000	97	44139	1.00	0.9292	
93 Bromobenzene	156	10.777	10.777	0.000	93	14134	1.00	0.9370	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	19747	1.00	0.9284	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	91	7285	1.00	1.11	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	64	5444	1.00	1.16	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	13357	1.00	0.7423	
97 2-Chlorotoluene	126	10.979	10.979	0.000	98	15207	1.00	0.9562	
100 4-Chlorotoluene	126	11.085	11.085	0.000	96	12845	1.00	0.8130	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	83	32857	1.00	0.9290	
102 tert-Butylbenzene	119	11.405	11.405	0.000	95	27976	1.00	0.9685	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	95	31523	1.00	0.9001	
105 sec-Butylbenzene	105	11.618	11.618	0.000	95	43525	1.00	0.9584	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	98	27380	1.00	0.9410	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	64	40015	1.00	0.9553	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	92	31183	1.00	1.00	
112 1,2-Dichlorobenzene	146	12.162	12.174	-0.012	96	26883	1.00	0.9182	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	35504	1.00	0.9413	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	78	4437	1.00	1.00	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	92	15713	1.00	0.8617	
116 Hexachlorobutadiene	225	13.961	13.960	0.001	94	9479	1.00	1.18	
117 Naphthalene	128	14.008	14.008	0.000	96	41844	1.00	0.9026	
118 1,2,3-Trichlorobenzene	180	14.245	14.244	0.001	96	17184	1.00	0.8891	
S 134 Trihalomethanes, Total	1				0		4.00	3.67	
S 158 Total BTEX	1				0		5.00	4.26	
S 131 1,2-Dichloroethene, Total	96				0			1.86	
S 132 1,3-Dichloropropene, Total	75				0			1.95	
S 133 Xylenes, Total	106				0		2.00	1.56	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	0.80	Units: uL
VMAROLISTDW_00419	Amount Added:	0.80	Units: uL
VMRGAS_00410	Amount Added:	0.80	Units: uL
VMRPRIMW_00462	Amount Added:	0.80	Units: uL

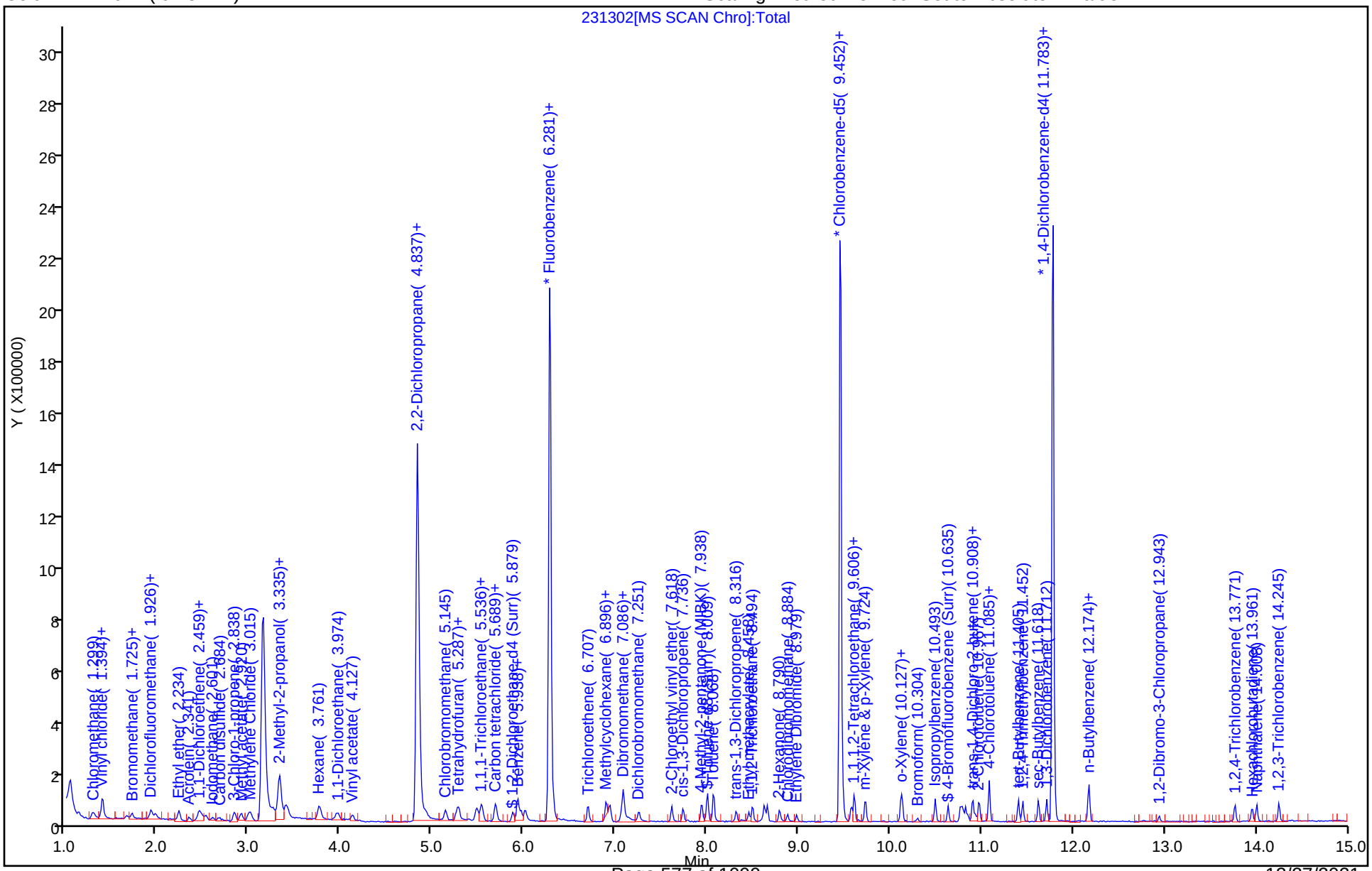
Report Date: 10-Dec-2021 08:52:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231302.D

Injection Date:	06-Dec-2021 16:12:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231303.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Dec-2021 16:37:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-005
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:52:03 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:30:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	99	1737130	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	88	1117558	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	575302	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	79002	5.00	4.85	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	96	113758	5.00	5.11	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	94	293339	5.00	4.82	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	87	85633	5.00	4.95	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	97	88698	5.00	5.51	
10 Chloromethane	50	1.299	1.299	0.000	99	206001	5.00	5.48	
11 Vinyl chloride	62	1.382	1.394	-0.012	96	130169	5.00	5.61	
12 Butadiene	54	1.394	1.406	-0.012	93	177060	5.00	5.48	
13 Bromomethane	94	1.666	1.666	0.000	90	57964	5.00	5.63	
14 Chloroethane	64	1.725	1.725	0.000	95	63084	5.00	5.47	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	148022	5.00	5.61	
16 Trichlorofluoromethane	101	1.962	1.986	-0.024	83	128776	5.00	5.42	
17 Ethyl ether	59	2.234	2.234	0.000	95	120773	5.00	4.90	
18 Acrolein	56	2.352	2.352	0.000	99	77694	25.0	24.3	
19 1,1-Dichloroethene	96	2.447	2.459	-0.012	91	75549	5.00	5.33	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.471	2.483	-0.012	96	56403	5.00	5.36	
21 Acetone	58	2.530	2.530	0.000	100	35586	10.0	9.90	
23 Iodomethane	142	2.601	2.601	0.000	97	115685	5.00	5.34	
24 Carbon disulfide	76	2.672	2.684	-0.012	100	210609	5.00	4.98	
26 3-Chloro-1-propene	41	2.837	2.838	-0.001	90	189317	5.00	4.74	
27 Methyl acetate	43	2.908	2.909	-0.001	100	277551	10.0	9.65	
28 Methylene Chloride	84	3.015	3.015	0.000	92	93214	5.00	5.07	
29 2-Methyl-2-propanol	59	3.263	3.264	-0.001	95	139078	50.0	49.0	
30 Acrylonitrile	53	3.323	3.335	-0.012	99	720850	50.0	47.7	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	99573	5.00	5.14	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	94	225629	5.00	4.75	
33 Hexane	57	3.772	3.761	0.011	93	179144	5.00	4.76	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	218972	5.00	5.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	250195	5.00	4.65	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	73	18664	5.00	5.21	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	99547	5.00	4.85	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	32283	10.0	10.0	
45 Chlorobromomethane	128	5.145	5.145	0.000	87	50878	5.00	5.19	
46 Tetrahydrofuran	42	5.263	5.251	0.012	94	107316	10.0	9.33	
47 Chloroform	83	5.287	5.287	0.000	98	148358	5.00	4.87	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	95	105303	5.00	4.97	
49 Cyclohexane	56	5.535	5.535	0.000	90	221425	5.00	4.93	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	90	120446	5.00	5.18	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	89415	5.00	4.94	
54 Benzene	78	5.938	5.938	0.000	97	370150	5.00	4.91	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	152564	5.00	4.95	
52 Isobutyl alcohol	41	6.009	6.009	0.000	94	155579	125.0	128.4	
56 n-Heptane	100	6.328	6.328	0.000	95	21400	5.00	5.06	
58 Trichloroethene	130	6.707	6.707	0.000	94	91055	5.00	5.12	
60 Methylcyclohexane	83	6.896	6.896	0.000	93	135737	5.00	4.77	
61 1,2-Dichloropropane	63	6.943	6.944	-0.001	97	112324	5.00	4.90	
63 Dibromomethane	93	7.062	7.062	0.000	98	53431	5.00	4.98	
64 1,4-Dioxane	88	7.145	7.145	0.000	89	23563	100.0	106.6	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	86690	5.00	4.70	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	91	124655	10.0	8.42	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	91	106782	5.00	4.30	
69 4-Methyl-2-pentanone (MIBK)	43	7.937	7.938	-0.001	98	299031	10.0	9.38	
70 Toluene	91	8.068	8.068	0.000	97	356198	5.00	5.02	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	88717	5.00	4.25	
72 Ethyl methacrylate	69	8.458	8.458	0.000	94	83770	5.00	4.14	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	75255	5.00	4.98	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	59708	5.00	4.99	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	129543	5.00	5.08	
76 2-Hexanone	43	8.789	8.790	-0.001	97	196219	10.0	9.31	
78 Chlorodibromomethane	129	8.884	8.884	0.000	89	60635	5.00	4.55	
80 Ethylene Dibromide	107	8.979	8.979	0.000	96	73599	5.00	5.14	
82 Chlorobenzene	112	9.488	9.488	0.000	94	208119	5.00	4.89	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	94	62033	5.00	4.68	
84 Ethylbenzene	106	9.606	9.606	0.000	98	109300	5.00	5.05	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	98	125049	5.00	4.66	
86 o-Xylene	106	10.127	10.127	0.000	97	120961	5.00	4.72	
87 Styrene	104	10.138	10.138	0.000	96	186883	5.00	4.51	
88 Bromoform	173	10.304	10.304	0.000	95	31616	5.00	4.14	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	300255	5.00	4.58	
93 Bromobenzene	156	10.777	10.777	0.000	95	73785	5.00	4.72	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	93	108728	5.00	4.93	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	91	32028	5.00	4.72	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	67	33499	5.00	4.33	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	87754	5.00	4.71	
97 2-Chlorotoluene	126	10.979	10.979	-0.001	97	78268	5.00	4.75	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	80917	5.00	4.94	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	88	252895	5.00	4.59	
102 tert-Butylbenzene	119	11.404	11.405	-0.001	95	181965	5.00	4.14	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	260022	5.00	4.65	
105 sec-Butylbenzene	105	11.617	11.618	-0.001	95	317640	5.00	4.54	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	151690	5.00	5.03	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	95	274796	5.00	4.63	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	159921	5.00	4.96	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	97	151185	5.00	4.98	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	248736	5.00	4.54	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	79	21061	5.00	4.57	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	89741	5.00	4.75	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	97	41622	5.00	5.01	
117 Naphthalene	128	14.008	14.008	0.000	97	307863	5.00	4.31	
118 1,2,3-Trichlorobenzene	180	14.244	14.244	0.000	95	99457	5.00	4.97	
S 134 Trihalomethanes, Total	1				0		20.0	18.2	
S 158 Total BTEX	1				0		25.0	24.4	
S 131 1,2-Dichloroethene, Total	96				0			9.99	
S 132 1,3-Dichloropropene, Total	75				0			8.55	
S 133 Xylenes, Total	106				0		10.0	9.38	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
VMAROLISTDW_00419	Amount Added:	4.00	Units: uL
VMRGAS_00410	Amount Added:	4.00	Units: uL
VMRPRIMW_00462	Amount Added:	4.00	Units: uL
vm50ss_00459	Amount Added:	4.00	Units: uL

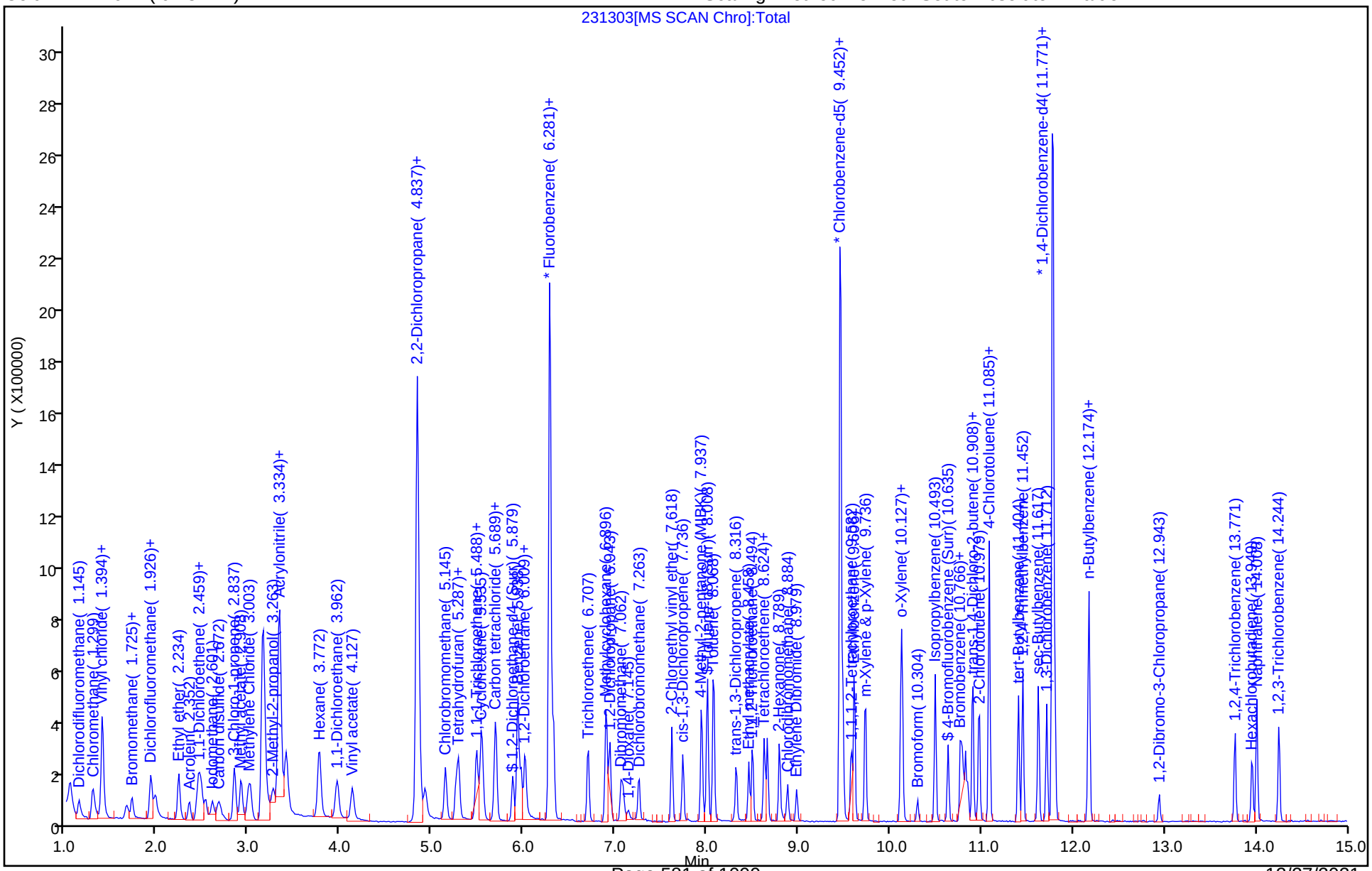
Report Date: 10-Dec-2021 08:52:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231303.D

Injection Date:	06-Dec-2021 16:37:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231304.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Dec-2021 17:02:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-006
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:52:06 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:31:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1864275	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	88	1211674	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	605045	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	92	221864	12.5	12.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	306519	12.5	12.8	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	844062	12.5	12.8	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	233738	12.5	12.5	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	227470	12.5	13.2	
10 Chloromethane	50	1.299	1.299	0.000	98	501367	12.5	12.4	
11 Vinyl chloride	62	1.394	1.394	0.000	96	323761	12.5	13.0	
12 Butadiene	54	1.406	1.406	0.000	92	463888	12.5	13.4	
13 Bromomethane	94	1.666	1.666	0.000	90	141499	12.5	12.8	
14 Chloroethane	64	1.725	1.725	0.000	95	157990	12.5	12.8	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	96	368547	12.5	13.0	
16 Trichlorofluoromethane	101	1.974	1.986	-0.012	87	341651	12.5	13.4	
17 Ethyl ether	59	2.234	2.234	0.000	97	361223	12.5	13.7	
18 Acrolein	56	2.352	2.352	0.000	99	215858	62.5	62.9	
19 1,1-Dichloroethene	96	2.459	2.459	0.000	91	207399	12.5	13.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.483	0.000	94	145994	12.5	12.9	
21 Acetone	58	2.530	2.530	0.000	100	90374	25.0	25.2	
23 Iodomethane	142	2.601	2.601	0.000	97	306955	12.5	13.2	
24 Carbon disulfide	76	2.672	2.684	-0.012	99	574959	12.5	12.7	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	90	579577	12.5	13.5	
27 Methyl acetate	43	2.909	2.909	0.000	100	807501	25.0	26.2	
28 Methylene Chloride	84	3.027	3.015	0.012	93	249939	12.5	12.7	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	95	405209	125.0	133.0	
30 Acrylonitrile	53	3.323	3.335	-0.012	99	2178513	125.0	134.2	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	91	273831	12.5	13.2	
31 Methyl tert-butyl ether	73	3.406	3.406	0.000	94	672852	12.5	13.2	
33 Hexane	57	3.772	3.761	0.011	92	519591	12.5	12.9	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	95	613255	12.5	13.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	759311	12.5	13.1	
41 2,2-Dichloropropane	97	4.826	4.825	0.001	73	51373	12.5	13.4	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	88	288858	12.5	13.1	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	83163	25.0	24.0	
45 Chlorobromomethane	128	5.145	5.145	0.000	87	141238	12.5	13.4	
46 Tetrahydrofuran	42	5.251	5.251	0.000	94	319991	25.0	25.9	
47 Chloroform	83	5.287	5.287	0.000	97	430423	12.5	13.2	
48 1,1,1-Trichloroethane	97	5.476	5.476	0.000	95	312568	12.5	13.7	
49 Cyclohexane	56	5.535	5.535	0.000	89	647267	12.5	13.4	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	91	338465	12.5	13.6	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	270908	12.5	14.0	
54 Benzene	78	5.938	5.938	0.000	97	1069325	12.5	13.2	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	431790	12.5	13.0	
52 Isobutyl alcohol	41	6.009	6.009	0.000	94	450320	312.5	346.4	
56 n-Heptane	100	6.328	6.328	0.000	96	57778	12.5	12.7	
58 Trichloroethene	130	6.707	6.707	0.000	95	252843	12.5	13.2	
60 Methylcyclohexane	83	6.896	6.896	0.000	94	408947	12.5	13.4	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	97	329091	12.5	13.4	
63 Dibromomethane	93	7.062	7.062	0.000	97	147091	12.5	12.8	
64 1,4-Dioxane	88	7.145	7.145	0.000	91	63990	250.0	269.9	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	256001	12.5	12.9	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	401115	25.0	24.0	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	91	338392	12.5	12.1	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	922131	25.0	27.0	
70 Toluene	91	8.068	8.068	0.000	97	1021315	12.5	13.3	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	280984	12.5	11.7	
72 Ethyl methacrylate	69	8.458	8.458	0.000	95	293481	12.5	11.8	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	91	214473	12.5	13.1	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	167855	12.5	12.9	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	356062	12.5	12.9	
76 2-Hexanone	43	8.790	8.790	0.000	98	593214	25.0	24.9	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	179172	12.5	11.9	
80 Ethylene Dibromide	107	8.979	8.979	0.000	100	202396	12.5	13.0	
82 Chlorobenzene	112	9.488	9.488	0.000	94	590081	12.5	12.8	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	194331	12.5	13.5	
84 Ethylbenzene	106	9.606	9.606	0.000	98	326114	12.5	13.9	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	98	395174	12.5	13.6	
86 o-Xylene	106	10.127	10.127	0.000	97	377034	12.5	13.6	
87 Styrene	104	10.138	10.138	0.000	96	577057	12.5	12.2	
88 Bromoform	173	10.304	10.304	0.000	96	100762	12.5	11.6	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	943213	12.5	12.7	
93 Bromobenzene	156	10.777	10.777	0.000	96	203722	12.5	12.4	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	297923	12.5	12.9	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	87930	12.5	12.3	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	73	105558	12.5	11.9	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	269550	12.5	13.8	
97 2-Chlorotoluene	126	10.979	10.979	0.000	96	223895	12.5	12.9	
100 4-Chlorotoluene	126	11.085	11.085	0.000	95	226499	12.5	13.2	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	88	761757	12.5	12.5	
102 tert-Butylbenzene	119	11.405	11.405	0.000	94	601515	12.5	12.2	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	786597	12.5	12.7	
105 sec-Butylbenzene	105	11.618	11.618	0.000	95	973264	12.5	12.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	419866	12.5	13.2	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	830247	12.5	12.7	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	98	436003	12.5	12.9	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	97	417330	12.5	13.1	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	767879	12.5	12.7	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	79	58827	12.5	12.1	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	270438	12.5	13.6	
116 Hexachlorobutadiene	225	13.961	13.960	0.000	97	115220	12.5	13.2	
117 Naphthalene	128	14.008	14.008	0.000	97	1018150	12.5	12.8	
118 1,2,3-Trichlorobenzene	180	14.244	14.244	0.000	95	286807	12.5	13.6	
S 134 Trihalomethanes, Total	1				0		50.0	49.6	
S 158 Total BTEX	1				0		62.5	67.5	
S 131 1,2-Dichloroethene, Total	96				0			26.3	
S 132 1,3-Dichloropropene, Total	75				0			23.9	
S 133 Xylenes, Total	106				0		25.0	27.2	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	10.00	Units: uL
VMRPRIMW_00462	Amount Added:	10.00	Units: uL
VMRGAS_00410	Amount Added:	10.00	Units: uL
VMAROLISTDW_00419	Amount Added:	10.00	Units: uL

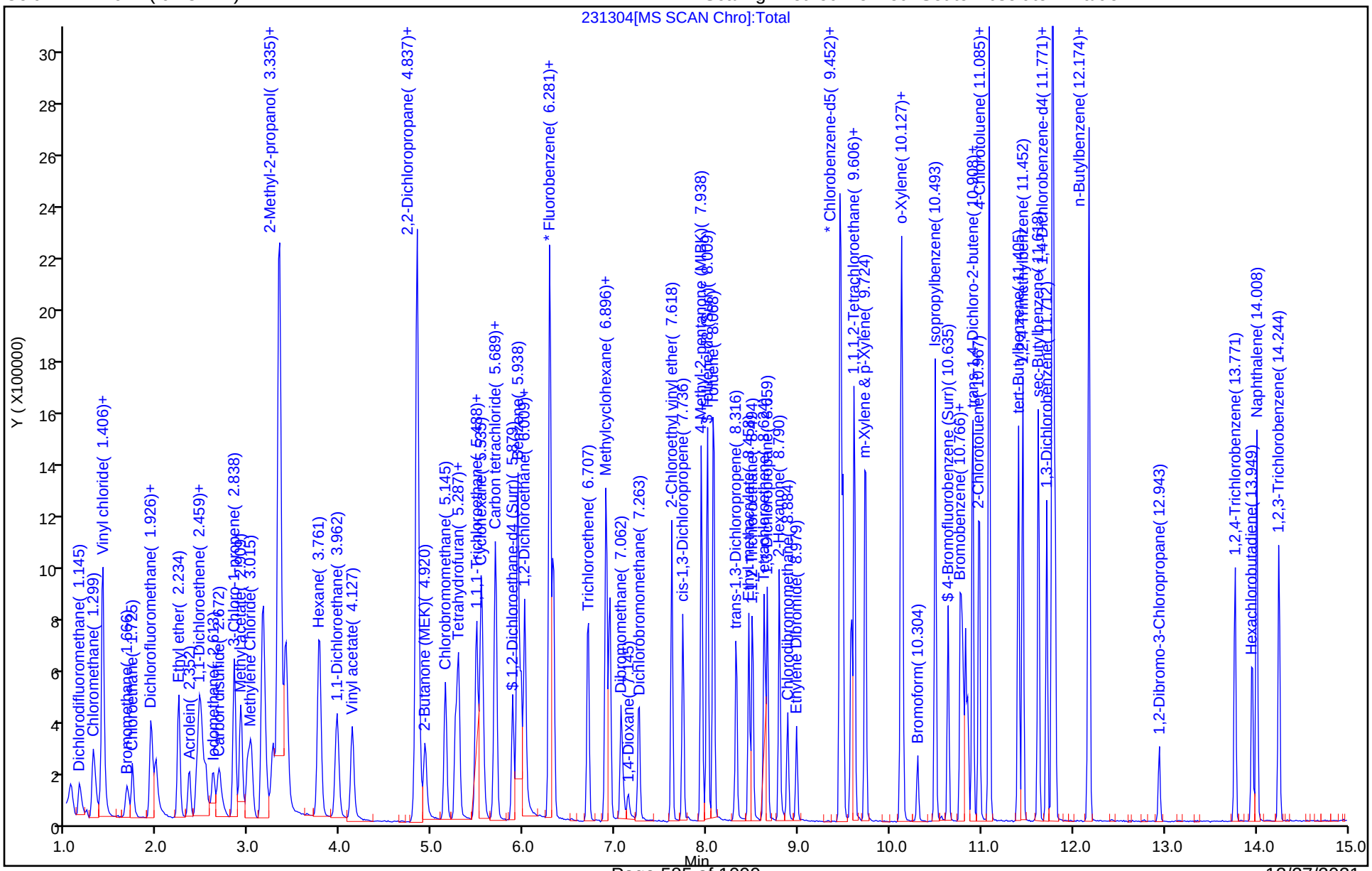
Report Date: 10-Dec-2021 08:52:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231304.D

Injection Date:	06-Dec-2021 17:02:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231305.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 06-Dec-2021 17:27:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-007
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:52:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:31:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	2022141	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	87	1335703	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	655295	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	474564	25.0	25.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	635332	25.0	24.5	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	1855468	25.0	25.5	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	530565	25.0	25.6	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	476211	25.0	25.4	
10 Chloromethane	50	1.299	1.299	0.000	99	1018416	25.0	23.3	
11 Vinyl chloride	62	1.394	1.394	0.000	97	686166	25.0	25.4	
12 Butadiene	54	1.406	1.406	0.000	93	959972	25.0	25.5	
13 Bromomethane	94	1.666	1.666	0.000	91	267961	25.0	22.4	
14 Chloroethane	64	1.725	1.725	0.000	95	316509	25.0	23.6	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	96	728840	25.0	23.7	
16 Trichlorofluoromethane	101	1.986	1.986	0.000	82	696418	25.0	25.2	
17 Ethyl ether	59	2.234	2.234	0.000	96	703663	25.0	24.5	
18 Acrolein	56	2.352	2.352	0.000	99	481412	125.0	129.4	
19 1,1-Dichloroethene	96	2.459	2.459	0.000	91	424405	25.0	25.7	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.483	0.000	94	309879	25.0	25.3	
21 Acetone	58	2.530	2.530	0.000	100	197327	50.0	52.1	
23 Iodomethane	142	2.601	2.601	0.000	97	630486	25.0	25.0	
24 Carbon disulfide	76	2.684	2.684	0.000	100	1267173	25.0	25.8	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	90	1262511	25.0	27.2	
27 Methyl acetate	43	2.909	2.909	0.000	100	1728104	50.0	51.6	
28 Methylene Chloride	84	3.015	3.015	0.000	94	504041	25.0	23.6	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	96	903422	250.0	273.3	
30 Acrylonitrile	53	3.335	3.335	0.000	100	4656247	250.0	264.4	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	578024	25.0	25.6	
31 Methyl tert-butyl ether	73	3.406	3.406	0.000	95	1414073	25.0	25.6	
33 Hexane	57	3.761	3.761	0.000	92	1149887	25.0	26.2	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1298411	25.0	25.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	1882398	25.0	30.1	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	79	105106	25.0	25.2	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	91	607208	25.0	25.4	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	179046	50.0	47.6	
45 Chlorobromomethane	128	5.145	5.145	0.000	88	295454	25.0	25.9	
46 Tetrahydrofuran	42	5.251	5.251	0.000	95	702887	50.0	52.5	
47 Chloroform	83	5.287	5.287	0.000	97	901889	25.0	25.4	
48 1,1,1-Trichloroethane	97	5.476	5.476	0.000	94	655951	25.0	26.6	
49 Cyclohexane	56	5.535	5.535	0.000	90	1390499	25.0	26.6	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	94	740476	25.0	27.3	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	570392	25.0	27.1	
54 Benzene	78	5.938	5.938	0.000	97	2316303	25.0	26.4	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	910792	25.0	25.4	
52 Isobutyl alcohol	41	6.009	6.009	0.000	95	981108	625.0	695.8	
56 n-Heptane	100	6.328	6.328	0.000	95	128293	25.0	26.0	
58 Trichloroethene	130	6.707	6.707	0.000	95	540998	25.0	26.1	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	905168	25.0	27.3	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	97	705915	25.0	26.5	
63 Dibromomethane	93	7.062	7.062	0.000	97	323985	25.0	26.0	
64 1,4-Dioxane	88	7.145	7.145	0.000	93	132949	500.0	516.9	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	585542	25.0	27.3	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	91	934715	50.0	50.8	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	91	770633	25.0	25.1	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	2032742	50.0	54.8	
70 Toluene	91	8.068	8.068	0.000	97	2270227	25.0	26.8	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	662020	25.0	24.7	
72 Ethyl methacrylate	69	8.458	8.458	0.000	96	705604	25.0	25.0	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	465070	25.0	25.7	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	375995	25.0	26.3	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	802464	25.0	26.3	
76 2-Hexanone	43	8.790	8.790	0.000	98	1342508	50.0	50.6	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	424544	25.0	25.3	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	468486	25.0	27.4	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1296643	25.0	25.5	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	96	429306	25.0	27.1	
84 Ethylbenzene	106	9.606	9.606	0.000	98	716573	25.0	27.7	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	98	873208	25.0	27.3	
86 o-Xylene	106	10.127	10.127	0.000	98	831546	25.0	27.1	
87 Styrene	104	10.138	10.138	0.000	96	1352104	25.0	25.5	
88 Bromoform	173	10.304	10.304	0.000	97	233691	25.0	24.1	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	2137526	25.0	25.7	
93 Bromobenzene	156	10.777	10.777	0.000	96	476111	25.0	26.7	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	657133	25.0	26.2	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	192288	25.0	24.9	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	75	244375	25.0	24.9	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	581535	25.0	27.4	
97 2-Chlorotoluene	126	10.979	10.979	0.000	97	489402	25.0	26.1	
100 4-Chlorotoluene	126	11.085	11.085	0.000	94	494408	25.0	26.5	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	88	1724656	25.0	25.7	
102 tert-Butylbenzene	119	11.405	11.405	0.000	93	1409554	25.0	26.1	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1737784	25.0	25.5	
105 sec-Butylbenzene	105	11.618	11.618	0.000	95	2199514	25.0	25.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	915834	25.0	26.7	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	1852540	25.0	25.9	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	98	924028	25.0	25.1	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	97	914462	25.0	26.5	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	1726969	25.0	26.1	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	82	132902	25.0	25.3	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	599335	25.0	27.9	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	98	246394	25.0	26.0	
117 Naphthalene	128	14.008	14.008	0.000	97	2268001	25.0	26.0	
118 1,2,3-Trichlorobenzene	180	14.244	14.244	0.000	95	603979	25.0	26.5	
S 134 Trihalomethanes, Total	1				0		100.0	102.1	
S 158 Total BTEX	1				0		125.0	135.2	
S 133 Xylenes, Total	106				0		50.0	54.4	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	20.00	Units: uL
VMAROLISTDW_00419	Amount Added:	20.00	Units: uL
VMRGAS_00410	Amount Added:	20.00	Units: uL
VMRPRIMW_00462	Amount Added:	20.00	Units: uL

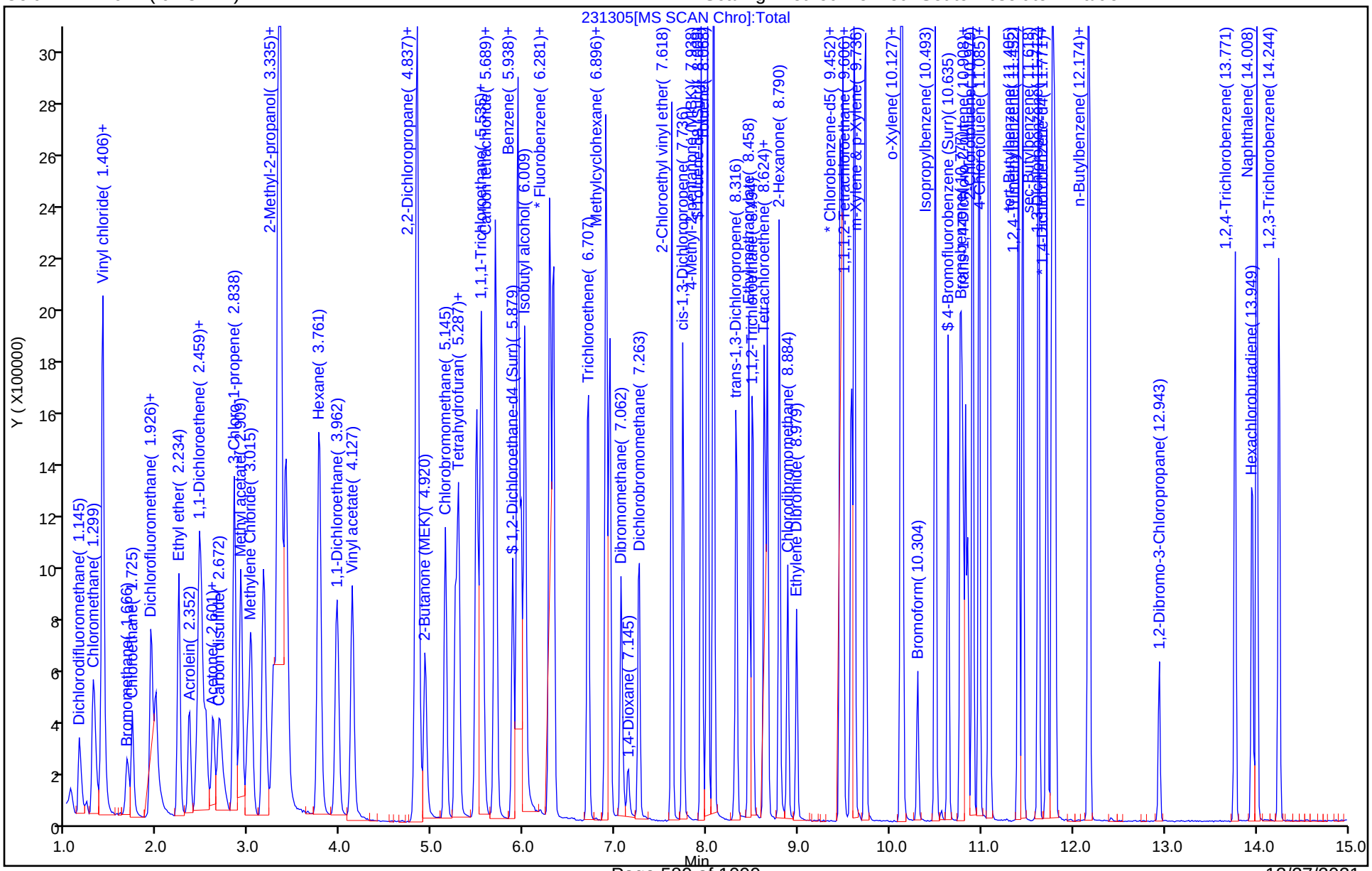
Report Date: 10-Dec-2021 08:52:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231305.D

Injection Date:	06-Dec-2021 17:27:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231306.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Dec-2021 17:52:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-008
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:52:14 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:32:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	2091610	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	87	1364274	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	666607	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	734161	37.5	37.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	970977	37.5	36.2	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	94	2772290	37.5	37.3	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	87	804412	37.5	38.1	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	690159	37.5	35.6	
10 Chloromethane	50	1.299	1.299	0.000	99	1521103	37.5	33.6	
11 Vinyl chloride	62	1.382	1.394	-0.012	97	1020157	37.5	36.5	
12 Butadiene	54	1.394	1.406	-0.012	95	1392874	37.5	35.8	
13 Bromomethane	94	1.666	1.666	0.000	91	377264	37.5	30.4	
14 Chloroethane	64	1.725	1.725	0.000	95	434683	37.5	31.3	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	96	1061078	37.5	33.4	
16 Trichlorofluoromethane	101	1.974	1.986	-0.012	87	1007490	37.5	35.2	
17 Ethyl ether	59	2.234	2.234	0.000	97	1108316	37.5	37.4	
18 Acrolein	56	2.352	2.352	0.000	100	736796	187.5	191.5	
19 1,1-Dichloroethene	96	2.447	2.459	-0.012	91	665394	37.5	39.0	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.483	0.000	96	470251	37.5	37.1	
21 Acetone	58	2.530	2.530	0.000	100	298863	75.0	76.9	
23 Iodomethane	142	2.601	2.601	0.000	97	962505	37.5	36.9	
24 Carbon disulfide	76	2.672	2.684	-0.012	100	1989467	37.5	39.1	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	90	1933410	37.5	40.2	
27 Methyl acetate	43	2.909	2.909	0.000	100	2689518	75.0	77.6	
28 Methylene Chloride	84	3.015	3.015	0.000	94	764653	37.5	34.6	
29 2-Methyl-2-propanol	59	3.275	3.264	0.011	96	1287427	375.0	376.6	
30 Acrylonitrile	53	3.335	3.335	0.000	100	7264465	375.0	398.8	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	90	902963	37.5	38.7	
31 Methyl tert-butyl ether	73	3.406	3.406	0.000	96	2233448	37.5	39.0	
33 Hexane	57	3.761	3.761	0.000	92	1726041	37.5	38.1	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1966546	37.5	37.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	2658593	37.5	41.0	
41 2,2-Dichloropropane	97	4.826	4.825	0.001	86	164490	37.5	38.1	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	931339	37.5	37.7	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	283043	75.0	72.8	
45 Chlorobromomethane	128	5.145	5.145	0.000	88	448740	37.5	38.0	
46 Tetrahydrofuran	42	5.251	5.251	0.000	95	1094785	75.0	79.1	
47 Chloroform	83	5.287	5.287	0.000	97	1377311	37.5	37.5	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	96	1010514	37.5	39.6	
49 Cyclohexane	56	5.535	5.535	0.000	89	2055033	37.5	38.0	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	92	1127733	37.5	40.3	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	894655	37.5	41.1	
54 Benzene	78	5.938	5.938	0.000	97	3482800	37.5	38.3	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	1372734	37.5	37.0	
52 Isobutyl alcohol	41	6.009	6.009	0.000	96	1445823	937.5	991.3	
56 n-Heptane	100	6.328	6.328	0.000	96	193415	37.5	38.0	
58 Trichloroethene	130	6.707	6.707	0.000	96	833398	37.5	38.9	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	1358819	37.5	39.7	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	98	1044066	37.5	37.8	
63 Dibromomethane	93	7.062	7.062	0.000	97	484664	37.5	37.5	
64 1,4-Dioxane	88	7.145	7.145	0.000	93	196534	750.0	738.7	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	899896	37.5	40.5	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	1417337	75.0	74.2	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	91	1192914	37.5	37.4	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	3140804	75.0	81.9	
70 Toluene	91	8.080	8.068	0.012	97	3392967	37.5	39.2	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	1035190	37.5	37.6	
72 Ethyl methacrylate	69	8.458	8.458	0.000	96	1086781	37.5	37.3	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	91	697669	37.5	37.8	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	548320	37.5	37.5	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	1192767	37.5	38.3	
76 2-Hexanone	43	8.790	8.790	0.000	97	2064846	75.0	75.9	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	635170	37.5	37.0	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	704112	37.5	40.3	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1931564	37.5	37.2	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	96	642532	37.5	39.7	
84 Ethylbenzene	106	9.606	9.606	0.000	98	1055644	37.5	40.0	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	1278173	37.5	39.1	
86 o-Xylene	106	10.127	10.127	0.000	97	1235566	37.5	39.5	
87 Styrene	104	10.138	10.138	0.000	96	2017819	37.5	37.1	
88 Bromoform	173	10.304	10.304	0.000	97	374032	37.5	37.7	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	3188058	37.5	37.4	
93 Bromobenzene	156	10.777	10.777	0.000	98	701644	37.5	38.8	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	974041	37.5	38.2	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	280925	37.5	35.8	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	76	375855	37.5	37.4	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	853730	37.5	39.5	
97 2-Chlorotoluene	126	10.979	10.979	0.000	96	712702	37.5	37.3	
100 4-Chlorotoluene	126	11.085	11.085	0.000	95	727425	37.5	38.4	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	2537970	37.5	37.0	
102 tert-Butylbenzene	119	11.405	11.405	0.000	94	2055255	37.5	37.2	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	2570914	37.5	37.0	
105 sec-Butylbenzene	105	11.618	11.618	0.000	95	3252597	37.5	37.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	1335091	37.5	38.2	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	2698394	37.5	37.0	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	1389693	37.5	37.2	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	97	1354296	37.5	38.5	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	2529262	37.5	37.4	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	84	216020	37.5	40.4	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	884326	37.5	40.4	
116 Hexachlorobutadiene	225	13.961	13.960	0.000	98	350924	37.5	36.5	
117 Naphthalene	128	14.008	14.008	0.000	97	3450574	37.5	38.7	
118 1,2,3-Trichlorobenzene	180	14.256	14.244	0.012	95	880815	37.5	38.0	
S 134 Trihalomethanes, Total	1				0		150.0	152.7	
S 158 Total BTEX	1				0		187.5	196.0	
S 131 1,2-Dichloroethene, Total	96				0			76.4	
S 132 1,3-Dichloropropene, Total	75				0			75.0	
S 133 Xylenes, Total	106				0		75.0	78.5	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	30.00	Units: uL
VMAROLISTDW_00419	Amount Added:	30.00	Units: uL
VMRGAS_00410	Amount Added:	30.00	Units: uL
VMRPRIMW_00462	Amount Added:	30.00	Units: uL

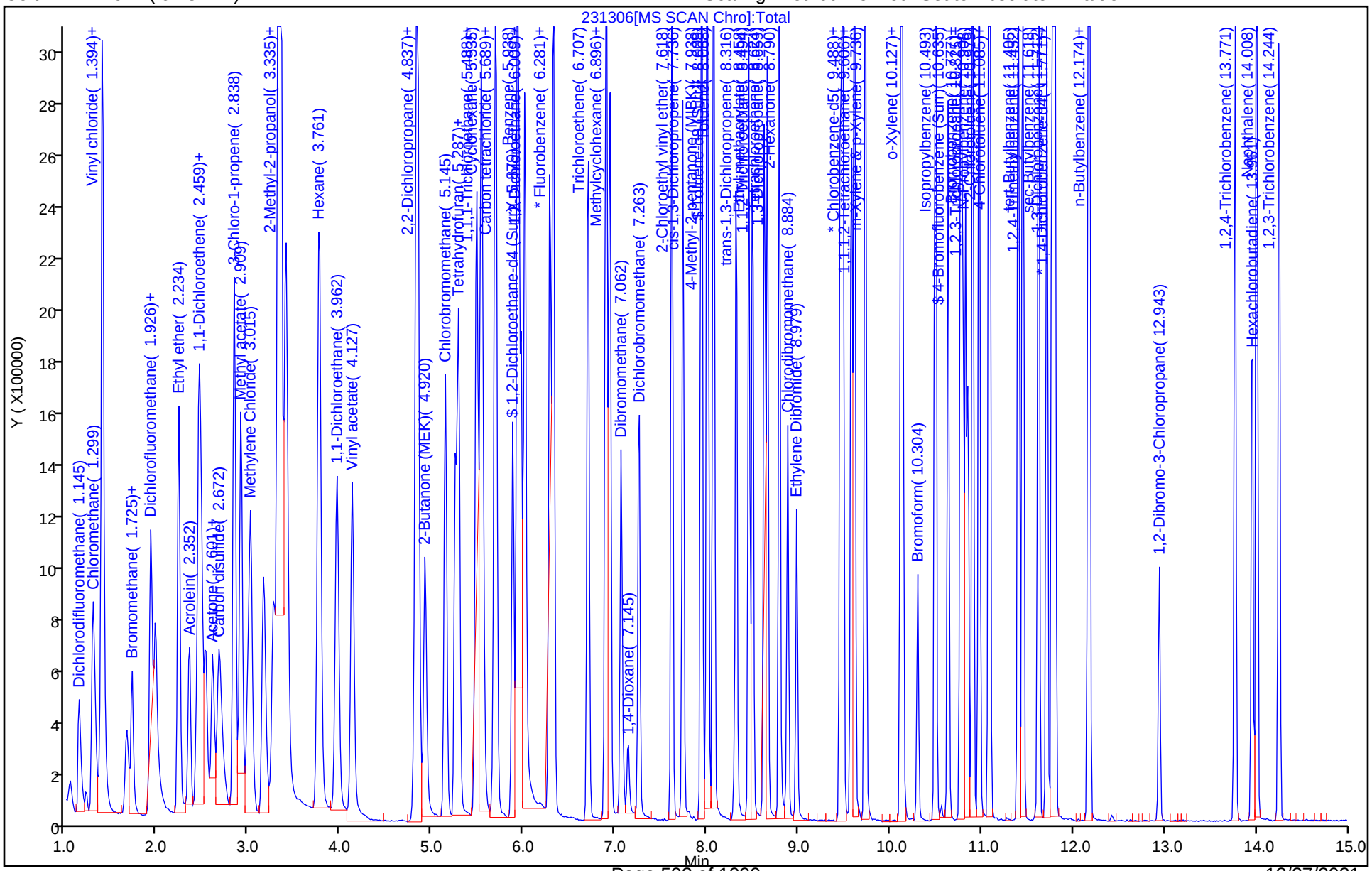
Report Date: 10-Dec-2021 08:52:15 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231306.D

Injection Date:	06-Dec-2021 17:52:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Dec-2021 18:17:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-009
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 08:52:18 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 07-Dec-2021 06:45:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	2291020	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	87	1496746	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	97	711463	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	1043470	50.0	48.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.879	-0.001	97	1394316	50.0	47.5	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	94	4120987	50.0	50.5	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	87	1191826	50.0	51.4	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	972195	50.0	45.8	
10 Chloromethane	50	1.299	1.299	0.000	99	2114898	50.0	42.6	
11 Vinyl chloride	62	1.382	1.394	-0.012	97	1422301	50.0	46.5	
12 Butadiene	54	1.406	1.406	0.000	94	1951350	50.0	45.8	
13 Bromomethane	94	1.666	1.666	0.000	91	490224	50.0	36.1	
14 Chloroethane	64	1.725	1.725	0.000	95	584975	50.0	38.4	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	1452227	50.0	41.7	
16 Trichlorofluoromethane	101	1.974	1.986	-0.012	87	1382005	50.0	44.1	
17 Ethyl ether	59	2.234	2.234	0.000	97	1583632	50.0	48.7	
18 Acrolein	56	2.352	2.352	0.000	100	991020	250.0	235.1	
19 1,1-Dichloroethene	96	2.459	2.459	0.000	91	919149	50.0	49.2	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.483	-0.001	94	668312	50.0	48.1	
21 Acetone	58	2.530	2.530	0.000	100	406755	100.0	95.9	
23 Iodomethane	142	2.601	2.601	0.000	97	1402128	50.0	49.1	
24 Carbon disulfide	76	2.672	2.684	-0.012	100	2904436	50.0	52.1	
26 3-Chloro-1-propene	41	2.837	2.838	-0.001	91	2734361	50.0	51.9	
27 Methyl acetate	43	2.908	2.909	-0.001	100	3701632	100.0	97.6	
28 Methylene Chloride	84	3.015	3.015	0.000	94	1068753	50.0	44.1	
29 2-Methyl-2-propanol	59	3.275	3.264	0.011	96	1743806	500.0	465.7	
30 Acrylonitrile	53	3.334	3.335	-0.001	99	9849533	500.0	493.7	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	1274926	50.0	49.9	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	96	3225978	50.0	51.5	
33 Hexane	57	3.760	3.761	-0.001	91	2525257	50.0	50.8	
34 1,1-Dichloroethane	63	3.961	3.962	-0.001	96	2812926	50.0	49.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	96	3467125	50.0	48.9	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	91	224337	50.0	47.5	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	89	1346967	50.0	49.7	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	384412	100.0	90.2	
45 Chlorobromomethane	128	5.145	5.145	0.000	88	640536	50.0	49.6	
46 Tetrahydrofuran	42	5.251	5.251	0.000	95	1515896	100.0	100.0	
47 Chloroform	83	5.287	5.287	0.000	97	1966181	50.0	48.9	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	96	1458422	50.0	52.2	
49 Cyclohexane	56	5.535	5.535	0.000	89	2939449	50.0	49.6	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	93	1630878	50.0	53.1	
51 Carbon tetrachloride	117	5.689	5.689	0.000	97	1274110	50.0	53.4	
54 Benzene	78	5.938	5.938	0.000	97	5052497	50.0	50.8	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	95	2012205	50.0	49.5	
52 Isobutyl alcohol	41	6.009	6.009	0.000	96	1885514	1250.0	1180.2	
56 n-Heptane	100	6.328	6.328	0.000	96	288597	50.0	51.7	
58 Trichloroethene	130	6.707	6.707	0.000	96	1241750	50.0	52.9	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	1929196	50.0	51.4	
61 1,2-Dichloropropane	63	6.943	6.944	-0.001	98	1541791	50.0	51.0	
63 Dibromomethane	93	7.062	7.062	0.000	97	696472	50.0	49.2	
64 1,4-Dioxane	88	7.145	7.145	-0.001	94	271556	1000.0	931.9	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	1334759	50.0	54.8	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	2152129	100.0	102.6	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	91	1786477	50.0	51.0	
69 4-Methyl-2-pentanone (MIBK)	43	7.937	7.938	-0.001	97	4454387	100.0	106.0	
70 Toluene	91	8.079	8.068	0.011	97	5013047	50.0	52.7	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	1560148	50.0	51.6	
72 Ethyl methacrylate	69	8.458	8.458	0.000	96	1656077	50.0	51.5	
73 1,1,2-Trichloroethane	97	8.493	8.494	-0.001	92	1008228	50.0	49.8	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	813353	50.0	50.7	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	1783531	50.0	52.2	
76 2-Hexanone	43	8.789	8.790	-0.001	98	2969611	100.0	99.3	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	968049	50.0	51.2	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	1030544	50.0	53.7	
82 Chlorobenzene	112	9.487	9.488	-0.001	94	2867623	50.0	50.3	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	96	941440	50.0	53.0	
84 Ethylbenzene	106	9.618	9.606	0.012	98	1566067	50.0	54.0	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	1895935	50.0	52.8	
86 o-Xylene	106	10.126	10.127	-0.001	97	1836494	50.0	53.5	
87 Styrene	104	10.138	10.138	0.000	96	3023736	50.0	50.6	
88 Bromoform	173	10.304	10.304	0.000	97	571072	50.0	52.3	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	4662241	50.0	49.7	
93 Bromobenzene	156	10.777	10.777	0.000	96	1038294	50.0	53.7	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	1362537	50.0	50.0	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	404229	50.0	48.2	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	79	552597	50.0	51.3	
96 N-Propylbenzene	120	10.907	10.908	-0.001	99	1228877	50.0	53.3	
97 2-Chlorotoluene	126	10.978	10.979	-0.001	97	1040458	50.0	51.1	
100 4-Chlorotoluene	126	11.085	11.085	0.000	96	1074326	50.0	53.1	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	3681884	50.0	50.2	
102 tert-Butylbenzene	119	11.404	11.405	-0.001	94	2976287	50.0	50.3	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	3731223	50.0	50.2	
105 sec-Butylbenzene	105	11.617	11.618	-0.001	95	4656022	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	1964931	50.0	52.7	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	3887624	50.0	49.8	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	98	2037532	50.0	51.1	
112 1,2-Dichlorobenzene	146	12.173	12.174	-0.001	97	1925072	50.0	51.3	
111 n-Butylbenzene	91	12.173	12.174	-0.001	98	3561775	50.0	49.3	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	84	291702	50.0	51.2	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	1222846	50.0	52.3	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	98	471193	50.0	45.9	
117 Naphthalene	128	14.008	14.008	0.000	97	4591906	50.0	48.2	
118 1,2,3-Trichlorobenzene	180	14.256	14.244	0.012	96	1183865	50.0	47.8	
S 134 Trihalomethanes, Total	1				0		200.0	207.3	
S 158 Total BTEX	1				0		250.0	263.8	
S 131 1,2-Dichloroethene, Total	96				0			99.7	
S 132 1,3-Dichloropropene, Total	75				0			102.6	
S 133 Xylenes, Total	106				0		100.0	106.3	

QC Flag Legend

Processing Flags

Reagents:

vm125UX21_IS_00012	Amount Added:	1.10	Units: uL
vm50ss_00459	Amount Added:	40.00	Units: uL
VMAROLISTDW_00419	Amount Added:	40.00	Units: uL
VMRGAS_00410	Amount Added:	40.00	Units: uL
VMRPRIMW_00462	Amount Added:	40.00	Units: uL

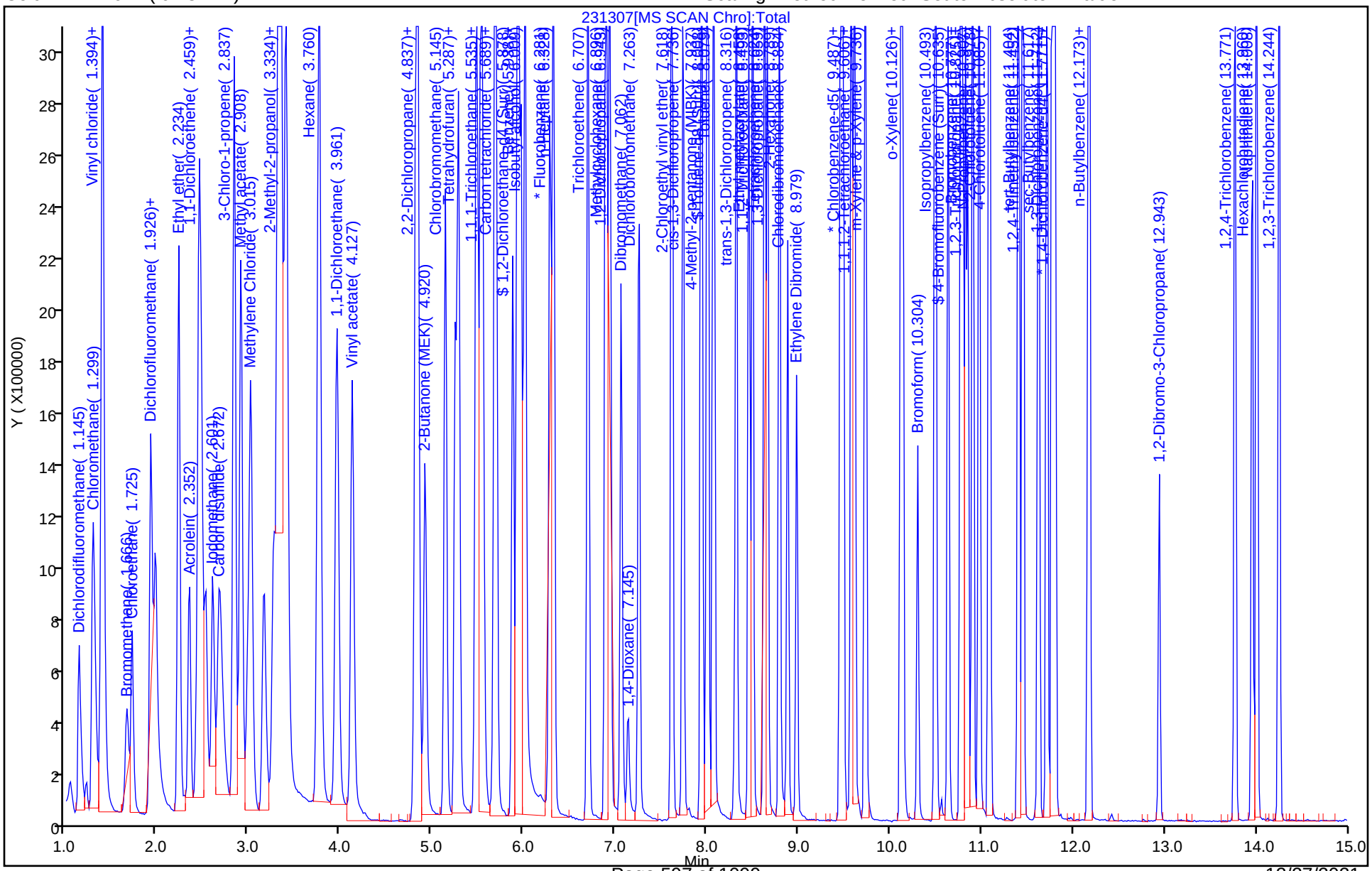
Report Date: 10-Dec-2021 08:52:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Injection Date:	06-Dec-2021 18:17:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

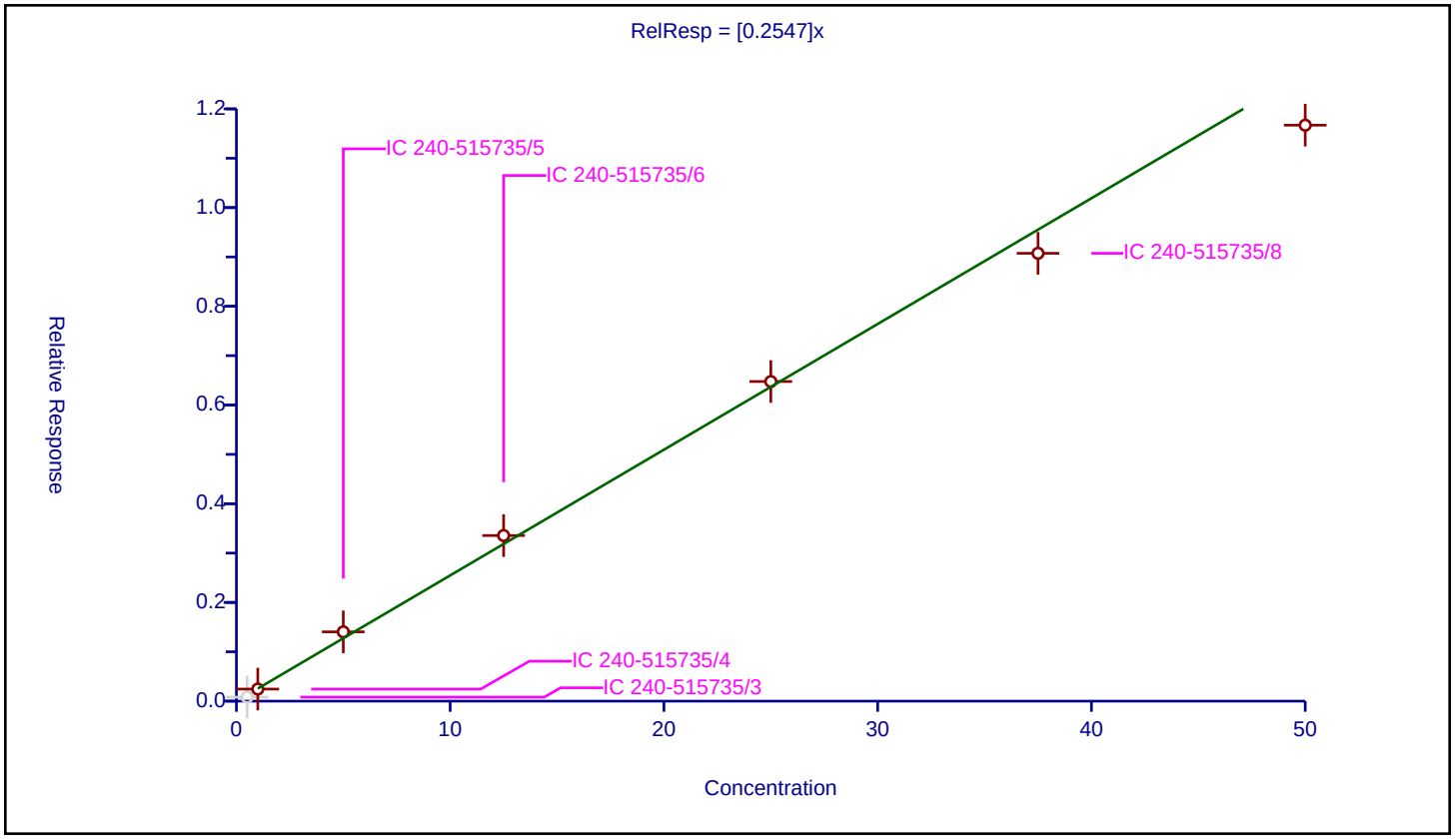
Curve Coefficients

Intercept:	0
Slope:	0.2547

Error Coefficients

Standard Error:	584000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.081432	27.5	1899933.0	0.162864	N
2	IC 240-515735/4	1.0	0.244706	27.5	1752449.0	0.244706	Y
3	IC 240-515735/5	5.0	1.404152	27.5	1737130.0	0.28083	Y
4	IC 240-515735/6	12.5	3.35542	27.5	1864275.0	0.268434	Y
5	ICIS 240-515735/7	25.0	6.476206	27.5	2022141.0	0.259048	Y
6	IC 240-515735/8	37.5	9.074049	27.5	2091610.0	0.241975	Y
7	IC 240-515735/9	50.0	11.669633	27.5	2291020.0	0.233393	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

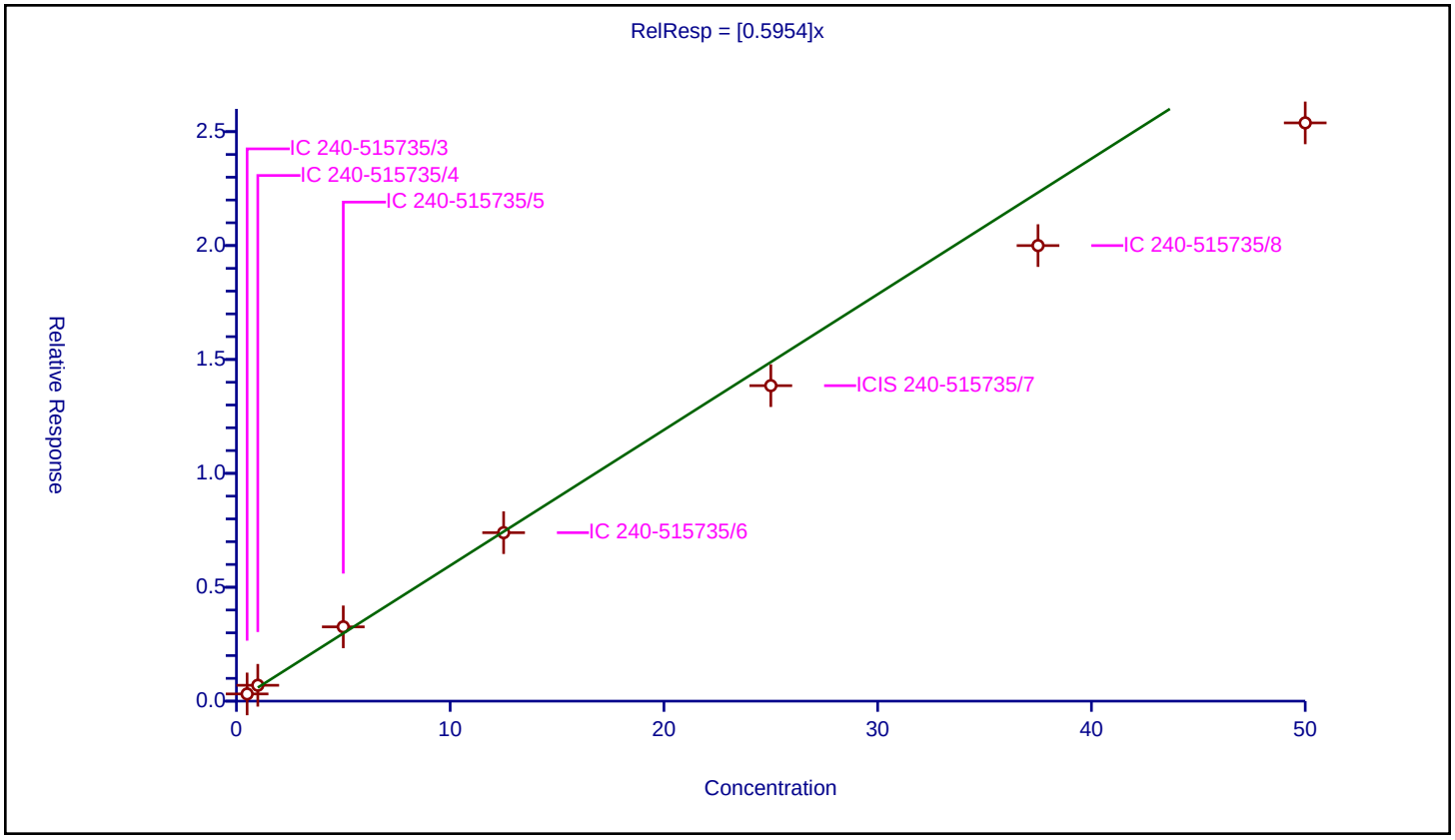
Curve Coefficients

Intercept:	0
Slope:	0.5954

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	11.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.316131	27.5	1899933.0	0.632262	Y
2	IC 240-515735/4	1.0	0.696488	27.5	1752449.0	0.696488	Y
3	IC 240-515735/5	5.0	3.261142	27.5	1737130.0	0.652228	Y
4	IC 240-515735/6	12.5	7.395686	27.5	1864275.0	0.591655	Y
5	ICIS 240-515735/7	25.0	13.849895	27.5	2022141.0	0.553996	Y
6	IC 240-515735/8	37.5	19.999107	27.5	2091610.0	0.53331	Y
7	IC 240-515735/9	50.0	25.385939	27.5	2291020.0	0.507719	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

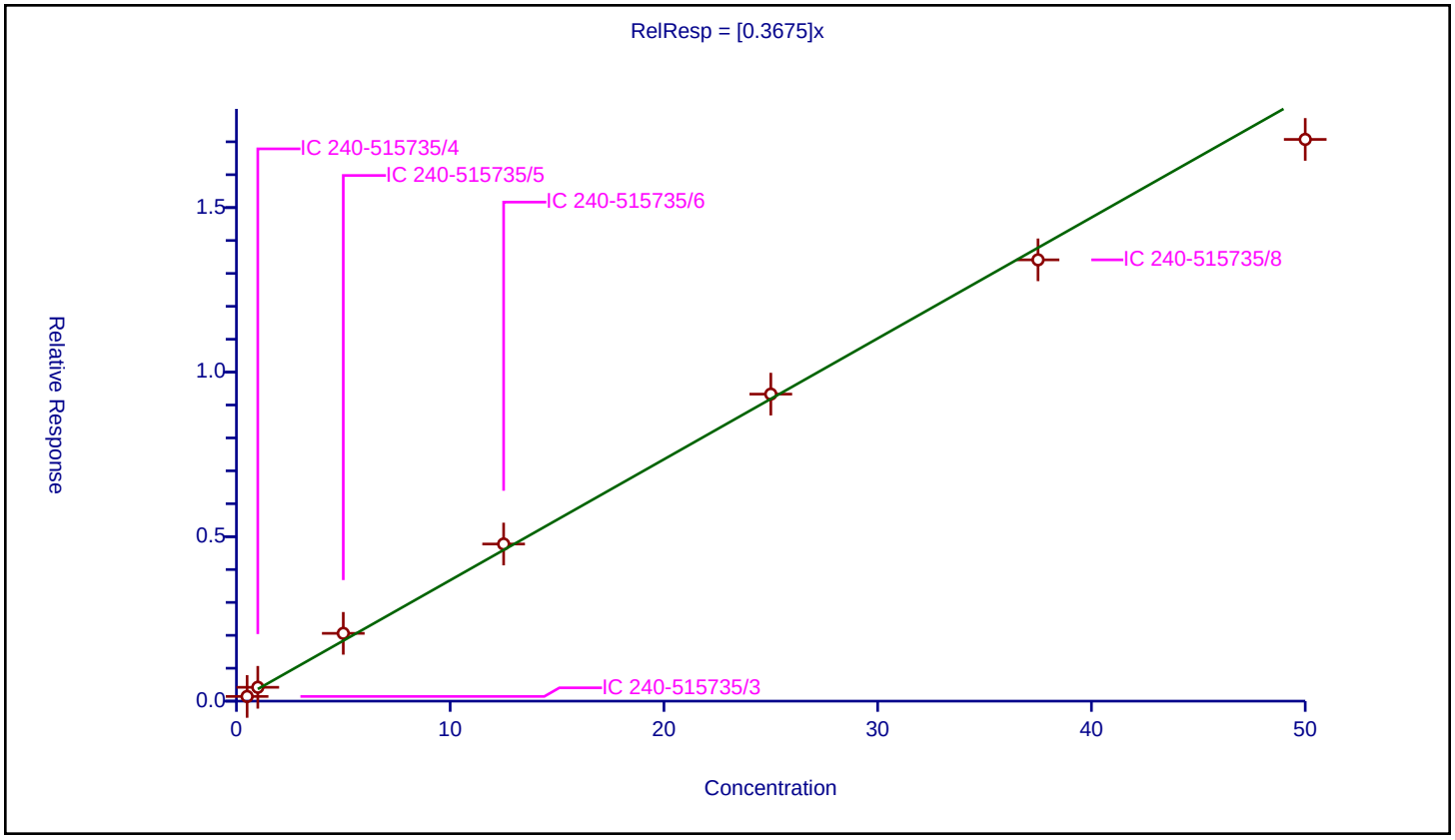
Curve Coefficients

Intercept:	0
Slope:	0.3675

Error Coefficients

Standard Error:	781000
Relative Standard Error:	12.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.142672	27.5	1899933.0	0.285344	Y
2	IC 240-515735/4	1.0	0.42024	27.5	1752449.0	0.42024	Y
3	IC 240-515735/5	5.0	2.060668	27.5	1737130.0	0.412134	Y
4	IC 240-515735/6	12.5	4.775812	27.5	1864275.0	0.382065	Y
5	ICIS 240-515735/7	25.0	9.331478	27.5	2022141.0	0.373259	Y
6	IC 240-515735/8	37.5	13.412786	27.5	2091610.0	0.357674	Y
7	IC 240-515735/9	50.0	17.07243	27.5	2291020.0	0.341449	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

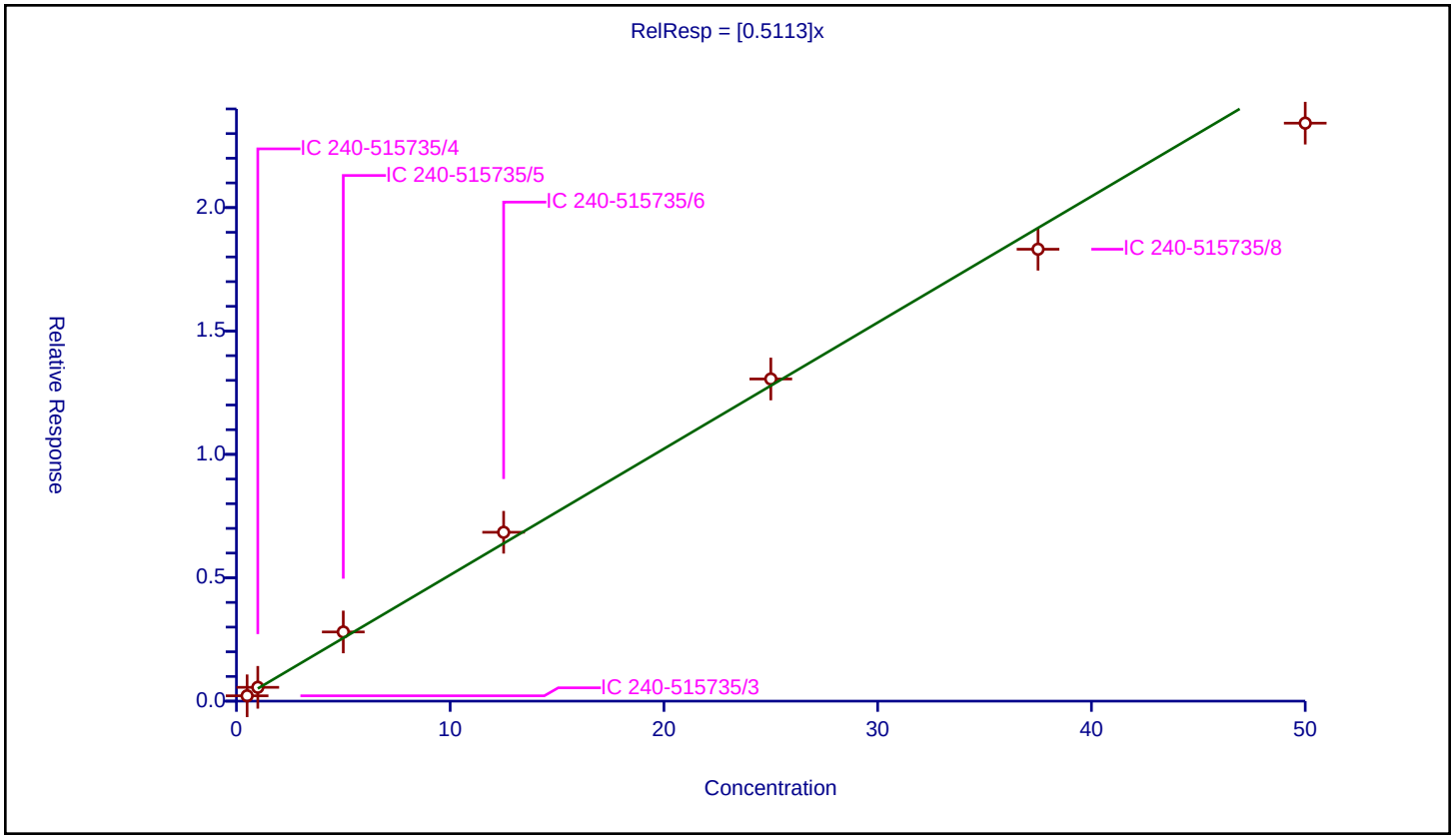
Curve Coefficients

Intercept:	0
Slope:	0.5113

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.21665	27.5	1899933.0	0.433299	Y
2	IC 240-515735/4	1.0	0.559102	27.5	1752449.0	0.559102	Y
3	IC 240-515735/5	5.0	2.802985	27.5	1737130.0	0.560597	Y
4	IC 240-515735/6	12.5	6.842832	27.5	1864275.0	0.547427	Y
5	ICIS 240-515735/7	25.0	13.055089	27.5	2022141.0	0.522204	Y
6	IC 240-515735/8	37.5	18.313182	27.5	2091610.0	0.488352	Y
7	IC 240-515735/9	50.0	23.422809	27.5	2291020.0	0.468456	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

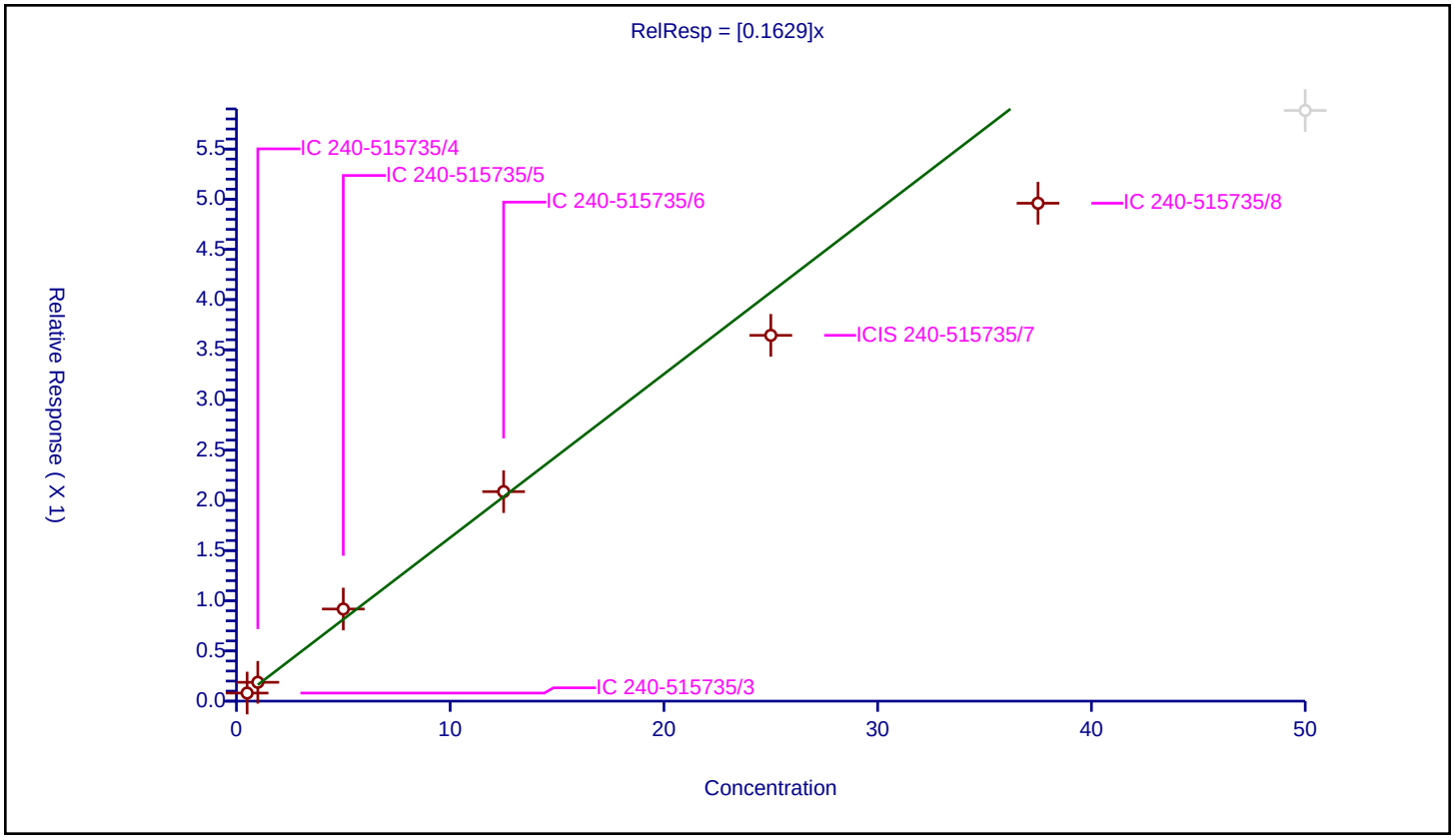
Curve Coefficients

Intercept:	0
Slope:	0.1629

Error Coefficients

Standard Error:	218000
Relative Standard Error:	13.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.080636	27.5	1899933.0	0.161271	Y
2	IC 240-515735/4	1.0	0.187727	27.5	1752449.0	0.187727	Y
3	IC 240-515735/5	5.0	0.917611	27.5	1737130.0	0.183522	Y
4	IC 240-515735/6	12.5	2.087258	27.5	1864275.0	0.166981	Y
5	ICIS 240-515735/7	25.0	3.644122	27.5	2022141.0	0.145765	Y
6	IC 240-515735/8	37.5	4.960179	27.5	2091610.0	0.132271	Y
7	IC 240-515735/9	50.0	5.884348	27.5	2291020.0	0.117687	N



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

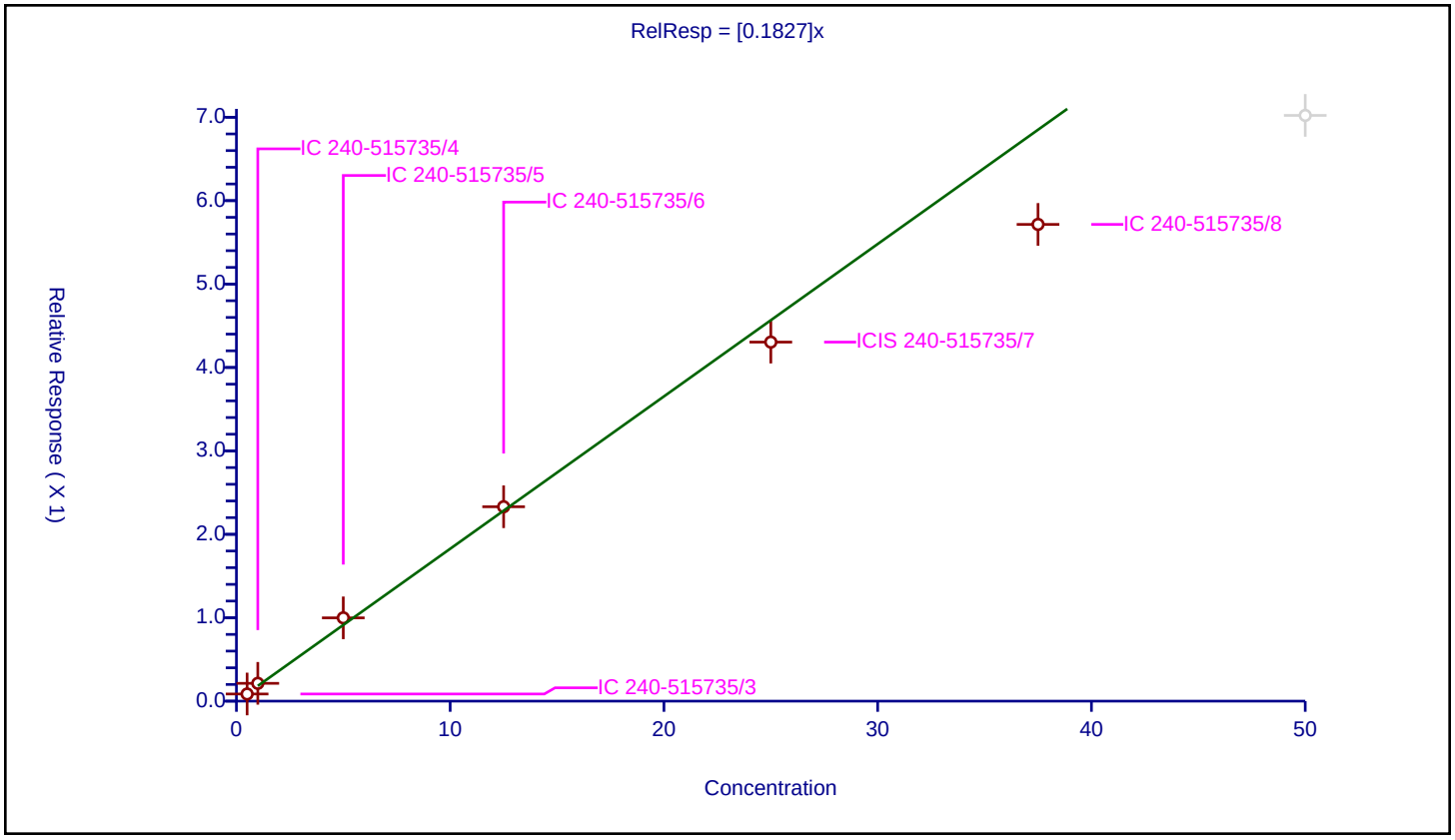
Curve Coefficients

Intercept:	0
Slope:	0.1827

Error Coefficients

Standard Error:	252000
Relative Standard Error:	12.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.085832	27.5	1899933.0	0.171664	Y
2	IC 240-515735/4	1.0	0.213557	27.5	1752449.0	0.213557	Y
3	IC 240-515735/5	5.0	0.998664	27.5	1737130.0	0.199733	Y
4	IC 240-515735/6	12.5	2.330517	27.5	1864275.0	0.186441	Y
5	ICIS 240-515735/7	25.0	4.304347	27.5	2022141.0	0.172174	Y
6	IC 240-515735/8	37.5	5.715111	27.5	2091610.0	0.152403	Y
7	IC 240-515735/9	50.0	7.021681	27.5	2291020.0	0.140434	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

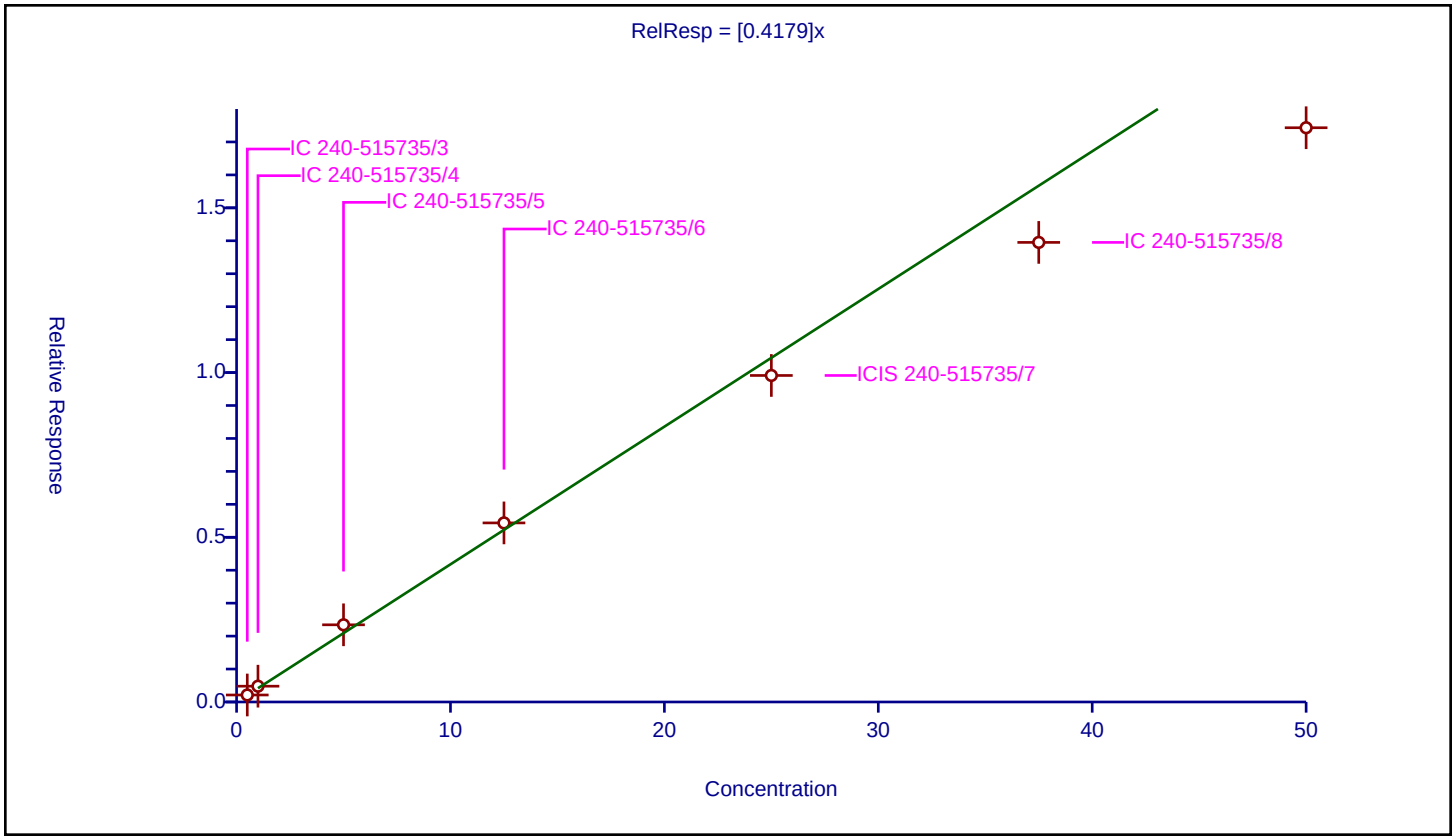
Curve Coefficients

Intercept:	0
Slope:	0.4179

Error Coefficients

Standard Error:	809000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.212597	27.5	1899933.0	0.425194	Y
2	IC 240-515735/4	1.0	0.479432	27.5	1752449.0	0.479432	Y
3	IC 240-515735/5	5.0	2.343293	27.5	1737130.0	0.468659	Y
4	IC 240-515735/6	12.5	5.436453	27.5	1864275.0	0.434916	Y
5	ICIS 240-515735/7	25.0	9.911821	27.5	2022141.0	0.396473	Y
6	IC 240-515735/8	37.5	13.950806	27.5	2091610.0	0.372021	Y
7	IC 240-515735/9	50.0	17.431643	27.5	2291020.0	0.348633	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

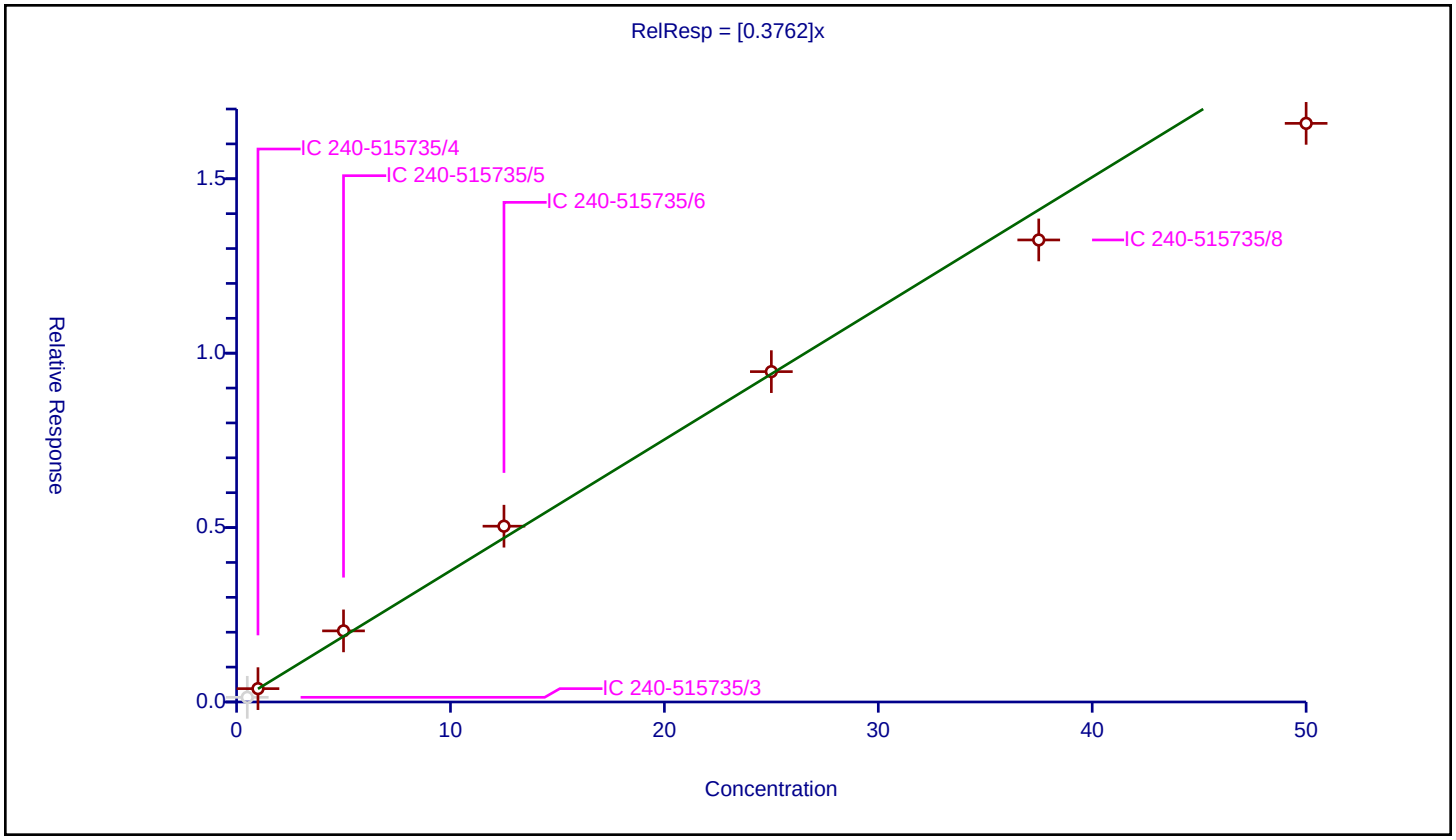
Curve Coefficients

Intercept:	0
Slope:	0.3762

Error Coefficients

Standard Error:	842000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.133814	27.5	1899933.0	0.267628	N
2	IC 240-515735/4	1.0	0.382375	27.5	1752449.0	0.382375	Y
3	IC 240-515735/5	5.0	2.038615	27.5	1737130.0	0.407723	Y
4	IC 240-515735/6	12.5	5.039708	27.5	1864275.0	0.403177	Y
5	ICIS 240-515735/7	25.0	9.4709	27.5	2022141.0	0.378836	Y
6	IC 240-515735/8	37.5	13.246243	27.5	2091610.0	0.353233	Y
7	IC 240-515735/9	50.0	16.588741	27.5	2291020.0	0.331775	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

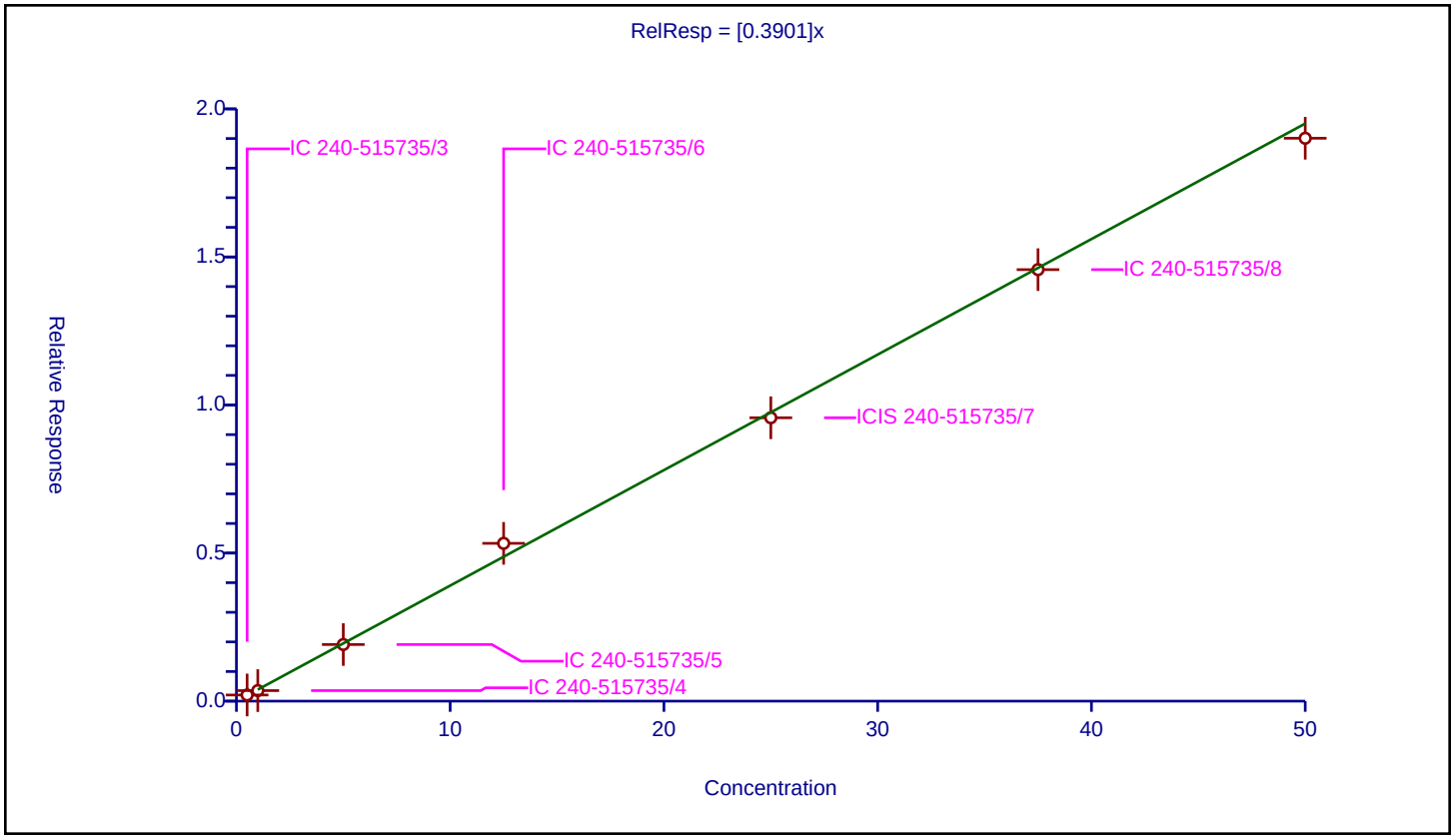
Curve Coefficients

Intercept:	0
Slope:	0.3901

Error Coefficients

Standard Error:	854000
Relative Standard Error:	6.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.207502	27.5	1899933.0	0.415004	Y
2	IC 240-515735/4	1.0	0.355431	27.5	1752449.0	0.355431	Y
3	IC 240-515735/5	5.0	1.911922	27.5	1737130.0	0.382384	Y
4	IC 240-515735/6	12.5	5.328416	27.5	1864275.0	0.426273	Y
5	ICIS 240-515735/7	25.0	9.569428	27.5	2022141.0	0.382777	Y
6	IC 240-515735/8	37.5	14.57188	27.5	2091610.0	0.388583	Y
7	IC 240-515735/9	50.0	19.008948	27.5	2291020.0	0.380179	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

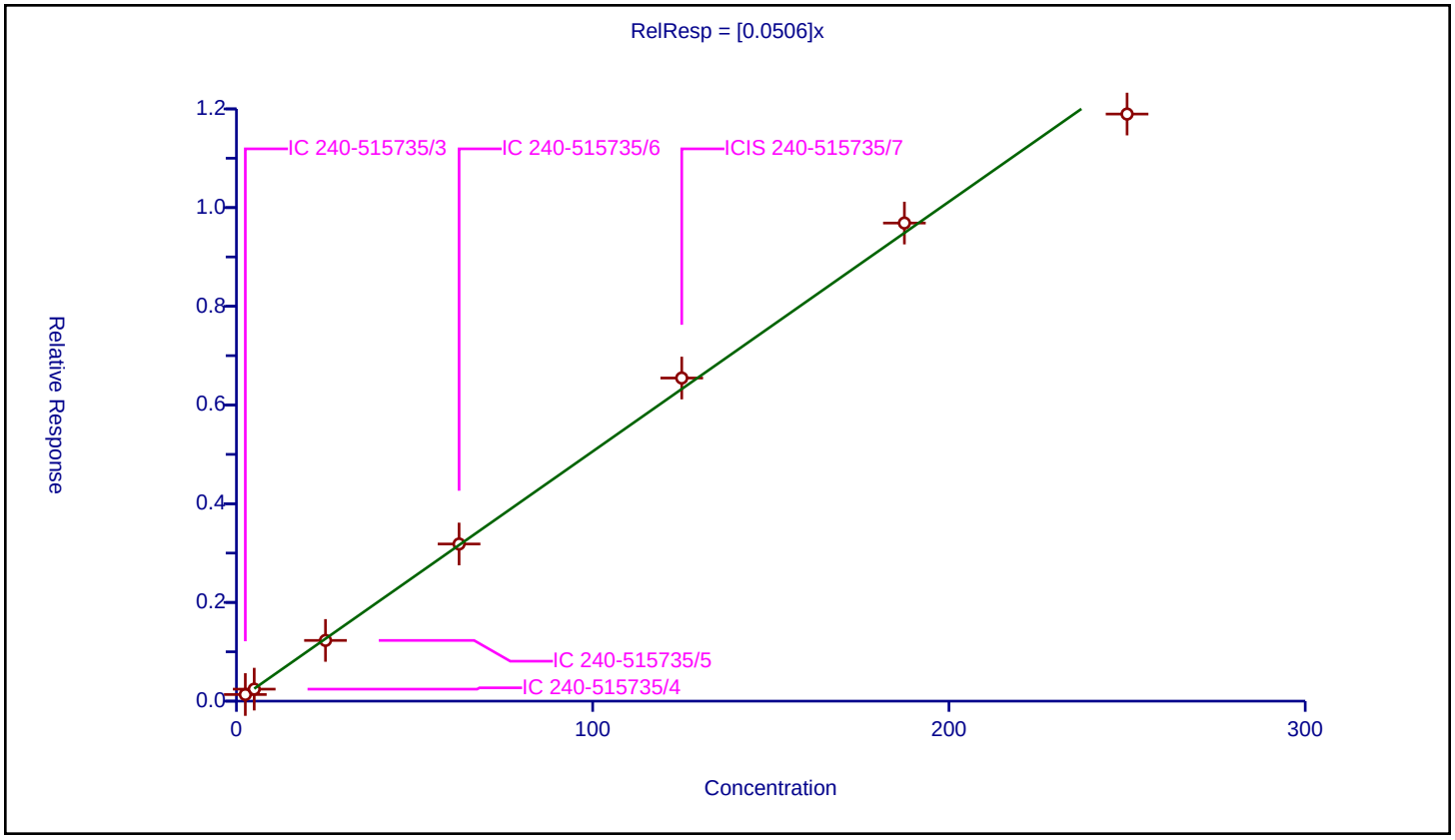
Curve Coefficients

Intercept:	0
Slope:	0.0506

Error Coefficients

Standard Error:	549000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	2.5	0.134364	27.5	1899933.0	0.053746	Y
2	IC 240-515735/4	5.0	0.243262	27.5	1752449.0	0.048652	Y
3	IC 240-515735/5	25.0	1.229951	27.5	1737130.0	0.049198	Y
4	IC 240-515735/6	62.5	3.184131	27.5	1864275.0	0.050946	Y
5	ICIS 240-515735/7	125.0	6.546937	27.5	2022141.0	0.052375	Y
6	IC 240-515735/8	187.5	9.687222	27.5	2091610.0	0.051665	Y
7	IC 240-515735/9	250.0	11.895597	27.5	2291020.0	0.047582	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

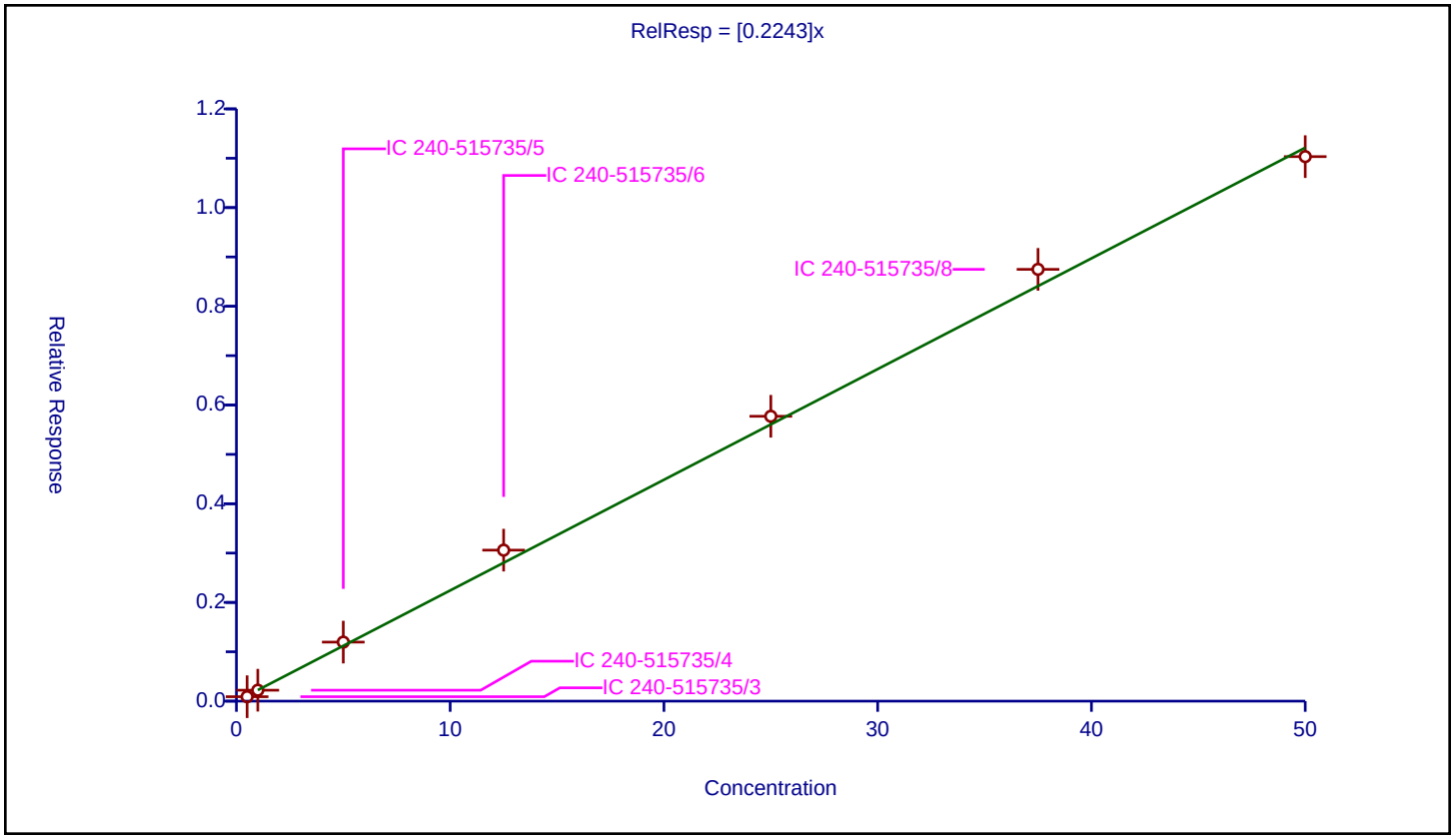
Curve Coefficients

Intercept:	0
Slope:	0.2243

Error Coefficients

Standard Error:	503000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.089798	27.5	1899933.0	0.179596	Y
2	IC 240-515735/4	1.0	0.221513	27.5	1752449.0	0.221513	Y
3	IC 240-515735/5	5.0	1.195994	27.5	1737130.0	0.239199	Y
4	IC 240-515735/6	12.5	3.059351	27.5	1864275.0	0.244748	Y
5	ICIS 240-515735/7	25.0	5.771673	27.5	2022141.0	0.230867	Y
6	IC 240-515735/8	37.5	8.748445	27.5	2091610.0	0.233292	Y
7	IC 240-515735/9	50.0	11.032901	27.5	2291020.0	0.220658	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

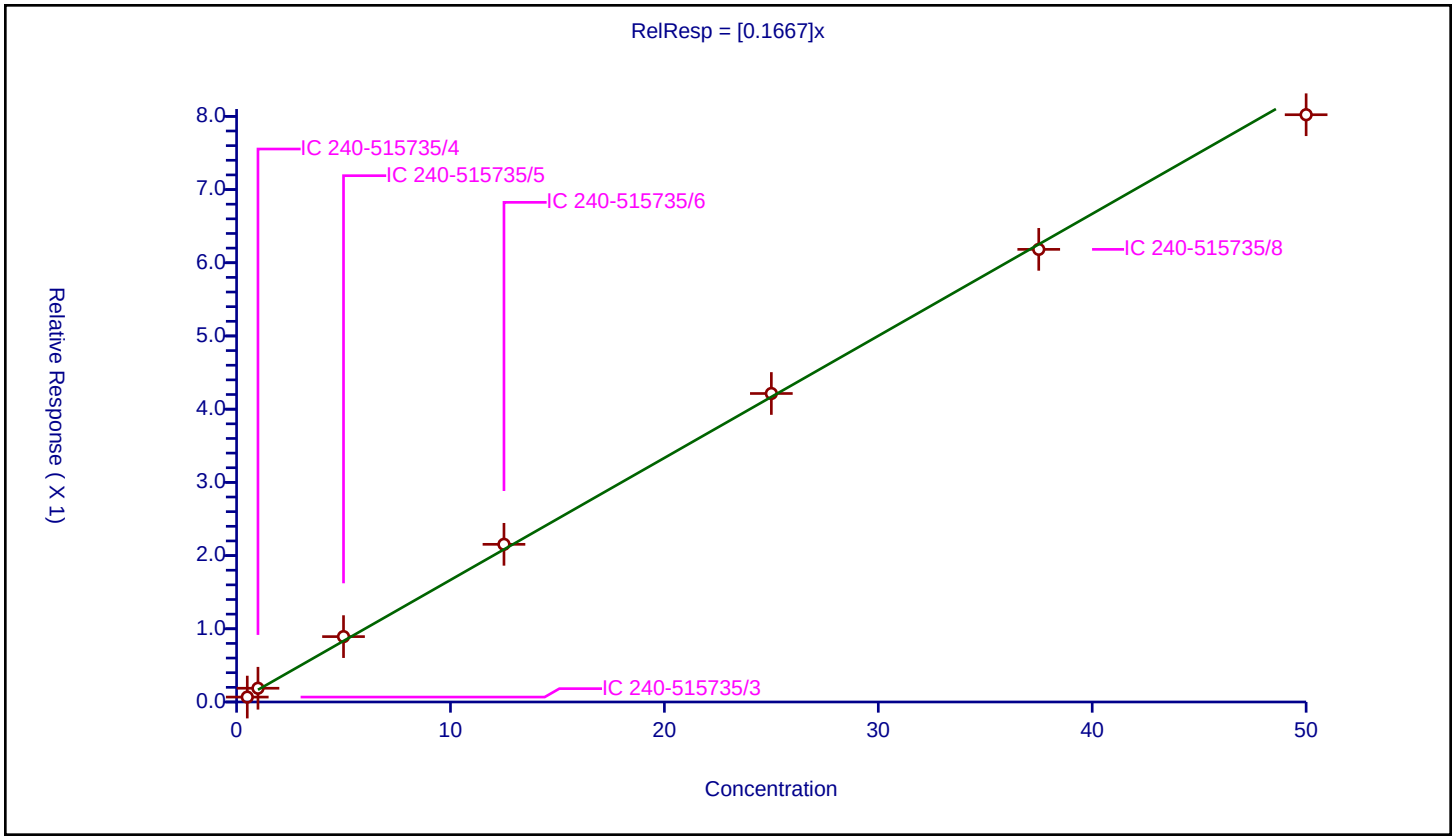
Curve Coefficients

Intercept:	0
Slope:	0.1667

Error Coefficients

Standard Error:	363000
Relative Standard Error:	10.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.067204	27.5	1899933.0	0.134407	Y
2	IC 240-515735/4	1.0	0.18779	27.5	1752449.0	0.18779	Y
3	IC 240-515735/5	5.0	0.892899	27.5	1737130.0	0.17858	Y
4	IC 240-515735/6	12.5	2.153564	27.5	1864275.0	0.172285	Y
5	ICIS 240-515735/7	25.0	4.214183	27.5	2022141.0	0.168567	Y
6	IC 240-515735/8	37.5	6.18275	27.5	2091610.0	0.164873	Y
7	IC 240-515735/9	50.0	8.022008	27.5	2291020.0	0.16044	Y



Calibration / Acetone

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

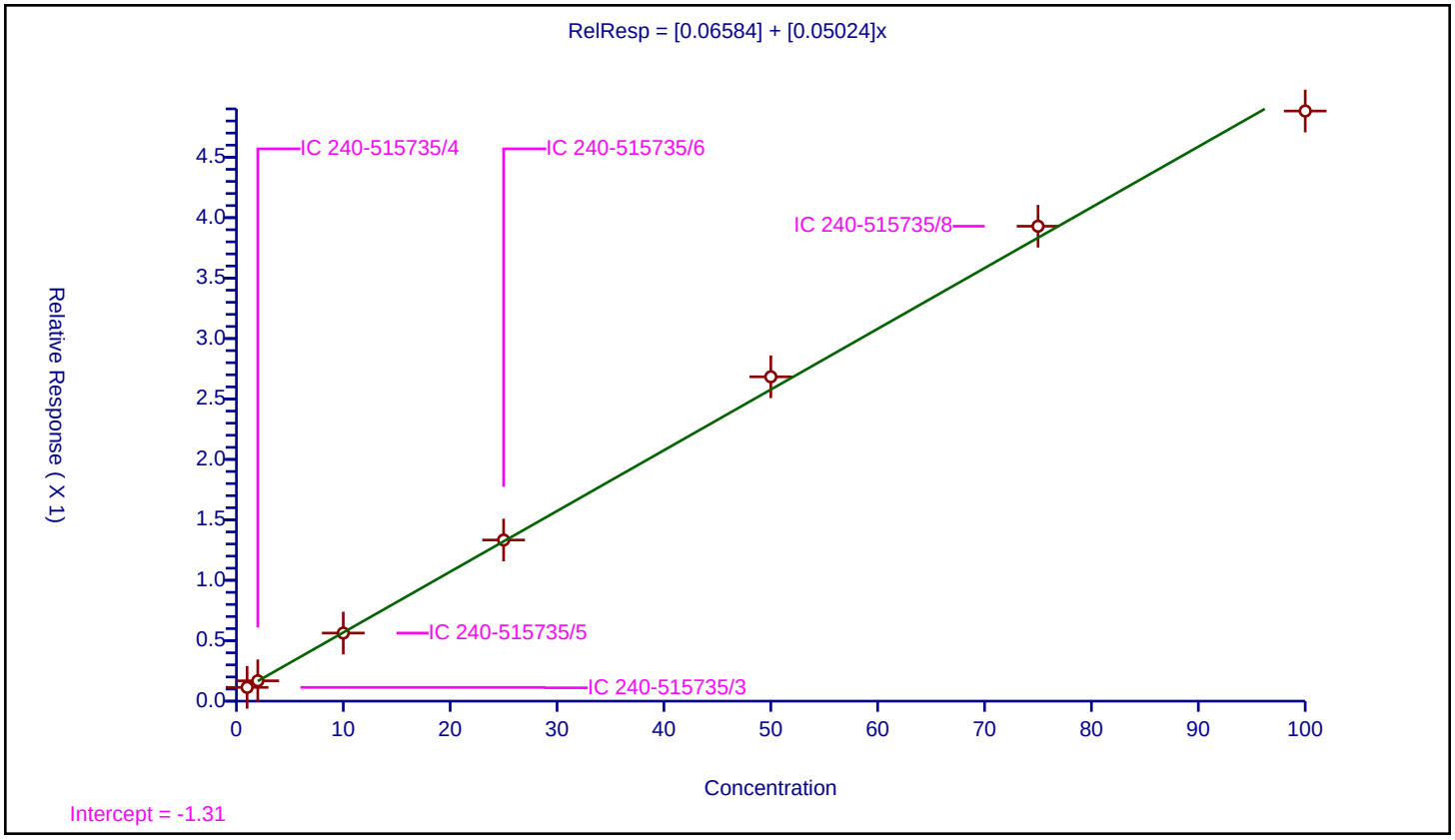
Curve Coefficients

Intercept:	0.06584
Slope:	0.05024

Error Coefficients

Standard Error:	246000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.113825	27.5	1899933.0	0.113825	Y
2	IC 240-515735/4	2.0	0.168269	27.5	1752449.0	0.084134	Y
3	IC 240-515735/5	10.0	0.563352	27.5	1737130.0	0.056335	Y
4	IC 240-515735/6	25.0	1.333111	27.5	1864275.0	0.053324	Y
5	ICIS 240-515735/7	50.0	2.683538	27.5	2022141.0	0.053671	Y
6	IC 240-515735/8	75.0	3.929381	27.5	2091610.0	0.052392	Y
7	IC 240-515735/9	100.0	4.882438	27.5	2291020.0	0.048824	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

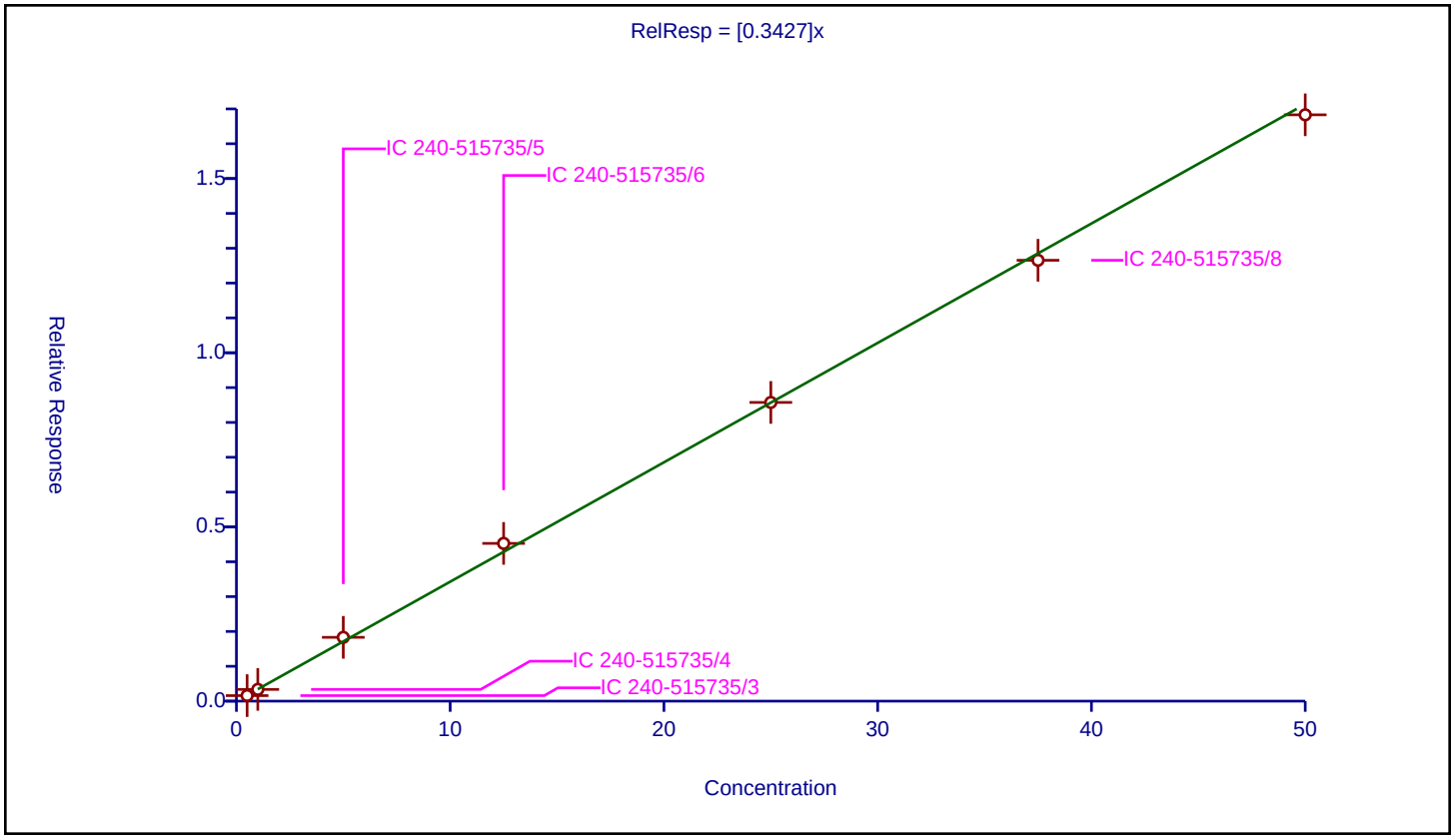
Curve Coefficients

Intercept:	0
Slope:	0.3427

Error Coefficients

Standard Error:	753000
Relative Standard Error:	4.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.158319	27.5	1899933.0	0.316637	Y
2	IC 240-515735/4	1.0	0.336993	27.5	1752449.0	0.336993	Y
3	IC 240-515735/5	5.0	1.831376	27.5	1737130.0	0.366275	Y
4	IC 240-515735/6	12.5	4.527906	27.5	1864275.0	0.362233	Y
5	ICIS 240-515735/7	25.0	8.574261	27.5	2022141.0	0.34297	Y
6	IC 240-515735/8	37.5	12.654791	27.5	2091610.0	0.337461	Y
7	IC 240-515735/9	50.0	16.830285	27.5	2291020.0	0.336606	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

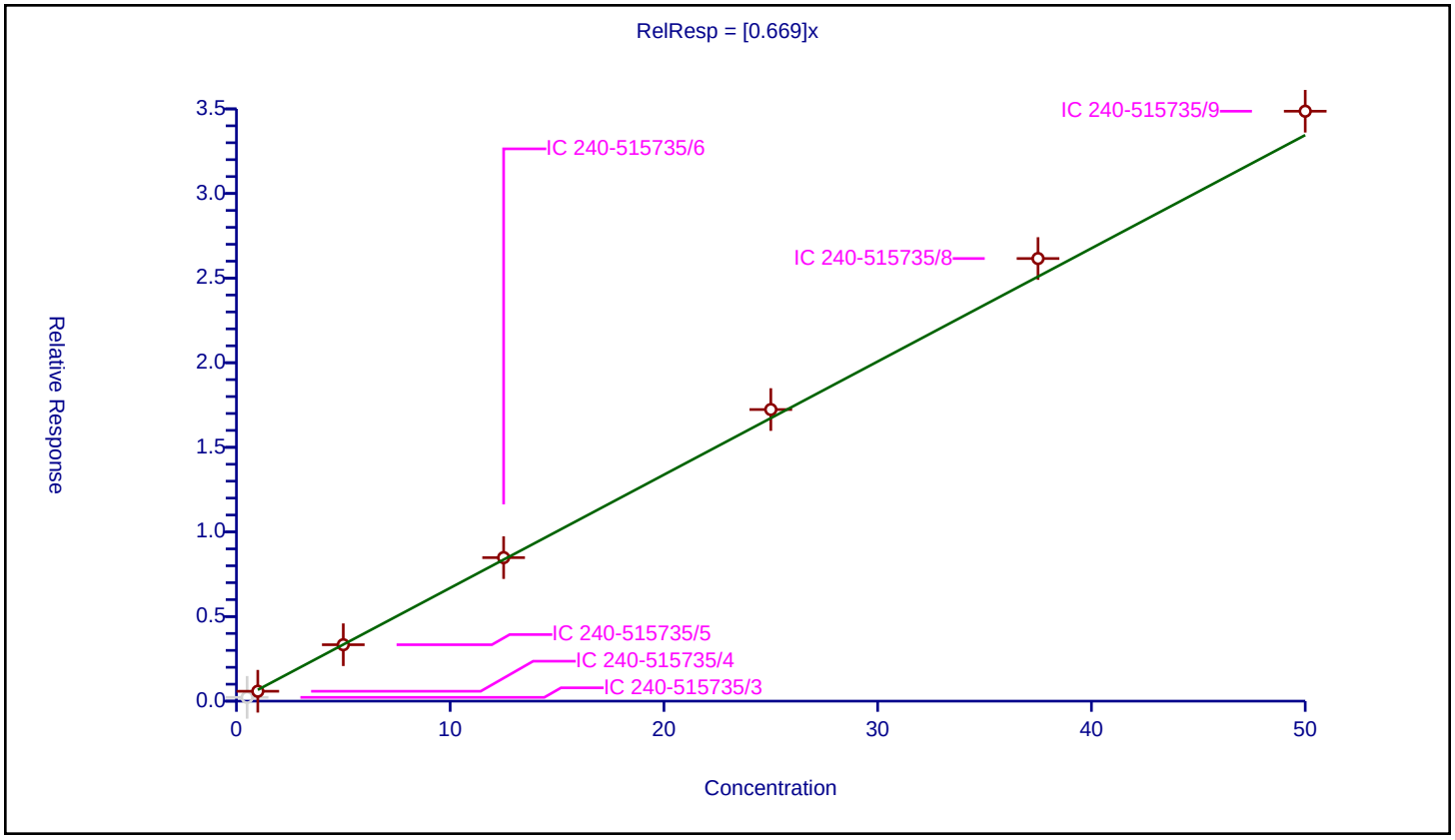
Curve Coefficients

Intercept:	0
Slope:	0.669

Error Coefficients

Standard Error:	1700000
Relative Standard Error:	6.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.222497	27.5	1899933.0	0.444995	N
2	IC 240-515735/4	1.0	0.584727	27.5	1752449.0	0.584727	Y
3	IC 240-515735/5	5.0	3.33409	27.5	1737130.0	0.666818	Y
4	IC 240-515735/6	12.5	8.481245	27.5	1864275.0	0.6785	Y
5	ICIS 240-515735/7	25.0	17.232852	27.5	2022141.0	0.689314	Y
6	IC 240-515735/8	37.5	26.157048	27.5	2091610.0	0.697521	Y
7	IC 240-515735/9	50.0	34.86307	27.5	2291020.0	0.697261	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

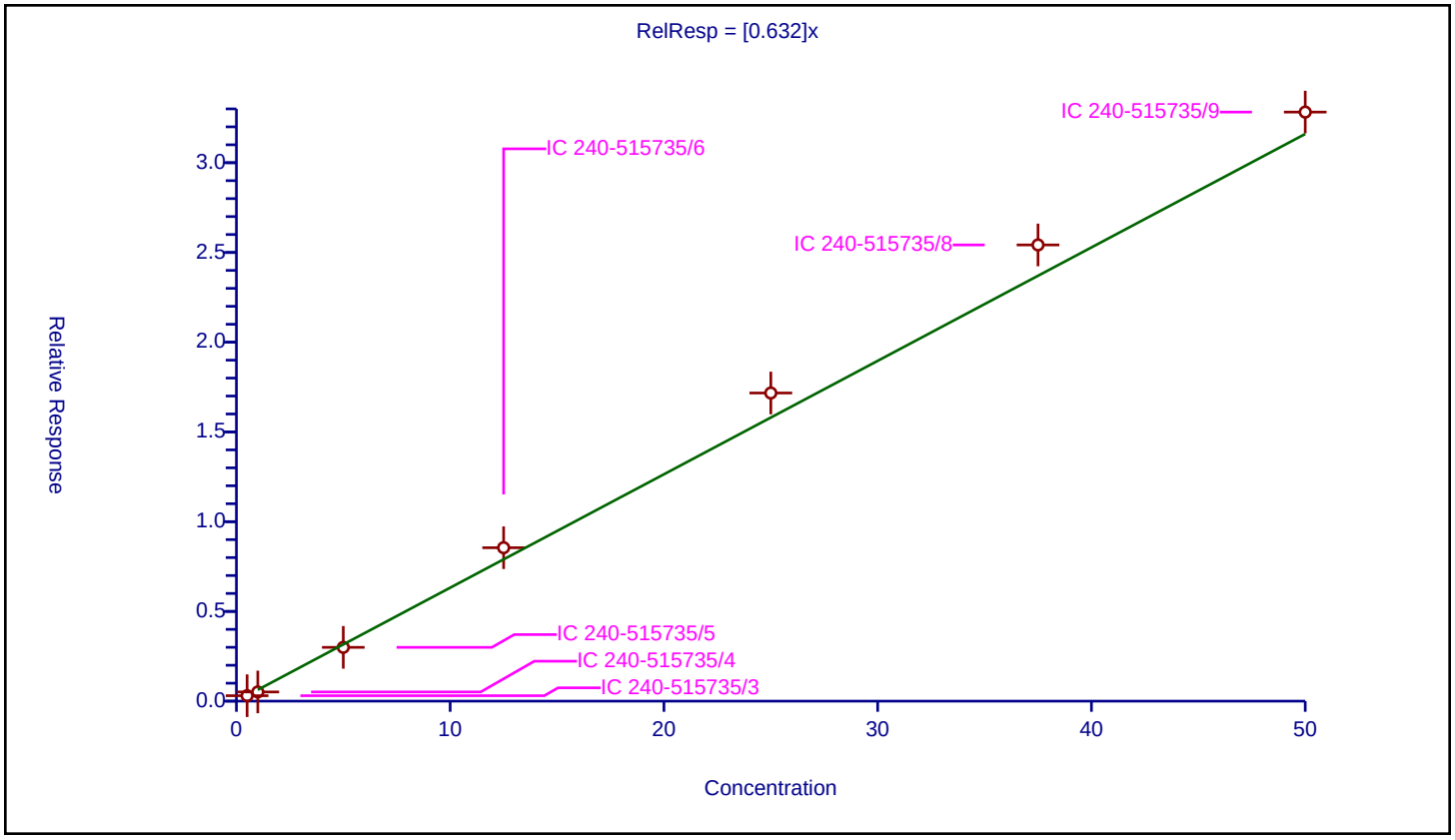
Curve Coefficients

Intercept:	0
Slope:	0.632

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	10.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.303307	27.5	1899933.0	0.606613	Y
2	IC 240-515735/4	1.0	0.513233	27.5	1752449.0	0.513233	Y
3	IC 240-515735/5	5.0	2.997022	27.5	1737130.0	0.599404	Y
4	IC 240-515735/6	12.5	8.549365	27.5	1864275.0	0.683949	Y
5	ICIS 240-515735/7	25.0	17.169452	27.5	2022141.0	0.686778	Y
6	IC 240-515735/8	37.5	25.420023	27.5	2091610.0	0.677867	Y
7	IC 240-515735/9	50.0	32.821594	27.5	2291020.0	0.656432	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

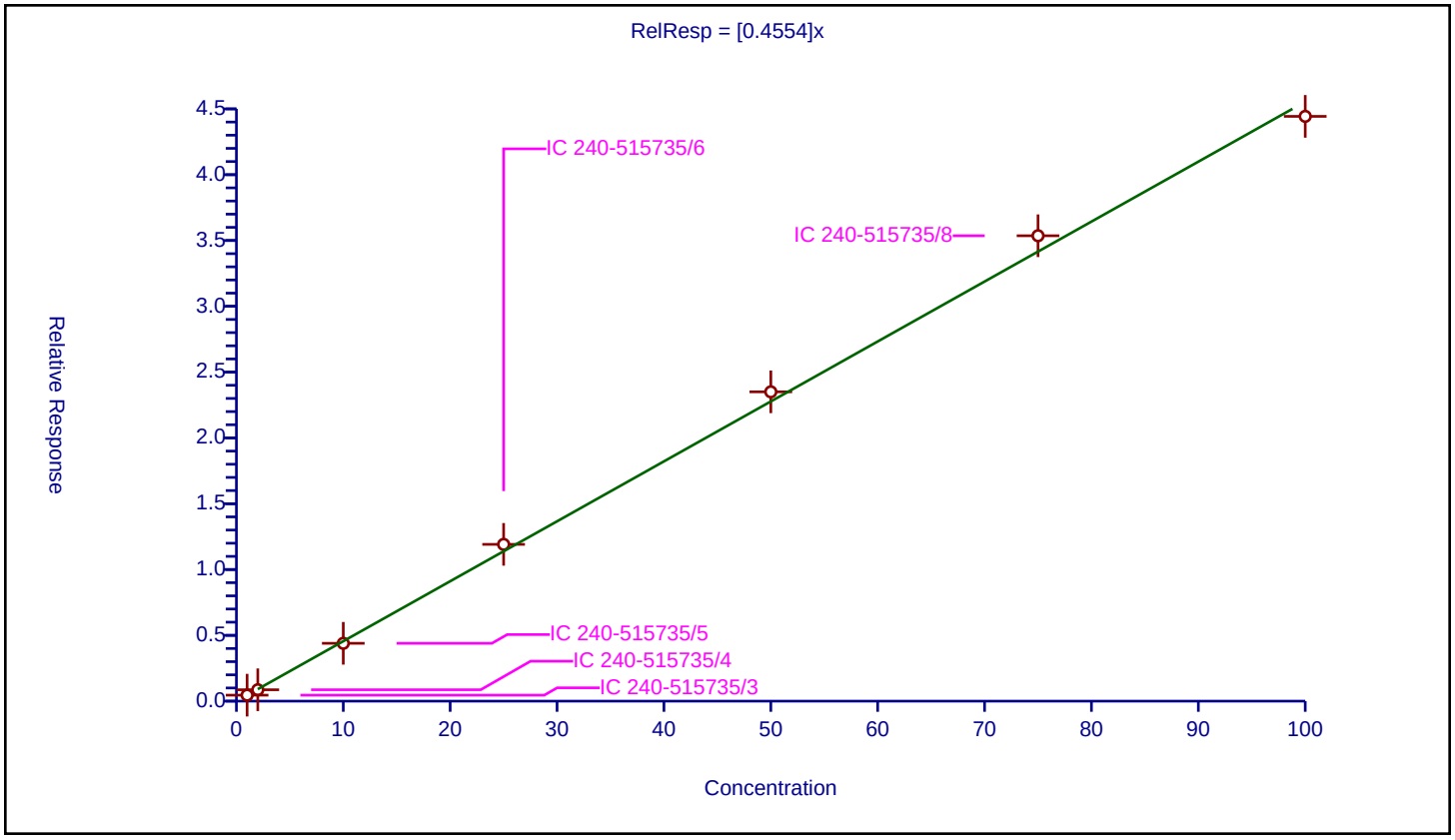
Curve Coefficients

Intercept:	0
Slope:	0.4554

Error Coefficients

Standard Error:	2030000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.454316	27.5	1899933.0	0.454316	Y
2	IC 240-515735/4	2.0	0.864161	27.5	1752449.0	0.43208	Y
3	IC 240-515735/5	10.0	4.393829	27.5	1737130.0	0.439383	Y
4	IC 240-515735/6	25.0	11.911482	27.5	1864275.0	0.476459	Y
5	ICIS 240-515735/7	50.0	23.501259	27.5	2022141.0	0.470025	Y
6	IC 240-515735/8	75.0	35.361155	27.5	2091610.0	0.471482	Y
7	IC 240-515735/9	100.0	44.432122	27.5	2291020.0	0.444321	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

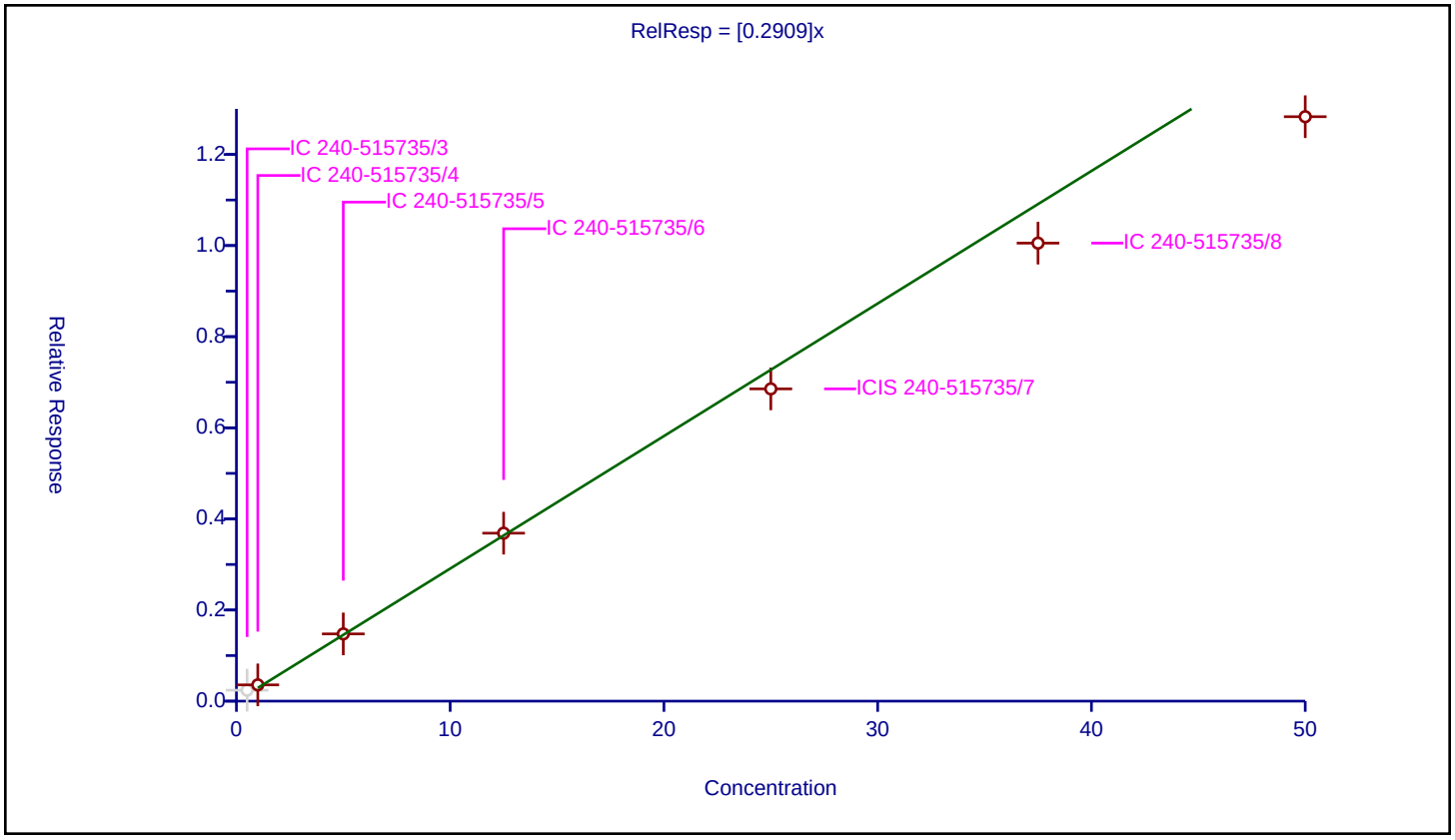
Curve Coefficients

Intercept:	0
Slope:	0.2909

Error Coefficients

Standard Error:	641000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.240083	27.5	1899933.0	0.480167	N
2	IC 240-515735/4	1.0	0.356624	27.5	1752449.0	0.356624	Y
3	IC 240-515735/5	5.0	1.475644	27.5	1737130.0	0.295129	Y
4	IC 240-515735/6	12.5	3.686861	27.5	1864275.0	0.294949	Y
5	ICIS 240-515735/7	25.0	6.854679	27.5	2022141.0	0.274187	Y
6	IC 240-515735/8	37.5	10.053479	27.5	2091610.0	0.268093	Y
7	IC 240-515735/9	50.0	12.828656	27.5	2291020.0	0.256573	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

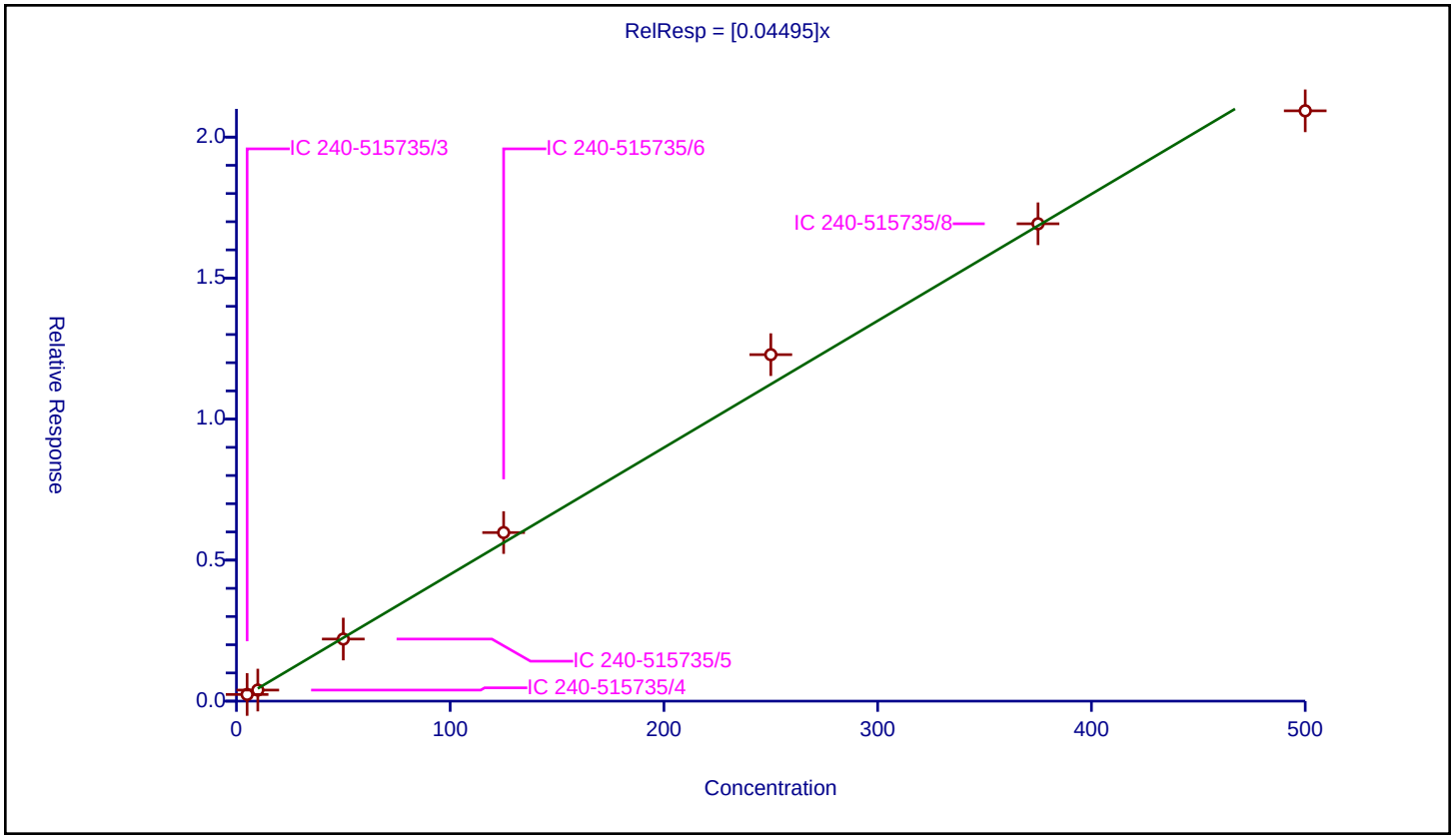
Curve Coefficients

Intercept:	0
Slope:	0.04495

Error Coefficients

Standard Error:	975000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	5.0	0.236957	27.5	1899933.0	0.047391	Y
2	IC 240-515735/4	10.0	0.392653	27.5	1752449.0	0.039265	Y
3	IC 240-515735/5	50.0	2.201703	27.5	1737130.0	0.044034	Y
4	IC 240-515735/6	125.0	5.977255	27.5	1864275.0	0.047818	Y
5	ICIS 240-515735/7	250.0	12.28604	27.5	2022141.0	0.049144	Y
6	IC 240-515735/8	375.0	16.92679	27.5	2091610.0	0.045138	Y
7	IC 240-515735/9	500.0	20.931579	27.5	2291020.0	0.041863	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

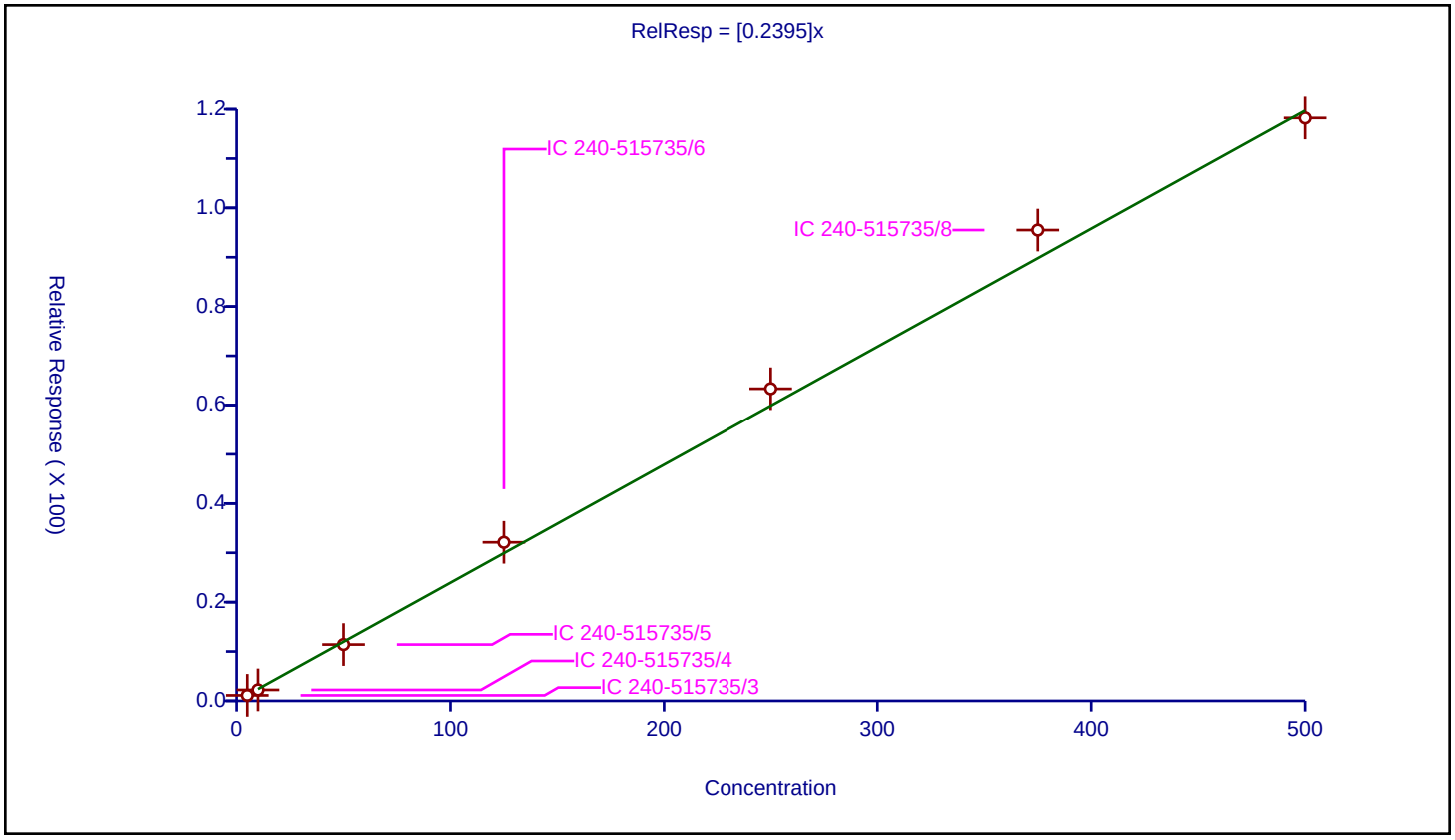
Curve Coefficients

Intercept:	0
Slope:	0.2395

Error Coefficients

Standard Error:	5430000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	5.0	1.118899	27.5	1899933.0	0.22378	Y
2	IC 240-515735/4	10.0	2.227855	27.5	1752449.0	0.222786	Y
3	IC 240-515735/5	50.0	11.411567	27.5	1737130.0	0.228231	Y
4	IC 240-515735/6	125.0	32.135338	27.5	1864275.0	0.257083	Y
5	ICIS 240-515735/7	250.0	63.322386	27.5	2022141.0	0.25329	Y
6	IC 240-515735/8	375.0	95.51149	27.5	2091610.0	0.254697	Y
7	IC 240-515735/9	500.0	118.227758	27.5	2291020.0	0.236456	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

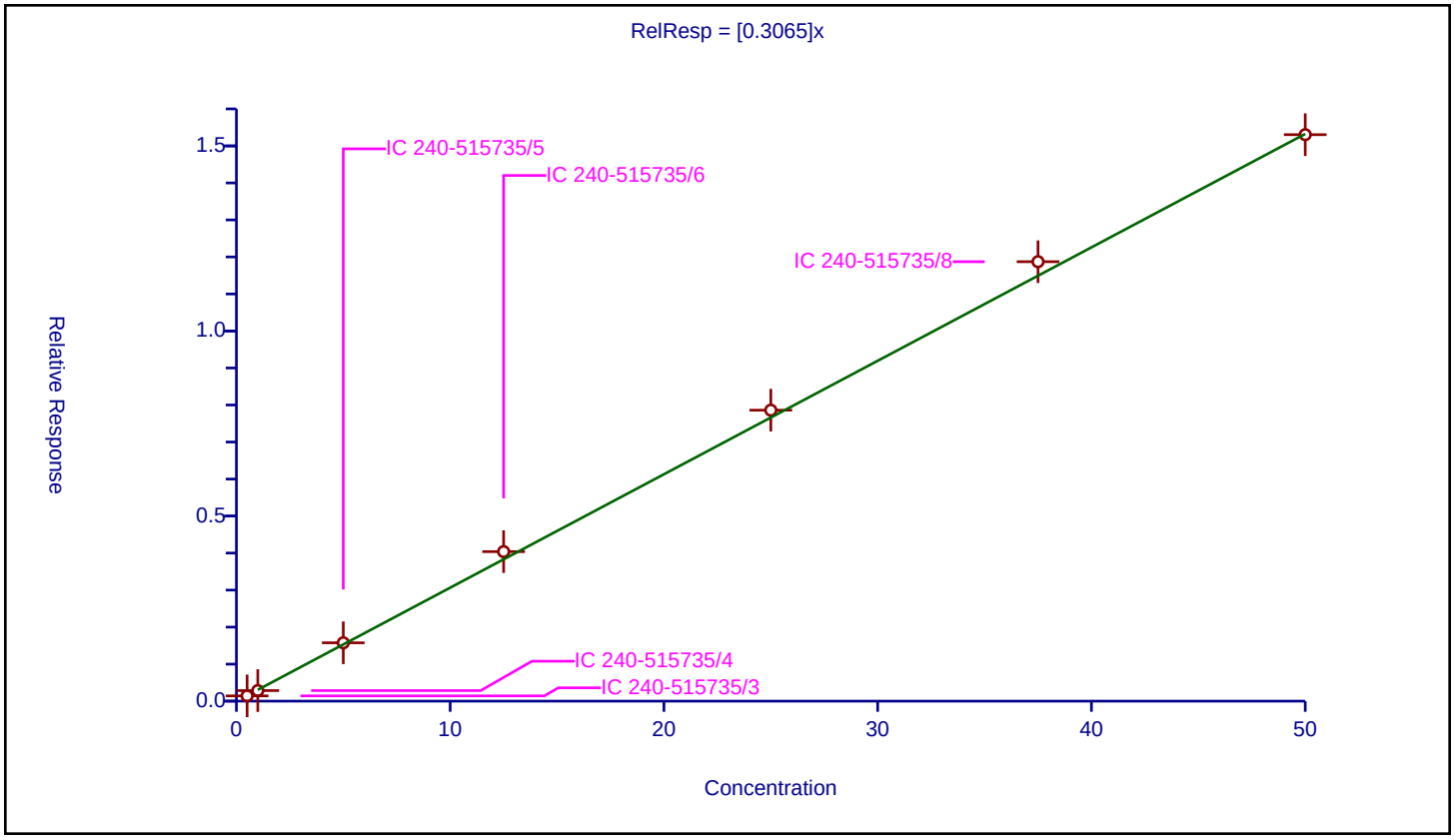
Curve Coefficients

Intercept:	0
Slope:	0.3065

Error Coefficients

Standard Error:	690000
Relative Standard Error:	5.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.142223	27.5	1899933.0	0.284447	Y
2	IC 240-515735/4	1.0	0.285396	27.5	1752449.0	0.285396	Y
3	IC 240-515735/5	5.0	1.576311	27.5	1737130.0	0.315262	Y
4	IC 240-515735/6	12.5	4.039293	27.5	1864275.0	0.323143	Y
5	ICIS 240-515735/7	25.0	7.860807	27.5	2022141.0	0.314432	Y
6	IC 240-515735/8	37.5	11.871947	27.5	2091610.0	0.316585	Y
7	IC 240-515735/9	50.0	15.30343	27.5	2291020.0	0.306069	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

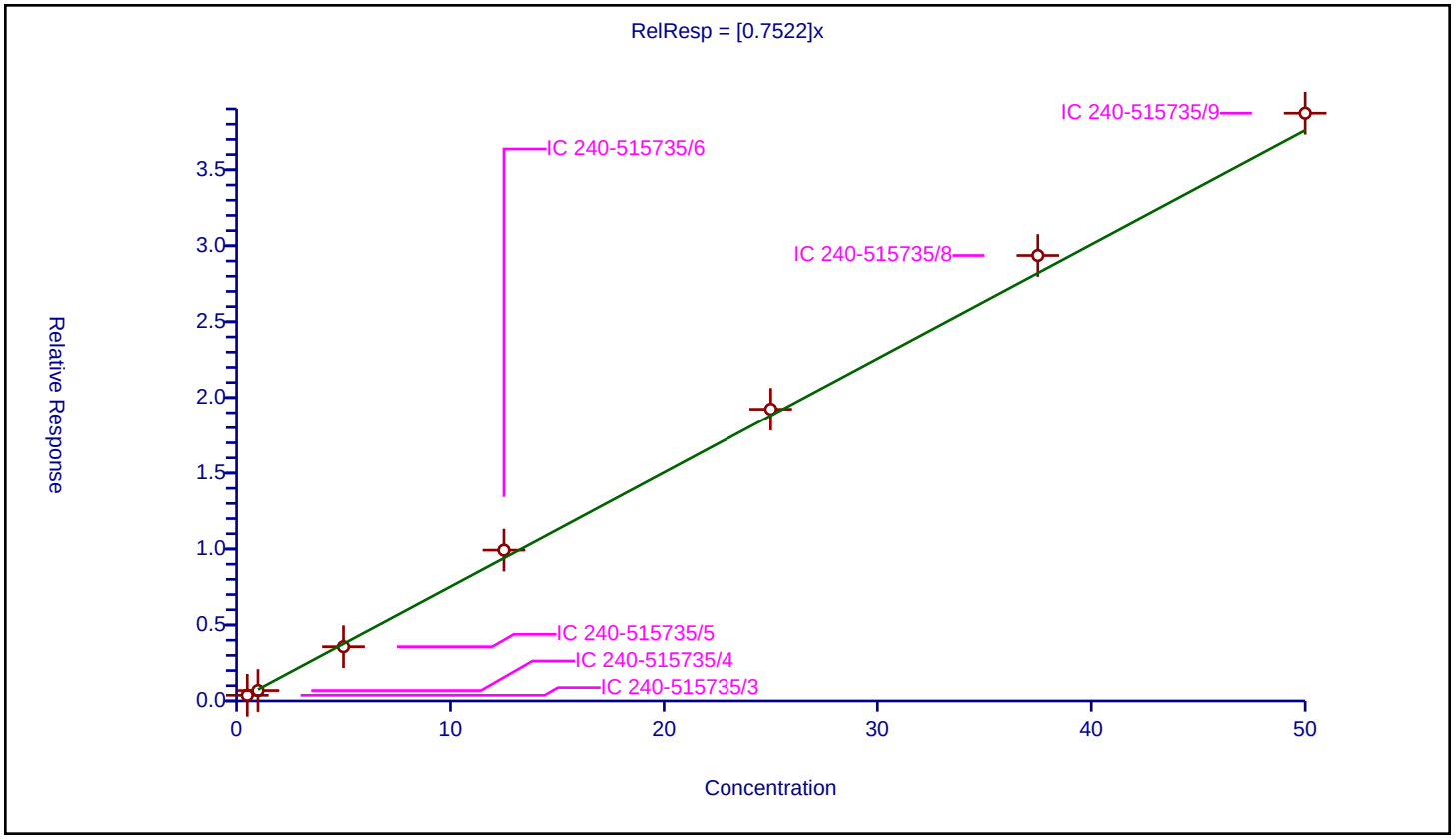
Curve Coefficients

Intercept:	0
Slope:	0.7522

Error Coefficients

Standard Error:	1730000
Relative Standard Error:	5.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.372132	27.5	1899933.0	0.744263	Y
2	IC 240-515735/4	1.0	0.68566	27.5	1752449.0	0.68566	Y
3	IC 240-515735/5	5.0	3.571867	27.5	1737130.0	0.714373	Y
4	IC 240-515735/6	12.5	9.925269	27.5	1864275.0	0.794021	Y
5	ICIS 240-515735/7	25.0	19.230611	27.5	2022141.0	0.769224	Y
6	IC 240-515735/8	37.5	29.364853	27.5	2091610.0	0.783063	Y
7	IC 240-515735/9	50.0	38.722663	27.5	2291020.0	0.774453	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

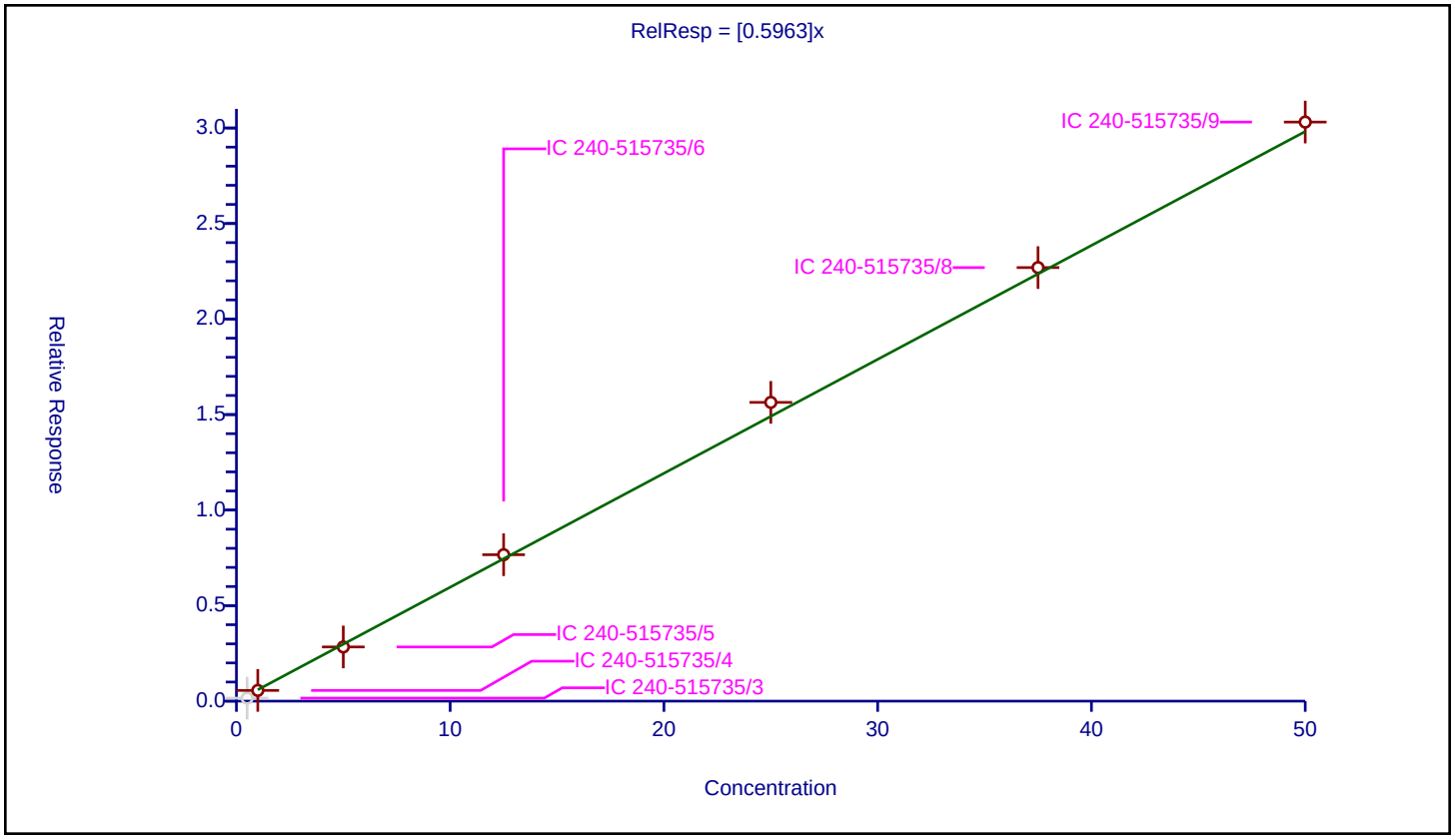
Curve Coefficients

Intercept:	0
Slope:	0.5963

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	4.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.158362	27.5	1899933.0	0.316724	N
2	IC 240-515735/4	1.0	0.560577	27.5	1752449.0	0.560577	Y
3	IC 240-515735/5	5.0	2.835977	27.5	1737130.0	0.567195	Y
4	IC 240-515735/6	12.5	7.664509	27.5	1864275.0	0.613161	Y
5	ICIS 240-515735/7	25.0	15.637828	27.5	2022141.0	0.625513	Y
6	IC 240-515735/8	37.5	22.693584	27.5	2091610.0	0.605162	Y
7	IC 240-515735/9	50.0	30.311637	27.5	2291020.0	0.606233	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

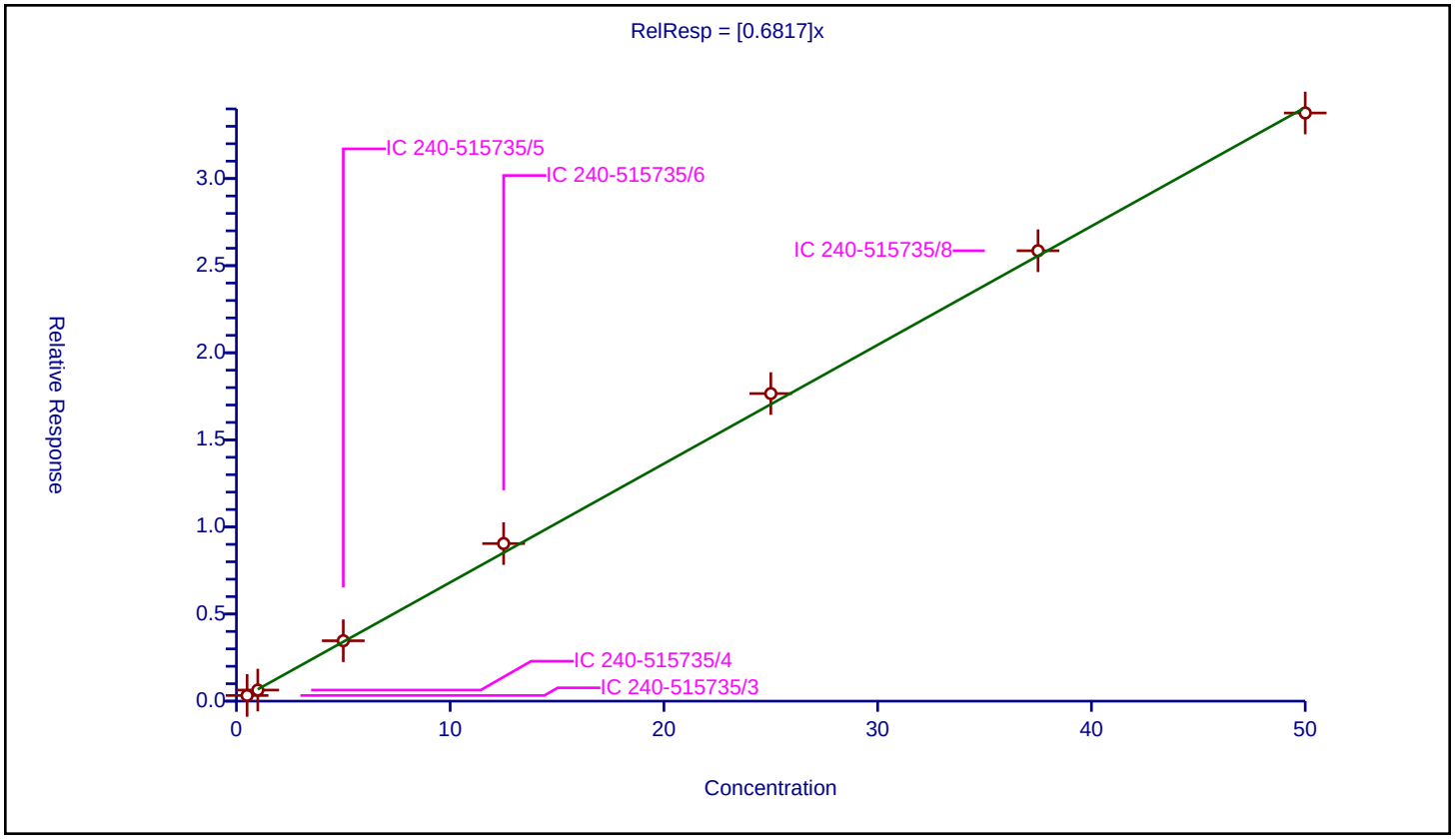
Curve Coefficients

Intercept:	0
Slope:	0.6817

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	4.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.324207	27.5	1899933.0	0.648415	Y
2	IC 240-515735/4	1.0	0.6351	27.5	1752449.0	0.6351	Y
3	IC 240-515735/5	5.0	3.466482	27.5	1737130.0	0.693296	Y
4	IC 240-515735/6	12.5	9.046151	27.5	1864275.0	0.723692	Y
5	ICIS 240-515735/7	25.0	17.657672	27.5	2022141.0	0.706307	Y
6	IC 240-515735/8	37.5	25.855688	27.5	2091610.0	0.689485	Y
7	IC 240-515735/9	50.0	33.76464	27.5	2291020.0	0.675293	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

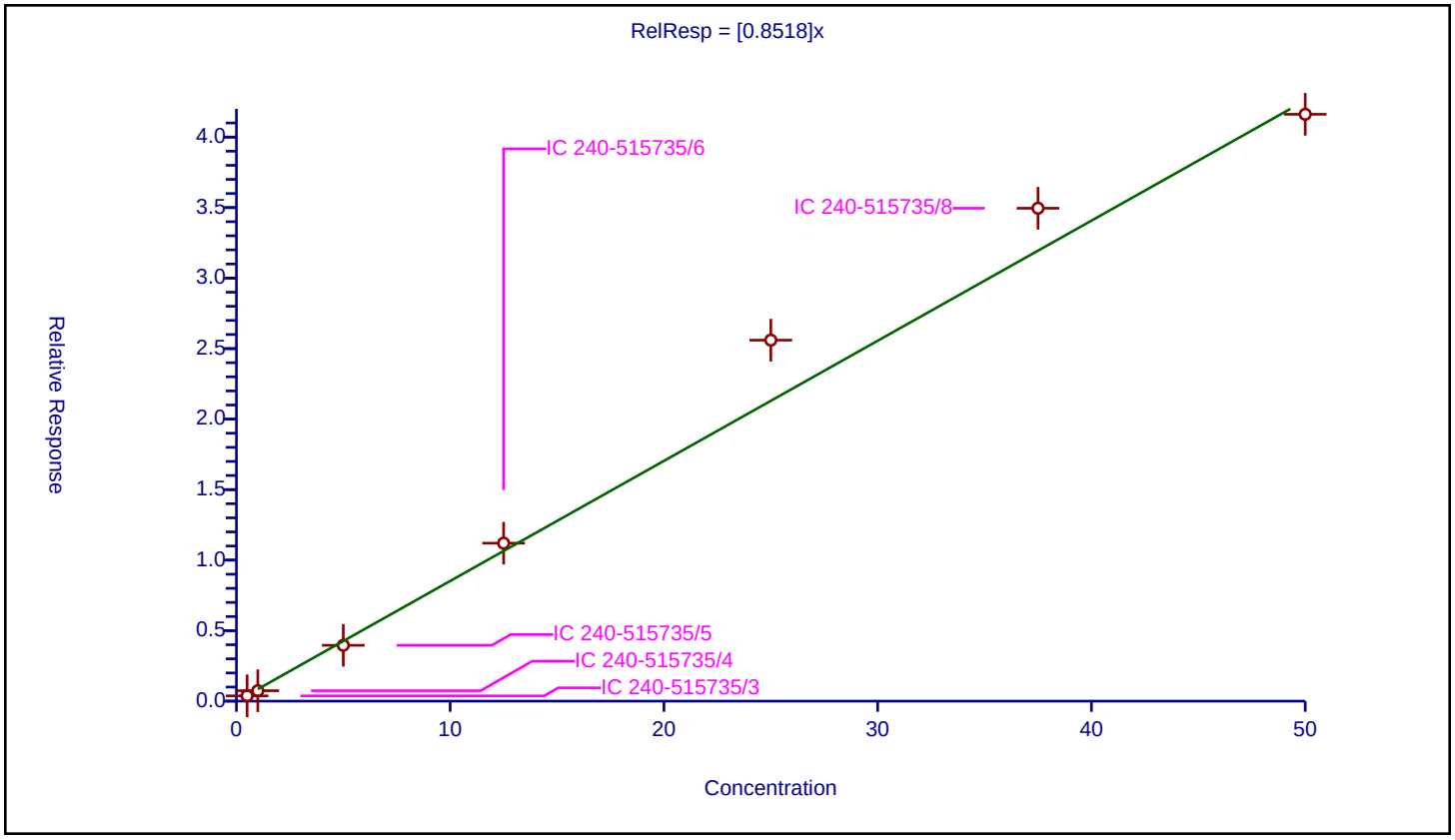
Curve Coefficients

Intercept:	0
Slope:	0.8518

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	12.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.373883	27.5	1899933.0	0.747766	Y
2	IC 240-515735/4	1.0	0.738512	27.5	1752449.0	0.738512	Y
3	IC 240-515735/5	5.0	3.960764	27.5	1737130.0	0.792153	Y
4	IC 240-515735/6	12.5	11.200629	27.5	1864275.0	0.89605	Y
5	ICIS 240-515735/7	25.0	25.599572	27.5	2022141.0	1.023983	Y
6	IC 240-515735/8	37.5	34.95456	27.5	2091610.0	0.932122	Y
7	IC 240-515735/9	50.0	41.617244	27.5	2291020.0	0.832345	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

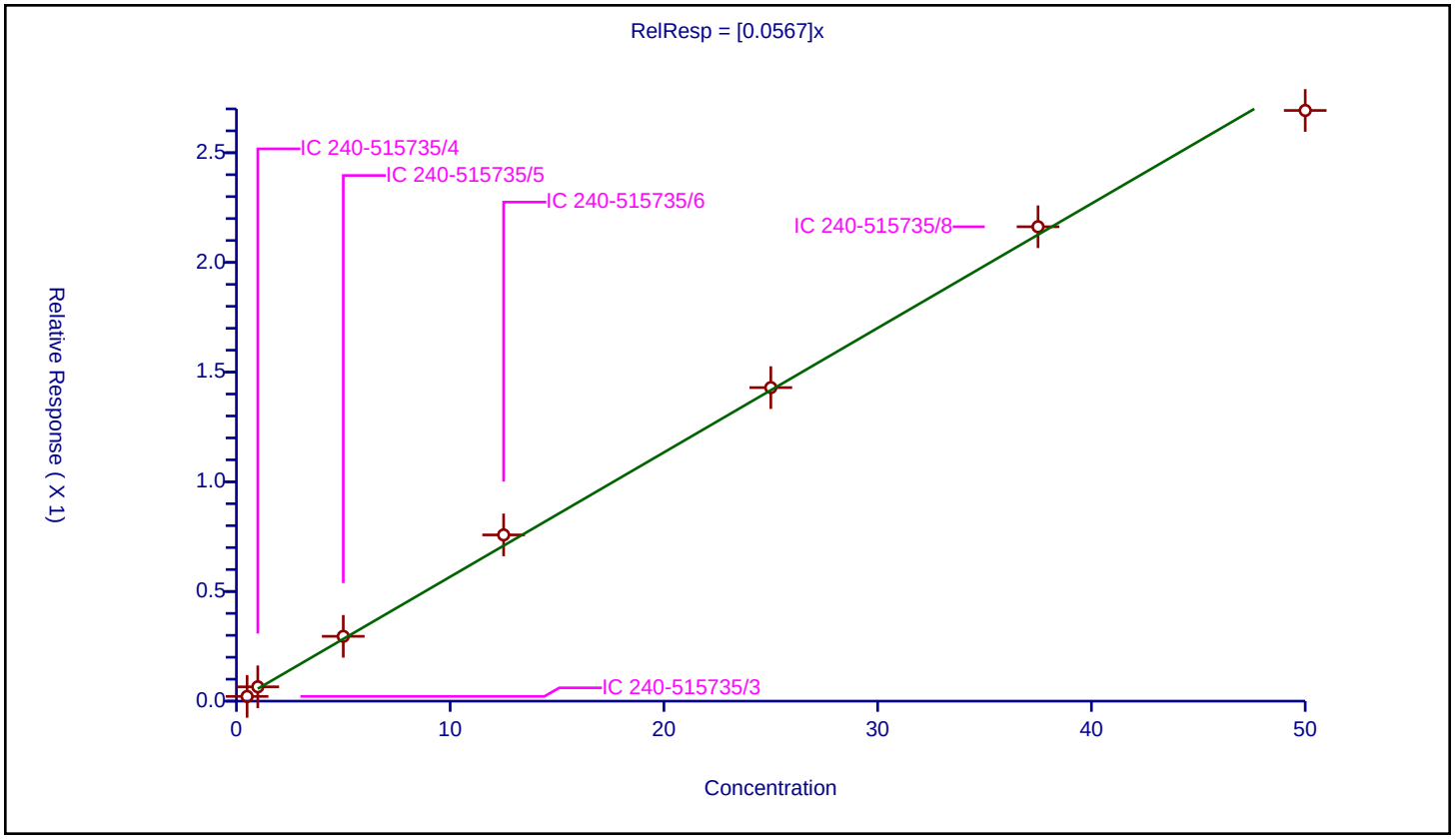
Curve Coefficients

Intercept:	0
Slope:	0.0567

Error Coefficients

Standard Error:	123000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.021595	27.5	1899933.0	0.043191	Y
2	IC 240-515735/4	1.0	0.065296	27.5	1752449.0	0.065296	Y
3	IC 240-515735/5	5.0	0.295464	27.5	1737130.0	0.059093	Y
4	IC 240-515735/6	12.5	0.757805	27.5	1864275.0	0.060624	Y
5	ICIS 240-515735/7	25.0	1.429384	27.5	2022141.0	0.057175	Y
6	IC 240-515735/8	37.5	2.162676	27.5	2091610.0	0.057671	Y
7	IC 240-515735/9	50.0	2.692804	27.5	2291020.0	0.053856	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

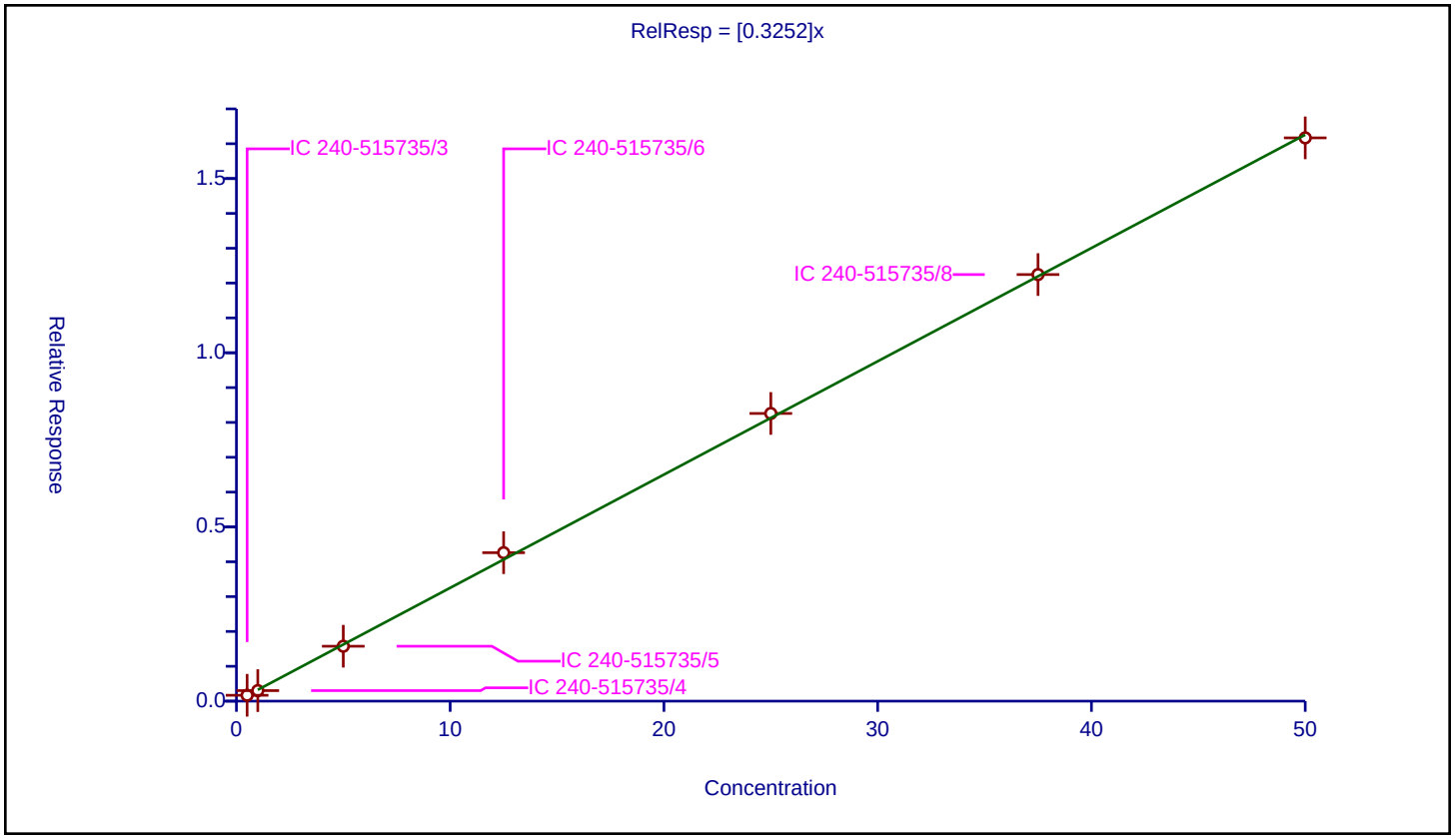
Curve Coefficients

Intercept:	0
Slope:	0.3252

Error Coefficients

Standard Error:	724000
Relative Standard Error:	4.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.168726	27.5	1899933.0	0.337451	Y
2	IC 240-515735/4	1.0	0.302407	27.5	1752449.0	0.302407	Y
3	IC 240-515735/5	5.0	1.5759	27.5	1737130.0	0.31518	Y
4	IC 240-515735/6	12.5	4.260957	27.5	1864275.0	0.340877	Y
5	ICIS 240-515735/7	25.0	8.257693	27.5	2022141.0	0.330308	Y
6	IC 240-515735/8	37.5	12.245028	27.5	2091610.0	0.326534	Y
7	IC 240-515735/9	50.0	16.168166	27.5	2291020.0	0.323363	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

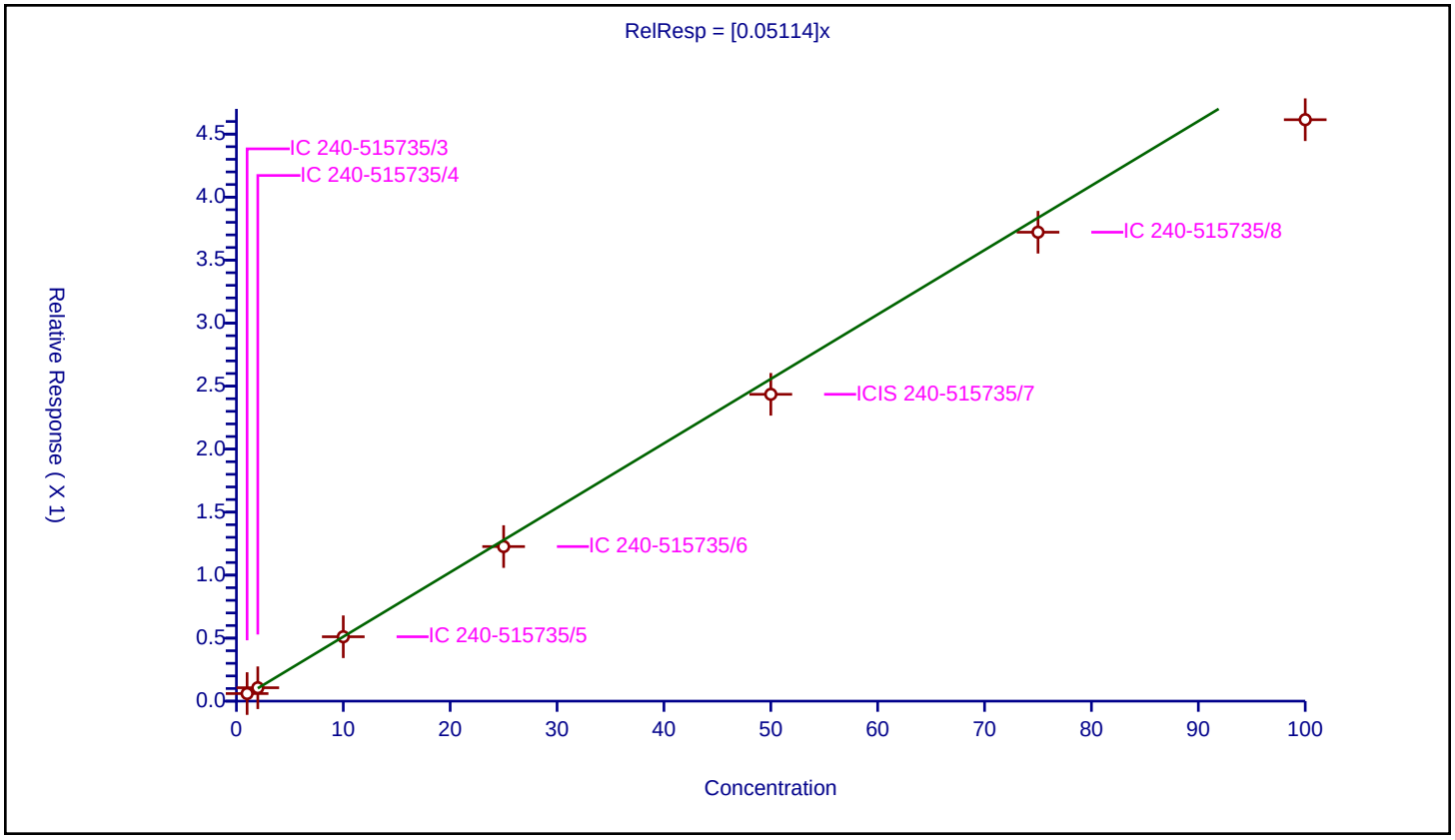
Curve Coefficients

Intercept:	0
Slope:	0.05114

Error Coefficients

Standard Error:	211000
Relative Standard Error:	8.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.060184	27.5	1899933.0	0.060184	Y
2	IC 240-515735/4	2.0	0.106316	27.5	1752449.0	0.053158	Y
3	IC 240-515735/5	10.0	0.511063	27.5	1737130.0	0.051106	Y
4	IC 240-515735/6	25.0	1.226741	27.5	1864275.0	0.04907	Y
5	ICIS 240-515735/7	50.0	2.434927	27.5	2022141.0	0.048699	Y
6	IC 240-515735/8	75.0	3.721383	27.5	2091610.0	0.049618	Y
7	IC 240-515735/9	100.0	4.614246	27.5	2291020.0	0.046142	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

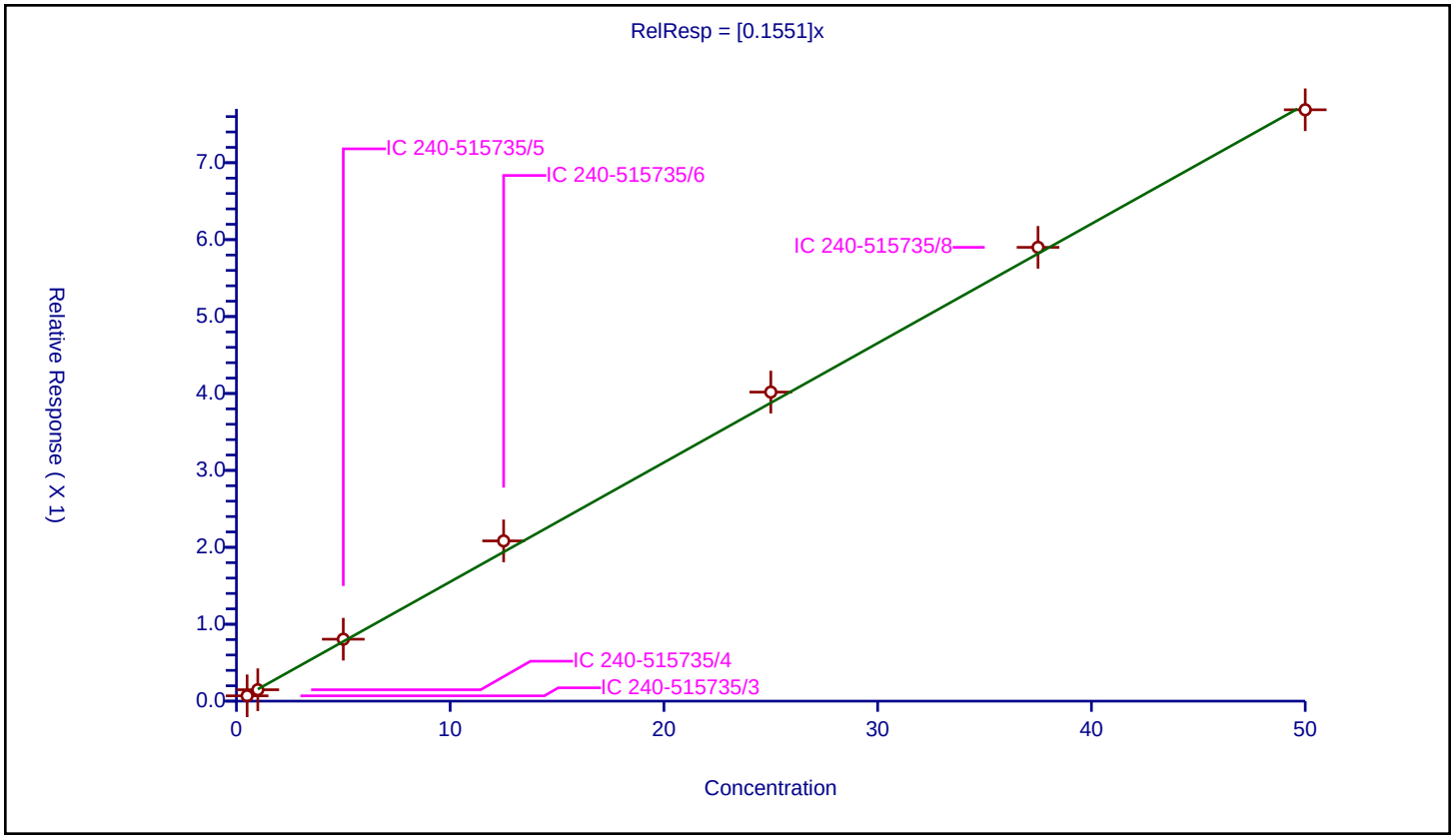
Curve Coefficients

Intercept:	0
Slope:	0.1551

Error Coefficients

Standard Error:	347000
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.069071	27.5	1899933.0	0.138142	Y
2	IC 240-515735/4	1.0	0.148261	27.5	1752449.0	0.148261	Y
3	IC 240-515735/5	5.0	0.805435	27.5	1737130.0	0.161087	Y
4	IC 240-515735/6	12.5	2.083408	27.5	1864275.0	0.166673	Y
5	ICIS 240-515735/7	25.0	4.018011	27.5	2022141.0	0.16072	Y
6	IC 240-515735/8	37.5	5.899929	27.5	2091610.0	0.157331	Y
7	IC 240-515735/9	50.0	7.688602	27.5	2291020.0	0.153772	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

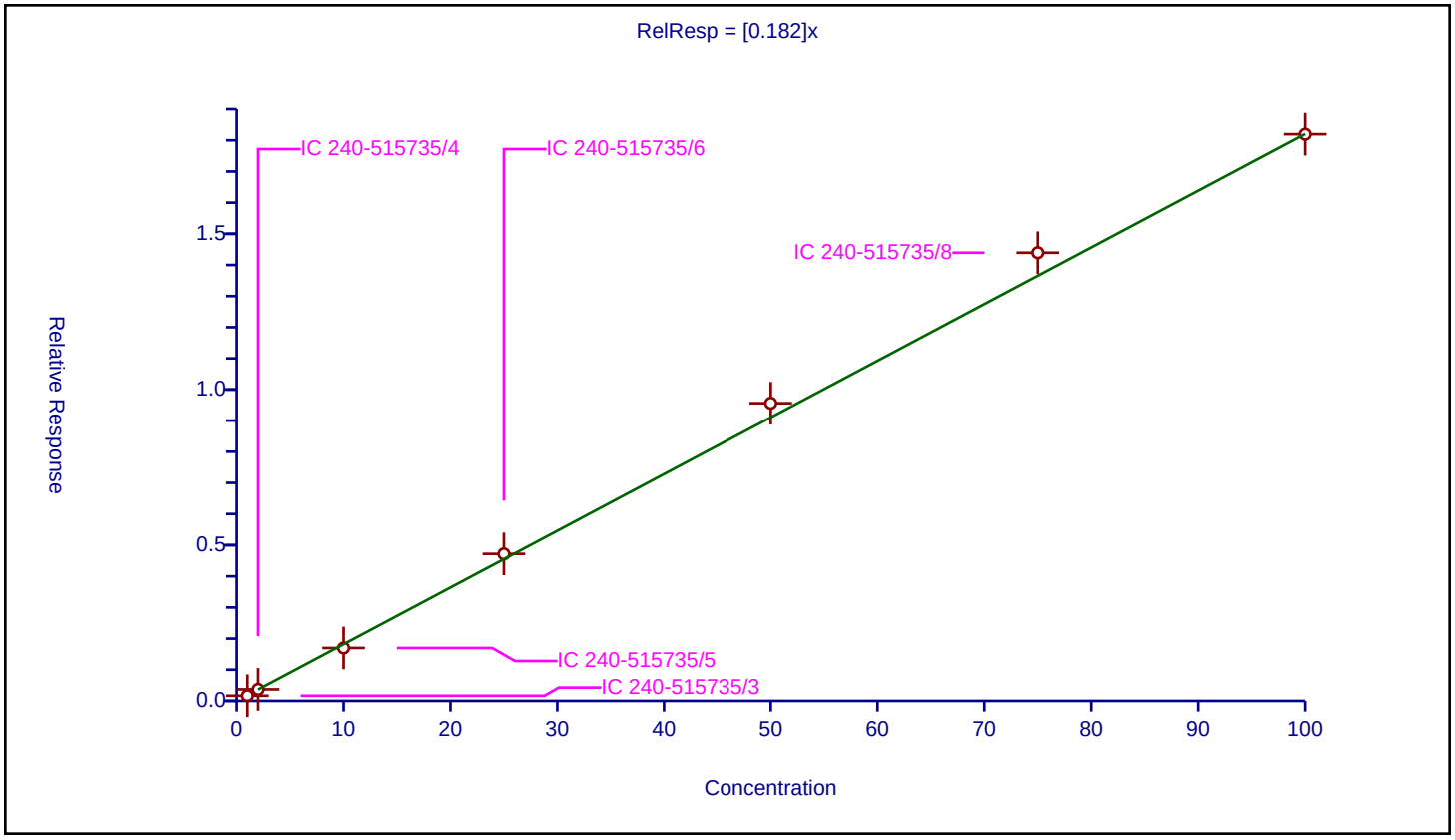
Curve Coefficients

Intercept:	0
Slope:	0.182

Error Coefficients

Standard Error:	827000
Relative Standard Error:	5.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.165802	27.5	1899933.0	0.165802	Y
2	IC 240-515735/4	2.0	0.369429	27.5	1752449.0	0.184714	Y
3	IC 240-515735/5	10.0	1.698888	27.5	1737130.0	0.169889	Y
4	IC 240-515735/6	25.0	4.720201	27.5	1864275.0	0.188808	Y
5	ICIS 240-515735/7	50.0	9.558875	27.5	2022141.0	0.191177	Y
6	IC 240-515735/8	75.0	14.393978	27.5	2091610.0	0.19192	Y
7	IC 240-515735/9	100.0	18.195887	27.5	2291020.0	0.181959	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

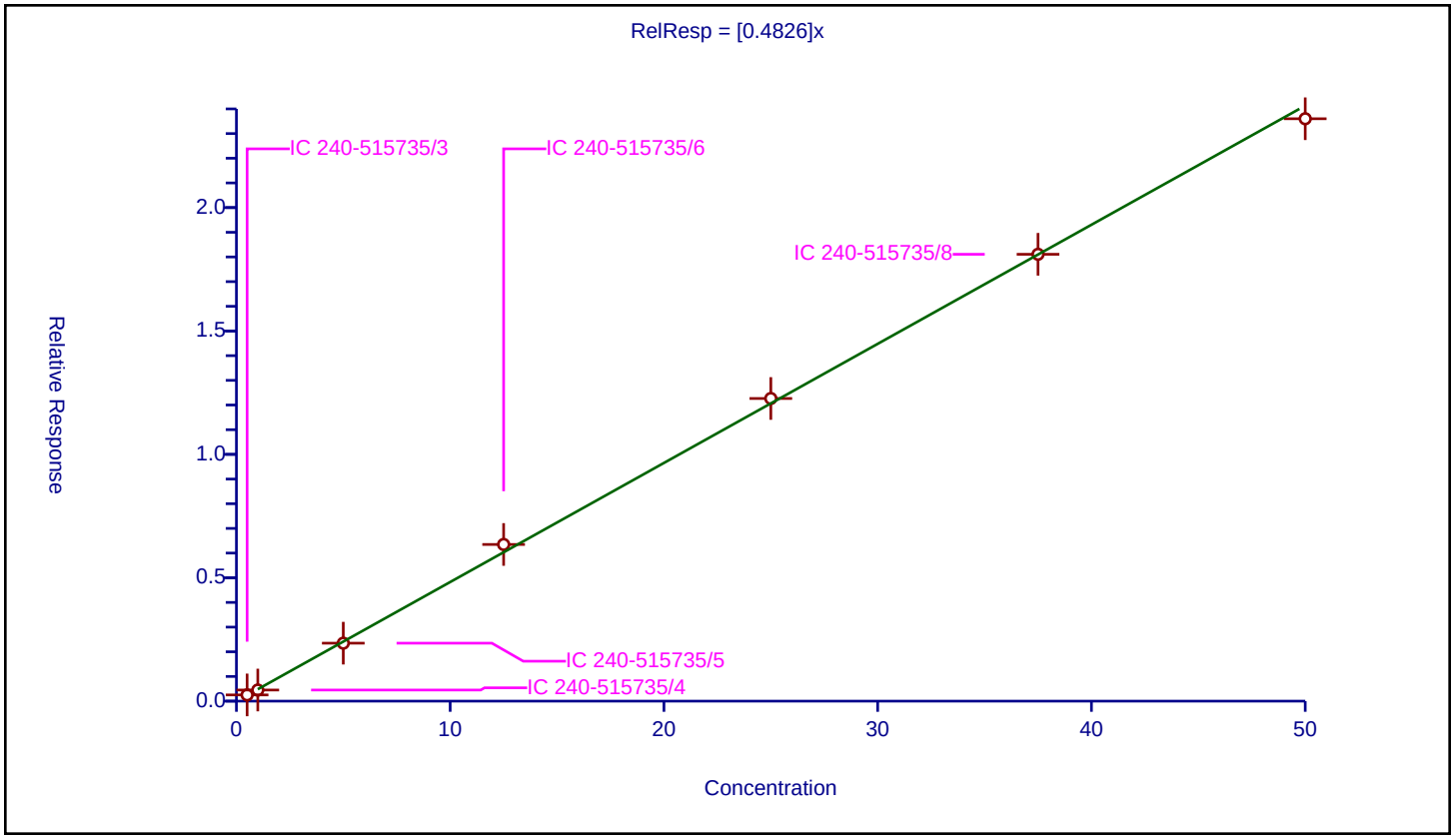
Curve Coefficients

Intercept:	0
Slope:	0.4826

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	4.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.251996	27.5	1899933.0	0.503991	Y
2	IC 240-515735/4	1.0	0.451139	27.5	1752449.0	0.451139	Y
3	IC 240-515735/5	5.0	2.348612	27.5	1737130.0	0.469722	Y
4	IC 240-515735/6	12.5	6.349188	27.5	1864275.0	0.507935	Y
5	ICIS 240-515735/7	25.0	12.265192	27.5	2022141.0	0.490608	Y
6	IC 240-515735/8	37.5	18.108563	27.5	2091610.0	0.482895	Y
7	IC 240-515735/9	50.0	23.600832	27.5	2291020.0	0.472017	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

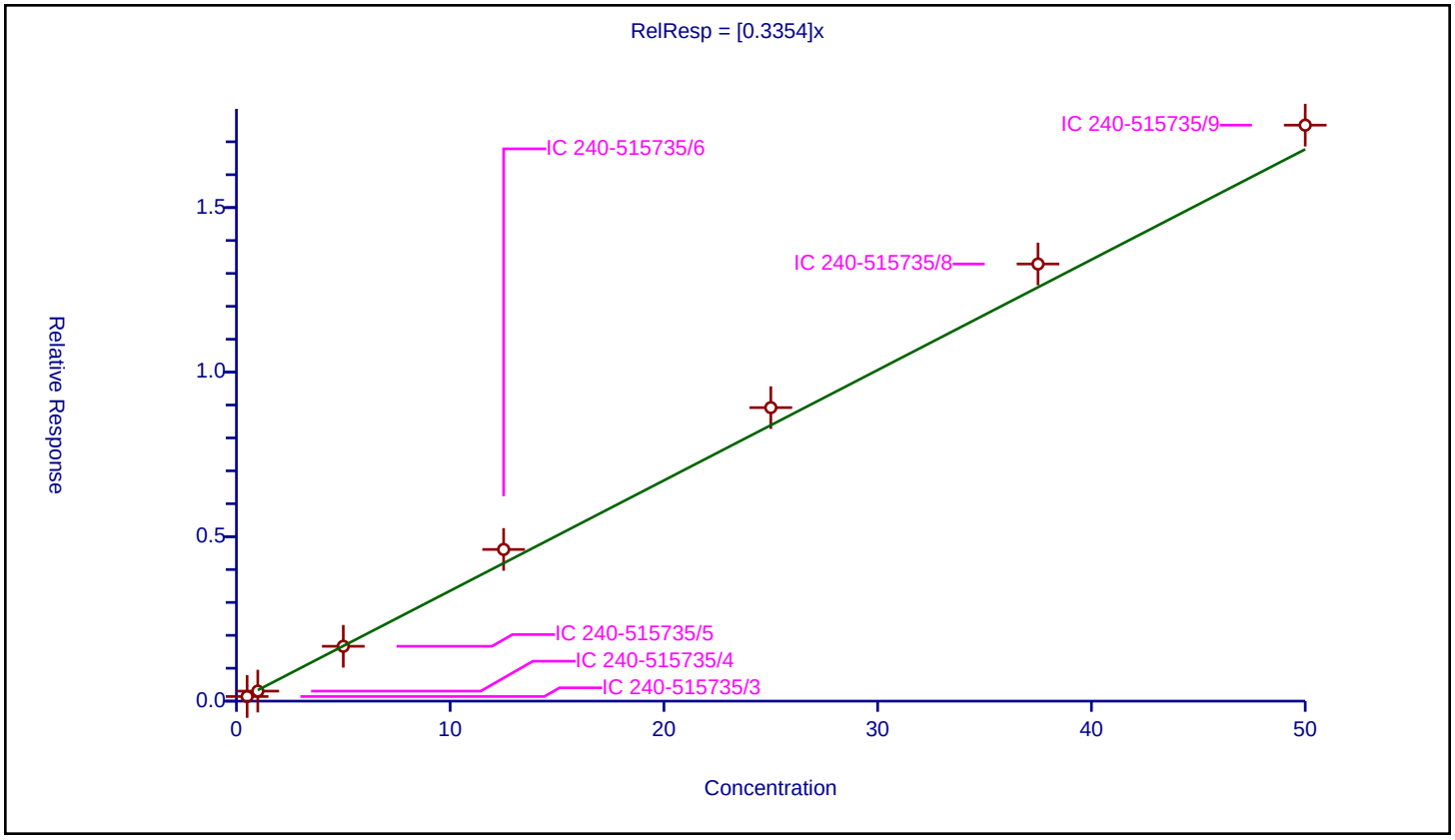
Curve Coefficients

Intercept:	0
Slope:	0.3354

Error Coefficients

Standard Error:	784000
Relative Standard Error:	9.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.140067	27.5	1899933.0	0.280134	Y
2	IC 240-515735/4	1.0	0.304462	27.5	1752449.0	0.304462	Y
3	IC 240-515735/5	5.0	1.667021	27.5	1737130.0	0.333404	Y
4	IC 240-515735/6	12.5	4.610704	27.5	1864275.0	0.368856	Y
5	ICIS 240-515735/7	25.0	8.920571	27.5	2022141.0	0.356823	Y
6	IC 240-515735/8	37.5	13.286002	27.5	2091610.0	0.354293	Y
7	IC 240-515735/9	50.0	17.506004	27.5	2291020.0	0.35012	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

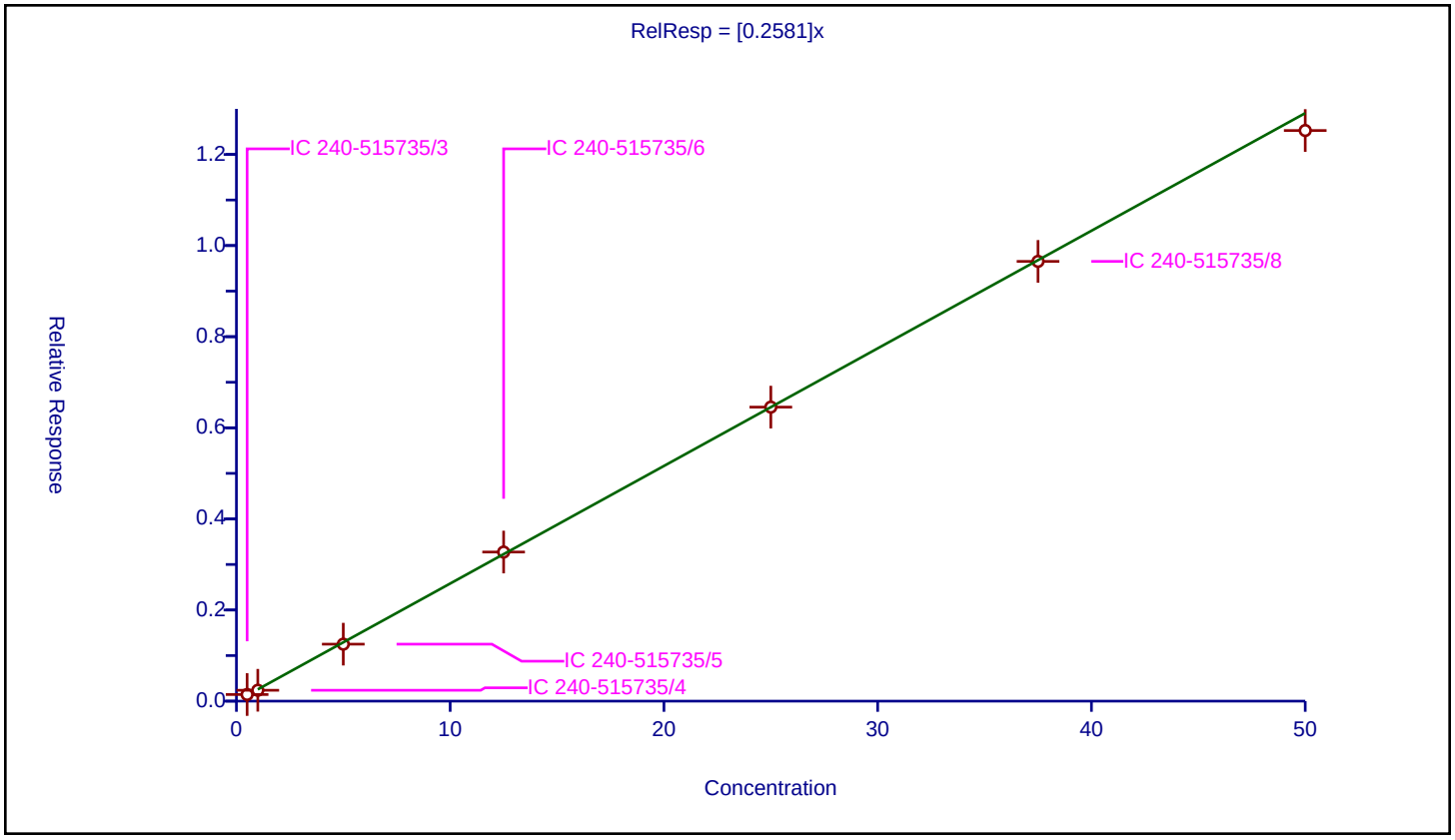
Curve Coefficients

Intercept:	0
Slope:	0.2581

Error Coefficients

Standard Error:	564000
Relative Standard Error:	6.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.14506	27.5	1899933.0	0.290121	Y
2	IC 240-515735/4	1.0	0.238712	27.5	1752449.0	0.238712	Y
3	IC 240-515735/5	5.0	1.250658	27.5	1737130.0	0.250132	Y
4	IC 240-515735/6	12.5	3.272725	27.5	1864275.0	0.261818	Y
5	ICIS 240-515735/7	25.0	6.453808	27.5	2022141.0	0.258152	Y
6	IC 240-515735/8	37.5	9.652577	27.5	2091610.0	0.257402	Y
7	IC 240-515735/9	50.0	12.525174	27.5	2291020.0	0.250503	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

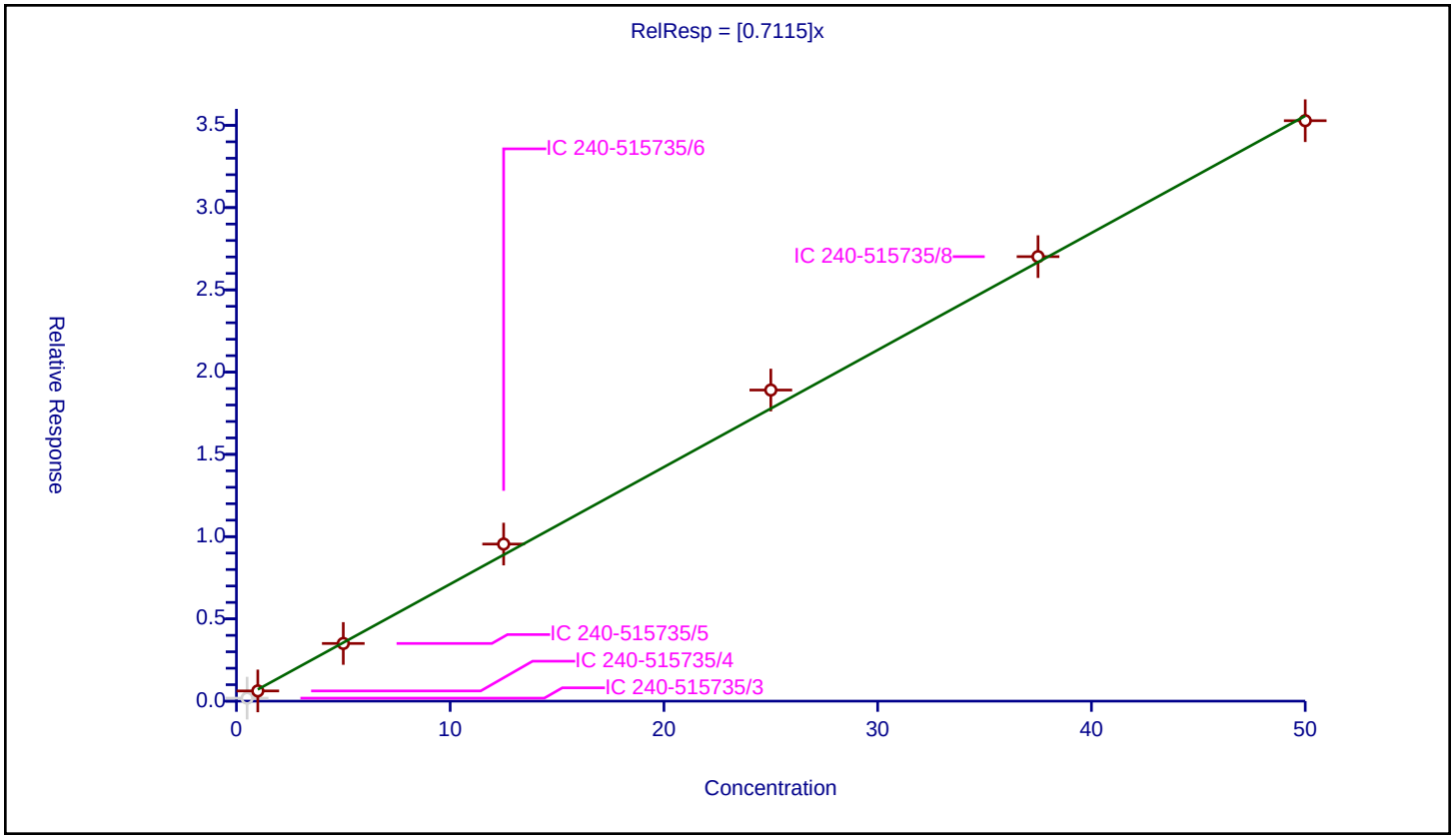
Curve Coefficients

Intercept:	0
Slope:	0.7115

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	7.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.182635	27.5	1899933.0	0.365271	N
2	IC 240-515735/4	1.0	0.621338	27.5	1752449.0	0.621338	Y
3	IC 240-515735/5	5.0	3.505315	27.5	1737130.0	0.701063	Y
4	IC 240-515735/6	12.5	9.547863	27.5	1864275.0	0.763829	Y
5	ICIS 240-515735/7	25.0	18.910018	27.5	2022141.0	0.756401	Y
6	IC 240-515735/8	37.5	27.019094	27.5	2091610.0	0.720509	Y
7	IC 240-515735/9	50.0	35.283344	27.5	2291020.0	0.705667	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

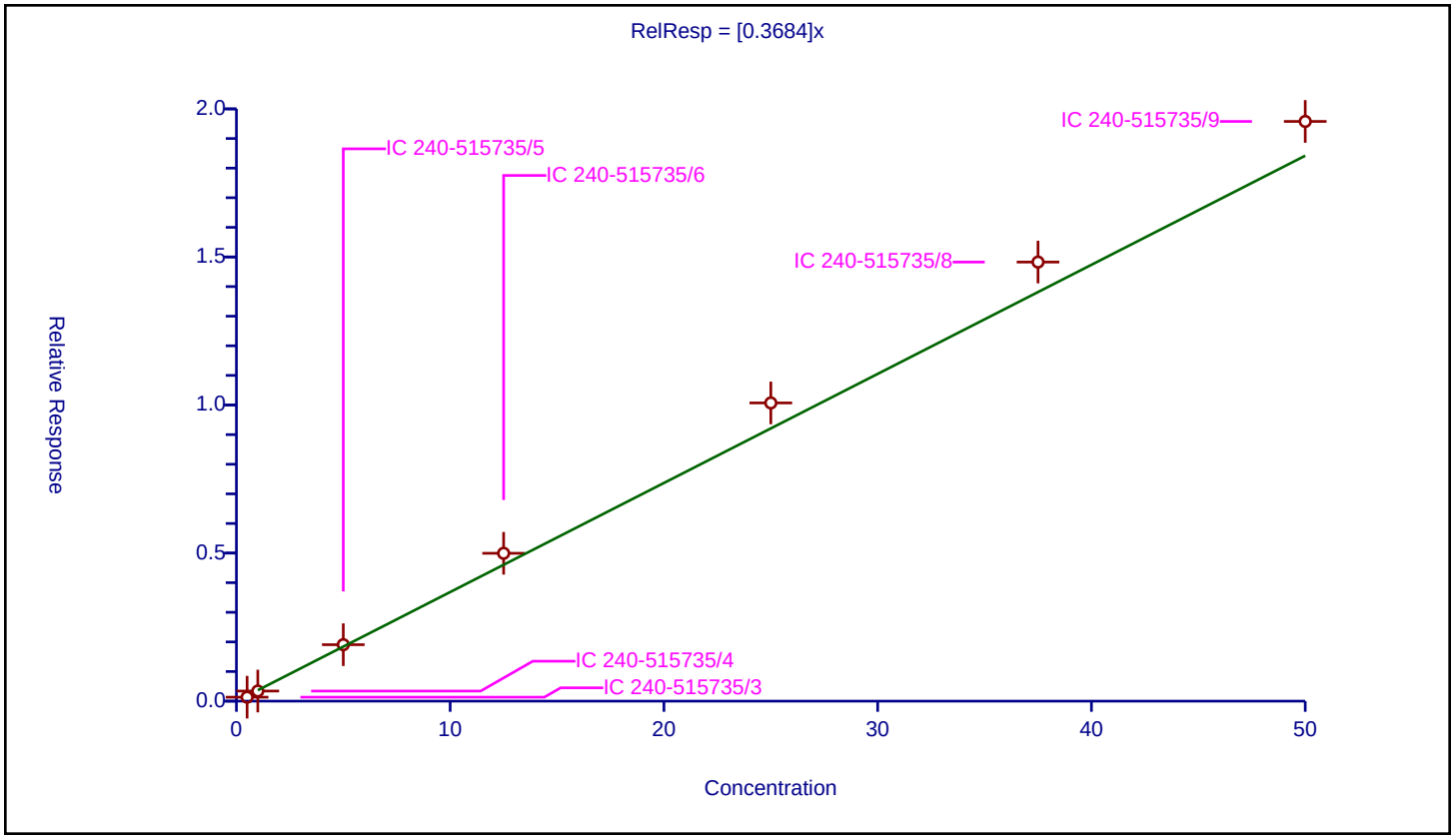
Curve Coefficients

Intercept:	0
Slope:	0.3684

Error Coefficients

Standard Error:	876000
Relative Standard Error:	13.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.133611	27.5	1899933.0	0.267223	Y
2	IC 240-515735/4	1.0	0.3409	27.5	1752449.0	0.3409	Y
3	IC 240-515735/5	5.0	1.906746	27.5	1737130.0	0.381349	Y
4	IC 240-515735/6	12.5	4.992712	27.5	1864275.0	0.399417	Y
5	ICIS 240-515735/7	25.0	10.070064	27.5	2022141.0	0.402803	Y
6	IC 240-515735/8	37.5	14.82717	27.5	2091610.0	0.395391	Y
7	IC 240-515735/9	50.0	19.57606	27.5	2291020.0	0.391521	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

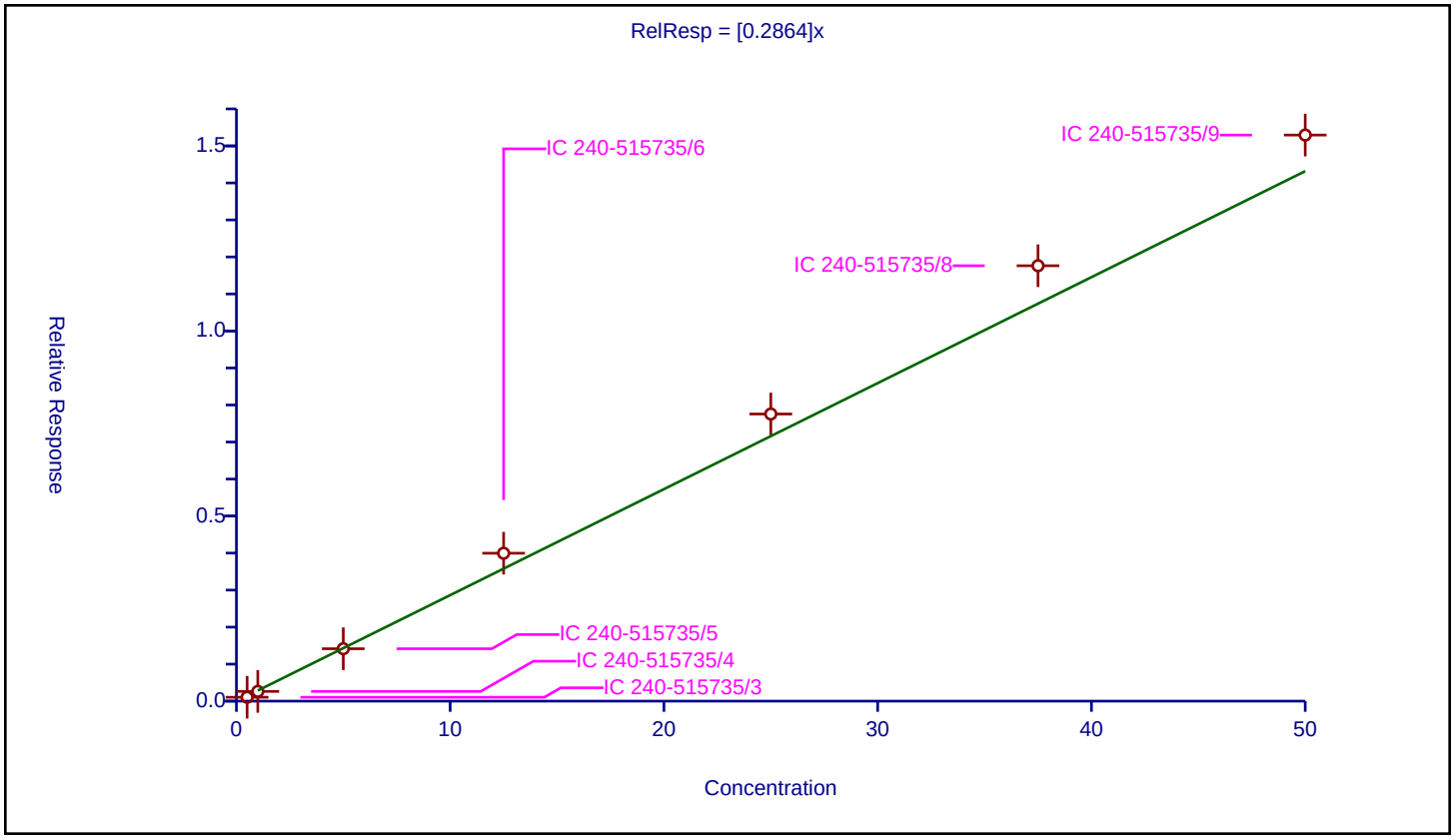
Curve Coefficients

Intercept:	0
Slope:	0.2864

Error Coefficients

Standard Error:	687000
Relative Standard Error:	13.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.104446	27.5	1899933.0	0.208892	Y
2	IC 240-515735/4	1.0	0.262956	27.5	1752449.0	0.262956	Y
3	IC 240-515735/5	5.0	1.415503	27.5	1737130.0	0.283101	Y
4	IC 240-515735/6	12.5	3.996175	27.5	1864275.0	0.319694	Y
5	ICIS 240-515735/7	25.0	7.757016	27.5	2022141.0	0.310281	Y
6	IC 240-515735/8	37.5	11.762715	27.5	2091610.0	0.313672	Y
7	IC 240-515735/9	50.0	15.293636	27.5	2291020.0	0.305873	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

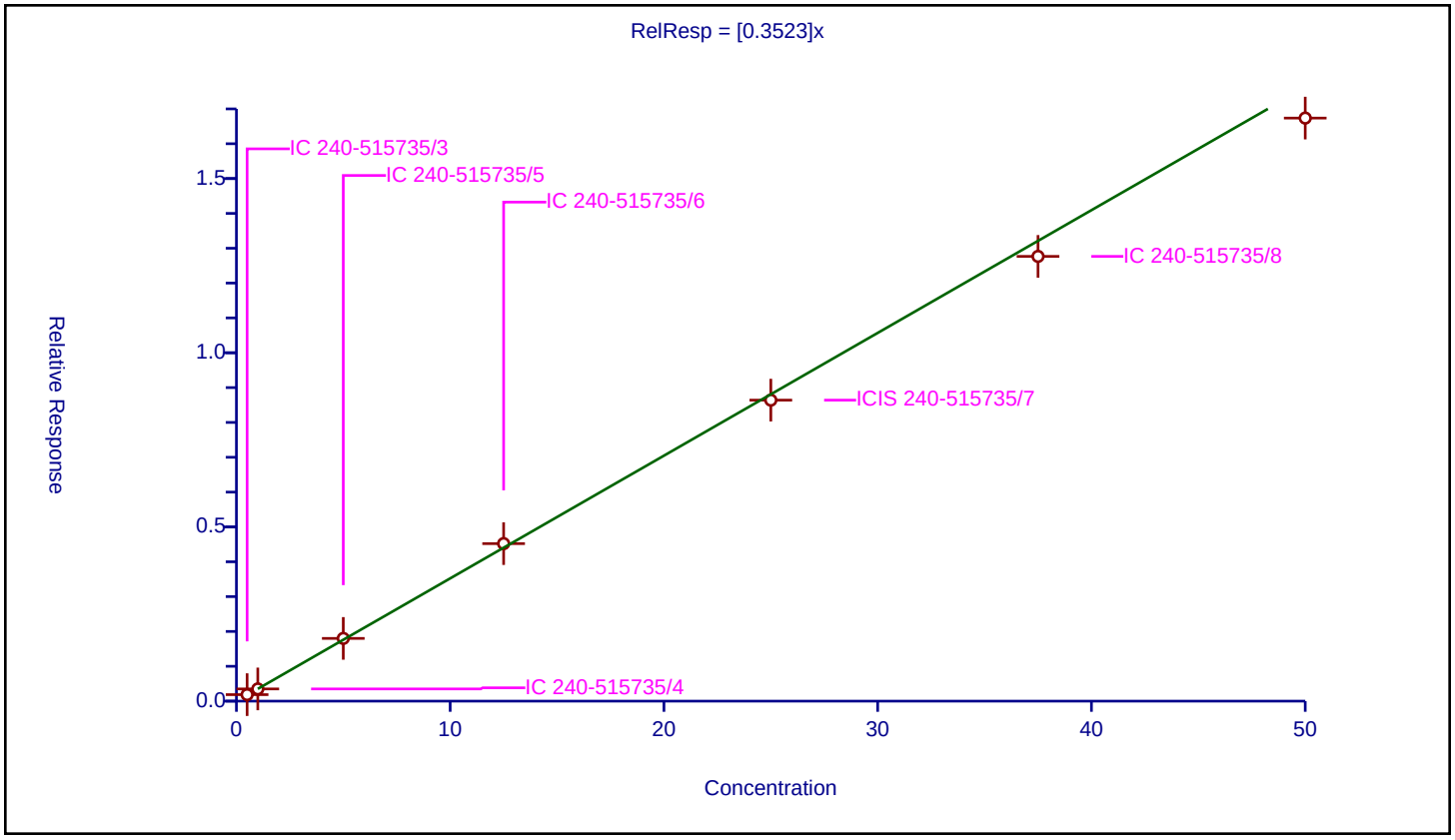
Curve Coefficients

Intercept:	0
Slope:	0.3523

Error Coefficients

Standard Error:	753000
Relative Standard Error:	3.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.186616	27.5	1899933.0	0.373232	Y
2	IC 240-515735/4	1.0	0.350284	27.5	1752449.0	0.350284	Y
3	IC 240-515735/5	5.0	1.80087	27.5	1737130.0	0.360174	Y
4	IC 240-515735/6	12.5	4.521475	27.5	1864275.0	0.361718	Y
5	ICIS 240-515735/7	25.0	8.640164	27.5	2022141.0	0.345607	Y
6	IC 240-515735/8	37.5	12.766179	27.5	2091610.0	0.340431	Y
7	IC 240-515735/9	50.0	16.736515	27.5	2291020.0	0.33473	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

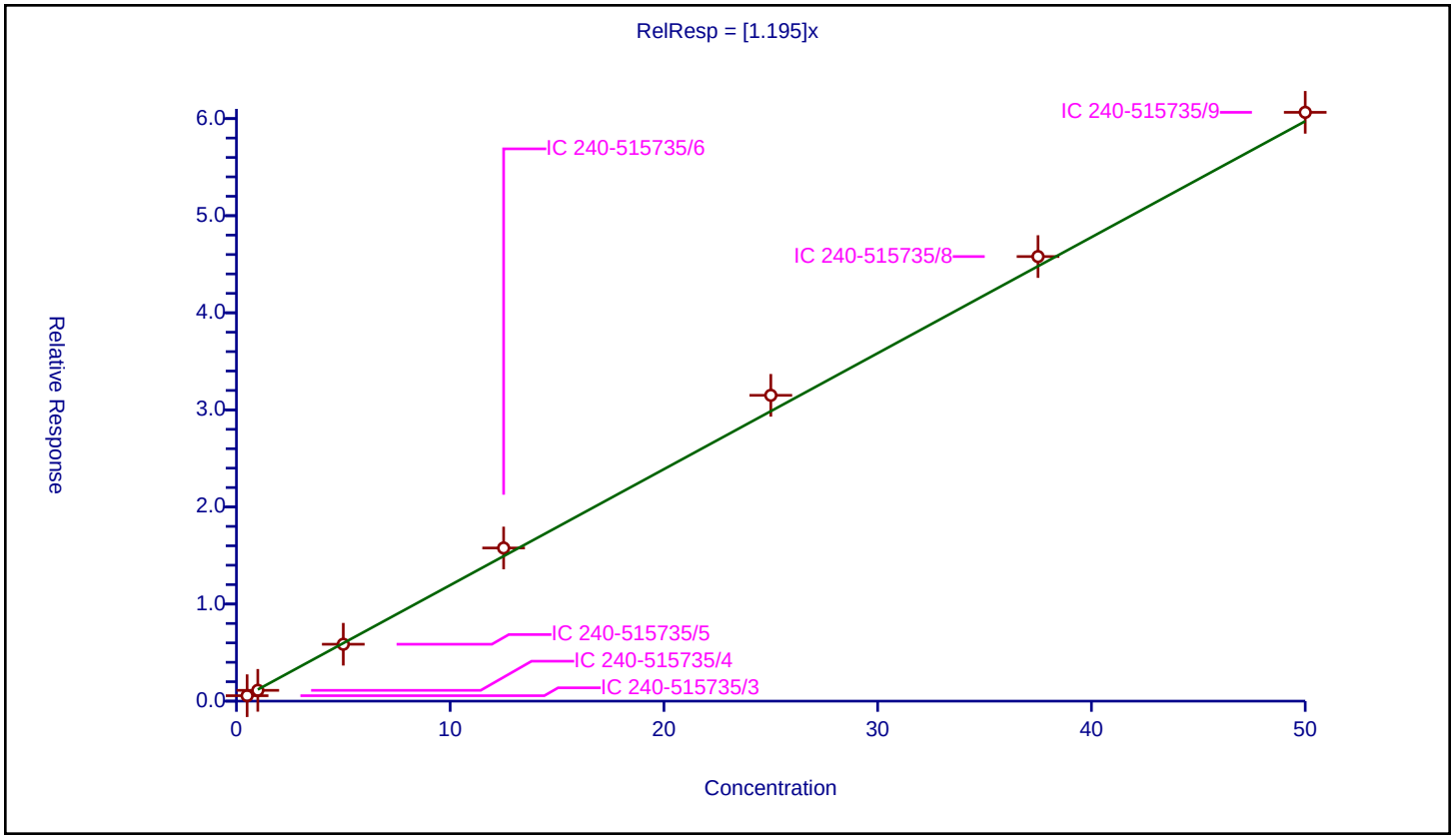
Curve Coefficients

Intercept:	0
Slope:	1.195

Error Coefficients

Standard Error:	2720000
Relative Standard Error:	5.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.560397	27.5	1899933.0	1.120795	Y
2	IC 240-515735/4	1.0	1.113386	27.5	1752449.0	1.113386	Y
3	IC 240-515735/5	5.0	5.859737	27.5	1737130.0	1.171947	Y
4	IC 240-515735/6	12.5	15.773659	27.5	1864275.0	1.261893	Y
5	ICIS 240-515735/7	25.0	31.500441	27.5	2022141.0	1.260018	Y
6	IC 240-515735/8	37.5	45.791041	27.5	2091610.0	1.221094	Y
7	IC 240-515735/9	50.0	60.647078	27.5	2291020.0	1.212942	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

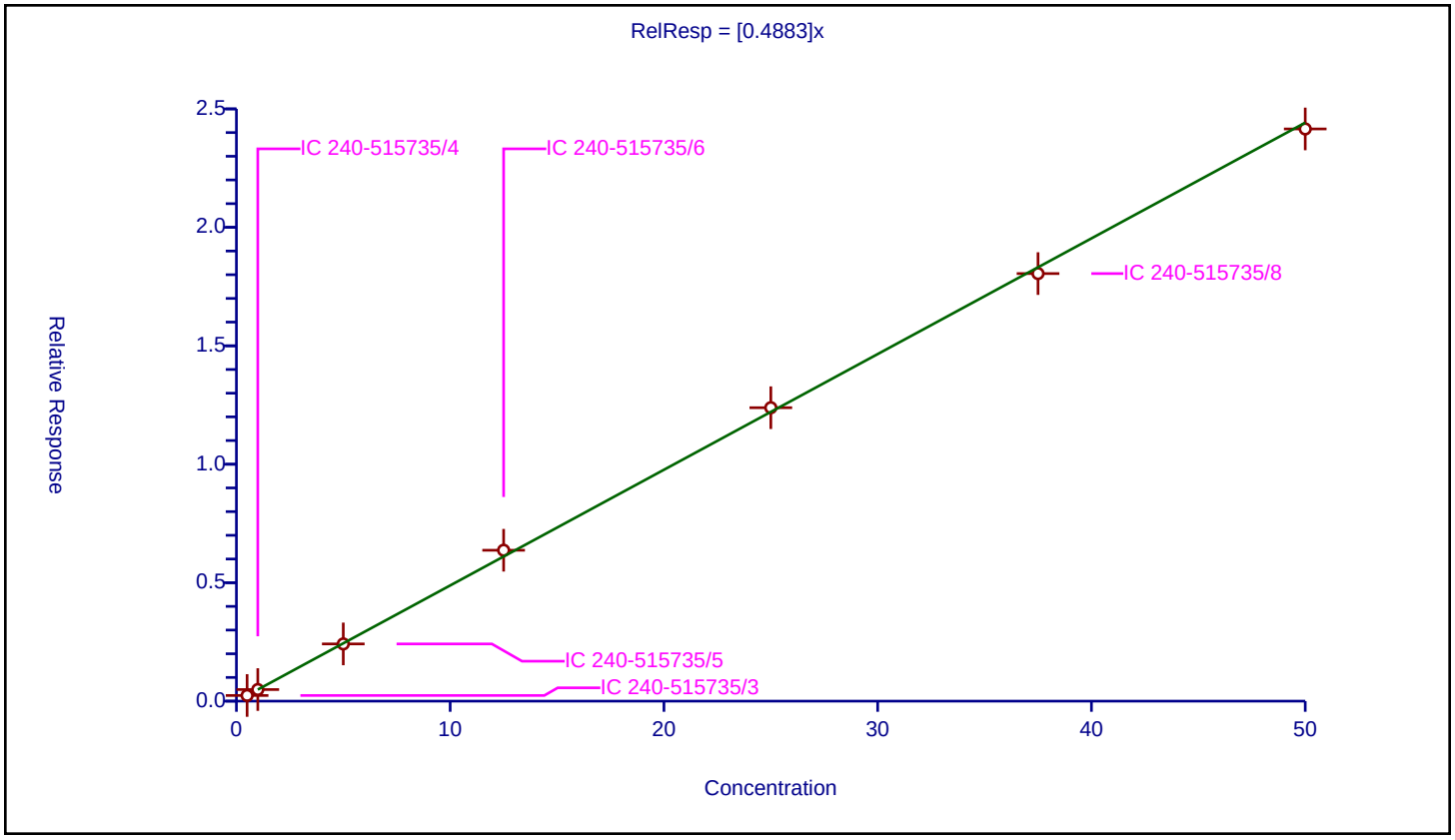
Curve Coefficients

Intercept:	0
Slope:	0.4883

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	2.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.238419	27.5	1899933.0	0.476838	Y
2	IC 240-515735/4	1.0	0.489177	27.5	1752449.0	0.489177	Y
3	IC 240-515735/5	5.0	2.415196	27.5	1737130.0	0.483039	Y
4	IC 240-515735/6	12.5	6.369353	27.5	1864275.0	0.509548	Y
5	ICIS 240-515735/7	25.0	12.386268	27.5	2022141.0	0.495451	Y
6	IC 240-515735/8	37.5	18.048386	27.5	2091610.0	0.48129	Y
7	IC 240-515735/9	50.0	24.153276	27.5	2291020.0	0.483066	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

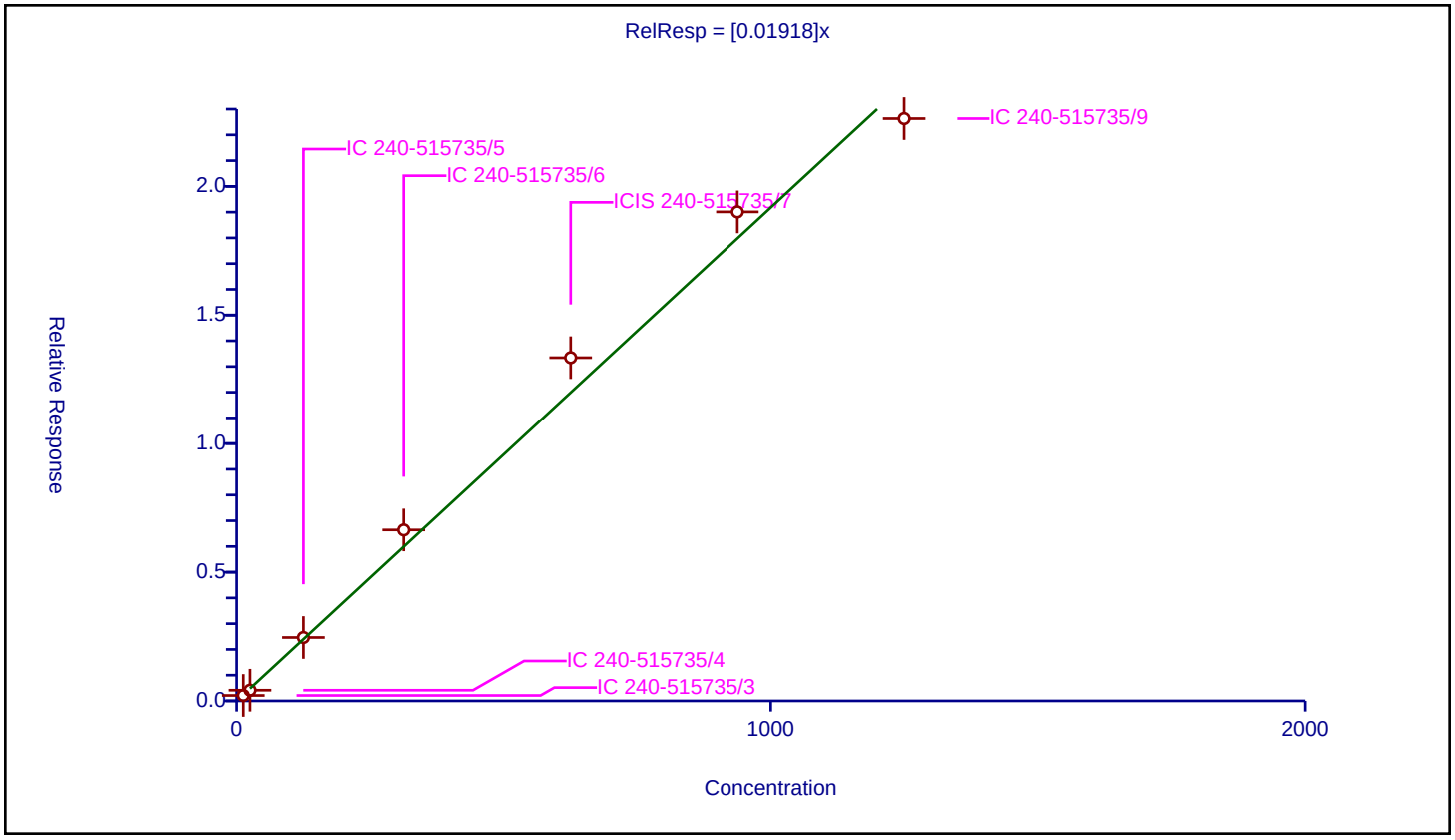
Curve Coefficients

Intercept:	0
Slope:	0.01918

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	10.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	12.5	0.211642	27.5	1899933.0	0.016931	Y
2	IC 240-515735/4	25.0	0.415376	27.5	1752449.0	0.016615	Y
3	IC 240-515735/5	125.0	2.462926	27.5	1737130.0	0.019703	Y
4	IC 240-515735/6	312.5	6.64269	27.5	1864275.0	0.021257	Y
5	ICIS 240-515735/7	625.0	13.342527	27.5	2022141.0	0.021348	Y
6	IC 240-515735/8	937.5	19.009343	27.5	2091610.0	0.020277	Y
7	IC 240-515735/9	1250.0	22.632554	27.5	2291020.0	0.018106	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

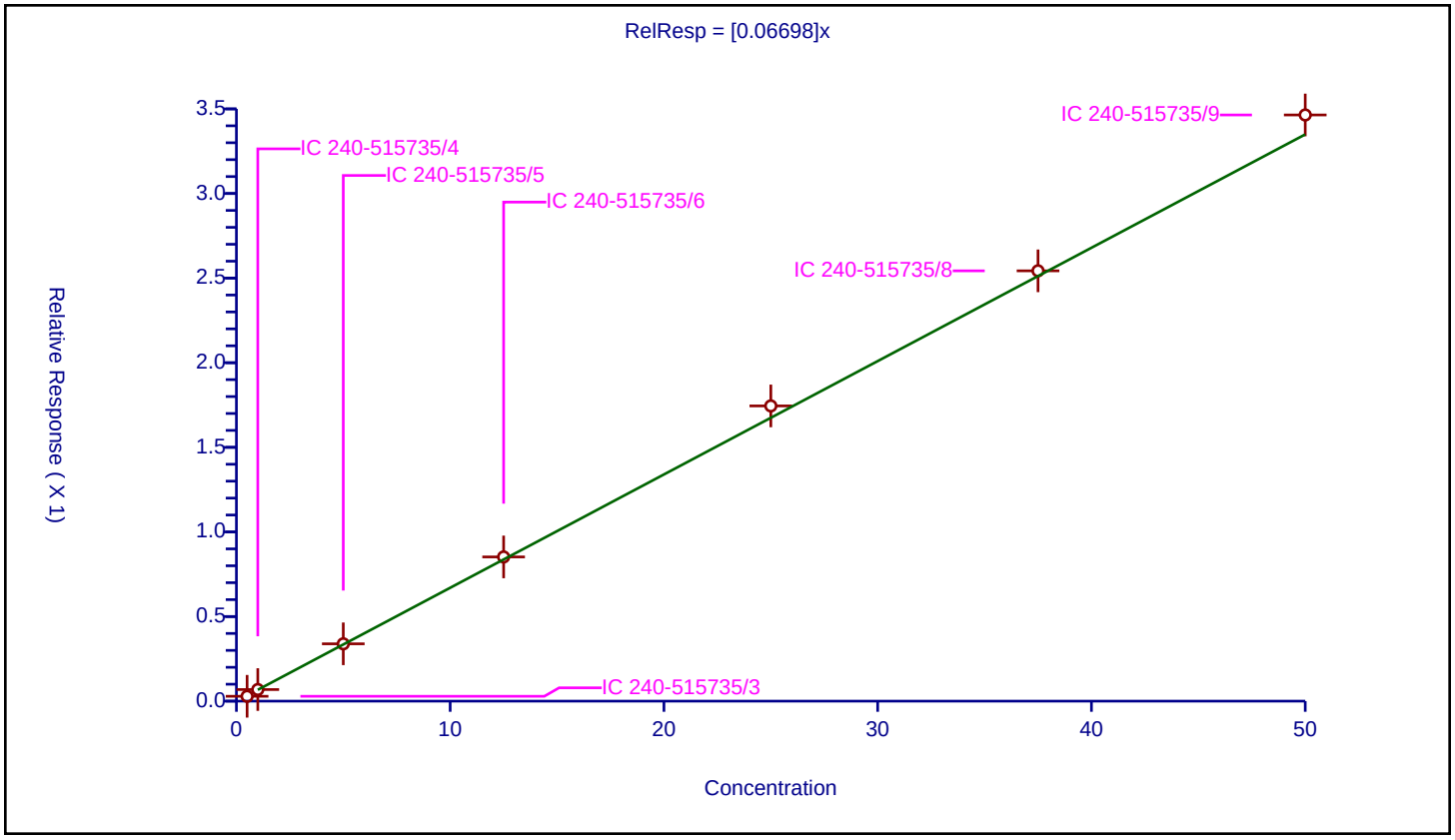
Curve Coefficients

Intercept:	0
Slope:	0.06698

Error Coefficients

Standard Error:	153000
Relative Standard Error:	6.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.028731	27.5	1899933.0	0.057463	Y
2	IC 240-515735/4	1.0	0.068591	27.5	1752449.0	0.068591	Y
3	IC 240-515735/5	5.0	0.338777	27.5	1737130.0	0.067755	Y
4	IC 240-515735/6	12.5	0.852286	27.5	1864275.0	0.068183	Y
5	ICIS 240-515735/7	25.0	1.744714	27.5	2022141.0	0.069789	Y
6	IC 240-515735/8	37.5	2.542975	27.5	2091610.0	0.067813	Y
7	IC 240-515735/9	50.0	3.464142	27.5	2291020.0	0.069283	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

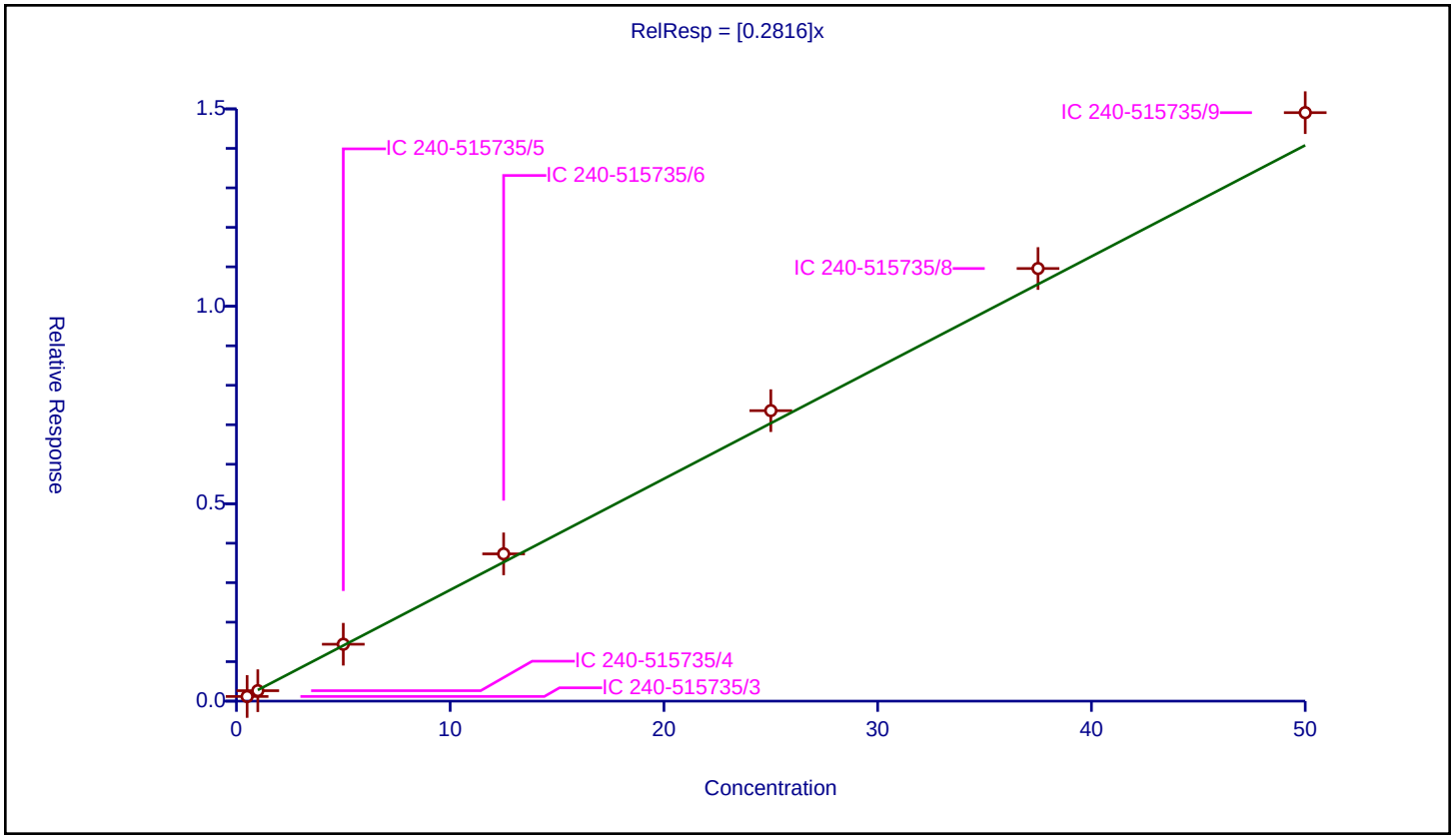
Curve Coefficients

Intercept:	0
Slope:	0.2816

Error Coefficients

Standard Error:	658000
Relative Standard Error:	8.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.117458	27.5	1899933.0	0.234916	Y
2	IC 240-515735/4	1.0	0.264808	27.5	1752449.0	0.264808	Y
3	IC 240-515735/5	5.0	1.441465	27.5	1737130.0	0.288293	Y
4	IC 240-515735/6	12.5	3.729698	27.5	1864275.0	0.298376	Y
5	ICIS 240-515735/7	25.0	7.357274	27.5	2022141.0	0.294291	Y
6	IC 240-515735/8	37.5	10.957322	27.5	2091610.0	0.292195	Y
7	IC 240-515735/9	50.0	14.905206	27.5	2291020.0	0.298104	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

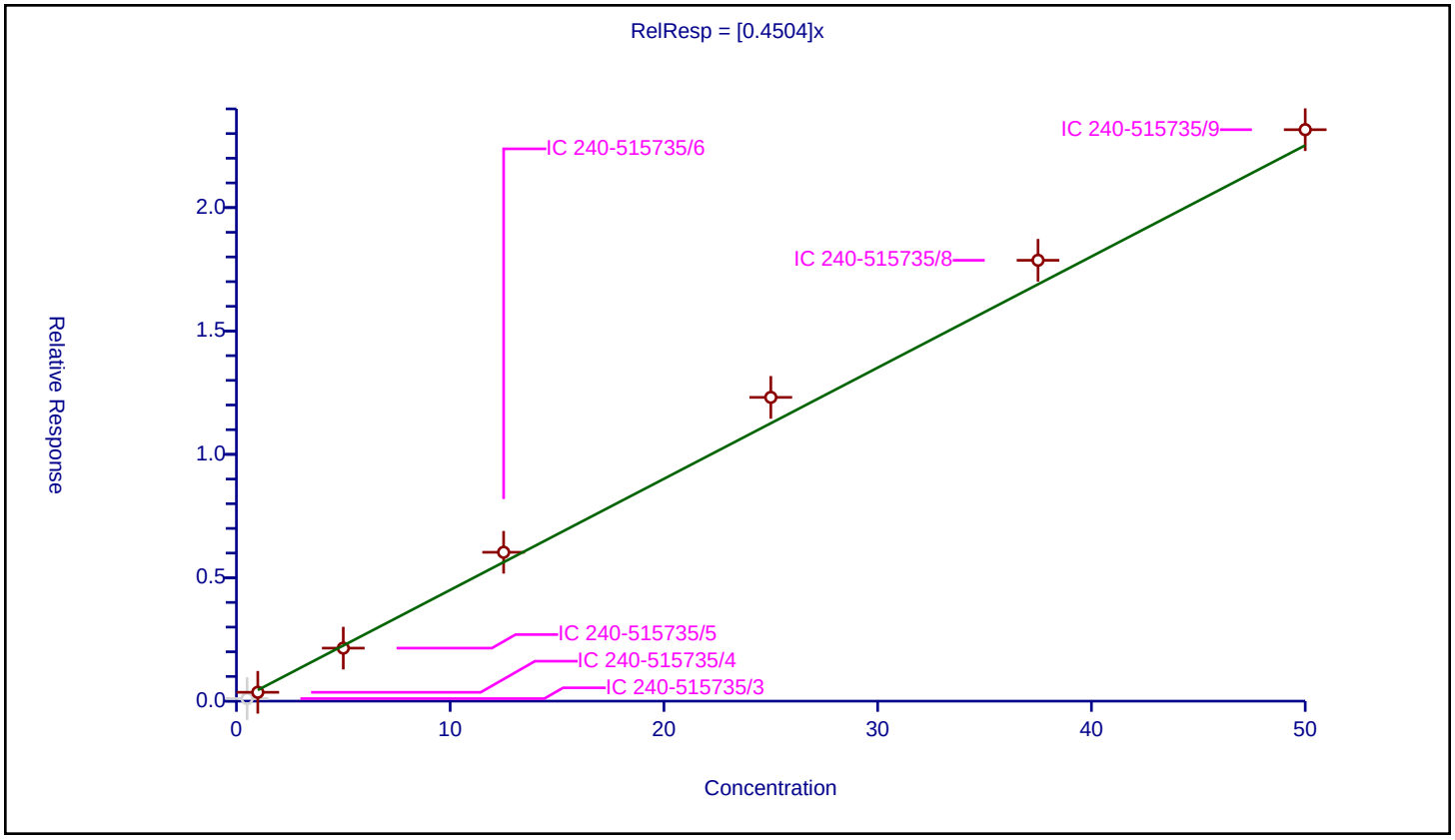
Curve Coefficients

Intercept:	0
Slope:	0.4504

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	11.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.103027	27.5	1899933.0	0.206055	N
2	IC 240-515735/4	1.0	0.35835	27.5	1752449.0	0.35835	Y
3	IC 240-515735/5	5.0	2.148813	27.5	1737130.0	0.429763	Y
4	IC 240-515735/6	12.5	6.032395	27.5	1864275.0	0.482592	Y
5	ICIS 240-515735/7	25.0	12.309785	27.5	2022141.0	0.492391	Y
6	IC 240-515735/8	37.5	17.865435	27.5	2091610.0	0.476412	Y
7	IC 240-515735/9	50.0	23.156886	27.5	2291020.0	0.463138	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

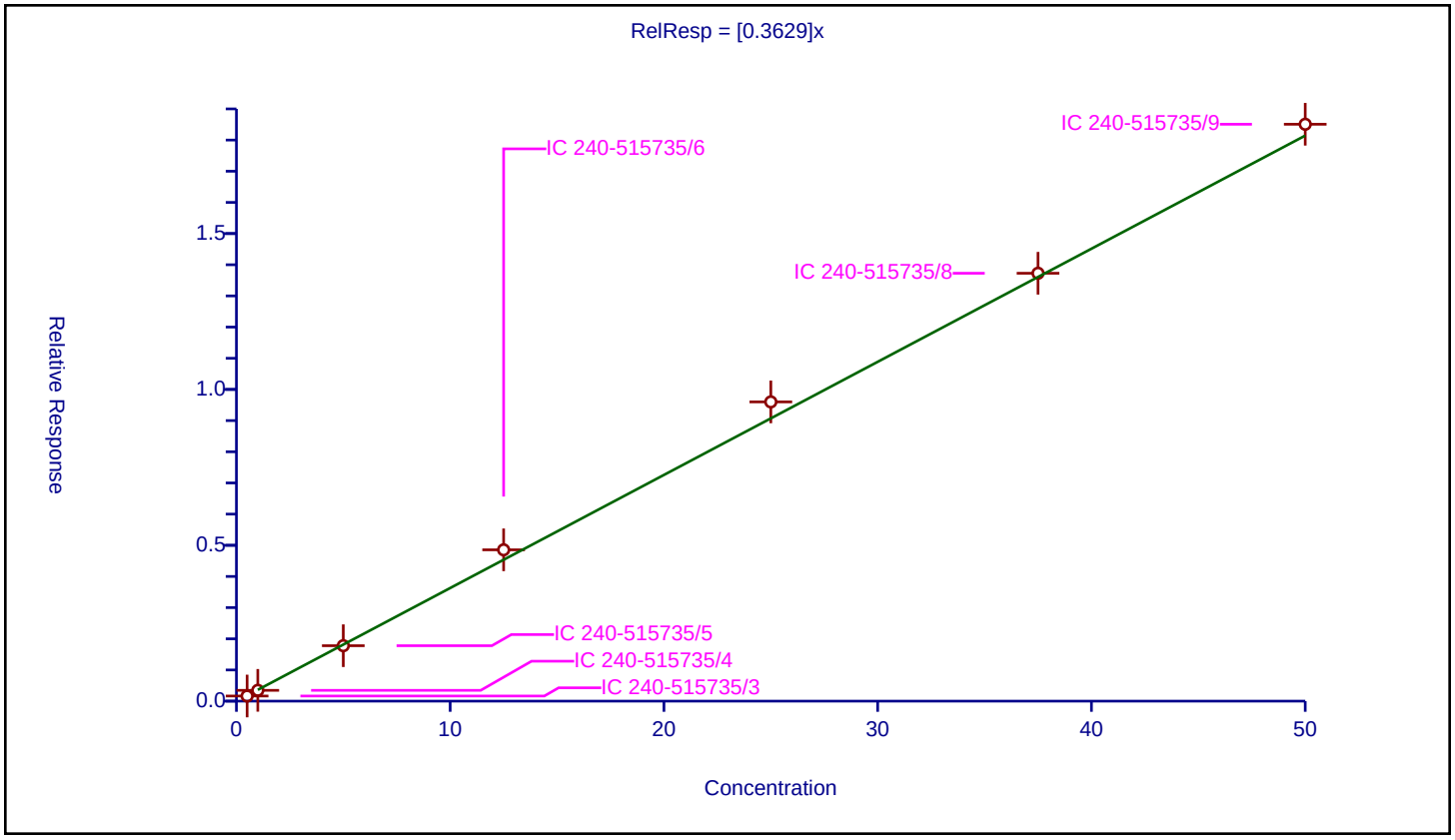
Curve Coefficients

Intercept:	0
Slope:	0.3629

Error Coefficients

Standard Error:	825000
Relative Standard Error:	5.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.164543	27.5	1899933.0	0.329085	Y
2	IC 240-515735/4	1.0	0.346722	27.5	1752449.0	0.346722	Y
3	IC 240-515735/5	5.0	1.778169	27.5	1737130.0	0.355634	Y
4	IC 240-515735/6	12.5	4.854435	27.5	1864275.0	0.388355	Y
5	ICIS 240-515735/7	25.0	9.600054	27.5	2022141.0	0.384002	Y
6	IC 240-515735/8	37.5	13.727136	27.5	2091610.0	0.366057	Y
7	IC 240-515735/9	50.0	18.506714	27.5	2291020.0	0.370134	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

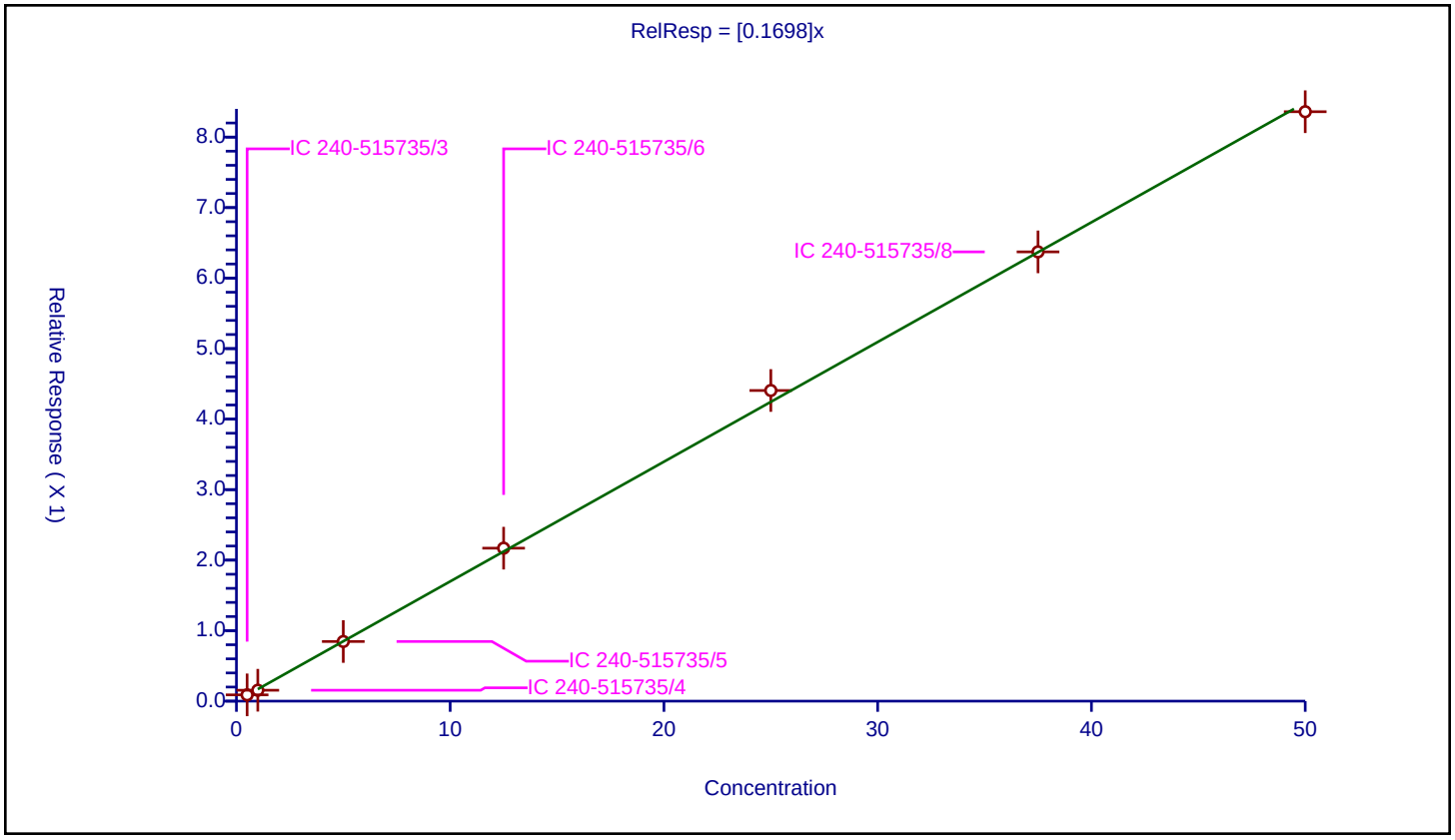
Curve Coefficients

Intercept:	0
Slope:	0.1698

Error Coefficients

Standard Error:	376000
Relative Standard Error:	4.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.088843	27.5	1899933.0	0.177685	Y
2	IC 240-515735/4	1.0	0.154679	27.5	1752449.0	0.154679	Y
3	IC 240-515735/5	5.0	0.845851	27.5	1737130.0	0.16917	Y
4	IC 240-515735/6	12.5	2.169746	27.5	1864275.0	0.17358	Y
5	ICIS 240-515735/7	25.0	4.406017	27.5	2022141.0	0.176241	Y
6	IC 240-515735/8	37.5	6.372249	27.5	2091610.0	0.169927	Y
7	IC 240-515735/9	50.0	8.360023	27.5	2291020.0	0.1672	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

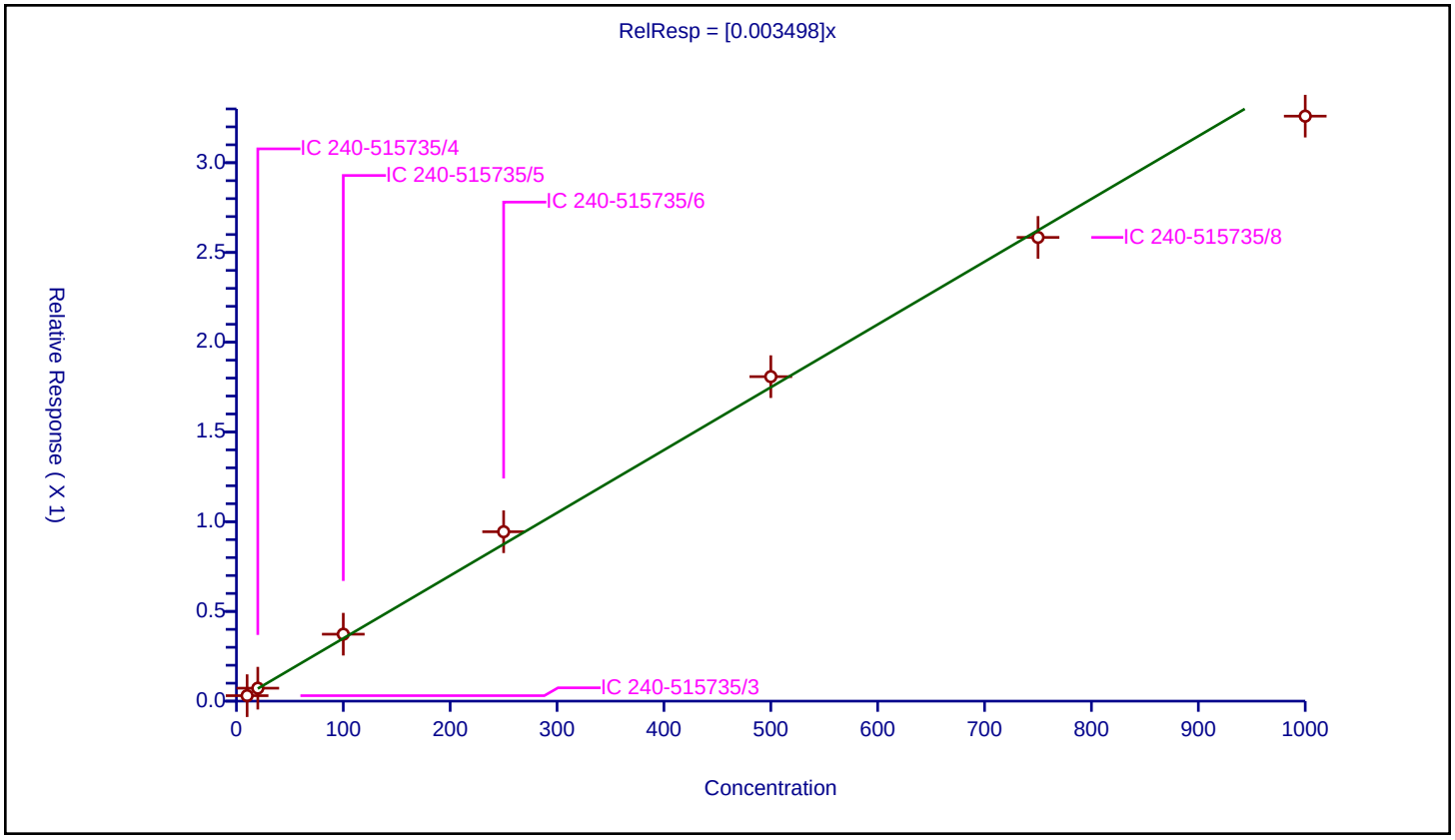
Curve Coefficients

Intercept:	0
Slope:	0.003498

Error Coefficients

Standard Error:	150000
Relative Standard Error:	7.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	10.0	0.030512	27.5	1899933.0	0.003051	Y
2	IC 240-515735/4	20.0	0.072138	27.5	1752449.0	0.003607	Y
3	IC 240-515735/5	100.0	0.373019	27.5	1737130.0	0.00373	Y
4	IC 240-515735/6	250.0	0.943919	27.5	1864275.0	0.003776	Y
5	ICIS 240-515735/7	500.0	1.808033	27.5	2022141.0	0.003616	Y
6	IC 240-515735/8	750.0	2.583983	27.5	2091610.0	0.003445	Y
7	IC 240-515735/9	1000.0	3.259592	27.5	2291020.0	0.00326	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

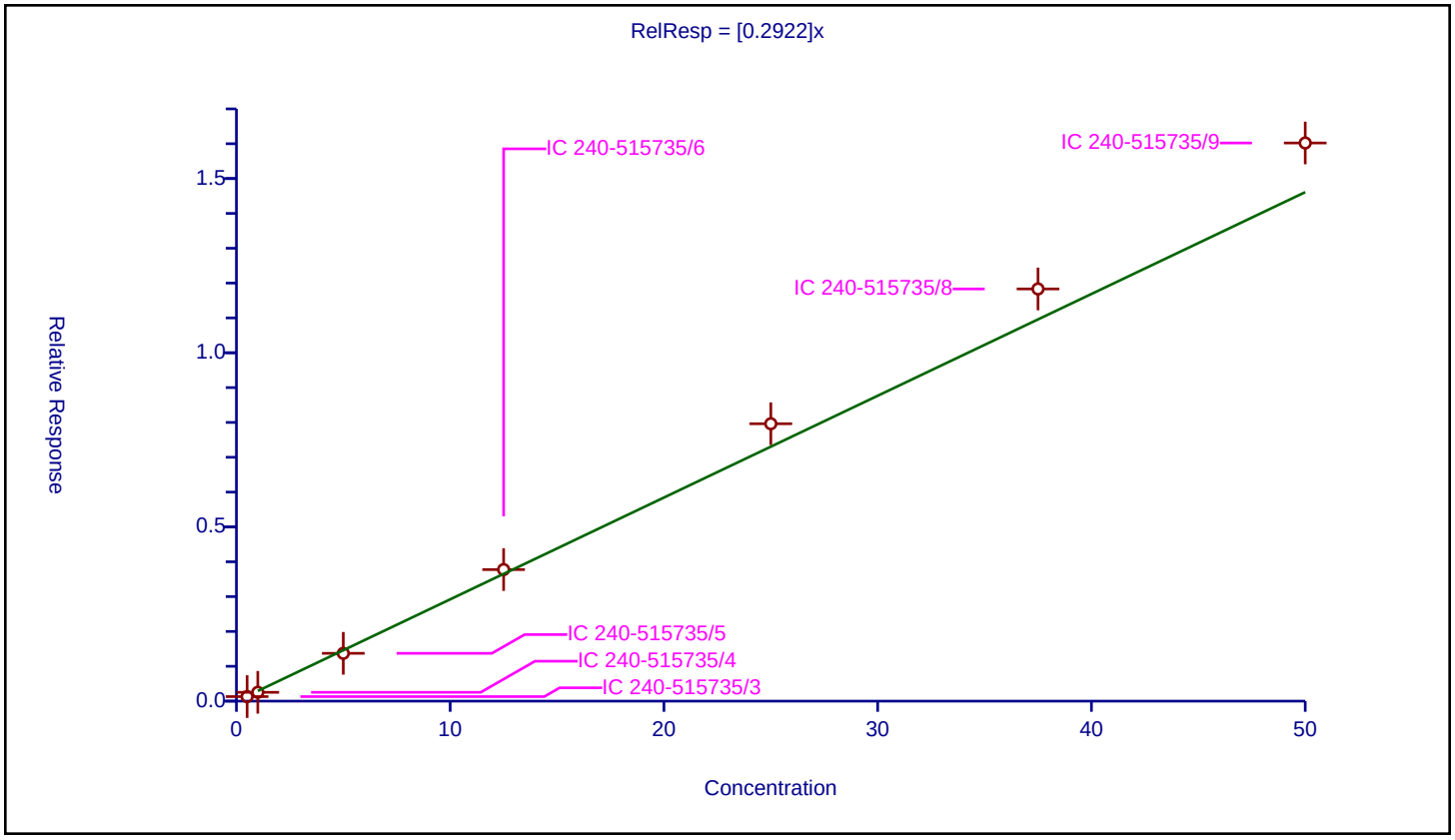
Curve Coefficients

Intercept:	0
Slope:	0.2922

Error Coefficients

Standard Error:	708000
Relative Standard Error:	9.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.130601	27.5	1899933.0	0.261201	Y
2	IC 240-515735/4	1.0	0.253086	27.5	1752449.0	0.253086	Y
3	IC 240-515735/5	5.0	1.372364	27.5	1737130.0	0.274473	Y
4	IC 240-515735/6	12.5	3.776282	27.5	1864275.0	0.302103	Y
5	ICIS 240-515735/7	25.0	7.963048	27.5	2022141.0	0.318522	Y
6	IC 240-515735/8	37.5	11.831623	27.5	2091610.0	0.31551	Y
7	IC 240-515735/9	50.0	16.021629	27.5	2291020.0	0.320433	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

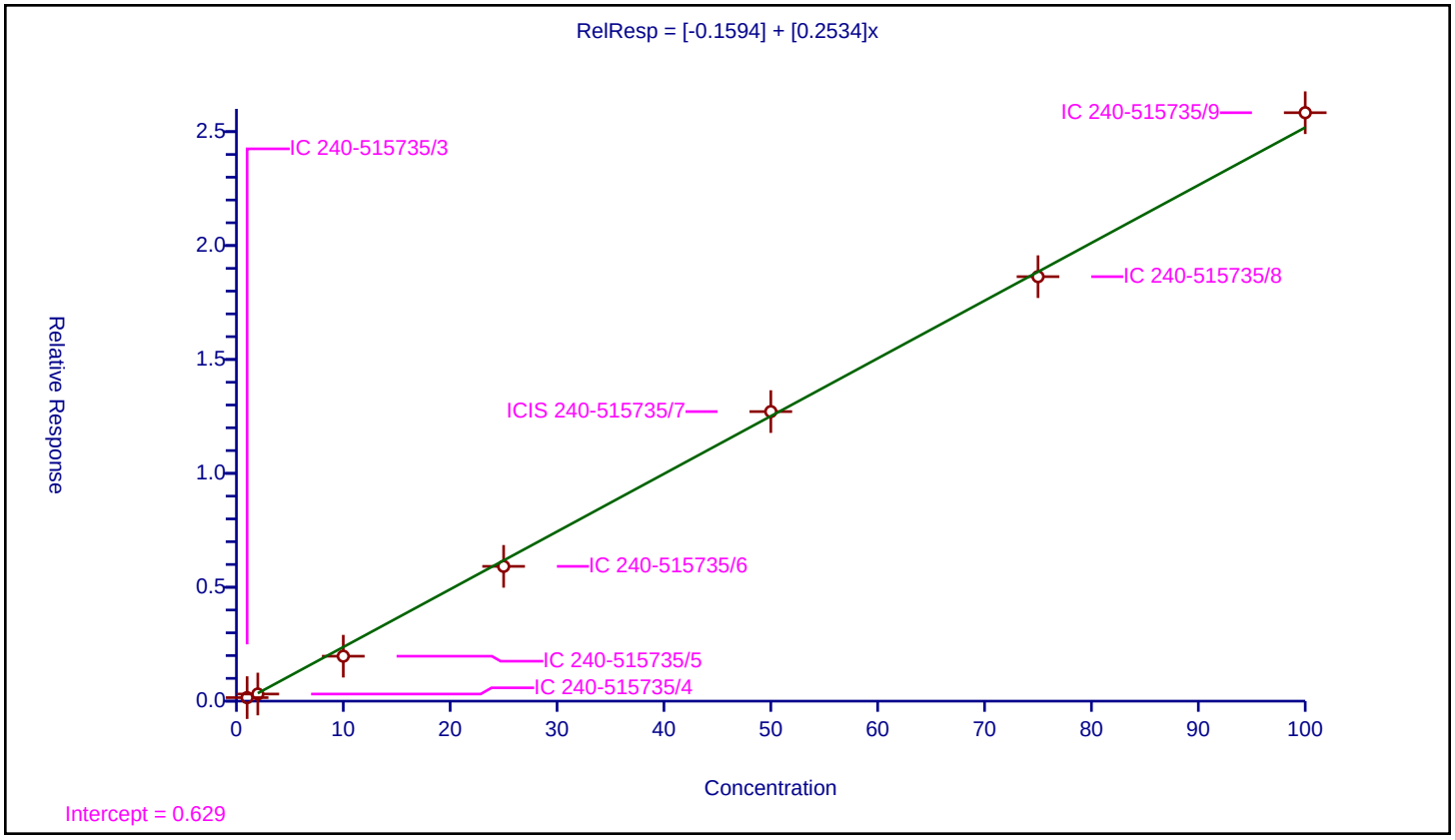
Curve Coefficients

Intercept:	-0.1594
Slope:	0.2534

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	13.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.15444	27.5	1899933.0	0.15444	Y
2	IC 240-515735/4	2.0	0.312293	27.5	1752449.0	0.156146	Y
3	IC 240-515735/5	10.0	1.973377	27.5	1737130.0	0.197338	Y
4	IC 240-515735/6	25.0	5.916864	27.5	1864275.0	0.236675	Y
5	ICIS 240-515735/7	50.0	12.711607	27.5	2022141.0	0.254232	Y
6	IC 240-515735/8	75.0	18.634816	27.5	2091610.0	0.248464	Y
7	IC 240-515735/9	100.0	25.832838	27.5	2291020.0	0.258328	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

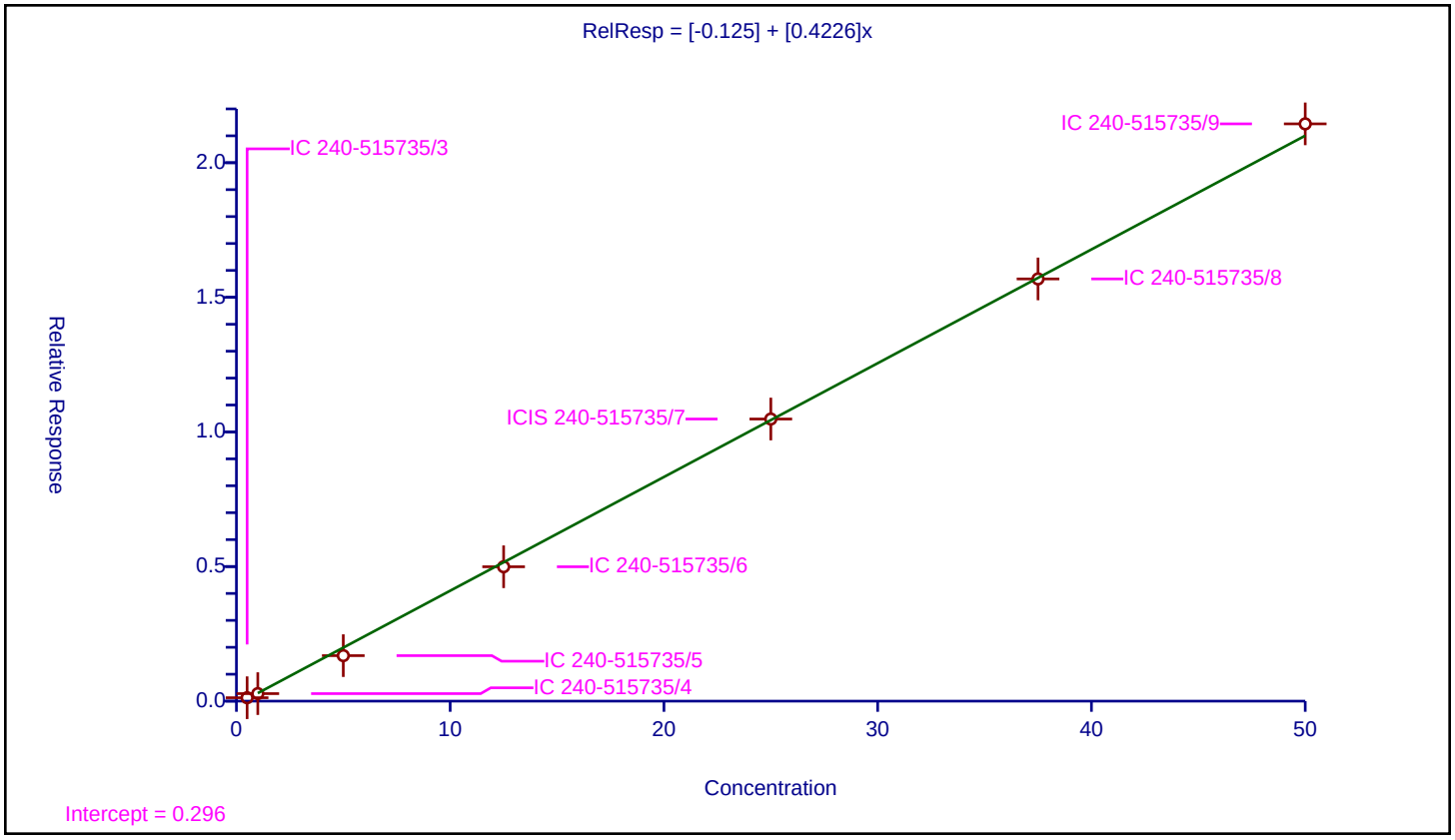
Curve Coefficients

Intercept:	-0.125
Slope:	0.4226

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	10.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.126924	27.5	1899933.0	0.253848	Y
2	IC 240-515735/4	1.0	0.279904	27.5	1752449.0	0.279904	Y
3	IC 240-515735/5	5.0	1.690435	27.5	1737130.0	0.338087	Y
4	IC 240-515735/6	12.5	4.991635	27.5	1864275.0	0.399331	Y
5	ICIS 240-515735/7	25.0	10.480183	27.5	2022141.0	0.419207	Y
6	IC 240-515735/8	37.5	15.684155	27.5	2091610.0	0.418244	Y
7	IC 240-515735/9	50.0	21.443775	27.5	2291020.0	0.428876	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

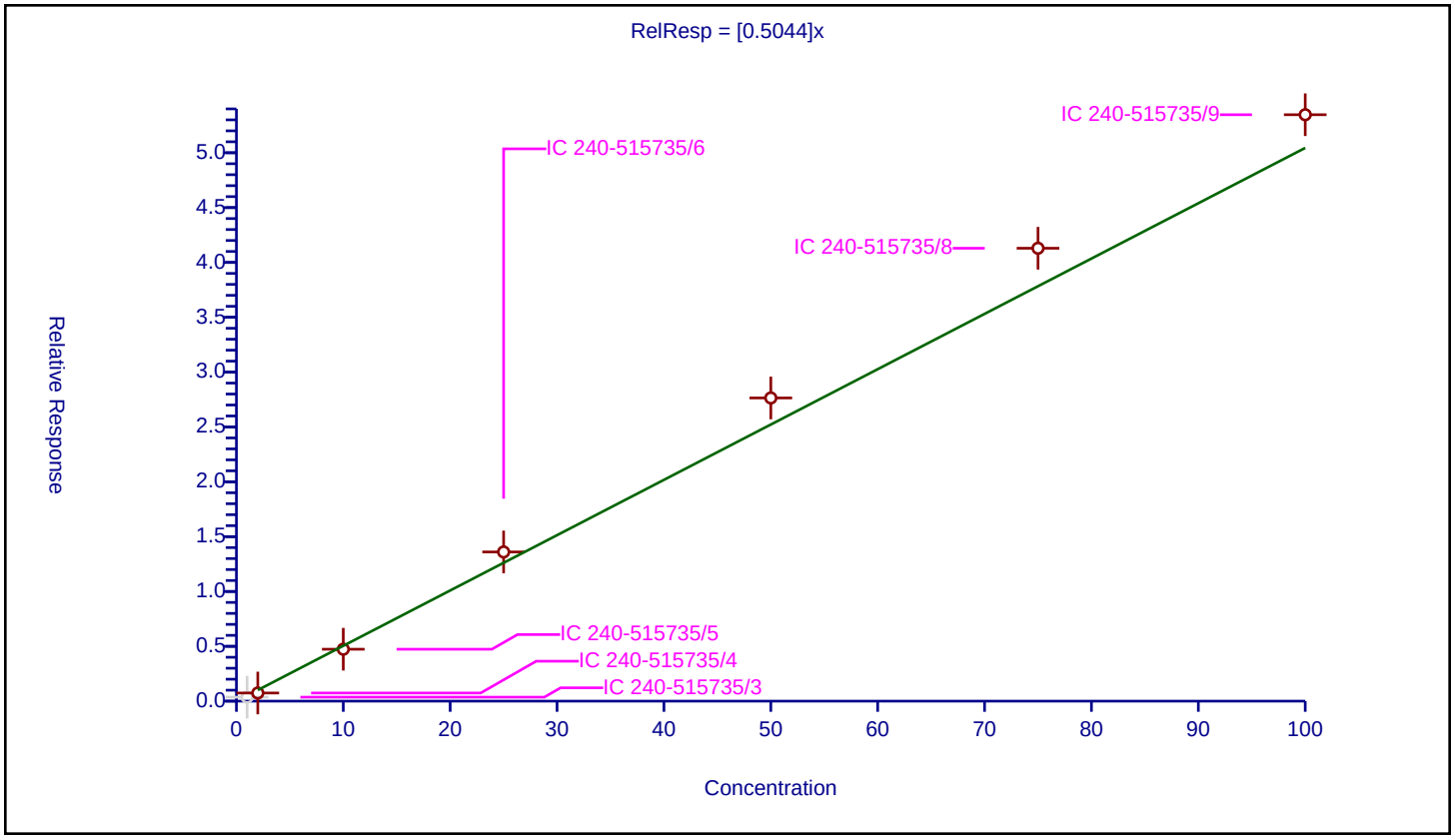
Curve Coefficients

Intercept:	0
Slope:	0.5044

Error Coefficients

Standard Error:	2640000
Relative Standard Error:	14.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.3631	27.5	1899933.0	0.3631	N
2	IC 240-515735/4	2.0	0.741666	27.5	1752449.0	0.370833	Y
3	IC 240-515735/5	10.0	4.733873	27.5	1737130.0	0.473387	Y
4	IC 240-515735/6	25.0	13.602394	27.5	1864275.0	0.544096	Y
5	ICIS 240-515735/7	50.0	27.644168	27.5	2022141.0	0.552883	Y
6	IC 240-515735/8	75.0	41.294558	27.5	2091610.0	0.550594	Y
7	IC 240-515735/9	100.0	53.467732	27.5	2291020.0	0.534677	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

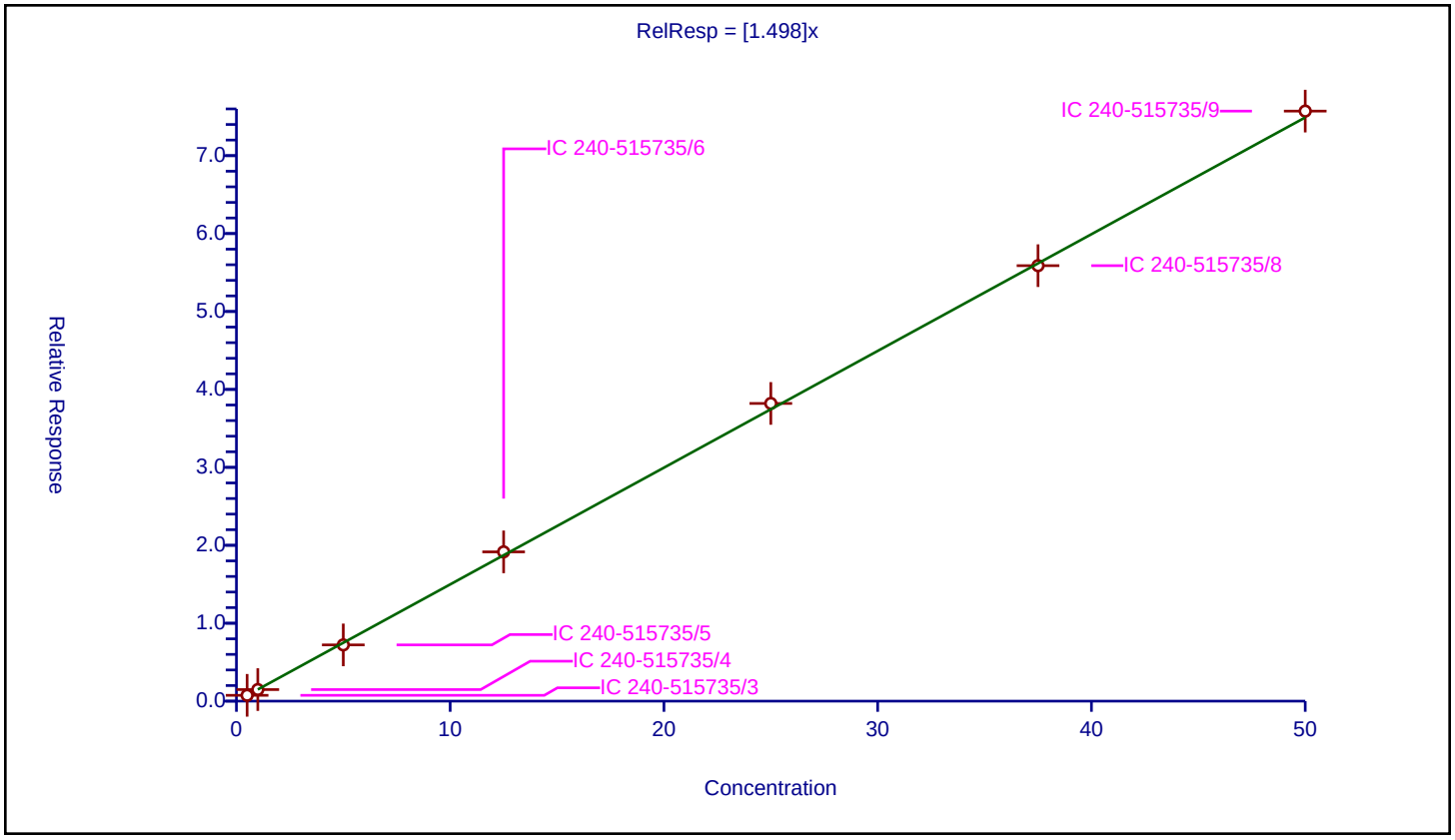
Curve Coefficients

Intercept:	0
Slope:	1.498

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	2.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.745788	27.5	1227454.0	1.491575	Y
2	IC 240-515735/4	1.0	1.485791	27.5	1150387.0	1.485791	Y
3	IC 240-515735/5	5.0	7.218258	27.5	1117558.0	1.443652	Y
4	IC 240-515735/6	12.5	19.156724	27.5	1211674.0	1.532538	Y
5	ICIS 240-515735/7	25.0	38.201135	27.5	1335703.0	1.528045	Y
6	IC 240-515735/8	37.5	55.881718	27.5	1364274.0	1.490179	Y
7	IC 240-515735/9	50.0	75.715681	27.5	1496746.0	1.514314	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

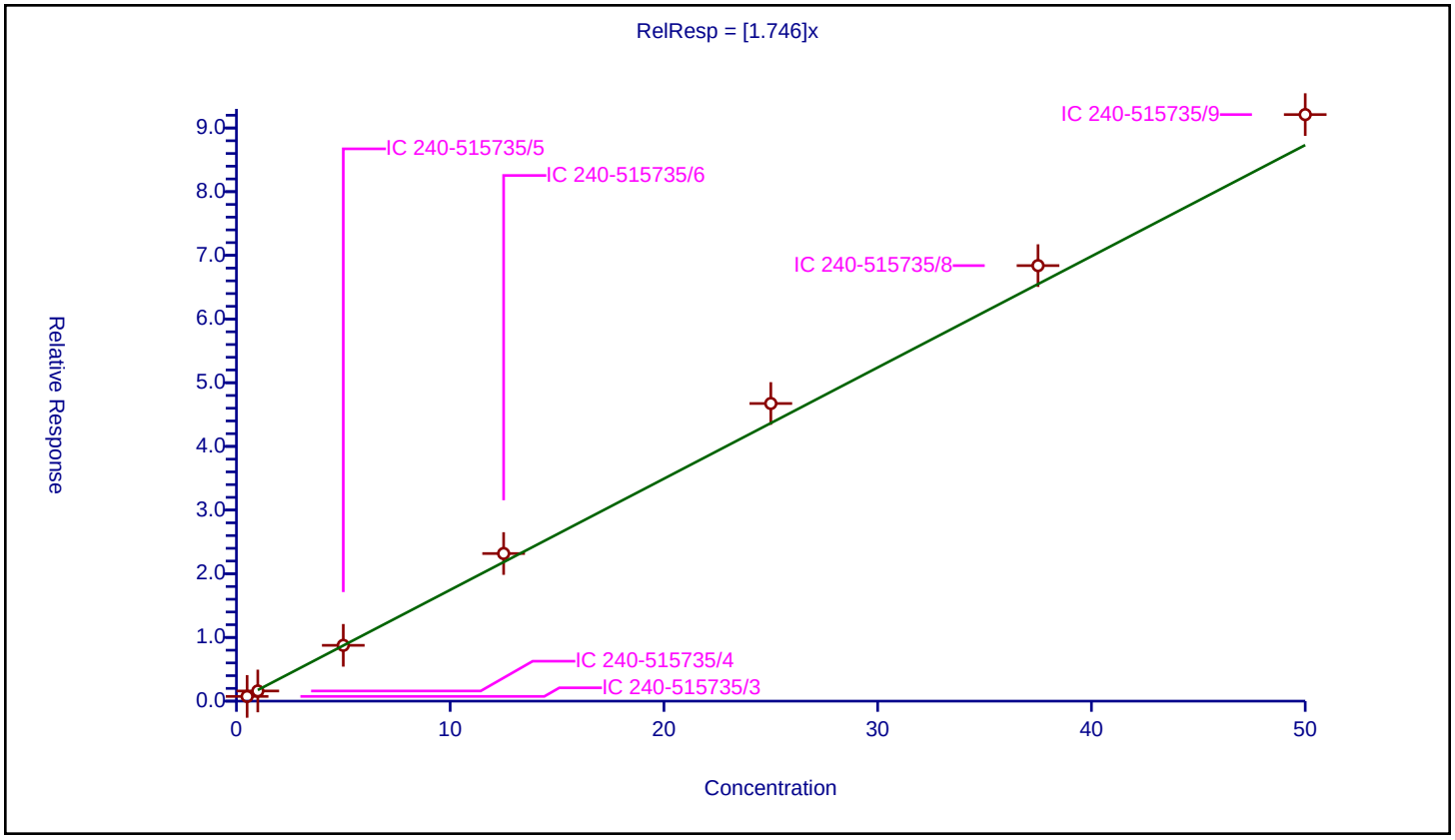
Curve Coefficients

Intercept:	0
Slope:	1.746

Error Coefficients

Standard Error:	2680000
Relative Standard Error:	8.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.742472	27.5	1227454.0	1.484944	Y
2	IC 240-515735/4	1.0	1.597045	27.5	1150387.0	1.597045	Y
3	IC 240-515735/5	5.0	8.765044	27.5	1117558.0	1.753009	Y
4	IC 240-515735/6	12.5	23.179636	27.5	1211674.0	1.854371	Y
5	ICIS 240-515735/7	25.0	46.740363	27.5	1335703.0	1.869615	Y
6	IC 240-515735/8	37.5	68.392854	27.5	1364274.0	1.823809	Y
7	IC 240-515735/9	50.0	92.10567	27.5	1496746.0	1.842113	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

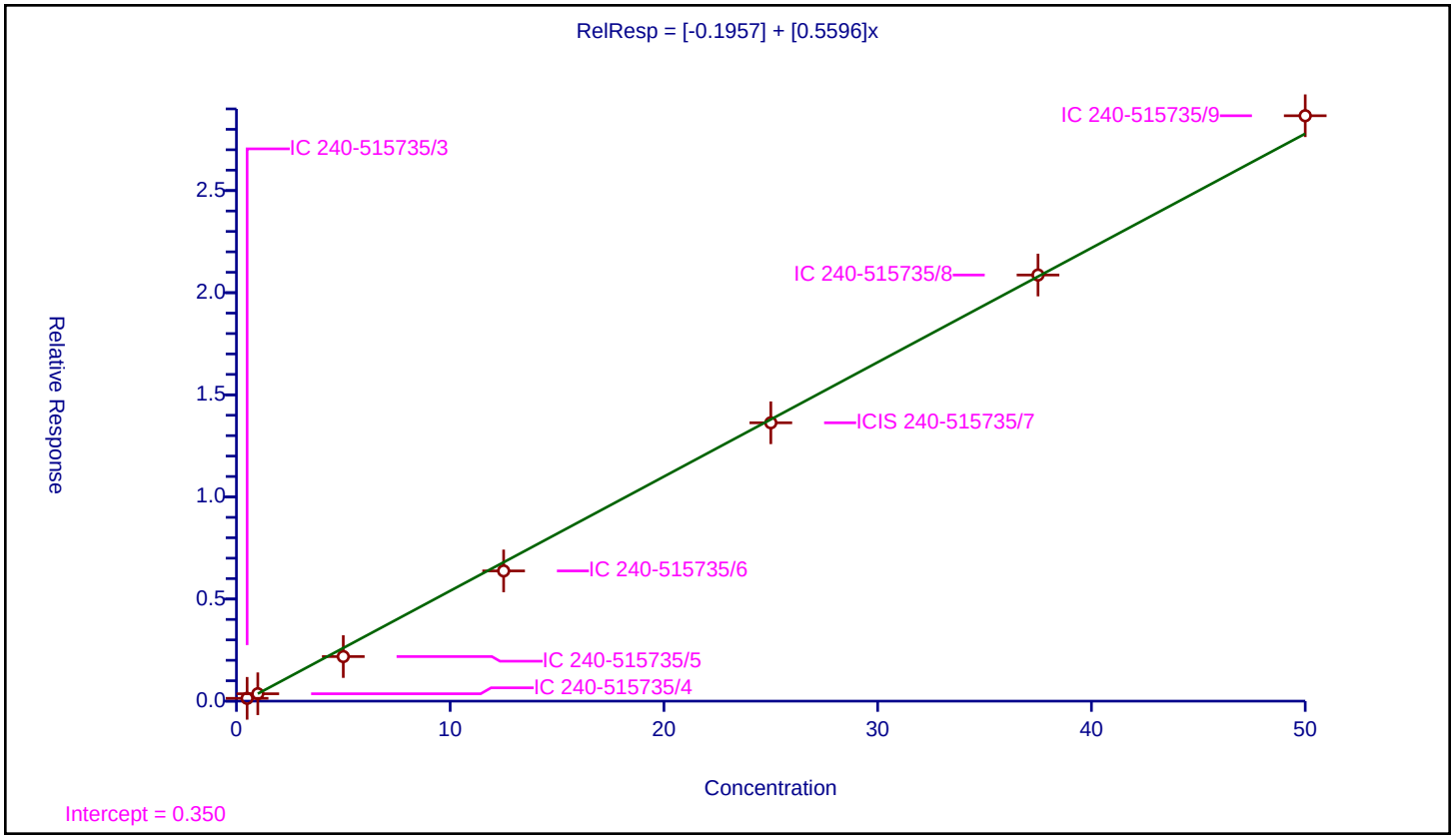
Curve Coefficients

Intercept:	-0.1957
Slope:	0.5596

Error Coefficients

Standard Error:	898000
Relative Standard Error:	11.3
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.137539	27.5	1227454.0	0.275078	Y
2	IC 240-515735/4	1.0	0.361707	27.5	1150387.0	0.361707	Y
3	IC 240-515735/5	5.0	2.183079	27.5	1117558.0	0.436616	Y
4	IC 240-515735/6	12.5	6.377177	27.5	1211674.0	0.510174	Y
5	ICIS 240-515735/7	25.0	13.629939	27.5	1335703.0	0.545198	Y
6	IC 240-515735/8	37.5	20.866574	27.5	1364274.0	0.556442	Y
7	IC 240-515735/9	50.0	28.664897	27.5	1496746.0	0.573298	Y



Calibration / Ethyl methacrylate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

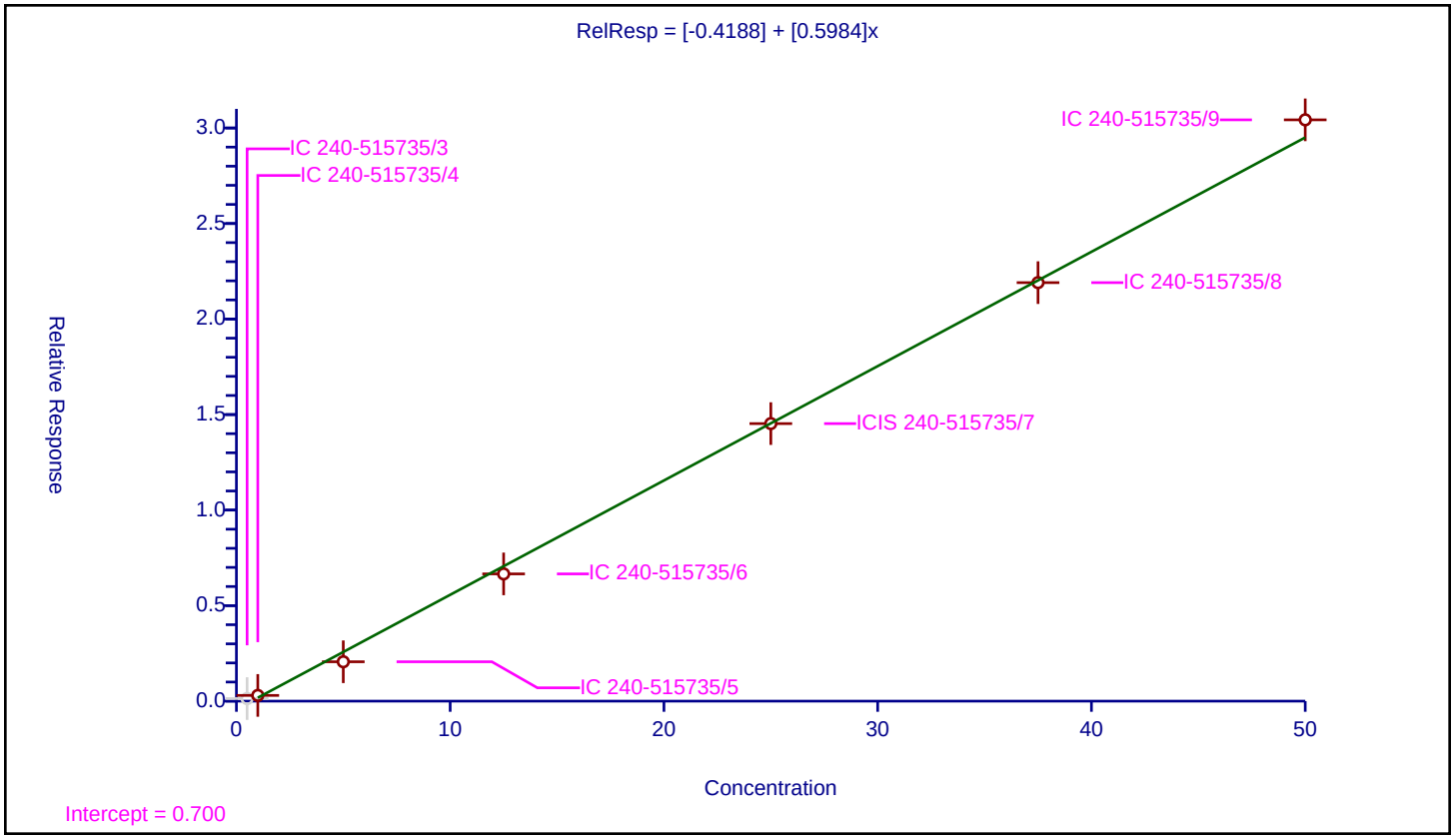
Curve Coefficients

Intercept:	-0.4188
Slope:	0.5984

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	13.5
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.134581	27.5	1227454.0	0.269163	N
2	IC 240-515735/4	1.0	0.299338	27.5	1150387.0	0.299338	Y
3	IC 240-515735/5	5.0	2.061347	27.5	1117558.0	0.412269	Y
4	IC 240-515735/6	12.5	6.660808	27.5	1211674.0	0.532865	Y
5	ICIS 240-515735/7	25.0	14.527264	27.5	1335703.0	0.581091	Y
6	IC 240-515735/8	37.5	21.906507	27.5	1364274.0	0.584174	Y
7	IC 240-515735/9	50.0	30.427419	27.5	1496746.0	0.608548	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

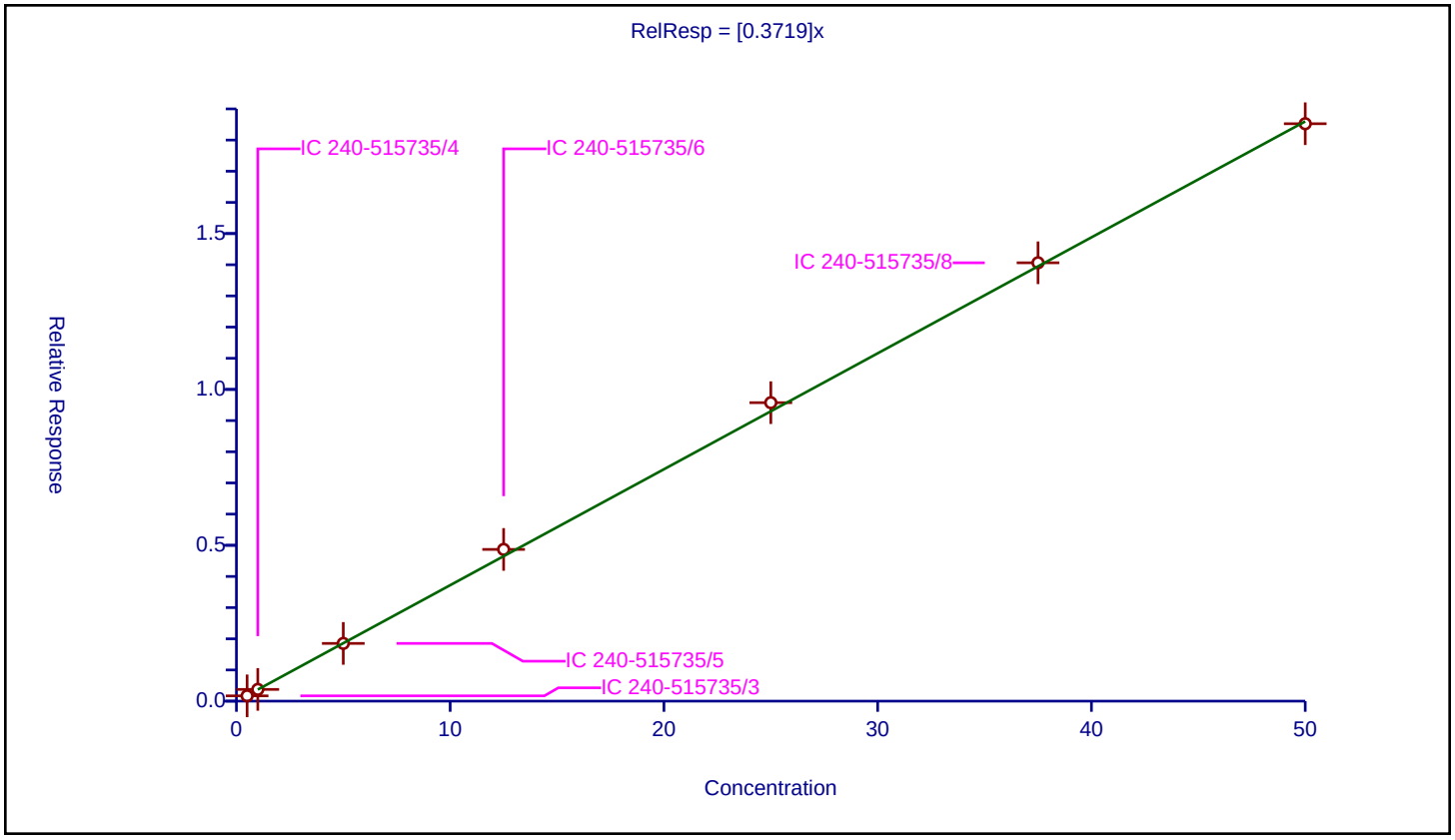
Curve Coefficients

Intercept:	0
Slope:	0.3719

Error Coefficients

Standard Error:	543000
Relative Standard Error:	4.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.169442	27.5	1227454.0	0.338884	Y
2	IC 240-515735/4	1.0	0.37648	27.5	1150387.0	0.37648	Y
3	IC 240-515735/5	5.0	1.851817	27.5	1117558.0	0.370363	Y
4	IC 240-515735/6	12.5	4.867652	27.5	1211674.0	0.389412	Y
5	ICIS 240-515735/7	25.0	9.575051	27.5	1335703.0	0.383002	Y
6	IC 240-515735/8	37.5	14.063082	27.5	1364274.0	0.375016	Y
7	IC 240-515735/9	50.0	18.524366	27.5	1496746.0	0.370487	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

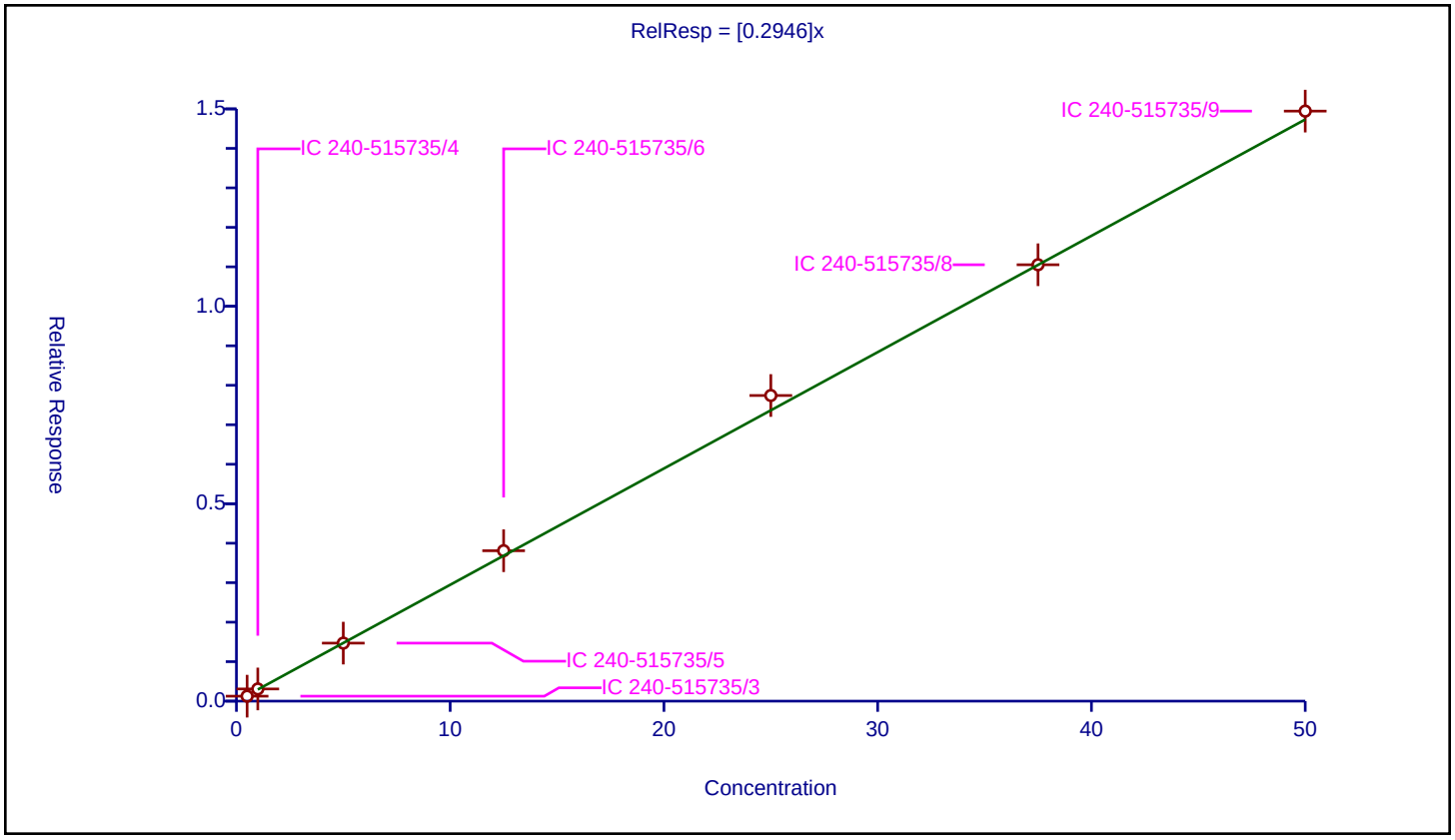
Curve Coefficients

Intercept:	0
Slope:	0.2946

Error Coefficients

Standard Error:	435000
Relative Standard Error:	6.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.126023	27.5	1227454.0	0.252046	Y
2	IC 240-515735/4	1.0	0.308446	27.5	1150387.0	0.308446	Y
3	IC 240-515735/5	5.0	1.469248	27.5	1117558.0	0.29385	Y
4	IC 240-515735/6	12.5	3.809616	27.5	1211674.0	0.304769	Y
5	ICIS 240-515735/7	25.0	7.741139	27.5	1335703.0	0.309646	Y
6	IC 240-515735/8	37.5	11.052618	27.5	1364274.0	0.294736	Y
7	IC 240-515735/9	50.0	14.94389	27.5	1496746.0	0.298878	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

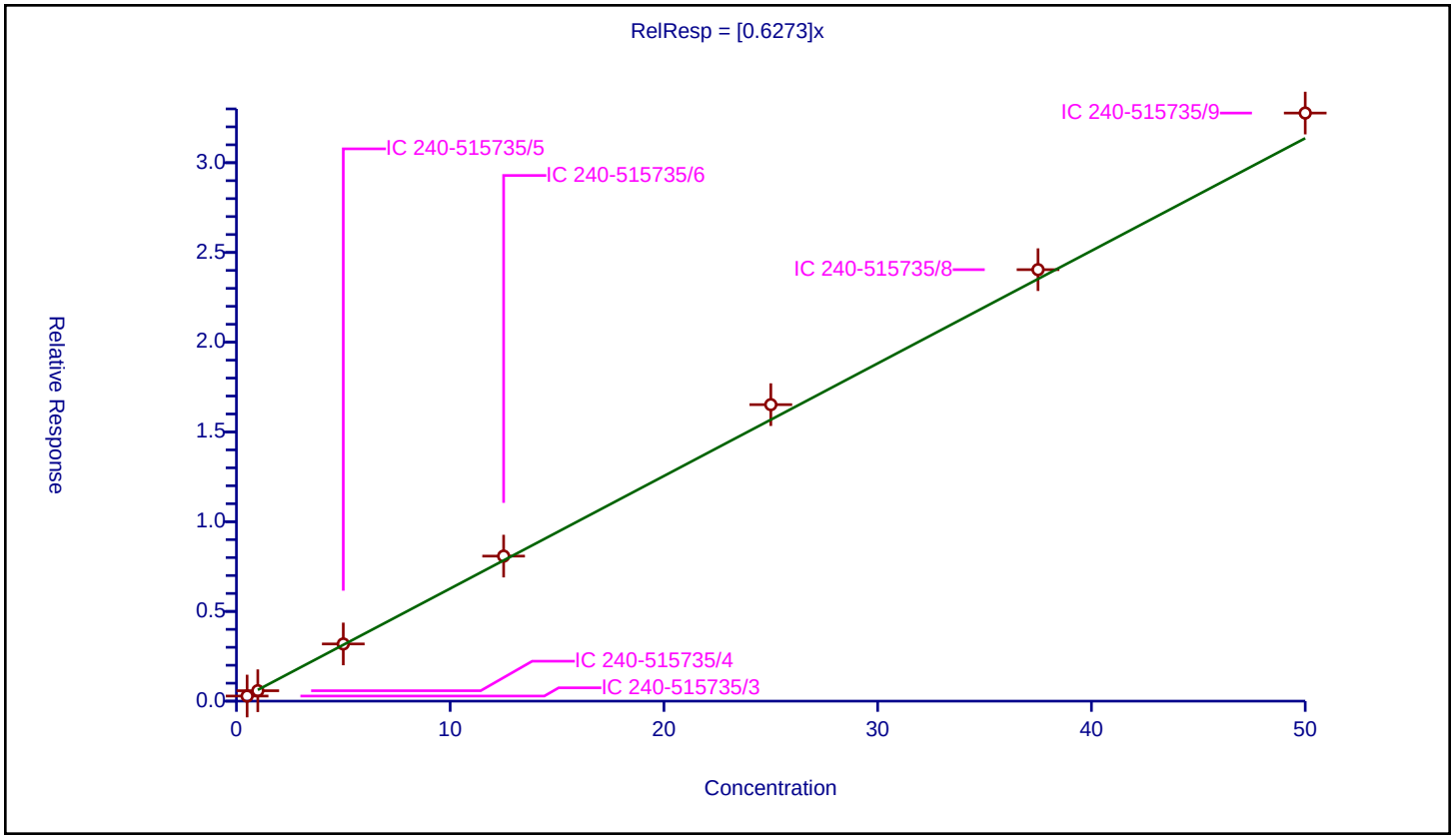
Curve Coefficients

Intercept:	0
Slope:	0.6273

Error Coefficients

Standard Error:	948000
Relative Standard Error:	5.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.284129	27.5	1227454.0	0.568258	Y
2	IC 240-515735/4	1.0	0.581441	27.5	1150387.0	0.581441	Y
3	IC 240-515735/5	5.0	3.187694	27.5	1117558.0	0.637539	Y
4	IC 240-515735/6	12.5	8.081138	27.5	1211674.0	0.646491	Y
5	ICIS 240-515735/7	25.0	16.521457	27.5	1335703.0	0.660858	Y
6	IC 240-515735/8	37.5	24.042892	27.5	1364274.0	0.641144	Y
7	IC 240-515735/9	50.0	32.769156	27.5	1496746.0	0.655383	Y



Calibration / 2-Hexanone

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

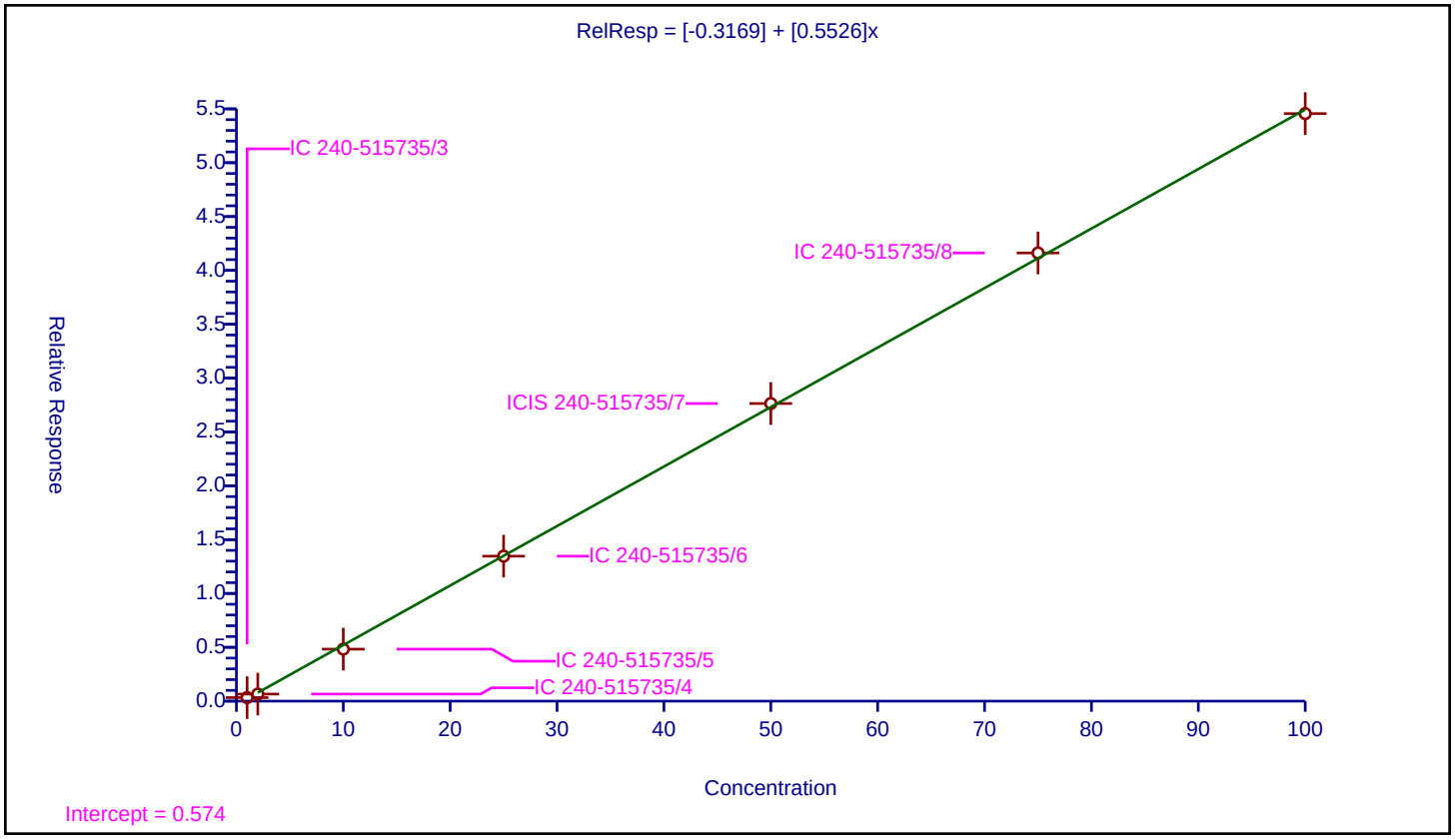
Curve Coefficients

Intercept:	-0.3169
Slope:	0.5526

Error Coefficients

Standard Error:	1750000
Relative Standard Error:	9.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	1.0	0.330998	27.5	1227454.0	0.330998	Y
2	IC 240-515735/4	2.0	0.65734	27.5	1150387.0	0.32867	Y
3	IC 240-515735/5	10.0	4.828405	27.5	1117558.0	0.48284	Y
4	IC 240-515735/6	25.0	13.46351	27.5	1211674.0	0.53854	Y
5	ICIS 240-515735/7	50.0	27.640104	27.5	1335703.0	0.552802	Y
6	IC 240-515735/8	75.0	41.621599	27.5	1364274.0	0.554955	Y
7	IC 240-515735/9	100.0	54.56123	27.5	1496746.0	0.545612	Y



Calibration / Chlorodibromomethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

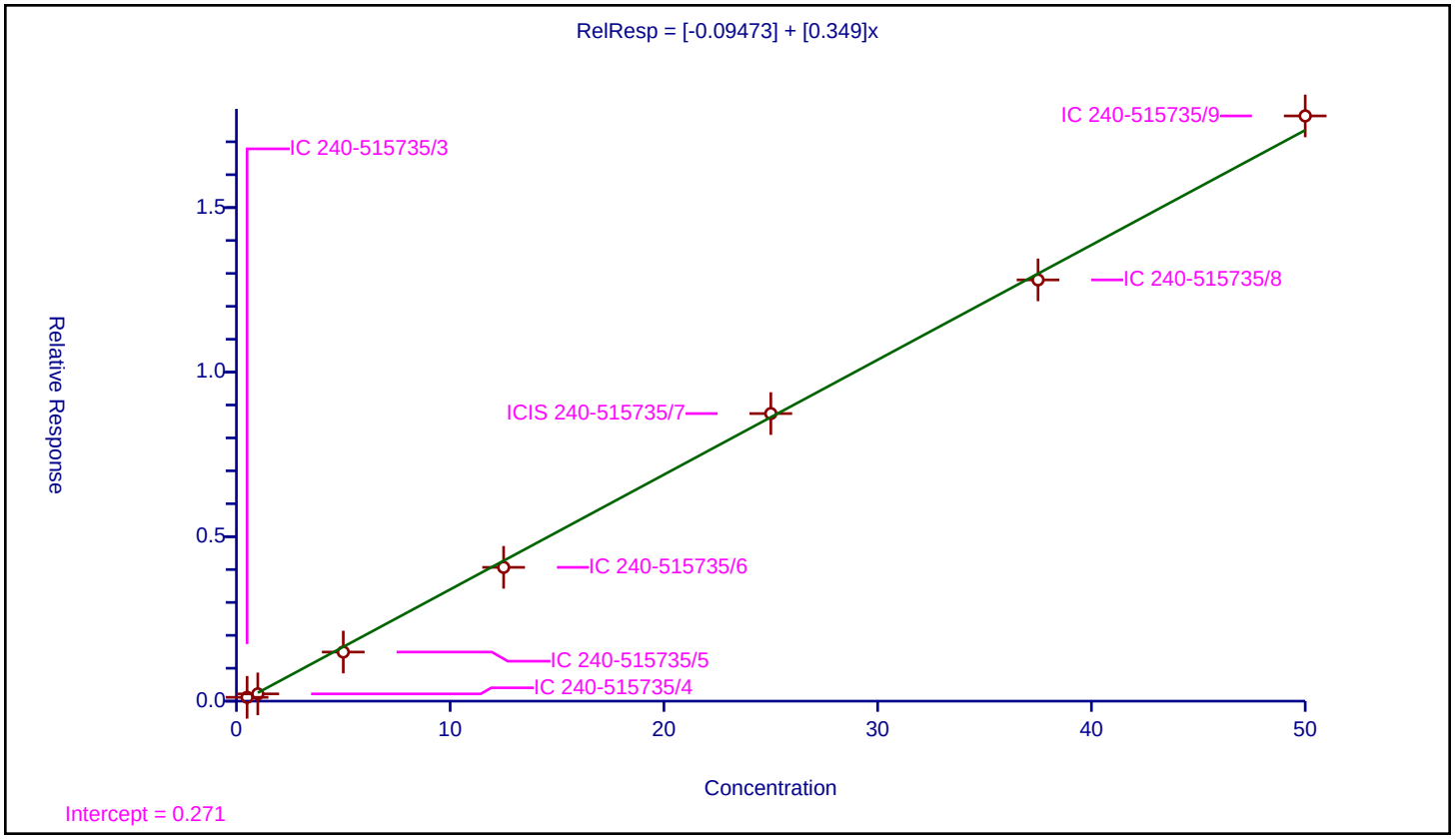
Curve Coefficients

Intercept:	-0.09473
Slope:	0.349

Error Coefficients

Standard Error:	558000
Relative Standard Error:	11.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.116457	27.5	1227454.0	0.232913	Y
2	IC 240-515735/4	1.0	0.220404	27.5	1150387.0	0.220404	Y
3	IC 240-515735/5	5.0	1.492059	27.5	1117558.0	0.298412	Y
4	IC 240-515735/6	12.5	4.066465	27.5	1211674.0	0.325317	Y
5	ICIS 240-515735/7	25.0	8.740686	27.5	1335703.0	0.349627	Y
6	IC 240-515735/8	37.5	12.803275	27.5	1364274.0	0.341421	Y
7	IC 240-515735/9	50.0	17.786149	27.5	1496746.0	0.355723	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

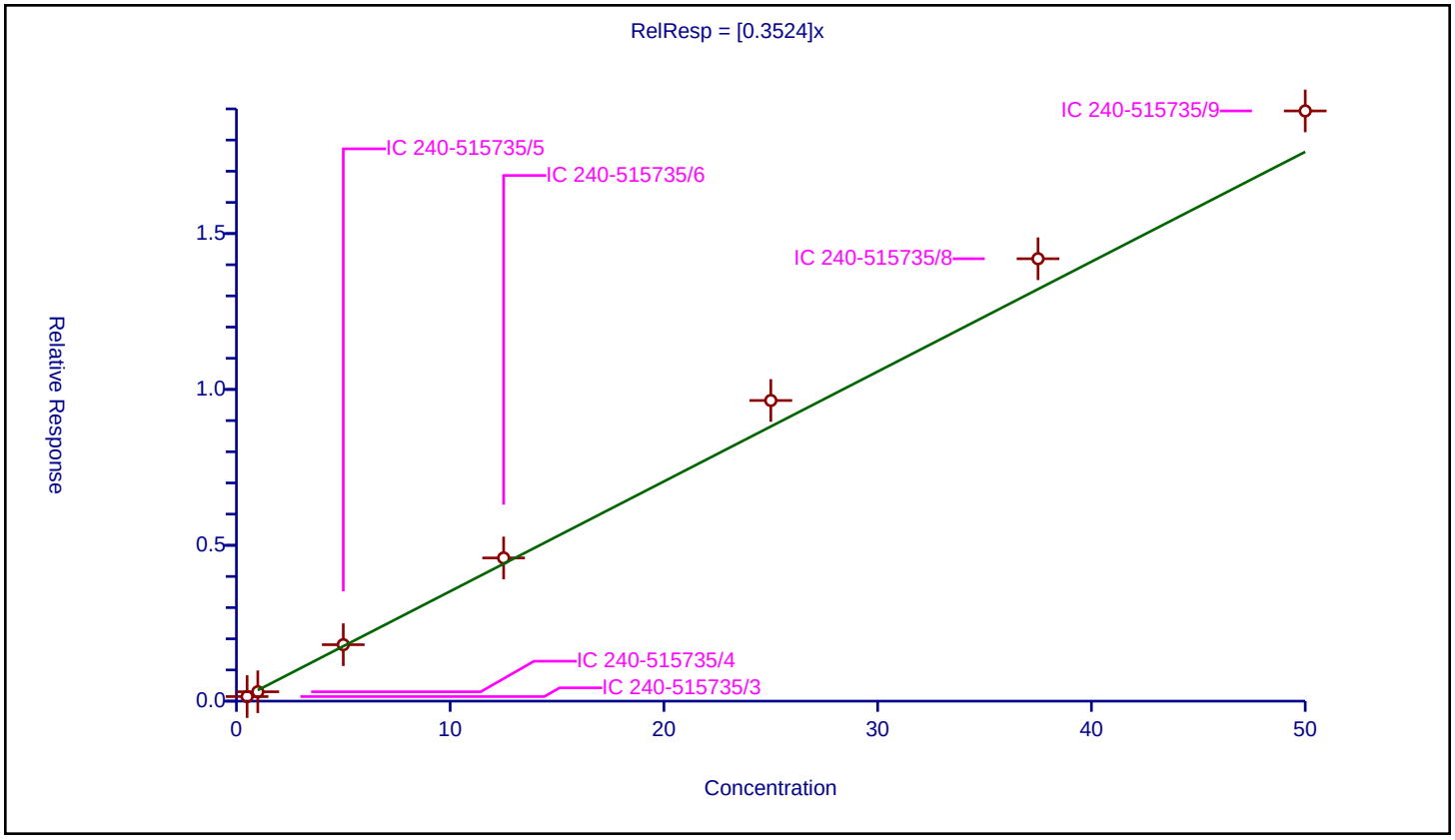
Curve Coefficients

Intercept:	0
Slope:	0.3524

Error Coefficients

Standard Error:	551000
Relative Standard Error:	10.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.146635	27.5	1227454.0	0.29327	Y
2	IC 240-515735/4	1.0	0.301155	27.5	1150387.0	0.301155	Y
3	IC 240-515735/5	5.0	1.811067	27.5	1117558.0	0.362213	Y
4	IC 240-515735/6	12.5	4.593554	27.5	1211674.0	0.367484	Y
5	ICIS 240-515735/7	25.0	9.645381	27.5	1335703.0	0.385815	Y
6	IC 240-515735/8	37.5	14.192955	27.5	1364274.0	0.378479	Y
7	IC 240-515735/9	50.0	18.934382	27.5	1496746.0	0.378688	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

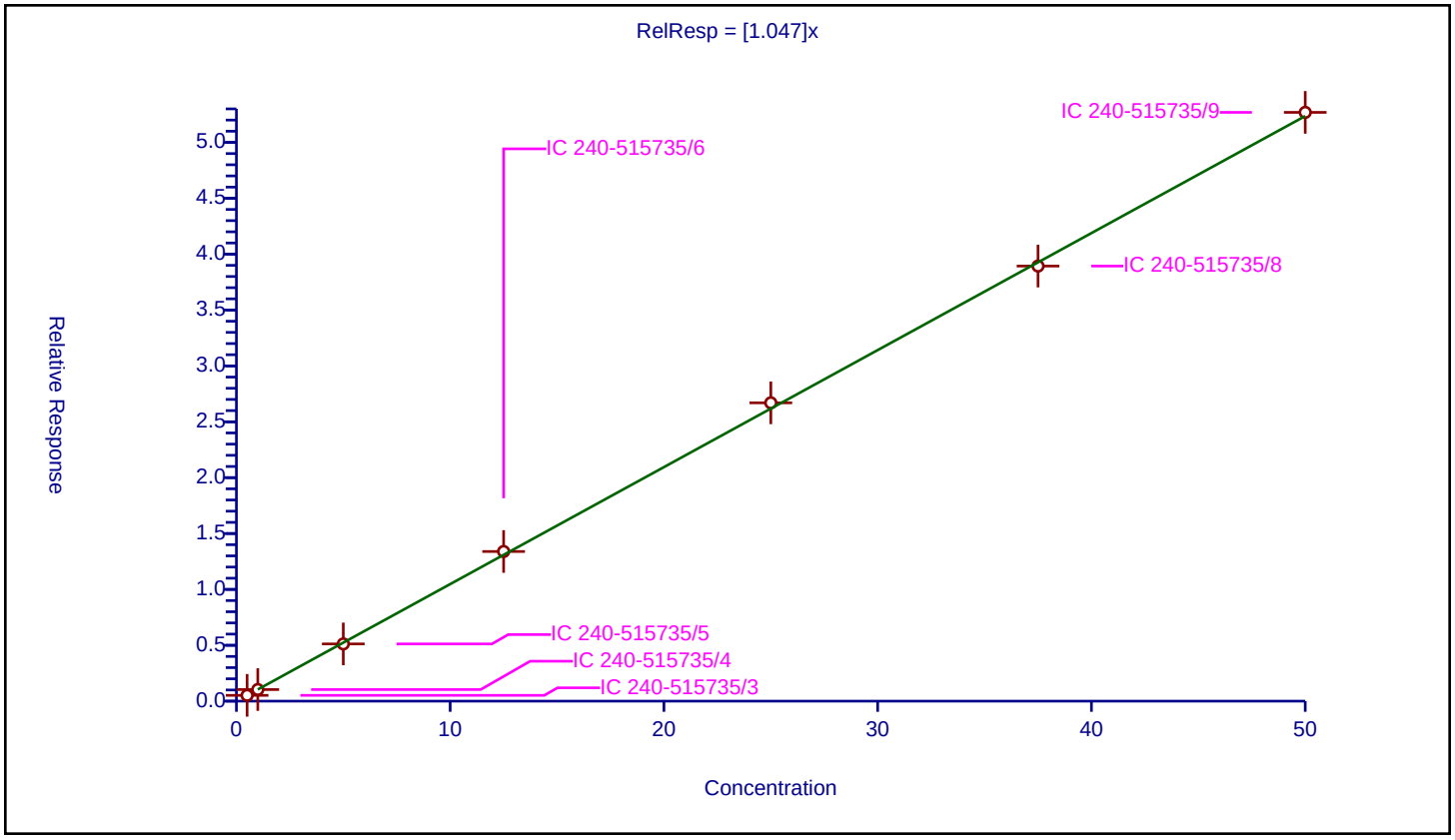
Curve Coefficients

Intercept:	0
Slope:	1.047

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	1.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.51814	27.5	1227454.0	1.036279	Y
2	IC 240-515735/4	1.0	1.03829	27.5	1150387.0	1.03829	Y
3	IC 240-515735/5	5.0	5.121231	27.5	1117558.0	1.024246	Y
4	IC 240-515735/6	12.5	13.392404	27.5	1211674.0	1.071392	Y
5	ICIS 240-515735/7	25.0	26.695817	27.5	1335703.0	1.067833	Y
6	IC 240-515735/8	37.5	38.935001	27.5	1364274.0	1.038267	Y
7	IC 240-515735/9	50.0	52.687385	27.5	1496746.0	1.053748	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

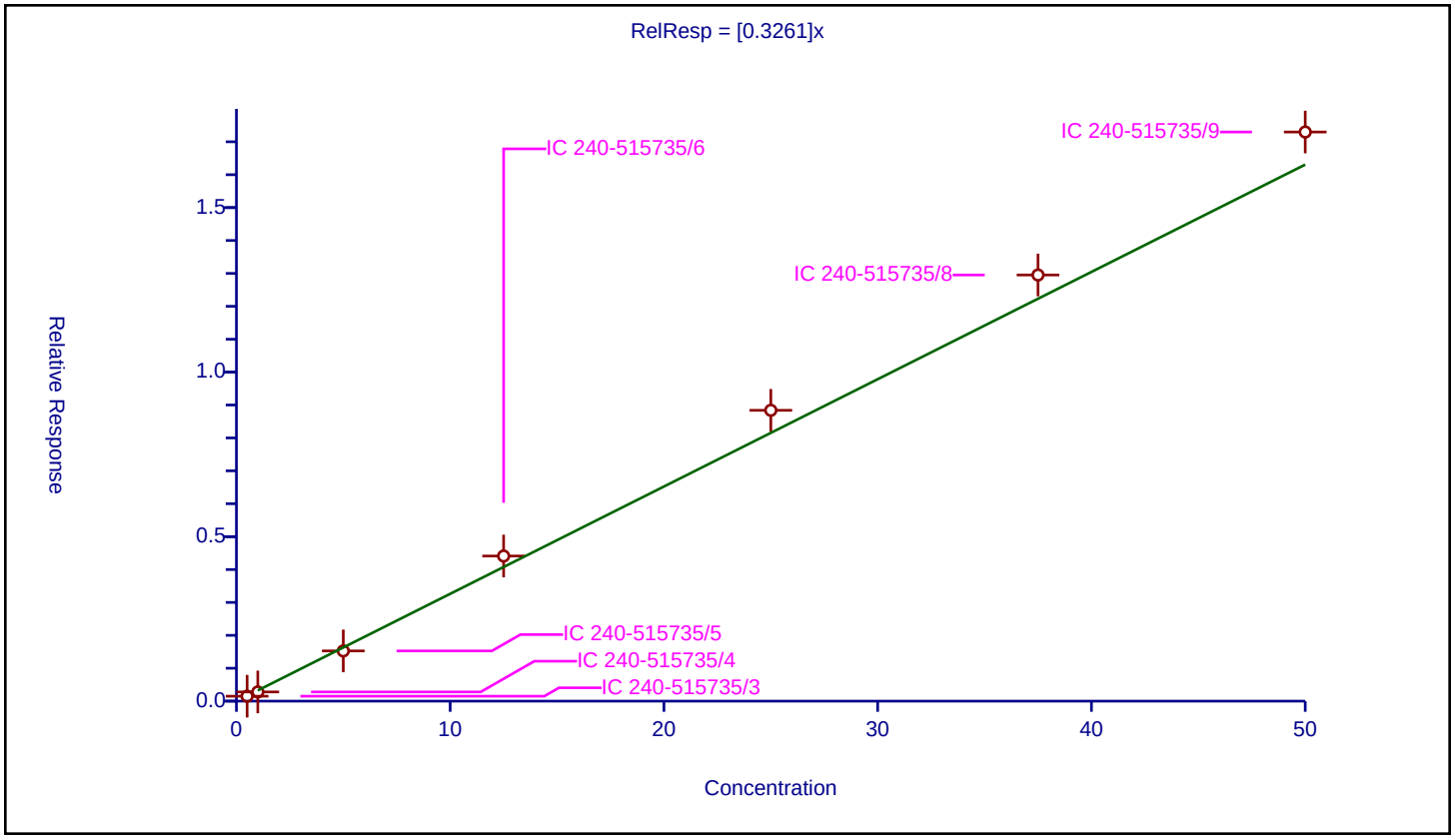
Curve Coefficients

Intercept:	0
Slope:	0.3261

Error Coefficients

Standard Error:	504000
Relative Standard Error:	9.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.150264	27.5	1227454.0	0.300529	Y
2	IC 240-515735/4	1.0	0.279402	27.5	1150387.0	0.279402	Y
3	IC 240-515735/5	5.0	1.52646	27.5	1117558.0	0.305292	Y
4	IC 240-515735/6	12.5	4.410512	27.5	1211674.0	0.352841	Y
5	ICIS 240-515735/7	25.0	8.838728	27.5	1335703.0	0.353549	Y
6	IC 240-515735/8	37.5	12.951672	27.5	1364274.0	0.345378	Y
7	IC 240-515735/9	50.0	17.297257	27.5	1496746.0	0.345945	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

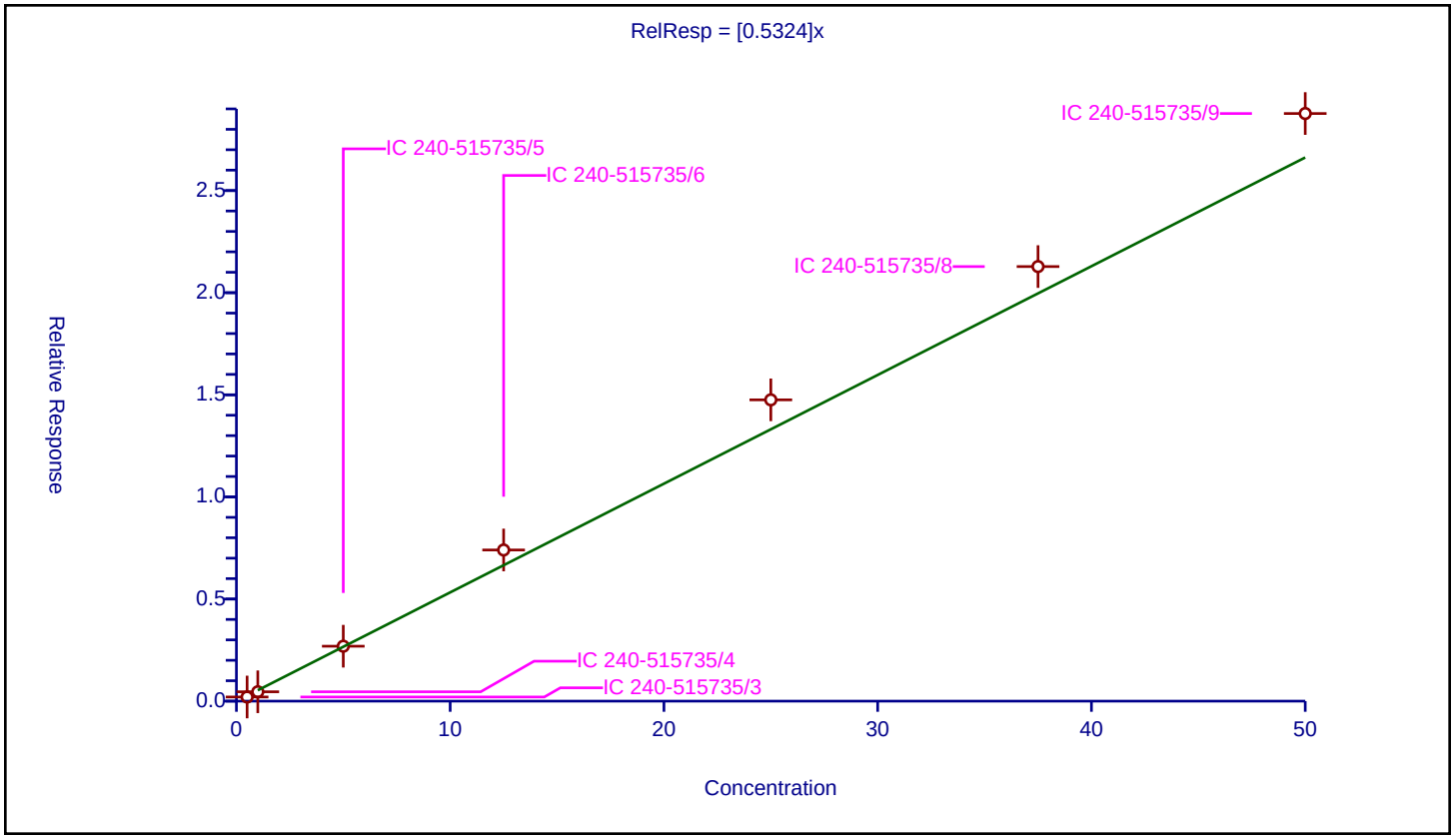
Curve Coefficients

Intercept:	0
Slope:	0.5324

Error Coefficients

Standard Error:	837000
Relative Standard Error:	13.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.202533	27.5	1227454.0	0.405066	Y
2	IC 240-515735/4	1.0	0.458641	27.5	1150387.0	0.458641	Y
3	IC 240-515735/5	5.0	2.68957	27.5	1117558.0	0.537914	Y
4	IC 240-515735/6	12.5	7.401442	27.5	1211674.0	0.592115	Y
5	ICIS 240-515735/7	25.0	14.753098	27.5	1335703.0	0.590124	Y
6	IC 240-515735/8	37.5	21.278871	27.5	1364274.0	0.567437	Y
7	IC 240-515735/9	50.0	28.773648	27.5	1496746.0	0.575473	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

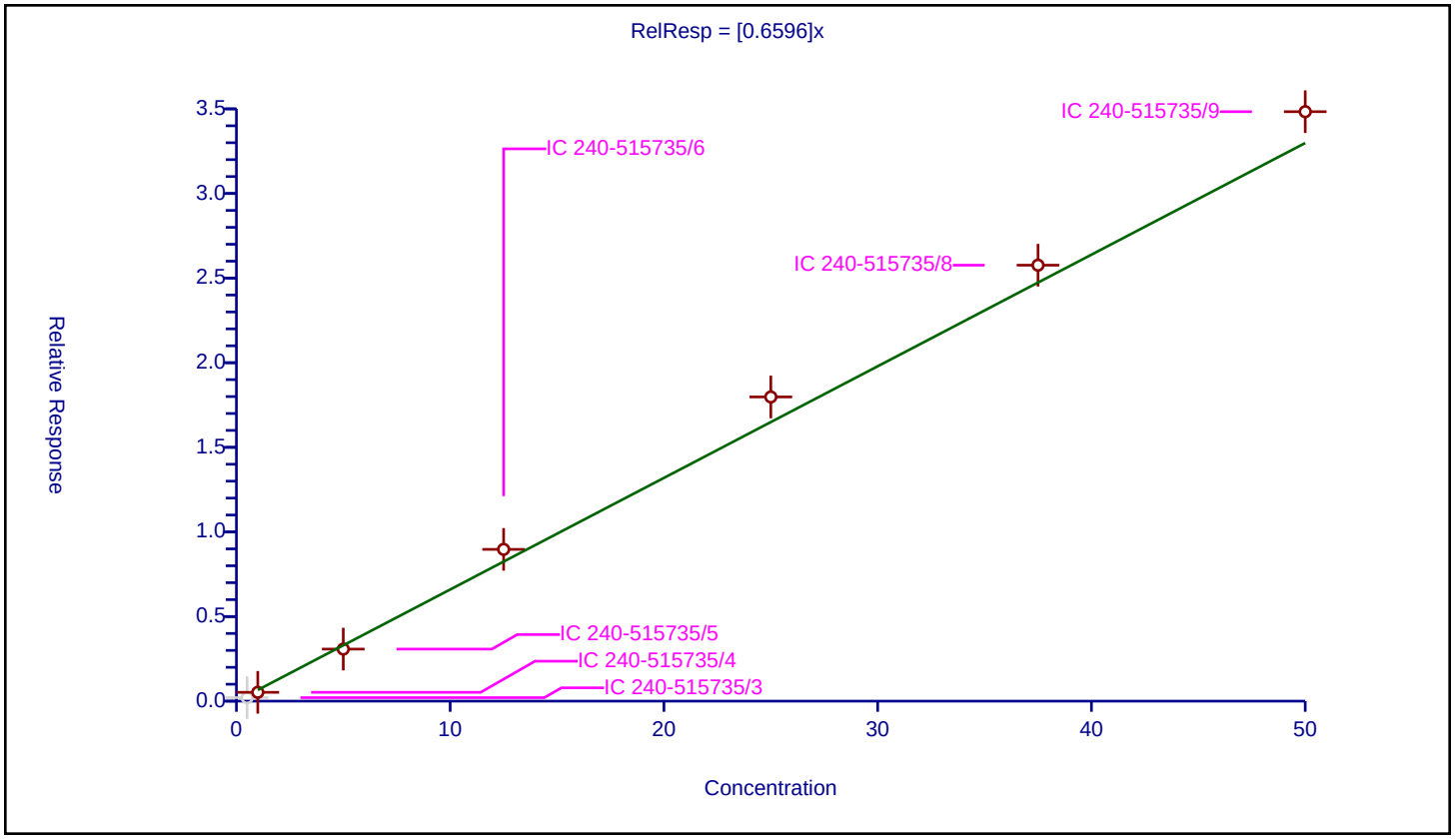
Curve Coefficients

Intercept:	0
Slope:	0.6596

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	11.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.207619	27.5	1227454.0	0.415238	N
2	IC 240-515735/4	1.0	0.522013	27.5	1150387.0	0.522013	Y
3	IC 240-515735/5	5.0	3.077109	27.5	1117558.0	0.615422	Y
4	IC 240-515735/6	12.5	8.968819	27.5	1211674.0	0.717506	Y
5	ICIS 240-515735/7	25.0	17.977964	27.5	1335703.0	0.719119	Y
6	IC 240-515735/8	37.5	25.764441	27.5	1364274.0	0.687052	Y
7	IC 240-515735/9	50.0	34.834376	27.5	1496746.0	0.696688	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

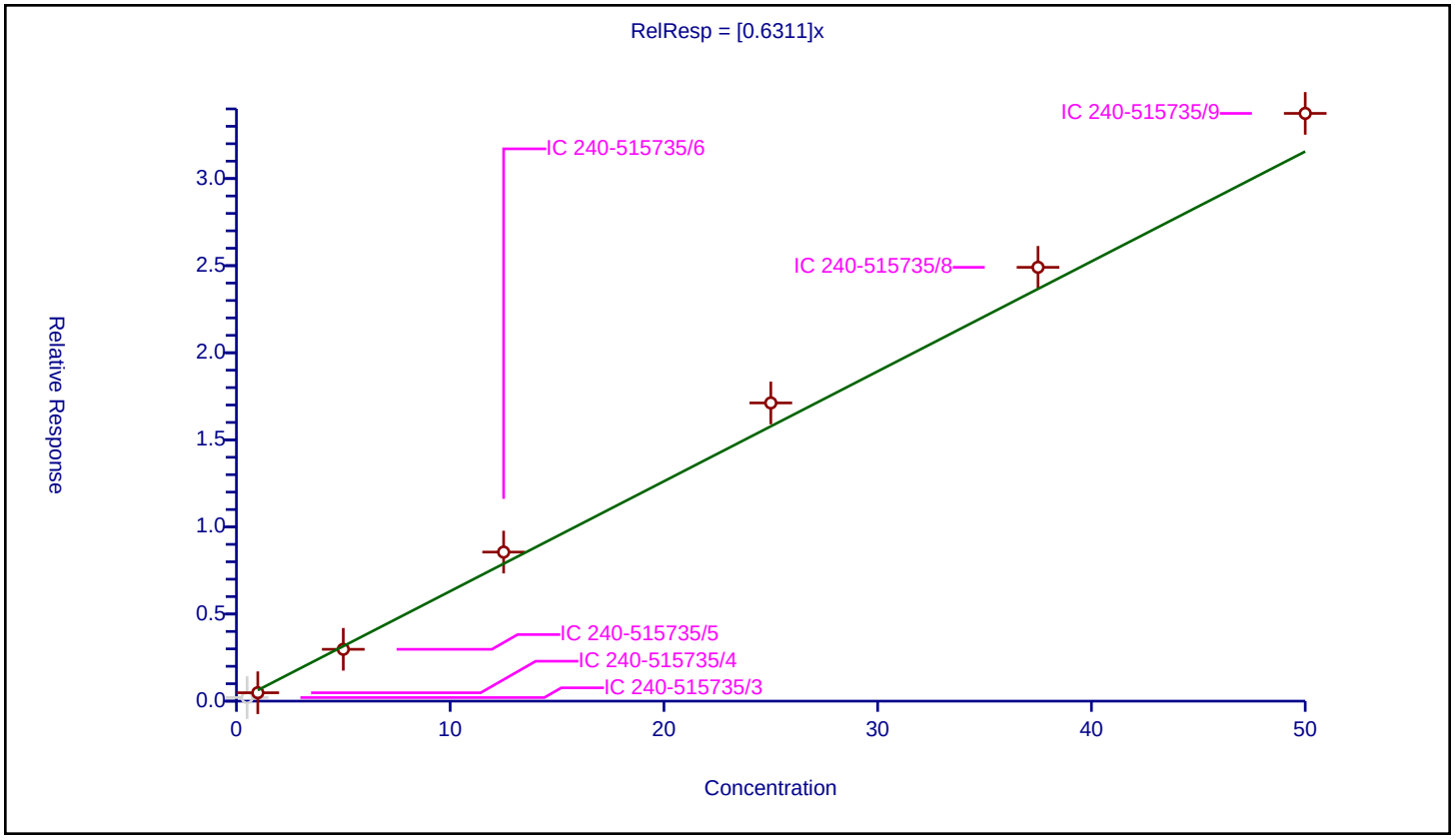
Curve Coefficients

Intercept:	0
Slope:	0.6311

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	12.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.205289	27.5	1227454.0	0.410578	N
2	IC 240-515735/4	1.0	0.482809	27.5	1150387.0	0.482809	Y
3	IC 240-515735/5	5.0	2.976514	27.5	1117558.0	0.595303	Y
4	IC 240-515735/6	12.5	8.557116	27.5	1211674.0	0.684569	Y
5	ICIS 240-515735/7	25.0	17.120209	27.5	1335703.0	0.684808	Y
6	IC 240-515735/8	37.5	24.905602	27.5	1364274.0	0.664149	Y
7	IC 240-515735/9	50.0	33.742255	27.5	1496746.0	0.674845	Y



Calibration / Styrene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

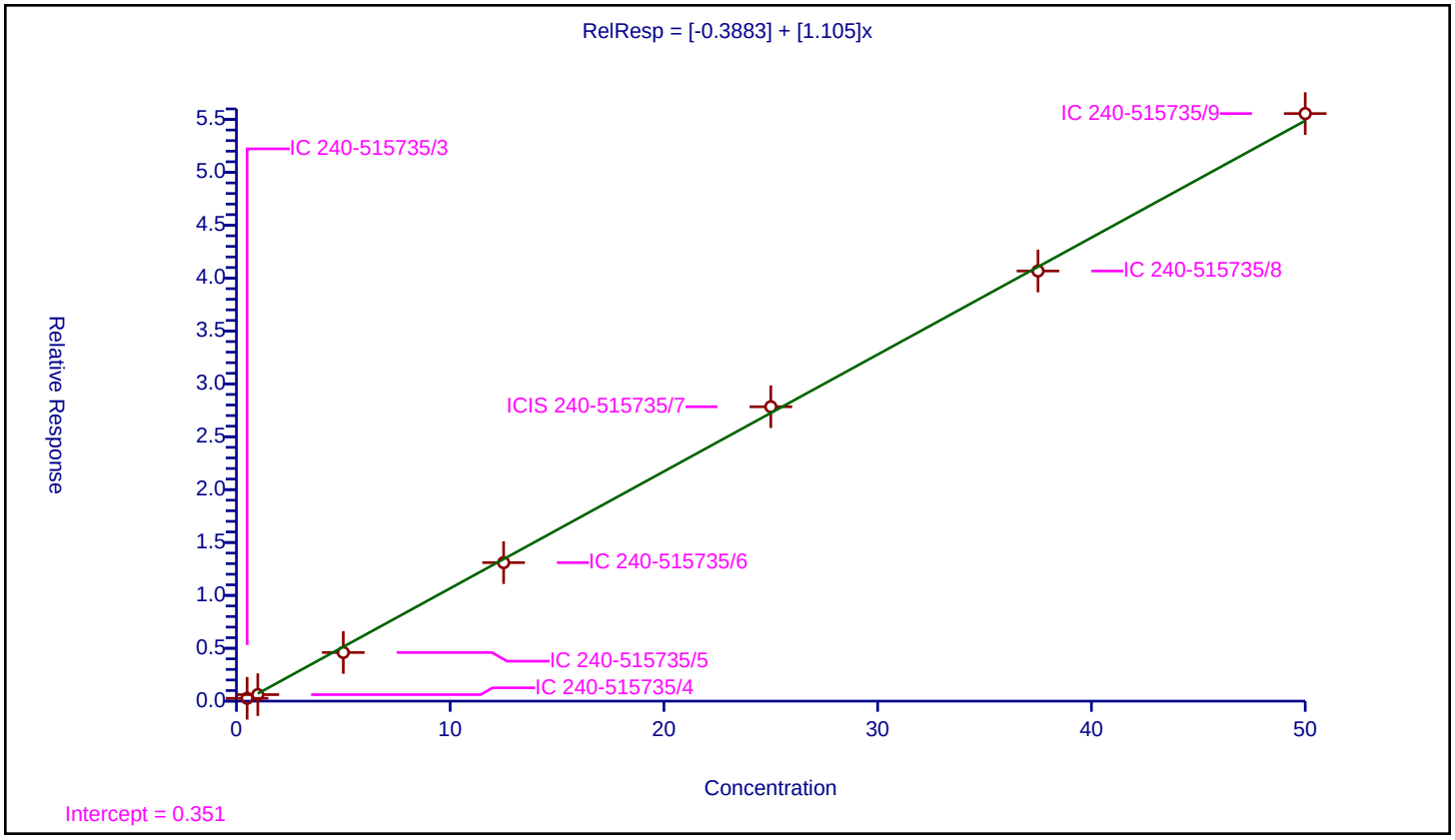
Curve Coefficients

Intercept:	-0.3883
Slope:	1.105

Error Coefficients

Standard Error:	1760000
Relative Standard Error:	10.4
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.268603	27.5	1227454.0	0.537205	Y
2	IC 240-515735/4	1.0	0.616845	27.5	1150387.0	0.616845	Y
3	IC 240-515735/5	5.0	4.598672	27.5	1117558.0	0.919734	Y
4	IC 240-515735/6	12.5	13.096813	27.5	1211674.0	1.047745	Y
5	ICIS 240-515735/7	25.0	27.837671	27.5	1335703.0	1.113507	Y
6	IC 240-515735/8	37.5	40.673664	27.5	1364274.0	1.084631	Y
7	IC 240-515735/9	50.0	55.555679	27.5	1496746.0	1.111114	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

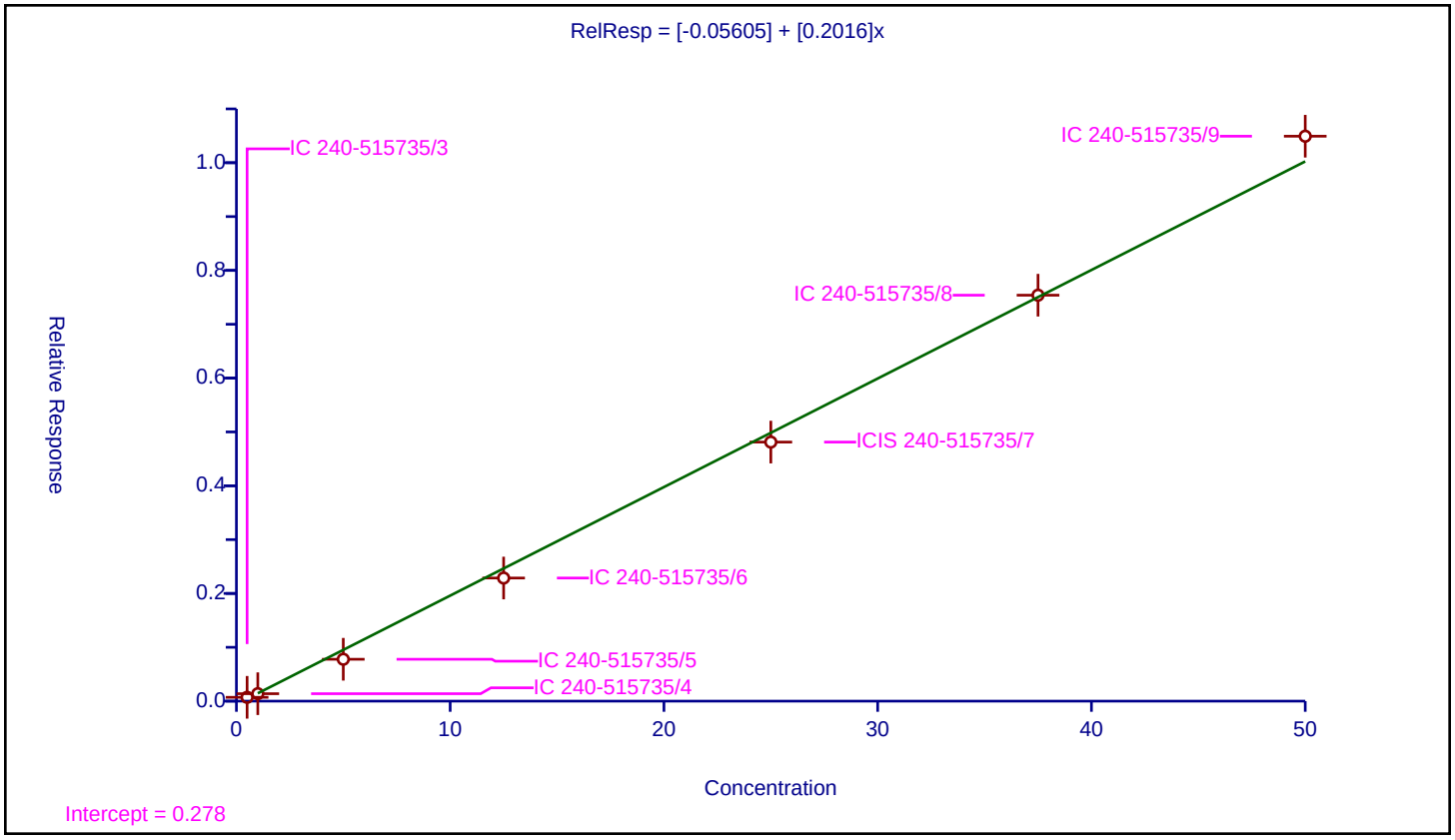
Curve Coefficients

Intercept:	-0.05605
Slope:	0.2016

Error Coefficients

Standard Error:	326000
Relative Standard Error:	14.7
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.071066	27.5	1227454.0	0.142132	Y
2	IC 240-515735/4	1.0	0.138434	27.5	1150387.0	0.138434	Y
3	IC 240-515735/5	5.0	0.777982	27.5	1117558.0	0.155596	Y
4	IC 240-515735/6	12.5	2.286882	27.5	1211674.0	0.182951	Y
5	ICIS 240-515735/7	25.0	4.811326	27.5	1335703.0	0.192453	Y
6	IC 240-515735/8	37.5	7.539453	27.5	1364274.0	0.201052	Y
7	IC 240-515735/9	50.0	10.492415	27.5	1496746.0	0.209848	Y



Calibration / Isopropylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

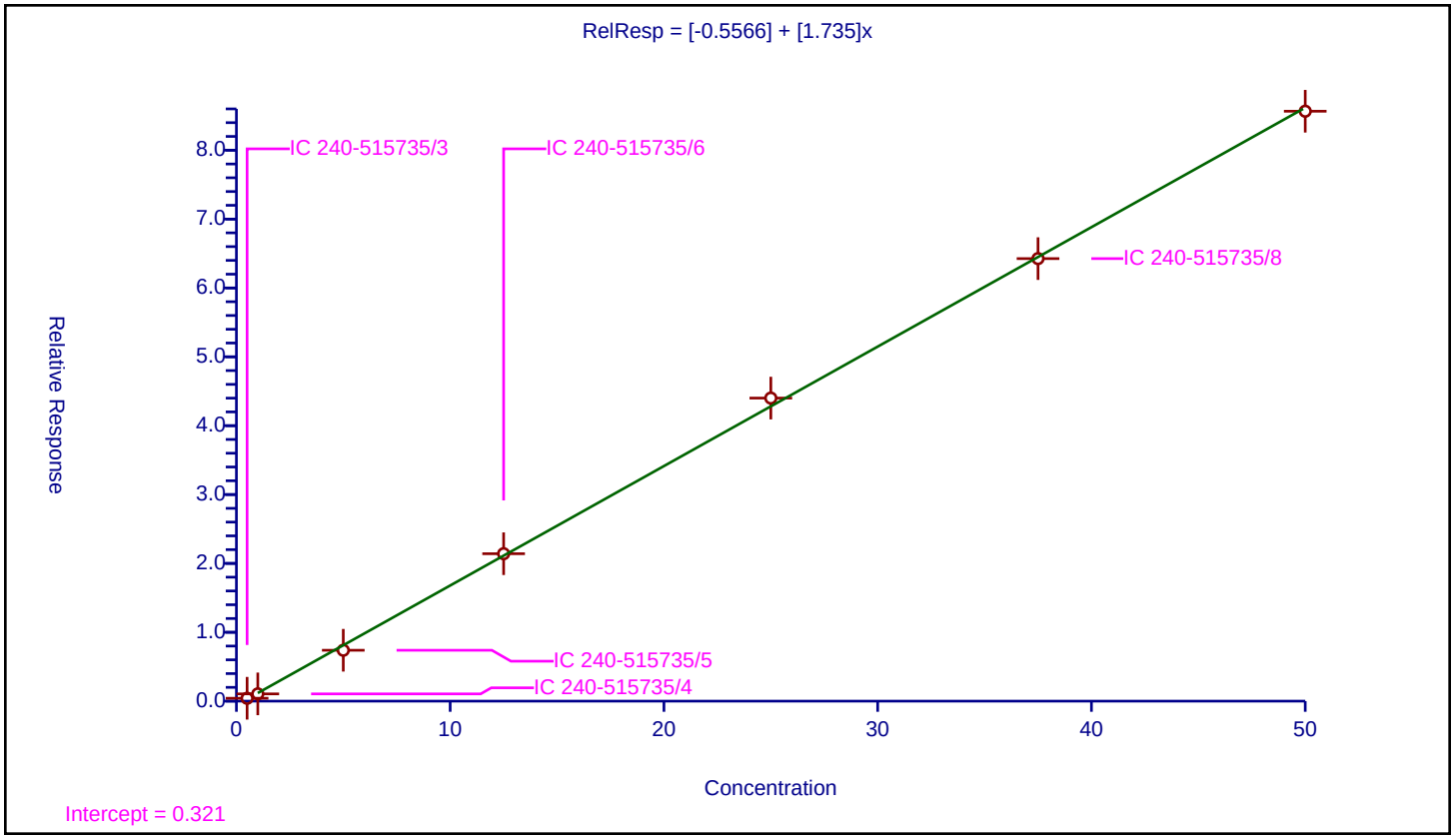
Curve Coefficients

Intercept:	-0.5566
Slope:	1.735

Error Coefficients

Standard Error:	2740000
Relative Standard Error:	7.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.41768	27.5	1227454.0	0.835359	Y
2	IC 240-515735/4	1.0	1.055143	27.5	1150387.0	1.055143	Y
3	IC 240-515735/5	5.0	7.388442	27.5	1117558.0	1.477688	Y
4	IC 240-515735/6	12.5	21.407043	27.5	1211674.0	1.712563	Y
5	ICIS 240-515735/7	25.0	44.00826	27.5	1335703.0	1.76033	Y
6	IC 240-515735/8	37.5	64.262454	27.5	1364274.0	1.713665	Y
7	IC 240-515735/9	50.0	85.660244	27.5	1496746.0	1.713205	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

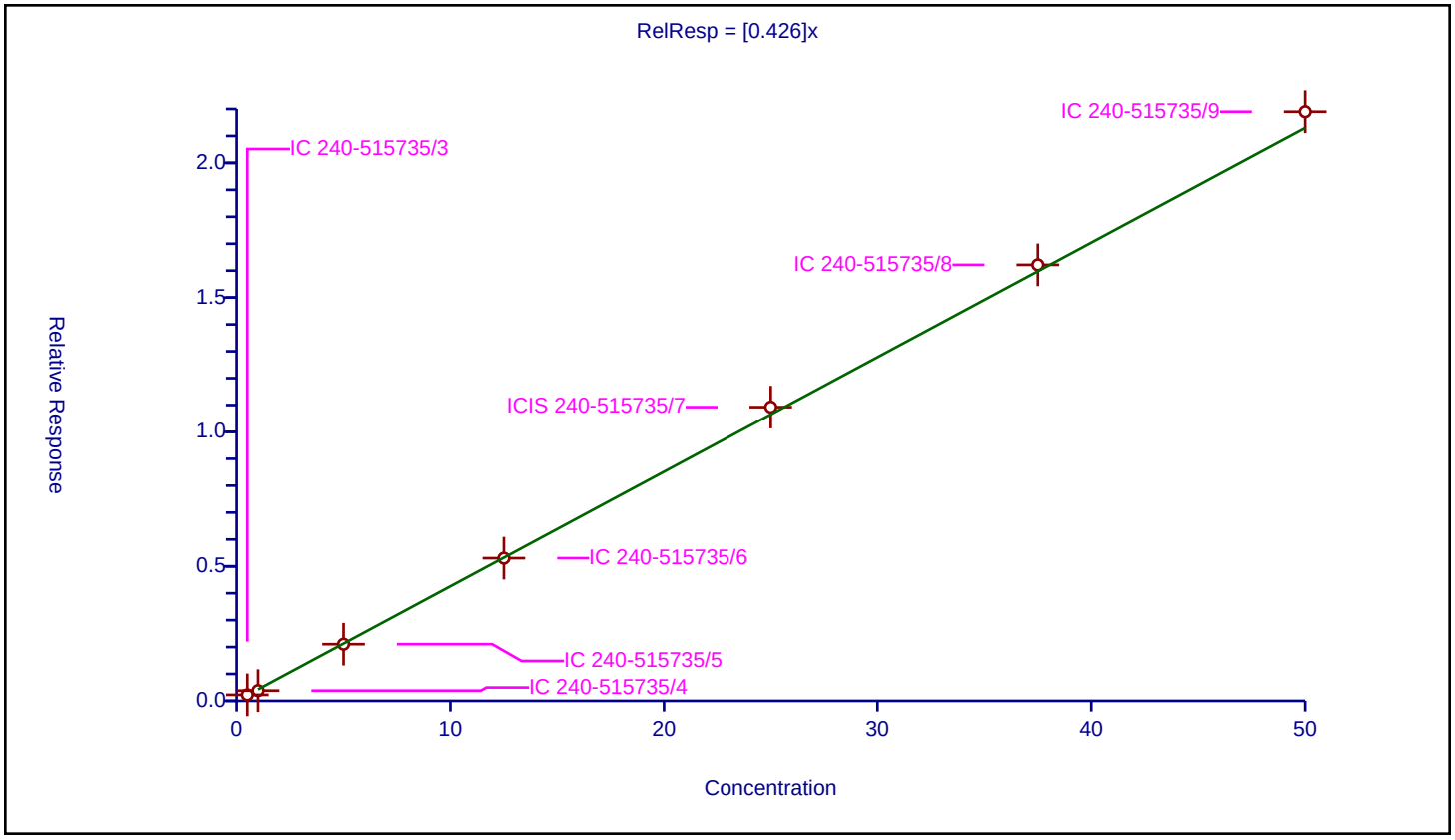
Curve Coefficients

Intercept:	0
Slope:	0.426

Error Coefficients

Standard Error:	634000
Relative Standard Error:	5.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.22431	27.5	1227454.0	0.44862	Y
2	IC 240-515735/4	1.0	0.380329	27.5	1150387.0	0.380329	Y
3	IC 240-515735/5	5.0	2.10719	27.5	1117558.0	0.421438	Y
4	IC 240-515735/6	12.5	5.304888	27.5	1211674.0	0.424391	Y
5	ICIS 240-515735/7	25.0	10.923489	27.5	1335703.0	0.43694	Y
6	IC 240-515735/8	37.5	16.214727	27.5	1364274.0	0.432393	Y
7	IC 240-515735/9	50.0	21.897647	27.5	1496746.0	0.437953	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

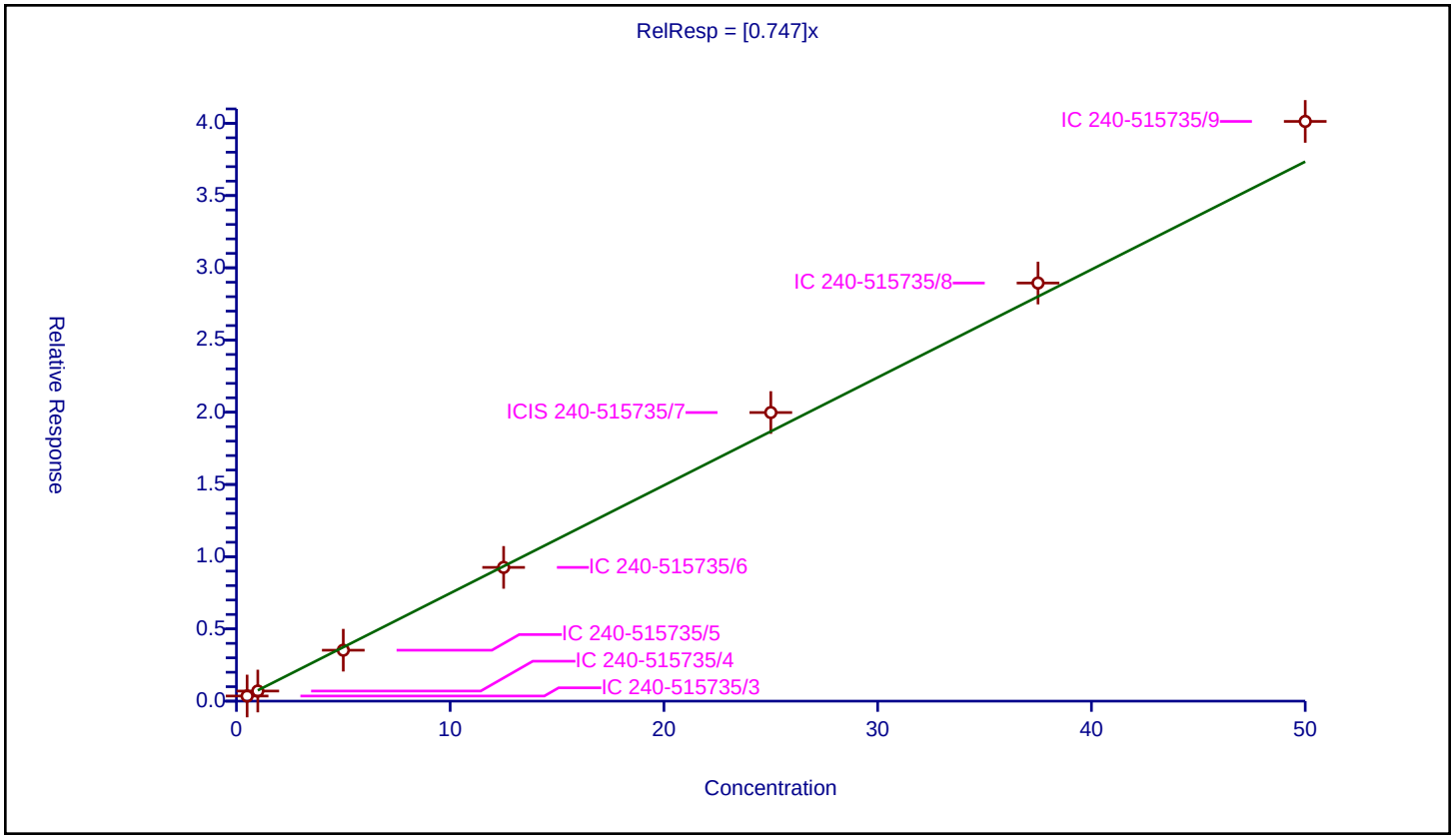
Curve Coefficients

Intercept:	0
Slope:	0.747

Error Coefficients

Standard Error:	554000
Relative Standard Error:	6.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.354462	27.5	571162.0	0.708923	Y
2	IC 240-515735/4	1.0	0.699886	27.5	555355.0	0.699886	Y
3	IC 240-515735/5	5.0	3.526995	27.5	575302.0	0.705399	Y
4	IC 240-515735/6	12.5	9.259402	27.5	605045.0	0.740752	Y
5	ICIS 240-515735/7	25.0	19.980394	27.5	655295.0	0.799216	Y
6	IC 240-515735/8	37.5	28.945406	27.5	666607.0	0.771877	Y
7	IC 240-515735/9	50.0	40.132916	27.5	711463.0	0.802658	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

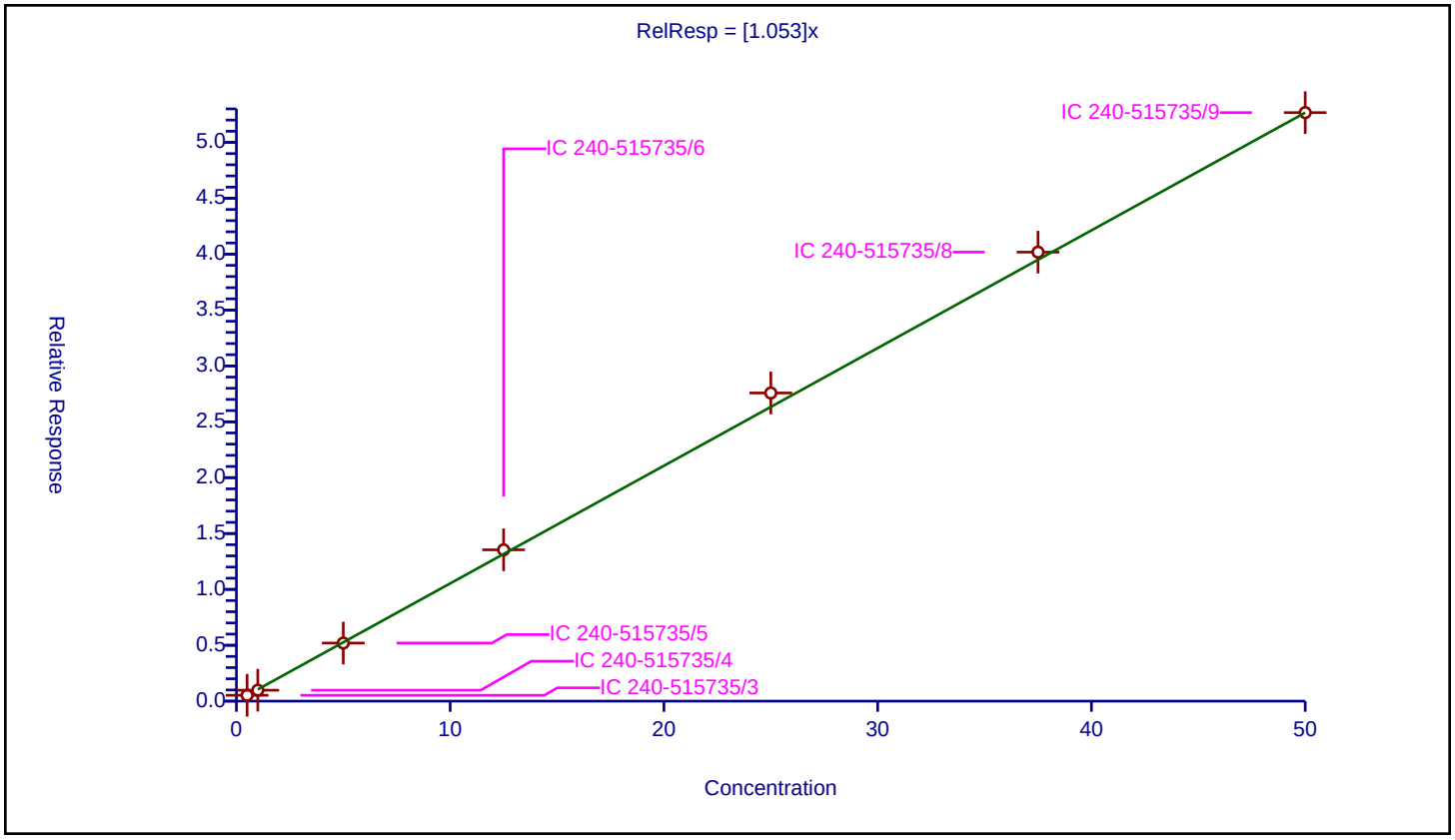
Curve Coefficients

Intercept:	0
Slope:	1.053

Error Coefficients

Standard Error:	746000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.522111	27.5	571162.0	1.044222	Y
2	IC 240-515735/4	1.0	0.977829	27.5	555355.0	0.977829	Y
3	IC 240-515735/5	5.0	5.197305	27.5	575302.0	1.039461	Y
4	IC 240-515735/6	12.5	13.540947	27.5	605045.0	1.083276	Y
5	ICIS 240-515735/7	25.0	27.577133	27.5	655295.0	1.103085	Y
6	IC 240-515735/8	37.5	40.182788	27.5	666607.0	1.071541	Y
7	IC 240-515735/9	50.0	52.665799	27.5	711463.0	1.053316	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

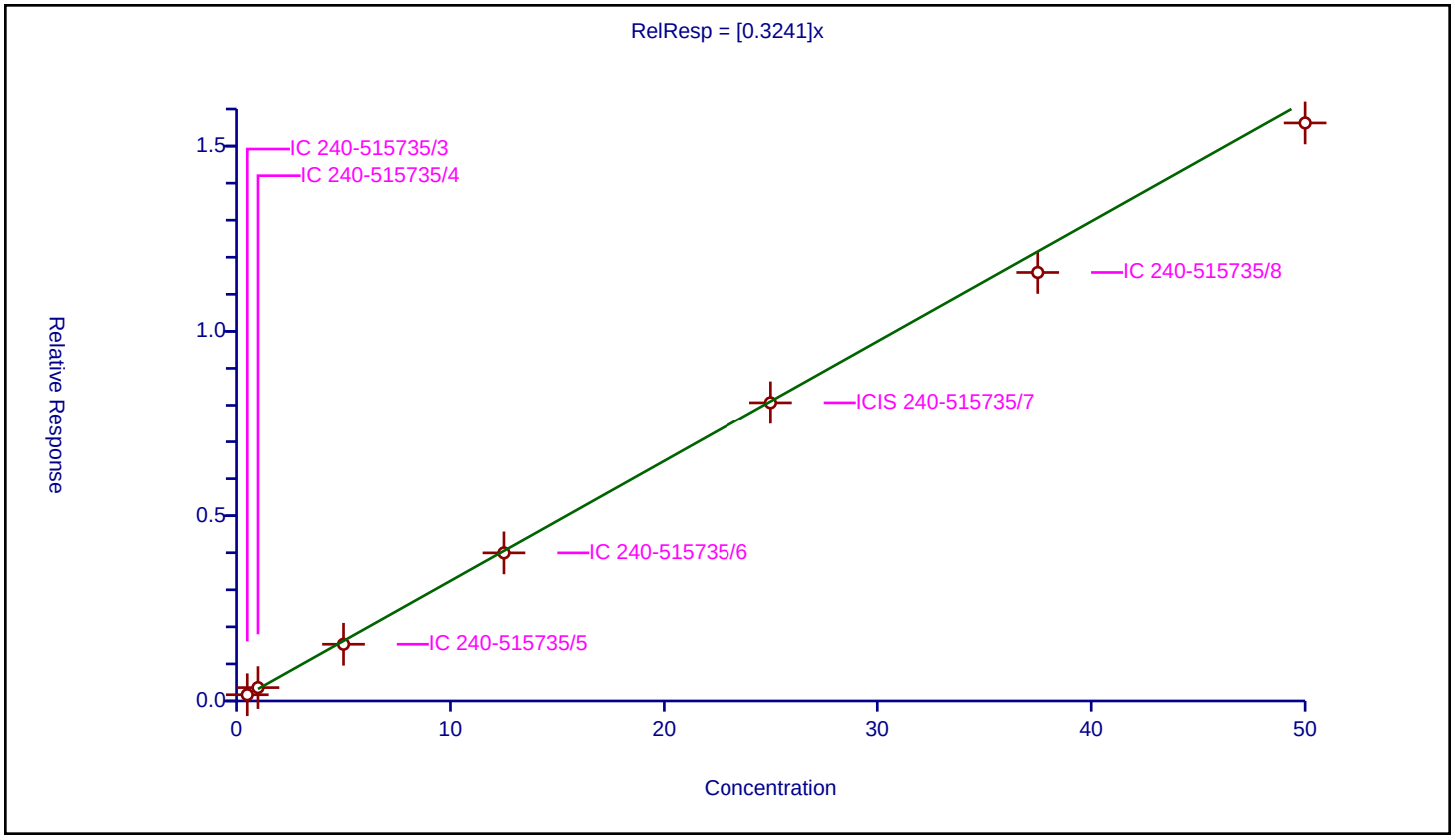
Curve Coefficients

Intercept:	0
Slope:	0.3241

Error Coefficients

Standard Error:	219000
Relative Standard Error:	6.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.168998	27.5	571162.0	0.337995	Y
2	IC 240-515735/4	1.0	0.360738	27.5	555355.0	0.360738	Y
3	IC 240-515735/5	5.0	1.53097	27.5	575302.0	0.306194	Y
4	IC 240-515735/6	12.5	3.996521	27.5	605045.0	0.319722	Y
5	ICIS 240-515735/7	25.0	8.069526	27.5	655295.0	0.322781	Y
6	IC 240-515735/8	37.5	11.589193	27.5	666607.0	0.309045	Y
7	IC 240-515735/9	50.0	15.624562	27.5	711463.0	0.312491	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

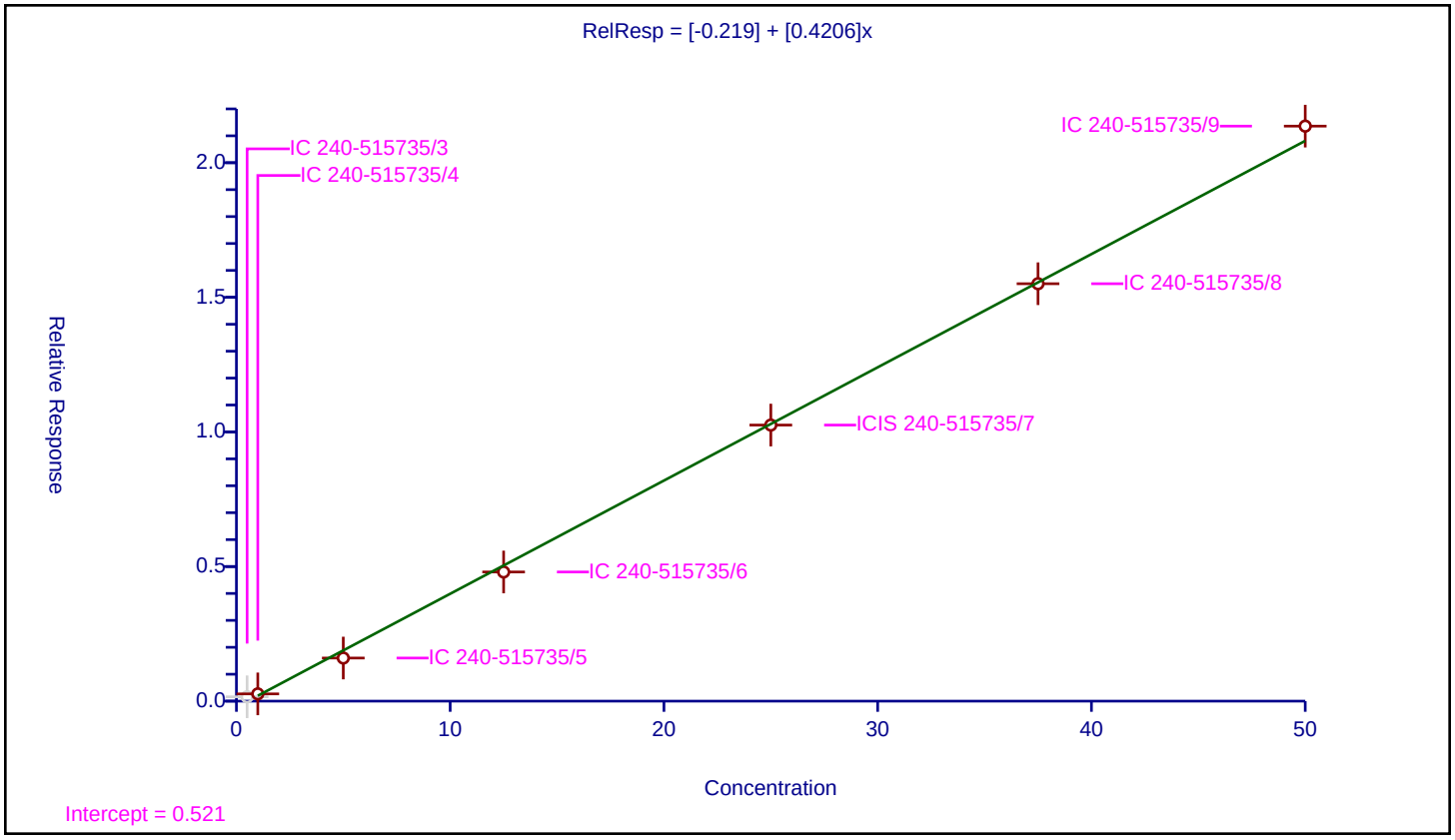
Curve Coefficients

Intercept:	-0.219
Slope:	0.4206

Error Coefficients

Standard Error:	360000
Relative Standard Error:	10.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.161101	27.5	571162.0	0.322203	N
2	IC 240-515735/4	1.0	0.269575	27.5	555355.0	0.269575	Y
3	IC 240-515735/5	5.0	1.601285	27.5	575302.0	0.320257	Y
4	IC 240-515735/6	12.5	4.797734	27.5	605045.0	0.383819	Y
5	ICIS 240-515735/7	25.0	10.2554	27.5	655295.0	0.410216	Y
6	IC 240-515735/8	37.5	15.505406	27.5	666607.0	0.413478	Y
7	IC 240-515735/9	50.0	21.359393	27.5	711463.0	0.427188	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

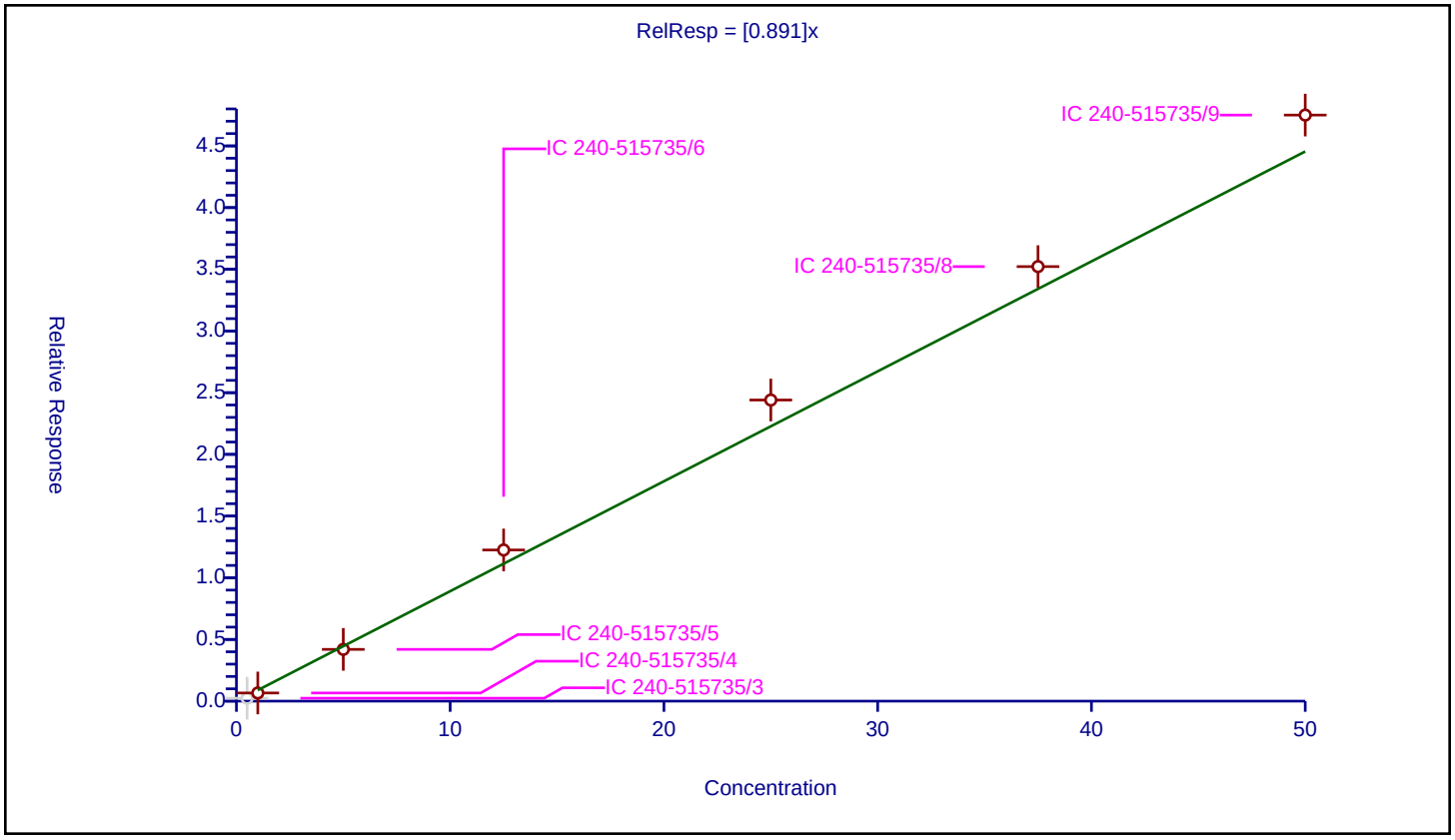
Curve Coefficients

Intercept:	0
Slope:	0.891

Error Coefficients

Standard Error:	729000
Relative Standard Error:	13.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.239293	27.5	571162.0	0.478586	N
2	IC 240-515735/4	1.0	0.66141	27.5	555355.0	0.66141	Y
3	IC 240-515735/5	5.0	4.194727	27.5	575302.0	0.838945	Y
4	IC 240-515735/6	12.5	12.251361	27.5	605045.0	0.980109	Y
5	ICIS 240-515735/7	25.0	24.4046	27.5	655295.0	0.976184	Y
6	IC 240-515735/8	37.5	35.219515	27.5	666607.0	0.939187	Y
7	IC 240-515735/9	50.0	47.499473	27.5	711463.0	0.949989	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

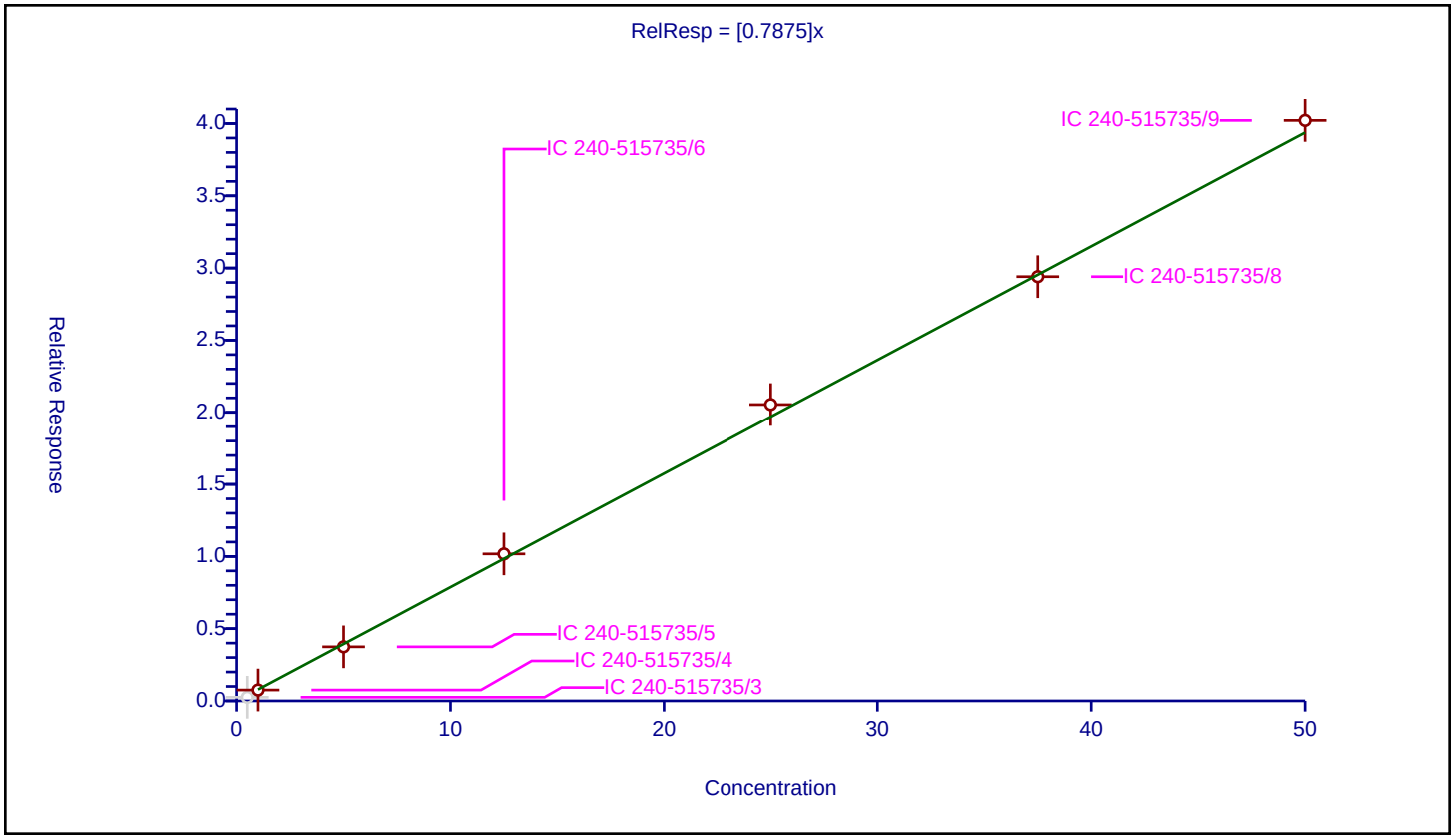
Curve Coefficients

Intercept:	0
Slope:	0.7875

Error Coefficients

Standard Error:	614000
Relative Standard Error:	4.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.252148	27.5	571162.0	0.504297	N
2	IC 240-515735/4	1.0	0.753018	27.5	555355.0	0.753018	Y
3	IC 240-515735/5	5.0	3.741287	27.5	575302.0	0.748257	Y
4	IC 240-515735/6	12.5	10.176289	27.5	605045.0	0.814103	Y
5	ICIS 240-515735/7	25.0	20.538162	27.5	655295.0	0.821526	Y
6	IC 240-515735/8	37.5	29.401589	27.5	666607.0	0.784042	Y
7	IC 240-515735/9	50.0	40.216561	27.5	711463.0	0.804331	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

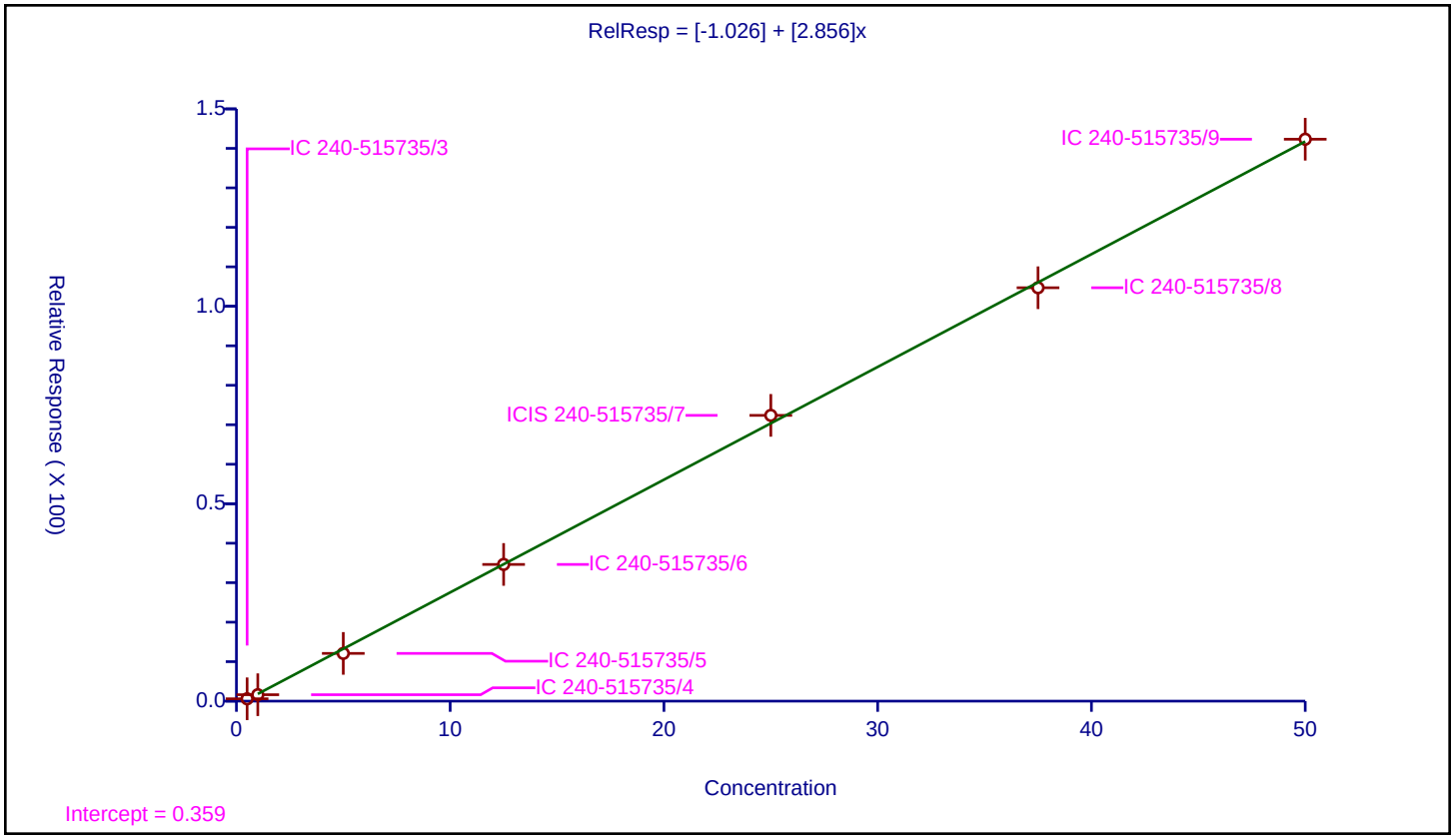
Curve Coefficients

Intercept:	-1.026
Slope:	2.856

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	7.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.593706	27.5	571162.0	1.187413	Y
2	IC 240-515735/4	1.0	1.627009	27.5	555355.0	1.627009	Y
3	IC 240-515735/5	5.0	12.088629	27.5	575302.0	2.417726	Y
4	IC 240-515735/6	12.5	34.622743	27.5	605045.0	2.769819	Y
5	ICIS 240-515735/7	25.0	72.376624	27.5	655295.0	2.895065	Y
6	IC 240-515735/8	37.5	104.700633	27.5	666607.0	2.792017	Y
7	IC 240-515735/9	50.0	142.314934	27.5	711463.0	2.846299	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

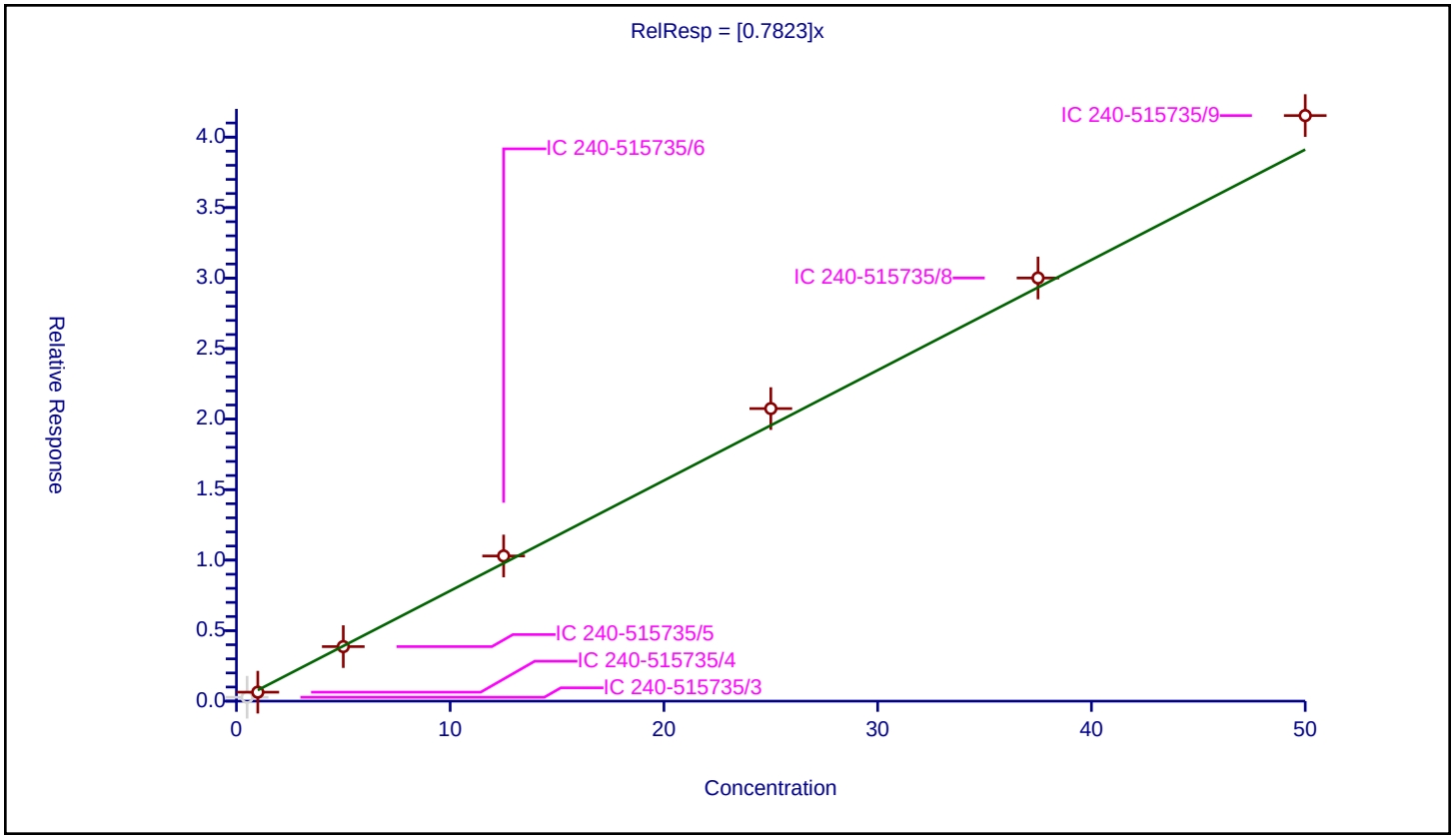
Curve Coefficients

Intercept:	0
Slope:	0.7823

Error Coefficients

Standard Error:	630000
Relative Standard Error:	9.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.273911	27.5	571162.0	0.547822	N
2	IC 240-515735/4	1.0	0.636057	27.5	555355.0	0.636057	Y
3	IC 240-515735/5	5.0	3.867912	27.5	575302.0	0.773582	Y
4	IC 240-515735/6	12.5	10.294643	27.5	605045.0	0.823571	Y
5	ICIS 240-515735/7	25.0	20.748243	27.5	655295.0	0.82993	Y
6	IC 240-515735/8	37.5	30.008967	27.5	666607.0	0.800239	Y
7	IC 240-515735/9	50.0	41.525652	27.5	711463.0	0.830513	Y



Calibration / tert-Butylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

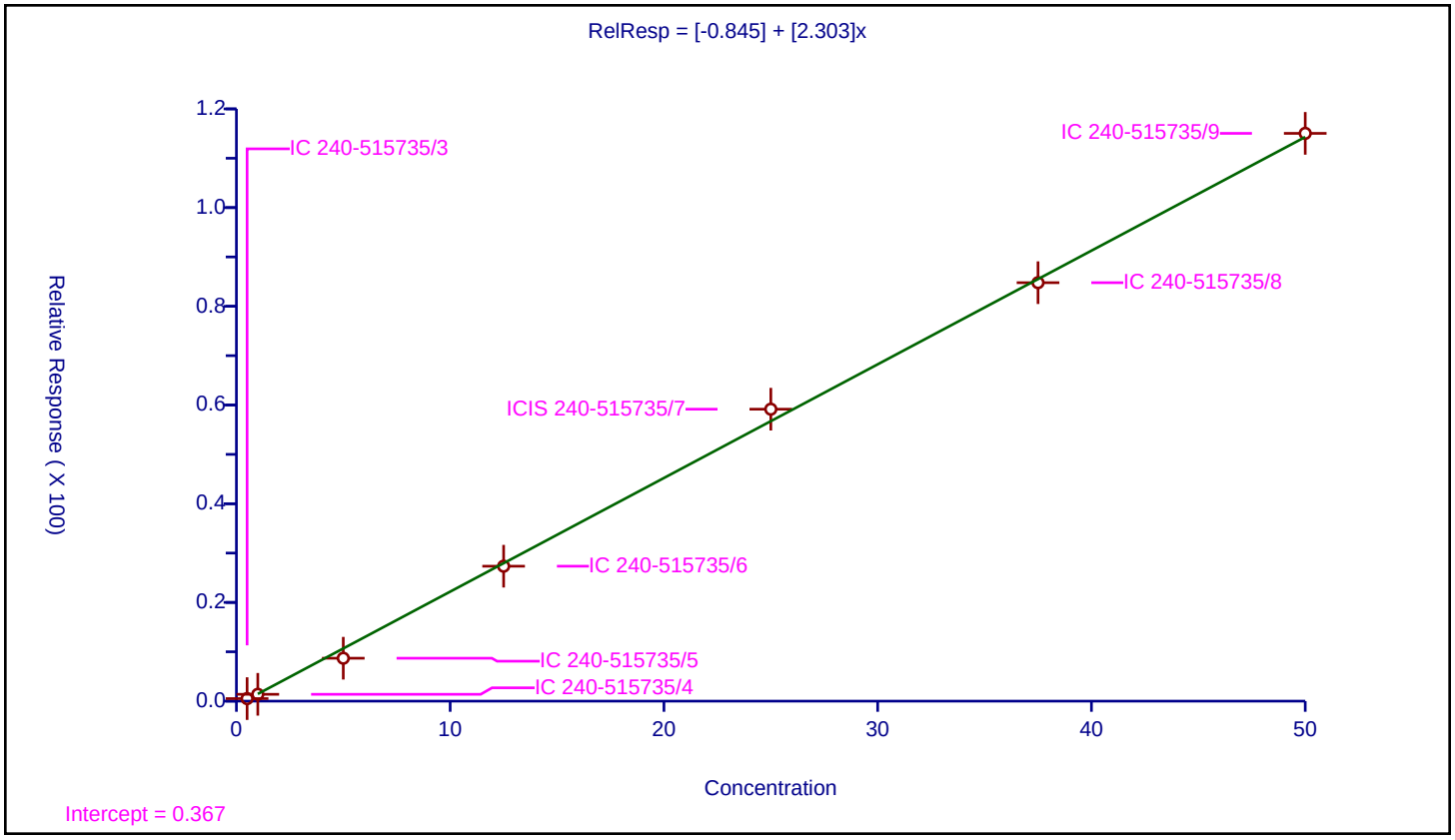
Curve Coefficients

Intercept:	-0.845
Slope:	2.303

Error Coefficients

Standard Error:	1760000
Relative Standard Error:	11.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.517826	27.5	571162.0	1.035652	Y
2	IC 240-515735/4	1.0	1.385312	27.5	555355.0	1.385312	Y
3	IC 240-515735/5	5.0	8.698106	27.5	575302.0	1.739621	Y
4	IC 240-515735/6	12.5	27.339557	27.5	605045.0	2.187165	Y
5	ICIS 240-515735/7	25.0	59.153107	27.5	655295.0	2.366124	Y
6	IC 240-515735/8	37.5	84.786857	27.5	666607.0	2.260983	Y
7	IC 240-515735/9	50.0	115.041671	27.5	711463.0	2.300833	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

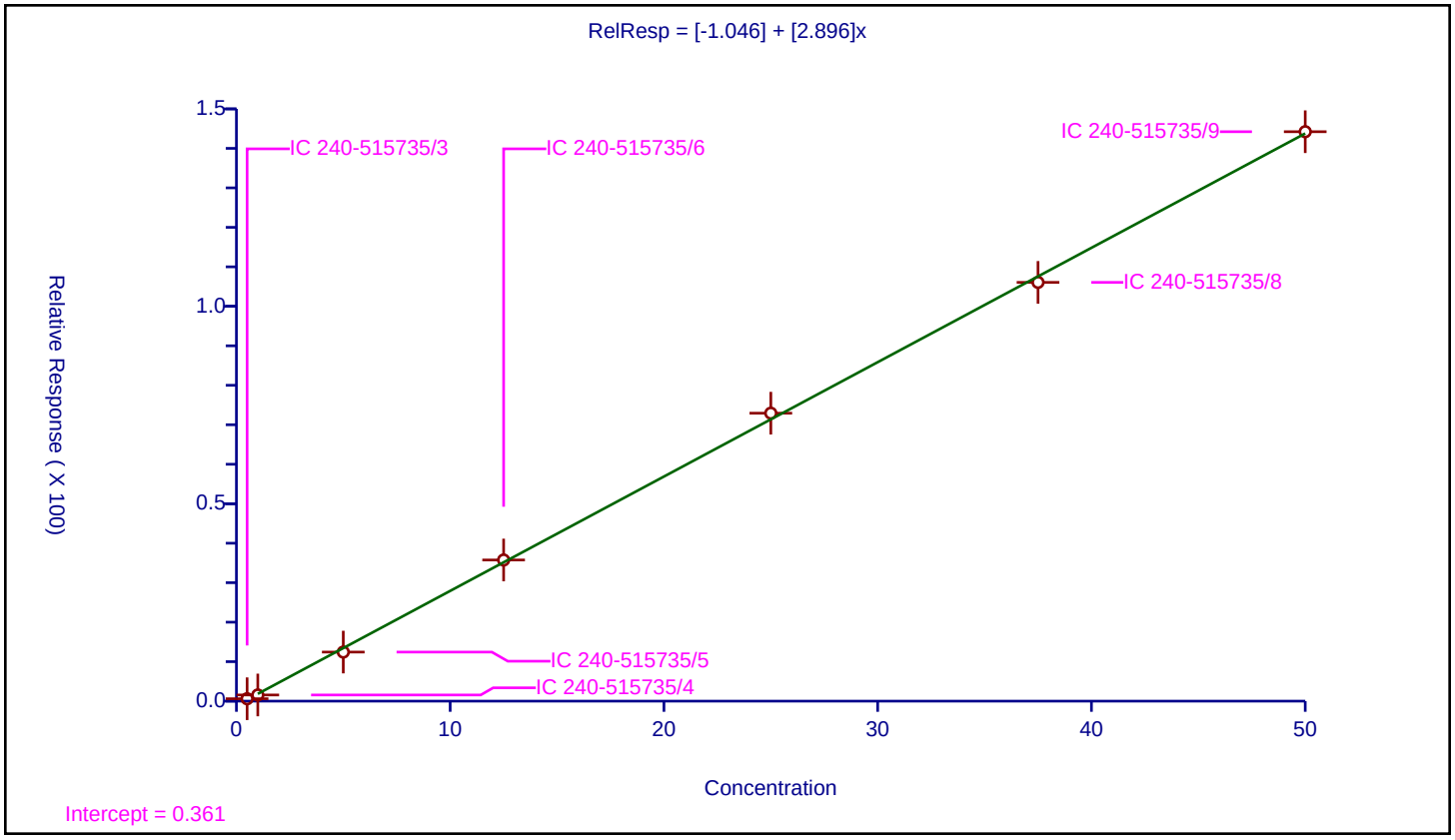
Curve Coefficients

Intercept:	-1.046
Slope:	2.896

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	8.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.608199	27.5	571162.0	1.216397	Y
2	IC 240-515735/4	1.0	1.560952	27.5	555355.0	1.560952	Y
3	IC 240-515735/5	5.0	12.429307	27.5	575302.0	2.485861	Y
4	IC 240-515735/6	12.5	35.75175	27.5	605045.0	2.86014	Y
5	ICIS 240-515735/7	25.0	72.927552	27.5	655295.0	2.917102	Y
6	IC 240-515735/8	37.5	106.059695	27.5	666607.0	2.828259	Y
7	IC 240-515735/9	50.0	144.222022	27.5	711463.0	2.88444	Y



Calibration / sec-Butylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

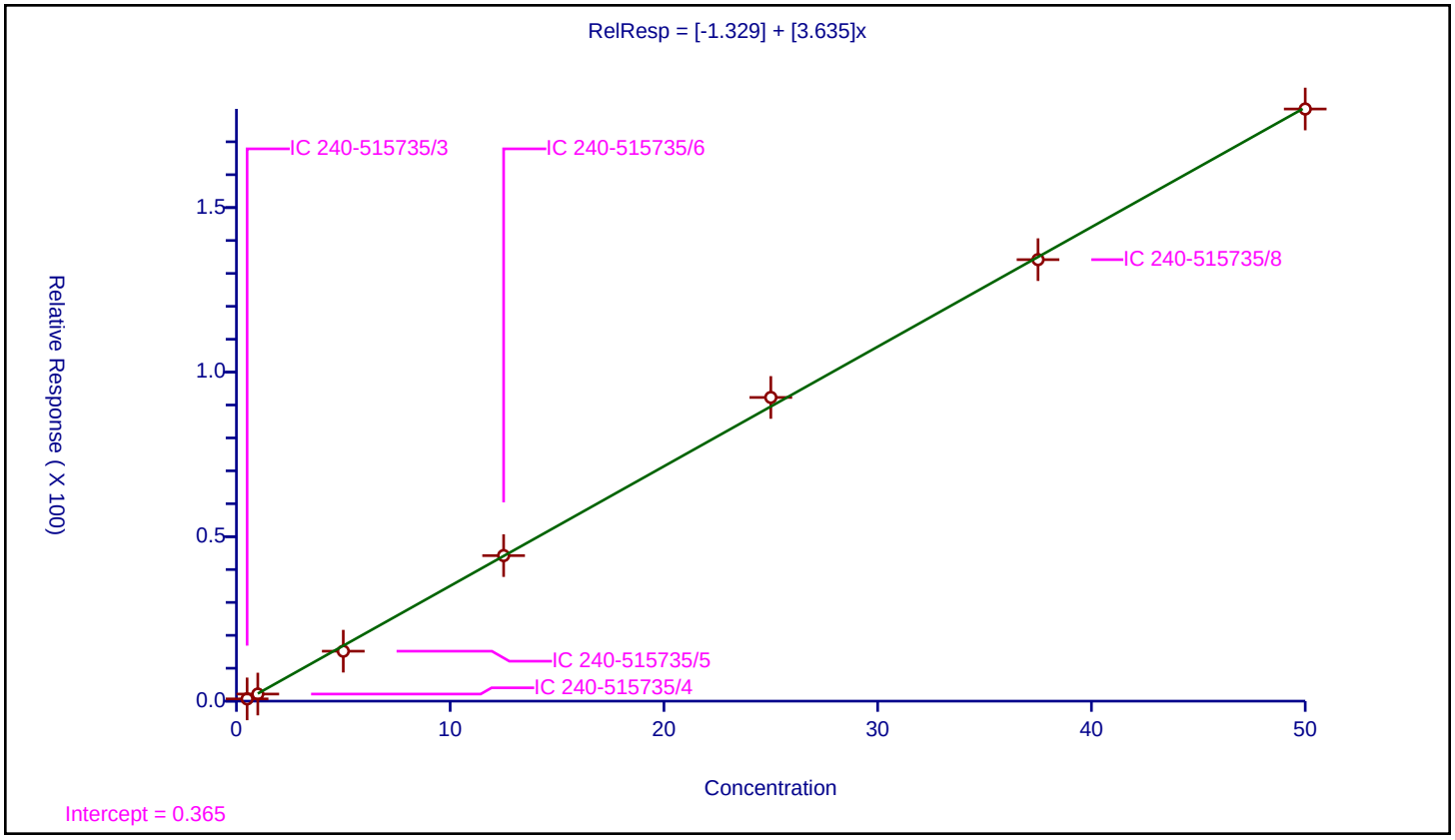
Curve Coefficients

Intercept:	-1.329
Slope:	3.635

Error Coefficients

Standard Error:	2760000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.686053	27.5	571162.0	1.372106	Y
2	IC 240-515735/4	1.0	2.155266	27.5	555355.0	2.155266	Y
3	IC 240-515735/5	5.0	15.183504	27.5	575302.0	3.036701	Y
4	IC 240-515735/6	12.5	44.235982	27.5	605045.0	3.538879	Y
5	ICIS 240-515735/7	25.0	92.304435	27.5	655295.0	3.692177	Y
6	IC 240-515735/8	37.5	134.181636	27.5	666607.0	3.578177	Y
7	IC 240-515735/9	50.0	179.968045	27.5	711463.0	3.599361	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

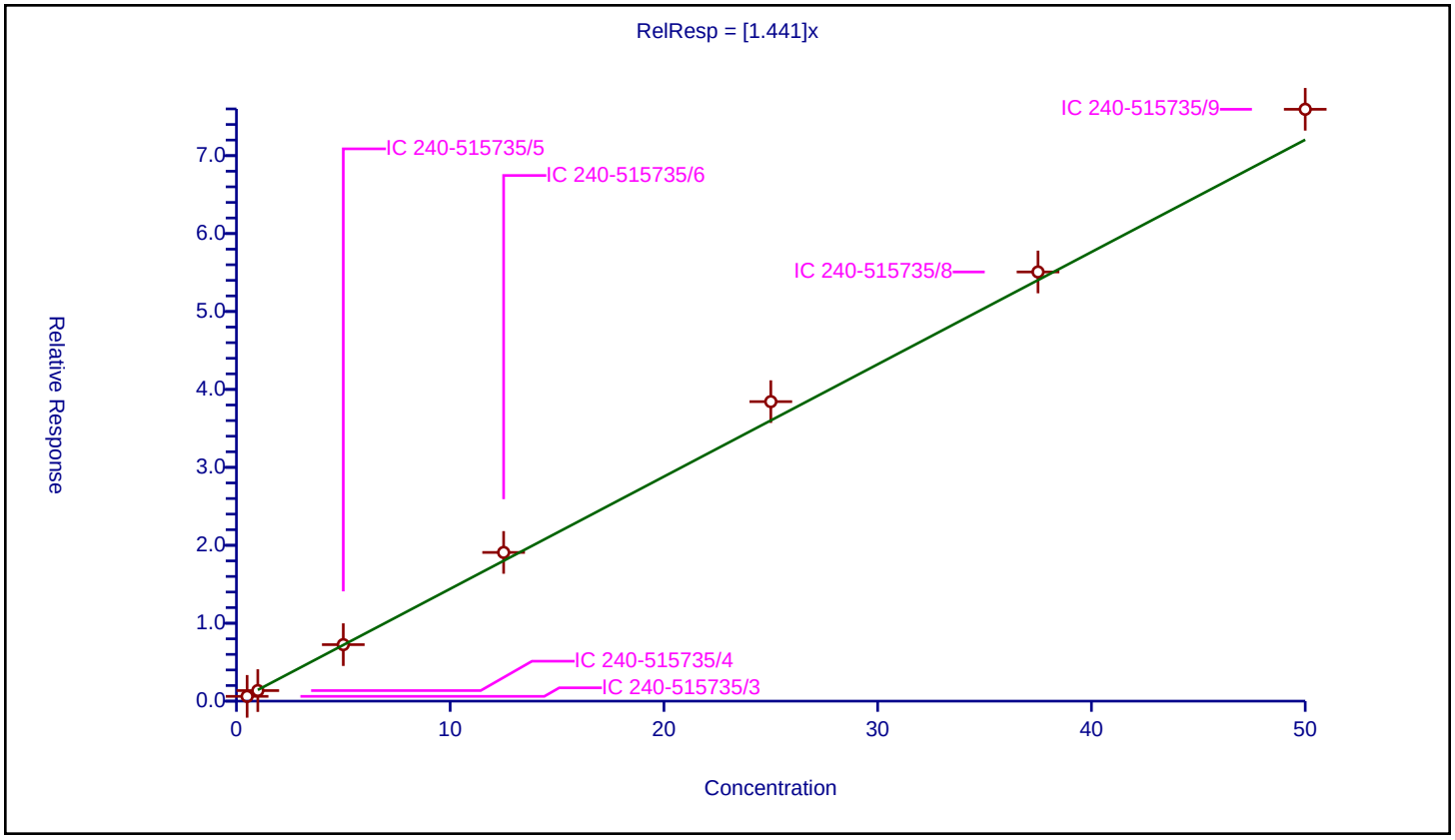
Curve Coefficients

Intercept:	0
Slope:	1.441

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	7.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.613976	27.5	571162.0	1.227953	Y
2	IC 240-515735/4	1.0	1.355799	27.5	555355.0	1.355799	Y
3	IC 240-515735/5	5.0	7.250931	27.5	575302.0	1.450186	Y
4	IC 240-515735/6	12.5	19.083399	27.5	605045.0	1.526672	Y
5	ICIS 240-515735/7	25.0	38.433736	27.5	655295.0	1.537349	Y
6	IC 240-515735/8	37.5	55.077433	27.5	666607.0	1.468732	Y
7	IC 240-515735/9	50.0	75.949983	27.5	711463.0	1.519	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

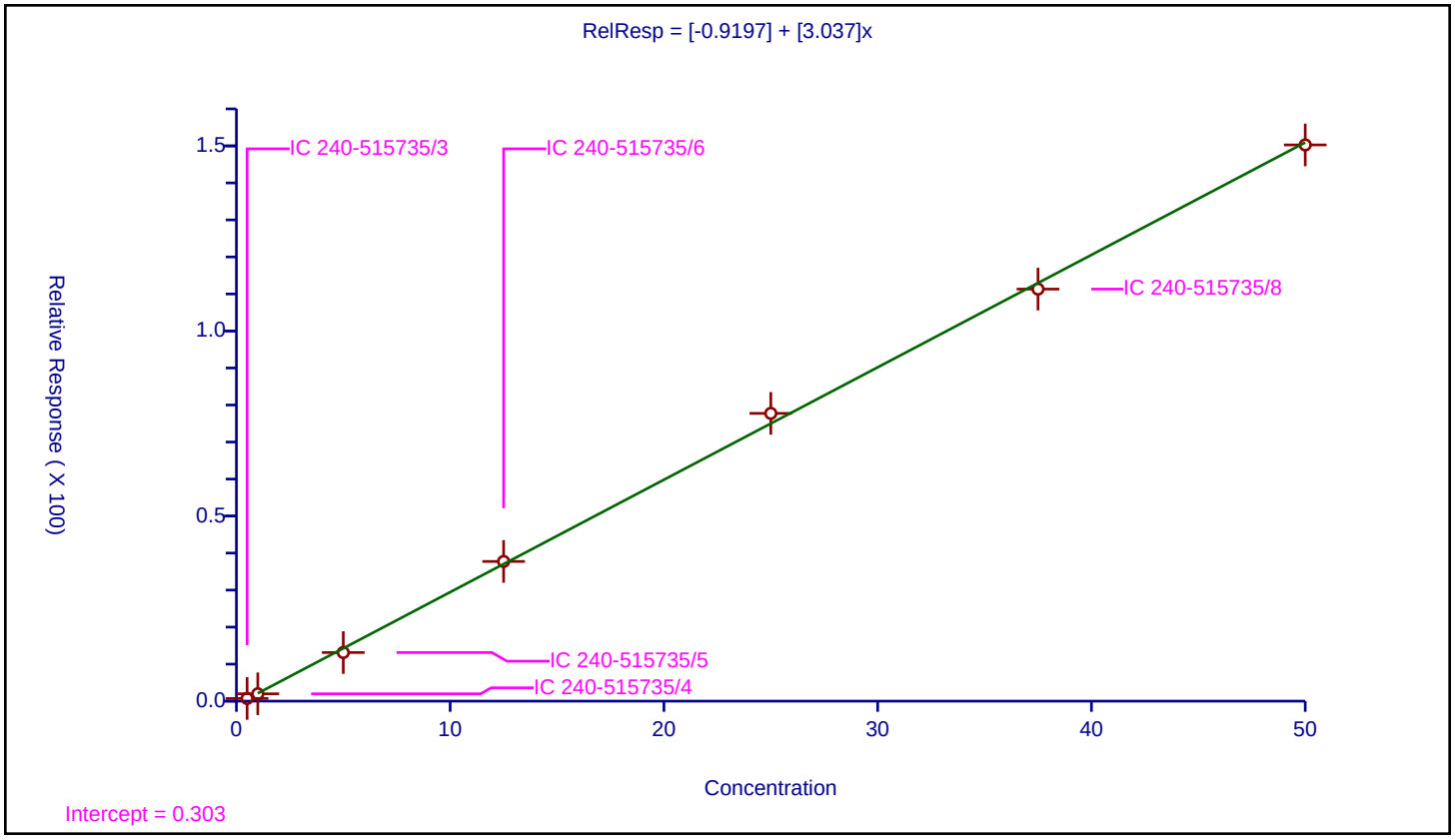
Curve Coefficients

Intercept:	-0.9197
Slope:	3.037

Error Coefficients

Standard Error:	2310000
Relative Standard Error:	5.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.725245	27.5	571162.0	1.45049	Y
2	IC 240-515735/4	1.0	1.981458	27.5	555355.0	1.981458	Y
3	IC 240-515735/5	5.0	13.135518	27.5	575302.0	2.627104	Y
4	IC 240-515735/6	12.5	37.735693	27.5	605045.0	3.018855	Y
5	ICIS 240-515735/7	25.0	77.743383	27.5	655295.0	3.109735	Y
6	IC 240-515735/8	37.5	111.318716	27.5	666607.0	2.968499	Y
7	IC 240-515735/9	50.0	150.267351	27.5	711463.0	3.005347	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

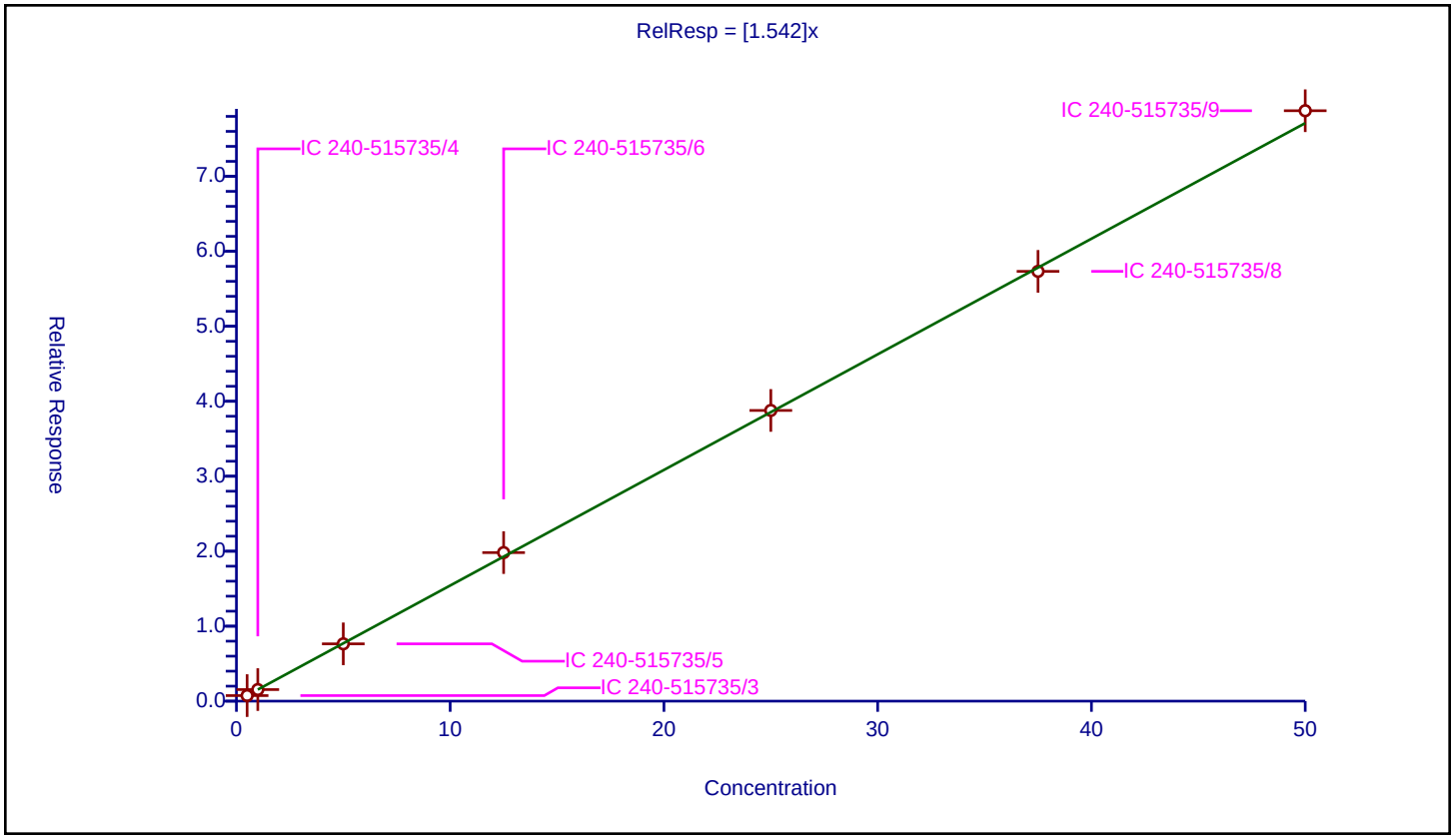
Curve Coefficients

Intercept:	0
Slope:	1.542

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	2.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.740315	27.5	571162.0	1.480631	Y
2	IC 240-515735/4	1.0	1.544116	27.5	555355.0	1.544116	Y
3	IC 240-515735/5	5.0	7.644381	27.5	575302.0	1.528876	Y
4	IC 240-515735/6	12.5	19.816844	27.5	605045.0	1.585348	Y
5	ICIS 240-515735/7	25.0	38.777604	27.5	655295.0	1.551104	Y
6	IC 240-515735/8	37.5	57.329967	27.5	666607.0	1.528799	Y
7	IC 240-515735/9	50.0	78.756211	27.5	711463.0	1.575124	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

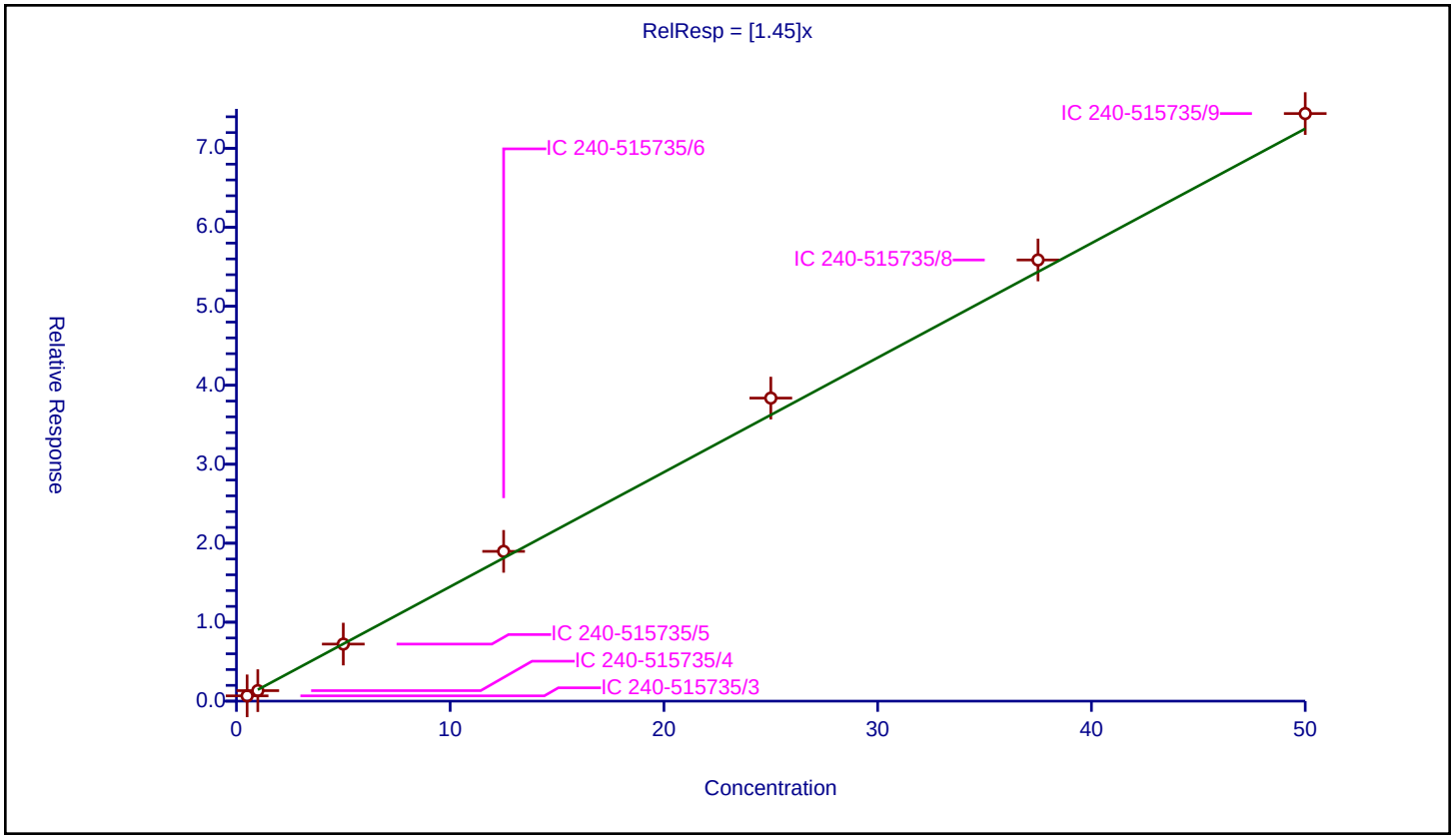
Curve Coefficients

Intercept:	0
Slope:	1.45

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	5.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.670694	27.5	571162.0	1.341388	Y
2	IC 240-515735/4	1.0	1.331189	27.5	555355.0	1.331189	Y
3	IC 240-515735/5	5.0	7.226791	27.5	575302.0	1.445358	Y
4	IC 240-515735/6	12.5	18.968135	27.5	605045.0	1.517451	Y
5	ICIS 240-515735/7	25.0	38.376159	27.5	655295.0	1.535046	Y
6	IC 240-515735/8	37.5	55.86971	27.5	666607.0	1.489859	Y
7	IC 240-515735/9	50.0	74.409323	27.5	711463.0	1.488186	Y



Calibration / n-Butylbenzene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

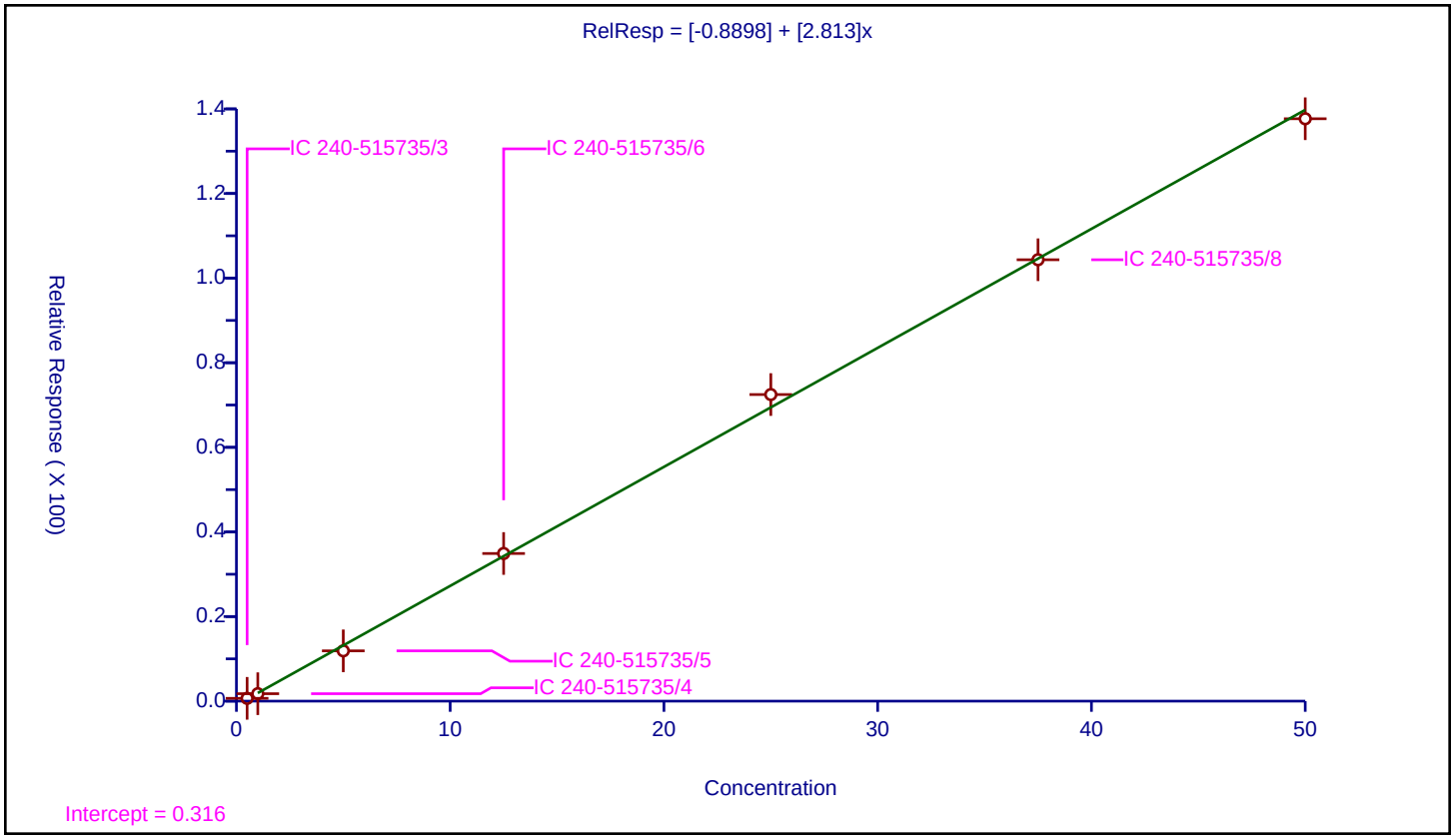
Curve Coefficients

Intercept:	-0.8898
Slope:	2.813

Error Coefficients

Standard Error:	2130000
Relative Standard Error:	7.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.666746	27.5	571162.0	1.333492	Y
2	IC 240-515735/4	1.0	1.758083	27.5	555355.0	1.758083	Y
3	IC 240-515735/5	5.0	11.889825	27.5	575302.0	2.377965	Y
4	IC 240-515735/6	12.5	34.900995	27.5	605045.0	2.79208	Y
5	ICIS 240-515735/7	25.0	72.473691	27.5	655295.0	2.898948	Y
6	IC 240-515735/8	37.5	104.341396	27.5	666607.0	2.782437	Y
7	IC 240-515735/9	50.0	137.672391	27.5	711463.0	2.753448	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

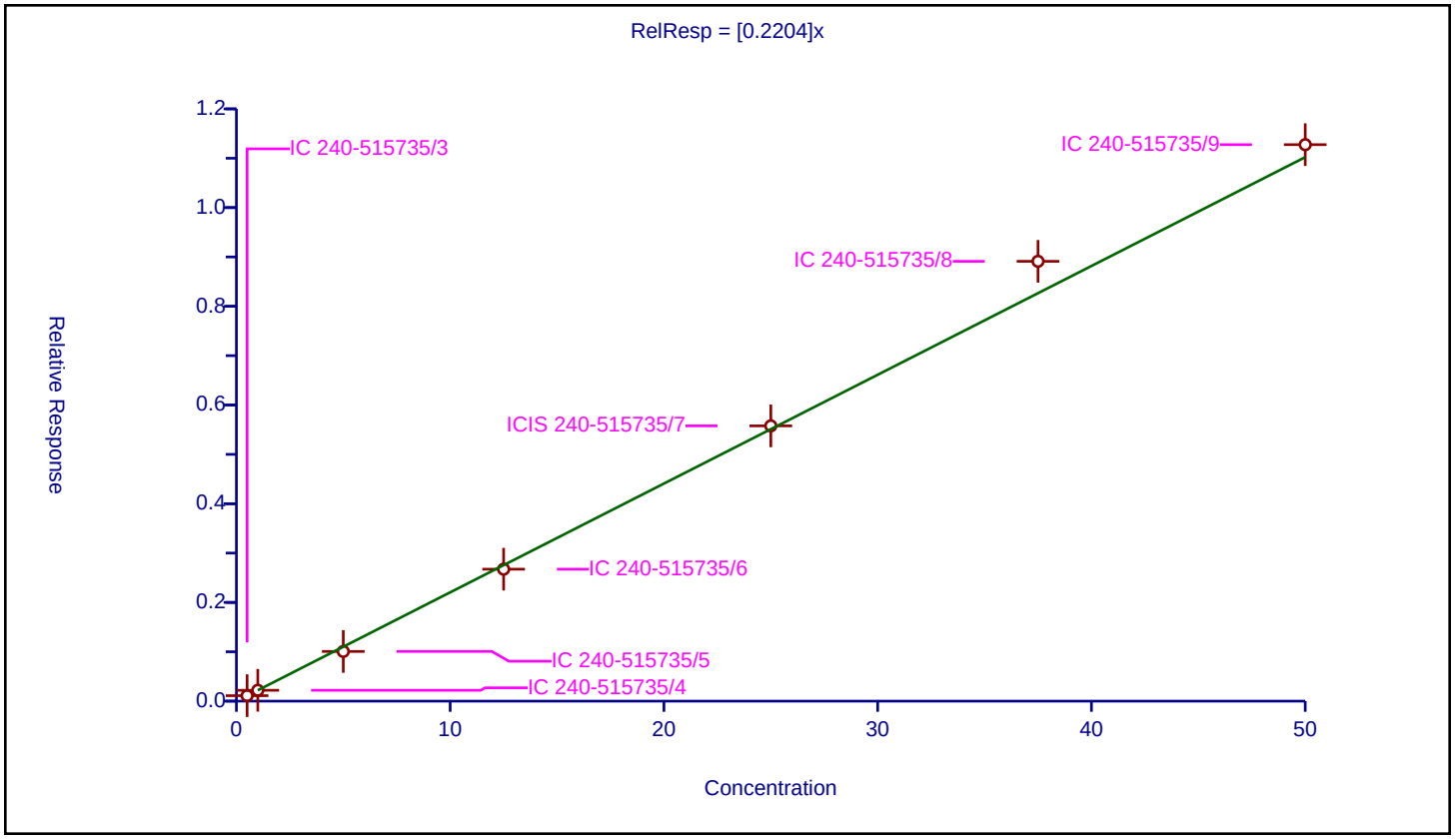
Curve Coefficients

Intercept:	0
Slope:	0.2204

Error Coefficients

Standard Error:	160000
Relative Standard Error:	5.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.110884	27.5	571162.0	0.221767	Y
2	IC 240-515735/4	1.0	0.219711	27.5	555355.0	0.219711	Y
3	IC 240-515735/5	5.0	1.006736	27.5	575302.0	0.201347	Y
4	IC 240-515735/6	12.5	2.673756	27.5	605045.0	0.2139	Y
5	ICIS 240-515735/7	25.0	5.577343	27.5	655295.0	0.223094	Y
6	IC 240-515735/8	37.5	8.911623	27.5	666607.0	0.237643	Y
7	IC 240-515735/9	50.0	11.275084	27.5	711463.0	0.225502	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

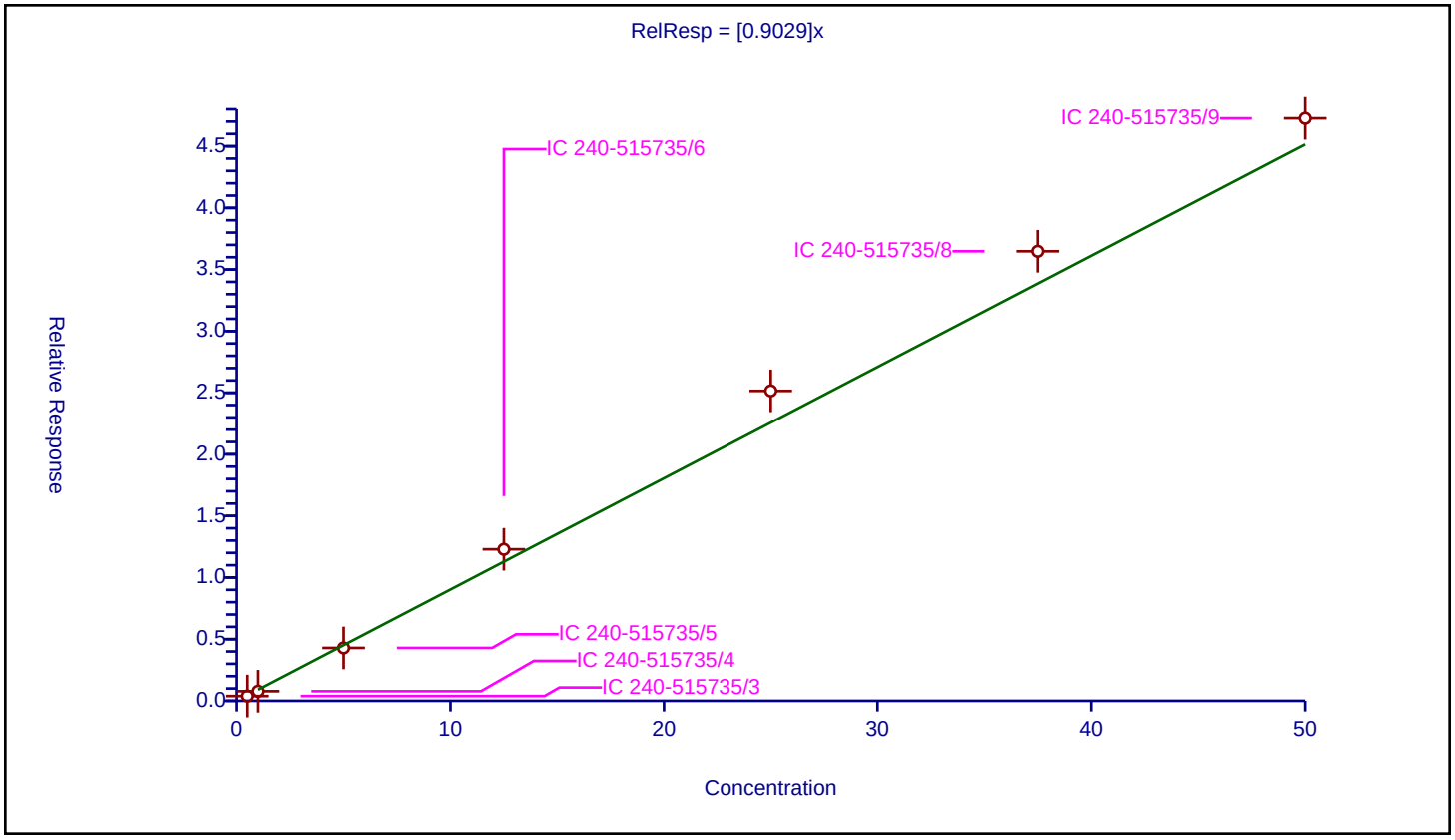
Curve Coefficients

Intercept:	0
Slope:	0.9029

Error Coefficients

Standard Error:	673000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.388454	27.5	571162.0	0.776907	Y
2	IC 240-515735/4	1.0	0.778074	27.5	555355.0	0.778074	Y
3	IC 240-515735/5	5.0	4.289708	27.5	575302.0	0.857942	Y
4	IC 240-515735/6	12.5	12.291722	27.5	605045.0	0.983338	Y
5	ICIS 240-515735/7	25.0	25.151592	27.5	655295.0	1.006064	Y
6	IC 240-515735/8	37.5	36.481713	27.5	666607.0	0.972846	Y
7	IC 240-515735/9	50.0	47.266358	27.5	711463.0	0.945327	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

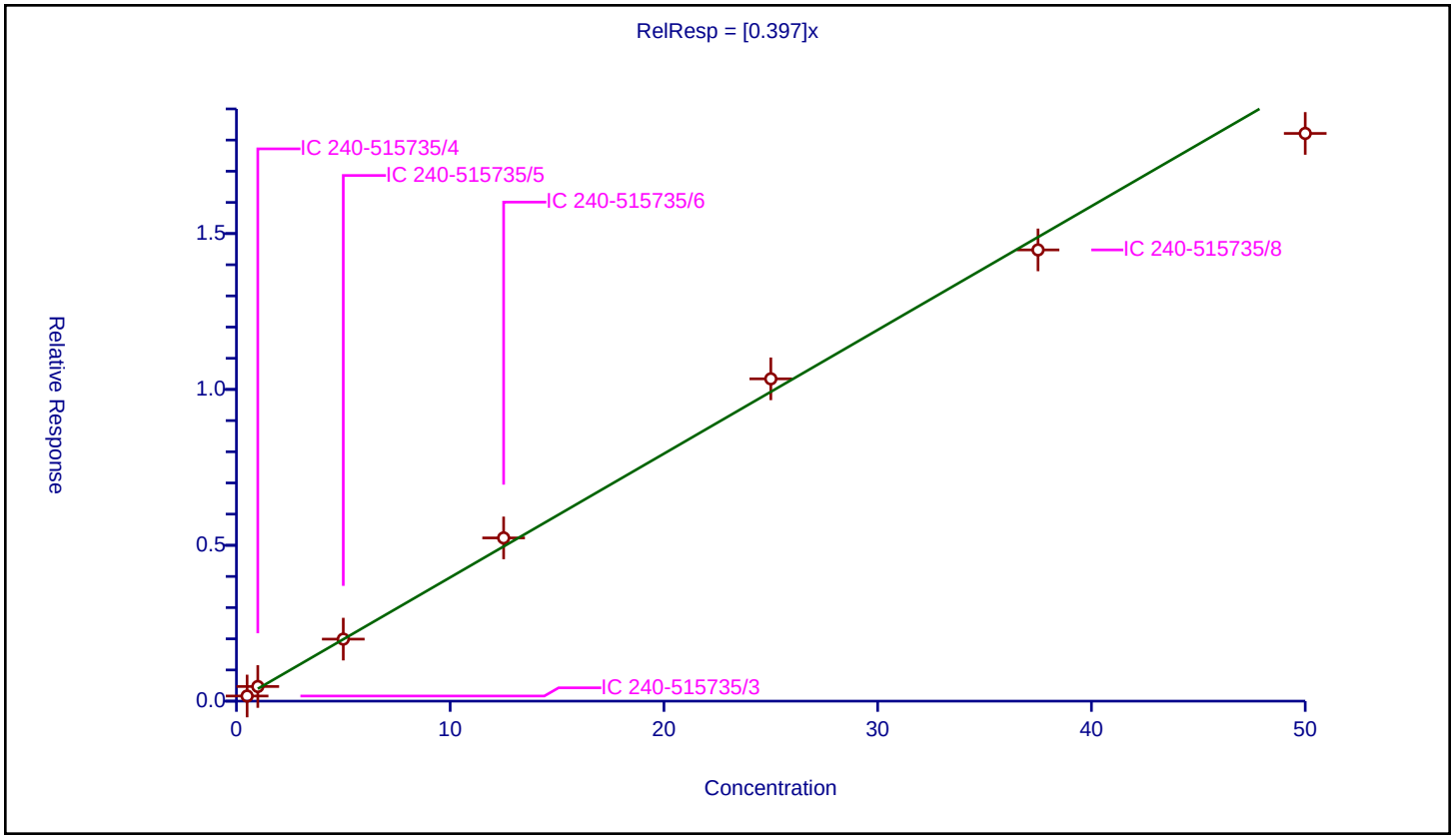
Curve Coefficients

Intercept:	0
Slope:	0.397

Error Coefficients

Standard Error:	265000
Relative Standard Error:	11.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.164327	27.5	571162.0	0.328655	Y
2	IC 240-515735/4	1.0	0.46938	27.5	555355.0	0.46938	Y
3	IC 240-515735/5	5.0	1.989572	27.5	575302.0	0.397914	Y
4	IC 240-515735/6	12.5	5.236883	27.5	605045.0	0.418951	Y
5	ICIS 240-515735/7	25.0	10.340129	27.5	655295.0	0.413605	Y
6	IC 240-515735/8	37.5	14.476911	27.5	666607.0	0.386051	Y
7	IC 240-515735/9	50.0	18.212904	27.5	711463.0	0.364258	Y



Calibration / Naphthalene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

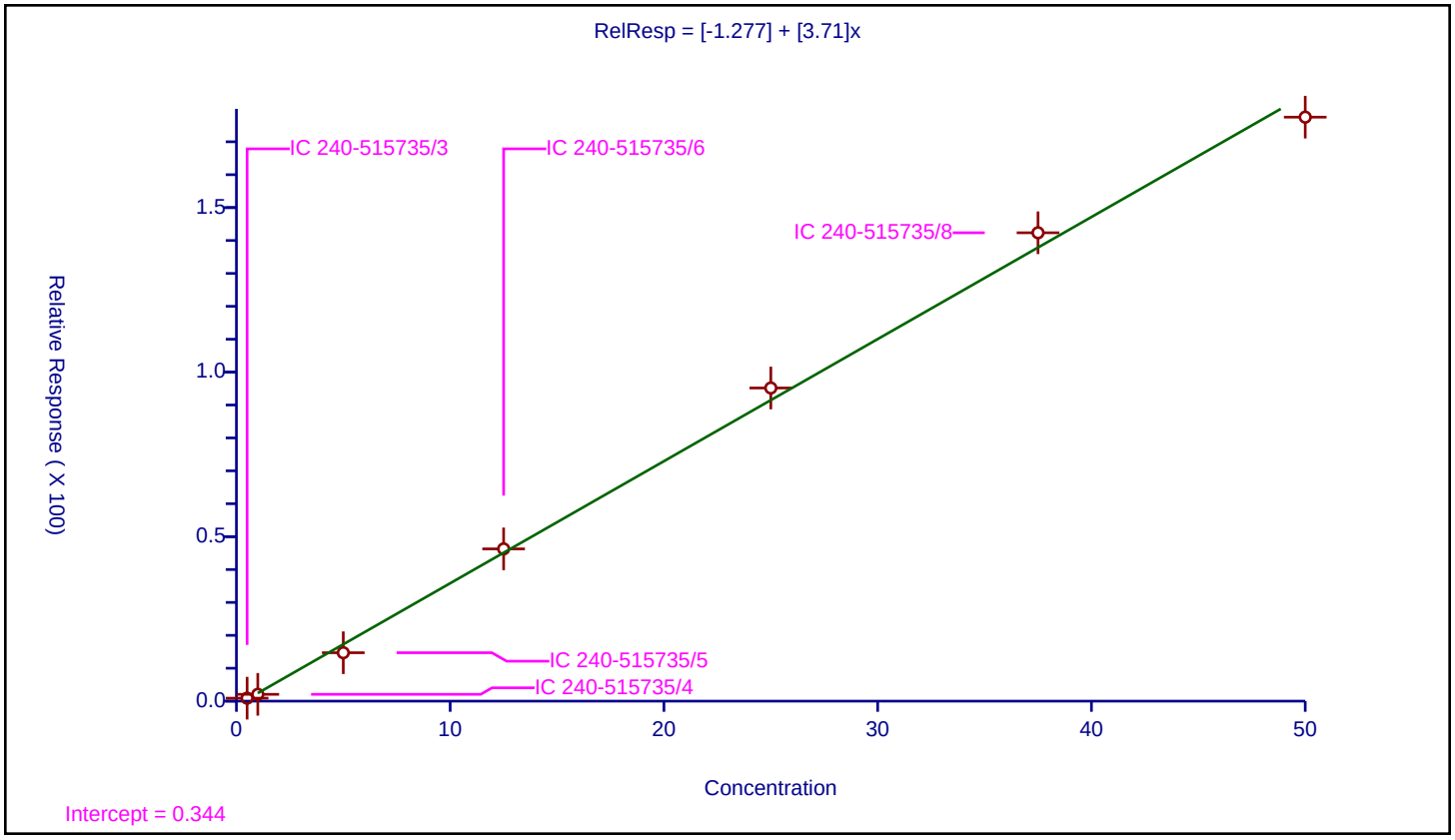
Curve Coefficients

Intercept:	-1.277
Slope:	3.71

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	11.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.901657	27.5	571162.0	1.803315	Y
2	IC 240-515735/4	1.0	2.072026	27.5	555355.0	2.072026	Y
3	IC 240-515735/5	5.0	14.716153	27.5	575302.0	2.943231	Y
4	IC 240-515735/6	12.5	46.276103	27.5	605045.0	3.702088	Y
5	ICIS 240-515735/7	25.0	95.178549	27.5	655295.0	3.807142	Y
6	IC 240-515735/8	37.5	142.348918	27.5	666607.0	3.795971	Y
7	IC 240-515735/9	50.0	177.489785	27.5	711463.0	3.549796	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

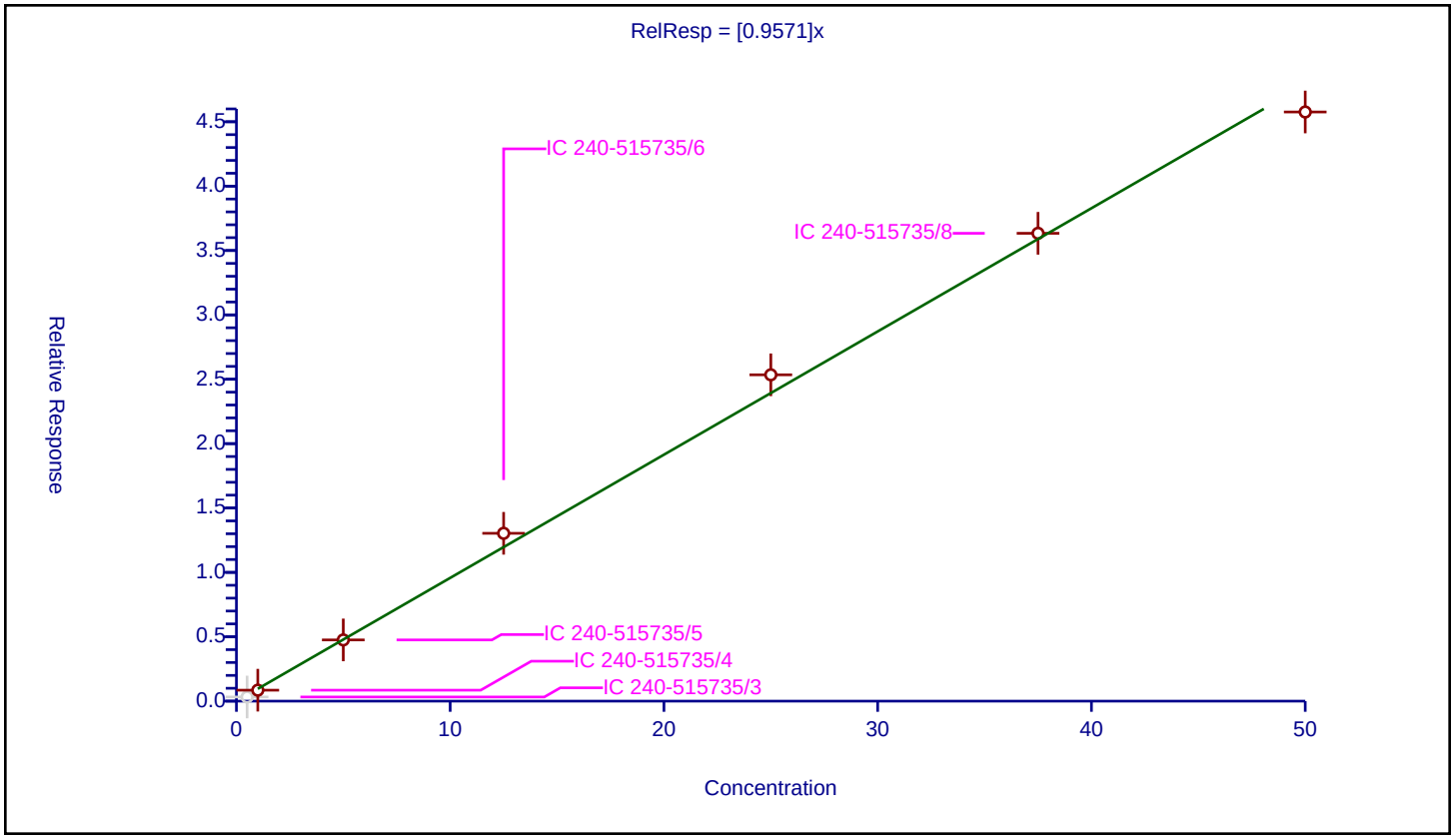
Curve Coefficients

Intercept:	0
Slope:	0.9571

Error Coefficients

Standard Error:	726000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-515735/3	0.5	0.322347	27.5	571162.0	0.644694	N
2	IC 240-515735/4	1.0	0.850915	27.5	555355.0	0.850915	Y
3	IC 240-515735/5	5.0	4.754142	27.5	575302.0	0.950828	Y
4	IC 240-515735/6	12.5	13.035712	27.5	605045.0	1.042857	Y
5	ICIS 240-515735/7	25.0	25.346481	27.5	655295.0	1.013859	Y
6	IC 240-515735/8	37.5	36.336871	27.5	666607.0	0.968983	Y
7	IC 240-515735/9	50.0	45.759635	27.5	711463.0	0.915193	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.3204		0.0121	0.0100	21.0	50.0
Chloromethane	Ave	0.2085	0.2316	0.1000	0.0111	0.0100	11.1	50.0
Butadiene	Ave	0.2195	0.2175		0.00991	0.0100	-0.9	50.0
Vinyl chloride	Ave	0.2484	0.2737		0.0110	0.0100	10.2	20.0
Bromomethane	Ave	0.1787	0.1948		0.0109	0.0100	9.0	50.0
Chloroethane	Ave	0.1469	0.1634		0.0111	0.0100	11.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3916		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.4246	0.4398		0.0104	0.0100	3.6	50.0
Ethyl ether	Ave	0.1891	0.2067		0.0109	0.0100	9.3	50.0
Acrolein	Ave	0.0073	0.0087		0.0595	0.0500	19.0	50.0
1,1-Dichloroethene	Ave	0.2398	0.2587		0.0108	0.0100	7.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.2103		0.0115	0.0100	15.0	50.0
Acetone	Qua		0.0663		0.0168	0.0200	-16.0	50.0
Iodomethane	Ave	0.4292	0.4457		0.0104	0.0100	3.8	50.0
Carbon disulfide	Ave	0.7139	0.7183		0.0101	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1609	0.1661		0.0103	0.0100	3.3	50.0
Methyl acetate	Ave	0.1601	0.1572		0.0196	0.0200	-1.8	50.0
Methylene Chloride	Ave	0.2646	0.2601		0.00983	0.0100	-1.7	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0282		0.0874	0.100	-12.6	50.0
Acrylonitrile	Ave	0.0817	0.0808		0.0989	0.100	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2923		0.0104	0.0100	3.7	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7137		0.0103	0.0100	2.8	50.0
Hexane	Ave	0.0646	0.0732		0.0113	0.0100	13.4	20.0
1,1-Dichloroethane	Ave	0.4093	0.4326	0.1000	0.0106	0.0100	5.7	50.0
Vinyl acetate	Ave	0.4414	0.4244		0.00962	0.0100	-3.8	50.0
2,2-Dichloropropane	Ave	0.0667	0.0739		0.0111	0.0100	10.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2973		0.0102	0.0100	2.3	50.0
2-Butanone (MEK)	Ave	0.1171	0.1005		0.0172	0.0200	-14.2	50.0
Chlorobromomethane	Ave	0.1450	0.1423		0.00981	0.0100	-1.9	50.0
Chloroform	Ave	0.4451	0.4453		0.0100	0.0100	0.0	20.0
Tetrahydrofuran	Ave	0.0687	0.0660		0.0192	0.0200	-4.0	50.0
1,1,1-Trichloroethane	Ave	0.3903	0.3971		0.0102	0.0100	1.8	50.0
Cyclohexane	Ave	0.3237	0.3509		0.0108	0.0100	8.4	50.0
1,1-Dichloropropene	Ave	0.3529	0.3538		0.0100	0.0100	0.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3627		0.0101	0.0100	1.5	50.0
Isobutyl alcohol	Ave	0.0117	0.0112		0.239	0.250	-4.5	50.0
Benzene	Ave	0.997	1.008		0.0101	0.0100	1.1	50.0
1,2-Dichloroethane	Ave	0.3233	0.3310		0.0102	0.0100	2.4	50.0
n-Heptane	Ave	0.0579	0.0622		0.0107	0.0100	7.4	50.0
Trichloroethene	Ave	0.3122	0.3144		0.0101	0.0100	0.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3828		0.0109	0.0100	8.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2201		0.0106	0.0100	5.6	20.0
Dibromomethane	Ave	0.1524	0.1520		0.00997	0.0100	-0.3	50.0
1,4-Dioxane	Qua		0.0023		0.145	0.200	-27.3	50.0
Dichlorobromomethane	Ave	0.3068	0.3197		0.0104	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1498		0.0101	0.0100	0.9	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3793		0.00999	0.0100	-0.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.2083		0.0200	0.0200	-0.0	50.0
Toluene	Ave	1.519	1.513		0.00997	0.0100	-0.3	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.4614		0.00936	0.0100	-6.4	50.0
Ethyl methacrylate	Ave	0.3857	0.3929		0.0102	0.0100	1.9	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3015		0.0100	0.0100	0.1	50.0
Tetrachloroethene	Ave	0.3233	0.3416		0.0106	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.5016	0.5097		0.0102	0.0100	1.6	50.0
2-Hexanone	Ave	0.2134	0.2222		0.0208	0.0200	4.1	50.0
Chlorodibromomethane	Ave	0.3328	0.3379		0.0102	0.0100	1.5	50.0
Ethylene Dibromide	Ave	0.3165	0.3176		0.0100	0.0100	0.3	50.0
Chlorobenzene	Ave	0.9925	1.006	0.3000	0.0101	0.0100	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3394		0.0102	0.0100	2.0	50.0
Ethylbenzene	Ave	0.5200	0.5412		0.0104	0.0100	4.1	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6567		0.0103	0.0100	3.0	50.0
o-Xylene	Ave	0.5870	0.6377		0.0109	0.0100	8.6	50.0
Styrene	Ave	0.8528	0.8951		0.0105	0.0100	5.0	50.0
Bromoform	Lin1		0.1995	0.1000	0.00911	0.0100	-8.9	50.0
Isopropylbenzene	Ave	1.500	1.585		0.0106	0.0100	5.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.7796	0.3000	0.0100	0.0100	0.4	50.0
Bromobenzene	Ave	0.8603	0.8714		0.0101	0.0100	1.3	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.2926		0.00983	0.0100	-1.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.2175		0.00983	0.0100	-1.7	50.0
N-Propylbenzene	Ave	0.9157	0.9721		0.0106	0.0100	6.2	50.0
2-Chlorotoluene	Ave	0.7837	0.8108		0.0103	0.0100	3.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.608		0.0103	0.0100	2.7	50.0
4-Chlorotoluene	Ave	0.8219	0.8306		0.0101	0.0100	1.1	50.0
tert-Butylbenzene	Ave	2.265	2.342		0.0103	0.0100	3.4	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.663		0.0106	0.0100	6.0	50.0
sec-Butylbenzene	Ave	2.907	3.132		0.0108	0.0100	7.8	50.0
1,3-Dichlorobenzene	Ave	1.550	1.593		0.0103	0.0100	2.8	50.0
4-Isopropyltoluene	Ave	2.545	2.724		0.0107	0.0100	7.0	50.0
1,4-Dichlorobenzene	Ave	1.570	1.620		0.0103	0.0100	3.2	50.0
1,2-Dichlorobenzene	Ave	1.479	1.496		0.0101	0.0100	1.1	50.0
n-Butylbenzene	Ave	1.990	2.014		0.0101	0.0100	1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-469338/14 Calibration Date: 01/15/2021 13:20

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5274.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2078		0.0107	0.0100	6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.8965		0.0100	0.0100	0.4	50.0
Hexachlorobutadiene	Ave	0.3079	0.2781		0.00903	0.0100	-9.7	50.0
Naphthalene	Ave	2.693	2.701		0.0100	0.0100	0.3	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.8686		0.0101	0.0100	1.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2556		0.0201	0.0200	0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2786		0.0193	0.0200	-3.6	50.0
Toluene-d8 (Surr)	Ave	1.423	1.364		0.0192	0.0200	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4637		0.0186	0.0200	-6.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 13:20:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-014
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:50:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1139518	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	84	814816	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.552	9.552	0.000	94	388972	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	291259	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	98	317501	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1111224	20.0	19.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	377864	20.0	18.6	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	182533	10.0	12.1	
12 Chloromethane	50	1.305	1.293	0.012	99	131974	10.0	11.1	
13 Butadiene	54	1.364	1.352	0.012	95	123899	10.0	9.91	
14 Vinyl chloride	62	1.376	1.376	0.000	98	155927	10.0	11.0	
15 Bromomethane	94	1.600	1.589	0.011	90	110983	10.0	10.9	
16 Chloroethane	64	1.648	1.648	0.000	99	93120	10.0	11.1	
17 Dichlorofluoromethane	67	1.813	1.802	0.011	98	223097	10.0	10.8	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	96	250556	10.0	10.4	
19 Ethyl ether	59	2.074	2.062	0.012	87	117780	10.0	10.9	
20 Acrolein	56	2.168	2.157	0.012	98	24774	50.0	59.5	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	147377	10.0	10.8	
23 112TCTFE	151	2.287	2.275	0.012	90	119846	10.0	11.5	
24 Acetone	43	2.299	2.298	0.001	100	75504	20.0	16.8	
25 Iodomethane	142	2.370	2.358	0.012	98	253950	10.0	10.4	
26 Carbon disulfide	76	2.429	2.417	0.012	99	409283	10.0	10.1	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	86	94654	10.0	10.3	
29 Methyl acetate	43	2.583	2.571	0.012	96	179186	20.0	19.6	
30 Methylene Chloride	84	2.654	2.642	0.012	86	148216	10.0	9.83	
31 2-Methyl-2-propanol	59	2.784	2.784	0.000	99	160833	100.0	87.4	
32 Acrylonitrile	53	2.855	2.855	0.000	99	460333	100.0	98.9	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	94	166535	10.0	10.4	
34 Methyl tert-butyl ether	73	2.902	2.902	0.000	93	406634	10.0	10.3	
35 Hexane	86	3.127	3.115	0.012	88	41725	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	246486	10.0	10.6	
37 Vinyl acetate	43	3.293	3.281	0.012	97	241829	10.0	9.62	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	80	169379	10.0	10.2	
42 2,2-Dichloropropane	97	3.719	3.718	0.001	72	42131	10.0	11.1	
43 2-Butanone (MEK)	43	3.742	3.742	0.000	98	114545	20.0	17.2	
46 Chlorobromomethane	128	3.908	3.908	0.000	83	81061	10.0	9.81	
49 Tetrahydrofuran	42	3.979	3.967	0.012	83	75213	20.0	19.2	
48 Chloroform	83	3.979	3.979	0.000	93	253696	10.0	10.0	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	98	226278	10.0	10.2	
51 Cyclohexane	56	4.192	4.180	0.012	83	199902	10.0	10.8	
53 1,1-Dichloropropene	75	4.275	4.275	0.000	95	201601	10.0	10.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	94	206652	10.0	10.1	
54 Isobutyl alcohol	41	4.393	4.393	0.000	94	114166	250.0	238.8	
55 Benzene	78	4.440	4.440	0.000	95	574397	10.0	10.1	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	99	188586	10.0	10.2	
58 n-Heptane	100	4.689	4.689	0.000	82	35418	10.0	10.7	
60 Trichloroethene	130	4.985	4.985	0.000	97	179111	10.0	10.1	
62 Methylcyclohexane	83	5.162	5.150	0.012	87	218131	10.0	10.9	
63 1,2-Dichloropropane	63	5.174	5.174	0.000	95	125385	10.0	10.6	
64 Dibromomethane	93	5.269	5.269	0.000	92	86580	10.0	9.97	
66 1,4-Dioxane	88	5.304	5.304	0.000	88	26089	200.0	145.4	
67 Dichlorobromomethane	83	5.411	5.411	0.000	99	182159	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	5.683	5.671	0.012	92	85339	10.0	10.1	
70 cis-1,3-Dichloropropene	75	5.801	5.801	0.000	97	216118	10.0	10.0	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.943	0.000	93	237362	20.0	20.0	
72 Toluene	91	6.097	6.097	0.000	99	616594	10.0	9.97	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	91	187970	10.0	9.36	
74 Ethyl methacrylate	69	6.393	6.381	0.012	85	160062	10.0	10.2	
75 1,1,2-Trichloroethane	97	6.452	6.440	0.012	89	122846	10.0	10.0	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	139184	10.0	10.6	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	88	207644	10.0	10.2	
78 2-Hexanone	43	6.689	6.689	0.001	93	181066	20.0	20.8	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	137672	10.0	10.2	
82 Ethylene Dibromide	107	6.902	6.901	0.001	99	129379	10.0	10.0	
84 Chlorobenzene	112	7.351	7.351	0.000	97	409667	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	94	138267	10.0	10.2	
86 Ethylbenzene	106	7.470	7.469	0.001	97	220495	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.576	7.576	0.000	97	267564	10.0	10.3	
89 o-Xylene	106	7.943	7.943	0.000	95	259795	10.0	10.9	
88 Styrene	104	7.955	7.955	0.000	94	364651	10.0	10.5	
90 Bromoform	173	8.120	8.120	0.000	97	81292	10.0	9.11	
91 Isopropylbenzene	105	8.298	8.298	0.000	95	645571	10.0	10.6	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	77	151615	10.0	10.0	
95 Bromobenzene	156	8.570	8.570	0.000	91	169468	10.0	10.1	
96 1,2,3-Trichloropropane	110	8.617	8.605	0.012	83	56911	10.0	9.83	
97 trans-1,4-Dichloro-2-butene	53	8.629	8.629	0.000	77	42300	10.0	9.83	
98 N-Propylbenzene	120	8.688	8.688	0.000	98	189067	10.0	10.6	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	157698	10.0	10.3	
100 1,3,5-Trimethylbenzene	105	8.866	8.866	0.000	88	507306	10.0	10.3	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	161531	10.0	10.1	
103 tert-Butylbenzene	119	9.174	9.173	0.001	91	455517	10.0	10.3	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	95	517914	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	609221	10.0	10.8	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	97	309806	10.0	10.3	
107 4-Isopropyltoluene	119	9.540	9.540	0.000	97	529687	10.0	10.7	
108 1,4-Dichlorobenzene	146	9.564	9.576	-0.012	95	315092	10.0	10.3	
112 1,2-Dichlorobenzene	146	9.931	9.931	0.000	97	290856	10.0	10.1	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	391670	10.0	10.1	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	40406	10.0	10.7	
116 1,2,4-Trichlorobenzene	180	11.516	11.516	0.000	95	174348	10.0	10.0	
117 Hexachlorobutadiene	225	11.706	11.706	0.000	95	54094	10.0	9.03	
118 Naphthalene	128	11.753	11.753	0.000	96	525229	10.0	10.0	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	96	168935	10.0	10.1	
S 129 Total BTEX	1				0		50.0	51.6	
S 128 Trihalomethanes, Total	1				0		40.0	39.7	
S 132 Xylenes, Total	106				0		20.0	21.2	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00382	Amount Added:	8.00	Units: uL	
VMFASAW_00359	Amount Added:	8.00	Units: uL	
VMFASGW_00391	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

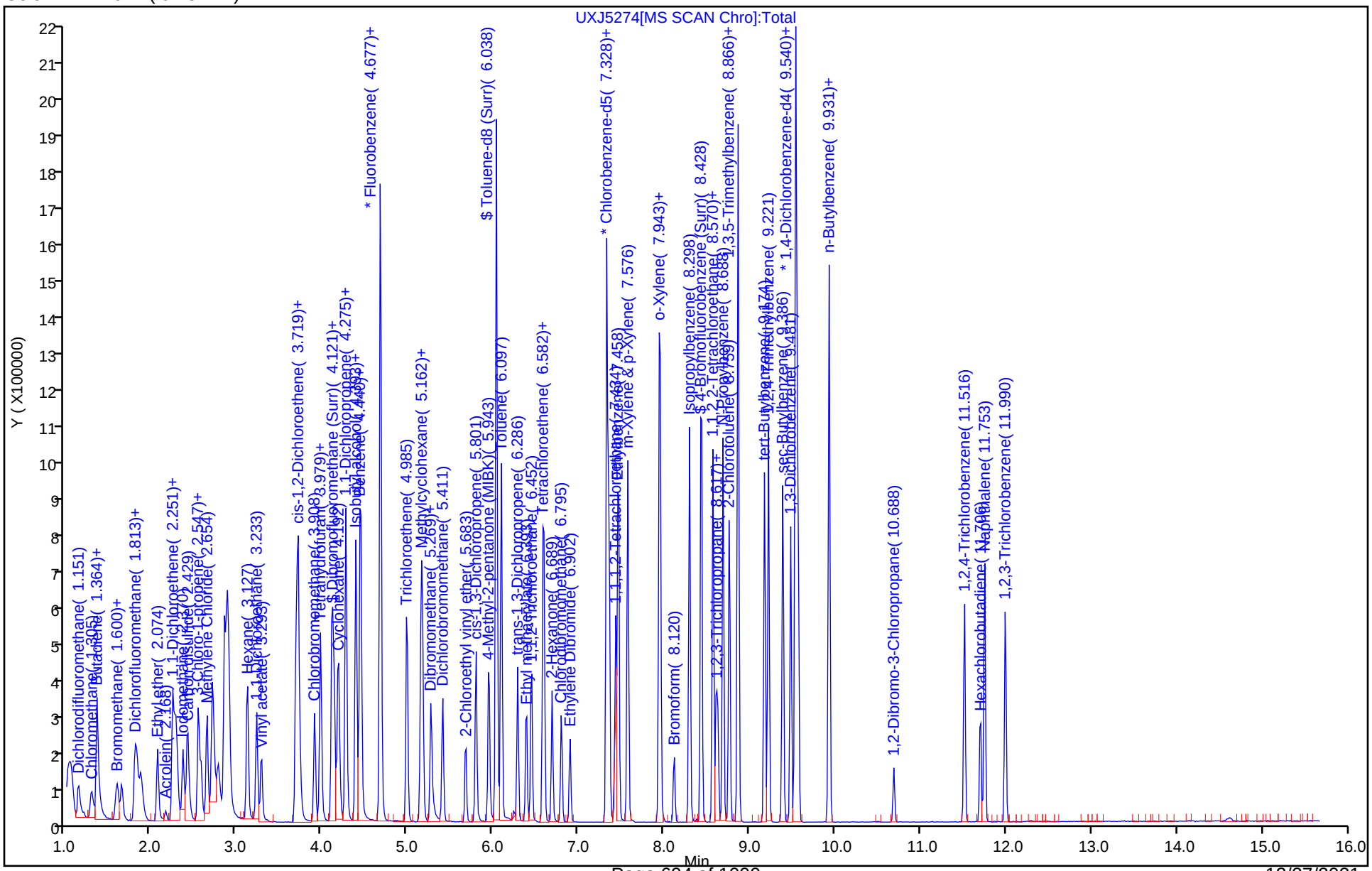
Report Date: 18-Jan-2021 09:31:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5274.D

Injection Date:	15-Jan-2021 13:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2548	0.2367		0.0186	0.0200	-7.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2719		0.0188	0.0200	-5.9	50.0
Toluene-d8 (Surr)	Ave	1.423	1.305		0.0183	0.0200	-8.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4431		0.0178	0.0200	-11.1	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

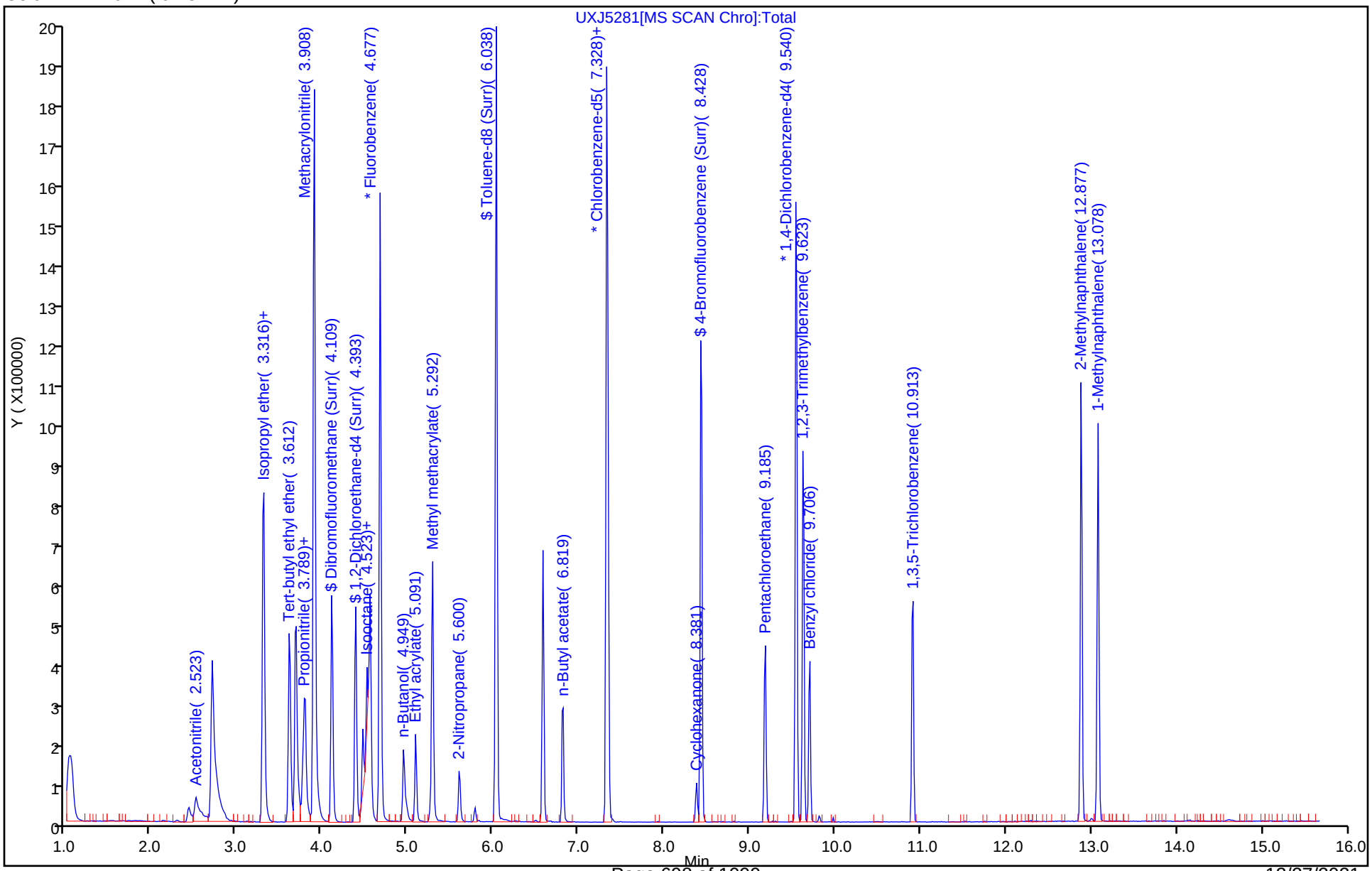
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-469338/15 Calibration Date: 01/15/2021 15:55

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 13:42

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 15:33

Lab File ID: UXJ5281.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Qua		0.0243		0.112	0.100	12.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3560	0.3676		0.0103	0.0100	3.3	50.0
Isopropyl ether	Ave	0.2182	0.2176		0.00997	0.0100	-0.3	50.0
Tert-butyl ethyl ether	Ave	0.6105	0.6145		0.0101	0.0100	0.7	50.0
Propionitrile	Ave	0.0327	0.0329		0.101	0.100	0.9	50.0
Ethyl acetate	Ave	0.2110	0.2208		0.0209	0.0200	4.7	50.0
Methacrylonitrile	Ave	0.1278	0.1289		0.101	0.100	0.9	50.0
Tert-amyl methyl ether	Ave	0.6525	0.6551		0.0100	0.0100	0.4	50.0
n-Butanol	Ave	0.0112	0.0108		0.240	0.250	-4.0	50.0
Ethyl acrylate	Ave	0.2791	0.2897		0.0104	0.0100	3.8	50.0
Methyl methacrylate	Ave	0.1775	0.1876		0.0211	0.0200	5.7	50.0
2-Nitropropane	Ave	0.0615	0.0576		0.0187	0.0200	-6.4	50.0
n-Butyl acetate	Ave	0.2958	0.3050		0.0103	0.0100	3.1	50.0
1-Chlorohexane	Ave	0.4822	0.4843		0.0100	0.0100	0.4	50.0
Cyclohexanone	Ave	0.0212	0.0192		0.0904	0.100	-9.6	50.0
Pentachloroethane	Ave	0.1300	0.0945		0.0145	0.0200	-27.3	50.0
1,2,3-Trimethylbenzene	Ave	2.497	2.446		0.00980	0.0100	-2.0	50.0
Benzyl chloride	Ave	0.3080	0.2891		0.00939	0.0100	-6.1	50.0
1,3,5-Trichlorobenzene	Ave	0.9535	0.8699		0.00912	0.0100	-8.8	50.0
2-Methylnaphthalene	Ave	1.501	1.191		0.0159	0.0200	-20.7	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 15-Jan-2021 15:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0105695-015
Misc. Info.: J211015A-IC,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jan-2021 09:28:08 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1641

First Level Reviewer: evansle Date: 18-Jan-2021 08:57:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	1208129	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	83	881966	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.552	-0.012	95	428396	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	286001	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.393	0.000	96	328522	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.038	6.038	0.000	92	1150596	20.0	18.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	98	390777	20.0	17.8	
27 Acetonitrile	41	2.523	2.523	0.000	97	146813	100.0	112.0	
38 2-Chloro-1,3-butadiene	53	3.304	3.316	-0.012	90	222037	10.0	10.3	
39 Isopropyl ether	87	3.316	3.316	0.000	95	131420	10.0	9.97	
40 Tert-butyl ethyl ether	59	3.612	3.624	-0.012	95	371221	10.0	10.1	
44 Propionitrile	54	3.778	3.778	0.000	99	199019	100.0	100.9	
45 Ethyl acetate	43	3.801	3.801	0.000	98	266807	20.0	20.9	
47 Methacrylonitrile	41	3.908	3.908	0.000	88	778754	100.0	100.9	
126 Isooctane	57	4.523	4.523	0.000	95	309168	10.0	10.3	
57 Tert-amyl methyl ether	73	4.559	4.559	0.000	97	395734	10.0	10.0	
59 n-Butanol	56	4.949	4.961	-0.012	85	118924	250.0	240.1	
61 Ethyl acrylate	55	5.091	5.091	0.000	99	174979	10.0	10.4	
65 Methyl methacrylate	41	5.292	5.292	0.000	82	226682	20.0	21.1	
68 2-Nitropropane	41	5.600	5.612	-0.012	98	69535	20.0	18.7	
81 n-Butyl acetate	43	6.807	6.819	-0.012	94	184225	10.0	10.3	
83 1-Chlorohexane	91	7.351	7.351	0.000	89	213585	10.0	10.0	
93 Cyclohexanone	55	8.381	8.381	0.000	88	41142	100.0	90.4	
102 Pentachloroethane	167	9.185	9.185	0.000	94	83333	20.0	14.5	
109 1,2,3-Trimethylbenzene	105	9.623	9.623	0.000	98	524002	10.0	9.80	
110 Benzyl chloride	126	9.706	9.706	0.000	99	61916	10.0	9.39	
115 1,3,5-Trichlorobenzene	180	10.913	10.913	0.000	98	186335	10.0	9.12	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	100	510070	20.0	15.9	
127 1-Methylnaphthalene	142	13.078	13.078	0.000	93	465534	20.0	15.9	

QC Flag Legend

Processing Flags

Reagents:

VMFASA9W_00305	Amount Added:	8.00	Units: uL	
VM50IS_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM50SS_STK_00086	Amount Added:	2.00	Units: uL	Run Reagent
VM40ML_VIALS_00015	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00177	Amount Added:	0.00	Units:	Run Reagent

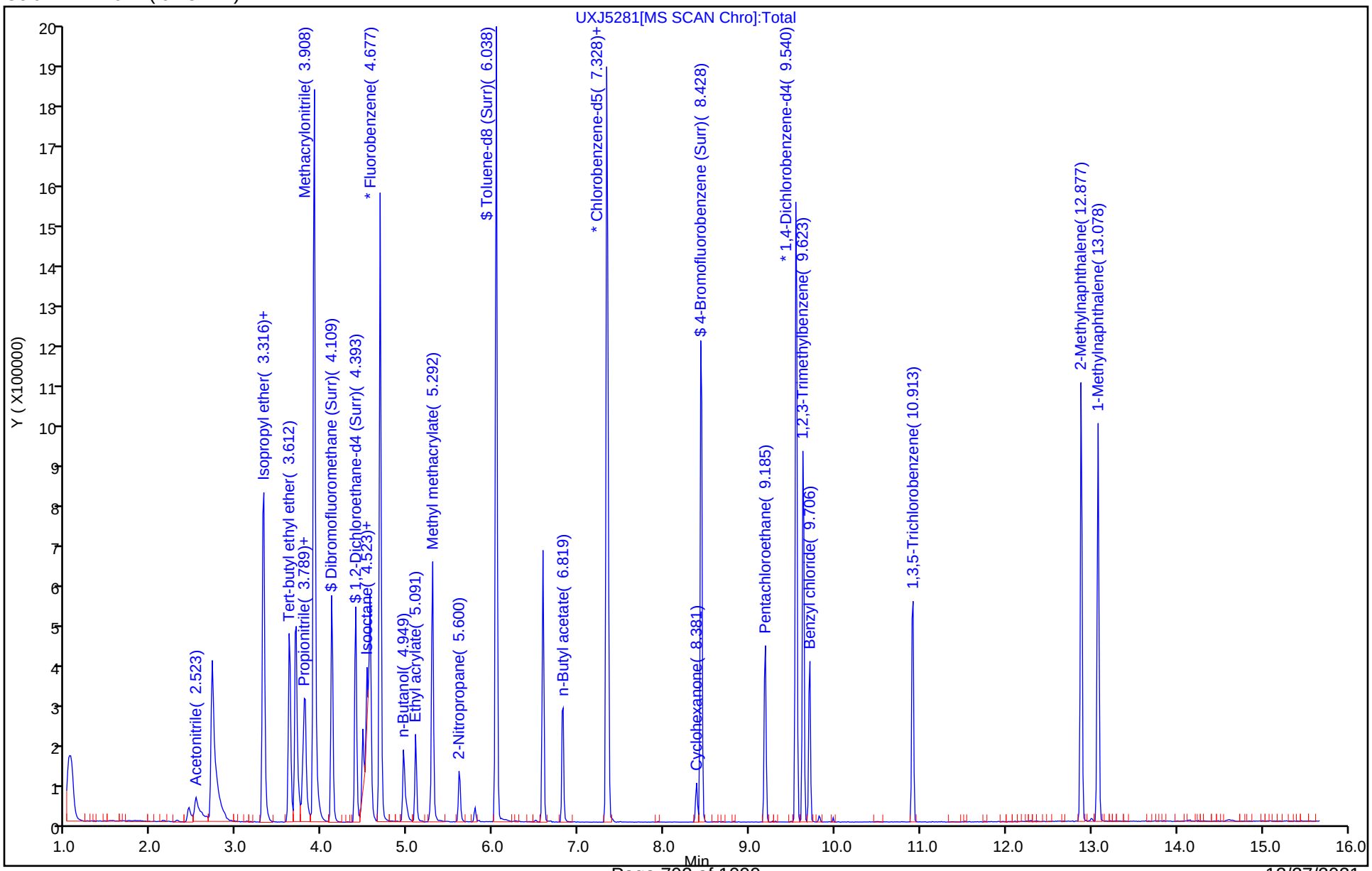
Report Date: 18-Jan-2021 09:31:12 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5281.D

Injection Date:	15-Jan-2021 15:55:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517187/2 Calibration Date: 12/20/2021 12:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ3205.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2647	0.2036		0.00769	0.0100	-23.1	50.0
Chloromethane	Ave	0.2085	0.2622	0.1000	0.0126	0.0100	25.7	50.0
Vinyl chloride	Ave	0.2484	0.2491		0.0100	0.0100	0.3	20.0
Butadiene	Ave	0.2195	0.2786		0.0127	0.0100	26.9	50.0
Bromomethane	Ave	0.1787	0.1484		0.00830	0.0100	-17.0	50.0
Chloroethane	Ave	0.1469	0.1487		0.0101	0.0100	1.2	50.0
Dichlorofluoromethane	Ave	0.3641	0.3298		0.00906	0.0100	-9.4	50.0
Trichlorofluoromethane	Ave	0.4246	0.2882		0.00679	0.0100	-32.1	50.0
Ethyl ether	Ave	0.1891	0.2619		0.0139	0.0100	38.5	50.0
Acrolein	Ave	0.0073	0.0130		0.0889	0.0500	77.8*	50.0
1,1-Dichloroethene	Ave	0.2398	0.2360		0.00984	0.0100	-1.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1830	0.1676		0.00916	0.0100	-8.4	50.0
Acetone	Qua		0.1253		0.0365	0.0200	82.5*	50.0
Iodomethane	Ave	0.4292	0.3764		0.00877	0.0100	-12.3	50.0
Carbon disulfide	Ave	0.7139	0.7094		0.00994	0.0100	-0.6	50.0
3-Chloro-1-propene	Ave	0.1609	0.1835		0.0114	0.0100	14.1	50.0
Methyl acetate	Ave	0.1601	0.3060		0.0382	0.0200	91.1*	50.0
Methylene Chloride	Ave	0.2646	0.2667		0.0101	0.0100	0.8	50.0
2-Methyl-2-propanol	Ave	0.0323	0.0363		0.112	0.100	12.4	50.0
Acrylonitrile	Ave	0.0817	0.1517		0.186	0.100	85.7*	50.0
trans-1,2-Dichloroethene	Ave	0.2819	0.2913		0.0103	0.0100	3.3	50.0
Methyl tert-butyl ether	Ave	0.6940	0.7674		0.0111	0.0100	10.6	50.0
Hexane	Ave	0.0646	0.0751		0.0116	0.0100	16.3	20.0
1,1-Dichloroethane	Ave	0.4093	0.5222	0.1000	0.0128	0.0100	27.6	50.0
Vinyl acetate	Ave	0.4414	0.7080		0.0160	0.0100	60.4*	50.0
2,2-Dichloropropane	Ave	0.0667	0.0726		0.0109	0.0100	8.9	50.0
cis-1,2-Dichloroethene	Ave	0.2905	0.2950		0.0102	0.0100	1.5	50.0
2-Butanone (MEK)	Ave	0.1171	0.2048		0.0350	0.0200	74.9*	50.0
Chlorobromomethane	Ave	0.1450	0.1407		0.00970	0.0100	-3.0	50.0
Tetrahydrofuran	Ave	0.0687	0.1386		0.0403	0.0200	101.7*	50.0
Chloroform	Ave	0.4451	0.4565		0.0103	0.0100	2.6	20.0
1,1,1-Trichloroethane	Ave	0.3903	0.3809		0.00976	0.0100	-2.4	50.0
Cyclohexane	Ave	0.3237	0.4403		0.0136	0.0100	36.0	50.0
1,1-Dichloropropene	Ave	0.3529	0.3894		0.0110	0.0100	10.3	50.0
Carbon tetrachloride	Ave	0.3575	0.3402		0.00951	0.0100	-4.9	50.0
Isobutyl alcohol	Ave	0.0117	0.0260		0.554	0.250	121.6*	50.0
Benzene	Ave	0.997	1.144		0.0115	0.0100	14.7	50.0
1,2-Dichloroethane	Ave	0.3233	0.3529		0.0109	0.0100	9.1	50.0
n-Heptane	Ave	0.0579	0.0584		0.0101	0.0100	0.8	50.0
Trichloroethene	Ave	0.3122	0.2893		0.00927	0.0100	-7.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517187/2 Calibration Date: 12/20/2021 12:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ3205.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3527	0.3719		0.0105	0.0100	5.5	50.0
1,2-Dichloropropane	Ave	0.2085	0.2600		0.0125	0.0100	24.7*	20.0
Dibromomethane	Ave	0.1524	0.1473		0.00967	0.0100	-3.3	50.0
1,4-Dioxane	Qua		0.0027		0.171	0.200	-14.4	50.0
Dichlorobromomethane	Ave	0.3068	0.2933		0.00956	0.0100	-4.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1485	0.1769		0.0238	0.0200	19.1	50.0
cis-1,3-Dichloropropene	Ave	0.3795	0.3706		0.00976	0.0100	-2.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2083	0.3514		0.0337	0.0200	68.7*	50.0
Toluene	Ave	1.519	1.977		0.0130	0.0100	30.2*	20.0
trans-1,3-Dichloropropene	Ave	0.4928	0.5429		0.0110	0.0100	10.2	50.0
Ethyl methacrylate	Ave	0.3857	0.5662		0.0147	0.0100	46.8	50.0
1,1,2-Trichloroethane	Ave	0.3012	0.3415		0.0113	0.0100	13.4	50.0
Tetrachloroethene	Ave	0.3233	0.3724		0.0115	0.0100	15.2	50.0
1,3-Dichloropropane	Ave	0.5016	0.6498		0.0130	0.0100	29.5	50.0
2-Hexanone	Ave	0.2134	0.4318		0.0405	0.0200	102.3*	50.0
Chlorodibromomethane	Ave	0.3328	0.3331		0.0100	0.0100	0.0	50.0
Ethylene Dibromide	Ave	0.3165	0.3441		0.0109	0.0100	8.7	50.0
Chlorobenzene	Ave	0.9925	1.042	0.3000	0.0105	0.0100	5.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3327	0.3523		0.0106	0.0100	5.9	50.0
Ethylbenzene	Ave	0.5200	0.5422		0.0104	0.0100	4.3	20.0
m-Xylene & p-Xylene	Ave	0.6376	0.6433		0.0101	0.0100	0.9	50.0
o-Xylene	Ave	0.5870	0.6112		0.0104	0.0100	4.1	50.0
Styrene	Ave	0.8528	0.9899		0.0116	0.0100	16.1	50.0
Bromoform	Lin1		0.2389	0.1000	0.0108	0.0100	8.2	50.0
Isopropylbenzene	Ave	1.500	1.519		0.0101	0.0100	1.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7764	0.9683	0.3000	0.0125	0.0100	24.7	50.0
Bromobenzene	Ave	0.8603	0.7316		0.00850	0.0100	-15.0	50.0
1,2,3-Trichloropropane	Ave	0.2977	0.3052		0.0103	0.0100	2.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2212	0.1527		0.00690	0.0100	-31.0	50.0
N-Propylbenzene	Ave	0.9157	0.7578		0.00828	0.0100	-17.2	50.0
2-Chlorotoluene	Ave	0.7837	0.7089		0.00905	0.0100	-9.5	50.0
1,3,5-Trimethylbenzene	Ave	2.541	2.149		0.00846	0.0100	-15.4	50.0
4-Chlorotoluene	Ave	0.8219	0.7278		0.00886	0.0100	-11.4	50.0
tert-Butylbenzene	Ave	2.265	1.737		0.00767	0.0100	-23.3	50.0
1,2,4-Trimethylbenzene	Ave	2.513	2.188		0.00871	0.0100	-12.9	50.0
sec-Butylbenzene	Ave	2.907	2.454		0.00844	0.0100	-15.6	50.0
1,3-Dichlorobenzene	Ave	1.550	1.374		0.00886	0.0100	-11.4	50.0
4-Isopropyltoluene	Ave	2.545	2.165		0.00851	0.0100	-14.9	50.0
1,4-Dichlorobenzene	Ave	1.570	1.448		0.00922	0.0100	-7.8	50.0
1,2-Dichlorobenzene	Ave	1.479	1.311		0.00886	0.0100	-11.4	50.0
n-Butylbenzene	Ave	1.990	1.703		0.00856	0.0100	-14.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517187/2 Calibration Date: 12/20/2021 12:08

Instrument ID: A3UX11 Calib Start Date: 01/15/2021 11:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/15/2021 12:58

Lab File ID: UXJ3205.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1946	0.2112		0.0109	0.0100	8.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8933	0.5509		0.00617	0.0100	-38.3	50.0
Hexachlorobutadiene	Ave	0.3079	0.2309		0.00750	0.0100	-25.0	50.0
Naphthalene	Ave	2.693	1.521		0.00565	0.0100	-43.5	50.0
1,2,3-Trichlorobenzene	Ave	0.8577	0.4559		0.00532	0.0100	-46.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2548	0.2280		0.0179	0.0200	-10.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2890	0.2751		0.0190	0.0200	-4.8	50.0
Toluene-d8 (Surr)	Ave	1.423	1.623		0.0228	0.0200	14.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4984	0.4476		0.0180	0.0200	-10.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3205.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Dec-2021 12:08:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-002
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:07 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 20-Dec-2021 12:47:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2232479	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.327	0.000	85	1246053	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	692960	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	508907	20.0	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.381	4.381	0.000	98	614130	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	6.026	6.026	0.000	93	2022828	20.0	22.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	92	557714	20.0	18.0	
10 Dichlorodifluoromethane	85	1.139	1.139	0.000	99	227314	10.0	7.69	
12 Chloromethane	50	1.293	1.293	0.000	99	292632	10.0	12.6	
14 Vinyl chloride	62	1.352	1.352	0.000	97	278075	10.0	10.0	
13 Butadiene	54	1.364	1.364	0.000	94	310999	10.0	12.7	
15 Bromomethane	94	1.600	1.600	0.000	91	165677	10.0	8.30	
16 Chloroethane	64	1.648	1.648	0.000	100	165998	10.0	10.1	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	97	368179	10.0	9.06	
18 Trichlorofluoromethane	101	1.825	1.825	0.000	98	321654	10.0	6.79	
19 Ethyl ether	59	2.062	2.062	0.000	93	292372	10.0	13.9	
20 Acrolein	56	2.157	2.157	0.000	99	72499	50.0	88.9	
21 1,1-Dichloroethene	96	2.239	2.239	0.000	97	263475	10.0	9.84	
23 112TCTFE	151	2.287	2.287	0.000	94	187096	10.0	9.16	
24 Acetone	43	2.287	2.287	0.000	100	279765	20.0	36.5	
25 Iodomethane	142	2.358	2.358	0.000	98	420127	10.0	8.77	
26 Carbon disulfide	76	2.417	2.417	0.000	99	791888	10.0	9.94	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	92	204858	10.0	11.4	
29 Methyl acetate	43	2.571	2.571	0.000	98	683059	20.0	38.2	
30 Methylene Chloride	84	2.642	2.642	0.000	93	297698	10.0	10.1	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	98	405253	100.0	112.4	
32 Acrylonitrile	53	2.843	2.843	0.000	99	1693647	100.0	185.7	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	99	325113	10.0	10.3	
34 Methyl tert-butyl ether	73	2.890	2.890	0.000	97	856549	10.0	11.1	
35 Hexane	86	3.115	3.115	0.000	93	83850	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.221	3.221	0.000	96	582881	10.0	12.8	
37 Vinyl acetate	43	3.281	3.281	0.000	97	790345	10.0	16.0	
41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	329237	10.0	10.2	
42 2,2-Dichloropropane	97	3.707	3.707	0.000	76	81075	10.0	10.9	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	457291	20.0	35.0	
46 Chlorobromomethane	128	3.908	3.908	0.000	97	157102	10.0	9.70	
49 Tetrahydrofuran	42	3.955	3.955	0.000	88	309497	20.0	40.3	
48 Chloroform	83	3.979	3.979	0.000	94	509613	10.0	10.3	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	99	425164	10.0	9.76	
51 Cyclohexane	56	4.180	4.180	0.000	91	491527	10.0	13.6	
53 1,1-Dichloropropene	75	4.263	4.263	0.000	95	434619	10.0	11.0	
52 Carbon tetrachloride	117	4.275	4.275	0.000	83	379711	10.0	9.51	
54 Isobutyl alcohol	41	4.381	4.381	0.000	81	404944	250.0	553.9	
55 Benzene	78	4.440	4.440	0.000	96	1276461	10.0	11.5	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	393871	10.0	10.9	
58 n-Heptane	100	4.677	4.677	0.000	88	65152	10.0	10.1	
60 Trichloroethene	130	4.985	4.985	0.000	96	322929	10.0	9.27	
62 Methylcyclohexane	83	5.150	5.150	0.000	93	415164	10.0	10.5	
63 1,2-Dichloropropane	63	5.162	5.162	0.000	97	290187	10.0	12.5	
64 Dibromomethane	93	5.269	5.269	0.000	94	164396	10.0	9.67	
66 1,4-Dioxane	88	5.292	5.292	0.000	97	60192	200.0	171.2	
67 Dichlorobromomethane	83	5.399	5.399	0.000	99	327344	10.0	9.56	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	91	395020	20.0	23.8	
70 cis-1,3-Dichloropropene	75	5.789	5.789	0.000	96	413662	10.0	9.76	
71 4-Methyl-2-pentanone (MIBK)	43	5.931	5.931	0.000	97	784498	20.0	33.7	
72 Toluene	91	6.085	6.085	0.000	98	1231494	10.0	13.0	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	93	338262	10.0	11.0	
74 Ethyl methacrylate	69	6.381	6.381	0.000	90	352780	10.0	14.7	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	92	212790	10.0	11.3	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	232034	10.0	11.5	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	90	404820	10.0	13.0	
78 2-Hexanone	43	6.677	6.677	0.000	97	537993	20.0	40.5	
80 Chlorodibromomethane	129	6.795	6.795	0.000	90	207560	10.0	10.0	
82 Ethylene Dibromide	107	6.890	6.890	0.000	98	214393	10.0	10.9	
84 Chlorobenzene	112	7.351	7.351	0.000	96	649325	10.0	10.5	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	219479	10.0	10.6	
86 Ethylbenzene	106	7.458	7.458	0.000	98	337803	10.0	10.4	
87 m-Xylene & p-Xylene	106	7.564	7.564	0.000	98	400786	10.0	10.1	
89 o-Xylene	106	7.943	7.943	0.000	94	380823	10.0	10.4	
88 Styrene	104	7.955	7.955	0.000	95	616707	10.0	11.6	
90 Bromoform	173	8.108	8.108	0.000	96	148864	10.0	10.8	
91 Isopropylbenzene	105	8.286	8.286	0.000	96	946280	10.0	10.1	
95 Bromobenzene	156	8.570	8.570	0.000	91	253501	10.0	8.50	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	93	335501	10.0	12.5	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	86	105758	10.0	10.3	
97 trans-1,4-Dichloro-2-butene	53	8.617	8.617	0.000	78	52911	10.0	6.90	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	262548	10.0	8.28	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	245623	10.0	9.05	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	96	744472	10.0	8.46	
101 4-Chlorotoluene	126	8.866	8.866	0.000	98	252182	10.0	8.86	
103 tert-Butylbenzene	119	9.173	9.173	0.000	92	601684	10.0	7.67	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	757940	10.0	8.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.386	9.386	0.000	93	850385	10.0	8.44	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	475966	10.0	8.86	
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	750112	10.0	8.51	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	501673	10.0	9.22	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	96	454151	10.0	8.86	
111 n-Butylbenzene	91	9.931	9.931	0.000	98	590127	10.0	8.56	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	88	73185	10.0	10.9	
116 1,2,4-Trichlorobenzene	180	11.505	11.505	0.000	94	190887	10.0	6.17	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	95	80006	10.0	7.50	
118 Naphthalene	128	11.741	11.741	0.000	97	527089	10.0	5.65	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	157968	10.0	5.32	
S 129 Total BTEX	1				0		50.0	55.4	
S 128 Trihalomethanes, Total	1				0		40.0	40.6	
S 132 Xylenes, Total	106				0		20.0	20.5	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00420	Amount Added:	8.00	Units: uL	
VMRGAS_00411	Amount Added:	8.00	Units: uL	
VMRPRIMW_00464	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

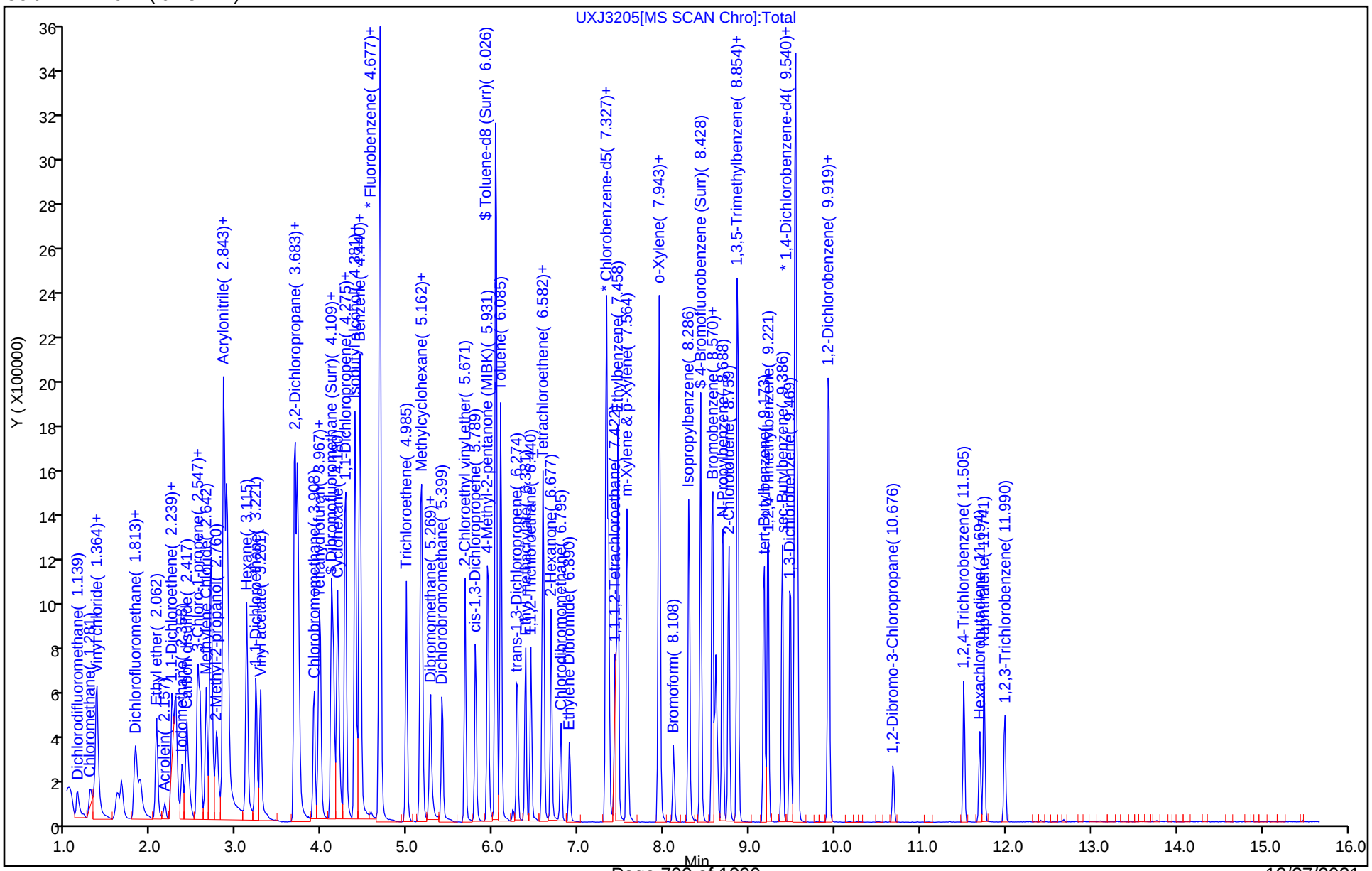
Report Date: 21-Dec-2021 09:02:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3205.D

Injection Date:	20-Dec-2021 12:08:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-498246/12 Calibration Date: 08/05/2021 15:56

Instrument ID: A3UX23 Calib Start Date: 08/04/2021 13:39

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/04/2021 16:09

Lab File ID: 230147.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2179	0.2045		0.0258	0.0275	-6.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3477	0.3307		0.0262	0.0275	-4.9	50.0
Toluene-d8 (Surr)	Ave	1.476	1.424		0.0265	0.0275	-3.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4540	0.4401		0.0267	0.0275	-3.0	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230147.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 05-Aug-2021 15:56:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111917-012
Operator ID: 002808 Instrument ID: A3UX23
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Aug-2021 15:30:52 Calib Date: 05-Aug-2021 15:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230145.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

First Level Reviewer: macenczaks Date: 06-Aug-2021 15:09:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1464754	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	91	845794	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	380756	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	299599	27.5	25.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.001	96	484419	27.5	26.2	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	1204382	27.5	26.5	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	83	372258	27.5	26.7	
25 Acetonitrile	41	2.826	2.826	0.000	99	843921	250.0	251.5	
37 2-Chloro-1,3-butadiene	53	4.115	4.116	-0.001	91	886453	25.0	24.8	
36 Isopropyl ether	87	4.186	4.187	0.000	97	313847	25.0	25.6	
38 Tert-butyl ethyl ether	59	4.731	4.731	0.000	95	1356893	25.0	26.9	
42 Propionitrile	54	4.979	4.979	0.000	99	1146926	250.0	254.8	
43 Ethyl acetate	43	5.050	5.050	0.000	99	1654313	50.0	51.9	
44 Methacrylonitrile	41	5.180	5.180	0.000	98	5586087	250.0	261.3	
163 Isooctane	57	6.080	6.080	0.000	98	1660600	25.0	25.8	
55 Tert-amyl methyl ether	73	6.151	6.151	0.000	86	909656	25.0	25.6	
57 n-Butanol	56	6.778	6.778	0.000	94	492963	625.0	677.3	E
59 Ethyl acrylate	55	6.908	6.908	0.000	98	838803	25.0	27.4	
62 Methyl methacrylate	41	7.145	7.145	0.000	91	1308032	50.0	55.5	
66 2-Nitropropane	41	7.511	7.512	-0.001	97	364036	50.0	51.2	
77 n-Butyl acetate	43	8.943	8.943	0.000	99	987149	25.0	25.7	
81 1-Chlorohexane	91	9.499	9.499	0.000	79	392539	25.0	25.9	
91 Cyclohexanone	55	10.588	10.588	0.000	97	170948	250.0	280.7	E
103 Pentachloroethane	167	11.416	11.416	0.000	96	278138	50.0	71.4	
109 1,2,3-Trimethylbenzene	105	11.866	11.866	0.000	99	1043837	25.0	24.9	
110 Benzyl chloride	126	11.949	11.949	0.000	98	119883	25.0	24.6	
114 1,3,5-Trichlorobenzene	180	13.156	13.156	0.000	95	362821	25.0	24.4	
119 2-Methylnaphthalene	142	15.132	15.132	0.000	93	1216710	50.0	48.5	
162 1-Methylnaphthalene	142	15.333	15.333	0.000	0	1117122	50.0	42.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASA9W_00329	Amount Added:	20.00	Units: uL	
vm125UX21_SS_00001	Amount Added:	1.10	Units: uL	Run Reagent
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL	Run Reagent

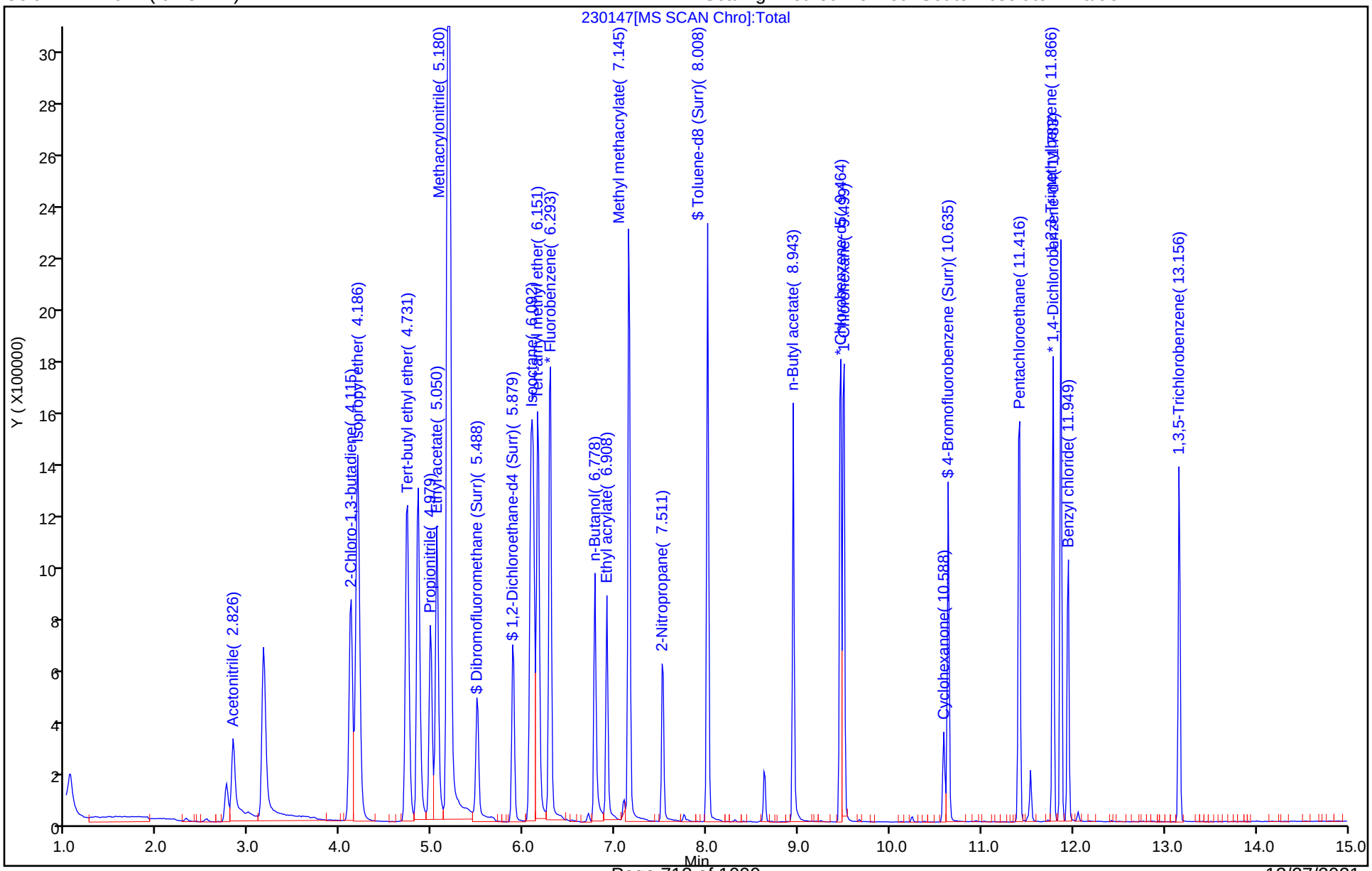
Report Date: 12-Aug-2021 15:30:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230147.D

Injection Date:	05-Aug-2021 15:56:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-498246/12 Calibration Date: 08/05/2021 15:56

Instrument ID: A3UX23 Calib Start Date: 08/05/2021 12:35

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/05/2021 15:05

Lab File ID: 230147.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0630	0.0634		0.252	0.250	0.6	50.0
2-Chloro-1,3-butadiene	Ave	0.6719	0.6657		0.0248	0.0250	-0.9	50.0
Isopropyl ether	Ave	0.2304	0.2357		0.0256	0.0250	2.3	50.0
Tert-butyl ethyl ether	Ave	0.9464	1.019		0.0269	0.0250	7.7	50.0
Propionitrile	Ave	0.0845	0.0861		0.255	0.250	1.9	50.0
Ethyl acetate	Ave	0.5983	0.6212		0.0519	0.0500	3.8	50.0
Methacrylonitrile	Ave	0.4013	0.4195		0.261	0.250	4.5	50.0
Tert-amyl methyl ether	Ave	0.6678	0.6831		0.0256	0.0250	2.3	50.0
n-Butanol	Ave	0.0137	0.0148		0.677	0.625	8.4	50.0
Ethyl acrylate	Ave	0.5748	0.6299		0.0274	0.0250	9.6	50.0
Methyl methacrylate	Ave	0.4428	0.4912		0.0555	0.0500	10.9	50.0
2-Nitropropane	Ave	0.1334	0.1367		0.0512	0.0500	2.5	50.0
n-Butyl acetate	Lin1		0.7413		0.0257	0.0250	2.8	50.0
1-Chlorohexane	Ave	0.4925	0.5105		0.0259	0.0250	3.7	50.0
Cyclohexanone	Ave	0.0440	0.0494		0.281	0.250	12.3	50.0
Pentachloroethane	Ave	0.1266	0.1809		0.0714	0.0500	42.9	50.0
1,2,3-Trimethylbenzene	Lin1		3.016		0.0249	0.0250	-0.4	50.0
Benzyl chloride	Lin1		0.3463		0.0246	0.0250	-1.7	50.0
1,3,5-Trichlorobenzene	Ave	1.075	1.048		0.0244	0.0250	-2.5	50.0
2-Methylnaphthalene	Qua		1.758		0.0485	0.0500	-3.0	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230147.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 05-Aug-2021 15:56:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0111917-012
Operator ID: 002808 Instrument ID: A3UX23
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Aug-2021 15:30:52 Calib Date: 05-Aug-2021 15:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230145.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

First Level Reviewer: macenczaks Date: 06-Aug-2021 15:09:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.293	0.000	98	1464754	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	91	845794	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	380756	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	299599	27.5	25.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.001	96	484419	27.5	26.2	
$ 6 Toluene-d8 (Surr)	98	8.008	8.008	0.000	96	1204382	27.5	26.5	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	83	372258	27.5	26.7	
25 Acetonitrile	41	2.826	2.826	0.000	99	843921	250.0	251.5	
37 2-Chloro-1,3-butadiene	53	4.115	4.116	-0.001	91	886453	25.0	24.8	
36 Isopropyl ether	87	4.186	4.187	0.000	97	313847	25.0	25.6	
38 Tert-butyl ethyl ether	59	4.731	4.731	0.000	95	1356893	25.0	26.9	
42 Propionitrile	54	4.979	4.979	0.000	99	1146926	250.0	254.8	
43 Ethyl acetate	43	5.050	5.050	0.000	99	1654313	50.0	51.9	
44 Methacrylonitrile	41	5.180	5.180	0.000	98	5586087	250.0	261.3	
163 Isooctane	57	6.080	6.080	0.000	98	1660600	25.0	25.8	
55 Tert-amyl methyl ether	73	6.151	6.151	0.000	86	909656	25.0	25.6	
57 n-Butanol	56	6.778	6.778	0.000	94	492963	625.0	677.3	E
59 Ethyl acrylate	55	6.908	6.908	0.000	98	838803	25.0	27.4	
62 Methyl methacrylate	41	7.145	7.145	0.000	91	1308032	50.0	55.5	
66 2-Nitropropane	41	7.511	7.512	-0.001	97	364036	50.0	51.2	
77 n-Butyl acetate	43	8.943	8.943	0.000	99	987149	25.0	25.7	
81 1-Chlorohexane	91	9.499	9.499	0.000	79	392539	25.0	25.9	
91 Cyclohexanone	55	10.588	10.588	0.000	97	170948	250.0	280.7	E
103 Pentachloroethane	167	11.416	11.416	0.000	96	278138	50.0	71.4	
109 1,2,3-Trimethylbenzene	105	11.866	11.866	0.000	99	1043837	25.0	24.9	
110 Benzyl chloride	126	11.949	11.949	0.000	98	119883	25.0	24.6	
114 1,3,5-Trichlorobenzene	180	13.156	13.156	0.000	95	362821	25.0	24.4	
119 2-Methylnaphthalene	142	15.132	15.132	0.000	93	1216710	50.0	48.5	
162 1-Methylnaphthalene	142	15.333	15.333	0.000	0	1117122	50.0	42.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASA9W_00329	Amount Added:	20.00	Units: uL	
vm125UX21_SS_00001	Amount Added:	1.10	Units: uL	Run Reagent
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL	Run Reagent

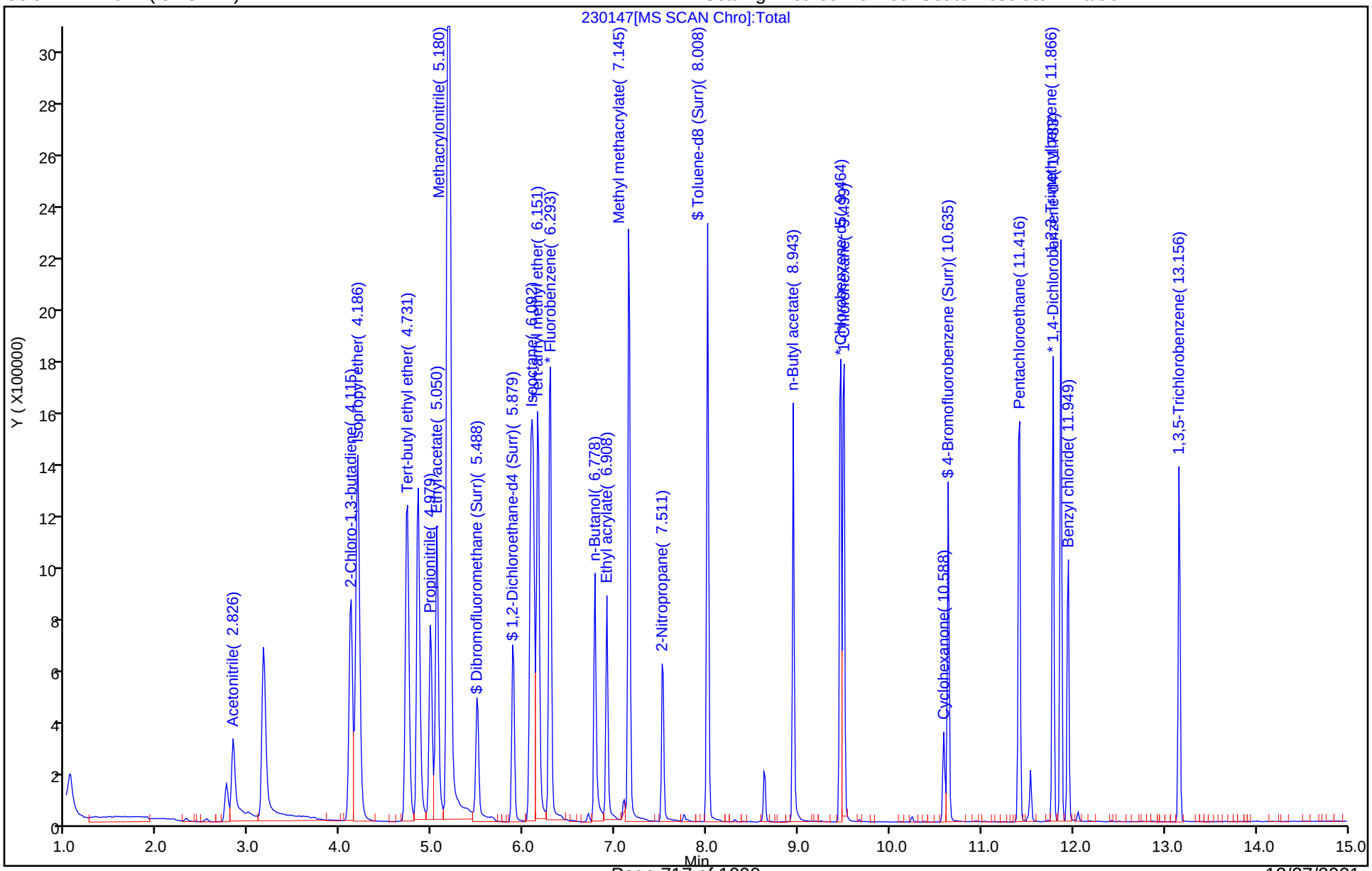
Report Date: 12-Aug-2021 15:30:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230147.D

Injection Date:	05-Aug-2021 15:56:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-515735/12 Calibration Date: 12/06/2021 19:32

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231310.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2547	0.1921		0.0188	0.0250	-24.6	50.0
Chloromethane	Ave	0.5954	0.4924	0.1000	0.0207	0.0250	-17.3	50.0
Vinyl chloride	Ave	0.3675	0.3299		0.0224	0.0250	-10.2	20.0
Butadiene	Ave	0.5113	0.3970		0.0194	0.0250	-22.4	50.0
Bromomethane	Ave	0.1629	0.1221		0.0187	0.0250	-25.1	50.0
Chloroethane	Ave	0.1827	0.1472		0.0202	0.0250	-19.4	50.0
Dichlorofluoromethane	Ave	0.4179	0.3527		0.0211	0.0250	-15.6	50.0
Trichlorofluoromethane	Ave	0.3762	0.3217		0.0214	0.0250	-14.5	50.0
Ethyl ether	Ave	0.3901	0.3960		0.0254	0.0250	1.5	50.0
Acrolein	Ave	0.0506	0.0727		0.180	0.125	43.7	50.0
1,1-Dichloroethene	Ave	0.2243	0.2277		0.0254	0.0250	1.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1667	0.1600		0.0240	0.0250	-4.0	50.0
Acetone	Lin1		0.0501		0.0486	0.0500	-2.8	50.0
Iodomethane	Ave	0.3427	0.3525		0.0257	0.0250	2.9	50.0
Carbon disulfide	Ave	0.6690	0.6928		0.0259	0.0250	3.6	50.0
3-Chloro-1-propene	Ave	0.6320	0.6584		0.0260	0.0250	4.2	50.0
Methyl acetate	Ave	0.4554	0.4621		0.0507	0.0500	1.5	50.0
Methylene Chloride	Ave	0.2909	0.2611		0.0224	0.0250	-10.2	50.0
2-Methyl-2-propanol	Ave	0.0450	0.0471		0.262	0.250	4.7	50.0
Acrylonitrile	Ave	0.2395	0.2399		0.250	0.250	0.2	50.0
trans-1,2-Dichloroethene	Ave	0.3065	0.3060		0.0250	0.0250	-0.2	50.0
Methyl tert-butyl ether	Ave	0.7522	0.7764		0.0258	0.0250	3.2	50.0
Hexane	Ave	0.5963	0.5958		0.0250	0.0250	-0.0	20.0
1,1-Dichloroethane	Ave	0.6817	0.6672	0.1000	0.0245	0.0250	-2.1	50.0
Vinyl acetate	Ave	0.8518	0.8450		0.0248	0.0250	-0.8	50.0
2,2-Dichloropropane	Ave	0.0567	0.0527		0.0232	0.0250	-7.1	50.0
cis-1,2-Dichloroethene	Ave	0.3252	0.3267		0.0251	0.0250	0.5	50.0
2-Butanone (MEK)	Ave	0.0511	0.0512		0.0500	0.0500	0.0	50.0
Chlorobromomethane	Ave	0.1551	0.1517		0.0244	0.0250	-2.2	50.0
Tetrahydrofuran	Ave	0.1820	0.1915		0.0526	0.0500	5.2	50.0
Chloroform	Ave	0.4826	0.4689		0.0243	0.0250	-2.8	20.0
1,1,1-Trichloroethane	Ave	0.3354	0.3436		0.0256	0.0250	2.4	50.0
Cyclohexane	Ave	0.7115	0.7124		0.0250	0.0250	0.1	50.0
1,1-Dichloropropene	Ave	0.3684	0.3861		0.0262	0.0250	4.8	50.0
Carbon tetrachloride	Ave	0.2864	0.3022		0.0264	0.0250	5.5	50.0
Benzene	Ave	1.195	1.208		0.0253	0.0250	1.2	50.0
1,2-Dichloroethane	Ave	0.4883	0.4800		0.0246	0.0250	-1.7	50.0
Isobutyl alcohol	Ave	0.0192	0.0208		0.678	0.625	8.5	50.0
n-Heptane	Ave	0.0670	0.0679		0.0253	0.0250	1.3	50.0
Trichloroethene	Ave	0.2816	0.2971		0.0264	0.0250	5.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-515735/12 Calibration Date: 12/06/2021 19:32

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231310.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4504	0.4594		0.0255	0.0250	2.0	50.0
1,2-Dichloropropane	Ave	0.3629	0.3744		0.0258	0.0250	3.2	20.0
Dibromomethane	Ave	0.1698	0.1679		0.0247	0.0250	-1.1	50.0
1,4-Dioxane	Ave	0.0035	0.0036		0.514	0.500	2.7	50.0
Dichlorobromomethane	Ave	0.2922	0.3105		0.0266	0.0250	6.3	50.0
2-Chloroethyl vinyl ether	Lin1		0.2491		0.0252	0.0250	0.8	50.0
cis-1,3-Dichloropropene	Lin1		0.4035		0.0242	0.0250	-3.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5044	0.5512		0.0546	0.0500	9.3	50.0
Toluene	Ave	1.746	1.775		0.0254	0.0250	1.6	20.0
trans-1,3-Dichloropropene	Lin1		0.5348		0.0242	0.0250	-3.0	50.0
Ethyl methacrylate	Lin1		0.5738		0.0247	0.0250	-1.3	50.0
1,1,2-Trichloroethane	Ave	0.3719	0.3739		0.0251	0.0250	0.5	50.0
Tetrachloroethene	Ave	0.2946	0.2917		0.0247	0.0250	-1.0	50.0
1,3-Dichloropropane	Ave	0.6273	0.6463		0.0258	0.0250	3.0	50.0
2-Hexanone	Lin1		0.5695		0.0521	0.0500	4.2	50.0
Chlorodibromomethane	Lin1		0.3334		0.0242	0.0250	-3.4	50.0
Ethylene Dibromide	Ave	0.3524	0.3781		0.0268	0.0250	7.3	50.0
Chlorobenzene	Ave	1.047	1.048	0.3000	0.0250	0.0250	0.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3261	0.3388		0.0260	0.0250	3.9	50.0
Ethylbenzene	Ave	0.5324	0.5733		0.0269	0.0250	7.7	20.0
m-Xylene & p-Xylene	Ave	0.6596	0.6791		0.0257	0.0250	3.0	50.0
o-Xylene	Ave	0.6311	0.6676		0.0264	0.0250	5.8	50.0
Styrene	Lin1		1.056		0.0242	0.0250	-3.1	50.0
Bromoform	Lin1		0.1976	0.1000	0.0248	0.0250	-0.9	50.0
Isopropylbenzene	Lin1		1.644		0.0240	0.0250	-3.9	50.0
Bromobenzene	Ave	0.7470	0.7649		0.0256	0.0250	2.4	50.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.064	0.3000	0.0252	0.0250	1.0	50.0
1,2,3-Trichloropropane	Ave	0.3241	0.3200		0.0247	0.0250	-1.3	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.4115		0.0250	0.0250	-0.0	50.0
N-Propylbenzene	Ave	0.8910	0.9316		0.0261	0.0250	4.6	50.0
2-Chlorotoluene	Ave	0.7875	0.7954		0.0252	0.0250	1.0	50.0
1,3,5-Trimethylbenzene	Lin1		2.760		0.0245	0.0250	-1.9	50.0
4-Chlorotoluene	Ave	0.7823	0.8213		0.0262	0.0250	5.0	50.0
tert-Butylbenzene	Lin1		2.245		0.0247	0.0250	-1.0	50.0
1,2,4-Trimethylbenzene	Lin1		2.801		0.0245	0.0250	-1.9	50.0
sec-Butylbenzene	Lin1		3.478		0.0243	0.0250	-2.9	50.0
1,3-Dichlorobenzene	Ave	1.441	1.487		0.0258	0.0250	3.2	50.0
4-Isopropyltoluene	Lin1		2.897		0.0241	0.0250	-3.4	50.0
1,4-Dichlorobenzene	Ave	1.542	1.529		0.0248	0.0250	-0.9	50.0
1,2-Dichlorobenzene	Ave	1.450	1.481		0.0255	0.0250	2.1	50.0
n-Butylbenzene	Lin1		2.652		0.0239	0.0250	-4.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-515735/12 Calibration Date: 12/06/2021 19:32

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231310.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2204	0.2118		0.0240	0.0250	-3.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9029	0.9619		0.0266	0.0250	6.5	50.0
Hexachlorobutadiene	Ave	0.3970	0.3901		0.0246	0.0250	-1.7	50.0
Naphthalene	Lin1		3.661		0.0250	0.0250	0.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9571	0.9519		0.0249	0.0250	-0.5	50.0
Dibromofluoromethane (Surr)	Ave	0.2581	0.2497		0.0266	0.0275	-3.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3523	0.3252		0.0254	0.0275	-7.7	50.0
Toluene-d8 (Surr)	Ave	1.498	1.451		0.0266	0.0275	-3.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4260	0.4446		0.0287	0.0275	4.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231310.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 06-Dec-2021 19:32:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-012
Operator ID: 002808 Instrument ID: A3UX23
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 13:36:56 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 08-Dec-2021 14:36:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	2190926	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.464	0.000	87	1462020	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	709265	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	547036	27.5	26.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.879	-0.001	97	712529	27.5	25.4	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	2121078	27.5	26.6	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	87	649967	27.5	28.7	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	98	382519	25.0	18.8	
10 Chloromethane	50	1.299	1.299	0.000	99	980764	25.0	20.7	
11 Vinyl chloride	62	1.382	1.394	-0.012	97	657051	25.0	22.4	
12 Butadiene	54	1.406	1.406	0.000	93	790645	25.0	19.4	
13 Bromomethane	94	1.666	1.666	0.000	91	243115	25.0	18.7	
14 Chloroethane	64	1.725	1.725	0.000	95	293285	25.0	20.2	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	96	702516	25.0	21.1	
16 Trichlorofluoromethane	101	1.985	1.986	-0.001	74	640706	25.0	21.4	
17 Ethyl ether	59	2.234	2.234	0.000	97	788690	25.0	25.4	
18 Acrolein	56	2.340	2.352	-0.012	100	723934	125.0	179.6	
19 1,1-Dichloroethene	96	2.459	2.459	0.000	91	453465	25.0	25.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.482	2.483	-0.001	95	318685	25.0	24.0	
21 Acetone	58	2.530	2.530	0.000	100	199694	50.0	48.6	
23 Iodomethane	142	2.601	2.601	0.000	97	702181	25.0	25.7	
24 Carbon disulfide	76	2.684	2.684	0.000	100	1379879	25.0	25.9	
26 3-Chloro-1-propene	41	2.837	2.838	-0.001	90	1311388	25.0	26.0	
27 Methyl acetate	43	2.908	2.909	-0.001	100	1840621	50.0	50.7	
28 Methylene Chloride	84	3.015	3.015	0.000	93	520116	25.0	22.4	
29 2-Methyl-2-propanol	59	3.263	3.264	-0.001	96	937767	250.0	261.9	
30 Acrylonitrile	53	3.323	3.335	-0.012	100	4777239	250.0	250.4	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	91	609455	25.0	25.0	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	96	1546324	25.0	25.8	
33 Hexane	57	3.760	3.761	-0.001	92	1186617	25.0	25.0	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1328897	25.0	24.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	1682949	25.0	24.8	
41 2,2-Dichloropropane	97	4.825	4.825	0.000	91	104971	25.0	23.2	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	650732	25.0	25.1	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	203842	50.0	50.0	
45 Chlorobromomethane	128	5.145	5.145	0.000	88	302134	25.0	24.4	
46 Tetrahydrofuran	42	5.251	5.251	0.000	95	762973	50.0	52.6	
47 Chloroform	83	5.287	5.287	0.000	97	934003	25.0	24.3	
48 1,1,1-Trichloroethane	97	5.476	5.476	0.000	94	684316	25.0	25.6	
49 Cyclohexane	56	5.535	5.535	0.000	89	1418995	25.0	25.0	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	92	769005	25.0	26.2	
51 Carbon tetrachloride	117	5.689	5.689	0.000	96	601858	25.0	26.4	
54 Benzene	78	5.938	5.938	0.000	97	2406962	25.0	25.3	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	956054	25.0	24.6	
52 Isobutyl alcohol	41	6.009	6.009	0.000	94	1035691	625.0	677.9	
56 n-Heptane	100	6.328	6.328	0.000	96	135166	25.0	25.3	
58 Trichloroethene	130	6.707	6.707	0.000	96	591712	25.0	26.4	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	915022	25.0	25.5	
61 1,2-Dichloropropane	63	6.943	6.944	-0.001	98	745762	25.0	25.8	
63 Dibromomethane	93	7.062	7.062	0.000	98	334336	25.0	24.7	
64 1,4-Dioxane	88	7.145	7.145	0.000	94	143152	500.0	513.7	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	618525	25.0	26.6	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	496125	25.0	25.2	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	92	803622	25.0	24.2	
69 4-Methyl-2-pentanone (MIBK)	43	7.937	7.938	-0.001	97	2195896	50.0	54.6	
70 Toluene	91	8.079	8.068	0.011	97	2359071	25.0	25.4	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	710866	25.0	24.2	
72 Ethyl methacrylate	69	8.458	8.458	0.000	96	762700	25.0	24.7	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	496912	25.0	25.1	
75 Tetrachloroethene	164	8.624	8.624	0.000	96	387641	25.0	24.7	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	99	859050	25.0	25.8	
76 2-Hexanone	43	8.789	8.790	-0.001	97	1513911	50.0	52.1	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	443176	25.0	24.2	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	502489	25.0	26.8	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1392701	25.0	25.0	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	96	450311	25.0	26.0	
84 Ethylbenzene	106	9.618	9.606	0.012	98	761963	25.0	26.9	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	902633	25.0	25.7	
86 o-Xylene	106	10.126	10.127	-0.001	97	887324	25.0	26.4	
87 Styrene	104	10.138	10.138	0.000	95	1403232	25.0	24.2	
88 Bromoform	173	10.304	10.304	0.000	96	262669	25.0	24.8	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	2185434	25.0	24.0	
93 Bromobenzene	156	10.777	10.777	0.000	94	493219	25.0	25.6	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	94	685910	25.0	25.2	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	206327	25.0	24.7	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	76	265343	25.0	25.0	
96 N-Propylbenzene	120	10.907	10.908	-0.001	99	600688	25.0	26.1	
97 2-Chlorotoluene	126	10.978	10.979	-0.001	96	512851	25.0	25.2	
100 4-Chlorotoluene	126	11.085	11.085	0.000	96	529544	25.0	26.2	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	1779785	25.0	24.5	
102 tert-Butylbenzene	119	11.404	11.405	-0.001	93	1447736	25.0	24.7	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1806030	25.0	24.5	
105 sec-Butylbenzene	105	11.617	11.618	-0.001	95	2242424	25.0	24.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	98	958697	25.0	25.8	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	96	1867809	25.0	24.1	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	985748	25.0	24.8	
112 1,2-Dichlorobenzene	146	12.174	12.174	0.000	97	954836	25.0	25.5	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	1709946	25.0	23.9	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	81	136578	25.0	24.0	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	620239	25.0	26.6	
116 Hexachlorobutadiene	225	13.960	13.960	0.000	98	251525	25.0	24.6	
117 Naphthalene	128	14.008	14.008	0.000	97	2360601	25.0	25.0	
118 1,2,3-Trichlorobenzene	180	14.256	14.244	0.012	95	613740	25.0	24.9	
S 134 Trihalomethanes, Total	1				0		100.0	99.8	
S 158 Total BTEX	1				0		125.0	129.8	
S 133 Xylenes, Total	106				0		50.0	52.2	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00425	Amount Added: 20.00	Units: uL		
VMFASAW_00401	Amount Added: 20.00	Units: uL		
VMFASGW_00436	Amount Added: 20.00	Units: uL		
vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_SS_00002	Amount Added: 1.10	Units: uL	Run Reagent	
vmDist_H2o_00205	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_IS_00012	Amount Added: 1.10	Units: uL	Run Reagent	

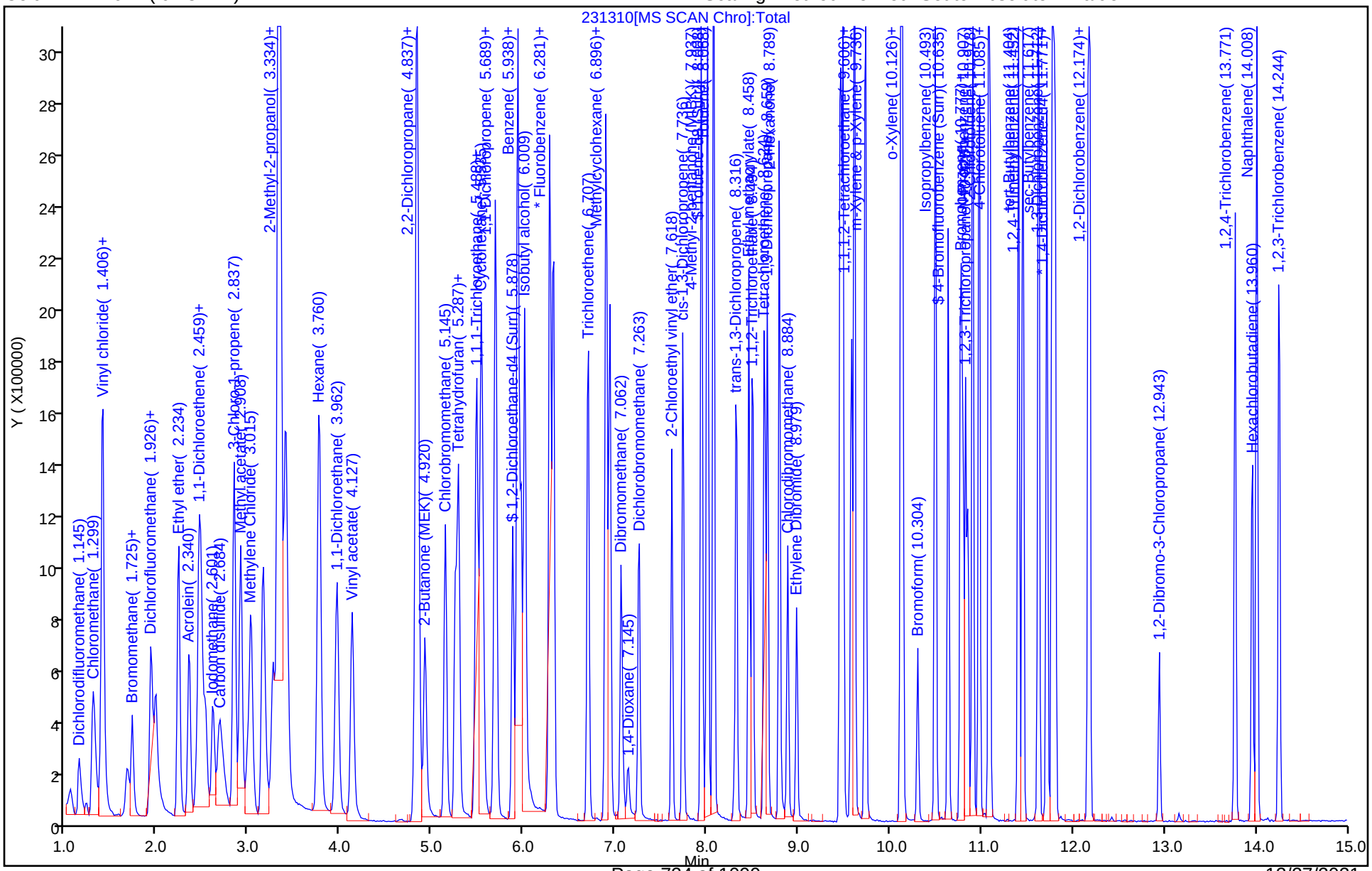
Report Date: 10-Dec-2021 13:36:58 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231310.D

Injection Date:	06-Dec-2021 19:32:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517192/3 Calibration Date: 12/20/2021 10:59

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231381.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2547	0.2893		0.0284	0.0250	13.6	50.0
Chloromethane	Ave	0.5954	0.5681	0.1000	0.0239	0.0250	-4.6	50.0
Vinyl chloride	Ave	0.3675	0.4156		0.0283	0.0250	13.1	20.0
Butadiene	Ave	0.5113	0.5316		0.0260	0.0250	4.0	50.0
Bromomethane	Ave	0.1629	0.1721		0.0264	0.0250	5.6	50.0
Chloroethane	Ave	0.1827	0.1857		0.0254	0.0250	1.7	50.0
Dichlorofluoromethane	Ave	0.4179	0.4412		0.0264	0.0250	5.6	50.0
Trichlorofluoromethane	Ave	0.3762	0.4022		0.0267	0.0250	6.9	50.0
Ethyl ether	Ave	0.3901	0.3819		0.0245	0.0250	-2.1	50.0
Acrolein	Ave	0.0506	0.0391		0.0965	0.125	-22.8	50.0
1,1-Dichloroethene	Ave	0.2243	0.2402		0.0268	0.0250	7.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1667	0.1716		0.0257	0.0250	2.9	50.0
Acetone	Lin1		0.0451		0.0436	0.0500	-12.8	50.0
Iodomethane	Ave	0.3427	0.3692		0.0269	0.0250	7.7	50.0
Carbon disulfide	Ave	0.6690	0.7422		0.0277	0.0250	10.9	50.0
3-Chloro-1-propene	Ave	0.6320	0.6696		0.0265	0.0250	5.9	50.0
Methyl acetate	Ave	0.4554	0.4355		0.0478	0.0500	-4.4	50.0
Methylene Chloride	Ave	0.2909	0.2835		0.0244	0.0250	-2.6	50.0
2-Methyl-2-propanol	Ave	0.0450	0.0456		0.254	0.250	1.5	50.0
Acrylonitrile	Ave	0.2395	0.2362		0.247	0.250	-1.4	50.0
trans-1,2-Dichloroethene	Ave	0.3065	0.3242		0.0264	0.0250	5.8	50.0
Methyl tert-butyl ether	Ave	0.7522	0.8126		0.0270	0.0250	8.0	50.0
Hexane	Ave	0.5963	0.5467		0.0229	0.0250	-8.3	20.0
1,1-Dichloroethane	Ave	0.6817	0.7062	0.1000	0.0259	0.0250	3.6	50.0
Vinyl acetate	Ave	0.8518	1.060		0.0311	0.0250	24.5	50.0
2,2-Dichloropropane	Ave	0.0567	0.0645		0.0285	0.0250	13.8	50.0
cis-1,2-Dichloroethene	Ave	0.3252	0.3428		0.0264	0.0250	5.4	50.0
2-Butanone (MEK)	Ave	0.0511	0.0529		0.0517	0.0500	3.4	50.0
Chlorobromomethane	Ave	0.1551	0.1676		0.0270	0.0250	8.0	50.0
Tetrahydrofuran	Ave	0.1820	0.1888		0.0518	0.0500	3.7	50.0
Chloroform	Ave	0.4826	0.5062		0.0262	0.0250	4.9	20.0
1,1,1-Trichloroethane	Ave	0.3354	0.3847		0.0287	0.0250	14.7	50.0
Cyclohexane	Ave	0.7115	0.6889		0.0242	0.0250	-3.2	50.0
Carbon tetrachloride	Ave	0.2864	0.3322		0.0290	0.0250	16.0	50.0
1,1-Dichloropropene	Ave	0.3684	0.4212		0.0286	0.0250	14.3	50.0
Benzene	Ave	1.195	1.325		0.0277	0.0250	10.9	50.0
1,2-Dichloroethane	Ave	0.4883	0.5122		0.0262	0.0250	4.9	50.0
Isobutyl alcohol	Ave	0.0192	0.0201		0.654	0.625	4.6	50.0
n-Heptane	Ave	0.0670	0.0625		0.0233	0.0250	-6.6	50.0
Trichloroethene	Ave	0.2816	0.3176		0.0282	0.0250	12.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517192/3 Calibration Date: 12/20/2021 10:59

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231381.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4504	0.4423		0.0245	0.0250	-1.8	50.0
1,2-Dichloropropane	Ave	0.3629	0.3949		0.0272	0.0250	8.8	20.0
Dibromomethane	Ave	0.1698	0.1853		0.0273	0.0250	9.1	50.0
1,4-Dioxane	Ave	0.0035	0.0037		0.525	0.500	5.1	50.0
Dichlorobromomethane	Ave	0.2922	0.3491		0.0299	0.0250	19.5	50.0
2-Chloroethyl vinyl ether	Lin1		0.2894		0.0577	0.0500	15.4	50.0
cis-1,3-Dichloropropene	Lin1		0.4803		0.0287	0.0250	14.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5044	0.5613		0.0556	0.0500	11.3	50.0
Toluene	Ave	1.746	1.871		0.0268	0.0250	7.1	20.0
trans-1,3-Dichloropropene	Lin1		0.5741		0.0260	0.0250	4.0	50.0
Ethyl methacrylate	Lin1		0.5784		0.0249	0.0250	-0.6	50.0
1,1,2-Trichloroethane	Ave	0.3719	0.3765		0.0253	0.0250	1.2	50.0
Tetrachloroethene	Ave	0.2946	0.3092		0.0262	0.0250	5.0	50.0
1,3-Dichloropropane	Ave	0.6273	0.6591		0.0263	0.0250	5.1	50.0
2-Hexanone	Lin1		0.5310		0.0486	0.0500	-2.8	50.0
Chlorodibromomethane	Lin1		0.3615		0.0262	0.0250	4.7	50.0
Ethylene Dibromide	Ave	0.3524	0.3870		0.0275	0.0250	9.8	50.0
Chlorobenzene	Ave	1.047	1.062	0.3000	0.0253	0.0250	1.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3261	0.3441		0.0264	0.0250	5.5	50.0
Ethylbenzene	Ave	0.5324	0.5845		0.0274	0.0250	9.8	20.0
m-Xylene & p-Xylene	Ave	0.6596	0.7069		0.0268	0.0250	7.2	50.0
o-Xylene	Ave	0.6311	0.6671		0.0264	0.0250	5.7	50.0
Styrene	Lin1		1.124		0.0258	0.0250	3.1	50.0
Bromoform	Lin1		0.2120	0.1000	0.0266	0.0250	6.3	50.0
Isopropylbenzene	Lin1		1.658		0.0242	0.0250	-3.1	50.0
Bromobenzene	Ave	0.7470	0.7951		0.0266	0.0250	6.4	50.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.084	0.3000	0.0257	0.0250	2.9	50.0
1,2,3-Trichloropropane	Ave	0.3241	0.3201		0.0247	0.0250	-1.3	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.4365		0.0265	0.0250	5.9	50.0
N-Propylbenzene	Ave	0.8910	0.9348		0.0262	0.0250	4.9	50.0
2-Chlorotoluene	Ave	0.7875	0.7795		0.0247	0.0250	-1.0	50.0
1,3,5-Trimethylbenzene	Lin1		2.698		0.0240	0.0250	-4.1	50.0
4-Chlorotoluene	Ave	0.7823	0.8296		0.0265	0.0250	6.0	50.0
tert-Butylbenzene	Lin1		2.221		0.0245	0.0250	-2.1	50.0
1,2,4-Trimethylbenzene	Lin1		2.733		0.0240	0.0250	-4.2	50.0
sec-Butylbenzene	Lin1		3.297		0.0230	0.0250	-7.8	50.0
1,3-Dichlorobenzene	Ave	1.441	1.498		0.0260	0.0250	4.0	50.0
4-Isopropyltoluene	Lin1		2.792		0.0233	0.0250	-6.9	50.0
1,4-Dichlorobenzene	Ave	1.542	1.578		0.0256	0.0250	2.3	50.0
1,2-Dichlorobenzene	Ave	1.450	1.469		0.0253	0.0250	1.3	50.0
n-Butylbenzene	Lin1		2.559		0.0231	0.0250	-7.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517192/3 Calibration Date: 12/20/2021 10:59

Instrument ID: A3UX23 Calib Start Date: 12/06/2021 15:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/06/2021 18:17

Lab File ID: 231381.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2204	0.2070		0.0235	0.0250	-6.1	50.0
1,2,4-Trichlorobenzene	Ave	0.9029	0.8444		0.0234	0.0250	-6.5	50.0
Hexachlorobutadiene	Ave	0.3970	0.2895		0.0182	0.0250	-27.1	50.0
Naphthalene	Lin1		3.229		0.0221	0.0250	-11.6	50.0
1,2,3-Trichlorobenzene	Ave	0.9571	0.7995		0.0209	0.0250	-16.5	50.0
Dibromofluoromethane (Surr)	Ave	0.2581	0.2603		0.0277	0.0275	0.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3523	0.3456		0.0270	0.0275	-1.9	50.0
Toluene-d8 (Surr)	Ave	1.498	1.450		0.0266	0.0275	-3.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4260	0.4446		0.0287	0.0275	4.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231381.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Dec-2021 10:59:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-003
Operator ID: 002808 Instrument ID: A3UX23
Sublist: chrom-8260_23*sub1

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:09 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 20-Dec-2021 12:40:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1972393	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.452	9.452	0.000	89	1424849	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	687424	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	94	513329	27.5	27.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	96	681683	27.5	27.0	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	2066351	27.5	26.6	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	633436	27.5	28.7	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	98	518717	25.0	28.4	
10 Chloromethane	50	1.299	1.299	0.000	99	1018693	25.0	23.9	
11 Vinyl chloride	62	1.382	1.382	0.000	97	745148	25.0	28.3	
12 Butadiene	54	1.406	1.406	0.000	93	953277	25.0	26.0	
13 Bromomethane	94	1.666	1.666	0.000	91	308624	25.0	26.4	
14 Chloroethane	64	1.725	1.725	0.000	96	332943	25.0	25.4	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	96	791096	25.0	26.4	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	85	721261	25.0	26.7	
17 Ethyl ether	59	2.234	2.234	0.000	96	684854	25.0	24.5	
18 Acrolein	56	2.341	2.341	0.000	100	350239	125.0	96.5	
19 1,1-Dichloroethene	96	2.447	2.447	0.000	92	430673	25.0	26.8	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.483	0.000	93	307610	25.0	25.7	
21 Acetone	58	2.518	2.518	0.000	100	161903	50.0	43.6	
23 Iodomethane	142	2.601	2.601	0.000	97	662055	25.0	26.9	
24 Carbon disulfide	76	2.672	2.672	0.000	100	1330772	25.0	27.7	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	90	1200579	25.0	26.5	
27 Methyl acetate	43	2.909	2.909	0.000	100	1561657	50.0	47.8	
28 Methylene Chloride	84	3.015	3.015	0.000	95	508250	25.0	24.4	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	97	818068	250.0	253.7	
30 Acrylonitrile	53	3.323	3.323	0.000	100	4234835	250.0	246.6	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	581396	25.0	26.4	
31 Methyl tert-butyl ether	73	3.406	3.406	0.000	96	1457073	25.0	27.0	
33 Hexane	57	3.761	3.761	0.000	91	980253	25.0	22.9	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1266205	25.0	25.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.127	4.127	0.000	97	1900992	25.0	31.1	
41 2,2-Dichloropropane	97	4.826	4.826	0.000	80	115724	25.0	28.5	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	89	614697	25.0	26.4	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	189599	50.0	51.7	
45 Chlorobromomethane	128	5.145	5.145	0.000	90	300475	25.0	27.0	
46 Tetrahydrofuran	42	5.252	5.252	0.000	93	676924	50.0	51.8	
47 Chloroform	83	5.287	5.287	0.000	97	907673	25.0	26.2	
48 1,1,1-Trichloroethane	97	5.476	5.476	0.000	95	689808	25.0	28.7	
49 Cyclohexane	56	5.535	5.535	0.000	90	1235191	25.0	24.2	
51 Carbon tetrachloride	117	5.677	5.677	0.000	96	595608	25.0	29.0	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	91	755174	25.0	28.6	
54 Benzene	78	5.938	5.938	0.000	97	2376073	25.0	27.7	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	918431	25.0	26.2	
52 Isobutyl alcohol	41	6.009	6.009	0.000	96	899319	625.0	653.9	
56 n-Heptane	100	6.328	6.328	0.000	96	112151	25.0	23.3	
58 Trichloroethene	130	6.707	6.707	0.000	96	569447	25.0	28.2	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	793084	25.0	24.5	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	98	708091	25.0	27.2	
63 Dibromomethane	93	7.062	7.062	0.000	97	332264	25.0	27.3	
64 1,4-Dioxane	88	7.133	7.133	0.000	94	131826	500.0	525.5	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	625968	25.0	29.9	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	1037736	50.0	57.7	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	92	861188	25.0	28.7	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	2012746	50.0	55.6	
70 Toluene	91	8.068	8.068	0.000	97	2423746	25.0	26.8	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	743682	25.0	26.0	
72 Ethyl methacrylate	69	8.458	8.458	0.000	95	749177	25.0	24.9	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	487641	25.0	25.3	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	400556	25.0	26.2	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	98	853766	25.0	26.3	
76 2-Hexanone	43	8.790	8.790	0.000	97	1375509	50.0	48.6	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	468281	25.0	26.2	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	501288	25.0	27.5	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1375295	25.0	25.3	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	96	445663	25.0	26.4	
84 Ethylbenzene	106	9.606	9.606	0.000	98	757080	25.0	27.4	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	98	915659	25.0	26.8	
86 o-Xylene	106	10.115	10.115	0.000	98	864053	25.0	26.4	
87 Styrene	104	10.138	10.138	0.000	96	1455538	25.0	25.8	
88 Bromoform	173	10.304	10.304	0.000	98	274562	25.0	26.6	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	2148144	25.0	24.2	
93 Bromobenzene	156	10.777	10.777	0.000	96	496897	25.0	26.6	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	94	677454	25.0	25.7	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	200013	25.0	24.7	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	78	272799	25.0	26.5	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	584205	25.0	26.2	
97 2-Chlorotoluene	126	10.979	10.979	0.000	96	487151	25.0	24.7	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	518451	25.0	26.5	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	1686239	25.0	24.0	
102 tert-Butylbenzene	119	11.405	11.405	0.000	93	1387741	25.0	24.5	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1707984	25.0	24.0	
105 sec-Butylbenzene	105	11.618	11.618	0.000	94	2060441	25.0	23.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	936287	25.0	26.0	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	97	1744756	25.0	23.3	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	985873	25.0	25.6	
112 1,2-Dichlorobenzene	146	12.162	12.162	0.000	97	917808	25.0	25.3	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	1599100	25.0	23.1	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	83	129346	25.0	23.5	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	527710	25.0	23.4	
116 Hexachlorobutadiene	225	13.961	13.961	0.000	97	180943	25.0	18.2	
117 Naphthalene	128	14.008	14.008	0.000	97	2018097	25.0	22.1	
118 1,2,3-Trichlorobenzene	180	14.245	14.245	0.000	96	499603	25.0	20.9	
S 134 Trihalomethanes, Total	1				0		100.0	108.8	
S 158 Total BTEX	1				0		125.0	135.2	
S 133 Xylenes, Total	106				0		50.0	53.2	

QC Flag Legend

Processing Flags

Reagents:

VMAROLISTDW_00420	Amount Added: 20.00	Units: uL		
VMRGAS_00411	Amount Added: 20.00	Units: uL		
VMRPRIMW_00464	Amount Added: 20.00	Units: uL		
vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_SS_00002	Amount Added: 1.10	Units: uL	Run Reagent	
vmDist_H2o_00205	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_IS_00012	Amount Added: 1.10	Units: uL	Run Reagent	

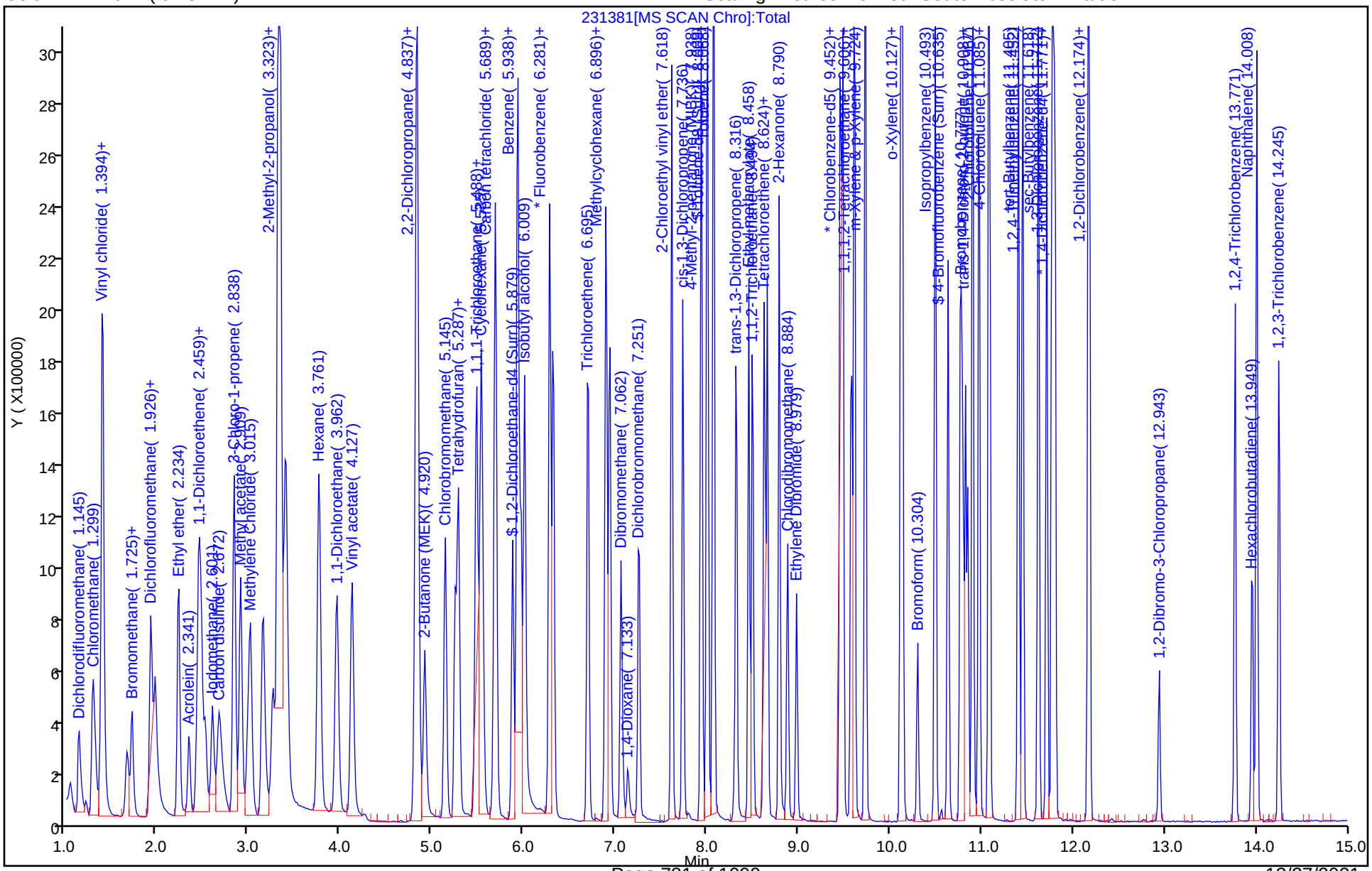
Report Date: 21-Dec-2021 09:18:09 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231381.D

Injection Date:	20-Dec-2021 10:59:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jan-2021 10:36:30	ALS Bottle#:	4	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211015A-IC,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Jan-2021 09:28:08	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1641				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.350	4.350	0.000	0	393211	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

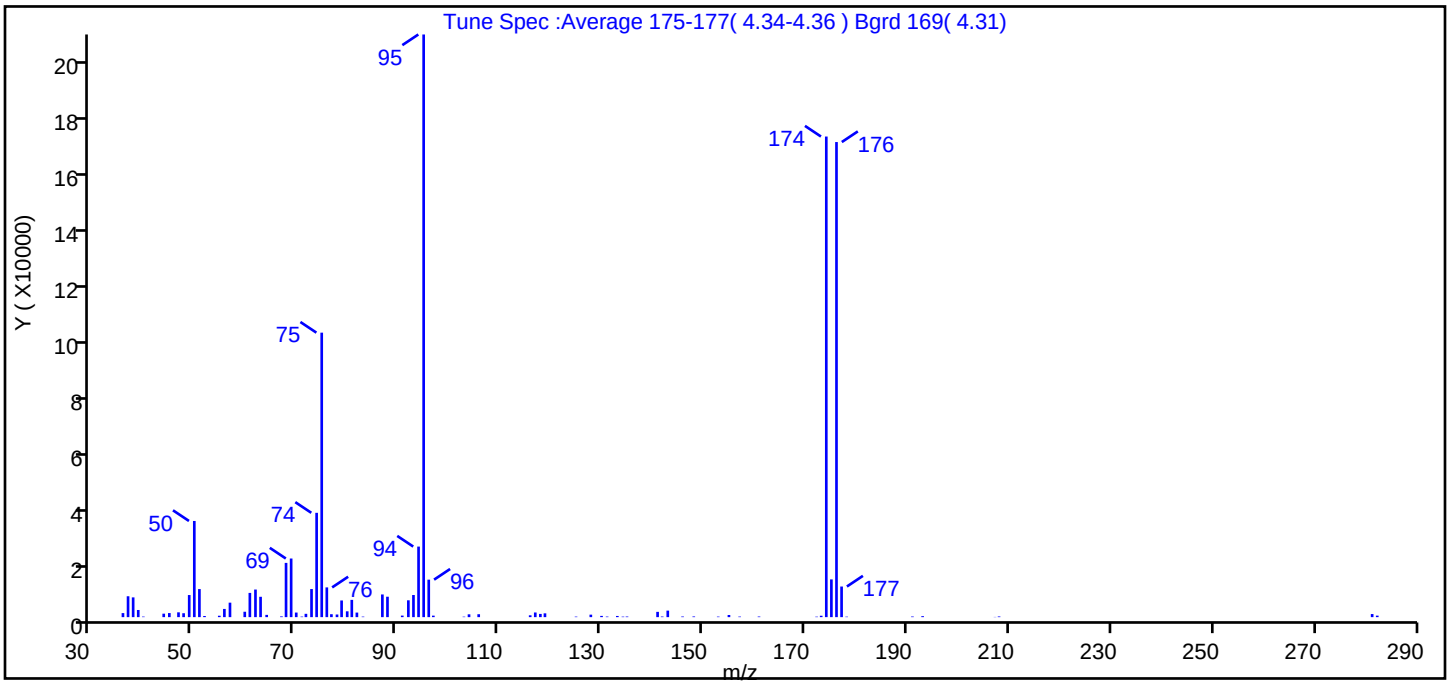
VMBFB_00026 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D
Injection Date: 15-Jan-2021 10:36:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.5
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	82.5
175	5 to 9% of m/z 174	6.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	81.5 (98.9)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D\8260_11.rslt\spectra.d
Injection Date: 15-Jan-2021 10:36:30
Spectrum: Tune Spec :Average 175-177(4.34-4.36) Bgrd 169(4.31)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1457	67.00	272	93.00	7966	143.00	2347
37.00	7520	68.00	19528	94.00	25400	146.00	229
38.00	7112	69.00	21104	95.00	209728	148.00	248
39.00	2576	70.00	1651	96.00	13491	153.00	194
40.00	196	71.00	196	97.00	539	155.00	774
44.00	1250	72.00	1197	103.00	169	157.00	207
45.00	1468	73.00	10110	104.00	1019	161.00	223
47.00	1730	74.00	37552	106.00	1050	172.00	174
48.00	1410	75.00	102400	116.00	659	173.00	502
49.00	7954	76.00	10706	117.00	1675	174.00	172992
50.00	34616	77.00	1056	118.00	1161	175.00	13587
51.00	10108	78.00	952	119.00	1367	176.00	171008
52.00	407	79.00	6005	125.00	193	177.00	11023
55.00	505	80.00	2102	128.00	895	178.00	172
56.00	2954	81.00	6216	130.00	450	191.00	226
57.00	5212	82.00	1644	131.00	207	193.00	350
60.00	1944	83.00	190	133.00	424	207.00	72
61.00	8722	87.00	8167	134.00	185	208.00	245
62.00	9935	88.00	7351	135.00	224	281.00	1116
63.00	7326	91.00	558	141.00	1904	282.00	543
64.00	815	92.00	6063	142.00	222		

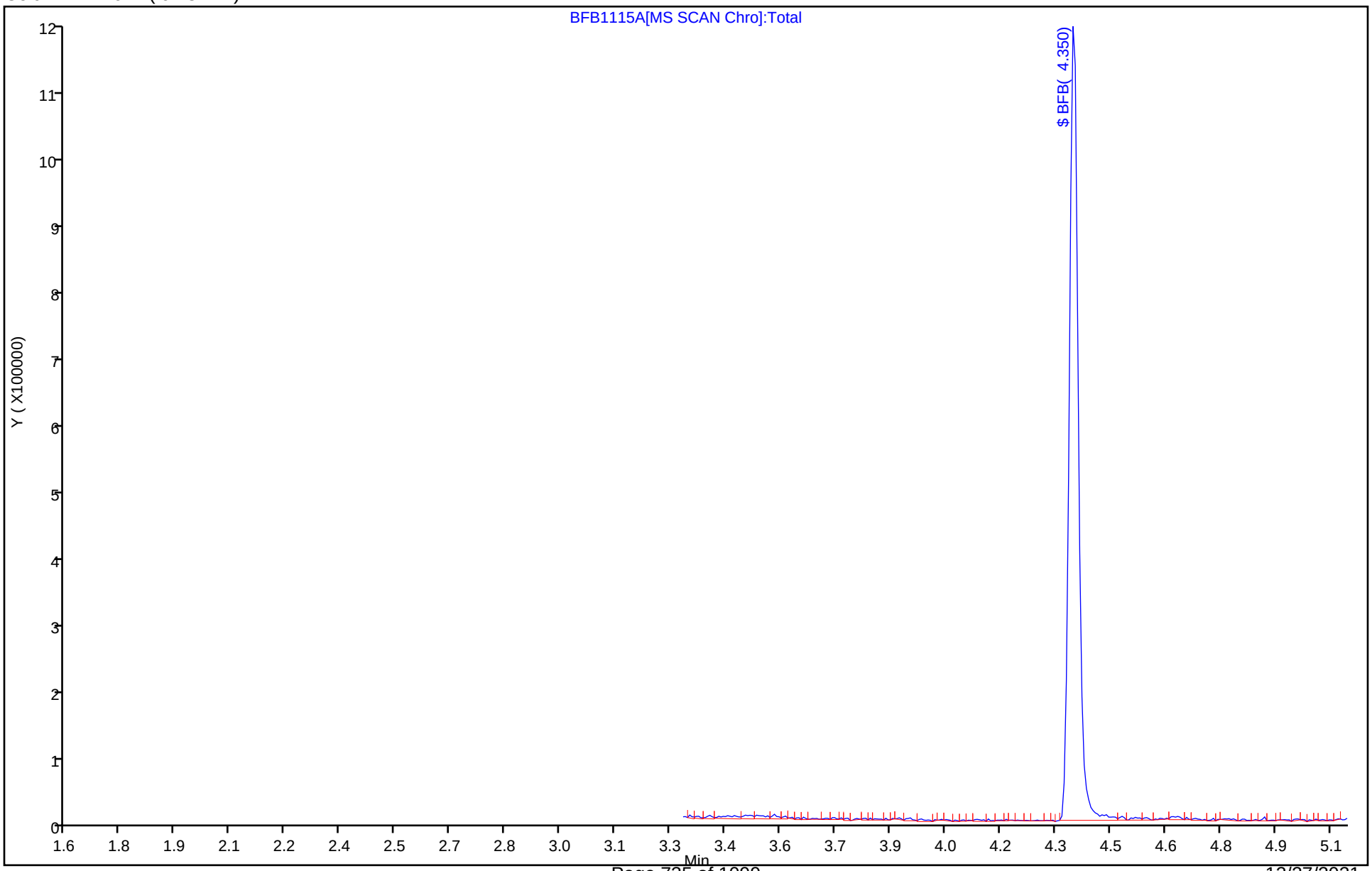
Report Date: 18-Jan-2021 09:28:08 Chrom Revision: 2.3 17-Jan-2021 00:24:10

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\BFB1115A.D

Injection Date:	15-Jan-2021 10:36:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\BFB1220.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Dec-2021 11:08:30	ALS Bottle#:	30	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	J211220A,BFBUX11,,43582				
Operator ID:		Instrument ID:	A3UX11		
Method:	\\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	21-Dec-2021 09:02:06	Calib Date:	15-Jan-2021 15:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1670				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.344	4.344	0.000	0	964690	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

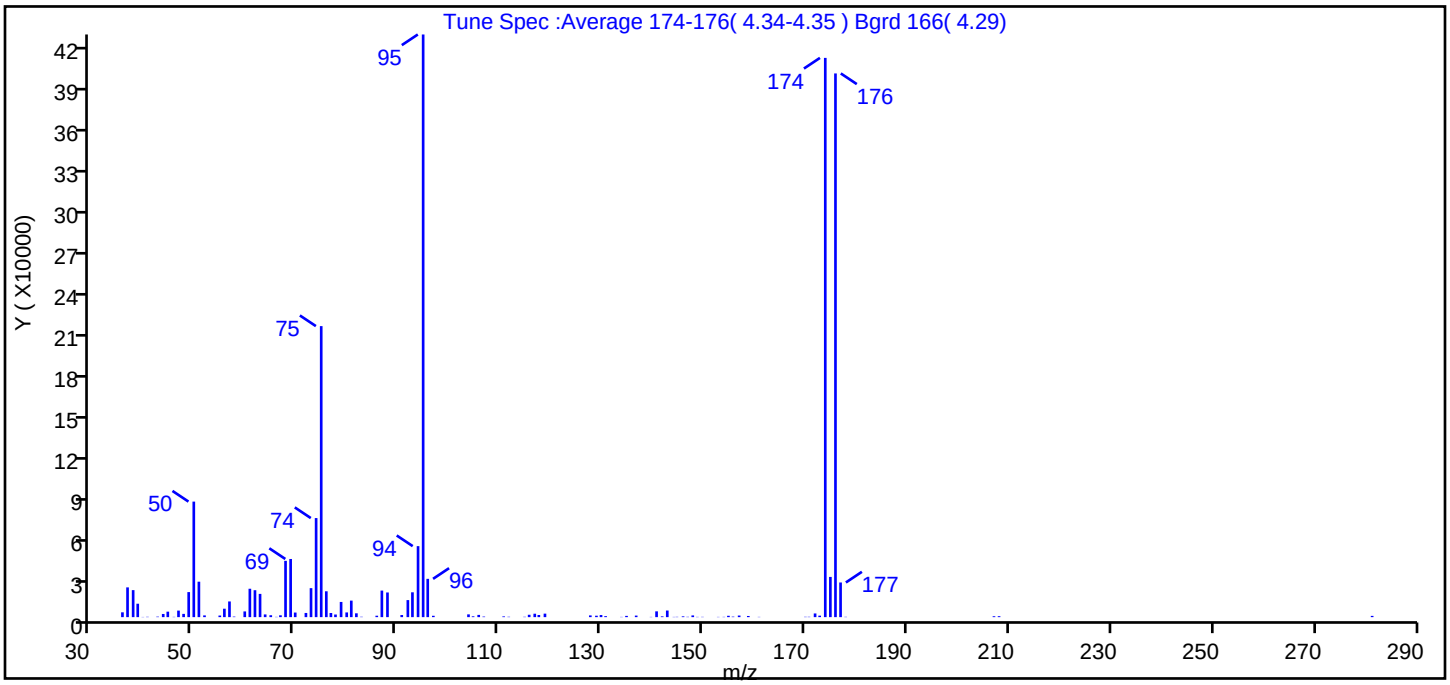
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\BFB1220.D
Injection Date: 20-Dec-2021 11:08:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.8
75	30 to 60% of m/z 95	49.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	96.0
175	5 to 9% of m/z 174	6.9 (7.2)
176	Greater than 95% but less than 101% of m/z 174	93.3 (97.2)
177	5 to 9% of m/z 176	5.9 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\BFB1220.D\8260_11.rslt\spectra.d
Injection Date: 20-Dec-2021 11:08:30
Spectrum: Tune Spec :Average 174-176(4.34-4.35) Bgrd 166(4.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3489	66.00	188	97.00	983	147.00	242
37.00	21560	67.00	1325	104.00	2001	148.00	1246
38.00	19568	68.00	40784	105.00	591	149.00	183
39.00	9722	69.00	42136	106.00	1632	150.00	207
40.00	142	70.00	3325	107.00	410	153.00	175
41.00	240	72.00	3031	111.00	531	154.00	198
43.00	361	73.00	21000	112.00	273	155.00	992
44.00	2304	74.00	71768	115.00	253	156.00	371
45.00	3974	75.00	210816	116.00	1721	157.00	1162
46.00	197	76.00	18736	117.00	2478	159.00	841
47.00	4741	77.00	2998	118.00	1554	161.00	186
48.00	2363	78.00	1906	119.00	2538	170.00	250
49.00	18144	79.00	11007	128.00	1249	171.00	258
50.00	83696	80.00	3412	129.00	1036	172.00	2668
51.00	25680	81.00	11975	130.00	1522	173.00	1074
52.00	1260	82.00	2779	131.00	720	174.00	405120
55.00	1155	83.00	270	134.00	177	175.00	29136
56.00	6111	86.00	1034	135.00	917	176.00	393856
57.00	11366	87.00	19240	137.00	1124	177.00	25112
58.00	394	88.00	17872	140.00	168	178.00	218
60.00	4147	91.00	1526	141.00	4208	207.00	639
61.00	20568	92.00	12348	142.00	557	208.00	679
62.00	19512	93.00	17992	143.00	4791	281.00	915
63.00	16848	94.00	51432	144.00	172		
64.00	1971	95.00	422080	145.00	228		
65.00	1376	96.00	27744	146.00	569		

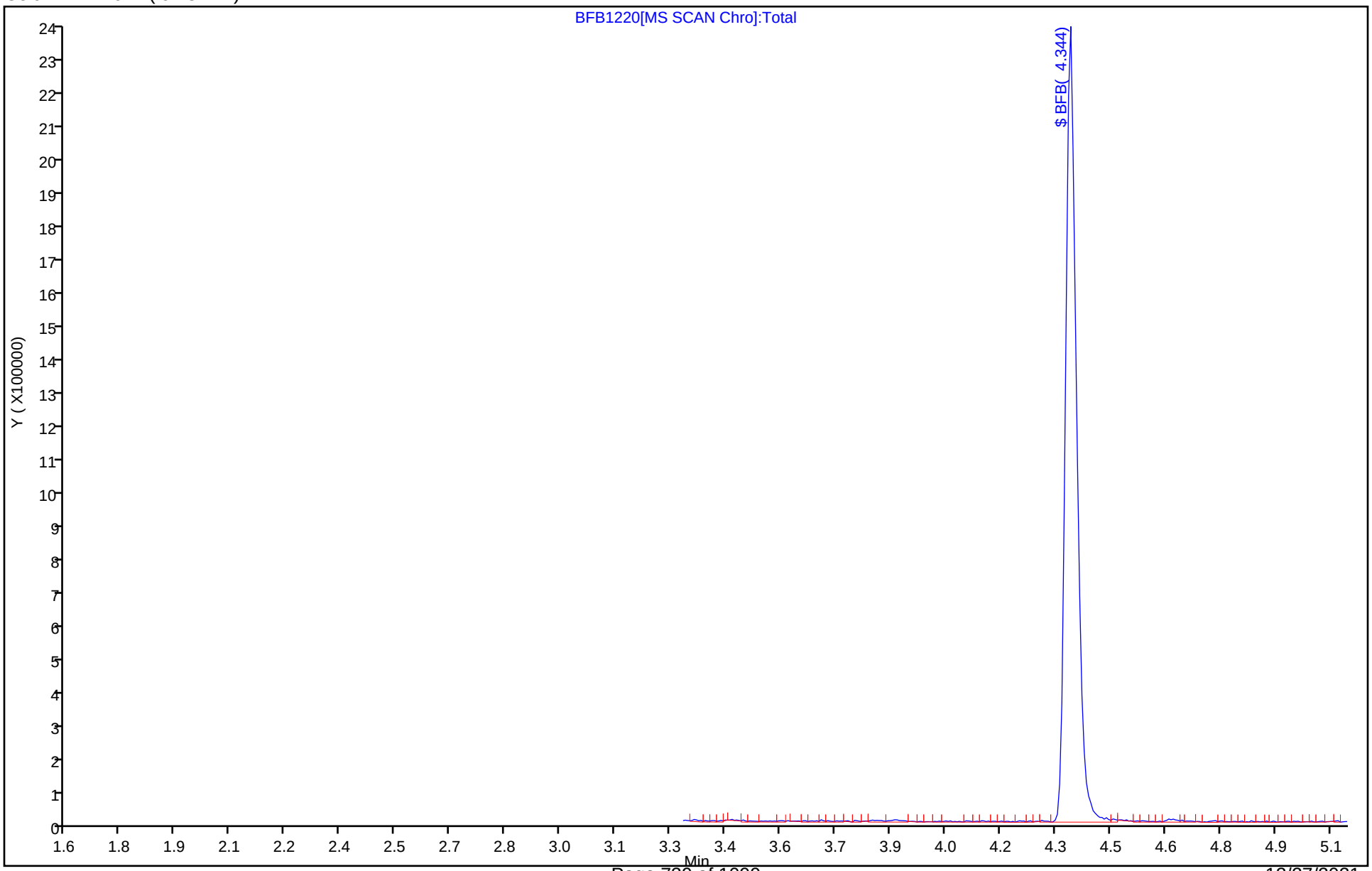
Report Date: 21-Dec-2021 09:02:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\BFB1220.D

Injection Date:	20-Dec-2021 11:08:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\BFB23018.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Aug-2021 12:53:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0111884-001
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Aug-2021 15:21:04 Calib Date: 04-Aug-2021 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\230131.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1605

First Level Reviewer: macenczaks Date: 11-Aug-2021 15:20:26

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96		6.293				27.5	ND	
*	2 Chlorobenzene-d5	117		9.464				27.5	ND	
*	3 1,4-Dichlorobenzene-d4	152		11.783				27.5	ND	
$	4 Dibromofluoromethane (Surr)	113		5.488				ND	ND	
$	5 1,2-Dichloroethane-d4 (Surr)	65		5.878				ND	ND	
$	6 Toluene-d8 (Surr)	98		8.008				ND	ND	
$	7 4-Bromofluorobenzene (Surr)	95		10.635				ND	ND	
$	8 BFB	95	3.603	3.603	0.000	0	623402	NR		NR

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

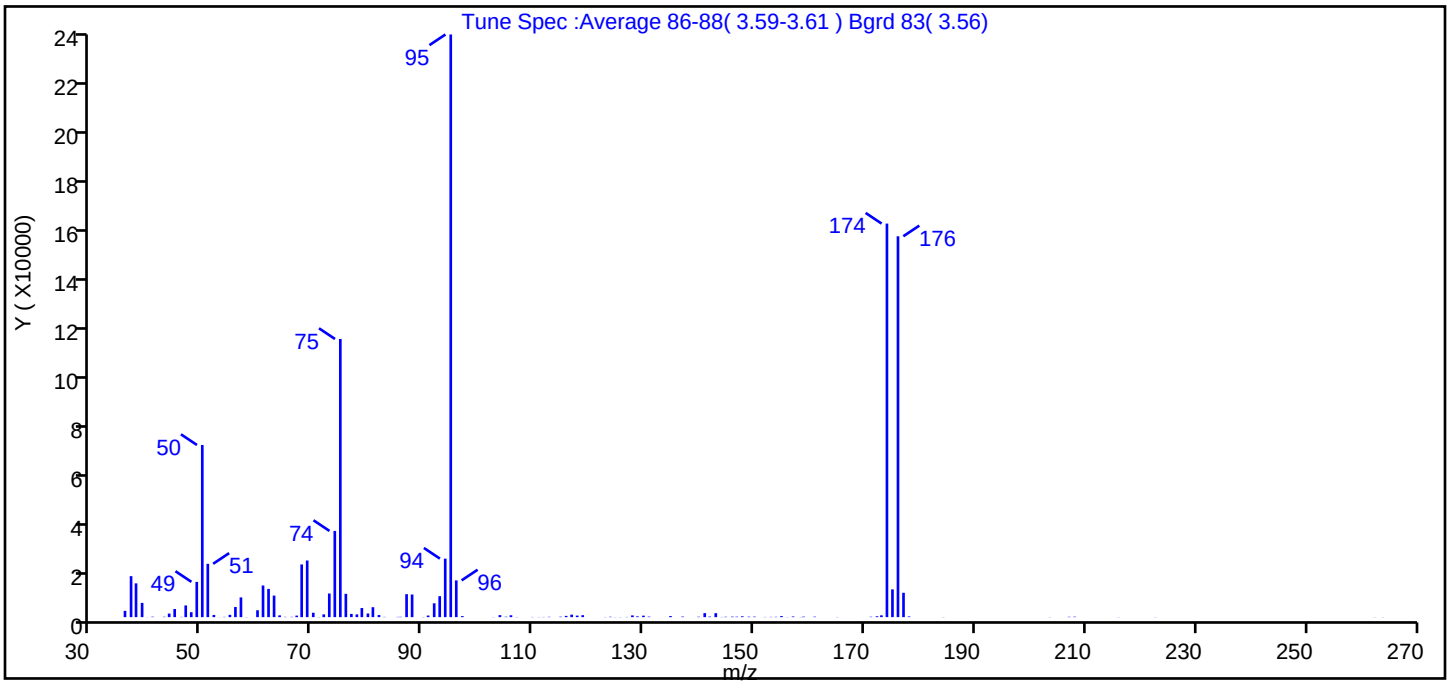
vmbfb_00027	Amount Added:	1.00	Units: uL	
vm125UX21_SS_00001	Amount Added:	1.10	Units: uL	Run Reagent
vm125UX21_IS_00006	Amount Added:	1.10	Units: uL	Run Reagent

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\BFB23018.D
Injection Date: 04-Aug-2021 12:53:30 Instrument ID: A3UX23
Lims ID: BFB
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_23 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	29.5
75	30 to 60% of m/z 95	47.7
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	67.5
175	5 to 9% of m/z 174	4.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	65.4 (96.8)
177	5 to 9% of m/z 176	4.2 (6.4)

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\BFB23018.D\8260_23.rslt\spectra.d
Injection Date: 04-Aug-2021 12:53:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 120

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2576	68.00	21528	105.00	173	147.00	185
37.00	16752	69.00	23136	106.00	765	148.00	341
38.00	13796	70.00	1797	107.00	65	149.00	189
39.00	5819	71.00	64	110.00	75	150.00	207
40.00	37	72.00	1128	111.00	68	152.00	78
41.00	175	73.00	9655	112.00	78	153.00	105
43.00	146	74.00	35216	113.00	138	154.00	136
44.00	1460	75.00	113632	115.00	181	155.00	430
45.00	3328	76.00	9531	116.00	518	156.00	54
46.00	97	77.00	1323	117.00	1011	157.00	265
47.00	4779	78.00	1120	118.00	624	158.00	66
48.00	2014	79.00	3726	119.00	801	159.00	211
49.00	14404	80.00	1490	123.00	65	161.00	192
50.00	70328	81.00	4060	124.00	157	165.00	63
51.00	21792	82.00	866	125.00	55	171.00	163
52.00	893	83.00	96	126.00	61	172.00	357
53.00	30	85.00	101	127.00	84	173.00	738
54.00	108	86.00	133	128.00	706	174.00	160768
55.00	934	87.00	9393	129.00	310	175.00	11339
56.00	4158	88.00	9247	130.00	606	176.00	155584
57.00	8066	90.00	63	131.00	203	177.00	9957
58.00	51	91.00	657	135.00	437	178.00	277
60.00	2817	92.00	5649	137.00	223	184.00	56
61.00	12926	93.00	8569	140.00	167	204.00	59
62.00	11529	94.00	23904	141.00	1637	207.00	152
63.00	8806	95.00	238016	142.00	226	208.00	180
64.00	727	96.00	15011	143.00	1627	216.00	54
65.00	122	97.00	417	144.00	76	223.00	57
66.00	125	103.00	57	145.00	158	262.00	50
67.00	630	104.00	826	146.00	205	264.00	54

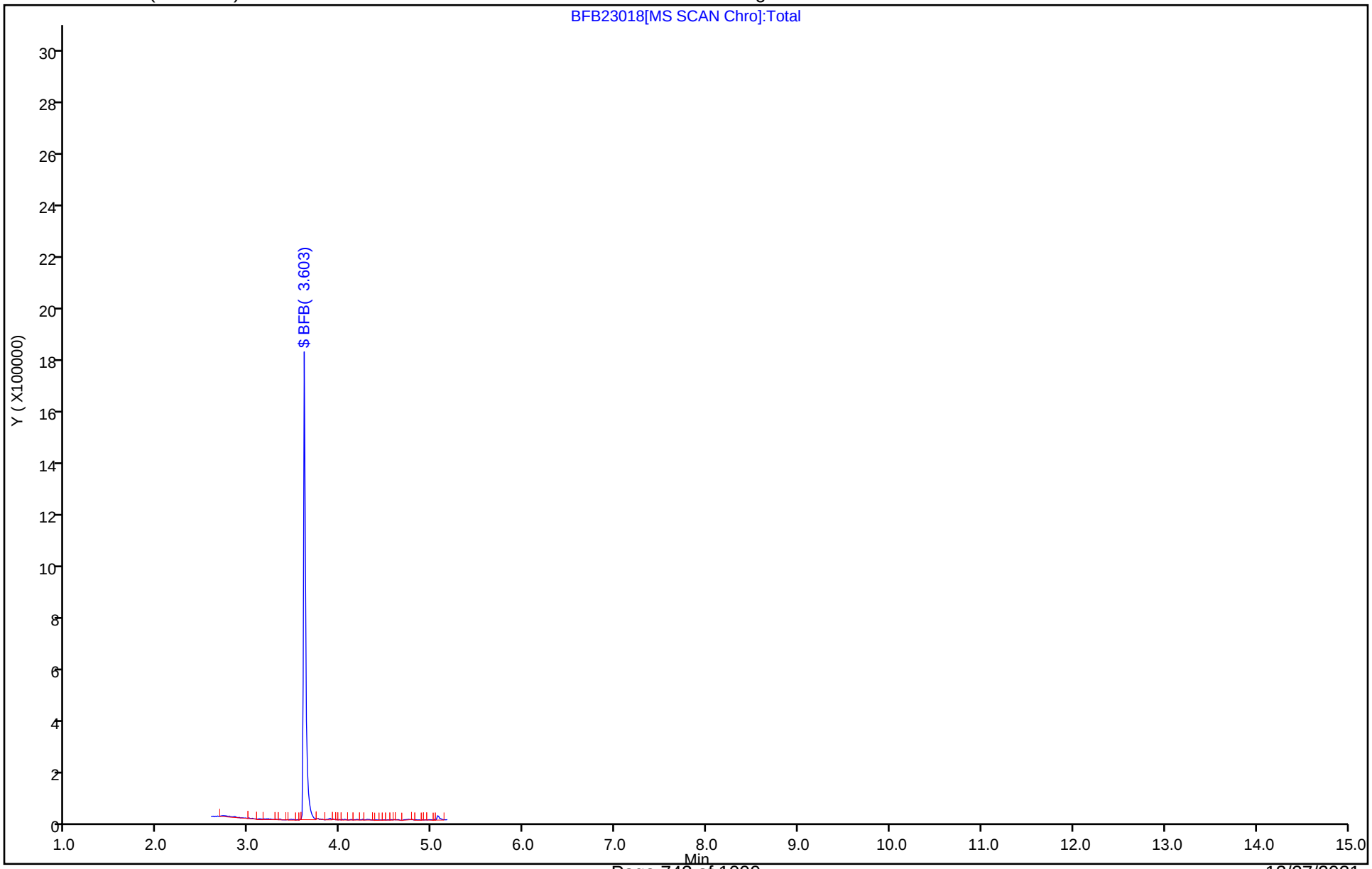
Report Date: 11-Aug-2021 15:21:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210804-111884.b\BFB23018.D

Injection Date:	04-Aug-2021 12:53:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\BFB23019.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Aug-2021 11:25:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0111917-001
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Aug-2021 15:30:49 Calib Date: 05-Aug-2021 15:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\230145.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1669

First Level Reviewer: macenczaks Date: 12-Aug-2021 15:30:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.603	3.603	0.000	0	590216	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

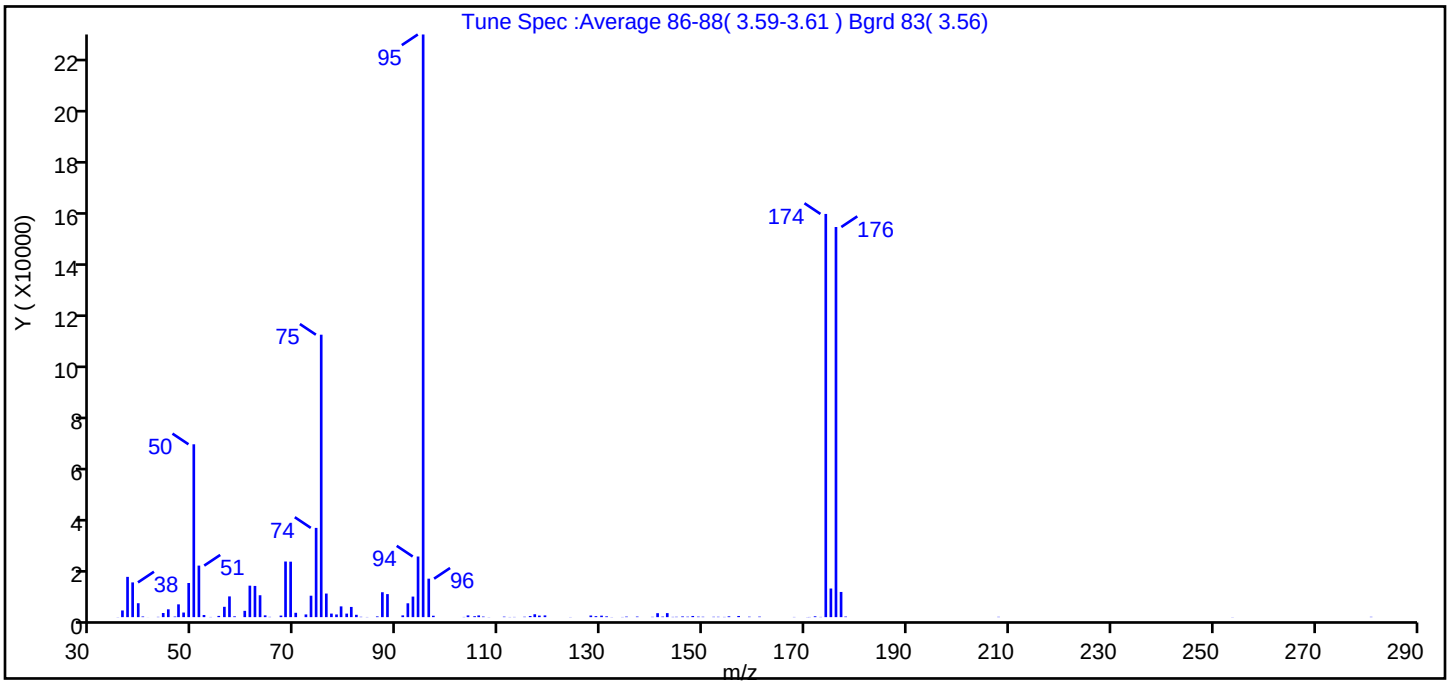
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\BFB23019.D
Injection Date: 05-Aug-2021 11:25:30 Instrument ID: A3UX23
Lims ID: BFB
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_23 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	29.7
75	30 to 60% of m/z 95	48.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	69.2
175	5 to 9% of m/z 174	4.9 (7.1)
176	Greater than 95% but less than 101% of m/z 174	67.0 (96.8)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\BFB23019.D\8260_23.rslt\spectra.d
Injection Date: 05-Aug-2021 11:25:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	50	67.00	610	104.00	682	146.00	279
36.00	2616	68.00	21784	105.00	367	147.00	182
37.00	15772	69.00	21720	106.00	666	148.00	458
38.00	13606	70.00	1704	107.00	222	149.00	195
39.00	5454	72.00	1060	108.00	53	150.00	154
40.00	257	73.00	8394	111.00	195	152.00	141
41.00	19	74.00	34952	112.00	66	153.00	141
43.00	112	75.00	110600	113.00	83	154.00	90
44.00	1624	76.00	9238	115.00	158	155.00	323
45.00	3068	77.00	1395	116.00	454	157.00	455
46.00	223	78.00	1050	117.00	1134	159.00	180
47.00	5014	79.00	4213	118.00	606	161.00	209
48.00	1800	80.00	1386	119.00	679	168.00	76
49.00	13370	81.00	3996	124.00	61	170.00	52
50.00	67688	82.00	922	128.00	635	171.00	72
51.00	20184	83.00	132	129.00	393	172.00	329
52.00	833	84.00	66	130.00	584	173.00	86
53.00	73	86.00	292	131.00	313	174.00	157888
55.00	484	87.00	9754	132.00	57	175.00	11211
56.00	4049	88.00	9021	134.00	69	176.00	152768
57.00	8127	91.00	686	135.00	211	177.00	9865
58.00	318	92.00	5427	137.00	230	178.00	226
60.00	2466	93.00	8051	140.00	125	208.00	120
61.00	12325	94.00	23744	141.00	1555	254.00	51
62.00	12222	95.00	228160	142.00	213	281.00	122
63.00	8575	96.00	15066	143.00	1578		
64.00	703	97.00	548	144.00	105		
65.00	109	103.00	79	145.00	138		

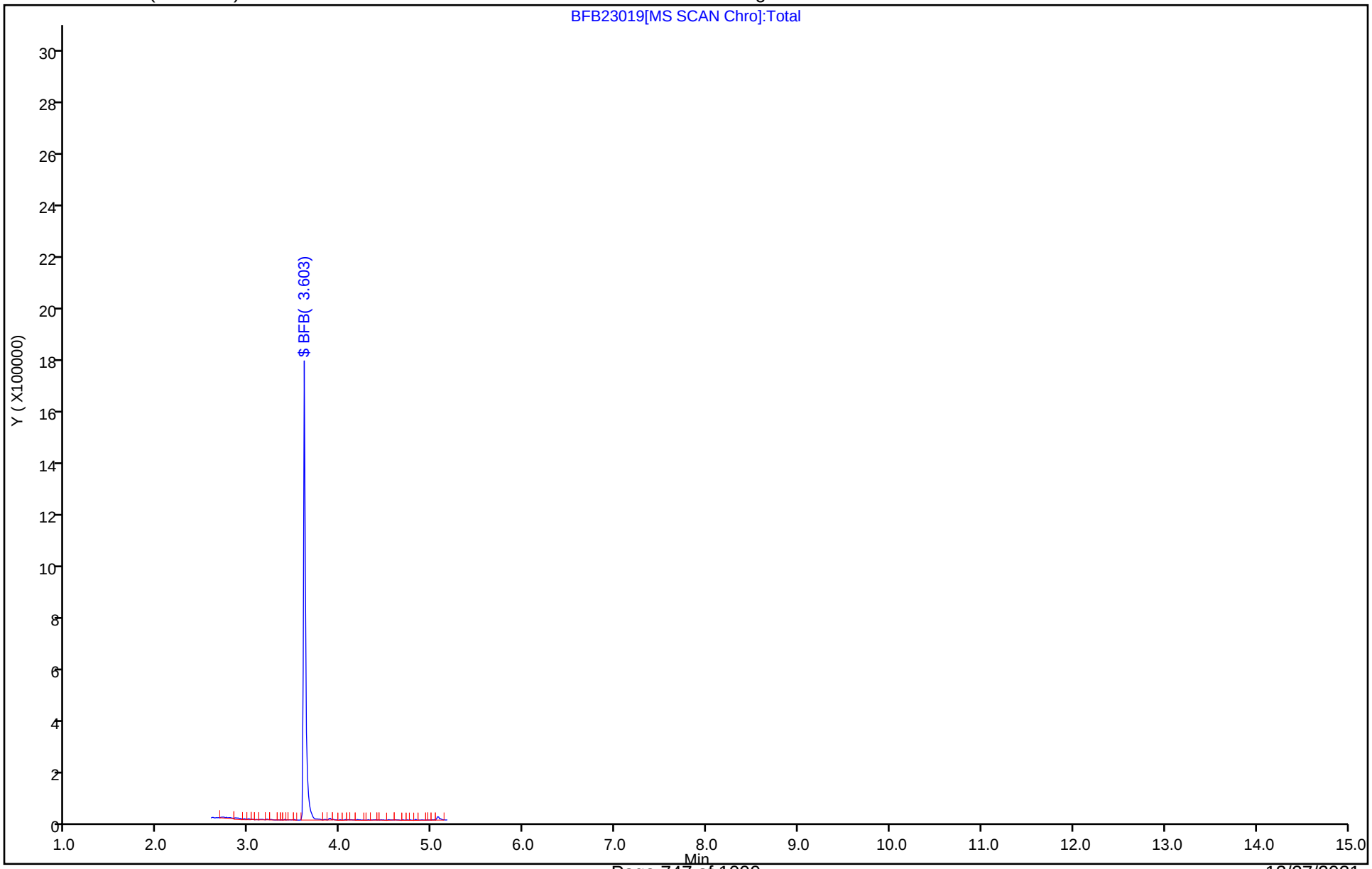
Report Date: 12-Aug-2021 15:30:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20210805-111917.b\BFB23019.D

Injection Date:	05-Aug-2021 11:25:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\BFB23080.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Dec-2021 15:02:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0115786-001
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 10-Dec-2021 13:36:55 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: macenczaks Date: 10-Dec-2021 13:36:19

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96		6.281				27.5	ND	
*	2 Chlorobenzene-d5	117		9.464				27.5	ND	
*	3 1,4-Dichlorobenzene-d4	152		11.783				27.5	ND	
$	4 Dibromofluoromethane (Surr)	113		5.488				ND	ND	
$	5 1,2-Dichloroethane-d4 (Surr)	65		5.879				ND	ND	
$	6 Toluene-d8 (Surr)	98		8.009				ND	ND	
$	7 4-Bromofluorobenzene (Surr)	95		10.635				ND	ND	
$	8 BFB	95	3.603	3.603	0.000	0	788856	NR		NR

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

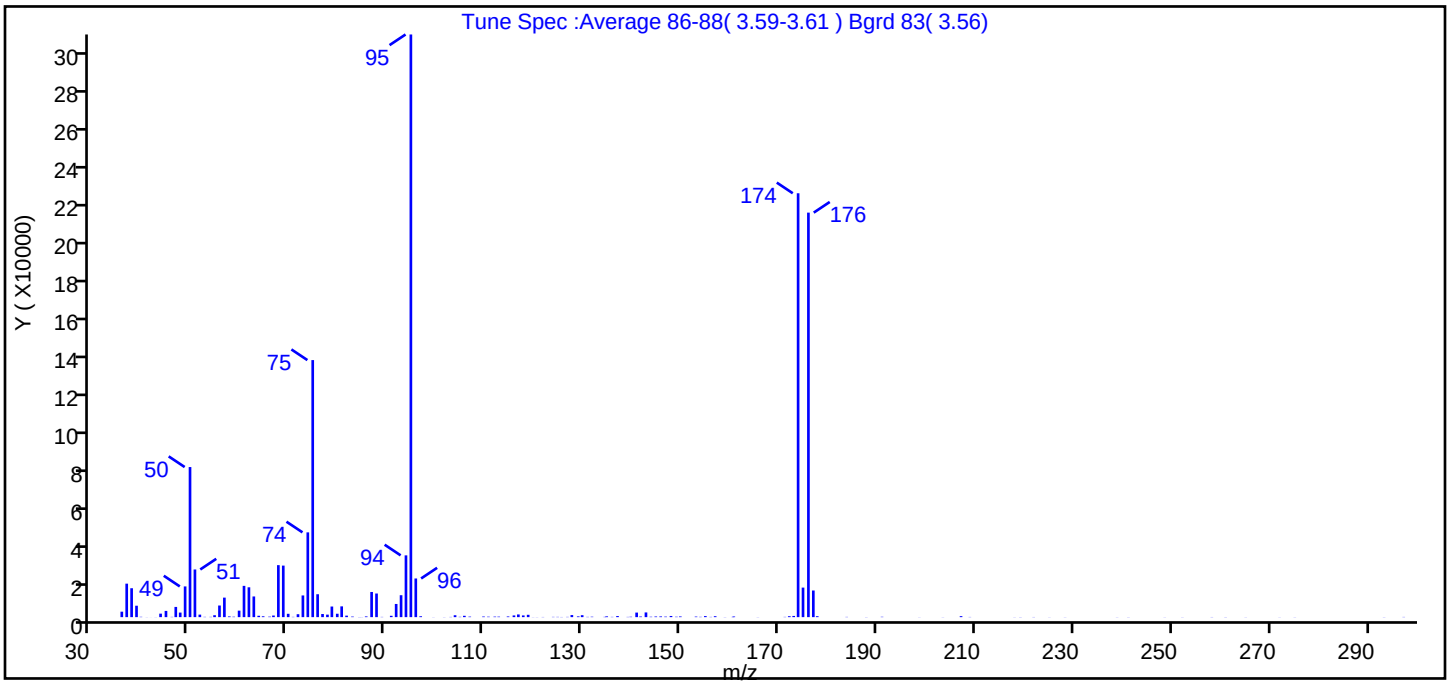
vmbfb_00029	Amount Added:	1.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\BFB23080.D
Injection Date: 06-Dec-2021 15:02:30 Instrument ID: A3UX23
Lims ID: BFB
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_23 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.8
75	30 to 60% of m/z 95	44.1
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	72.7
175	5 to 9% of m/z 174	5.1 (7.0)
176	Greater than 95% but less than 101% of m/z 174	69.4 (95.4)
177	5 to 9% of m/z 176	4.6 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\BFB23080.D\8260_23.rslt\spectra.d
Injection Date: 06-Dec-2021 15:02:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2876	73.00	11404	117.00	1410	161.00	125
37.00	17600	74.00	44560	118.00	900	161.00	330
38.00	15198	75.00	135104	119.00	1233	166.00	56
39.00	6002	76.00	12040	120.00	50	171.00	132
40.00	172	77.00	1646	121.00	52	172.00	486
41.00	44	78.00	1326	122.00	93	173.00	627
42.00	19	79.00	5578	124.00	138	174.00	222784
43.00	42	80.00	1787	125.00	137	175.00	15526
44.00	1837	81.00	5668	126.00	88	176.00	212608
45.00	3271	82.00	790	127.00	133	177.00	14004
46.00	133	83.00	295	128.00	1091	178.00	477
47.00	5370	84.00	77	129.00	384	184.00	126
48.00	2400	85.00	55	130.00	1025	188.00	67
49.00	16146	86.00	379	131.00	137	191.00	184
50.00	78888	87.00	13225	132.00	227	199.00	50
51.00	25048	88.00	12420	134.00	140	203.00	53
52.00	1326	89.00	125	135.00	412	207.00	512
53.00	146	91.00	707	136.00	139	209.00	103
54.00	140	92.00	6931	137.00	568	218.00	53
55.00	1013	93.00	11524	139.00	125	219.00	75
56.00	6114	94.00	32472	140.00	204	222.00	84
57.00	10260	95.00	306240	141.00	2396	225.00	50
58.00	377	96.00	20320	142.00	329	228.00	54
59.00	220	97.00	464	143.00	2474	239.00	55
60.00	3412	100.00	51	144.00	210	241.00	63
61.00	16440	102.00	61	145.00	340	249.00	50
62.00	15687	103.00	112	146.00	377	252.00	57
63.00	10869	104.00	997	147.00	274	258.00	83
64.00	723	105.00	161	148.00	611	261.00	78
65.00	443	106.00	708	149.00	211	265.00	52
66.00	262	107.00	277	150.00	357	272.00	51
67.00	844	110.00	318	153.00	296	275.00	56
68.00	27328	111.00	239	154.00	155	293.00	65

Report Date: 10-Dec-2021 13:36:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\BFB23080.D\8260_23.rslt\spectra.d
Injection Date: 06-Dec-2021 15:02:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
69.00	27088	112.00	274	155.00	554	297.00	110
70.00	1761	113.00	262	156.00	124		
71.00	138	115.00	361	157.00	481		
72.00	1540	116.00	900	159.00	68		

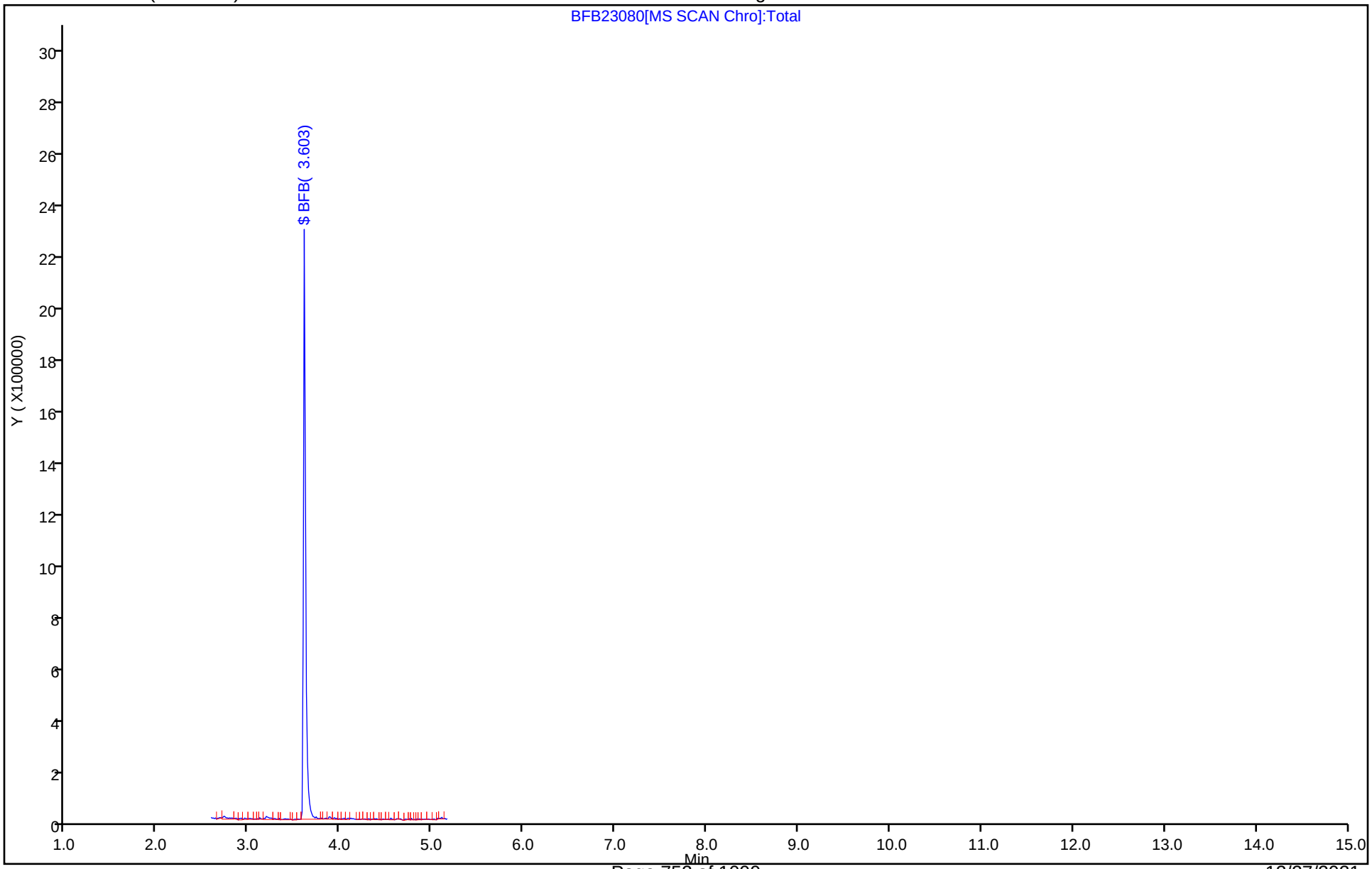
Report Date: 10-Dec-2021 13:36:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\BFB23080.D

Injection Date:	06-Dec-2021 15:02:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\BFB23086.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Dec-2021 10:14:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-001
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:07 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96		6.281				27.5	ND	
* 2 Chlorobenzene-d5	117		9.452				27.5	ND	
* 3 1,4-Dichlorobenzene-d4	152		11.783				27.5	ND	
$ 4 Dibromofluoromethane (Surr)	113		5.488				ND	ND	
$ 5 1,2-Dichloroethane-d4 (Surr)	65		5.879				ND	ND	
$ 6 Toluene-d8 (Surr)	98		8.009				ND	ND	
$ 7 4-Bromofluorobenzene (Surr)	95		10.635				ND	ND	
$ 8 BFB	95	3.603	3.603	0.000	0	826927	NR		NR

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

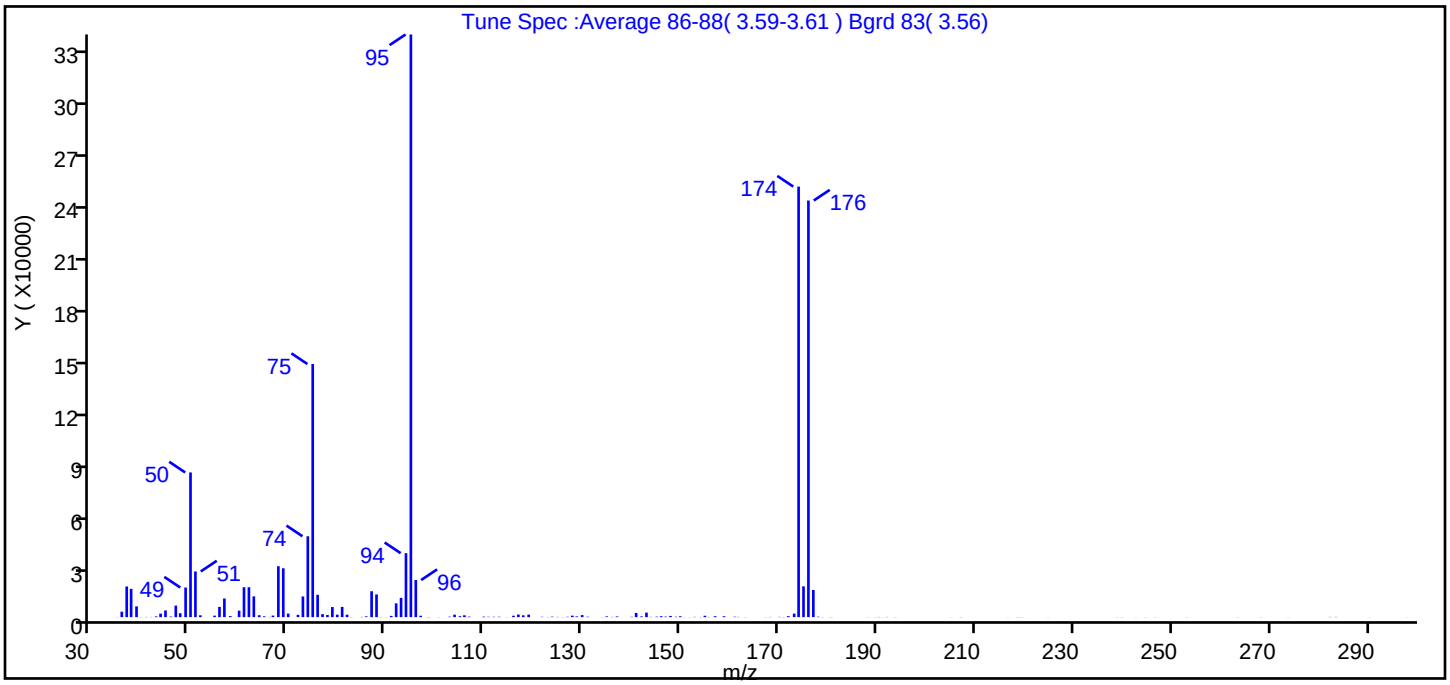
vmbfb_00029	Amount Added:	1.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\BFB23086.D
Injection Date: 20-Dec-2021 10:14:30 Instrument ID: A3UX23
Lims ID: BFB
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_23 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.8
75	30 to 60% of m/z 95	43.4
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.6 (0.8)
174	50 to 120% of m/z 95	73.9
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	71.5 (96.8)
177	5 to 9% of m/z 176	4.7 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\BFB23086.D\8260_23.rslt\spectra.d
Injection Date: 20-Dec-2021 10:14:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 153

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	52	77.00	1718	123.00	89	172.00	564
36.00	3120	78.00	1243	124.00	267	173.00	2017
37.00	17440	79.00	5750	125.00	129	174.00	244928
38.00	16107	80.00	1402	126.00	92	175.00	17504
39.00	6122	81.00	5836	127.00	197	176.00	236992
40.00	85	82.00	1401	128.00	842	177.00	15452
41.00	129	83.00	78	129.00	418	178.00	265
42.00	112	85.00	131	130.00	1160	179.00	86
43.00	429	86.00	446	131.00	233	180.00	50
44.00	1999	87.00	14741	134.00	66	181.00	97
45.00	3791	88.00	12920	135.00	421	188.00	59
46.00	340	89.00	114	136.00	129	190.00	54
47.00	6563	90.00	67	137.00	396	190.00	114
48.00	2214	91.00	713	140.00	204	191.00	75
49.00	16840	92.00	7835	141.00	2365	192.00	118
50.00	82320	93.00	10973	142.00	426	194.00	85
51.00	25992	94.00	36400	143.00	2573	205.00	55
52.00	1057	95.00	331456	144.00	145	207.00	91
53.00	15	96.00	21104	145.00	277	217.00	51
55.00	853	97.00	808	146.00	538	219.00	88
56.00	5819	98.00	80	147.00	279	219.00	66
57.00	10610	99.00	64	148.00	683	220.00	53
58.00	598	101.00	67	149.00	226	225.00	53
60.00	3685	103.00	250	150.00	501	239.00	75
61.00	17032	104.00	1395	151.00	55	240.00	81
62.00	17024	105.00	532	152.00	66	243.00	50
63.00	11828	106.00	1058	153.00	144	245.00	61
64.00	1088	107.00	292	154.00	95	247.00	63
65.00	464	110.00	58	155.00	788	253.00	59
66.00	122	110.00	302	156.00	118	264.00	54
67.00	885	111.00	203	157.00	536	268.00	72
68.00	28976	112.00	215	159.00	520	274.00	56
69.00	27800	113.00	238	161.00	256	282.00	126

Report Date: 21-Dec-2021 09:18:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\BFB23086.D\8260_23.rslt\spectra.d
Injection Date: 20-Dec-2021 10:14:30
Spectrum: Tune Spec :Average 86-88(3.59-3.61) Bgrd 83(3.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 153

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	2036	115.00	58	162.00	132	284.00	136
72.00	1338	116.00	808	163.00	66	290.00	54
73.00	11755	117.00	1480	167.00	67	298.00	50
74.00	46008	118.00	1036	168.00	124		
75.00	144000	119.00	1442	170.00	147		
76.00	12727	122.00	199	171.00	100		

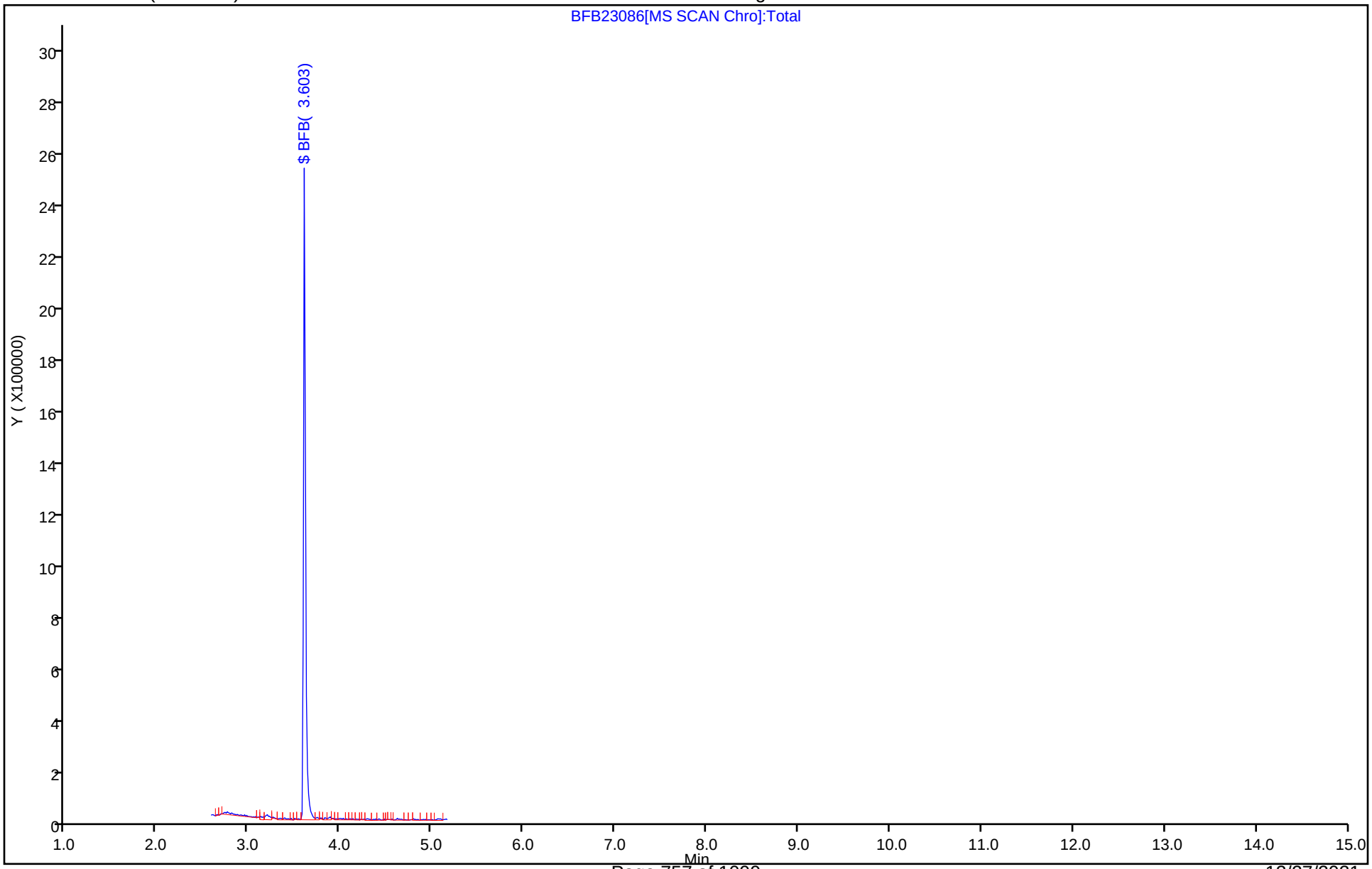
Report Date: 21-Dec-2021 09:18:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\BFB23086.D

Injection Date:	20-Dec-2021 10:14:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-517187/6

Matrix: Water Lab File ID: UXJ3210.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 13:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	79		56-136
2037-26-5	Toluene-d8 (Surr)	108		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3210.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2021 13:58:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: VBLK
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 20-Dec-2021 14:25:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2132343	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1164011	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	93	631823	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	98	487326	20.0	17.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	599392	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1787609	20.0	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	459562	20.0	15.8	
9 Chlorodifluoromethane TIC	51		0.975					ND	
10 Dichlorodifluoromethane	85		1.139					ND	
11 Isobutylene TIC	1		1.250					ND	
12 Chloromethane	50		1.293					ND	
14 Vinyl chloride	62		1.352					ND	
13 Butadiene	54		1.364					ND	
15 Bromomethane	94		1.600					ND	
16 Chloroethane	64		1.648					ND	
17 Dichlorofluoromethane	67		1.813					ND	
18 Trichlorofluoromethane	101		1.825					ND	
19 Ethyl ether	59		2.062					ND	
20 Acrolein	56		2.157					ND	
21 1,1-Dichloroethene	96		2.239					ND	
23 112TCTFE	151		2.287					ND	
24 Acetone	43		2.287					ND	7
22 Methylal	45		2.308					ND	
25 Iodomethane	142		2.358					ND	
26 Carbon disulfide	76		2.417					ND	
27 Acetonitrile	41		2.523					ND	U
28 3-Chloro-1-propene	76		2.547					ND	
29 Methyl acetate	43		2.571					ND	
30 Methylene Chloride	84	2.654	2.642	0.012	97	4702		0.1666	
31 2-Methyl-2-propanol	59		2.772					ND	
32 Acrylonitrile	53		2.843					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		2.878					ND	
34 Methyl tert-butyl ether	73		2.890					ND	
35 Hexane	86		3.115					ND	
36 1,1-Dichloroethane	63		3.221					ND	
37 Vinyl acetate	43		3.281					ND	
38 2-Chloro-1,3-butadiene	53		3.304					ND	
39 Isopropyl ether	87		3.316					ND	
40 Tert-butyl ethyl ether	59		3.612					ND	
41 cis-1,2-Dichloroethene	96		3.707					ND	
42 2,2-Dichloropropane	97		3.707					ND	
43 2-Butanone (MEK)	43		3.730					ND	U
44 Propionitrile	54		3.766					ND	U
45 Ethyl acetate	43		3.790					ND	
47 Methacrylonitrile	41		3.896					ND	
46 Chlorobromomethane	128		3.908					ND	
49 Tetrahydrofuran	42	3.967	3.955	0.012	90	5911		0.8067	
48 Chloroform	83		3.979					ND	
50 1,1,1-Trichloroethane	97		4.133					ND	
51 Cyclohexane	56		4.180					ND	
53 1,1-Dichloropropene	75		4.263					ND	
52 Carbon tetrachloride	117		4.275					ND	
54 Isobutyl alcohol	41		4.381					ND	
55 Benzene	78		4.440					ND	
56 1,2-Dichloroethane	62		4.452					ND	
126 Isooctane	57		4.523					ND	
57 Tert-amyl methyl ether	73		4.559					ND	
58 n-Heptane	100		4.677					ND	
59 n-Butanol	56		4.949					ND	
60 Trichloroethene	130		4.985					ND	
61 Ethyl acrylate	55		5.091					ND	
62 Methylcyclohexane	83		5.150					ND	
63 1,2-Dichloropropane	63		5.162					ND	
64 Dibromomethane	93		5.269					ND	
65 Methyl methacrylate	41		5.281					ND	
66 1,4-Dioxane	88		5.292					ND	
67 Dichlorobromomethane	83		5.399					ND	
68 2-Nitropropane	41		5.600					ND	
69 2-Chloroethyl vinyl ether	63		5.671					ND	
70 cis-1,3-Dichloropropene	75		5.789					ND	
71 4-Methyl-2-pentanone (MIBK)	43		5.931					ND	
72 Toluene	91		6.085					ND	
73 trans-1,3-Dichloropropene	75		6.286					ND	
74 Ethyl methacrylate	69		6.381					ND	
75 1,1,2-Trichloroethane	97		6.440					ND	
76 Tetrachloroethene	164		6.582					ND	
77 1,3-Dichloropropane	76		6.594					ND	
78 2-Hexanone	43		6.677					ND	
79 Tetrahydrothiophene	60		6.783					ND	
80 Chlorodibromomethane	129		6.795					ND	
81 n-Butyl acetate	43		6.807					ND	
82 Ethylene Dibromide	107		6.890					ND	
83 1-Chlorohexane	91		7.339					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorobenzene	112		7.351					ND	
85 1,1,1,2-Tetrachloroethane	131		7.434					ND	
86 Ethylbenzene	106		7.458					ND	
87 m-Xylene & p-Xylene	106		7.564					ND	
89 o-Xylene	106		7.943					ND	
88 Styrene	104		7.955					ND	
90 Bromoform	173		8.108					ND	
91 Isopropylbenzene	105		8.286					ND	
93 Cyclohexanone	55		8.369					ND	
92 1,4-Dichlorobutane	55		8.381					ND	
95 Bromobenzene	156		8.570					ND	
94 1,1,2,2-Tetrachloroethane	83		8.570					ND	
96 1,2,3-Trichloropropane	110		8.605					ND	
97 trans-1,4-Dichloro-2-butene	53		8.617					ND	
98 N-Propylbenzene	120		8.688					ND	
99 2-Chlorotoluene	126		8.759					ND	
100 1,3,5-Trimethylbenzene	105		8.854					ND	
101 4-Chlorotoluene	126		8.866					ND	
103 tert-Butylbenzene	119		9.173					ND	
102 Pentachloroethane	167		9.174					ND	
104 1,2,4-Trimethylbenzene	105		9.221					ND	
105 sec-Butylbenzene	105		9.386					ND	
106 1,3-Dichlorobenzene	146		9.481					ND	
107 4-Isopropyltoluene	119		9.528					ND	
108 1,4-Dichlorobenzene	146		9.564					ND	
109 1,2,3-Trimethylbenzene	105		9.623					ND	
110 Benzyl chloride	126		9.694					ND	
112 1,2-Dichlorobenzene	146		9.919					ND	
111 n-Butylbenzene	91		9.931					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropane	157		10.688					ND	
115 1,3,5-Trichlorobenzene	180	10.901	10.901	0.000	88	4109		0.1364	
116 1,2,4-Trichlorobenzene	180		11.505					ND	
117 Hexachlorobutadiene	225		11.694					ND	
118 Naphthalene	128		11.741					ND	7
119 1,2,3-Trichlorobenzene	180		11.990					ND	
120 2-Methylnaphthalene	142	12.877	12.877	0.000	97	33936		0.7158	
127 1-Methylnaphthalene	142	13.067	13.067	0.000	94	40963		0.9495	
121 Epichlorohydrin	1		-0.500					ND	
122 Ethylene oxide	1		-0.500					ND	
123 Propene oxide	1		-0.500					ND	
124 3-Ethyltoluene	1		-0.500					ND	
125 2-Ethyltoluene	1		-0.500					ND	
S 129 Total BTEX	1		-0.500					ND	
S 128 Trihalomethanes, Total	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

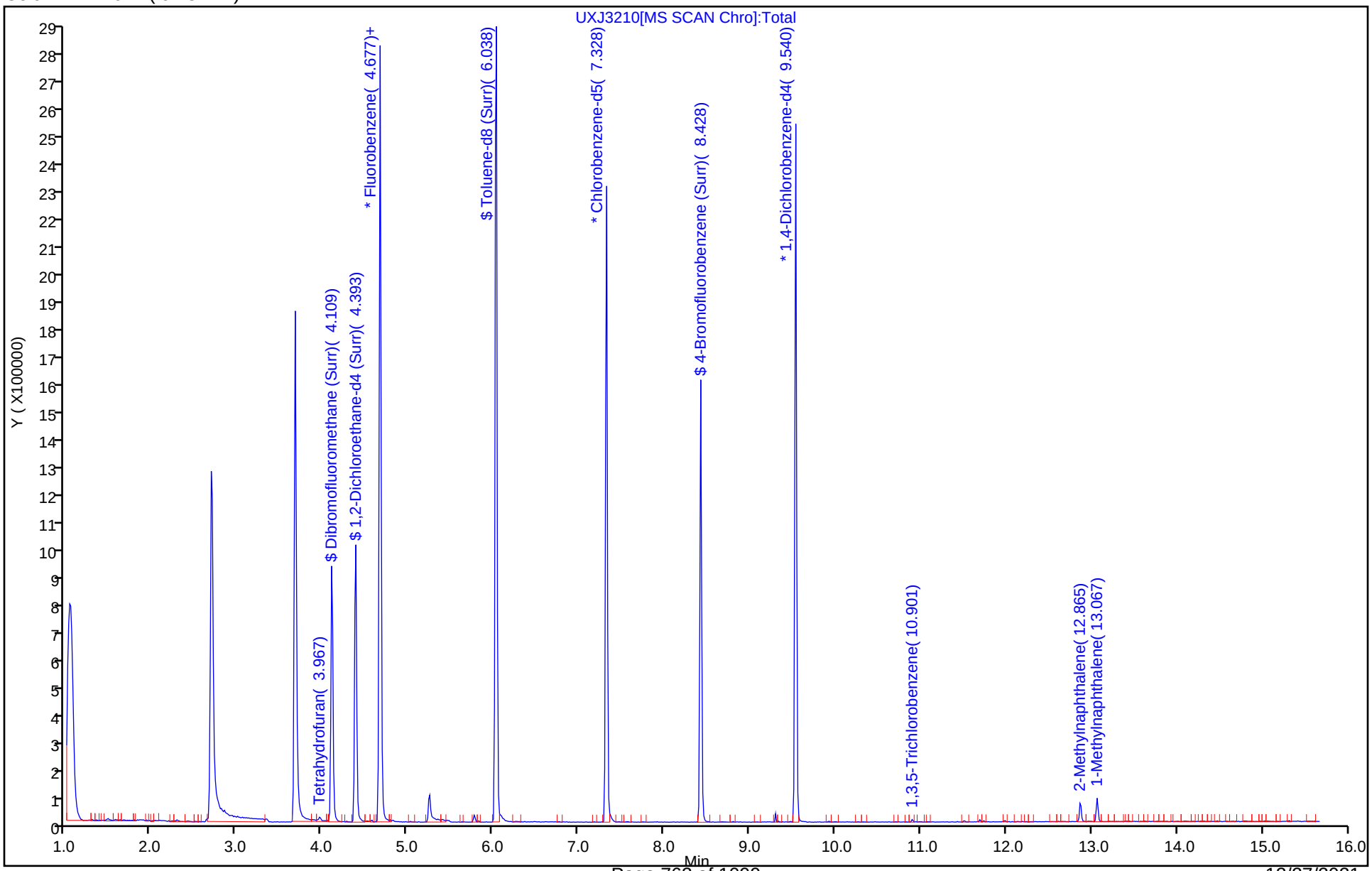
Report Date: 21-Dec-2021 09:02:15 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3210.D

Injection Date:	20-Dec-2021 13:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3210.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2021 13:58:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: VBLK
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

First Level Reviewer: evansle Date: 20-Dec-2021 14:25:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.9	89.70
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.5	97.26
$ 6 Toluene-d8 (Surr)	20.0	21.6	107.96
$ 7 4-Bromofluorobenzene (Surr)	20.0	15.8	79.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-517192/7

Matrix: Water Lab File ID: 231385.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 12:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	94		56-136
2037-26-5	Toluene-d8 (Surr)	99		78-122
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231385.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2021 12:40:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-007
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 20-Dec-2021 14:12:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	99	1872370	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	88	1273998	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	551828	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	475531	27.5	27.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	97	660562	27.5	27.5	
$ 6 Toluene-d8 (Surr)	98	8.009	8.009	0.000	95	1887331	27.5	27.2	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	508192	27.5	25.7	
9 Dichlorodifluoromethane	85		1.145					ND	
10 Chloromethane	50		1.299					ND	
11 Vinyl chloride	62		1.382					ND	
12 Butadiene	54		1.406					ND	
13 Bromomethane	94		1.666					ND	U
14 Chloroethane	64		1.725					ND	U
15 Dichlorofluoromethane	67		1.926					ND	
16 Trichlorofluoromethane	101		1.974					ND	
17 Ethyl ether	59		2.234					ND	
18 Acrolein	56		2.341					ND	
19 1,1-Dichloroethene	96		2.447					ND	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.483					ND	U
21 Acetone	58		2.518					ND	7
123 Ethylene oxide	44		2.599					ND	U
23 Iodomethane	142		2.601					ND	
24 Carbon disulfide	76		2.672					ND	U
25 Acetonitrile	41		2.826					ND	U
26 3-Chloro-1-propene	41		2.838					ND	
27 Methyl acetate	43		2.909					ND	
28 Methylene Chloride	84		3.015					ND	
120 Propene oxide	58		3.238					ND	U
29 2-Methyl-2-propanol	59		3.264					ND	U
30 Acrylonitrile	53		3.323					ND	
32 trans-1,2-Dichloroethene	96		3.346					ND	
31 Methyl tert-butyl ether	73		3.406					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Methylal	45		3.629					ND	U
33 Hexane	57		3.761					ND	7
34 1,1-Dichloroethane	63		3.962					ND	
37 2-Chloro-1,3-butadiene	53		4.115					ND	
35 Vinyl acetate	43		4.127					ND	
36 Isopropyl ether	87		4.186					ND	
38 Tert-butyl ethyl ether	59		4.731					ND	
41 2,2-Dichloropropane	97		4.826					ND	U
39 cis-1,2-Dichloroethene	96		4.837					ND	U
40 2-Butanone (MEK)	72		4.920					ND	
42 Propionitrile	54		4.979					ND	U
43 Ethyl acetate	43		5.050					ND	U
45 Chlorobromomethane	128		5.145					ND	
44 Methacrylonitrile	41		5.180					ND	
46 Tetrahydrofuran	42		5.252					ND	MU
47 Chloroform	83		5.287					ND	
48 1,1,1-Trichloroethane	97		5.476					ND	
49 Cyclohexane	56		5.535					ND	
51 Carbon tetrachloride	117		5.677					ND	
50 1,1-Dichloropropene	75		5.689					ND	
54 Benzene	78		5.938					ND	
53 1,2-Dichloroethane	62		5.973					ND	
52 Isobutyl alcohol	41		6.009					ND	
163 Isooctane	57		6.080					ND	7
55 Tert-amyl methyl ether	73		6.151					ND	
56 n-Heptane	100		6.328					ND	
58 Trichloroethene	130		6.707					ND	
57 n-Butanol	56		6.778					ND	
60 Methylcyclohexane	83		6.896					ND	7
59 Ethyl acrylate	55		6.908					ND	U
61 1,2-Dichloropropane	63		6.944					ND	
63 Dibromomethane	93		7.062					ND	
121 Epichlorohydrin	57		7.071					ND	U
64 1,4-Dioxane	88		7.133					ND	
62 Methyl methacrylate	41		7.145					ND	
65 Dichlorobromomethane	83		7.263					ND	
66 2-Nitropropane	41		7.511					ND	
67 2-Chloroethyl vinyl ether	63		7.618					ND	U
68 cis-1,3-Dichloropropene	75		7.736					ND	
69 4-Methyl-2-pentanone (MIBK)	43		7.938					ND	
79 Tetrahydrothiophene	60		8.042					ND	U
70 Toluene	91		8.068					ND	7
71 trans-1,3-Dichloropropene	75		8.316					ND	
72 Ethyl methacrylate	69		8.458					ND	
73 1,1,2-Trichloroethane	97		8.494					ND	
75 Tetrachloroethene	164		8.624					ND	
74 1,3-Dichloropropane	76		8.659					ND	
76 2-Hexanone	43		8.790					ND	
78 Chlorodibromomethane	129		8.884					ND	U
77 n-Butyl acetate	43		8.943					ND	
80 Ethylene Dibromide	107		8.979					ND	
82 Chlorobenzene	112		9.488					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
81 1-Chlorohexane	91		9.499					ND	
83 1,1,1,2-Tetrachloroethane	131		9.582					ND	
84 Ethylbenzene	106		9.606					ND	
90 1,4-Dichlorobutane	55		9.651					ND	U
85 m-Xylene & p-Xylene	106		9.736					ND	
86 o-Xylene	106		10.115					ND	
87 Styrene	104		10.138					ND	
88 Bromoform	173		10.304					ND	
98 3-Ethyltoluene	105		10.411					ND	U
101 2-Ethyltoluene	105		10.411					ND	U
89 Isopropylbenzene	105		10.493					ND	
91 Cyclohexanone	55		10.588					ND	U
93 Bromobenzene	156		10.777					ND	
92 1,1,2,2-Tetrachloroethane	83		10.789					ND	
95 1,2,3-Trichloropropane	110		10.825					ND	
94 trans-1,4-Dichloro-2-butene	53		10.848					ND	U
96 N-Propylbenzene	120		10.908					ND	
97 2-Chlorotoluene	126		10.979					ND	
100 4-Chlorotoluene	126		11.085					ND	
99 1,3,5-Trimethylbenzene	105		11.085					ND	
102 tert-Butylbenzene	119		11.405					ND	
103 Pentachloroethane	167		11.416					ND	
104 1,2,4-Trimethylbenzene	105		11.452					ND	
105 sec-Butylbenzene	105		11.618					ND	
106 1,3-Dichlorobenzene	146		11.712					ND	
107 4-Isopropyltoluene	119		11.771					ND	U
108 1,4-Dichlorobenzene	146		11.807					ND	
109 1,2,3-Trimethylbenzene	105		11.866					ND	
110 Benzyl chloride	126		11.949					ND	
112 1,2-Dichlorobenzene	146		12.162					ND	
111 n-Butylbenzene	91	12.174	12.174	0.000	94	3232		0.3736	
113 1,2-Dibromo-3-Chloropropane	157		12.943					ND	U
114 1,3,5-Trichlorobenzene	180		13.156					ND	
115 1,2,4-Trichlorobenzene	180		13.771					ND	7
116 Hexachlorobutadiene	225	13.960	13.961	-0.001	91	2197		0.2758	
117 Naphthalene	128	14.008	14.008	0.000	92	3698		0.3939	
118 1,2,3-Trichlorobenzene	180		14.245					ND	7
119 2-Methylnaphthalene	142	15.132	15.132	0.000	44	1816		0.1218	
162 1-Methylnaphthalene	142	15.321	15.333	-0.012	0	1673		1.48	
126 Butyl Methacrylate TIC	1		0.520					ND	U
S 134 Trihalomethanes, Total	1		0.520					ND	
S 158 Total BTEX	1		0.520					ND	
S 131 1,2-Dichloroethene, Total	96		1.660					ND	
S 132 1,3-Dichloropropene, Total	75		7.280					ND	
S 133 Xylenes, Total	106		17.050					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

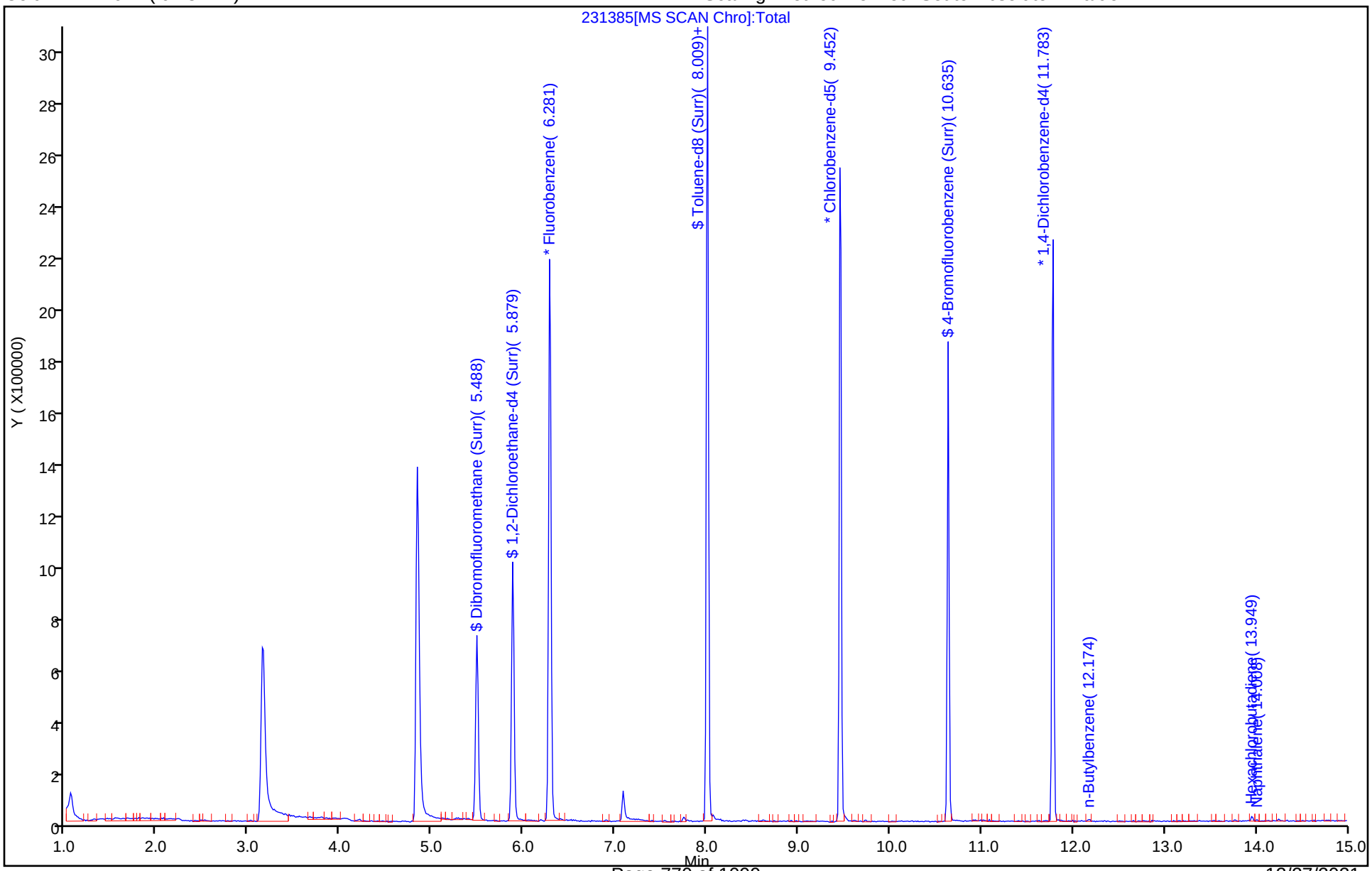
Report Date: 21-Dec-2021 09:18:14 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231385.D

Injection Date:	20-Dec-2021 12:40:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231385.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2021 12:40:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-007
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 20-Dec-2021 14:12:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	27.1	98.39
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	27.5	100.14
$ 6 Toluene-d8 (Surr)	27.5	27.2	98.89
$ 7 4-Bromofluorobenzene (Surr)	27.5	25.7	93.64

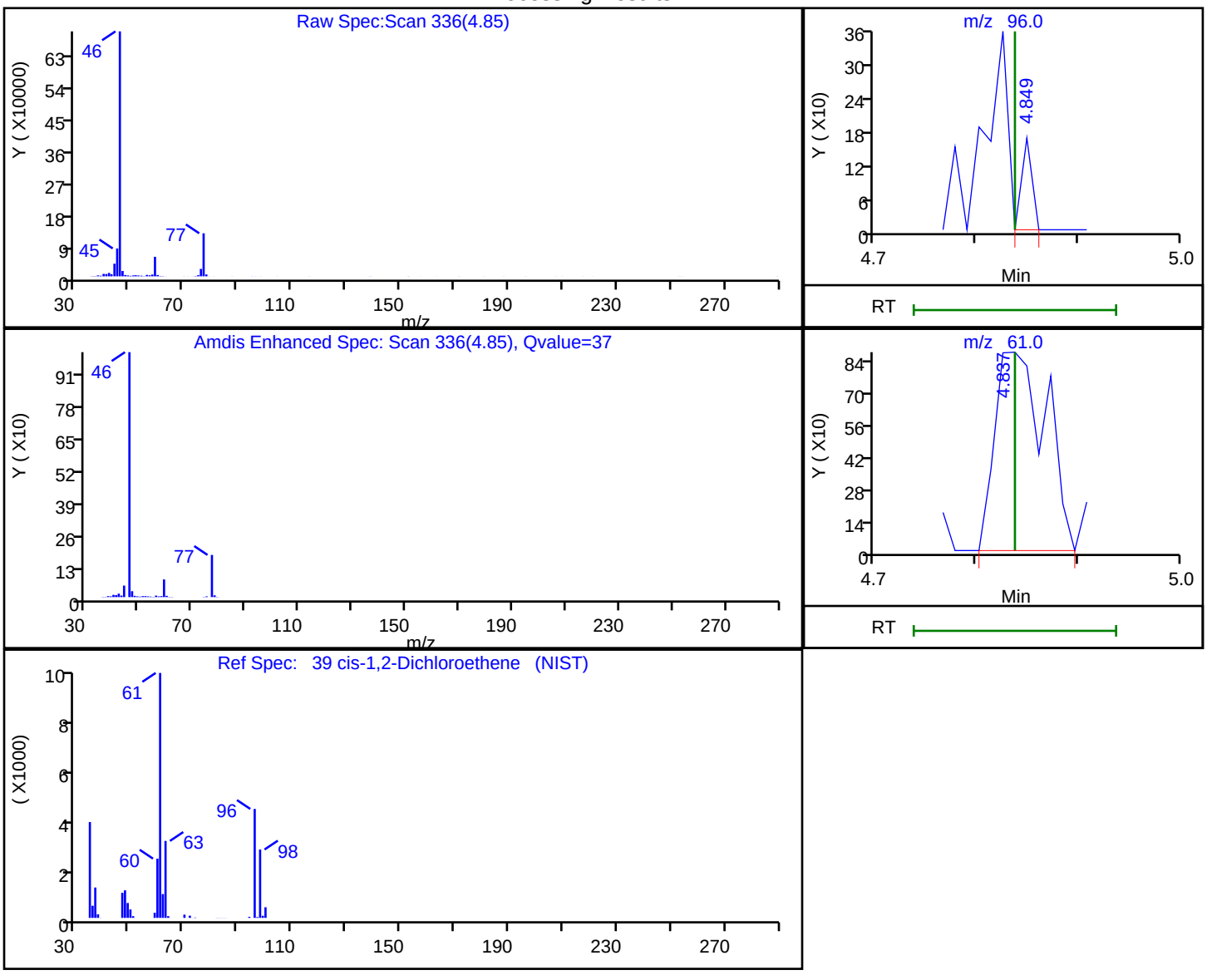
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231385.D				
Injection Date:	20-Dec-2021 12:40:30	Instrument ID:	A3UX23		
Lims ID:	MB				
Client ID:					
Operator ID:	002808	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_23	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

39 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
4.85	96.00	118	0.005330
4.84	61.00	3068	

Reviewer: macenczaks, 20-Dec-2021 14:10:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-517187/4

Matrix: Water Lab File ID: UXJ3206.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 12:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.5		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	10.3		1.0	0.46
127-18-4	Tetrachloroethene	11.3		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.51
79-01-6	Trichloroethene	9.06		1.0	0.44
75-01-4	Vinyl chloride	11.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	88		56-136
2037-26-5	Toluene-d8 (Surr)	114		78-122
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3206.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2021 12:30:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-004
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2244634	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.327	7.328	-0.001	85	1222718	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	714468	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	516690	20.0	18.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	619569	20.0	19.1	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1978859	20.0	22.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	539246	20.0	17.7	
10 Dichlorodifluoromethane	85	1.151	1.139	0.012	99	281904	10.0	9.49	
12 Chloromethane	50	1.293	1.293	0.000	98	330804	10.0	14.1	
14 Vinyl chloride	62	1.364	1.352	0.012	76	317327	10.0	11.4	
13 Butadiene	54	1.375	1.364	0.011	92	334448	10.0	13.6	
15 Bromomethane	94	1.612	1.600	0.012	91	184507	10.0	9.20	
16 Chloroethane	64	1.659	1.648	0.011	99	189243	10.0	11.5	
17 Dichlorofluoromethane	67	1.813	1.813	0.000	97	404366	10.0	9.90	
18 Trichlorofluoromethane	101	1.837	1.825	0.012	97	387448	10.0	8.13	
19 Ethyl ether	59	2.074	2.062	0.012	94	303159	10.0	14.3	
20 Acrolein	56	2.168	2.157	0.012	98	141933	50.0	173.1	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	97	281413	10.0	10.5	
23 112TCTFE	151	2.298	2.287	0.011	93	193838	10.0	9.44	
24 Acetone	43	2.298	2.287	0.011	99	267262	20.0	34.2	
25 Iodomethane	142	2.369	2.358	0.011	97	457639	10.0	9.50	
26 Carbon disulfide	76	2.429	2.417	0.012	99	862780	10.0	10.8	
28 3-Chloro-1-propene	76	2.547	2.547	0.000	91	204341	10.0	11.3	
29 Methyl acetate	43	2.582	2.571	0.011	98	675606	20.0	37.6	
30 Methylene Chloride	84	2.653	2.642	0.011	94	310414	10.0	10.5	
31 2-Methyl-2-propanol	59	2.772	2.772	0.000	98	452565	100.0	124.8	
32 Acrylonitrile	53	2.855	2.843	0.012	99	1664575	100.0	181.5	
33 trans-1,2-Dichloroethene	96	2.890	2.878	0.012	99	323489	10.0	10.2	
34 Methyl tert-butyl ether	73	2.902	2.890	0.012	96	864439	10.0	11.1	
35 Hexane	86	3.127	3.115	0.012	93	79666	10.0	11.0	
36 1,1-Dichloroethane	63	3.233	3.221	0.012	96	574541	10.0	12.5	
37 Vinyl acetate	43	3.281	3.281	0.000	97	725167	10.0	14.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	3.718	3.707	0.011	84	336292	10.0	10.3	
42 2,2-Dichloropropane	97	3.718	3.707	0.011	66	82151	10.0	11.0	
43 2-Butanone (MEK)	43	3.730	3.730	0.000	100	443992	20.0	33.8	
46 Chlorobromomethane	128	3.908	3.908	0.000	97	153889	10.0	9.45	
49 Tetrahydrofuran	42	3.967	3.955	0.012	88	304042	20.0	39.4	
48 Chloroform	83	3.979	3.979	0.000	93	515472	10.0	10.3	
50 1,1,1-Trichloroethane	97	4.133	4.133	0.000	99	425955	10.0	9.72	
51 Cyclohexane	56	4.180	4.180	0.000	91	509334	10.0	14.0	
53 1,1-Dichloropropene	75	4.275	4.263	0.012	96	445693	10.0	11.3	
52 Carbon tetrachloride	117	4.275	4.275	0.000	83	387945	10.0	9.67	
54 Isobutyl alcohol	41	4.393	4.381	0.012	83	406272	250.0	566.4	
55 Benzene	78	4.440	4.440	0.000	96	1289528	10.0	11.5	
56 1,2-Dichloroethane	62	4.452	4.452	0.000	97	382127	10.0	10.5	
58 n-Heptane	100	4.689	4.677	0.012	91	65084	10.0	10.0	
60 Trichloroethene	130	4.984	4.985	-0.001	97	317469	10.0	9.06	
62 Methylcyclohexane	83	5.150	5.150	0.000	93	423054	10.0	10.7	
63 1,2-Dichloropropane	63	5.174	5.162	0.012	96	280314	10.0	12.0	
64 Dibromomethane	93	5.268	5.269	-0.001	94	162970	10.0	9.53	
66 1,4-Dioxane	88	5.292	5.292	0.000	95	79599	200.0	228.8	
67 Dichlorobromomethane	83	5.410	5.399	0.011	99	309270	10.0	8.98	
69 2-Chloroethyl vinyl ether	63	5.671	5.671	0.000	92	173257	10.0	10.4	
70 cis-1,3-Dichloropropene	75	5.801	5.789	0.012	96	369072	10.0	8.66	
71 4-Methyl-2-pentanone (MIBK)	43	5.943	5.931	0.012	97	741056	20.0	31.7	
72 Toluene	91	6.097	6.085	0.012	98	1138558	10.0	12.3	
73 trans-1,3-Dichloropropene	75	6.286	6.286	0.000	92	321678	10.0	10.7	
74 Ethyl methacrylate	69	6.381	6.381	0.000	90	335195	10.0	14.2	
75 1,1,2-Trichloroethane	97	6.440	6.440	0.000	91	205007	10.0	11.1	
76 Tetrachloroethene	164	6.582	6.582	0.000	97	223040	10.0	11.3	
77 1,3-Dichloropropane	76	6.594	6.594	0.000	90	397244	10.0	13.0	
78 2-Hexanone	43	6.677	6.677	0.000	98	516439	20.0	39.6	
80 Chlorodibromomethane	129	6.795	6.795	0.000	91	192095	10.0	9.44	
82 Ethylene Dibromide	107	6.890	6.890	0.000	98	207182	10.0	10.7	
84 Chlorobenzene	112	7.351	7.351	0.000	95	620725	10.0	10.2	
85 1,1,1,2-Tetrachloroethane	131	7.434	7.434	0.000	95	211206	10.0	10.4	
86 Ethylbenzene	106	7.458	7.458	0.000	98	334198	10.0	10.5	
87 m-Xylene & p-Xylene	106	7.576	7.564	0.012	97	397818	10.0	10.2	
89 o-Xylene	106	7.943	7.943	0.000	96	370029	10.0	10.3	
88 Styrene	104	7.955	7.955	0.000	94	591270	10.0	11.3	
90 Bromoform	173	8.108	8.108	0.000	97	135787	10.0	10.1	
91 Isopropylbenzene	105	8.286	8.286	0.000	96	912848	10.0	9.96	
95 Bromobenzene	156	8.570	8.570	0.000	89	243595	10.0	7.93	
94 1,1,2,2-Tetrachloroethane	83	8.570	8.570	0.000	94	330519	10.0	11.9	
96 1,2,3-Trichloropropane	110	8.605	8.605	0.000	87	99029	10.0	9.31	
97 trans-1,4-Dichloro-2-butene	53	8.617	8.617	0.000	84	39738	10.0	5.03	
98 N-Propylbenzene	120	8.688	8.688	0.000	99	258532	10.0	7.90	
99 2-Chlorotoluene	126	8.759	8.759	0.000	97	236053	10.0	8.43	
100 1,3,5-Trimethylbenzene	105	8.854	8.854	0.000	95	731624	10.0	8.06	
101 4-Chlorotoluene	126	8.866	8.866	0.000	99	250857	10.0	8.54	
103 tert-Butylbenzene	119	9.173	9.173	0.000	92	603053	10.0	7.45	
104 1,2,4-Trimethylbenzene	105	9.221	9.221	0.000	96	766239	10.0	8.54	
105 sec-Butylbenzene	105	9.386	9.386	0.000	94	871158	10.0	8.39	
106 1,3-Dichlorobenzene	146	9.481	9.481	0.000	99	490887	10.0	8.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.528	9.528	0.000	97	773064	10.0	8.50	
108 1,4-Dichlorobenzene	146	9.564	9.564	0.000	96	509660	10.0	9.09	
112 1,2-Dichlorobenzene	146	9.919	9.919	0.000	94	466005	10.0	8.82	
111 n-Butylbenzene	91	9.931	9.931	0.000	97	649585	10.0	9.14	
114 1,2-Dibromo-3-Chloropropane	157	10.688	10.688	0.000	85	76566	10.0	11.0	
116 1,2,4-Trichlorobenzene	180	11.504	11.505	0.000	94	270668	10.0	8.48	
117 Hexachlorobutadiene	225	11.694	11.694	0.000	96	116088	10.0	10.6	
118 Naphthalene	128	11.741	11.741	0.000	97	723773	10.0	7.52	
119 1,2,3-Trichlorobenzene	180	11.990	11.990	0.000	95	238711	10.0	7.79	
S 129 Total BTEX	1				0		50.0	54.8	
S 128 Trihalomethanes, Total	1				0		40.0	38.8	
S 132 Xylenes, Total	106				0		20.0	20.5	

Reagents:

VMFASPW_00427	Amount Added:	8.00	Units: uL	
VMFASAW_00402	Amount Added:	8.00	Units: uL	
VMFASGW_00438	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

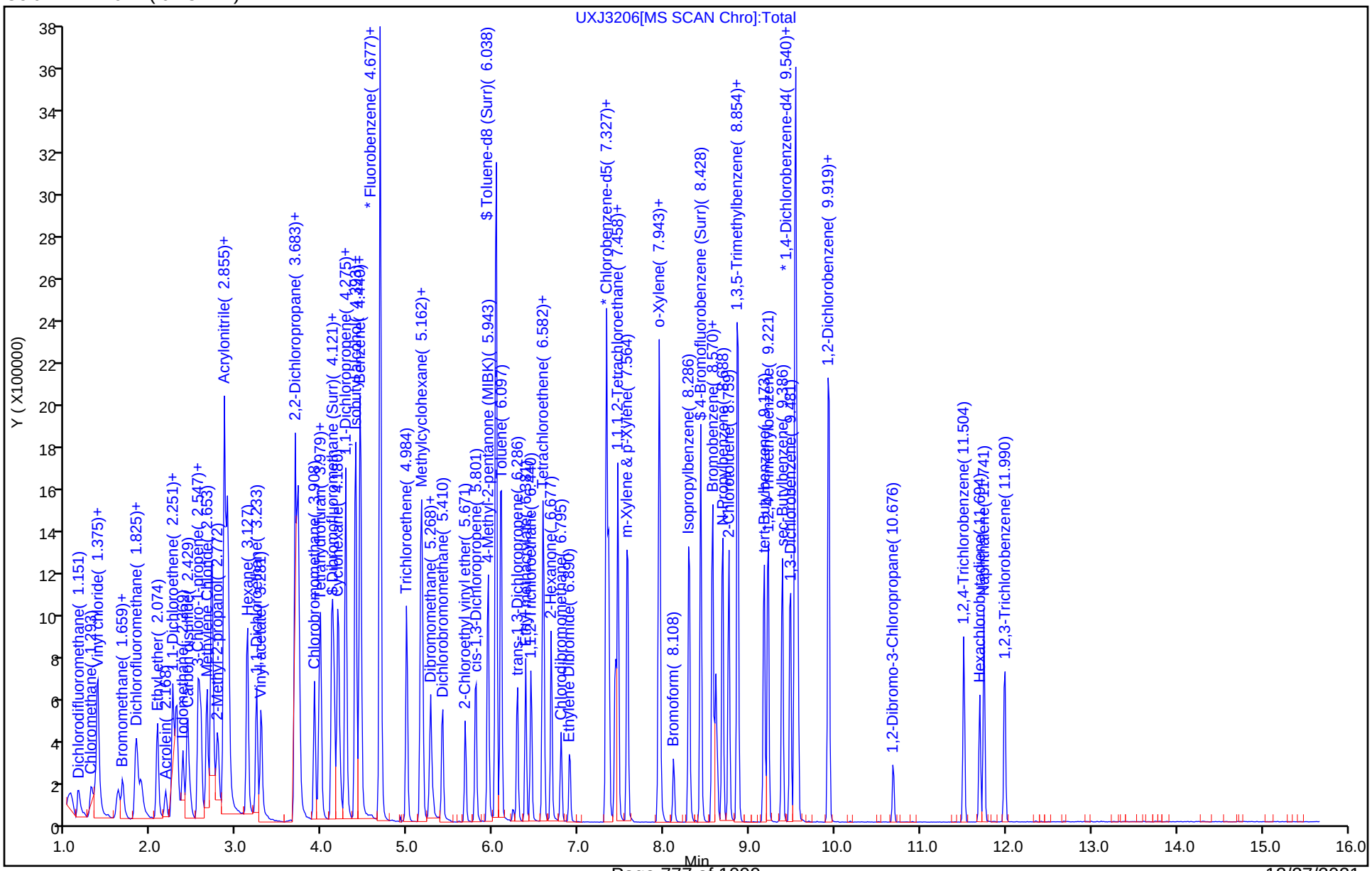
Report Date: 21-Dec-2021 09:02:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3206.D

Injection Date:	20-Dec-2021 12:30:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3206.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2021 12:30:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-004
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.35
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.1	95.50
$ 6 Toluene-d8 (Surr)	20.0	22.8	113.77
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-517192/5

Matrix: Water Lab File ID: 231383.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 11:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	28.8		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	26.9		1.0	0.46
127-18-4	Tetrachloroethene	27.0		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	27.8		1.0	0.51
79-01-6	Trichloroethene	29.3		1.0	0.44
75-01-4	Vinyl chloride	28.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	102		56-136
2037-26-5	Toluene-d8 (Surr)	97		78-122
1868-53-7	Dibromofluoromethane (Surr)	100		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231383.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2021 11:49:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-005
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 20-Dec-2021 13:21:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	2010067	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.452	9.452	0.000	91	1429648	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	95	673314	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	94	519148	27.5	27.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	0.000	96	684050	27.5	26.6	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	2080348	27.5	26.7	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	621038	27.5	28.0	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	523169	25.0	28.1	
10 Chloromethane	50	1.299	1.299	0.000	99	1046501	25.0	24.0	
11 Vinyl chloride	62	1.394	1.382	0.012	97	755760	25.0	28.1	
12 Butadiene	54	1.406	1.406	0.000	92	885997	25.0	23.7	
13 Bromomethane	94	1.666	1.666	0.000	91	306999	25.0	25.8	
14 Chloroethane	64	1.725	1.725	0.000	96	328490	25.0	24.6	
15 Dichlorofluoromethane	67	1.926	1.926	0.000	97	768945	25.0	25.2	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	85	714670	25.0	26.0	
17 Ethyl ether	59	2.234	2.234	0.000	95	744440	25.0	26.1	
18 Acrolein	56	2.352	2.341	0.011	99	602745	125.0	163.0	
19 1,1-Dichloroethene	96	2.459	2.447	0.012	92	472707	25.0	28.8	
20 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.483	2.483	0.000	94	328389	25.0	27.0	
21 Acetone	58	2.530	2.518	0.012	100	151331	50.0	39.9	
23 Iodomethane	142	2.601	2.601	0.000	97	713153	25.0	28.5	
24 Carbon disulfide	76	2.684	2.672	0.012	100	1455081	25.0	29.8	
26 3-Chloro-1-propene	41	2.838	2.838	0.000	90	1275636	25.0	27.6	
27 Methyl acetate	43	2.909	2.909	-0.001	100	1563076	50.0	47.0	
28 Methylene Chloride	84	3.015	3.015	0.000	96	544176	25.0	25.6	
29 2-Methyl-2-propanol	59	3.264	3.264	0.000	97	778509	250.0	236.9	
30 Acrylonitrile	53	3.323	3.323	0.000	100	4082267	250.0	233.2	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	623834	25.0	27.8	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	97	1486922	25.0	27.0	
33 Hexane	57	3.772	3.761	0.011	90	1044098	25.0	24.0	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1298432	25.0	26.1	
35 Vinyl acetate	43	4.127	4.127	0.000	97	1758810	25.0	28.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2,2-Dichloropropane	97	4.825	4.826	-0.001	83	123172	25.0	29.7	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	638668	25.0	26.9	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	183563	50.0	49.1	
45 Chlorobromomethane	128	5.145	5.145	0.000	90	303618	25.0	26.8	
46 Tetrahydrofuran	42	5.251	5.252	-0.001	94	666997	50.0	50.1	
47 Chloroform	83	5.287	5.287	0.000	97	960851	25.0	27.2	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	96	715569	25.0	29.2	
49 Cyclohexane	56	5.535	5.535	0.000	90	1292341	25.0	24.9	
51 Carbon tetrachloride	117	5.689	5.677	0.012	96	633874	25.0	30.3	
50 1,1-Dichloropropene	75	5.689	5.689	0.000	96	779632	25.0	29.0	
54 Benzene	78	5.938	5.938	0.000	97	2424073	25.0	27.8	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	946227	25.0	26.5	
52 Isobutyl alcohol	41	6.009	6.009	0.000	96	881996	625.0	629.2	
56 n-Heptane	100	6.328	6.328	0.000	95	117250	25.0	23.9	
58 Trichloroethene	130	6.707	6.707	0.000	96	602655	25.0	29.3	
60 Methylcyclohexane	83	6.896	6.896	0.000	95	829024	25.0	25.2	
61 1,2-Dichloropropane	63	6.944	6.944	0.000	98	724582	25.0	27.3	
63 Dibromomethane	93	7.062	7.062	0.000	97	338449	25.0	27.3	
64 1,4-Dioxane	88	7.145	7.133	0.012	95	139417	500.0	545.3	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	637725	25.0	29.9	
67 2-Chloroethyl vinyl ether	63	7.618	7.618	0.000	90	492080	25.0	27.2	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	93	848536	25.0	27.8	
69 4-Methyl-2-pentanone (MIBK)	43	7.938	7.938	0.000	97	2024686	50.0	54.9	
70 Toluene	91	8.068	8.068	0.000	98	2423782	25.0	26.7	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	745241	25.0	26.0	
72 Ethyl methacrylate	69	8.458	8.458	0.000	95	800818	25.0	26.4	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	509988	25.0	26.4	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	413689	25.0	27.0	
74 1,3-Dichloropropane	76	8.659	8.659	0.000	97	884208	25.0	27.1	
76 2-Hexanone	43	8.789	8.790	-0.001	97	1423777	50.0	50.1	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	481083	25.0	26.8	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	504730	25.0	27.5	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1423335	25.0	26.1	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	455185	25.0	26.8	
84 Ethylbenzene	106	9.606	9.606	0.000	98	770934	25.0	27.9	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	920700	25.0	26.8	
86 o-Xylene	106	10.115	10.115	0.000	98	880030	25.0	26.8	
87 Styrene	104	10.138	10.138	0.000	96	1430701	25.0	25.2	
88 Bromoform	173	10.304	10.304	0.000	98	279670	25.0	27.0	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	2145815	25.0	24.1	
93 Bromobenzene	156	10.777	10.777	0.000	96	510426	25.0	27.9	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	94	688251	25.0	26.7	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	88	200292	25.0	25.2	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	77	273611	25.0	27.1	
96 N-Propylbenzene	120	10.908	10.908	0.000	99	586744	25.0	26.9	
97 2-Chlorotoluene	126	10.979	10.979	0.000	97	499222	25.0	25.9	
100 4-Chlorotoluene	126	11.085	11.085	0.000	97	518851	25.0	27.1	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	1713747	25.0	24.9	
102 tert-Butylbenzene	119	11.405	11.405	0.000	93	1371207	25.0	24.7	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	97	1739846	25.0	24.9	
105 sec-Butylbenzene	105	11.618	11.618	0.000	94	2080675	25.0	23.7	
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	940504	25.0	26.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	11.771	11.771	0.000	98	1733035	25.0	23.6	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	968703	25.0	25.7	
112 1,2-Dichlorobenzene	146	12.174	12.162	0.012	97	914117	25.0	25.8	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	1543795	25.0	22.7	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	83	126761	25.0	23.5	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	95	530297	25.0	24.0	
116 Hexachlorobutadiene	225	13.960	13.961	-0.001	97	187032	25.0	19.2	
117 Naphthalene	128	14.008	14.008	0.000	97	1994113	25.0	22.3	
118 1,2,3-Trichlorobenzene	180	14.244	14.245	0.000	95	491330	25.0	21.0	
S 134 Trihalomethanes, Total	1				0		100.0	110.9	
S 158 Total BTEX	1				0		125.0	136.0	
S 133 Xylenes, Total	106				0		50.0	53.7	

QC Flag Legend

Processing Flags

Reagents:

VMFASPW_00427	Amount Added: 20.00	Units: uL		
VMFASAW_00402	Amount Added: 20.00	Units: uL		
VMFASGW_00438	Amount Added: 20.00	Units: uL		
vm40ml_vials_00016	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_SS_00002	Amount Added: 1.10	Units: uL	Run Reagent	
vmDist_H2o_00205	Amount Added: 0.00	Units:	Run Reagent	
vm125UX21_IS_00012	Amount Added: 1.10	Units: uL	Run Reagent	

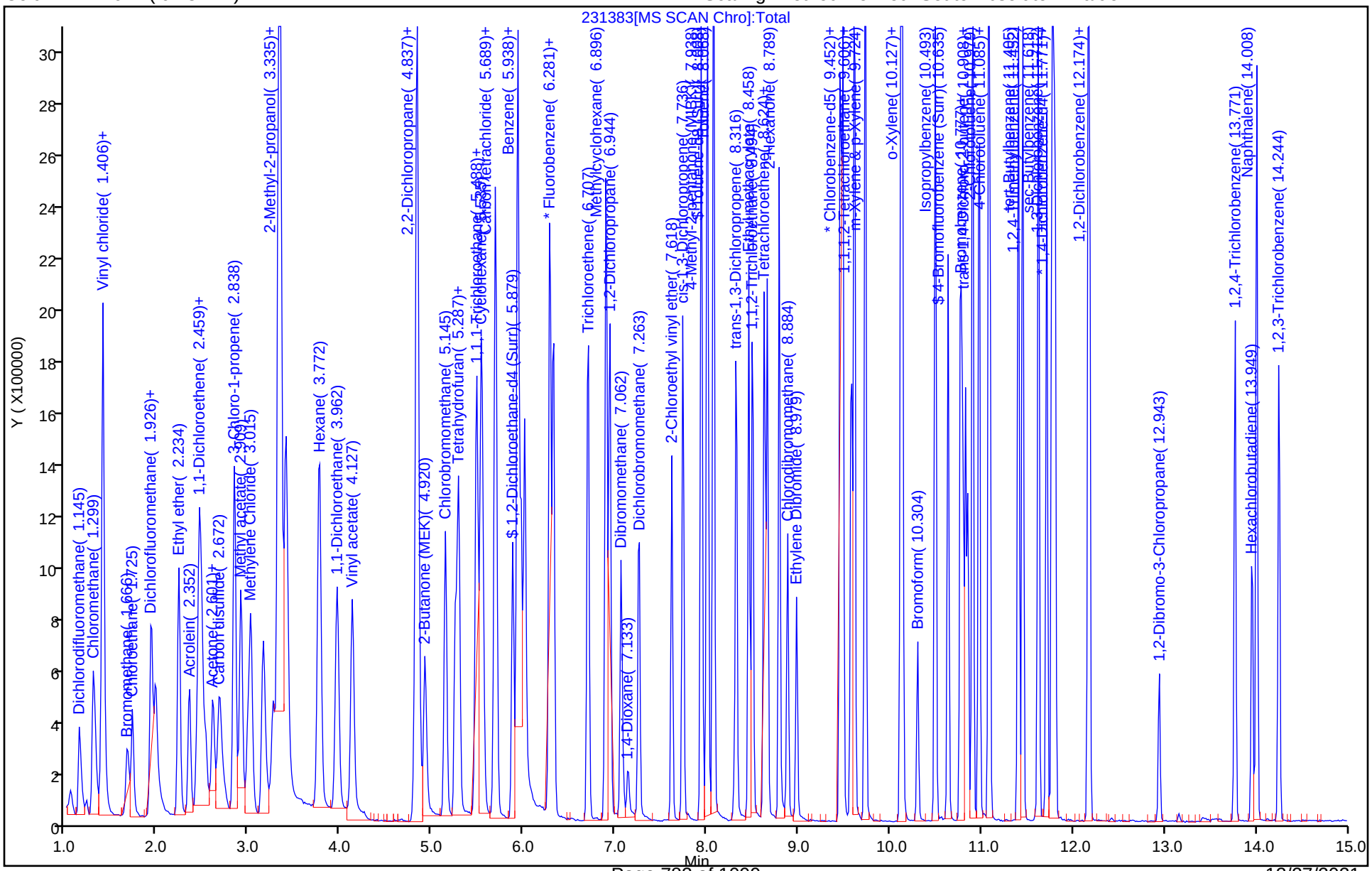
Report Date: 21-Dec-2021 09:18:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231383.D

Injection Date:	20-Dec-2021 11:49:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231383.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2021 11:49:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116121-005
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 20-Dec-2021 13:21:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	27.5	100.06
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	26.6	96.59
$ 6 Toluene-d8 (Surr)	27.5	26.7	97.14
$ 7 4-Bromofluorobenzene (Surr)	27.5	28.0	101.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-10_121621 MS Lab Sample ID: 240-161553-20 MS

Matrix: Water Lab File ID: UXJ3231.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:35

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 21:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	10.4		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	12.2		1.0	0.46
127-18-4	Tetrachloroethene	9.27		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.55		1.0	0.51
79-01-6	Trichloroethene	8.96		1.0	0.44
75-01-4	Vinyl chloride	14.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
460-00-4	4-Bromofluorobenzene (Surr)	90		56-136
2037-26-5	Toluene-d8 (Surr)	107		78-122
1868-53-7	Dibromofluoromethane (Surr)	88		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3231.D
Lims ID: 240-161553-A-20 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Dec-2021 21:44:30 ALS Bottle#: 28 Worklist Smp#: 57
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-057
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.677	4.677	0.000	99	2063484	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1250060	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	699660	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	97	464055	20.0	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	97	579638	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1909260	20.0	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	94	562863	20.0	18.1	
14 Vinyl chloride	62	1.364	1.352	0.012	88	379442	10.0	14.8	
21 1,1-Dichloroethene	96	2.251	2.239	0.012	98	257356	10.0	10.4	
33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	99	277672	10.0	9.55	
41 cis-1,2-Dichloroethene	96	3.719	3.707	0.012	82	365189	10.0	12.2	
60 Trichloroethene	130	4.985	4.985	0.000	95	288568	10.0	8.96	
76 Tetrachloroethene	164	6.582	6.582	0.000	98	187288	10.0	9.27	

Reagents:

VMFASPW_00427	Amount Added:	8.00	Units: uL	
VMFASAW_00402	Amount Added:	8.00	Units: uL	
VMFASGW_00438	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

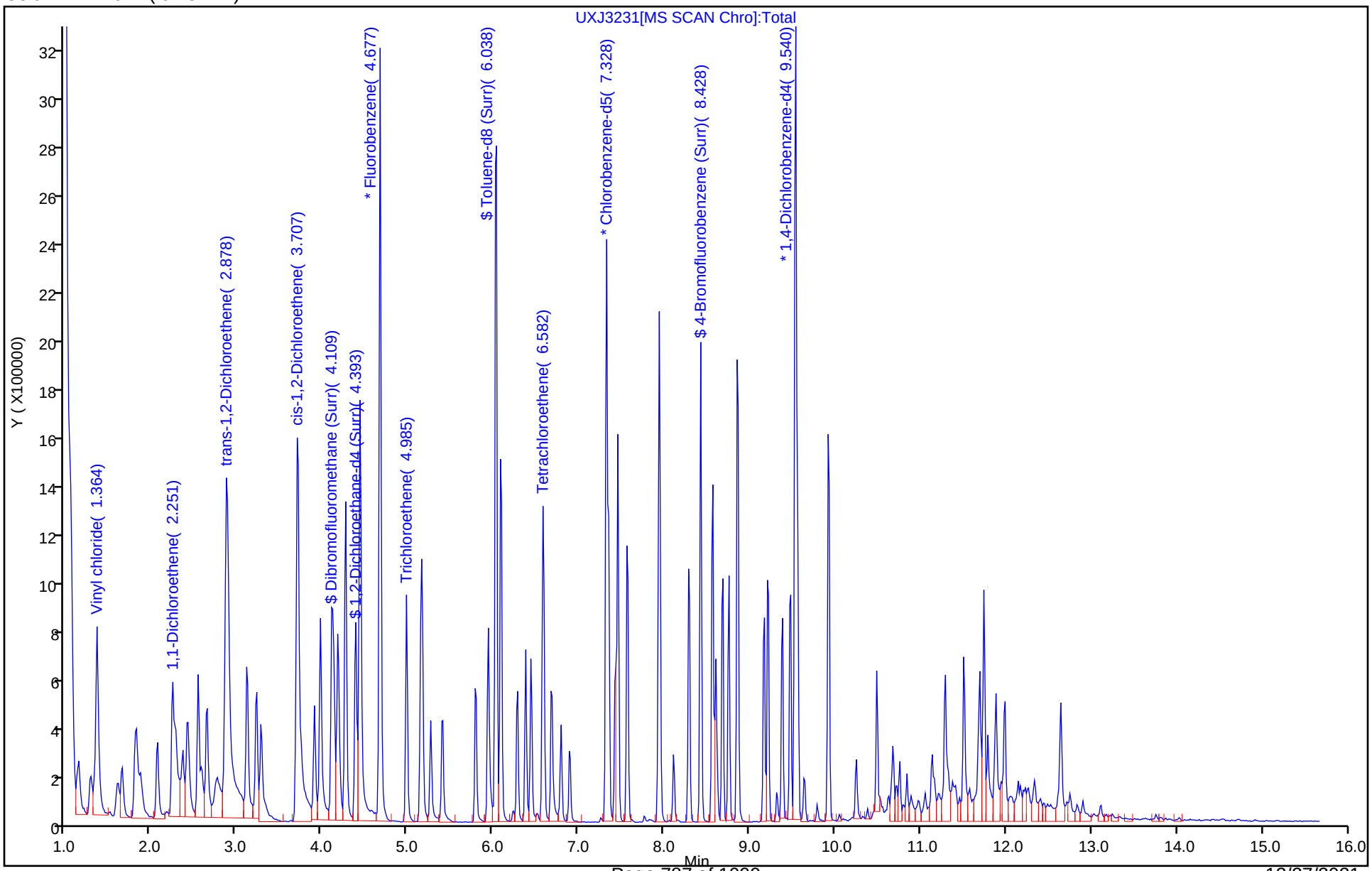
Report Date: 21-Dec-2021 09:02:30 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3231.D

Injection Date:	20-Dec-2021 21:44:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-A-20 MS			Worklist Smp#:	57
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3231.D
Lims ID: 240-161553-A-20 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Dec-2021 21:44:30 ALS Bottle#: 28 Worklist Smp#: 57
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-057
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.27
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.4	97.19
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.37
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.1	90.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-161506-B-27 MS

Matrix: Water Lab File ID: 231396.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 17:15

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	250		8.0	3.9
156-59-2	cis-1,2-Dichloroethene	225		8.0	3.7
127-18-4	Tetrachloroethene	203		8.0	3.5
156-60-5	trans-1,2-Dichloroethene	224		8.0	4.1
79-01-6	Trichloroethene	264		8.0	3.5
75-01-4	Vinyl chloride	635		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		62-137
460-00-4	4-Bromofluorobenzene (Surr)	107		56-136
2037-26-5	Toluene-d8 (Surr)	96		78-122
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231396.D
Lims ID: 240-161506-B-27 MS
Client ID: MW-23
Sample Type: MS
Inject. Date: 20-Dec-2021 17:15:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0116121-018
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:15:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.293	6.281	0.012	99	1721334	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	86	1243128	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	96	648680	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	464910	27.5	28.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.878	5.879	-0.001	96	607150	27.5	27.5	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	1791966	27.5	26.5	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	89	564018	27.5	29.3	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	98	477783	25.0	30.0	
10 Chloromethane	50	1.299	1.299	0.000	99	983776	25.0	26.4	
11 Vinyl chloride	62	1.394	1.382	0.012	97	1826281	25.0	79.4	E
13 Bromomethane	94	1.666	1.666	0.000	90	315684	25.0	31.0	
14 Chloroethane	64	1.725	1.725	0.000	96	332848	25.0	29.1	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	97	642439	25.0	27.3	
17 Ethyl ether	59	2.234	2.234	0.000	96	665423	25.0	27.3	
19 1,1-Dichloroethene	96	2.459	2.447	0.012	92	438991	25.0	31.3	
21 Acetone	58	2.530	2.518	0.012	100	119947	50.0	36.8	
23 Iodomethane	142	2.601	2.601	0.000	98	646470	25.0	30.1	
24 Carbon disulfide	76	2.684	2.672	0.012	100	1354959	25.0	32.4	
28 Methylene Chloride	84	3.015	3.015	0.000	95	480685	25.0	26.4	
30 Acrylonitrile	53	3.334	3.323	0.011	100	3535944	250.0	235.9	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	91	536803	25.0	28.0	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	96	1255100	25.0	26.7	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1149470	25.0	26.9	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	571451	25.0	28.1	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	157901	50.0	49.3	
45 Chlorobromomethane	128	5.145	5.145	0.000	85	266529	25.0	27.4	
47 Chloroform	83	5.287	5.287	0.000	96	847268	25.0	28.0	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	96	625717	25.0	29.8	
51 Carbon tetrachloride	117	5.689	5.677	0.012	96	481895	25.0	26.9	
54 Benzene	78	5.938	5.938	0.000	97	2051129	25.0	27.4	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	815599	25.0	26.7	
58 Trichloroethene	130	6.707	6.707	0.000	96	581440	25.0	33.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63	6.943	6.944	-0.001	98	620083	25.0	27.3	
63 Dibromomethane	93	7.062	7.062	0.000	96	293851	25.0	27.7	
65 Dichlorobromomethane	83	7.263	7.263	0.000	97	546930	25.0	29.9	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	92	657342	25.0	25.1	
69 4-Methyl-2-pentanone (MIBK)	43	7.937	7.938	-0.001	97	1794392	50.0	56.8	
70 Toluene	91	8.079	8.068	0.011	97	2041932	25.0	25.9	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	97	587343	25.0	23.6	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	427246	25.0	25.4	
75 Tetrachloroethene	164	8.624	8.624	0.000	95	337768	25.0	25.4	
76 2-Hexanone	43	8.789	8.790	-0.001	97	1273151	50.0	51.5	
78 Chlorodibromomethane	129	8.884	8.884	0.000	90	375113	25.0	24.1	
80 Ethylene Dibromide	107	8.979	8.979	0.000	97	436167	25.0	27.4	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1181219	25.0	25.0	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	372010	25.0	25.2	
84 Ethylbenzene	106	9.606	9.606	0.000	98	651120	25.0	27.1	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	97	778186	25.0	26.1	
86 o-Xylene	106	10.127	10.115	0.011	97	771872	25.0	27.1	
87 Styrene	104	10.138	10.138	0.000	96	1234825	25.0	25.1	
88 Bromoform	173	10.304	10.304	0.000	97	213375	25.0	23.7	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	1856264	25.0	24.0	
93 Bromobenzene	156	10.777	10.777	0.000	96	445109	25.0	25.3	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	628774	25.0	25.3	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	90	179948	25.0	23.5	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	72	173510	25.0	18.0	
96 N-Propylbenzene	120	10.907	10.908	-0.001	99	511987	25.0	24.4	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	87	1553531	25.0	23.4	
102 tert-Butylbenzene	119	11.404	11.405	-0.001	95	1613475	25.0	30.1	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	96	1596928	25.0	23.7	
105 sec-Butylbenzene	105	11.617	11.618	-0.001	95	1833209	25.0	21.7	
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	878384	25.0	25.8	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	97	1579531	25.0	22.4	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	95	887350	25.0	24.4	
112 1,2-Dichlorobenzene	146	12.174	12.162	0.012	97	885709	25.0	25.9	
111 n-Butylbenzene	91	12.174	12.174	0.000	98	1431540	25.0	21.9	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	84	130598	25.0	25.1	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	559342	25.0	26.3	
117 Naphthalene	128	14.008	14.008	0.000	97	2099711	25.0	24.3	
118 1,2,3-Trichlorobenzene	180	14.244	14.245	0.000	96	515748	25.0	22.8	
119 2-Methylnaphthalene	142	15.132	15.132	0.000	93	1887053	50.0	45.2	
S 133 Xylenes, Total	106				0		50.0	53.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASPW_00427	Amount Added:	20.00	Units: uL	
VMFASAW_00402	Amount Added:	20.00	Units: uL	
VMFASGW_00438	Amount Added:	20.00	Units: uL	
VMFASA9W_00345	Amount Added:	20.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

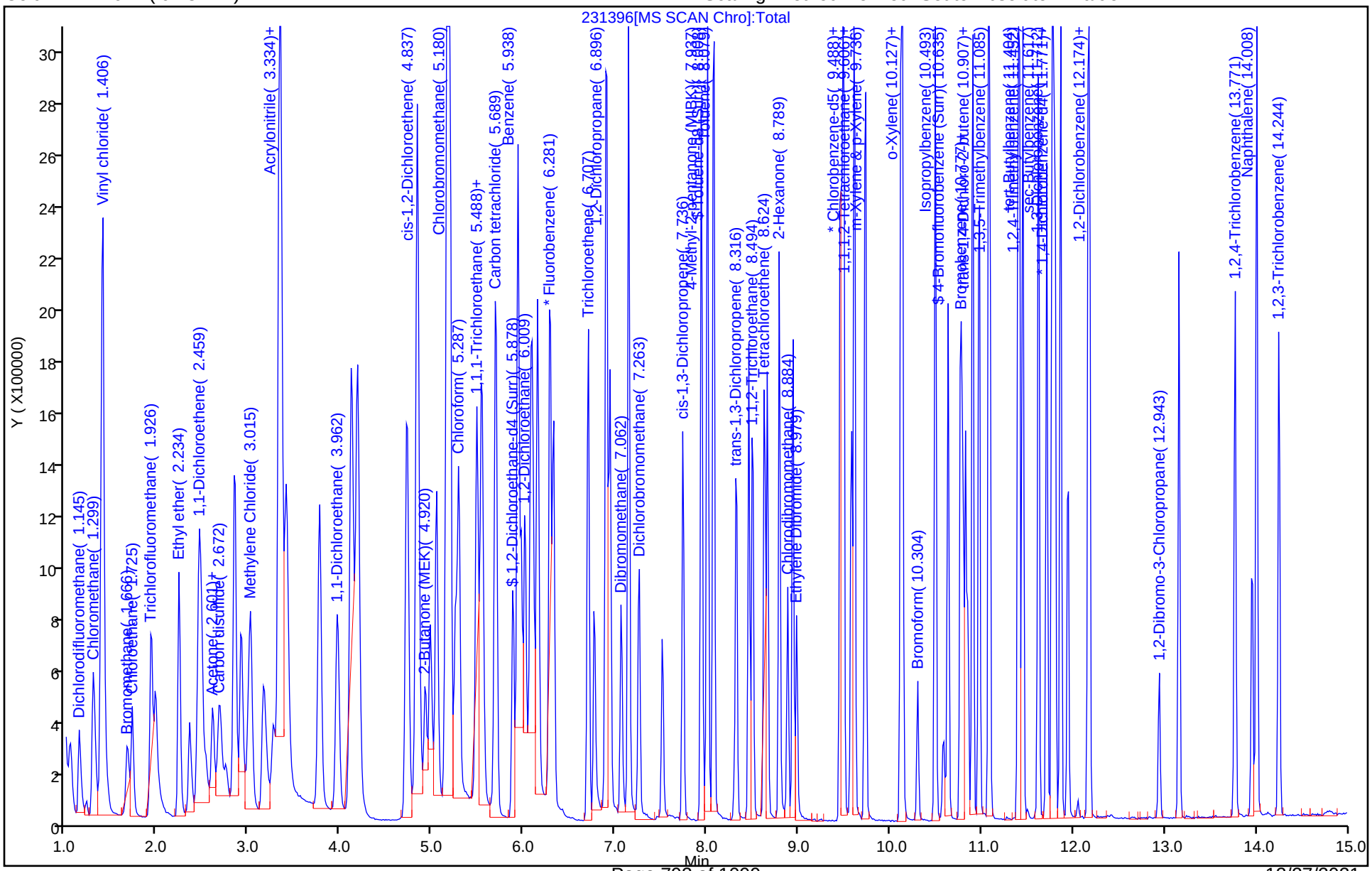
Report Date: 21-Dec-2021 09:18:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231396.D

Injection Date:	20-Dec-2021 17:15:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161506-B-27 MS			Worklist Smp#:	18
Client ID:	MW-23				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	17
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231396.D
Lims ID: 240-161506-B-27 MS
Client ID: MW-23
Sample Type: MS
Inject. Date: 20-Dec-2021 17:15:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0116121-018
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:15:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	28.8	104.64
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	27.5	100.12
$ 6 Toluene-d8 (Surr)	27.5	26.5	96.23
$ 7 4-Bromofluorobenzene (Surr)	27.5	29.3	106.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-10_121621 MSD Lab Sample ID: 240-161553-20 MSD

Matrix: Water Lab File ID: UXJ3232.D

Analysis Method: 8260B Date Collected: 12/16/2021 10:35

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 22:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517187 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	9.08		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	12.0		1.0	0.46
127-18-4	Tetrachloroethene	8.94		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	9.26		1.0	0.51
79-01-6	Trichloroethene	8.80		1.0	0.44
75-01-4	Vinyl chloride	14.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-137
460-00-4	4-Bromofluorobenzene (Surr)	88		56-136
2037-26-5	Toluene-d8 (Surr)	106		78-122
1868-53-7	Dibromofluoromethane (Surr)	83		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3232.D
Lims ID: 240-161553-C-20 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Dec-2021 22:06:30 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-058
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.677	4.677	0.000	99	2151769	20.0	20.0	
*	2 Chlorobenzene-d5	117	7.328	7.328	0.000	85	1314772	20.0	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.540	9.540	0.000	95	725775	20.0	20.0	
$	4 Dibromofluoromethane (Surr)	113	4.109	4.109	0.000	96	453463	20.0	16.5	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.393	4.381	0.012	98	599971	20.0	19.3	
$	6 Toluene-d8 (Surr)	98	6.038	6.026	0.012	93	1982407	20.0	21.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.428	8.428	0.000	93	576219	20.0	17.6	
	14 Vinyl chloride	62	1.352	1.352	0.000	89	391150	10.0	14.6	
	21 1,1-Dichloroethene	96	2.251	2.239	0.012	96	234383	10.0	9.08	
	33 trans-1,2-Dichloroethene	96	2.878	2.878	0.000	99	281043	10.0	9.26	
	41 cis-1,2-Dichloroethene	96	3.707	3.707	0.000	82	375863	10.0	12.0	
	60 Trichloroethene	130	4.985	4.985	0.000	96	295532	10.0	8.80	
	76 Tetrachloroethene	164	6.582	6.582	0.000	97	190028	10.0	8.94	

Reagents:

VMFASPW_00427	Amount Added:	8.00	Units: uL	
VMFASAW_00402	Amount Added:	8.00	Units: uL	
VMFASGW_00438	Amount Added:	8.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00090	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00090	Amount Added:	2.00	Units: uL	Run Reagent

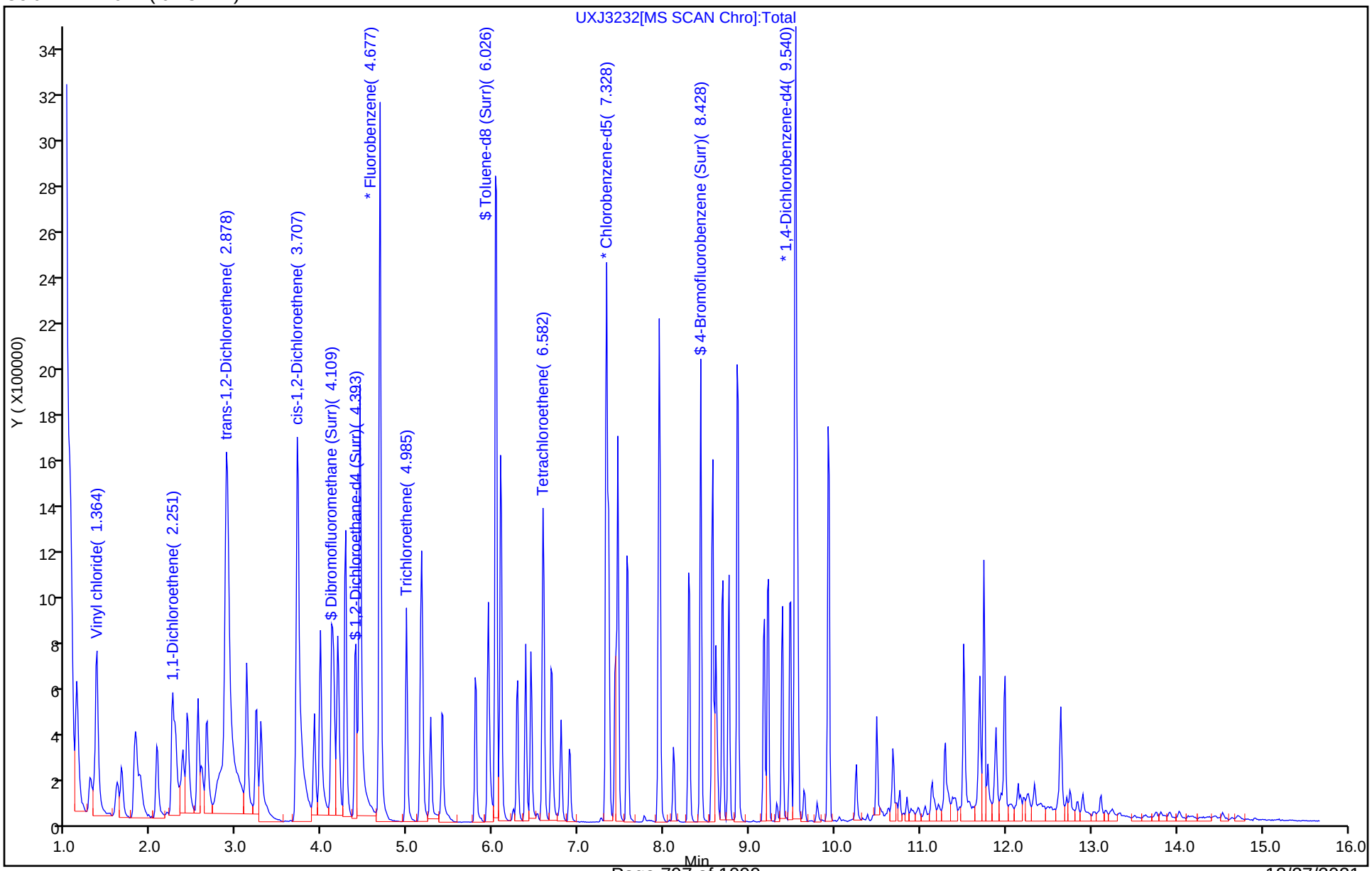
Report Date: 21-Dec-2021 09:02:30 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3232.D

Injection Date:	20-Dec-2021 22:06:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-161553-C-20 MSD			Worklist Smp#:	58
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\UXJ3232.D
Lims ID: 240-161553-C-20 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Dec-2021 22:06:30 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116119-058
Misc. Info.: J211220A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromfs\Canton\ChromData\A3UX11\20211220-116119.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:02:09 Calib Date: 15-Jan-2021 15:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX11\20210115-105695.b\UXJ5280.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1670

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	16.5	82.72
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.47
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.99
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	87.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: 240-161506-B-27 MSD

Matrix: Water Lab File ID: 231397.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/20/2021 17:40

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517192 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	251		8.0	3.9
156-59-2	cis-1,2-Dichloroethene	238		8.0	3.7
127-18-4	Tetrachloroethene	210		8.0	3.5
156-60-5	trans-1,2-Dichloroethene	242		8.0	4.1
79-01-6	Trichloroethene	267		8.0	3.5
75-01-4	Vinyl chloride	632		8.0	3.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		62-137
460-00-4	4-Bromofluorobenzene (Surr)	106		56-136
2037-26-5	Toluene-d8 (Surr)	97		78-122
1868-53-7	Dibromofluoromethane (Surr)	110		73-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231397.D
Lims ID: 240-161506-B-27 MSD
Client ID: MW-23
Sample Type: MSD
Inject. Date: 20-Dec-2021 17:40:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0116121-019
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:16:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.281	6.281	0.000	98	1809292	27.5	27.5	
* 2 Chlorobenzene-d5	117	9.464	9.452	0.012	87	1268325	27.5	27.5	
* 3 1,4-Dichlorobenzene-d4	152	11.783	11.783	0.000	95	658411	27.5	27.5	
$ 4 Dibromofluoromethane (Surr)	113	5.488	5.488	0.000	93	512071	27.5	30.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.879	5.879	-0.001	97	654801	27.5	28.2	
$ 6 Toluene-d8 (Surr)	98	8.008	8.009	-0.001	95	1842246	27.5	26.7	
$ 7 4-Bromofluorobenzene (Surr)	95	10.635	10.635	0.000	88	574956	27.5	29.3	
9 Dichlorodifluoromethane	85	1.145	1.145	0.000	99	491711	25.0	29.3	
10 Chloromethane	50	1.299	1.299	0.000	99	1078850	25.0	27.5	
11 Vinyl chloride	62	1.394	1.382	0.012	97	1908807	25.0	79.0	E
13 Bromomethane	94	1.666	1.666	0.000	91	284798	25.0	26.6	
14 Chloroethane	64	1.725	1.725	0.000	97	335428	25.0	27.9	
16 Trichlorofluoromethane	101	1.974	1.974	0.000	99	663766	25.0	26.8	
17 Ethyl ether	59	2.234	2.234	0.000	96	757990	25.0	29.5	
19 1,1-Dichloroethene	96	2.459	2.447	0.012	92	463547	25.0	31.4	
21 Acetone	58	2.530	2.518	0.012	100	147457	50.0	43.3	
23 Iodomethane	142	2.601	2.601	0.000	97	715138	25.0	31.7	
24 Carbon disulfide	76	2.672	2.672	0.000	100	1443907	25.0	32.8	
28 Methylene Chloride	84	3.015	3.015	0.000	95	533387	25.0	27.9	
30 Acrylonitrile	53	3.334	3.323	0.011	100	4225040	250.0	268.2	
32 trans-1,2-Dichloroethene	96	3.346	3.346	0.000	92	610084	25.0	30.3	
31 Methyl tert-butyl ether	73	3.405	3.406	-0.001	96	1449621	25.0	29.3	
34 1,1-Dichloroethane	63	3.962	3.962	0.000	96	1247837	25.0	27.8	
39 cis-1,2-Dichloroethene	96	4.837	4.837	0.000	90	635115	25.0	29.7	
40 2-Butanone (MEK)	72	4.920	4.920	0.000	98	178393	50.0	53.0	
45 Chlorobromomethane	128	5.145	5.145	0.000	85	292295	25.0	28.6	
47 Chloroform	83	5.287	5.287	0.000	97	937163	25.0	29.5	
48 1,1,1-Trichloroethane	97	5.488	5.476	0.012	96	691456	25.0	31.3	
51 Carbon tetrachloride	117	5.689	5.677	0.012	96	552407	25.0	29.3	
54 Benzene	78	5.938	5.938	0.000	96	2235318	25.0	28.4	
53 1,2-Dichloroethane	62	5.973	5.973	0.000	96	884071	25.0	27.5	
58 Trichloroethene	130	6.707	6.707	0.000	96	619016	25.0	33.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63	6.943	6.944	-0.001	97	654594	25.0	27.4	
63 Dibromomethane	93	7.062	7.062	0.000	97	314757	25.0	28.2	
65 Dichlorobromomethane	83	7.263	7.263	0.000	98	581450	25.0	30.2	
68 cis-1,3-Dichloropropene	75	7.736	7.736	0.000	92	703613	25.0	25.6	
69 4-Methyl-2-pentanone (MIBK)	43	7.937	7.938	-0.001	97	1834166	50.0	55.3	
70 Toluene	91	8.079	8.068	0.011	97	2131911	25.0	26.5	
71 trans-1,3-Dichloropropene	75	8.316	8.316	0.000	98	620558	25.0	24.4	
73 1,1,2-Trichloroethane	97	8.494	8.494	0.000	92	445437	25.0	26.0	
75 Tetrachloroethene	164	8.624	8.624	0.000	94	356299	25.0	26.2	
76 2-Hexanone	43	8.789	8.790	-0.001	96	1227699	50.0	48.7	
78 Chlorodibromomethane	129	8.884	8.884	0.000	91	395547	25.0	24.8	
80 Ethylene Dibromide	107	8.979	8.979	0.000	98	444986	25.0	27.4	
82 Chlorobenzene	112	9.488	9.488	0.000	94	1239869	25.0	25.7	
83 1,1,1,2-Tetrachloroethane	131	9.582	9.582	0.000	95	402584	25.0	26.8	
84 Ethylbenzene	106	9.606	9.606	0.000	98	678794	25.0	27.6	
85 m-Xylene & p-Xylene	106	9.736	9.736	0.000	98	810821	25.0	26.7	
86 o-Xylene	106	10.115	10.115	0.000	98	815071	25.0	28.0	
87 Styrene	104	10.138	10.138	0.000	96	1274975	25.0	25.4	
88 Bromoform	173	10.304	10.304	0.000	98	224594	25.0	24.4	
89 Isopropylbenzene	105	10.493	10.493	0.000	96	1987901	25.0	25.2	
93 Bromobenzene	156	10.777	10.777	0.000	94	459895	25.0	25.7	
92 1,1,2,2-Tetrachloroethane	83	10.789	10.789	0.000	95	660753	25.0	26.2	
95 1,2,3-Trichloropropane	110	10.825	10.825	0.000	89	191282	25.0	24.6	
94 trans-1,4-Dichloro-2-butene	53	10.848	10.848	0.000	71	192873	25.0	19.7	
96 N-Propylbenzene	120	10.907	10.908	-0.001	99	539702	25.0	25.3	
99 1,3,5-Trimethylbenzene	105	11.085	11.085	0.000	88	1632151	25.0	24.2	
102 tert-Butylbenzene	119	11.404	11.405	-0.001	95	1709776	25.0	31.4	
104 1,2,4-Trimethylbenzene	105	11.452	11.452	0.000	96	1689265	25.0	24.7	
105 sec-Butylbenzene	105	11.617	11.618	-0.001	94	1973812	25.0	23.0	
106 1,3-Dichlorobenzene	146	11.712	11.712	0.000	99	885765	25.0	25.7	
107 4-Isopropyltoluene	119	11.771	11.771	0.000	96	1700669	25.0	23.7	
108 1,4-Dichlorobenzene	146	11.807	11.807	0.000	96	917700	25.0	24.9	
112 1,2-Dichlorobenzene	146	12.174	12.162	0.012	97	936190	25.0	27.0	
111 n-Butylbenzene	91	12.174	12.174	0.000	99	1535532	25.0	23.1	
113 1,2-Dibromo-3-Chloropropane	157	12.943	12.943	0.000	83	135199	25.0	25.6	
115 1,2,4-Trichlorobenzene	180	13.771	13.771	0.000	94	615712	25.0	28.5	
117 Naphthalene	128	14.008	14.008	0.000	97	2311700	25.0	26.4	
118 1,2,3-Trichlorobenzene	180	14.244	14.245	0.000	96	585628	25.0	25.6	
119 2-Methylnaphthalene	142	15.132	15.132	0.000	95	2237135	50.0	50.8	
S 133 Xylenes, Total	106				0		50.0	54.7	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VMFASA9W_00345	Amount Added:	20.00	Units: uL	
VMFASGW_00438	Amount Added:	20.00	Units: uL	
VMFASAW_00402	Amount Added:	20.00	Units: uL	
VMFASPW_00427	Amount Added:	20.00	Units: uL	
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_SS_00002	Amount Added:	1.10	Units: uL	Run Reagent
vmDist_H2o_00205	Amount Added:	0.00	Units:	Run Reagent
vm125UX21_IS_00012	Amount Added:	1.10	Units: uL	Run Reagent

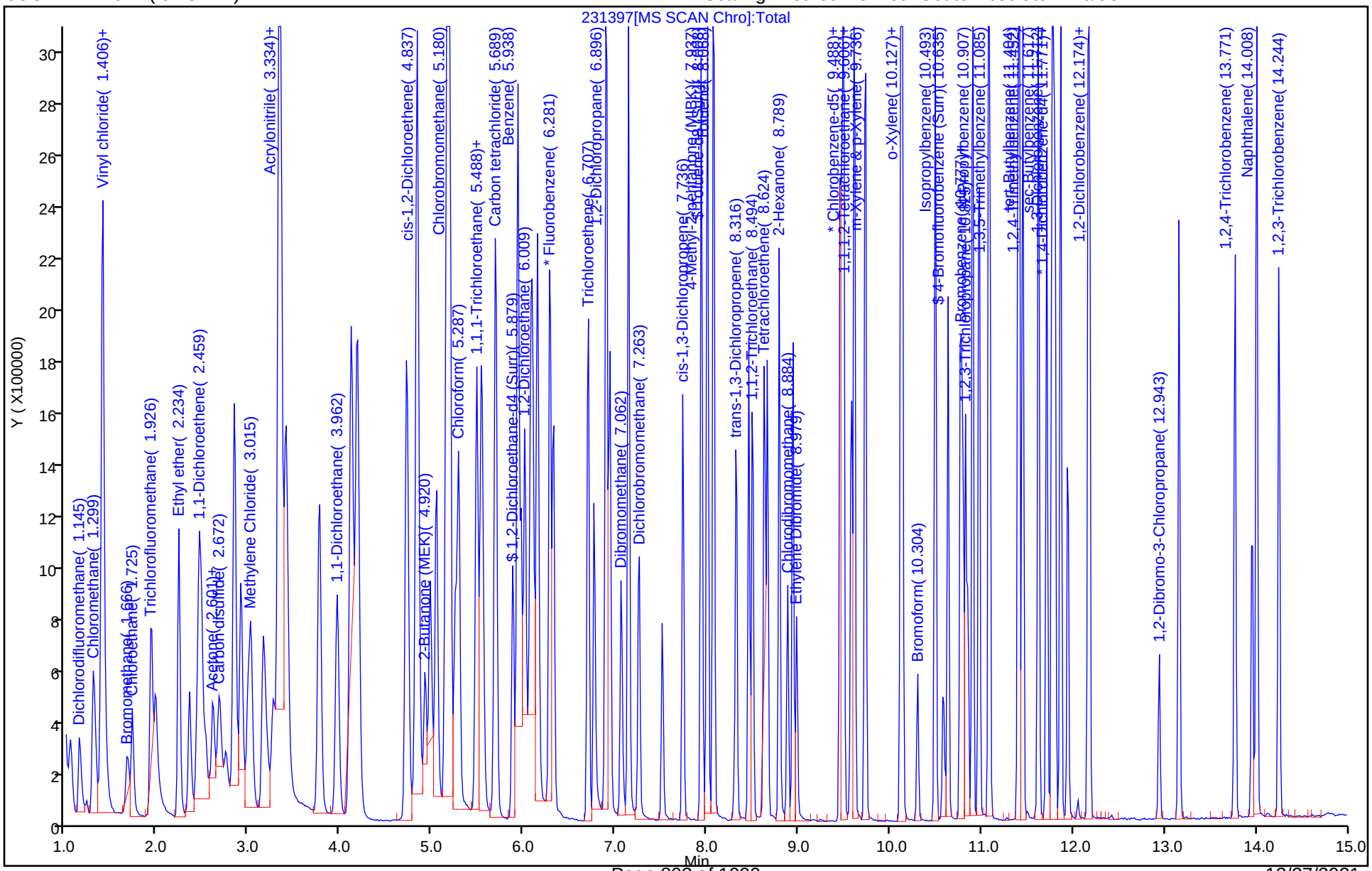
Report Date: 21-Dec-2021 09:18:25 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231397.D

Injection Date:	20-Dec-2021 17:40:30	Instrument ID:	A3UX23	Operator ID:	002808
Lims ID:	240-161506-B-27 MSD			Worklist Smp#:	19
Client ID:	MW-23				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	18
Method:	8260_23	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\231397.D
Lims ID: 240-161506-B-27 MSD
Client ID: MW-23
Sample Type: MSD
Inject. Date: 20-Dec-2021 17:40:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 240-0116121-019
Operator ID: 002808 Instrument ID: A3UX23

Method: \\chromfs\Canton\ChromData\A3UX23\20211220-116121.b\8260_23.m
Limit Group: MSV 8260B ICAL
Last Update: 21-Dec-2021 09:18:10 Calib Date: 06-Dec-2021 18:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX23\20211206-115786.b\231307.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1656

First Level Reviewer: macenczaks Date: 21-Dec-2021 09:16:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	27.5	30.2	109.65
$ 5 1,2-Dichloroethane-d4 (Surr)	27.5	28.2	102.72
$ 6 Toluene-d8 (Surr)	27.5	26.7	96.96
$ 7 4-Bromofluorobenzene (Surr)	27.5	29.3	106.41

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX11 Start Date: 01/15/2021 10:36

Analysis Batch Number: 469338 End Date: 01/15/2021 15:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-469338/1		01/15/2021 10:36	1	BFB1115A.D	DB-624 0.18(mm)
STD8260 240-469338/2 IC		01/15/2021 11:06	1	UXJ5268.D	DB-624 0.18(mm)
STD8260 240-469338/3 IC		01/15/2021 11:29	1	UXJ5269.D	DB-624 0.18(mm)
STD8260 240-469338/4 ICIS		01/15/2021 11:51	1	UXJ5270.D	DB-624 0.18(mm)
STD8260 240-469338/5 IC		01/15/2021 12:13	1	UXJ5271.D	DB-624 0.18(mm)
STD8260 240-469338/6 IC		01/15/2021 12:36	1	UXJ5272.D	DB-624 0.18(mm)
STD8260 240-469338/7 IC		01/15/2021 12:58	1	UXJ5273.D	DB-624 0.18(mm)
ICV 240-469338/14		01/15/2021 13:20	1	UXJ5274.D	DB-624 0.18(mm)
STD6 240-469338/8 IC		01/15/2021 13:42	1		DB-624 0.18(mm)
STD5 240-469338/9 IC		01/15/2021 14:05	1		DB-624 0.18(mm)
STD4 240-469338/10 IC		01/15/2021 14:26	1		DB-624 0.18(mm)
STD3 240-469338/11 IC		01/15/2021 14:48	1		DB-624 0.18(mm)
STD2 240-469338/12 IC		01/15/2021 15:10	1		DB-624 0.18(mm)
STD1 240-469338/13 IC		01/15/2021 15:33	1		DB-624 0.18(mm)
ICV 240-469338/15		01/15/2021 15:55	1	UXJ5281.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Start Date: 08/04/2021 12:53

Analysis Batch Number: 498110 End Date: 08/04/2021 18:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-498110/1		08/04/2021 12:53	1	BFB23018.D	DB-624 0.18(mm)
IC 240-498110/3		08/04/2021 13:39	1	230125.D	DB-624 0.18(mm)
IC 240-498110/4		08/04/2021 14:04	1	230126.D	DB-624 0.18(mm)
IC 240-498110/5		08/04/2021 14:29	1	230127.D	DB-624 0.18(mm)
IC 240-498110/6		08/04/2021 14:54	1	230128.D	DB-624 0.18(mm)
ICIS 240-498110/7		08/04/2021 15:19	1	230129.D	DB-624 0.18(mm)
IC 240-498110/8		08/04/2021 15:44	1	230130.D	DB-624 0.18(mm)
IC 240-498110/9		08/04/2021 16:09	1	230131.D	DB-624 0.18(mm)
ICV 240-498110/11		08/04/2021 16:59	1		DB-624 0.18(mm)
ZZZZZ		08/04/2021 17:24	1		DB-624 0.18(mm)
ZZZZZ		08/04/2021 17:49	1		DB-624 0.18(mm)
ZZZZZ		08/04/2021 18:14	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Start Date: 08/05/2021 11:25

Analysis Batch Number: 498246 End Date: 08/05/2021 18:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-498246/1		08/05/2021 11:25	1	BFB23019.D	DB-624 0.18(mm)
CCVIS 240-498246/3		08/05/2021 12:10	1		DB-624 0.18(mm)
IC 240-498246/4		08/05/2021 12:35	1		DB-624 0.18(mm)
IC 240-498246/5		08/05/2021 13:00	1		DB-624 0.18(mm)
IC 240-498246/6		08/05/2021 13:25	1		DB-624 0.18(mm)
IC 240-498246/7		08/05/2021 13:50	1		DB-624 0.18(mm)
IC 240-498246/8		08/05/2021 14:15	1		DB-624 0.18(mm)
IC 240-498246/9		08/05/2021 14:40	1		DB-624 0.18(mm)
IC 240-498246/10		08/05/2021 15:05	1		DB-624 0.18(mm)
ICV 240-498246/12		08/05/2021 15:56	1	230147.D	DB-624 0.18(mm)
ZZZZZ		08/05/2021 16:21	1		DB-624 0.18(mm)
ZZZZZ		08/05/2021 16:46	1		DB-624 0.18(mm)
ZZZZZ		08/05/2021 17:11	1		DB-624 0.18(mm)
ZZZZZ		08/05/2021 17:36	1		DB-624 0.18(mm)
ZZZZZ		08/05/2021 18:01	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Start Date: 12/06/2021 15:02

Analysis Batch Number: 515735 End Date: 12/06/2021 20:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-515735/1		12/06/2021 15:02	1	BFB23080.D	DB-624 0.18(mm)
IC 240-515735/3		12/06/2021 15:47	1	231301.D	DB-624 0.18(mm)
IC 240-515735/4		12/06/2021 16:12	1	231302.D	DB-624 0.18(mm)
IC 240-515735/5		12/06/2021 16:37	1	231303.D	DB-624 0.18(mm)
IC 240-515735/6		12/06/2021 17:02	1	231304.D	DB-624 0.18(mm)
ICIS 240-515735/7		12/06/2021 17:27	1	231305.D	DB-624 0.18(mm)
IC 240-515735/8		12/06/2021 17:52	1	231306.D	DB-624 0.18(mm)
IC 240-515735/9		12/06/2021 18:17	1	231307.D	DB-624 0.18(mm)
CCV 240-515735/11		12/06/2021 19:07	1		DB-624 0.18(mm)
ICV 240-515735/12		12/06/2021 19:32	1	231310.D	DB-624 0.18(mm)
ZZZZZ		12/06/2021 19:57	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 20:22	1		DB-624 0.18(mm)
ZZZZZ		12/06/2021 20:47	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX11 Start Date: 12/20/2021 11:08

Analysis Batch Number: 517187 End Date: 12/20/2021 22:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-517187/1		12/20/2021 11:08	1	BFB1220.D	DB-624 0.18(mm)
CCVIS 240-517187/2		12/20/2021 12:08	1	UXJ3205.D	DB-624 0.18(mm)
LCS 240-517187/4		12/20/2021 12:30	1	UXJ3206.D	DB-624 0.18(mm)
CCV 240-517187/3		12/20/2021 12:52	1	UXJ3207.D	DB-624 0.18(mm)
ZZZZZ		12/20/2021 13:14	1		DB-624 0.18(mm)
ZZZZZ		12/20/2021 13:36	1		DB-624 0.18(mm)
MB 240-517187/6		12/20/2021 13:58	1	UXJ3210.D	DB-624 0.18(mm)
240-161553-1	TRIP BLANK	12/20/2021 14:20	1	UXJ3211.D	DB-624 0.18(mm)
240-161553-2	SL-4_121421	12/20/2021 14:43	1	UXJ3212.D	DB-624 0.18(mm)
240-161553-3	SL-18_121421	12/20/2021 15:05	1	UXJ3213.D	DB-624 0.18(mm)
240-161553-4	SL-17_121421	12/20/2021 15:27	1	UXJ3214.D	DB-624 0.18(mm)
240-161553-5	SL-16_121421	12/20/2021 15:49	1	UXJ3215.D	DB-624 0.18(mm)
240-161553-6	SL-3_121421	12/20/2021 16:11	1	UXJ3216.D	DB-624 0.18(mm)
240-161553-7	SL-2_121421	12/20/2021 16:33	1	UXJ3217.D	DB-624 0.18(mm)
240-161553-8	MH-1231_121421	12/20/2021 16:55	1	UXJ3218.D	DB-624 0.18(mm)
240-161553-9	SL-21_121421	12/20/2021 17:17	1	UXJ3219.D	DB-624 0.18(mm)
240-161553-10	SL-20_121421	12/20/2021 17:40	1	UXJ3220.D	DB-624 0.18(mm)
240-161553-11	SL-22_121421	12/20/2021 18:02	1	UXJ3221.D	DB-624 0.18(mm)
240-161553-12	SL-15_121621	12/20/2021 18:24	1	UXJ3222.D	DB-624 0.18(mm)
240-161553-13	SL-14_121621	12/20/2021 18:46	1	UXJ3223.D	DB-624 0.18(mm)
240-161553-14	SL-13_121621	12/20/2021 19:08	1	UXJ3224.D	DB-624 0.18(mm)
240-161553-15	SL-7_121621	12/20/2021 19:31	1	UXJ3225.D	DB-624 0.18(mm)
240-161553-16	SL-6_121621	12/20/2021 19:53	1	UXJ3226.D	DB-624 0.18(mm)
240-161553-17	SL-5_121621	12/20/2021 20:15	1	UXJ3227.D	DB-624 0.18(mm)
240-161553-18	SL-8_121621	12/20/2021 20:37	1	UXJ3228.D	DB-624 0.18(mm)
240-161553-19	SL-9_121621	12/20/2021 21:00	1	UXJ3229.D	DB-624 0.18(mm)
240-161553-20	SL-10_121621	12/20/2021 21:22	1	UXJ3230.D	DB-624 0.18(mm)
240-161553-20 MS	SL-10_121621 MS	12/20/2021 21:44	1	UXJ3231.D	DB-624 0.18(mm)
240-161553-20 MSD	SL-10_121621 MSD	12/20/2021 22:06	1	UXJ3232.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX23 Start Date: 12/20/2021 10:14

Analysis Batch Number: 517192 End Date: 12/20/2021 17:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-517192/1		12/20/2021 10:14	1	BFB23086.D	DB-624 0.18(mm)
CCVIS 240-517192/3		12/20/2021 10:59	1	231381.D	DB-624 0.18(mm)
CCV 240-517192/4		12/20/2021 11:24	1	231382.D	DB-624 0.18(mm)
LCS 240-517192/5		12/20/2021 11:49	1	231383.D	DB-624 0.18(mm)
ZZZZZ		12/20/2021 12:15	1		DB-624 0.18(mm)
MB 240-517192/7		12/20/2021 12:40	1	231385.D	DB-624 0.18(mm)
ZZZZZ		12/20/2021 13:04	1		DB-624 0.18(mm)
ZZZZZ		12/20/2021 13:29	1		DB-624 0.18(mm)
ZZZZZ		12/20/2021 13:54	1		DB-624 0.18(mm)
240-161553-21	SL-11_121621	12/20/2021 14:19	1	231389.D	DB-624 0.18(mm)
240-161553-22	SL-12_121621	12/20/2021 14:45	1	231390.D	DB-624 0.18(mm)
240-161553-23	SL-19_121621	12/20/2021 15:10	1	231391.D	DB-624 0.18(mm)
ZZZZZ		12/20/2021 15:35	10		DB-624 0.18(mm)
ZZZZZ		12/20/2021 16:00	8		DB-624 0.18(mm)
240-161553-24	DUP-01	12/20/2021 16:25	1	231394.D	DB-624 0.18(mm)
240-161553-25	DUP-02	12/20/2021 16:50	1	231395.D	DB-624 0.18(mm)
240-161506-B-27 MS		12/20/2021 17:15	8	231396.D	DB-624 0.18(mm)
240-161506-B-27 MSD		12/20/2021 17:40	8	231397.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00086	VM50SS_STK 00086	VMAROLISTDW 00376	VMBFB 00026
BFB 240-469338/1		8260B		5 mL	5 mL				1 uL
STD8260 240-469338/2 IC		8260B		5 mL	5 mL	2 uL	32 uL	32 uL	
STD8260 240-469338/3 IC		8260B		5 mL	5 mL	2 uL	16 uL	16 uL	
STD8260 240-469338/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL	8 uL	
STD8260 240-469338/5 IC		8260B		5 mL	5 mL	2 uL	4 uL	4 uL	
STD8260 240-469338/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL	1.6 uL	
STD8260 240-469338/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL	0.8 uL	
ICV 240-469338/14		8260B		5 mL	5 mL	2 uL	2 uL		
ICV 240-469338/15		8260B		5 mL	5 mL	2 uL	2 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00305	VMFASAW 00359	VMFASGW 00391	VMFASPW 00382	VMRGAS 00369	VMRPRIMW 00419
BFB 240-469338/1		8260B							
STD8260 240-469338/2 IC		8260B						32 uL	32 uL
STD8260 240-469338/3 IC		8260B						16 uL	16 uL
STD8260 240-469338/4 ICIS		8260B						8 uL	8 uL
STD8260 240-469338/5 IC		8260B						4 uL	4 uL
STD8260 240-469338/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-469338/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-469338/14		8260B			8 uL	8 uL	8 uL		
ICV 240-469338/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 469338 Batch Start Date: 01/15/21 10:36 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	hc907861

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 498246 Batch Start Date: 08/05/21 11:25 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm125UX21_IS 00006	vm125UX21_SS 00001	vmbfb 00027	VMFASA9W 00329
BFB 240-498246/1		8260B		5 mL	5 mL			1 uL	
ICV 240-498246/12		8260B		5 mL	5 mL	1.1 uL	1.1 uL		20 uL

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 515735 Batch Start Date: 12/06/21 15:02 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm125UX21_IS 00012	vm125UX21_SS 00002	vm50ss 00459	VMAROLISTDW 00419
BFB 240-515735/1		8260B		5 mL	5 mL	1.1 uL	1.1 uL		
IC 240-515735/3		8260B		5 mL	5 mL	1.1 uL		0.4 uL	0.4 uL
IC 240-515735/4		8260B		5 mL	5 mL	1.1 uL		0.8 uL	0.8 uL
IC 240-515735/5		8260B		5 mL	5 mL	1.1 uL		4 uL	4 uL
IC 240-515735/6		8260B		5 mL	5 mL	1.1 uL		10 uL	10 uL
ICIS 240-515735/7		8260B		5 mL	5 mL	1.1 uL		20 uL	20 uL
IC 240-515735/8		8260B		5 mL	5 mL	1.1 uL		30 uL	30 uL
IC 240-515735/9		8260B		5 mL	5 mL	1.1 uL		40 uL	40 uL
ICV 240-515735/12		8260B		5 mL	5 mL	1.1 uL	1.1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00029	VMFASAW 00401	VMFASGW 00436	VMFASPW 00425	VMRGAS 00410	VMRPRIMW 00462
BFB 240-515735/1		8260B		1 uL					
IC 240-515735/3		8260B						0.4 uL	0.4 uL
IC 240-515735/4		8260B						0.8 uL	0.8 uL
IC 240-515735/5		8260B						4 uL	4 uL
IC 240-515735/6		8260B						10 uL	10 uL
ICIS 240-515735/7		8260B						20 uL	20 uL
IC 240-515735/8		8260B						30 uL	30 uL
IC 240-515735/9		8260B						40 uL	40 uL
ICV 240-515735/12		8260B			20 uL	20 uL	20 uL		

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517187 Batch Start Date: 12/20/21 11:08 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is 00089	VM50IS 00090	vm50ss_stk 00090
BFB 240-517187/1		8260B		5 mL	5 mL				
CCVIS 240-517187/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-517187/3		8260B		5 mL	5 mL		2 uL		
LCS 240-517187/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-517187/6		8260B		5 mL	5 mL			2 uL	2 uL
240-161553-A-1	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-E-2	SL-4_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-3	SL-18_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-4	SL-17_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-5	SL-16_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-6	SL-3_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-7	SL-2_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-8	MH-1231_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-9	SL-21_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-10	SL-20_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-11	SL-22_121421	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-12	SL-15_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-13	SL-14_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-14	SL-13_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-15	SL-7_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-16	SL-6_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-17	SL-5_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-18	SL-8_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-19	SL-9_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-B-20	SL-10_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-A-20 MS	SL-10_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL
240-161553-C-20 MSD	SL-10_121621	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517187 Batch Start Date: 12/20/21 11:08 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00420	vmbfb 00029	VMFASAW 00402	VMFASGW 00438	VMFASPW 00427	VMRA9W 00419
BFB 240-517187/1		8260B			1 uL				
CCVIS 240-517187/2		8260B		8 uL					
CCV 240-517187/3		8260B							8 uL
LCS 240-517187/4		8260B				8 uL	8 uL	8 uL	
MB 240-517187/6		8260B							
240-161553-A-1	TRIP BLANK	8260B	T						
240-161553-E-2	SL-4_121421	8260B	T						
240-161553-B-3	SL-18_121421	8260B	T						
240-161553-B-4	SL-17_121421	8260B	T						
240-161553-B-5	SL-16_121421	8260B	T						
240-161553-B-6	SL-3_121421	8260B	T						
240-161553-B-7	SL-2_121421	8260B	T						
240-161553-B-8	MH-1231_121421	8260B	T						
240-161553-B-9	SL-21_121421	8260B	T						
240-161553-B-10	SL-20_121421	8260B	T						
240-161553-B-11	SL-22_121421	8260B	T						
240-161553-B-12	SL-15_121621	8260B	T						
240-161553-B-13	SL-14_121621	8260B	T						
240-161553-B-14	SL-13_121621	8260B	T						
240-161553-B-15	SL-7_121621	8260B	T						
240-161553-B-16	SL-6_121621	8260B	T						
240-161553-B-17	SL-5_121621	8260B	T						
240-161553-B-18	SL-8_121621	8260B	T						
240-161553-B-19	SL-9_121621	8260B	T						
240-161553-B-20	SL-10_121621	8260B	T						
240-161553-A-20 MS	SL-10_121621	8260B	T			8 uL	8 uL	8 uL	
240-161553-C-20 MSD	SL-10_121621	8260B	T			8 uL	8 uL	8 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517187 Batch Start Date: 12/20/21 11:08 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00411	VMRPRIMW 00464				
BFB 240-517187/1		8260B							
CCVIS 240-517187/2		8260B		8 uL	8 uL				
CCV 240-517187/3		8260B							
LCS 240-517187/4		8260B							
MB 240-517187/6		8260B							
240-161553-A-1	TRIP BLANK	8260B	T						
240-161553-E-2	SL-4_121421	8260B	T						
240-161553-B-3	SL-18_121421	8260B	T						
240-161553-B-4	SL-17_121421	8260B	T						
240-161553-B-5	SL-16_121421	8260B	T						
240-161553-B-6	SL-3_121421	8260B	T						
240-161553-B-7	SL-2_121421	8260B	T						
240-161553-B-8	MH-1231_121421	8260B	T						
240-161553-B-9	SL-21_121421	8260B	T						
240-161553-B-10	SL-20_121421	8260B	T						
240-161553-B-11	SL-22_121421	8260B	T						
240-161553-B-12	SL-15_121621	8260B	T						
240-161553-B-13	SL-14_121621	8260B	T						
240-161553-B-14	SL-13_121621	8260B	T						
240-161553-B-15	SL-7_121621	8260B	T						
240-161553-B-16	SL-6_121621	8260B	T						
240-161553-B-17	SL-5_121621	8260B	T						
240-161553-B-18	SL-8_121621	8260B	T						
240-161553-B-19	SL-9_121621	8260B	T						
240-161553-B-20	SL-10_121621	8260B	T						
240-161553-A-20 MS	SL-10_121621	8260B	T						
240-161553-C-20 MSD	SL-10_121621	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517187 Batch Start Date: 12/20/21 11:08 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC042657

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517192 Batch Start Date: 12/20/21 10:14 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm125UX21_IS 00012	vm125UX21_SS 00002	VMAROLISTDW 00420
BFB 240-517192/1		8260B		5 mL	5 mL		1.1 uL	1.1 uL	
CCVIS 240-517192/3		8260B		5 mL	5 mL		1.1 uL	1.1 uL	20 uL
CCV 240-517192/4		8260B		5 mL	5 mL		1.1 uL		
LCS 240-517192/5		8260B		5 mL	5 mL		1.1 uL	1.1 uL	
MB 240-517192/7		8260B		5 mL	5 mL		1.1 uL	1.1 uL	
240-161553-E-21	SL-11_121421	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161553-F-22	SL-12_121421	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161553-B-23	SL-19_121421	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161553-B-24	DUP-01	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161553-B-25	DUP-02	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161506-B-27 MS	MW-23	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	
240-161506-B-27 MSD	MW-23	8260B	T	5 mL	5 mL	<2 SU	1.1 uL	1.1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00029	VMFASA9W 00345	VMFASAW 00402	VMFASGW 00438	VMFASPW 00427	VMRA9W 00419
BFB 240-517192/1		8260B		1 uL					
CCVIS 240-517192/3		8260B							
CCV 240-517192/4		8260B							20 uL
LCS 240-517192/5		8260B				20 uL	20 uL	20 uL	
MB 240-517192/7		8260B							
240-161553-E-21	SL-11_121421	8260B	T						
240-161553-F-22	SL-12_121421	8260B	T						
240-161553-B-23	SL-19_121421	8260B	T						
240-161553-B-24	DUP-01	8260B	T						
240-161553-B-25	DUP-02	8260B	T						
240-161506-B-27 MS	MW-23	8260B	T		20 uL	20 uL	20 uL	20 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517192 Batch Start Date: 12/20/21 10:14 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00029	VMFASA9W 00345	VMFASAW 00402	VMFASGW 00438	VMFASPW 00427	VMRA9W 00419
240-161506-B-27 MSD	MW-23	8260B	T		20 uL	20 uL	20 uL	20 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00411	VMRPRIMW 00464				
BFB 240-517192/1		8260B							
CCVIS 240-517192/3		8260B		20 uL	20 uL				
CCV 240-517192/4		8260B							
LCS 240-517192/5		8260B							
MB 240-517192/7		8260B							
240-161553-E-21	SL-11_121421	8260B	T						
240-161553-F-22	SL-12_121421	8260B	T						
240-161553-B-23	SL-19_121421	8260B	T						
240-161553-B-24	DUP-01	8260B	T						
240-161553-B-25	DUP-02	8260B	T						
240-161506-B-27 MS	MW-23	8260B	T						
240-161506-B-27 MSD	MW-23	8260B	T						

Batch Notes	
pH Indicator ID	HC157843

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8260B SIM

Volatile Organic Compounds (GC/MS SIM) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #
SL-4_121421	240-161553-2	96
SL-18_121421	240-161553-3	101
SL-17_121421	240-161553-4	102
SL-16_121421	240-161553-5	100
SL-3_121421	240-161553-6	97
SL-2_121421	240-161553-7	99
MH-1231_121421	240-161553-8	102
SL-21_121421	240-161553-9	101
SL-20_121421	240-161553-10	101
SL-22_121421	240-161553-11	101
SL-15_121621	240-161553-12	103
SL-14_121621	240-161553-13	100
SL-13_121621	240-161553-14	102
SL-7_121621	240-161553-15	103
SL-6_121621	240-161553-16	103
SL-5_121621	240-161553-17	102
SL-8_121621	240-161553-18	104
SL-9_121621	240-161553-19	103
SL-10_121621	240-161553-20	101
SL-11_121621	240-161553-21	102
SL-12_121621	240-161553-22	103
SL-19_121621	240-161553-23	89
DUP-01	240-161553-24	89
DUP-02	240-161553-25	88
	MB 240-517240/5	100
	MB 240-517292/5	89
	LCS 240-517240/4	99
	LCS 240-517292/4	89
SL-20_121421 MS	240-161553-10 MS	103
SL-19_121621 MS	240-161553-23 MS	91
SL-20_121421 MSD	240-161553-10 MSD	102
SL-19_121621 MSD	240-161553-23 MSD	91

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202701.D

Lab ID: LCS 240-517240/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	9.84	98	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 191226.D

Lab ID: LCS 240-517292/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	10.6	106	80-122	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202714.D

Lab ID: 240-161553-10 MS Client ID: SL-20_121421 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	11.2	112	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 191230.D

Lab ID: 240-161553-23 MS Client ID: SL-19_121621 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	10.0	2.0 U	10.7	107	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 202715.D

Lab ID: 240-161553-10 MSD Client ID: SL-20_121421 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	10.6	106	5	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 191231.D

Lab ID: 240-161553-23 MSD Client ID: SL-19_121621 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	10.0	10.7	107	0	16	51-153	

Column to be used to flag recovery and RPD values

FORM III 8260B SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: 202702.D Lab Sample ID: MB 240-517240/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX20 Date Analyzed: 12/20/2021 21:29

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-517240/4	202701.D	12/20/2021 21:05
SL-4_121421	240-161553-2	202705.D	12/20/2021 22:41
SL-18_121421	240-161553-3	202706.D	12/20/2021 23:05
SL-17_121421	240-161553-4	202707.D	12/20/2021 23:28
SL-16_121421	240-161553-5	202708.D	12/20/2021 23:52
SL-3_121421	240-161553-6	202709.D	12/21/2021 00:16
SL-2_121421	240-161553-7	202710.D	12/21/2021 00:40
MH-1231_121421	240-161553-8	202711.D	12/21/2021 01:04
SL-21_121421	240-161553-9	202712.D	12/21/2021 01:27
SL-20_121421	240-161553-10	202713.D	12/21/2021 01:51
SL-20_121421 MS	240-161553-10 MS	202714.D	12/21/2021 02:15
SL-20_121421 MSD	240-161553-10 MSD	202715.D	12/21/2021 02:39
SL-22_121421	240-161553-11	202716.D	12/21/2021 03:03
SL-15_121621	240-161553-12	202717.D	12/21/2021 03:27
SL-14_121621	240-161553-13	202718.D	12/21/2021 03:51
SL-13_121621	240-161553-14	202719.D	12/21/2021 04:15
SL-7_121621	240-161553-15	202720.D	12/21/2021 04:38
SL-6_121621	240-161553-16	202721.D	12/21/2021 05:02
SL-5_121621	240-161553-17	202722.D	12/21/2021 05:26
SL-8_121621	240-161553-18	202723.D	12/21/2021 05:50
SL-9_121621	240-161553-19	202724.D	12/21/2021 06:14
SL-10_121621	240-161553-20	202725.D	12/21/2021 06:38
SL-11_121621	240-161553-21	202726.D	12/21/2021 07:02
SL-12_121621	240-161553-22	202727.D	12/21/2021 07:26

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: 191227.D Lab Sample ID: MB 240-517292/5

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: A3UX18 Date Analyzed: 12/21/2021 20:16

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-517292/4	191226.D	12/21/2021 19:51
SL-19_121621	240-161553-23	191229.D	12/21/2021 21:06
SL-19_121621 MS	240-161553-23 MS	191230.D	12/21/2021 21:30
SL-19_121621 MSD	240-161553-23 MSD	191231.D	12/21/2021 21:55
DUP-01	240-161553-24	191232.D	12/21/2021 22:20
DUP-02	240-161553-25	191233.D	12/21/2021 22:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB18107.D BFB Injection Date: 10/21/2021

Instrument ID: A3UX18 BFB Injection Time: 16:07

Analysis Batch No.: 509326

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.8	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	78.0	
175	5.0 - 9.0 % of mass 174	5.8	(7.5) 1
176	95.0 - 101.0 % of mass 174	75.4	(96.7) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-509326/3	190503.D	10/21/2021	16:50
	IC 240-509326/4	190504.D	10/21/2021	17:15
	IC 240-509326/5	190505.D	10/21/2021	17:40
	IC 240-509326/6	190506.D	10/21/2021	18:05
	ICIS 240-509326/7	190507.D	10/21/2021	18:29
	IC 240-509326/8	190508.D	10/21/2021	18:54
	IC 240-509326/9	190509.D	10/21/2021	19:19
	IC 240-509326/10	190510.D	10/21/2021	19:44
	ICV 240-509326/12	190512.D	10/21/2021	20:33

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB18138.D BFB Injection Date: 12/21/2021

Instrument ID: A3UX18 BFB Injection Time: 18:50

Analysis Batch No.: 517292

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.2	
75	30.0 - 60.0 % of mass 95	45.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	74.8	
175	5.0 - 9.0 % of mass 174	5.5	(7.3) 1
176	95.0 - 101.0 % of mass 174	72.1	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-517292/3	191225.D	12/21/2021	19:26
	LCS 240-517292/4	191226.D	12/21/2021	19:51
	MB 240-517292/5	191227.D	12/21/2021	20:16
SL-19_121621	240-161553-23	191229.D	12/21/2021	21:06
SL-19_121621 MS	240-161553-23 MS	191230.D	12/21/2021	21:30
SL-19_121621 MSD	240-161553-23 MSD	191231.D	12/21/2021	21:55
DUP-01	240-161553-24	191232.D	12/21/2021	22:20
DUP-02	240-161553-25	191233.D	12/21/2021	22:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB20126.D BFB Injection Date: 09/09/2021

Instrument ID: A3UX20 BFB Injection Time: 13:33

Analysis Batch No.: 503003

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.3	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.1) 1
174	Greater than 50% of mass 95	68.0	
175	5.0 - 9.0 % of mass 174	4.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	66.1	(97.1) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-503003/3	201661.D	09/09/2021	14:25
	IC 240-503003/4	201662.D	09/09/2021	14:49
	IC 240-503003/5	201663.D	09/09/2021	15:14
	IC 240-503003/6	201664.D	09/09/2021	15:38
	ICIS 240-503003/7	201665.D	09/09/2021	16:03
	IC 240-503003/8	201666.D	09/09/2021	16:27
	IC 240-503003/9	201667.D	09/09/2021	16:52
	IC 240-503003/10	201668.D	09/09/2021	17:16
	ICV 240-503003/12	201670.D	09/09/2021	18:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab File ID: BFB20174.D BFB Injection Date: 12/20/2021

Instrument ID: A3UX20 BFB Injection Time: 20:04

Analysis Batch No.: 517240

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.9	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	59.9	
175	5.0 - 9.0 % of mass 174	4.5	(7.5) 1
176	95.0 - 101.0 % of mass 174	57.1	(95.3) 1
177	5.0 - 9.0 % of mass 176	3.8	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-517240/3	202700.D	12/20/2021	20:41
	LCS 240-517240/4	202701.D	12/20/2021	21:05
	MB 240-517240/5	202702.D	12/20/2021	21:29
SL-4_121421	240-161553-2	202705.D	12/20/2021	22:41
SL-18_121421	240-161553-3	202706.D	12/20/2021	23:05
SL-17_121421	240-161553-4	202707.D	12/20/2021	23:28
SL-16_121421	240-161553-5	202708.D	12/20/2021	23:52
SL-3_121421	240-161553-6	202709.D	12/21/2021	0:16
SL-2_121421	240-161553-7	202710.D	12/21/2021	0:40
MH-1231_121421	240-161553-8	202711.D	12/21/2021	1:04
SL-21_121421	240-161553-9	202712.D	12/21/2021	1:27
SL-20_121421	240-161553-10	202713.D	12/21/2021	1:51
SL-20_121421 MS	240-161553-10 MS	202714.D	12/21/2021	2:15
SL-20_121421 MSD	240-161553-10 MSD	202715.D	12/21/2021	2:39
SL-22_121421	240-161553-11	202716.D	12/21/2021	3:03
SL-15_121621	240-161553-12	202717.D	12/21/2021	3:27
SL-14_121621	240-161553-13	202718.D	12/21/2021	3:51
SL-13_121621	240-161553-14	202719.D	12/21/2021	4:15
SL-7_121621	240-161553-15	202720.D	12/21/2021	4:38
SL-6_121621	240-161553-16	202721.D	12/21/2021	5:02
SL-5_121621	240-161553-17	202722.D	12/21/2021	5:26
SL-8_121621	240-161553-18	202723.D	12/21/2021	5:50
SL-9_121621	240-161553-19	202724.D	12/21/2021	6:14
SL-10_121621	240-161553-20	202725.D	12/21/2021	6:38
SL-11_121621	240-161553-21	202726.D	12/21/2021	7:02
SL-12_121621	240-161553-22	202727.D	12/21/2021	7:26

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: ICIS 240-509326/7 Date Analyzed: 10/21/2021 18:29

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 190507.D Heated Purge: (Y/N) Y

Calibration ID: 62881

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		7703977	6.59	219909	7.24		
UPPER LIMIT		15407954	7.09	439818	7.74		
LOWER LIMIT		3851989	6.09	109955	6.74		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-517292/3		6024604	6.59	179476	7.24		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: CCVIS 240-517292/3 Date Analyzed: 12/21/2021 19:26

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 191225.D Heated Purge: (Y/N) Y

Calibration ID: 62881

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		6024604	6.59	179476	7.24		
UPPER LIMIT		12049208	7.09	358952	7.74		
LOWER LIMIT		3012302	6.09	89738	6.74		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-517292/4		5904454	6.59	168606	7.24		
MB 240-517292/5		6045570	6.59	171123	7.24		
240-161553-23	SL-19_121621	5844153	6.59	173763	7.24		
240-161553-23 MS	SL-19_121621 MS	5769703	6.59	173691	7.24		
240-161553-23 MSD	SL-19_121621 MSD	5749324	6.59	173491	7.24		
240-161553-24	DUP-01	5634218	6.59	185075	7.24		
240-161553-25	DUP-02	5571685	6.59	175062	7.24		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: ICIS 240-503003/7 Date Analyzed: 09/09/2021 16:03

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 201665.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3376203	7.44	100508	8.19		
UPPER LIMIT		6752406	7.94	201016	8.69		
LOWER LIMIT		1688102	6.94	50254	7.69		
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-517240/3		2755559	7.44	79096	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Sample No.: CCVIS 240-517240/3 Date Analyzed: 12/20/2021 20:41

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 202700.D Heated Purge: (Y/N) Y

Calibration ID: 62639

		FB		14DD8			
		AREA #	RT #	AREA #	RT #	#	RT #
12/24 HOUR STD		2755559	7.44	79096	8.18		
UPPER LIMIT		5511118	7.94	158192	8.68		
LOWER LIMIT		1377780	6.94	39548	7.68		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-517240/4		2782219	7.44	85070	8.18		
MB 240-517240/5		2768615	7.44	83042	8.18		
240-161553-2	SL-4_121421	2664951	7.42	74850	8.18		
240-161553-3	SL-18_121421	2675813	7.42	80221	8.18		
240-161553-4	SL-17_121421	2610223	7.42	79767	8.18		
240-161553-5	SL-16_121421	2685176	7.44	79905	8.18		
240-161553-6	SL-3_121421	2735229	7.44	83529	8.18		
240-161553-7	SL-2_121421	2634908	7.44	75823	8.18		
240-161553-8	MH-1231_121421	2668413	7.44	84223	8.18		
240-161553-9	SL-21_121421	2580552	7.44	77228	8.18		
240-161553-10	SL-20_121421	2560331	7.42	78934	8.18		
240-161553-10 MS	SL-20_121421 MS	2573605	7.42	80143	8.18		
240-161553-10 MSD	SL-20_121421 MSD	2634052	7.42	83106	8.18		
240-161553-11	SL-22_121421	2634649	7.42	79366	8.18		
240-161553-12	SL-15_121621	2747418	7.44	85731	8.18		
240-161553-13	SL-14_121621	2691127	7.44	84443	8.18		
240-161553-14	SL-13_121621	2635384	7.42	80964	8.18		
240-161553-15	SL-7_121621	2643967	7.44	83399	8.18		
240-161553-16	SL-6_121621	2585511	7.42	82835	8.18		
240-161553-17	SL-5_121621	2572186	7.42	78573	8.18		
240-161553-18	SL-8_121621	2608101	7.42	78594	8.18		
240-161553-19	SL-9_121621	2632758	7.44	81648	8.18		
240-161553-20	SL-10_121621	2645323	7.42	79391	8.18		
240-161553-21	SL-11_121621	2615864	7.44	81952	8.18		
240-161553-22	SL-12_121621	2568373	7.44	80988	8.18		

FB = Fluorobenzene
14DD8 = 1,4-Dioxane (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-4_121421 Lab Sample ID: 240-161553-2

Matrix: Water Lab File ID: 202705.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 09:25

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 22:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.5		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202705.D
Lims ID: 240-161553-C-2
Client ID: SL-4_121421
Sample Type: Client
Inject. Date: 20-Dec-2021 22:41:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-008
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:14:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	819006	9.62	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2664951	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	74850	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	43	2744	4.49	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

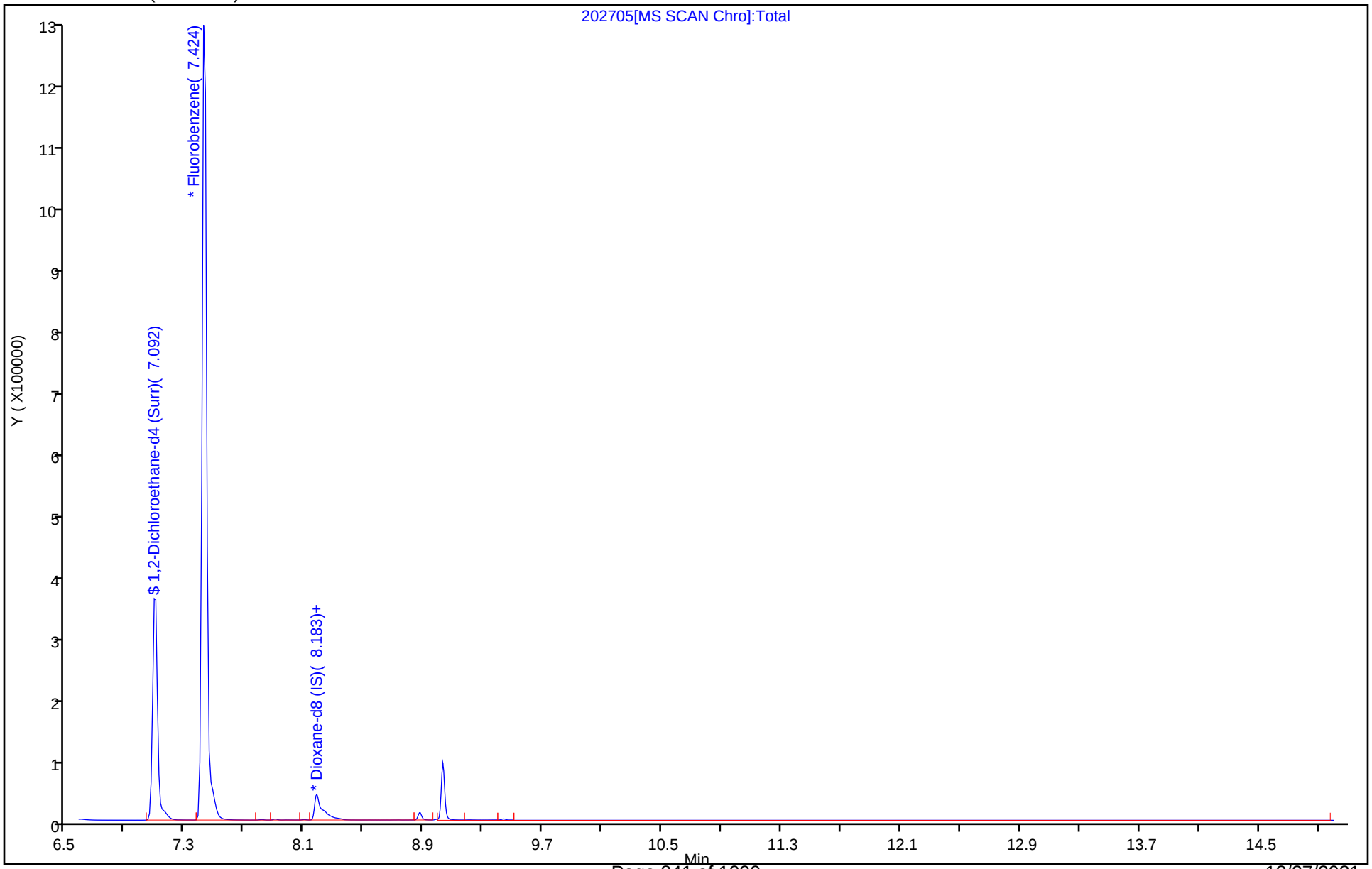
Report Date: 21-Dec-2021 18:35:04 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202705.D

Injection Date:	20-Dec-2021 22:41:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-2	Lab Sample ID:	240-161553-2	Worklist Smp#:	8
Client ID:	SL-4_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202705.D				
Lims ID:	240-161553-C-2				
Client ID:	SL-4_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 22:41:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

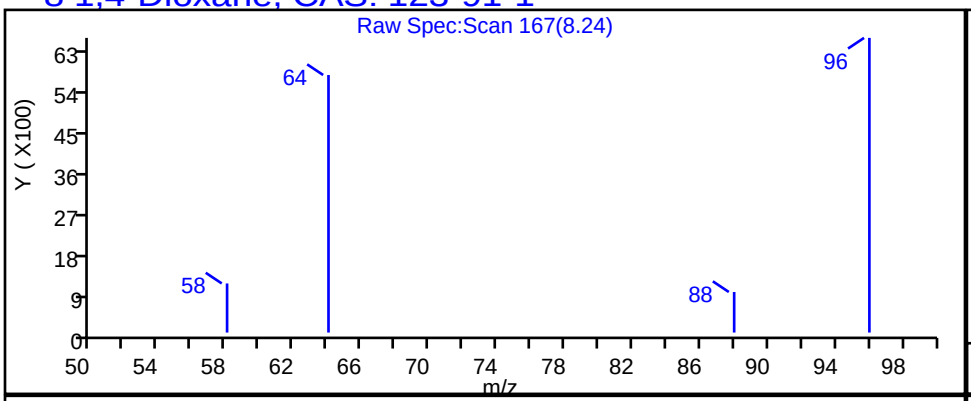
First Level Reviewer: seymourc Date: 21-Dec-2021 18:14:49

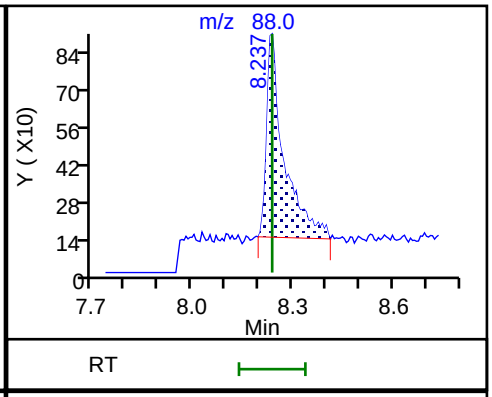
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.62	96.23

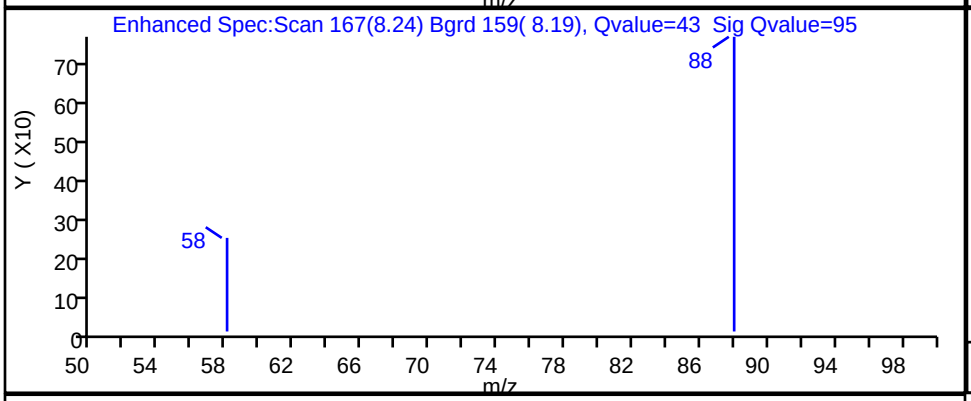
Eurofins TestAmerica, Canton

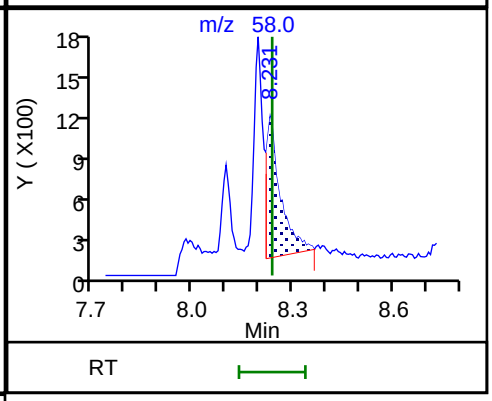
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202705.D				
Injection Date:	20-Dec-2021 22:41:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-2	Lab Sample ID:	240-161553-2		
Client ID:	SL-4_121421				
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

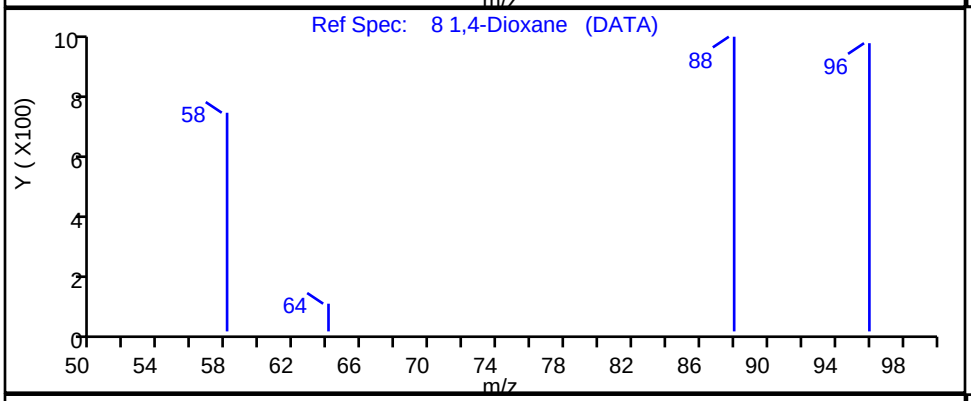
8 1,4-Dioxane, CAS: 123-91-1

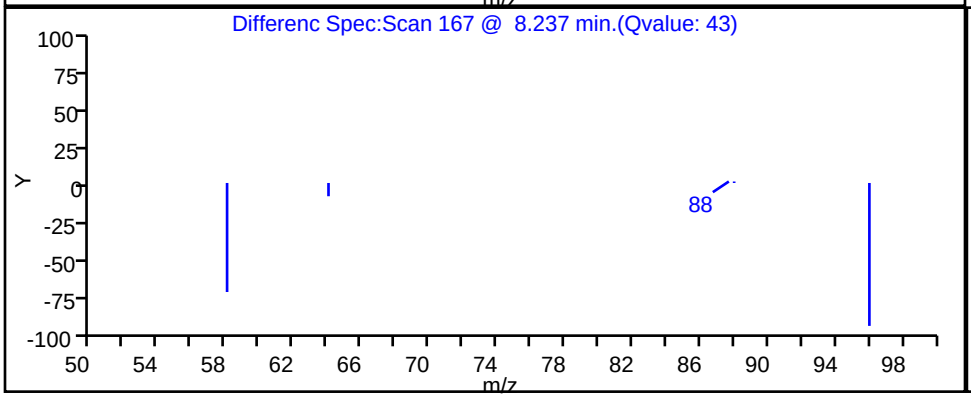


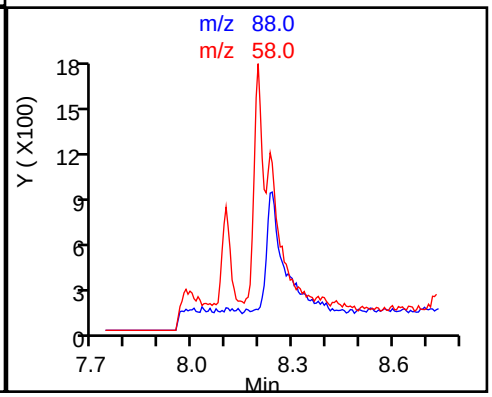












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

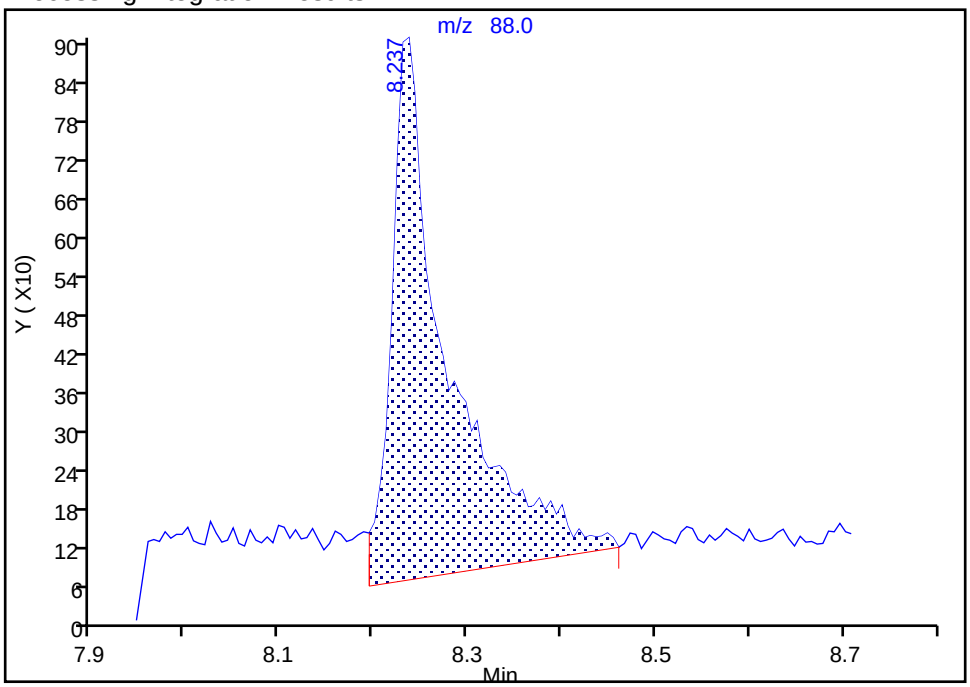
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202705.D				
Injection Date:	20-Dec-2021 22:41:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-2	Lab Sample ID:	240-161553-2		
Client ID:	SL-4_121421				
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

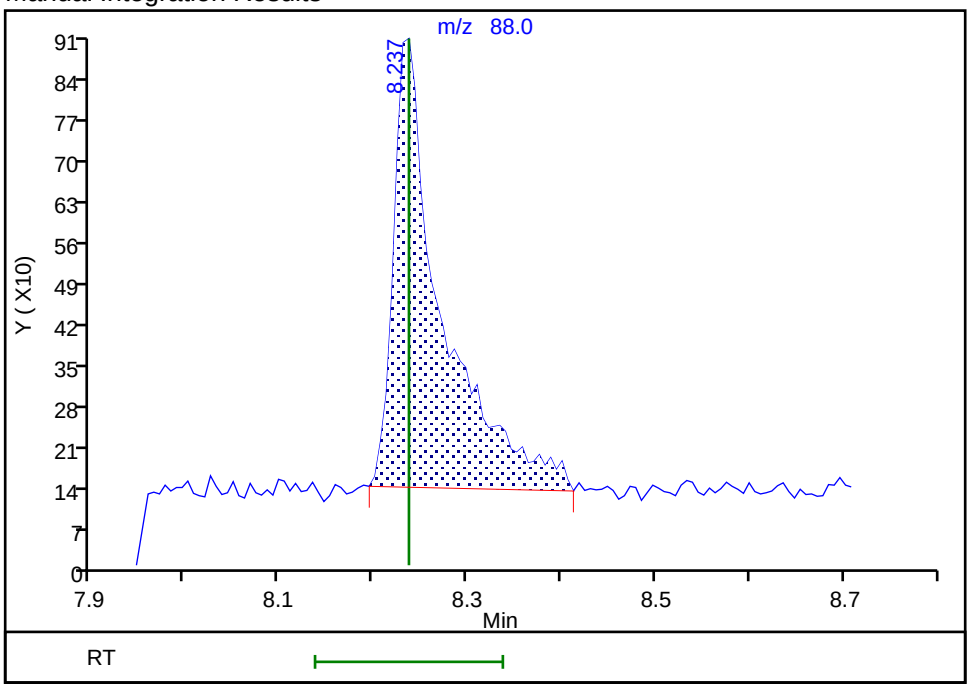
Processing Integration Results

RT: 8.24
Area: 3521
Amount: 5.763721
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2744
Amount: 4.491806
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:14:40

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-18_121421 Lab Sample ID: 240-161553-3

Matrix: Water Lab File ID: 202706.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 10:00

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 23:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202706.D				
Lims ID:	240-161553-C-3				
Client ID:	SL-18_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:05:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:15:08		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	866876	10.1	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2675813	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	80221	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	37	2698	4.12	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

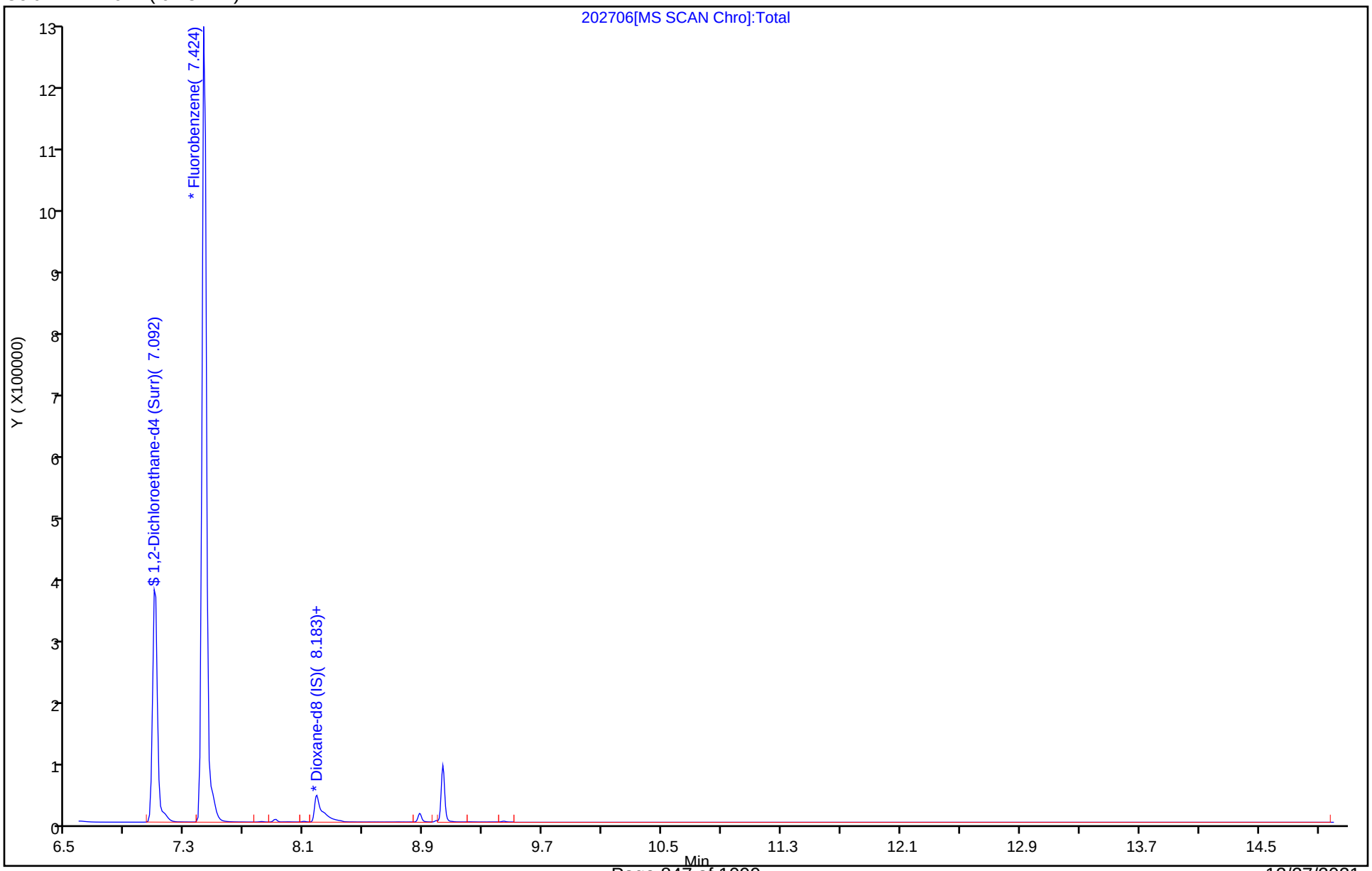
Report Date: 21-Dec-2021 18:35:05 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202706.D

Injection Date:	20-Dec-2021 23:05:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-3	Lab Sample ID:	240-161553-3	Worklist Smp#:	9
Client ID:	SL-18_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202706.D				
Lims ID:	240-161553-C-3				
Client ID:	SL-18_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:05:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-009				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:15:08

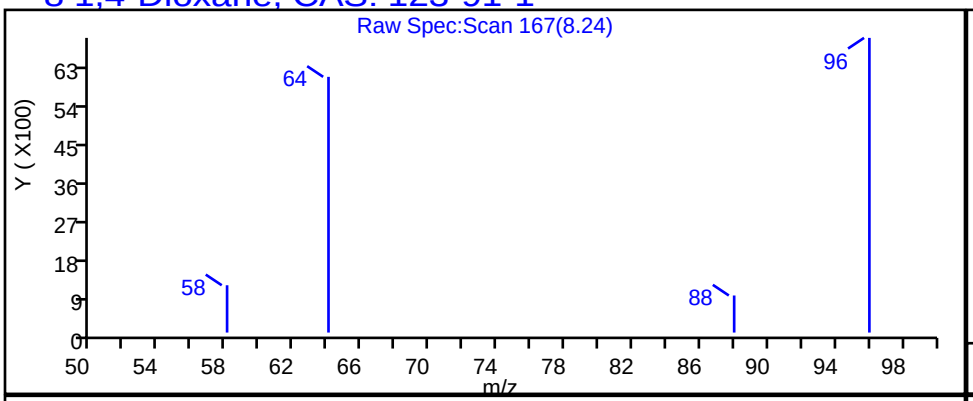
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.45

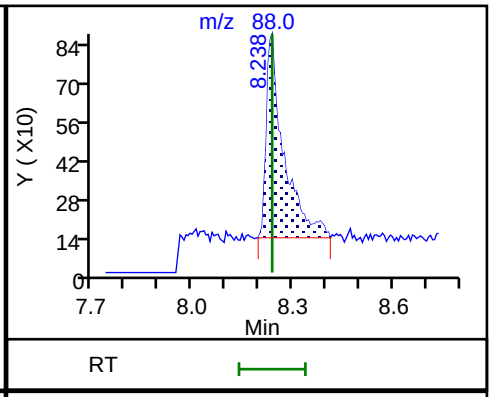
Eurofins TestAmerica, Canton

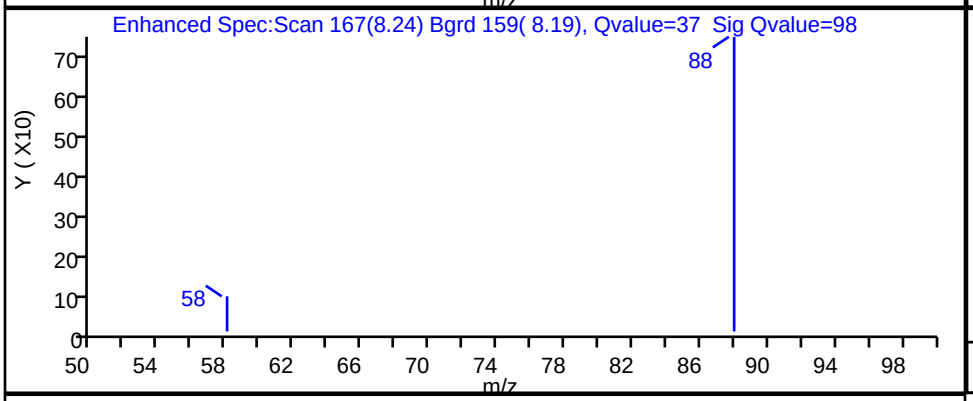
Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202706.D

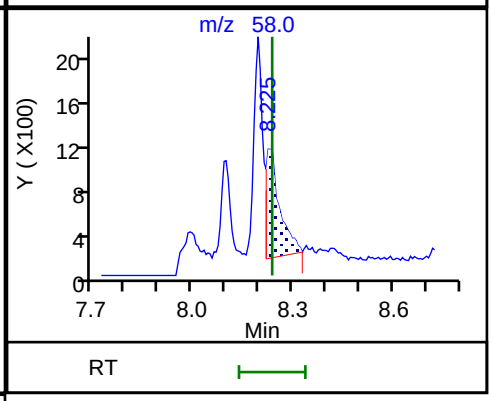
Injection Date:	20-Dec-2021 23:05:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-3	Lab Sample ID:	240-161553-3		
Client ID:	SL-18_121421				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

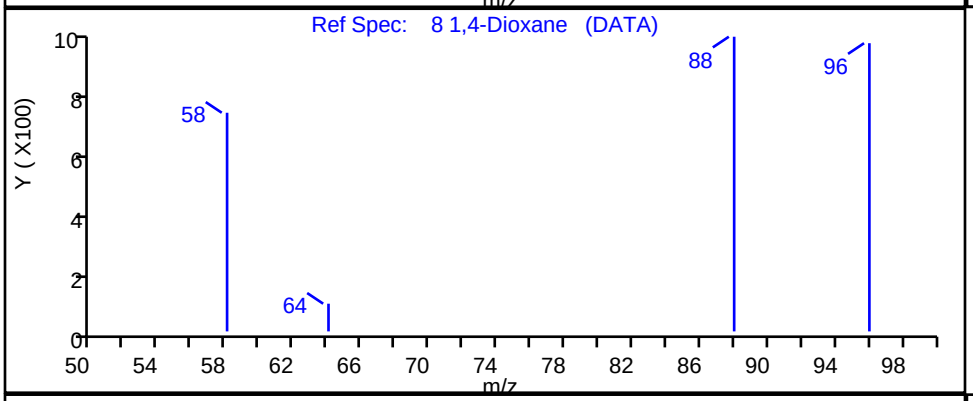
8 1,4-Dioxane, CAS: 123-91-1

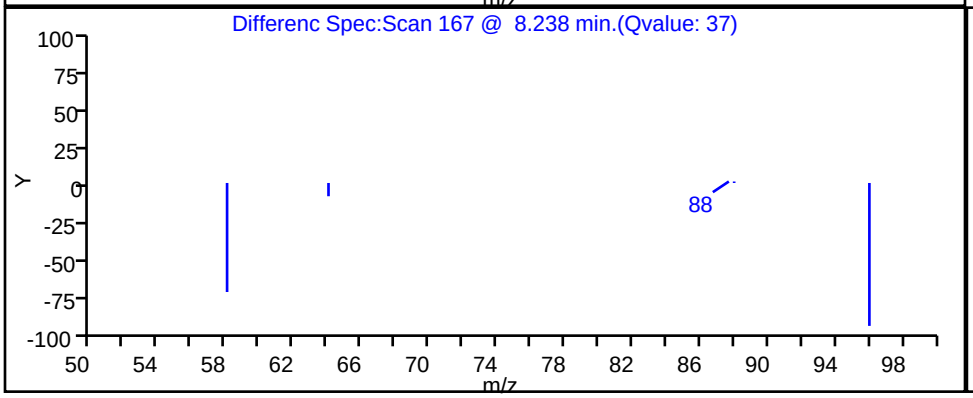


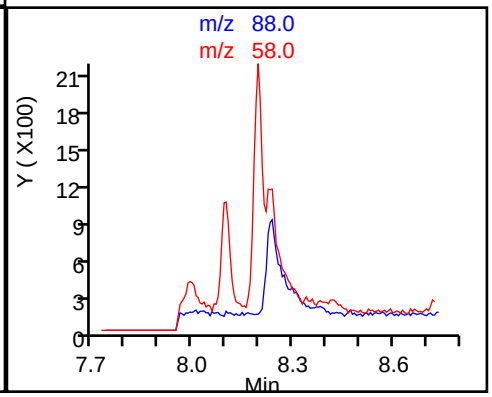












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

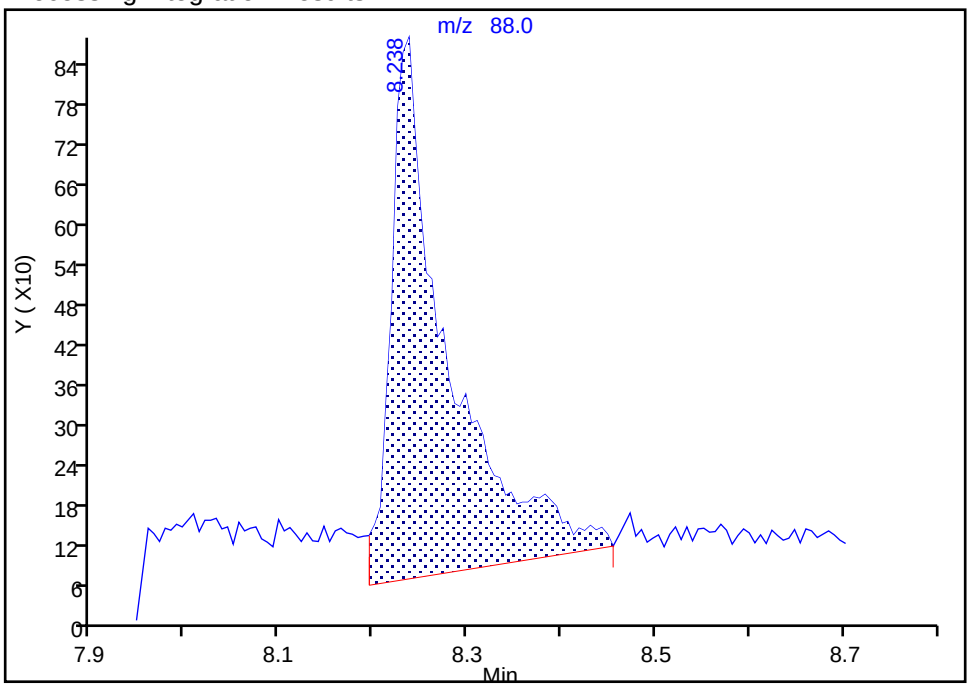
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202706.D				
Injection Date:	20-Dec-2021 23:05:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-3	Lab Sample ID:	240-161553-3		
Client ID:	SL-18_121421				
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

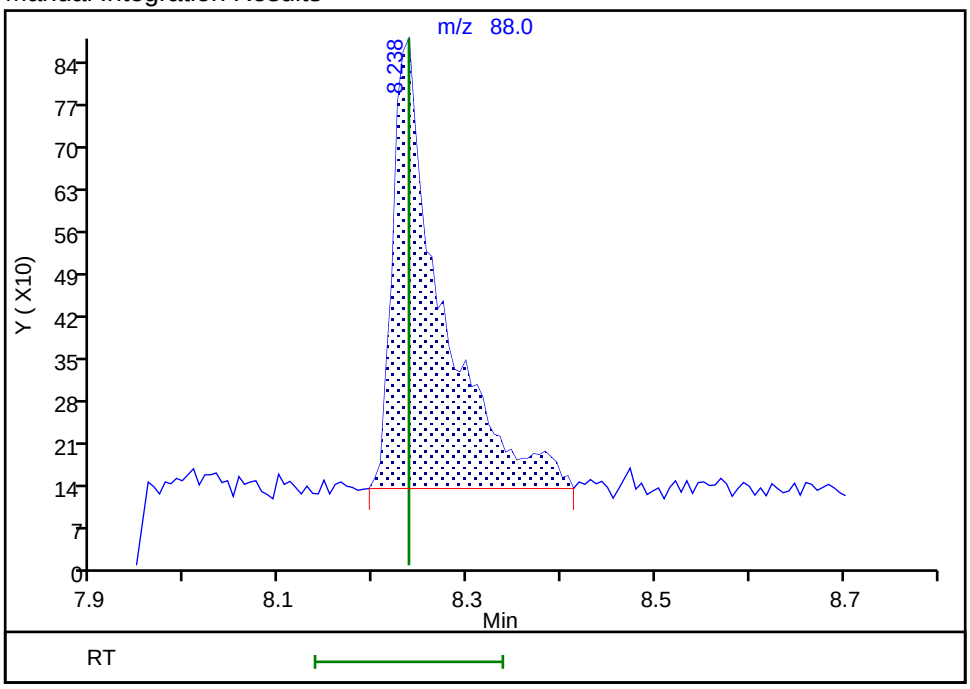
Processing Integration Results

RT: 8.24
Area: 3437
Amount: 5.249527
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2698
Amount: 4.120810
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:15:01

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-17_121421 Lab Sample ID: 240-161553-4

Matrix: Water Lab File ID: 202707.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 10:25

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 23:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202707.D				
Lims ID:	240-161553-C-4				
Client ID:	SL-17_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:28:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:15:23		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	852583	10.2	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2610223	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	93	79767	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	51	3639	5.59	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

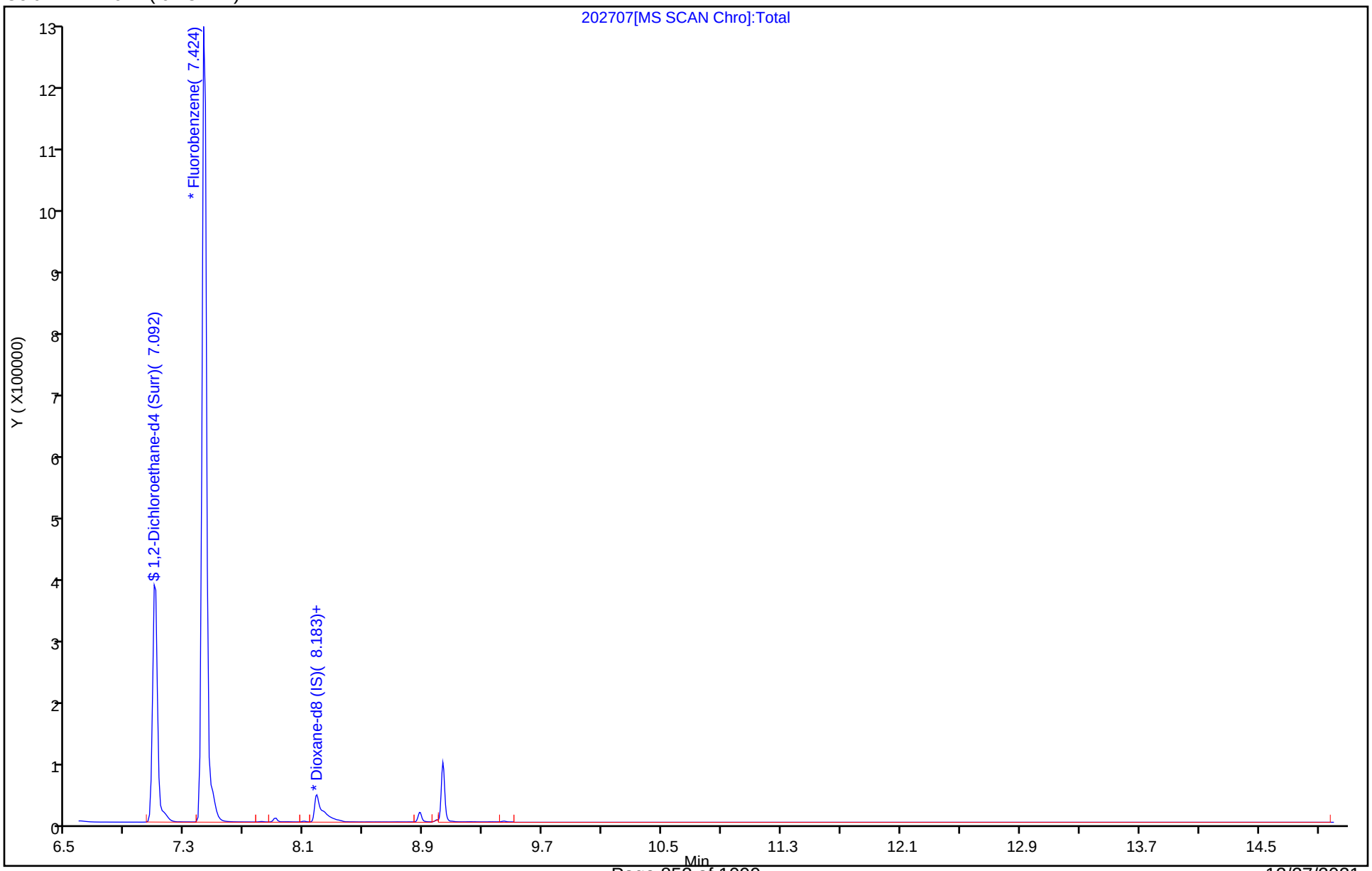
Report Date: 21-Dec-2021 18:35:05 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202707.D

Injection Date:	20-Dec-2021 23:28:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-4	Lab Sample ID:	240-161553-4	Worklist Smp#:	10
Client ID:	SL-17_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202707.D				
Lims ID:	240-161553-C-4				
Client ID:	SL-17_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:28:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:15:23		

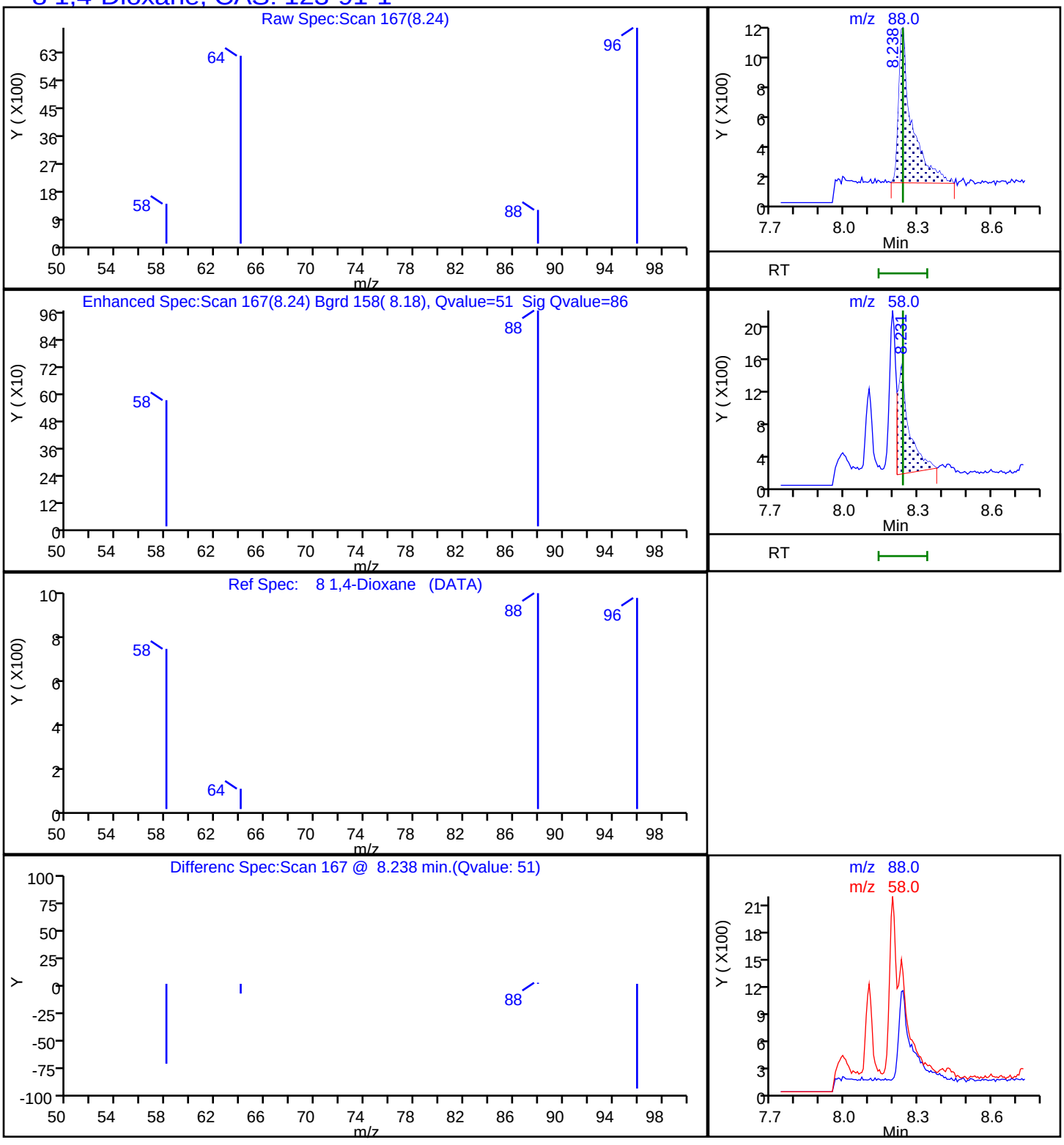
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.28

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202707.D

Injection Date:	20-Dec-2021 23:28:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-4	Lab Sample ID:	240-161553-4		
Client ID:	SL-17_121421				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Canton

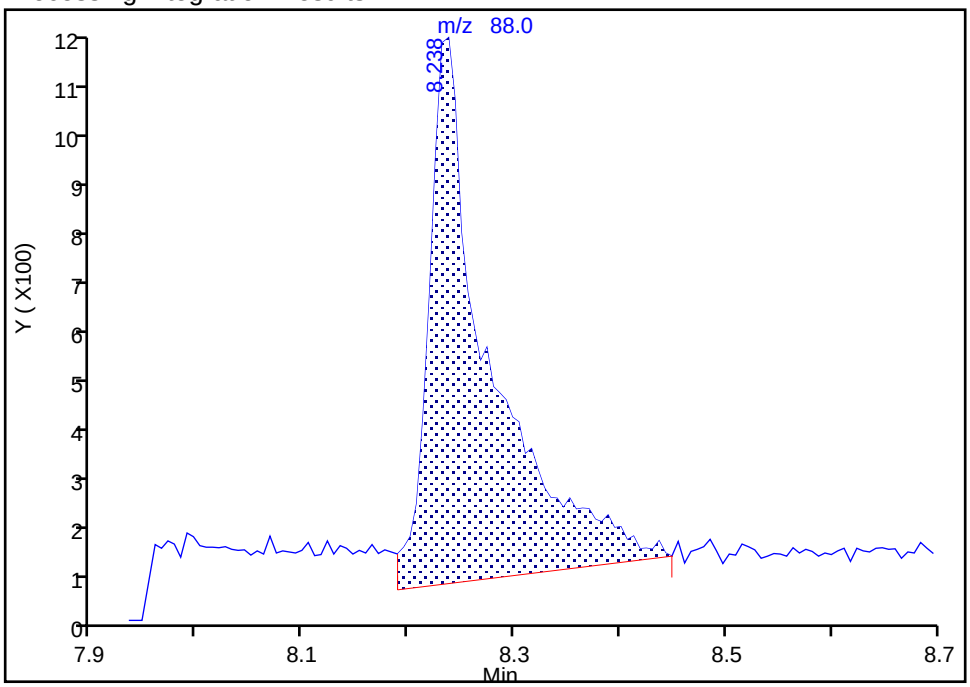
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202707.D				
Injection Date:	20-Dec-2021 23:28:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-4	Lab Sample ID:	240-161553-4		
Client ID:	SL-17_121421				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

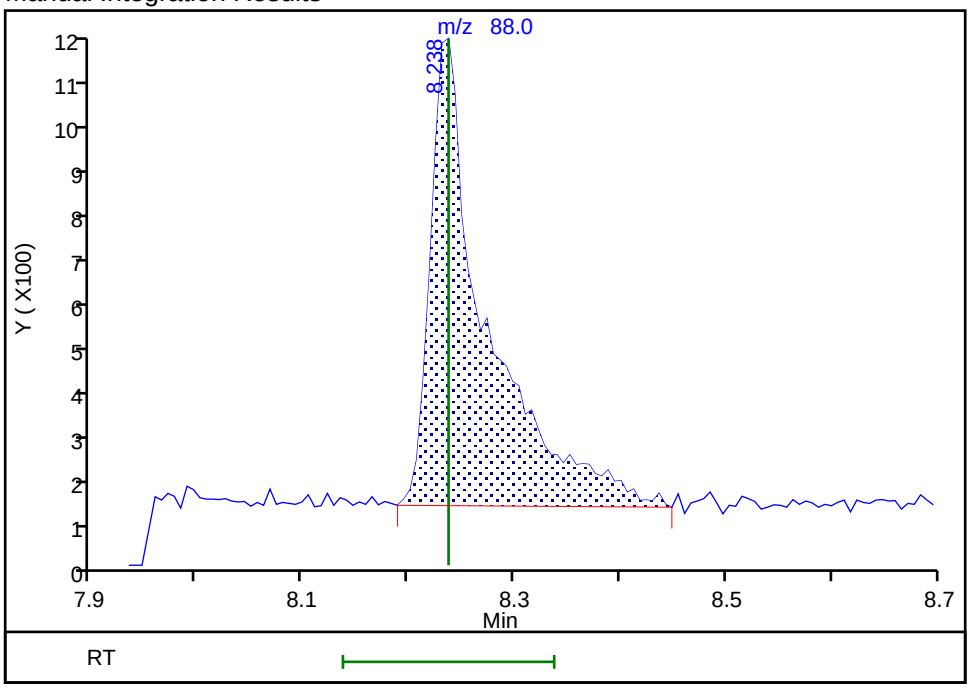
Processing Integration Results

RT: 8.24
Area: 4181
Amount: 6.422227
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 3639
Amount: 5.589687
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:15:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-16_121421 Lab Sample ID: 240-161553-5

Matrix: Water Lab File ID: 202708.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 10:45

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 23:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202708.D				
Lims ID:	240-161553-C-5				
Client ID:	SL-16_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:52:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:16:21		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	857865	10.0	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2685176	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	79905	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	48	3057	4.69	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

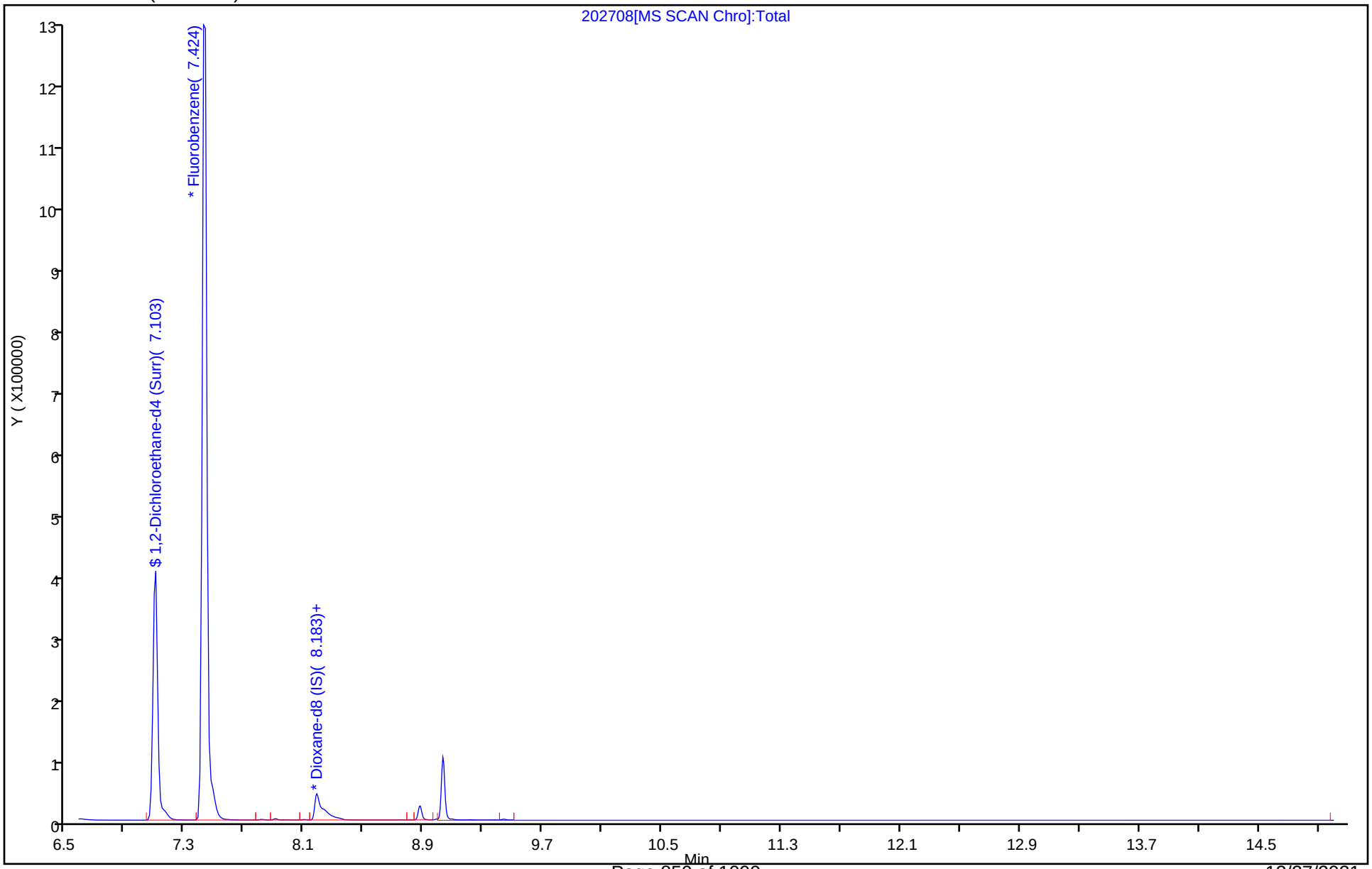
Report Date: 21-Dec-2021 18:35:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202708.D

Injection Date:	20-Dec-2021 23:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-5	Lab Sample ID:	240-161553-5	Worklist Smp#:	11
Client ID:	SL-16_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202708.D				
Lims ID:	240-161553-C-5				
Client ID:	SL-16_121421				
Sample Type:	Client				
Inject. Date:	20-Dec-2021 23:52:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-011				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:16:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.04

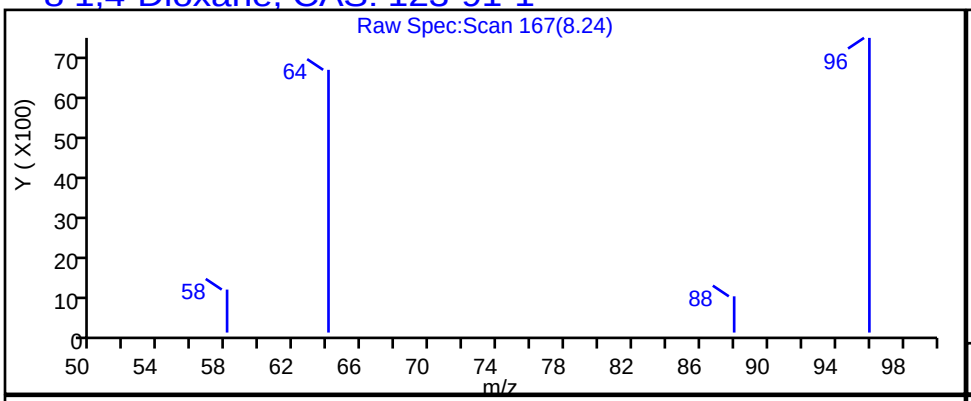
Report Date: 21-Dec-2021 18:35:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

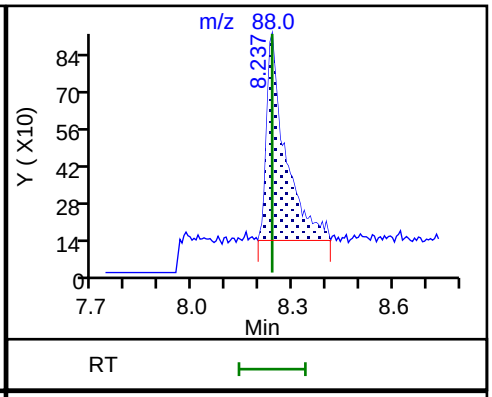
Eurofins TestAmerica, Canton

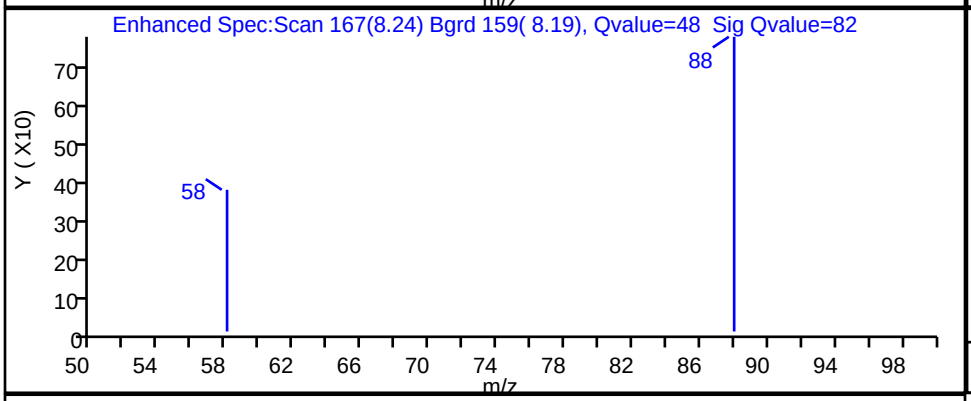
Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202708.D

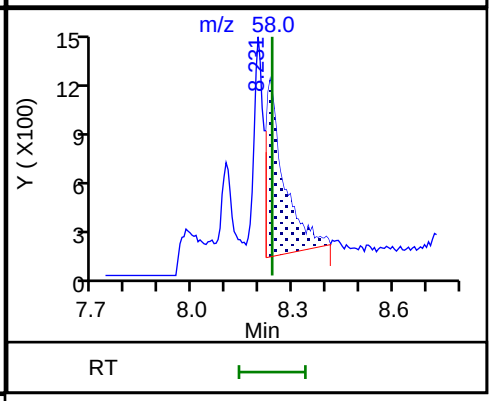
Injection Date:	20-Dec-2021 23:52:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-5	Lab Sample ID:	240-161553-5		
Client ID:	SL-16_121421				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

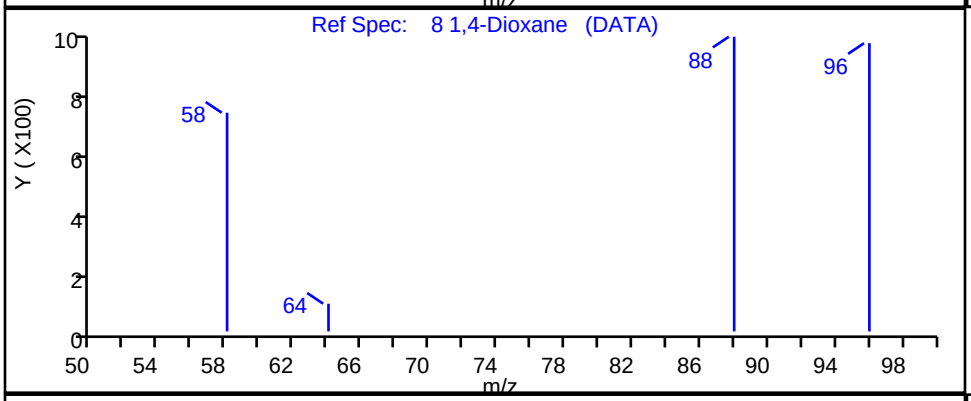
8 1,4-Dioxane, CAS: 123-91-1

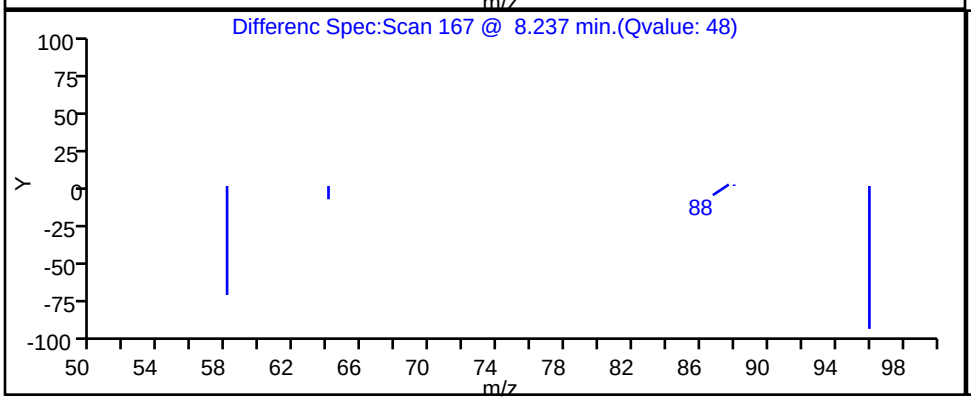


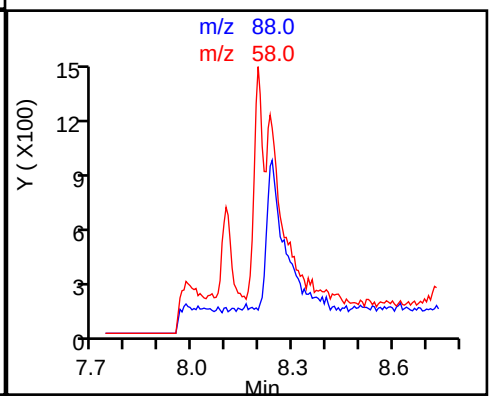












Eurofins TestAmerica, Canton

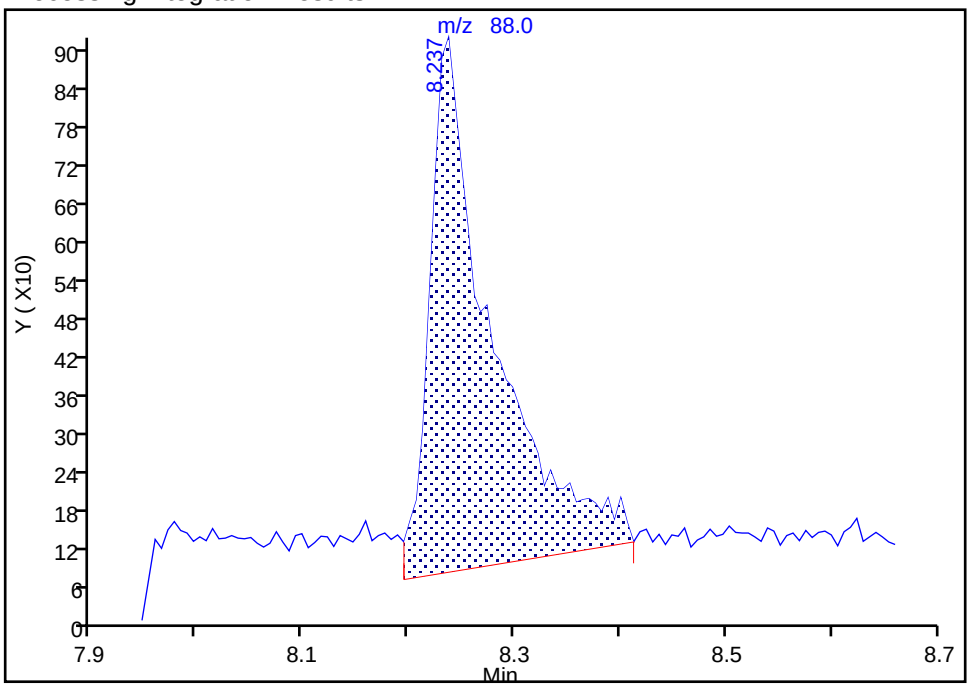
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202708.D				
Injection Date:	20-Dec-2021 23:52:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-5	Lab Sample ID:	240-161553-5		
Client ID:	SL-16_121421				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

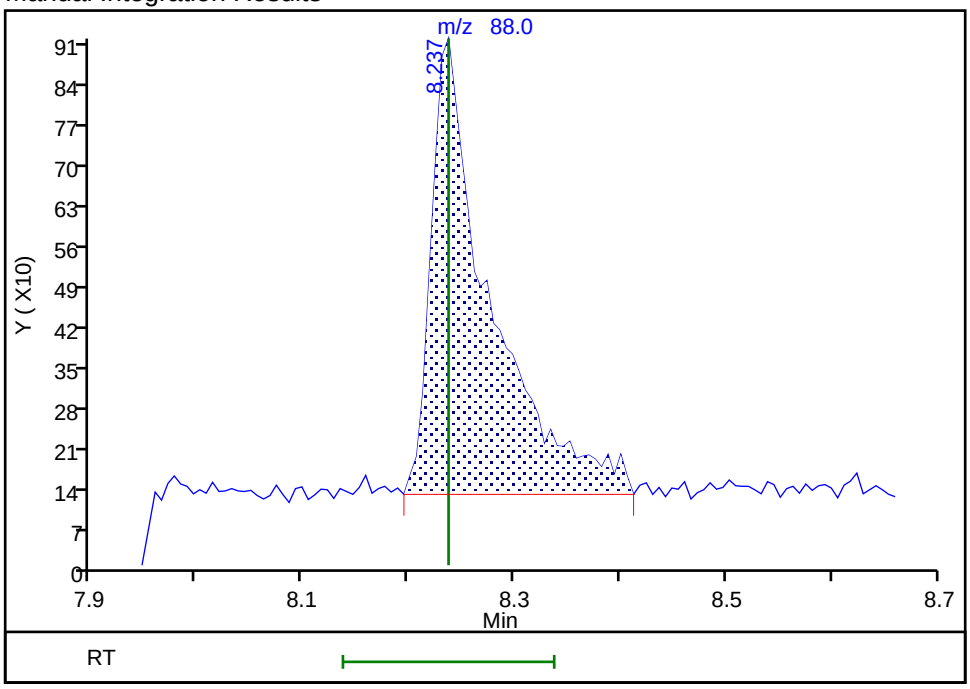
Processing Integration Results

RT: 8.24
Area: 3453
Amount: 5.294822
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 3057
Amount: 4.687596
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:16:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-3_121421 Lab Sample ID: 240-161553-6

Matrix: Water Lab File ID: 202709.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 11:15

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 00:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.5		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202709.D				
Lims ID:	240-161553-C-6				
Client ID:	SL-3_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 00:16:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:16:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	846841	9.69	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2735229	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	83529	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	52	4433	6.50	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

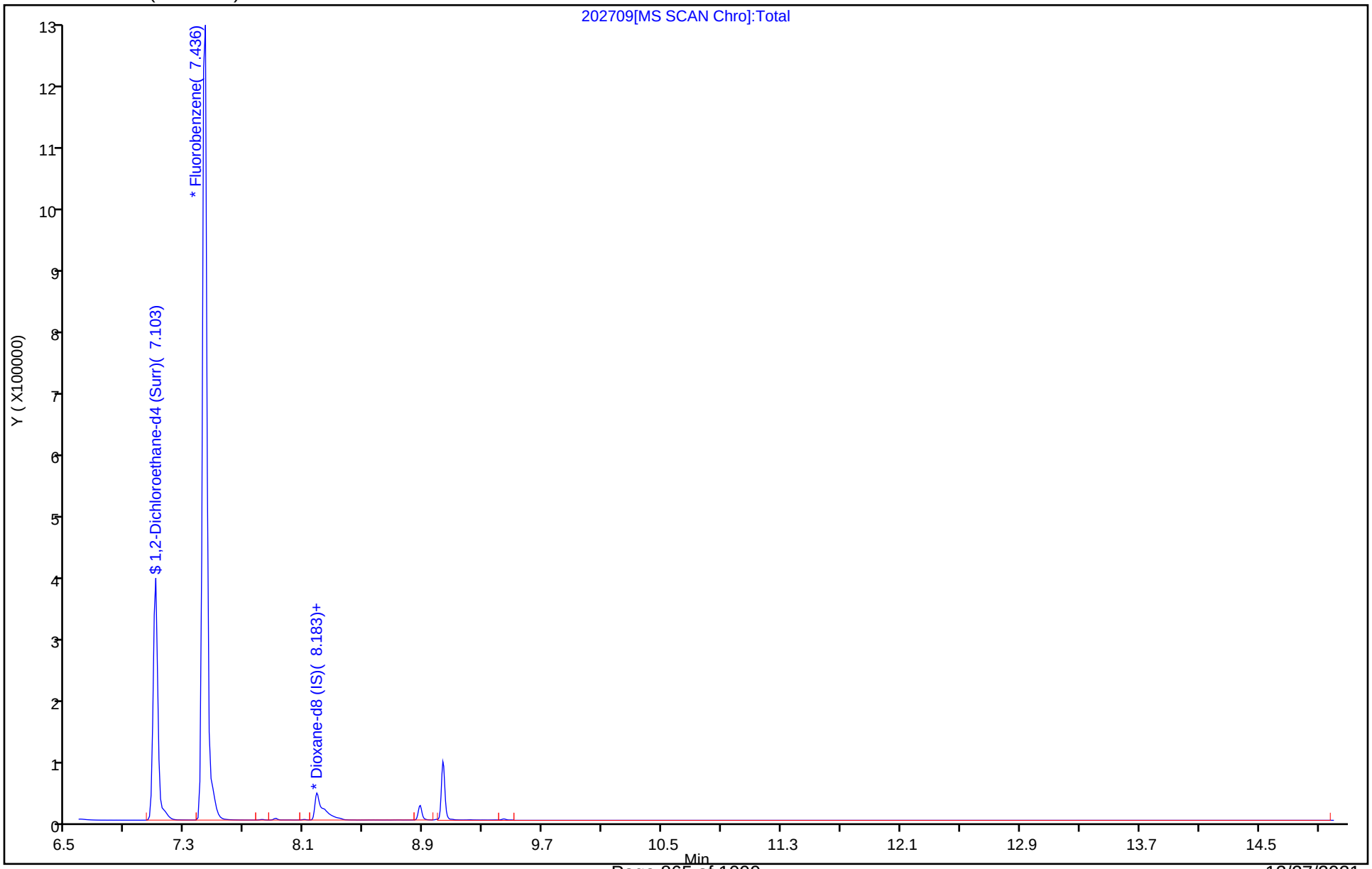
Report Date: 21-Dec-2021 18:35:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202709.D

Injection Date:	21-Dec-2021 00:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-6	Lab Sample ID:	240-161553-6	Worklist Smp#:	12
Client ID:	SL-3_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202709.D				
Lims ID:	240-161553-C-6				
Client ID:	SL-3_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 00:16:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:16:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.69	96.95

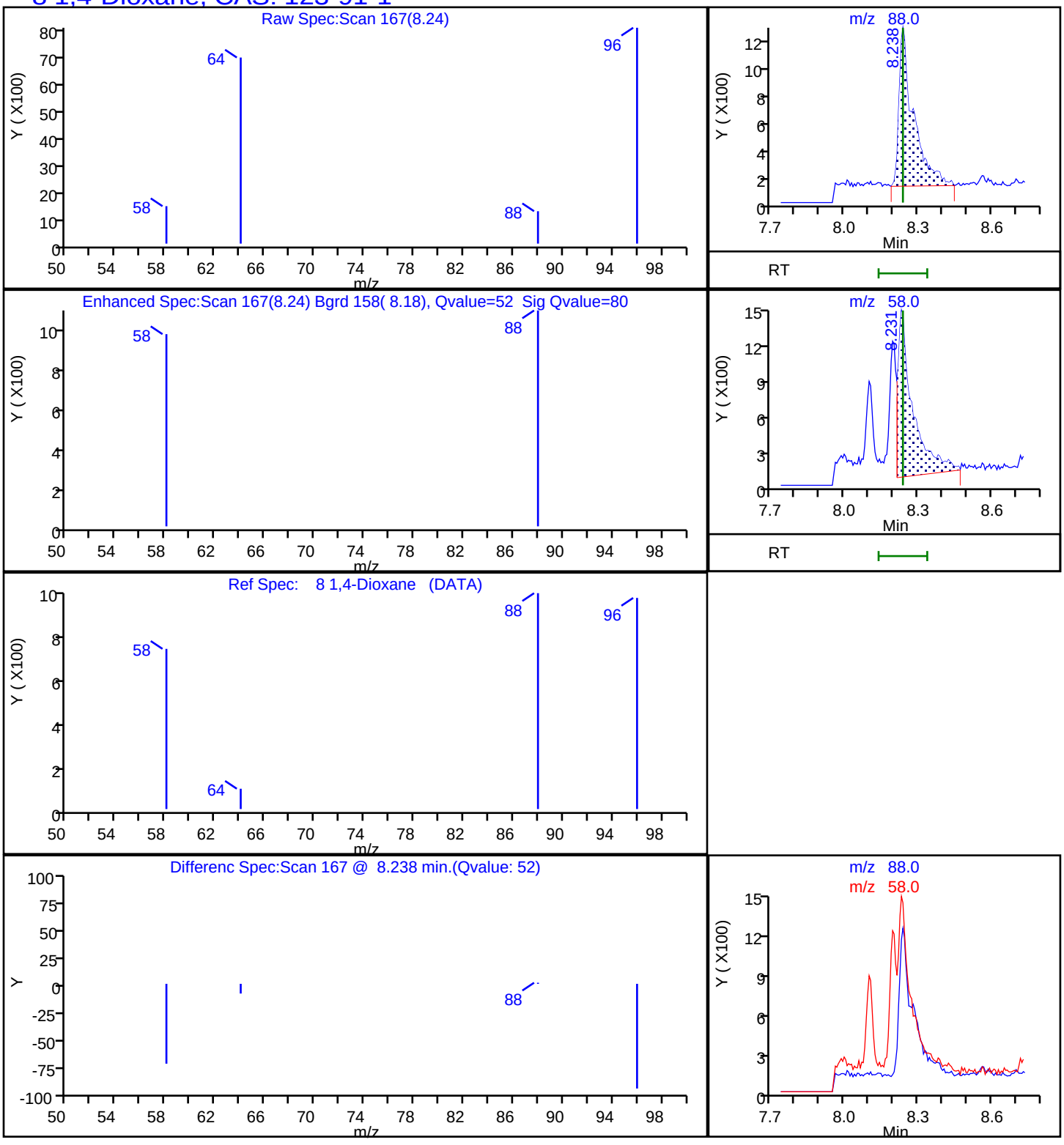
Report Date: 21-Dec-2021 18:35:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202709.D

Injection Date:	21-Dec-2021 00:16:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-6	Lab Sample ID:	240-161553-6		
Client ID:	SL-3_121421				
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

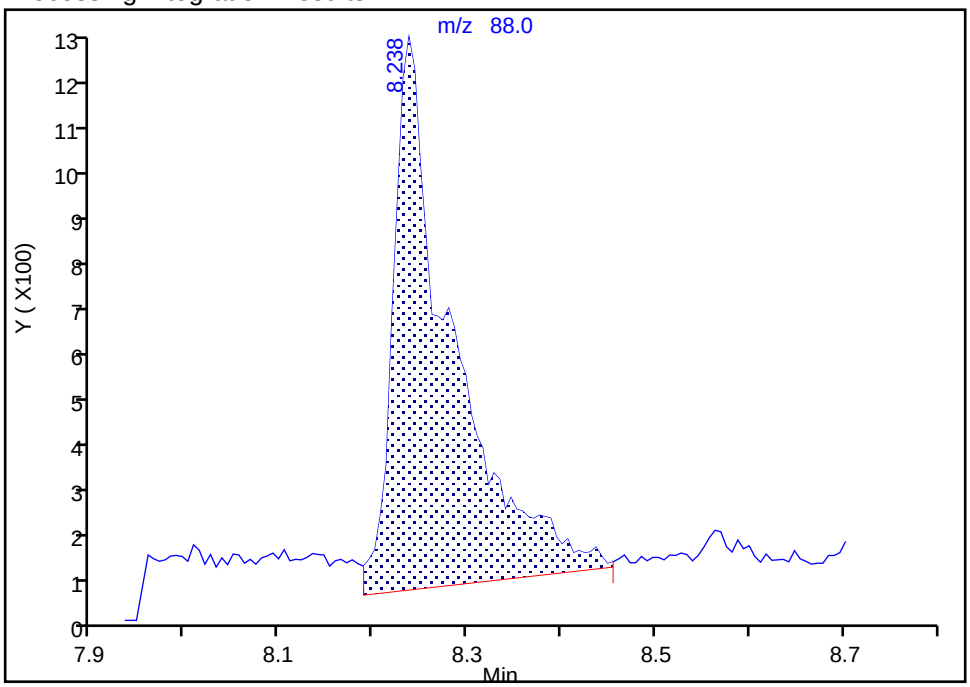
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202709.D				
Injection Date:	21-Dec-2021 00:16:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-6	Lab Sample ID:	240-161553-6		
Client ID:	SL-3_121421				
Operator ID:	434006	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

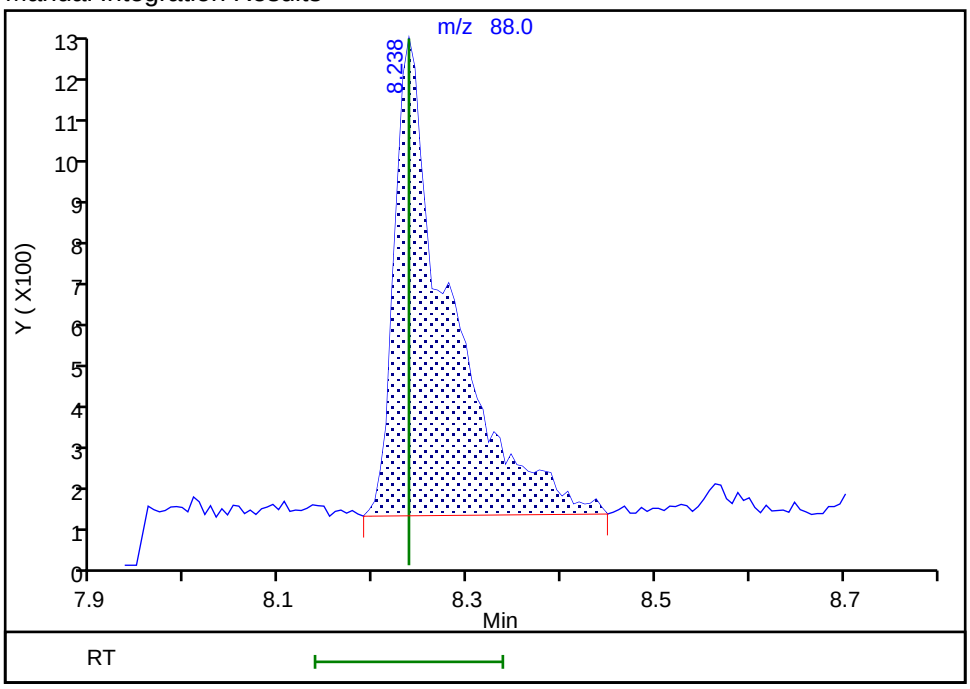
Processing Integration Results

RT: 8.24
Area: 4982
Amount: 7.307943
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4433
Amount: 6.502632
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:16:33

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-2_121421 Lab Sample ID: 240-161553-7

Matrix: Water Lab File ID: 202710.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 11:45

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 00:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202710.D				
Lims ID:	240-161553-C-7				
Client ID:	SL-2_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 00:40:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:17:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	836339	9.94	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2634908	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	75823	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	55	2858	4.62	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

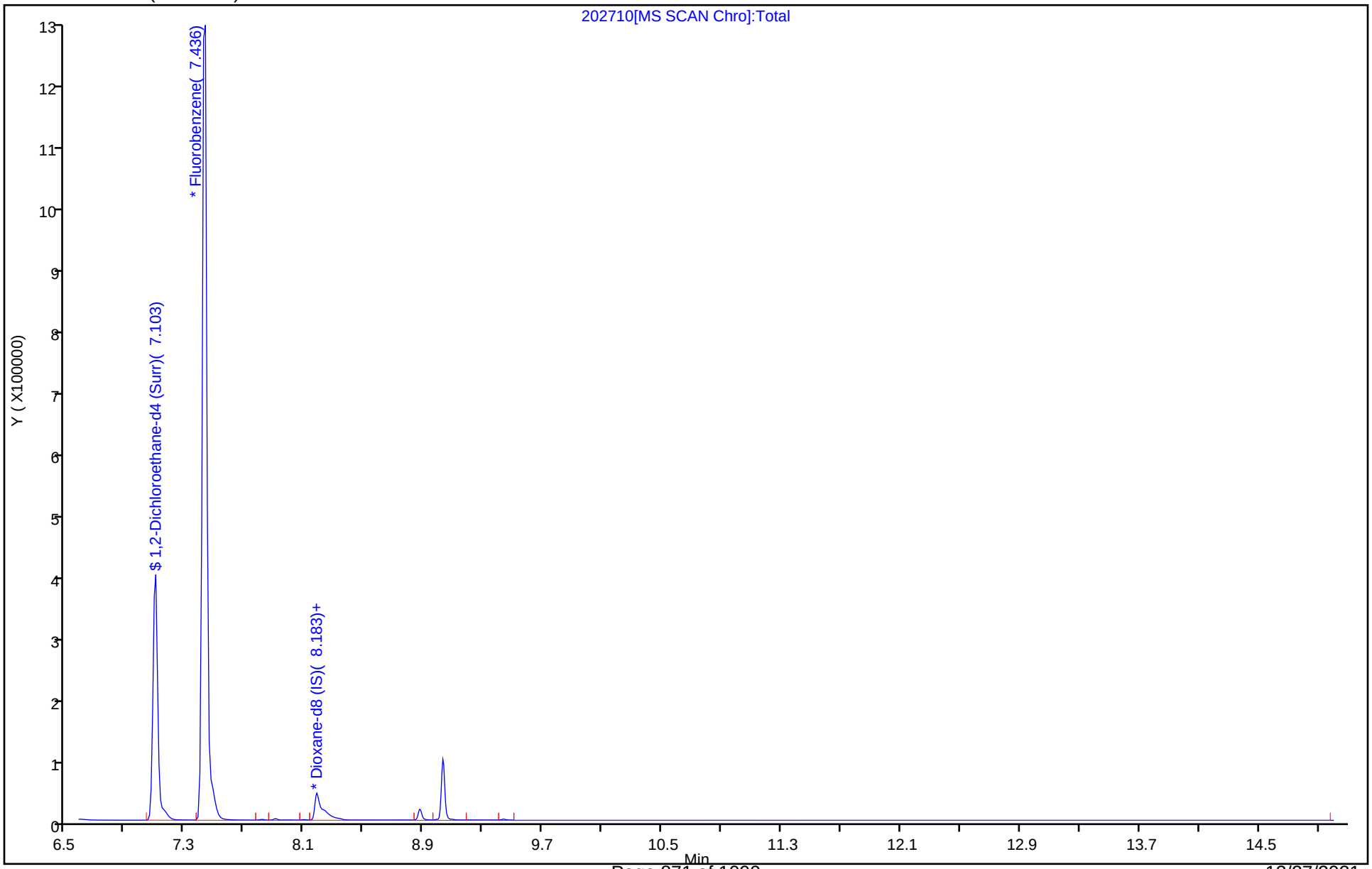
Report Date: 21-Dec-2021 18:35:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202710.D

Injection Date:	21-Dec-2021 00:40:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-7	Lab Sample ID:	240-161553-7	Worklist Smp#:	13
Client ID:	SL-2_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202710.D				
Lims ID:	240-161553-C-7				
Client ID:	SL-2_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 00:40:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-013				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:17:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.39

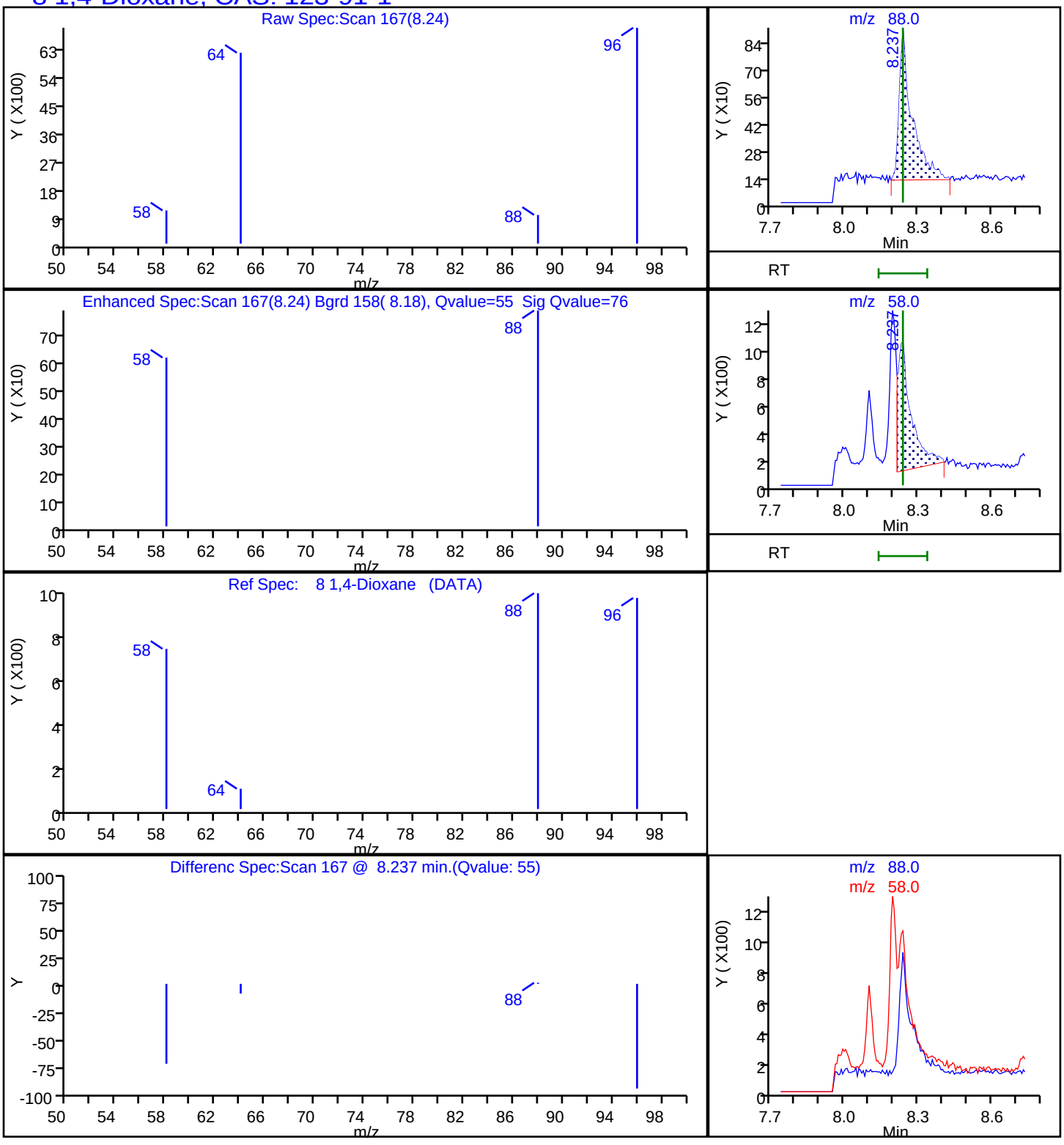
Report Date: 21-Dec-2021 18:35:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202710.D

Injection Date:	21-Dec-2021 00:40:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-7	Lab Sample ID:	240-161553-7		
Client ID:	SL-2_121421				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

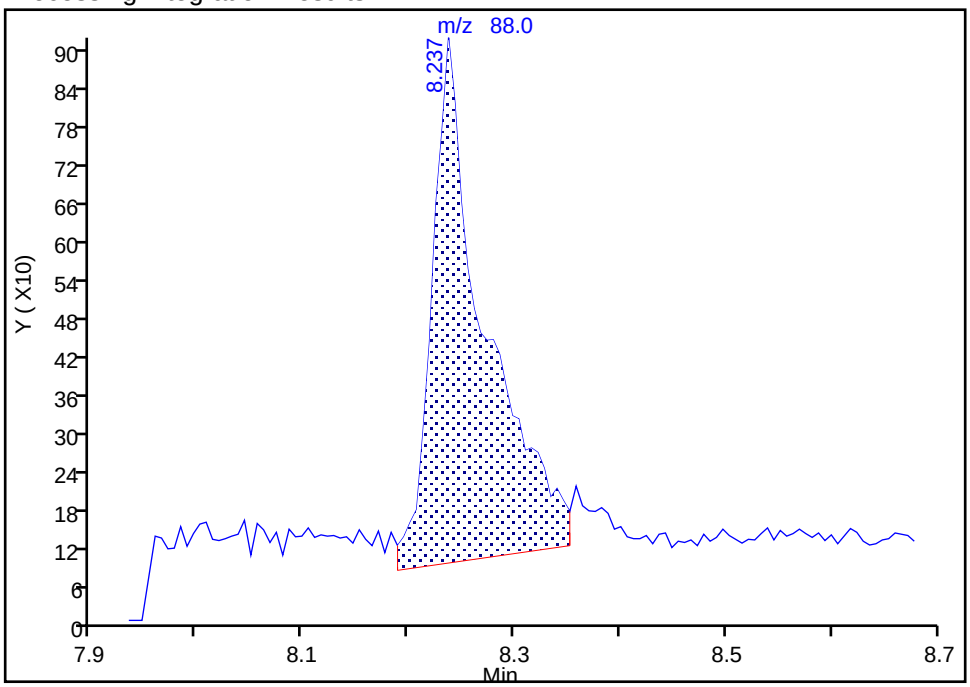
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202710.D				
Injection Date:	21-Dec-2021 00:40:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-7	Lab Sample ID:	240-161553-7		
Client ID:	SL-2_121421				
Operator ID:	434006	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

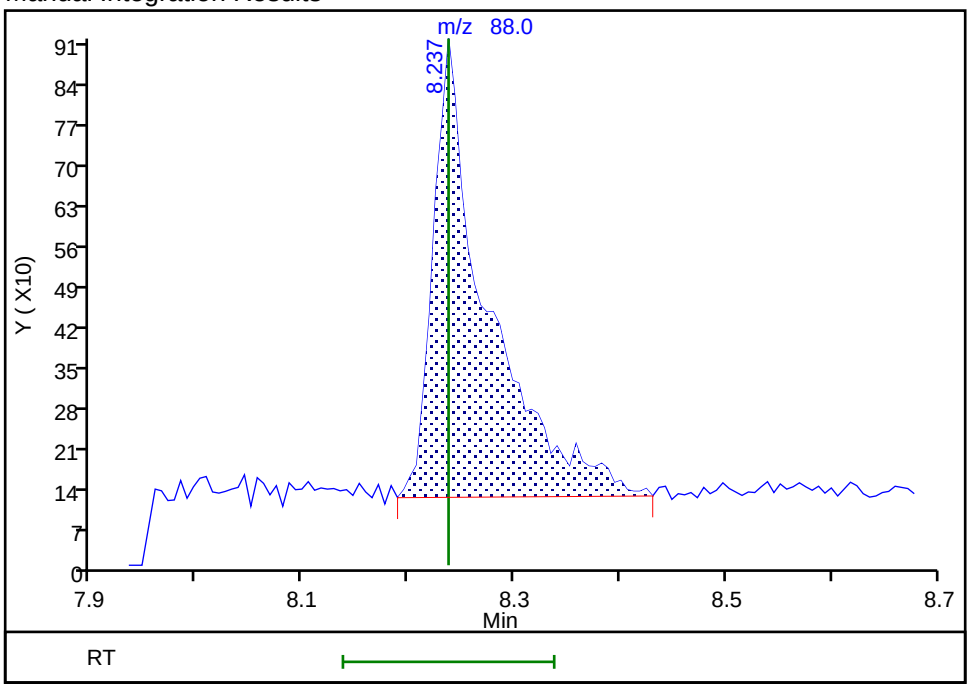
Processing Integration Results

RT: 8.24
Area: 2902
Amount: 4.689485
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 2858
Amount: 4.618383
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:17:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: MH-1231_121421 Lab Sample ID: 240-161553-8

Matrix: Water Lab File ID: 202711.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 12:10

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 01:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	16		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202711.D				
Lims ID:	240-161553-A-8				
Client ID:	MH-1231_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 01:04:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:18:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	866827	10.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2668413	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	84223	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	52	11270	16.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

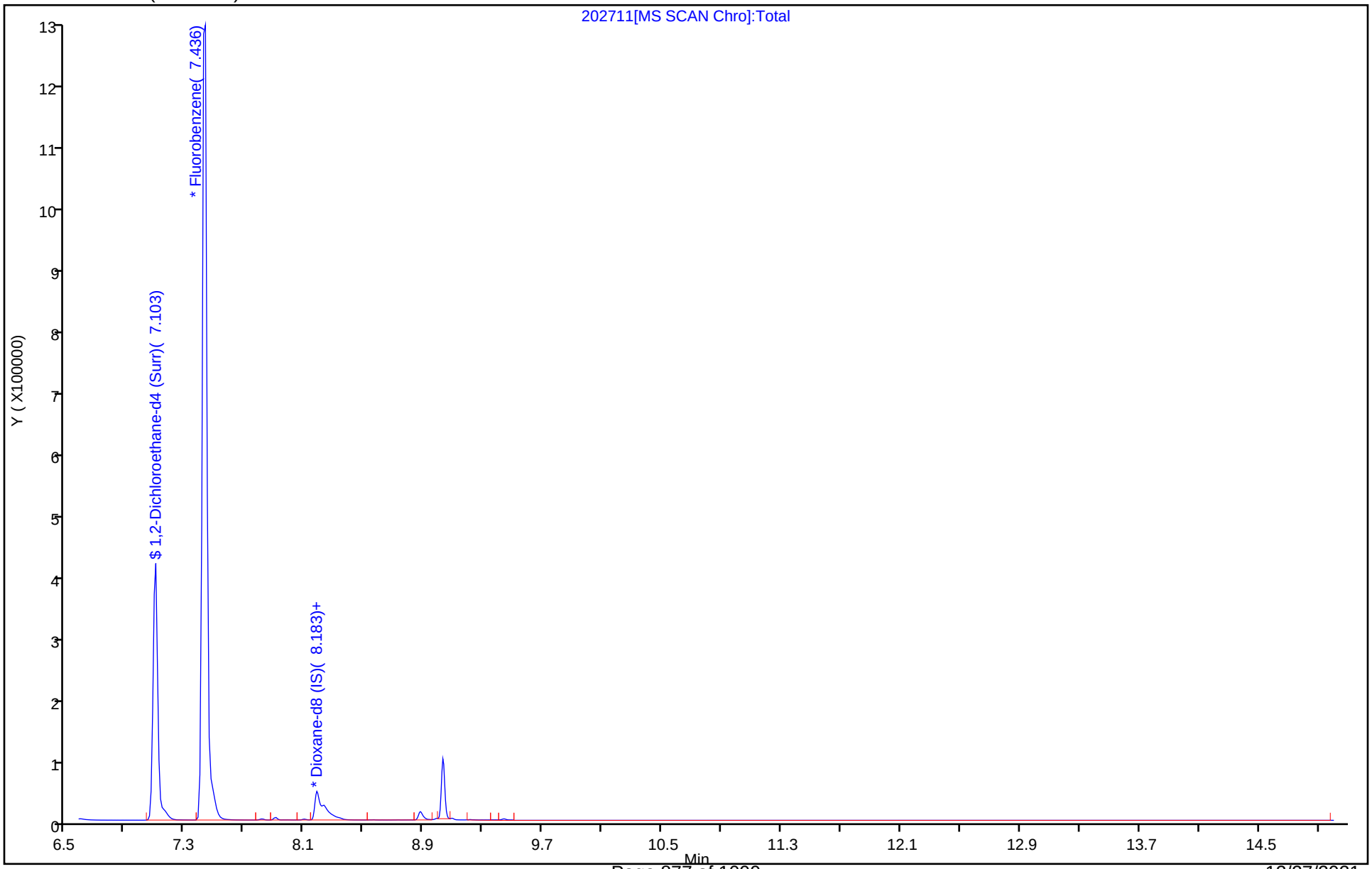
Report Date: 21-Dec-2021 18:35:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202711.D

Injection Date:	21-Dec-2021 01:04:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-8	Lab Sample ID:	240-161553-8	Worklist Smp#:	14
Client ID:	MH-1231_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202711.D				
Lims ID:	240-161553-A-8				
Client ID:	MH-1231_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 01:04:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-014				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:18:14

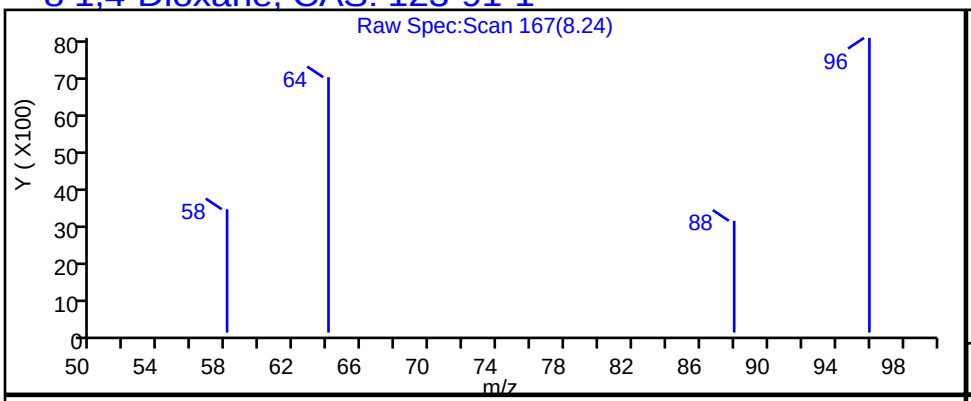
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.72

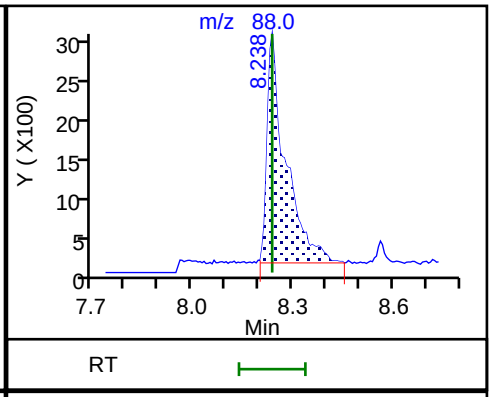
Eurofins TestAmerica, Canton

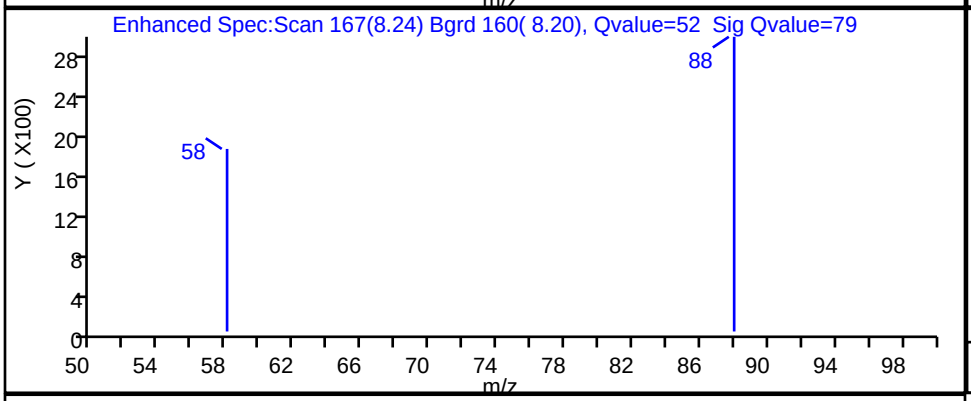
Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202711.D

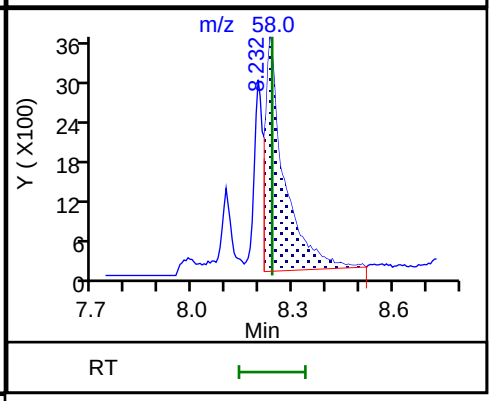
Injection Date:	21-Dec-2021 01:04:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-8	Lab Sample ID:	240-161553-8		
Client ID:	MH-1231_121421				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

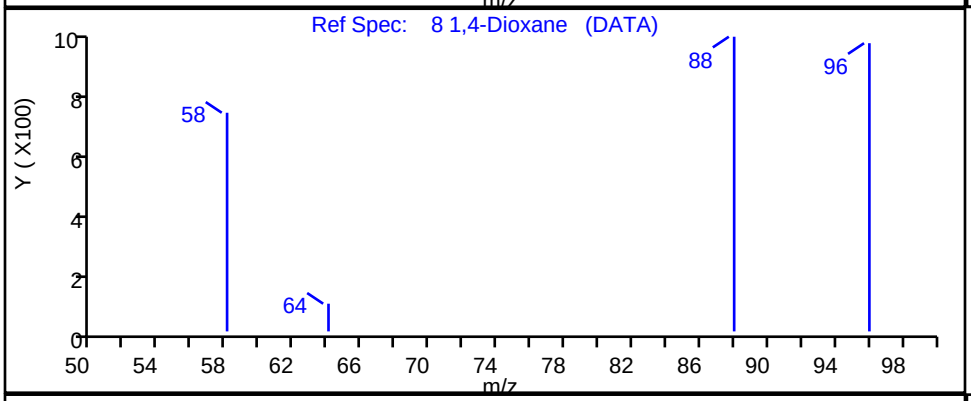
8 1,4-Dioxane, CAS: 123-91-1

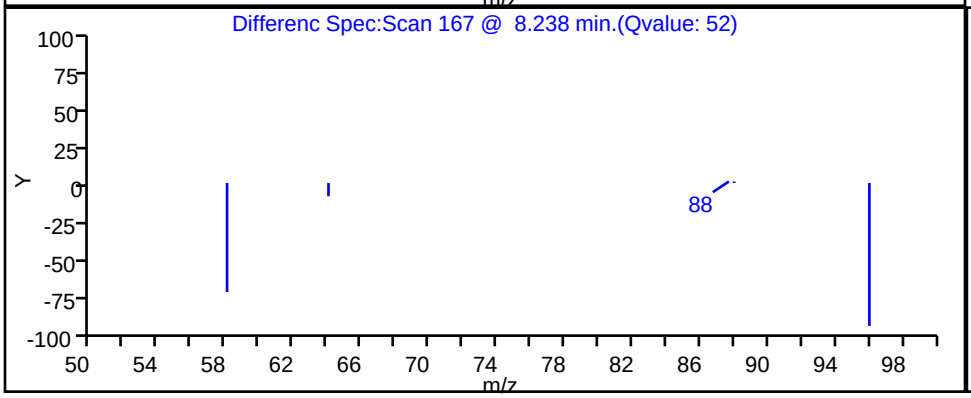


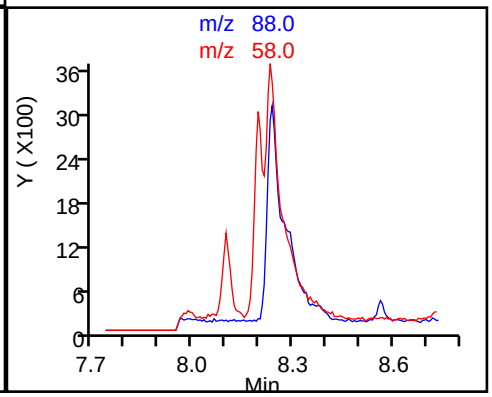












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

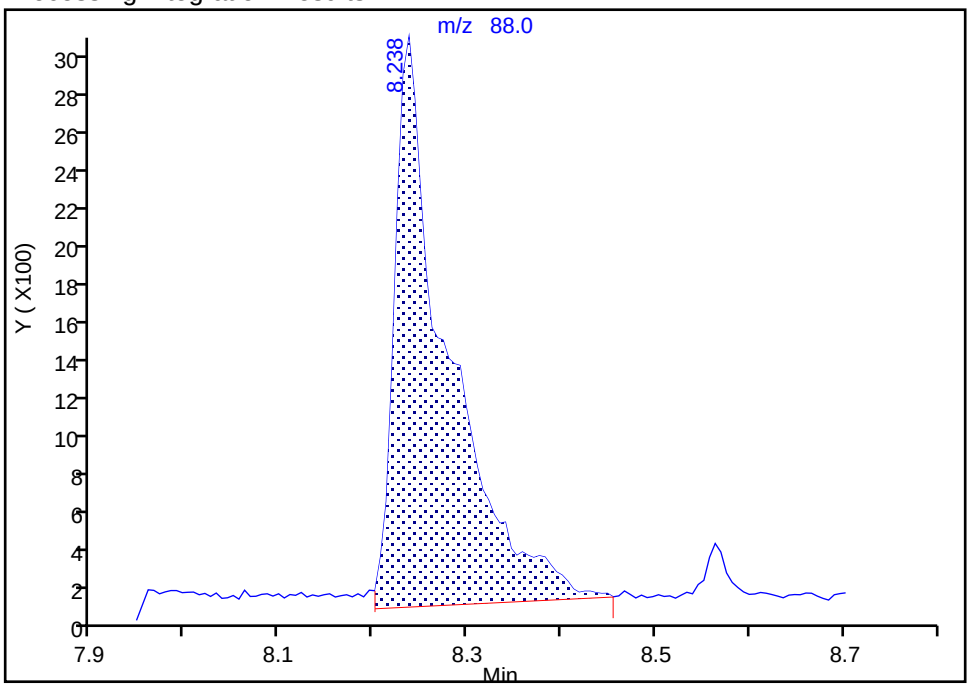
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202711.D				
Injection Date:	21-Dec-2021 01:04:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-8	Lab Sample ID:	240-161553-8		
Client ID:	MH-1231_121421				
Operator ID:	434006	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

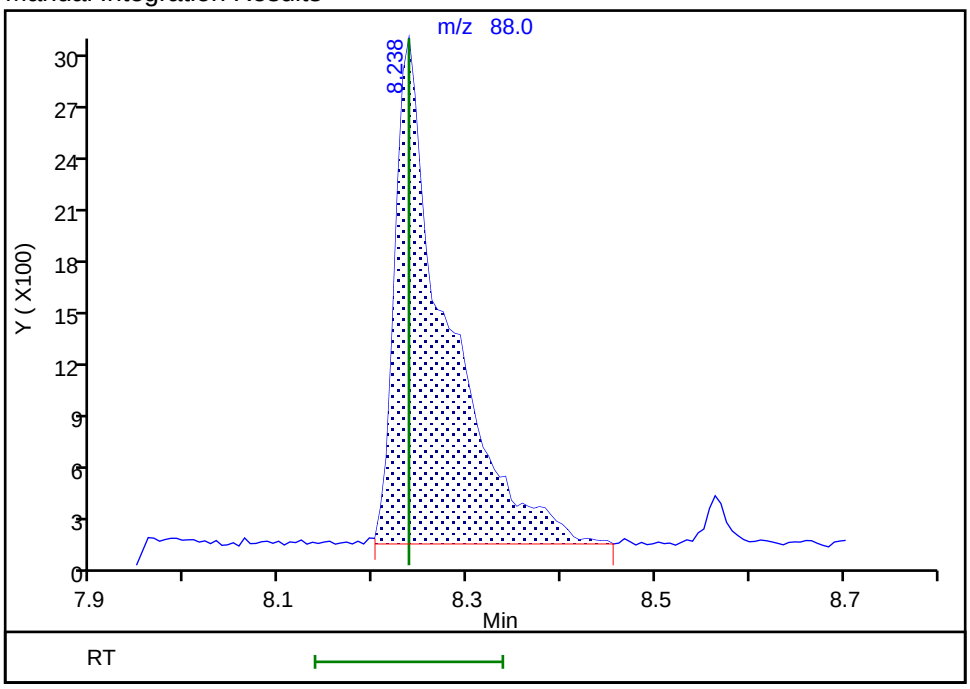
Processing Integration Results

RT: 8.24
Area: 11768
Amount: 17.119878
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 11270
Amount: 16.395397
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:17:34

Audit Action: Split an Integrated Peak Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-21_121421 Lab Sample ID: 240-161553-9

Matrix: Water Lab File ID: 202712.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 13:40

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 01:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.86	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202712.D
Lims ID: 240-161553-A-9
Client ID: SL-21_121421
Sample Type: Client
Inject. Date: 21-Dec-2021 01:27:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-015
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:18:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	830149	10.1	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2580552	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	77228	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	25	539	0.8552	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

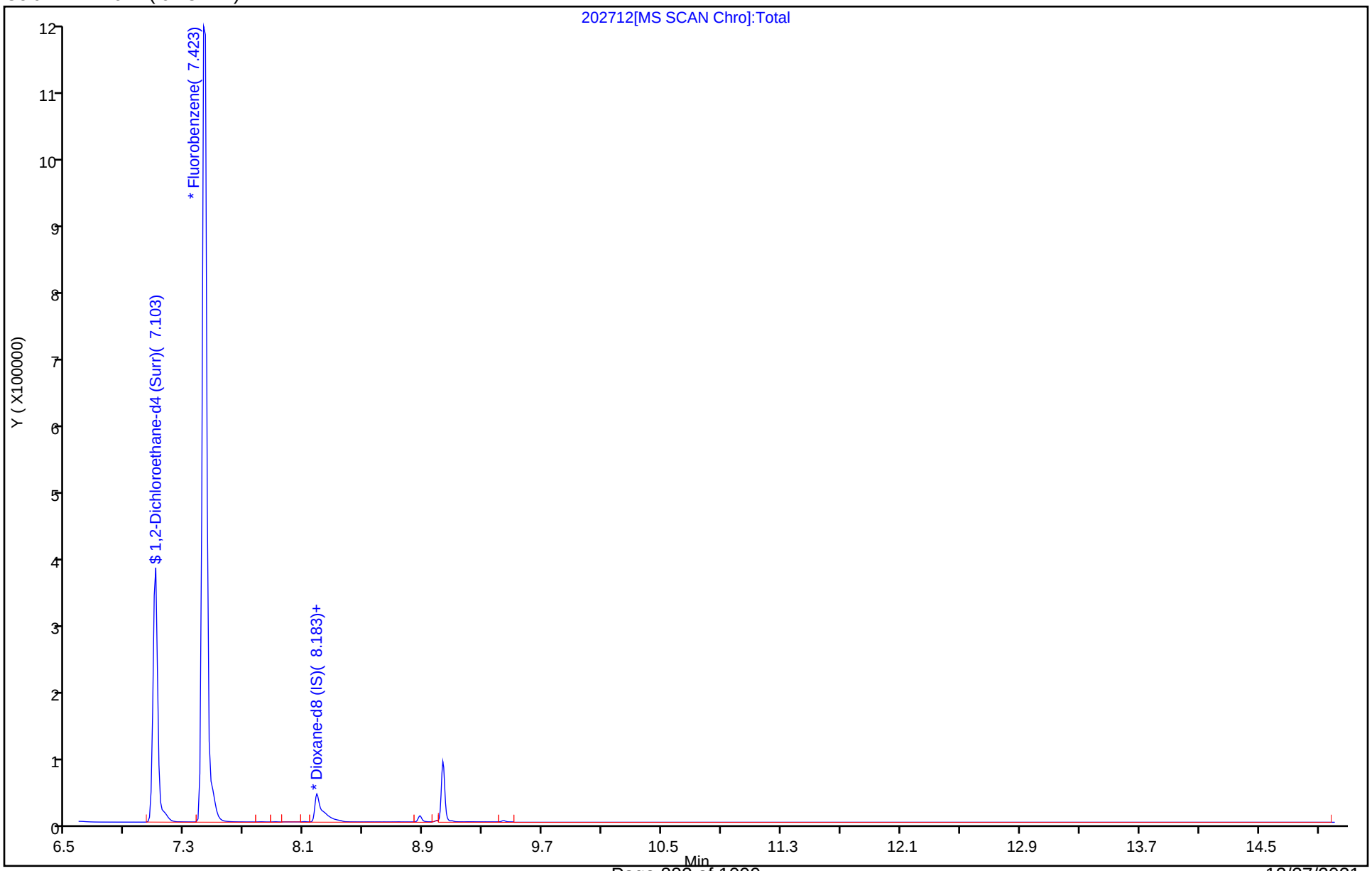
Report Date: 21-Dec-2021 18:35:07 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202712.D

Injection Date:	21-Dec-2021 01:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-9	Lab Sample ID:	240-161553-9	Worklist Smp#:	15
Client ID:	SL-21_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202712.D				
Lims ID:	240-161553-A-9				
Client ID:	SL-21_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 01:27:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-015				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:18:36

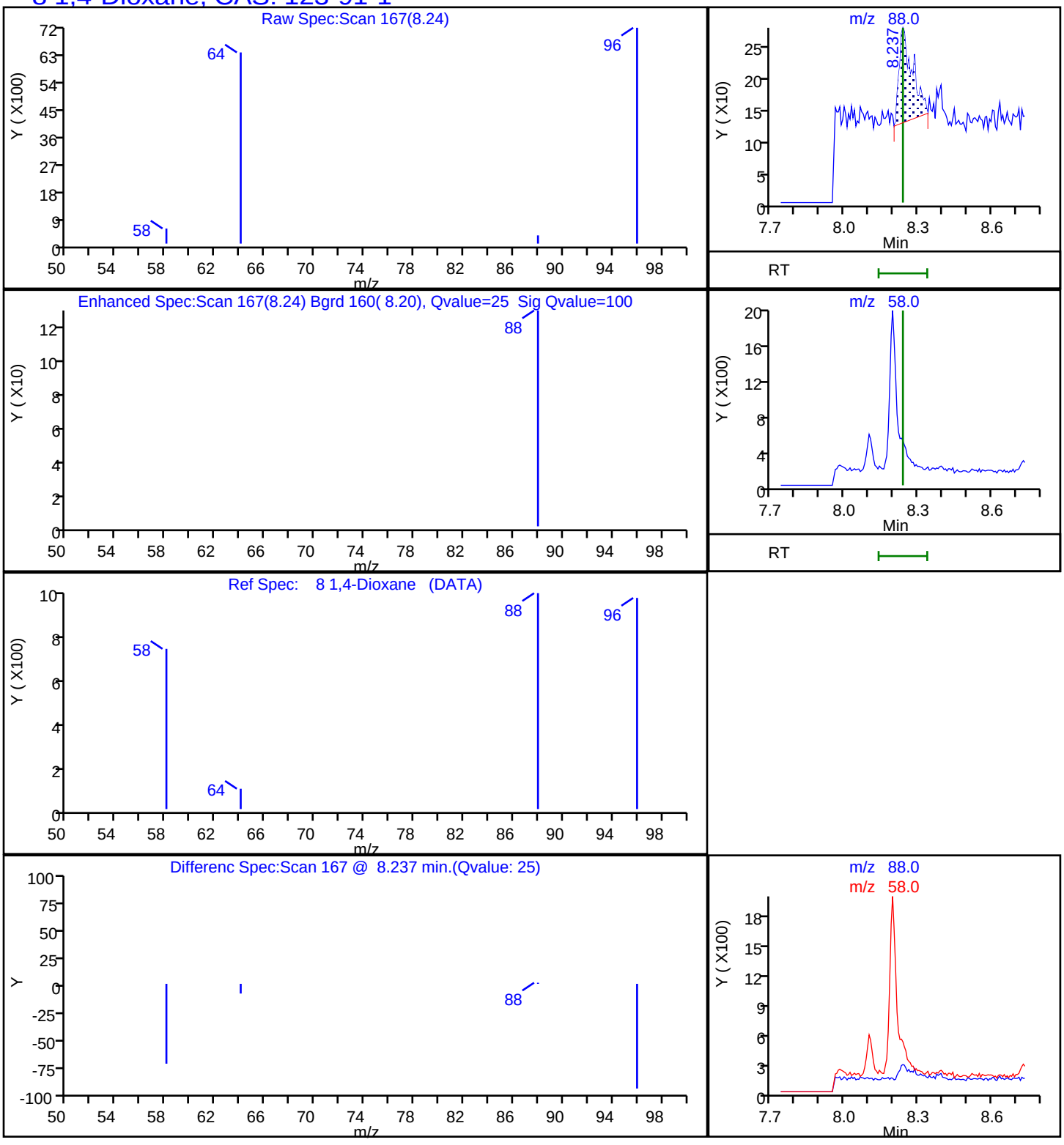
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.73

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202712.D

Injection Date:	21-Dec-2021 01:27:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-9	Lab Sample ID:	240-161553-9		
Client ID:	SL-21_121421				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

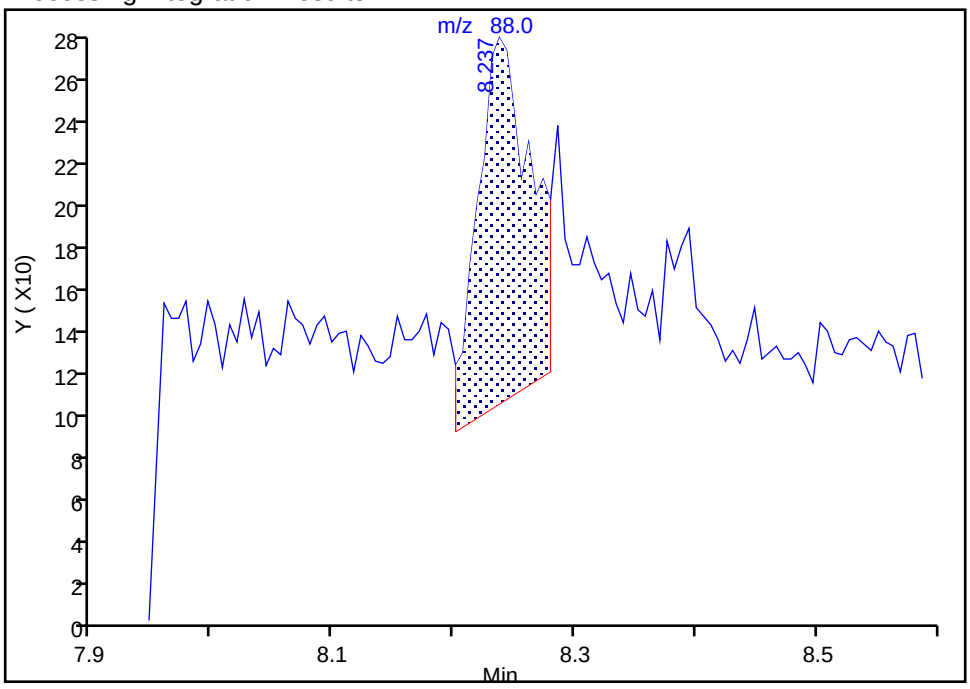
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202712.D				
Injection Date:	21-Dec-2021 01:27:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-9	Lab Sample ID:	240-161553-9		
Client ID:	SL-21_121421				
Operator ID:	434006	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

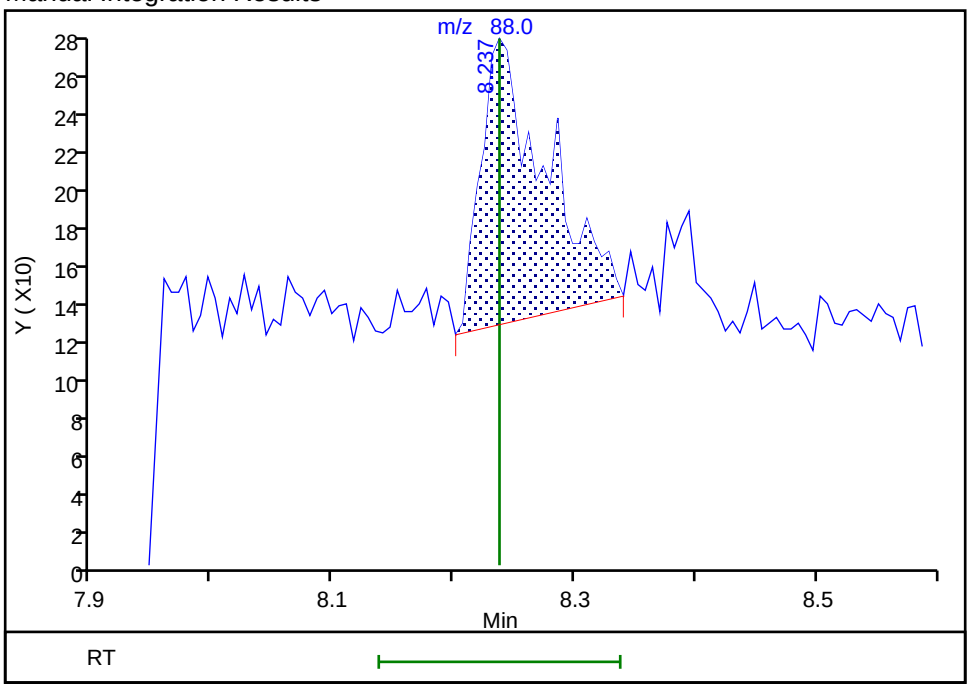
Processing Integration Results

RT: 8.24
Area: 530
Amount: 0.840872
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 539
Amount: 0.855151
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:18:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-20_121421 Lab Sample ID: 240-161553-10

Matrix: Water Lab File ID: 202713.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 14:05

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 01:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202713.D
Lims ID: 240-161553-A-10
Client ID: SL-20_121421
Sample Type: Client
Inject. Date: 21-Dec-2021 01:51:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-016
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:20:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	822300	10.1	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2560331	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	78934	200.0	
8 1,4-Dioxane	88	8.232	8.237	-0.005	23	528	0.8196	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

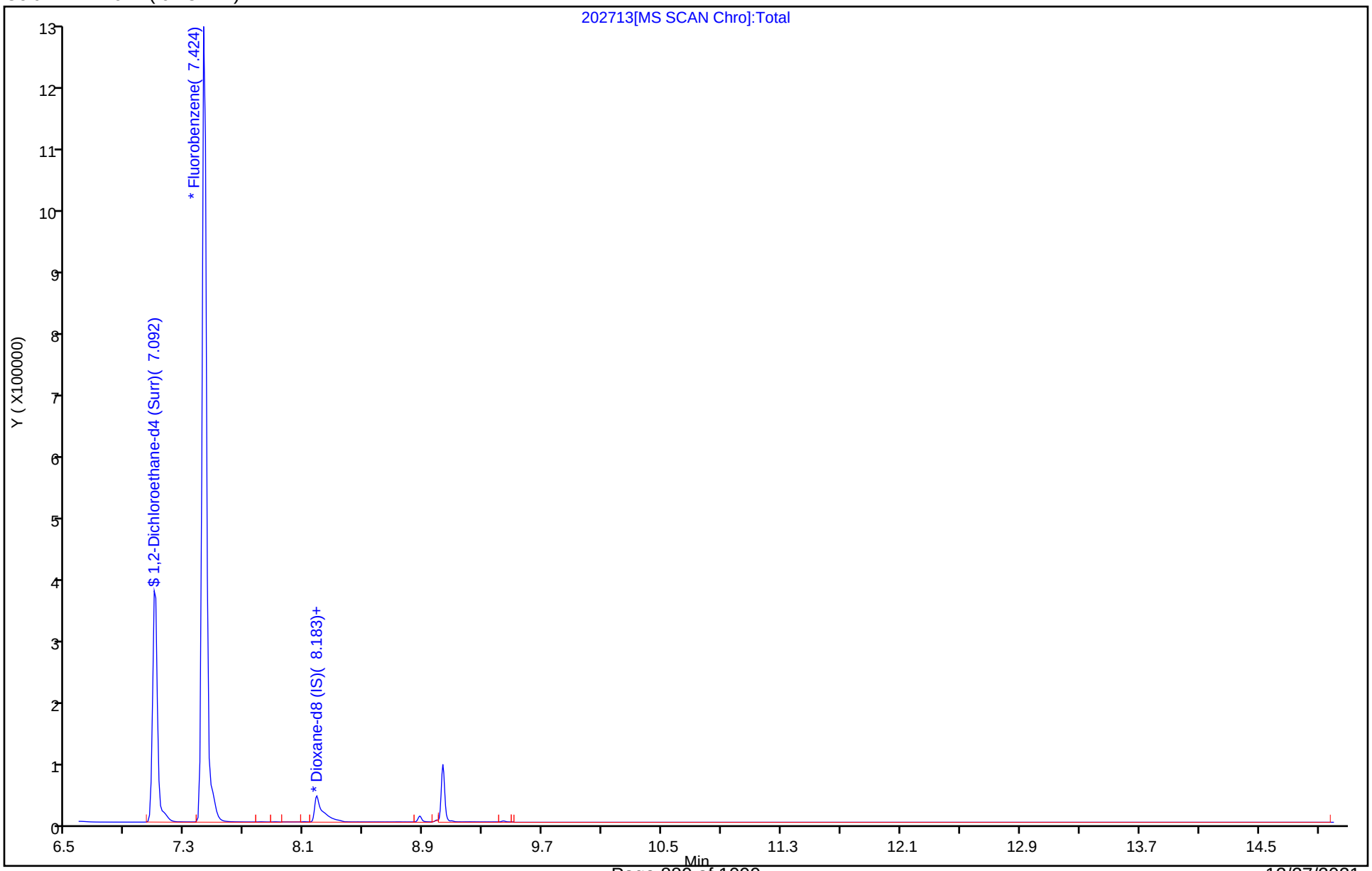
Report Date: 21-Dec-2021 18:35:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202713.D

Injection Date:	21-Dec-2021 01:51:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-10	Lab Sample ID:	240-161553-10	Worklist Smp#:	16
Client ID:	SL-20_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202713.D				
Lims ID:	240-161553-A-10				
Client ID:	SL-20_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 01:51:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-016				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:20:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.57

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

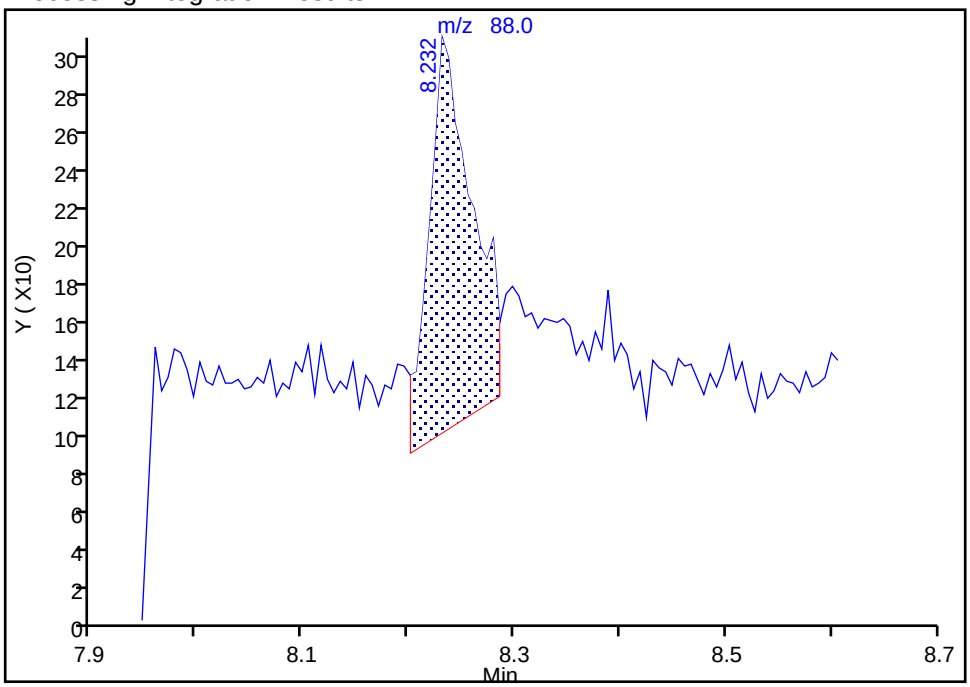
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202713.D				
Injection Date:	21-Dec-2021 01:51:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-10	Lab Sample ID:	240-161553-10		
Client ID:	SL-20_121421				
Operator ID:	434006	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

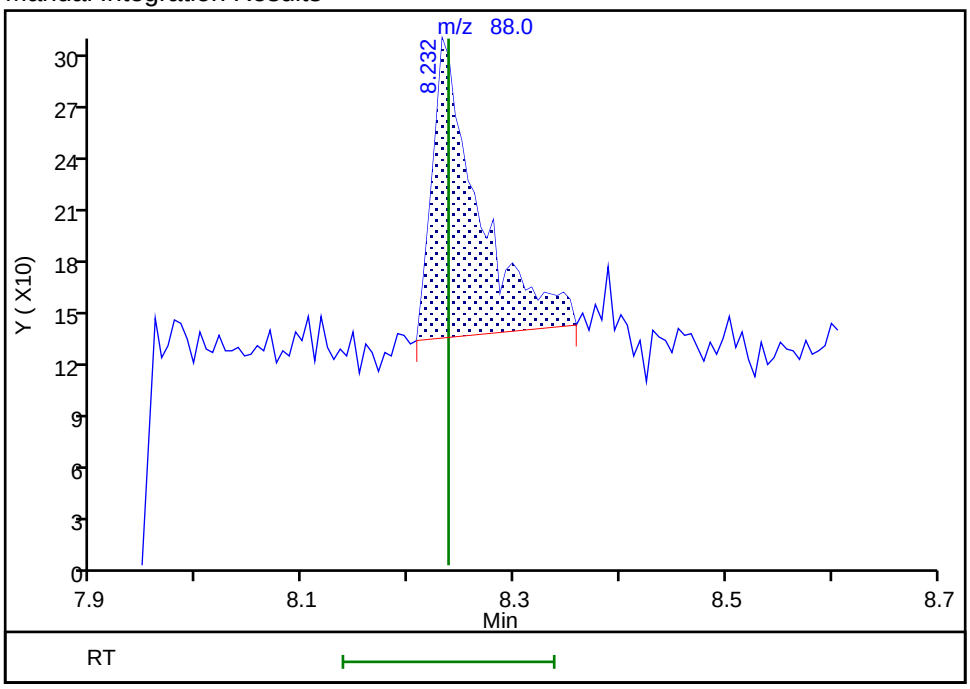
Processing Integration Results

RT: 8.23
Area: 595
Amount: 0.923595
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 528
Amount: 0.819594
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:20:36

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-22_121421 Lab Sample ID: 240-161553-11

Matrix: Water Lab File ID: 202716.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 14:25

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 03:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202716.D				
Lims ID:	240-161553-A-11				
Client ID:	SL-22_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:03:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:21:32		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	851515	10.1	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2634649	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	79366	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

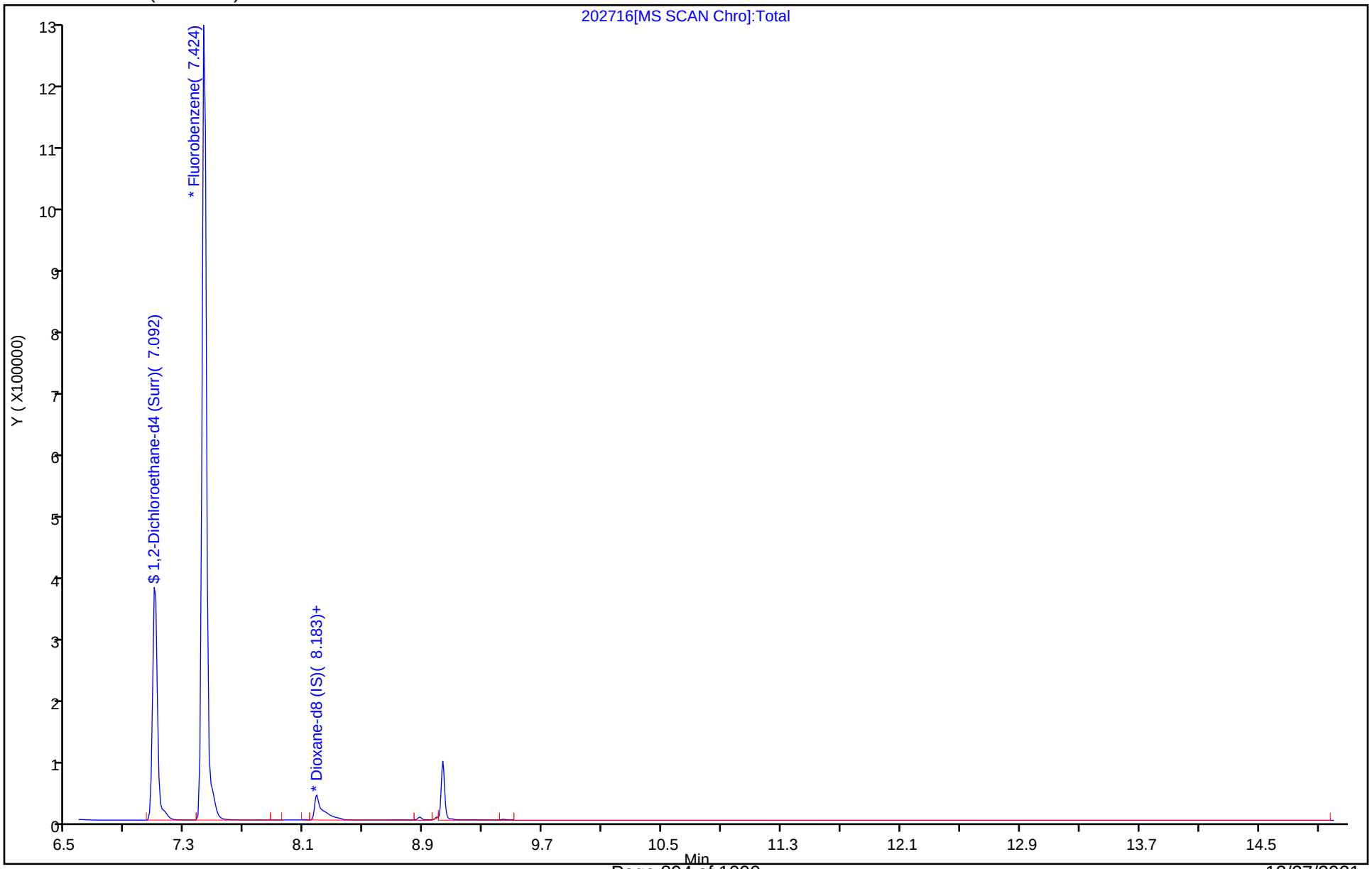
Report Date: 21-Dec-2021 18:35:09 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202716.D

Injection Date:	21-Dec-2021 03:03:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-11	Lab Sample ID:	240-161553-11	Worklist Smp#:	19
Client ID:	SL-22_121421				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202716.D				
Lims ID:	240-161553-A-11				
Client ID:	SL-22_121421				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:03:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-019				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-15_121621 Lab Sample ID: 240-161553-12

Matrix: Water Lab File ID: 202717.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 08:20

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 03:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202717.D				
Lims ID:	240-161553-A-12				
Client ID:	SL-15_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:27:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:21:38		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	900505	10.3	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2747418	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	85731	200.0	
8 1,4-Dioxane	88	8.225	8.237	-0.012	27	335	0.4788	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

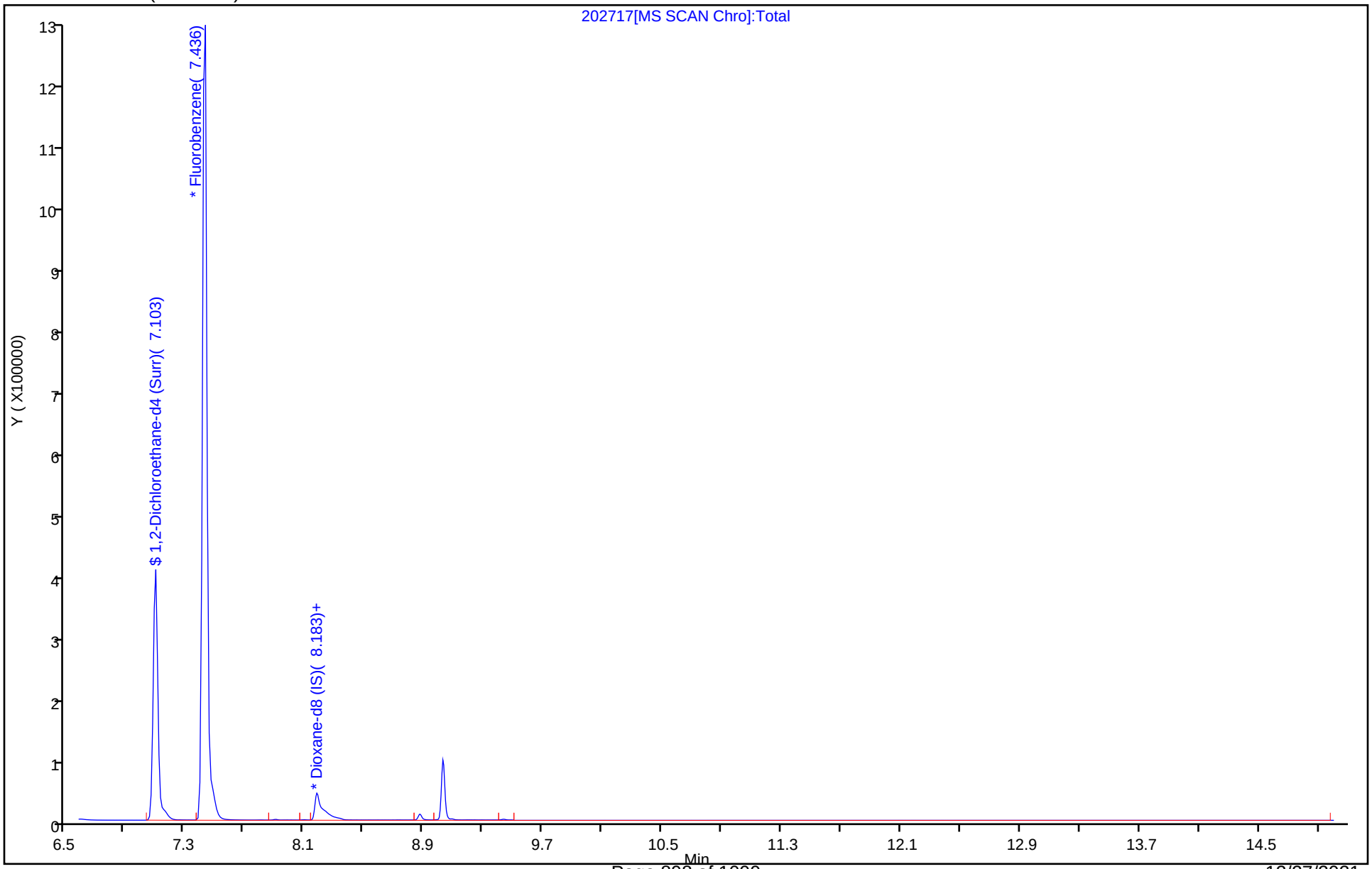
Report Date: 21-Dec-2021 18:35:09 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202717.D

Injection Date:	21-Dec-2021 03:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-12	Lab Sample ID:	240-161553-12	Worklist Smp#:	20
Client ID:	SL-15_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202717.D				
Lims ID:	240-161553-A-12				
Client ID:	SL-15_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:27:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-020				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-14_121621 Lab Sample ID: 240-161553-13

Matrix: Water Lab File ID: 202718.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 08:35

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 03:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202718.D				
Lims ID:	240-161553-A-13				
Client ID:	SL-14_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:51:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:21:50		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	861635	10.0	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2691127	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	84443	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

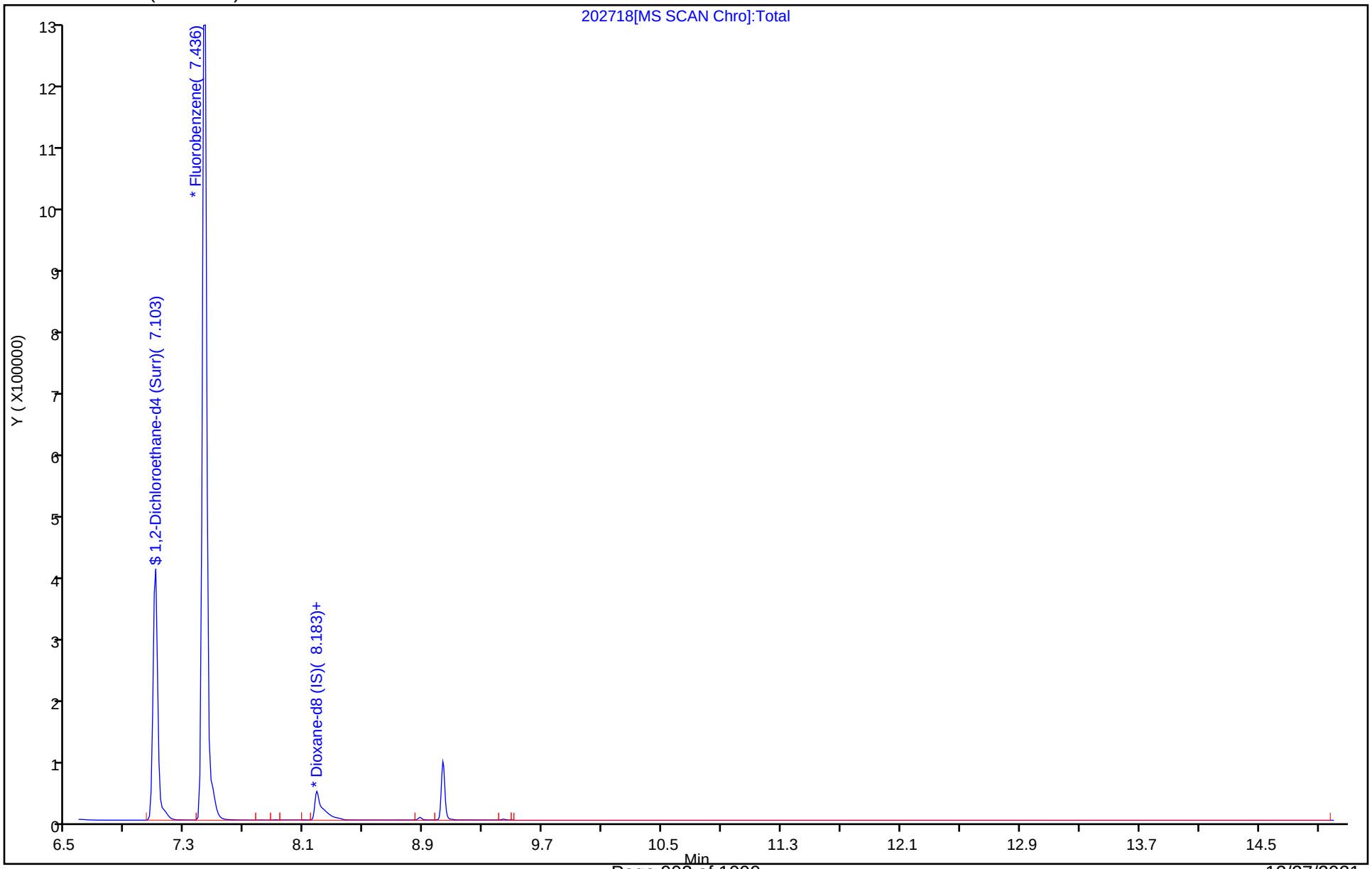
Report Date: 21-Dec-2021 18:35:09 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202718.D

Injection Date:	21-Dec-2021 03:51:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-13	Lab Sample ID:	240-161553-13	Worklist Smp#:	21
Client ID:	SL-14_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202718.D				
Lims ID:	240-161553-A-13				
Client ID:	SL-14_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 03:51:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-021				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-13_121621 Lab Sample ID: 240-161553-14

Matrix: Water Lab File ID: 202719.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 08:50

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 04:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202719.D				
Lims ID:	240-161553-C-14				
Client ID:	SL-13_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 04:15:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:21:57		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	857138	10.2	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2635384	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	80964	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	27	441	0.6674	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

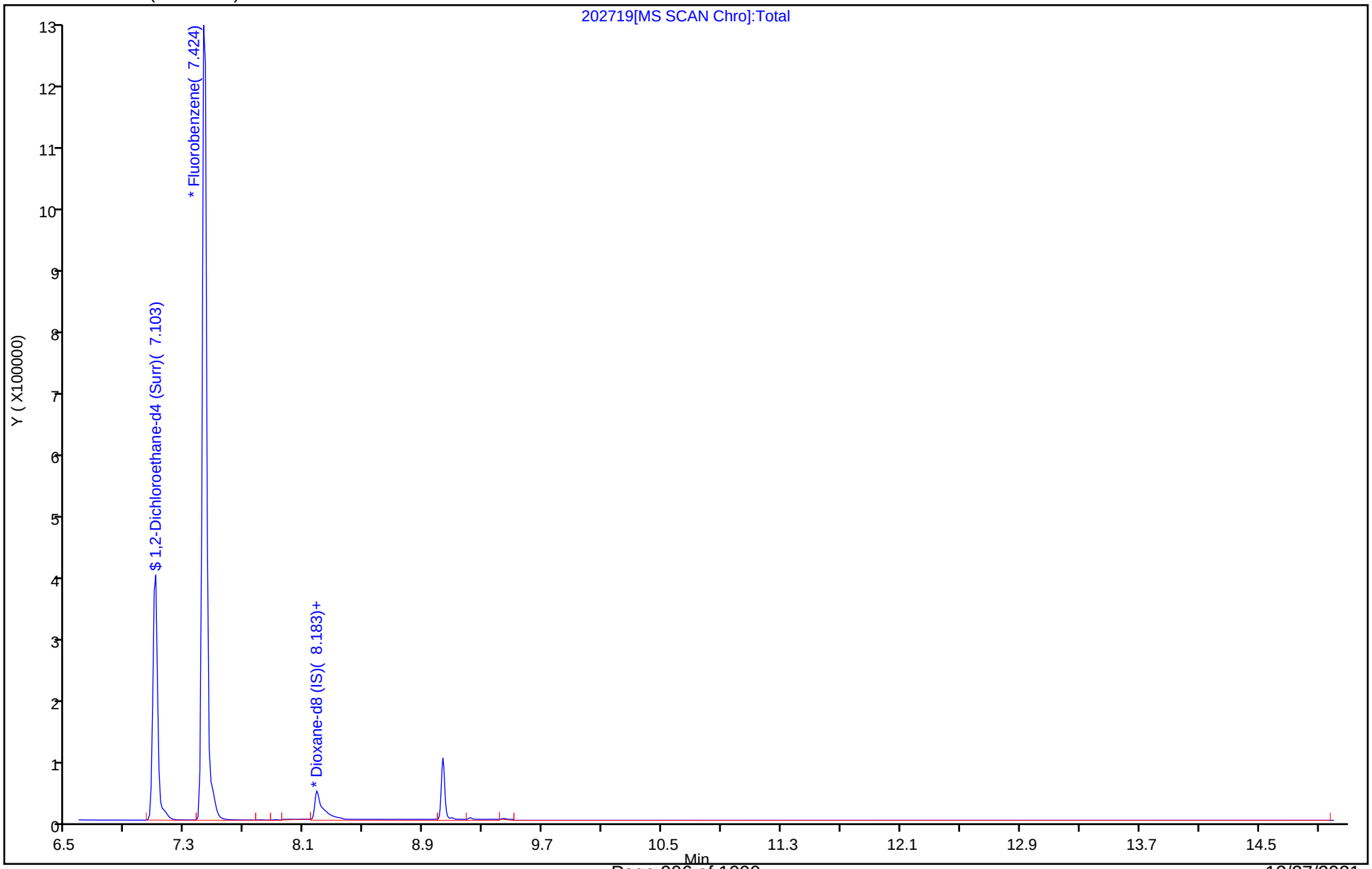
Report Date: 21-Dec-2021 18:35:10 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202719.D

Injection Date:	21-Dec-2021 04:15:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-14	Lab Sample ID:	240-161553-14	Worklist Smp#:	22
Client ID:	SL-13_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202719.D				
Lims ID:	240-161553-C-14				
Client ID:	SL-13_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 04:15:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-022				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.85

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-7_121621 Lab Sample ID: 240-161553-15

Matrix: Water Lab File ID: 202720.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 09:05

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 04:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202720.D				
Lims ID:	240-161553-C-15				
Client ID:	SL-7_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 04:38:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:22:00		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	867494	10.3	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2643967	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	90	83399	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

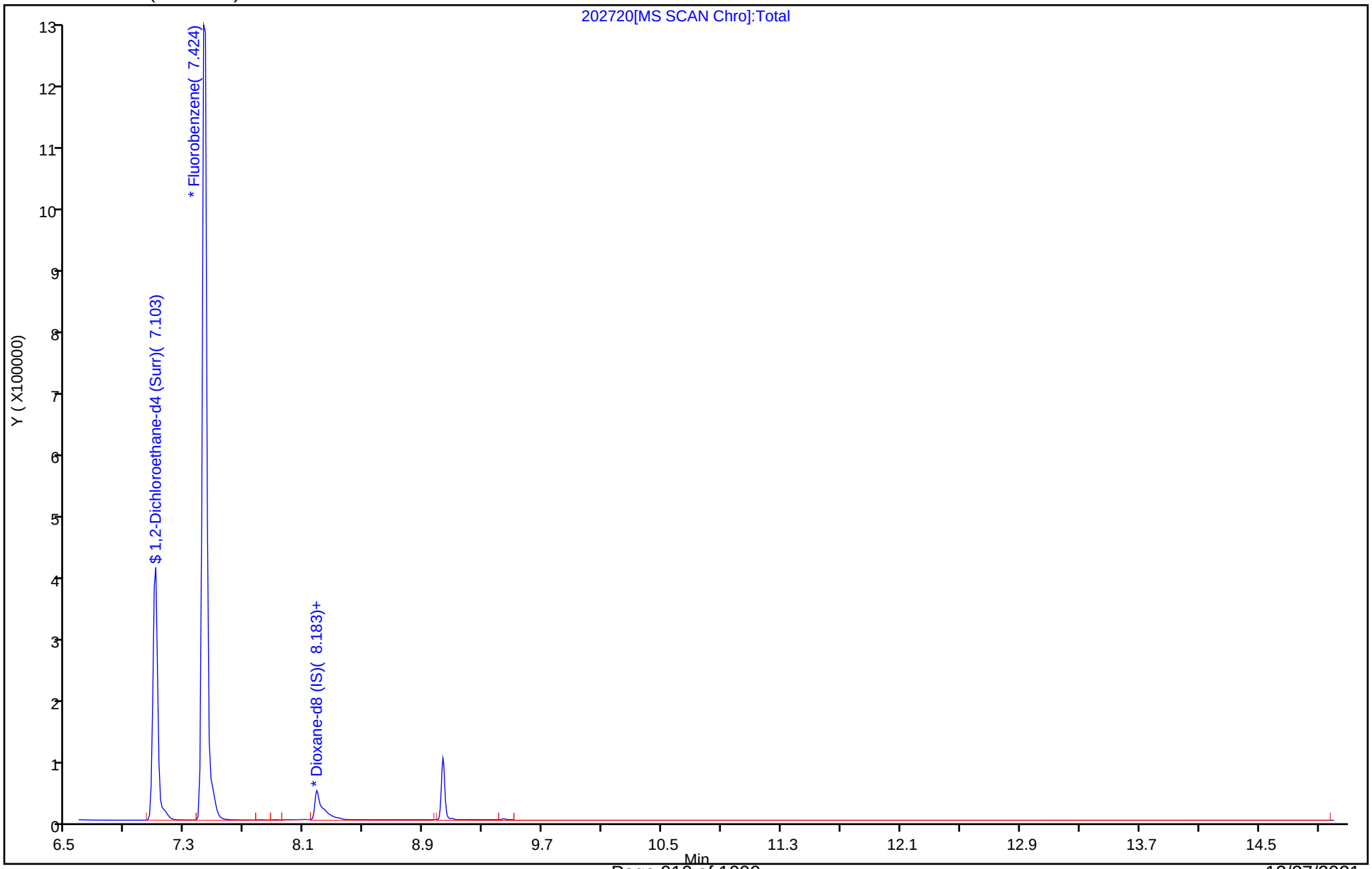
Report Date: 21-Dec-2021 18:35:10 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202720.D

Injection Date:	21-Dec-2021 04:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-15	Lab Sample ID:	240-161553-15	Worklist Smp#:	23
Client ID:	SL-7_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202720.D				
Lims ID:	240-161553-C-15				
Client ID:	SL-7_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 04:38:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-023				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:22:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-6_121621 Lab Sample ID: 240-161553-16

Matrix: Water Lab File ID: 202721.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 09:35

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 05:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202721.D				
Lims ID:	240-161553-C-16				
Client ID:	SL-6_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:02:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:22:03		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	849612	10.3	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2585511	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	82835	200.0	
8 1,4-Dioxane	88	8.232	8.237	-0.005	44	334	0.4940	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

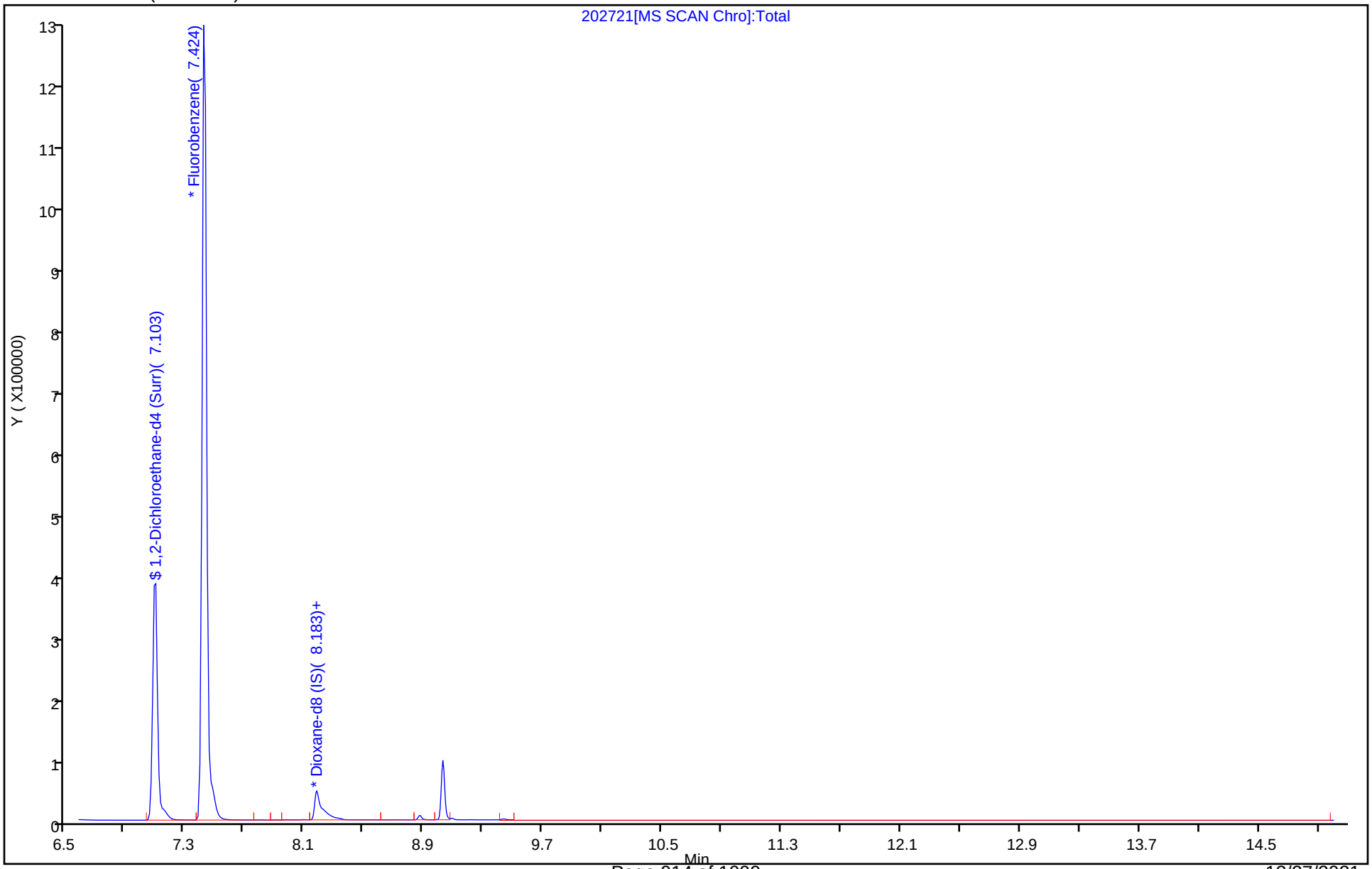
Report Date: 21-Dec-2021 18:35:10 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202721.D

Injection Date:	21-Dec-2021 05:02:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-16	Lab Sample ID:	240-161553-16	Worklist Smp#:	24
Client ID:	SL-6_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202721.D				
Lims ID:	240-161553-C-16				
Client ID:	SL-6_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:02:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-024				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:22:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.90

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-5_121621 Lab Sample ID: 240-161553-17

Matrix: Water Lab File ID: 202722.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 09:55

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 05:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.9		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202722.D				
Lims ID:	240-161553-C-17				
Client ID:	SL-5_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:26:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:23:23		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.092	7.103	-0.011	100	837665	10.2	
* 7 Fluorobenzene	96	7.423	7.436	-0.013	100	2572186	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	78573	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	52	1854	2.89	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

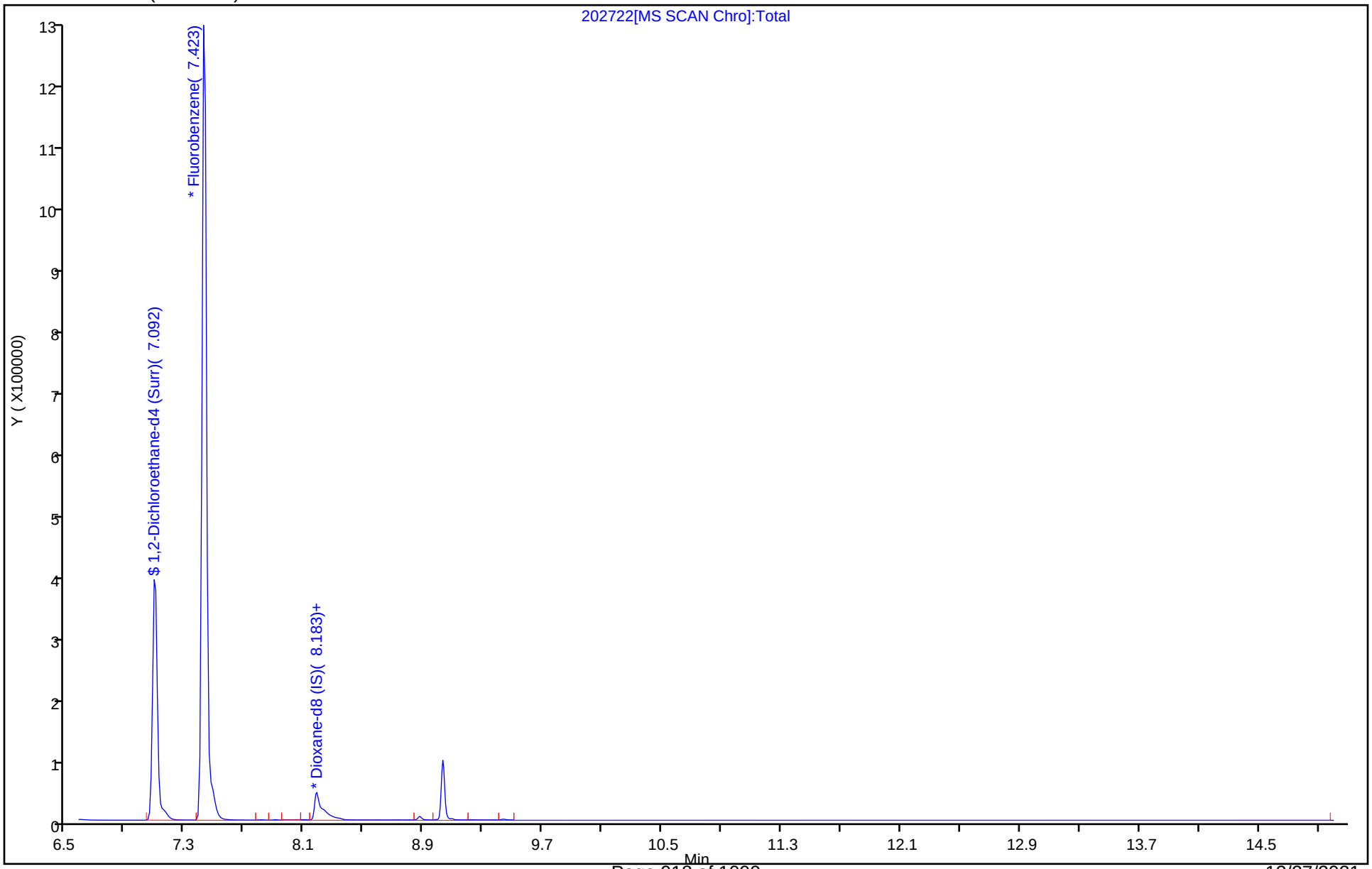
Report Date: 21-Dec-2021 18:35:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202722.D

Injection Date:	21-Dec-2021 05:26:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-17	Lab Sample ID:	240-161553-17	Worklist Smp#:	25
Client ID:	SL-5_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202722.D				
Lims ID:	240-161553-C-17				
Client ID:	SL-5_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:26:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-025				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:23:23

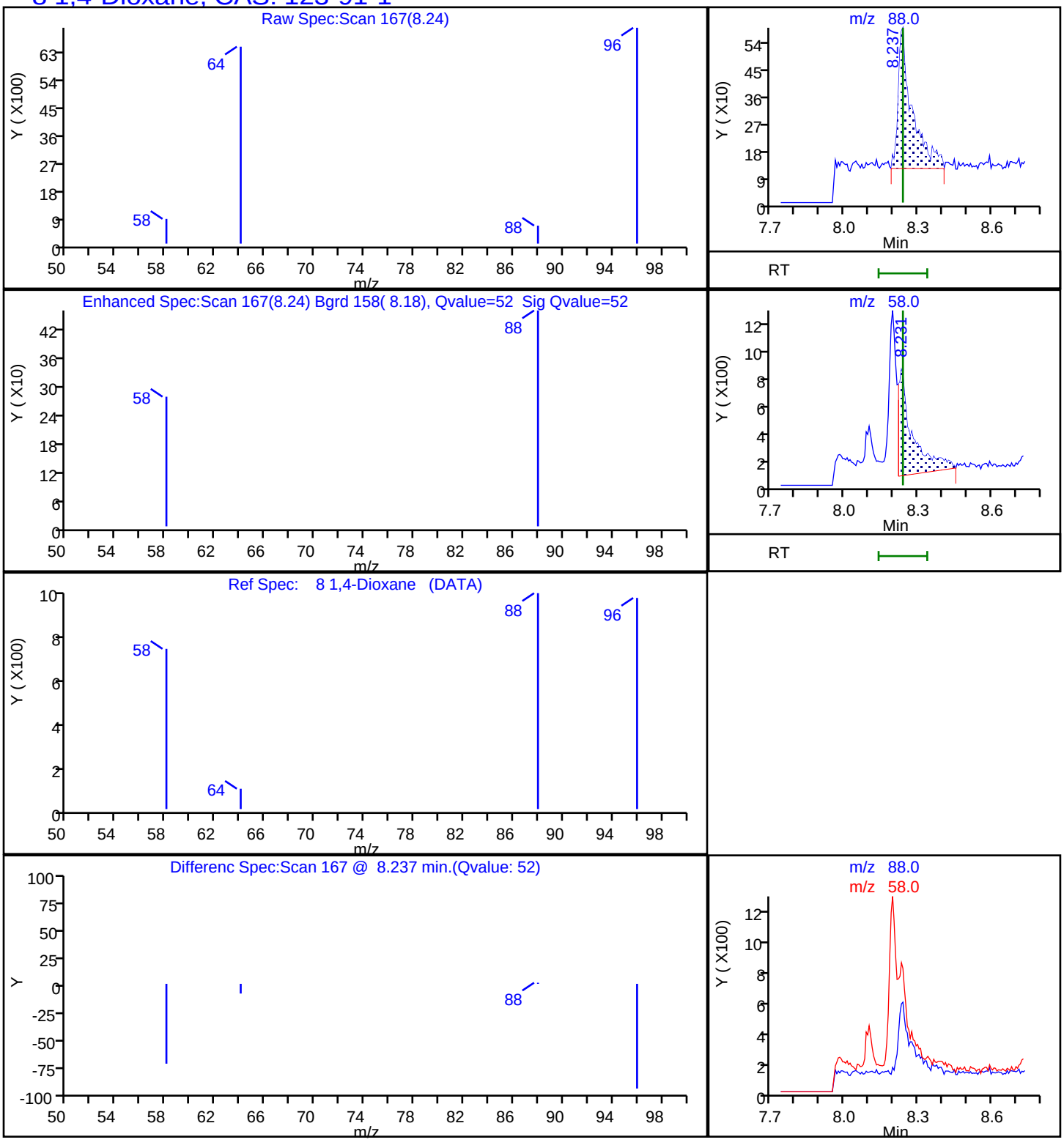
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.98

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202722.D

Injection Date:	21-Dec-2021 05:26:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-17	Lab Sample ID:	240-161553-17		
Client ID:	SL-5_121621				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

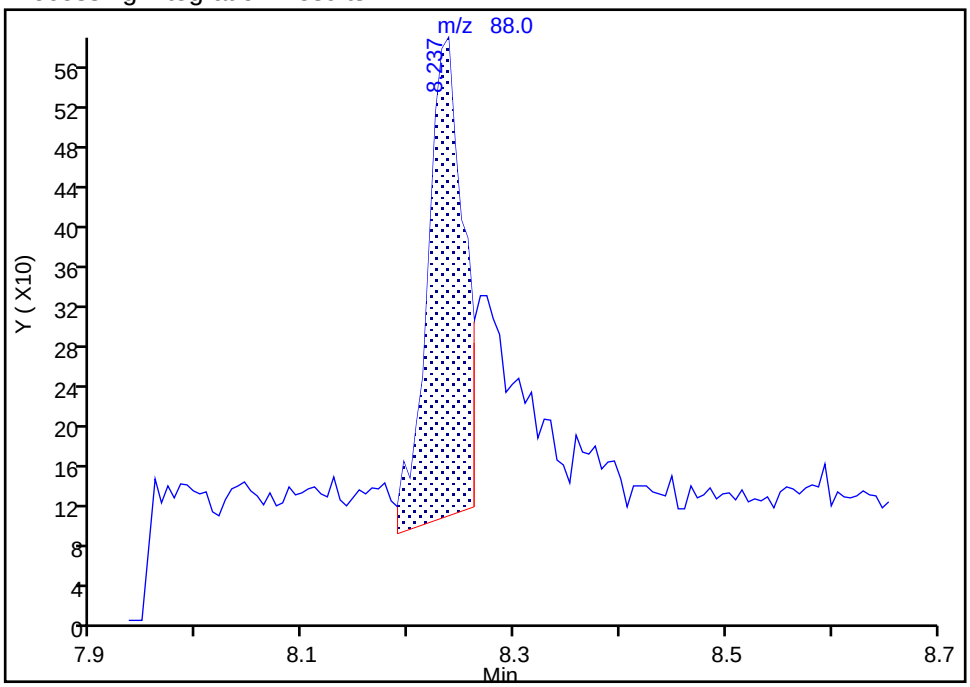
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202722.D				
Injection Date:	21-Dec-2021 05:26:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-17	Lab Sample ID:	240-161553-17		
Client ID:	SL-5_121621				
Operator ID:	434006	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

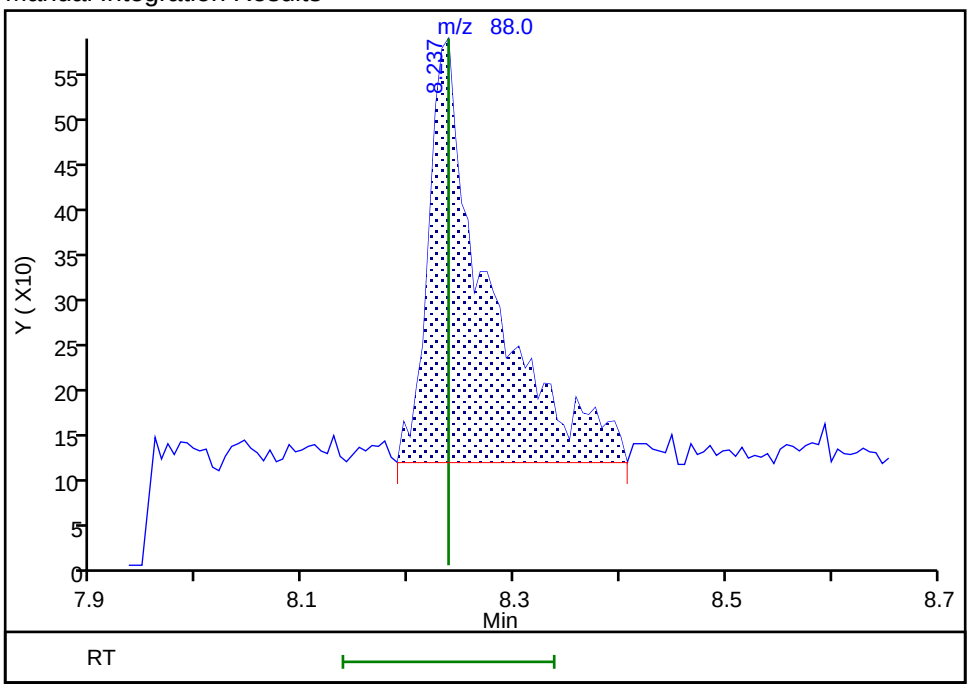
Processing Integration Results

RT: 8.24
Area: 1147
Amount: 1.788623
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1854
Amount: 2.891113
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:23:15

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-8_121621 Lab Sample ID: 240-161553-18

Matrix: Water Lab File ID: 202723.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 10:10

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 05:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.8		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202723.D				
Lims ID:	240-161553-C-18				
Client ID:	SL-8_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:50:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:23:40		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	868906	10.4	
* 7 Fluorobenzene	96	7.424	7.436	-0.012	100	2608101	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	78594	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	53	1779	2.77	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

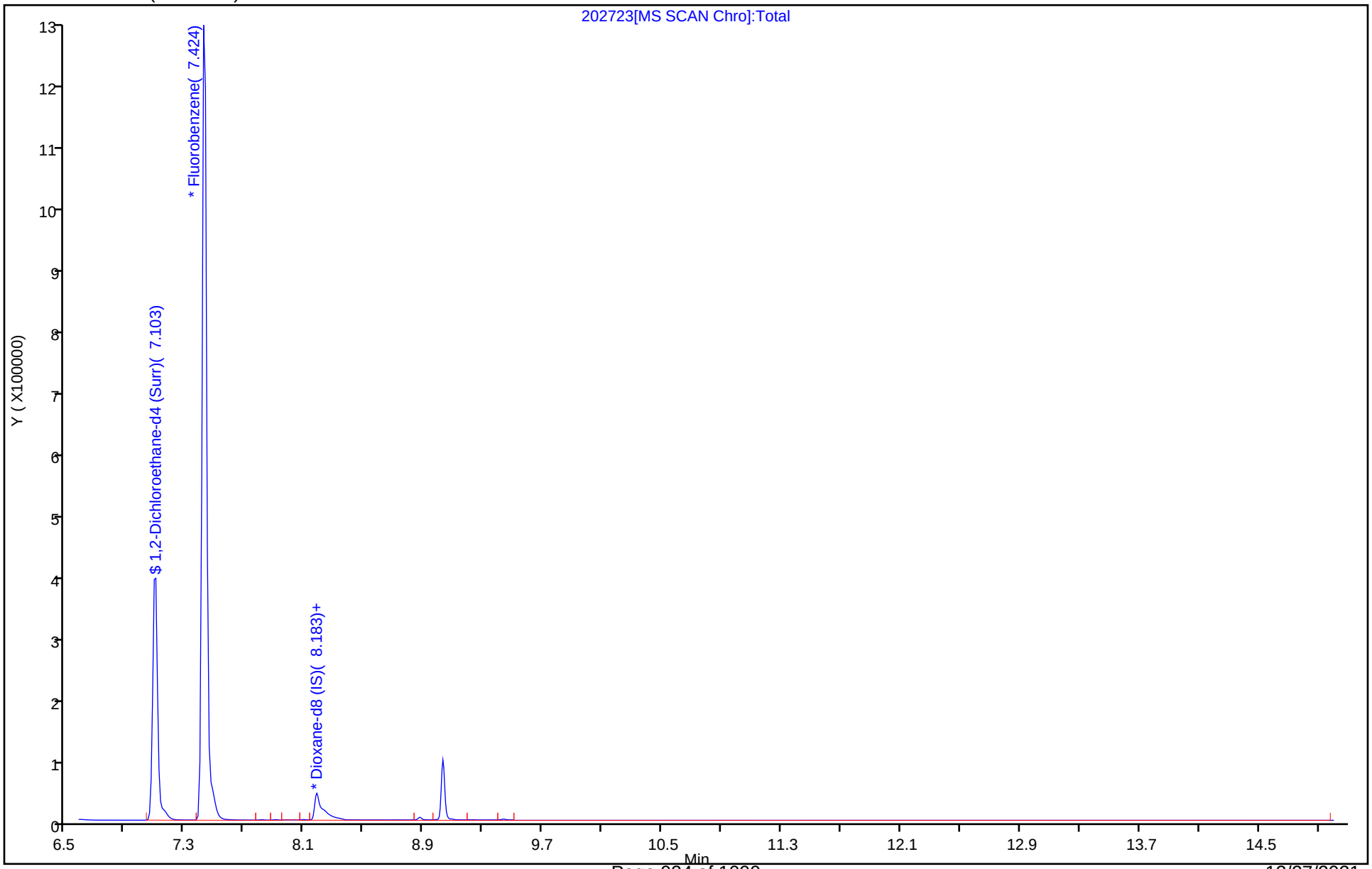
Report Date: 21-Dec-2021 18:35:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202723.D

Injection Date:	21-Dec-2021 05:50:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-18	Lab Sample ID:	240-161553-18	Worklist Smp#:	26
Client ID:	SL-8_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202723.D				
Lims ID:	240-161553-C-18				
Client ID:	SL-8_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 05:50:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-026				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:23:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.32

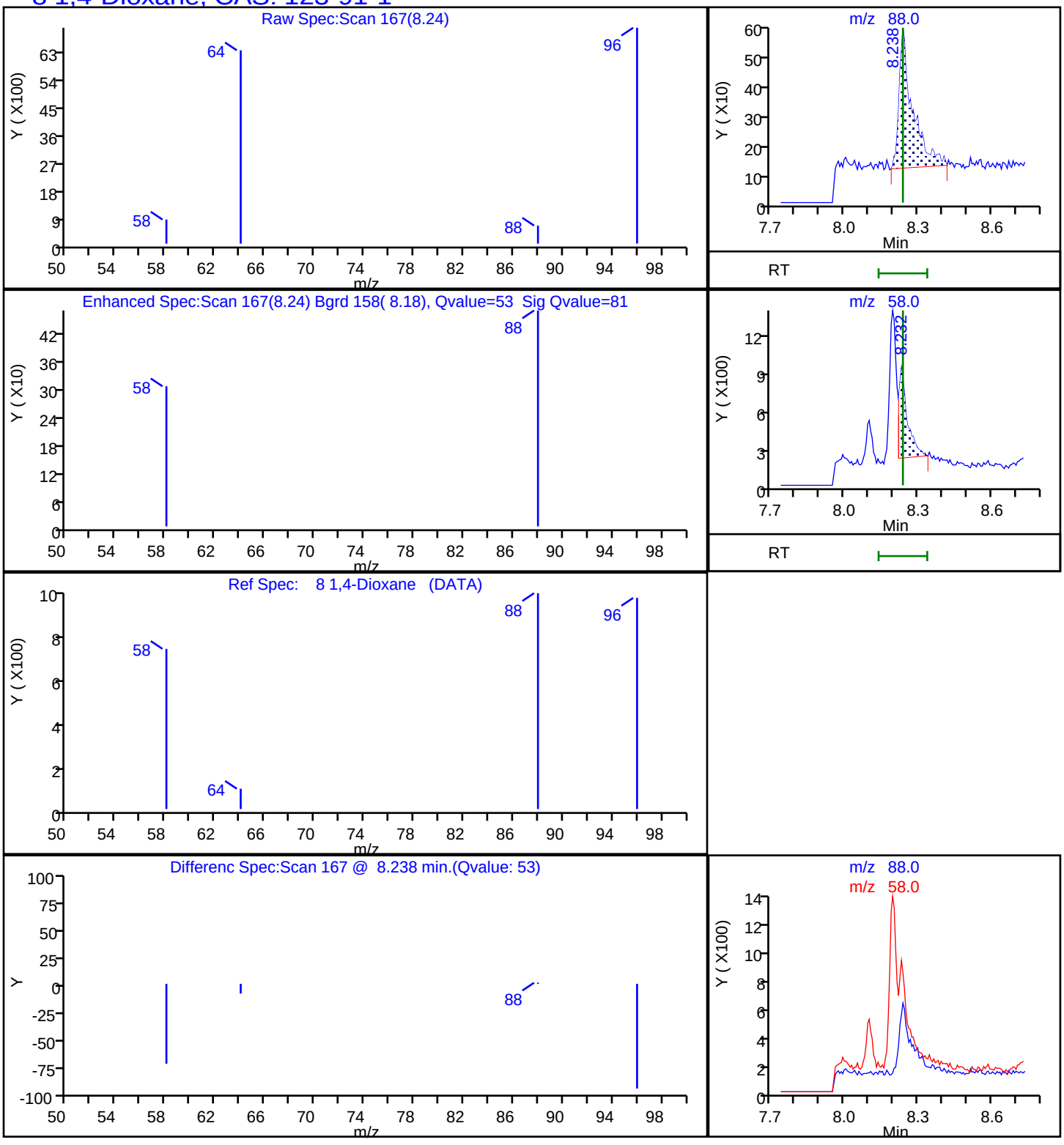
Report Date: 21-Dec-2021 18:35:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202723.D

Injection Date:	21-Dec-2021 05:50:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-18	Lab Sample ID:	240-161553-18		
Client ID:	SL-8_121621				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

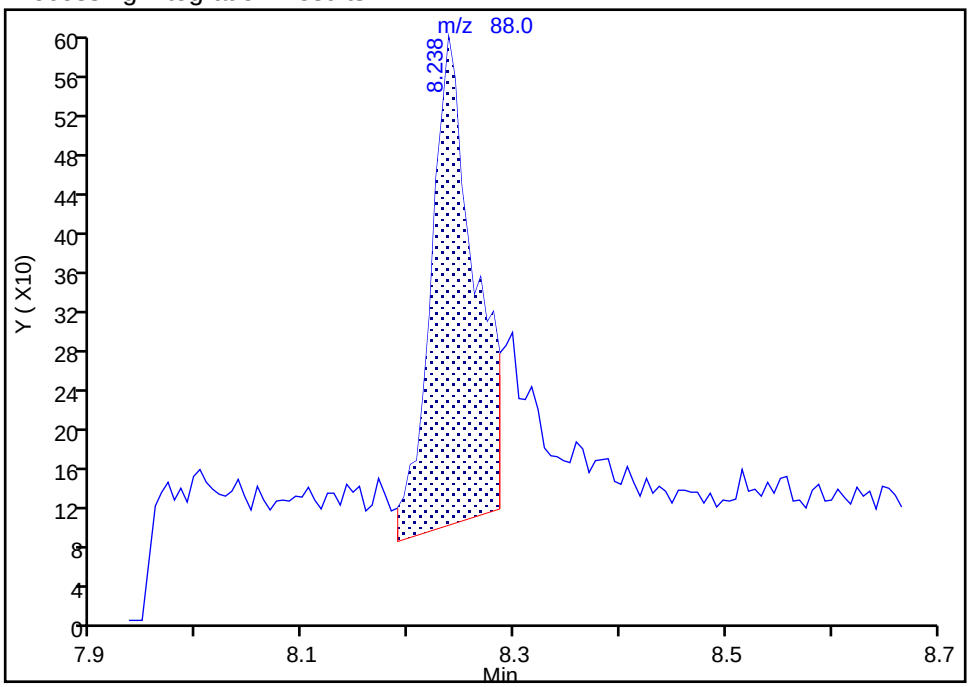
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202723.D				
Injection Date:	21-Dec-2021 05:50:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-18	Lab Sample ID:	240-161553-18		
Client ID:	SL-8_121621				
Operator ID:	434006	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

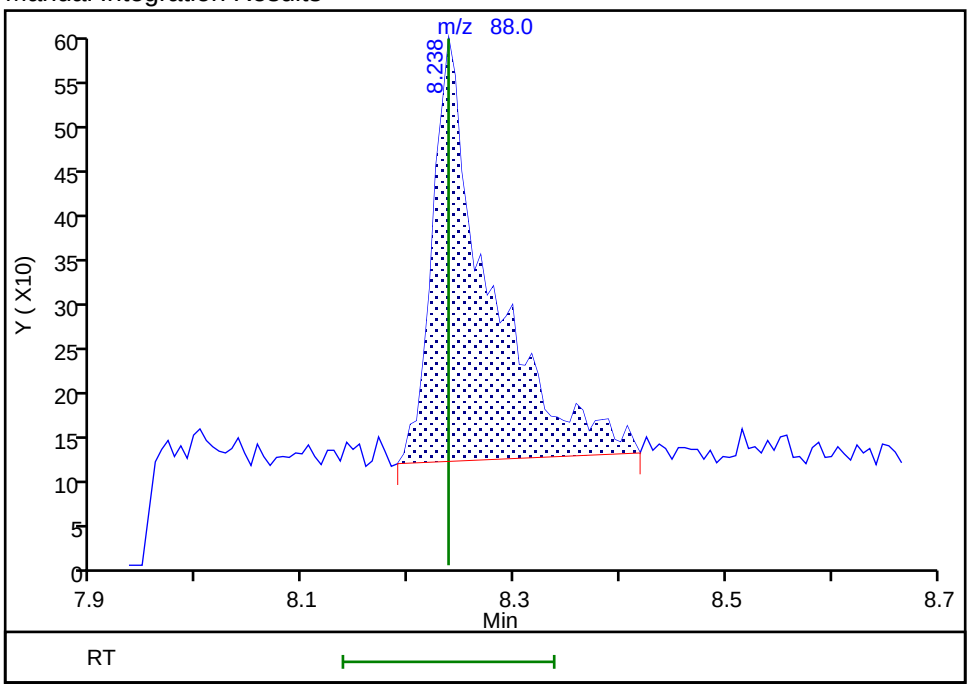
Processing Integration Results

RT: 8.24
Area: 1433
Amount: 2.234012
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1779
Amount: 2.773418
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:23:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-9_121621 Lab Sample ID: 240-161553-19

Matrix: Water Lab File ID: 202724.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 10:20

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 06:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.8		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202724.D
Lims ID: 240-161553-C-19
Client ID: SL-9_121621
Sample Type: Client
Inject. Date: 21-Dec-2021 06:14:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-027
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:23:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	866765	10.3	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2632758	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	81648	200.0	
8 1,4-Dioxane	88	8.244	8.237	0.007	25	1883	2.83	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

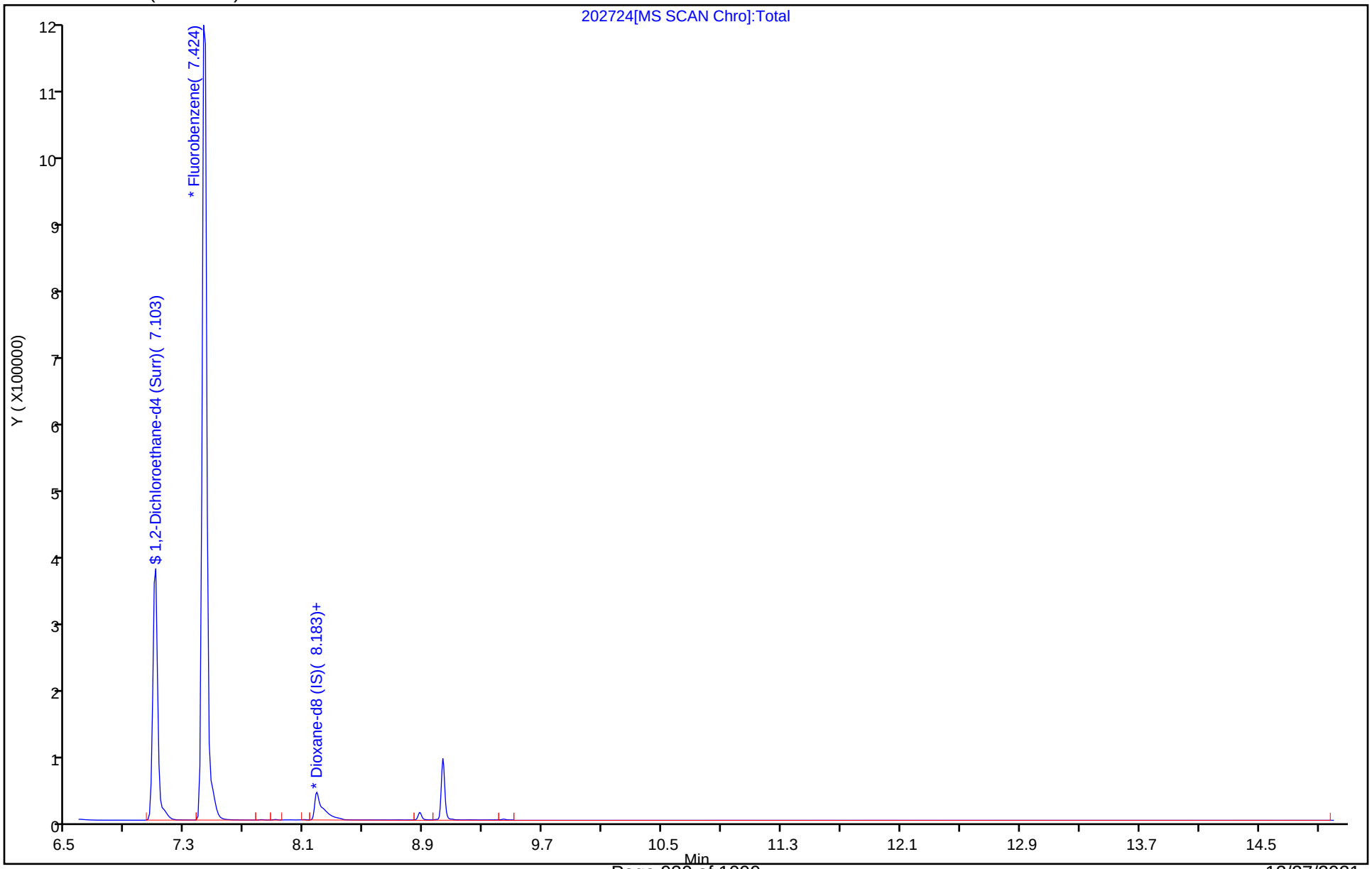
Report Date: 21-Dec-2021 18:35:11 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202724.D

Injection Date:	21-Dec-2021 06:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-C-19	Lab Sample ID:	240-161553-19	Worklist Smp#:	27
Client ID:	SL-9_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202724.D				
Lims ID:	240-161553-C-19				
Client ID:	SL-9_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 06:14:30	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-027				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:23:56

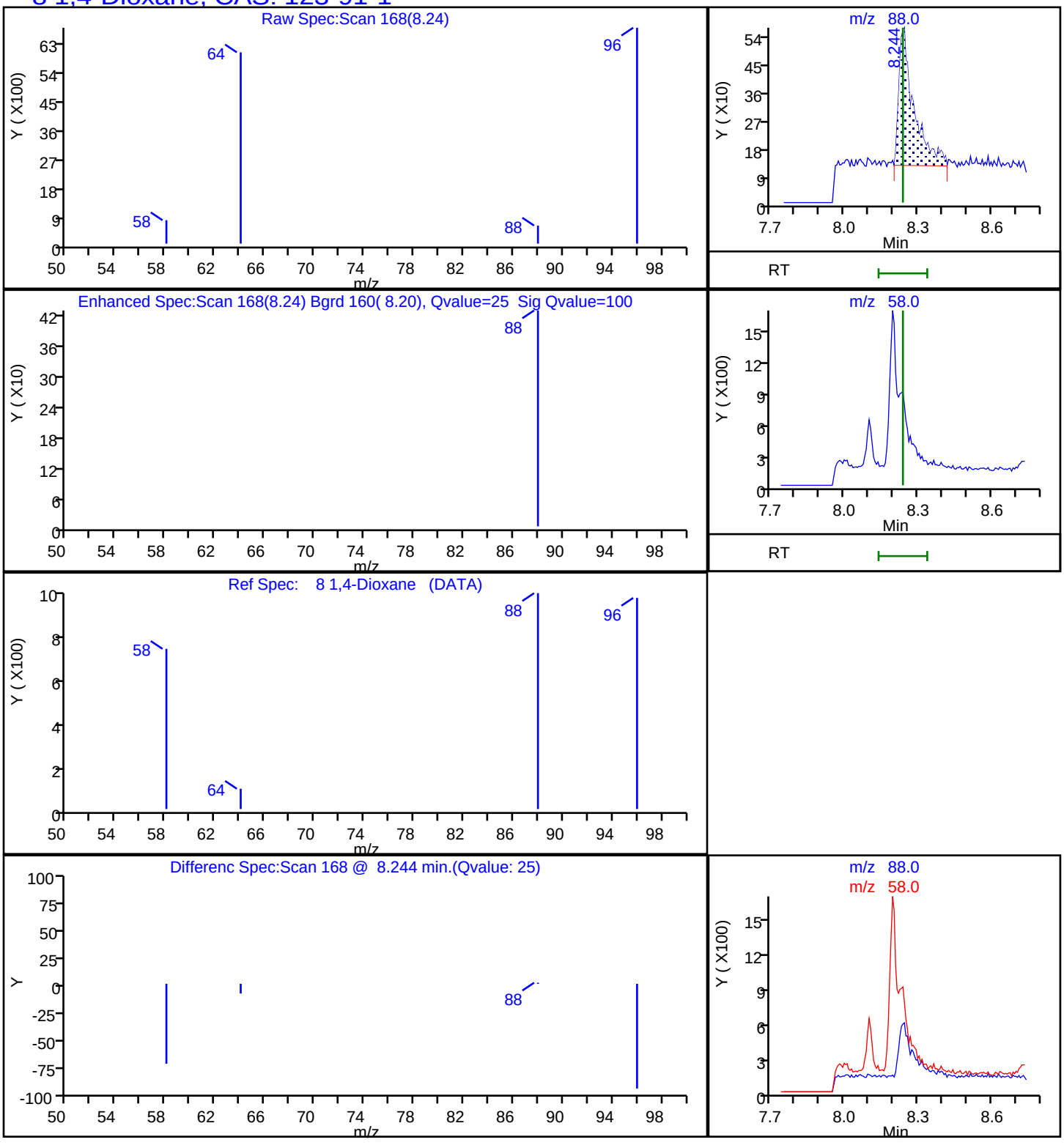
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.09

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202724.D

Injection Date:	21-Dec-2021 06:14:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-19	Lab Sample ID:	240-161553-19		
Client ID:	SL-9_121621				
Operator ID:	434006	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

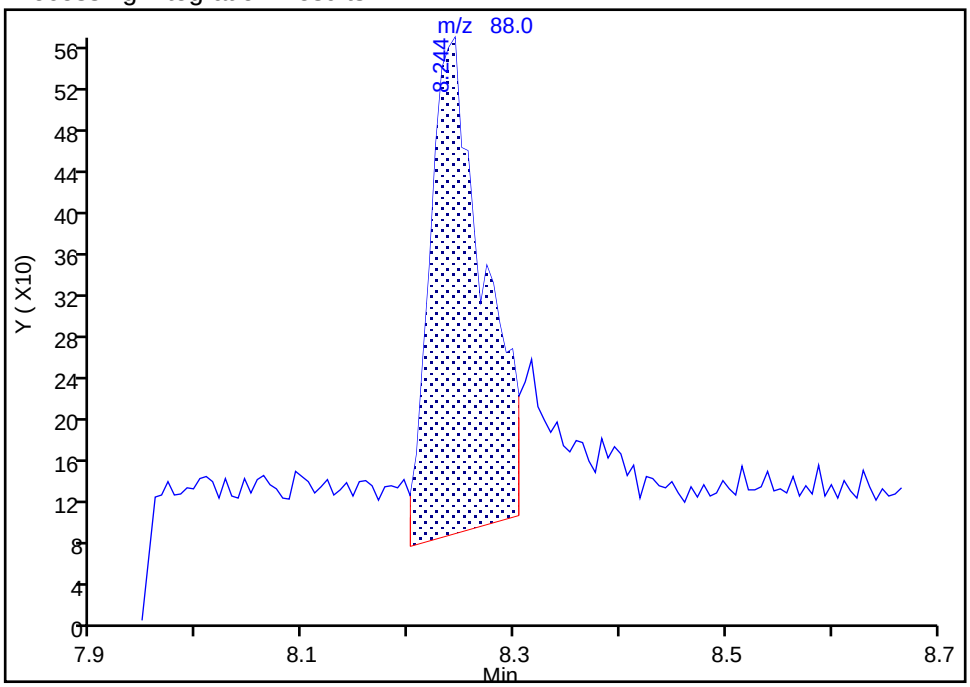
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202724.D				
Injection Date:	21-Dec-2021 06:14:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-C-19	Lab Sample ID:	240-161553-19		
Client ID:	SL-9_121621				
Operator ID:	434006	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

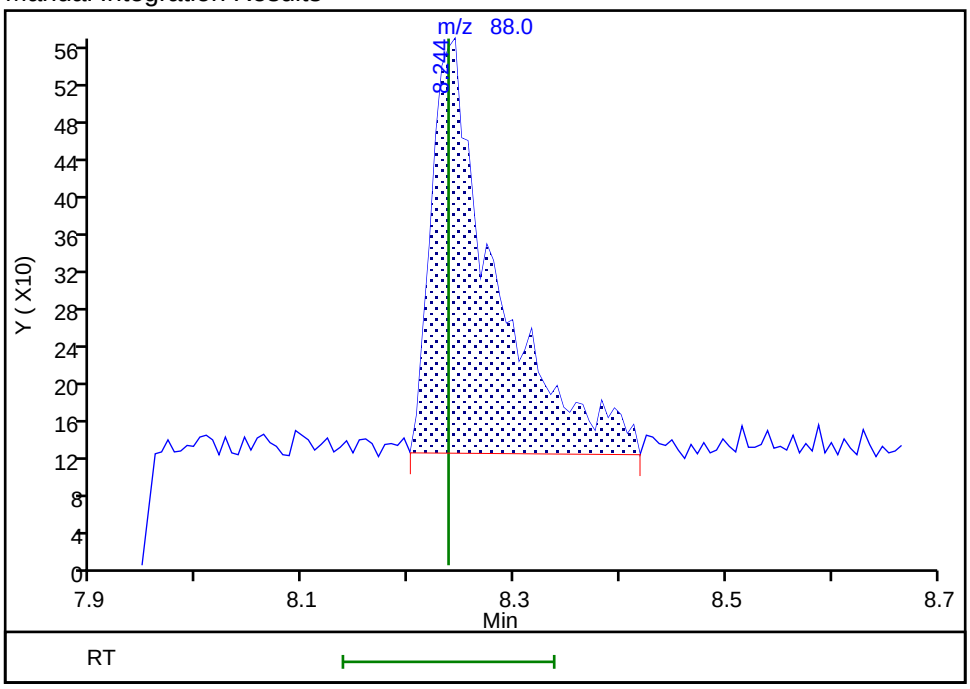
Processing Integration Results

RT: 8.24
Area: 1720
Amount: 2.581140
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1883
Amount: 2.825748
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:23:52

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-10_121621 Lab Sample ID: 240-161553-20

Matrix: Water Lab File ID: 202725.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 10:35

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 06:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202725.D				
Lims ID:	240-161553-F-20				
Client ID:	SL-10_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 06:38:30	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-028				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:24:15		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	849111	10.1	
* 7 Fluorobenzene	96	7.423	7.436	-0.013	100	2645323	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	79391	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	51	1704	2.63	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

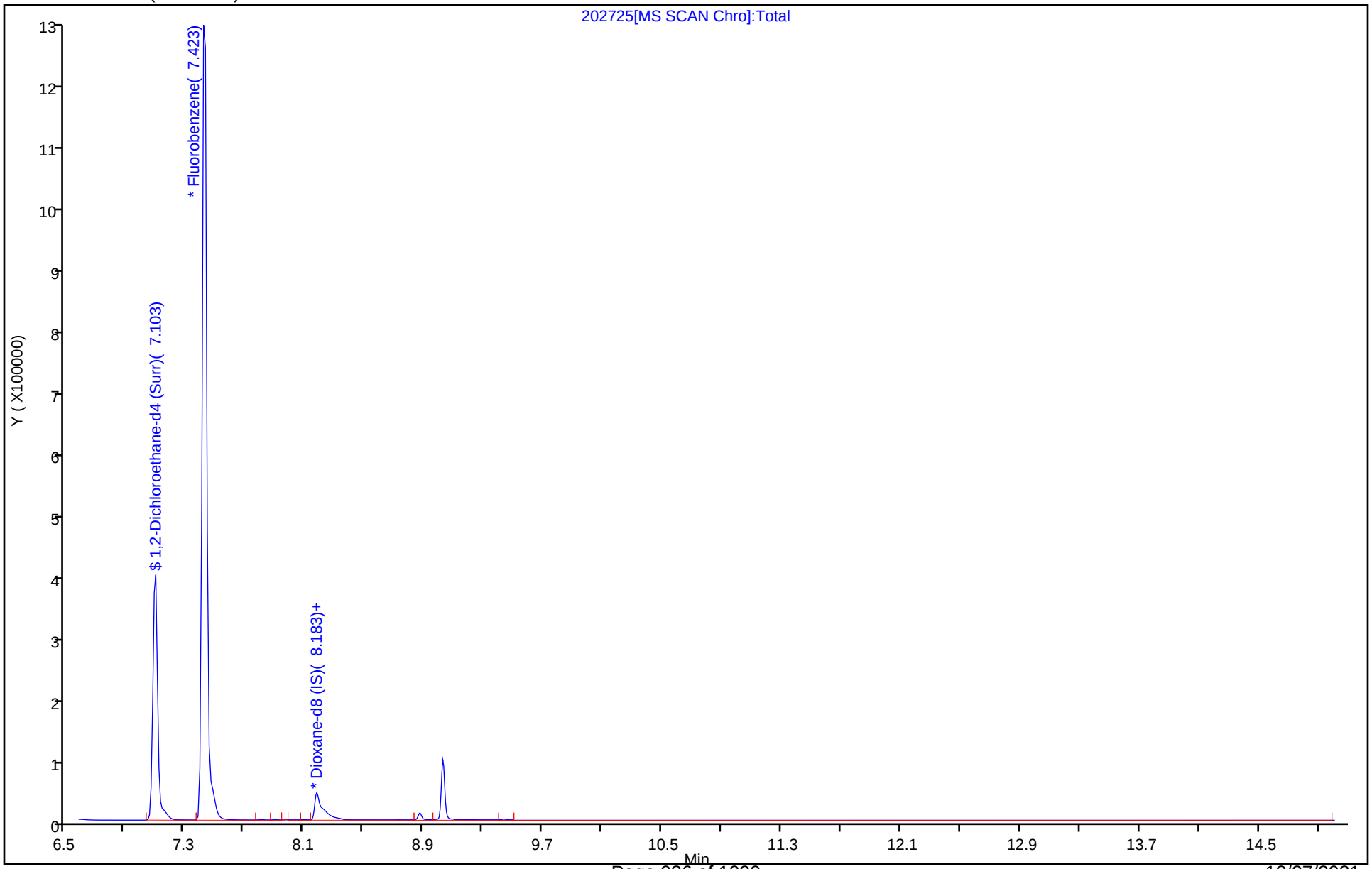
Report Date: 21-Dec-2021 18:35:12 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202725.D

Injection Date:	21-Dec-2021 06:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-F-20	Lab Sample ID:	240-161553-20	Worklist Smp#:	28
Client ID:	SL-10_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202725.D				
Lims ID:	240-161553-F-20				
Client ID:	SL-10_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 06:38:30	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-028				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:24:15

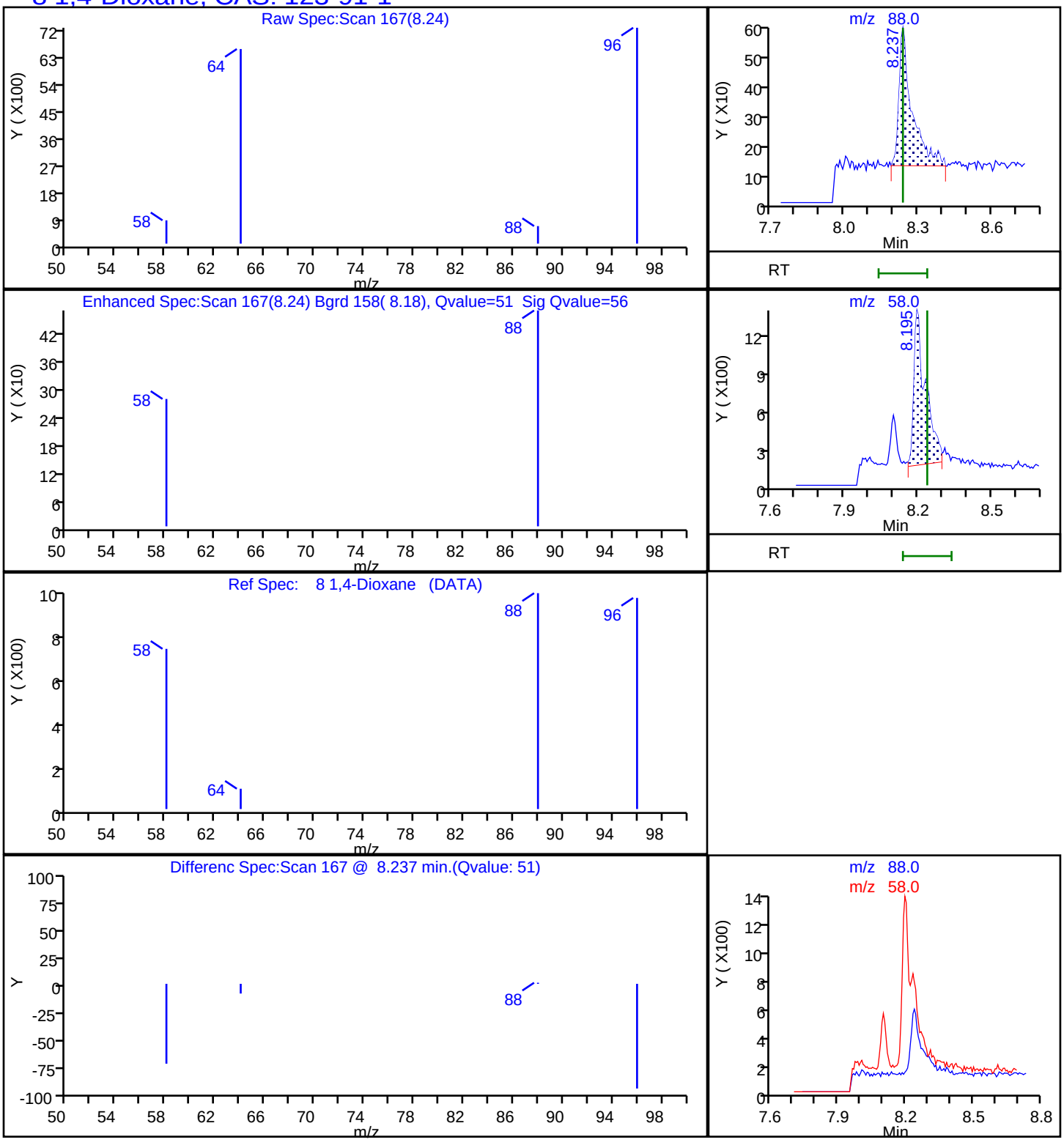
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.51

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202725.D

Injection Date:	21-Dec-2021 06:38:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-20	Lab Sample ID:	240-161553-20		
Client ID:	SL-10_121621				
Operator ID:	434006	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

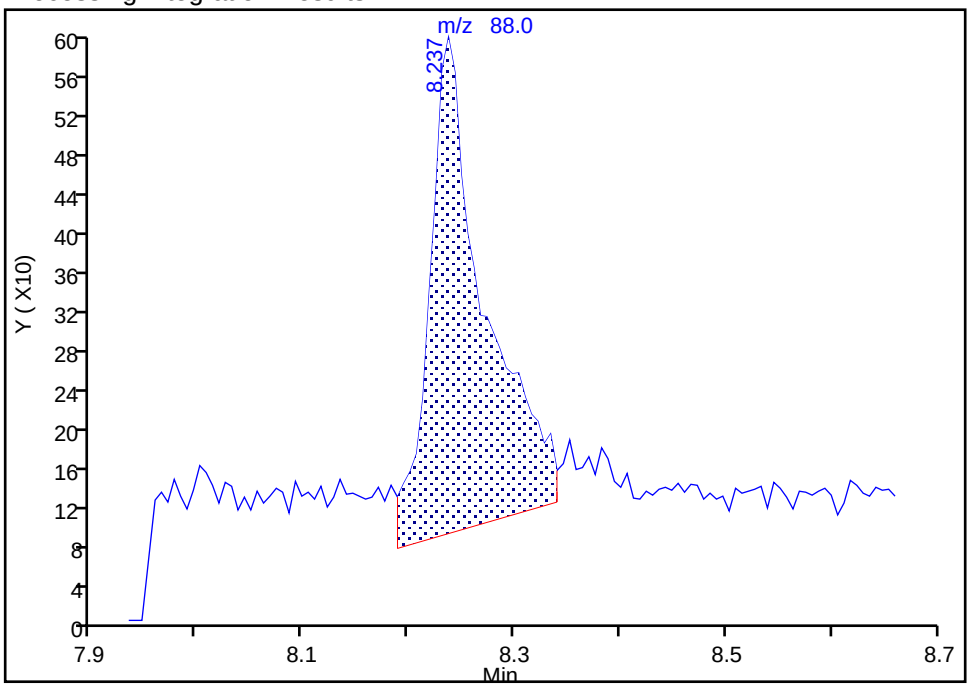
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202725.D				
Injection Date:	21-Dec-2021 06:38:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-20	Lab Sample ID:	240-161553-20		
Client ID:	SL-10_121621				
Operator ID:	434006	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

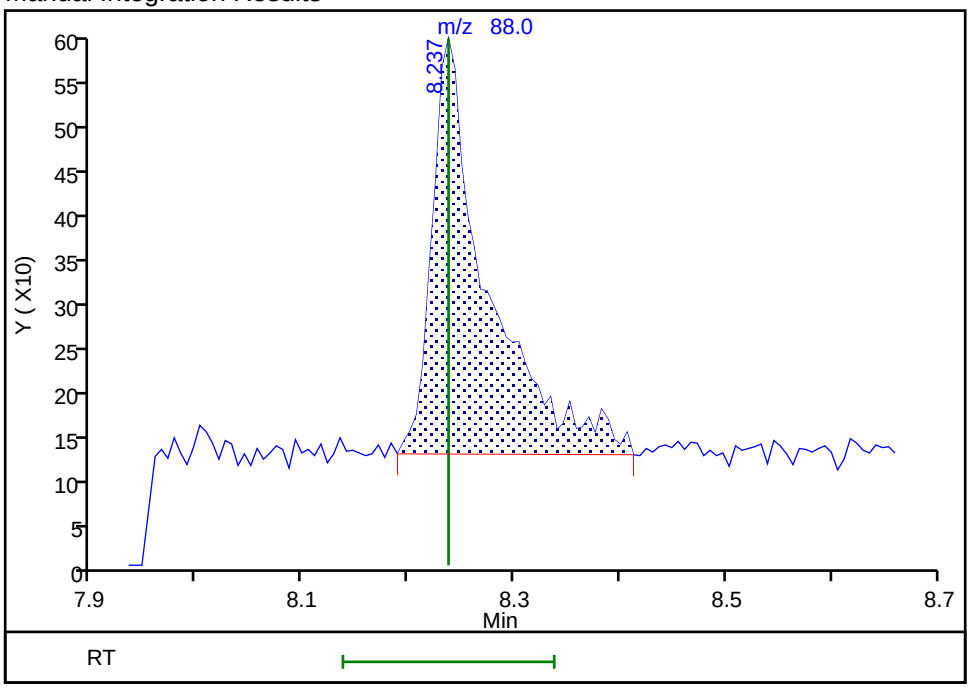
Processing Integration Results

RT: 8.24
Area: 1838
Amount: 2.836632
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1704
Amount: 2.629826
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:24:08

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-11_121621 Lab Sample ID: 240-161553-21

Matrix: Water Lab File ID: 202726.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 10:50

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 07:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.5		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202726.D				
Lims ID:	240-161553-F-21				
Client ID:	SL-11_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 07:02:30	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-029				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:25:07		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	856189	10.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2615864	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	81952	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	1639	2.45	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

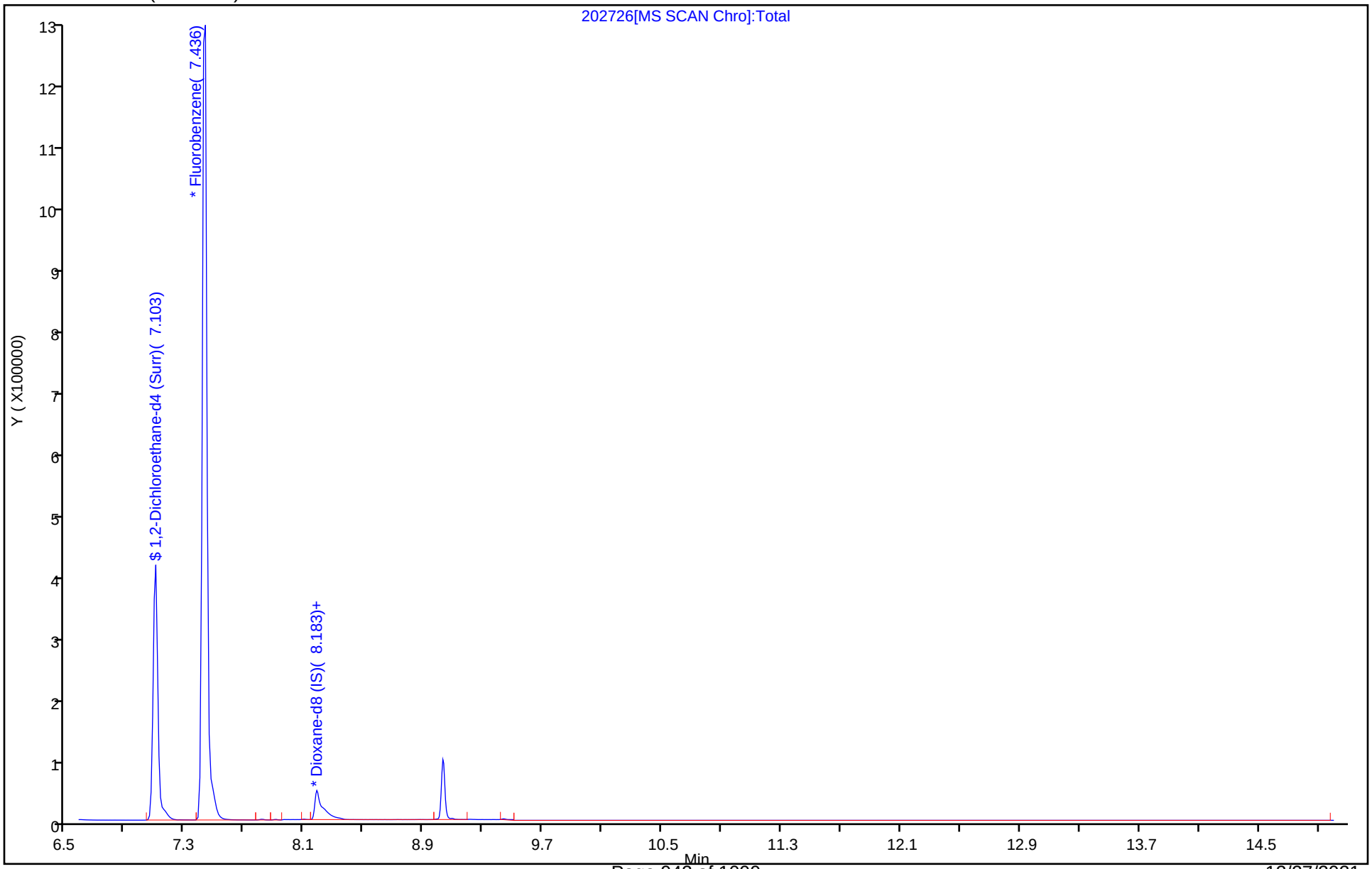
Report Date: 21-Dec-2021 18:35:12 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202726.D

Injection Date:	21-Dec-2021 07:02:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-F-21	Lab Sample ID:	240-161553-21	Worklist Smp#:	29
Client ID:	SL-11_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202726.D				
Lims ID:	240-161553-F-21				
Client ID:	SL-11_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 07:02:30	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-029				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:25:07

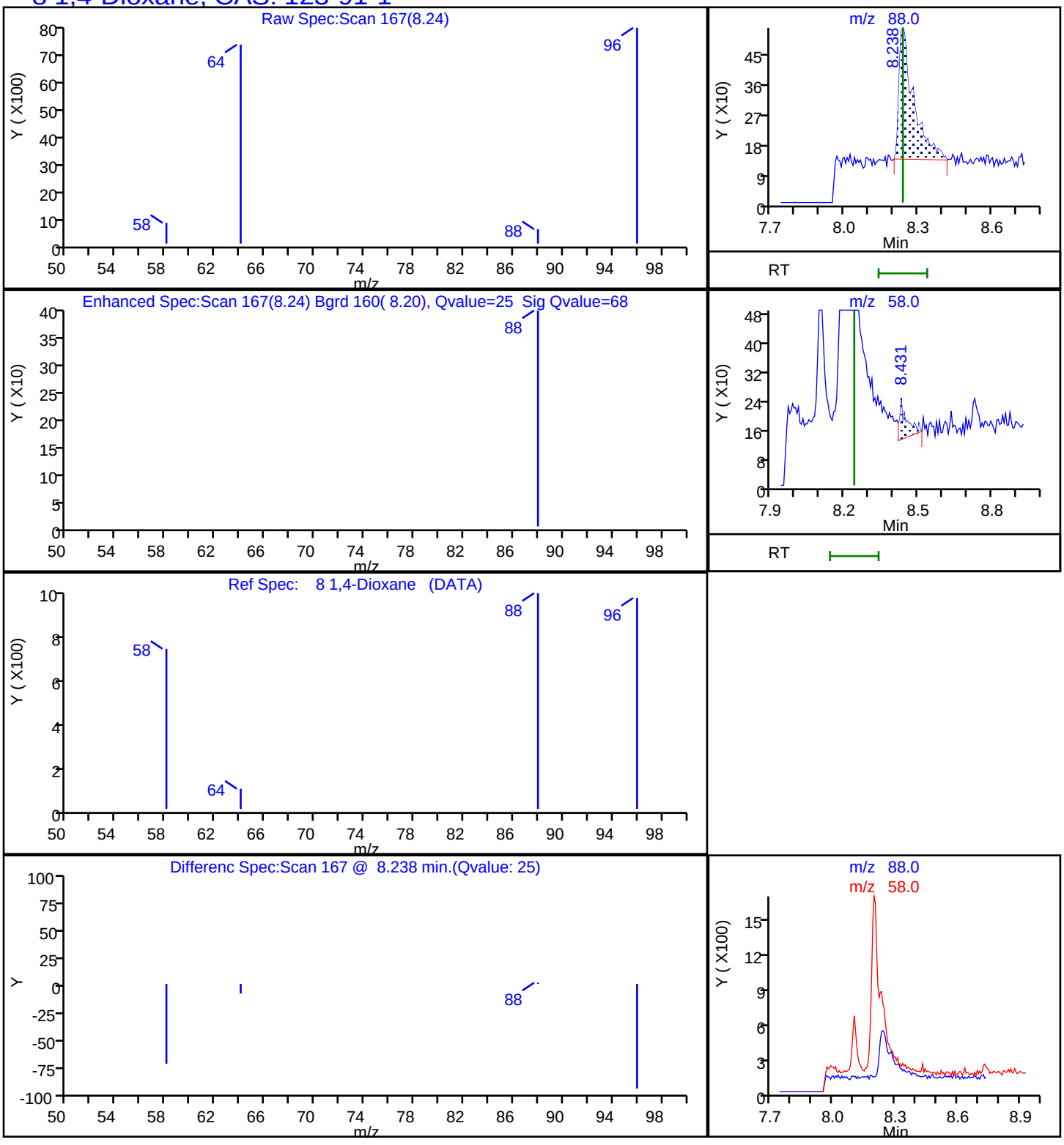
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.49

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202726.D

Injection Date:	21-Dec-2021 07:02:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-21	Lab Sample ID:	240-161553-21		
Client ID:	SL-11_121621				
Operator ID:	434006	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

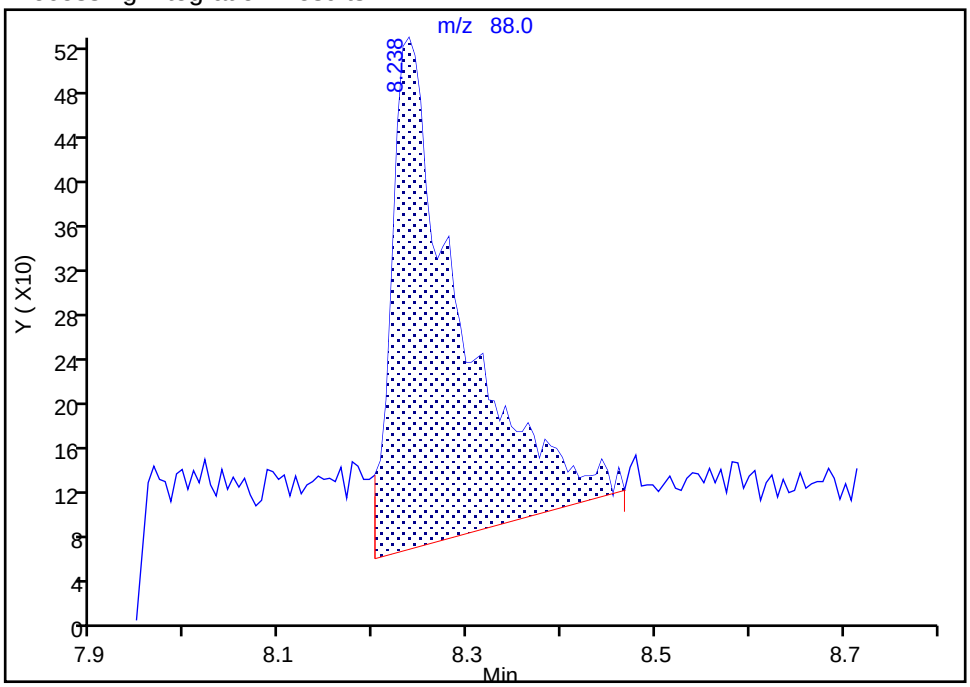
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202726.D				
Injection Date:	21-Dec-2021 07:02:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-21	Lab Sample ID:	240-161553-21		
Client ID:	SL-11_121621				
Operator ID:	434006	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

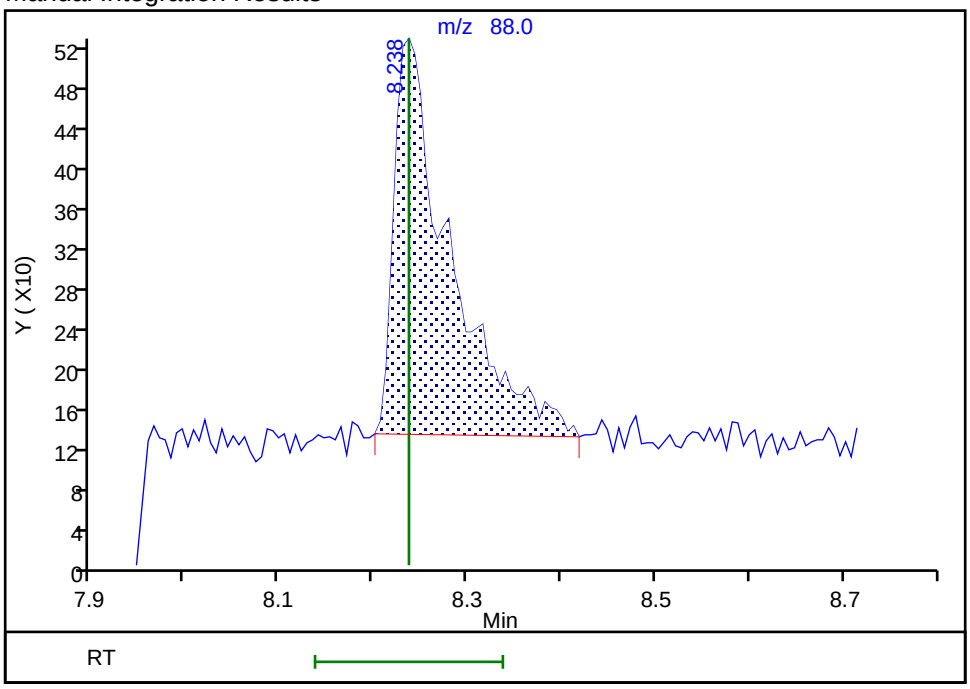
Processing Integration Results

RT: 8.24
Area: 2349
Amount: 3.511981
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1639
Amount: 2.450463
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:25:00

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-12_121621 Lab Sample ID: 240-161553-22

Matrix: Water Lab File ID: 202727.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 11:05

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 07:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.8	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202727.D				
Lims ID:	240-161553-A-22				
Client ID:	SL-12_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 07:26:30	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-030				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 18:25:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	848482	10.3	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2568373	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	90	80988	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	25	1160	1.75	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

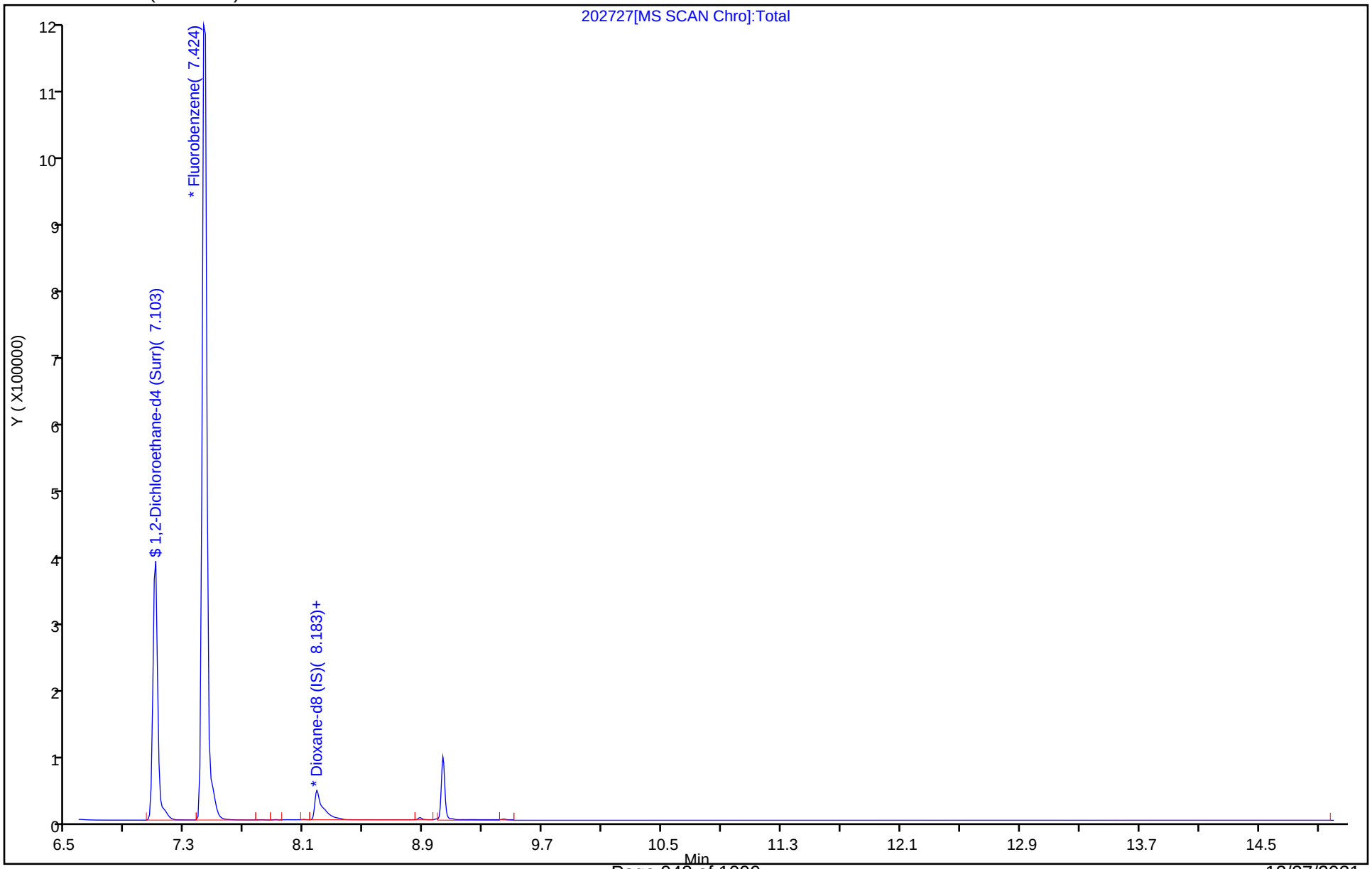
Report Date: 21-Dec-2021 18:35:13 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202727.D

Injection Date:	21-Dec-2021 07:26:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-A-22	Lab Sample ID:	240-161553-22	Worklist Smp#:	30
Client ID:	SL-12_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202727.D				
Lims ID:	240-161553-A-22				
Client ID:	SL-12_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 07:26:30	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-030				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

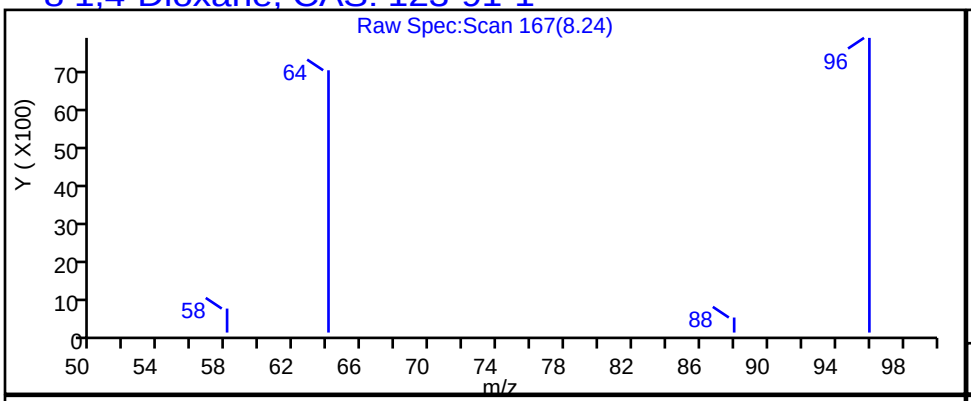
First Level Reviewer: seymourc Date: 21-Dec-2021 18:25:37

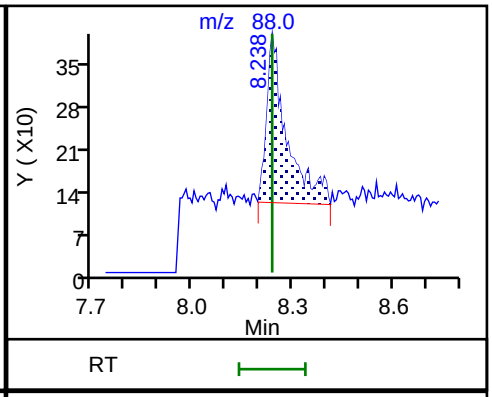
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.45

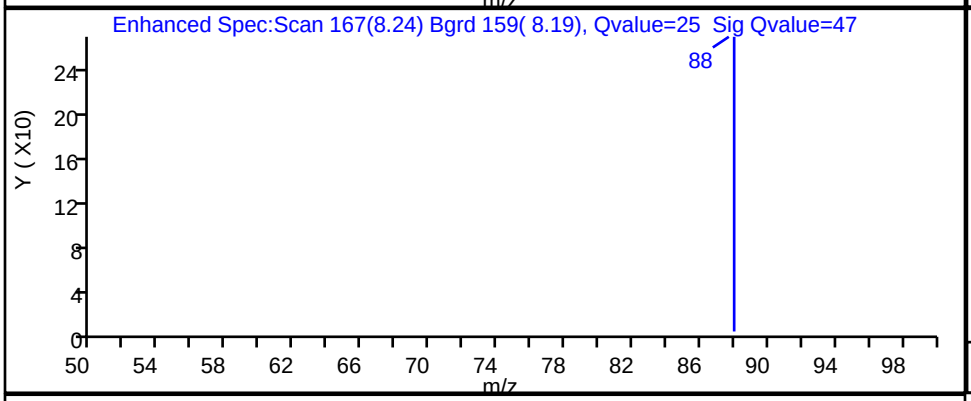
Eurofins TestAmerica, Canton

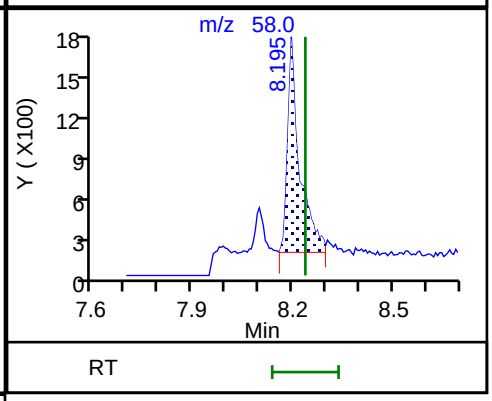
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202727.D				
Injection Date:	21-Dec-2021 07:26:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-22	Lab Sample ID:	240-161553-22		
Client ID:	SL-12_121621				
Operator ID:	434006	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

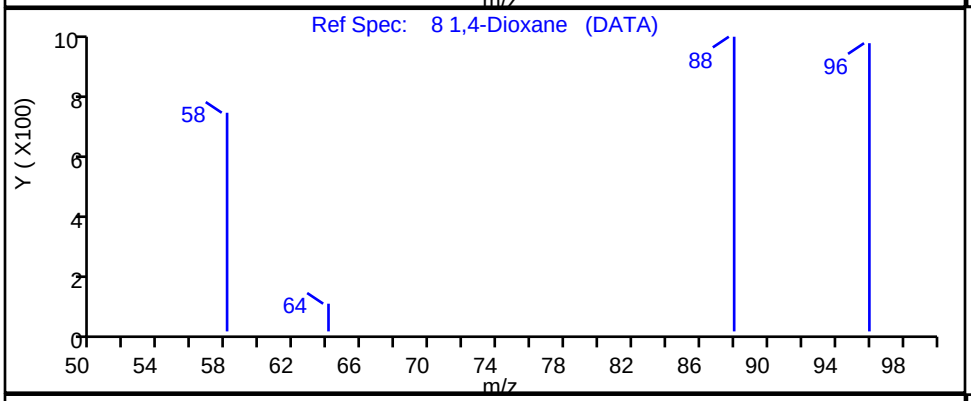
8 1,4-Dioxane, CAS: 123-91-1

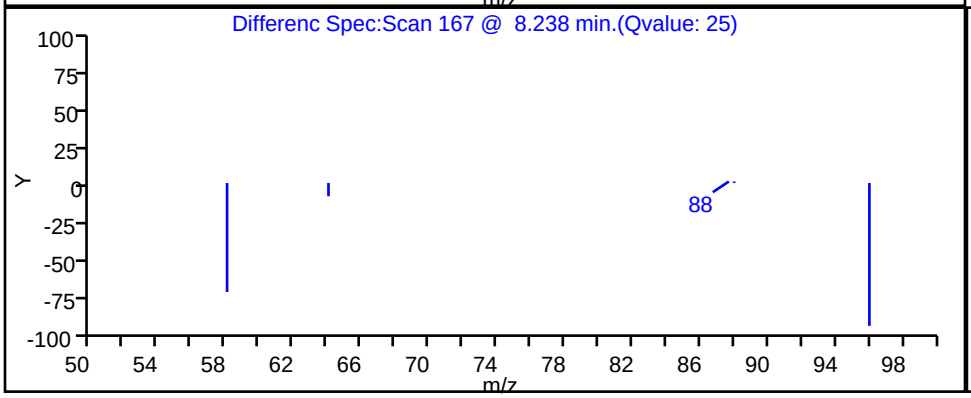


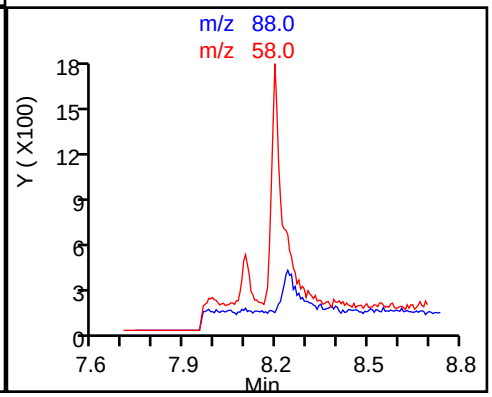












Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

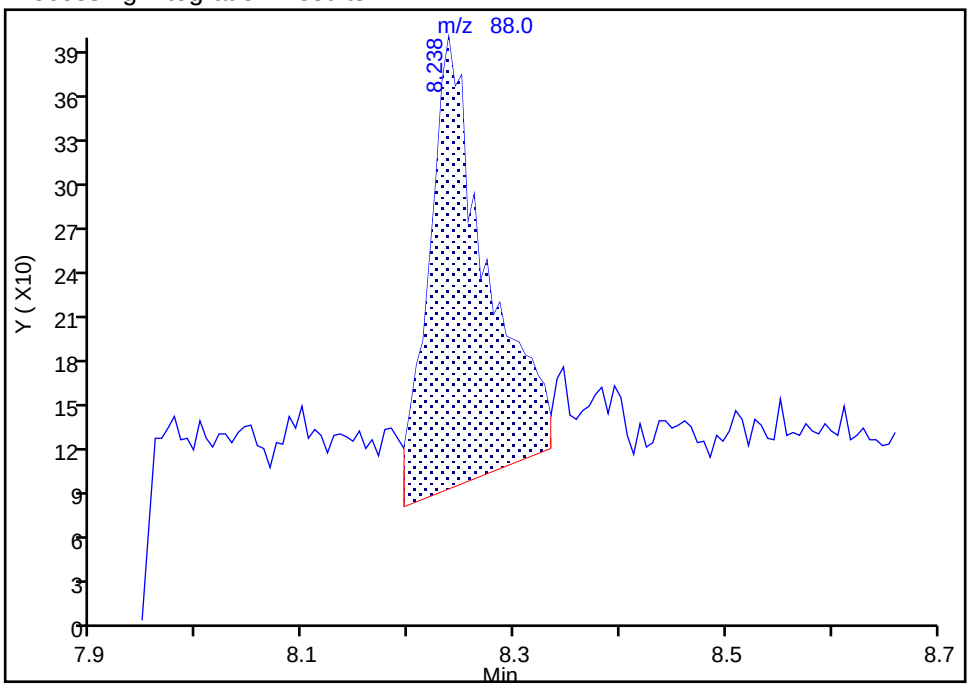
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202727.D				
Injection Date:	21-Dec-2021 07:26:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-A-22	Lab Sample ID:	240-161553-22		
Client ID:	SL-12_121621				
Operator ID:	434006	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

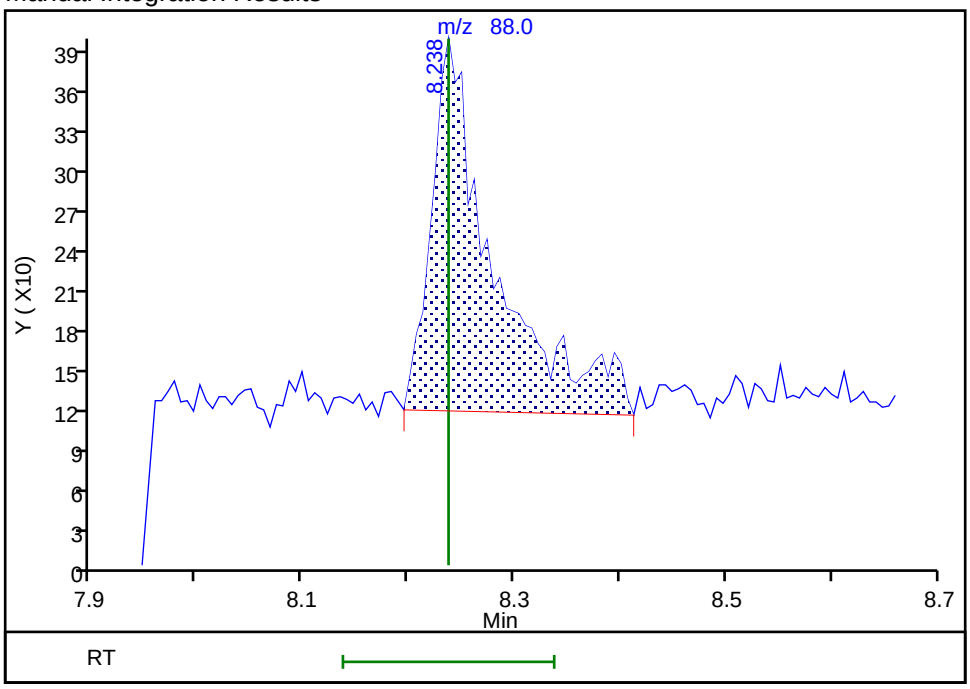
Processing Integration Results

RT: 8.24
Area: 1166
Amount: 1.764033
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1160
Amount: 1.754955
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:25:21

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-19_121621 Lab Sample ID: 240-161553-23

Matrix: Water Lab File ID: 191229.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 11:15

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191229.D				
Lims ID:	240-161553-A-23				
Client ID:	SL-19_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 21:06:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-007				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 22:22:06		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	1383344	10.8	
* 7 Fluorobenzene	96	6.589	6.586	0.003	100	5844153	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.243	0.000	99	173763	242.7	
18 Ethylene Dibromide	107	8.922	8.910	0.012	47	67	NC	
21 1,2-Dibromo-3-Chloropropane	157	12.241	12.260	-0.019	73	26	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

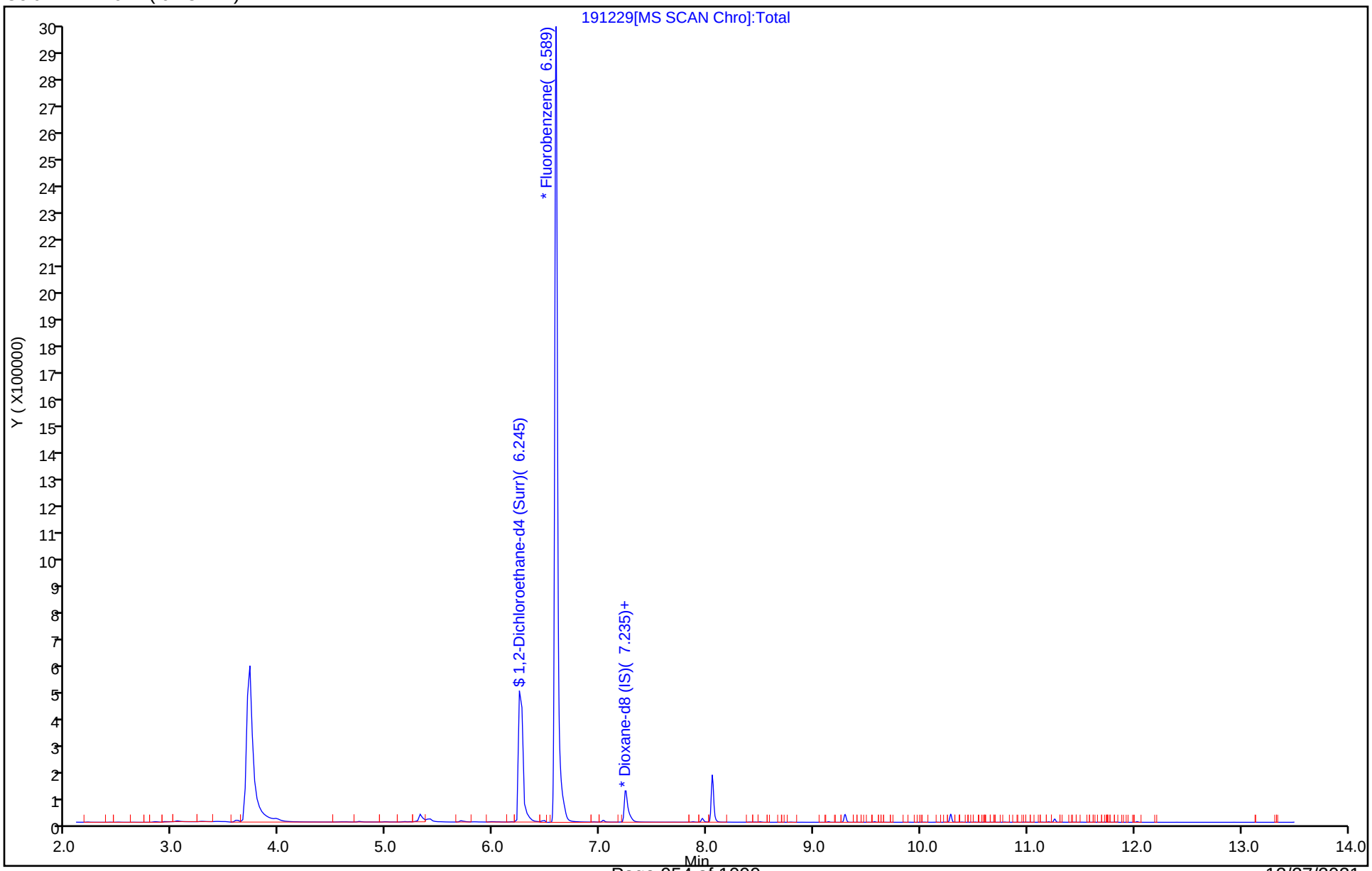
Report Date: 21-Dec-2021 23:47:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191229.D

Injection Date:	21-Dec-2021 21:06:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-161553-A-23	Lab Sample ID:	240-161553-23	Worklist Smp#:	7
Client ID:	SL-19_121621				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191229.D				
Lims ID:	240-161553-A-23				
Client ID:	SL-19_121621				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 21:06:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-007				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 22:22:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.8	88.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: DUP-01 Lab Sample ID: 240-161553-24

Matrix: Water Lab File ID: 191232.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 22:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191232.D				
Lims ID:	240-161553-A-24				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 22:20:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-010				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 23:47:33		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	1344842	10.9	
* 7 Fluorobenzene	96	6.586	6.586	0.000	100	5634218	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.243	0.000	98	185075	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	55	6166	5.14	

QC Flag Legend

Processing Flags

Reagents:

vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

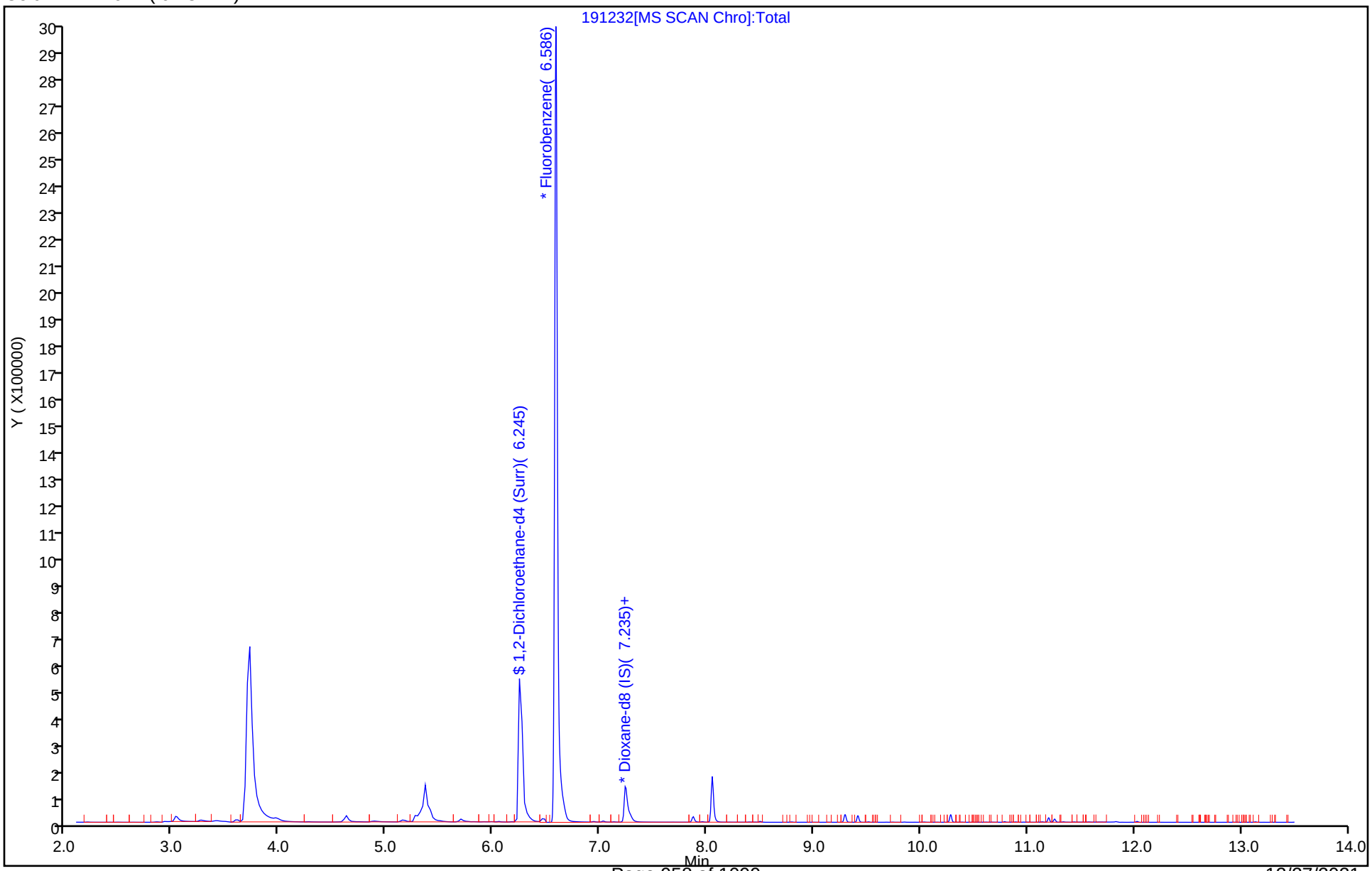
Report Date: 21-Dec-2021 23:47:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191232.D

Injection Date:	21-Dec-2021 22:20:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-161553-A-24	Lab Sample ID:	240-161553-24	Worklist Smp#:	10
Client ID:	DUP-01				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191232.D				
Lims ID:	240-161553-A-24				
Client ID:	DUP-01				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 22:20:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-010				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 23:47:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.9	89.50

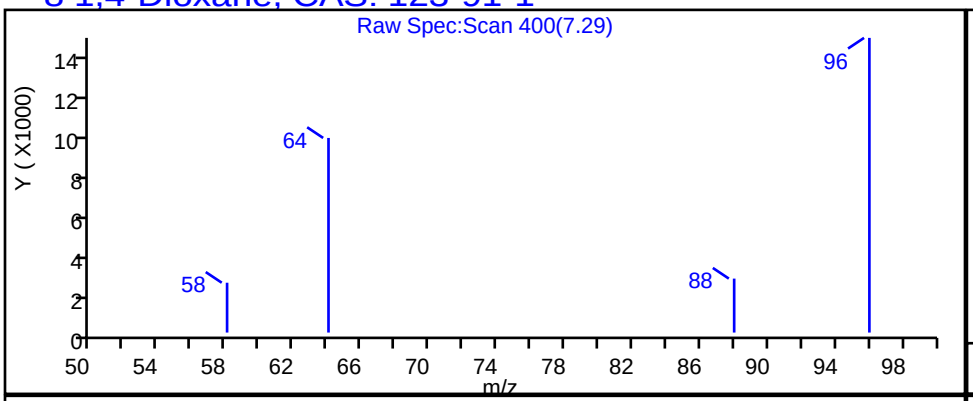
Report Date: 21-Dec-2021 23:47:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

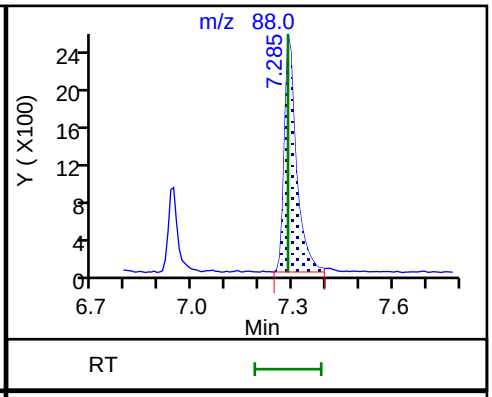
Eurofins TestAmerica, Canton

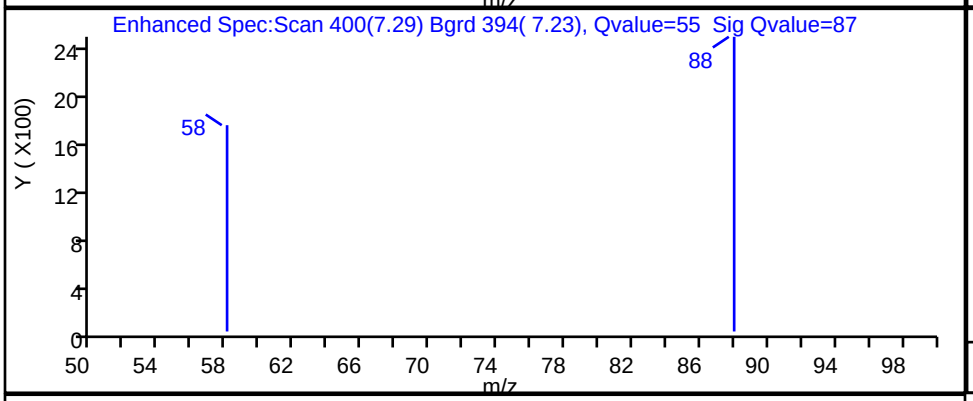
Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191232.D

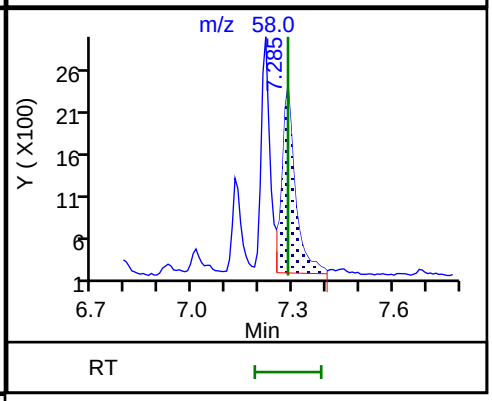
Injection Date:	21-Dec-2021 22:20:30	Instrument ID:	A3UX18		
Lims ID:	240-161553-A-24	Lab Sample ID:	240-161553-24		
Client ID:	DUP-01				
Operator ID:	434006	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

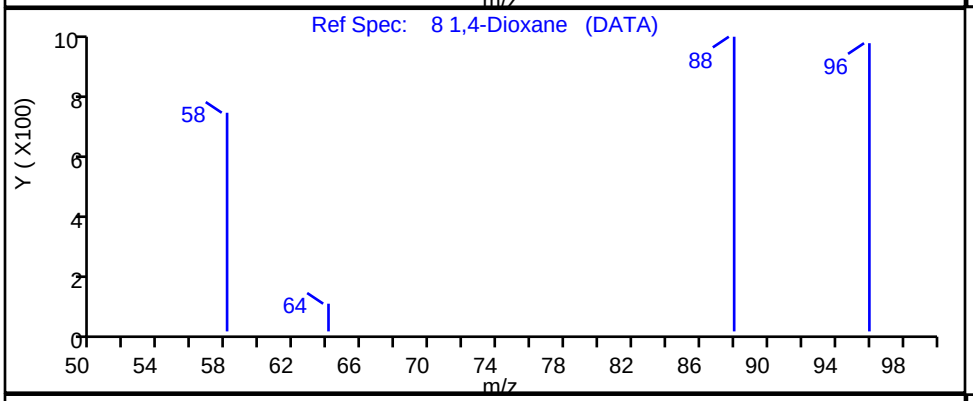
8 1,4-Dioxane, CAS: 123-91-1

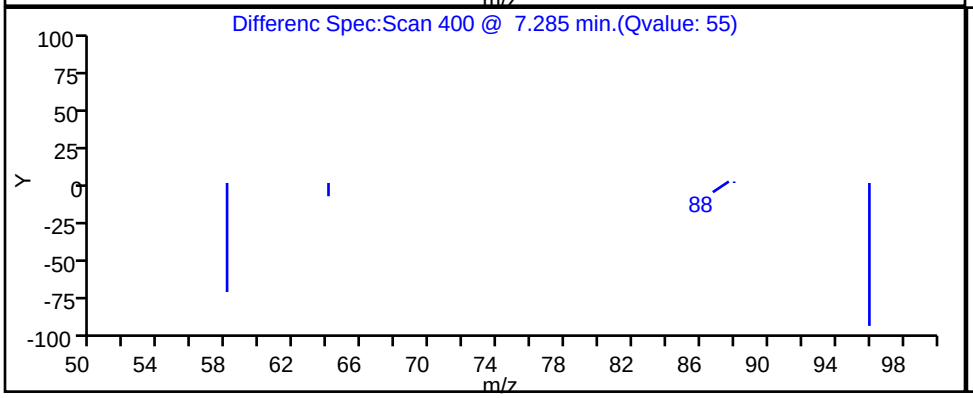


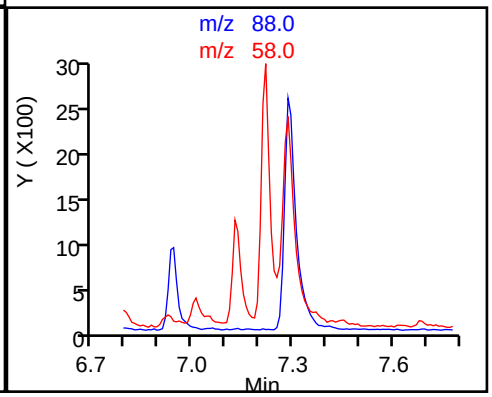












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 240-161553-25

Matrix: Water Lab File ID: 191233.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 00:00

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 22:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191233.D				
Lims ID:	240-161553-A-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 22:45:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-011				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 23:47:37		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	1302975	10.6	
* 7 Fluorobenzene	96	6.588	6.586	0.002	100	5571685	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.243	0.000	99	175062	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	55	11738	10.3	

QC Flag Legend

Processing Flags

Reagents:

vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

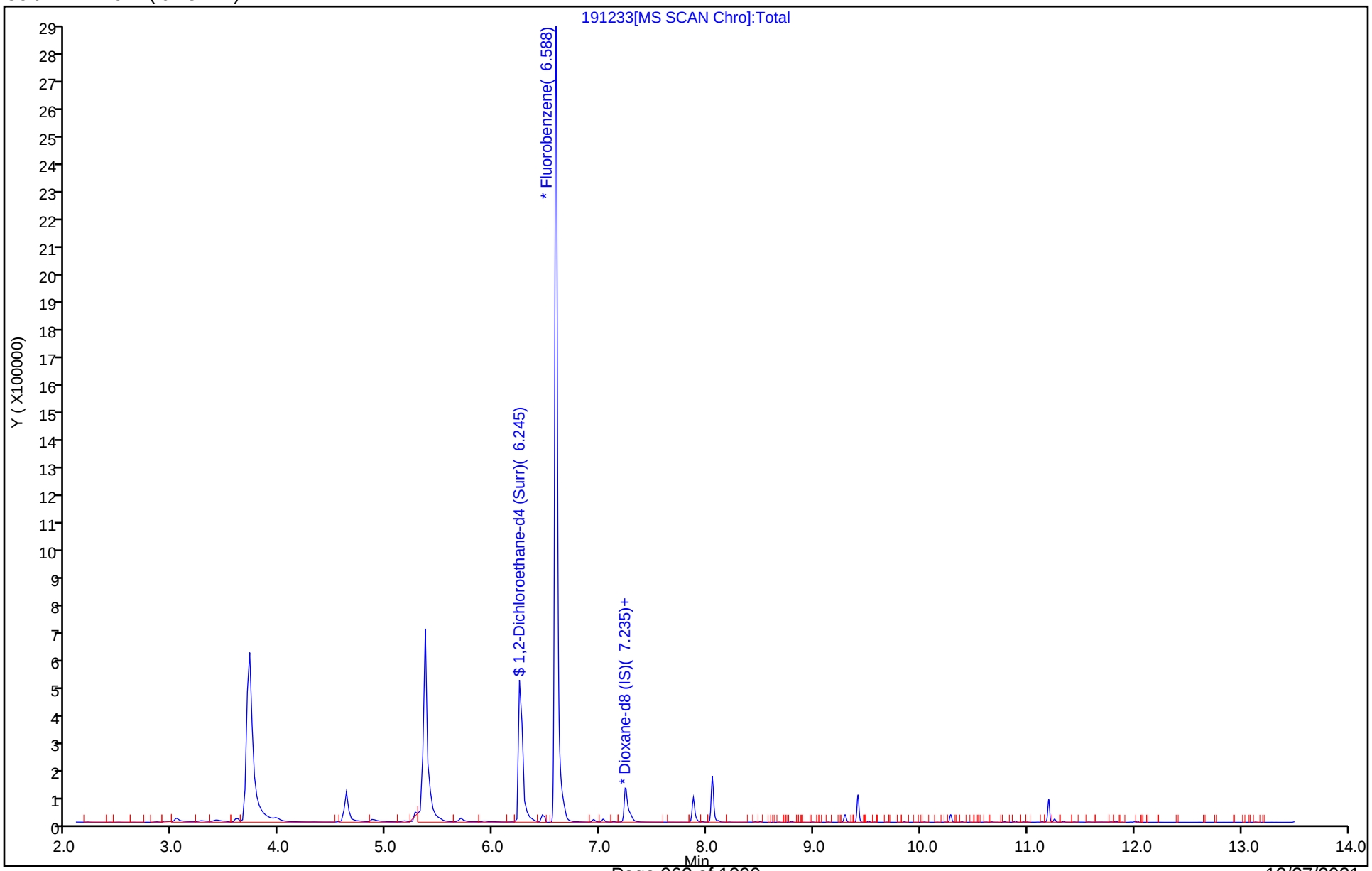
Report Date: 21-Dec-2021 23:47:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191233.D

Injection Date:	21-Dec-2021 22:45:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-161553-A-25	Lab Sample ID:	240-161553-25	Worklist Smp#:	11
Client ID:	DUP-02				
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191233.D				
Lims ID:	240-161553-A-25				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	21-Dec-2021 22:45:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-011				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 23:47:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.6	87.68

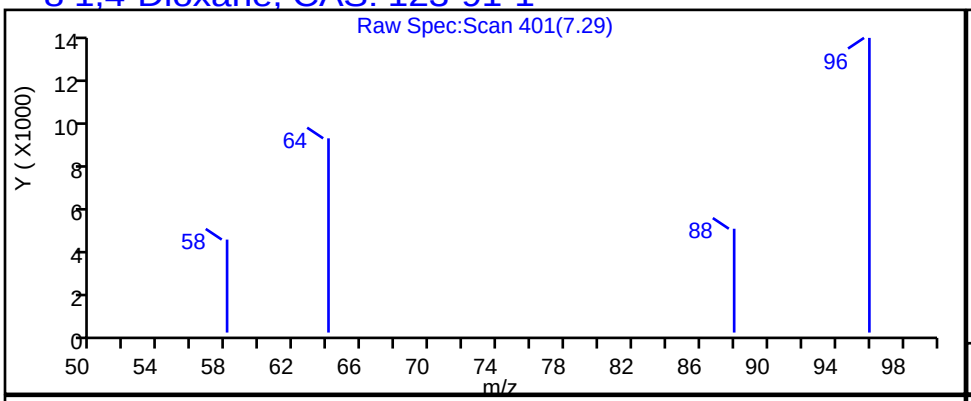
Report Date: 21-Dec-2021 23:47:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

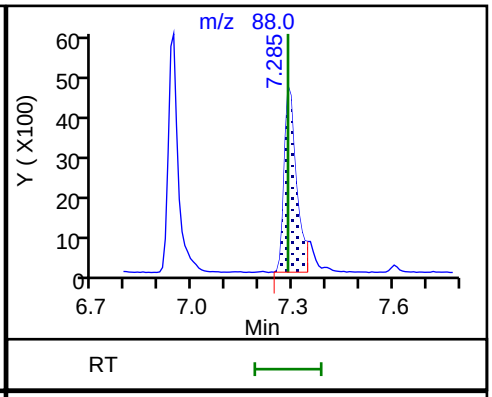
Eurofins TestAmerica, Canton

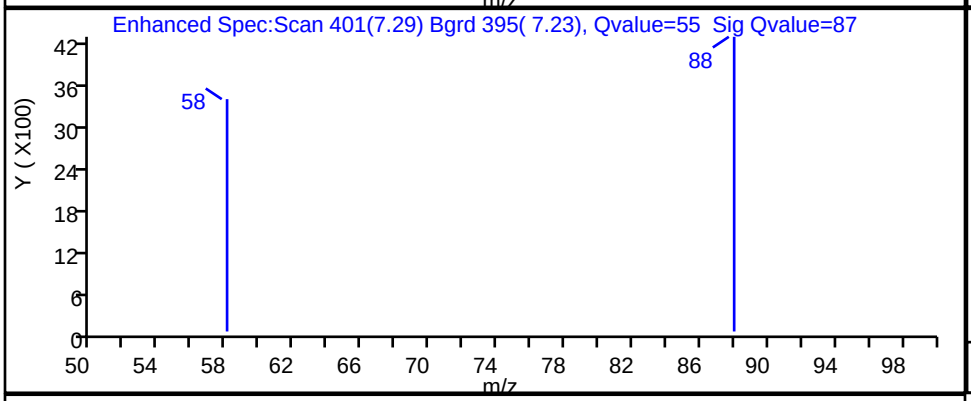
Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191233.D

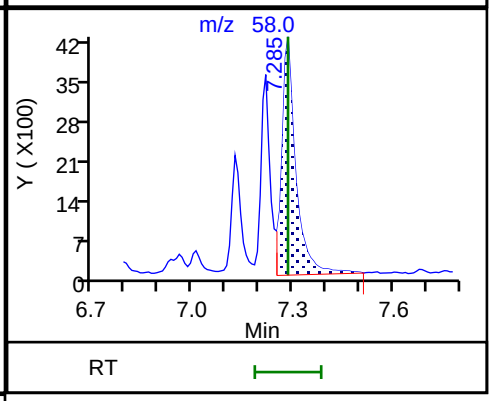
Injection Date:	21-Dec-2021 22:45:30	Instrument ID:	A3UX18		
Lims ID:	240-161553-A-25	Lab Sample ID:	240-161553-25		
Client ID:	DUP-02				
Operator ID:	434006	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

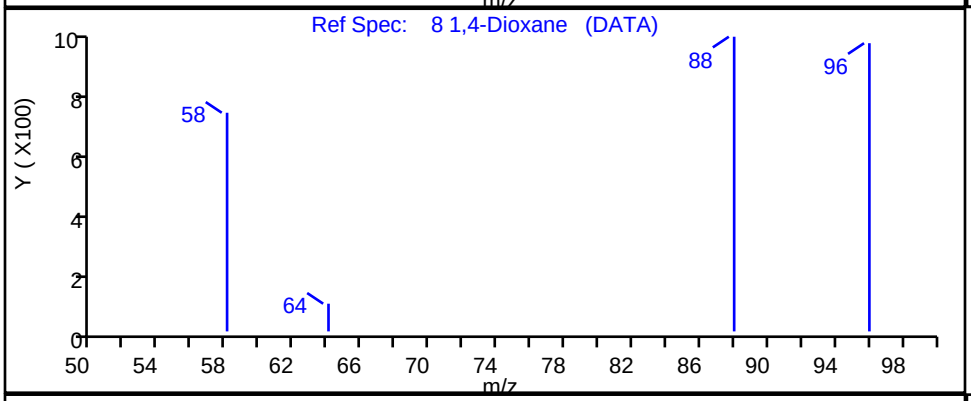
8 1,4-Dioxane, CAS: 123-91-1

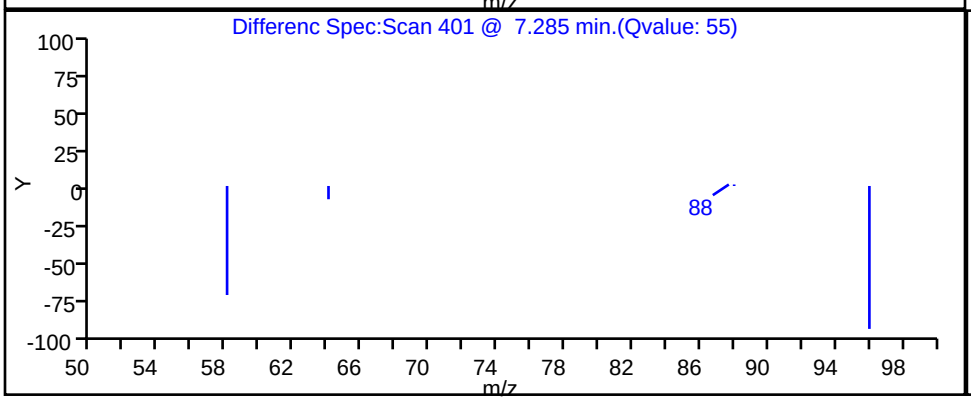


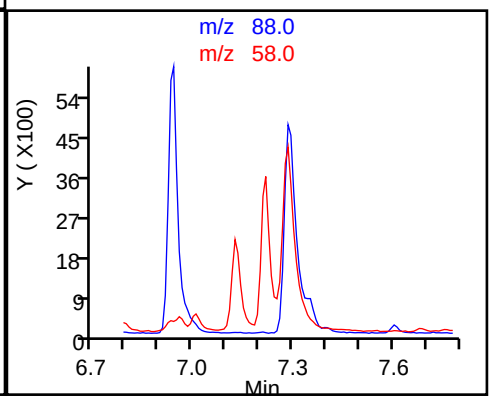












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 509326

SDG No.:

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/21/2021 16:50 Calibration End Date: 10/21/2021 19:44 Calibration ID: 62881

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-509326/3	190503.D
Level 2	IC 240-509326/4	190504.D
Level 3	IC 240-509326/5	190505.D
Level 4	IC 240-509326/6	190506.D
Level 5	ICIS 240-509326/7	190507.D
Level 6	IC 240-509326/8	190508.D
Level 7	IC 240-509326/9	190509.D
Level 8	IC 240-509326/10	190510.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 1.4707	1.8967 1.4714	1.6075 1.5735	1.5193	1.4727	Ave		1.5731				9.7		35.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2548	+++++ 0.2573	0.2888 0.2630	0.2816	0.2547	Ave		0.2667				5.6		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 509326

SDG No.:

Instrument ID: A3UX18 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/21/2021 16:50 Calibration End Date: 10/21/2021 19:44 Calibration ID: 62881

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-509326/3	190503.D
Level 2	IC 240-509326/4	190504.D
Level 3	IC 240-509326/5	190505.D
Level 4	IC 240-509326/6	190506.D
Level 5	ICIS 240-509326/7	190507.D
Level 6	IC 240-509326/8	190508.D
Level 7	IC 240-509326/9	190509.D
Level 8	IC 240-509326/10	190510.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Ave	+++++ 64616	3344 137269	6839 288406	13773	26691	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 4018790	+++++ 8237114	434687 16859249	913525	1617427	+++++ 25.0	+++++ 50.0	2.50 100	5.00	10.0

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190503.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 21-Oct-2021 16:50:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-003
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:47 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 18:55:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	99	108544	0.5000	0.6311	
* 7 Fluorobenzene	96	6.588	6.588	0.000	100	7823976	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.244	-0.001	98	211819	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	53	1731	1.00	1.26	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268	Amount Added:	0.15	Units: uL
vm25UX18IS_00003	Amount Added:	7.28	Units: uL
vm50ss_00456	Amount Added:	0.15	Units: uL

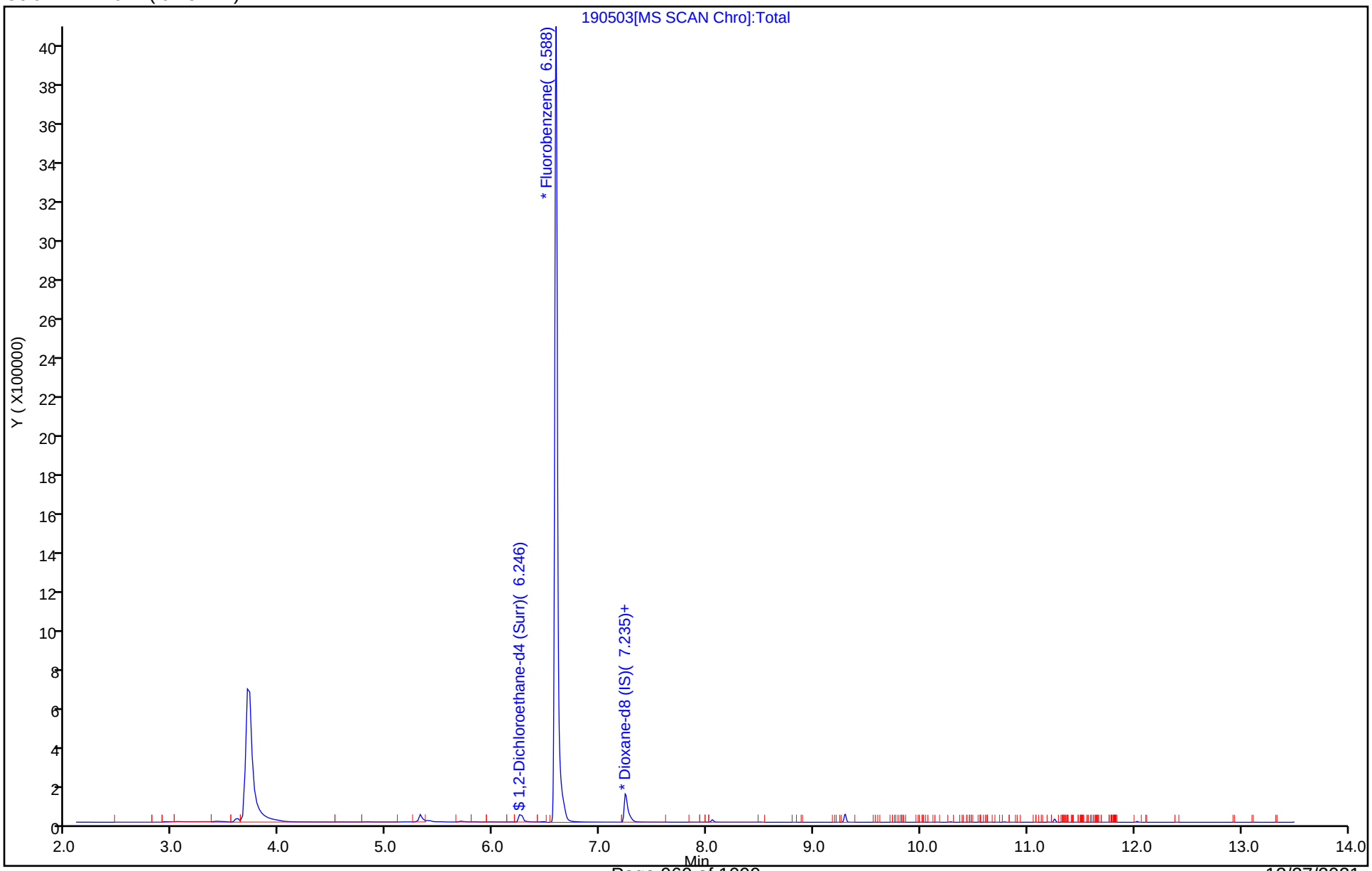
Report Date: 21-Oct-2021 20:29:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190503.D

Injection Date:	21-Oct-2021 16:50:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190504.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 21-Oct-2021 17:15:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-004
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:47 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 19:34:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	99	213373	1.00	1.26	
* 7 Fluorobenzene	96	6.589	6.588	0.001	100	7682089	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.244	7.244	0.000	98	213919	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	55	3344	2.00	2.41	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268 Amount Added: 0.30 Units: uL
vm25UX18IS_00003 Amount Added: 7.28 Units: uL
vm50ss_00456 Amount Added: 0.30 Units: uL

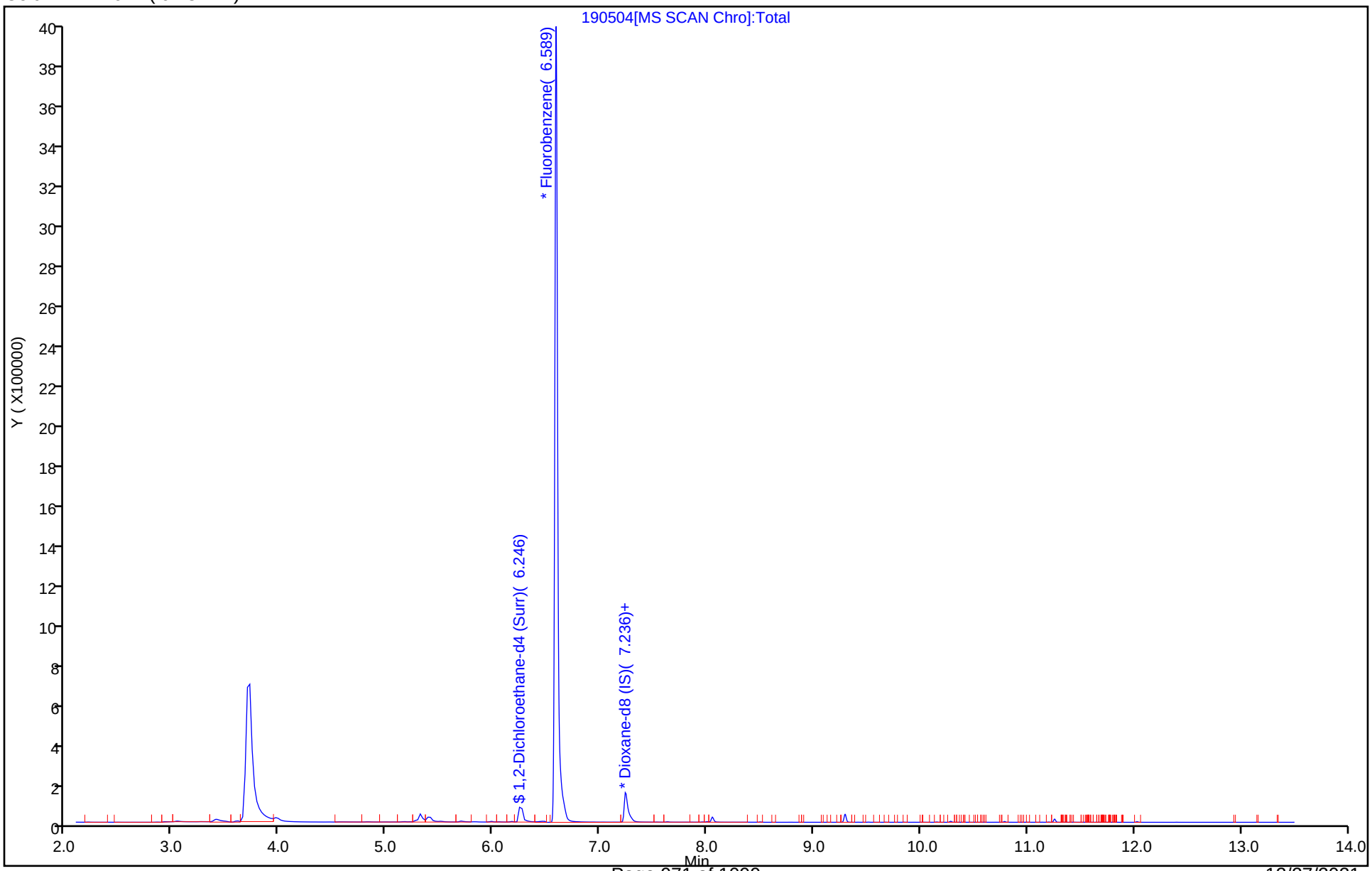
Report Date: 21-Oct-2021 20:29:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190504.D

Injection Date:	21-Oct-2021 17:15:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190505.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 21-Oct-2021 17:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-005
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:48 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 19:34:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	434687	2.50	2.71	
* 7 Fluorobenzene	96	6.587	6.588	-0.001	100	7304681	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.236	7.244	-0.008	97	206478	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	55	6839	5.00	5.11	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268	Amount Added:	0.75	Units: uL
vm25UX18IS_00003	Amount Added:	7.28	Units: uL
vm50ss_00456	Amount Added:	0.75	Units: uL

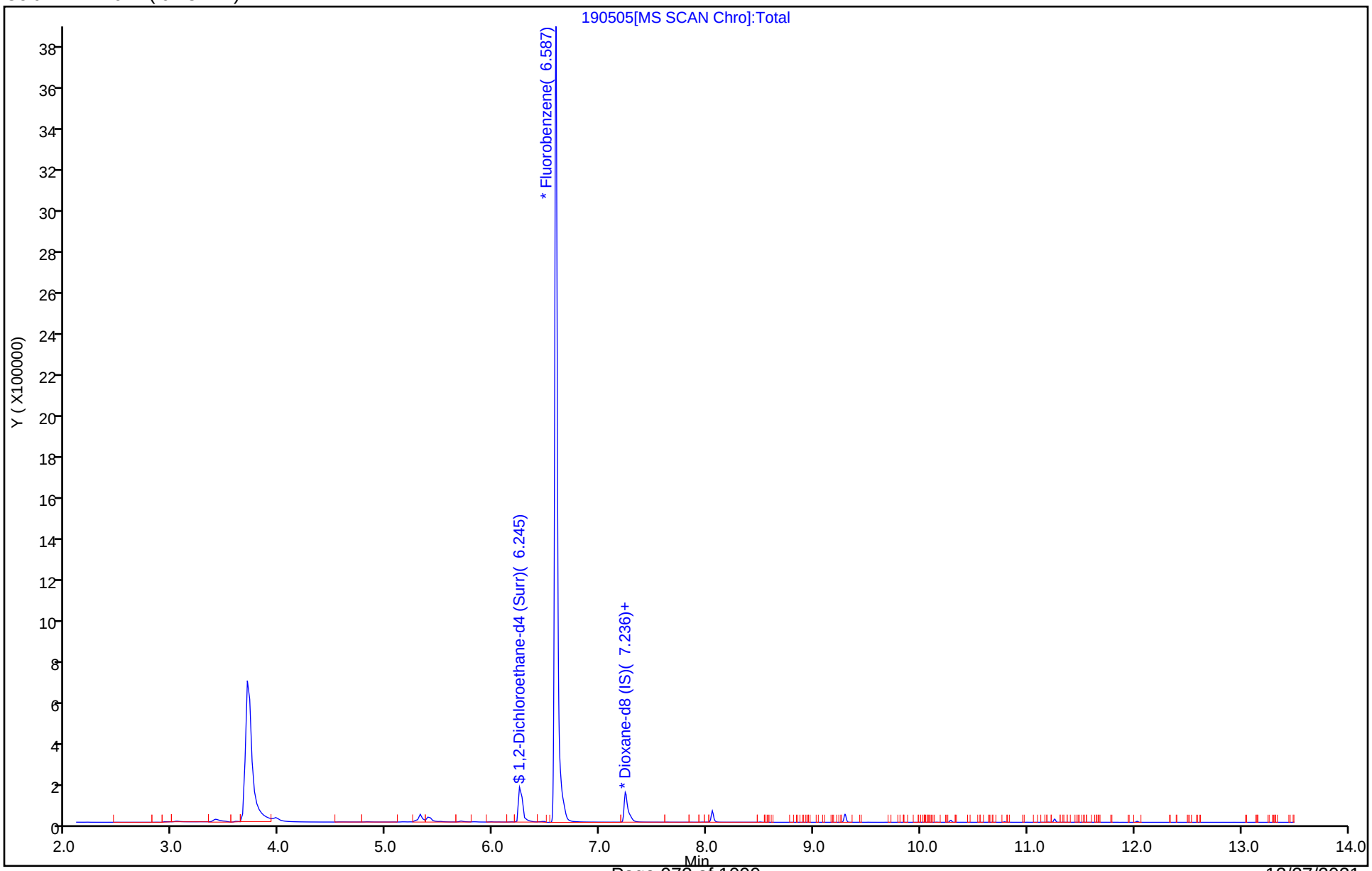
Report Date: 21-Oct-2021 20:29:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190505.D

Injection Date:	21-Oct-2021 17:40:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190506.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 21-Oct-2021 18:05:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-006
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:48 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 19:34:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	913525	5.00	5.28	
* 7 Fluorobenzene	96	6.588	6.588	0.000	100	7871921	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.244	7.244	0.000	99	219986	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	54	13773	10.0	9.66	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268 Amount Added: 1.50 Units: uL
vm25UX18IS_00003 Amount Added: 7.28 Units: uL
vm50ss_00456 Amount Added: 1.50 Units: uL

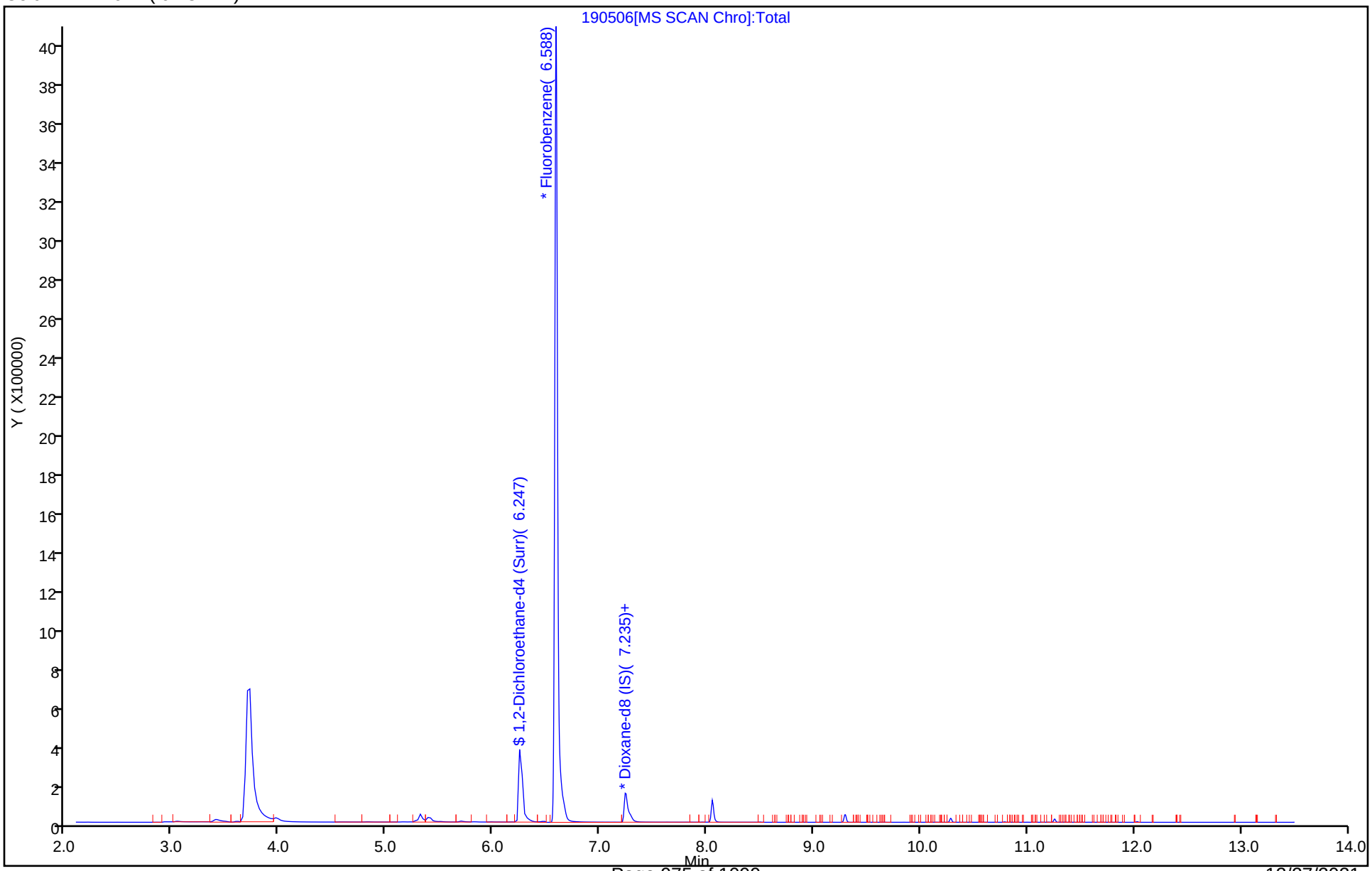
Report Date: 21-Oct-2021 20:29:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190506.D

Injection Date:	21-Oct-2021 18:05:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190507.D				
Lims ID:	icis				
Client ID:					
Sample Type:	ICIS	Calib Level:	5		
Inject. Date:	21-Oct-2021 18:29:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0114325-007				
Operator ID:	434006	Instrument ID:	A3UX18		
Sublist:	chrom-8260SIM_18*sub6				
Method:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Oct-2021 20:29:46	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1649				
First Level Reviewer: seymourc		Date:	21-Oct-2021 20:29:46		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	1617427	10.0	9.55	
* 7 Fluorobenzene	96	6.588	6.588	0.000	100	7703977	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.244	7.244	0.000	98	219909	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.286	0.000	53	26691	20.0	18.7	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268	Amount Added:	3.00	Units: uL
vm25UX18IS_00003	Amount Added:	7.28	Units: uL
vm50ss_00456	Amount Added:	3.00	Units: uL

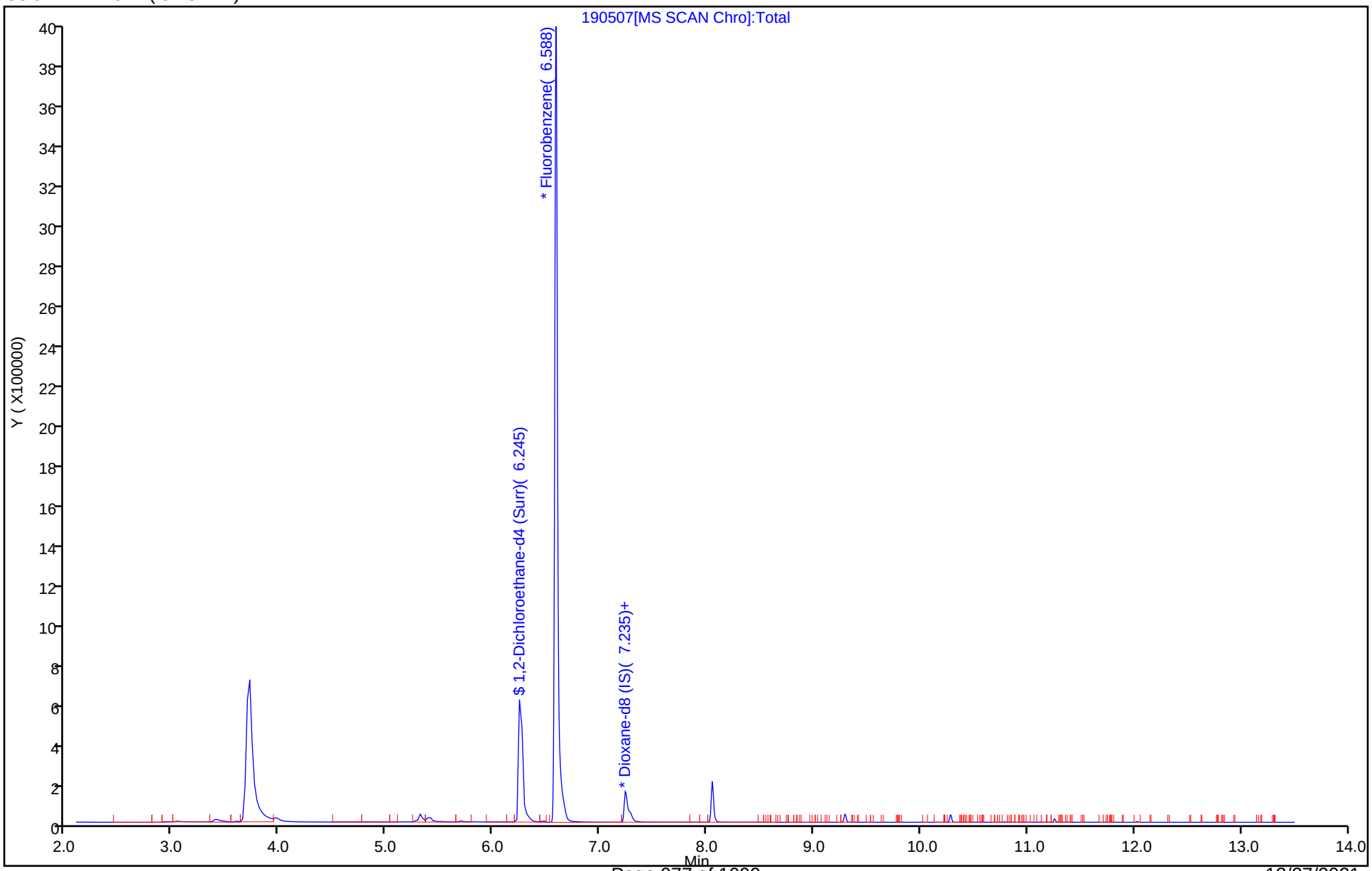
Report Date: 21-Oct-2021 20:29:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190507.D

Injection Date:	21-Oct-2021 18:29:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	icis			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190508.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 21-Oct-2021 18:54:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-008
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:49 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 19:35:00

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	4018790	25.0	23.9	
*	7 Fluorobenzene	96	6.587	6.588	-0.001	100	7654962	12.1	12.1	
*	9 Dioxane-d8 (IS)	96	7.242	7.244	-0.002	99	213238	242.7	242.7	
	8 1,4-Dioxane	88	7.284	7.286	-0.002	53	64616	50.0	46.7	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268 Amount Added: 7.50 Units: uL
vm25UX18IS_00003 Amount Added: 7.28 Units: uL
vm50ss_00456 Amount Added: 7.50 Units: uL

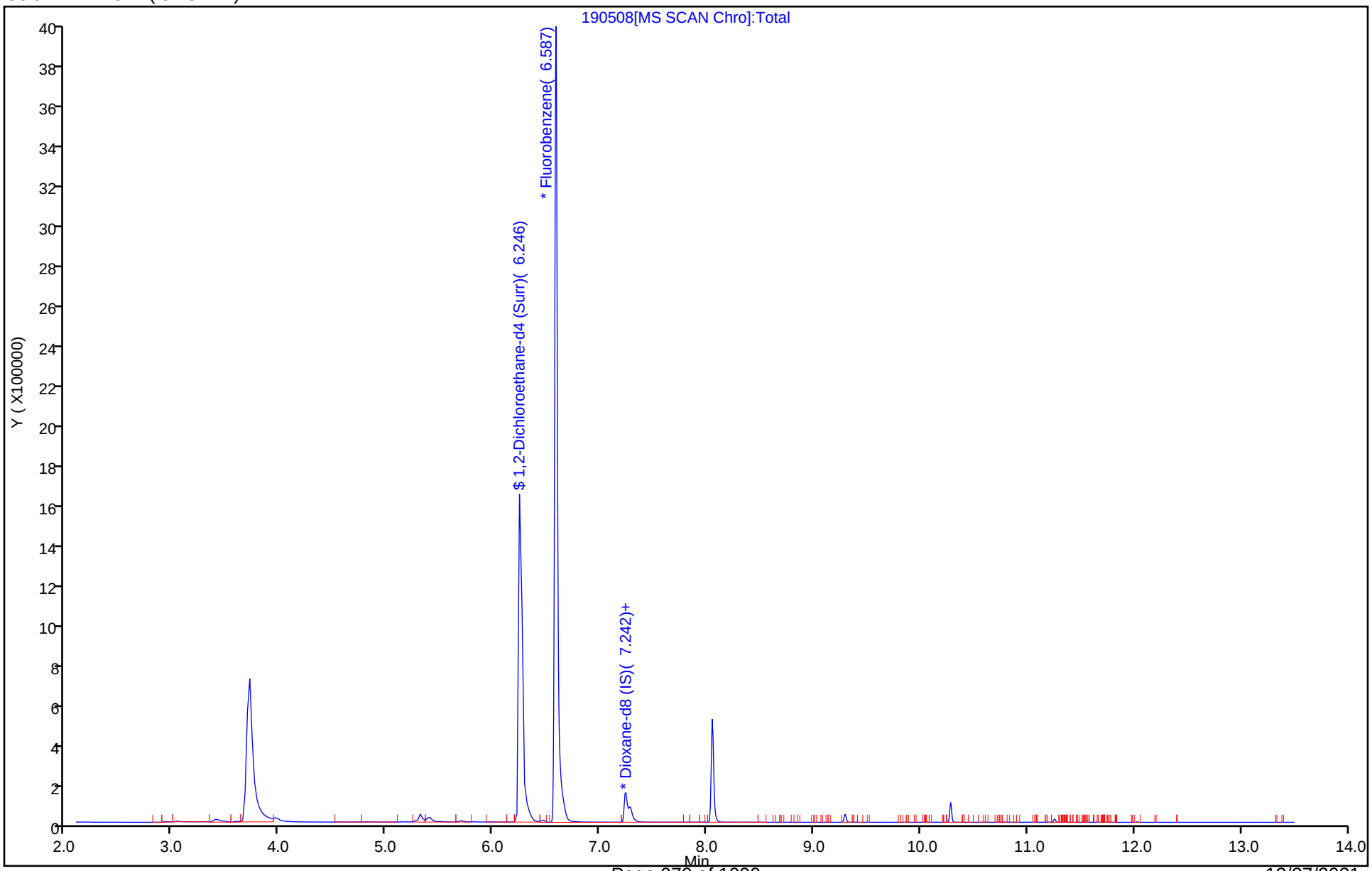
Report Date: 21-Oct-2021 20:29:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190508.D

Injection Date:	21-Oct-2021 18:54:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190509.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 21-Oct-2021 19:19:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-009
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:49 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 20:27:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	8237114	50.0	48.2	
* 7 Fluorobenzene	96	6.587	6.588	-0.001	100	7770057	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.244	-0.001	99	226383	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	53	137269	100.0	93.5	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268 Amount Added: 15.00 Units: uL
vm25UX18IS_00003 Amount Added: 7.28 Units: uL
vm50ss_00456 Amount Added: 15.00 Units: uL

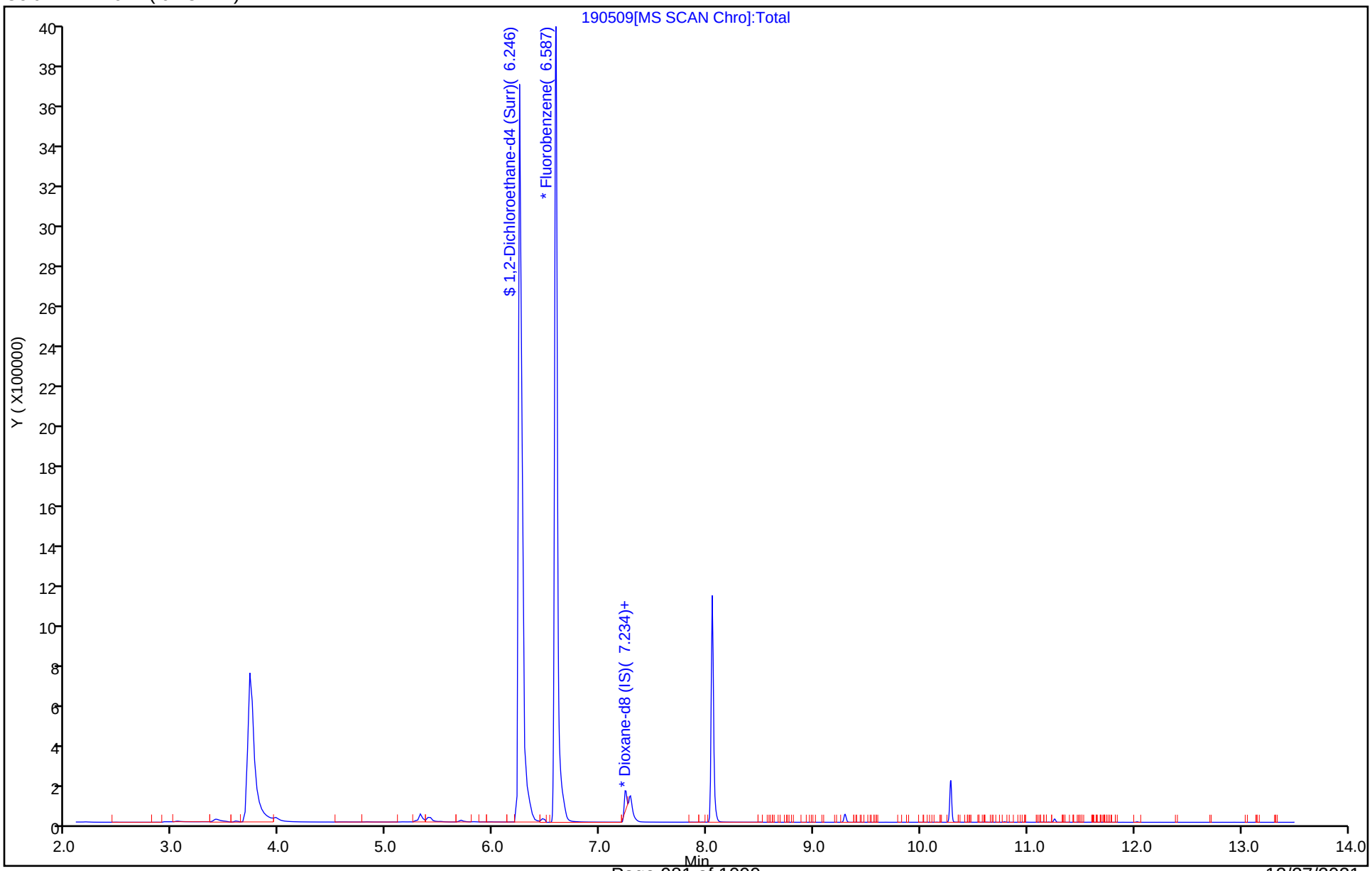
Report Date: 21-Oct-2021 20:29:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190509.D

Injection Date:	21-Oct-2021 19:19:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 21-Oct-2021 19:44:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-010
Operator ID: 434006 Instrument ID: A3UX18
Sublist: chrom-8260SIM_18*sub6

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Oct-2021 20:29:50 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: seymourc Date: 21-Oct-2021 20:27:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	16859249	100.0	98.6	
* 7 Fluorobenzene	96	6.585	6.588	-0.003	100	7776975	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.244	-0.001	100	222391	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	53	288406	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00268 Amount Added: 30.00 Units: uL
vm25UX18IS_00003 Amount Added: 7.28 Units: uL
vm50ss_00456 Amount Added: 30.00 Units: uL

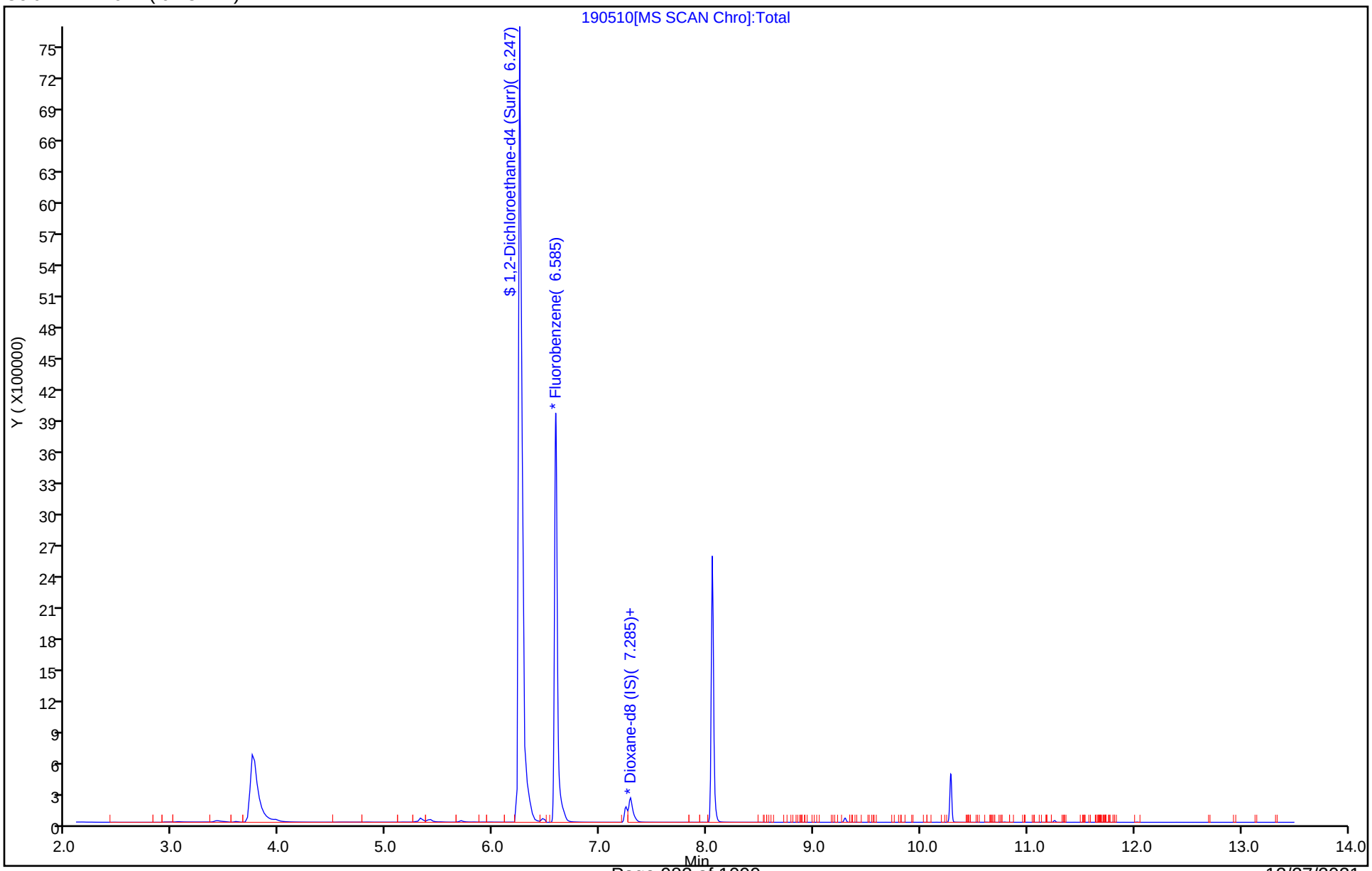
Report Date: 21-Oct-2021 20:29:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Injection Date:	21-Oct-2021 19:44:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

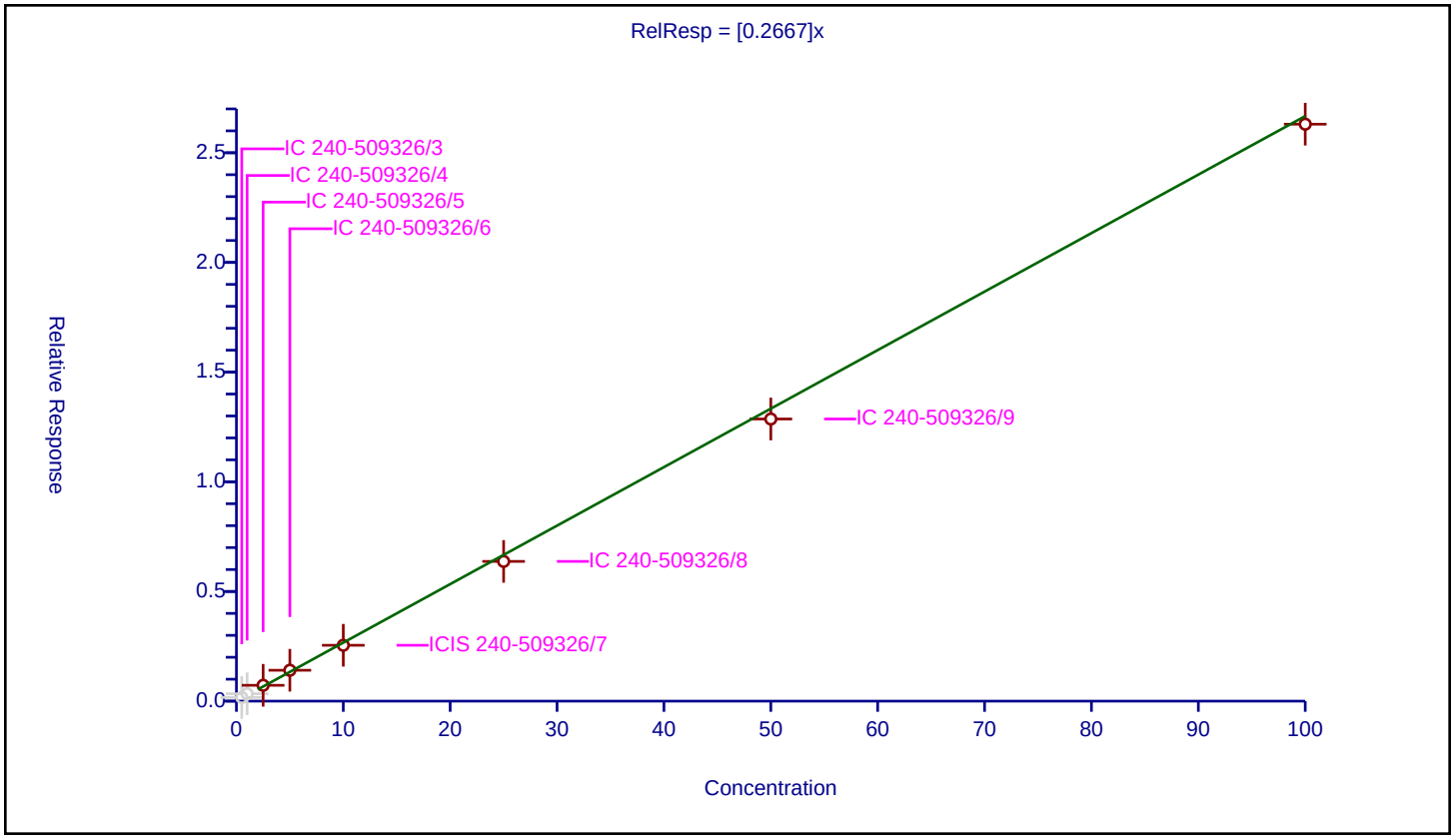
Curve Coefficients

Intercept:	0
Slope:	0.2667

Error Coefficients

Standard Error:	8620000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-509326/3	0.5	0.168329	12.133333	7823976.0	0.336658	N
2	IC 240-509326/4	1.0	0.337008	12.133333	7682089.0	0.337008	N
3	IC 240-509326/5	2.5	0.72203	12.133333	7304681.0	0.288812	Y
4	IC 240-509326/6	5.0	1.408056	12.133333	7871921.0	0.281611	Y
5	ICIS 240-509326/7	10.0	2.547357	12.133333	7703977.0	0.254736	Y
6	IC 240-509326/8	25.0	6.369897	12.133333	7654962.0	0.254796	Y
7	IC 240-509326/9	50.0	12.862666	12.133333	7770057.0	0.257253	Y
8	IC 240-509326/10	100.0	26.303143	12.133333	7776975.0	0.263031	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

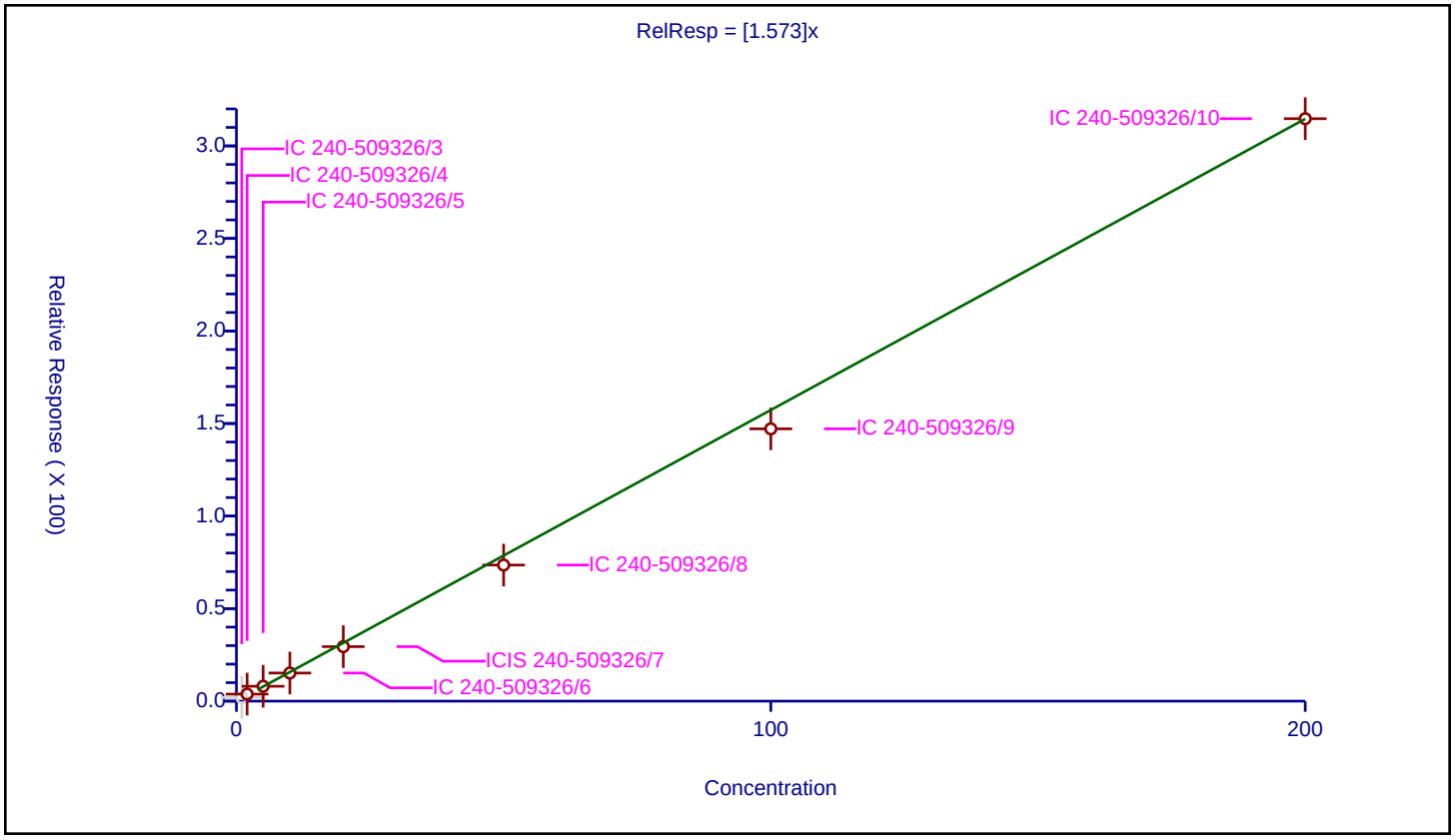
Curve Coefficients

Intercept:	0
Slope:	1.573

Error Coefficients

Standard Error:	133000
Relative Standard Error:	9.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-509326/3	1.0	1.983089	242.666667	211819.0	1.983089	N
2	IC 240-509326/4	2.0	3.793386	242.666667	213919.0	1.896693	Y
3	IC 240-509326/5	5.0	8.037647	242.666667	206478.0	1.607529	Y
4	IC 240-509326/6	10.0	15.193003	242.666667	219986.0	1.5193	Y
5	ICIS 240-509326/7	20.0	29.453165	242.666667	219909.0	1.472658	Y
6	IC 240-509326/8	50.0	73.53356	242.666667	213238.0	1.470671	Y
7	IC 240-509326/9	100.0	147.142721	242.666667	226383.0	1.471427	Y
8	IC 240-509326/10	200.0	314.700337	242.666667	222391.0	1.573502	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 1.5375	1.8357 1.5662	1.7028 1.5384	1.6415	1.6040	Ave		1.6323				6.6		35.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3150	0.3083 0.3197	0.3159 0.3393	0.3206	0.3166	Ave		0.3193				3.0		35.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1 Analy Batch No.: 503003

SDG No.:

Instrument ID: A3UX20 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/09/2021 14:25 Calibration End Date: 09/09/2021 17:16 Calibration ID: 62639

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-503003/3	201661.D
Level 2	IC 240-503003/4	201662.D
Level 3	IC 240-503003/5	201663.D
Level 4	IC 240-503003/6	201664.D
Level 5	ICIS 240-503003/7	201665.D
Level 6	IC 240-503003/8	201666.D
Level 7	IC 240-503003/9	201667.D
Level 8	IC 240-503003/10	201668.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	14DD8	Ave	+++++ 36824	1616 77285	4129 162137	8243	16121	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 2674197	99153 5574700	260453 11798688	541364	1068809	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	09-Sep-2021 14:25:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-003				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:15		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	60669	0.5000	0.5822	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3263223	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	94647	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	40	1001	1.00	1.30	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.15	Units: uL
vm50ss_00453	Amount Added:	0.15	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

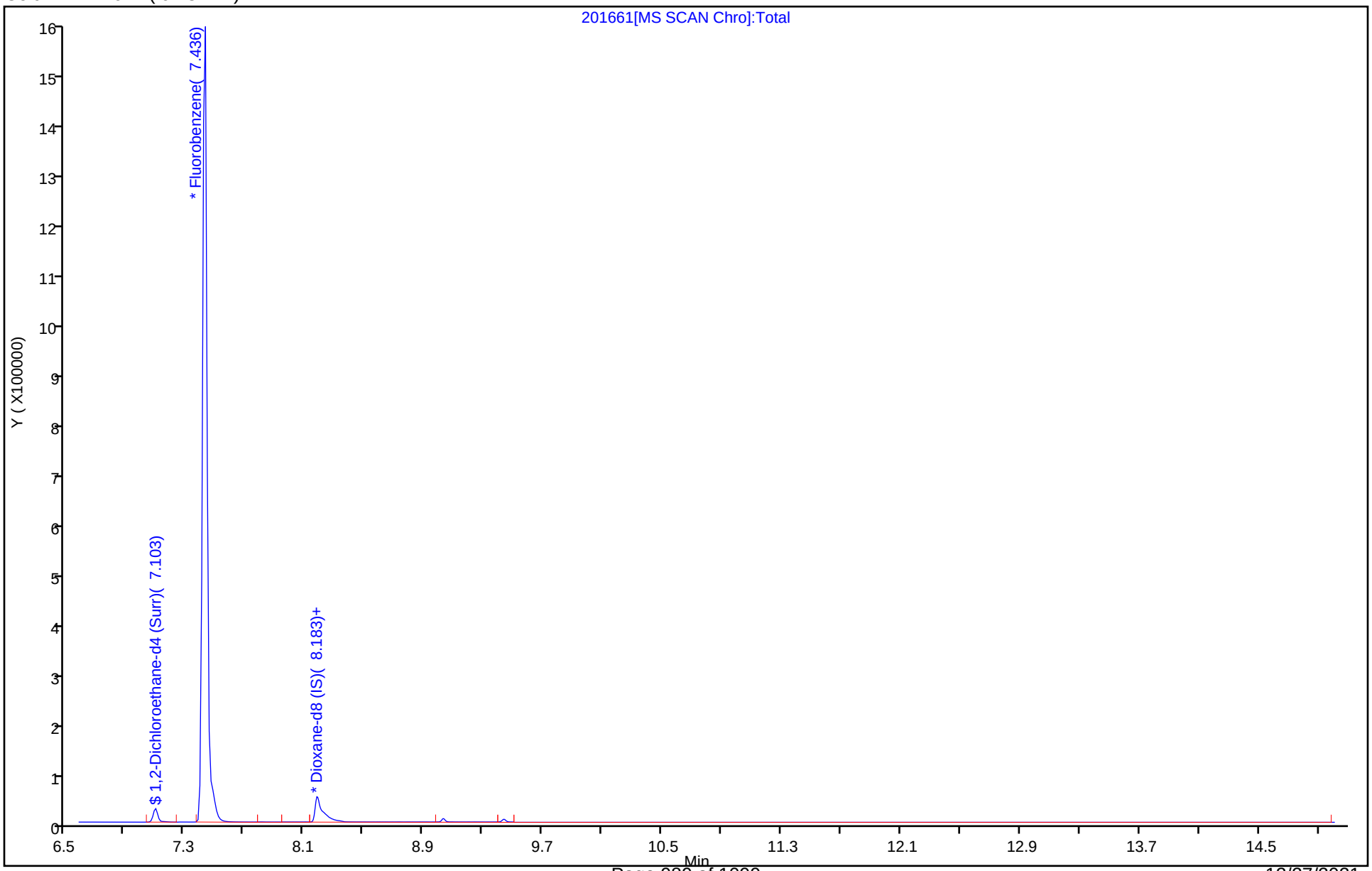
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D

Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

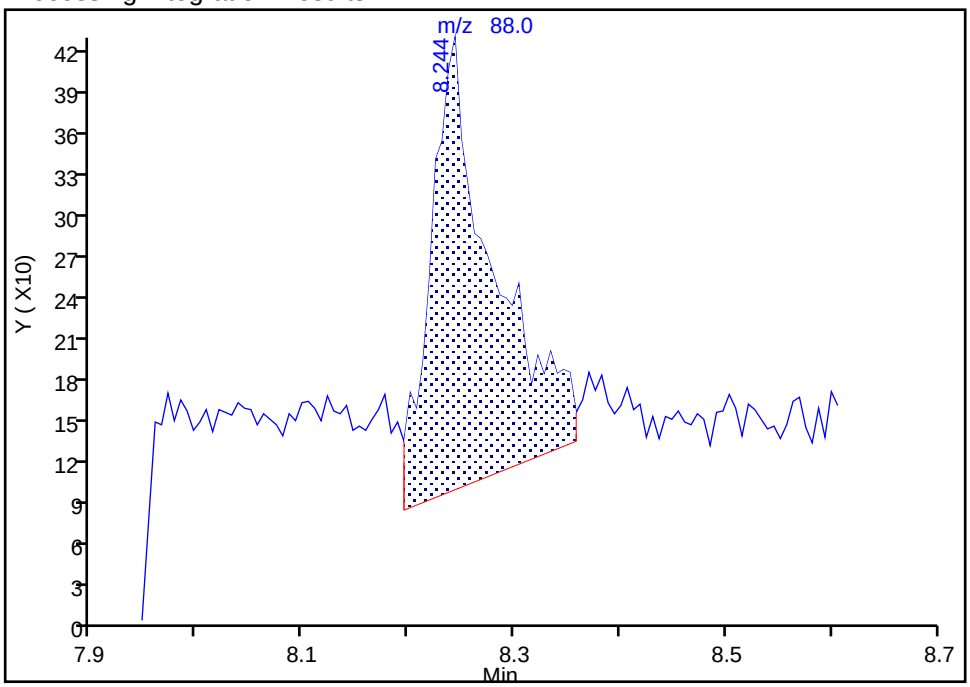
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201661.D				
Injection Date:	09-Sep-2021 14:25:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

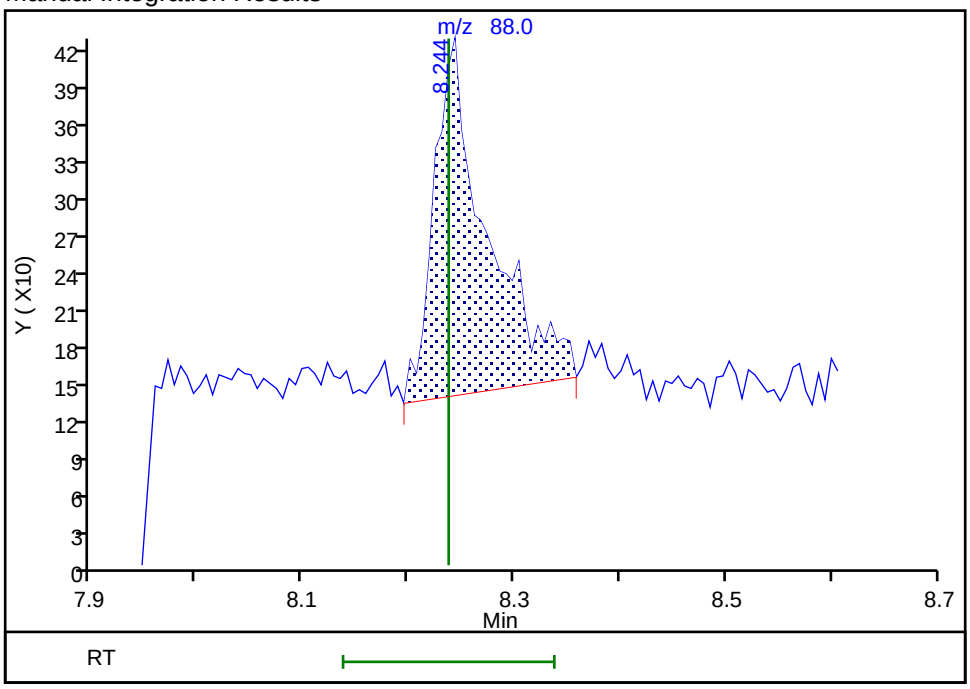
Processing Integration Results

RT: 8.24
Area: 1361
Amount: 1.197683
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1001
Amount: 1.295854
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:10:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	09-Sep-2021 14:49:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:17	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:11:35		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	78	99153	1.00	0.9655	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3215764	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	88032	200.0	200.0	
8 1,4-Dioxane	88	8.244	8.238	0.006	49	1616	2.00	2.25	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264	Amount Added:	0.30	Units: uL
vm50ss_00453	Amount Added:	0.30	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

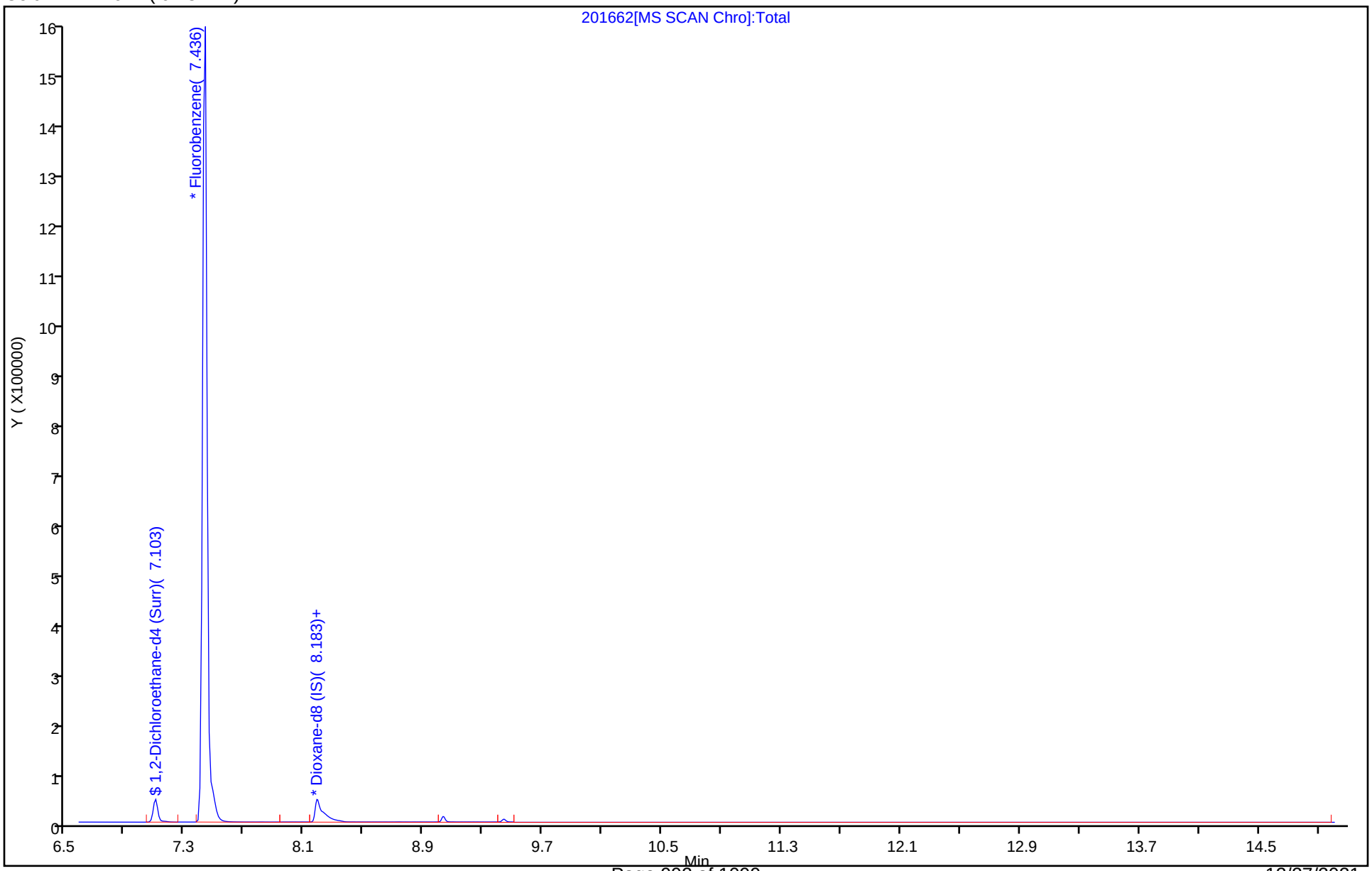
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D

Injection Date:	09-Sep-2021 14:49:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

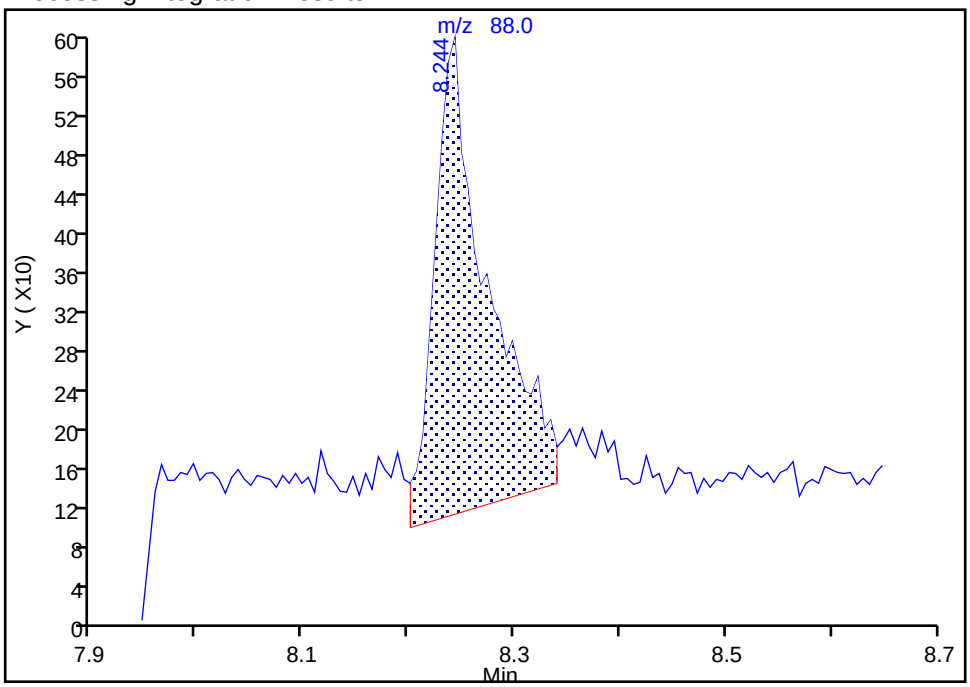
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201662.D
Injection Date: 09-Sep-2021 14:49:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

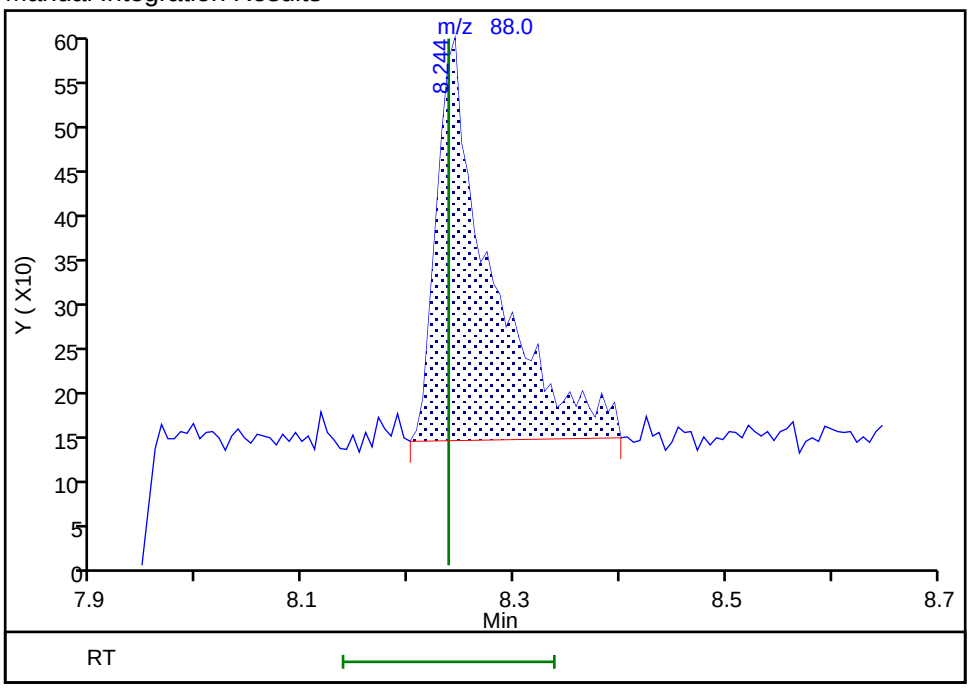
Processing Integration Results

RT: 8.24
Area: 1696
Amount: 1.906648
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 1616
Amount: 2.249207
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 15:11:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Sep-2021 15:14:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-005
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 16:51:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	99	260453	2.50	2.47	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3297506	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	96993	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	55	4129	5.00	5.22	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 0.75 Units: uL
vm50ss_00453 Amount Added: 0.75 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

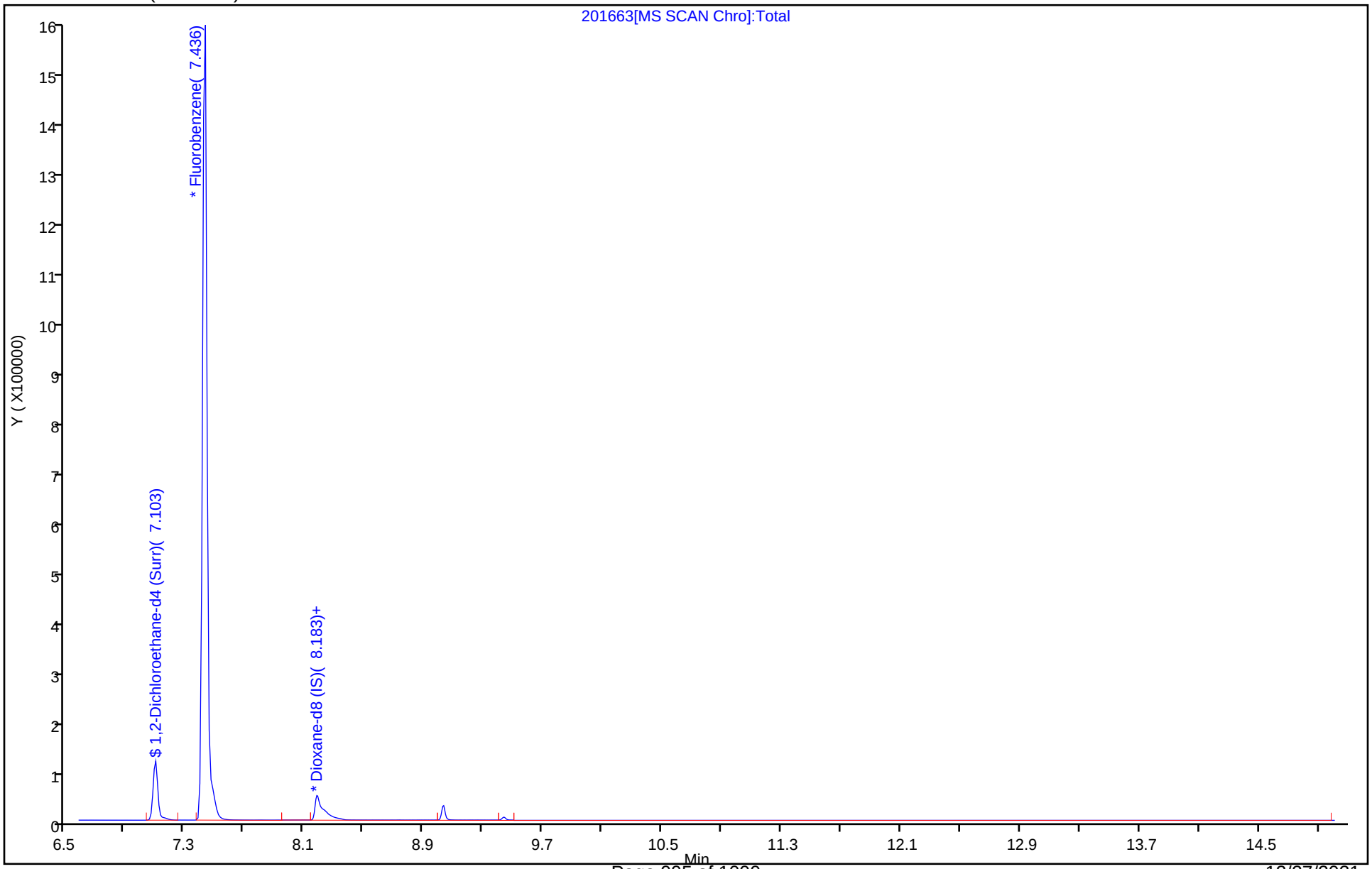
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D

Injection Date:	09-Sep-2021 15:14:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

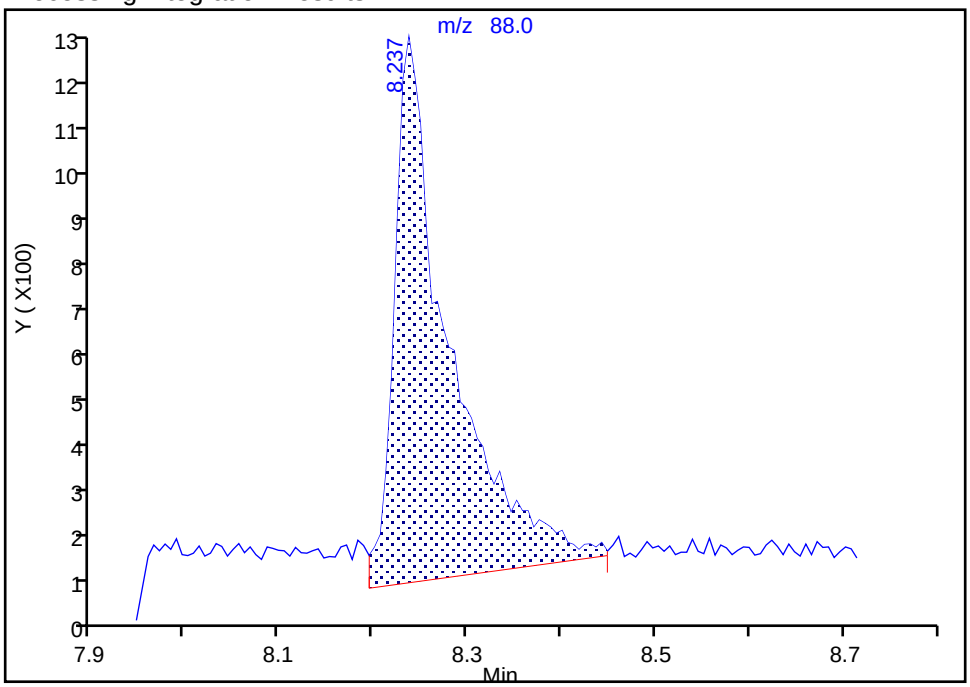
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201663.D
Injection Date: 09-Sep-2021 15:14:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

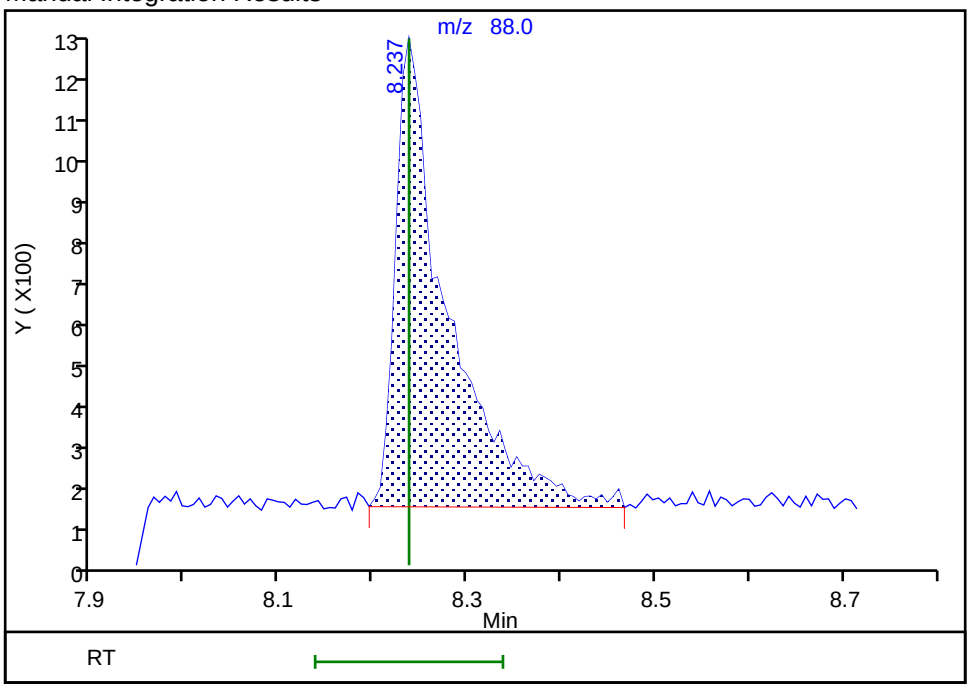
Processing Integration Results

RT: 8.24
Area: 4620
Amount: 5.267691
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 4129
Amount: 5.215948
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:51:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Sep-2021 15:38:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-006
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:18 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 16:52:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	541364	5.00	5.02	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3377511	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	100431	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	51	8243	10.0	10.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453 Amount Added: 1.50 Units: uL
vmdioxanew_00264 Amount Added: 1.50 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

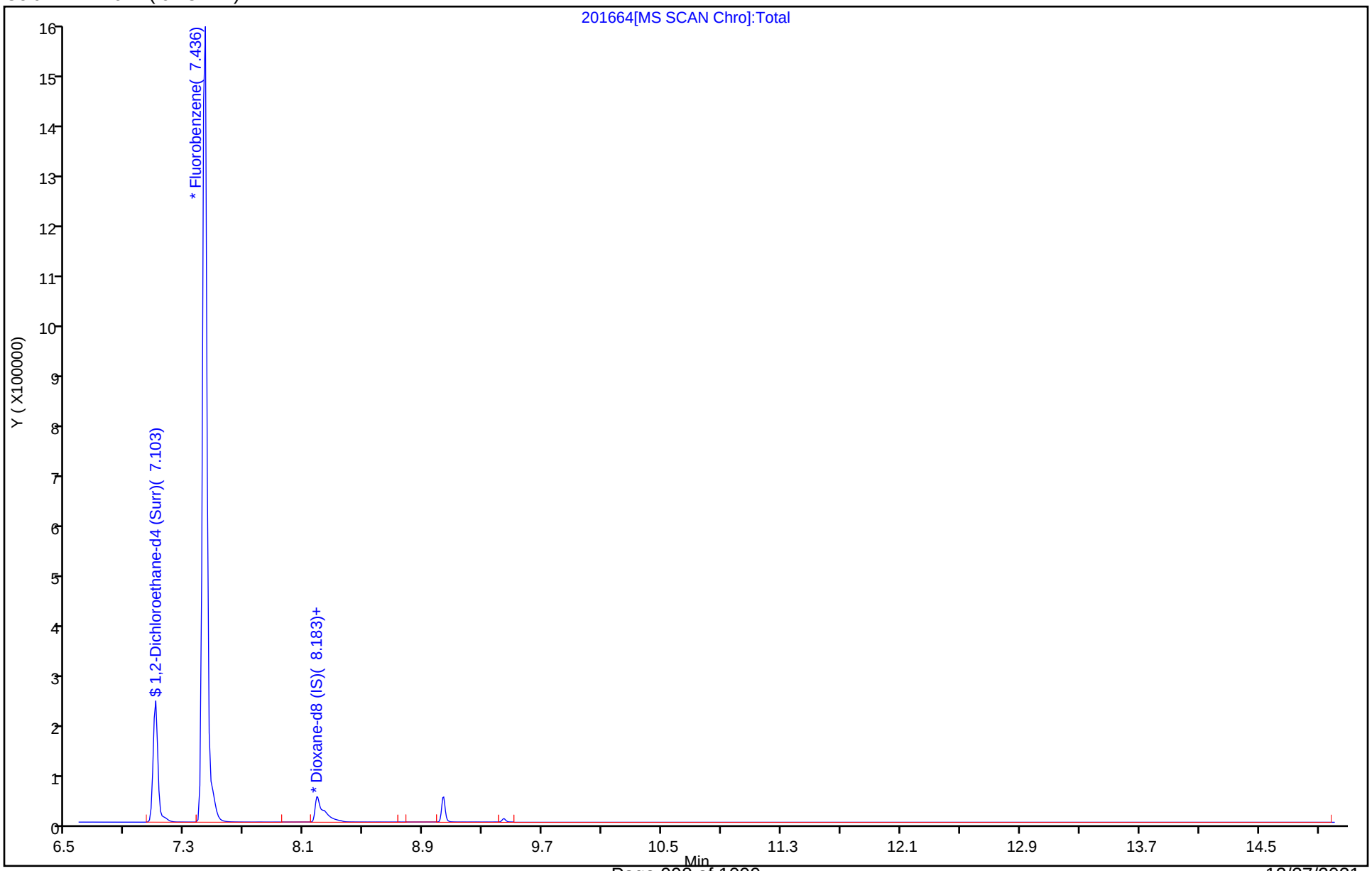
Report Date: 09-Sep-2021 17:49:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D

Injection Date:	09-Sep-2021 15:38:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

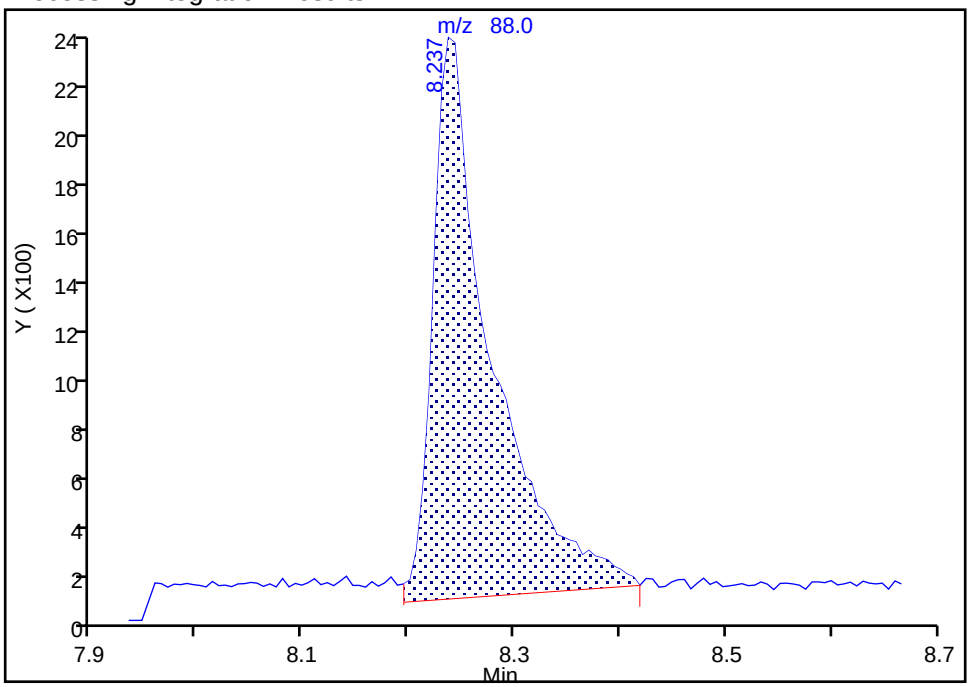
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201664.D
Injection Date: 09-Sep-2021 15:38:30 Instrument ID: A3UX20
Lims ID: IC
Client ID:
Operator ID: 434006 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

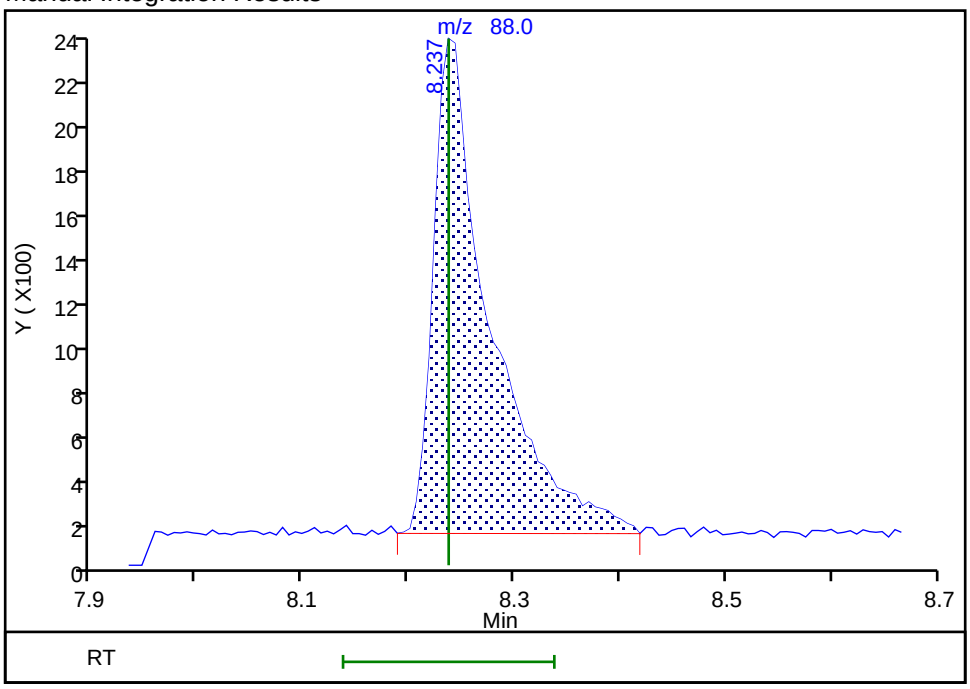
Processing Integration Results

RT: 8.24
Area: 8718
Amount: 9.782476
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 8243
Amount: 10.056486
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:52:21
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 09-Sep-2021 16:03:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-007
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:17 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 17:49:17

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	1068809	10.0	9.91	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3376203	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	96	100508	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.238	0.000	49	16121	20.0	19.7	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 3.00 Units: uL
vm50ss_00453 Amount Added: 3.00 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

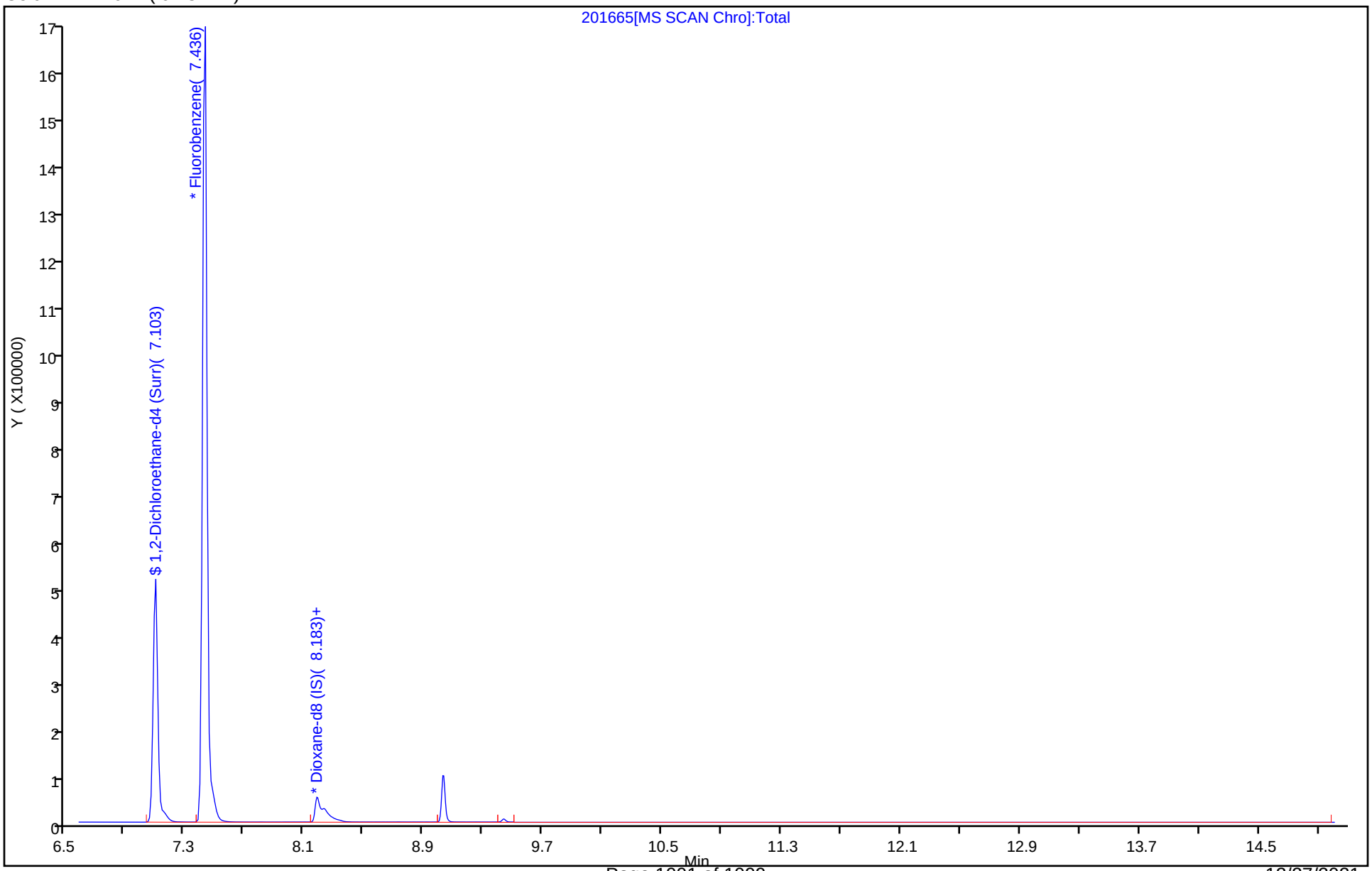
Report Date: 09-Sep-2021 17:49:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D

Injection Date:	09-Sep-2021 16:03:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

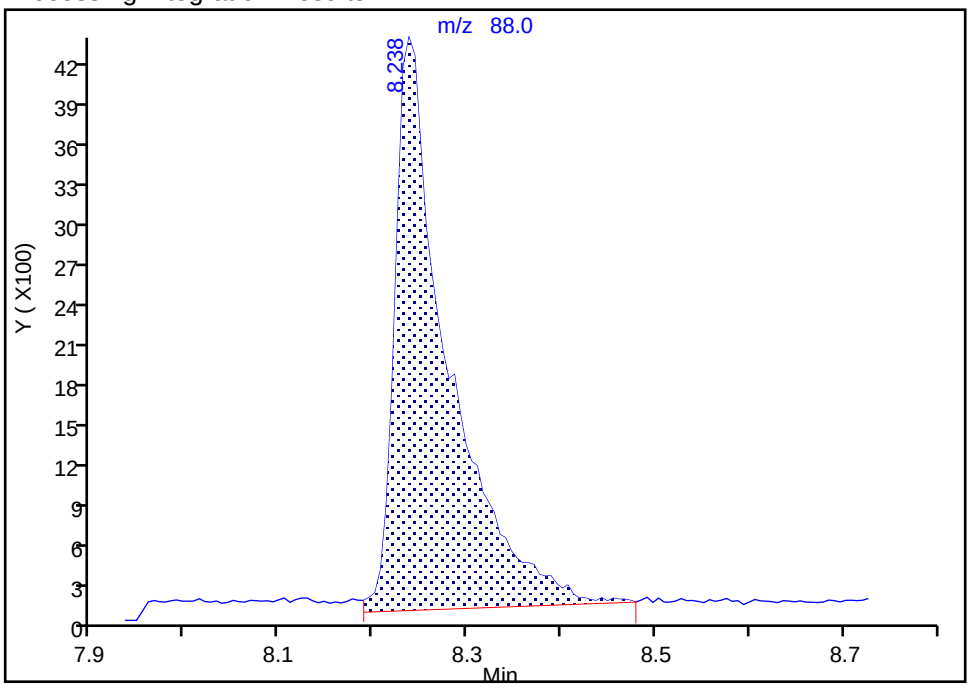
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201665.D
Injection Date: 09-Sep-2021 16:03:30 Instrument ID: A3UX20
Lims ID: ICIS
Client ID:
Operator ID: 434006 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

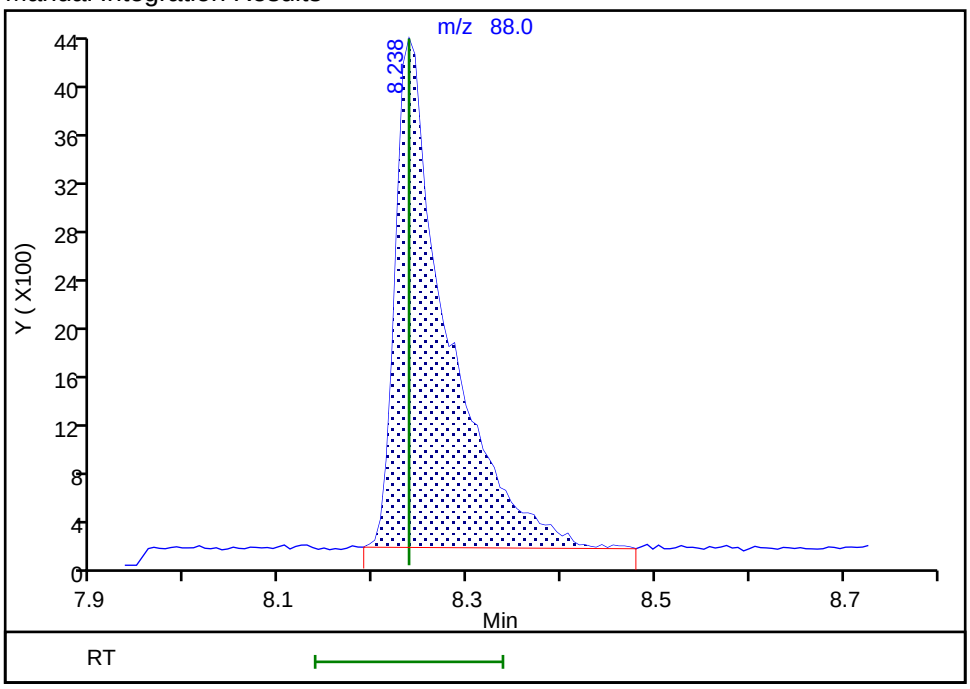
Processing Integration Results

RT: 8.24
Area: 16911
Amount: 19.131260
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 16121
Amount: 19.652602
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	09-Sep-2021 16:27:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-008				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:19	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 16:54:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	2674197	25.0	24.7	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3395321	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.189	-0.006	92	95801	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	36824	50.0	47.1	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vm50ss_00453	Amount Added:	7.50	Units: uL
vmdioxanew_00264	Amount Added:	7.50	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

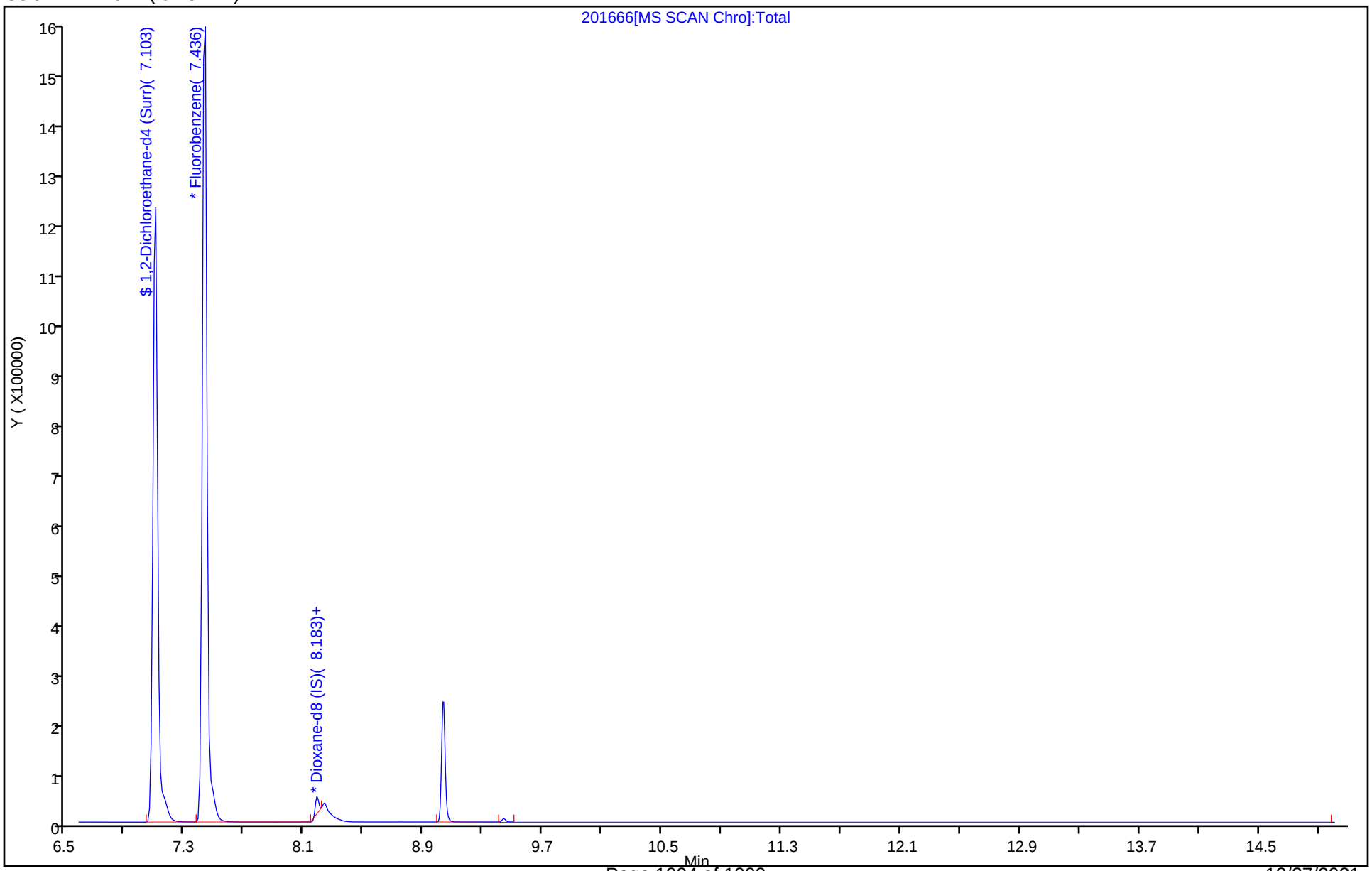
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D

Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

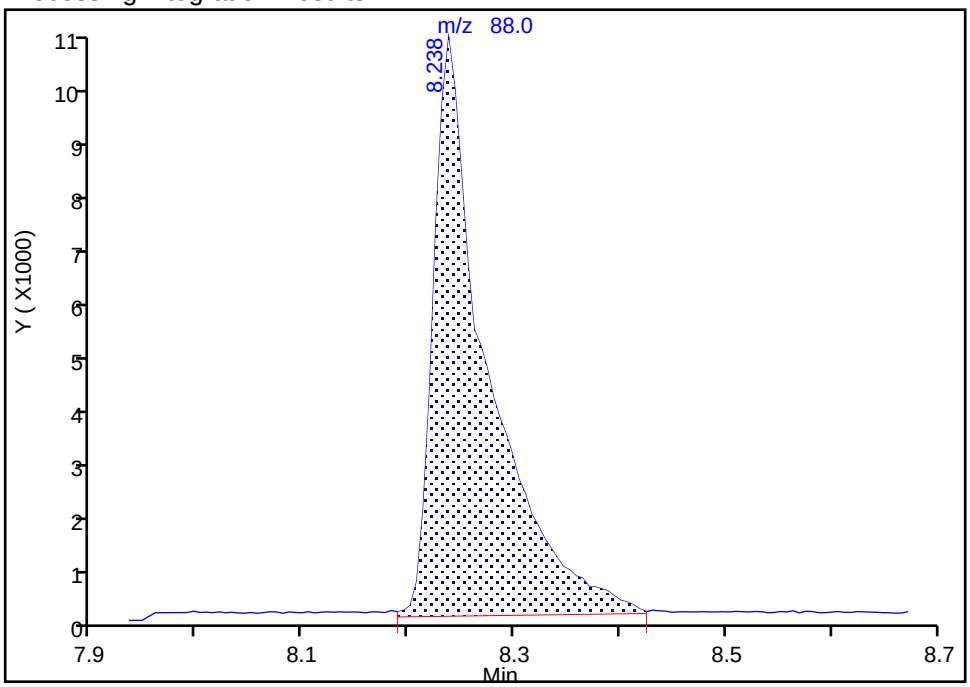
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201666.D				
Injection Date:	09-Sep-2021 16:27:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

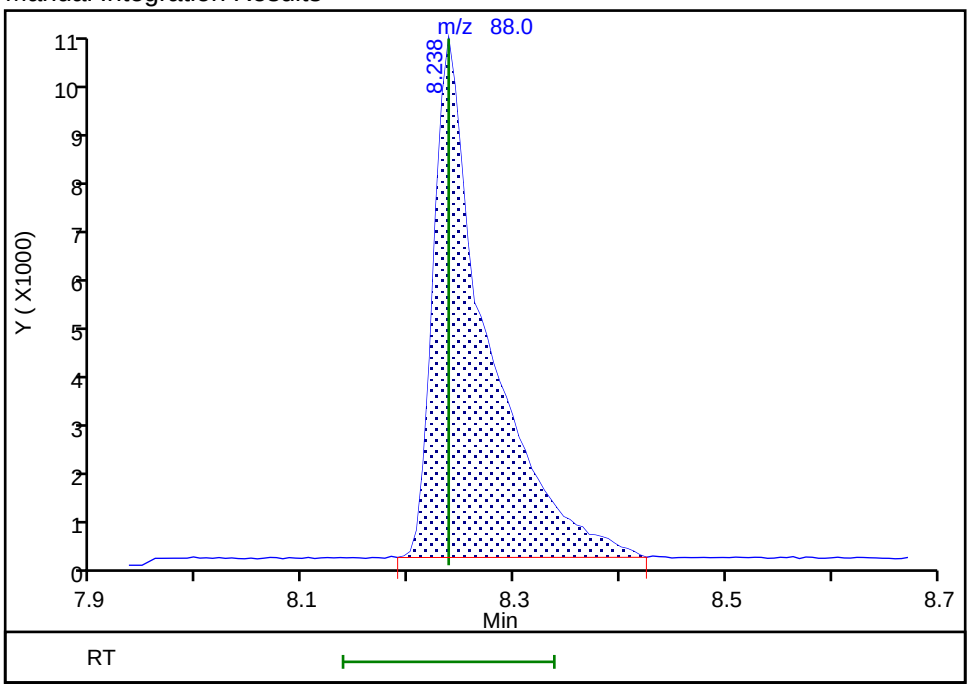
Processing Integration Results

RT: 8.24
Area: 37744
Amount: 45.133538
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 36824
Amount: 47.096609
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 16:53:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Sep-2021 16:52:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0112994-009
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 09-Sep-2021 17:49:19 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1671

First Level Reviewer: seymourc Date: 09-Sep-2021 17:40:36

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	5574700	50.0	50.1	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	3487222	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	94	98689	200.0	200.0	
	8 1,4-Dioxane	88	8.238	8.238	0.000	50	77285	100.0	96.0	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00264 Amount Added: 15.00 Units: uL
vm50ss_00453 Amount Added: 15.00 Units: uL
vm150IS20_00012 Amount Added: 1.00 Units: uL

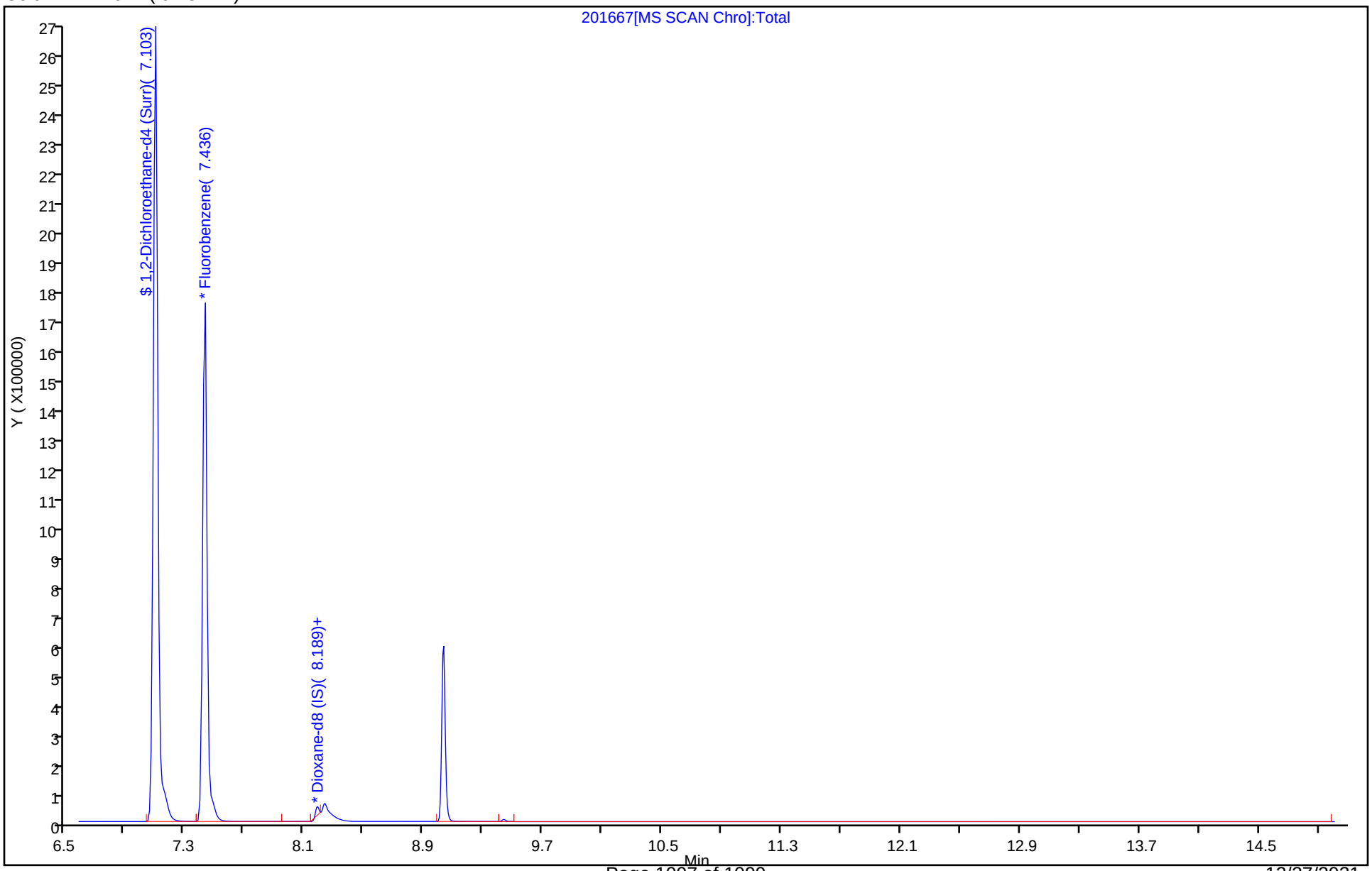
Report Date: 09-Sep-2021 17:49:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D

Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

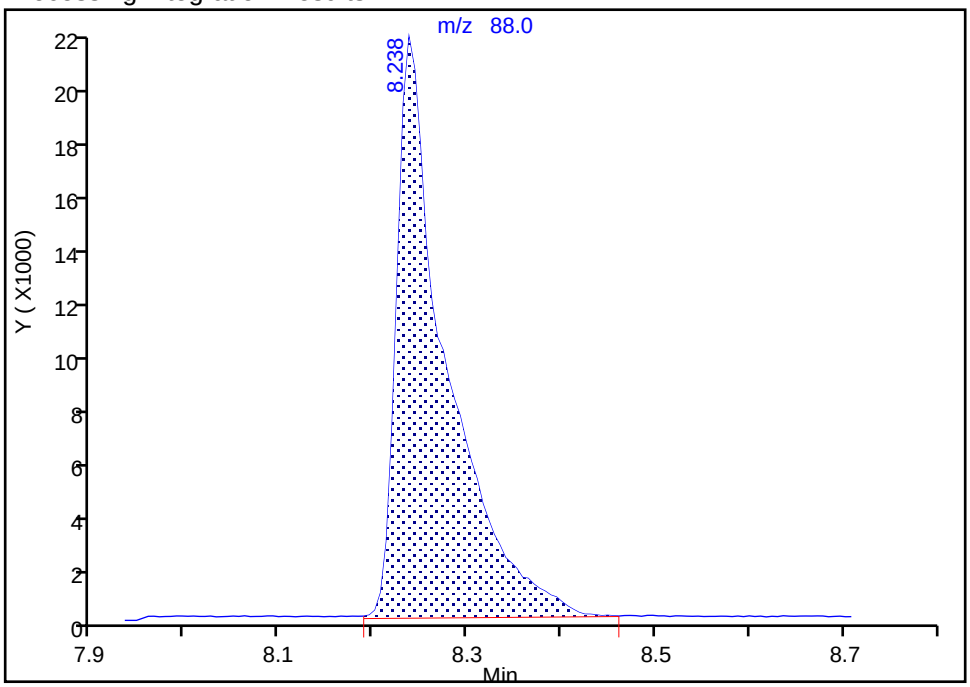
Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201667.D				
Injection Date:	09-Sep-2021 16:52:30	Instrument ID:	A3UX20		
Lims ID:	IC				
Client ID:					
Operator ID:	434006	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

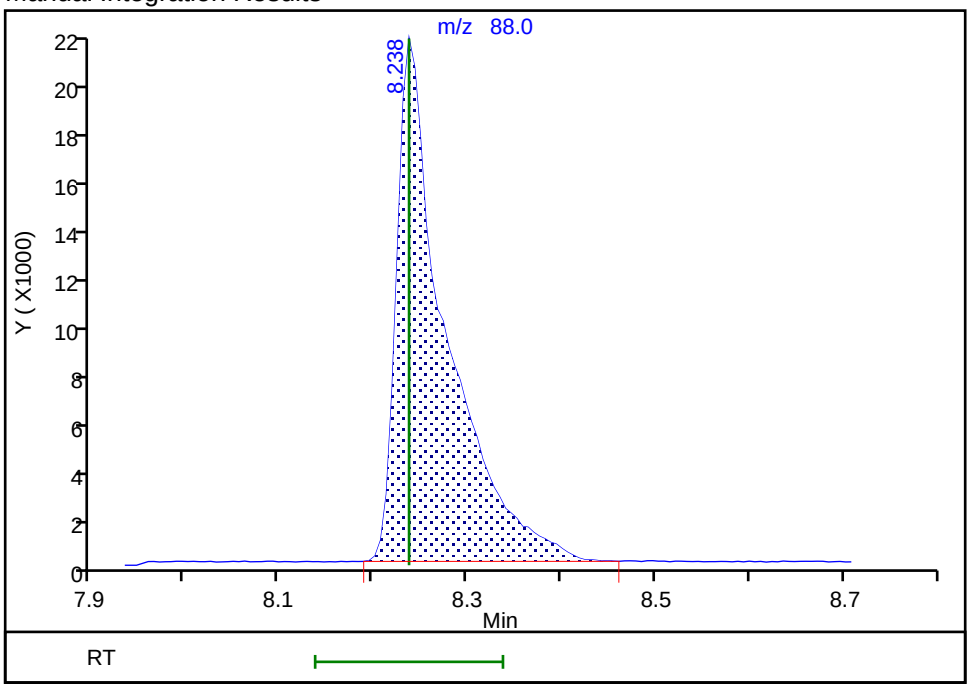
Processing Integration Results

RT: 8.24
Area: 78168
Amount: 96.896781
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 77285
Amount: 95.952255
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 17:41:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Lims ID:	IC				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	09-Sep-2021 17:16:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-010				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:	chrom-8260SIM_20*sub1				
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:20	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 17:40:53		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	11798688	100.0	106.2	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3477775	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	105393	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.238	0.000	50	162137	200.0	188.5	

QC Flag Legend

Processing Flags

Reagents:

vm50ss_00453	Amount Added:	30.00	Units: uL
vmdioxanew_00264	Amount Added:	30.00	Units: uL
vm150IS20_00012	Amount Added:	1.00	Units: uL

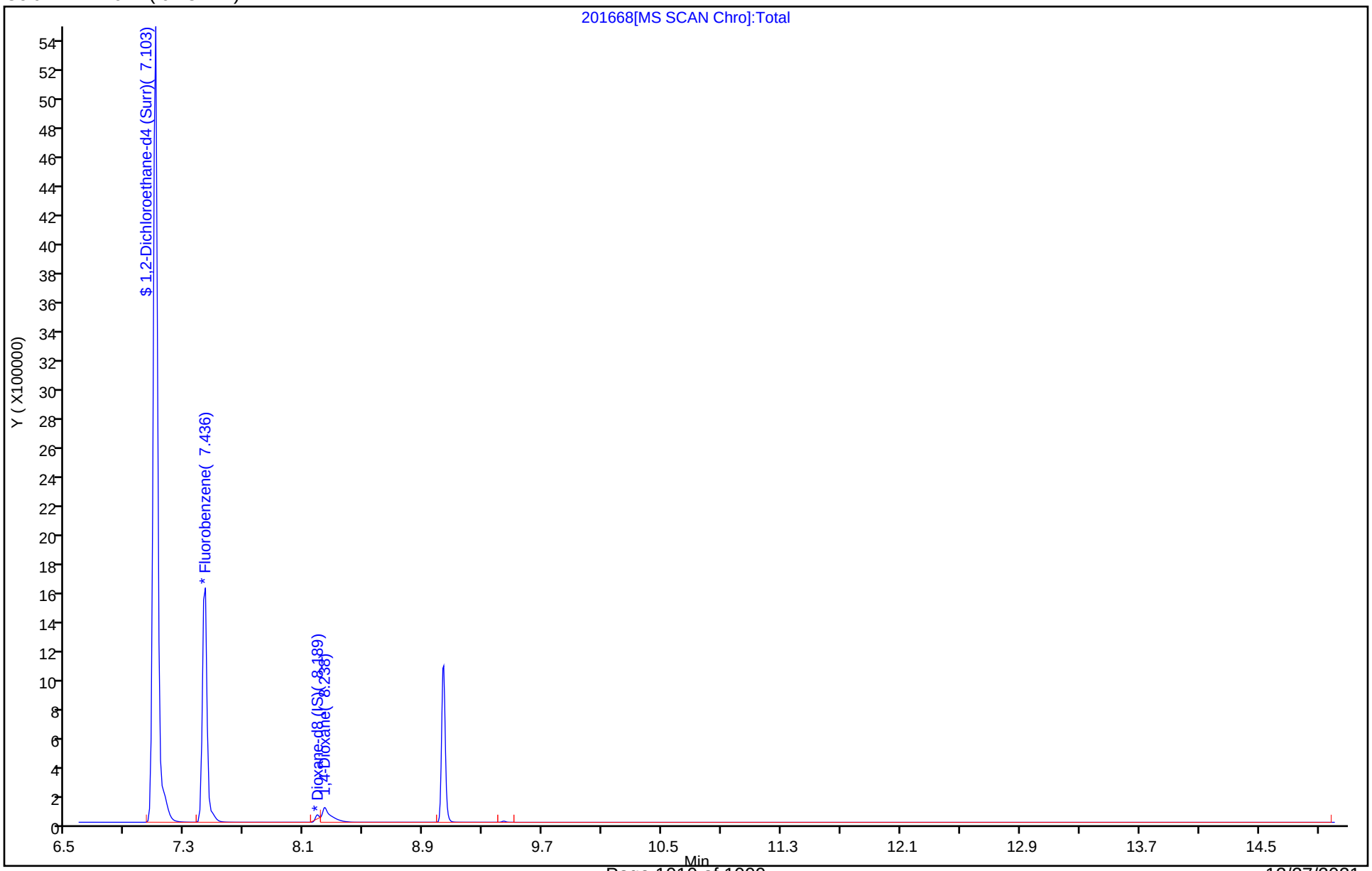
Report Date: 09-Sep-2021 17:49:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Injection Date:	09-Sep-2021 17:16:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

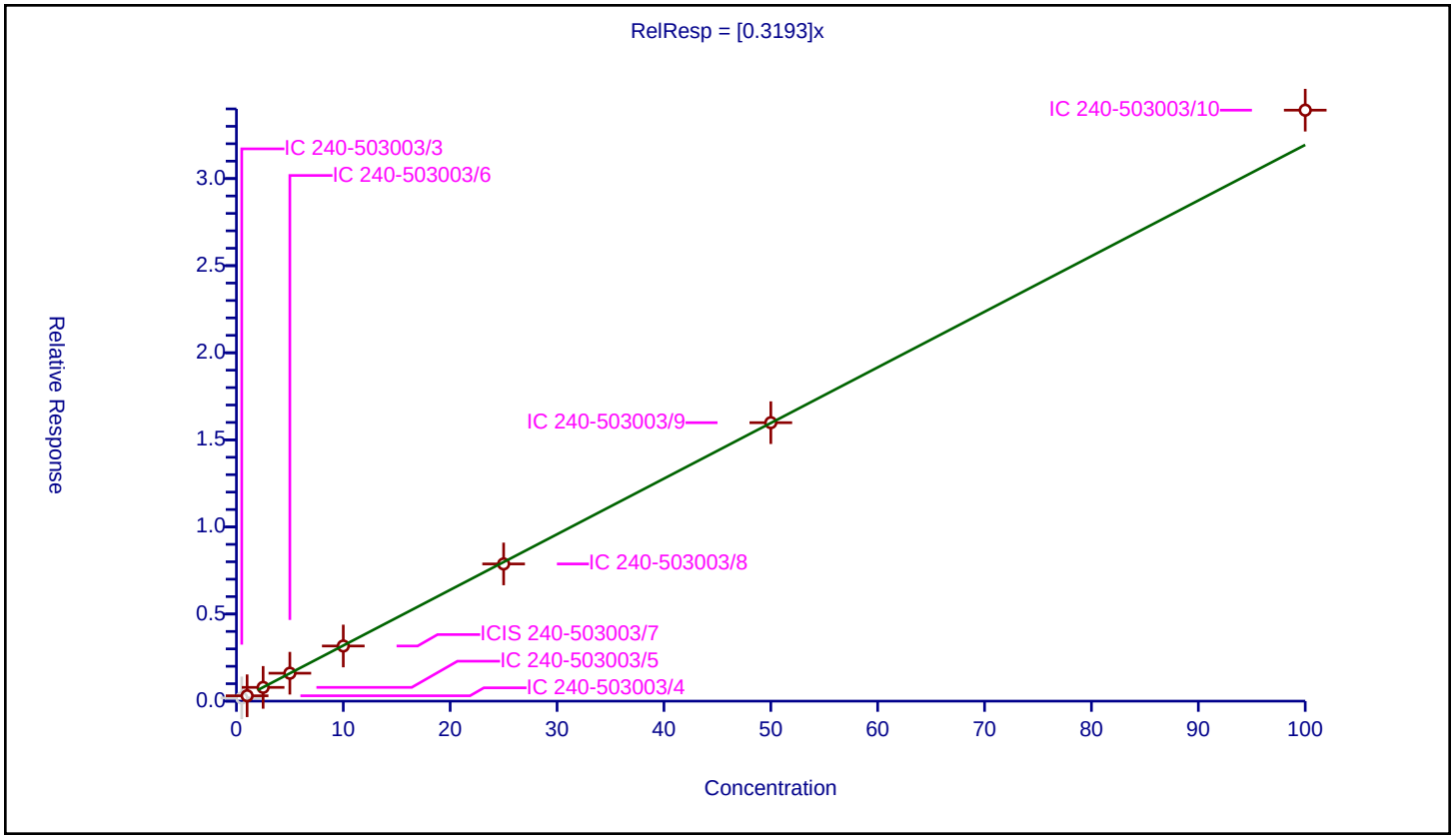
Curve Coefficients

Intercept:	0
Slope:	0.3193

Error Coefficients

Standard Error:	5460000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	0.5	0.185917	10.0	3263223.0	0.371835	N
2	IC 240-503003/4	1.0	0.308334	10.0	3215764.0	0.308334	Y
3	IC 240-503003/5	2.5	0.789848	10.0	3297506.0	0.315939	Y
4	IC 240-503003/6	5.0	1.602849	10.0	3377511.0	0.32057	Y
5	ICIS 240-503003/7	10.0	3.165713	10.0	3376203.0	0.316571	Y
6	IC 240-503003/8	25.0	7.876124	10.0	3395321.0	0.315045	Y
7	IC 240-503003/9	50.0	15.986077	10.0	3487222.0	0.319722	Y
8	IC 240-503003/10	100.0	33.925967	10.0	3477775.0	0.33926	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

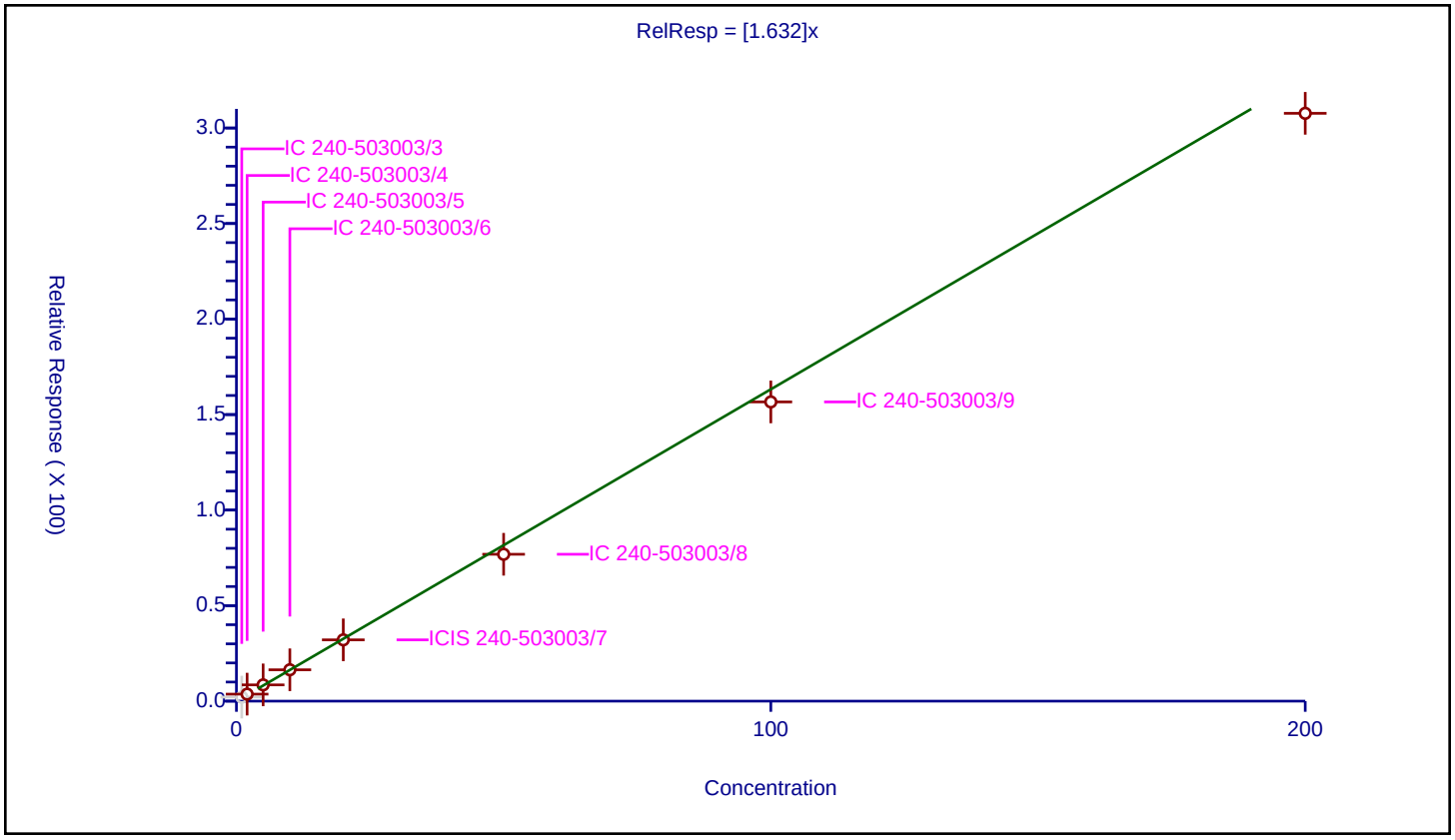
Curve Coefficients

Intercept:	0
Slope:	1.632

Error Coefficients

Standard Error:	75100
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 240-503003/3	1.0	2.115228	200.0	94647.0	2.115228	N
2	IC 240-503003/4	2.0	3.671392	200.0	88032.0	1.835696	Y
3	IC 240-503003/5	5.0	8.514016	200.0	96993.0	1.702803	Y
4	IC 240-503003/6	10.0	16.41525	200.0	100431.0	1.641525	Y
5	ICIS 240-503003/7	20.0	32.079038	200.0	100508.0	1.603952	Y
6	IC 240-503003/8	50.0	76.876024	200.0	95801.0	1.53752	Y
7	IC 240-503003/9	100.0	156.623332	200.0	98689.0	1.566233	Y
8	IC 240-503003/10	200.0	307.680776	200.0	105393.0	1.538404	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-509326/12 Calibration Date: 10/21/2021 20:33

Instrument ID: A3UX18 Calib Start Date: 10/21/2021 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/21/2021 19:44

Lab File ID: 190512.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.573	1.603		0.0102	0.0100	1.9	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2667	0.2320		0.0106	0.0121	-13.0	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190512.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 21-Oct-2021 20:33:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-012
Operator ID: 434006 Instrument ID: A3UX18
Sublist:

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 22-Oct-2021 14:10:21 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: seymourc Date: 22-Oct-2021 14:10:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	1828791	12.1	10.6	
* 7 Fluorobenzene	96	6.587	6.588	-0.001	100	7882541	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.244	-0.001	99	207765	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.286	-0.001	54	13728	10.0	10.2	

QC Flag Legend

Processing Flags

Reagents:

vmdiox_spike_00280	Amount Added:	3.00	Units: uL	
vm25UX18SS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00003	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00203	Amount Added:	0.00	Units:	Run Reagent

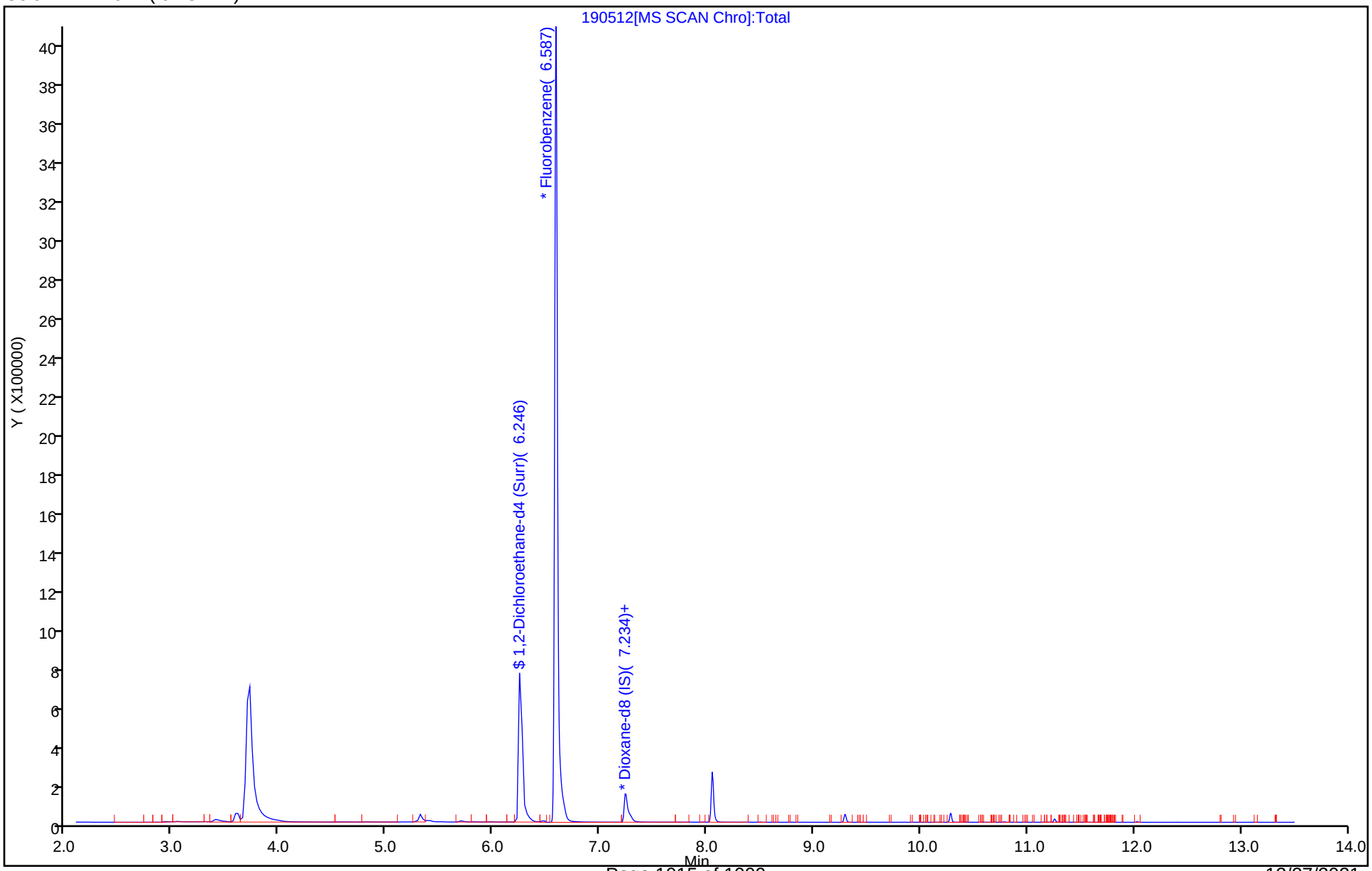
Report Date: 22-Oct-2021 14:10:22 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190512.D

Injection Date:	21-Oct-2021 20:33:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	icv			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517292/3 Calibration Date: 12/21/2021 19:26

Instrument ID: A3UX18 Calib Start Date: 10/21/2021 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/21/2021 19:44

Lab File ID: 191225.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.573	1.574		0.0200	0.0200	0.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2667	0.2387		0.0109	0.0121	-10.5	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191225.D				
Lims ID:	ccvis				
Client ID:					
Sample Type:	CCVIS				
Inject. Date:	21-Dec-2021 19:26:30	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-003				
Operator ID:	434006	Instrument ID:	A3UX18		
Sublist:	chrom-8260SIM_18*sub6				
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				
First Level Reviewer: seymourc		Date:	21-Dec-2021 20:12:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.245	6.245	0.000	100	1438151	12.1	10.9	
* 7 Fluorobenzene	96	6.586	6.586	0.000	100	6024604	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.243	0.000	98	179476	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.285	0.000	54	23280	20.0	20.0	

QC Flag Legend

Processing Flags

Reagents:

vmdioxanew_00275	Amount Added:	3.00	Units: uL	
vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

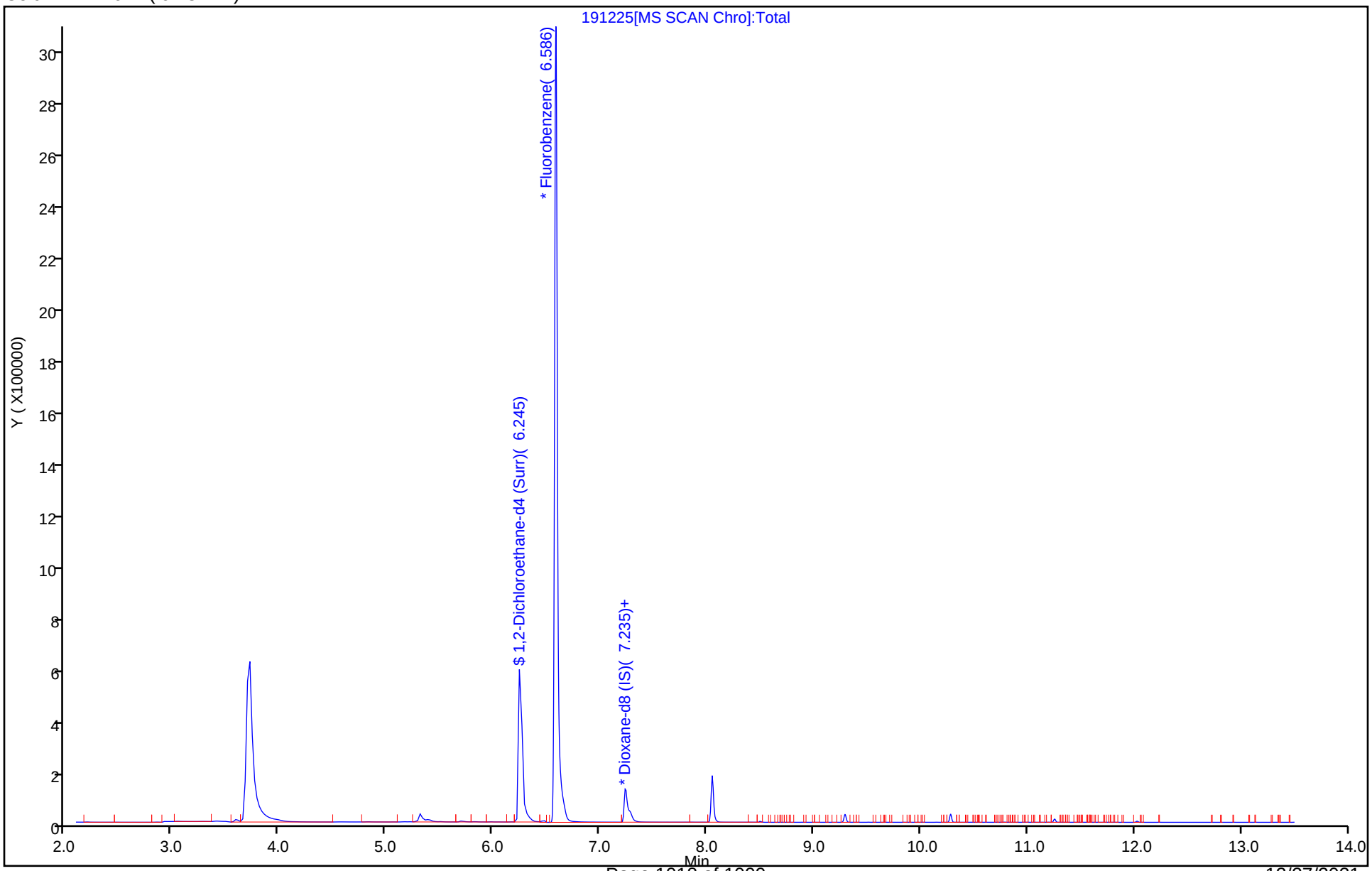
Report Date: 21-Dec-2021 23:47:54 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191225.D

Injection Date:	21-Dec-2021 19:26:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	ccvis			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: ICV 240-503003/12 Calibration Date: 09/09/2021 18:06

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 201670.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.559		0.00955	0.0100	-4.5	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2641		0.00827	0.0100	-17.3	

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	09-Sep-2021 18:06:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-012				
Operator ID:	434006	Instrument ID:	A3UX20		
Sublist:					
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:37:00	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1666				
First Level Reviewer: seymourc		Date:	09-Sep-2021 18:34:47		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	893369	10.0	8.27	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	3382724	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.189	8.189	0.000	95	94434	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.238	-0.001	54	7360	10.0	9.55	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00275	Amount Added:	3.00	Units: uL	
vm150IS20_00012	Amount Added:	1.00	Units: uL	Run Reagent
vm150SS20_00003	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00201	Amount Added:	0.00	Units:	Run Reagent

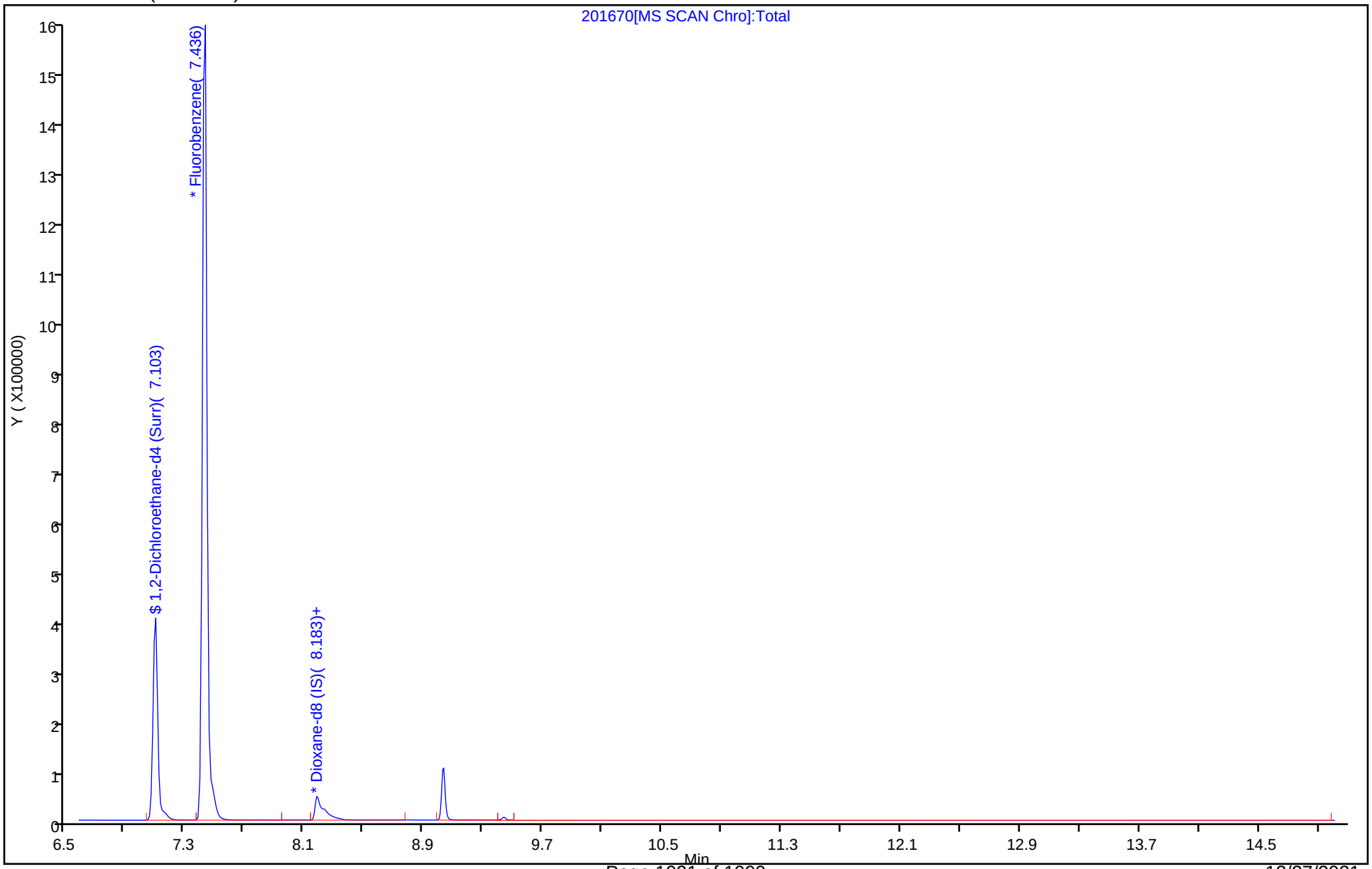
Report Date: 10-Sep-2021 15:14:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D

Injection Date:	09-Sep-2021 18:06:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

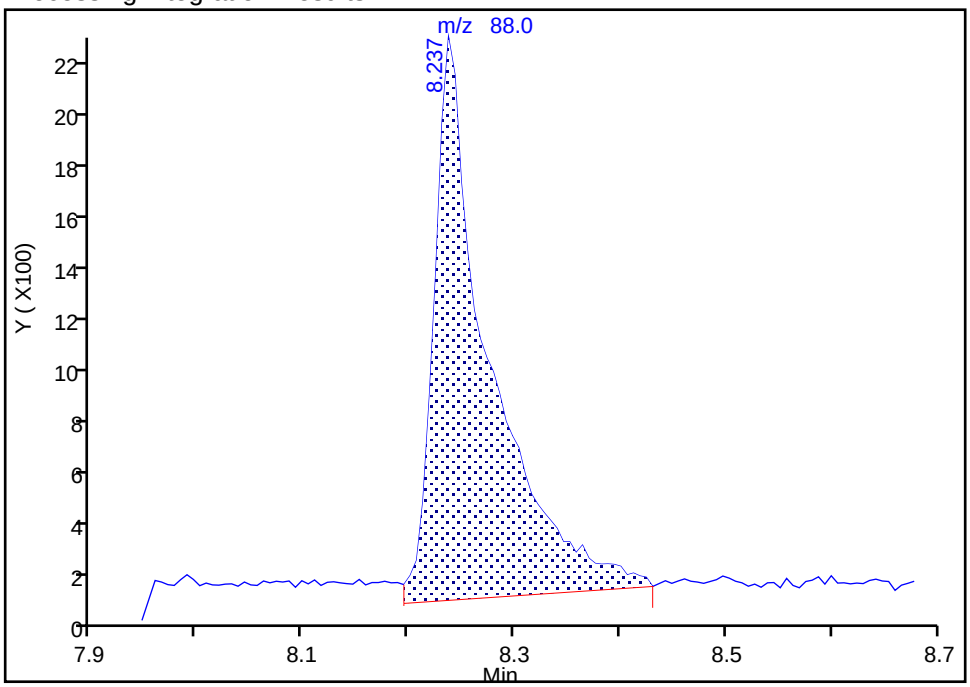
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201670.D
Injection Date: 09-Sep-2021 18:06:30 Instrument ID: A3UX20
Lims ID: ICV
Client ID:
Operator ID: 434006 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

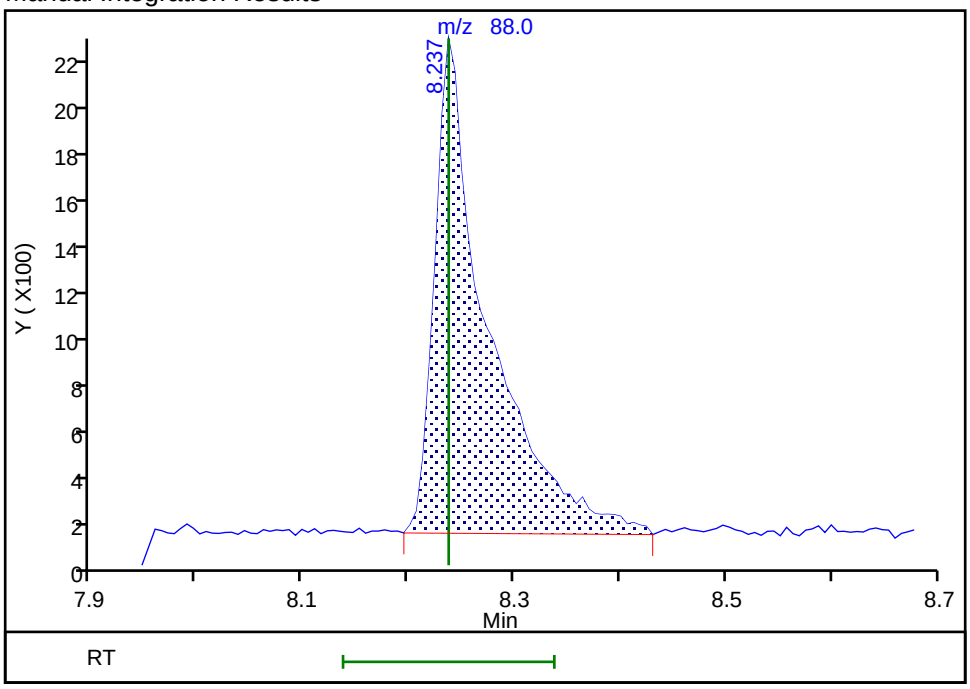
Processing Integration Results

RT: 8.24
Area: 7881
Amount: 10.225432
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7360
Amount: 9.549445
Amount Units: ug/l



Reviewer: seymourc, 09-Sep-2021 18:34:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Lab Sample ID: CCVIS 240-517240/3 Calibration Date: 12/20/2021 20:41

Instrument ID: A3UX20 Calib Start Date: 09/09/2021 14:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/09/2021 17:16

Lab File ID: 202700.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	1.632	1.519		0.0186	0.0200	-6.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3096		0.00969	0.0100	-3.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202700.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Dec-2021 20:41:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-003
Operator ID: 434006 Instrument ID: A3UX20
Sublist: chrom-8260SIM_20*sub1

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 20-Dec-2021 21:27:04

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$	5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	853029	10.0	9.69	
*	7 Fluorobenzene	96	7.436	7.436	0.000	100	2755559	10.0	10.0	
*	9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	79096	200.0	200.0	
	8 1,4-Dioxane	88	8.237	8.237	0.000	47	12018	20.0	18.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdioxanew_00275	Amount Added:	3.00	Units: uL	
vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

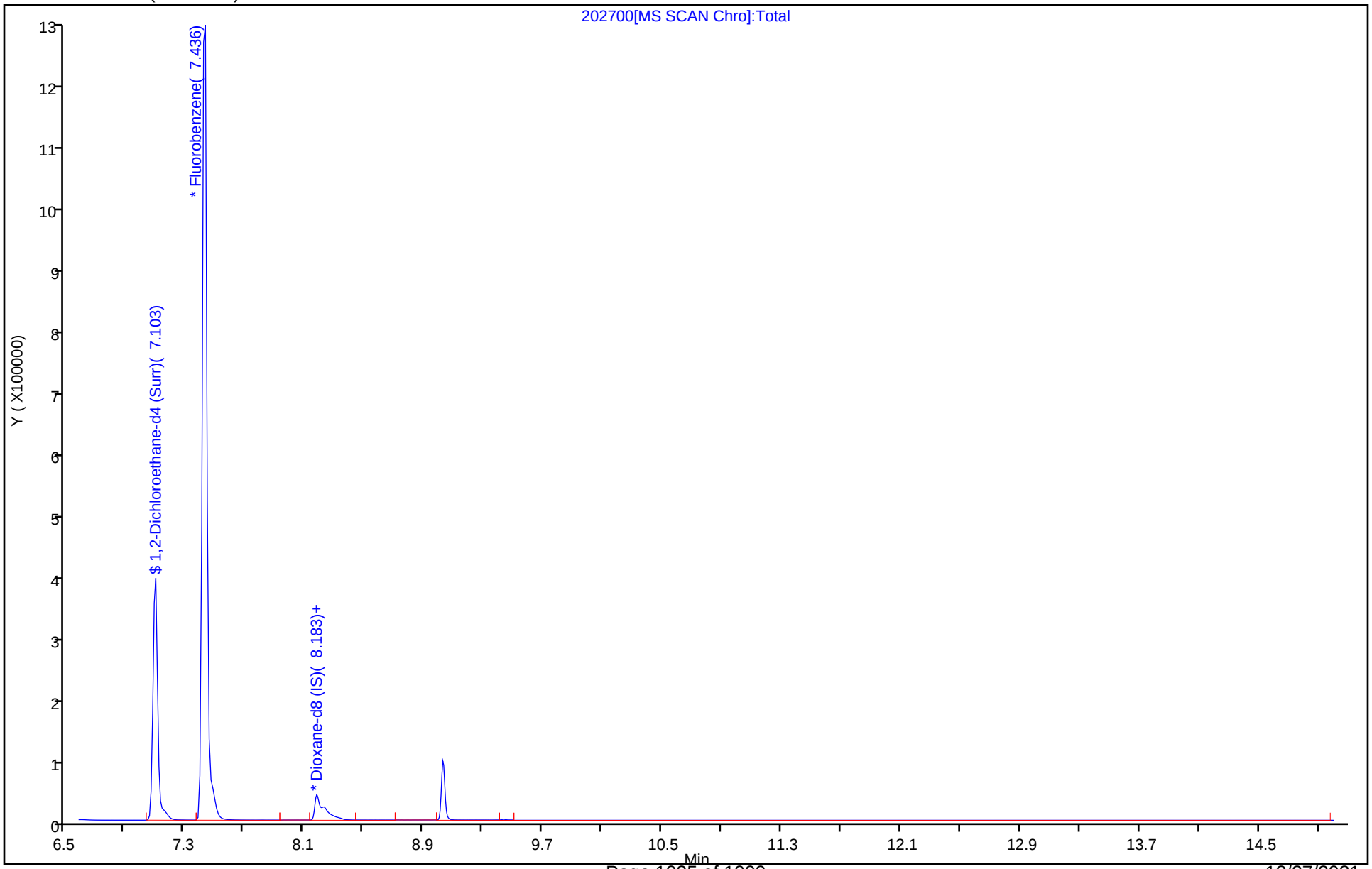
Report Date: 21-Dec-2021 18:35:02 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202700.D

Injection Date:	20-Dec-2021 20:41:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton

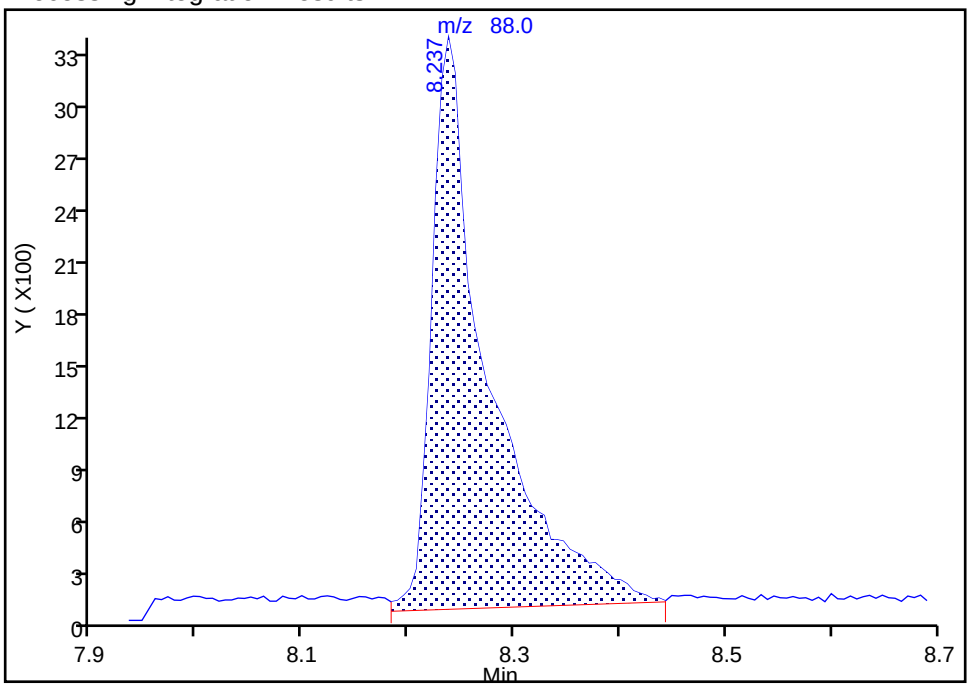
Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202700.D
Injection Date: 20-Dec-2021 20:41:30 Instrument ID: A3UX20
Lims ID: CCVIS
Client ID:
Operator ID: 434006 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

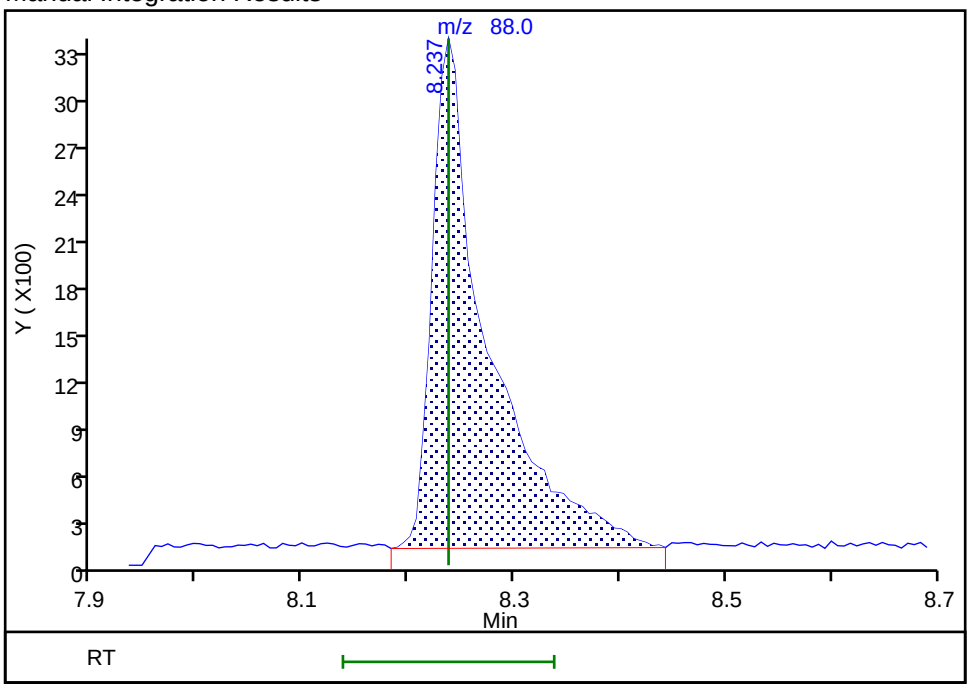
Processing Integration Results

RT: 8.24
Area: 12504
Amount: 19.369712
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 12018
Amount: 18.616859
Amount Units: ug/l



Reviewer: seymourc, 20-Dec-2021 21:27:02
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\BFB18107.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 21-Oct-2021 16:07:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0114325-001
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 22-Oct-2021 14:10:21 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: seymourc Date: 21-Oct-2021 17:37:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.611	3.611	0.000	0	1806655	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

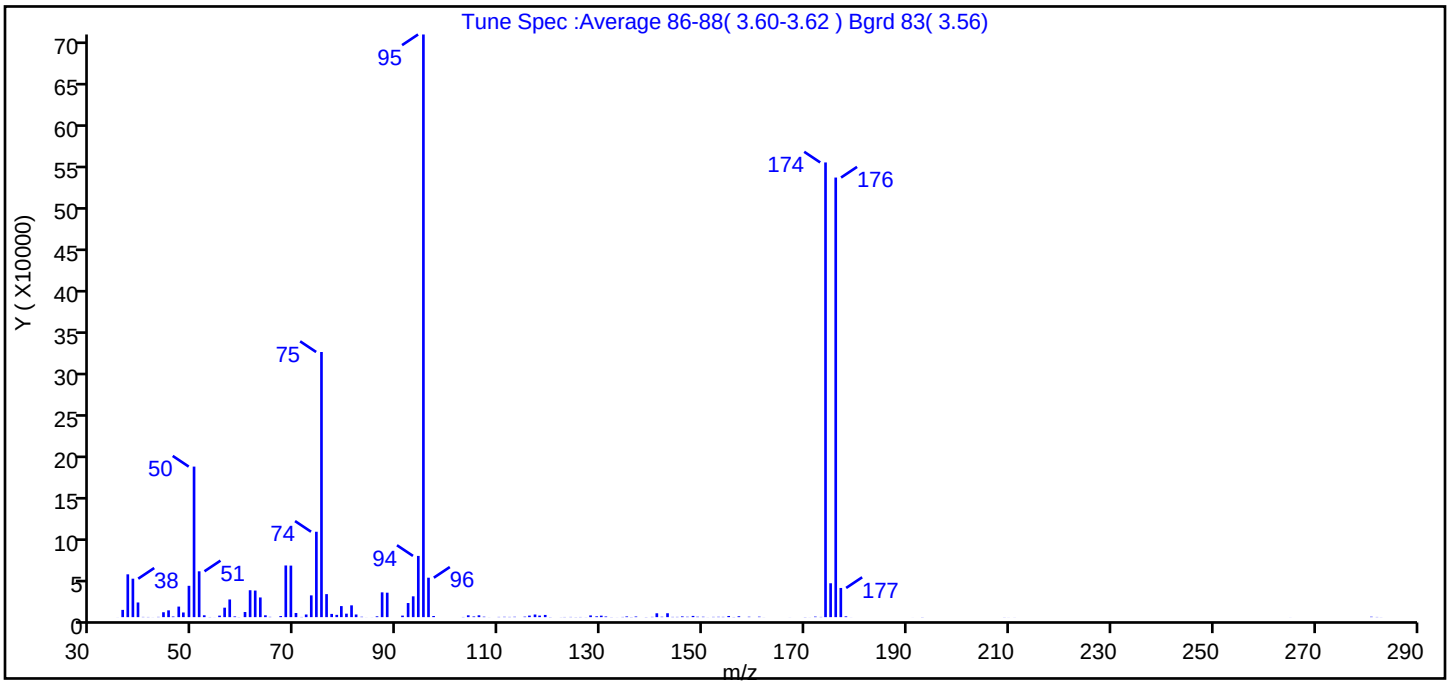
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\BFB18107.D
Injection Date: 21-Oct-2021 16:07:30 Instrument ID: A3UX18
Lims ID: bfb
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_18 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.8
75	30 to 60% of m/z 95	45.5
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	78.0
175	5 to 9% of m/z 174	5.8 (7.5)
176	Greater than 95% but less than 101% of m/z 174	75.4 (96.7)
177	5 to 9% of m/z 176	5.0 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\BFB18107.D\8260SIM_18.rslt\spectra.d
Injection Date: 21-Oct-2021 16:07:30
Spectrum: Tune Spec :Average 86-88(3.60-3.62) Bgrd 83(3.56)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 134

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	54	70.00	5052	112.00	294	149.00	505
36.00	8826	71.00	235	113.00	448	150.00	476
37.00	52064	72.00	3216	115.00	627	151.00	69
38.00	46752	73.00	26464	116.00	1883	152.00	318
39.00	17840	74.00	103832	117.00	3185	153.00	413
40.00	284	75.00	322368	118.00	1881	154.00	337
41.00	220	76.00	27992	119.00	2687	155.00	1416
42.00	63	77.00	3933	120.00	172	156.00	192
43.00	308	78.00	2785	122.00	90	157.00	1082
44.00	5963	79.00	13441	123.00	210	159.00	515
45.00	8256	80.00	4229	124.00	264	161.00	597
46.00	753	81.00	14350	125.00	157	162.00	64
47.00	12832	82.00	3237	126.00	215	167.00	53
48.00	5671	83.00	457	127.00	92	170.00	173
49.00	38104	84.00	54	128.00	2106	171.00	57
50.00	183040	85.00	58	129.00	1010	172.00	656
51.00	55736	86.00	1024	130.00	1806	173.00	262
52.00	2258	87.00	30144	131.00	811	174.00	552832
53.00	185	88.00	29736	132.00	137	175.00	41208
54.00	50	91.00	1863	133.00	61	176.00	534464
55.00	1835	92.00	17168	134.00	255	177.00	35496
56.00	11502	93.00	25312	135.00	895	178.00	959
57.00	21496	94.00	74448	136.00	177	179.00	59
58.00	898	95.00	708416	137.00	803	191.00	35
59.00	142	96.00	47952	139.00	177	193.00	156
60.00	6249	97.00	1381	140.00	334	209.00	111
61.00	32720	103.00	213	141.00	4701	210.00	55
62.00	32328	104.00	2224	142.00	488	211.00	66
63.00	23936	105.00	846	143.00	4750	265.00	54
64.00	2250	106.00	2245	144.00	304	281.00	511
65.00	348	107.00	551	145.00	307	282.00	236
67.00	1325	108.00	61	146.00	915	283.00	90
68.00	62824	110.00	290	147.00	477		

Report Date: 22-Oct-2021 14:10:21 Chrom Revision: 2.3 22-Sep-2021 15:38:46
Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\BFB18107.D\8260SIM_18.rslt\spectra.d
Injection Date: 21-Oct-2021 16:07:30
Spectrum: Tune Spec :Average 86-88(3.60-3.62) Bgrd 83(3.56)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 134

m/z	Y	m/z	Y	m/z	Y	m/z	Y
69.00	62656	111.00	410	148.00	1493		

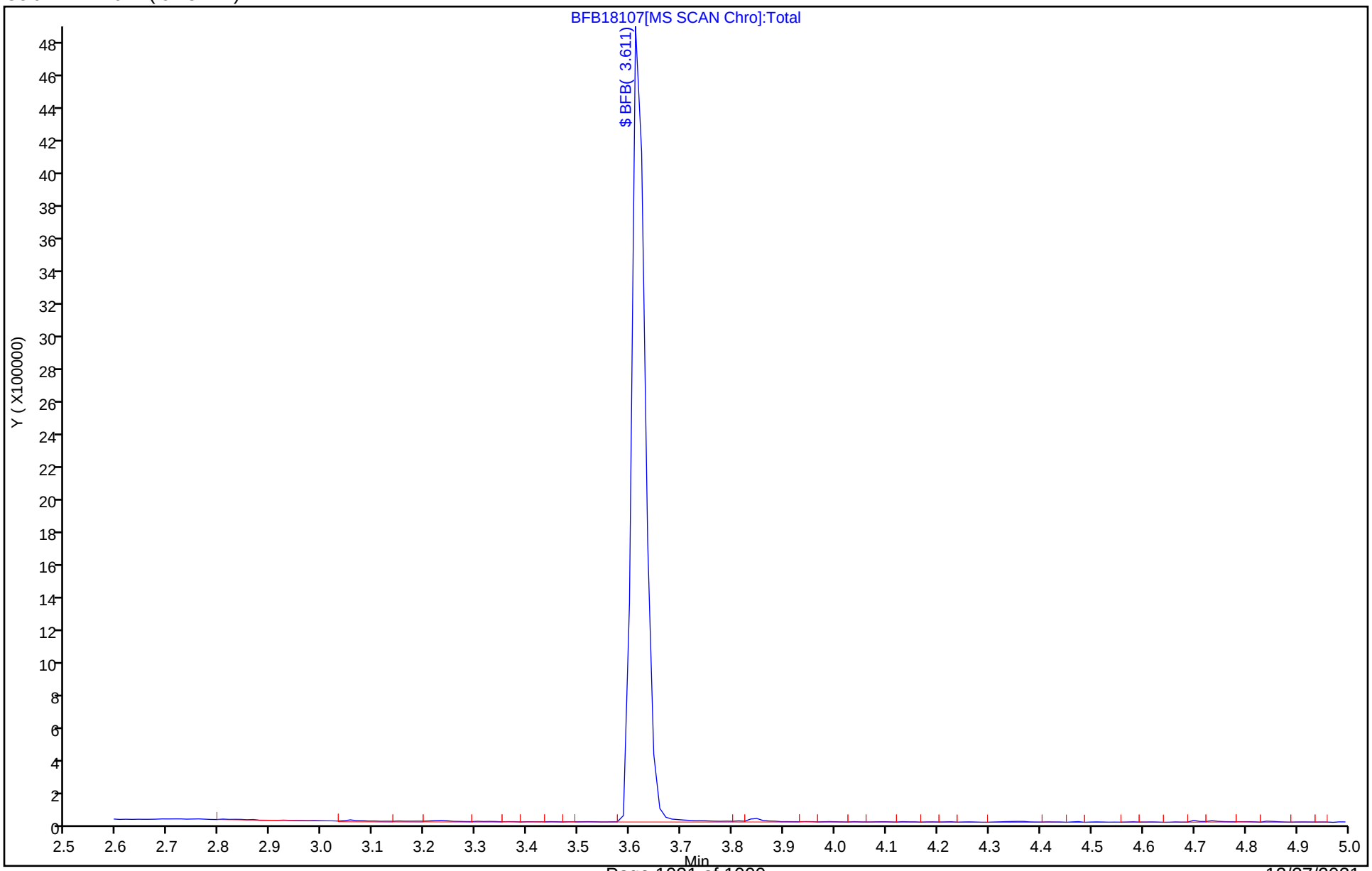
Report Date: 22-Oct-2021 14:10:21 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\BFB18107.D

Injection Date:	21-Oct-2021 16:07:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\BFB18138.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 21-Dec-2021 18:50:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0116043-001
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:57 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 19:26:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.612	3.612	0.000	0	774506	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

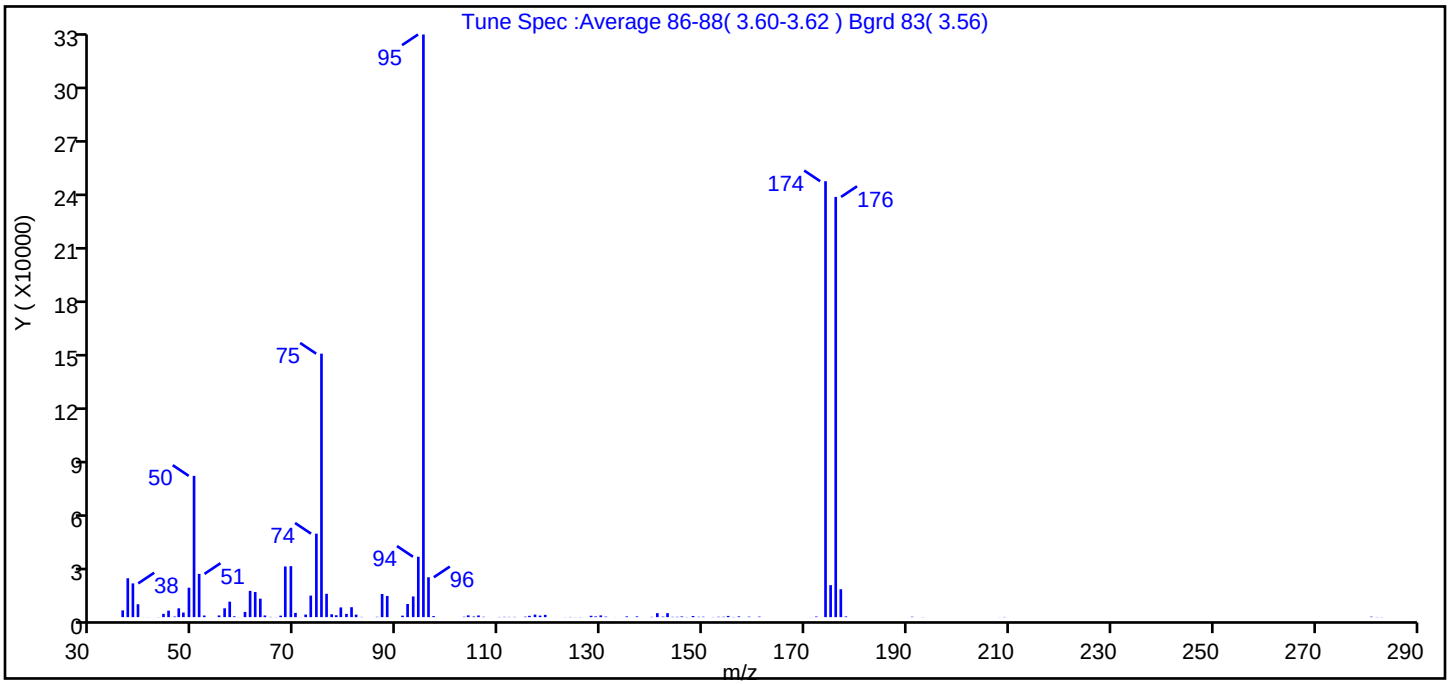
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\BFB18138.D
Injection Date: 21-Dec-2021 18:50:30 Instrument ID: A3UX18
Lims ID: bfb
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_18 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.2
75	30 to 60% of m/z 95	45.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.8
175	5 to 9% of m/z 174	5.5 (7.3)
176	Greater than 95% but less than 101% of m/z 174	72.1 (96.4)
177	5 to 9% of m/z 176	4.8 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\BFB18138.D\8260SIM_18.rslt\spectra.d
Injection Date: 21-Dec-2021 18:50:30
Spectrum: Tune Spec :Average 86-88(3.60-3.62) Bgrd 83(3.56)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3836	67.00	849	105.00	365	146.00	388
37.00	22000	68.00	28664	106.00	951	147.00	104
38.00	19088	69.00	28832	107.00	201	148.00	660
39.00	7303	70.00	2394	110.00	112	149.00	192
40.00	25	71.00	58	111.00	174	150.00	233
41.00	49	72.00	1453	112.00	133	152.00	91
43.00	82	73.00	12190	113.00	144	153.00	201
44.00	1869	74.00	47224	115.00	263	154.00	218
45.00	3675	75.00	149056	116.00	759	155.00	700
46.00	333	76.00	13207	117.00	1441	156.00	114
47.00	4995	77.00	1620	118.00	856	157.00	419
48.00	2577	78.00	1083	119.00	1289	159.00	271
49.00	16640	79.00	5497	123.00	61	161.00	291
50.00	79920	80.00	1843	124.00	124	171.00	50
51.00	24464	81.00	5626	125.00	57	172.00	339
52.00	922	82.00	1416	126.00	79	174.00	246592
53.00	13	83.00	135	128.00	777	175.00	18112
55.00	965	86.00	183	129.00	425	176.00	237696
56.00	4999	87.00	13097	130.00	995	177.00	15785
57.00	8743	88.00	11989	131.00	288	178.00	395
58.00	456	91.00	840	133.00	43	191.00	230
59.00	50	92.00	7443	135.00	440	193.00	84
60.00	2957	93.00	11700	137.00	428	208.00	45
61.00	14850	94.00	34176	140.00	172	209.00	116
62.00	14240	95.00	329600	141.00	2243	281.00	259
63.00	10443	96.00	22568	142.00	289	282.00	97
64.00	959	97.00	586	143.00	2247	283.00	84
65.00	149	103.00	212	144.00	181		
66.00	58	104.00	1003	145.00	195		

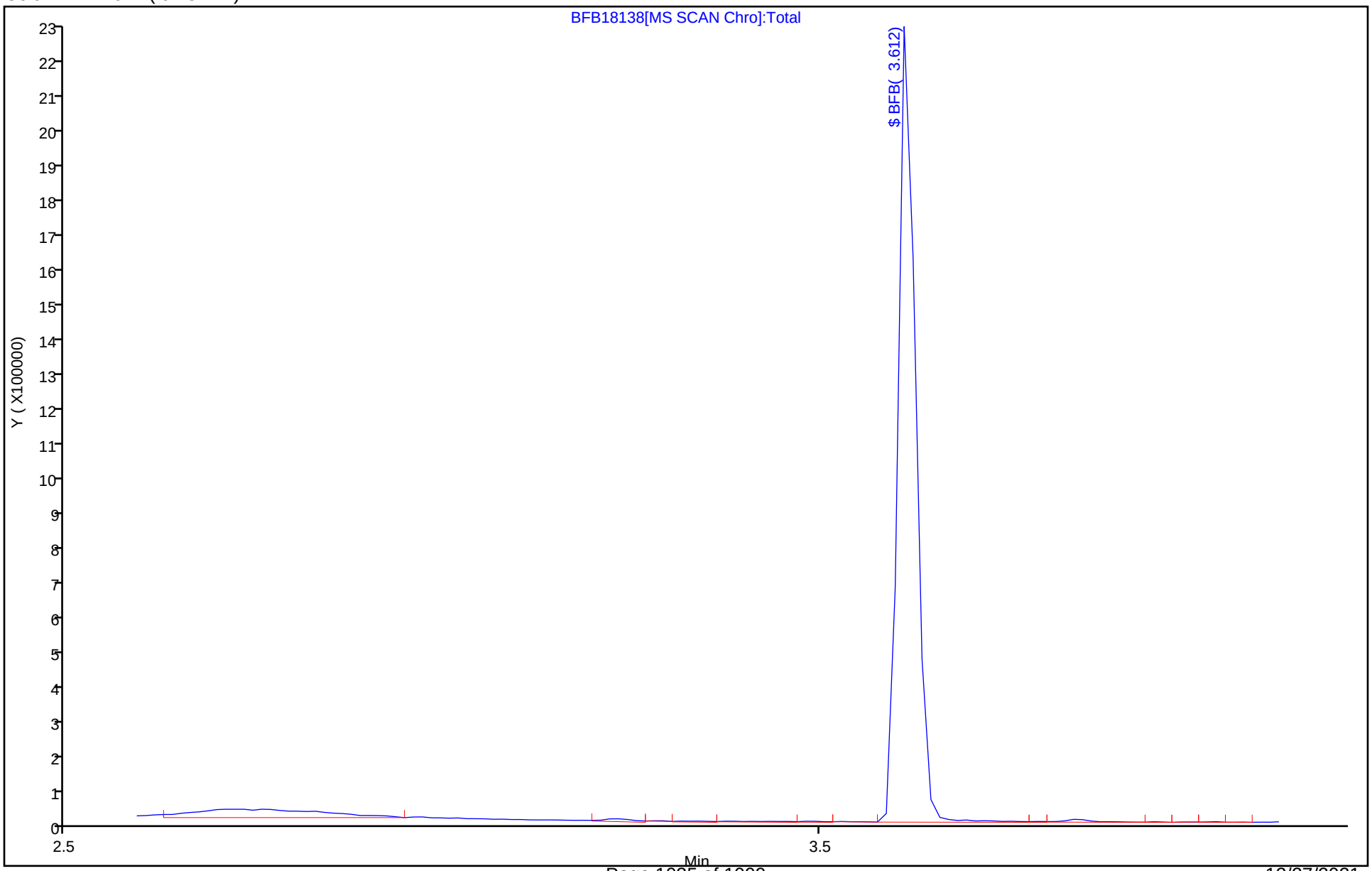
Report Date: 21-Dec-2021 23:47:57 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\BFB18138.D

Injection Date:	21-Dec-2021 18:50:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	09-Sep-2021 13:33:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0112994-001				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	09-Sep-2021 17:49:29	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1671				
First Level Reviewer: seymourc		Date:	09-Sep-2021 15:10:14		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.939	3.939	0.000	0	994347	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

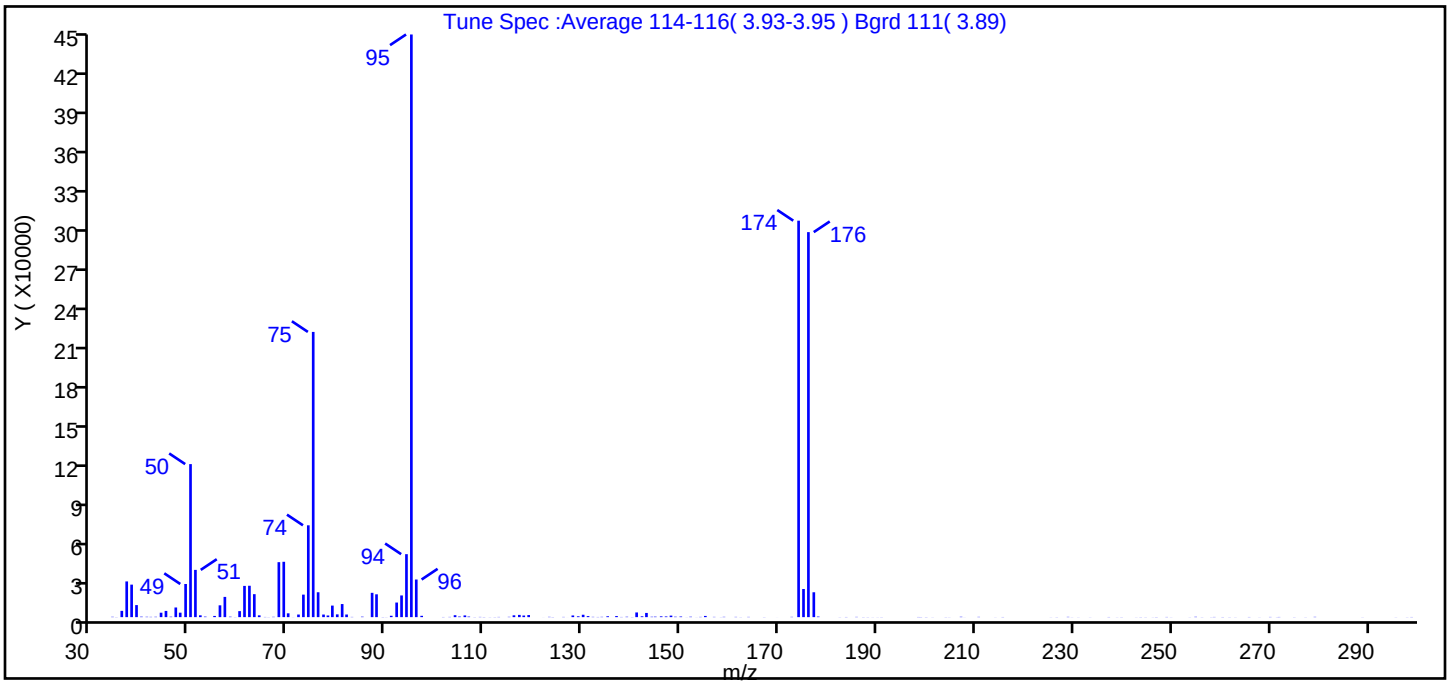
vmbfb_00027 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D
Injection Date: 09-Sep-2021 13:33:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.1)
174	50 to 120% of m/z 95	68.0
175	5 to 9% of m/z 174	4.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	66.1 (97.1)
177	5 to 9% of m/z 176	4.3 (6.5)

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	256	80.00	2103	135.00	668	201.00	55
35.00	86	81.00	9949	137.00	827	204.00	78
36.00	4779	82.00	2003	138.00	143	205.00	60
37.00	27144	83.00	168	139.00	299	207.00	277
38.00	24712	85.00	349	140.00	100	208.00	34
39.00	9159	87.00	18480	141.00	3566	211.00	203
40.00	362	88.00	17352	142.00	626	214.00	50
41.00	277	89.00	103	143.00	3194	216.00	120
42.00	206	90.00	57	144.00	298	225.00	54
43.00	269	91.00	1044	145.00	366	227.00	79
44.00	3367	92.00	11093	146.00	611	229.00	209
45.00	4727	93.00	16488	147.00	529	230.00	53
46.00	338	94.00	47864	148.00	1161	231.00	54
47.00	7337	95.00	442816	149.00	328	233.00	56
48.00	3399	96.00	28600	150.00	472	237.00	123
49.00	25192	97.00	1012	151.00	41	239.00	53
50.00	116304	102.00	123	152.00	311	240.00	84
51.00	35920	103.00	171	153.00	38	243.00	51
52.00	1379	104.00	1466	154.00	184	244.00	89
53.00	392	105.00	453	155.00	919	245.00	74
55.00	917	106.00	1305	157.00	192	246.00	54
56.00	8982	107.00	417	158.00	61	247.00	108
57.00	15386	108.00	86	159.00	228	249.00	145
58.00	343	109.00	166	161.00	192	250.00	54
59.00	72	110.00	113	162.00	67	254.00	59
60.00	4577	111.00	70	164.00	180	255.00	260
61.00	23744	112.00	91	167.00	77	256.00	73
62.00	23856	113.00	159	170.00	20	258.00	67
63.00	17464	115.00	229	173.00	205	259.00	146
64.00	1361	116.00	1389	174.00	301312	260.00	114
65.00	141	117.00	1709	175.00	21384	262.00	77
66.00	76	118.00	1227	176.00	292608	263.00	60
67.00	238	119.00	1583	177.00	18904	266.00	126

Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40
Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D\8260SIM_20.rslt\spectra.d
Injection Date: 09-Sep-2021 13:33:30
Spectrum: Tune Spec :Average 114-116(3.93-3.95) Bgrd 111(3.89)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	41776	122.00	24	178.00	412	268.00	53
69.00	42072	123.00	216	182.00	67	270.00	152
70.00	2909	124.00	108	184.00	125	272.00	68
71.00	46	126.00	169	186.00	193	272.00	142
72.00	1983	127.00	15	187.00	87	275.00	79
73.00	17120	128.00	1271	188.00	79	277.00	64
74.00	69792	129.00	629	189.00	50	279.00	219
75.00	216768	130.00	1823	190.00	50	289.00	58
76.00	18920	131.00	784	191.00	81	296.00	59
77.00	1972	132.00	215	198.00	129	298.00	63
78.00	1260	133.00	137	199.00	112	299.00	127
79.00	8784	134.00	230	200.00	98		

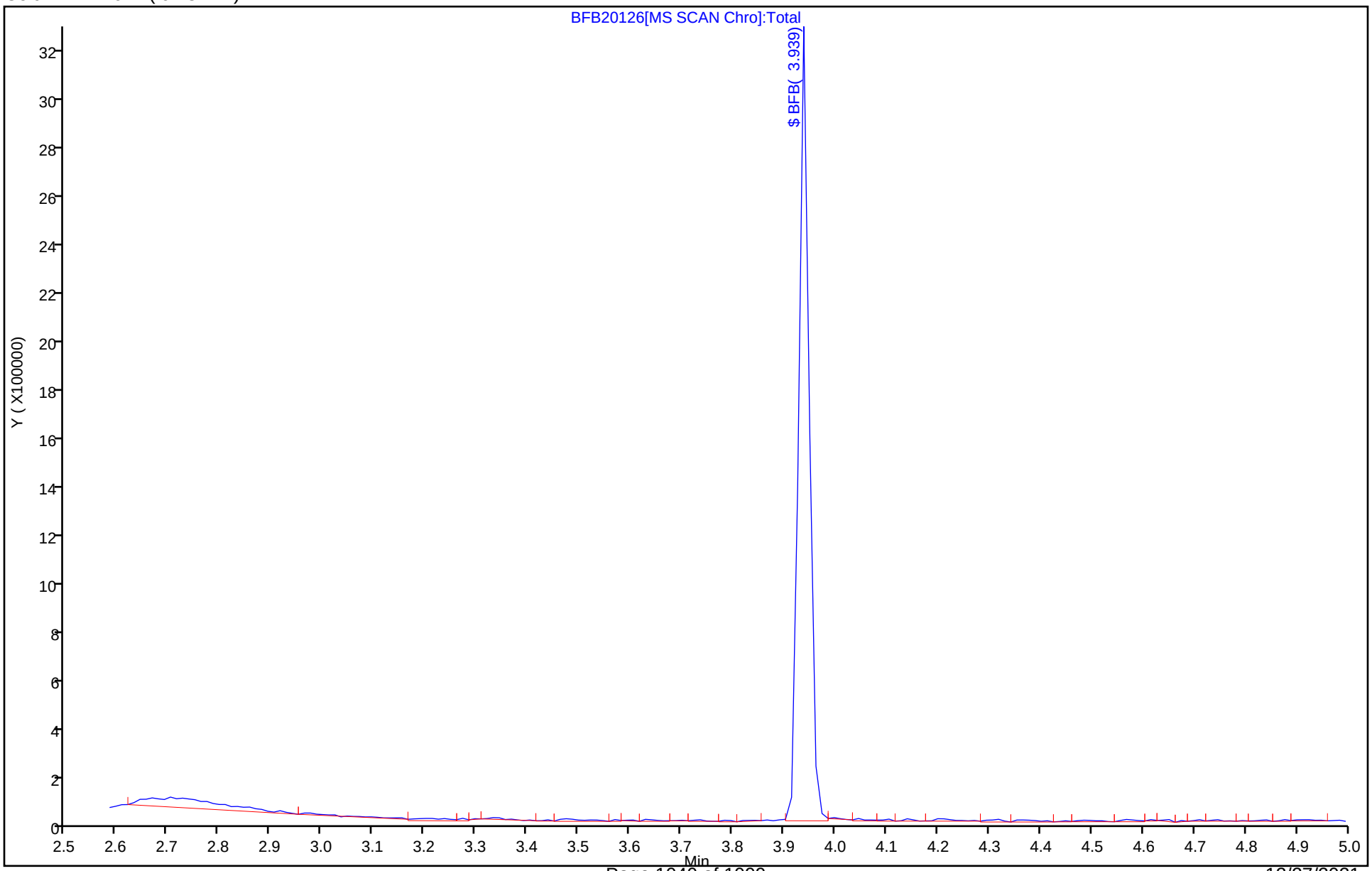
Report Date: 09-Sep-2021 17:49:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\BFB20126.D

Injection Date:	09-Sep-2021 13:33:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\BFB20174.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Dec-2021 20:04:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-001
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:13 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 20-Dec-2021 20:31:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 3 BFB	95	3.927	3.927	0.000	0	1611522	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

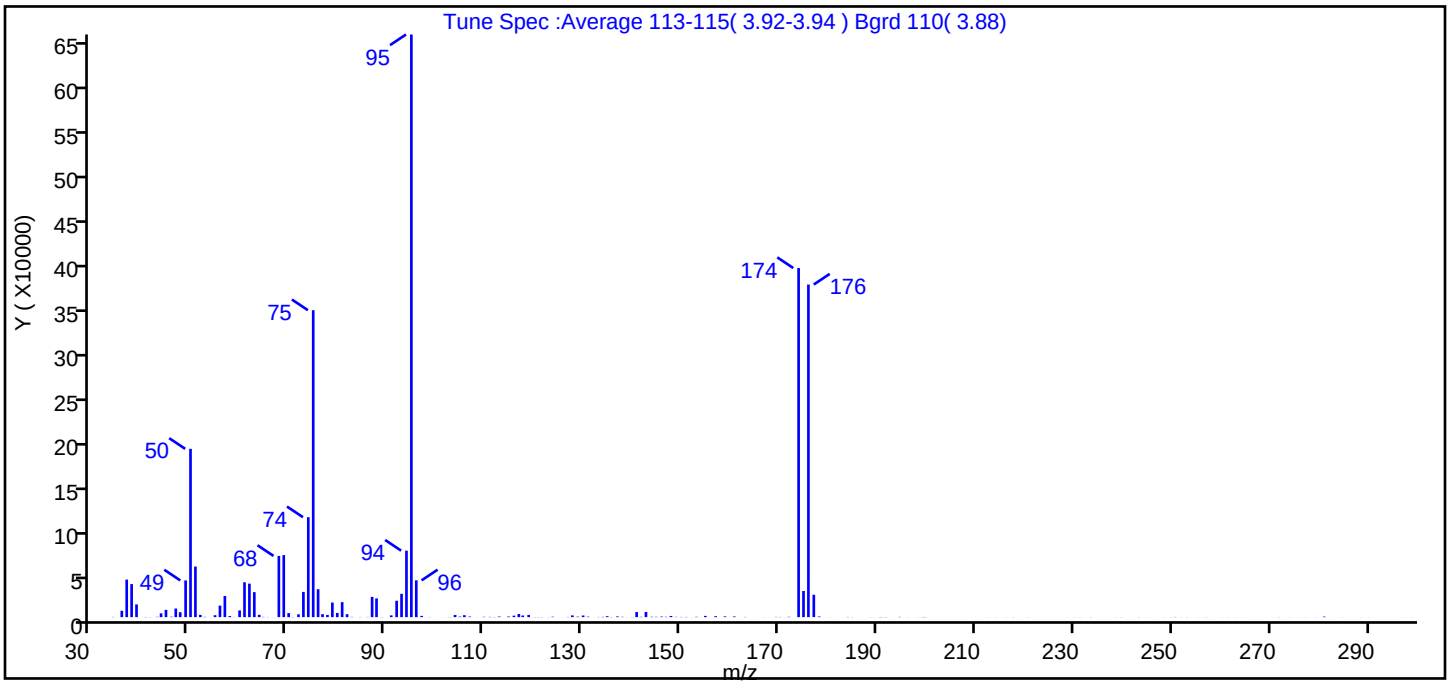
vmbfb_00029 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\BFB20174.D
Injection Date: 20-Dec-2021 20:04:30 Instrument ID: A3UX20
Lims ID: BFB
Client ID:
Operator ID: 434006 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260SIM_20 Limit Group: MSV SIM ICAL
Tune Method: BFB Method 8260

$ 3 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	28.9
75	30 to 60% of m/z 95	52.7
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	59.9
175	5 to 9% of m/z 174	4.5 (7.5)
176	Greater than 95% but less than 101% of m/z 174	57.1 (95.3)
177	5 to 9% of m/z 176	3.8 (6.7)

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\BFB20174.D\8260SIM_20.rslt\spectra.d
Injection Date: 20-Dec-2021 20:04:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
34.00	256	82.00	3305	133.00	217	192.00	158
36.00	7136	83.00	306	134.00	334	195.00	281
37.00	42064	85.00	178	135.00	1064	196.00	58
38.00	37064	86.00	235	136.00	188	198.00	86
39.00	14269	87.00	22680	137.00	823	199.00	203
41.00	203	88.00	20984	138.00	337	200.00	156
42.00	133	89.00	192	139.00	33	212.00	61
43.00	330	91.00	1982	140.00	149	213.00	80
44.00	4285	92.00	18360	141.00	5705	214.00	76
45.00	8178	93.00	26104	142.00	356	216.00	75
46.00	460	94.00	74496	143.00	5819	218.00	114
47.00	9665	95.00	652736	144.00	440	221.00	113
48.00	5525	96.00	41208	145.00	363	229.00	50
49.00	41152	97.00	1432	146.00	623	230.00	91
50.00	188544	98.00	53	147.00	390	231.00	90
51.00	56680	99.00	182	148.00	1317	234.00	132
52.00	2532	102.00	50	149.00	301	239.00	56
53.00	328	103.00	145	150.00	203	240.00	122
55.00	2188	104.00	2427	151.00	243	243.00	131
56.00	12891	105.00	634	152.00	81	245.00	63
57.00	23704	106.00	2171	153.00	380	248.00	79
58.00	1197	107.00	661	154.00	61	250.00	123
59.00	93	108.00	69	155.00	1406	251.00	227
60.00	7528	110.00	369	157.00	1081	252.00	76
61.00	39088	111.00	304	159.00	853	253.00	127
62.00	37552	112.00	167	161.00	777	256.00	54
63.00	28008	113.00	684	163.00	227	256.00	53
64.00	2588	115.00	728	167.00	64	257.00	101
65.00	310	116.00	1652	168.00	44	260.00	51
66.00	136	117.00	3547	169.00	249	262.00	59
67.00	74	118.00	1845	170.00	221	263.00	61
68.00	68576	119.00	2496	171.00	98	264.00	51
69.00	69496	120.00	165	172.00	385	271.00	53

Report Date: 21-Dec-2021 18:35:13 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\BFB20174.D\8260SIM_20.rslt\spectra.d
Injection Date: 20-Dec-2021 20:04:30
Spectrum: Tune Spec :Average 113-115(3.92-3.94) Bgrd 110(3.88)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 180

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	4484	121.00	161	174.00	391104	272.00	129
71.00	176	122.00	155	175.00	29344	274.00	60
72.00	3176	123.00	114	176.00	372608	276.00	52
73.00	28272	124.00	480	177.00	25096	277.00	65
74.00	111968	125.00	53	178.00	730	280.00	71
75.00	343872	126.00	33	180.00	72	281.00	619
76.00	31288	127.00	203	184.00	197	285.00	71
77.00	3334	128.00	1955	185.00	130	288.00	63
78.00	2467	129.00	526	189.00	128	290.00	75
79.00	16384	130.00	1847	189.00	59	292.00	56
80.00	4728	131.00	523	191.00	164	298.00	62
81.00	16824	132.00	19	191.00	136	299.00	82

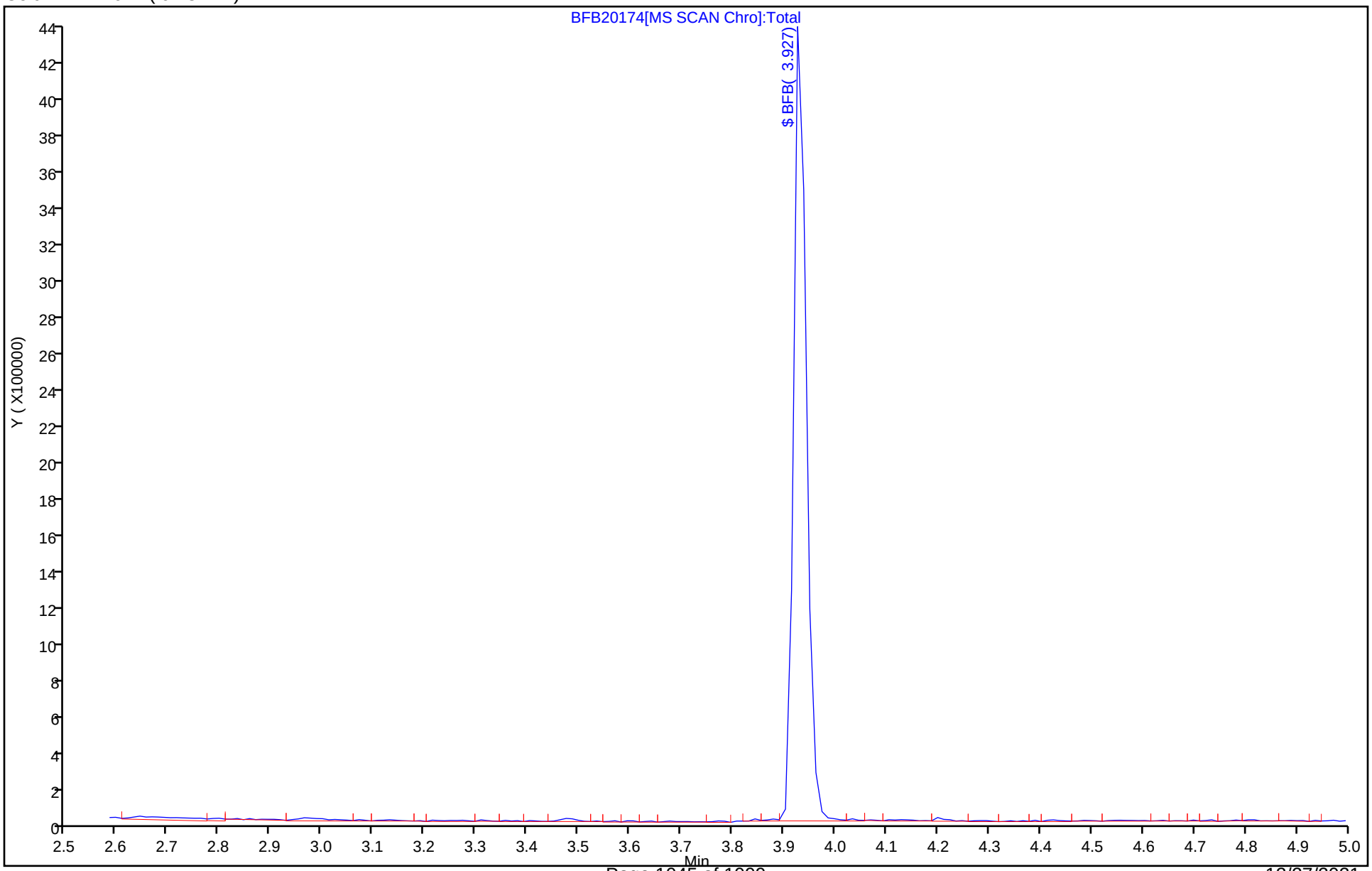
Report Date: 21-Dec-2021 18:35:13 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\BFB20174.D

Injection Date:	20-Dec-2021 20:04:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-517240/5

Matrix: Water Lab File ID: 202702.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 21:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202702.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2021 21:29:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-005
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 20-Dec-2021 22:19:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	883708	10.0	10.0	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2768615	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	83042	200.0	200.0	

QC Flag Legend

Processing Flags

Reagents:

vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

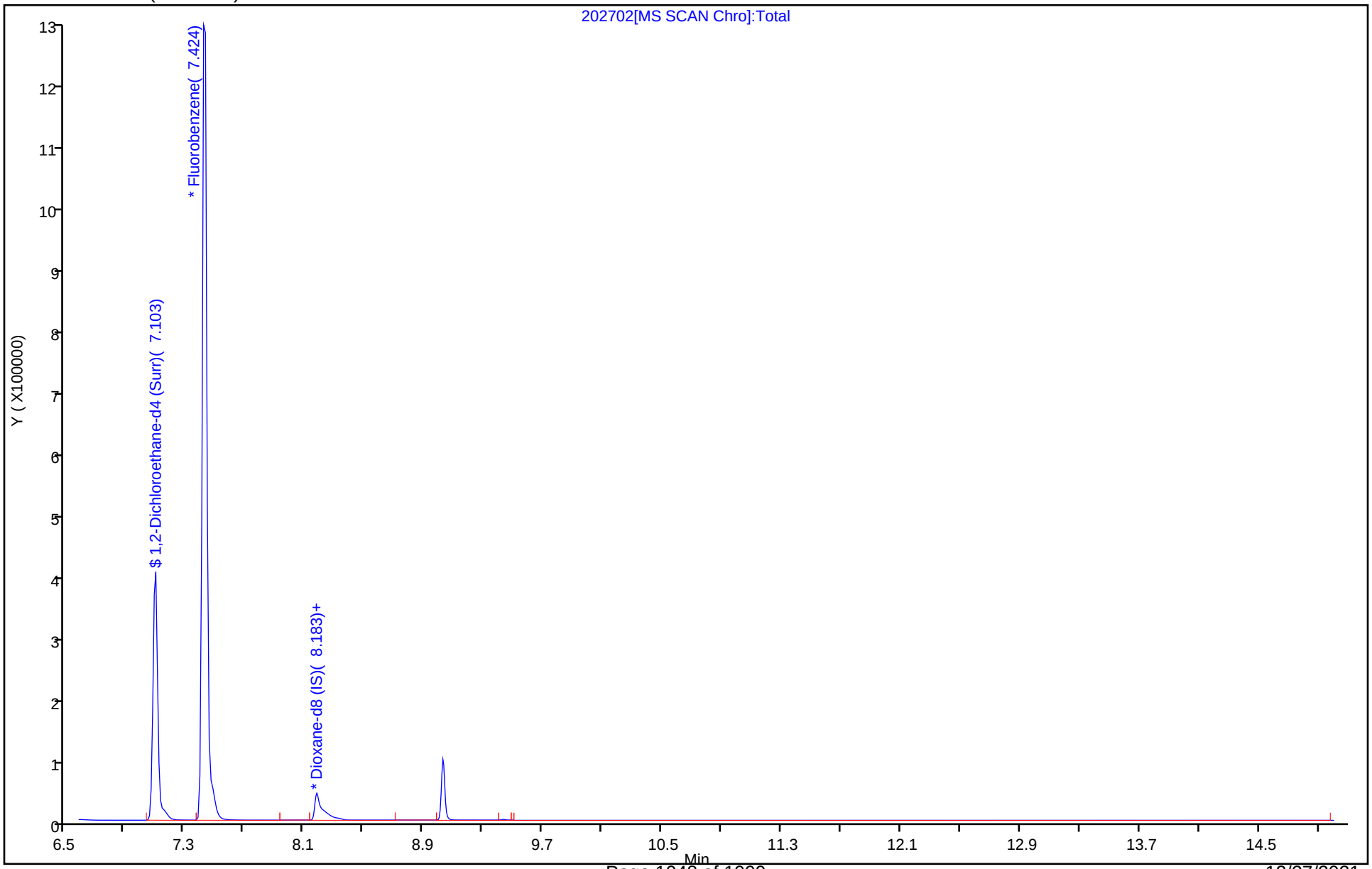
Report Date: 21-Dec-2021 18:35:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202702.D

Injection Date:	20-Dec-2021 21:29:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202702.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	20-Dec-2021 21:29:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-005				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 20-Dec-2021 22:19:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-517292/5

Matrix: Water Lab File ID: 191227.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 20:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191227.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Dec-2021 20:16:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116143-005
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:54 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 20:37:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.247	6.245	0.002	100	1439273	12.1	10.8	
* 7 Fluorobenzene	96	6.587	6.586	0.001	100	6045570	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.243	7.243	0.000	98	171123	242.7	242.7	
18 Ethylene Dibromide	107	8.915	8.910	0.005	41	37		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.245	12.260	-0.015	77	48		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

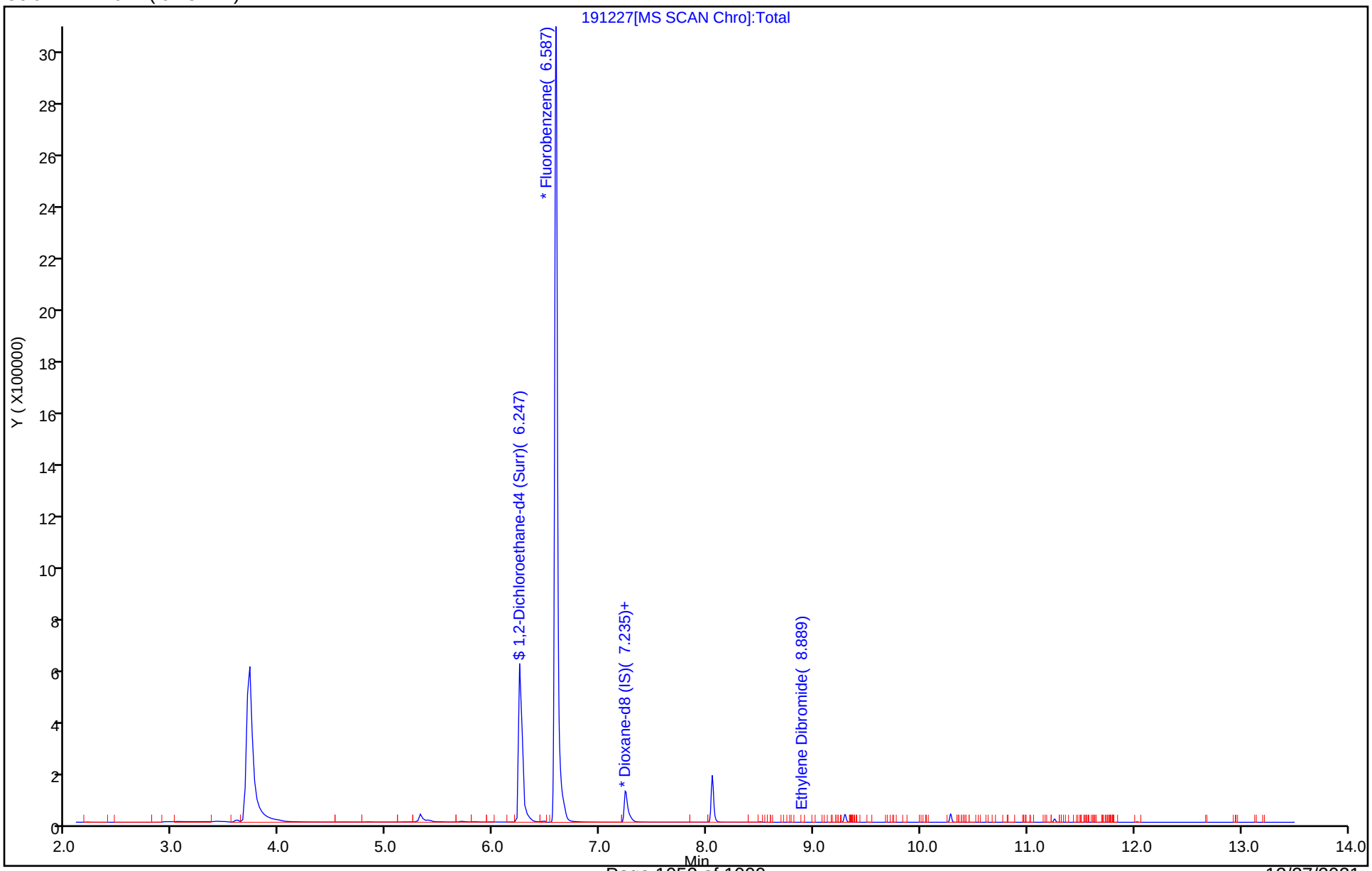
Report Date: 21-Dec-2021 23:47:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191227.D

Injection Date:	21-Dec-2021 20:16:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191227.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Dec-2021 20:16:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116143-005
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:54 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 20:37:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.8	89.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-517240/4

Matrix: Water Lab File ID: 202701.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 12/20/2021 21:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.84		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202701.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2021 21:05:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-004
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 20-Dec-2021 21:28:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	880679	10.0	9.91	
* 7 Fluorobenzene	96	7.436	7.436	0.000	100	2782219	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	91	85070	200.0	200.0	
8 1,4-Dioxane	88	8.238	8.237	0.001	50	6830	10.0	9.84	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

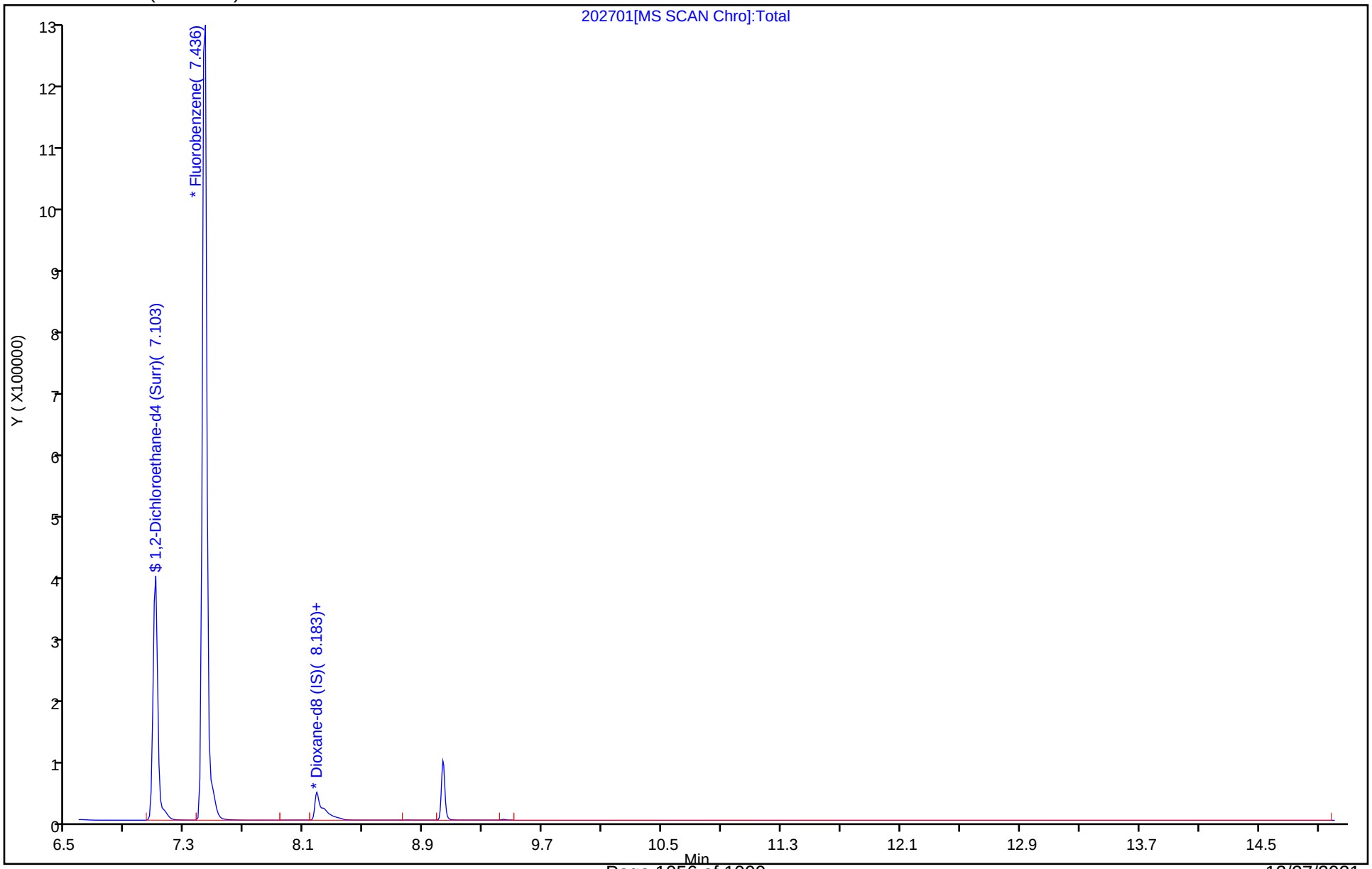
Report Date: 21-Dec-2021 18:35:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202701.D

Injection Date:	20-Dec-2021 21:05:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202701.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-Dec-2021 21:05:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-004				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 20-Dec-2021 21:28:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.91	99.12

Eurofins TestAmerica, Canton

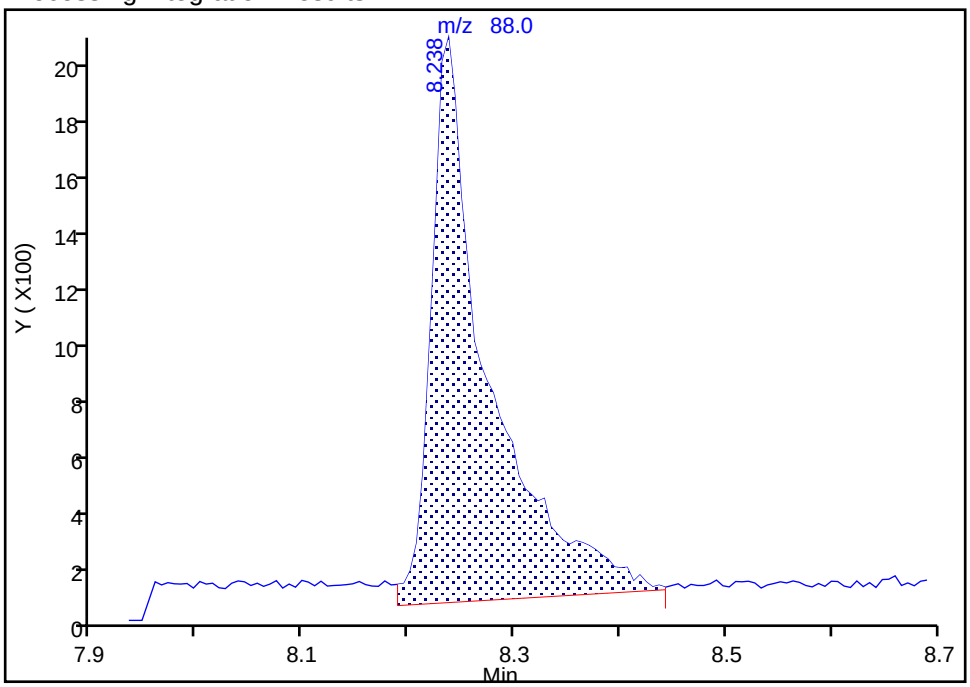
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202701.D				
Injection Date:	20-Dec-2021 21:05:30	Instrument ID:	A3UX20		
Lims ID:	LCS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

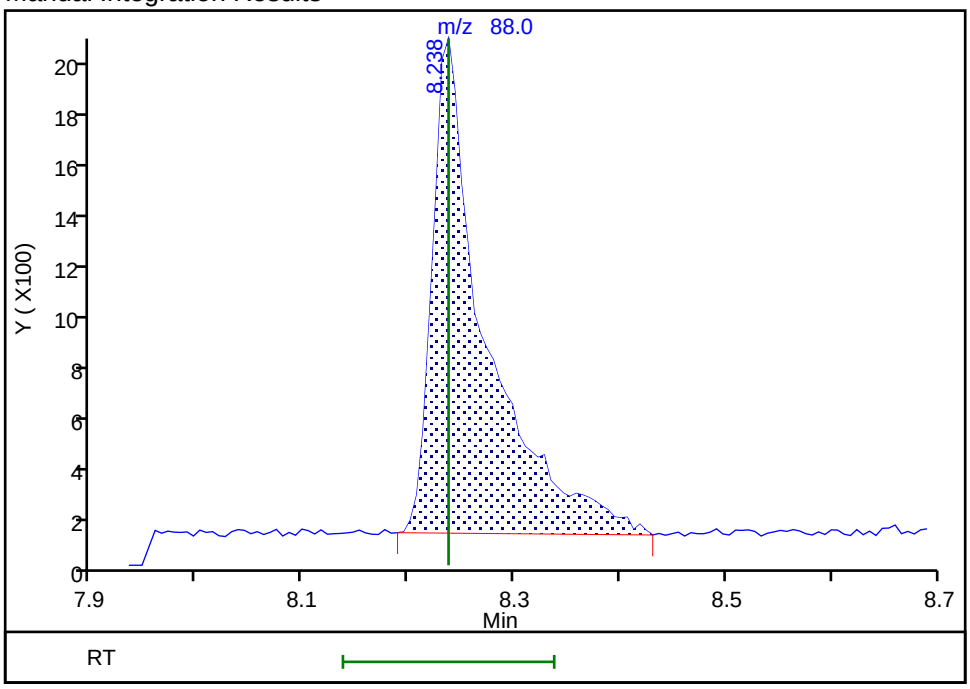
Processing Integration Results

RT: 8.24
Area: 7491
Amount: 10.789271
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 6830
Amount: 9.837234
Amount Units: ug/l



Reviewer: seymourc, 20-Dec-2021 21:27:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-517292/4

Matrix: Water Lab File ID: 191226.D

Analysis Method: 8260B SIM Date Collected:

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 19:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191226.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Dec-2021 19:51:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116143-004
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:54 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 20:12:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	1403123	12.1	10.8	
* 7 Fluorobenzene	96	6.586	6.586	0.000	100	5904454	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.242	7.243	-0.001	99	168606	242.7	242.7	
8 1,4-Dioxane	88	7.285	7.285	-0.001	53	11618	10.0	10.6	

QC Flag Legend
Processing Flags

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

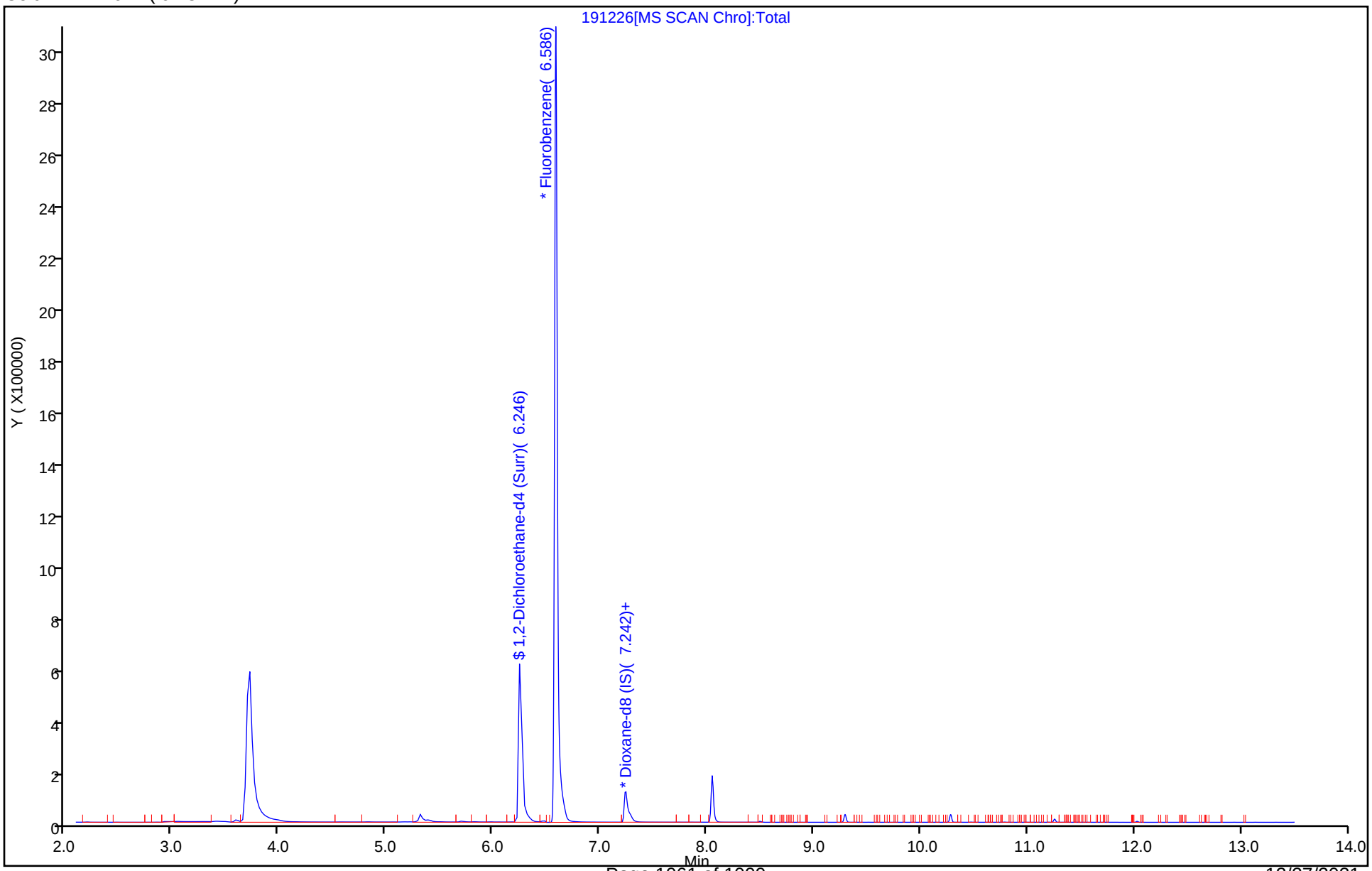
Report Date: 21-Dec-2021 23:47:55 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191226.D

Injection Date:	21-Dec-2021 19:51:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191226.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	21-Dec-2021 19:51:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-004				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 20:12:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	10.8	89.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-20_121421 MS Lab Sample ID: 240-161553-10 MS

Matrix: Water Lab File ID: 202714.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 14:05

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 02:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	11.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202714.D
Lims ID: 240-161553-F-10 MS
Client ID:
Sample Type: MS
Inject. Date: 21-Dec-2021 02:15:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-017
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	846866	10.0	10.3	
* 7 Fluorobenzene	96	7.423	7.436	-0.013	100	2573605	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	80143	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	56	7296	10.0	11.2	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

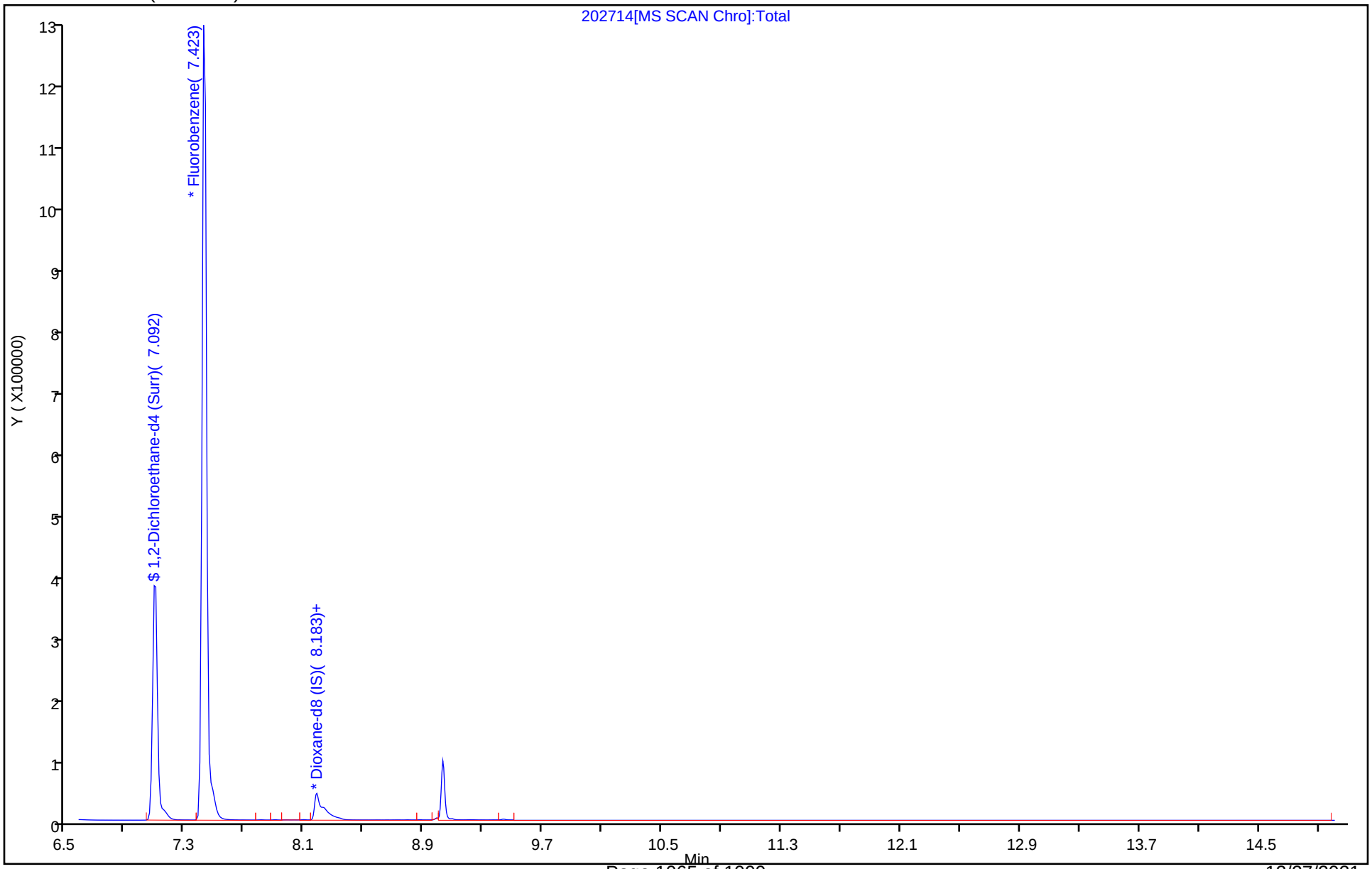
Report Date: 21-Dec-2021 18:35:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202714.D

Injection Date:	21-Dec-2021 02:15:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-F-10 MS			Worklist Smp#:	17
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202714.D				
Lims ID:	240-161553-F-10 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	21-Dec-2021 02:15:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-017				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.04

Eurofins TestAmerica, Canton

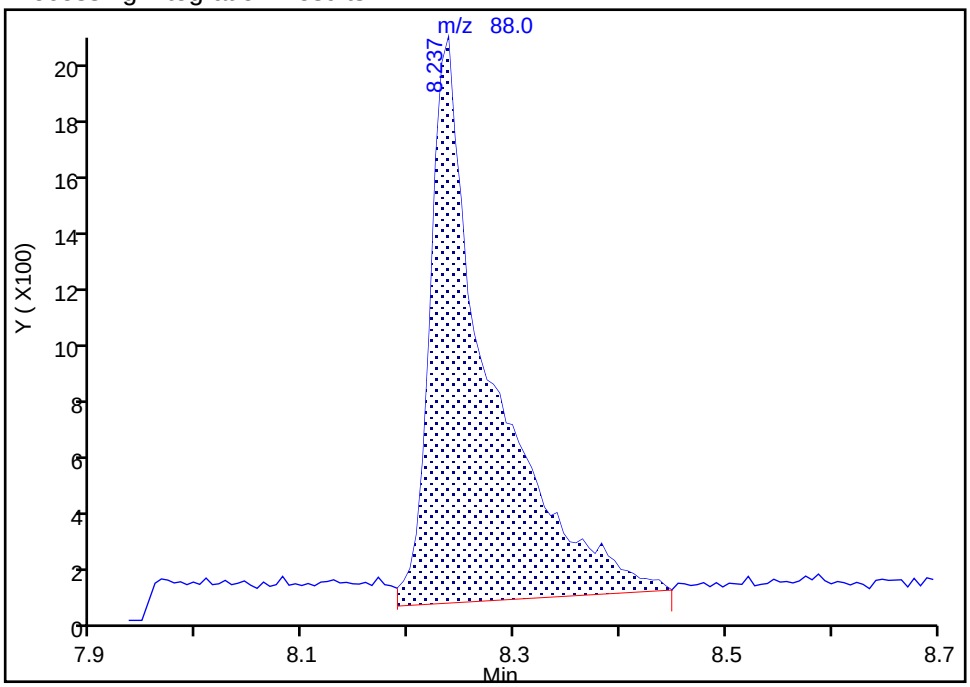
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202714.D				
Injection Date:	21-Dec-2021 02:15:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-10 MS				
Client ID:					
Operator ID:	434006	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

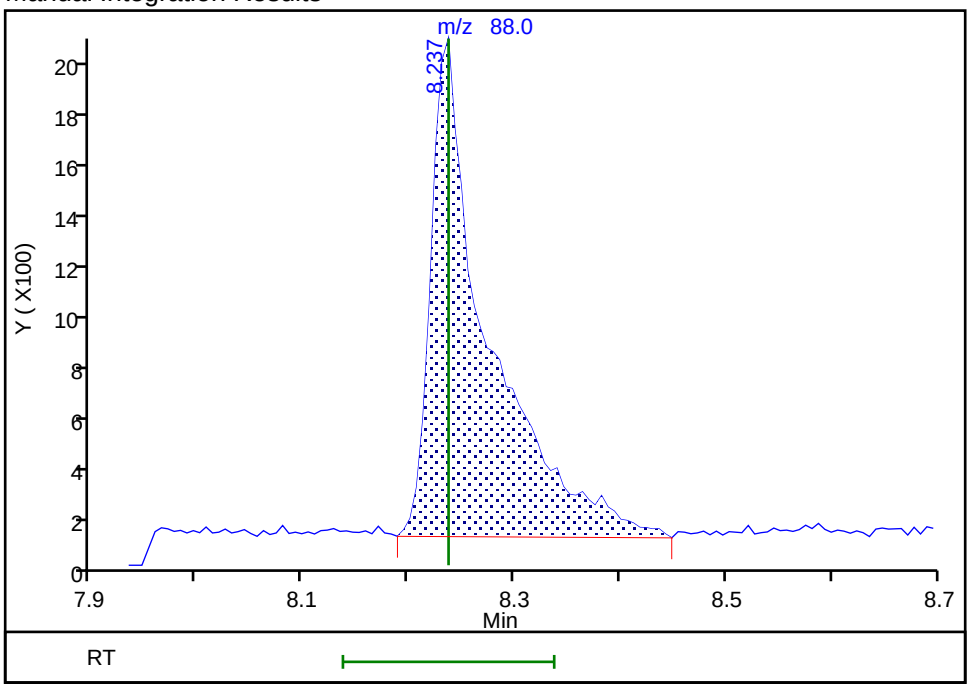
Processing Integration Results

RT: 8.24
Area: 7790
Amount: 11.909693
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7296
Amount: 11.154445
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:21:10
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-19_121621 MS Lab Sample ID: 240-161553-23 MS

Matrix: Water Lab File ID: 191230.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 11:15

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 21:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191230.D
Lims ID: 240-161553-F-23 MS
Client ID:
Sample Type: MS
Inject. Date: 21-Dec-2021 21:30:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116143-008
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:54 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 22:22:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	1398911	12.1	11.0	
* 7 Fluorobenzene	96	6.586	6.586	0.000	100	5769703	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.244	7.243	0.001	98	173691	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.285	0.001	54	12062	10.0	10.7	
18 Ethylene Dibromide	107	8.905	8.910	-0.005	41	203		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.238	12.260	-0.022	87	88		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

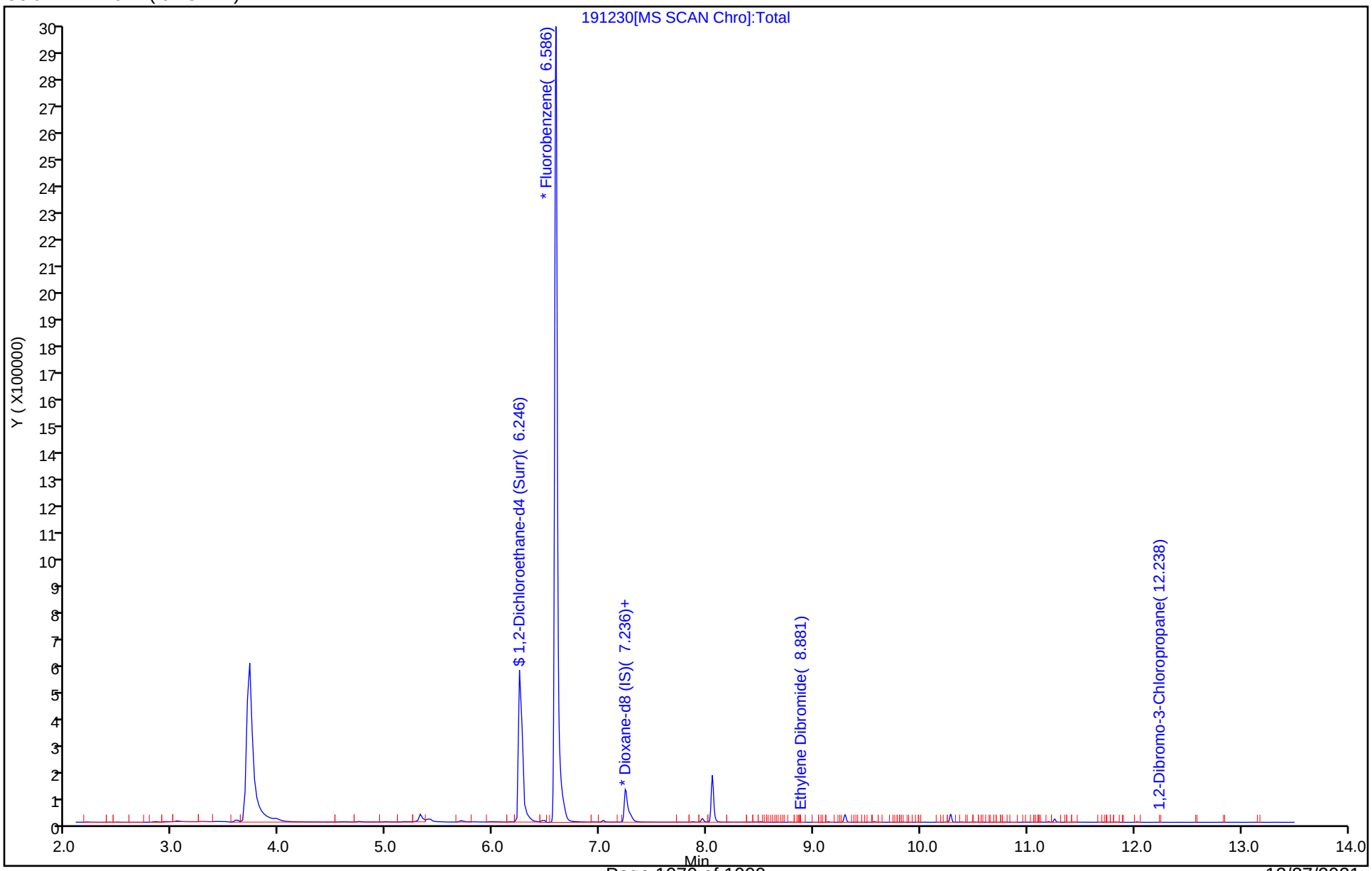
Report Date: 21-Dec-2021 23:47:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191230.D

Injection Date:	21-Dec-2021 21:30:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-161553-F-23 MS			Worklist Smp#:	8
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191230.D				
Lims ID:	240-161553-F-23 MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	21-Dec-2021 21:30:30	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-008				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 22:22:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	11.0	90.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-20_121421 MSD Lab Sample ID: 240-161553-10 MSD

Matrix: Water Lab File ID: 202715.D

Analysis Method: 8260B SIM Date Collected: 12/14/2021 14:05

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 02:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517240 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.6		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202715.D
Lims ID: 240-161553-F-10 MSD
Client ID:
Sample Type: MSD
Inject. Date: 21-Dec-2021 02:39:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116132-018
Operator ID: 434006 Instrument ID: A3UX20

Method: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 18:35:02 Calib Date: 09-Sep-2021 17:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	7.103	7.103	0.000	100	858046	10.0	10.2	
* 7 Fluorobenzene	96	7.423	7.436	-0.013	100	2634052	10.0	10.0	
* 9 Dioxane-d8 (IS)	96	8.183	8.183	0.000	92	83106	200.0	200.0	
8 1,4-Dioxane	88	8.237	8.237	0.000	50	7213	10.0	10.6	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm150ss20_00005	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00206	Amount Added:	0.00	Units:	Run Reagent
vm150IS20_00017	Amount Added:	1.00	Units: uL	Run Reagent

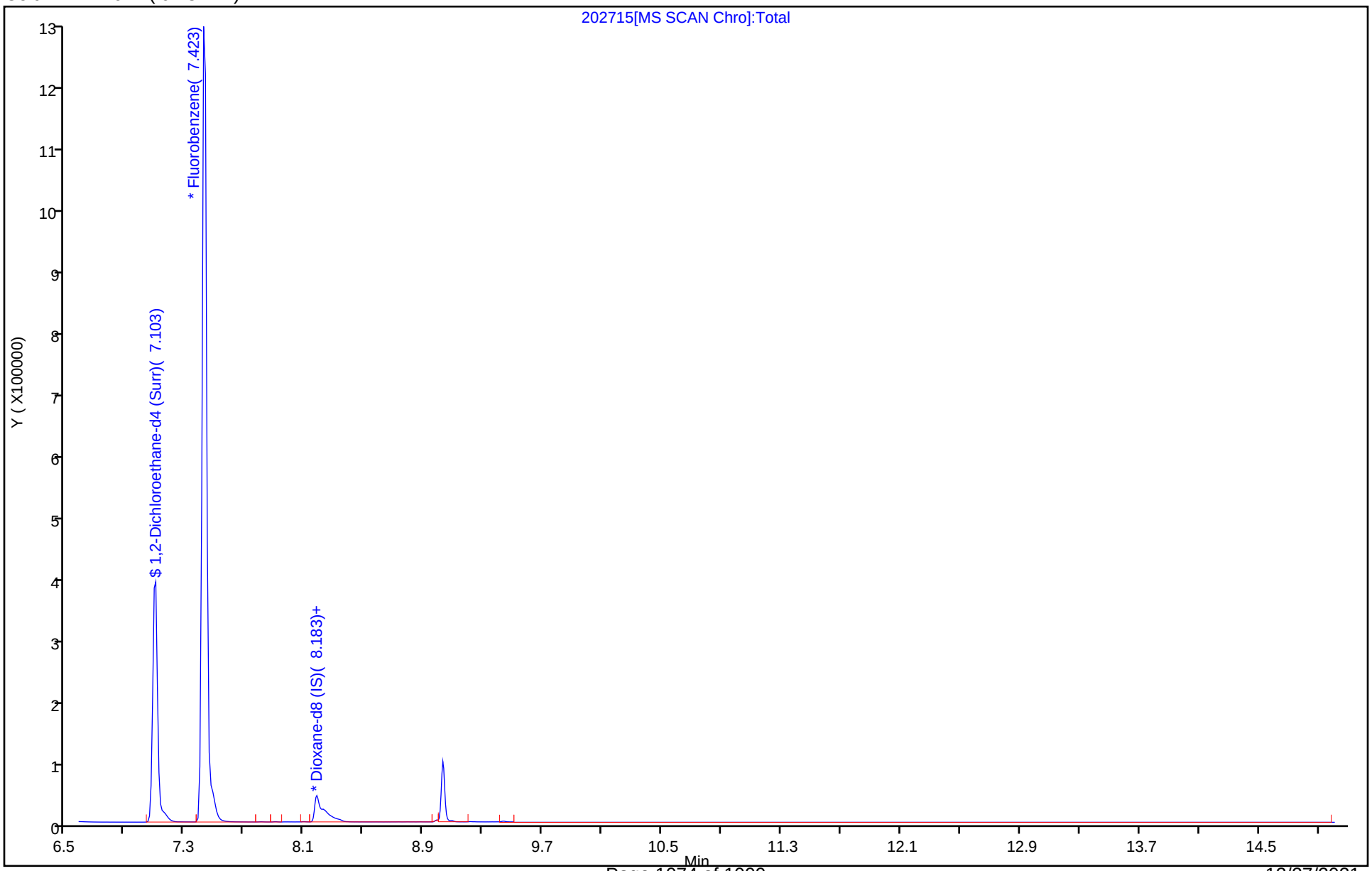
Report Date: 21-Dec-2021 18:35:08 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202715.D

Injection Date:	21-Dec-2021 02:39:30	Instrument ID:	A3UX20	Operator ID:	434006
Lims ID:	240-161553-F-10 MSD			Worklist Smp#:	18
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202715.D				
Lims ID:	240-161553-F-10 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	21-Dec-2021 02:39:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116132-018				
Operator ID:	434006	Instrument ID:	A3UX20		
Method:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\8260SIM_20.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 18:35:02	Calib Date:	09-Sep-2021 17:16:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX20\20210909-112994.b\201668.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 18:21:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

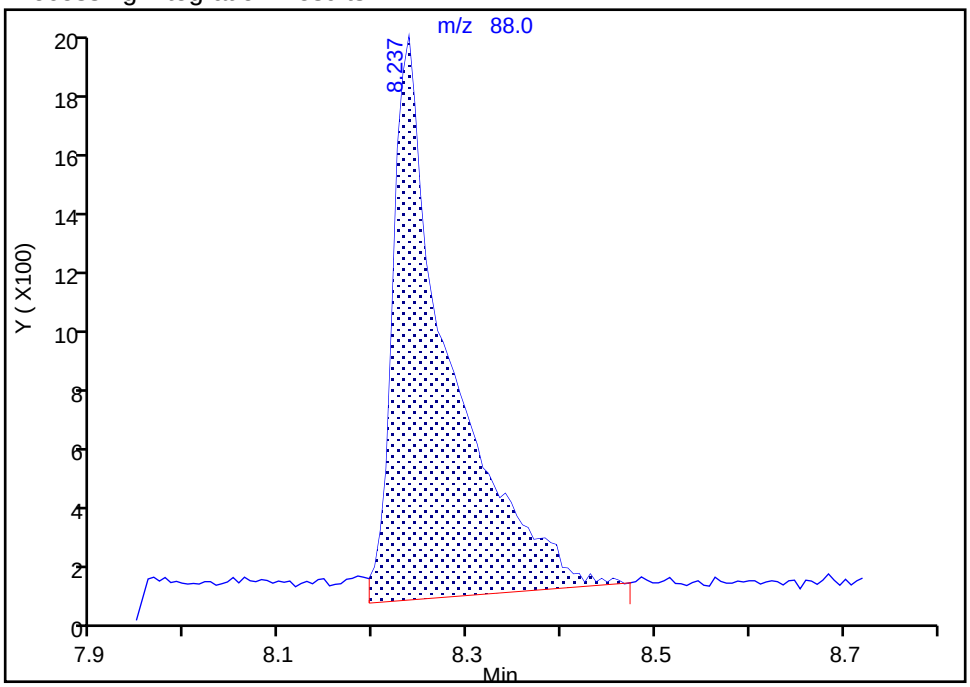
Data File:	\\chromfs\Canton\ChromData\A3UX20\20211220-116132.b\202715.D				
Injection Date:	21-Dec-2021 02:39:30	Instrument ID:	A3UX20		
Lims ID:	240-161553-F-10 MSD				
Client ID:					
Operator ID:	434006	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_20	Limit Group:	MSV SIM ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

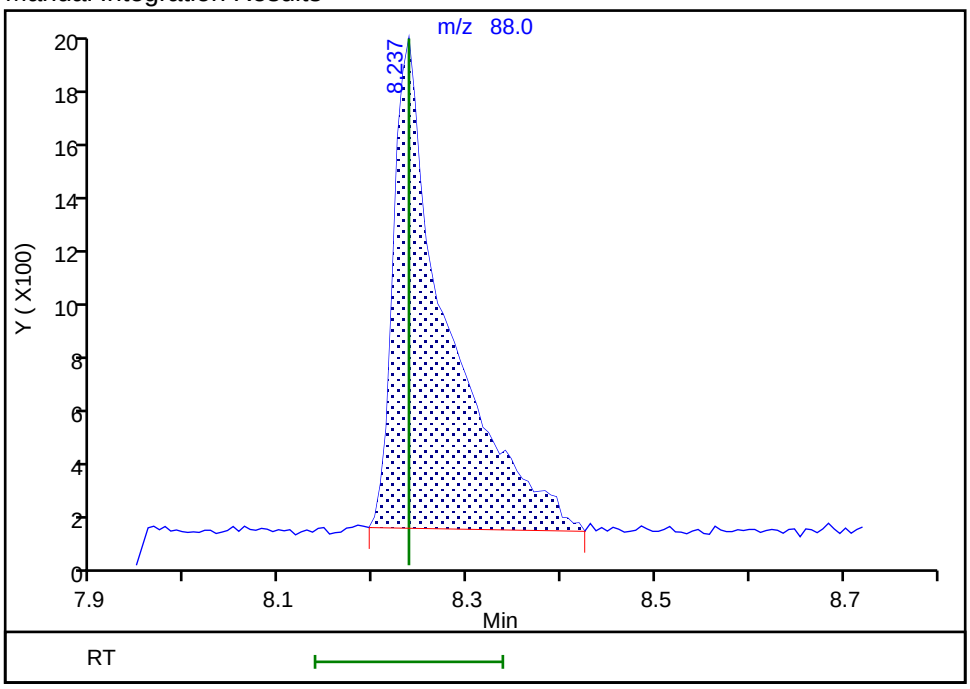
Processing Integration Results

RT: 8.24
Area: 7914
Amount: 11.667892
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7213
Amount: 10.634382
Amount Units: ug/l



Reviewer: seymourc, 21-Dec-2021 18:21:24

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Client Sample ID: SL-19_121621 MSD Lab Sample ID: 240-161553-23 MSD

Matrix: Water Lab File ID: 191231.D

Analysis Method: 8260B SIM Date Collected: 12/16/2021 11:15

Sample wt/vol: 15(mL) Date Analyzed: 12/21/2021 21:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 517292 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		66-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191231.D
Lims ID: 240-161553-F-23 MSD
Client ID:
Sample Type: MSD
Inject. Date: 21-Dec-2021 21:55:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 15.000 mL Dil. Factor: 1.0000
Sample Info: 240-0116143-009
Operator ID: 434006 Instrument ID: A3UX18

Method: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m
Limit Group: MSV SIM ICAL
Last Update: 21-Dec-2021 23:47:54 Calib Date: 21-Oct-2021 19:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: seymourc Date: 21-Dec-2021 23:47:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 5 1,2-Dichloroethane-d4 (Surr)	65	6.246	6.245	0.001	100	1391833	12.1	11.0	
* 7 Fluorobenzene	96	6.587	6.586	0.001	100	5749324	12.1	12.1	
* 9 Dioxane-d8 (IS)	96	7.244	7.243	0.001	98	173491	242.7	242.7	
8 1,4-Dioxane	88	7.286	7.285	0.001	54	12046	10.0	10.7	
18 Ethylene Dibromide	107	8.906	8.910	-0.004	41	78		NC	
21 1,2-Dibromo-3-Chloropropane	157	12.257	12.260	-0.003	80	17		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

vmdiox_spike_00287	Amount Added:	3.00	Units: uL	
vm25ux18ss_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm25UX18IS_00004	Amount Added:	7.28	Units: uL	Run Reagent
vm40ml_vials_00016	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00204	Amount Added:	0.00	Units:	Run Reagent

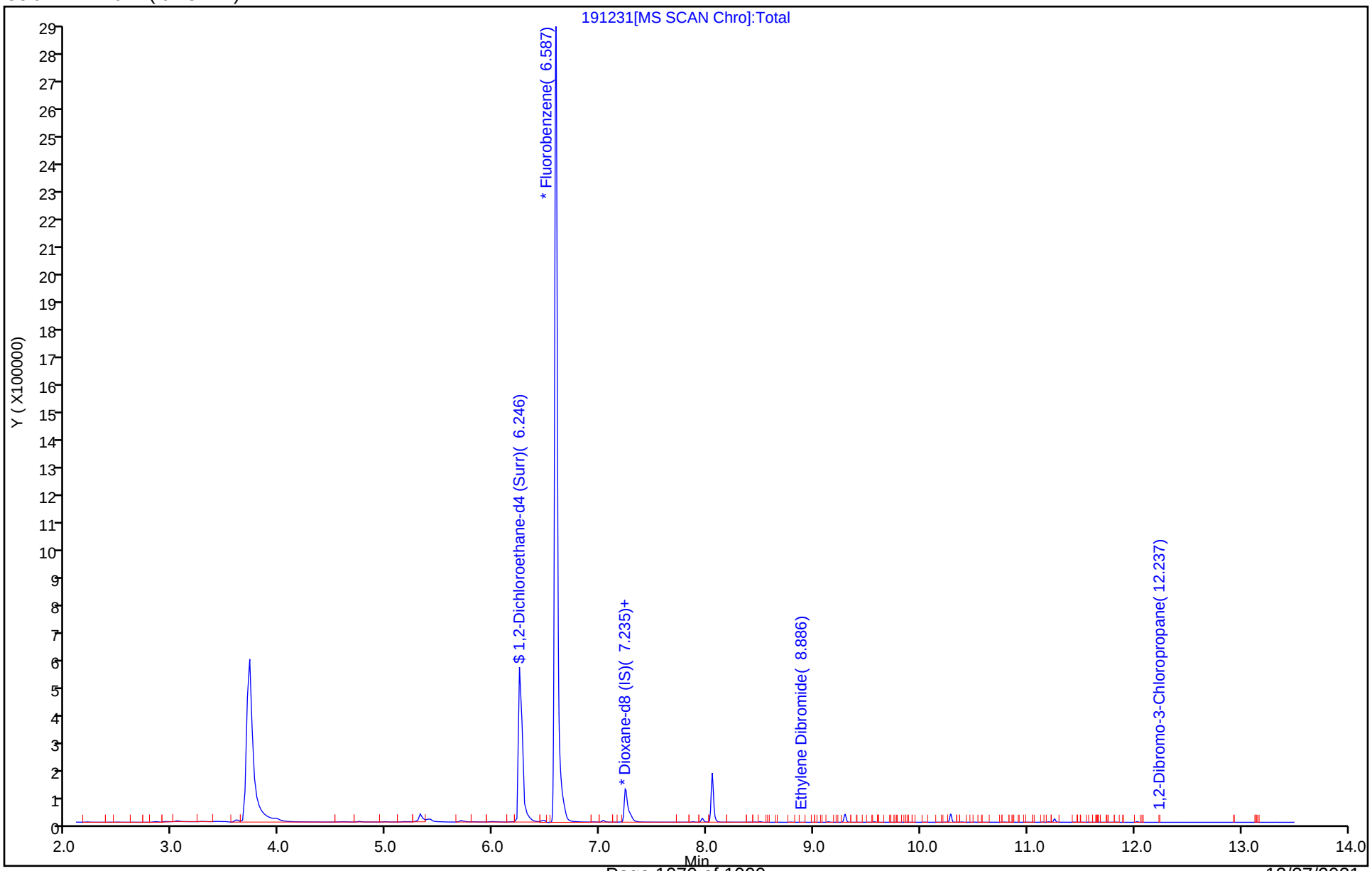
Report Date: 21-Dec-2021 23:47:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191231.D

Injection Date:	21-Dec-2021 21:55:30	Instrument ID:	A3UX18	Operator ID:	434006
Lims ID:	240-161553-F-23 MSD			Worklist Smp#:	9
Client ID:					
Purge Vol:	15.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260SIM_18	Limit Group:	MSV SIM ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\191231.D				
Lims ID:	240-161553-F-23 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	21-Dec-2021 21:55:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	15.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0116143-009				
Operator ID:	434006	Instrument ID:	A3UX18		
Method:	\\chromfs\Canton\ChromData\A3UX18\20211221-116143.b\8260SIM_18.m				
Limit Group:	MSV SIM ICAL				
Last Update:	21-Dec-2021 23:47:54	Calib Date:	21-Oct-2021 19:44:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX18\20211021-114325.b\190510.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1619				

First Level Reviewer: seymourc Date: 21-Dec-2021 23:47:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 1,2-Dichloroethane-d4 (Surr)	12.1	11.0	90.77

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Start Date: 09/09/2021 13:33

Analysis Batch Number: 503003 End Date: 09/09/2021 18:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-503003/1		09/09/2021 13:33	1	BFB20126.D	DB-624 0.18(mm)
IC 240-503003/3		09/09/2021 14:25	1	201661.D	DB-624 0.18(mm)
IC 240-503003/4		09/09/2021 14:49	1	201662.D	DB-624 0.18(mm)
IC 240-503003/5		09/09/2021 15:14	1	201663.D	DB-624 0.18(mm)
IC 240-503003/6		09/09/2021 15:38	1	201664.D	DB-624 0.18(mm)
ICIS 240-503003/7		09/09/2021 16:03	1	201665.D	DB-624 0.18(mm)
IC 240-503003/8		09/09/2021 16:27	1	201666.D	DB-624 0.18(mm)
IC 240-503003/9		09/09/2021 16:52	1	201667.D	DB-624 0.18(mm)
IC 240-503003/10		09/09/2021 17:16	1	201668.D	DB-624 0.18(mm)
ICV 240-503003/12		09/09/2021 18:06	1	201670.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX18 Start Date: 10/21/2021 16:07

Analysis Batch Number: 509326 End Date: 10/21/2021 20:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-509326/1		10/21/2021 16:07	1	BFB18107.D	DB-624 0.18(mm)
IC 240-509326/3		10/21/2021 16:50	1	190503.D	DB-624 0.18(mm)
IC 240-509326/4		10/21/2021 17:15	1	190504.D	DB-624 0.18(mm)
IC 240-509326/5		10/21/2021 17:40	1	190505.D	DB-624 0.18(mm)
IC 240-509326/6		10/21/2021 18:05	1	190506.D	DB-624 0.18(mm)
ICIS 240-509326/7		10/21/2021 18:29	1	190507.D	DB-624 0.18(mm)
IC 240-509326/8		10/21/2021 18:54	1	190508.D	DB-624 0.18(mm)
IC 240-509326/9		10/21/2021 19:19	1	190509.D	DB-624 0.18(mm)
IC 240-509326/10		10/21/2021 19:44	1	190510.D	DB-624 0.18(mm)
ICV 240-509326/12		10/21/2021 20:33	1	190512.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX20 Start Date: 12/20/2021 20:04

Analysis Batch Number: 517240 End Date: 12/21/2021 07:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-517240/1		12/20/2021 20:04	1	BFB20174.D	DB-624 0.18(mm)
CCVIS 240-517240/3		12/20/2021 20:41	1	202700.D	DB-624 0.18(mm)
LCS 240-517240/4		12/20/2021 21:05	1	202701.D	DB-624 0.18(mm)
MB 240-517240/5		12/20/2021 21:29	1	202702.D	DB-624 0.18(mm)
ZZZZZ		12/20/2021 21:53	1		DB-624 0.18(mm)
ZZZZZ		12/20/2021 22:17	1		DB-624 0.18(mm)
240-161553-2	SL-4_121421	12/20/2021 22:41	1	202705.D	DB-624 0.18(mm)
240-161553-3	SL-18_121421	12/20/2021 23:05	1	202706.D	DB-624 0.18(mm)
240-161553-4	SL-17_121421	12/20/2021 23:28	1	202707.D	DB-624 0.18(mm)
240-161553-5	SL-16_121421	12/20/2021 23:52	1	202708.D	DB-624 0.18(mm)
240-161553-6	SL-3_121421	12/21/2021 00:16	1	202709.D	DB-624 0.18(mm)
240-161553-7	SL-2_121421	12/21/2021 00:40	1	202710.D	DB-624 0.18(mm)
240-161553-8	MH-1231_121421	12/21/2021 01:04	1	202711.D	DB-624 0.18(mm)
240-161553-9	SL-21_121421	12/21/2021 01:27	1	202712.D	DB-624 0.18(mm)
240-161553-10	SL-20_121421	12/21/2021 01:51	1	202713.D	DB-624 0.18(mm)
240-161553-10 MS	SL-20_121421 MS	12/21/2021 02:15	1	202714.D	DB-624 0.18(mm)
240-161553-10 MSD	SL-20_121421 MSD	12/21/2021 02:39	1	202715.D	DB-624 0.18(mm)
240-161553-11	SL-22_121421	12/21/2021 03:03	1	202716.D	DB-624 0.18(mm)
240-161553-12	SL-15_121621	12/21/2021 03:27	1	202717.D	DB-624 0.18(mm)
240-161553-13	SL-14_121621	12/21/2021 03:51	1	202718.D	DB-624 0.18(mm)
240-161553-14	SL-13_121621	12/21/2021 04:15	1	202719.D	DB-624 0.18(mm)
240-161553-15	SL-7_121621	12/21/2021 04:38	1	202720.D	DB-624 0.18(mm)
240-161553-16	SL-6_121621	12/21/2021 05:02	1	202721.D	DB-624 0.18(mm)
240-161553-17	SL-5_121621	12/21/2021 05:26	1	202722.D	DB-624 0.18(mm)
240-161553-18	SL-8_121621	12/21/2021 05:50	1	202723.D	DB-624 0.18(mm)
240-161553-19	SL-9_121621	12/21/2021 06:14	1	202724.D	DB-624 0.18(mm)
240-161553-20	SL-10_121621	12/21/2021 06:38	1	202725.D	DB-624 0.18(mm)
240-161553-21	SL-11_121621	12/21/2021 07:02	1	202726.D	DB-624 0.18(mm)
240-161553-22	SL-12_121621	12/21/2021 07:26	1	202727.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Instrument ID: A3UX18 Start Date: 12/21/2021 18:50

Analysis Batch Number: 517292 End Date: 12/21/2021 22:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-517292/1		12/21/2021 18:50	1	BFB18138.D	DB-624 0.18(mm)
CCVIS 240-517292/3		12/21/2021 19:26	1	191225.D	DB-624 0.18(mm)
LCS 240-517292/4		12/21/2021 19:51	1	191226.D	DB-624 0.18(mm)
MB 240-517292/5		12/21/2021 20:16	1	191227.D	DB-624 0.18(mm)
ZZZZZ		12/21/2021 20:41	1		DB-624 0.18(mm)
240-161553-23	SL-19_121621	12/21/2021 21:06	1	191229.D	DB-624 0.18(mm)
240-161553-23 MS	SL-19_121621 MS	12/21/2021 21:30	1	191230.D	DB-624 0.18(mm)
240-161553-23 MSD	SL-19_121621 MSD	12/21/2021 21:55	1	191231.D	DB-624 0.18(mm)
240-161553-24	DUP-01	12/21/2021 22:20	1	191232.D	DB-624 0.18(mm)
240-161553-25	DUP-02	12/21/2021 22:45	1	191233.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm150IS20 00012	vm150SS20 00003	vm50ss 00453	vmbfb 00027
BFB 240-503003/1		8260B SIM		5 mL	5 mL				1 uL
IC 240-503003/3		8260B SIM		15 mL	15 mL	1 uL		0.15 uL	
IC 240-503003/4		8260B SIM		15 mL	15 mL	1 uL		0.3 uL	
IC 240-503003/5		8260B SIM		15 mL	15 mL	1 uL		0.75 uL	
IC 240-503003/6		8260B SIM		15 mL	15 mL	1 uL		1.5 uL	
ICIS 240-503003/7		8260B SIM		15 mL	15 mL	1 uL		3 uL	
IC 240-503003/8		8260B SIM		15 mL	15 mL	1 uL		7.5 uL	
IC 240-503003/9		8260B SIM		15 mL	15 mL	1 uL		15 uL	
IC 240-503003/10		8260B SIM		15 mL	15 mL	1 uL		30 uL	
ICV 240-503003/12		8260B SIM		15 mL	15 mL	1 uL	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00275	vmdioxanew 00264				
BFB 240-503003/1		8260B SIM							
IC 240-503003/3		8260B SIM			0.15 uL				
IC 240-503003/4		8260B SIM			0.3 uL				
IC 240-503003/5		8260B SIM			0.75 uL				
IC 240-503003/6		8260B SIM			1.5 uL				
ICIS 240-503003/7		8260B SIM			3 uL				
IC 240-503003/8		8260B SIM			7.5 uL				
IC 240-503003/9		8260B SIM			15 uL				
IC 240-503003/10		8260B SIM			30 uL				
ICV 240-503003/12		8260B SIM		3 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 503003 Batch Start Date: 09/09/21 13:33 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 509326 Batch Start Date: 10/21/21 16:07 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm25UX18IS 00003	vm25UX18SS 00004	vm50ss 00456	vmbfb 00027
BFB 240-509326/1		8260B SIM		5 mL	5 mL				1 uL
IC 240-509326/3		8260B SIM		15 mL	15 mL	7.28 uL		0.15 uL	
IC 240-509326/4		8260B SIM		15 mL	15 mL	7.28 uL		0.3 uL	
IC 240-509326/5		8260B SIM		15 mL	15 mL	7.28 uL		0.75 uL	
IC 240-509326/6		8260B SIM		15 mL	15 mL	7.28 uL		1.5 uL	
ICIS 240-509326/7		8260B SIM		15 mL	15 mL	7.28 uL		3 uL	
IC 240-509326/8		8260B SIM		15 mL	15 mL	7.28 uL		7.5 uL	
IC 240-509326/9		8260B SIM		15 mL	15 mL	7.28 uL		15 uL	
IC 240-509326/10		8260B SIM		15 mL	15 mL	7.28 uL		30 uL	
ICV 240-509326/12		8260B SIM		15 mL	15 mL	7.28 uL	7.28 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00280	vmdioxanew 00268				
BFB 240-509326/1		8260B SIM							
IC 240-509326/3		8260B SIM			0.15 uL				
IC 240-509326/4		8260B SIM			0.3 uL				
IC 240-509326/5		8260B SIM			0.75 uL				
IC 240-509326/6		8260B SIM			1.5 uL				
ICIS 240-509326/7		8260B SIM			3 uL				
IC 240-509326/8		8260B SIM			7.5 uL				
IC 240-509326/9		8260B SIM			15 uL				
IC 240-509326/10		8260B SIM			30 uL				
ICV 240-509326/12		8260B SIM		3 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 509326 Batch Start Date: 10/21/21 16:07 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517240 Batch Start Date: 12/20/21 20:04 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm150IS20 00017	vm150ss20 00005	vmbfb 00029
BFB 240-517240/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-517240/3		8260B SIM		15 mL	15 mL		1 uL	1 uL	
LCS 240-517240/4		8260B SIM		15 mL	15 mL		1 uL	1 uL	
MB 240-517240/5		8260B SIM		15 mL	15 mL		1 uL	1 uL	
240-161553-C-2	SL-4_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-3	SL-18_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-4	SL-17_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-5	SL-16_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-6	SL-3_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-7	SL-2_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-8	MH-1231_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-9	SL-21_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-10	SL-20_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-F-10 MS	SL-20_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-F-10 MSD	SL-20_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-11	SL-22_121421	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-12	SL-15_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-13	SL-14_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-14	SL-13_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-15	SL-7_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-16	SL-6_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-17	SL-5_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-18	SL-8_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-C-19	SL-9_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-F-20	SL-10_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-F-21	SL-11_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	
240-161553-A-22	SL-12_121621	8260B SIM	T	15 mL	15 mL	<2 SU	1 uL	1 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517240 Batch Start Date: 12/20/21 20:04 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00287	vmdioxanew 00275				
BFB 240-517240/1		8260B SIM							
CCVIS 240-517240/3		8260B SIM			3 uL				
LCS 240-517240/4		8260B SIM		3 uL					
MB 240-517240/5		8260B SIM							
240-161553-C-2	SL-4_121421	8260B SIM	T						
240-161553-C-3	SL-18_121421	8260B SIM	T						
240-161553-C-4	SL-17_121421	8260B SIM	T						
240-161553-C-5	SL-16_121421	8260B SIM	T						
240-161553-C-6	SL-3_121421	8260B SIM	T						
240-161553-C-7	SL-2_121421	8260B SIM	T						
240-161553-A-8	MH-1231_121421	8260B SIM	T						
240-161553-A-9	SL-21_121421	8260B SIM	T						
240-161553-A-10	SL-20_121421	8260B SIM	T						
240-161553-F-10 MS	SL-20_121421	8260B SIM	T	3 uL					
240-161553-F-10 MSD	SL-20_121421	8260B SIM	T	3 uL					
240-161553-A-11	SL-22_121421	8260B SIM	T						
240-161553-A-12	SL-15_121621	8260B SIM	T						
240-161553-A-13	SL-14_121621	8260B SIM	T						
240-161553-C-14	SL-13_121621	8260B SIM	T						
240-161553-C-15	SL-7_121621	8260B SIM	T						
240-161553-C-16	SL-6_121621	8260B SIM	T						
240-161553-C-17	SL-5_121621	8260B SIM	T						
240-161553-C-18	SL-8_121621	8260B SIM	T						
240-161553-C-19	SL-9_121621	8260B SIM	T						
240-161553-F-20	SL-10_121621	8260B SIM	T						
240-161553-F-21	SL-11_121621	8260B SIM	T						
240-161553-A-22	SL-12_121621	8260B SIM	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517240 Batch Start Date: 12/20/21 20:04 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Batch Notes	
pH Indicator ID	HC157843

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517292 Batch Start Date: 12/21/21 18:50 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm25UX18IS 00004	vm25ux18ss 00004	vmbfb 00029
BFB 240-517292/1		8260B SIM		5 mL	5 mL				1 uL
CCVIS 240-517292/3		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
LCS 240-517292/4		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
MB 240-517292/5		8260B SIM		15 mL	15 mL		7.28 uL	7.28 uL	
240-161553-A-23	SL-19_121621	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-161553-F-23 MS	SL-19_121621	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-161553-F-23 MSD	SL-19_121621	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-161553-A-24	DUP-01	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	
240-161553-A-25	DUP-02	8260B SIM	T	15 mL	15 mL	<2 SU	7.28 uL	7.28 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmdiox_spike 00287	vmdioxanew 00275				
BFB 240-517292/1		8260B SIM							
CCVIS 240-517292/3		8260B SIM			3 uL				
LCS 240-517292/4		8260B SIM		3 uL					
MB 240-517292/5		8260B SIM							
240-161553-A-23	SL-19_121621	8260B SIM	T						
240-161553-F-23 MS	SL-19_121621	8260B SIM	T	3 uL					
240-161553-F-23 MSD	SL-19_121621	8260B SIM	T	3 uL					
240-161553-A-24	DUP-01	8260B SIM	T						
240-161553-A-25	DUP-02	8260B SIM	T						

Batch Notes	
pH Indicator ID	HC157843

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-161553-1

SDG No.:

Batch Number: 517292 Batch Start Date: 12/21/21 18:50 Batch Analyst: Seymour, Charles

Batch Method: 8260B SIM Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record

MICHIGAN

TestAmerica

TestAmerica Laboratories, Inc.

Location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-225-2763

Program: DW NPDES RCRA Other

...ger: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico
...2240	Telephone: 734-648-5131	Telephone: 330-497-9396
...rskey@arcadis.com	Analysis Turnaround Time	
...nitt Dominic Harmon	TAT (different from below)	
...Carrier:	10 day	
...o:		

COC No:

1 of 2 COCs

For lab use only

Walk-in client

Lab sampling

Job/SDG No.

Sample Specific Notes /

Remove checked box for 1,4-Dioxane analysis on Trip Blank
- J. McClafferty 12/20/21

3 VOAs for 8260B SIM

...ple Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite / Grab	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM
---		X						1							X	X	X	X	X	X	X
0925		X						6					N	G	X	X	X	X	X	X	X
000		X						6					N	G	X	X	X	X	X	X	X
025		X						6					N	G	X	X	X	X	X	X	X
045		X						6					N	G	X	X	X	X	X	X	X
145		X						6					N	G	X	X	X	X	X	X	X
145		X						6					N	G	X	X	X	X	X	X	X
210		X						6					N	G	X	X	X	X	X	X	X
340		X						6					N	G	X	X	X	X	X	X	X
405		X						6					N	G	X	X	X	X	X	X	X

Update time for SLC 12/20/21 1115
- J. McClafferty 12/20/21

240-161553 Chain of Custody

Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client / Disposal By Lab / Archive For ... Months

...samples collected from sanitary sewers (contain sanitary waste)

...s	Date/Time: 12/17/21, 1055	Received by:	Company: ETA	Date/Time: 12/17/21 1058
	Date/Time: 12/17/21 1059	Received by:	Company: ETA	Date/Time: 12/18/21 8:00
	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

12/27/2021

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client ACADIS Site Name _____ Cooler unpacked by: Matthew Swan

Cooler Received on 12/18/21 Opened on 12/18/21

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN#14 (CF +0.1 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN#8 (CF +0.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were temperature(s) read on the outside of the cooler(s)? If Yes Quantity 1 Yes No

Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

Were temperature(s) read on the bottle(s) or bottle kits (LL Hg/Me Hg)? Yes No

Were sample custody seals intact and uncompromised? Yes No NA

3. Shipping packing slip attached to the cooler(s)? Yes No

Tests that will not be performed, or packing or holding times were exceeded:

VOAs Oil and Grease Metals

---

10. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

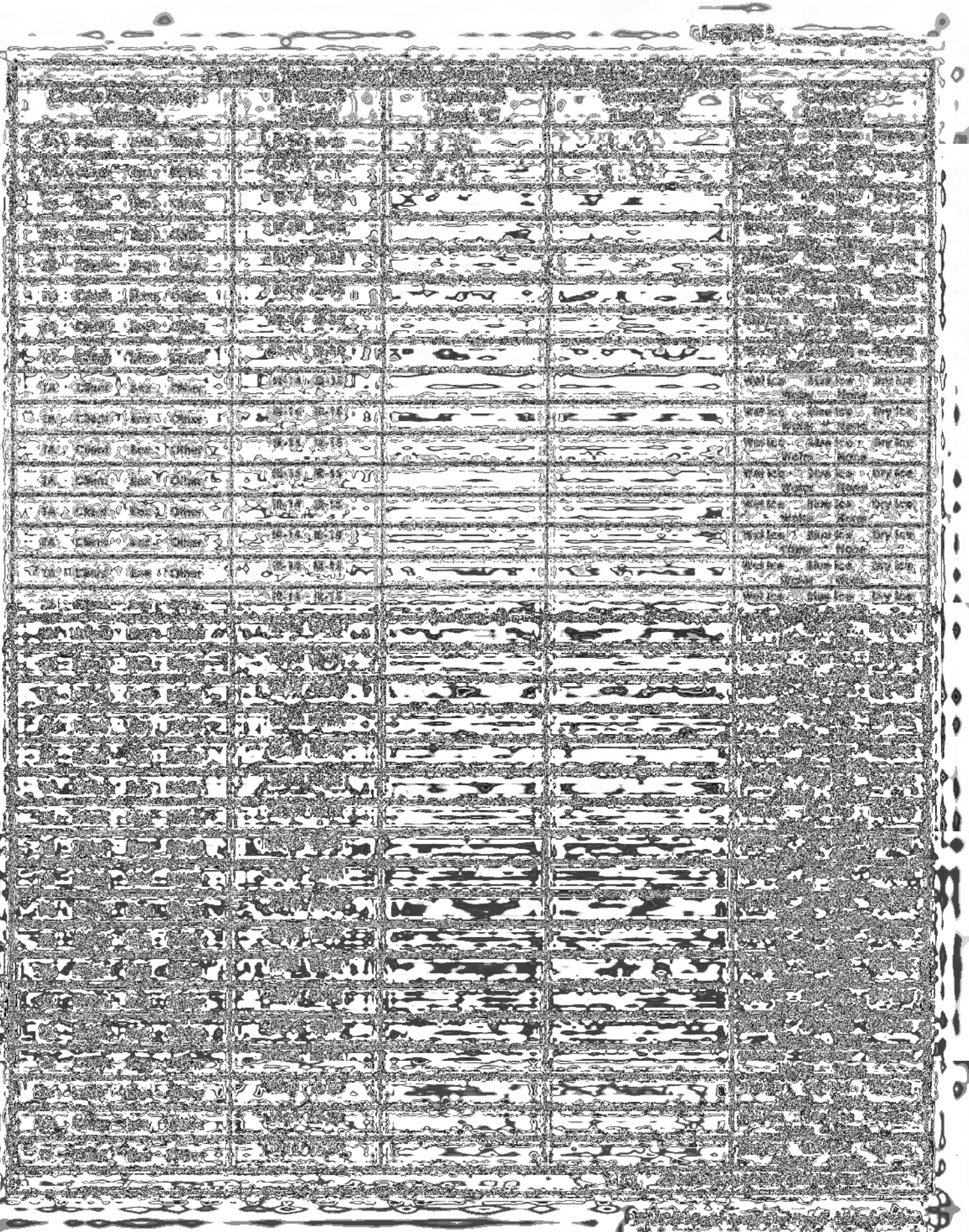
---

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:



ANALYTICAL REPORT

Job Number: 460-250807-1

Job Description: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Attention: Kristoffer Hinskey

Approved for release.
Michael DelMonico
Project Manager I
1/19/2022 3:38 PM

Michael DelMonico, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
Michael.DelMonico@Eurofinset.com
01/19/2022

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-250807-1

Comments
No additional comments.

Receipt
The samples were received on 1/15/2022 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3º C and 2.2º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-1

No Detections.

Client Sample ID: SL-15_011222 — Lab Sample ID: 460-250807-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.94	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-14_011222 — Lab Sample ID: 460-250807-3

No Detections.

Client Sample ID: SL-13_011222 — Lab Sample ID: 460-250807-4

No Detections.

Client Sample ID: SL-7_011222 — Lab Sample ID: 460-250807-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.92	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_011222 — Lab Sample ID: 460-250807-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_011222 — Lab Sample ID: 460-250807-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_011222 — Lab Sample ID: 460-250807-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_011222 — Lab Sample ID: 460-250807-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_011222 — Lab Sample ID: 460-250807-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.49	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_011222 — Lab Sample ID: 460-250807-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_011322 — Lab Sample ID: 460-250807-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.86	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_011322 — Lab Sample ID: 460-250807-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.66	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_011322 — Lab Sample ID: 460-250807-15

No Detections.

Client Sample ID: SL-22_011322 — Lab Sample ID: 460-250807-16

No Detections.

Client Sample ID: SL-20_011322 — Lab Sample ID: 460-250807-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.85	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_011322 — Lab Sample ID: 460-250807-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_011322 — Lab Sample ID: 460-250807-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-21

No Detections.

Client Sample ID: SL-17_011322 — Lab Sample ID: 460-250807-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.8		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-21_011422 — Lab Sample ID: 460-250807-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.73	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_011422 — Lab Sample ID: 460-250807-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_011422 — Lab Sample ID: 460-250807-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.93	J	1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.5		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_011422 — Lab Sample ID: 460-250807-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_011422 — Lab Sample ID: 460-250807-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	9.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_011422 — Lab Sample ID: 460-250807-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.69	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.6		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-1

Date Collected: 01/12/22 00:00 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/18/22 14:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 08:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 08:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 08:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 08:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 08:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 08:51*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 08:51*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/18/22 08:51*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 08:51*	*1*

Client Sample ID: SL-15_011222 — Lab Sample ID: 460-250807-2

Date Collected: 01/12/22 09:15 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.94**	**J**	2.0	0.86	ug/L			01/18/22 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*01/18/22 15:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 09:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 09:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 09:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 09:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 09:57*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/18/22 09:57*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/18/22 09:57*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/18/22 09:57*	*1*

Client Sample ID: SL-14_011222 — Lab Sample ID: 460-250807-3

Date Collected: 01/12/22 09:50 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*01/18/22 15:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 10:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 10:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 10:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 10:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 10:19	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 10:19*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 10:19*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/18/22 10:19*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 10:19*	*1*

Client Sample ID: SL-13_011222 — Lab Sample ID: 460-250807-4

Date Collected: 01/12/22 10:45 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/18/22 15:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 10:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 10:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 10:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 10:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 10:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 10:41*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/18/22 10:41*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 10:41*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/18/22 10:41*	*1*

Client Sample ID: SL-7_011222 — Lab Sample ID: 460-250807-5

Date Collected: 01/12/22 11:15 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.92	J	2.0	0.86	ug/L			01/18/22 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/18/22 16:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 11:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 11:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 11:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 11:03*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 11:03*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 11:03*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 11:03*	*1*

Client Sample ID: SL-6_011222 — Lab Sample ID: 460-250807-6

Date Collected: 01/12/22 11:45 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.4		2.0	0.86	ug/L			01/18/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*01/18/22 16:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 11:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 11:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 11:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 11:24*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 11:24*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 11:24*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/18/22 11:24*	*1*

Client Sample ID: SL-5_011222 — Lab Sample ID: 460-250807-7

Date Collected: 01/12/22 12:05 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			01/19/22 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/19/22 05:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 11:46	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			01/18/22 11:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 11:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 11:46	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			01/18/22 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 11:46*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 124*		*01/18/22 11:46*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/18/22 11:46*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/18/22 11:46*	*1*

Client Sample ID: SL-8_011222 — Lab Sample ID: 460-250807-8

Date Collected: 01/12/22 13:15 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.1**		2.0	0.86	ug/L			01/18/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/18/22 17:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 12:08	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.46	ug/L			01/18/22 12:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 12:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 12:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 12:08	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			01/18/22 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 12:08*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 12:08*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 12:08*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 12:08*	*1*

Client Sample ID: SL-9_011222 — Lab Sample ID: 460-250807-9

Date Collected: 01/12/22 13:40 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			01/18/22 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*65 - 133*		*01/18/22 17:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 12:30	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			01/18/22 12:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 12:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 12:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 12:30	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			01/18/22 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 12:30*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 12:30*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 12:30*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*01/18/22 12:30*	*1*

Client Sample ID: SL-10_011222 — Lab Sample ID: 460-250807-10

Date Collected: 01/12/22 14:10 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			01/19/22 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/19/22 02:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 12:52	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			01/18/22 12:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 12:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 12:52	1
Trichloroethene	**0.49**	**J**	1.0	0.44	ug/L			01/18/22 12:52	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			01/18/22 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 12:52*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/18/22 12:52*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/18/22 12:52*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/18/22 12:52*	*1*

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-11

Date Collected: 01/12/22 00:00 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/18/22 22:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 09:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 09:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 09:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 09:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 09:13*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 09:13*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/18/22 09:13*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/18/22 09:13*	*1*

Client Sample ID: SL-11_011222 — Lab Sample ID: 460-250807-12

Date Collected: 01/12/22 14:35 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			01/18/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/18/22 23:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 13:13	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			01/18/22 13:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 13:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:13	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			01/18/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 13:13*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 13:13*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/18/22 13:13*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 13:13*	*1*

Client Sample ID: SL-23_011322 — Lab Sample ID: 460-250807-13

Date Collected: 01/13/22 09:25 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.7**		2.0	0.86	ug/L			01/18/22 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/18/22 23:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 13:35	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			01/18/22 13:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 13:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:35	1
Vinyl chloride	**0.86**	**J**	1.0	0.45	ug/L			01/18/22 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 13:35*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 13:35*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 13:35*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/18/22 13:35*	*1*

Client Sample ID: SL-12_011322 — Lab Sample ID: 460-250807-14

Date Collected: 01/13/22 09:50 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			01/18/22 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/18/22 23:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 13:56	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			01/18/22 13:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 13:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 13:56	1
Vinyl chloride	**0.66**	**J**	1.0	0.45	ug/L			01/18/22 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*01/18/22 13:56*	*1*
Dibromofluoromethane (Surr)	*93*		*77 - 124*		*01/18/22 13:56*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 13:56*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/18/22 13:56*	*1*

Client Sample ID: SL-19_011322 — Lab Sample ID: 460-250807-15

Date Collected: 01/13/22 10:20 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/19/22 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*01/19/22 00:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 14:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 14:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 14:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 14:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 14:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 14:18*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 14:18*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 14:18*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 14:18*	*1*

Client Sample ID: SL-22_011322 — Lab Sample ID: 460-250807-16

Date Collected: 01/13/22 10:50 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/19/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/19/22 00:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 14:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 14:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 14:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 14:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 14:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*01/18/22 14:40*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/18/22 14:40*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 14:40*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/18/22 14:40*	*1*

Client Sample ID: SL-20_011322 — Lab Sample ID: 460-250807-18

Date Collected: 01/13/22 13:20 **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/19/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/19/22 01:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 15:02	1
cis-1,2-Dichloroethene	**0.85**	**J**	1.0	0.46	ug/L			01/18/22 15:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 15:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:02	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*01/18/22 15:02*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/18/22 15:02*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 15:02*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 15:02*	*1*

Client Sample ID: SL-4_011322 — Lab Sample ID: 460-250807-19

Date Collected: 01/13/22 14:15 **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.5**		2.0	0.86	ug/L			01/19/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*01/19/22 01:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 15:24	1
cis-1,2-Dichloroethene	**6.3**		1.0	0.46	ug/L			01/18/22 15:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 15:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:24	1
Vinyl chloride	**3.1**		1.0	0.45	ug/L			01/18/22 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*01/18/22 15:24*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*01/18/22 15:24*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 15:24*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/18/22 15:24*	*1*

Client Sample ID: SL-18_011322 — Lab Sample ID: 460-250807-20

Date Collected: 01/13/22 14:50 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			01/19/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/19/22 01:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 15:46	1
cis-1,2-Dichloroethene	**8.0**		1.0	0.46	ug/L			01/18/22 15:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 15:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 15:46	1
Vinyl chloride	**5.1**		1.0	0.45	ug/L			01/18/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*01/18/22 15:46*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 15:46*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 15:46*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*01/18/22 15:46*	*1*

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-21

Date Collected: 01/13/22 00:00 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/18/22 22:54*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 09:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 09:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 09:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 09:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 09:35*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 09:35*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/18/22 09:35*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*01/18/22 09:35*	*1*

Client Sample ID: SL-17_011322 — Lab Sample ID: 460-250807-22

Date Collected: 01/13/22 15:10 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			01/19/22 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*01/19/22 02:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 08:45	1
cis-1,2-Dichloroethene	**6.2**		1.0	0.46	ug/L			01/19/22 08:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 08:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 08:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 08:45	1
Vinyl chloride	**3.8**		1.0	0.45	ug/L			01/19/22 08:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*01/19/22 08:45*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/19/22 08:45*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 08:45*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/19/22 08:45*	*1*

Client Sample ID: SL-21_011422 — Lab Sample ID: 460-250807-23

Date Collected: 01/14/22 09:15 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			01/19/22 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/19/22 02:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 09:07	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			01/19/22 09:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 09:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 09:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 09:07	1
Vinyl chloride	**0.73**	**J**	1.0	0.45	ug/L			01/19/22 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*01/19/22 09:07*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/19/22 09:07*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 09:07*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*01/19/22 09:07*	*1*

Client Sample ID: SL-16_011422 — Lab Sample ID: 460-250807-24

Date Collected: 01/14/22 09:40 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			01/19/22 03:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/19/22 03:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 09:28	1
cis-1,2-Dichloroethene	**8.1**		1.0	0.46	ug/L			01/19/22 09:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 09:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 09:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 09:28	1
Vinyl chloride	**4.9**		1.0	0.45	ug/L			01/19/22 09:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*01/19/22 09:28*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 124*		*01/19/22 09:28*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*01/19/22 09:28*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*01/19/22 09:28*	*1*

Client Sample ID: SL-3_011422 — Lab Sample ID: 460-250807-25

Date Collected: 01/14/22 10:25 — **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/19/22 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*01/19/22 03:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 09:50	1
cis-1,2-Dichloroethene	**0.93**	**J**	1.0	0.46	ug/L			01/19/22 09:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 09:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 09:50	1
Trichloroethene	**2.5**		1.0	0.44	ug/L			01/19/22 09:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/19/22 09:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*01/19/22 09:50*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/19/22 09:50*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 09:50*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/19/22 09:50*	*1*

Client Sample ID: SL-2_011422 — Lab Sample ID: 460-250807-26

Date Collected: 01/14/22 10:45 **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.4**		2.0	0.86	ug/L			01/19/22 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*01/19/22 03:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 10:12	1
cis-1,2-Dichloroethene	**9.1**		1.0	0.46	ug/L			01/19/22 10:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 10:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 10:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 10:12	1
Vinyl chloride	**6.0**		1.0	0.45	ug/L			01/19/22 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*01/19/22 10:12*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 124*		*01/19/22 10:12*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 10:12*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*01/19/22 10:12*	*1*

Client Sample ID: MH-1231_011422 — Lab Sample ID: 460-250807-27

Date Collected: 01/14/22 11:35 **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.1**		2.0	0.86	ug/L			01/19/22 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*01/19/22 04:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 10:34	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			01/19/22 10:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 10:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 10:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 10:34	1
Vinyl chloride	**9.3**		1.0	0.45	ug/L			01/19/22 10:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*01/19/22 10:34*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 124*		*01/19/22 10:34*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 10:34*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/19/22 10:34*	*1*

Client Sample ID: MH-1244_011422 Lab Sample ID: 460-250807-28

Date Collected: 01/14/22 12:00 **Matrix: Water**
Date Received: 01/15/22 11:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			01/19/22 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/19/22 04:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 10:56	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			01/19/22 10:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 10:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 10:56	1
Trichloroethene	**0.69**	**J**	1.0	0.44	ug/L			01/19/22 10:56	1
Vinyl chloride	**3.6**		1.0	0.45	ug/L			01/19/22 10:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*01/19/22 10:56*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 124*		*01/19/22 10:56*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/19/22 10:56*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/19/22 10:56*	*1*

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,4-Dioxane	2.0	0.86	ug/L

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.49	ug/L
cis-1,2-Dichloroethene	1.0	0.46	ug/L
Tetrachloroethene	1.0	0.44	ug/L
trans-1,2-Dichloroethene	1.0	0.51	ug/L
Trichloroethene	1.0	0.44	ug/L
Vinyl chloride	1.0	0.45	ug/L

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-250807-1	TRIP BLANK	89	90	91	104
460-250807-2	SL-15_011222	90	92	93	102
460-250807-3	SL-14_011222	89	90	91	104
460-250807-4	SL-13_011222	89	92	92	105
460-250807-5	SL-7_011222	90	91	92	104
460-250807-6	SL-6_011222	89	91	92	102
460-250807-7	SL-5_011222	90	89	91	105
460-250807-8	SL-8_011222	90	91	92	104
460-250807-9	SL-9_011222	89	90	92	103
460-250807-10	SL-10_011222	90	92	93	105
460-250807-11	TRIP BLANK	89	90	93	102
460-250807-12	SL-11_011222	90	90	93	104
460-250807-13	SL-23_011322	90	91	92	105
460-250807-14	SL-12_011322	92	93	92	105
460-250807-15	SL-19_011322	90	91	92	104
460-250807-16	SL-22_011322	90	92	92	102
460-250807-18	SL-20_011322	91	92	92	104
460-250807-19	SL-4_011322	91	91	92	102
460-250807-20	SL-18_011322	91	90	92	104
460-250807-21	TRIP BLANK	89	90	92	100
460-250807-22	SL-17_011322	92	90	92	105
460-250807-23	SL-21_011422	93	92	92	106
460-250807-24	SL-16_011422	94	89	90	103
460-250807-25	SL-3_011422	92	90	92	105
460-250807-26	SL-2_011422	92	89	92	103
460-250807-27	MH-1231_011422	93	88	92	102
460-250807-28	MH-1244_011422	93	88	91	102
LCS 460-823788/4	Lab Control Sample	88	91	92	101
LCS 460-823977/4	Lab Control Sample	93	91	93	102
LCSD 460-823788/5	Lab Control Sample Dup	89	89	92	102
LCSD 460-823977/5	Lab Control Sample Dup	93	89	91	103
MB 460-823788/8	Method Blank	89	90	91	103
MB 460-823977/8	Method Blank	92	88	92	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(65-133)
460-250807-1	TRIP BLANK	100
460-250807-2	SL-15_011222	99
460-250807-3	SL-14_011222	105
460-250807-4	SL-13_011222	102

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		BFB						
Lab Sample ID	Client Sample ID	(65-133)						
460-250807-5	SL-7_011222	102						
460-250807-6	SL-6_011222	99						
460-250807-7	SL-5_011222	101						
460-250807-8	SL-8_011222	102						
460-250807-9	SL-9_011222	98						
460-250807-10	SL-10_011222	101						
460-250807-11	TRIP BLANK	101						
460-250807-12	SL-11_011222	100						
460-250807-13	SL-23_011322	100						
460-250807-14	SL-12_011322	100						
460-250807-15	SL-19_011322	103						
460-250807-16	SL-22_011322	101						
460-250807-18	SL-20_011322	101						
460-250807-19	SL-4_011322	99						
460-250807-20	SL-18_011322	102						
460-250807-21	TRIP BLANK	100						
460-250807-22	SL-17_011322	100						
460-250807-23	SL-21_011422	102						
460-250807-24	SL-16_011422	102						
460-250807-25	SL-3_011422	103						
460-250807-26	SL-2_011422	99						
460-250807-27	MH-1231_011422	101						
460-250807-28	MH-1244_011422	102						
LCS 460-823803/3	Lab Control Sample	102						
LCS 460-823919/4	Lab Control Sample	104						
LCSD 460-823803/4	Lab Control Sample Dup	104						
LCSD 460-823919/5	Lab Control Sample Dup	101						
MB 460-823803/7	Method Blank	102						
MB 460-823919/8	Method Blank	102						

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-823788/8
Matrix: Water
Analysis Batch: 823788

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/18/22 08:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/18/22 08:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 08:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/18/22 08:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/18/22 08:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/18/22 08:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*01/18/22 08:29*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 124*		*01/18/22 08:29*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/18/22 08:29*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*01/18/22 08:29*	*1*

Lab Sample ID: LCS 460-823788/4
Matrix: Water
Analysis Batch: 823788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	16.9		ug/L		84	68 - 133		
cis-1,2-Dichloroethene			20.0	17.5		ug/L		87	78 - 121		
Tetrachloroethene			20.0	21.2		ug/L		106	70 - 127		
trans-1,2-Dichloroethene			20.0	17.9		ug/L		90	74 - 126		
Trichloroethene			20.0	17.6		ug/L		88	71 - 121		
Vinyl chloride			20.0	15.4		ug/L		77	61 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 123*
Dibromofluoromethane (Surr)	*91*		*77 - 124*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene	*101*		*76 - 120*

Lab Sample ID: LCSD 460-823788/5
Matrix: Water
Analysis Batch: 823788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	17.1		ug/L		86	68 - 133	1	30
cis-1,2-Dichloroethene			20.0	17.6		ug/L		88	78 - 121	1	30
Tetrachloroethene			20.0	21.1		ug/L		105	70 - 127	0	30
trans-1,2-Dichloroethene			20.0	18.2		ug/L		91	74 - 126	2	30
Trichloroethene			20.0	17.8		ug/L		89	71 - 121	1	30
Vinyl chloride			20.0	15.6		ug/L		78	61 - 144	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*
Dibromofluoromethane (Surr)	*89*		*77 - 124*
Toluene-d8 (Surr)	*92*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-823788/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823788

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*76 - 120*

Lab Sample ID: MB 460-823977/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/19/22 08:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/19/22 08:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 08:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/19/22 08:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/19/22 08:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/19/22 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*01/19/22 08:23*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 124*		*01/19/22 08:23*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/19/22 08:23*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*01/19/22 08:23*	*1*

Lab Sample ID: LCS 460-823977/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823977

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	18.8		ug/L		94	68 - 133		
cis-1,2-Dichloroethene			20.0	19.6		ug/L		98	78 - 121		
Tetrachloroethene			20.0	22.6		ug/L		113	70 - 127		
trans-1,2-Dichloroethene			20.0	19.6		ug/L		98	74 - 126		
Trichloroethene			20.0	19.3		ug/L		96	71 - 121		
Vinyl chloride			20.0	17.6		ug/L		88	61 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*
Dibromofluoromethane (Surr)	*91*		*77 - 124*
Toluene-d8 (Surr)	*93*		*80 - 120*
4-Bromofluorobenzene	*102*		*76 - 120*

Lab Sample ID: LCSD 460-823977/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823977

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	17.8		ug/L		89	68 - 133	5	30
cis-1,2-Dichloroethene			20.0	17.5		ug/L		87	78 - 121	12	30
Tetrachloroethene			20.0	21.1		ug/L		105	70 - 127	7	30
trans-1,2-Dichloroethene			20.0	18.6		ug/L		93	74 - 126	6	30
Trichloroethene			20.0	17.4		ug/L		87	71 - 121	10	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-823977/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823977

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			20.0	16.8		ug/L		84	61 - 144	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*
Dibromofluoromethane (Surr)	*89*		*77 - 124*
Toluene-d8 (Surr)	*91*		*80 - 120*
4-Bromofluorobenzene	*103*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-823803/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*01/18/22 10:24*	*1*

Lab Sample ID: LCS 460-823803/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823803

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.33		ug/L		87	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*65 - 133*

Lab Sample ID: LCSD 460-823803/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823803

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	3.85		ug/L		77	72 - 124	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*65 - 133*

Lab Sample ID: MB 460-823919/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/18/22 22:10	1

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-823919/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823919

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		65 - 133		01/18/22 22:10	1

Lab Sample ID: LCS 460-823919/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823919

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.35		ug/L		87	72 - 124		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		65 - 133

Lab Sample ID: LCSD 460-823919/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 823919

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.24		ug/L		85	72 - 124	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		65 - 133

GC/MS VOA

Analysis Batch: 823788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-250807-1	TRIP BLANK	Total/NA	Water	8260D	
460-250807-2	SL-15_011222	Total/NA	Water	8260D	
460-250807-3	SL-14_011222	Total/NA	Water	8260D	
460-250807-4	SL-13_011222	Total/NA	Water	8260D	
460-250807-5	SL-7_011222	Total/NA	Water	8260D	
460-250807-6	SL-6_011222	Total/NA	Water	8260D	
460-250807-7	SL-5_011222	Total/NA	Water	8260D	
460-250807-8	SL-8_011222	Total/NA	Water	8260D	
460-250807-9	SL-9_011222	Total/NA	Water	8260D	
460-250807-10	SL-10_011222	Total/NA	Water	8260D	
460-250807-11	TRIP BLANK	Total/NA	Water	8260D	
460-250807-12	SL-11_011222	Total/NA	Water	8260D	
460-250807-13	SL-23_011322	Total/NA	Water	8260D	
460-250807-14	SL-12_011322	Total/NA	Water	8260D	
460-250807-15	SL-19_011322	Total/NA	Water	8260D	
460-250807-16	SL-22_011322	Total/NA	Water	8260D	
460-250807-18	SL-20_011322	Total/NA	Water	8260D	
460-250807-19	SL-4_011322	Total/NA	Water	8260D	
460-250807-20	SL-18_011322	Total/NA	Water	8260D	
460-250807-21	TRIP BLANK	Total/NA	Water	8260D	
MB 460-823788/8	Method Blank	Total/NA	Water	8260D	
LCS 460-823788/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-823788/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 823803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-250807-1	TRIP BLANK	Total/NA	Water	8260D SIM	
460-250807-2	SL-15_011222	Total/NA	Water	8260D SIM	
460-250807-3	SL-14_011222	Total/NA	Water	8260D SIM	
460-250807-4	SL-13_011222	Total/NA	Water	8260D SIM	
460-250807-5	SL-7_011222	Total/NA	Water	8260D SIM	
460-250807-6	SL-6_011222	Total/NA	Water	8260D SIM	
460-250807-8	SL-8_011222	Total/NA	Water	8260D SIM	
460-250807-9	SL-9_011222	Total/NA	Water	8260D SIM	
MB 460-823803/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-823803/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-823803/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 823919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-250807-7	SL-5_011222	Total/NA	Water	8260D SIM	
460-250807-10	SL-10_011222	Total/NA	Water	8260D SIM	
460-250807-11	TRIP BLANK	Total/NA	Water	8260D SIM	
460-250807-12	SL-11_011222	Total/NA	Water	8260D SIM	
460-250807-13	SL-23_011322	Total/NA	Water	8260D SIM	
460-250807-14	SL-12_011322	Total/NA	Water	8260D SIM	
460-250807-15	SL-19_011322	Total/NA	Water	8260D SIM	
460-250807-16	SL-22_011322	Total/NA	Water	8260D SIM	
460-250807-18	SL-20_011322	Total/NA	Water	8260D SIM	
460-250807-19	SL-4_011322	Total/NA	Water	8260D SIM	
460-250807-20	SL-18_011322	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 823919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-250807-21	TRIP BLANK	Total/NA	Water	8260D SIM	
460-250807-22	SL-17_011322	Total/NA	Water	8260D SIM	
460-250807-23	SL-21_011422	Total/NA	Water	8260D SIM	
460-250807-24	SL-16_011422	Total/NA	Water	8260D SIM	
460-250807-25	SL-3_011422	Total/NA	Water	8260D SIM	
460-250807-26	SL-2_011422	Total/NA	Water	8260D SIM	
460-250807-27	MH-1231_011422	Total/NA	Water	8260D SIM	
460-250807-28	MH-1244_011422	Total/NA	Water	8260D SIM	
MB 460-823919/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-823919/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-823919/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 823977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-250807-22	SL-17_011322	Total/NA	Water	8260D	
460-250807-23	SL-21_011422	Total/NA	Water	8260D	
460-250807-24	SL-16_011422	Total/NA	Water	8260D	
460-250807-25	SL-3_011422	Total/NA	Water	8260D	
460-250807-26	SL-2_011422	Total/NA	Water	8260D	
460-250807-27	MH-1231_011422	Total/NA	Water	8260D	
460-250807-28	MH-1244_011422	Total/NA	Water	8260D	
MB 460-823977/8	Method Blank	Total/NA	Water	8260D	
LCS 460-823977/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-823977/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-1

Date Collected: 01/12/22 00:00 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 08:51	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 14:46	MZS	TAL EDI

Client Sample ID: SL-15_011222 — Lab Sample ID: 460-250807-2

Date Collected: 01/12/22 09:15 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 09:57	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 15:07	MZS	TAL EDI

Client Sample ID: SL-14_011222 — Lab Sample ID: 460-250807-3

Date Collected: 01/12/22 09:50 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 10:19	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 15:29	MZS	TAL EDI

Client Sample ID: SL-13_011222 — Lab Sample ID: 460-250807-4

Date Collected: 01/12/22 10:45 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 10:41	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 15:51	MZS	TAL EDI

Client Sample ID: SL-7_011222 — Lab Sample ID: 460-250807-5

Date Collected: 01/12/22 11:15 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 11:03	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 16:13	MZS	TAL EDI

Client Sample ID: SL-6_011222 — Lab Sample ID: 460-250807-6

Date Collected: 01/12/22 11:45 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 11:24	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 16:35	MZS	TAL EDI

Client Sample ID: SL-5_011222 — Lab Sample ID: 460-250807-7

Date Collected: 01/12/22 12:05 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 11:46	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 05:03	MZS	TAL EDI

Client Sample ID: SL-8_011222 — Lab Sample ID: 460-250807-8

Date Collected: 01/12/22 13:15 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 12:08	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 17:18	MZS	TAL EDI

Client Sample ID: SL-9_011222 — Lab Sample ID: 460-250807-9

Date Collected: 01/12/22 13:40 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 12:30	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823803	01/18/22 17:40	MZS	TAL EDI

Client Sample ID: SL-10_011222 — Lab Sample ID: 460-250807-10

Date Collected: 01/12/22 14:10 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 12:52	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 02:09	MZS	TAL EDI

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-11

Date Collected: 01/12/22 00:00 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 09:13	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/18/22 22:32	MZS	TAL EDI

Client Sample ID: SL-11_011222 — Lab Sample ID: 460-250807-12

Date Collected: 01/12/22 14:35 — **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 13:13	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/18/22 23:16	MZS	TAL EDI

Client Sample ID: SL-23_011322 — Lab Sample ID: 460-250807-13

Date Collected: 01/13/22 09:25 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 13:35	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/18/22 23:37	MZS	TAL EDI

Client Sample ID: SL-12_011322 — Lab Sample ID: 460-250807-14

Date Collected: 01/13/22 09:50 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 13:56	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/18/22 23:59	MZS	TAL EDI

Client Sample ID: SL-19_011322 — Lab Sample ID: 460-250807-15

Date Collected: 01/13/22 10:20 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 14:18	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 00:21	MZS	TAL EDI

Client Sample ID: SL-22_011322 — Lab Sample ID: 460-250807-16

Date Collected: 01/13/22 10:50 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 14:40	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 00:43	MZS	TAL EDI

Client Sample ID: SL-20_011322 — Lab Sample ID: 460-250807-18

Date Collected: 01/13/22 13:20 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 15:02	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 01:04	MZS	TAL EDI

Client Sample ID: SL-4_011322 — Lab Sample ID: 460-250807-19

Date Collected: 01/13/22 14:15 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 15:24	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 01:26	MZS	TAL EDI

Client Sample ID: SL-18_011322 — Lab Sample ID: 460-250807-20

Date Collected: 01/13/22 14:50 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 15:46	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 01:48	MZS	TAL EDI

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-250807-21

Date Collected: 01/13/22 00:00 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823788	01/18/22 09:35	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/18/22 22:54	MZS	TAL EDI

Client Sample ID: SL-17_011322 — Lab Sample ID: 460-250807-22

Date Collected: 01/13/22 15:10 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 08:45	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 02:31	MZS	TAL EDI

Client Sample ID: SL-21_011422 — Lab Sample ID: 460-250807-23

Date Collected: 01/14/22 09:15 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 09:07	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 02:53	MZS	TAL EDI

Client Sample ID: SL-16_011422 — Lab Sample ID: 460-250807-24

Date Collected: 01/14/22 09:40 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 09:28	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 03:15	MZS	TAL EDI

Client Sample ID: SL-3_011422 — Lab Sample ID: 460-250807-25

Date Collected: 01/14/22 10:25 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 09:50	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 03:36	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_011422 — Lab Sample ID: 460-250807-26

Date Collected: 01/14/22 10:45 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 10:12	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 03:58	MZS	TAL EDI

Client Sample ID: MH-1231_011422 — Lab Sample ID: 460-250807-27

Date Collected: 01/14/22 11:35 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 10:34	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 04:20	MZS	TAL EDI

Client Sample ID: MH-1244_011422 — Lab Sample ID: 460-250807-28

Date Collected: 01/14/22 12:00 **Matrix: Water**
Date Received: 01/15/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	823977	01/19/22 10:56	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	823919	01/19/22 04:42	MZS	TAL EDI

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-250807-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-250807-1	TRIP BLANK	Water	01/12/22 00:00	01/15/22 11:00
460-250807-2	SL-15_011222	Water	01/12/22 09:15	01/15/22 11:00
460-250807-3	SL-14_011222	Water	01/12/22 09:50	01/15/22 11:00
460-250807-4	SL-13_011222	Water	01/12/22 10:45	01/15/22 11:00
460-250807-5	SL-7_011222	Water	01/12/22 11:15	01/15/22 11:00
460-250807-6	SL-6_011222	Water	01/12/22 11:45	01/15/22 11:00
460-250807-7	SL-5_011222	Water	01/12/22 12:05	01/15/22 11:00
460-250807-8	SL-8_011222	Water	01/12/22 13:15	01/15/22 11:00
460-250807-9	SL-9_011222	Water	01/12/22 13:40	01/15/22 11:00
460-250807-10	SL-10_011222	Water	01/12/22 14:10	01/15/22 11:00
460-250807-11	TRIP BLANK	Water	01/12/22 00:00	01/15/22 11:00
460-250807-12	SL-11_011222	Water	01/12/22 14:35	01/15/22 11:00
460-250807-13	SL-23_011322	Water	01/13/22 09:25	01/15/22 11:00
460-250807-14	SL-12_011322	Water	01/13/22 09:50	01/15/22 11:00
460-250807-15	SL-19_011322	Water	01/13/22 10:20	01/15/22 11:00
460-250807-16	SL-22_011322	Water	01/13/22 10:50	01/15/22 11:00
460-250807-18	SL-20_011322	Water	01/13/22 13:20	01/15/22 11:00
460-250807-19	SL-4_011322	Water	01/13/22 14:15	01/15/22 11:00
460-250807-20	SL-18_011322	Water	01/13/22 14:50	01/15/22 11:00
460-250807-21	TRIP BLANK	Water	01/13/22 00:00	01/15/22 11:00
460-250807-22	SL-17_011322	Water	01/13/22 15:10	01/15/22 11:00
460-250807-23	SL-21_011422	Water	01/14/22 09:15	01/15/22 11:00
460-250807-24	SL-16_011422	Water	01/14/22 09:40	01/15/22 11:00
460-250807-25	SL-3_011422	Water	01/14/22 10:25	01/15/22 11:00
460-250807-26	SL-2_011422	Water	01/14/22 10:45	01/15/22 11:00
460-250807-27	MH-1231_011422	Water	01/14/22 11:35	01/15/22 11:00
460-250807-28	MH-1244_011422	Water	01/14/22 12:00	01/15/22 11:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD7 460-814964/3 IC Client Sample ID:

Date Analyzed: 11/23/21 12:45 Lab File ID: F22510.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Epichlorohydrin	6.29	Baseline	delpolitov	11/24/21 07:55
1,2,3-Trichlorobenzene		Invalid Compound ID	baronm	11/23/21 20:59
1,2,3-Trimethylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
1,2,4,5-Tetramethylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
1,2,4-Trichlorobenzene		Invalid Compound ID	baronm	11/23/21 20:59
1,2,4-Trimethylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
1,2-Dichloroethane		Invalid Compound ID	baronm	11/23/21 20:59
1,3,5-Trimethylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
2-Nitropropane		Invalid Compound ID	baronm	11/23/21 20:59
3-Chloro-1-propene		Invalid Compound ID	baronm	11/23/21 20:58
4-Isopropyltoluene		Invalid Compound ID	baronm	11/23/21 20:59
Acetone		Invalid Compound ID	baronm	11/23/21 20:58
Acetonitrile		Invalid Compound ID	baronm	11/23/21 20:58
Acrolein		Invalid Compound ID	baronm	11/23/21 20:58
Benzene		Invalid Compound ID	baronm	11/23/21 20:59
Bromomethane		Invalid Compound ID	baronm	11/23/21 20:58
Carbon disulfide		Invalid Compound ID	baronm	11/23/21 20:58
Chloroethane		Invalid Compound ID	baronm	11/23/21 20:58
Chloromethane		Invalid Compound ID	baronm	11/23/21 20:58
Dichlorofluoromethane		Invalid Compound ID	baronm	11/23/21 20:58
Ethanol		Invalid Compound ID	baronm	11/23/21 20:58
Hexachlorobutadiene		Invalid Compound ID	baronm	11/23/21 20:59
Iodomethane		Invalid Compound ID	baronm	11/23/21 20:58
Isopropyl alcohol		Invalid Compound ID	baronm	11/23/21 20:58
Methyl acetate		Invalid Compound ID	baronm	11/23/21 20:58
Methyl acrylate		Invalid Compound ID	baronm	11/23/21 20:59
Naphthalene		Invalid Compound ID	baronm	11/23/21 20:59
n-Butylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
N-Propylbenzene		Invalid Compound ID	baronm	11/23/21 20:59

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD7 460-814964/3 IC Client Sample ID:

Date Analyzed: 11/23/21 12:45 Lab File ID: F22510.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
p-Diethylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
Pentane		Invalid Compound ID	baronm	11/23/21 20:58
Propionitrile		Invalid Compound ID	baronm	11/23/21 20:59
sec-Butylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
tert-Butylbenzene		Invalid Compound ID	baronm	11/23/21 20:59
Toluene		Invalid Compound ID	baronm	11/23/21 20:59
Trichlorofluoromethane		Invalid Compound ID	baronm	11/23/21 20:58
Vinyl chloride		Invalid Compound ID	baronm	11/23/21 20:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD1 460-814964/4 IC Client Sample ID:

Date Analyzed: 11/23/21 13:07 Lab File ID: F22511.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.98	Incomplete Integration	delpolitov	11/24/21 07:56
Ethanol	2.34	Incomplete Integration	delpolitov	11/24/21 07:56
Acrolein	2.53	Peak Tail	delpolitov	11/24/21 08:20
Acetone	2.65	Incomplete Integration	baronm	11/23/21 20:57
Isopropyl alcohol	2.73	Incomplete Integration	delpolitov	11/24/21 07:57
Acetonitrile	2.93	Baseline	delpolitov	11/24/21 08:19
2-Methyl-2-propanol	3.05	Incomplete Integration	delpolitov	11/24/21 07:57
Methyl acrylate	4.05	Peak assignment corrected	delpolitov	11/23/21 15:20
Propionitrile	4.16	Incomplete Integration	delpolitov	11/24/21 07:58
Isobutyl alcohol	4.66	Peak assignment corrected	delpolitov	11/23/21 15:20
Isopropyl acetate	4.76	Peak assignment corrected	delpolitov	11/23/21 15:20
Tert-amyl methyl ether	4.76	Peak assignment corrected	delpolitov	11/23/21 15:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD5 460-814964/5 IC Client Sample ID:

Date Analyzed: 11/23/21 13:28 Lab File ID: F22512.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.48	Incomplete Integration	delpolitov	11/24/21 07:59
Ethanol	2.39	Incomplete Integration	delpolitov	11/24/21 07:59
Isopropyl alcohol	2.74	Incomplete Integration	delpolitov	11/24/21 07:59
Acetonitrile	2.94	Peak assignment corrected	delpolitov	11/23/21 15:21
2-Methyl-2-propanol	3.05	Incomplete Integration	delpolitov	11/24/21 08:00
1,4-Dioxane	5.71	Peak assignment corrected	delpolitov	11/23/21 15:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD20 460-814964/6 ICIS Client Sample ID:

Date Analyzed: 11/23/21 13:51 Lab File ID: F22513.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.36	Incomplete Integration	delpolitov	11/24/21 07:53
2-Methyl-1,3-butadiene	2.40	Peak assignment corrected	delpolitov	11/23/21 15:12
Acrolein	2.53	Peak assignment corrected	delpolitov	11/23/21 15:12
Isopropyl alcohol	2.77	Incomplete Integration	delpolitov	11/24/21 07:53
Methyl acetate	2.86	Peak assignment corrected	delpolitov	11/23/21 15:12
Acetonitrile	2.95	Peak assignment corrected	delpolitov	11/23/21 15:12
2-Methyl-2-propanol	3.05	Peak assignment corrected	delpolitov	11/23/21 15:12
Methyl acrylate	4.04	Peak assignment corrected	delpolitov	11/23/21 15:13
Propionitrile	4.12	Peak assignment corrected	delpolitov	11/23/21 15:12
Methacrylonitrile	4.20	Peak assignment corrected	delpolitov	11/23/21 15:13
Tetrahydrofuran	4.20	Peak assignment corrected	delpolitov	11/23/21 15:13
Carbon tetrachloride	4.48	Peak assignment corrected	delpolitov	11/23/21 15:13
Isobutyl alcohol	4.66	Peak assignment corrected	delpolitov	11/23/21 15:13
n-Heptane	4.84	Peak assignment corrected	delpolitov	11/23/21 15:13
Dichlorobromomethane	5.86	Peak assignment corrected	delpolitov	11/23/21 15:13
Epichlorohydrin	6.29	Peak assignment corrected	delpolitov	11/23/21 15:13
n-Butyl acrylate	9.14	Peak assignment corrected	delpolitov	11/23/21 15:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD20 460-814964/6 ICIS Client Sample ID:

Date Analyzed: 11/23/21 13:51 Lab File ID: F22513.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2,2-Tetrachloroethane	9.91	Peak assignment corrected	delpolitov	11/23/21 15:14
trans-1,4-Dichloro-2-butene	9.96	Peak assignment corrected	delpolitov	11/23/21 15:14
2-Chlorotoluene	10.02	Peak assignment corrected	delpolitov	11/23/21 15:14
1,3,5-Trimethylbenzene	10.10	Peak assignment corrected	delpolitov	11/23/21 15:14
1,4-Dichlorobenzene-d4	10.67	Peak assignment corrected	delpolitov	11/23/21 15:11
1,2,4,5-Tetramethylbenzene	11.38	Peak assignment corrected	delpolitov	11/23/21 15:14
Naphthalene	12.05	Peak assignment corrected	delpolitov	11/23/21 15:15

Lab Sample ID: STD50 460-814964/7 IC Client Sample ID:

Date Analyzed: 11/23/21 14:12 Lab File ID: F22514.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.49	Incomplete Integration	delpolitov	11/24/21 08:01
Acetonitrile	2.92	Peak assignment corrected	delpolitov	11/23/21 15:22
2-Methyl-2-propanol	3.03	Peak assignment corrected	delpolitov	11/23/21 15:22

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD200 460-814964/8 IC Client Sample ID:

Date Analyzed: 11/23/21 14:35 Lab File ID: F22515.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	2.92	Peak assignment corrected	delpolitov	11/23/21 15:23
2-Methyl-2-propanol	3.04	Peak assignment corrected	delpolitov	11/23/21 15:23
Methyl acrylate	4.04	Peak assignment corrected	delpolitov	11/23/21 15:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD500 460-814964/9 IC Client Sample ID:

Date Analyzed: 11/23/21 14:57 Lab File ID: F22516.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.03	Peak assignment corrected	delpolitov	11/23/21 15:24
2-Methyl-1,3-butadiene	2.40	Peak assignment corrected	baronm	11/23/21 20:53
Acrolein	2.53	Peak assignment corrected	baronm	11/23/21 20:53
Isopropyl alcohol	2.76	Peak assignment corrected	baronm	11/23/21 20:53
Acetonitrile	2.94	Peak assignment corrected	delpolitov	11/23/21 15:24
2-Methyl-2-propanol	3.05	Peak assignment corrected	delpolitov	11/23/21 15:24
Methyl acrylate	4.04	Peak assignment corrected	delpolitov	11/23/21 15:24
Propionitrile	4.13	Peak assignment corrected	baronm	11/23/21 20:53
Tetrahydrofuran	4.19	Peak assignment corrected	delpolitov	11/23/21 15:24
Carbon tetrachloride	4.49	Peak assignment corrected	delpolitov	11/23/21 15:24
Isobutyl alcohol	4.66	Peak assignment corrected	delpolitov	11/23/21 15:24
n-Heptane	4.84	Peak assignment corrected	delpolitov	11/23/21 15:24
Dichlorobromomethane	5.86	Peak assignment corrected	baronm	11/23/21 20:55
Epichlorohydrin	6.30	Peak assignment corrected	baronm	11/23/21 20:54
1,1,2-Trichloroethane	7.21	Peak assignment corrected	baronm	11/23/21 20:54
n-Butyl acrylate	9.14	Peak assignment corrected	baronm	11/23/21 20:54
1,1,2,2-Tetrachloroethane	9.91	Peak assignment corrected	baronm	11/23/21 20:55
trans-1,4-Dichloro-2-butene	9.97	Peak assignment corrected	baronm	11/23/21 20:54
2-Chlorotoluene	10.02	Peak assignment corrected	baronm	11/23/21 20:54
1,3,5-Trimethylbenzene	10.10	Peak assignment corrected	baronm	11/23/21 20:54
4-Chlorotoluene	10.12	Shouldering	delpolitov	11/24/21 08:03
1,4-Dichlorobenzene-d4	10.67	Peak assignment corrected	delpolitov	11/23/21 15:19

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 814964

Lab Sample ID: STD500 460-814964/9 IC Client Sample ID:

Date Analyzed: 11/23/21 14:57 Lab File ID: F22516.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4,5-Tetramethylbenzene	11.38	Peak assignment corrected	delpolitov	11/23/21 15:24
Hexachlorobutadiene	11.97	Peak assignment corrected	delpolitov	11/23/21 15:24
Naphthalene	12.05	Peak assignment corrected	delpolitov	11/23/21 15:24

Lab Sample ID: ICV 460-814964/15 Client Sample ID:

Date Analyzed: 11/23/21 21:13 Lab File ID: F22522.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	2.94	Peak assignment corrected	delpolitov	11/24/21 08:36
2-Methyl-2-propanol	3.03	Peak assignment corrected	delpolitov	11/24/21 08:36
Methyl acrylate	4.04	Peak assignment corrected	delpolitov	11/24/21 08:36
Ethyl acrylate	5.43	Peak assignment corrected	delpolitov	11/24/21 08:36
trans-1,4-Dichloro-2-butene	9.96	Peak assignment corrected	delpolitov	11/24/21 08:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 823788

Lab Sample ID: CCVIS 460-823788/3 Client Sample ID:

Date Analyzed: 01/18/22 06:37 Lab File ID: F24962.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.98	Peak assignment corrected	moroneyc	01/18/22 06:55
Acrolein	2.53	Peak assignment corrected	moroneyc	01/18/22 06:59
Methyl acetate	2.85	Peak assignment corrected	moroneyc	01/18/22 06:55
Acetonitrile	2.90	Wrong peak	xuyvo	01/19/22 10:51
2-Methyl-2-propanol	3.00	Peak assignment corrected	moroneyc	01/18/22 06:55
Hexane	3.27	Peak assignment corrected	moroneyc	01/18/22 06:55
Methyl acrylate	4.02	Peak assignment corrected	moroneyc	01/18/22 06:55
Tetrahydrofuran	4.18	Peak assignment corrected	moroneyc	01/18/22 06:58
n-Heptane	4.83	Peak assignment corrected	moroneyc	01/18/22 06:56
n-Propyl acetate	5.48	Peak assignment corrected	moroneyc	01/18/22 06:56
1,4-Dioxane	5.71	Peak assignment corrected	moroneyc	01/18/22 06:56
Dichlorobromomethane	5.84	Peak assignment corrected	moroneyc	01/18/22 06:56
Epichlorohydrin	6.27	Peak assignment corrected	moroneyc	01/18/22 06:56
Toluene	6.64	Peak assignment corrected	moroneyc	01/18/22 06:56
1,1,2-Trichloroethane	7.19	Peak assignment corrected	moroneyc	01/18/22 06:56
Chlorobenzene-d5	8.30	Peak assignment corrected	moroneyc	01/18/22 06:54
n-Butyl acrylate	9.13	Peak assignment corrected	moroneyc	01/18/22 06:57
Styrene	9.15	Peak assignment corrected	moroneyc	01/18/22 06:57
trans-1,4-Dichloro-2-butene	9.96	Peak assignment corrected	moroneyc	01/18/22 06:57
2-Chlorotoluene	10.01	Peak assignment corrected	moroneyc	01/18/22 06:57
1,3,5-Trimethylbenzene	10.08	Peak assignment corrected	moroneyc	01/18/22 06:57
Butyl Methacrylate	10.18	Peak assignment corrected	moroneyc	01/18/22 06:57
1,2,4,5-Tetramethylbenzene	11.36	Peak assignment corrected	moroneyc	01/18/22 06:57
1,2-Dibromo-3-Chloropropane	11.43	Peak assignment corrected	moroneyc	01/18/22 06:57
Hexachlorobutadiene	11.95	Peak assignment corrected	moroneyc	01/18/22 06:57

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 823788

Lab Sample ID: LCSD 460-823788/5 Client Sample ID:

Date Analyzed: 01/18/22 07:23 Lab File ID: F24964.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dichlorobenzene-d4	10.66	Peak assignment corrected	moroneyc	01/18/22 08:08

Lab Sample ID: 460-250807-10 Client Sample ID: SL-10_011222

Date Analyzed: 01/18/22 12:52 Lab File ID: F24979.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	3.98	Incomplete Integration	moroneyc	01/18/22 13:11

Lab Sample ID: 460-250807-14 Client Sample ID:

Date Analyzed: 01/18/22 13:56 Lab File ID: F24982.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene-d5	8.30	Peak assignment corrected	moroneyc	01/19/22 06:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 823977

Lab Sample ID: CCVIS 460-823977/3 Client Sample ID:

Date Analyzed: 01/19/22 06:31 Lab File ID: F24991.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.97	Peak assignment corrected	moroneyc	01/19/22 06:50
Acetonitrile	2.92	Assign Peak	xuyvo	01/19/22 11:24
2-Methyl-2-propanol	3.00	Peak assignment corrected	moroneyc	01/19/22 06:51
Propionitrile	4.09	Peak assignment corrected	moroneyc	01/19/22 06:51
Tetrahydrofuran	4.17	Peak assignment corrected	moroneyc	01/19/22 06:51
Methacrylonitrile	4.19	Peak assignment corrected	moroneyc	01/19/22 06:51
n-Heptane	4.83	Peak assignment corrected	moroneyc	01/19/22 06:51
n-Butanol	5.29	Peak assignment corrected	moroneyc	01/19/22 06:51
n-Propyl acetate	5.70	Peak assignment corrected	moroneyc	01/19/22 07:35
Dichlorobromomethane	5.84	Peak assignment corrected	moroneyc	01/19/22 06:51
Epichlorohydrin	6.27	Peak assignment corrected	moroneyc	01/19/22 06:52
n-Butyl acrylate	9.12	Peak assignment corrected	moroneyc	01/19/22 06:52
1,1,2,2-Tetrachloroethane	9.89	Peak assignment corrected	moroneyc	01/19/22 06:52
trans-1,4-Dichloro-2-butene	9.96	Peak assignment corrected	moroneyc	01/19/22 06:52
2-Chlorotoluene	10.01	Peak assignment corrected	moroneyc	01/19/22 06:52
1,3,5-Trimethylbenzene	10.08	Peak assignment corrected	moroneyc	01/19/22 06:52
1,2,4,5-Tetramethylbenzene	11.36	Peak assignment corrected	moroneyc	01/19/22 06:52

Lab Sample ID: 460-250807-25 Client Sample ID:

Date Analyzed: 01/19/22 09:50 Lab File ID: F25000.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone-d5	3.92	Incomplete Integration	moroneyc	01/19/22 10:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Analysis Batch Number: 823977

Lab Sample ID: 460-250807-28 Client Sample ID: MH-1244_011422

Date Analyzed: 01/19/22 10:56 Lab File ID: F25003.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	5.30	Incomplete Integration	xuyvo	01/19/22 11:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 820935

Lab Sample ID: STD04 460-820935/3 IC Client Sample ID:

Date Analyzed: 12/27/21 13:10 Lab File ID: S054839.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8	5.85	Incomplete Integration	xuyvo	12/28/21 10:37
1,4-Dioxane	5.93	Incomplete Integration	starzecm	12/27/21 14:43

Lab Sample ID: STD1 460-820935/4 IC Client Sample ID:

Date Analyzed: 12/27/21 13:32 Lab File ID: S054840.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.91	Assign Peak	xuyvo	12/28/21 10:40

Lab Sample ID: STD20 460-820935/7 IC Client Sample ID:

Date Analyzed: 12/27/21 14:37 Lab File ID: S054843.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8	5.85	Incomplete Integration	xuyvo	12/28/21 10:41

Lab Sample ID: STD40 460-820935/9 IC Client Sample ID:

Date Analyzed: 12/27/21 15:21 Lab File ID: S054845.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8	5.85	Incomplete Integration	xuyvo	12/28/21 10:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 823803

Lab Sample ID: 460-250807-2 Client Sample ID: SL-15_011222

Date Analyzed: 01/18/22 15:07 Lab File ID: S055120.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.91	Wrong peak	xuyvo	01/19/22 10:39

Lab Sample ID: 460-250807-4 Client Sample ID: SL-13_011222

Date Analyzed: 01/18/22 15:51 Lab File ID: S055122.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.92	Wrong peak	xuyvo	01/19/22 10:39

Lab Sample ID: 460-250807-5 Client Sample ID: SL-7_011222

Date Analyzed: 01/18/22 16:13 Lab File ID: S055123.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.91	Peak assignment corrected	boykink	01/18/22 18:40

Lab Sample ID: 460-250807-6 Client Sample ID: SL-6_011222

Date Analyzed: 01/18/22 16:35 Lab File ID: S055124.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.93	Peak assignment corrected	boykink	01/18/22 18:40

Lab Sample ID: 460-250807-8 Client Sample ID:

Date Analyzed: 01/18/22 17:18 Lab File ID: S055126.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8	5.83	Baseline	xuyvo	01/19/22 10:44
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 823803

Lab Sample ID: 460-250807-9 Client Sample ID: SL-9_011222

Date Analyzed: 01/18/22 17:40 Lab File ID: S055127.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:43

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 823919

Lab Sample ID: LCSD 460-823919/5 Client Sample ID:

Date Analyzed: 01/18/22 21:05 Lab File ID: S055133.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	boykink	01/18/22 21:57

Lab Sample ID: 460-250807-12 Client Sample ID: SL-11_011222

Date Analyzed: 01/18/22 23:16 Lab File ID: S055139.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:47

Lab Sample ID: 460-250807-13 Client Sample ID: SL-23_011322

Date Analyzed: 01/18/22 23:37 Lab File ID: S055140.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:47

Lab Sample ID: 460-250807-14 Client Sample ID: SL-12_011322

Date Analyzed: 01/18/22 23:59 Lab File ID: S055141.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Peak assignment corrected	boykink	01/19/22 00:33

Lab Sample ID: 460-250807-16 Client Sample ID: SL-22_011322

Date Analyzed: 01/19/22 00:43 Lab File ID: S055143.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Assign Peak	xuyvo	01/19/22 10:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 823919

Lab Sample ID: 460-250807-18 Client Sample ID: SL-20_011322

Date Analyzed: 01/19/22 01:04 Lab File ID: S055144.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Peak assignment corrected	delpolitov	01/19/22 07:40

Lab Sample ID: 460-250807-20 Client Sample ID: SL-18_011322

Date Analyzed: 01/19/22 01:48 Lab File ID: S055146.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:48

Lab Sample ID: 460-250807-10 Client Sample ID: SL-10_011222

Date Analyzed: 01/19/22 02:09 Lab File ID: S055147.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Peak assignment corrected	delpolitov	01/19/22 07:41

Lab Sample ID: 460-250807-22 Client Sample ID: SL-17_011322

Date Analyzed: 01/19/22 02:31 Lab File ID: S055148.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Analysis Batch Number: 823919

Lab Sample ID: 460-250807-23 Client Sample ID: SL-21_011422

Date Analyzed: 01/19/22 02:53 Lab File ID: S055149.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Peak assignment corrected	delpolitov	01/19/22 07:41

Lab Sample ID: 460-250807-25 Client Sample ID: SL-3_011422

Date Analyzed: 01/19/22 03:36 Lab File ID: S055151.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.91	Wrong peak	xuyvo	01/19/22 10:49

Lab Sample ID: 460-250807-26 Client Sample ID: SL-2_011422

Date Analyzed: 01/19/22 03:58 Lab File ID: S055152.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Peak assignment corrected	delpolitov	01/19/22 07:41

Lab Sample ID: 460-250807-27 Client Sample ID: MH-1231_011422

Date Analyzed: 01/19/22 04:20 Lab File ID: S055153.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:49

Lab Sample ID: 460-250807-7 Client Sample ID: SL-5_011222

Date Analyzed: 01/19/22 05:03 Lab File ID: S055155.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	5.89	Incomplete Integration	xuyvo	01/19/22 10:50

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
1,4DIOXSP_00116	02/27/22	12/27/21	MeOH, Lot 288059	10 mL	1,4-Dioxane_00011	500 uL	1,4-Dioxane	50 ug/mL
.1,4-Dioxane_00011	12/16/24		ABSOLUTE, Lot 121619		(Purchased Reagent)		1,4-Dioxane	1000 ug/mL
524freon_00045	12/16/21	11/16/21	MeOH, Lot 273166	50 mL	VM8FREONS_00018	1.25 mL	1,1,1-Trifluoro-2,2-dichloroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
.VM8FREONS_00018	10/22/23		Absolute, Lot 102220		(Purchased Reagent)		1,1,1-Trifluoro-2,2-dichloroethane	2000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
8260 SP_00146	11/24/21	10/24/21	MeOH, Lot 273166	10 mL	Mega Mix SS_00018	200 uL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.Mega Mix SS_00018	06/30/23		RESTEK, Lot A0167172		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
8260MIX1COMB_00147	12/19/21	11/19/21	MeOH, Lot 273166	50 mL	2-CEVEC_00020	1 mL	2-Chloroethyl vinyl ether	50.12 ug/mL
					EPICH(working_00010	500 uL	Epichlorohydrin	1000 ug/mL
					ETHANOL(new)_00015	1 mL	Ethanol	2000 ug/mL
					Extra Cmpd_00014	1 mL	1,2,4,5-Tetramethylbenzene	50 ug/mL
							2,3-Dihydroindene	50 ug/mL
							2-Methyl-1,3-butadiene	50 ug/mL
							4-Ethyltoluene	50 ug/mL
							Amyl acetate (mixed isomers)	50 ug/mL
							Butyl Methacrylate	50 ug/mL
							Cyclopentene	50 ug/mL
							Isopropyl acetate	50 ug/mL
							Methyl acrylate	50 ug/mL
							n-Butyl acrylate	50 ug/mL
							n-Propyl acetate	50 ug/mL
							p-Diethylbenzene	50 ug/mL
							Pentane	100 ug/mL
					KetonesC_00021	1 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					LIST2/STD6_00012	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Isopropyl alcohol	500 ug/mL
							Methacrylonitrile	500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	1250 ug/mL
					LIST2/STD7_00015	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					Mega Mix_00030	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					POLAR ADD_00019	1 mL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					Vinyl Acetate_00086	1 mL	Vinyl acetate	100 ug/mL
.2-CEVEC_00020	03/31/23		RESTEK, Lot A0158872		(Purchased Reagent)		2-Chloroethyl vinyl ether	2506 ug/mL
.EPICH(working_00010	07/03/23	07/03/21	MeOH, Lot 273166	10 mL	EPICHLO(NEAT)_00001	845.31 uL	Epichlorohydrin	100000 ug/mL
..EPICHLO(NEAT)_00001	09/24/25		FLUKA, Lot SHBD0368V		(Purchased Reagent)		Epichlorohydrin	1.183 g/g
.ETHANOL(new)_00015	03/31/24		RESTEK, Lot A0169978		(Purchased Reagent)		Ethanol	100000 ug/mL
.Extra Cmpd_00014	03/12/23		Absolute, Lot 031220		(Purchased Reagent)		1,2,4,5-Tetramethylbenzene	2500 ug/mL
							2,3-Dihydroindene	2500 ug/mL
							2-Methyl-1,3-butadiene	2500 ug/mL
							4-Ethyltoluene	2500 ug/mL
							Amyl acetate (mixed isomers)	2500 ug/mL
							Butyl Methacrylate	2500 ug/mL
							Cyclopentene	2500 ug/mL
							Isopropyl acetate	2500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acrylate	2500 ug/mL
							n-Butyl acrylate	2500 ug/mL
							n-Propyl acetate	2500 ug/mL
							p-Diethylbenzene	2500 ug/mL
							Pentane	5000 ug/mL
.KetonesC_00021	01/31/24		RESTEK, Lot A0168313		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.LIST2/STD6_00012	09/30/22		RESTEK, Lot A0170418		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.LIST2/STD7_00015	12/31/22		RESTEK, Lot A0173205		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
.Mega Mix_00030	10/31/22		RESTEK, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.POLAR ADD_00019	06/30/23		RESTEK, Lot A0172903		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.Vinyl Acetate_00086	01/31/22		RESTEK, Lot A0162610		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
8260MIX1COMB_00149	02/06/22	01/06/22	MeOH, Lot 288059	50 mL	Mega Mix_00030	1 mL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.Mega Mix_00030	10/31/22		RESTEK, Lot A0159680		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
8FreonHi_00038	12/02/21	11/02/21	MeOH, Lot 273166	5 mL	VM8FREONS_00017	1.25 mL	1,1,1-Trifluoro-2,2-dichloroethane	500 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	500 ug/mL
.VM8FREONS_00017	10/22/23		Absolute, Lot 102220		(Purchased Reagent)		1,1,1-Trifluoro-2,2-dichloroethane	2000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
ACROLEIN W_00133	12/10/21	11/10/21	MeOH, Lot 273166	20 mL	ACROLEIN_00019	507 uL	Acrolein	507 ug/mL
.ACROLEIN_00019	07/31/22		RESTEK, Lot A0168111		(Purchased Reagent)		Acrolein	20000 ug/mL
ACRY/EPIH MIX_00092	12/13/21	11/13/21	MeOH, Lot 273166	10 mL	Acrylonitrile_00006	500 uL	Acrylonitrile	50 ug/mL
					EPICH(working_00010	12.5 uL	Epichlorohydrin	125 ug/mL
.Acrylonitrile_00006	04/10/23		ABSOLUTE, Lot 041020		(Purchased Reagent)		Acrylonitrile	1000 ug/mL
.EPICH(working_00010	07/03/23	07/03/21	MeOH, Lot 273166	10 mL	EPICHLO(NEAT)_00001	845.31 uL	Epichlorohydrin	100000 ug/mL
..EPICHLO(NEAT)_00001	09/24/25		FLUKA, Lot SHBD0368V		(Purchased Reagent)		Epichlorohydrin	1.183 g/g
BFB_00030							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VMC21SU_00009	200 uL	4-Bromofluorobenzene	50 ug/mL
							BFB	50 ug/mL
.VMC21SU_00009	04/06/25		Absolute, Lot 040620		(Purchased Reagent)		4-Bromofluorobenzene	2500 ug/mL
							BFB	2500 ug/mL
Ethanol mix_00058	12/02/21	11/02/21	MeOH, Lot 273166	5 mL	ETHANOL(new)_00015	1 mL	Ethanol	20000 ug/mL
.ETHANOL(new)_00015	03/31/24		RESTEK, Lot A0169978		(Purchased Reagent)		Ethanol	100000 ug/mL
GAS C SP_00436	11/23/21	11/16/21	MeOH, Lot 273166	10 mL	GASES SS_00015	0.2 mL	Vinyl chloride	50 ug/mL
.GASES SS_00015	02/29/24		RESTEK, Lot A0168991		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
GAS Hi_00401	11/24/21	11/10/21	MeOH, Lot 273166	5 mL	GASES C_00029	1 mL	Bromomethane	500 ug/mL
							Butadiene	500 ug/mL
							Chloroethane	500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	500 ug/mL
							Dichlorodifluoromethane	500 ug/mL
							Dichlorofluoromethane	500 ug/mL
							Trichlorofluoromethane	500 ug/mL
							Vinyl chloride	500 ug/mL
.GASES C_00029	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
GASES Li_00449	11/23/21	11/16/21	MeOH, Lot 273166	25 mL	GASES C_00029	0.5 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.GASES C_00029	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
GASES Li_00458	01/18/22	01/11/22	MeOH, Lot 288059	25 mL	GASES C_00030	0.5 mL	Vinyl chloride	50 ug/mL
.GASES C_00030	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
GASES Li_00459	01/25/22	01/18/22	MeOH, Lot 288059	25 mL	GASES C_00030	0.5 mL	Vinyl chloride	50 ug/mL
.GASES C_00030	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
MIX 2 Hi_00117	12/02/21	11/02/21	MeOH, Lot 273166	5 mL	2-CEVEC_00020	1 mL	2-Chloroethyl vinyl ether	501.2 ug/mL
					Extra Cmpd_00013	1 mL	1,2,4,5-Tetramethylbenzene	500 ug/mL
							2,3-Dihydroindene	500 ug/mL
							2-Methyl-1,3-butadiene	500 ug/mL
							4-Ethyltoluene	500 ug/mL
							Amyl acetate (mixed isomers)	500 ug/mL
							Butyl Methacrylate	500 ug/mL
							Cyclopentene	500 ug/mL
							Isopropyl acetate	500 ug/mL
							Methyl acrylate	500 ug/mL
							n-Butyl acrylate	500 ug/mL
							n-Propyl acetate	500 ug/mL
							p-Diethylbenzene	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	1000 ug/mL
					LIST2/STD6_00012	1 mL	1,2,3-Trimethylbenzene	500 ug/mL
							1,3,5-Trichlorobenzene	500 ug/mL
							2-Chloro-1,3-butadiene	500 ug/mL
							2-Nitropropane	1000 ug/mL
							Benzyl chloride	500 ug/mL
							Isopropyl alcohol	5000 ug/mL
							Methacrylonitrile	5000 ug/mL
							n-Butanol	12500 ug/mL
					LIST2/STD7_00015	1 mL	Ethyl acetate	1000 ug/mL
							Ethyl acrylate	500 ug/mL
							Methyl methacrylate	1000 ug/mL
							n-Butyl acetate	500 ug/mL
					POLAR ADD_00019	1 mL	Acetonitrile	5000 ug/mL
							Isopropyl ether	500 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	500 ug/mL
							Tert-butyl ethyl ether	500 ug/mL
.2-CEVEC_00020	03/31/23		RESTEK, Lot A0158872		(Purchased Reagent)		2-Chloroethyl vinyl ether	2506 ug/mL
.Extra Cmpd_00013	03/12/23		Absolute, Lot 031220		(Purchased Reagent)		1,2,4,5-Tetramethylbenzene	2500 ug/mL
							2,3-Dihydroindene	2500 ug/mL
							2-Methyl-1,3-butadiene	2500 ug/mL
							4-Ethyltoluene	2500 ug/mL
							Amyl acetate (mixed isomers)	2500 ug/mL
							Butyl Methacrylate	2500 ug/mL
							Cyclopentene	2500 ug/mL
							Isopropyl acetate	2500 ug/mL
							Methyl acrylate	2500 ug/mL
							n-Butyl acrylate	2500 ug/mL
							n-Propyl acetate	2500 ug/mL
							p-Diethylbenzene	2500 ug/mL
							Pentane	5000 ug/mL
.LIST2/STD6_00012	09/30/22		RESTEK, Lot A0170418		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.LIST2/STD7_00015	12/31/22		RESTEK, Lot A0173205		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
.POLAR ADD_00019	06/30/23		RESTEK, Lot A0172903		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-butyl ethyl ether	2500 ug/mL
MIX I Hi_00144	12/02/21	11/02/21	MeOH, Lot 273166	5 mL	EPICH(working_00010	0.5 mL	Epichlorohydrin	10000 ug/mL
					KetonesC_00021	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
					Mega Mix_00030	1 mL	1,1,1,2-Tetrachloroethane	500 ug/mL
							1,1,1-Trichloroethane	500 ug/mL
							1,1,2,2-Tetrachloroethane	500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	500 ug/mL
							1,1,2-Trichloroethane	500 ug/mL
							1,1-Dichloroethane	500 ug/mL
							1,1-Dichloroethene	500 ug/mL
							1,1-Dichloropropene	500 ug/mL
							1,2,3-Trichlorobenzene	500 ug/mL
							1,2,3-Trichloropropane	500 ug/mL
							1,2,4-Trichlorobenzene	500 ug/mL
							1,2,4-Trimethylbenzene	500 ug/mL
							1,2-Dibromo-3-Chloropropane	500 ug/mL
							1,2-Dichlorobenzene	500 ug/mL
							1,2-Dichloroethane	500 ug/mL
							1,2-Dichloropropane	500 ug/mL
							1,3,5-Trimethylbenzene	500 ug/mL
							1,3-Dichlorobenzene	500 ug/mL
							1,3-Dichloropropane	500 ug/mL
							1,4-Dichlorobenzene	500 ug/mL
							1,4-Dioxane	10000 ug/mL
							2,2-Dichloropropane	500 ug/mL
							2-Chlorotoluene	500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							3-Chloro-1-propene	500 ug/mL
							4-Chlorotoluene	500 ug/mL
							4-Isopropyltoluene	500 ug/mL
							Acrylonitrile	5000 ug/mL
							Benzene	500 ug/mL
							Bromobenzene	500 ug/mL
							Bromoform	500 ug/mL
							Carbon disulfide	500 ug/mL
							Carbon tetrachloride	500 ug/mL
							Chlorobenzene	500 ug/mL
							Chlorobromomethane	500 ug/mL
							Chlorodibromomethane	500 ug/mL
							Chloroform	500 ug/mL
							cis-1,2-Dichloroethene	500 ug/mL
							cis-1,3-Dichloropropene	500 ug/mL
							Cyclohexane	500 ug/mL
							Dibromomethane	500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	500 ug/mL
							Ethyl ether	500 ug/mL
							Ethyl methacrylate	500 ug/mL
							Ethylbenzene	500 ug/mL
							Ethylene Dibromide	500 ug/mL
							Hexachlorobutadiene	500 ug/mL
							Hexane	500 ug/mL
							Iodomethane	500 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropylbenzene	500 ug/mL
							m-Xylene & p-Xylene	500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	500 ug/mL
							Methylcyclohexane	500 ug/mL
							Methylene Chloride	500 ug/mL
							n-Butylbenzene	500 ug/mL
							n-Heptane	500 ug/mL
							N-Propylbenzene	500 ug/mL
							Naphthalene	500 ug/mL
							o-Xylene	500 ug/mL
							sec-Butylbenzene	500 ug/mL
							Styrene	500 ug/mL
							tert-Butylbenzene	500 ug/mL
							Tetrachloroethene	500 ug/mL
							Tetrahydrofuran	1000 ug/mL
							Toluene	500 ug/mL
							trans-1,2-Dichloroethene	500 ug/mL
							trans-1,3-Dichloropropene	500 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
							Trichloroethene	500 ug/mL
					Vinyl Acetate_00087	1 mL	Vinyl acetate	1000 ug/mL
.EPICH(working_00010	07/03/23	07/03/21	MeOH, Lot 273166	10 mL	EPICHLO(NEAT)_00001	845.31 uL	Epichlorohydrin	100000 ug/mL
..EPICHLO(NEAT)_00001	09/24/25		FLUKA, Lot SHBD0368V		(Purchased Reagent)		Epichlorohydrin	1.183 g/g
.KetonesC_00021	01/31/24		RESTEK, Lot A0168313		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.Mega Mix_00030	10/31/22		RESTEK, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.Vinyl Acetate_00087	07/31/22		RESTEK, Lot A0168154		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
SIMDIOX50_00068	01/02/22	12/02/21	MeOH, Lot 273166	10 mL	14DIOXINTER_00123	10 uL	1,4-Dioxane	50.0001 ug/mL
.14DIOXINTER_00123	12/11/22	12/11/20	MeOH, Lot 230446	10 mL	14DIOXNEAT_00003	483.56 uL	1,4-Dioxane	50000.1 ug/mL
..14DIOXNEAT_00003	03/31/23		SIGMA-ALDRICH, Lot BCCD0972		(Purchased Reagent)		1,4-Dioxane	1.034 g/g
SIMDIOX50_00069	02/03/22	01/03/22	MeOH, Lot 288059	10 mL	14DIOXINTER_00123	10 uL	1,4-Dioxane	50.0001 ug/mL
.14DIOXINTER_00123	12/11/22	12/11/20	MeOH, Lot 230446	10 mL	14DIOXNEAT_00003	483.56 uL	1,4-Dioxane	50000.1 ug/mL
..14DIOXNEAT_00003	03/31/23		SIGMA-ALDRICH, Lot BCCD0972		(Purchased Reagent)		1,4-Dioxane	1.034 g/g
SimissurNEW_00053	01/19/22	11/19/21	MeOH, Lot 273166	10 mL	1,4DIOXD810MG_00007	50 uL	1,4-Dioxane-d8	50 ug/mL
					3c8260AISTD_00002	10 uL	Chlorobenzene-d5	2.5 ug/mL
							Fluorobenzene	2.5 ug/mL
					8260 SURR C_00040	10 uL	4-Bromofluorobenzene	2.5 ug/mL
.1,4DIOXD810MG_00007	04/20/25		Absolute, Lot 042020		(Purchased Reagent)		1,4-Dioxane-d8	10000 ug/mL
.3c8260AISTD_00002	08/31/25		RESTEK, Lot A0163483		(Purchased Reagent)		Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.8260 SURR C_00040	12/31/25		RESTEK, Lot A0167135		(Purchased Reagent)		4-Bromofluorobenzene	2500 ug/mL
VMB/C/MIX1SIM_00046	01/02/22	12/02/21	MeOH, Lot 273166	10 mL	BENZENE_00004	100 uL	Benzene	10 ug/mL
					Chloroform_00003	100 uL	Chloroform	10 ug/mL
					NEWsimmix1_00006	500 uL	1,2,3-Trichloropropane	10 ug/mL
							1,2-Dibromo-3-Chloropropane	10 ug/mL
							Ethylene Dibromide	10 ug/mL
.BENZENE_00004	03/05/24		ABSOLUTE, Lot 030519		(Purchased Reagent)		Benzene	1000 ug/mL
.Chloroform_00003	05/15/22		ABSOLUTE, Lot 051519		(Purchased Reagent)		Chloroform	1000 ug/mL
.NEWsimmix1_00006	06/11/25		ABSOLUTE, Lot 061120		(Purchased Reagent)		1,2,3-Trichloropropane	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							Ethylene Dibromide	200 ug/mL
VOA6IS/SURR_00052	01/23/22	11/23/21	MeOH, Lot 273166	5 mL	8260 SURR C_00041	100 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					8260ISNEW_00159	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane-d8	1000 ug/mL
							2-Butanone-d5	250 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
							TBA-d9 (IS)	1000 ug/mL
.8260 SURR C_00041	12/31/25	RESTEK, Lot A0167135			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.8260ISNEW_00159	01/31/26	RESTEK, Lot A0168626			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							1,4-Dioxane-d8	5000 ug/mL
							2-Butanone-d5	1250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL

Reagent

1,4-Dioxane_00011

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R2085

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

01/19/2022

CERTIFIED WEIGHT REPORT

Part Number: 70373
Lot Number: 121619
Description: 1,4-Dioxane

Solvent: Methanol **Lot#** DV182-US

Expiration Date: 121624
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

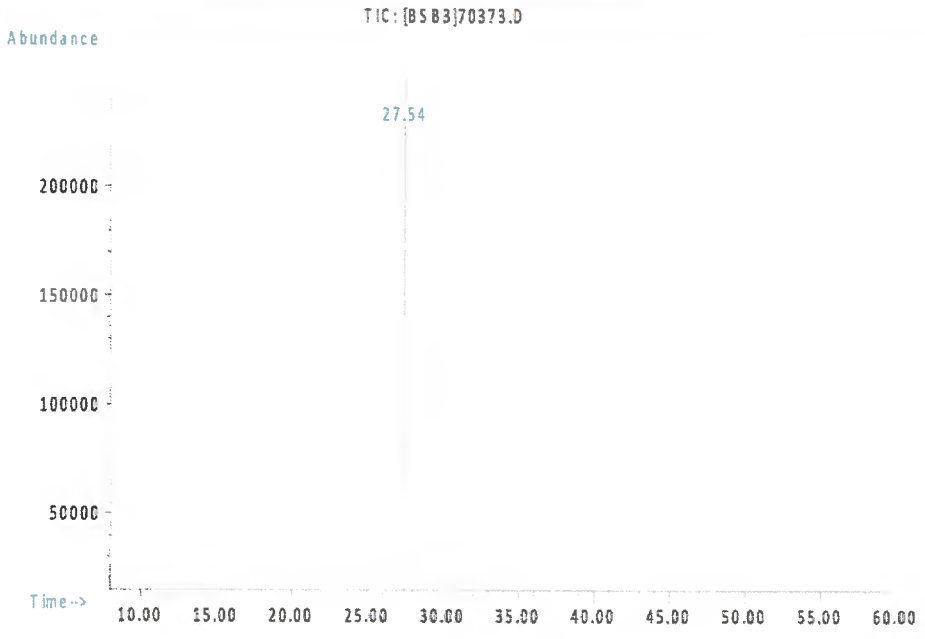
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

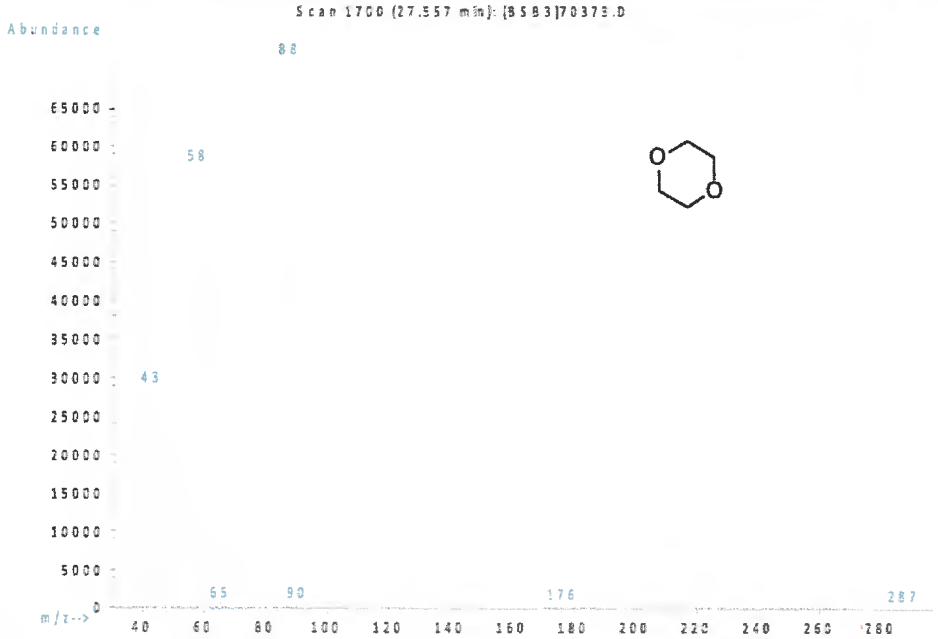
Weight(s) shown below were combined and diluted to (mL): 200.0

Eli Aliaga		121619
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		121619
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dioxane	373	03853KE	1000	99	0.2	0.20201	0.20220	1000.9	4.1	123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp.= 200°C, Detector Temp. = 220°C. Analysis performed by Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

1,4DIOXD810MG_00007

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01/19/2022

CERTIFIED WEIGHT REPORT

Part Number: 92785
Lot Number: 042020
Description: 1,4-Dioxane-d8

Solvent(s): Methanol **Lot#** DX932-US

Expiration Date: 042025
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

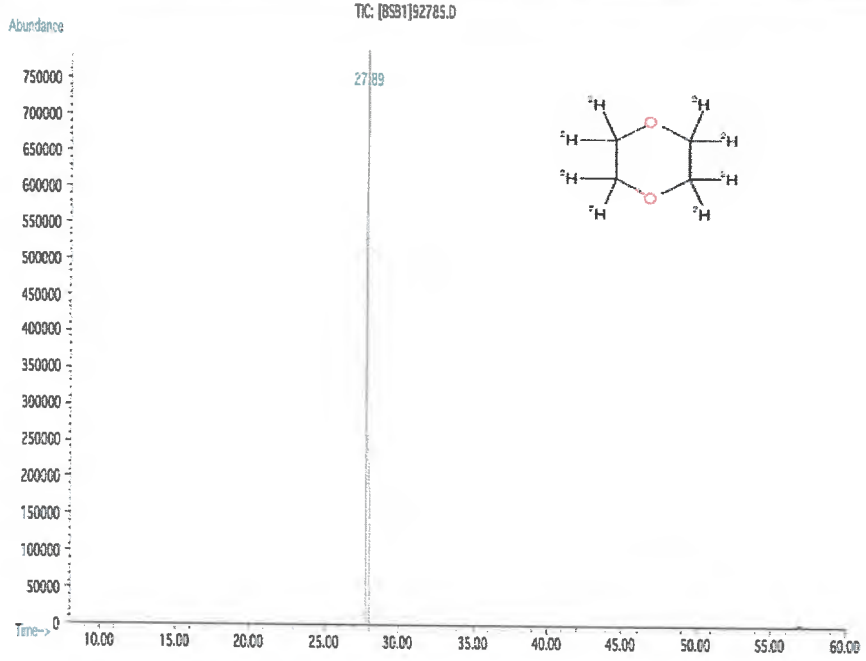
5E-05 Balance Uncertainty
0.007 Flask Uncertainty

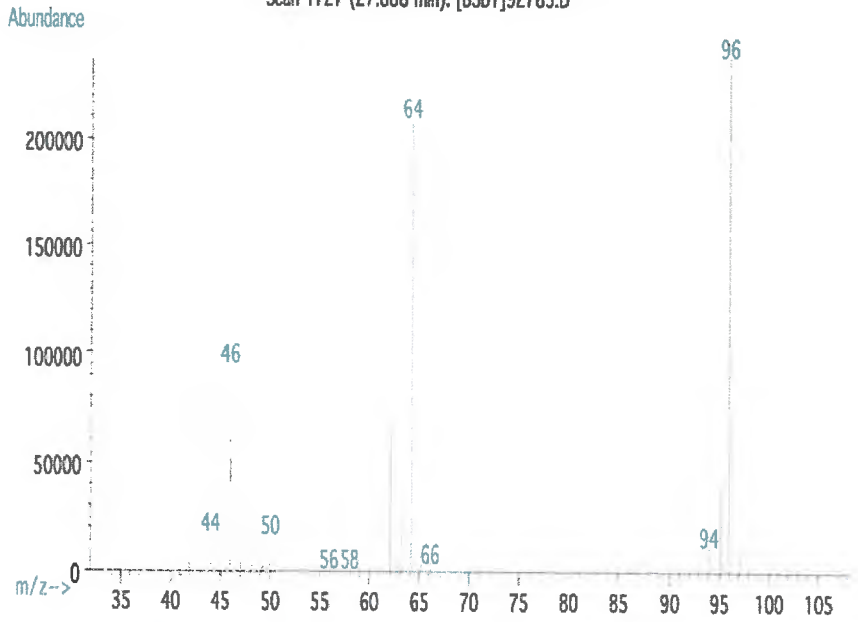
Weight(s) shown below were combined and diluted to (mL): 50.0

Formulated By:	Justin Dippold	042020 DATE
Reviewed By:	Pedro L. Rentas	042020 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dioxane-d8	1882	MBBB2489V	10000	99	0.2	0.50503	0.50515	10002.4	40.6	17647-74-4	N/A	orl-rbt 2000mg/kg

Method: GC6MSD-1. **Detector:** MSD (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm filmthickness). **Oven Profile:** Temp. 1=35°C (Time 1=10min.), Temp. 2=200°C (Time 2=18.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Solvent delay = 7 min. **Analyst:** Candice Warren.





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- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

14DIOXNEAT_00003

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Certificate of Analysis

R2114
8545906.

Product Name:	1,4-Dioxane (NEAT) analytical standard
Product Number:	76887
Batch Number:	BCCD0972
Brand:	Sigma-Aldrich
CAS Number:	123-91-1
Formula:	$C_4H_8O_2$
Formula Weight:	88.11
Expiration Date:	MAR 2023
Quality Release Date:	15 APR 2020

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS	COLORLESS
APPEARANCE (FORM)	LIQUID	LIQUID
PURITY (GC AREA %)	≥ 99.5 %	99.9 %
REFRACTIVE INDEX N20/D	1.421 - 1.423	1.422
WATER (COULOMETR.)	≤ 0.05 %	0.04 %
TRACES PEROXIDE (AS H2O2)	≤ 50.00 MG/KG	< 50.00 MG/KG

Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Reagent

2-CEVEC_00020

R2191

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0158872

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8 (Lot MKBS6526V) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 53.5360 +/- 55.0924	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

8260 SURR C_00040

R2161

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0167135

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 **Purity** 99%	(Lot 0012016)	2,523.0 µg/mL	+/- 14.6689 µg/mL +/- 141.4621 µg/mL +/- 144.7721 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot PR-29377)	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-30867)	2,503.2 µg/mL	+/- 14.5538 µg/mL +/- 140.3519 µg/mL +/- 143.6360 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KO)	2,523.8 µg/mL	+/- 14.6736 µg/mL +/- 141.5070 µg/mL +/- 144.8180 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

8260 SURR C_00041

R2172

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0167135

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,523.0 µg/mL	+/- 14.6689 µg/mL +/- 141.4621 µg/mL +/- 144.7721 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-30867) **Purity** 99%	2,503.2 µg/mL	+/- 14.5538 µg/mL +/- 140.3519 µg/mL +/- 143.6360 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,523.8 µg/mL	+/- 14.6736 µg/mL +/- 141.5070 µg/mL +/- 144.8180 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

8260ISNEW_00159

R2171

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0168626

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 **Purity** 99%	(Lot CD-107)	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 107.0613 µg/mL +/- 110.1738 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99%	(Lot M-276)	1,256.6 µg/mL	+/- 7.3060 µg/mL +/- 26.9040 µg/mL +/- 27.6861 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	251.0 µg/mL	+/- 1.4627 µg/mL +/- 5.3749 µg/mL +/- 5.5311 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 99%	(Lot I19942-0122JM)	5,003.4 µg/mL	+/- 29.0902 µg/mL +/- 107.1234 µg/mL +/- 110.2377 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	(Lot PR-29571)	250.6 µg/mL	+/- 1.4604 µg/mL +/- 5.3663 µg/mL +/- 5.5222 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	(Lot PR-30447)	250.9 µg/mL	+/- 1.4621 µg/mL +/- 5.3727 µg/mL +/- 5.5289 µg/mL	Gravimetric Unstressed Stressed

Reagent

ACROLEIN_00019

R2156

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0168111

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein		19,912.5	µg/mL	+/-	116.5921	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot RP200811)			+/-	397.7985	µg/mL	Unstressed
	Purity 99%				+/-	892.4506	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

Acrylonitrile_00006

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01/19/2022

CERTIFIED WEIGHT REPORT

Part Number: 79007
Lot Number: 041020
Description: Acrylonitrile

Solvent: Methanol **Lot#** DX349-USQ3

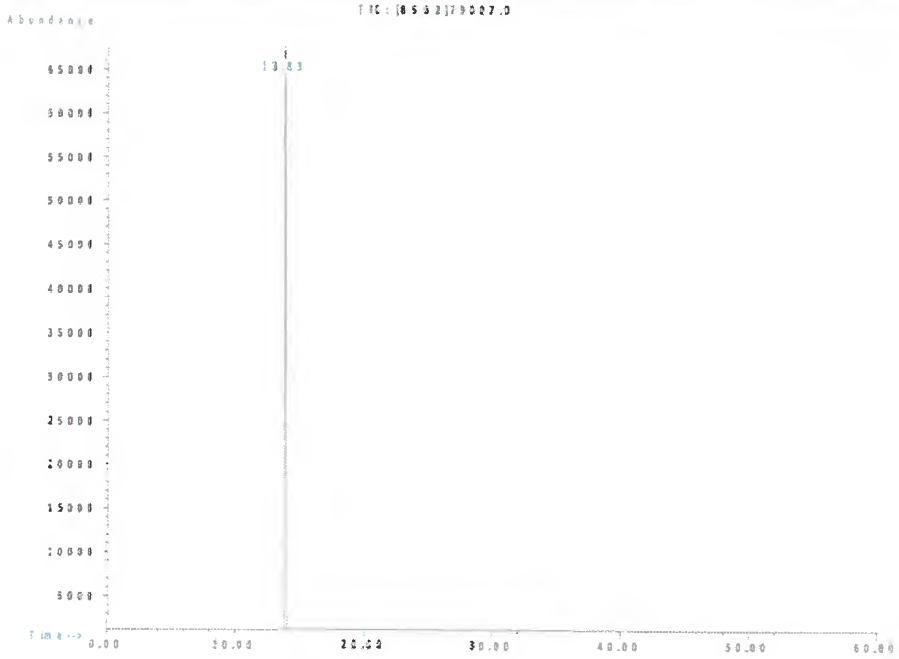
Expiration Date: 041023
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

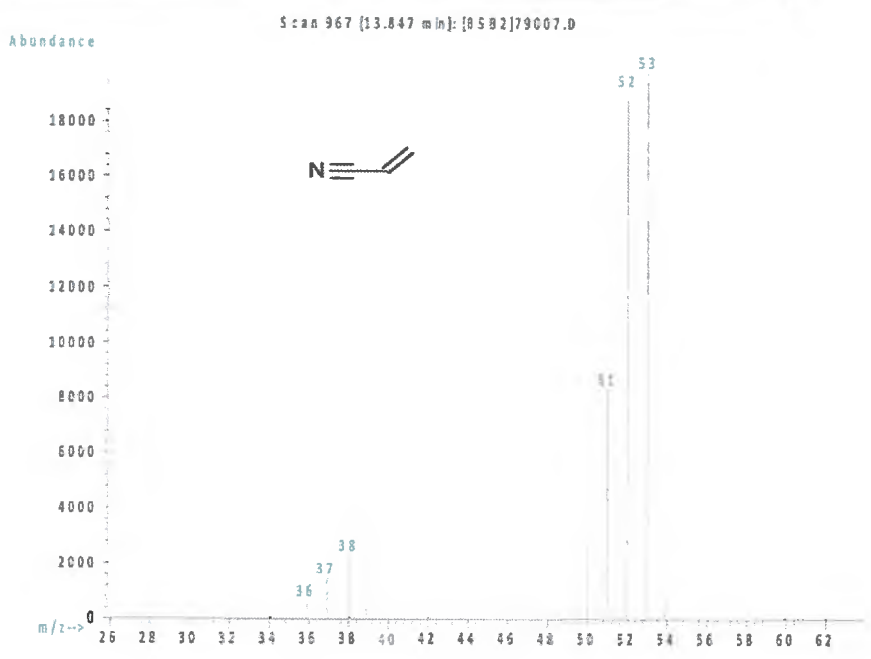
Weight(s) shown below were combined and diluted to (mL): 50.0 | 5E-05 Balance Uncertainty | 0.007 Flask Uncertainty

Prashant Chauhan		041020
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		041020
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrylonitrile	7	4718CK	1000	99	0.2	0.05050	0.05060	1001.9	4.5	107-13-1	N/A	orl-rat 78 mg/kg

Method: GC16MSD-1 **Detector:** Mass Selective Detector **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Candice Warren





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- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

BENZENE_00004

CERTIFIED WEIGHT REPORT

Part Number: 70025
Lot Number: 030519
Description: Benzene

Expiration Date: 030524
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 2684186

Solvent(s): **Lot#**
Methanol DU230-US

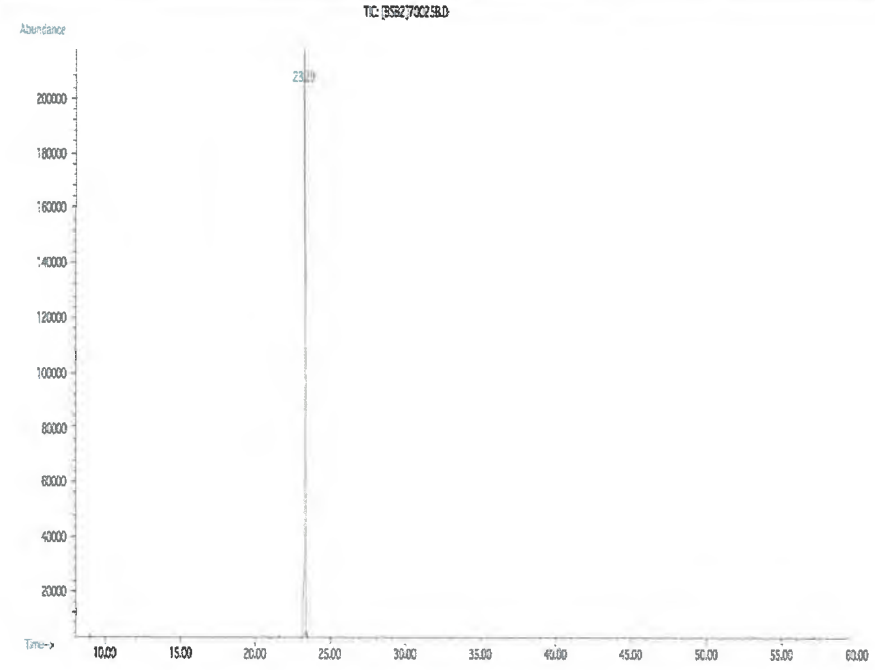
Eli Aliaga		030519
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		030519
Reviewed By:	Pedro L. Rentas	DATE

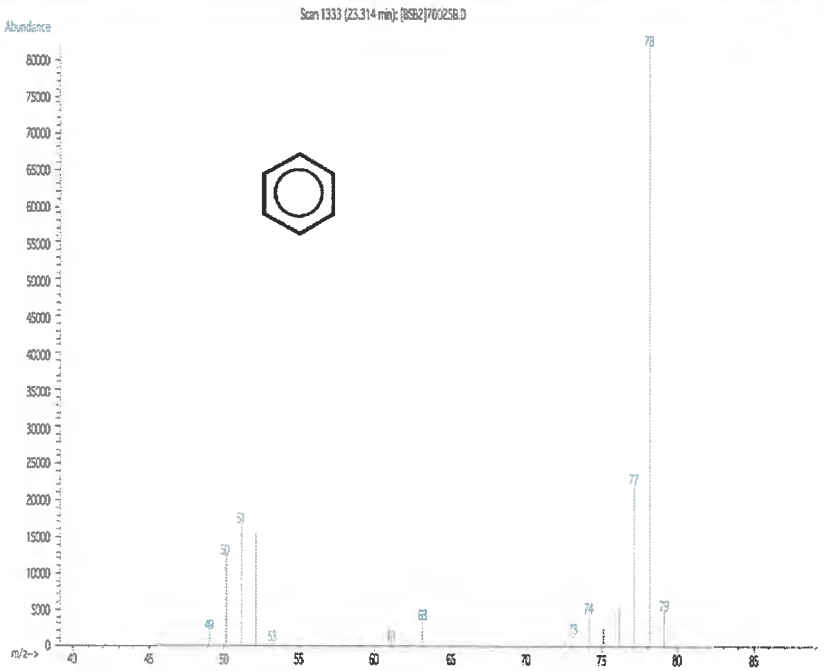
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzene	25	SHBG1830V	1000	99.8	0.2	0.10021	0.10030	1000.9	4.1	71-43-2	1 ppm	ori-rat 4894mg/kg

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Analysis performed by Candice Warren.





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- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

Chloroform_00003

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Certified Reference Material CRM

R1943

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Scopes: http://AbsoluteStandards.com

01/19/2022

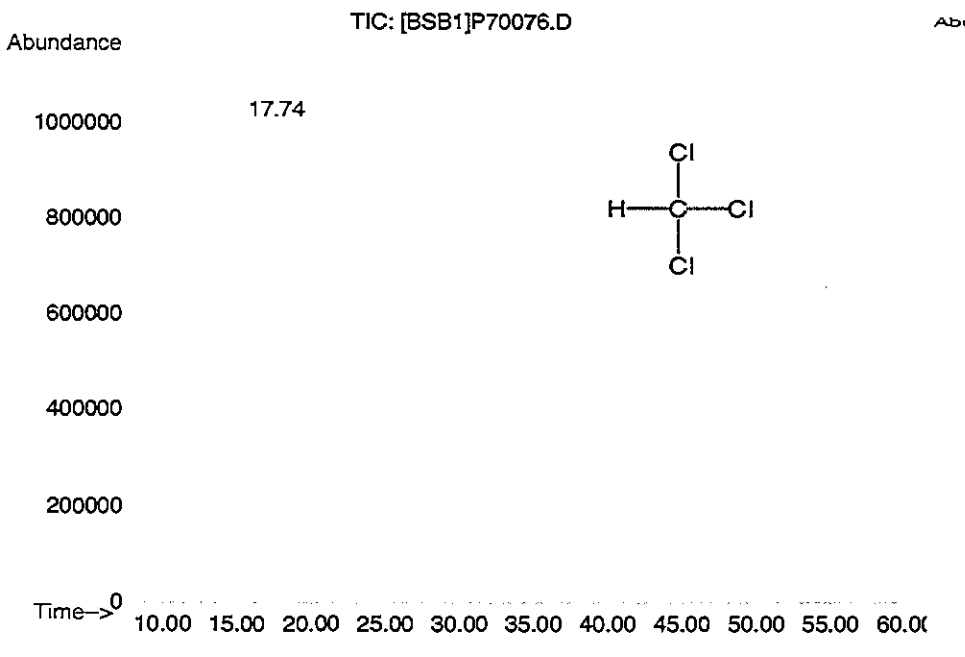
CERTIFIED WEIGHT REPORT

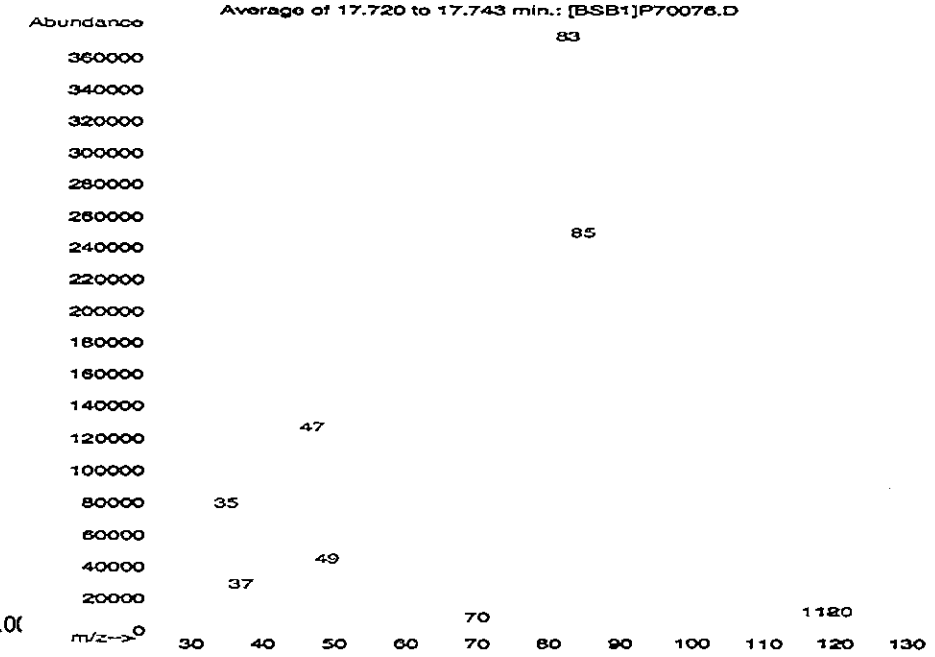
Part Number:	70076	**Solvent:**	**Lot#**	
Lot Number:	051519	Methanol	DU230-US	
Description:	Chloroform			
Expiration Date:	051522			
Recommended Storage:	Freezer (0 °C)			
Nominal Concentration (µg/mL):	1000			
NIST Test ID#:	6UTB	5E-05	Balance Uncertainty	
Volume(s) shown below were combined and diluted to (mL):		20.0	0.002	Flask Uncertainty

		051519
Formulated By:	Mario Luis	DATE
		051519
Reviewed By:	Pedro L. Rentas	DATE

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Chloroform	32111	122818	0.05	1.00	0.004	20021.5	1001.8	9.0	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector. **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1=35°C (Time 1=10min.), Temp. 2=200°C (Time 2=8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. **Analyst:** Pedro Rentas.





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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

EPICHLO(NEAT)_00001

R1584

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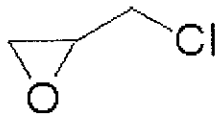
Product Name:
(±)-Epichlorohydrin - purum, ≥99% (GC)



Product Number:	**45340**
Batch Number:	**SHBD0368V**
Brand:	FLUKA
CAS Number:	106-89-8
MDL Number:	MFCD00005132
Formula:	C3H5ClO
Formula Weight:	92.52 g/mol
Quality Release Date:	23 JAN 2013

Test	Specification	Result
Appearance (Clarity)	Clear	Clear
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared spectrum	Conforms to Structure	Conforms
Color Test	≤ 20 APHA	< 10 APHA
Refractive index at 20 ° C	1.437 - 1.439	1.438
Purity (GC)	≥ 99.0 %	99.9 %
Water (by Karl Fischer)	≤ 0.1 %	< 0.1 %

Jamie Gleason

Jamie Gleason, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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ETHANOL(new)_00015

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571994 **Lot No.:** A0169978

Description : 8260 Ethanol Standard

8260 Ethanol Standard 100,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol	100,586.0 µg/mL	+/- 588.9228 µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBM3719)		+/- 2,154.6772 µg/mL	Unstressed
	Purity 99%		+/- 2,217.2533 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

Extra Cmpd_00013

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01/19/2022

CERTIFIED WEIGHT REPORT

Part Number: 98593
Lot Number: 031220
Description: VOC Standard 2015
14 components
Expiration Date: 031223
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Methanol DX349-USQ1

R2173

5E-05 Balance Uncertainty #9105306
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty MS 7/16/21

Prashant Chauhan		031220
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		031220
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. n-Amyl acetate	1515	OGL01	2500	98	0.2	0.25511	0.25517	2500.5	10.3	628-63-7	100 ppm (525 mg/m3/8H)	orl-rbt 7400 mg/kg
2. tert-Amyl ethyl ether	2609	IKVYB-KF	2500	98	0.2	0.25511	0.25514	2500.3	10.3	919-94-8	N/A	inh-mus 81284mg/m3/15H
3. n-Butyl acrylate	1194	10921JF	2500	99	0.2	0.25254	0.25256	2500.2	10.2	141-32-2	10 ppm (55mg/m3/8H)	orl-rat 900mg/kg
4. Butyl methacrylate	1314	03220HG	2500	99	0.2	0.25254	0.25257	2500.3	10.2	97-88-1	N/A	orl-rat 18 g/kg
5. Cyclopentene	519	04013BX	2500	99	0.2	0.25254	0.25260	2500.6	10.2	142-29-0	N/A	orl-rat 1656mg/kg
6. 4-Ethyltoluene	1001	031097	2500	99	0.2	0.25254	0.25258	2500.4	10.2	622-96-8	N/A	N/A
7. Indan	955	02625MQ	2500	96	0.2	0.26043	0.26050	2500.7	10.5	496-11-7	N/A	N/A
8. Isoprene	1541	07903LQ	2500	99	0.2	0.25254	0.25260	2500.6	10.2	78-79-5	N/A	N/A
9. Isopropyl acetate	1106	01519BZ	2500	99	0.2	0.25254	0.25260	2500.6	10.2	108-21-4	250 ppm (950mg/m3)	orl-rbt 6946mg/kg
10. Methyl acrylate	1075	05208KY	2500	99	0.2	0.25254	0.25255	2500.1	10.2	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
11. n-Pentane	783	SHBK3094	**5000**	99.4	0.2	0.50304	0.50310	**5000.6**	20.2	109-66-0	600 ppm(1800mg/m3/8H)	ivn-mus 446mg/kg
12. Propyl acetate	1105	05017HY	2500	99	0.2	0.25254	0.25259	2500.5	10.2	109-60-4	200 ppm (840mg/m3)	orl-rat 9370mg/kg
13. 1,2,4,5-Tetramethylbenzene	1222	06310PW	2500	98	0.2	0.25511	0.25515	2500.3	10.3	95-93-2	N/A	orl-rat 6989mg/kg
14. 1,4-Diethylbenzene	949	FBQ01	2500	99.9	0.2	0.25026	0.25027	2500.1	10.1	105-05-5	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

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R2031

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CERTIFIED WEIGHT REPORT

Part Number: 98593
Lot Number: 031220
Description: VOC Standard 2015
14 components
Expiration Date: 031223
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Methanol DX349-USQ1

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Prashant Chauhan	031220	
Formulated By:	Prashant Chauhan	DATE
Pedro L. Rentas	031220	
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. n-Amyl acetate	1515	OGL01	2500	98	0.2	0.25511	0.25517	2500.5	10.3	628-63-7	100 ppm (525 mg/m3/8H)	orl-rbt 7400 mg/kg
2. tert-Amyl ethyl ether	2609	IKVYB-KF	2500	98	0.2	0.25511	0.25514	2500.3	10.3	919-94-8	N/A	inh-mus 81284mg/m3/15H
3. n-Butyl acrylate	1194	10921JF	2500	99	0.2	0.25254	0.25256	2500.2	10.2	141-32-2	10 ppm (55mg/m3/8H)	orl-rat 900mg/kg
4. Butyl methacrylate	1314	03220HG	2500	99	0.2	0.25254	0.25257	2500.3	10.2	97-88-1	N/A	orl-rat 18 g/kg
5. Cyclopentene	519	04013BX	2500	99	0.2	0.25254	0.25260	2500.6	10.2	142-29-0	N/A	orl-rat 1656mg/kg
6. 4-Ethyltoluene	1001	031097	2500	99	0.2	0.25254	0.25258	2500.4	10.2	622-96-8	N/A	N/A
7. Indan	955	02625MQ	2500	96	0.2	0.26043	0.26050	2500.7	10.5	496-11-7	N/A	N/A
8. Isoprene	1541	07903LQ	2500	99	0.2	0.25254	0.25260	2500.6	10.2	78-79-5	N/A	N/A
9. Isopropyl acetate	1106	01519BZ	2500	99	0.2	0.25254	0.25260	2500.6	10.2	108-21-4	250 ppm (950mg/m3)	orl-rbt 6946mg/kg
10. Methyl acrylate	1075	05208KY	2500	99	0.2	0.25254	0.25255	2500.1	10.2	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
11. n-Pentane	783	SHBK3094	5000	99.4	0.2	0.50304	0.50310	5000.6	20.2	109-66-0	600 ppm(1800mg/m3/8H)	ivn-mus 446mg/kg
12. Propyl acetate	1105	05017HY	2500	99	0.2	0.25254	0.25259	2500.5	10.2	109-60-4	200 ppm (840mg/m3)	orl-rat 9370mg/kg
13. 1,2,4,5-Tetramethylbenzene	1222	06310PW	2500	98	0.2	0.25511	0.25515	2500.3	10.3	95-93-2	N/A	orl-rat 6989mg/kg
14. 1,4-Diethylbenzene	949	FBQ01	2500	99.9	0.2	0.25026	0.25027	2500.1	10.1	105-05-5	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

GASES C_00029

R2178

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,500.4 µg/mL	+/- 17.4665 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5300 µg/mL	Unstressed
	Purity 99%		+/- 143.8028 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/- 17.4265 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.5200 µg/mL	Unstressed
	Purity 99%		+/- 143.7928 µg/mL	Stressed
3	Vinyl chloride	2,501.4 µg/mL	+/- 16.6715 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.4849 µg/mL	Unstressed
	Purity 99%		+/- 143.7611 µg/mL	Stressed
4	1,3-Butadiene	2,499.9 µg/mL	+/- 17.9031 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/- 140.5578 µg/mL	Unstressed
	Purity 99%		+/- 143.8287 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/- 16.8347 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4711 µg/mL	Unstressed
	Purity 99%		+/- 143.7461 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,501.1 µg/mL	+/- 17.4608 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.5674 µg/mL	Unstressed
	Purity 99%		+/- 143.8412 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 10172500)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

Reagent

GASES C_00030

R2233

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

Reagent

GASES SS_00015

R2179

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0168991

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12)		2,508.1	µg/mL	+/- 22.5818	µg/mL	Gravimetric
	CAS # 75-71-8.SEC	(Lot 26871)			+/- 141.6820	µg/mL	Unstressed
	Purity 99%				+/- 144.9486	µg/mL	Stressed
2	Chloromethane (methyl chloride)		2,503.8	µg/mL	+/- 23.7255	µg/mL	Gravimetric
	CAS # 74-87-3.SEC	(Lot 18343)			+/- 141.6279	µg/mL	Unstressed
	Purity 99%				+/- 144.8845	µg/mL	Stressed
3	Vinyl chloride		2,497.8	µg/mL	+/- 21.9174	µg/mL	Gravimetric
	CAS # 75-01-4.SEC	(Lot MKBK6872V)			+/- 141.0052	µg/mL	Unstressed
	Purity 99%				+/- 144.2603	µg/mL	Stressed
4	1,3-Butadiene		2,503.0	µg/mL	+/- 21.1599	µg/mL	Gravimetric
	CAS # 106-99-0.SEC	(Lot 24033)			+/- 141.1761	µg/mL	Unstressed
	Purity 99%				+/- 144.4408	µg/mL	Stressed
5	Bromomethane (methyl bromide)		2,502.1	µg/mL	+/- 29.2976	µg/mL	Gravimetric
	CAS # 74-83-9.SEC	(Lot 00017022)			+/- 142.5788	µg/mL	Unstressed
	Purity 99%				+/- 145.8100	µg/mL	Stressed
6	Chloroethane (ethyl chloride)		2,502.6	µg/mL	+/- 24.1786	µg/mL	Gravimetric
	CAS # 75-00-3.SEC	(Lot 00004202)			+/- 141.6397	µg/mL	Unstressed
	Purity 99%				+/- 144.8930	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)		2,500.0	µg/mL	+/- 14.6714	µg/mL	Gravimetric
	CAS # 75-43-4 *	(Lot 10172500)			+/- 140.1867	µg/mL	Unstressed
	Purity 99%				+/- 143.4662	µg/mL	Stressed

Reagent

KetonesC_00021

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0168313

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,516.4 µg/mL	+/- 73.2863 µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBM6699)		+/- 755.2197 µg/mL	Unstressed
	Purity 99%		+/- 757.0124 µg/mL	Stressed
2	2-Butanone (MEK)	12,515.2 µg/mL	+/- 73.2792 µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBL6194)		+/- 755.1473 µg/mL	Unstressed
	Purity 99%		+/- 756.9399 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,512.0 µg/mL	+/- 73.2605 µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBM2797)		+/- 754.9542 µg/mL	Unstressed
	Purity 99%		+/- 756.7463 µg/mL	Stressed
4	2-Hexanone	12,504.4 µg/mL	+/- 73.2160 µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/- 754.4956 µg/mL	Unstressed
	Purity 99%		+/- 756.2867 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

LIST2/STD6_00012

R2189

RESTEK CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808 **Lot No.:** A0170418

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2,500-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBM4333) **Purity** 99%	25,060.5 µg/mL	+/- 146.7347 µg/mL +/- 1,239.8106 µg/mL +/- 1,270.6336 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 201117JLM) **Purity** 99%	2,520.5 µg/mL	+/- 14.7917 µg/mL +/- 124.6999 µg/mL +/- 127.7999 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012014) **Purity** 99%	25,036.0 µg/mL	+/- 146.5913 µg/mL +/- 1,238.5985 µg/mL +/- 1,269.3914 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBF8066V) **Purity** 99%	2,517.5 µg/mL	+/- 14.7741 µg/mL +/- 124.5515 µg/mL +/- 127.6478 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBM5061) **Purity** 99%	62,608.5 µg/mL	+/- 366.5676 µg/mL +/- 3,097.4093 µg/mL +/- 3,174.4142 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCCB9352) **Purity** 97%	5,014.4 µg/mL	+/- 29.3605 µg/mL +/- 248.0766 µg/mL +/- 254.2441 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot BCBS3368V) **Purity** 98%	2,521.1 µg/mL	+/- 14.7949 µg/mL +/- 124.7271 µg/mL +/- 127.8278 µg/mL	Gravimetric Unstressed Stressed

Reagent

LIST2/STD7_00015

R2190

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570809 **Lot No.:** A0173205

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2,500-5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate **CAS #** 141-78-6 **Purity** 99%	(Lot SHBM3421)	5,011.0 µg/mL	+/- 29.3405 +/- 302.3558 +/- 303.0735	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Ethyl acrylate **CAS #** 140-88-5 **Purity** 99%	(Lot 10129902)	2,505.5 µg/mL	+/- 14.7037 +/- 151.1811 +/- 151.5400	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Methyl methacrylate **CAS #** 80-62-6 **Purity** 99%	(Lot MKCN3027)	5,010.5 µg/mL	+/- 29.3376 +/- 302.3256 +/- 303.0433	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Butyl acetate **CAS #** 123-86-4 **Purity** 99%	(Lot SHBM7214)	2,507.5 µg/mL	+/- 14.7154 +/- 151.3018 +/- 151.6610	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

Mega Mix SS_00018

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R2168
#9000303 MS 6/11/2021

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0167172

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot HGCHN) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

Reagent

Mega Mix_00030

R 2194

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBL3107)	2,518.6	µg/mL	+/- 14.6435 +/- 151.9598 +/- 152.3206	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,521.9	µg/mL	+/- 14.6624 +/- 152.1559 +/- 152.5171	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot A0387097)	25,178.5	µg/mL	+/- 146.3823 +/- 1,519.1297 +/- 1,522.7364	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBL0822)	2,513.9	µg/mL	+/- 14.6159 +/- 151.6732 +/- 152.0333	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKCK1803)	2,517.3	µg/mL	+/- 14.6355 +/- 151.8768 +/- 152.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBL0924)	2,521.1	µg/mL	+/- 14.6580 +/- 152.1106 +/- 152.4718	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 580900)	2,524.5	µg/mL	+/- 14.6777 +/- 152.3143 +/- 152.6759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBX0066)	2,523.0	µg/mL	+/- 14.6690 +/- 152.2244 +/- 152.5858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,523.8	µg/mL	+/- 14.6733 +/- 152.2690 +/- 152.6305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,671.0	µg/mL	+/- 364.3555 +/- 3,781.2173 +/- 3,790.1946	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBL6923)	2,524.3	µg/mL	+/- 14.6762 +/- 152.2992 +/- 152.6608	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,516.6	µg/mL	+/- 14.6320 +/- 151.8400 +/- 152.2005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,045.5	µg/mL	+/- 29.3350 +/- 304.4174 +/- 305.1401	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 98%	(Lot 190123CG)	2,514.9	µg/mL	+/- 14.6220 +/- 151.7366 +/- 152.0968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCF5831)	2,521.5	µg/mL	+/- 14.6602 +/- 152.1333 +/- 152.4945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 190919JLM)	2,522.3	µg/mL	+/- 14.6646 +/- 152.1785 +/- 152.5398	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG8938V)	2,523.6	µg/mL	+/- 14.6726 +/- 152.2615 +/- 152.6230	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 98%	(Lot SHBK8626)	2,515.8	µg/mL	+/- 14.6270 +/- 151.7883 +/- 152.1487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot MKCH9948)	2,522.6	µg/mL	+/- 14.6668 +/- 152.2011 +/- 152.5625	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBL4231)	2,514.6	µg/mL	+/- 14.6202 +/- 151.7185 +/- 152.0787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBJ4611)	2,512.9	µg/mL	+/- 14.6101 +/- 151.6129 +/- 151.9728	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,517.4	µg/mL	+/- 14.6362 +/- 151.8844 +/- 152.2450	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,519.5	µg/mL	+/- 14.6486 +/- 152.0126 +/- 152.3735	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBL3022)	50,250.0	µg/mL	+/- 292.1426 +/- 3,031.8037 +/- 3,039.0017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10215970)	2,523.5	µg/mL	+/- 14.6718 +/- 152.2539 +/- 152.6154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 200107JLM)	2,523.0	µg/mL	+/- 14.6689 +/- 152.2238 +/- 152.5852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot MKCH9232)	2,523.3	µg/mL	+/- 14.6704 +/- 152.2389 +/- 152.6003	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBF9649V)	2,515.4	µg/mL	+/- 14.6246 +/- 151.7637 +/- 152.1240	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot 19420164-D1119)	2,521.1	µg/mL	+/- 14.6576 +/- 152.1061 +/- 152.4672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,515.8	µg/mL	+/- 14.6268 +/- 151.7863 +/- 152.1467	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBC6265)	2,518.8	µg/mL	+/- 14.6442 +/- 151.9673 +/- 152.3281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBJ7422)	2,513.1	µg/mL	+/- 14.6115 +/- 151.6280 +/- 151.9880	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 99%	(Lot MKCK6472)	2,513.5	µg/mL	+/- 14.6137 +/- 151.6506 +/- 152.0106	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,521.9	µg/mL	+/- 14.6624 +/- 152.1559 +/- 152.5171	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBJ0839)	2,521.0	µg/mL	+/- 14.6573 +/- 152.1031 +/- 152.4642	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBL0265)	1,257.9	µg/mL	+/- 7.3134 +/- 75.8932 +/- 76.0734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ7329)	1,260.0	µg/mL	+/- 7.3257 +/- 76.0214 +/- 76.2019	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBL0706)	2,521.1	µg/mL	+/- 14.6580 +/- 152.1106 +/- 152.4718	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 98%	(Lot GC01)	2,515.5	µg/mL	+/- 14.6256 +/- 151.7735 +/- 152.1339	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBK7739)	2,517.9	µg/mL	+/- 14.6391 +/- 151.9146 +/- 152.2752	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCG7519)	2,516.0	µg/mL	+/- 14.6282 +/- 151.8014 +/- 152.1618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot P15E008)	2,516.8	µg/mL	+/- 14.6326 +/- 151.8467 +/- 152.2072	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBJ4835)	2,518.4	µg/mL	+/- 14.6420 +/- 151.9447 +/- 152.3055	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCJ0238)	2,523.3	µg/mL	+/- 14.6704 +/- 152.2389 +/- 152.6003	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,520.9	µg/mL	+/- 14.6566 +/- 152.0956 +/- 152.4567	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,520.3	µg/mL	+/- 14.6530 +/- 152.0579 +/- 152.4189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBZ5026V)	2,511.8	µg/mL	+/- 14.6038 +/- 151.5480 +/- 151.9078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKCG9378)	2,518.3	µg/mL	+/- 14.6413 +/- 151.9372 +/- 152.2979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,520.1	µg/mL	+/- 14.6522 +/- 152.0503 +/- 152.4113	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBZ6781)	2,519.4	µg/mL	+/- 14.6479 +/- 152.0051 +/- 152.3659	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKCF5243)	2,519.4	µg/mL	+/- 14.6479 +/- 152.0051 +/- 152.3659	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKCC8496)	2,518.8	µg/mL	+/- 14.6442 +/- 151.9673 +/- 152.3281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,518.6	µg/mL	+/- 14.6435 +/- 151.9598 +/- 152.3206	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 99%	(Lot WXBC4246V)	2,522.0	µg/mL	+/- 14.6631 +/- 152.1634 +/- 152.5247	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKCG5431)	2,519.8	µg/mL	+/- 14.6500 +/- 152.0277 +/- 152.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKCJ9905)	2,521.5	µg/mL	+/- 14.6602 +/- 152.1333 +/- 152.4945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,517.6	µg/mL	+/- 14.6377 +/- 151.8995 +/- 152.2601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,520.3	µg/mL	+/- 14.6530 +/- 152.0579 +/- 152.4189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,523.9	µg/mL	+/- 14.6740 +/- 152.2766 +/- 152.6381	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBK7741)	2,514.4	µg/mL	+/- 14.6188 +/- 151.7034 +/- 152.0636	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 97%	(Lot FBL01)	2,510.7	µg/mL	+/- 14.5976 +/- 151.4831 +/- 151.8427	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,521.6	µg/mL	+/- 14.6609 +/- 152.1408 +/- 152.5020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,517.0	µg/mL	+/- 14.6341 +/- 151.8622 +/- 152.2228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,511.4	µg/mL	+/- 14.6014 +/- 151.5224 +/- 151.8821	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

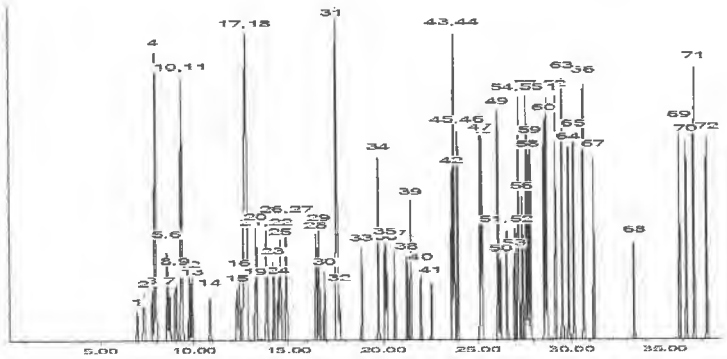
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 07-Apr-2020 **Balance:** B707717271

Feng-Yun Lo - QC Analyst

Date Passed: 13-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

NEWsimmix1_00006

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01/19/2022

CERTIFIED WEIGHT REPORT

Part Number: 30096
Lot Number: 061120
Description: EPA Method 504.1 - Analytes
3 components
Expiration Date: 061125
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 200
NIST Test ID#: 23060

Solvent(s): Methanol **Lot#** DX932-US

R2159

05/14/2021 MS

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

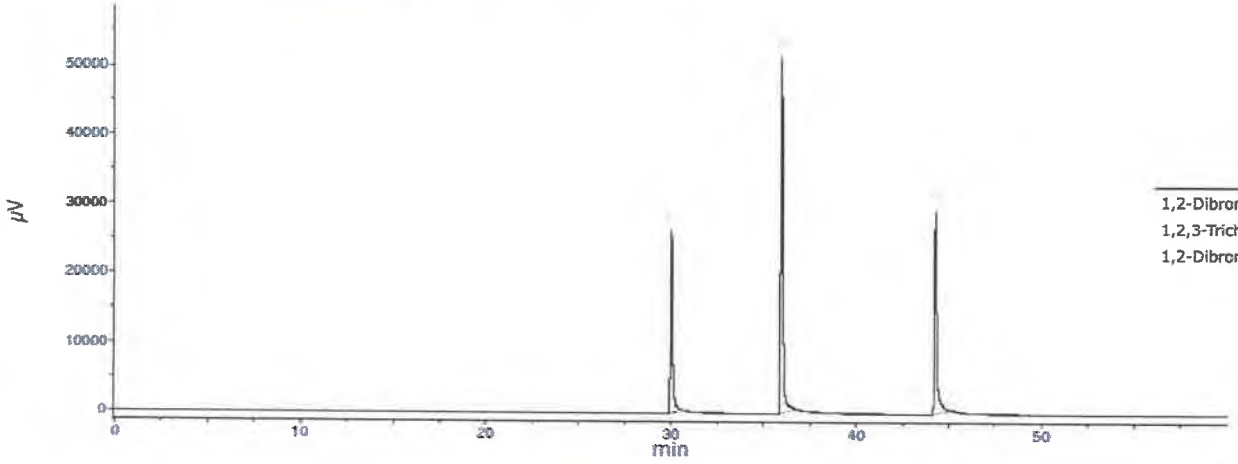
#8914740

Formulated By:	Benson Chan	061120 DATE
Reviewed By:	Pedro L. Rentas	061120 DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	1,2-Dibromo-3-chloropropane	117	PO3221	200	99	0.2	0.04040	0.04047	200.3	1.0	96-12-8	0.001 ppm	orl-rat 170mg/kg
2.	1,2-Dibromoethane	121	06020AB	200	99	0.2	0.04040	0.04052	200.6	1.0	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
3.	1,2,3-Trichloropropane	297	1428739V	200	99	0.2	0.04040	0.04041	200.0	1.0	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Comments
GC1-M7 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=150mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=40mL/min., Hydogen(make-up)=100mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
ELCD Signal = Edaq Channel 1 PID Signal = Edaq Channel 2
Standard injection = 0.5µL, Range=4 Purge Valve = 8 min.



Name	ELCD RT (min.)
1,2-Dibromoethane	29.99
1,2,3-Trichloropropane	35.95
1,2-Dibromo-3-chloropropane	44.25

Reagent

POLAR ADD_00019

R2193

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 **Lot No.:** A0172903

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2,500-25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile **CAS #** 75-05-8 **Purity** 99% (Lot SHBH6233)	25,165.0 µg/mL	+/- 147.3466 µg/mL +/- 1,244.9805 µg/mL +/- 1,275.9320 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3 **Purity** 99% (Lot SHBH1927V)	2,519.5 µg/mL	+/- 14.7858 µg/mL +/- 124.6504 µg/mL +/- 127.7492 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3 **Purity** 99% (Lot MKCM3774)	2,510.5 µg/mL	+/- 14.7330 µg/mL +/- 124.2052 µg/mL +/- 127.2929 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0 **Purity** 99% (Lot BCCB0845)	25.132.5 µg/mL	+/- 147.1563 µg/mL +/- 1,243.3726 µg/mL +/- 1,274.2842 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4 **Purity** 99% (Lot STBB1898V)	25,074.0 µg/mL	+/- 146.8138 µg/mL +/- 1,240.4785 µg/mL +/- 1,271.3181 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8 **Purity** 99% (Lot HMBG7745V)	2,509.0 µg/mL	+/- 14.7242 µg/mL +/- 124.1310 µg/mL +/- 127.2168 µg/mL	Gravimetric Unstressed Stressed

Reagent

Vinyl Acetate_00086

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Certificate of Analysis

R2152

04/23/2021 MS #8852768

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0162610

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,017.3 µg/mL	+/- 29.4445	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot RD200601)		+/- 302.7444	µg/mL	Unstressed
	Purity 99%		+/- 303.4631	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

Vinyl Acetate_00087

R2188

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0168154

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate **CAS #** 108-05-4 **Purity** 99% (Lot RD200601)	5,038.0 µg/mL	+/- 29.4986 µg/mL +/- 303.9849 µg/mL +/- 304.7065 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM8FREONS_00017

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R2163

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CERTIFIED WEIGHT REPORT

Part Number: 96694
Lot Number: 102220
Description: Freon Standard
8 components
Expiration Date: 102223
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060

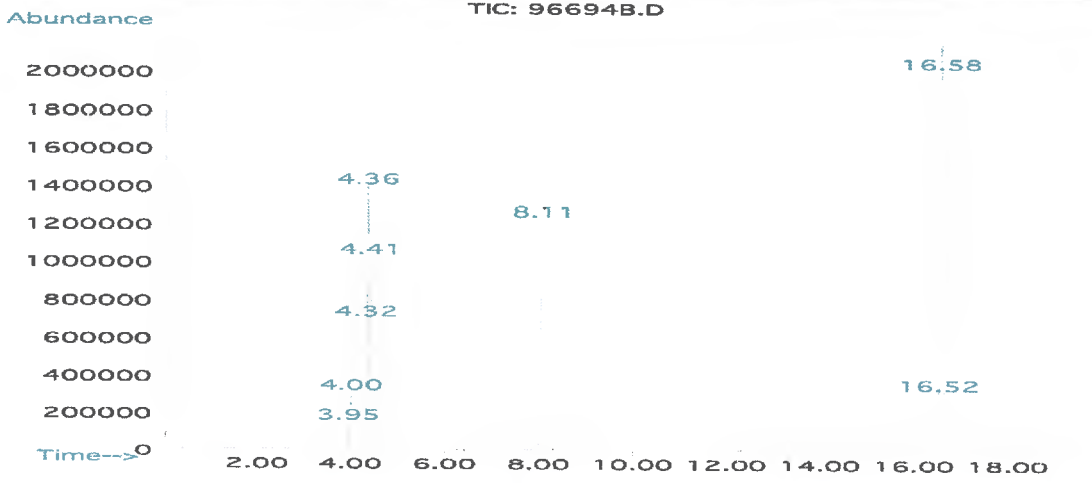
Solvent(s):	Lot#
Methanol	DX932-USQ4

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By:	Mario Luis	102220 DATE
Reviewed By:	Pedro L. Rentas	102220 DATE

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Chlorodifluoromethane	33601	091420	0.10	10.00	0.004	20069.1	2006.8	8.3	75-45-6	1000 ppm(3500mg/m3/8H)	N/A
2. Chloropentafluoroethane	34471	050719	0.10	10.00	0.004	20213.6	2021.3	8.3	76-15-3	N/A	N/A
3. Chlorotrifluoroethene	33611	102120	0.20	20.00	0.004	10125.2	2024.9	8.3	79-38-9	N/A	N/A
4. Chlorotrifluoromethane	34401	102616	0.20	20.00	0.004	10019.0	2003.7	8.3	75-72-9	N/A	N/A
5. 1,2-Dichlorotrifluoroethane	32641	102119	0.10	10.00	0.004	20038.8	2003.8	8.4	354-23-4	N/A	N/A
6. 2,2-Dichloro-1,1,1-trifluoroethane	33951	090518	0.10	10.00	0.004	20019.8	2001.9	8.3	306-83-2	N/A	N/A
7. 1,1-Difluoroethane	34411	121617	0.10	10.00	0.004	20009.4	2000.8	8.3	75-37-6	N/A	N/A
8. 1,2-Difluorotetrachloroethane	34481	102616	0.10	10.00	0.004	20010.7	2001.0	8.3	76-12-0	500 ppm	N/A

Method: GC6MSD-1. **Detector:** MSD. Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1=10min.), Temp. 2 = 200°C (Time 2=8.75 min.) Rate = 4°C/min., Injector Temp.= 200°C, Detector Temp. = 220°C. **Analyst:** Melissa Stonier.



Peak No.	Name	MSD RT (min.)
1	Chlorotrifluoromethane	3.95
2	Chloropentafluoroethane	4.00
3	Chlorotrifluoroethene	4.32
4	1,1-Difluoroethane	4.36
5	Chlorodifluoromethane	4.41
6	2,2-Dichloro-1,1,1-trifluoroethane	8.11
7	1,2-Dichlorotrifluoroethane	16.52
8	1,2-Difluorotetrachloroethane	16.58

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

VM8FREONS_00018

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R2204

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CERTIFIED WEIGHT REPORT

Part Number: 96694
Lot Number: 102220
Description: Freon Standard
8 components
Expiration Date: 102223
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060

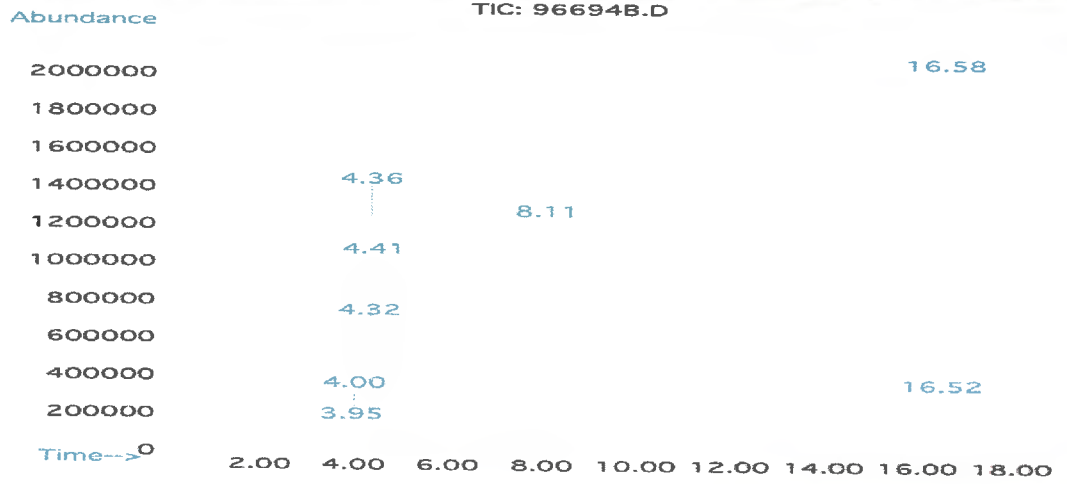
Solvent(s):	Lot#
Methanol	DX932-USQ4

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By:	Mario Luis	102220 DATE
Reviewed By:	Pedro L. Rentas	102220 DATE

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Chlorodifluoromethane	33601	091420	0.10	10.00	0.004	20069.1	2006.8	8.3	75-45-6	1000 ppm(3500mg/m3/8H)	N/A
2.	Chloropentafluoroethane	34471	050719	0.10	10.00	0.004	20213.6	2021.3	8.3	76-15-3	N/A	N/A
3.	Chlorotrifluoroethene	33611	102120	0.20	20.00	0.004	10125.2	2024.9	8.3	79-38-9	N/A	N/A
4.	Chlorotrifluoromethane	34401	102616	0.20	20.00	0.004	10019.0	2003.7	8.3	75-72-9	N/A	N/A
5.	1,2-Dichlorotrifluoroethane	32641	102119	0.10	10.00	0.004	20038.8	2003.8	8.4	354-23-4	N/A	N/A
6.	2,2-Dichloro-1,1,1-trifluoroethane	33951	090518	0.10	10.00	0.004	20019.8	2001.9	8.3	306-83-2	N/A	N/A
7.	1,1-Difluoroethane	34411	121617	0.10	10.00	0.004	20009.4	2000.8	8.3	75-37-6	N/A	N/A
8.	1,2-Difluorotetrachloroethane	34481	102616	0.10	10.00	0.004	20010.7	2001.0	8.3	76-12-0	500 ppm	N/A

Method: GC6MSD-1. **Detector:** MSD. Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1=10min.), Temp. 2 = 200°C (Time 2=8.75 min.) Rate = 4°C/min., Injector Temp.= 200°C, Detector Temp. = 220°C. **Analyst:** Melissa Stonier.



Peak No.	Name	MSD RT (min.)
1	Chlorotrifluoromethane	3.95
2	Chloropentafluoroethane	4.00
3	Chlorotrifluoroethene	4.32
4	1,1-Difluoroethane	4.36
5	Chlorodifluoromethane	4.41
6	2,2-Dichloro-1,1,1-trifluoroethane	8.11
7	1,2-Dichlorotrifluoroethane	16.52
8	1,2-Difluorotetrachloroethane	16.58

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

VMC21SU_00009

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R2053

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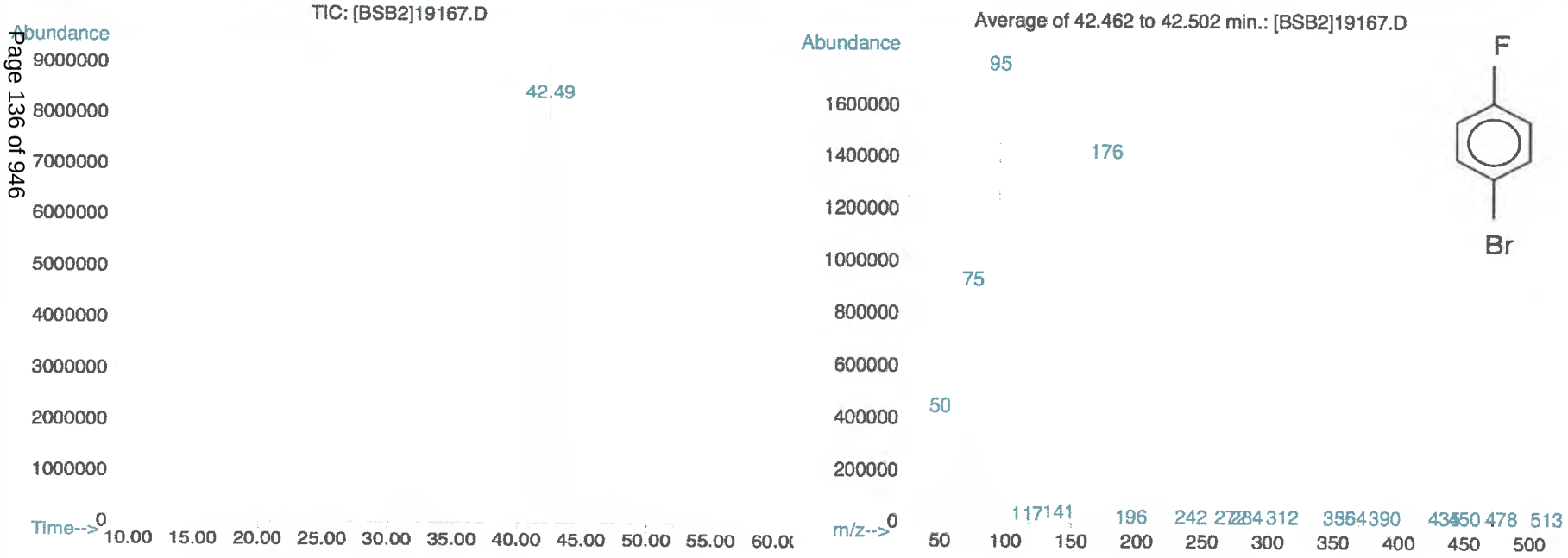
CERTIFIED WEIGHT REPORT

Part Number:	**19167**	**Solvent(s):**	**Lot#**	
Lot Number:	040620	Methanol	DX932-US	
Description:	CLP - Instrument Performance Check Solution			
	p-Bromofluorobenzene			
Expiration Date:	040625			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	2500			
NIST Test ID#:	6UTB	5E-05	Balance Uncertainty	
Weight(s) shown below were combined and diluted to (mL):	100.0	0.012	Flask Uncertainty	

		040620
Formulated By:	Benson Chan	DATE
		040620
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. p-Bromofluorobenzene	48	01127COV	2500	99	0.2	0.25254	0.25265	2501.1	10.2	460-00-4	N/A	orl-rat 2700mg/kg

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness).Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Solvent vent time = 6 min. Analysis performed by Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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8260D

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	460-250807-1	90	89	91	104
SL-15_011222	460-250807-2	92	90	93	102
SL-14_011222	460-250807-3	90	89	91	104
SL-13_011222	460-250807-4	92	89	92	105
SL-7_011222	460-250807-5	91	90	92	104
SL-6_011222	460-250807-6	91	89	92	102
SL-5_011222	460-250807-7	89	90	91	105
SL-8_011222	460-250807-8	91	90	92	104
SL-9_011222	460-250807-9	90	89	92	103
SL-10_011222	460-250807-10	92	90	93	105
TRIP BLANK	460-250807-11	90	89	93	102
SL-11_011222	460-250807-12	90	90	93	104
SL-23_011322	460-250807-13	91	90	92	105
SL-12_011322	460-250807-14	93	92	92	105
SL-19_011322	460-250807-15	91	90	92	104
SL-22_011322	460-250807-16	92	90	92	102
SL-20_011322	460-250807-18	92	91	92	104
SL-4_011322	460-250807-19	91	91	92	102
SL-18_011322	460-250807-20	90	91	92	104
TRIP BLANK	460-250807-21	90	89	92	100
SL-17_011322	460-250807-22	90	92	92	105
SL-21_011422	460-250807-23	92	93	92	106
SL-16_011422	460-250807-24	89	94	90	103
SL-3_011422	460-250807-25	90	92	92	105
SL-2_011422	460-250807-26	89	92	92	103
MH-1231_011422	460-250807-27	88	93	92	102
MH-1244_011422	460-250807-28	88	93	91	102
	MB 460-823788/8	90	89	91	103
	MB 460-823977/8	88	92	92	102
	LCS 460-823788/4	91	88	92	101
	LCS 460-823977/4	91	93	93	102
	LCSD 460-823788/5	89	89	92	102
	LCSD 460-823977/5	89	93	91	103

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-124
DCA = 1,2-Dichloroethane-d4 (Surr)	75-123
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene	76-120

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F24963.D

Lab ID: LCS 460-823788/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	20.0	16.9	84	68-133	
cis-1,2-Dichloroethene	20.0	17.5	87	78-121	
Tetrachloroethene	20.0	21.2	106	70-127	
trans-1,2-Dichloroethene	20.0	17.9	90	74-126	
Trichloroethene	20.0	17.6	88	71-121	
Vinyl chloride	20.0	15.4	77	61-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F24992.D

Lab ID: LCS 460-823977/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	20.0	18.8	94	68-133	
cis-1,2-Dichloroethene	20.0	19.6	98	78-121	
Tetrachloroethene	20.0	22.6	113	70-127	
trans-1,2-Dichloroethene	20.0	19.6	98	74-126	
Trichloroethene	20.0	19.3	96	71-121	
Vinyl chloride	20.0	17.6	88	61-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F24964.D

Lab ID: LCSD 460-823788/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	20.0	17.1	86	1	30	68-133	
cis-1,2-Dichloroethene	20.0	17.6	88	1	30	78-121	
Tetrachloroethene	20.0	21.1	105	0	30	70-127	
trans-1,2-Dichloroethene	20.0	18.2	91	2	30	74-126	
Trichloroethene	20.0	17.8	89	1	30	71-121	
Vinyl chloride	20.0	15.6	78	1	30	61-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F24993.D

Lab ID: LCSD 460-823977/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	20.0	17.8	89	5	30	68-133	
cis-1,2-Dichloroethene	20.0	17.5	87	12	30	78-121	
Tetrachloroethene	20.0	21.1	105	7	30	70-127	
trans-1,2-Dichloroethene	20.0	18.6	93	6	30	74-126	
Trichloroethene	20.0	17.4	87	10	30	71-121	
Vinyl chloride	20.0	16.8	84	5	30	61-144	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: F24967.D Lab Sample ID: MB 460-823788/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS6 Date Analyzed: 01/18/2022 08:29

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-823788/4	F24963.D	01/18/2022 07:01
	LCSD 460-823788/5	F24964.D	01/18/2022 07:23
TRIP BLANK	460-250807-1	F24968.D	01/18/2022 08:51
TRIP BLANK	460-250807-11	F24969.D	01/18/2022 09:13
TRIP BLANK	460-250807-21	F24970.D	01/18/2022 09:35
SL-15_011222	460-250807-2	F24971.D	01/18/2022 09:57
SL-14_011222	460-250807-3	F24972.D	01/18/2022 10:19
SL-13_011222	460-250807-4	F24973.D	01/18/2022 10:41
SL-7_011222	460-250807-5	F24974.D	01/18/2022 11:03
SL-6_011222	460-250807-6	F24975.D	01/18/2022 11:24
SL-5_011222	460-250807-7	F24976.D	01/18/2022 11:46
SL-8_011222	460-250807-8	F24977.D	01/18/2022 12:08
SL-9_011222	460-250807-9	F24978.D	01/18/2022 12:30
SL-10_011222	460-250807-10	F24979.D	01/18/2022 12:52
SL-11_011222	460-250807-12	F24980.D	01/18/2022 13:13
SL-23_011322	460-250807-13	F24981.D	01/18/2022 13:35
SL-12_011322	460-250807-14	F24982.D	01/18/2022 13:56
SL-19_011322	460-250807-15	F24983.D	01/18/2022 14:18
SL-22_011322	460-250807-16	F24984.D	01/18/2022 14:40
SL-20_011322	460-250807-18	F24985.D	01/18/2022 15:02
SL-4_011322	460-250807-19	F24986.D	01/18/2022 15:24
SL-18_011322	460-250807-20	F24987.D	01/18/2022 15:46

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: F24996.D Lab Sample ID: MB 460-823977/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CVOAMS6 Date Analyzed: 01/19/2022 08:23

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-823977/4	F24992.D	01/19/2022 06:56
	LCSD 460-823977/5	F24993.D	01/19/2022 07:17
SL-17_011322	460-250807-22	F24997.D	01/19/2022 08:45
SL-21_011422	460-250807-23	F24998.D	01/19/2022 09:07
SL-16_011422	460-250807-24	F24999.D	01/19/2022 09:28
SL-3_011422	460-250807-25	F25000.D	01/19/2022 09:50
SL-2_011422	460-250807-26	F25001.D	01/19/2022 10:12
MH-1231_011422	460-250807-27	F25002.D	01/19/2022 10:34
MH-1244_011422	460-250807-28	F25003.D	01/19/2022 10:56

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: F22508.D BFB Injection Date: 11/23/2021

Instrument ID: CVOAMS6 BFB Injection Time: 12:03

Analysis Batch No.: 814964

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	50 - 200% of m/z 174	134.0
96	5 - 9% of m/z 95	5.4
173	Less than 2% of m/z 174	0.0
174	50 - 200% of m/z 95	74.6
175	5 - 9% of m/z 174	8.5
176	95 -105% of m/z 174	95.8
177	5 - 10% of m/z 176	5.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD7 460-814964/3	F22510.D	11/23/2021	12:45
	STD1 460-814964/4	F22511.D	11/23/2021	13:07
	STD5 460-814964/5	F22512.D	11/23/2021	13:28
	STD20 460-814964/6	F22513.D	11/23/2021	13:51
	STD50 460-814964/7	F22514.D	11/23/2021	14:12
	STD200 460-814964/8	F22515.D	11/23/2021	14:35
	STD500 460-814964/9	F22516.D	11/23/2021	14:57
	ICV 460-814964/15	F22522.D	11/23/2021	21:13

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: STD20 460-814964/6 Date Analyzed: 11/23/2021 13:51

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F22513.D Heated Purge: (Y/N) N

Calibration ID: 88145

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		532762	2.98	817618	3.95	966989	4.97
UPPER LIMIT		1065524	3.48	1635236	4.45	1933978	5.47
LOWER LIMIT		266381	2.48	408809	3.45	483495	4.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-814964/15		776767	2.99	1066876	3.94	1290858	4.97

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: STD20 460-814964/6 Date Analyzed: 11/23/2021 13:51

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F22513.D Heated Purge: (Y/N) N

Calibration ID: 88145

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		36532	5.71	745851	8.32	405748	10.67
UPPER LIMIT		73064	6.21	1491702	8.82	811496	11.17
LOWER LIMIT		18266	5.21	372926	7.82	202874	10.17
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-814964/15		55837	5.65	958736	8.32	498626	10.67

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823788/3 Date Analyzed: 01/18/2022 06:37

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F24962.D Heated Purge: (Y/N) N

Calibration ID: 88145

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		648036	2.95	850284	3.92	1315002	4.95
UPPER LIMIT		1296072	3.45	1700568	4.42	2630004	5.45
LOWER LIMIT		324018	2.45	425142	3.42	657501	4.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823788/4		727319	2.98	931200	3.92	1398183	4.95
LCSD 460-823788/5		697040	3.00	920845	3.93	1398610	4.96
MB 460-823788/8		680929	2.95	949864	3.92	1375983	4.95
460-250807-1	TRIP BLANK	703637	2.98	903686	3.92	1381611	4.96
460-250807-11	TRIP BLANK	700129	2.98	897542	3.92	1336377	4.96
460-250807-21	TRIP BLANK	708703	2.97	881468	3.92	1332220	4.95
460-250807-2	SL-15_011222	823270	2.98	1005630	3.93	1460123	4.96
460-250807-3	SL-14_011222	782910	3.00	946039	3.92	1398942	4.96
460-250807-4	SL-13_011222	708363	3.00	842130	3.92	1294124	4.95
460-250807-5	SL-7_011222	733356	2.95	844761	3.92	1261141	4.95
460-250807-6	SL-6_011222	692544	2.99	941074	3.92	1378871	4.96
460-250807-7	SL-5_011222	711958	2.98	893872	3.93	1371573	4.96
460-250807-8	SL-8_011222	641013	2.98	829260	3.92	1313749	4.96
460-250807-9	SL-9_011222	662831	2.99	836640	3.92	1333733	4.96
460-250807-10	SL-10_011222	761373	2.99	922178	3.92	1315282	4.95
460-250807-12	SL-11_011222	673057	2.97	830475	3.92	1336021	4.96
460-250807-13	SL-23_011322	639706	2.97	761877	3.93	1254580	4.96
460-250807-14	SL-12_011322	748839	2.97	826160	3.94	1258359	4.95
460-250807-15	SL-19_011322	829054	2.96	870903	3.92	1218951	4.95
460-250807-16	SL-22_011322	619978	2.96	786274	3.94	1296693	4.96
460-250807-18	SL-20_011322	682329	2.97	761207	3.93	1193427	4.95
460-250807-19	SL-4_011322	628000	2.96	750930	3.94	1265451	4.96
460-250807-20	SL-18_011322	646847	2.96	821943	3.93	1202006	4.95

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823788/3 Date Analyzed: 01/18/2022 06:37

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F24962.D Heated Purge: (Y/N) N

Calibration ID: 88145

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		51008	5.69	952747	8.30	534318	10.65
UPPER LIMIT		102016	6.19	1905494	8.80	1068636	11.15
LOWER LIMIT		25504	5.19	476374	7.80	267159	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823788/4		57057	5.67	1026660	8.30	573308	10.65
LCSD 460-823788/5		53666	5.66	1020356	8.30	565879	10.66
MB 460-823788/8		51969	5.63	1005952	8.30	569850	10.66
460-250807-1	TRIP BLANK	56687	5.69	1000463	8.30	570339	10.66
460-250807-11	TRIP BLANK	53031	5.67	959156	8.30	552571	10.66
460-250807-21	TRIP BLANK	57542	5.68	953717	8.30	553738	10.66
460-250807-2	SL-15_011222	57840	5.67	1058250	8.30	605910	10.66
460-250807-3	SL-14_011222	57768	5.69	1016654	8.30	579514	10.66
460-250807-4	SL-13_011222	58856	5.69	931551	8.30	543971	10.66
460-250807-5	SL-7_011222	57710	5.67	914109	8.30	537502	10.66
460-250807-6	SL-6_011222	51797	5.67	990113	8.30	567770	10.66
460-250807-7	SL-5_011222	46840	5.65	991387	8.30	567966	10.66
460-250807-8	SL-8_011222	48713	5.64	952354	8.30	549805	10.66
460-250807-9	SL-9_011222	47595	5.68	957936	8.30	552639	10.66
460-250807-10	SL-10_011222	52892	5.70	932801	8.30	544539	10.66
460-250807-12	SL-11_011222	51712	5.69	953751	8.30	544522	10.66
460-250807-13	SL-23_011322	45344	5.68	899334	8.31	520925	10.66
460-250807-14	SL-12_011322	51359	5.69	915130	8.30	528098	10.66
460-250807-15	SL-19_011322	54766	5.66	874284	8.30	512454	10.66
460-250807-16	SL-22_011322	44354	5.67	928666	8.30	525137	10.66
460-250807-18	SL-20_011322	50303	5.63	860470	8.30	496008	10.66
460-250807-19	SL-4_011322	44609	5.67	908595	8.30	517116	10.66
460-250807-20	SL-18_011322	41663	5.69	861128	8.30	503547	10.66

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823977/3 Date Analyzed: 01/19/2022 06:31

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F24991.D Heated Purge: (Y/N) N

Calibration ID: 88145

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		588057	2.94	787023	3.92	1245138	4.95
UPPER LIMIT		1176114	3.44	1574046	4.42	2490276	5.45
LOWER LIMIT		294029	2.44	393512	3.42	622569	4.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823977/4		579126	2.94	787696	3.92	1238087	4.95
LCSD 460-823977/5		599506	2.92	803819	3.91	1287653	4.95
MB 460-823977/8		571075	2.94	842123	3.92	1302567	4.95
460-250807-22	SL-17_011322	608801	2.97	839443	3.92	1270596	4.95
460-250807-23	SL-21_011422	852231	2.98	918206	3.91	1317397	4.95
460-250807-24	SL-16_011422	645557	2.98	823558	3.94	1279579	4.95
460-250807-25	SL-3_011422	613578	2.93	774149	3.92	1235843	4.95
460-250807-26	SL-2_011422	618676	2.98	812541	3.92	1262996	4.96
460-250807-27	MH-1231_011422	585124	2.97	757105	3.94	1217992	4.96
460-250807-28	MH-1244_011422	653096	2.97	803696	3.93	1205105	4.95

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823977/3 Date Analyzed: 01/19/2022 06:31

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): F24991.D Heated Purge: (Y/N) N

Calibration ID: 88145

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		45631	5.70	909340	8.30	512436	10.65
UPPER LIMIT		91262	6.20	1818680	8.80	1024872	11.15
LOWER LIMIT		22816	5.20	454670	7.80	256218	10.15
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823977/4		36294	5.70	909934	8.30	506807	10.65
LCSD 460-823977/5		44019	5.63	939299	8.30	535817	10.65
MB 460-823977/8		36963	5.63	924824	8.30	532497	10.65
460-250807-22	SL-17_011322	40181	5.64	907634	8.30	534619	10.66
460-250807-23	SL-21_011422	59263	5.65	936939	8.30	559615	10.65
460-250807-24	SL-16_011422	50105	5.66	923846	8.30	530585	10.65
460-250807-25	SL-3_011422	44025	5.65	866355	8.30	515685	10.66
460-250807-26	SL-2_011422	46303	5.67	898248	8.30	523625	10.66
460-250807-27	MH-1231_011422	38633	5.71	854733	8.30	499576	10.66
460-250807-28	MH-1244_011422	45357	5.71	856168	8.30	490206	10.66

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-1

Matrix: Water | Lab File ID: F24968.D

Analysis Method: 8260D | Date Collected: 01/12/2022 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24968.D
Lims ID: 460-250807-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 08:51:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-1
Misc. Info.: 460-0140330-009
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:52:29 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:05:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	703637	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	903686	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	322103	45.2	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	405823	44.4	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1381611	50.0	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	56687	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1243002	45.7	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	1000463	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	369092	52.0	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	57	570339	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

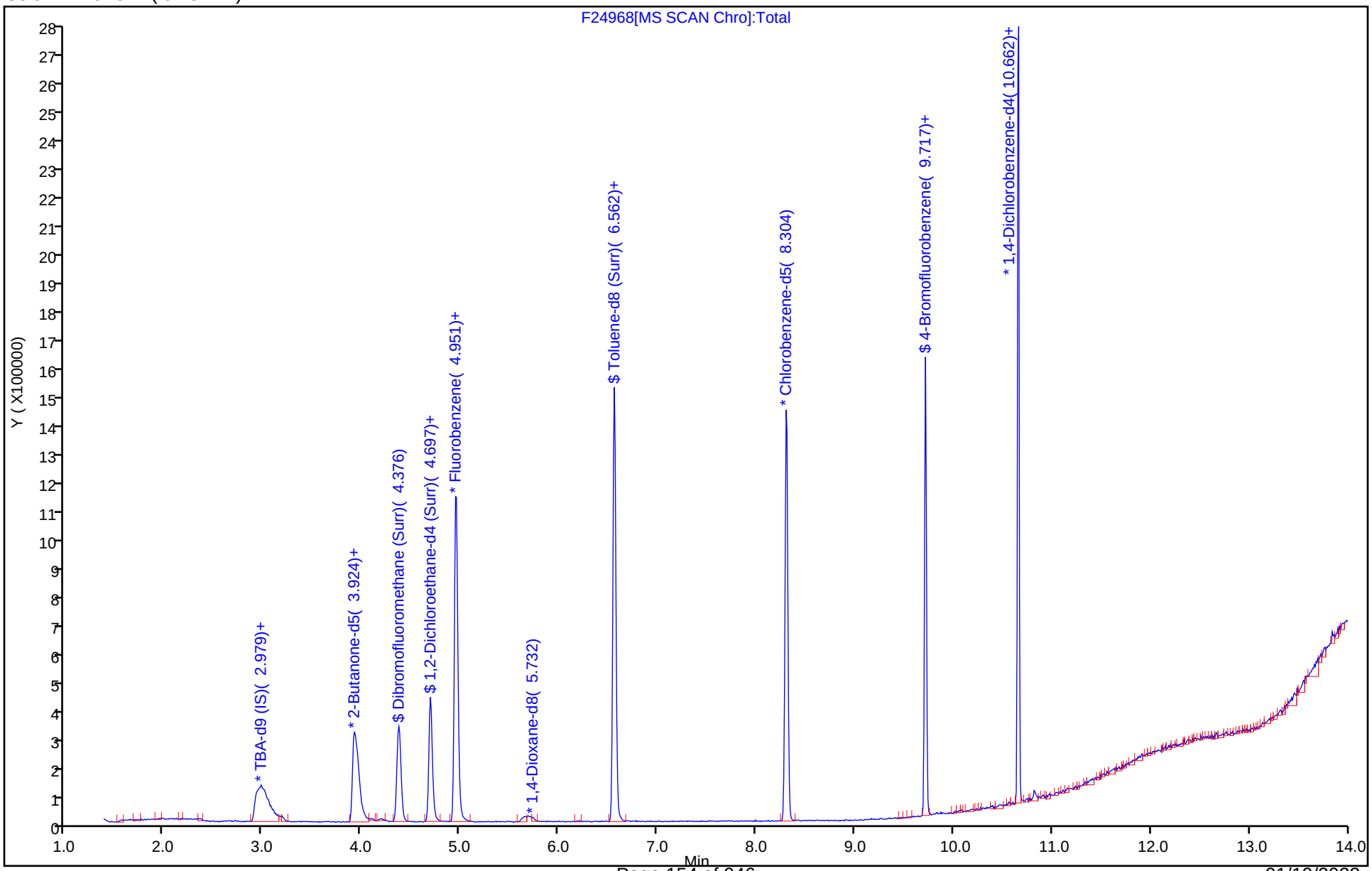
Report Date: 18-Jan-2022 10:05:45 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24968.D

Injection Date:	18-Jan-2022 08:51:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-1	Lab Sample ID:	460-250807-1	Worklist Smp#:	9
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24968.D
Lims ID: 460-250807-A-1
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 08:51:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-1
Misc. Info.: 460-0140330-009
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:52:29 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:05:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.2	90.50
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.4	88.81
$ 78 Toluene-d8 (Surr)	50.0	45.7	91.31
$ 100 4-Bromofluorobenzene	50.0	52.0	103.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-15_011222 | Lab Sample ID: 460-250807-2

Matrix: Water | Lab File ID: F24971.D

Analysis Method: 8260D | Date Collected: 01/12/2022 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 09:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24971.D
Lims ID: 460-250807-A-2
Client ID: SL-15_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 09:57:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-2
Misc. Info.: 460-0140330-012
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:16:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	823270	1000.0	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	1005630	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	32	347101	46.1	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	-0.001	0	433409	44.9	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1460123	50.0	
* 67 1,4-Dioxane-d8	96	5.666	5.691	-0.025	0	57840	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1335145	46.4	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	1058250	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	382784	50.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	605910	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

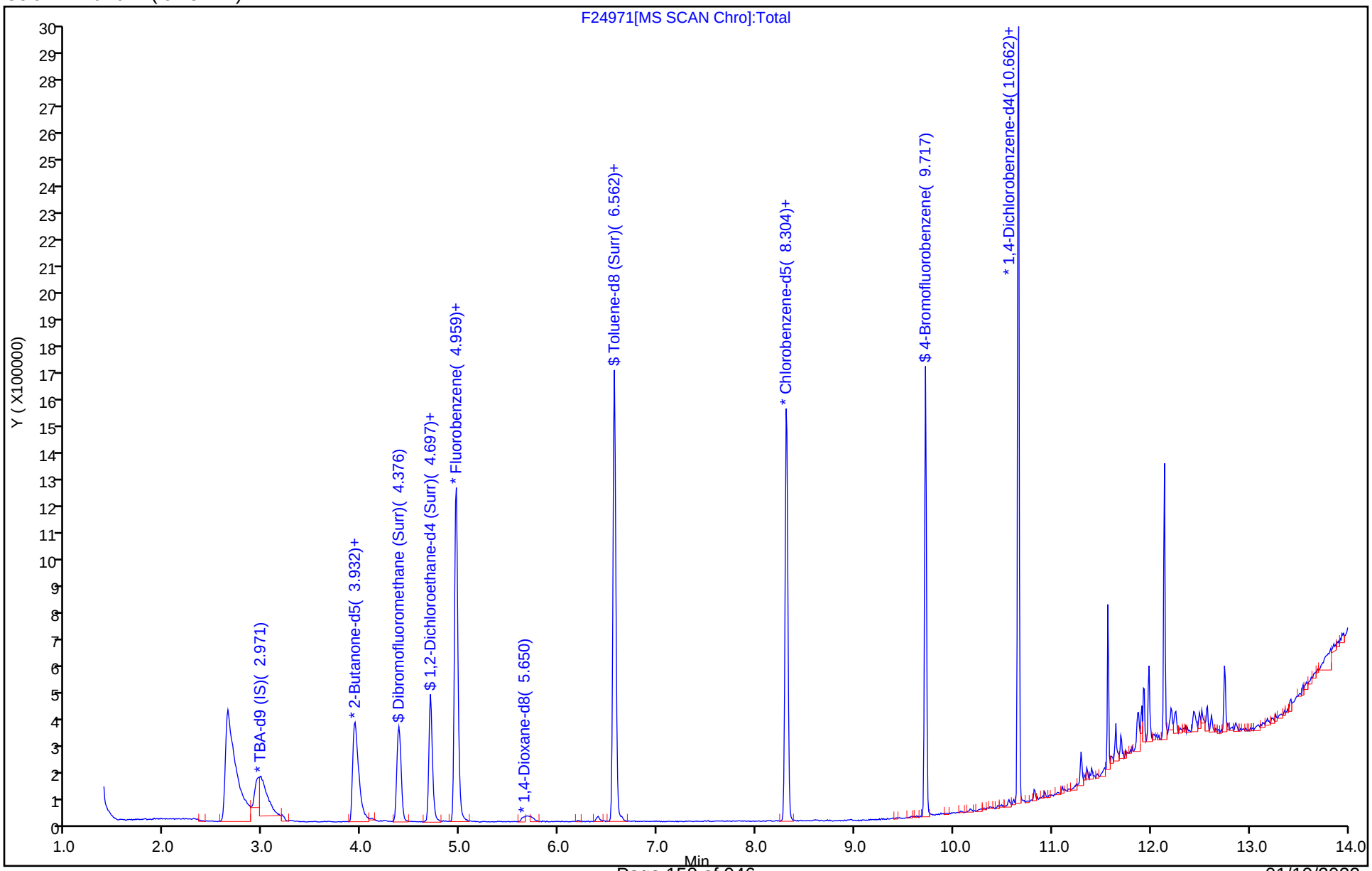
Report Date: 19-Jan-2022 10:55:35 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24971.D

Injection Date:	18-Jan-2022 09:57:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-2	Lab Sample ID:	460-250807-2	Worklist Smp#:	12
Client ID:	SL-15_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24971.D				
Lims ID:	460-250807-A-2				
Client ID:	SL-15_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 09:57:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-A-2				
Misc. Info.:	460-0140330-012				
Operator ID:		Instrument ID:	CVOAMS6		
Method:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:54:38	Calib Date:	23-Nov-2021 14:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:16:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	46.1	92.28
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.9	89.75
$ 78 Toluene-d8 (Surr)	50.0	46.4	92.72
$ 100 4-Bromofluorobenzene	50.0	50.9	101.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-14_011222 | Lab Sample ID: 460-250807-3

Matrix: Water | Lab File ID: F24972.D

Analysis Method: 8260D | Date Collected: 01/12/2022 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 10:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24972.D
Lims ID: 460-250807-A-3
Client ID: SL-14_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 10:19:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-3
Misc. Info.: 460-0140330-013
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:42:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.996	2.946	0.050	0	782910	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	946039	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	323810	44.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	411572	44.5	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1398942	50.0	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	57768	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1264736	45.7	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	1016654	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	374941	51.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	579514	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

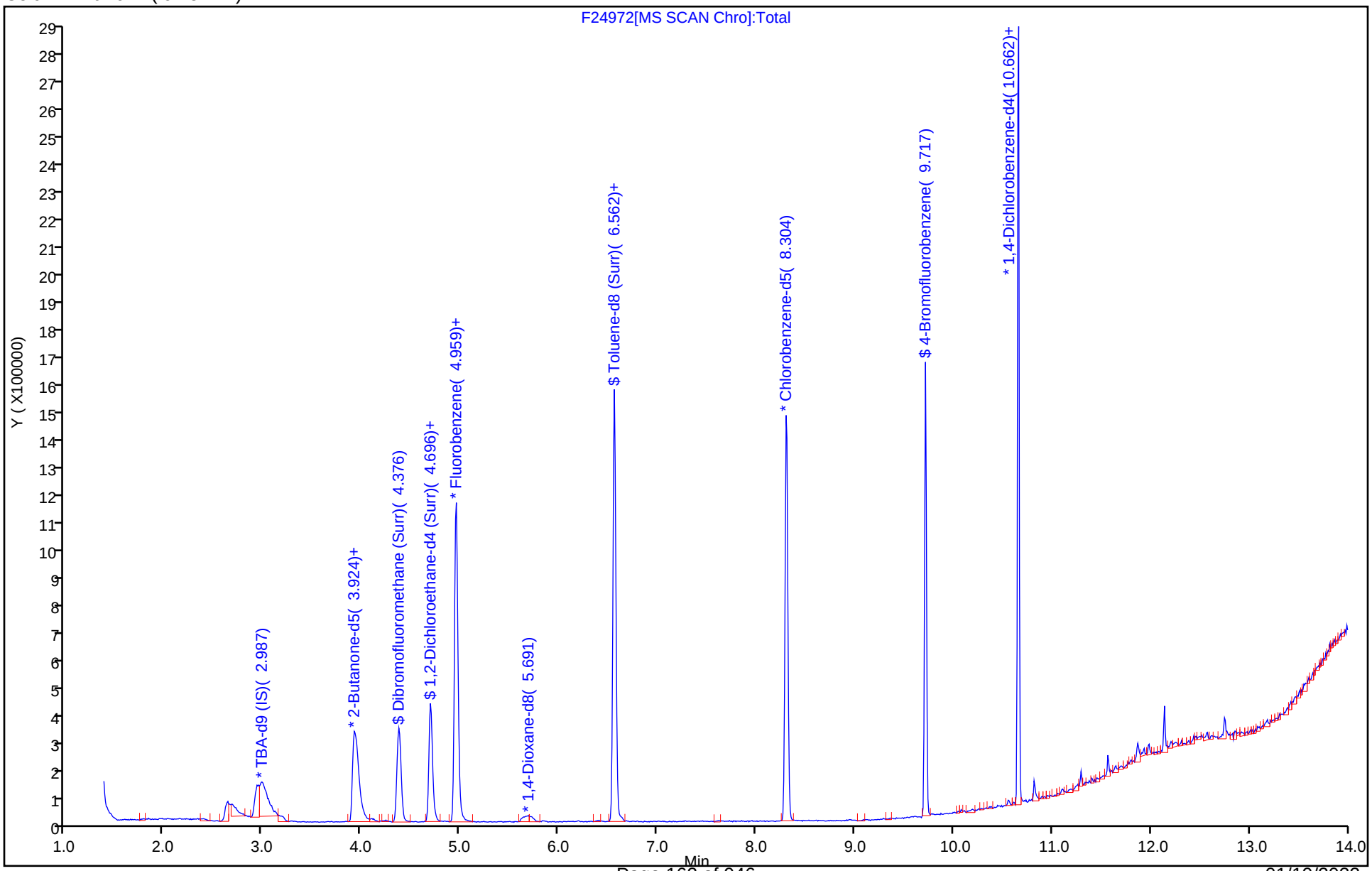
Report Date: 19-Jan-2022 10:55:39 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24972.D

Injection Date:	18-Jan-2022 10:19:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-3	Lab Sample ID:	460-250807-3	Worklist Smp#:	13
Client ID:	SL-14_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24972.D
Lims ID: 460-250807-A-3
Client ID: SL-14_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 10:19:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-3
Misc. Info.: 460-0140330-013
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:42:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.9	89.85
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.5	88.95
$ 78 Toluene-d8 (Surr)	50.0	45.7	91.42
$ 100 4-Bromofluorobenzene	50.0	51.9	103.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-13_011222 | Lab Sample ID: 460-250807-4

Matrix: Water | Lab File ID: F24973.D

Analysis Method: 8260D | Date Collected: 01/12/2022 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 10:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24973.D
Lims ID: 460-250807-A-4
Client ID: SL-13_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 10:41:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-4
Misc. Info.: 460-0140330-014
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:11:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.996	2.946	0.050	0	708363	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	842130	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	307384	46.1	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	380753	44.5	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1294124	50.0	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	58856	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1162045	45.8	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	931551	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	347960	52.6	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	543971	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

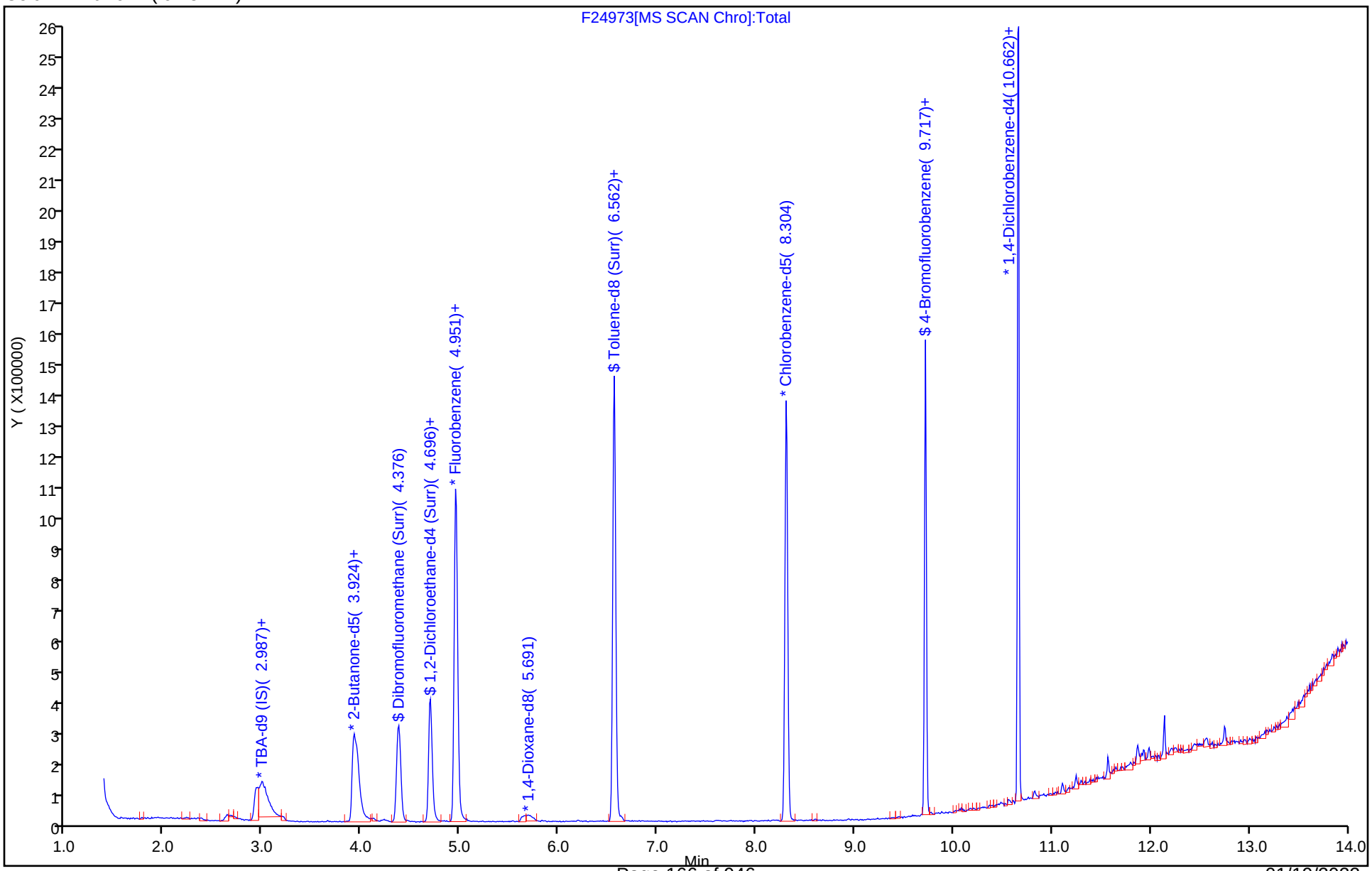
Report Date: 19-Jan-2022 10:55:44 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24973.D

Injection Date:	18-Jan-2022 10:41:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-4	Lab Sample ID:	460-250807-4	Worklist Smp#:	14
Client ID:	SL-13_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24973.D
Lims ID: 460-250807-A-4
Client ID: SL-13_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 10:41:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-4
Misc. Info.: 460-0140330-014
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:11:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	46.1	92.20
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.5	88.96
$ 78 Toluene-d8 (Surr)	50.0	45.8	91.68
$ 100 4-Bromofluorobenzene	50.0	52.6	105.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-7_011222 | Lab Sample ID: 460-250807-5

Matrix: Water | Lab File ID: F24974.D

Analysis Method: 8260D | Date Collected: 01/12/2022 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 11:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24974.D
Lims ID: 460-250807-A-5
Client ID: SL-7_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:03:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-5
Misc. Info.: 460-0140330-015
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:44:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.946	2.946	0.000	0	733356	1000.0	
* 38 2-Butanone-d5	46	3.916	3.924	-0.008	0	844761	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	296669	45.7	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	377268	45.2	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1261141	50.0	
* 67 1,4-Dioxane-d8	96	5.666	5.691	-0.025	0	57710	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1141283	45.9	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	914109	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	338365	52.1	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	537502	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

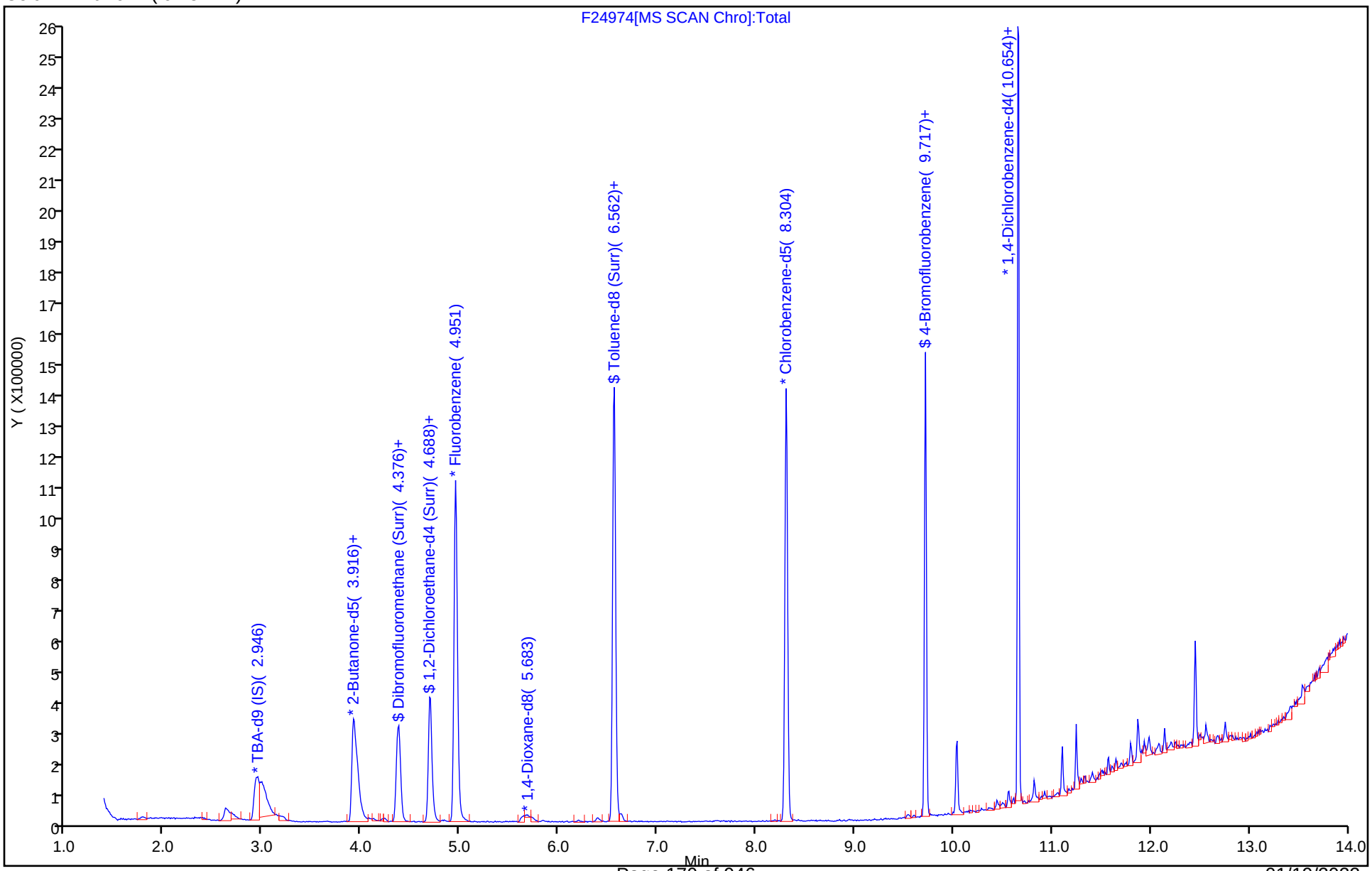
Report Date: 19-Jan-2022 10:55:48 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24974.D

Injection Date:	18-Jan-2022 11:03:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-5	Lab Sample ID:	460-250807-5	Worklist Smp#:	15
Client ID:	SL-7_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24974.D
Lims ID: 460-250807-A-5
Client ID: SL-7_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:03:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-5
Misc. Info.: 460-0140330-015
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:44:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.7	91.32
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.2	90.45
$ 78 Toluene-d8 (Surr)	50.0	45.9	91.76
$ 100 4-Bromofluorobenzene	50.0	52.1	104.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-6_011222 | Lab Sample ID: 460-250807-6

Matrix: Water | Lab File ID: F24975.D

Analysis Method: 8260D | Date Collected: 01/12/2022 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 11:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24975.D
Lims ID: 460-250807-A-6
Client ID: SL-6_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:24:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-6
Misc. Info.: 460-0140330-016
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:44:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.988	2.946	0.042	0	692544	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	941074	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	324302	45.6	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	405470	44.5	
* 61 Fluorobenzene	96	4.960	4.951	0.009	38	1378871	50.0	
* 67 1,4-Dioxane-d8	96	5.666	5.691	-0.025	0	51797	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1243351	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	990113	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	357262	50.8	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	567770	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

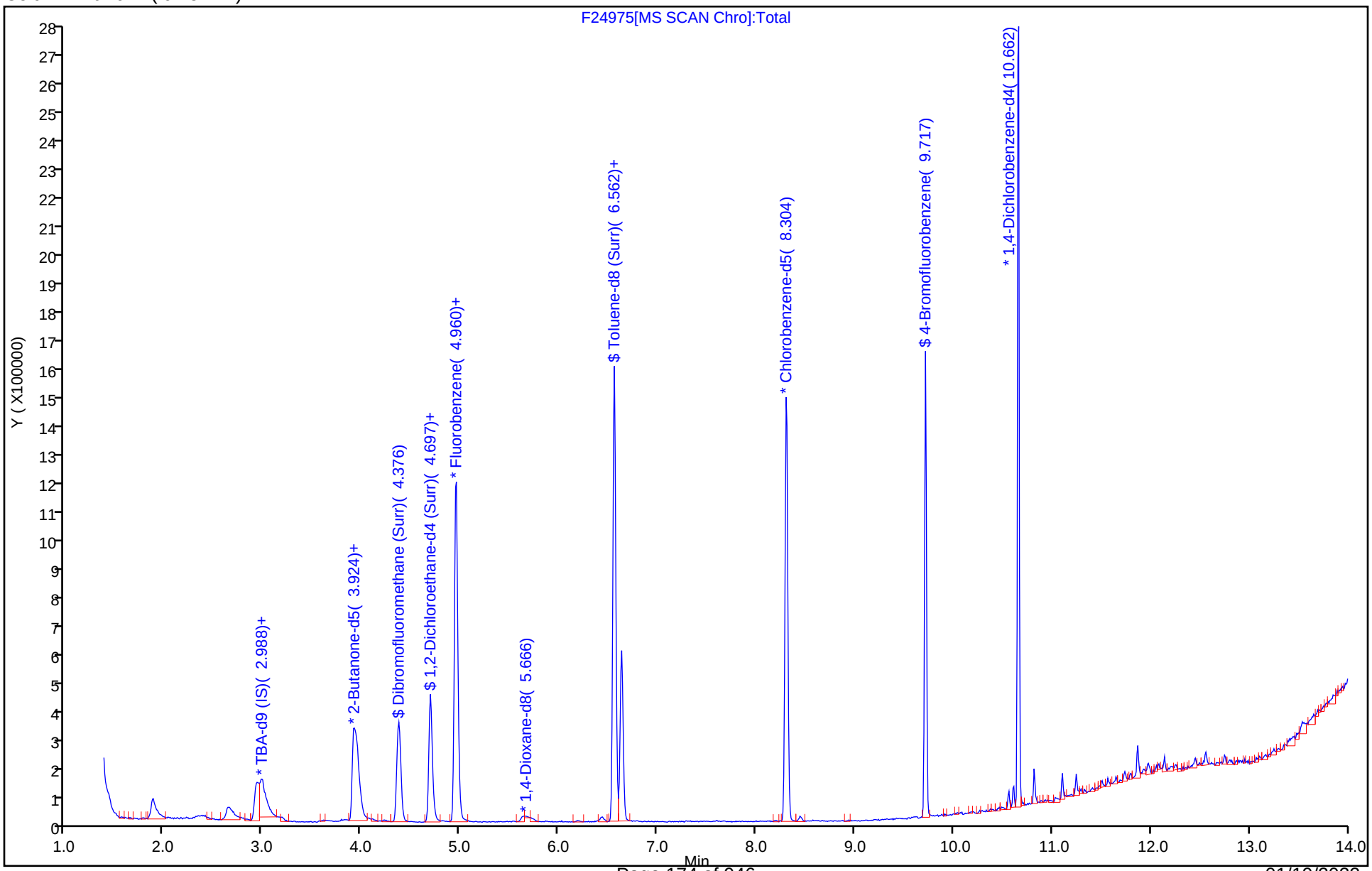
Report Date: 19-Jan-2022 10:55:56 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24975.D

Injection Date:	18-Jan-2022 11:24:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-6	Lab Sample ID:	460-250807-6	Worklist Smp#:	16
Client ID:	SL-6_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24975.D
Lims ID: 460-250807-A-6
Client ID: SL-6_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:24:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-6
Misc. Info.: 460-0140330-016
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 11:44:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.6	91.30
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.5	88.91
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.29
$ 100 4-Bromofluorobenzene	50.0	50.8	101.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-5_011222 | Lab Sample ID: 460-250807-7

Matrix: Water | Lab File ID: F24976.D

Analysis Method: 8260D | Date Collected: 01/12/2022 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 11:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.6		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	89		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24976.D
Lims ID: 460-250807-A-7
Client ID: SL-5_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:46:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-7
Misc. Info.: 460-0140330-017
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 12:08:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	13675	1.38	
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	711958	1000.0	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	893872	250.0	
40 cis-1,2-Dichloroethene	96	3.965	3.974	-0.009	24	20974	2.62	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	316130	44.7	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	406595	44.8	
* 61 Fluorobenzene	96	4.960	4.951	0.009	38	1371573	50.0	
* 67 1,4-Dioxane-d8	96	5.650	5.691	-0.041	0	46840	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1224025	45.4	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	991387	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	368370	52.3	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	567966	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

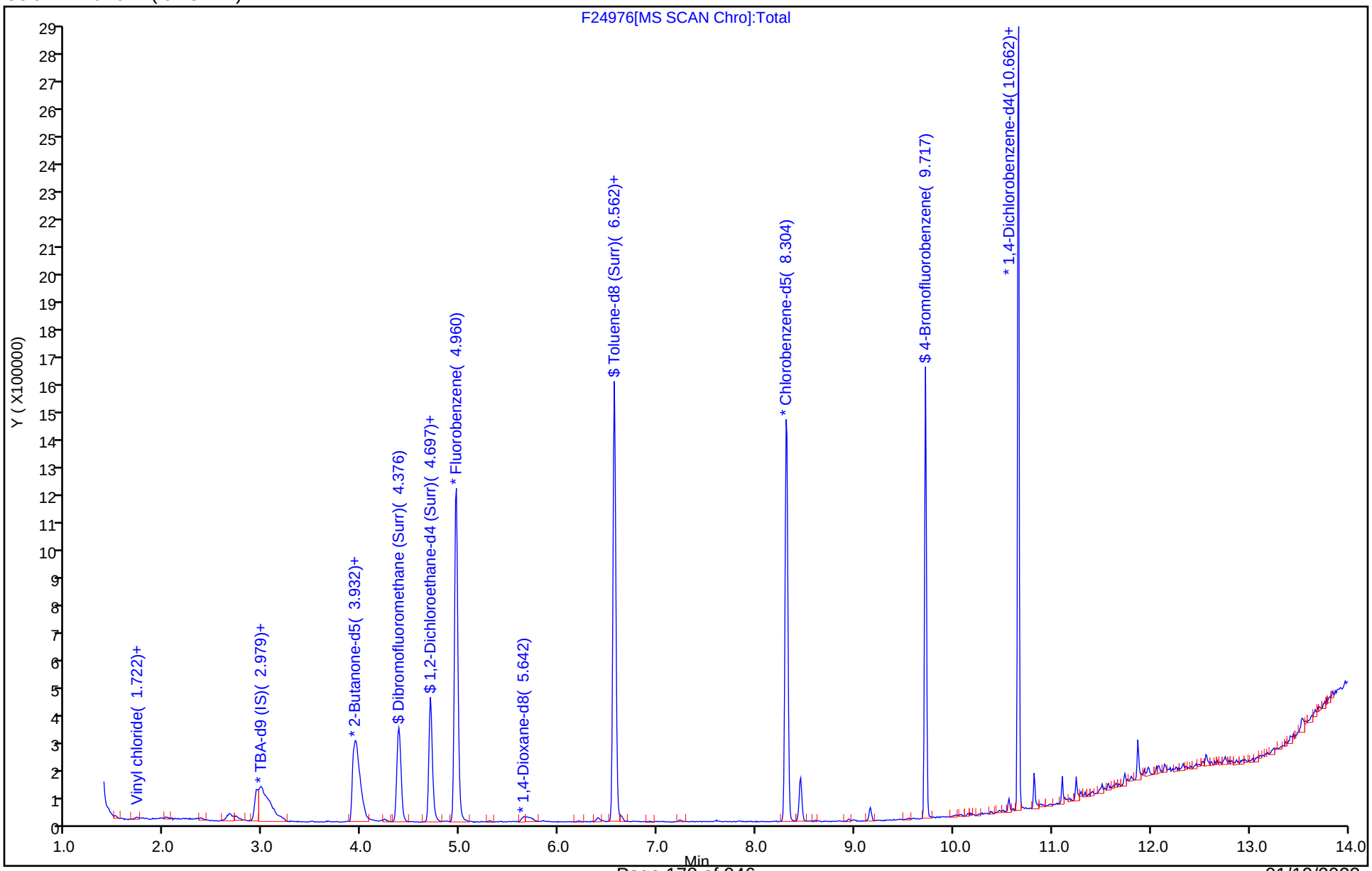
Report Date: 19-Jan-2022 10:56:04 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24976.D

Injection Date:	18-Jan-2022 11:46:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-7	Lab Sample ID:	460-250807-7	Worklist Smp#:	17
Client ID:	SL-5_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24976.D
Lims ID: 460-250807-A-7
Client ID: SL-5_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 11:46:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-7
Misc. Info.: 460-0140330-017
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

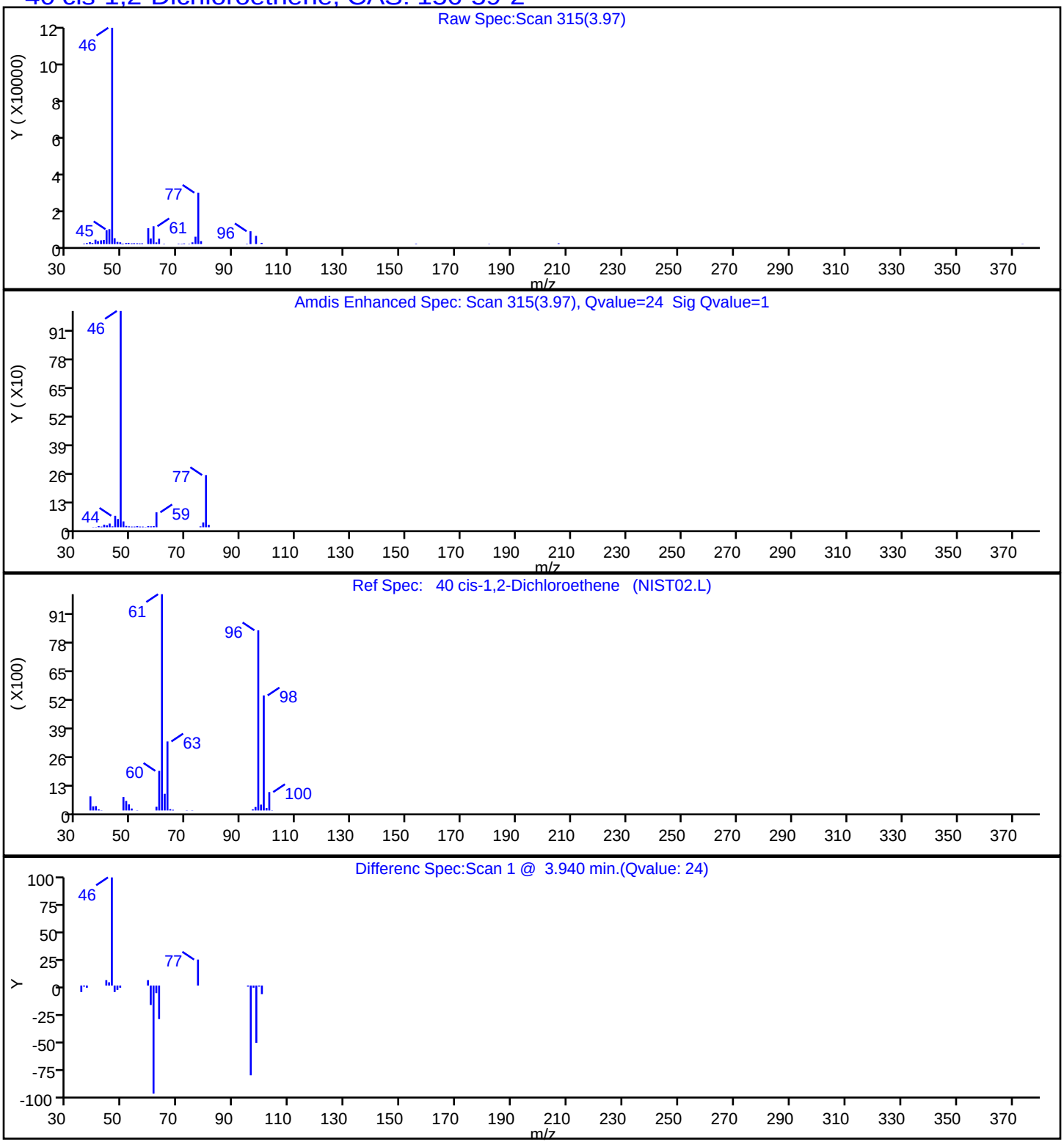
First Level Reviewer: moroneyc Date: 18-Jan-2022 12:08:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.7	89.47
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.63
$ 78 Toluene-d8 (Surr)	50.0	45.4	90.74
$ 100 4-Bromofluorobenzene	50.0	52.3	104.66

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24976.D		
Injection Date:	18-Jan-2022 11:46:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-7	Lab Sample ID:	460-250807-7
Client ID:	SL-5_011222		
Operator ID:		ALS Bottle#:	16 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

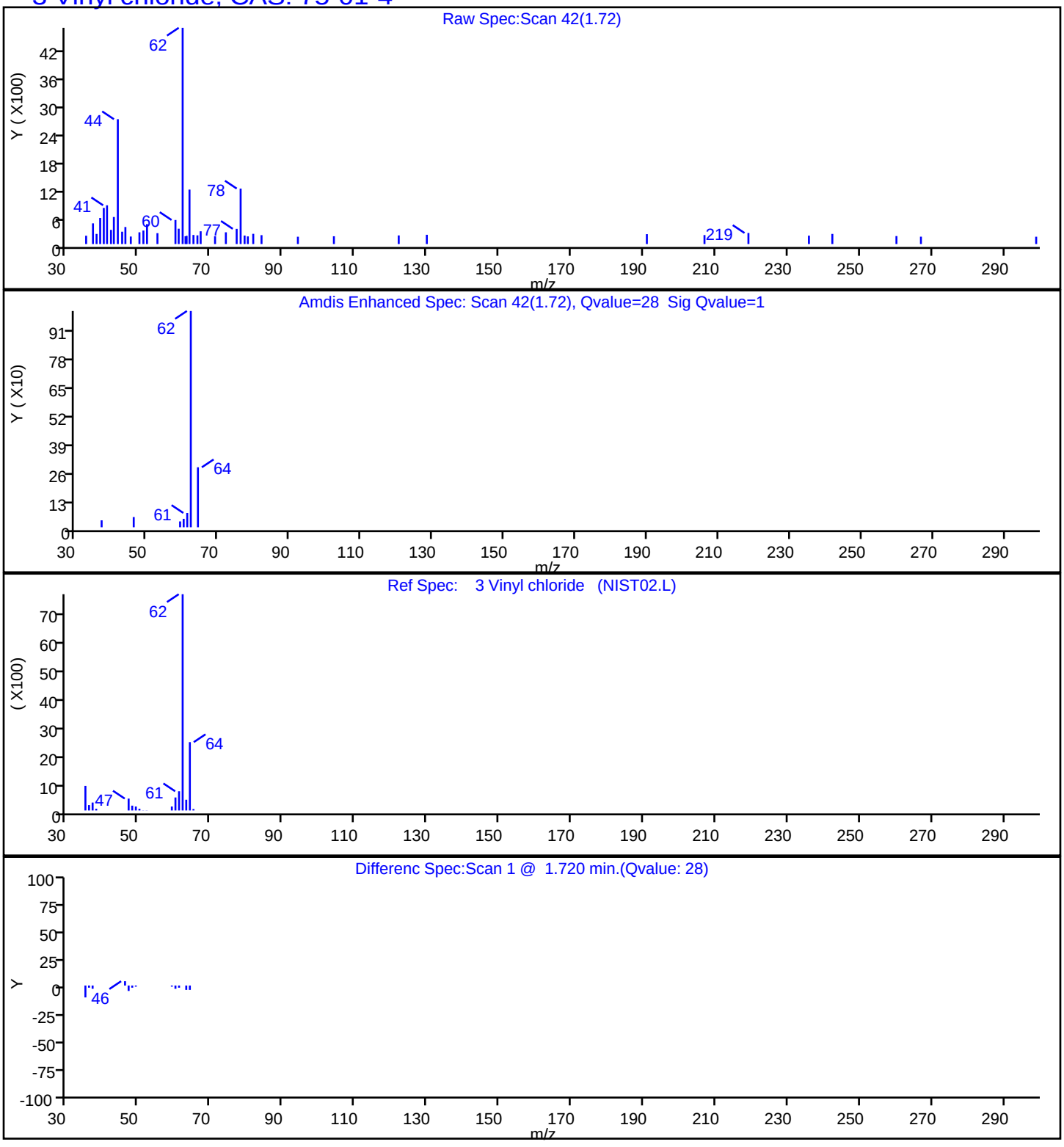
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24976.D
Injection Date: 18-Jan-2022 11:46:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-7 Lab Sample ID: 460-250807-7
Client ID: SL-5_011222
Operator ID: ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-8_011222 | Lab Sample ID: 460-250807-8

Matrix: Water | Lab File ID: F24977.D

Analysis Method: 8260D | Date Collected: 01/12/2022 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.6		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	2.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24977.D
Lims ID: 460-250807-A-8
Client ID: SL-8_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:08:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-8
Misc. Info.: 460-0140330-018
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 12:40:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	1	19682	2.07	
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	641013	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	829260	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	24	27626	3.60	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	307909	45.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	390976	45.0	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1313749	50.0	
* 67 1,4-Dioxane-d8	96	5.641	5.691	-0.050	0	48713	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1194275	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	952354	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	352692	52.2	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	549805	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

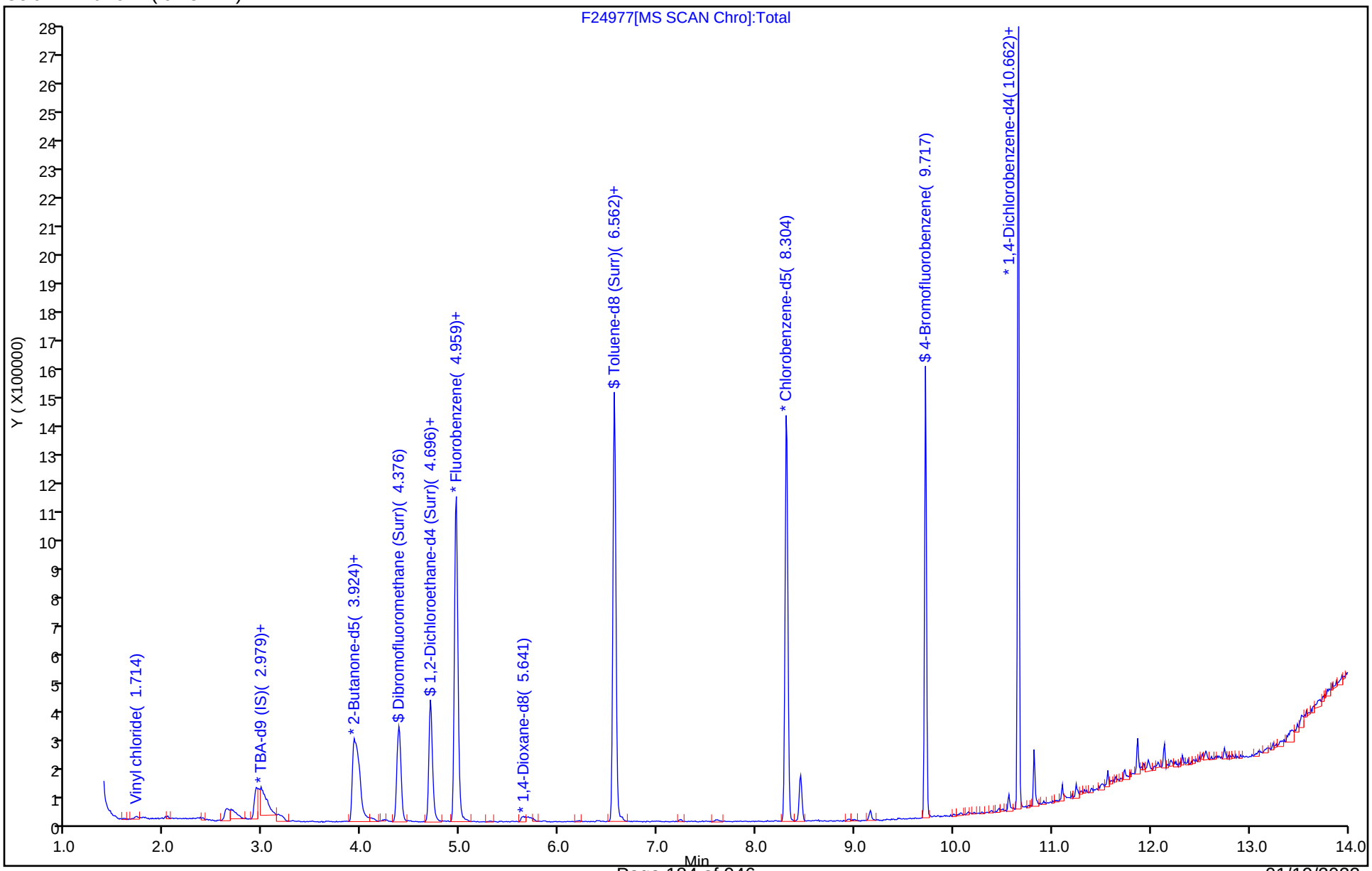
Report Date: 19-Jan-2022 10:56:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24977.D

Injection Date:	18-Jan-2022 12:08:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-8	Lab Sample ID:	460-250807-8	Worklist Smp#:	18
Client ID:	SL-8_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24977.D
Lims ID: 460-250807-A-8
Client ID: SL-8_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:08:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-8
Misc. Info.: 460-0140330-018
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

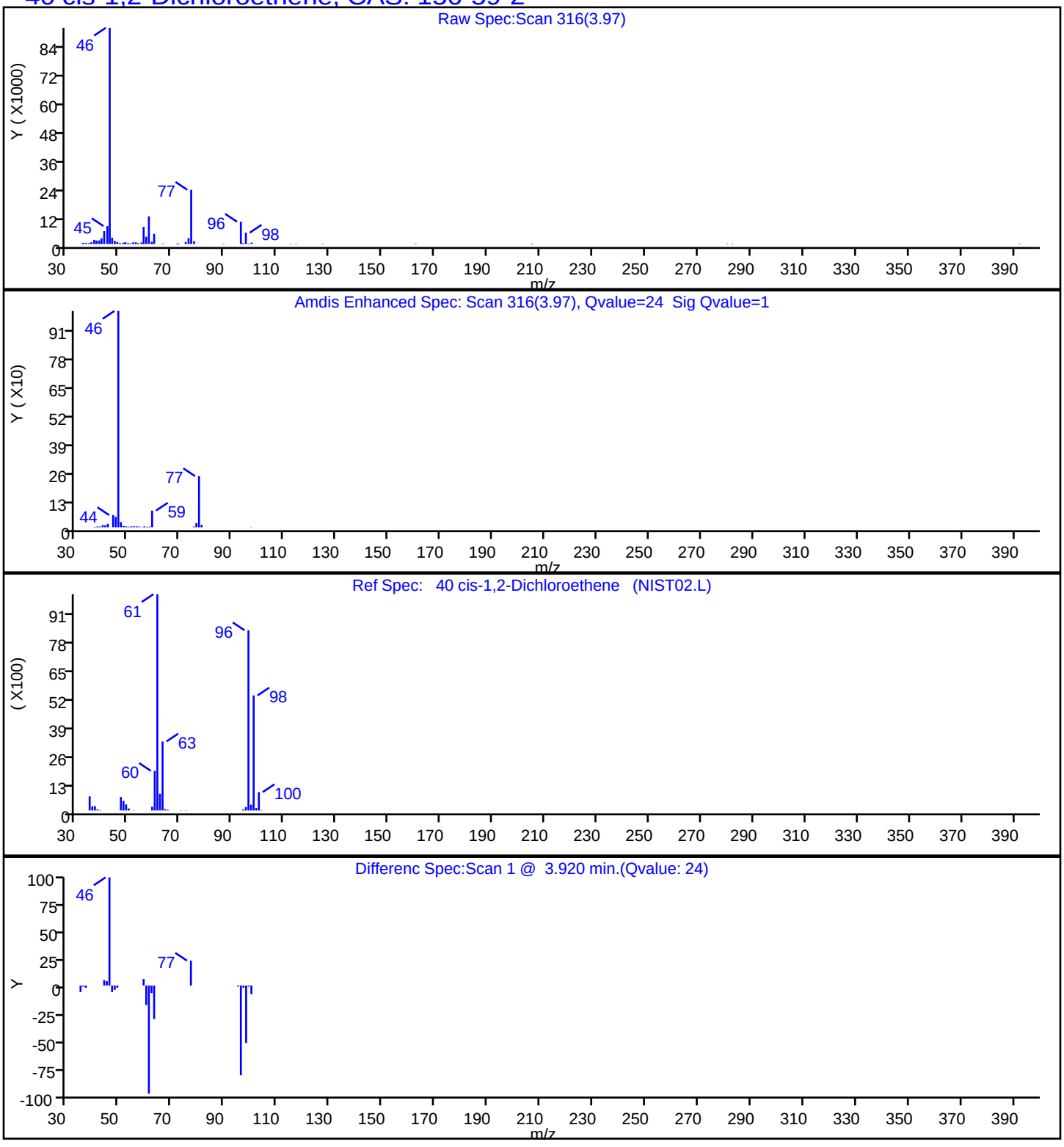
First Level Reviewer: moroneyc Date: 18-Jan-2022 12:40:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.5	90.98
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.0	89.98
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.16
$ 100 4-Bromofluorobenzene	50.0	52.2	104.31

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24977.D
Injection Date: 18-Jan-2022 12:08:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-8 Lab Sample ID: 460-250807-8
Client ID: SL-8_011222
Operator ID: ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

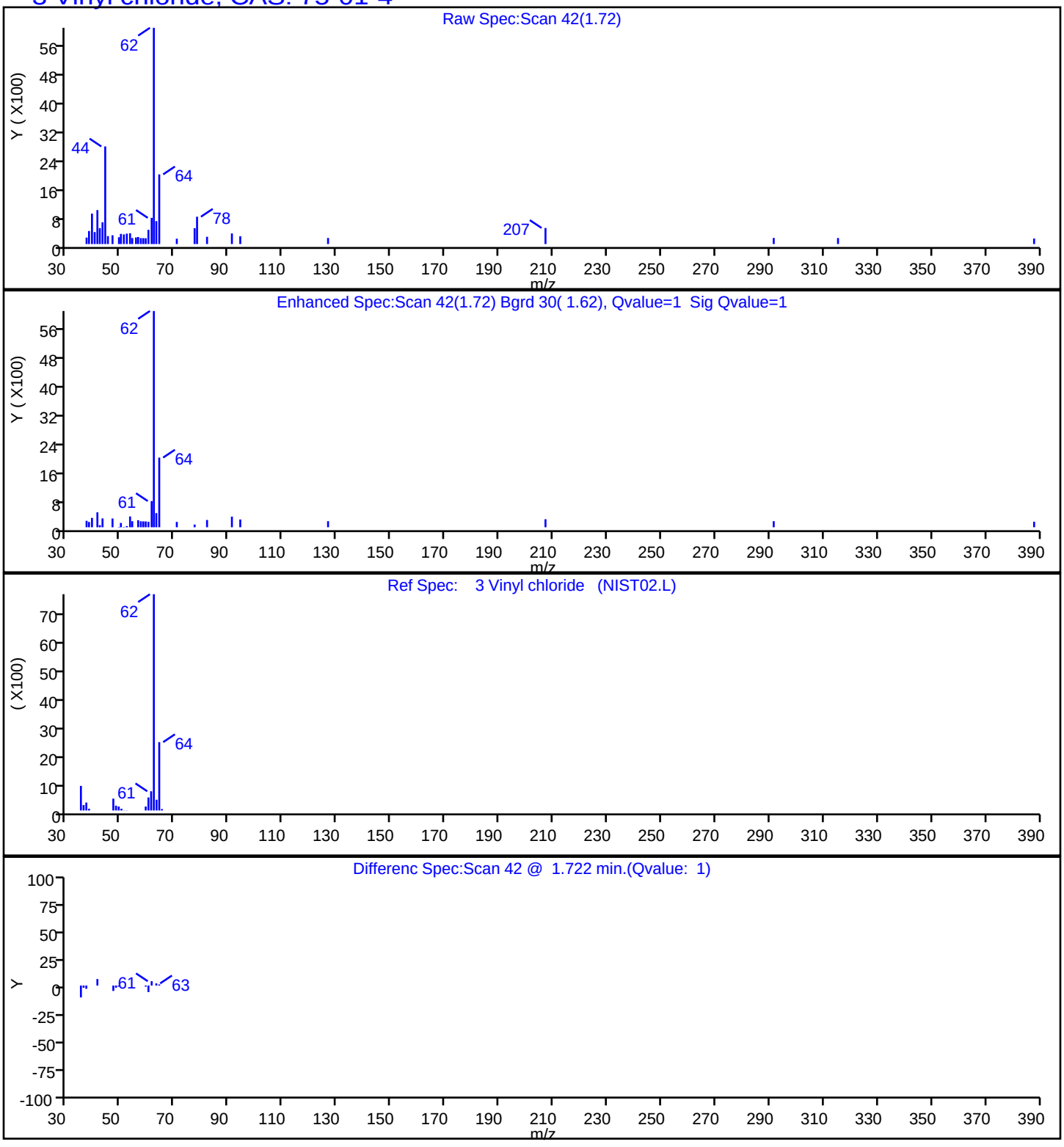
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24977.D				
Injection Date:	18-Jan-2022 12:08:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-8	Lab Sample ID:	460-250807-8		
Client ID:	SL-8_011222				
Operator ID:		ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-9_011222 | Lab Sample ID: 460-250807-9

Matrix: Water | Lab File ID: F24978.D

Analysis Method: 8260D | Date Collected: 01/12/2022 13:40

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 12:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	3.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	103		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24978.D
Lims ID: 460-250807-A-9
Client ID: SL-9_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:30:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-9
Misc. Info.: 460-0140330-019
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 13:04:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.714	1.714	0.000	1	14967	1.55	
* 26 TBA-d9 (IS)	65	2.987	2.946	0.041	0	662831	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	836640	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	24	24263	3.11	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	310503	45.2	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	394448	44.7	
* 61 Fluorobenzene	96	4.959	4.951	0.008	41	1333733	50.0	
* 67 1,4-Dioxane-d8	96	5.682	5.691	-0.009	0	47595	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1199610	46.0	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	957936	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	350883	51.6	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	552639	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

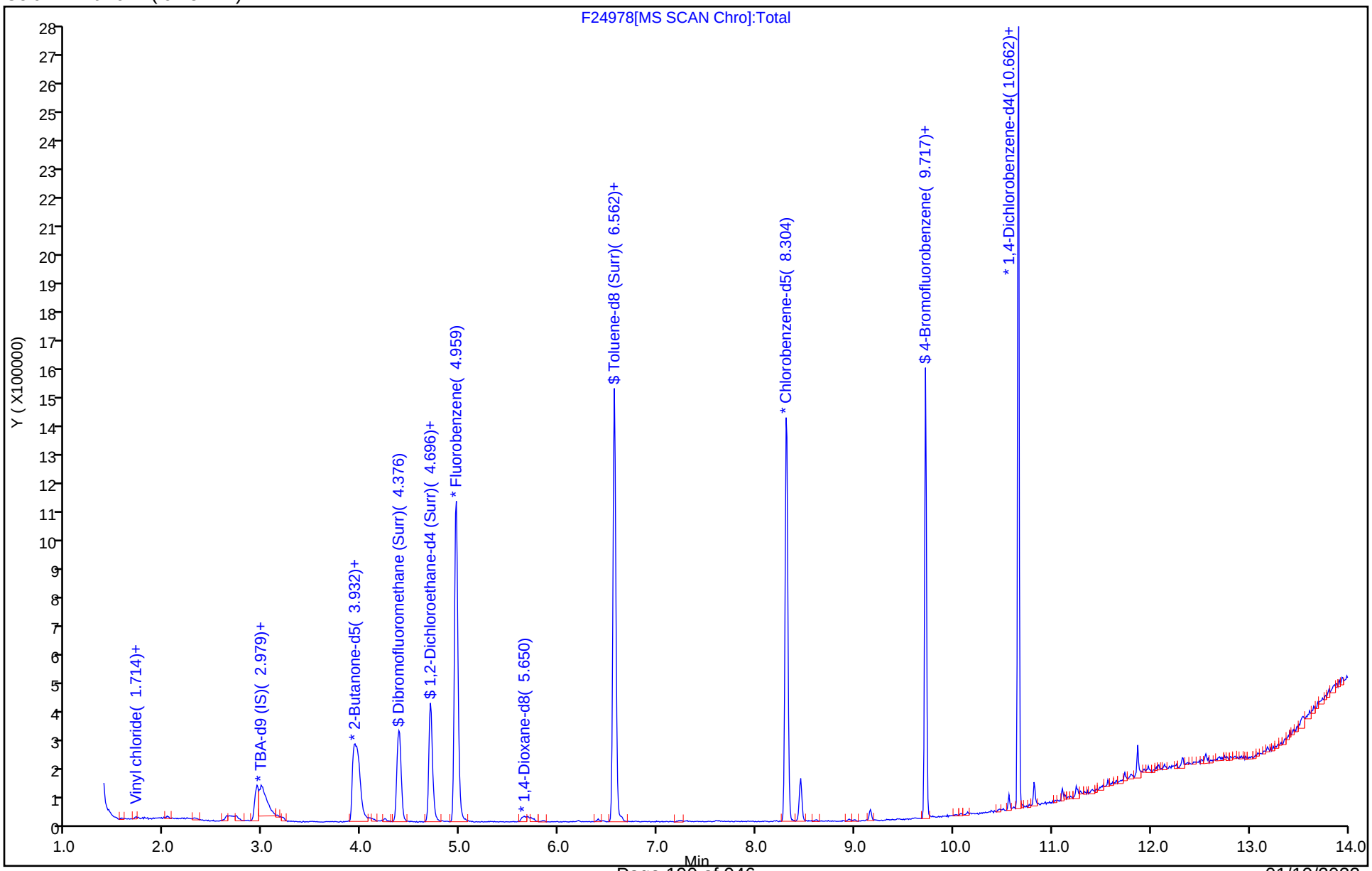
Report Date: 19-Jan-2022 10:56:24 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24978.D

Injection Date:	18-Jan-2022 12:30:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-9	Lab Sample ID:	460-250807-9	Worklist Smp#:	19
Client ID:	SL-9_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24978.D
Lims ID: 460-250807-A-9
Client ID: SL-9_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:30:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-9
Misc. Info.: 460-0140330-019
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

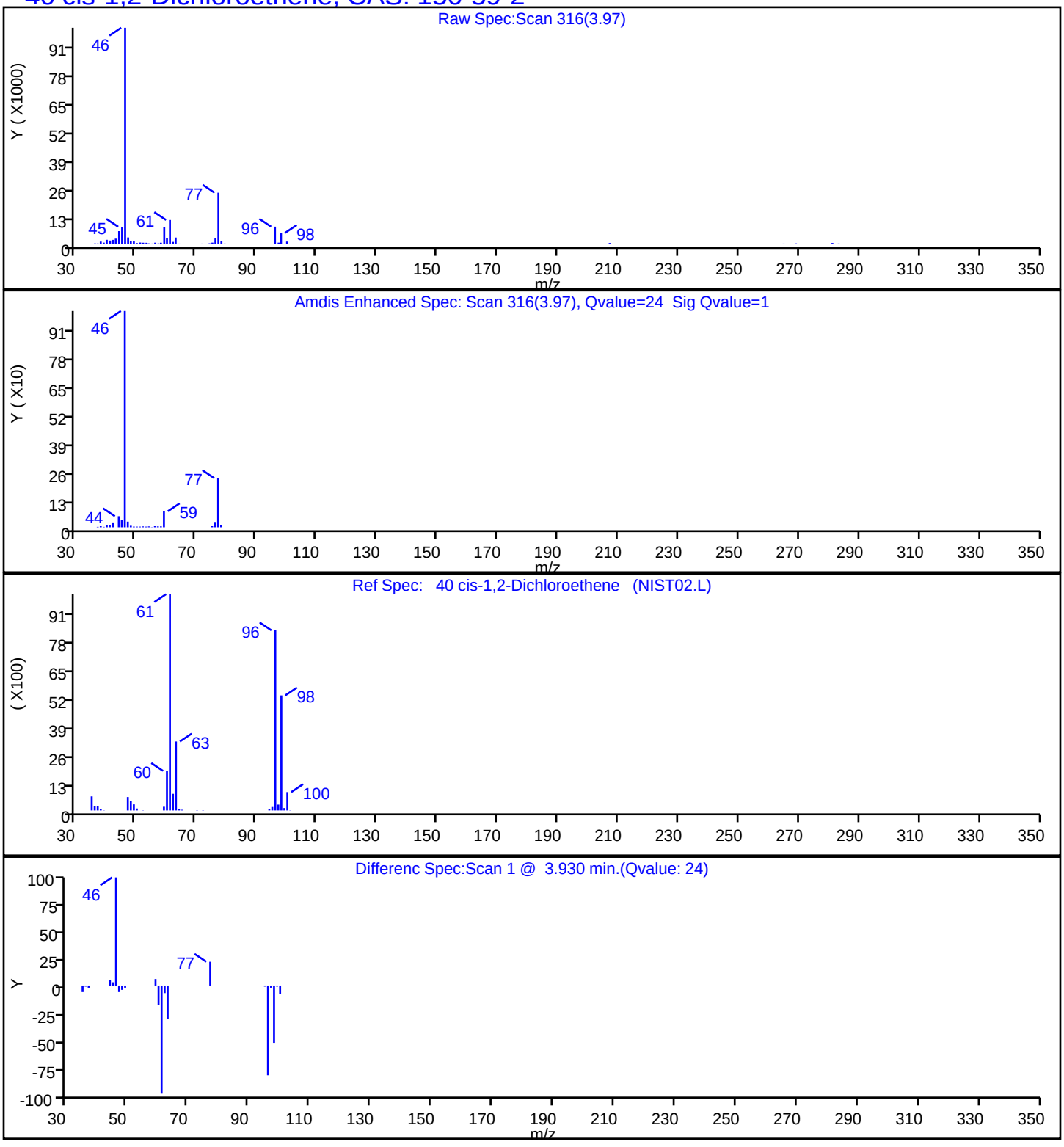
First Level Reviewer: moroneyc Date: 18-Jan-2022 13:04:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.2	90.37
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.7	89.42
$ 78 Toluene-d8 (Surr)	50.0	46.0	92.03
$ 100 4-Bromofluorobenzene	50.0	51.6	103.18

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24978.D
Injection Date: 18-Jan-2022 12:30:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-9 Lab Sample ID: 460-250807-9
Client ID: SL-9_011222
Operator ID: ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

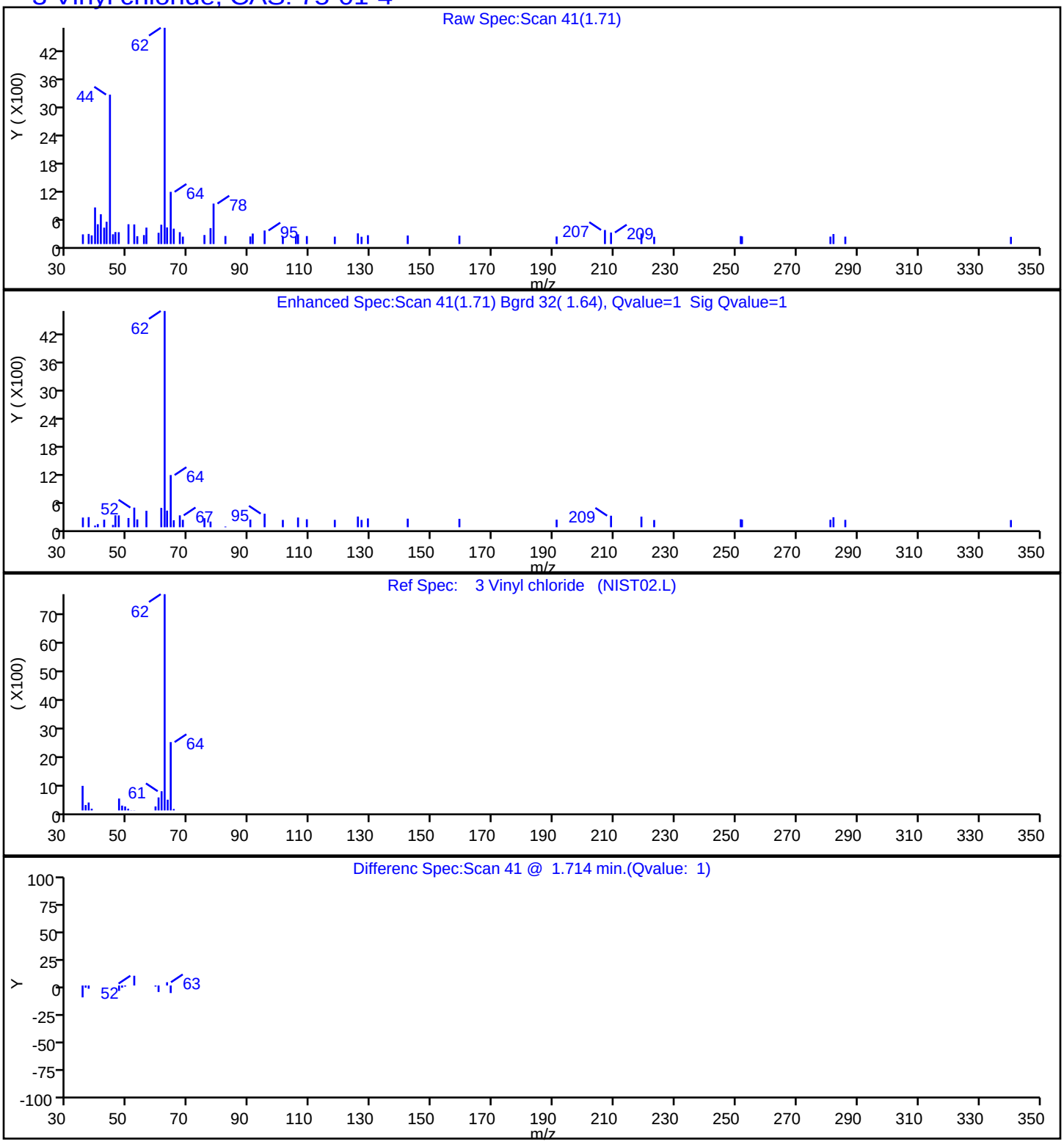
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24978.D				
Injection Date:	18-Jan-2022 12:30:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-9	Lab Sample ID:	460-250807-9		
Client ID:	SL-9_011222				
Operator ID:		ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-10_011222 | Lab Sample ID: 460-250807-10

Matrix: Water | Lab File ID: F24979.D

Analysis Method: 8260D | Date Collected: 01/12/2022 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 12:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.49	J	1.0	0.44
75-01-4	Vinyl chloride	1.0		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D
Lims ID: 460-250807-A-10
Client ID: SL-10_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:52:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-10
Misc. Info.: 460-0140330-020
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 13:12:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.705	1.714	-0.009	28	9918	1.04	
* 26 TBA-d9 (IS)	65	2.987	2.946	0.041	0	761373	1000.0	
* 38 2-Butanone-d5	46	3.916	3.924	-0.008	0	922178	250.0	
40 cis-1,2-Dichloroethene	96	3.982	3.974	0.008	93	16268	2.12	M
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	311081	45.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	390059	44.8	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1315282	50.0	
63 Trichloroethene	95	5.296	5.288	0.008	42	3170	0.4875	
* 67 1,4-Dioxane-d8	96	5.699	5.691	0.008	0	52892	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1175846	46.3	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	932801	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	347679	52.5	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	544539	50.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

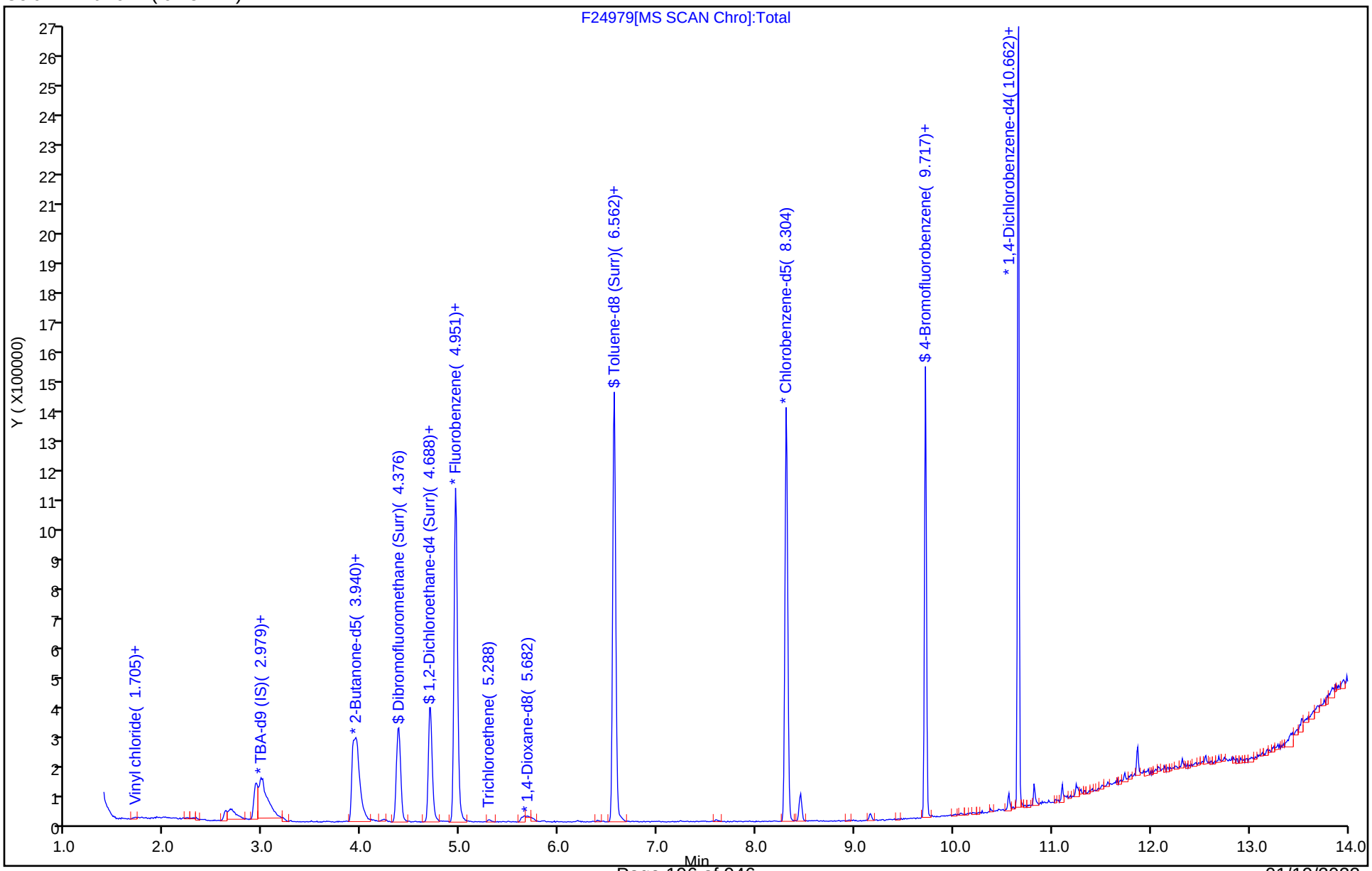
Report Date: 19-Jan-2022 10:56:32 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D

Injection Date:	18-Jan-2022 12:52:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-10	Lab Sample ID:	460-250807-10	Worklist Smp#:	20
Client ID:	SL-10_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D
Lims ID: 460-250807-A-10
Client ID: SL-10_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 12:52:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-10
Misc. Info.: 460-0140330-020
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

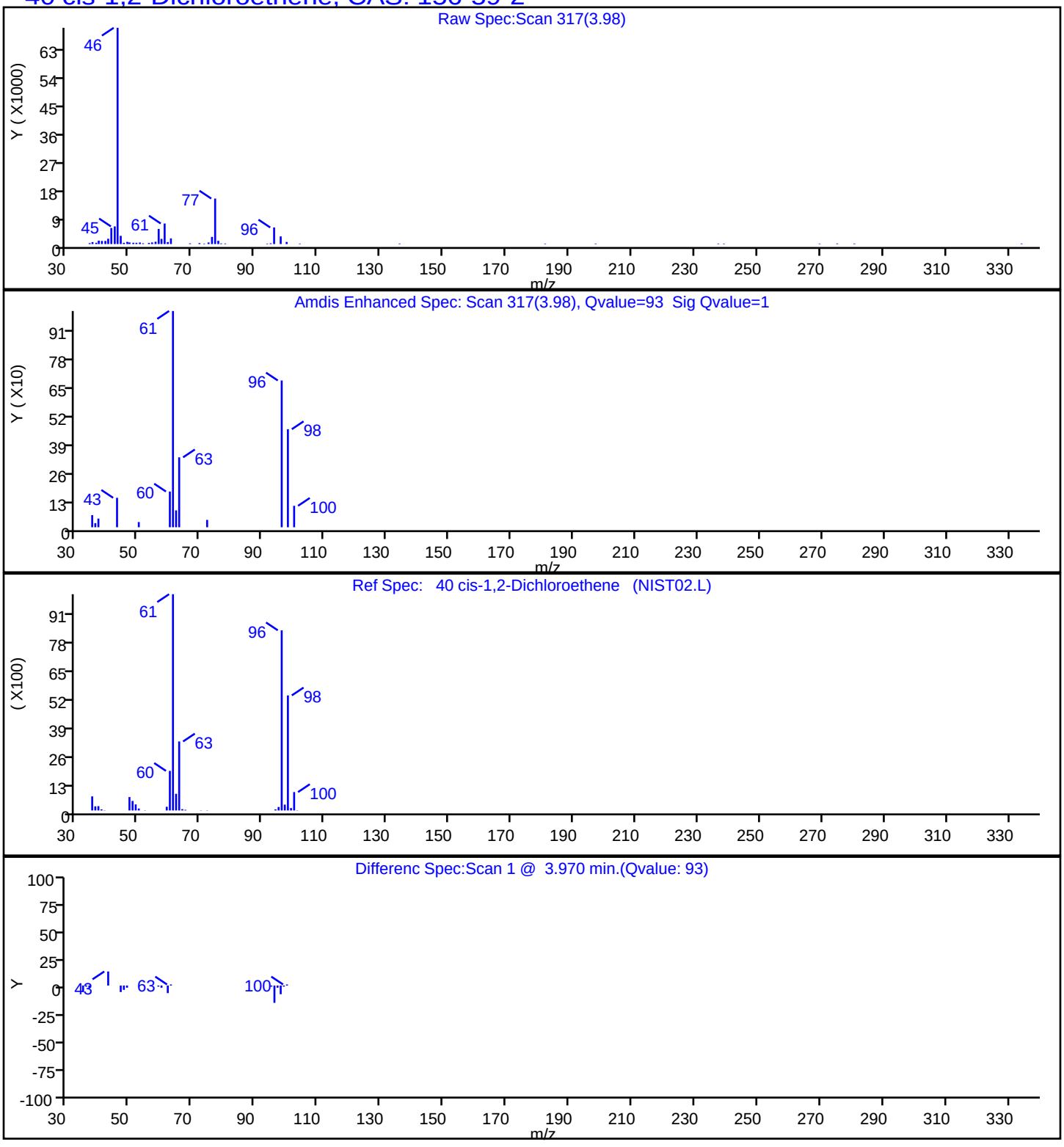
First Level Reviewer: moroneyc Date: 18-Jan-2022 13:12:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.9	91.81
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.67
$ 78 Toluene-d8 (Surr)	50.0	46.3	92.64
$ 100 4-Bromofluorobenzene	50.0	52.5	104.99

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D
Injection Date: 18-Jan-2022 12:52:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-10 Lab Sample ID: 460-250807-10
Client ID: SL-10_011222
Operator ID: ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

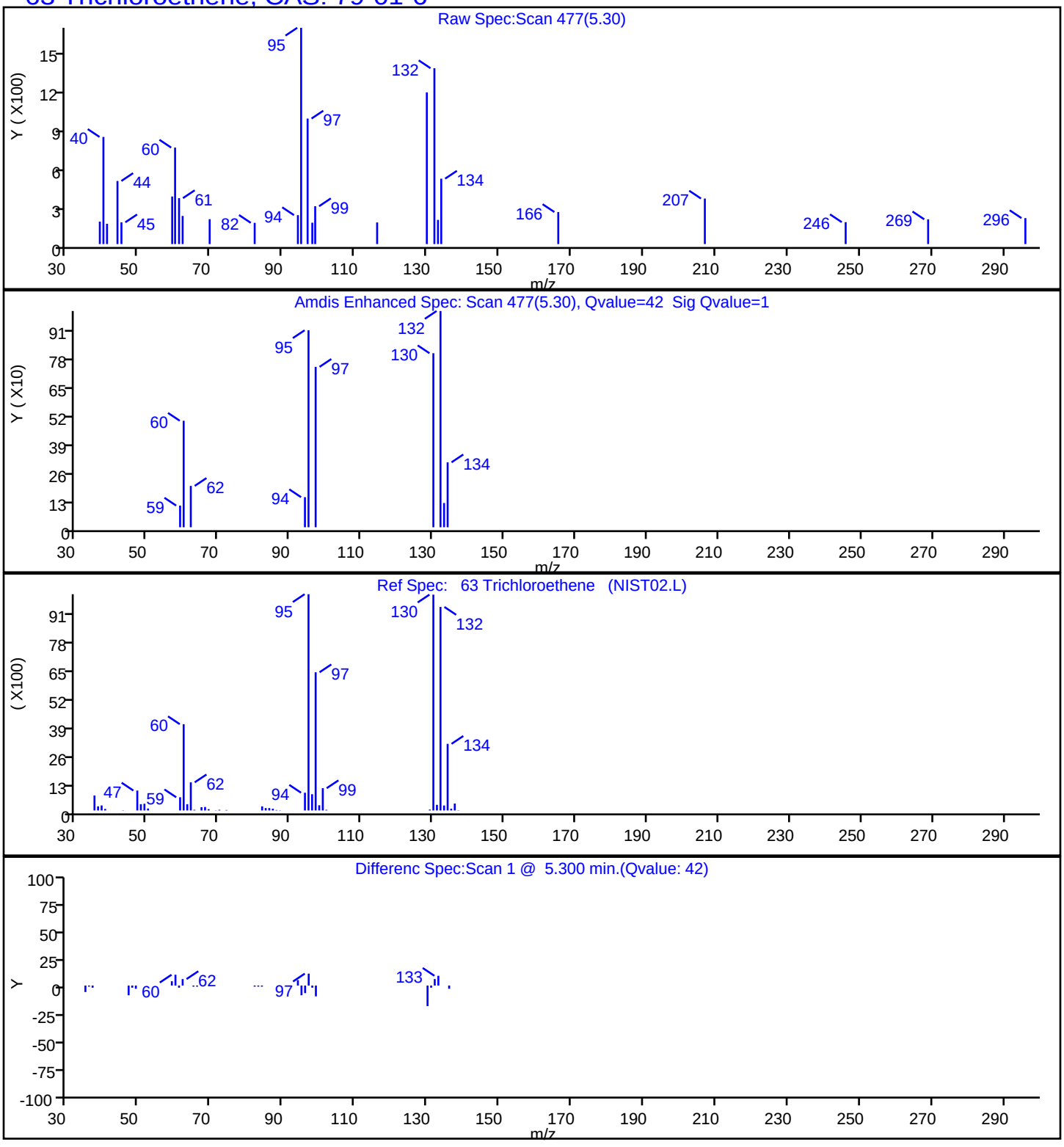
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D		
Injection Date:	18-Jan-2022 12:52:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-10	Lab Sample ID:	460-250807-10
Client ID:	SL-10_011222		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

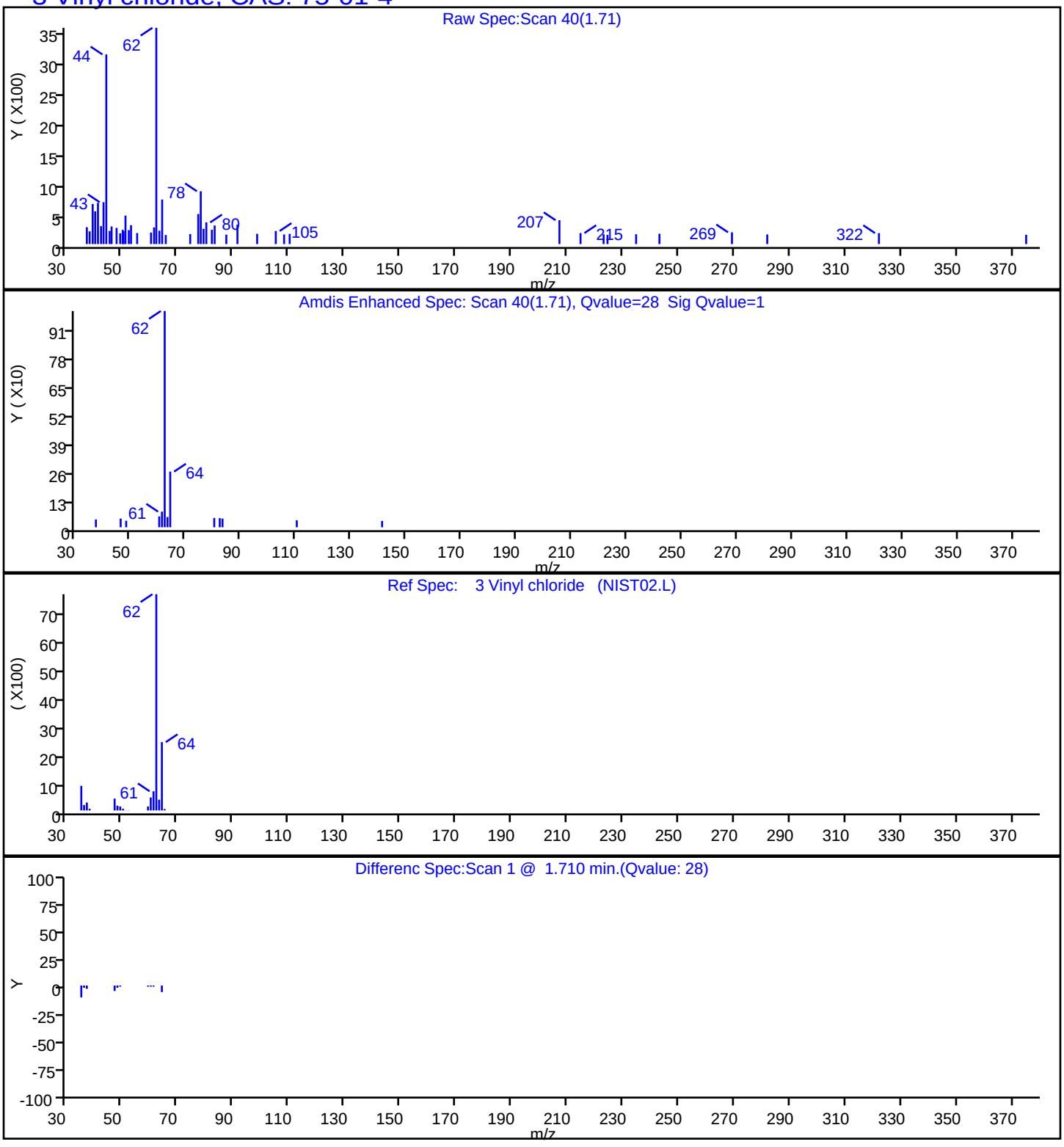
63 Trichloroethene, CAS: 79-01-6



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D
Injection Date: 18-Jan-2022 12:52:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-10 Lab Sample ID: 460-250807-10
Client ID: SL-10_011222
Operator ID: ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

Eurofins Edison

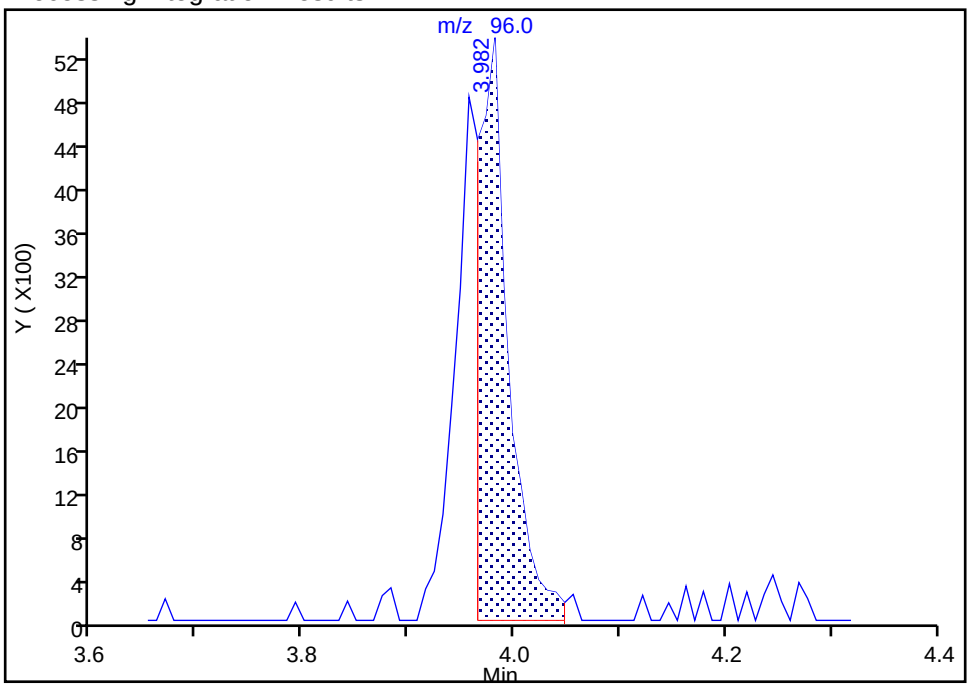
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24979.D		
Injection Date:	18-Jan-2022 12:52:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-10	Lab Sample ID:	460-250807-10
Client ID:	SL-10_011222		
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

40 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

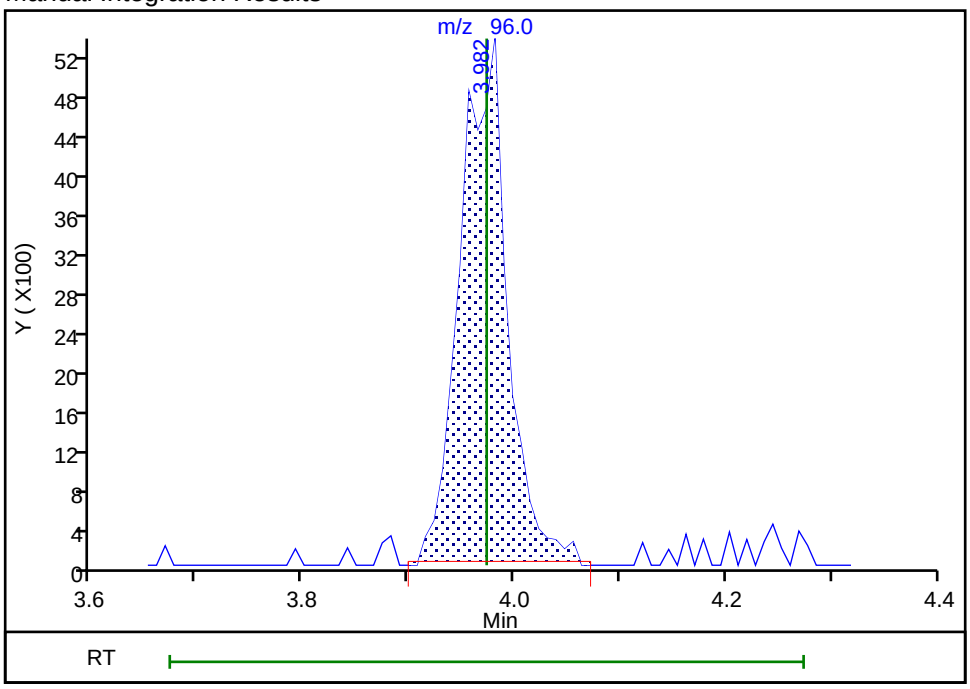
Processing Integration Results

RT: 3.98
Area: 10889
Amount: 1.415959
Amount Units: ug/l



Manual Integration Results

RT: 3.98
Area: 16268
Amount: 2.115421
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 13:11:48

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-11

Matrix: Water | Lab File ID: F24969.D

Analysis Method: 8260D | Date Collected: 01/12/2022 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 09:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24969.D
Lims ID: 460-250807-A-11
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 09:13:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-11
Misc. Info.: 460-0140330-010
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:32:13 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 09:38:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	700129	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	897542	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	310634	45.1	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	393977	44.6	
* 61 Fluorobenzene	96	4.960	4.951	0.009	38	1336377	50.0	
* 67 1,4-Dioxane-d8	96	5.674	5.691	-0.017	0	53031	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1207978	46.3	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	959156	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	348059	51.1	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	552571	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

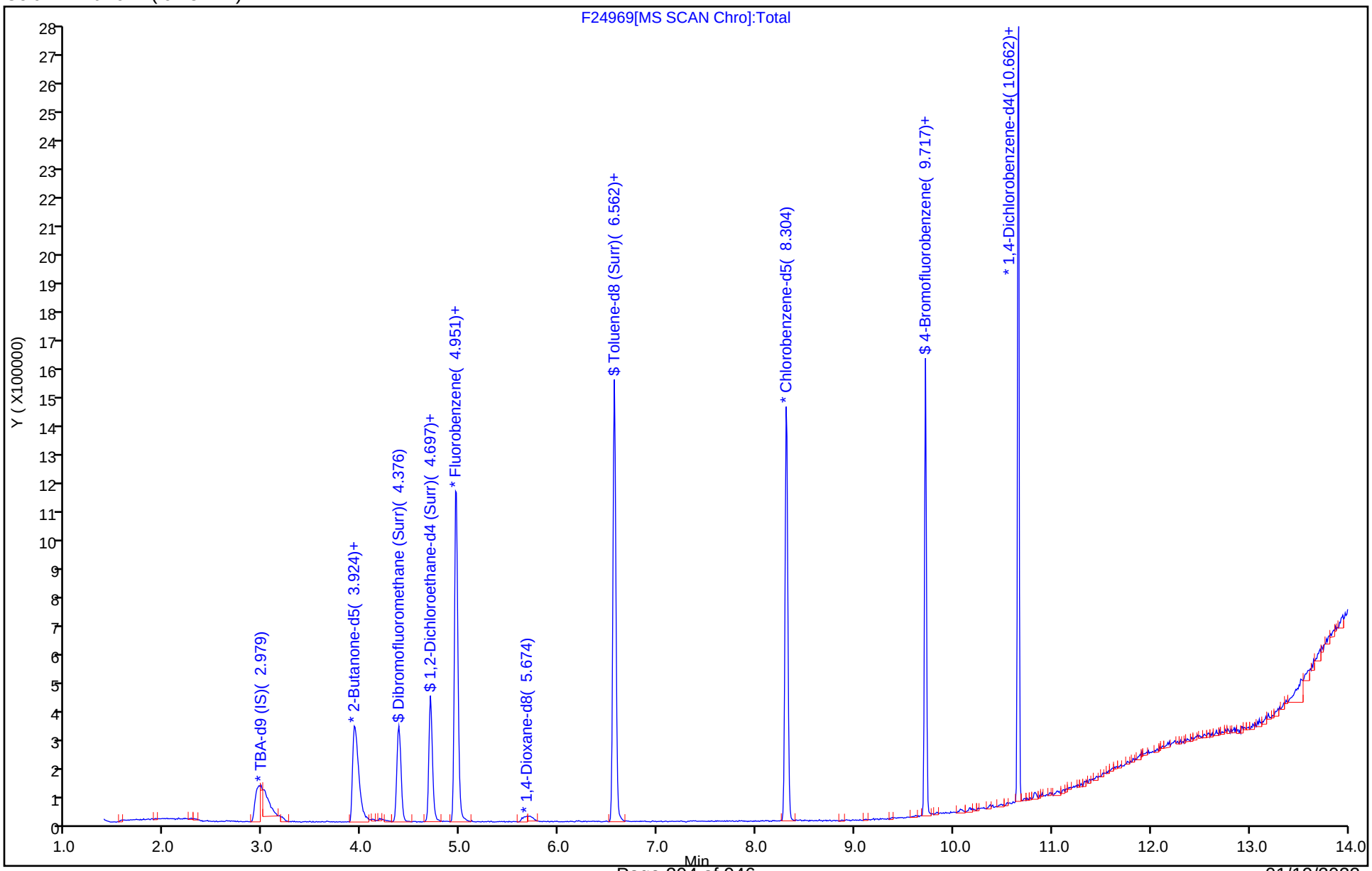
Report Date: 18-Jan-2022 09:38:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24969.D

Injection Date:	18-Jan-2022 09:13:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-11	Lab Sample ID:	460-250807-11	Worklist Smp#:	10
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24969.D
Lims ID: 460-250807-A-11
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 09:13:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-11
Misc. Info.: 460-0140330-010
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:32:13 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 09:38:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.1	90.23
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.6	89.14
$ 78 Toluene-d8 (Surr)	50.0	46.3	92.56
$ 100 4-Bromofluorobenzene	50.0	51.1	102.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-11_011222 | Lab Sample ID: 460-250807-12

Matrix: Water | Lab File ID: F24980.D

Analysis Method: 8260D | Date Collected: 01/12/2022 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.2		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24980.D
Lims ID: 460-250807-A-12
Client ID: SL-11_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 13:13:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-12
Misc. Info.: 460-0140330-021
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.705	1.714	-0.009	1	11963	1.24	
* 26 TBA-d9 (IS)	65	2.971	2.946	0.025	0	673057	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	830475	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	24	19599	2.51	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	309889	45.0	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	395612	44.8	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1336021	50.0	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	51712	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1207301	46.5	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	953751	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	351359	51.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	544522	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

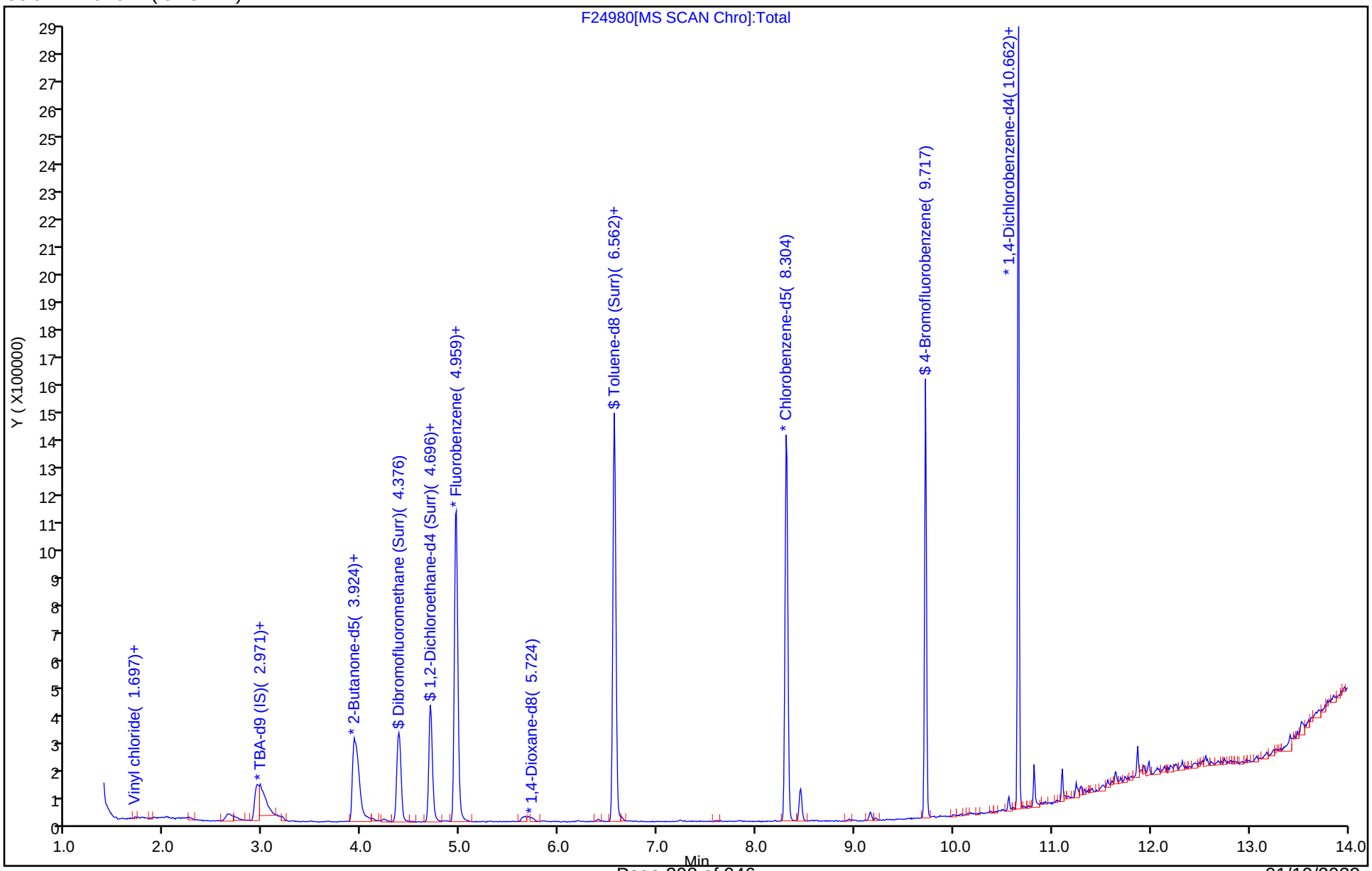
Report Date: 19-Jan-2022 10:56:39 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24980.D

Injection Date:	18-Jan-2022 13:13:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-12	Lab Sample ID:	460-250807-12	Worklist Smp#:	21
Client ID:	SL-11_011222				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24980.D
Lims ID: 460-250807-A-12
Client ID: SL-11_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 13:13:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-12
Misc. Info.: 460-0140330-021
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

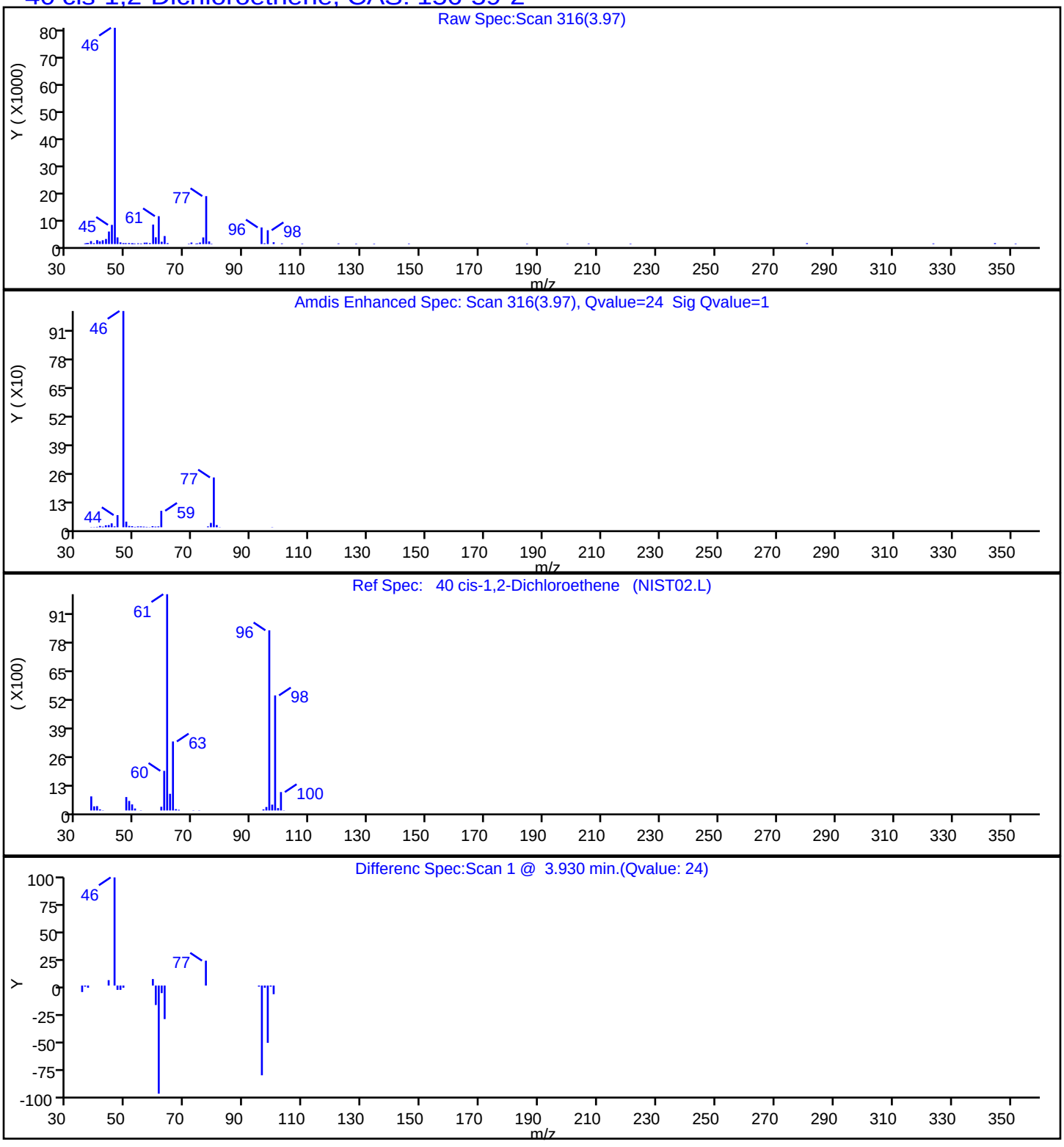
First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.0	90.04
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.53
$ 78 Toluene-d8 (Surr)	50.0	46.5	93.03
$ 100 4-Bromofluorobenzene	50.0	51.9	103.77

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24980.D
Injection Date: 18-Jan-2022 13:13:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-12 Lab Sample ID: 460-250807-12
Client ID: SL-11_011222
Operator ID: ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

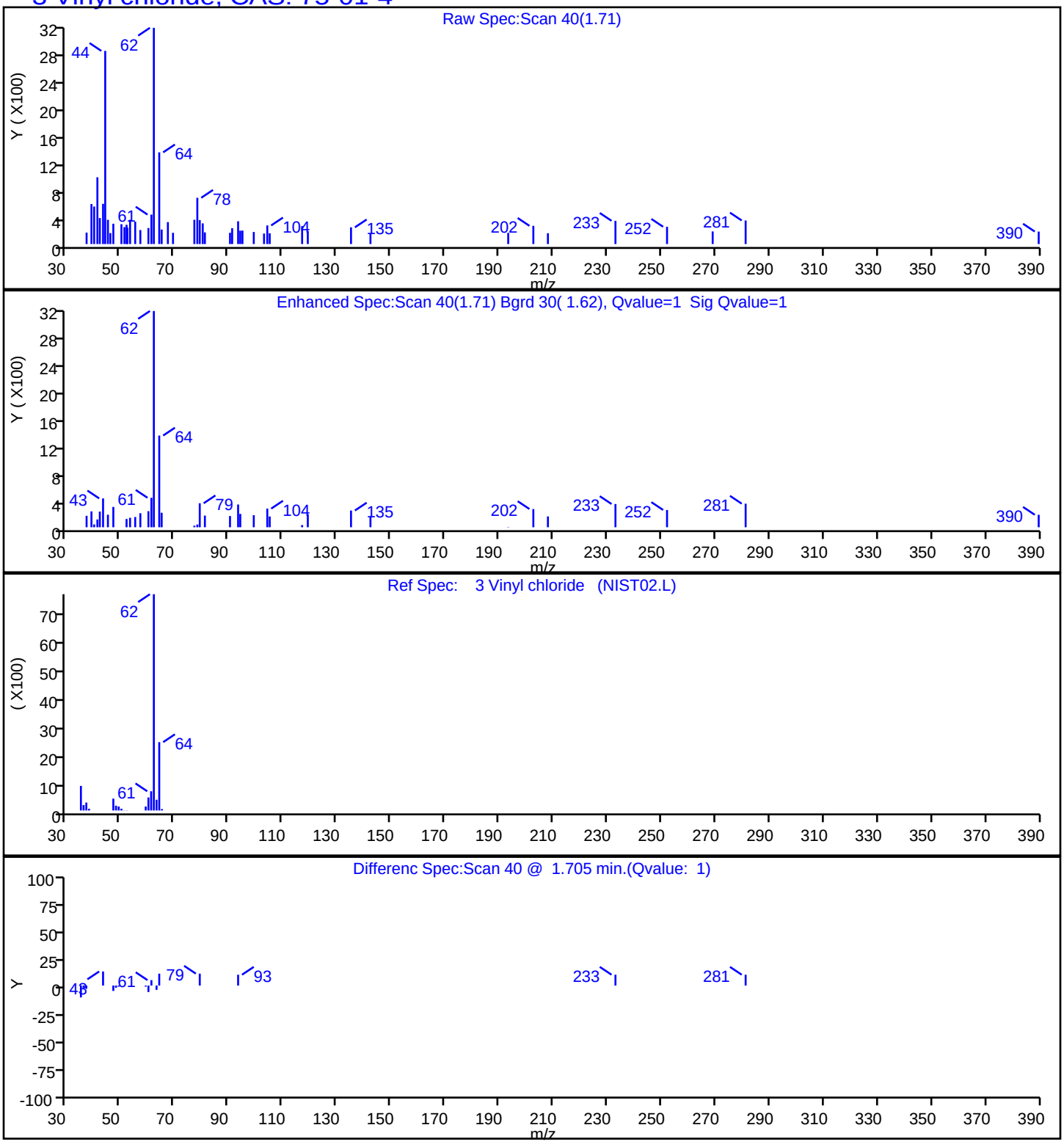
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24980.D
Injection Date: 18-Jan-2022 13:13:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-12 Lab Sample ID: 460-250807-12
Client ID: SL-11_011222
Operator ID: ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-23_011322 | Lab Sample ID: 460-250807-13

Matrix: Water | Lab File ID: F24981.D

Analysis Method: 8260D | Date Collected: 01/13/2022 09:25

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 13:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	2.5		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.86	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24981.D
Lims ID: 460-250807-A-13
Client ID: SL-23_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 13:35:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-13
Misc. Info.: 460-0140330-022
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	7830	0.8631	
* 26 TBA-d9 (IS)	65	2.971	2.946	0.025	0	639706	1000.0	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	761877	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	24	18174	2.48	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	294034	45.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	373986	45.1	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1254580	50.0	
* 67 1,4-Dioxane-d8	96	5.683	5.691	-0.009	0	45344	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1130978	46.2	
* 89 Chlorobenzene-d5	117	8.312	8.304	0.008	22	899334	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	334646	52.4	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	520925	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

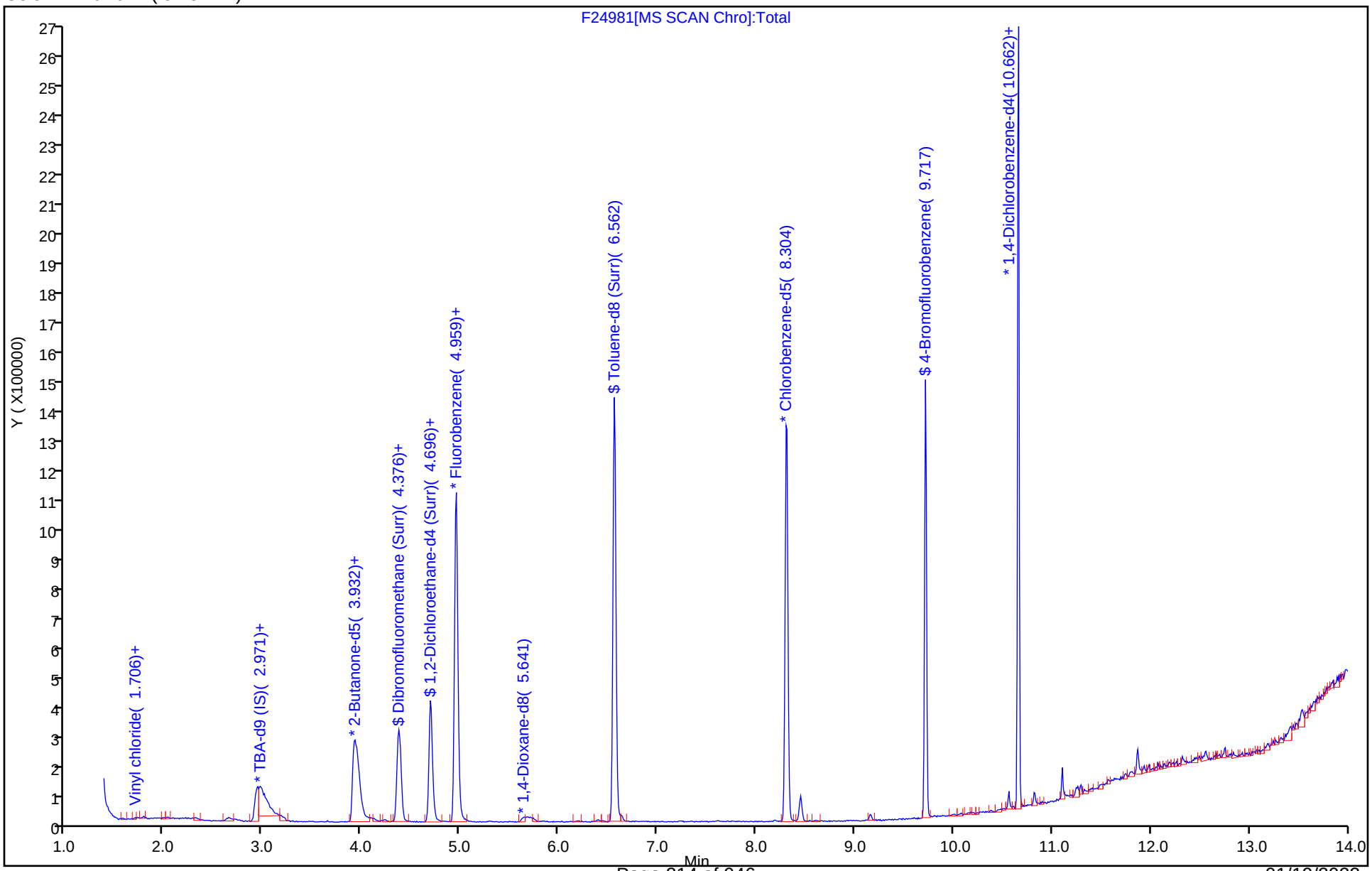
Report Date: 19-Jan-2022 10:56:55 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24981.D

Injection Date:	18-Jan-2022 13:35:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-13	Lab Sample ID:	460-250807-13	Worklist Smp#:	22
Client ID:	SL-23_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24981.D
Lims ID: 460-250807-A-13
Client ID: SL-23_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 13:35:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-13
Misc. Info.: 460-0140330-022
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

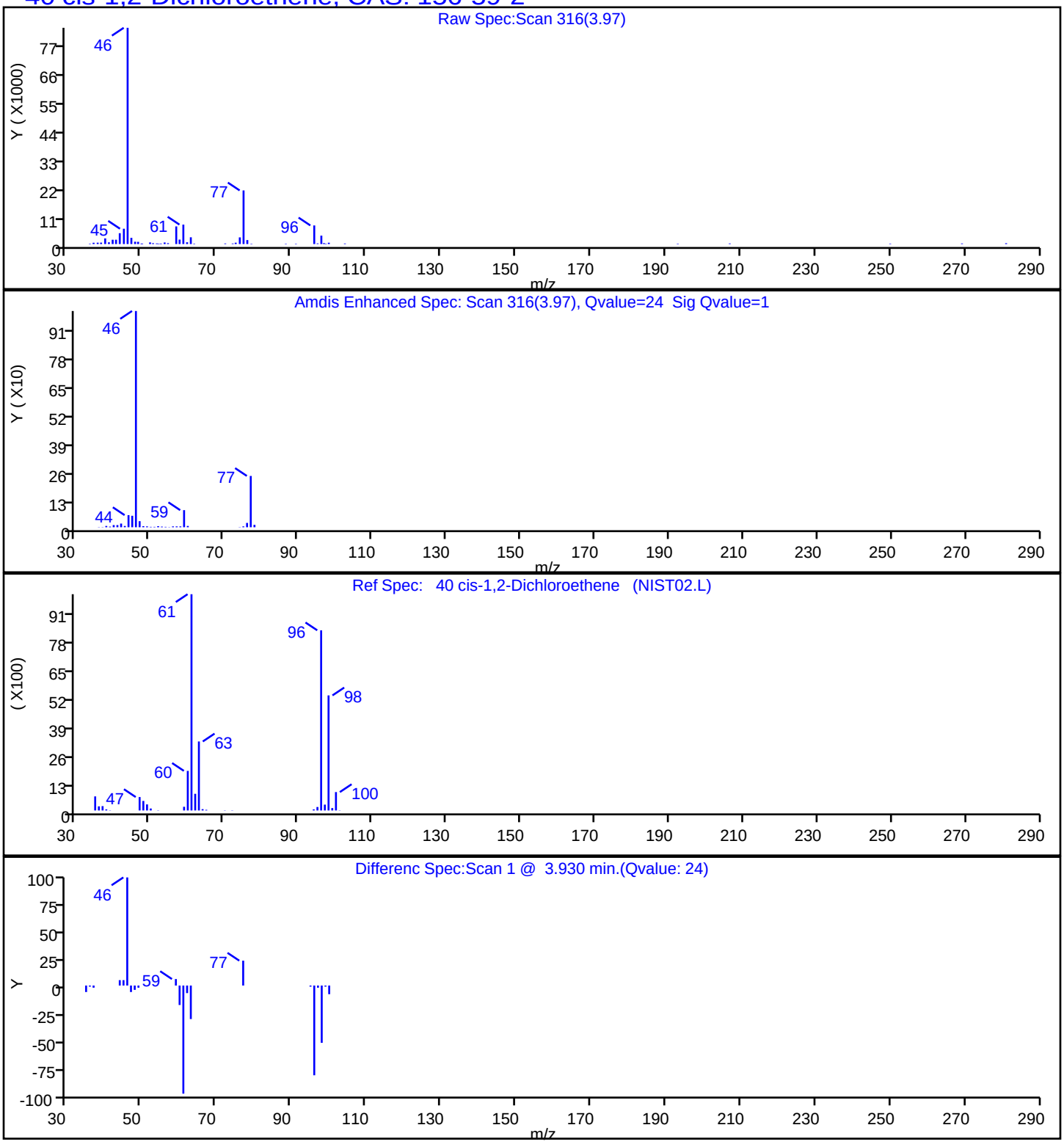
First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.5	90.98
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.1	90.13
$ 78 Toluene-d8 (Surr)	50.0	46.2	92.42
$ 100 4-Bromofluorobenzene	50.0	52.4	104.81

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24981.D				
Injection Date:	18-Jan-2022 13:35:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-13	Lab Sample ID:	460-250807-13		
Client ID:	SL-23_011322				
Operator ID:		ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

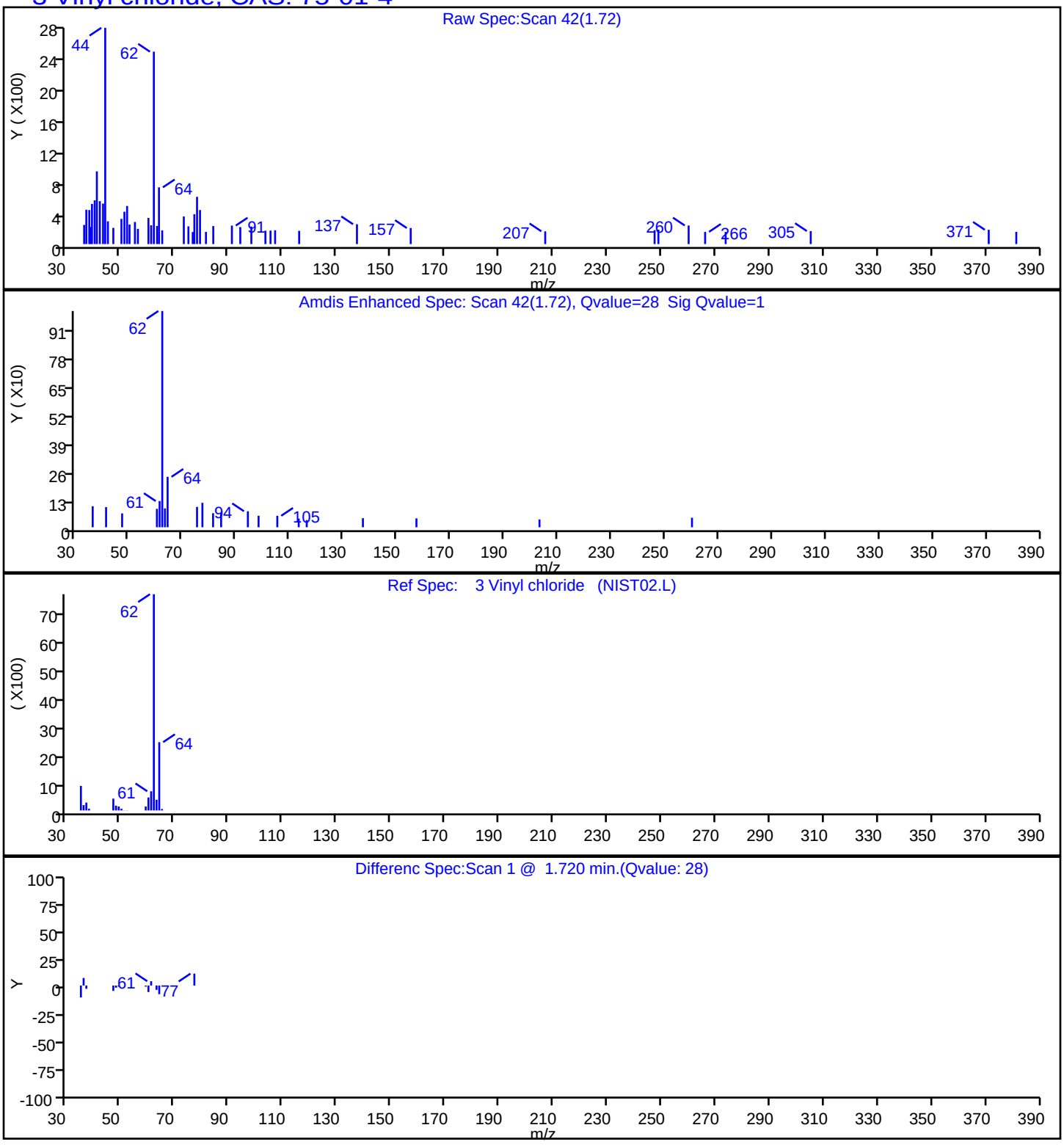
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24981.D		
Injection Date:	18-Jan-2022 13:35:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-13	Lab Sample ID:	460-250807-13
Client ID:	SL-23_011322		
Operator ID:		ALS Bottle#:	21 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-12_011322 | Lab Sample ID: 460-250807-14

Matrix: Water | Lab File ID: F24982.D

Analysis Method: 8260D | Date Collected: 01/13/2022 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 13:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.7		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.66	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-123
1868-53-7	Dibromofluoromethane (Surr)	93		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D
Lims ID: 460-250807-A-14
Client ID: SL-12_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 13:56:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-14
Misc. Info.: 460-0140330-023
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	1	6025	0.6622	
* 26 TBA-d9 (IS)	65	2.971	2.946	0.025	0	748839	1000.0	
* 38 2-Butanone-d5	46	3.941	3.924	0.017	0	826160	250.0	
40 cis-1,2-Dichloroethene	96	3.982	3.974	0.008	26	12179	1.66	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	300228	46.3	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	383664	46.1	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1258359	50.0	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	51359	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1145092	46.0	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	87	915130	50.0	a
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	341140	52.5	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	528098	50.0	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

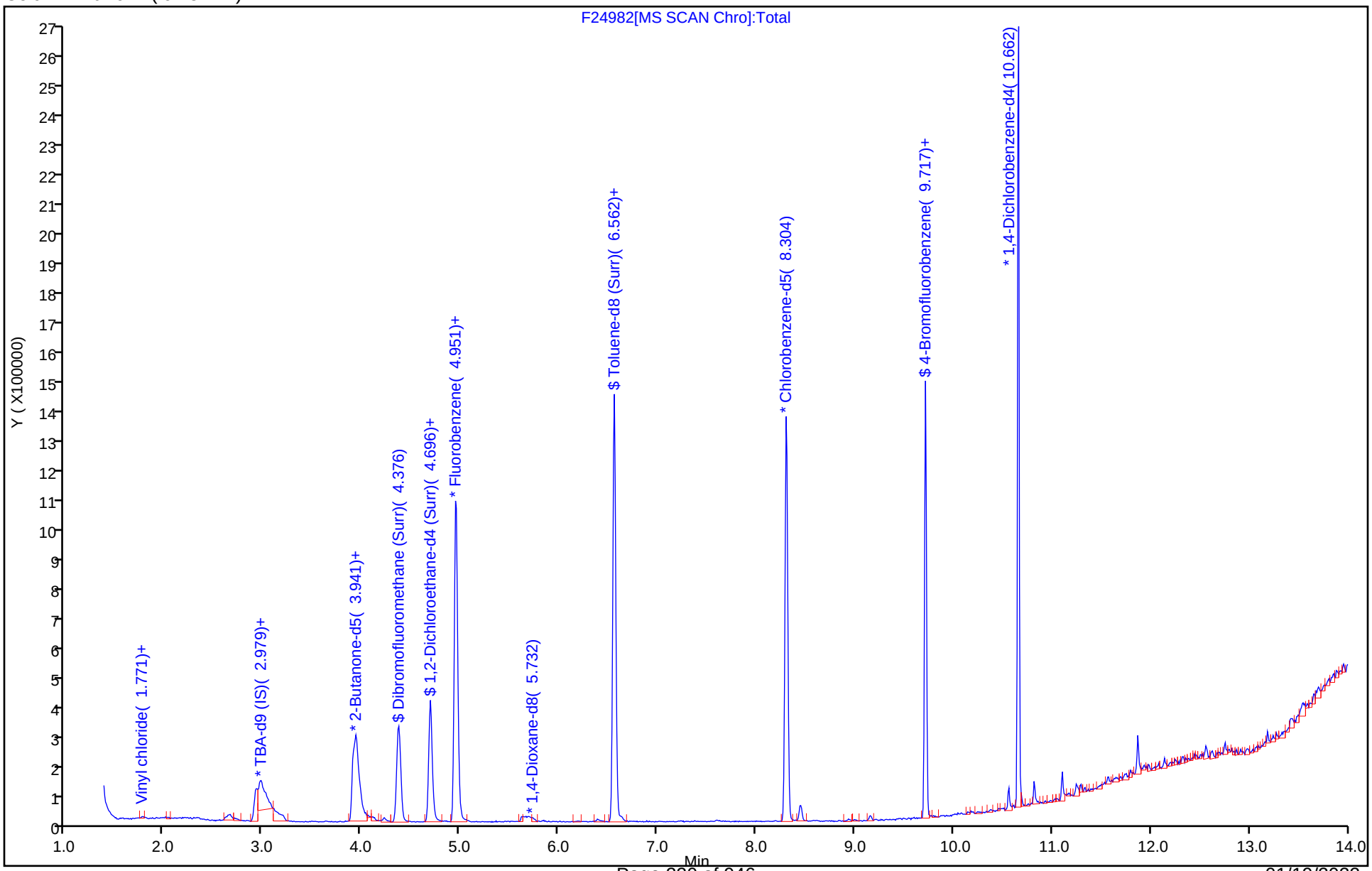
Report Date: 19-Jan-2022 10:57:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D

Injection Date:	18-Jan-2022 13:56:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-14	Lab Sample ID:	460-250807-14	Worklist Smp#:	23
Client ID:	SL-12_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D
Lims ID: 460-250807-A-14
Client ID: SL-12_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 13:56:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-14
Misc. Info.: 460-0140330-023
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

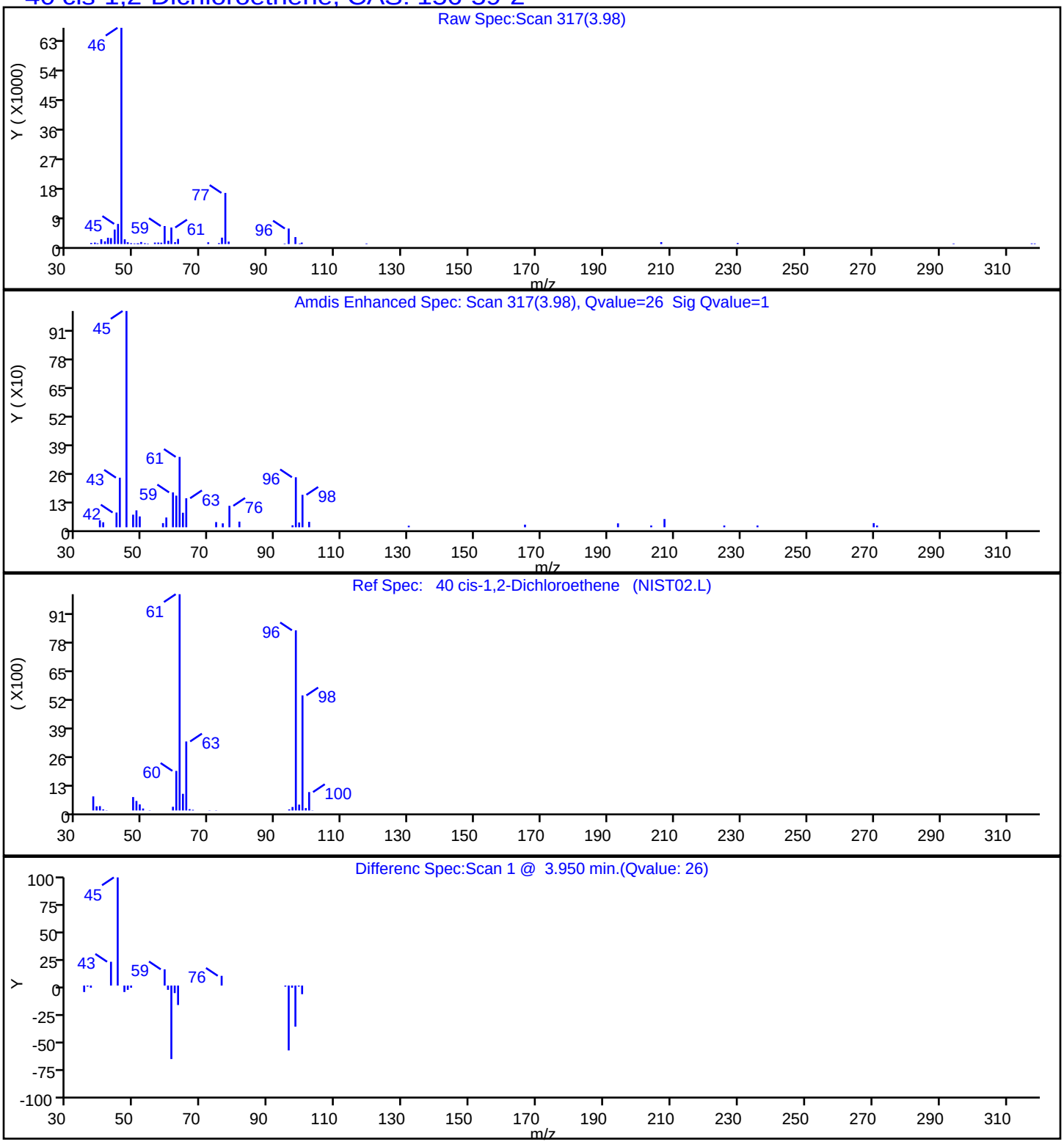
First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	46.3	92.62
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.1	92.19
$ 78 Toluene-d8 (Surr)	50.0	46.0	91.96
$ 100 4-Bromofluorobenzene	50.0	52.5	105.00

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D
Injection Date: 18-Jan-2022 13:56:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-14 Lab Sample ID: 460-250807-14
Client ID: SL-12_011322
Operator ID: ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

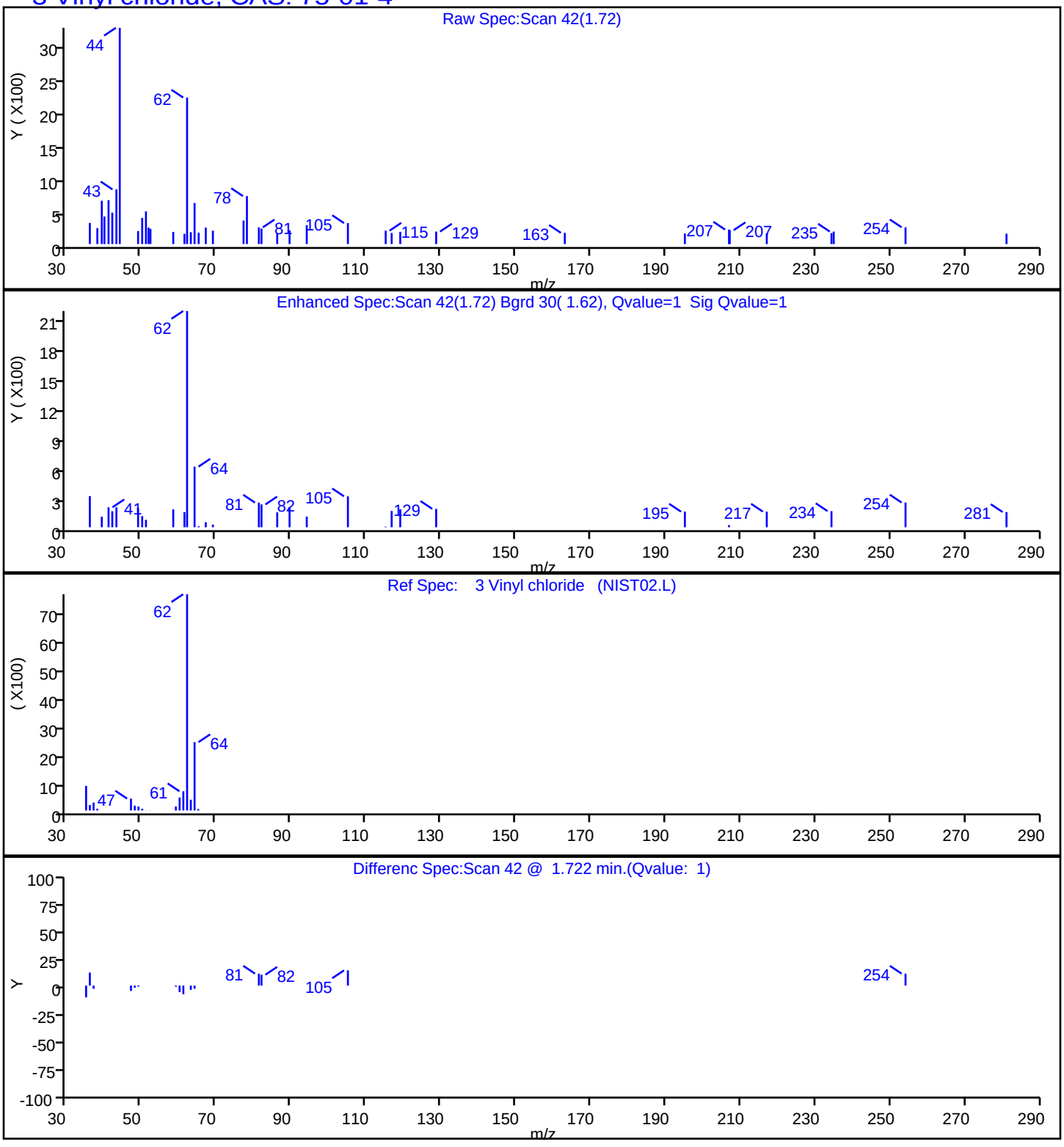
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D
Injection Date: 18-Jan-2022 13:56:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-14 Lab Sample ID: 460-250807-14
Client ID: SL-12_011322
Operator ID: ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

Eurofins Edison

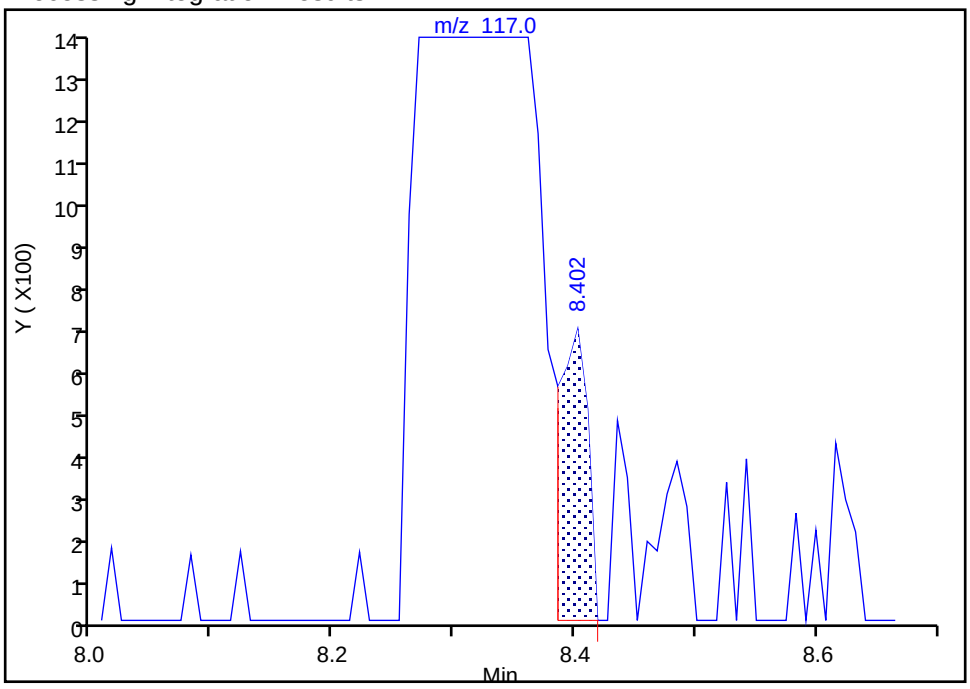
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24982.D				
Injection Date:	18-Jan-2022 13:56:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-14	Lab Sample ID:	460-250807-14		
Client ID:	SL-12_011322				
Operator ID:		ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

* 89 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 1

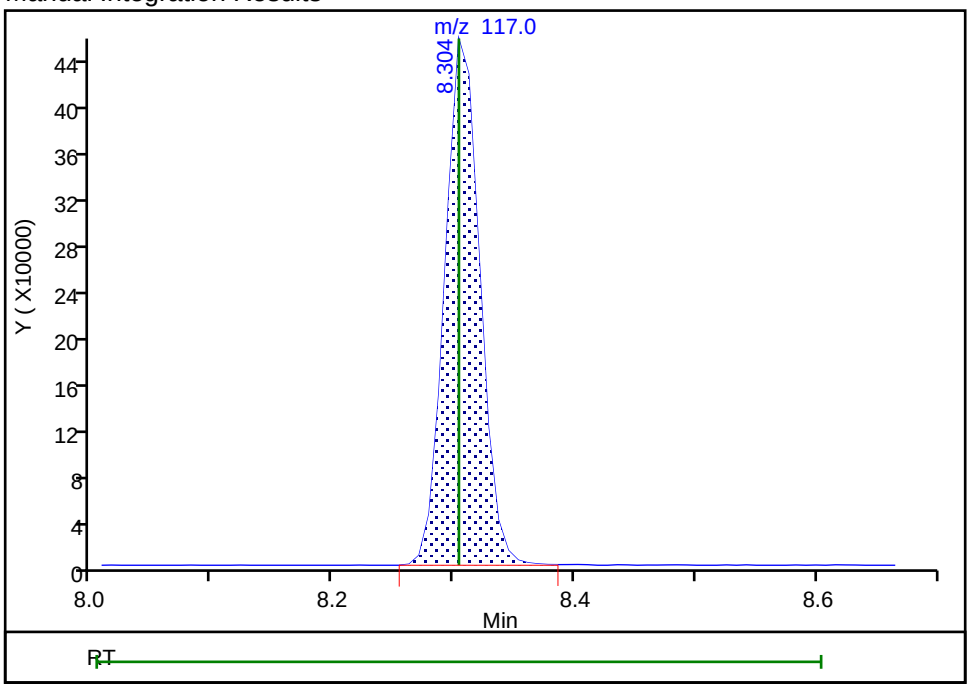
Processing Integration Results

RT: 8.40
Area: 1125
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 8.30
Area: 915130
Amount: 50.000000
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:14:14

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-19_011322 | Lab Sample ID: 460-250807-15

Matrix: Water | Lab File ID: F24983.D

Analysis Method: 8260D | Date Collected: 01/13/2022 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 14:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24983.D
Lims ID: 460-250807-A-15
Client ID: SL-19_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 14:18:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-15
Misc. Info.: 460-0140330-024
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.963	2.946	0.017	0	829054	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	870903	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	285914	45.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	361176	44.8	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1218951	50.0	
* 67 1,4-Dioxane-d8	96	5.658	5.691	-0.033	0	54766	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1092527	45.9	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	874284	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	322003	51.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	512454	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

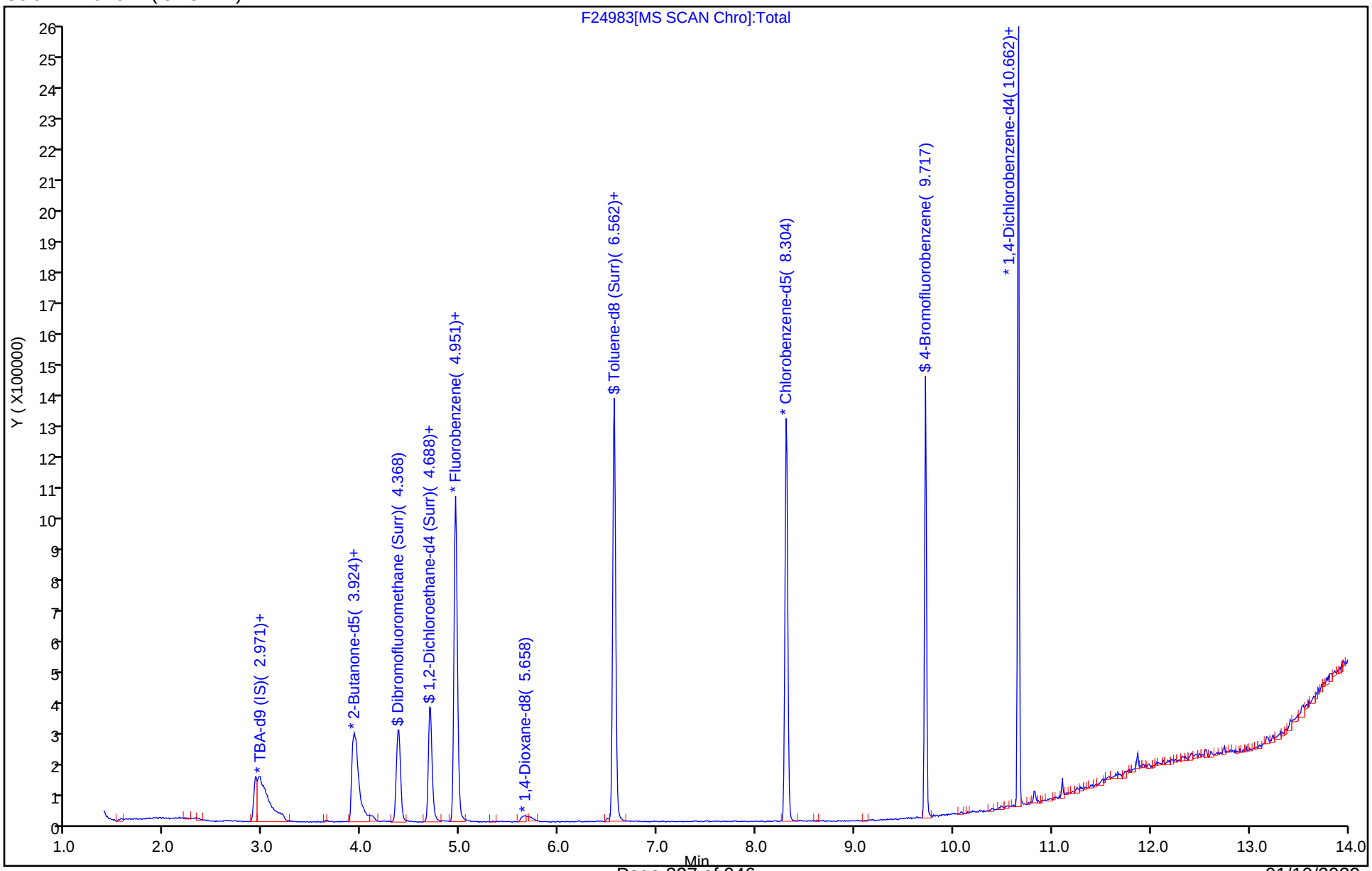
Report Date: 19-Jan-2022 10:57:16 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24983.D

Injection Date:	18-Jan-2022 14:18:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-15	Lab Sample ID:	460-250807-15	Worklist Smp#:	24
Client ID:	SL-19_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24983.D
Lims ID: 460-250807-A-15
Client ID: SL-19_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 14:18:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-15
Misc. Info.: 460-0140330-024
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.5	91.05
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.59
$ 78 Toluene-d8 (Surr)	50.0	45.9	91.84
$ 100 4-Bromofluorobenzene	50.0	51.9	103.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-22_011322 | Lab Sample ID: 460-250807-16

Matrix: Water | Lab File ID: F24984.D

Analysis Method: 8260D | Date Collected: 01/13/2022 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 14:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24984.D
Lims ID: 460-250807-A-16
Client ID: SL-22_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 14:40:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-16
Misc. Info.: 460-0140330-025
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.962	2.946	0.016	0	619978	1000.0	
* 38 2-Butanone-d5	46	3.940	3.924	0.016	0	786274	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	305974	45.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	384024	44.8	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1296693	50.0	
* 67 1,4-Dioxane-d8	96	5.674	5.691	-0.017	0	44354	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.561	6.562	-0.001	36	1159203	45.9	
* 89 Chlorobenzene-d5	117	8.303	8.304	-0.001	22	928666	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	34	337029	51.1	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	525137	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

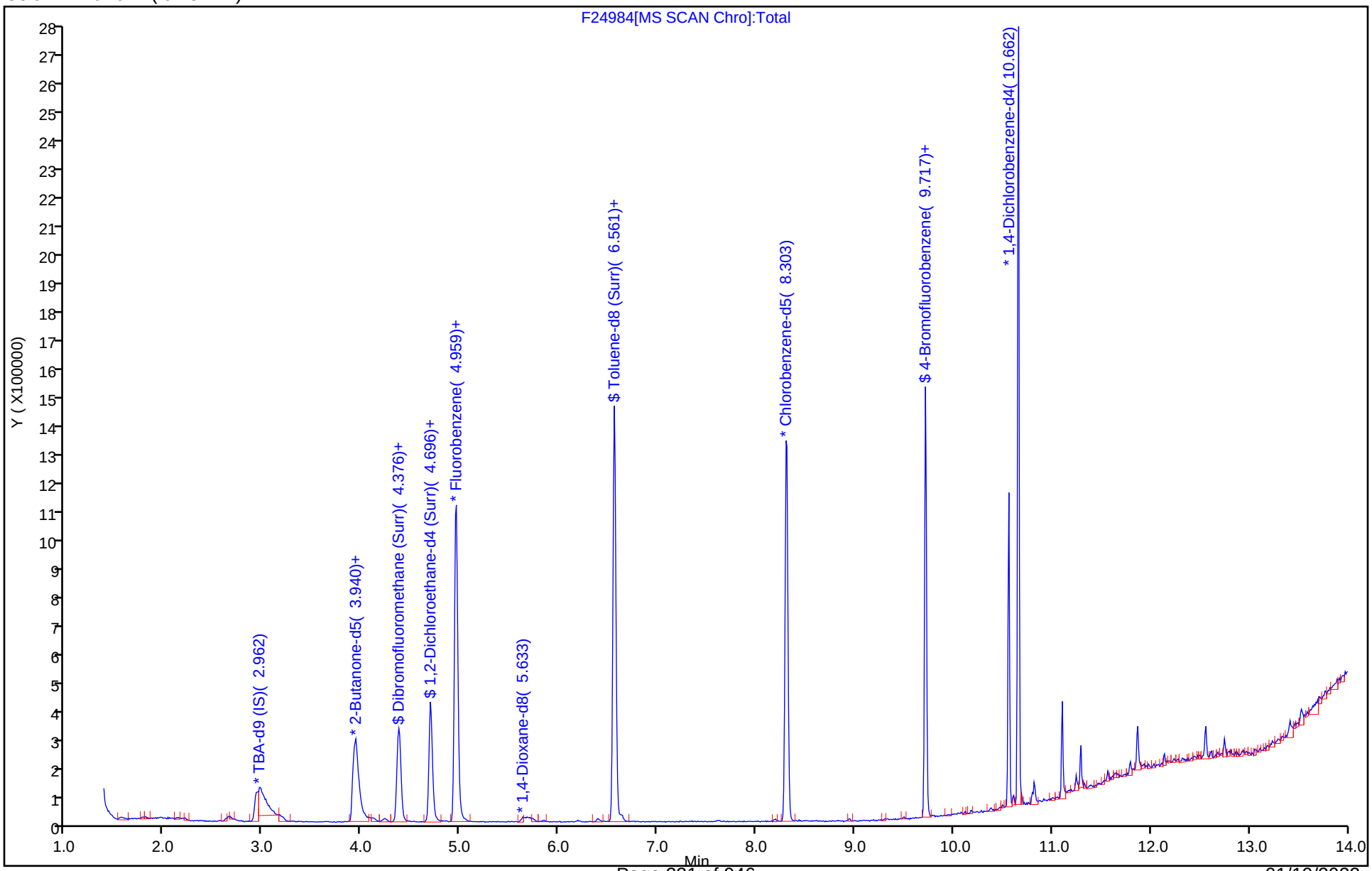
Report Date: 19-Jan-2022 10:57:23 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24984.D

Injection Date:	18-Jan-2022 14:40:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-16	Lab Sample ID:	460-250807-16	Worklist Smp#:	25
Client ID:	SL-22_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24984.D
Lims ID: 460-250807-A-16
Client ID: SL-22_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 14:40:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-16
Misc. Info.: 460-0140330-025
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.8	91.60
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.54
$ 78 Toluene-d8 (Surr)	50.0	45.9	91.74
$ 100 4-Bromofluorobenzene	50.0	51.1	102.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-20_011322 | Lab Sample ID: 460-250807-18

Matrix: Water | Lab File ID: F24985.D

Analysis Method: 8260D | Date Collected: 01/13/2022 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 15:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.85	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24985.D
Lims ID: 460-250807-A-18
Client ID: SL-20_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:02:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-18
Misc. Info.: 460-0140330-026
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.971	2.946	0.025	0	682329	1000.0	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	761207	250.0	
40 cis-1,2-Dichloroethene	96	3.965	3.974	-0.009	24	5959	0.8540	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	283704	46.1	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.697	-0.009	0	360135	45.6	
* 61 Fluorobenzene	96	4.951	4.951	0.000	40	1193427	50.0	
* 67 1,4-Dioxane-d8	96	5.633	5.691	-0.058	0	50303	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1071422	45.8	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	860470	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	316858	51.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	496008	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

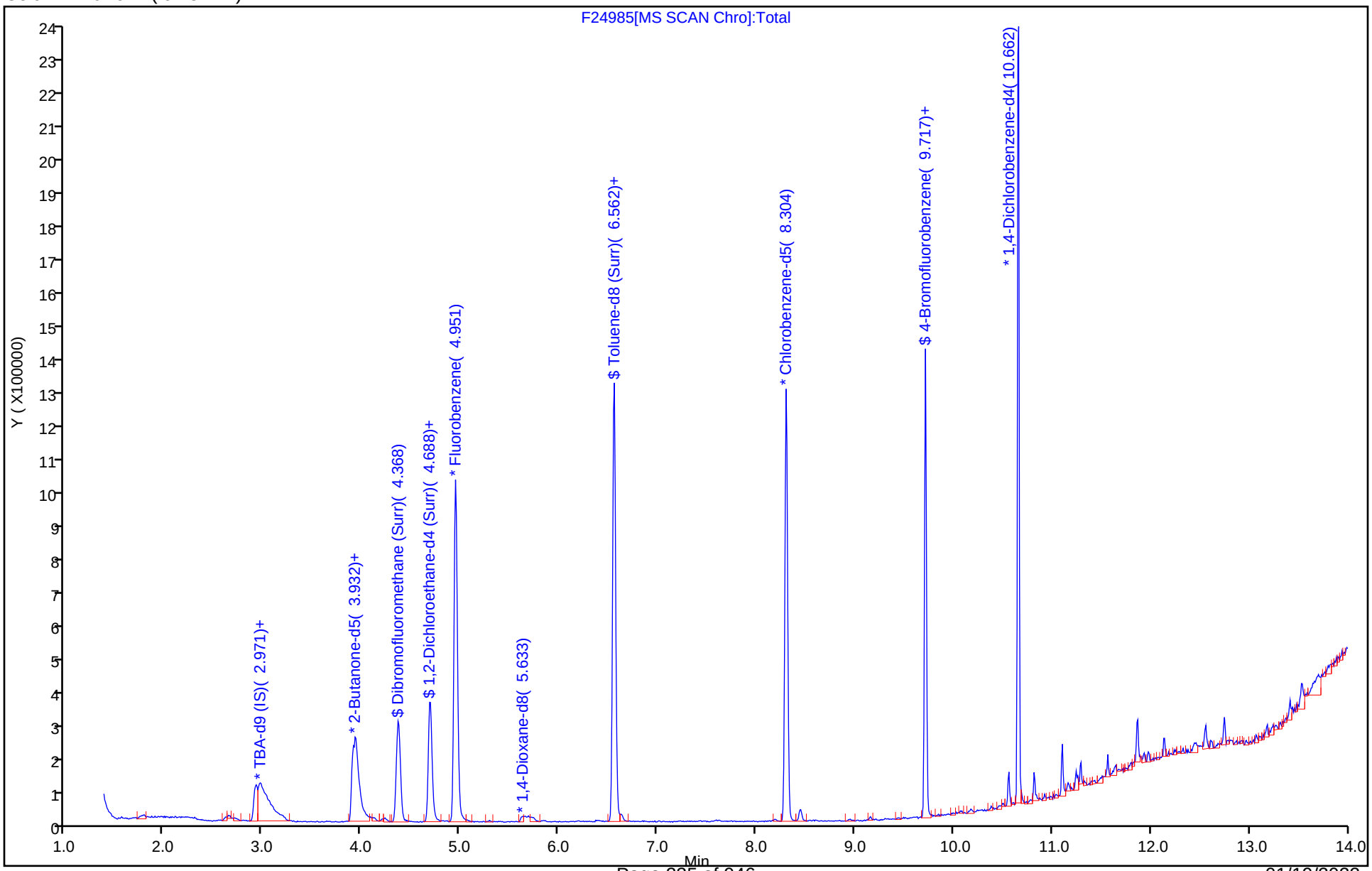
Report Date: 19-Jan-2022 10:57:33 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24985.D

Injection Date:	18-Jan-2022 15:02:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-18	Lab Sample ID:	460-250807-18	Worklist Smp#:	26
Client ID:	SL-20_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24985.D
Lims ID: 460-250807-A-18
Client ID: SL-20_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:02:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-18
Misc. Info.: 460-0140330-026
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

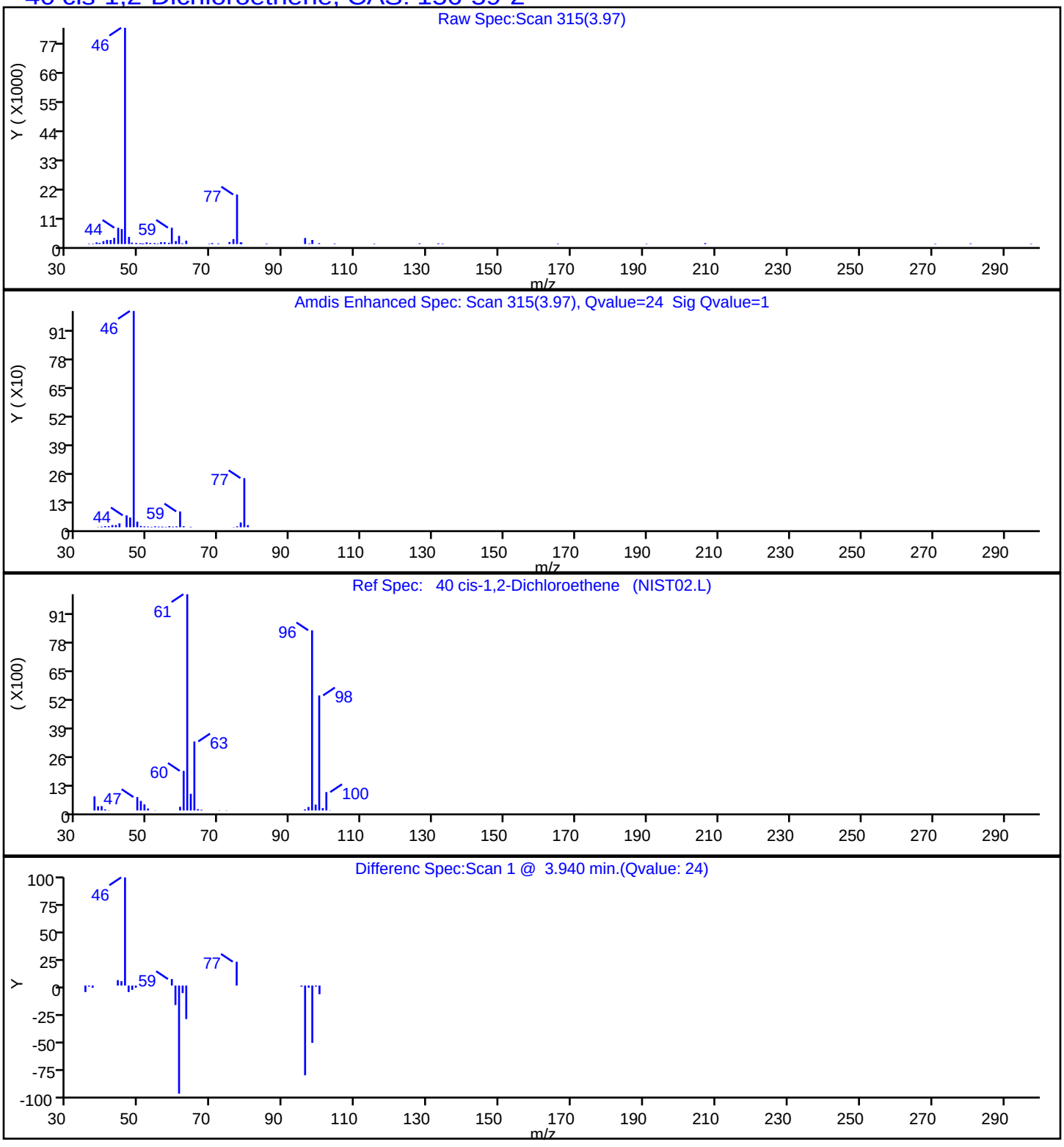
First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	46.1	92.28
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.24
$ 78 Toluene-d8 (Surr)	50.0	45.8	91.51
$ 100 4-Bromofluorobenzene	50.0	51.9	103.72

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24985.D		
Injection Date:	18-Jan-2022 15:02:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-18	Lab Sample ID:	460-250807-18
Client ID:	SL-20_011322		
Operator ID:		ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

40 cis-1,2-Dichloroethene, CAS: 156-59-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-4_011322 | Lab Sample ID: 460-250807-19

Matrix: Water | Lab File ID: F24986.D

Analysis Method: 8260D | Date Collected: 01/13/2022 14:15

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 15:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	6.3		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24986.D
Lims ID: 460-250807-A-19
Client ID: SL-4_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:24:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-19
Misc. Info.: 460-0140330-027
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	28546	3.12	
* 26 TBA-d9 (IS)	65	2.963	2.946	0.017	0	628000	1000.0	
* 38 2-Butanone-d5	46	3.940	3.924	0.016	0	750930	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	24	46453	6.28	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	297335	45.6	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	381086	45.5	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1265451	50.0	
63 Trichloroethene	95	5.296	5.288	0.008	1	2107	0.3368	
* 67 1,4-Dioxane-d8	96	5.666	5.691	-0.025	0	44609	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1133743	45.9	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	908595	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	329587	51.1	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	517116	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

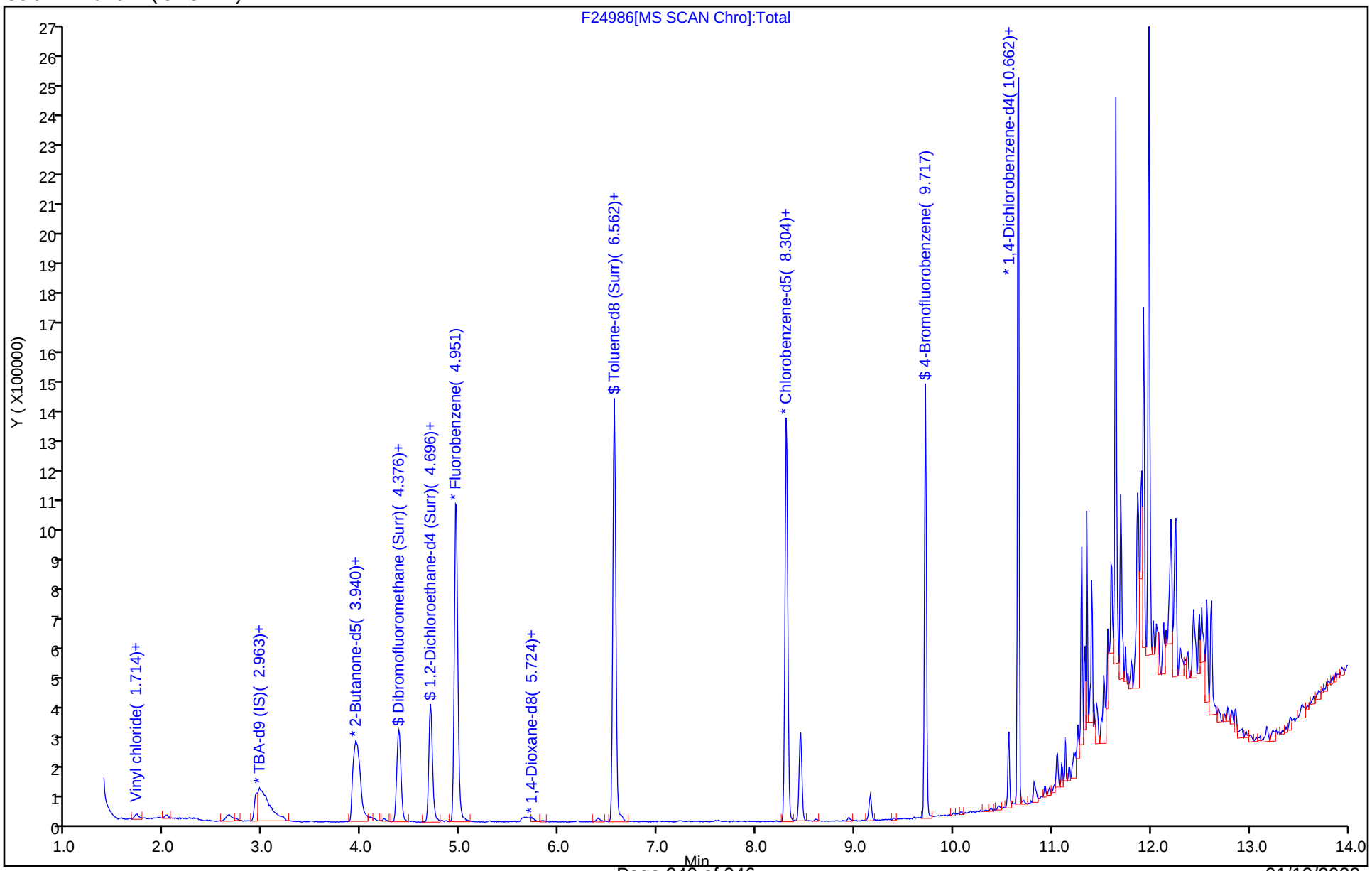
Report Date: 19-Jan-2022 10:57:43 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24986.D

Injection Date:	18-Jan-2022 15:24:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-19	Lab Sample ID:	460-250807-19	Worklist Smp#:	27
Client ID:	SL-4_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24986.D
Lims ID: 460-250807-A-19
Client ID: SL-4_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:24:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-19
Misc. Info.: 460-0140330-027
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

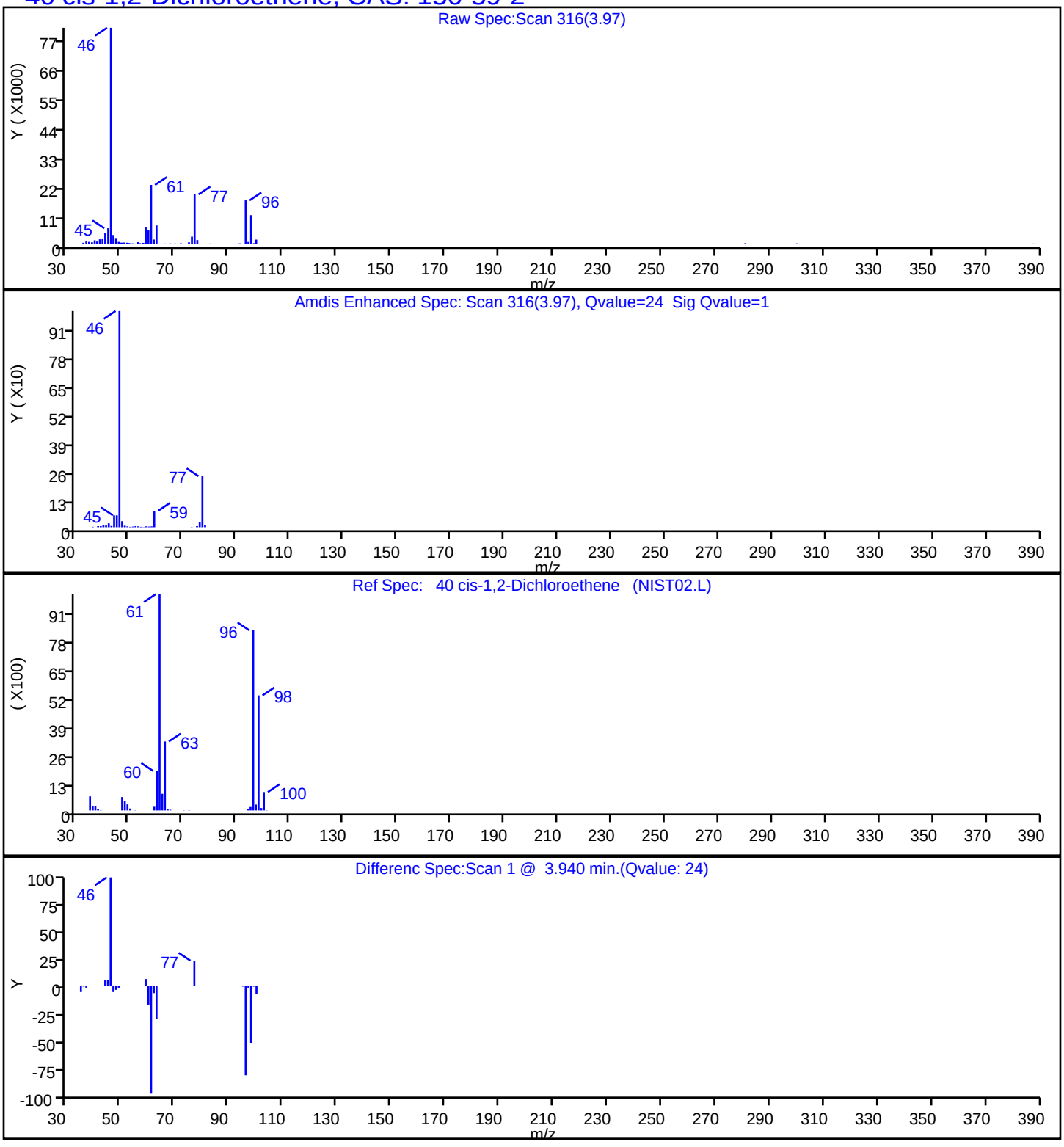
First Level Reviewer: moroneyc Date: 19-Jan-2022 06:14:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.6	91.21
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	91.05
$ 78 Toluene-d8 (Surr)	50.0	45.9	91.70
$ 100 4-Bromofluorobenzene	50.0	51.1	102.18

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24986.D
Injection Date: 18-Jan-2022 15:24:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-19 Lab Sample ID: 460-250807-19
Client ID: SL-4_011322
Operator ID: ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

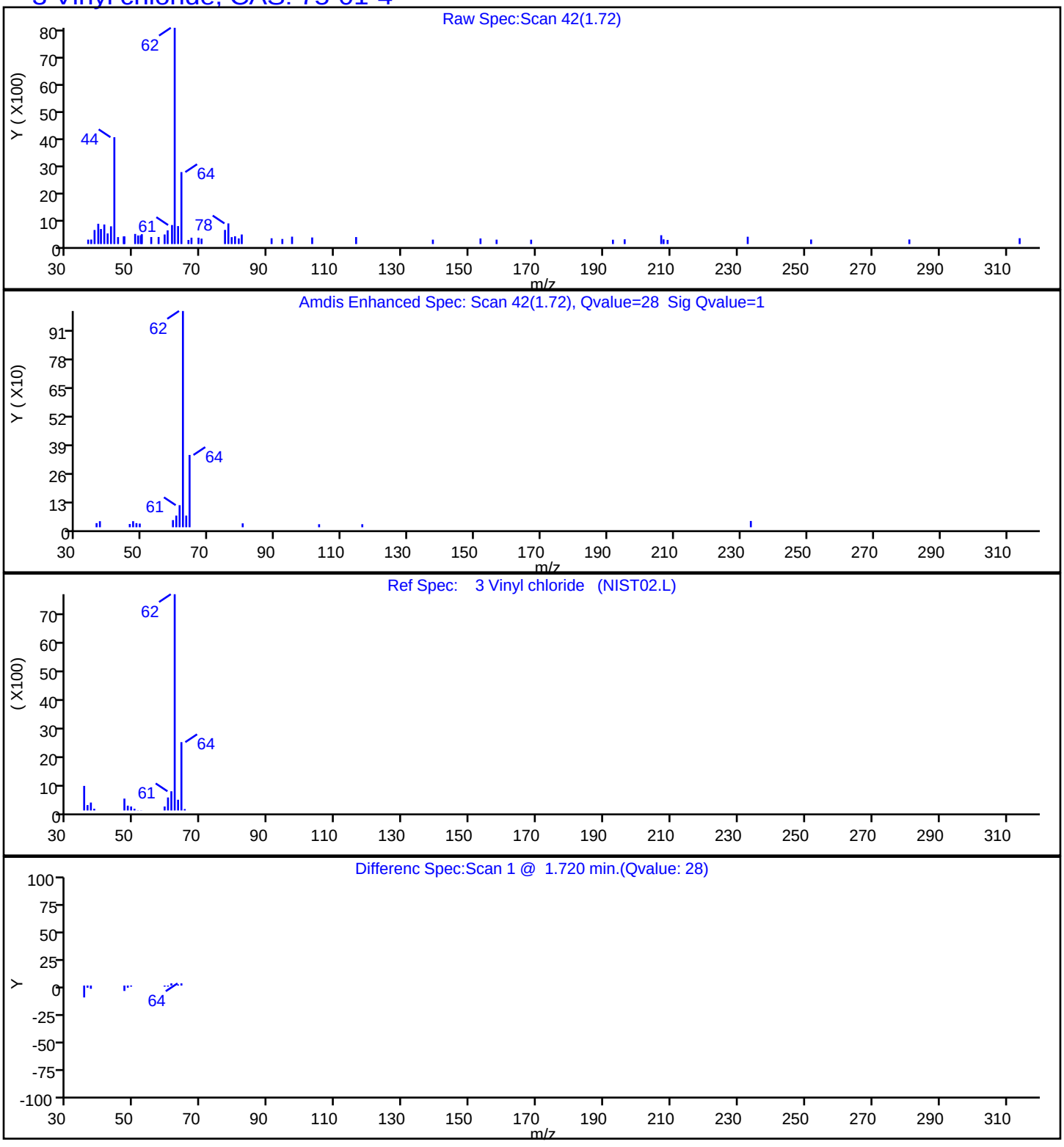
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24986.D
Injection Date: 18-Jan-2022 15:24:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-19 Lab Sample ID: 460-250807-19
Client ID: SL-4_011322
Operator ID: ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-18_011322 | Lab Sample ID: 460-250807-20

Matrix: Water | Lab File ID: F24987.D

Analysis Method: 8260D | Date Collected: 01/13/2022 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 15:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	8.0		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	5.1		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	104		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24987.D
Lims ID: 460-250807-A-20
Client ID: SL-18_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:46:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-20
Misc. Info.: 460-0140330-028
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:15:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	44736	5.15	
* 26 TBA-d9 (IS)	65	2.963	2.946	0.017	0	646847	1000.0	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	821943	250.0	
40 cis-1,2-Dichloroethene	96	3.974	3.974	0.000	24	56311	8.01	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	277310	44.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	362276	45.6	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1202006	50.0	
63 Trichloroethene	95	5.305	5.288	0.017	1	1893	0.3186	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	41663	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1080789	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	861128	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	317028	51.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	503547	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

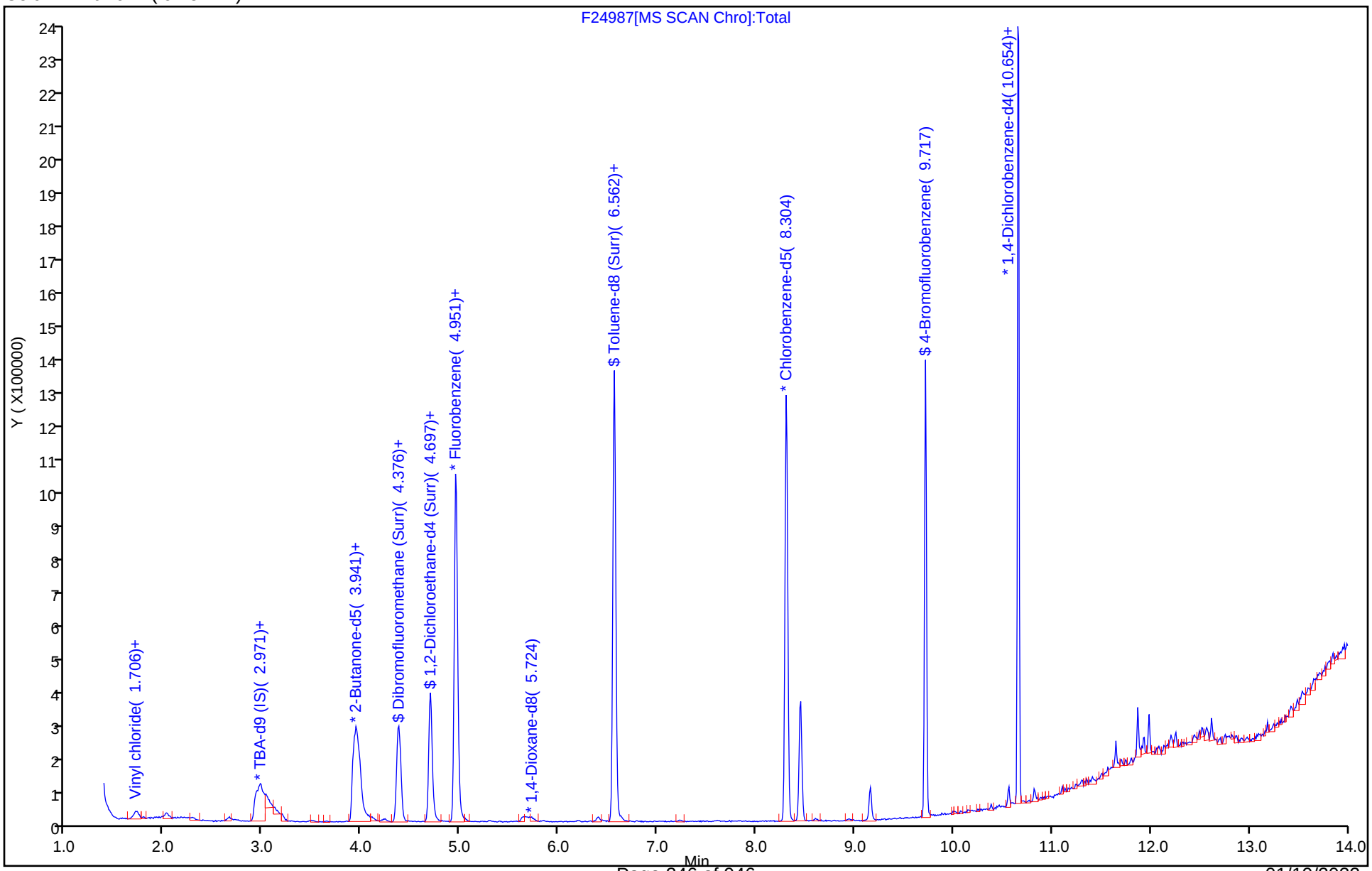
Report Date: 19-Jan-2022 10:57:53 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24987.D

Injection Date:	18-Jan-2022 15:46:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-20	Lab Sample ID:	460-250807-20	Worklist Smp#:	28
Client ID:	SL-18_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24987.D
Lims ID: 460-250807-A-20
Client ID: SL-18_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 15:46:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-20
Misc. Info.: 460-0140330-028
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 06:15:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.8	89.56
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.13
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.24
$ 100 4-Bromofluorobenzene	50.0	51.9	103.70

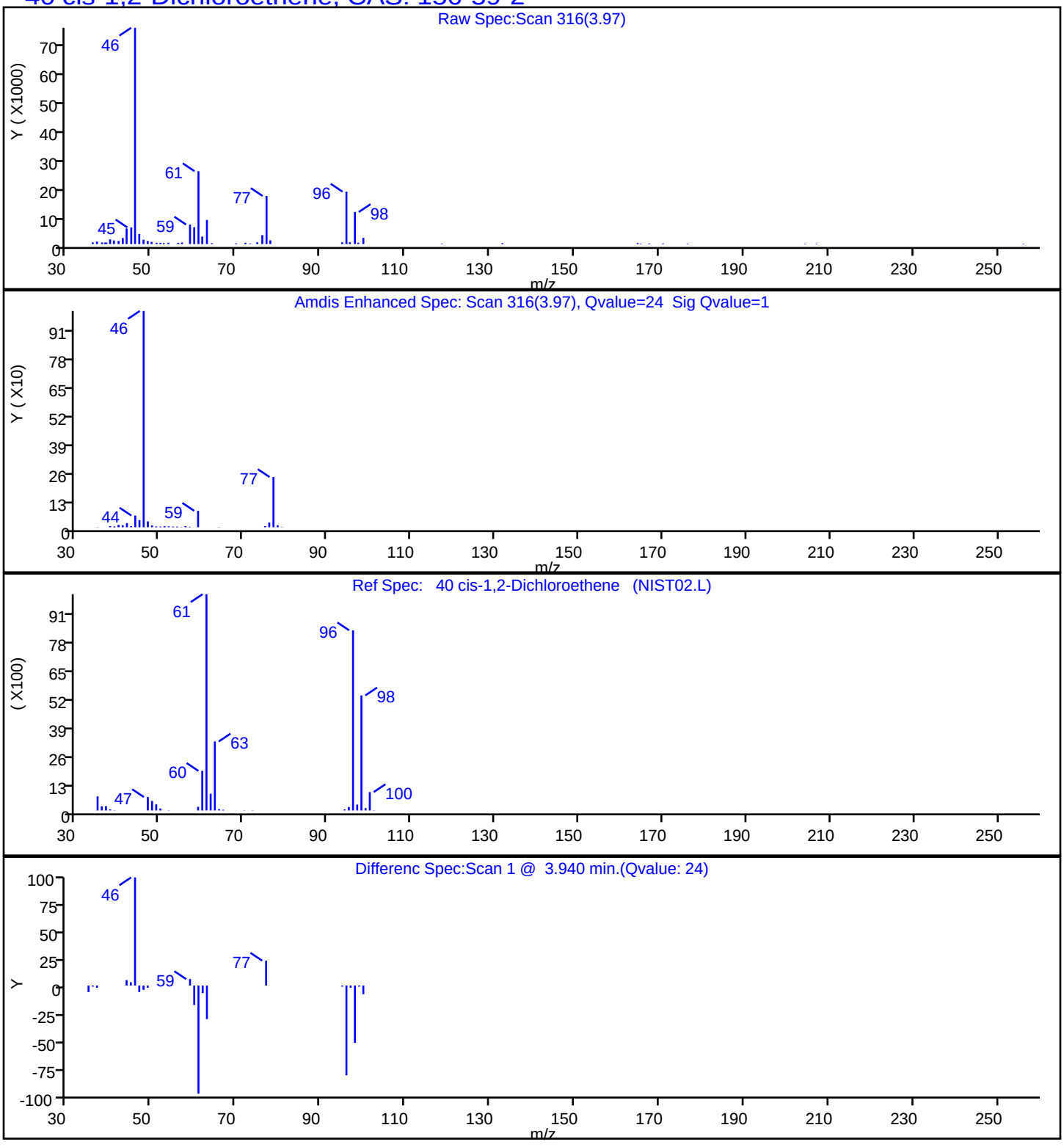
Report Date: 19-Jan-2022 10:57:53 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24987.D

Injection Date:	18-Jan-2022 15:46:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-20	Lab Sample ID:	460-250807-20		
Client ID:	SL-18_011322				
Operator ID:		ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

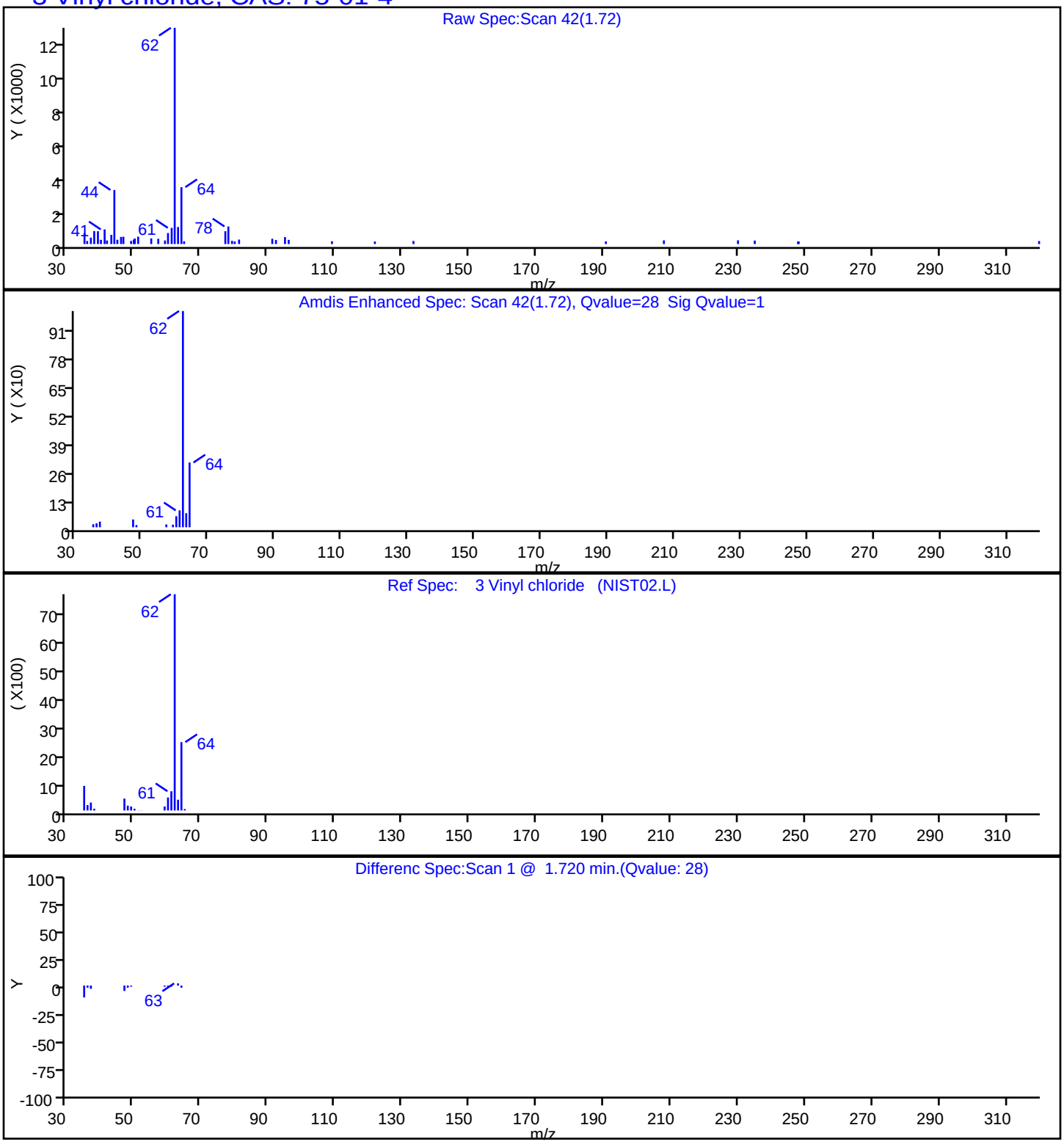
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24987.D
Injection Date: 18-Jan-2022 15:46:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-20 Lab Sample ID: 460-250807-20
Client ID: SL-18_011322
Operator ID: ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-21

Matrix: Water | Lab File ID: F24970.D

Analysis Method: 8260D | Date Collected: 01/13/2022 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 09:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	100		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24970.D
Lims ID: 460-250807-A-21
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 09:35:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-21
Misc. Info.: 460-0140330-011
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:52:29 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:00:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.971	2.946	0.025	0	708703	1000.0	
* 38 2-Butanone-d5	46	3.916	3.924	-0.008	0	881468	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	307925	44.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.697	-0.009	0	390779	44.3	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1332220	50.0	
* 67 1,4-Dioxane-d8	96	5.682	5.691	-0.009	0	57542	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1194189	46.0	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	953717	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	339896	50.2	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	553738	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

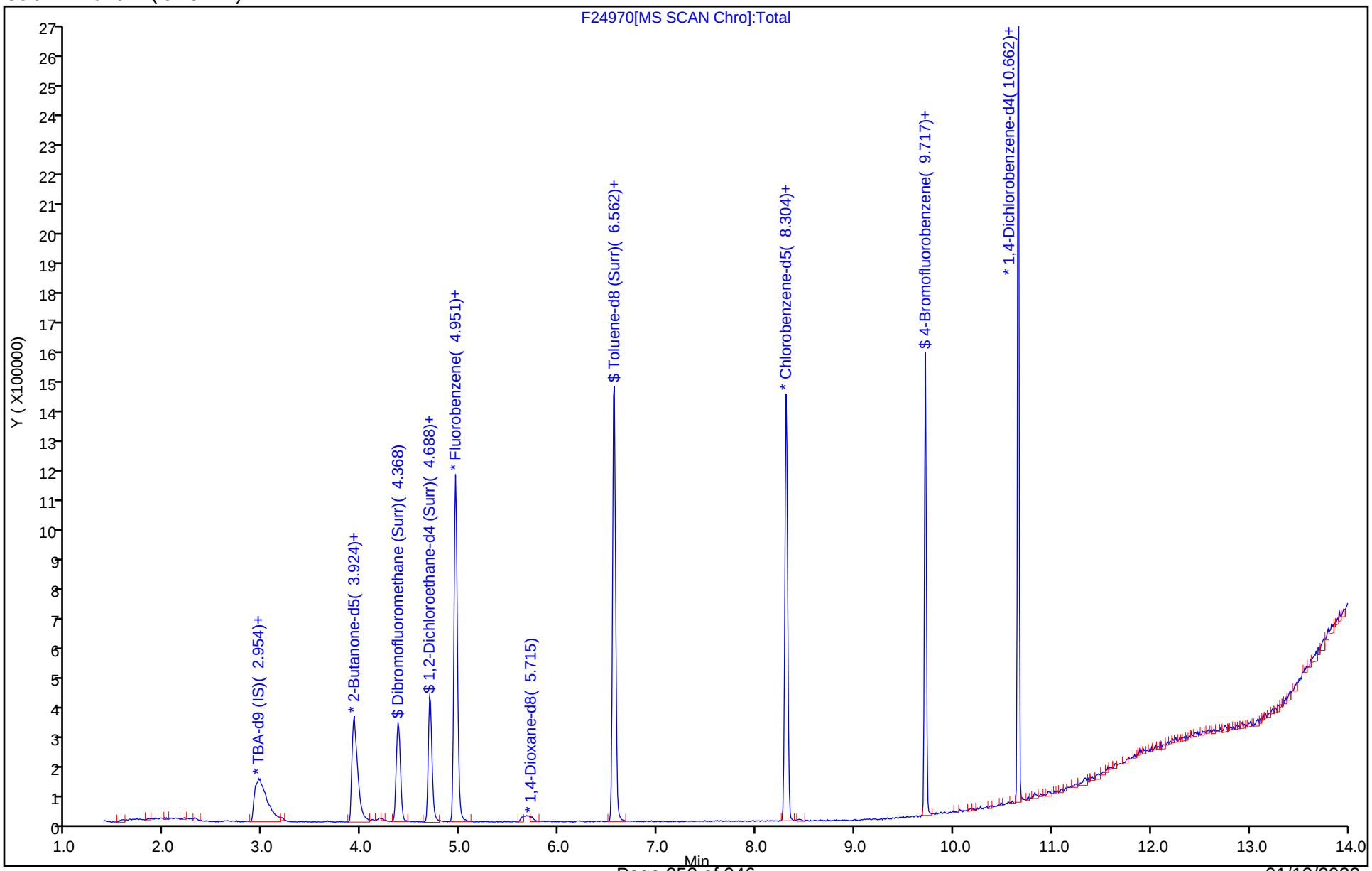
Report Date: 18-Jan-2022 10:00:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24970.D

Injection Date:	18-Jan-2022 09:35:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-21	Lab Sample ID:	460-250807-21	Worklist Smp#:	11
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24970.D
Lims ID: 460-250807-A-21
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Jan-2022 09:35:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-21
Misc. Info.: 460-0140330-011
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 07:52:29 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 10:00:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.9	89.72
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.3	88.69
$ 78 Toluene-d8 (Surr)	50.0	46.0	92.02
$ 100 4-Bromofluorobenzene	50.0	50.2	100.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-17_011322 | Lab Sample ID: 460-250807-22

Matrix: Water | Lab File ID: F24997.D

Analysis Method: 8260D | Date Collected: 01/13/2022 15:10

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 08:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	6.2		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	3.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24997.D
Lims ID: 460-250807-A-22
Client ID: SL-17_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 08:45:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-22
Misc. Info.: 460-0140380-009
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 09:01:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	34765	3.78	
* 26 TBA-d9 (IS)	65	2.971	2.938	0.033	0	608801	1000.0	
* 38 2-Butanone-d5	46	3.916	3.916	0.000	0	839443	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.965	0.008	24	46071	6.20	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	293300	44.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	386611	46.0	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1270596	50.0	
* 67 1,4-Dioxane-d8	96	5.641	5.699	-0.058	0	40181	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1142007	46.2	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	907634	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	338860	52.6	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	534619	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

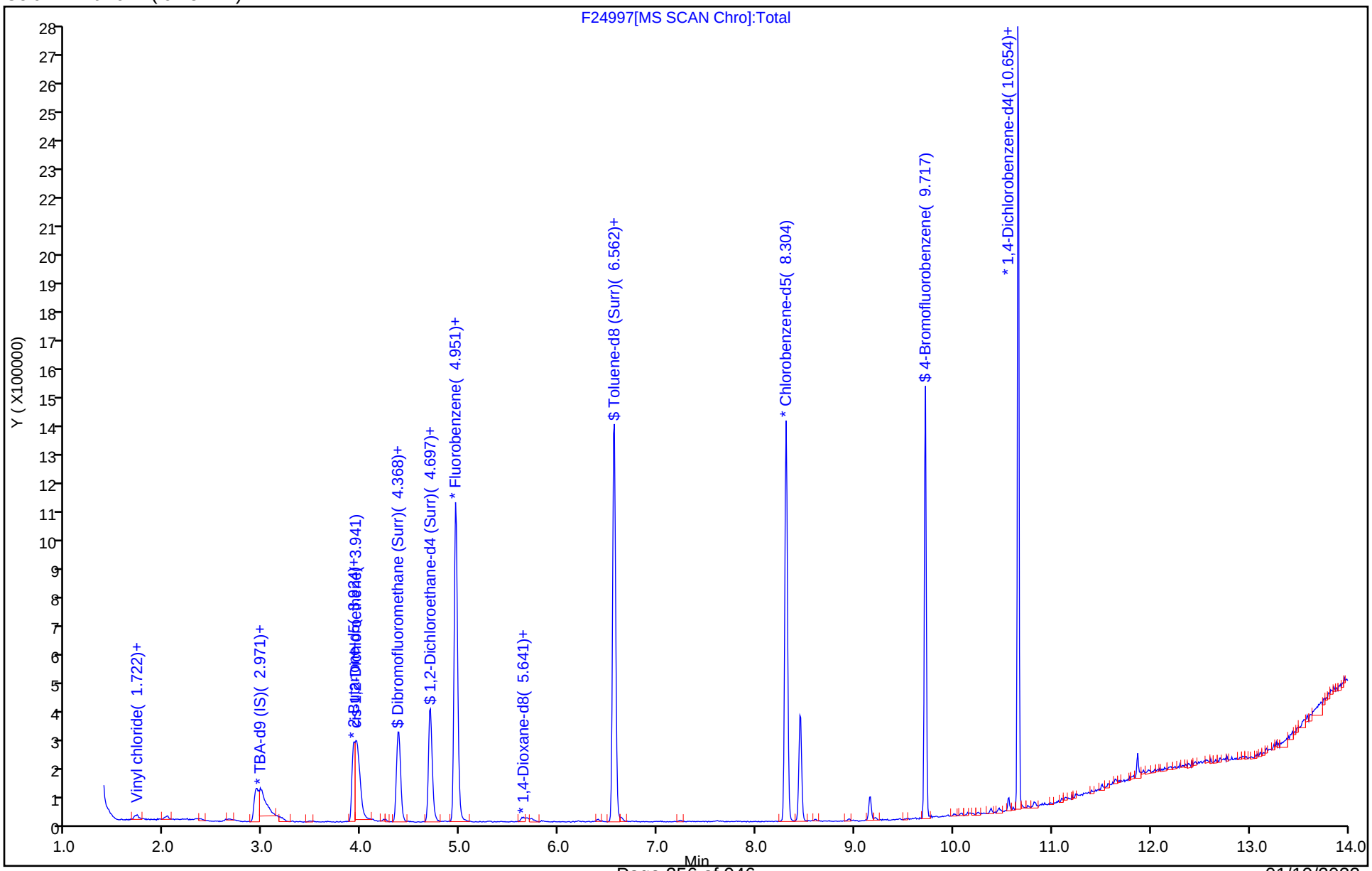
Report Date: 19-Jan-2022 11:28:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24997.D

Injection Date:	19-Jan-2022 08:45:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-22	Lab Sample ID:	460-250807-22	Worklist Smp#:	9
Client ID:	SL-17_011322				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24997.D
Lims ID: 460-250807-A-22
Client ID: SL-17_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 08:45:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-22
Misc. Info.: 460-0140380-009
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

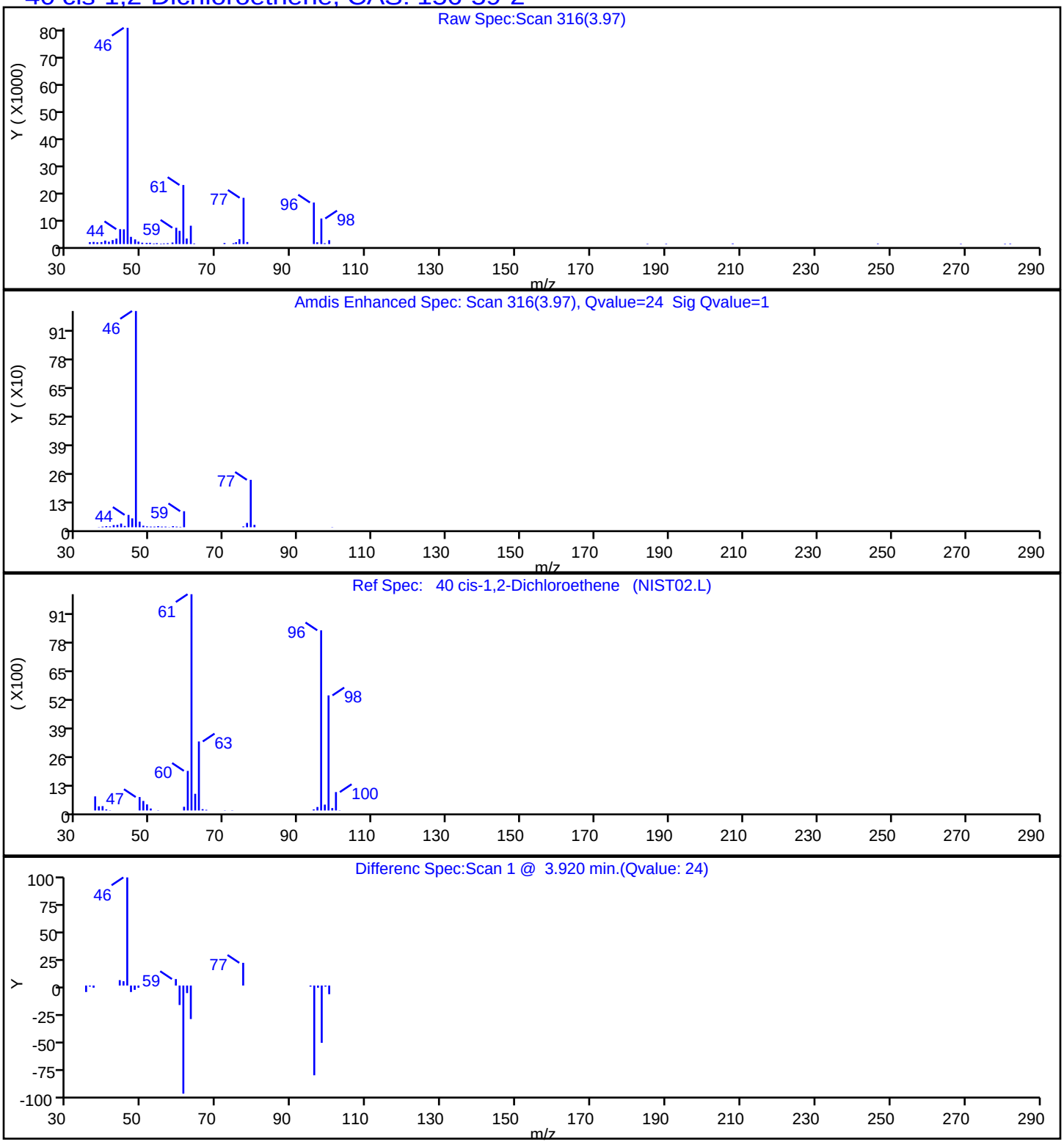
First Level Reviewer: moroneyc Date: 19-Jan-2022 09:01:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.8	89.61
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.0	92.00
$ 78 Toluene-d8 (Surr)	50.0	46.2	92.47
$ 100 4-Bromofluorobenzene	50.0	52.6	105.16

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24997.D				
Injection Date:	19-Jan-2022 08:45:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-22	Lab Sample ID:	460-250807-22		
Client ID:	SL-17_011322				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

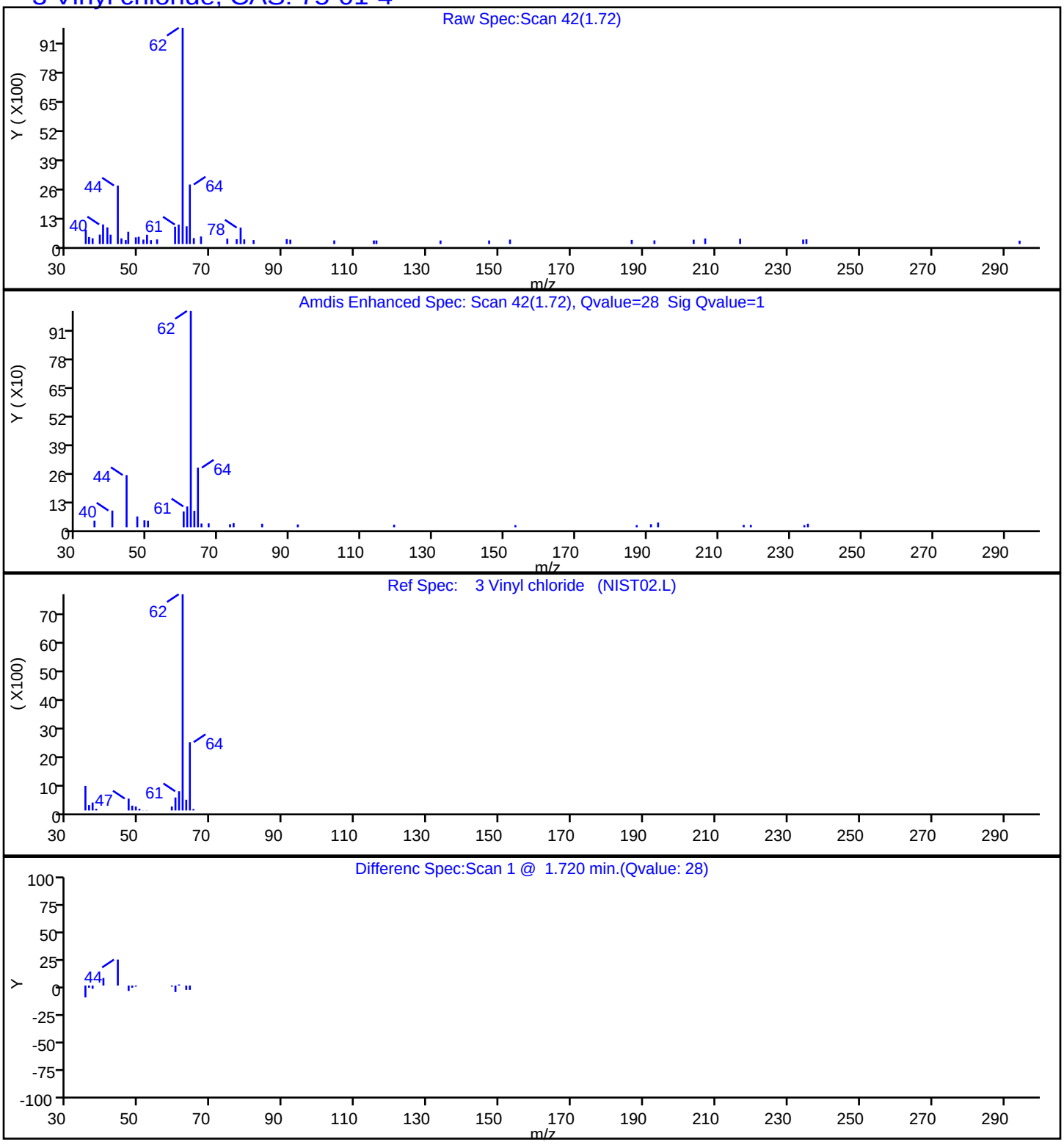
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24997.D
Injection Date: 19-Jan-2022 08:45:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-22 Lab Sample ID: 460-250807-22
Client ID: SL-17_011322
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-21_011422 | Lab Sample ID: 460-250807-23

Matrix: Water | Lab File ID: F24998.D

Analysis Method: 8260D | Date Collected: 01/14/2022 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 09:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	0.73	J	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-123
1868-53-7	Dibromofluoromethane (Surr)	92		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	106		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24998.D
Lims ID: 460-250807-A-23
Client ID: SL-21_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:07:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-23
Misc. Info.: 460-0140380-010
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 09:22:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.697	1.714	-0.017	27	6945	0.7291	
* 26 TBA-d9 (IS)	65	2.979	2.938	0.041	0	852231	1000.0	
* 38 2-Butanone-d5	46	3.908	3.916	-0.008	0	918206	250.0	
40 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	24	10706	1.39	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	311105	45.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.688	0.000	0	403133	46.3	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1317397	50.0	
* 67 1,4-Dioxane-d8	96	5.650	5.699	-0.049	0	59263	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.553	6.553	0.000	36	1171747	46.0	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	936939	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	352814	53.0	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	559615	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

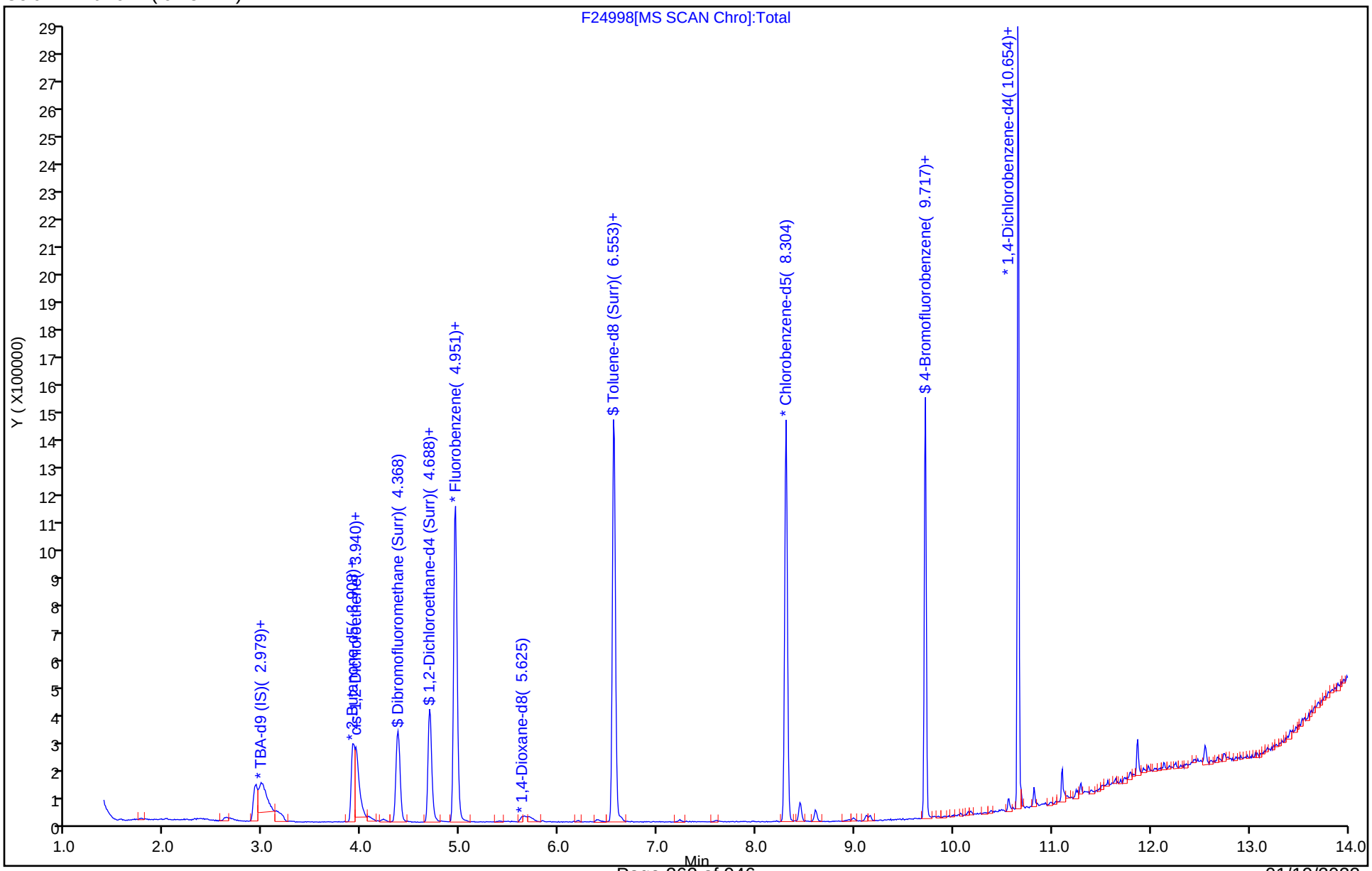
Report Date: 19-Jan-2022 11:28:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24998.D

Injection Date:	19-Jan-2022 09:07:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-23	Lab Sample ID:	460-250807-23	Worklist Smp#:	10
Client ID:	SL-21_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24998.D
Lims ID: 460-250807-A-23
Client ID: SL-21_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:07:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-23
Misc. Info.: 460-0140380-010
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

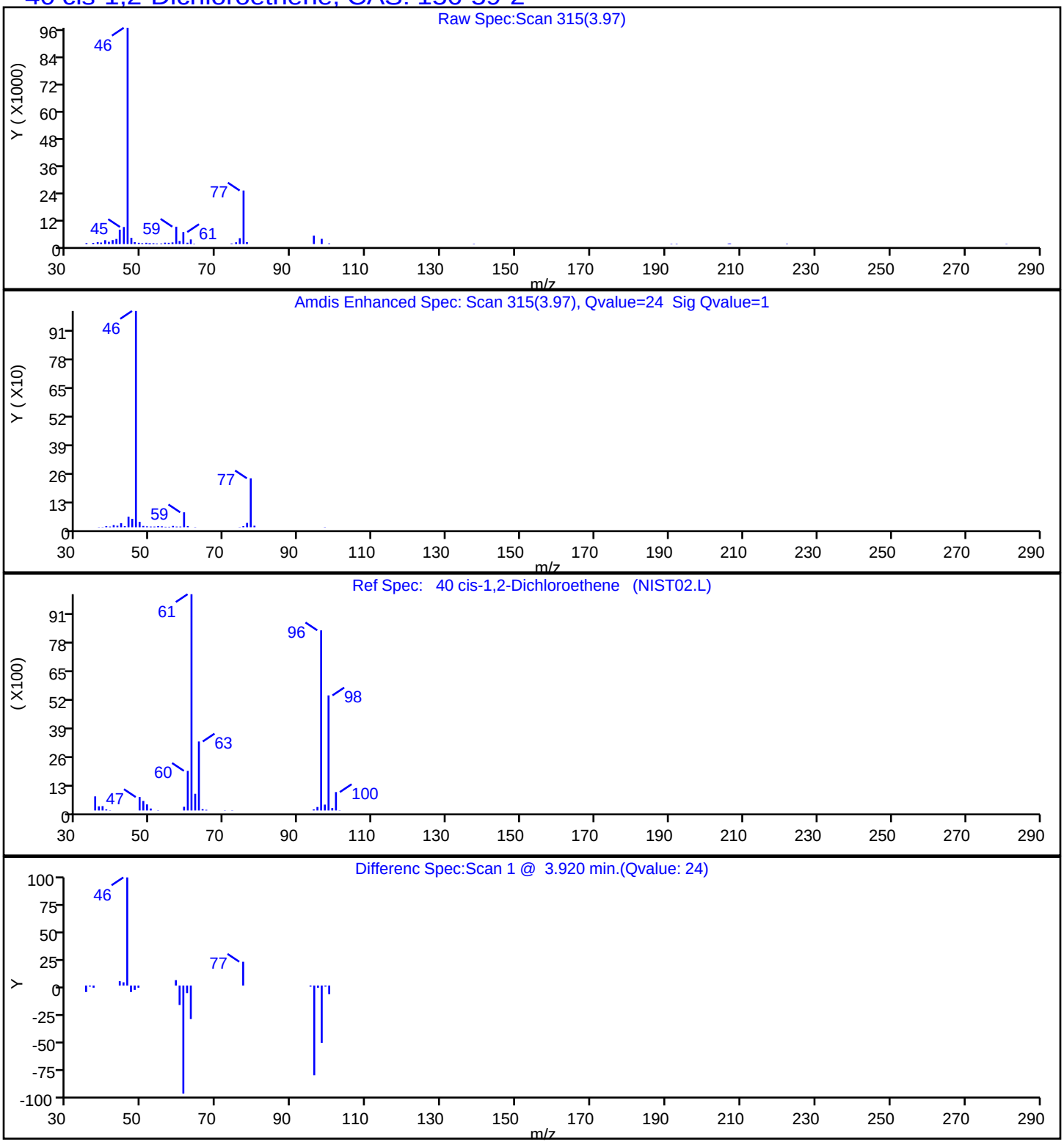
First Level Reviewer: moroneyc Date: 19-Jan-2022 09:22:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.8	91.67
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.3	92.52
$ 78 Toluene-d8 (Surr)	50.0	46.0	91.91
$ 100 4-Bromofluorobenzene	50.0	53.0	106.07

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24998.D				
Injection Date:	19-Jan-2022 09:07:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-23	Lab Sample ID:	460-250807-23		
Client ID:	SL-21_011422				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

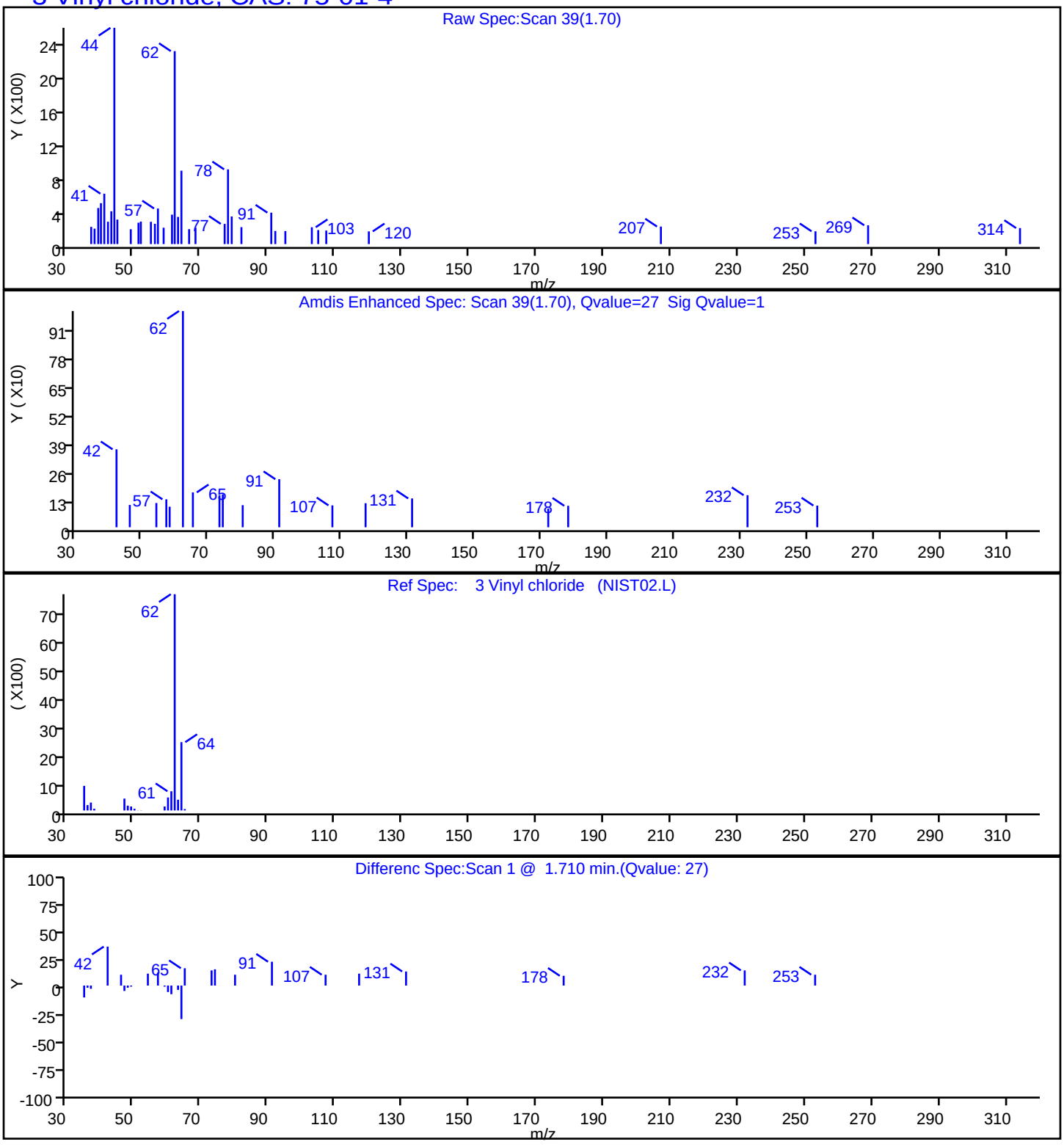
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24998.D
Injection Date: 19-Jan-2022 09:07:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-23 Lab Sample ID: 460-250807-23
Client ID: SL-21_011422
Operator ID: ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-16_011422 | Lab Sample ID: 460-250807-24

Matrix: Water | Lab File ID: F24999.D

Analysis Method: 8260D | Date Collected: 01/14/2022 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 09:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	8.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	4.9		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		75-123
1868-53-7	Dibromofluoromethane (Surr)	89		77-124
2037-26-5	Toluene-d8 (Surr)	90		80-120
460-00-4	4-Bromofluorobenzene	103		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24999.D
Lims ID: 460-250807-A-24
Client ID: SL-16_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:28:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-24
Misc. Info.: 460-0140380-011
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 09:43:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	45688	4.94	
* 26 TBA-d9 (IS)	65	2.979	2.938	0.041	0	645557	1000.0	
* 38 2-Butanone-d5	46	3.941	3.916	0.025	0	823558	250.0	
40 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	25	60622	8.10	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	293506	44.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	396249	46.8	
* 61 Fluorobenzene	96	4.951	4.951	0.000	40	1279579	50.0	
* 67 1,4-Dioxane-d8	96	5.658	5.699	-0.041	0	50105	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1135854	45.2	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	923846	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	337788	51.5	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	530585	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

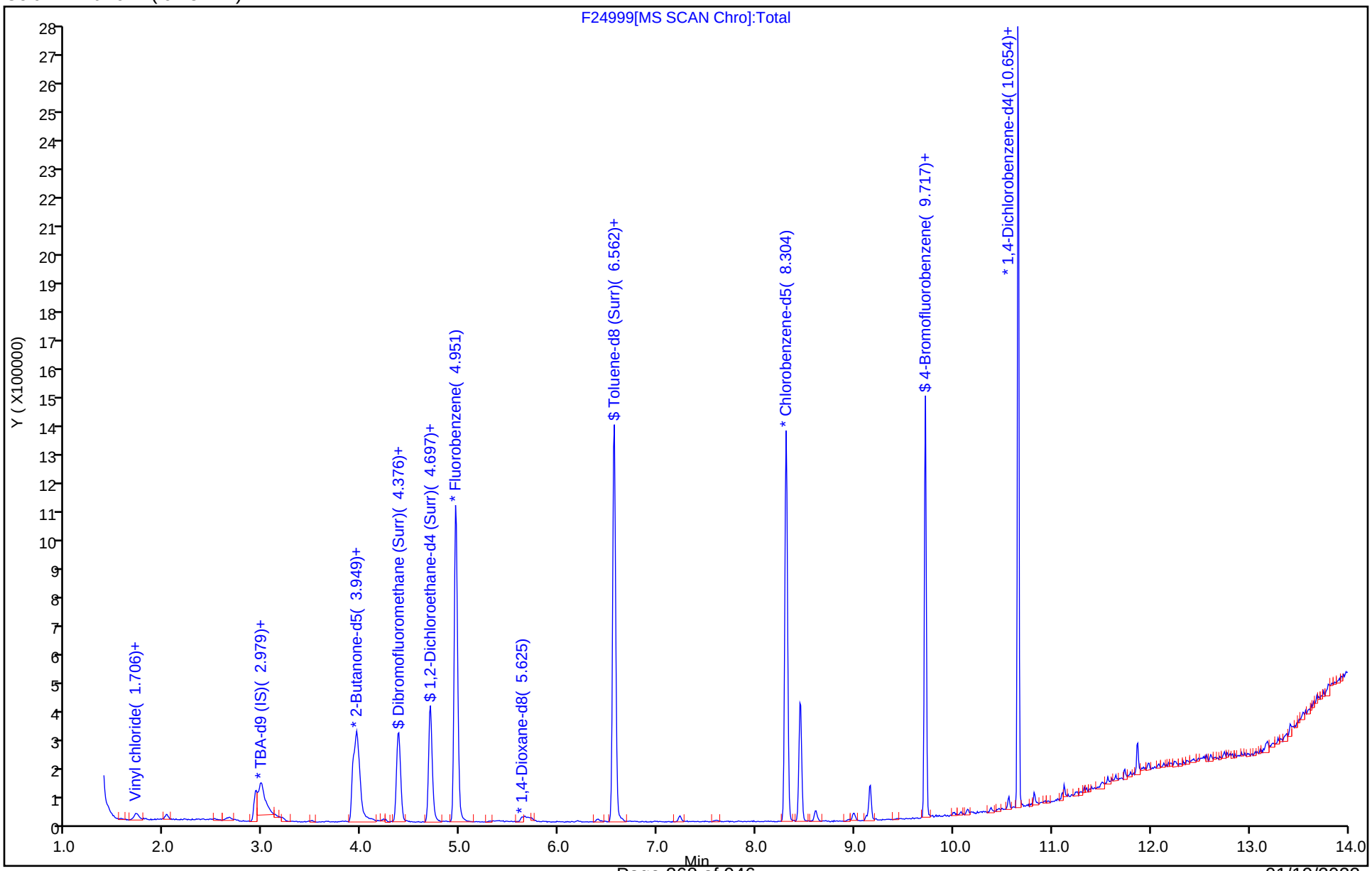
Report Date: 19-Jan-2022 11:28:22 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24999.D

Injection Date:	19-Jan-2022 09:28:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-24	Lab Sample ID:	460-250807-24	Worklist Smp#:	11
Client ID:	SL-16_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24999.D
Lims ID: 460-250807-A-24
Client ID: SL-16_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:28:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-24
Misc. Info.: 460-0140380-011
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

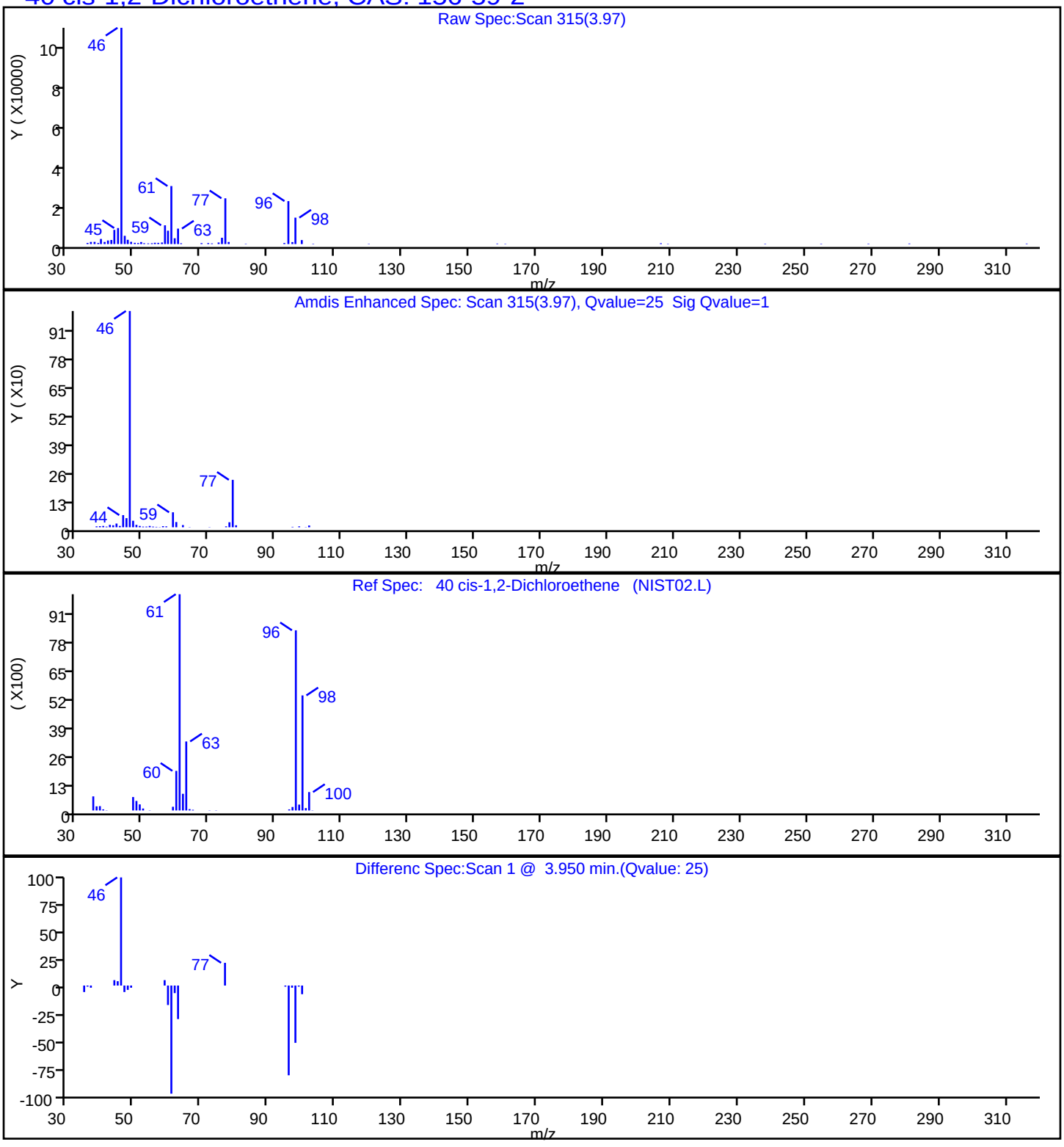
First Level Reviewer: moroneyc Date: 19-Jan-2022 09:43:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.5	89.04
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.8	93.63
$ 78 Toluene-d8 (Surr)	50.0	45.2	90.36
$ 100 4-Bromofluorobenzene	50.0	51.5	102.99

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24999.D
Injection Date: 19-Jan-2022 09:28:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-24 Lab Sample ID: 460-250807-24
Client ID: SL-16_011422
Operator ID: ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

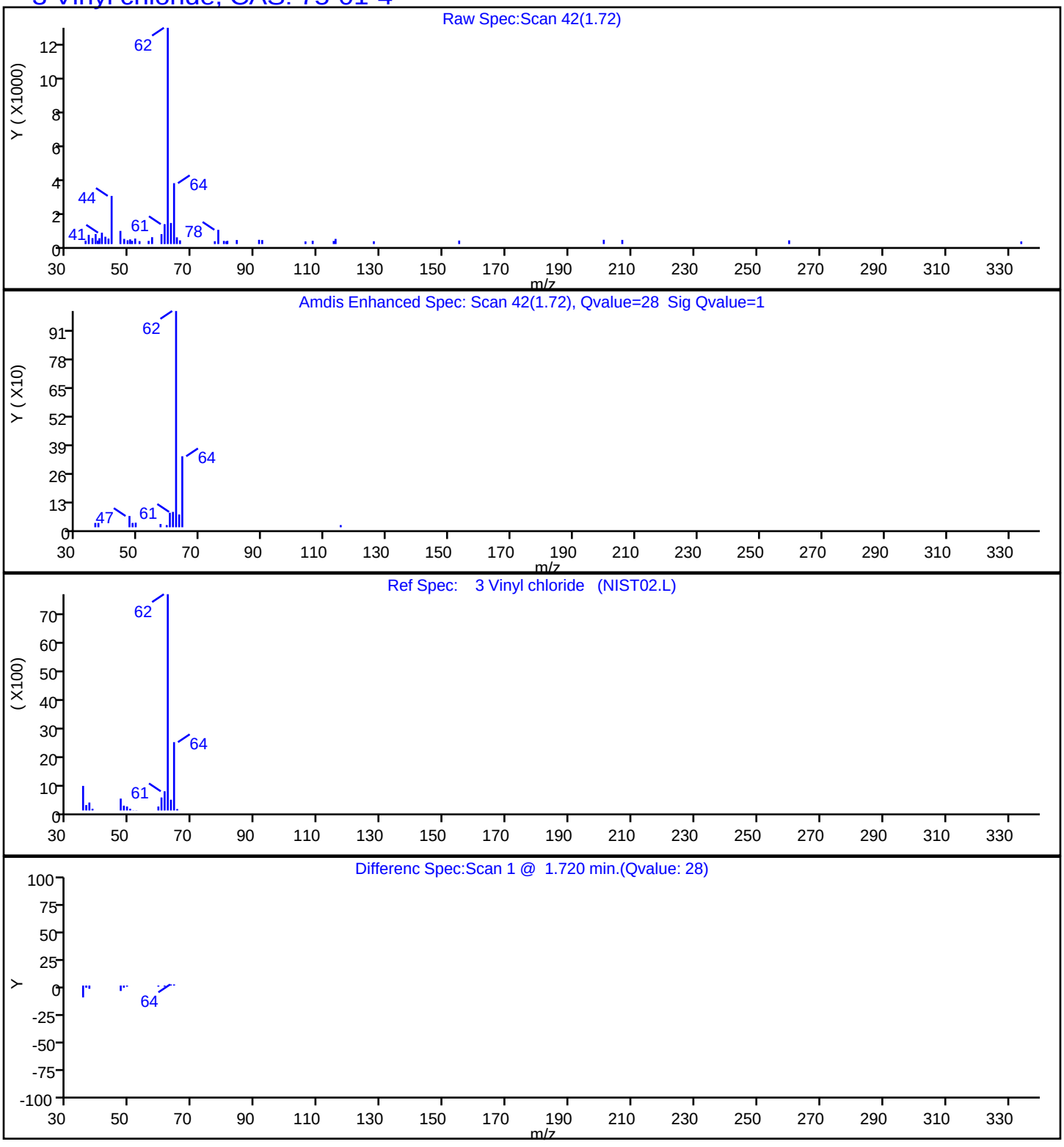
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24999.D				
Injection Date:	19-Jan-2022 09:28:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-24	Lab Sample ID:	460-250807-24		
Client ID:	SL-16_011422				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-3_011422 | Lab Sample ID: 460-250807-25

Matrix: Water | Lab File ID: F25000.D

Analysis Method: 8260D | Date Collected: 01/14/2022 10:25

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 09:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	0.93	J	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	2.5		1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	105		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D
Lims ID: 460-250807-A-25
Client ID: SL-3_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:50:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-25
Misc. Info.: 460-0140380-012
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 10:06:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.930	2.938	-0.008	0	613578	1000.0	
* 38 2-Butanone-d5	46	3.916	3.916	0.000	0	774149	250.0	M
40 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	24	6709	0.9285	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	31	287678	45.2	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	374310	45.8	
* 61 Fluorobenzene	96	4.951	4.951	0.000	40	1235843	50.0	
63 Trichloroethene	95	5.296	5.288	0.008	42	15258	2.50	
* 67 1,4-Dioxane-d8	96	5.650	5.699	-0.049	0	44025	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	37	1082119	45.9	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	866355	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	324421	52.7	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	515685	50.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

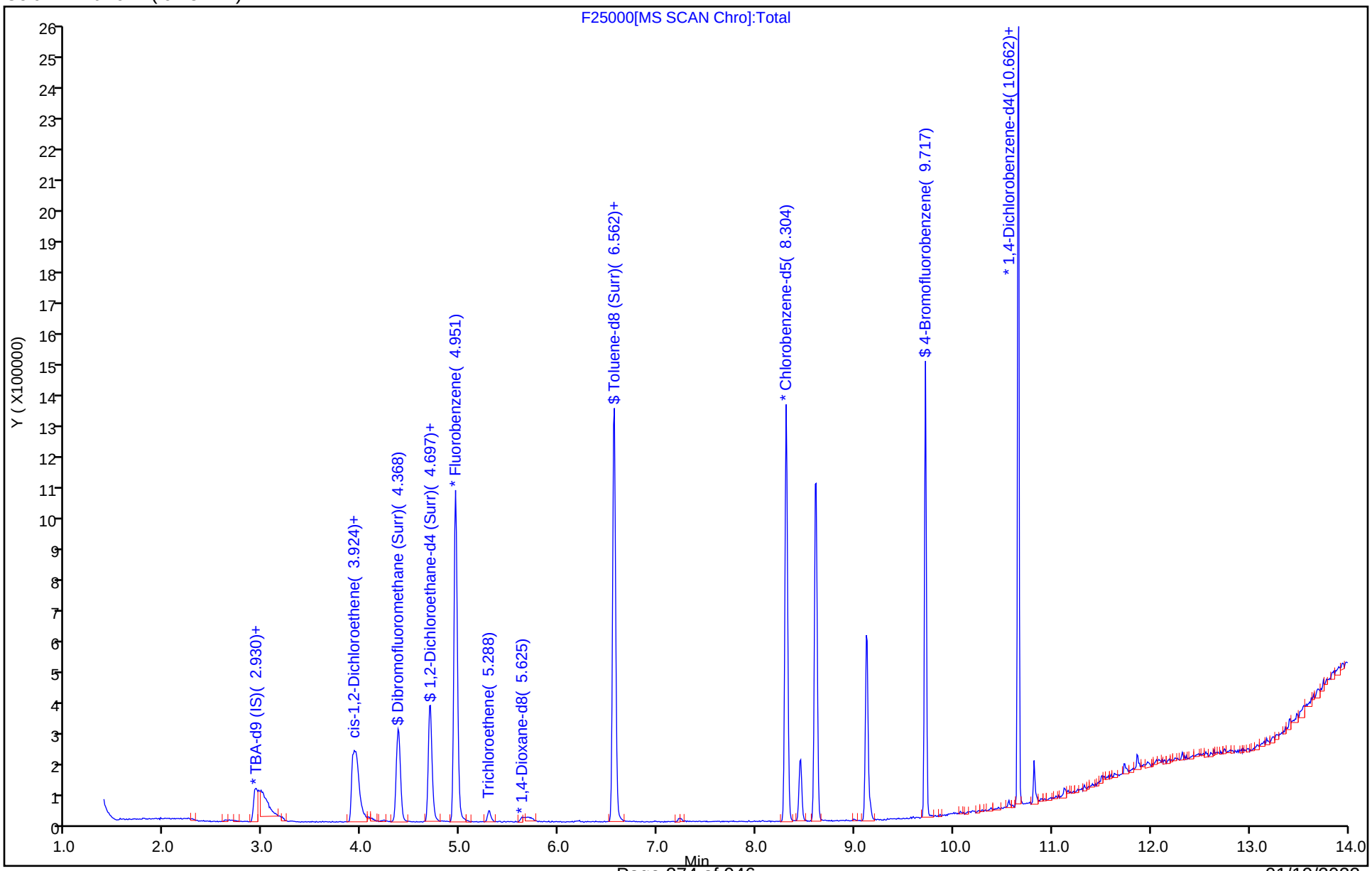
Report Date: 19-Jan-2022 11:28:31 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D

Injection Date:	19-Jan-2022 09:50:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-25	Lab Sample ID:	460-250807-25	Worklist Smp#:	12
Client ID:	SL-3_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D
Lims ID: 460-250807-A-25
Client ID: SL-3_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 09:50:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-25
Misc. Info.: 460-0140380-012
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

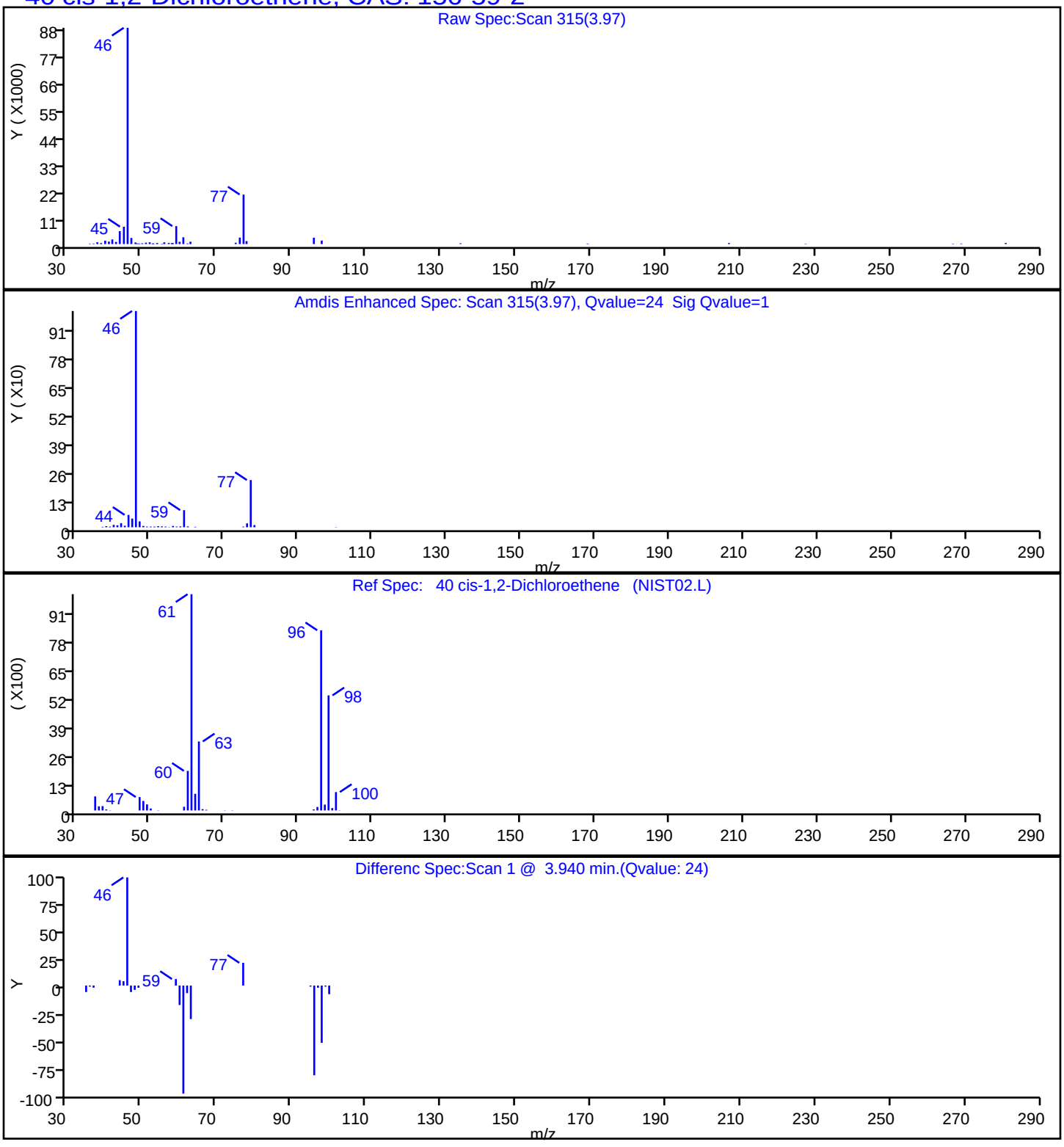
First Level Reviewer: moroneyc Date: 19-Jan-2022 10:06:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.2	90.36
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	45.8	91.58
$ 78 Toluene-d8 (Surr)	50.0	45.9	91.79
$ 100 4-Bromofluorobenzene	50.0	52.7	105.48

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D				
Injection Date:	19-Jan-2022 09:50:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-25	Lab Sample ID:	460-250807-25		
Client ID:	SL-3_011422				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

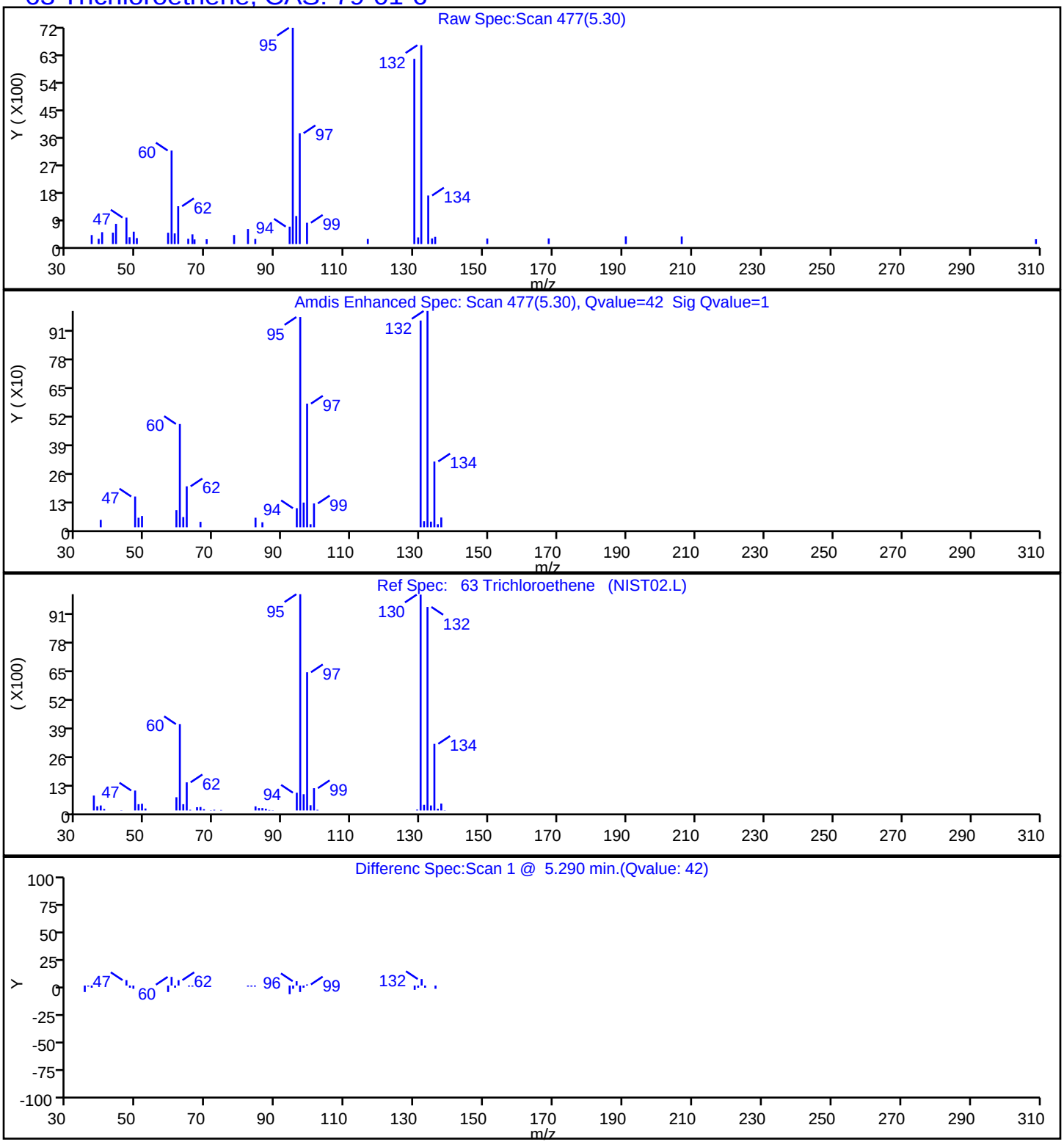
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D		
Injection Date:	19-Jan-2022 09:50:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-25	Lab Sample ID:	460-250807-25
Client ID:	SL-3_011422		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

63 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Edison

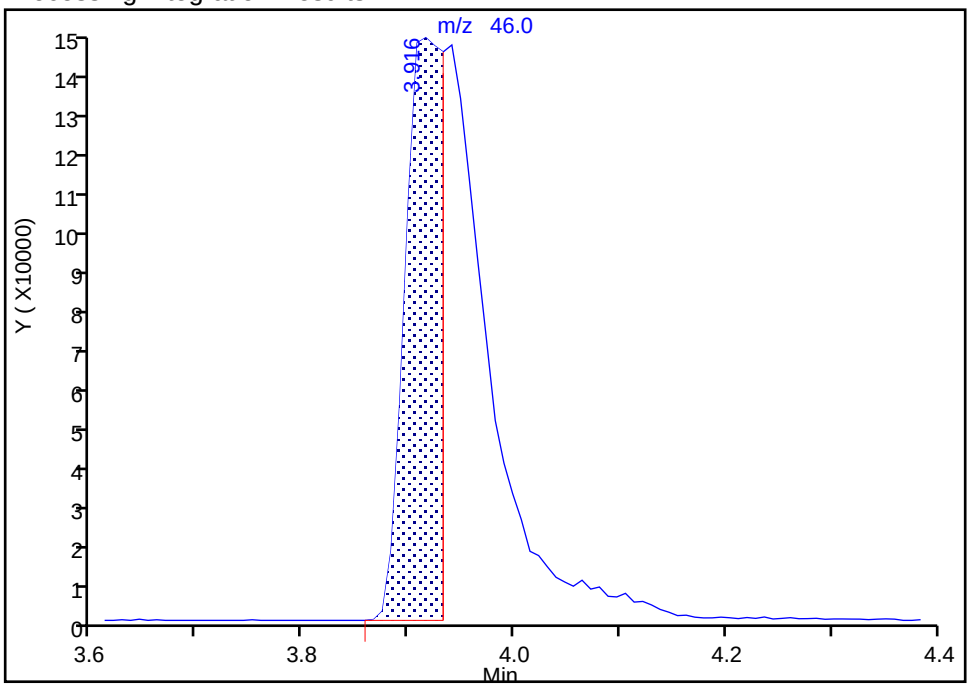
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25000.D				
Injection Date:	19-Jan-2022 09:50:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-25	Lab Sample ID:	460-250807-25		
Client ID:	SL-3_011422				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

* 38 2-Butanone-d5, CAS: 24313-50-6

Signal: 1

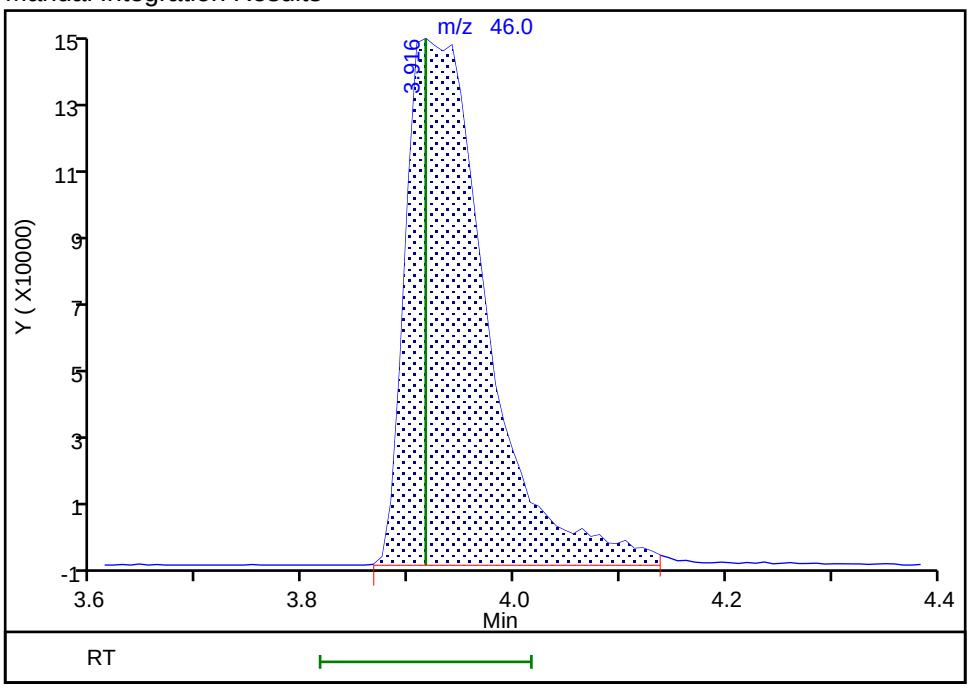
Processing Integration Results

RT: 3.92
Area: 369216
Amount: 250.0000
Amount Units: ug/l



Manual Integration Results

RT: 3.92
Area: 774149
Amount: 250.0000
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 10:05:54

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-2_011422 | Lab Sample ID: 460-250807-26

Matrix: Water | Lab File ID: F25001.D

Analysis Method: 8260D | Date Collected: 01/14/2022 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 10:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	9.1		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	6.0		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-123
1868-53-7	Dibromofluoromethane (Surr)	89		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	103		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25001.D
Lims ID: 460-250807-A-26
Client ID: SL-2_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:12:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-26
Misc. Info.: 460-0140380-013
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 10:27:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	55247	6.05	
* 26 TBA-d9 (IS)	65	2.979	2.938	0.041	0	618676	1000.0	
* 38 2-Butanone-d5	46	3.924	3.916	0.008	0	812541	250.0	
40 cis-1,2-Dichloroethene	96	3.982	3.965	0.017	24	67399	9.13	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	289463	44.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	385976	46.2	
* 61 Fluorobenzene	96	4.960	4.951	0.009	38	1262996	50.0	
* 67 1,4-Dioxane-d8	96	5.666	5.699	-0.033	0	46303	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1127964	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	898248	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	327874	51.4	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	523625	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

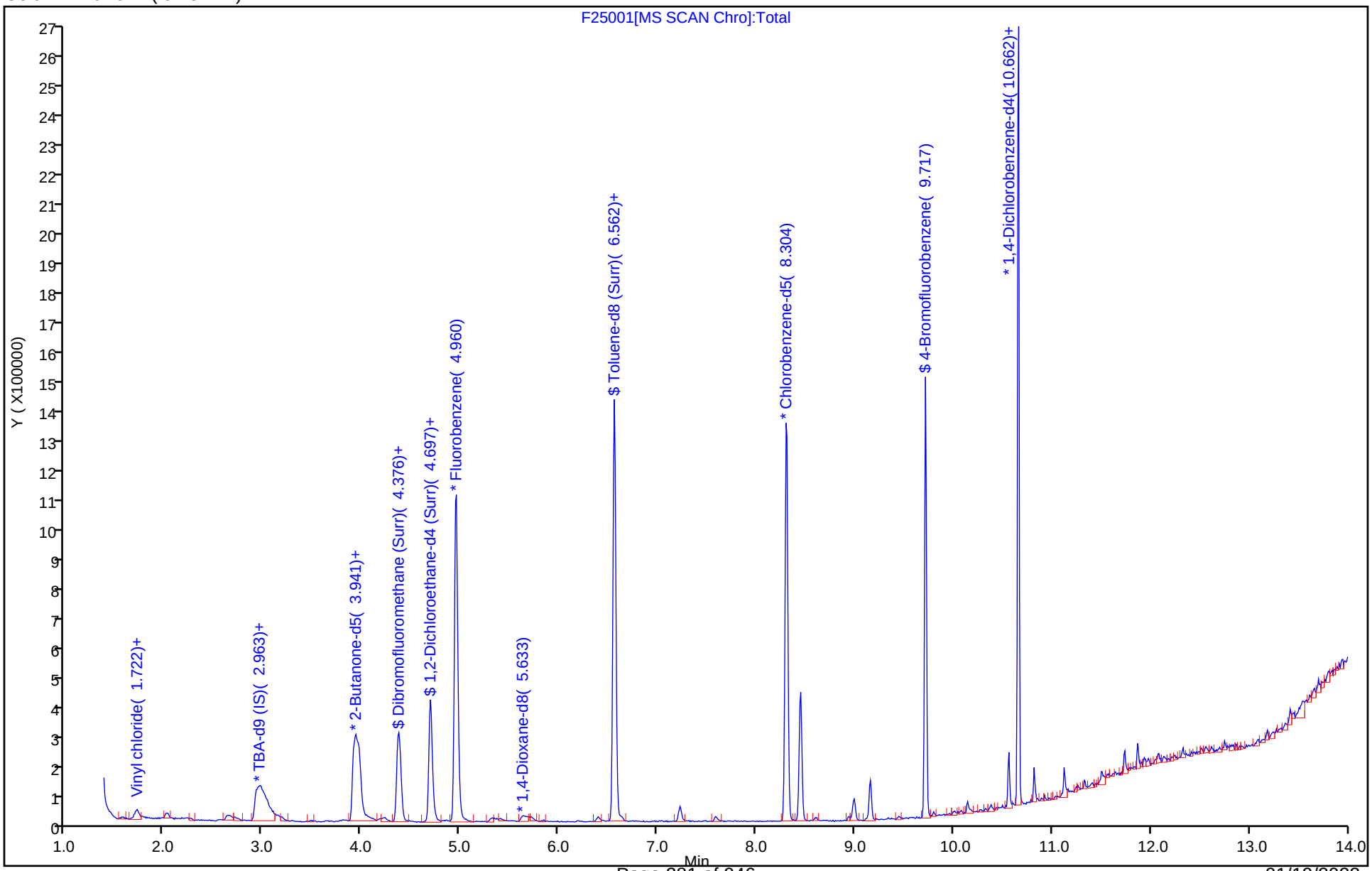
Report Date: 19-Jan-2022 11:28:38 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25001.D

Injection Date:	19-Jan-2022 10:12:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-26	Lab Sample ID:	460-250807-26	Worklist Smp#:	13
Client ID:	SL-2_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25001.D
Lims ID: 460-250807-A-26
Client ID: SL-2_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:12:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-26
Misc. Info.: 460-0140380-013
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

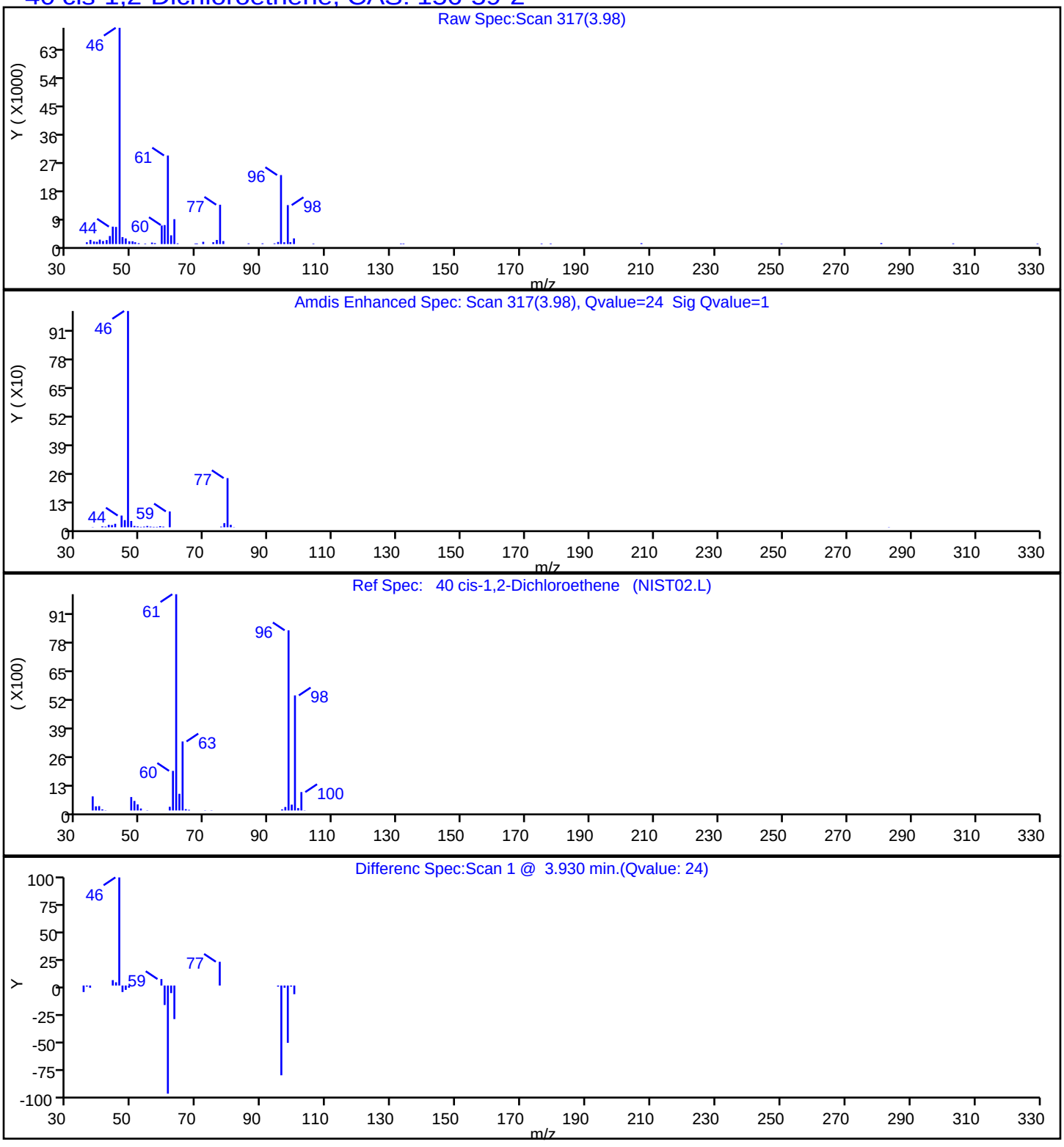
First Level Reviewer: moroneyc Date: 19-Jan-2022 10:27:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.5	88.97
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.2	92.40
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.29
$ 100 4-Bromofluorobenzene	50.0	51.4	102.82

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25001.D
Injection Date: 19-Jan-2022 10:12:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-26 Lab Sample ID: 460-250807-26
Client ID: SL-2_011422
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

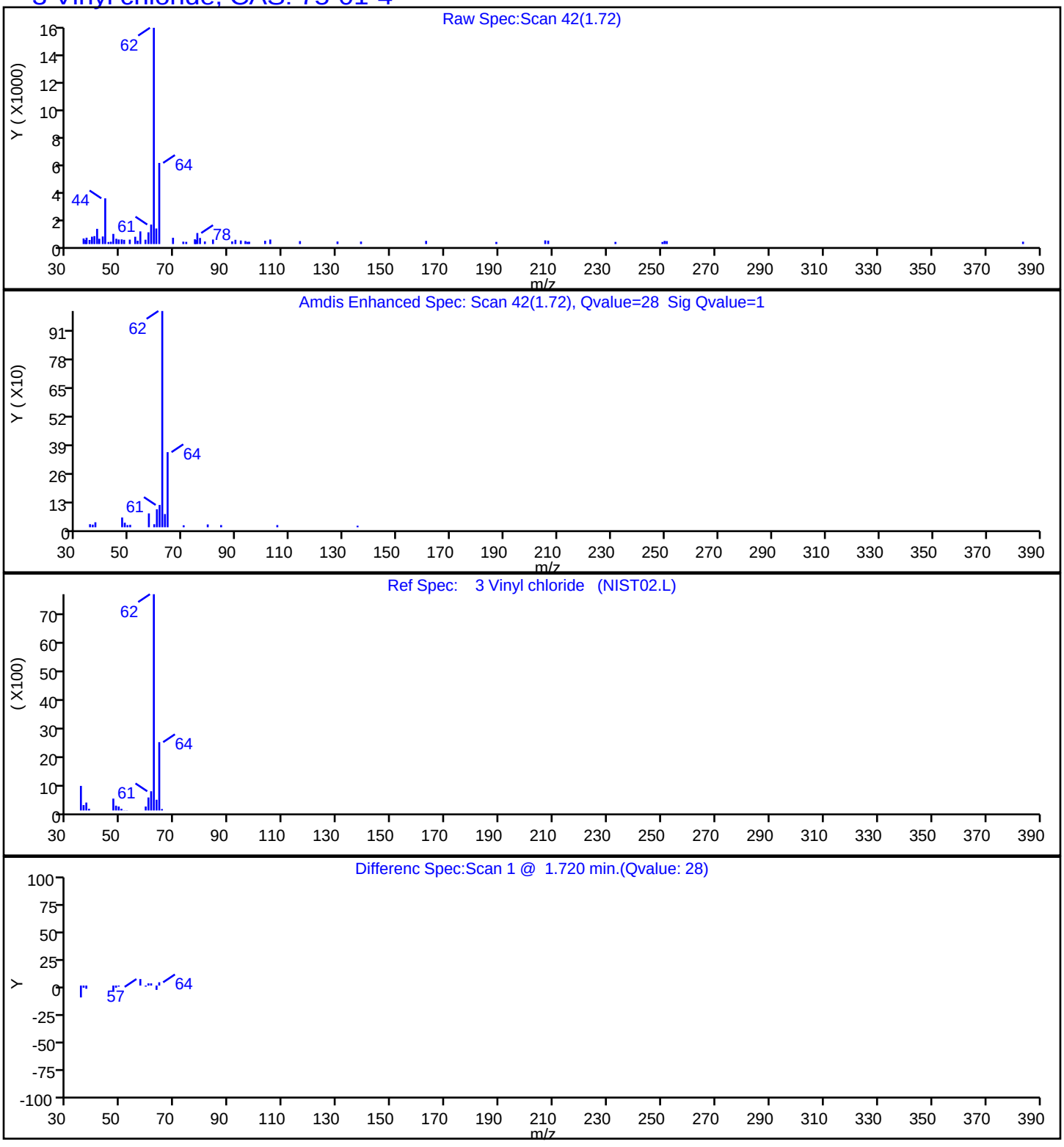
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25001.D
Injection Date: 19-Jan-2022 10:12:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-26 Lab Sample ID: 460-250807-26
Client ID: SL-2_011422
Operator ID: ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: MH-1231_011422 | Lab Sample ID: 460-250807-27

Matrix: Water | Lab File ID: F25002.D

Analysis Method: 8260D | Date Collected: 01/14/2022 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 10:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	13		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	9.3		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-123
1868-53-7	Dibromofluoromethane (Surr)	88		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25002.D
Lims ID: 460-250807-A-27
Client ID: SAMH-1231_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:34:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-27
Misc. Info.: 460-0140380-014
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 11:12:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.722	1.714	0.008	28	81523	9.26	
* 26 TBA-d9 (IS)	65	2.971	2.938	0.033	0	585124	1000.0	
* 38 2-Butanone-d5	46	3.941	3.916	0.025	0	757105	250.0	
40 cis-1,2-Dichloroethene	96	3.973	3.965	0.008	25	90993	12.8	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	274582	43.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	375433	46.6	
* 61 Fluorobenzene	96	4.960	4.951	0.009	38	1217992	50.0	
63 Trichloroethene	95	5.305	5.288	0.017	1	2000	0.3322	
* 67 1,4-Dioxane-d8	96	5.707	5.699	0.008	0	38633	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1071791	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	854733	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	310985	51.2	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	499576	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

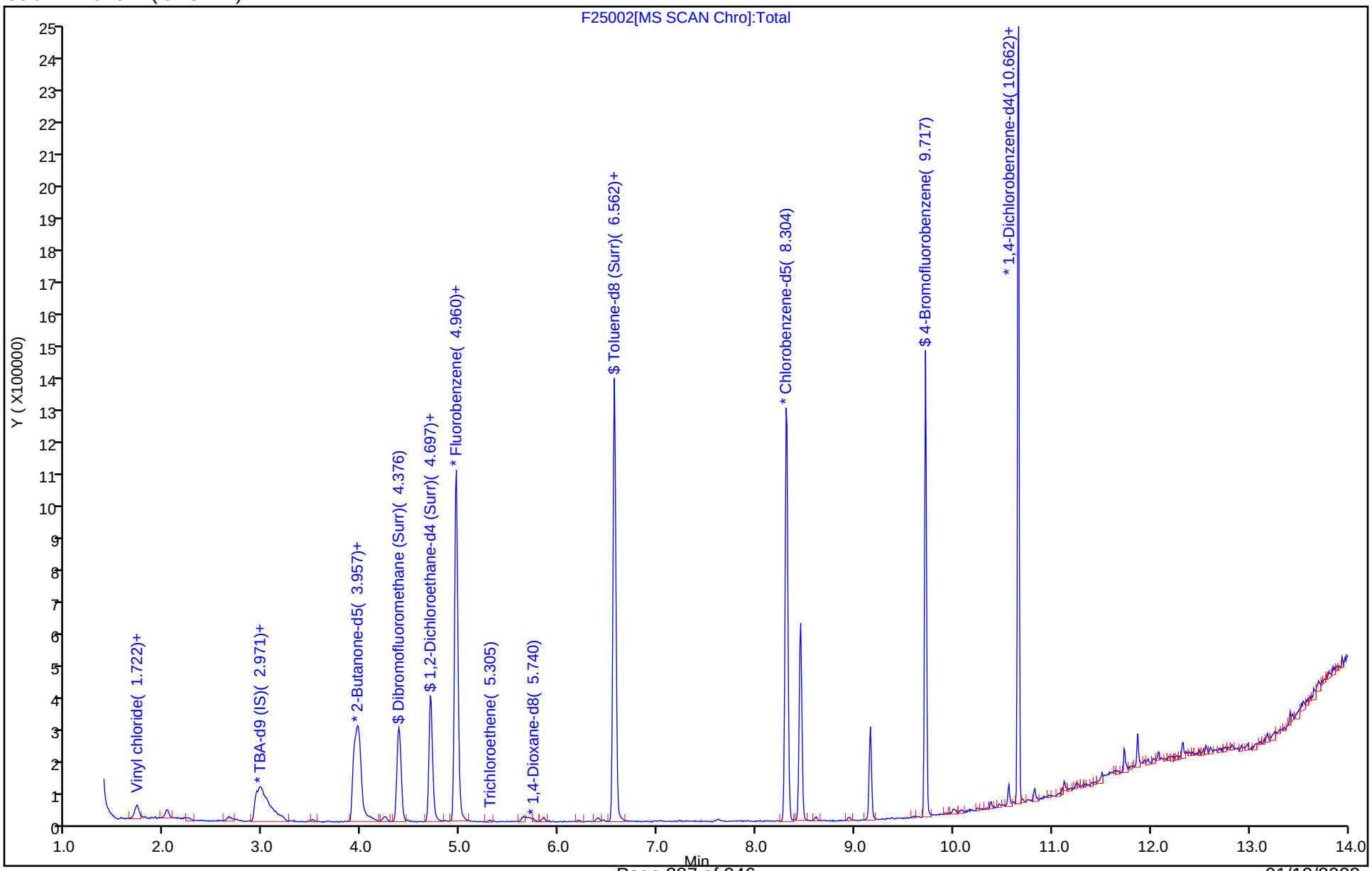
Report Date: 19-Jan-2022 11:28:46 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25002.D

Injection Date:	19-Jan-2022 10:34:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-27	Lab Sample ID:	460-250807-27	Worklist Smp#:	14
Client ID:	SAMH-1231_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25002.D
Lims ID: 460-250807-A-27
Client ID: SAMH-1231_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:34:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-27
Misc. Info.: 460-0140380-014
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

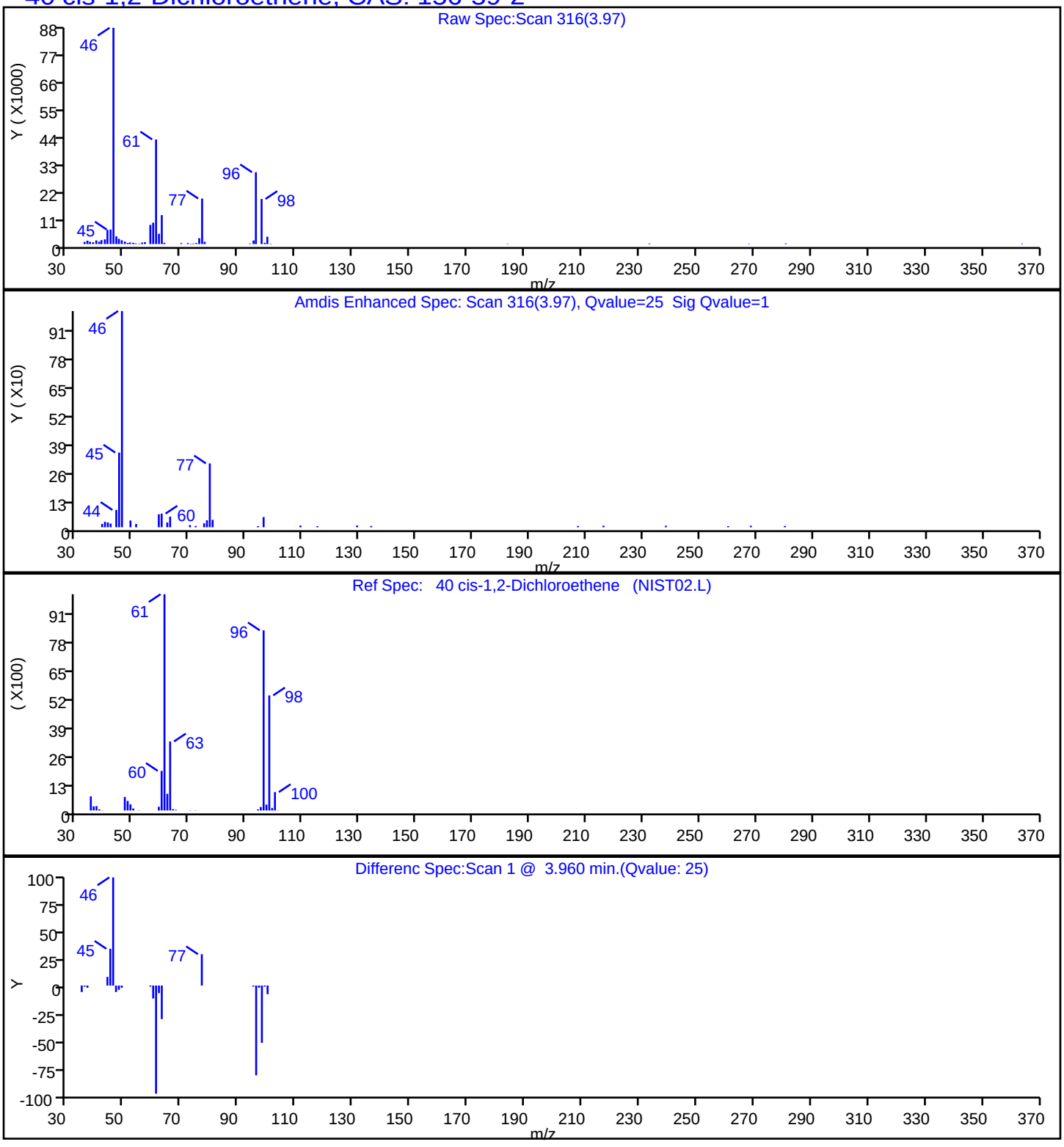
First Level Reviewer: moroneyc Date: 19-Jan-2022 11:12:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	43.8	87.51
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.6	93.20
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.15
$ 100 4-Bromofluorobenzene	50.0	51.2	102.48

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25002.D				
Injection Date:	19-Jan-2022 10:34:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-27	Lab Sample ID:	460-250807-27		
Client ID:	SAMH-1231_011422				
Operator ID:		ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

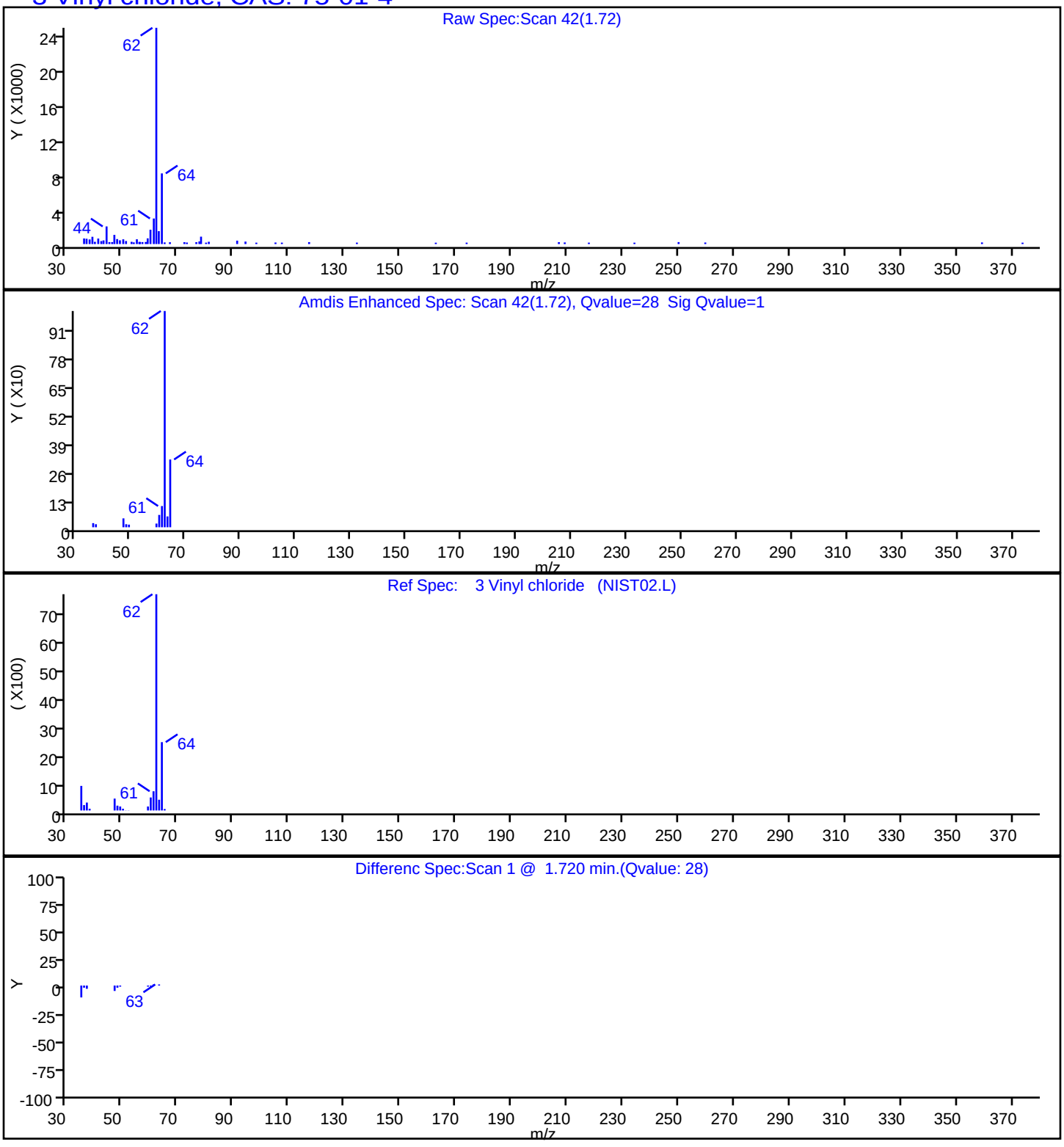
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25002.D		
Injection Date:	19-Jan-2022 10:34:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-27	Lab Sample ID:	460-250807-27
Client ID:	SAMH-1231_011422		
Operator ID:		ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: MH-1244_011422 | Lab Sample ID: 460-250807-28

Matrix: Water | Lab File ID: F25003.D

Analysis Method: 8260D | Date Collected: 01/14/2022 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 10:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	11		1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	0.69	J	1.0	0.44
75-01-4	Vinyl chloride	3.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-123
1868-53-7	Dibromofluoromethane (Surr)	88		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D
Lims ID: 460-250807-A-28
Client ID: SAMH-1244_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:56:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-28
Misc. Info.: 460-0140380-015
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:29:12 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 11:12:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Vinyl chloride	62	1.714	1.714	0.000	28	31530	3.62	
* 26 TBA-d9 (IS)	65	2.971	2.938	0.033	0	653096	1000.0	
* 38 2-Butanone-d5	46	3.932	3.916	0.016	0	803696	250.0	
40 cis-1,2-Dichloroethene	96	3.974	3.965	0.009	25	79855	11.3	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	274682	44.2	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.688	0.009	0	369629	46.4	
* 61 Fluorobenzene	96	4.951	4.951	0.000	40	1205105	50.0	
63 Trichloroethene	95	5.296	5.288	0.008	89	4112	0.6902	M
* 67 1,4-Dioxane-d8	96	5.707	5.699	0.008	0	45357	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1064007	45.7	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	856168	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	309694	50.9	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	490206	50.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

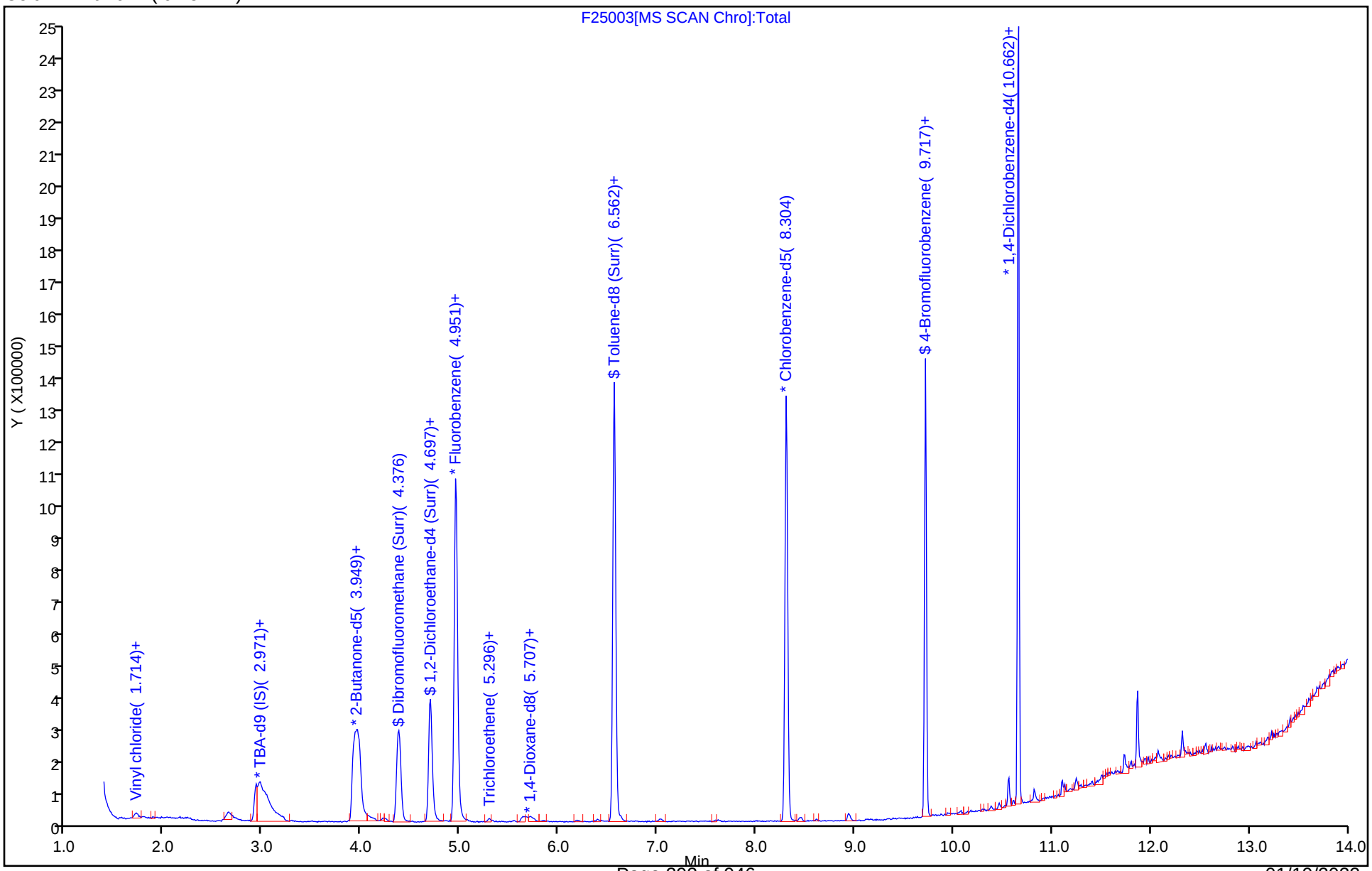
Report Date: 19-Jan-2022 11:29:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D

Injection Date:	19-Jan-2022 10:56:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	460-250807-A-28	Lab Sample ID:	460-250807-28	Worklist Smp#:	15
Client ID:	SAMH-1244_011422				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D
Lims ID: 460-250807-A-28
Client ID: SAMH-1244_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 10:56:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-A-28
Misc. Info.: 460-0140380-015
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:29:12 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

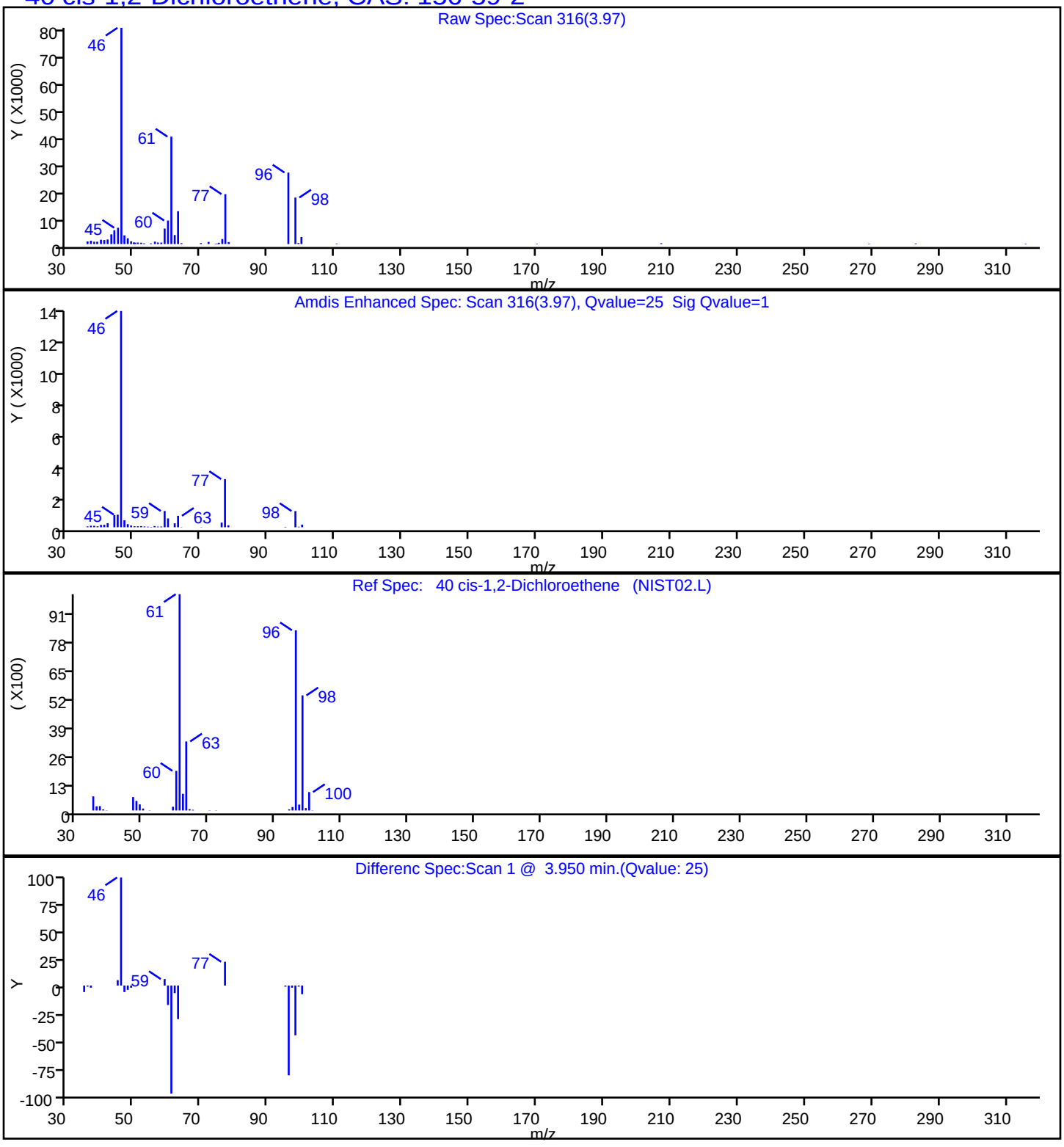
First Level Reviewer: moroneyc Date: 19-Jan-2022 11:12:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.2	88.48
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.4	92.74
$ 78 Toluene-d8 (Surr)	50.0	45.7	91.33
$ 100 4-Bromofluorobenzene	50.0	50.9	101.89

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D
Injection Date: 19-Jan-2022 10:56:30 Instrument ID: CVOAMS6
Lims ID: 460-250807-A-28 Lab Sample ID: 460-250807-28
Client ID: SAMH-1244_011422
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

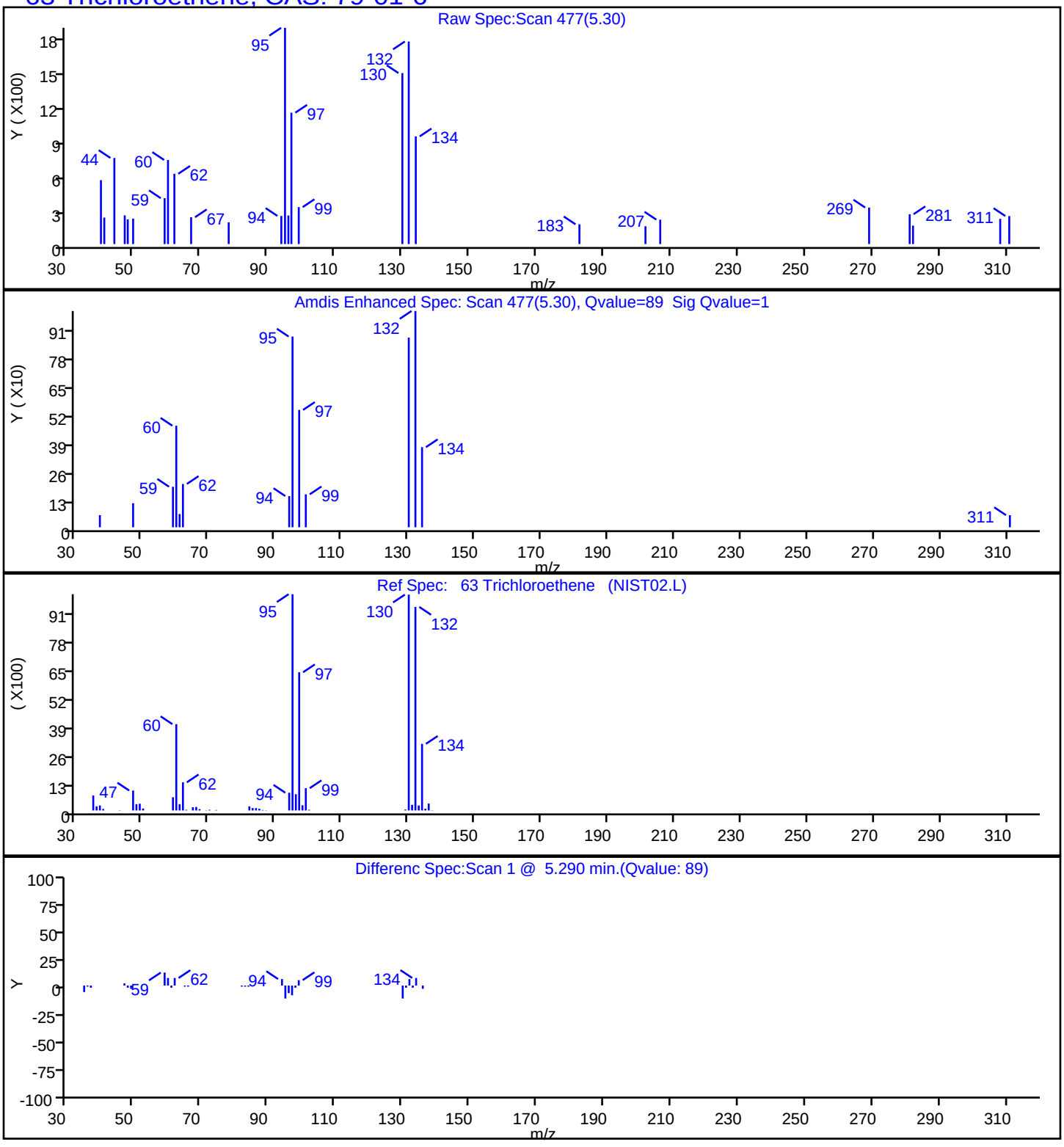
40 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D				
Injection Date:	19-Jan-2022 10:56:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-28	Lab Sample ID:	460-250807-28		
Client ID:	SAMH-1244_011422				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

63 Trichloroethene, CAS: 79-01-6



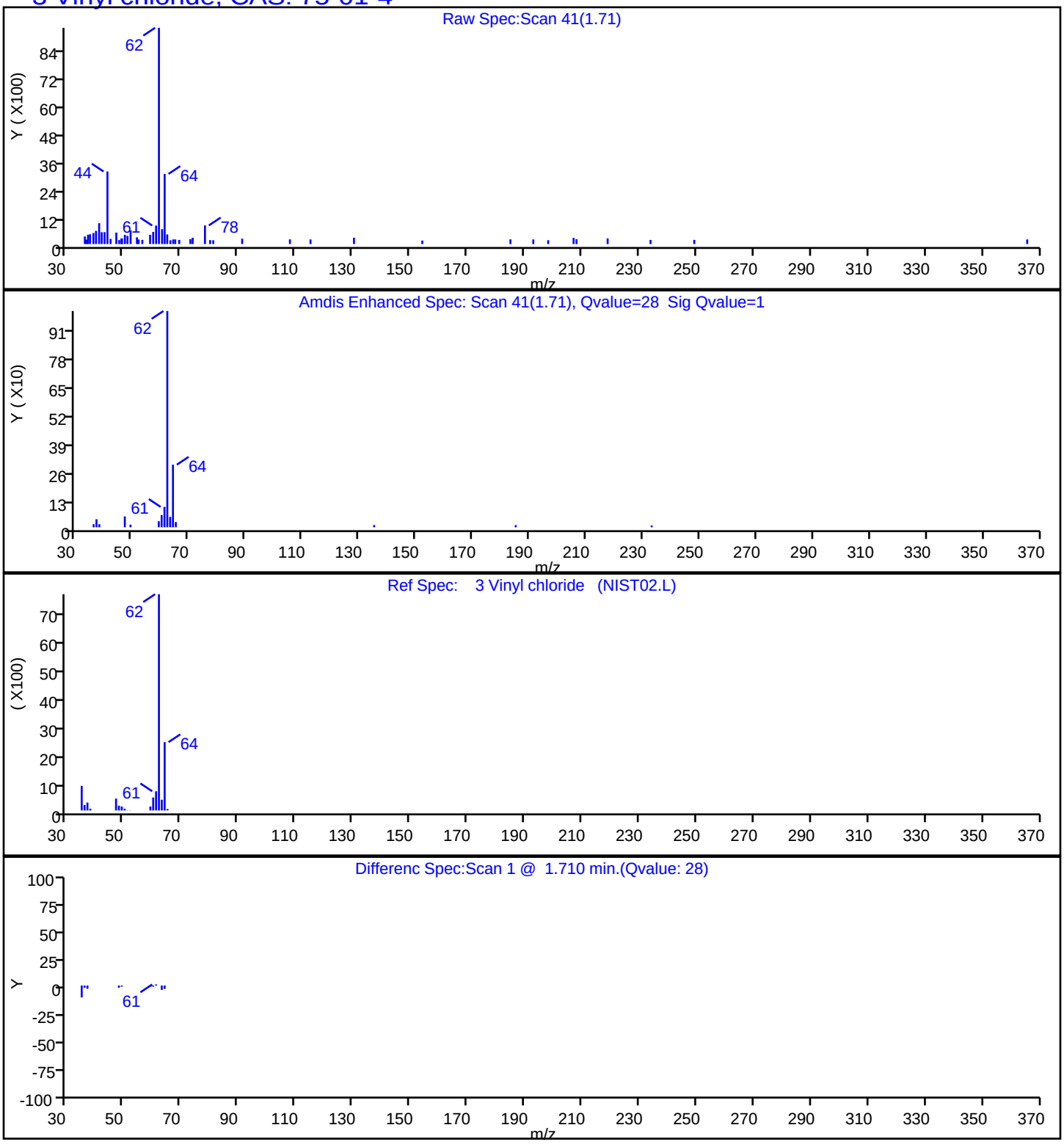
Report Date: 19-Jan-2022 11:29:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D

Injection Date:	19-Jan-2022 10:56:30	Instrument ID:	CVOAMS6
Lims ID:	460-250807-A-28	Lab Sample ID:	460-250807-28
Client ID:	SAMH-1244_011422		
Operator ID:		ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

3 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

Eurofins Edison

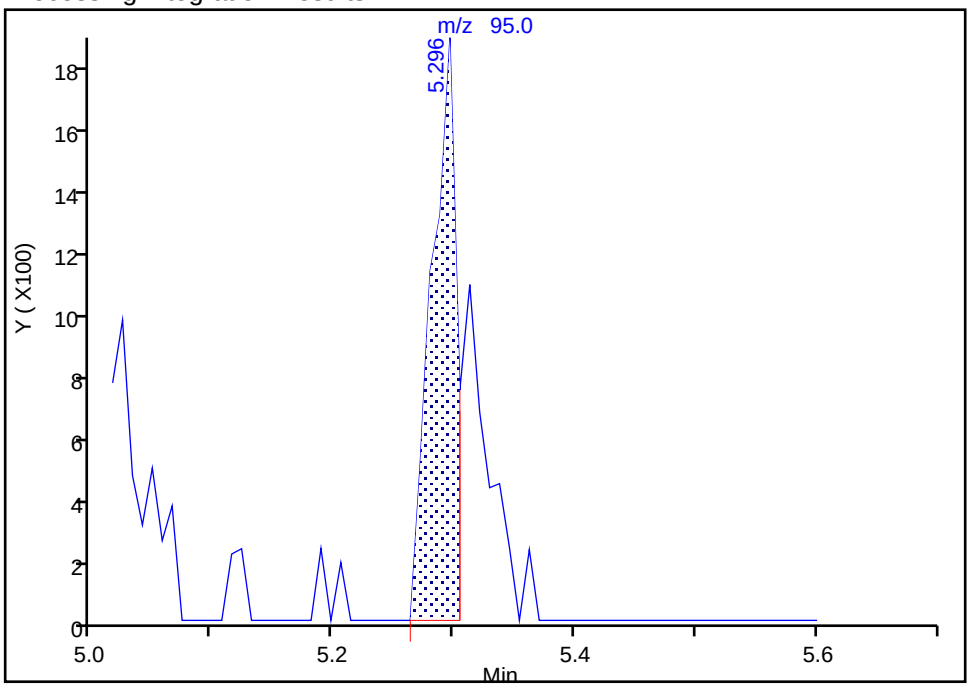
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F25003.D				
Injection Date:	19-Jan-2022 10:56:30	Instrument ID:	CVOAMS6		
Lims ID:	460-250807-A-28	Lab Sample ID:	460-250807-28		
Client ID:	SAMH-1244_011422				
Operator ID:		ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

63 Trichloroethene, CAS: 79-01-6

Signal: 1

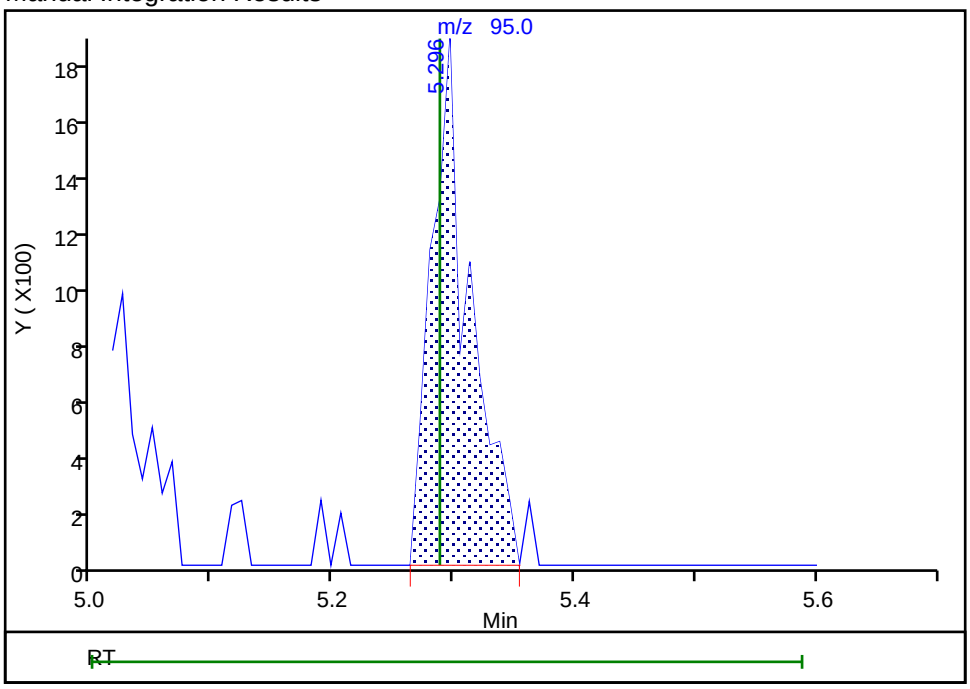
Processing Integration Results

RT: 5.30
Area: 2716
Amount: 0.455910
Amount Units: ug/l



Manual Integration Results

RT: 5.30
Area: 4112
Amount: 0.690244
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 11:29:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-814964/3	F22510.D
Level 2	STD1 460-814964/4	F22511.D
Level 3	STD5 460-814964/5	F22512.D
Level 4	STD20 460-814964/6	F22513.D
Level 5	STD50 460-814964/7	F22514.D
Level 6	STD200 460-814964/8	F22515.D
Level 7	STD500 460-814964/9	F22516.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.3410	0.2546 0.3004	0.2726	0.2802	0.2663	Ave		0.2859			0.1000	10.9		20.0			
Chloromethane	+++++ 0.4373	0.4377 0.3756	0.3793	0.4304	0.3880	Ave		0.4081			0.1000	7.4		20.0			
Vinyl chloride	+++++ 0.3675	0.4124 0.3193	0.3576	0.3679	0.3445	Ave		0.3615			0.1000	8.5		20.0			
Butadiene	0.3179 0.3609	0.3118 0.3195	0.3175	0.3462	0.3278	Ave		0.3288				5.5		20.0			
Bromomethane	+++++ 0.1753	0.1914 0.1432	0.1719	0.1847	0.1643	Ave		0.1718			0.1000	9.9		20.0			
Chloroethane	+++++ 0.1861	0.1958 0.1530	0.1814	0.2004	0.1761	Ave		0.1821			0.1000	9.3		20.0			
Dichlorofluoromethane	+++++ 0.4900	0.5470 0.3891	0.4538	0.5319	0.4422	Ave		0.4757				12.5		20.0			
Trichlorofluoromethane	+++++ 0.3737	0.3973 0.2978	0.3740	0.3992	0.3474	Ave		0.3649			0.1000	10.4		20.0			
Pentane	+++++ 1.7834	2.3263 +++++	1.9140	2.0642	1.4757	Ave		1.9127				16.6		20.0			
Ethanol	+++++ 0.0426	0.0299 0.0317	0.0441	0.0437	0.0460	Ave		0.0397				17.6		20.0			
Ethyl ether	+++++ 0.2139	0.2326 0.1873	0.2354	0.2235	0.2138	Ave		0.2178				8.0		20.0			
2-Methyl-1,3-butadiene	+++++ 0.2500	0.2552 0.2250	0.2641	0.2696	0.2505	Ave		0.2524				6.1		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	+++++ 0.2171	0.2337 0.1875	0.2384	0.2135	0.2128	Ave		0.2172				8.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trifluoro-2,2-dichloroethane	+++++ 0.3732	0.3556 0.3285	0.3841	0.3600	0.3581	Ave		0.3599				5.2		20.0			
Acrolein	+++++ 1.6032	1.5528 1.2549	1.2945	1.3432	1.1385	Ave		1.3645				13.1		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2485	0.2378 0.2168	0.2488	0.2466	0.2379	Ave		0.2394			0.1000	5.1		20.0			
1,1-Dichloroethene	+++++ 0.2547	0.2569 0.2211	0.2486	0.2457	0.2424	Ave		0.2449			0.1000	5.3		20.0			
Acetone	+++++ 0.6553	0.6920 0.5368	0.6101	0.4935	0.5073	Ave		0.5825			0.0500	14.1		20.0			
Iodomethane	+++++ 0.3886	0.3461 0.3291	0.3541	0.3820	0.3747	Ave		0.3624				6.4		20.0			
Isopropyl alcohol	+++++ 0.5072	0.3278 0.4209	0.4130	0.2860	0.4204	Ave		0.3959				19.8		20.0			
Carbon disulfide	+++++ 0.9719	0.9385 0.8448	1.0806	0.9334	0.9232	Ave		0.9487			0.1000	8.1		20.0			
Methyl acetate	+++++ 0.2717	0.2555 0.2467	0.2538	0.2726	0.2559	Ave		0.2593			0.1000	4.0		20.0			
3-Chloro-1-propene	+++++ 0.6521	0.6057 0.5801	0.6205	0.6470	0.6307	Ave		0.6227				4.3		20.0			
Cyclopentene	+++++ 0.6760	0.6473 0.6117	0.6962	0.7067	0.6761	Ave		0.6690				5.2		20.0			
Acetonitrile	+++++ 1.1948	1.3455 0.9522	1.6035	1.2146	1.1182	Ave		1.2381				17.8		20.0			
Methylene Chloride	+++++ 0.2962	0.2888 0.2570	0.2932	0.2927	0.2859	Ave		0.2856			0.1000	5.1		20.0			
2-Methyl-2-propanol	+++++ 0.9857	1.1772 0.7860	1.1442	0.9985	0.9326	Ave		1.0040				14.3		20.0			
Methyl tert-butyl ether	+++++ 0.7333	0.7898 0.6477	0.7909	0.7568	0.7114	Ave		0.7383			0.1000	7.3		20.0			
trans-1,2-Dichloroethene	+++++ 0.2761	0.2688 0.2388	0.2644	0.2743	0.2638	Ave		0.2644			0.1000	5.1		20.0			
Acrylonitrile	0.1448 0.1459	0.1353 0.1306	0.1403	0.1392	0.1386	Ave		0.1392				3.8		20.0			
Hexane	+++++ 0.3246	0.3538 0.2919	0.3298	0.3262	0.3077	Ave		0.3223				6.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isopropyl ether	+++++ 0.8875	0.9301 0.7927	0.9486	0.9351	0.8979	Ave		0.8986				6.3		20.0			
1,1-Dichloroethane	+++++ 0.5399	0.5116 0.4709	0.5274	0.5230	0.5127	Ave		0.5142			0.2000	4.6		20.0			
Vinyl acetate	+++++ 0.0531	0.0472 0.0533	0.0627	0.0649	0.0545	Ave		0.0560				11.8		20.0			
2-Chloro-1,3-butadiene	+++++ 0.2459	0.2167 0.2229	0.2491	0.2451	0.2426	Ave		0.2371				5.8		20.0			
Tert-butyl ethyl ether	+++++ 0.7689	0.8175 0.6947	0.8339	0.8057	0.7748	Ave		0.7826				6.3		20.0			
2,2-Dichloropropane	+++++ 0.0872	0.0976 0.0751	0.0851	0.0865	0.0834	Ave		0.0858				8.5		20.0			
cis-1,2-Dichloroethene	+++++ 0.2985	0.3214 0.2555	0.2978	0.2967	0.2842	Ave		0.2923			0.1000	7.4		20.0			
2-Butanone (MEK)	+++++ 0.2347	0.2246 0.1883	0.2372	0.2139	0.2118	Ave		0.2184			0.0500	8.3		20.0			
Ethyl acetate	+++++ 0.1904	0.1520 0.1609	0.1925	0.1954	0.1833	Ave		0.1791				10.2		20.0			
Methyl acrylate	+++++ 0.3775	0.4102 0.3917	0.3850	0.3912	0.3506	Ave		0.3844				5.1		20.0			
Propionitrile	+++++ 1.6983	1.6194 1.3244	1.6241	1.6987	1.5930	Ave		1.5930				8.7		20.0			
Tetrahydrofuran	+++++ 0.2689	0.2958 0.2095	0.2895	0.2623	0.2417	Ave		0.2613				12.2		20.0			
Chlorobromomethane	+++++ 0.1387	0.1405 0.1130	0.1350	0.1362	0.1317	Ave		0.1325				7.6		20.0			
Methacrylonitrile	+++++ 0.1362	0.1201 0.1203	0.1377	0.1357	0.1354	Ave		0.1309				6.4		20.0			
Chloroform	+++++ 0.4595	0.4278 0.3982	0.4466	0.4485	0.4325	Ave		0.4355			0.2000	5.0		20.0			
Cyclohexane	+++++ 0.4656	0.4338 0.4074	0.4794	0.4630	0.4391	Ave		0.4481			0.1000	5.9		20.0			
1,1,1-Trichloroethane	+++++ 0.3866	0.3698 0.3351	0.3792	0.3709	0.3671	Ave		0.3681			0.1000	4.8		20.0			
Carbon tetrachloride	+++++ 0.3256	0.3073 0.2851	0.3128	0.3069	0.3067	Ave		0.3074			0.1000	4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 0.3831	0.3272 0.3479	0.3840	0.3634	0.3592	Ave		0.3608				6.0		20.0			
Isobutyl alcohol	+++++ 0.6389	0.4543 0.5552	0.5509	0.6014	0.5376	Ave		0.5564				11.3		20.0			
Benzene	+++++ 1.4956	1.4897 1.3784	1.4837	1.4144	1.3728	Ave		1.4391			0.5000	4.0		20.0			
Isopropyl acetate	+++++ 0.7856	0.9990 0.7303	0.7449	1.0100	0.7668	Ave		0.8394				15.4		20.0			
Tert-amyl methyl ether	+++++ 0.9031	0.8326 0.8073	0.9205	0.9029	0.9285	Ave		0.8825				5.7		20.0			
1,2-Dichloroethane	+++++ 0.3610	0.3549 0.3236	0.3535	0.3433	0.3389	Ave		0.3459			0.1000	3.9		20.0			
n-Heptane	+++++ 0.2384	0.2180 0.2184	0.2341	0.2455	0.2313	Ave		0.2310				4.8		20.0			
n-Butanol	+++++ 0.2296	+++++ 0.1903	0.1345	0.1449	0.1928	Ave		0.1784				21.7	*	20.0			
Trichloroethene	+++++ 0.2672	0.2362 0.2329	0.2529	0.2461	0.2477	Ave		0.2472			0.2000	5.0		20.0			
Methylcyclohexane	+++++ 0.5299	0.4966 0.4647	0.5078	0.5041	0.5002	Ave		0.5005			0.1000	4.2		20.0			
Ethyl acrylate	+++++ 0.8518	0.7022 0.7831	0.7389	0.7705	0.7789	Ave		0.7709				6.5		20.0			
1,2-Dichloropropane	+++++ 0.2972	0.2780 0.2658	0.2906	0.2806	0.2772	Ave		0.2816			0.1000	3.9		20.0			
Methyl methacrylate	+++++ 0.0843	0.0648 0.0758	0.0733	0.0738	0.0785	Ave		0.0751				8.6		20.0			
Dibromomethane	+++++ 0.1643	0.1505 0.1449	0.1534	0.1554	0.1521	Ave		0.1534				4.2		20.0			
1,4-Dioxane	+++++ 0.8107	0.9630 +++++	1.1189	0.9208	0.9377	Ave		0.9502				11.7		20.0			
n-Propyl acetate	+++++ 0.5467	0.4380 0.5031	0.4667	0.4846	0.4957	Ave		0.4891				7.5		20.0			
Dichlorobromomethane	+++++ 0.3482	0.2896 0.3128	0.3094	0.3126	0.3152	Ave		0.3146			0.2000	6.0		20.0			
2-Nitropropane	+++++ 0.0895	0.1123 0.0835	0.0846	0.0811	0.0835	Ave		0.0891				13.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Chloroethyl vinyl ether	+++++ 0.1897	0.1560 0.1776	0.1613	0.1719	0.1787	Ave		0.1725				7.1		20.0			
Epichlorohydrin	0.1935 0.1978	0.1694 0.1631	0.1943	0.1904	0.1860	Ave		0.1849				7.2		20.0			
cis-1,3-Dichloropropene	+++++ 0.6042	0.4891 0.5626	0.5581	0.5502	0.5403	Ave		0.5507			0.2000	6.8		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 2.2191	1.8405 1.7932	2.0760	2.0255	2.0424	Ave		1.9994			0.0500	7.9		20.0			
Toluene	+++++ 1.4742	1.4417 1.3409	1.4380	1.3933	1.3484	Ave		1.4061			0.4000	3.9		20.0			
trans-1,3-Dichloropropene	+++++ 0.5498	0.4720 0.5190	0.4588	0.4831	0.4824	Ave		0.4942			0.1000	6.8		20.0			
Ethyl methacrylate	+++++ 0.5702	0.3219 +++++	0.4453	0.4505	0.4801	Ave		0.4536				19.6		20.0			
1,1,2-Trichloroethane	+++++ 0.2671	0.2371 0.2481	0.2580	0.2493	0.2459	Ave		0.2509			0.1000	4.1		20.0			
Tetrachloroethene	+++++ 0.2999	0.2806 0.2633	0.2970	0.2988	0.2830	Ave		0.2871			0.2000	5.0		20.0			
1,3-Dichloropropane	+++++ 0.5710	0.5004 0.5349	0.5329	0.5289	0.5130	Ave		0.5302				4.5		20.0			
2-Hexanone	+++++ 1.5664	1.1413 1.3204	1.2150	1.2502	1.3107	Ave		1.3006			0.0500	11.2		20.0			
n-Butyl acetate	+++++ 0.7798	0.6231 0.7494	0.6664	0.6480	0.6837	Ave		0.6917				8.8		20.0			
Chlorodibromomethane	+++++ 0.3113	0.2540 0.2852	0.2774	0.2695	0.2783	Ave		0.2793			0.1000	6.8		20.0			
Ethylene Dibromide	+++++ 0.3107	0.2946 0.2853	0.2736	0.2871	0.2759	Ave		0.2879			0.1000	4.7		20.0			
Chlorobenzene	+++++ 0.9043	0.7973 0.8213	0.8820	0.8515	0.8192	Ave		0.8459			0.5000	4.9		20.0			
Ethylbenzene	+++++ 0.4974	0.4210 0.4387	0.4861	0.4628	0.4594	Ave		0.4609			0.1000	6.2		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3160	0.2940 0.2772	0.3032	0.2988	0.2918	Ave		0.2968				4.3		20.0			
m-Xylene & p-Xylene	+++++ 0.6132	0.5134 0.5441	0.5905	0.5768	0.5653	Ave		0.5672			0.1000	6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
o-Xylene	+++++ 0.6081	0.5539 0.5204	0.5850	0.5701	0.5758	Ave		0.5689			0.3000	5.2		20.0			
n-Butyl acrylate	+++++ 0.3256	0.2494 0.2993	0.2360	0.2463	0.2805	Ave		0.2728				12.9		20.0			
Styrene	+++++ 1.0548	0.8579 0.9316	0.8821	0.9205	0.9506	Ave		0.9329			0.3000	7.4		20.0			
Bromoform	+++++ 0.2068	0.1464 0.1822	0.1832	0.1820	0.1846	Ave		0.1809			0.1000	10.7		20.0			
Amyl acetate (mixed isomers)	+++++ 1.8014	1.3034 1.7326	1.3541	1.4237	1.5671	Ave		1.5304				13.4		20.0			
Isopropylbenzene	+++++ 1.6231	1.4119 1.3722	1.5429	1.5374	1.5195	Ave		1.5012			0.1000	6.2		20.0			
Bromobenzene	+++++ 0.6896	0.6167 0.6133	0.6620	0.6278	0.6311	Ave		0.6401				4.6		20.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8759	0.8045 0.8089	0.8083	0.7905	0.7949	Ave		0.8138			0.3000	3.8		20.0			
N-Propylbenzene	+++++ 3.9203	3.4654 3.0408	3.4456	3.4887	3.5802	Ave		3.4902				8.1		20.0			
1,2,3-Trichloropropane	+++++ 0.2458	0.2318 0.2211	0.2322	0.2157	0.2335	Ave		0.2300				4.6		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2583	0.1991 0.2485	0.2310	0.2125	0.2179	Ave		0.2279				9.9		20.0			
2-Chlorotoluene	+++++ 2.5628	2.2080 2.2892	2.2777	2.3069	2.3438	Ave		2.3314				5.2		20.0			
4-Ethyltoluene	+++++ 2.9284	2.5931 2.5403	2.7389	2.7638	2.8551	Ave		2.7366				5.4		20.0			
1,3,5-Trimethylbenzene	+++++ 2.5625	2.0896 2.2209	2.2463	2.3156	2.3943	Ave		2.3049				7.0		20.0			
4-Chlorotoluene	+++++ 2.4301	2.0866 2.1298	2.1317	2.1722	2.1837	Ave		2.1890				5.6		20.0			
Butyl Methacrylate	+++++ 0.9717	0.6990 0.8880	0.7256	0.7720	0.8793	Ave		0.8226				13.0		20.0			
tert-Butylbenzene	+++++ 2.1180	1.7767 1.8337	1.8968	1.9369	1.9918	Ave		1.9257				6.3		20.0			
1,2,4-Trimethylbenzene	+++++ 2.6868	2.3417 2.2505	2.3564	2.3952	2.4729	Ave		2.4172				6.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	+++++ 3.3906	2.8643 2.5635	3.0792	3.0857	3.1804	Ave		3.0273				9.4		20.0			
1,3-Dichlorobenzene	+++++ 1.3236	1.2719 1.1151	1.3012	1.2619	1.2562	Ave		1.2550			0.6000	5.8		20.0			
4-Isopropyltoluene	+++++ 2.8538	2.4004 2.2101	2.5802	2.6265	2.6931	Ave		2.5607				8.8		20.0			
1,4-Dichlorobenzene	+++++ 1.3482	1.4041 1.1624	1.3310	1.2655	1.2467	Ave		1.2930			0.5000	6.6		20.0			
1,2,3-Trimethylbenzene	+++++ 2.7064	2.4686 2.1758	2.6327	2.5477	2.6185	Ave		2.5250				7.5		20.0			
Benzyl chloride	+++++ 1.6752	1.4787 1.5288	1.6590	1.6279	1.5341	Ave		1.5840				5.1		20.0			
Indan	+++++ 2.5586	2.3943 2.1438	2.3845	2.4545	2.4564	Ave		2.3987				5.8		20.0			
p-Diethylbenzene	+++++ 1.4353	1.4556 1.2571	1.4413	1.3986	1.4208	Ave		1.4014				5.2		20.0			
n-Butylbenzene	+++++ 1.5879	1.3781 1.3401	1.4842	1.4934	1.5285	Ave		1.4687				6.3		20.0			
1,2-Dichlorobenzene	+++++ 1.3461	1.3834 1.1472	1.3510	1.2751	1.2562	Ave		1.2932			0.4000	6.7		20.0			
1,2,4,5-Tetramethylbenzene	+++++ 2.5901	2.5521 1.9700	2.5752	2.5064	2.5474	Ave		2.4569				9.8		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1794	0.1857 0.1565	0.1847	0.1575	0.1732	Ave		0.1728			0.0500	7.6		20.0			
1,3,5-Trichlorobenzene	+++++ 0.9302	1.0663 0.7459	1.0078	0.9920	0.9862	Ave		0.9547				11.6		20.0			
1,2,4-Trichlorobenzene	+++++ 0.9234	1.1132 0.7246	0.9566	0.9318	0.9242	Ave		0.9290			0.2000	13.3		20.0			
Hexachlorobutadiene	+++++ 0.3381	0.3786 0.2551	0.3637	0.3495	0.3460	Ave		0.3385				12.8		20.0			
Naphthalene	+++++ 2.8013	2.7644 2.2071	2.7167	2.5911	2.6596	Ave		2.6234				8.3		20.0			
1,2,3-Trichlorobenzene	+++++ 0.8347	0.9942 0.6635	0.8989	0.8572	0.8431	Ave		0.8486				12.7		20.0			
Dibromofluoromethane (Surr)	0.2617 0.2546	0.2580 0.2478	0.2605	0.2614	0.2592	Ave		0.2576				1.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloroethane-d4 (Surr)	0.3283 0.3272	0.3248 0.3473	0.3239	0.3344	0.3292	Ave		0.3307				2.4		20.0			
Toluene-d8 (Surr)	1.3759 1.3296	1.3762 1.3641	1.3731	1.3648	1.3413	Ave		1.3607				1.3		20.0			
4-Bromofluorobenzene	0.3537 0.3539	0.3551 0.3497	0.3598	0.3594	0.3535	Ave		0.3550				1.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD7 460-814964/3	F22510.D
Level 2	STD1 460-814964/4	F22511.D
Level 3	STD5 460-814964/5	F22512.D
Level 4	STD20 460-814964/6	F22513.D
Level 5	STD50 460-814964/7	F22514.D
Level 6	STD200 460-814964/8	F22515.D
Level 7	STD500 460-814964/9	F22516.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 1387658	4761 3700756	27449	108380	276293	+++++ 200	1.00 500	5.00	20.0	50.0
Chloromethane	FB	Ave	+++++ 1779599	8186 4626330	38192	166490	402596	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl chloride	FB	Ave	+++++ 1495649	7712 3933312	36000	142308	357453	+++++ 200	1.00 500	5.00	20.0	50.0
Butadiene	FB	Ave	1552 1468725	5832 3935056	31965	133924	340083	0.250 200	1.00 500	5.00	20.0	50.0
Bromomethane	FB	Ave	+++++ 713237	3579 1763630	17305	71448	170490	+++++ 200	1.00 500	5.00	20.0	50.0
Chloroethane	FB	Ave	+++++ 757467	3662 1885005	18260	77514	182760	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorofluoromethane	FB	Ave	+++++ 1993924	10230 4792604	45692	205726	458870	+++++ 200	1.00 500	5.00	20.0	50.0
Trichlorofluoromethane	FB	Ave	+++++ 1520834	7431 3668173	37656	154418	360431	+++++ 200	1.00 500	5.00	20.0	50.0
Pentane	TBAd 9	Ave	+++++ 439222	2460 +++++	11022	43989	100133	+++++ 400	2.00 +++++	10.0	40.0	100
Ethanol	TBAd 9	Ave	+++++ 209749	632 532273	5084	18642	62444	+++++ 8000	40.0 20000	200	800	2000
Ethyl ether	FB	Ave	+++++ 870290	4350 2307361	23704	86442	221884	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-1,3-butadiene	FB	Ave	+++++ 1017204	4773 2771350	26591	104284	259897	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	+++++ 883250	4370 2309993	24006	82562	220777	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1-Trifluoro-2,2-dichloroethane	FB	Ave	+++++ 1518455	6650 4045990	38670	139262	371544	+++++ 200	1.00 500	5.00	20.0	50.0
Acrolein	TBAd9	Ave	+++++ 200182	3330 426822	15118	29025	78331	+++++ 203	4.06 406	20.3	40.6	101
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 1011309	4447 2669998	25052	95396	246813	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethene	FB	Ave	+++++ 1036323	4805 2723405	25027	95033	251518	+++++ 200	1.00 500	5.00	20.0	50.0
Acetone	BUT	Ave	+++++ 2415280	10224 6410629	51013	161407	469376	+++++ 1000	5.00 2500	25.0	100	250
Iodomethane	FB	Ave	+++++ 1581392	6472 4054014	35646	147771	388753	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl alcohol	TBAd9	Ave	+++++ 624628	1733 1764764	11892	30479	142631	+++++ 2000	10.0 5000	50.0	200	500
Carbon disulfide	FB	Ave	+++++ 3954974	17551 10405894	108796	361052	957975	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl acetate	FB	Ave	+++++ 2211202	9556 6076331	51107	210872	530956	+++++ 400	2.00 1000	10.0	40.0	100
3-Chloro-1-propene	FB	Ave	+++++ 2653412	11328 7145144	62475	250259	654420	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclopentene	FB	Ave	+++++ 2750945	12105 7535136	70088	273358	701561	+++++ 200	1.00 500	5.00	20.0	50.0
Acetonitrile	TBAd9	Ave	+++++ 1471277	7114 3992627	46170	129416	379369	+++++ 2000	10.0 5000	50.0	200	500
Methylene Chloride	FB	Ave	+++++ 1205385	5401 3165761	29523	113222	296640	+++++ 200	1.00 500	5.00	20.0	50.0
2-Methyl-2-propanol	TBAd9	Ave	+++++	6224	32947	106390	316397	+++++	10.0	50.0	200	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1213825	3295456				2000	5000			
Methyl tert-butyl ether	FB	Ave	+++++ 2983934	14770 7978537	79623	292733	738189	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 1123362	5027 2940950	26616	106101	273736	+++++ 200	1.00 500	5.00	20.0	50.0
Acrylonitrile	FB	Ave	5656 5937772	25305 16083935	141246	538271	1438516	2.00 2000	10.0 5000	50.0	200	500
Hexane	FB	Ave	+++++ 1320996	6616 3595485	33200	126166	319292	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl ether	FB	Ave	+++++ 3611509	17394 9763735	95507	361684	931663	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloroethane	FB	Ave	+++++ 2196851	9567 5800585	53093	202289	531982	+++++ 200	1.00 500	5.00	20.0	50.0
Vinyl acetate	FB	Ave	+++++ 432375	1767 1312393	12623	50221	113056	+++++ 400	2.00 1000	10.0	40.0	100
2-Chloro-1,3-butadiene	FB	Ave	+++++ 1000747	4053 2745388	25083	94787	251758	+++++ 200	1.00 500	5.00	20.0	50.0
Tert-butyl ethyl ether	FB	Ave	+++++ 3128947	15288 8557518	83952	311660	803943	+++++ 200	1.00 500	5.00	20.0	50.0
2,2-Dichloropropane	FB	Ave	+++++ 354933	1826 925171	8568	33455	86563	+++++ 200	1.00 500	5.00	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 1214498	6011 3147259	29983	114745	294890	+++++ 200	1.00 500	5.00	20.0	50.0
2-Butanone (MEK)	BUT	Ave	+++++ 865114	3319 2248581	19832	69960	195966	+++++ 1000	5.00 2500	25.0	100	250
Ethyl acetate	BUT	Ave	+++++ 280686	898 768815	6437	25566	67834	+++++ 400	2.00 1000	10.0	40.0	100
Methyl acrylate	CBNZ d5	Ave	+++++ 1183238	5661 3590034	29037	116722	285331	+++++ 200	1.00 500	5.00	20.0	50.0
Propionitrile	TBAd 9	Ave	+++++ 2091343	8562 5553057	46763	181004	540436	+++++ 2000	10.0 5000	50.0	200	500
Tetrahydrofuran	BUT	Ave	+++++ 396463	1748 1000564	9682	34313	89464	+++++ 400	2.00 1000	10.0	40.0	100
Chlorobromomethane	FB	Ave	+++++	2628	13589	52666	136697	+++++	1.00	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			564584	1391849				200	500			
Methacrylonitrile	FB	Ave	+++++ 5544125	22463 14813858	138681	525015	1404686	+++++ 2000	10.0 5000	50.0	200	500
Chloroform	FB	Ave	+++++ 1869709	8000 4904803	44958	173463	448805	+++++ 200	1.00 500	5.00	20.0	50.0
Cyclohexane	FB	Ave	+++++ 1894756	8112 5017918	48263	179100	455652	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1-Trichloroethane	FB	Ave	+++++ 1572998	6916 4127016	38179	143466	380893	+++++ 200	1.00 500	5.00	20.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 1325068	5748 3511595	31489	118716	318210	+++++ 200	1.00 500	5.00	20.0	50.0
1,1-Dichloropropene	FB	Ave	+++++ 1558910	6119 4285222	38665	140559	372665	+++++ 200	1.00 500	5.00	20.0	50.0
Isobutyl alcohol	TBAd9	Ave	+++++ 1966732	6005 5819427	39653	160197	455950	+++++ 5000	25.0 12500	125	500	1250
Benzene	CBNZd5	Ave	+++++ 4687332	20560 12632571	111903	421985	1117357	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropyl acetate	FB	Ave	+++++ 3196697	18684 8995097	74996	390682	795694	+++++ 200	1.00 500	5.00	20.0	50.0
Tert-amyl methyl ether	FB	Ave	+++++ 3674882	15572 9943855	92669	349251	963401	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichloroethane	FB	Ave	+++++ 1468802	6637 3986099	35589	132793	351655	+++++ 200	1.00 500	5.00	20.0	50.0
n-Heptane	FB	Ave	+++++ 970194	4077 2690035	23569	94945	240046	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butanol	TBAd9	Ave	+++++ 706725	+++++ 1995201	9683	38611	163509	+++++ 5000	+++++ 12500	125	500	1250
Trichloroethene	FB	Ave	+++++ 1087453	4418 2869009	25457	95199	256971	+++++ 200	1.00 500	5.00	20.0	50.0
Methylcyclohexane	FB	Ave	+++++ 2156142	9287 5723381	51128	194981	519018	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl acrylate	FB	Ave	+++++ 3466139	13133 9645864	74392	298020	808162	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloropropane	FB	Ave	+++++ 1209320	5200 3273600	29257	108521	287662	+++++ 200	1.00 500	5.00	20.0	50.0
Methyl methacrylate	FB	Ave	+++++ 686121	2422 1867919	14761	57079	162978	+++++ 400	2.00 1000	10.0	40.0	100
Dibromomethane	FB	Ave	+++++ 668482	2815 1785244	15440	60092	157774	+++++ 200	1.00 500	5.00	20.0	50.0
1,4-Dioxane	DXE	Ave	+++++ 145813	1869 +++++	4486	13456	42475	+++++ 4000	50.0 +++++	100	400	1000
n-Propyl acetate	FB	Ave	+++++ 2224491	8191 6196399	46985	187427	514306	+++++ 200	1.00 500	5.00	20.0	50.0
Dichlorobromomethane	FB	Ave	+++++ 1416970	5416 3852876	31147	120917	327035	+++++ 200	1.00 500	5.00	20.0	50.0
2-Nitropropane	FB	Ave	+++++ 728784	4199 2057881	17041	62762	173219	+++++ 400	2.00 1000	10.0	40.0	100
2-Chloroethyl vinyl ether	FB	Ave	+++++ 773949	2925 2192576	16277	66637	185864	+++++ 200	1.00 501	5.01	20.0	50.1
Epichlorohydrin	BUT	Ave	3009 2915682	10011 7792627	64978	249122	688405	5.00 4000	20.0 10000	100	400	1000
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 1893586	6750 5156260	42092	164141	439734	+++++ 200	1.00 500	5.00	20.0	50.0
4-Methyl-2-pentanone (MIBK)	BUT	Ave	+++++ 8179514	27192 21415541	173583	662422	1889643	+++++ 1000	5.00 2500	25.0	100	250
Toluene	CBNZ d5	Ave	+++++ 4620324	19898 12288525	108455	415676	1097482	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 1722985	6515 4756019	34604	144137	392648	+++++ 200	1.00 500	5.00	20.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 1786933	4443 +++++	33587	134392	390776	+++++ 200	1.00 +++++	5.00	20.0	50.0
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 837176	3272 2274052	19459	74372	200110	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	+++++ 939938	3873 2412612	22403	89150	230328	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 1789525	6906 4902025	40192	157788	417555	+++++ 200	1.00 500	5.00	20.0	50.0
2-Hexanone	BUT	Ave	+++++ 5773513	16862 15769331	101589	408861	1212653	+++++ 1000	5.00 2500	25.0	100	250
n-Butyl acetate	CBNZ d5	Ave	+++++ 2444045	8600 6867784	50259	193328	556446	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorodibromomethane	CBNZ d5	Ave	+++++ 975585	3505 2614109	20920	80407	226488	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 973863	4066 2614570	20635	85640	224550	+++++ 200	1.00 500	5.00	20.0	50.0
Chlorobenzene	CBNZ d5	Ave	+++++ 2833993	11004 7527165	66520	254040	666718	+++++ 200	1.00 500	5.00	20.0	50.0
Ethylbenzene	CBNZ d5	Ave	+++++ 1558931	5810 4020115	36664	138076	373873	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 990271	4058 2540350	22864	89157	237461	+++++ 200	1.00 500	5.00	20.0	50.0
m-Xylene & p-Xylene	CBNZ d5	Ave	+++++ 1921901	7086 4986630	44538	172086	460115	+++++ 200	1.00 500	5.00	20.0	50.0
o-Xylene	CBNZ d5	Ave	+++++ 1905822	7645 4769035	44122	170077	468652	+++++ 200	1.00 500	5.00	20.0	50.0
n-Butyl acrylate	CBNZ d5	Ave	+++++ 1020560	3442 2742471	17796	73492	228265	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	CBNZ d5	Ave	+++++ 3305653	11841 8537844	66528	274623	773679	+++++ 200	1.00 500	5.00	20.0	50.0
Bromoform	CBNZ d5	Ave	+++++ 648031	2020 1669740	13818	54307	150270	+++++ 200	1.00 500	5.00	20.0	50.0
Amyl acetate (mixed isomers)	DCBd 4	Ave	+++++ 2915847	9571 7971391	56106	231069	671337	+++++ 200	1.00 500	5.00	20.0	50.0
Isopropylbenzene	CBNZ d5	Ave	+++++ 5086988	19487 12575266	116368	458682	1236714	+++++ 200	1.00 500	5.00	20.0	50.0
Bromobenzene	DCBd 4	Ave	+++++ 1116256	4529 2821727	27432	101888	270354	+++++ 200	1.00 500	5.00	20.0	50.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 1417859	5908 3721412	33490	128303	340540	+++++ 200	1.00 500	5.00	20.0	50.0
N-Propylbenzene	DCBd 4	Ave	+++++ 6345777	25448 13990274	142770	566209	1533717	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 397857	1702 1017270	9621	35009	100025	+++++ 200	1.00 500	5.00	20.0	50.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 418183	1462 1143445	9571	34491	93358	+++++ 200	1.00 500	5.00	20.0	50.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 4148372	16214 10532320	94378	374401	1004034	+++++ 200	1.00 500	5.00	20.0	50.0
4-Ethyltoluene	DCBd 4	Ave	+++++ 4740216	19042 11687692	113488	448567	1223098	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 4147995	15345 10217959	93077	375821	1025664	+++++ 200	1.00 500	5.00	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Chlorotoluene	DCBd 4	Ave	+++++ 3933652	15323 9798897	88328	352545	935463	+++++ 200	1.00 500	5.00	20.0	50.0
Butyl Methacrylate	DCBd 4	Ave	+++++ 1572942	5133 4085570	30066	125299	376662	+++++ 200	1.00 500	5.00	20.0	50.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 3428416	13047 8436787	78593	314358	853248	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 4349143	17196 10354414	97636	388731	1059343	+++++ 200	1.00 500	5.00	20.0	50.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 5488377	21034 11794462	127589	500800	1362420	+++++ 200	1.00 500	5.00	20.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 2142443	9340 5130321	53917	204803	538145	+++++ 200	1.00 500	5.00	20.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 4619463	17627 10168414	106910	426276	1153668	+++++ 200	1.00 500	5.00	20.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 2182358	10311 5348149	55149	205394	534060	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	+++++ 4380919	18128 10010500	109088	413487	1121736	+++++ 200	1.00 500	5.00	20.0	50.0
Benzyl chloride	DCBd 4	Ave	+++++ 2711717	10859 7033677	68741	264209	657174	+++++ 200	1.00 500	5.00	20.0	50.0
Indan	DCBd 4	Ave	+++++ 4141605	17582 9863429	98803	398367	1052285	+++++ 200	1.00 500	5.00	20.0	50.0
p-Diethylbenzene	DCBd 4	Ave	+++++ 2323346	10689 5783732	59719	226985	608638	+++++ 200	1.00 500	5.00	20.0	50.0

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	+++++ 2570303	10120 6165536	61496	242373	654805	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 2179009	10159 5278158	55980	206954	538143	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	+++++ 4192650	18741 9063794	106702	406794	1091278	+++++ 200	1.00 500	5.00	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 290402	1364 720114	7651	25555	74178	+++++ 200	1.00 500	5.00	20.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	+++++ 1505669	7830 3431909	41760	161002	422482	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 1494661	8175 3333622	39637	151224	395897	+++++ 200	1.00 500	5.00	20.0	50.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 547332	2780 1173832	15072	56723	148227	+++++ 200	1.00 500	5.00	20.0	50.0
Naphthalene	DCBd 4	Ave	+++++ 4534504	20300 10154427	112567	420533	1139340	+++++ 200	1.00 500	5.00	20.0	50.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 1351117	7301 3052744	37244	139123	361158	+++++ 200	1.00 500	5.00	20.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	255564 259015	241300 305283	262238	252753	268923	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	320574 332870	303750 427730	326054	323399	341635	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	998567 1041721	949700 1250098	1035647	1017908	1091692	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene	CBNZ d5	Ave	256687	245050	271403	268089	287689	50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 814964

SDG No.:

Instrument ID: CVOAMS6 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2021 12:45 Calibration End Date: 11/23/2021 14:57 Calibration ID: 88145

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			277308	320442				50.0	50.0			

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Nov-2021 12:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD7
Misc. Info.: 460-0138064-003
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:33:51 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: moroneyc Date: 23-Nov-2021 13:18:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Butadiene	54	1.739	1.738	0.000	57	1552	0.2500	0.2417	
* 26 TBA-d9 (IS)	65	2.963	2.979	-0.016	0	530613	1000.0	1000.0	
31 Acrylonitrile	53	3.209	3.193	0.016	82	5656	2.00	2.08	
* 38 2-Butanone-d5	46	3.941	3.949	-0.008	0	777460	250.0	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	96	255564	50.0	50.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.705	4.705	0.000	0	320574	50.0	49.6	
* 61 Fluorobenzene	96	4.968	4.968	0.000	98	976405	50.0	50.0	
* 67 1,4-Dioxane-d8	96	5.666	5.707	-0.041	0	39123	1000.0	1000.0	
75 Epichlorohydrin	57	6.291	6.291	0.001	27	3009	5.00	5.23	M
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	99	998567	50.0	50.6	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	87	725747	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	9.734	9.733	0.001	87	256687	50.0	49.8	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	96	388946	50.0	50.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

GASES Li_00449	Amount Added:	2.50	Units: uL	
ACROLEIN W_00133	Amount Added:	0.00	Units: uL	
8260MIX1COMB_00147	Amount Added:	0.00	Units: uL	
524freon_00045	Amount Added:	0.00	Units: uL	
ACRY/EPIH MIX_00092	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00117	Amount Added:	0.00	Units: uL	
MIX I Hi_00144	Amount Added:	0.00	Units: uL	
8FreonHi_00038	Amount Added:	0.00	Units: uL	
Ethanol mix_00058	Amount Added:	0.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

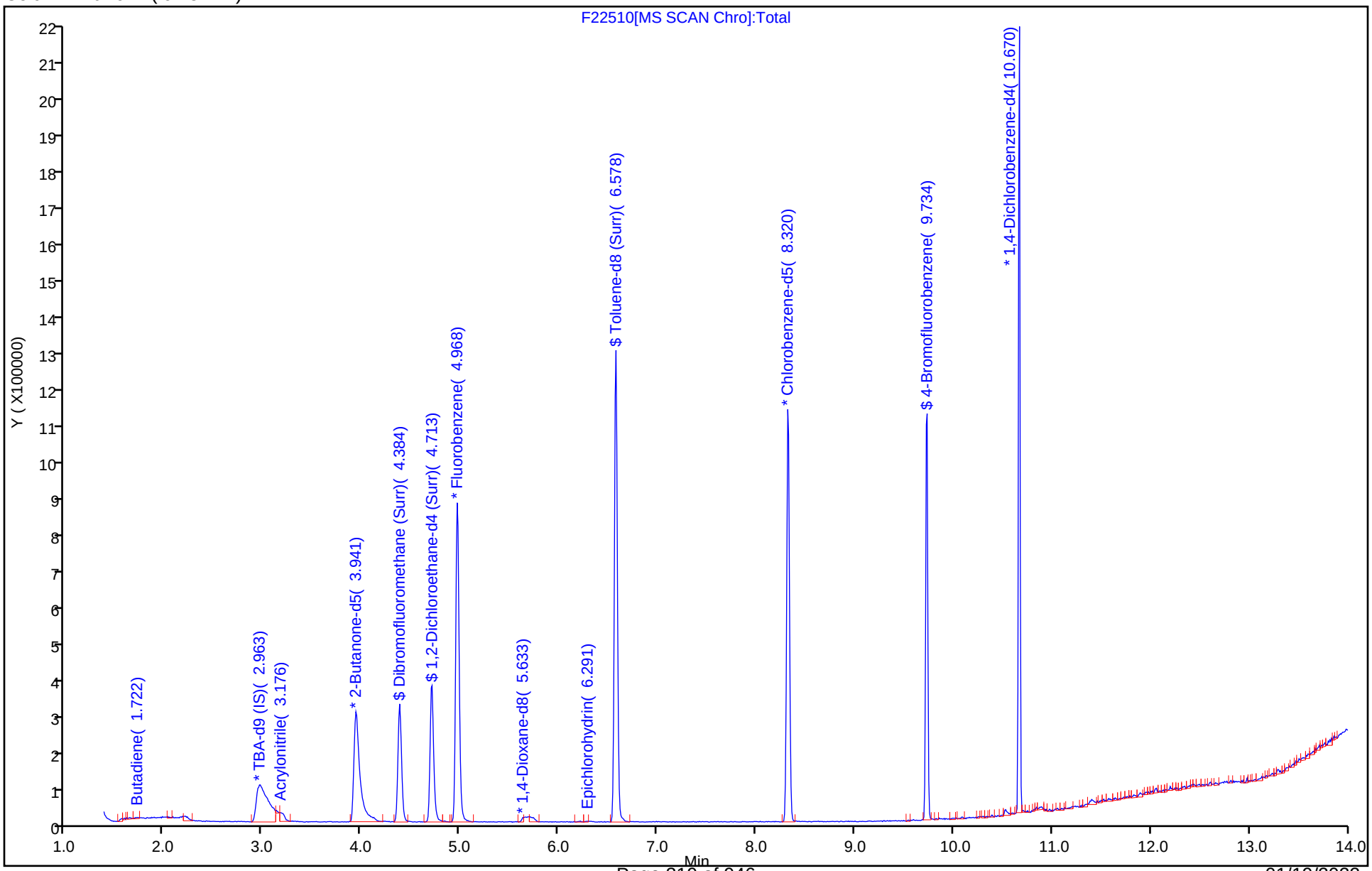
Report Date: 24-Nov-2021 08:33:52 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D

Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	STD7			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

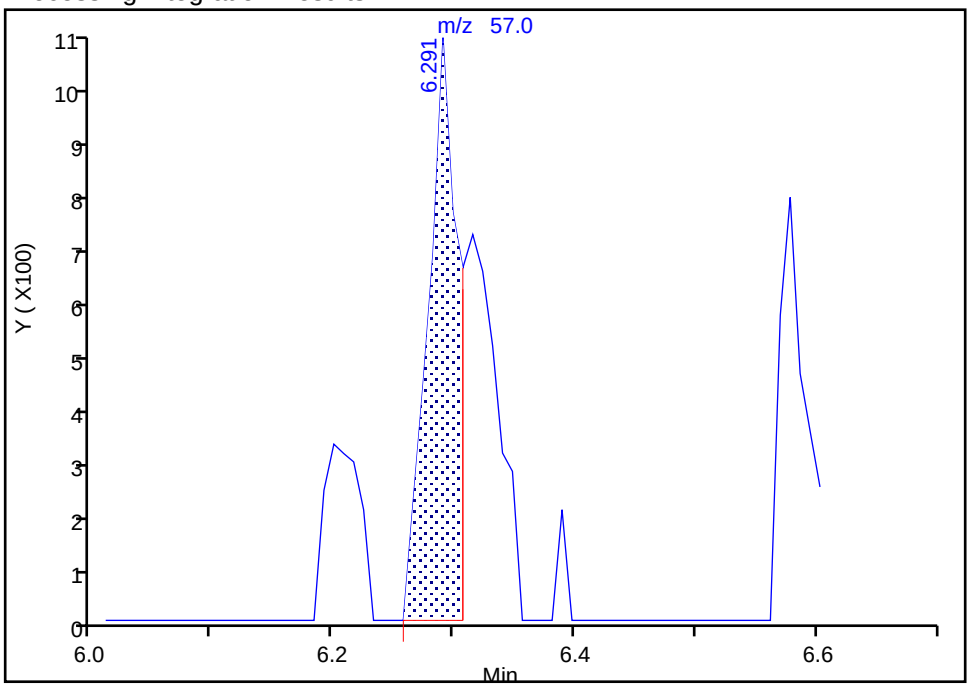
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

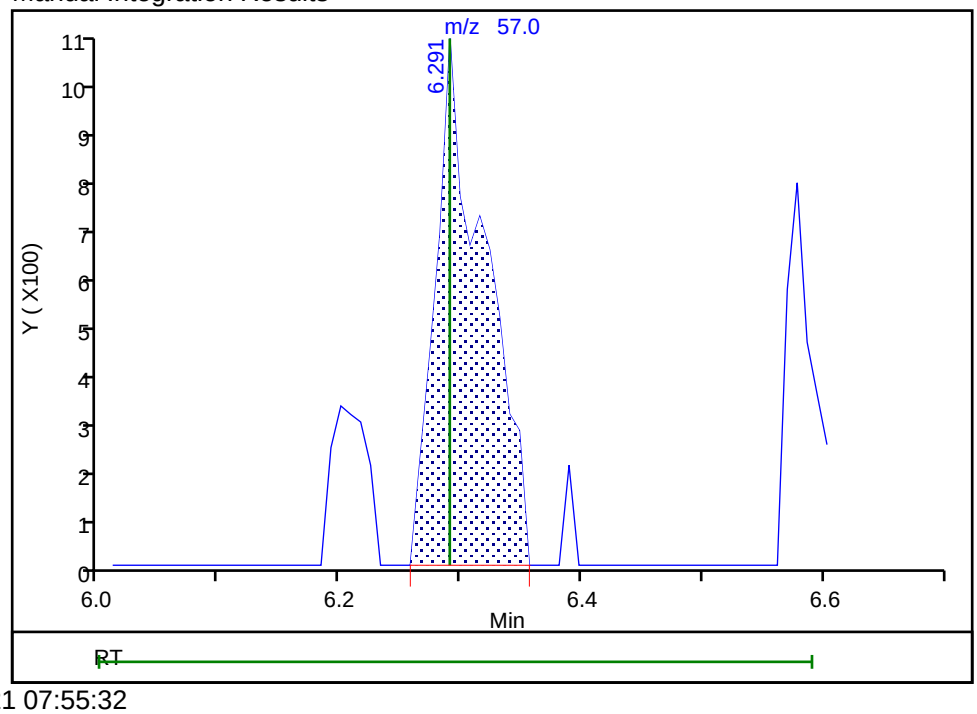
Processing Integration Results

RT: 6.29
Area: 1834
Amount: 3.386680
Amount Units: ug/l



Manual Integration Results

RT: 6.29
Area: 3009
Amount: 5.232091
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:55:32
Audit Action: Manually Integrated Audit Reason: Baseline

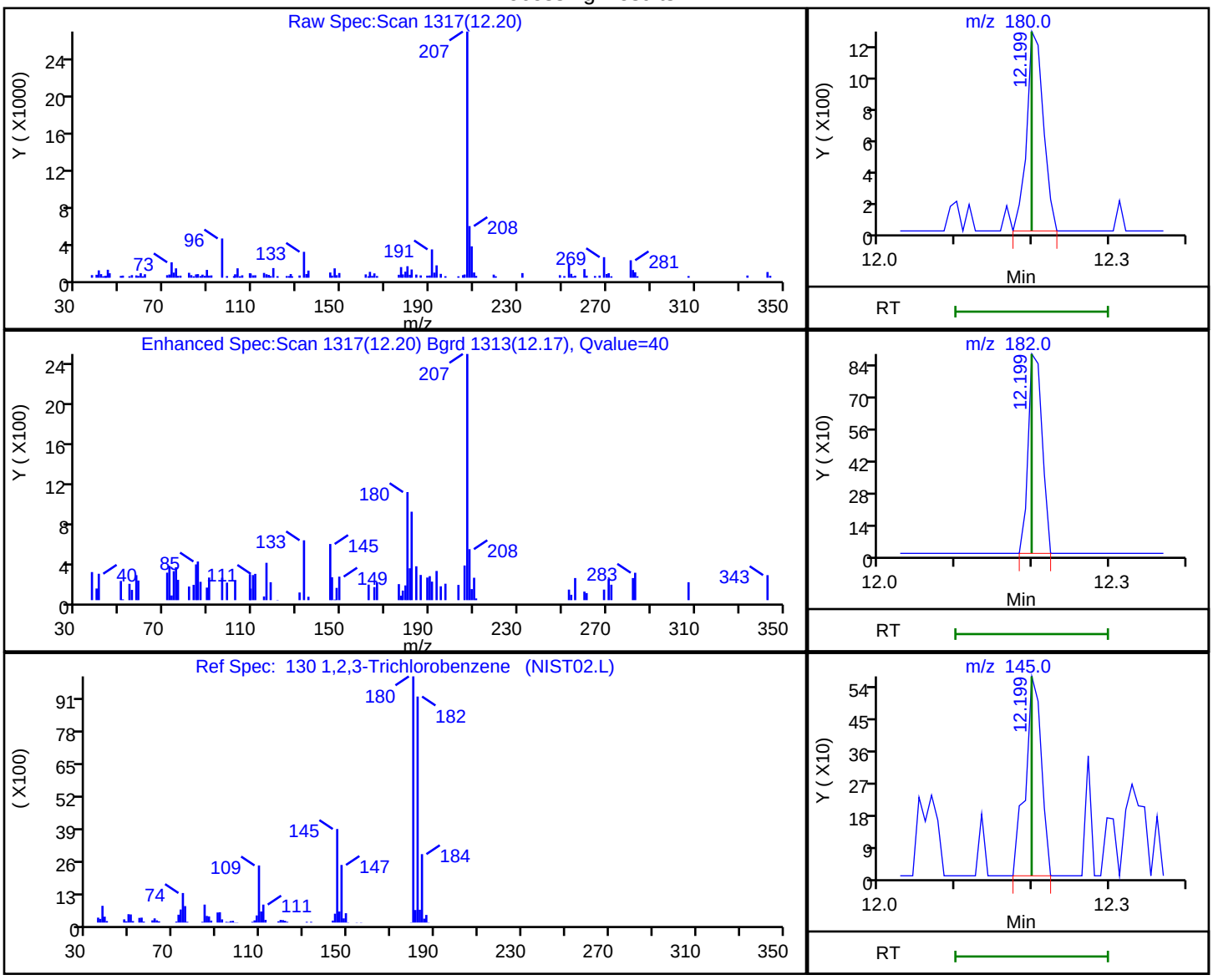
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

130 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results



RT	Mass	Response	Amount
12.20	180.00	1878	0.284496
12.20	182.00	1126	
12.20	145.00	819	

Reviewer: baronm, 23-Nov-2021 20:59:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

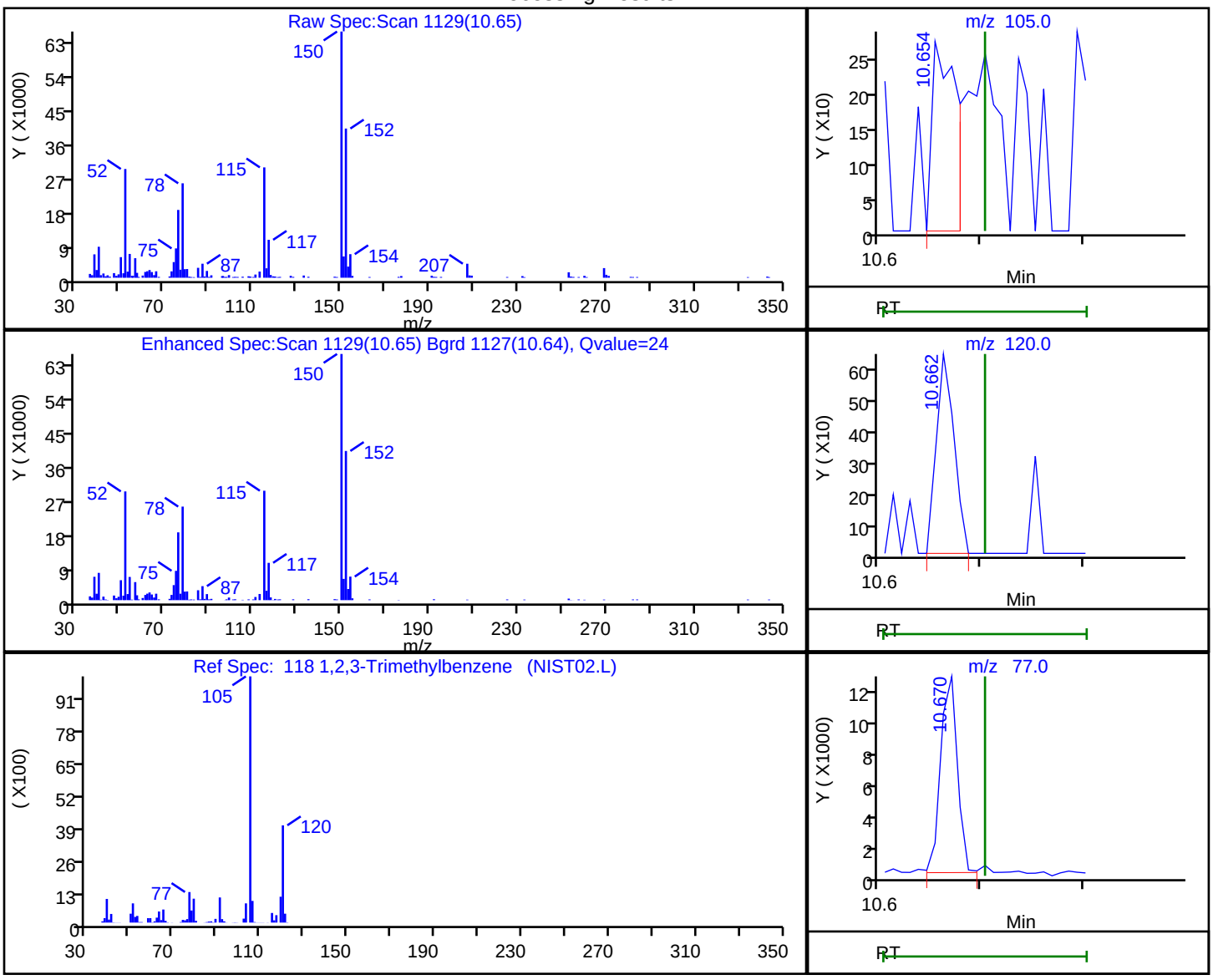
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

118 1,2,3-Trimethylbenzene, CAS: 526-73-8

Processing Results



RT	Mass	Response	Amount
10.65	105.00	440	0.022402
10.66	120.00	784	
10.67	77.00	14625	

Reviewer: baronm, 23-Nov-2021 20:59:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

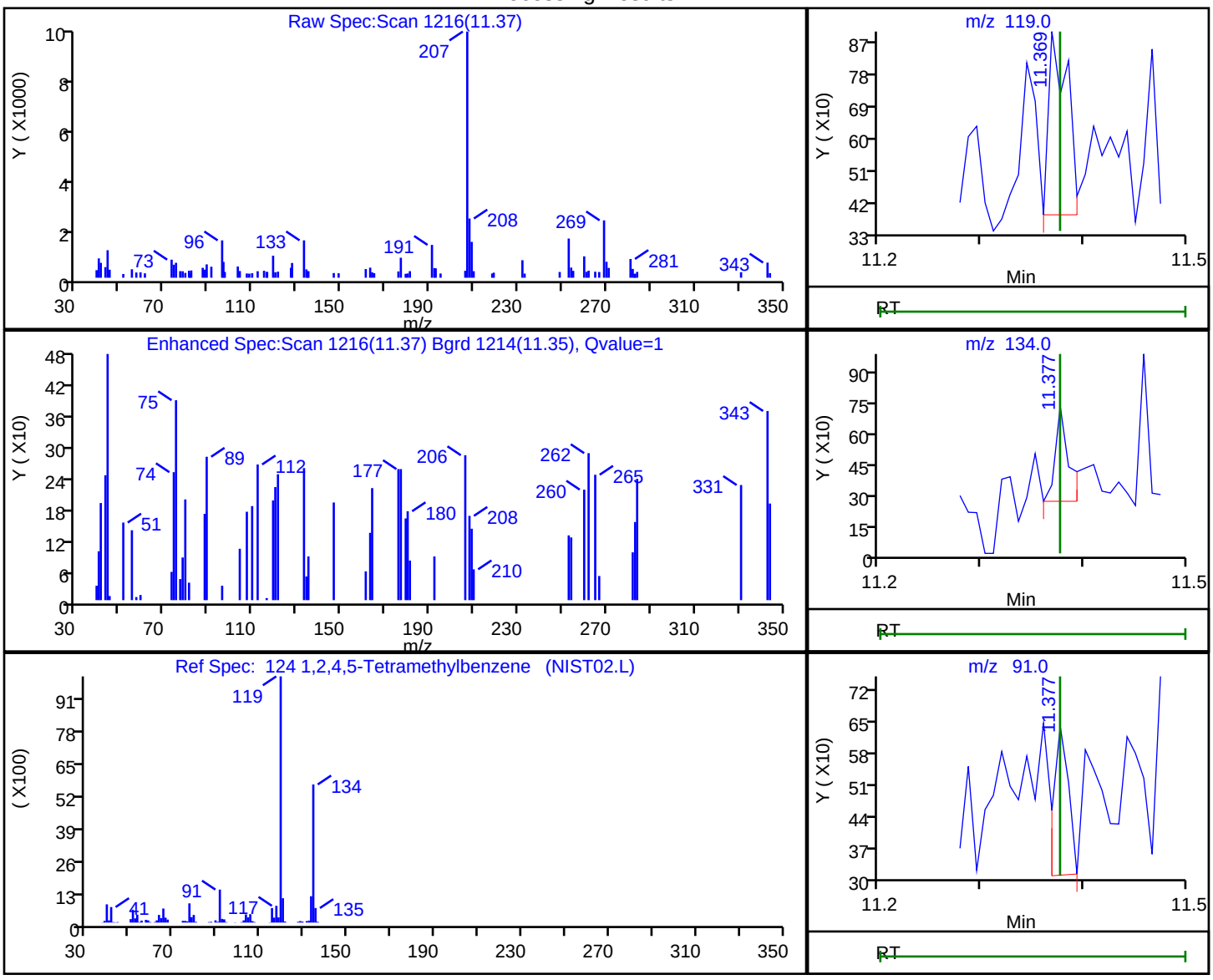
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Processing Results



RT	Mass	Response	Amount
11.37	119.00	656	0.034324
11.38	134.00	427	
11.38	91.00	335	

Reviewer: baronm, 23-Nov-2021 20:59:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

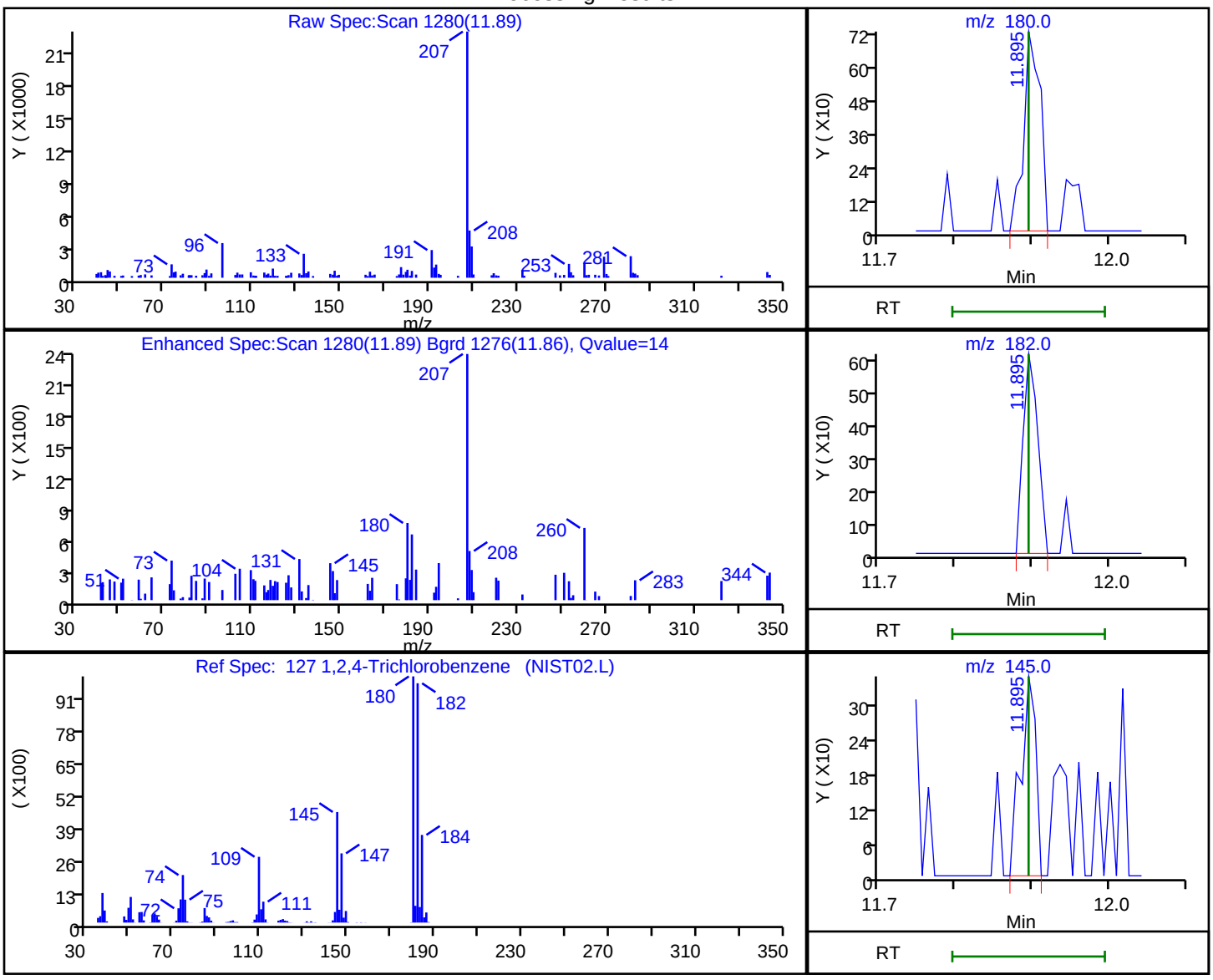
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

127 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
11.89	180.00	1080	0.149455
11.89	182.00	819	
11.89	145.00	471	

Reviewer: baronm, 23-Nov-2021 20:59:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

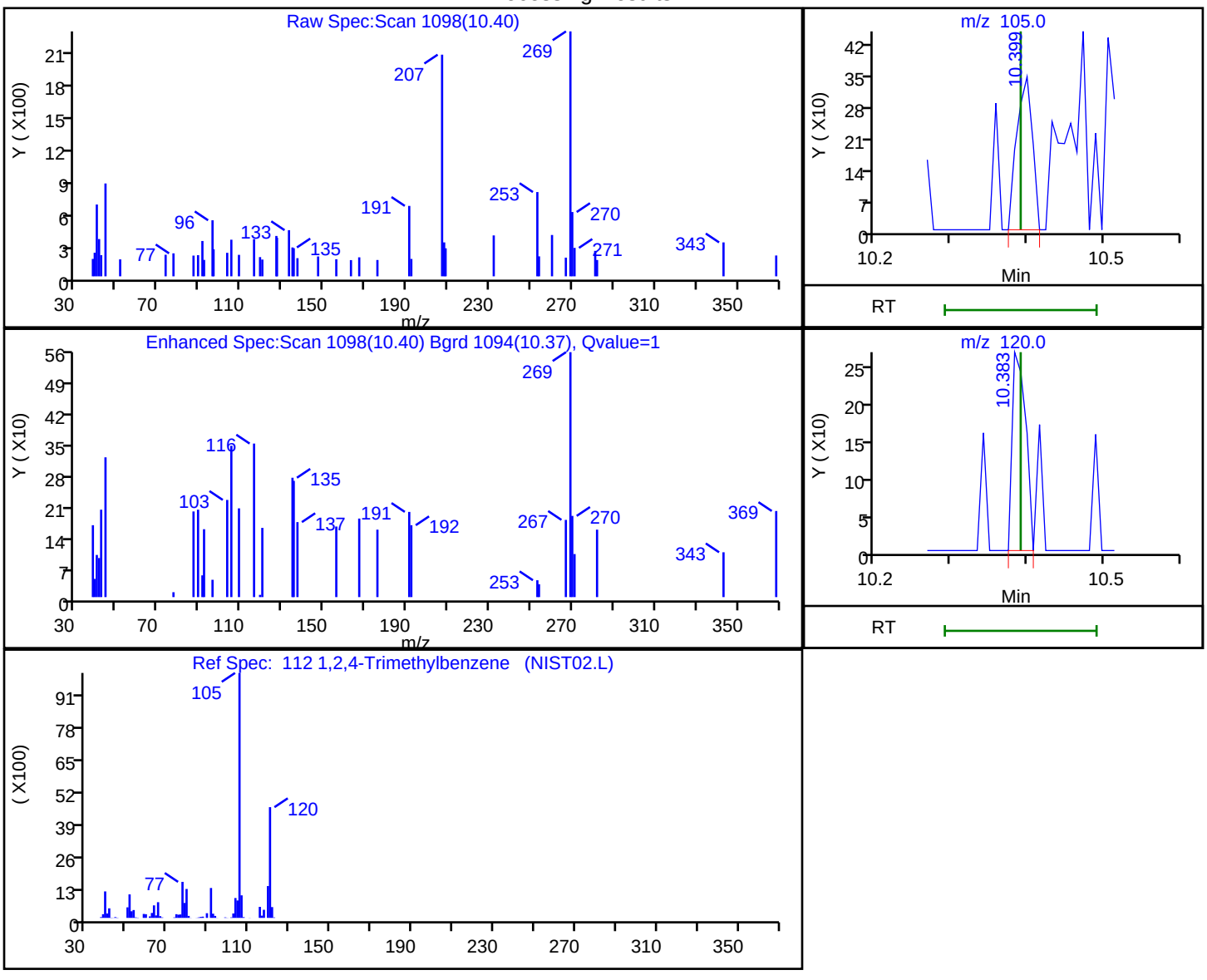
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

112 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
10.40	105.00	488	0.025953
10.38	120.00	323	

Reviewer: baronm, 23-Nov-2021 20:59:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

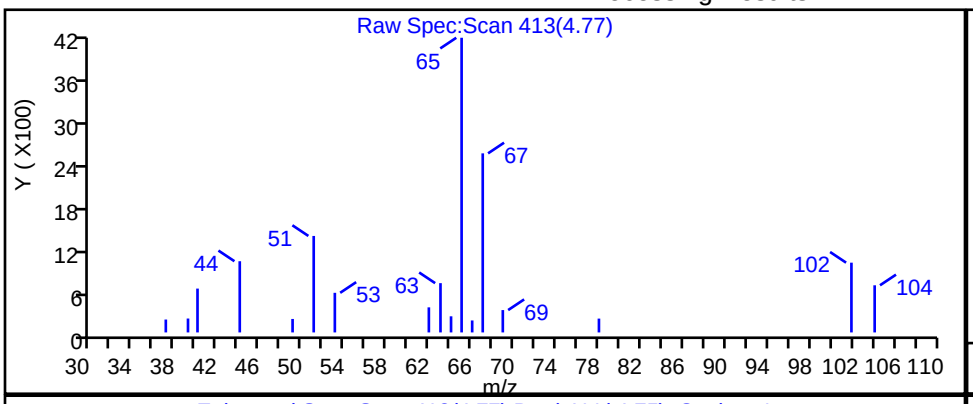
User Disabled Compound Report

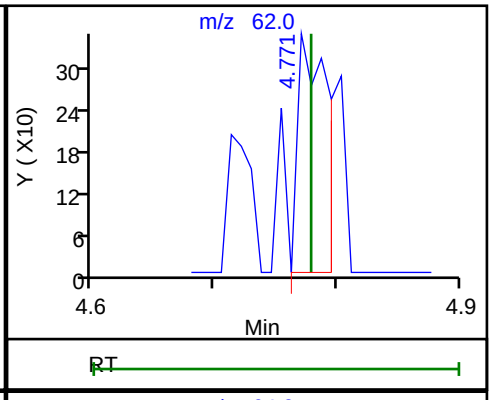
Eurofins TestAmerica, Edison

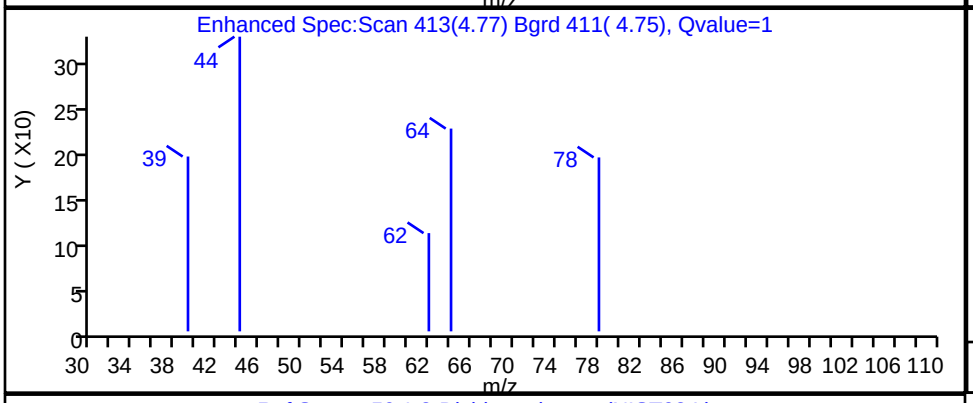
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

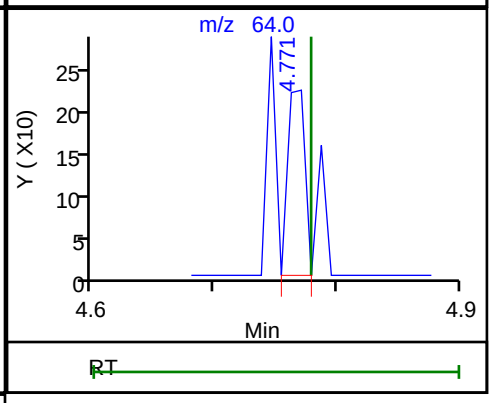
59 1,2-Dichloroethane, CAS: 107-06-2

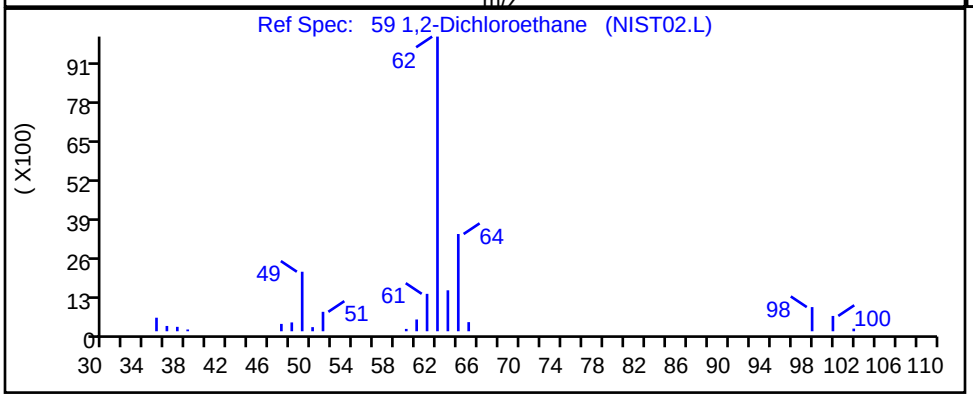
Processing Results











RT	Mass	Response	Amount
4.77	62.00	588	0.087060
4.77	64.00	220	

Reviewer: baronm, 23-Nov-2021 20:59:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

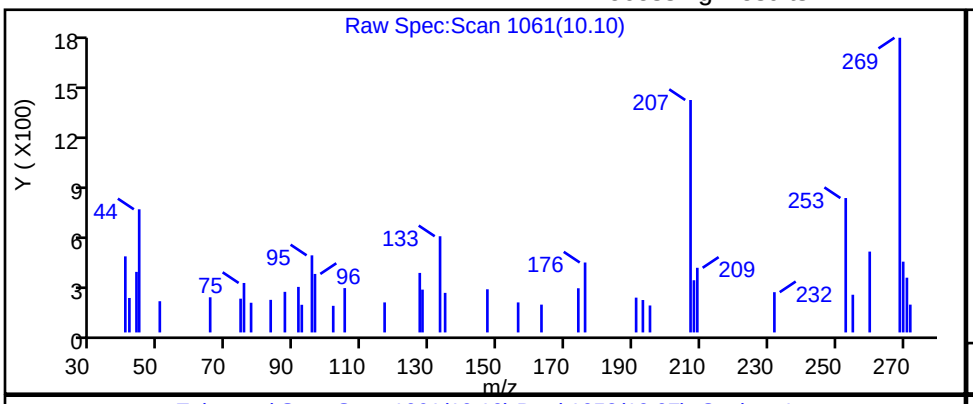
User Disabled Compound Report

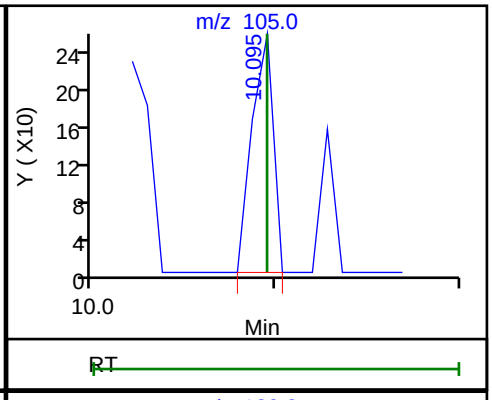
Eurofins TestAmerica, Edison

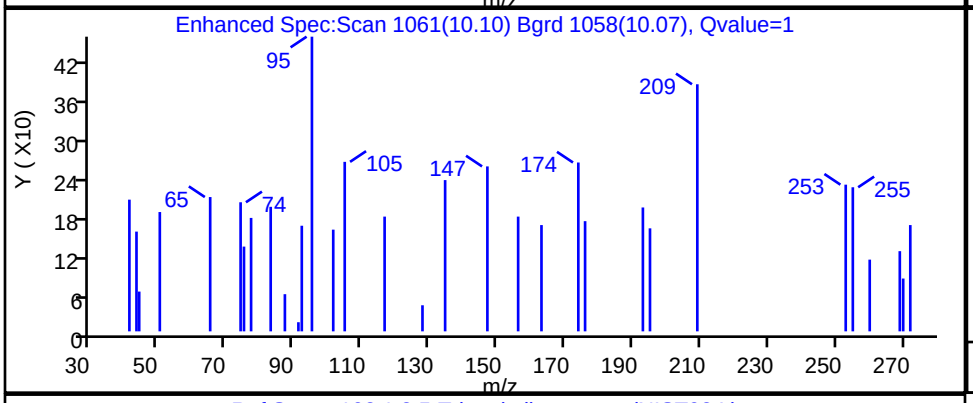
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

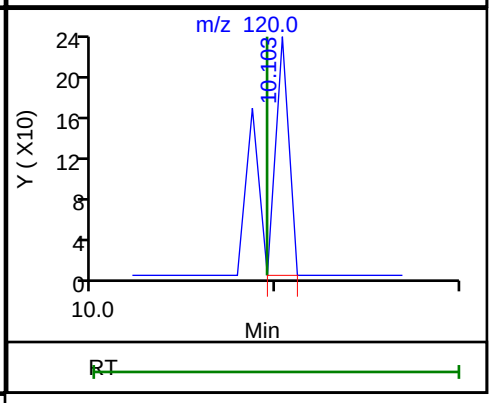
108 1,3,5-Trimethylbenzene, CAS: 108-67-8

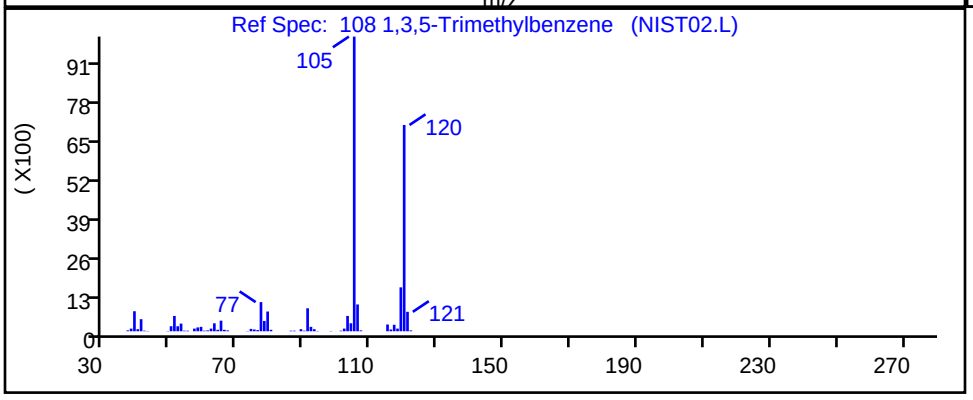
Processing Results











RT	Mass	Response	Amount
10.10	105.00	211	0.011768
10.10	120.00	117	

Reviewer: baronm, 23-Nov-2021 20:59:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

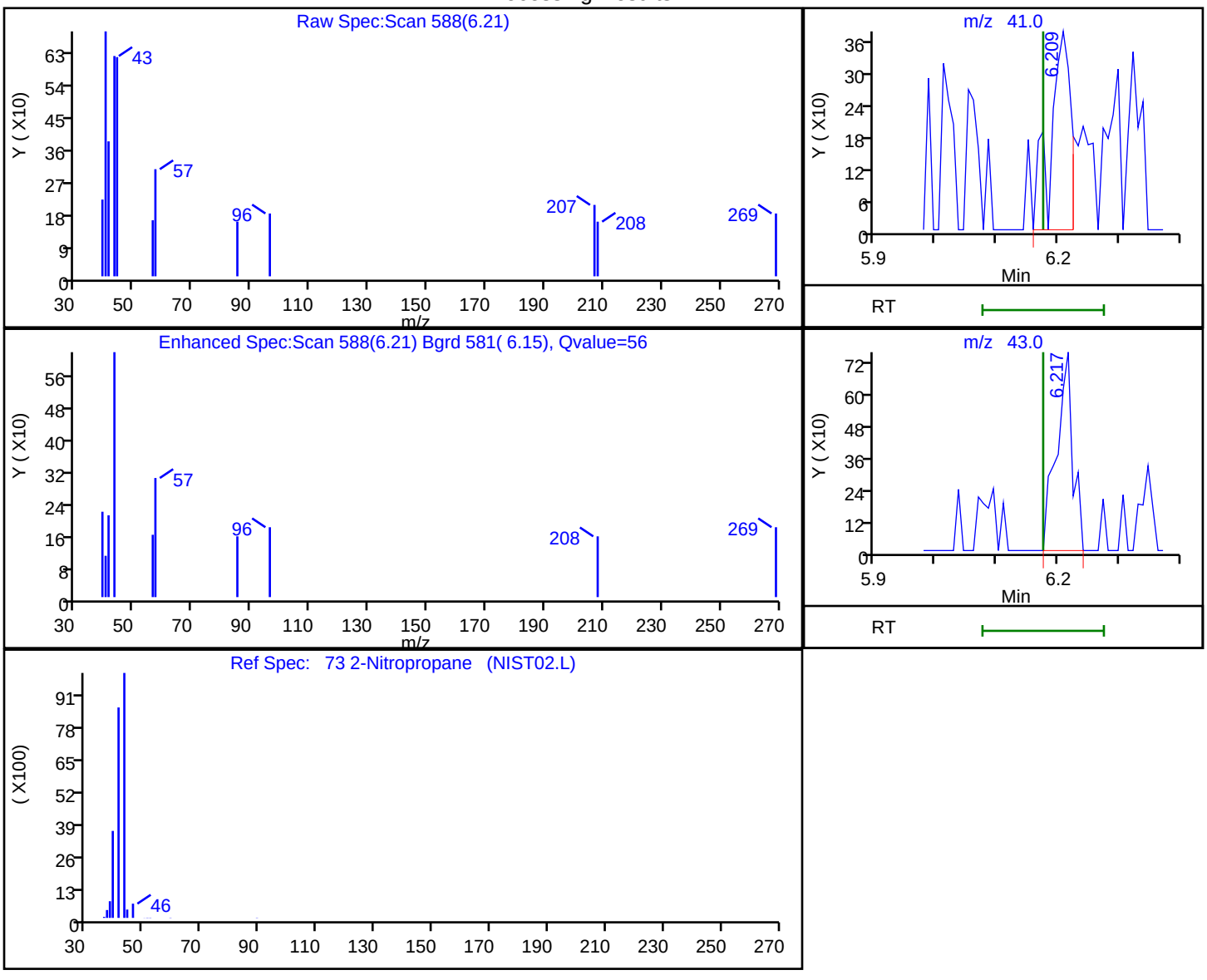
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

73 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
6.21	41.00	873	0.501762
6.22	43.00	1410	

Reviewer: baronm, 23-Nov-2021 20:59:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

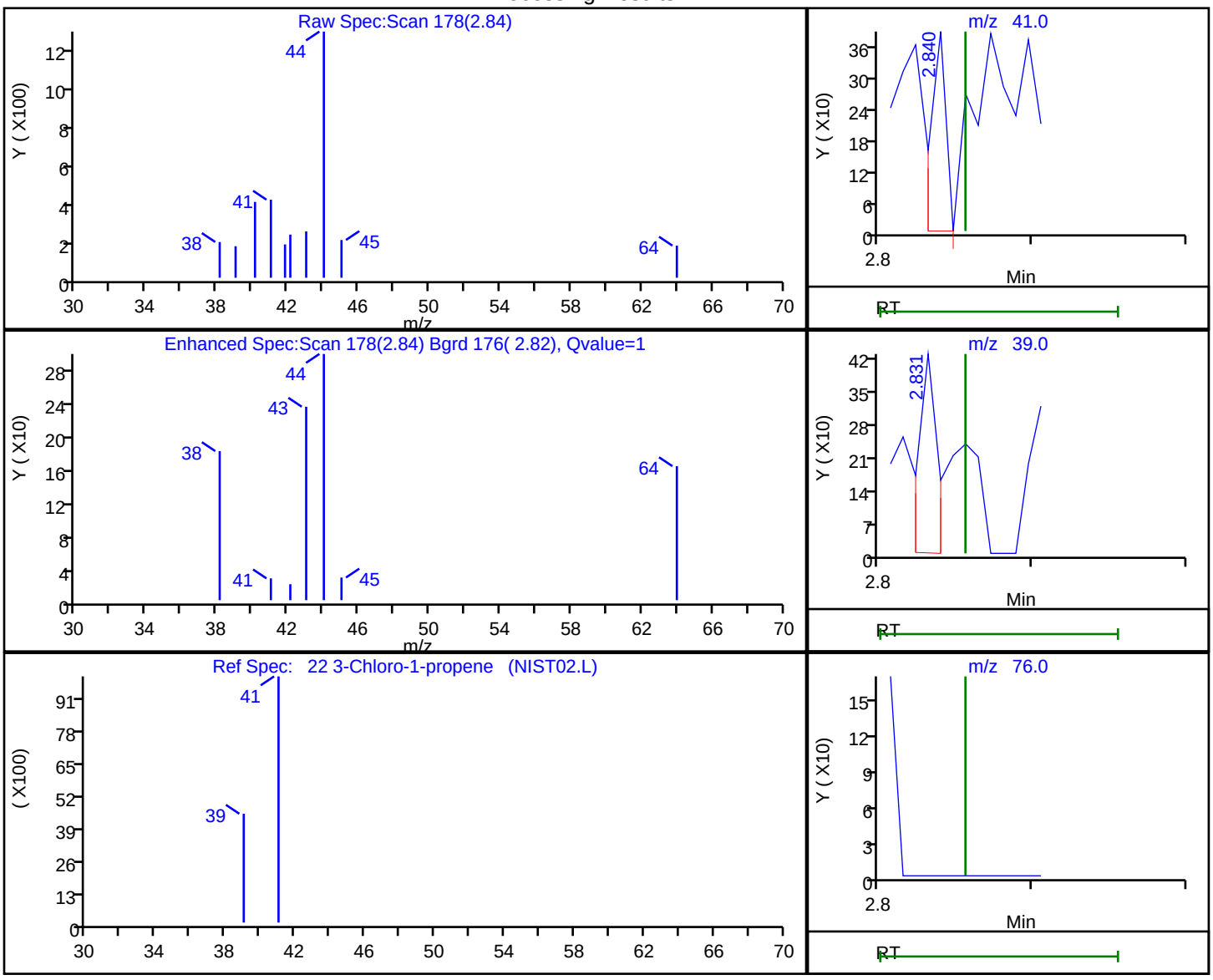
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

22 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
2.84	41.00	269	0.022122
2.83	39.00	369	
2.86	76.00	0	

Reviewer: baronm, 23-Nov-2021 20:58:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

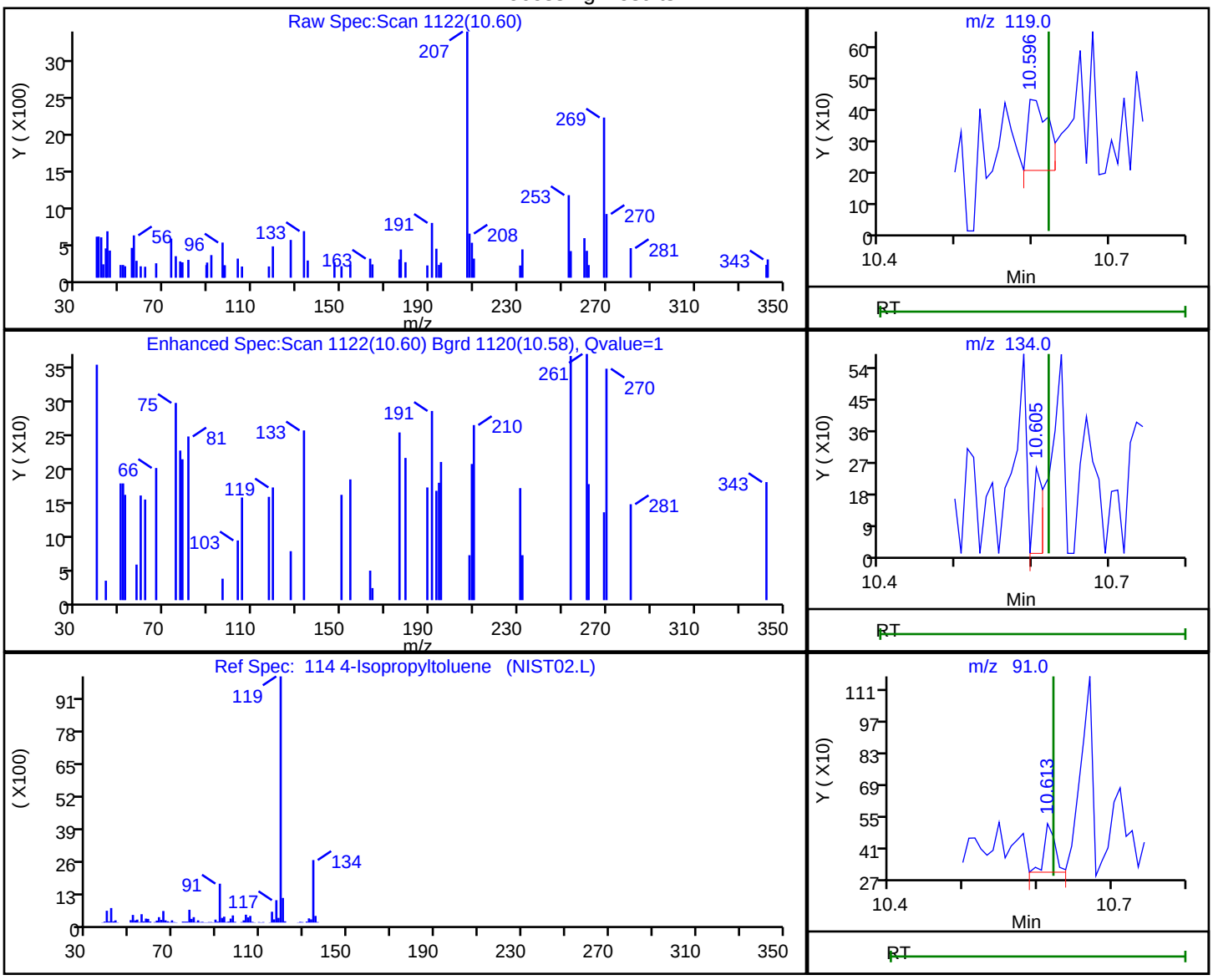
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

114 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
10.60	119.00	433	0.021738
10.60	134.00	211	
10.61	91.00	216	

Reviewer: baronm, 23-Nov-2021 20:59:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

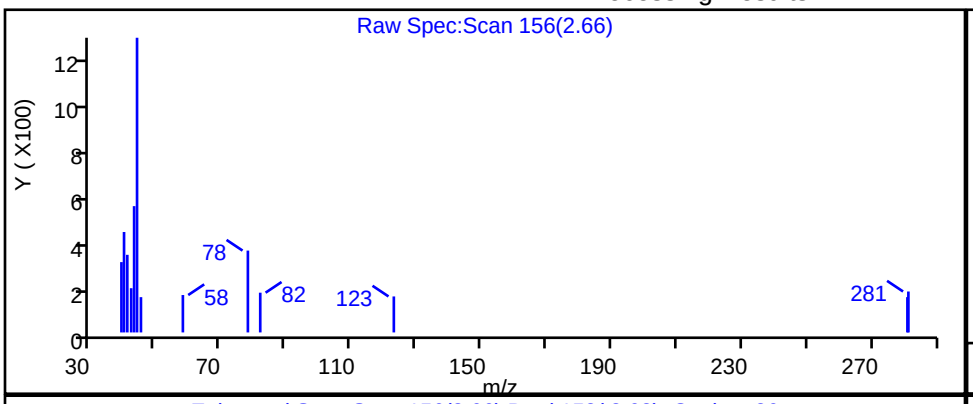
User Disabled Compound Report

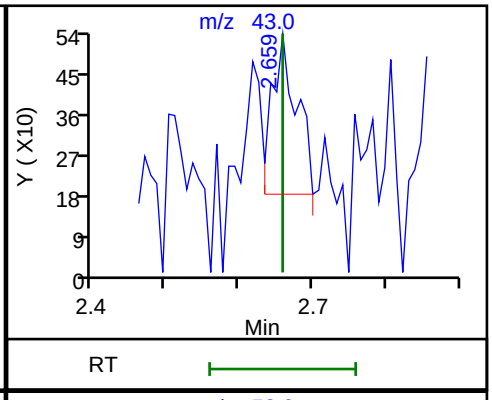
Eurofins TestAmerica, Edison

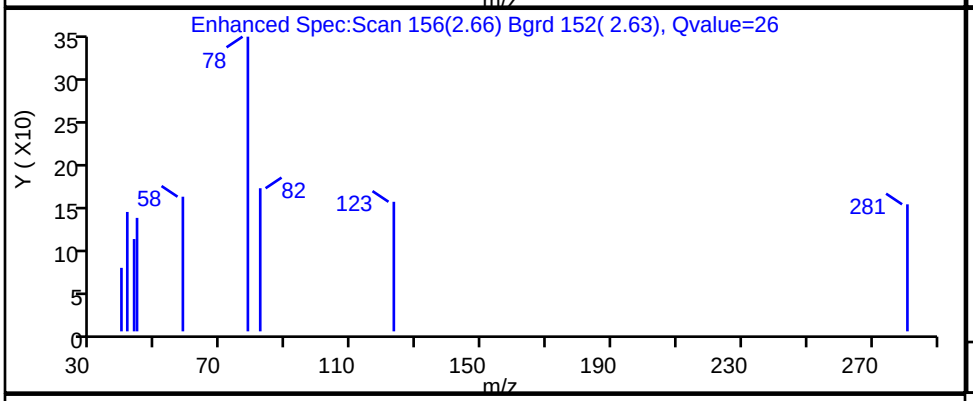
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

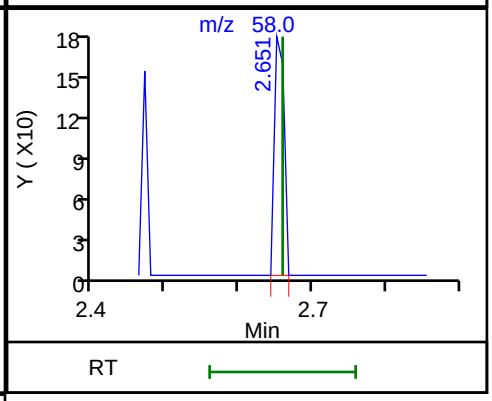
18 Acetone, CAS: 67-64-1

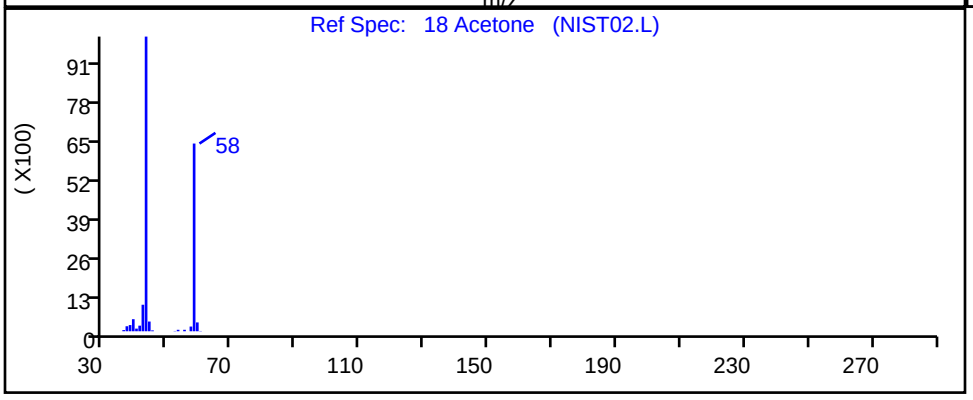
Processing Results











RT	Mass	Response	Amount
2.66	43.00	840	0.463710
2.65	58.00	167	

Reviewer: baronm, 23-Nov-2021 20:58:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

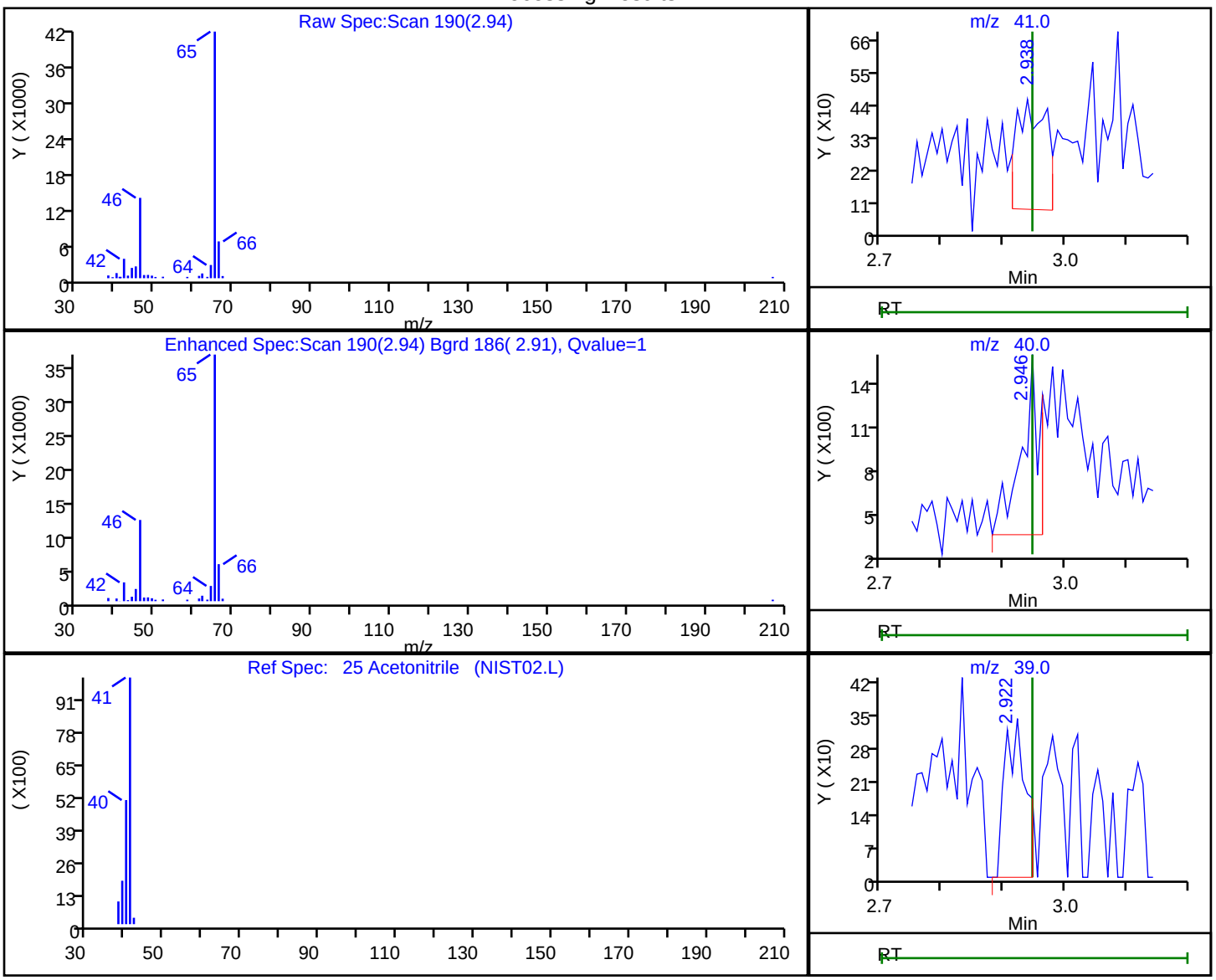
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
2.94	41.00	1280	2.026888
2.95	40.00	2405	
2.92	39.00	802	
2.96	38.00	1435	

Reviewer: baronm, 23-Nov-2021 20:58:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

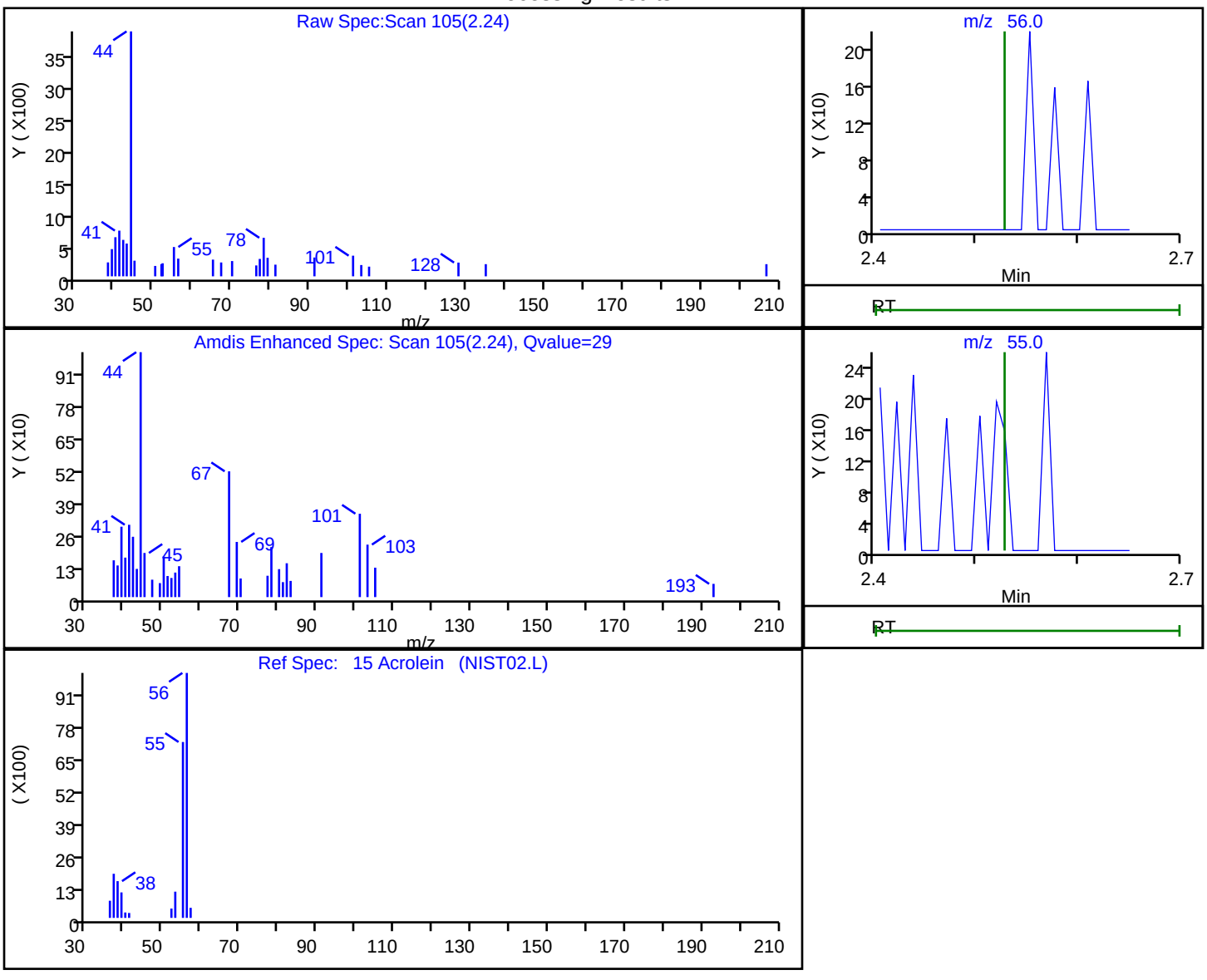
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
2.24	56.00	437	0.579635
2.24	55.00	986	

Reviewer: baronm, 23-Nov-2021 20:58:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

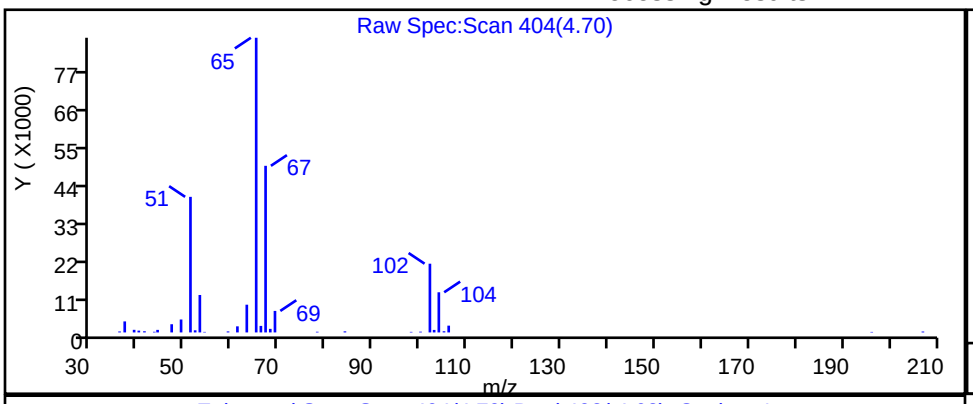
User Disabled Compound Report

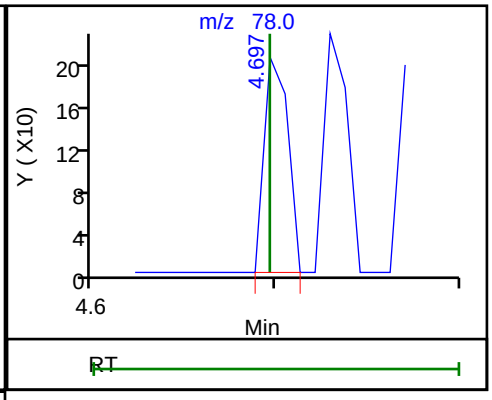
Eurofins TestAmerica, Edison

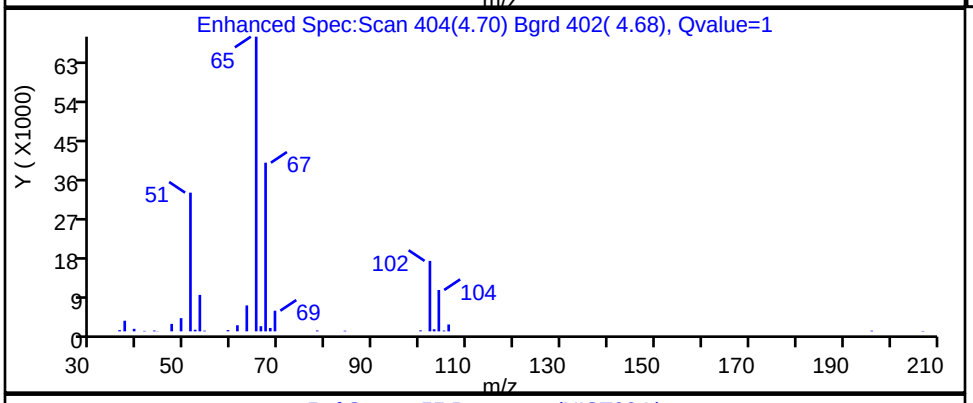
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

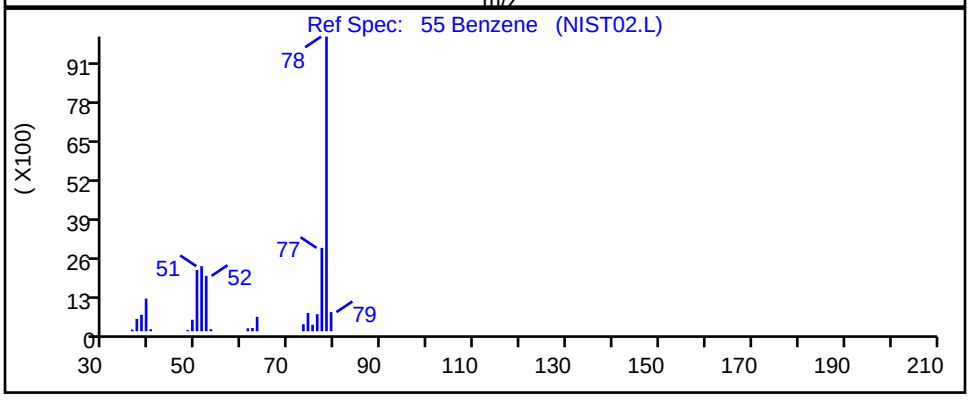
55 Benzene, CAS: 71-43-2

Processing Results









RT	Mass	Response	Amount
4.70	78.00	180	0.008617

Reviewer: baronm, 23-Nov-2021 20:59:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

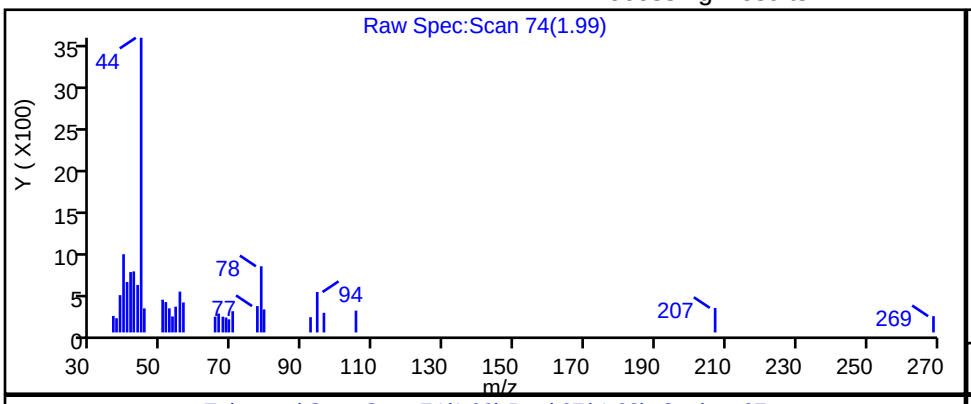
User Disabled Compound Report

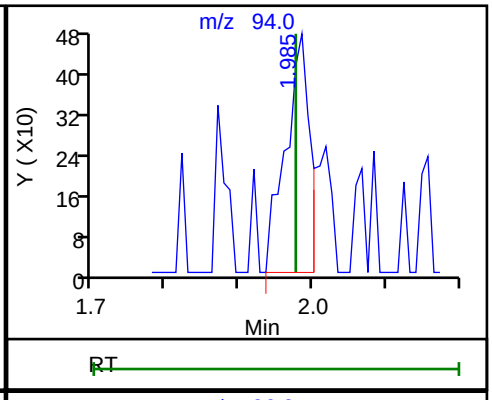
Eurofins TestAmerica, Edison

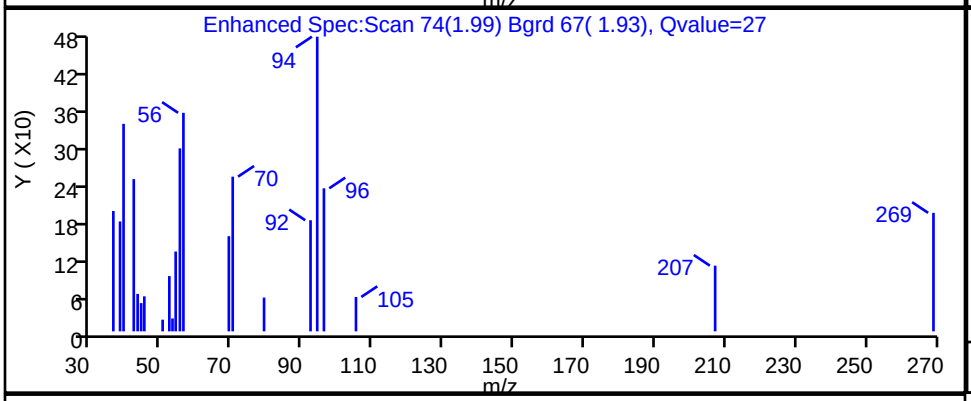
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

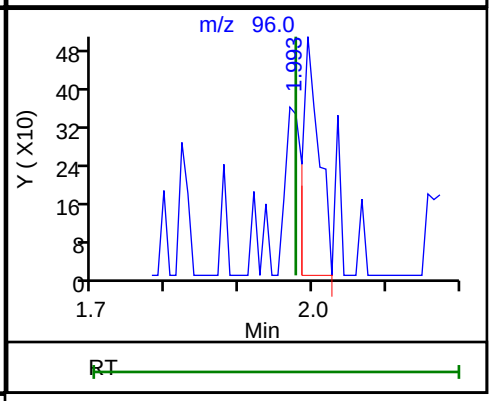
5 Bromomethane, CAS: 74-83-9

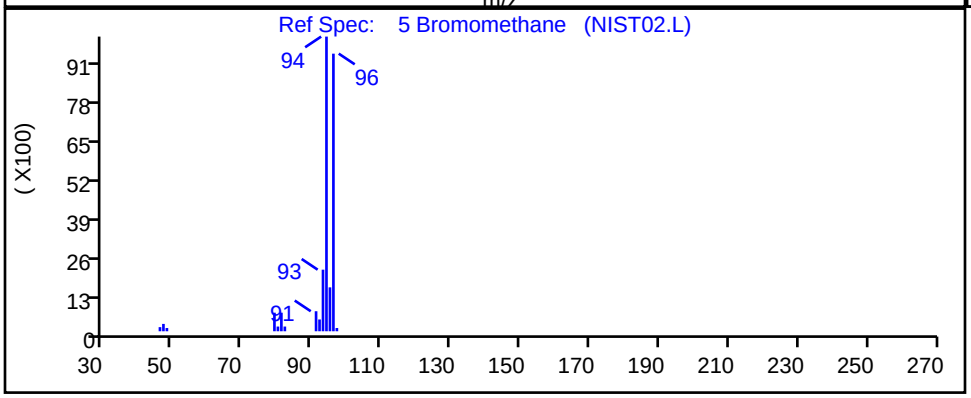
Processing Results











RT	Mass	Response	Amount
1.99	94.00	1100	0.323650
1.99	96.00	758	

Reviewer: baronm, 23-Nov-2021 20:58:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

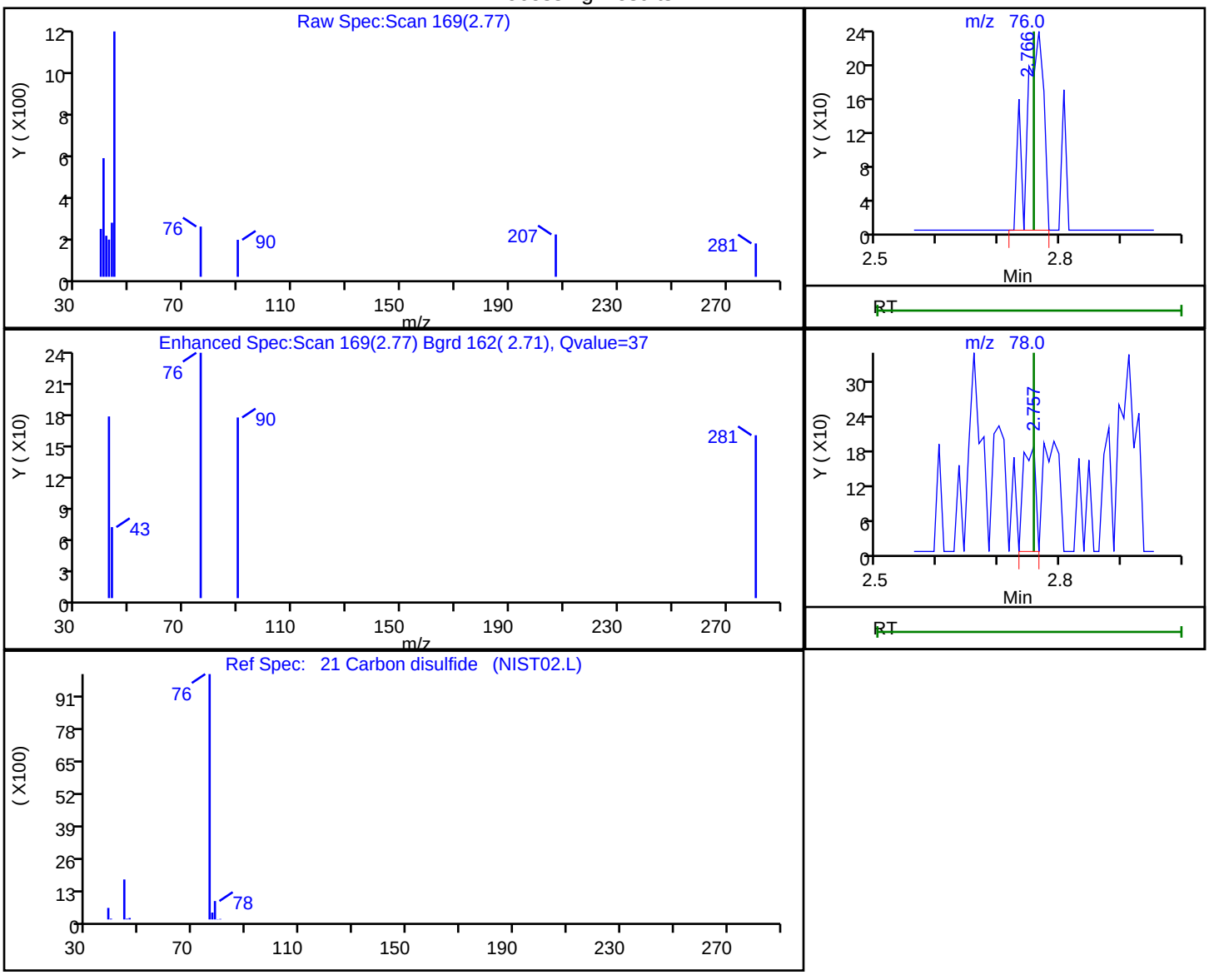
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

21 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.77	76.00	458	0.024720
2.76	78.00	255	

Reviewer: baronm, 23-Nov-2021 20:58:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

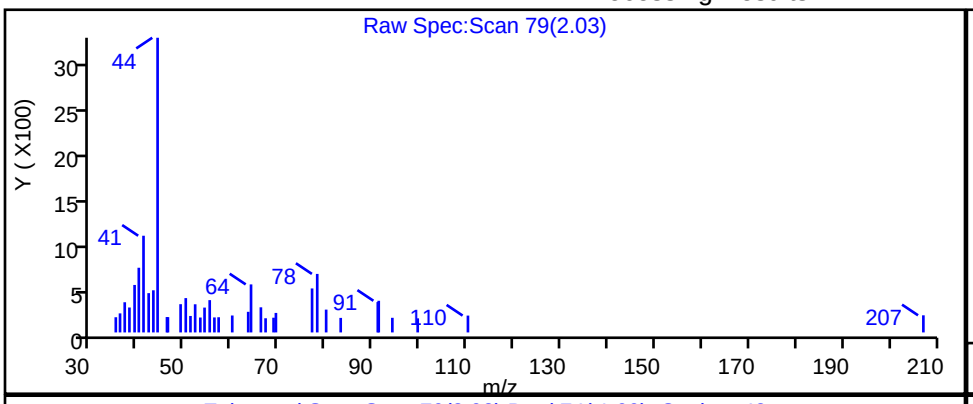
User Disabled Compound Report

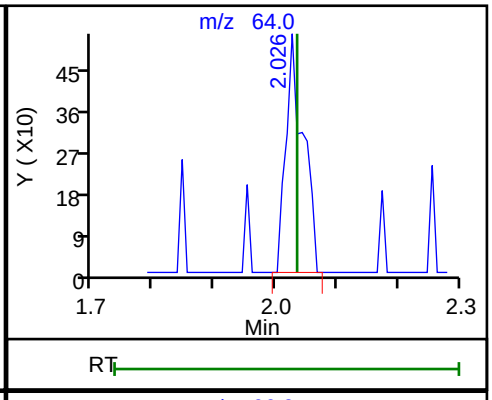
Eurofins TestAmerica, Edison

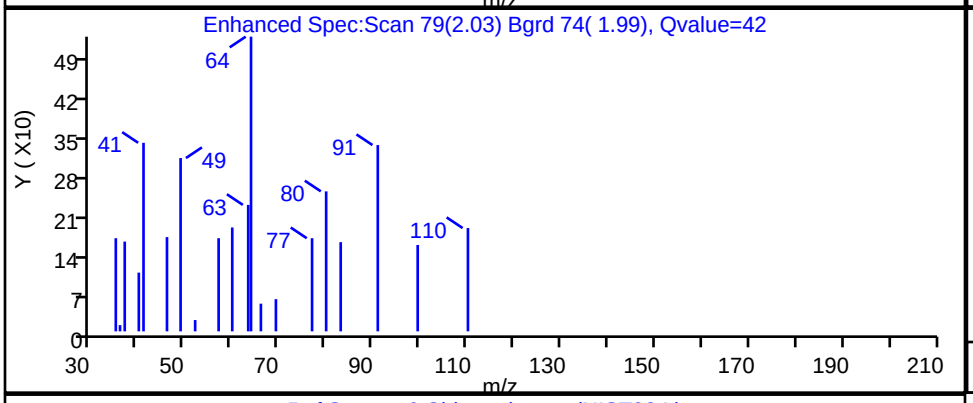
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

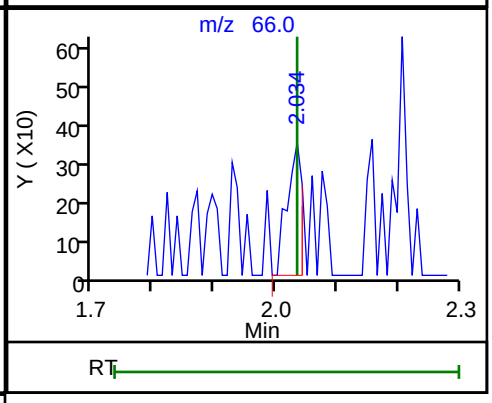
6 Chloroethane, CAS: 75-00-3

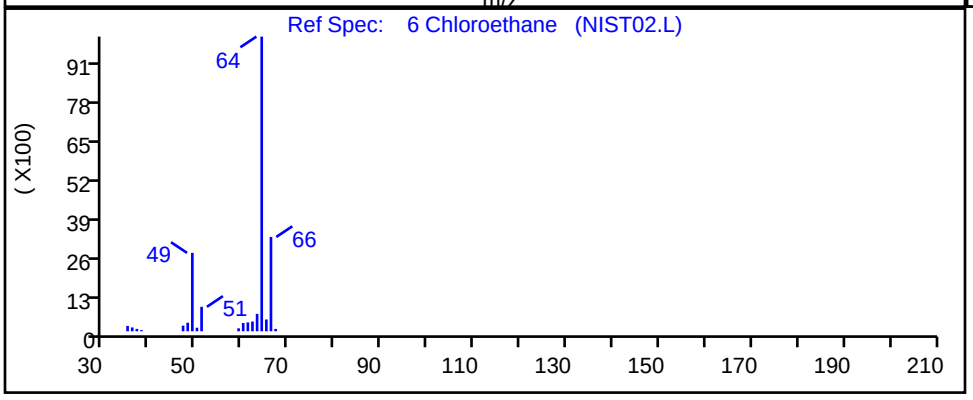
Processing Results











RT	Mass	Response	Amount
2.03	64.00	1029	0.282936
2.03	66.00	596	

Reviewer: baronm, 23-Nov-2021 20:58:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

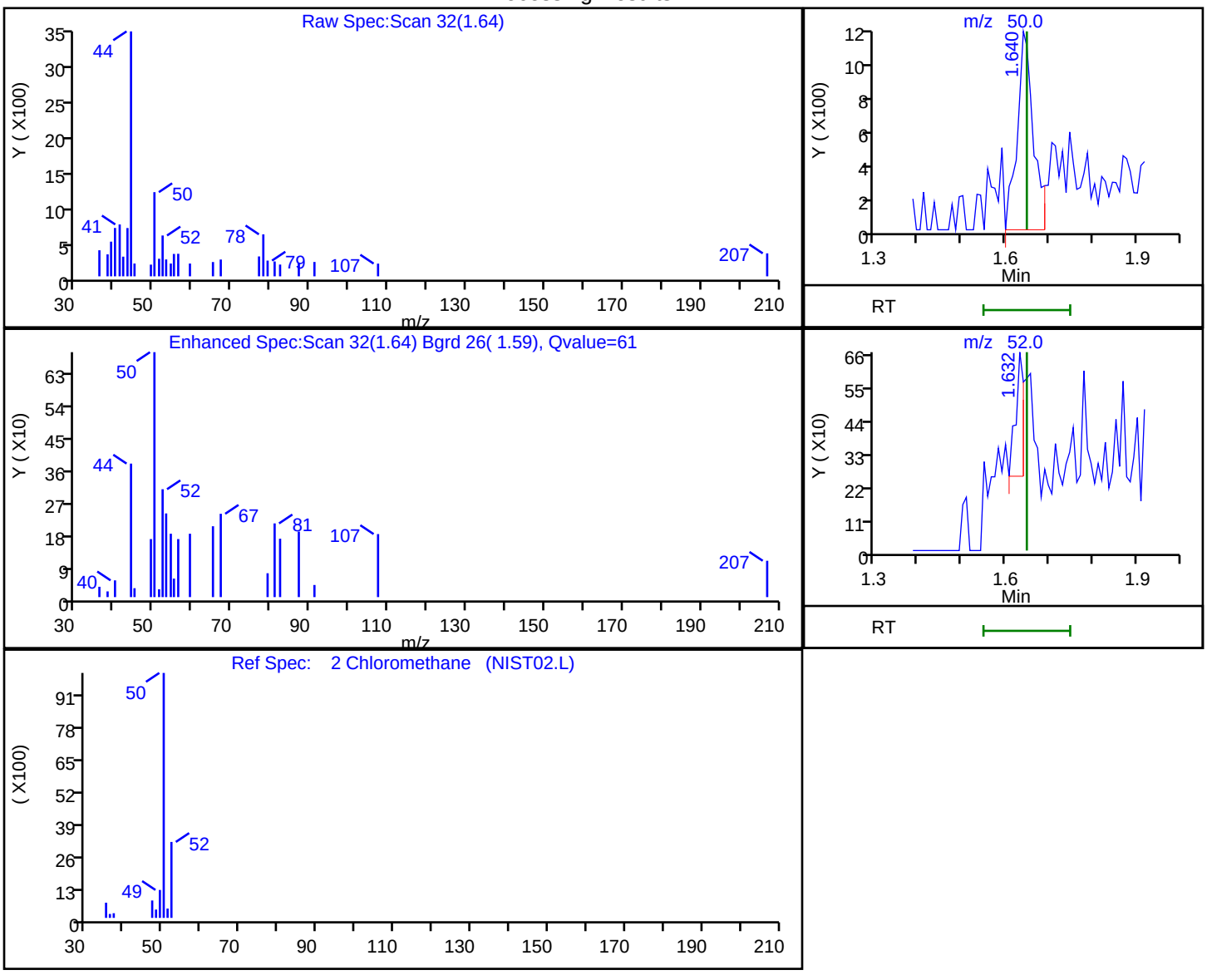
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

2 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.64	50.00	3047	0.355479
1.63	52.00	532	

Reviewer: baronm, 23-Nov-2021 20:58:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

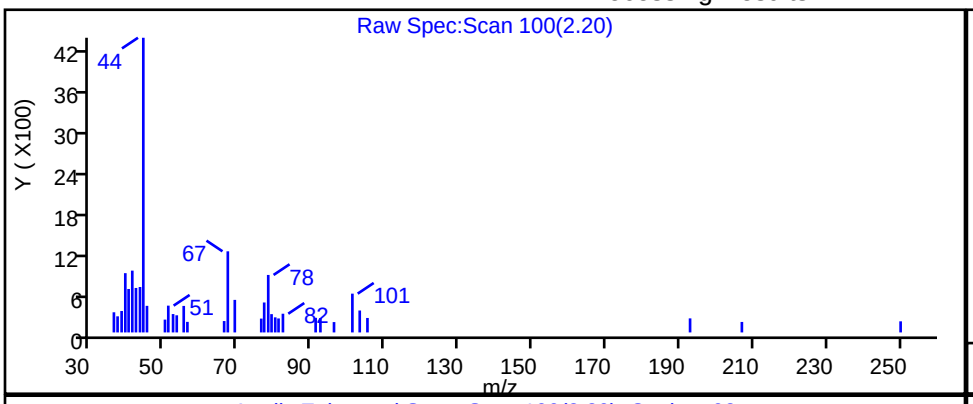
User Disabled Compound Report

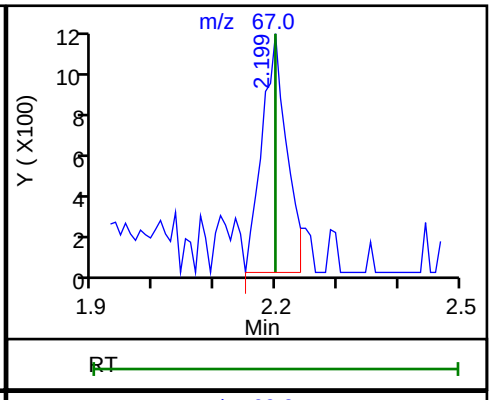
Eurofins TestAmerica, Edison

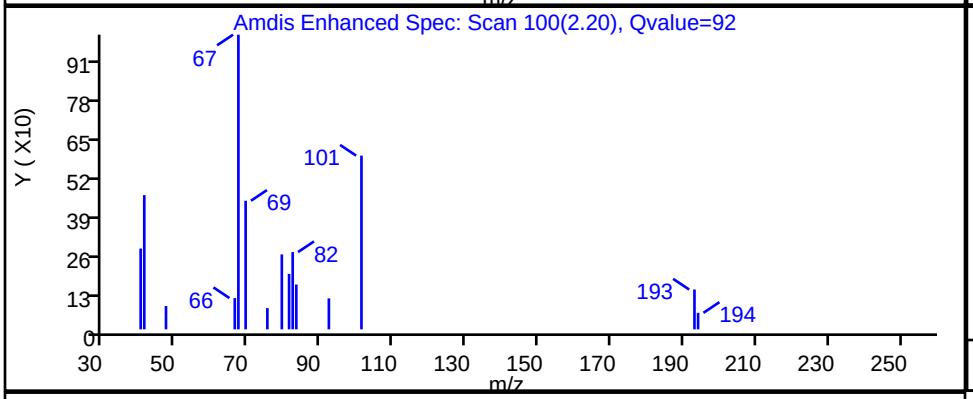
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

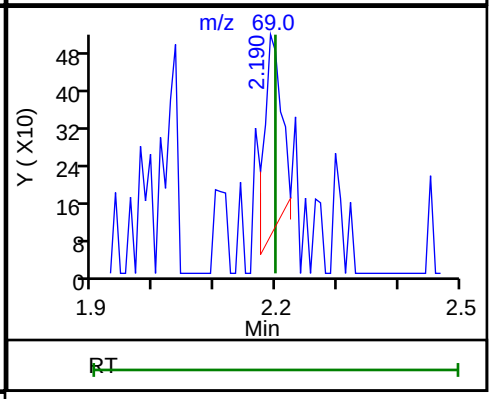
7 Dichlorofluoromethane, CAS: 75-43-4

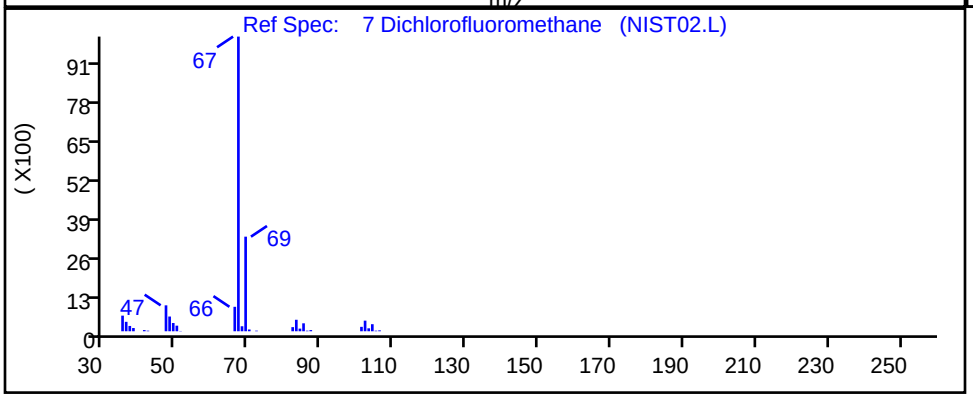
Processing Results











RT	Mass	Response	Amount
2.20	67.00	3320	0.336744
2.19	69.00	808	

Reviewer: baronm, 23-Nov-2021 20:58:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

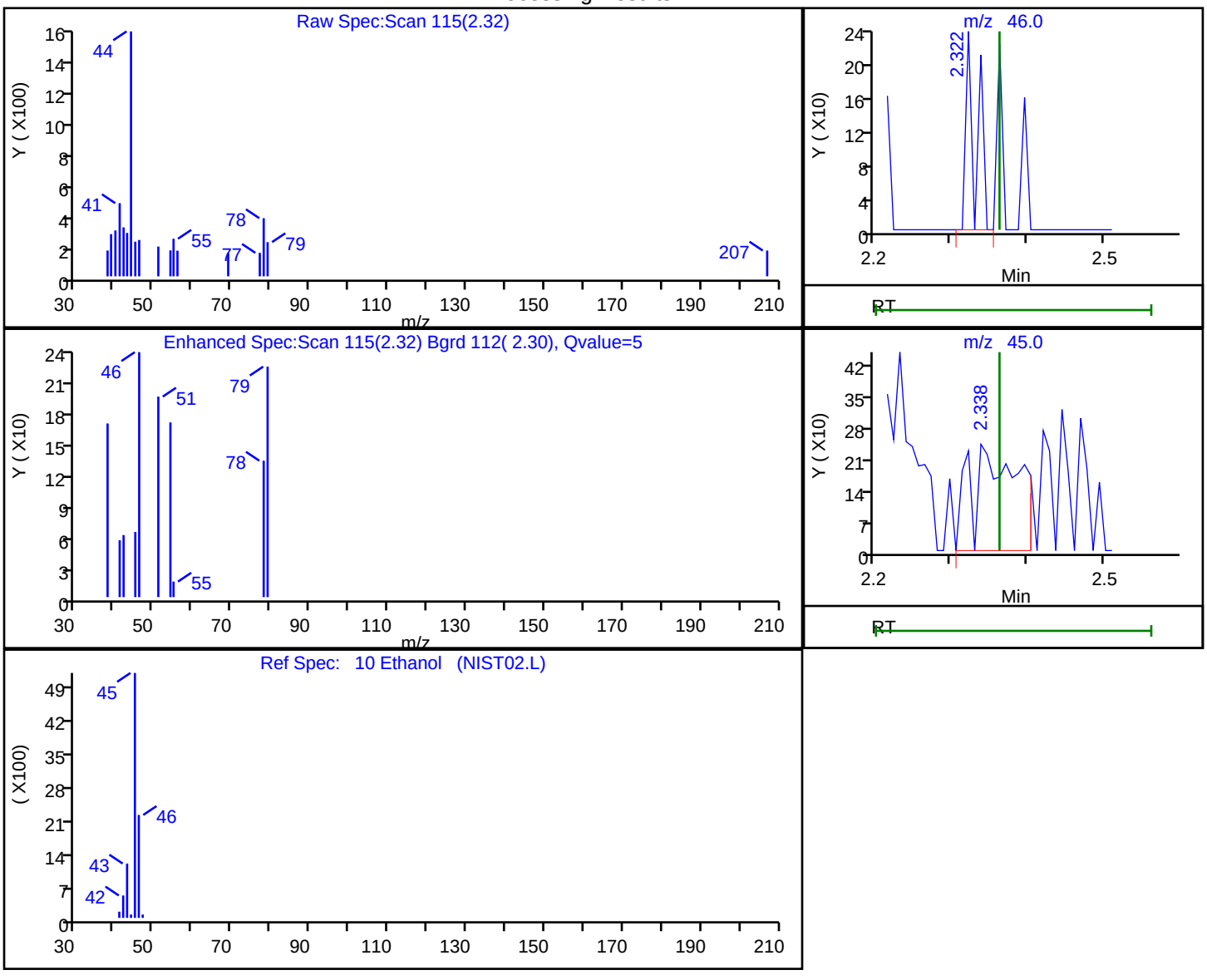
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
2.32	46.00	220	8.459142
2.34	45.00	1034	

Reviewer: baronm, 23-Nov-2021 20:58:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

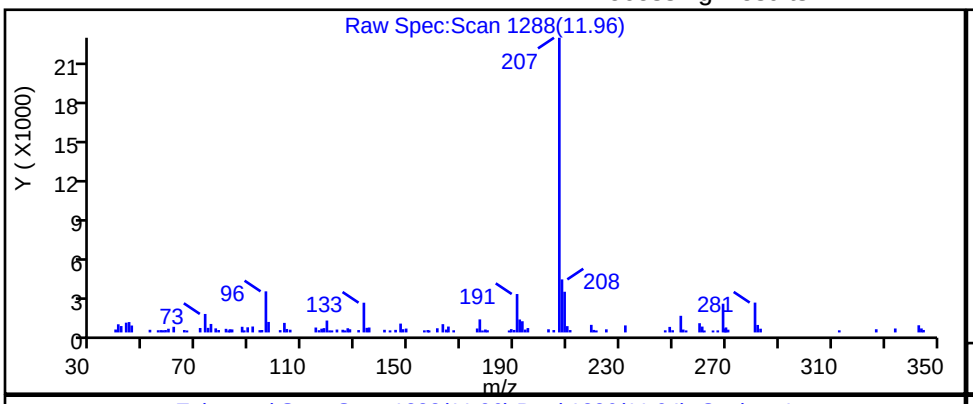
User Disabled Compound Report

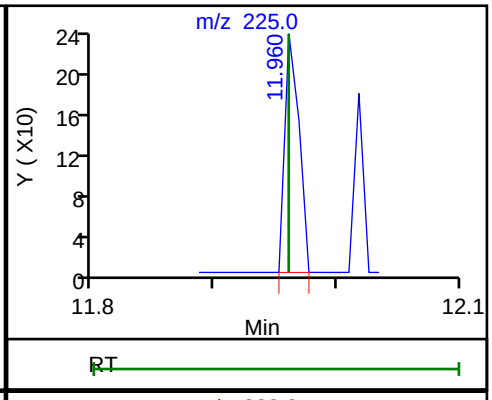
Eurofins TestAmerica, Edison

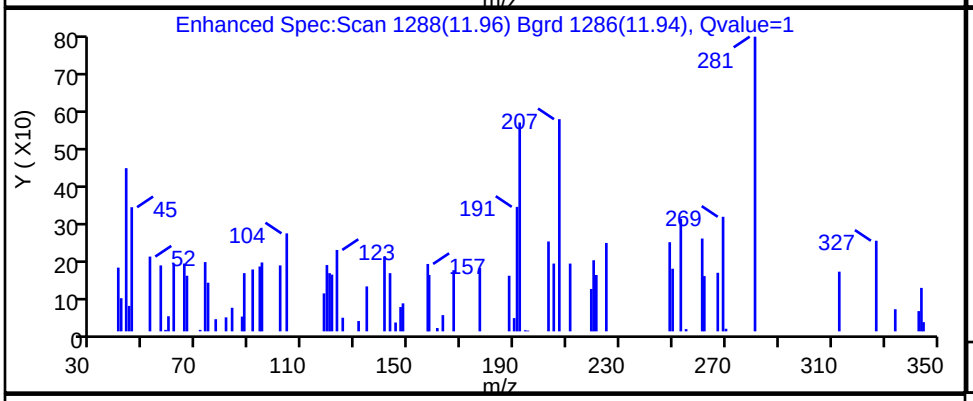
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

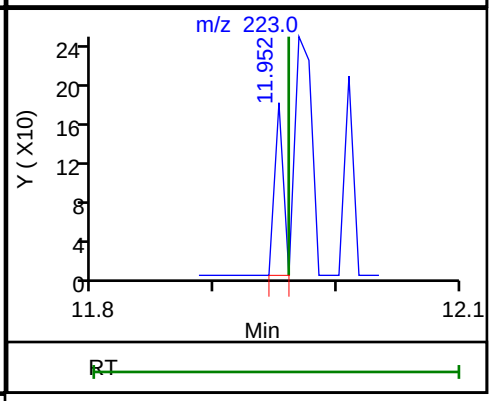
128 Hexachlorobutadiene, CAS: 87-68-3

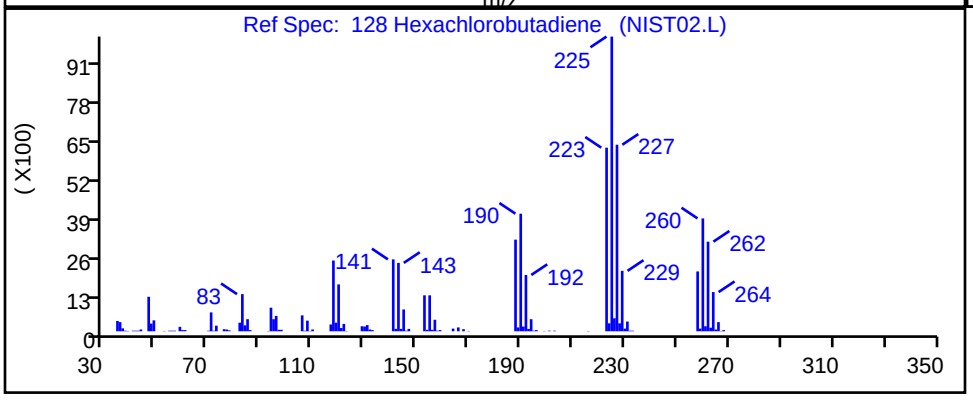
Processing Results











RT	Mass	Response	Amount
11.96	225.00	194	0.073672
11.95	223.00	86	

Reviewer: baronm, 23-Nov-2021 20:59:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

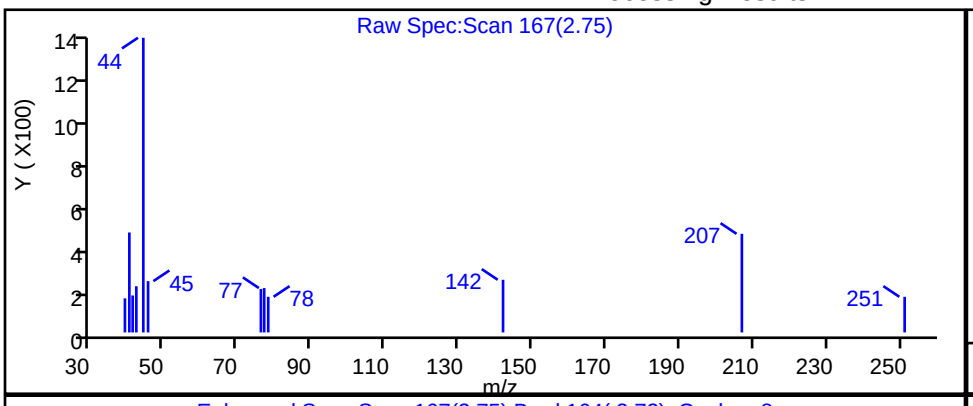
User Disabled Compound Report

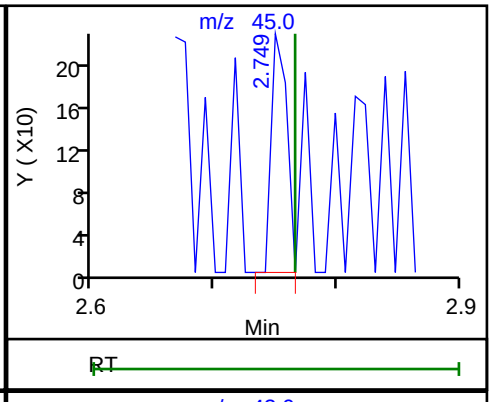
Eurofins TestAmerica, Edison

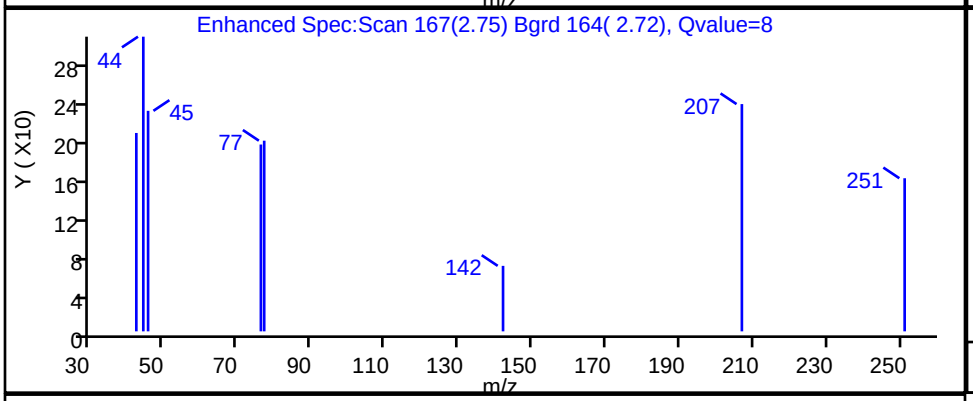
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

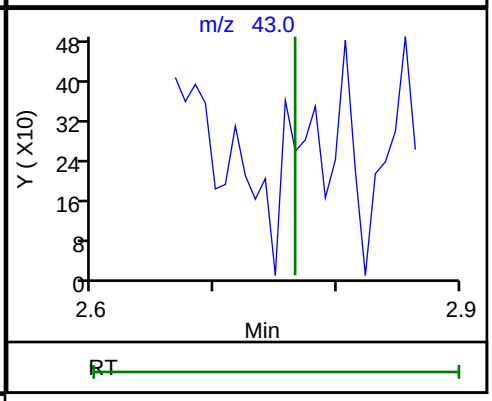
20 Isopropyl alcohol, CAS: 67-63-0

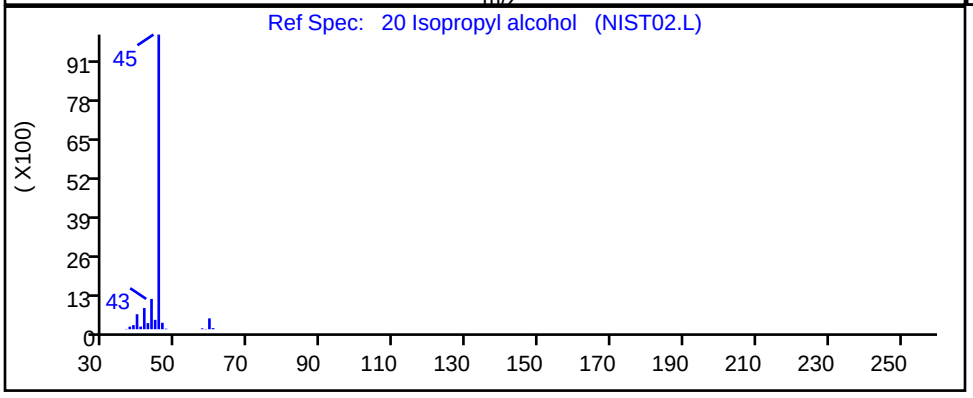
Processing Results











RT	Mass	Response	Amount
2.75	45.00	203	0.711799
2.77	43.00	0	

Reviewer: baronm, 23-Nov-2021 20:58:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

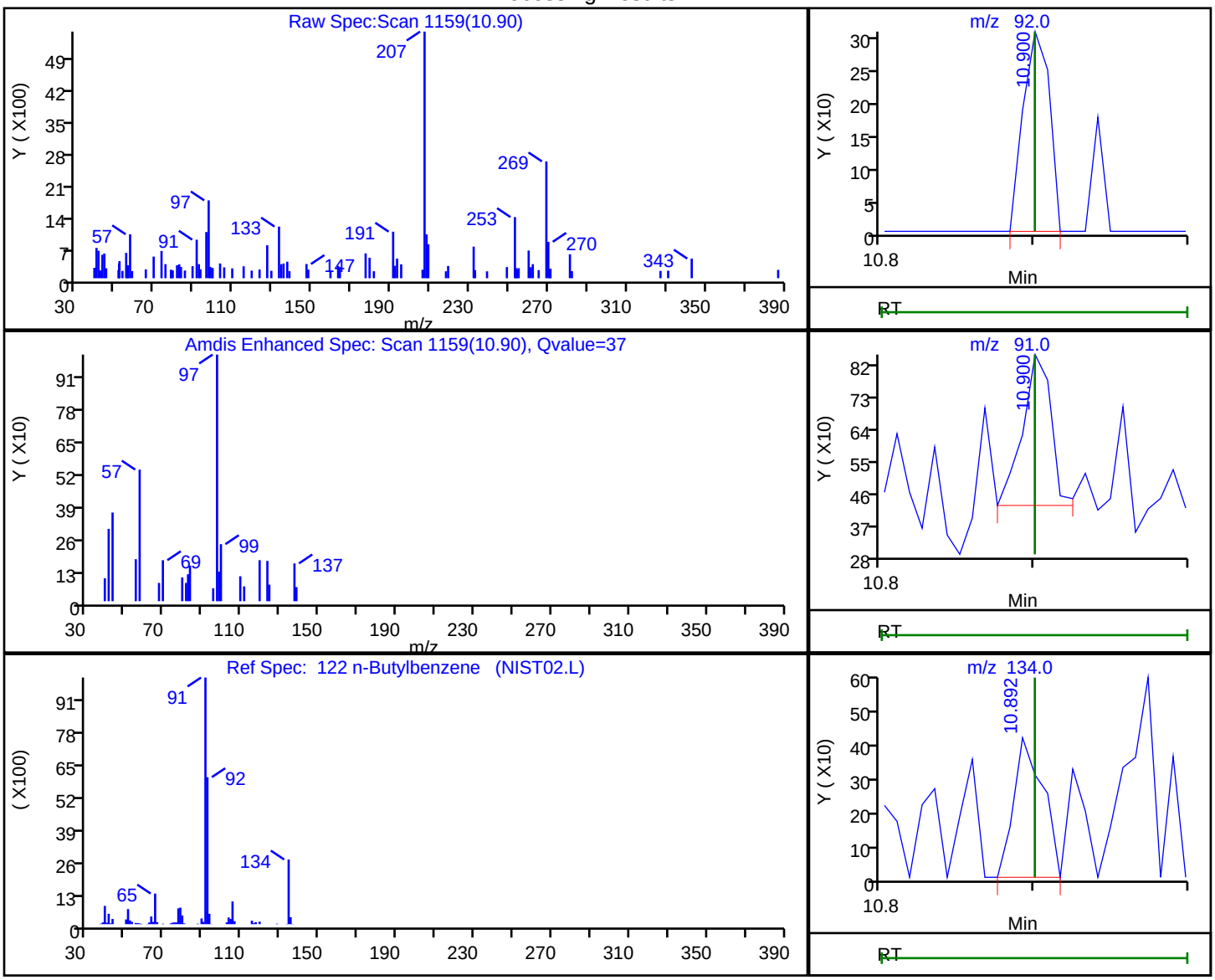
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

122 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
10.90	92.00	367	0.032123
10.90	91.00	546	
10.89	134.00	557	

Reviewer: baronm, 23-Nov-2021 20:59:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

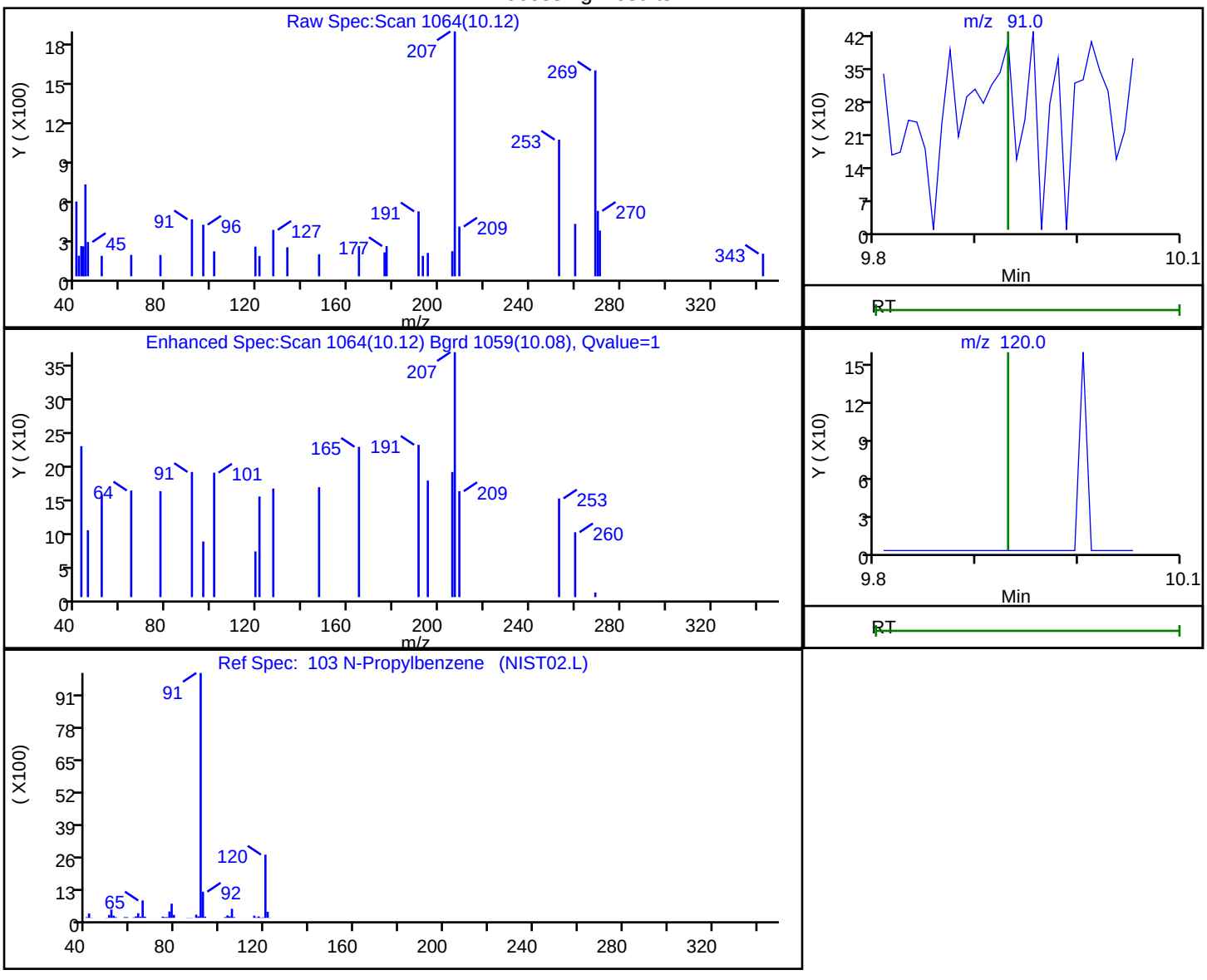
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

103 N-Propylbenzene, CAS: 103-65-1

Processing Results



RT	Mass	Response	Amount
10.12	91.00	755	0.027809
10.10	120.00	117	

Reviewer: baronm, 23-Nov-2021 20:59:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

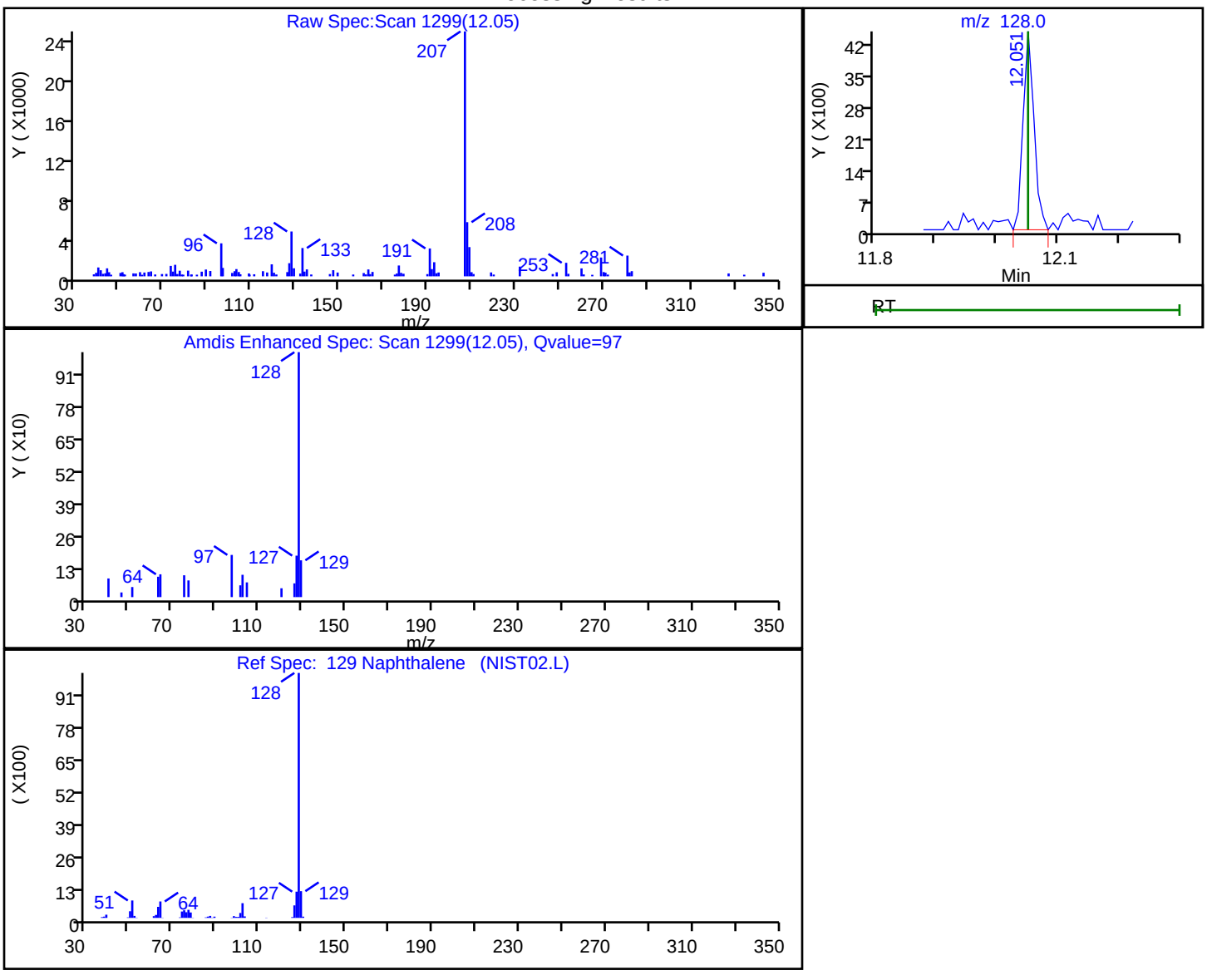
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

129 Naphthalene, CAS: 91-20-3

Processing Results



RT	Mass	Response	Amount
12.05	128.00	5525	0.270741

Reviewer: baronm, 23-Nov-2021 20:59:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

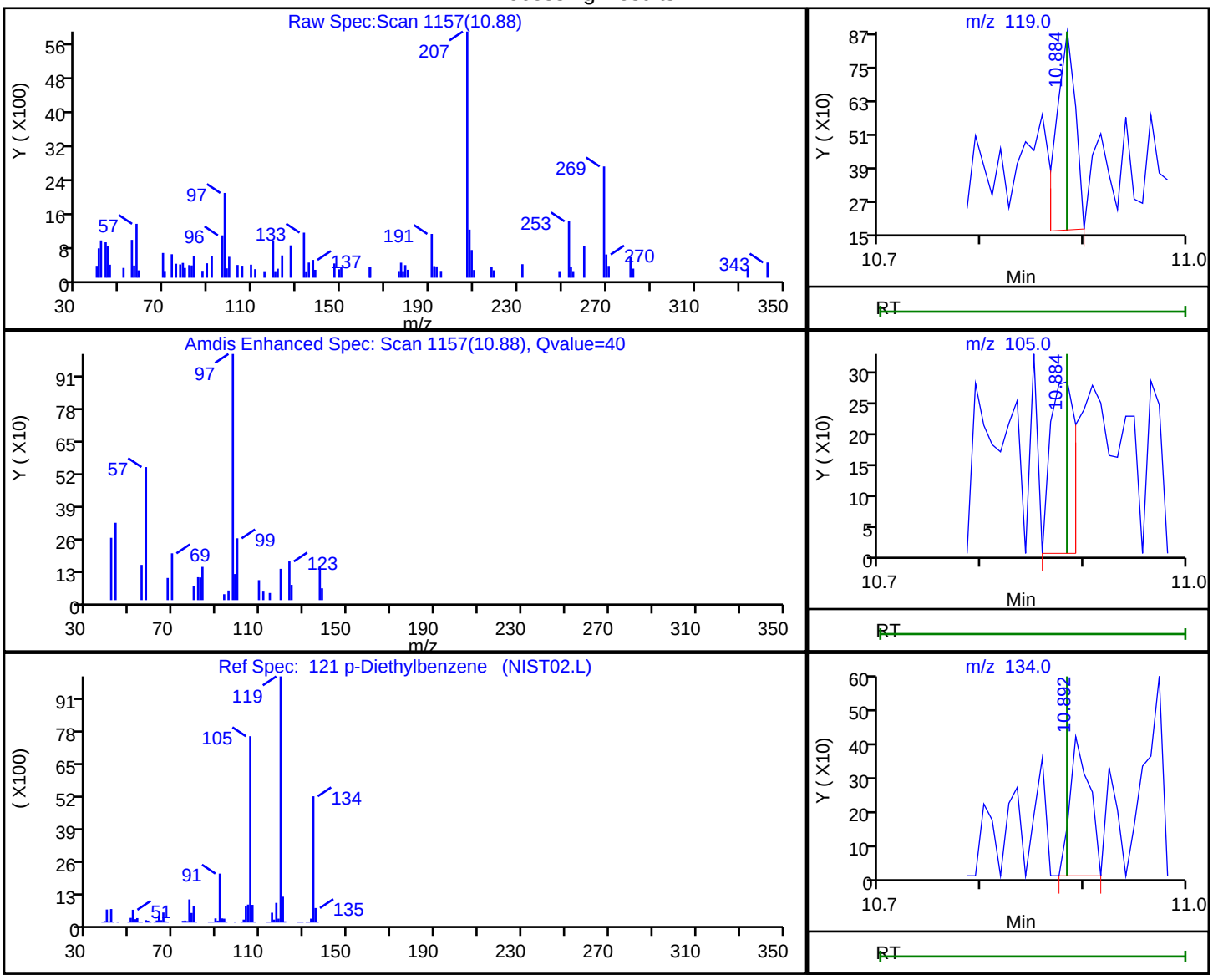
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

121 p-Diethylbenzene, CAS: 105-05-5

Processing Results



RT	Mass	Response	Amount
10.88	119.00	916	0.084024
10.88	105.00	491	
10.89	134.00	557	

Reviewer: baronm, 23-Nov-2021 20:59:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

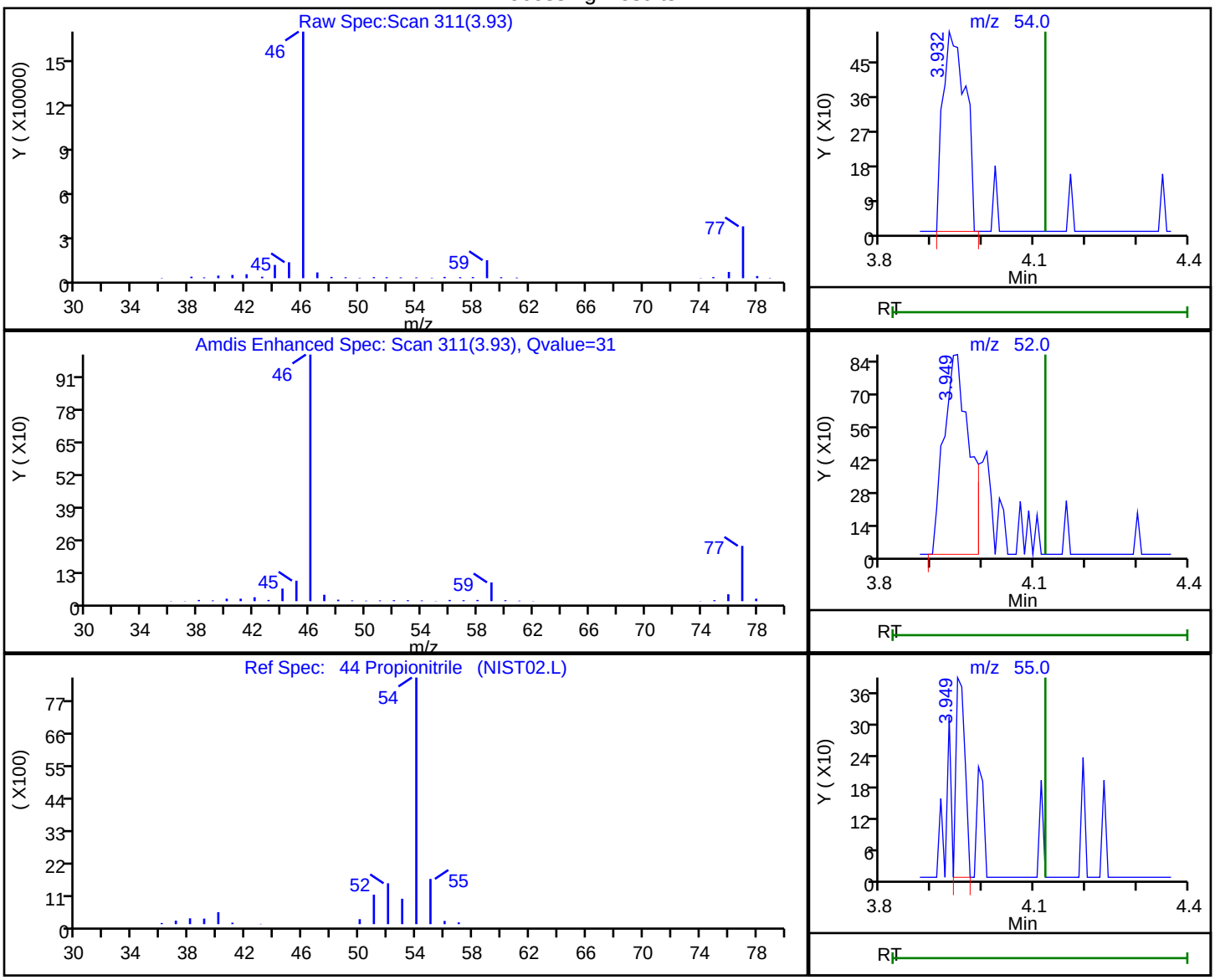
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D				
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6		
Lims ID:	STD7				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

44 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
3.93	54.00	1627	1.612328
3.95	52.00	3006	
3.95	55.00	467	

Reviewer: baronm, 23-Nov-2021 20:59:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

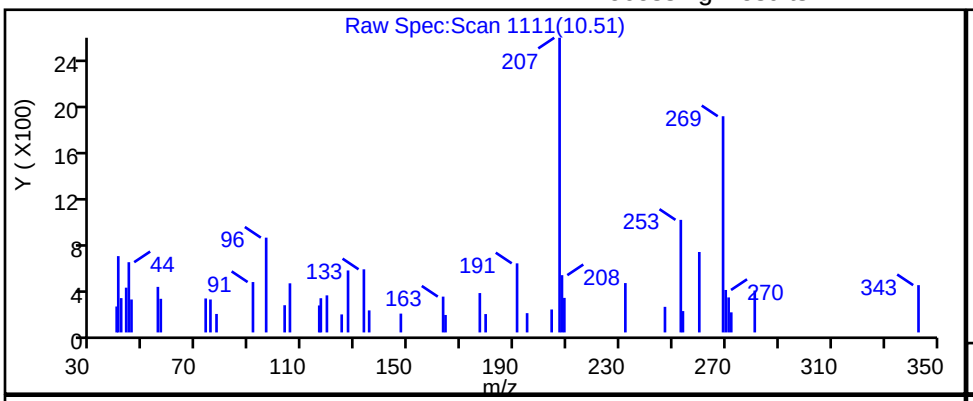
User Disabled Compound Report

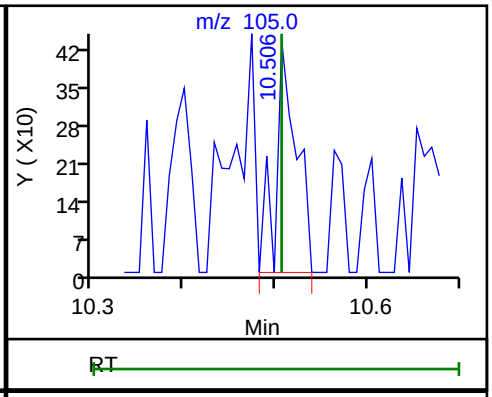
Eurofins TestAmerica, Edison

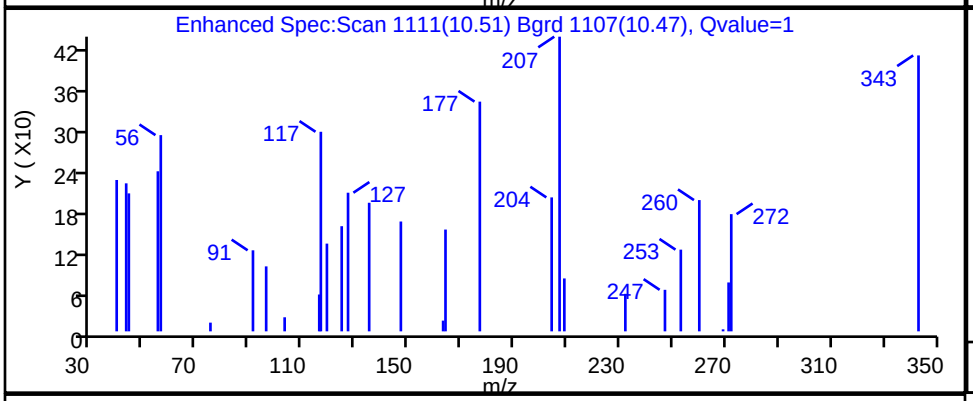
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

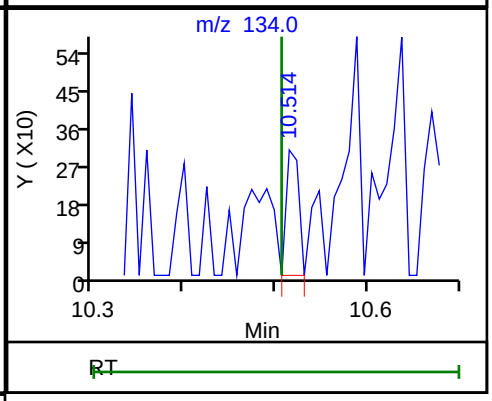
113 sec-Butylbenzene, CAS: 135-98-8

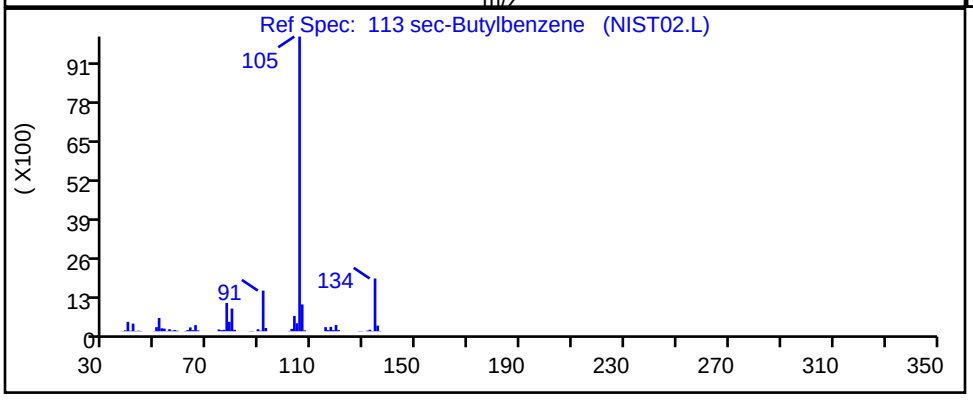
Processing Results











RT	Mass	Response	Amount
10.51	105.00	676	0.028706
10.51	134.00	284	

Reviewer: baronm, 23-Nov-2021 20:59:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

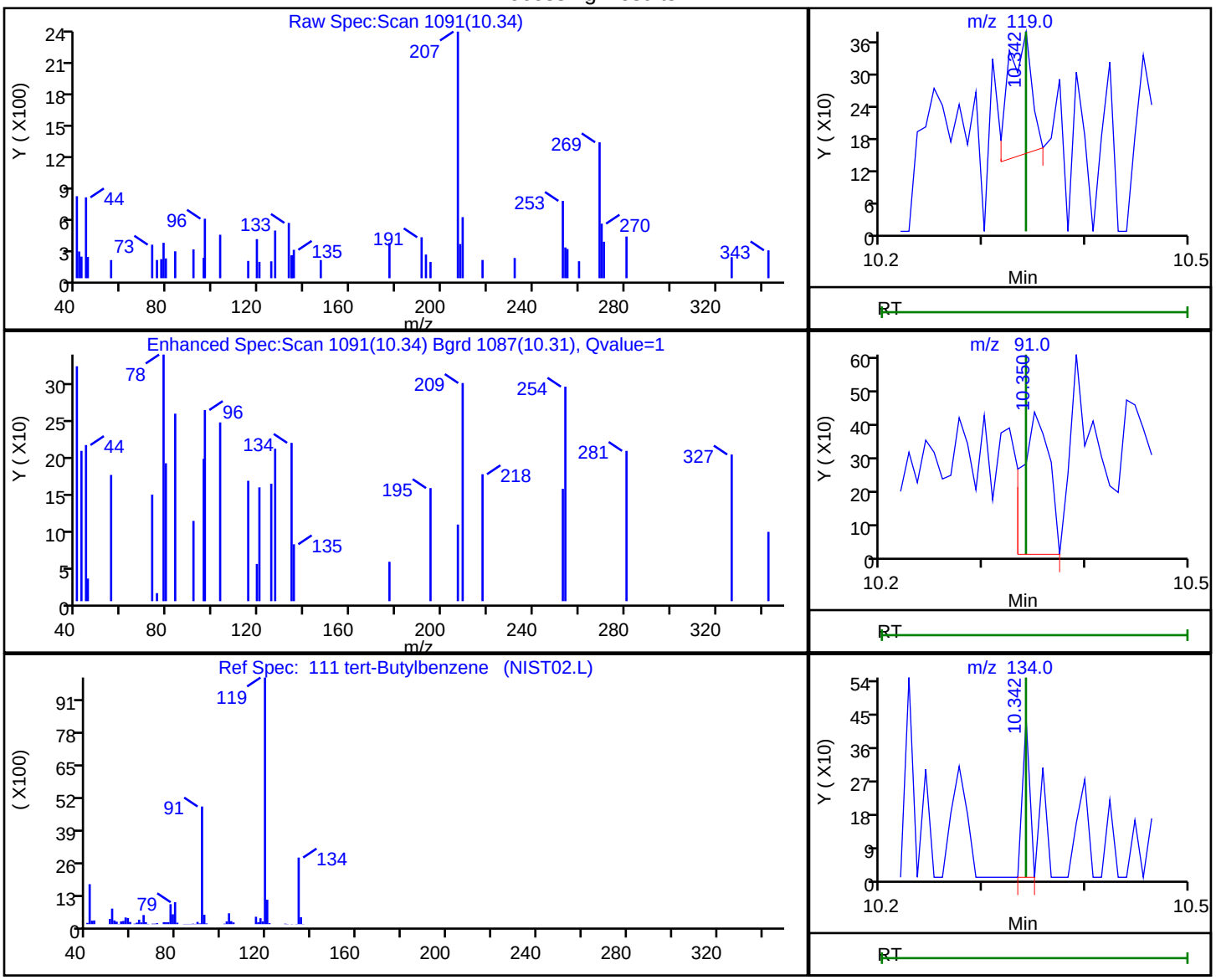
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

111 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
10.34	119.00	345	0.023031
10.35	91.00	795	
10.34	134.00	215	

Reviewer: baronm, 23-Nov-2021 20:59:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

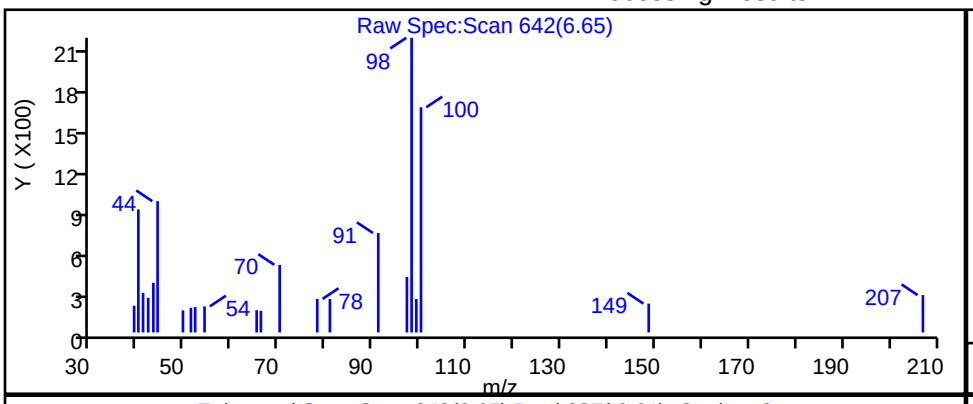
User Disabled Compound Report

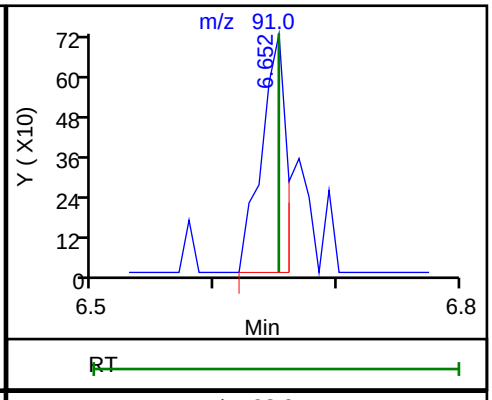
Eurofins TestAmerica, Edison

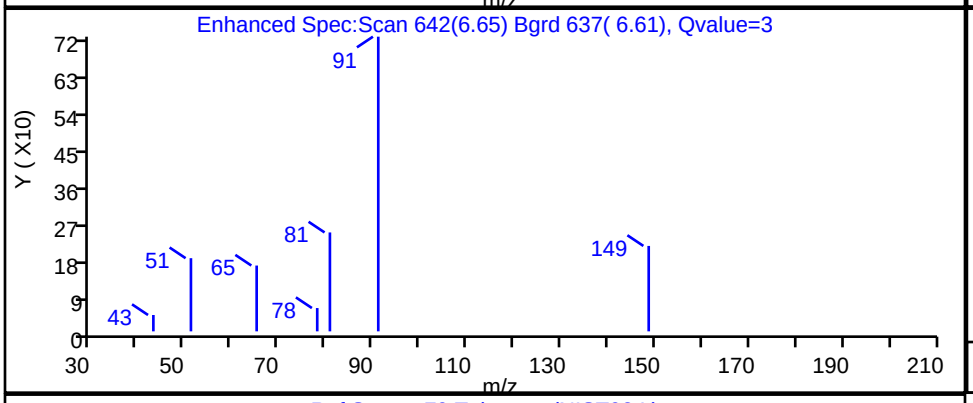
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D		
Injection Date:	23-Nov-2021 12:45:30	Instrument ID:	CVOAMS6
Lims ID:	STD7		
Client ID:			
Operator ID:		ALS Bottle#:	2 Worklist Smp#: 3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

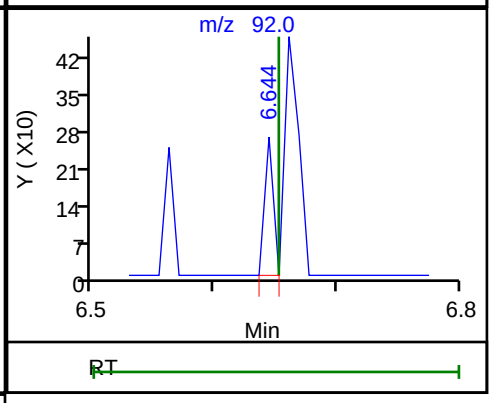
79 Toluene, CAS: 108-88-3

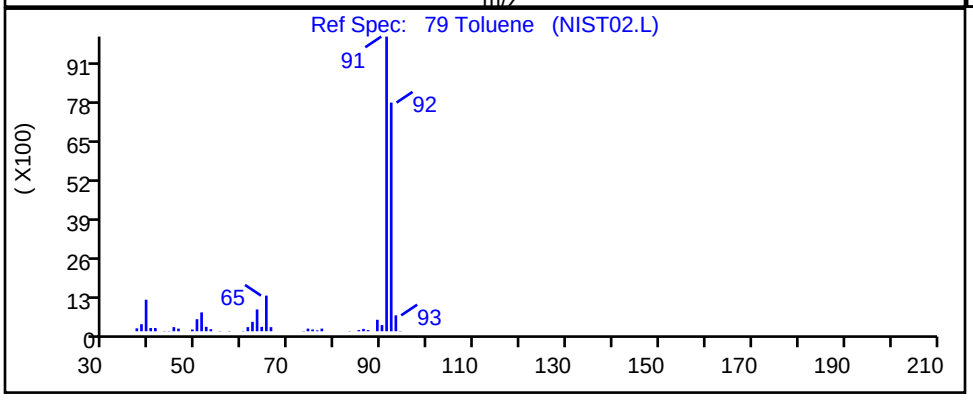
Processing Results











RT	Mass	Response	Amount
6.65	91.00	1007	0.049340
6.64	92.00	131	

Reviewer: baronm, 23-Nov-2021 20:59:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

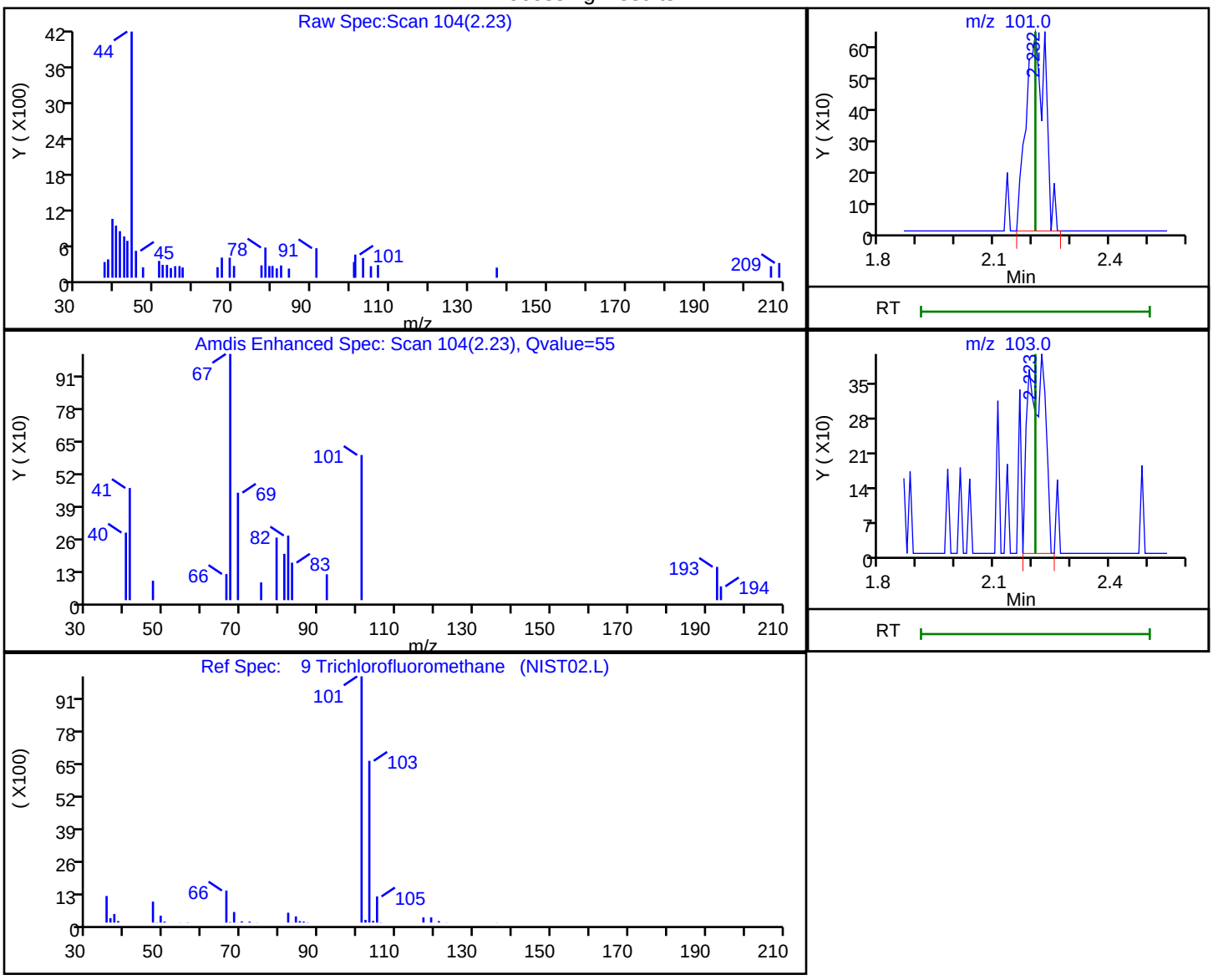
User Disabled Compound Report

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

9 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
2.23	101.00	2247	0.303974
2.22	103.00	1204	

Reviewer: baronm, 23-Nov-2021 20:58:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

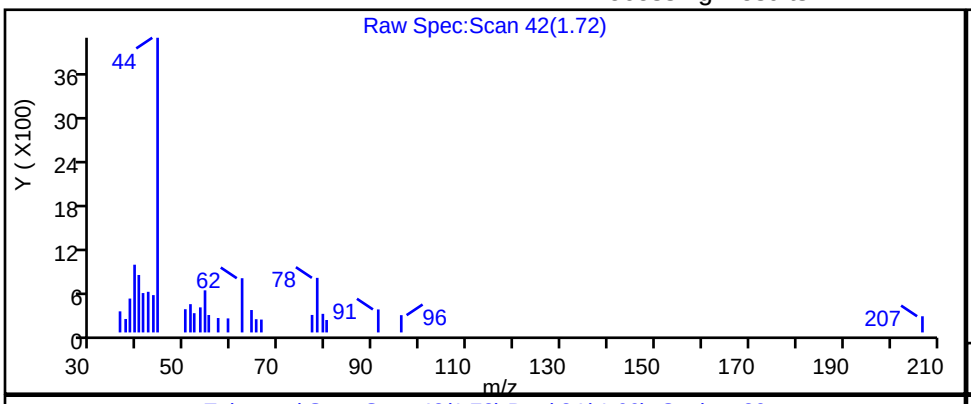
User Disabled Compound Report

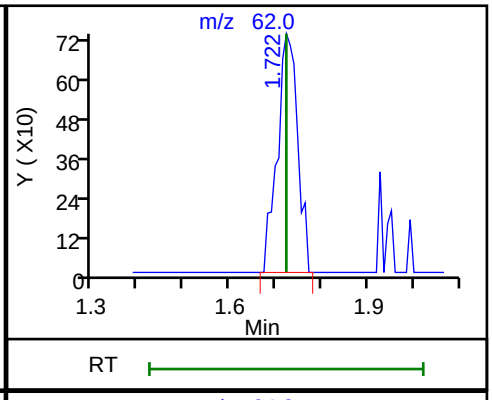
Eurofins TestAmerica, Edison

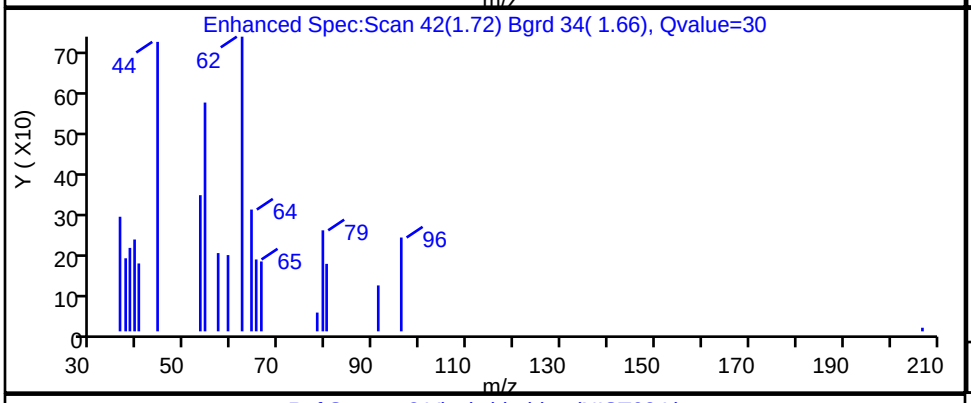
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22510.D
Injection Date: 23-Nov-2021 12:45:30 Instrument ID: CVOAMS6
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

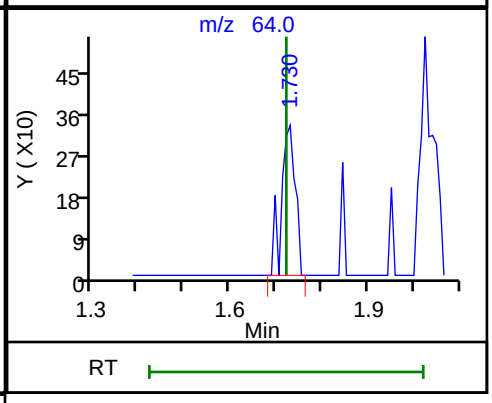
3 Vinyl chloride, CAS: 75-01-4

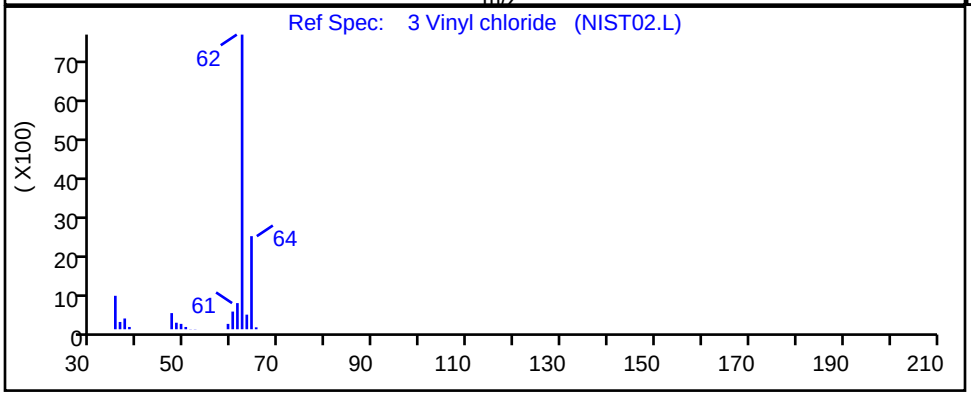
Processing Results











RT	Mass	Response	Amount
1.72	62.00	2278	0.309795
1.73	64.00	691	

Reviewer: baronm, 23-Nov-2021 20:58:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Nov-2021 13:07:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0138064-004
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:33:55 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: moroneyc Date: 23-Nov-2021 13:24:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	59	4761	1.00	0.8906	
2 Chloromethane	50	1.640	1.648	-0.008	98	8186	1.00	1.07	
3 Vinyl chloride	62	1.722	1.722	0.000	95	7712	1.00	1.14	
4 Butadiene	54	1.739	1.738	0.001	74	5832	1.00	0.9484	
5 Bromomethane	94	1.977	1.977	0.000	95	3579	1.00	1.11	M
6 Chloroethane	64	2.026	2.034	-0.008	91	3662	1.00	1.08	
7 Dichlorofluoromethane	67	2.199	2.198	0.001	95	10230	1.00	1.15	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	87	7431	1.00	1.09	
8 Pentane	72	2.256	2.231	0.025	98	2460	2.00	2.43	
10 Ethanol	46	2.338	2.363	-0.025	65	632	40.0	30.1	M
11 Ethyl ether	59	2.371	2.371	0.000	91	4350	1.00	1.07	
12 2-Methyl-1,3-butadiene	53	2.412	2.404	0.008	93	4773	1.00	1.01	
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.429	2.437	-0.008	79	4370	1.00	1.08	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.478	2.478	0.000	88	6650	1.00	0.9880	
15 Acrolein	56	2.527	2.527	0.000	44	3330	4.06	4.62	M
16 112TCTFE	101	2.552	2.544	0.008	83	4447	1.00	0.99	
17 1,1-Dichloroethene	96	2.585	2.593	-0.008	94	4805	1.00	1.05	
18 Acetone	43	2.651	2.659	-0.008	71	10224	5.00	5.94	M
19 Iodomethane	142	2.725	2.724	0.001	95	6472	1.00	0.9548	
21 Carbon disulfide	76	2.757	2.757	0.000	100	17551	1.00	0.9892	
20 Isopropyl alcohol	45	2.725	2.765	-0.040	25	1733	10.0	8.28	M
22 3-Chloro-1-propene	41	2.856	2.856	0.000	83	11328	1.00	0.9728	
23 Methyl acetate	43	2.848	2.856	-0.008	77	9556	2.00	1.97	
24 Cyclopentene	67	2.872	2.872	0.000	92	12105	1.00	0.9675	
25 Acetonitrile	41	2.930	2.946	-0.016	21	7114	10.0	10.9	Ma
27 Methylene Chloride	84	2.971	2.971	0.000	32	5401	1.00	1.01	
* 26 TBA-d9 (IS)	65	2.955	2.979	-0.024	0	528727	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.045	3.053	-0.008	32	6224	10.0	11.7	Ma
29 Methyl tert-butyl ether	73	3.094	3.102	-0.008	97	14770	1.00	1.07	
30 trans-1,2-Dichloroethene	96	3.152	3.135	0.017	96	5027	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.193	0.000	94	25305	10.0	9.72	
32 Hexane	43	3.267	3.267	0.000	65	6616	1.00	1.10	
33 Isopropyl ether	45	3.456	3.464	-0.008	90	17394	1.00	1.03	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	68	9567	1.00	0.99	
35 Vinyl acetate	86	3.505	3.497	0.008	100	1767	2.00	1.69	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	89	4053	1.00	0.9142	
37 Tert-butyl ethyl ether	59	3.760	3.760	0.000	88	15288	1.00	1.04	
* 38 2-Butanone-d5	46	3.941	3.949	-0.008	0	738727	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	46	1826	1.00	1.14	
40 cis-1,2-Dichloroethene	96	3.974	3.973	0.001	51	6011	1.00	1.10	
41 2-Butanone (MEK)	72	3.982	3.990	-0.008	94	3319	5.00	5.14	
42 Ethyl acetate	70	3.998	3.990	0.008	90	898	2.00	1.70	
43 Methyl acrylate	55	4.048	4.039	0.009	97	5661	1.00	1.07	a
44 Propionitrile	54	4.163	4.121	0.042	89	8562	10.0	10.2	a
45 Chlorobromomethane	128	4.195	4.187	0.008	39	2628	1.00	1.06	
46 Tetrahydrofuran	72	4.204	4.195	0.009	30	1748	2.00	2.26	
47 Methacrylonitrile	67	4.204	4.203	0.001	95	22463	10.0	9.17	
48 Chloroform	83	4.236	4.236	0.000	98	8000	1.00	0.9822	
49 Cyclohexane	84	4.360	4.360	0.000	33	8112	1.00	0.9681	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	36	6916	1.00	1.00	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	96	241300	50.0	50.1	
52 Carbon tetrachloride	117	4.491	4.483	0.008	79	5748	1.00	1.00	
53 1,1-Dichloropropene	75	4.508	4.507	0.001	91	6119	1.00	0.9069	
54 Isobutyl alcohol	43	4.664	4.664	0.000	35	6005	25.0	20.4	a
55 Benzene	78	4.697	4.696	0.001	44	20560	1.00	1.04	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.705	4.705	0.000	0	303750	50.0	49.1	
57 Isopropyl acetate	43	4.762	4.762	0.000	95	18684	1.00	1.19	a
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	78	15572	1.00	0.9435	a
59 1,2-Dichloroethane	62	4.779	4.779	0.000	92	6637	1.00	1.03	
60 n-Heptane	57	4.836	4.844	-0.008	94	4077	1.00	0.9439	
* 61 Fluorobenzene	96	4.968	4.968	0.000	98	935092	50.0	50.0	
63 Trichloroethene	95	5.313	5.304	0.009	95	4418	1.00	0.9558	
64 Ethyl acrylate	55	5.428	5.428	0.000	93	13133	1.00	0.9109	
65 Methylcyclohexane	83	5.420	5.428	-0.008	85	9287	1.00	0.99	
66 1,2-Dichloropropane	63	5.584	5.584	0.000	85	5200	1.00	0.9875	
68 Methyl methacrylate	100	5.674	5.666	0.008	94	2422	2.00	1.72	
* 67 1,4-Dioxane-d8	96	5.691	5.707	-0.016	0	38818	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	90	2815	1.00	0.9811	
71 n-Propyl acetate	43	5.716	5.724	-0.008	98	8191	1.00	0.8955	
69 1,4-Dioxane	88	5.674	5.740	-0.066	33	1869	50.0	50.7	
72 Dichlorobromomethane	83	5.855	5.855	0.000	96	5416	1.00	0.9204	
73 2-Nitropropane	41	6.184	6.175	0.009	81	4199	2.00	2.52	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	82	2925	1.00	0.9065	
75 Epichlorohydrin	57	6.291	6.291	0.001	98	10011	20.0	18.3	
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	96	6750	1.00	0.8880	
77 4-Methyl-2-pentanone (MIBK)	43	6.504	6.504	0.000	97	27192	5.00	4.60	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	100	949700	50.0	50.6	
79 Toluene	91	6.652	6.652	0.000	92	19898	1.00	1.03	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	94	6515	1.00	0.9552	
81 Ethyl methacrylate	69	7.038	7.038	0.000	93	4443	1.00	0.7097	
82 1,1,2-Trichloroethane	83	7.203	7.203	0.000	88	3272	1.00	0.9448	
83 Tetrachloroethene	166	7.244	7.252	-0.008	89	3873	1.00	0.9774	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	7.408	7.408	0.000	95	6906	1.00	0.9438	
85 2-Hexanone	43	7.482	7.482	0.000	98	16862	5.00	4.39	
86 n-Butyl acetate	43	7.605	7.597	0.008	99	8600	1.00	0.9008	
87 Chlorodibromomethane	129	7.638	7.638	0.000	94	3505	1.00	0.9093	
88 Ethylene Dibromide	107	7.778	7.778	0.000	92	4066	1.00	1.02	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	87	690088	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	94	11004	1.00	0.9425	
91 Ethylbenzene	106	8.468	8.468	0.000	99	5810	1.00	0.9134	
92 1,1,1,2-Tetrachloroethane	131	8.476	8.484	-0.008	37	4058	1.00	0.99	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	97	7086	1.00	0.9051	
95 o-Xylene	106	9.142	9.134	0.008	92	7645	1.00	0.9737	
94 n-Butyl acrylate	73	9.142	9.142	0.000	63	3442	1.00	0.9141	
96 Styrene	104	9.167	9.175	-0.008	97	11841	1.00	0.9196	
98 Bromoform	173	9.389	9.396	-0.008	52	2020	1.00	0.8092	
97 Amyl acetate (mixed isomers)	43	9.397	9.405	-0.008	89	9571	1.00	0.8517	
99 Isopropylbenzene	105	9.536	9.536	0.000	95	19487	1.00	0.9405	
$ 100 4-Bromofluorobenzene	174	9.734	9.733	0.001	89	245050	50.0	50.0	
101 Bromobenzene	156	9.857	9.857	0.000	93	4529	1.00	0.9635	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	95	5908	1.00	0.9886	
103 N-Propylbenzene	91	9.931	9.931	0.000	99	25448	1.00	0.99	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	95	1702	1.00	1.01	
105 trans-1,4-Dichloro-2-butene	53	9.964	9.963	0.001	71	1462	1.00	0.8736	
106 2-Chlorotoluene	91	10.021	10.021	0.000	98	16214	1.00	0.9471	
107 4-Ethyltoluene	105	10.038	10.029	0.009	98	19042	1.00	0.9475	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	95	15345	1.00	0.9066	
109 4-Chlorotoluene	91	10.120	10.120	0.000	97	15323	1.00	0.9532	
110 Butyl Methacrylate	87	10.186	10.185	0.001	93	5133	1.00	0.8497	
111 tert-Butylbenzene	119	10.342	10.341	0.001	93	13047	1.00	0.9226	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	96	17196	1.00	0.9687	
113 sec-Butylbenzene	105	10.506	10.506	0.000	99	21034	1.00	0.9462	
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	94	9340	1.00	1.01	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	98	17627	1.00	0.9374	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	96	367169	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	88	10311	1.00	1.09	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	96	18128	1.00	0.9777	
119 Benzyl chloride	91	10.794	10.793	0.001	97	10859	1.00	0.9336	
120 2,3-Dihydroindene	117	10.835	10.834	0.001	94	17582	1.00	1.00	
121 p-Diethylbenzene	119	10.884	10.884	0.000	93	10689	1.00	1.04	
122 n-Butylbenzene	92	10.900	10.900	0.000	98	10120	1.00	0.9383	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	93	10159	1.00	1.07	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	97	18741	1.00	1.04	
125 1,2-Dibromo-3-Chloropropane	157	11.435	11.443	-0.008	89	1364	1.00	1.07	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	96	7830	1.00	1.12	
127 1,2,4-Trichlorobenzene	180	11.895	11.894	0.001	92	8175	1.00	1.20	
128 Hexachlorobutadiene	225	11.960	11.960	0.000	89	2780	1.00	1.12	
129 Naphthalene	128	12.051	12.051	0.000	99	20300	1.00	1.05	
130 1,2,3-Trichlorobenzene	180	12.199	12.198	0.001	96	7301	1.00	1.17	
S 131 1,2-Dichloroethene, Total	100				0		2.00	2.12	
S 133 Total BTEX	1				0		5.00	4.85	
S 132 Xylenes, Total	100				0		2.00	1.88	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00449	Amount Added:	10.00	Units: uL	
ACROLEIN W_00133	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00147	Amount Added:	10.00	Units: uL	
524freon_00045	Amount Added:	10.00	Units: uL	
14DIOXINTER_00135	Amount Added:	30.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

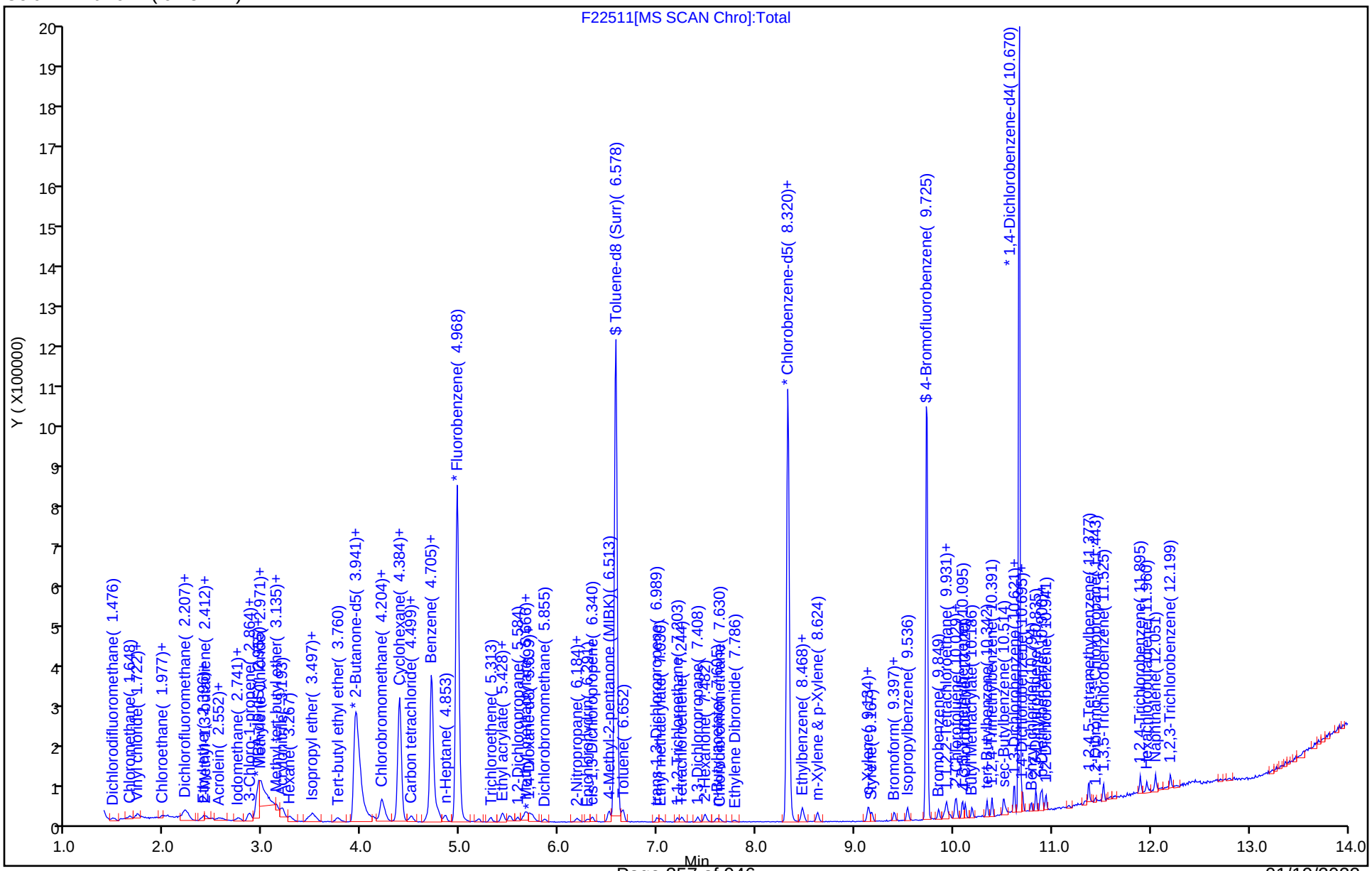
Report Date: 24-Nov-2021 08:33:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D

Injection Date:	23-Nov-2021 13:07:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	STD1			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

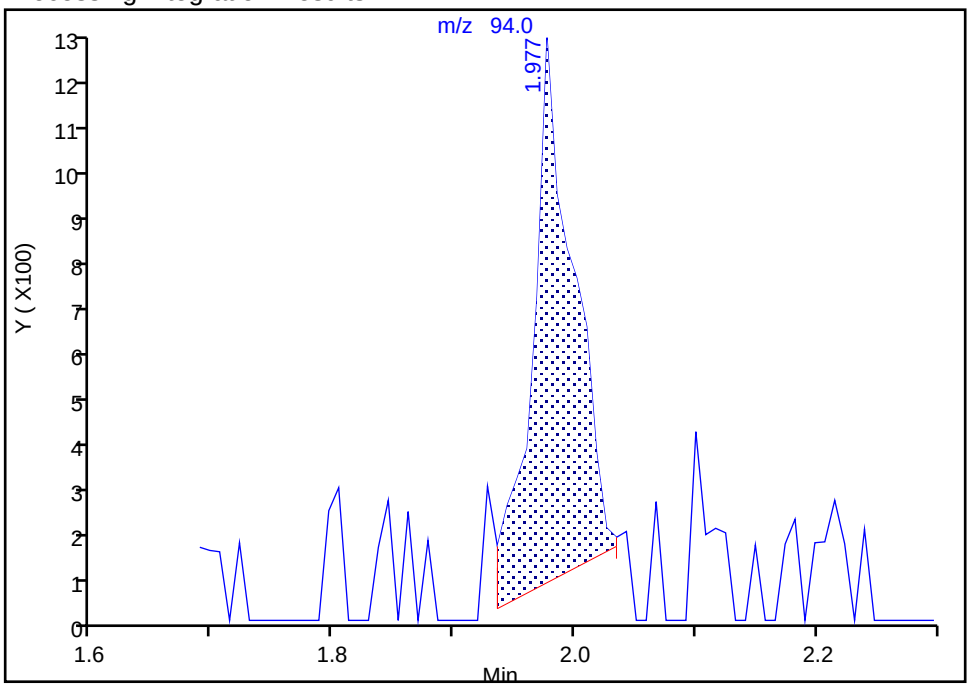
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Bromomethane, CAS: 74-83-9

Signal: 1

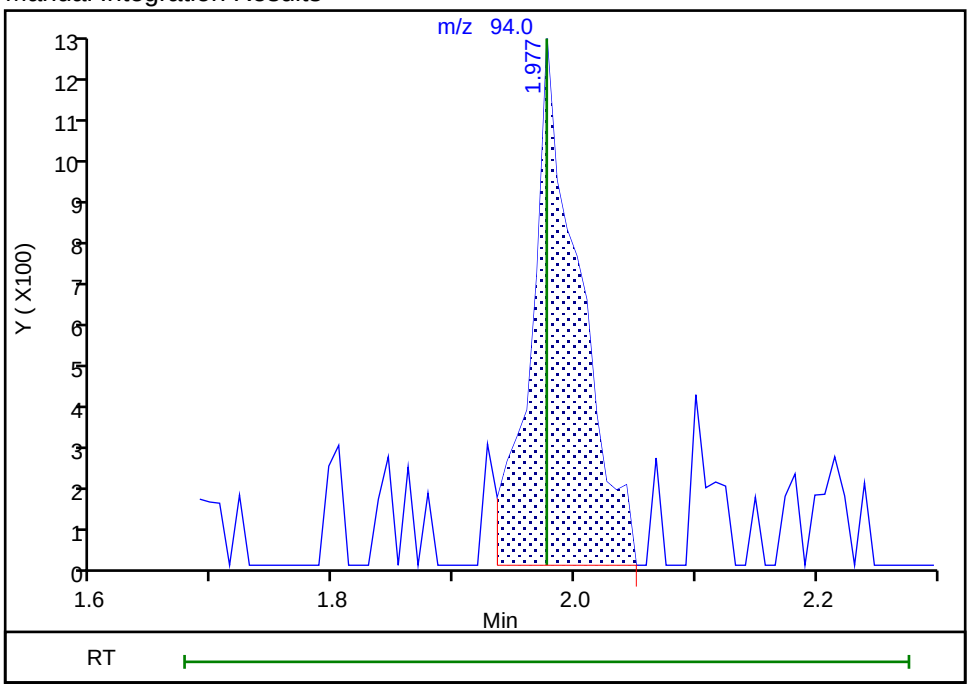
Processing Integration Results

RT: 1.98
Area: 2873
Amount: 0.928239
Amount Units: ug/l



Manual Integration Results

RT: 1.98
Area: 3579
Amount: 1.113990
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:56:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

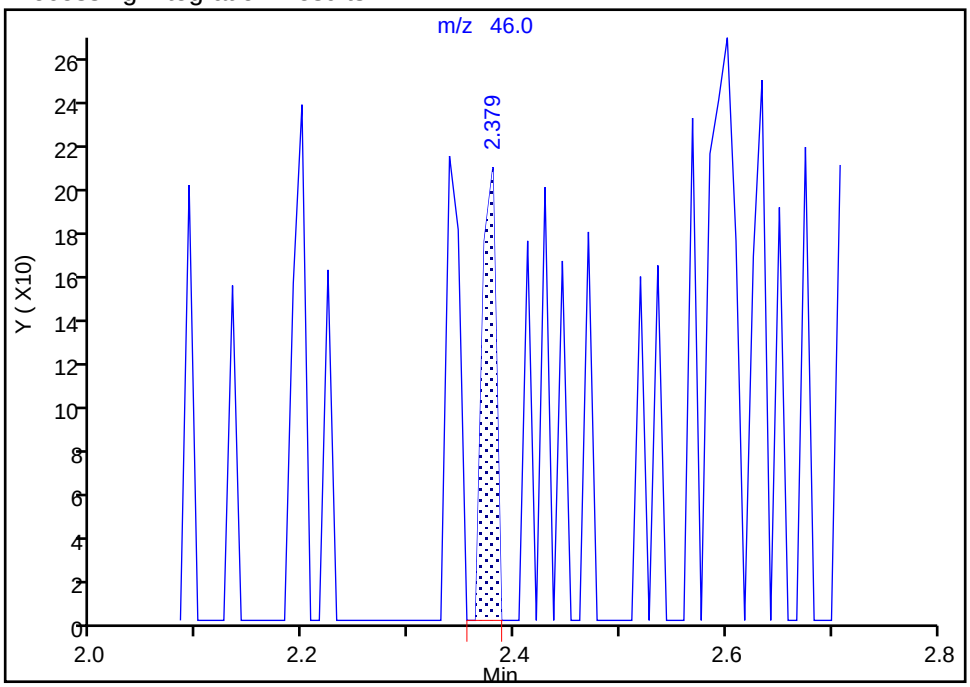
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Ethanol, CAS: 64-17-5

Signal: 1

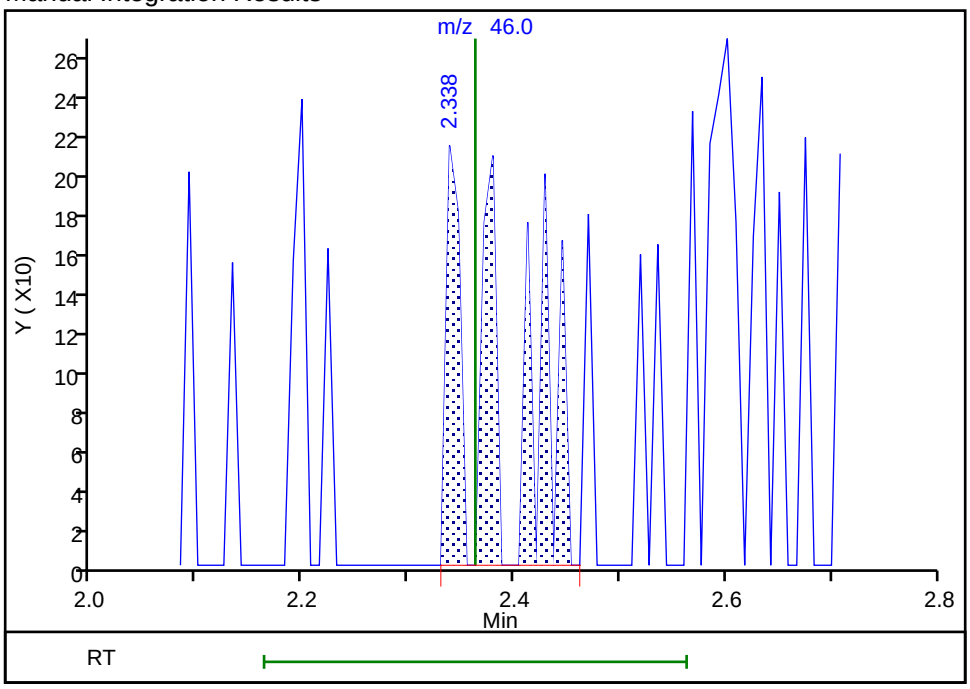
Processing Integration Results

RT: 2.38
Area: 184
Amount: 7.048325
Amount Units: ug/l



Manual Integration Results

RT: 2.34
Area: 632
Amount: 30.121913
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:56:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

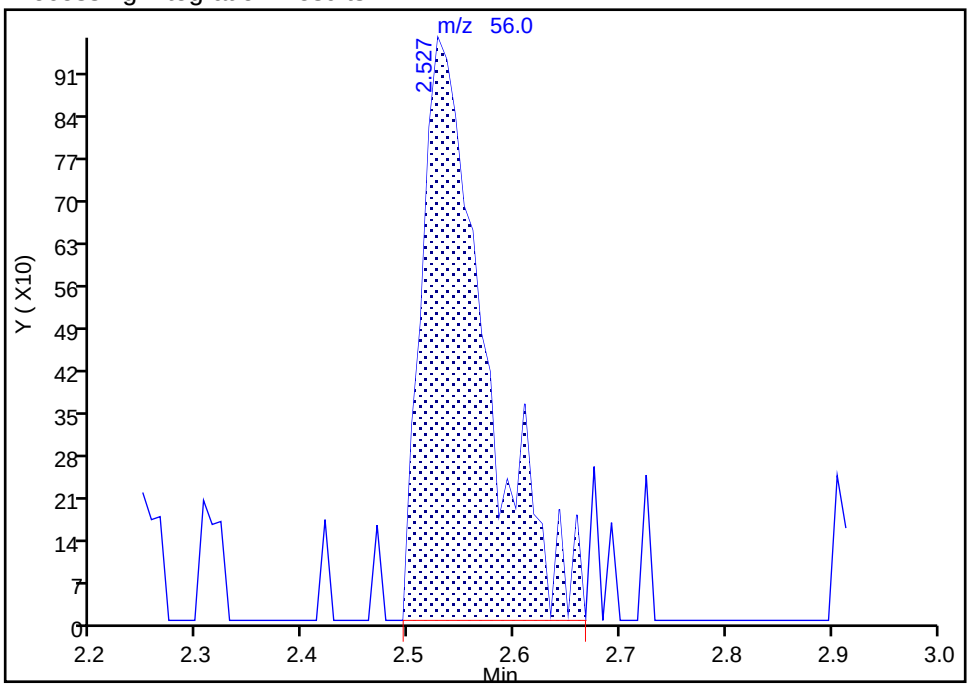
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 Acrolein, CAS: 107-02-8

Signal: 1

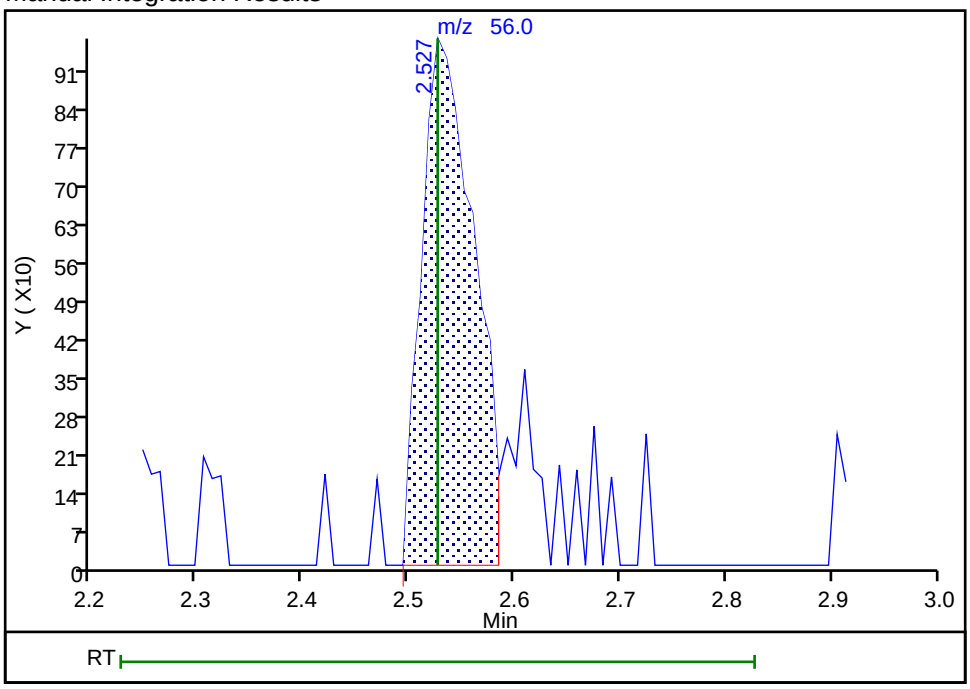
Processing Integration Results

RT: 2.53
Area: 4055
Amount: 5.397725
Amount Units: ug/l



Manual Integration Results

RT: 2.53
Area: 3330
Amount: 4.615697
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:20:41
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

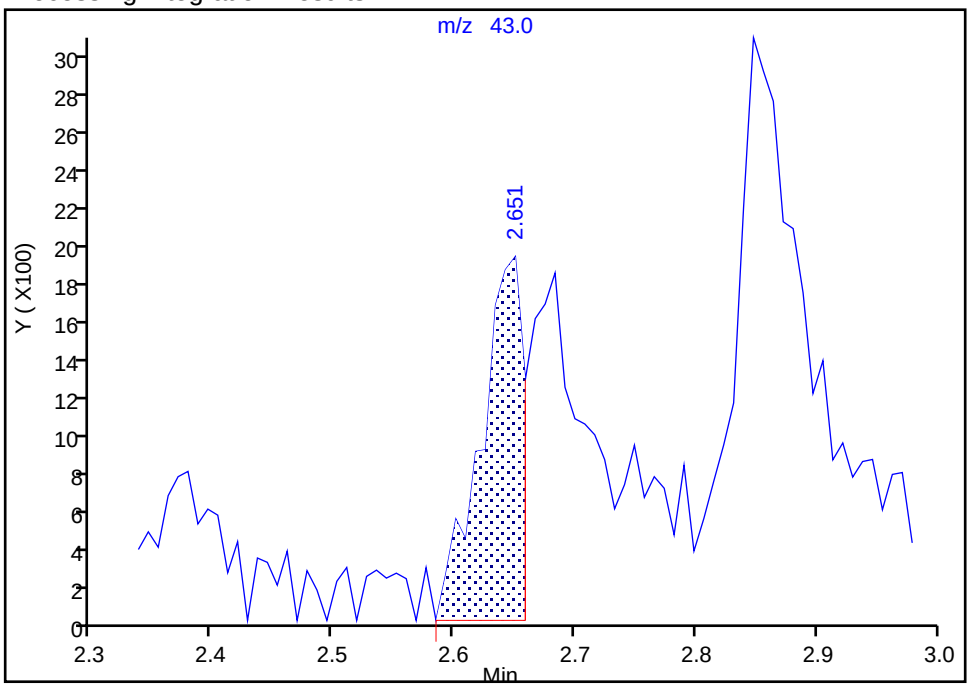
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

18 Acetone, CAS: 67-64-1

Signal: 1

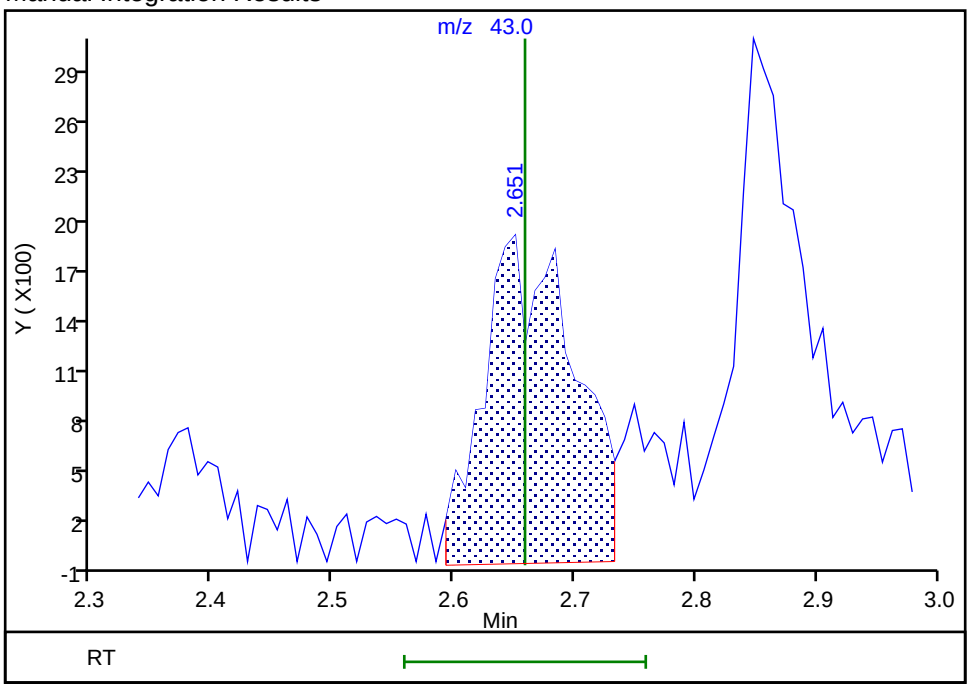
Processing Integration Results

RT: 2.65
Area: 4784
Amount: 2.312070
Amount Units: ug/l



Manual Integration Results

RT: 2.65
Area: 10224
Amount: 5.939938
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:57:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

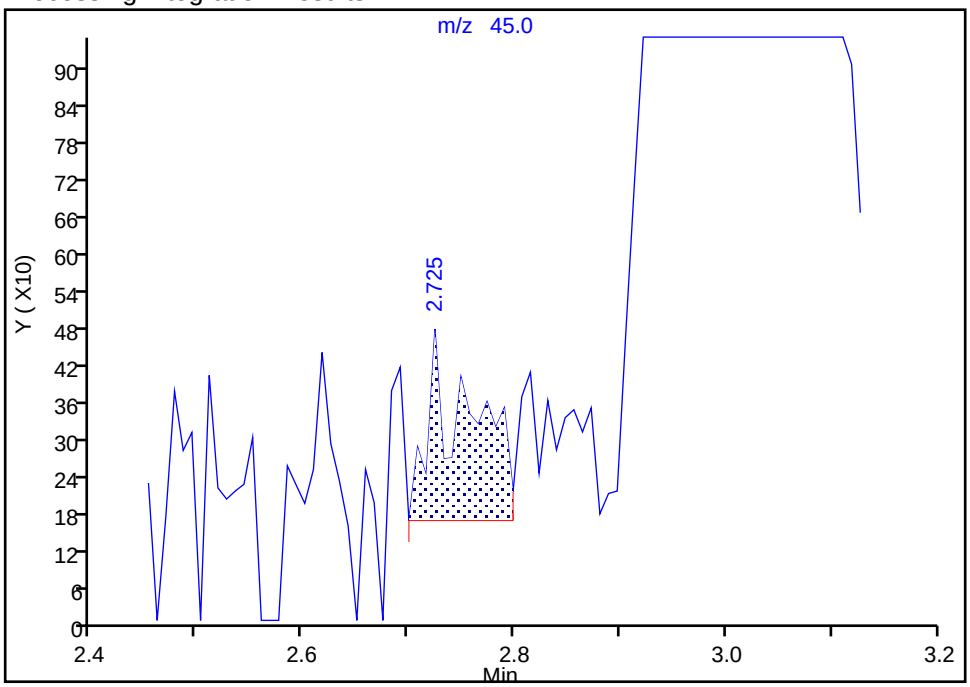
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

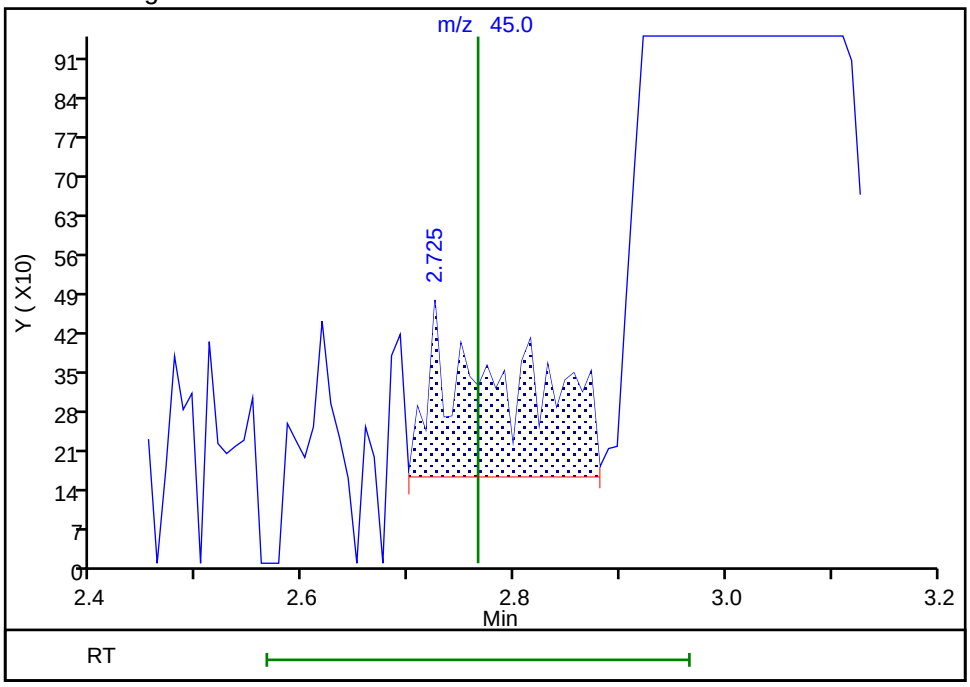
Processing Integration Results

RT: 2.72
Area: 908
Amount: 3.179771
Amount Units: ug/l



Manual Integration Results

RT: 2.72
Area: 1733
Amount: 8.279173
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:57:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

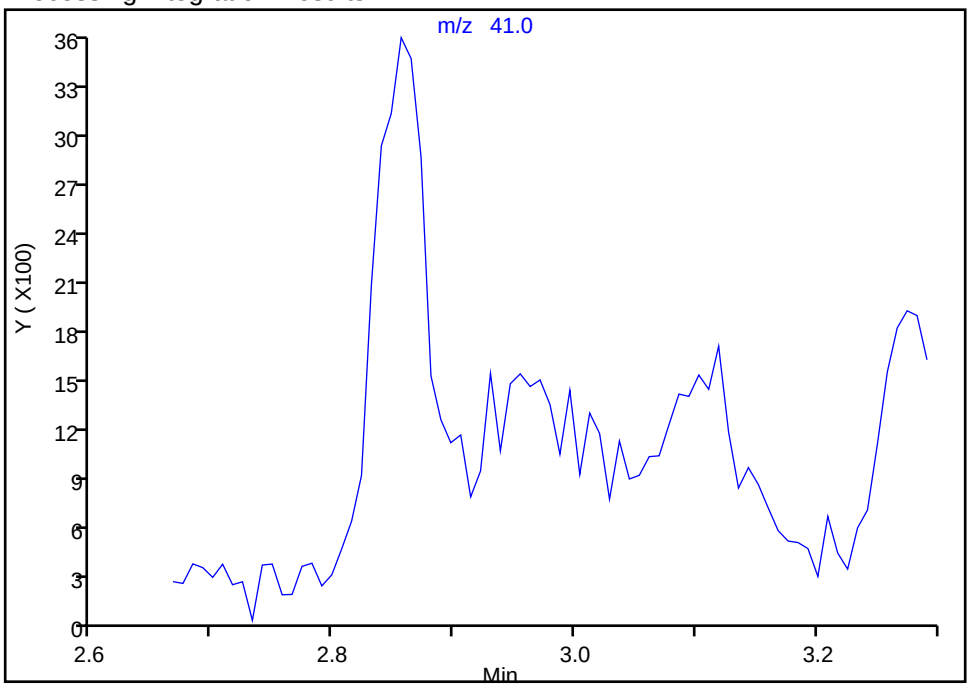
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

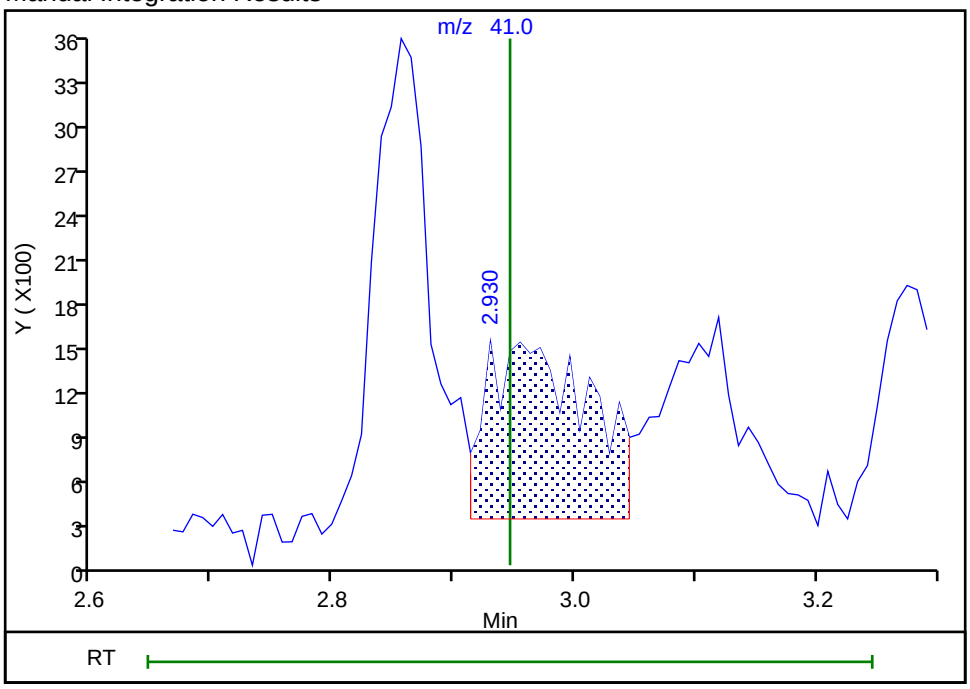
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 7114
Amount: 10.867175
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:19:25
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

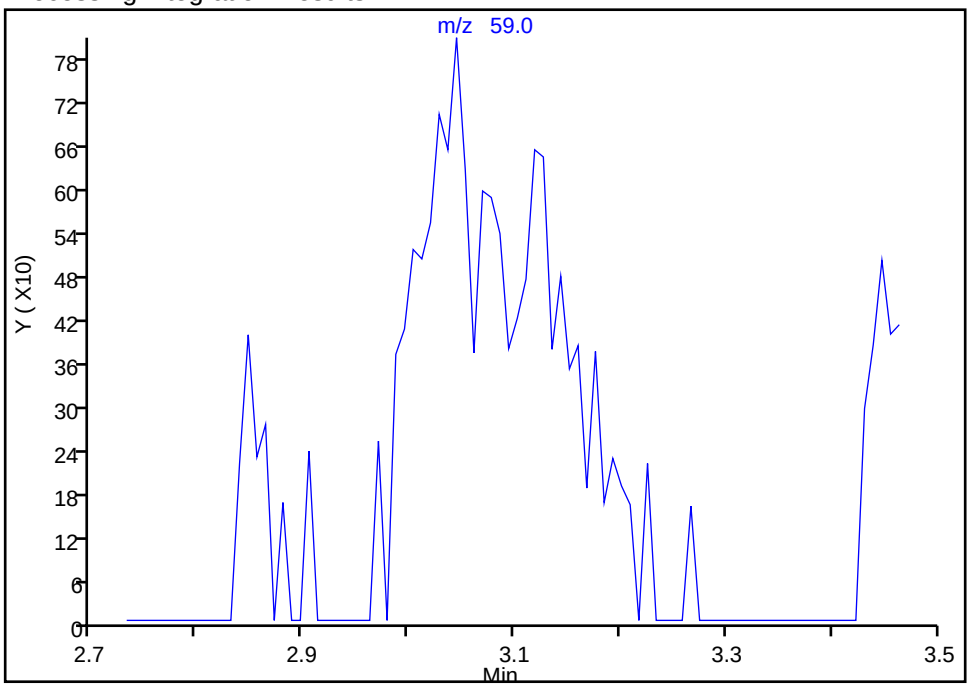
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

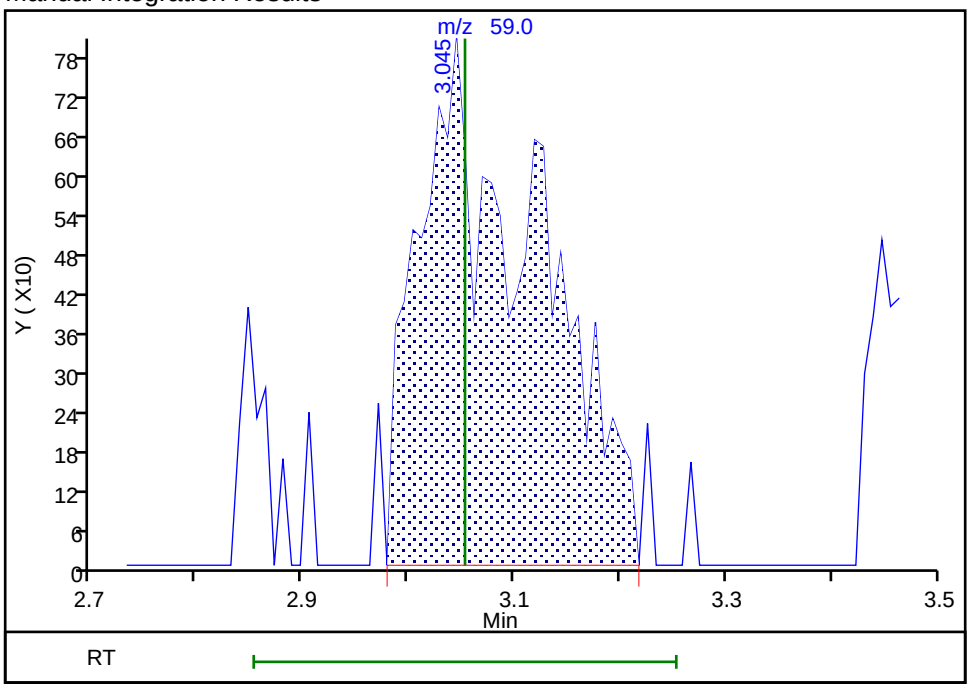
Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.05
Area: 6224
Amount: 11.724472
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:57:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

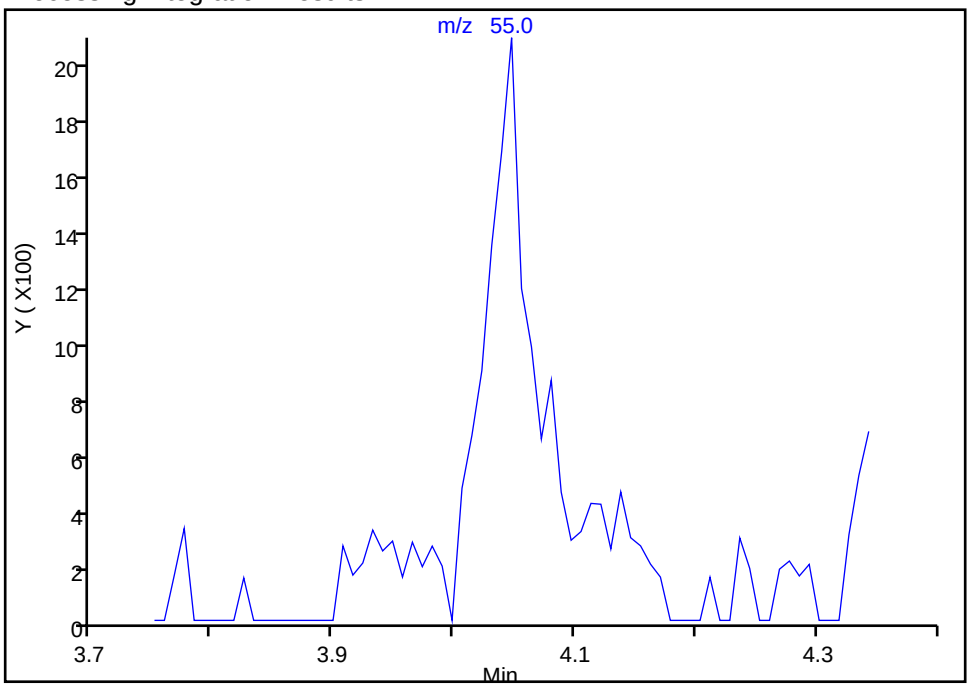
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

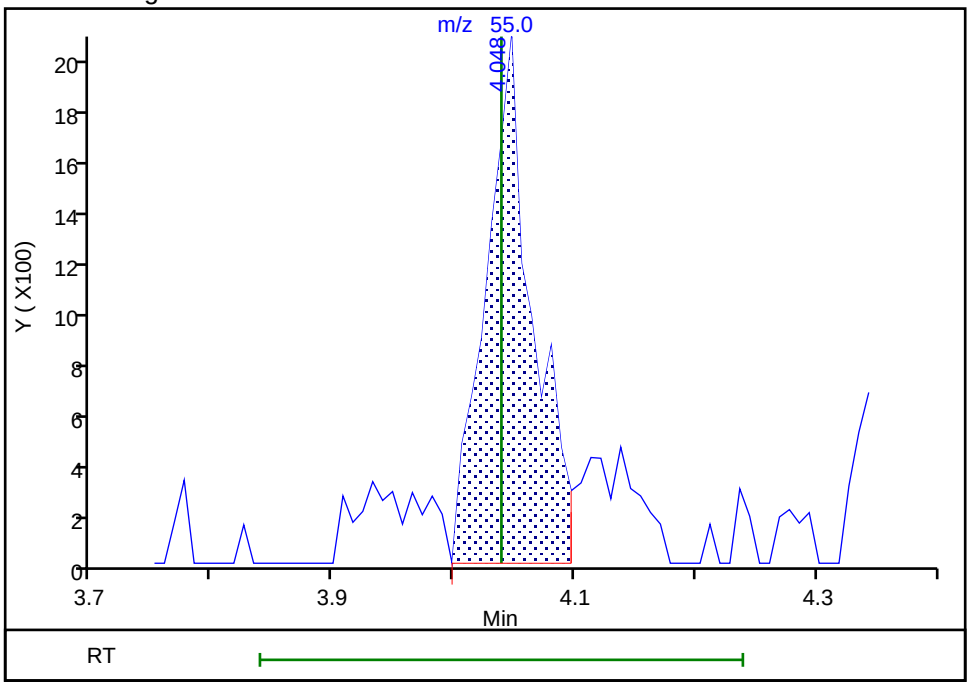
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 5661
Amount: 1.067097
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:20:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

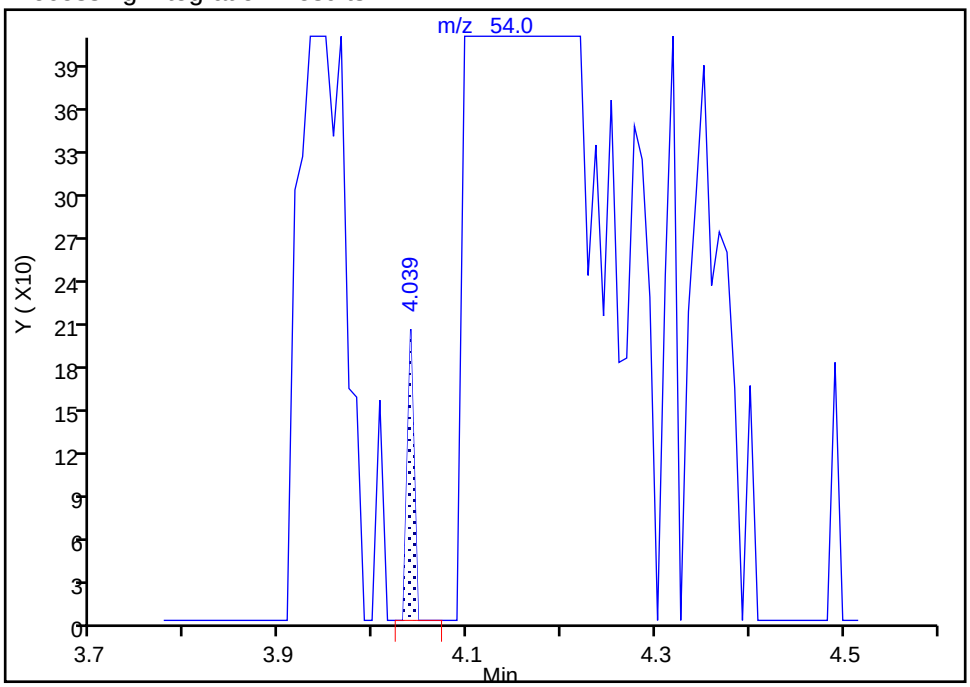
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

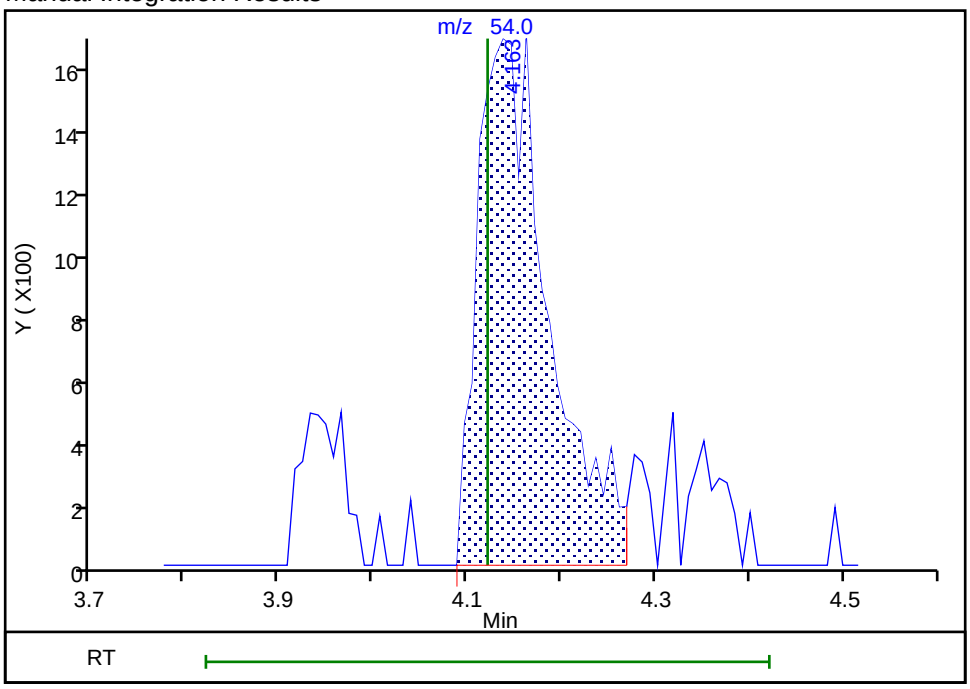
Processing Integration Results

RT: 4.04
Area: 99
Amount: 0.098448
Amount Units: ug/l



Manual Integration Results

RT: 4.16
Area: 8562
Amount: 10.165652
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:58:03
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

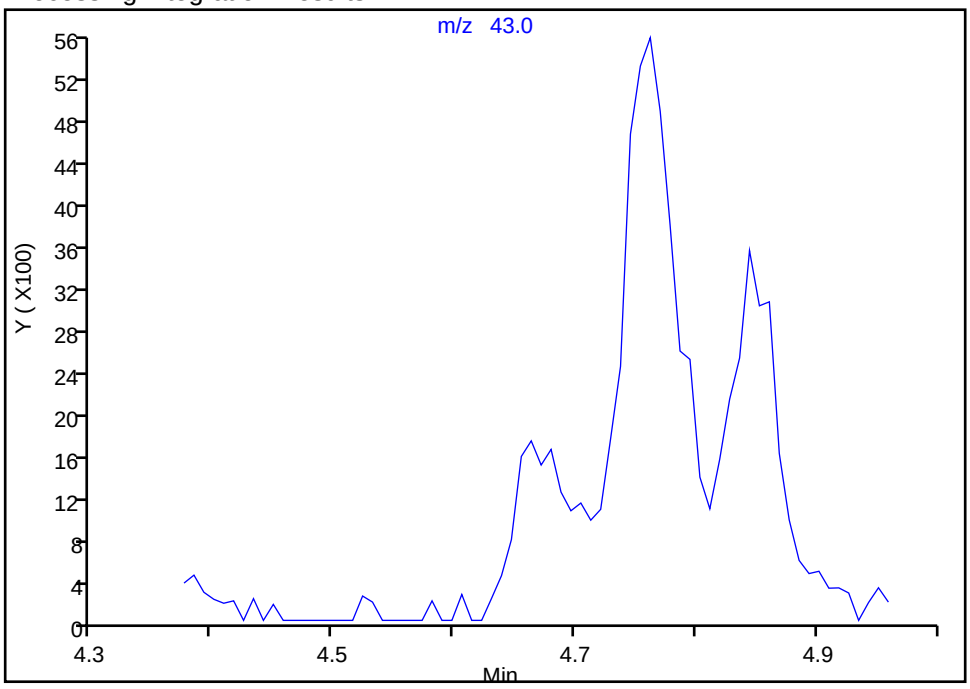
Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D		
Injection Date:	23-Nov-2021 13:07:30	Instrument ID:	CVOAMS6
Lims ID:	STD1		
Client ID:			
Operator ID:		ALS Bottle#:	3 Worklist Smp#: 4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

54 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

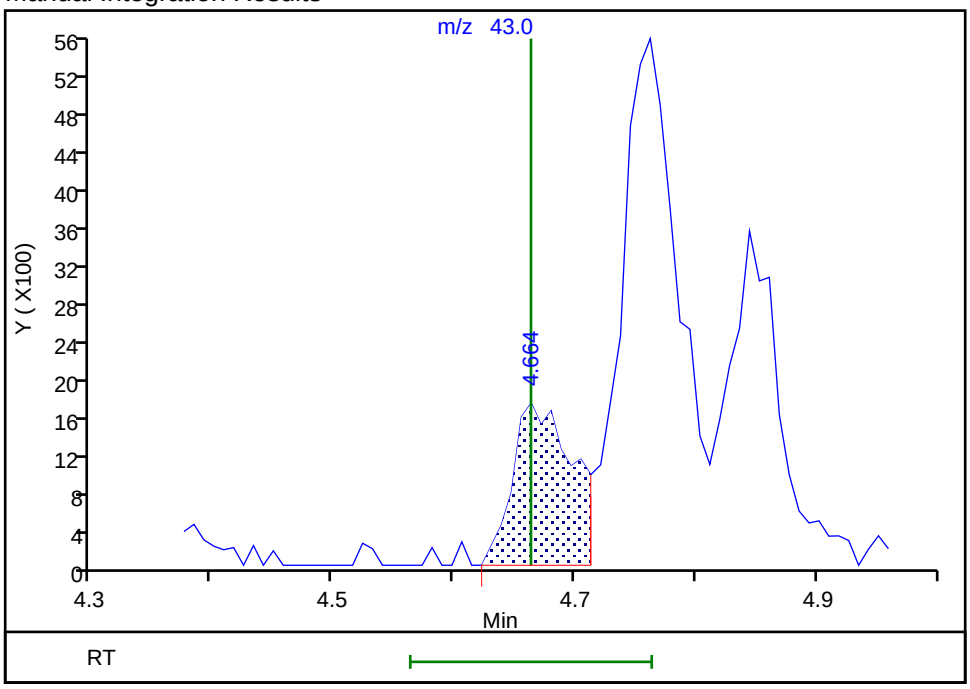
Not Detected
Expected RT: 4.66

Processing Integration Results



Manual Integration Results

RT: 4.66
Area: 6005
Amount: 20.414047
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:20:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

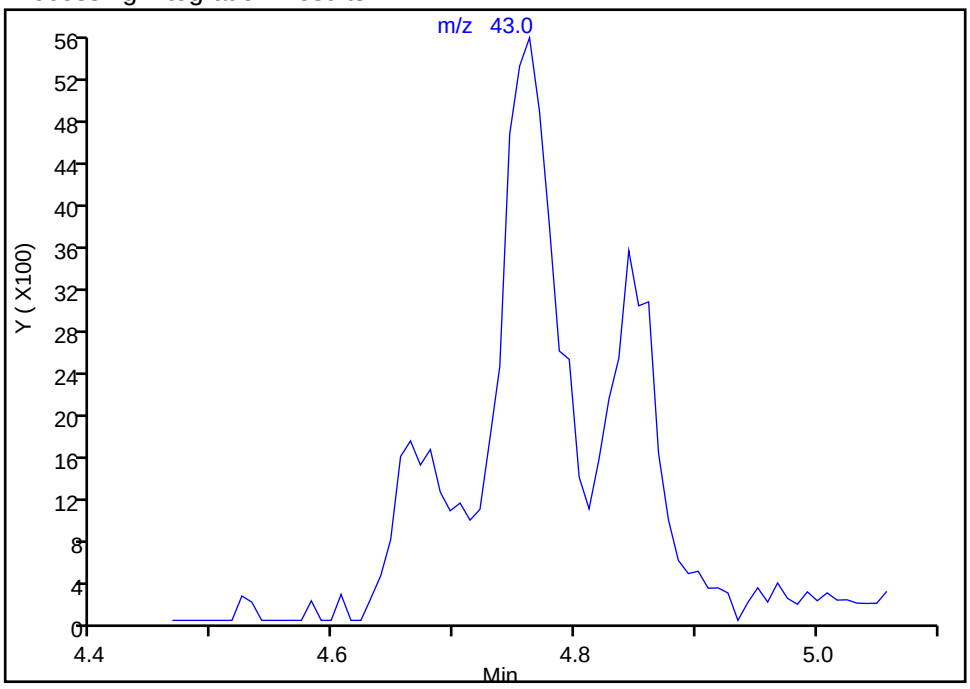
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

57 Isopropyl acetate, CAS: 108-21-4

Signal: 1

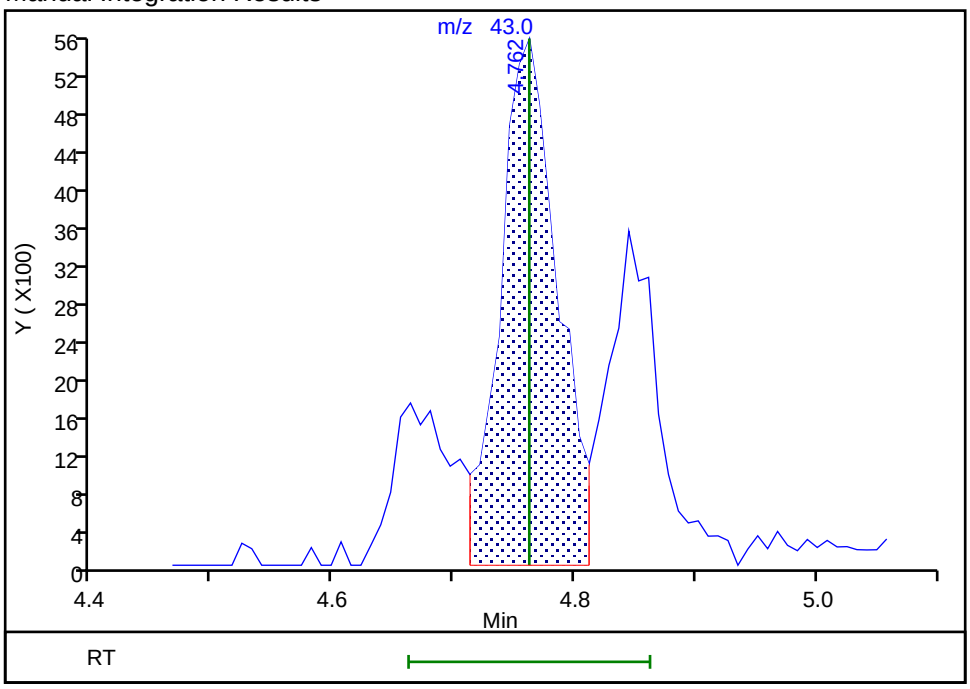
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 18684
Amount: 1.190125
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:20:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

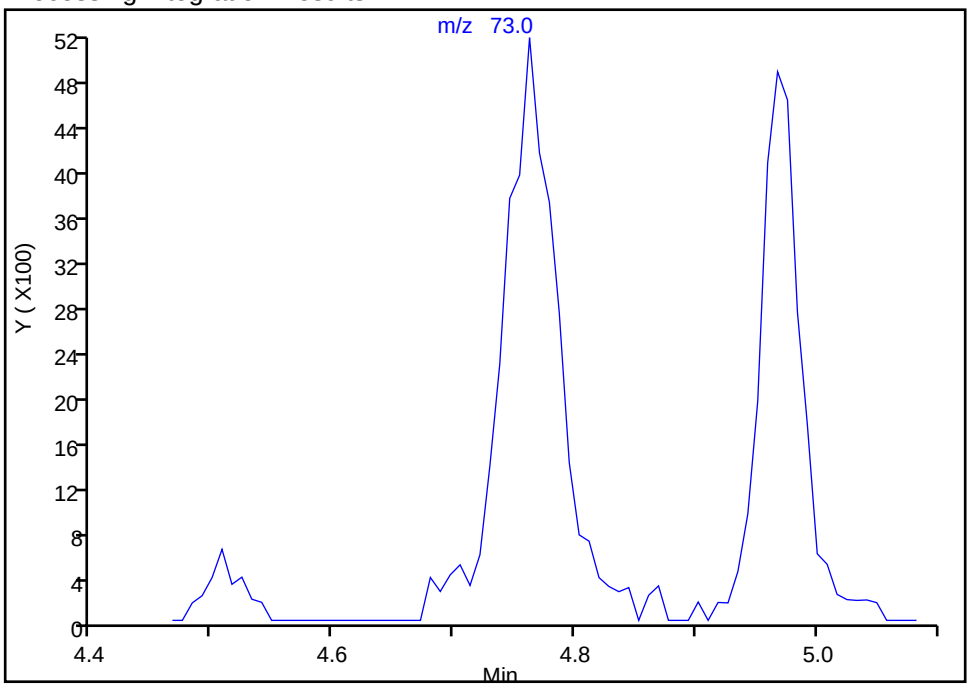
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22511.D
Injection Date: 23-Nov-2021 13:07:30 Instrument ID: CVOAMS6
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

58 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

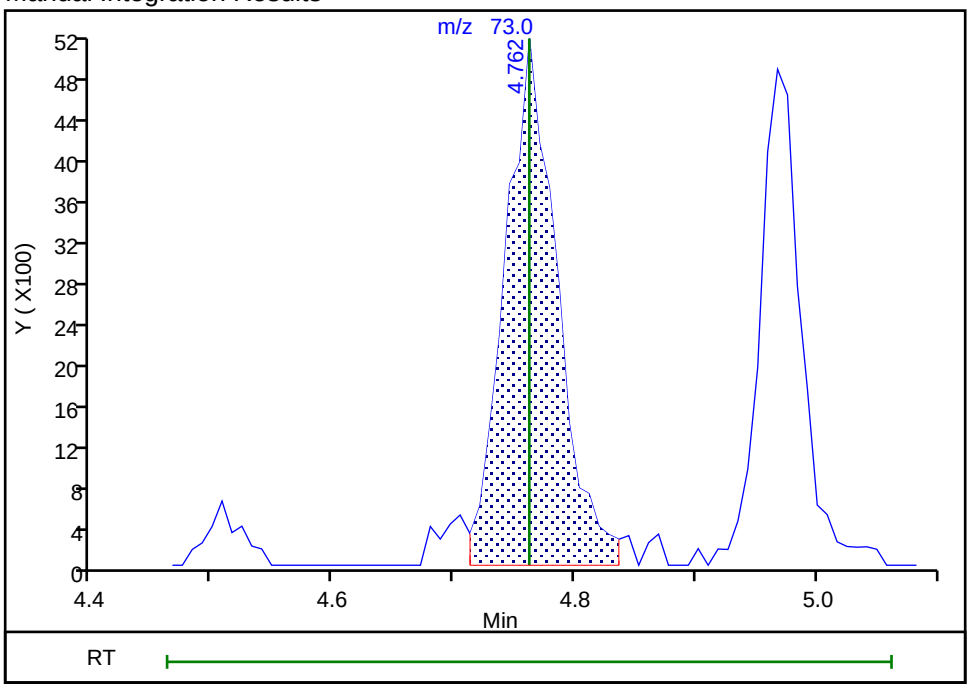
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 15572
Amount: 0.943531
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:20:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Nov-2021 13:28:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0138064-005
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:33:59 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 23-Nov-2021 15:21:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.484	1.492	-0.008	63	27449	5.00	4.77	M
2 Chloromethane	50	1.648	1.648	0.000	99	38192	5.00	4.65	
3 Vinyl chloride	62	1.722	1.722	0.000	98	36000	5.00	4.95	
4 Butadiene	54	1.739	1.738	0.001	97	31965	5.00	4.83	
5 Bromomethane	94	1.985	1.977	0.008	98	17305	5.00	5.00	
6 Chloroethane	64	2.043	2.034	0.009	99	18260	5.00	4.98	
7 Dichlorofluoromethane	67	2.199	2.198	0.001	97	45692	5.00	4.77	
9 Trichlorofluoromethane	101	2.215	2.207	0.008	64	37656	5.00	5.12	
8 Pentane	72	2.248	2.231	0.017	98	11022	10.0	10.0	
10 Ethanol	46	2.388	2.363	0.025	73	5084	200.0	222.5	M
11 Ethyl ether	59	2.371	2.371	0.000	93	23704	5.00	5.41	
12 2-Methyl-1,3-butadiene	53	2.404	2.404	0.000	87	26591	5.00	5.23	
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.437	2.437	0.000	82	24006	5.00	5.49	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.486	2.478	0.008	90	38670	5.00	5.34	
15 Acrolein	56	2.536	2.527	0.009	49	15118	20.3	19.2	
16 112TCTFE	101	2.536	2.544	-0.008	94	25052	5.00	5.20	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	94	25027	5.00	5.08	
18 Acetone	43	2.659	2.659	0.000	87	51013	25.0	26.2	
19 Iodomethane	142	2.725	2.724	0.001	97	35646	5.00	4.88	
21 Carbon disulfide	76	2.766	2.757	0.009	99	108796	5.00	5.70	
20 Isopropyl alcohol	45	2.741	2.765	-0.024	25	11892	50.0	52.2	M
22 3-Chloro-1-propene	41	2.856	2.856	0.000	89	62475	5.00	4.98	
23 Methyl acetate	43	2.856	2.856	0.000	74	51107	10.0	9.79	
24 Cyclopentene	67	2.872	2.872	0.000	92	70088	5.00	5.20	
25 Acetonitrile	41	2.938	2.946	-0.008	21	46170	50.0	64.8	a
27 Methylene Chloride	84	2.971	2.971	0.000	98	29523	5.00	5.13	
* 26 TBA-d9 (IS)	65	2.996	2.979	0.017	0	575877	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.053	3.053	0.000	91	32947	50.0	57.0	Ma
29 Methyl tert-butyl ether	73	3.103	3.102	0.001	98	79623	5.00	5.36	
30 trans-1,2-Dichloroethene	96	3.144	3.135	0.009	96	26616	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.193	0.000	96	141246	50.0	50.4	
32 Hexane	43	3.275	3.267	0.008	94	33200	5.00	5.12	
33 Isopropyl ether	45	3.456	3.464	-0.008	96	95507	5.00	5.28	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	58	53093	5.00	5.13	
35 Vinyl acetate	86	3.497	3.497	0.000	100	12623	10.0	11.2	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	90	25083	5.00	5.25	
37 Tert-butyl ethyl ether	59	3.760	3.760	0.000	89	83952	5.00	5.33	
* 38 2-Butanone-d5	46	3.941	3.949	-0.008	0	836155	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	50	8568	5.00	4.96	
40 cis-1,2-Dichloroethene	96	3.982	3.973	0.009	93	29983	5.00	5.09	
41 2-Butanone (MEK)	72	3.998	3.990	0.008	95	19832	25.0	27.1	
42 Ethyl acetate	70	4.006	3.990	0.016	96	6437	10.0	10.7	
43 Methyl acrylate	55	4.047	4.039	0.008	98	29037	5.00	5.01	
44 Propionitrile	54	4.138	4.121	0.017	94	46763	50.0	51.0	
45 Chlorobromomethane	128	4.195	4.187	0.008	88	13589	5.00	5.09	
46 Tetrahydrofuran	72	4.187	4.195	-0.008	59	9682	10.0	11.1	
47 Methacrylonitrile	67	4.204	4.203	0.001	94	138681	50.0	52.6	
48 Chloroform	83	4.245	4.236	0.009	98	44958	5.00	5.13	
49 Cyclohexane	84	4.368	4.360	0.008	93	48263	5.00	5.35	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	89	38179	5.00	5.15	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	96	262238	50.0	50.6	
52 Carbon tetrachloride	117	4.491	4.483	0.008	97	31489	5.00	5.09	
53 1,1-Dichloropropene	75	4.508	4.507	0.001	96	38665	5.00	5.32	
54 Isobutyl alcohol	43	4.664	4.664	0.000	44	39653	125.0	123.8	
55 Benzene	78	4.697	4.696	0.001	97	111903	5.00	5.15	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.713	4.705	0.008	0	326054	50.0	49.0	
57 Isopropyl acetate	43	4.762	4.762	0.000	92	74996	5.00	4.44	
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	75	92669	5.00	5.22	
59 1,2-Dichloroethane	62	4.779	4.779	0.000	95	35589	5.00	5.11	
60 n-Heptane	57	4.853	4.844	0.009	95	23569	5.00	5.07	
* 61 Fluorobenzene	96	4.968	4.968	0.000	98	1006778	50.0	50.0	
62 n-Butanol	56	5.338	5.304	0.034	88	9683	125.0	94.2	
63 Trichloroethene	95	5.313	5.304	0.009	97	25457	5.00	5.12	
64 Ethyl acrylate	55	5.428	5.428	0.000	94	74392	5.00	4.79	
65 Methylcyclohexane	83	5.428	5.428	0.000	82	51128	5.00	5.07	
66 1,2-Dichloropropane	63	5.576	5.584	-0.008	92	29257	5.00	5.16	
68 Methyl methacrylate	100	5.666	5.666	0.000	92	14761	10.0	9.76	
* 67 1,4-Dioxane-d8	96	5.707	5.707	0.000	0	40092	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	95	15440	5.00	5.00	
71 n-Propyl acetate	43	5.724	5.724	0.000	99	46985	5.00	4.77	
69 1,4-Dioxane	88	5.707	5.740	-0.033	30	4486	100.0	117.8	a
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	31147	5.00	4.92	
73 2-Nitropropane	41	6.176	6.175	0.001	85	17041	10.0	9.50	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	75	16277	5.01	4.69	
75 Epichlorohydrin	57	6.291	6.291	0.001	99	64978	100.0	105.1	
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	95	42092	5.00	5.07	
77 4-Methyl-2-pentanone (MIBK)	43	6.513	6.504	0.009	98	173583	25.0	26.0	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	99	1035647	50.0	50.5	
79 Toluene	91	6.652	6.652	0.000	93	108455	5.00	5.11	
80 trans-1,3-Dichloropropene	75	6.989	6.997	-0.008	96	34604	5.00	4.64	
81 Ethyl methacrylate	69	7.038	7.038	0.000	93	33587	5.00	4.91	
82 1,1,2-Trichloroethane	83	7.203	7.203	0.000	94	19459	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.252	7.252	0.000	93	22403	5.00	5.17	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	98	40192	5.00	5.03	
85 2-Hexanone	43	7.482	7.482	0.000	97	101589	25.0	23.4	
86 n-Butyl acetate	43	7.597	7.597	0.000	99	50259	5.00	4.82	
87 Chlorodibromomethane	129	7.638	7.638	0.000	98	20920	5.00	4.97	
88 Ethylene Dibromide	107	7.778	7.778	0.000	98	20635	5.00	4.75	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	87	754214	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	94	66520	5.00	5.21	
91 Ethylbenzene	106	8.468	8.468	0.000	99	36664	5.00	5.27	
92 1,1,1,2-Tetrachloroethane	131	8.476	8.484	-0.008	92	22864	5.00	5.11	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	98	44538	5.00	5.21	
95 o-Xylene	106	9.134	9.134	0.000	93	44122	5.00	5.14	
94 n-Butyl acrylate	73	9.142	9.142	0.000	92	17796	5.00	4.32	
96 Styrene	104	9.175	9.175	0.000	95	66528	5.00	4.73	
98 Bromoform	173	9.397	9.396	0.001	93	13818	5.00	5.06	
97 Amyl acetate (mixed isomers)	43	9.397	9.405	-0.008	89	56106	5.00	4.42	
99 Isopropylbenzene	105	9.536	9.536	0.000	96	116368	5.00	5.14	
$ 100 4-Bromofluorobenzene	174	9.734	9.733	0.001	89	271403	50.0	50.7	
101 Bromobenzene	156	9.849	9.857	-0.008	96	27432	5.00	5.17	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	97	33490	5.00	4.97	
103 N-Propylbenzene	91	9.931	9.931	0.000	98	142770	5.00	4.94	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	98	9621	5.00	5.05	
105 trans-1,4-Dichloro-2-butene	53	9.964	9.963	0.001	78	9571	5.00	5.07	
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	94378	5.00	4.88	
107 4-Ethyltoluene	105	10.029	10.029	0.000	98	113488	5.00	5.00	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	93	93077	5.00	4.87	
109 4-Chlorotoluene	91	10.120	10.120	0.000	97	88328	5.00	4.87	
110 Butyl Methacrylate	87	10.186	10.185	0.001	95	30066	5.00	4.41	
111 tert-Butylbenzene	119	10.342	10.341	0.001	95	78593	5.00	4.93	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	97	97636	5.00	4.87	
113 sec-Butylbenzene	105	10.506	10.506	0.000	98	127589	5.00	5.09	
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	94	53917	5.00	5.18	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	98	106910	5.00	5.04	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	97	414351	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	95	55149	5.00	5.15	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	99	109088	5.00	5.21	
119 Benzyl chloride	91	10.794	10.793	0.001	99	68741	5.00	5.24	
120 2,3-Dihydroindene	117	10.835	10.834	0.001	95	98803	5.00	4.97	
121 p-Diethylbenzene	119	10.884	10.884	0.000	92	59719	5.00	5.14	
122 n-Butylbenzene	92	10.900	10.900	0.000	97	61496	5.00	5.05	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	94	55980	5.00	5.22	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	98	106702	5.00	5.24	
125 1,2-Dibromo-3-Chloropropane	157	11.443	11.443	0.001	93	7651	5.00	5.34	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	97	41760	5.00	5.28	
127 1,2,4-Trichlorobenzene	180	11.903	11.894	0.009	94	39637	5.00	5.15	
128 Hexachlorobutadiene	225	11.969	11.960	0.009	90	15072	5.00	5.37	
129 Naphthalene	128	12.051	12.051	0.000	99	112567	5.00	5.18	
130 1,2,3-Trichlorobenzene	180	12.207	12.198	0.009	96	37244	5.00	5.30	
S 131 1,2-Dichloroethene, Total	100				0		10.0	10.1	
S 133 Total BTEX	1				0		25.0	25.9	
S 132 Xylenes, Total	100				0		10.0	10.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00449	Amount Added:	10.00	Units: uL	
ACROLEIN W_00133	Amount Added:	4.00	Units: uL	
8260MIX1COMB_00147	Amount Added:	10.00	Units: uL	
524freon_00045	Amount Added:	10.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 24-Nov-2021 08:34:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D

Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6 Operator ID:

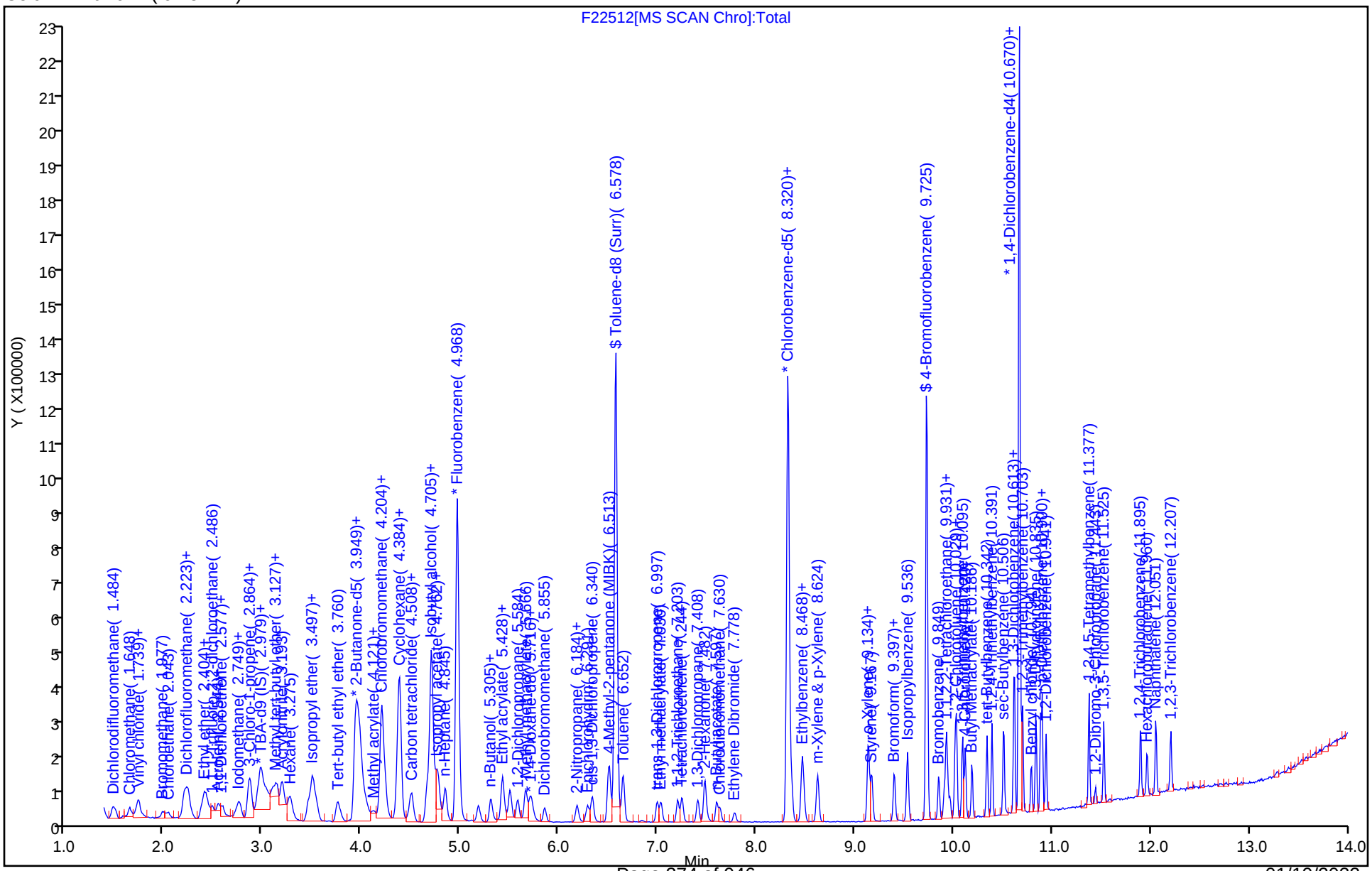
Lims ID: STD5 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

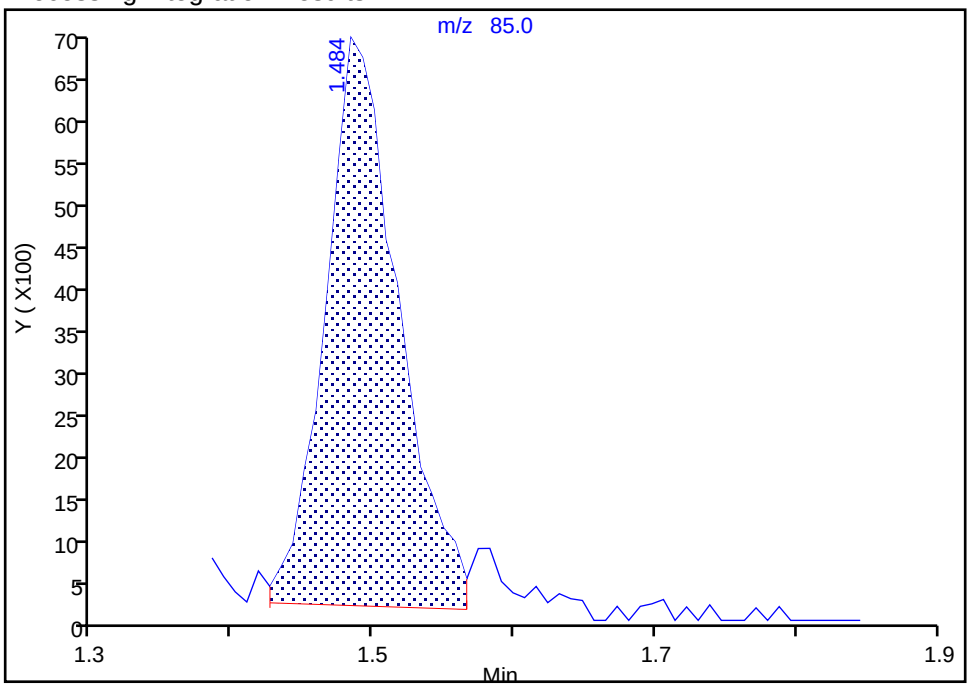
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

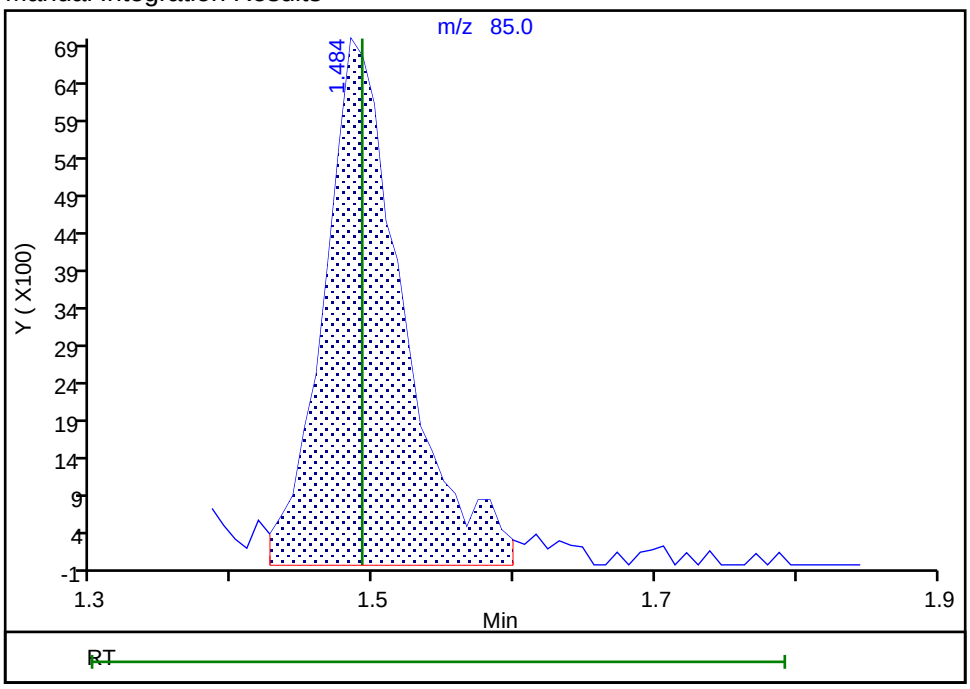
Processing Integration Results

RT: 1.48
Area: 24640
Amount: 4.403384
Amount Units: ug/l



Manual Integration Results

RT: 1.48
Area: 27449
Amount: 4.768849
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:59:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

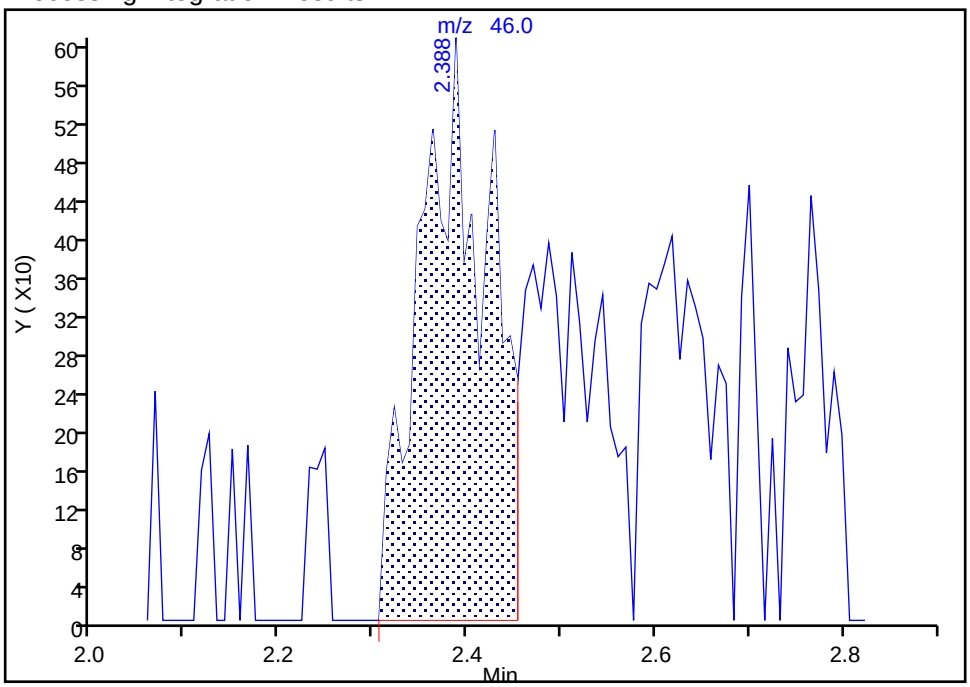
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Ethanol, CAS: 64-17-5

Signal: 1

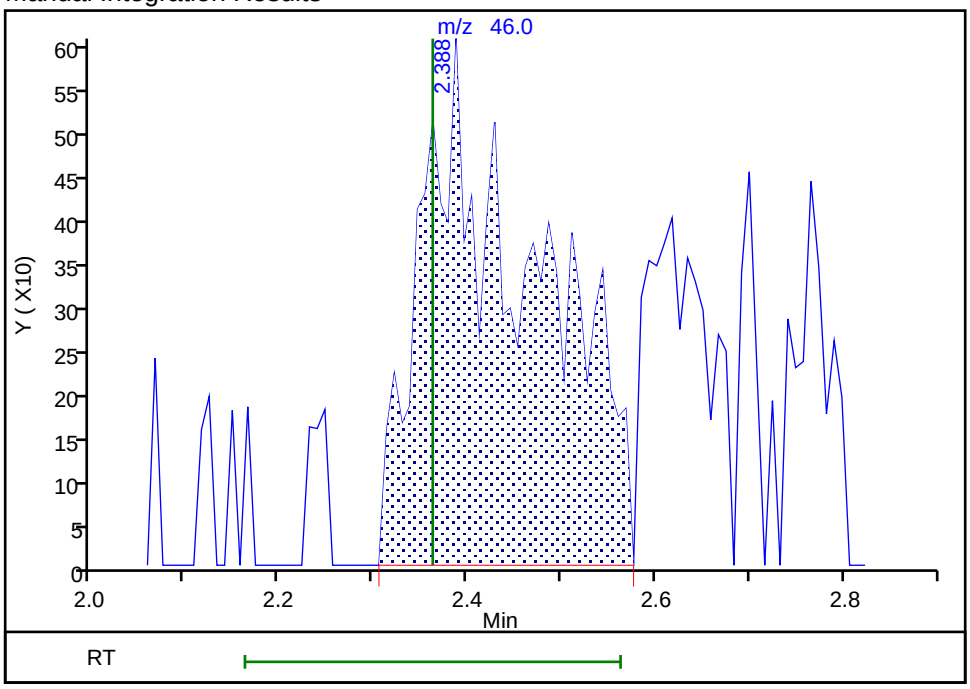
Processing Integration Results

RT: 2.39
Area: 3088
Amount: 108.7992
Amount Units: ug/l



Manual Integration Results

RT: 2.39
Area: 5084
Amount: 222.4707
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:59:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

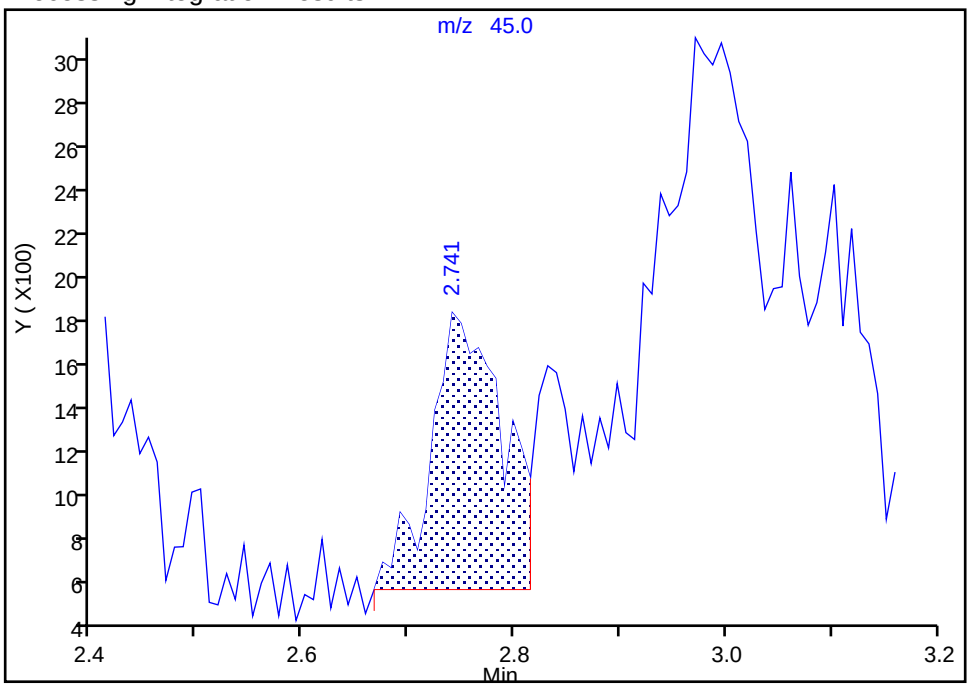
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

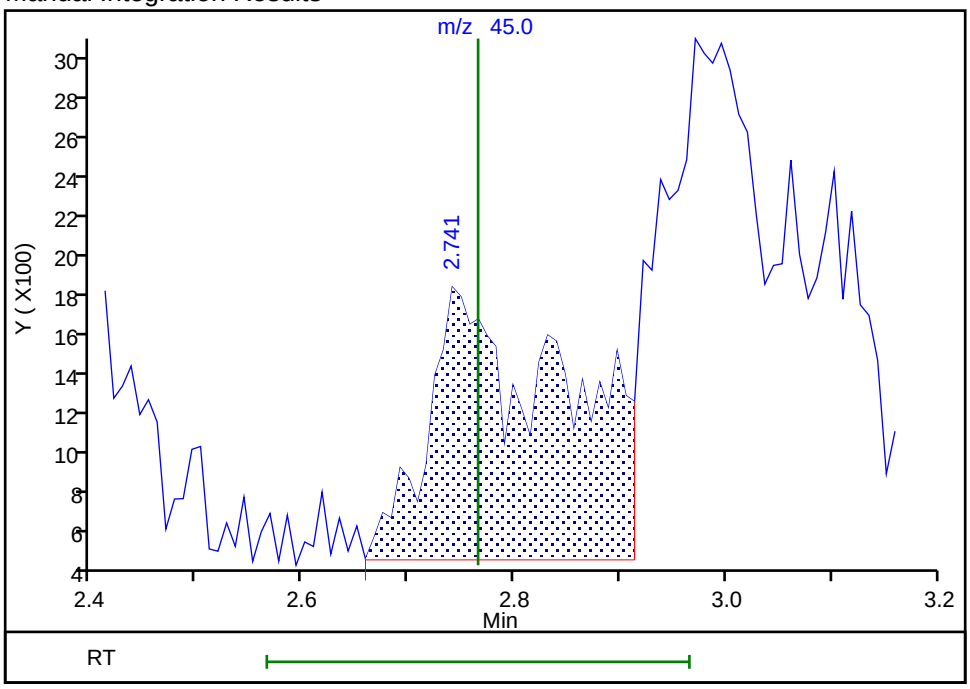
Processing Integration Results

RT: 2.74
Area: 5774
Amount: 18.576949
Amount Units: ug/l



Manual Integration Results

RT: 2.74
Area: 11892
Amount: 52.160895
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:59:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

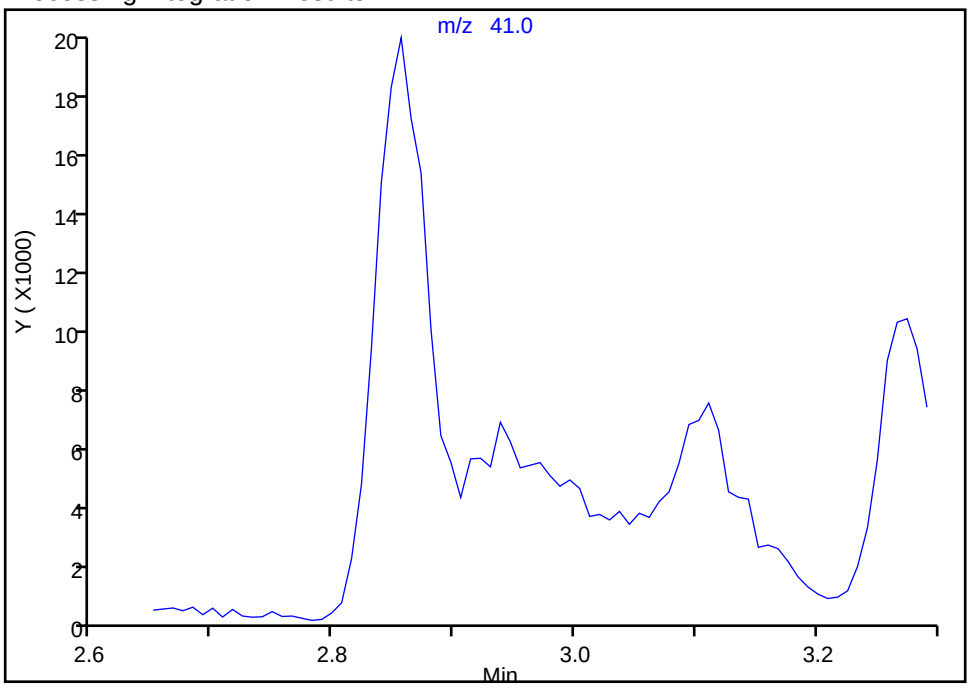
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

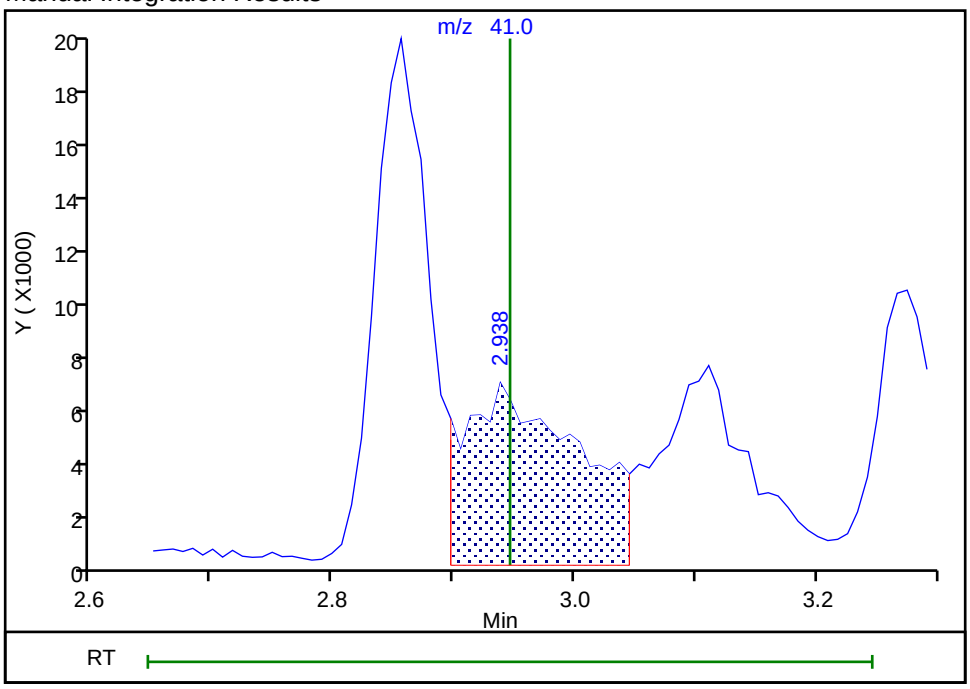
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 46170
Amount: 64.753679
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:21:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

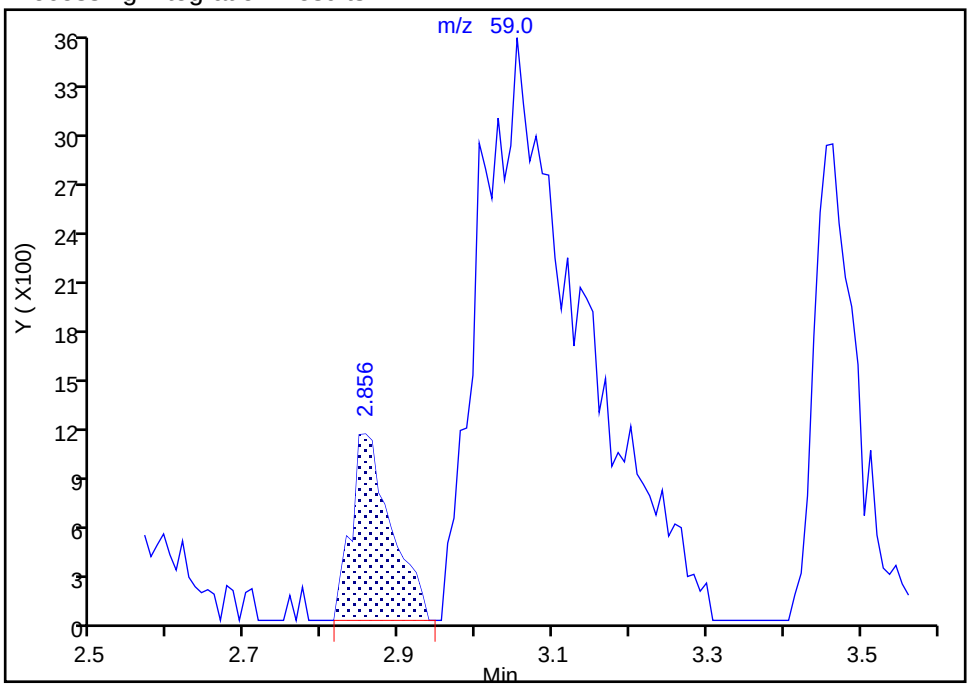
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

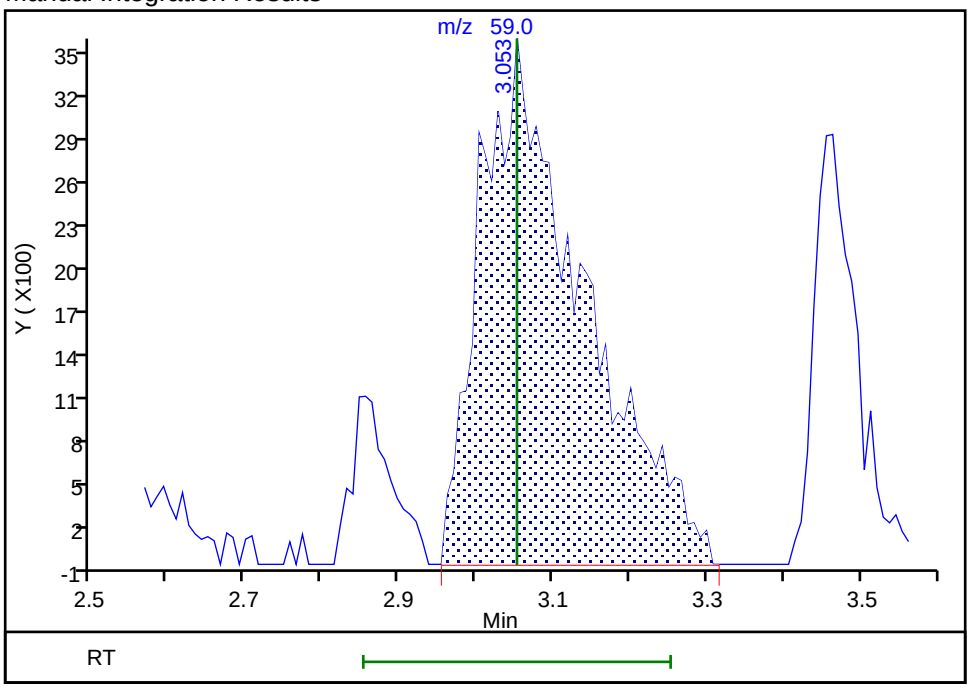
Processing Integration Results

RT: 2.86
Area: 4058
Amount: 19.199372
Amount Units: ug/l



Manual Integration Results

RT: 3.05
Area: 32947
Amount: 56.982479
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:00:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

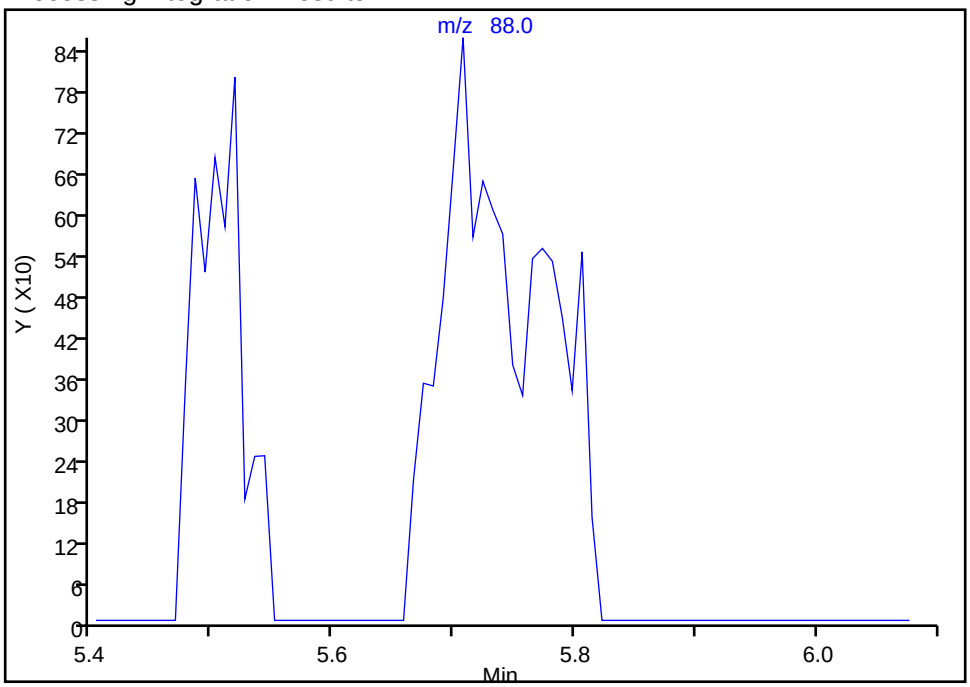
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22512.D
Injection Date: 23-Nov-2021 13:28:30 Instrument ID: CVOAMS6
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

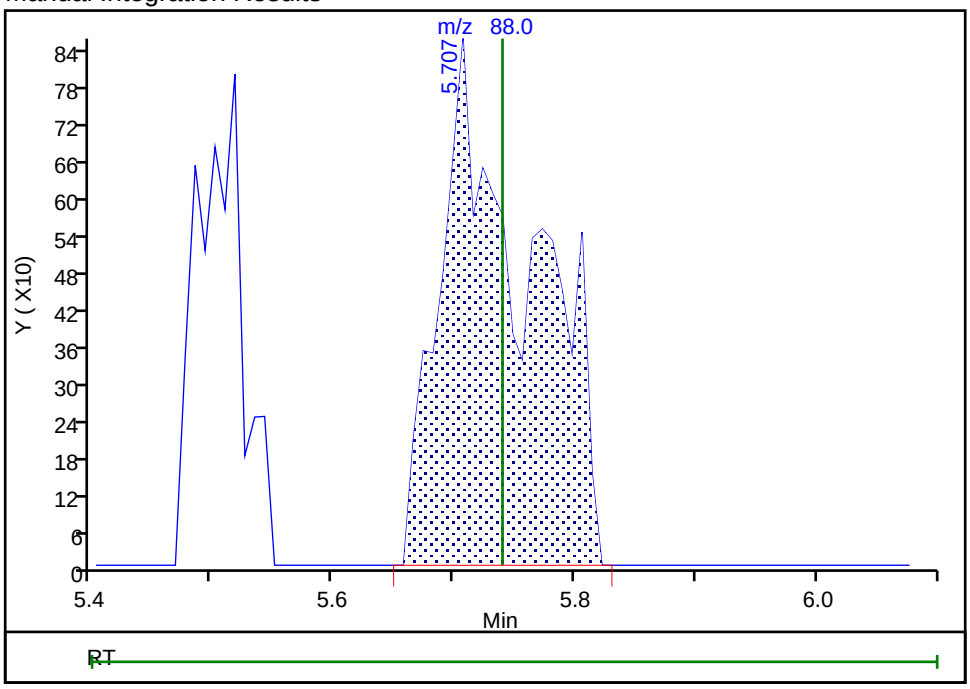
Not Detected
Expected RT: 5.74

Processing Integration Results



Manual Integration Results

RT: 5.71
Area: 4486
Amount: 117.7530
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:20:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 23-Nov-2021 13:51:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0138064-006
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:34:05 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 23-Nov-2021 15:19:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	32	108380	20.0	19.6	
2 Chloromethane	50	1.648	1.648	0.000	42	166490	20.0	21.1	
3 Vinyl chloride	62	1.722	1.722	0.000	28	142308	20.0	20.4	
4 Butadiene	54	1.738	1.738	0.000	37	133924	20.0	21.1	
5 Bromomethane	94	1.977	1.977	0.000	15	71448	20.0	21.5	
6 Chloroethane	64	2.034	2.034	0.000	39	77514	20.0	22.0	
7 Dichlorofluoromethane	67	2.198	2.198	0.000	34	205726	20.0	22.4	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	64	154418	20.0	21.9	
8 Pentane	72	2.231	2.231	0.000	37	43989	40.0	43.2	
10 Ethanol	46	2.363	2.363	0.000	74	18642	800.0	881.8	M
11 Ethyl ether	59	2.371	2.371	0.000	23	86442	20.0	20.5	
12 2-Methyl-1,3-butadiene	53	2.404	2.404	0.000	98	104284	20.0	21.4	a
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.437	2.437	0.000	29	82562	20.0	19.7	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.478	2.478	0.000	0	139262	20.0	20.0	
15 Acrolein	56	2.527	2.527	0.000	38	29025	40.6	39.9	a
16 112TCTFE	101	2.544	2.544	0.000	39	95396	20.0	20.6	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	65	95033	20.0	20.1	
18 Acetone	43	2.659	2.659	0.000	38	161407	100.0	84.7	
19 Iodomethane	142	2.724	2.724	0.000	32	147771	20.0	21.1	
21 Carbon disulfide	76	2.757	2.757	0.000	21	361052	20.0	19.7	
20 Isopropyl alcohol	45	2.765	2.765	0.000	24	30479	200.0	144.5	Ma
22 3-Chloro-1-propene	41	2.856	2.856	0.000	44	250259	20.0	20.8	
23 Methyl acetate	43	2.856	2.856	0.000	72	210872	40.0	42.0	a
24 Cyclopentene	67	2.872	2.872	0.000	68	273358	20.0	21.1	
25 Acetonitrile	41	2.946	2.946	0.000	19	129416	200.0	196.2	a
27 Methylene Chloride	84	2.971	2.971	0.000	29	113222	20.0	20.5	
* 26 TBA-d9 (IS)	65	2.979	2.979	0.000	0	532762	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.053	3.053	0.000	94	106390	200.0	198.9	a
29 Methyl tert-butyl ether	73	3.102	3.102	0.000	39	292733	20.0	20.5	
30 trans-1,2-Dichloroethene	96	3.135	3.135	0.000	38	106101	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.193	0.000	45	538271	200.0	199.9	
32 Hexane	43	3.267	3.267	0.000	19	126166	20.0	20.2	
33 Isopropyl ether	45	3.464	3.464	0.000	96	361684	20.0	20.8	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	45	202289	20.0	20.3	
35 Vinyl acetate	86	3.497	3.497	0.000	27	50221	40.0	46.4	
36 2-Chloro-1,3-butadiene	88	3.530	3.530	0.000	45	94787	20.0	20.7	
37 Tert-butyl ethyl ether	59	3.760	3.760	0.000	37	311660	20.0	20.6	
* 38 2-Butanone-d5	46	3.949	3.949	0.000	0	817618	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	43	33455	20.0	20.2	
40 cis-1,2-Dichloroethene	96	3.973	3.973	0.000	26	114745	20.0	20.3	
41 2-Butanone (MEK)	72	3.990	3.990	0.000	42	69960	100.0	97.9	
42 Ethyl acetate	70	3.990	3.990	0.000	27	25566	40.0	43.7	
43 Methyl acrylate	55	4.039	4.039	0.000	99	116722	20.0	20.4	a
44 Propionitrile	54	4.121	4.121	0.000	97	181004	200.0	213.3	a
45 Chlorobromomethane	128	4.187	4.187	0.000	32	52666	20.0	20.5	
46 Tetrahydrofuran	72	4.195	4.195	0.000	59	34313	40.0	40.2	a
47 Methacrylonitrile	67	4.203	4.203	0.000	94	525015	200.0	207.4	a
48 Chloroform	83	4.236	4.236	0.000	31	173463	20.0	20.6	
49 Cyclohexane	84	4.360	4.360	0.000	39	179100	20.0	20.7	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	49	143466	20.0	20.2	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	30	252753	50.0	50.7	
52 Carbon tetrachloride	117	4.483	4.483	0.000	96	118716	20.0	20.0	a
53 1,1-Dichloropropene	75	4.507	4.507	0.000	35	140559	20.0	20.1	
54 Isobutyl alcohol	43	4.664	4.664	0.000	38	160197	500.0	540.5	a
55 Benzene	78	4.696	4.696	0.000	51	421985	20.0	19.7	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.705	4.705	0.000	0	323399	50.0	50.6	
57 Isopropyl acetate	43	4.762	4.762	0.000	40	390682	20.0	24.1	
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	79	349251	20.0	20.5	
59 1,2-Dichloroethane	62	4.779	4.779	0.000	46	132793	20.0	19.9	
60 n-Heptane	57	4.844	4.844	0.000	94	94945	20.0	21.3	a
* 61 Fluorobenzene	96	4.968	4.968	0.000	38	966989	50.0	50.0	
62 n-Butanol	56	5.304	5.304	0.000	38	38611	500.0	406.2	
63 Trichloroethene	95	5.304	5.304	0.000	42	95199	20.0	19.9	
64 Ethyl acrylate	55	5.428	5.428	0.000	36	298020	20.0	20.0	
65 Methylcyclohexane	83	5.428	5.428	0.000	47	194981	20.0	20.1	
66 1,2-Dichloropropane	63	5.584	5.584	0.000	39	108521	20.0	19.9	
68 Methyl methacrylate	100	5.666	5.666	0.000	38	57079	40.0	39.3	
* 67 1,4-Dioxane-d8	96	5.707	5.707	0.000	0	36532	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	20	60092	20.0	20.3	
71 n-Propyl acetate	43	5.724	5.724	0.000	36	187427	20.0	19.8	
69 1,4-Dioxane	88	5.740	5.740	0.000	47	13456	400.0	387.6	
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	120917	20.0	19.9	a
73 2-Nitropropane	41	6.175	6.175	0.000	34	62762	40.0	36.4	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	26	66637	20.0	20.0	
75 Epichlorohydrin	57	6.291	6.291	0.000	99	249122	400.0	411.9	a
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	41	164141	20.0	20.0	
77 4-Methyl-2-pentanone (MIBK)	43	6.504	6.504	0.000	32	662422	100.0	101.3	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	36	1017908	50.0	50.1	
79 Toluene	91	6.652	6.652	0.000	27	415676	20.0	19.8	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	22	144137	20.0	19.6	
81 Ethyl methacrylate	69	7.038	7.038	0.000	37	134392	20.0	19.9	
82 1,1,2-Trichloroethane	83	7.203	7.203	0.000	31	74372	20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.252	7.252	0.000	76	89150	20.0	20.8	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	35	157788	20.0	20.0	
85 2-Hexanone	43	7.482	7.482	0.000	75	408861	100.0	96.1	
86 n-Butyl acetate	43	7.597	7.597	0.000	36	193328	20.0	18.7	
87 Chlorodibromomethane	129	7.638	7.638	0.000	39	80407	20.0	19.3	
88 Ethylene Dibromide	107	7.778	7.778	0.000	45	85640	20.0	19.9	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	65	745851	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	69	254040	20.0	20.1	
91 Ethylbenzene	106	8.468	8.468	0.000	46	138076	20.0	20.1	
92 1,1,1,2-Tetrachloroethane	131	8.484	8.484	0.000	44	89157	20.0	20.1	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	31	172086	20.0	20.3	
95 o-Xylene	106	9.134	9.134	0.000	45	170077	20.0	20.0	
94 n-Butyl acrylate	73	9.142	9.142	0.000	97	73492	20.0	18.1	a
96 Styrene	104	9.175	9.175	0.000	32	274623	20.0	19.7	
98 Bromoform	173	9.396	9.396	0.000	26	54307	20.0	20.1	
97 Amyl acetate (mixed isomers)	43	9.405	9.405	0.000	29	231069	20.0	18.6	
99 Isopropylbenzene	105	9.536	9.536	0.000	37	458682	20.0	20.5	
$ 100 4-Bromofluorobenzene	174	9.733	9.733	0.000	33	268089	50.0	50.6	
101 Bromobenzene	156	9.857	9.857	0.000	39	101888	20.0	19.6	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	98	128303	20.0	19.4	a
103 N-Propylbenzene	91	9.931	9.931	0.000	31	566209	20.0	20.0	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	35	35009	20.0	18.8	
105 trans-1,4-Dichloro-2-butene	53	9.963	9.963	0.000	80	34491	20.0	18.6	a
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	374401	20.0	19.8	a
107 4-Ethyltoluene	105	10.029	10.029	0.000	74	448567	20.0	20.2	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	92	375821	20.0	20.1	a
109 4-Chlorotoluene	91	10.120	10.120	0.000	38	352545	20.0	19.8	
110 Butyl Methacrylate	87	10.185	10.185	0.000	34	125299	20.0	18.8	
111 tert-Butylbenzene	119	10.341	10.341	0.000	18	314358	20.0	20.1	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	36	388731	20.0	19.8	
113 sec-Butylbenzene	105	10.506	10.506	0.000	22	500800	20.0	20.4	
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	15	204803	20.0	20.1	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	34	426276	20.0	20.5	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	95	405748	50.0	50.0	a
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	39	205394	20.0	19.6	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	32	413487	20.0	20.2	
119 Benzyl chloride	91	10.793	10.793	0.000	91	264209	20.0	20.6	
120 2,3-Dihydroindene	117	10.834	10.834	0.000	24	398367	20.0	20.5	
121 p-Diethylbenzene	119	10.884	10.884	0.000	23	226985	20.0	20.0	
122 n-Butylbenzene	92	10.900	10.900	0.000	37	242373	20.0	20.3	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	33	206954	20.0	19.7	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	98	406794	20.0	20.4	a
125 1,2-Dibromo-3-Chloropropane	157	11.443	11.443	0.000	45	25555	20.0	18.2	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	26	161002	20.0	20.8	
127 1,2,4-Trichlorobenzene	180	11.894	11.894	0.000	39	151224	20.0	20.1	
128 Hexachlorobutadiene	225	11.960	11.960	0.000	41	56723	20.0	20.6	
129 Naphthalene	128	12.051	12.051	0.000	99	420533	20.0	19.8	a
130 1,2,3-Trichlorobenzene	180	12.198	12.198	0.000	33	139123	20.0	20.2	
S 131 1,2-Dichloroethene, Total	100				0		40.0	41.0	
S 133 Total BTEX	1				0		100.0	99.9	
S 132 Xylenes, Total	100				0		40.0	40.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00449	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00147	Amount Added:	20.00	Units: uL	
ACROLEIN W_00133	Amount Added:	4.00	Units: uL	
524freon_00045	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 24-Nov-2021 08:34:06 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D

Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6 Operator ID:

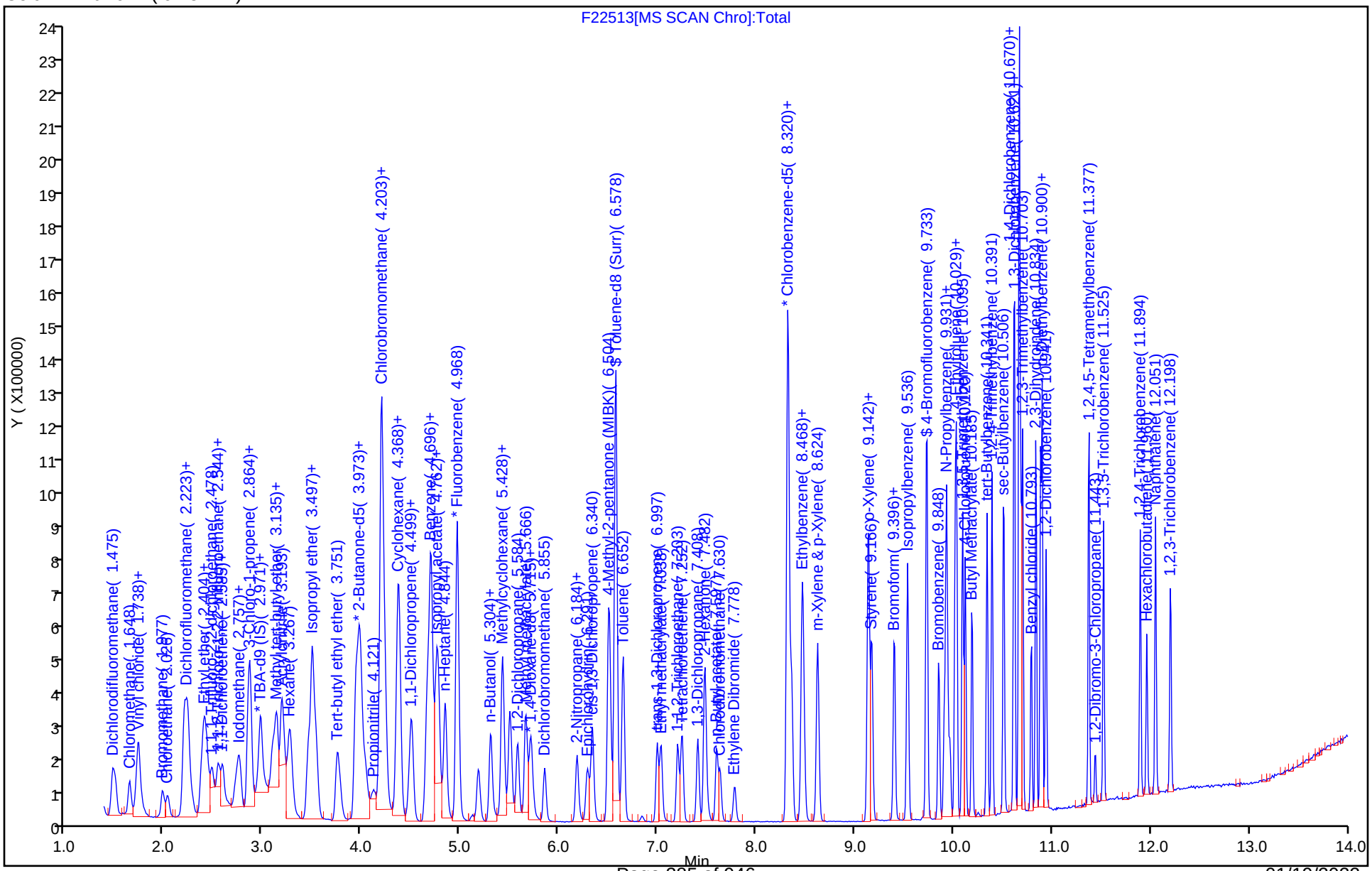
Lims ID: STD20 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

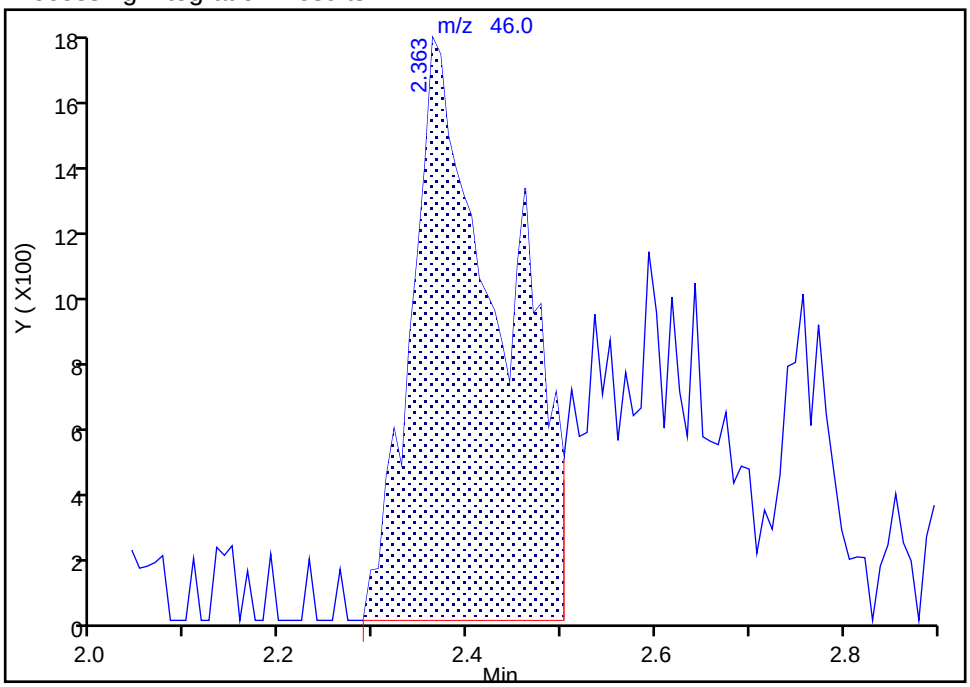
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

10 Ethanol, CAS: 64-17-5

Signal: 1

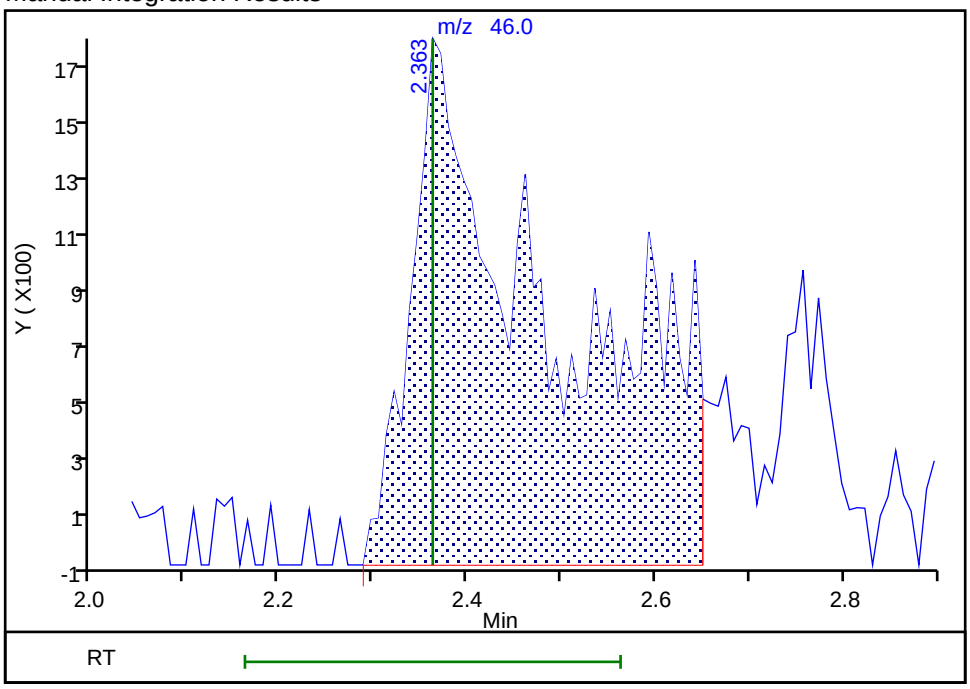
Processing Integration Results

RT: 2.36
Area: 12074
Amount: 466.1361
Amount Units: ug/l



Manual Integration Results

RT: 2.36
Area: 18642
Amount: 881.7718
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:53:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

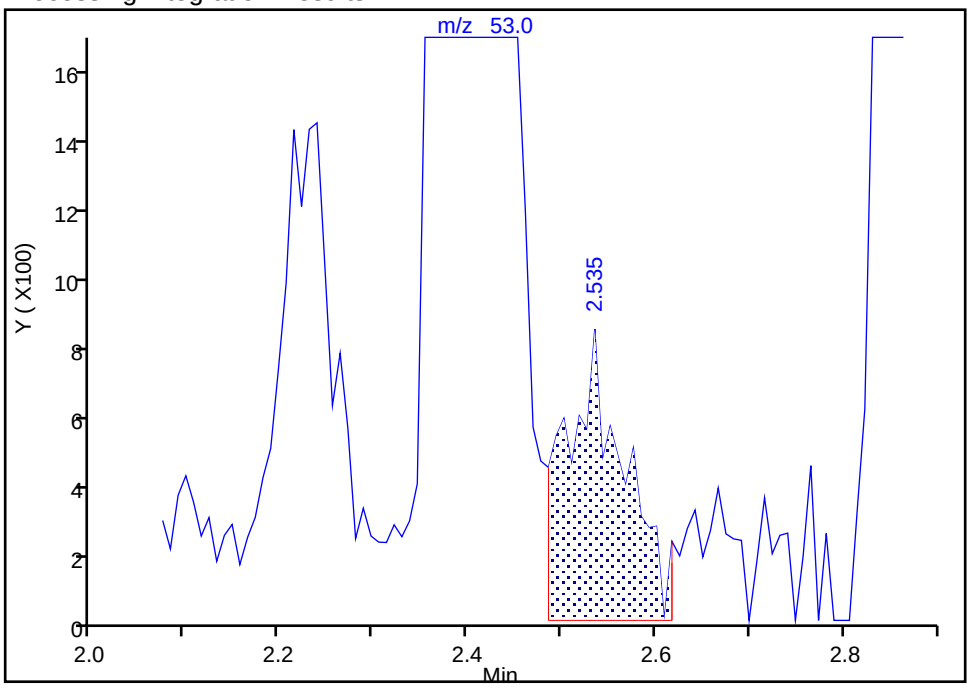
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 2-Methyl-1,3-butadiene, CAS: 78-79-5

Signal: 1

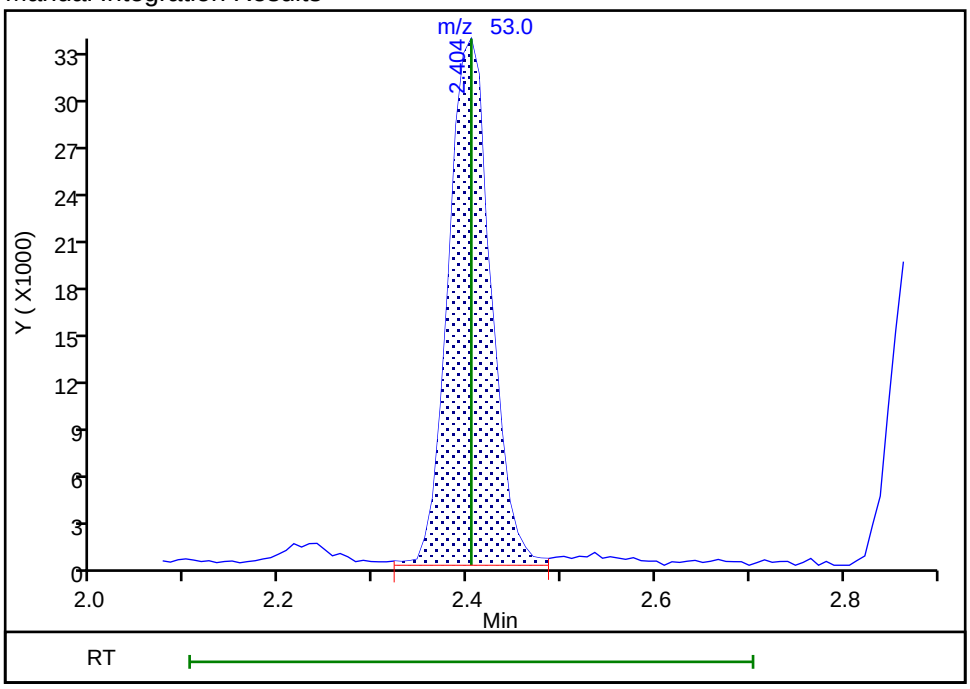
Processing Integration Results

RT: 2.54
Area: 3520
Amount: 3.172069
Amount Units: ug/l



Manual Integration Results

RT: 2.40
Area: 104284
Amount: 21.363977
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

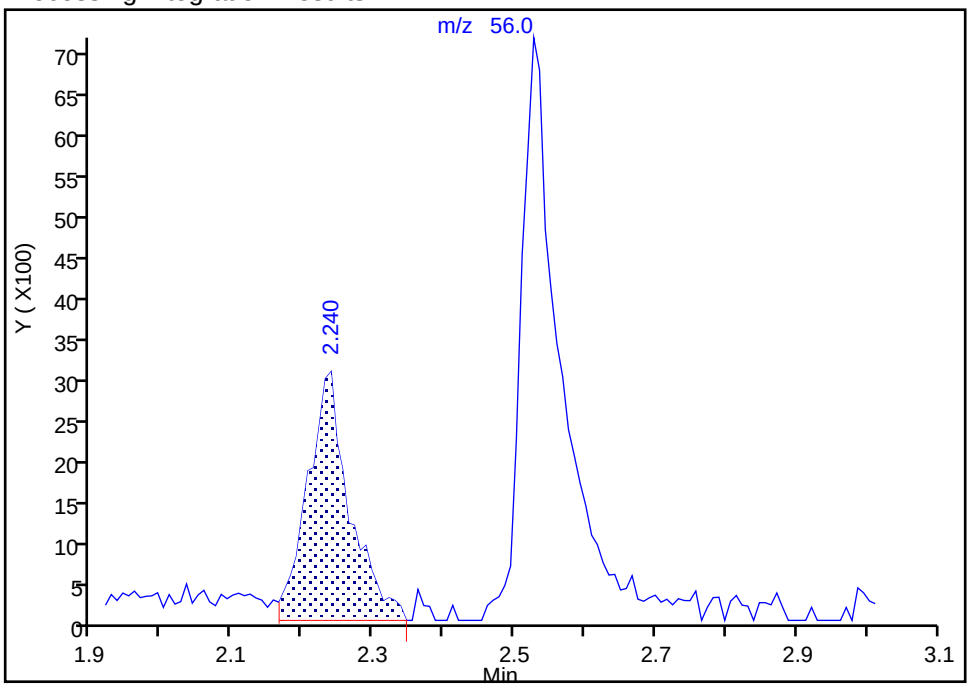
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 Acrolein, CAS: 107-02-8

Signal: 1

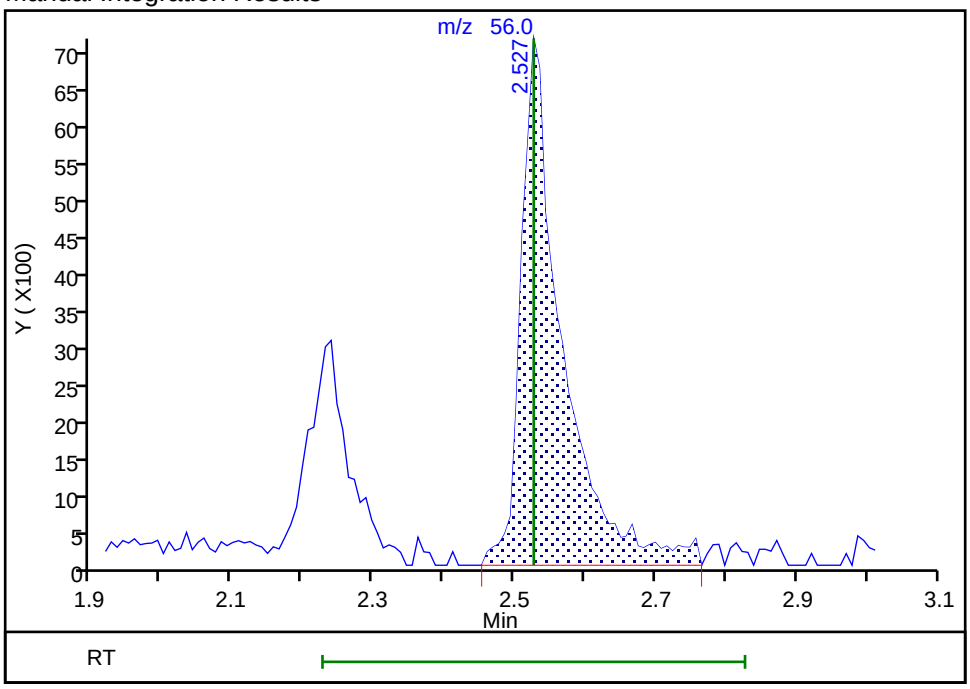
Processing Integration Results

RT: 2.24
Area: 12596
Amount: 65.932860
Amount Units: ug/l



Manual Integration Results

RT: 2.53
Area: 29025
Amount: 39.926709
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

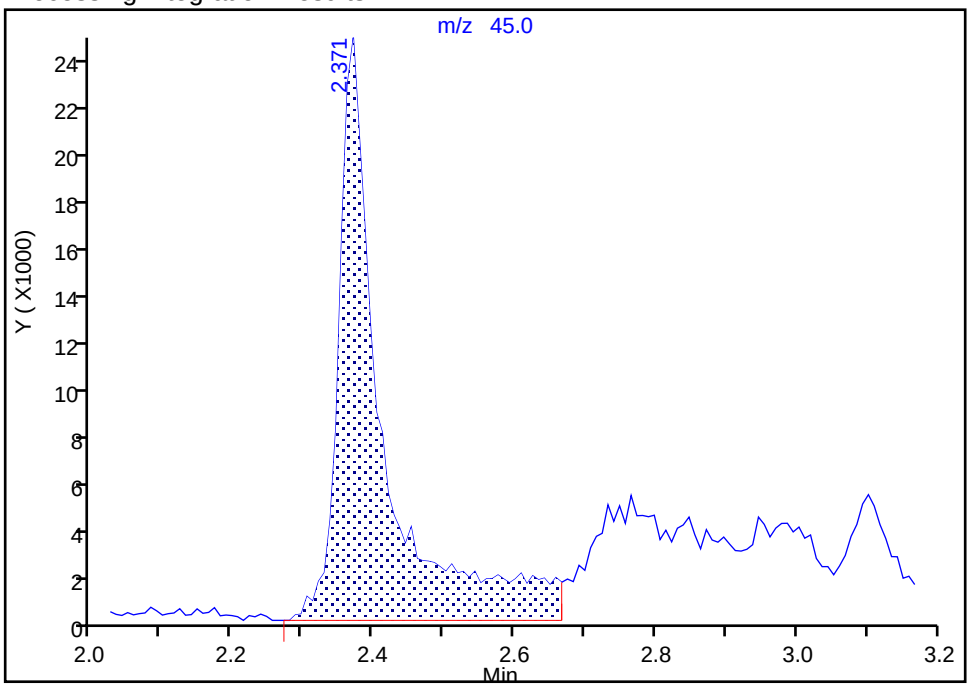
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

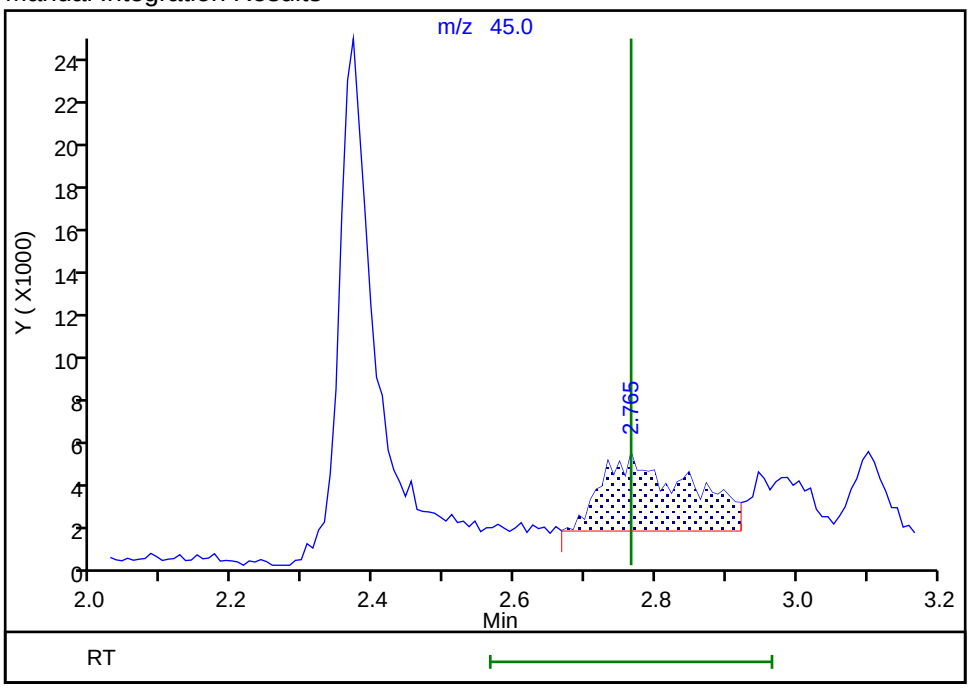
Processing Integration Results

RT: 2.37
Area: 107686
Amount: 481.6253
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 30479
Amount: 144.5065
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 07:53:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

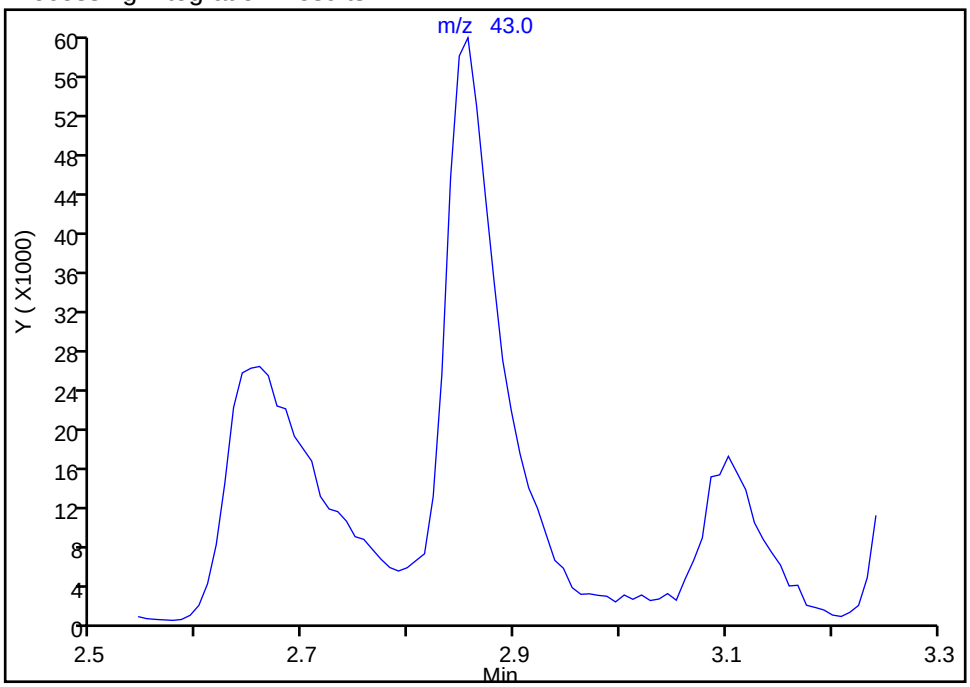
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

23 Methyl acetate, CAS: 79-20-9

Signal: 1

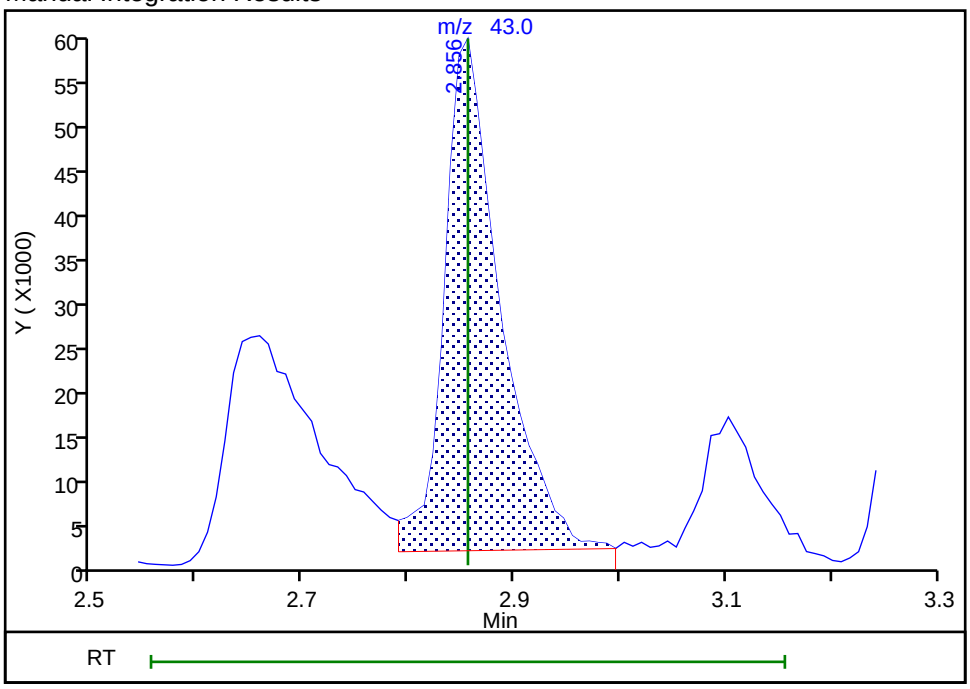
Not Detected
Expected RT: 2.86

Processing Integration Results



Manual Integration Results

RT: 2.86
Area: 210872
Amount: 42.042188
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

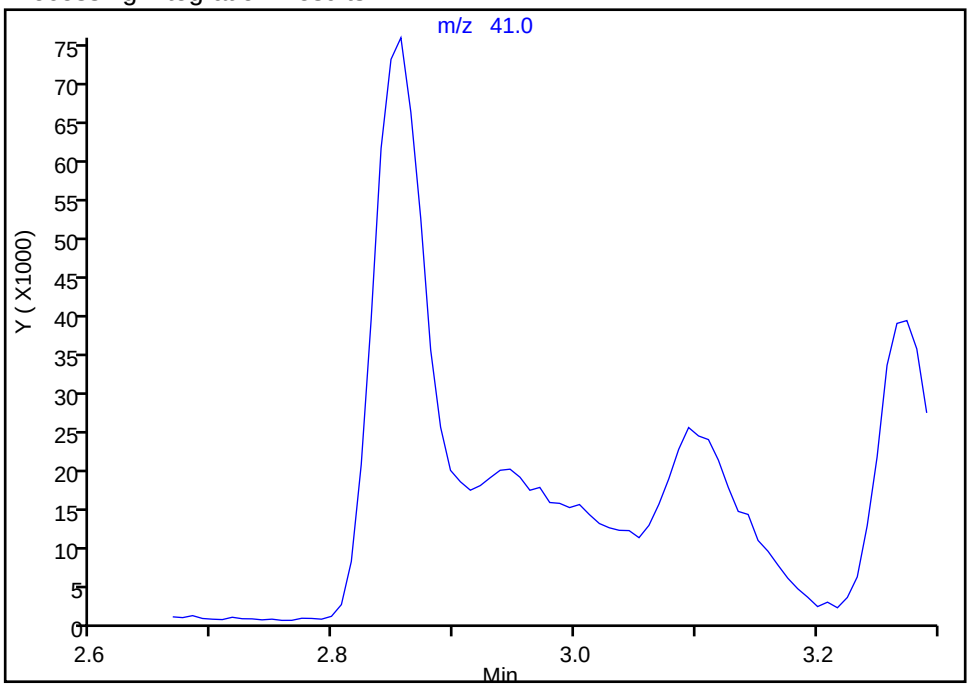
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

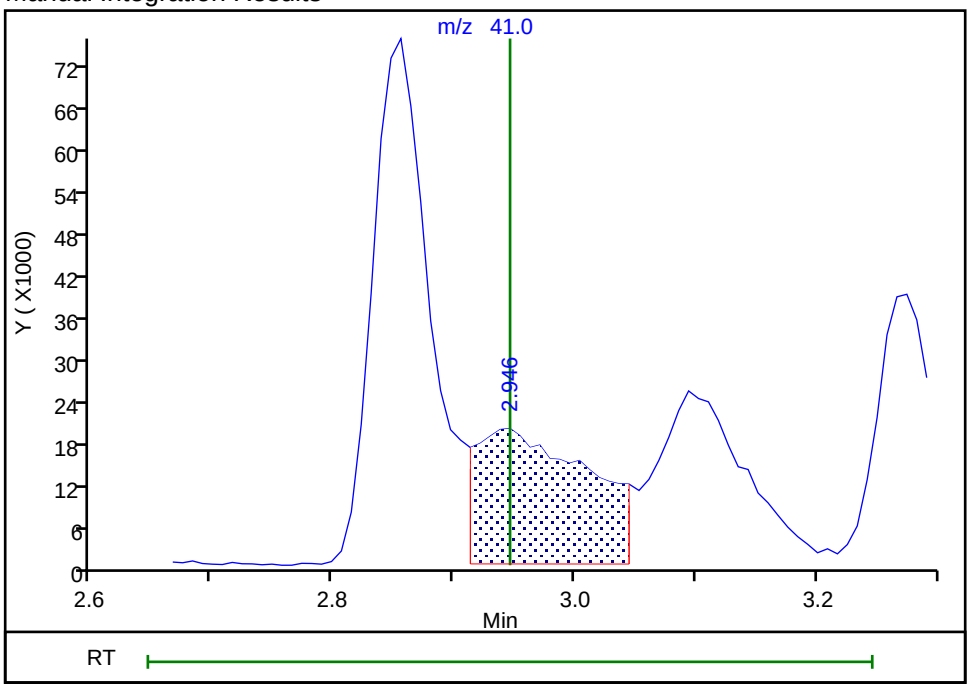
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.95
Area: 129416
Amount: 196.1955
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

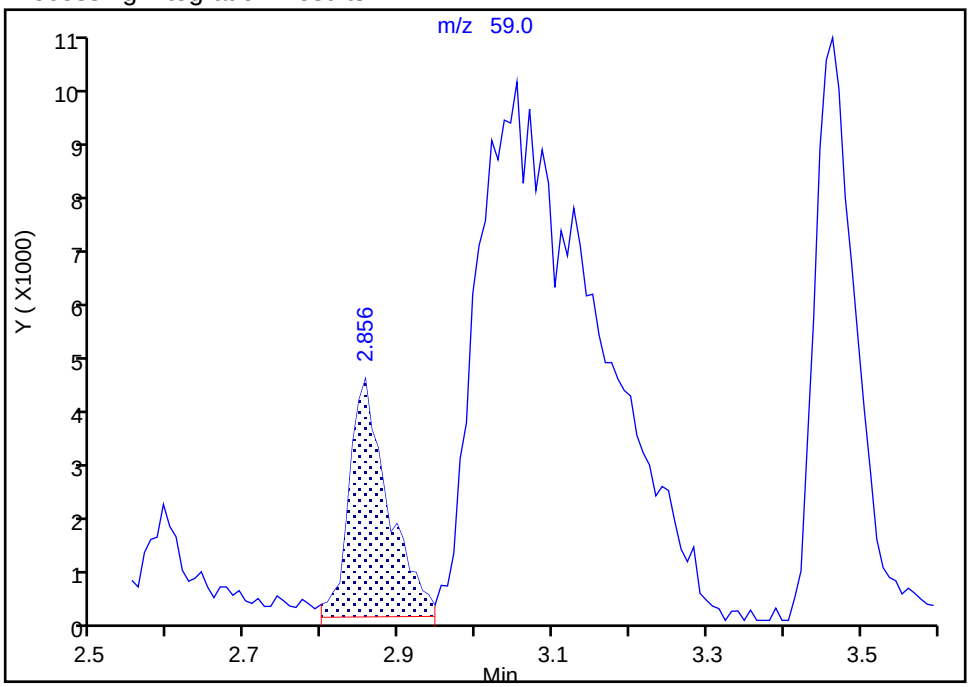
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

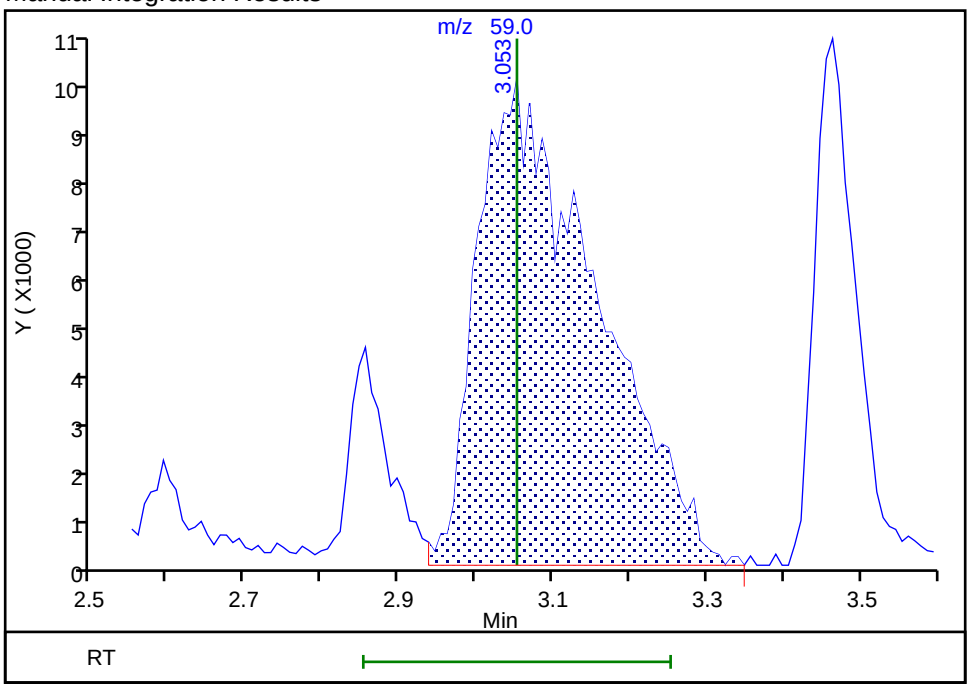
Processing Integration Results

RT: 2.86
Area: 15432
Amount: 220.4199
Amount Units: ug/l



Manual Integration Results

RT: 3.05
Area: 106390
Amount: 198.8945
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

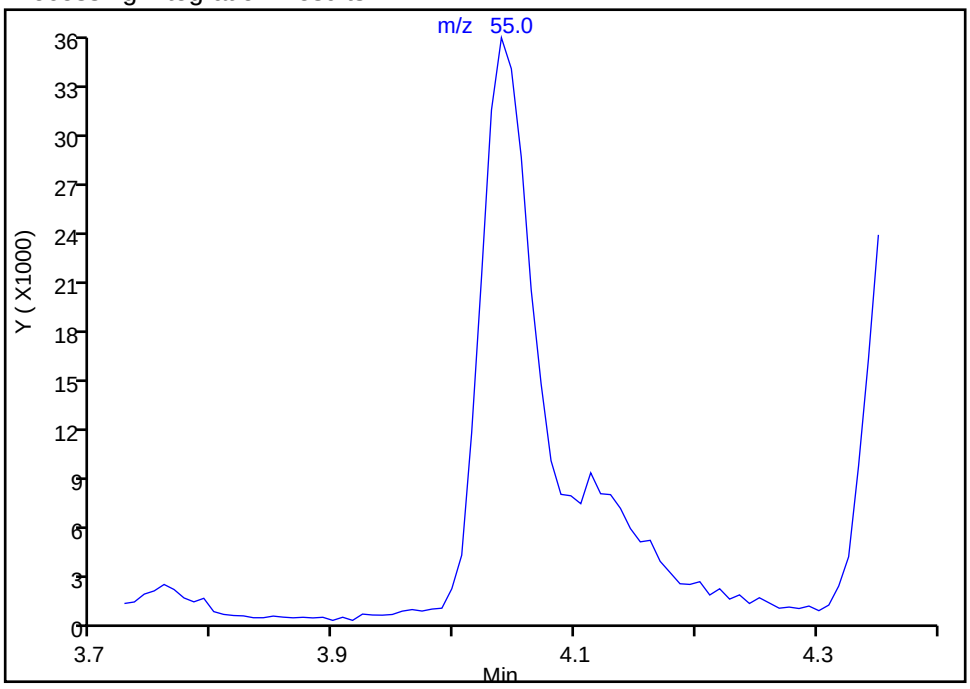
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

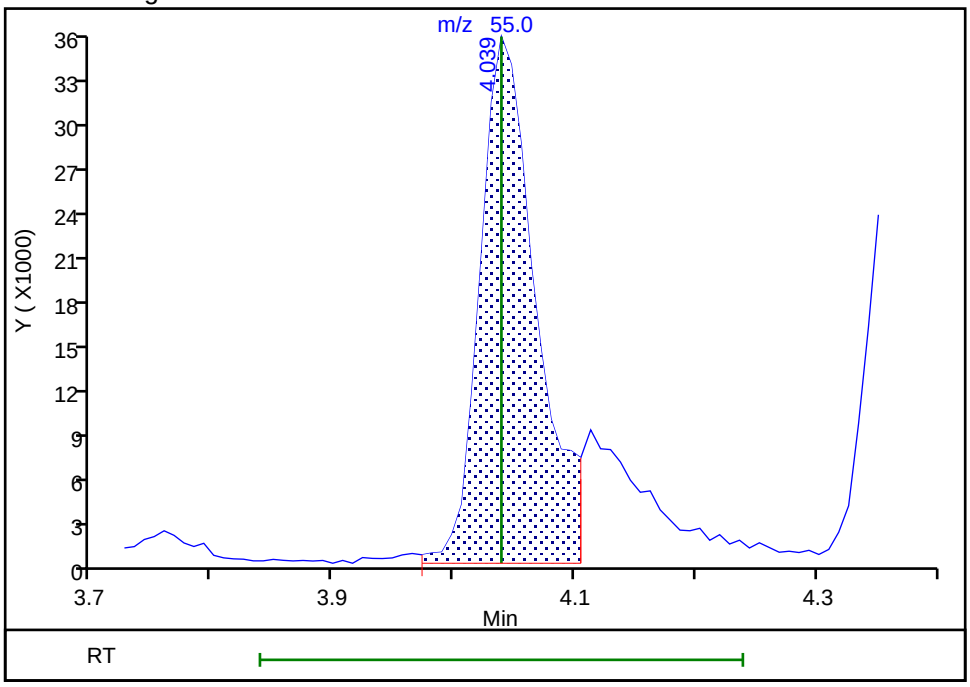
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.04
Area: 116722
Amount: 20.357096
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

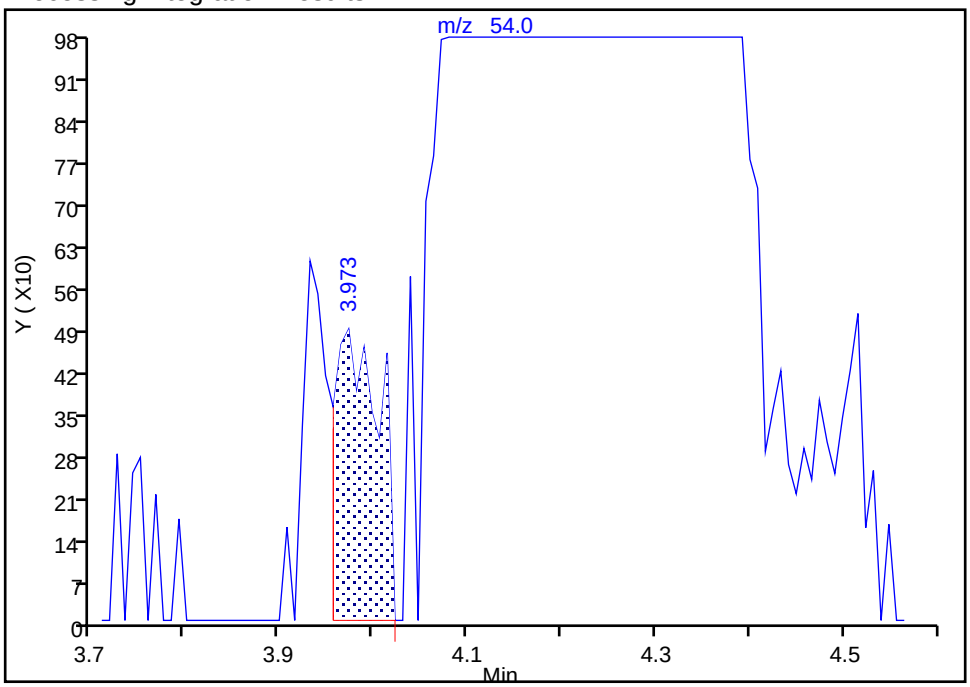
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

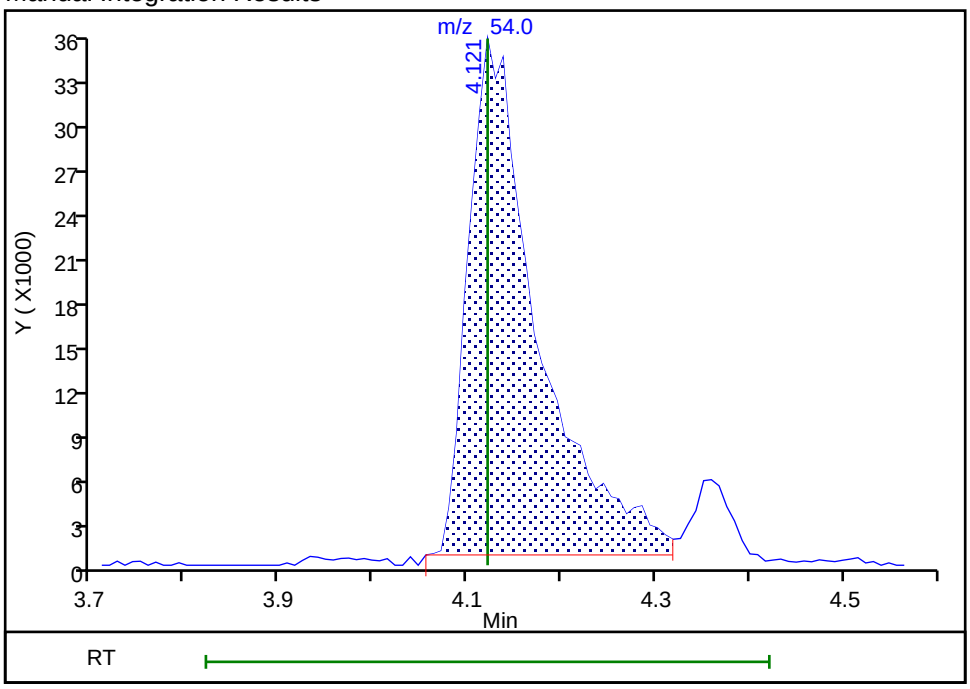
Processing Integration Results

RT: 3.97
Area: 1599
Amount: 8.268772
Amount Units: ug/l



Manual Integration Results

RT: 4.12
Area: 181004
Amount: 213.2782
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:12:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

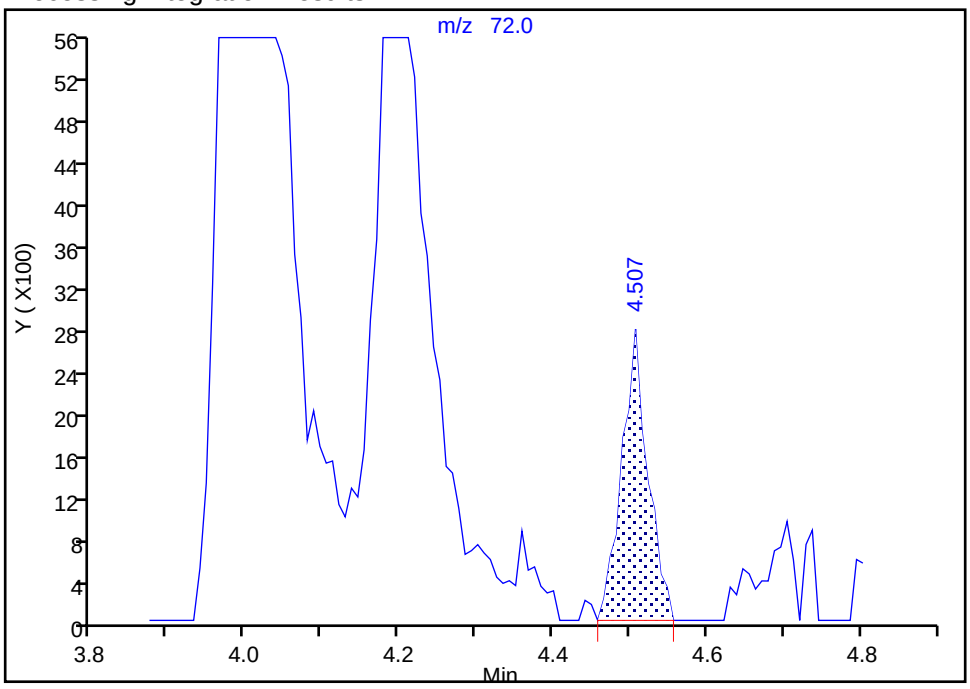
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

46 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

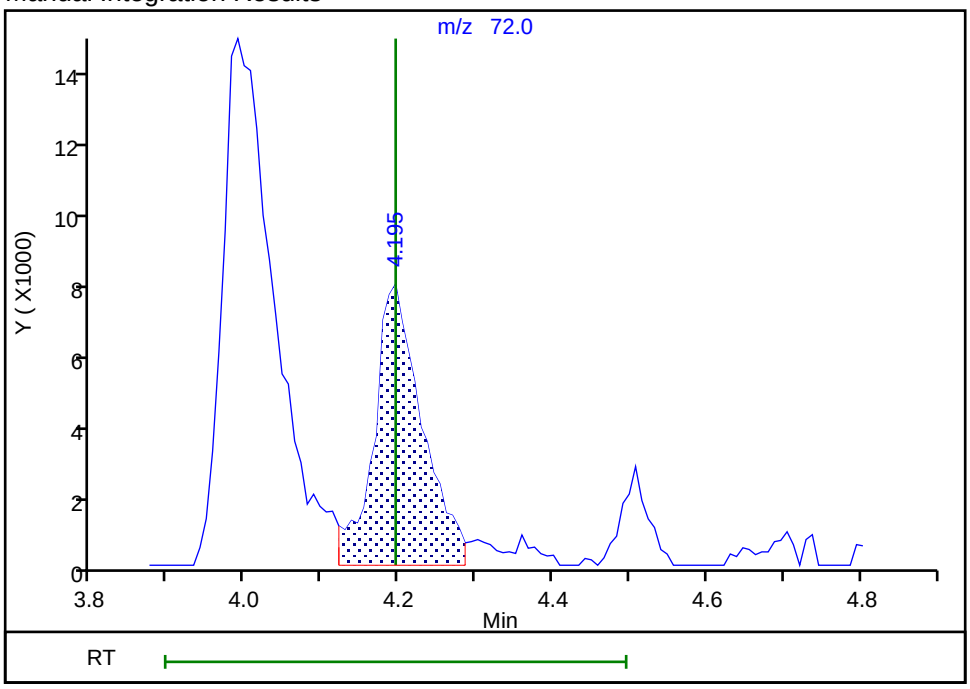
Processing Integration Results

RT: 4.51
Area: 6425
Amount: 43.768268
Amount Units: ug/l



Manual Integration Results

RT: 4.20
Area: 34313
Amount: 40.156063
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

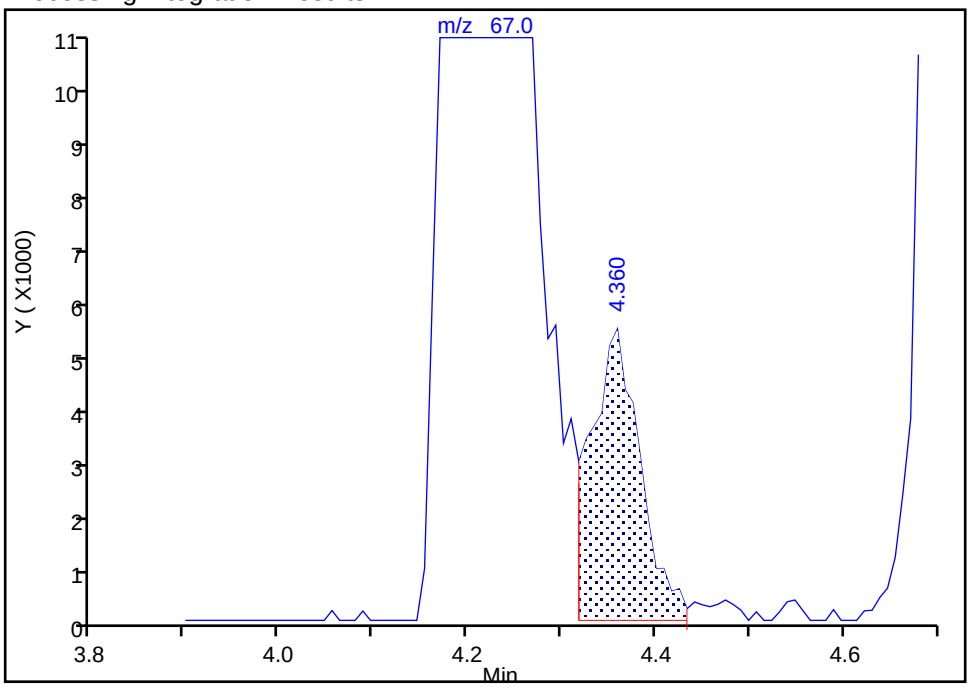
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

47 Methacrylonitrile, CAS: 126-98-7

Signal: 1

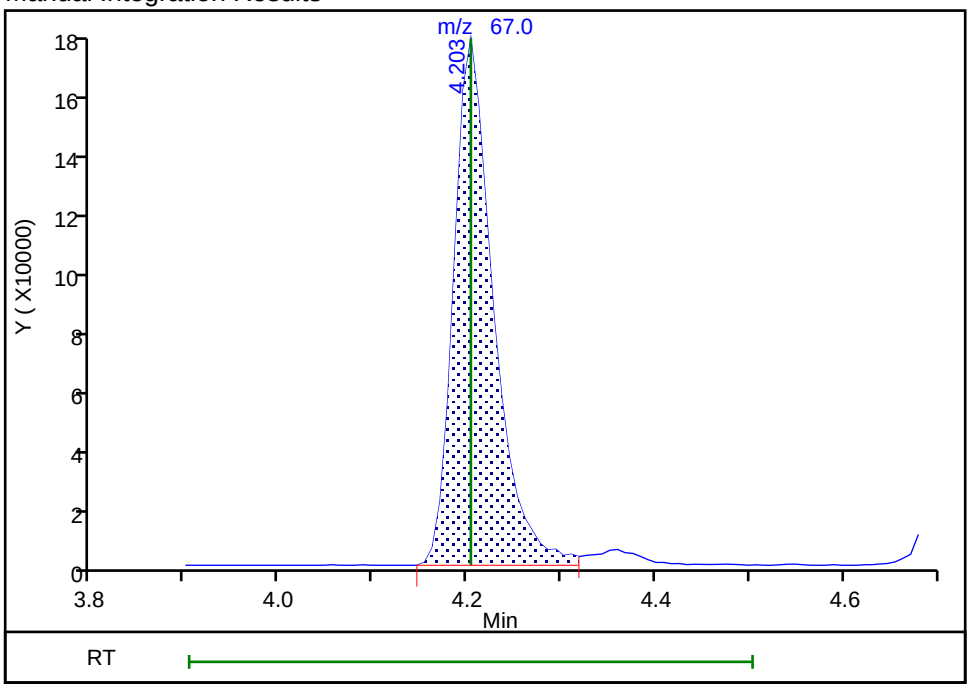
Processing Integration Results

RT: 4.36
Area: 19889
Amount: 206.3726
Amount Units: ug/l



Manual Integration Results

RT: 4.20
Area: 525015
Amount: 207.3660
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

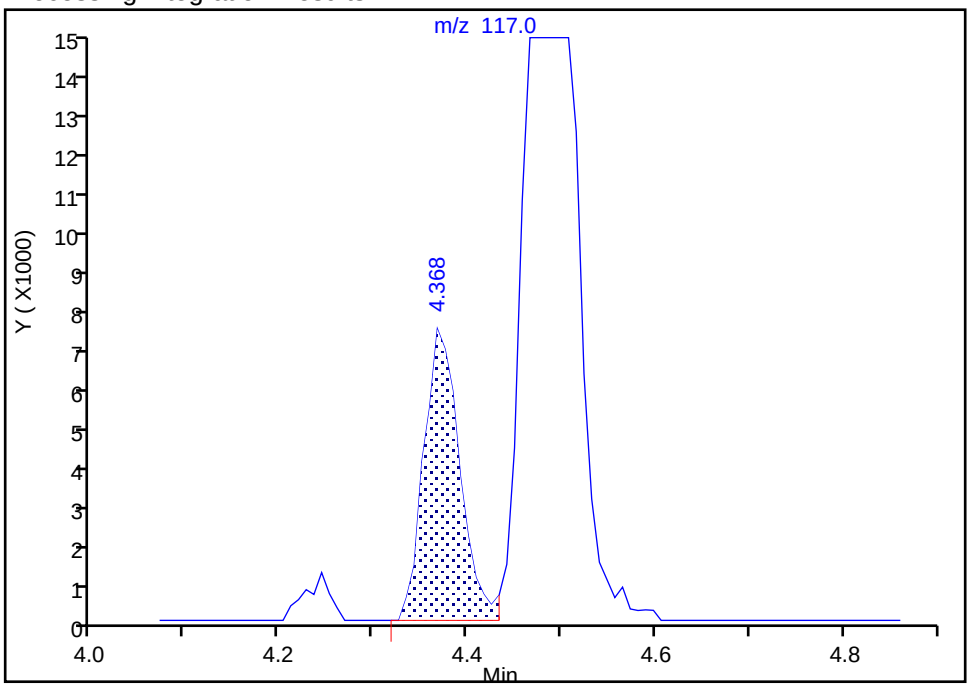
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

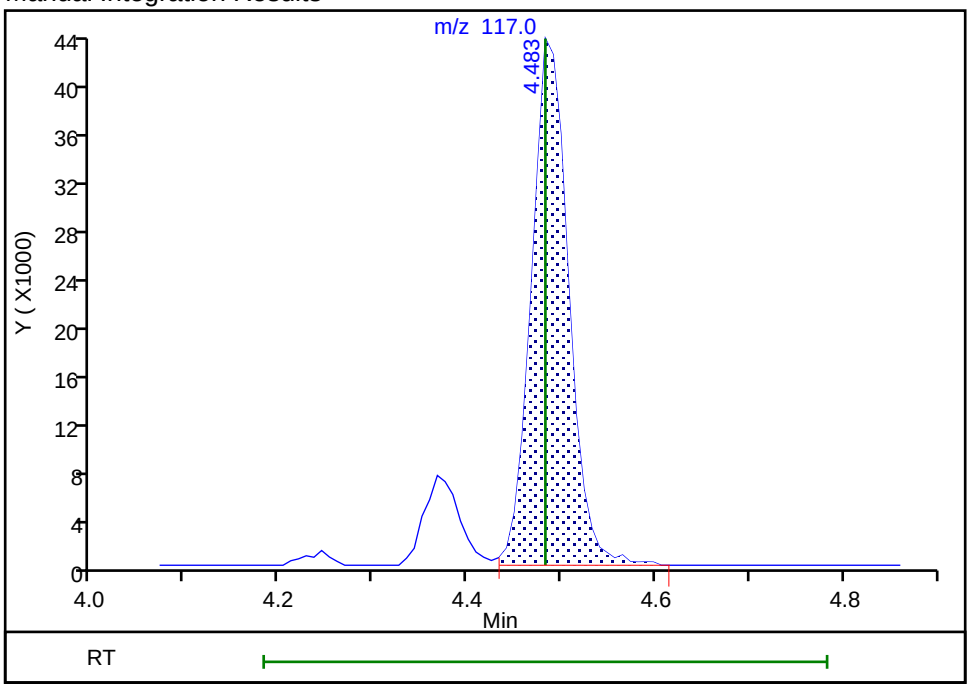
Processing Integration Results

RT: 4.37
Area: 19689
Amount: 20.836177
Amount Units: ug/l



Manual Integration Results

RT: 4.48
Area: 118716
Amount: 19.968581
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

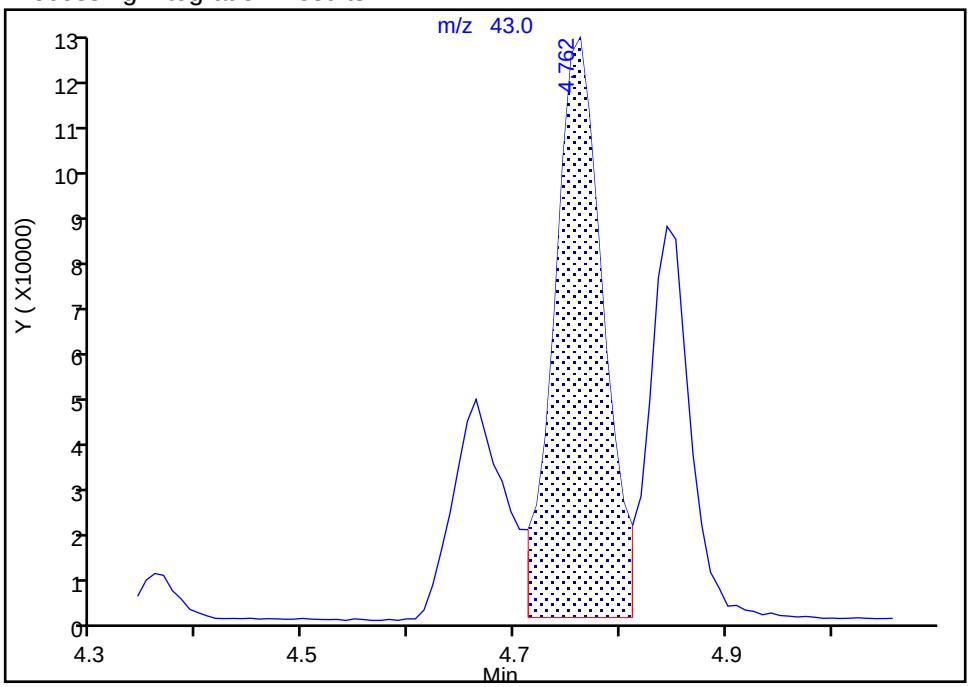
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

54 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

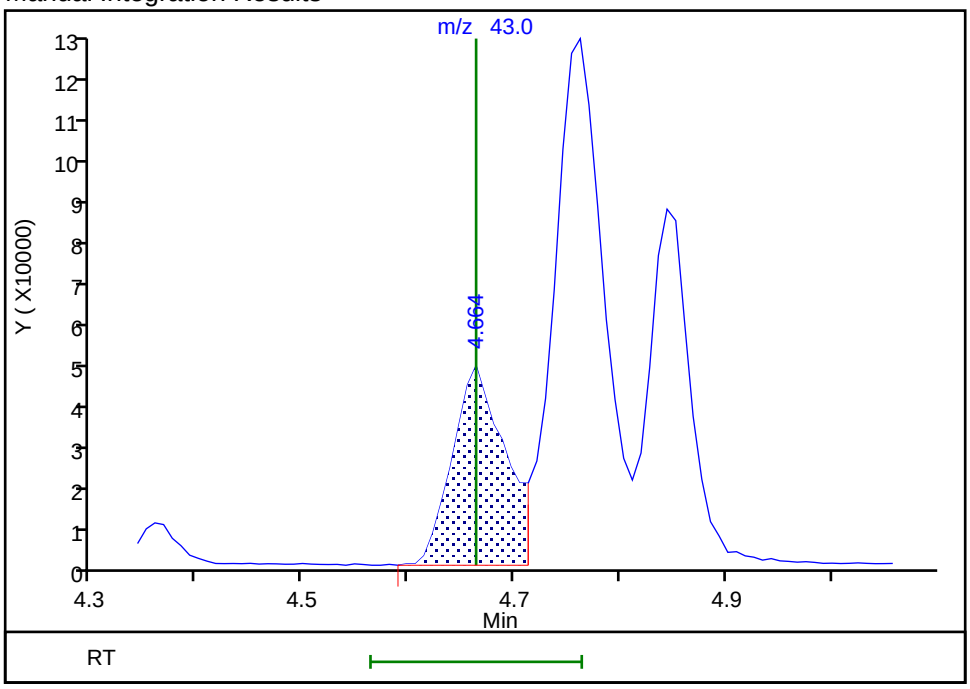
Processing Integration Results

RT: 4.76
Area: 390682
Amount: 717.3843
Amount Units: ug/l



Manual Integration Results

RT: 4.66
Area: 160197
Amount: 540.4664
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

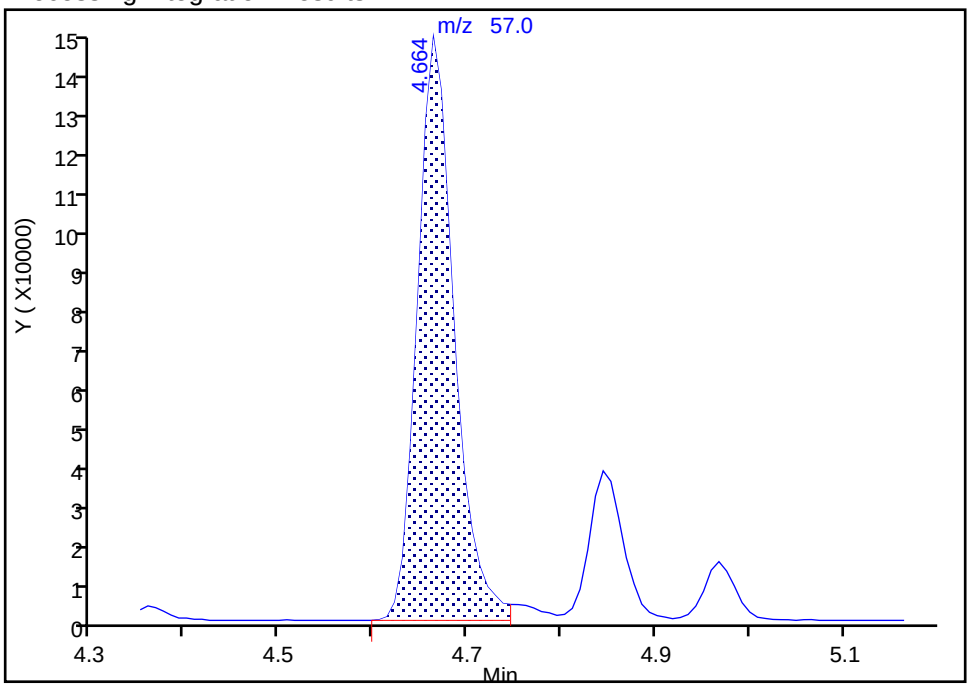
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 n-Heptane, CAS: 142-82-5

Signal: 1

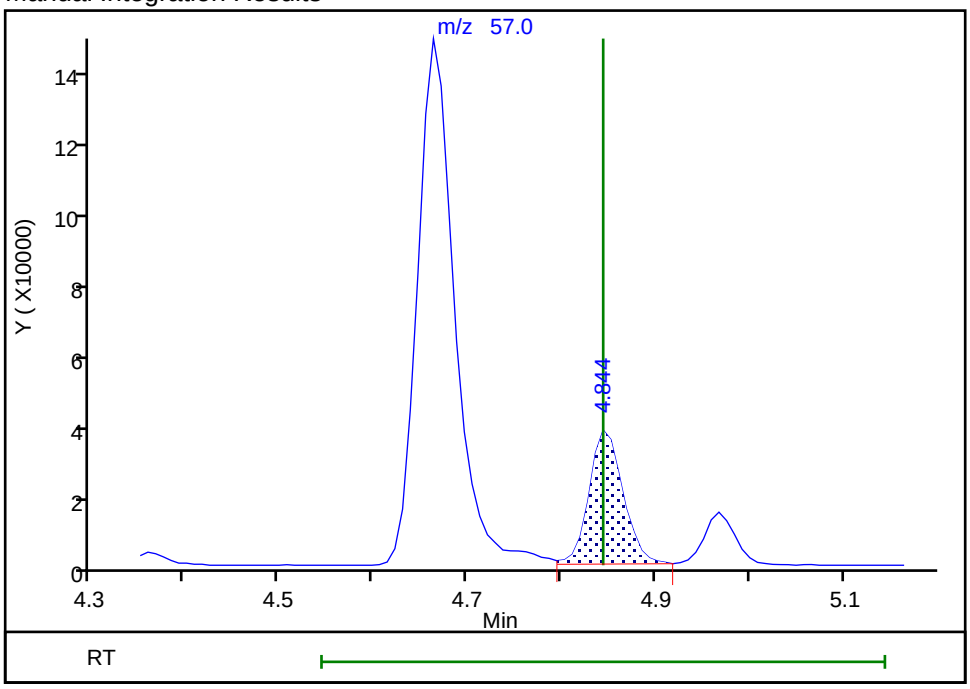
Processing Integration Results

RT: 4.66
Area: 406173
Amount: 19.762268
Amount Units: ug/l



Manual Integration Results

RT: 4.84
Area: 94945
Amount: 21.256729
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

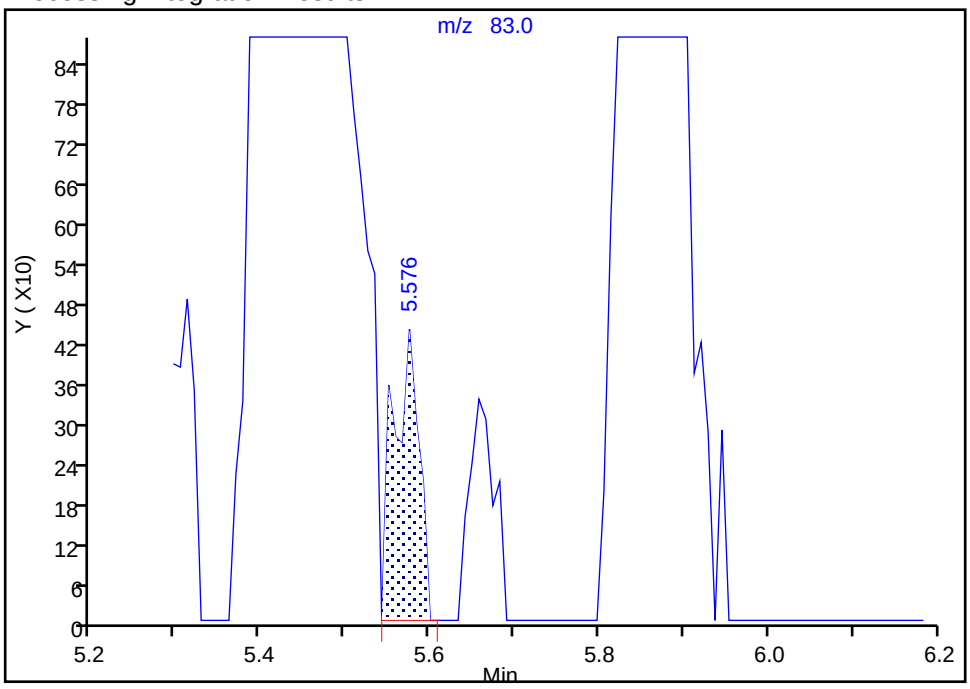
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

72 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

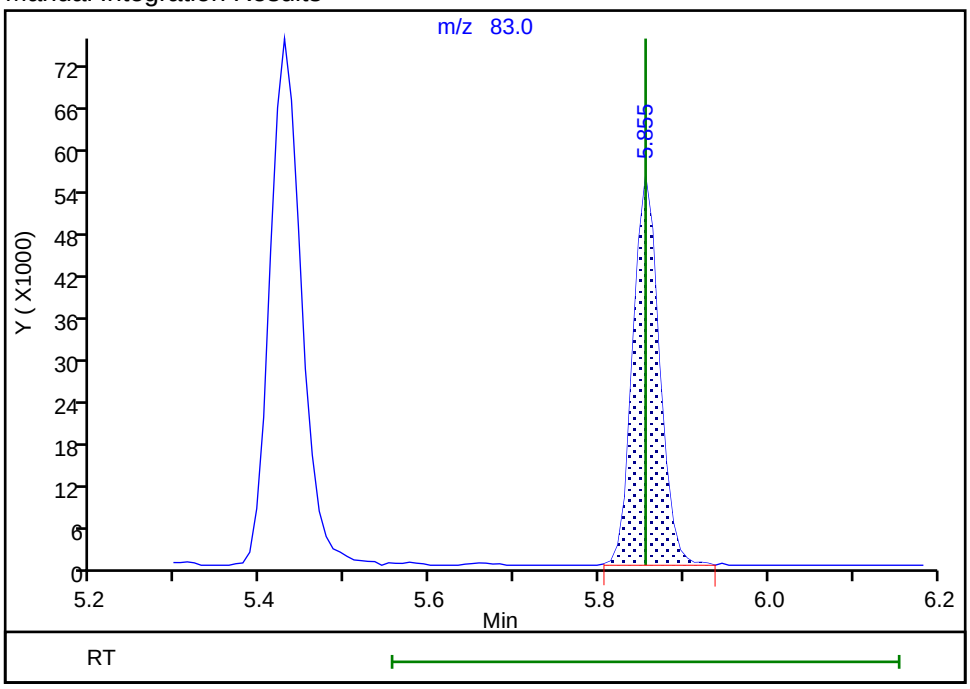
Processing Integration Results

RT: 5.58
Area: 903
Amount: 0.356777
Amount Units: ug/l



Manual Integration Results

RT: 5.86
Area: 120917
Amount: 19.871884
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

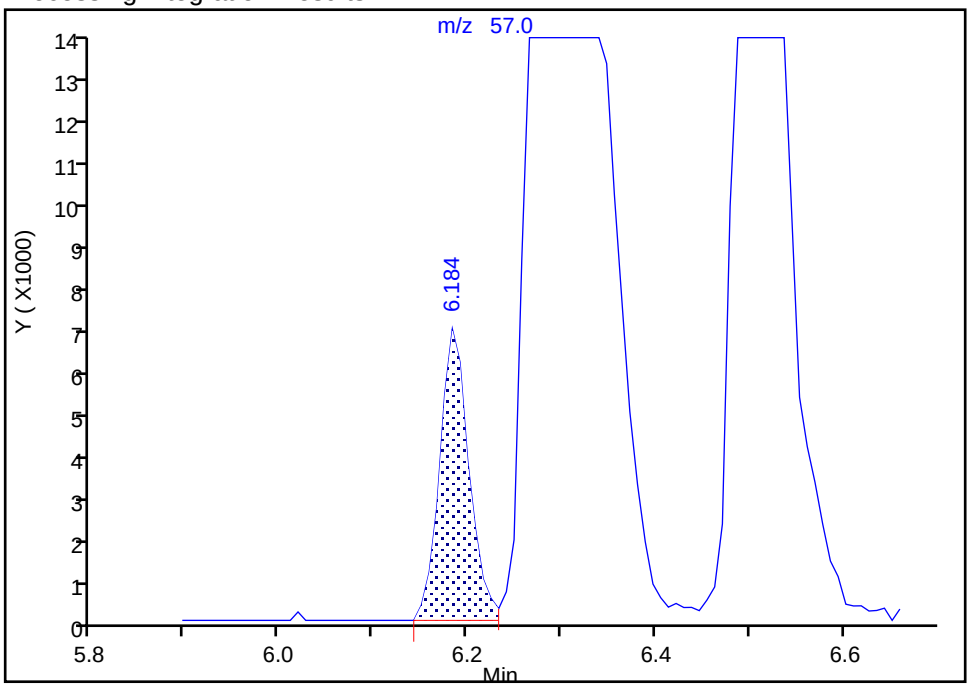
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

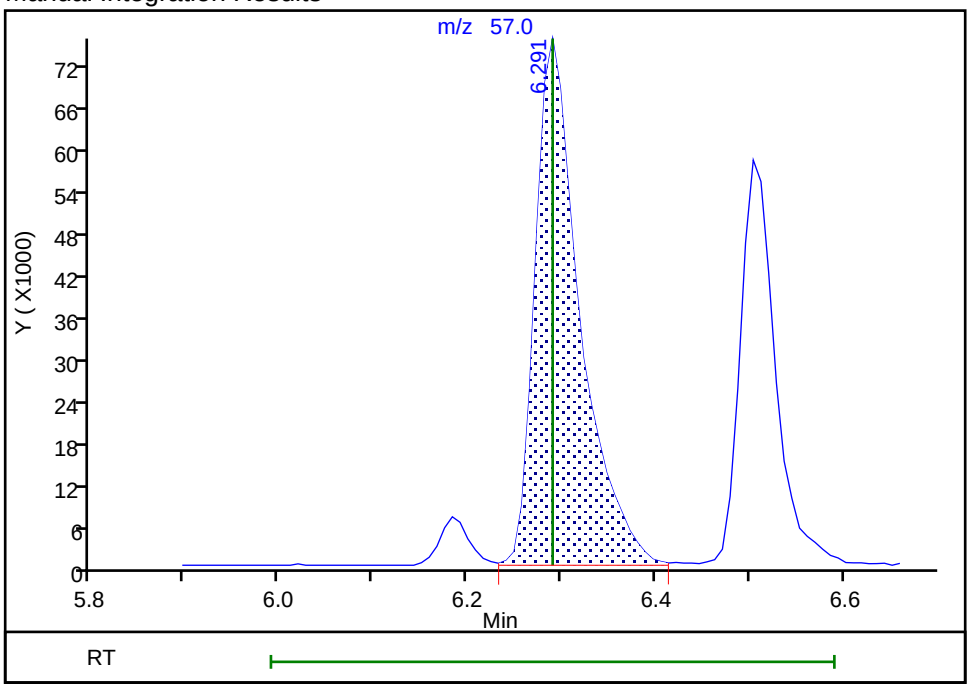
Processing Integration Results

RT: 6.18
Area: 14936
Amount: 82.009688
Amount Units: ug/l



Manual Integration Results

RT: 6.29
Area: 249122
Amount: 411.9010
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:13:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

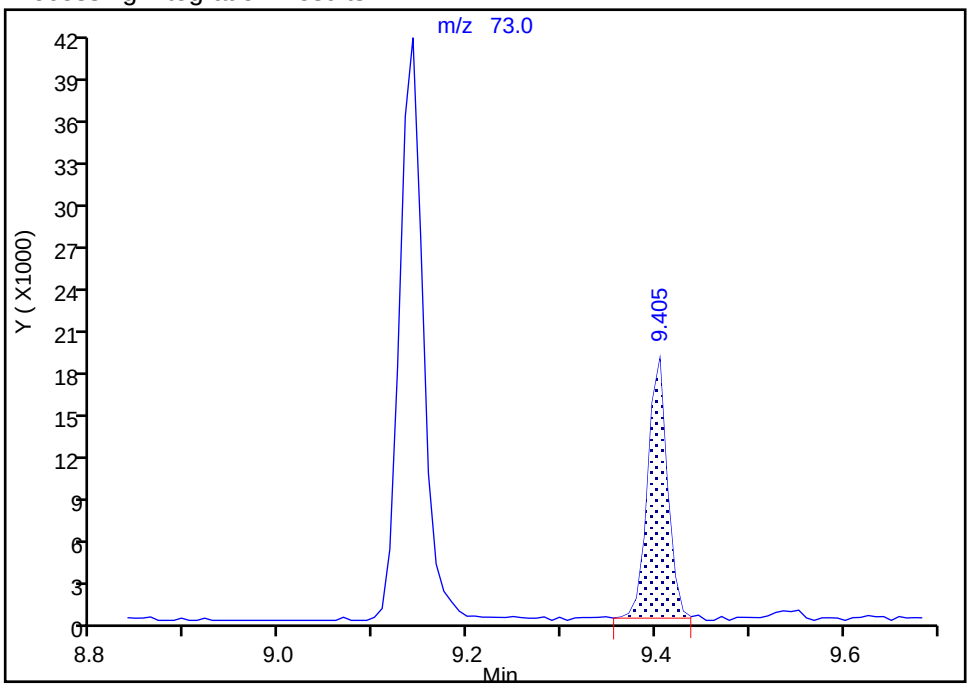
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

94 n-Butyl acrylate, CAS: 141-32-2

Signal: 1

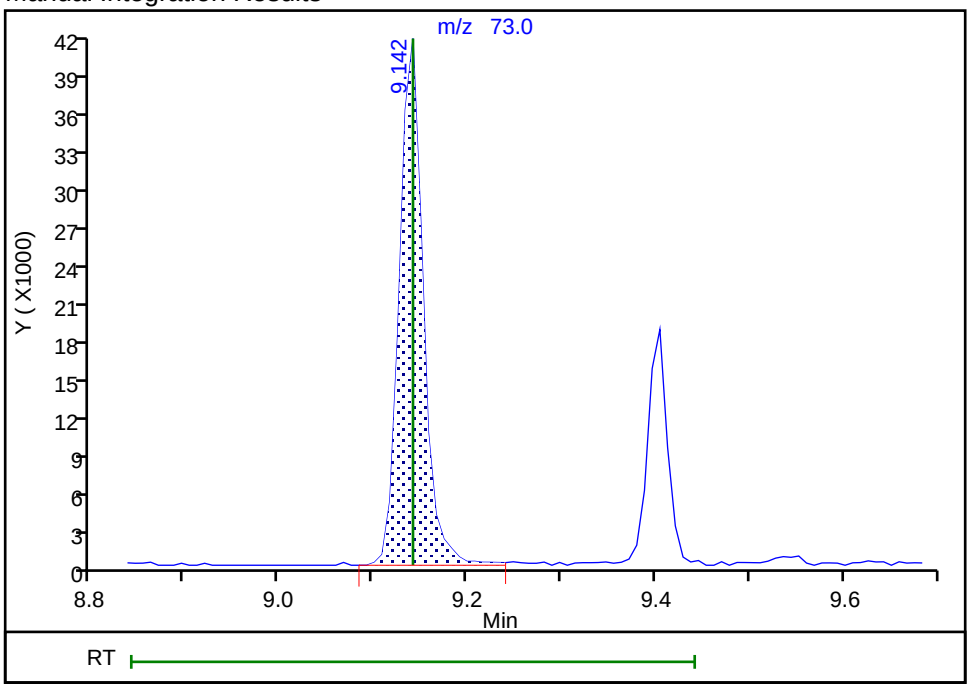
Processing Integration Results

RT: 9.40
Area: 26651
Amount: 20.220388
Amount Units: ug/l



Manual Integration Results

RT: 9.14
Area: 73492
Amount: 18.057367
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

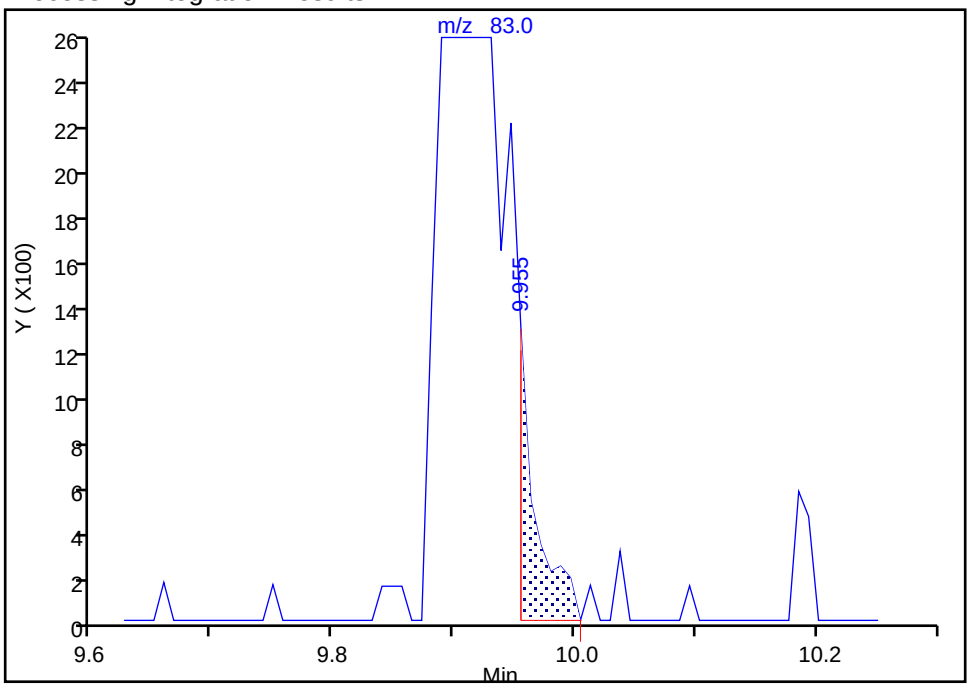
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

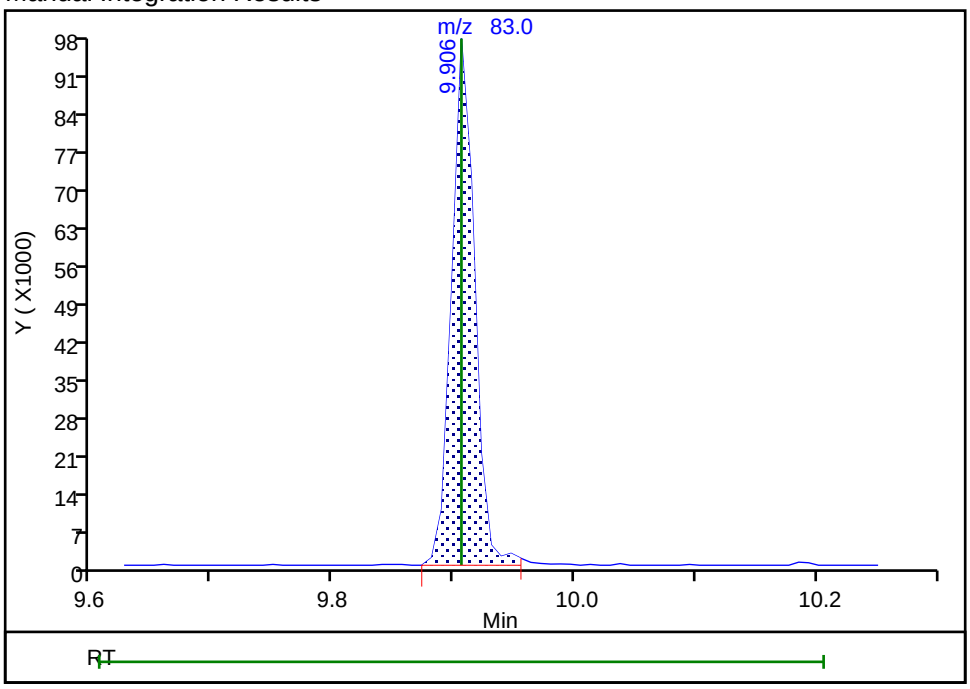
Processing Integration Results

RT: 9.96
Area: 1378
Amount: 0.061108
Amount Units: ug/l



Manual Integration Results

RT: 9.91
Area: 128303
Amount: 19.427259
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

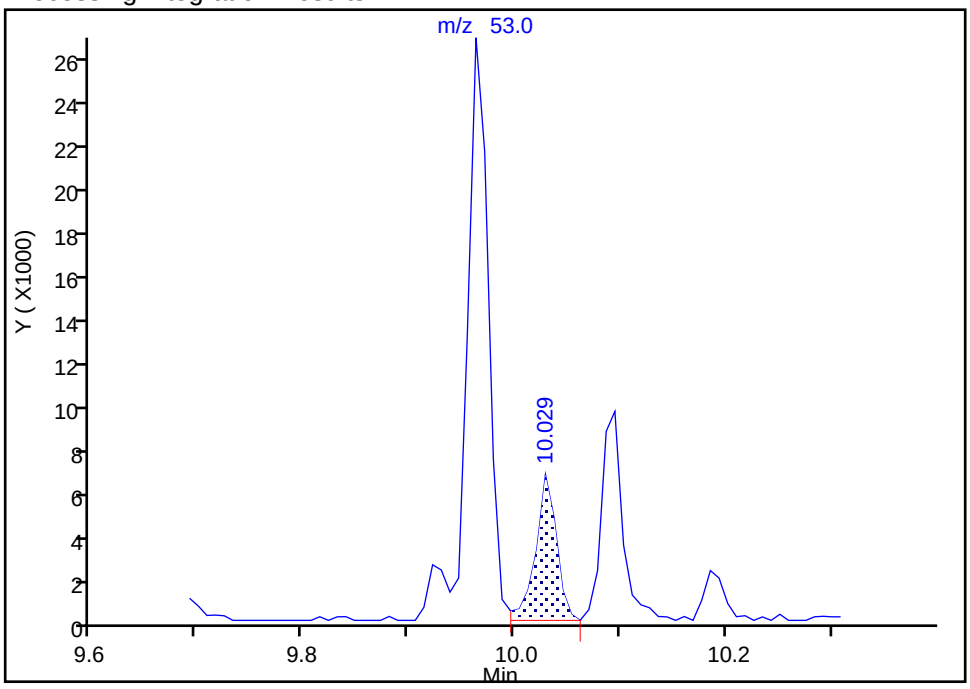
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

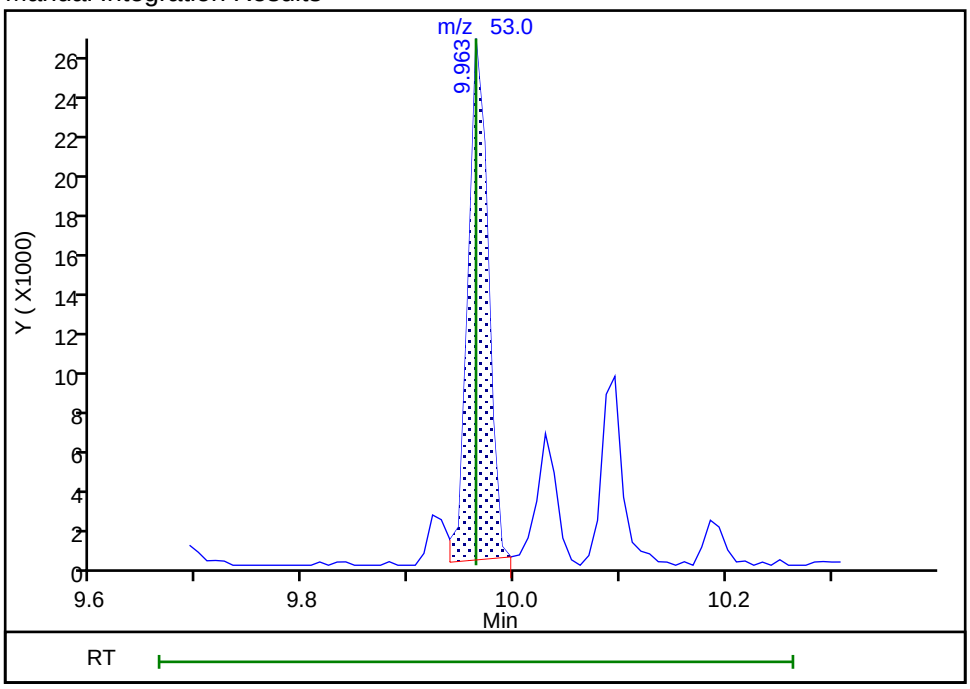
Processing Integration Results

RT: 10.03
Area: 9040
Amount: 0.032958
Amount Units: ug/l



Manual Integration Results

RT: 9.96
Area: 34491
Amount: 18.649862
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

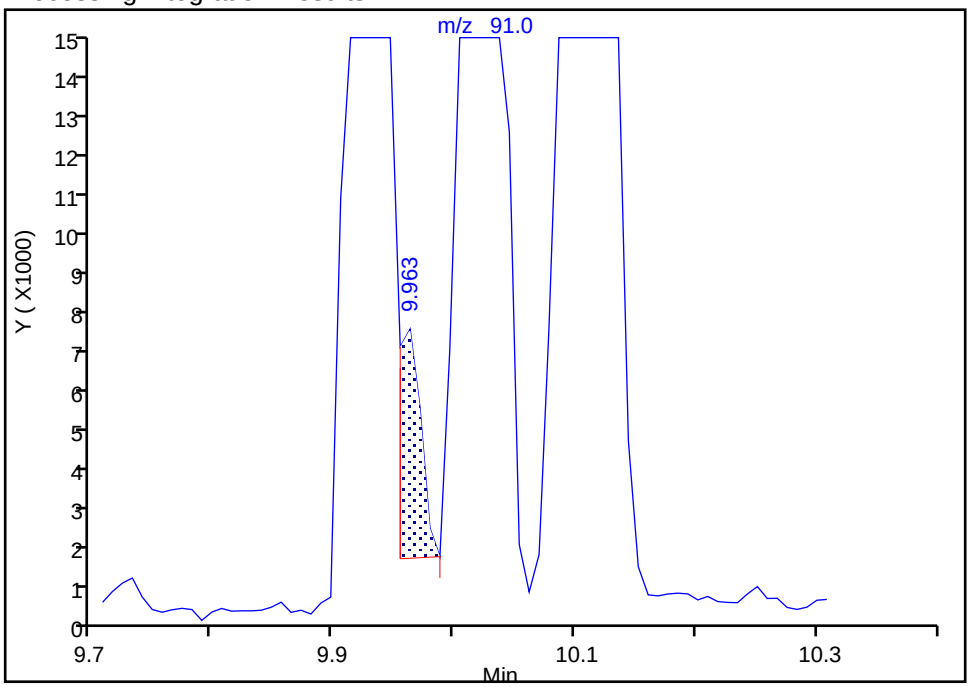
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

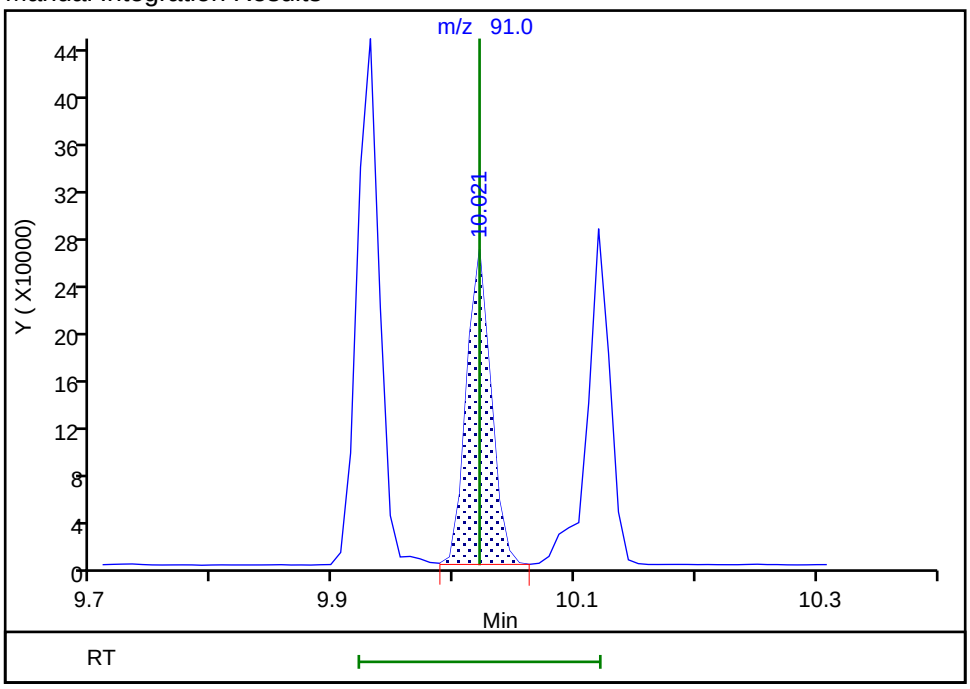
Processing Integration Results

RT: 9.96
Area: 7817
Amount: 0.033314
Amount Units: ug/l



Manual Integration Results

RT: 10.02
Area: 374401
Amount: 19.789561
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

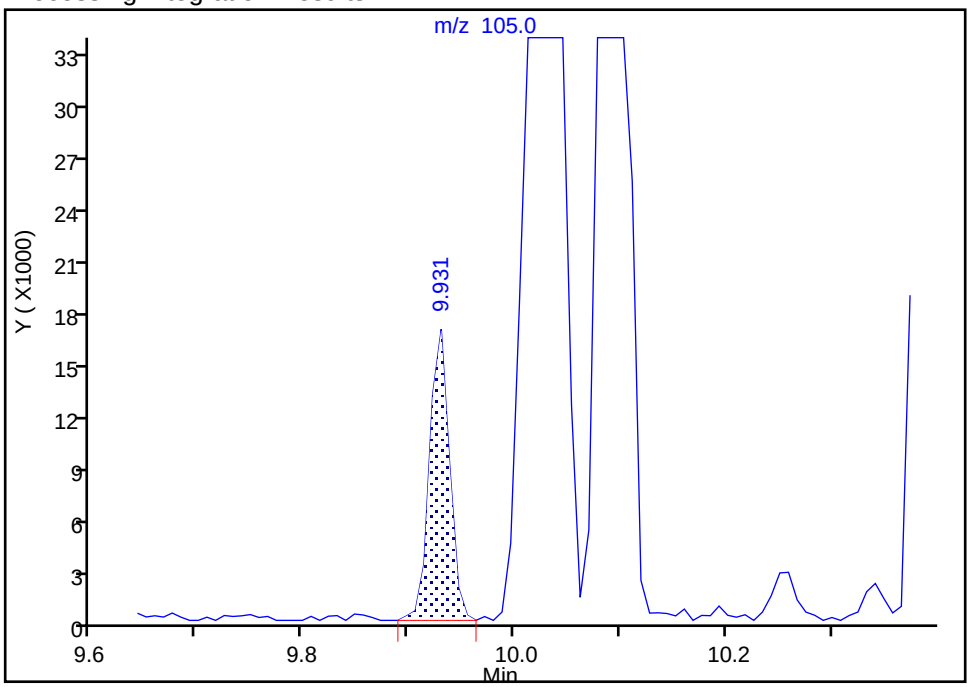
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

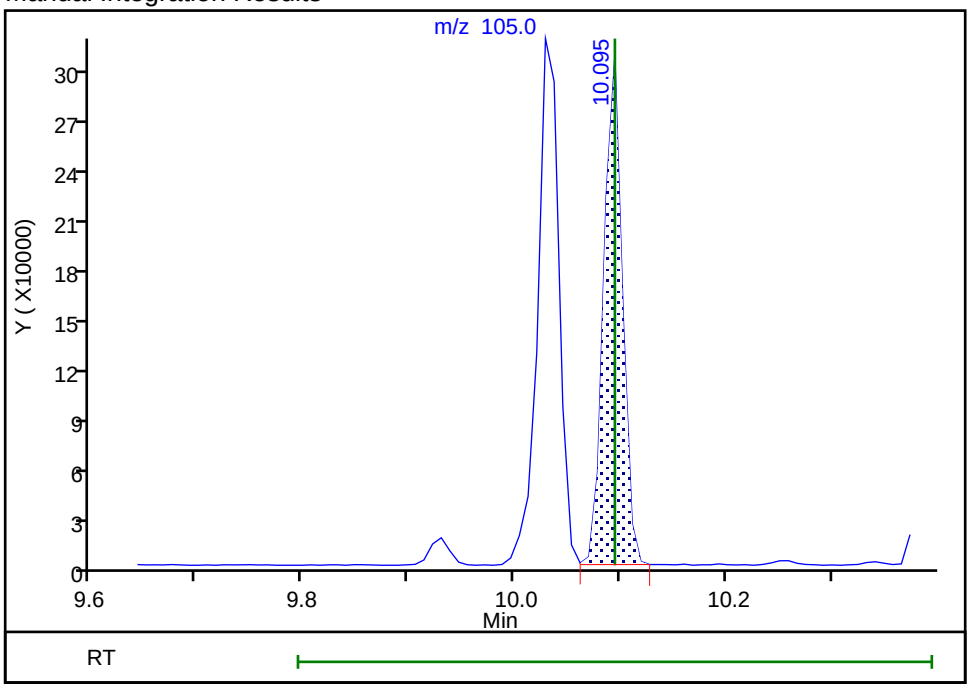
Processing Integration Results

RT: 9.93
Area: 21731
Amount: 0.034923
Amount Units: ug/l



Manual Integration Results

RT: 10.09
Area: 375821
Amount: 20.093087
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

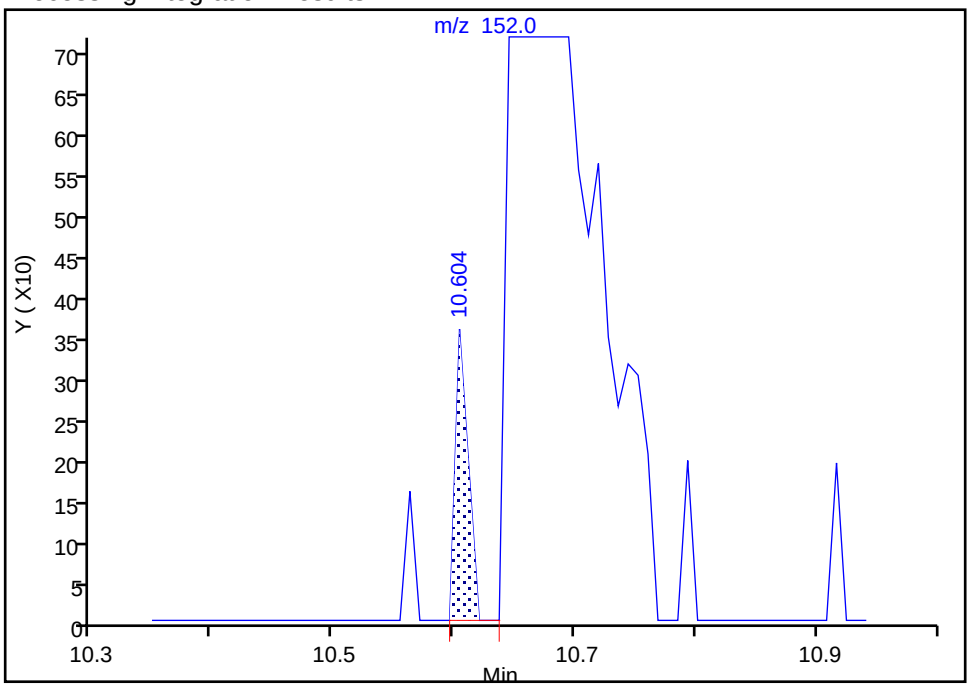
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 116 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

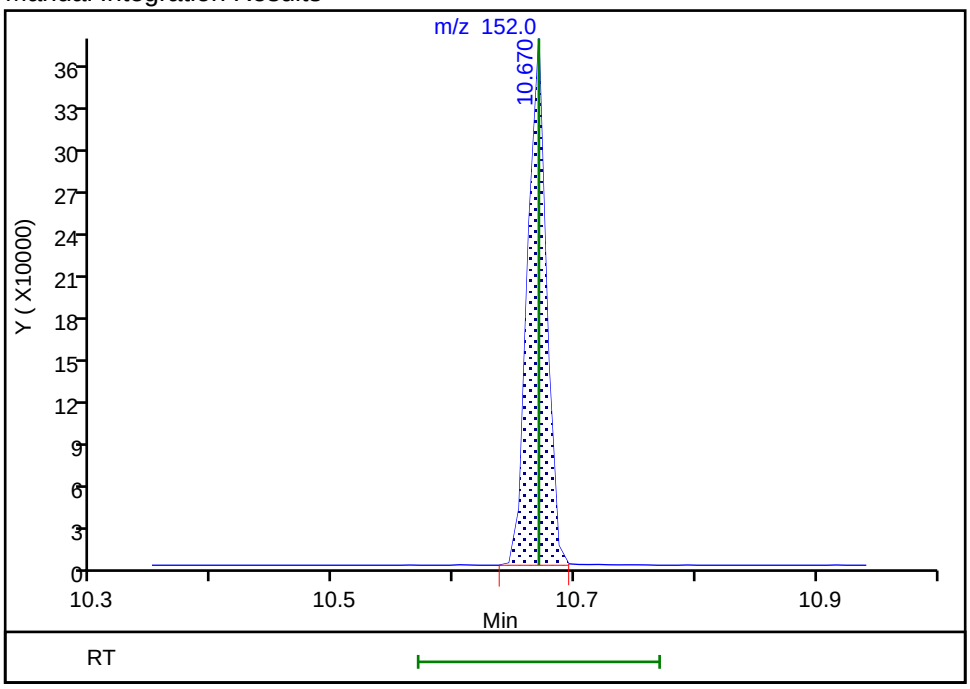
Processing Integration Results

RT: 10.60
Area: 265
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 10.67
Area: 405748
Amount: 50.000000
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:11:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison

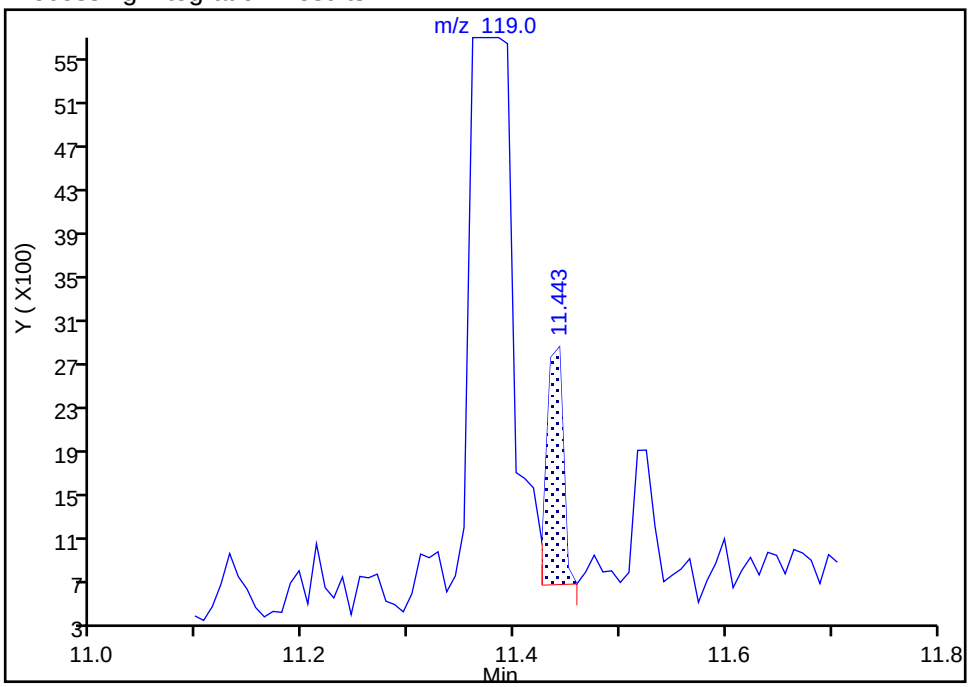
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

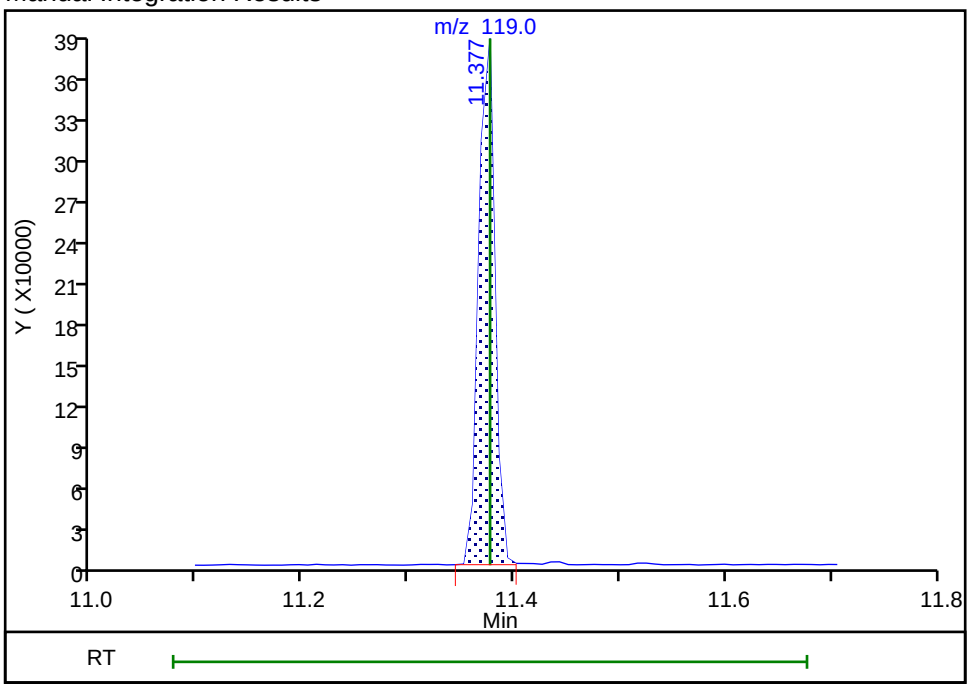
Processing Integration Results

RT: 11.44
Area: 2360
Amount: 0.073422
Amount Units: ug/l



Manual Integration Results

RT: 11.38
Area: 406794
Amount: 20.403469
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:14:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

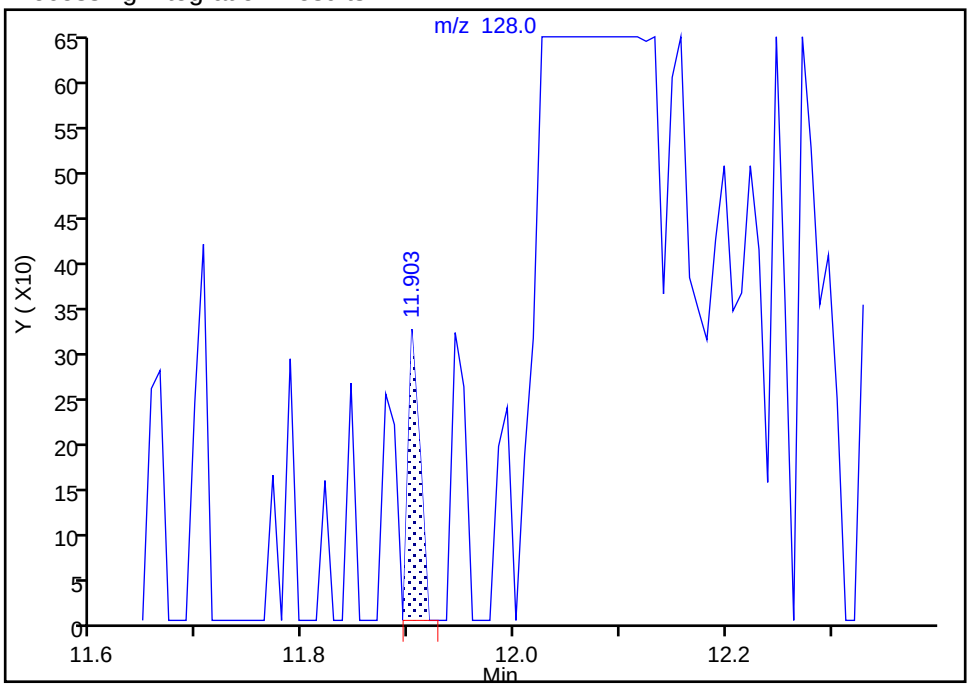
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22513.D
Injection Date: 23-Nov-2021 13:51:30 Instrument ID: CVOAMS6
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

129 Naphthalene, CAS: 91-20-3

Signal: 1

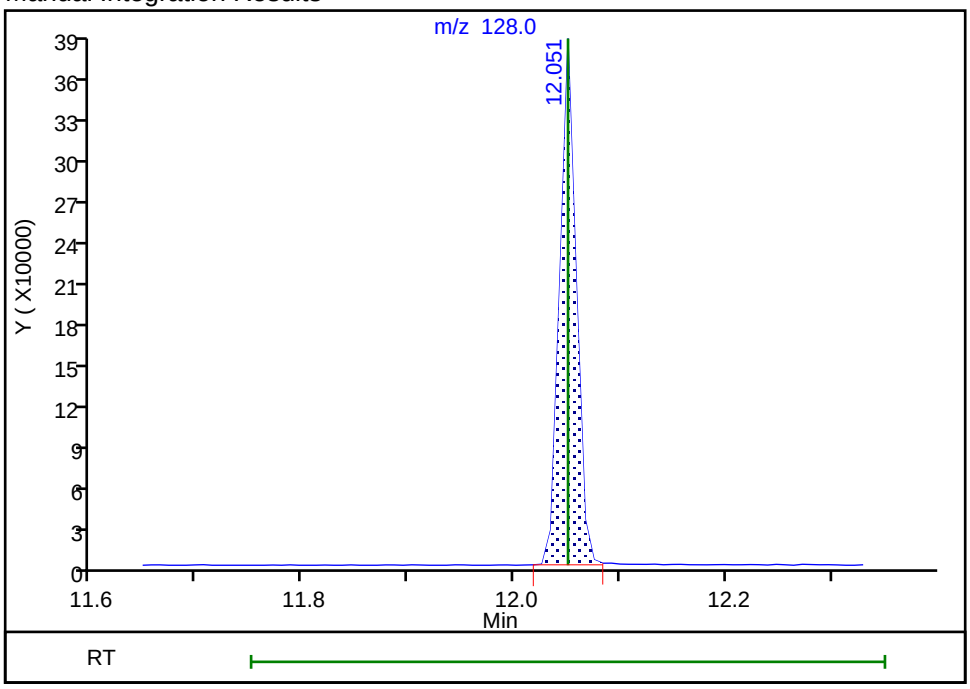
Processing Integration Results

RT: 11.90
Area: 249
Amount: 0.138668
Amount Units: ug/l



Manual Integration Results

RT: 12.05
Area: 420533
Amount: 19.753958
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:15:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22514.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Nov-2021 14:12:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0138064-007
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:34:11 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 23-Nov-2021 15:22:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	59	276293	50.0	46.6	M
2 Chloromethane	50	1.648	1.648	0.000	99	402596	50.0	47.5	
3 Vinyl chloride	62	1.722	1.722	0.000	98	357453	50.0	47.6	
4 Butadiene	54	1.739	1.738	0.001	96	340083	50.0	49.8	
5 Bromomethane	94	1.977	1.977	0.000	99	170490	50.0	47.8	
6 Chloroethane	64	2.034	2.034	0.000	100	182760	50.0	48.3	
7 Dichlorofluoromethane	67	2.199	2.198	0.001	98	458870	50.0	46.5	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	97	360431	50.0	47.6	
8 Pentane	72	2.232	2.231	0.001	96	100133	100.0	77.2	
10 Ethanol	46	2.363	2.363	0.000	74	62444	2000.0	2319.1	
11 Ethyl ether	59	2.363	2.371	-0.008	92	221884	50.0	49.1	
12 2-Methyl-1,3-butadiene	53	2.396	2.404	-0.008	98	259897	50.0	49.6	
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.429	2.437	-0.008	86	220777	50.0	49.0	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.478	2.478	0.000	92	371544	50.0	49.7	
15 Acrolein	56	2.527	2.527	0.000	94	78331	101.4	84.6	
16 112TCTFE	101	2.544	2.544	0.000	95	246813	50.0	49.7	
17 1,1-Dichloroethene	96	2.585	2.593	-0.008	96	251518	50.0	49.5	
18 Acetone	43	2.651	2.659	-0.008	87	469376	250.0	217.7	
19 Iodomethane	142	2.716	2.724	-0.008	97	388753	50.0	51.7	
21 Carbon disulfide	76	2.757	2.757	0.000	99	957975	50.0	48.7	
20 Isopropyl alcohol	45	2.749	2.765	-0.016	96	142631	500.0	531.0	
22 3-Chloro-1-propene	41	2.848	2.856	-0.008	91	654420	50.0	50.6	
23 Methyl acetate	43	2.848	2.856	-0.008	99	530956	100.0	98.7	
24 Cyclopentene	67	2.864	2.872	-0.008	95	701561	50.0	50.5	
25 Acetonitrile	41	2.922	2.946	-0.024	56	379369	500.0	451.6	a
27 Methylene Chloride	84	2.971	2.971	0.000	97	296640	50.0	50.0	
* 26 TBA-d9 (IS)	65	2.971	2.979	-0.008	0	678532	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.029	3.053	-0.024	94	316397	500.0	464.4	a
29 Methyl tert-butyl ether	73	3.094	3.102	-0.008	98	738189	50.0	48.2	
30 trans-1,2-Dichloroethene	96	3.135	3.135	0.000	97	273736	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.193	3.193	0.000	95	1438516	500.0	497.8	
32 Hexane	43	3.275	3.267	0.008	95	319292	50.0	47.7	
33 Isopropyl ether	45	3.456	3.464	-0.008	97	931663	50.0	50.0	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	61	531982	50.0	49.9	
35 Vinyl acetate	86	3.497	3.497	0.000	100	113056	100.0	97.4	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	91	251758	50.0	51.2	
37 Tert-butyl ethyl ether	59	3.752	3.760	-0.008	89	803943	50.0	49.5	
* 38 2-Butanone-d5	46	3.949	3.949	0.000	0	925205	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	85	86563	50.0	48.6	
40 cis-1,2-Dichloroethene	96	3.982	3.973	0.009	94	294890	50.0	48.6	
41 2-Butanone (MEK)	72	3.998	3.990	0.008	95	195966	250.0	242.4	
42 Ethyl acetate	70	3.990	3.990	0.000	95	67834	100.0	102.4	
43 Methyl acrylate	55	4.039	4.039	0.000	99	285331	50.0	45.6	
44 Propionitrile	54	4.121	4.121	0.000	95	540436	500.0	500.0	
45 Chlorobromomethane	128	4.187	4.187	0.000	88	136697	50.0	49.7	
46 Tetrahydrofuran	72	4.187	4.195	-0.008	64	89464	100.0	92.5	
47 Methacrylonitrile	67	4.204	4.203	0.001	94	1404686	500.0	517.0	
48 Chloroform	83	4.236	4.236	0.000	98	448805	50.0	49.7	
49 Cyclohexane	84	4.360	4.360	0.000	95	455652	50.0	49.0	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	98	380893	50.0	49.9	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	97	268923	50.0	50.3	
52 Carbon tetrachloride	117	4.483	4.483	0.000	97	318210	50.0	49.9	
53 1,1-Dichloropropene	75	4.508	4.507	0.001	96	372665	50.0	49.8	
54 Isobutyl alcohol	43	4.664	4.664	0.000	44	455950	1250.0	1207.8	
55 Benzene	78	4.697	4.696	0.001	97	1117357	50.0	47.7	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.713	4.705	0.008	0	341635	50.0	49.8	
57 Isopropyl acetate	43	4.754	4.762	-0.008	94	795694	50.0	45.7	
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	93	963401	50.0	52.6	
59 1,2-Dichloroethane	62	4.779	4.779	0.000	96	351655	50.0	49.0	
60 n-Heptane	57	4.845	4.844	0.001	94	240046	50.0	50.1	
* 61 Fluorobenzene	96	4.968	4.968	0.000	98	1037626	50.0	50.0	
62 n-Butanol	56	5.288	5.304	-0.016	63	163509	1250.0	1350.5	
63 Trichloroethene	95	5.305	5.304	0.001	98	256971	50.0	50.1	
64 Ethyl acrylate	55	5.428	5.428	0.000	95	808162	50.0	50.5	
65 Methylcyclohexane	83	5.428	5.428	0.000	79	519018	50.0	50.0	
66 1,2-Dichloropropane	63	5.584	5.584	0.000	91	287662	50.0	49.2	
68 Methyl methacrylate	100	5.658	5.666	-0.008	93	162978	100.0	104.6	
* 67 1,4-Dioxane-d8	96	5.699	5.707	-0.008	0	45296	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	96	157774	50.0	49.6	
71 n-Propyl acetate	43	5.724	5.724	0.000	99	514306	50.0	50.7	
69 1,4-Dioxane	88	5.732	5.740	-0.008	72	42475	1000.0	986.8	
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	327035	50.0	50.1	
73 2-Nitropropane	41	6.176	6.175	0.001	82	173219	100.0	93.7	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	86	185864	50.1	51.9	
75 Epichlorohydrin	57	6.291	6.291	0.001	99	688405	1000.0	1005.9	
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	93	439734	50.0	49.0	
77 4-Methyl-2-pentanone (MIBK)	43	6.504	6.504	0.000	98	1889643	250.0	255.4	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	99	1091692	50.0	49.3	
79 Toluene	91	6.652	6.652	0.000	93	1097482	50.0	47.9	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	98	392648	50.0	48.8	
81 Ethyl methacrylate	69	7.038	7.038	0.000	92	390776	50.0	52.9	
82 1,1,2-Trichloroethane	83	7.203	7.203	0.000	95	200110	50.0	49.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.252	7.252	0.000	94	230328	50.0	49.3	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	96	417555	50.0	48.4	
85 2-Hexanone	43	7.482	7.482	0.000	99	1212653	250.0	251.9	
86 n-Butyl acetate	43	7.597	7.597	0.000	99	556446	50.0	49.4	
87 Chlorodibromomethane	129	7.630	7.638	-0.008	98	226488	50.0	49.8	
88 Ethylene Dibromide	107	7.778	7.778	0.000	98	224550	50.0	47.9	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	86	813912	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	93	666718	50.0	48.4	
91 Ethylbenzene	106	8.468	8.468	0.000	99	373873	50.0	49.8	
92 1,1,1,2-Tetrachloroethane	131	8.476	8.484	-0.008	95	237461	50.0	49.1	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	99	460115	50.0	49.8	
95 o-Xylene	106	9.134	9.134	0.000	93	468652	50.0	50.6	
94 n-Butyl acrylate	73	9.142	9.142	0.000	96	228265	50.0	51.4	
96 Styrene	104	9.175	9.175	0.000	95	773679	50.0	50.9	
98 Bromoform	173	9.397	9.396	0.001	95	150270	50.0	51.0	
97 Amyl acetate (mixed isomers)	43	9.397	9.405	-0.008	90	671337	50.0	51.2	
99 Isopropylbenzene	105	9.536	9.536	0.000	98	1236714	50.0	50.6	
$ 100 4-Bromofluorobenzene	174	9.734	9.733	0.001	88	287689	50.0	49.8	
101 Bromobenzene	156	9.849	9.857	-0.008	95	270354	50.0	49.3	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	99	340540	50.0	48.8	
103 N-Propylbenzene	91	9.931	9.931	0.000	99	1533717	50.0	51.3	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	98	100025	50.0	50.8	
105 trans-1,4-Dichloro-2-butene	53	9.964	9.963	0.001	81	93358	50.0	47.8	
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	1004034	50.0	50.3	
107 4-Ethyltoluene	105	10.029	10.029	0.000	98	1223098	50.0	52.2	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	93	1025664	50.0	51.9	
109 4-Chlorotoluene	91	10.120	10.120	0.000	97	935463	50.0	49.9	
110 Butyl Methacrylate	87	10.186	10.185	0.001	94	376662	50.0	53.4	
111 tert-Butylbenzene	119	10.342	10.341	0.001	95	853248	50.0	51.7	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	98	1059343	50.0	51.2	
113 sec-Butylbenzene	105	10.506	10.506	0.000	99	1362420	50.0	52.5	
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	96	538145	50.0	50.0	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	98	1153668	50.0	52.6	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	96	428385	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	94	534060	50.0	48.2	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	98	1121736	50.0	51.9	
119 Benzyl chloride	91	10.785	10.793	-0.008	98	657174	50.0	48.4	
120 2,3-Dihydroindene	117	10.835	10.834	0.001	95	1052285	50.0	51.2	
121 p-Diethylbenzene	119	10.884	10.884	0.000	93	608638	50.0	50.7	
122 n-Butylbenzene	92	10.900	10.900	0.000	97	654805	50.0	52.0	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	95	538143	50.0	48.6	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	98	1091278	50.0	51.8	
125 1,2-Dibromo-3-Chloropropane	157	11.443	11.443	0.001	96	74178	50.0	50.1	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	97	422482	50.0	51.6	
127 1,2,4-Trichlorobenzene	180	11.895	11.894	0.001	94	395897	50.0	49.7	
128 Hexachlorobutadiene	225	11.960	11.960	0.000	90	148227	50.0	51.1	
129 Naphthalene	128	12.051	12.051	0.000	99	1139340	50.0	50.7	
130 1,2,3-Trichlorobenzene	180	12.207	12.198	0.009	95	361158	50.0	49.7	
S 131 1,2-Dichloroethene, Total	100				0		100.0	98.5	
S 133 Total BTEX	1				0		250.0	245.9	
S 132 Xylenes, Total	100				0		100.0	100.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00449	Amount Added:	50.00	Units: uL	
ACROLEIN W_00133	Amount Added:	10.00	Units: uL	
8260MIX1COMB_00147	Amount Added:	50.00	Units: uL	
524freon_00045	Amount Added:	50.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 24-Nov-2021 08:34:12 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22514.D

Injection Date: 23-Nov-2021 14:12:30 Instrument ID: CVOAMS6 Operator ID:

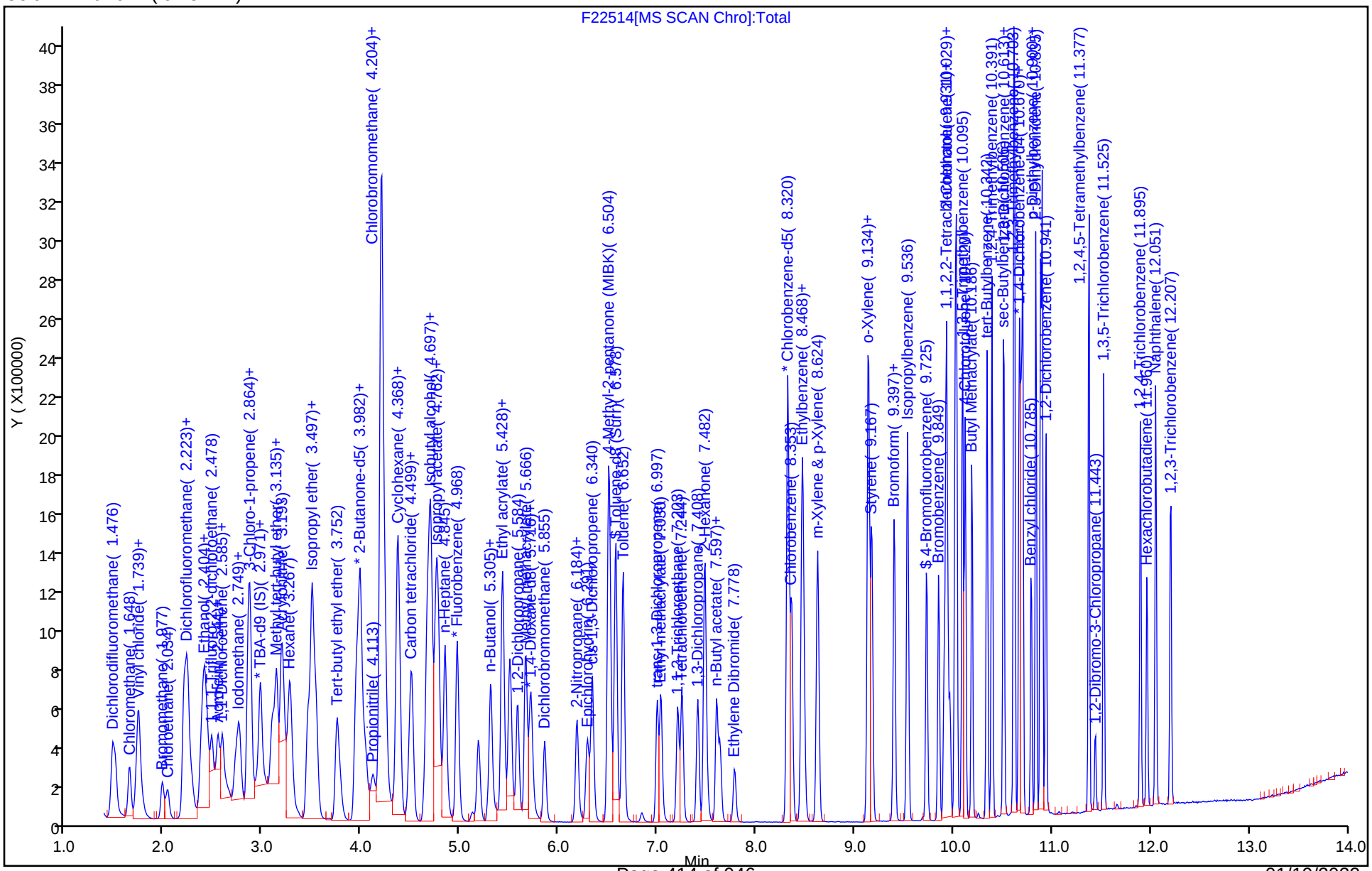
Lims ID: STD50 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

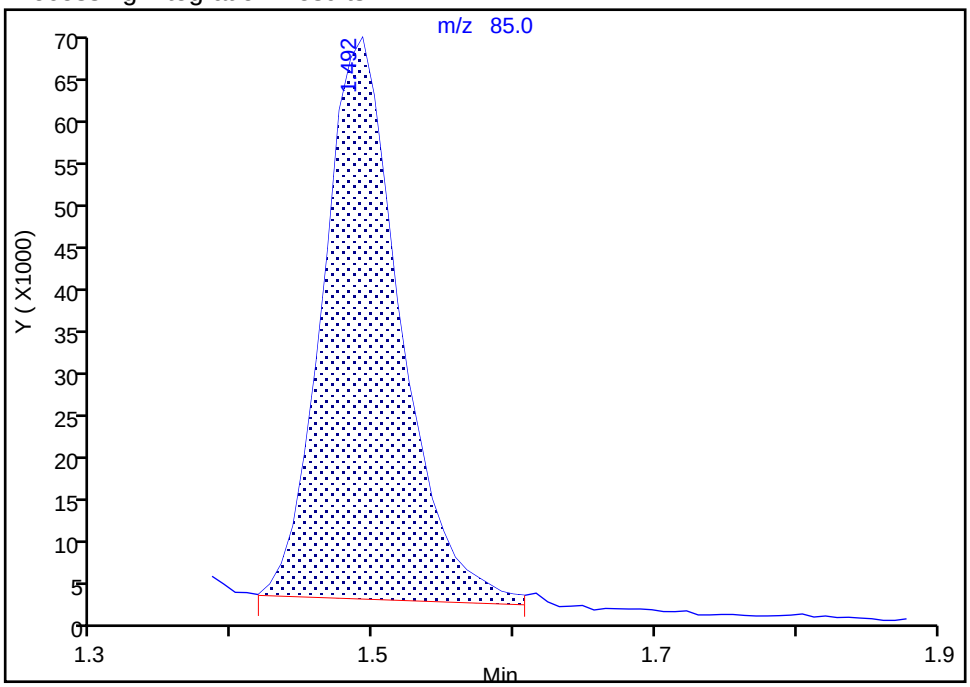
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22514.D
Injection Date: 23-Nov-2021 14:12:30 Instrument ID: CVOAMS6
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

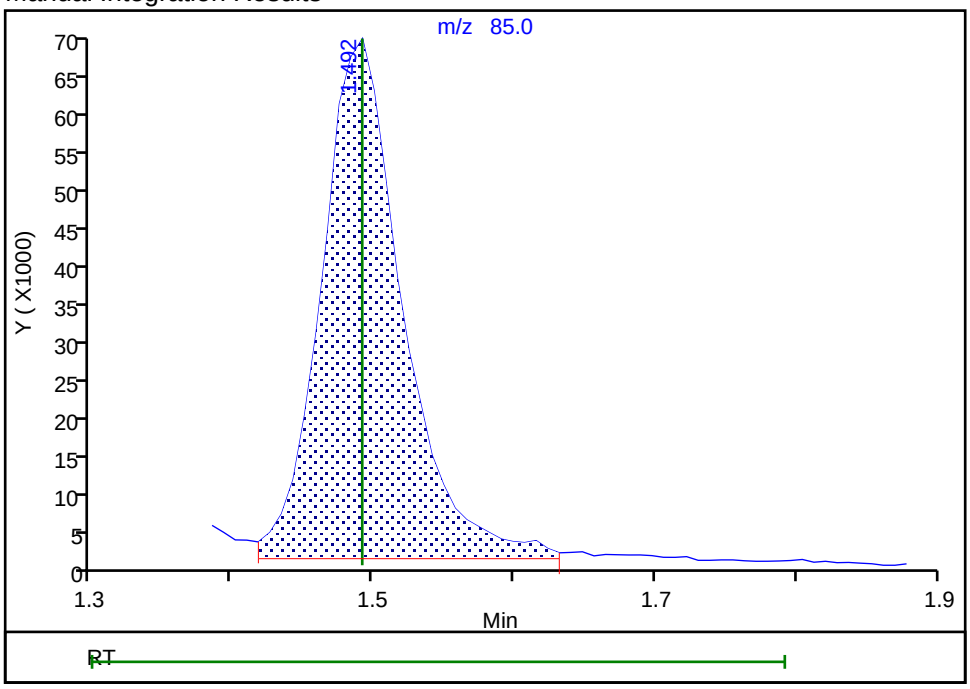
Processing Integration Results

RT: 1.49
Area: 255711
Amount: 43.609510
Amount Units: ug/l



Manual Integration Results

RT: 1.49
Area: 276293
Amount: 46.574670
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:01:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

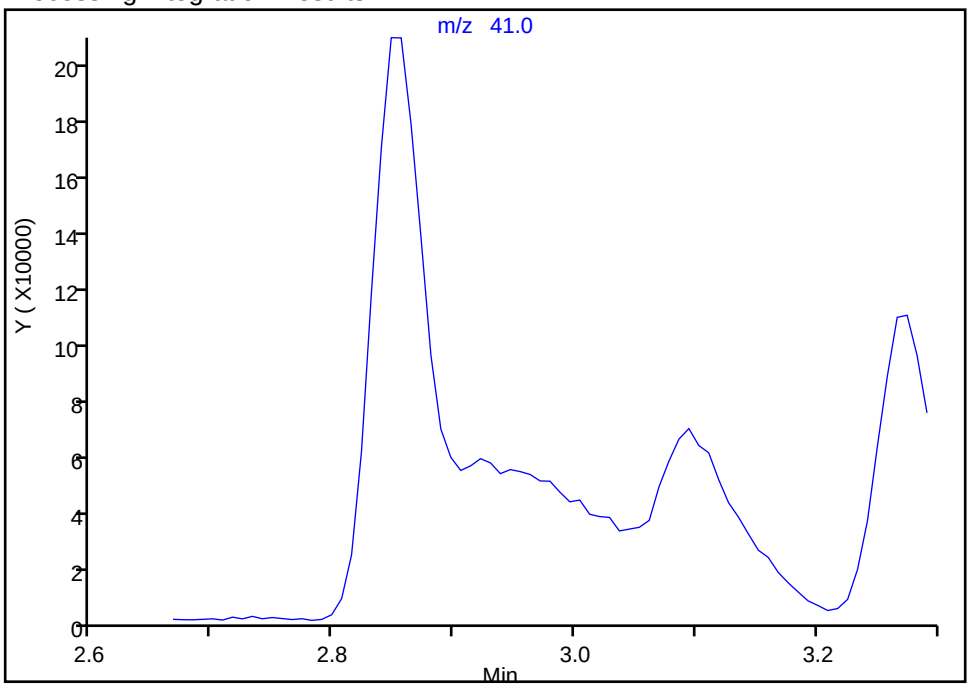
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22514.D
Injection Date: 23-Nov-2021 14:12:30 Instrument ID: CVOAMS6
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

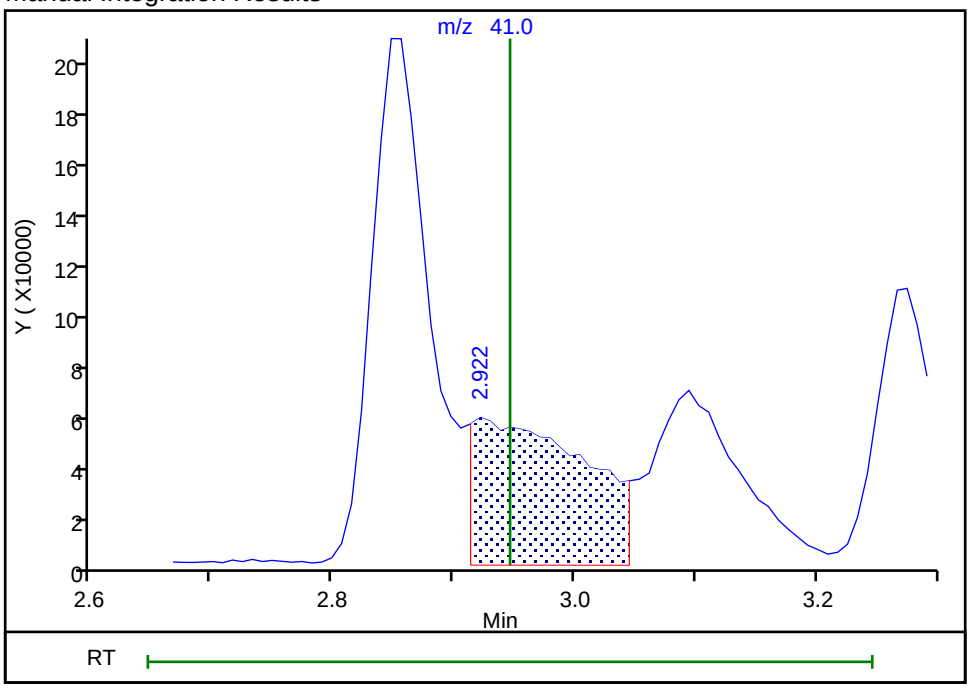
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 379369
Amount: 451.5708
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:22:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

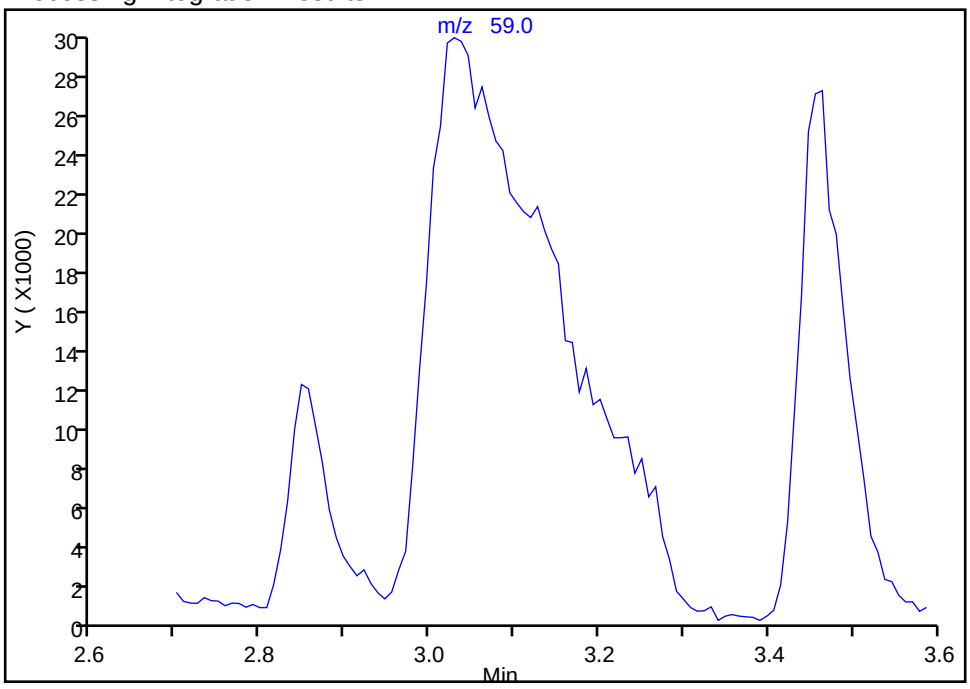
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22514.D
Injection Date: 23-Nov-2021 14:12:30 Instrument ID: CVOAMS6
Lims ID: STD50
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

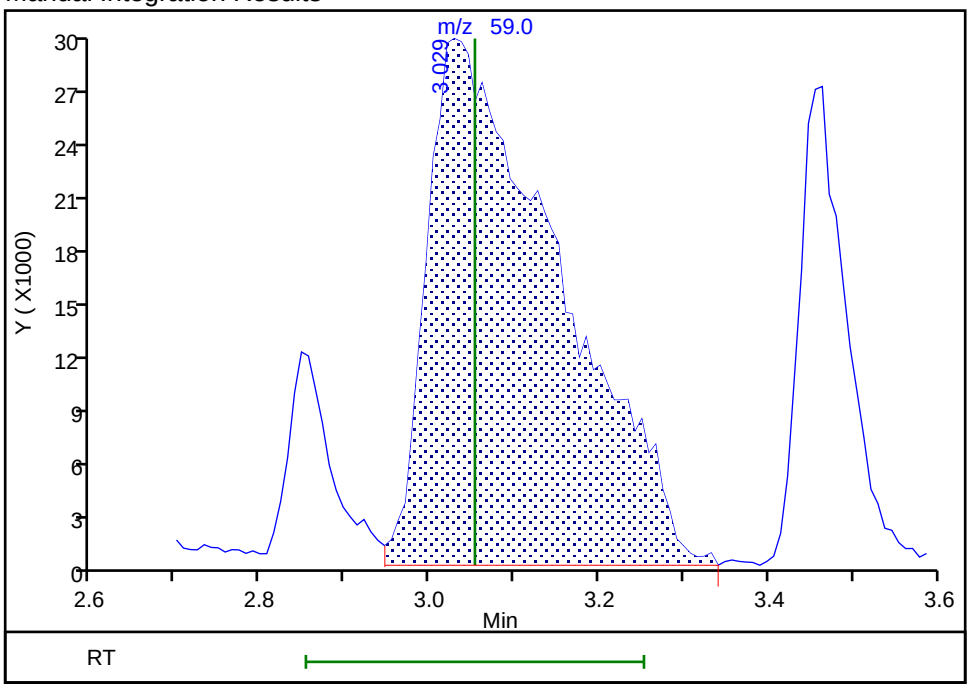
Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.03
Area: 316397
Amount: 464.4267
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:22:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22515.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Nov-2021 14:35:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0138064-008
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:34:16 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 23-Nov-2021 15:23:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.483	1.492	-0.009	98	1387658	200.0	238.6	
2 Chloromethane	50	1.640	1.648	-0.008	99	1779599	200.0	214.3	
3 Vinyl chloride	62	1.714	1.722	-0.008	98	1495649	200.0	203.3	
4 Butadiene	54	1.738	1.738	0.000	96	1468725	200.0	219.5	
5 Bromomethane	94	1.977	1.977	-0.001	99	713237	200.0	204.1	
6 Chloroethane	64	2.034	2.034	0.000	100	757467	200.0	204.4	
7 Dichlorofluoromethane	67	2.190	2.198	-0.008	98	1993924	200.0	206.0	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	98	1520834	200.0	204.8	
8 Pentane	72	2.231	2.231	0.000	97	439222	400.0	373.0	
10 Ethanol	46	2.371	2.363	0.008	71	209749	8000.0	8584.6	
11 Ethyl ether	59	2.363	2.371	-0.008	93	870290	200.0	196.4	
12 2-Methyl-1,3-butadiene	53	2.396	2.404	-0.008	98	1017204	200.0	198.1	
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.428	2.437	-0.009	86	883250	200.0	199.9	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.478	2.478	0.000	92	1518455	200.0	207.4	
15 Acrolein	56	2.519	2.527	-0.008	94	200182	202.8	238.3	
16 112TCTFE	101	2.543	2.544	-0.001	97	1011309	200.0	207.6	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	96	1036323	200.0	208.0	
18 Acetone	43	2.642	2.659	-0.017	86	2415280	1000.0	1124.9	
19 Iodomethane	142	2.724	2.724	0.000	97	1581392	200.0	214.5	
21 Carbon disulfide	76	2.757	2.757	0.000	99	3954974	200.0	204.9	
20 Isopropyl alcohol	45	2.749	2.765	-0.016	52	624628	2000.0	2562.5	
22 3-Chloro-1-propene	41	2.848	2.856	-0.008	86	2653412	200.0	209.4	
23 Methyl acetate	43	2.848	2.856	-0.008	100	2211202	400.0	419.0	
24 Cyclopentene	67	2.864	2.872	-0.008	93	2750945	200.0	202.1	
25 Acetonitrile	41	2.921	2.946	-0.025	94	1471277	2000.0	1930.0	a
27 Methylene Chloride	84	2.971	2.971	0.000	97	1205385	200.0	207.4	
* 26 TBA-d9 (IS)	65	2.979	2.979	0.000	0	615709	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.036	3.053	-0.017	93	1213825	2000.0	1963.5	a
29 Methyl tert-butyl ether	73	3.094	3.102	-0.008	98	2983934	200.0	198.6	
30 trans-1,2-Dichloroethene	96	3.135	3.135	0.000	97	1123362	200.0	208.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.184	3.193	-0.009	95	5937772	2000.0	2095.8	
32 Hexane	43	3.275	3.267	0.008	95	1320996	200.0	201.4	
33 Isopropyl ether	45	3.456	3.464	-0.008	98	3611509	200.0	197.5	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	99	2196851	200.0	210.0	
35 Vinyl acetate	86	3.497	3.497	0.000	100	432375	400.0	379.8	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	92	1000747	200.0	207.5	
37 Tert-butyl ethyl ether	59	3.751	3.760	-0.009	88	3128947	200.0	196.5	
* 38 2-Butanone-d5	46	3.940	3.949	-0.009	0	921484	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	95	354933	200.0	203.2	
40 cis-1,2-Dichloroethene	96	3.981	3.973	0.008	93	1214498	200.0	204.2	
41 2-Butanone (MEK)	72	3.990	3.990	0.000	95	865114	1000.0	1074.6	
42 Ethyl acetate	70	3.990	3.990	0.000	96	280686	400.0	425.2	
43 Methyl acrylate	55	4.039	4.039	0.000	99	1183238	200.0	196.4	a
44 Propionitrile	54	4.113	4.121	-0.008	96	2091343	2000.0	2132.3	
45 Chlorobromomethane	128	4.187	4.187	0.000	98	564584	200.0	209.4	
46 Tetrahydrofuran	72	4.179	4.195	-0.016	78	396463	400.0	411.7	
47 Methacrylonitrile	67	4.203	4.203	0.000	94	5544125	2000.0	2081.4	
48 Chloroform	83	4.236	4.236	0.000	98	1869709	200.0	211.0	
49 Cyclohexane	84	4.359	4.360	-0.001	95	1894756	200.0	207.8	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	99	1572998	200.0	210.0	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	96	259015	50.0	49.4	
52 Carbon tetrachloride	117	4.491	4.483	0.008	97	1325068	200.0	211.9	
53 1,1-Dichloropropene	75	4.507	4.507	0.000	96	1558910	200.0	212.4	
54 Isobutyl alcohol	43	4.663	4.664	-0.001	94	1966732	5000.0	5741.4	
55 Benzene	78	4.696	4.696	0.000	97	4687332	200.0	207.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.713	4.705	0.008	0	332870	50.0	49.5	
57 Isopropyl acetate	43	4.754	4.762	-0.008	94	3196697	200.0	187.2	
58 Tert-amyl methyl ether	73	4.754	4.762	-0.008	74	3674882	200.0	204.7	
59 1,2-Dichloroethane	62	4.778	4.779	-0.001	96	1468802	200.0	208.7	
60 n-Heptane	57	4.844	4.844	0.000	96	970194	200.0	206.5	
* 61 Fluorobenzene	96	4.967	4.968	-0.001	98	1017316	50.0	50.0	
62 n-Butanol	56	5.280	5.304	-0.024	90	706725	5000.0	6432.9	
63 Trichloroethene	95	5.304	5.304	0.000	99	1087453	200.0	216.2	
64 Ethyl acrylate	55	5.428	5.428	0.000	95	3466139	200.0	221.0	
65 Methylcyclohexane	83	5.428	5.428	0.000	79	2156142	200.0	211.7	
66 1,2-Dichloropropane	63	5.584	5.584	0.000	91	1209320	200.0	211.1	
68 Methyl methacrylate	100	5.666	5.666	0.000	93	686121	400.0	449.1	
* 67 1,4-Dioxane-d8	96	5.707	5.707	0.000	0	44964	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	96	668482	200.0	214.2	
71 n-Propyl acetate	43	5.723	5.724	-0.001	99	2224491	200.0	223.5	
69 1,4-Dioxane	88	5.748	5.740	0.008	83	145813	4000.0	3412.7	
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	1416970	200.0	221.3	
73 2-Nitropropane	41	6.175	6.175	0.000	97	728784	400.0	402.0	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	100	773949	200.5	220.5	
75 Epichlorohydrin	57	6.290	6.291	0.000	99	2915682	4000.0	4277.4	
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	95	1893586	200.0	219.4	
77 4-Methyl-2-pentanone (MIBK)	43	6.504	6.504	0.000	98	8179514	1000.0	1109.9	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	98	1041721	50.0	48.9	
79 Toluene	91	6.652	6.652	0.000	93	4620324	200.0	209.7	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	98	1722985	200.0	222.5	
81 Ethyl methacrylate	69	7.038	7.038	0.000	93	1786933	200.0	251.4	
82 1,1,2-Trichloroethane	83	7.202	7.203	-0.001	96	837176	200.0	212.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.252	7.252	0.000	94	939938	200.0	208.9	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	96	1789525	200.0	215.4	
85 2-Hexanone	43	7.482	7.482	0.000	99	5773513	1000.0	1204.3	
86 n-Butyl acetate	43	7.597	7.597	0.000	99	2444045	200.0	225.5	
87 Chlorodibromomethane	129	7.638	7.638	0.000	98	975585	200.0	222.9	
88 Ethylene Dibromide	107	7.786	7.778	0.008	98	973863	200.0	215.9	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	88	783510	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	93	2833993	200.0	213.8	
91 Ethylbenzene	106	8.468	8.468	0.000	99	1558931	200.0	215.9	
92 1,1,1,2-Tetrachloroethane	131	8.484	8.484	0.000	95	990271	200.0	212.9	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	99	1921901	200.0	216.2	
95 o-Xylene	106	9.133	9.134	-0.001	92	1905822	200.0	213.8	
94 n-Butyl acrylate	73	9.142	9.142	0.000	96	1020560	200.0	238.7	
96 Styrene	104	9.175	9.175	0.000	94	3305653	200.0	226.1	
98 Bromoform	173	9.396	9.396	0.000	94	648031	200.0	228.6	
97 Amyl acetate (mixed isomers)	43	9.405	9.405	0.000	89	2915847	200.0	235.4	
99 Isopropylbenzene	105	9.536	9.536	0.000	96	5086988	200.0	216.2	
$ 100 4-Bromofluorobenzene	174	9.733	9.733	0.000	87	277308	50.0	49.8	
101 Bromobenzene	156	9.857	9.857	0.000	97	1116256	200.0	215.5	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	99	1417859	200.0	215.3	
103 N-Propylbenzene	91	9.930	9.931	-0.001	99	6345777	200.0	224.6	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	98	397857	200.0	213.7	
105 trans-1,4-Dichloro-2-butene	53	9.963	9.963	0.000	81	418183	200.0	226.7	
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	4148372	200.0	219.9	
107 4-Ethyltoluene	105	10.037	10.029	0.008	98	4740216	200.0	214.0	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	92	4147995	200.0	222.4	
109 4-Chlorotoluene	91	10.119	10.120	-0.001	98	3933652	200.0	222.0	
110 Butyl Methacrylate	87	10.185	10.185	0.000	94	1572942	200.0	236.3	
111 tert-Butylbenzene	119	10.341	10.341	0.000	94	3428416	200.0	220.0	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	98	4349143	200.0	222.3	
113 sec-Butylbenzene	105	10.514	10.506	0.008	99	5488377	200.0	224.0	
115 1,3-Dichlorobenzene	146	10.612	10.613	-0.001	93	2142443	200.0	210.9	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	98	4619463	200.0	222.9	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	96	404675	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.686	10.687	-0.001	93	2182358	200.0	208.5	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	98	4380919	200.0	214.4	
119 Benzyl chloride	91	10.793	10.793	0.000	98	2711717	200.0	211.5	
120 2,3-Dihydroindene	117	10.834	10.834	0.000	95	4141605	200.0	213.3	
121 p-Diethylbenzene	119	10.884	10.884	0.000	93	2323346	200.0	204.8	
122 n-Butylbenzene	92	10.900	10.900	0.000	97	2570303	200.0	216.2	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	94	2179009	200.0	208.2	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	97	4192650	200.0	210.8	
125 1,2-Dibromo-3-Chloropropane	157	11.442	11.443	0.000	96	290402	200.0	207.6	
126 1,3,5-Trichlorobenzene	180	11.533	11.525	0.008	96	1505669	200.0	194.9	
127 1,2,4-Trichlorobenzene	180	11.903	11.894	0.009	94	1494661	200.0	198.8	
128 Hexachlorobutadiene	225	11.968	11.960	0.008	90	547332	200.0	199.8	
129 Naphthalene	128	12.059	12.051	0.008	99	4534504	200.0	213.6	
130 1,2,3-Trichlorobenzene	180	12.207	12.198	0.009	95	1351117	200.0	196.7	
S 131 1,2-Dichloroethene, Total	100				0		400.0	413.0	
S 133 Total BTEX	1				0		1000.0	1063.4	
S 132 Xylenes, Total	100				0		400.0	430.0	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00133	Amount Added:	20.00	Units: uL	
GAS Hi_00401	Amount Added:	20.00	Units: uL	
8FreonHi_00038	Amount Added:	20.00	Units: uL	
Ethanol mix_00058	Amount Added:	20.00	Units: uL	
MIX 2 Hi_00117	Amount Added:	20.00	Units: uL	
MIX I Hi_00144	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 24-Nov-2021 08:34:17 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22515.D

Injection Date: 23-Nov-2021 14:35:30 Instrument ID: CVOAMS6 Operator ID:

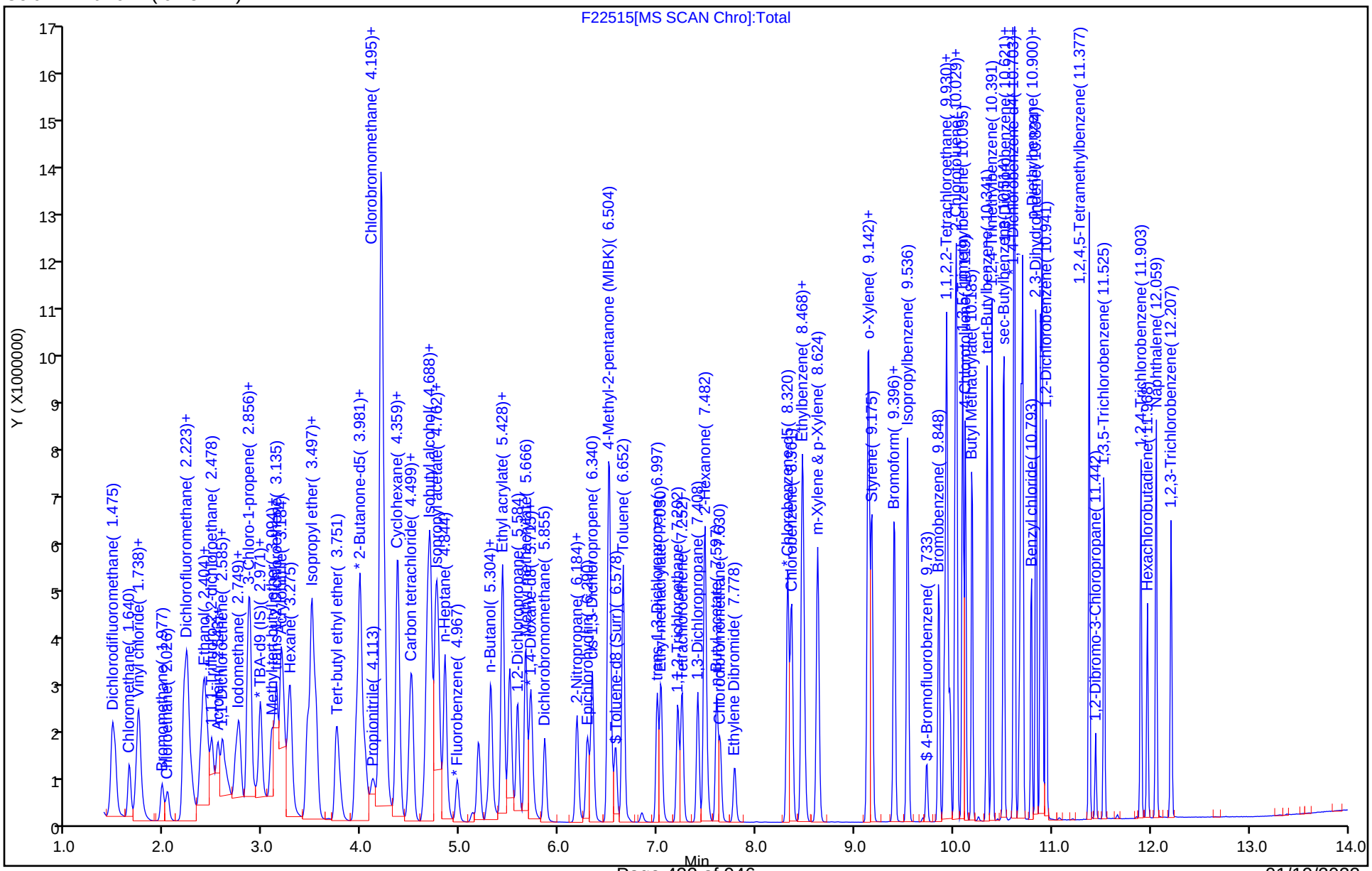
Lims ID: STD200 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

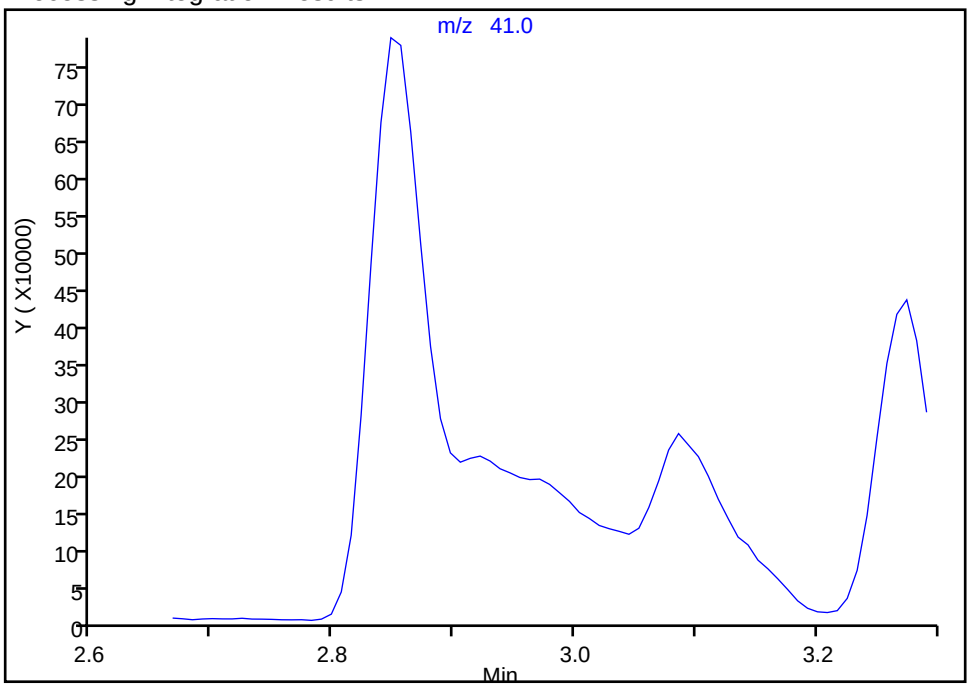
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22515.D
Injection Date: 23-Nov-2021 14:35:30 Instrument ID: CVOAMS6
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

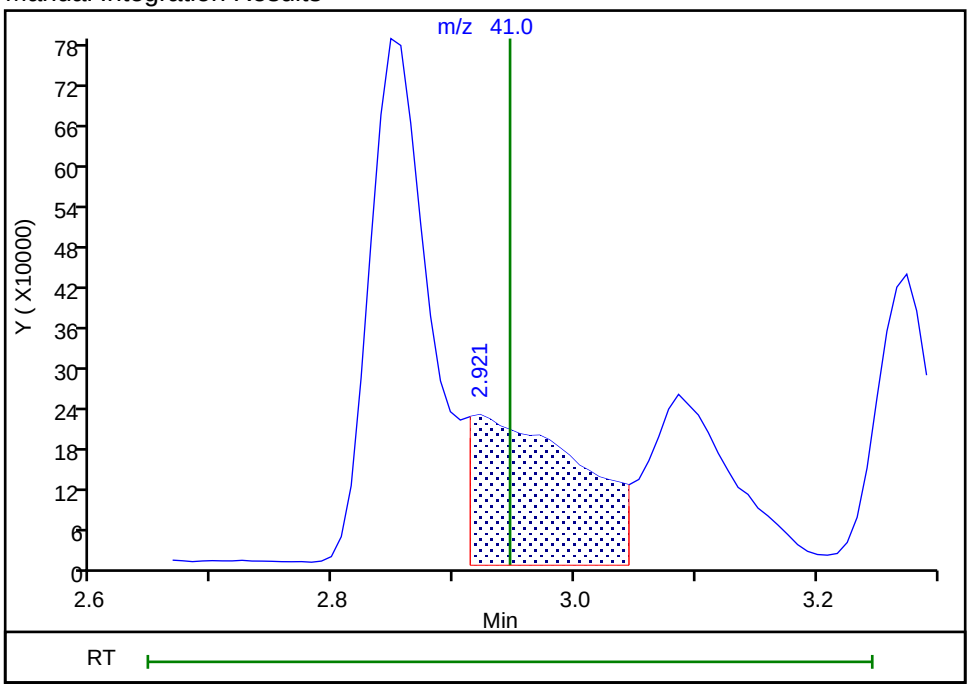
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 1471277
Amount: 1929.9820
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:23:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

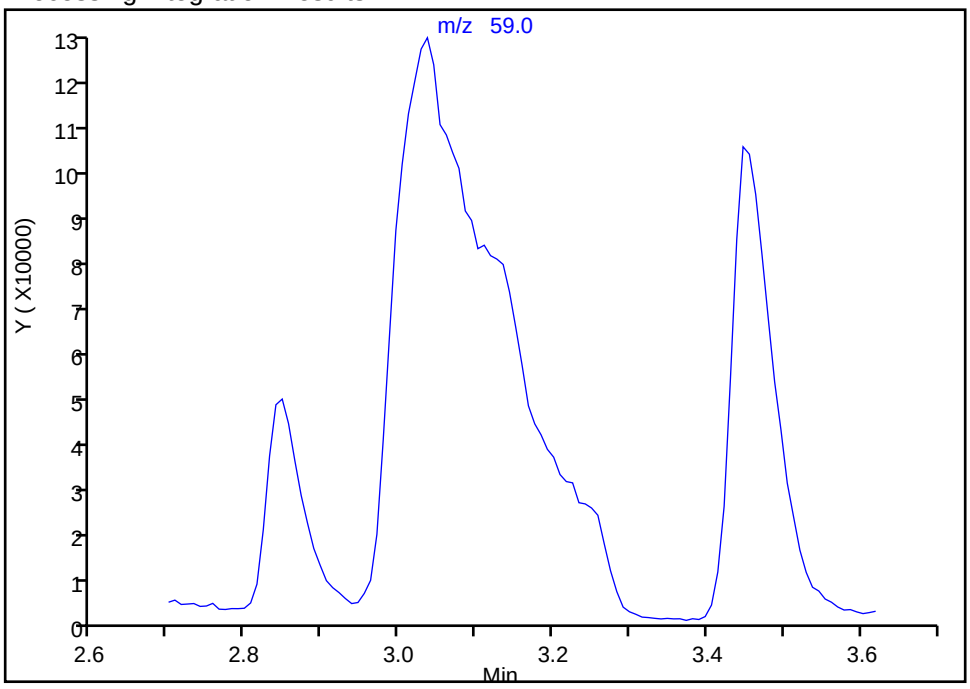
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22515.D
Injection Date: 23-Nov-2021 14:35:30 Instrument ID: CVOAMS6
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

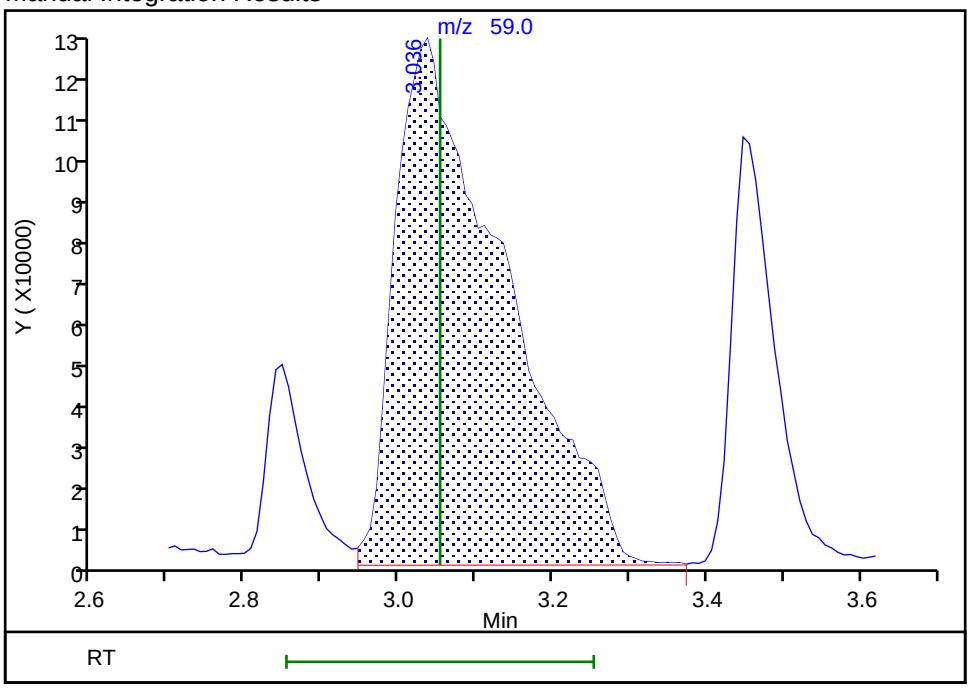
Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.04
Area: 1213825
Amount: 1963.5220
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:23:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

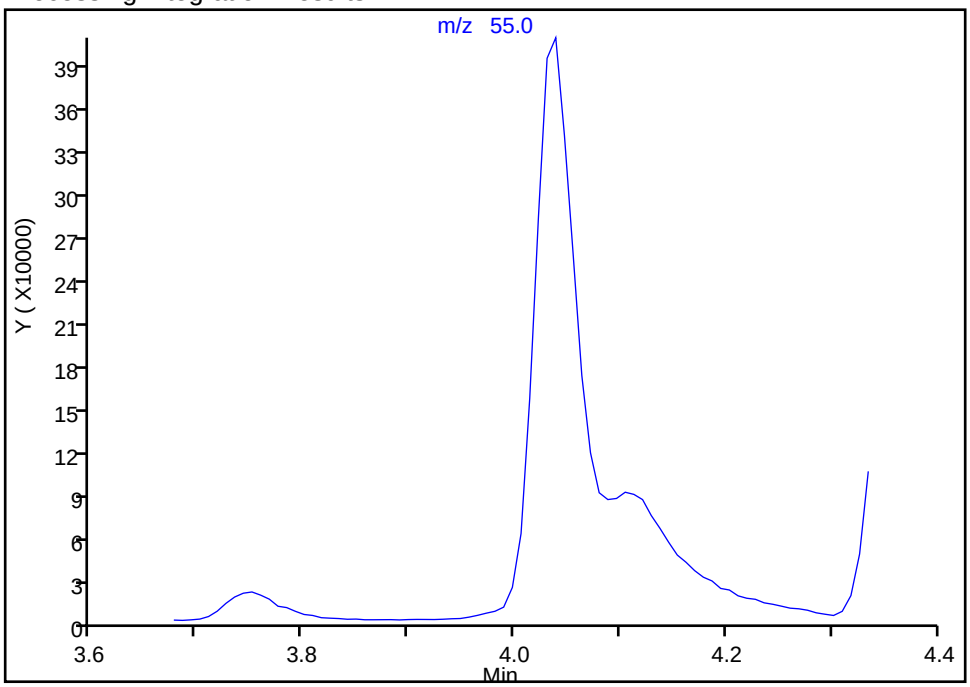
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22515.D
Injection Date: 23-Nov-2021 14:35:30 Instrument ID: CVOAMS6
Lims ID: STD200
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

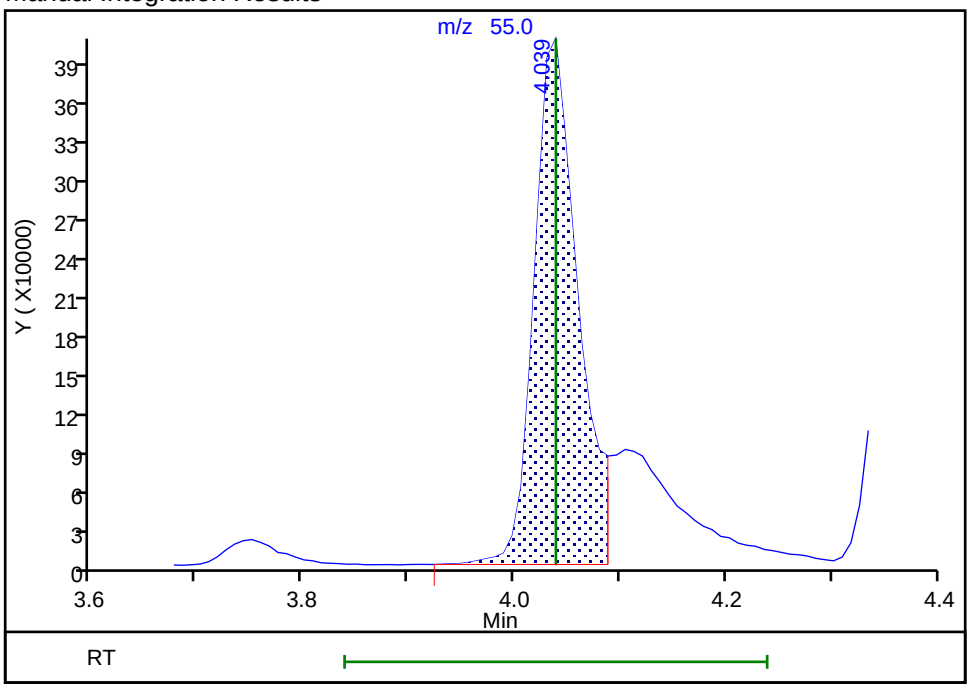
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.04
Area: 1183238
Amount: 196.4458
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:23:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Nov-2021 14:57:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0138064-009
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub55

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:34:23 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 23-Nov-2021 15:19:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	33	3700756	500.0	525.5	
2 Chloromethane	50	1.648	1.648	0.000	43	4626330	500.0	460.2	
3 Vinyl chloride	62	1.722	1.722	0.000	29	3933312	500.0	441.6	
4 Butadiene	54	1.747	1.738	0.009	39	3935056	500.0	485.8	
5 Bromomethane	94	1.977	1.977	0.000	18	1763630	500.0	416.7	
6 Chloroethane	64	2.034	2.034	0.000	100	1885005	500.0	420.1	a
7 Dichlorofluoromethane	67	2.199	2.198	0.001	34	4792604	500.0	409.0	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	63	3668173	500.0	408.0	
8 Pentane	72	2.240	2.231	0.009	41	1048989	1000.0	654.0	
10 Ethanol	46	2.371	2.363	0.008	59	532273	20000	15995	
11 Ethyl ether	59	2.363	2.371	-0.008	20	2307361	500.0	430.1	
12 2-Methyl-1,3-butadiene	53	2.404	2.404	0.000	96	2771350	500.0	445.7	a
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.437	2.437	0.000	29	2309993	500.0	431.8	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.486	2.478	0.008	0	4045990	500.0	456.3	
15 Acrolein	56	2.527	2.527	0.000	93	426822	405.6	373.0	a
16 112TCTFE	101	2.544	2.544	0.000	41	2669998	500.0	452.7	
17 1,1-Dichloroethene	96	2.593	2.593	0.000	67	2723405	500.0	451.4	
18 Acetone	43	2.667	2.659	0.008	41	6410629	2500.0	2303.8	
19 Iodomethane	142	2.724	2.724	0.000	38	4054014	500.0	454.1	
21 Carbon disulfide	76	2.757	2.757	0.000	32	10405894	500.0	445.2	
20 Isopropyl alcohol	45	2.757	2.765	-0.008	96	1764764	5000.0	5315.8	a
22 3-Chloro-1-propene	41	2.856	2.856	0.000	43	7145144	500.0	465.8	
23 Methyl acetate	43	2.848	2.856	-0.008	48	6076331	1000.0	951.0	
24 Cyclopentene	67	2.872	2.872	0.000	68	7535136	500.0	457.2	
25 Acetonitrile	41	2.938	2.946	-0.008	95	3992627	5000.0	3845.5	a
27 Methylene Chloride	84	2.979	2.971	0.008	29	3165761	500.0	449.9	
* 26 TBA-d9 (IS)	65	2.996	2.979	0.017	0	838573	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.053	3.053	0.000	93	3295456	5000.0	3914.1	a
29 Methyl tert-butyl ether	73	3.094	3.102	-0.008	38	7978537	500.0	438.7	
30 trans-1,2-Dichloroethene	96	3.144	3.135	0.009	38	2940950	500.0	451.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.201	3.193	0.008	47	16083935	5000.0	4688.8	
32 Hexane	43	3.275	3.267	0.008	20	3595485	500.0	452.8	
33 Isopropyl ether	45	3.456	3.464	-0.008	96	9763735	500.0	441.0	
34 1,1-Dichloroethane	63	3.505	3.497	0.008	50	5800585	500.0	457.9	
35 Vinyl acetate	86	3.497	3.497	0.000	28	1312393	1000.0	952.1	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	46	2745388	500.0	470.1	
37 Tert-butyl ethyl ether	59	3.752	3.760	-0.008	38	8557518	500.0	443.9	
* 38 2-Butanone-d5	46	3.949	3.949	0.000	0	1194270	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	43	925171	500.0	437.5	
40 cis-1,2-Dichloroethene	96	3.982	3.973	0.009	28	3147259	500.0	437.0	
41 2-Butanone (MEK)	72	3.998	3.990	0.008	42	2248581	2500.0	2155.0	
42 Ethyl acetate	70	3.990	3.990	0.000	23	768815	1000.0	898.7	
43 Methyl acrylate	55	4.039	4.039	0.000	99	3590034	500.0	509.6	a
44 Propionitrile	54	4.130	4.121	0.009	99	5553057	5000.0	4157.0	a
45 Chlorobromomethane	128	4.195	4.187	0.008	35	1391849	500.0	426.3	
46 Tetrahydrofuran	72	4.187	4.195	-0.008	92	1000564	1000.0	801.7	a
47 Methacrylonitrile	67	4.203	4.203	0.000	66	14813858	5000.0	4593.3	
48 Chloroform	83	4.245	4.236	0.009	34	4904803	500.0	457.2	
49 Cyclohexane	84	4.368	4.360	0.008	39	5017918	500.0	454.6	
50 1,1,1-Trichloroethane	97	4.376	4.368	0.008	49	4127016	500.0	455.1	
$ 51 Dibromofluoromethane (Surr)	113	4.392	4.384	0.008	30	305283	50.0	48.1	
52 Carbon tetrachloride	117	4.491	4.483	0.008	97	3511595	500.0	463.7	a
53 1,1-Dichloropropene	75	4.516	4.507	0.009	35	4285222	500.0	482.1	
54 Isobutyl alcohol	43	4.664	4.664	0.000	90	5819427	12500	12473	a
55 Benzene	78	4.697	4.696	0.000	48	12632571	500.0	478.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.713	4.705	0.008	0	427730	50.0	52.5	
57 Isopropyl acetate	43	4.754	4.762	-0.008	42	8995097	500.0	435.0	
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	79	9943855	500.0	457.4	
59 1,2-Dichloroethane	62	4.787	4.779	0.008	47	3986099	500.0	467.8	
60 n-Heptane	57	4.844	4.844	0.000	95	2690035	500.0	472.8	a
* 61 Fluorobenzene	96	4.976	4.968	0.008	38	1231761	50.0	50.0	
62 n-Butanol	56	5.296	5.304	-0.008	38	1995201	12500	13335	
63 Trichloroethene	95	5.313	5.304	0.009	42	2869009	500.0	471.2	
64 Ethyl acrylate	55	5.428	5.428	0.000	36	9645864	500.0	507.9	
65 Methylcyclohexane	83	5.428	5.428	0.000	46	5723381	500.0	464.2	
66 1,2-Dichloropropane	63	5.584	5.584	0.000	39	3273600	500.0	471.9	
68 Methyl methacrylate	100	5.666	5.666	0.000	39	1867919	1000.0	1009.8	
* 67 1,4-Dioxane-d8	96	5.707	5.707	0.000	0	69847	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	22	1785244	500.0	472.4	
71 n-Propyl acetate	43	5.724	5.724	0.000	41	6196399	500.0	514.3	
69 1,4-Dioxane	88	5.732	5.740	-0.008	47	392225	10000	5909.6	
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	3852876	500.0	497.1	a
73 2-Nitropropane	41	6.184	6.175	0.009	36	2057881	1000.0	937.6	
74 2-Chloroethyl vinyl ether	63	6.192	6.184	0.008	28	2192576	501.2	515.9	
75 Epichlorohydrin	57	6.299	6.291	0.009	99	7792627	10000	8820.9	a
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	41	5156260	500.0	510.8	
77 4-Methyl-2-pentanone (MIBK)	43	6.512	6.504	0.008	32	21415541	2500.0	2242.1	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	36	1250098	50.0	50.1	
79 Toluene	91	6.652	6.652	0.000	27	12288525	500.0	476.8	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	23	4756019	500.0	525.1	
81 Ethyl methacrylate	69	7.038	7.038	0.000	37	4895375	500.0	588.8	
82 1,1,2-Trichloroethane	83	7.211	7.203	0.008	95	2274052	500.0	494.5	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.252	7.252	0.000	77	2412612	500.0	458.5	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	44	4902025	500.0	504.5	
85 2-Hexanone	43	7.482	7.482	0.000	74	15769331	2500.0	2538.0	
86 n-Butyl acetate	43	7.605	7.597	0.008	38	6867784	500.0	541.7	
87 Chlorodibromomethane	129	7.638	7.638	0.000	48	2614109	500.0	510.7	
88 Ethylene Dibromide	107	7.786	7.778	0.008	45	2614570	500.0	495.5	
* 89 Chlorobenzene-d5	117	8.328	8.320	0.008	57	916439	50.0	50.0	
90 Chlorobenzene	112	8.361	8.361	0.000	68	7527165	500.0	485.5	
91 Ethylbenzene	106	8.468	8.468	0.000	46	4020115	500.0	475.9	
92 1,1,1,2-Tetrachloroethane	131	8.485	8.484	0.000	45	2540350	500.0	466.9	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	31	4986630	500.0	479.6	
95 o-Xylene	106	9.142	9.134	0.008	44	4769035	500.0	457.4	
94 n-Butyl acrylate	73	9.142	9.142	0.000	96	2742471	500.0	548.4	a
96 Styrene	104	9.175	9.175	0.000	33	8537844	500.0	499.3	
98 Bromoform	173	9.397	9.396	0.001	37	1669740	500.0	503.7	
97 Amyl acetate (mixed isomers)	43	9.405	9.405	0.000	29	7971391	500.0	566.1	
99 Isopropylbenzene	105	9.536	9.536	0.000	37	12575266	500.0	457.0	
$ 100 4-Bromofluorobenzene	174	9.733	9.733	0.000	33	320442	50.0	49.2	
101 Bromobenzene	156	9.857	9.857	0.000	39	2821727	500.0	479.1	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	99	3721412	500.0	496.9	a
103 N-Propylbenzene	91	9.931	9.931	0.000	33	13990274	500.0	435.6	e
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	35	1017270	500.0	480.6	
105 trans-1,4-Dichloro-2-butene	53	9.972	9.963	0.009	81	1143445	500.0	545.3	a
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	10532320	500.0	491.0	a
107 4-Ethyltoluene	105	10.037	10.029	0.008	76	11687692	500.0	464.1	e
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	93	10217959	500.0	481.8	a
109 4-Chlorotoluene	91	10.120	10.120	0.000	97	9798897	500.0	486.5	M
110 Butyl Methacrylate	87	10.194	10.185	0.009	36	4085570	500.0	539.8	
111 tert-Butylbenzene	119	10.342	10.341	0.001	18	8436787	500.0	476.1	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	40	10354414	500.0	465.5	e
113 sec-Butylbenzene	105	10.506	10.506	0.000	22	11794462	500.0	423.4	e
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	15	5130321	500.0	444.3	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	33	10168414	500.0	431.6	e
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	97	460084	50.0	50.0	a
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	41	5348149	500.0	449.5	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	32	10010500	500.0	430.9	e
119 Benzyl chloride	91	10.793	10.793	0.000	91	7033677	500.0	482.6	
120 2,3-Dihydroindene	117	10.835	10.834	0.001	36	9863429	500.0	446.9	
121 p-Diethylbenzene	119	10.884	10.884	0.000	24	5783732	500.0	448.5	
122 n-Butylbenzene	92	10.900	10.900	0.000	67	6165536	500.0	456.2	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	33	5278158	500.0	443.6	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	99	9063794	500.0	400.9	ea
125 1,2-Dibromo-3-Chloropropane	157	11.443	11.443	0.001	47	720114	500.0	452.8	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	26	3431909	500.0	390.6	
127 1,2,4-Trichlorobenzene	180	11.903	11.894	0.009	39	3333622	500.0	390.0	
128 Hexachlorobutadiene	225	11.968	11.960	0.008	88	1173832	500.0	376.8	a
129 Naphthalene	128	12.051	12.051	0.000	98	10154427	500.0	420.7	ea
130 1,2,3-Trichlorobenzene	180	12.207	12.198	0.009	33	3052744	500.0	391.0	
S 131 1,2-Dichloroethene, Total	100				0		1000.0	888.6	
S 133 Total BTEX	1				0		2500.0	2368.6	
S 132 Xylenes, Total	100				0		1000.0	937.0	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00133	Amount Added:	40.00	Units: uL	
GAS Hi_00401	Amount Added:	50.00	Units: uL	
8FreonHi_00038	Amount Added:	50.00	Units: uL	
Ethanol mix_00058	Amount Added:	50.00	Units: uL	
MIX 2 Hi_00117	Amount Added:	50.00	Units: uL	
MIX I Hi_00144	Amount Added:	50.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 24-Nov-2021 08:34:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6 Operator ID:

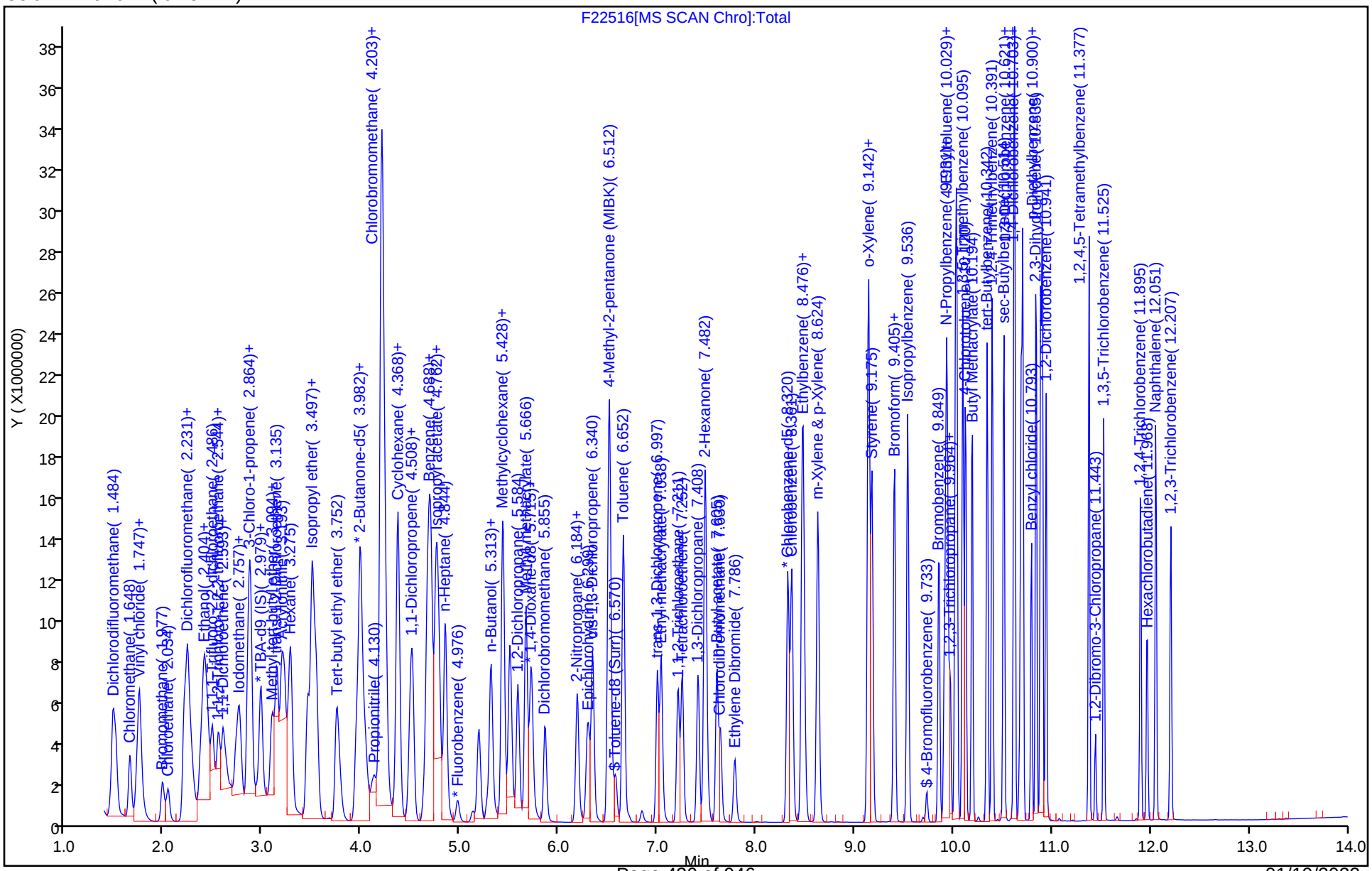
Lims ID: STD500 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

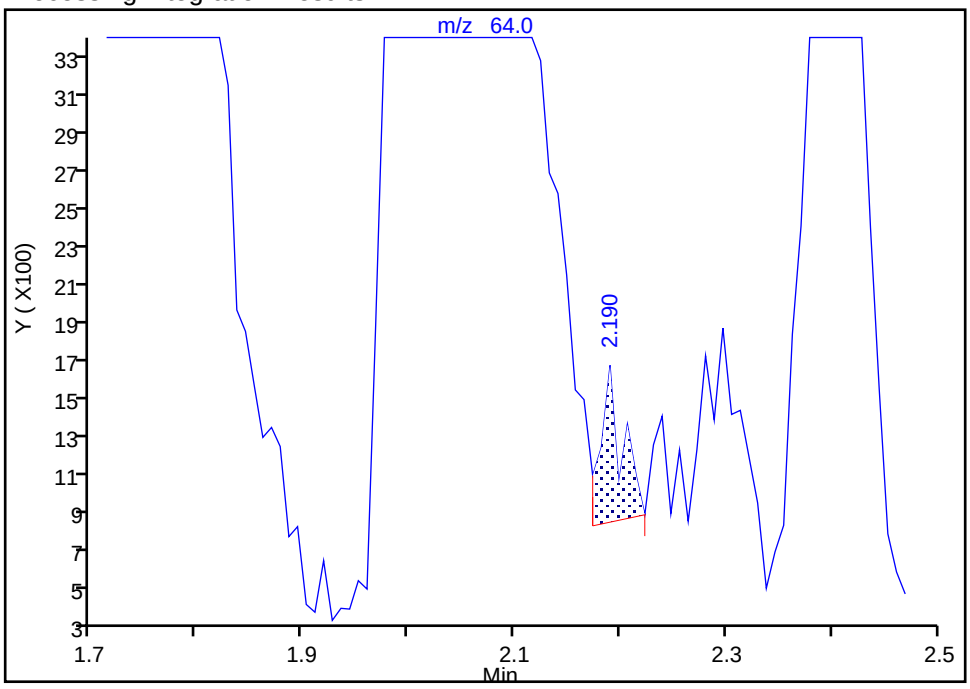
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

6 Chloroethane, CAS: 75-00-3

Signal: 1

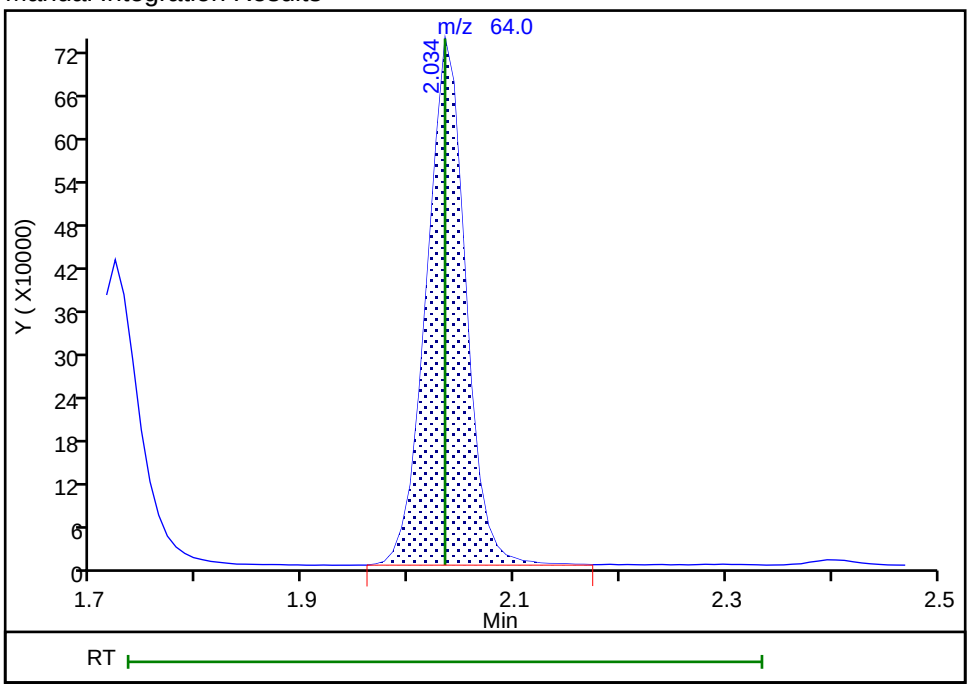
Processing Integration Results

RT: 2.19
Area: 1155
Amount: 0.285202
Amount Units: ug/l



Manual Integration Results

RT: 2.03
Area: 1885005
Amount: 420.0788
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

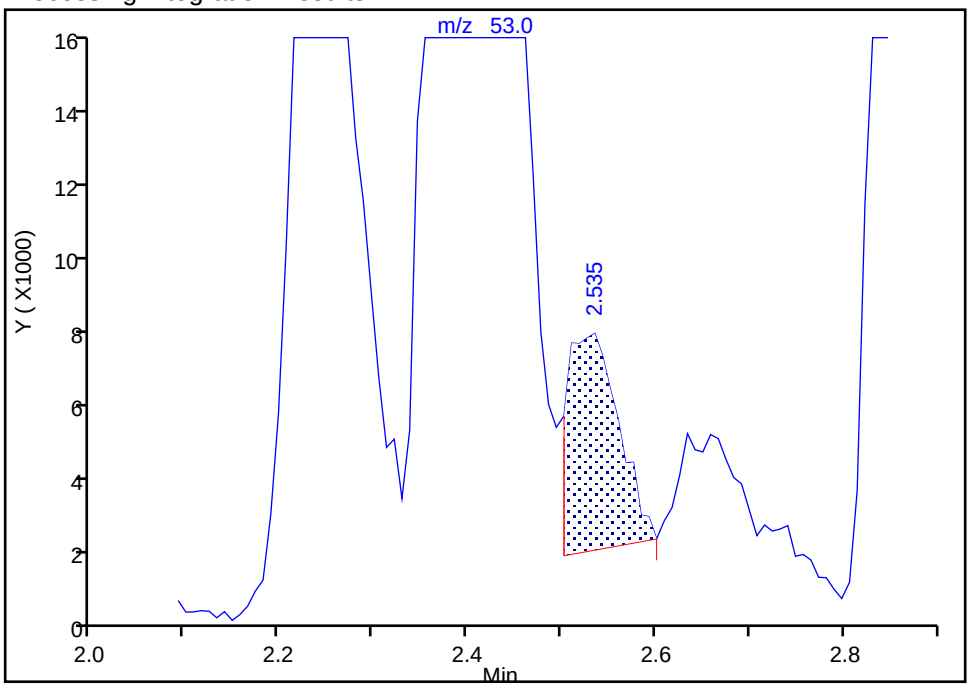
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

12 2-Methyl-1,3-butadiene, CAS: 78-79-5

Signal: 1

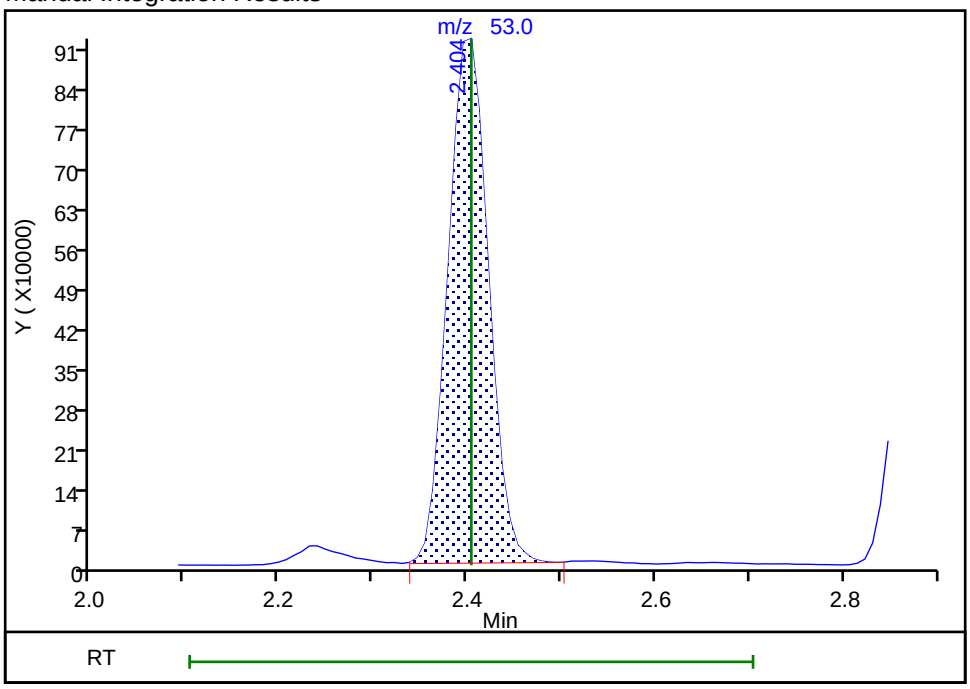
Processing Integration Results

RT: 2.54
Area: 21850
Amount: 4.121589
Amount Units: ug/l



Manual Integration Results

RT: 2.40
Area: 2771350
Amount: 445.7085
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:53:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

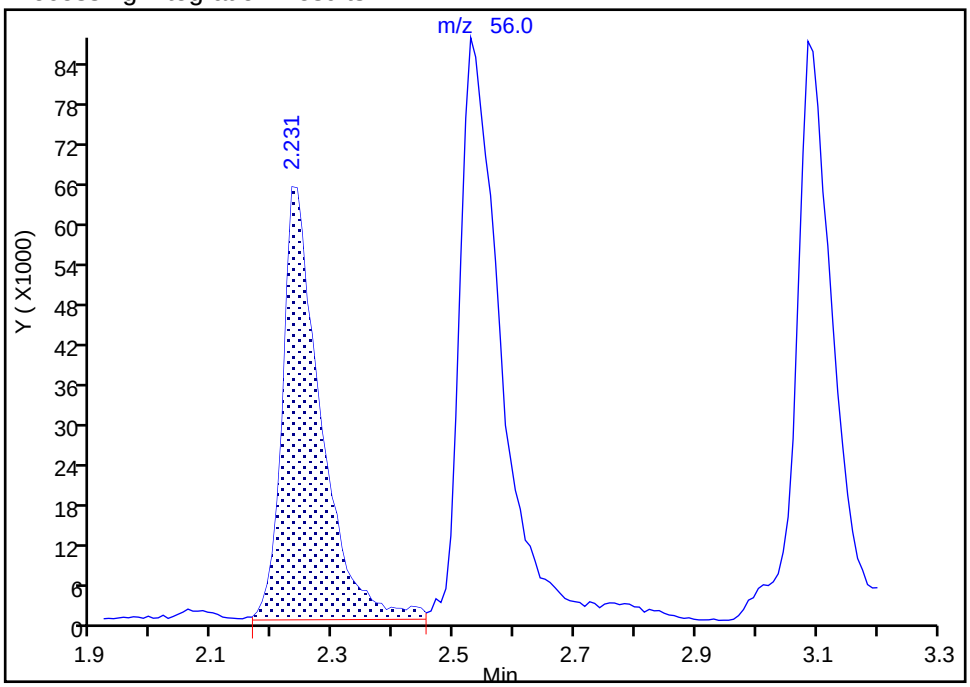
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 Acrolein, CAS: 107-02-8

Signal: 1

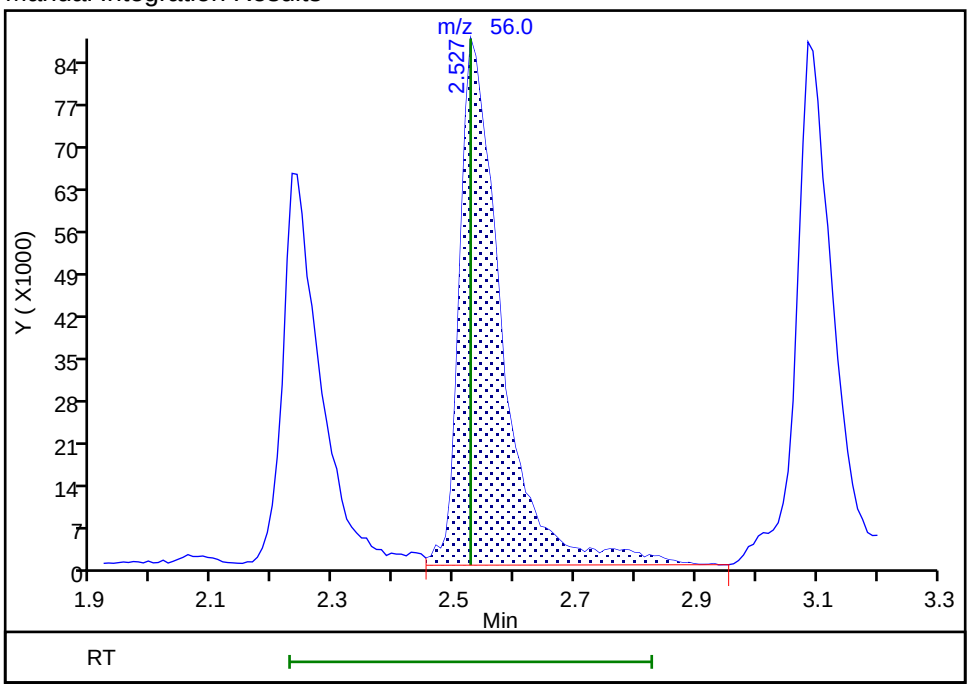
Processing Integration Results

RT: 2.23
Area: 285384
Amount: 251.8015
Amount Units: ug/l



Manual Integration Results

RT: 2.53
Area: 426822
Amount: 373.0186
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:53:27
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

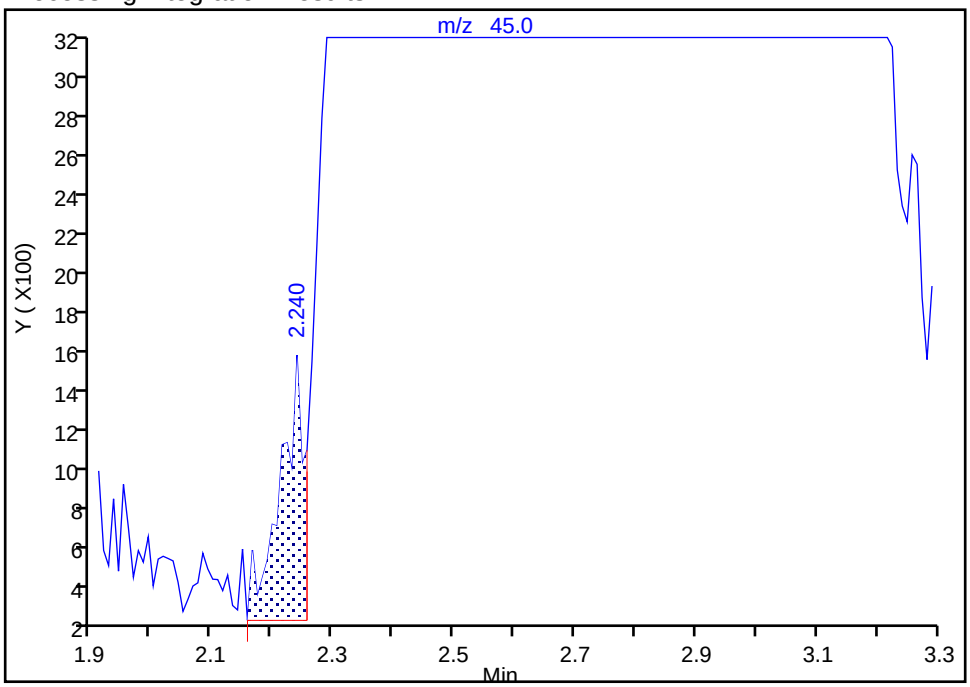
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

20 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

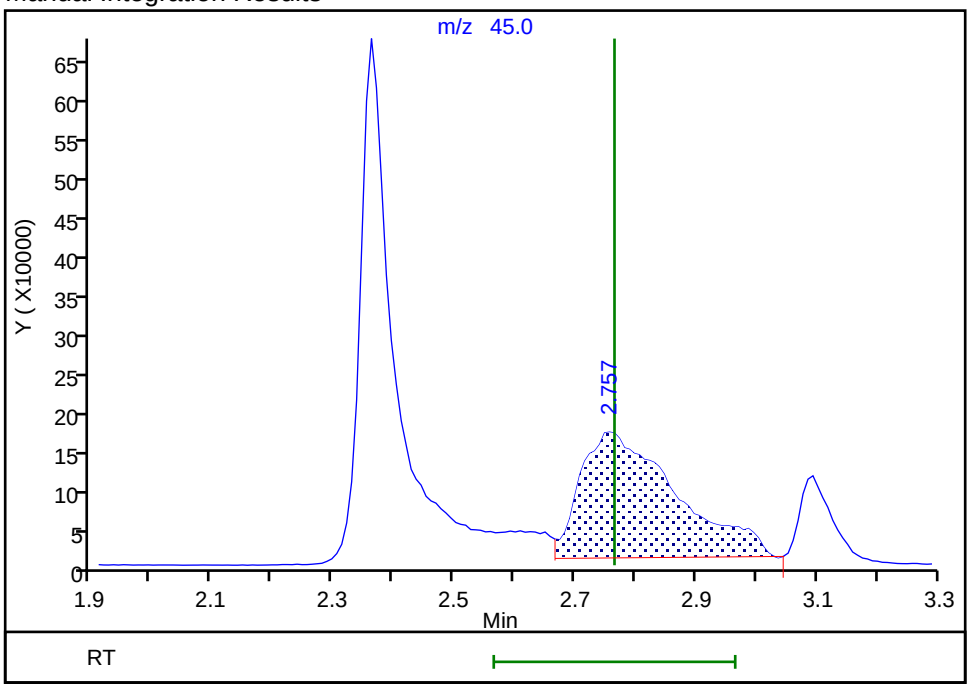
Processing Integration Results

RT: 2.24
Area: 3630
Amount: 17.635921
Amount Units: ug/l



Manual Integration Results

RT: 2.76
Area: 1764764
Amount: 5315.7632
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:53:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

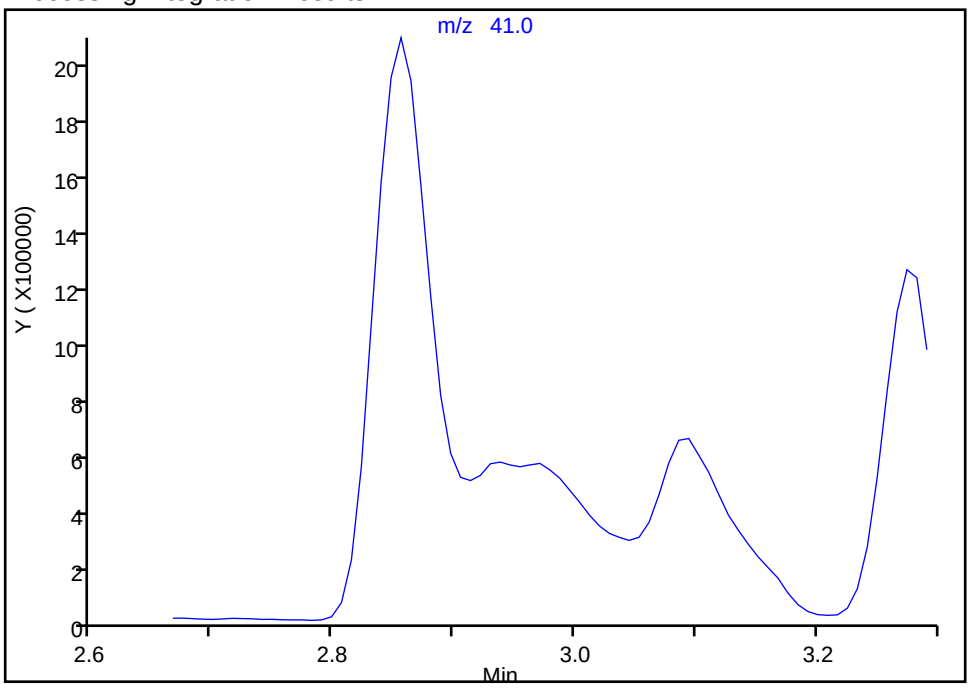
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

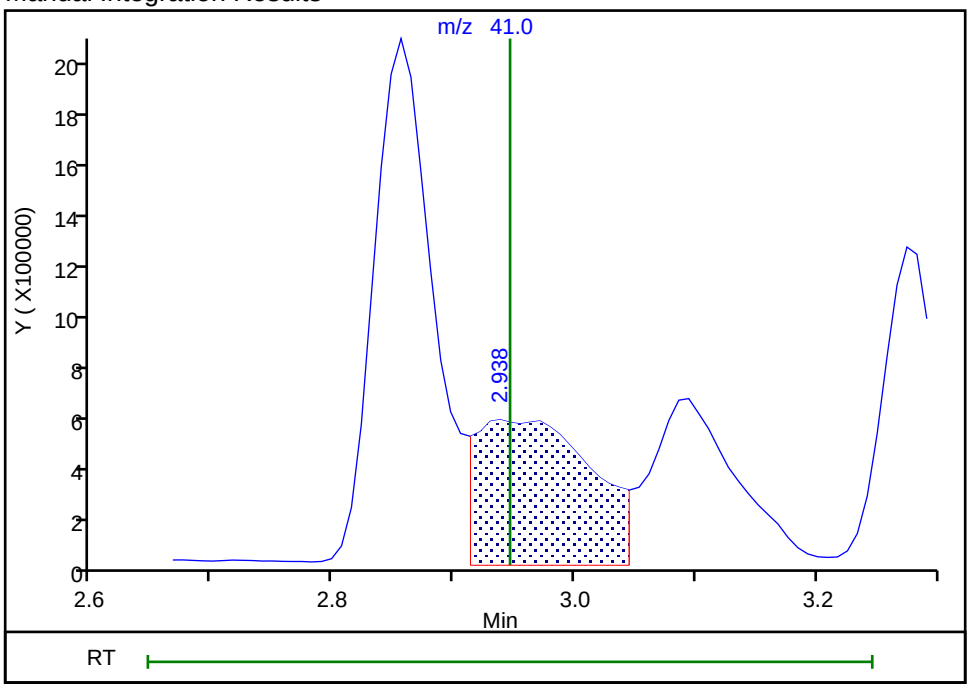
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 3992627
Amount: 3845.4943
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

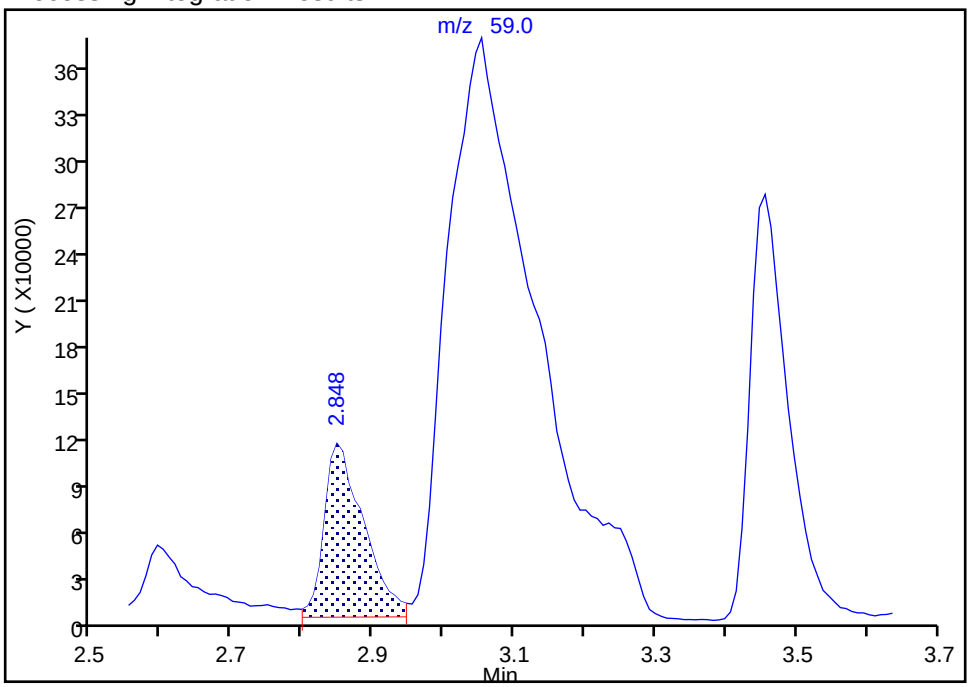
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

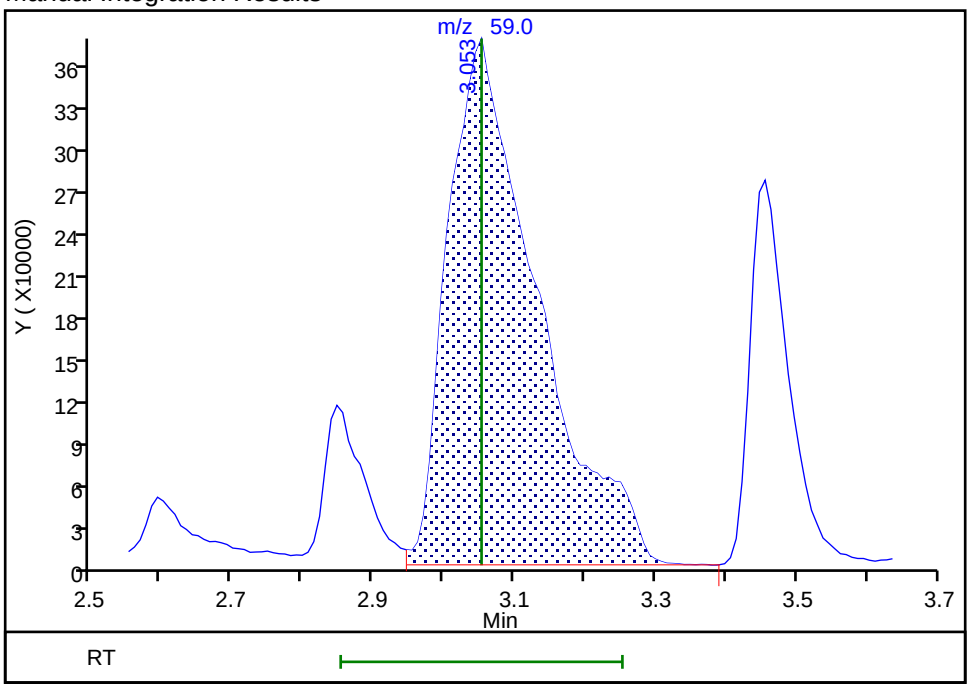
Processing Integration Results

RT: 2.85
Area: 435218
Amount: 664.4906
Amount Units: ug/l



Manual Integration Results

RT: 3.05
Area: 3295456
Amount: 3914.0813
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

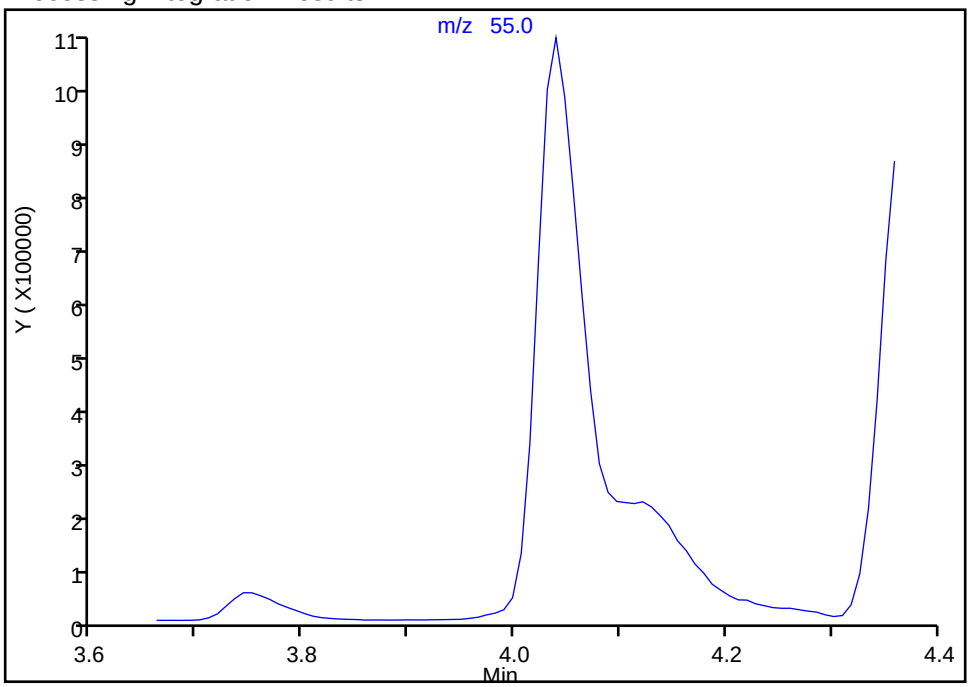
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

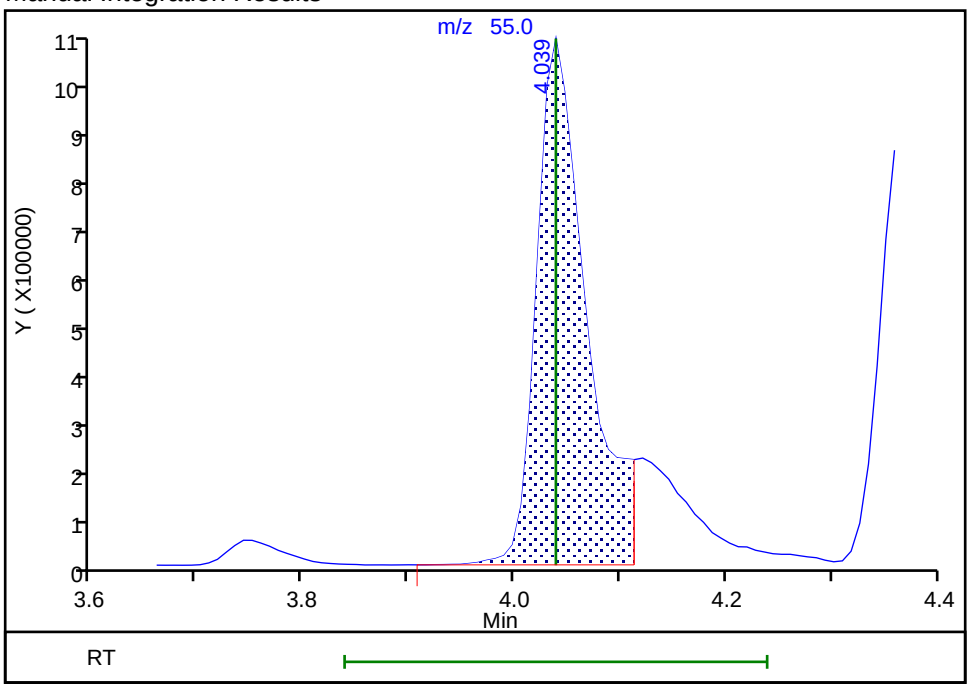
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.04
Area: 3590034
Amount: 509.5774
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

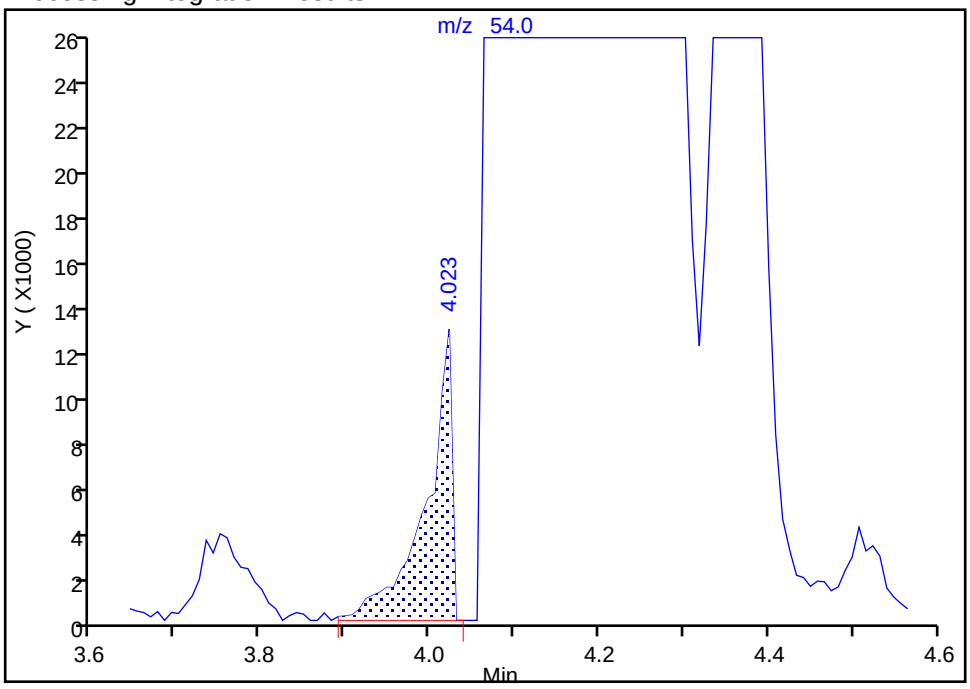
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

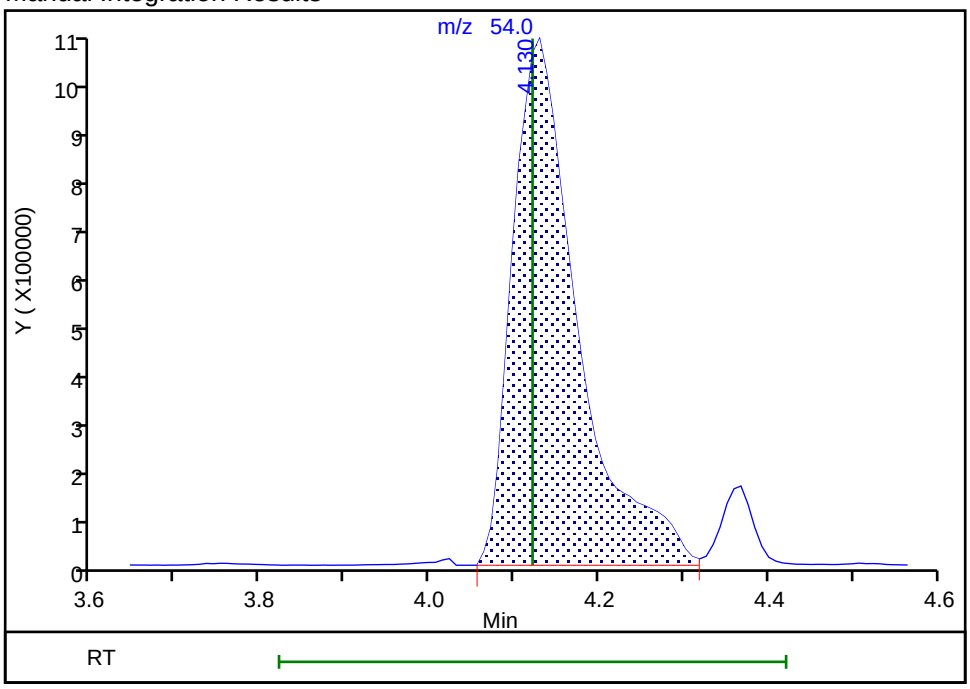
Processing Integration Results

RT: 4.02
Area: 26987
Amount: 29.083529
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 5553057
Amount: 4157.0263
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:53:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

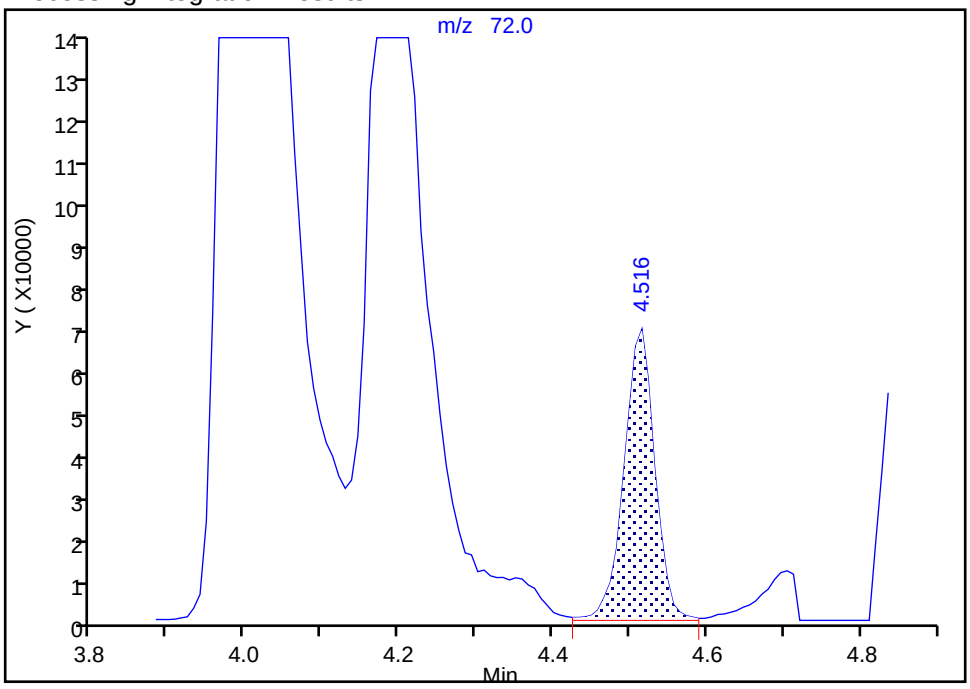
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

46 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

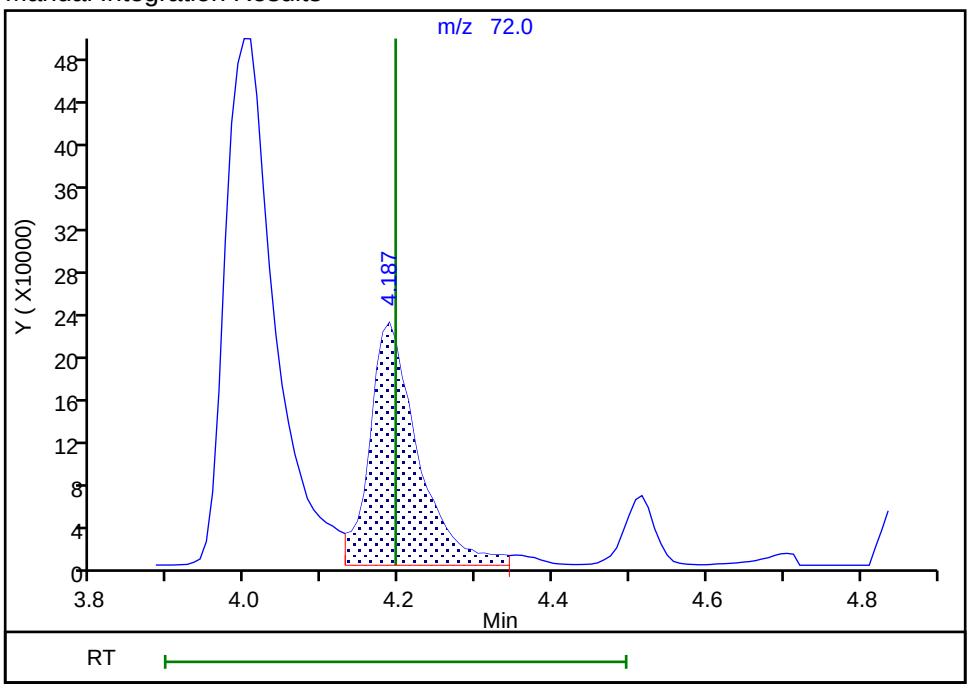
Processing Integration Results

RT: 4.52
Area: 182730
Amount: 164.3516
Amount Units: ug/l



Manual Integration Results

RT: 4.19
Area: 1000564
Amount: 801.6508
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison

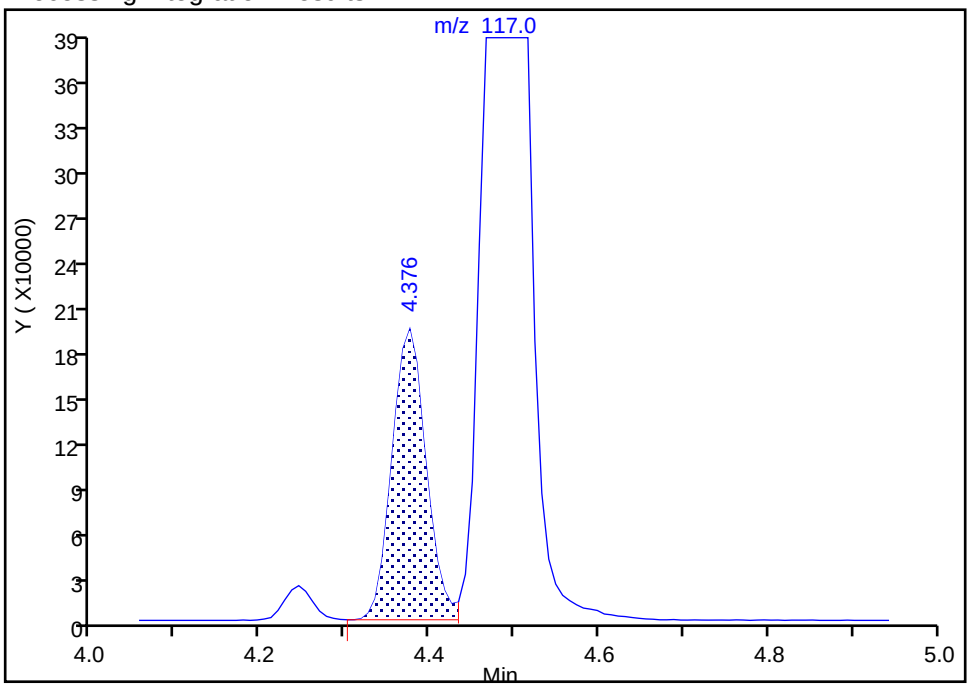
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

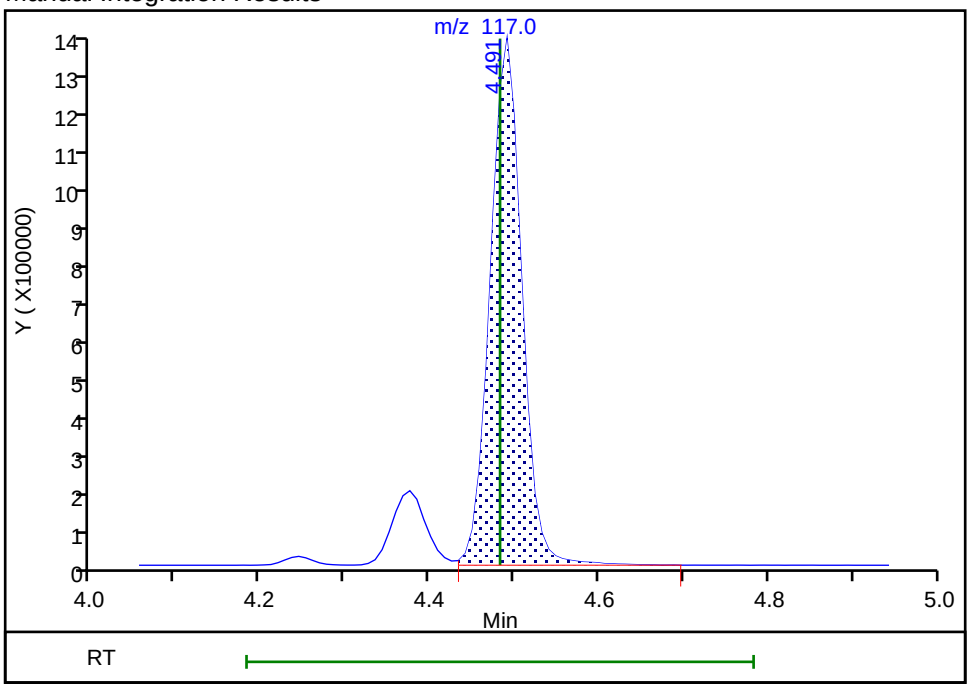
Processing Integration Results

RT: 4.38
Area: 537279
Amount: 81.634188
Amount Units: ug/l



Manual Integration Results

RT: 4.49
Area: 3511595
Amount: 463.7004
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

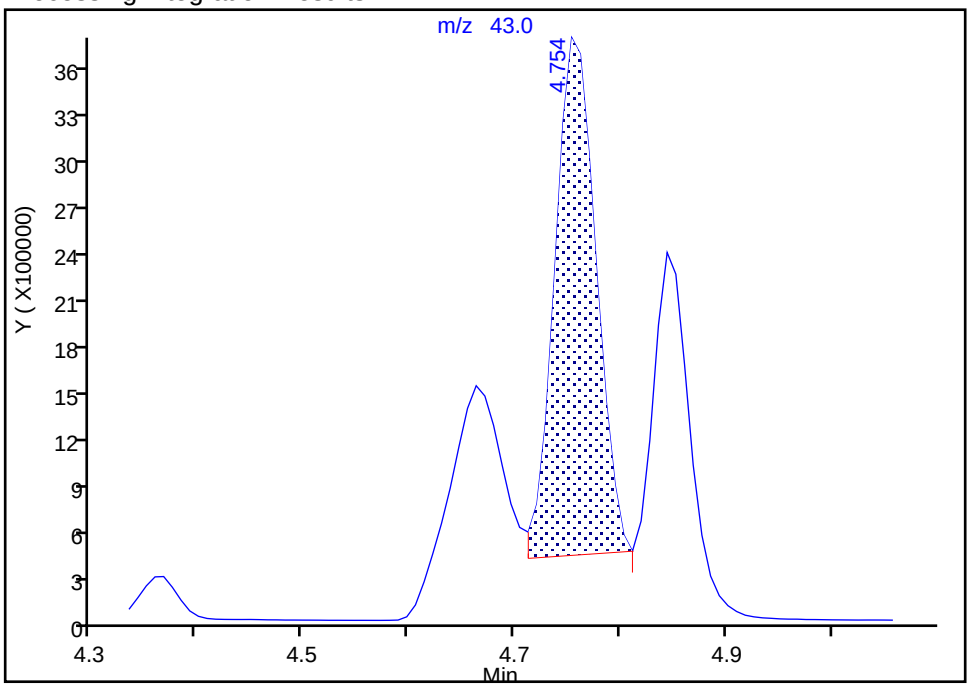
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

54 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

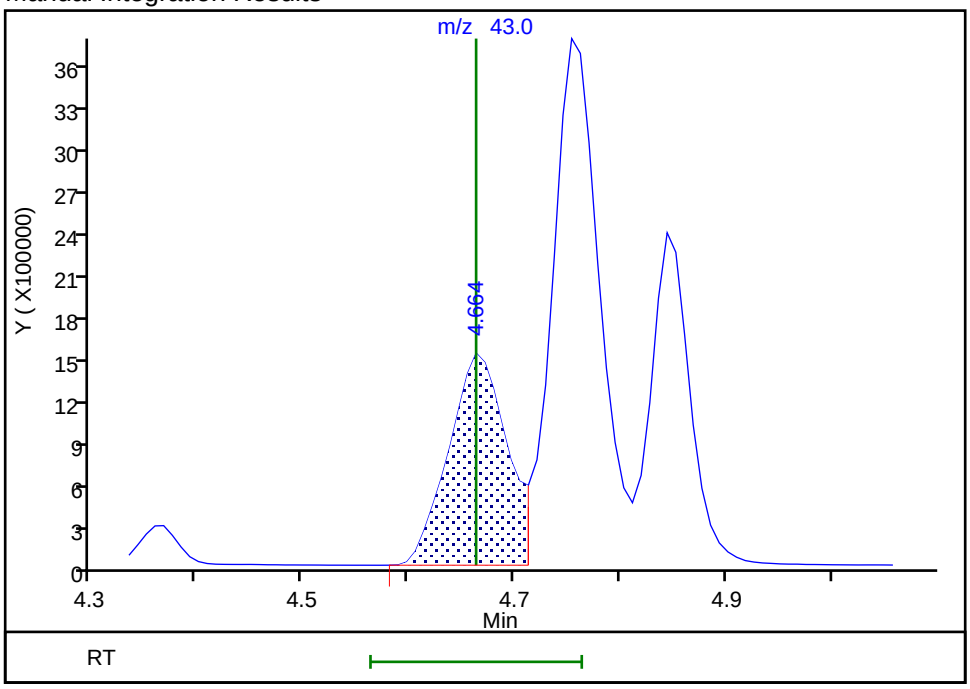
Processing Integration Results

RT: 4.75
Area: 8995097
Amount: 12501
Amount Units: ug/l



Manual Integration Results

RT: 4.66
Area: 5819427
Amount: 12473
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

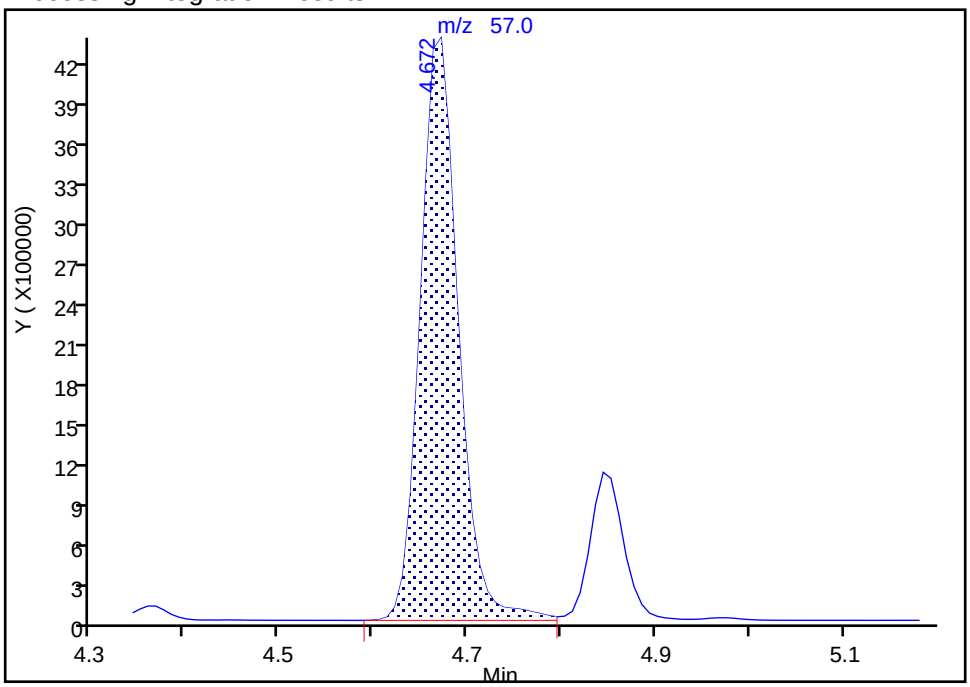
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 n-Heptane, CAS: 142-82-5

Signal: 1

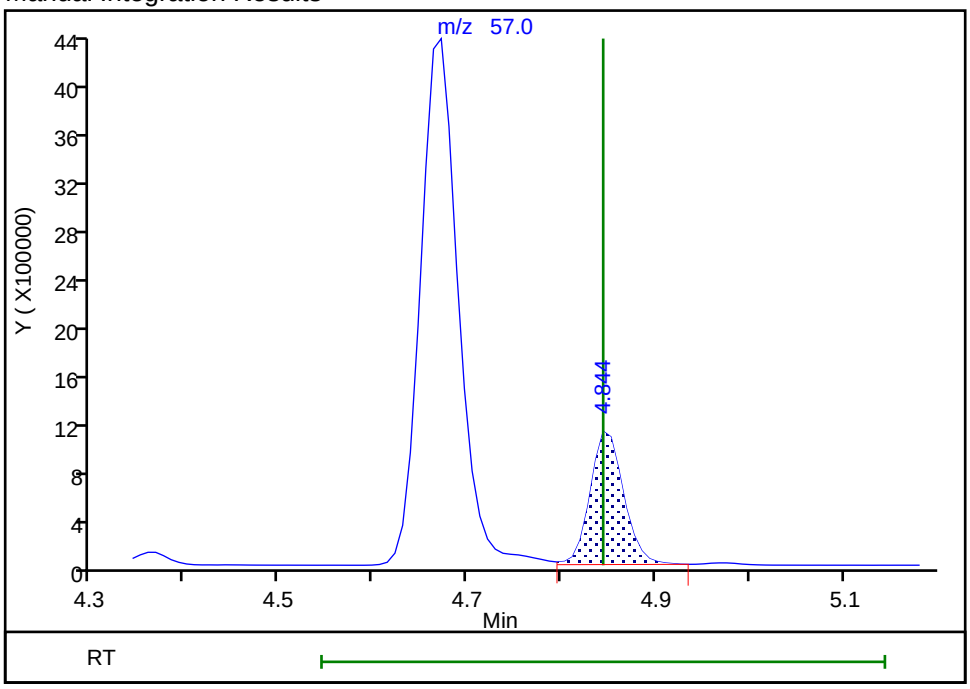
Processing Integration Results

RT: 4.67
Area: 12129618
Amount: 500.4538
Amount Units: ug/l



Manual Integration Results

RT: 4.84
Area: 2690035
Amount: 472.7999
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

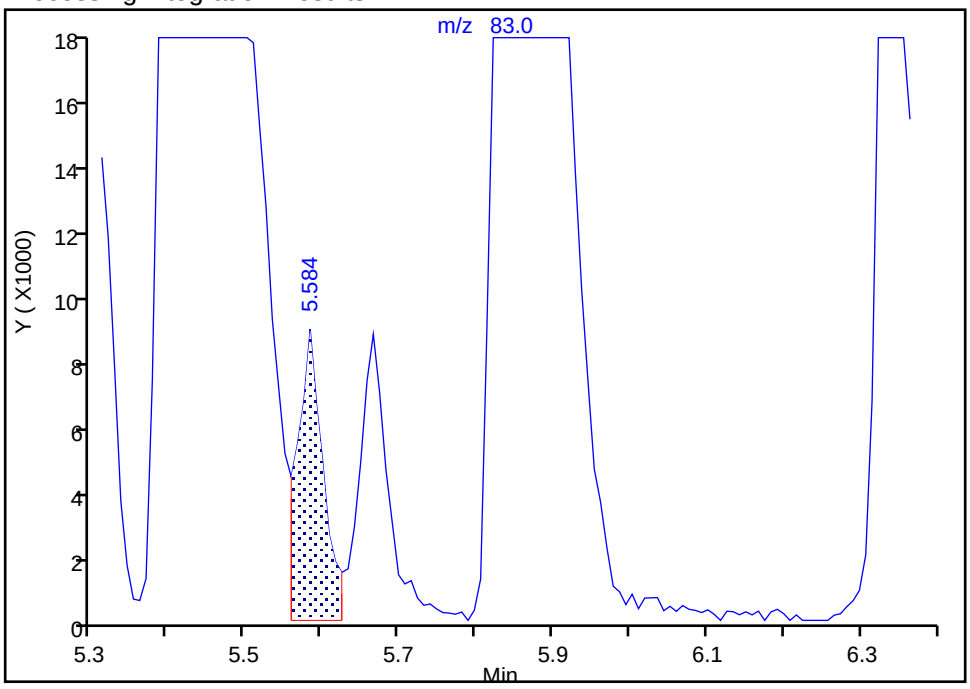
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

72 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

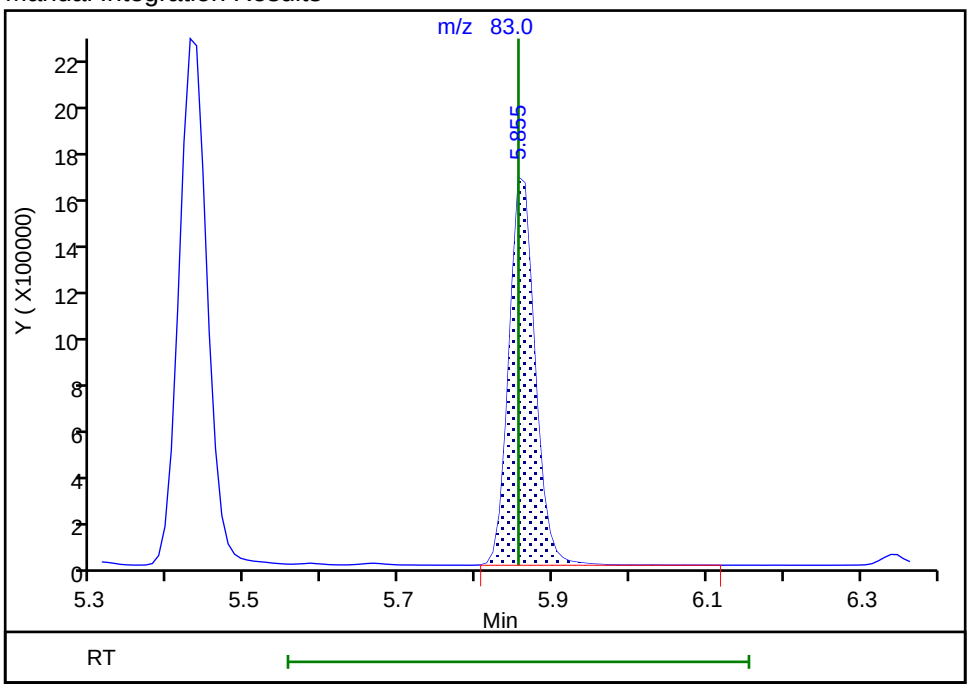
Processing Integration Results

RT: 5.58
Area: 20951
Amount: 3.236370
Amount Units: ug/l



Manual Integration Results

RT: 5.86
Area: 3852876
Amount: 497.0863
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:55:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

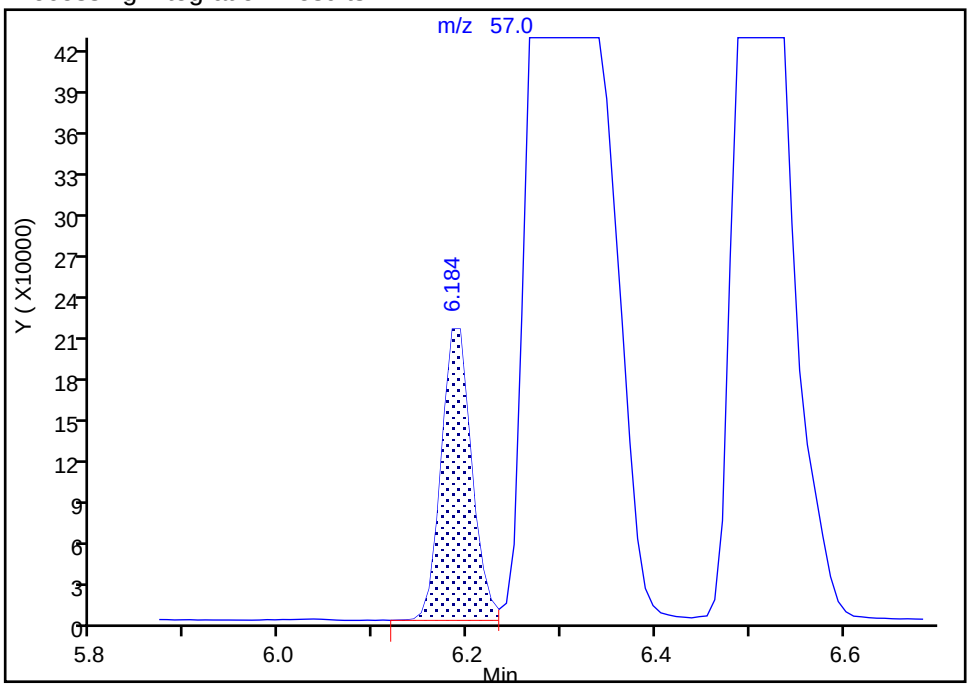
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

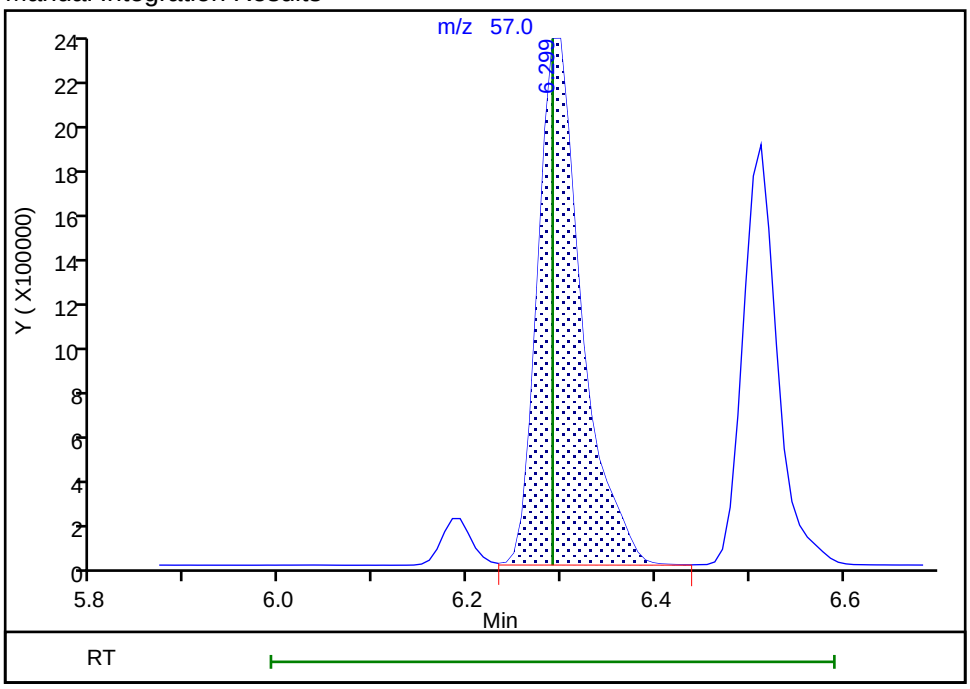
Processing Integration Results

RT: 6.18
Area: 476654
Amount: 655.3341
Amount Units: ug/l



Manual Integration Results

RT: 6.30
Area: 7792627
Amount: 8820.8929
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

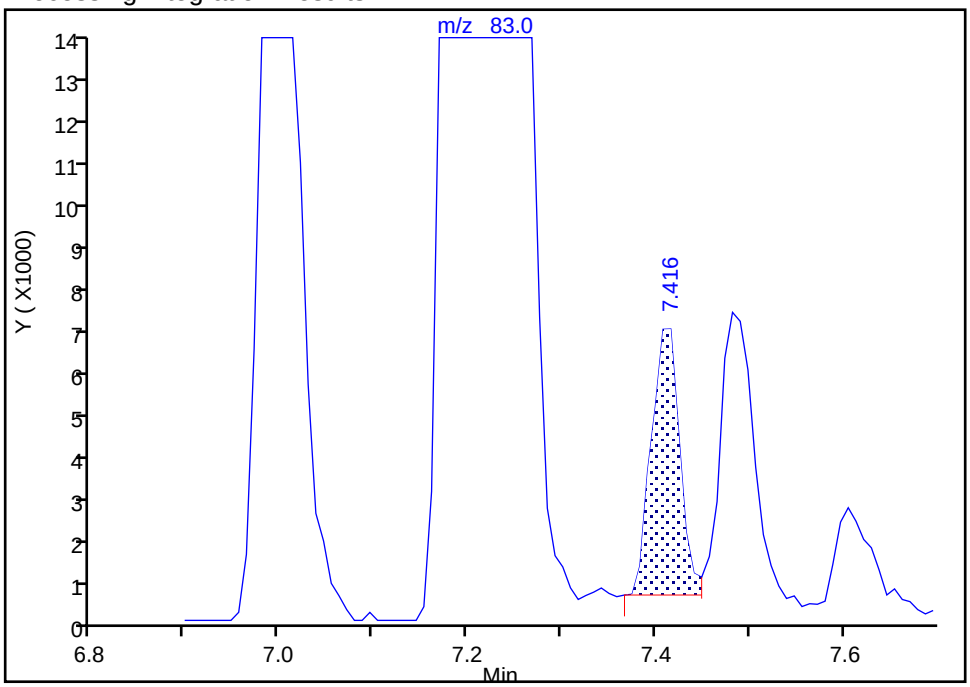
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

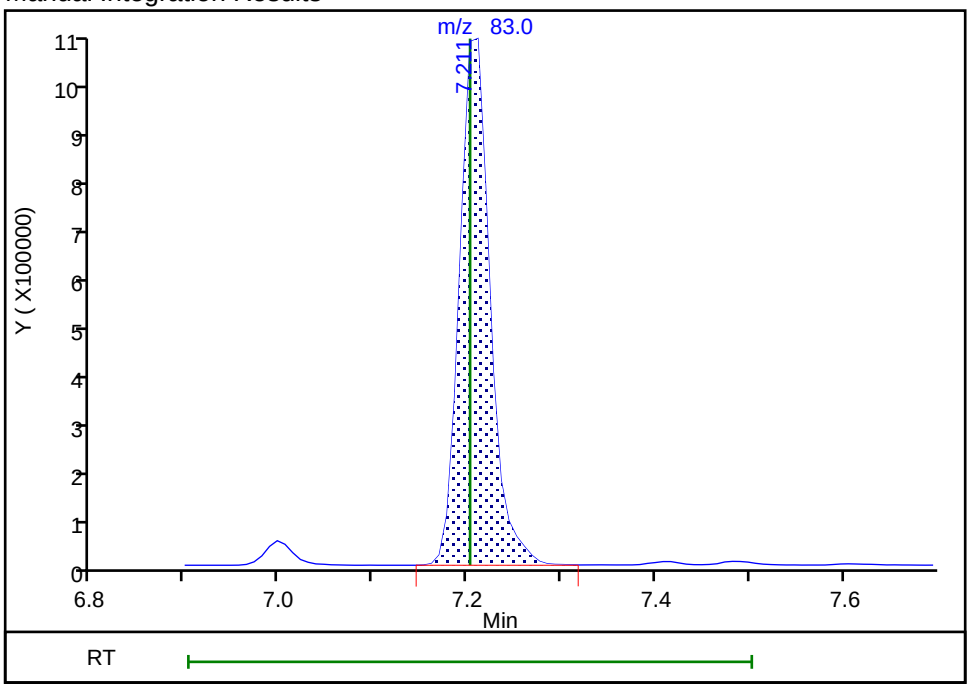
Processing Integration Results

RT: 7.42
Area: 13503
Amount: 3.511434
Amount Units: ug/l



Manual Integration Results

RT: 7.21
Area: 2274052
Amount: 494.4715
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

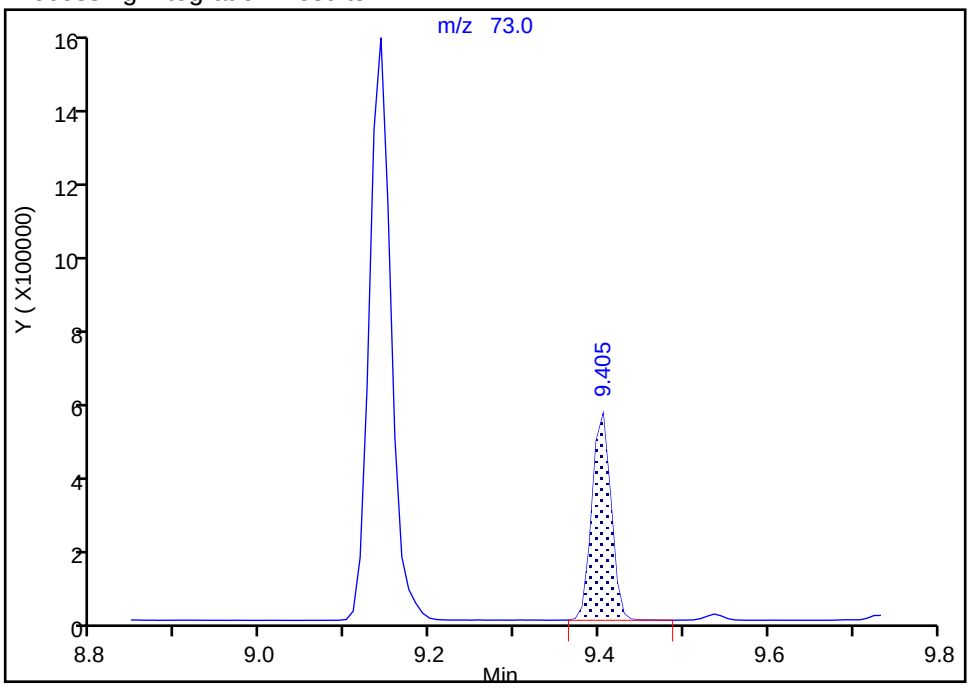
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

94 n-Butyl acrylate, CAS: 141-32-2

Signal: 1

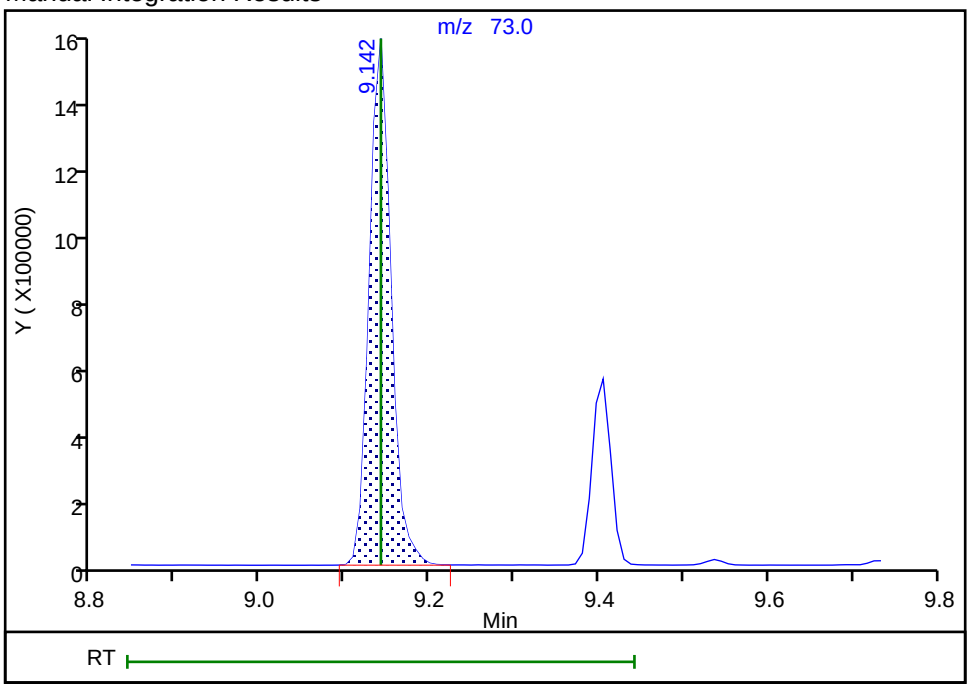
Processing Integration Results

RT: 9.40
Area: 848255
Amount: 194.1368
Amount Units: ug/l



Manual Integration Results

RT: 9.14
Area: 2742471
Amount: 548.4094
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:27
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison

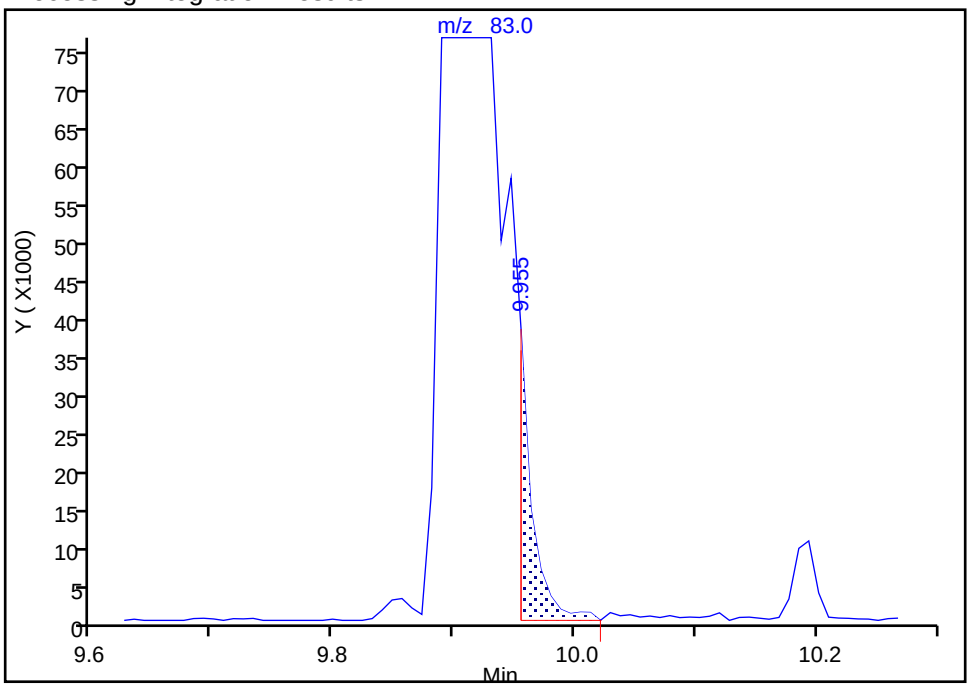
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

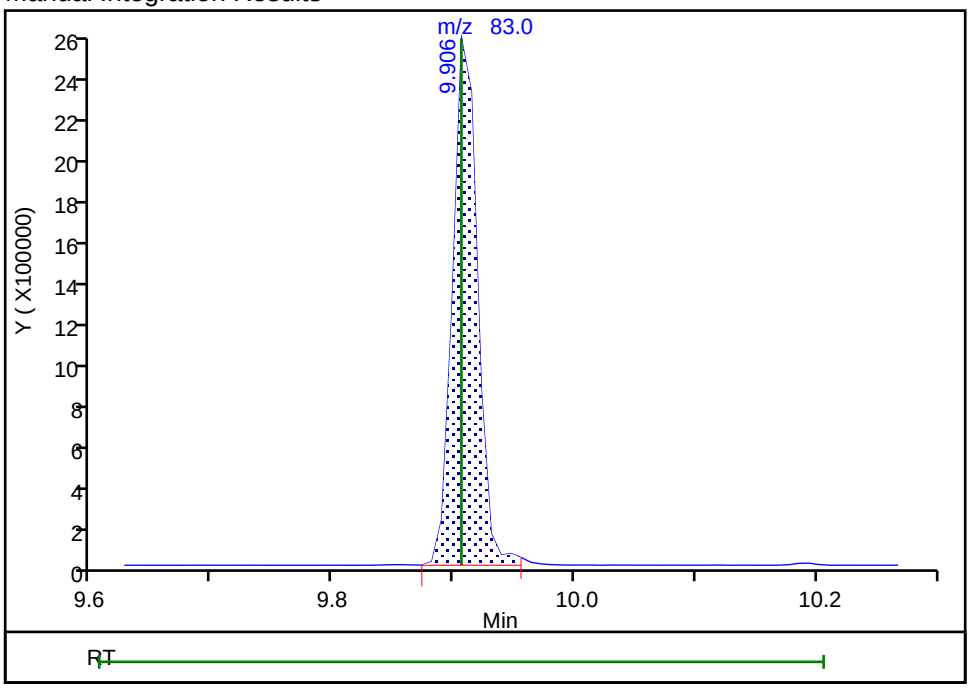
Processing Integration Results

RT: 9.96
Area: 33056
Amount: 5.281152
Amount Units: ug/l



Manual Integration Results

RT: 9.91
Area: 3721412
Amount: 496.9375
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:55:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

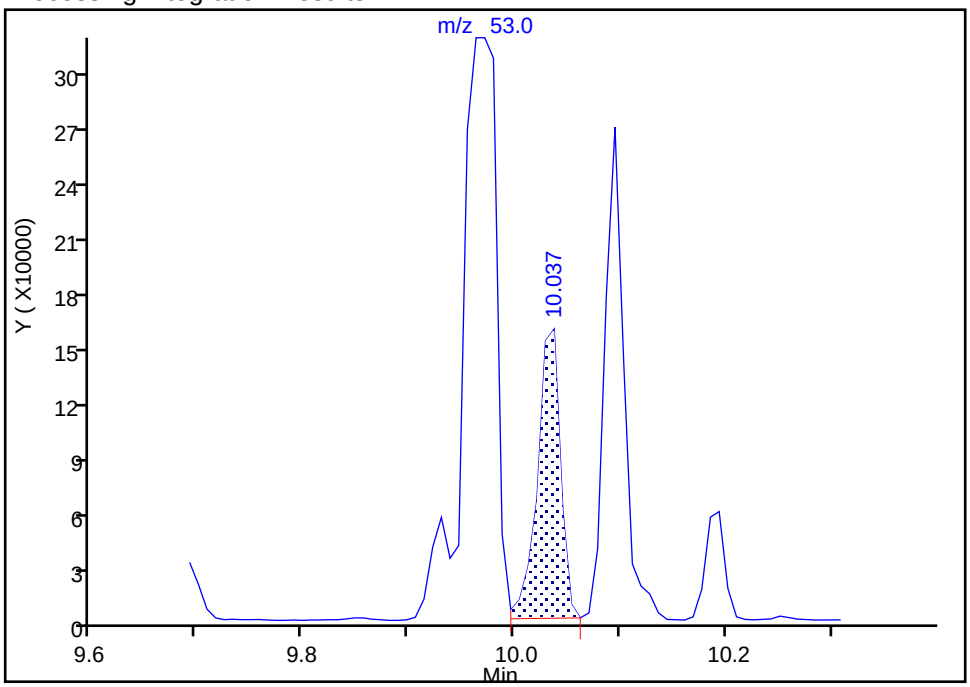
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

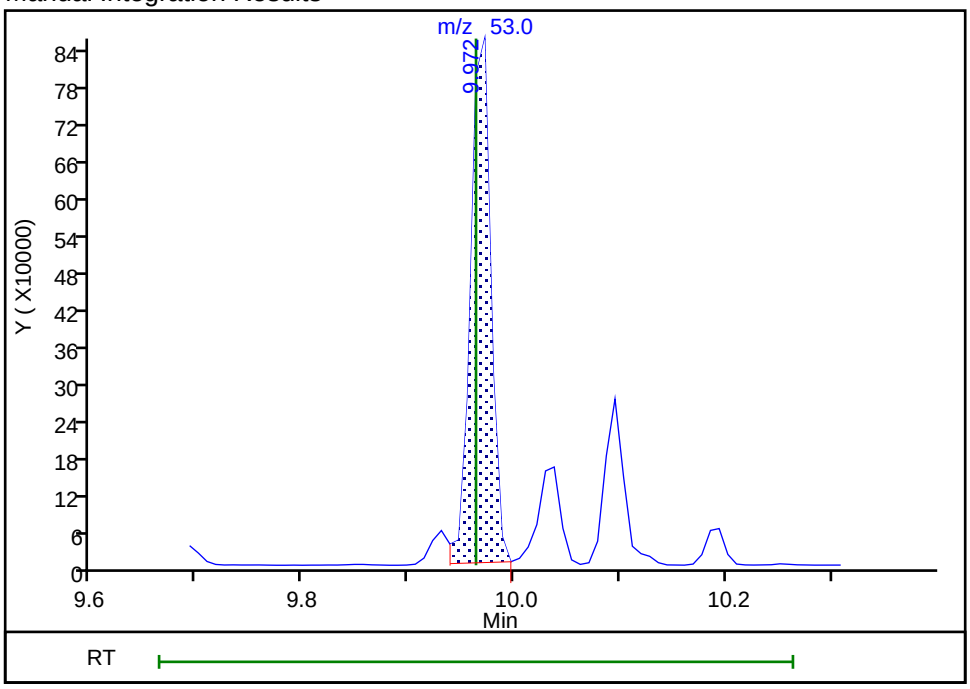
Processing Integration Results

RT: 10.04
Area: 238967
Amount: 133.0872
Amount Units: ug/l



Manual Integration Results

RT: 9.97
Area: 1143445
Amount: 545.2609
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

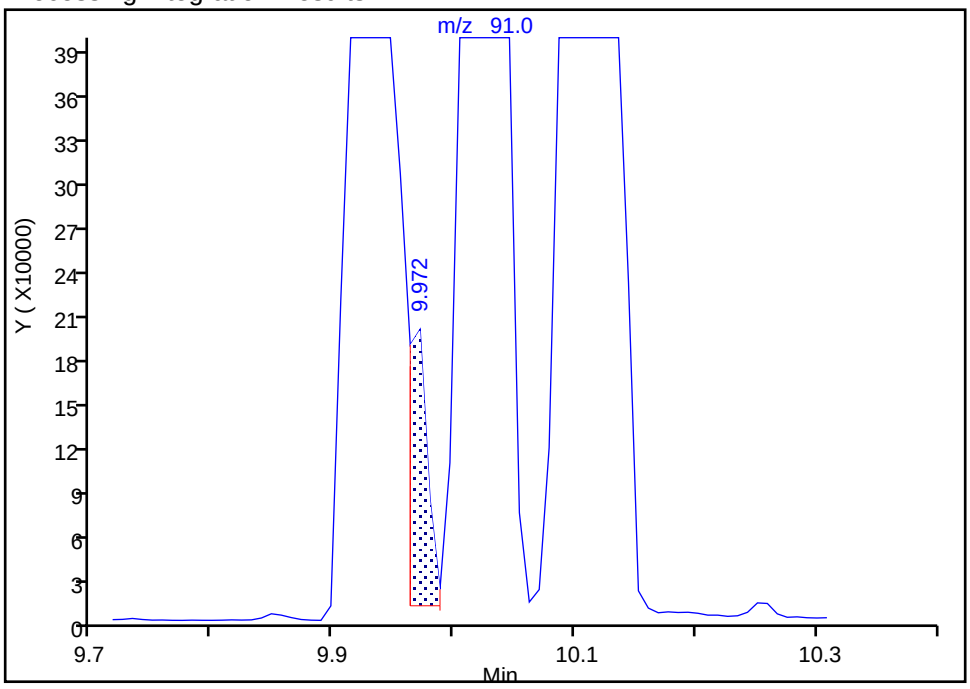
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

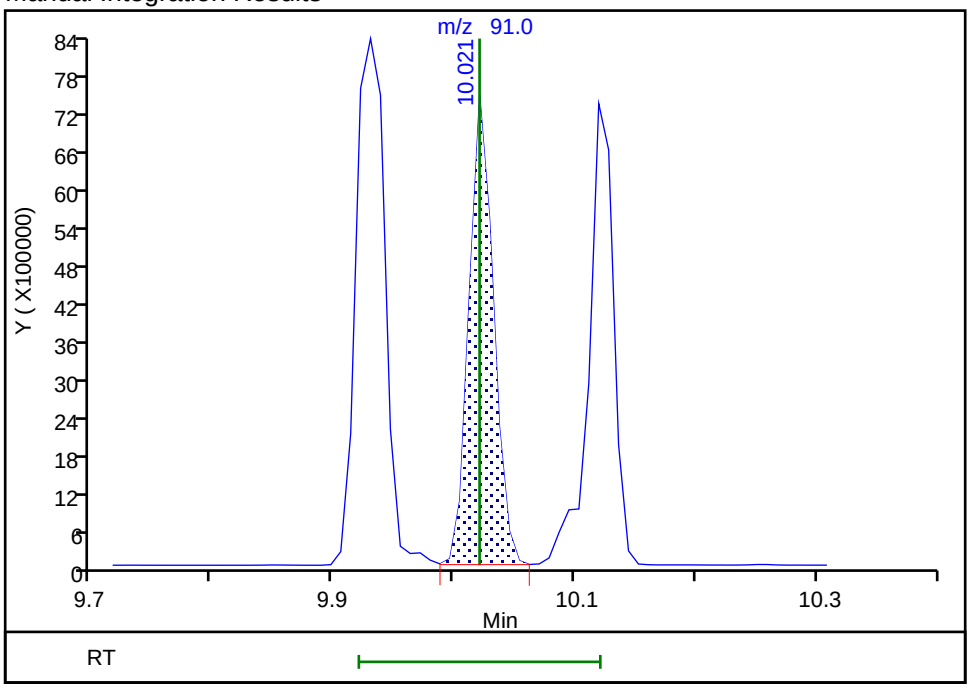
Processing Integration Results

RT: 9.97
Area: 221094
Amount: 12.272360
Amount Units: ug/l



Manual Integration Results

RT: 10.02
Area: 10532320
Amount: 490.9559
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison

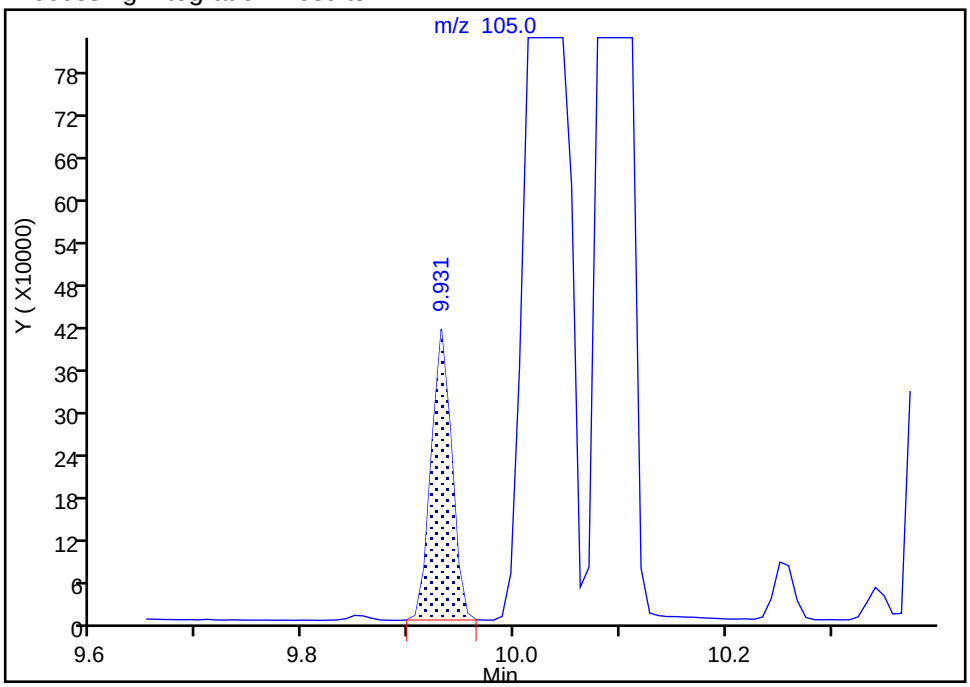
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

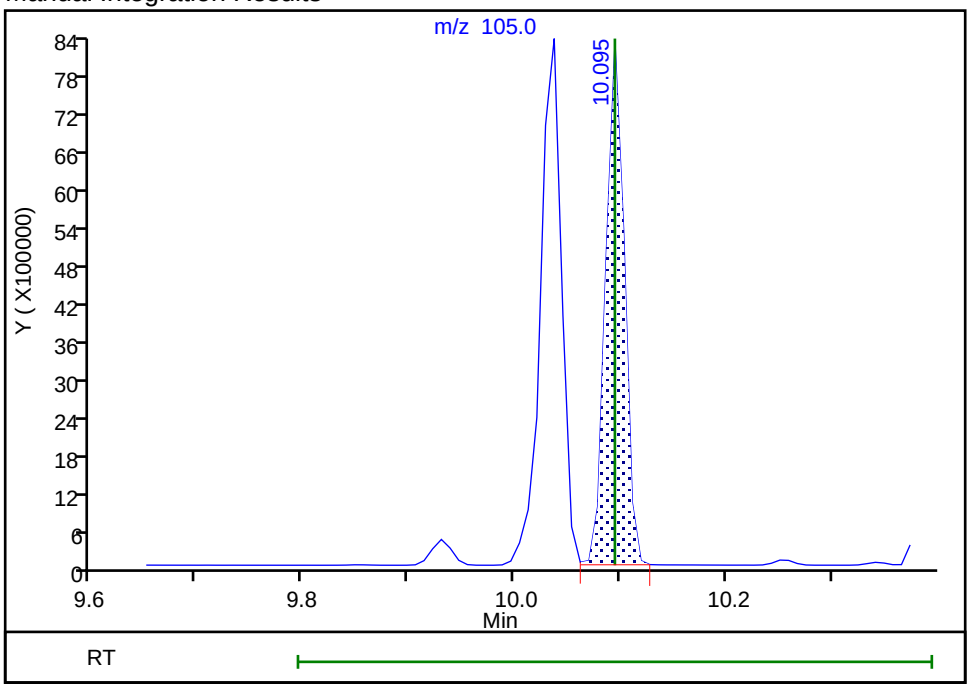
Processing Integration Results

RT: 9.93
Area: 549011
Amount: 30.524743
Amount Units: ug/l



Manual Integration Results

RT: 10.10
Area: 10217959
Amount: 481.7803
Amount Units: ug/l



Reviewer: baronm, 23-Nov-2021 20:54:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

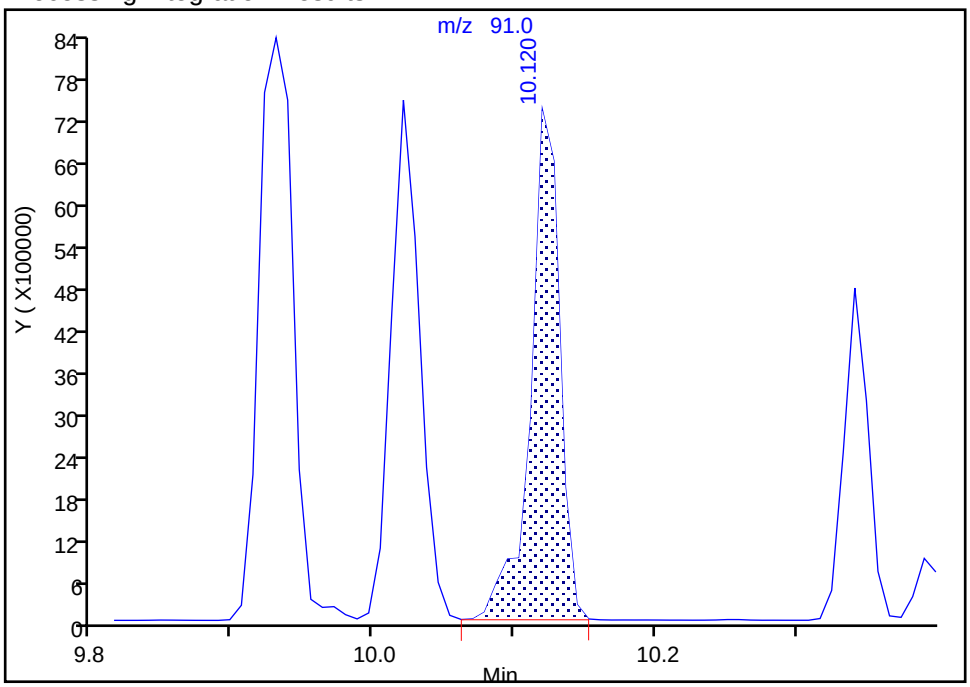
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

109 4-Chlorotoluene, CAS: 106-43-4

Signal: 1

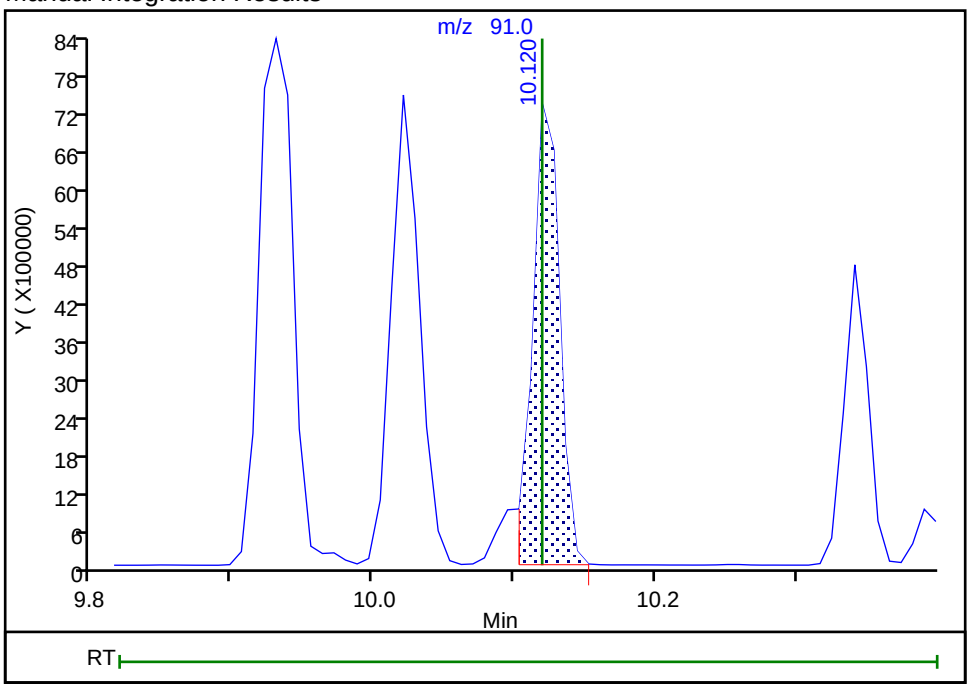
Processing Integration Results

RT: 10.12
Area: 10544837
Amount: 517.1215
Amount Units: ug/l



Manual Integration Results

RT: 10.12
Area: 9798897
Amount: 486.4724
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:03:35
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

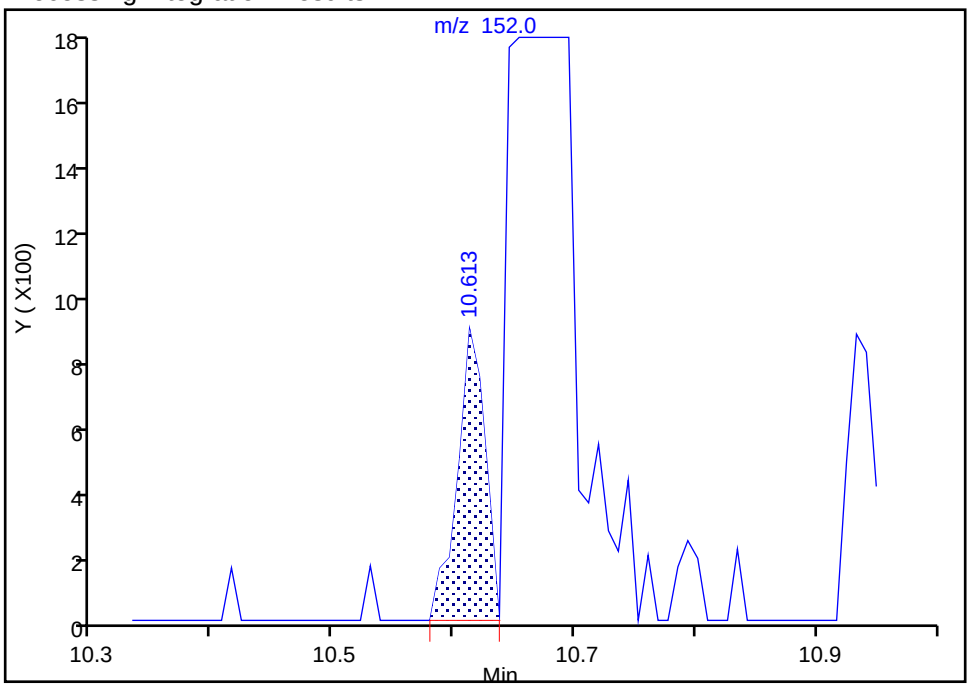
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 116 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

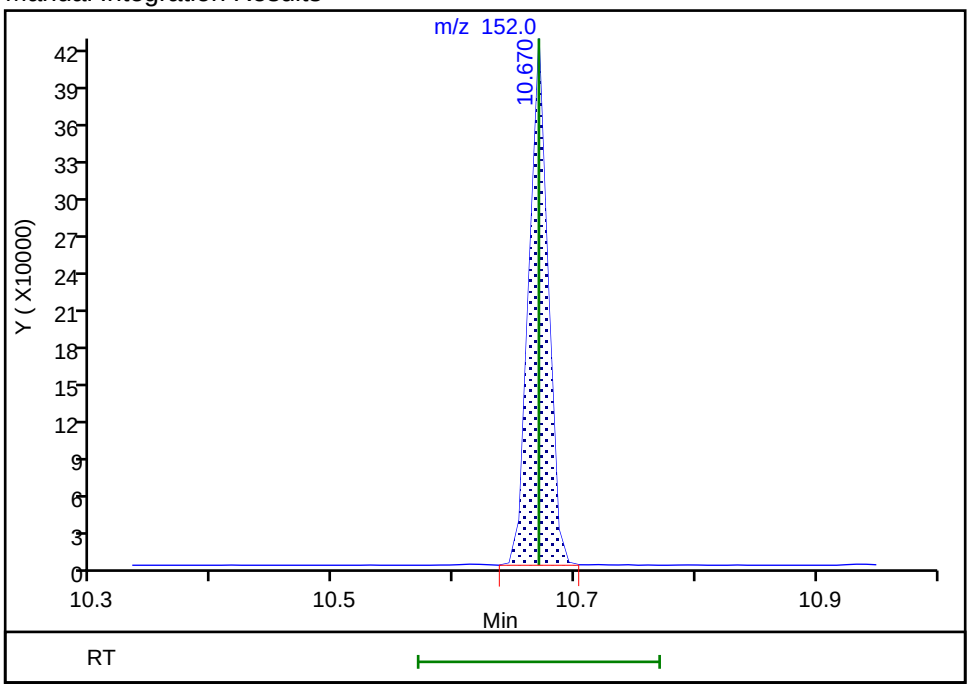
Processing Integration Results

RT: 10.61
Area: 1362
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 10.67
Area: 460084
Amount: 50.000000
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:19:33
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

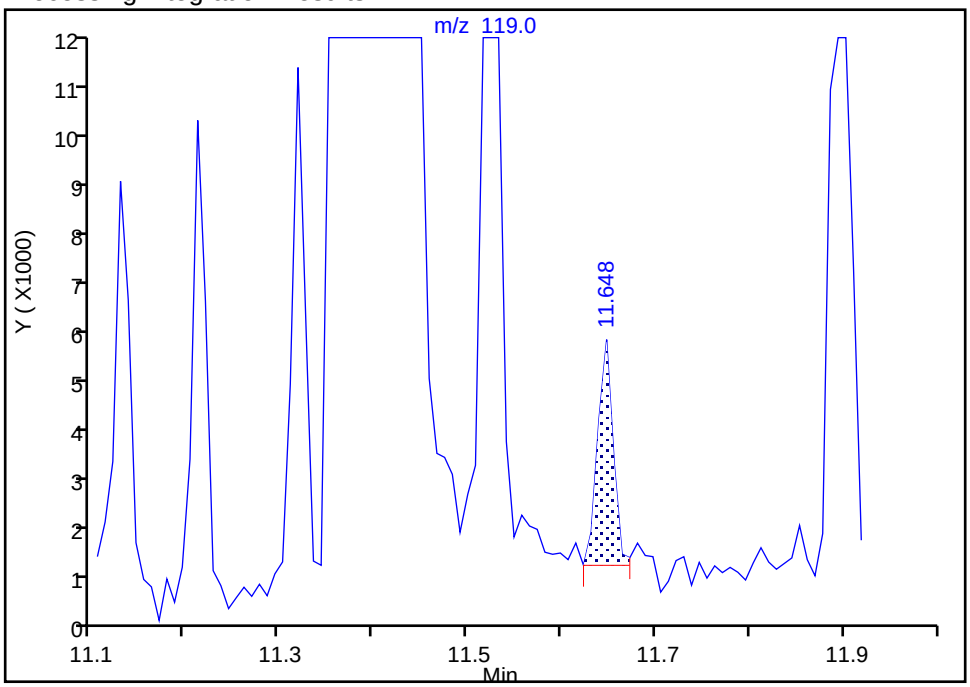
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

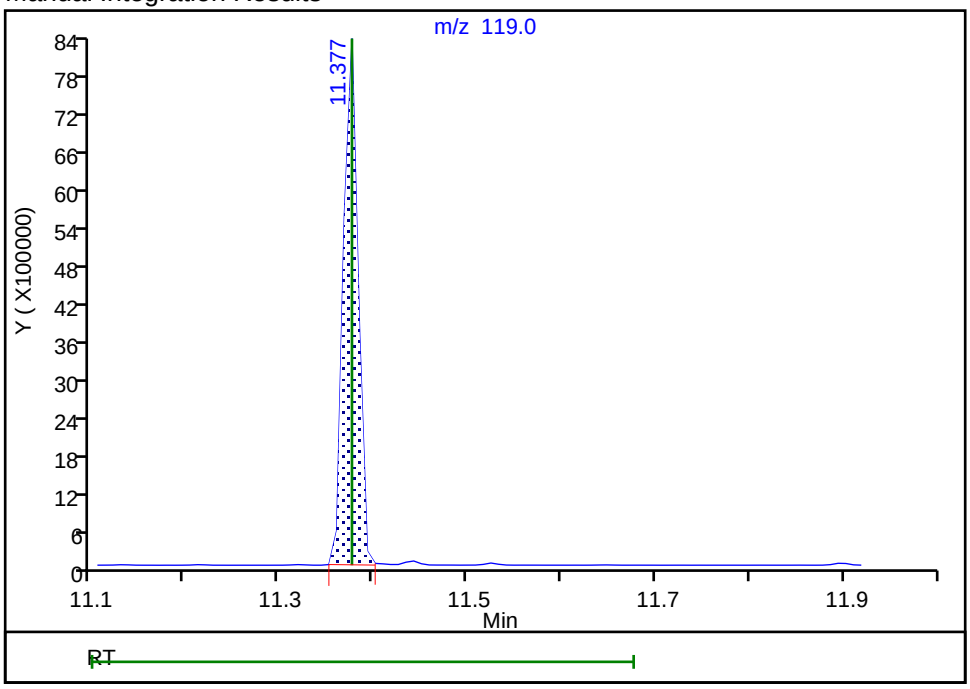
Processing Integration Results

RT: 11.65
Area: 4755
Amount: 0.242754
Amount Units: ug/l



Manual Integration Results

RT: 11.38
Area: 9063794
Amount: 400.9210
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

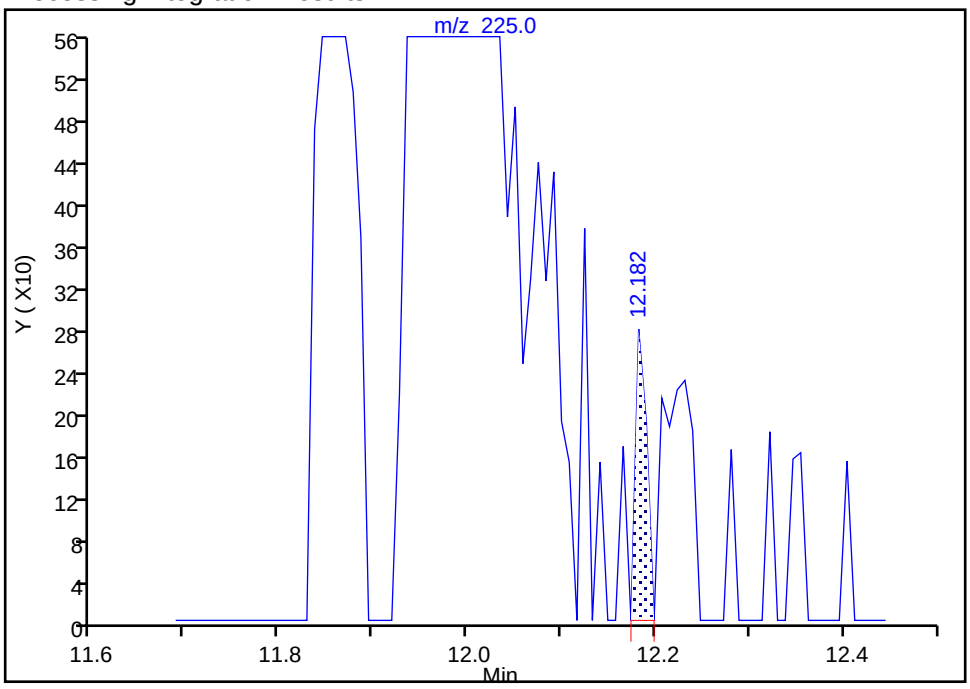
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

128 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

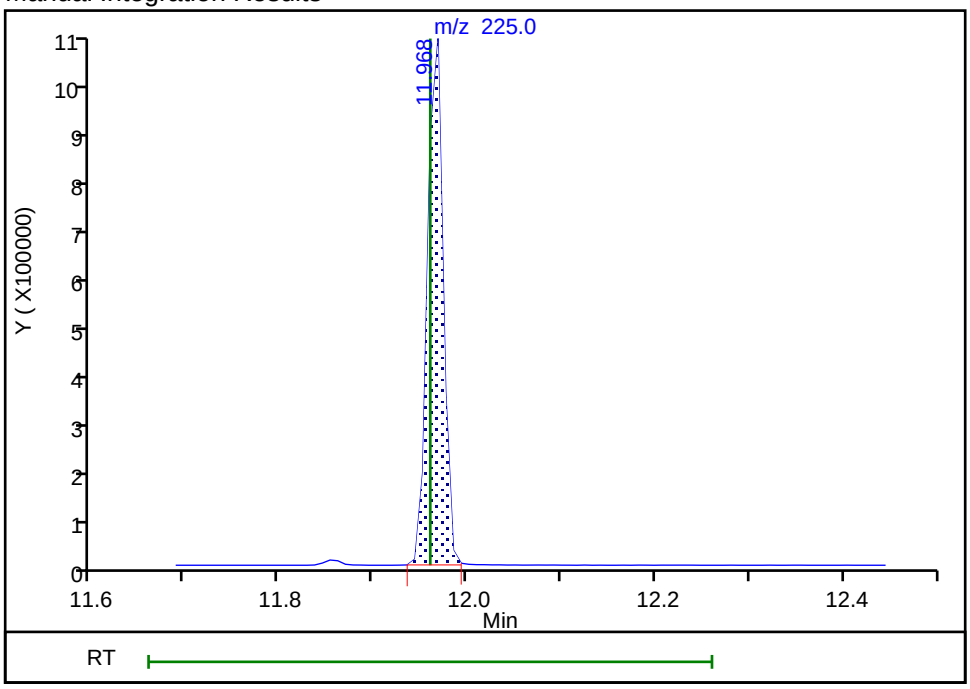
Processing Integration Results

RT: 12.18
Area: 230
Amount: 0.084443
Amount Units: ug/l



Manual Integration Results

RT: 11.97
Area: 1173832
Amount: 376.8421
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

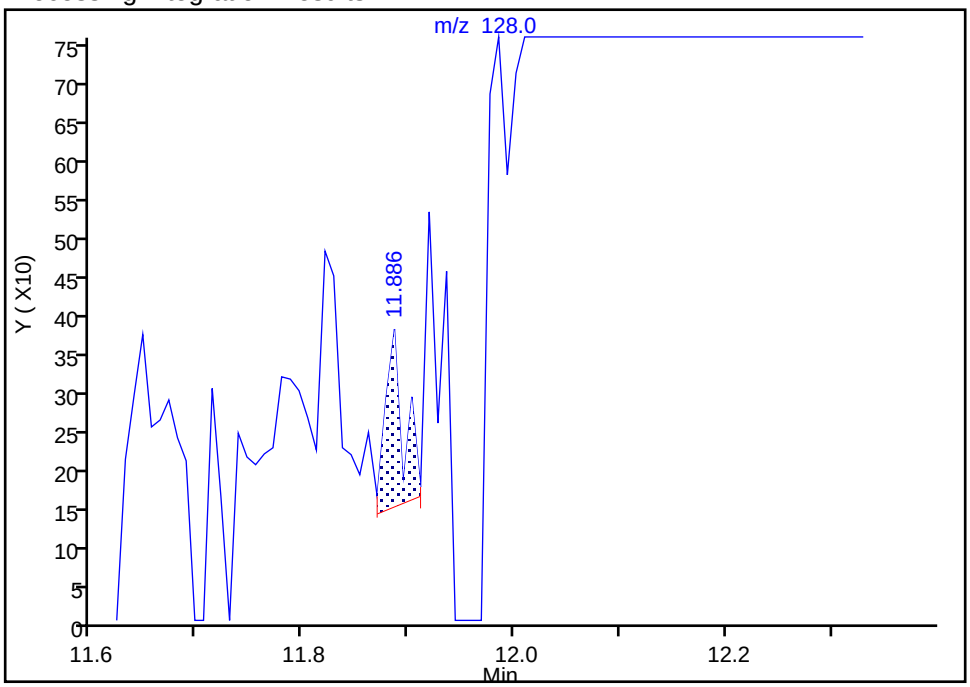
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D
Injection Date: 23-Nov-2021 14:57:30 Instrument ID: CVOAMS6
Lims ID: STD500
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

129 Naphthalene, CAS: 91-20-3

Signal: 1

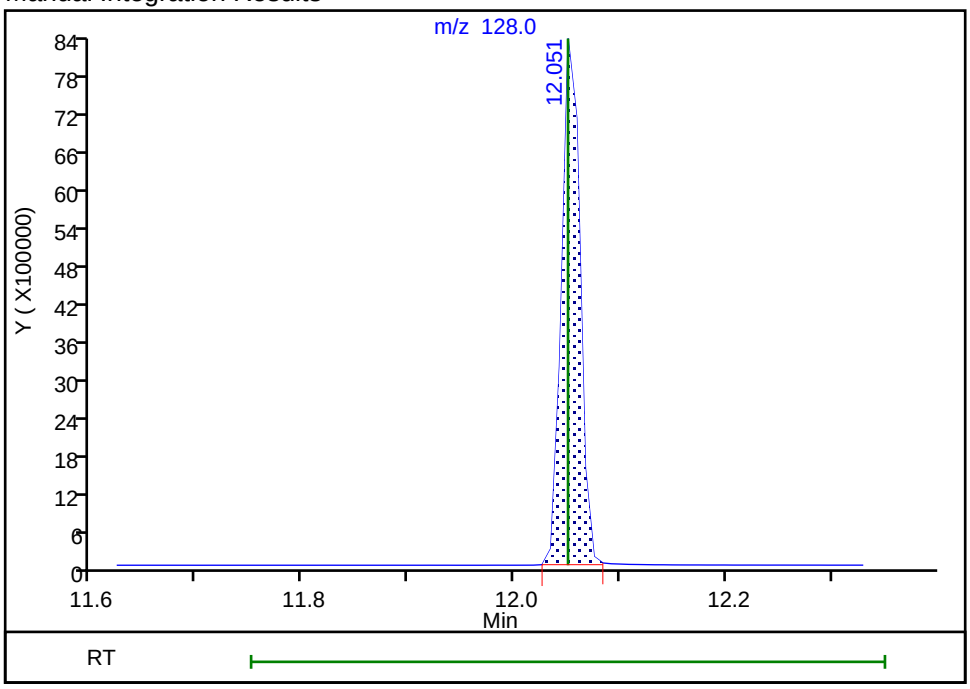
Processing Integration Results

RT: 11.89
Area: 280
Amount: 0.013491
Amount Units: ug/l



Manual Integration Results

RT: 12.05
Area: 10154427
Amount: 420.6576
Amount Units: ug/l



Reviewer: delpolitov, 23-Nov-2021 15:24:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

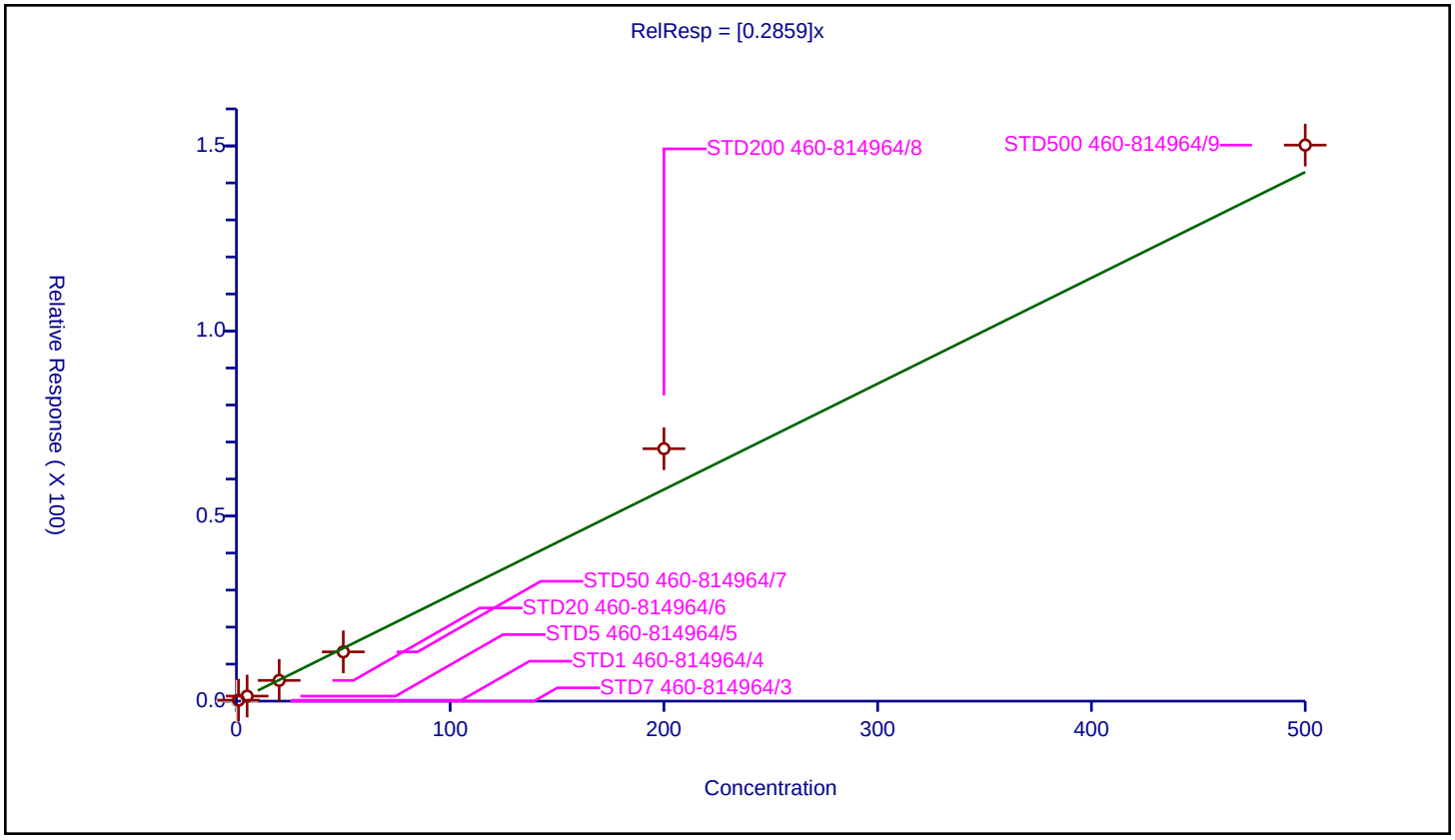
Curve Coefficients

Intercept:	0
Slope:	0.2859

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	10.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.254574	50.0	935092.0	0.254574	Y
3	STD5 460-814964/5	5.0	1.36321	50.0	1006778.0	0.272642	Y
4	STD20 460-814964/6	20.0	5.603993	50.0	966989.0	0.2802	Y
5	STD50 460-814964/7	50.0	13.313708	50.0	1037626.0	0.266274	Y
6	STD200 460-814964/8	200.0	68.201916	50.0	1017316.0	0.34101	Y
7	STD500 460-814964/9	500.0	150.222162	50.0	1231761.0	0.300444	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

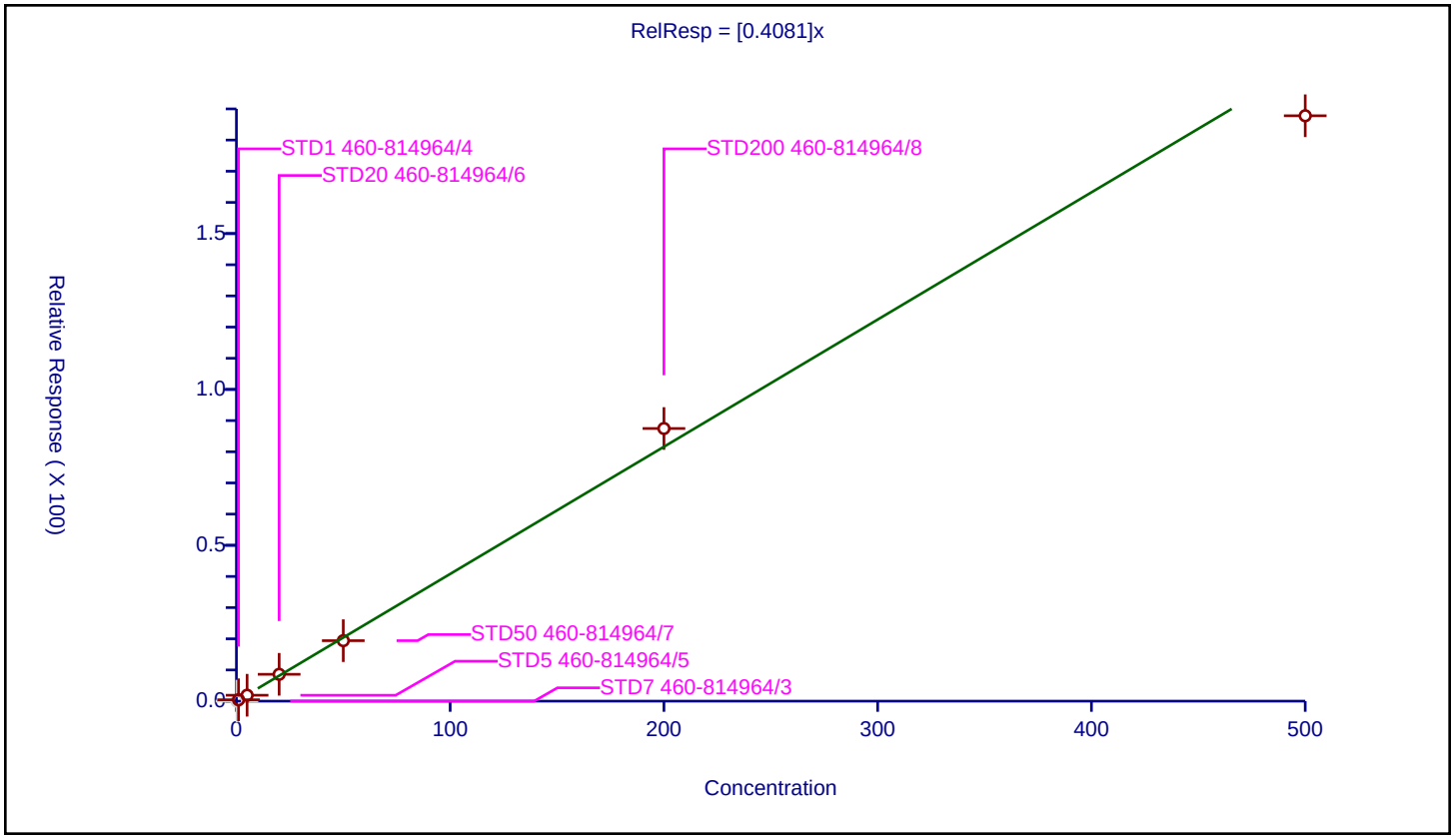
Curve Coefficients

Intercept:	0
Slope:	0.4081

Error Coefficients

Standard Error:	2230000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.437711	50.0	935092.0	0.437711	Y
3	STD5 460-814964/5	5.0	1.896744	50.0	1006778.0	0.379349	Y
4	STD20 460-814964/6	20.0	8.608681	50.0	966989.0	0.430434	Y
5	STD50 460-814964/7	50.0	19.399861	50.0	1037626.0	0.387997	Y
6	STD200 460-814964/8	200.0	87.465399	50.0	1017316.0	0.437327	Y
7	STD500 460-814964/9	500.0	187.79333	50.0	1231761.0	0.375587	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

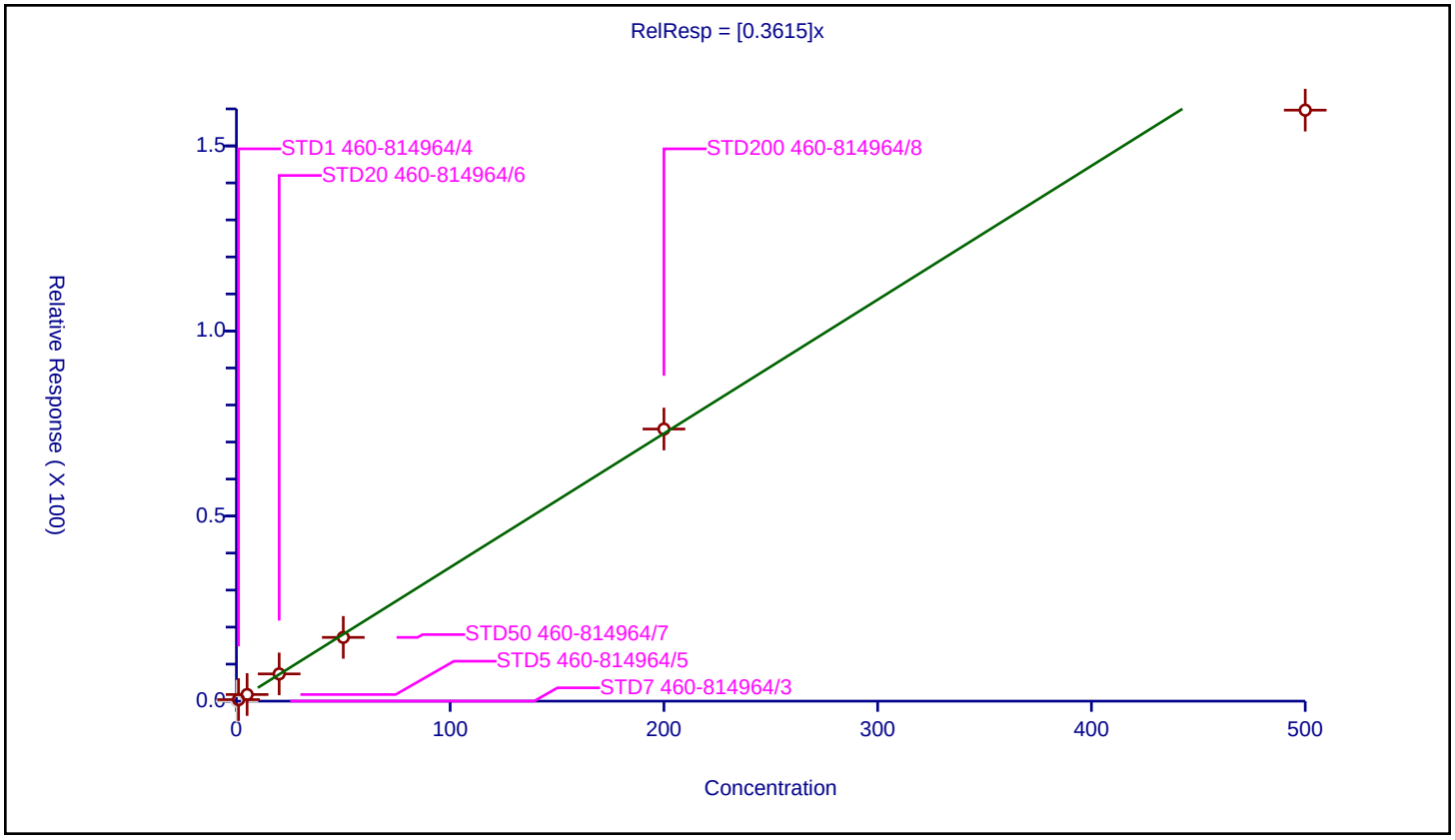
Curve Coefficients

Intercept:	0
Slope:	0.3615

Error Coefficients

Standard Error:	1890000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.412366	50.0	935092.0	0.412366	Y
3	STD5 460-814964/5	5.0	1.787882	50.0	1006778.0	0.357576	Y
4	STD20 460-814964/6	20.0	7.358305	50.0	966989.0	0.367915	Y
5	STD50 460-814964/7	50.0	17.224559	50.0	1037626.0	0.344491	Y
6	STD200 460-814964/8	200.0	73.509558	50.0	1017316.0	0.367548	Y
7	STD500 460-814964/9	500.0	159.662142	50.0	1231761.0	0.319324	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

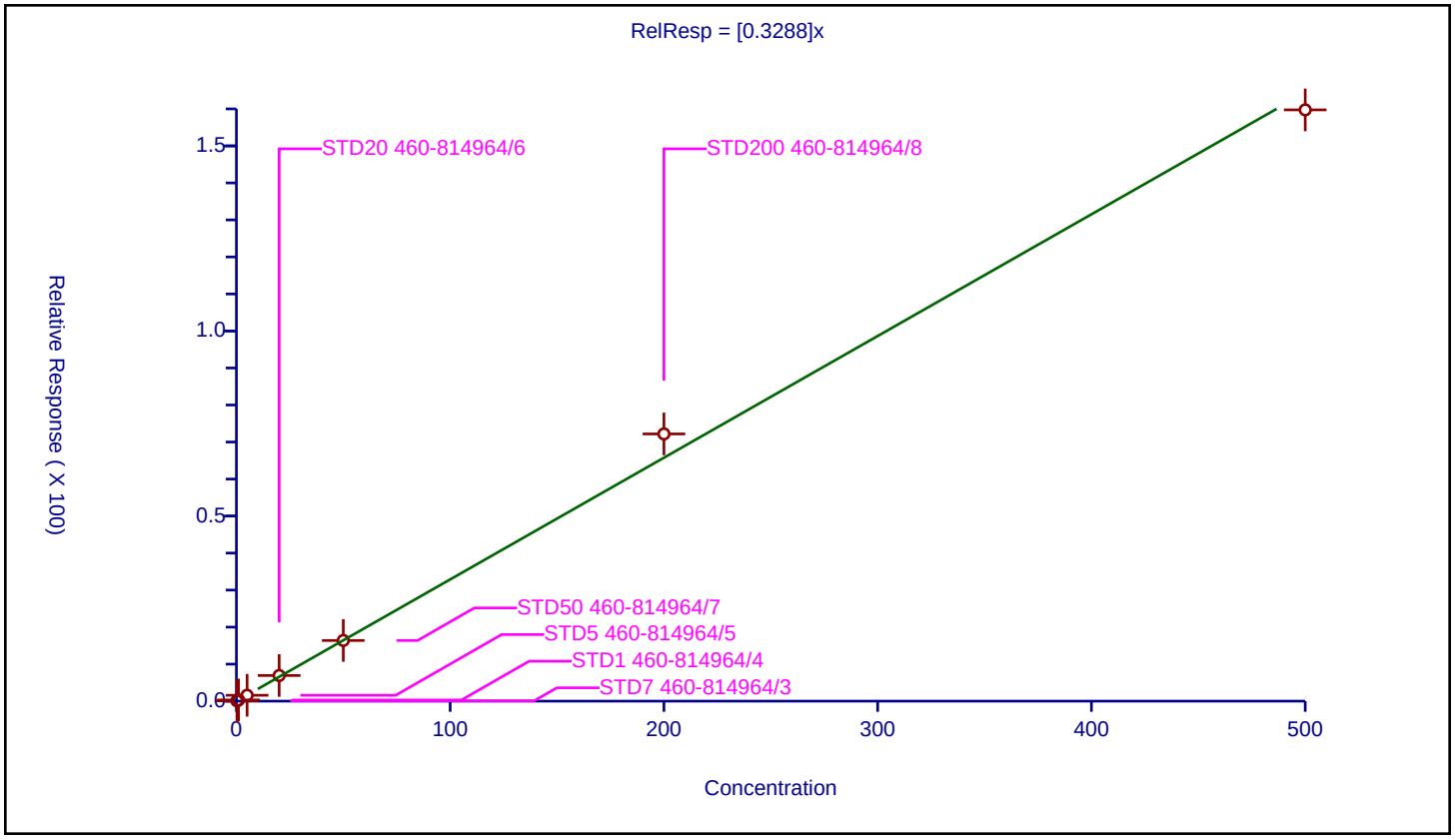
Curve Coefficients

Intercept:	0
Slope:	0.3288

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.079475	50.0	976405.0	0.317901	Y
2	STD1 460-814964/4	1.0	0.311841	50.0	935092.0	0.311841	Y
3	STD5 460-814964/5	5.0	1.58749	50.0	1006778.0	0.317498	Y
4	STD20 460-814964/6	20.0	6.924794	50.0	966989.0	0.34624	Y
5	STD50 460-814964/7	50.0	16.387552	50.0	1037626.0	0.327751	Y
6	STD200 460-814964/8	200.0	72.186273	50.0	1017316.0	0.360931	Y
7	STD500 460-814964/9	500.0	159.732935	50.0	1231761.0	0.319466	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

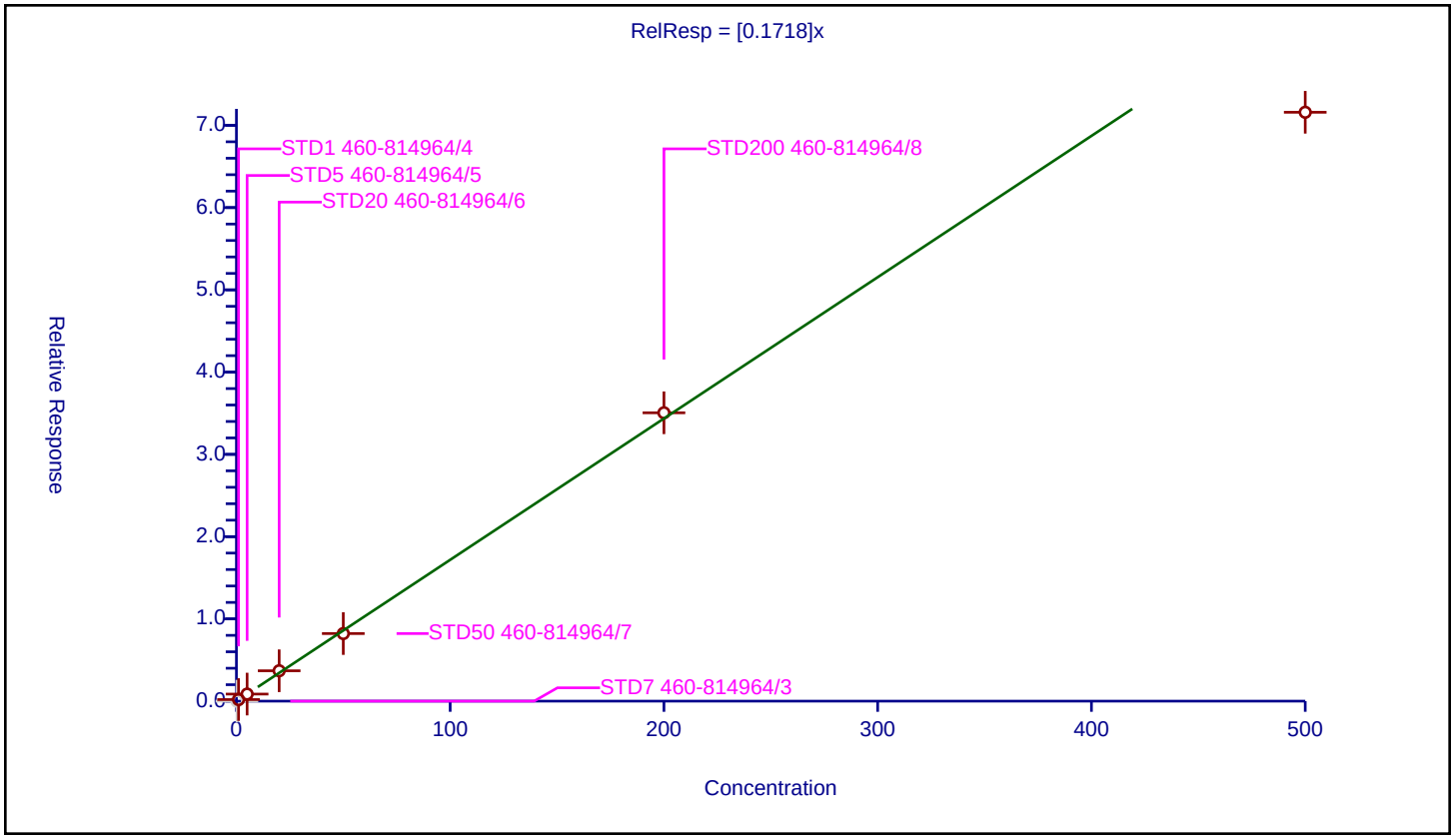
Curve Coefficients

Intercept:	0
Slope:	0.1718

Error Coefficients

Standard Error:	855000
Relative Standard Error:	9.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.191372	50.0	935092.0	0.191372	Y
3	STD5 460-814964/5	5.0	0.859425	50.0	1006778.0	0.171885	Y
4	STD20 460-814964/6	20.0	3.694354	50.0	966989.0	0.184718	Y
5	STD50 460-814964/7	50.0	8.215388	50.0	1037626.0	0.164308	Y
6	STD200 460-814964/8	200.0	35.05484	50.0	1017316.0	0.175274	Y
7	STD500 460-814964/9	500.0	71.589781	50.0	1231761.0	0.14318	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

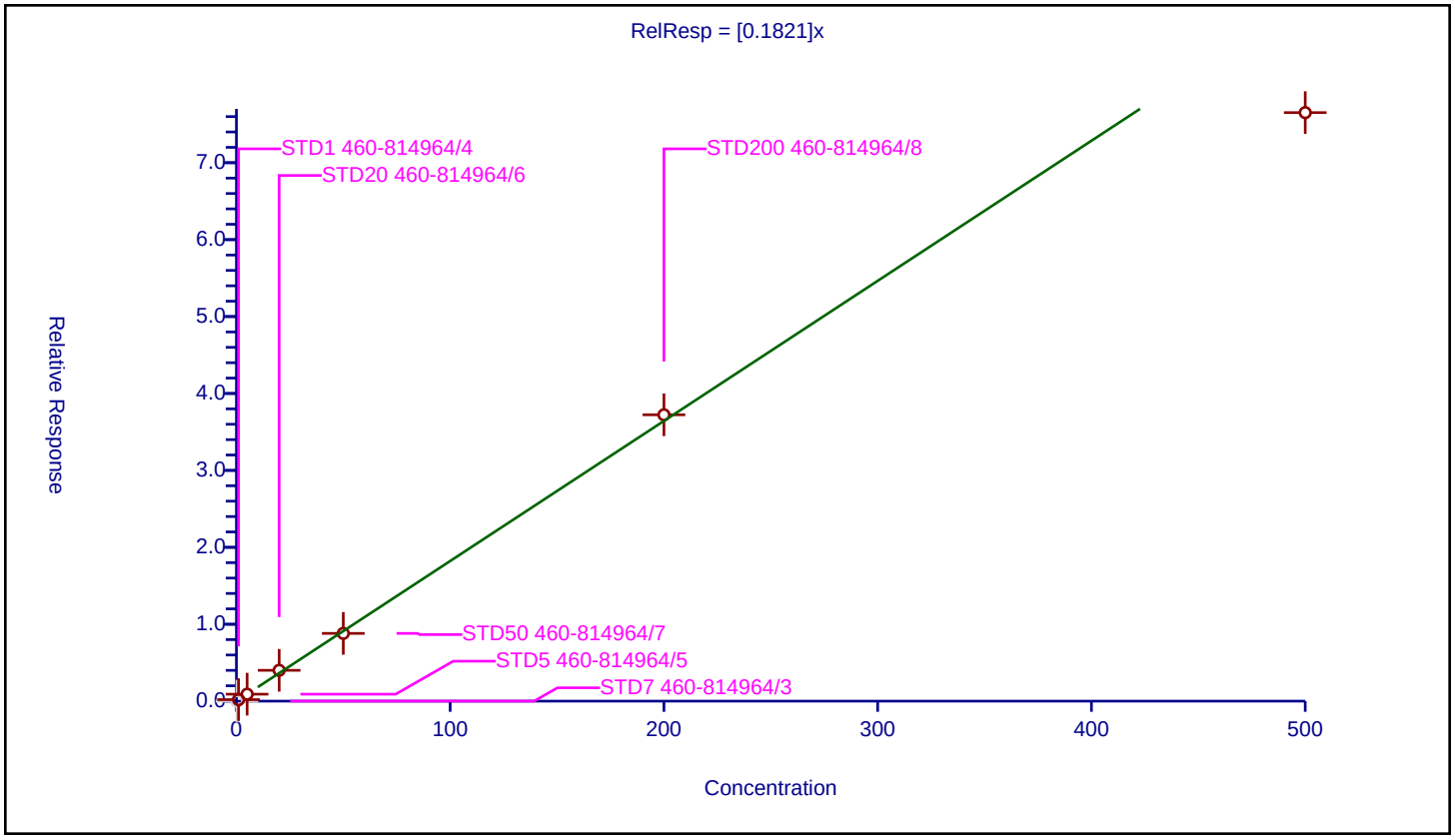
Curve Coefficients

Intercept:	0
Slope:	0.1821

Error Coefficients

Standard Error:	913000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.19581	50.0	935092.0	0.19581	Y
3	STD5 460-814964/5	5.0	0.906853	50.0	1006778.0	0.181371	Y
4	STD20 460-814964/6	20.0	4.008008	50.0	966989.0	0.2004	Y
5	STD50 460-814964/7	50.0	8.806641	50.0	1037626.0	0.176133	Y
6	STD200 460-814964/8	200.0	37.228698	50.0	1017316.0	0.186143	Y
7	STD500 460-814964/9	500.0	76.51667	50.0	1231761.0	0.153033	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

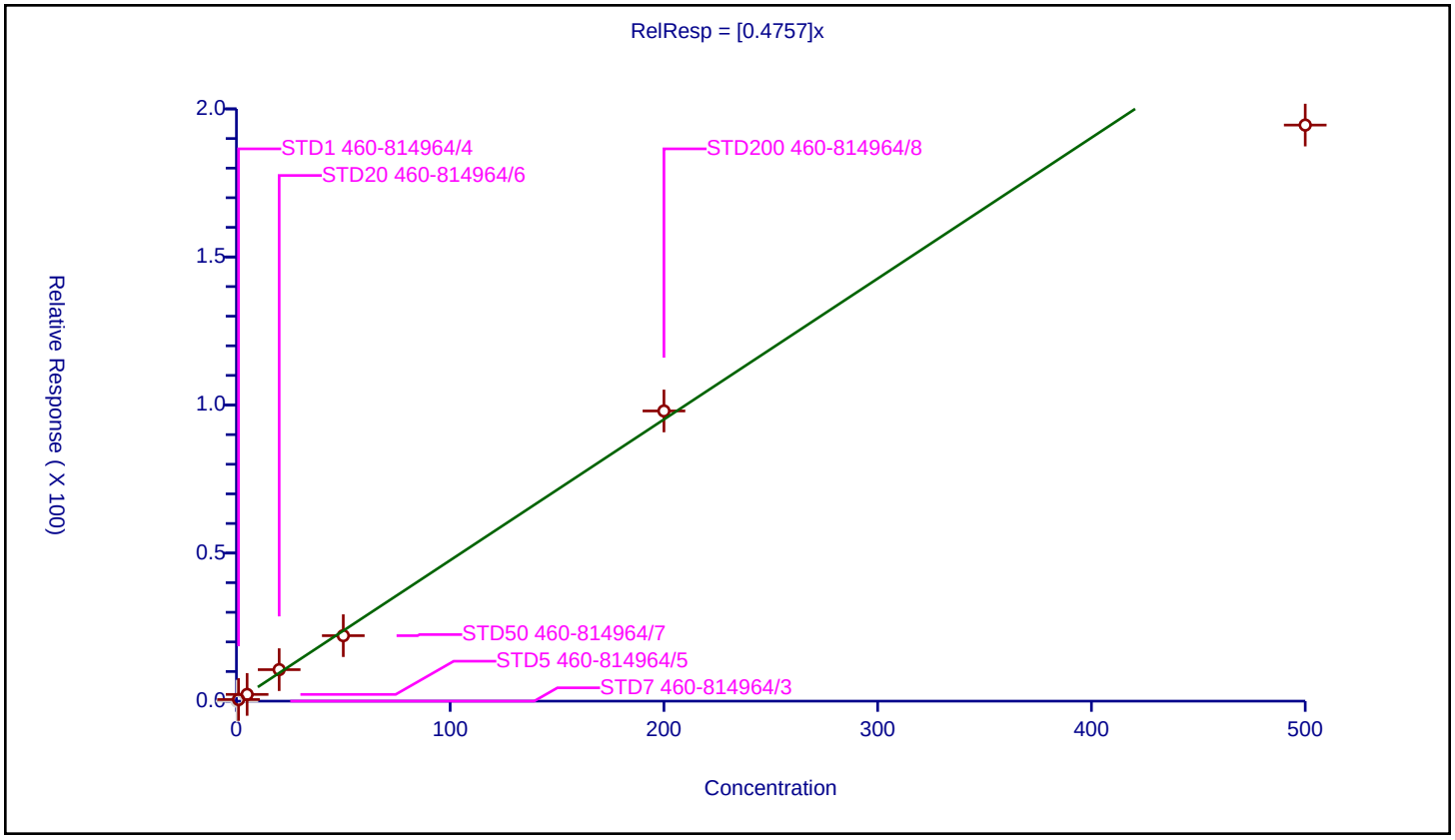
Curve Coefficients

Intercept:	0
Slope:	0.4757

Error Coefficients

Standard Error:	2330000
Relative Standard Error:	12.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.547005	50.0	935092.0	0.547005	Y
3	STD5 460-814964/5	5.0	2.269219	50.0	1006778.0	0.453844	Y
4	STD20 460-814964/6	20.0	10.637453	50.0	966989.0	0.531873	Y
5	STD50 460-814964/7	50.0	22.111532	50.0	1037626.0	0.442231	Y
6	STD200 460-814964/8	200.0	97.999245	50.0	1017316.0	0.489996	Y
7	STD500 460-814964/9	500.0	194.542773	50.0	1231761.0	0.389086	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

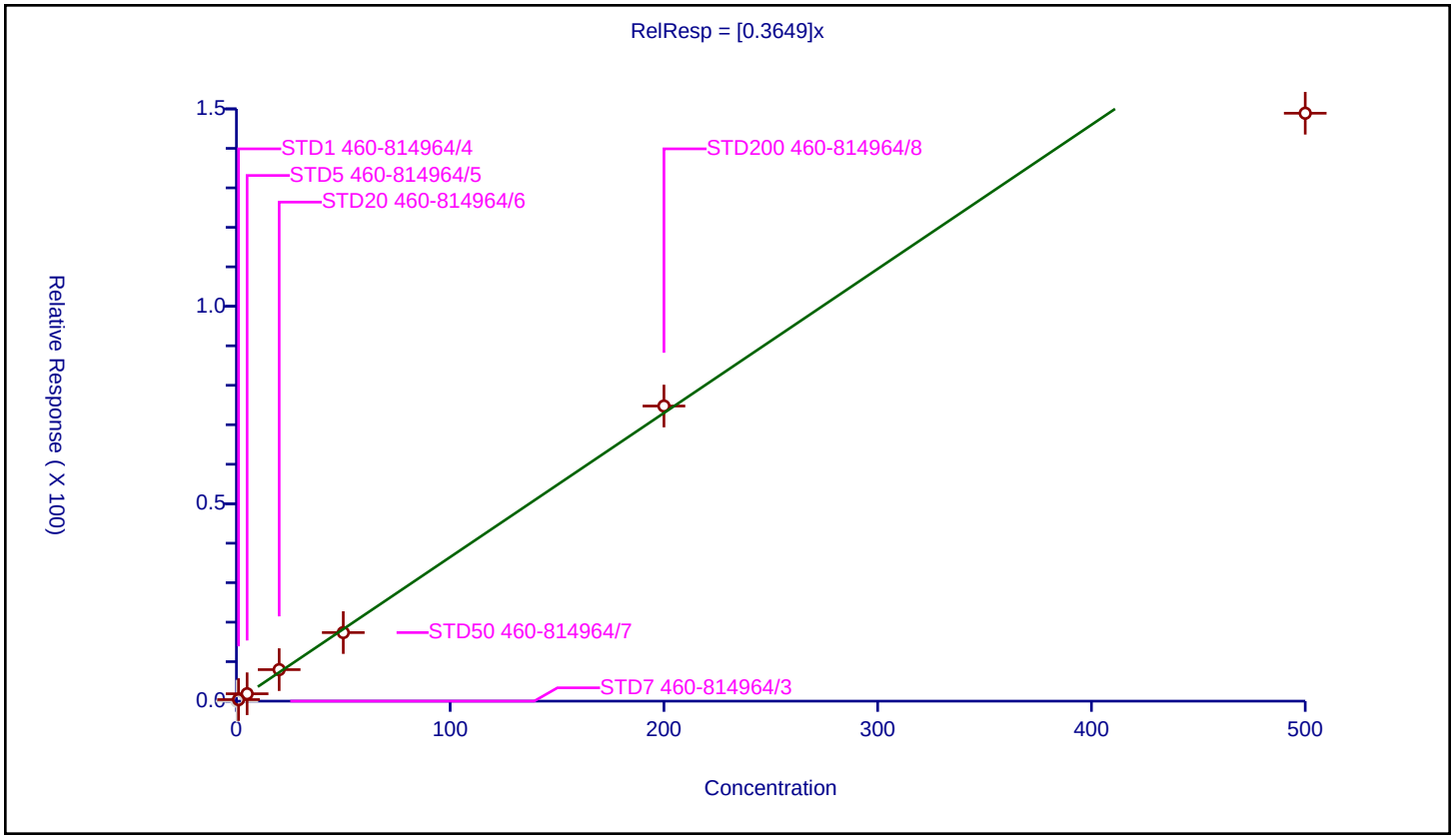
Curve Coefficients

Intercept:	0
Slope:	0.3649

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.25	0.0	50.0	976405.0	0.0	N
2	STD1 460-814964/4	1.0	0.397341	50.0	935092.0	0.397341	Y
3	STD5 460-814964/5	5.0	1.870124	50.0	1006778.0	0.374025	Y
4	STD20 460-814964/6	20.0	7.984476	50.0	966989.0	0.399224	Y
5	STD50 460-814964/7	50.0	17.368059	50.0	1037626.0	0.347361	Y
6	STD200 460-814964/8	200.0	74.747374	50.0	1017316.0	0.373737	Y
7	STD500 460-814964/9	500.0	148.899543	50.0	1231761.0	0.297799	Y



Calibration / Pentane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

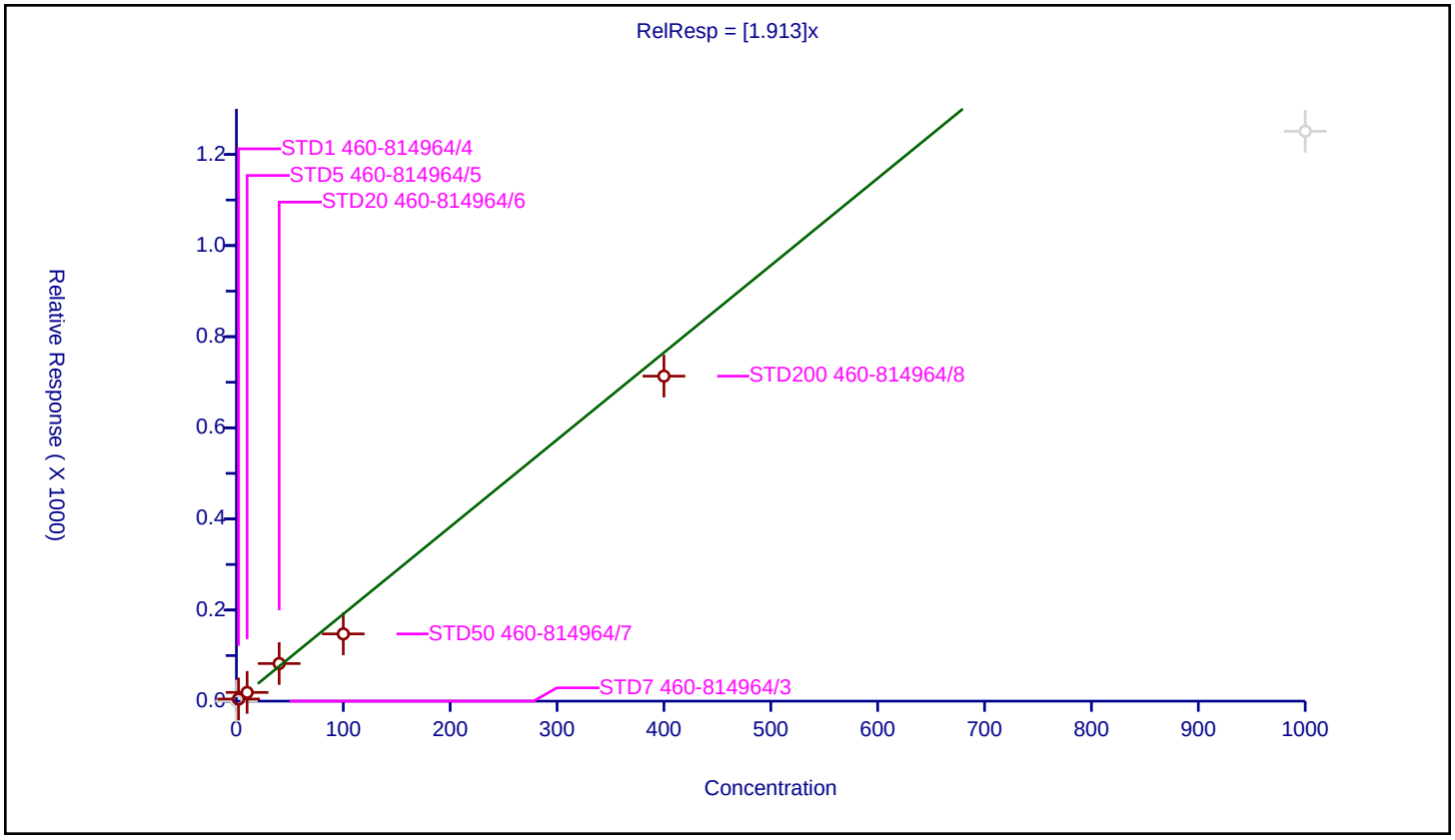
Curve Coefficients

Intercept:	0
Slope:	1.913

Error Coefficients

Standard Error:	226000
Relative Standard Error:	16.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	2.0	4.652685	1000.0	528727.0	2.326342	Y
3	STD5 460-814964/5	10.0	19.139504	1000.0	575877.0	1.91395	Y
4	STD20 460-814964/6	40.0	82.567826	1000.0	532762.0	2.064196	Y
5	STD50 460-814964/7	100.0	147.572996	1000.0	678532.0	1.47573	Y
6	STD200 460-814964/8	400.0	713.35972	1000.0	615709.0	1.783399	Y
7	STD500 460-814964/9	1000.0	1250.921506	1000.0	838573.0	1.250922	N



Calibration / Ethanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

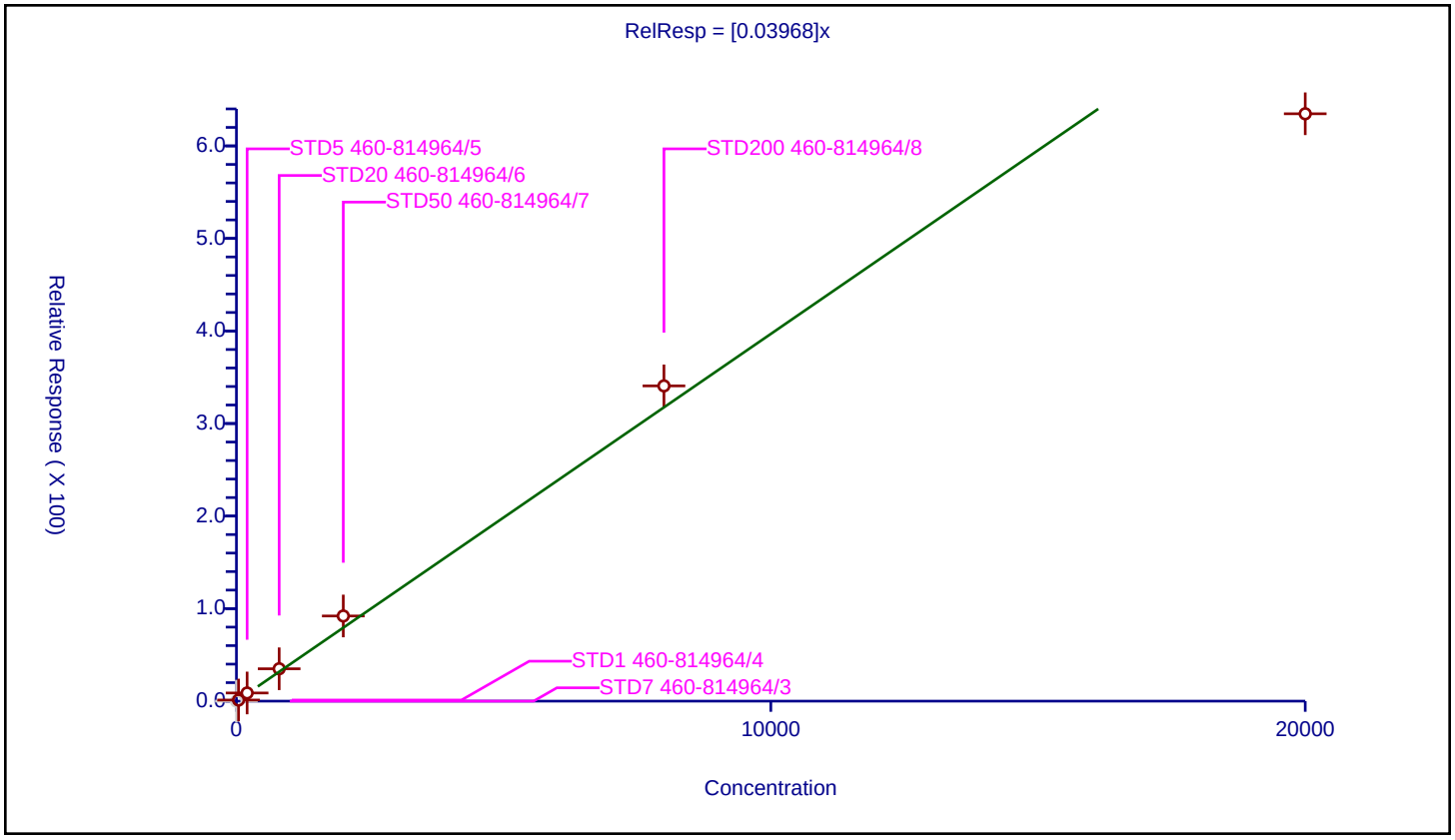
Curve Coefficients

Intercept:	0
Slope:	0.03968

Error Coefficients

Standard Error:	257000
Relative Standard Error:	17.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	40.0	1.195324	1000.0	528727.0	0.029883	Y
3	STD5 460-814964/5	200.0	8.828274	1000.0	575877.0	0.044141	Y
4	STD20 460-814964/6	800.0	34.991234	1000.0	532762.0	0.043739	Y
5	STD50 460-814964/7	2000.0	92.028084	1000.0	678532.0	0.046014	Y
6	STD200 460-814964/8	8000.0	340.662553	1000.0	615709.0	0.042583	Y
7	STD500 460-814964/9	20000.0	634.73663	1000.0	838573.0	0.031737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

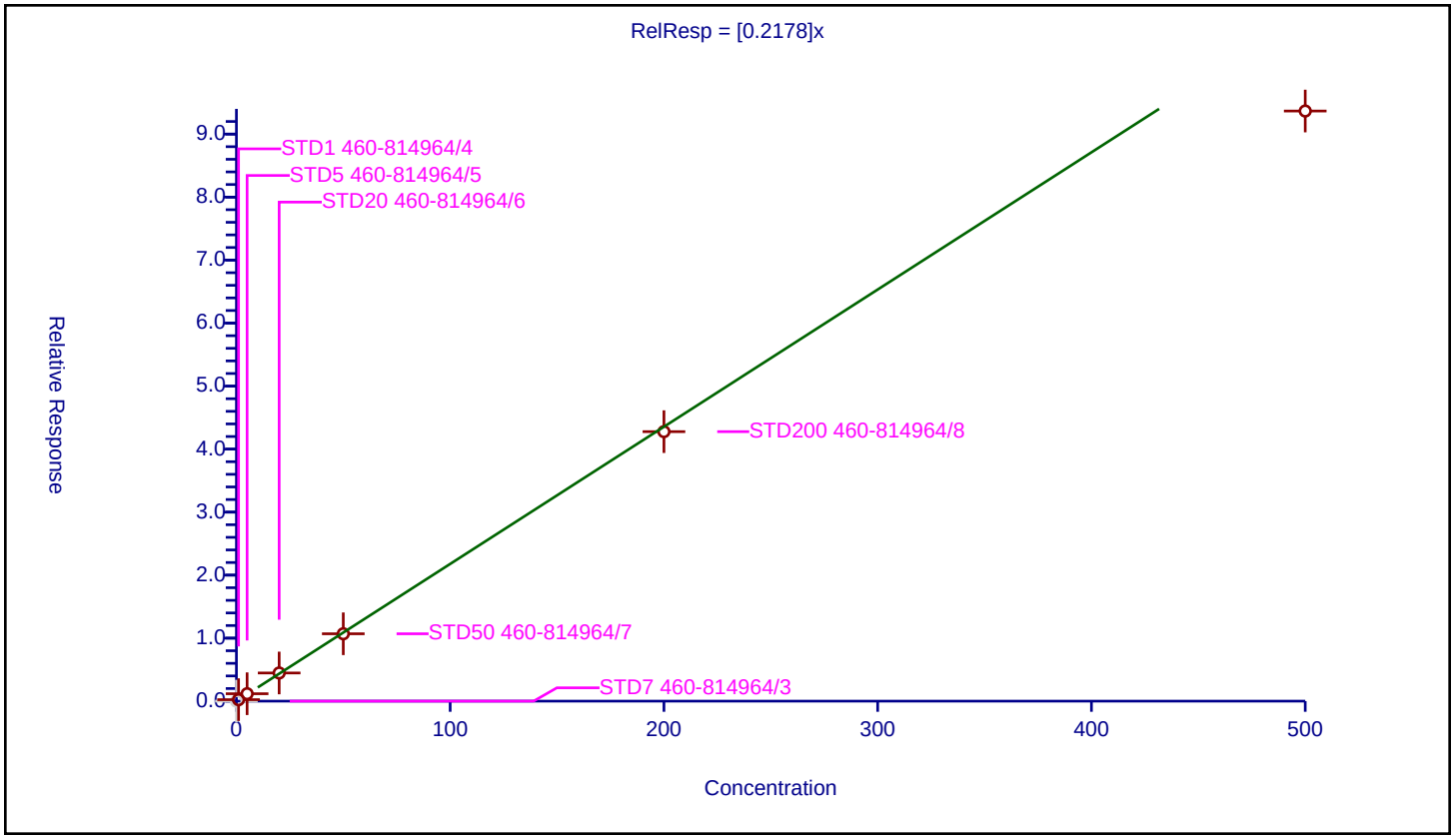
Curve Coefficients

Intercept:	0
Slope:	0.2178

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.232597	50.0	935092.0	0.232597	Y
3	STD5 460-814964/5	5.0	1.177221	50.0	1006778.0	0.235444	Y
4	STD20 460-814964/6	20.0	4.469648	50.0	966989.0	0.223482	Y
5	STD50 460-814964/7	50.0	10.691906	50.0	1037626.0	0.213838	Y
6	STD200 460-814964/8	200.0	42.773828	50.0	1017316.0	0.213869	Y
7	STD500 460-814964/9	500.0	93.661067	50.0	1231761.0	0.187322	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

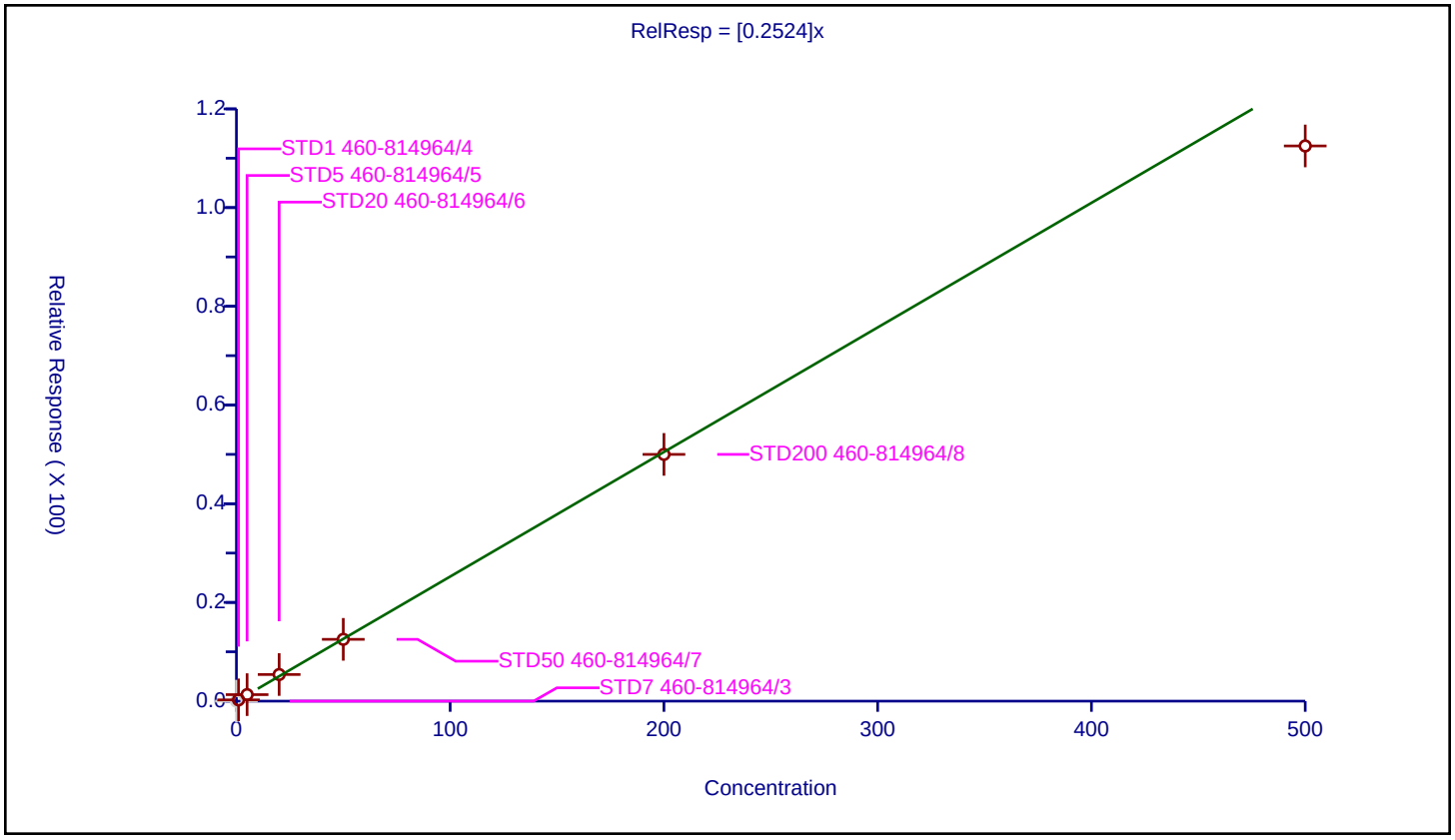
Curve Coefficients

Intercept:	0
Slope:	0.2524

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.255216	50.0	935092.0	0.255216	Y
3	STD5 460-814964/5	5.0	1.320599	50.0	1006778.0	0.26412	Y
4	STD20 460-814964/6	20.0	5.392202	50.0	966989.0	0.26961	Y
5	STD50 460-814964/7	50.0	12.523636	50.0	1037626.0	0.250473	Y
6	STD200 460-814964/8	200.0	49.994495	50.0	1017316.0	0.249972	Y
7	STD500 460-814964/9	500.0	112.495444	50.0	1231761.0	0.224991	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

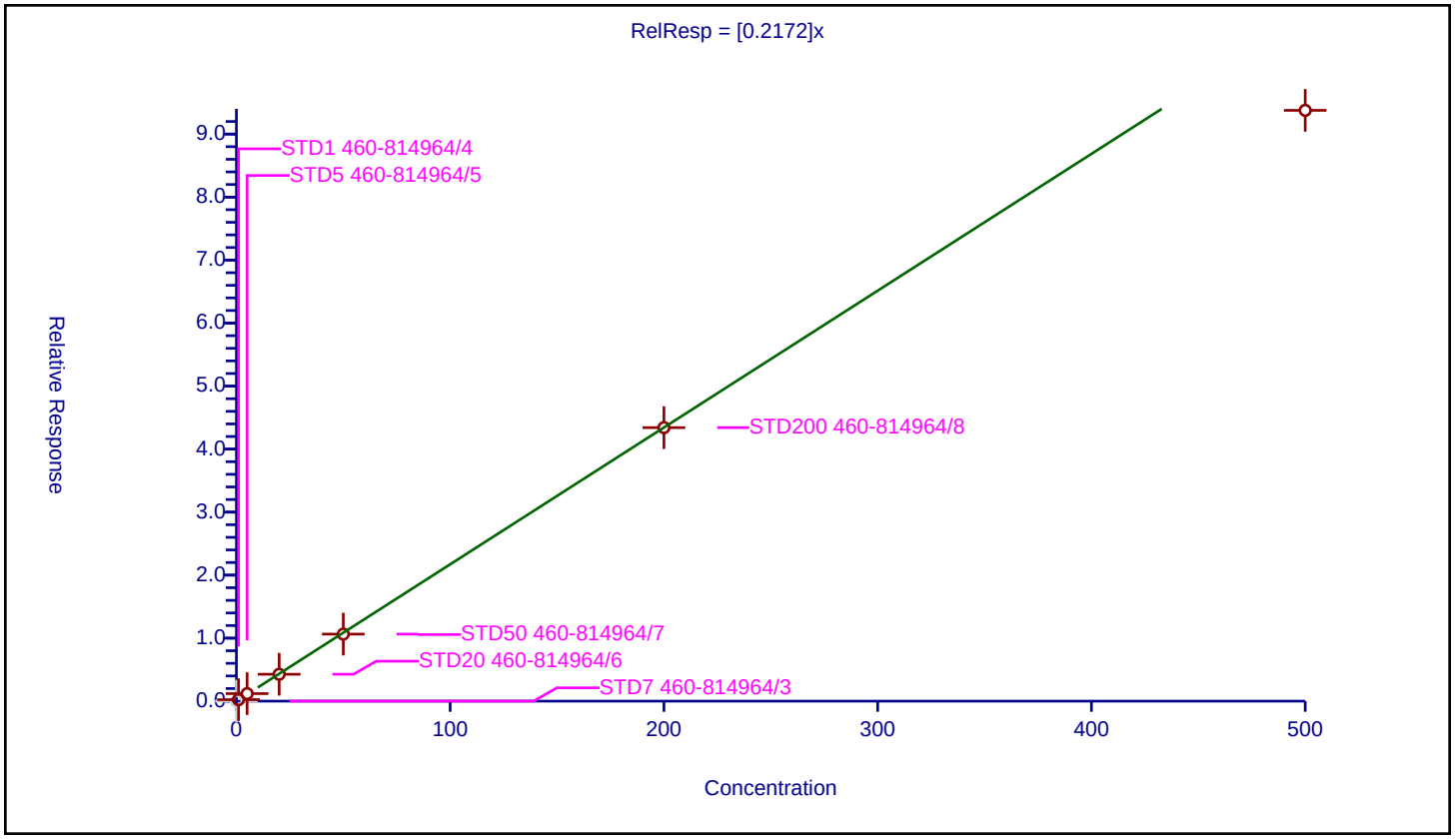
Curve Coefficients

Intercept:	0
Slope:	0.2172

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.233667	50.0	935092.0	0.233667	Y
3	STD5 460-814964/5	5.0	1.192219	50.0	1006778.0	0.238444	Y
4	STD20 460-814964/6	20.0	4.269025	50.0	966989.0	0.213451	Y
5	STD50 460-814964/7	50.0	10.638563	50.0	1037626.0	0.212771	Y
6	STD200 460-814964/8	200.0	43.410799	50.0	1017316.0	0.217054	Y
7	STD500 460-814964/9	500.0	93.767906	50.0	1231761.0	0.187536	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

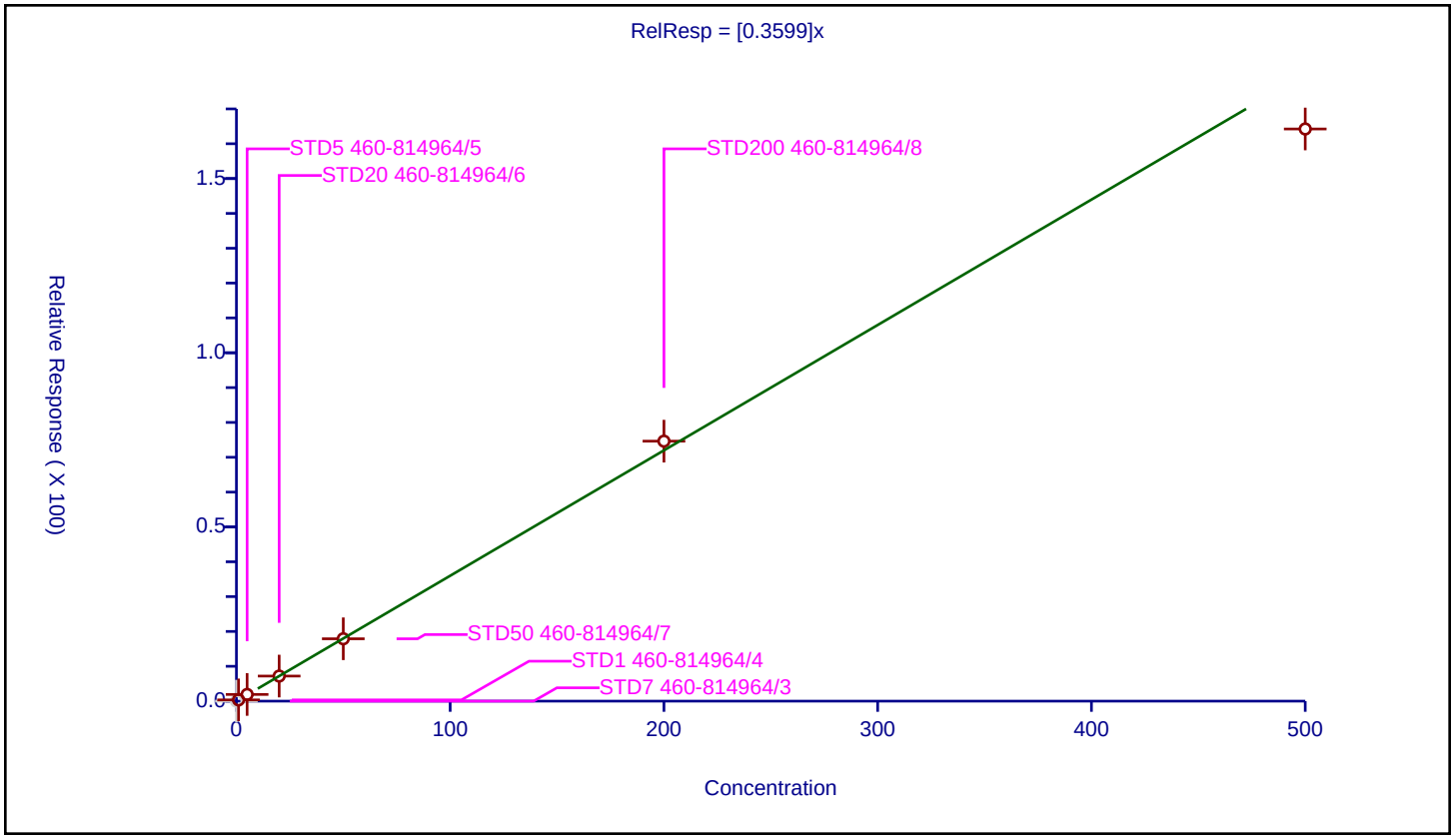
Curve Coefficients

Intercept:	0
Slope:	0.3599

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.35558	50.0	935092.0	0.35558	Y
3	STD5 460-814964/5	5.0	1.920483	50.0	1006778.0	0.384097	Y
4	STD20 460-814964/6	20.0	7.200806	50.0	966989.0	0.36004	Y
5	STD50 460-814964/7	50.0	17.903561	50.0	1037626.0	0.358071	Y
6	STD200 460-814964/8	200.0	74.630449	50.0	1017316.0	0.373152	Y
7	STD500 460-814964/9	500.0	164.236	50.0	1231761.0	0.328472	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

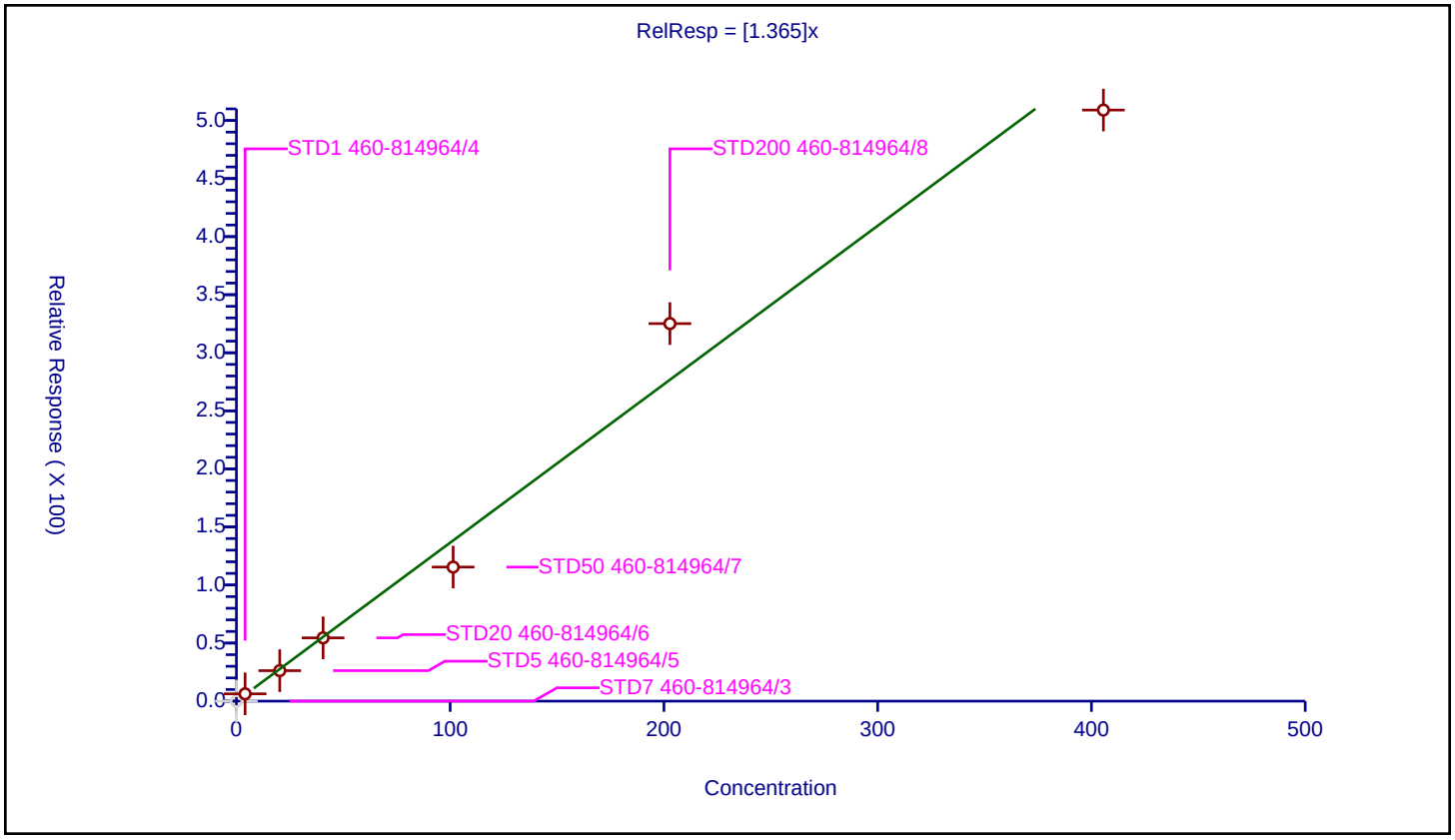
Curve Coefficients

Intercept:	0
Slope:	1.365

Error Coefficients

Standard Error:	214000
Relative Standard Error:	13.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	4.056	6.298146	1000.0	528727.0	1.552797	Y
3	STD5 460-814964/5	20.28	26.252134	1000.0	575877.0	1.294484	Y
4	STD20 460-814964/6	40.56	54.480237	1000.0	532762.0	1.343201	Y
5	STD50 460-814964/7	101.4	115.441866	1000.0	678532.0	1.13848	Y
6	STD200 460-814964/8	202.8	325.124369	1000.0	615709.0	1.603177	Y
7	STD500 460-814964/9	405.6	508.986099	1000.0	838573.0	1.254897	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

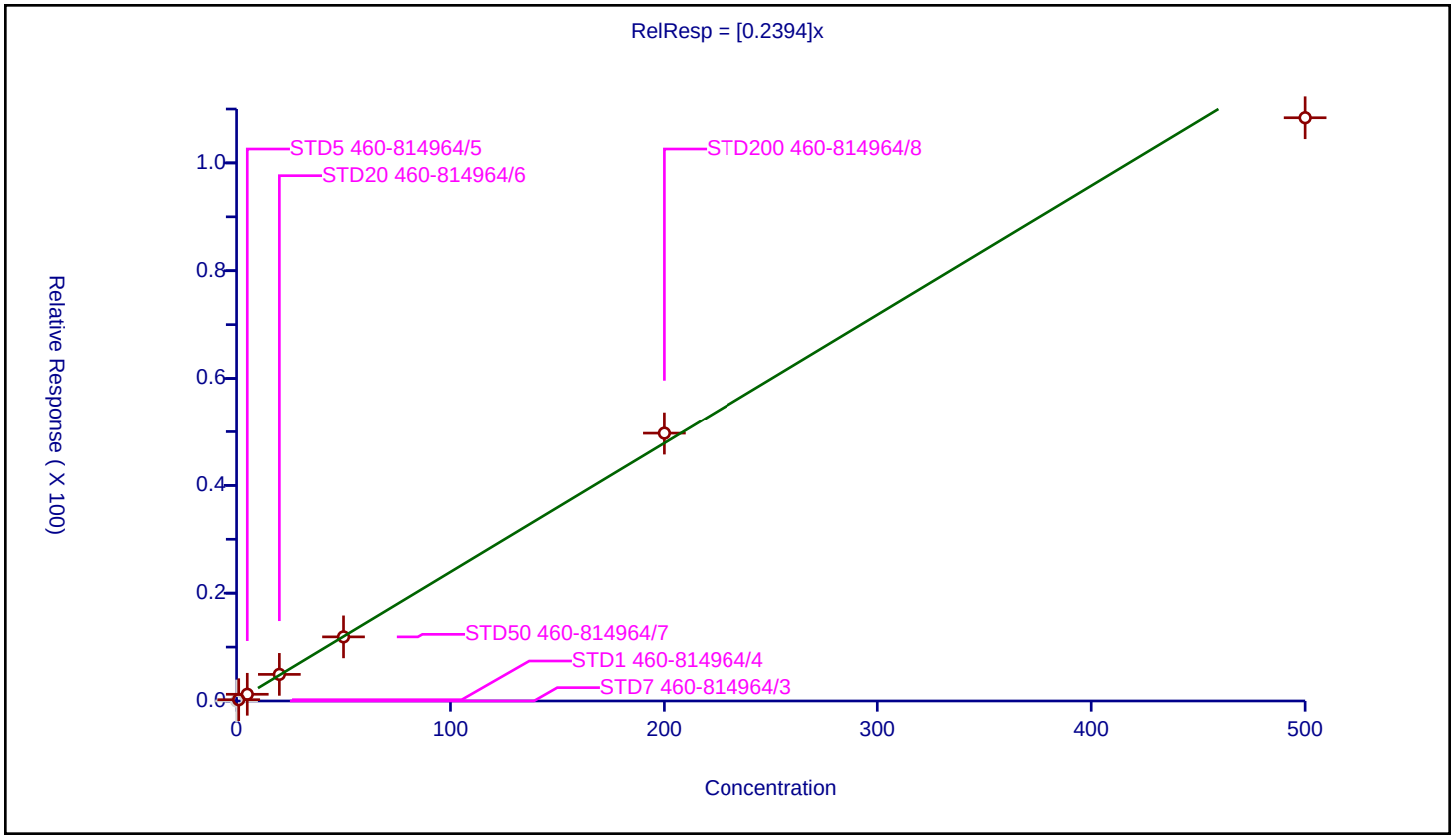
Curve Coefficients

Intercept:	0
Slope:	0.2394

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.237784	50.0	935092.0	0.237784	Y
3	STD5 460-814964/5	5.0	1.244167	50.0	1006778.0	0.248833	Y
4	STD20 460-814964/6	20.0	4.932631	50.0	966989.0	0.246632	Y
5	STD50 460-814964/7	50.0	11.893158	50.0	1037626.0	0.237863	Y
6	STD200 460-814964/8	200.0	49.704762	50.0	1017316.0	0.248524	Y
7	STD500 460-814964/9	500.0	108.381334	50.0	1231761.0	0.216763	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

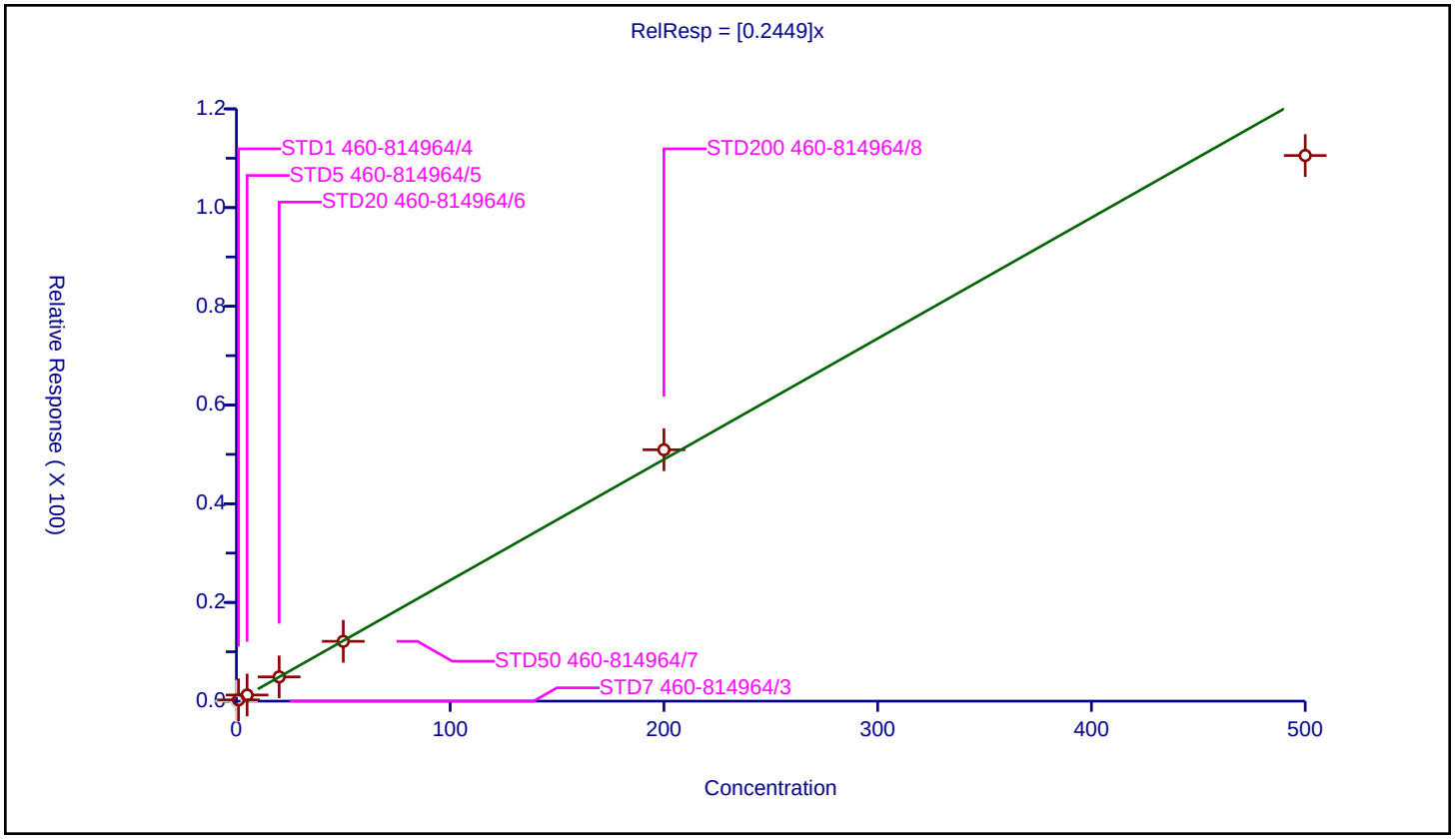
Curve Coefficients

Intercept:	0
Slope:	0.2449

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.256927	50.0	935092.0	0.256927	Y
3	STD5 460-814964/5	5.0	1.242925	50.0	1006778.0	0.248585	Y
4	STD20 460-814964/6	20.0	4.913861	50.0	966989.0	0.245693	Y
5	STD50 460-814964/7	50.0	12.119877	50.0	1037626.0	0.242398	Y
6	STD200 460-814964/8	200.0	50.934174	50.0	1017316.0	0.254671	Y
7	STD500 460-814964/9	500.0	110.549246	50.0	1231761.0	0.221098	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

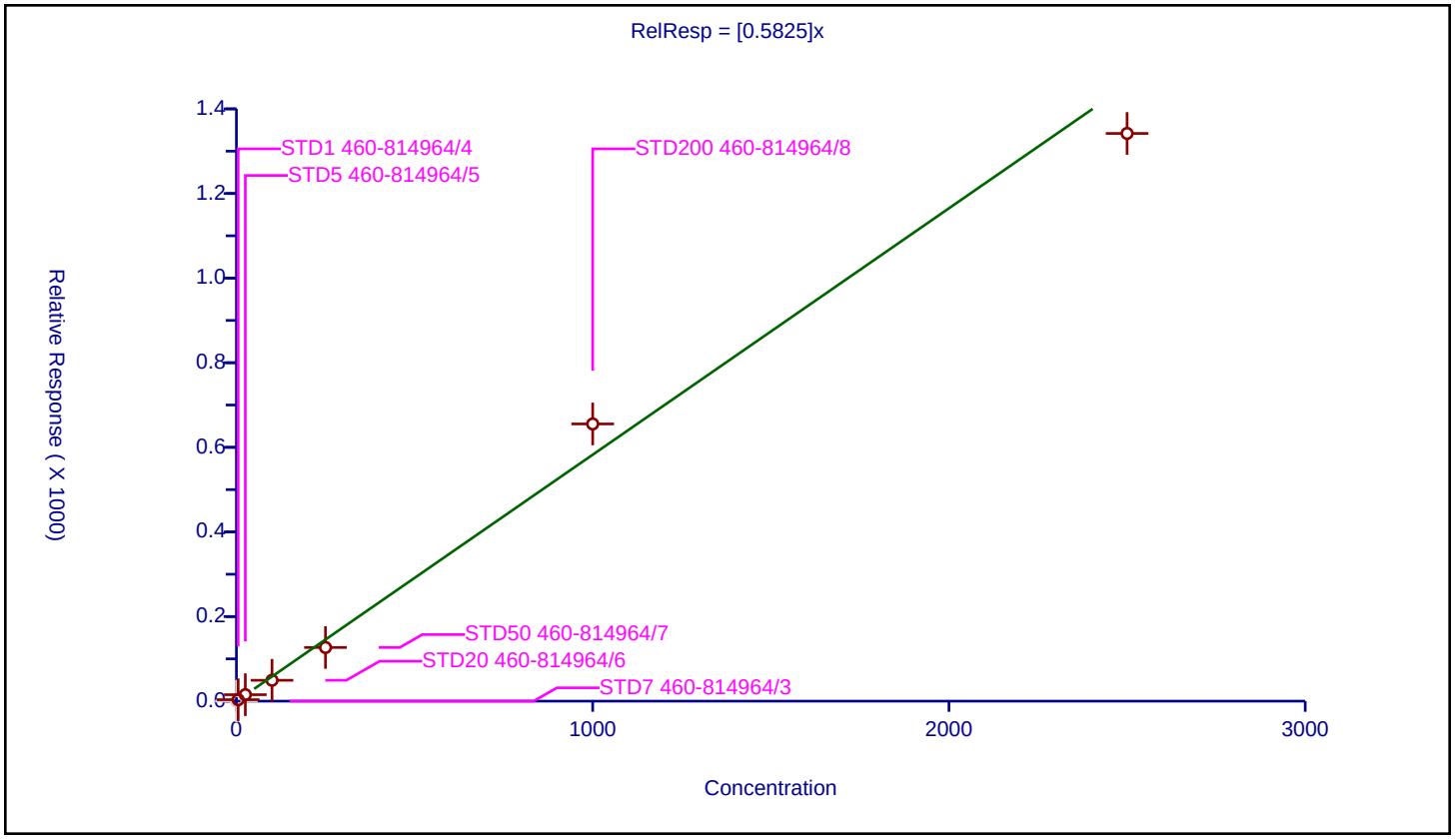
Curve Coefficients

Intercept:	0
Slope:	0.5825

Error Coefficients

Standard Error:	3070000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	5.0	3.460006	250.0	738727.0	0.692001	Y
3	STD5 460-814964/5	25.0	15.252256	250.0	836155.0	0.61009	Y
4	STD20 460-814964/6	100.0	49.352815	250.0	817618.0	0.493528	Y
5	STD50 460-814964/7	250.0	126.83027	250.0	925205.0	0.507321	Y
6	STD200 460-814964/8	1000.0	655.269109	250.0	921484.0	0.655269	Y
7	STD500 460-814964/9	2500.0	1341.955546	250.0	1194270.0	0.536782	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

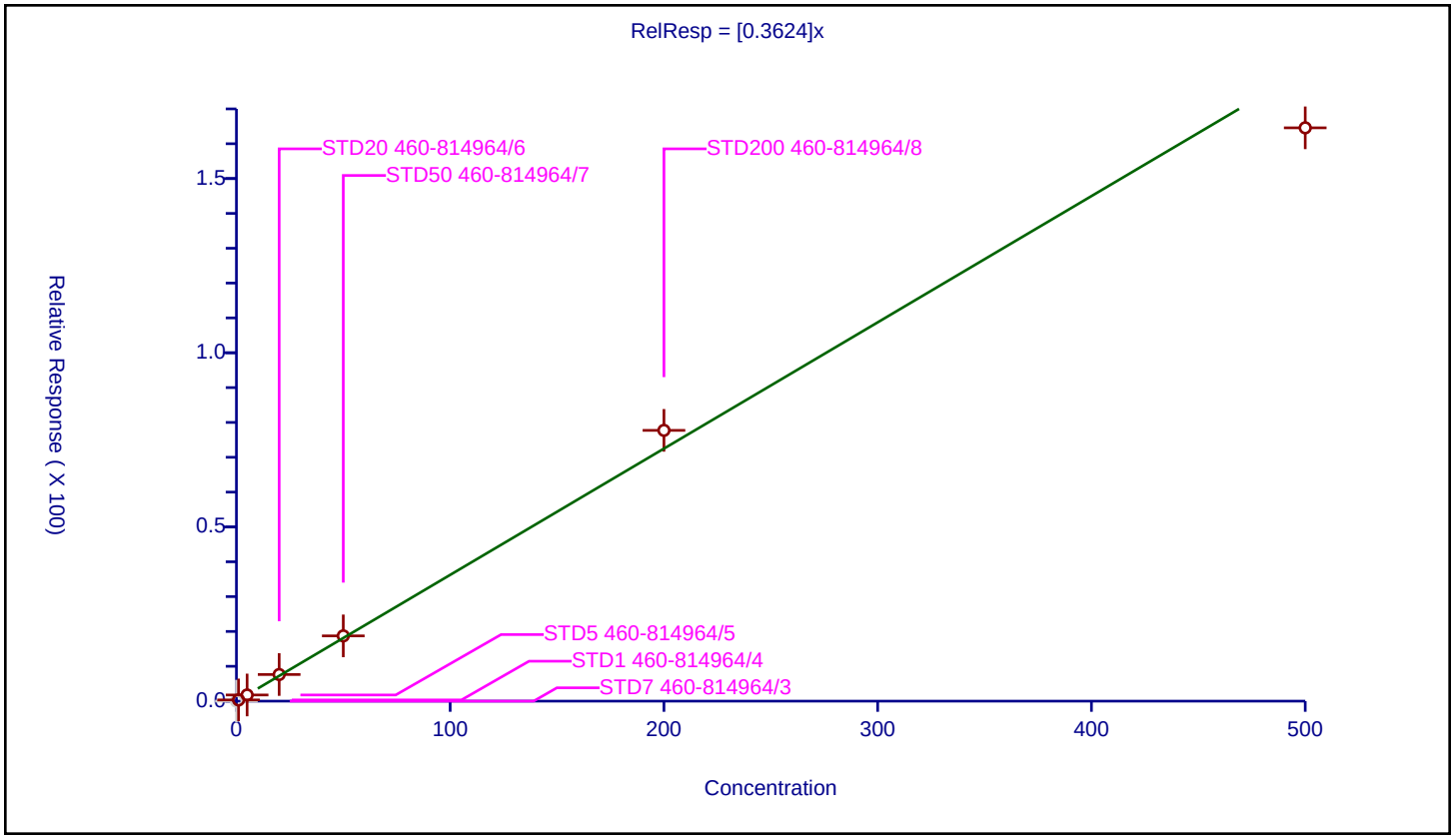
Curve Coefficients

Intercept:	0
Slope:	0.3624

Error Coefficients

Standard Error:	1950000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.346062	50.0	935092.0	0.346062	Y
3	STD5 460-814964/5	5.0	1.770301	50.0	1006778.0	0.35406	Y
4	STD20 460-814964/6	20.0	7.64078	50.0	966989.0	0.382039	Y
5	STD50 460-814964/7	50.0	18.732809	50.0	1037626.0	0.374656	Y
6	STD200 460-814964/8	200.0	77.723736	50.0	1017316.0	0.388619	Y
7	STD500 460-814964/9	500.0	164.561713	50.0	1231761.0	0.329123	Y



Calibration / Isopropyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

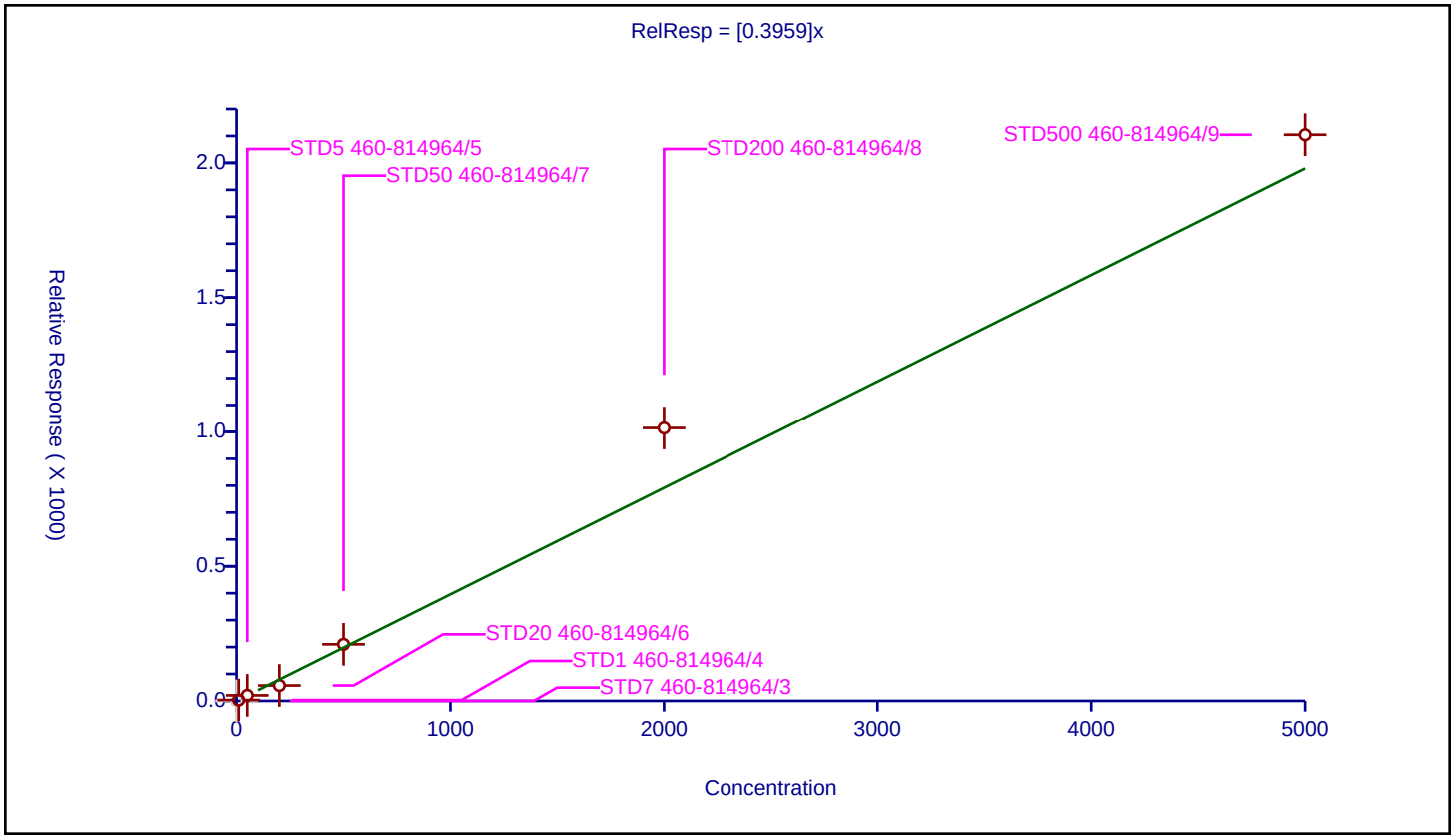
Curve Coefficients

Intercept:	0
Slope:	0.3959

Error Coefficients

Standard Error:	839000
Relative Standard Error:	19.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.961

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	10.0	3.277684	1000.0	528727.0	0.327768	Y
3	STD5 460-814964/5	50.0	20.650243	1000.0	575877.0	0.413005	Y
4	STD20 460-814964/6	200.0	57.209411	1000.0	532762.0	0.286047	Y
5	STD50 460-814964/7	500.0	210.205267	1000.0	678532.0	0.420411	Y
6	STD200 460-814964/8	2000.0	1014.485739	1000.0	615709.0	0.507243	Y
7	STD500 460-814964/9	5000.0	2104.484642	1000.0	838573.0	0.420897	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

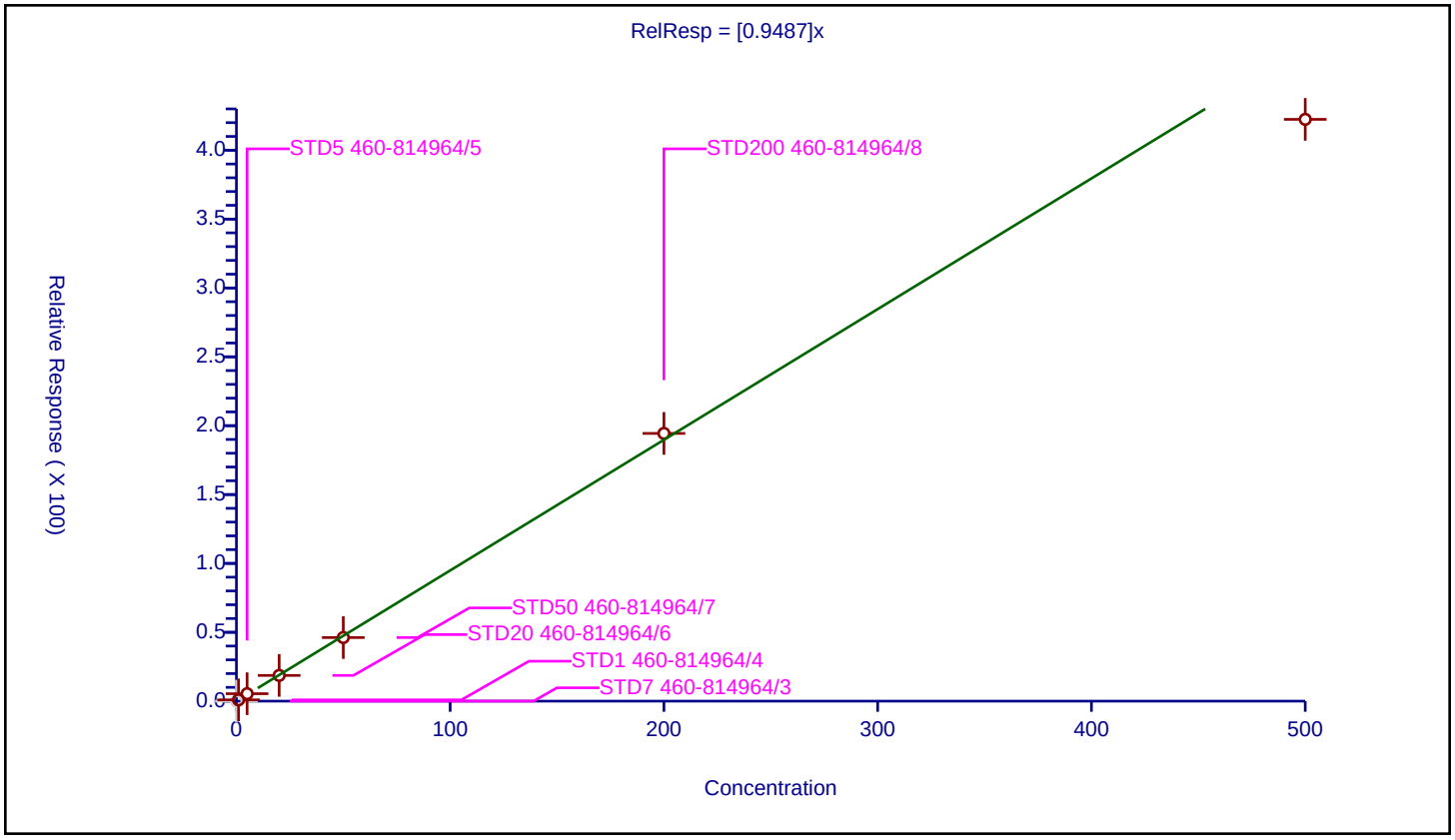
Curve Coefficients

Intercept:	0
Slope:	0.9487

Error Coefficients

Standard Error:	5000000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.938464	50.0	935092.0	0.938464	Y
3	STD5 460-814964/5	5.0	5.403177	50.0	1006778.0	1.080635	Y
4	STD20 460-814964/6	20.0	18.668878	50.0	966989.0	0.933444	Y
5	STD50 460-814964/7	50.0	46.161864	50.0	1037626.0	0.923237	Y
6	STD200 460-814964/8	200.0	194.382768	50.0	1017316.0	0.971914	Y
7	STD500 460-814964/9	500.0	422.399069	50.0	1231761.0	0.844798	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

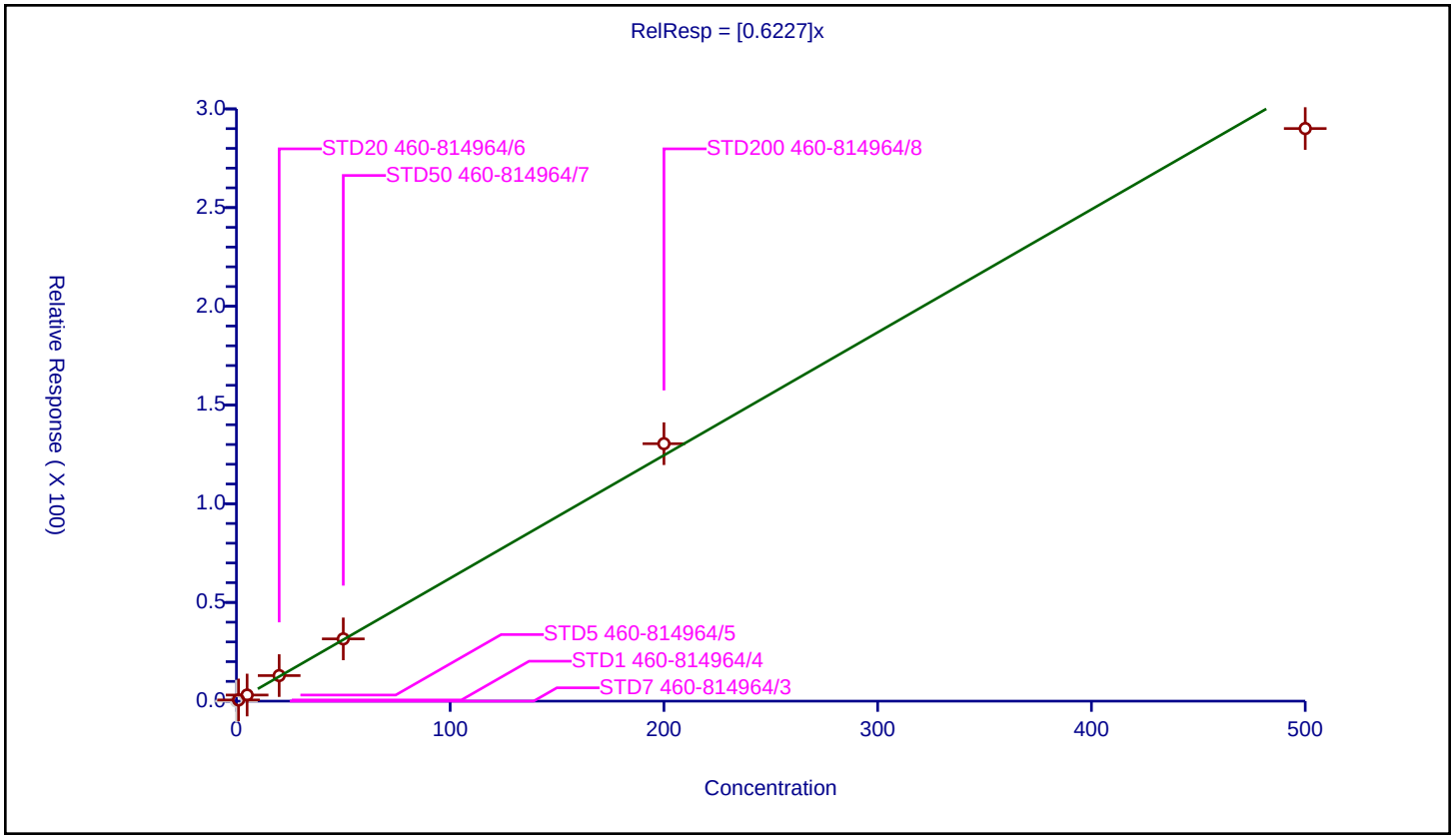
Curve Coefficients

Intercept:	0
Slope:	0.6227

Error Coefficients

Standard Error:	3420000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.605716	50.0	935092.0	0.605716	Y
3	STD5 460-814964/5	5.0	3.10272	50.0	1006778.0	0.620544	Y
4	STD20 460-814964/6	20.0	12.940116	50.0	966989.0	0.647006	Y
5	STD50 460-814964/7	50.0	31.534484	50.0	1037626.0	0.63069	Y
6	STD200 460-814964/8	200.0	130.412379	50.0	1017316.0	0.652062	Y
7	STD500 460-814964/9	500.0	290.037759	50.0	1231761.0	0.580076	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

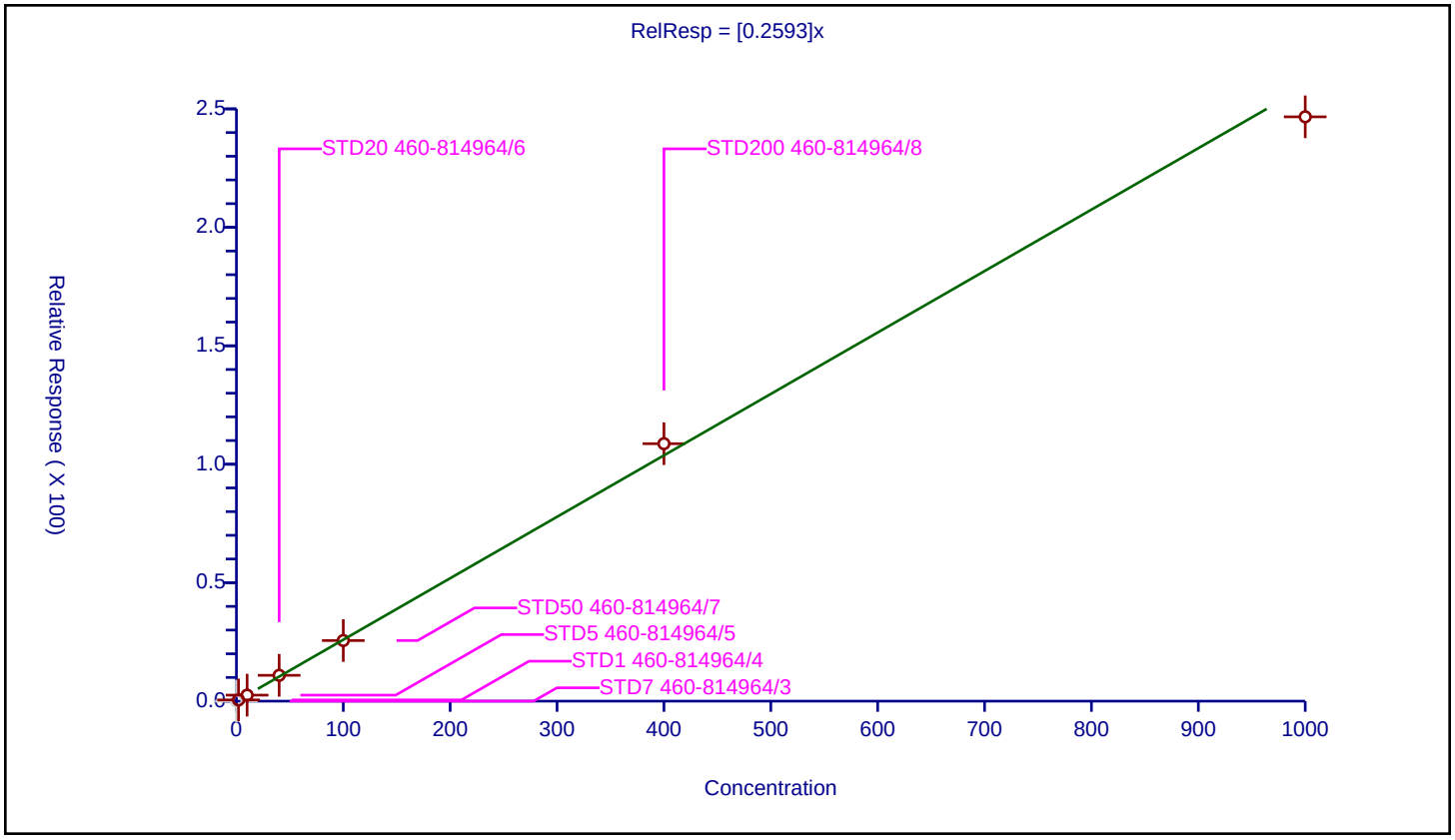
Curve Coefficients

Intercept:	0
Slope:	0.2593

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	2.0	0.510966	50.0	935092.0	0.255483	Y
3	STD5 460-814964/5	10.0	2.538146	50.0	1006778.0	0.253815	Y
4	STD20 460-814964/6	40.0	10.903537	50.0	966989.0	0.272588	Y
5	STD50 460-814964/7	100.0	25.585134	50.0	1037626.0	0.255851	Y
6	STD200 460-814964/8	400.0	108.678228	50.0	1017316.0	0.271696	Y
7	STD500 460-814964/9	1000.0	246.652191	50.0	1231761.0	0.246652	Y



Calibration / Cyclopentene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

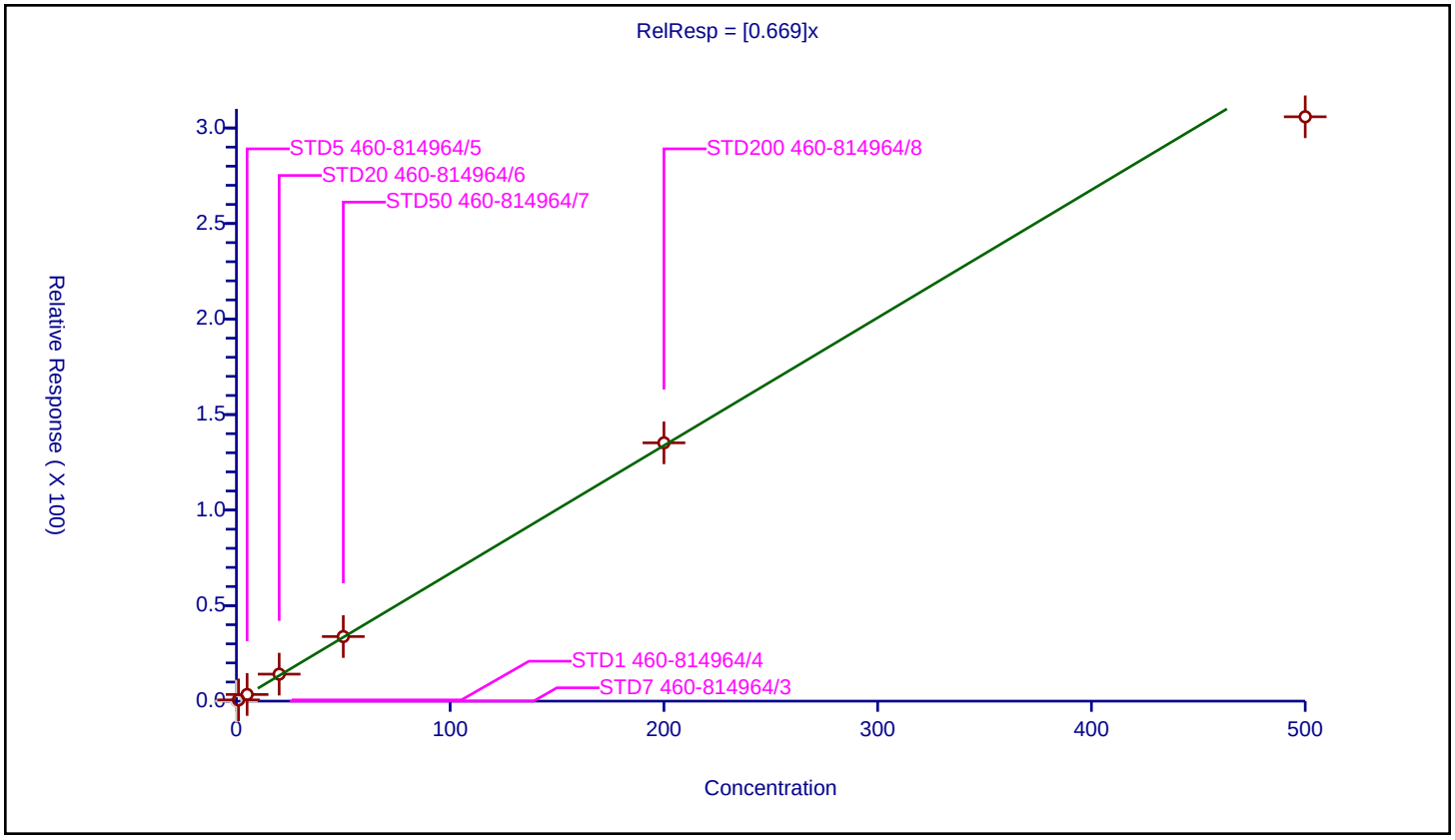
Curve Coefficients

Intercept:	0
Slope:	0.669

Error Coefficients

Standard Error:	3600000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.647263	50.0	935092.0	0.647263	Y
3	STD5 460-814964/5	5.0	3.480807	50.0	1006778.0	0.696161	Y
4	STD20 460-814964/6	20.0	14.134494	50.0	966989.0	0.706725	Y
5	STD50 460-814964/7	50.0	33.806063	50.0	1037626.0	0.676121	Y
6	STD200 460-814964/8	200.0	135.206023	50.0	1017316.0	0.67603	Y
7	STD500 460-814964/9	500.0	305.868427	50.0	1231761.0	0.611737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

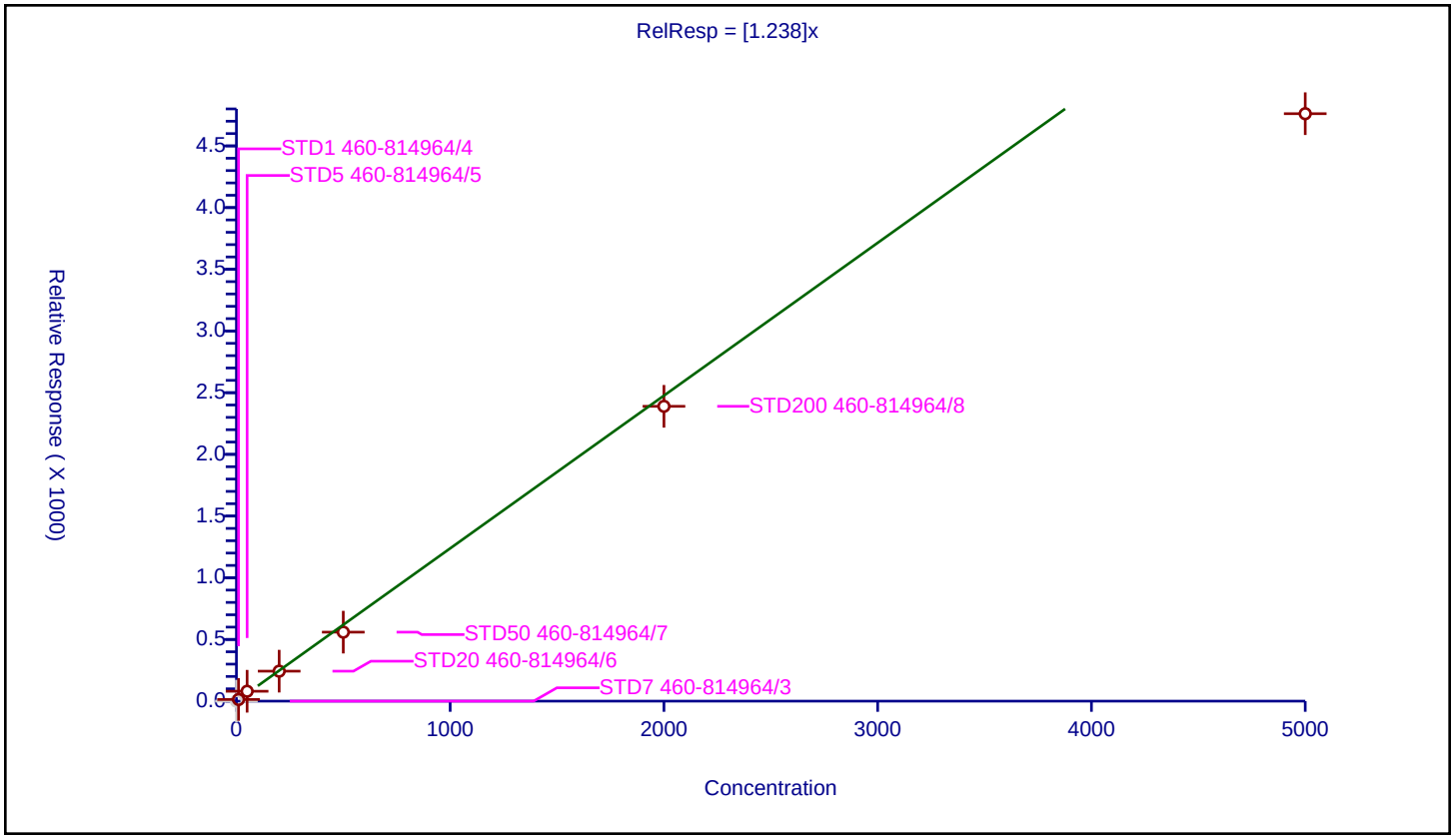
Curve Coefficients

Intercept:	0
Slope:	1.238

Error Coefficients

Standard Error:	1910000
Relative Standard Error:	17.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	10.0	13.454959	1000.0	528727.0	1.345496	Y
3	STD5 460-814964/5	50.0	80.17337	1000.0	575877.0	1.603467	Y
4	STD20 460-814964/6	200.0	242.915223	1000.0	532762.0	1.214576	Y
5	STD50 460-814964/7	500.0	559.102592	1000.0	678532.0	1.118205	Y
6	STD200 460-814964/8	2000.0	2389.565525	1000.0	615709.0	1.194783	Y
7	STD500 460-814964/9	5000.0	4761.21578	1000.0	838573.0	0.952243	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

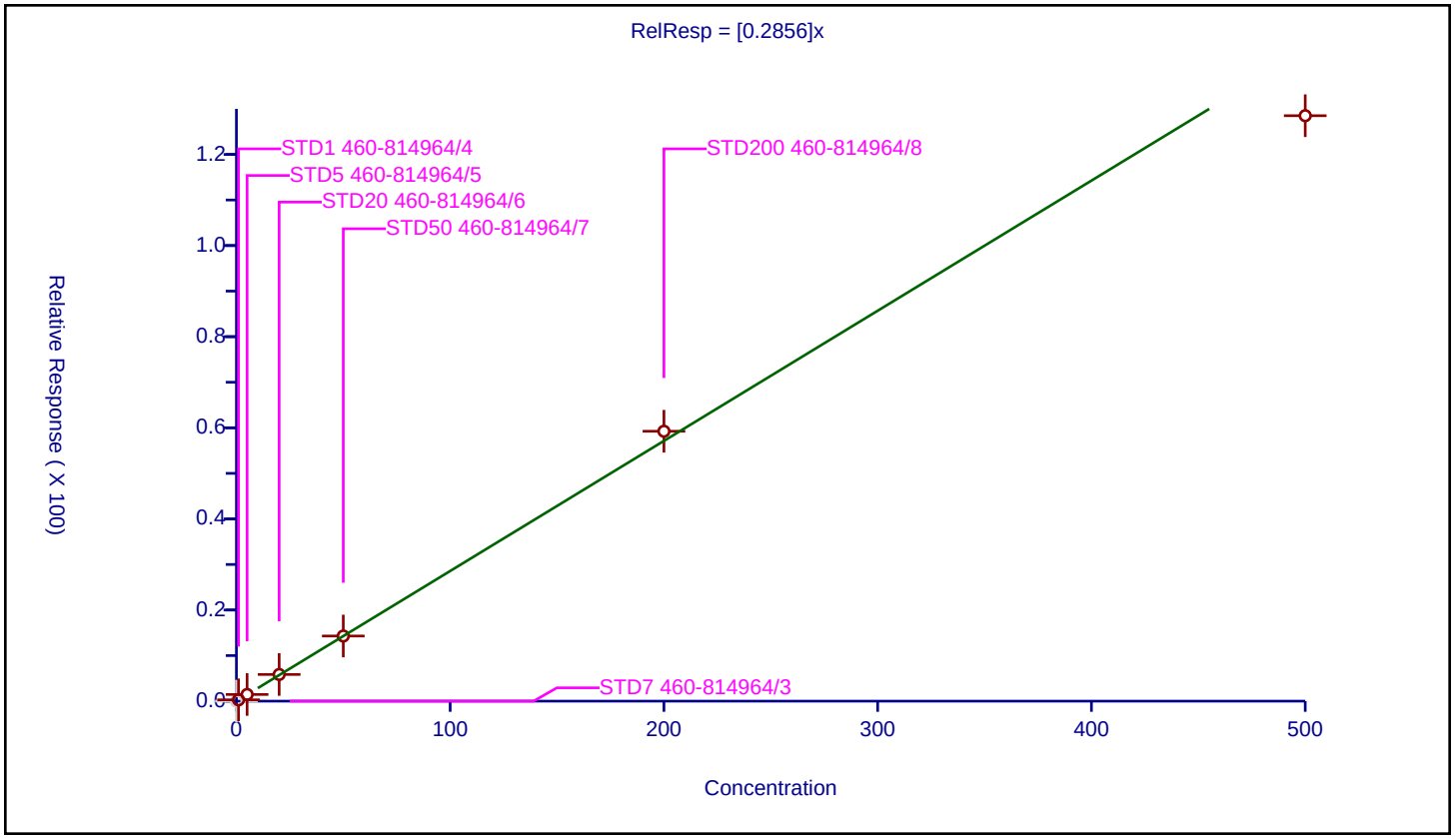
Curve Coefficients

Intercept:	0
Slope:	0.2856

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.288795	50.0	935092.0	0.288795	Y
3	STD5 460-814964/5	5.0	1.466212	50.0	1006778.0	0.293242	Y
4	STD20 460-814964/6	20.0	5.854358	50.0	966989.0	0.292718	Y
5	STD50 460-814964/7	50.0	14.294168	50.0	1037626.0	0.285883	Y
6	STD200 460-814964/8	200.0	59.243391	50.0	1017316.0	0.296217	Y
7	STD500 460-814964/9	500.0	128.505489	50.0	1231761.0	0.257011	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

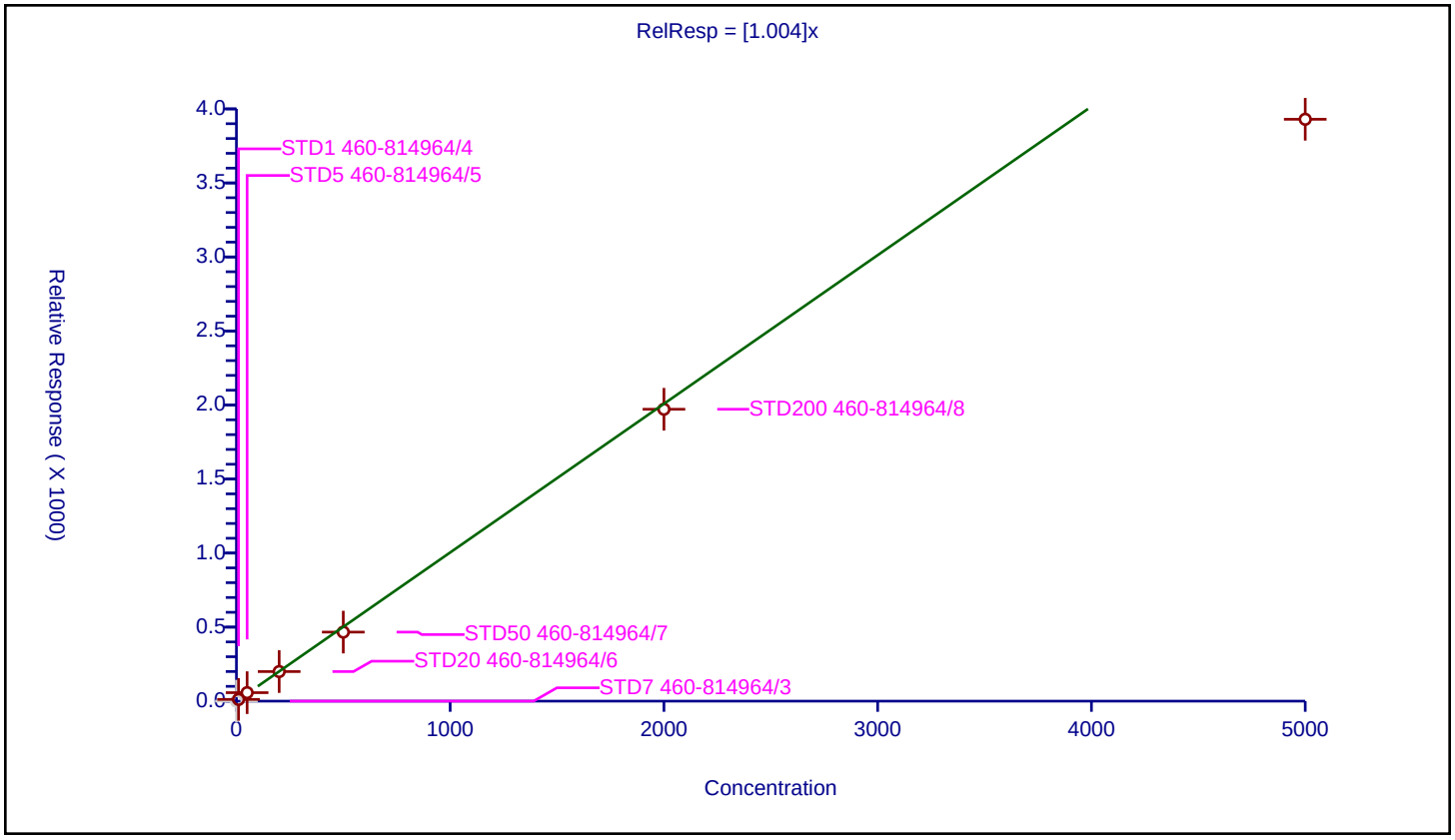
Curve Coefficients

Intercept:	0
Slope:	1.004

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	14.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	10.0	11.77167	1000.0	528727.0	1.177167	Y
3	STD5 460-814964/5	50.0	57.21187	1000.0	575877.0	1.144237	Y
4	STD20 460-814964/6	200.0	199.695173	1000.0	532762.0	0.998476	Y
5	STD50 460-814964/7	500.0	466.296357	1000.0	678532.0	0.932593	Y
6	STD200 460-814964/8	2000.0	1971.426437	1000.0	615709.0	0.985713	Y
7	STD500 460-814964/9	5000.0	3929.837951	1000.0	838573.0	0.785968	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

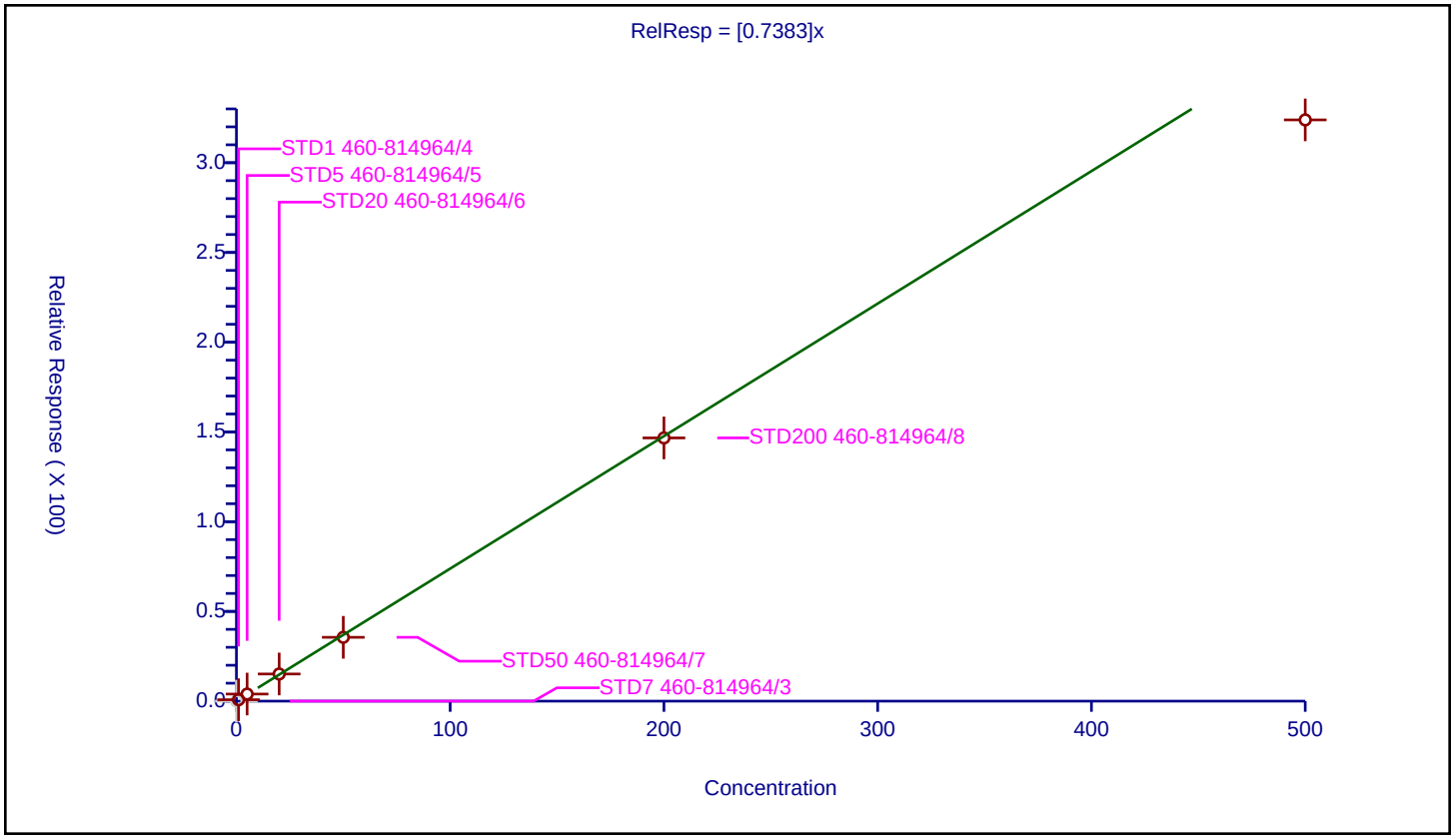
Curve Coefficients

Intercept:	0
Slope:	0.7383

Error Coefficients

Standard Error:	3830000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.789762	50.0	935092.0	0.789762	Y
3	STD5 460-814964/5	5.0	3.954347	50.0	1006778.0	0.790869	Y
4	STD20 460-814964/6	20.0	15.136315	50.0	966989.0	0.756816	Y
5	STD50 460-814964/7	50.0	35.571054	50.0	1037626.0	0.711421	Y
6	STD200 460-814964/8	200.0	146.657184	50.0	1017316.0	0.733286	Y
7	STD500 460-814964/9	500.0	323.867089	50.0	1231761.0	0.647734	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

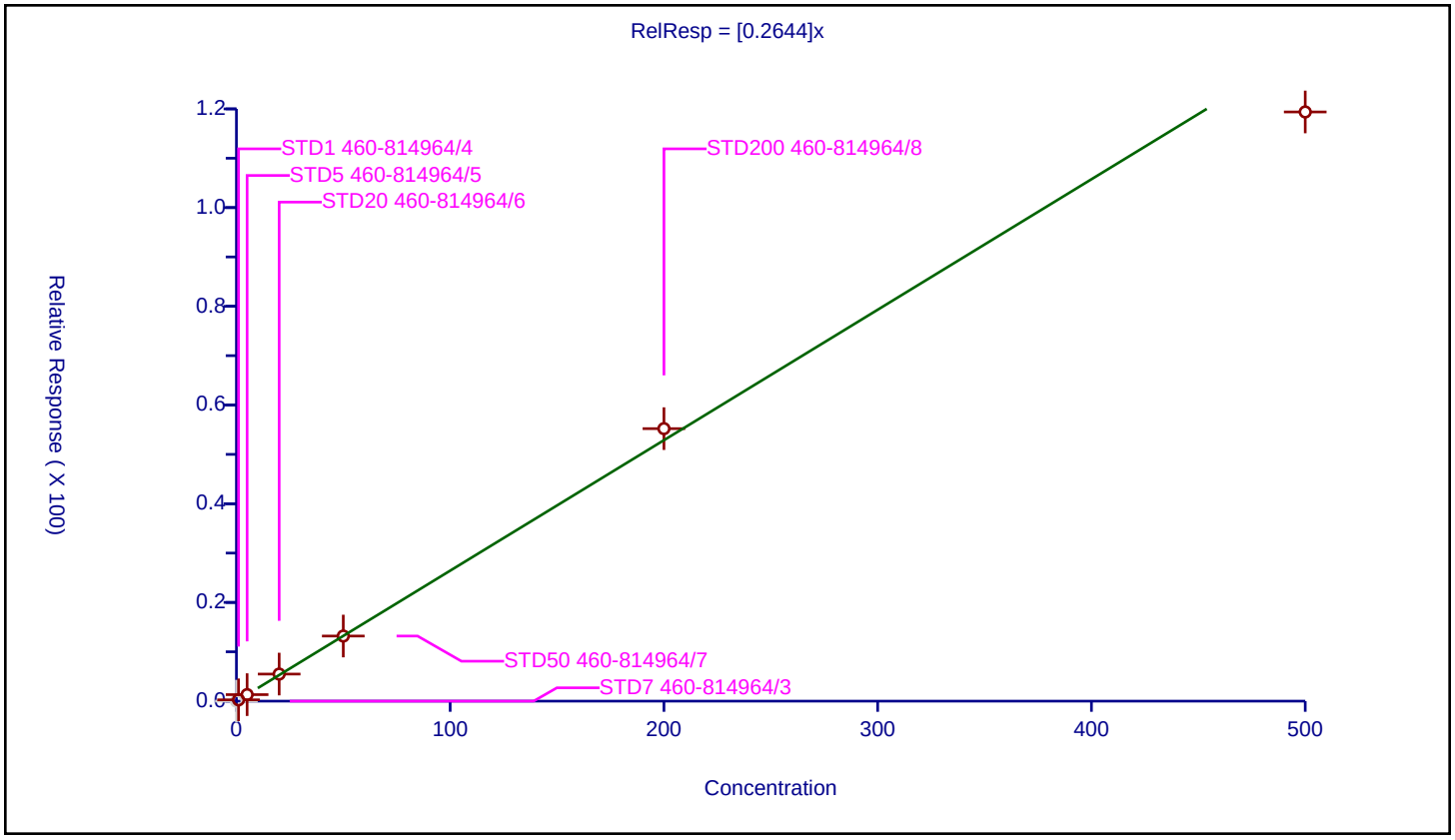
Curve Coefficients

Intercept:	0
Slope:	0.2644

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.268797	50.0	935092.0	0.268797	Y
3	STD5 460-814964/5	5.0	1.321841	50.0	1006778.0	0.264368	Y
4	STD20 460-814964/6	20.0	5.486153	50.0	966989.0	0.274308	Y
5	STD50 460-814964/7	50.0	13.190494	50.0	1037626.0	0.26381	Y
6	STD200 460-814964/8	200.0	55.212048	50.0	1017316.0	0.27606	Y
7	STD500 460-814964/9	500.0	119.379896	50.0	1231761.0	0.23876	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

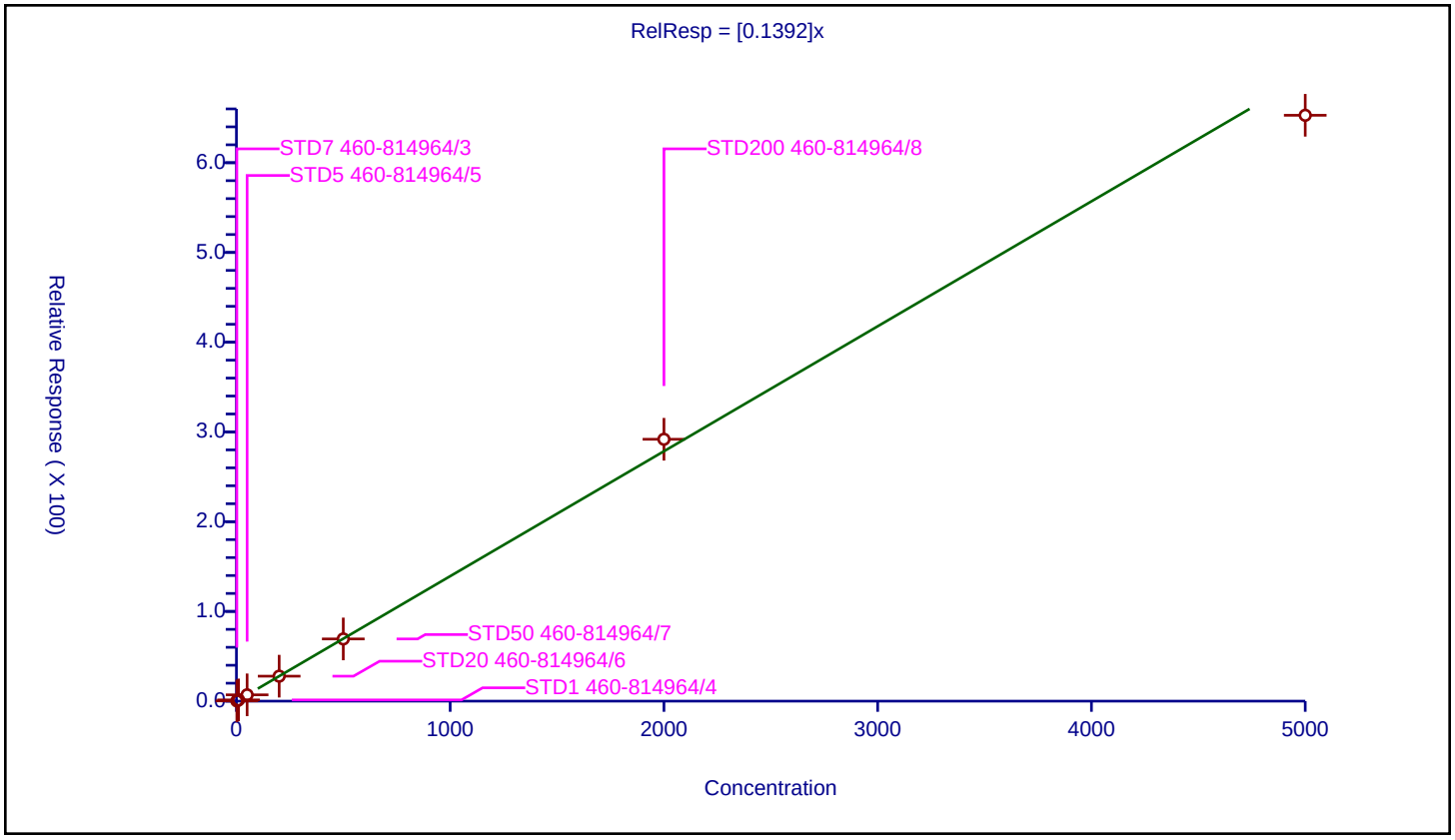
Curve Coefficients

Intercept:	0
Slope:	0.1392

Error Coefficients

Standard Error:	7030000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	2.0	0.289634	50.0	976405.0	0.144817	Y
2	STD1 460-814964/4	10.0	1.353075	50.0	935092.0	0.135308	Y
3	STD5 460-814964/5	50.0	7.014754	50.0	1006778.0	0.140295	Y
4	STD20 460-814964/6	200.0	27.832323	50.0	966989.0	0.139162	Y
5	STD50 460-814964/7	500.0	69.317654	50.0	1037626.0	0.138635	Y
6	STD200 460-814964/8	2000.0	291.835182	50.0	1017316.0	0.145918	Y
7	STD500 460-814964/9	5000.0	652.883757	50.0	1231761.0	0.130577	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

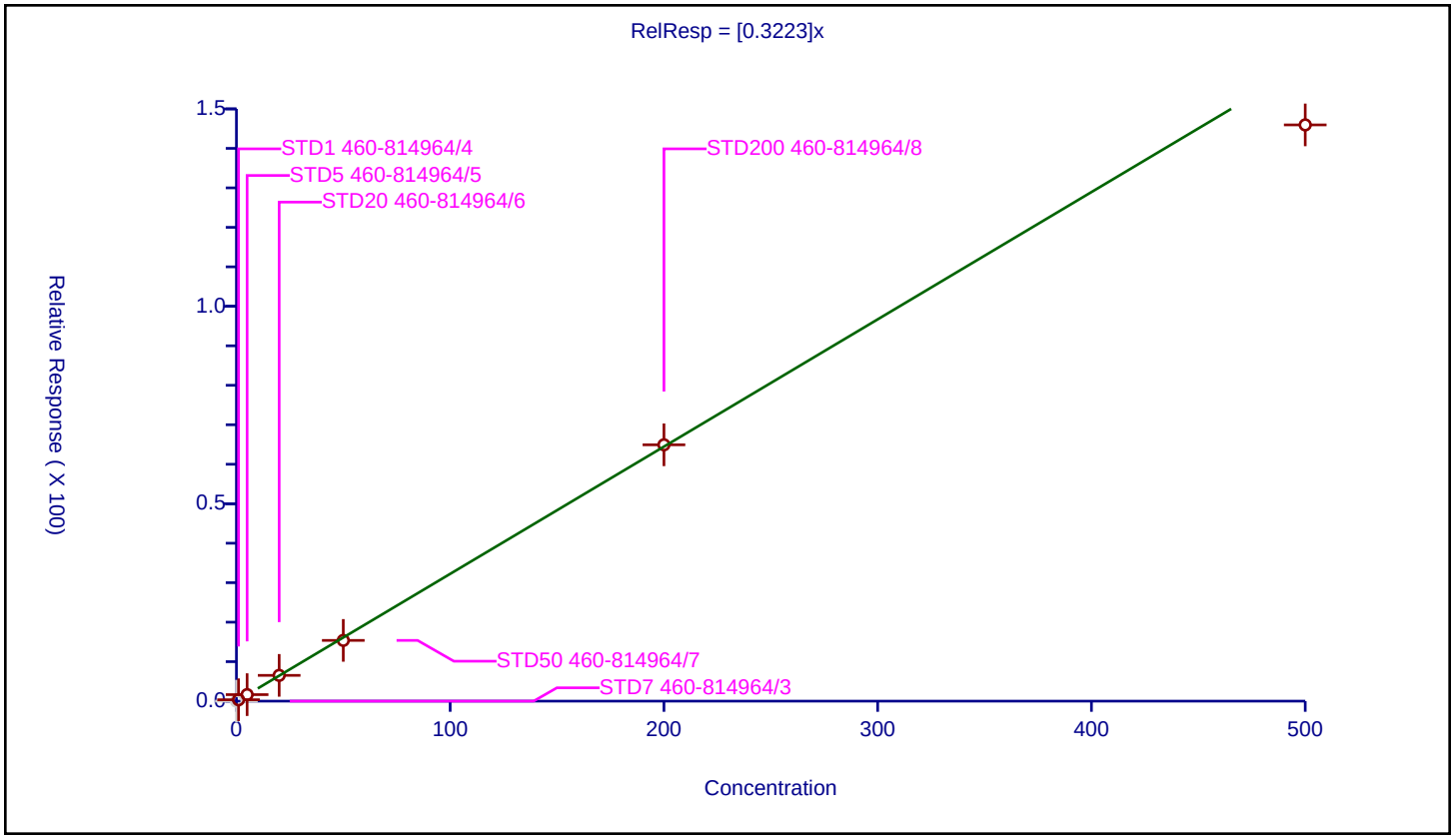
Curve Coefficients

Intercept:	0
Slope:	0.3223

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.353762	50.0	935092.0	0.353762	Y
3	STD5 460-814964/5	5.0	1.648824	50.0	1006778.0	0.329765	Y
4	STD20 460-814964/6	20.0	6.523652	50.0	966989.0	0.326183	Y
5	STD50 460-814964/7	50.0	15.385698	50.0	1037626.0	0.307714	Y
6	STD200 460-814964/8	200.0	64.925549	50.0	1017316.0	0.324628	Y
7	STD500 460-814964/9	500.0	145.948971	50.0	1231761.0	0.291898	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

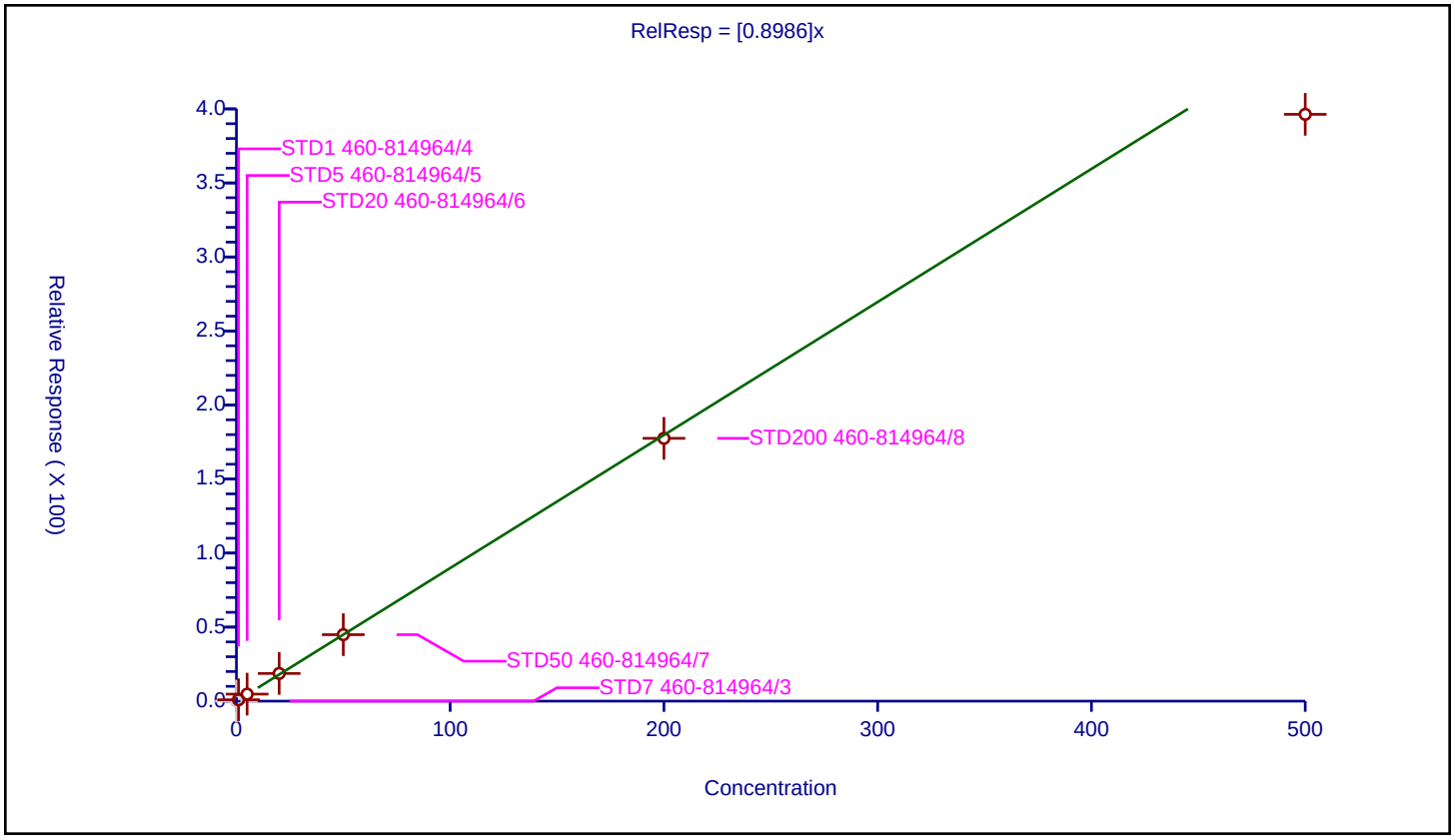
Curve Coefficients

Intercept:	0
Slope:	0.8986

Error Coefficients

Standard Error:	4680000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.930069	50.0	935092.0	0.930069	Y
3	STD5 460-814964/5	5.0	4.743201	50.0	1006778.0	0.94864	Y
4	STD20 460-814964/6	20.0	18.701557	50.0	966989.0	0.935078	Y
5	STD50 460-814964/7	50.0	44.89397	50.0	1037626.0	0.897879	Y
6	STD200 460-814964/8	200.0	177.501828	50.0	1017316.0	0.887509	Y
7	STD500 460-814964/9	500.0	396.332365	50.0	1231761.0	0.792665	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

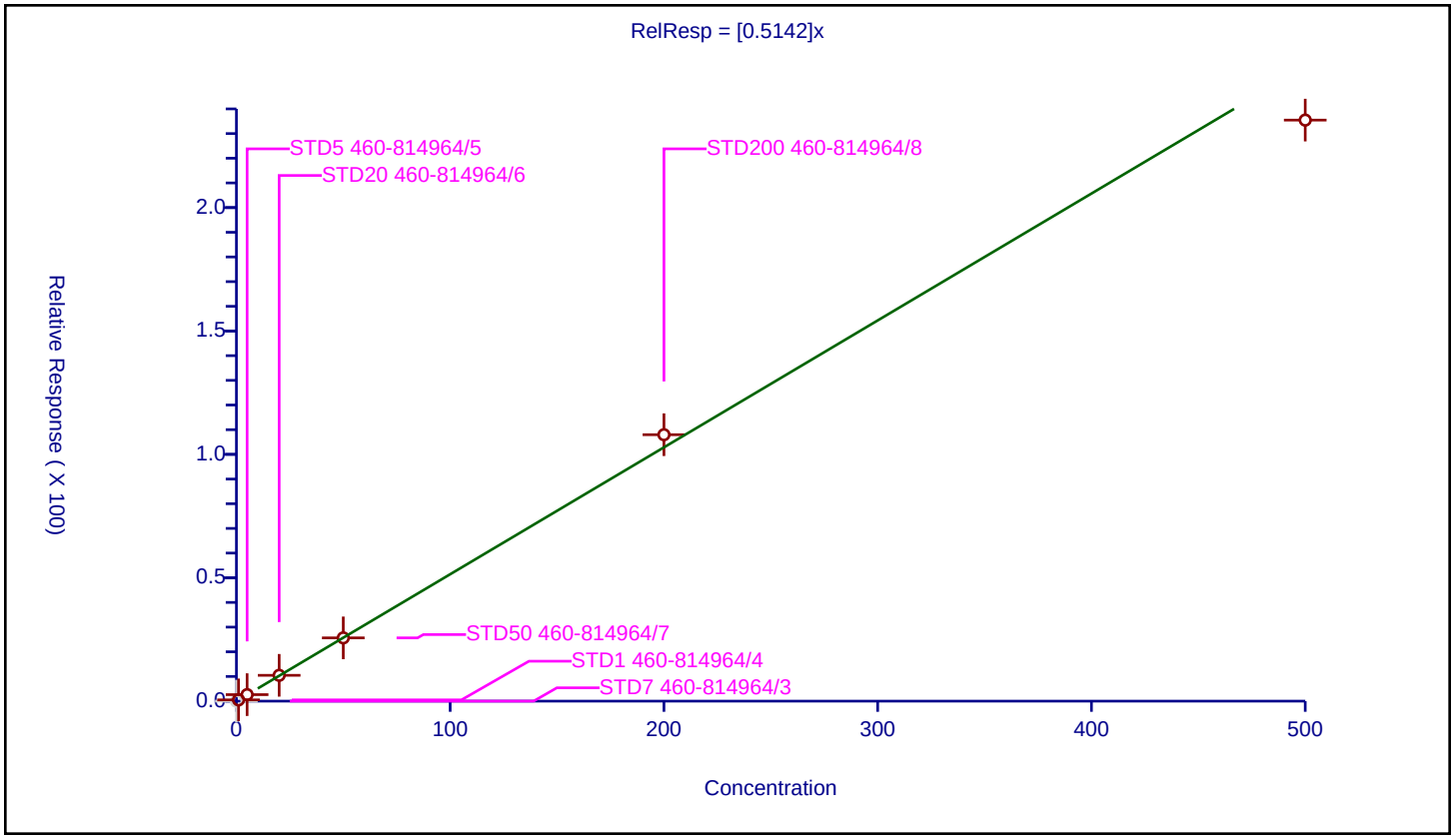
Curve Coefficients

Intercept:	0
Slope:	0.5142

Error Coefficients

Standard Error:	2790000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.511554	50.0	935092.0	0.511554	Y
3	STD5 460-814964/5	5.0	2.636778	50.0	1006778.0	0.527356	Y
4	STD20 460-814964/6	20.0	10.459736	50.0	966989.0	0.522987	Y
5	STD50 460-814964/7	50.0	25.634574	50.0	1037626.0	0.512691	Y
6	STD200 460-814964/8	200.0	107.972891	50.0	1017316.0	0.539864	Y
7	STD500 460-814964/9	500.0	235.45903	50.0	1231761.0	0.470918	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

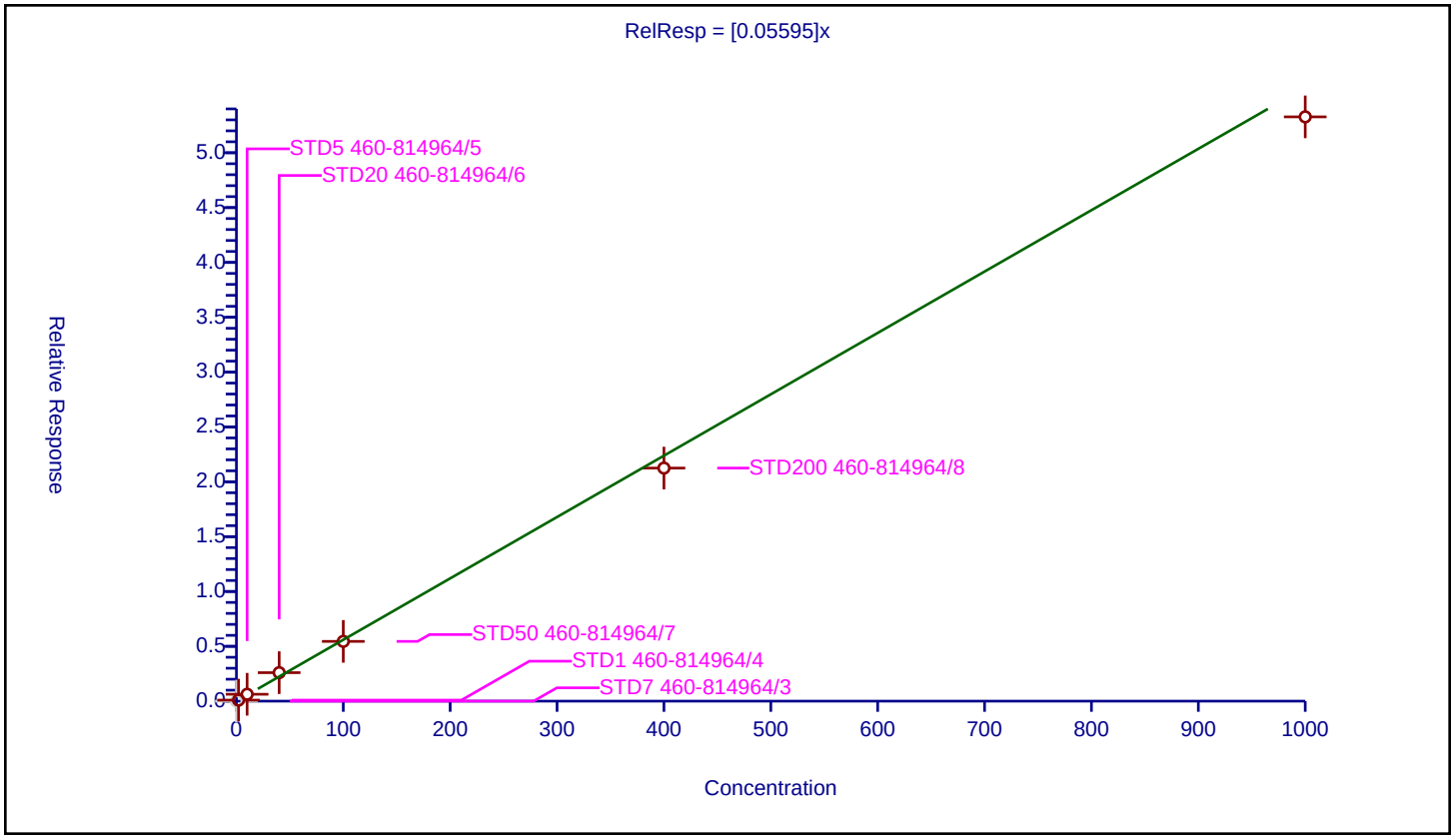
Curve Coefficients

Intercept:	0
Slope:	0.05595

Error Coefficients

Standard Error:	620000
Relative Standard Error:	11.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	2.0	0.094483	50.0	935092.0	0.047241	Y
3	STD5 460-814964/5	10.0	0.626901	50.0	1006778.0	0.06269	Y
4	STD20 460-814964/6	40.0	2.596772	50.0	966989.0	0.064919	Y
5	STD50 460-814964/7	100.0	5.44782	50.0	1037626.0	0.054478	Y
6	STD200 460-814964/8	400.0	21.250772	50.0	1017316.0	0.053127	Y
7	STD500 460-814964/9	1000.0	53.273038	50.0	1231761.0	0.053273	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

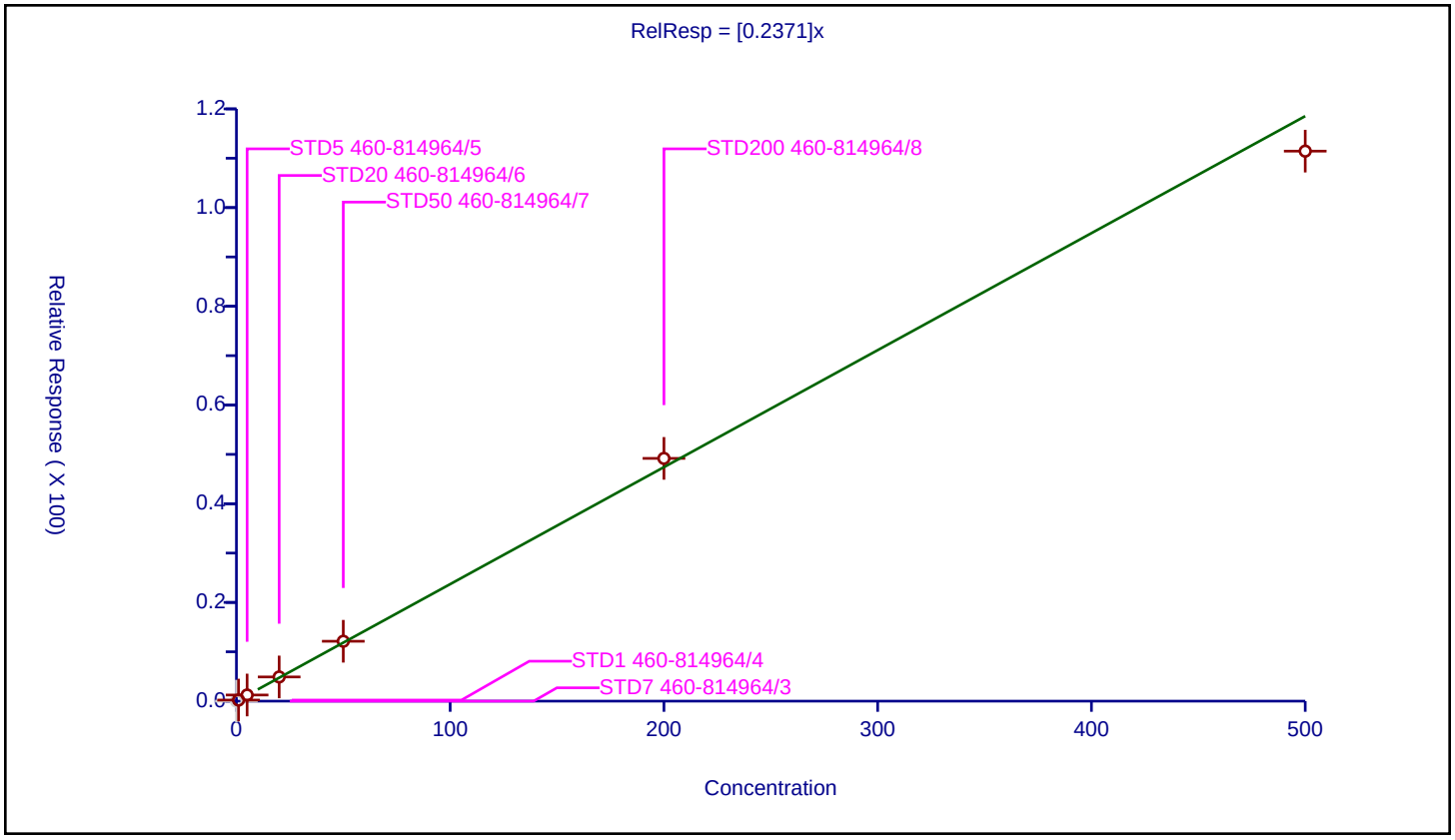
Curve Coefficients

Intercept:	0
Slope:	0.2371

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	5.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.216717	50.0	935092.0	0.216717	Y
3	STD5 460-814964/5	5.0	1.245707	50.0	1006778.0	0.249141	Y
4	STD20 460-814964/6	20.0	4.901142	50.0	966989.0	0.245057	Y
5	STD50 460-814964/7	50.0	12.131442	50.0	1037626.0	0.242629	Y
6	STD200 460-814964/8	200.0	49.185651	50.0	1017316.0	0.245928	Y
7	STD500 460-814964/9	500.0	111.441586	50.0	1231761.0	0.222883	Y



Calibration / Tert-butyl ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

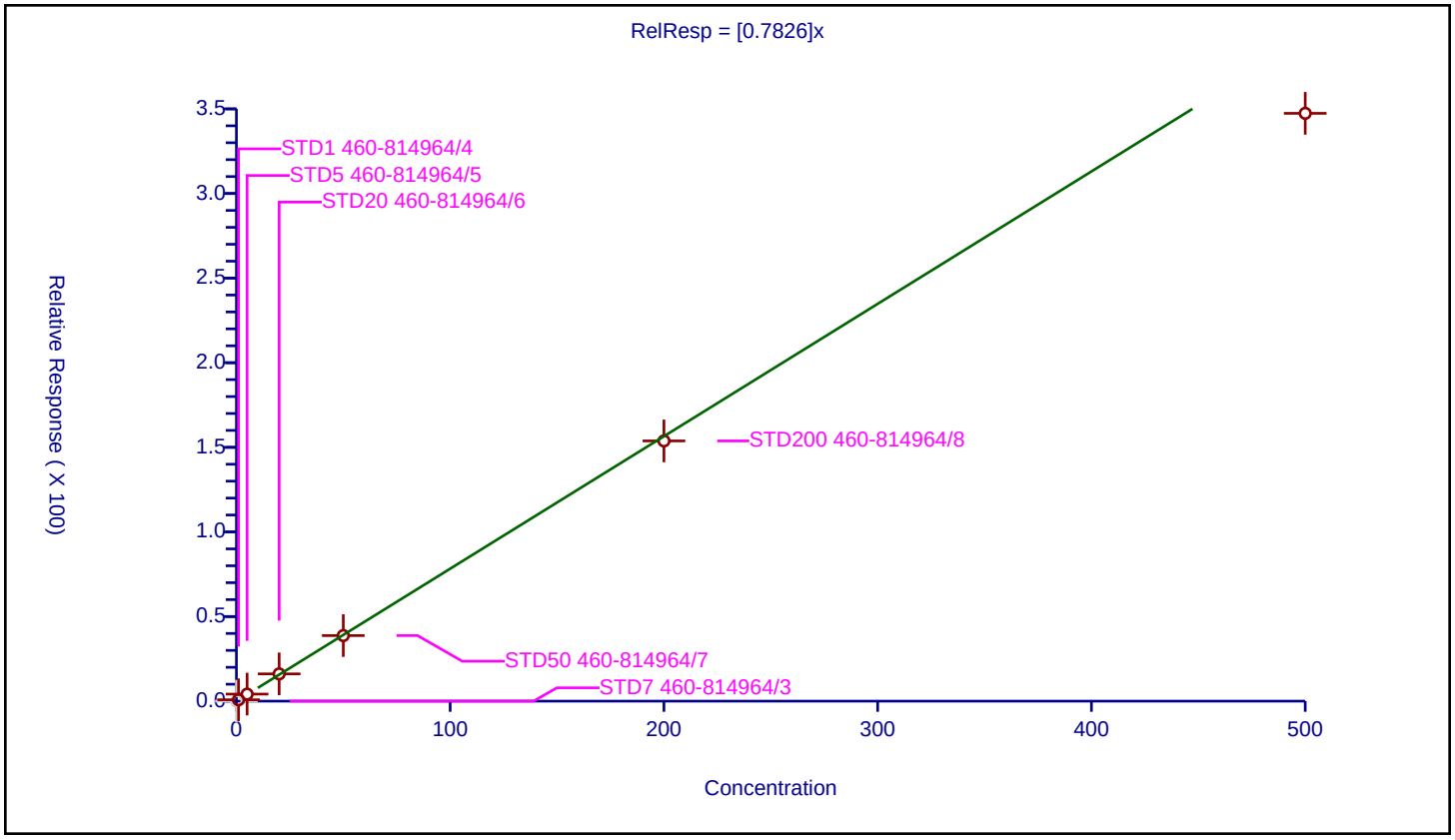
Curve Coefficients

Intercept:	0
Slope:	0.7826

Error Coefficients

Standard Error:	4090000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.81746	50.0	935092.0	0.81746	Y
3	STD5 460-814964/5	5.0	4.16934	50.0	1006778.0	0.833868	Y
4	STD20 460-814964/6	20.0	16.114971	50.0	966989.0	0.805749	Y
5	STD50 460-814964/7	50.0	38.739536	50.0	1037626.0	0.774791	Y
6	STD200 460-814964/8	200.0	153.784419	50.0	1017316.0	0.768922	Y
7	STD500 460-814964/9	500.0	347.369254	50.0	1231761.0	0.694739	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

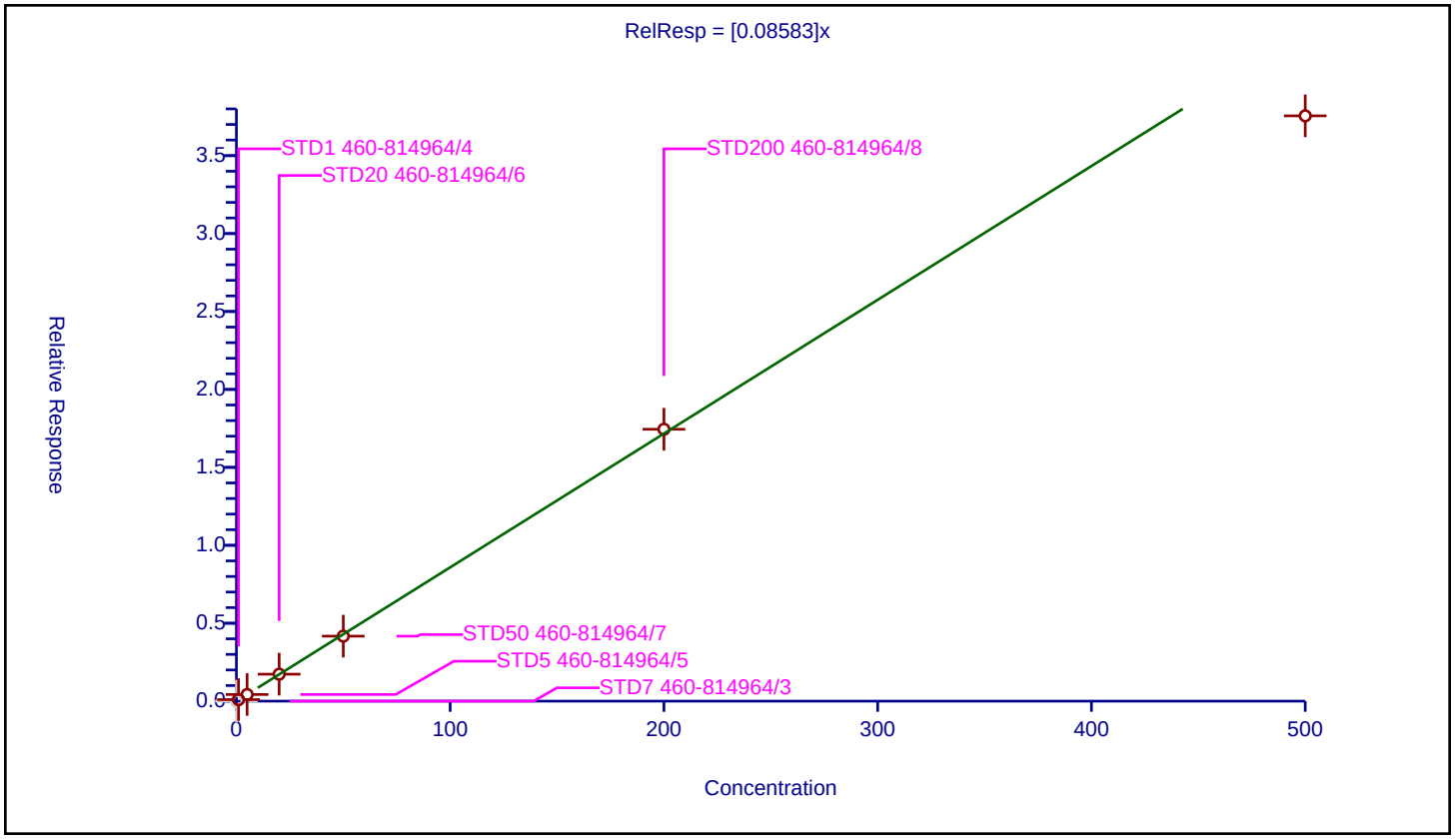
Curve Coefficients

Intercept:	0
Slope:	0.08583

Error Coefficients

Standard Error:	445000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.097637	50.0	935092.0	0.097637	Y
3	STD5 460-814964/5	5.0	0.425516	50.0	1006778.0	0.085103	Y
4	STD20 460-814964/6	20.0	1.729854	50.0	966989.0	0.086493	Y
5	STD50 460-814964/7	50.0	4.171204	50.0	1037626.0	0.083424	Y
6	STD200 460-814964/8	200.0	17.44458	50.0	1017316.0	0.087223	Y
7	STD500 460-814964/9	500.0	37.55481	50.0	1231761.0	0.07511	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

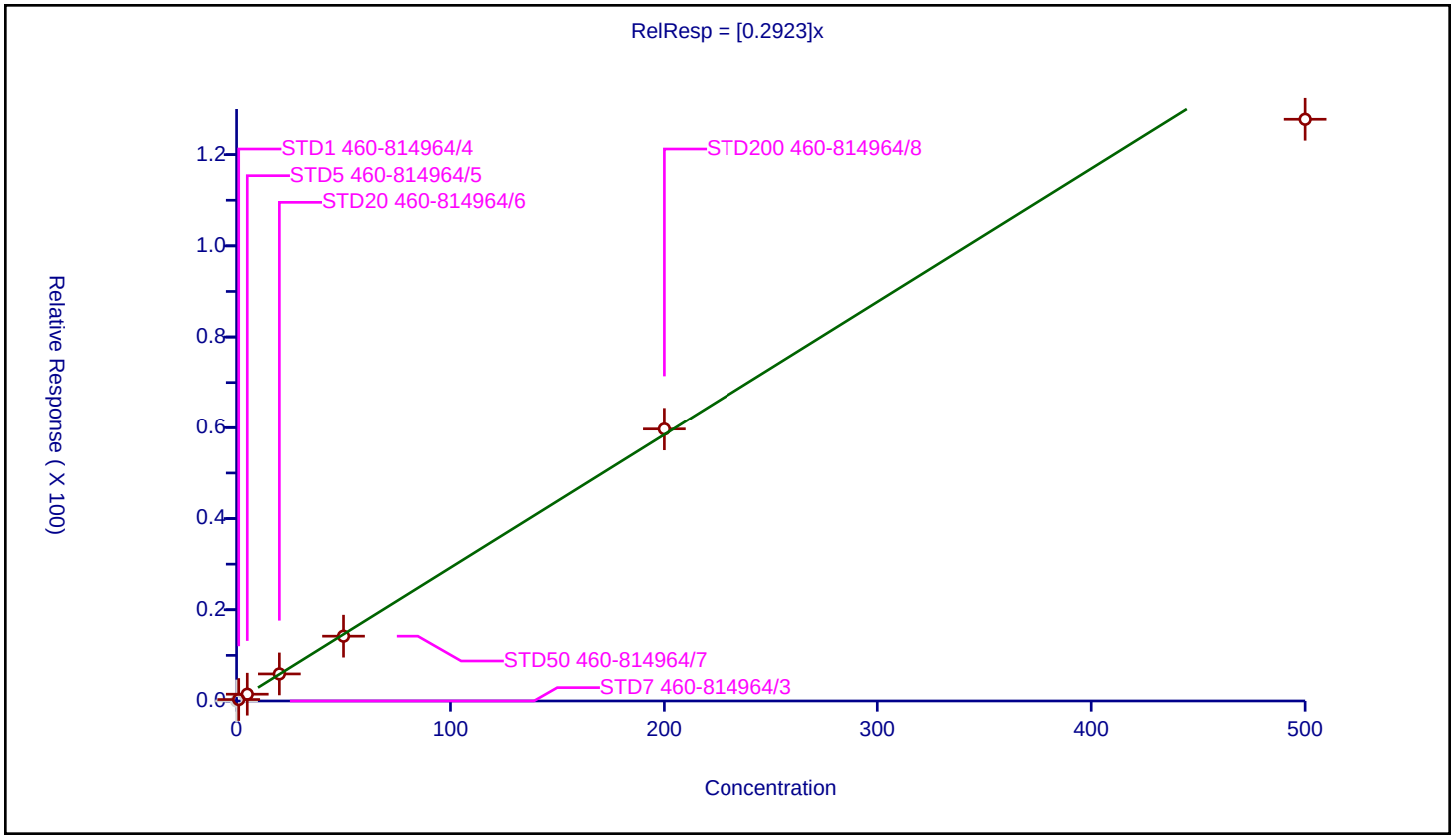
Curve Coefficients

Intercept:	0
Slope:	0.2923

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.321412	50.0	935092.0	0.321412	Y
3	STD5 460-814964/5	5.0	1.489057	50.0	1006778.0	0.297811	Y
4	STD20 460-814964/6	20.0	5.933108	50.0	966989.0	0.296655	Y
5	STD50 460-814964/7	50.0	14.209841	50.0	1037626.0	0.284197	Y
6	STD200 460-814964/8	200.0	59.691286	50.0	1017316.0	0.298456	Y
7	STD500 460-814964/9	500.0	127.754451	50.0	1231761.0	0.255509	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

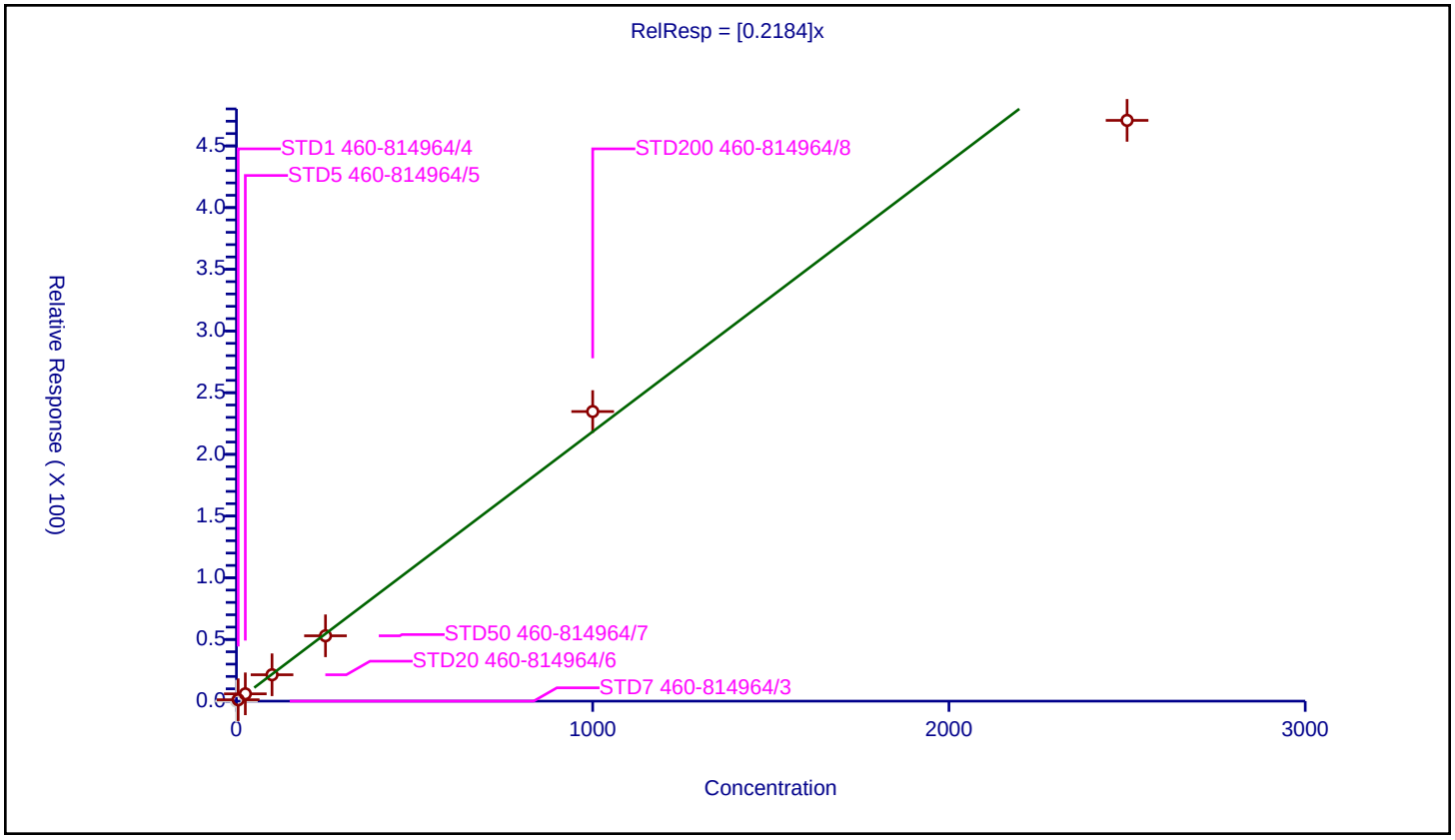
Curve Coefficients

Intercept:	0
Slope:	0.2184

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	5.0	1.123216	250.0	738727.0	0.224643	Y
3	STD5 460-814964/5	25.0	5.929523	250.0	836155.0	0.237181	Y
4	STD20 460-814964/6	100.0	21.391408	250.0	817618.0	0.213914	Y
5	STD50 460-814964/7	250.0	52.952048	250.0	925205.0	0.211808	Y
6	STD200 460-814964/8	1000.0	234.706734	250.0	921484.0	0.234707	Y
7	STD500 460-814964/9	2500.0	470.701977	250.0	1194270.0	0.188281	Y



Calibration / Ethyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

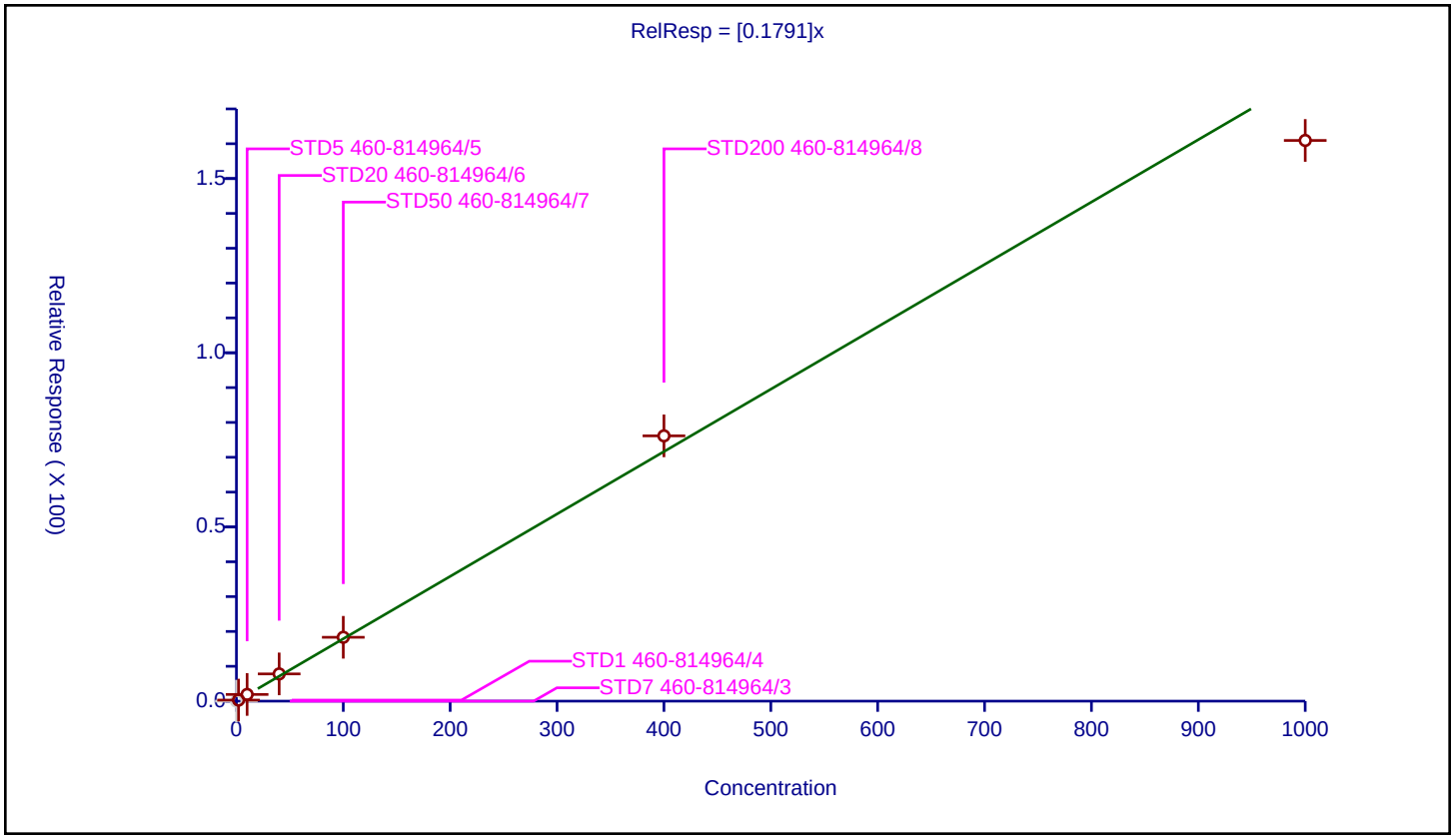
Curve Coefficients

Intercept:	0
Slope:	0.1791

Error Coefficients

Standard Error:	367000
Relative Standard Error:	10.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	2.0	0.303901	250.0	738727.0	0.151951	Y
3	STD5 460-814964/5	10.0	1.924583	250.0	836155.0	0.192458	Y
4	STD20 460-814964/6	40.0	7.81722	250.0	817618.0	0.195431	Y
5	STD50 460-814964/7	100.0	18.329451	250.0	925205.0	0.183295	Y
6	STD200 460-814964/8	400.0	76.150535	250.0	921484.0	0.190376	Y
7	STD500 460-814964/9	1000.0	160.938272	250.0	1194270.0	0.160938	Y



Calibration / Methyl acrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

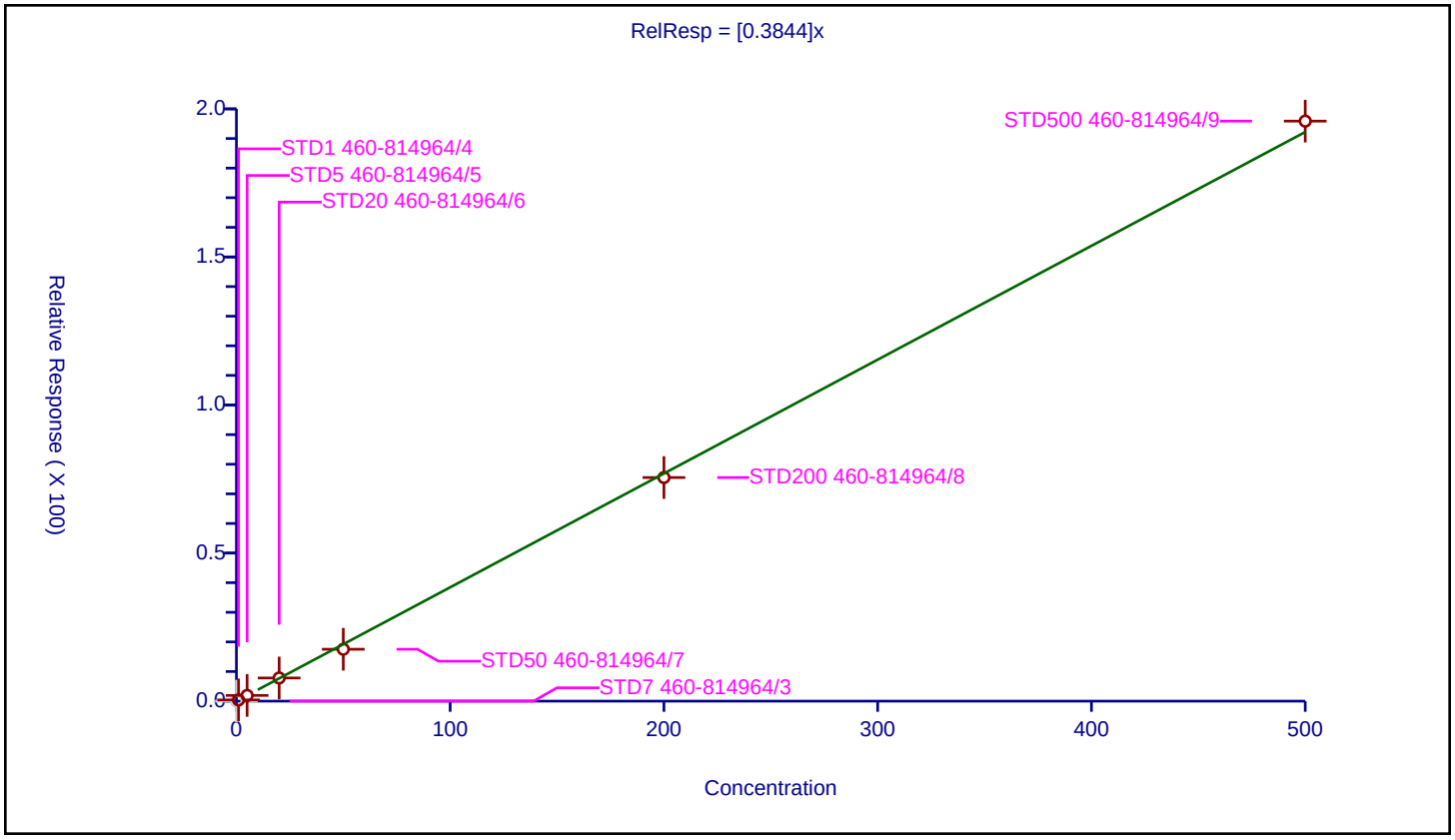
Curve Coefficients

Intercept:	0
Slope:	0.3844

Error Coefficients

Standard Error:	1700000
Relative Standard Error:	5.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.410165	50.0	690088.0	0.410165	Y
3	STD5 460-814964/5	5.0	1.924984	50.0	754214.0	0.384997	Y
4	STD20 460-814964/6	20.0	7.824753	50.0	745851.0	0.391238	Y
5	STD50 460-814964/7	50.0	17.528369	50.0	813912.0	0.350567	Y
6	STD200 460-814964/8	200.0	75.5088	50.0	783510.0	0.377544	Y
7	STD500 460-814964/9	500.0	195.868683	50.0	916439.0	0.391737	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

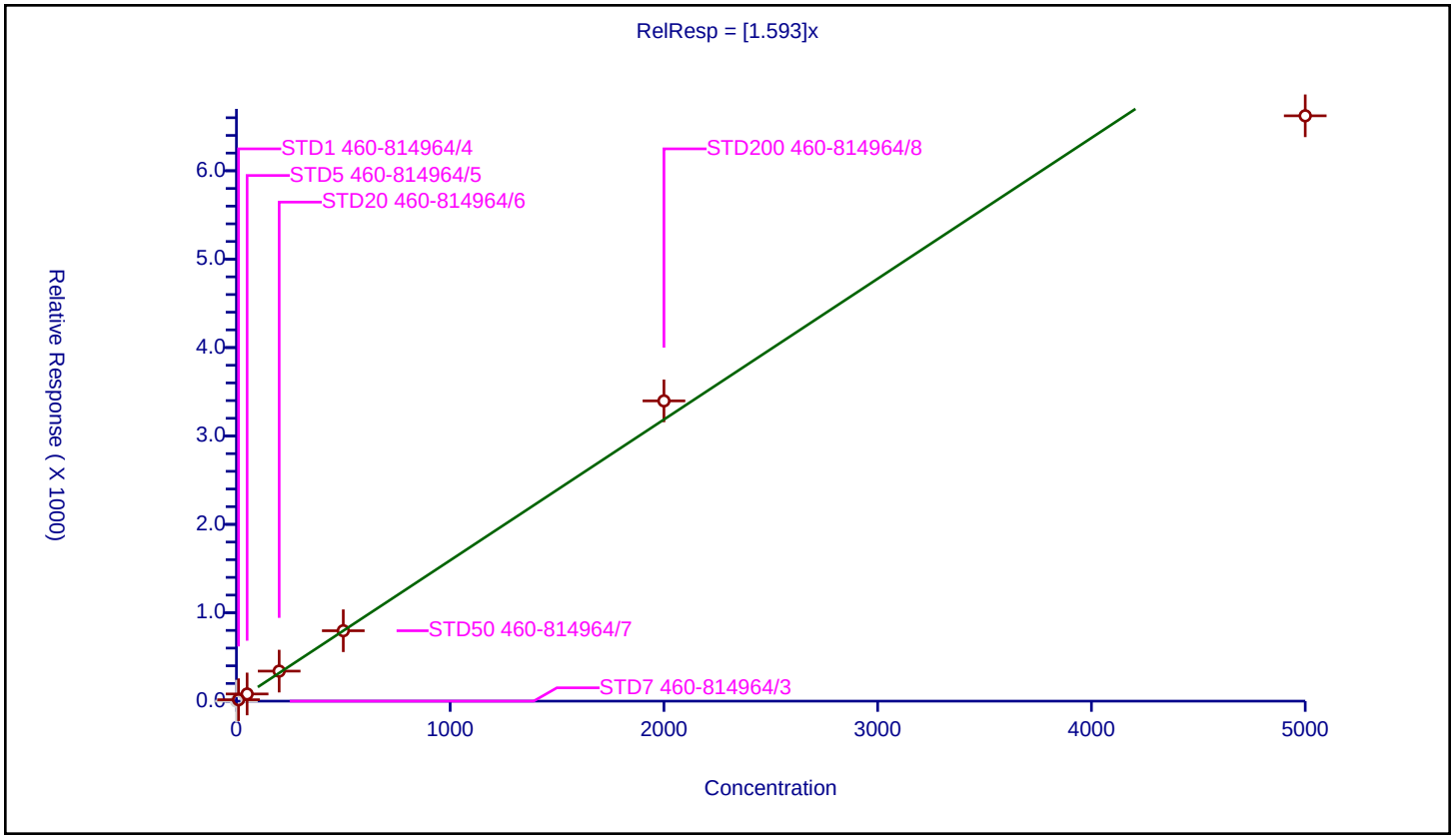
Curve Coefficients

Intercept:	0
Slope:	1.593

Error Coefficients

Standard Error:	2660000
Relative Standard Error:	8.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	10.0	16.193612	1000.0	528727.0	1.619361	Y
3	STD5 460-814964/5	50.0	81.203104	1000.0	575877.0	1.624062	Y
4	STD20 460-814964/6	200.0	339.746453	1000.0	532762.0	1.698732	Y
5	STD50 460-814964/7	500.0	796.47828	1000.0	678532.0	1.592957	Y
6	STD200 460-814964/8	2000.0	3396.64192	1000.0	615709.0	1.698321	Y
7	STD500 460-814964/9	5000.0	6622.031713	1000.0	838573.0	1.324406	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

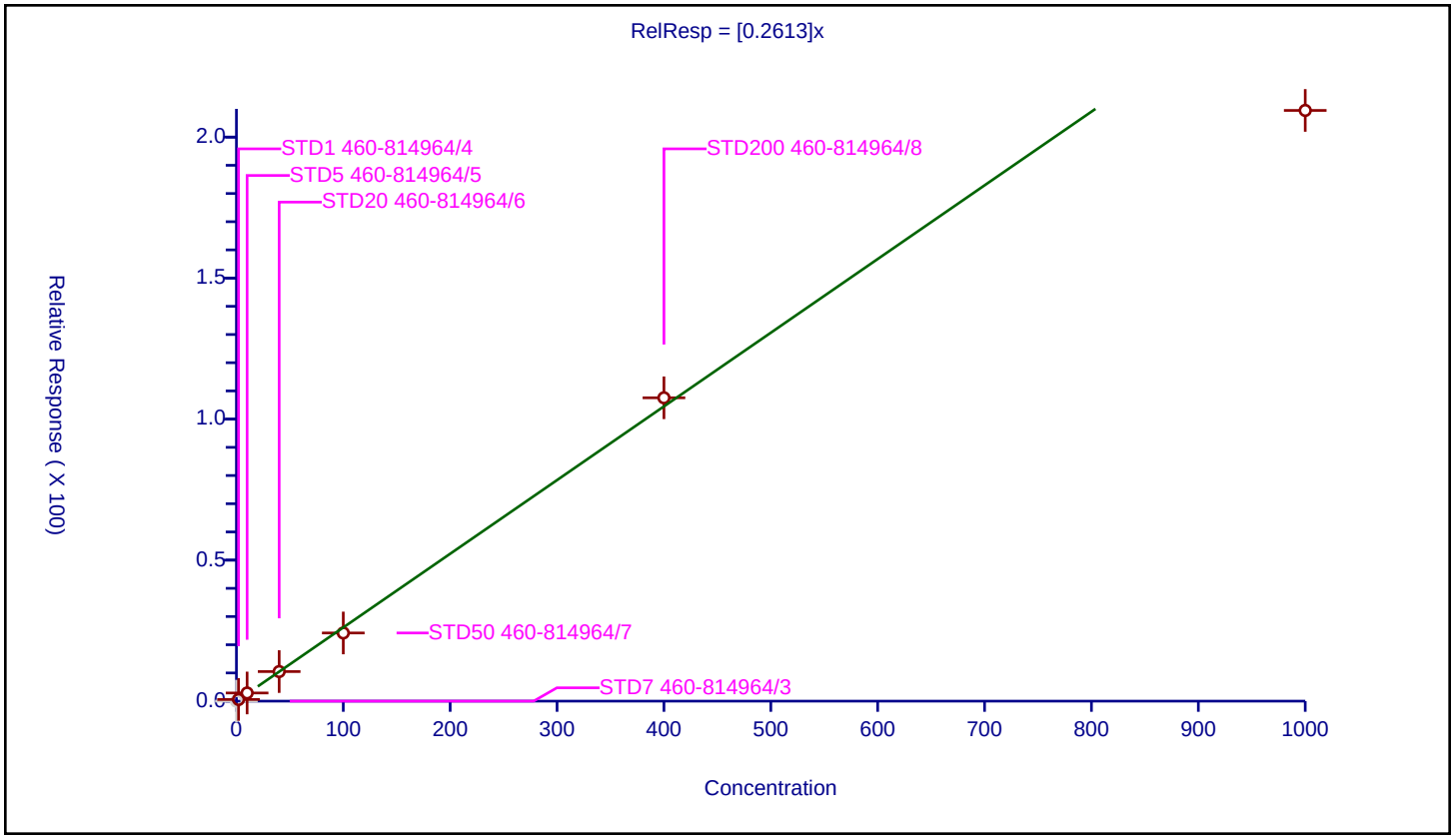
Curve Coefficients

Intercept:	0
Slope:	0.2613

Error Coefficients

Standard Error:	483000
Relative Standard Error:	12.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	2.0	0.591558	250.0	738727.0	0.295779	Y
3	STD5 460-814964/5	10.0	2.894798	250.0	836155.0	0.28948	Y
4	STD20 460-814964/6	40.0	10.491758	250.0	817618.0	0.262294	Y
5	STD50 460-814964/7	100.0	24.174102	250.0	925205.0	0.241741	Y
6	STD200 460-814964/8	400.0	107.56101	250.0	921484.0	0.268903	Y
7	STD500 460-814964/9	1000.0	209.450962	250.0	1194270.0	0.209451	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

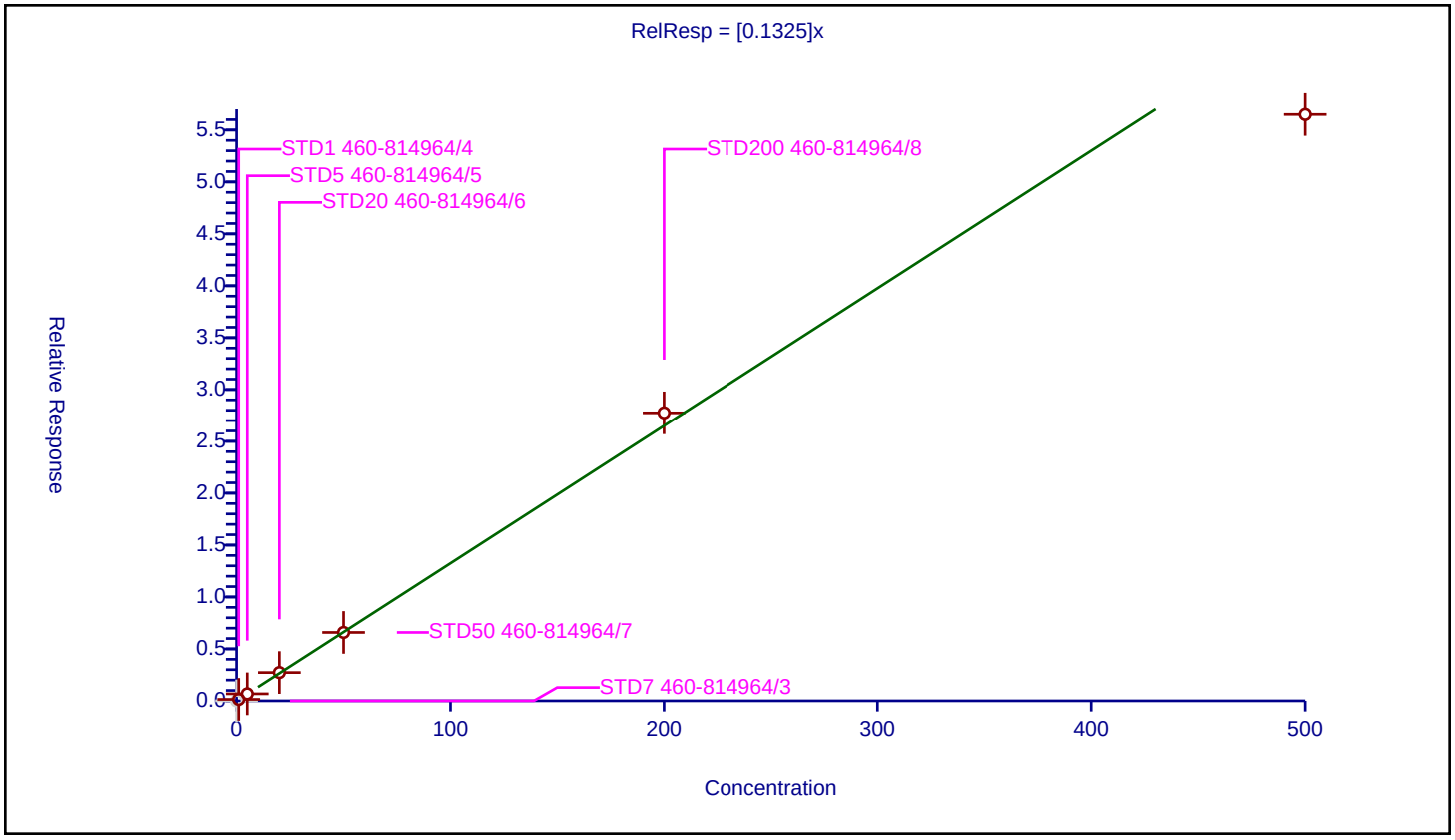
Curve Coefficients

Intercept:	0
Slope:	0.1325

Error Coefficients

Standard Error:	675000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.140521	50.0	935092.0	0.140521	Y
3	STD5 460-814964/5	5.0	0.674876	50.0	1006778.0	0.134975	Y
4	STD20 460-814964/6	20.0	2.723195	50.0	966989.0	0.13616	Y
5	STD50 460-814964/7	50.0	6.587007	50.0	1037626.0	0.13174	Y
6	STD200 460-814964/8	200.0	27.748703	50.0	1017316.0	0.138744	Y
7	STD500 460-814964/9	500.0	56.498339	50.0	1231761.0	0.112997	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

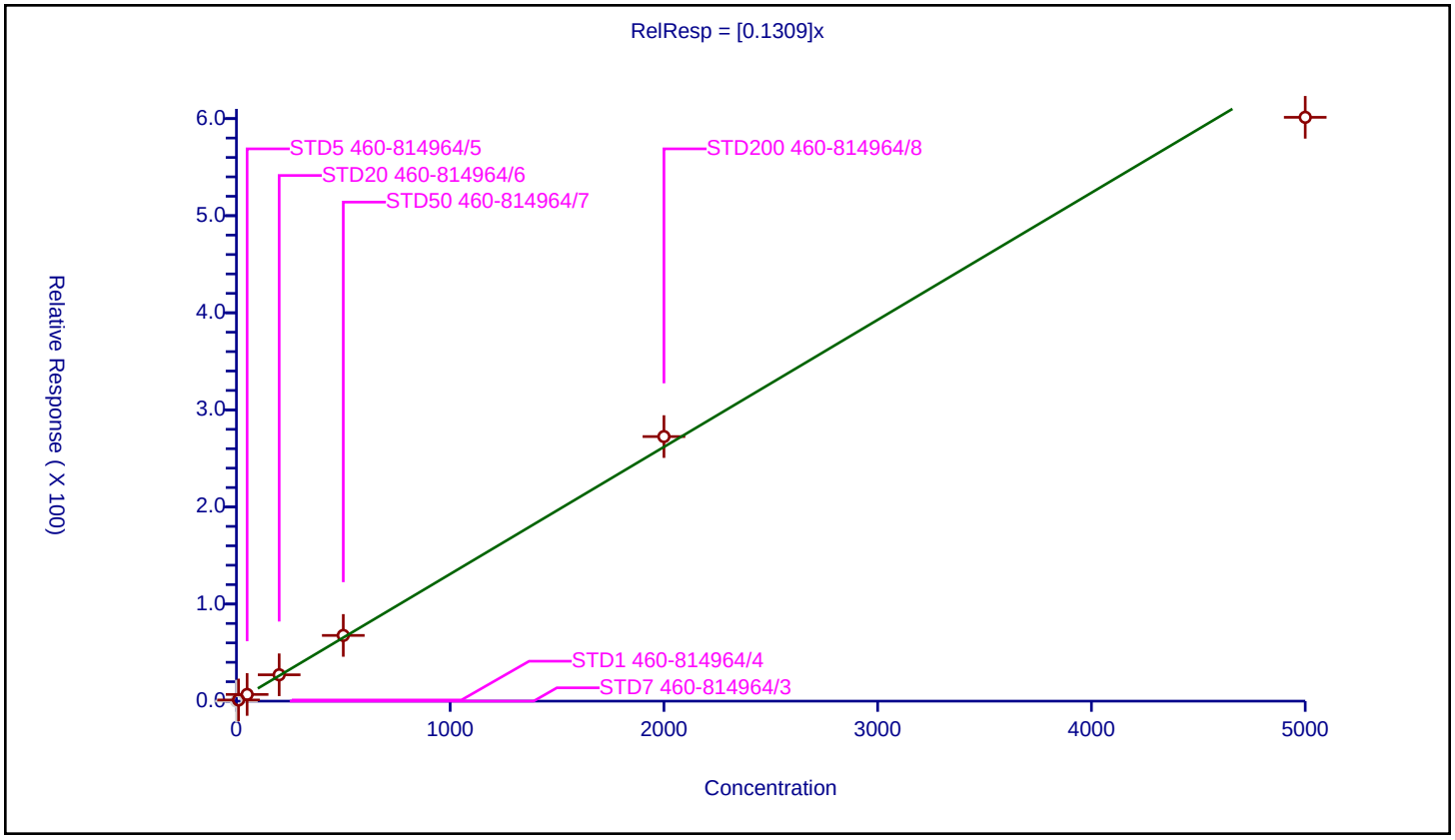
Curve Coefficients

Intercept:	0
Slope:	0.1309

Error Coefficients

Standard Error:	7110000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	10.0	1.201112	50.0	935092.0	0.120111	Y
3	STD5 460-814964/5	50.0	6.887367	50.0	1006778.0	0.137747	Y
4	STD20 460-814964/6	200.0	27.146896	50.0	966989.0	0.135734	Y
5	STD50 460-814964/7	500.0	67.68749	50.0	1037626.0	0.135375	Y
6	STD200 460-814964/8	2000.0	272.48785	50.0	1017316.0	0.136244	Y
7	STD500 460-814964/9	5000.0	601.328423	50.0	1231761.0	0.120266	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

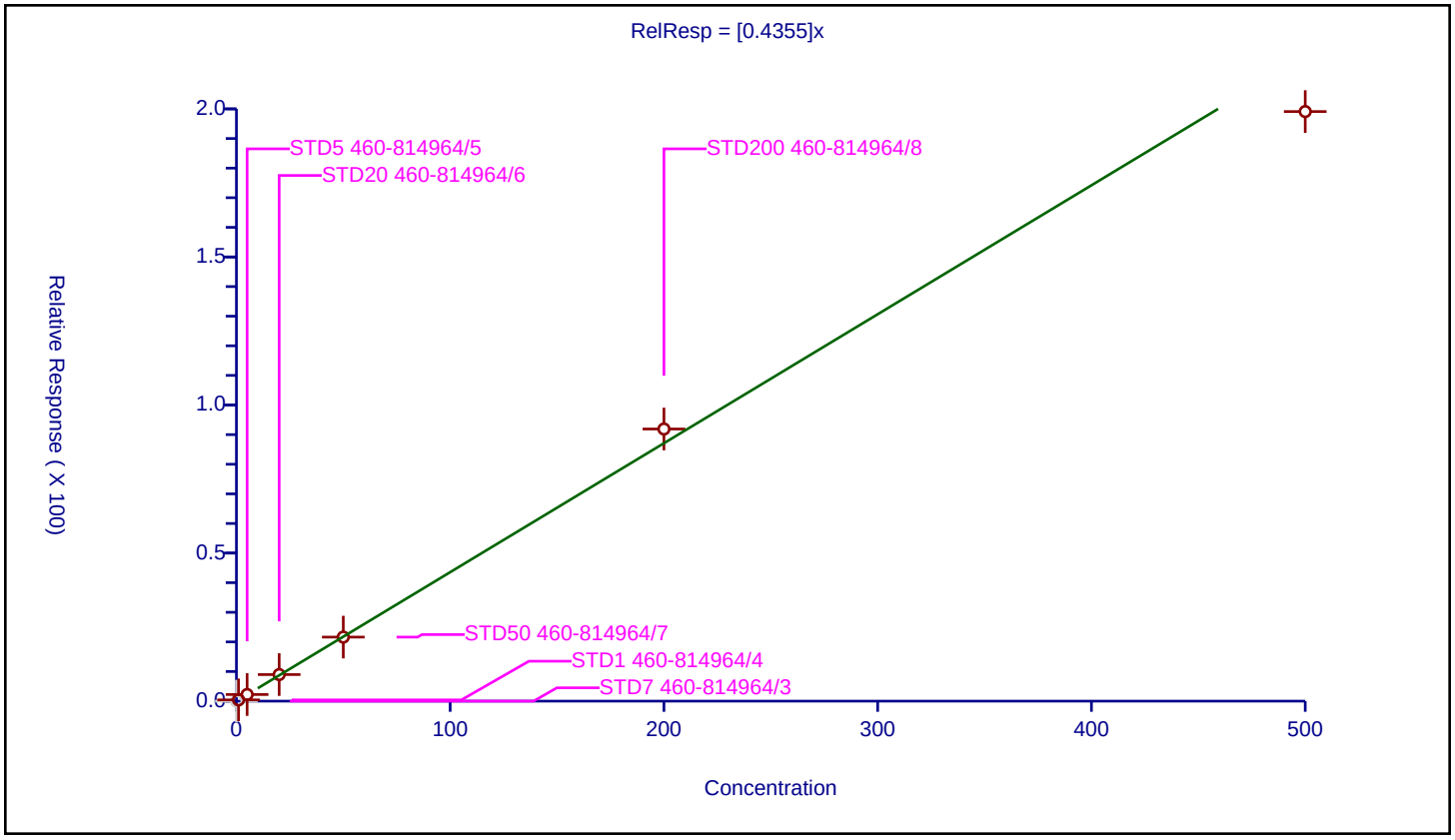
Curve Coefficients

Intercept:	0
Slope:	0.4355

Error Coefficients

Standard Error:	2360000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.427765	50.0	935092.0	0.427765	Y
3	STD5 460-814964/5	5.0	2.232766	50.0	1006778.0	0.446553	Y
4	STD20 460-814964/6	20.0	8.969233	50.0	966989.0	0.448462	Y
5	STD50 460-814964/7	50.0	21.62653	50.0	1037626.0	0.432531	Y
6	STD200 460-814964/8	200.0	91.89421	50.0	1017316.0	0.459471	Y
7	STD500 460-814964/9	500.0	199.097187	50.0	1231761.0	0.398194	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

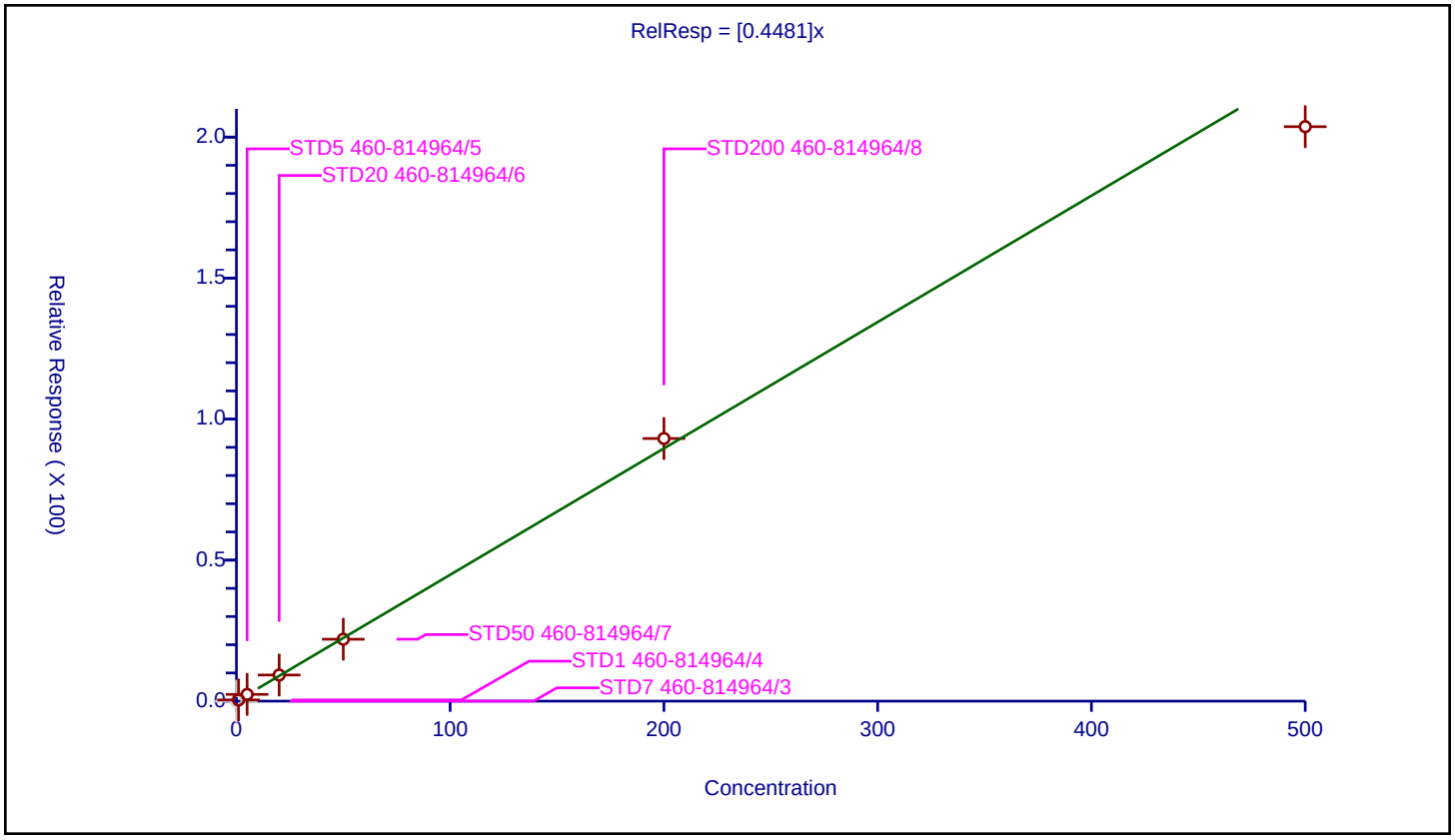
Curve Coefficients

Intercept:	0
Slope:	0.4481

Error Coefficients

Standard Error:	2410000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.433754	50.0	935092.0	0.433754	Y
3	STD5 460-814964/5	5.0	2.396904	50.0	1006778.0	0.479381	Y
4	STD20 460-814964/6	20.0	9.260705	50.0	966989.0	0.463035	Y
5	STD50 460-814964/7	50.0	21.956466	50.0	1037626.0	0.439129	Y
6	STD200 460-814964/8	200.0	93.125243	50.0	1017316.0	0.465626	Y
7	STD500 460-814964/9	500.0	203.688784	50.0	1231761.0	0.407378	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

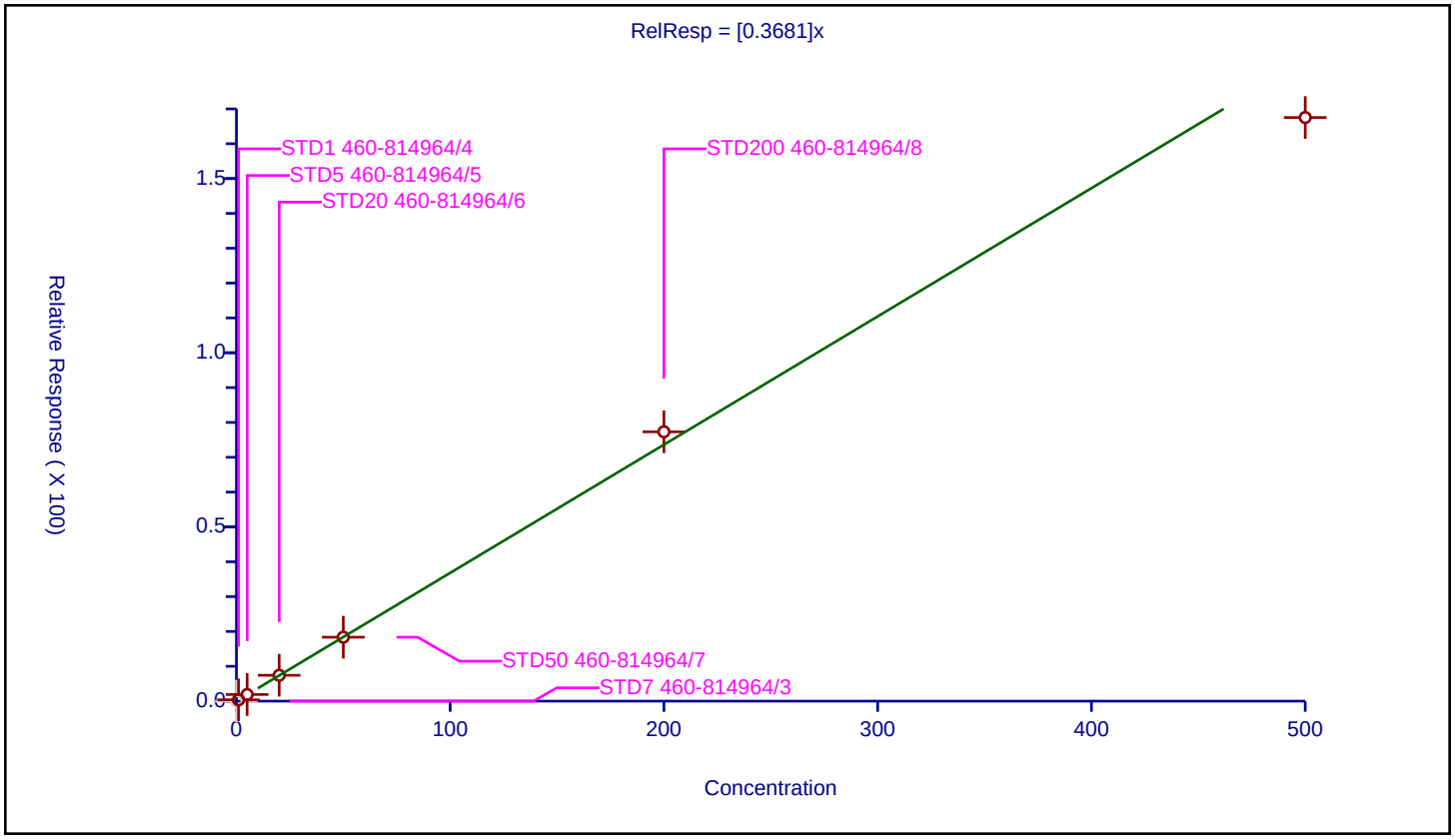
Curve Coefficients

Intercept:	0
Slope:	0.3681

Error Coefficients

Standard Error:	1980000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.369803	50.0	935092.0	0.369803	Y
3	STD5 460-814964/5	5.0	1.896098	50.0	1006778.0	0.37922	Y
4	STD20 460-814964/6	20.0	7.418182	50.0	966989.0	0.370909	Y
5	STD50 460-814964/7	50.0	18.35406	50.0	1037626.0	0.367081	Y
6	STD200 460-814964/8	200.0	77.31118	50.0	1017316.0	0.386556	Y
7	STD500 460-814964/9	500.0	167.525031	50.0	1231761.0	0.33505	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

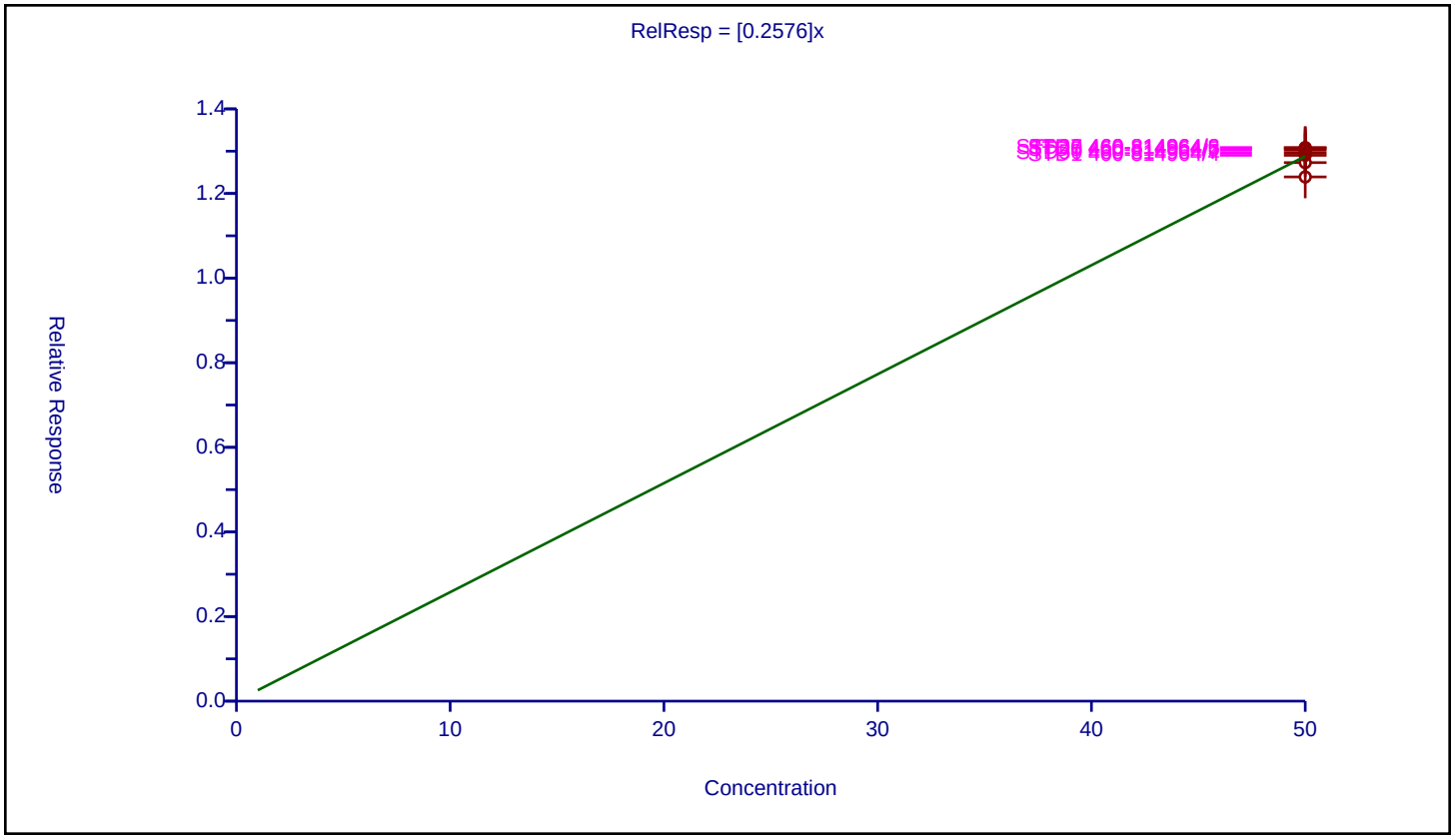
Curve Coefficients

Intercept:	0
Slope:	0.2576

Error Coefficients

Standard Error:	285000
Relative Standard Error:	1.9
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	50.0	13.086987	50.0	976405.0	0.26174	Y
2	STD1 460-814964/4	50.0	12.902474	50.0	935092.0	0.258049	Y
3	STD5 460-814964/5	50.0	13.023626	50.0	1006778.0	0.260473	Y
4	STD20 460-814964/6	50.0	13.069073	50.0	966989.0	0.261381	Y
5	STD50 460-814964/7	50.0	12.958571	50.0	1037626.0	0.259171	Y
6	STD200 460-814964/8	50.0	12.730312	50.0	1017316.0	0.254606	Y
7	STD500 460-814964/9	50.0	12.392136	50.0	1231761.0	0.247843	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

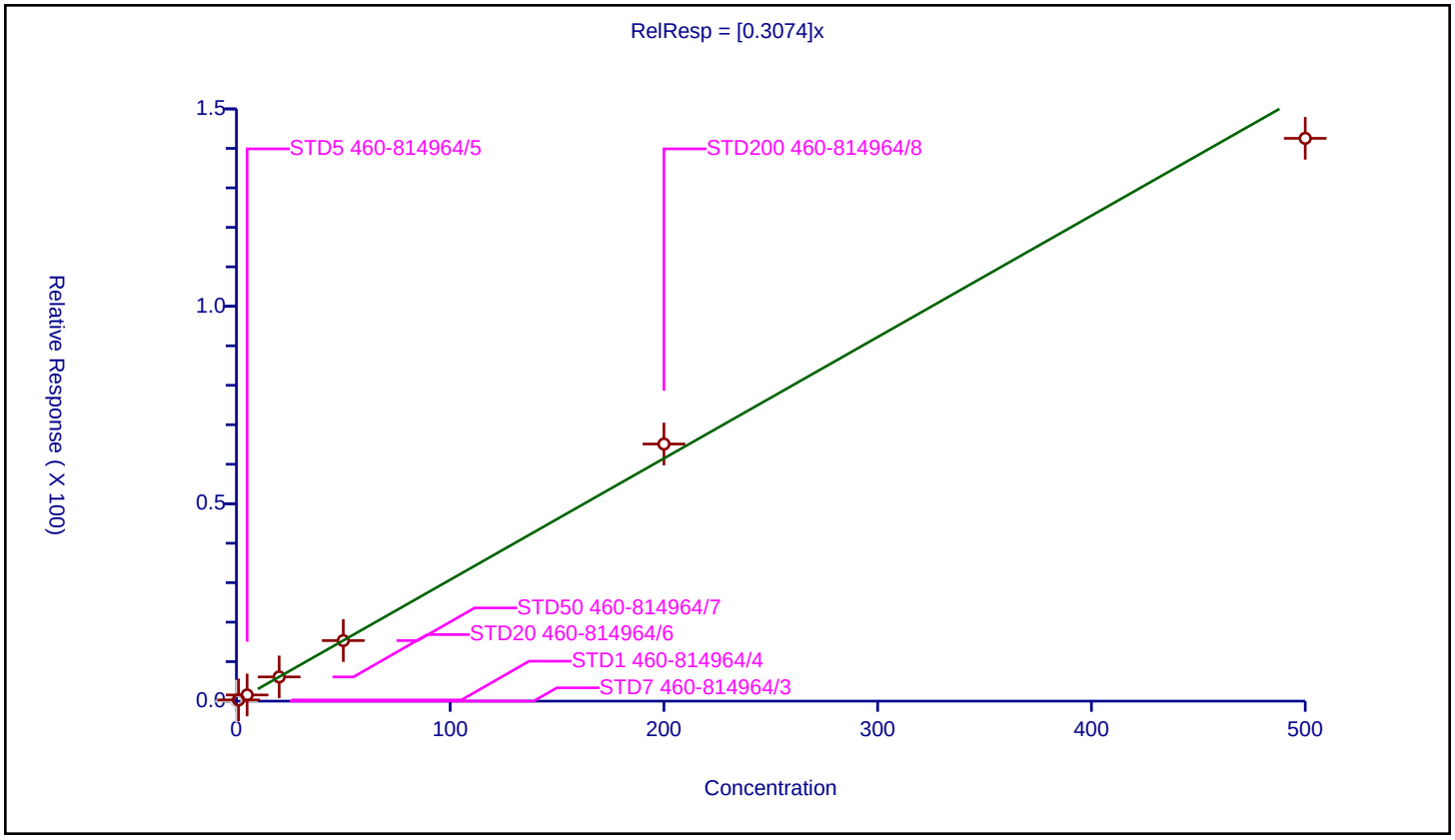
Curve Coefficients

Intercept:	0
Slope:	0.3074

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.307349	50.0	935092.0	0.307349	Y
3	STD5 460-814964/5	5.0	1.56385	50.0	1006778.0	0.31277	Y
4	STD20 460-814964/6	20.0	6.138436	50.0	966989.0	0.306922	Y
5	STD50 460-814964/7	50.0	15.333559	50.0	1037626.0	0.306671	Y
6	STD200 460-814964/8	200.0	65.125684	50.0	1017316.0	0.325628	Y
7	STD500 460-814964/9	500.0	142.543683	50.0	1231761.0	0.285087	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

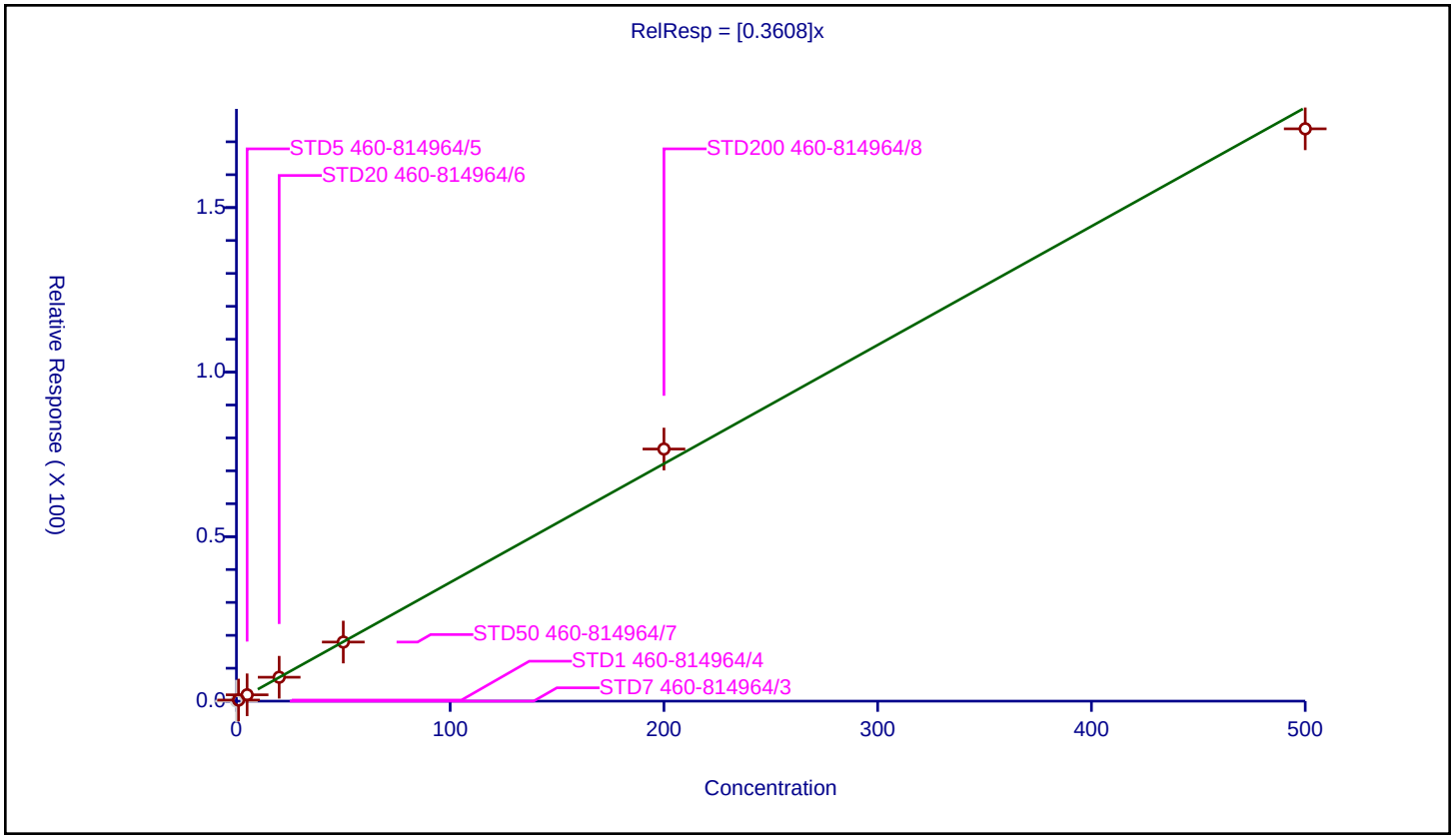
Curve Coefficients

Intercept:	0
Slope:	0.3608

Error Coefficients

Standard Error:	2050000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.327187	50.0	935092.0	0.327187	Y
3	STD5 460-814964/5	5.0	1.920235	50.0	1006778.0	0.384047	Y
4	STD20 460-814964/6	20.0	7.26787	50.0	966989.0	0.363393	Y
5	STD50 460-814964/7	50.0	17.957578	50.0	1037626.0	0.359152	Y
6	STD200 460-814964/8	200.0	76.618769	50.0	1017316.0	0.383094	Y
7	STD500 460-814964/9	500.0	173.946975	50.0	1231761.0	0.347894	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

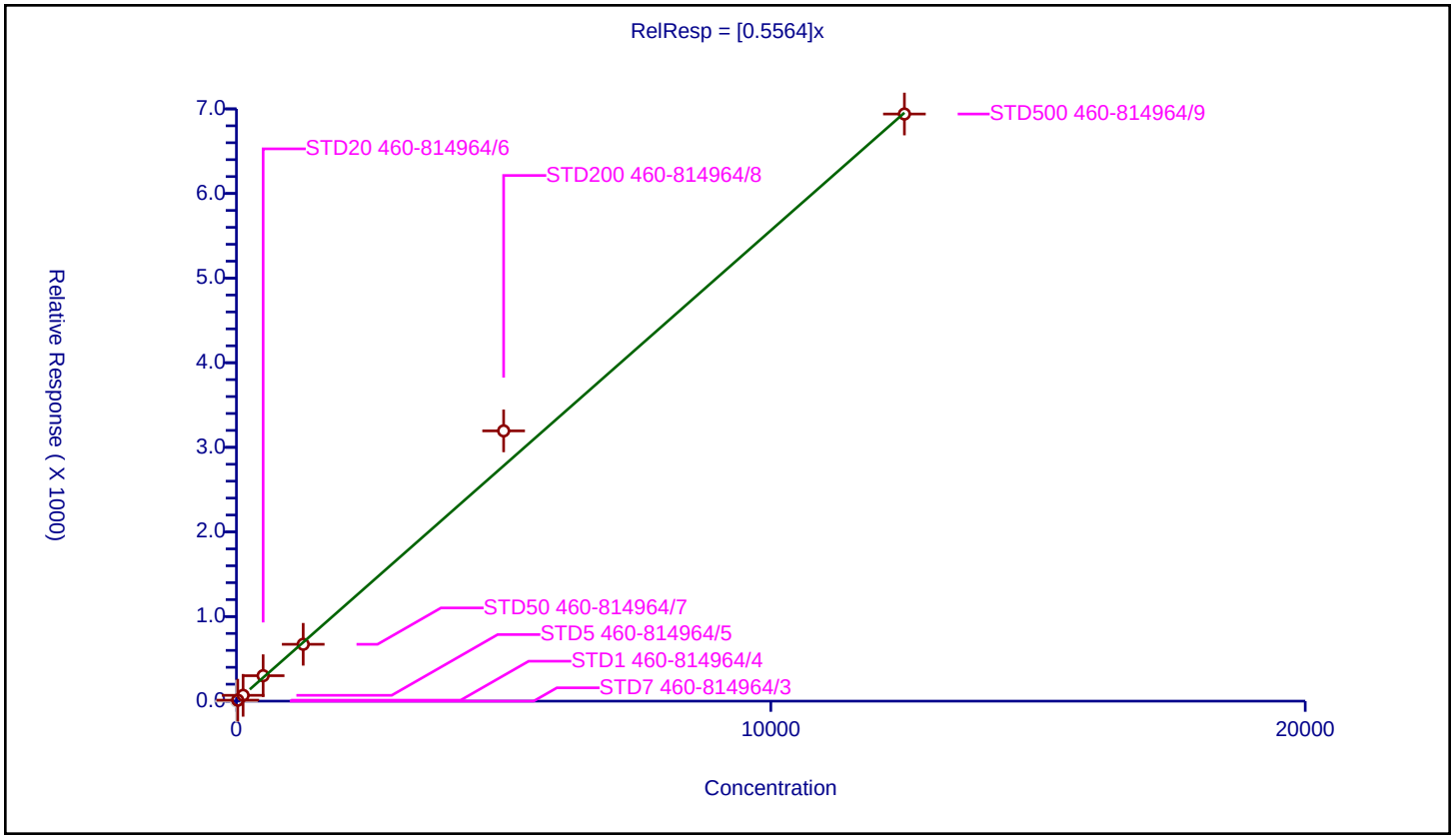
Curve Coefficients

Intercept:	0
Slope:	0.5564

Error Coefficients

Standard Error:	2750000
Relative Standard Error:	11.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	25.0	11.357468	1000.0	528727.0	0.454299	Y
3	STD5 460-814964/5	125.0	68.856718	1000.0	575877.0	0.550854	Y
4	STD20 460-814964/6	500.0	300.691491	1000.0	532762.0	0.601383	Y
5	STD50 460-814964/7	1250.0	671.965361	1000.0	678532.0	0.537572	Y
6	STD200 460-814964/8	5000.0	3194.255728	1000.0	615709.0	0.638851	Y
7	STD500 460-814964/9	12500.0	6939.678478	1000.0	838573.0	0.555174	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

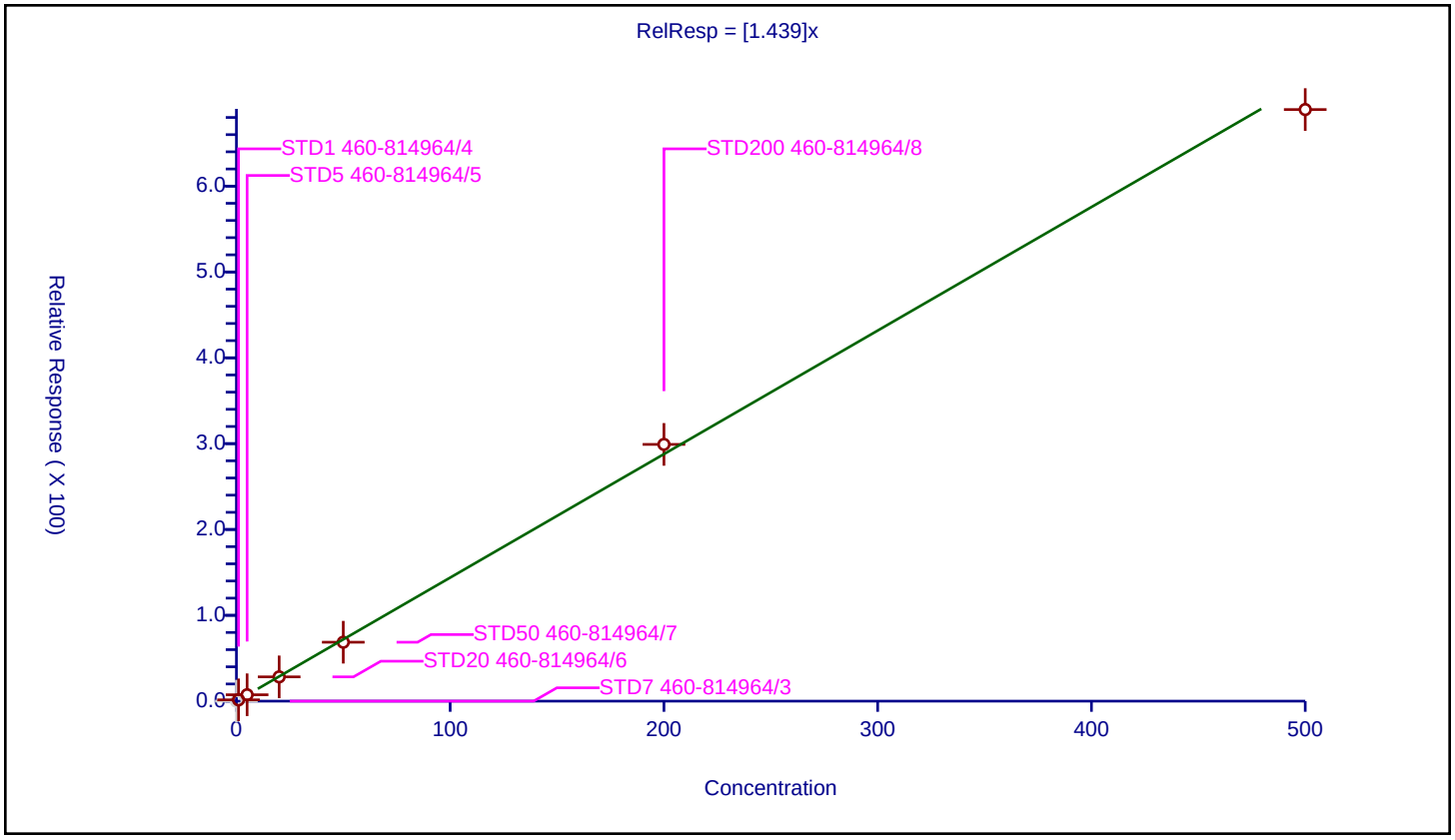
Curve Coefficients

Intercept:	0
Slope:	1.439

Error Coefficients

Standard Error:	6050000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	1.489665	50.0	690088.0	1.489665	Y
3	STD5 460-814964/5	5.0	7.418518	50.0	754214.0	1.483704	Y
4	STD20 460-814964/6	20.0	28.288827	50.0	745851.0	1.414441	Y
5	STD50 460-814964/7	50.0	68.641143	50.0	813912.0	1.372823	Y
6	STD200 460-814964/8	200.0	299.123942	50.0	783510.0	1.49562	Y
7	STD500 460-814964/9	500.0	689.220505	50.0	916439.0	1.378441	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

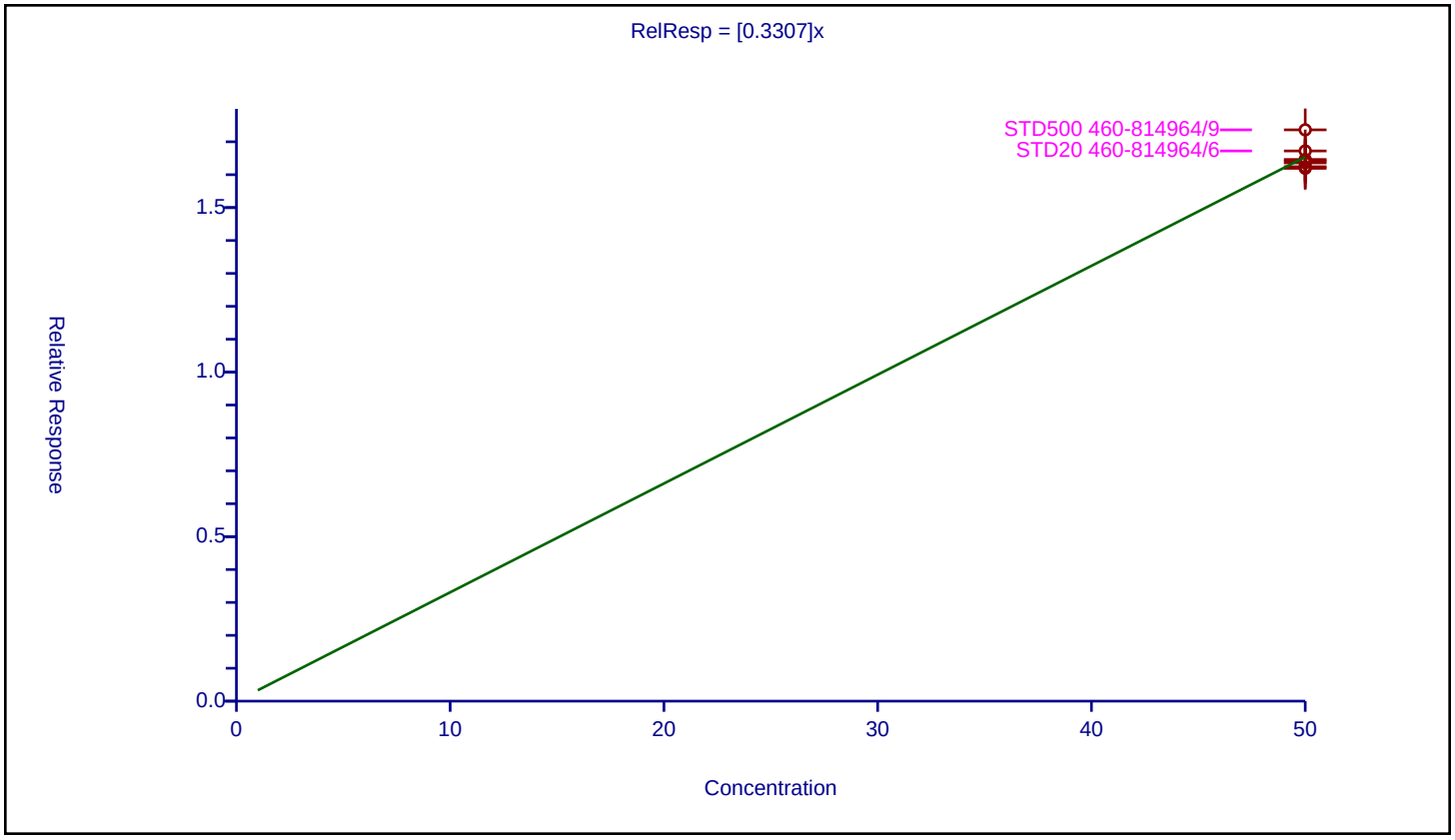
Curve Coefficients

Intercept:	0
Slope:	0.3307

Error Coefficients

Standard Error:	369000
Relative Standard Error:	2.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	50.0	16.416036	50.0	976405.0	0.328321	Y
2	STD1 460-814964/4	50.0	16.241717	50.0	935092.0	0.324834	Y
3	STD5 460-814964/5	50.0	16.192944	50.0	1006778.0	0.323859	Y
4	STD20 460-814964/6	50.0	16.721959	50.0	966989.0	0.334439	Y
5	STD50 460-814964/7	50.0	16.462338	50.0	1037626.0	0.329247	Y
6	STD200 460-814964/8	50.0	16.360207	50.0	1017316.0	0.327204	Y
7	STD500 460-814964/9	50.0	17.36254	50.0	1231761.0	0.347251	Y



Calibration / Isopropyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

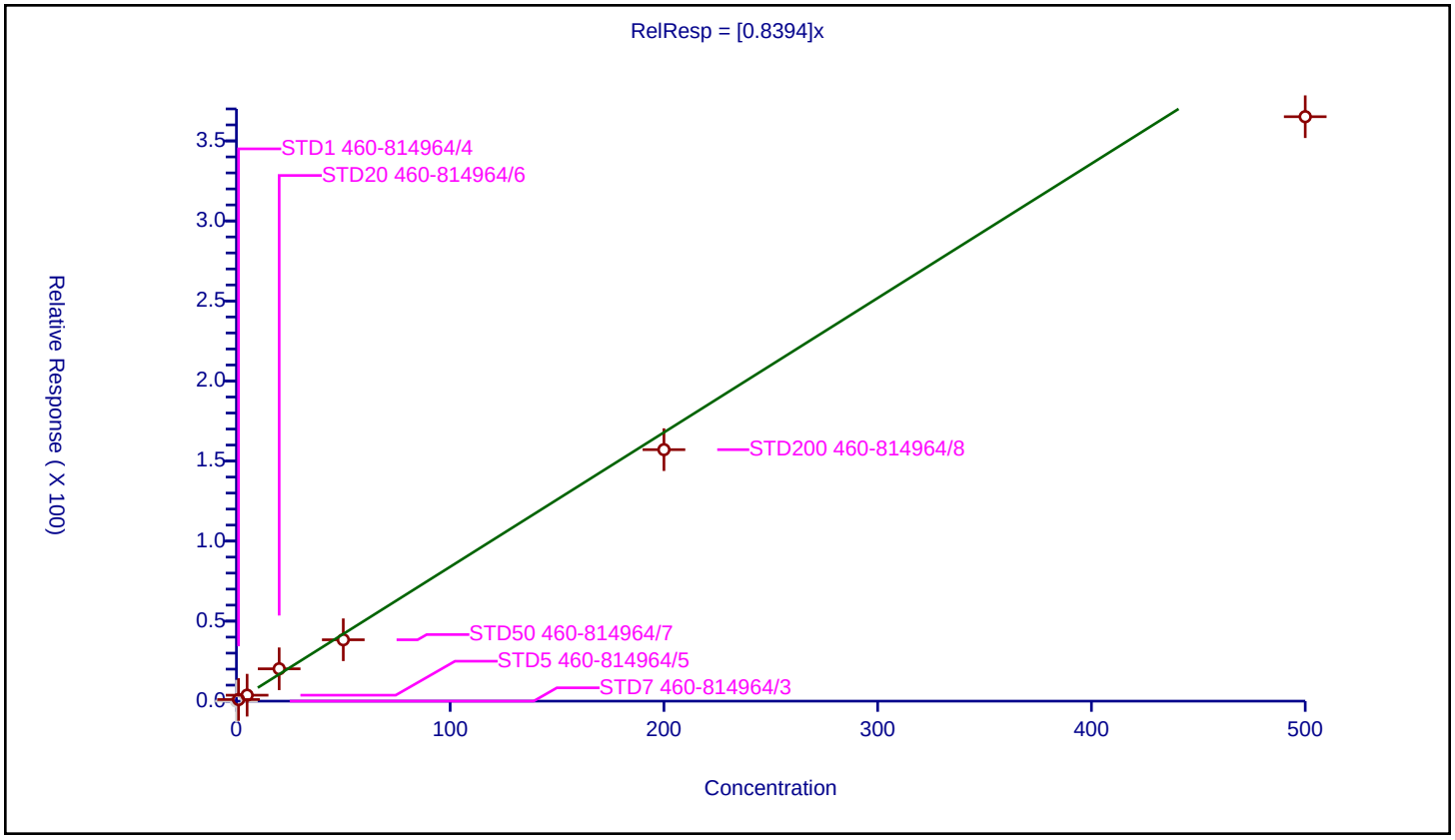
Curve Coefficients

Intercept:	0
Slope:	0.8394

Error Coefficients

Standard Error:	4290000
Relative Standard Error:	15.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.999046	50.0	935092.0	0.999046	Y
3	STD5 460-814964/5	5.0	3.724555	50.0	1006778.0	0.744911	Y
4	STD20 460-814964/6	20.0	20.200954	50.0	966989.0	1.010048	Y
5	STD50 460-814964/7	50.0	38.342042	50.0	1037626.0	0.766841	Y
6	STD200 460-814964/8	200.0	157.114259	50.0	1017316.0	0.785571	Y
7	STD500 460-814964/9	500.0	365.131588	50.0	1231761.0	0.730263	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

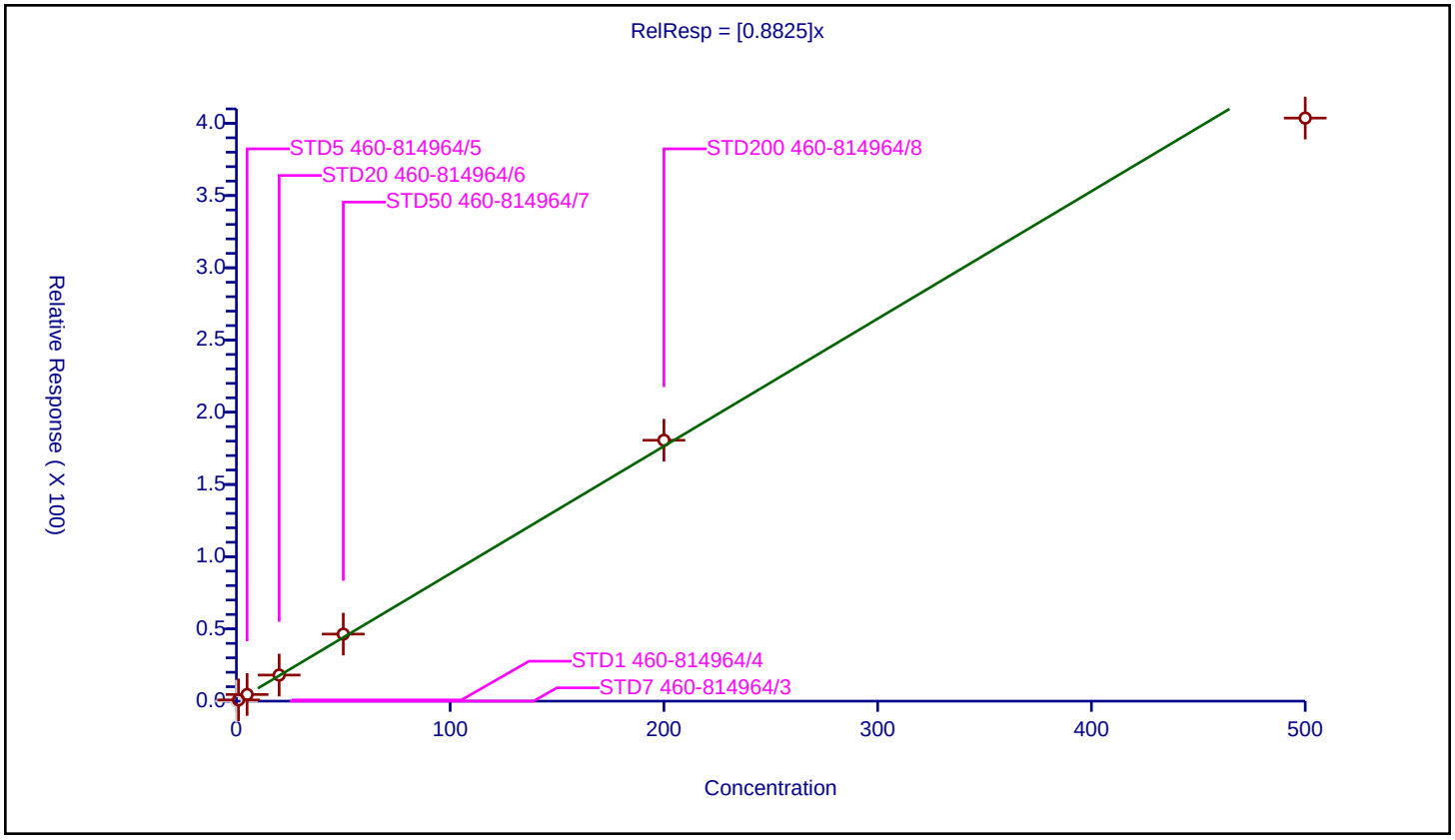
Curve Coefficients

Intercept:	0
Slope:	0.8825

Error Coefficients

Standard Error:	4760000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.832645	50.0	935092.0	0.832645	Y
3	STD5 460-814964/5	5.0	4.602256	50.0	1006778.0	0.920451	Y
4	STD20 460-814964/6	20.0	18.058685	50.0	966989.0	0.902934	Y
5	STD50 460-814964/7	50.0	46.423326	50.0	1037626.0	0.928467	Y
6	STD200 460-814964/8	200.0	180.616544	50.0	1017316.0	0.903083	Y
7	STD500 460-814964/9	500.0	403.643848	50.0	1231761.0	0.807288	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

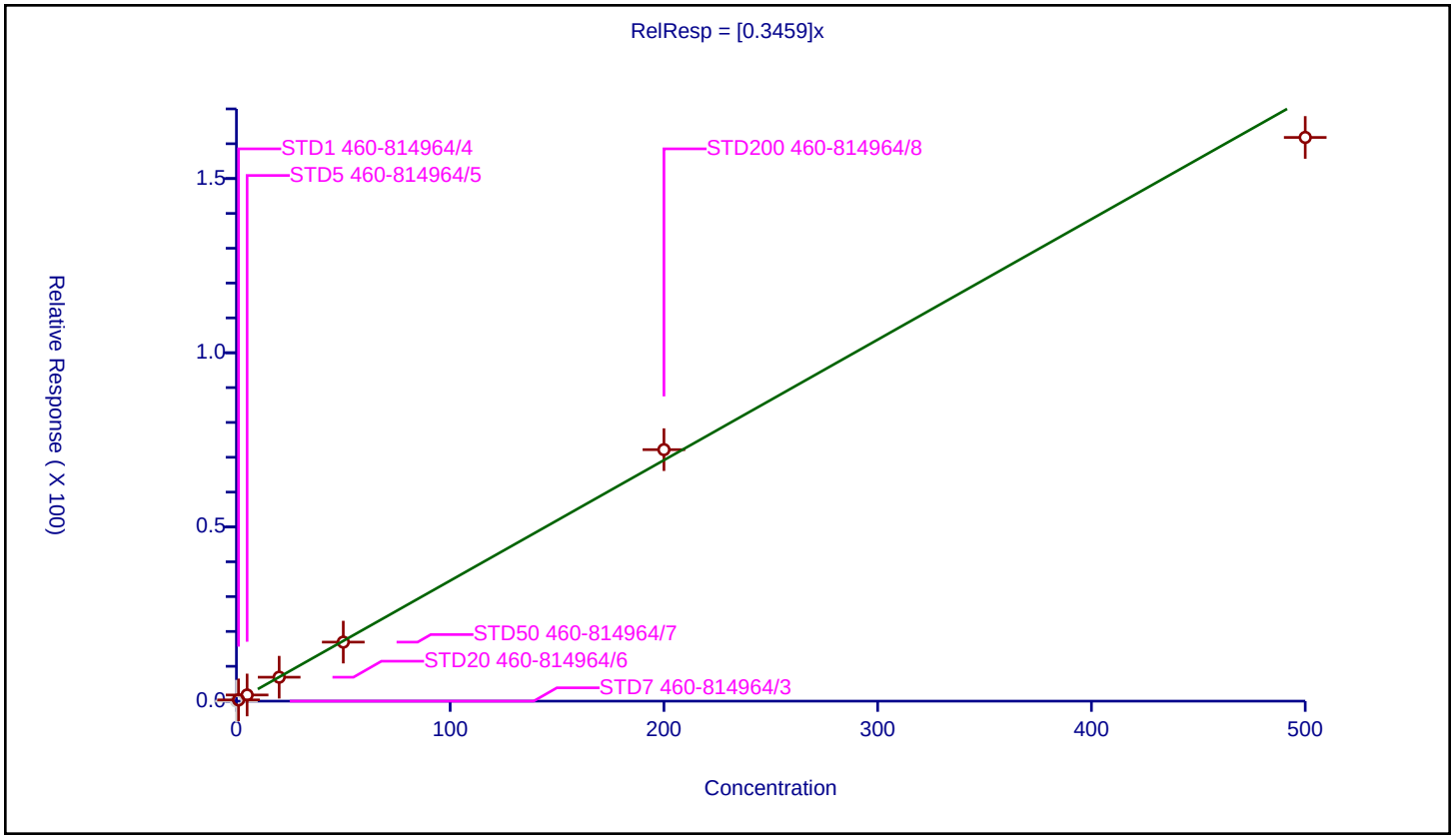
Curve Coefficients

Intercept:	0
Slope:	0.3459

Error Coefficients

Standard Error:	1910000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.354885	50.0	935092.0	0.354885	Y
3	STD5 460-814964/5	5.0	1.76747	50.0	1006778.0	0.353494	Y
4	STD20 460-814964/6	20.0	6.866314	50.0	966989.0	0.343316	Y
5	STD50 460-814964/7	50.0	16.945171	50.0	1037626.0	0.338903	Y
6	STD200 460-814964/8	200.0	72.190057	50.0	1017316.0	0.36095	Y
7	STD500 460-814964/9	500.0	161.804887	50.0	1231761.0	0.32361	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

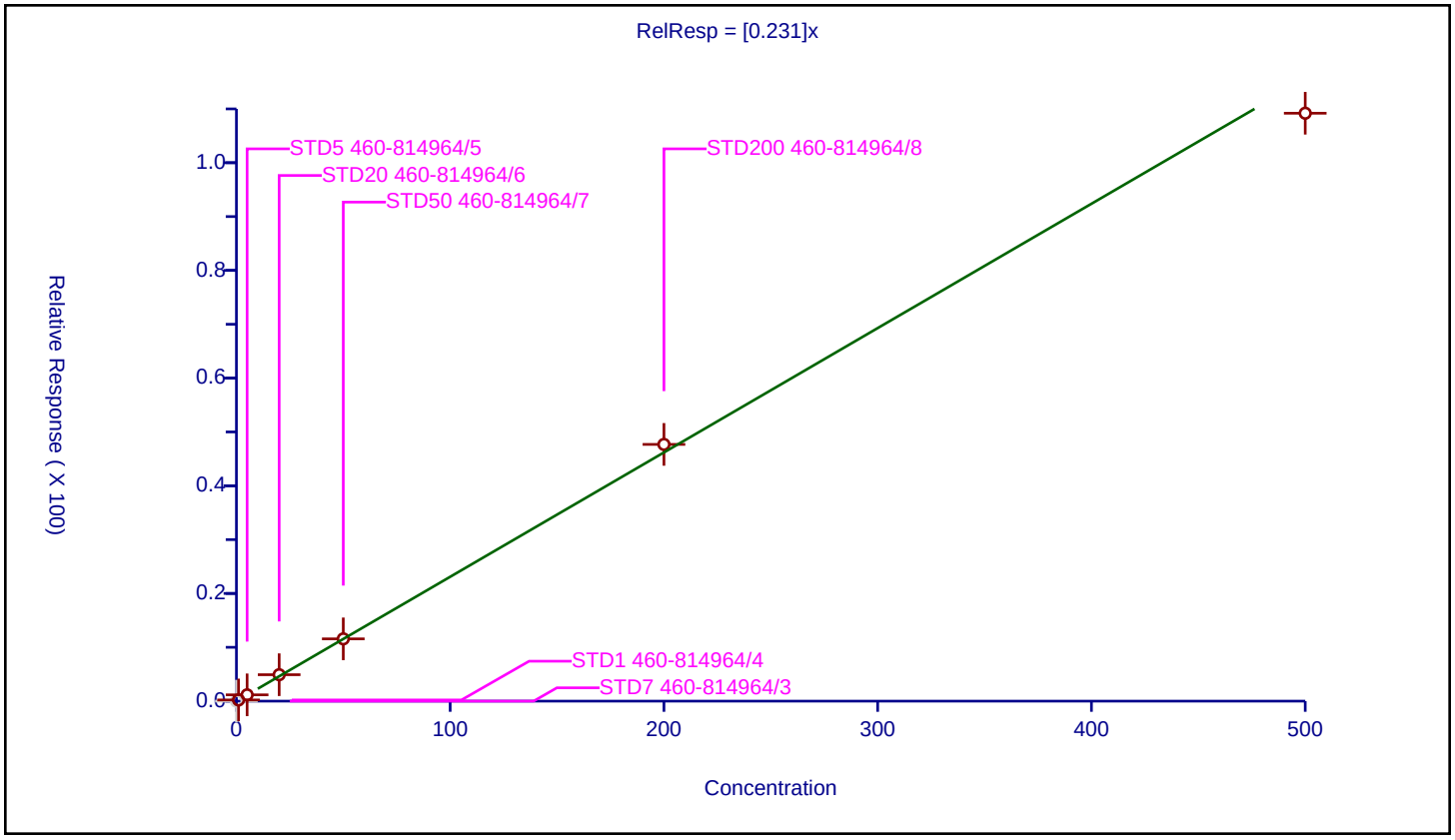
Curve Coefficients

Intercept:	0
Slope:	0.231

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.218	50.0	935092.0	0.218	Y
3	STD5 460-814964/5	5.0	1.170516	50.0	1006778.0	0.234103	Y
4	STD20 460-814964/6	20.0	4.909311	50.0	966989.0	0.245466	Y
5	STD50 460-814964/7	50.0	11.567077	50.0	1037626.0	0.231342	Y
6	STD200 460-814964/8	200.0	47.684004	50.0	1017316.0	0.23842	Y
7	STD500 460-814964/9	500.0	109.194681	50.0	1231761.0	0.218389	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

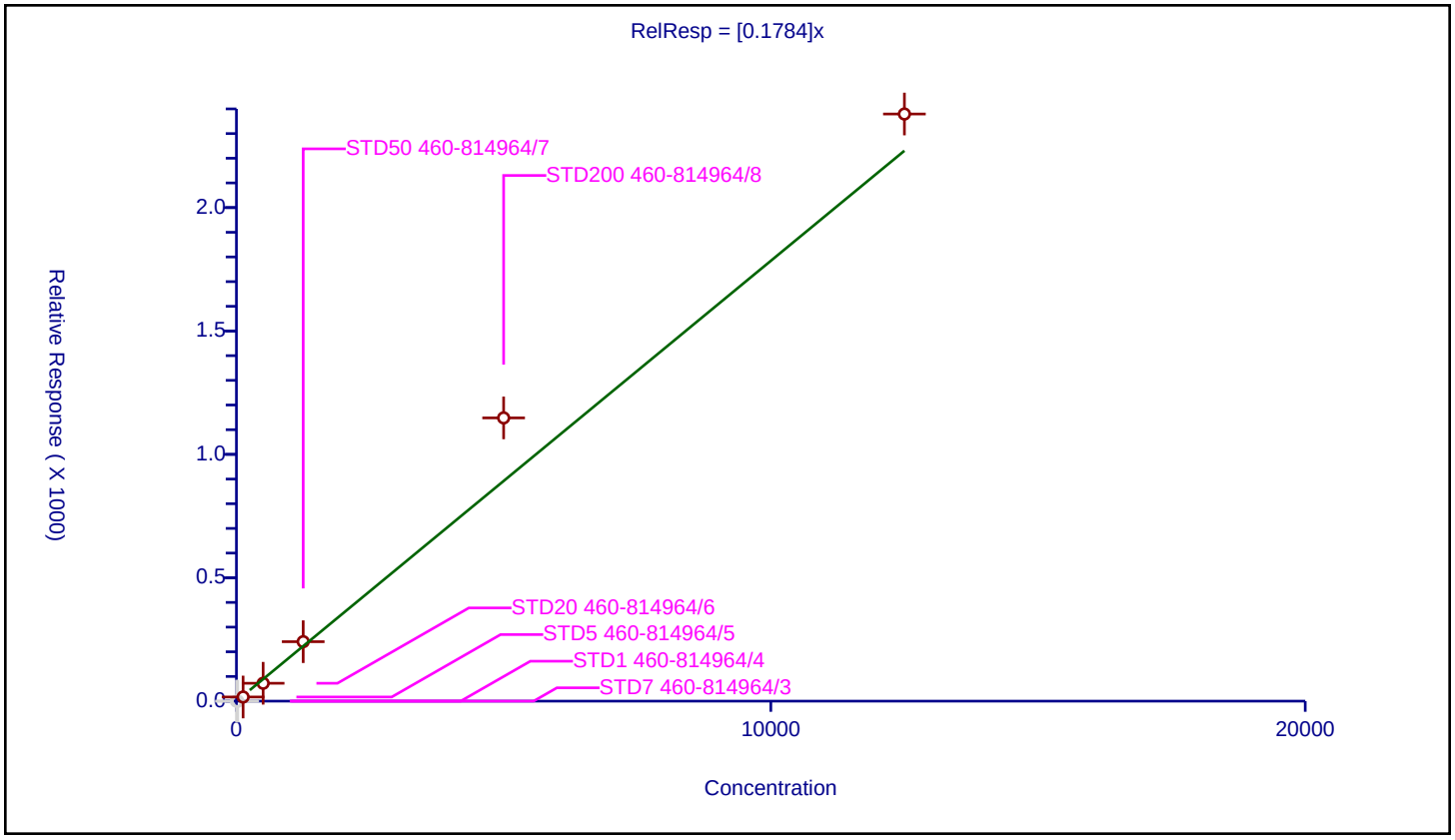
Curve Coefficients

Intercept:	0
Slope:	0.1784

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	21.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.953

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	530613.0	NaN	N
2	STD1 460-814964/4	25.0	0.0	1000.0	528727.0	0.0	N
3	STD5 460-814964/5	125.0	16.814354	1000.0	575877.0	0.134515	Y
4	STD20 460-814964/6	500.0	72.473262	1000.0	532762.0	0.144947	Y
5	STD50 460-814964/7	1250.0	240.974633	1000.0	678532.0	0.19278	Y
6	STD200 460-814964/8	5000.0	1147.823079	1000.0	615709.0	0.229565	Y
7	STD500 460-814964/9	12500.0	2379.281231	1000.0	838573.0	0.190342	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

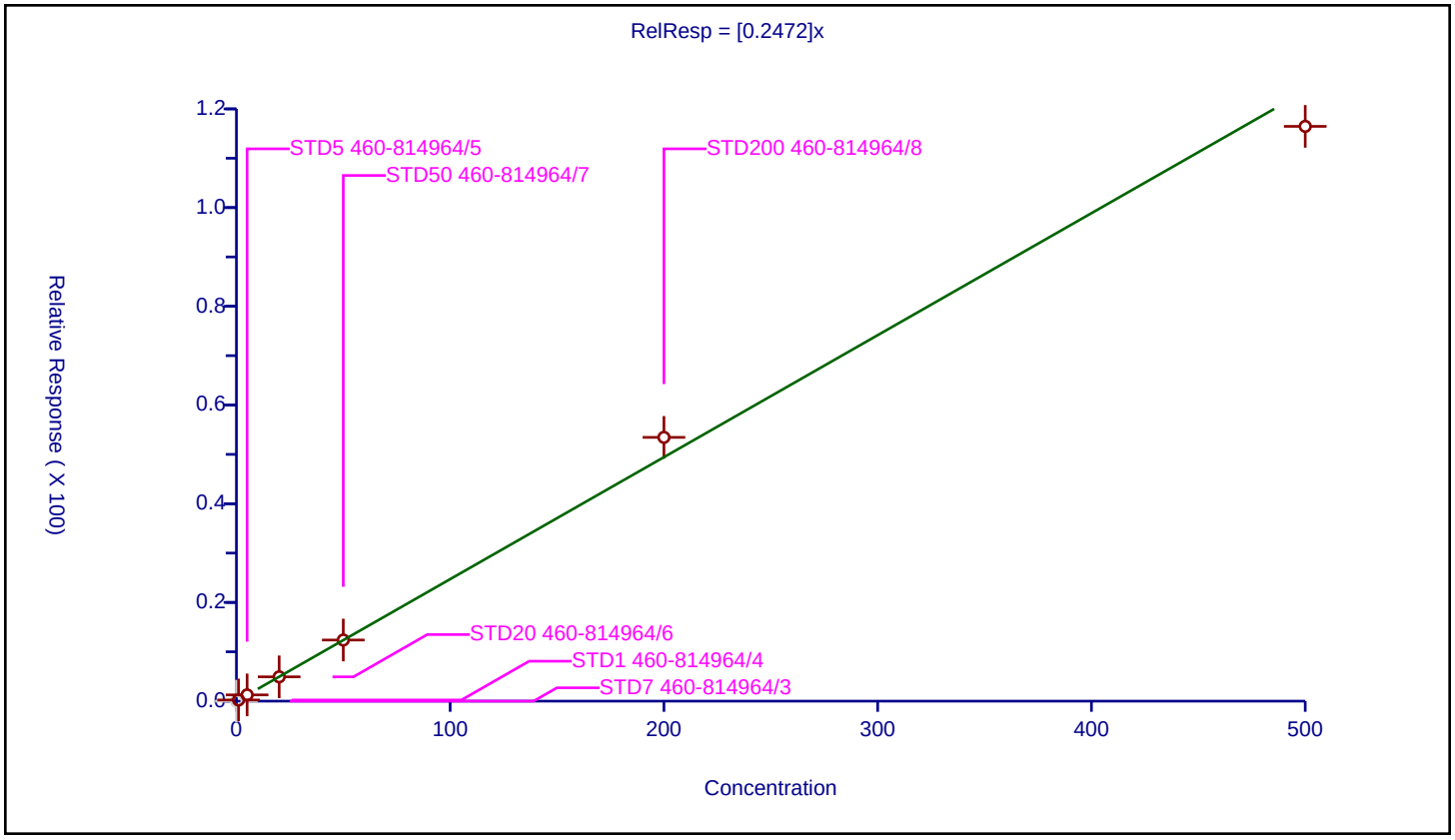
Curve Coefficients

Intercept:	0
Slope:	0.2472

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.236233	50.0	935092.0	0.236233	Y
3	STD5 460-814964/5	5.0	1.264281	50.0	1006778.0	0.252856	Y
4	STD20 460-814964/6	20.0	4.922445	50.0	966989.0	0.246122	Y
5	STD50 460-814964/7	50.0	12.382641	50.0	1037626.0	0.247653	Y
6	STD200 460-814964/8	200.0	53.447159	50.0	1017316.0	0.267236	Y
7	STD500 460-814964/9	500.0	116.459646	50.0	1231761.0	0.232919	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

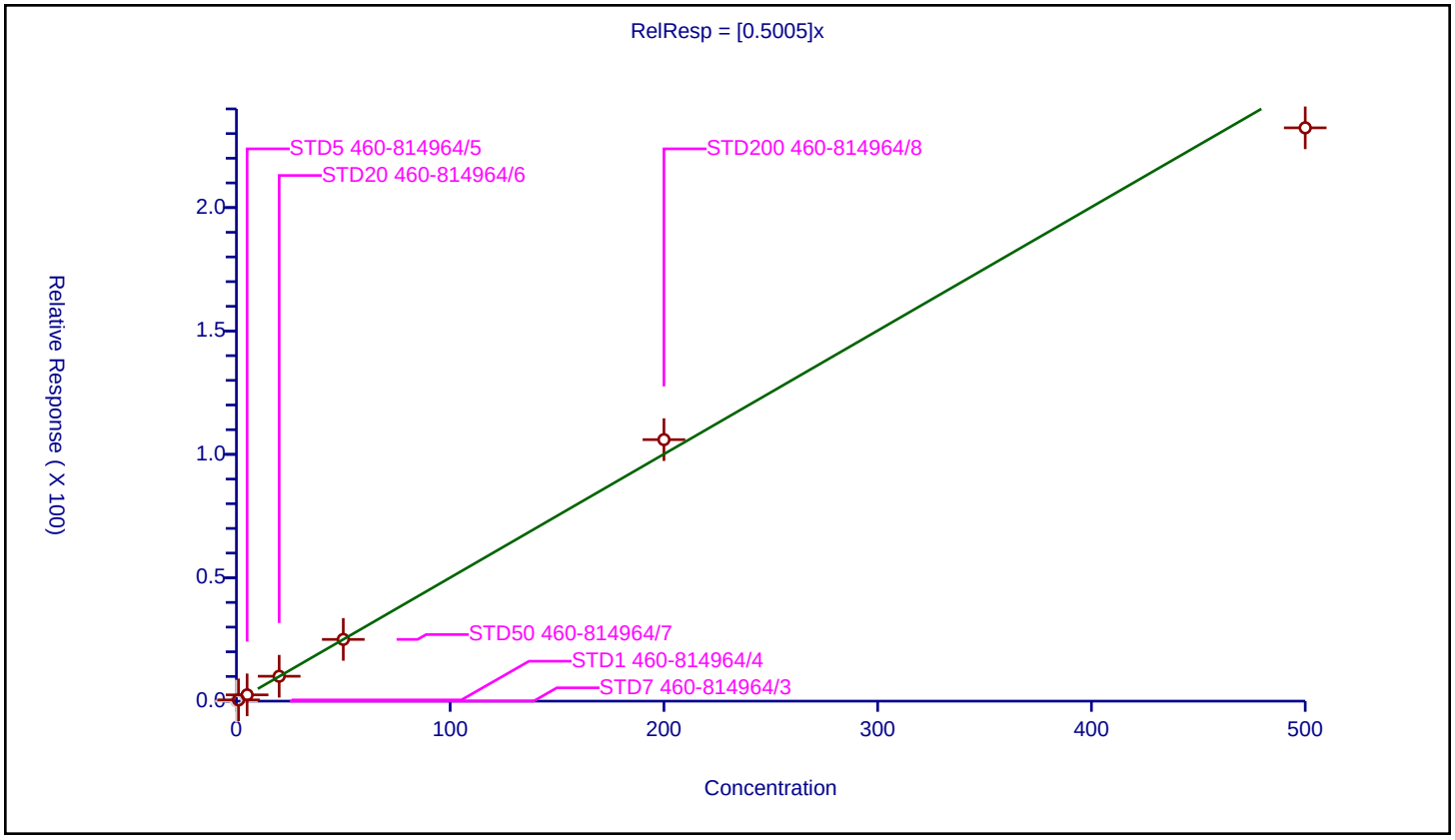
Curve Coefficients

Intercept:	0
Slope:	0.5005

Error Coefficients

Standard Error:	2750000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.496582	50.0	935092.0	0.496582	Y
3	STD5 460-814964/5	5.0	2.539189	50.0	1006778.0	0.507838	Y
4	STD20 460-814964/6	20.0	10.081862	50.0	966989.0	0.504093	Y
5	STD50 460-814964/7	50.0	25.009878	50.0	1037626.0	0.500198	Y
6	STD200 460-814964/8	200.0	105.972087	50.0	1017316.0	0.52986	Y
7	STD500 460-814964/9	500.0	232.325143	50.0	1231761.0	0.46465	Y



Calibration / Ethyl acrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

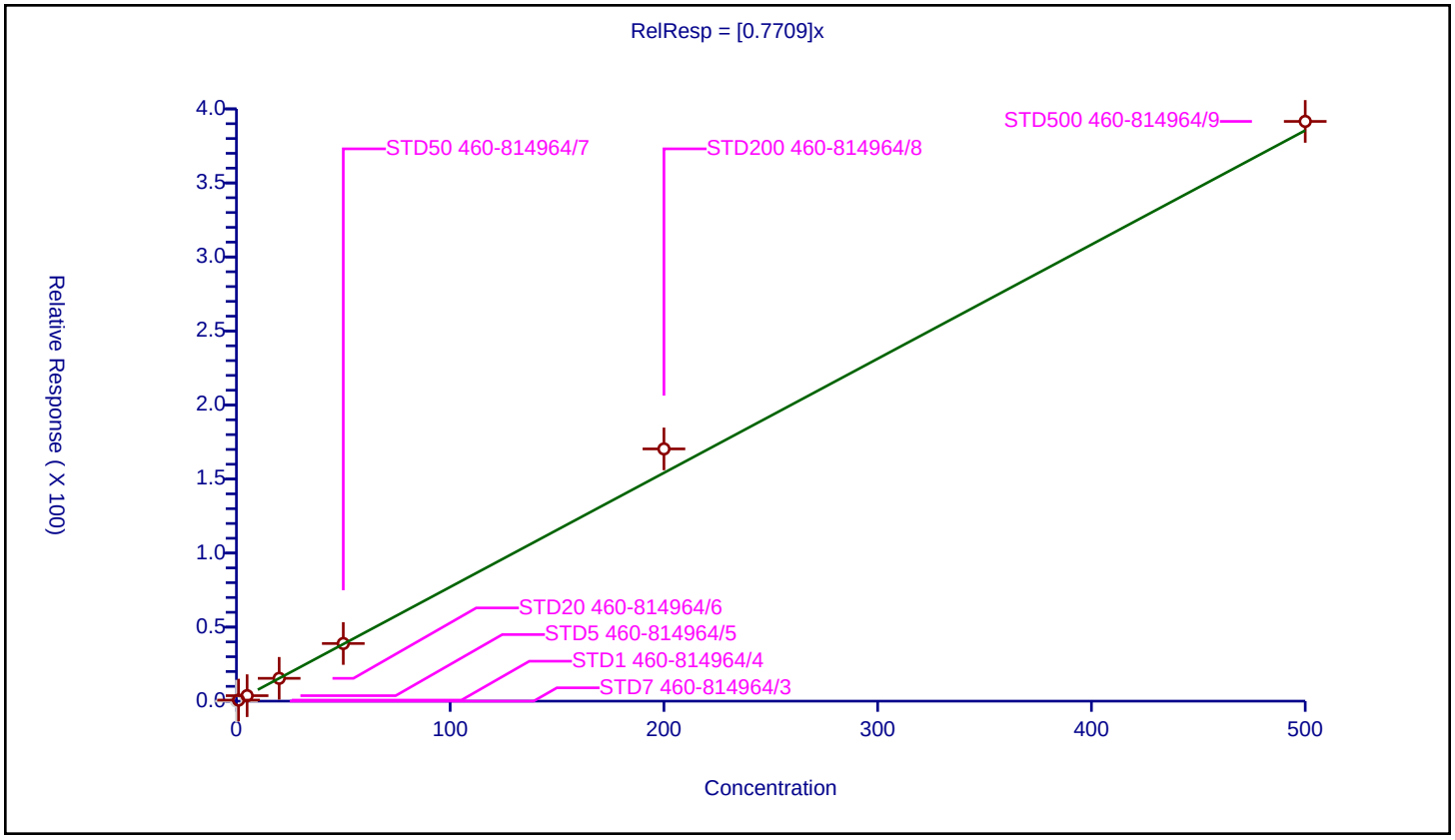
Curve Coefficients

Intercept:	0
Slope:	0.7709

Error Coefficients

Standard Error:	4600000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.70223	50.0	935092.0	0.70223	Y
3	STD5 460-814964/5	5.0	3.694558	50.0	1006778.0	0.738912	Y
4	STD20 460-814964/6	20.0	15.409689	50.0	966989.0	0.770484	Y
5	STD50 460-814964/7	50.0	38.942837	50.0	1037626.0	0.778857	Y
6	STD200 460-814964/8	200.0	170.357047	50.0	1017316.0	0.851785	Y
7	STD500 460-814964/9	500.0	391.547711	50.0	1231761.0	0.783095	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

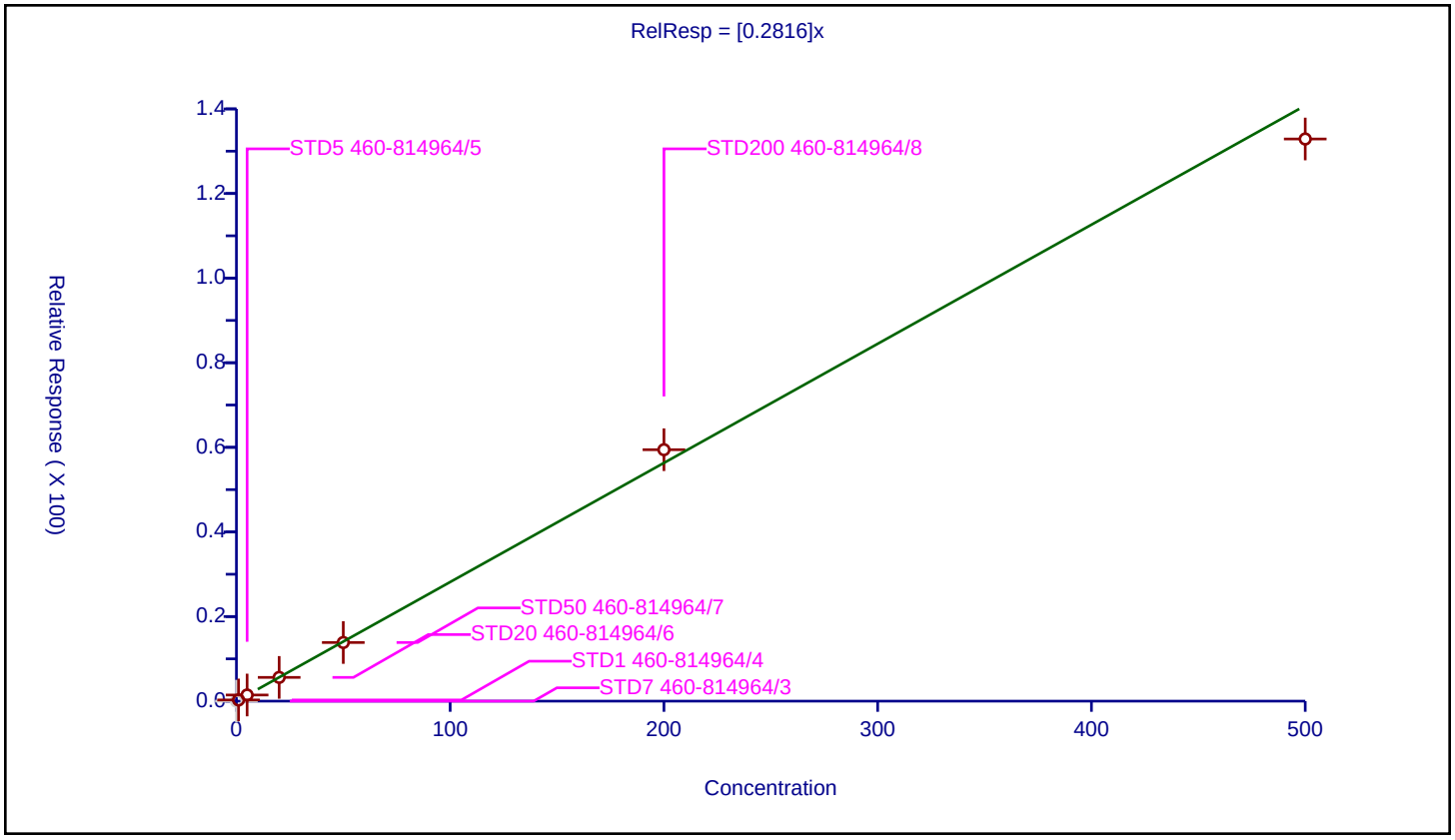
Curve Coefficients

Intercept:	0
Slope:	0.2816

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.278048	50.0	935092.0	0.278048	Y
3	STD5 460-814964/5	5.0	1.453002	50.0	1006778.0	0.2906	Y
4	STD20 460-814964/6	20.0	5.611284	50.0	966989.0	0.280564	Y
5	STD50 460-814964/7	50.0	13.861545	50.0	1037626.0	0.277231	Y
6	STD200 460-814964/8	200.0	59.436793	50.0	1017316.0	0.297184	Y
7	STD500 460-814964/9	500.0	132.882921	50.0	1231761.0	0.265766	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

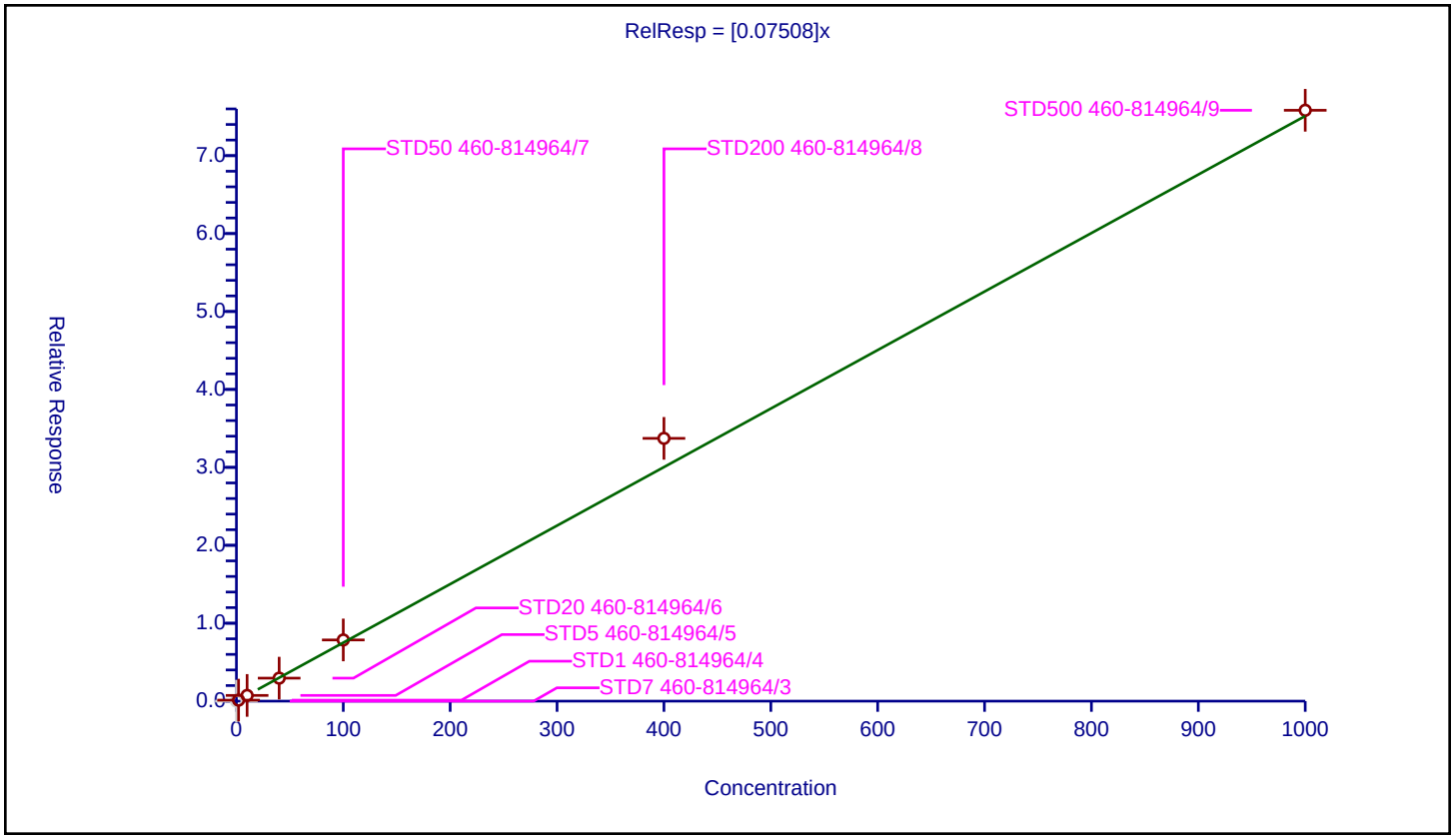
Curve Coefficients

Intercept:	0
Slope:	0.07508

Error Coefficients

Standard Error:	893000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	2.0	0.129506	50.0	935092.0	0.064753	Y
3	STD5 460-814964/5	10.0	0.733081	50.0	1006778.0	0.073308	Y
4	STD20 460-814964/6	40.0	2.951378	50.0	966989.0	0.073784	Y
5	STD50 460-814964/7	100.0	7.853408	50.0	1037626.0	0.078534	Y
6	STD200 460-814964/8	400.0	33.722118	50.0	1017316.0	0.084305	Y
7	STD500 460-814964/9	1000.0	75.82311	50.0	1231761.0	0.075823	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

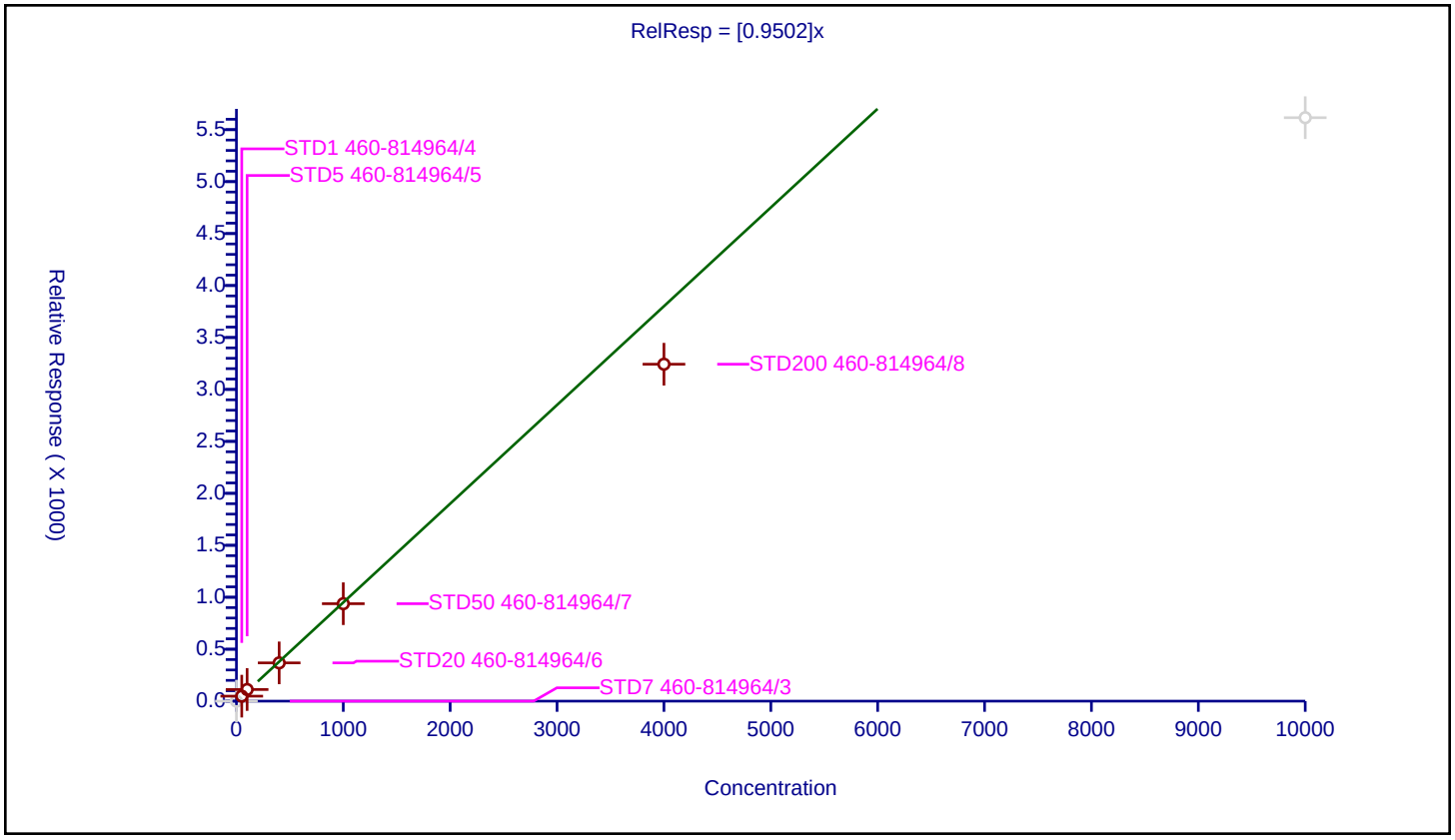
Curve Coefficients

Intercept:	0
Slope:	0.9502

Error Coefficients

Standard Error:	74300
Relative Standard Error:	11.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	1000.0	39123.0	NaN	N
2	STD1 460-814964/4	50.000062	48.147767	1000.0	38818.0	0.962954	Y
3	STD5 460-814964/5	100.0	111.892647	1000.0	40092.0	1.118926	Y
4	STD20 460-814964/6	400.0	368.334611	1000.0	36532.0	0.920837	Y
5	STD50 460-814964/7	1000.0	937.72077	1000.0	45296.0	0.937721	Y
6	STD200 460-814964/8	4000.0	3242.883195	1000.0	44964.0	0.810721	Y
7	STD500 460-814964/9	10000.0	5615.488138	1000.0	69847.0	0.561549	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

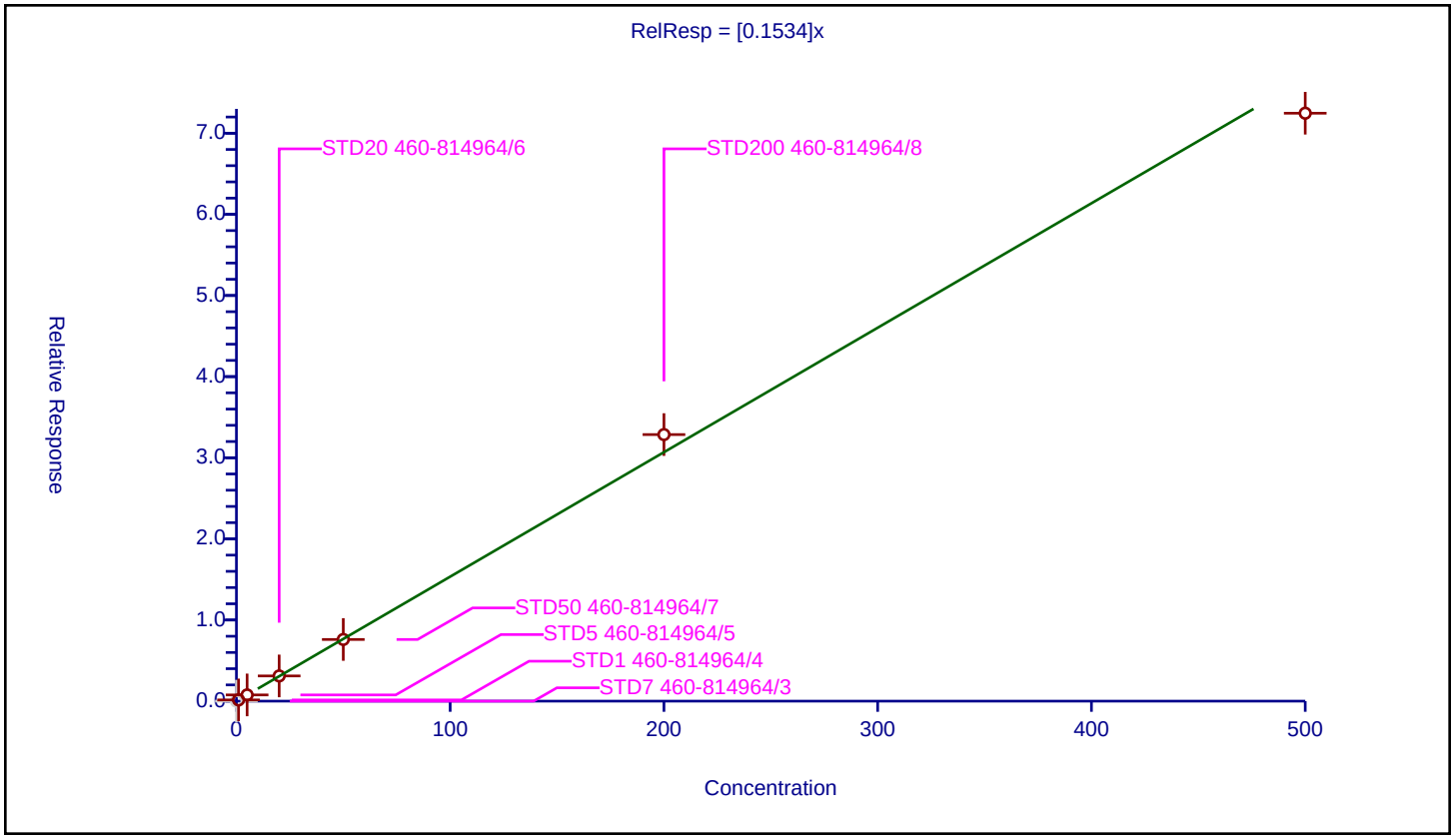
Curve Coefficients

Intercept:	0
Slope:	0.1534

Error Coefficients

Standard Error:	856000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.15052	50.0	935092.0	0.15052	Y
3	STD5 460-814964/5	5.0	0.766803	50.0	1006778.0	0.153361	Y
4	STD20 460-814964/6	20.0	3.107171	50.0	966989.0	0.155359	Y
5	STD50 460-814964/7	50.0	7.602643	50.0	1037626.0	0.152053	Y
6	STD200 460-814964/8	200.0	32.85518	50.0	1017316.0	0.164276	Y
7	STD500 460-814964/9	500.0	72.467143	50.0	1231761.0	0.144934	Y



Calibration / n-Propyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

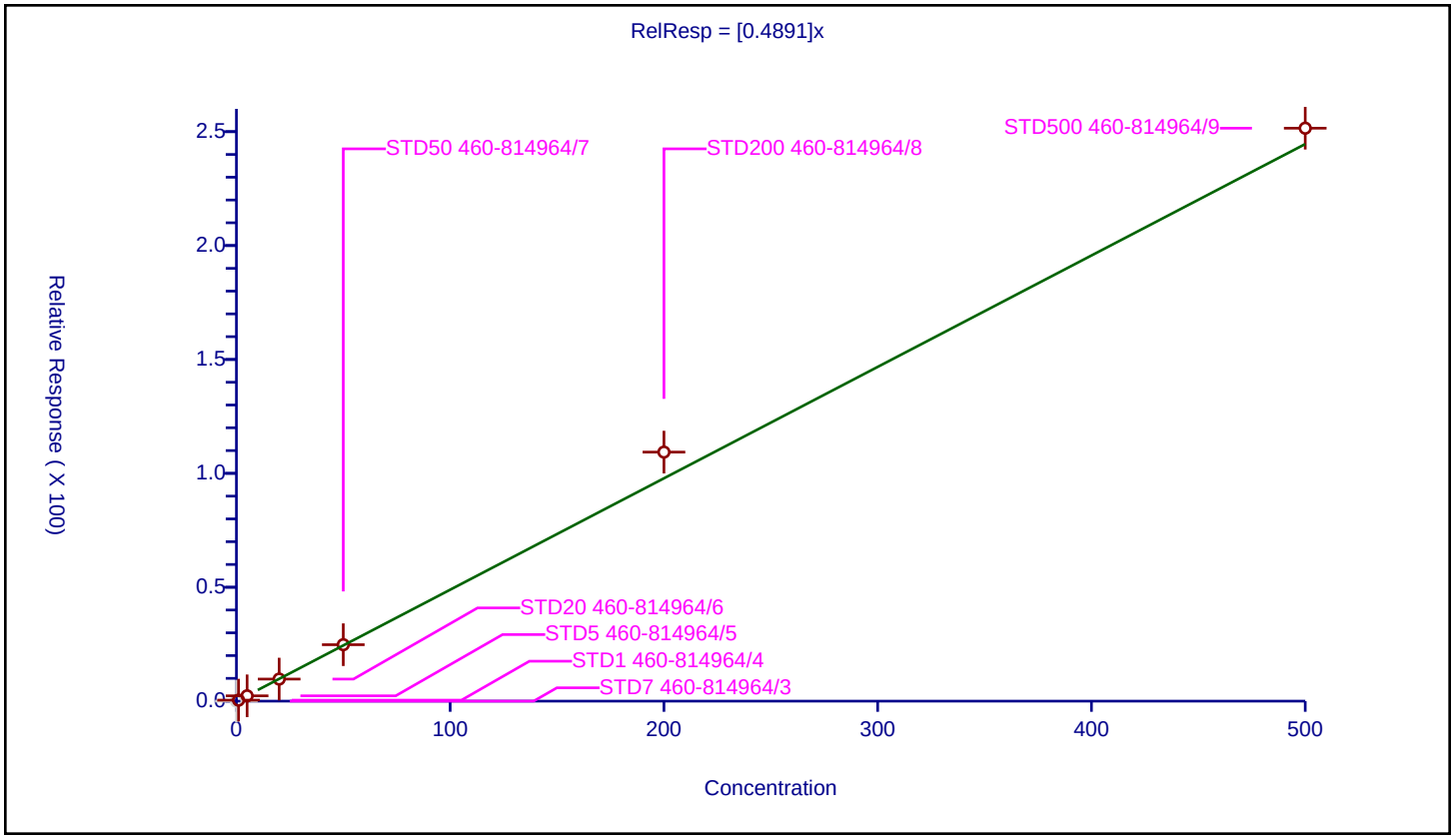
Curve Coefficients

Intercept:	0
Slope:	0.4891

Error Coefficients

Standard Error:	2950000
Relative Standard Error:	7.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.437978	50.0	935092.0	0.437978	Y
3	STD5 460-814964/5	5.0	2.333434	50.0	1006778.0	0.466687	Y
4	STD20 460-814964/6	20.0	9.691268	50.0	966989.0	0.484563	Y
5	STD50 460-814964/7	50.0	24.782822	50.0	1037626.0	0.495656	Y
6	STD200 460-814964/8	200.0	109.331368	50.0	1017316.0	0.546657	Y
7	STD500 460-814964/9	500.0	251.526027	50.0	1231761.0	0.503052	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

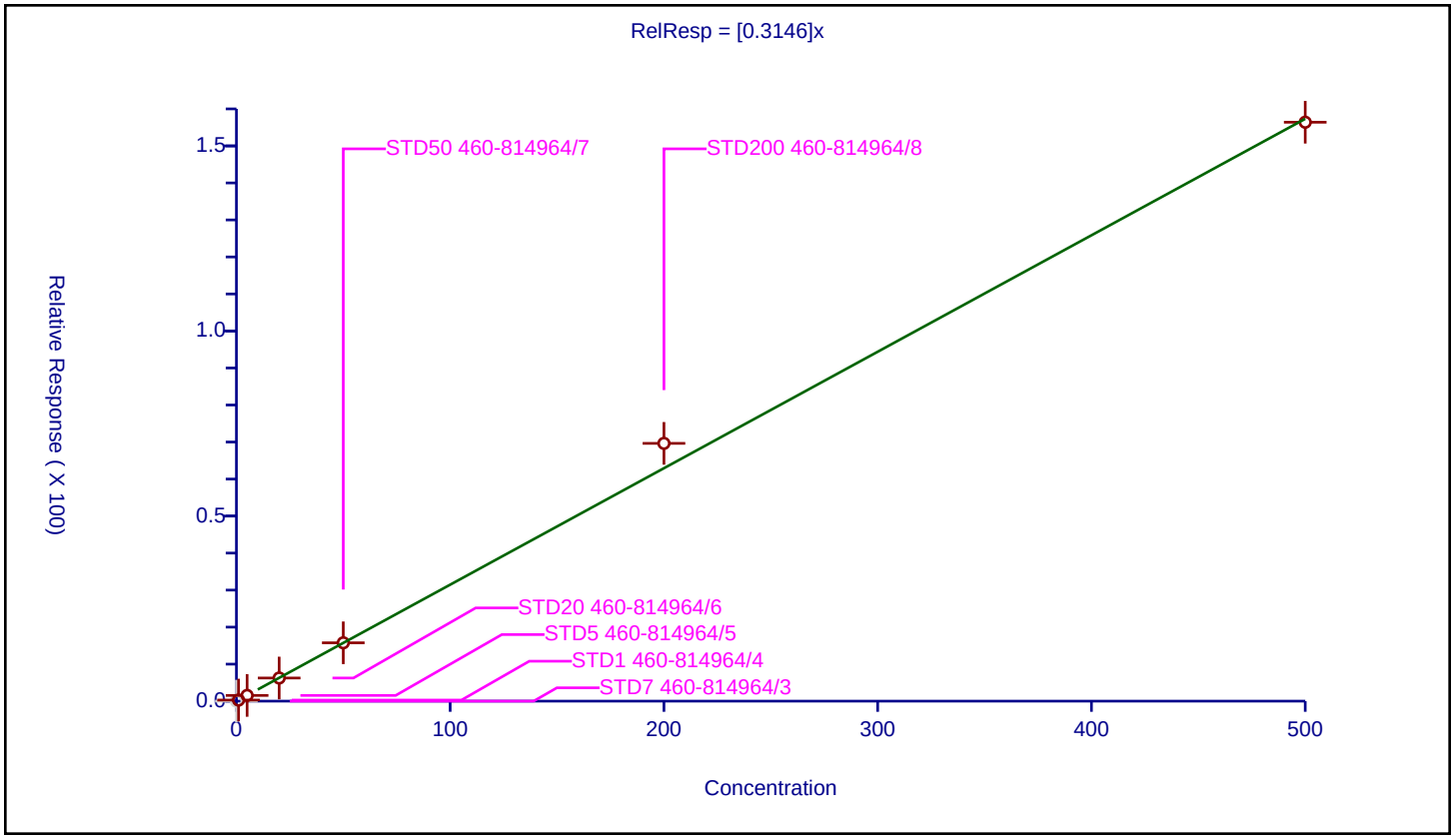
Curve Coefficients

Intercept:	0
Slope:	0.3146

Error Coefficients

Standard Error:	1840000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0	0.289597	50.0	935092.0	0.289597	Y
3	STD5 460-814964/5	5.0	1.546865	50.0	1006778.0	0.309373	Y
4	STD20 460-814964/6	20.0	6.252243	50.0	966989.0	0.312612	Y
5	STD50 460-814964/7	50.0	15.758809	50.0	1037626.0	0.315176	Y
6	STD200 460-814964/8	200.0	69.642569	50.0	1017316.0	0.348213	Y
7	STD500 460-814964/9	500.0	156.397061	50.0	1231761.0	0.312794	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

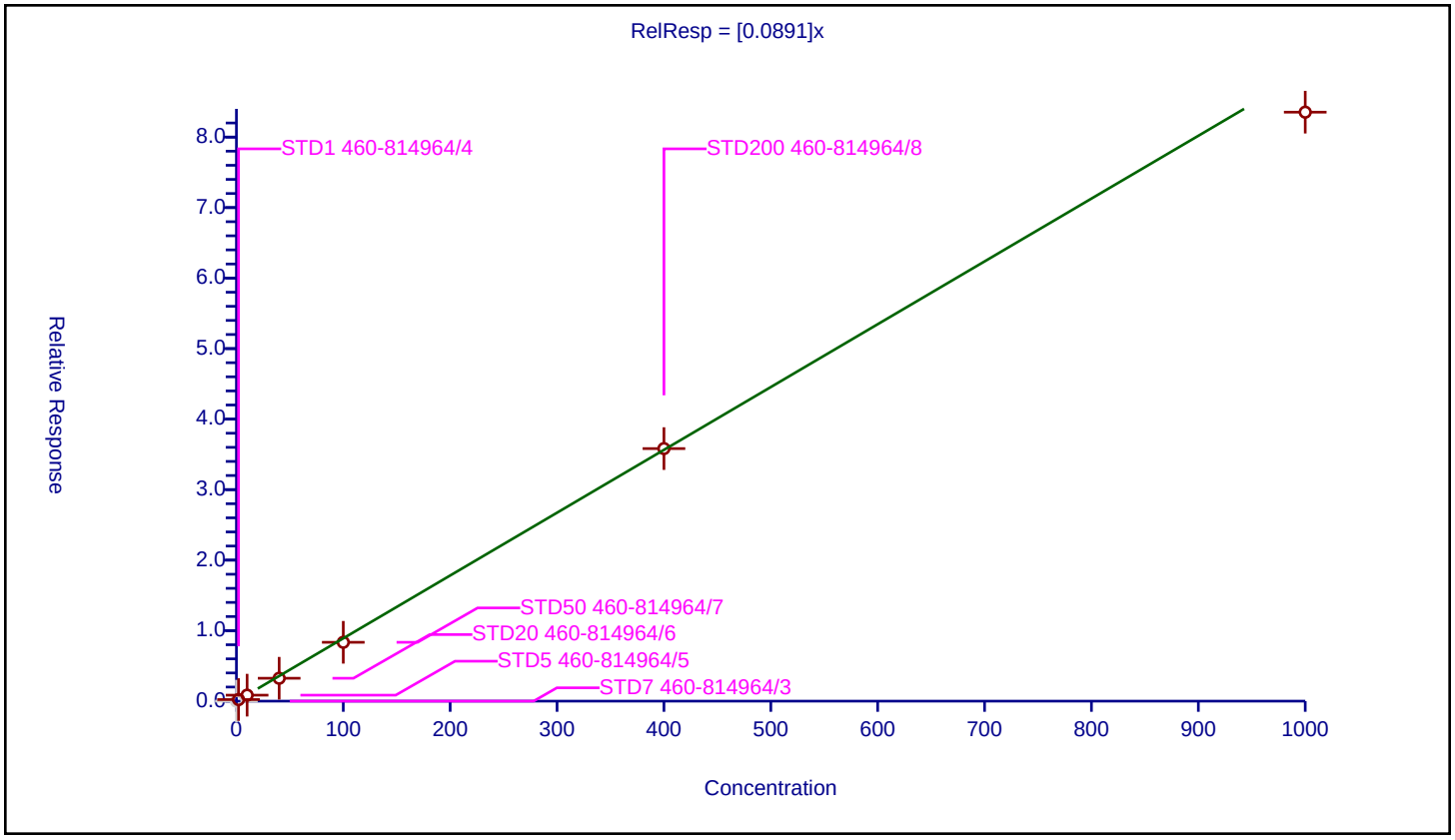
Curve Coefficients

Intercept:	0
Slope:	0.0891

Error Coefficients

Standard Error:	980000
Relative Standard Error:	13.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	2.0	0.224523	50.0	935092.0	0.112262	Y
3	STD5 460-814964/5	10.0	0.846314	50.0	1006778.0	0.084631	Y
4	STD20 460-814964/6	40.0	3.245228	50.0	966989.0	0.081131	Y
5	STD50 460-814964/7	100.0	8.34689	50.0	1037626.0	0.083469	Y
6	STD200 460-814964/8	400.0	35.818959	50.0	1017316.0	0.089547	Y
7	STD500 460-814964/9	1000.0	83.534103	50.0	1231761.0	0.083534	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

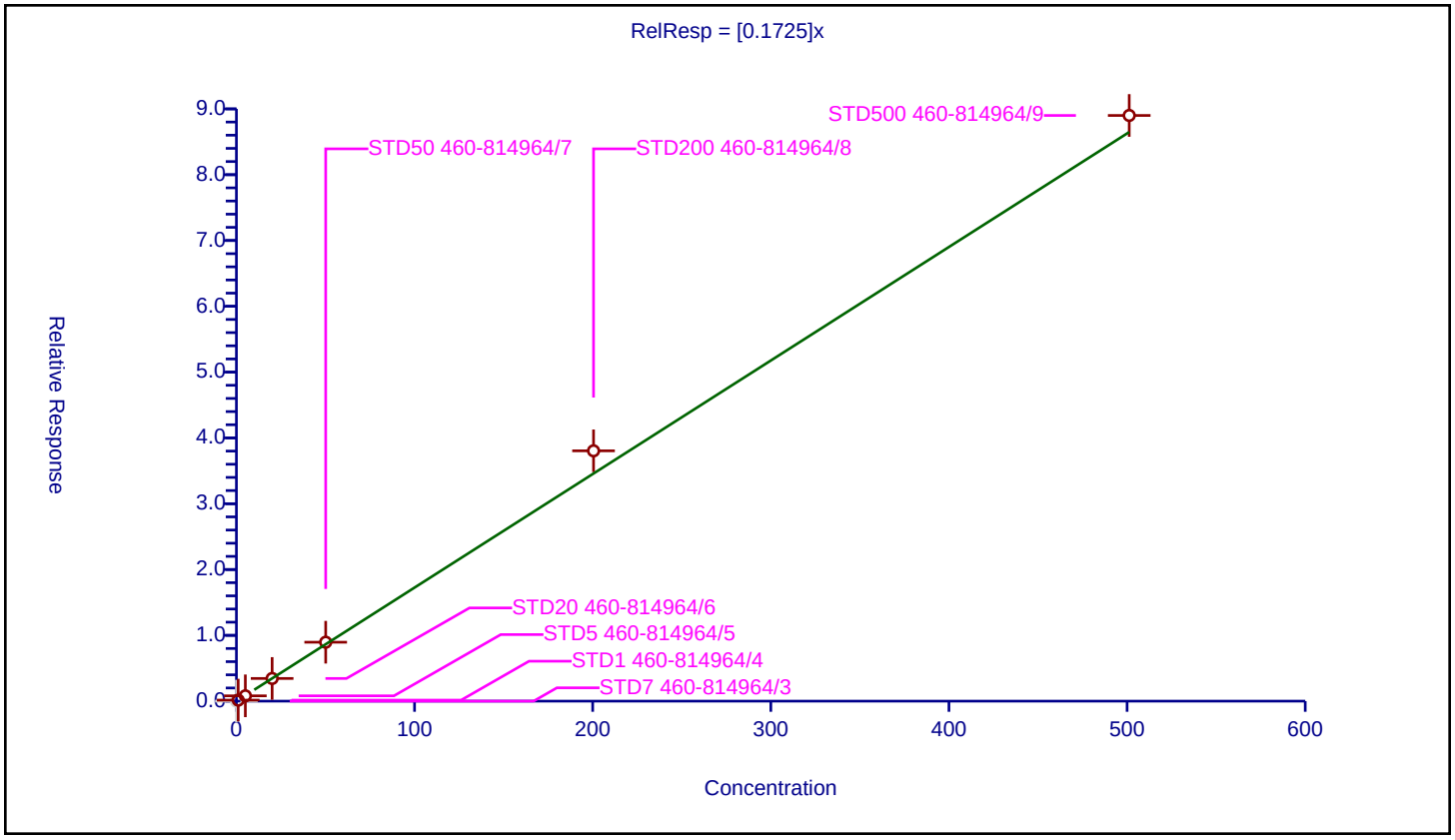
Curve Coefficients

Intercept:	0
Slope:	0.1725

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	7.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	976405.0	NaN	N
2	STD1 460-814964/4	1.0024	0.156402	50.0	935092.0	0.156027	Y
3	STD5 460-814964/5	5.012	0.808371	50.0	1006778.0	0.161287	Y
4	STD20 460-814964/6	20.048	3.445592	50.0	966989.0	0.171867	Y
5	STD50 460-814964/7	50.12	8.956214	50.0	1037626.0	0.178695	Y
6	STD200 460-814964/8	200.48	38.038771	50.0	1017316.0	0.189738	Y
7	STD500 460-814964/9	501.2	89.001681	50.0	1231761.0	0.177577	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

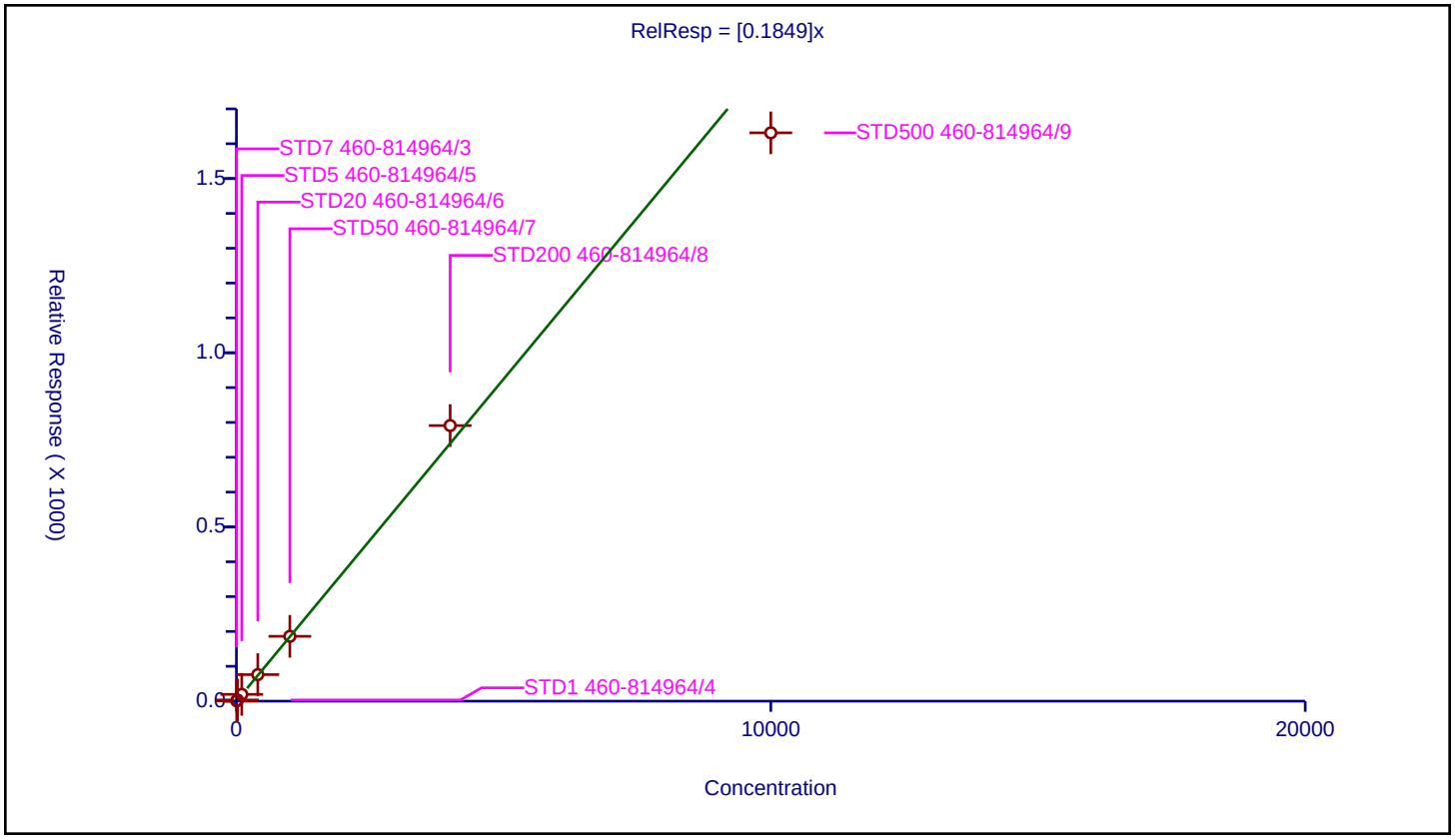
Curve Coefficients

Intercept:	0
Slope:	0.1849

Error Coefficients

Standard Error:	3410000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	5.000009	0.967574	250.0	777460.0	0.193514	Y
2	STD1 460-814964/4	20.000035	3.387923	250.0	738727.0	0.169396	Y
3	STD5 460-814964/5	100.000173	19.427618	250.0	836155.0	0.194276	Y
4	STD20 460-814964/6	400.000692	76.173103	250.0	817618.0	0.190432	Y
5	STD50 460-814964/7	1000.00173	186.014181	250.0	925205.0	0.186014	Y
6	STD200 460-814964/8	4000.00692	791.028927	250.0	921484.0	0.197757	Y
7	STD500 460-814964/9	10000.0173	1631.253192	250.0	1194270.0	0.163125	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

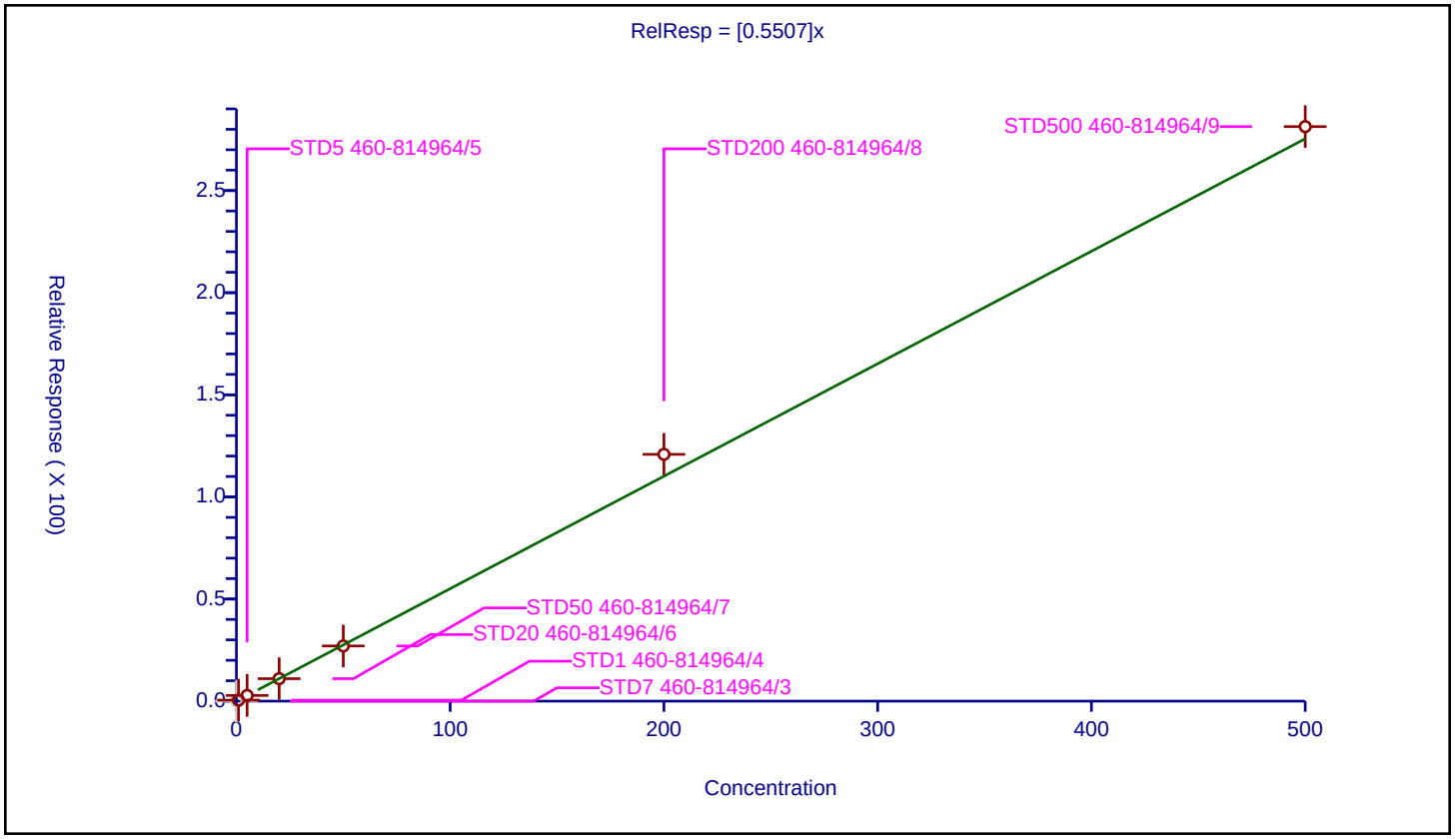
Curve Coefficients

Intercept:	0
Slope:	0.5507

Error Coefficients

Standard Error:	2470000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.489068	50.0	690088.0	0.489068	Y
3	STD5 460-814964/5	5.0	2.790455	50.0	754214.0	0.558091	Y
4	STD20 460-814964/6	20.0	11.003605	50.0	745851.0	0.55018	Y
5	STD50 460-814964/7	50.0	27.013608	50.0	813912.0	0.540272	Y
6	STD200 460-814964/8	200.0	120.839938	50.0	783510.0	0.6042	Y
7	STD500 460-814964/9	500.0	281.320415	50.0	916439.0	0.562641	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

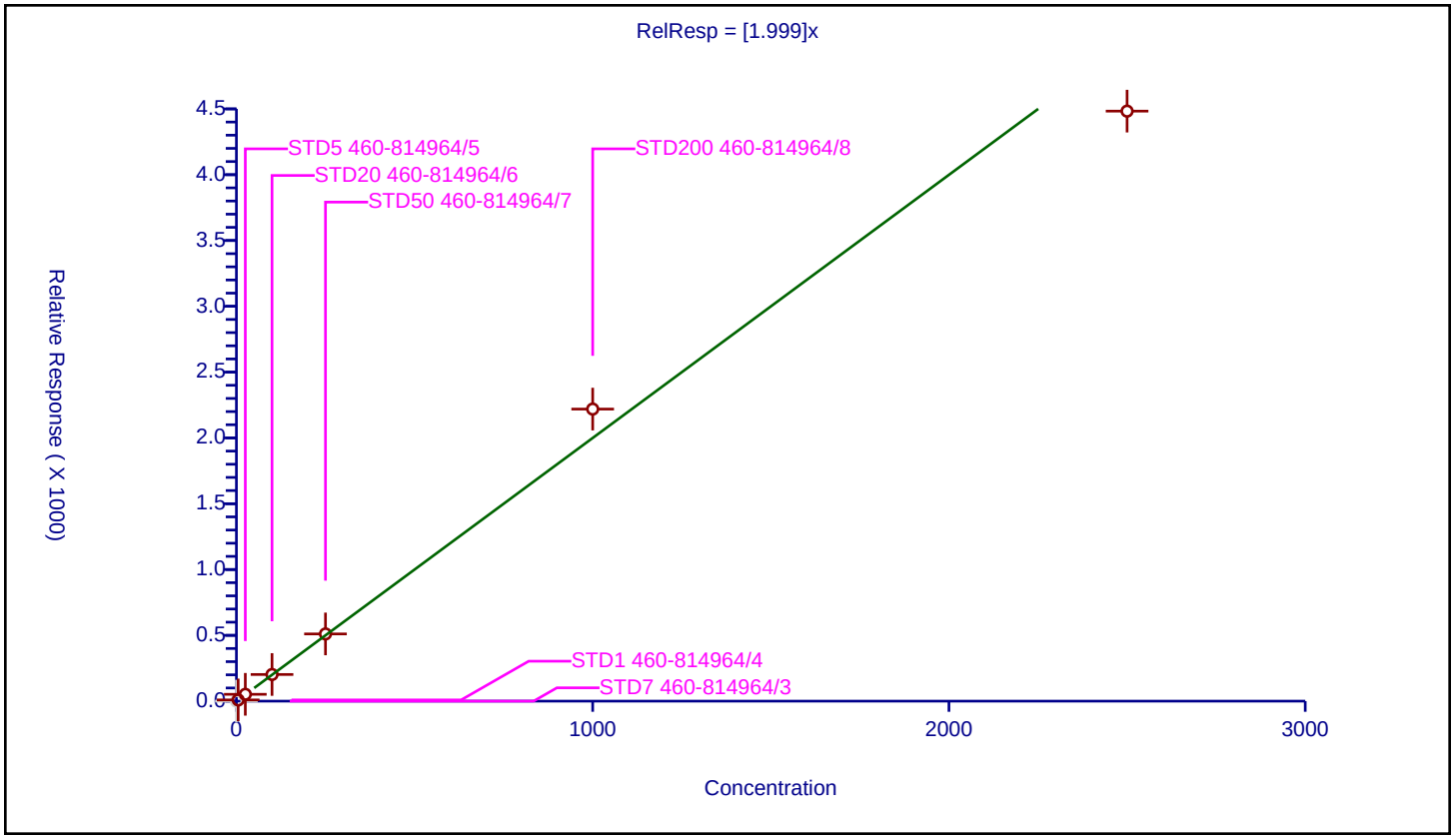
Curve Coefficients

Intercept:	0
Slope:	1.999

Error Coefficients

Standard Error:	10300000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	5.0	9.202317	250.0	738727.0	1.840463	Y
3	STD5 460-814964/5	25.0	51.899169	250.0	836155.0	2.075967	Y
4	STD20 460-814964/6	100.0	202.546299	250.0	817618.0	2.025463	Y
5	STD50 460-814964/7	250.0	510.601164	250.0	925205.0	2.042405	Y
6	STD200 460-814964/8	1000.0	2219.114494	250.0	921484.0	2.219114	Y
7	STD500 460-814964/9	2500.0	4482.977258	250.0	1194270.0	1.793191	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

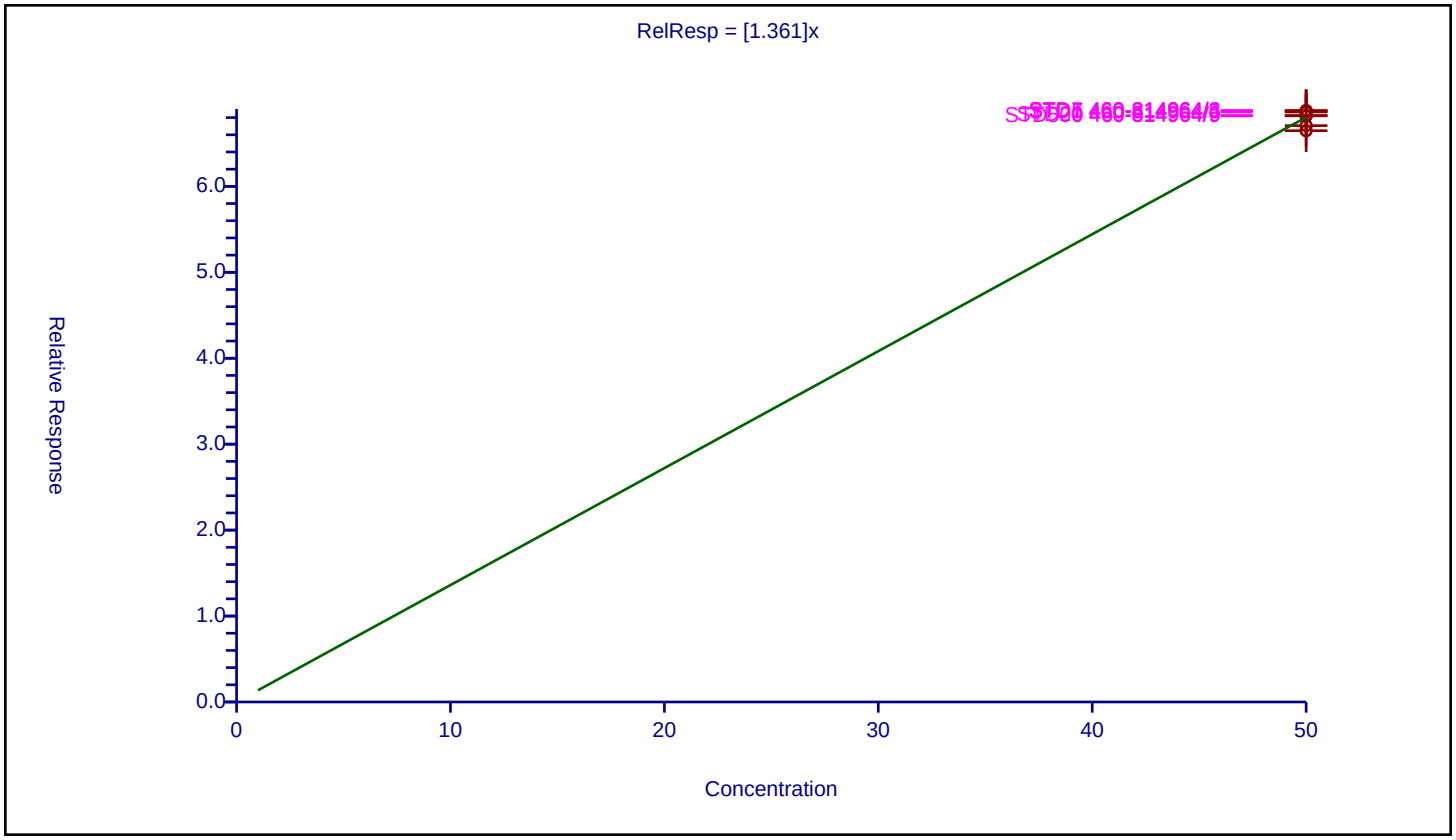
Curve Coefficients

Intercept:	0
Slope:	1.361

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	1.3
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	50.0	68.795806	50.0	725747.0	1.375916	Y
2	STD1 460-814964/4	50.0	68.810065	50.0	690088.0	1.376201	Y
3	STD5 460-814964/5	50.0	68.65737	50.0	754214.0	1.373147	Y
4	STD20 460-814964/6	50.0	68.238026	50.0	745851.0	1.364761	Y
5	STD50 460-814964/7	50.0	67.064498	50.0	813912.0	1.34129	Y
6	STD200 460-814964/8	50.0	66.477837	50.0	783510.0	1.329557	Y
7	STD500 460-814964/9	50.0	68.204103	50.0	916439.0	1.364082	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

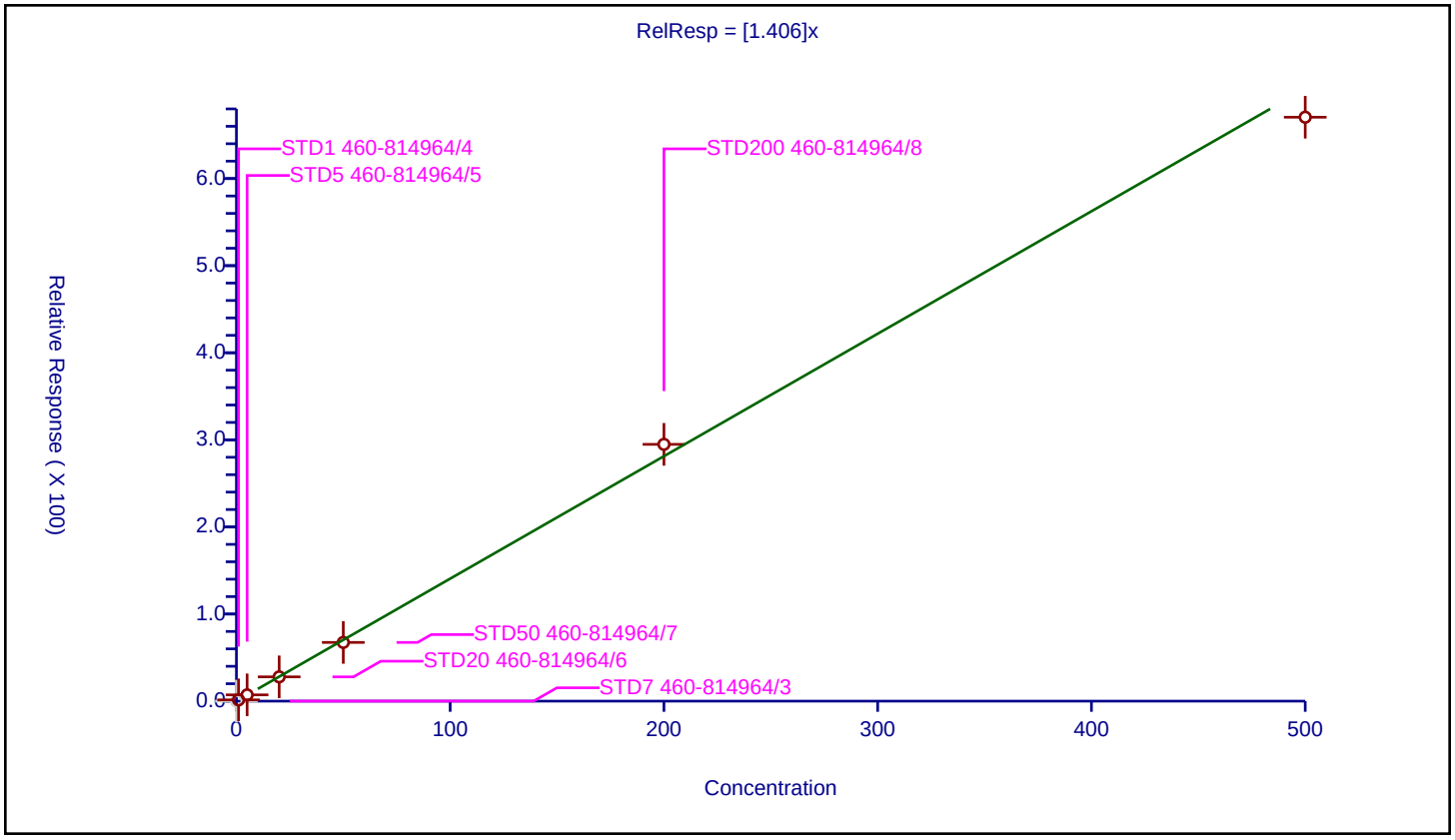
Curve Coefficients

Intercept:	0
Slope:	1.406

Error Coefficients

Standard Error:	5890000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	1.4417	50.0	690088.0	1.4417	Y
3	STD5 460-814964/5	5.0	7.189935	50.0	754214.0	1.437987	Y
4	STD20 460-814964/6	20.0	27.865887	50.0	745851.0	1.393294	Y
5	STD50 460-814964/7	50.0	67.420188	50.0	813912.0	1.348404	Y
6	STD200 460-814964/8	200.0	294.8478	50.0	783510.0	1.474239	Y
7	STD500 460-814964/9	500.0	670.449697	50.0	916439.0	1.340899	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

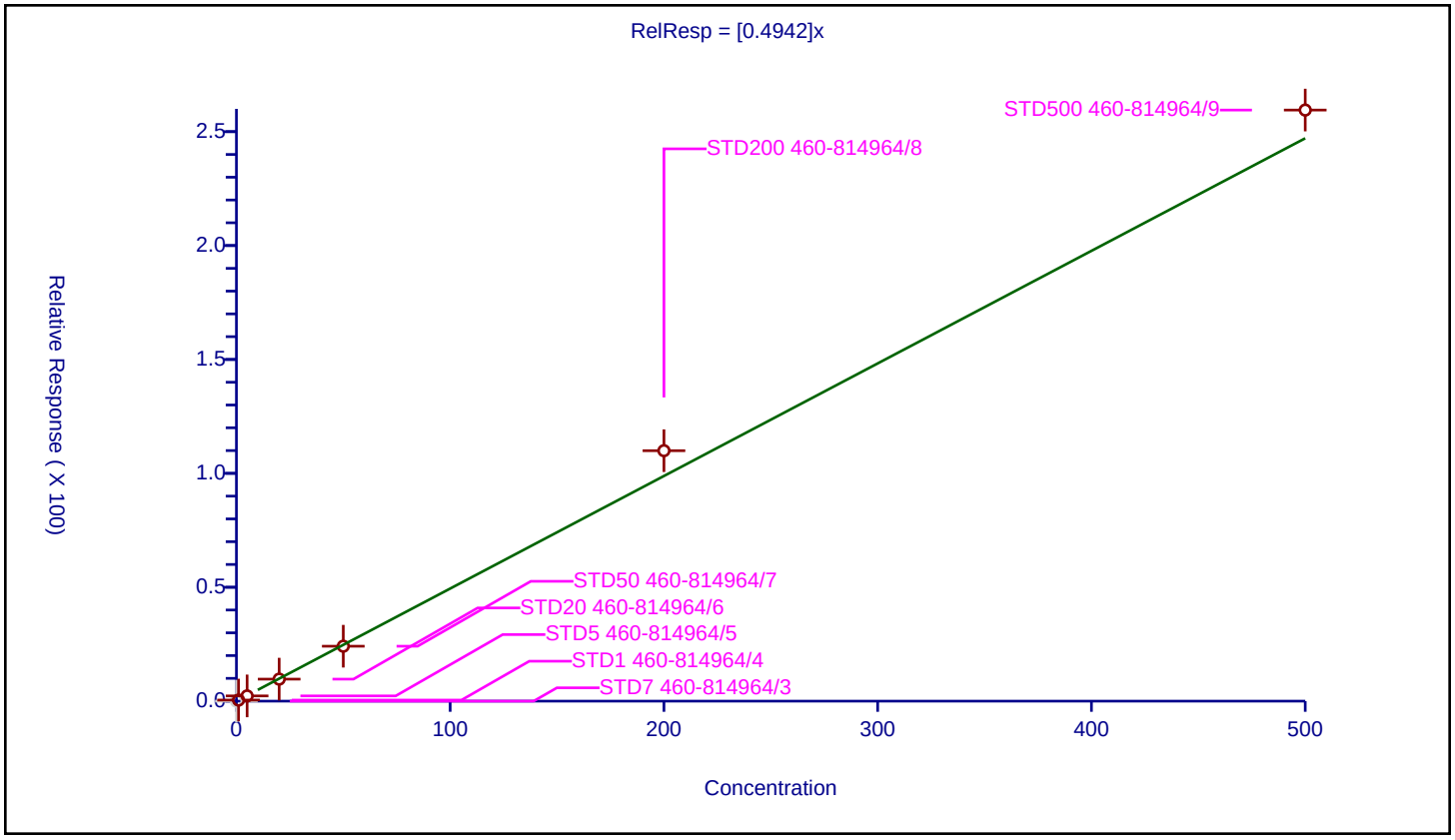
Curve Coefficients

Intercept:	0
Slope:	0.4942

Error Coefficients

Standard Error:	2270000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.472041	50.0	690088.0	0.472041	Y
3	STD5 460-814964/5	5.0	2.294044	50.0	754214.0	0.458809	Y
4	STD20 460-814964/6	20.0	9.662587	50.0	745851.0	0.483129	Y
5	STD50 460-814964/7	50.0	24.121035	50.0	813912.0	0.482421	Y
6	STD200 460-814964/8	200.0	109.952968	50.0	783510.0	0.549765	Y
7	STD500 460-814964/9	500.0	259.483664	50.0	916439.0	0.518967	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

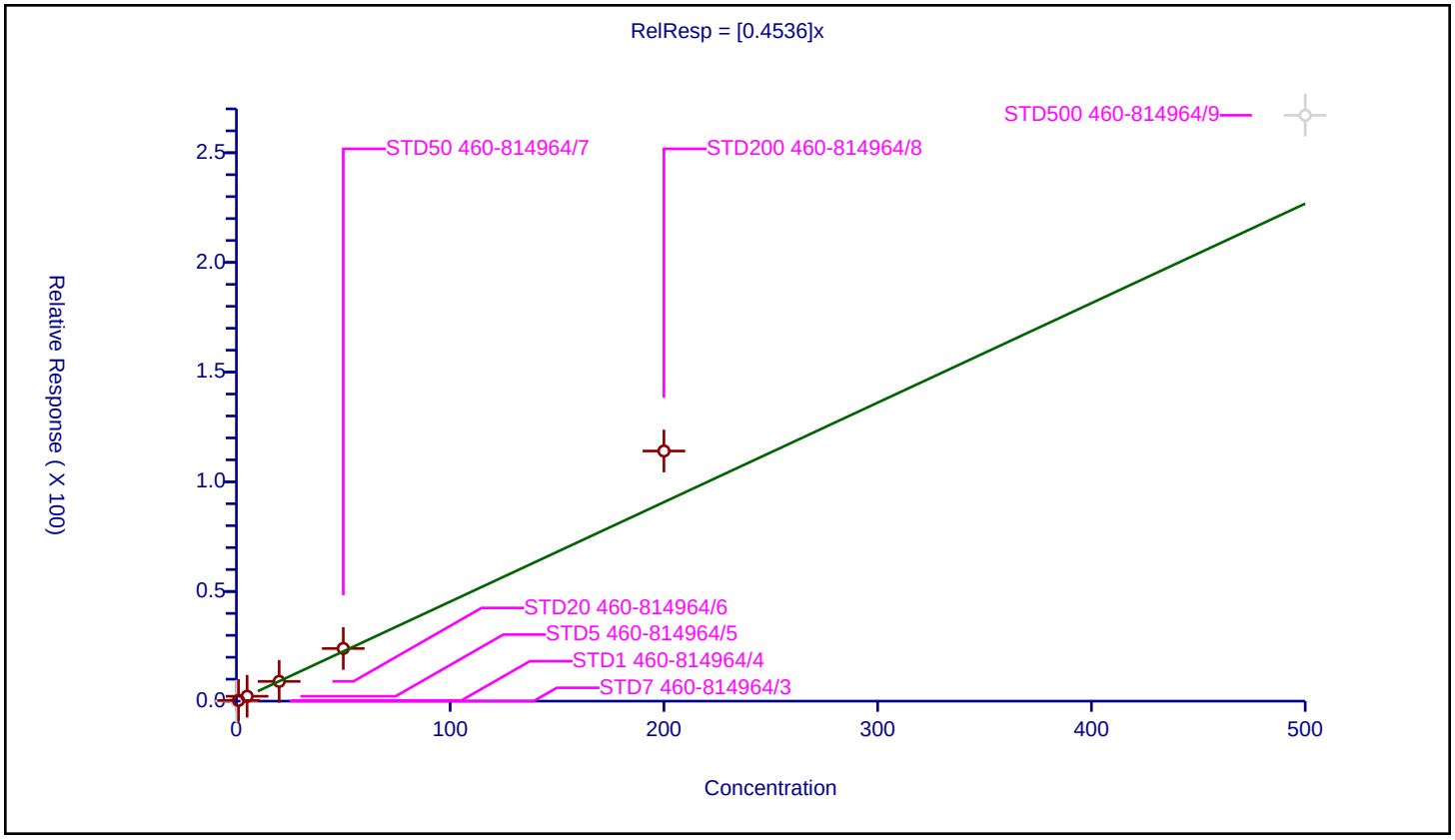
Curve Coefficients

Intercept:	0
Slope:	0.4536

Error Coefficients

Standard Error:	917000
Relative Standard Error:	19.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.321915	50.0	690088.0	0.321915	Y
3	STD5 460-814964/5	5.0	2.226623	50.0	754214.0	0.445325	Y
4	STD20 460-814964/6	20.0	9.009306	50.0	745851.0	0.450465	Y
5	STD50 460-814964/7	50.0	24.006035	50.0	813912.0	0.480121	Y
6	STD200 460-814964/8	200.0	114.033835	50.0	783510.0	0.570169	Y
7	STD500 460-814964/9	500.0	267.086789	50.0	916439.0	0.534174	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

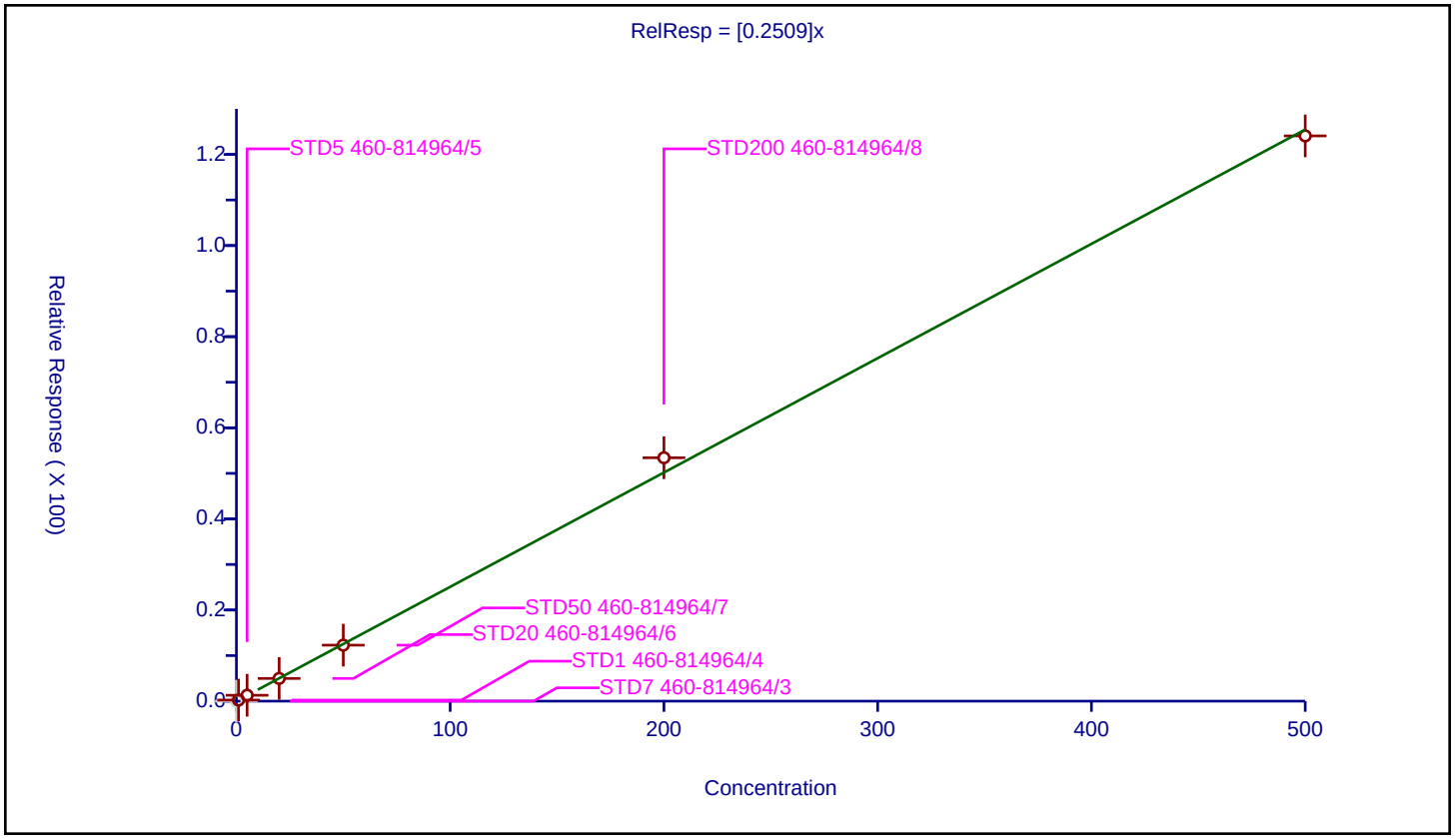
Curve Coefficients

Intercept:	0
Slope:	0.2509

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.237071	50.0	690088.0	0.237071	Y
3	STD5 460-814964/5	5.0	1.290018	50.0	754214.0	0.258004	Y
4	STD20 460-814964/6	20.0	4.985714	50.0	745851.0	0.249286	Y
5	STD50 460-814964/7	50.0	12.293098	50.0	813912.0	0.245862	Y
6	STD200 460-814964/8	200.0	53.424717	50.0	783510.0	0.267124	Y
7	STD500 460-814964/9	500.0	124.070014	50.0	916439.0	0.24814	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

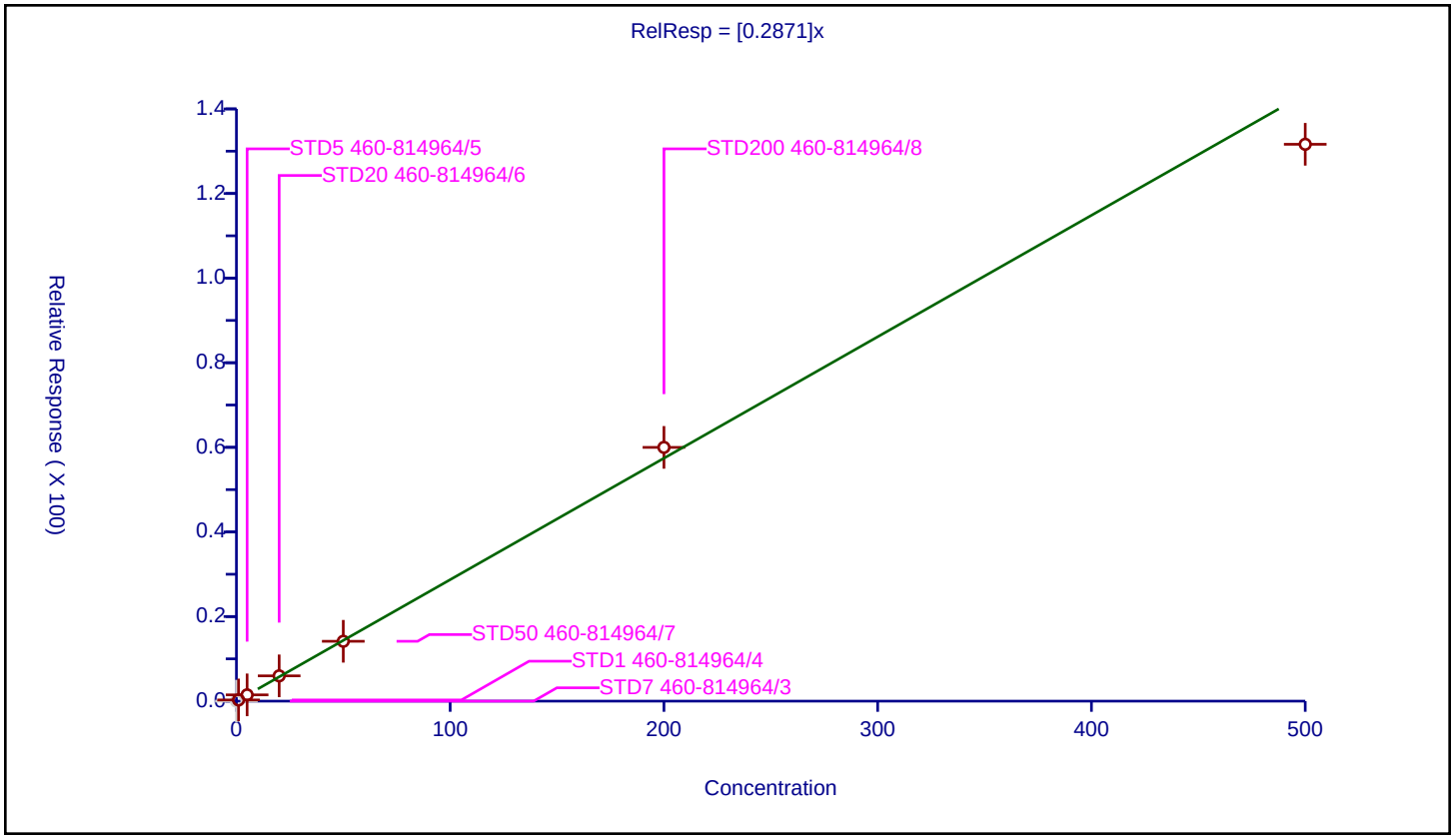
Curve Coefficients

Intercept:	0
Slope:	0.2871

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.280616	50.0	690088.0	0.280616	Y
3	STD5 460-814964/5	5.0	1.485189	50.0	754214.0	0.297038	Y
4	STD20 460-814964/6	20.0	5.976395	50.0	745851.0	0.29882	Y
5	STD50 460-814964/7	50.0	14.149441	50.0	813912.0	0.282989	Y
6	STD200 460-814964/8	200.0	59.982515	50.0	783510.0	0.299913	Y
7	STD500 460-814964/9	500.0	131.62971	50.0	916439.0	0.263259	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

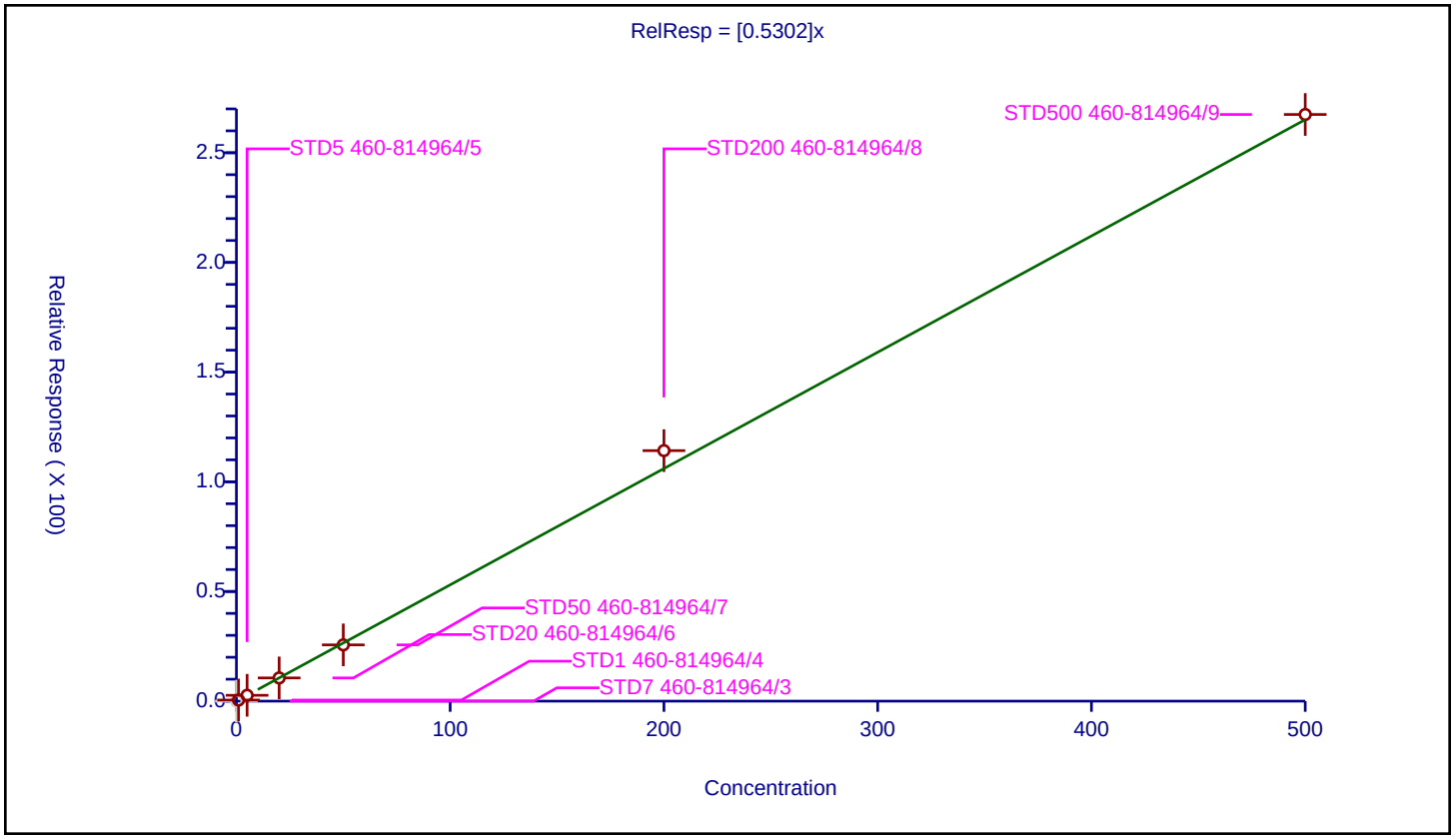
Curve Coefficients

Intercept:	0
Slope:	0.5302

Error Coefficients

Standard Error:	2340000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.500371	50.0	690088.0	0.500371	Y
3	STD5 460-814964/5	5.0	2.664496	50.0	754214.0	0.532899	Y
4	STD20 460-814964/6	20.0	10.577716	50.0	745851.0	0.528886	Y
5	STD50 460-814964/7	50.0	25.651115	50.0	813912.0	0.513022	Y
6	STD200 460-814964/8	200.0	114.199244	50.0	783510.0	0.570996	Y
7	STD500 460-814964/9	500.0	267.449607	50.0	916439.0	0.534899	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

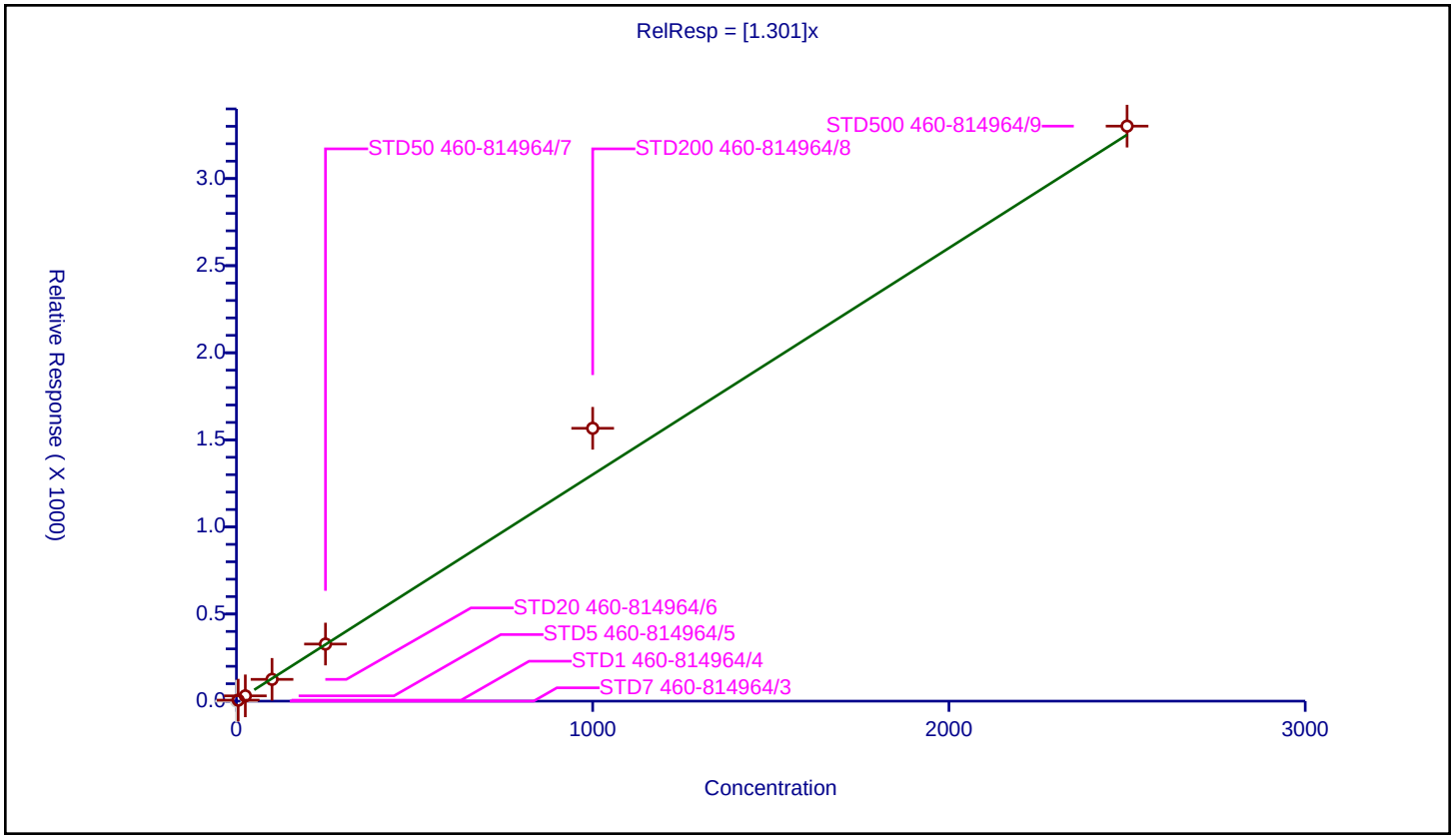
Curve Coefficients

Intercept:	0
Slope:	1.301

Error Coefficients

Standard Error:	7530000
Relative Standard Error:	11.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	250.0	777460.0	NaN	N
2	STD1 460-814964/4	5.0	5.706438	250.0	738727.0	1.141288	Y
3	STD5 460-814964/5	25.0	30.373854	250.0	836155.0	1.214954	Y
4	STD20 460-814964/6	100.0	125.0159	250.0	817618.0	1.250159	Y
5	STD50 460-814964/7	250.0	327.671435	250.0	925205.0	1.310686	Y
6	STD200 460-814964/8	1000.0	1566.362791	250.0	921484.0	1.566363	Y
7	STD500 460-814964/9	2500.0	3301.039757	250.0	1194270.0	1.320416	Y



Calibration / n-Butyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

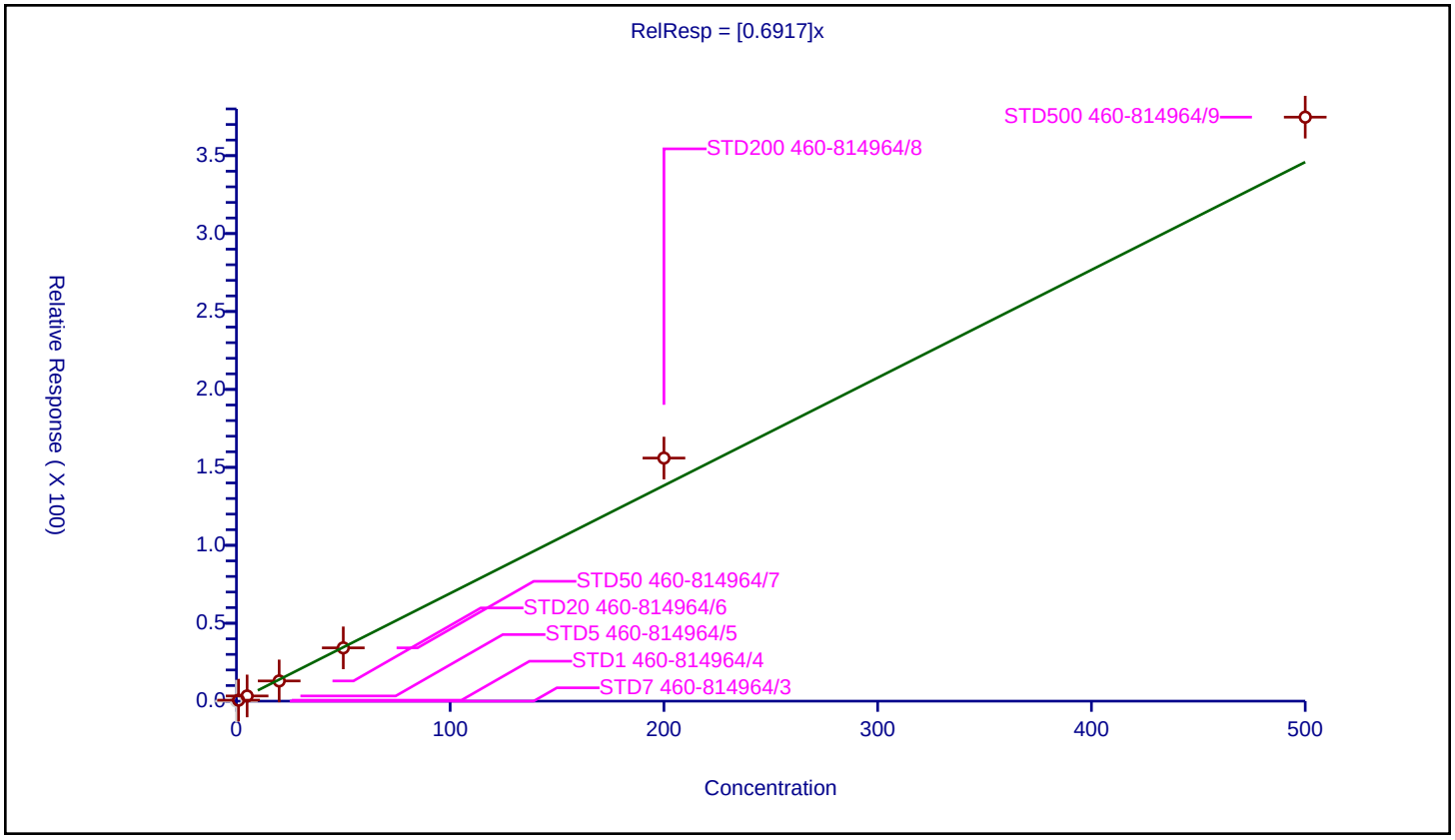
Curve Coefficients

Intercept:	0
Slope:	0.6917

Error Coefficients

Standard Error:	3270000
Relative Standard Error:	8.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.623109	50.0	690088.0	0.623109	Y
3	STD5 460-814964/5	5.0	3.331879	50.0	754214.0	0.666376	Y
4	STD20 460-814964/6	20.0	12.960229	50.0	745851.0	0.648011	Y
5	STD50 460-814964/7	50.0	34.183425	50.0	813912.0	0.683669	Y
6	STD200 460-814964/8	200.0	155.967697	50.0	783510.0	0.779838	Y
7	STD500 460-814964/9	500.0	374.699462	50.0	916439.0	0.749399	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

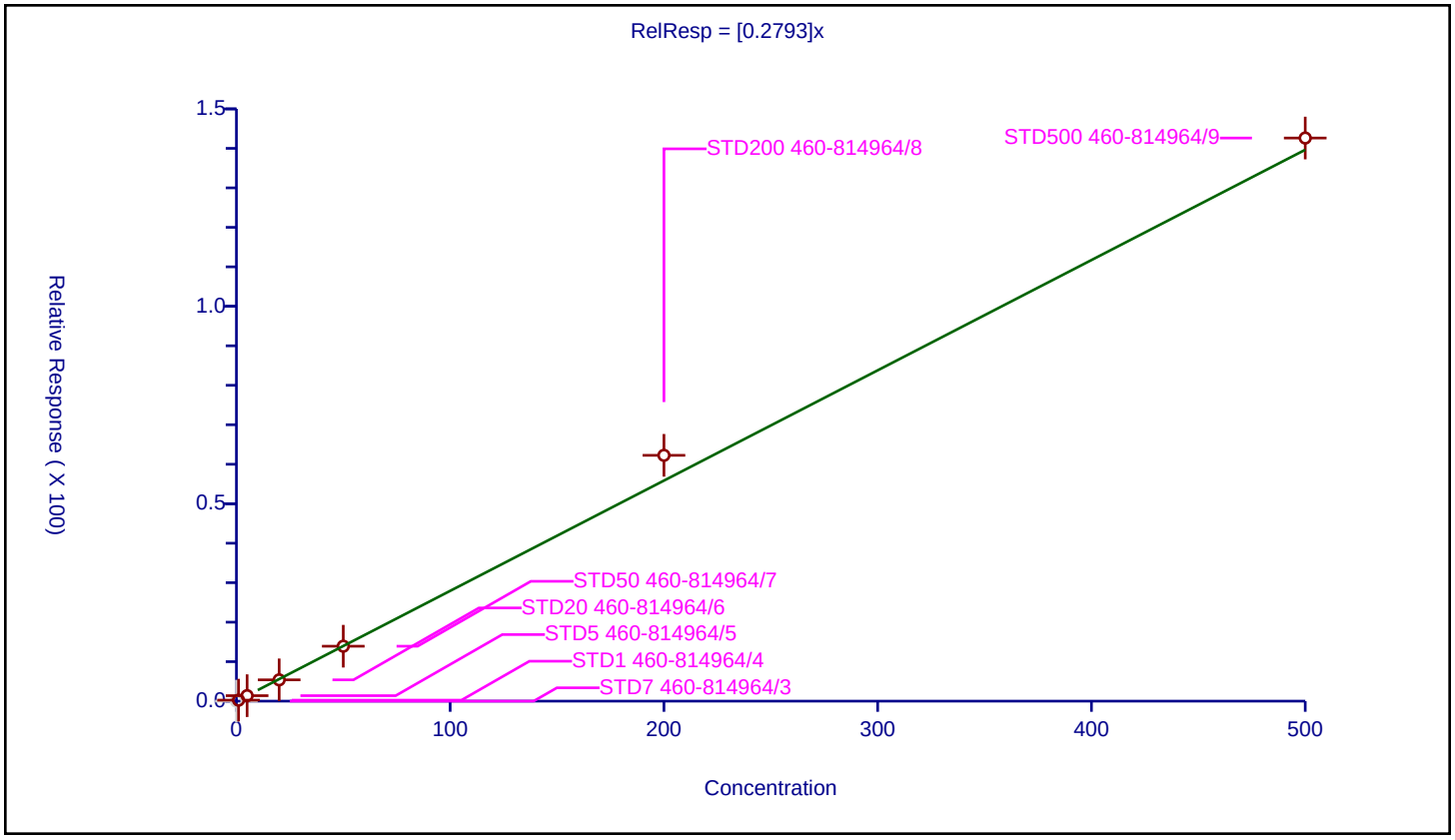
Curve Coefficients

Intercept:	0
Slope:	0.2793

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.253953	50.0	690088.0	0.253953	Y
3	STD5 460-814964/5	5.0	1.386874	50.0	754214.0	0.277375	Y
4	STD20 460-814964/6	20.0	5.390286	50.0	745851.0	0.269514	Y
5	STD50 460-814964/7	50.0	13.913543	50.0	813912.0	0.278271	Y
6	STD200 460-814964/8	200.0	62.257342	50.0	783510.0	0.311287	Y
7	STD500 460-814964/9	500.0	142.623186	50.0	916439.0	0.285246	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

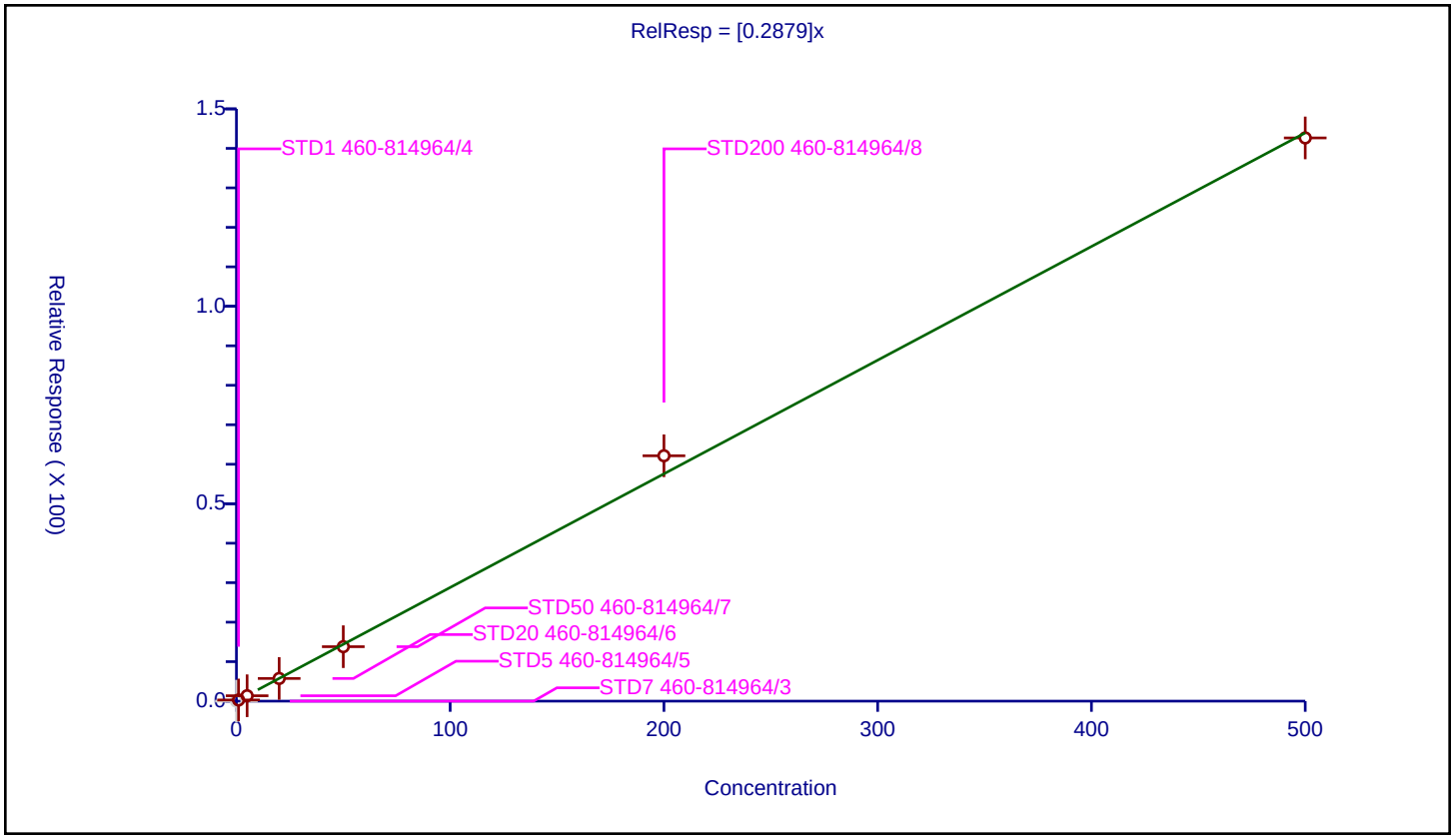
Curve Coefficients

Intercept:	0
Slope:	0.2879

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.2946	50.0	690088.0	0.2946	Y
3	STD5 460-814964/5	5.0	1.36798	50.0	754214.0	0.273596	Y
4	STD20 460-814964/6	20.0	5.741093	50.0	745851.0	0.287055	Y
5	STD50 460-814964/7	50.0	13.794489	50.0	813912.0	0.27589	Y
6	STD200 460-814964/8	200.0	62.147452	50.0	783510.0	0.310737	Y
7	STD500 460-814964/9	500.0	142.648338	50.0	916439.0	0.285297	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

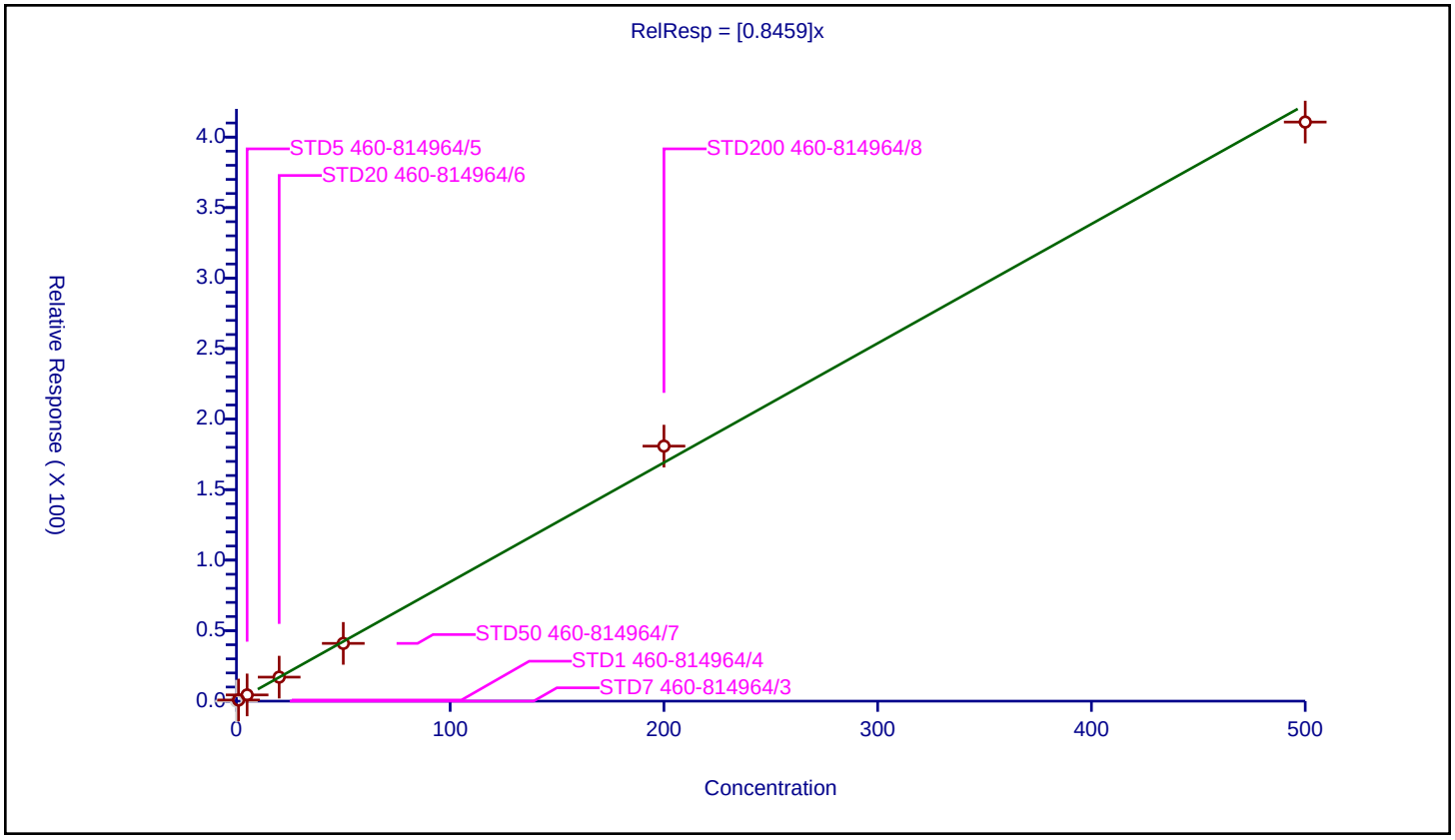
Curve Coefficients

Intercept:	0
Slope:	0.8459

Error Coefficients

Standard Error:	3610000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.79729	50.0	690088.0	0.79729	Y
3	STD5 460-814964/5	5.0	4.409889	50.0	754214.0	0.881978	Y
4	STD20 460-814964/6	20.0	17.030211	50.0	745851.0	0.851511	Y
5	STD50 460-814964/7	50.0	40.957622	50.0	813912.0	0.819152	Y
6	STD200 460-814964/8	200.0	180.852382	50.0	783510.0	0.904262	Y
7	STD500 460-814964/9	500.0	410.674633	50.0	916439.0	0.821349	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

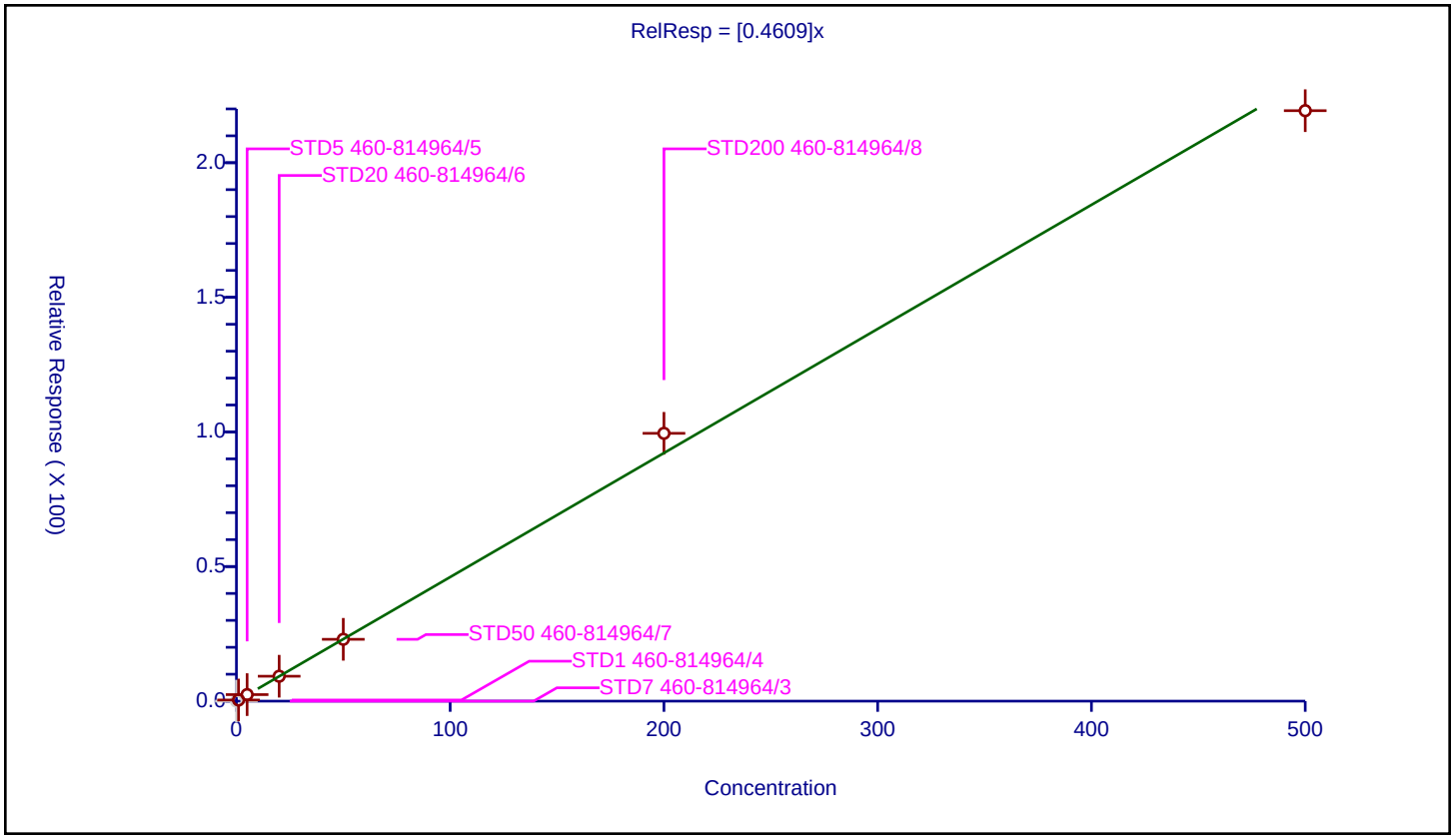
Curve Coefficients

Intercept:	0
Slope:	0.4609

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.420961	50.0	690088.0	0.420961	Y
3	STD5 460-814964/5	5.0	2.43061	50.0	754214.0	0.486122	Y
4	STD20 460-814964/6	20.0	9.256272	50.0	745851.0	0.462814	Y
5	STD50 460-814964/7	50.0	22.967655	50.0	813912.0	0.459353	Y
6	STD200 460-814964/8	200.0	99.483797	50.0	783510.0	0.497419	Y
7	STD500 460-814964/9	500.0	219.333474	50.0	916439.0	0.438667	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

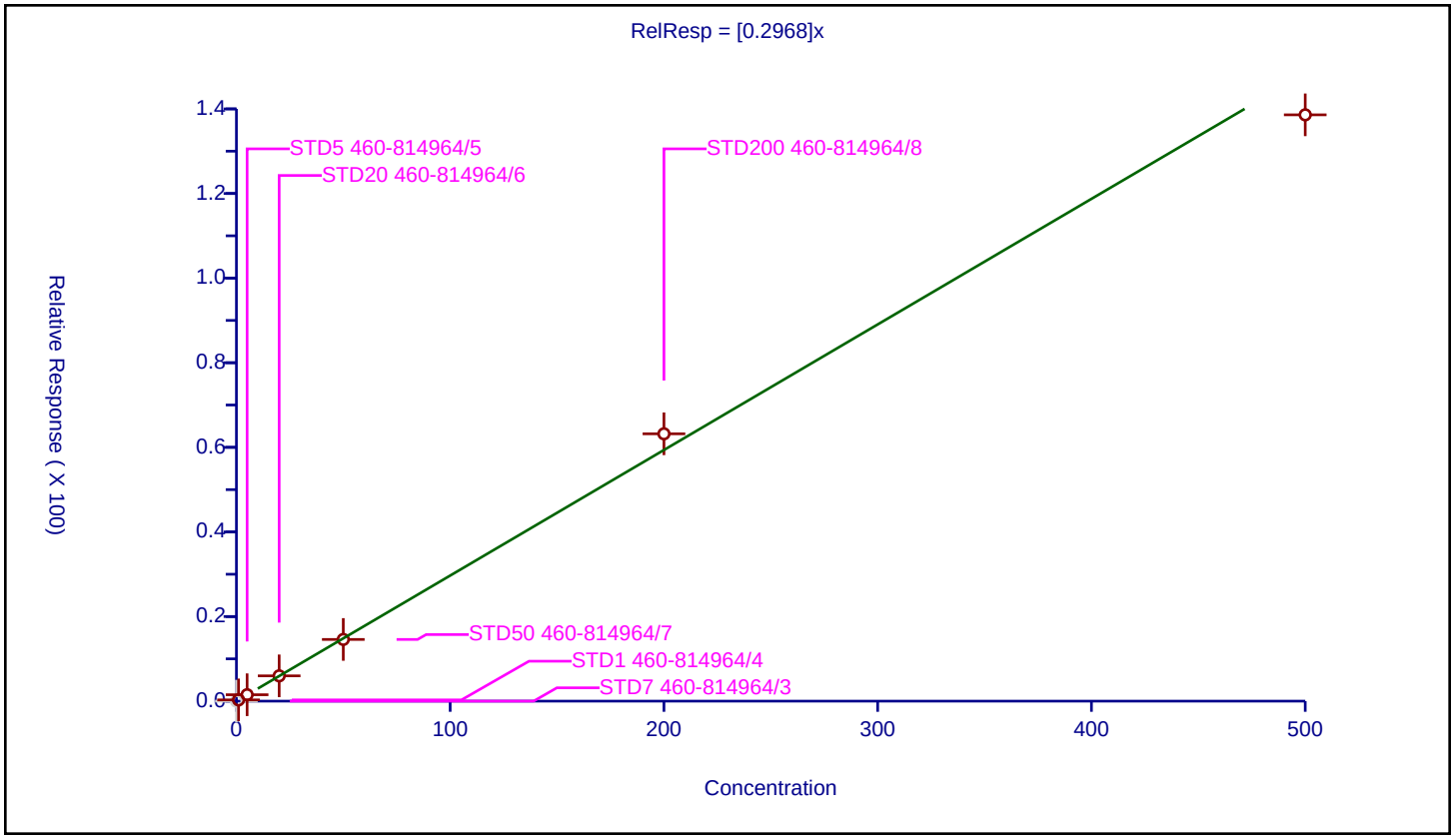
Curve Coefficients

Intercept:	0
Slope:	0.2968

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.29402	50.0	690088.0	0.29402	Y
3	STD5 460-814964/5	5.0	1.51575	50.0	754214.0	0.30315	Y
4	STD20 460-814964/6	20.0	5.976864	50.0	745851.0	0.298843	Y
5	STD50 460-814964/7	50.0	14.587634	50.0	813912.0	0.291753	Y
6	STD200 460-814964/8	200.0	63.194535	50.0	783510.0	0.315973	Y
7	STD500 460-814964/9	500.0	138.598968	50.0	916439.0	0.277198	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

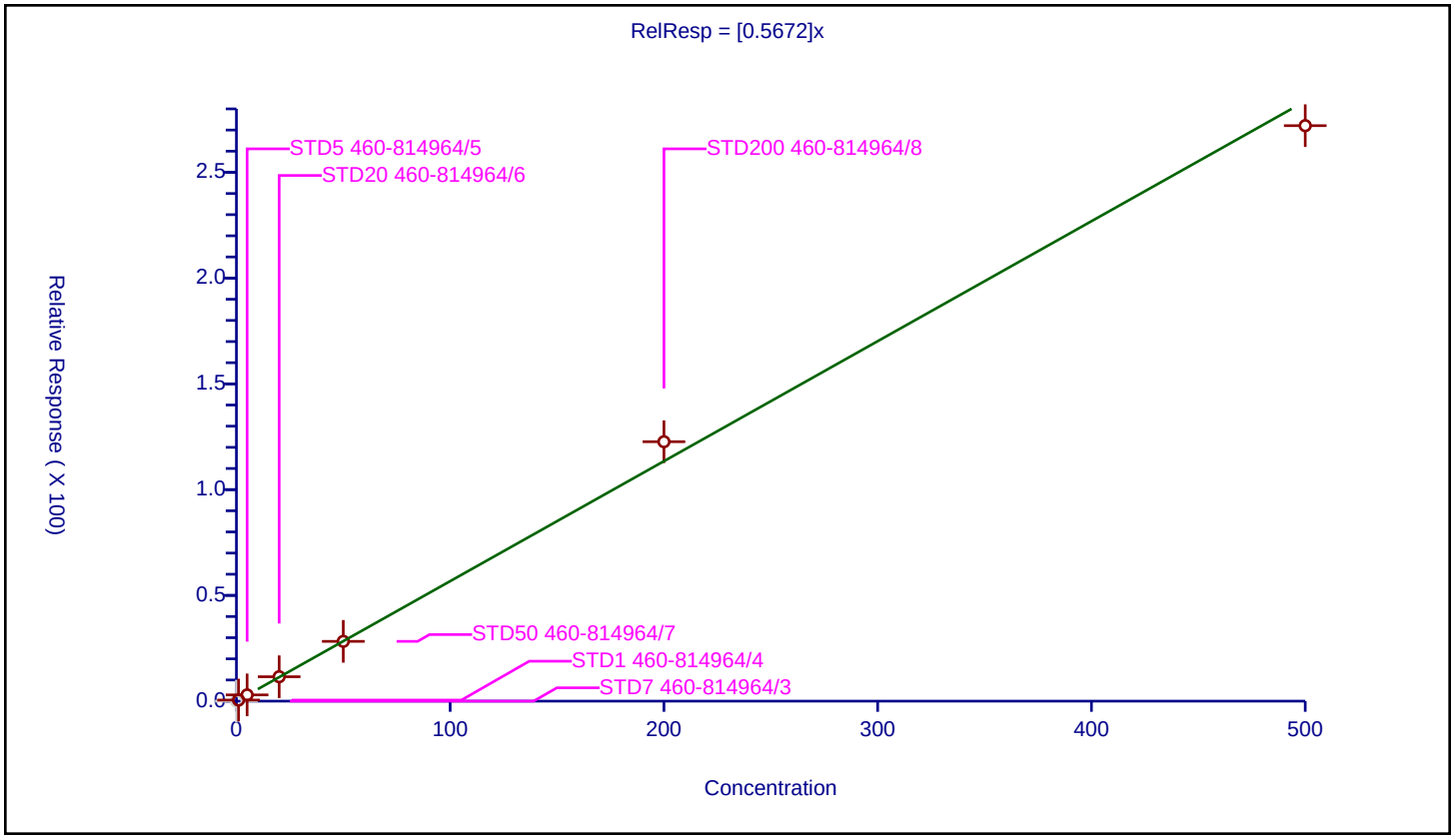
Curve Coefficients

Intercept:	0
Slope:	0.5672

Error Coefficients

Standard Error:	2400000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.513413	50.0	690088.0	0.513413	Y
3	STD5 460-814964/5	5.0	2.95261	50.0	754214.0	0.590522	Y
4	STD20 460-814964/6	20.0	11.536218	50.0	745851.0	0.576811	Y
5	STD50 460-814964/7	50.0	28.265648	50.0	813912.0	0.565313	Y
6	STD200 460-814964/8	200.0	122.646871	50.0	783510.0	0.613234	Y
7	STD500 460-814964/9	500.0	272.065571	50.0	916439.0	0.544131	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

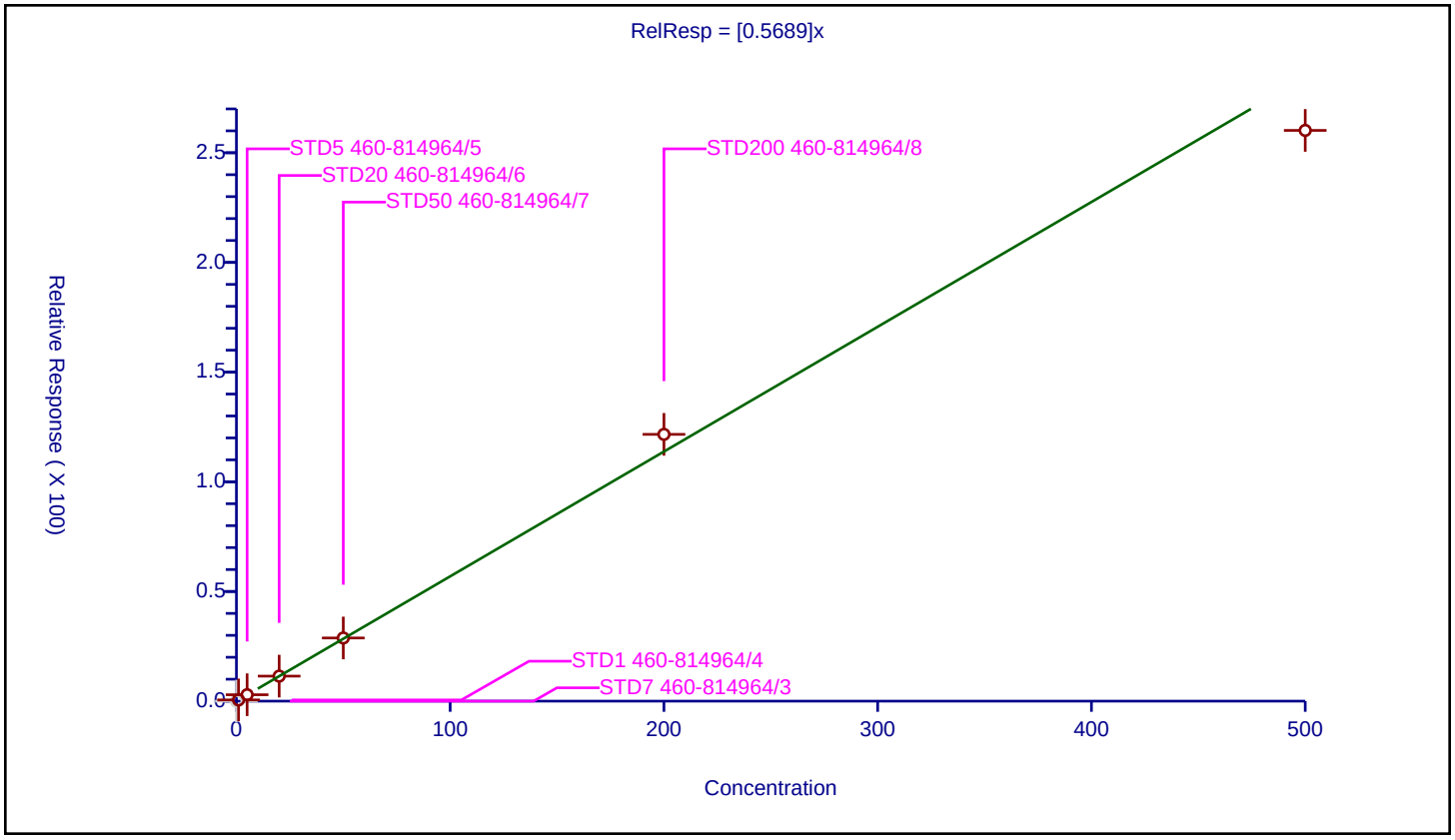
Curve Coefficients

Intercept:	0
Slope:	0.5689

Error Coefficients

Standard Error:	2310000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.553915	50.0	690088.0	0.553915	Y
3	STD5 460-814964/5	5.0	2.925032	50.0	754214.0	0.585006	Y
4	STD20 460-814964/6	20.0	11.40154	50.0	745851.0	0.570077	Y
5	STD50 460-814964/7	50.0	28.79009	50.0	813912.0	0.575802	Y
6	STD200 460-814964/8	200.0	121.620783	50.0	783510.0	0.608104	Y
7	STD500 460-814964/9	500.0	260.193804	50.0	916439.0	0.520388	Y



Calibration / n-Butyl acrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

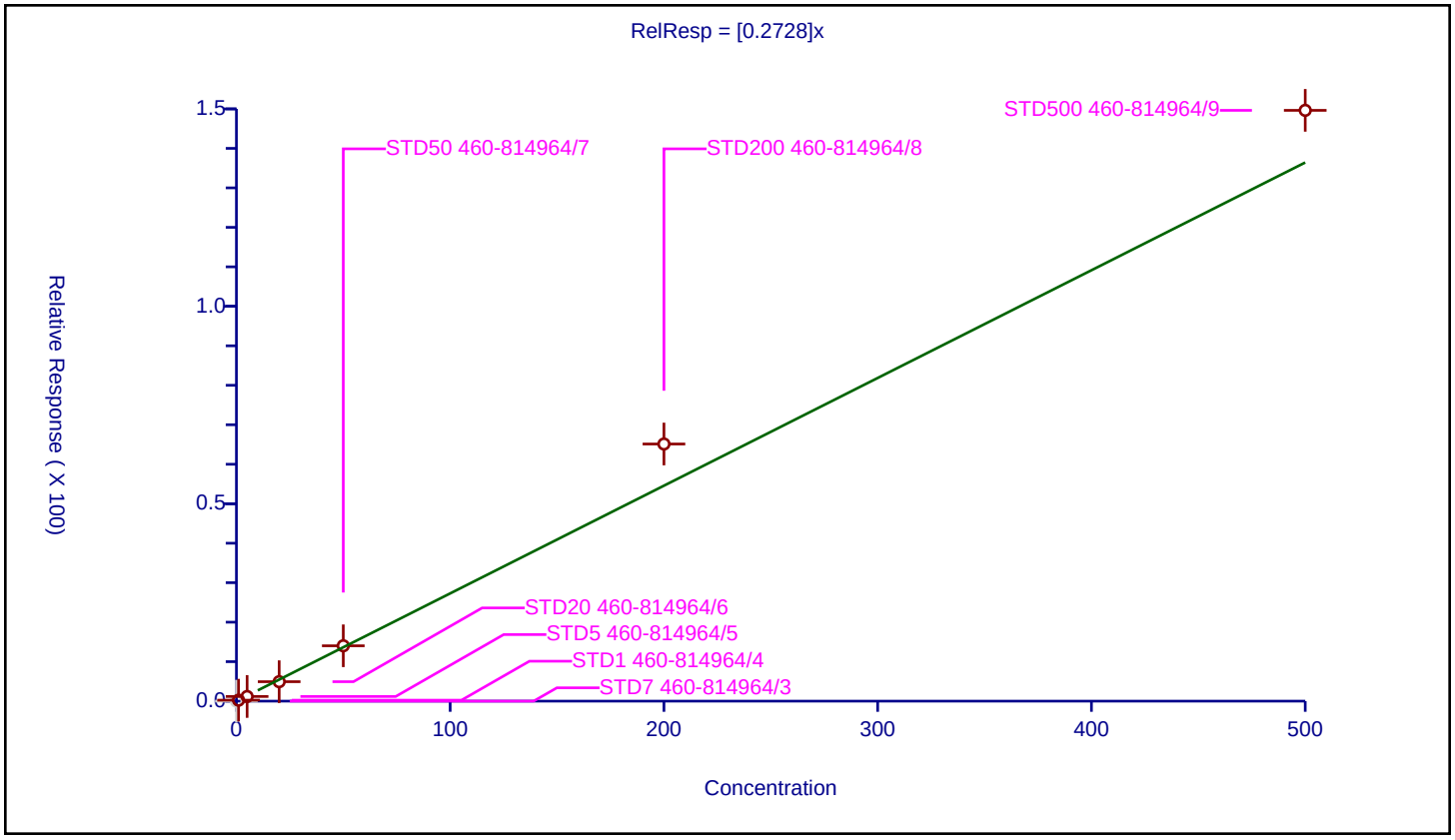
Curve Coefficients

Intercept:	0
Slope:	0.2728

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.249388	50.0	690088.0	0.249388	Y
3	STD5 460-814964/5	5.0	1.179771	50.0	754214.0	0.235954	Y
4	STD20 460-814964/6	20.0	4.926721	50.0	745851.0	0.246336	Y
5	STD50 460-814964/7	50.0	14.022708	50.0	813912.0	0.280454	Y
6	STD200 460-814964/8	200.0	65.127439	50.0	783510.0	0.325637	Y
7	STD500 460-814964/9	500.0	149.626489	50.0	916439.0	0.299253	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

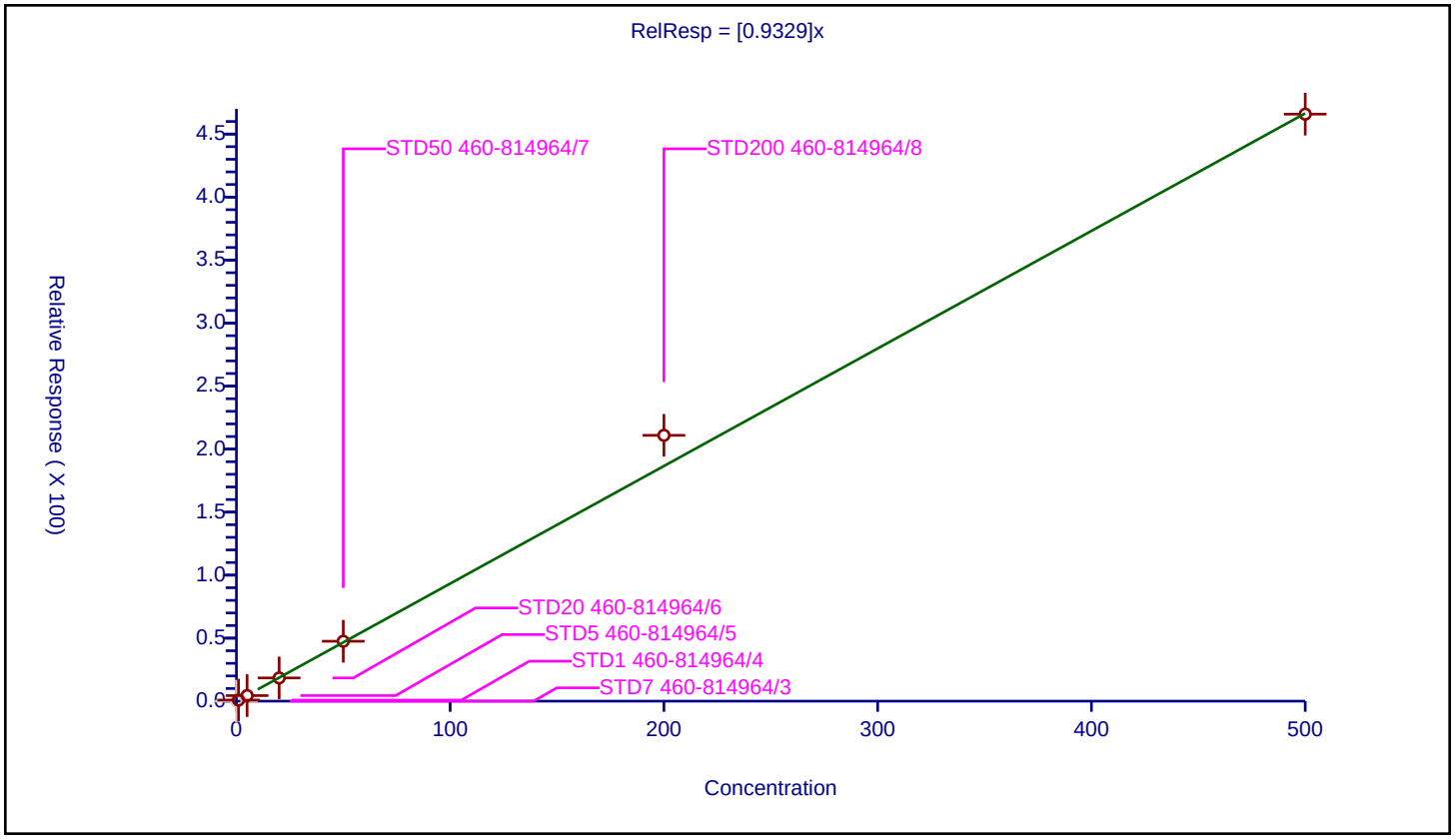
Curve Coefficients

Intercept:	0
Slope:	0.9329

Error Coefficients

Standard Error:	4110000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.857934	50.0	690088.0	0.857934	Y
3	STD5 460-814964/5	5.0	4.410419	50.0	754214.0	0.882084	Y
4	STD20 460-814964/6	20.0	18.410044	50.0	745851.0	0.920502	Y
5	STD50 460-814964/7	50.0	47.528418	50.0	813912.0	0.950568	Y
6	STD200 460-814964/8	200.0	210.951551	50.0	783510.0	1.054758	Y
7	STD500 460-814964/9	500.0	465.816274	50.0	916439.0	0.931633	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

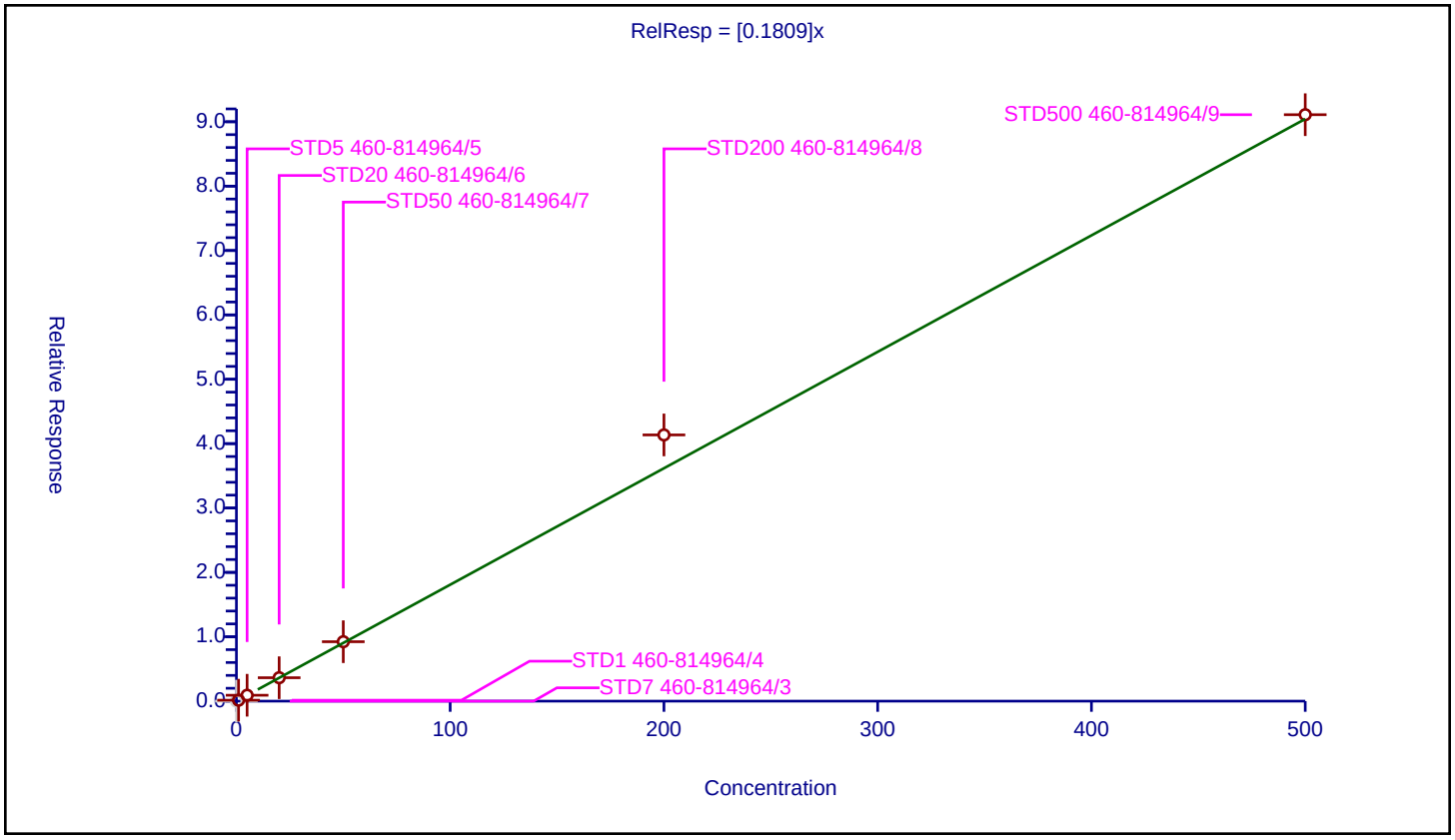
Curve Coefficients

Intercept:	0
Slope:	0.1809

Error Coefficients

Standard Error:	804000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	0.146358	50.0	690088.0	0.146358	Y
3	STD5 460-814964/5	5.0	0.916053	50.0	754214.0	0.183211	Y
4	STD20 460-814964/6	20.0	3.640607	50.0	745851.0	0.18203	Y
5	STD50 460-814964/7	50.0	9.231342	50.0	813912.0	0.184627	Y
6	STD200 460-814964/8	200.0	41.354354	50.0	783510.0	0.206772	Y
7	STD500 460-814964/9	500.0	91.099353	50.0	916439.0	0.182199	Y



Calibration / Amyl acetate (mixed isomers)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

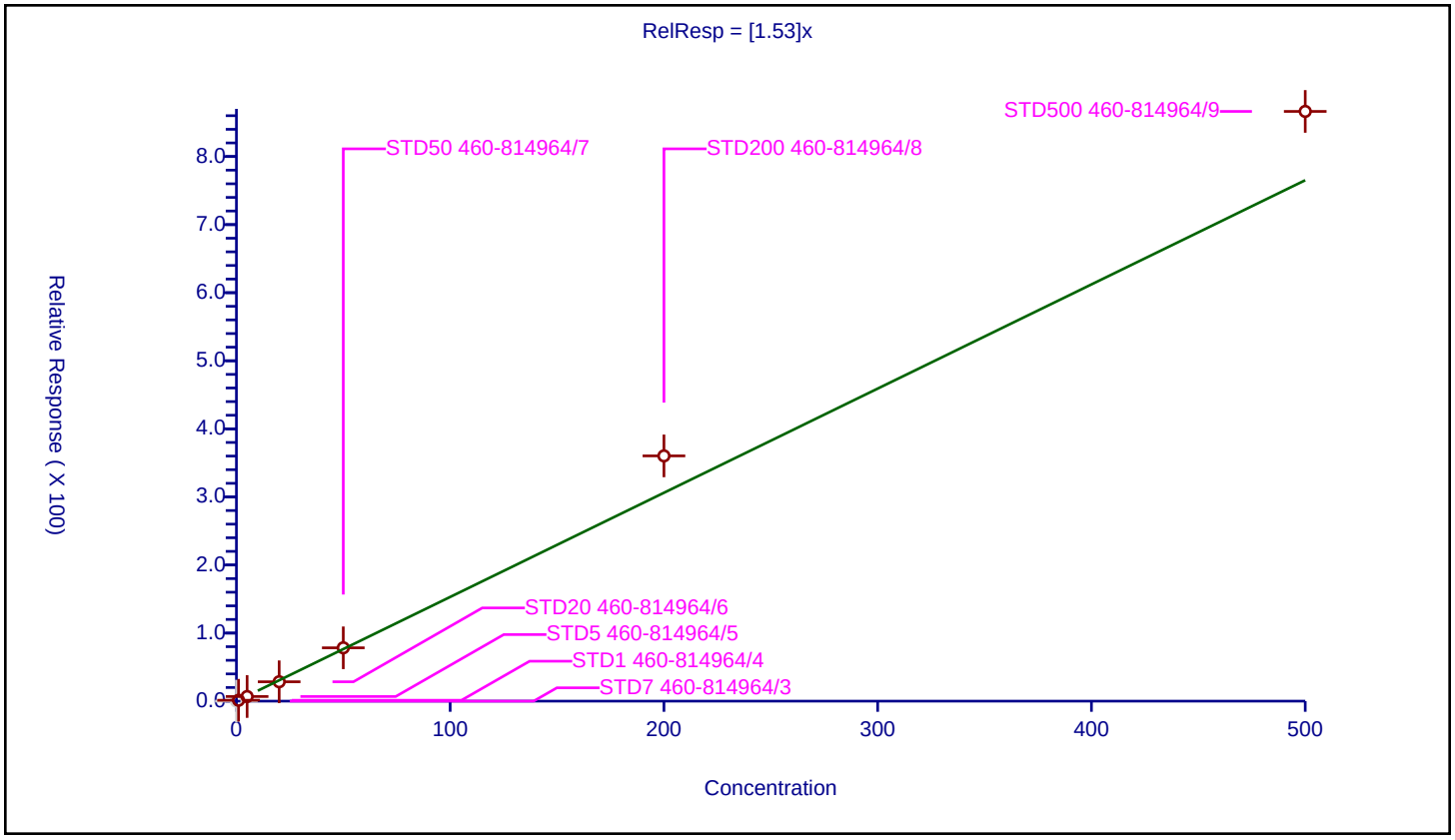
Curve Coefficients

Intercept:	0
Slope:	1.53

Error Coefficients

Standard Error:	3810000
Relative Standard Error:	13.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.303351	50.0	367169.0	1.303351	Y
3	STD5 460-814964/5	5.0	6.770347	50.0	414351.0	1.354069	Y
4	STD20 460-814964/6	20.0	28.474447	50.0	405748.0	1.423722	Y
5	STD50 460-814964/7	50.0	78.356735	50.0	428385.0	1.567135	Y
6	STD200 460-814964/8	200.0	360.270217	50.0	404675.0	1.801351	Y
7	STD500 460-814964/9	500.0	866.29735	50.0	460084.0	1.732595	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

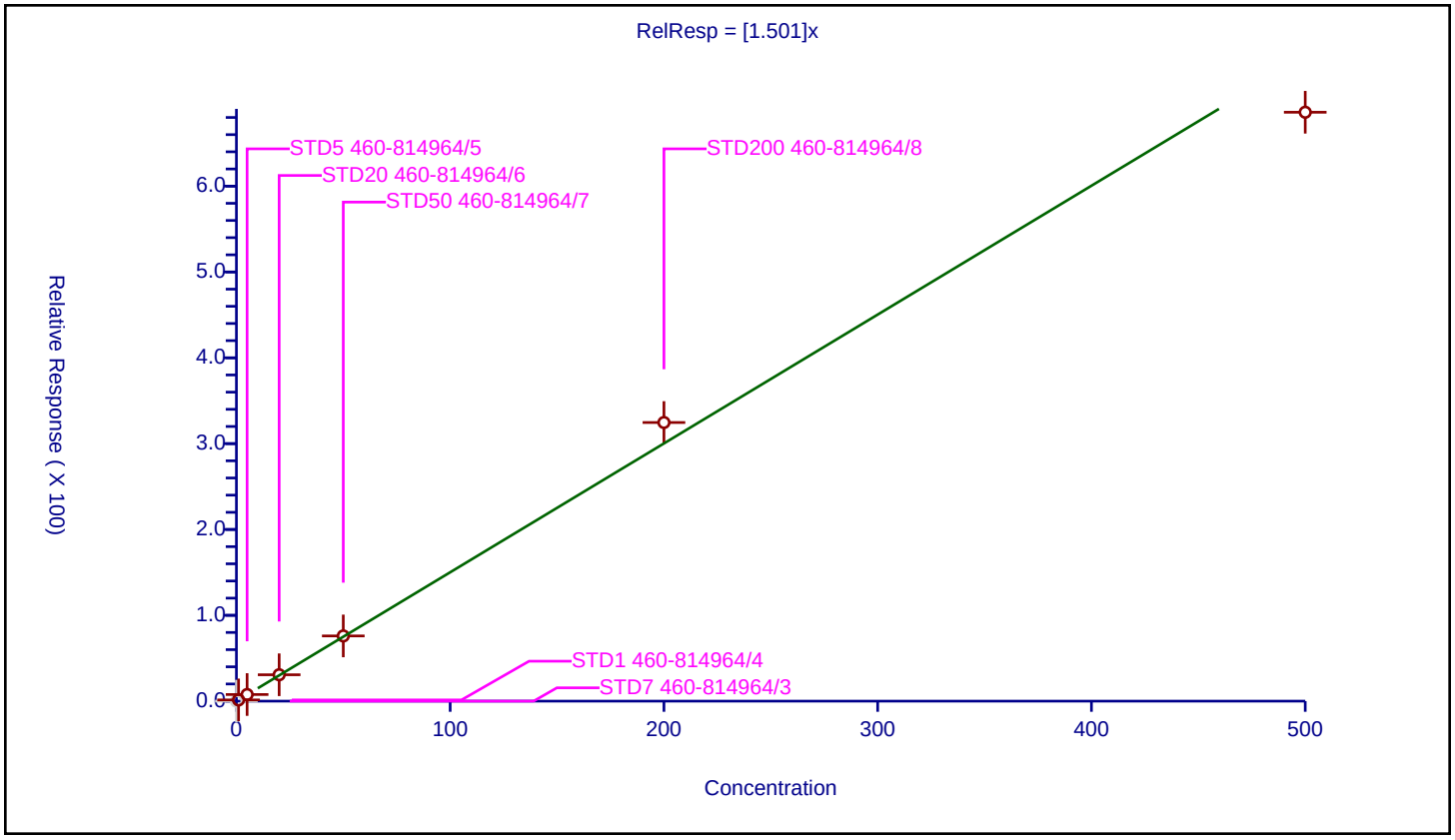
Curve Coefficients

Intercept:	0
Slope:	1.501

Error Coefficients

Standard Error:	6100000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	725747.0	NaN	N
2	STD1 460-814964/4	1.0	1.411921	50.0	690088.0	1.411921	Y
3	STD5 460-814964/5	5.0	7.714521	50.0	754214.0	1.542904	Y
4	STD20 460-814964/6	20.0	30.748903	50.0	745851.0	1.537445	Y
5	STD50 460-814964/7	50.0	75.973447	50.0	813912.0	1.519469	Y
6	STD200 460-814964/8	200.0	324.628148	50.0	783510.0	1.623141	Y
7	STD500 460-814964/9	500.0	686.094001	50.0	916439.0	1.372188	Y



Calibration / 4-Bromofluorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

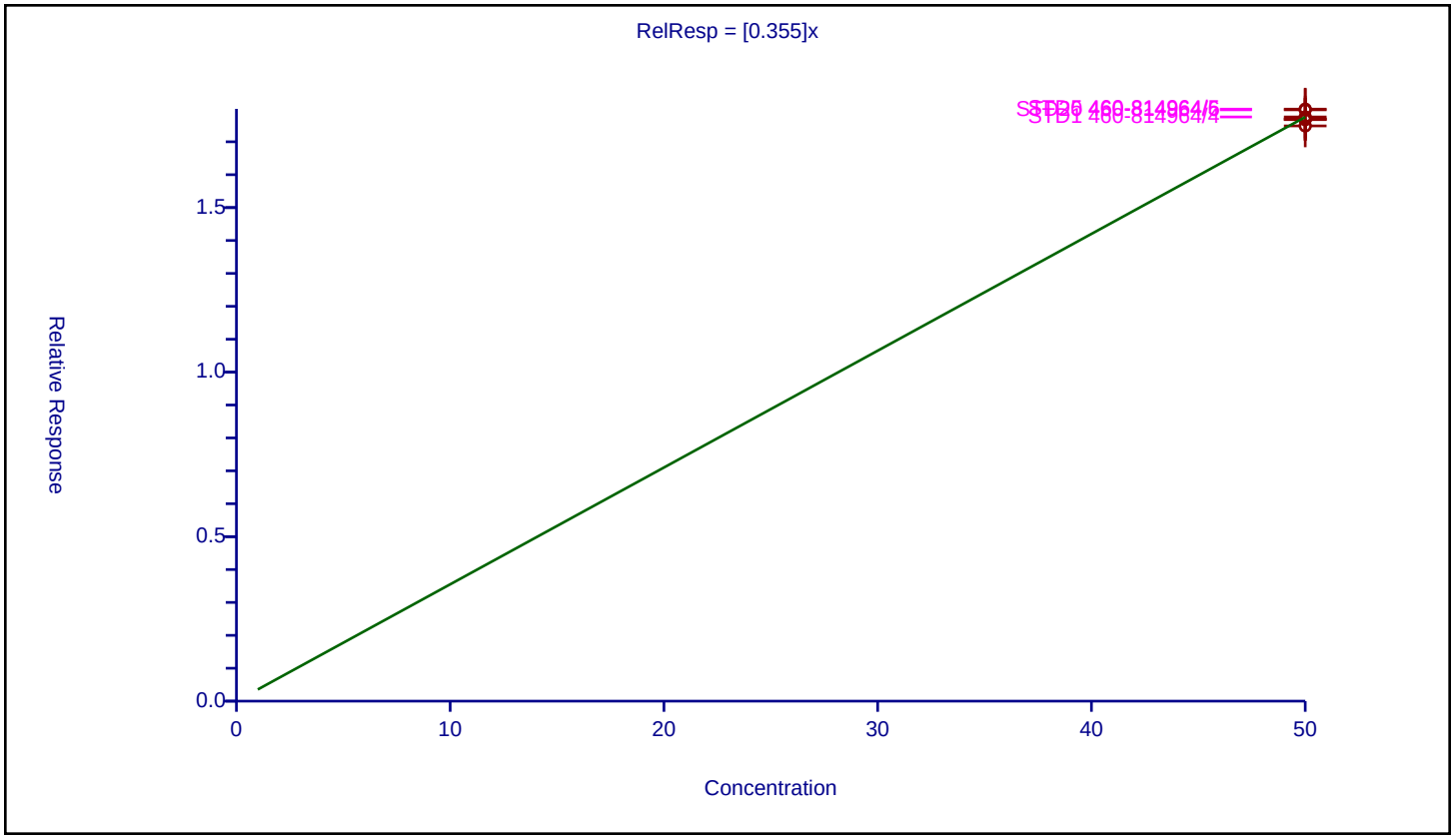
Curve Coefficients

Intercept:	0
Slope:	0.355

Error Coefficients

Standard Error:	298000
Relative Standard Error:	1.0
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	50.0	17.684331	50.0	725747.0	0.353687	Y
2	STD1 460-814964/4	50.0	17.754982	50.0	690088.0	0.3551	Y
3	STD5 460-814964/5	50.0	17.99244	50.0	754214.0	0.359849	Y
4	STD20 460-814964/6	50.0	17.972021	50.0	745851.0	0.35944	Y
5	STD50 460-814964/7	50.0	17.673225	50.0	813912.0	0.353465	Y
6	STD200 460-814964/8	50.0	17.69652	50.0	783510.0	0.35393	Y
7	STD500 460-814964/9	50.0	17.482997	50.0	916439.0	0.34966	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

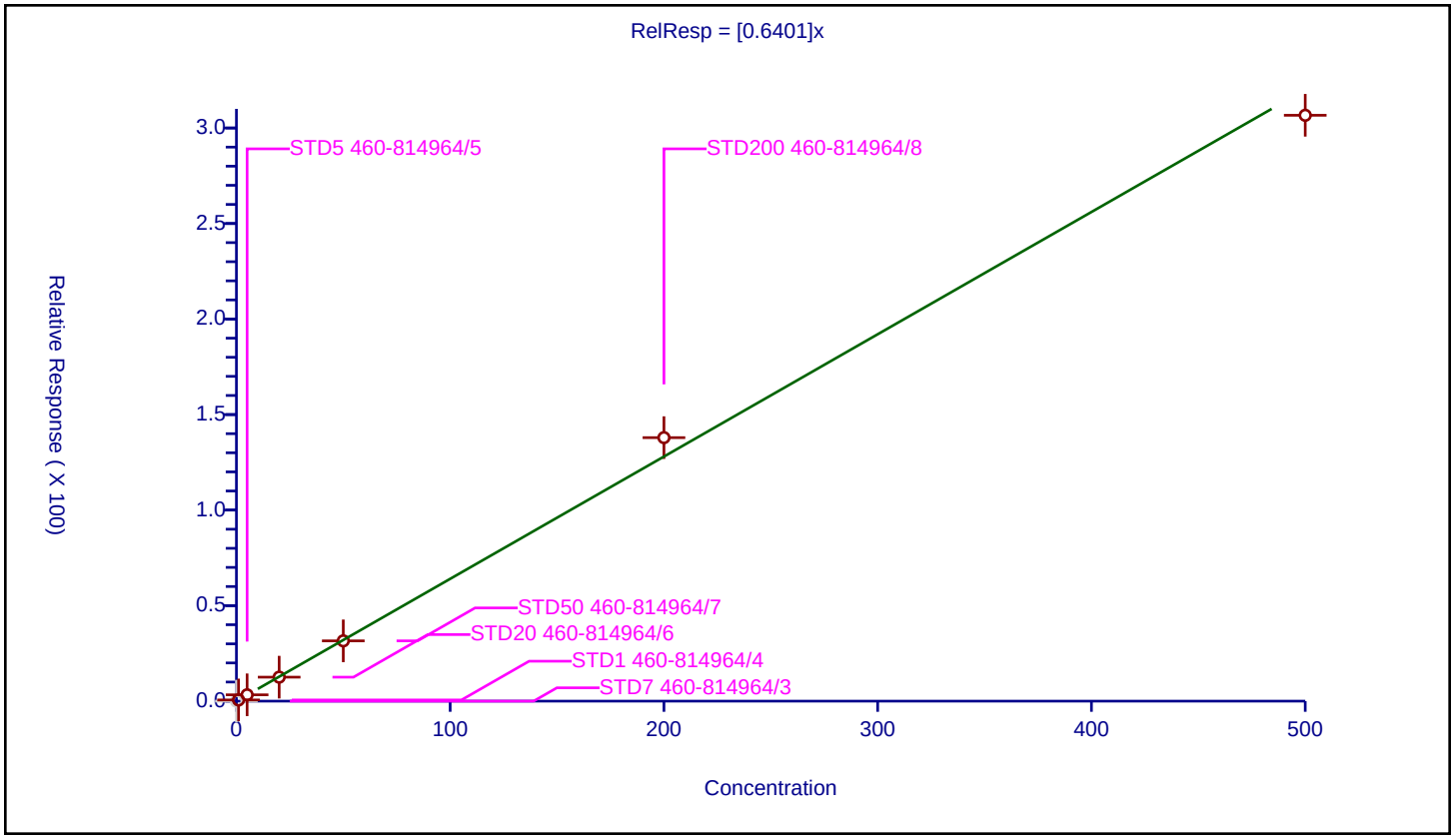
Curve Coefficients

Intercept:	0
Slope:	0.6401

Error Coefficients

Standard Error:	1360000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.616746	50.0	367169.0	0.616746	Y
3	STD5 460-814964/5	5.0	3.310237	50.0	414351.0	0.662047	Y
4	STD20 460-814964/6	20.0	12.555576	50.0	405748.0	0.627779	Y
5	STD50 460-814964/7	50.0	31.555026	50.0	428385.0	0.631101	Y
6	STD200 460-814964/8	200.0	137.920059	50.0	404675.0	0.6896	Y
7	STD500 460-814964/9	500.0	306.653459	50.0	460084.0	0.613307	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

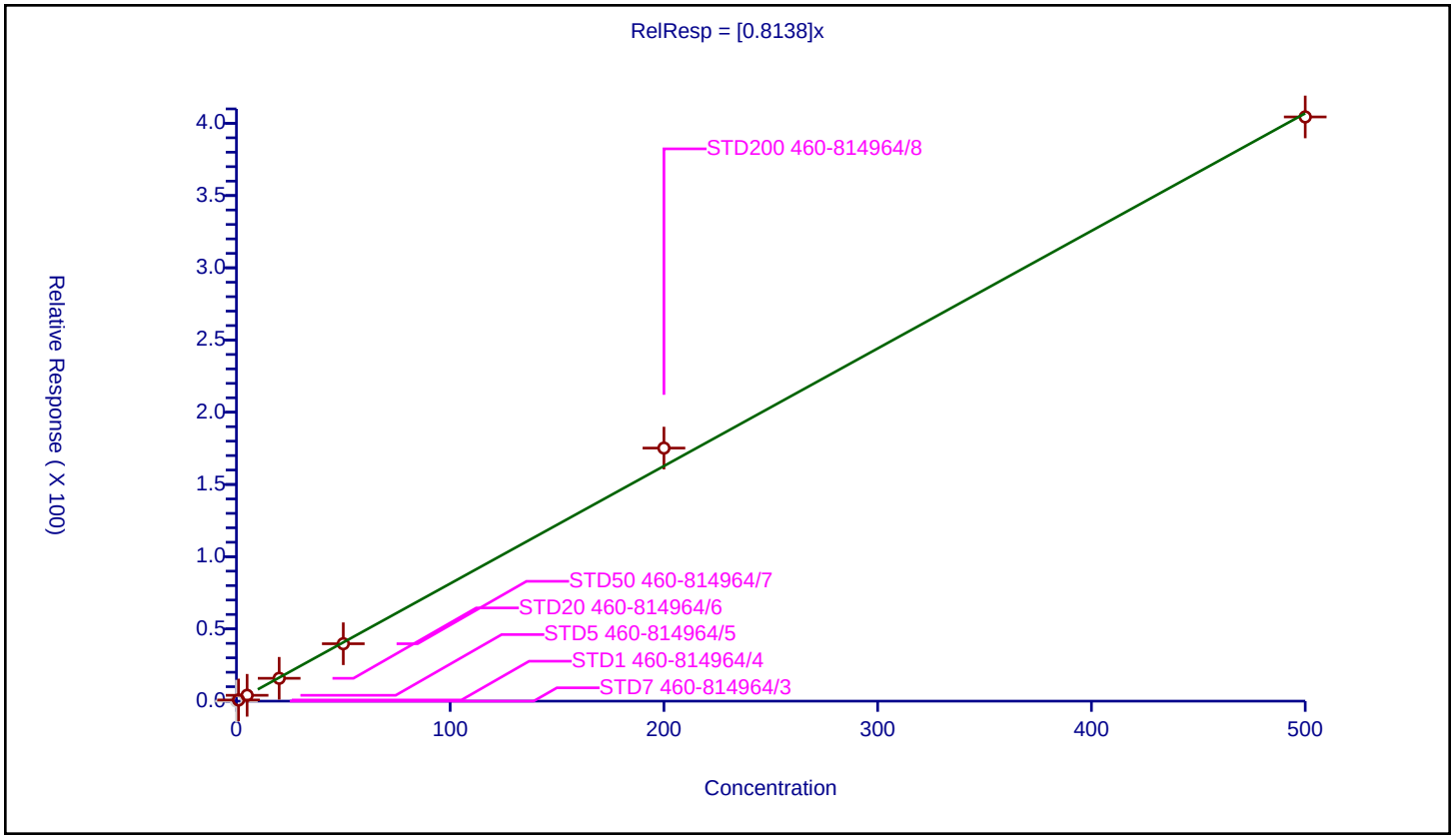
Curve Coefficients

Intercept:	0
Slope:	0.8138

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.804534	50.0	367169.0	0.804534	Y
3	STD5 460-814964/5	5.0	4.04126	50.0	414351.0	0.808252	Y
4	STD20 460-814964/6	20.0	15.810676	50.0	405748.0	0.790534	Y
5	STD50 460-814964/7	50.0	39.746957	50.0	428385.0	0.794939	Y
6	STD200 460-814964/8	200.0	175.184901	50.0	404675.0	0.875925	Y
7	STD500 460-814964/9	500.0	404.427452	50.0	460084.0	0.808855	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

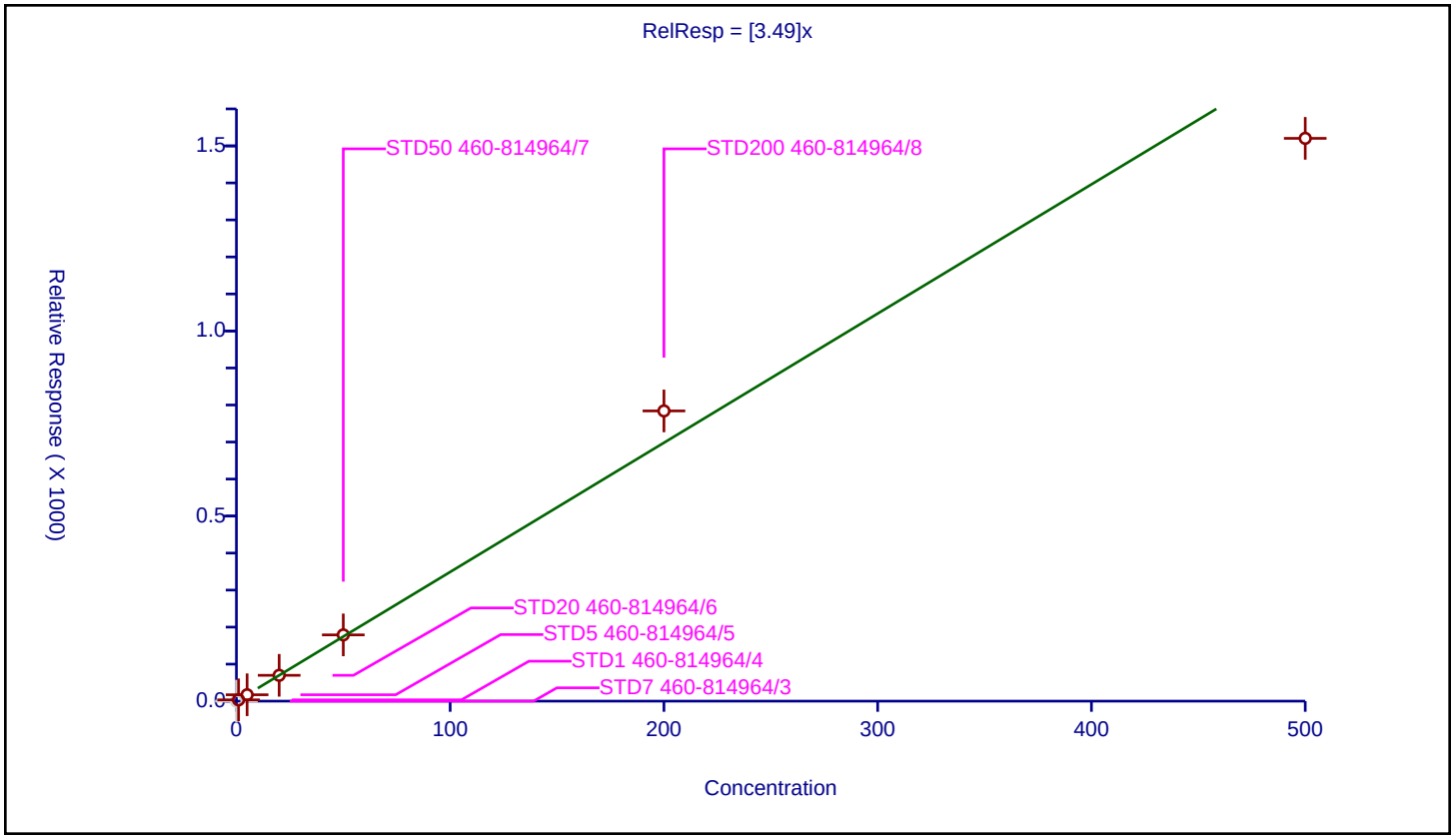
Curve Coefficients

Intercept:	0
Slope:	3.49

Error Coefficients

Standard Error:	6910000
Relative Standard Error:	8.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	3.465434	50.0	367169.0	3.465434	Y
3	STD5 460-814964/5	5.0	17.228147	50.0	414351.0	3.445629	Y
4	STD20 460-814964/6	20.0	69.77348	50.0	405748.0	3.488674	Y
5	STD50 460-814964/7	50.0	179.01152	50.0	428385.0	3.58023	Y
6	STD200 460-814964/8	200.0	784.058442	50.0	404675.0	3.920292	Y
7	STD500 460-814964/9	500.0	1520.404317	50.0	460084.0	3.040809	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

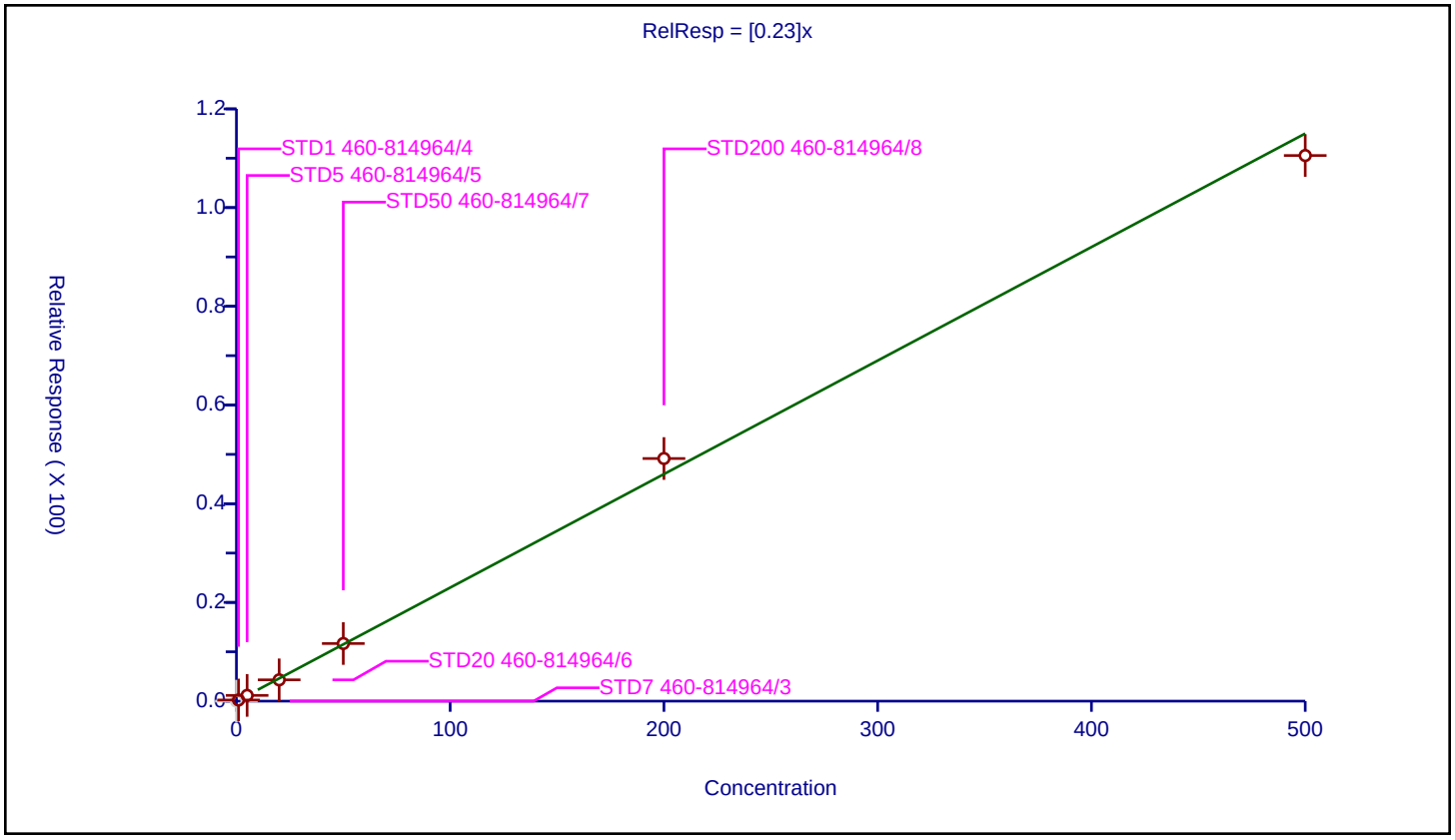
Curve Coefficients

Intercept:	0
Slope:	0.23

Error Coefficients

Standard Error:	491000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.231773	50.0	367169.0	0.231773	Y
3	STD5 460-814964/5	5.0	1.160972	50.0	414351.0	0.232194	Y
4	STD20 460-814964/6	20.0	4.314131	50.0	405748.0	0.215707	Y
5	STD50 460-814964/7	50.0	11.674662	50.0	428385.0	0.233493	Y
6	STD200 460-814964/8	200.0	49.157596	50.0	404675.0	0.245788	Y
7	STD500 460-814964/9	500.0	110.552638	50.0	460084.0	0.221105	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

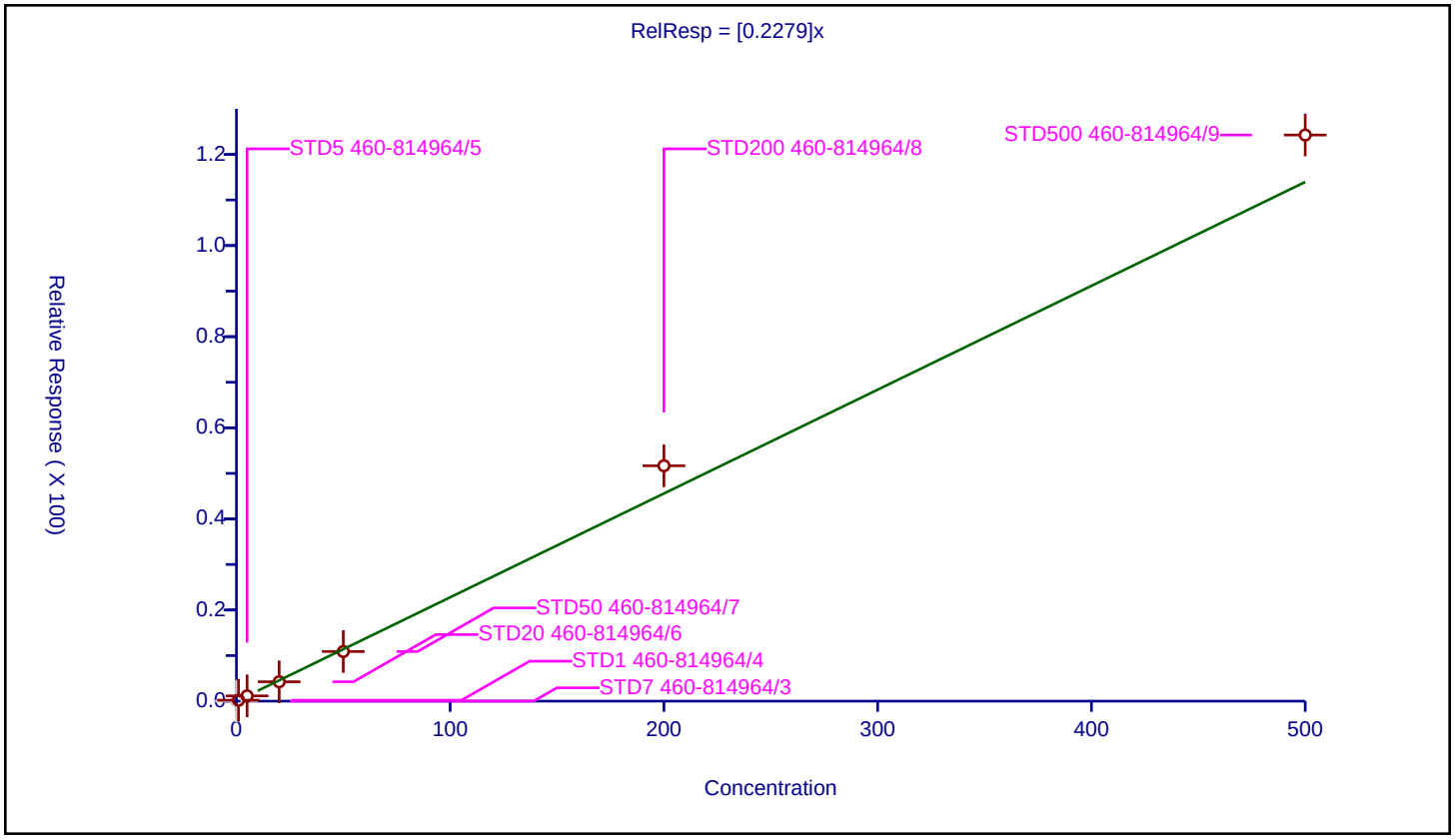
Curve Coefficients

Intercept:	0
Slope:	0.2279

Error Coefficients

Standard Error:	546000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.199091	50.0	367169.0	0.199091	Y
3	STD5 460-814964/5	5.0	1.154939	50.0	414351.0	0.230988	Y
4	STD20 460-814964/6	20.0	4.250298	50.0	405748.0	0.212515	Y
5	STD50 460-814964/7	50.0	10.896507	50.0	428385.0	0.21793	Y
6	STD200 460-814964/8	200.0	51.668994	50.0	404675.0	0.258345	Y
7	STD500 460-814964/9	500.0	124.264808	50.0	460084.0	0.24853	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

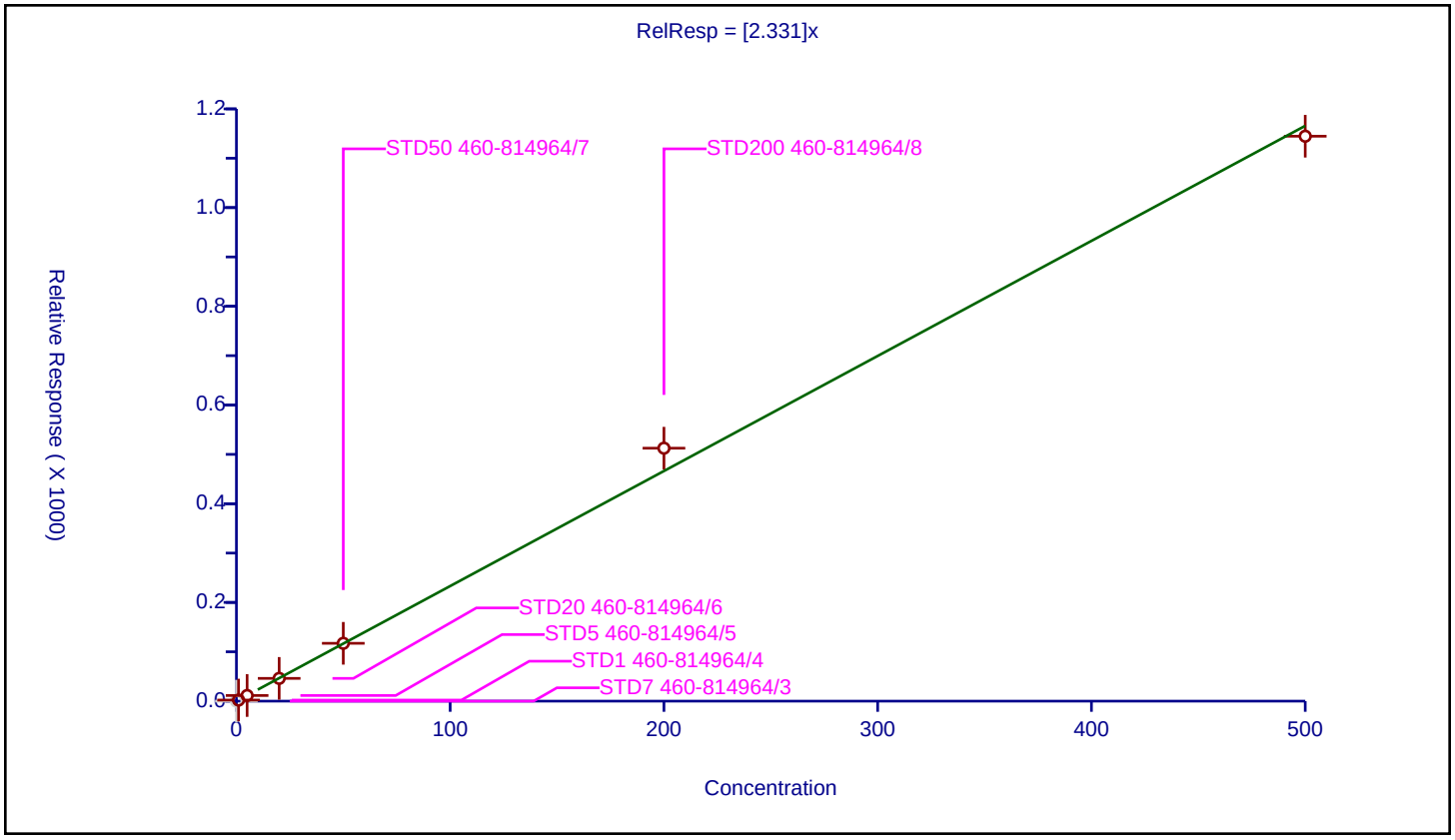
Curve Coefficients

Intercept:	0
Slope:	2.331

Error Coefficients

Standard Error:	5080000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.207975	50.0	367169.0	2.207975	Y
3	STD5 460-814964/5	5.0	11.388654	50.0	414351.0	2.277731	Y
4	STD20 460-814964/6	20.0	46.137134	50.0	405748.0	2.306857	Y
5	STD50 460-814964/7	50.0	117.188277	50.0	428385.0	2.343766	Y
6	STD200 460-814964/8	200.0	512.556002	50.0	404675.0	2.56278	Y
7	STD500 460-814964/9	500.0	1144.608376	50.0	460084.0	2.289217	Y



Calibration / 4-Ethyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

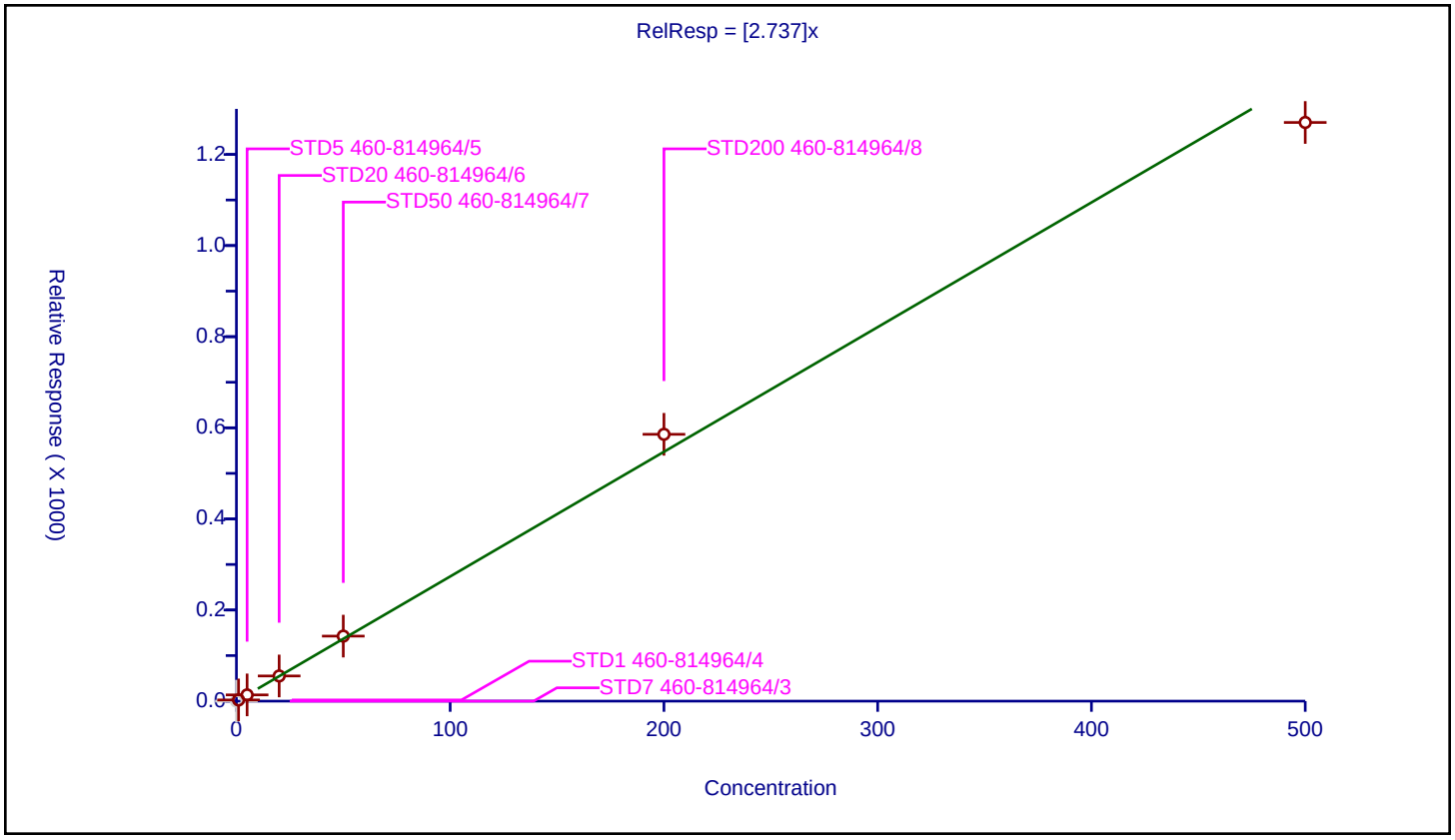
Curve Coefficients

Intercept:	0
Slope:	2.737

Error Coefficients

Standard Error:	5670000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.593084	50.0	367169.0	2.593084	Y
3	STD5 460-814964/5	5.0	13.694669	50.0	414351.0	2.738934	Y
4	STD20 460-814964/6	20.0	55.276551	50.0	405748.0	2.763828	Y
5	STD50 460-814964/7	50.0	142.756866	50.0	428385.0	2.855137	Y
6	STD200 460-814964/8	200.0	585.681843	50.0	404675.0	2.928409	Y
7	STD500 460-814964/9	500.0	1270.16936	50.0	460084.0	2.540339	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

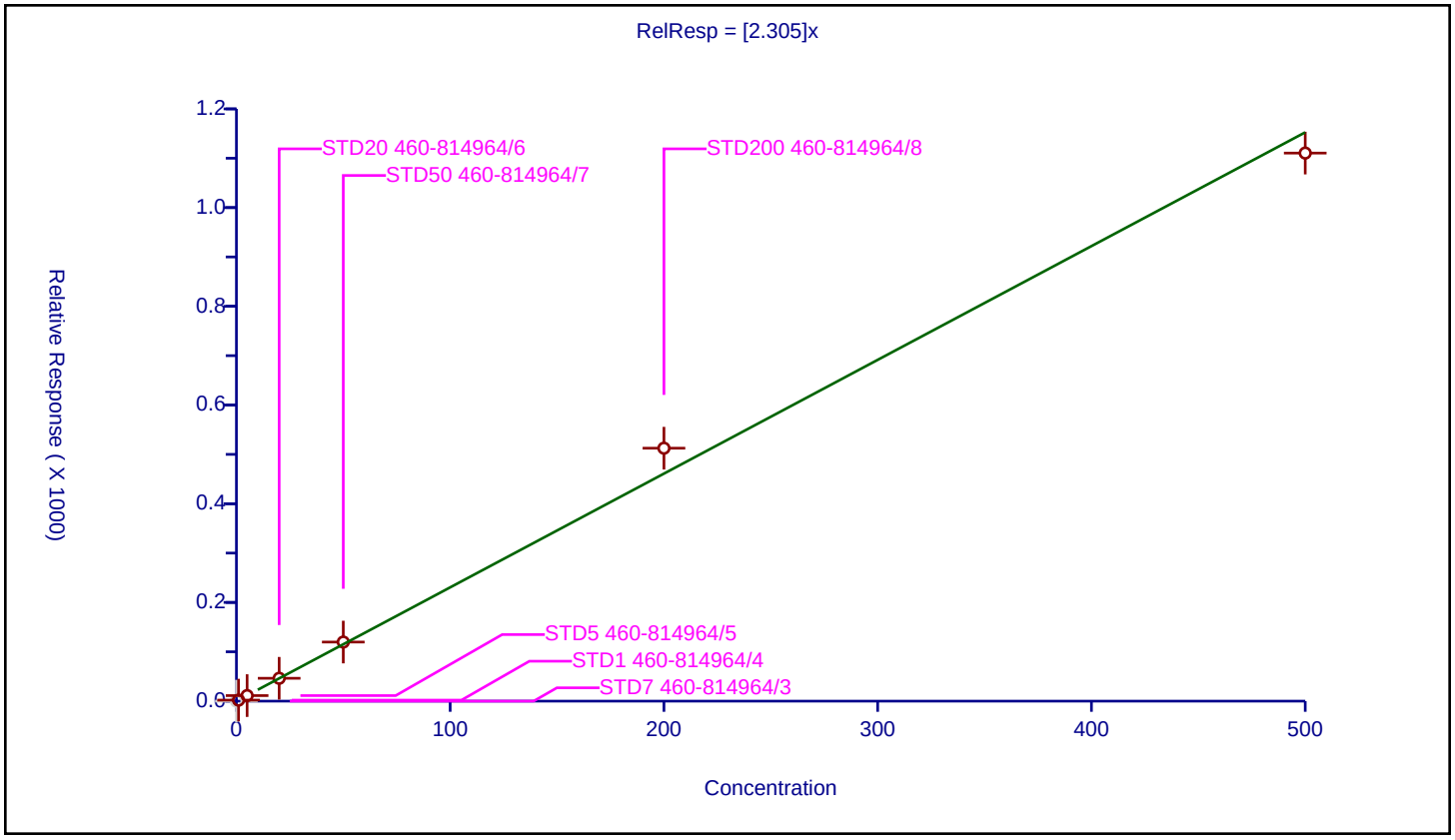
Curve Coefficients

Intercept:	0
Slope:	2.305

Error Coefficients

Standard Error:	4960000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.089637	50.0	367169.0	2.089637	Y
3	STD5 460-814964/5	5.0	11.231661	50.0	414351.0	2.246332	Y
4	STD20 460-814964/6	20.0	46.31212	50.0	405748.0	2.315606	Y
5	STD50 460-814964/7	50.0	119.712875	50.0	428385.0	2.394258	Y
6	STD200 460-814964/8	200.0	512.509421	50.0	404675.0	2.562547	Y
7	STD500 460-814964/9	500.0	1110.44494	50.0	460084.0	2.22089	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

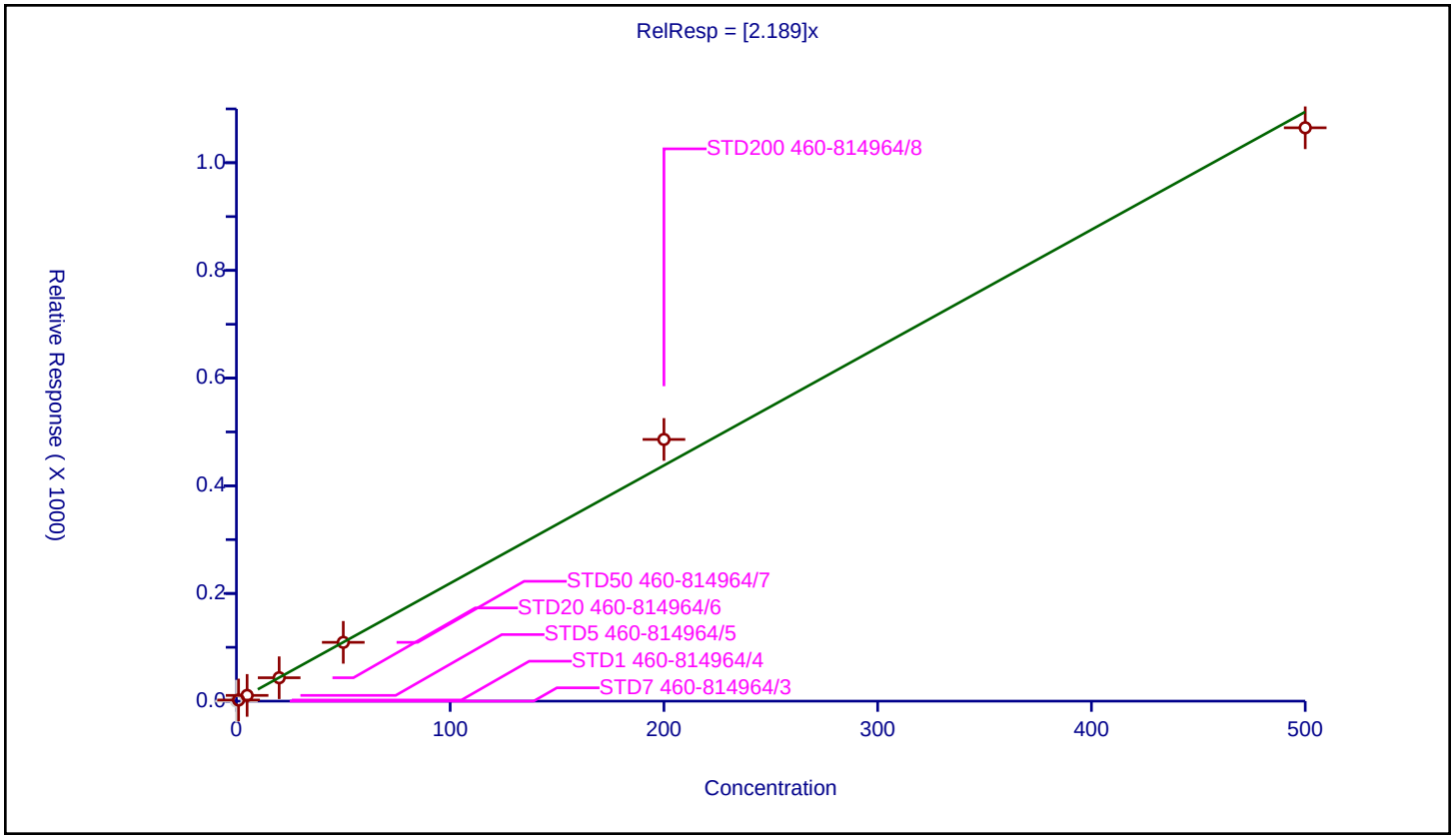
Curve Coefficients

Intercept:	0
Slope:	2.189

Error Coefficients

Standard Error:	4740000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.086641	50.0	367169.0	2.086641	Y
3	STD5 460-814964/5	5.0	10.658596	50.0	414351.0	2.131719	Y
4	STD20 460-814964/6	20.0	43.443837	50.0	405748.0	2.172192	Y
5	STD50 460-814964/7	50.0	109.184845	50.0	428385.0	2.183697	Y
6	STD200 460-814964/8	200.0	486.02607	50.0	404675.0	2.43013	Y
7	STD500 460-814964/9	500.0	1064.903039	50.0	460084.0	2.129806	Y



Calibration / Butyl Methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

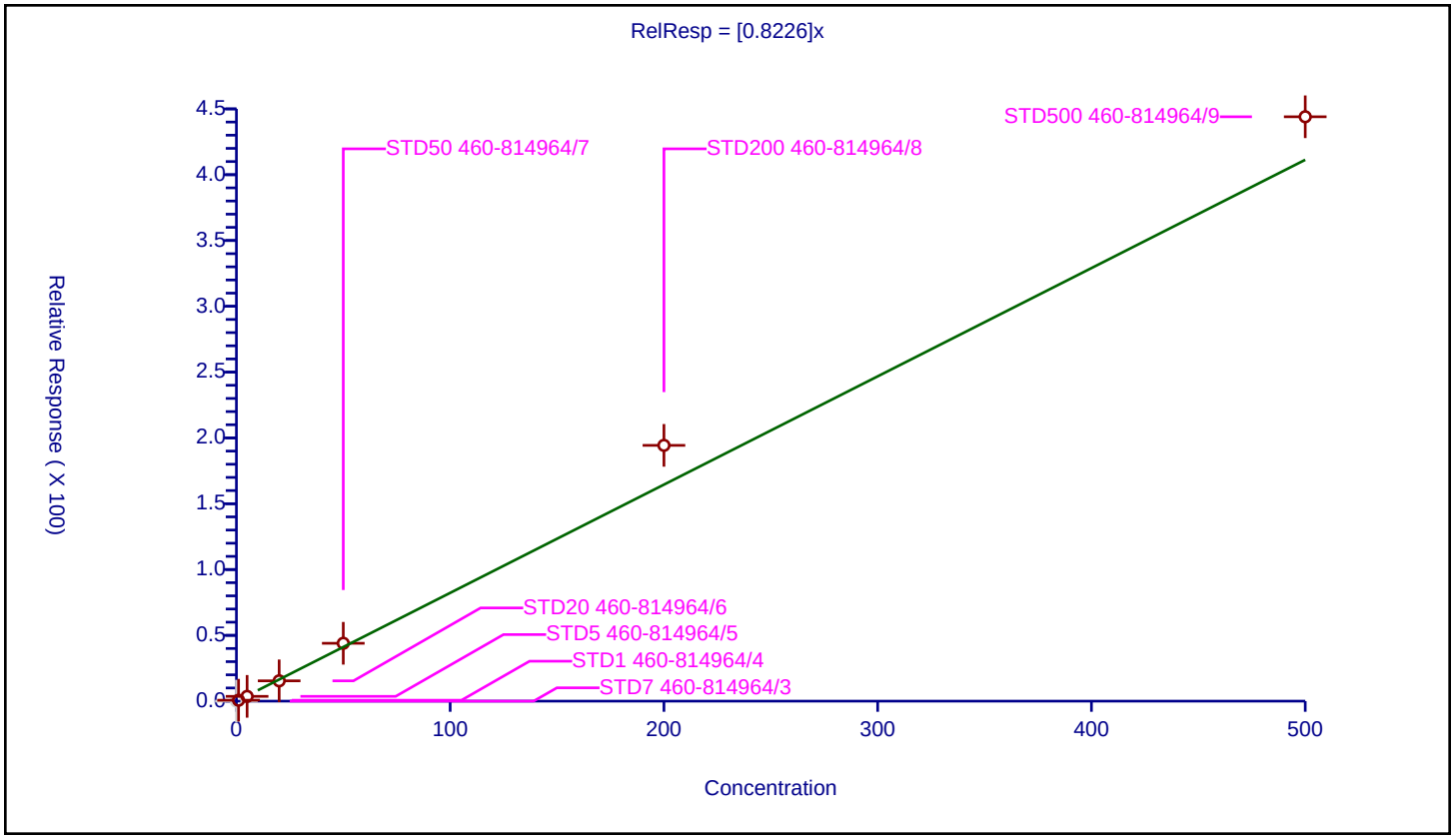
Curve Coefficients

Intercept:	0
Slope:	0.8226

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	13.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.698997	50.0	367169.0	0.698997	Y
3	STD5 460-814964/5	5.0	3.628083	50.0	414351.0	0.725617	Y
4	STD20 460-814964/6	20.0	15.440495	50.0	405748.0	0.772025	Y
5	STD50 460-814964/7	50.0	43.963024	50.0	428385.0	0.87926	Y
6	STD200 460-814964/8	200.0	194.346327	50.0	404675.0	0.971732	Y
7	STD500 460-814964/9	500.0	444.002617	50.0	460084.0	0.888005	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

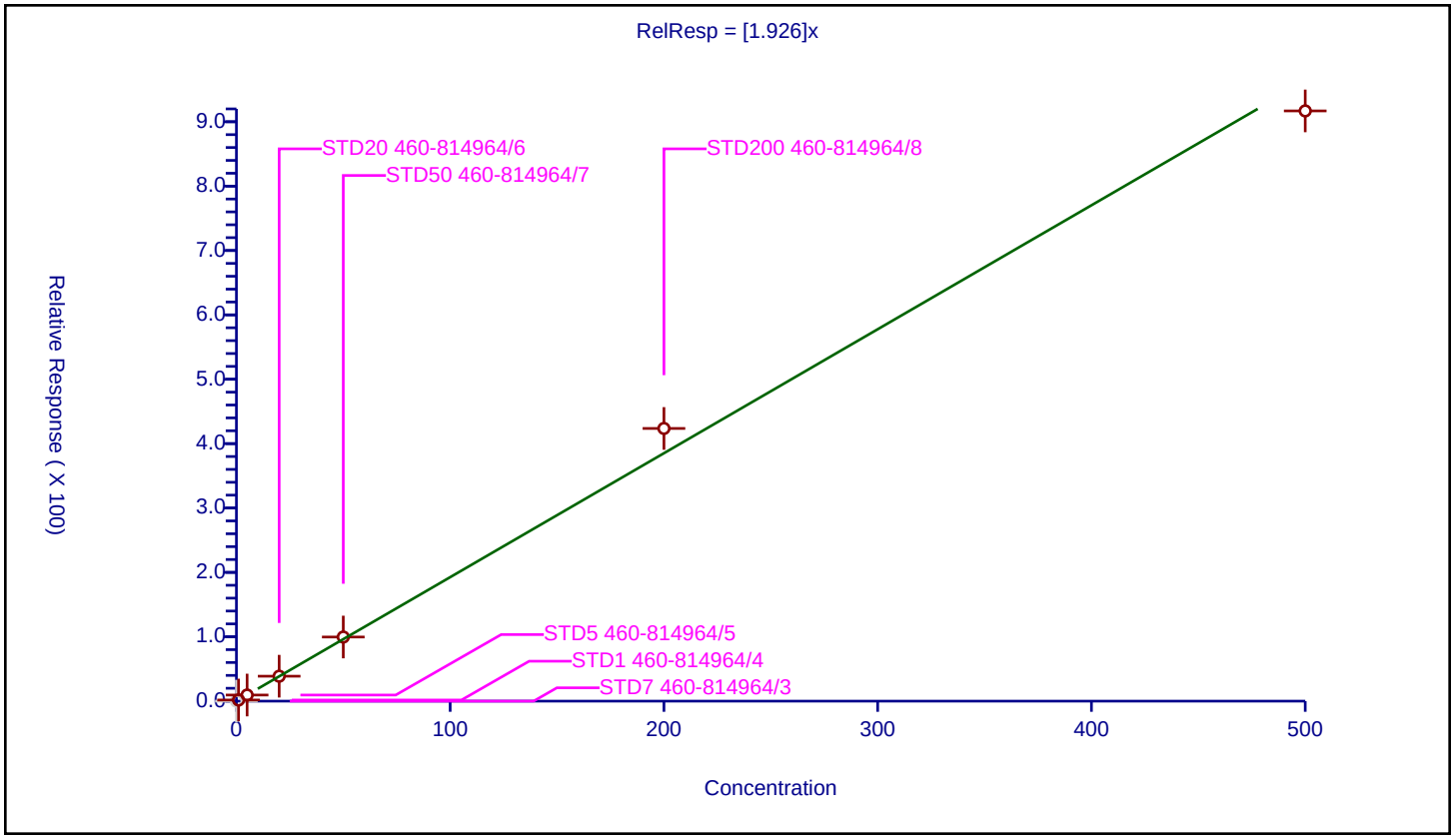
Curve Coefficients

Intercept:	0
Slope:	1.926

Error Coefficients

Standard Error:	4090000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.776702	50.0	367169.0	1.776702	Y
3	STD5 460-814964/5	5.0	9.483868	50.0	414351.0	1.896774	Y
4	STD20 460-814964/6	20.0	38.738084	50.0	405748.0	1.936904	Y
5	STD50 460-814964/7	50.0	99.588921	50.0	428385.0	1.991778	Y
6	STD200 460-814964/8	200.0	423.601161	50.0	404675.0	2.118006	Y
7	STD500 460-814964/9	500.0	916.874636	50.0	460084.0	1.833749	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

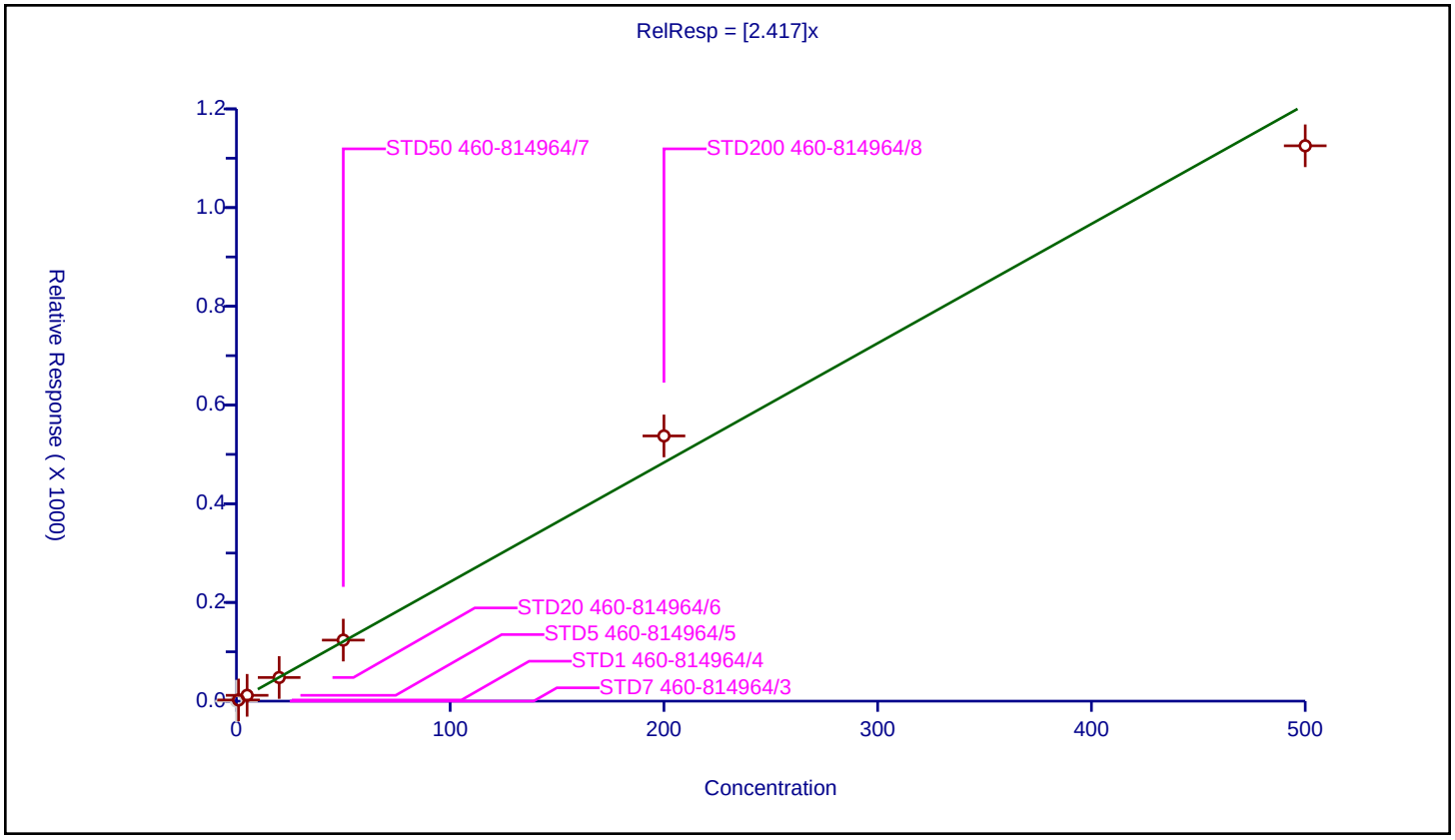
Curve Coefficients

Intercept:	0
Slope:	2.417

Error Coefficients

Standard Error:	5050000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.341701	50.0	367169.0	2.341701	Y
3	STD5 460-814964/5	5.0	11.781799	50.0	414351.0	2.35636	Y
4	STD20 460-814964/6	20.0	47.903009	50.0	405748.0	2.39515	Y
5	STD50 460-814964/7	50.0	123.643802	50.0	428385.0	2.472876	Y
6	STD200 460-814964/8	200.0	537.362451	50.0	404675.0	2.686812	Y
7	STD500 460-814964/9	500.0	1125.274298	50.0	460084.0	2.250549	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

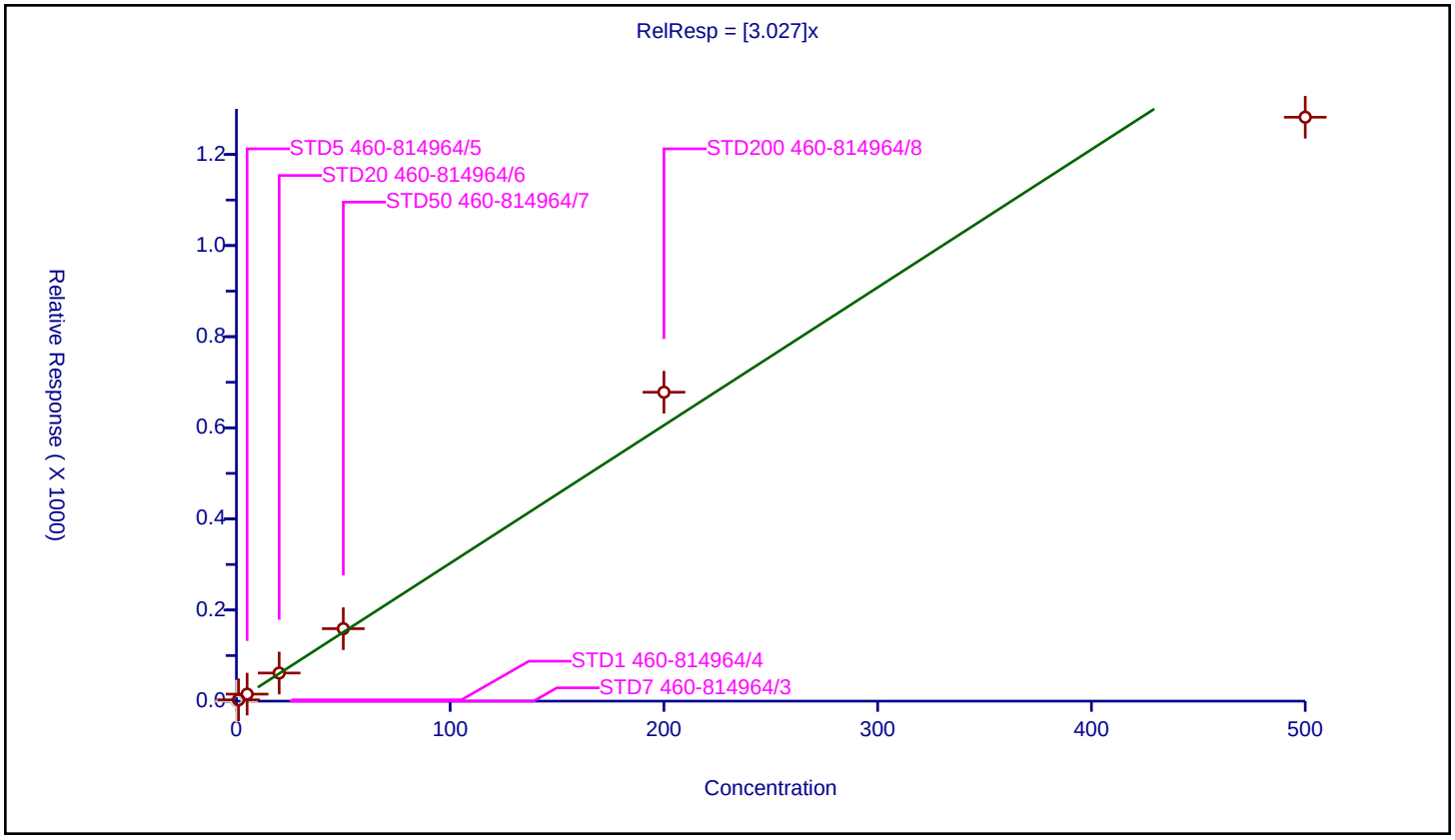
Curve Coefficients

Intercept:	0
Slope:	3.027

Error Coefficients

Standard Error:	5850000
Relative Standard Error:	9.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.864349	50.0	367169.0	2.864349	Y
3	STD5 460-814964/5	5.0	15.396246	50.0	414351.0	3.079249	Y
4	STD20 460-814964/6	20.0	61.713182	50.0	405748.0	3.085659	Y
5	STD50 460-814964/7	50.0	159.018173	50.0	428385.0	3.180363	Y
6	STD200 460-814964/8	200.0	678.121579	50.0	404675.0	3.390608	Y
7	STD500 460-814964/9	500.0	1281.772676	50.0	460084.0	2.563545	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

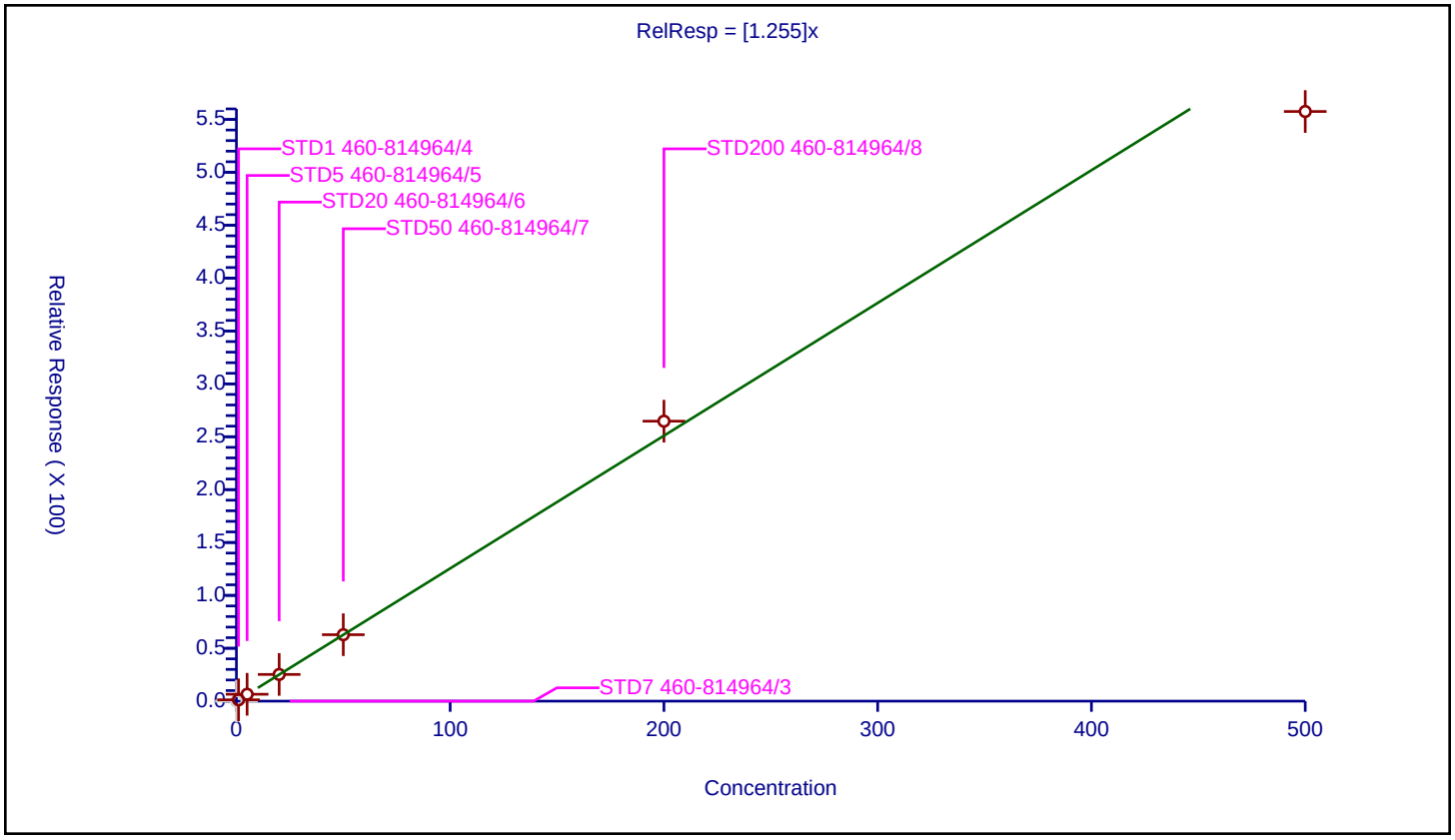
Curve Coefficients

Intercept:	0
Slope:	1.255

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.271894	50.0	367169.0	1.271894	Y
3	STD5 460-814964/5	5.0	6.506199	50.0	414351.0	1.30124	Y
4	STD20 460-814964/6	20.0	25.237709	50.0	405748.0	1.261885	Y
5	STD50 460-814964/7	50.0	62.810906	50.0	428385.0	1.256218	Y
6	STD200 460-814964/8	200.0	264.711559	50.0	404675.0	1.323558	Y
7	STD500 460-814964/9	500.0	557.541775	50.0	460084.0	1.115084	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

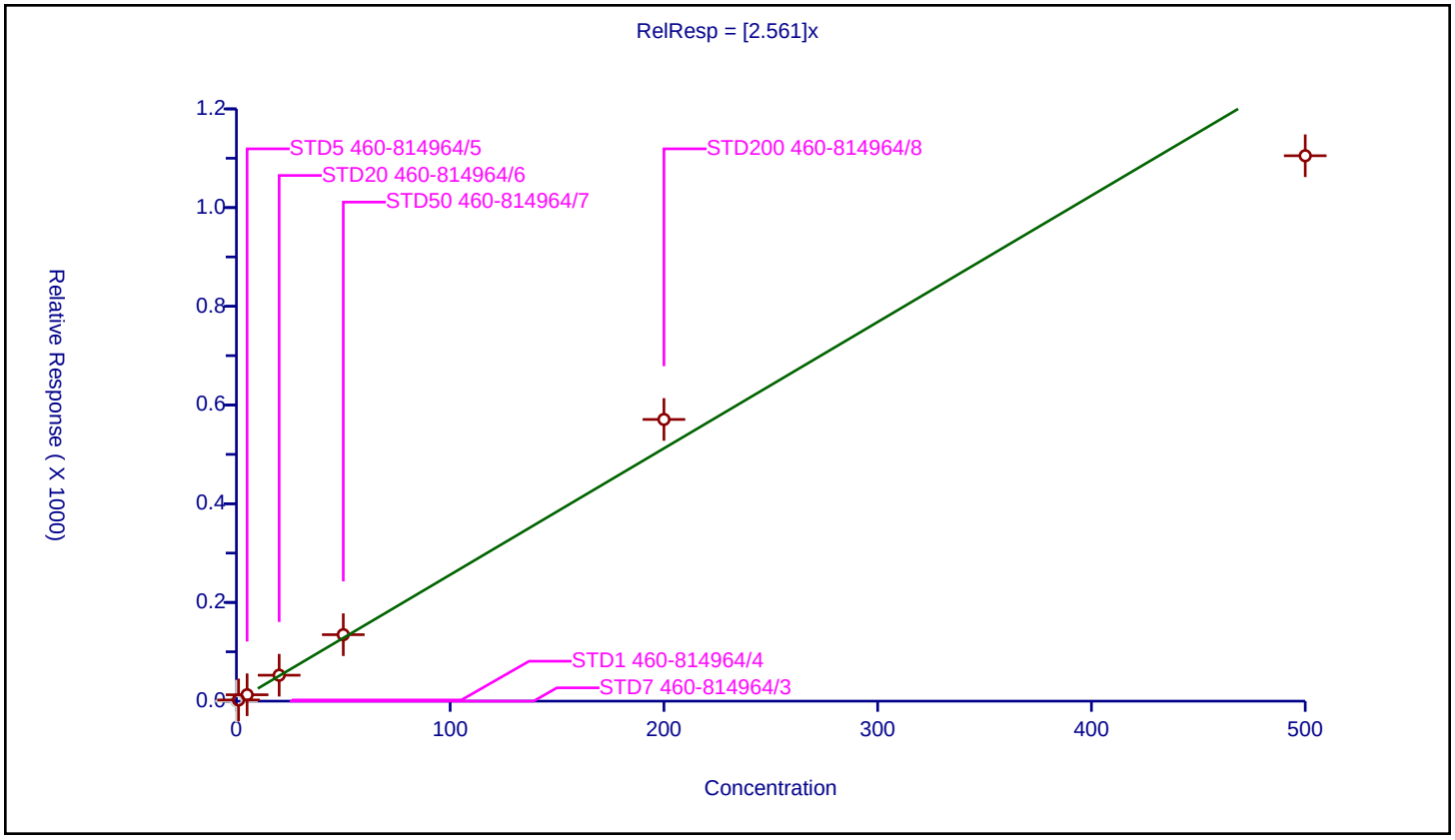
Curve Coefficients

Intercept:	0
Slope:	2.561

Error Coefficients

Standard Error:	5020000
Relative Standard Error:	8.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.400393	50.0	367169.0	2.400393	Y
3	STD5 460-814964/5	5.0	12.900898	50.0	414351.0	2.58018	Y
4	STD20 460-814964/6	20.0	52.529649	50.0	405748.0	2.626482	Y
5	STD50 460-814964/7	50.0	134.653174	50.0	428385.0	2.693063	Y
6	STD200 460-814964/8	200.0	570.762093	50.0	404675.0	2.85381	Y
7	STD500 460-814964/9	500.0	1105.060598	50.0	460084.0	2.210121	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

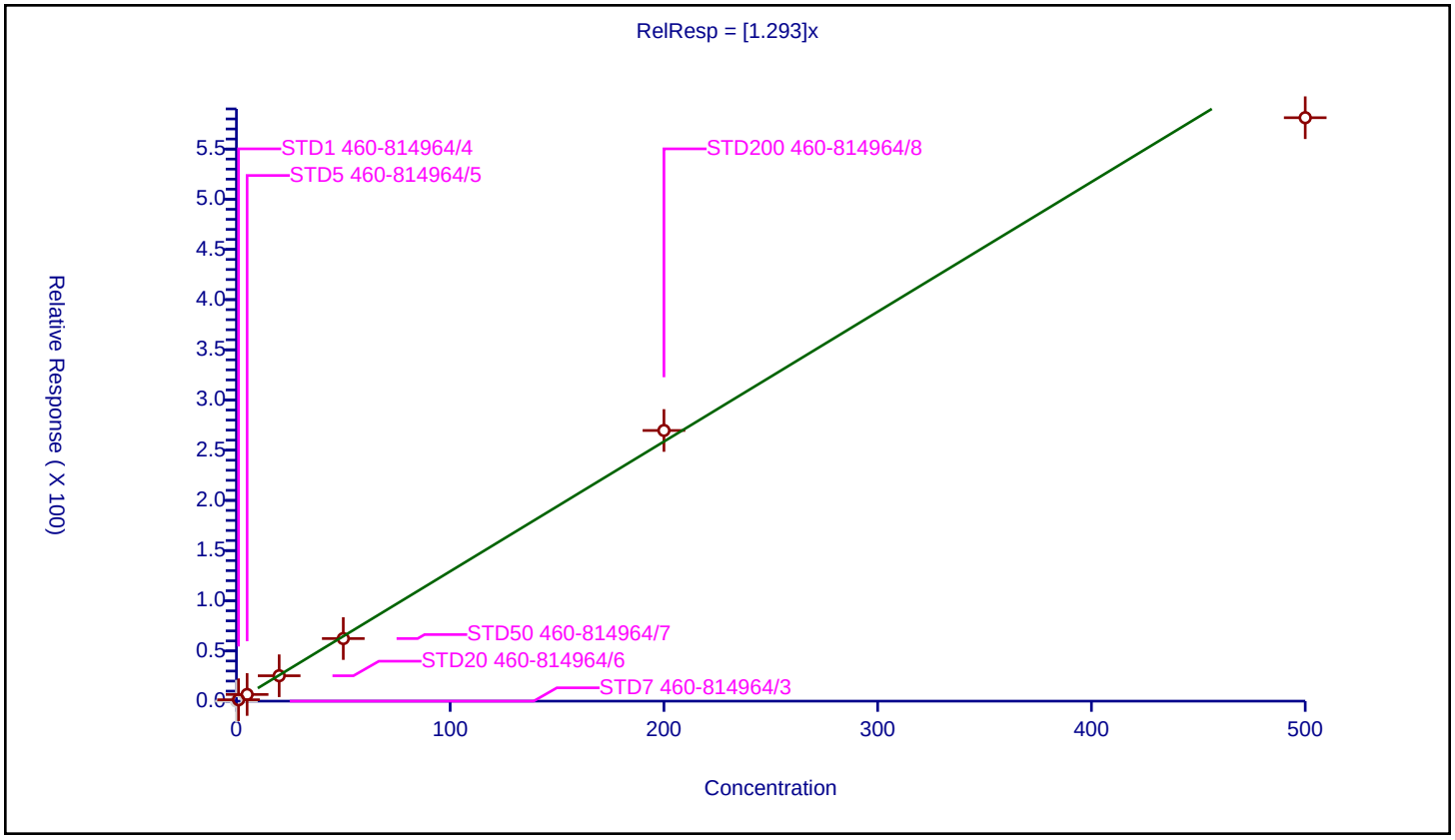
Curve Coefficients

Intercept:	0
Slope:	1.293

Error Coefficients

Standard Error:	2600000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.404122	50.0	367169.0	1.404122	Y
3	STD5 460-814964/5	5.0	6.654865	50.0	414351.0	1.330973	Y
4	STD20 460-814964/6	20.0	25.310538	50.0	405748.0	1.265527	Y
5	STD50 460-814964/7	50.0	62.334115	50.0	428385.0	1.246682	Y
6	STD200 460-814964/8	200.0	269.643294	50.0	404675.0	1.348216	Y
7	STD500 460-814964/9	500.0	581.214409	50.0	460084.0	1.162429	Y



Calibration / 1,2,3-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

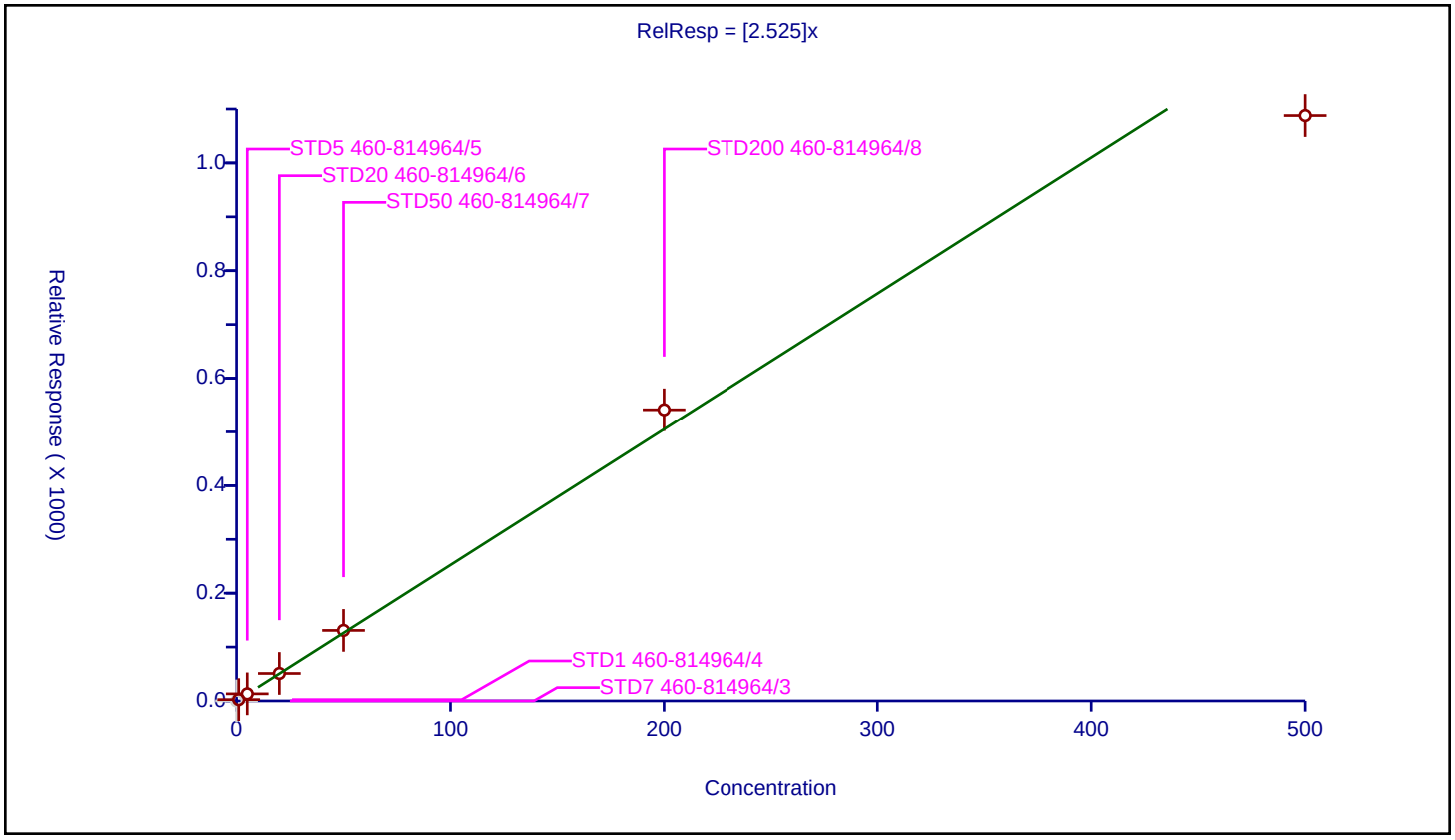
Curve Coefficients

Intercept:	0
Slope:	2.525

Error Coefficients

Standard Error:	4920000
Relative Standard Error:	7.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.468618	50.0	367169.0	2.468618	Y
3	STD5 460-814964/5	5.0	13.163719	50.0	414351.0	2.632744	Y
4	STD20 460-814964/6	20.0	50.953671	50.0	405748.0	2.547684	Y
5	STD50 460-814964/7	50.0	130.926153	50.0	428385.0	2.618523	Y
6	STD200 460-814964/8	200.0	541.288565	50.0	404675.0	2.706443	Y
7	STD500 460-814964/9	500.0	1087.899166	50.0	460084.0	2.175798	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

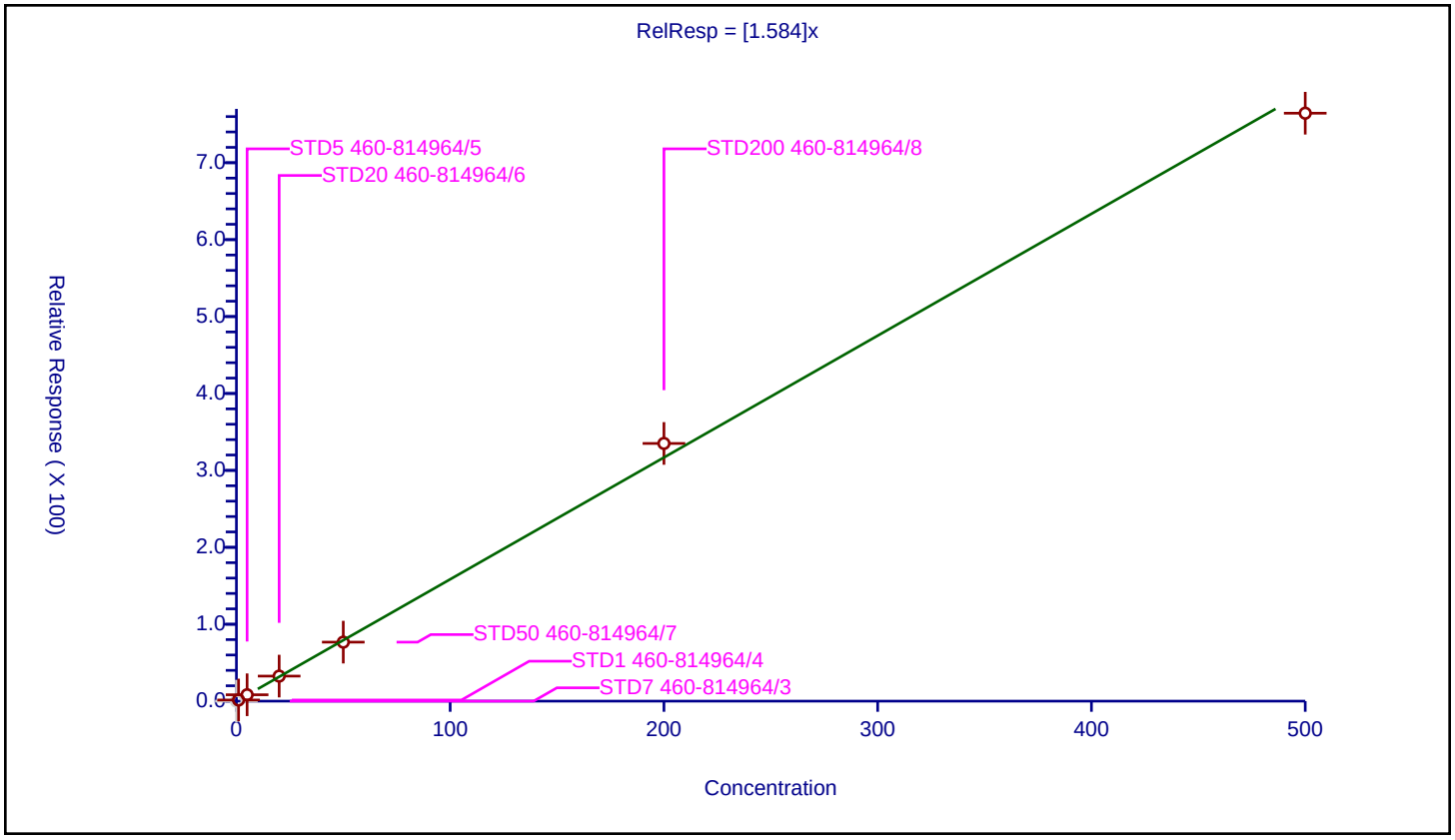
Curve Coefficients

Intercept:	0
Slope:	1.584

Error Coefficients

Standard Error:	3390000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.478747	50.0	367169.0	1.478747	Y
3	STD5 460-814964/5	5.0	8.29502	50.0	414351.0	1.659004	Y
4	STD20 460-814964/6	20.0	32.558263	50.0	405748.0	1.627913	Y
5	STD50 460-814964/7	50.0	76.703666	50.0	428385.0	1.534073	Y
6	STD200 460-814964/8	200.0	335.048743	50.0	404675.0	1.675244	Y
7	STD500 460-814964/9	500.0	764.390524	50.0	460084.0	1.528781	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

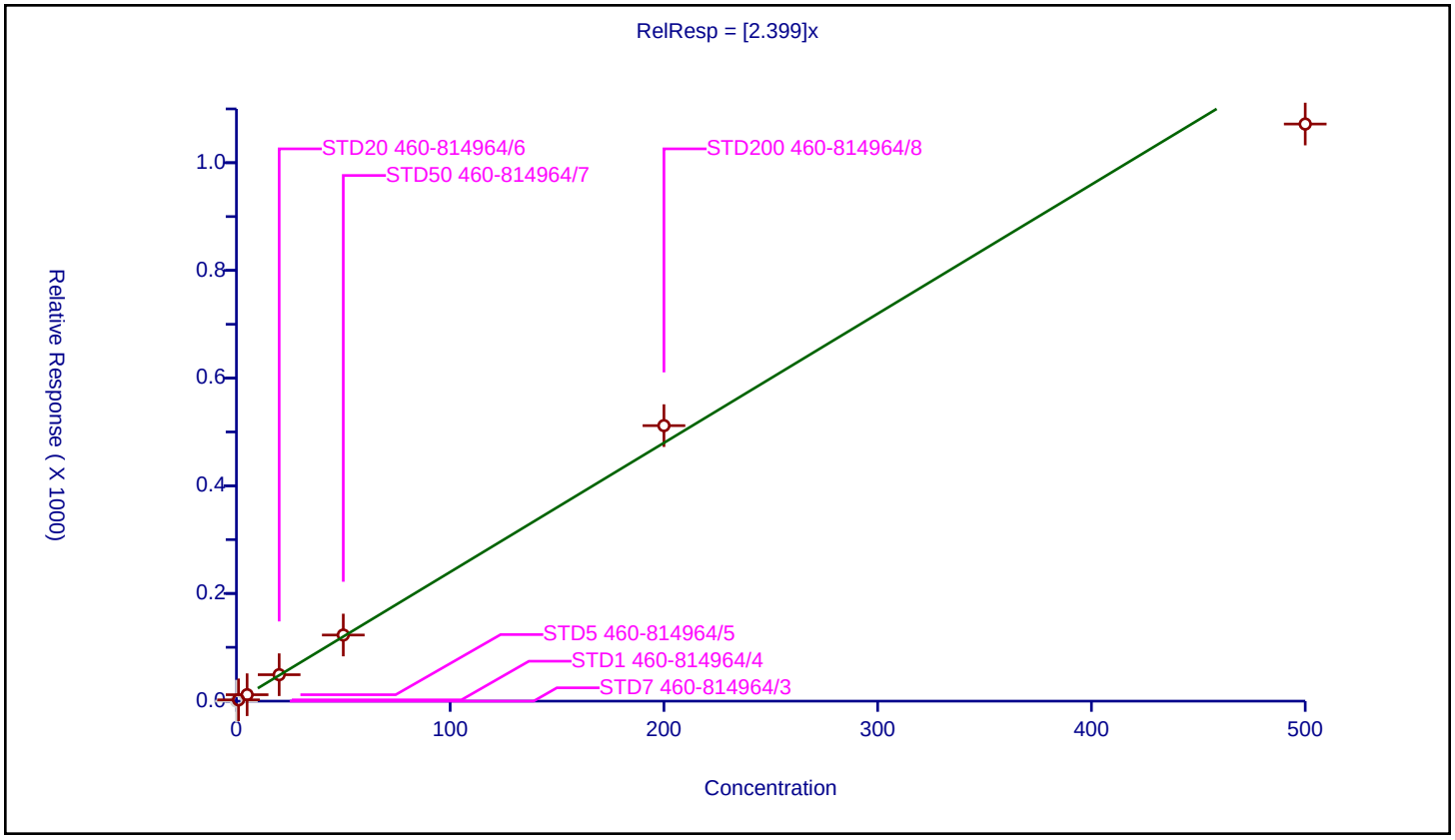
Curve Coefficients

Intercept:	0
Slope:	2.399

Error Coefficients

Standard Error:	4810000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.394265	50.0	367169.0	2.394265	Y
3	STD5 460-814964/5	5.0	11.922621	50.0	414351.0	2.384524	Y
4	STD20 460-814964/6	20.0	49.090445	50.0	405748.0	2.454522	Y
5	STD50 460-814964/7	50.0	122.82001	50.0	428385.0	2.4564	Y
6	STD200 460-814964/8	200.0	511.719899	50.0	404675.0	2.558599	Y
7	STD500 460-814964/9	500.0	1071.916107	50.0	460084.0	2.143832	Y



Calibration / p-Diethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

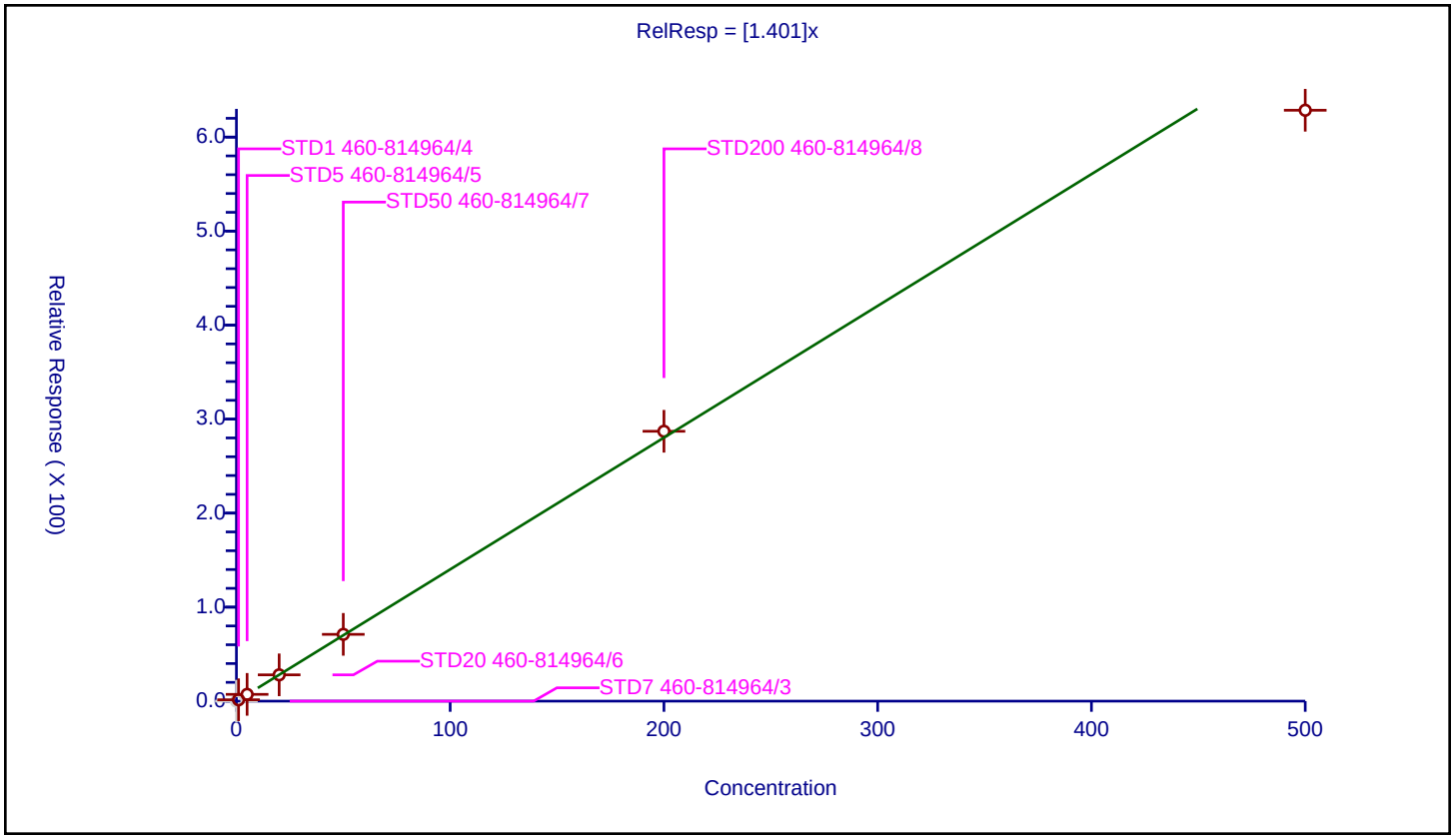
Curve Coefficients

Intercept:	0
Slope:	1.401

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.455597	50.0	367169.0	1.455597	Y
3	STD5 460-814964/5	5.0	7.20633	50.0	414351.0	1.441266	Y
4	STD20 460-814964/6	20.0	27.971179	50.0	405748.0	1.398559	Y
5	STD50 460-814964/7	50.0	71.038668	50.0	428385.0	1.420773	Y
6	STD200 460-814964/8	200.0	287.063199	50.0	404675.0	1.435316	Y
7	STD500 460-814964/9	500.0	628.551743	50.0	460084.0	1.257103	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

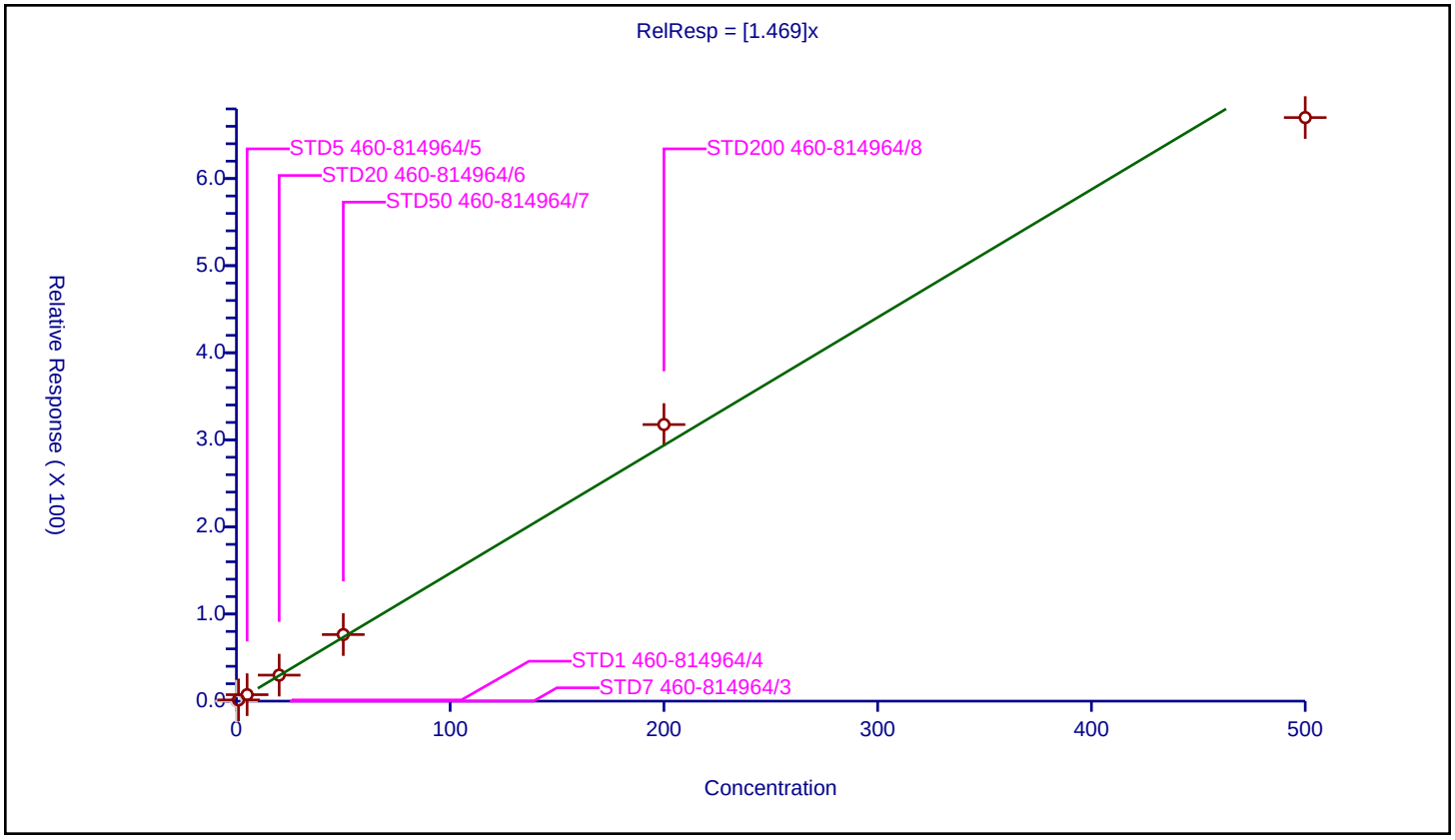
Curve Coefficients

Intercept:	0
Slope:	1.469

Error Coefficients

Standard Error:	3000000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.378112	50.0	367169.0	1.378112	Y
3	STD5 460-814964/5	5.0	7.420762	50.0	414351.0	1.484152	Y
4	STD20 460-814964/6	20.0	29.86743	50.0	405748.0	1.493372	Y
5	STD50 460-814964/7	50.0	76.427162	50.0	428385.0	1.528543	Y
6	STD200 460-814964/8	200.0	317.576203	50.0	404675.0	1.587881	Y
7	STD500 460-814964/9	500.0	670.044601	50.0	460084.0	1.340089	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

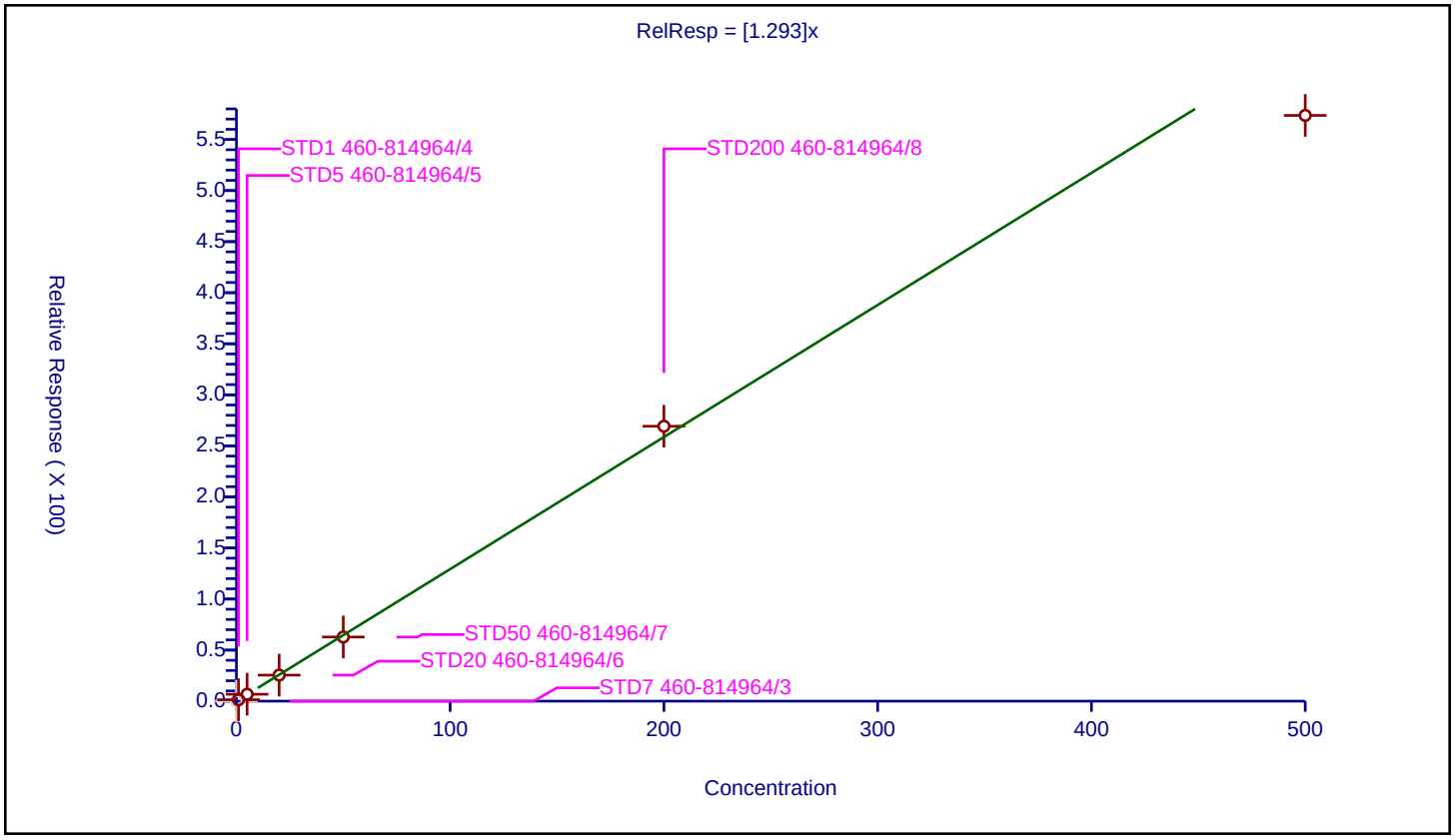
Curve Coefficients

Intercept:	0
Slope:	1.293

Error Coefficients

Standard Error:	2570000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.383423	50.0	367169.0	1.383423	Y
3	STD5 460-814964/5	5.0	6.755142	50.0	414351.0	1.351028	Y
4	STD20 460-814964/6	20.0	25.502775	50.0	405748.0	1.275139	Y
5	STD50 460-814964/7	50.0	62.810673	50.0	428385.0	1.256213	Y
6	STD200 460-814964/8	200.0	269.229505	50.0	404675.0	1.346148	Y
7	STD500 460-814964/9	500.0	573.60808	50.0	460084.0	1.147216	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

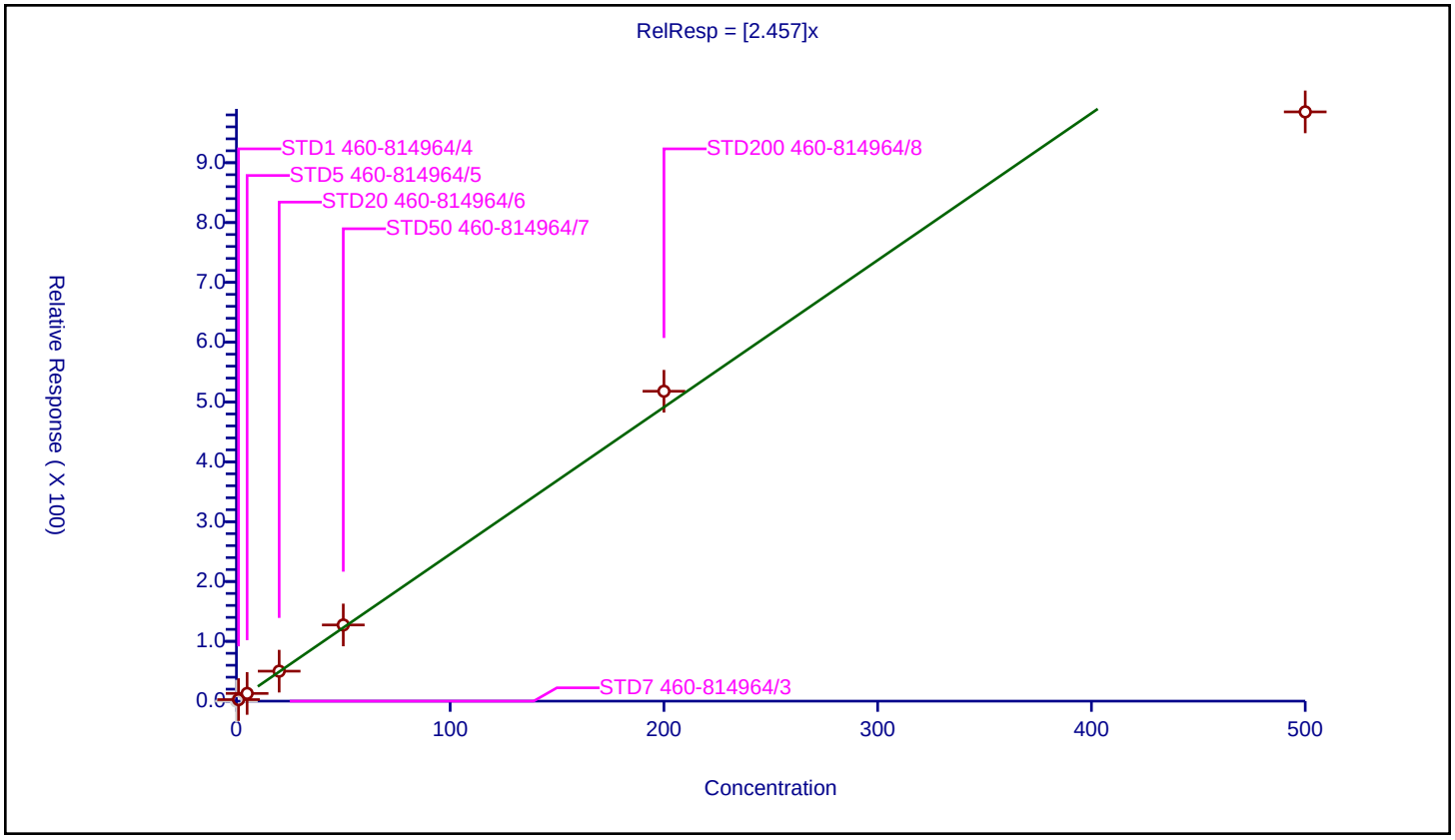
Curve Coefficients

Intercept:	0
Slope:	2.457

Error Coefficients

Standard Error:	4500000
Relative Standard Error:	9.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.552095	50.0	367169.0	2.552095	Y
3	STD5 460-814964/5	5.0	12.875799	50.0	414351.0	2.57516	Y
4	STD20 460-814964/6	20.0	50.128898	50.0	405748.0	2.506445	Y
5	STD50 460-814964/7	50.0	127.371173	50.0	428385.0	2.547423	Y
6	STD200 460-814964/8	200.0	518.026812	50.0	404675.0	2.590134	Y
7	STD500 460-814964/9	500.0	985.015128	50.0	460084.0	1.97003	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

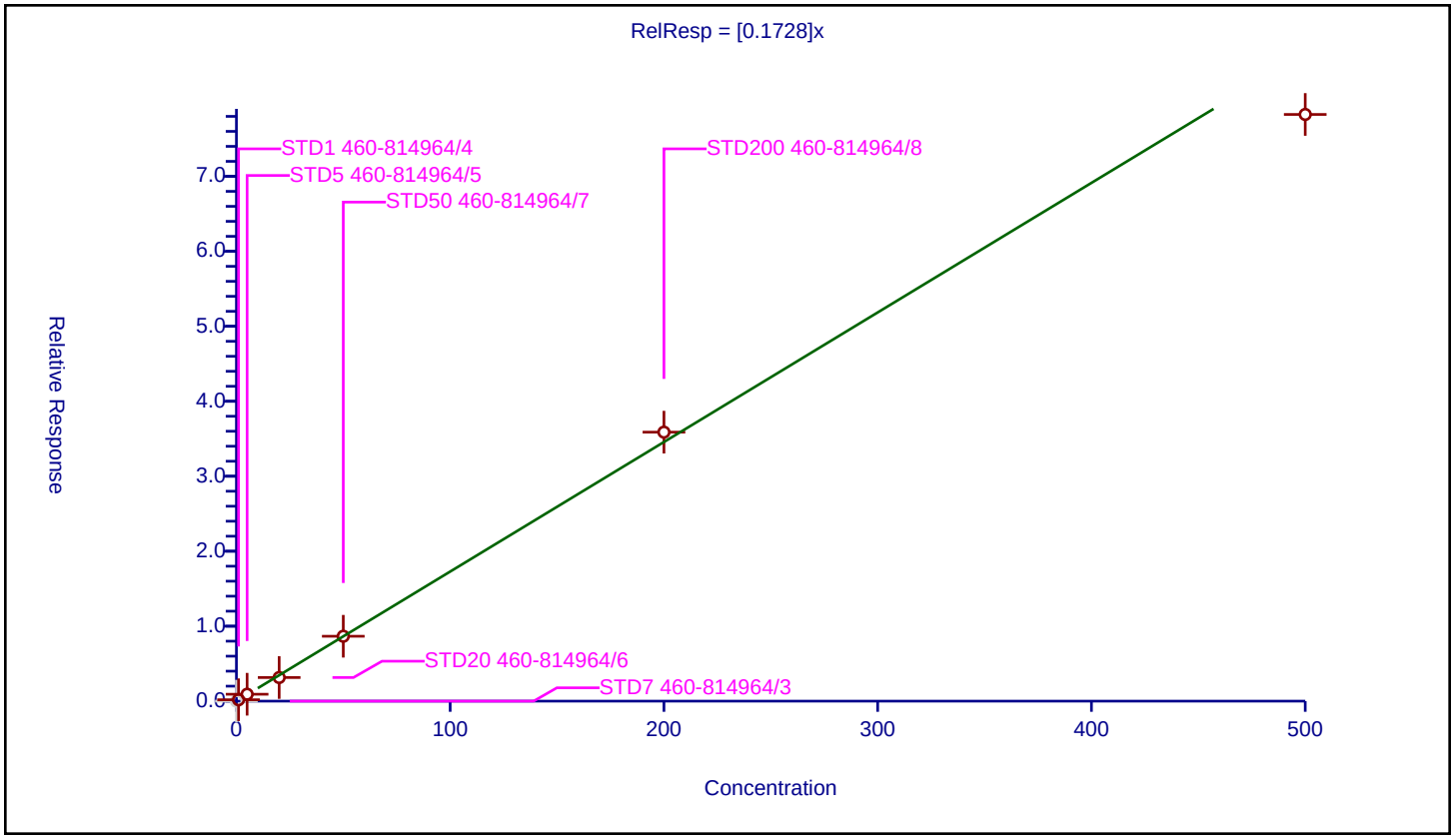
Curve Coefficients

Intercept:	0
Slope:	0.1728

Error Coefficients

Standard Error:	349000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.185746	50.0	367169.0	0.185746	Y
3	STD5 460-814964/5	5.0	0.923251	50.0	414351.0	0.18465	Y
4	STD20 460-814964/6	20.0	3.149122	50.0	405748.0	0.157456	Y
5	STD50 460-814964/7	50.0	8.657866	50.0	428385.0	0.173157	Y
6	STD200 460-814964/8	200.0	35.880892	50.0	404675.0	0.179404	Y
7	STD500 460-814964/9	500.0	78.25897	50.0	460084.0	0.156518	Y



Calibration / 1,3,5-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

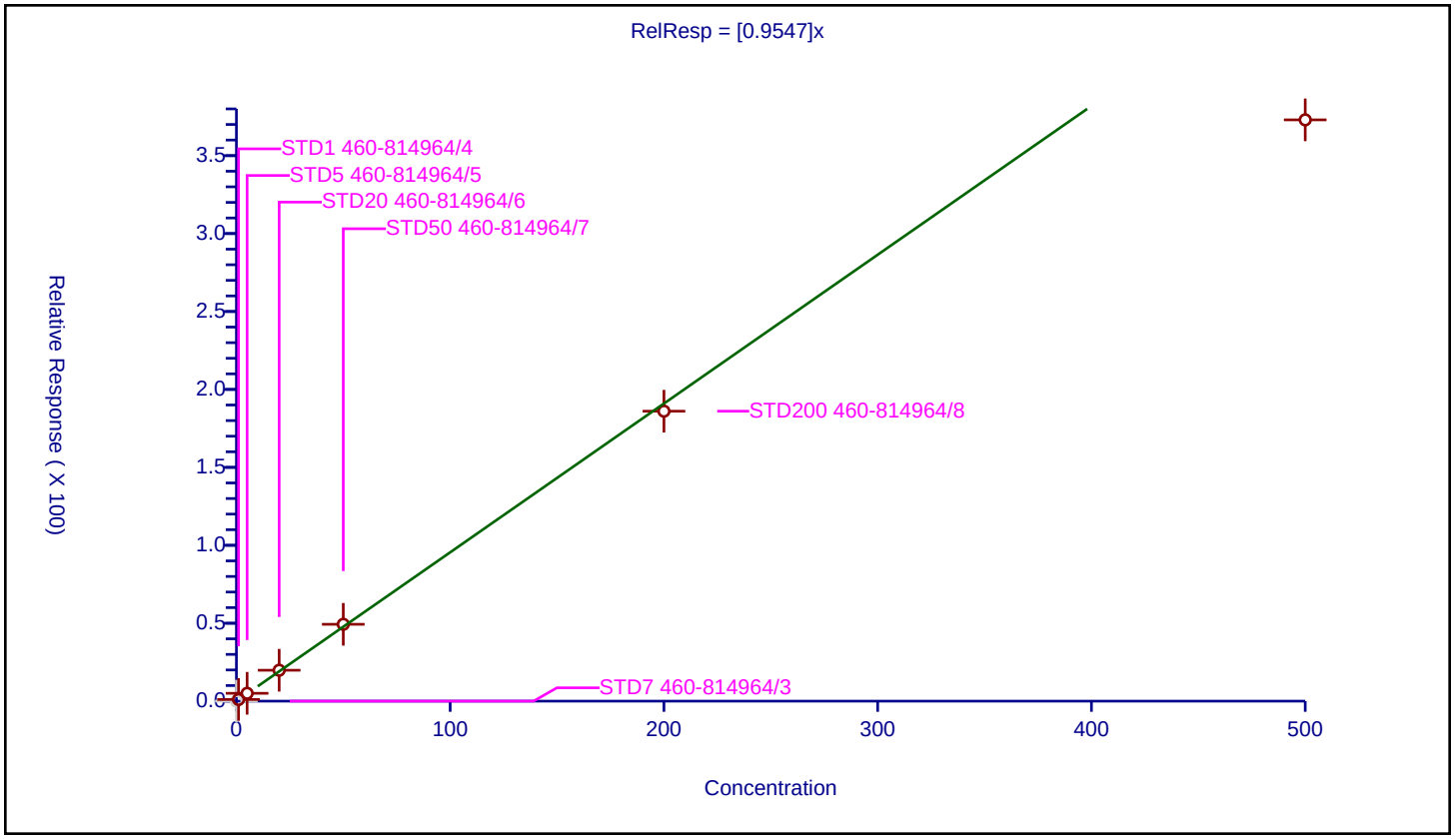
Curve Coefficients

Intercept:	0
Slope:	0.9547

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	11.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.066266	50.0	367169.0	1.066266	Y
3	STD5 460-814964/5	5.0	5.039206	50.0	414351.0	1.007841	Y
4	STD20 460-814964/6	20.0	19.840147	50.0	405748.0	0.992007	Y
5	STD50 460-814964/7	50.0	49.311017	50.0	428385.0	0.98622	Y
6	STD200 460-814964/8	200.0	186.034349	50.0	404675.0	0.930172	Y
7	STD500 460-814964/9	500.0	372.96548	50.0	460084.0	0.745931	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

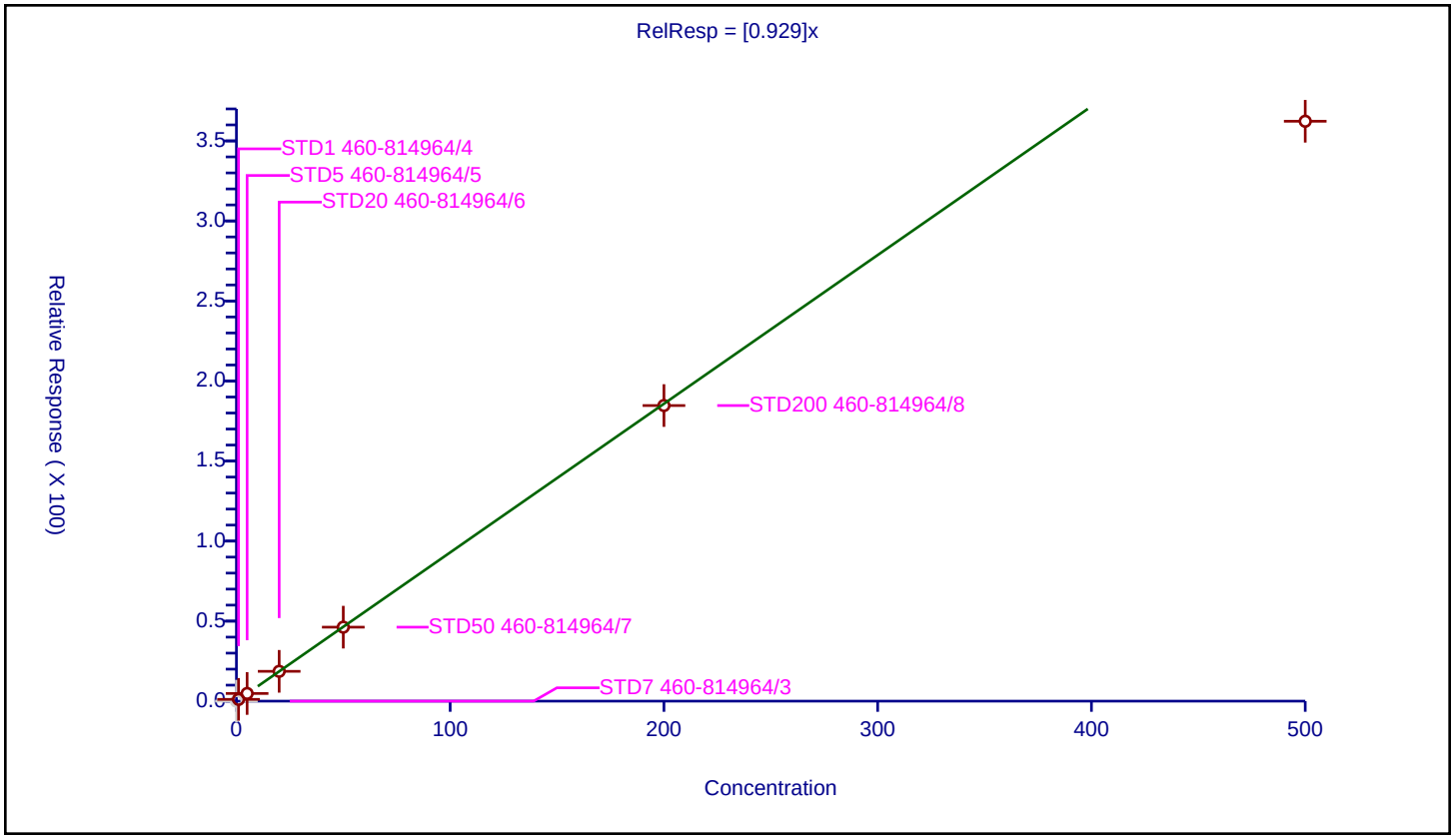
Curve Coefficients

Intercept:	0
Slope:	0.929

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	13.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	1.113248	50.0	367169.0	1.113248	Y
3	STD5 460-814964/5	5.0	4.783022	50.0	414351.0	0.956604	Y
4	STD20 460-814964/6	20.0	18.635212	50.0	405748.0	0.931761	Y
5	STD50 460-814964/7	50.0	46.208084	50.0	428385.0	0.924162	Y
6	STD200 460-814964/8	200.0	184.674245	50.0	404675.0	0.923371	Y
7	STD500 460-814964/9	500.0	362.284061	50.0	460084.0	0.724568	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

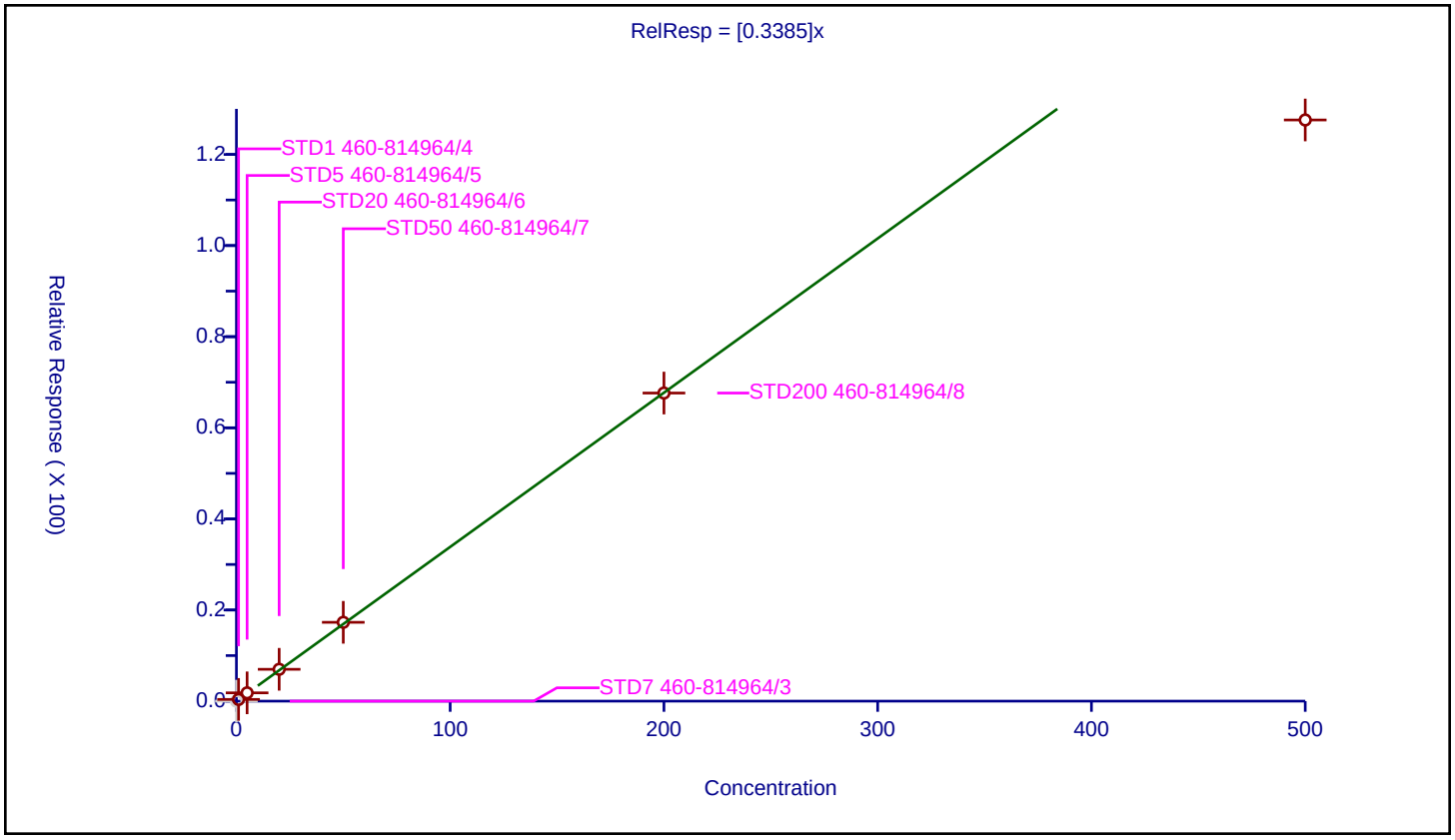
Curve Coefficients

Intercept:	0
Slope:	0.3385

Error Coefficients

Standard Error:	584000
Relative Standard Error:	12.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.378572	50.0	367169.0	0.378572	Y
3	STD5 460-814964/5	5.0	1.818748	50.0	414351.0	0.36375	Y
4	STD20 460-814964/6	20.0	6.98993	50.0	405748.0	0.349496	Y
5	STD50 460-814964/7	50.0	17.300676	50.0	428385.0	0.346014	Y
6	STD200 460-814964/8	200.0	67.62612	50.0	404675.0	0.338131	Y
7	STD500 460-814964/9	500.0	127.56714	50.0	460084.0	0.255134	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

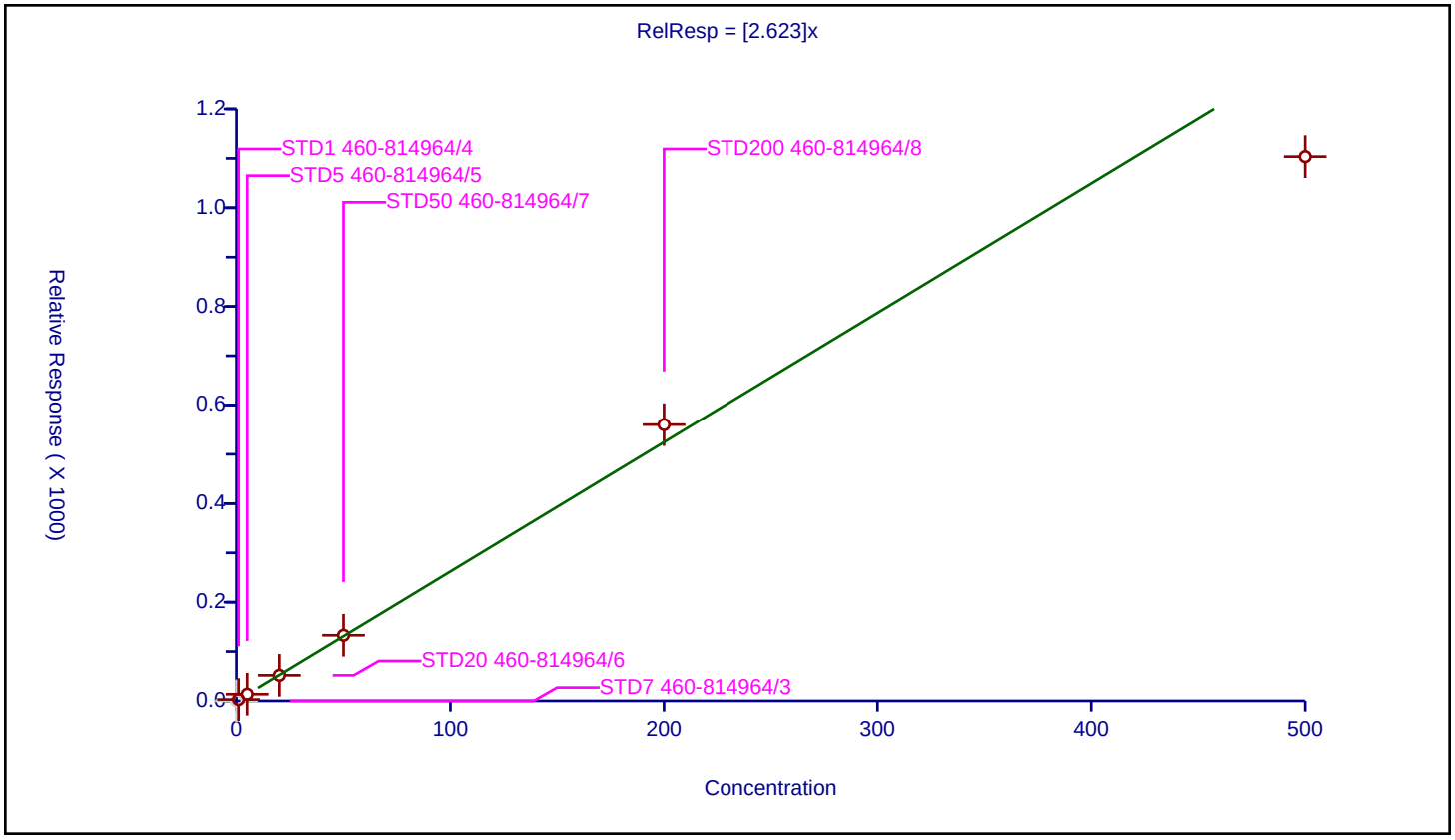
Curve Coefficients

Intercept:	0
Slope:	2.623

Error Coefficients

Standard Error:	5000000
Relative Standard Error:	8.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	2.764395	50.0	367169.0	2.764395	Y
3	STD5 460-814964/5	5.0	13.583532	50.0	414351.0	2.716706	Y
4	STD20 460-814964/6	20.0	51.821944	50.0	405748.0	2.591097	Y
5	STD50 460-814964/7	50.0	132.980847	50.0	428385.0	2.659617	Y
6	STD200 460-814964/8	200.0	560.264904	50.0	404675.0	2.801325	Y
7	STD500 460-814964/9	500.0	1103.540549	50.0	460084.0	2.207081	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

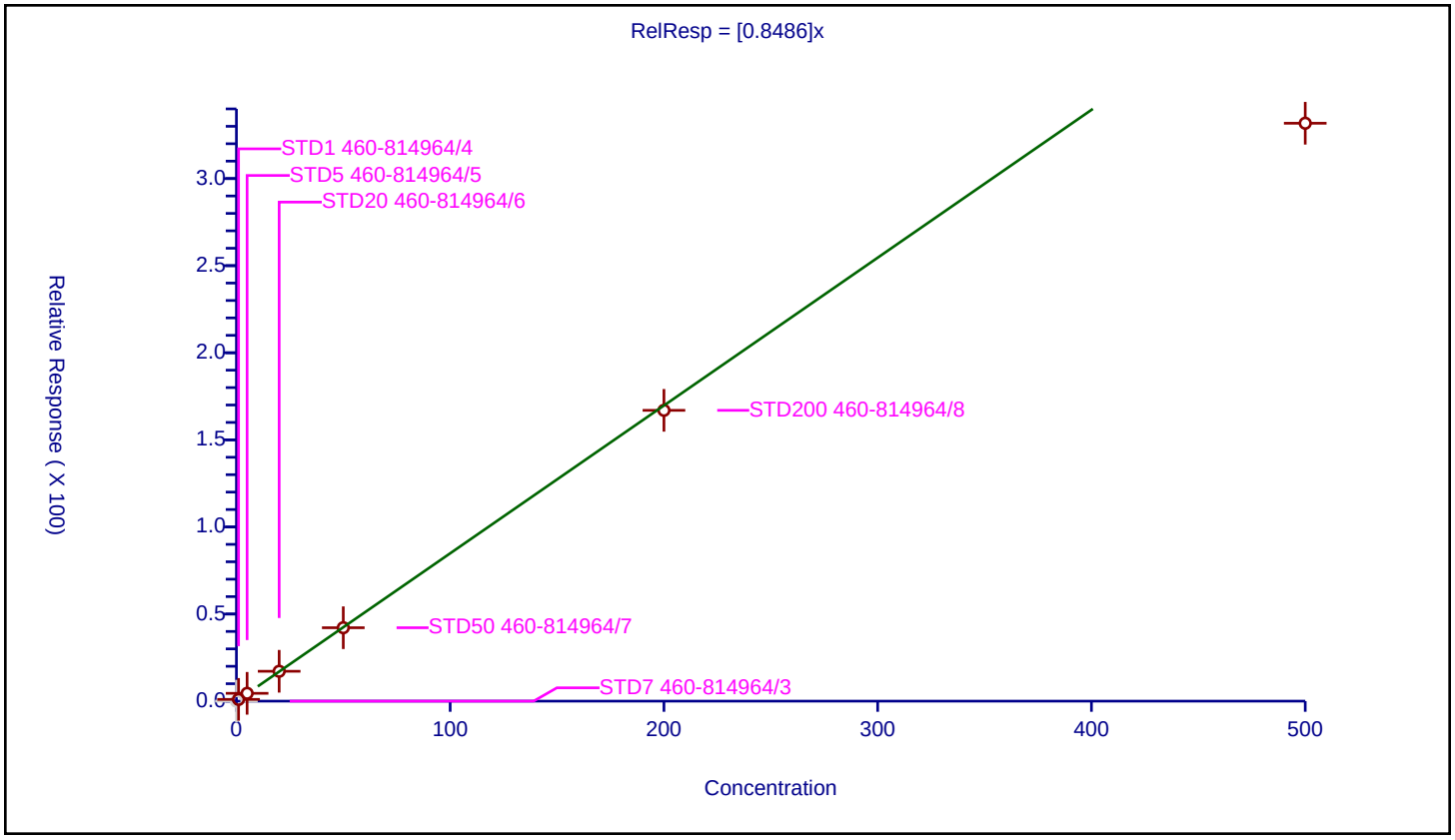
Curve Coefficients

Intercept:	0
Slope:	0.8486

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	12.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD7 460-814964/3	0.0	0.0	50.0	388946.0	NaN	N
2	STD1 460-814964/4	1.0	0.994229	50.0	367169.0	0.994229	Y
3	STD5 460-814964/5	5.0	4.494257	50.0	414351.0	0.898851	Y
4	STD20 460-814964/6	20.0	17.144015	50.0	405748.0	0.857201	Y
5	STD50 460-814964/7	50.0	42.153437	50.0	428385.0	0.843069	Y
6	STD200 460-814964/8	200.0	166.938531	50.0	404675.0	0.834693	Y
7	STD500 460-814964/9	500.0	331.759418	50.0	460084.0	0.663519	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: ICV 460-814964/15 Calibration Date: 11/23/2021 21:13

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F22522.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2859	0.2453	0.1000	17.2	20.0	-14.2	30.0
Chloromethane	Ave	0.4081	0.3980	0.1000	19.5	20.0	-2.5	30.0
Vinyl chloride	Ave	0.3615	0.3081	0.1000	17.0	20.0	-14.8	30.0
Butadiene	Ave	0.3288	0.2608		15.9	20.0	-20.7	30.0
Bromomethane	Ave	0.1718	0.1437	0.1000	16.7	20.0	-16.4	30.0
Chloroethane	Ave	0.1821	0.1565	0.1000	17.2	20.0	-14.1	30.0
Dichlorofluoromethane	Ave	0.4757	0.3883		16.3	20.0	-18.4	30.0
Trichlorofluoromethane	Ave	0.3649	0.3103	0.1000	17.0	20.0	-15.0	30.0
Pentane	Ave	1.913	1.941		40.6	40.0	1.5	30.0
Ethyl ether	Ave	0.2178	0.2049		18.8	20.0	-5.9	30.0
Ethanol	Ave	0.0397	0.0377		760	800	-5.0	30.0
2-Methyl-1,3-butadiene	Ave	0.2524	0.2535		20.1	20.0	0.4	30.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2172	0.1854		17.1	20.0	-14.6	30.0
1,1,1-Trifluoro-2,2-dichloro ethane	Ave	0.3599	0.3181		17.7	20.0	-11.6	30.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2394	0.2116	0.1000	17.7	20.0	-11.6	30.0
Acrolein	Ave	1.365	1.666		48.9	40.1	22.1	30.0
1,1-Dichloroethene	Ave	0.2449	0.2118	0.1000	17.3	20.0	-13.5	30.0
Acetone	Ave	0.5825	0.4971	0.0500	85.3	100	-14.7	30.0
Iodomethane	Ave	0.3624	0.3126		17.2	20.0	-13.8	30.0
Carbon disulfide	Ave	0.9487	0.7972	0.1000	16.8	20.0	-16.0	30.0
Isopropyl alcohol	Ave	0.3959	0.2945		149	200	-25.6	30.0
3-Chloro-1-propene	Ave	0.6227	0.5637		18.1	20.0	-9.5	30.0
Methyl acetate	Ave	0.2593	0.2384	0.1000	36.8	40.0	-8.1	30.0
Cyclopentene	Ave	0.6690	0.6259		18.7	20.0	-6.4	30.0
Acetonitrile	Ave	1.238	1.265		204	200	2.1	30.0
Methylene Chloride	Ave	0.2856	0.2493	0.1000	17.5	20.0	-12.7	30.0
2-Methyl-2-propanol	Ave	1.004	0.8362		167	200	-16.7	30.0
Methyl tert-butyl ether	Ave	0.7383	0.6268	0.1000	17.0	20.0	-15.1	30.0
trans-1,2-Dichloroethene	Ave	0.2644	0.2252	0.1000	17.0	20.0	-14.8	30.0
Acrylonitrile	Ave	0.1392	0.1247		179	200	-10.5	30.0
Hexane	Ave	0.3223	0.2609		16.2	20.0	-19.1	30.0
Isopropyl ether	Ave	0.8986	0.7862		17.5	20.0	-12.5	30.0
1,1-Dichloroethane	Ave	0.5142	0.4331	0.2000	16.8	20.0	-15.8	30.0
Vinyl acetate	Ave	0.0560	0.0265		19.0	40.0	-52.6*	30.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2009		16.9	20.0	-15.3	30.0
Tert-butyl ethyl ether	Ave	0.7826	0.6882		17.6	20.0	-12.1	30.0
2,2-Dichloropropane	Ave	0.0858	0.0628		14.6	20.0	-26.9	30.0
cis-1,2-Dichloroethene	Ave	0.2923	0.2463	0.1000	16.8	20.0	-15.8	30.0
2-Butanone (MEK)	Ave	0.2184	0.1940	0.0500	88.8	100	-11.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: ICV 460-814964/15 Calibration Date: 11/23/2021 21:13

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F22522.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl acetate	Ave	0.1791	0.1604		35.8	40.0	-10.4	30.0
Methyl acrylate	Ave	0.3844	0.3414		17.8	20.0	-11.2	30.0
Propionitrile	Ave	1.593	1.406		177	200	-11.7	30.0
Tetrahydrofuran	Ave	0.2613	0.2279		34.9	40.0	-12.8	30.0
Chlorobromomethane	Ave	0.1325	0.1130		17.1	20.0	-14.7	30.0
Methacrylonitrile	Ave	0.1309	0.1128		172	200	-13.8	30.0
Chloroform	Ave	0.4355	0.3723	0.2000	17.1	20.0	-14.5	30.0
Cyclohexane	Ave	0.4481	0.3820	0.1000	17.1	20.0	-14.7	30.0
1,1,1-Trichloroethane	Ave	0.3681	0.3083	0.1000	16.8	20.0	-16.2	30.0
Carbon tetrachloride	Ave	0.3074	0.2625	0.1000	17.1	20.0	-14.6	30.0
1,1-Dichloropropene	Ave	0.3608	0.3113		17.3	20.0	-13.7	30.0
Isobutyl alcohol	Ave	0.5564	0.5525		496	500	-0.7	30.0
Benzene	Ave	1.439	1.260	0.5000	17.5	20.0	-12.4	30.0
Isopropyl acetate	Ave	0.8394	0.6317		15.1	20.0	-24.7	30.0
Tert-amyl methyl ether	Ave	0.8825	0.7403		16.8	20.0	-16.1	30.0
1,2-Dichloroethane	Ave	0.3459	0.2944	0.1000	17.0	20.0	-14.9	30.0
n-Heptane	Ave	0.2310	0.1847		16.0	20.0	-20.0	30.0
n-Butanol	Ave	0.1784	0.1546		433	500	-13.3	30.0
Trichloroethene	Ave	0.2472	0.2227	0.2000	18.0	20.0	-9.9	30.0
Ethyl acrylate	Ave	0.7709	0.6426		16.7	20.0	-16.6	30.0
Methylcyclohexane	Ave	0.5005	0.4272	0.1000	17.1	20.0	-14.6	30.0
1,2-Dichloropropane	Ave	0.2816	0.2447	0.1000	17.4	20.0	-13.1	30.0
Methyl methacrylate	Ave	0.0751	0.0604		32.2	40.0	-19.6	30.0
1,4-Dioxane	Ave	0.9502	0.8073		340	400	-15.0	30.0
Dibromomethane	Ave	0.1534	0.1335		17.4	20.0	-13.0	30.0
n-Propyl acetate	Ave	0.4891	0.4123		16.9	20.0	-15.7	30.0
Dichlorobromomethane	Ave	0.3146	0.2658	0.2000	16.9	20.0	-15.5	30.0
2-Nitropropane	Ave	0.0891	0.0647		29.0	40.0	-27.4	30.0
2-Chloroethyl vinyl ether	Ave	0.1725	0.1418		16.4	20.0	-17.8	30.0
Epichlorohydrin	Ave	0.1849	0.2069		22.4	20.0	11.9	30.0
cis-1,3-Dichloropropene	Ave	0.5507	0.4581	0.2000	16.6	20.0	-16.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	1.999	1.681	0.0500	84.1	100	-15.9	30.0
Toluene	Ave	1.406	1.195	0.4000	17.0	20.0	-15.0	30.0
trans-1,3-Dichloropropene	Ave	0.4942	0.4120	0.1000	16.7	20.0	-16.6	30.0
Ethyl methacrylate	Ave	0.4536	0.3988		17.6	20.0	-12.1	30.0
1,1,2-Trichloroethane	Ave	0.2509	0.2256	0.1000	18.0	20.0	-10.1	30.0
Tetrachloroethene	Ave	0.2871	0.2524	0.2000	17.6	20.0	-12.1	30.0
1,3-Dichloropropane	Ave	0.5302	0.4615		17.4	20.0	-13.0	30.0
2-Hexanone	Ave	1.301	1.083	0.0500	83.3	100	-16.7	30.0
n-Butyl acetate	Ave	0.6917	0.5450		15.8	20.0	-21.2	30.0
Chlorodibromomethane	Ave	0.2793	0.2413	0.1000	17.3	20.0	-13.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: ICV 460-814964/15 Calibration Date: 11/23/2021 21:13

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F22522.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	0.2879	0.2463	0.1000	17.1	20.0	-14.4	30.0
Chlorobenzene	Ave	0.8459	0.7320	0.5000	17.3	20.0	-13.5	30.0
Ethylbenzene	Ave	0.4609	0.3935	0.1000	17.1	20.0	-14.6	30.0
1,1,1,2-Tetrachloroethane	Ave	0.2968	0.2640		17.8	20.0	-11.1	30.0
m-Xylene & p-Xylene	Ave	0.5672	0.4970	0.1000	17.5	20.0	-12.4	30.0
n-Butyl acrylate	Ave	0.2728	0.2243		16.4	20.0	-17.8	30.0
o-Xylene	Ave	0.5689	0.5006	0.3000	17.6	20.0	-12.0	30.0
Styrene	Ave	0.9329	0.7515	0.3000	16.1	20.0	-19.4	30.0
Amyl acetate (mixed isomers)	Ave	1.530	1.272		16.6	20.0	-16.9	30.0
Bromoform	Ave	0.1809	0.1480	0.1000	16.4	20.0	-18.2	30.0
Isopropylbenzene	Ave	1.501	1.328	0.1000	17.7	20.0	-11.6	30.0
Bromobenzene	Ave	0.6401	0.5364		16.8	20.0	-16.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8138	0.6546	0.3000	16.1	20.0	-19.6	30.0
N-Propylbenzene	Ave	3.490	3.080		17.7	20.0	-11.7	30.0
1,2,3-Trichloropropane	Ave	0.2300	0.1972		17.1	20.0	-14.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2279	0.1864		16.4	20.0	-18.2	30.0
2-Chlorotoluene	Ave	2.331	2.107		18.1	20.0	-9.6	30.0
4-Ethyltoluene	Ave	2.737	2.517		18.4	20.0	-8.0	30.0
1,3,5-Trimethylbenzene	Ave	2.305	2.127		18.5	20.0	-7.7	30.0
4-Chlorotoluene	Ave	2.189	1.903		17.4	20.0	-13.1	30.0
Butyl Methacrylate	Ave	0.8226	0.7063		17.2	20.0	-14.1	30.0
tert-Butylbenzene	Ave	1.926	1.817		18.9	20.0	-5.6	30.0
1,2,4-Trimethylbenzene	Ave	2.417	2.179		18.0	20.0	-9.9	30.0
sec-Butylbenzene	Ave	3.027	2.862		18.9	20.0	-5.4	30.0
1,3-Dichlorobenzene	Ave	1.255	1.090	0.6000	17.4	20.0	-13.2	30.0
4-Isopropyltoluene	Ave	2.561	2.372		18.5	20.0	-7.4	30.0
1,4-Dichlorobenzene	Ave	1.293	1.120	0.5000	17.3	20.0	-13.3	30.0
1,2,3-Trimethylbenzene	Ave	2.525	2.230		17.7	20.0	-11.7	30.0
Benzyl chloride	Ave	1.584	1.001		12.6	20.0	-36.8*	30.0
Indan	Ave	2.399	2.231		18.6	20.0	-7.0	30.0
p-Diethylbenzene	Ave	1.401	1.467		20.9	20.0	4.7	30.0
n-Butylbenzene	Ave	1.469	1.328		18.1	20.0	-9.6	30.0
1,2-Dichlorobenzene	Ave	1.293	1.131	0.4000	17.5	20.0	-12.5	30.0
1,2,4,5-Tetramethylbenzene	Ave	2.457	2.308		18.8	20.0	-6.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1728	0.1392	0.0500	16.1	20.0	-19.5	30.0
1,3,5-Trichlorobenzene	Ave	0.9547	0.8343		17.5	20.0	-12.6	30.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.8505	0.2000	18.3	20.0	-8.4	30.0
Hexachlorobutadiene	Ave	0.3385	0.3306		19.5	20.0	-2.3	30.0
Naphthalene	Ave	2.623	2.407		18.4	20.0	-8.2	30.0
1,2,3-Trichlorobenzene	Ave	0.8486	0.7813		18.4	20.0	-7.9	30.0
Dibromofluoromethane (Surr)	Ave	0.2576	0.2491		48.4	50.0	-3.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: ICV 460-814964/15 Calibration Date: 11/23/2021 21:13

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F22522.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3307	0.3278		49.6	50.0	-0.9	30.0
Toluene-d8 (Surr)	Ave	1.361	1.390		51.1	50.0	2.2	30.0
4-Bromofluorobenzene	Ave	0.3550	0.3385		47.7	50.0	-4.7	30.0

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 23-Nov-2021 21:13:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 460-0138064-015
Operator ID: Instrument ID: CVOAMS6
Sublist:

Method: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 24-Nov-2021 08:37:13 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1644

First Level Reviewer: delpolitov Date: 24-Nov-2021 08:39:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.500	1.492	0.008	62	126665	20.0	17.2	
2 Chloromethane	50	1.648	1.648	0.000	99	205528	20.0	19.5	
3 Vinyl chloride	62	1.722	1.722	0.000	98	159072	20.0	17.0	
4 Butadiene	54	1.738	1.738	0.000	95	134649	20.0	15.9	
5 Bromomethane	94	1.977	1.977	0.000	99	74194	20.0	16.7	
6 Chloroethane	64	2.042	2.034	0.008	100	80792	20.0	17.2	
7 Dichlorofluoromethane	67	2.198	2.198	0.000	97	200494	20.0	16.3	
9 Trichlorofluoromethane	101	2.207	2.207	0.000	65	160214	20.0	17.0	
8 Pentane	72	2.231	2.231	0.000	96	60299	40.0	40.6	
10 Ethanol	46	2.396	2.363	0.033	77	23420	800.0	759.8	
11 Ethyl ether	59	2.371	2.371	0.000	90	105819	20.0	18.8	
12 2-Methyl-1,3-butadiene	53	2.404	2.404	0.000	95	130873	20.0	20.1	
13 1,2-Dichloro-1,1,2-trifluoroetha	117	2.429	2.437	-0.008	79	95751	20.0	17.1	
14 1,1,1-Trifluoro-2,2-dichloroetha	83	2.486	2.478	0.008	85	164230	20.0	17.7	
15 Acrolein	56	2.544	2.527	0.017	50	51833	40.1	48.9	
16 112TCTFE	101	2.544	2.544	0.000	95	109265	20.0	17.7	
17 1,1-Dichloroethene	96	2.585	2.593	-0.008	96	109351	20.0	17.3	
18 Acetone	43	2.659	2.659	0.000	89	212138	100.0	85.3	
19 Iodomethane	142	2.724	2.724	0.000	97	161387	20.0	17.2	
21 Carbon disulfide	76	2.757	2.757	0.000	99	411652	20.0	16.8	
20 Isopropyl alcohol	45	2.757	2.765	-0.008	94	45757	200.0	148.8	
22 3-Chloro-1-propene	41	2.856	2.856	0.000	88	291049	20.0	18.1	
23 Methyl acetate	43	2.856	2.856	0.000	84	246213	40.0	36.8	
24 Cyclopentene	67	2.872	2.872	0.000	93	323203	20.0	18.7	
25 Acetonitrile	41	2.938	2.946	-0.008	19	196476	200.0	204.3	a
27 Methylene Chloride	84	2.979	2.971	0.008	87	128710	20.0	17.5	
* 26 TBA-d9 (IS)	65	2.987	2.979	0.008	0	776767	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.028	3.053	-0.025	91	129905	200.0	166.6	a
29 Methyl tert-butyl ether	73	3.102	3.102	0.000	98	323633	20.0	17.0	
30 trans-1,2-Dichloroethene	96	3.143	3.135	0.008	97	116293	20.0	17.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.201	3.193	0.008	95	643727	200.0	179.1	
32 Hexane	43	3.275	3.267	0.008	95	134707	20.0	16.2	
33 Isopropyl ether	45	3.464	3.464	0.000	97	405930	20.0	17.5	
34 1,1-Dichloroethane	63	3.497	3.497	0.000	96	223640	20.0	16.8	
35 Vinyl acetate	86	3.505	3.497	0.008	100	27376	40.0	19.0	
36 2-Chloro-1,3-butadiene	88	3.538	3.530	0.008	91	103734	20.0	16.9	
37 Tert-butyl ethyl ether	59	3.751	3.760	-0.009	89	355357	20.0	17.6	
* 38 2-Butanone-d5	46	3.940	3.949	-0.009	0	1066876	250.0	250.0	
39 2,2-Dichloropropane	97	3.949	3.949	0.000	91	32414	20.0	14.6	
40 cis-1,2-Dichloroethene	96	3.982	3.973	0.009	95	127172	20.0	16.8	
41 2-Butanone (MEK)	72	3.990	3.990	0.000	96	82785	100.0	88.8	
42 Ethyl acetate	70	3.990	3.990	0.000	95	27381	40.0	35.8	
43 Methyl acrylate	55	4.039	4.039	0.000	98	130907	20.0	17.8	a
44 Propionitrile	54	4.121	4.121	0.000	97	218502	200.0	176.6	
45 Chlorobromomethane	128	4.195	4.187	0.008	97	58344	20.0	17.1	
46 Tetrahydrofuran	72	4.187	4.195	-0.008	75	38895	40.0	34.9	
47 Methacrylonitrile	67	4.203	4.203	0.000	97	582548	200.0	172.4	
48 Chloroform	83	4.236	4.236	0.000	98	192251	20.0	17.1	
49 Cyclohexane	84	4.360	4.360	0.000	95	197239	20.0	17.1	
50 1,1,1-Trichloroethane	97	4.368	4.368	0.000	86	159185	20.0	16.8	
$ 51 Dibromofluoromethane (Surr)	113	4.384	4.384	0.000	96	321611	50.0	48.4	
52 Carbon tetrachloride	117	4.491	4.483	0.008	97	135558	20.0	17.1	
53 1,1-Dichloropropene	75	4.507	4.507	0.000	95	160736	20.0	17.3	
54 Isobutyl alcohol	43	4.655	4.664	-0.009	50	214566	500.0	496.5	
55 Benzene	78	4.696	4.696	0.000	96	483341	20.0	17.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.705	4.705	0.000	0	423165	50.0	49.6	
57 Isopropyl acetate	43	4.762	4.762	0.000	93	326179	20.0	15.1	
58 Tert-amyl methyl ether	73	4.762	4.762	0.000	78	382224	20.0	16.8	
59 1,2-Dichloroethane	62	4.779	4.779	0.000	95	152023	20.0	17.0	
60 n-Heptane	57	4.844	4.844	0.000	94	95371	20.0	16.0	
* 61 Fluorobenzene	96	4.968	4.968	0.000	98	1290858	50.0	50.0	
62 n-Butanol	56	5.288	5.304	-0.016	91	60057	500.0	433.3	
63 Trichloroethene	95	5.304	5.304	0.000	98	115005	20.0	18.0	
64 Ethyl acrylate	55	5.428	5.428	0.000	95	331817	20.0	16.7	a
65 Methylcyclohexane	83	5.428	5.428	0.000	79	220590	20.0	17.1	
66 1,2-Dichloropropane	63	5.576	5.584	-0.008	92	126364	20.0	17.4	
68 Methyl methacrylate	100	5.666	5.666	0.000	93	62336	40.0	32.2	
* 67 1,4-Dioxane-d8	96	5.650	5.707	-0.057	0	55837	1000.0	1000.0	
70 Dibromomethane	93	5.707	5.707	0.000	96	68922	20.0	17.4	
71 n-Propyl acetate	43	5.715	5.724	-0.009	99	212883	20.0	16.9	
69 1,4-Dioxane	88	5.707	5.740	-0.033	30	18030	400.0	339.8	
72 Dichlorobromomethane	83	5.855	5.855	0.000	99	137232	20.0	16.9	
73 2-Nitropropane	41	6.175	6.175	0.000	81	66772	40.0	29.0	
74 2-Chloroethyl vinyl ether	63	6.184	6.184	0.000	76	73237	20.0	16.4	
75 Epichlorohydrin	57	6.291	6.291	0.000	90	17661	20.0	22.4	
76 cis-1,3-Dichloropropene	75	6.340	6.340	0.000	94	175665	20.0	16.6	
77 4-Methyl-2-pentanone (MIBK)	43	6.504	6.504	0.000	98	717518	100.0	84.1	
$ 78 Toluene-d8 (Surr)	98	6.578	6.578	0.000	99	1333093	50.0	51.1	
79 Toluene	91	6.652	6.652	0.000	94	458148	20.0	17.0	
80 trans-1,3-Dichloropropene	75	6.997	6.997	0.000	96	158005	20.0	16.7	
81 Ethyl methacrylate	69	7.030	7.038	-0.008	91	152952	20.0	17.6	
82 1,1,2-Trichloroethane	83	7.203	7.203	0.000	95	86510	20.0	18.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	7.244	7.252	-0.008	95	96793	20.0	17.6	
84 1,3-Dichloropropane	76	7.408	7.408	0.000	97	176965	20.0	17.4	
85 2-Hexanone	43	7.474	7.482	-0.008	99	462353	100.0	83.3	
86 n-Butyl acetate	43	7.597	7.597	0.000	98	209014	20.0	15.8	
87 Chlorodibromomethane	129	7.630	7.638	-0.008	98	92556	20.0	17.3	
88 Ethylene Dibromide	107	7.778	7.778	0.000	97	94446	20.0	17.1	
* 89 Chlorobenzene-d5	117	8.320	8.320	0.000	87	958736	50.0	50.0	
90 Chlorobenzene	112	8.353	8.361	-0.008	94	280703	20.0	17.3	
91 Ethylbenzene	106	8.460	8.468	-0.008	99	150917	20.0	17.1	
92 1,1,1,2-Tetrachloroethane	131	8.476	8.484	-0.008	94	101251	20.0	17.8	
93 m-Xylene & p-Xylene	106	8.624	8.624	0.000	99	190600	20.0	17.5	
95 o-Xylene	106	9.134	9.134	0.000	93	191987	20.0	17.6	
94 n-Butyl acrylate	73	9.134	9.142	-0.008	97	86027	20.0	16.4	
96 Styrene	104	9.166	9.175	-0.009	95	288196	20.0	16.1	
98 Bromoform	173	9.397	9.396	0.000	94	56754	20.0	16.4	
97 Amyl acetate (mixed isomers)	43	9.397	9.405	-0.009	90	253657	20.0	16.6	
99 Isopropylbenzene	105	9.536	9.536	0.000	96	509168	20.0	17.7	
$ 100 4-Bromofluorobenzene	174	9.725	9.733	-0.008	84	324498	50.0	47.7	
101 Bromobenzene	156	9.848	9.857	-0.009	94	106978	20.0	16.8	
102 1,1,2,2-Tetrachloroethane	83	9.906	9.906	0.000	98	130555	20.0	16.1	
103 N-Propylbenzene	91	9.931	9.931	0.000	99	614353	20.0	17.7	
104 1,2,3-Trichloropropane	110	9.947	9.947	0.000	98	39326	20.0	17.1	
105 trans-1,4-Dichloro-2-butene	53	9.963	9.963	0.000	88	37187	20.0	16.4	a
106 2-Chlorotoluene	91	10.021	10.021	0.000	97	420213	20.0	18.1	
107 4-Ethyltoluene	105	10.029	10.029	0.000	98	501995	20.0	18.4	
108 1,3,5-Trimethylbenzene	105	10.095	10.095	0.000	93	424329	20.0	18.5	
109 4-Chlorotoluene	91	10.120	10.120	0.000	97	379610	20.0	17.4	
110 Butyl Methacrylate	87	10.185	10.185	0.000	94	140867	20.0	17.2	
111 tert-Butylbenzene	119	10.341	10.341	0.000	94	362412	20.0	18.9	
112 1,2,4-Trimethylbenzene	105	10.391	10.391	0.000	98	434593	20.0	18.0	
113 sec-Butylbenzene	105	10.506	10.506	0.000	99	570904	20.0	18.9	
115 1,3-Dichlorobenzene	146	10.613	10.613	0.000	96	217370	20.0	17.4	
114 4-Isopropyltoluene	119	10.621	10.621	0.000	98	473049	20.0	18.5	
* 116 1,4-Dichlorobenzene-d4	152	10.670	10.670	0.000	97	498626	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.687	10.687	0.000	95	223479	20.0	17.3	
118 1,2,3-Trimethylbenzene	105	10.703	10.703	0.000	98	444827	20.0	17.7	
119 Benzyl chloride	91	10.785	10.793	-0.008	98	199593	20.0	12.6	
120 2,3-Dihydroindene	117	10.834	10.834	0.000	95	445017	20.0	18.6	
121 p-Diethylbenzene	119	10.884	10.884	0.000	93	292559	20.0	20.9	
122 n-Butylbenzene	92	10.900	10.900	0.000	97	264905	20.0	18.1	
123 1,2-Dichlorobenzene	146	10.941	10.941	0.000	94	225674	20.0	17.5	
124 1,2,4,5-Tetramethylbenzene	119	11.377	11.377	0.000	98	460334	20.0	18.8	
125 1,2-Dibromo-3-Chloropropane	157	11.434	11.443	-0.008	95	27765	20.0	16.1	
126 1,3,5-Trichlorobenzene	180	11.525	11.525	0.000	96	166399	20.0	17.5	
127 1,2,4-Trichlorobenzene	180	11.894	11.894	0.000	94	169642	20.0	18.3	
128 Hexachlorobutadiene	225	11.960	11.960	0.000	90	65933	20.0	19.5	
129 Naphthalene	128	12.051	12.051	0.000	99	480139	20.0	18.4	
130 1,2,3-Trichlorobenzene	180	12.198	12.198	0.000	95	155828	20.0	18.4	
S 131 1,2-Dichloroethene, Total	100				0		40.0	33.9	
S 133 Total BTEX	1				0		100.0	86.7	
S 132 Xylenes, Total	100				0		40.0	35.1	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

8260 SP_00146	Amount Added:	20.00	Units: uL	
8FreonsSS_00038	Amount Added:	20.00	Units: uL	
ACROLEIN SP_00131	Amount Added:	4.00	Units: uL	
GAS C SP_00436	Amount Added:	20.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

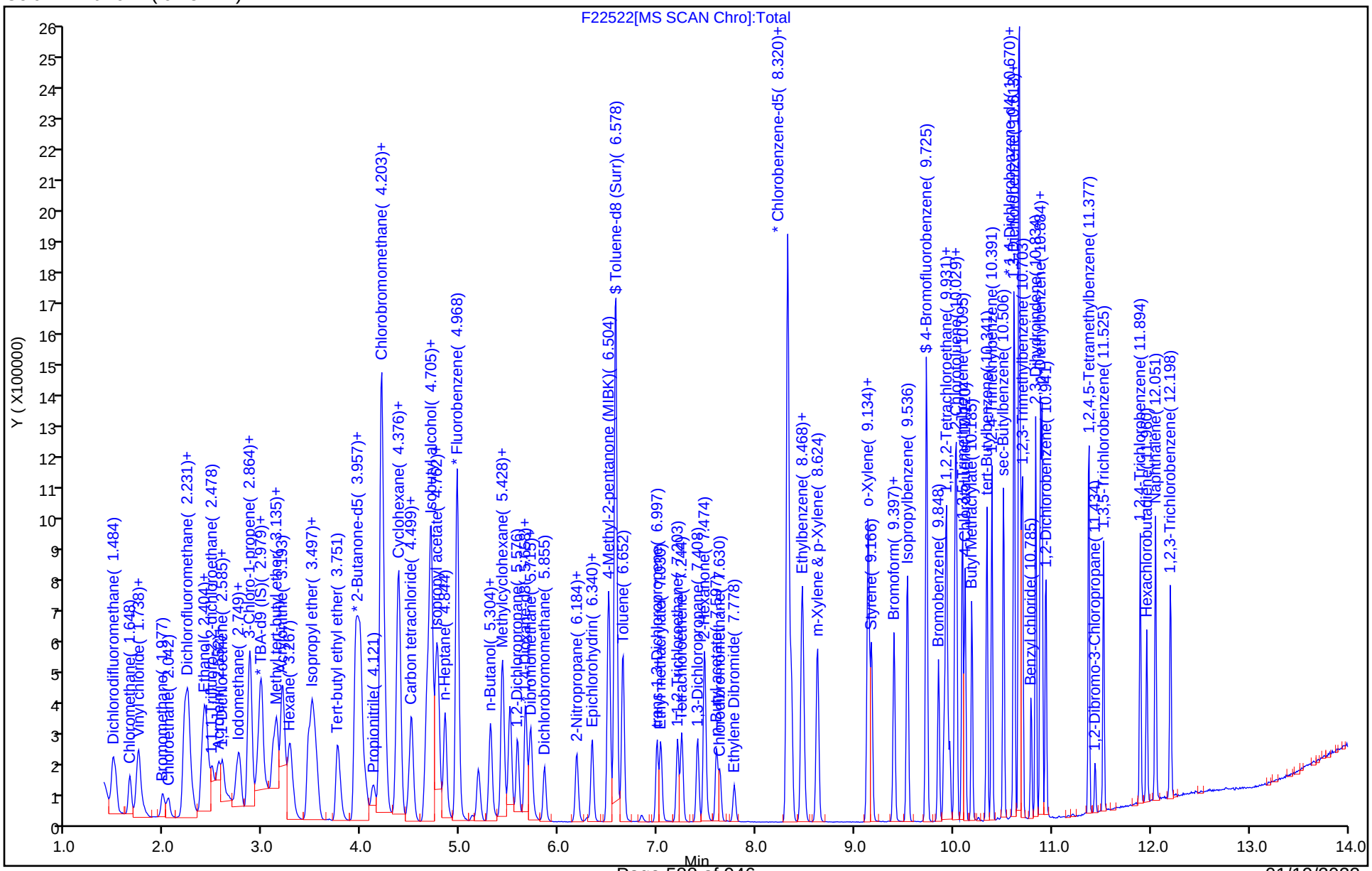
Report Date: 24-Nov-2021 08:39:53 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D

Injection Date:	23-Nov-2021 21:13:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

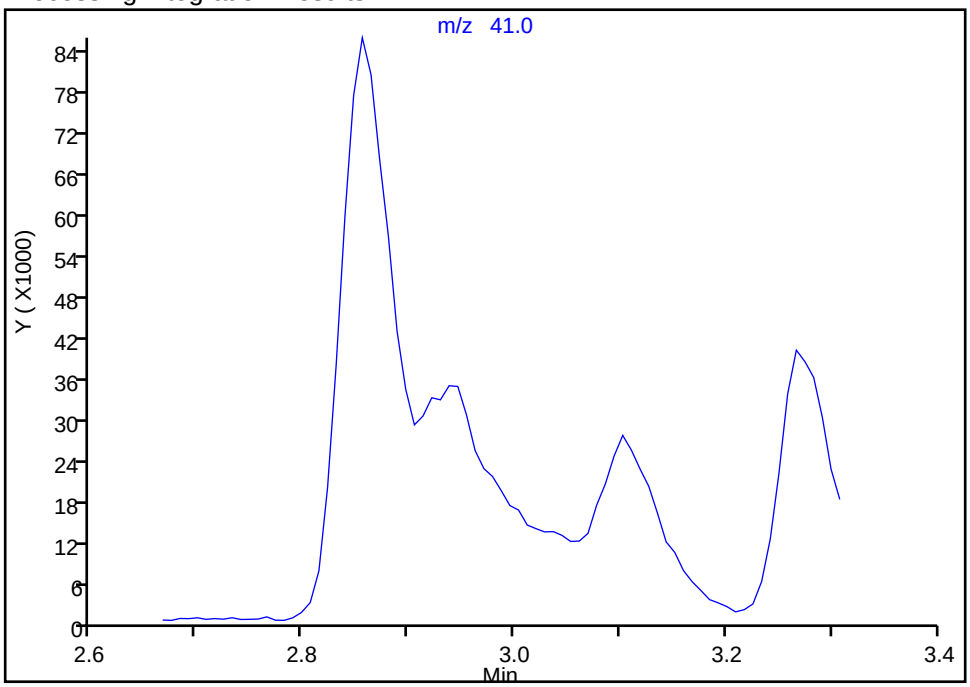
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Injection Date: 23-Nov-2021 21:13:30 Instrument ID: CVOAMS6
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

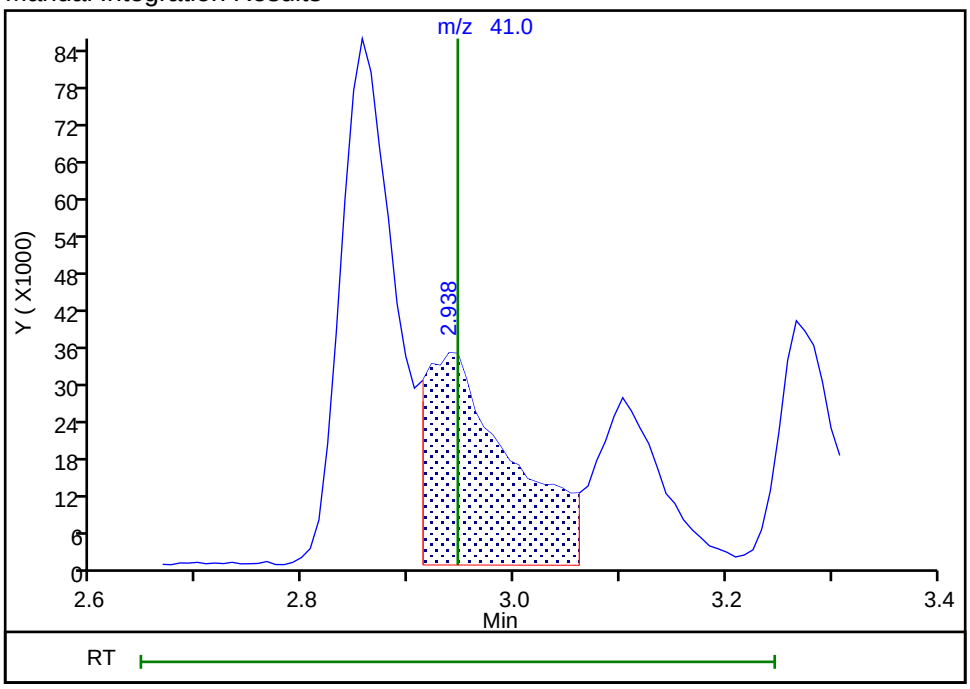
Not Detected
Expected RT: 2.95

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 196476
Amount: 204.2928
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:36:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

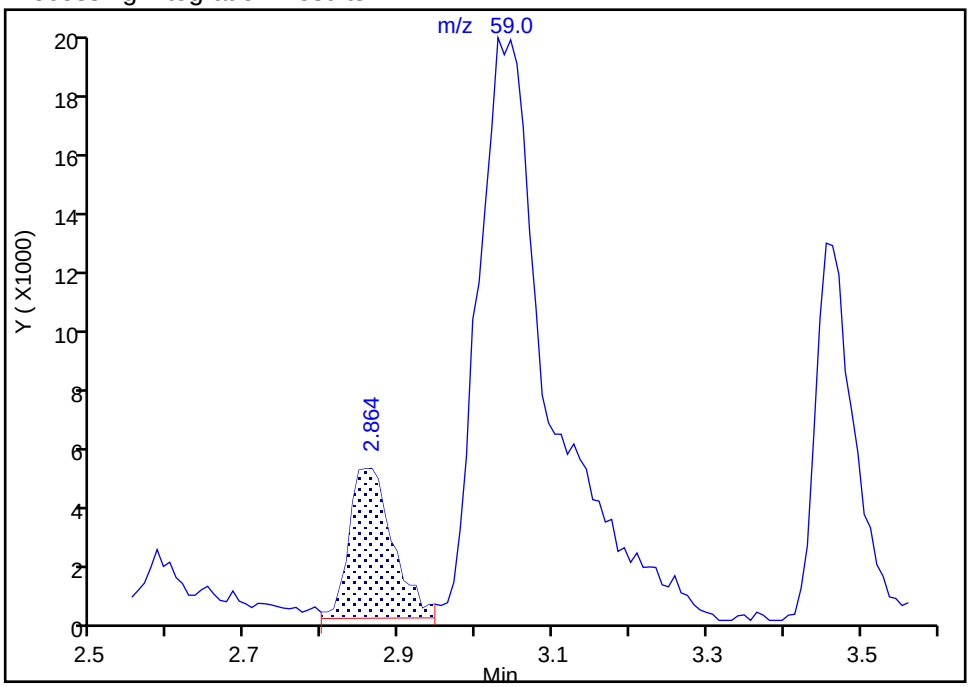
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Injection Date: 23-Nov-2021 21:13:30 Instrument ID: CVOAMS6
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

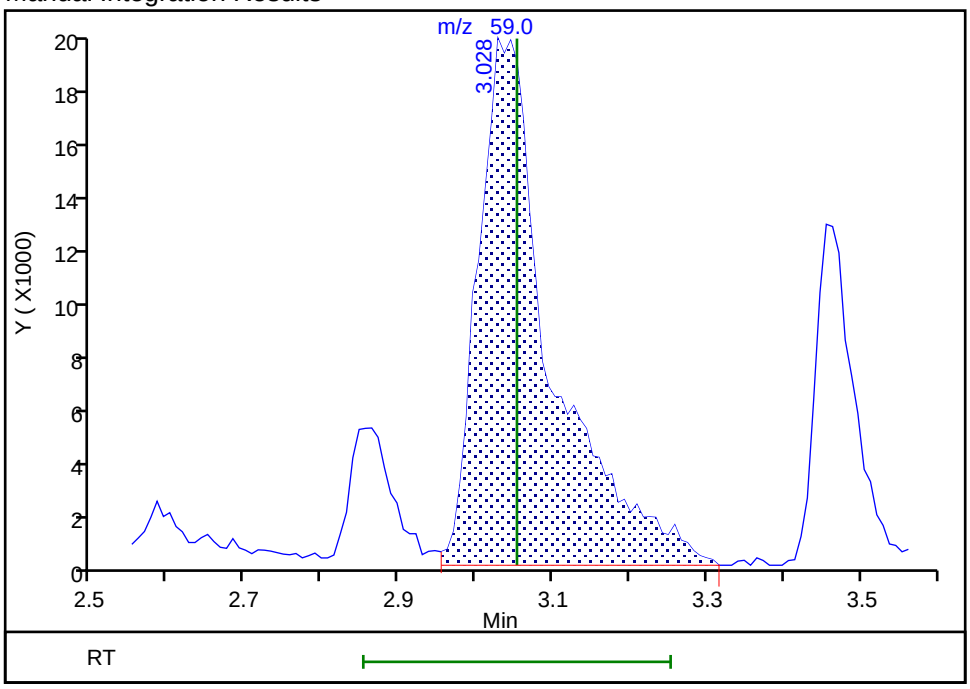
Processing Integration Results

RT: 2.86
Area: 19823
Amount: 25.558834
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 129905
Amount: 166.5675
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:36:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

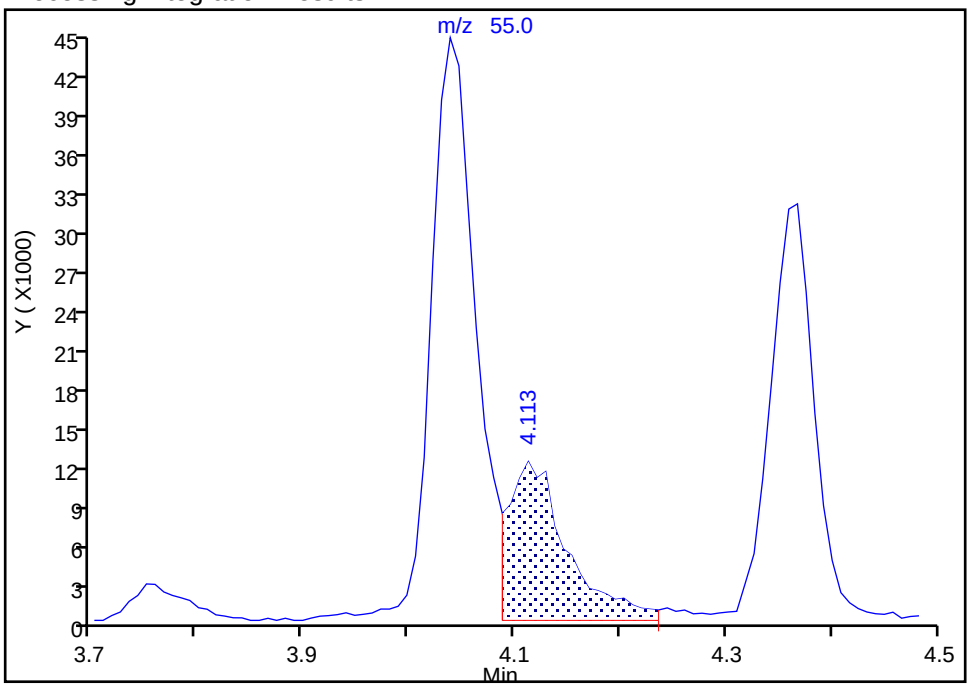
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Injection Date: 23-Nov-2021 21:13:30 Instrument ID: CVOAMS6
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

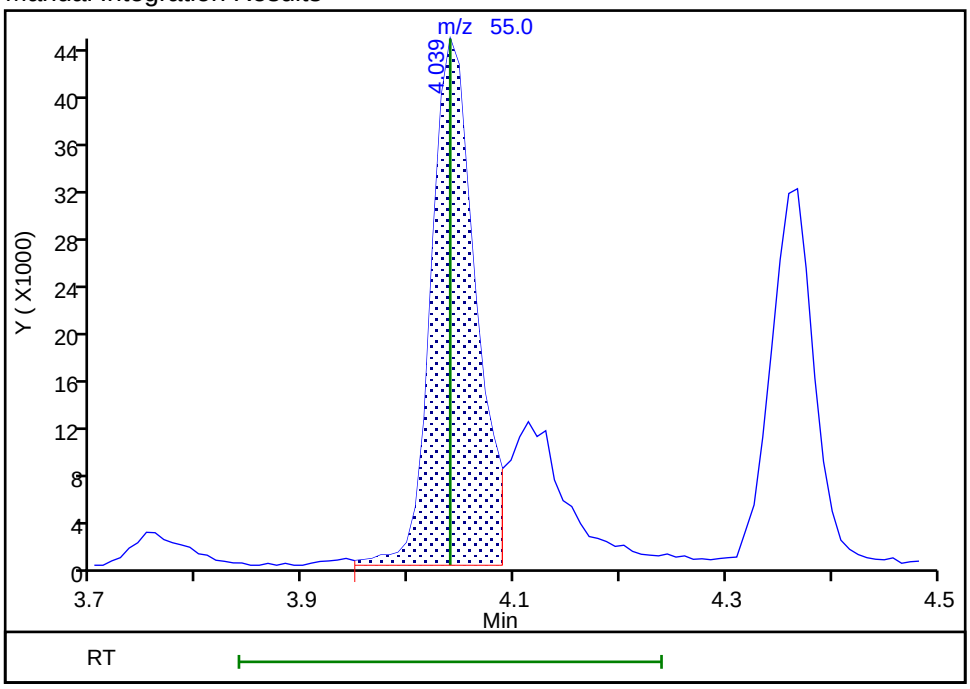
Processing Integration Results

RT: 4.11
Area: 47862
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 130907
Amount: 17.761475
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:36:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

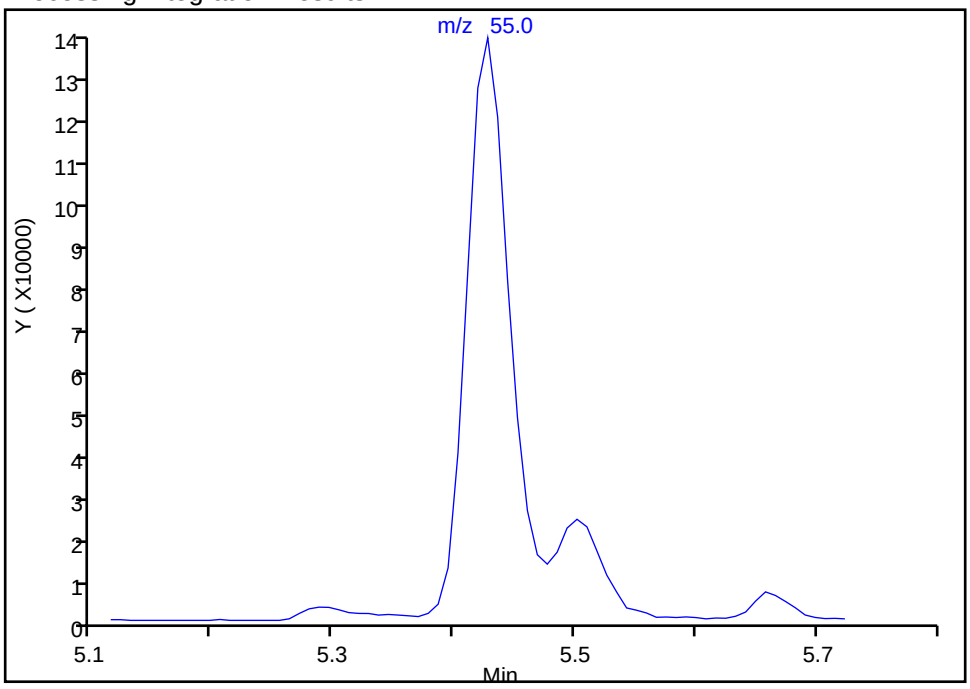
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Injection Date: 23-Nov-2021 21:13:30 Instrument ID: CVOAMS6
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

64 Ethyl acrylate, CAS: 140-88-5

Signal: 1

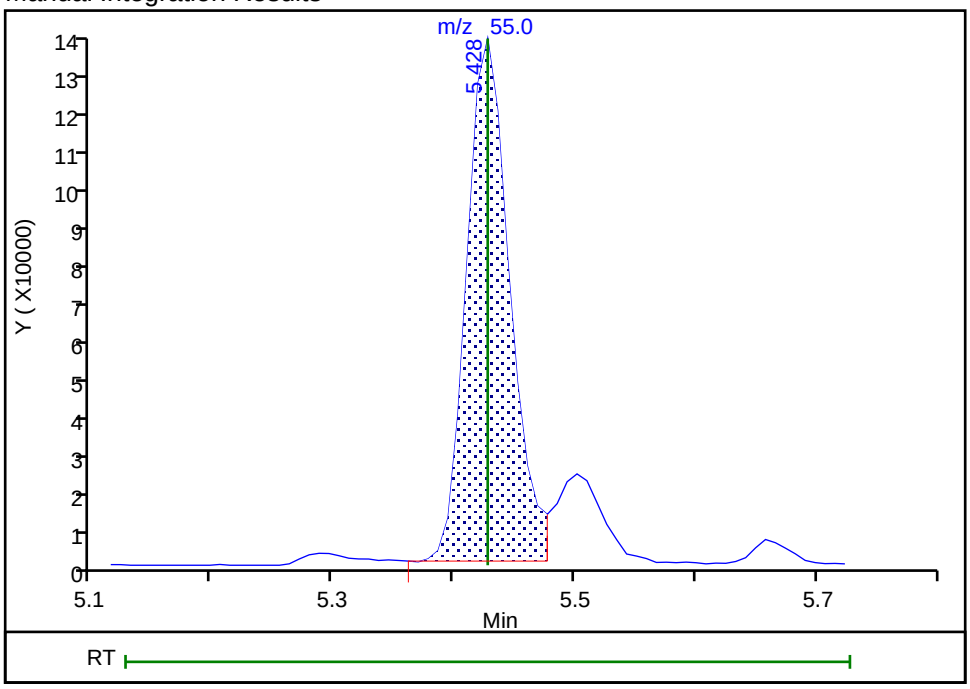
Not Detected
Expected RT: 5.43

Processing Integration Results



Manual Integration Results

RT: 5.43
Area: 331817
Amount: 16.672300
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:36:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

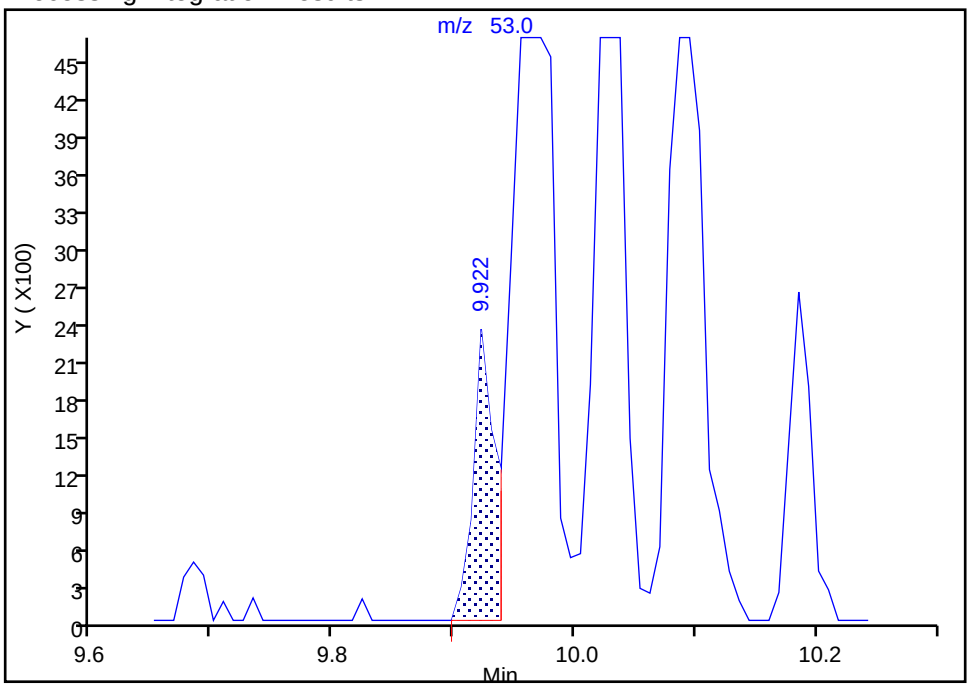
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22522.D
Injection Date: 23-Nov-2021 21:13:30 Instrument ID: CVOAMS6
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

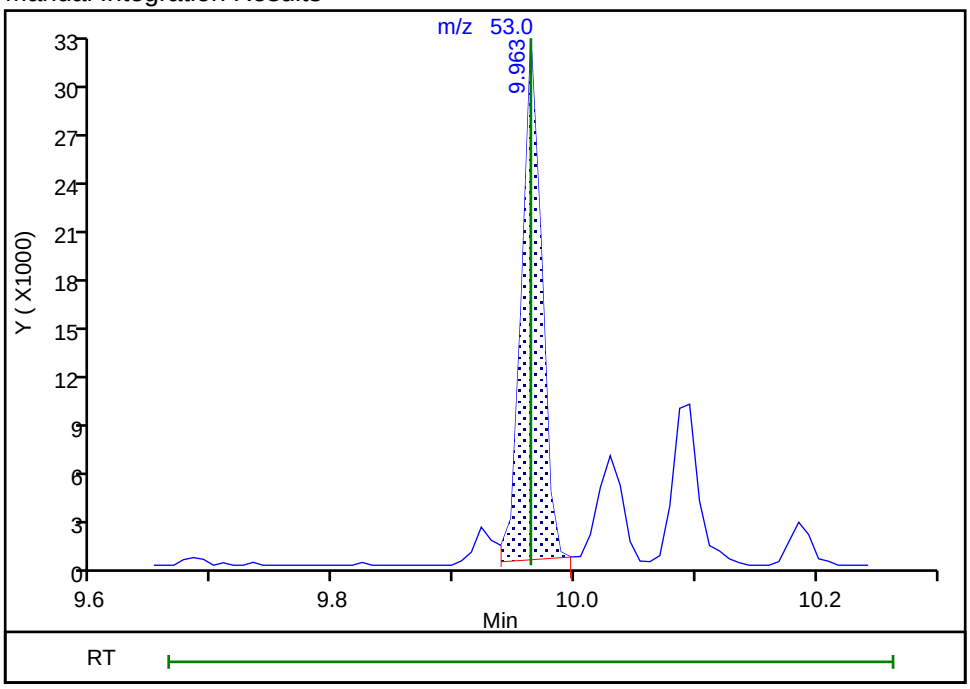
Processing Integration Results

RT: 9.92
Area: 3042
Amount: 1.435373
Amount Units: ug/l



Manual Integration Results

RT: 9.96
Area: 37187
Amount: 16.362229
Amount Units: ug/l



Reviewer: delpolitov, 24-Nov-2021 08:36:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823788/3 Calibration Date: 01/18/2022 06:37

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24962.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2859	0.2743	0.1000	19.2	20.0	-4.1	20.0
Chloromethane	Ave	0.4081	0.3242	0.1000	15.9	20.0	-20.5*	20.0
Butadiene	Ave	0.3288	0.2860		17.4	20.0	-13.0	20.0
Vinyl chloride	Ave	0.3615	0.3127	0.1000	17.3	20.0	-13.5	20.0
Bromomethane	Ave	0.1718	0.1777	0.1000	20.7	20.0	3.4	50.0
Chloroethane	Ave	0.1821	0.1715	0.1000	18.8	20.0	-5.8	50.0
Dichlorofluoromethane	Ave	0.4757	0.4230		17.8	20.0	-11.1	20.0
Trichlorofluoromethane	Ave	0.3649	0.3626	0.1000	19.9	20.0	-0.6	20.0
Pentane	Ave	1.913	1.791		37.5	40.0	-6.3	20.0
Ethanol	Ave	0.0397	0.0304		612	800	-23.5	50.0
Ethyl ether	Ave	0.2178	0.2001		18.4	20.0	-8.1	20.0
2-Methyl-1,3-butadiene	Ave	0.2524	0.2555		20.2	20.0	1.2	20.0
Acrolein	Ave	1.365	0.9310		27.7	40.6	-31.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2394	0.2480	0.1000	20.7	20.0	3.6	20.0
1,1-Dichloroethene	Ave	0.2449	0.2311	0.1000	18.9	20.0	-5.6	20.0
Acetone	Ave	0.5825	0.6373	0.0500	109	100	9.4	50.0
Iodomethane	Ave	0.3624	0.3671		20.3	20.0	1.3	20.0
Isopropyl alcohol	Ave	0.3959	0.2800		141	200	-29.3	50.0
Carbon disulfide	Ave	0.9487	0.8073	0.1000	17.0	20.0	-14.9	50.0
3-Chloro-1-propene	Ave	0.6227	0.6999		22.5	20.0	12.4	20.0
Methyl acetate	Ave	0.2593	0.2292	0.1000	35.4	40.0	-11.6	20.0
Cyclopentene	Ave	0.6690	0.6533		19.5	20.0	-2.3	20.0
Acetonitrile	Ave	1.238	1.331		215	200	7.5	20.0
Methylene Chloride	Ave	0.2856	0.2638	0.1000	18.5	20.0	-7.6	20.0
2-Methyl-2-propanol	Ave	1.004	1.001		199	200	-0.3	50.0
Methyl tert-butyl ether	Ave	0.7383	0.7193	0.1000	19.5	20.0	-2.6	20.0
trans-1,2-Dichloroethene	Ave	0.2644	0.2597	0.1000	19.6	20.0	-1.8	20.0
Acrylonitrile	Ave	0.1392	0.1115		160	200	-19.9	20.0
Hexane	Ave	0.3223	0.2984		18.5	20.0	-7.4	20.0
Isopropyl ether	Ave	0.8986	0.8153		18.1	20.0	-9.3	20.0
1,1-Dichloroethane	Ave	0.5142	0.4772	0.2000	18.6	20.0	-7.2	20.0
Vinyl acetate	Ave	0.0560	0.0569		40.7	40.0	1.7	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2432		20.5	20.0	2.6	20.0
Tert-butyl ethyl ether	Ave	0.7826	0.7514		19.2	20.0	-4.0	20.0
2,2-Dichloropropane	Ave	0.0858	0.0859		20.0	20.0	0.0	20.0
cis-1,2-Dichloroethene	Ave	0.2923	0.2788	0.1000	19.1	20.0	-4.6	20.0
2-Butanone (MEK)	Ave	0.2184	0.2429	0.0500	111	100	11.2	50.0
Ethyl acetate	Ave	0.1791	0.2251		50.3	40.0	25.7*	20.0
Methyl acrylate	Ave	0.3844	0.3177		16.5	20.0	-17.3	20.0
Propionitrile	Ave	1.593	1.632		205	200	2.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823788/3 Calibration Date: 01/18/2022 06:37

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24962.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobromomethane	Ave	0.1325	0.1340		20.2	20.0	1.1	20.0
Tetrahydrofuran	Ave	0.2613	0.2797		42.8	40.0	7.1	20.0
Methacrylonitrile	Ave	0.1309	0.1157		177	200	-11.6	20.0
Chloroform	Ave	0.4355	0.4268	0.2000	19.6	20.0	-2.0	20.0
1,1,1-Trichloroethane	Ave	0.3681	0.3746	0.1000	20.4	20.0	1.8	20.0
Cyclohexane	Ave	0.4481	0.4426	0.1000	19.8	20.0	-1.2	50.0
Carbon tetrachloride	Ave	0.3074	0.3130	0.1000	20.4	20.0	1.8	20.0
1,1-Dichloropropene	Ave	0.3608	0.3420		19.0	20.0	-5.2	20.0
Isobutyl alcohol	Ave	0.5564	0.6142		552	500	10.4	50.0
Benzene	Ave	1.439	1.364	0.5000	19.0	20.0	-5.2	20.0
Isopropyl acetate	Ave	0.8394	0.6054		14.4	20.0	-27.9*	20.0
Tert-amyl methyl ether	Ave	0.8825	0.8408		19.1	20.0	-4.7	20.0
1,2-Dichloroethane	Ave	0.3459	0.3301	0.1000	19.1	20.0	-4.6	20.0
n-Heptane	Ave	0.2310	0.2267		19.6	20.0	-1.8	20.0
n-Butanol	Ave	0.1784	0.1493		419	500	-16.3	50.0
Trichloroethene	Ave	0.2472	0.2315	0.2000	18.7	20.0	-6.3	20.0
Ethyl acrylate	Ave	0.7709	0.6866		17.8	20.0	-10.9	20.0
Methylcyclohexane	Ave	0.5005	0.4894	0.1000	19.6	20.0	-2.2	50.0
n-Propyl acetate	Ave	0.4891	0.2036		8.33	20.0	-58.4*	20.0
1,2-Dichloropropane	Ave	0.2816	0.2331	0.1000	16.6	20.0	-17.2	20.0
Methyl methacrylate	Ave	0.0751	0.0683		36.4	40.0	-9.1	20.0
Dibromomethane	Ave	0.1534	0.1418		18.5	20.0	-7.6	20.0
1,4-Dioxane	Ave	0.9502	0.8469		356	400	-10.9	50.0
Dichlorobromomethane	Ave	0.3146	0.2974	0.2000	18.9	20.0	-5.5	20.0
2-Nitropropane	Ave	0.0891	0.0753		33.8	40.0	-15.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1725	0.1437		16.7	20.0	-16.7	20.0
Epichlorohydrin	Ave	0.1849	0.2041		441	400	10.4	20.0
cis-1,3-Dichloropropene	Ave	0.5507	0.5424	0.2000	19.7	20.0	-1.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.999	2.070	0.0500	104	100	3.5	50.0
Toluene	Ave	1.406	1.391	0.4000	19.8	20.0	-1.0	20.0
trans-1,3-Dichloropropene	Ave	0.4942	0.4928	0.1000	19.9	20.0	-0.3	50.0
Ethyl methacrylate	Ave	0.4536	0.4203		18.5	20.0	-7.3	20.0
1,1,2-Trichloroethane	Ave	0.2509	0.2401	0.1000	19.1	20.0	-4.3	20.0
Tetrachloroethene	Ave	0.2871	0.3249	0.2000	22.6	20.0	13.2	20.0
1,3-Dichloropropane	Ave	0.5302	0.4987		18.8	20.0	-5.9	20.0
2-Hexanone	Ave	1.301	1.302	0.0500	100	100	0.0	50.0
n-Butyl acetate	Ave	0.6917	0.5652		16.3	20.0	-18.3	20.0
Chlorodibromomethane	Ave	0.2793	0.2790	0.1000	20.0	20.0	-0.1	50.0
Ethylene Dibromide	Ave	0.2879	0.2859	0.1000	19.9	20.0	-0.7	20.0
Chlorobenzene	Ave	0.8459	0.8857	0.5000	20.9	20.0	4.7	20.0
Ethylbenzene	Ave	0.4609	0.4884	0.1000	21.2	20.0	6.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823788/3 Calibration Date: 01/18/2022 06:37

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24962.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1,2-Tetrachloroethane	Ave	0.2968	0.3216		21.7	20.0	8.3	20.0
m-Xylene & p-Xylene	Ave	0.5672	0.6108	0.1000	21.5	20.0	7.7	20.0
o-Xylene	Ave	0.5689	0.6027	0.3000	21.2	20.0	5.9	20.0
n-Butyl acrylate	Ave	0.2728	0.2533		18.6	20.0	-7.2	20.0
Styrene	Ave	0.9329	0.9540	0.3000	20.5	20.0	2.3	20.0
Bromoform	Ave	0.1809	0.1934	0.1000	21.4	20.0	6.9	20.0
Amyl acetate (mixed isomers)	Ave	1.530	1.187		15.5	20.0	-22.4*	20.0
Isopropylbenzene	Ave	1.501	1.631	0.1000	21.7	20.0	8.6	20.0
Bromobenzene	Ave	0.6401	0.6693		20.9	20.0	4.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8138	0.7161	0.3000	17.6	20.0	-12.0	20.0
N-Propylbenzene	Ave	3.490	3.429		19.6	20.0	-1.8	20.0
1,2,3-Trichloropropane	Ave	0.2300	0.2223		19.3	20.0	-3.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2279	0.1977		17.4	20.0	-13.2	20.0
2-Chlorotoluene	Ave	2.331	2.343		20.1	20.0	0.5	20.0
4-Ethyltoluene	Ave	2.737	2.907		21.2	20.0	6.2	20.0
1,3,5-Trimethylbenzene	Ave	2.305	2.398		20.8	20.0	4.0	20.0
4-Chlorotoluene	Ave	2.189	2.236		20.4	20.0	2.1	20.0
Butyl Methacrylate	Ave	0.8226	0.7449		18.1	20.0	-9.4	20.0
tert-Butylbenzene	Ave	1.926	2.048		21.3	20.0	6.4	20.0
1,2,4-Trimethylbenzene	Ave	2.417	2.509		20.8	20.0	3.8	20.0
sec-Butylbenzene	Ave	3.027	3.227		21.3	20.0	6.6	20.0
1,3-Dichlorobenzene	Ave	1.255	1.344	0.6000	21.4	20.0	7.1	20.0
4-Isopropyltoluene	Ave	2.561	2.804		21.9	20.0	9.5	20.0
1,4-Dichlorobenzene	Ave	1.293	1.375	0.5000	21.3	20.0	6.4	20.0
1,2,3-Trimethylbenzene	Ave	2.525	2.694		21.3	20.0	6.7	20.0
Benzyl chloride	Ave	1.584	1.625		20.5	20.0	2.6	50.0
Indan	Ave	2.399	2.525		21.1	20.0	5.3	20.0
p-Diethylbenzene	Ave	1.401	1.476		21.1	20.0	5.3	20.0
n-Butylbenzene	Ave	1.469	1.519		20.7	20.0	3.4	20.0
1,2-Dichlorobenzene	Ave	1.293	1.358	0.4000	21.0	20.0	5.0	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.457	2.717		22.1	20.0	10.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1728	0.1659	0.0500	19.2	20.0	-4.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9547	1.058		22.2	20.0	10.8	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.996	0.2000	21.4	20.0	7.2	20.0
Hexachlorobutadiene	Ave	0.3385	0.3524		20.8	20.0	4.1	20.0
Naphthalene	Ave	2.623	2.686		20.5	20.0	2.4	50.0
1,2,3-Trichlorobenzene	Ave	0.8486	0.8953		21.1	20.0	5.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2576	0.2344		45.5	50.0	-9.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3307	0.2898		43.8	50.0	-12.4	20.0
Toluene-d8 (Surr)	Ave	1.361	1.266		46.5	50.0	-7.0	20.0
4-Bromofluorobenzene	Ave	0.3550	0.3627		51.1	50.0	2.2	20.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Jan-2022 06:37:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0140330-003
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub54

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:52:33 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 06:59:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	32	144268	20.0	19.2	
2 Chloromethane	50	1.648	1.648	0.000	36	170553	20.0	15.9	
4 Butadiene	54	1.714	1.714	0.000	37	150430	20.0	17.4	
3 Vinyl chloride	62	1.714	1.714	0.000	28	164478	20.0	17.3	
5 Bromomethane	94	1.977	1.977	0.000	99	93469	20.0	20.7	a
6 Chloroethane	64	2.026	2.026	0.000	40	90218	20.0	18.8	
7 Dichlorofluoromethane	67	2.166	2.166	0.000	34	222497	20.0	17.8	
9 Trichlorofluoromethane	101	2.182	2.182	0.000	63	190736	20.0	19.9	
8 Pentane	72	2.232	2.232	0.000	37	46435	40.0	37.5	
10 Ethanol	46	2.363	2.363	0.000	33	15746	800.0	612.3	
11 Ethyl ether	59	2.371	2.371	0.000	20	105271	20.0	18.4	
12 2-Methyl-1,3-butadiene	53	2.412	2.412	0.000	53	134380	20.0	20.2	
15 Acrolein	56	2.527	2.527	0.000	27	24472	40.6	27.7	a
16 112TCTFE	101	2.544	2.544	0.000	40	130426	20.0	20.7	
17 1,1-Dichloroethene	96	2.560	2.560	0.000	37	121584	20.0	18.9	
18 Acetone	43	2.642	2.642	0.000	39	216764	100.0	109.4	
19 Iodomethane	142	2.700	2.700	0.000	33	193097	20.0	20.3	
20 Isopropyl alcohol	45	2.716	2.716	0.000	37	36284	200.0	141.4	
21 Carbon disulfide	76	2.725	2.725	0.000	21	424615	20.0	17.0	
23 Methyl acetate	43	2.848	2.848	0.000	88	241164	40.0	35.4	a
22 3-Chloro-1-propene	41	2.848	2.848	0.000	44	368140	20.0	22.5	
24 Cyclopentene	67	2.864	2.864	0.000	68	343653	20.0	19.5	
* 26 TBA-d9 (IS)	65	2.946	2.946	0.000	0	648036	1000.0	1000.0	
25 Acetonitrile	41	2.897	2.897	0.000	19	172460	200.0	214.9	Ma
27 Methylene Chloride	84	2.963	2.963	0.000	29	138757	20.0	18.5	
28 2-Methyl-2-propanol	59	3.004	3.004	0.000	91	129701	200.0	199.3	a
29 Methyl tert-butyl ether	73	3.094	3.094	0.000	38	378352	20.0	19.5	
30 trans-1,2-Dichloroethene	96	3.127	3.127	0.000	38	136586	20.0	19.6	
31 Acrylonitrile	53	3.185	3.185	0.000	48	586676	200.0	160.2	
32 Hexane	43	3.267	3.267	0.000	94	156961	20.0	18.5	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.448	3.448	0.000	96	428827	20.0	18.1	
35 Vinyl acetate	86	3.489	3.489	0.000	27	59850	40.0	40.7	
34 1,1-Dichloroethane	63	3.489	3.489	0.000	45	251005	20.0	18.6	
36 2-Chloro-1,3-butadiene	88	3.522	3.522	0.000	45	127924	20.0	20.5	
37 Tert-butyl ethyl ether	59	3.743	3.743	0.000	37	395221	20.0	19.2	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	850284	250.0	250.0	
39 2,2-Dichloropropane	97	3.932	3.932	0.000	43	45169	20.0	20.0	
40 cis-1,2-Dichloroethene	96	3.974	3.974	0.000	27	146654	20.0	19.1	
41 2-Butanone (MEK)	72	3.982	3.982	0.000	41	82624	100.0	111.2	
42 Ethyl acetate	70	3.982	3.982	0.000	26	30627	40.0	50.3	
43 Methyl acrylate	55	4.023	4.023	0.000	99	121083	20.0	16.5	a
44 Propionitrile	54	4.097	4.097	0.000	32	211535	200.0	204.9	
46 Tetrahydrofuran	72	4.179	4.179	0.000	66	38056	40.0	42.8	a
45 Chlorobromomethane	128	4.179	4.179	0.000	33	70491	20.0	20.2	
47 Methacrylonitrile	67	4.187	4.187	0.000	43	608411	200.0	176.7	
48 Chloroform	83	4.228	4.228	0.000	33	224507	20.0	19.6	
50 1,1,1-Trichloroethane	97	4.360	4.360	0.000	84	197015	20.0	20.4	
49 Cyclohexane	84	4.360	4.360	0.000	43	232791	20.0	19.8	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	30	308270	50.0	45.5	
52 Carbon tetrachloride	117	4.483	4.483	0.000	30	164647	20.0	20.4	
53 1,1-Dichloropropene	75	4.491	4.491	0.000	36	179900	20.0	19.0	
54 Isobutyl alcohol	43	4.647	4.647	0.000	28	198999	500.0	551.9	
55 Benzene	78	4.680	4.680	0.000	52	519696	20.0	19.0	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.697	4.697	0.000	0	381123	50.0	43.8	
57 Isopropyl acetate	43	4.738	4.738	0.000	39	318430	20.0	14.4	
58 Tert-amyl methyl ether	73	4.746	4.746	0.000	79	442241	20.0	19.1	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	46	173636	20.0	19.1	
60 n-Heptane	57	4.828	4.828	0.000	92	119267	20.0	19.6	a
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1315002	50.0	50.0	
63 Trichloroethene	95	5.288	5.288	0.000	42	121792	20.0	18.7	
62 n-Butanol	56	5.288	5.288	0.000	38	48392	500.0	418.5	
64 Ethyl acrylate	55	5.412	5.412	0.000	37	361130	20.0	17.8	
65 Methylcyclohexane	83	5.412	5.412	0.000	36	257419	20.0	19.6	
71 n-Propyl acetate	43	5.477	5.477	0.000	37	107100	20.0	8.33	a
66 1,2-Dichloropropane	63	5.568	5.568	0.000	37	122635	20.0	16.6	
68 Methyl methacrylate	100	5.650	5.650	0.000	36	71815	40.0	36.4	
70 Dibromomethane	93	5.691	5.691	0.000	20	74599	20.0	18.5	
* 67 1,4-Dioxane-d8	96	5.691	5.691	0.000	0	51008	1000.0	1000.0	
69 1,4-Dioxane	88	5.707	5.707	0.000	28	17279	400.0	356.5	a
72 Dichlorobromomethane	83	5.839	5.839	0.000	99	156414	20.0	18.9	a
73 2-Nitropropane	41	6.159	6.159	0.000	34	79242	40.0	33.8	
74 2-Chloroethyl vinyl ether	63	6.167	6.167	0.000	26	75763	20.0	16.7	
75 Epichlorohydrin	57	6.266	6.266	0.000	99	277675	400.0	441.5	a
76 cis-1,3-Dichloropropene	75	6.324	6.324	0.000	41	206703	20.0	19.7	
77 4-Methyl-2-pentanone (MIBK)	43	6.488	6.488	0.000	36	703964	100.0	103.5	
$ 78 Toluene-d8 (Surr)	98	6.562	6.562	0.000	36	1205833	50.0	46.5	
79 Toluene	91	6.636	6.636	0.000	94	530238	20.0	19.8	a
80 trans-1,3-Dichloropropene	75	6.981	6.981	0.000	22	187800	20.0	19.9	
81 Ethyl methacrylate	69	7.014	7.014	0.000	37	160166	20.0	18.5	
82 1,1,2-Trichloroethane	83	7.186	7.186	0.000	95	91493	20.0	19.1	a
83 Tetrachloroethene	166	7.227	7.227	0.000	75	123838	20.0	22.6	
84 1,3-Dichloropropane	76	7.392	7.392	0.000	35	190045	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43	7.458	7.458	0.000	76	442699	100.0	100.1	
86 n-Butyl acetate	43	7.581	7.581	0.000	38	215379	20.0	16.3	
87 Chlorodibromomethane	129	7.614	7.614	0.000	41	106316	20.0	20.0	
88 Ethylene Dibromide	107	7.762	7.762	0.000	44	108954	20.0	19.9	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	86	952747	50.0	50.0	a
90 Chlorobenzene	112	8.337	8.337	0.000	35	337531	20.0	20.9	
91 Ethylbenzene	106	8.444	8.444	0.000	45	186144	20.0	21.2	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	44	122550	20.0	21.7	
93 m-Xylene & p-Xylene	106	8.600	8.600	0.000	31	232773	20.0	21.5	
95 o-Xylene	106	9.117	9.117	0.000	45	229692	20.0	21.2	
94 n-Butyl acrylate	73	9.126	9.126	0.000	98	96538	20.0	18.6	a
96 Styrene	104	9.150	9.150	0.000	95	363564	20.0	20.5	a
98 Bromoform	173	9.380	9.380	0.000	27	73702	20.0	21.4	
97 Amyl acetate (mixed isomers)	43	9.389	9.389	0.000	29	253773	20.0	15.5	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	621464	20.0	21.7	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	345528	50.0	51.1	
101 Bromobenzene	156	9.840	9.840	0.000	39	143042	20.0	20.9	
102 1,1,2,2-Tetrachloroethane	83	9.898	9.898	0.000	43	153040	20.0	17.6	
103 N-Propylbenzene	91	9.914	9.914	0.000	33	732867	20.0	19.6	
104 1,2,3-Trichloropropane	110	9.931	9.931	0.000	35	47517	20.0	19.3	
105 trans-1,4-Dichloro-2-butene	53	9.955	9.955	0.000	86	42264	20.0	17.4	a
106 2-Chlorotoluene	91	10.005	10.005	0.000	97	500746	20.0	20.1	a
107 4-Ethyltoluene	105	10.021	10.021	0.000	75	621385	20.0	21.2	
108 1,3,5-Trimethylbenzene	105	10.079	10.079	0.000	93	512411	20.0	20.8	a
109 4-Chlorotoluene	91	10.112	10.112	0.000	38	477899	20.0	20.4	
110 Butyl Methacrylate	87	10.177	10.177	0.000	94	159207	20.0	18.1	a
111 tert-Butylbenzene	119	10.325	10.325	0.000	18	437747	20.0	21.3	
112 1,2,4-Trimethylbenzene	105	10.383	10.383	0.000	36	536189	20.0	20.8	
113 sec-Butylbenzene	105	10.498	10.498	0.000	22	689804	20.0	21.3	
115 1,3-Dichlorobenzene	146	10.605	10.605	0.000	15	287150	20.0	21.4	
114 4-Isopropyltoluene	119	10.605	10.605	0.000	33	599197	20.0	21.9	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	534318	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.670	10.670	0.000	40	293948	20.0	21.3	
118 1,2,3-Trimethylbenzene	105	10.695	10.695	0.000	32	575816	20.0	21.3	
119 Benzyl chloride	91	10.777	10.777	0.000	91	347259	20.0	20.5	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	23	539648	20.0	21.1	
121 p-Diethylbenzene	119	10.876	10.876	0.000	21	315438	20.0	21.1	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	324714	20.0	20.7	
123 1,2-Dichlorobenzene	146	10.933	10.933	0.000	34	290167	20.0	21.0	
124 1,2,4,5-Tetramethylbenzene	119	11.361	11.361	0.000	98	580763	20.0	22.1	a
125 1,2-Dibromo-3-Chloropropane	157	11.426	11.426	0.000	95	35448	20.0	19.2	a
126 1,3,5-Trichlorobenzene	180	11.517	11.517	0.000	27	226115	20.0	22.2	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	38	212770	20.0	21.4	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	92	75317	20.0	20.8	a
129 Naphthalene	128	12.043	12.043	0.000	29	574080	20.0	20.5	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	191354	20.0	21.1	
S 131 1,2-Dichloroethene, Total	100				0		40.0	38.7	
S 133 Total BTEX	1				0		100.0	102.7	
S 132 Xylenes, Total	100				0		40.0	42.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00458	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 19-Jan-2022 10:52:34 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D

Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6 Operator ID:

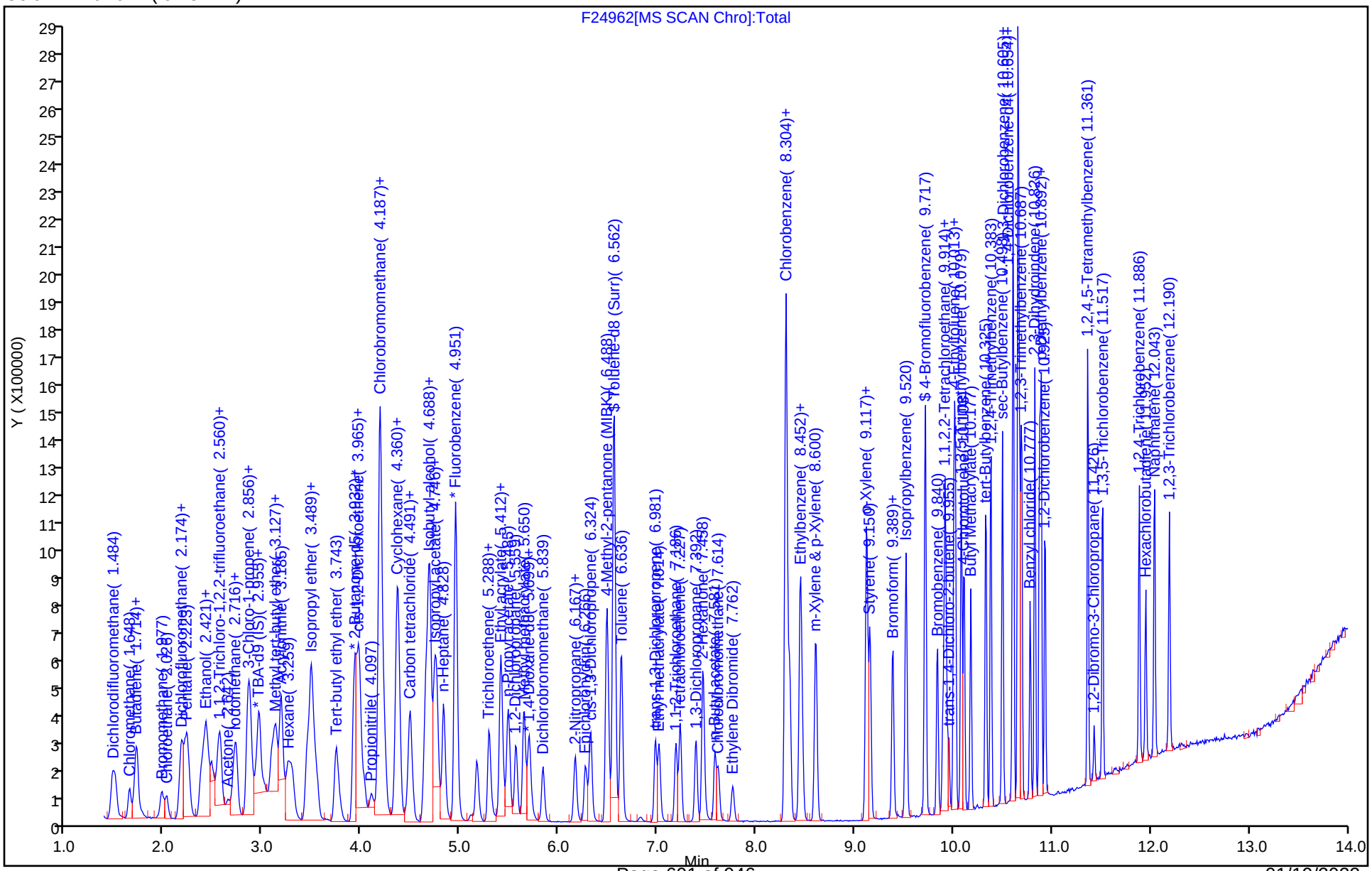
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Edison

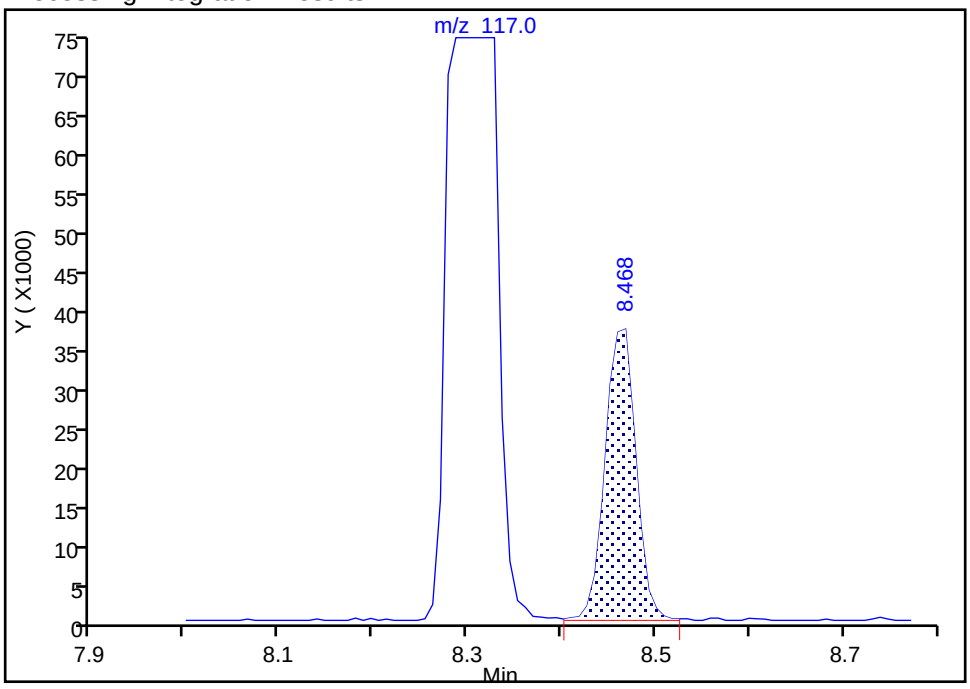
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 89 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 1

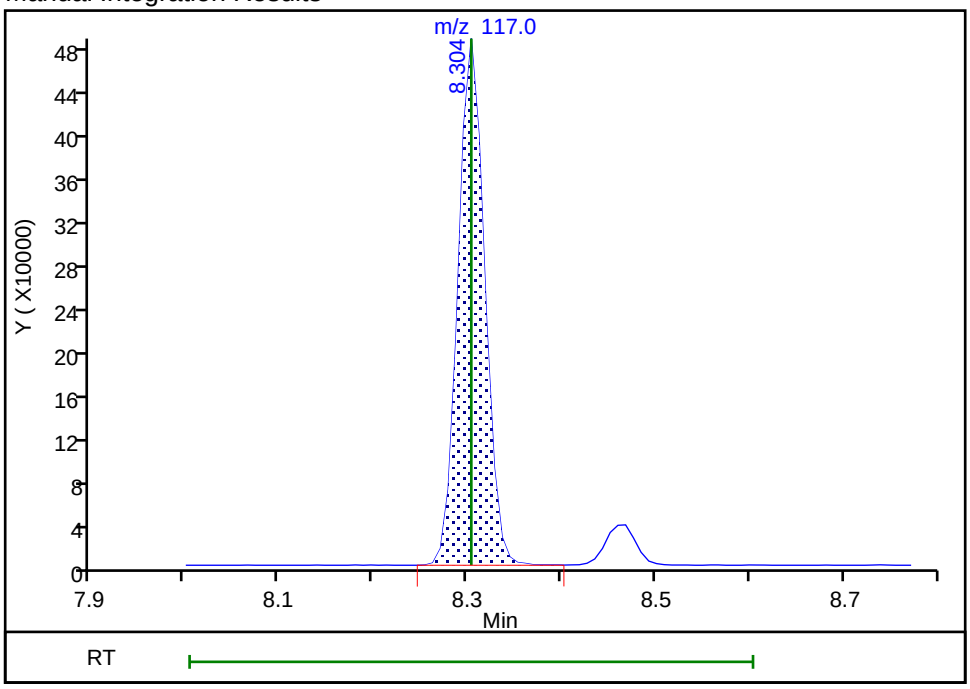
Processing Integration Results

RT: 8.47
Area: 84811
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 8.30
Area: 952747
Amount: 50.000000
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:54:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

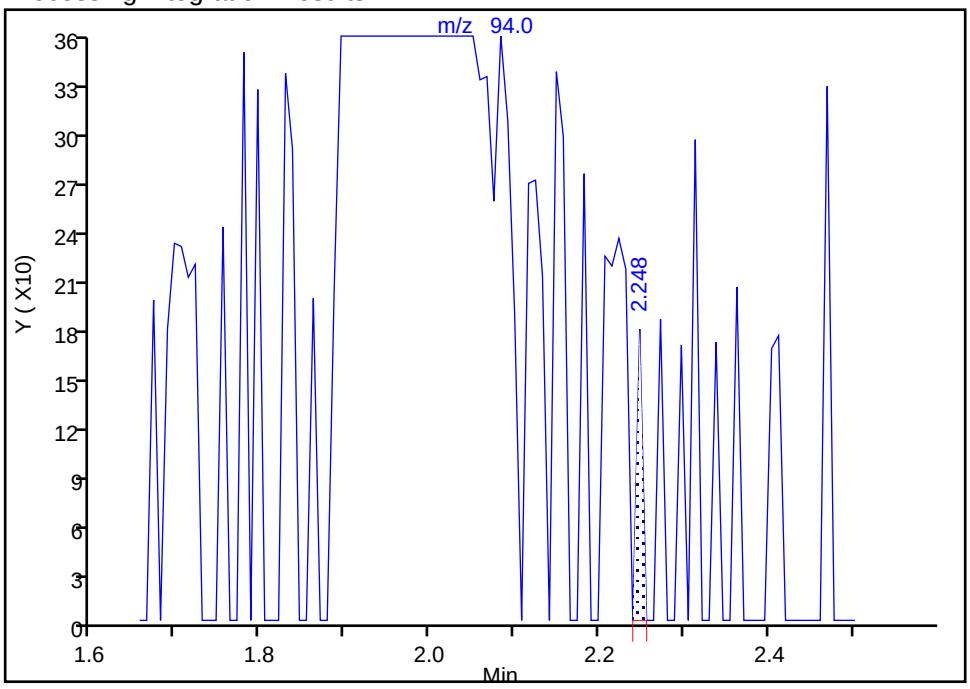
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Bromomethane, CAS: 74-83-9

Signal: 1

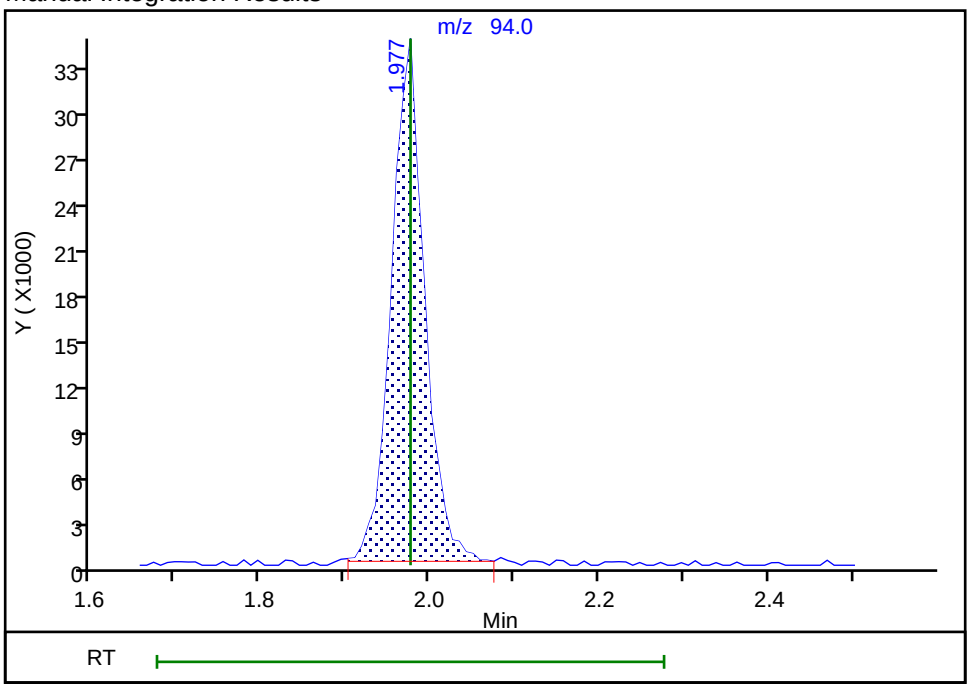
Processing Integration Results

RT: 2.25
Area: 89
Amount: 0.019699
Amount Units: ug/l



Manual Integration Results

RT: 1.98
Area: 93469
Amount: 20.687838
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:55:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

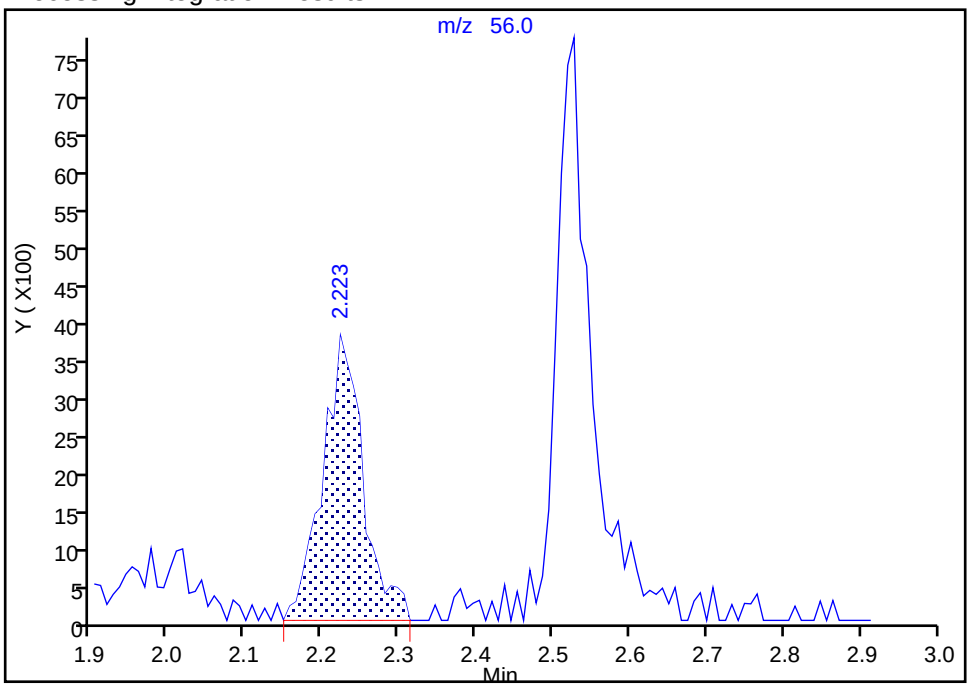
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

15 Acrolein, CAS: 107-02-8

Signal: 1

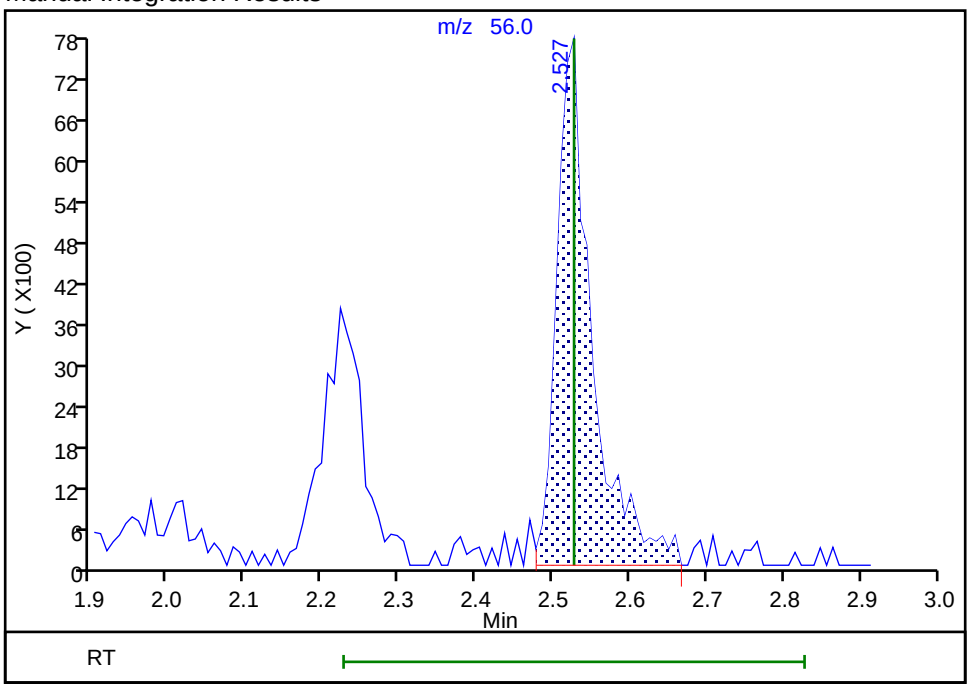
Processing Integration Results

RT: 2.22
Area: 13771
Amount: 15.573667
Amount Units: ug/l



Manual Integration Results

RT: 2.53
Area: 24472
Amount: 27.675461
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:59:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

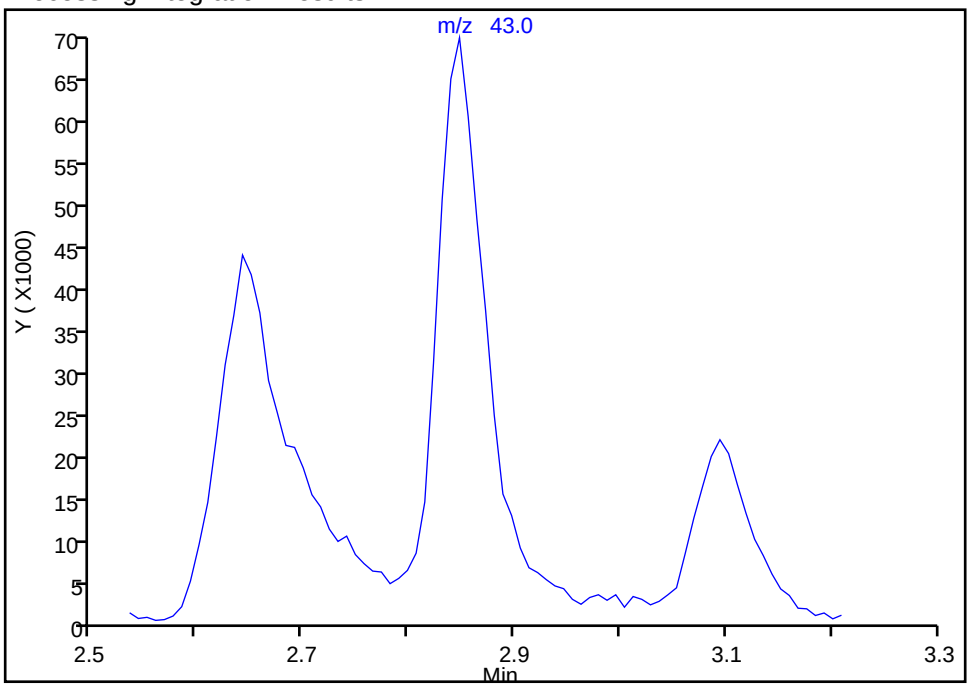
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

23 Methyl acetate, CAS: 79-20-9

Signal: 1

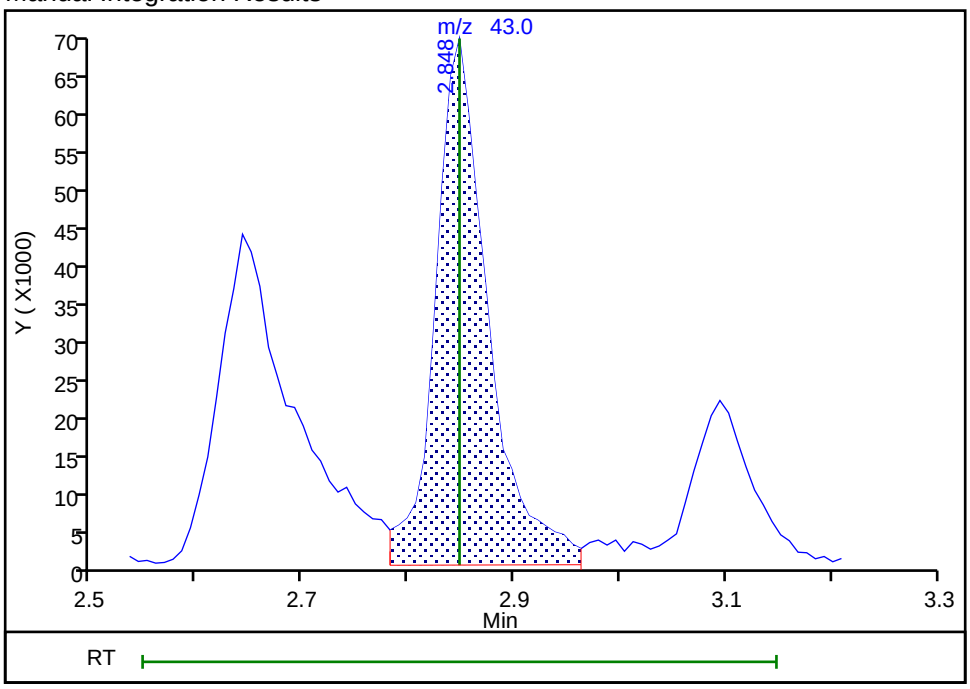
Not Detected
Expected RT: 2.85

Processing Integration Results



Manual Integration Results

RT: 2.85
Area: 241164
Amount: 35.356885
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:55:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

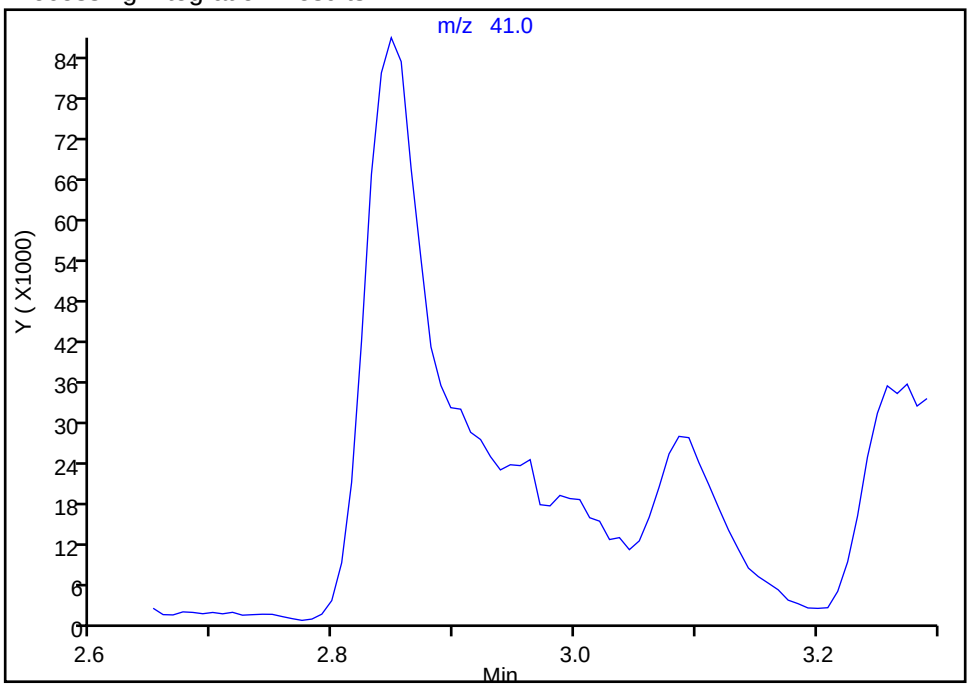
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

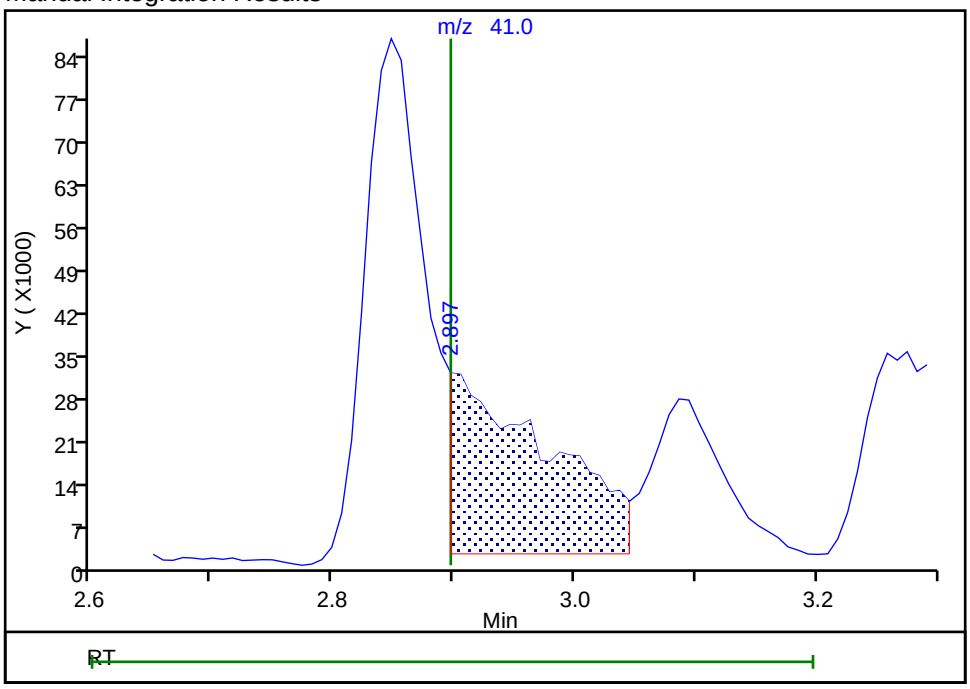
Not Detected
Expected RT: 2.90

Processing Integration Results



Manual Integration Results

RT: 2.90
Area: 172460
Amount: 214.9431
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:51:59
Audit Action: Manually Integrated Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

Eurofins Edison

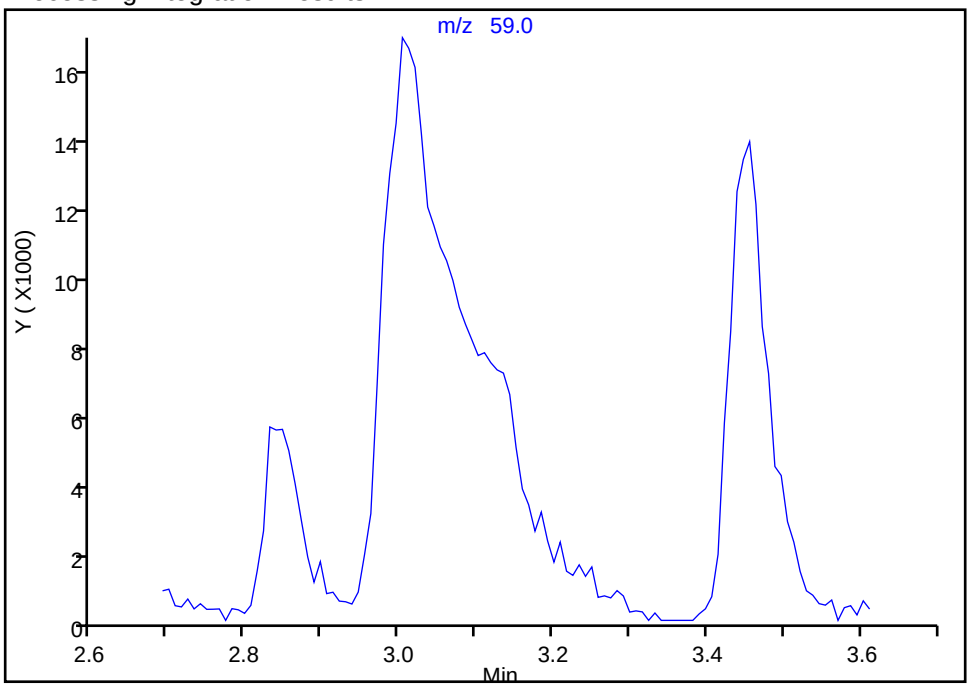
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

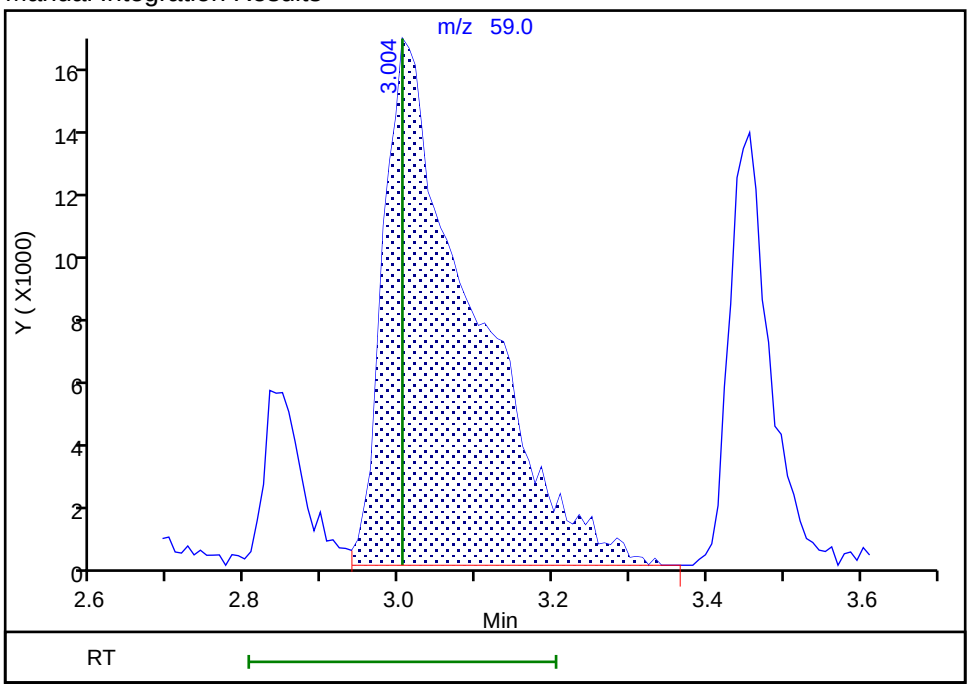
Not Detected
Expected RT: 3.00

Processing Integration Results



Manual Integration Results

RT: 3.00
Area: 129701
Amount: 199.3423
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:55:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

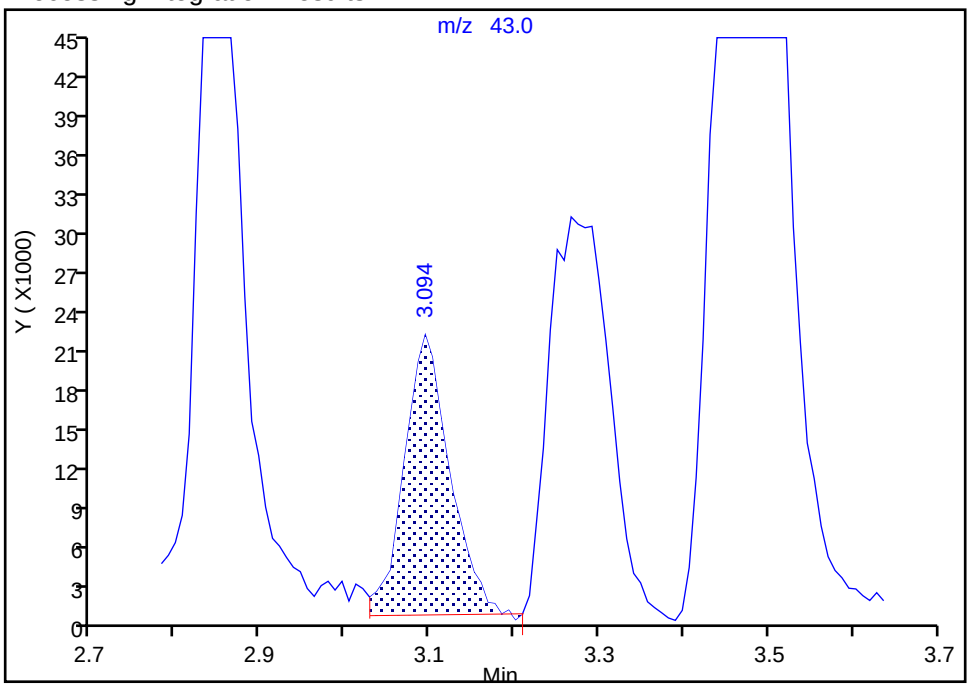
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

32 Hexane, CAS: 110-54-3

Signal: 1

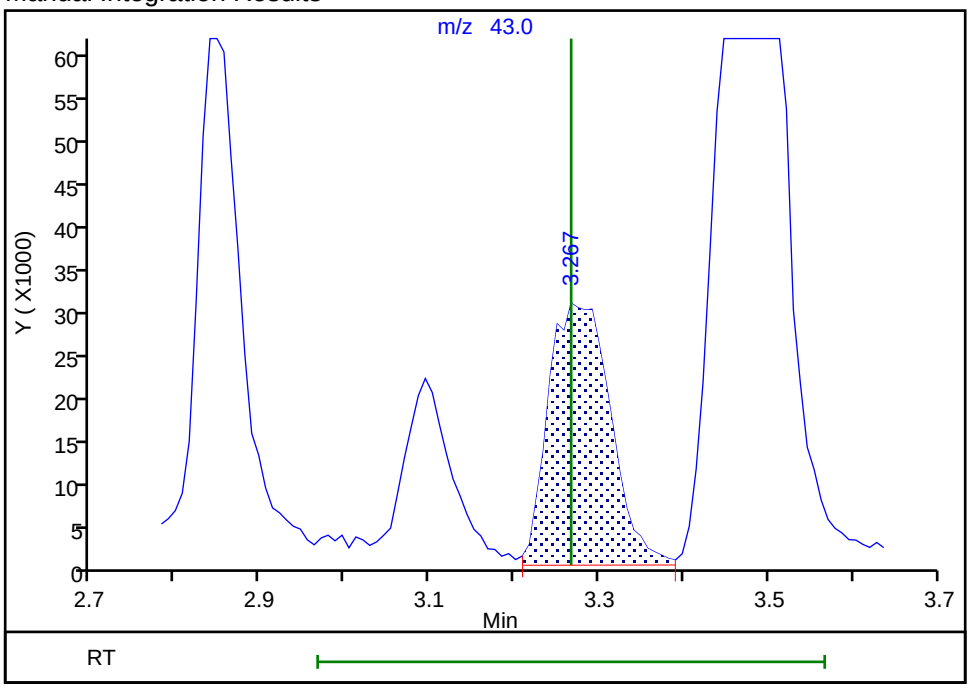
Processing Integration Results

RT: 3.09
Area: 78018
Amount: 9.203322
Amount Units: ug/l



Manual Integration Results

RT: 3.27
Area: 156961
Amount: 18.515761
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:55:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

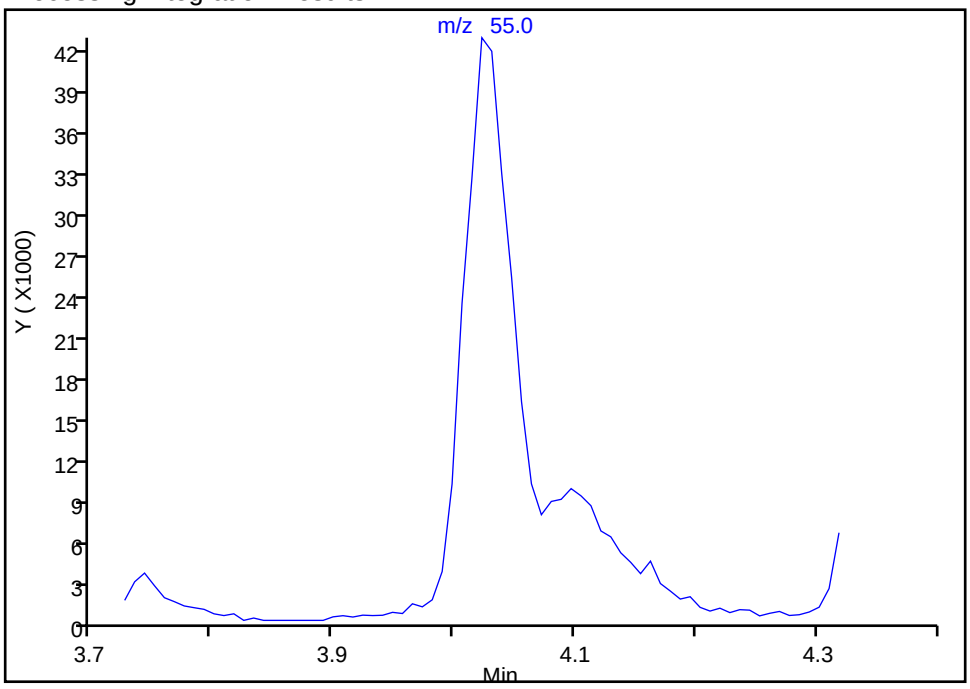
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

43 Methyl acrylate, CAS: 96-33-3

Signal: 1

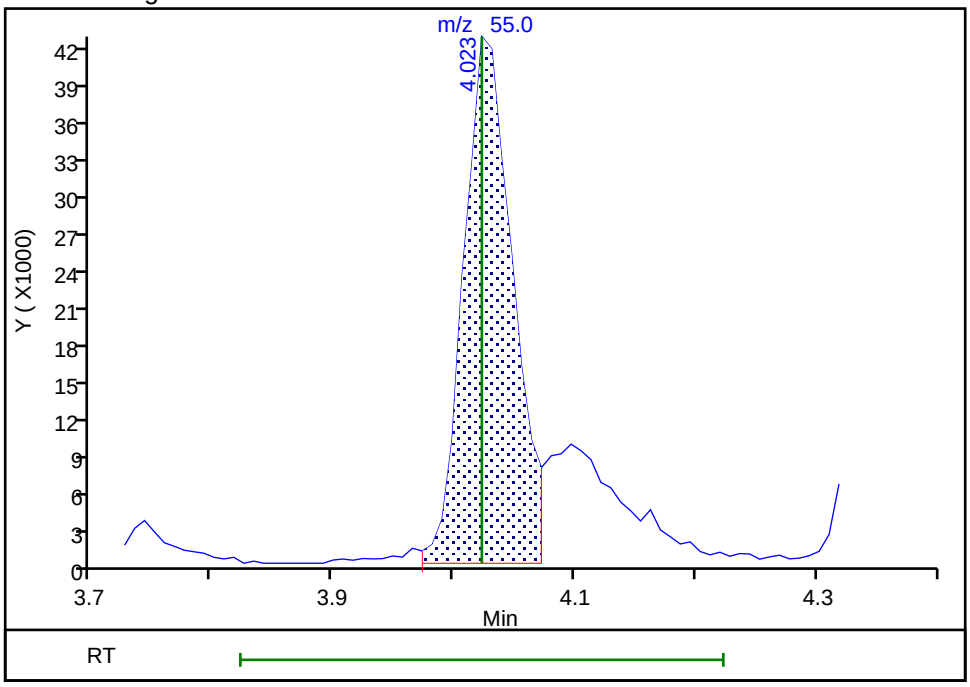
Not Detected
Expected RT: 4.02

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 121083
Amount: 16.531824
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:55:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

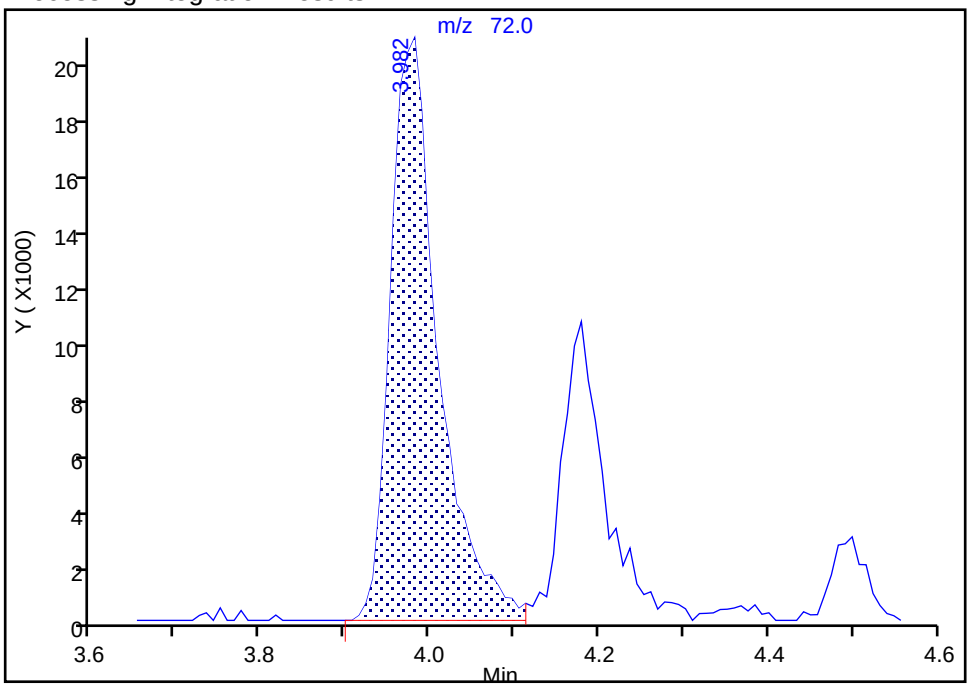
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

46 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

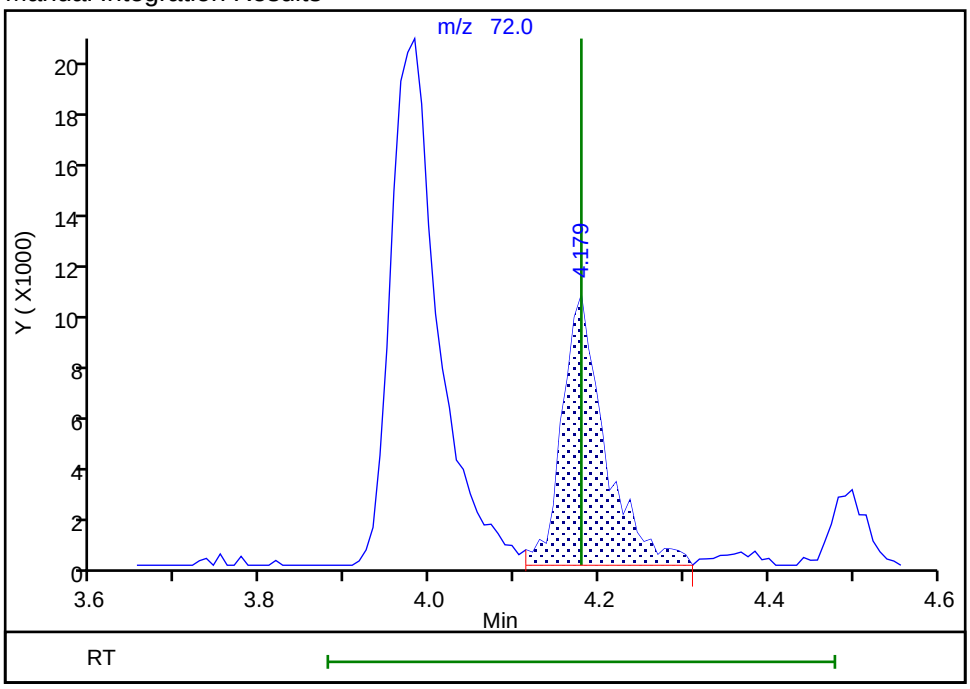
Processing Integration Results

RT: 3.98
Area: 82376
Amount: 92.699966
Amount Units: ug/l



Manual Integration Results

RT: 4.18
Area: 38056
Amount: 42.825458
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:58:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

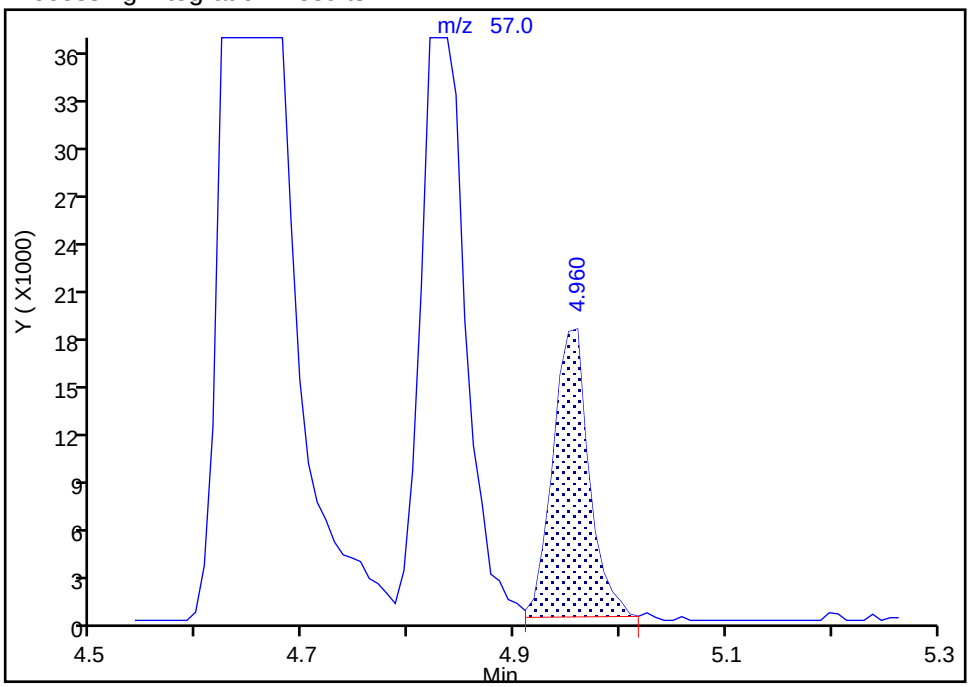
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 n-Heptane, CAS: 142-82-5

Signal: 1

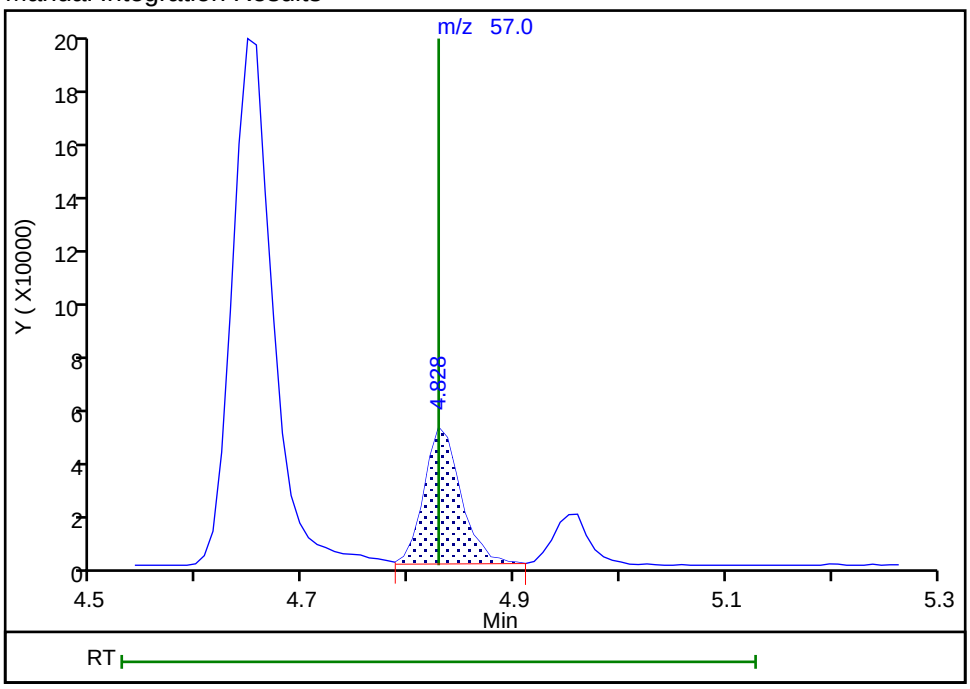
Processing Integration Results

RT: 4.96
Area: 43413
Amount: 7.147255
Amount Units: ug/l



Manual Integration Results

RT: 4.83
Area: 119267
Amount: 19.635400
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

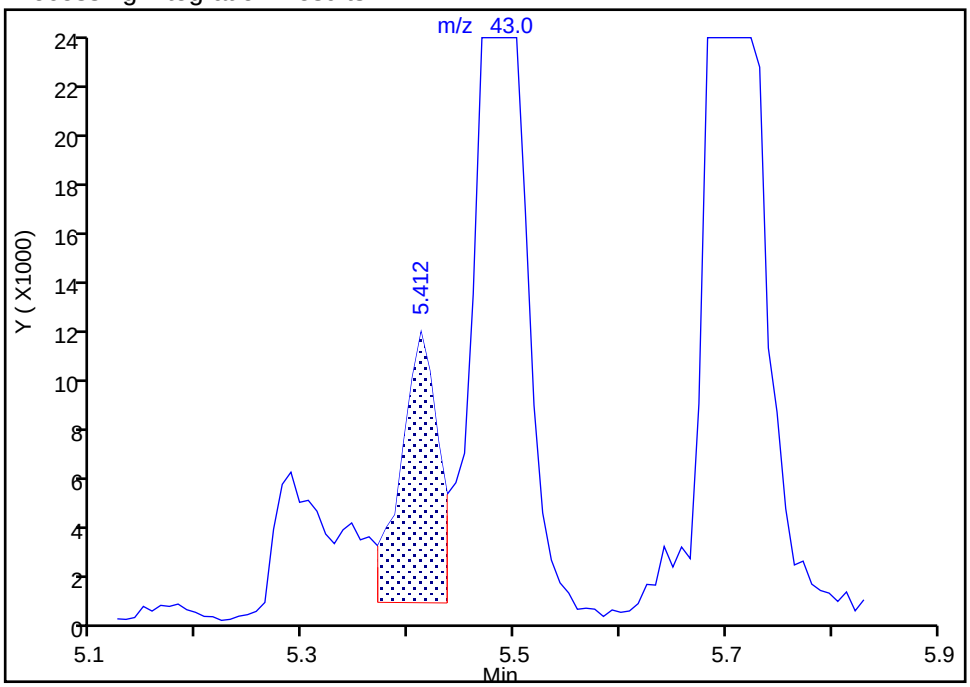
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

71 n-Propyl acetate, CAS: 109-60-4

Signal: 1

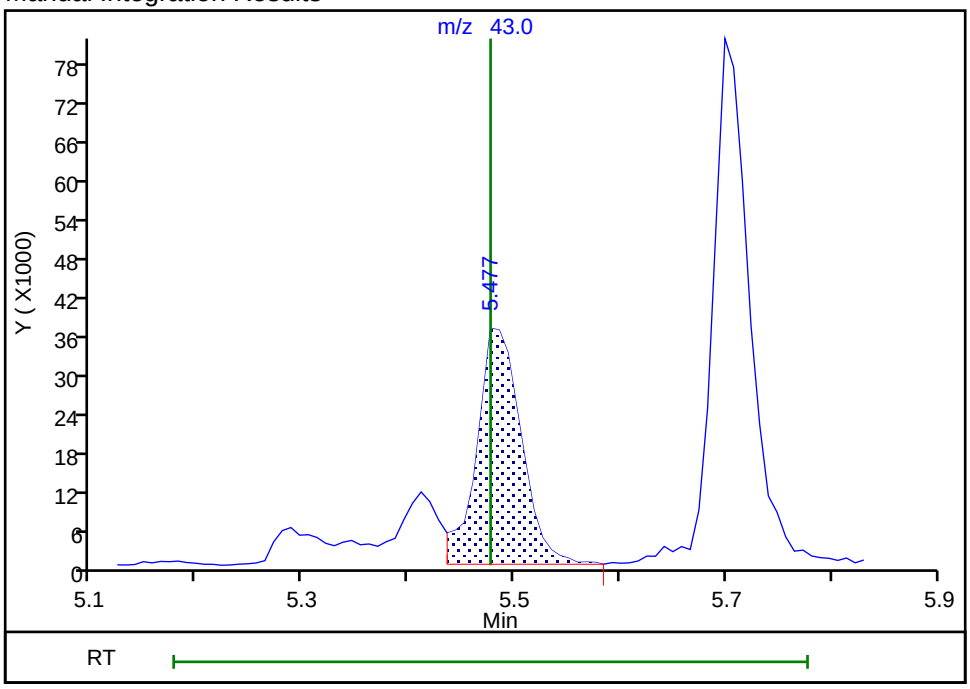
Processing Integration Results

RT: 5.41
Area: 26735
Amount: 2.078390
Amount Units: ug/l



Manual Integration Results

RT: 5.48
Area: 107100
Amount: 8.325998
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

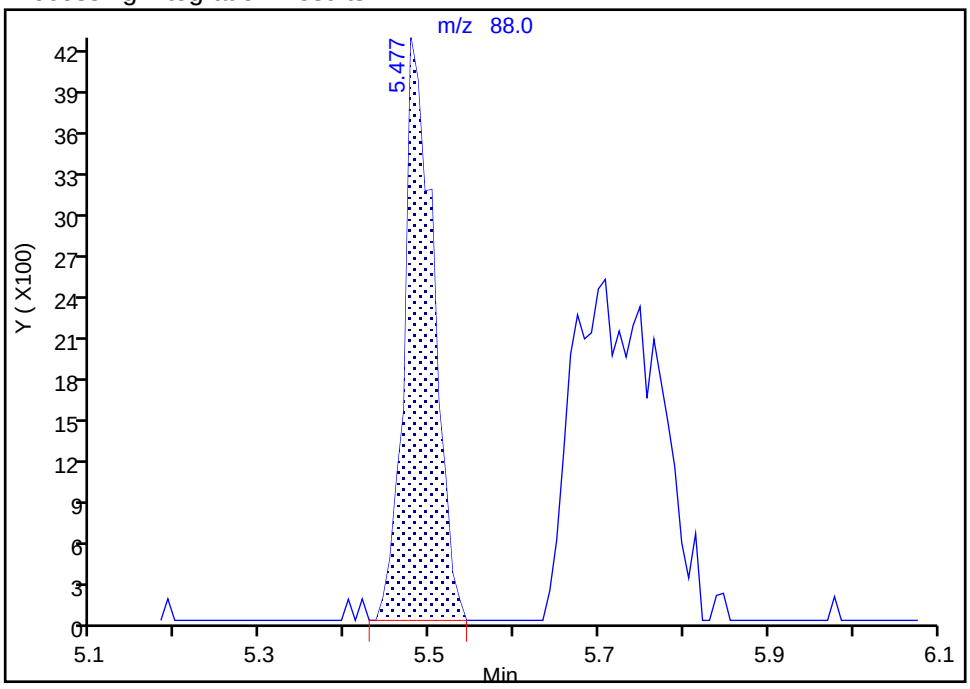
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

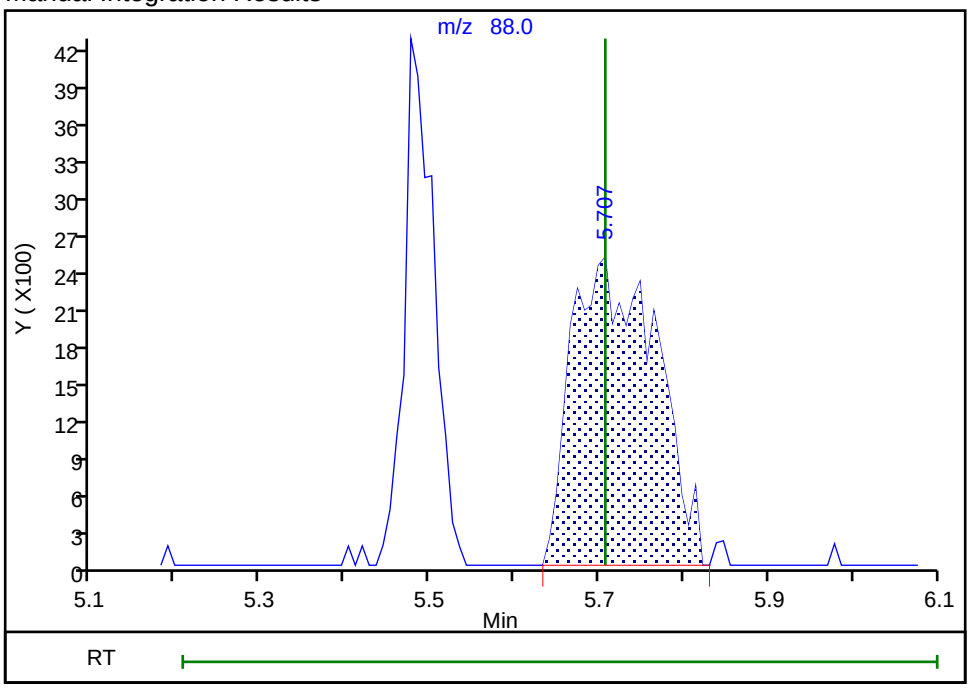
Processing Integration Results

RT: 5.48
Area: 10233
Amount: 211.1228
Amount Units: ug/l



Manual Integration Results

RT: 5.71
Area: 17279
Amount: 356.4928
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

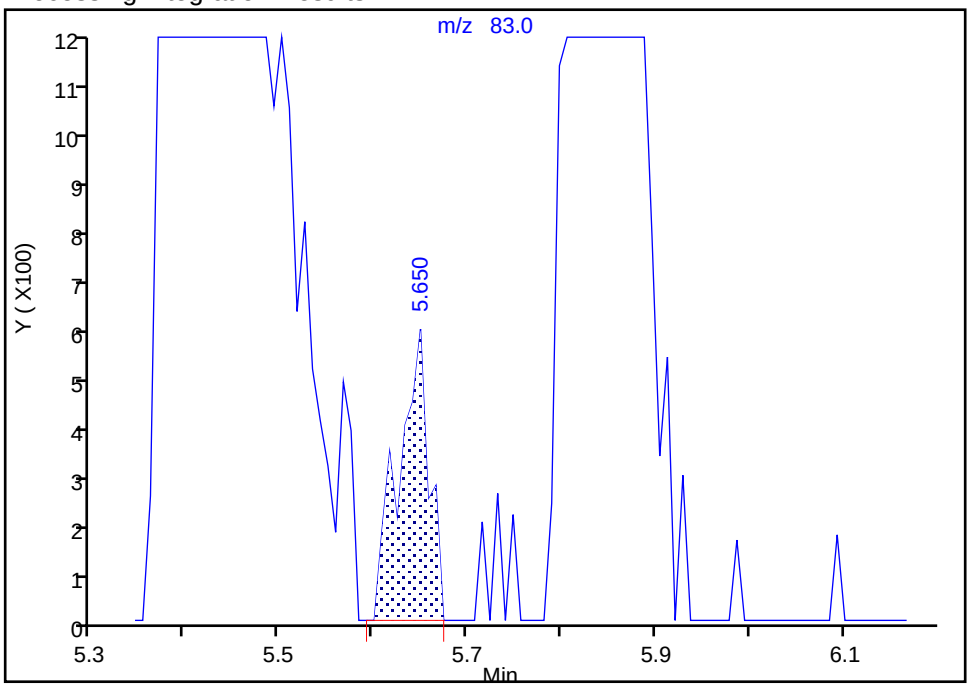
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

72 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

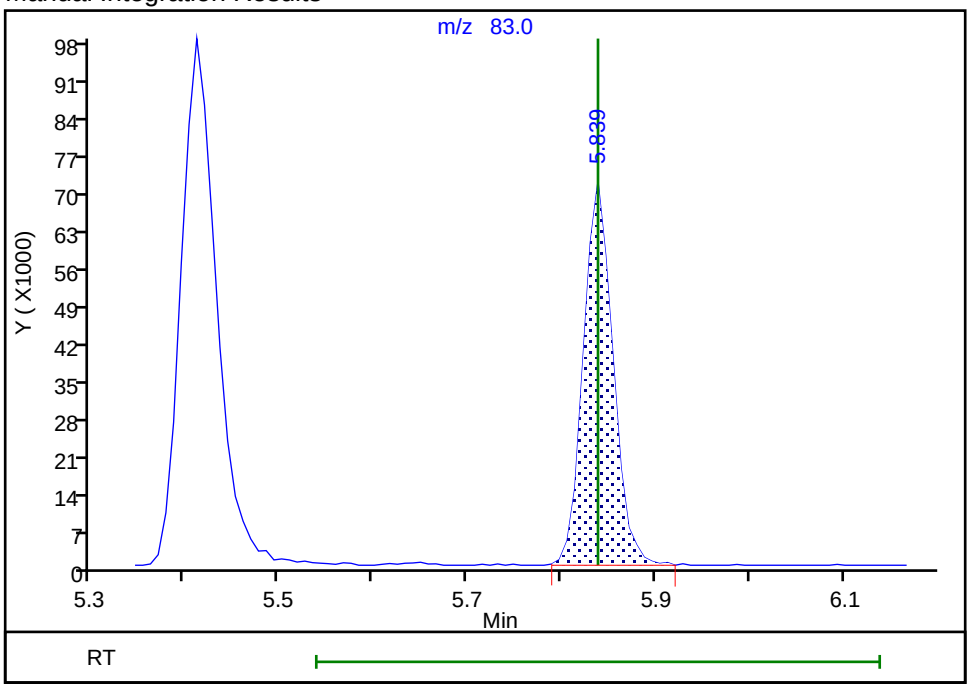
Processing Integration Results

RT: 5.65
Area: 1252
Amount: 0.151304
Amount Units: ug/l



Manual Integration Results

RT: 5.84
Area: 156414
Amount: 18.902638
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

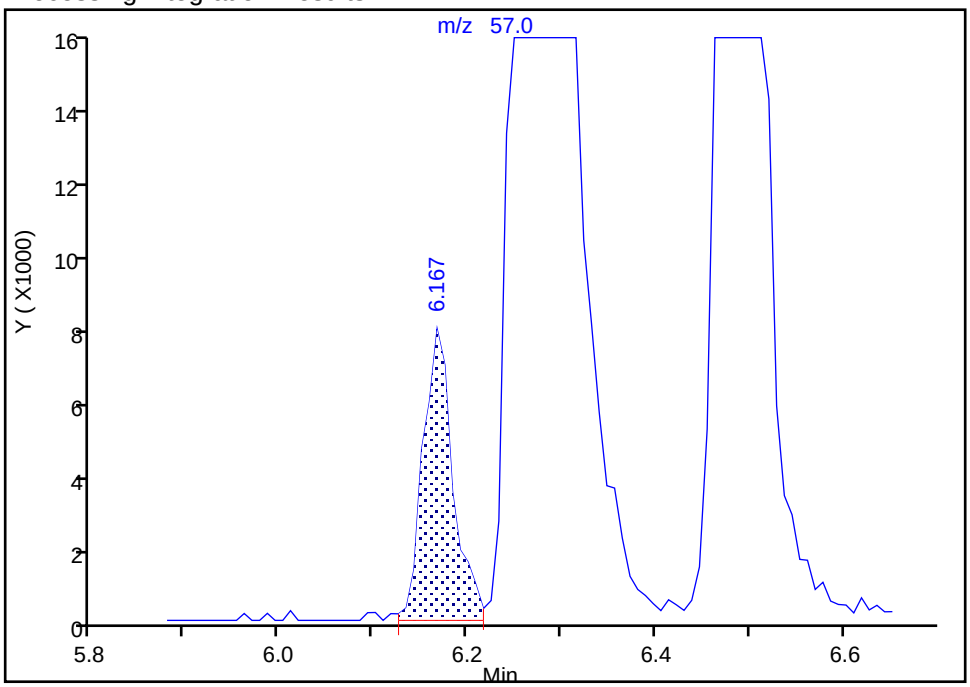
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

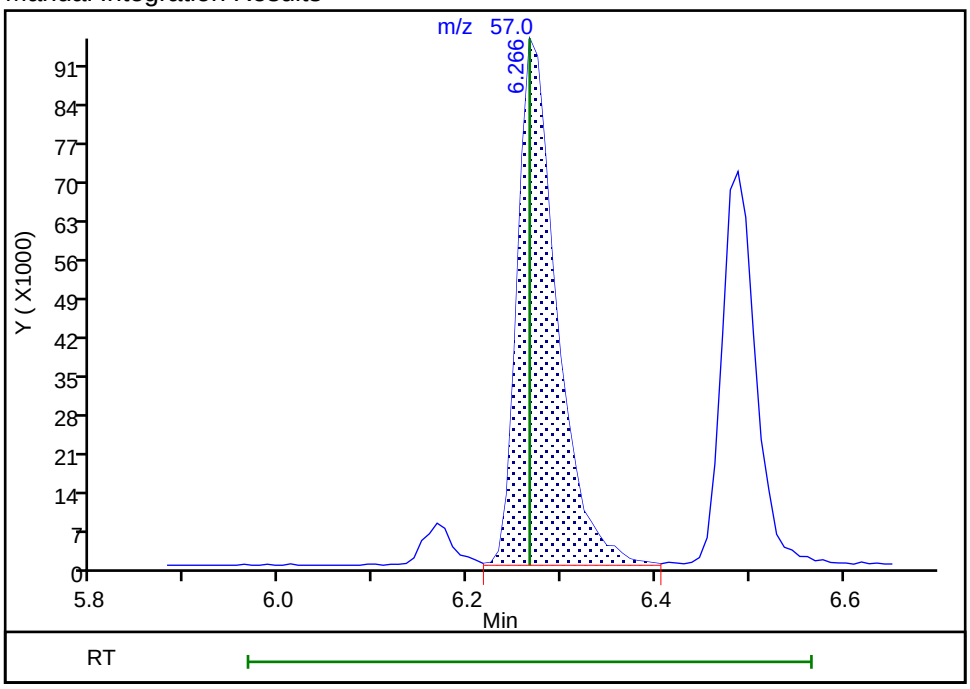
Processing Integration Results

RT: 6.17
Area: 16894
Amount: 26.859608
Amount Units: ug/l



Manual Integration Results

RT: 6.27
Area: 277675
Amount: 441.4728
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

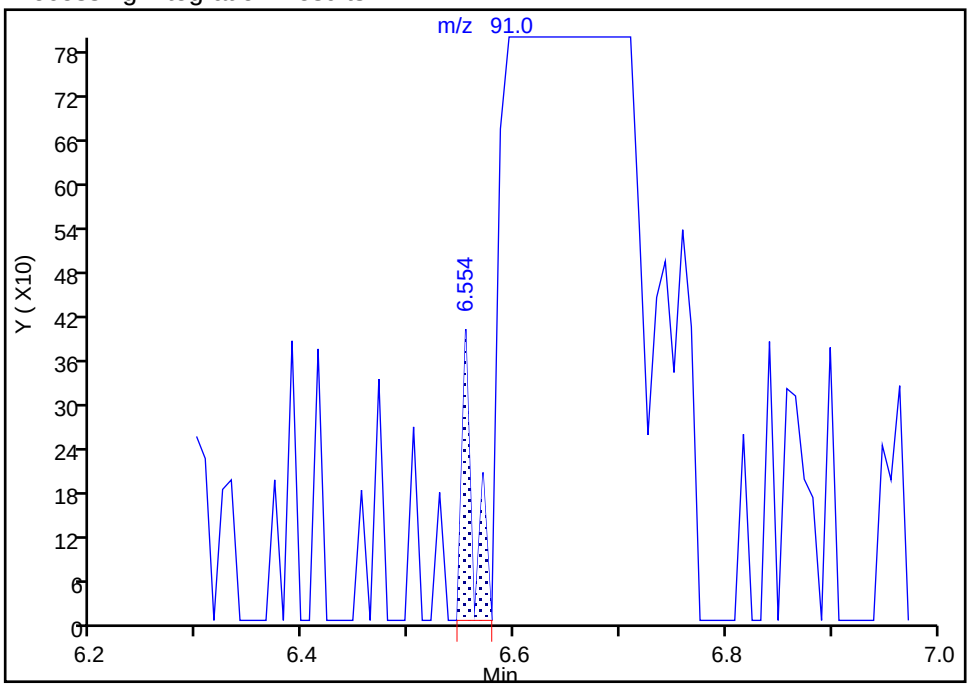
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

79 Toluene, CAS: 108-88-3

Signal: 1

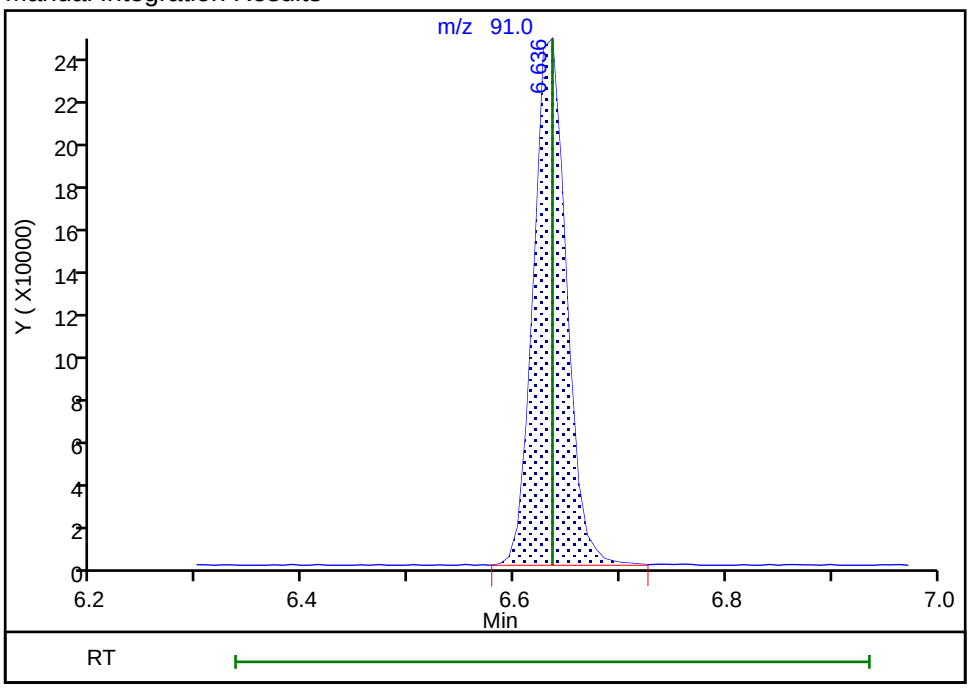
Processing Integration Results

RT: 6.55
Area: 294
Amount: 0.010973
Amount Units: ug/l



Manual Integration Results

RT: 6.64
Area: 530238
Amount: 19.790236
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

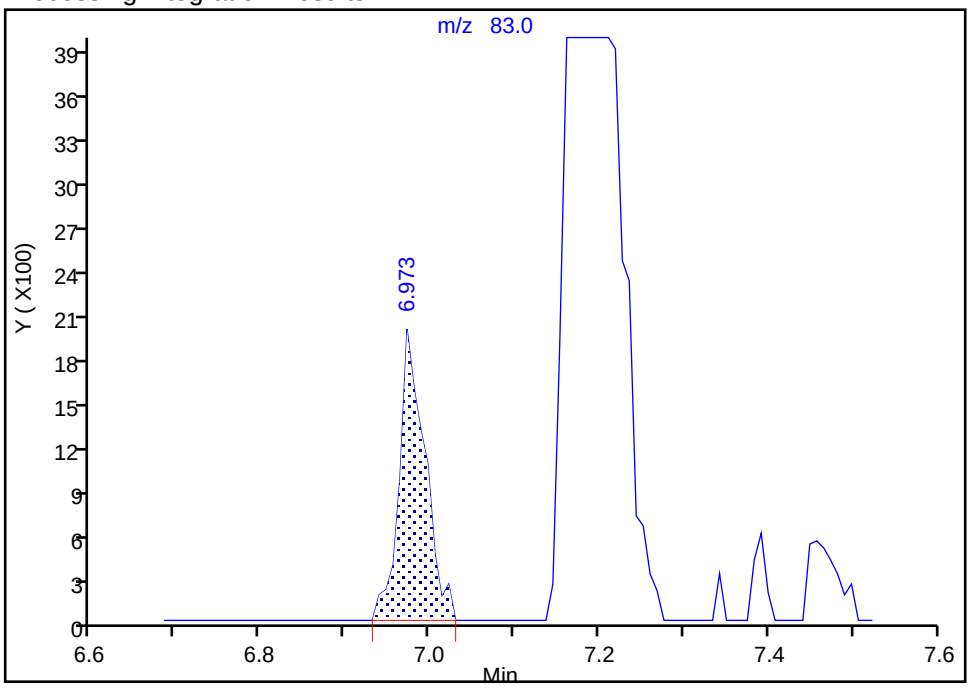
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

82 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

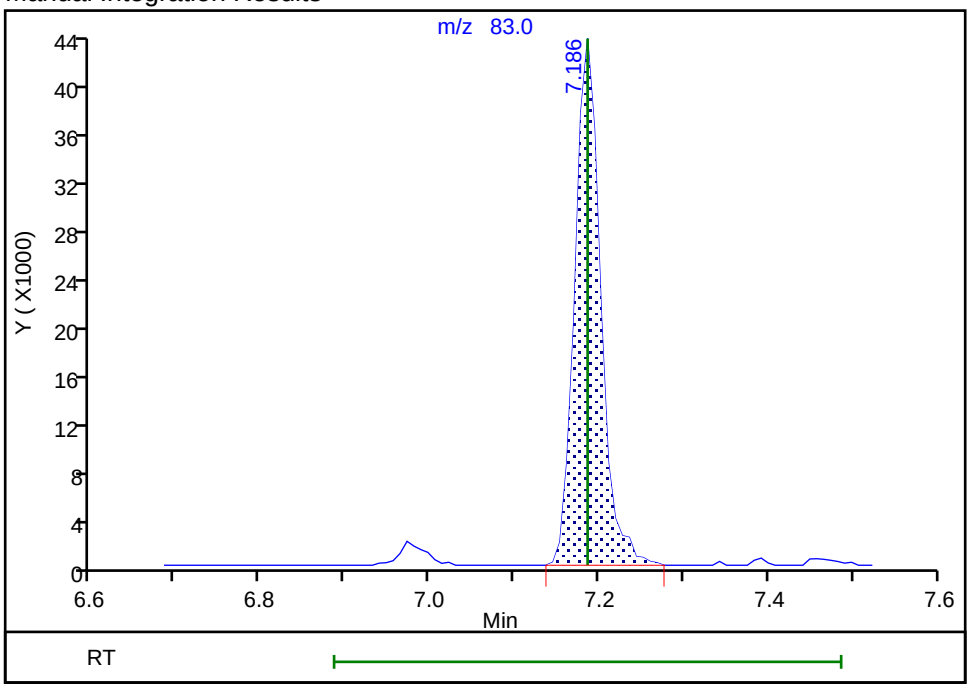
Processing Integration Results

RT: 6.97
Area: 4164
Amount: 0.870919
Amount Units: ug/l



Manual Integration Results

RT: 7.19
Area: 91493
Amount: 19.136158
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:56:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

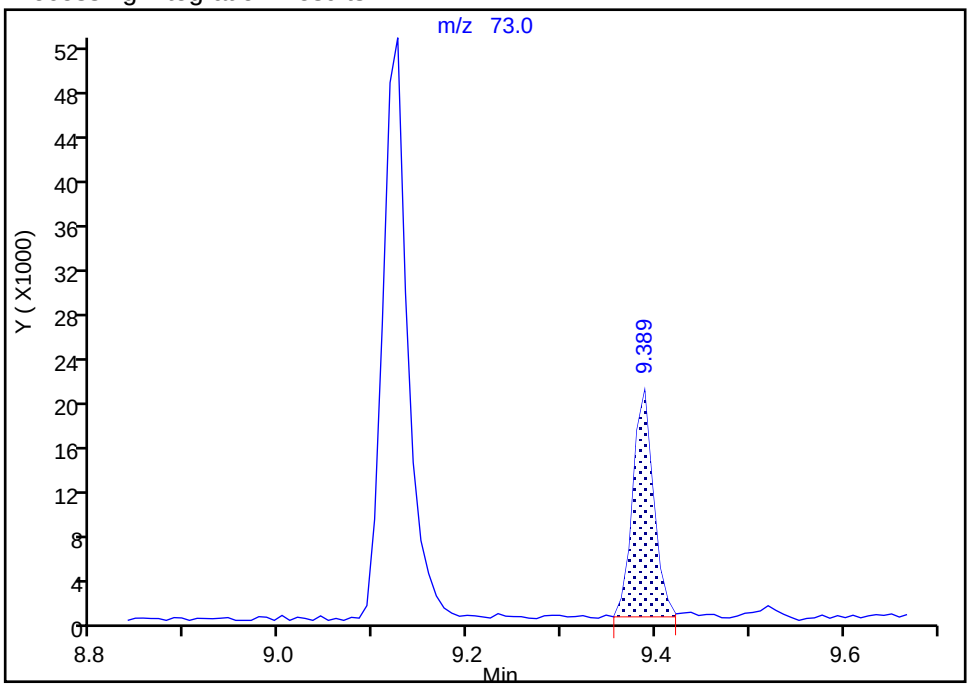
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

94 n-Butyl acrylate, CAS: 141-32-2

Signal: 1

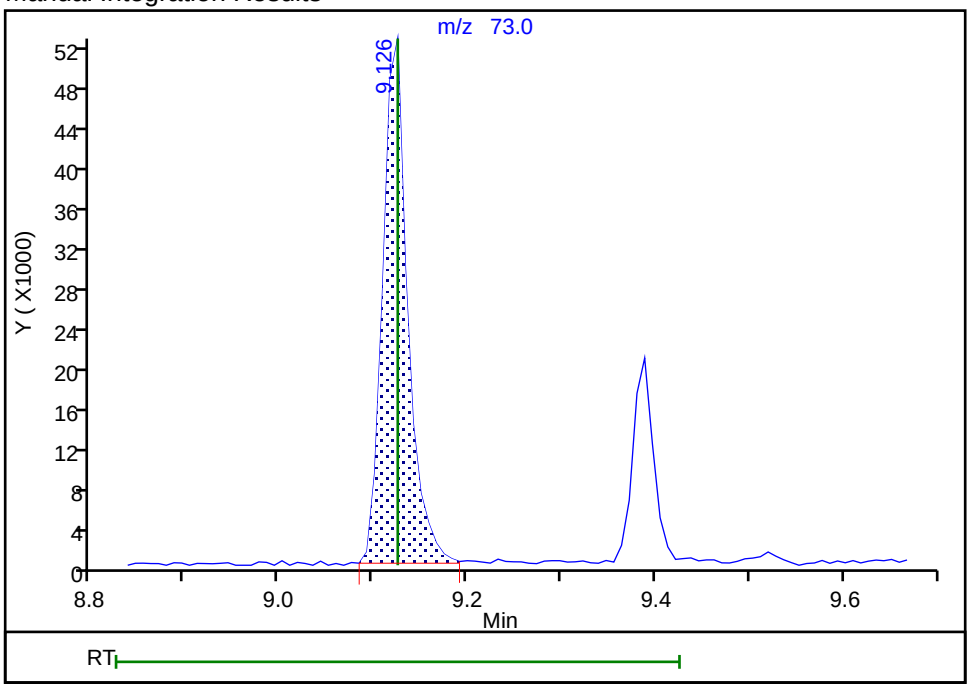
Processing Integration Results

RT: 9.39
Area: 31168
Amount: 5.995119
Amount Units: ug/l



Manual Integration Results

RT: 9.13
Area: 96538
Amount: 18.568941
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

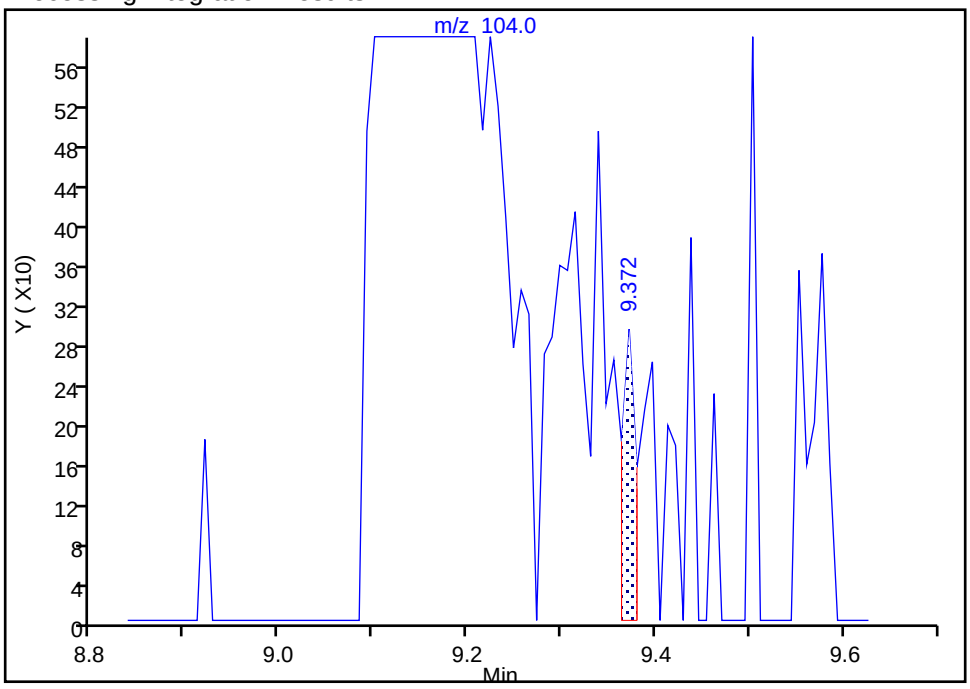
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

96 Styrene, CAS: 100-42-5

Signal: 1

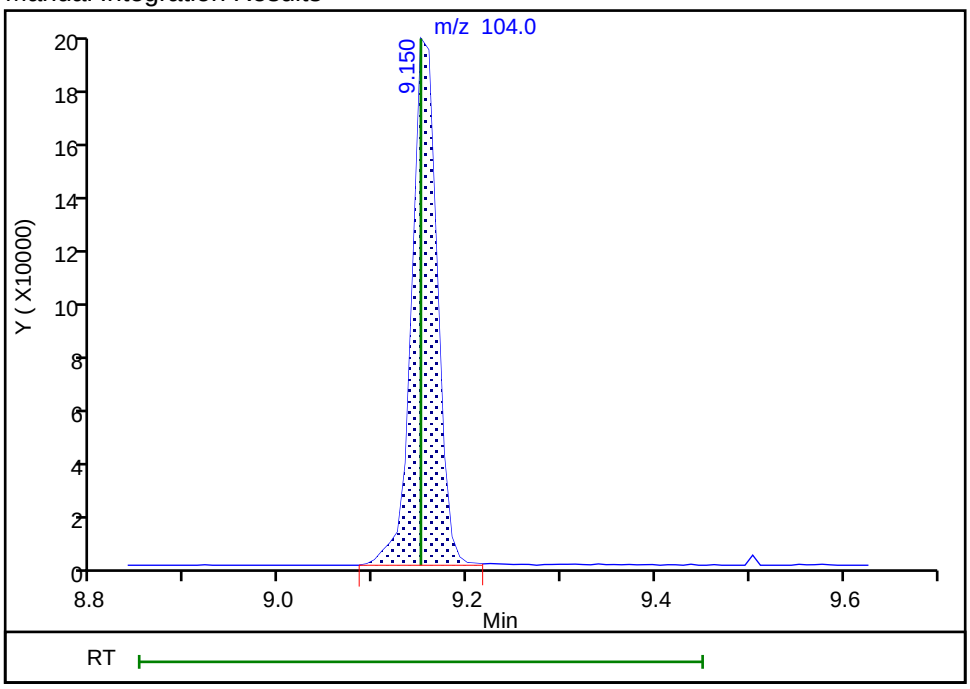
Processing Integration Results

RT: 9.37
Area: 309
Amount: 0.017382
Amount Units: ug/l



Manual Integration Results

RT: 9.15
Area: 363564
Amount: 20.451826
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

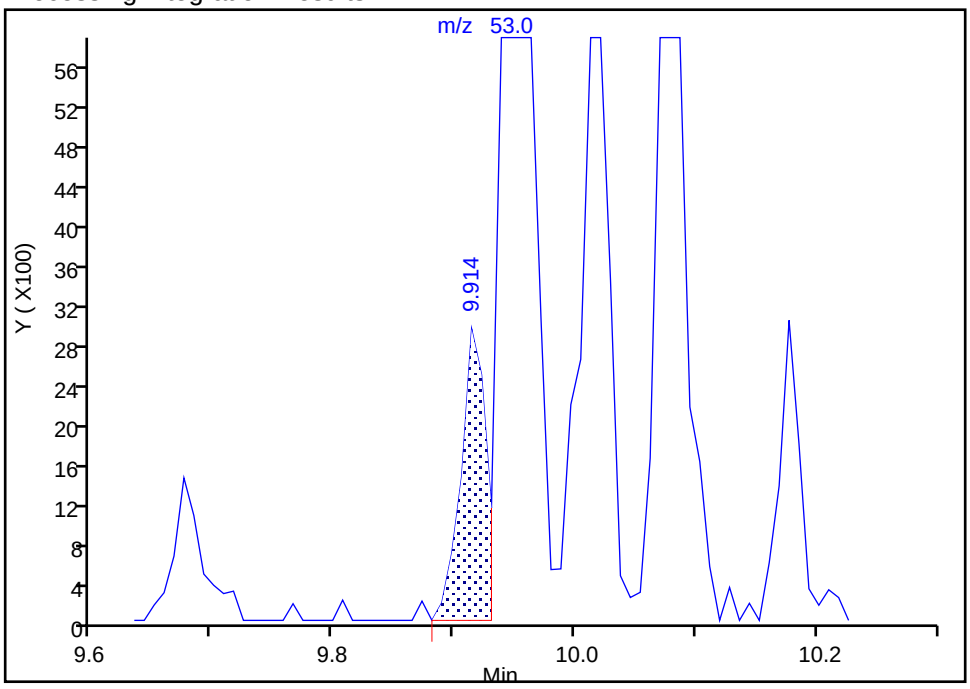
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

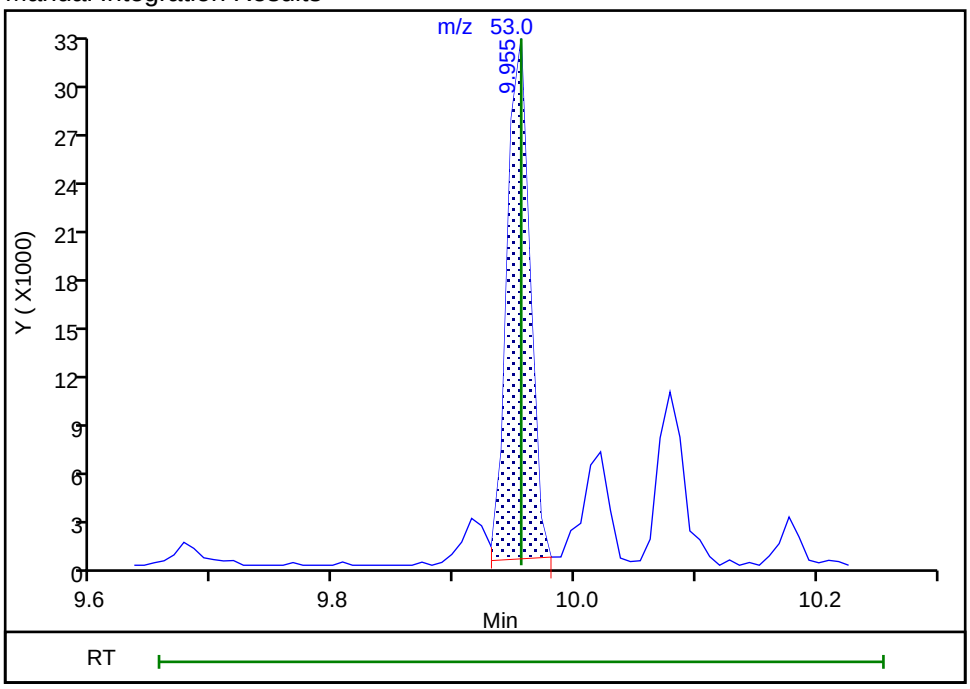
Processing Integration Results

RT: 9.91
Area: 4317
Amount: 1.772591
Amount Units: ug/l



Manual Integration Results

RT: 9.96
Area: 42264
Amount: 17.353898
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

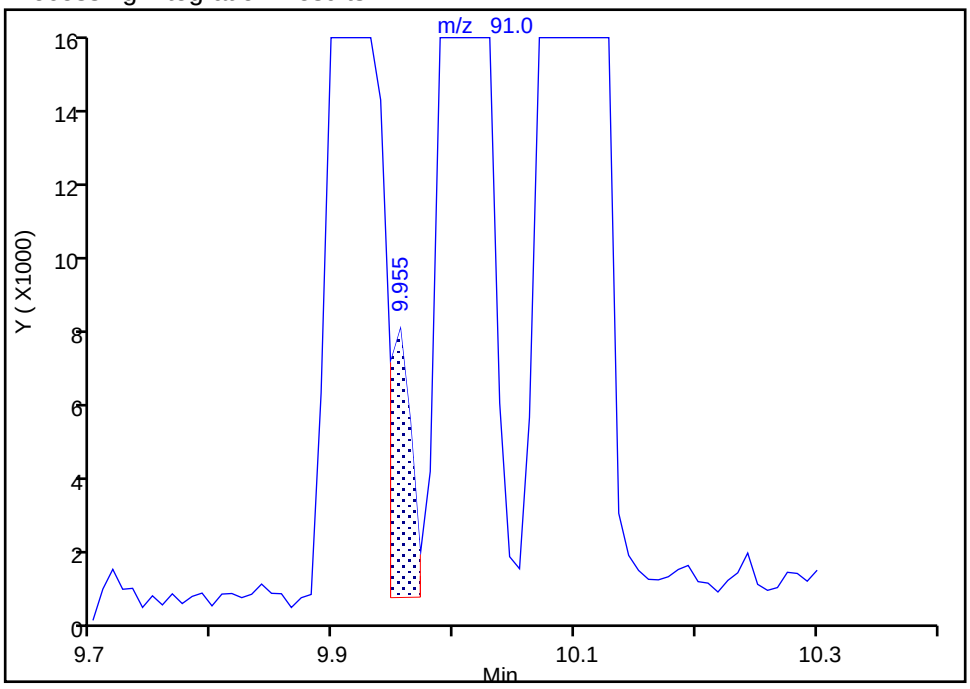
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

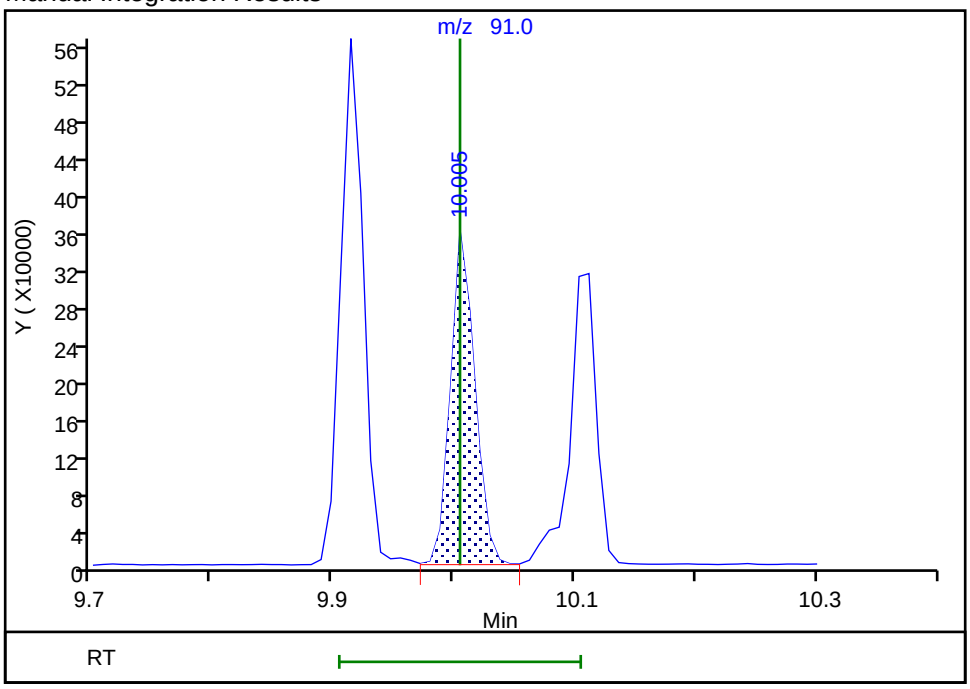
Processing Integration Results

RT: 9.96
Area: 9573
Amount: 0.384241
Amount Units: ug/l



Manual Integration Results

RT: 10.00
Area: 500746
Amount: 20.098944
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

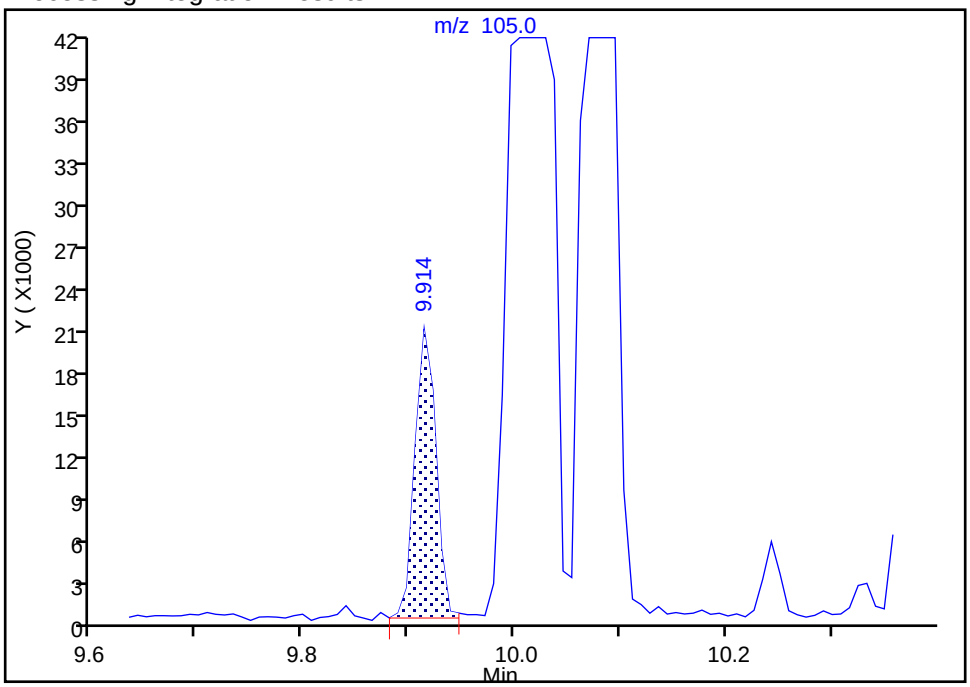
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

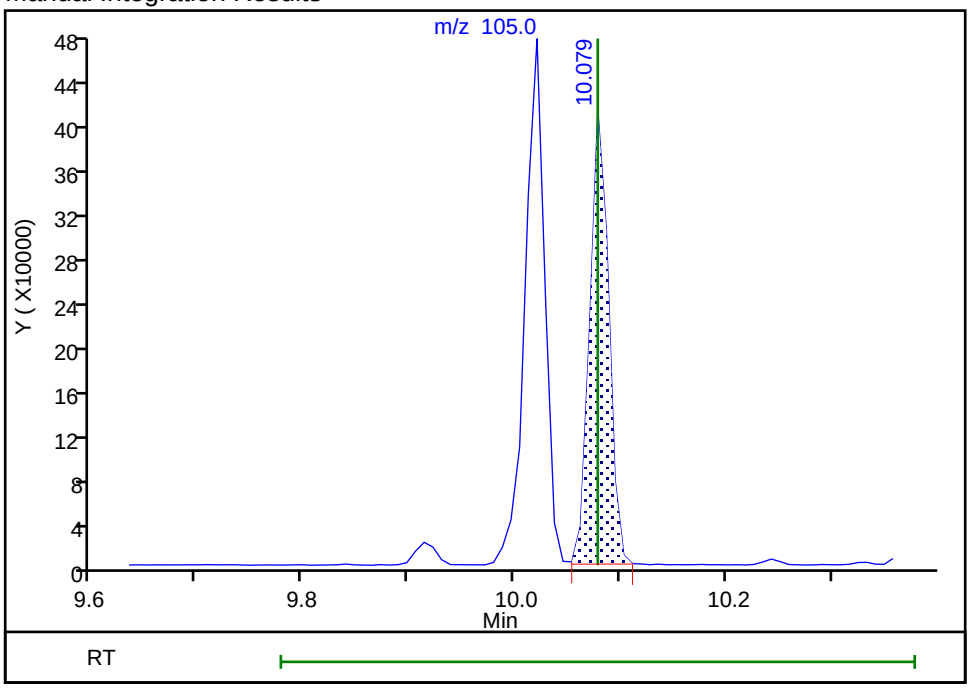
Processing Integration Results

RT: 9.91
Area: 28532
Amount: 1.158389
Amount Units: ug/l



Manual Integration Results

RT: 10.08
Area: 512411
Amount: 20.803703
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

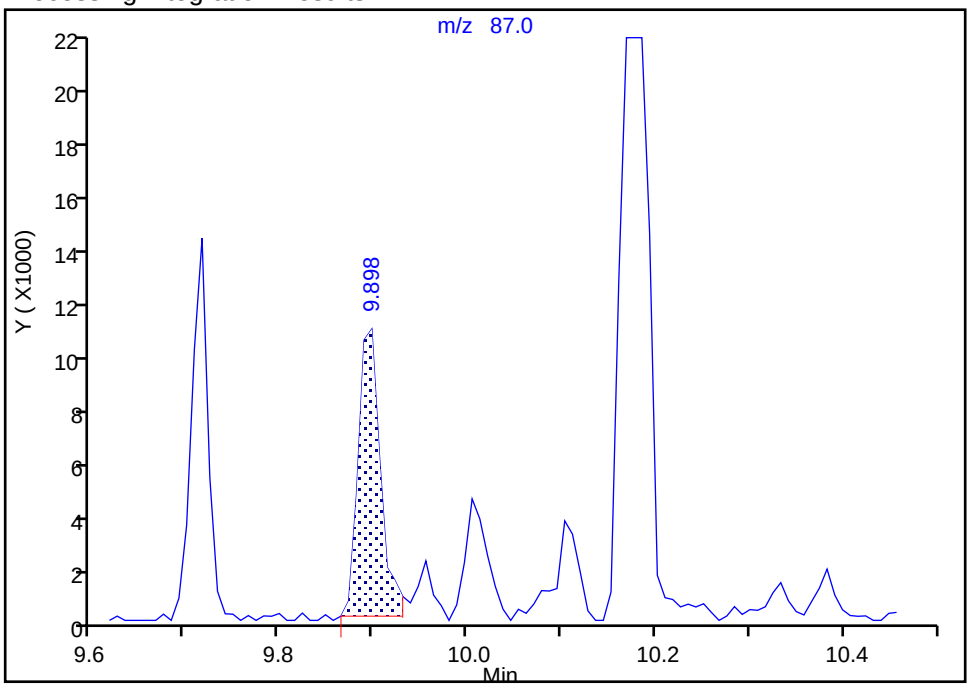
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

110 Butyl Methacrylate, CAS: 97-88-1

Signal: 1

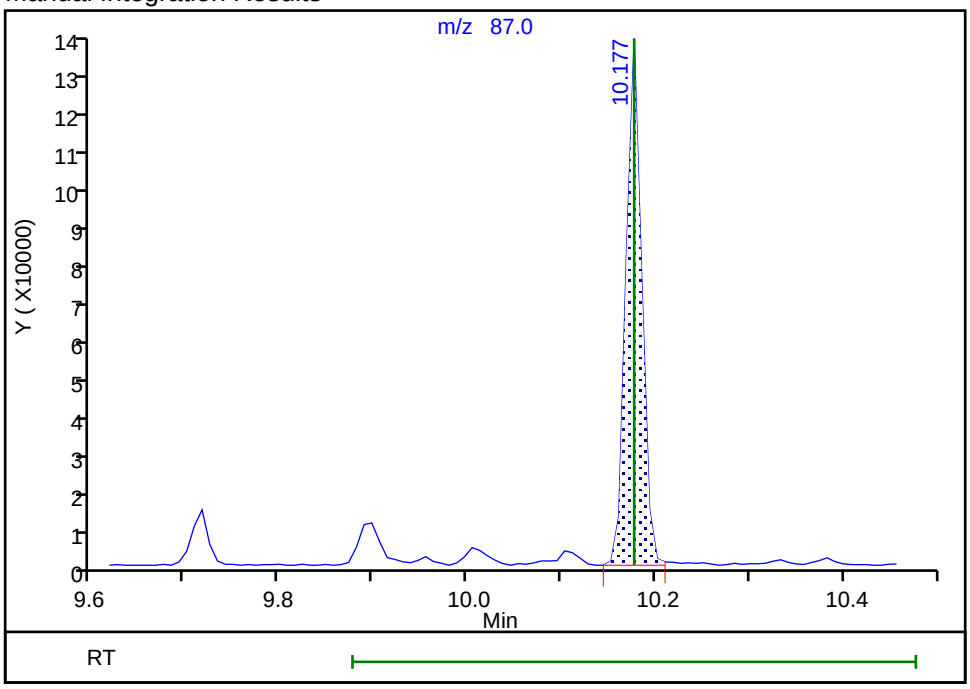
Processing Integration Results

RT: 9.90
Area: 17886
Amount: 2.034659
Amount Units: ug/l



Manual Integration Results

RT: 10.18
Area: 159207
Amount: 18.110920
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

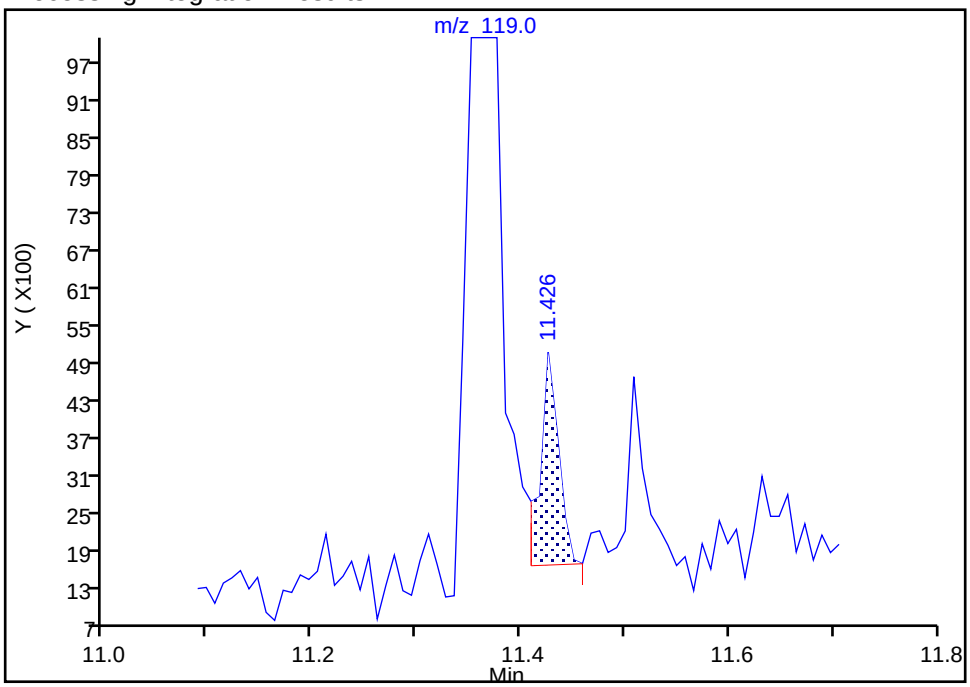
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

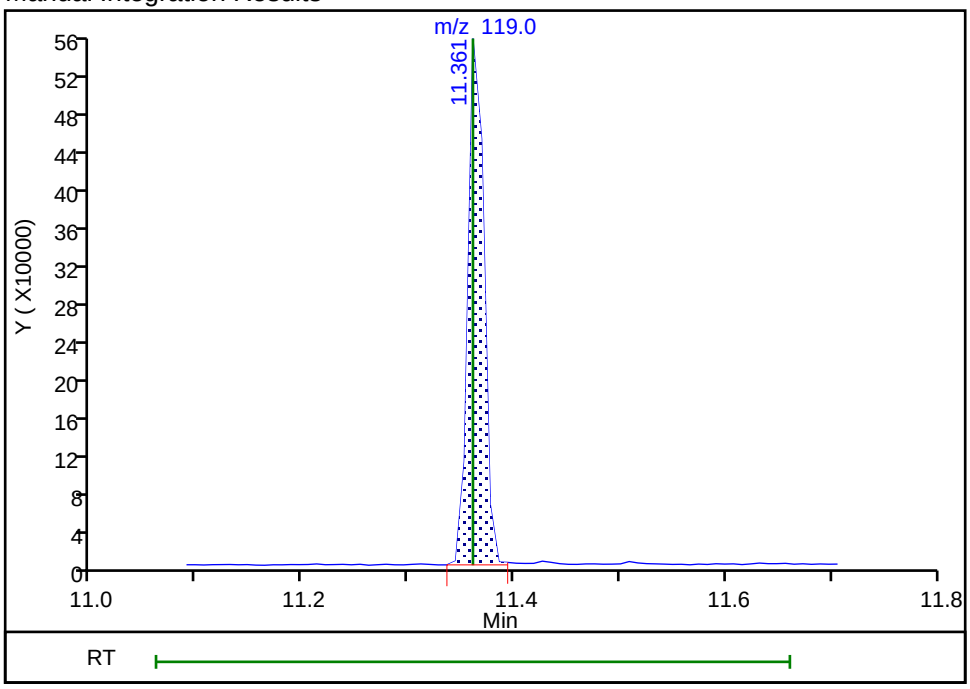
Processing Integration Results

RT: 11.43
Area: 4182
Amount: 0.159283
Amount Units: ug/l



Manual Integration Results

RT: 11.36
Area: 580763
Amount: 22.119993
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

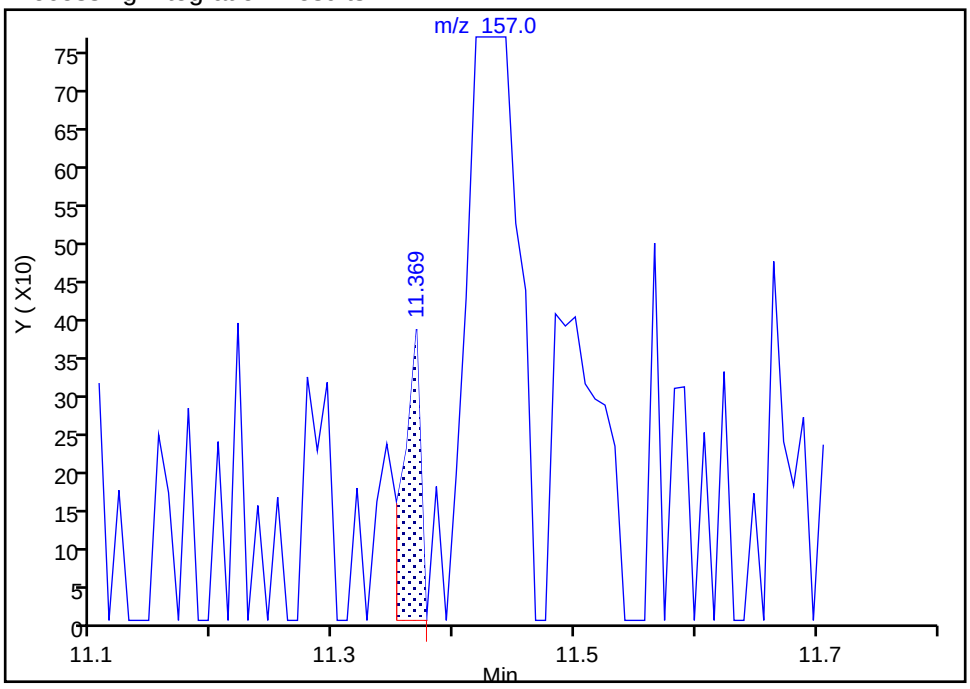
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

125 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

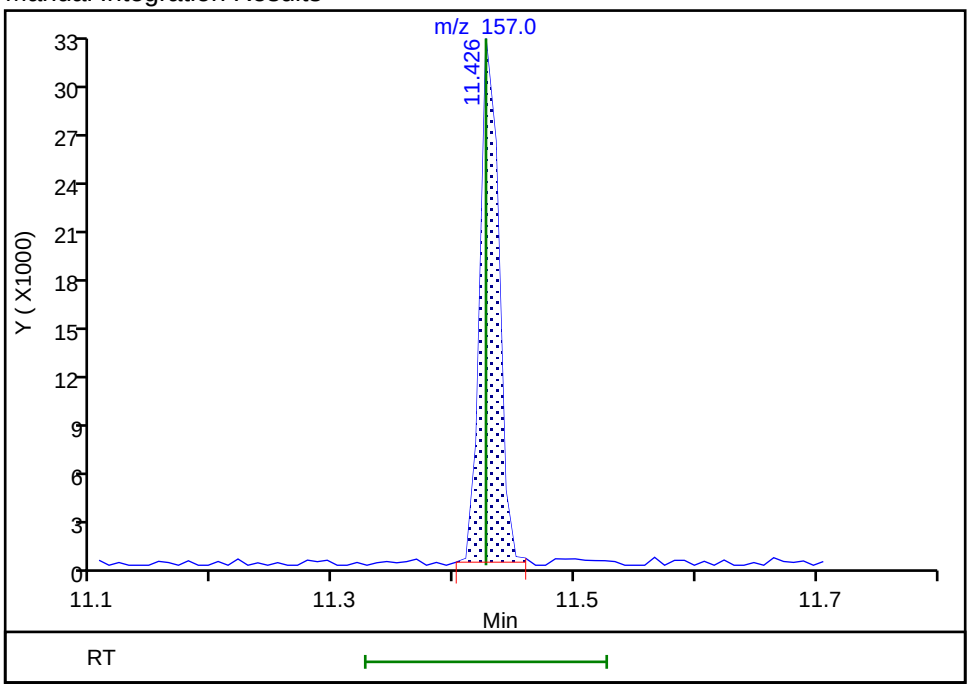
Processing Integration Results

RT: 11.37
Area: 376
Amount: 0.203591
Amount Units: ug/l



Manual Integration Results

RT: 11.43
Area: 35448
Amount: 19.193894
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

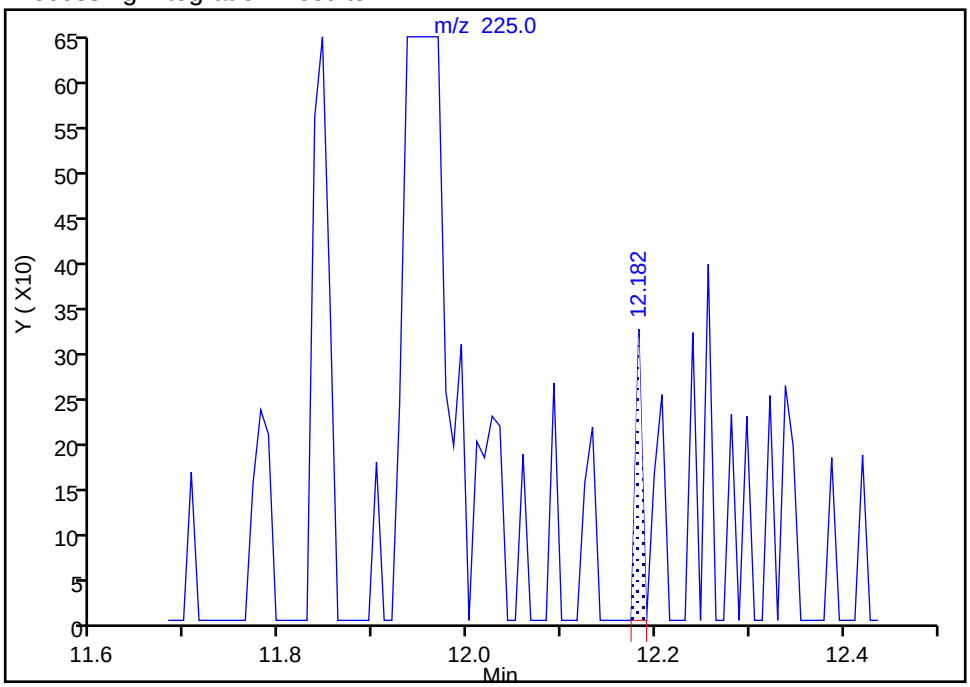
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24962.D
Injection Date: 18-Jan-2022 06:37:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

128 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

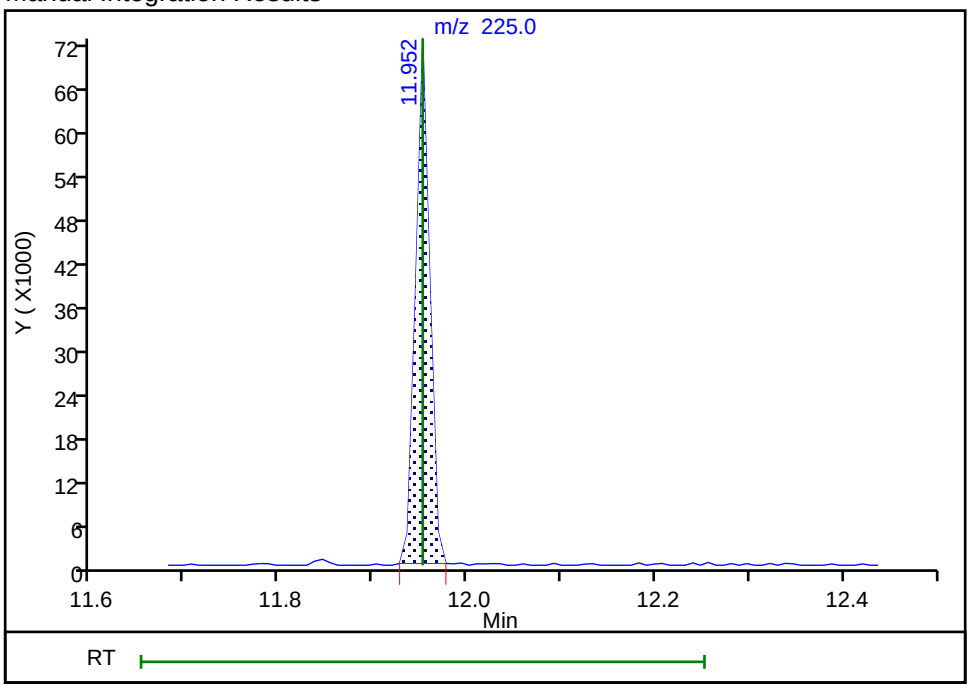
Processing Integration Results

RT: 12.18
Area: 160
Amount: 0.044229
Amount Units: ug/l



Manual Integration Results

RT: 11.95
Area: 75317
Amount: 20.820150
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 06:57:48
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823977/3 Calibration Date: 01/19/2022 06:31

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24991.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2859	0.3142	0.1000	22.0	20.0	9.9	20.0
Chloromethane	Ave	0.4081	0.3371	0.1000	16.5	20.0	-17.4	20.0
Butadiene	Ave	0.3288	0.2857		17.4	20.0	-13.1	20.0
Vinyl chloride	Ave	0.3615	0.3156	0.1000	17.5	20.0	-12.7	20.0
Bromomethane	Ave	0.1718	0.1952	0.1000	22.7	20.0	13.7	50.0
Chloroethane	Ave	0.1821	0.1801	0.1000	19.8	20.0	-1.1	50.0
Dichlorofluoromethane	Ave	0.4757	0.4367		18.4	20.0	-8.2	20.0
Trichlorofluoromethane	Ave	0.3649	0.3592	0.1000	19.7	20.0	-1.6	20.0
Pentane	Ave	1.913	2.008		42.0	40.0	5.0	20.0
Ethyl ether	Ave	0.2178	0.1974		18.1	20.0	-9.4	20.0
Ethanol	Ave	0.0397	0.0425		856	800	7.0	50.0
2-Methyl-1,3-butadiene	Ave	0.2524	0.2527		20.0	20.0	0.1	20.0
Acrolein	Ave	1.365	1.308		38.9	40.6	-4.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2394	0.2456	0.1000	20.5	20.0	2.6	20.0
1,1-Dichloroethene	Ave	0.2449	0.2253	0.1000	18.4	20.0	-8.0	20.0
Acetone	Ave	0.5825	0.6491	0.0500	111	100	11.4	50.0
Iodomethane	Ave	0.3624	0.3799		21.0	20.0	4.8	20.0
Carbon disulfide	Ave	0.9487	0.8143	0.1000	17.2	20.0	-14.2	50.0
Isopropyl alcohol	Ave	0.3959	0.2486		126	200	-37.2	50.0
Methyl acetate	Ave	0.2593	0.1886	0.1000	29.1	40.0	-27.3*	20.0
3-Chloro-1-propene	Ave	0.6227	0.7083		22.7	20.0	13.7	20.0
Cyclopentene	Ave	0.6690	0.6374		19.1	20.0	-4.7	20.0
Acetonitrile	Ave	1.238	1.143		185	200	-7.7	20.0
Methylene Chloride	Ave	0.2856	0.2650	0.1000	18.6	20.0	-7.2	20.0
2-Methyl-2-propanol	Ave	1.004	1.029		205	200	2.5	50.0
Methyl tert-butyl ether	Ave	0.7383	0.7002	0.1000	19.0	20.0	-5.2	20.0
trans-1,2-Dichloroethene	Ave	0.2644	0.2645	0.1000	20.0	20.0	0.0	20.0
Acrylonitrile	Ave	0.1392	0.1080		155	200	-22.4*	20.0
Hexane	Ave	0.3223	0.2852		17.7	20.0	-11.5	20.0
Isopropyl ether	Ave	0.8986	0.8167		18.2	20.0	-9.1	20.0
1,1-Dichloroethane	Ave	0.5142	0.4771	0.2000	18.6	20.0	-7.2	20.0
Vinyl acetate	Ave	0.0560	0.0542		38.7	40.0	-3.2	20.0
2-Chloro-1,3-butadiene	Ave	0.2371	0.2272		19.2	20.0	-4.1	20.0
Tert-butyl ethyl ether	Ave	0.7826	0.7572		19.4	20.0	-3.2	20.0
2,2-Dichloropropane	Ave	0.0858	0.0849		19.8	20.0	-1.1	20.0
2-Butanone (MEK)	Ave	0.2184	0.2293	0.0500	105	100	5.0	50.0
cis-1,2-Dichloroethene	Ave	0.2923	0.2717	0.1000	18.6	20.0	-7.1	20.0
Ethyl acetate	Ave	0.1791	0.2227		49.8	40.0	24.4*	20.0
Methyl acrylate	Ave	0.3844	0.2886		15.0	20.0	-24.9*	20.0
Propionitrile	Ave	1.593	1.603		201	200	0.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823977/3 Calibration Date: 01/19/2022 06:31

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24991.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	0.2613	0.2494		38.2	40.0	-4.5	20.0
Chlorobromomethane	Ave	0.1325	0.1304		19.7	20.0	-1.6	20.0
Methacrylonitrile	Ave	0.1309	0.1060		162	200	-19.0	20.0
Chloroform	Ave	0.4355	0.4281	0.2000	19.7	20.0	-1.7	20.0
1,1,1-Trichloroethane	Ave	0.3681	0.3752	0.1000	20.4	20.0	1.9	20.0
Cyclohexane	Ave	0.4481	0.4320	0.1000	19.3	20.0	-3.6	50.0
Carbon tetrachloride	Ave	0.3074	0.3148	0.1000	20.5	20.0	2.4	20.0
1,1-Dichloropropene	Ave	0.3608	0.3447		19.1	20.0	-4.5	20.0
Isobutyl alcohol	Ave	0.5564	0.6035		542	500	8.5	50.0
Benzene	Ave	1.439	1.324	0.5000	18.4	20.0	-8.0	20.0
Isopropyl acetate	Ave	0.8394	0.6520		15.5	20.0	-22.3*	20.0
Tert-amyl methyl ether	Ave	0.8825	0.8439		19.1	20.0	-4.4	20.0
1,2-Dichloroethane	Ave	0.3459	0.3481	0.1000	20.1	20.0	0.7	20.0
n-Heptane	Ave	0.2310	0.2192		19.0	20.0	-5.1	20.0
n-Butanol	Ave	0.1784	0.1558		437	500	-12.7	50.0
Trichloroethene	Ave	0.2472	0.2290	0.2000	18.5	20.0	-7.4	20.0
Ethyl acrylate	Ave	0.7709	0.6735		17.5	20.0	-12.6	20.0
Methylcyclohexane	Ave	0.5005	0.4719	0.1000	18.9	20.0	-5.7	50.0
1,2-Dichloropropane	Ave	0.2816	0.2438	0.1000	17.3	20.0	-13.4	20.0
Methyl methacrylate	Ave	0.0751	0.0679		36.2	40.0	-9.6	20.0
1,4-Dioxane	Ave	0.9502	0.9623		405	400	1.3	50.0
Dibromomethane	Ave	0.1534	0.1442		18.8	20.0	-6.0	20.0
n-Propyl acetate	Ave	0.4891	0.3730		15.3	20.0	-23.7*	20.0
Dichlorobromomethane	Ave	0.3146	0.2952	0.2000	18.8	20.0	-6.2	20.0
2-Nitropropane	Ave	0.0891	0.0775		34.8	40.0	-13.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1725	0.1387		16.1	20.0	-19.6	20.0
Epichlorohydrin	Ave	0.1849	0.1968		426	400	6.4	20.0
cis-1,3-Dichloropropene	Ave	0.5507	0.5316	0.2000	19.3	20.0	-3.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.999	2.151	0.0500	108	100	7.6	50.0
Toluene	Ave	1.406	1.348	0.4000	19.2	20.0	-4.1	20.0
trans-1,3-Dichloropropene	Ave	0.4942	0.4690	0.1000	19.0	20.0	-5.1	50.0
Ethyl methacrylate	Ave	0.4536	0.4185		18.5	20.0	-7.7	20.0
1,1,2-Trichloroethane	Ave	0.2509	0.2306	0.1000	18.4	20.0	-8.1	20.0
Tetrachloroethene	Ave	0.2871	0.3200	0.2000	22.3	20.0	11.5	20.0
1,3-Dichloropropane	Ave	0.5302	0.4840		18.3	20.0	-8.7	20.0
2-Hexanone	Ave	1.301	1.343	0.0500	103	100	3.3	50.0
n-Butyl acetate	Ave	0.6917	0.5742		16.6	20.0	-17.0	20.0
Chlorodibromomethane	Ave	0.2793	0.2903	0.1000	20.8	20.0	4.0	50.0
Ethylene Dibromide	Ave	0.2879	0.2737	0.1000	19.0	20.0	-4.9	20.0
Chlorobenzene	Ave	0.8459	0.8618	0.5000	20.4	20.0	1.9	20.0
Ethylbenzene	Ave	0.4609	0.4646	0.1000	20.2	20.0	0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823977/3 Calibration Date: 01/19/2022 06:31

Instrument ID: CVOAMS6 Calib Start Date: 11/23/2021 12:45

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 11/23/2021 14:57

Lab File ID: F24991.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1,2-Tetrachloroethane	Ave	0.2968	0.3088		20.8	20.0	4.0	20.0
m-Xylene & p-Xylene	Ave	0.5672	0.5940	0.1000	20.9	20.0	4.7	20.0
n-Butyl acrylate	Ave	0.2728	0.2522		18.5	20.0	-7.6	20.0
o-Xylene	Ave	0.5689	0.5990	0.3000	21.1	20.0	5.3	20.0
Styrene	Ave	0.9329	0.9451	0.3000	20.3	20.0	1.3	20.0
Amyl acetate (mixed isomers)	Ave	1.530	1.282		16.8	20.0	-16.2	20.0
Bromoform	Ave	0.1809	0.1830	0.1000	20.2	20.0	1.2	20.0
Isopropylbenzene	Ave	1.501	1.606	0.1000	21.4	20.0	7.0	20.0
Bromobenzene	Ave	0.6401	0.6486		20.3	20.0	1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8138	0.6832	0.3000	16.8	20.0	-16.1	20.0
N-Propylbenzene	Ave	3.490	3.370		19.3	20.0	-3.4	20.0
1,2,3-Trichloropropane	Ave	0.2300	0.2044		17.8	20.0	-11.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2279	0.1843		16.2	20.0	-19.1	20.0
2-Chlorotoluene	Ave	2.331	2.260		19.4	20.0	-3.1	20.0
4-Ethyltoluene	Ave	2.737	2.790		20.4	20.0	1.9	20.0
1,3,5-Trimethylbenzene	Ave	2.305	2.386		20.7	20.0	3.5	20.0
4-Chlorotoluene	Ave	2.189	2.037		18.6	20.0	-6.9	20.0
Butyl Methacrylate	Ave	0.8226	0.7321		17.8	20.0	-11.0	20.0
tert-Butylbenzene	Ave	1.926	1.930		20.0	20.0	0.2	20.0
1,2,4-Trimethylbenzene	Ave	2.417	2.509		20.8	20.0	3.8	20.0
sec-Butylbenzene	Ave	3.027	3.070		20.3	20.0	1.4	20.0
1,3-Dichlorobenzene	Ave	1.255	1.316	0.6000	21.0	20.0	4.9	20.0
4-Isopropyltoluene	Ave	2.561	2.778		21.7	20.0	8.5	20.0
1,4-Dichlorobenzene	Ave	1.293	1.348	0.5000	20.9	20.0	4.3	20.0
1,2,3-Trimethylbenzene	Ave	2.525	2.649		21.0	20.0	4.9	20.0
Benzyl chloride	Ave	1.584	1.565		19.8	20.0	-1.2	50.0
Indan	Ave	2.399	2.503		20.9	20.0	4.4	20.0
p-Diethylbenzene	Ave	1.401	1.475		21.1	20.0	5.3	20.0
n-Butylbenzene	Ave	1.469	1.494		20.3	20.0	1.7	20.0
1,2-Dichlorobenzene	Ave	1.293	1.349	0.4000	20.9	20.0	4.3	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.457	2.657		21.6	20.0	8.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1728	0.1542	0.0500	17.8	20.0	-10.8	50.0
1,3,5-Trichlorobenzene	Ave	0.9547	1.053		22.0	20.0	10.2	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.9789	0.2000	21.1	20.0	5.4	20.0
Hexachlorobutadiene	Ave	0.3385	0.3549		21.0	20.0	4.8	20.0
Naphthalene	Ave	2.623	2.523		19.2	20.0	-3.8	50.0
1,2,3-Trichlorobenzene	Ave	0.8486	0.8558		20.2	20.0	0.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2576	0.2355		45.7	50.0	-8.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3307	0.3091		46.7	50.0	-6.5	20.0
Toluene-d8 (Surr)	Ave	1.361	1.267		46.6	50.0	-6.9	20.0
4-Bromofluorobenzene	Ave	0.3550	0.3638		51.2	50.0	2.5	20.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Jan-2022 06:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0140380-003
Operator ID: Instrument ID: CVOAMS6
Sublist: chrom-8260624W6*sub54

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:25:27 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 07:35:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	32	156504	20.0	22.0	
2 Chloromethane	50	1.640	1.640	0.000	36	167896	20.0	16.5	
4 Butadiene	54	1.714	1.714	0.000	37	142297	20.0	17.4	
3 Vinyl chloride	62	1.714	1.714	0.000	28	157210	20.0	17.5	
5 Bromomethane	94	1.968	1.968	0.000	99	97240	20.0	22.7	a
6 Chloroethane	64	2.018	2.018	0.000	39	89712	20.0	19.8	
7 Dichlorofluoromethane	67	2.166	2.166	0.000	34	217487	20.0	18.4	
9 Trichlorofluoromethane	101	2.174	2.174	0.000	63	178878	20.0	19.7	
8 Pentane	72	2.223	2.223	0.000	39	47228	40.0	42.0	
11 Ethyl ether	59	2.363	2.363	0.000	21	98312	20.0	18.1	
10 Ethanol	46	2.371	2.371	0.000	52	19975	800.0	856.0	
12 2-Methyl-1,3-butadiene	53	2.404	2.404	0.000	55	125876	20.0	20.0	
15 Acrolein	56	2.519	2.519	0.000	39	31201	40.6	38.9	
16 112TCTFE	101	2.544	2.544	0.000	50	122339	20.0	20.5	
17 1,1-Dichloroethene	96	2.560	2.560	0.000	37	112222	20.0	18.4	
18 Acetone	43	2.626	2.626	0.000	37	204330	100.0	111.4	
19 Iodomethane	142	2.700	2.700	0.000	31	189211	20.0	21.0	
20 Isopropyl alcohol	45	2.724	2.724	0.000	32	29242	200.0	125.6	
21 Carbon disulfide	76	2.724	2.724	0.000	21	405552	20.0	17.2	
23 Methyl acetate	43	2.839	2.839	0.000	45	187885	40.0	29.1	
22 3-Chloro-1-propene	41	2.848	2.848	0.000	40	352758	20.0	22.7	
24 Cyclopentene	67	2.864	2.864	0.000	36	317476	20.0	19.1	
* 26 TBA-d9 (IS)	65	2.938	2.938	0.000	0	588057	1000.0	1000.0	
25 Acetonitrile	41	2.922	2.922	0.000	23	134472	200.0	184.7	Ma
27 Methylene Chloride	84	2.954	2.954	0.000	29	131983	20.0	18.6	
28 2-Methyl-2-propanol	59	2.996	2.996	0.000	91	120985	200.0	204.9	a
29 Methyl tert-butyl ether	73	3.086	3.086	0.000	37	348749	20.0	19.0	
30 trans-1,2-Dichloroethene	96	3.127	3.127	0.000	38	131737	20.0	20.0	
31 Acrylonitrile	53	3.176	3.176	0.000	48	537975	200.0	155.1	
32 Hexane	43	3.259	3.259	0.000	19	142066	20.0	17.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Isopropyl ether	45	3.439	3.439	0.000	96	406738	20.0	18.2	
35 Vinyl acetate	86	3.489	3.489	0.000	27	53954	40.0	38.7	
34 1,1-Dichloroethane	63	3.489	3.489	0.000	45	237631	20.0	18.6	
36 2-Chloro-1,3-butadiene	88	3.530	3.530	0.000	45	113176	20.0	19.2	
37 Tert-butyl ethyl ether	59	3.735	3.735	0.000	37	377119	20.0	19.4	
* 38 2-Butanone-d5	46	3.916	3.916	0.000	0	787023	250.0	250.0	
39 2,2-Dichloropropane	97	3.932	3.932	0.000	44	42282	20.0	19.8	
40 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	27	135313	20.0	18.6	
41 2-Butanone (MEK)	72	3.965	3.965	0.000	42	72189	100.0	105.0	
42 Ethyl acetate	70	3.973	3.973	0.000	27	28048	40.0	49.8	
43 Methyl acrylate	55	4.023	4.023	0.000	22	104964	20.0	15.0	
44 Propionitrile	54	4.088	4.088	0.000	96	188558	200.0	201.3	a
46 Tetrahydrofuran	72	4.171	4.171	0.000	62	31410	40.0	38.2	a
45 Chlorobromomethane	128	4.179	4.179	0.000	32	64932	20.0	19.7	
47 Methacrylonitrile	67	4.187	4.187	0.000	95	527821	200.0	161.9	a
48 Chloroform	83	4.220	4.220	0.000	31	213223	20.0	19.7	
50 1,1,1-Trichloroethane	97	4.351	4.351	0.000	45	186867	20.0	20.4	
49 Cyclohexane	84	4.360	4.360	0.000	43	215150	20.0	19.3	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	30	293238	50.0	45.7	
52 Carbon tetrachloride	117	4.483	4.483	0.000	29	156801	20.0	20.5	
53 1,1-Dichloropropene	75	4.491	4.491	0.000	35	171681	20.0	19.1	
54 Isobutyl alcohol	43	4.647	4.647	0.000	28	177448	500.0	542.4	
55 Benzene	78	4.680	4.680	0.000	53	481624	20.0	18.4	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.688	0.000	0	384868	50.0	46.7	
57 Isopropyl acetate	43	4.738	4.738	0.000	39	324720	20.0	15.5	
58 Tert-amyl methyl ether	73	4.738	4.738	0.000	78	420293	20.0	19.1	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	48	173387	20.0	20.1	
60 n-Heptane	57	4.828	4.828	0.000	94	109152	20.0	19.0	a
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1245138	50.0	50.0	
63 Trichloroethene	95	5.288	5.288	0.000	42	114056	20.0	18.5	
62 n-Butanol	56	5.288	5.288	0.000	34	45821	500.0	436.7	a
64 Ethyl acrylate	55	5.411	5.411	0.000	37	335465	20.0	17.5	
65 Methylcyclohexane	83	5.411	5.411	0.000	48	235027	20.0	18.9	
66 1,2-Dichloropropane	63	5.559	5.559	0.000	39	121428	20.0	17.3	
68 Methyl methacrylate	100	5.641	5.641	0.000	38	67608	40.0	36.2	
69 1,4-Dioxane	88	5.683	5.683	0.000	47	17564	400.0	405.1	
70 Dibromomethane	93	5.691	5.691	0.000	20	71809	20.0	18.8	
71 n-Propyl acetate	43	5.699	5.699	0.000	99	185778	20.0	15.3	a
* 67 1,4-Dioxane-d8	96	5.699	5.699	0.000	0	45631	1000.0	1000.0	
72 Dichlorobromomethane	83	5.839	5.839	0.000	98	147042	20.0	18.8	a
73 2-Nitropropane	41	6.159	6.159	0.000	34	77158	40.0	34.8	
74 2-Chloroethyl vinyl ether	63	6.167	6.167	0.000	27	69234	20.0	16.1	
75 Epichlorohydrin	57	6.266	6.266	0.000	99	247756	400.0	425.6	a
76 cis-1,3-Dichloropropene	75	6.315	6.315	0.000	41	193365	20.0	19.3	
77 4-Methyl-2-pentanone (MIBK)	43	6.488	6.488	0.000	33	677176	100.0	107.6	
$ 78 Toluene-d8 (Surr)	98	6.553	6.553	0.000	37	1152317	50.0	46.6	
79 Toluene	91	6.627	6.627	0.000	30	490295	20.0	19.2	
80 trans-1,3-Dichloropropene	75	6.981	6.981	0.000	24	170598	20.0	19.0	
81 Ethyl methacrylate	69	7.014	7.014	0.000	38	152220	20.0	18.5	
82 1,1,2-Trichloroethane	83	7.186	7.186	0.000	31	83892	20.0	18.4	
83 Tetrachloroethene	166	7.227	7.227	0.000	74	116393	20.0	22.3	
84 1,3-Dichloropropane	76	7.383	7.383	0.000	36	176042	20.0	18.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43	7.457	7.457	0.000	76	422795	100.0	103.3	
86 n-Butyl acetate	43	7.581	7.581	0.000	36	208872	20.0	16.6	
87 Chlorodibromomethane	129	7.613	7.613	0.000	39	105608	20.0	20.8	
88 Ethylene Dibromide	107	7.761	7.761	0.000	45	99568	20.0	19.0	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	67	909340	50.0	50.0	
90 Chlorobenzene	112	8.337	8.337	0.000	66	313475	20.0	20.4	
91 Ethylbenzene	106	8.443	8.443	0.000	45	168981	20.0	20.2	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	45	112319	20.0	20.8	
93 m-Xylene & p-Xylene	106	8.600	8.600	0.000	31	216066	20.0	20.9	
95 o-Xylene	106	9.117	9.117	0.000	45	217881	20.0	21.1	
94 n-Butyl acrylate	73	9.117	9.117	0.000	97	91735	20.0	18.5	a
96 Styrene	104	9.150	9.150	0.000	33	343750	20.0	20.3	
98 Bromoform	173	9.380	9.380	0.000	27	66550	20.0	20.2	
97 Amyl acetate (mixed isomers)	43	9.380	9.380	0.000	28	262723	20.0	16.8	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	584053	20.0	21.4	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	330799	50.0	51.2	
101 Bromobenzene	156	9.840	9.840	0.000	39	132939	20.0	20.3	
102 1,1,2,2-Tetrachloroethane	83	9.890	9.890	0.000	97	140029	20.0	16.8	a
103 N-Propylbenzene	91	9.914	9.914	0.000	31	690856	20.0	19.3	
104 1,2,3-Trichloropropane	110	9.931	9.931	0.000	35	41895	20.0	17.8	
105 trans-1,4-Dichloro-2-butene	53	9.955	9.955	0.000	79	37770	20.0	16.2	a
106 2-Chlorotoluene	91	10.005	10.005	0.000	97	463220	20.0	19.4	a
107 4-Ethyltoluene	105	10.021	10.021	0.000	74	571815	20.0	20.4	
108 1,3,5-Trimethylbenzene	105	10.079	10.079	0.000	93	489134	20.0	20.7	a
109 4-Chlorotoluene	91	10.103	10.103	0.000	38	417593	20.0	18.6	
110 Butyl Methacrylate	87	10.177	10.177	0.000	33	150066	20.0	17.8	
111 tert-Butylbenzene	119	10.325	10.325	0.000	18	395553	20.0	20.0	
112 1,2,4-Trimethylbenzene	105	10.383	10.383	0.000	36	514306	20.0	20.8	
113 sec-Butylbenzene	105	10.498	10.498	0.000	22	629354	20.0	20.3	
115 1,3-Dichlorobenzene	146	10.604	10.604	0.000	14	269737	20.0	21.0	
114 4-Isopropyltoluene	119	10.604	10.604	0.000	33	569452	20.0	21.7	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	512436	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.670	10.670	0.000	40	276388	20.0	20.9	
118 1,2,3-Trimethylbenzene	105	10.687	10.687	0.000	32	542981	20.0	21.0	
119 Benzyl chloride	91	10.777	10.777	0.000	91	320694	20.0	19.8	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	33	513145	20.0	20.9	
121 p-Diethylbenzene	119	10.876	10.876	0.000	22	302365	20.0	21.1	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	306263	20.0	20.3	
123 1,2-Dichlorobenzene	146	10.925	10.925	0.000	34	276549	20.0	20.9	
124 1,2,4,5-Tetramethylbenzene	119	11.360	11.360	0.000	97	544694	20.0	21.6	a
125 1,2-Dibromo-3-Chloropropane	157	11.426	11.426	0.000	46	31612	20.0	17.8	
126 1,3,5-Trichlorobenzene	180	11.508	11.508	0.000	26	215749	20.0	22.0	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	39	200650	20.0	21.1	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	41	72752	20.0	21.0	
129 Naphthalene	128	12.034	12.034	0.000	29	517214	20.0	19.2	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	175425	20.0	20.2	
S 131 1,2-Dichloroethene, Total	100				0		40.0	38.6	
S 133 Total BTEX	1				0		100.0	99.7	
S 132 Xylenes, Total	100				0		40.0	42.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00459	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

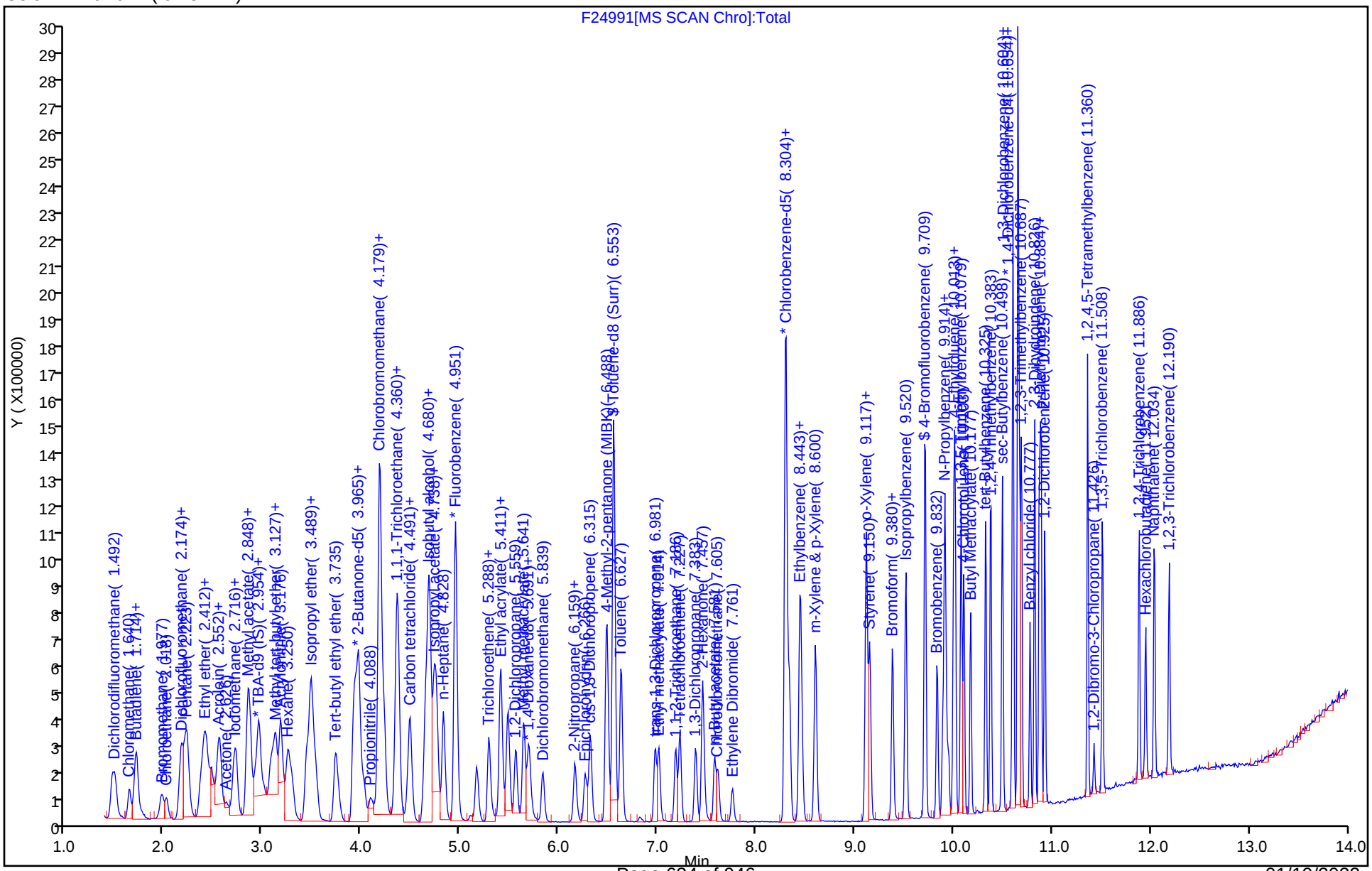
Report Date: 19-Jan-2022 11:25:28 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D

Injection Date:	19-Jan-2022 06:31:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison

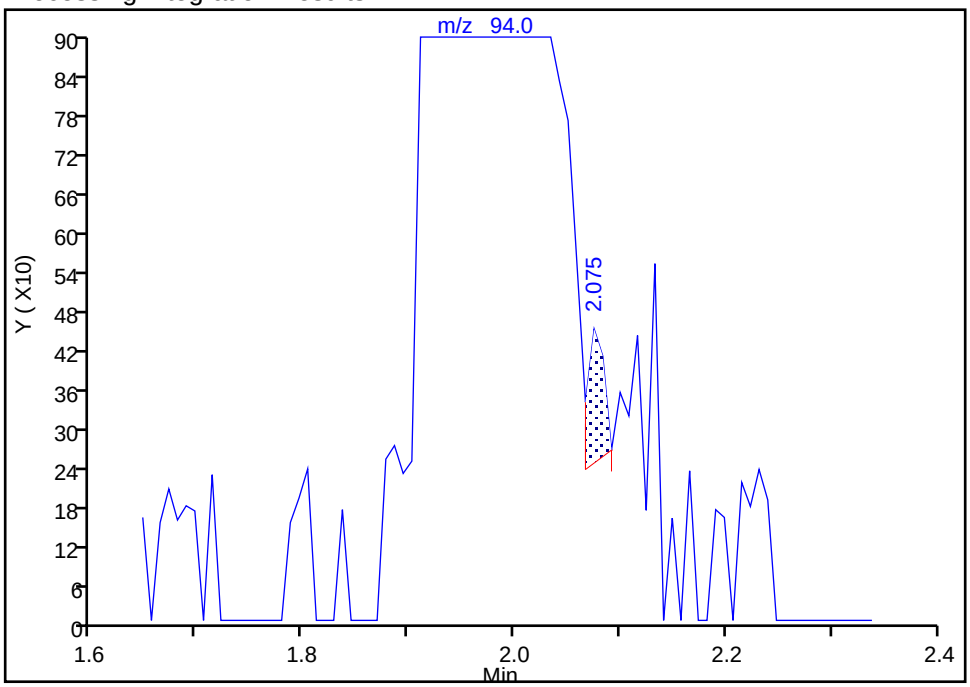
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

5 Bromomethane, CAS: 74-83-9

Signal: 1

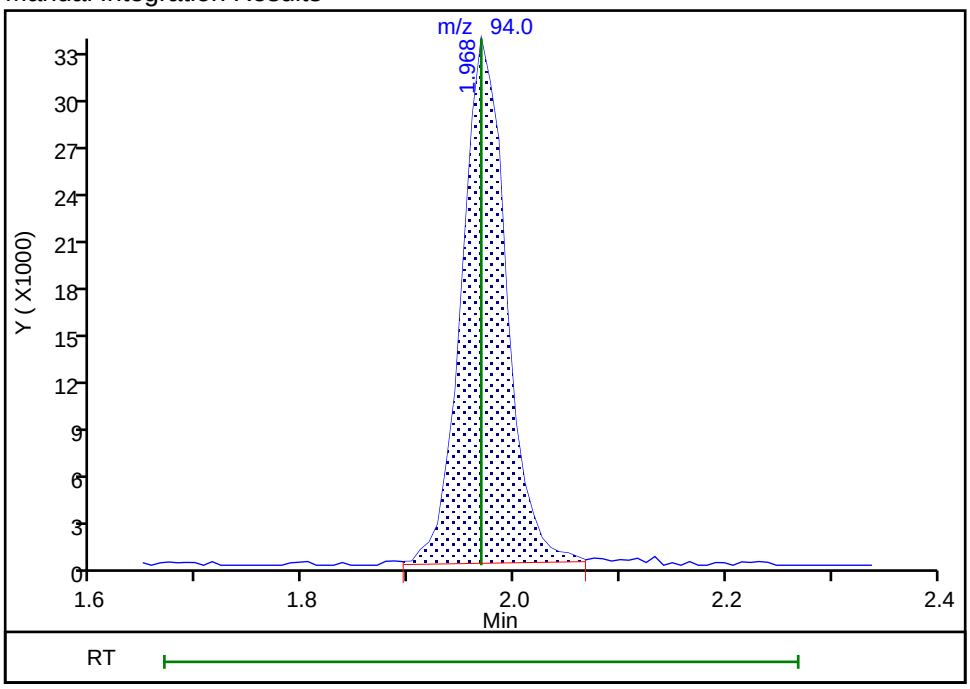
Processing Integration Results

RT: 2.08
Area: 230
Amount: 0.053763
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 97240
Amount: 22.730102
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:50:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

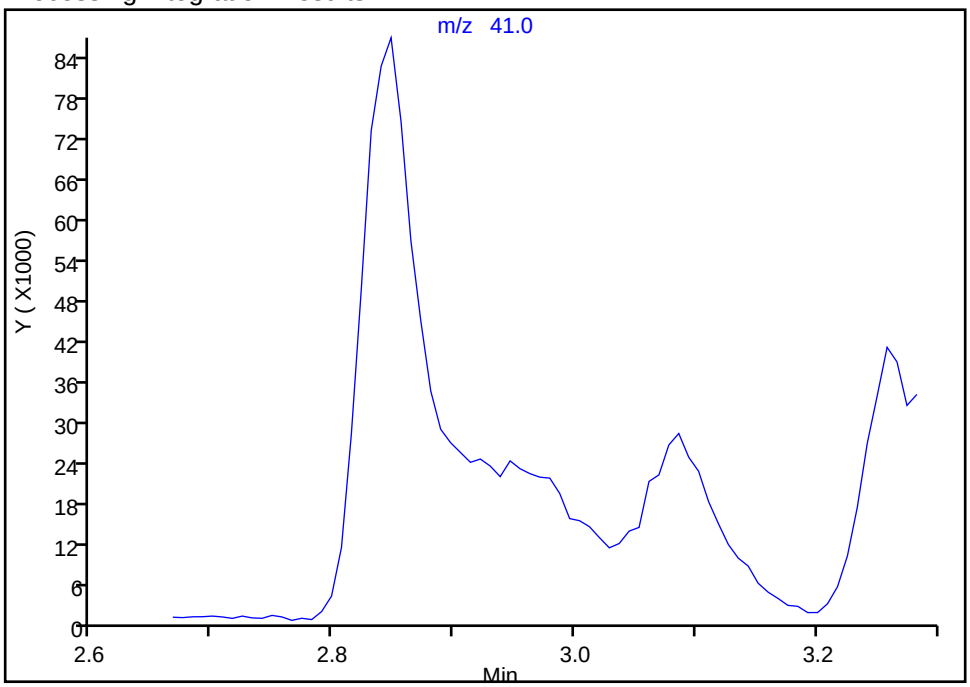
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

25 Acetonitrile, CAS: 75-05-8

Signal: 1

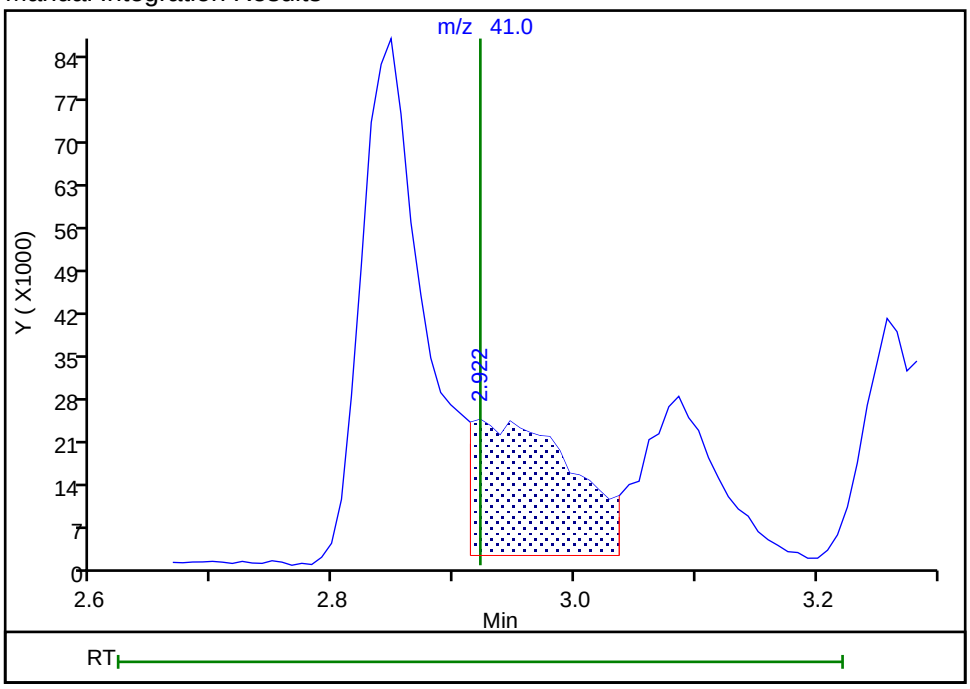
Not Detected
Expected RT: 2.92

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 134472
Amount: 184.6914
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 11:24:58
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Edison

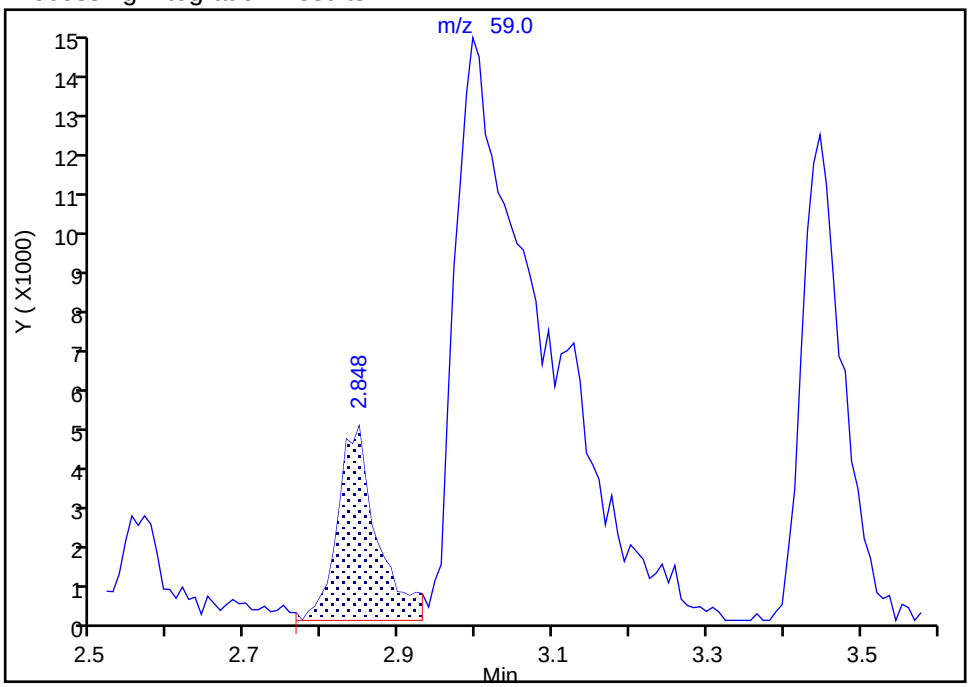
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

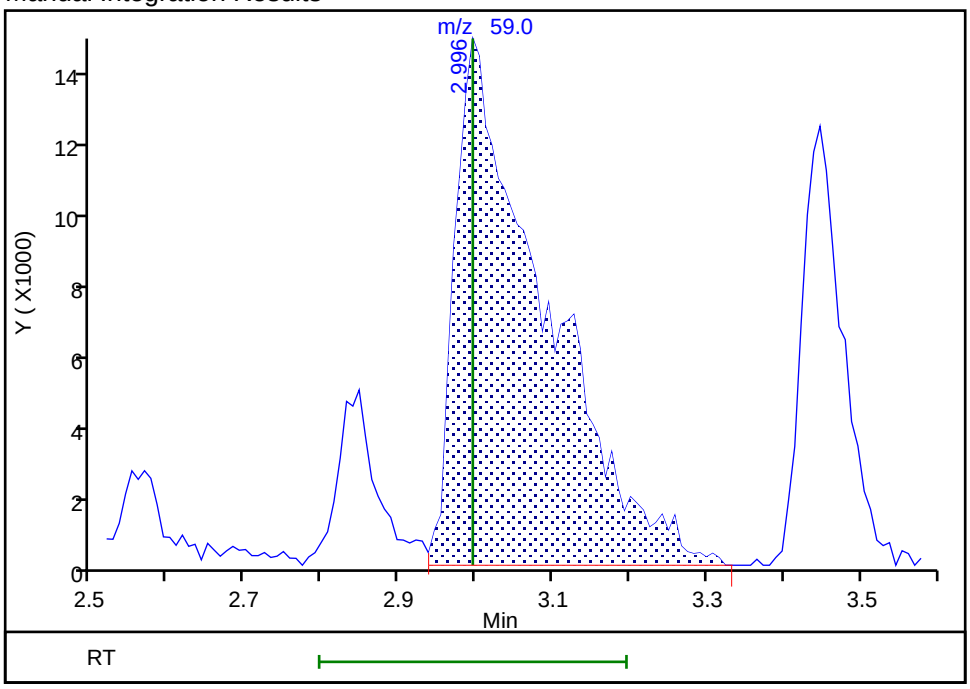
Processing Integration Results

RT: 2.85
Area: 17649
Amount: 29.892062
Amount Units: ug/l



Manual Integration Results

RT: 3.00
Area: 120985
Amount: 204.9120
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

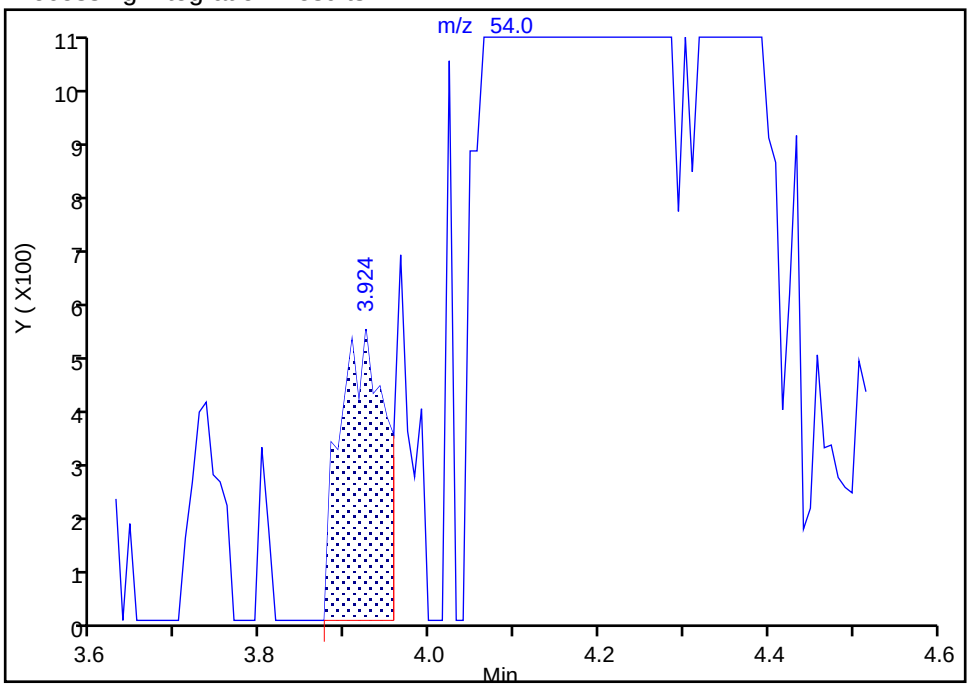
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

44 Propionitrile, CAS: 107-12-0

Signal: 1

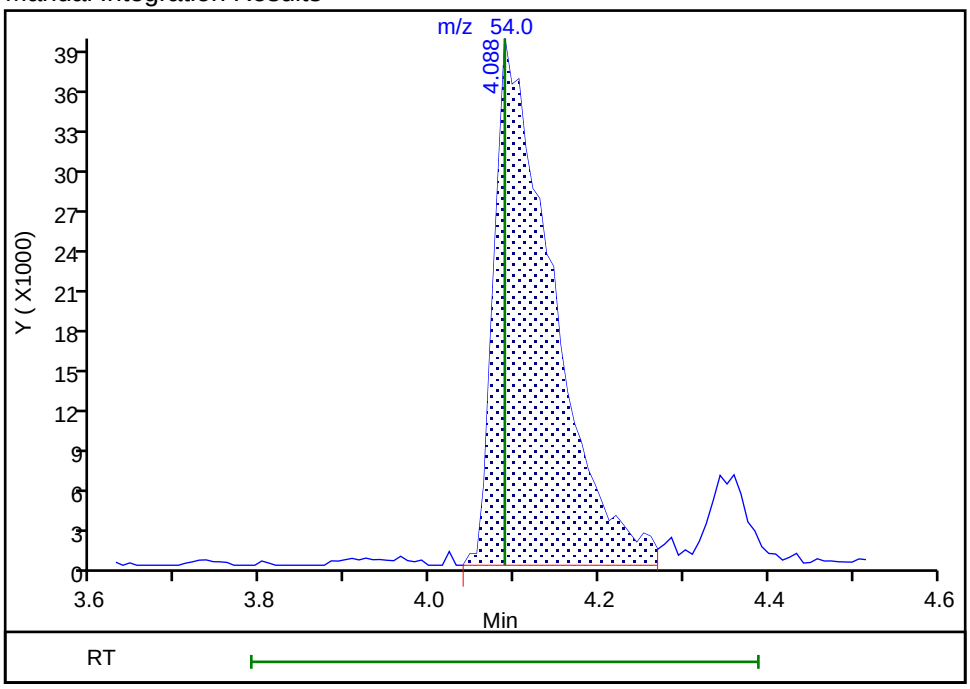
Processing Integration Results

RT: 3.92
Area: 1982
Amount: 2.115806
Amount Units: ug/l



Manual Integration Results

RT: 4.09
Area: 188558
Amount: 201.2876
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

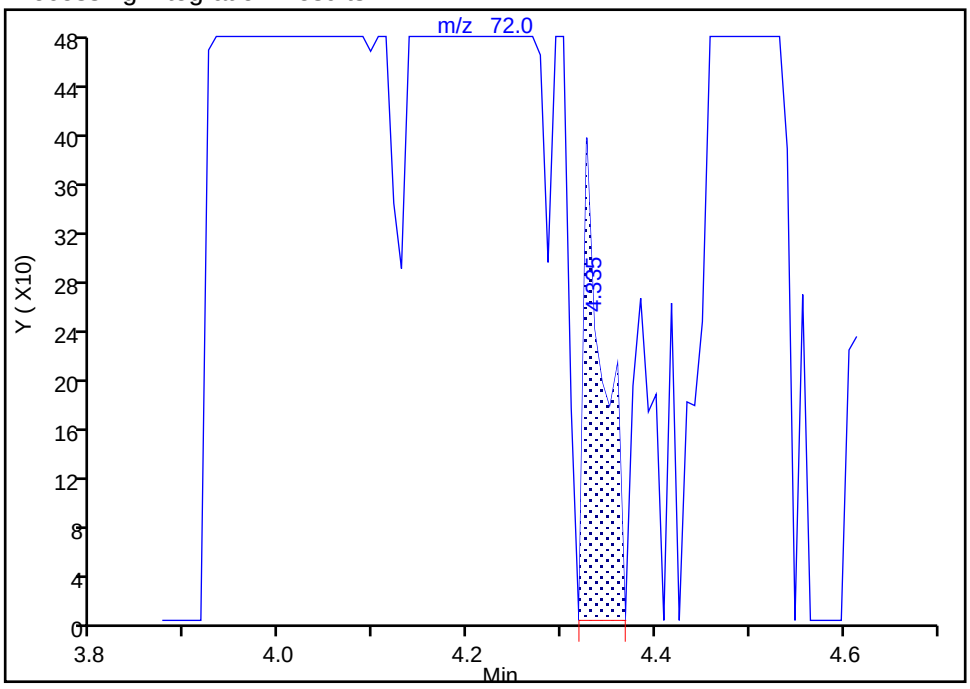
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

46 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

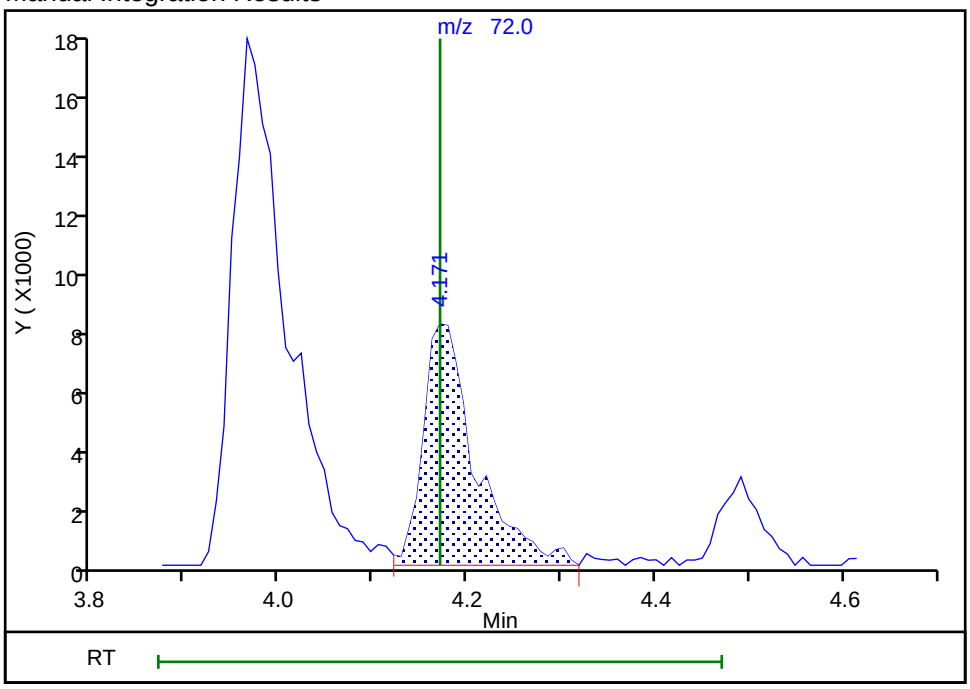
Processing Integration Results

RT: 4.33
Area: 591
Amount: 0.718527
Amount Units: ug/l



Manual Integration Results

RT: 4.17
Area: 31410
Amount: 38.187691
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:27
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Edison

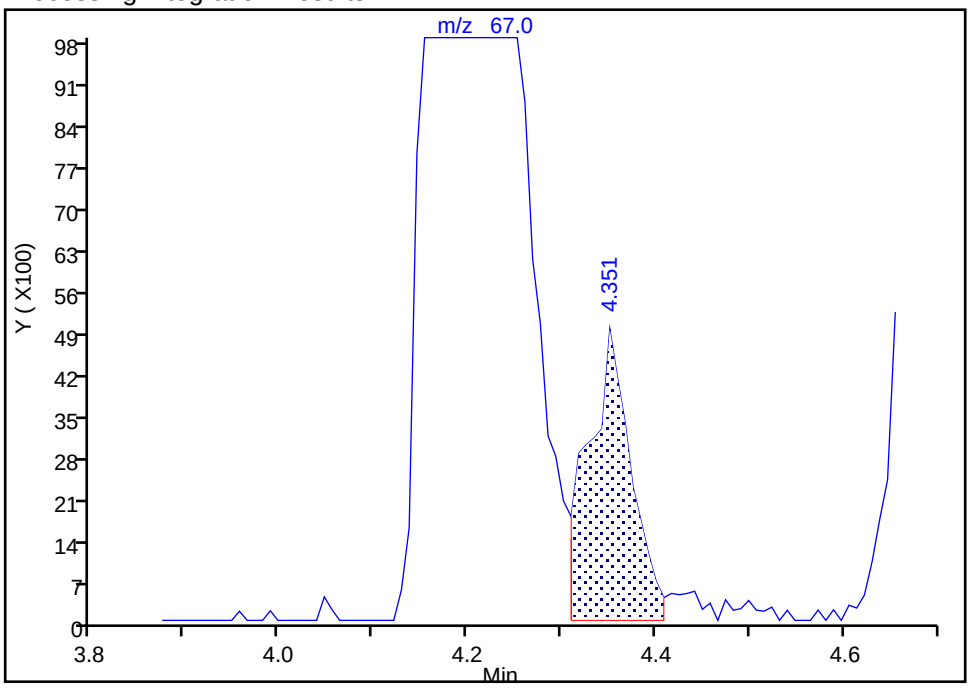
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

47 Methacrylonitrile, CAS: 126-98-7

Signal: 1

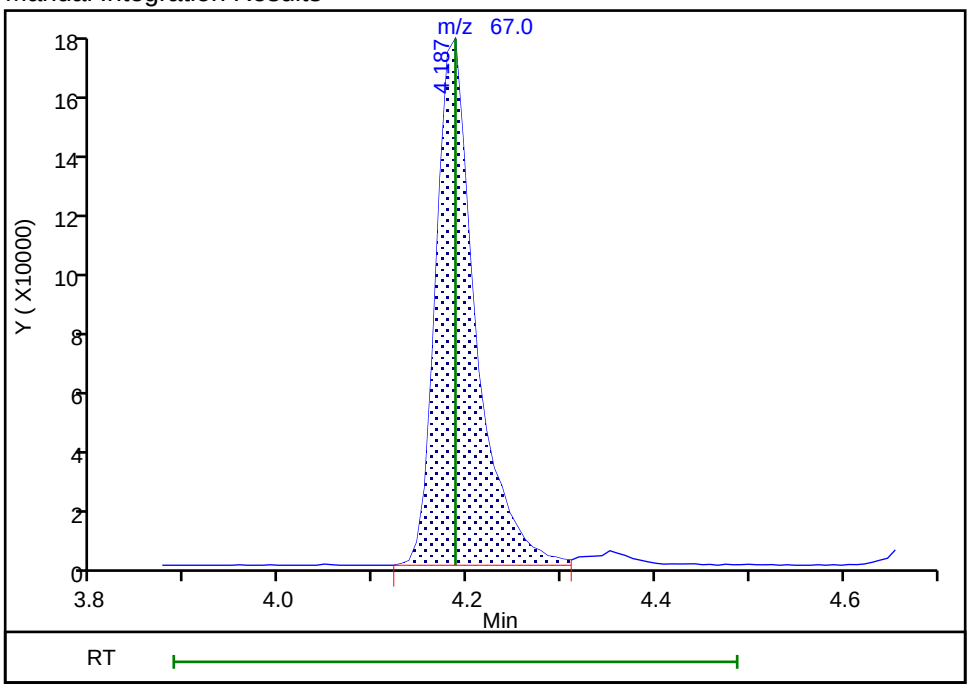
Processing Integration Results

RT: 4.35
Area: 15969
Amount: 4.898326
Amount Units: ug/l



Manual Integration Results

RT: 4.19
Area: 527821
Amount: 161.9036
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

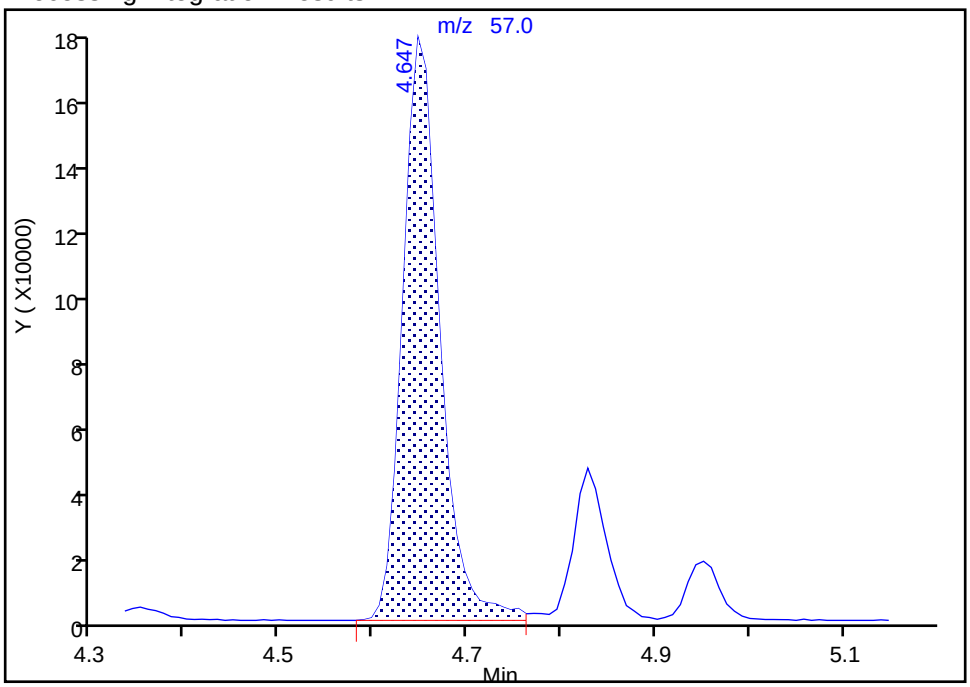
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

60 n-Heptane, CAS: 142-82-5

Signal: 1

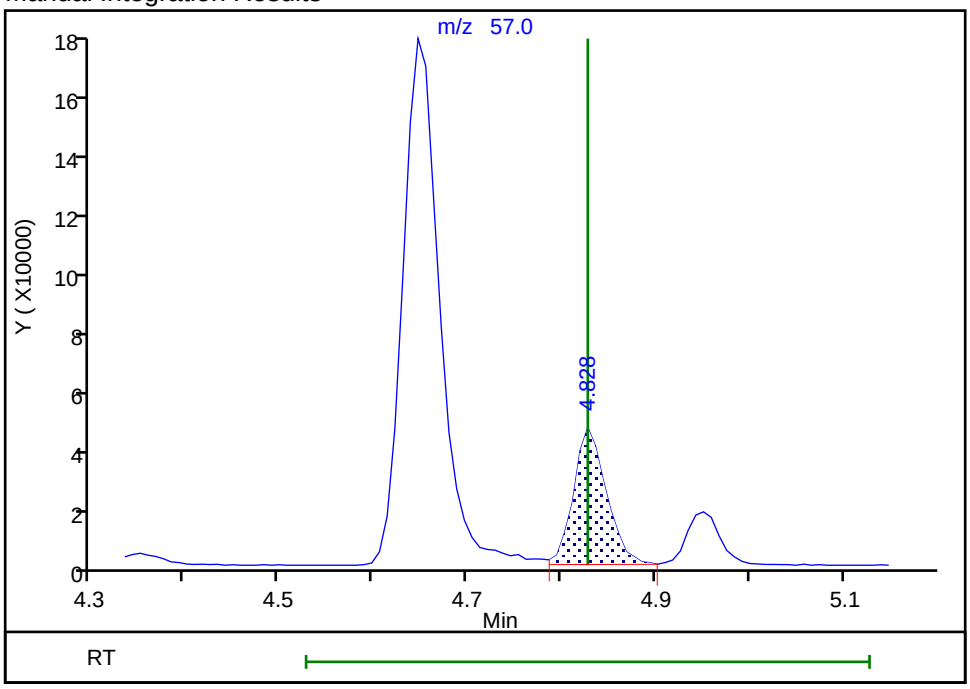
Processing Integration Results

RT: 4.65
Area: 477759
Amount: 83.068671
Amount Units: ug/l



Manual Integration Results

RT: 4.83
Area: 109152
Amount: 18.978421
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

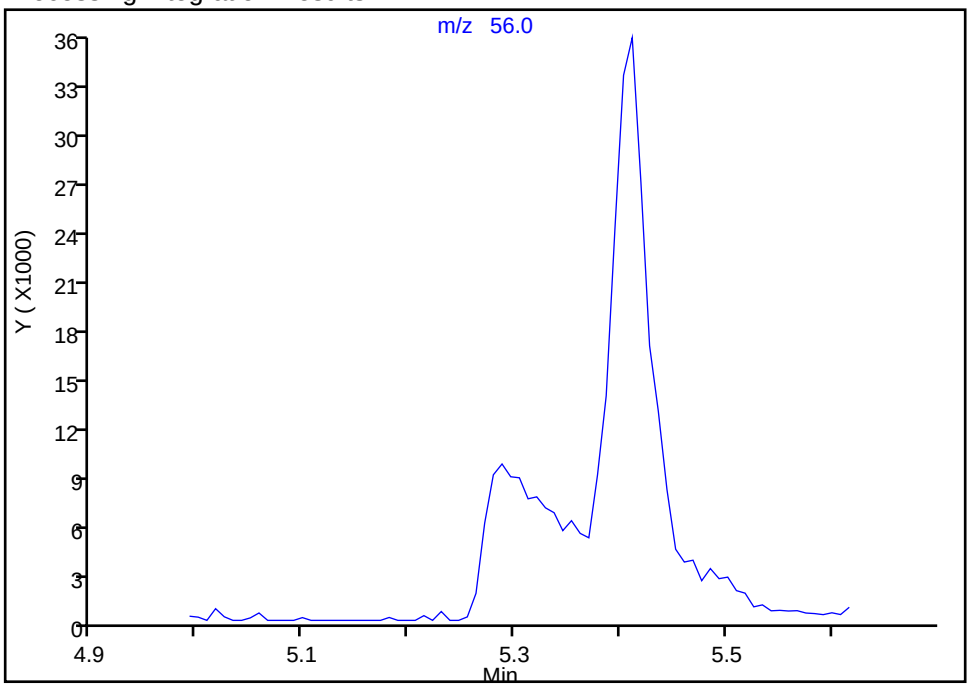
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

62 n-Butanol, CAS: 71-36-3

Signal: 1

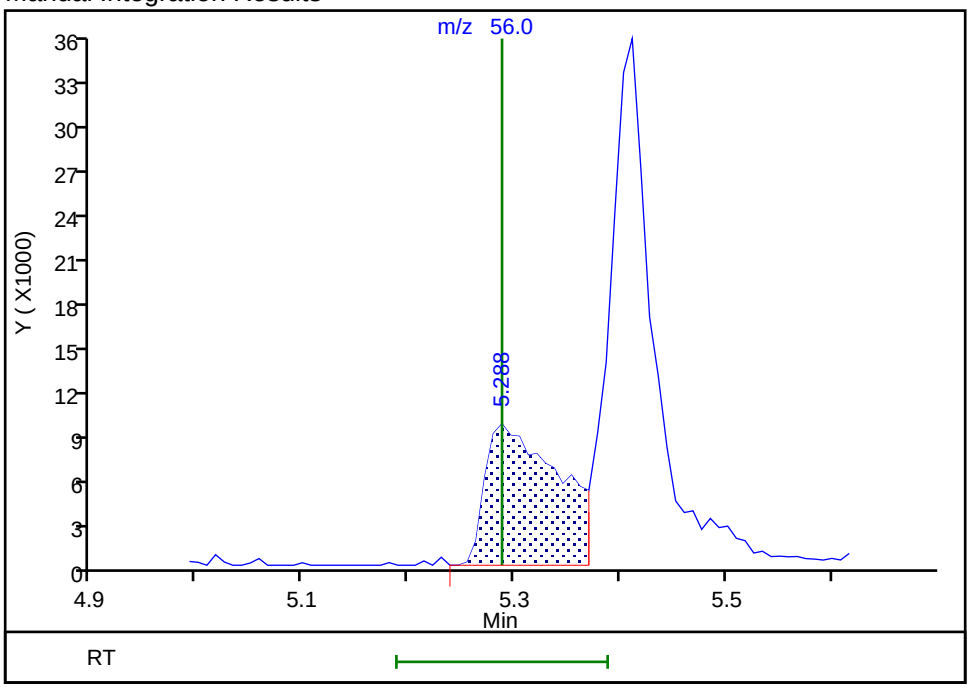
Not Detected
Expected RT: 5.29

Processing Integration Results



Manual Integration Results

RT: 5.29
Area: 45821
Amount: 436.6949
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

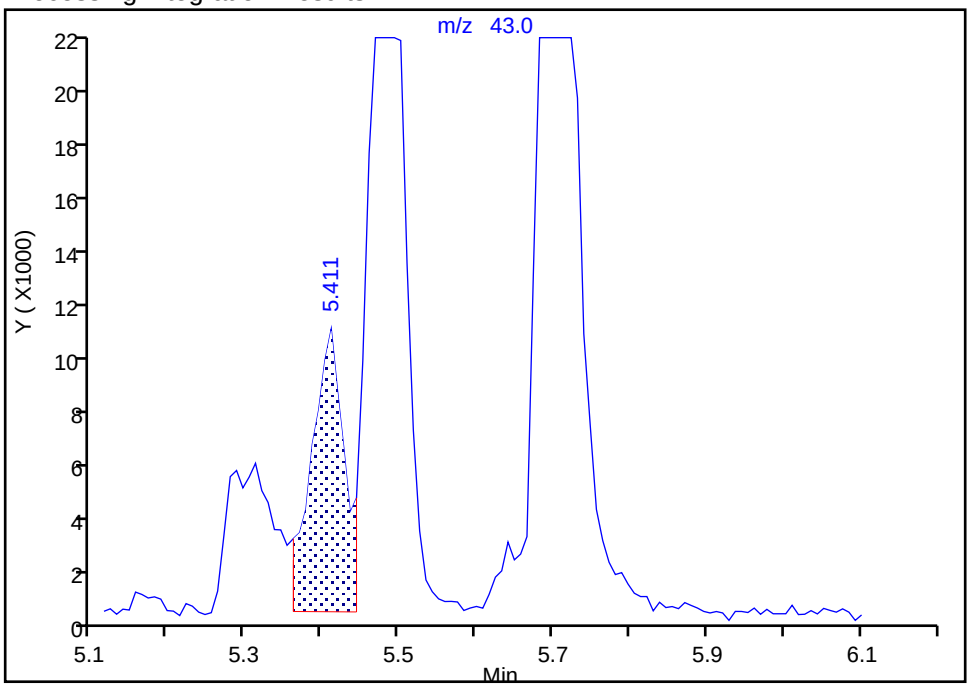
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

71 n-Propyl acetate, CAS: 109-60-4

Signal: 1

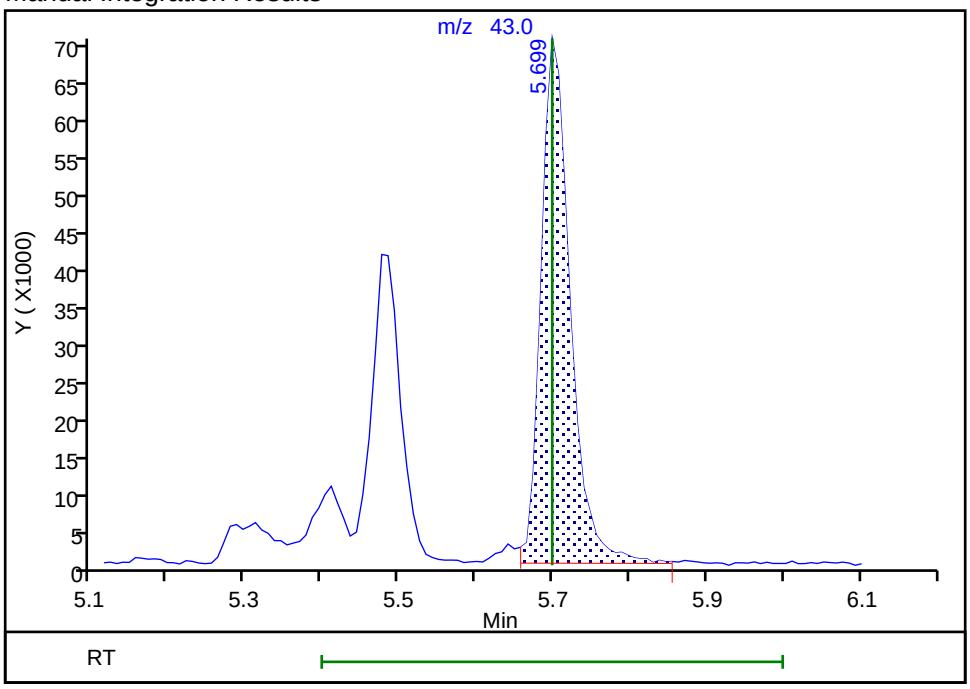
Processing Integration Results

RT: 5.41
Area: 31548
Amount: 2.590166
Amount Units: ug/l



Manual Integration Results

RT: 5.70
Area: 185778
Amount: 15.252817
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 07:35:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

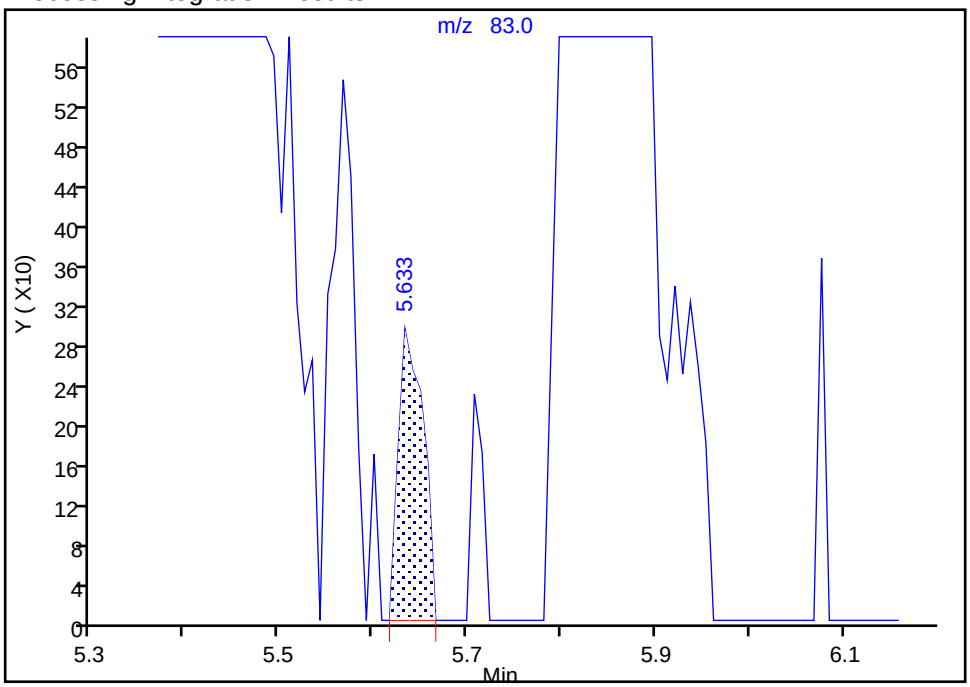
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

72 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

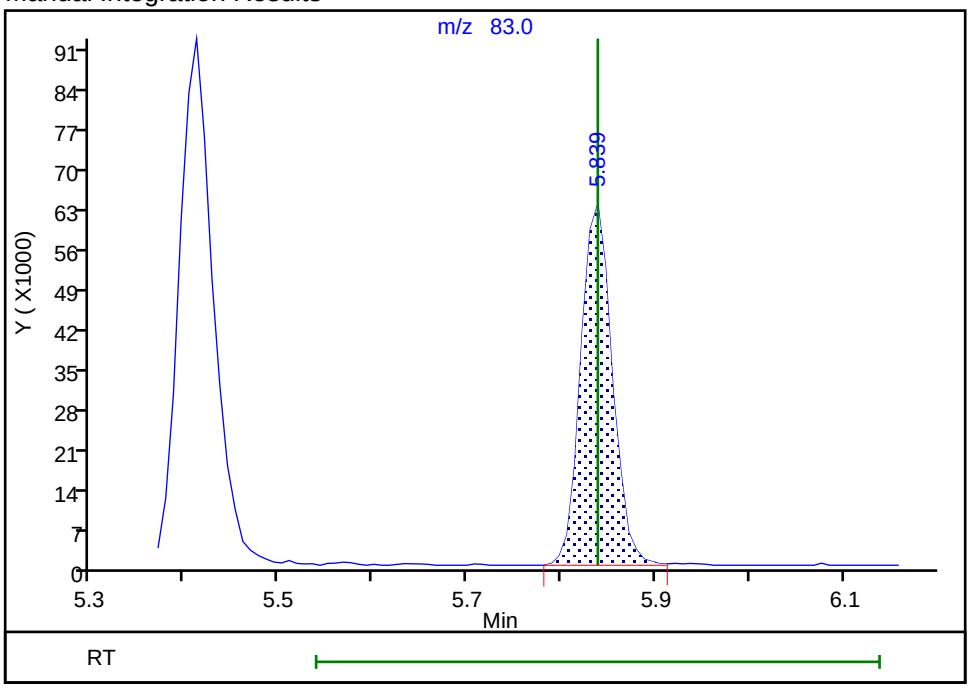
Processing Integration Results

RT: 5.63
Area: 533
Amount: 0.068027
Amount Units: ug/l



Manual Integration Results

RT: 5.84
Area: 147042
Amount: 18.767098
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:51:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

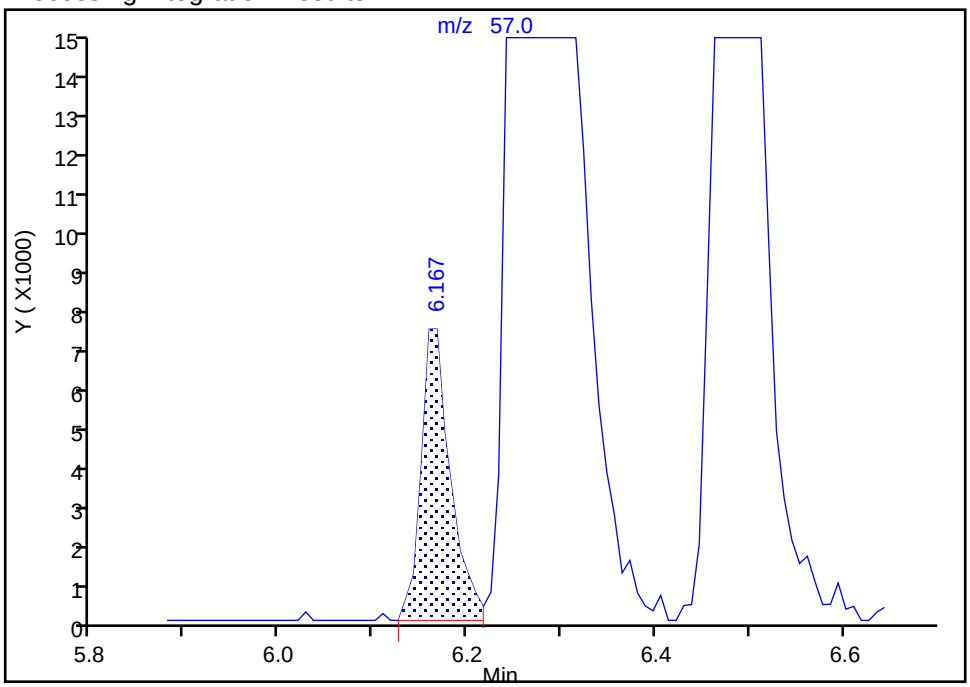
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

75 Epichlorohydrin, CAS: 106-89-8

Signal: 1

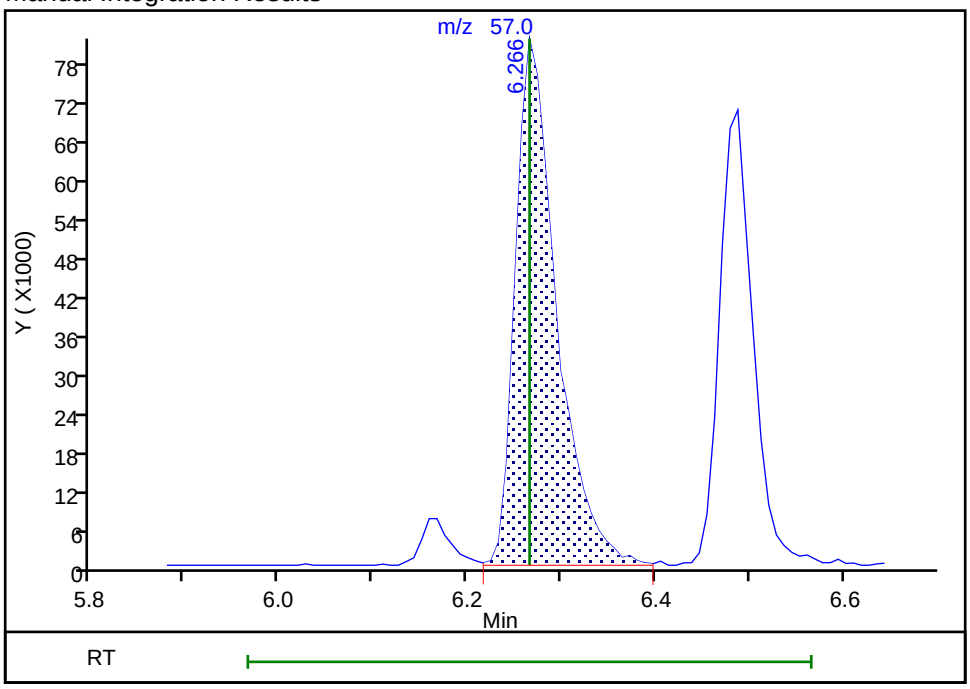
Processing Integration Results

RT: 6.17
Area: 15643
Amount: 26.869761
Amount Units: ug/l



Manual Integration Results

RT: 6.27
Area: 247756
Amount: 425.5670
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

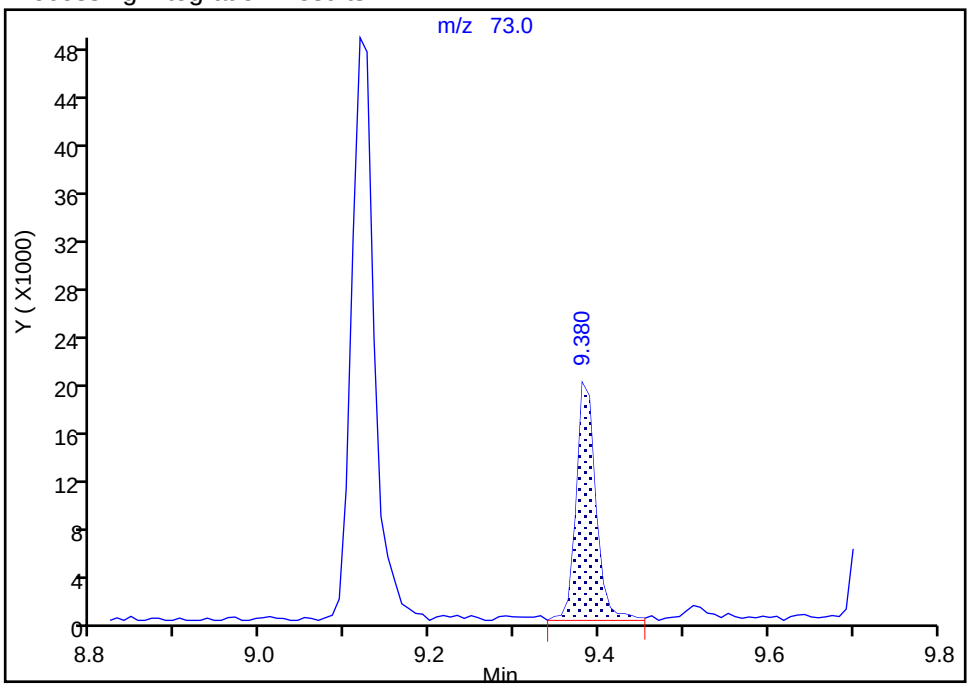
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

94 n-Butyl acrylate, CAS: 141-32-2

Signal: 1

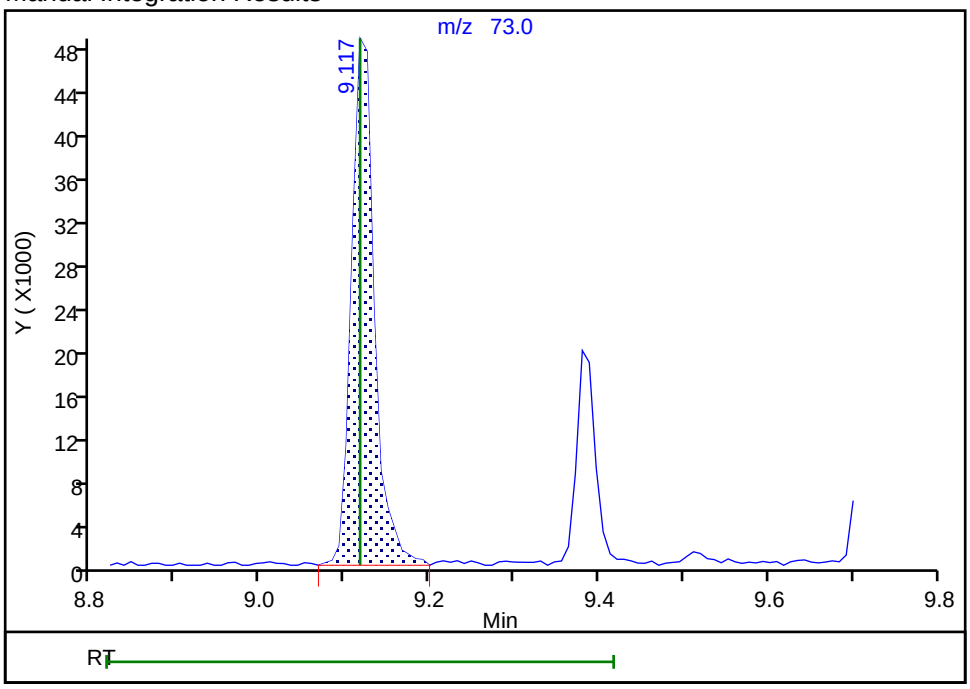
Processing Integration Results

RT: 9.38
Area: 31809
Amount: 6.410474
Amount Units: ug/l



Manual Integration Results

RT: 9.12
Area: 91735
Amount: 18.487373
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

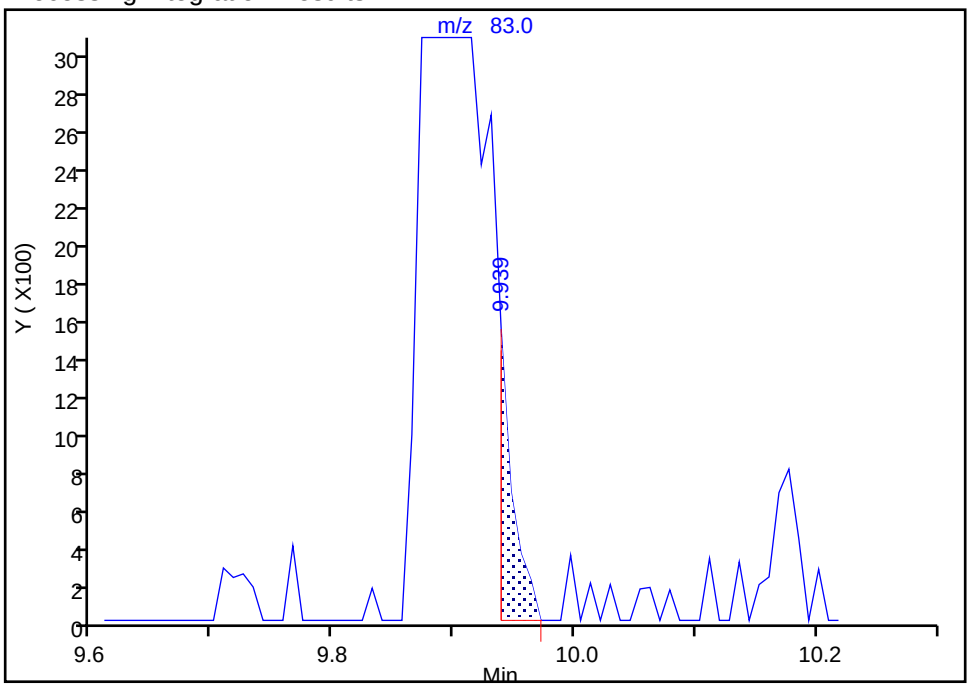
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

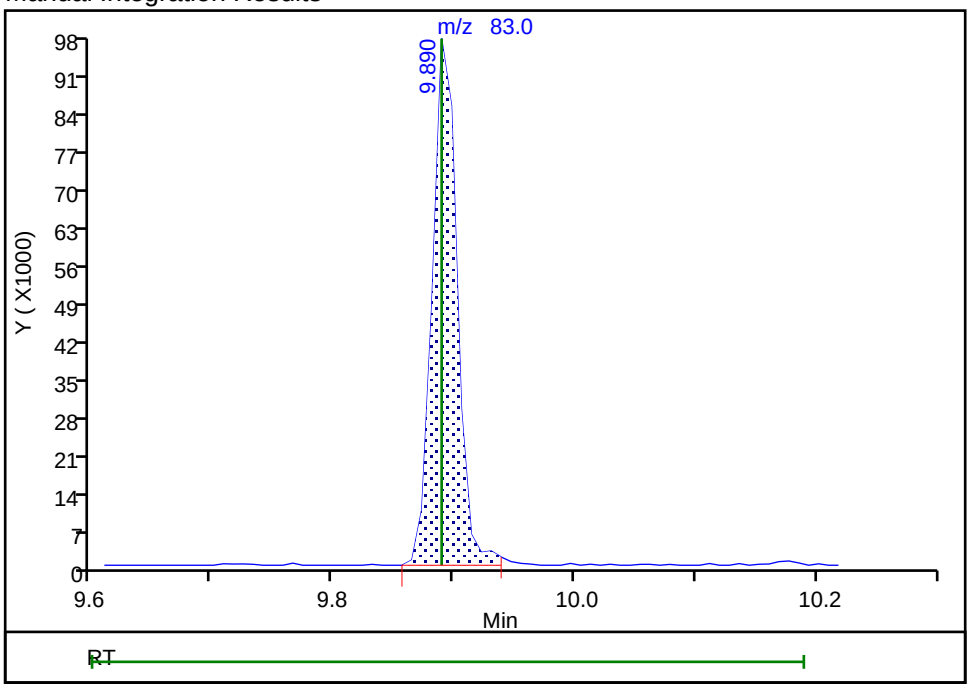
Processing Integration Results

RT: 9.94
Area: 1367
Amount: 0.163893
Amount Units: ug/l



Manual Integration Results

RT: 9.89
Area: 140029
Amount: 16.788406
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

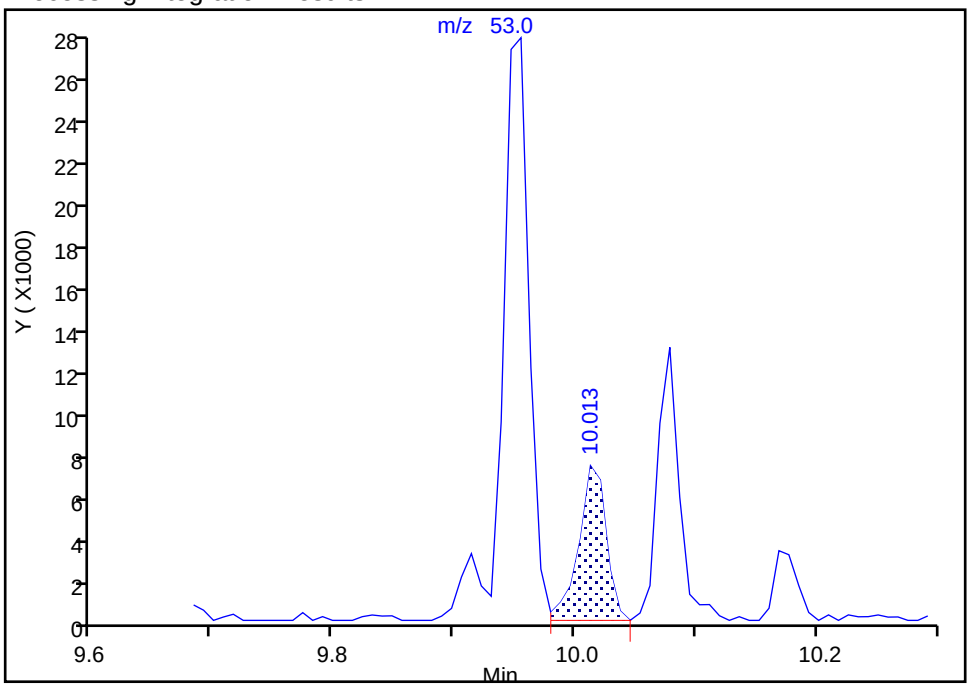
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

105 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

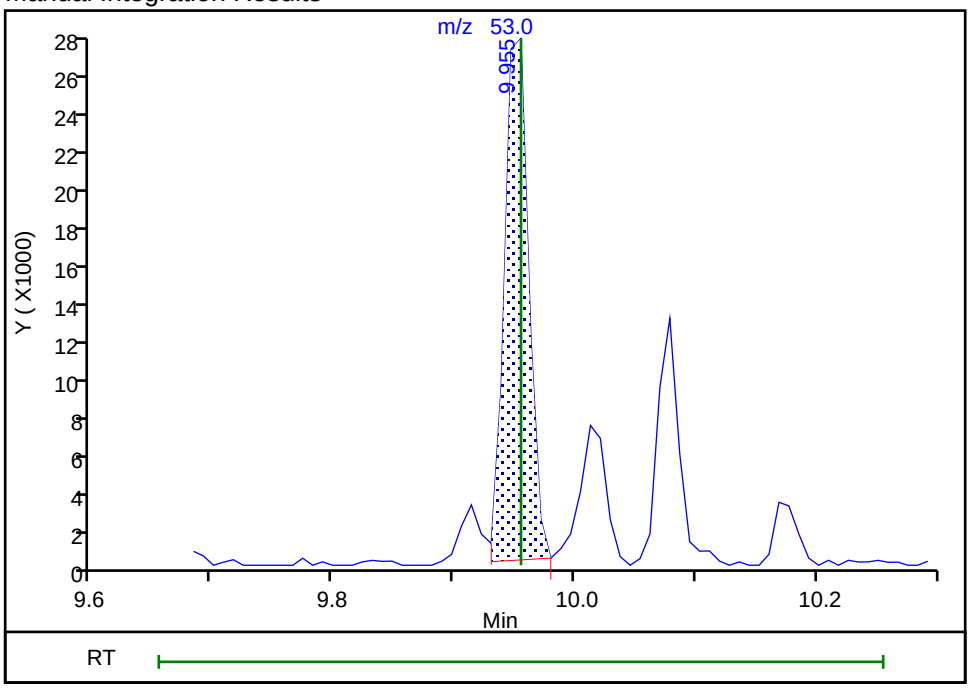
Processing Integration Results

RT: 10.01
Area: 11411
Amount: 4.885515
Amount Units: ug/l



Manual Integration Results

RT: 9.96
Area: 37770
Amount: 16.170878
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

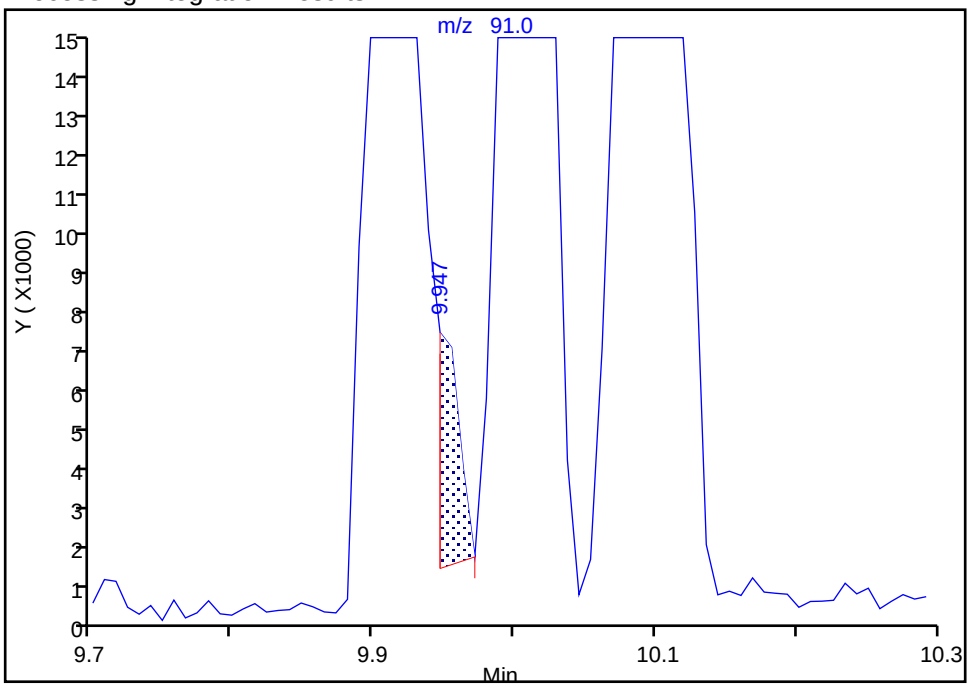
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

106 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

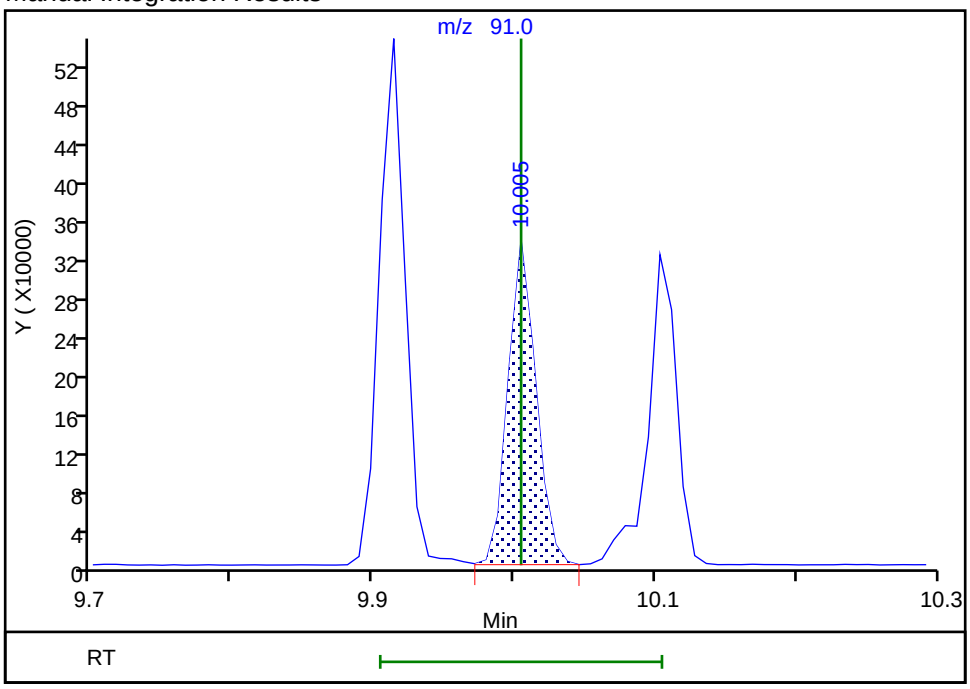
Processing Integration Results

RT: 9.95
Area: 6587
Amount: 0.275679
Amount Units: ug/l



Manual Integration Results

RT: 10.00
Area: 463220
Amount: 19.386670
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

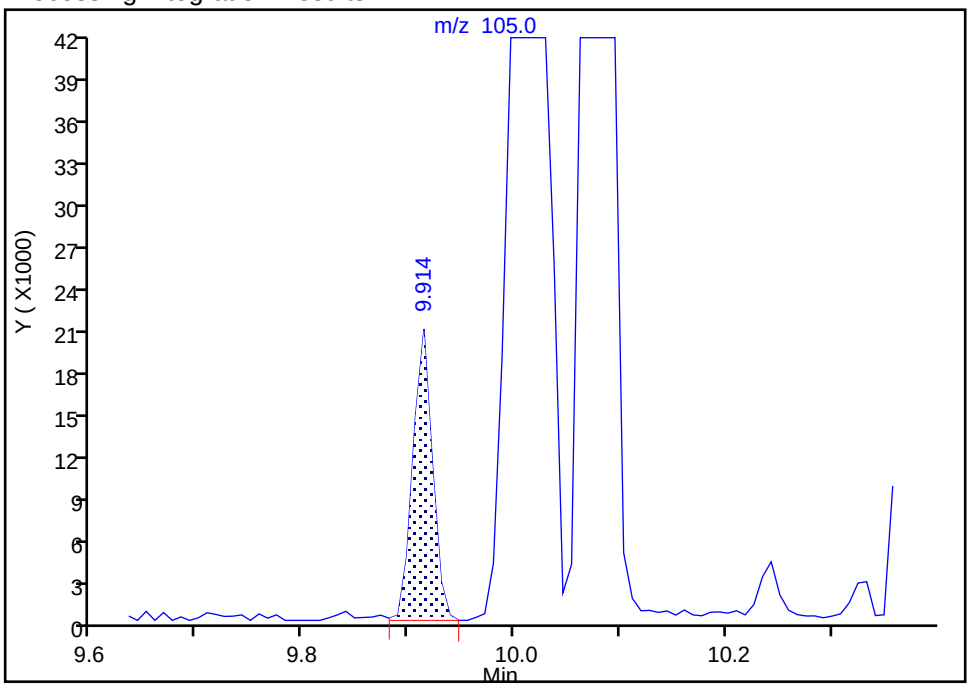
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

108 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

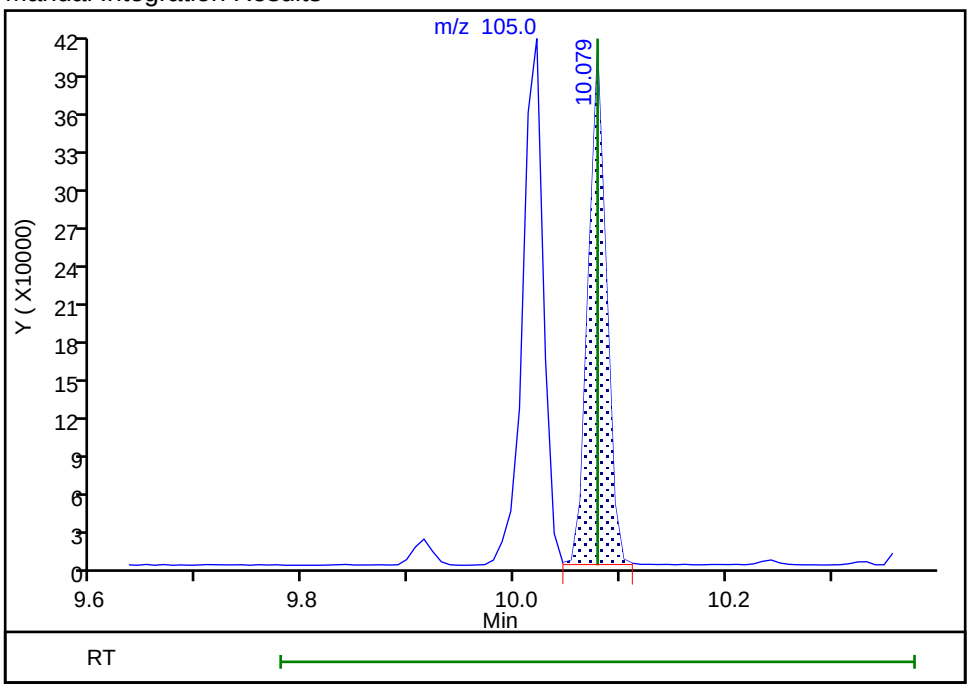
Processing Integration Results

RT: 9.91
Area: 26841
Amount: 1.136269
Amount Units: ug/l



Manual Integration Results

RT: 10.08
Area: 489134
Amount: 20.706668
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Edison

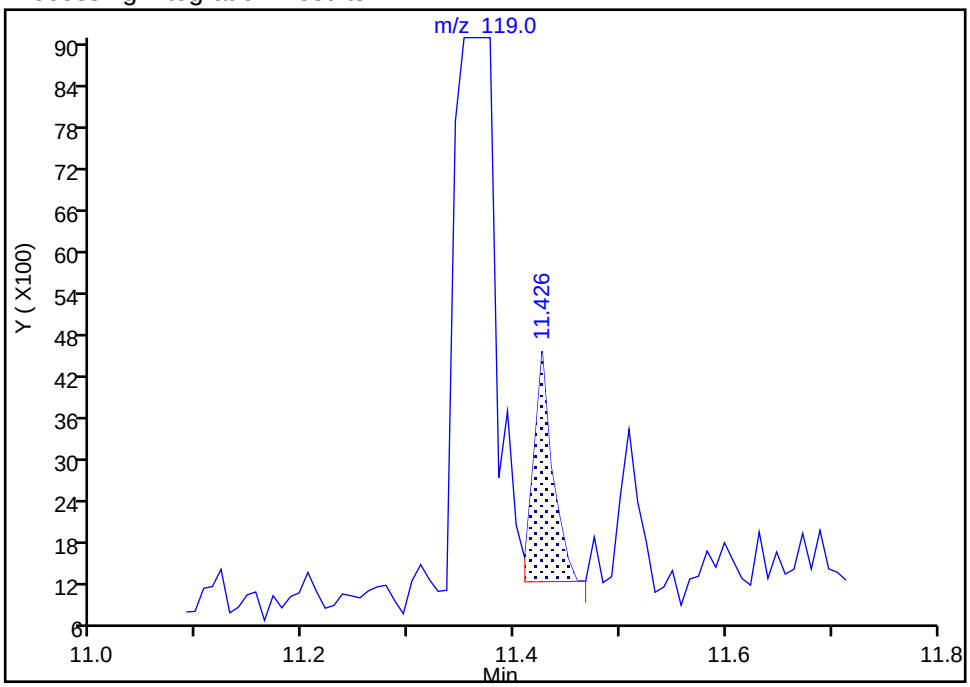
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24991.D
Injection Date: 19-Jan-2022 06:31:30 Instrument ID: CVOAMS6
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

124 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

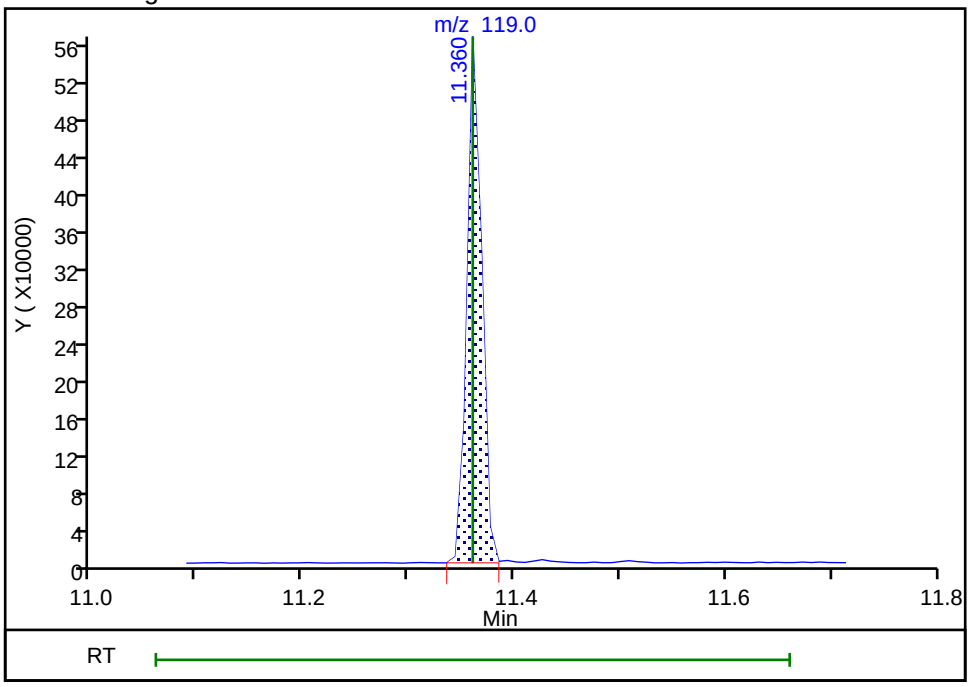
Processing Integration Results

RT: 11.43
Area: 4119
Amount: 0.163583
Amount Units: ug/l



Manual Integration Results

RT: 11.36
Area: 544694
Amount: 21.632107
Amount Units: ug/l



Reviewer: moroneyc, 19-Jan-2022 06:52:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22508.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Nov-2021 12:03:30	ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0138064-001				
Operator ID:		Instrument ID:	CVOAMS6		
Method:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\8260624W6.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	24-Nov-2021 08:41:56	Calib Date:	23-Nov-2021 14:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1644				
First Level Reviewer: moroneyc		Date:	23-Nov-2021 12:10:06		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 134 BFB

QC Flag Legend

Processing Flags

Reagents:

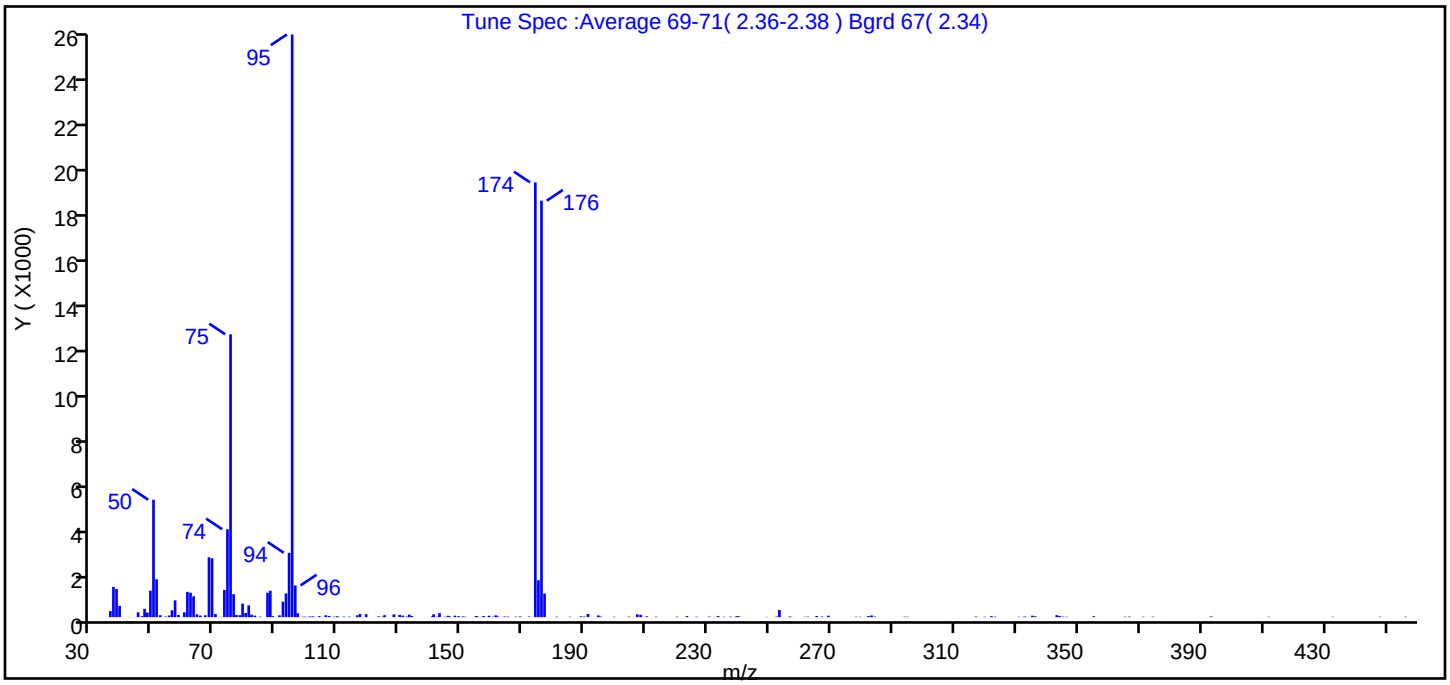
BFB_00030 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22508.D				
Injection Date:	23-Nov-2021 12:03:30	Instrument ID:	CVOAMS6		
Lims ID:	BFB				
Client ID:					
Operator ID:		ALS Bottle#:	99	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		
Tune Method:	BFB Method 8260D				

$ 134 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	50 to 200% of m/z 174	100.0 (134.0)
96	5 to 9% of m/z 95	5.4
173	<2% of m/z 174	0.0 (0.0)
174	50 to 200% of m/z 95	74.6
175	5 to 9% of m/z 174	6.3 (8.5)
176	95 to 105% of m/z 174	71.5 (95.8)
177	5 to 10% of m/z 176	4.0 (5.7)

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22508.D\8260624W6.rslt\spectra.d
Injection Date: 23-Nov-2021 12:03:30
Spectrum: Tune Spec :Average 69-71(2.36-2.38) Bgrd 67(2.34)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	261	89.00	43	150.00	30	249.00	12
37.00	1310	91.00	79	151.00	17	252.00	24
38.00	1220	92.00	670	153.00	1	253.00	312
39.00	490	93.00	1029	154.00	24	256.00	17
42.00	7	94.00	2788	155.00	52	257.00	19
45.00	210	95.00	25248	157.00	47	261.00	15
46.00	40	96.00	1375	159.00	59	262.00	22
47.00	359	97.00	169	160.00	20	265.00	49
48.00	196	99.00	17	161.00	79	267.00	24
49.00	1147	99.00	16	162.00	28	269.00	63
50.00	5088	101.00	24	164.00	28	278.00	18
51.00	1640	101.00	18	165.00	24	279.00	17
52.00	85	102.00	31	168.00	21	282.00	49
54.00	26	104.00	42	169.00	31	283.00	73
55.00	71	105.00	2	172.00	27	284.00	23
56.00	297	106.00	83	174.00	18840	294.00	20
57.00	726	107.00	51	175.00	1599	295.00	16
58.00	94	108.00	18	176.00	18048	317.00	26
60.00	209	110.00	36	177.00	1022	320.00	18
61.00	1097	110.00	21	178.00	1	322.00	43
62.00	1059	112.00	21	181.00	22	323.00	22
63.00	902	114.00	21	185.00	18	331.00	16
64.00	125	116.00	80	189.00	36	332.00	16
65.00	69	117.00	135	190.00	23	333.00	22
67.00	81	119.00	128	191.00	137	335.00	65
68.00	2595	123.00	34	194.00	75	336.00	35
69.00	2551	124.00	25	195.00	30	343.00	85
70.00	141	125.00	85	200.00	18	344.00	52
72.00	13	128.00	120	204.00	24	345.00	22
73.00	1176	130.00	96	207.00	122	346.00	17
74.00	3807	131.00	66	208.00	102	355.00	41
75.00	12256	132.00	26	210.00	35	365.00	20
76.00	994	133.00	110	213.00	20	367.00	23

Report Date: 24-Nov-2021 08:41:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22508.D\8260624W6.rslt\spectra.d
Injection Date: 23-Nov-2021 12:03:30
Spectrum: Tune Spec :Average 69-71(2.36-2.38) Bgrd 67(2.34)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	95	134.00	49	220.00	22	371.00	18
78.00	85	141.00	51	223.00	47	374.00	20
79.00	585	141.00	126	226.00	18	393.00	29
80.00	180	142.00	18	230.00	25	412.00	17
81.00	507	143.00	173	232.00	8	433.00	16
82.00	106	145.00	16	233.00	49	448.00	16
83.00	68	146.00	58	235.00	17	456.00	19
85.00	23	146.00	30	237.00	21		
87.00	1056	148.00	63	239.00	43		
88.00	1143	149.00	42	240.00	37		

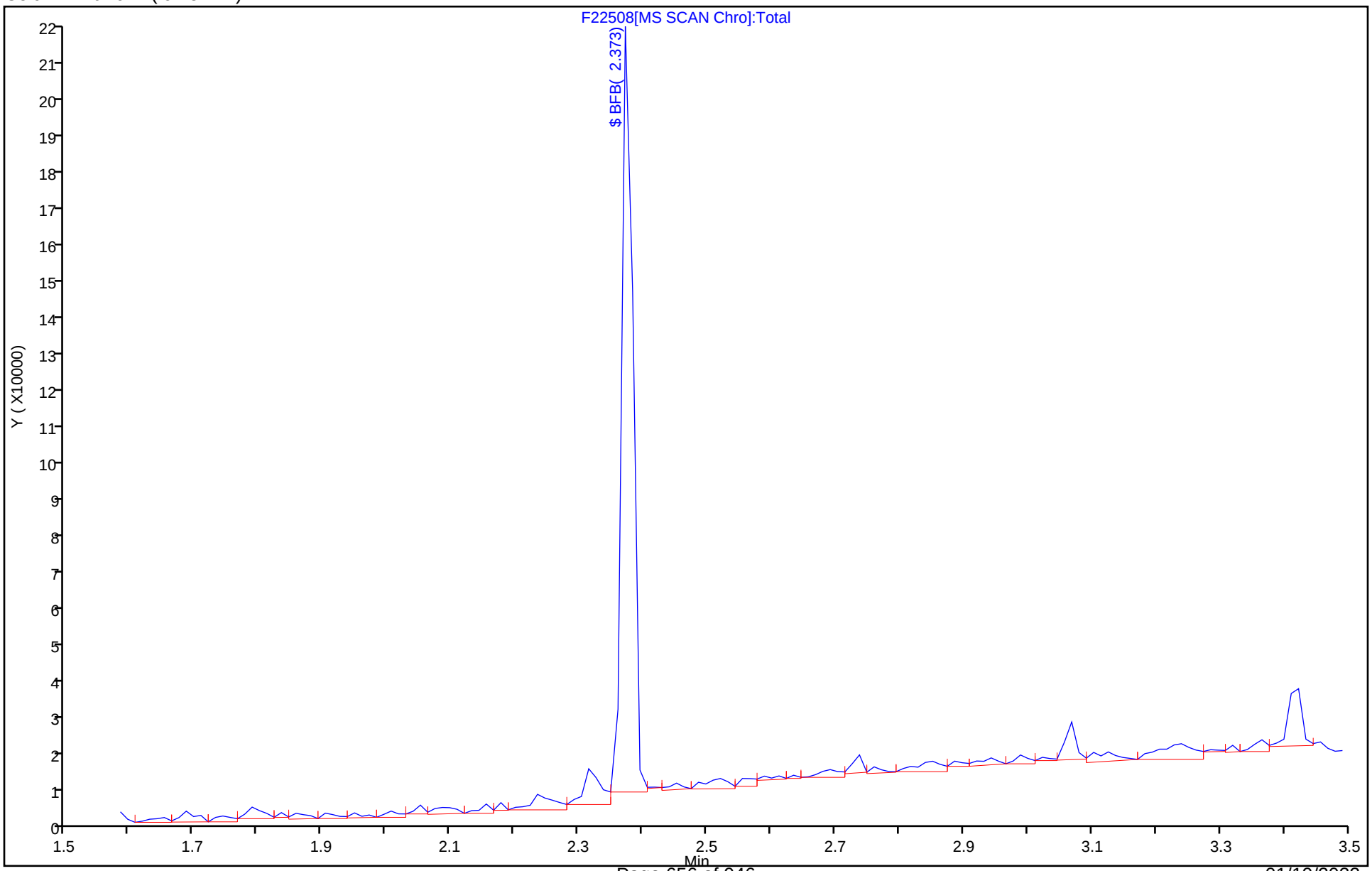
Report Date: 24-Nov-2021 08:41:56 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22508.D

Injection Date:	23-Nov-2021 12:03:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	99
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-823788/8

Matrix: Water | Lab File ID: F24967.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 08:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	90		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	103		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24967.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jan-2022 08:29:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140330-008
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 09:23:22 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 09:23:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.954	2.946	0.008	0	680929	1000.0	1000.0	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	949864	250.0	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	29	317901	50.0	44.8	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	405783	50.0	44.6	
* 61 Fluorobenzene	96	4.951	4.951	0.000	39	1375983	50.0	50.0	
* 67 1,4-Dioxane-d8	96	5.633	5.691	-0.058	0	51969	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.561	6.562	-0.001	36	1245506	50.0	45.5	
* 89 Chlorobenzene-d5	117	8.303	8.304	-0.001	22	1005952	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	366663	50.0	51.3	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	27	569850	50.0	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

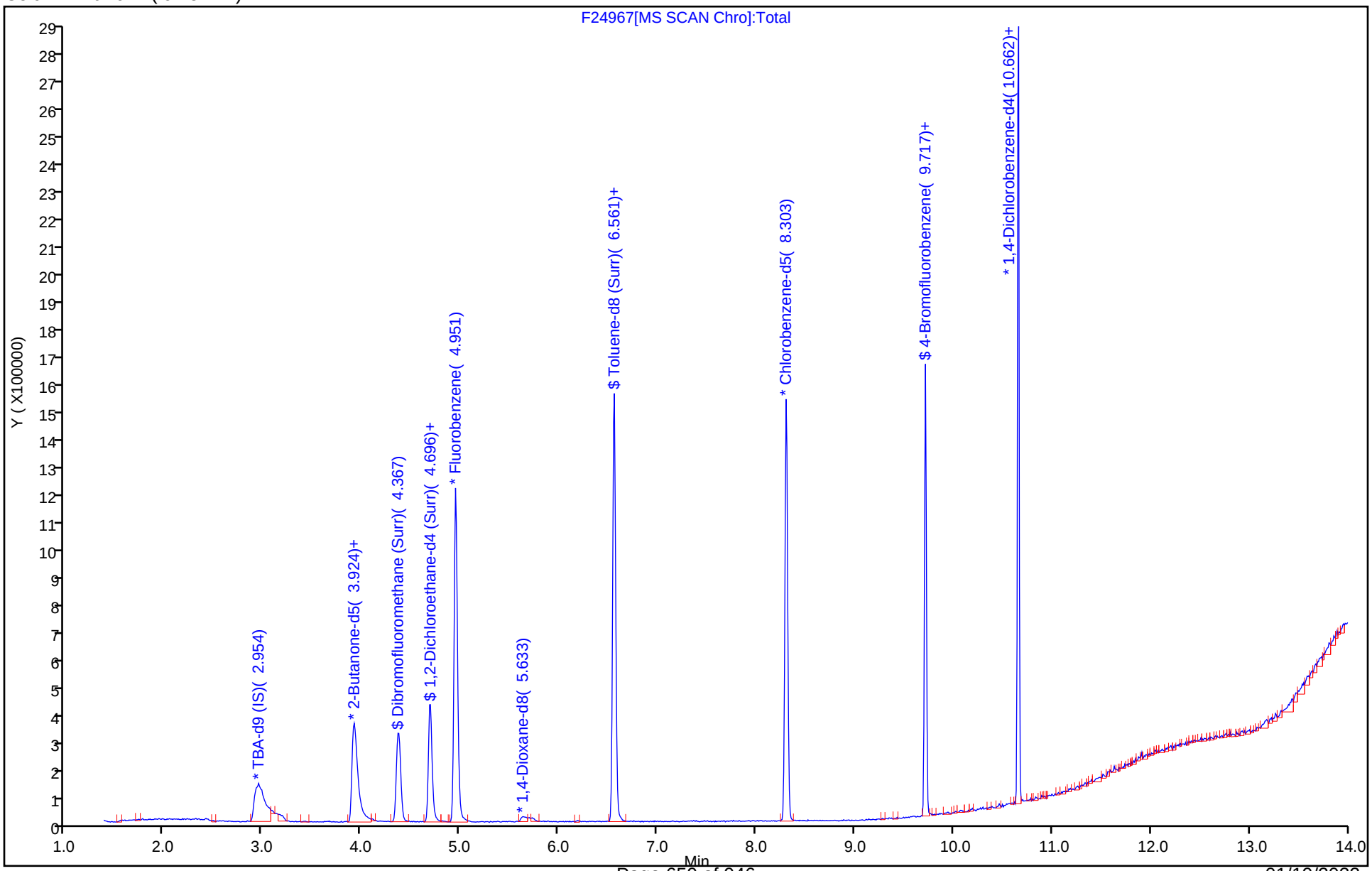
Report Date: 18-Jan-2022 09:23:23 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24967.D

Injection Date:	18-Jan-2022 08:29:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24967.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jan-2022 08:29:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140330-008
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 09:23:22 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: moroneyc Date: 18-Jan-2022 09:23:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.8	89.68
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.6	89.17
$ 78 Toluene-d8 (Surr)	50.0	45.5	90.99
$ 100 4-Bromofluorobenzene	50.0	51.3	102.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-823977/8

Matrix: Water | Lab File ID: F24996.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 08:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.49
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.46
127-18-4	Tetrachloroethene	1.0	U	1.0	0.44
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.51
79-01-6	Trichloroethene	1.0	U	1.0	0.44
75-01-4	Vinyl chloride	1.0	U	1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-123
1868-53-7	Dibromofluoromethane (Surr)	88		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24996.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Jan-2022 08:23:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140380-008
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 08:48:51 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: moroneyc Date: 19-Jan-2022 08:48:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 26 TBA-d9 (IS)	65	2.938	2.938	0.000	0	571075	1000.0	1000.0	
* 38 2-Butanone-d5	46	3.916	3.916	0.000	0	842123	250.0	250.0	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	29	295222	50.0	44.0	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.688	0.000	0	397392	50.0	46.1	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1302567	50.0	50.0	
* 67 1,4-Dioxane-d8	96	5.625	5.699	-0.074	0	36963	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	6.562	6.553	0.009	36	1159033	50.0	46.1	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	22	924824	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	334424	50.0	50.9	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	532497	50.0	50.0	

QC Flag Legend
Processing Flags

Reagents:
VOA6IS/SURR_00052 Amount Added: 5.00 Units: uL Run Reagent

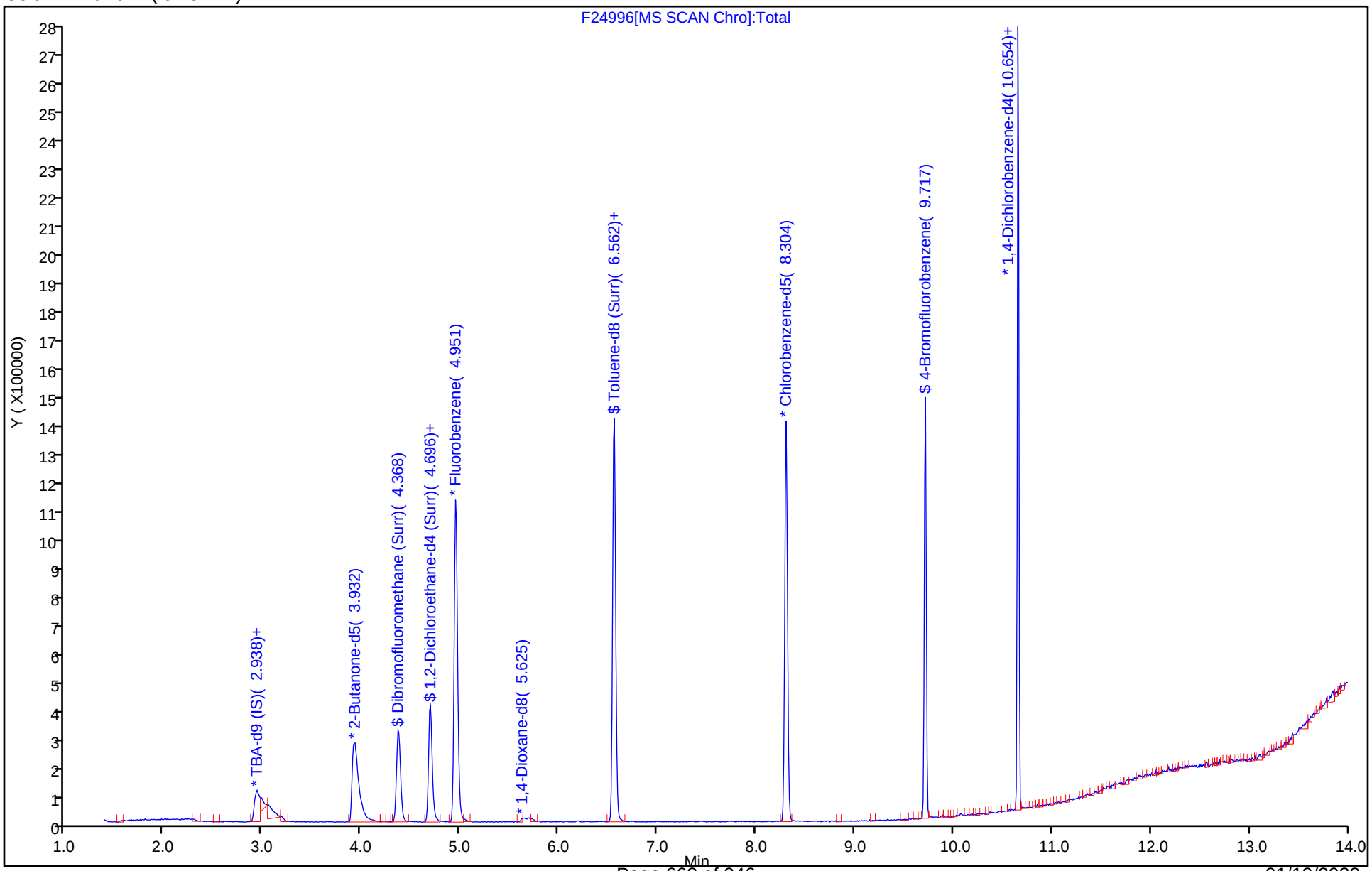
Report Date: 19-Jan-2022 08:48:52 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24996.D

Injection Date:	19-Jan-2022 08:23:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24996.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Jan-2022 08:23:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140380-008
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 08:48:51 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1604

First Level Reviewer: moroneyc Date: 19-Jan-2022 08:48:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.0	87.98
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.1	92.24
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.10
$ 100 4-Bromofluorobenzene	50.0	50.9	101.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-823788/4

Matrix: Water | Lab File ID: F24963.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 07:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	16.9		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	17.5		1.0	0.46
127-18-4	Tetrachloroethene	21.2		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	17.9		1.0	0.51
79-01-6	Trichloroethene	17.6		1.0	0.44
75-01-4	Vinyl chloride	15.4		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	101		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24963.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jan-2022 07:01:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140330-004
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:53:56 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 08:08:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.484	1.492	-0.008	32	127388	20.0	15.9	
2 Chloromethane	50	1.640	1.648	-0.008	37	166267	20.0	14.6	
4 Butadiene	54	1.705	1.714	-0.009	37	140642	20.0	15.3	
3 Vinyl chloride	62	1.705	1.714	-0.009	28	156019	20.0	15.4	
5 Bromomethane	94	1.968	1.977	-0.009	99	93237	20.0	19.4	a
6 Chloroethane	64	2.018	2.026	-0.008	39	84008	20.0	16.5	
7 Dichlorofluoromethane	67	2.157	2.166	-0.009	34	247857	20.0	18.6	
9 Trichlorofluoromethane	101	2.174	2.182	-0.008	63	199783	20.0	19.6	
8 Pentane	72	2.223	2.232	-0.009	37	51400	40.0	36.9	
10 Ethanol	46	2.396	2.363	0.033	35	13241	800.0	458.8	
11 Ethyl ether	59	2.363	2.371	-0.008	20	107941	20.0	17.7	
12 2-Methyl-1,3-butadiene	53	2.412	2.412	0.000	46	124599	20.0	17.7	
15 Acrolein	56	2.519	2.527	-0.008	34	28864	40.6	29.1	
16 112TCTFE	101	2.535	2.544	-0.009	41	123148	20.0	18.4	
17 1,1-Dichloroethene	96	2.560	2.560	0.000	39	115621	20.0	16.9	
18 Acetone	43	2.675	2.642	0.033	39	232339	100.0	107.1	
19 Iodomethane	142	2.700	2.700	0.000	32	192274	20.0	19.0	
20 Isopropyl alcohol	45	2.782	2.716	0.066	32	46286	200.0	160.7	
21 Carbon disulfide	76	2.716	2.725	-0.009	21	408374	20.0	15.4	
23 Methyl acetate	43	2.848	2.848	0.000	45	271054	40.0	37.4	
22 3-Chloro-1-propene	41	2.839	2.848	-0.009	37	312575	20.0	18.0	
24 Cyclopentene	67	2.864	2.864	0.000	68	332374	20.0	17.8	
25 Acetonitrile	41	2.938	2.897	0.041	55	193682	200.0	215.1	M
* 26 TBA-d9 (IS)	65	2.979	2.946	0.033	0	727319	1000.0	1000.0	
27 Methylene Chloride	84	2.954	2.963	-0.009	29	136186	20.0	17.0	
28 2-Methyl-2-propanol	59	3.053	3.004	0.049	91	143788	200.0	196.9	a
29 Methyl tert-butyl ether	73	3.094	3.094	0.000	38	362395	20.0	17.6	
30 trans-1,2-Dichloroethene	96	3.127	3.127	0.000	38	132360	20.0	17.9	
31 Acrylonitrile	53	3.176	3.185	-0.009	48	595519	200.0	152.9	
32 Hexane	43	3.283	3.267	0.016	19	152491	20.0	16.9	
33 Isopropyl ether	45	3.447	3.448	-0.001	97	403918	20.0	16.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	86	3.480	3.489	-0.009	27	57435	40.0	36.7	
34 1,1-Dichloroethane	63	3.480	3.489	-0.009	47	247668	20.0	17.2	
36 2-Chloro-1,3-butadiene	88	3.530	3.522	0.008	45	121357	20.0	18.3	
37 Tert-butyl ethyl ether	59	3.735	3.743	-0.008	37	376638	20.0	17.2	
* 38 2-Butanone-d5	46	3.924	3.924	0.000	0	931200	250.0	250.0	
39 2,2-Dichloropropane	97	3.932	3.932	0.000	43	44820	20.0	18.7	
40 cis-1,2-Dichloroethene	96	3.965	3.974	-0.009	26	142822	20.0	17.5	
41 2-Butanone (MEK)	72	3.965	3.982	-0.017	41	87799	100.0	107.9	
42 Ethyl acetate	70	3.973	3.982	-0.009	25	29724	40.0	44.6	
43 Methyl acrylate	55	4.023	4.023	0.000	15	135754	20.0	17.2	
44 Propionitrile	54	4.121	4.097	0.024	31	218886	200.0	188.9	
46 Tetrahydrofuran	72	4.162	4.179	-0.017	35	35556	40.0	36.5	
45 Chlorobromomethane	128	4.171	4.179	-0.009	32	70570	20.0	19.0	
47 Methacrylonitrile	67	4.187	4.187	0.000	46	604207	200.0	165.0	
48 Chloroform	83	4.228	4.228	0.000	33	219283	20.0	18.0	
50 1,1,1-Trichloroethane	97	4.359	4.360	-0.001	48	190814	20.0	18.5	
49 Cyclohexane	84	4.351	4.360	-0.009	43	225363	20.0	18.0	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	33	326017	50.0	45.3	
52 Carbon tetrachloride	117	4.475	4.483	-0.008	29	160534	20.0	18.7	
53 1,1-Dichloropropene	75	4.491	4.491	0.000	28	176960	20.0	17.5	
54 Isobutyl alcohol	43	4.647	4.647	0.000	27	191538	500.0	473.3	
55 Benzene	78	4.672	4.680	-0.008	53	504824	20.0	17.1	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.697	-0.009	0	407350	50.0	44.0	
57 Isopropyl acetate	43	4.737	4.738	-0.001	40	305698	20.0	13.0	
58 Tert-amyl methyl ether	73	4.737	4.746	-0.009	79	414229	20.0	16.8	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	46	174148	20.0	18.0	
60 n-Heptane	57	4.828	4.828	0.000	92	115273	20.0	17.8	a
* 61 Fluorobenzene	96	4.951	4.951	0.000	42	1398183	50.0	50.0	
63 Trichloroethene	95	5.288	5.288	0.000	42	121753	20.0	17.6	
62 n-Butanol	56	5.288	5.288	0.000	38	54125	500.0	417.1	
64 Ethyl acrylate	55	5.411	5.412	-0.001	37	360663	20.0	16.7	
65 Methylcyclohexane	83	5.411	5.412	-0.001	47	255168	20.0	18.2	
71 n-Propyl acetate	43	5.477	5.477	0.000	35	98657	20.0	7.21	
66 1,2-Dichloropropane	63	5.559	5.568	-0.009	38	125375	20.0	15.9	
68 Methyl methacrylate	100	5.641	5.650	-0.009	38	71455	40.0	34.0	
70 Dibromomethane	93	5.691	5.691	0.000	20	74777	20.0	17.4	
* 67 1,4-Dioxane-d8	96	5.674	5.691	-0.017	0	57057	1000.0	1000.0	
69 1,4-Dioxane	88	5.707	5.707	0.000	47	22952	400.0	423.3	
72 Dichlorobromomethane	83	5.839	5.839	0.000	19	152996	20.0	17.4	
73 2-Nitropropane	41	6.159	6.159	0.000	35	81333	40.0	32.6	
74 2-Chloroethyl vinyl ether	63	6.167	6.167	0.000	27	75412	20.0	15.6	
75 Epichlorohydrin	57	6.274	6.266	0.008	14	289079	400.0	419.7	
76 cis-1,3-Dichloropropene	75	6.323	6.324	-0.001	41	205801	20.0	18.2	
77 4-Methyl-2-pentanone (MIBK)	43	6.488	6.488	0.000	32	708038	100.0	95.1	
$ 78 Toluene-d8 (Surr)	98	6.553	6.562	-0.009	36	1286028	50.0	46.0	
79 Toluene	91	6.627	6.636	-0.009	27	524013	20.0	18.1	
80 trans-1,3-Dichloropropene	75	6.981	6.981	0.000	23	185338	20.0	18.3	
81 Ethyl methacrylate	69	7.014	7.014	0.000	37	160742	20.0	17.3	
82 1,1,2-Trichloroethane	83	7.186	7.186	0.000	31	91192	20.0	17.7	
83 Tetrachloroethene	166	7.227	7.227	0.000	75	124761	20.0	21.2	
84 1,3-Dichloropropane	76	7.392	7.392	0.000	35	188386	20.0	17.3	
85 2-Hexanone	43	7.457	7.458	-0.001	75	468051	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 n-Butyl acetate	43	7.581	7.581	0.000	69	213794	20.0	15.1	
87 Chlorodibromomethane	129	7.613	7.614	-0.001	45	111887	20.0	19.5	
88 Ethylene Dibromide	107	7.761	7.762	-0.001	44	110178	20.0	18.6	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	62	1026660	50.0	50.0	
90 Chlorobenzene	112	8.336	8.337	-0.001	69	334232	20.0	19.2	
91 Ethylbenzene	106	8.443	8.444	-0.001	45	187810	20.0	19.8	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	45	116699	20.0	19.1	
93 m-Xylene & p-Xylene	106	8.608	8.600	0.008	32	229030	20.0	19.7	
95 o-Xylene	106	9.117	9.117	0.000	45	231070	20.0	19.8	
94 n-Butyl acrylate	73	9.125	9.126	-0.001	97	94880	20.0	16.9	a
96 Styrene	104	9.158	9.150	0.008	33	363416	20.0	19.0	
98 Bromoform	173	9.380	9.380	0.000	27	73161	20.0	19.7	
97 Amyl acetate (mixed isomers)	43	9.388	9.389	0.000	29	264293	20.0	15.1	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	607905	20.0	19.7	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	369825	50.0	50.7	
101 Bromobenzene	156	9.840	9.840	0.000	39	143399	20.0	19.5	
102 1,1,2,2-Tetrachloroethane	83	9.898	9.898	0.000	42	156233	20.0	16.7	
103 N-Propylbenzene	91	9.914	9.914	0.000	31	737702	20.0	18.4	
104 1,2,3-Trichloropropane	110	9.931	9.931	0.000	35	47380	20.0	18.0	
105 trans-1,4-Dichloro-2-butene	53	9.955	9.955	0.000	84	41855	20.0	16.0	a
106 2-Chlorotoluene	91	10.005	10.005	-0.001	97	486014	20.0	18.2	a
107 4-Ethyltoluene	105	10.021	10.021	0.000	76	618750	20.0	19.7	
108 1,3,5-Trimethylbenzene	105	10.078	10.079	-0.001	93	517343	20.0	19.6	a
109 4-Chlorotoluene	91	10.111	10.112	-0.001	87	487320	20.0	19.4	
110 Butyl Methacrylate	87	10.177	10.177	0.000	33	167659	20.0	17.8	
111 tert-Butylbenzene	119	10.333	10.325	0.008	18	422483	20.0	19.1	
112 1,2,4-Trimethylbenzene	105	10.382	10.383	-0.001	36	541383	20.0	19.5	
113 sec-Butylbenzene	105	10.498	10.498	0.000	22	668365	20.0	19.3	
115 1,3-Dichlorobenzene	146	10.604	10.605	-0.001	15	285669	20.0	19.9	
114 4-Isopropyltoluene	119	10.613	10.605	0.008	33	593117	20.0	20.2	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	56	573308	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.678	10.670	0.008	41	298948	20.0	20.2	
118 1,2,3-Trimethylbenzene	105	10.695	10.695	0.000	38	577453	20.0	19.9	
119 Benzyl chloride	91	10.777	10.777	0.000	91	364452	20.0	20.1	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	23	545614	20.0	19.8	
121 p-Diethylbenzene	119	10.876	10.876	0.000	22	319505	20.0	19.9	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	326691	20.0	19.4	
123 1,2-Dichlorobenzene	146	10.933	10.933	0.000	34	289093	20.0	19.5	
124 1,2,4,5-Tetramethylbenzene	119	11.360	11.361	-0.001	37	582581	20.0	20.7	
125 1,2-Dibromo-3-Chloropropane	157	11.434	11.426	0.008	45	35499	20.0	17.9	
126 1,3,5-Trichlorobenzene	180	11.516	11.517	-0.001	26	231972	20.0	21.2	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	38	215324	20.0	20.2	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	92	78248	20.0	20.2	a
129 Naphthalene	128	12.042	12.043	-0.001	29	618302	20.0	20.6	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	200412	20.0	20.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	35.4	
S 133 Total BTEX	1				0		100.0	94.5	
S 132 Xylenes, Total	100				0		40.0	39.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00458	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

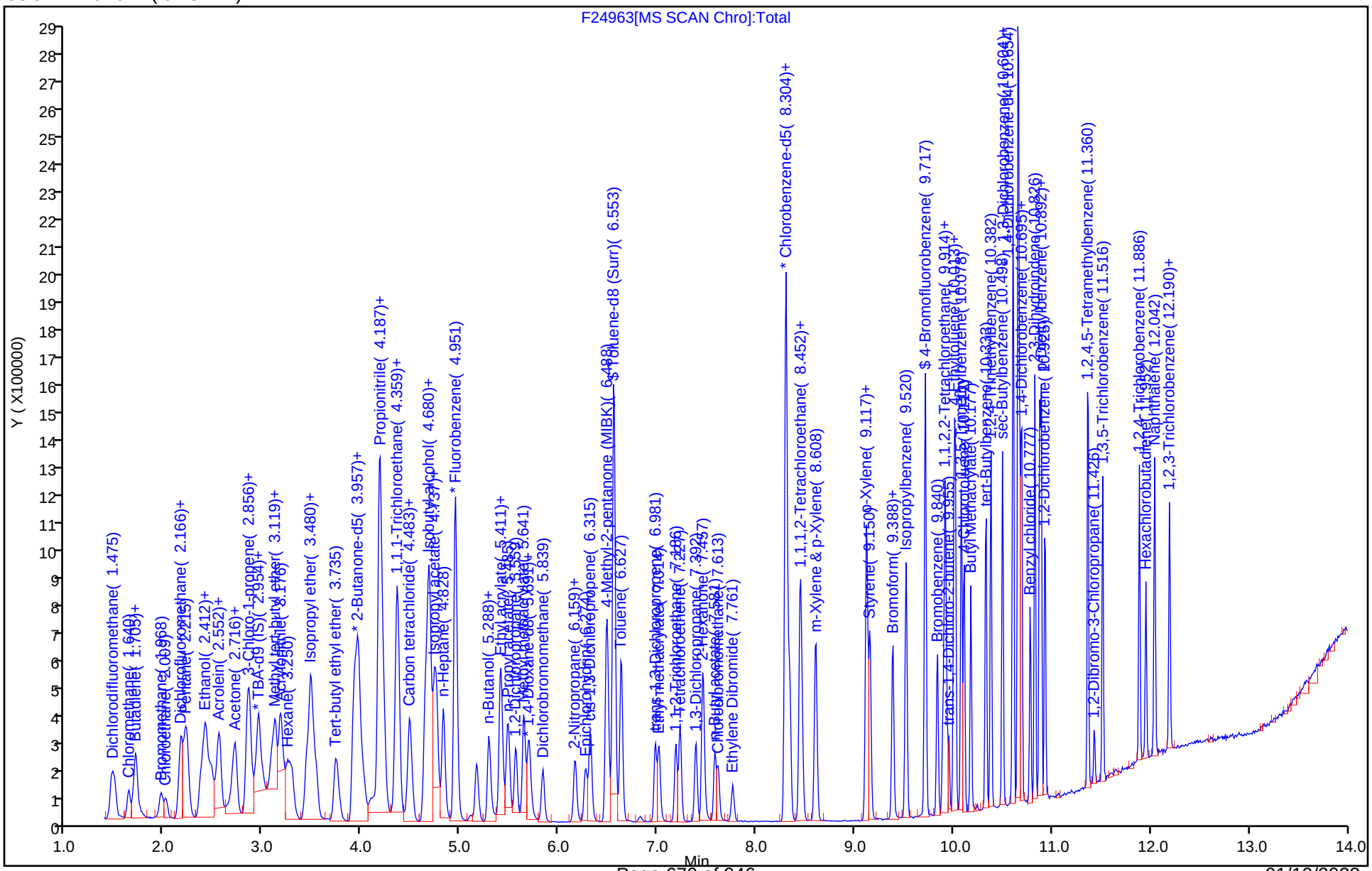
Report Date: 19-Jan-2022 10:53:57 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24963.D

Injection Date:	18-Jan-2022 07:01:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24963.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jan-2022 07:01:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140330-004
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:53:56 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 08:08:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.3	90.51
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.0	88.09
$ 78 Toluene-d8 (Surr)	50.0	46.0	92.06
$ 100 4-Bromofluorobenzene	50.0	50.7	101.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-823977/4

Matrix: Water | Lab File ID: F24992.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 06:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	18.8		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	19.6		1.0	0.46
127-18-4	Tetrachloroethene	22.6		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	19.6		1.0	0.51
79-01-6	Trichloroethene	19.3		1.0	0.44
75-01-4	Vinyl chloride	17.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-123
1868-53-7	Dibromofluoromethane (Surr)	91		77-124
2037-26-5	Toluene-d8 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24992.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Jan-2022 06:56:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140380-004
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:26:02 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 07:35:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.484	1.492	-0.008	32	142218	20.0	20.1	
2 Chloromethane	50	1.640	1.640	0.000	37	168376	20.0	16.7	
4 Butadiene	54	1.714	1.714	0.000	37	148784	20.0	18.3	
3 Vinyl chloride	62	1.706	1.714	-0.008	28	157803	20.0	17.6	
5 Bromomethane	94	1.969	1.968	0.001	17	100623	20.0	23.7	
6 Chloroethane	64	2.018	2.018	0.000	39	90501	20.0	20.1	
7 Dichlorofluoromethane	67	2.158	2.166	-0.008	34	248766	20.0	21.1	
9 Trichlorofluoromethane	101	2.174	2.174	0.000	63	204569	20.0	22.6	
8 Pentane	72	2.223	2.223	0.000	37	51515	40.0	46.5	
11 Ethyl ether	59	2.363	2.363	0.000	24	101947	20.0	18.9	
10 Ethanol	46	2.396	2.371	0.025	23	9784	800.0	425.7	
12 2-Methyl-1,3-butadiene	53	2.412	2.404	0.008	44	130068	20.0	20.8	
15 Acrolein	56	2.511	2.519	-0.008	90	34937	40.6	44.2	
16 112TCTFE	101	2.535	2.544	-0.009	90	126113	20.0	21.3	a
17 1,1-Dichloroethene	96	2.560	2.560	0.000	65	113864	20.0	18.8	
18 Acetone	43	2.634	2.626	0.008	38	200684	100.0	109.3	
19 Iodomethane	142	2.700	2.700	0.000	31	191941	20.0	21.4	
20 Isopropyl alcohol	45	2.716	2.724	-0.008	32	29891	200.0	130.4	
21 Carbon disulfide	76	2.724	2.724	0.000	21	417904	20.0	17.8	
23 Methyl acetate	43	2.840	2.839	0.001	47	239517	40.0	37.3	
22 3-Chloro-1-propene	41	2.840	2.848	-0.008	88	310954	20.0	20.2	a
24 Cyclopentene	67	2.864	2.864	0.000	68	329863	20.0	19.9	
25 Acetonitrile	41	2.938	2.922	0.016	21	141208	200.0	196.9	Ma
* 26 TBA-d9 (IS)	65	2.938	2.938	0.000	0	579126	1000.0	1000.0	
27 Methylene Chloride	84	2.955	2.954	0.001	25	131637	20.0	18.6	
28 2-Methyl-2-propanol	59	3.012	2.996	0.016	33	120367	200.0	207.0	a
29 Methyl tert-butyl ether	73	3.086	3.086	0.000	38	358422	20.0	19.6	
30 trans-1,2-Dichloroethene	96	3.127	3.127	0.000	38	128567	20.0	19.6	
31 Acrylonitrile	53	3.176	3.176	0.000	49	539089	200.0	156.4	
32 Hexane	43	3.267	3.259	0.008	19	152050	20.0	19.1	
33 Isopropyl ether	45	3.439	3.439	0.000	96	412611	20.0	18.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	86	3.489	3.489	0.000	27	54247	40.0	39.2	
34 1,1-Dichloroethane	63	3.480	3.489	-0.009	45	244648	20.0	19.2	
36 2-Chloro-1,3-butadiene	88	3.522	3.530	-0.008	45	116578	20.0	19.9	
37 Tert-butyl ethyl ether	59	3.735	3.735	0.000	37	384312	20.0	19.8	
* 38 2-Butanone-d5	46	3.916	3.916	0.000	0	787696	250.0	250.0	
39 2,2-Dichloropropane	97	3.932	3.932	0.000	43	45279	20.0	21.3	
40 cis-1,2-Dichloroethene	96	3.965	3.965	0.000	27	142178	20.0	19.6	
41 2-Butanone (MEK)	72	3.965	3.965	0.000	42	70265	100.0	102.1	
42 Ethyl acetate	70	3.973	3.973	0.000	26	27294	40.0	48.4	
43 Methyl acrylate	55	4.023	4.023	0.000	98	134678	20.0	19.3	a
44 Propionitrile	54	4.097	4.088	0.009	94	187504	200.0	203.2	a
46 Tetrahydrofuran	72	4.171	4.171	0.000	61	32610	40.0	39.6	a
45 Chlorobromomethane	128	4.171	4.179	-0.008	33	65928	20.0	20.1	
47 Methacrylonitrile	67	4.179	4.187	-0.008	45	539711	200.0	166.5	
48 Chloroform	83	4.220	4.220	0.000	32	219084	20.0	20.3	
50 1,1,1-Trichloroethane	97	4.351	4.351	0.000	49	189463	20.0	20.8	
49 Cyclohexane	84	4.351	4.360	-0.009	44	223400	20.0	20.1	
$ 51 Dibromofluoromethane (Surr)	113	4.368	4.368	0.000	32	290882	50.0	45.6	
52 Carbon tetrachloride	117	4.475	4.483	-0.008	29	159547	20.0	21.0	
53 1,1-Dichloropropene	75	4.483	4.491	-0.008	35	174030	20.0	19.5	
54 Isobutyl alcohol	43	4.647	4.647	0.000	27	178469	500.0	553.9	
55 Benzene	78	4.672	4.680	-0.008	53	494271	20.0	18.9	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.688	0.000	0	381997	50.0	46.6	
57 Isopropyl acetate	43	4.738	4.738	0.000	40	311622	20.0	15.0	
58 Tert-amyl methyl ether	73	4.738	4.738	0.000	78	415839	20.0	19.0	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	46	173722	20.0	20.3	
60 n-Heptane	57	4.828	4.828	0.000	26	111917	20.0	19.6	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1238087	50.0	50.0	
63 Trichloroethene	95	5.288	5.288	0.000	42	118059	20.0	19.3	
62 n-Butanol	56	5.305	5.288	0.017	28	37111	500.0	359.1	a
64 Ethyl acrylate	55	5.403	5.411	-0.008	37	353049	20.0	18.5	
65 Methylcyclohexane	83	5.411	5.411	0.000	47	246227	20.0	19.9	
66 1,2-Dichloropropane	63	5.559	5.559	0.000	38	125126	20.0	17.9	
68 Methyl methacrylate	100	5.641	5.641	0.000	38	69589	40.0	37.4	
69 1,4-Dioxane	88	5.683	5.683	0.001	47	16677	400.0	483.6	
70 Dibromomethane	93	5.683	5.691	-0.008	20	71269	20.0	18.8	
71 n-Propyl acetate	43	5.699	5.699	0.000	99	190340	20.0	15.7	a
* 67 1,4-Dioxane-d8	96	5.699	5.699	0.000	0	36294	1000.0	1000.0	
72 Dichlorobromomethane	83	5.830	5.839	-0.009	99	150259	20.0	19.3	a
73 2-Nitropropane	41	6.159	6.159	0.000	36	76435	40.0	34.6	
74 2-Chloroethyl vinyl ether	63	6.159	6.167	-0.008	71	70472	20.0	16.5	a
75 Epichlorohydrin	57	6.266	6.266	0.000	14	250131	400.0	429.3	
76 cis-1,3-Dichloropropene	75	6.315	6.315	0.000	41	197033	20.0	19.7	
77 4-Methyl-2-pentanone (MIBK)	43	6.480	6.488	-0.008	32	689459	100.0	109.4	
$ 78 Toluene-d8 (Surr)	98	6.554	6.553	0.001	36	1154050	50.0	46.6	
79 Toluene	91	6.628	6.627	0.001	27	506232	20.0	19.8	
80 trans-1,3-Dichloropropene	75	6.973	6.981	-0.008	23	180184	20.0	20.0	
81 Ethyl methacrylate	69	7.014	7.014	0.000	37	155550	20.0	18.8	
82 1,1,2-Trichloroethane	83	7.178	7.186	-0.008	94	84609	20.0	18.5	a
83 Tetrachloroethene	166	7.227	7.227	0.000	75	118324	20.0	22.6	
84 1,3-Dichloropropane	76	7.383	7.383	0.000	41	181772	20.0	18.8	
85 2-Hexanone	43	7.457	7.457	0.000	76	433676	100.0	105.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 n-Butyl acetate	43	7.581	7.581	0.000	36	216433	20.0	17.2	
87 Chlorodibromomethane	129	7.614	7.613	0.001	39	105216	20.0	20.7	
88 Ethylene Dibromide	107	7.753	7.761	-0.008	44	104244	20.0	19.9	
* 89 Chlorobenzene-d5	117	8.296	8.304	-0.008	61	909934	50.0	50.0	
90 Chlorobenzene	112	8.337	8.337	0.000	65	322476	20.0	20.9	
91 Ethylbenzene	106	8.443	8.443	0.000	45	175119	20.0	20.9	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	44	116470	20.0	21.6	
93 m-Xylene & p-Xylene	106	8.600	8.600	0.000	31	221238	20.0	21.4	
95 o-Xylene	106	9.117	9.117	0.000	44	221897	20.0	21.4	
94 n-Butyl acrylate	73	9.117	9.117	0.000	96	94296	20.0	19.0	a
96 Styrene	104	9.150	9.150	0.000	31	350340	20.0	20.6	
98 Bromoform	173	9.380	9.380	0.000	26	66748	20.0	20.3	
97 Amyl acetate (mixed isomers)	43	9.380	9.380	0.000	29	268730	20.0	17.3	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	594631	20.0	21.8	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	329650	50.0	51.0	
101 Bromobenzene	156	9.840	9.840	0.000	39	134703	20.0	20.8	
102 1,1,2,2-Tetrachloroethane	83	9.890	9.890	0.000	43	145459	20.0	17.6	
103 N-Propylbenzene	91	9.914	9.914	0.000	31	705795	20.0	20.0	
104 1,2,3-Trichloropropane	110	9.931	9.931	0.000	35	44630	20.0	19.1	
105 trans-1,4-Dichloro-2-butene	53	9.947	9.955	-0.008	38	40056	20.0	17.3	
106 2-Chlorotoluene	91	10.005	10.005	0.000	97	477168	20.0	20.2	a
107 4-Ethyltoluene	105	10.021	10.021	0.000	76	595772	20.0	21.5	
108 1,3,5-Trimethylbenzene	105	10.079	10.079	0.000	93	494474	20.0	21.2	a
109 4-Chlorotoluene	91	10.103	10.103	0.000	38	467824	20.0	21.1	
110 Butyl Methacrylate	87	10.177	10.177	0.000	32	155480	20.0	18.6	
111 tert-Butylbenzene	119	10.325	10.325	0.000	18	401571	20.0	20.6	
112 1,2,4-Trimethylbenzene	105	10.383	10.383	0.000	36	524492	20.0	21.4	
113 sec-Butylbenzene	105	10.498	10.498	0.000	22	649885	20.0	21.2	
115 1,3-Dichlorobenzene	146	10.604	10.604	0.000	15	276596	20.0	21.7	
114 4-Isopropyltoluene	119	10.604	10.604	0.000	34	564527	20.0	21.7	
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	27	506807	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.670	10.670	0.000	39	275477	20.0	21.0	
118 1,2,3-Trimethylbenzene	105	10.687	10.687	0.000	32	552048	20.0	21.6	
119 Benzyl chloride	91	10.777	10.777	0.000	91	325179	20.0	20.3	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	23	520020	20.0	21.4	
121 p-Diethylbenzene	119	10.876	10.876	0.000	22	309856	20.0	21.8	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	307702	20.0	20.7	
123 1,2-Dichlorobenzene	146	10.925	10.925	0.000	34	279660	20.0	21.3	
124 1,2,4,5-Tetramethylbenzene	119	11.360	11.360	0.000	37	557248	20.0	22.4	
125 1,2-Dibromo-3-Chloropropane	157	11.426	11.426	0.000	45	33248	20.0	19.0	
126 1,3,5-Trichlorobenzene	180	11.508	11.508	0.000	26	218250	20.0	22.6	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	39	202190	20.0	21.5	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	41	73925	20.0	21.5	
129 Naphthalene	128	12.034	12.034	0.000	29	538673	20.0	20.3	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	185600	20.0	21.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	39.3	
S 133 Total BTEX	1				0		100.0	102.4	
S 132 Xylenes, Total	100				0		40.0	42.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00459	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

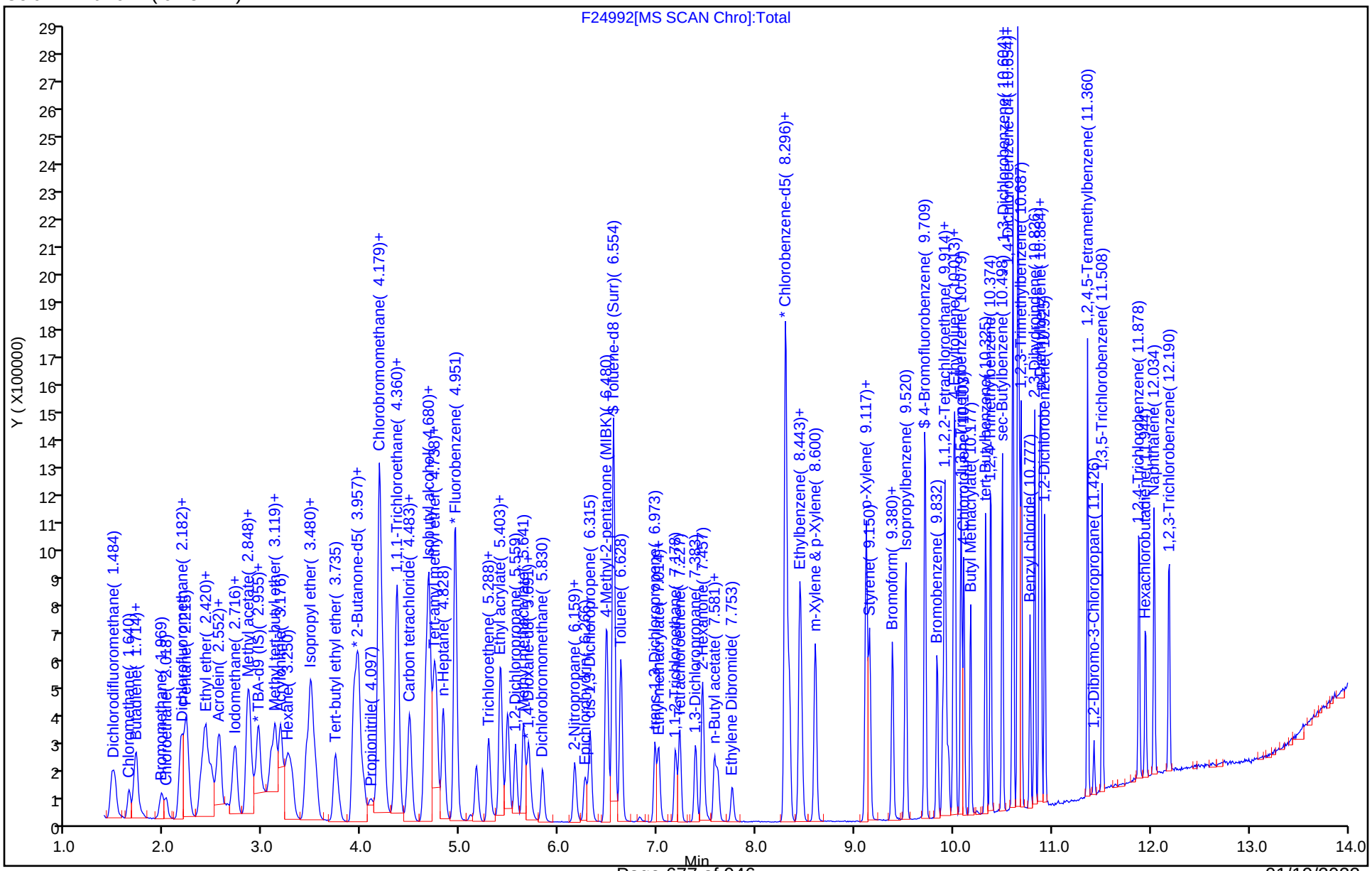
Report Date: 19-Jan-2022 11:26:03 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24992.D

Injection Date:	19-Jan-2022 06:56:30	Instrument ID:	CVOAMS6	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260624W6	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24992.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Jan-2022 06:56:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140380-004
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:26:02 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 07:35:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	45.6	91.20
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.6	93.29
$ 78 Toluene-d8 (Surr)	50.0	46.6	93.21
$ 100 4-Bromofluorobenzene	50.0	51.0	102.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-823788/5

Matrix: Water | Lab File ID: F24964.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/18/2022 07:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823788 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	17.1		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	17.6		1.0	0.46
127-18-4	Tetrachloroethene	21.1		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	18.2		1.0	0.51
79-01-6	Trichloroethene	17.8		1.0	0.44
75-01-4	Vinyl chloride	15.6		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		75-123
1868-53-7	Dibromofluoromethane (Surr)	89		77-124
2037-26-5	Toluene-d8 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene	102		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24964.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jan-2022 07:23:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140330-005
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 08:10:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.492	1.492	0.000	32	131430	20.0	16.4	
2 Chloromethane	50	1.640	1.648	-0.008	36	168583	20.0	14.8	
4 Butadiene	54	1.713	1.714	-0.001	37	144594	20.0	15.7	
3 Vinyl chloride	62	1.713	1.714	-0.001	28	157478	20.0	15.6	
5 Bromomethane	94	1.968	1.977	-0.009	98	90390	20.0	18.8	a
6 Chloroethane	64	2.017	2.026	-0.009	39	86827	20.0	17.0	
7 Dichlorofluoromethane	67	2.165	2.166	-0.001	34	216733	20.0	16.3	
9 Trichlorofluoromethane	101	2.174	2.182	-0.008	63	174680	20.0	17.1	
8 Pentane	72	2.231	2.232	-0.001	37	45198	40.0	33.9	
10 Ethanol	46	2.453	2.363	0.090	67	23015	800.0	832.1	a
11 Ethyl ether	59	2.363	2.371	-0.008	24	108066	20.0	17.7	
12 2-Methyl-1,3-butadiene	53	2.412	2.412	0.000	46	122634	20.0	17.4	
15 Acrolein	56	2.519	2.527	-0.008	91	27464	40.6	28.9	a
16 112TCTFE	101	2.552	2.544	0.008	40	126822	20.0	18.9	
17 1,1-Dichloroethene	96	2.568	2.560	0.008	38	117368	20.0	17.1	
18 Acetone	43	2.667	2.642	0.025	38	220161	100.0	102.6	
19 Iodomethane	142	2.699	2.700	-0.001	35	191885	20.0	18.9	
20 Isopropyl alcohol	45	2.708	2.716	-0.008	32	13210	200.0	47.9	
21 Carbon disulfide	76	2.724	2.725	-0.001	21	417642	20.0	15.7	
23 Methyl acetate	43	2.847	2.848	-0.001	75	261003	40.0	36.0	a
22 3-Chloro-1-propene	41	2.847	2.848	-0.001	42	313529	20.0	18.0	
24 Cyclopentene	67	2.872	2.864	0.008	68	335452	20.0	17.9	
25 Acetonitrile	41	2.930	2.897	0.033	22	177502	200.0	205.7	Ma
* 26 TBA-d9 (IS)	65	2.995	2.946	0.049	0	697040	1000.0	1000.0	
27 Methylene Chloride	84	2.962	2.963	-0.001	29	138175	20.0	17.3	
28 2-Methyl-2-propanol	59	3.053	3.004	0.049	92	136377	200.0	194.9	a
29 Methyl tert-butyl ether	73	3.102	3.094	0.008	38	371430	20.0	18.0	
30 trans-1,2-Dichloroethene	96	3.135	3.127	0.008	38	134554	20.0	18.2	
31 Acrylonitrile	53	3.184	3.185	-0.001	48	591049	200.0	151.7	
32 Hexane	43	3.283	3.267	0.016	19	159889	20.0	17.7	
33 Isopropyl ether	45	3.455	3.448	0.007	96	424003	20.0	16.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	86	3.488	3.489	-0.001	27	54722	40.0	35.0	
34 1,1-Dichloroethane	63	3.488	3.489	-0.001	45	243167	20.0	16.9	
36 2-Chloro-1,3-butadiene	88	3.529	3.522	0.007	45	128375	20.0	19.4	
37 Tert-butyl ethyl ether	59	3.743	3.743	0.000	37	388921	20.0	17.8	
* 38 2-Butanone-d5	46	3.932	3.924	0.008	0	920845	250.0	250.0	
39 2,2-Dichloropropane	97	3.948	3.932	0.016	43	43598	20.0	18.2	
40 cis-1,2-Dichloroethene	96	3.973	3.974	-0.001	26	143744	20.0	17.6	
41 2-Butanone (MEK)	72	3.973	3.982	-0.009	42	82729	100.0	102.8	
42 Ethyl acetate	70	3.981	3.982	-0.001	26	31473	40.0	47.7	
43 Methyl acrylate	55	4.088	4.023	0.065	4	17695	20.0	2.26	
44 Propionitrile	54	4.121	4.097	0.024	32	216830	200.0	195.3	
46 Tetrahydrofuran	72	4.179	4.179	0.000	63	38689	40.0	40.2	a
45 Chlorobromomethane	128	4.179	4.179	0.000	32	68058	20.0	18.4	
47 Methacrylonitrile	67	4.195	4.187	0.008	39	607631	200.0	165.9	
48 Chloroform	83	4.228	4.228	0.000	31	221639	20.0	18.2	
50 1,1,1-Trichloroethane	97	4.359	4.360	-0.001	49	193633	20.0	18.8	
49 Cyclohexane	84	4.359	4.360	-0.001	92	229441	20.0	18.3	a
$ 51 Dibromofluoromethane (Surr)	113	4.376	4.368	0.008	30	320507	50.0	44.5	
52 Carbon tetrachloride	117	4.483	4.483	0.000	29	162979	20.0	19.0	
53 1,1-Dichloropropene	75	4.499	4.491	0.008	35	182232	20.0	18.1	
54 Isobutyl alcohol	43	4.647	4.647	0.000	28	196156	500.0	505.8	
55 Benzene	78	4.680	4.680	0.000	53	513490	20.0	17.5	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.696	4.697	-0.001	0	411009	50.0	44.4	
57 Isopropyl acetate	43	4.746	4.738	0.008	43	287320	20.0	12.2	
58 Tert-amyl methyl ether	73	4.754	4.746	0.008	78	419669	20.0	17.0	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	46	180250	20.0	18.6	
60 n-Heptane	57	4.836	4.828	0.008	26	116824	20.0	18.1	
* 61 Fluorobenzene	96	4.959	4.951	0.008	38	1398610	50.0	50.0	
63 Trichloroethene	95	5.296	5.288	0.008	42	122935	20.0	17.8	
62 n-Butanol	56	5.312	5.288	0.024	38	54155	500.0	435.4	
64 Ethyl acrylate	55	5.411	5.412	-0.001	37	352131	20.0	16.3	
65 Methylcyclohexane	83	5.411	5.412	-0.001	47	258607	20.0	18.5	
71 n-Propyl acetate	43	5.485	5.477	0.008	35	106400	20.0	7.78	
66 1,2-Dichloropropane	63	5.567	5.568	-0.001	39	128716	20.0	16.3	
68 Methyl methacrylate	100	5.649	5.650	-0.001	38	73188	40.0	34.8	
70 Dibromomethane	93	5.690	5.691	-0.001	20	75253	20.0	17.5	
* 67 1,4-Dioxane-d8	96	5.658	5.691	-0.033	0	53666	1000.0	1000.0	
69 1,4-Dioxane	88	5.715	5.707	0.008	46	24124	400.0	473.1	
72 Dichlorobromomethane	83	5.838	5.839	-0.001	99	152203	20.0	17.3	a
73 2-Nitropropane	41	6.167	6.159	0.008	36	81716	40.0	32.8	
74 2-Chloroethyl vinyl ether	63	6.167	6.167	0.000	81	76875	20.0	15.9	a
75 Epichlorohydrin	57	6.274	6.266	0.008	99	279109	400.0	409.7	a
76 cis-1,3-Dichloropropene	75	6.323	6.324	-0.001	41	206439	20.0	18.4	
77 4-Methyl-2-pentanone (MIBK)	43	6.487	6.488	-0.001	32	698069	100.0	94.8	
$ 78 Toluene-d8 (Surr)	98	6.561	6.562	-0.001	36	1279019	50.0	46.1	
79 Toluene	91	6.635	6.636	-0.001	27	527975	20.0	18.4	
80 trans-1,3-Dichloropropene	75	6.981	6.981	-0.001	22	184335	20.0	18.3	
81 Ethyl methacrylate	69	7.022	7.014	0.008	37	157271	20.0	17.0	
82 1,1,2-Trichloroethane	83	7.186	7.186	0.000	31	92719	20.0	18.1	
83 Tetrachloroethene	166	7.235	7.227	0.008	75	123503	20.0	21.1	
84 1,3-Dichloropropane	76	7.391	7.392	-0.001	35	192623	20.0	17.8	
85 2-Hexanone	43	7.465	7.458	0.007	75	447705	100.0	93.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 n-Butyl acetate	43	7.580	7.581	-0.001	36	214938	20.0	15.2	
87 Chlorodibromomethane	129	7.621	7.614	0.007	39	110509	20.0	19.4	
88 Ethylene Dibromide	107	7.761	7.762	-0.001	44	109120	20.0	18.6	
* 89 Chlorobenzene-d5	117	8.303	8.304	-0.001	59	1020356	50.0	50.0	
90 Chlorobenzene	112	8.345	8.337	0.007	70	332532	20.0	19.3	
91 Ethylbenzene	106	8.451	8.444	0.007	45	187823	20.0	20.0	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	44	118615	20.0	19.6	
93 m-Xylene & p-Xylene	106	8.607	8.600	0.007	31	232402	20.0	20.1	
95 o-Xylene	106	9.117	9.117	0.000	44	233069	20.0	20.1	
94 n-Butyl acrylate	73	9.125	9.126	-0.001	96	96400	20.0	17.3	a
96 Styrene	104	9.158	9.150	0.008	34	363626	20.0	19.1	
98 Bromoform	173	9.380	9.380	0.000	26	72475	20.0	19.6	
97 Amyl acetate (mixed isomers)	43	9.388	9.389	0.000	30	257613	20.0	14.9	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	622425	20.0	20.3	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	369344	50.0	51.0	
101 Bromobenzene	156	9.840	9.840	0.000	39	143389	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	9.898	9.898	0.000	44	160078	20.0	17.4	
103 N-Propylbenzene	91	9.914	9.914	0.000	31	732413	20.0	18.5	
104 1,2,3-Trichloropropane	110	9.930	9.931	-0.001	35	46351	20.0	17.8	
105 trans-1,4-Dichloro-2-butene	53	9.955	9.955	0.000	89	45063	20.0	17.5	a
106 2-Chlorotoluene	91	10.004	10.005	-0.001	98	493634	20.0	18.7	a
107 4-Ethyltoluene	105	10.021	10.021	0.000	74	617052	20.0	19.9	
108 1,3,5-Trimethylbenzene	105	10.078	10.079	-0.001	93	512846	20.0	19.7	a
109 4-Chlorotoluene	91	10.111	10.112	-0.001	38	492314	20.0	19.9	
110 Butyl Methacrylate	87	10.177	10.177	0.000	34	161216	20.0	17.3	
111 tert-Butylbenzene	119	10.333	10.325	0.008	18	431315	20.0	19.8	
112 1,2,4-Trimethylbenzene	105	10.382	10.383	-0.001	36	543426	20.0	19.9	
113 sec-Butylbenzene	105	10.497	10.498	-0.001	22	677523	20.0	19.8	
115 1,3-Dichlorobenzene	146	10.604	10.605	-0.001	18	291025	20.0	20.5	
114 4-Isopropyltoluene	119	10.612	10.605	0.007	46	591210	20.0	20.4	
* 116 1,4-Dichlorobenzene-d4	152	10.662	10.654	0.008	95	565879	50.0	50.0	a
117 1,4-Dichlorobenzene	146	10.678	10.670	0.008	42	292192	20.0	20.0	
118 1,2,3-Trimethylbenzene	105	10.695	10.695	0.000	36	566545	20.0	19.8	
119 Benzyl chloride	91	10.777	10.777	0.000	91	354876	20.0	19.8	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	23	541121	20.0	19.9	
121 p-Diethylbenzene	119	10.875	10.876	-0.001	22	319719	20.0	20.2	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	323365	20.0	19.5	
123 1,2-Dichlorobenzene	146	10.933	10.933	0.000	33	291279	20.0	19.9	
124 1,2,4,5-Tetramethylbenzene	119	11.368	11.361	0.007	37	582922	20.0	21.0	
125 1,2-Dibromo-3-Chloropropane	157	11.434	11.426	0.008	46	37459	20.0	19.2	
126 1,3,5-Trichlorobenzene	180	11.516	11.517	-0.001	27	225703	20.0	20.9	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	39	216187	20.0	20.6	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	92	78156	20.0	20.4	a
129 Naphthalene	128	12.042	12.043	-0.001	29	611501	20.0	20.6	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	197979	20.0	20.6	
S 131 1,2-Dichloroethene, Total	100				0		40.0	35.8	
S 133 Total BTEX	1				0		100.0	96.0	
S 132 Xylenes, Total	100				0		40.0	40.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00458	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 19-Jan-2022 10:54:39 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24964.D

Injection Date: 18-Jan-2022 07:23:30 Instrument ID: CVOAMS6 Operator ID:

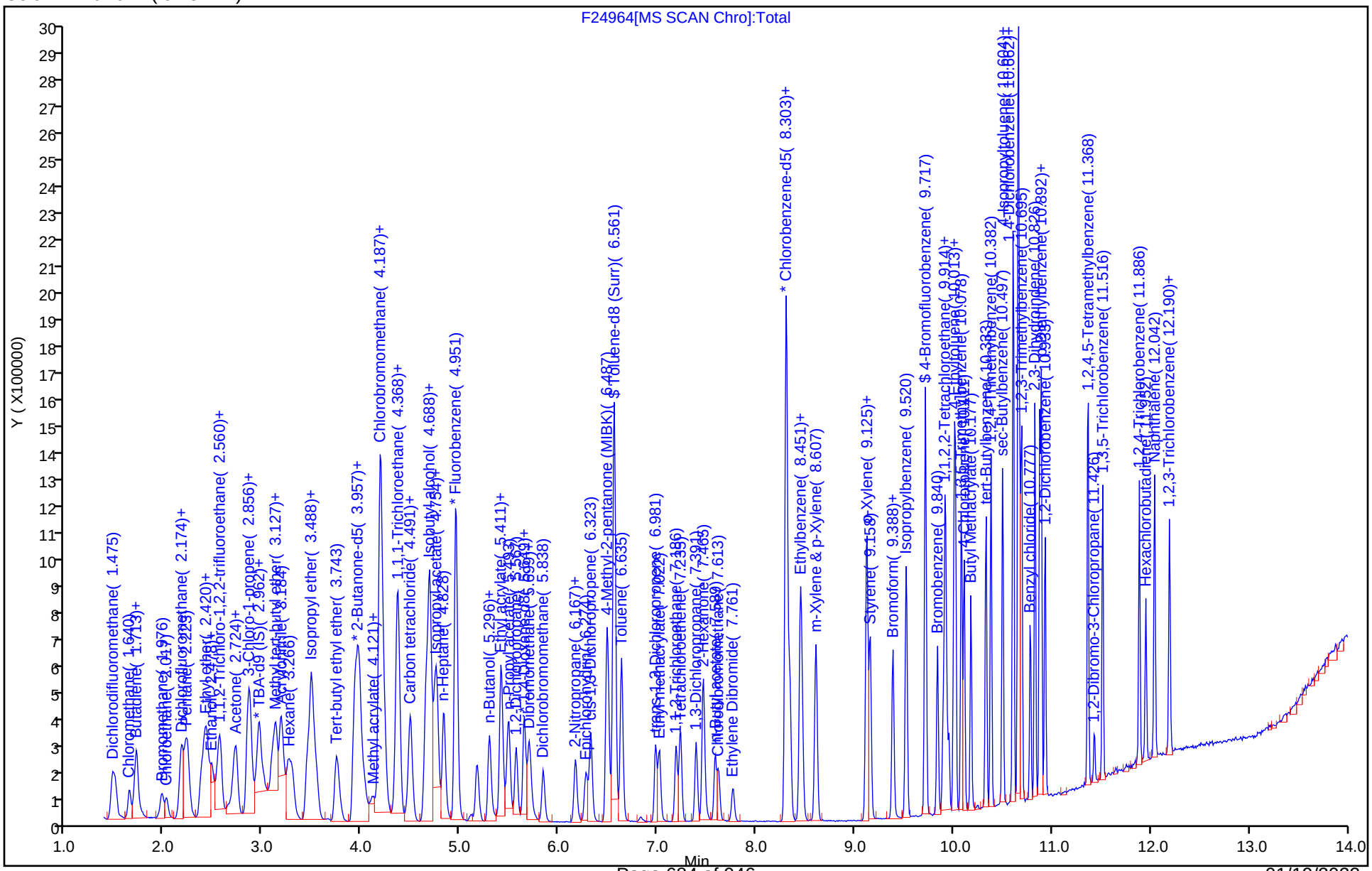
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24964.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jan-2022 07:23:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140330-005
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:54:38 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 18-Jan-2022 08:10:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.5	88.96
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	44.4	88.85
$ 78 Toluene-d8 (Surr)	50.0	46.1	92.12
$ 100 4-Bromofluorobenzene	50.0	51.0	101.96

Manual Integration/User Assign Peak Report

Eurofins Edison

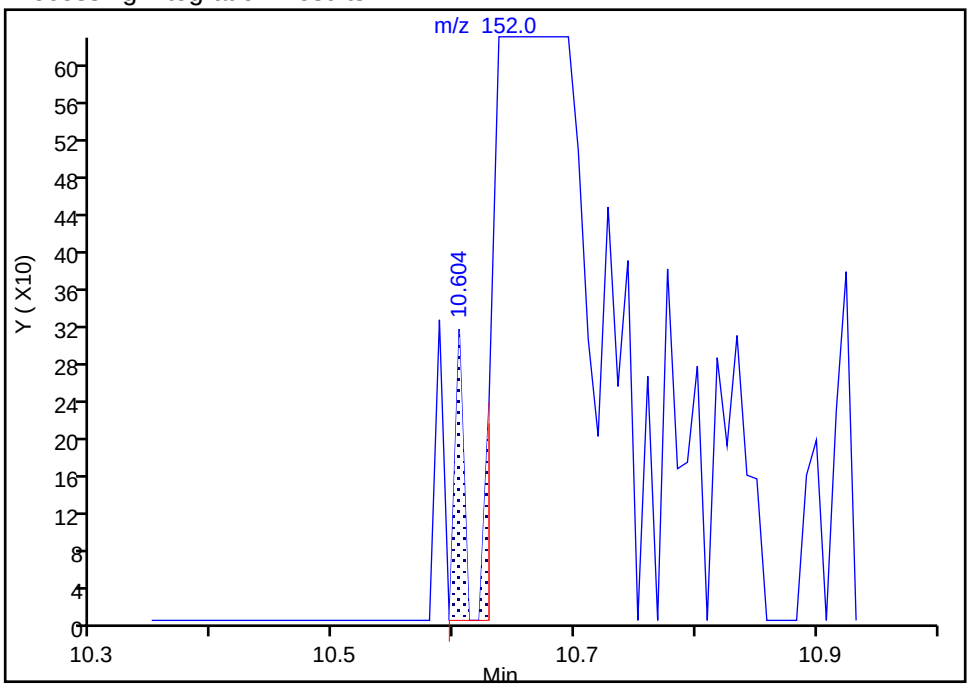
Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220118-140330.b\F24964.D
Injection Date: 18-Jan-2022 07:23:30 Instrument ID: CVOAMS6
Lims ID: LCSD
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 116 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

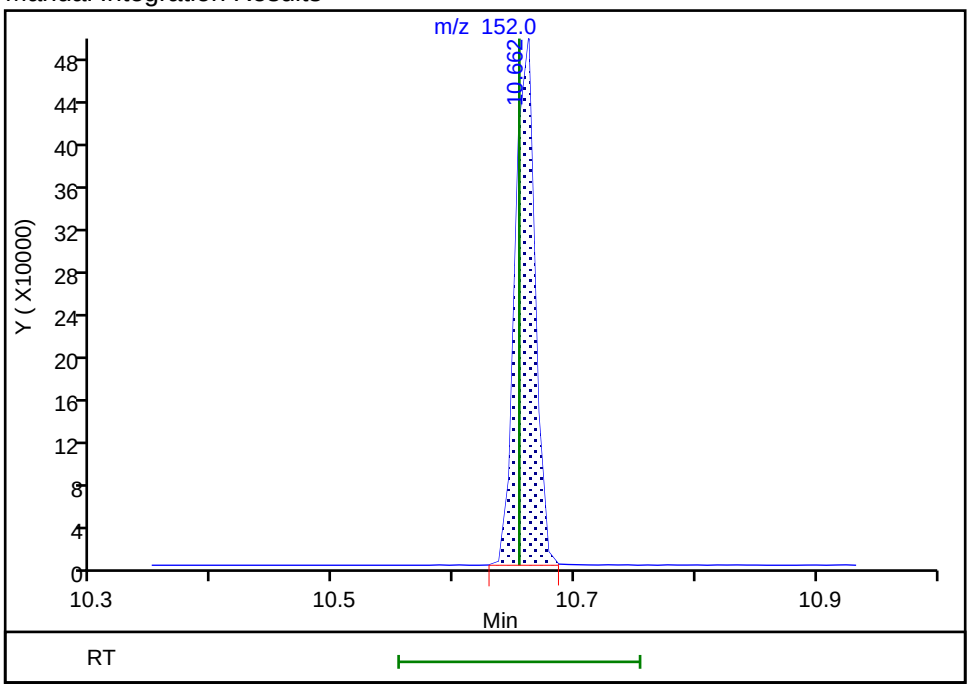
Processing Integration Results

RT: 10.60
Area: 272
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 10.66
Area: 565879
Amount: 50.000000
Amount Units: ug/l



Reviewer: moroneyc, 18-Jan-2022 08:08:33
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-823977/5

Matrix: Water | Lab File ID: F24993.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 01/19/2022 07:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	17.8		1.0	0.49
156-59-2	cis-1,2-Dichloroethene	17.5		1.0	0.46
127-18-4	Tetrachloroethene	21.1		1.0	0.44
156-60-5	trans-1,2-Dichloroethene	18.6		1.0	0.51
79-01-6	Trichloroethene	17.4		1.0	0.44
75-01-4	Vinyl chloride	16.8		1.0	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-123
1868-53-7	Dibromofluoromethane (Surr)	89		77-124
2037-26-5	Toluene-d8 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene	103		76-120

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24993.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 19-Jan-2022 07:17:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140380-005
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 07:38:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.476	1.492	-0.016	32	152483	20.0	20.7	
2 Chloromethane	50	1.632	1.640	-0.008	36	171372	20.0	16.3	
4 Butadiene	54	1.706	1.714	-0.008	34	125005	20.0	14.8	
3 Vinyl chloride	62	1.697	1.714	-0.017	28	156626	20.0	16.8	
5 Bromomethane	94	1.952	1.968	-0.016	98	95727	20.0	21.6	a
6 Chloroethane	64	2.010	2.018	-0.008	40	88667	20.0	18.9	
7 Dichlorofluoromethane	67	2.158	2.166	-0.008	34	208223	20.0	17.0	
9 Trichlorofluoromethane	101	2.166	2.174	-0.008	63	171512	20.0	18.3	
8 Pentane	72	2.223	2.223	0.000	37	45500	40.0	39.7	
11 Ethyl ether	59	2.355	2.363	-0.008	24	83681	20.0	14.9	
10 Ethanol	46	2.355	2.371	-0.016	32	13339	800.0	560.7	
12 2-Methyl-1,3-butadiene	53	2.396	2.404	-0.008	85	112978	20.0	17.4	a
15 Acrolein	56	2.503	2.519	-0.016	41	32991	40.6	40.3	
16 112TCTFE	101	2.536	2.544	-0.008	40	122638	20.0	19.9	
17 1,1-Dichloroethene	96	2.552	2.560	-0.008	37	112086	20.0	17.8	
18 Acetone	43	2.610	2.626	-0.016	37	196322	100.0	104.8	
19 Iodomethane	142	2.692	2.700	-0.008	31	186933	20.0	20.0	
20 Isopropyl alcohol	45	2.683	2.724	-0.041	32	35307	200.0	148.8	
21 Carbon disulfide	76	2.716	2.724	-0.008	21	414108	20.0	16.9	
23 Methyl acetate	43	2.831	2.839	-0.008	45	215768	40.0	32.3	
22 3-Chloro-1-propene	41	2.831	2.848	-0.017	89	304072	20.0	19.0	a
24 Cyclopentene	67	2.856	2.864	-0.008	68	321011	20.0	18.6	
25 Acetonitrile	41	2.905	2.922	-0.017	22	137367	200.0	185.1	Ma
* 26 TBA-d9 (IS)	65	2.922	2.938	-0.016	0	599506	1000.0	1000.0	
27 Methylene Chloride	84	2.946	2.954	-0.008	30	132936	20.0	18.1	
28 2-Methyl-2-propanol	59	2.987	2.996	-0.009	93	121803	200.0	202.4	a
29 Methyl tert-butyl ether	73	3.078	3.086	-0.008	39	342280	20.0	18.0	
30 trans-1,2-Dichloroethene	96	3.119	3.127	-0.008	38	126419	20.0	18.6	
31 Acrylonitrile	53	3.168	3.176	-0.008	44	523358	200.0	145.9	
32 Hexane	43	3.259	3.259	0.000	19	147206	20.0	17.7	
33 Isopropyl ether	45	3.439	3.439	0.000	96	412274	20.0	17.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	86	3.480	3.489	-0.009	27	50832	40.0	35.3	
34 1,1-Dichloroethane	63	3.480	3.489	-0.009	45	242227	20.0	18.3	
36 2-Chloro-1,3-butadiene	88	3.522	3.530	-0.008	45	113893	20.0	18.7	
37 Tert-butyl ethyl ether	59	3.735	3.735	0.000	37	382553	20.0	19.0	
* 38 2-Butanone-d5	46	3.908	3.916	-0.008	0	803819	250.0	250.0	
39 2,2-Dichloropropane	97	3.932	3.932	0.000	44	42464	20.0	19.2	
40 cis-1,2-Dichloroethene	96	3.957	3.965	-0.008	26	131452	20.0	17.5	
41 2-Butanone (MEK)	72	3.965	3.965	0.000	41	70451	100.0	100.3	
42 Ethyl acetate	70	3.965	3.973	-0.008	96	26764	40.0	46.5	a
43 Methyl acrylate	55	4.023	4.023	0.000	26	112439	20.0	15.6	a
44 Propionitrile	54	4.097	4.088	0.009	95	191269	200.0	200.3	a
46 Tetrahydrofuran	72	4.162	4.171	-0.009	36	31733	40.0	37.8	
45 Chlorobromomethane	128	4.162	4.179	-0.017	34	65151	20.0	19.1	
47 Methacrylonitrile	67	4.179	4.187	-0.008	45	521061	200.0	154.6	
48 Chloroform	83	4.220	4.220	0.000	33	209874	20.0	18.7	
50 1,1,1-Trichloroethane	97	4.351	4.351	0.000	45	188836	20.0	19.9	
49 Cyclohexane	84	4.351	4.360	-0.009	43	215870	20.0	18.7	
$ 51 Dibromofluoromethane (Surr)	113	4.360	4.368	-0.008	31	295002	50.0	44.5	
52 Carbon tetrachloride	117	4.467	4.483	-0.016	29	157875	20.0	19.9	
53 1,1-Dichloropropene	75	4.491	4.491	0.000	36	165813	20.0	17.8	
54 Isobutyl alcohol	43	4.647	4.647	0.000	28	185549	500.0	556.3	
55 Benzene	78	4.672	4.680	-0.008	53	479729	20.0	17.7	
$ 56 1,2-Dichloroethane-d4 (Surr)	65	4.688	4.688	0.000	0	395884	50.0	46.5	
57 Isopropyl acetate	43	4.729	4.738	-0.009	47	302913	20.0	14.0	
58 Tert-amyl methyl ether	73	4.738	4.738	0.000	78	410776	20.0	18.1	
59 1,2-Dichloroethane	62	4.762	4.762	0.000	46	168982	20.0	19.0	
60 n-Heptane	57	4.828	4.828	0.000	37	109675	20.0	18.4	
* 61 Fluorobenzene	96	4.951	4.951	0.000	38	1287653	50.0	50.0	
63 Trichloroethene	95	5.288	5.288	0.000	42	110801	20.0	17.4	
62 n-Butanol	56	5.305	5.288	0.017	38	38995	500.0	364.5	
64 Ethyl acrylate	55	5.403	5.411	-0.008	38	335460	20.0	16.9	
65 Methylcyclohexane	83	5.411	5.411	0.000	48	238517	20.0	18.5	
66 1,2-Dichloropropane	63	5.559	5.559	0.000	37	119633	20.0	16.5	
68 Methyl methacrylate	100	5.642	5.641	0.001	38	63328	40.0	32.8	
69 1,4-Dioxane	88	5.715	5.683	0.033	47	18605	400.0	444.8	
70 Dibromomethane	93	5.683	5.691	-0.008	20	69241	20.0	17.5	
71 n-Propyl acetate	43	5.699	5.699	0.000	99	185916	20.0	14.8	a
* 67 1,4-Dioxane-d8	96	5.625	5.699	-0.074	0	44019	1000.0	1000.0	
72 Dichlorobromomethane	83	5.839	5.839	0.000	99	149869	20.0	18.5	a
73 2-Nitropropane	41	6.151	6.159	-0.008	35	70626	40.0	30.8	
74 2-Chloroethyl vinyl ether	63	6.159	6.167	-0.008	27	70726	20.0	15.9	
75 Epichlorohydrin	57	6.266	6.266	0.000	13	248751	400.0	418.3	
76 cis-1,3-Dichloropropene	75	6.315	6.315	0.000	41	191179	20.0	18.5	
77 4-Methyl-2-pentanone (MIBK)	43	6.488	6.488	0.000	34	684985	100.0	106.6	
$ 78 Toluene-d8 (Surr)	98	6.554	6.553	0.001	36	1164824	50.0	45.6	
79 Toluene	91	6.628	6.627	0.001	35	489207	20.0	18.5	
80 trans-1,3-Dichloropropene	75	6.973	6.981	-0.008	22	171771	20.0	18.5	
81 Ethyl methacrylate	69	7.014	7.014	0.000	36	148350	20.0	17.4	
82 1,1,2-Trichloroethane	83	7.186	7.186	0.000	27	81066	20.0	17.2	
83 Tetrachloroethene	166	7.227	7.227	0.000	74	113617	20.0	21.1	
84 1,3-Dichloropropane	76	7.384	7.383	0.001	35	175114	20.0	17.6	
85 2-Hexanone	43	7.457	7.457	0.000	76	434447	100.0	103.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 n-Butyl acetate	43	7.581	7.581	0.000	36	209033	20.0	16.1	
87 Chlorodibromomethane	129	7.614	7.613	0.001	39	101410	20.0	19.3	
88 Ethylene Dibromide	107	7.762	7.761	0.001	44	96446	20.0	17.8	
* 89 Chlorobenzene-d5	117	8.304	8.304	0.000	63	939299	50.0	50.0	
90 Chlorobenzene	112	8.337	8.337	0.000	65	311296	20.0	19.6	
91 Ethylbenzene	106	8.444	8.443	0.001	45	172706	20.0	19.9	
92 1,1,1,2-Tetrachloroethane	131	8.460	8.460	0.000	45	112015	20.0	20.1	
93 m-Xylene & p-Xylene	106	8.600	8.600	0.000	33	216308	20.0	20.3	
95 o-Xylene	106	9.117	9.117	0.000	45	216465	20.0	20.3	
94 n-Butyl acrylate	73	9.117	9.117	0.000	98	92640	20.0	18.1	a
96 Styrene	104	9.150	9.150	0.000	33	343964	20.0	19.6	
98 Bromoform	173	9.380	9.380	0.000	27	64535	20.0	19.0	
97 Amyl acetate (mixed isomers)	43	9.380	9.380	0.000	28	260355	20.0	15.9	
99 Isopropylbenzene	105	9.520	9.520	0.000	37	574415	20.0	20.4	
$ 100 4-Bromofluorobenzene	174	9.717	9.717	0.000	33	343390	50.0	51.5	
101 Bromobenzene	156	9.840	9.840	0.000	39	131448	20.0	19.2	
102 1,1,2,2-Tetrachloroethane	83	9.890	9.890	0.000	42	140058	20.0	16.1	
103 N-Propylbenzene	91	9.914	9.914	0.000	31	688242	20.0	18.4	
104 1,2,3-Trichloropropane	110	9.931	9.931	0.000	35	44368	20.0	18.0	
105 trans-1,4-Dichloro-2-butene	53	9.947	9.955	-0.008	34	38049	20.0	15.6	
106 2-Chlorotoluene	91	10.005	10.005	0.000	32	467959	20.0	18.7	
107 4-Ethyltoluene	105	10.021	10.021	0.000	74	573210	20.0	19.5	
108 1,3,5-Trimethylbenzene	105	10.079	10.079	0.000	93	487618	20.0	19.7	a
109 4-Chlorotoluene	91	10.103	10.103	0.000	38	466288	20.0	19.9	
110 Butyl Methacrylate	87	10.177	10.177	0.000	33	156634	20.0	17.8	
111 tert-Butylbenzene	119	10.325	10.325	0.000	19	394852	20.0	19.1	
112 1,2,4-Trimethylbenzene	105	10.383	10.383	0.000	97	512800	20.0	19.8	a
113 sec-Butylbenzene	105	10.498	10.498	0.000	22	635624	20.0	19.6	
115 1,3-Dichlorobenzene	146	10.605	10.604	0.001	15	270847	20.0	20.1	
114 4-Isopropyltoluene	119	10.605	10.604	0.001	98	555400	20.0	20.2	a
* 116 1,4-Dichlorobenzene-d4	152	10.654	10.654	0.000	47	535817	50.0	50.0	
117 1,4-Dichlorobenzene	146	10.670	10.670	0.000	53	282419	20.0	20.4	
118 1,2,3-Trimethylbenzene	105	10.687	10.687	0.000	37	535181	20.0	19.8	
119 Benzyl chloride	91	10.777	10.777	0.000	91	327319	20.0	19.3	
120 2,3-Dihydroindene	117	10.826	10.826	0.000	32	515543	20.0	20.1	
121 p-Diethylbenzene	119	10.876	10.876	0.000	22	299857	20.0	20.0	
122 n-Butylbenzene	92	10.892	10.892	0.000	37	309840	20.0	19.7	
123 1,2-Dichlorobenzene	146	10.925	10.925	0.000	33	280198	20.0	20.2	
124 1,2,4,5-Tetramethylbenzene	119	11.361	11.360	0.000	37	551143	20.0	20.9	
125 1,2-Dibromo-3-Chloropropane	157	11.426	11.426	0.000	45	31791	20.0	17.2	
126 1,3,5-Trichlorobenzene	180	11.508	11.508	0.000	26	213526	20.0	20.9	
127 1,2,4-Trichlorobenzene	180	11.886	11.886	0.000	39	203394	20.0	20.4	
128 Hexachlorobutadiene	225	11.952	11.952	0.000	91	73983	20.0	20.4	a
129 Naphthalene	128	12.034	12.034	0.000	29	558828	20.0	19.9	
130 1,2,3-Trichlorobenzene	180	12.190	12.190	0.000	34	185686	20.0	20.4	
S 131 1,2-Dichloroethene, Total	100				0		40.0	36.0	
S 133 Total BTEX	1				0		100.0	96.8	
S 132 Xylenes, Total	100				0		40.0	40.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00459	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00149	Amount Added:	20.00	Units: uL	
ACROLEIN W_00135	Amount Added:	4.00	Units: uL	
VOA6IS/SURR_00052	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 19-Jan-2022 11:27:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24993.D

Injection Date: 19-Jan-2022 07:17:30 Instrument ID: CVOAMS6 Operator ID:

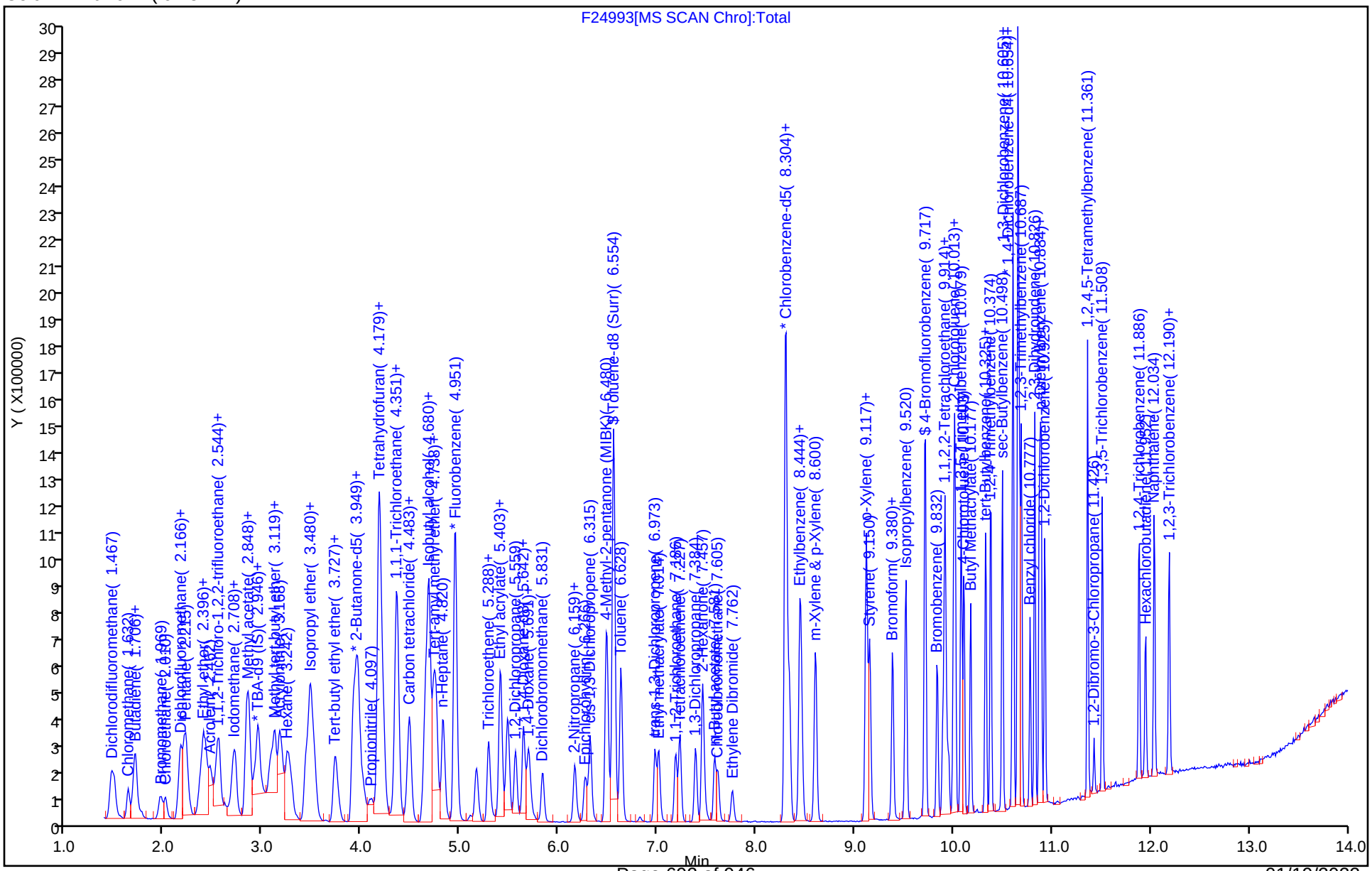
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260624W6 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\F24993.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 19-Jan-2022 07:17:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140380-005
Operator ID: Instrument ID: CVOAMS6

Method: \\chromfs\Edison\ChromData\CVOAMS6\20220119-140380.b\8260624W6.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 11:27:07 Calib Date: 23-Nov-2021 14:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS6\20211123-138064.b\F22516.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: moroneyc Date: 19-Jan-2022 07:38:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	50.0	44.5	88.93
$ 56 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	92.96
$ 78 Toluene-d8 (Surr)	50.0	45.6	91.14
$ 100 4-Bromofluorobenzene	50.0	51.5	102.98

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Start Date: 11/23/2021 12:03

Analysis Batch Number: 814964 End Date: 11/23/2021 21:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-814964/1		11/23/2021 12:03	1	F22508.D	Rtx-624 0.25(mm)
STD7 460-814964/3 IC		11/23/2021 12:45	1	F22510.D	Rtx-624 0.25(mm)
STD1 460-814964/4 IC		11/23/2021 13:07	1	F22511.D	Rtx-624 0.25(mm)
STD5 460-814964/5 IC		11/23/2021 13:28	1	F22512.D	Rtx-624 0.25(mm)
STD20 460-814964/6 ICIS		11/23/2021 13:51	1	F22513.D	Rtx-624 0.25(mm)
STD50 460-814964/7 IC		11/23/2021 14:12	1	F22514.D	Rtx-624 0.25(mm)
STD200 460-814964/8 IC		11/23/2021 14:35	1	F22515.D	Rtx-624 0.25(mm)
STD500 460-814964/9 IC		11/23/2021 14:57	1	F22516.D	Rtx-624 0.25(mm)
ICV 460-814964/15		11/23/2021 21:13	1	F22522.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Start Date: 01/18/2022 06:37

Analysis Batch Number: 823788 End Date: 01/18/2022 15:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 460-823788/3		01/18/2022 06:37	1	F24962.D	Rtx-624 0.25(mm)
LCS 460-823788/4		01/18/2022 07:01	1	F24963.D	Rtx-624 0.25(mm)
LCSD 460-823788/5		01/18/2022 07:23	1	F24964.D	Rtx-624 0.25(mm)
MB 460-823788/8		01/18/2022 08:29	1	F24967.D	Rtx-624 0.25(mm)
460-250807-1	TRIP BLANK	01/18/2022 08:51	1	F24968.D	Rtx-624 0.25(mm)
460-250807-11	TRIP BLANK	01/18/2022 09:13	1	F24969.D	Rtx-624 0.25(mm)
460-250807-21	TRIP BLANK	01/18/2022 09:35	1	F24970.D	Rtx-624 0.25(mm)
460-250807-2	SL-15_011222	01/18/2022 09:57	1	F24971.D	Rtx-624 0.25(mm)
460-250807-3	SL-14_011222	01/18/2022 10:19	1	F24972.D	Rtx-624 0.25(mm)
460-250807-4	SL-13_011222	01/18/2022 10:41	1	F24973.D	Rtx-624 0.25(mm)
460-250807-5	SL-7_011222	01/18/2022 11:03	1	F24974.D	Rtx-624 0.25(mm)
460-250807-6	SL-6_011222	01/18/2022 11:24	1	F24975.D	Rtx-624 0.25(mm)
460-250807-7	SL-5_011222	01/18/2022 11:46	1	F24976.D	Rtx-624 0.25(mm)
460-250807-8	SL-8_011222	01/18/2022 12:08	1	F24977.D	Rtx-624 0.25(mm)
460-250807-9	SL-9_011222	01/18/2022 12:30	1	F24978.D	Rtx-624 0.25(mm)
460-250807-10	SL-10_011222	01/18/2022 12:52	1	F24979.D	Rtx-624 0.25(mm)
460-250807-12	SL-11_011222	01/18/2022 13:13	1	F24980.D	Rtx-624 0.25(mm)
460-250807-13	SL-23_011322	01/18/2022 13:35	1	F24981.D	Rtx-624 0.25(mm)
460-250807-14	SL-12_011322	01/18/2022 13:56	1	F24982.D	Rtx-624 0.25(mm)
460-250807-15	SL-19_011322	01/18/2022 14:18	1	F24983.D	Rtx-624 0.25(mm)
460-250807-16	SL-22_011322	01/18/2022 14:40	1	F24984.D	Rtx-624 0.25(mm)
460-250807-18	SL-20_011322	01/18/2022 15:02	1	F24985.D	Rtx-624 0.25(mm)
460-250807-19	SL-4_011322	01/18/2022 15:24	1	F24986.D	Rtx-624 0.25(mm)
460-250807-20	SL-18_011322	01/18/2022 15:46	1	F24987.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS6 Start Date: 01/19/2022 05:47

Analysis Batch Number: 823977 End Date: 01/19/2022 13:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		01/19/2022 05:47	1		Rtx-624 0.25(mm)
CCVIS 460-823977/3		01/19/2022 06:31	1	F24991.D	Rtx-624 0.25(mm)
LCS 460-823977/4		01/19/2022 06:56	1	F24992.D	Rtx-624 0.25(mm)
LCSD 460-823977/5		01/19/2022 07:17	1	F24993.D	Rtx-624 0.25(mm)
MB 460-823977/8		01/19/2022 08:23	1	F24996.D	Rtx-624 0.25(mm)
460-250807-22	SL-17_011322	01/19/2022 08:45	1	F24997.D	Rtx-624 0.25(mm)
460-250807-23	SL-21_011422	01/19/2022 09:07	1	F24998.D	Rtx-624 0.25(mm)
460-250807-24	SL-16_011422	01/19/2022 09:28	1	F24999.D	Rtx-624 0.25(mm)
460-250807-25	SL-3_011422	01/19/2022 09:50	1	F25000.D	Rtx-624 0.25(mm)
460-250807-26	SL-2_011422	01/19/2022 10:12	1	F25001.D	Rtx-624 0.25(mm)
460-250807-27	MH-1231_011422	01/19/2022 10:34	1	F25002.D	Rtx-624 0.25(mm)
460-250807-28	MH-1244_011422	01/19/2022 10:56	1	F25003.D	Rtx-624 0.25(mm)
ZZZZZ		01/19/2022 12:46	1		Rtx-624 0.25(mm)
		01/19/2022 13:08	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 814964 Batch Start Date: 11/23/21 12:03 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	14DIOXINTER 00135	524freon 00045	8260 SP 00146	8260MIX1COMB 00147
BFB 460-814964/1		8260D		5 mL	5 mL				
STD7 460-814964/3 IC		8260D		5 mL	5 mL				
STD1 460-814964/4 IC		8260D		5 mL	5 mL	30 uL	10 uL		10 uL
STD5 460-814964/5 IC		8260D		5 mL	5 mL		10 uL		10 uL
STD20 460-814964/6 ICIS		8260D		5 mL	5 mL		20 uL		20 uL
STD50 460-814964/7 IC		8260D		5 mL	5 mL		50 uL		50 uL
STD200 460-814964/8 IC		8260D		5 mL	5 mL				
STD500 460-814964/9 IC		8260D		5 mL	5 mL				
ICV 460-814964/15		8260D		5 mL	5 mL			20 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8FreonHi 00038	8FreonsSS 00038	ACROLEIN SP 00131	ACROLEIN W 00133	ACRY/EPIH MIX 00092	BFB 00030
BFB 460-814964/1		8260D							1 uL
STD7 460-814964/3 IC		8260D						20 uL	
STD1 460-814964/4 IC		8260D					4 uL		
STD5 460-814964/5 IC		8260D					4 uL		
STD20 460-814964/6 ICIS		8260D					4 uL		
STD50 460-814964/7 IC		8260D					10 uL		
STD200 460-814964/8 IC		8260D		20 uL			20 uL		
STD500 460-814964/9 IC		8260D		50 uL			40 uL		
ICV 460-814964/15		8260D			20 uL	4 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 814964 Batch Start Date: 11/23/21 12:03 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Ethanol mix 00058	GAS C SP 00436	GAS Hi 00401	GASES Li 00449	MIX 2 Hi 00117	MIX I Hi 00144
BFB 460-814964/1		8260D							
STD7 460-814964/3 IC		8260D					2.5 uL		
STD1 460-814964/4 IC		8260D					10 uL		
STD5 460-814964/5 IC		8260D					10 uL		
STD20 460-814964/6 ICIS		8260D					20 uL		
STD50 460-814964/7 IC		8260D					50 uL		
STD200 460-814964/8 IC		8260D		20 uL		20 uL		20 uL	20 uL
STD500 460-814964/9 IC		8260D		50 uL		50 uL		50 uL	50 uL
ICV 460-814964/15		8260D			20 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00052					
BFB 460-814964/1		8260D							
STD7 460-814964/3 IC		8260D		5 uL					
STD1 460-814964/4 IC		8260D		5 uL					
STD5 460-814964/5 IC		8260D		5 uL					
STD20 460-814964/6 ICIS		8260D		5 uL					
STD50 460-814964/7 IC		8260D		5 uL					
STD200 460-814964/8 IC		8260D		5 uL					
STD500 460-814964/9 IC		8260D		5 uL					
ICV 460-814964/15		8260D		5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 814964 Batch Start Date: 11/23/21 12:03 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823788 Batch Start Date: 01/18/22 06:37 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260MIX1COMB 00149	ACROLEIN W 00135	GASES Li 00458
CCVIS 460-823788/3		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
LCS 460-823788/4		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
LCSD 460-823788/5		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
MB 460-823788/8		8260D		5 mL	5 mL				
460-250807-A-1	TRIP BLANK	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-11	TRIP BLANK	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-21	TRIP BLANK	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-2	SL-15_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-3	SL-14_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-4	SL-13_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-5	SL-7_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-6	SL-6_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-7	SL-5_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-8	SL-8_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-9	SL-9_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-10	SL-10_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-12	SL-11_011222	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-13	SL-23_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-14	SL-12_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-15	SL-19_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-16	SL-22_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-18	SL-20_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-19	SL-4_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-20	SL-18_011322	8260D	T	5 mL	5 mL	<2 PH Units			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00052					
CCVIS 460-823788/3		8260D		5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823788 Batch Start Date: 01/18/22 06:37 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00052					
LCS 460-823788/4		8260D		5 uL					
LCSD 460-823788/5		8260D		5 uL					
MB 460-823788/8		8260D		5 uL					
460-250807-A-1	TRIP BLANK	8260D	T	5 uL					
460-250807-A-11	TRIP BLANK	8260D	T	5 uL					
460-250807-A-21	TRIP BLANK	8260D	T	5 uL					
460-250807-A-2	SL-15_011222	8260D	T	5 uL					
460-250807-A-3	SL-14_011222	8260D	T	5 uL					
460-250807-A-4	SL-13_011222	8260D	T	5 uL					
460-250807-A-5	SL-7_011222	8260D	T	5 uL					
460-250807-A-6	SL-6_011222	8260D	T	5 uL					
460-250807-A-7	SL-5_011222	8260D	T	5 uL					
460-250807-A-8	SL-8_011222	8260D	T	5 uL					
460-250807-A-9	SL-9_011222	8260D	T	5 uL					
460-250807-A-10	SL-10_011222	8260D	T	5 uL					
460-250807-A-12	SL-11_011222	8260D	T	5 uL					
460-250807-A-13	SL-23_011322	8260D	T	5 uL					
460-250807-A-14	SL-12_011322	8260D	T	5 uL					
460-250807-A-15	SL-19_011322	8260D	T	5 uL					
460-250807-A-16	SL-22_011322	8260D	T	5 uL					
460-250807-A-18	SL-20_011322	8260D	T	5 uL					
460-250807-A-19	SL-4_011322	8260D	T	5 uL					
460-250807-A-20	SL-18_011322	8260D	T	5 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823788 Batch Start Date: 01/18/22 06:37 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823977 Batch Start Date: 01/19/22 05:47 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260MIX1COMB 00149	ACROLEIN W 00135	GASES Li 00459
CCVIS 460-823977/3		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
LCS 460-823977/4		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
LCSD 460-823977/5		8260D		5 mL	5 mL		20 uL	4 uL	20 uL
MB 460-823977/8		8260D		5 mL	5 mL				
460-250807-A-22	SL-17_011322	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-23	SL-21_011422	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-24	SL-16_011422	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-25	SL-3_011422	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-26	SL-2_011422	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-27	SAMH-1231_011422	8260D	T	5 mL	5 mL	<2 PH Units			
460-250807-A-28	SAMH-1244_011422	8260D	T	5 mL	5 mL	<2 PH Units			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA6IS/SURR 00052					
CCVIS 460-823977/3		8260D		5 uL					
LCS 460-823977/4		8260D		5 uL					
LCSD 460-823977/5		8260D		5 uL					
MB 460-823977/8		8260D		5 uL					
460-250807-A-22	SL-17_011322	8260D	T	5 uL					
460-250807-A-23	SL-21_011422	8260D	T	5 uL					
460-250807-A-24	SL-16_011422	8260D	T	5 uL					
460-250807-A-25	SL-3_011422	8260D	T	5 uL					
460-250807-A-26	SL-2_011422	8260D	T	5 uL					
460-250807-A-27	SAMH-1231_011422	8260D	T	5 uL					
460-250807-A-28	SAMH-1244_011422	8260D	T	5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823977 Batch Start Date: 01/19/22 05:47 Batch Analyst: Moroney, Christopher J

Batch Method: 8260D Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D_SIM

Volatile Organic Compounds (GC/MS)

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	BFB #
TRIP BLANK	460-250807-1	100
SL-15_011222	460-250807-2	99
SL-14_011222	460-250807-3	105
SL-13_011222	460-250807-4	102
SL-7_011222	460-250807-5	102
SL-6_011222	460-250807-6	99
SL-5_011222	460-250807-7	101
SL-8_011222	460-250807-8	102
SL-9_011222	460-250807-9	98
SL-10_011222	460-250807-10	101
TRIP BLANK	460-250807-11	101
SL-11_011222	460-250807-12	100
SL-23_011322	460-250807-13	100
SL-12_011322	460-250807-14	100
SL-19_011322	460-250807-15	103
SL-22_011322	460-250807-16	101
SL-20_011322	460-250807-18	101
SL-4_011322	460-250807-19	99
SL-18_011322	460-250807-20	102
TRIP BLANK	460-250807-21	100
SL-17_011322	460-250807-22	100
SL-21_011422	460-250807-23	102
SL-16_011422	460-250807-24	102
SL-3_011422	460-250807-25	103
SL-2_011422	460-250807-26	99
MH-1231_011422	460-250807-27	101
MH-1244_011422	460-250807-28	102
	MB 460-823803/7	102
	MB 460-823919/8	102
	LCS 460-823803/3	102
	LCS 460-823919/4	104
	LCSD 460-823803/4	104
	LCSD 460-823919/5	101

	QC LIMITS
BFB = 4-Bromofluorobenzene	65-133

Column to be used to flag recovery values

FORM II 8260D SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S055103.D

Lab ID: LCS 460-823803/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	5.00	4.33	87	72-124	

Column to be used to flag recovery and RPD values

FORM III 8260D SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S055132.D

Lab ID: LCS 460-823919/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	5.00	4.35	87	72-124	

Column to be used to flag recovery and RPD values

FORM III 8260D SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S055104.D

Lab ID: LCSD 460-823803/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	5.00	3.85	77	12	30	72-124	

Column to be used to flag recovery and RPD values

FORM III 8260D SIM

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S055133.D

Lab ID: LCSD 460-823919/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	5.00	4.24	85	3	30	72-124	

Column to be used to flag recovery and RPD values

FORM III 8260D SIM

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: S055107.D Lab Sample ID: MB 460-823803/7

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: CVOAMS14 Date Analyzed: 01/18/2022 10:24

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-823803/3	S055103.D	01/18/2022 08:57
	LCSD 460-823803/4	S055104.D	01/18/2022 09:19
TRIP BLANK	460-250807-1	S055119.D	01/18/2022 14:46
SL-15_011222	460-250807-2	S055120.D	01/18/2022 15:07
SL-14_011222	460-250807-3	S055121.D	01/18/2022 15:29
SL-13_011222	460-250807-4	S055122.D	01/18/2022 15:51
SL-7_011222	460-250807-5	S055123.D	01/18/2022 16:13
SL-6_011222	460-250807-6	S055124.D	01/18/2022 16:35
SL-8_011222	460-250807-8	S055126.D	01/18/2022 17:18
SL-9_011222	460-250807-9	S055127.D	01/18/2022 17:40

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: S055136.D Lab Sample ID: MB 460-823919/8

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: CVOAMS14 Date Analyzed: 01/18/2022 22:10

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-823919/4	S055132.D	01/18/2022 20:43
	LCSD 460-823919/5	S055133.D	01/18/2022 21:05
TRIP BLANK	460-250807-11	S055137.D	01/18/2022 22:32
TRIP BLANK	460-250807-21	S055138.D	01/18/2022 22:54
SL-11_011222	460-250807-12	S055139.D	01/18/2022 23:16
SL-23_011322	460-250807-13	S055140.D	01/18/2022 23:37
SL-12_011322	460-250807-14	S055141.D	01/18/2022 23:59
SL-19_011322	460-250807-15	S055142.D	01/19/2022 00:21
SL-22_011322	460-250807-16	S055143.D	01/19/2022 00:43
SL-20_011322	460-250807-18	S055144.D	01/19/2022 01:04
SL-4_011322	460-250807-19	S055145.D	01/19/2022 01:26
SL-18_011322	460-250807-20	S055146.D	01/19/2022 01:48
SL-10_011222	460-250807-10	S055147.D	01/19/2022 02:09
SL-17_011322	460-250807-22	S055148.D	01/19/2022 02:31
SL-21_011422	460-250807-23	S055149.D	01/19/2022 02:53
SL-16_011422	460-250807-24	S055150.D	01/19/2022 03:15
SL-3_011422	460-250807-25	S055151.D	01/19/2022 03:36
SL-2_011422	460-250807-26	S055152.D	01/19/2022 03:58
MH-1231_011422	460-250807-27	S055153.D	01/19/2022 04:20
MH-1244_011422	460-250807-28	S055154.D	01/19/2022 04:42
SL-5_011222	460-250807-7	S055155.D	01/19/2022 05:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab File ID: S054837.D BFB Injection Date: 12/27/2021

Instrument ID: CVOAMS14 BFB Injection Time: 12:24

Analysis Batch No.: 820935

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	50 - 200% of m/z 174	140.8
96	5 - 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.8
174	50 - 200% of m/z 95	71.0
175	5 - 9% of m/z 174	7.5
176	95 -105% of m/z 174	95.9
177	5 - 10% of m/z 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD04 460-820935/3	S054839.D	12/27/2021	13:10
	STD1 460-820935/4	S054840.D	12/27/2021	13:32
	STD5 460-820935/5	S054841.D	12/27/2021	13:54
	STD10 460-820935/6	S054842.D	12/27/2021	14:15
	STD20 460-820935/7	S054843.D	12/27/2021	14:37
	STD30 460-820935/8	S054844.D	12/27/2021	14:59
	STD40 460-820935/9	S054845.D	12/27/2021	15:21
	STD50 460-820935/10	S054846.D	12/27/2021	15:42
	ICV 460-820935/13	S054849.D	12/27/2021	16:48

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: STD5 460-820935/5 Date Analyzed: 12/27/2021 13:54

Instrument ID: CVOAMS14 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): S054841.D Heated Purge: (Y/N) Y

Calibration ID: 88511

		FB		DXE		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		9506	5.12	1374	5.85	8139	8.54
UPPER LIMIT		19012	5.62	2748	6.35	16278	9.04
LOWER LIMIT		4753	4.62	687	5.35	4070	8.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 460-820935/13		9510	5.12	1533	5.85	8068	8.54

FB = Fluorobenzene
DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823803/2 Date Analyzed: 01/18/2022 08:35

Instrument ID: CVOAMS14 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): S055102.D Heated Purge: (Y/N) Y

Calibration ID: 88511

		FB		DXE		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		10559	5.12	1639	5.83	8698	8.54
UPPER LIMIT		21118	5.62	3278	6.33	17396	9.04
LOWER LIMIT		5280	4.62	820	5.33	4349	8.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823803/3		11031	5.12	1800	5.85	9667	8.54
LCSD 460-823803/4		10606	5.12	2087	5.85	8745	8.54
MB 460-823803/7		10031	5.12	1670	5.85	8683	8.54
460-250807-1	TRIP BLANK	11502	5.12	1807	5.85	9668	8.54
460-250807-2	SL-15_011222	10833	5.12	1603	5.85	9564	8.54
460-250807-3	SL-14_011222	10469	5.12	1983	5.85	8856	8.54
460-250807-4	SL-13_011222	10482	5.12	1665	5.83	8906	8.54
460-250807-5	SL-7_011222	10140	5.12	1895	5.85	8354	8.54
460-250807-6	SL-6_011222	10662	5.12	2338	5.83	9646	8.54
460-250807-8	SL-8_011222	10433	5.12	1716	5.83	8675	8.54
460-250807-9	SL-9_011222	10012	5.12	1338	5.85	8715	8.54

FB = Fluorobenzene
DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D SIM

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Sample No.: CCVIS 460-823919/2 Date Analyzed: 01/18/2022 20:00

Instrument ID: CVOAMS14 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): S055130.D Heated Purge: (Y/N) Y

Calibration ID: 88511

		FB		DXE		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		11531	5.12	1778	5.85	9528	8.54
UPPER LIMIT		23062	5.62	3556	6.35	19056	9.04
LOWER LIMIT		5766	4.62	889	5.35	4764	8.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-823919/4		11751	5.12	1898	5.85	10376	8.54
LCSD 460-823919/5		11740	5.12	1972	5.85	10042	8.54
MB 460-823919/8		11351	5.12	1970	5.85	9471	8.54
460-250807-11	TRIP BLANK	10656	5.12	1712	5.85	9192	8.54
460-250807-21	TRIP BLANK	10131	5.12	1502	5.85	9056	8.54
460-250807-12	SL-11_011222	10007	5.12	1723	5.83	8596	8.54
460-250807-13	SL-23_011322	10242	5.12	1825	5.83	8625	8.54
460-250807-14	SL-12_011322	10576	5.12	2020	5.83	9067	8.54
460-250807-15	SL-19_011322	11211	5.12	2023	5.85	9623	8.54
460-250807-16	SL-22_011322	9948	5.12	1731	5.85	8351	8.54
460-250807-18	SL-20_011322	9846	5.12	1704	5.85	8204	8.54
460-250807-19	SL-4_011322	9212	5.12	1784	5.83	7455	8.54
460-250807-20	SL-18_011322	10579	5.12	1919	5.83	8931	8.54
460-250807-10	SL-10_011222	10161	5.12	2095	5.85	8564	8.54
460-250807-22	SL-17_011322	10735	5.12	2015	5.85	9278	8.54
460-250807-23	SL-21_011422	10278	5.12	1845	5.83	8360	8.54
460-250807-24	SL-16_011422	10337	5.12	1892	5.83	8412	8.54
460-250807-25	SL-3_011422	10782	5.12	1889	5.85	8944	8.54
460-250807-26	SL-2_011422	10763	5.12	2026	5.83	9044	8.54
460-250807-27	MH-1231_011422	10266	5.12	2160	5.85	8721	8.54
460-250807-28	MH-1244_011422	11227	5.12	2096	5.85	9669	8.54
460-250807-7	SL-5_011222	10046	5.12	1696	5.83	8372	8.54

FB = Fluorobenzene
DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D SIM

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-1

Matrix: Water | Lab File ID: S055119.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 14:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055119.D				
Lims ID:	460-250807-C-1				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 14:46:10	ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-C-1				
Misc. Info.:	460-0140338-019				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 16:18:44	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				
First Level Reviewer: starzecm		Date:	18-Jan-2022 15:04:54		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	11502	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1807	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	9668	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.993	-0.001	88	25229	0.5015	

QC Flag Legend

Processing Flags

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

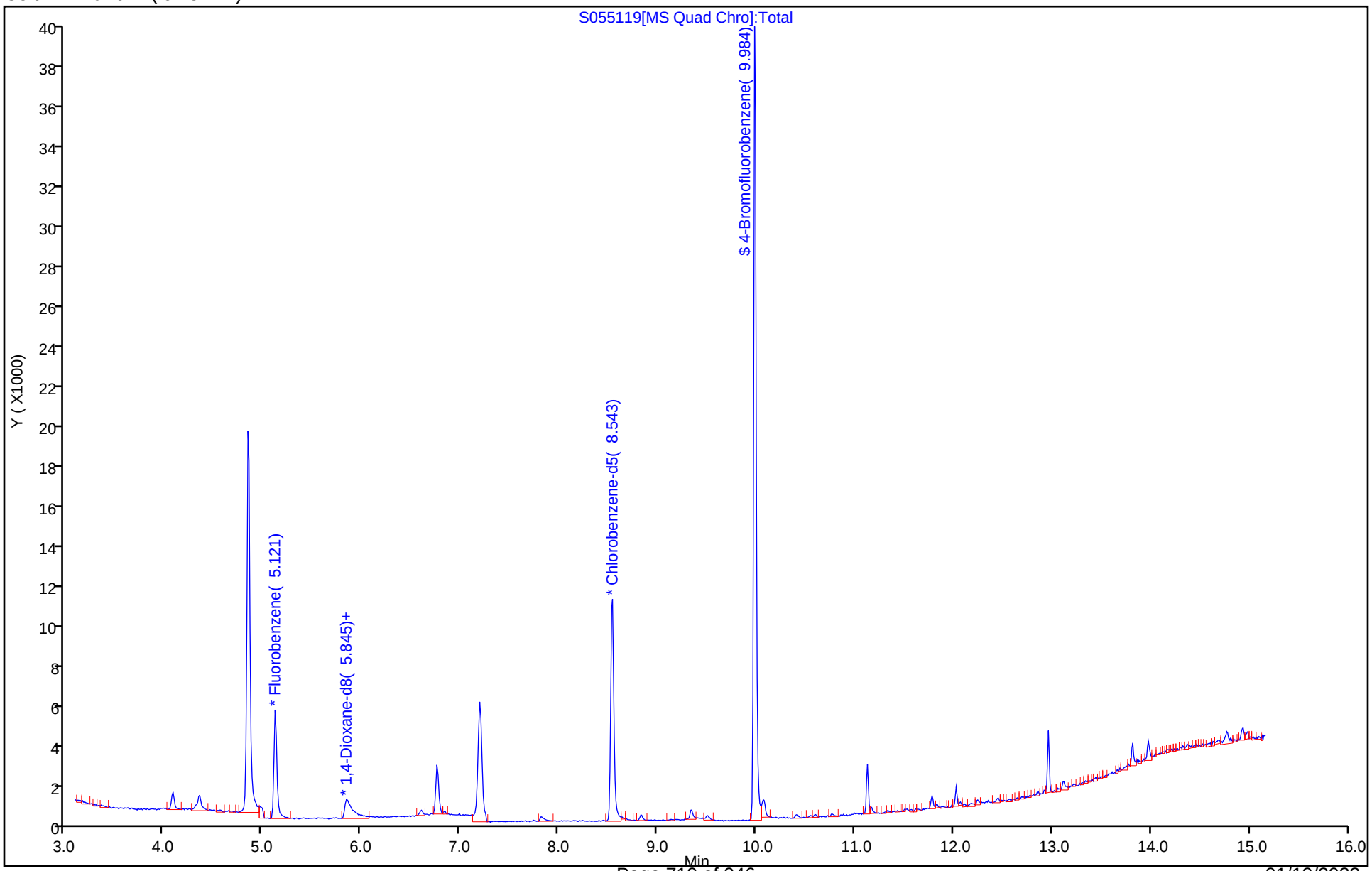
Report Date: 18-Jan-2022 18:39:51 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055119.D

Injection Date:	18-Jan-2022 14:46:10	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-C-1	Lab Sample ID:	460-250807-1	Worklist Smp#:	19
Client ID:	TRIP BLANK				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055119.D				
Lims ID:	460-250807-C-1				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 14:46:10	ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-C-1				
Misc. Info.:	460-0140338-019				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 16:18:44	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				

First Level Reviewer: starzecm Date: 18-Jan-2022 15:04:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5015	100.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-15_011222 | Lab Sample ID: 460-250807-2

Matrix: Water | Lab File ID: S055120.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 09:15

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 15:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.94	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055120.D
Lims ID: 460-250807-D-2
Client ID: SL-15_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 15:07:58 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-2
Misc. Info.: 460-0140338-020
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:39:14 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	66	10833	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	48	1603	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	95	9564	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	97	24623	0.4947	
8 1,4-Dioxane	88	5.905	5.893	0.012	49	393	0.9399	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

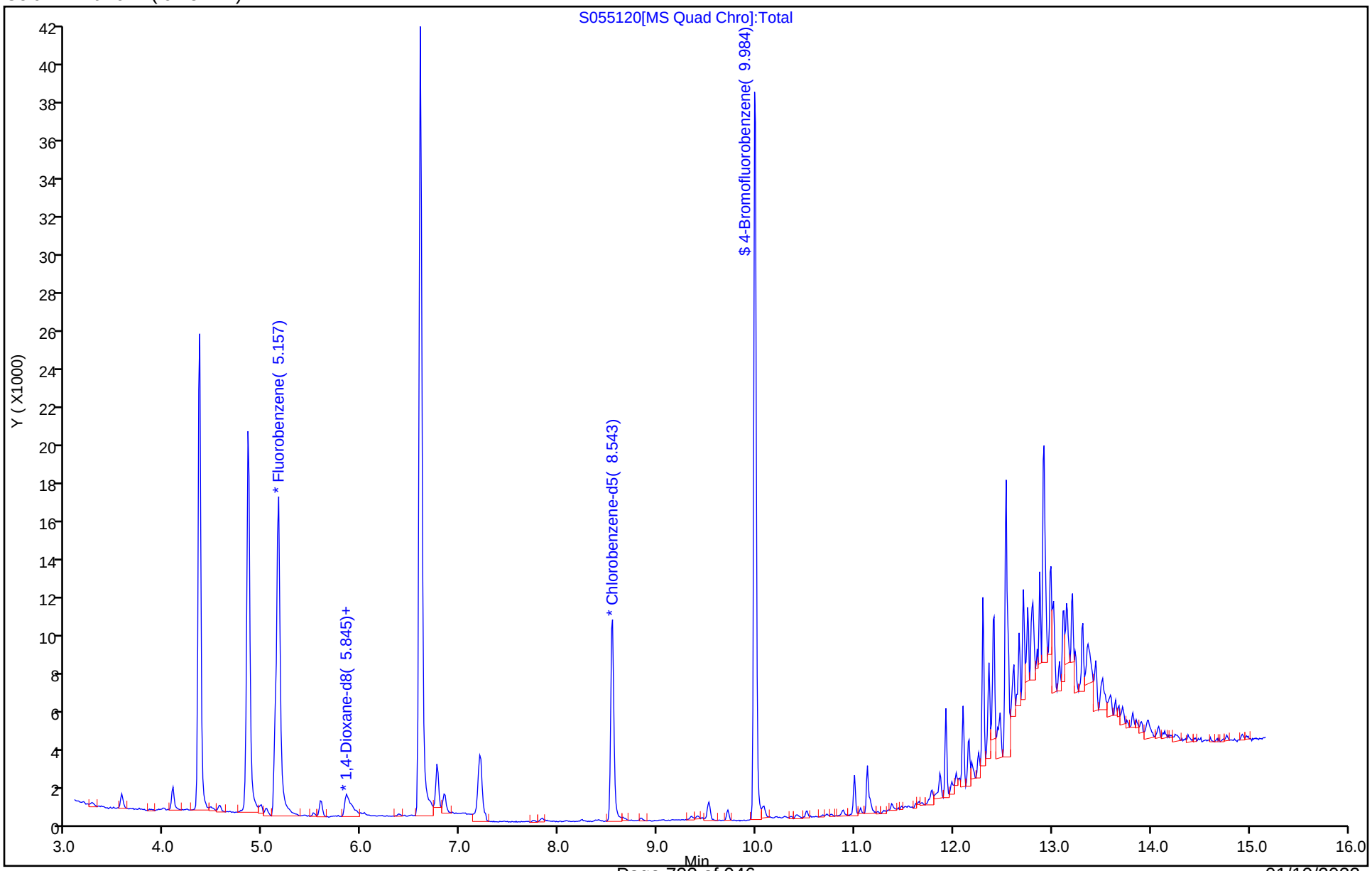
Report Date: 19-Jan-2022 10:39:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055120.D

Injection Date:	18-Jan-2022 15:07:58	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-2	Lab Sample ID:	460-250807-2	Worklist Smp#:	20
Client ID:	SL-15_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055120.D				
Lims ID:	460-250807-D-2				
Client ID:	SL-15_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 15:07:58	ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-2				
Misc. Info.:	460-0140338-020				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:39:14	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

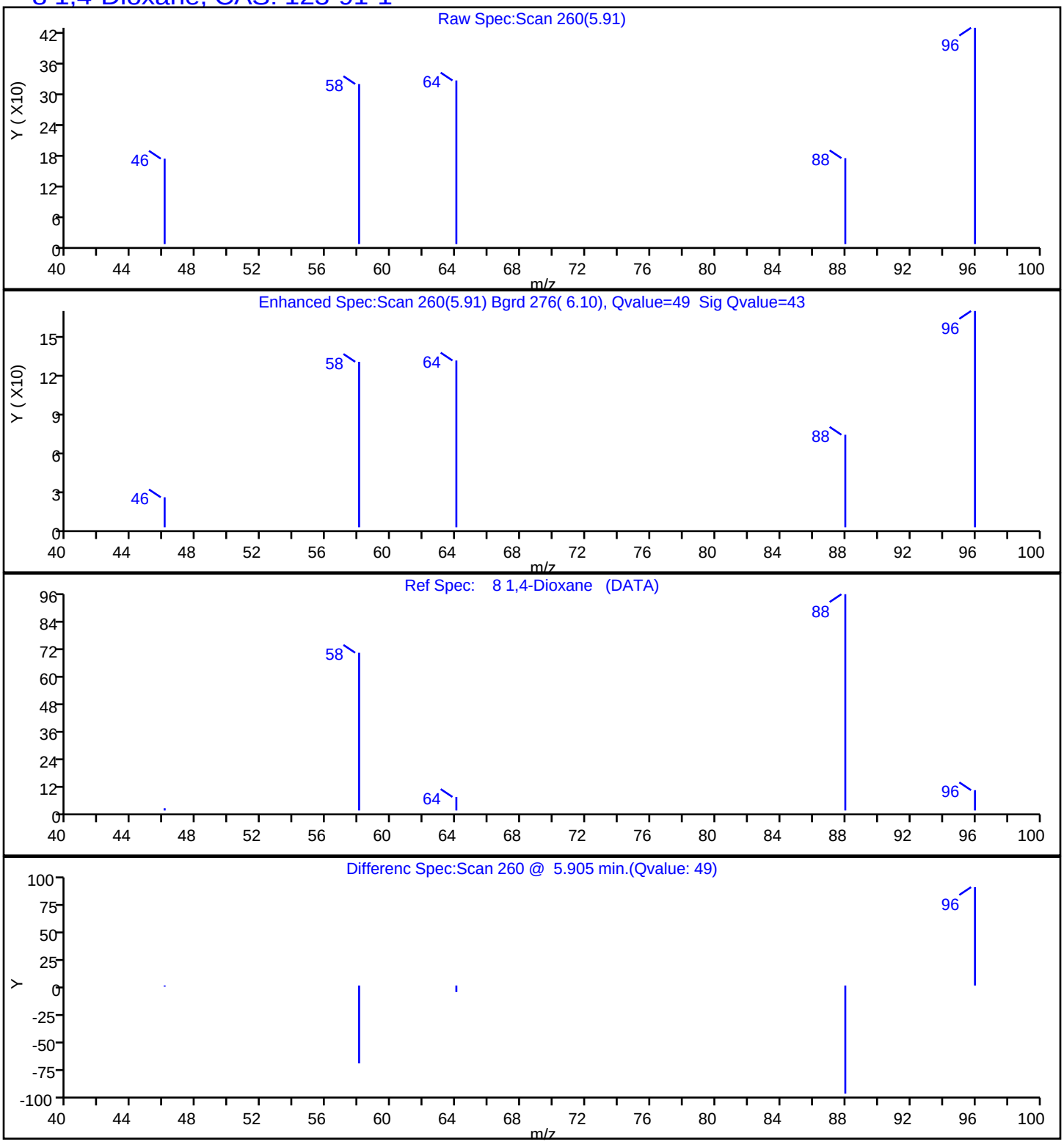
First Level Reviewer: boykink Date: 18-Jan-2022 18:40:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4947	98.95

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055120.D
Injection Date: 18-Jan-2022 15:07:58 Instrument ID: CVOAMS14
Lims ID: 460-250807-D-2 Lab Sample ID: 460-250807-2
Client ID: SL-15_011222
Operator ID: ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

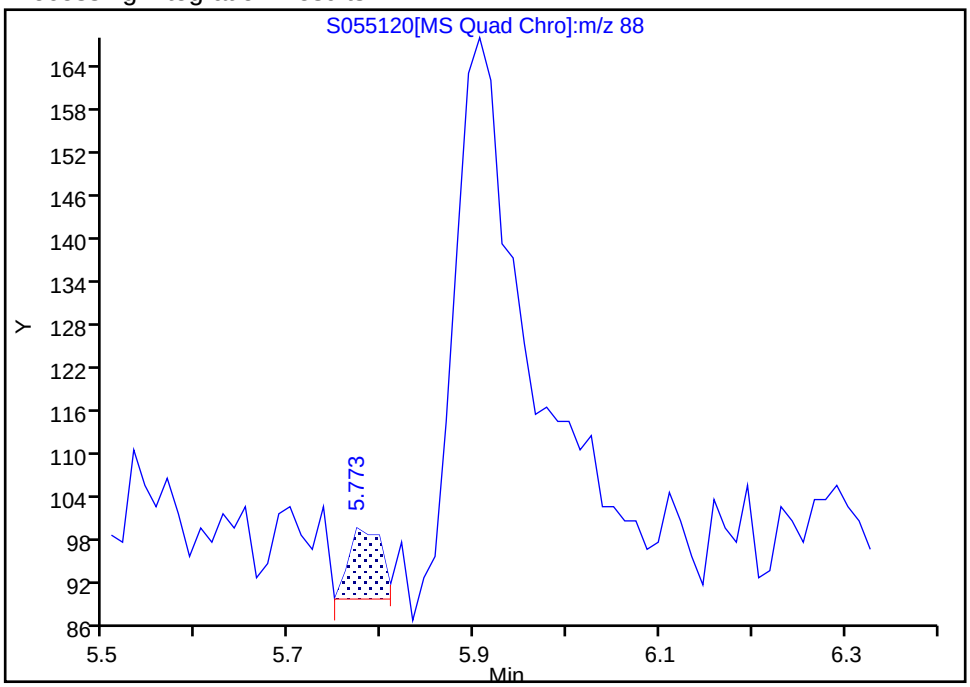
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055120.D				
Injection Date:	18-Jan-2022 15:07:58	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-2	Lab Sample ID:	460-250807-2		
Client ID:	SL-15_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

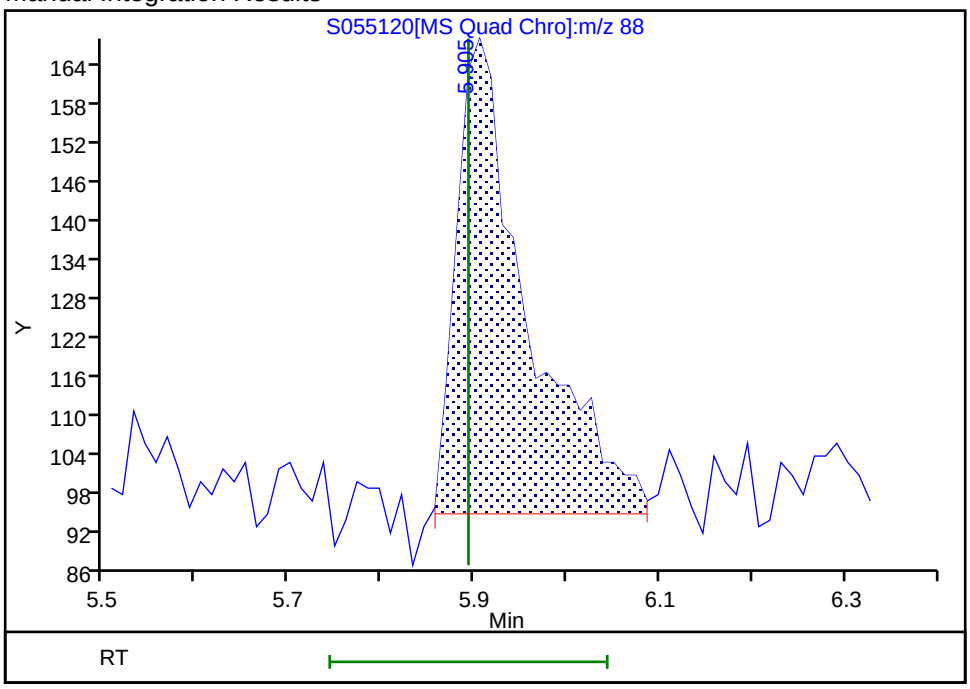
Processing Integration Results

RT: 5.77
Area: 25
Amount: 0.059790
Amount Units: ug/l



Manual Integration Results

RT: 5.91
Area: 393
Amount: 0.939903
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:39:08
Audit Action: Manually Integrated Audit Reason: Wrong peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-14_011222 | Lab Sample ID: 460-250807-3

Matrix: Water | Lab File ID: S055121.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 09:50

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 15:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	105		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055121.D				
Lims ID:	460-250807-D-3				
Client ID:	SL-14_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 15:29:47	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-3				
Misc. Info.:	460-0140338-021				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 18:40:02	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				
First Level Reviewer: boykink		Date:	18-Jan-2022 18:40:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10469	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1983	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	91	8856	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.993	-0.001	88	24260	0.5264	

QC Flag Legend

Processing Flags

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

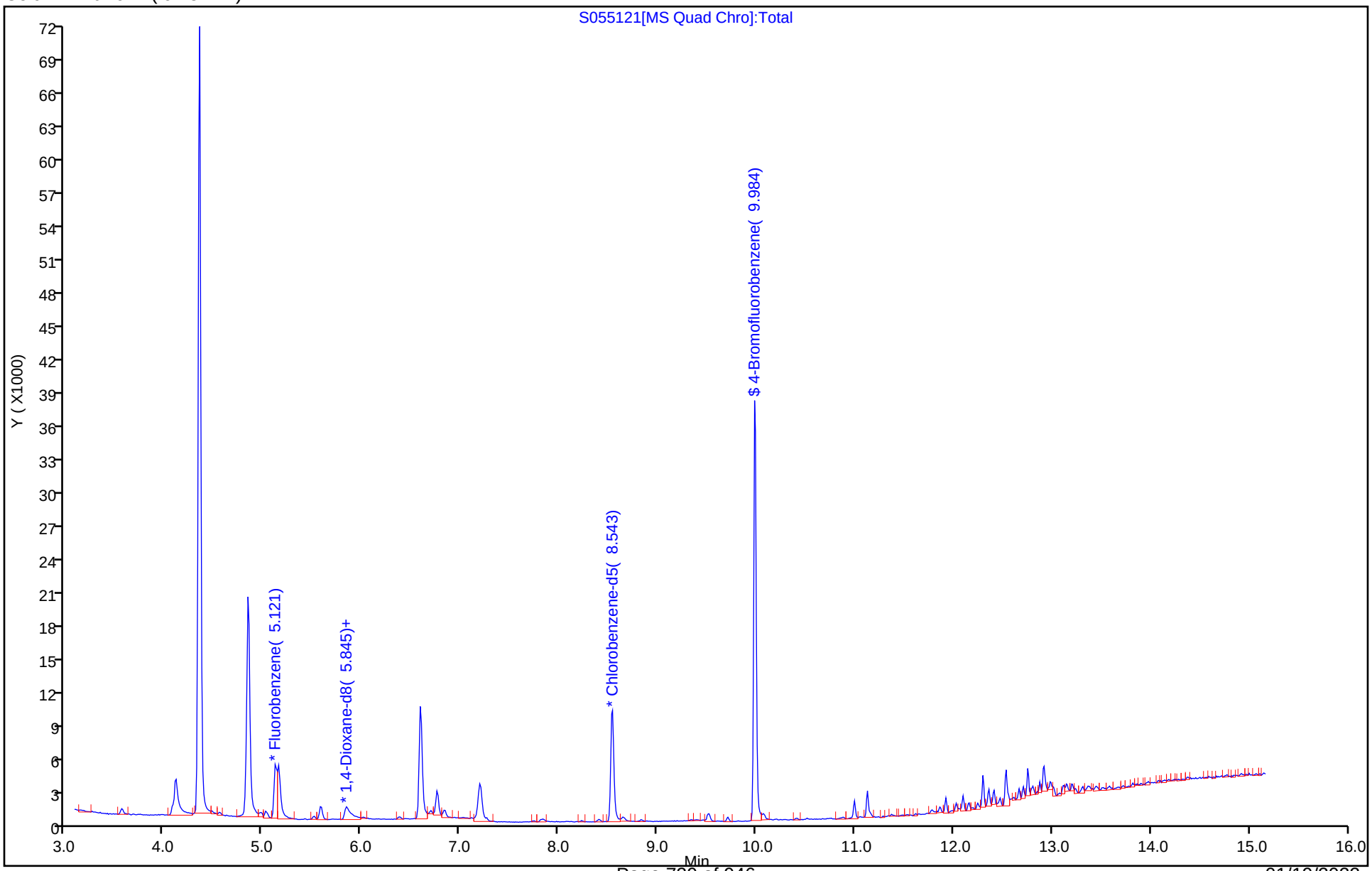
Report Date: 18-Jan-2022 18:40:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055121.D

Injection Date:	18-Jan-2022 15:29:47	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-3	Lab Sample ID:	460-250807-3	Worklist Smp#:	21
Client ID:	SL-14_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055121.D				
Lims ID:	460-250807-D-3				
Client ID:	SL-14_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 15:29:47	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-3				
Misc. Info.:	460-0140338-021				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 18:40:02	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5264	105.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-13_011222 | Lab Sample ID: 460-250807-4

Matrix: Water | Lab File ID: S055122.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 10:45

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 15:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055122.D
Lims ID: 460-250807-D-4
Client ID: SL-13_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 15:51:37 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-4
Misc. Info.: 460-0140338-022
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:39:54 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:26

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	10482	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	48	1665	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	97	8906	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	96	23656	0.5104	
	8 1,4-Dioxane	88	5.917	5.893	0.024	29	120	0.2763	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

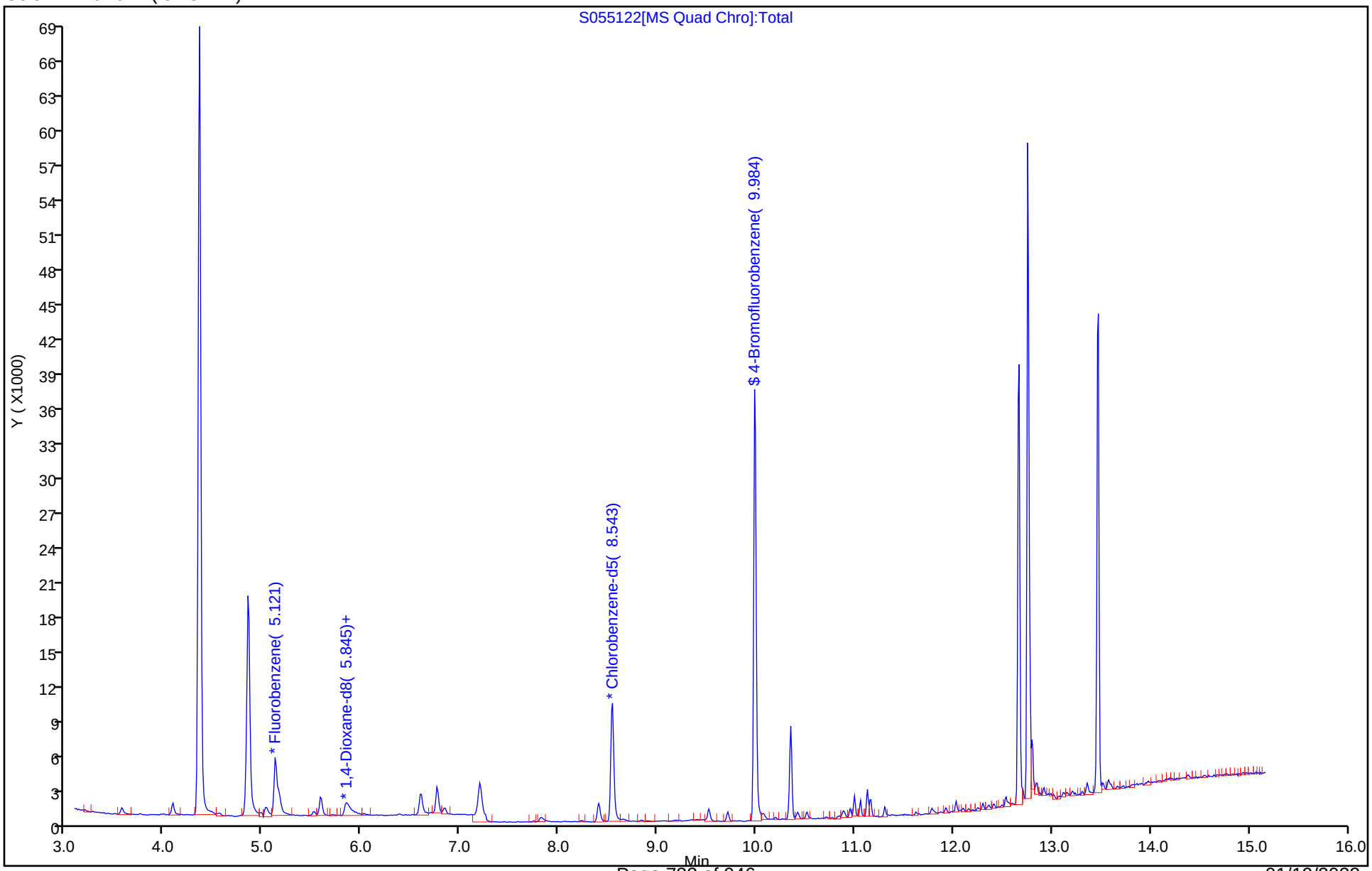
Report Date: 19-Jan-2022 10:39:54 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055122.D

Injection Date:	18-Jan-2022 15:51:37	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-4	Lab Sample ID:	460-250807-4	Worklist Smp#:	22
Client ID:	SL-13_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055122.D				
Lims ID:	460-250807-D-4				
Client ID:	SL-13_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 15:51:37	ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-4				
Misc. Info.:	460-0140338-022				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:39:54	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5104	102.08

Manual Integration/User Assign Peak Report

Eurofins Edison

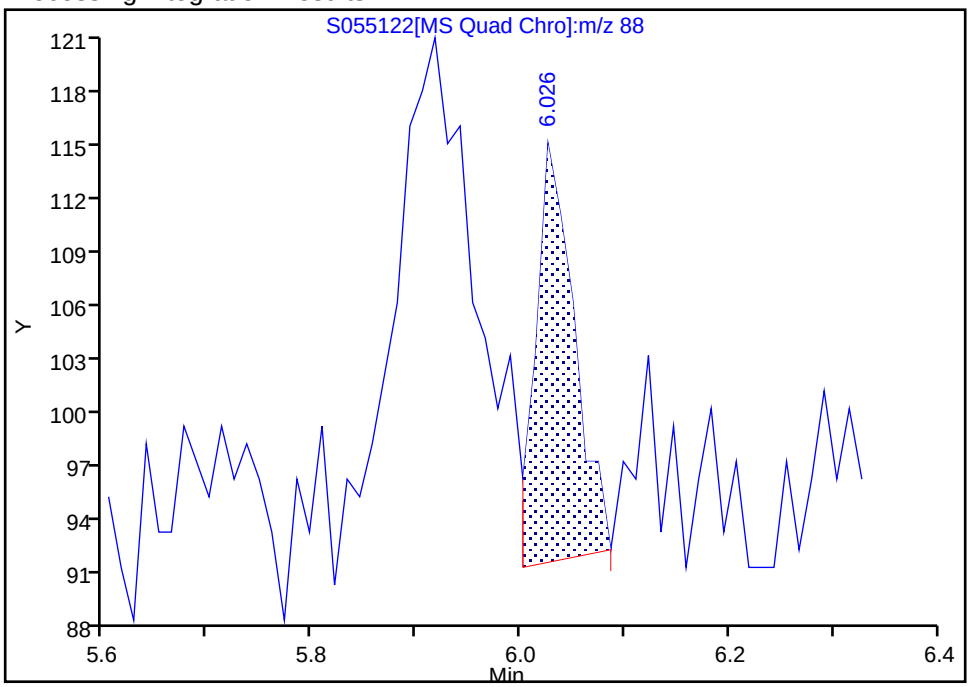
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055122.D				
Injection Date:	18-Jan-2022 15:51:37	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-4	Lab Sample ID:	460-250807-4		
Client ID:	SL-13_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

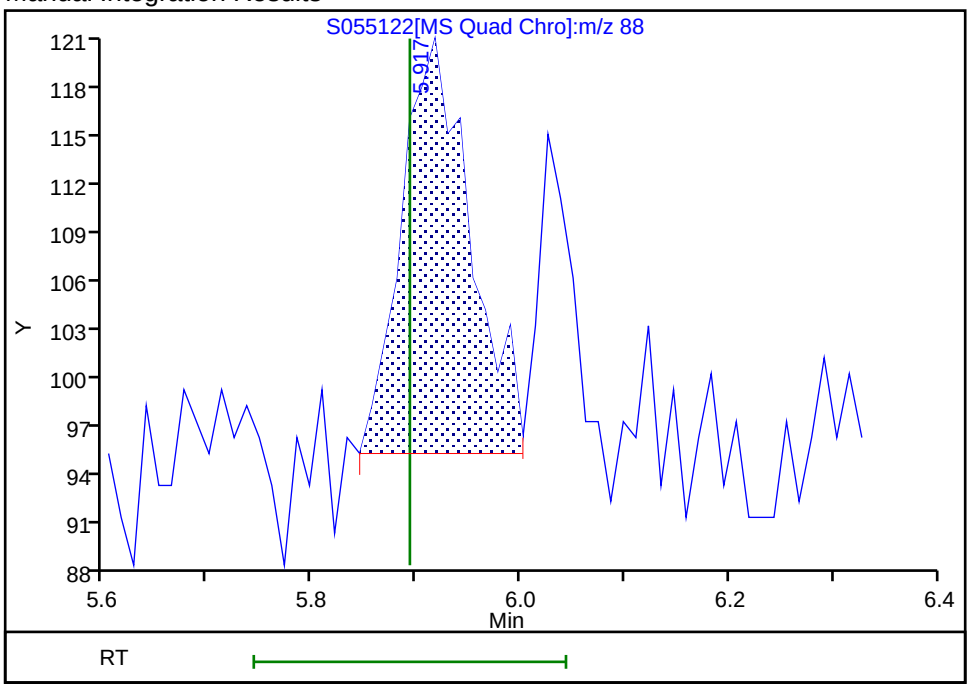
Processing Integration Results

RT: 6.03
Area: 62
Amount: 0.142758
Amount Units: ug/l



Manual Integration Results

RT: 5.92
Area: 120
Amount: 0.276306
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:39:50
Audit Action: Manually Integrated Audit Reason: Wrong peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-7_011222 | Lab Sample ID: 460-250807-5

Matrix: Water | Lab File ID: S055123.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 11:15

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 16:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.92	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055123.D
Lims ID: 460-250807-D-5
Client ID: SL-7_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 16:13:26 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-5
Misc. Info.: 460-0140338-023
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 18:40:36 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1601

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:36

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10140	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1895	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	8354	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.993	-0.001	89	22095	0.5082	
	8 1,4-Dioxane	88	5.905	5.893	0.012	44	457	0.9246	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

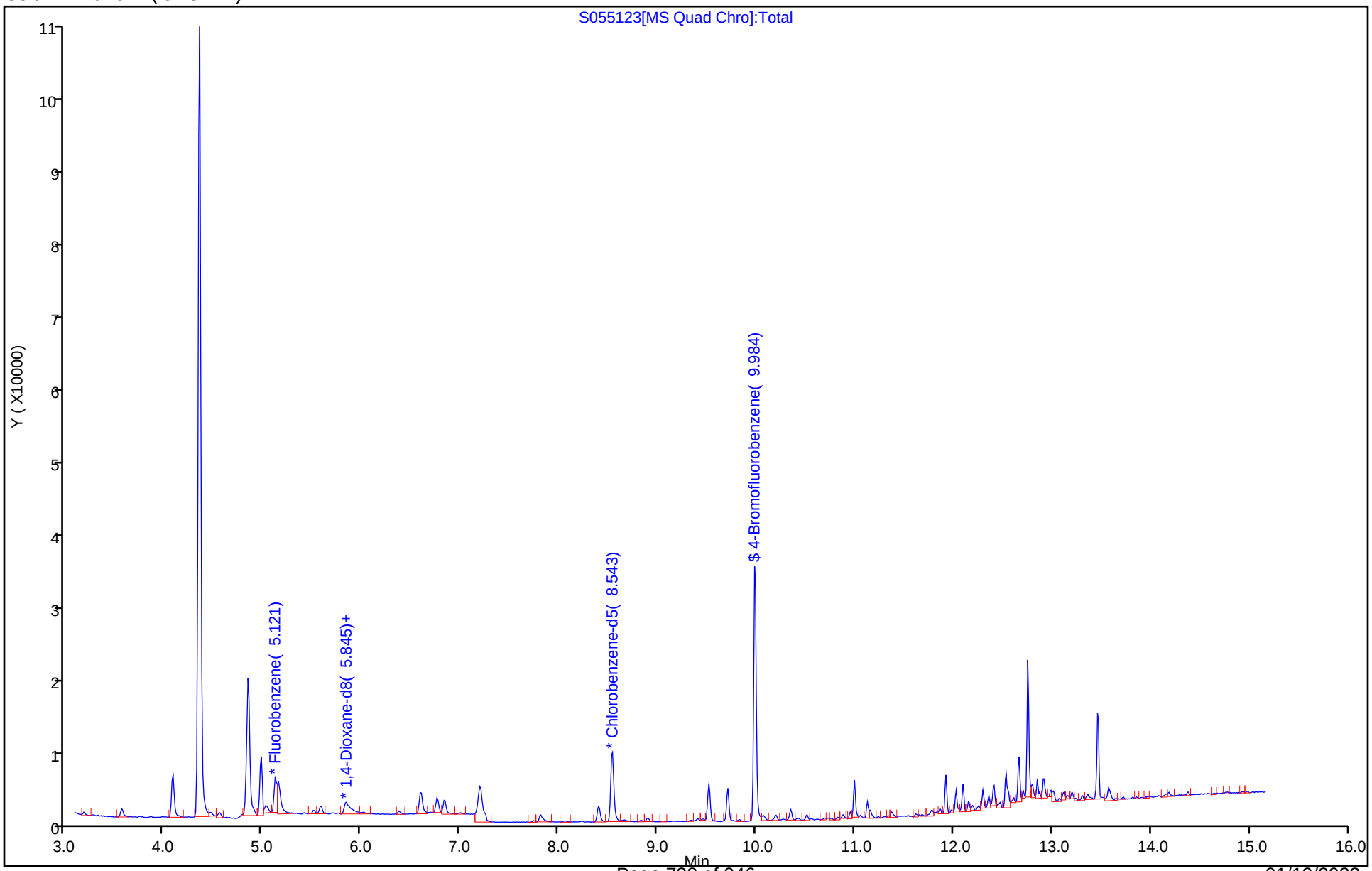
Report Date: 18-Jan-2022 18:40:36 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055123.D

Injection Date:	18-Jan-2022 16:13:26	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-5	Lab Sample ID:	460-250807-5	Worklist Smp#:	23
Client ID:	SL-7_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055123.D				
Lims ID:	460-250807-D-5				
Client ID:	SL-7_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 16:13:26	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-5				
Misc. Info.:	460-0140338-023				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 18:40:36	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				

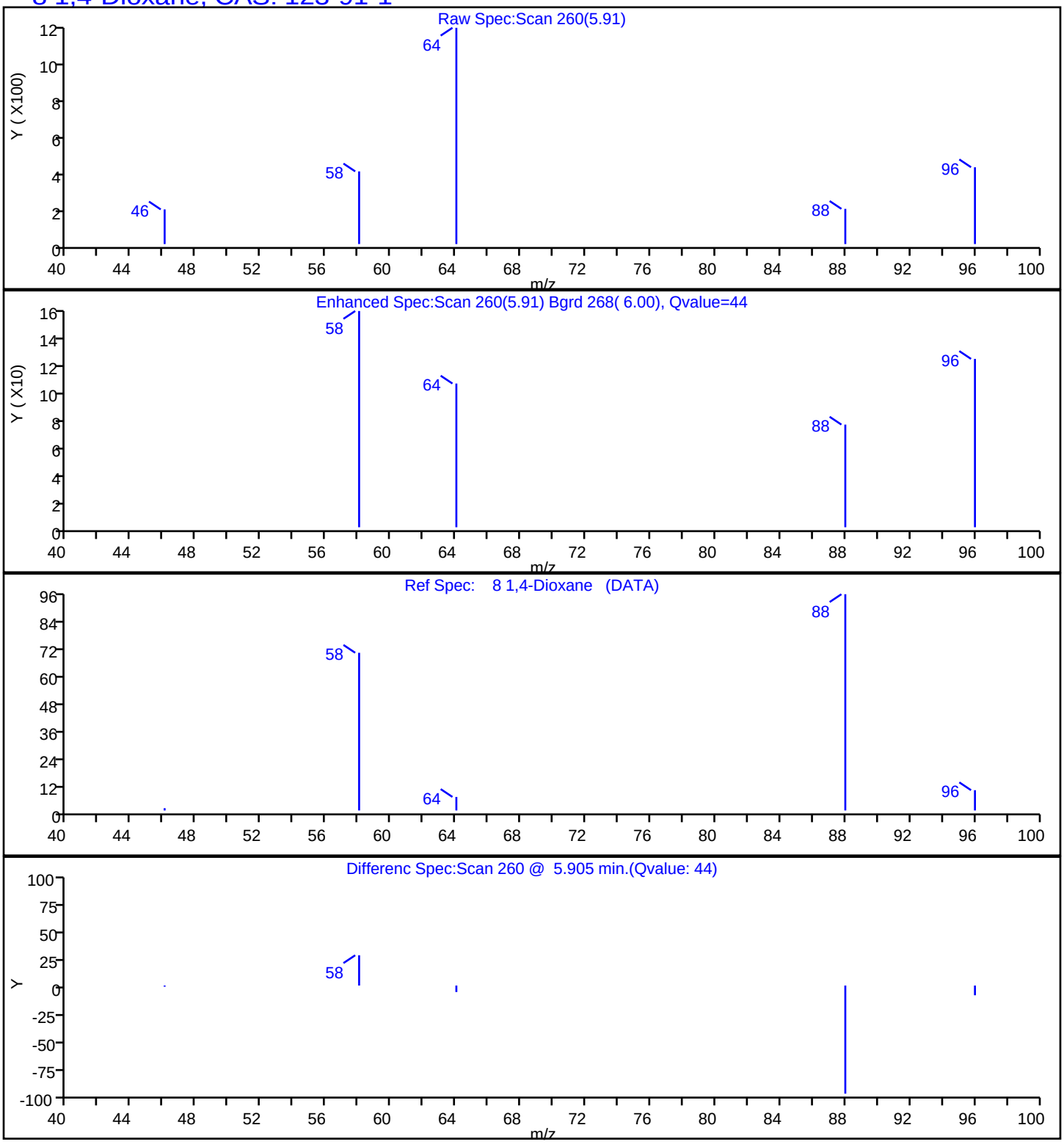
First Level Reviewer: boykink Date: 18-Jan-2022 18:40:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5082	101.65

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055123.D				
Injection Date:	18-Jan-2022 16:13:26	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-5	Lab Sample ID:	460-250807-5		
Client ID:	SL-7_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

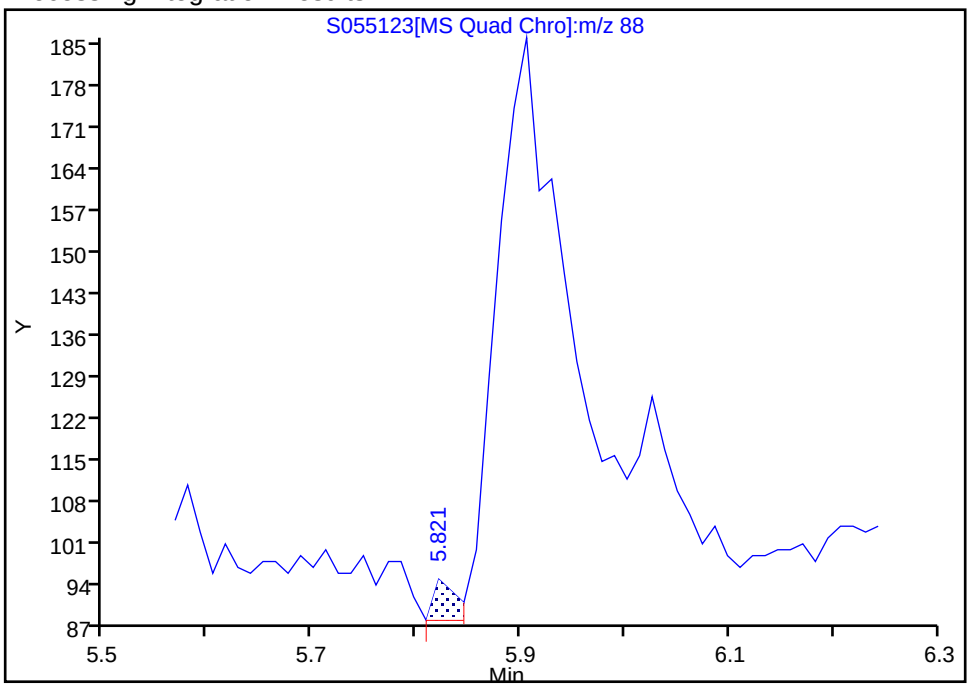
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055123.D				
Injection Date:	18-Jan-2022 16:13:26	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-5	Lab Sample ID:	460-250807-5		
Client ID:	SL-7_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

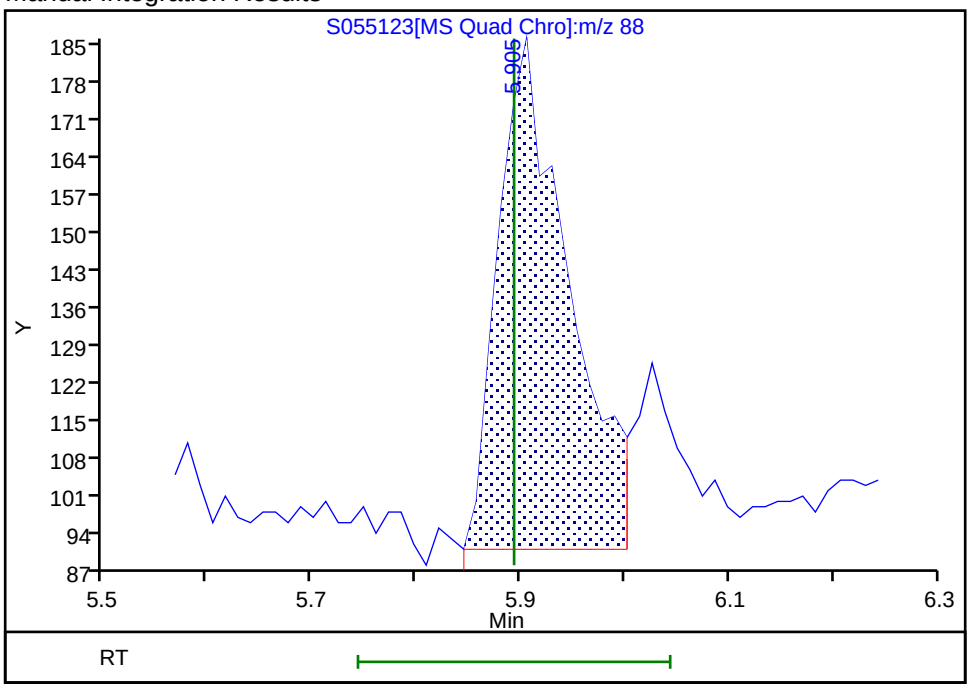
Processing Integration Results

RT: 5.82
Area: 11
Amount: 0.022254
Amount Units: ug/l



Manual Integration Results

RT: 5.91
Area: 457
Amount: 0.924551
Amount Units: ug/l



Reviewer: boykink, 18-Jan-2022 18:40:31

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-6_011222 | Lab Sample ID: 460-250807-6

Matrix: Water | Lab File ID: S055124.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 11:45

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 16:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055124.D
Lims ID: 460-250807-D-6
Client ID: SL-6_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 16:35:13 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-6
Misc. Info.: 460-0140338-024
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 18:40:49 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1601

First Level Reviewer: boykink Date: 18-Jan-2022 18:40:49

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10662	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	2338	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	9646	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.993	-0.001	89	24805	0.4942	
	8 1,4-Dioxane	88	5.930	5.893	0.037	72	2070	3.39	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

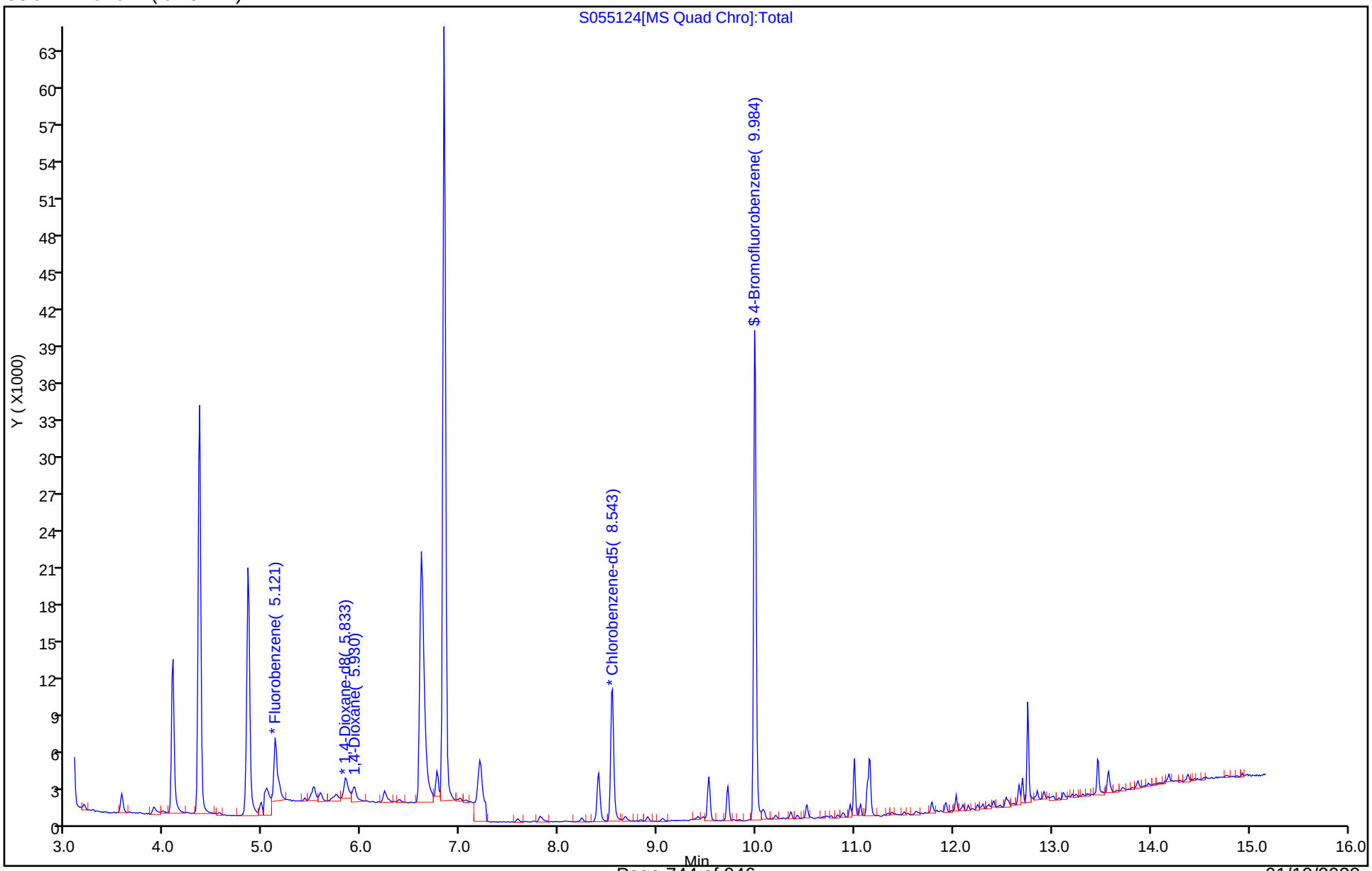
Report Date: 18-Jan-2022 18:40:50 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055124.D

Injection Date:	18-Jan-2022 16:35:13	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-6	Lab Sample ID:	460-250807-6	Worklist Smp#:	24
Client ID:	SL-6_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055124.D				
Lims ID:	460-250807-D-6				
Client ID:	SL-6_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 16:35:13	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-6				
Misc. Info.:	460-0140338-024				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 18:40:49	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1601				

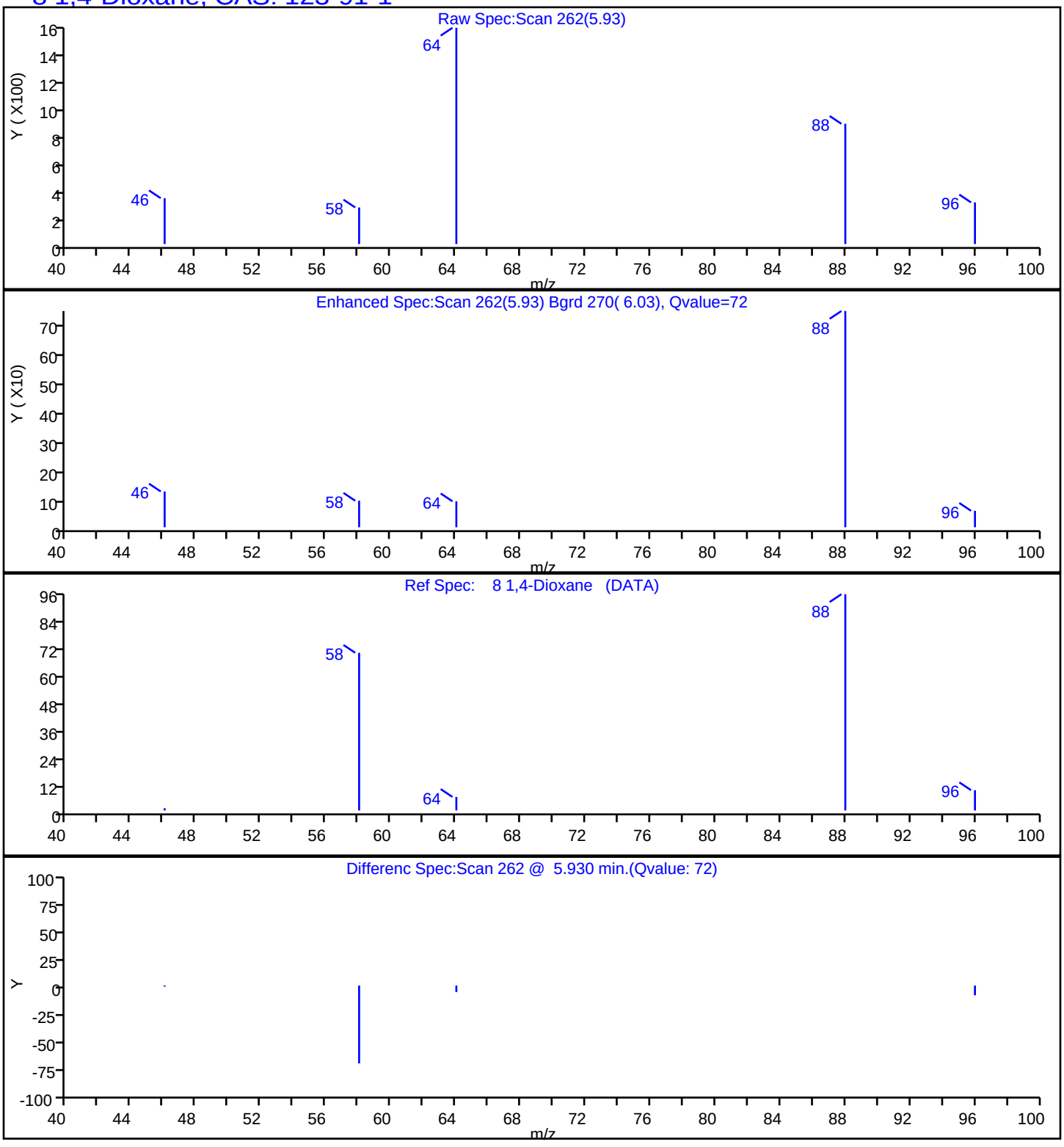
First Level Reviewer: boykink Date: 18-Jan-2022 18:40:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4942	98.83

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055124.D				
Injection Date:	18-Jan-2022 16:35:13	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-6	Lab Sample ID:	460-250807-6		
Client ID:	SL-6_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

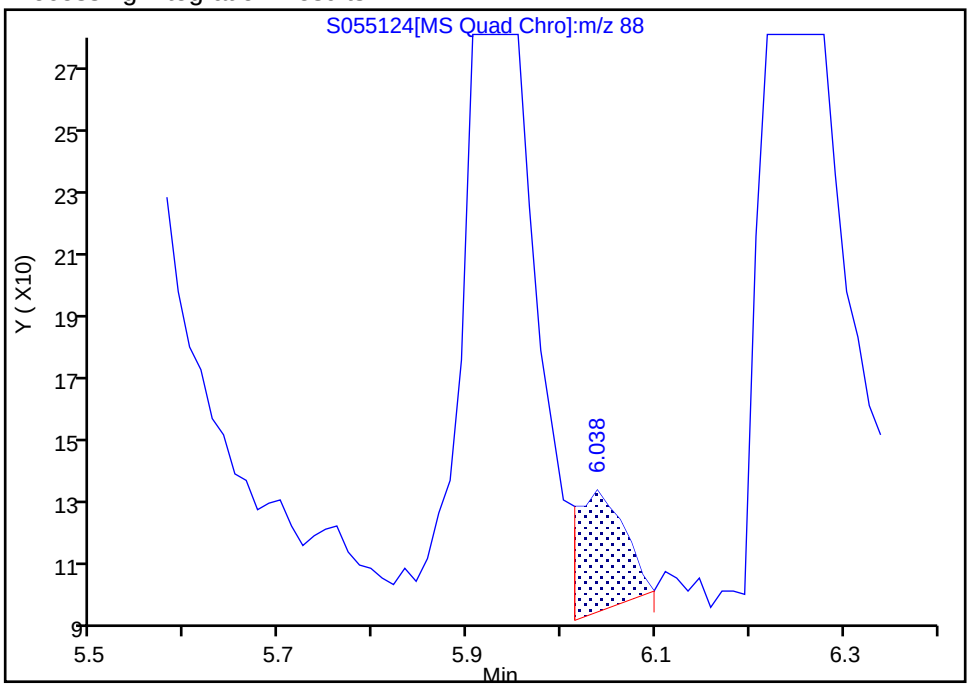
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055124.D				
Injection Date:	18-Jan-2022 16:35:13	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-6	Lab Sample ID:	460-250807-6		
Client ID:	SL-6_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

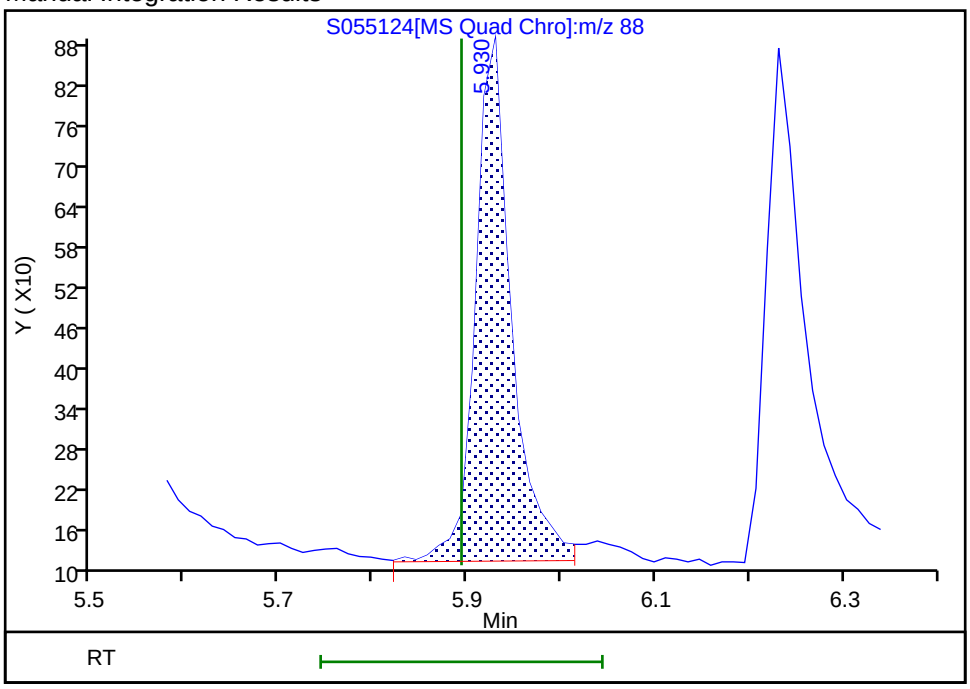
Processing Integration Results

RT: 6.04
Area: 135
Amount: 0.221367
Amount Units: ug/l



Manual Integration Results

RT: 5.93
Area: 2070
Amount: 3.394296
Amount Units: ug/l



Reviewer: boykink, 18-Jan-2022 18:40:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-5_011222 | Lab Sample ID: 460-250807-7

Matrix: Water | Lab File ID: S055155.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 12:05

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 05:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055155.D
Lims ID: 460-250807-D-7
Client ID: SL-5_011222
Sample Type: Client
Inject. Date: 19-Jan-2022 05:03:51 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-7
Misc. Info.: 460-0140361-027
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:50:45 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:25:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	10046	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	59	1696	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	96	8372	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.992	0.001	96	22109	0.5075	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	59	985	2.23	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

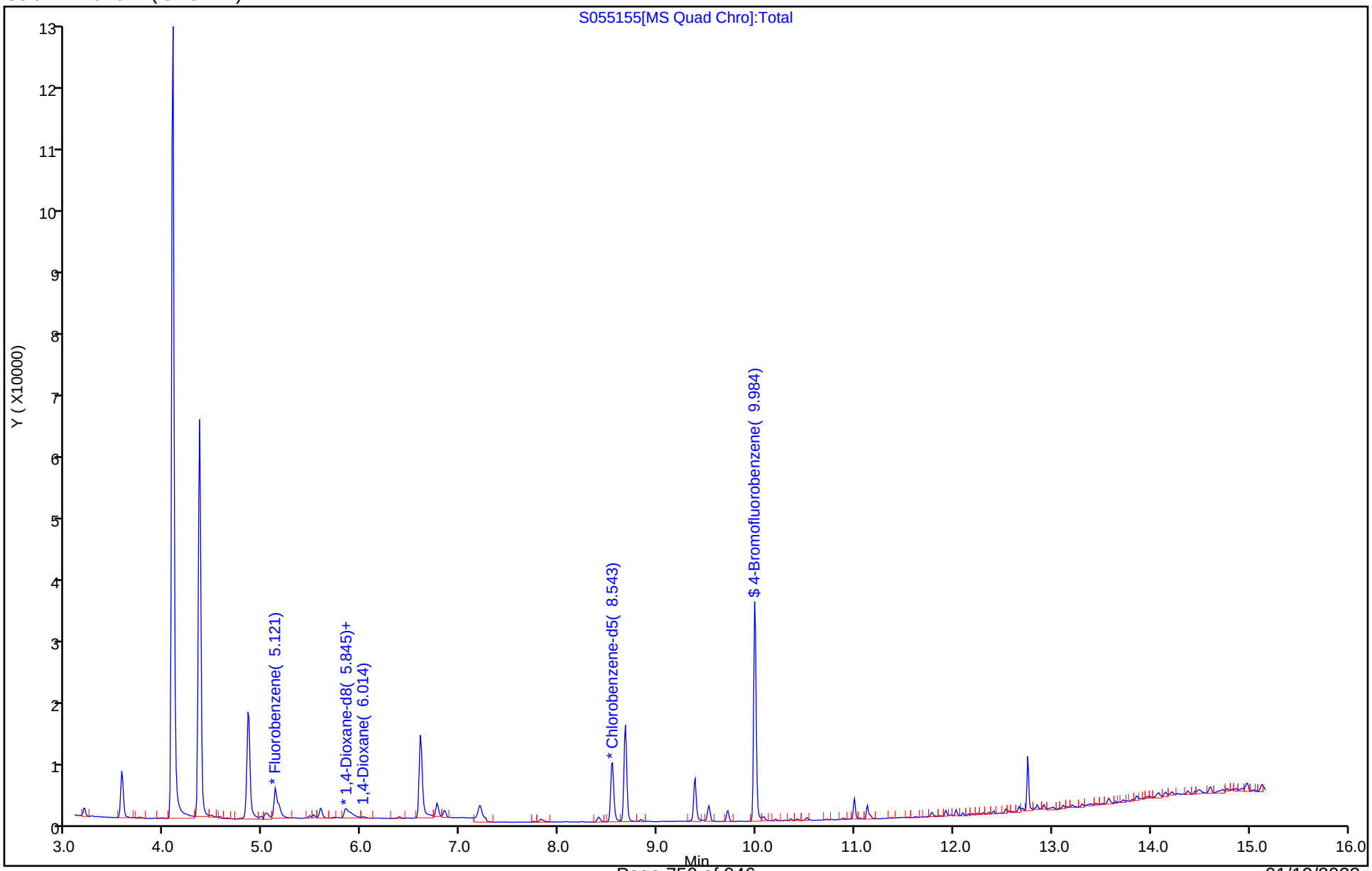
Report Date: 19-Jan-2022 10:50:45 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055155.D

Injection Date:	19-Jan-2022 05:03:51	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-7	Lab Sample ID:	460-250807-7	Worklist Smp#:	27
Client ID:	SL-5_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055155.D				
Lims ID:	460-250807-D-7				
Client ID:	SL-5_011222				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 05:03:51	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-7				
Misc. Info.:	460-0140361-027				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:50:45	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

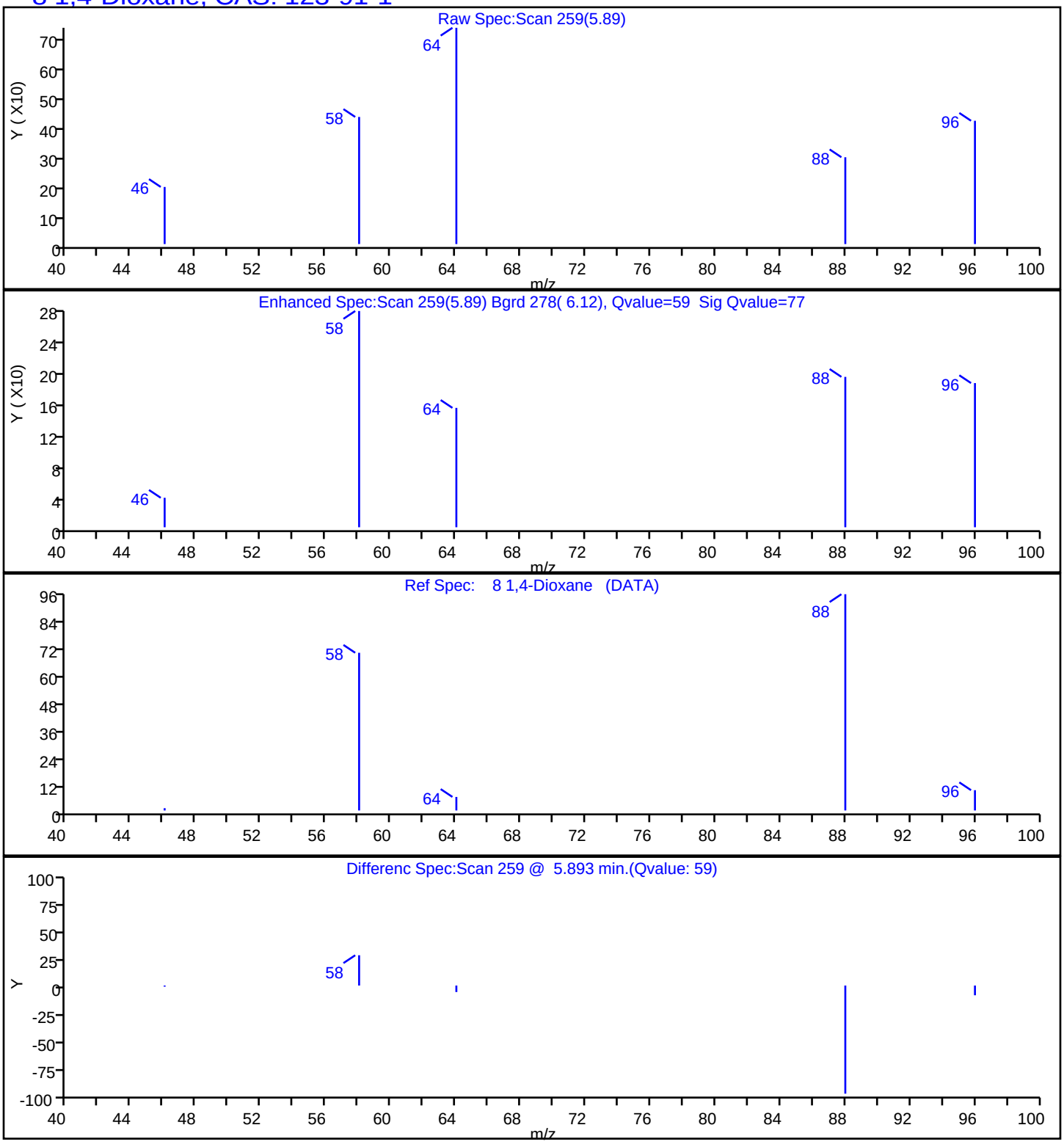
First Level Reviewer: starzecm Date: 19-Jan-2022 09:25:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5075	101.49

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055155.D				
Injection Date:	19-Jan-2022 05:03:51	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-7	Lab Sample ID:	460-250807-7		
Client ID:	SL-5_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

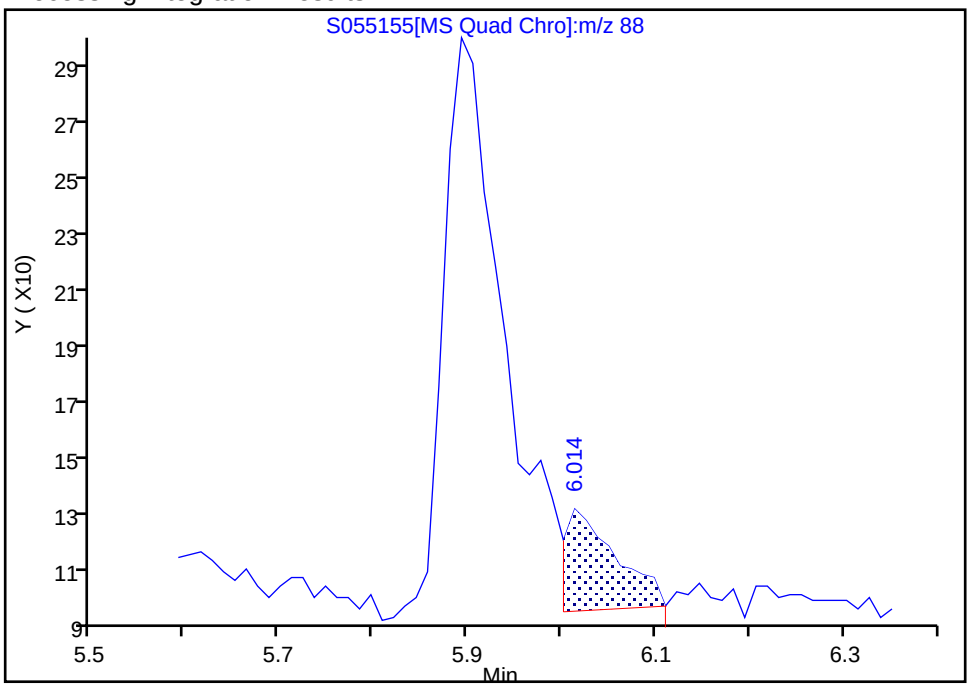
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055155.D				
Injection Date:	19-Jan-2022 05:03:51	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-7	Lab Sample ID:	460-250807-7		
Client ID:	SL-5_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

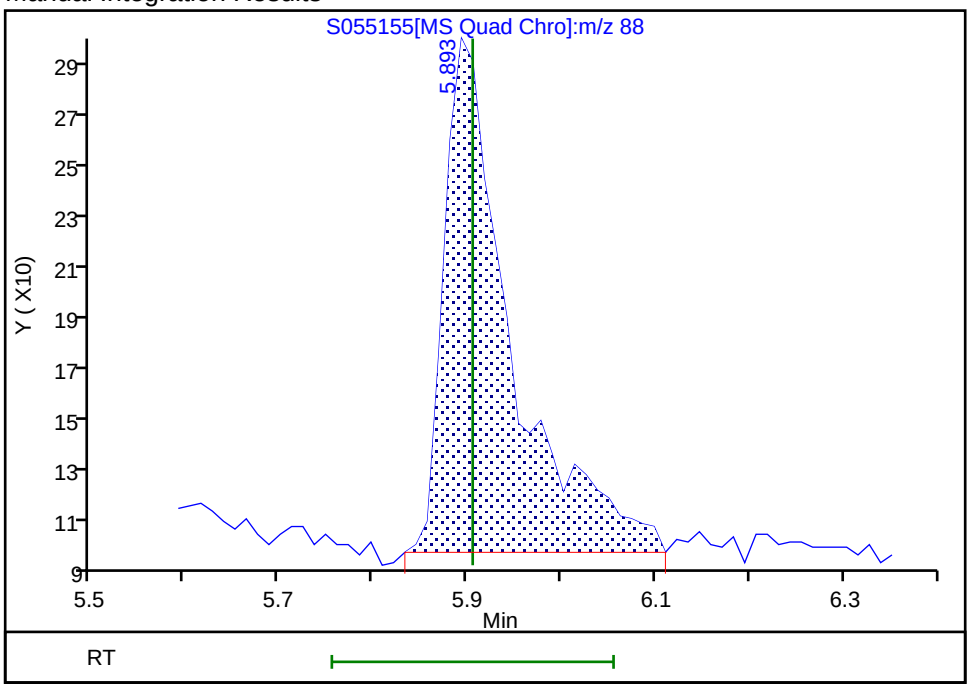
Processing Integration Results

RT: 6.01
Area: 138
Amount: 0.311944
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 985
Amount: 2.226560
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:50:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-8_011222 | Lab Sample ID: 460-250807-8

Matrix: Water | Lab File ID: S055126.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 13:15

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 17:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D
Lims ID: 460-250807-D-8
Client ID: SL-8_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 17:18:47 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-8
Misc. Info.: 460-0140338-026
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:45:57 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: xuyvo Date: 19-Jan-2022 10:45:57

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	10433	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	63	1716	10.0	M
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	95	8675	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	95	23073	0.5111	
	8 1,4-Dioxane	88	5.893	5.893	0.000	77	1381	3.09	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

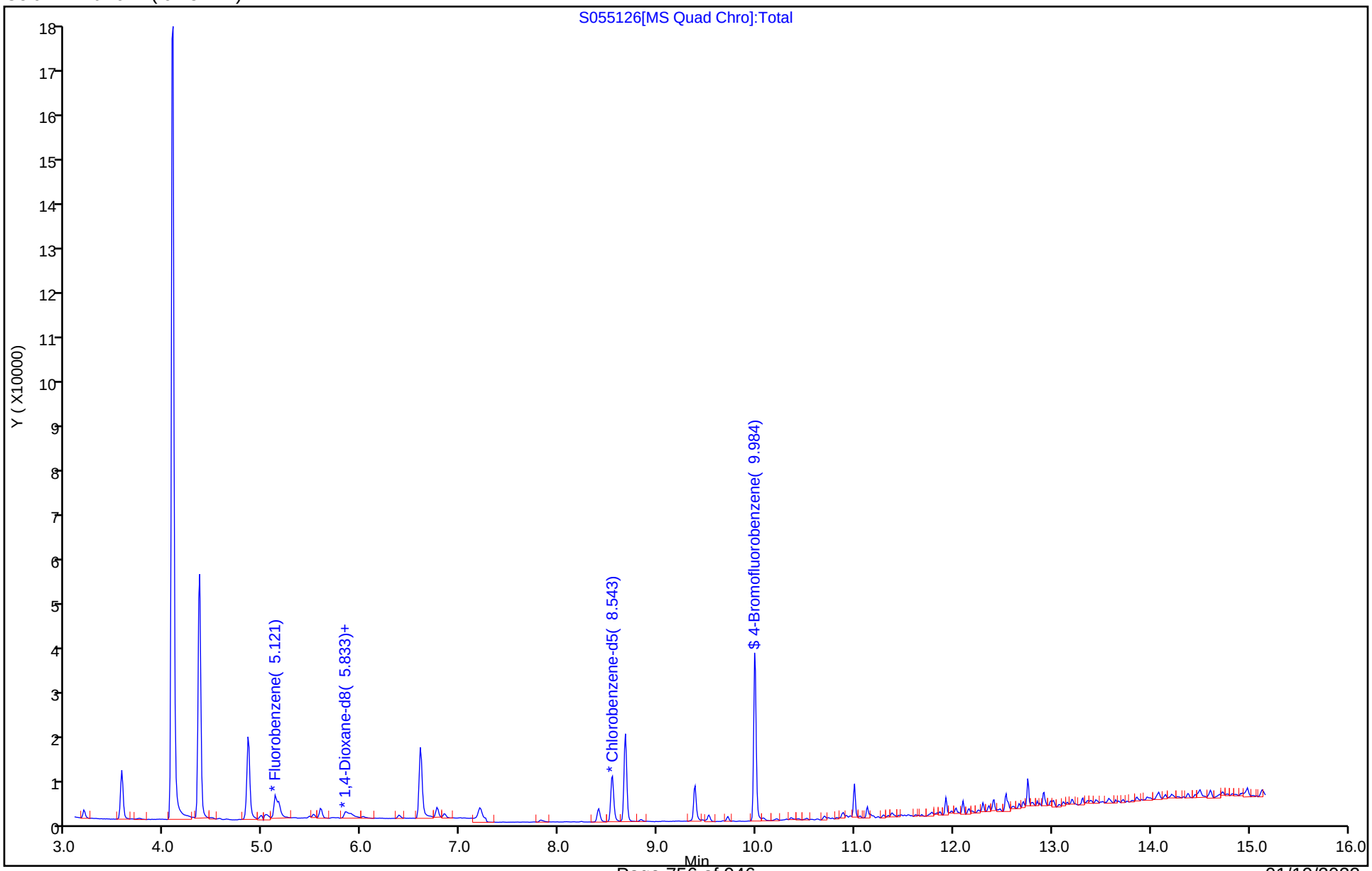
Report Date: 19-Jan-2022 10:45:57 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D

Injection Date:	18-Jan-2022 17:18:47	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-8	Lab Sample ID:	460-250807-8	Worklist Smp#:	26
Client ID:	SL-8_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D				
Lims ID:	460-250807-D-8				
Client ID:	SL-8_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 17:18:47	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-8				
Misc. Info.:	460-0140338-026				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:45:57	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

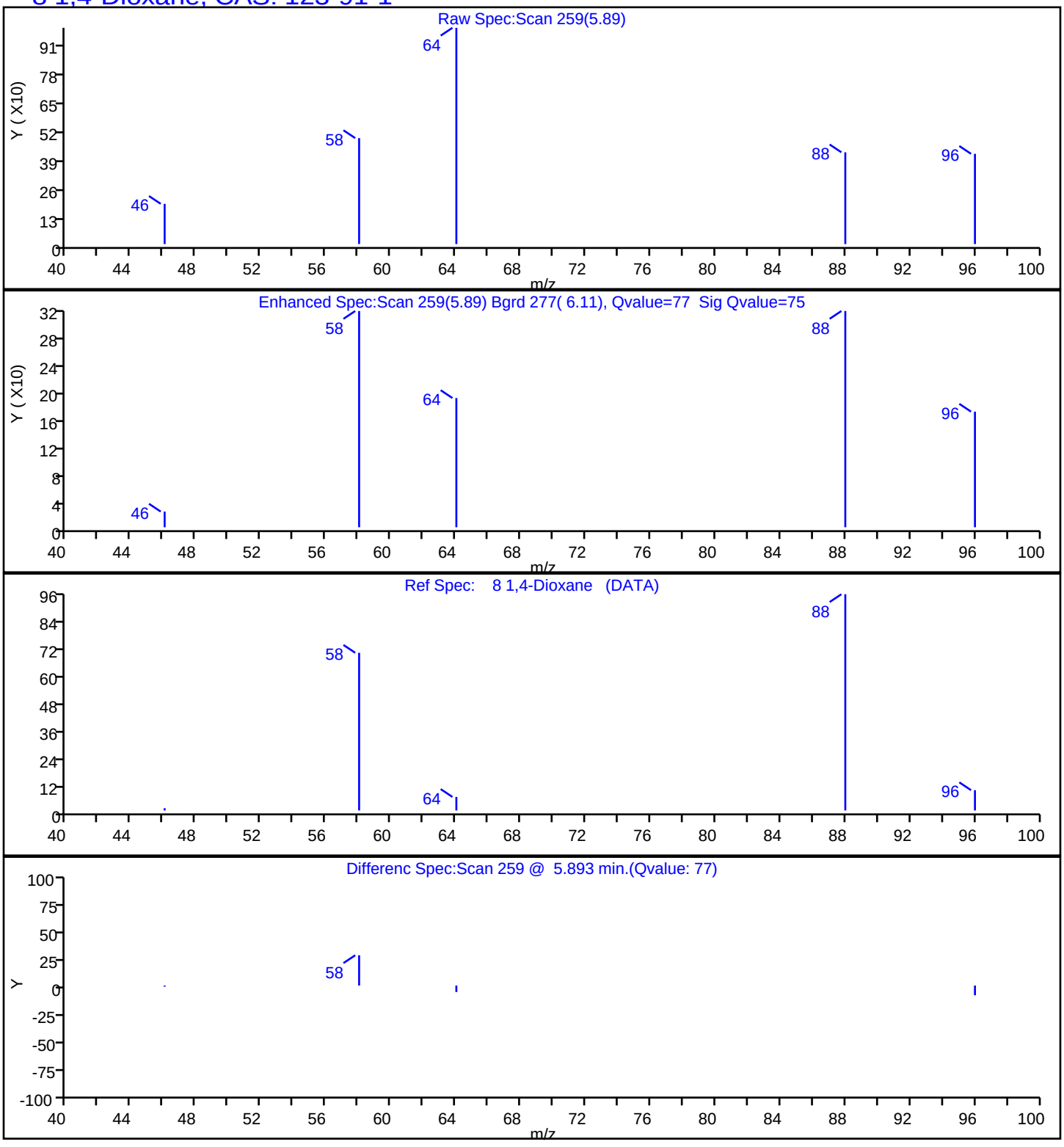
First Level Reviewer: xuyvo Date: 19-Jan-2022 10:45:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5111	102.22

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D				
Injection Date:	18-Jan-2022 17:18:47	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-8	Lab Sample ID:	460-250807-8		
Client ID:	SL-8_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

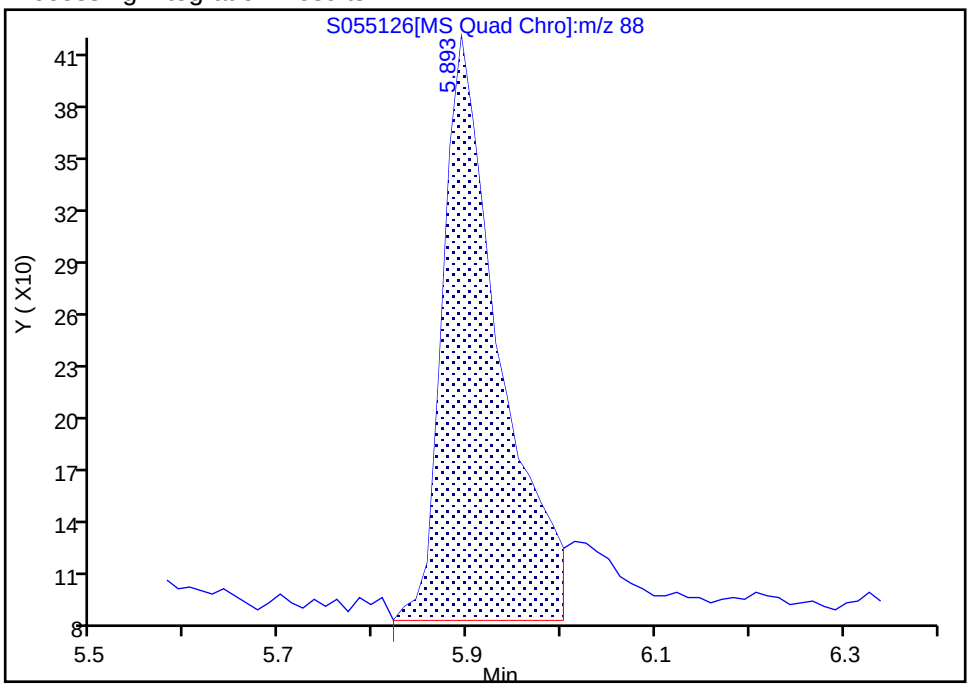
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D				
Injection Date:	18-Jan-2022 17:18:47	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-8	Lab Sample ID:	460-250807-8		
Client ID:	SL-8_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

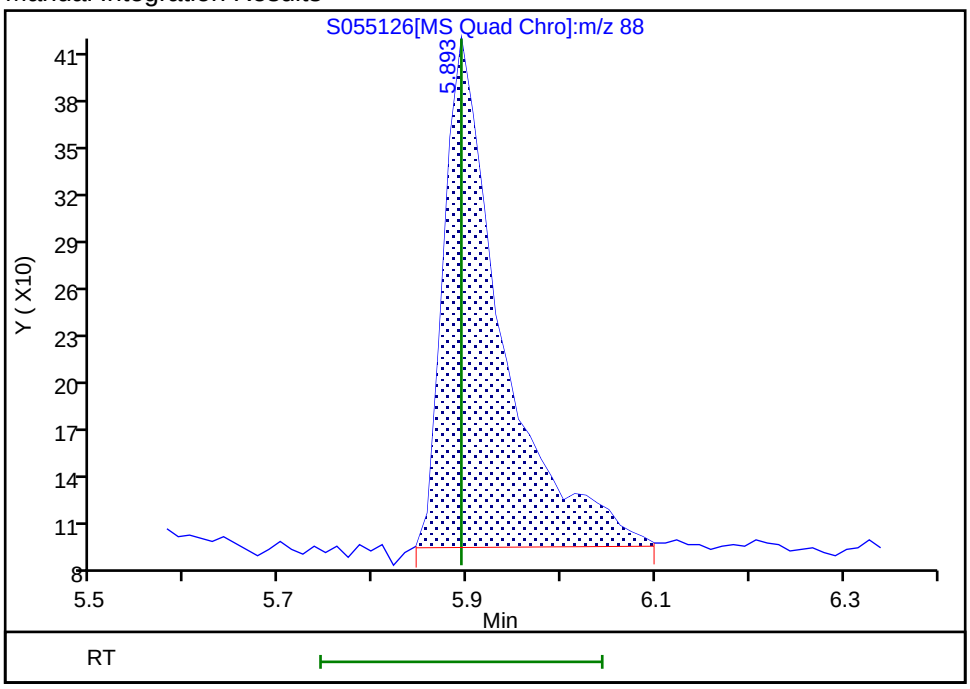
Processing Integration Results

RT: 5.89
Area: 1395
Amount: 3.116598
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1381
Amount: 3.085321
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:45:54

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Edison

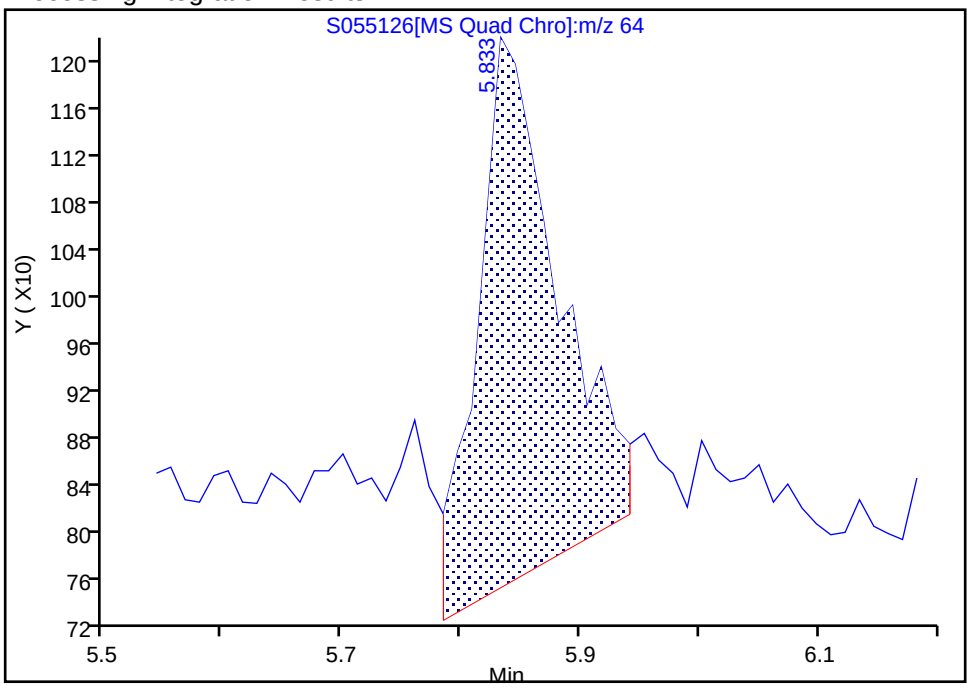
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055126.D				
Injection Date:	18-Jan-2022 17:18:47	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-8	Lab Sample ID:	460-250807-8		
Client ID:	SL-8_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

* 2 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

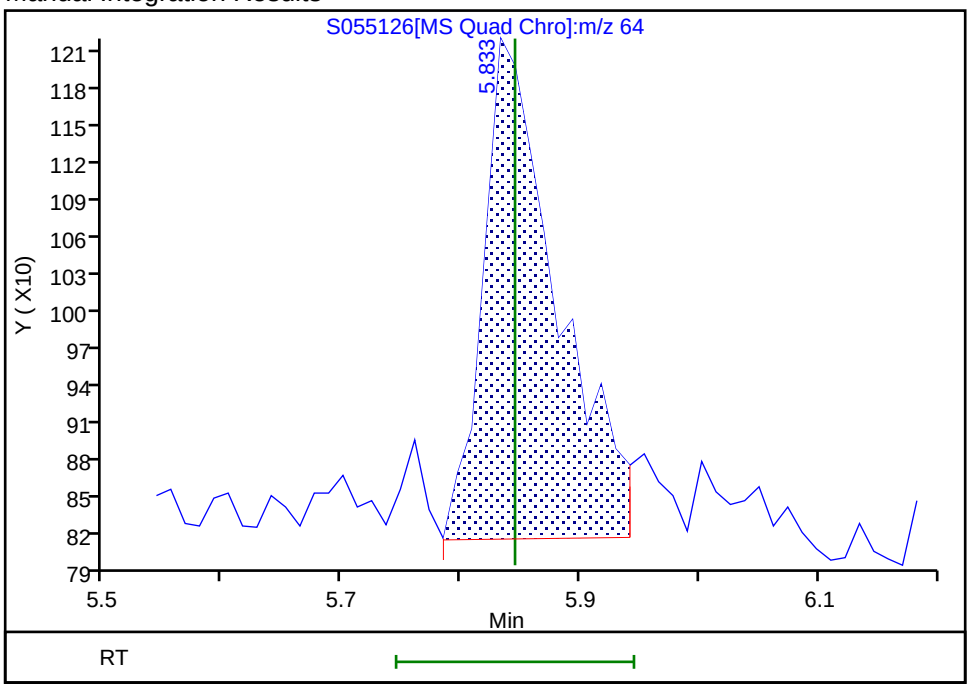
Processing Integration Results

RT: 5.83
Area: 2162
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 5.83
Area: 1716
Amount: 10.000000
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:44:26
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-9_011222 | Lab Sample ID: 460-250807-9

Matrix: Water | Lab File ID: S055127.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 13:40

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 17:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.7	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055127.D
Lims ID: 460-250807-D-9
Client ID: SL-9_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 17:40:35 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-9
Misc. Info.: 460-0140338-027
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:44:09 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 18-Jan-2022 18:41:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	66	10012	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	55	1338	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	96	8715	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	96	22128	0.4879	
8 1,4-Dioxane	88	5.893	5.893	0.000	54	599	1.72	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

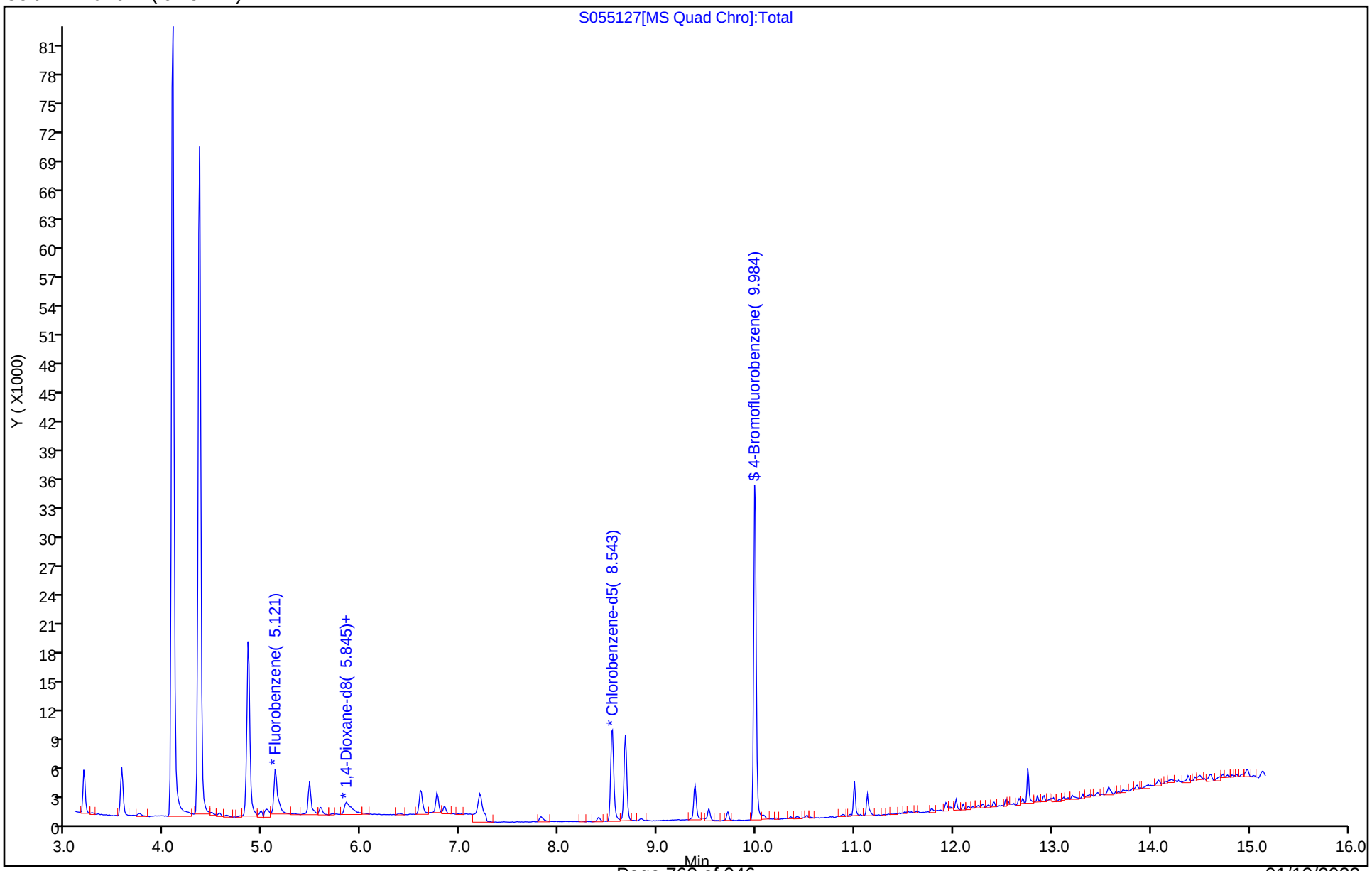
Report Date: 19-Jan-2022 10:44:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055127.D

Injection Date:	18-Jan-2022 17:40:35	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-9	Lab Sample ID:	460-250807-9	Worklist Smp#:	27
Client ID:	SL-9_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055127.D				
Lims ID:	460-250807-D-9				
Client ID:	SL-9_011222				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 17:40:35	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-9				
Misc. Info.:	460-0140338-027				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:44:09	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

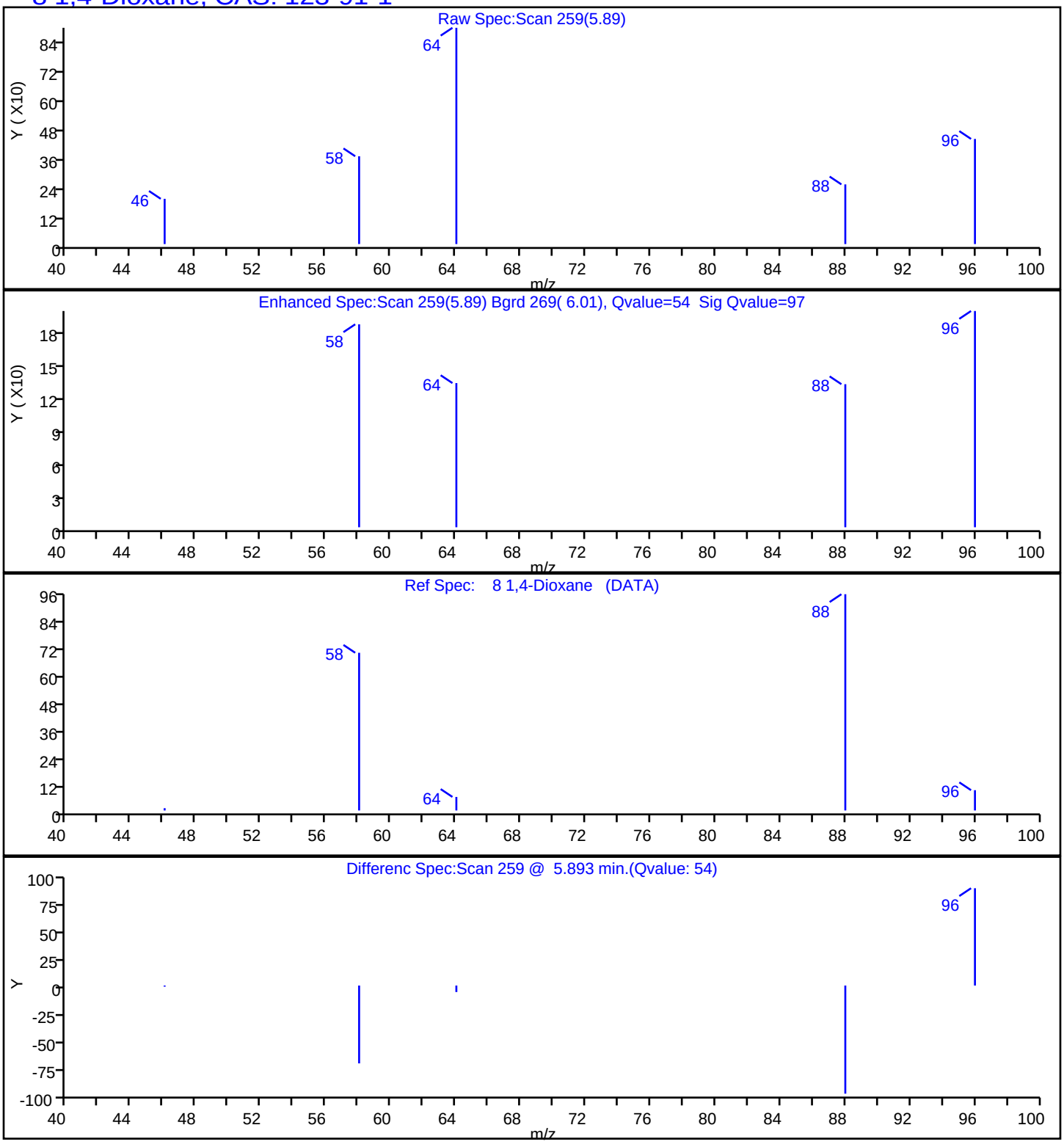
First Level Reviewer: boykink Date: 18-Jan-2022 18:41:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4879	97.58

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055127.D				
Injection Date:	18-Jan-2022 17:40:35	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-9	Lab Sample ID:	460-250807-9		
Client ID:	SL-9_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

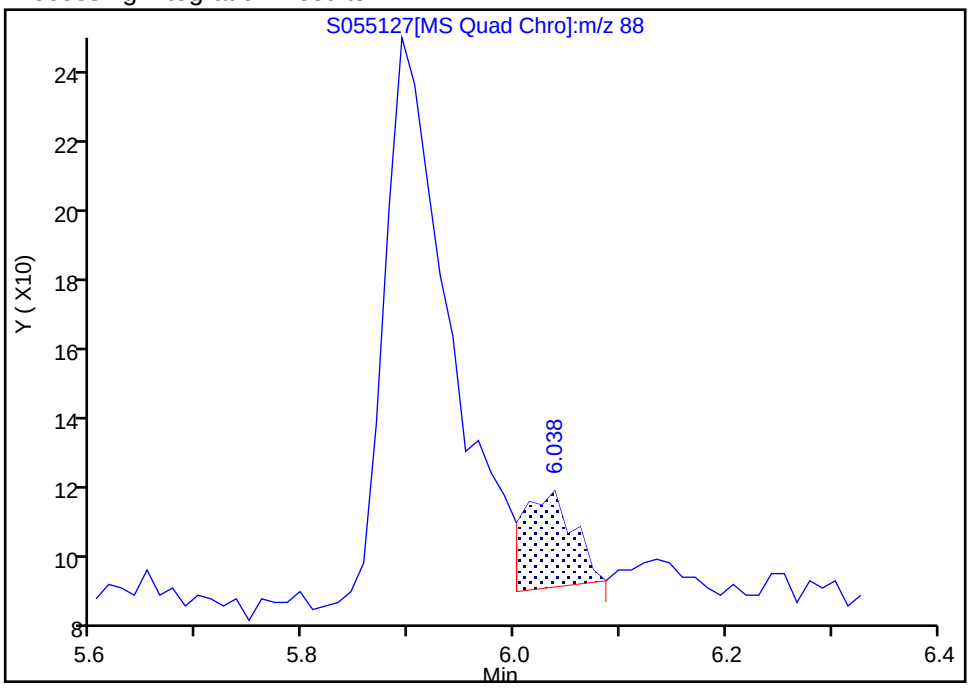
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055127.D				
Injection Date:	18-Jan-2022 17:40:35	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-9	Lab Sample ID:	460-250807-9		
Client ID:	SL-9_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

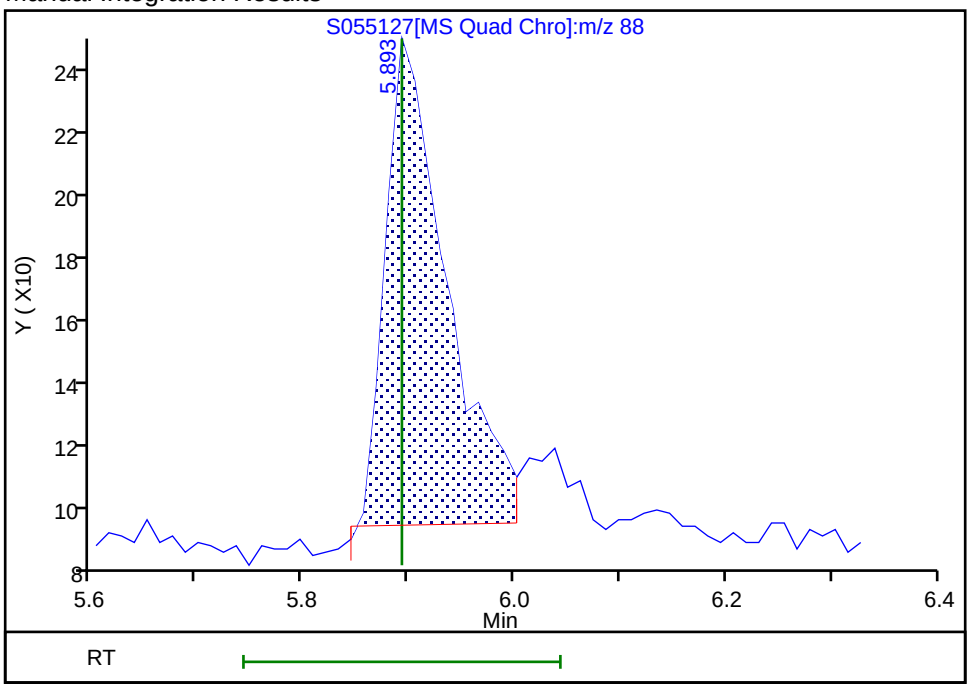
Processing Integration Results

RT: 6.04
Area: 92
Amount: 0.263606
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 599
Amount: 1.716306
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:43:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-10_011222 | Lab Sample ID: 460-250807-10

Matrix: Water | Lab File ID: S055147.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 14:10

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 02:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.9		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055147.D
Lims ID: 460-250807-D-10
Client ID: SL-10_011222
Sample Type: Client
Inject. Date: 19-Jan-2022 02:09:54 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-10
Misc. Info.: 460-0140361-019
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:22:22 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:22:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10161	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	2095	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	91	8564	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	22586	0.5068	
8 1,4-Dioxane	88	5.893	5.893	0.000	71	1589	2.91	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

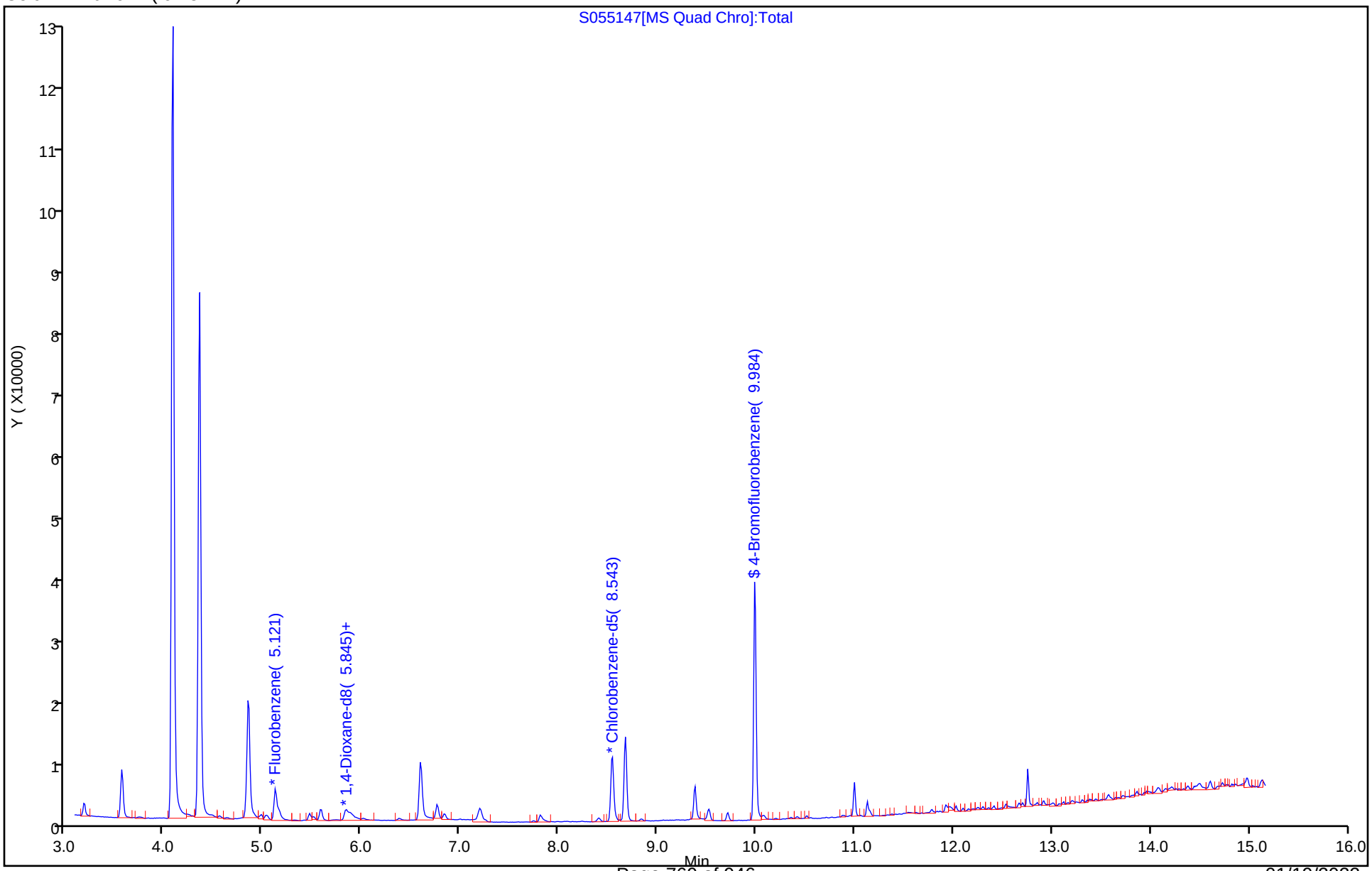
Report Date: 19-Jan-2022 09:22:27 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055147.D

Injection Date:	19-Jan-2022 02:09:54	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-10	Lab Sample ID:	460-250807-10	Worklist Smp#:	19
Client ID:	SL-10_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055147.D				
Lims ID:	460-250807-D-10				
Client ID:	SL-10_011222				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 02:09:54	ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-10				
Misc. Info.:	460-0140361-019				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:22:22	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

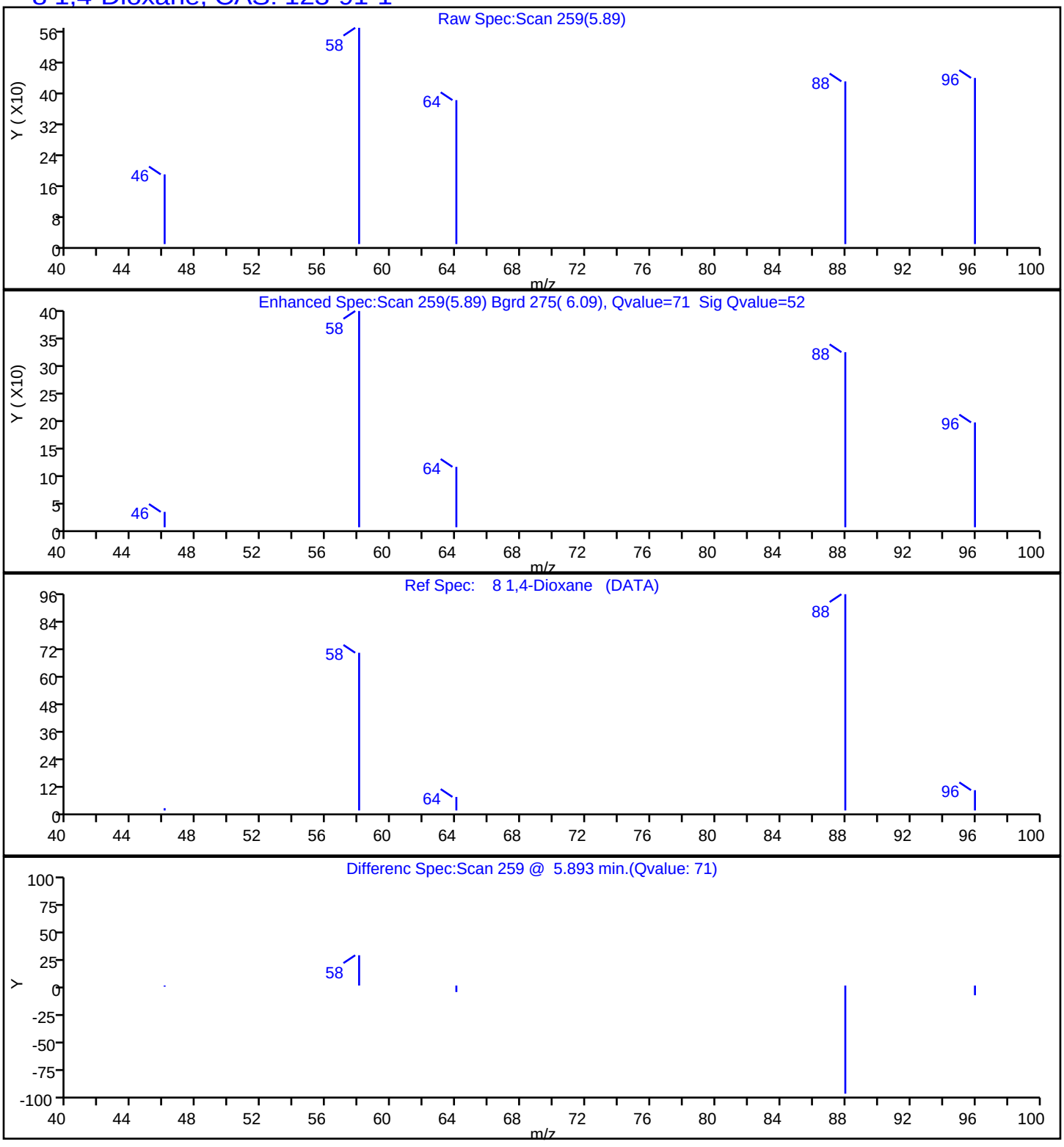
First Level Reviewer: starzecm Date: 19-Jan-2022 09:22:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5068	101.36

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055147.D				
Injection Date:	19-Jan-2022 02:09:54	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-10	Lab Sample ID:	460-250807-10		
Client ID:	SL-10_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Eurofins Edison

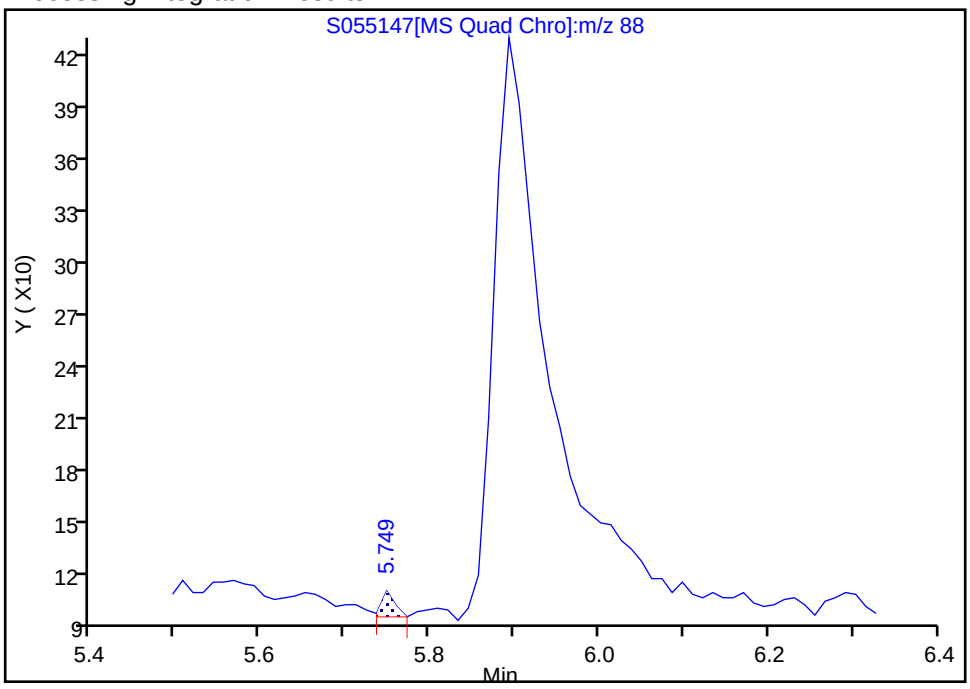
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055147.D				
Injection Date:	19-Jan-2022 02:09:54	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-10	Lab Sample ID:	460-250807-10		
Client ID:	SL-10_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

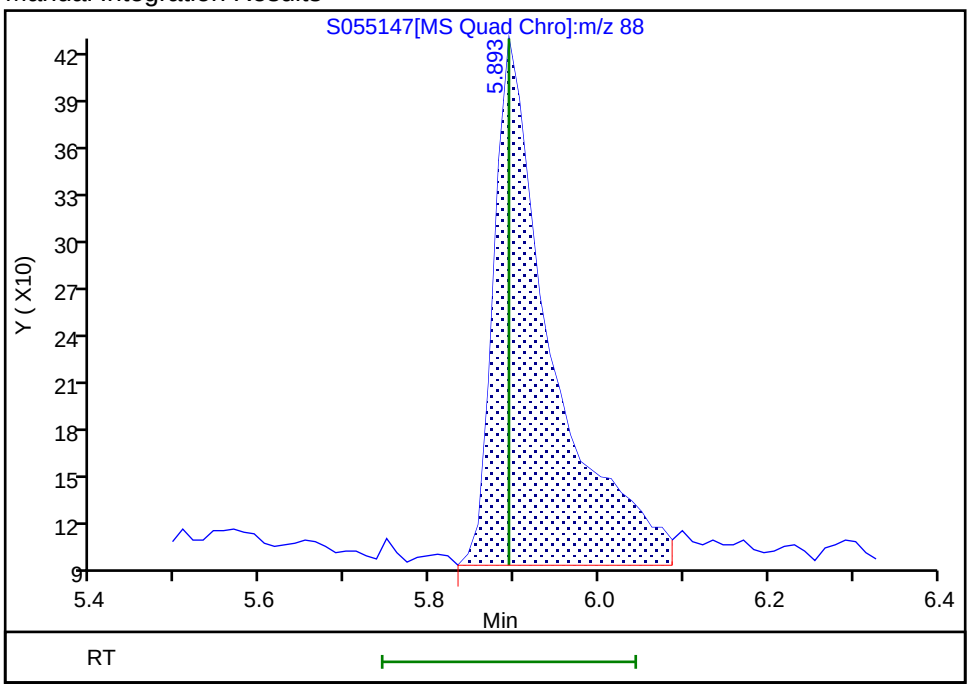
Processing Integration Results

RT: 5.75
Area: 17
Amount: 0.031109
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1589
Amount: 2.907795
Amount Units: ug/l



Reviewer: delpolitov, 19-Jan-2022 07:41:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-11

Matrix: Water | Lab File ID: S055137.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 22:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055137.D				
Lims ID:	460-250807-C-11				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 22:32:33	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-C-11				
Misc. Info.:	460-0140361-009				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:19:21	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				
First Level Reviewer: boykink		Date:	18-Jan-2022 23:53:27		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10656	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1712	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9192	0.5000	
$ 4 4-Bromofluorobenzene	174	9.993	9.992	0.001	88	24226	0.5065	

QC Flag Legend

Processing Flags

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

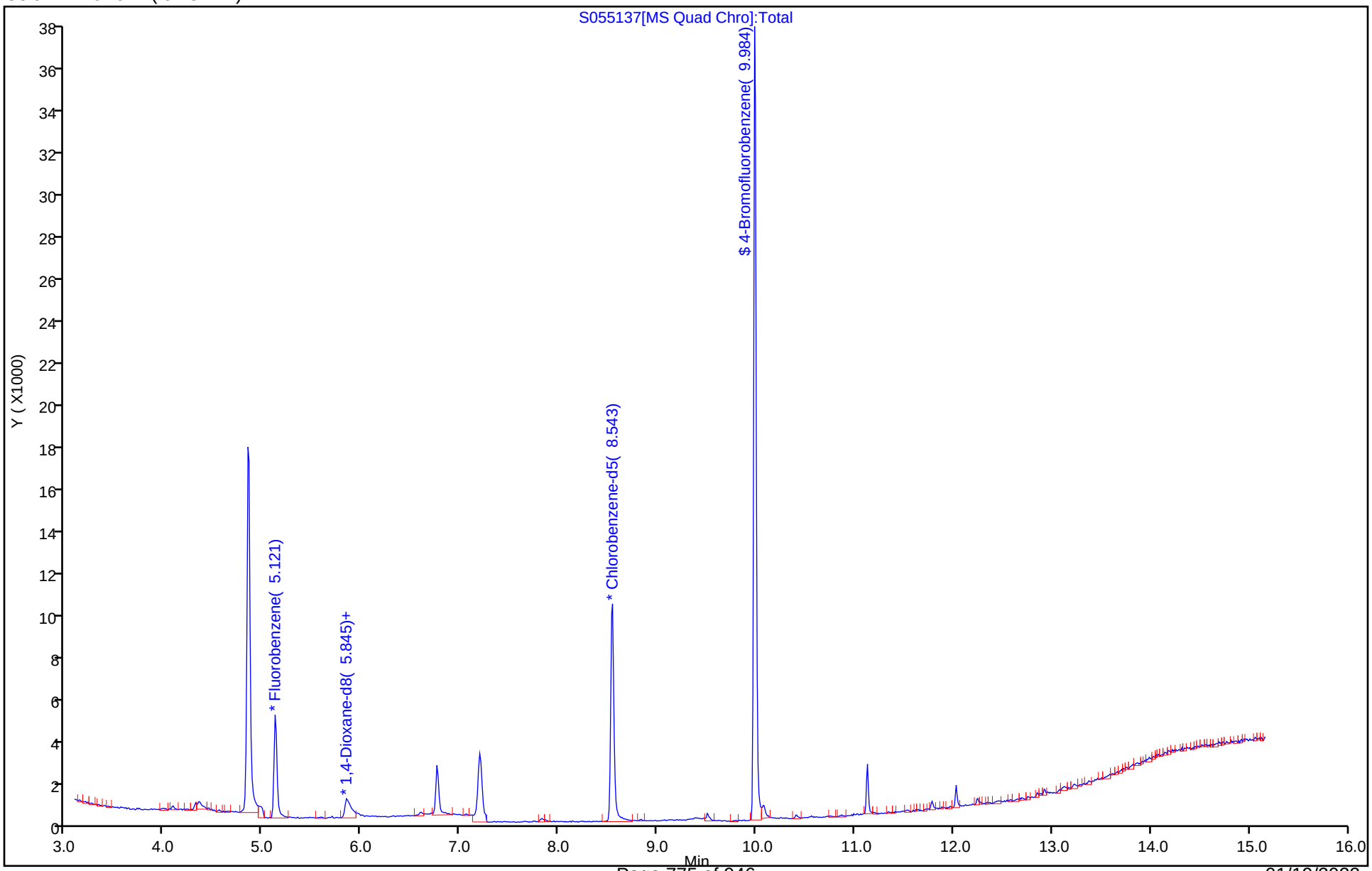
Report Date: 19-Jan-2022 09:19:26 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055137.D

Injection Date:	18-Jan-2022 22:32:33	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-C-11	Lab Sample ID:	460-250807-11	Worklist Smp#:	9
Client ID:	TRIP BLANK				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055137.D				
Lims ID:	460-250807-C-11				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 22:32:33	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-C-11				
Misc. Info.:	460-0140361-009				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:19:21	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

First Level Reviewer: boykink Date: 18-Jan-2022 23:53:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5065	101.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-11_011222 | Lab Sample ID: 460-250807-12

Matrix: Water | Lab File ID: S055139.D

Analysis Method: 8260D SIM | Date Collected: 01/12/2022 14:35

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 23:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.8		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055139.D
Lims ID: 460-250807-D-12
Client ID: SL-11_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 23:16:05 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-12
Misc. Info.: 460-0140361-011
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:47:15 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 18-Jan-2022 23:54:00

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	10007	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	78	1723	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	95	8596	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	96	22427	0.5014	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	66	1241	2.76	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

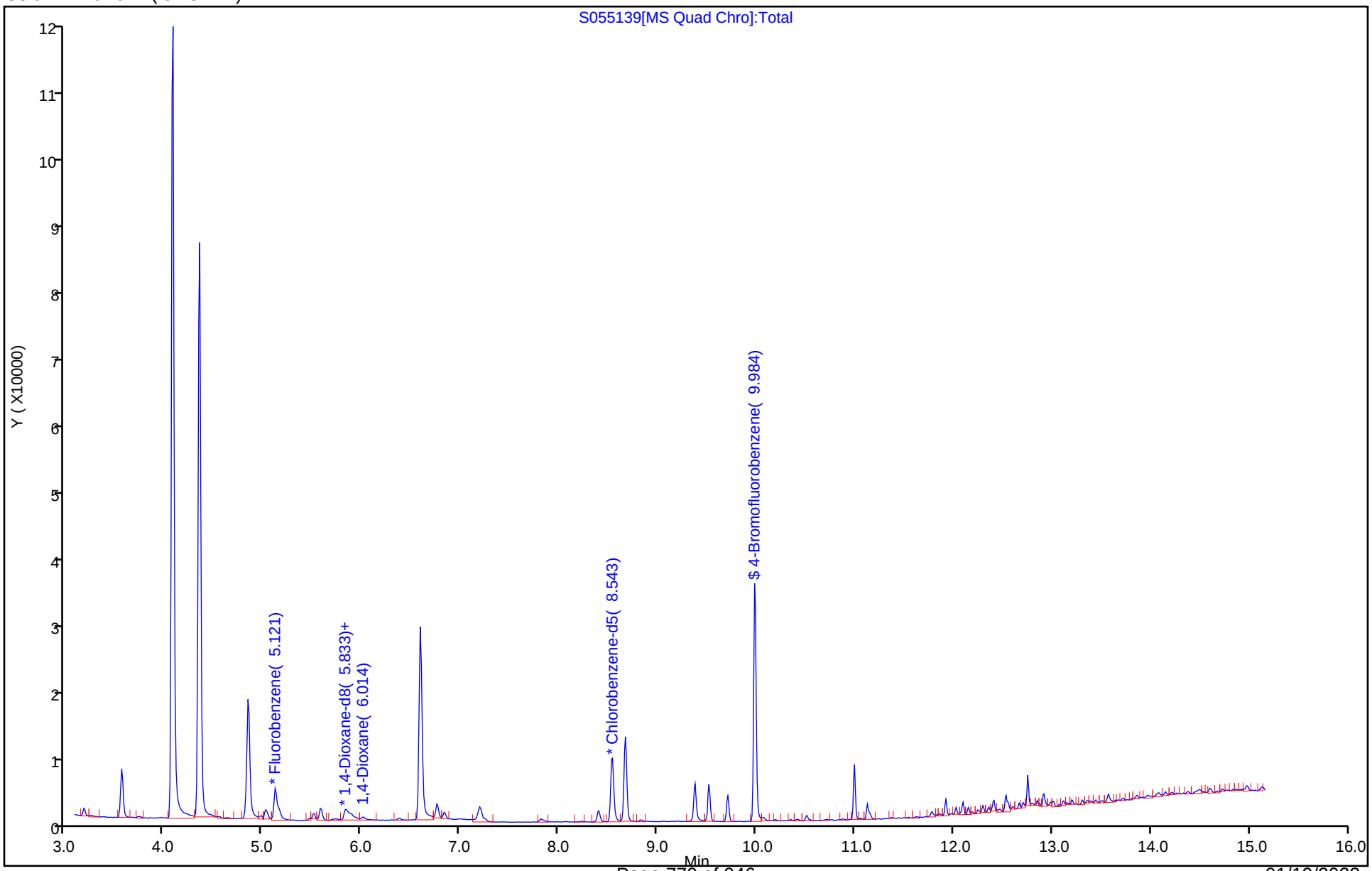
Report Date: 19-Jan-2022 10:47:15 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055139.D

Injection Date:	18-Jan-2022 23:16:05	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-12	Lab Sample ID:	460-250807-12	Worklist Smp#:	11
Client ID:	SL-11_011222				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055139.D
Lims ID: 460-250807-D-12
Client ID: SL-11_011222
Sample Type: Client
Inject. Date: 18-Jan-2022 23:16:05 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-12
Misc. Info.: 460-0140361-011
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:47:15 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 18-Jan-2022 23:54:00

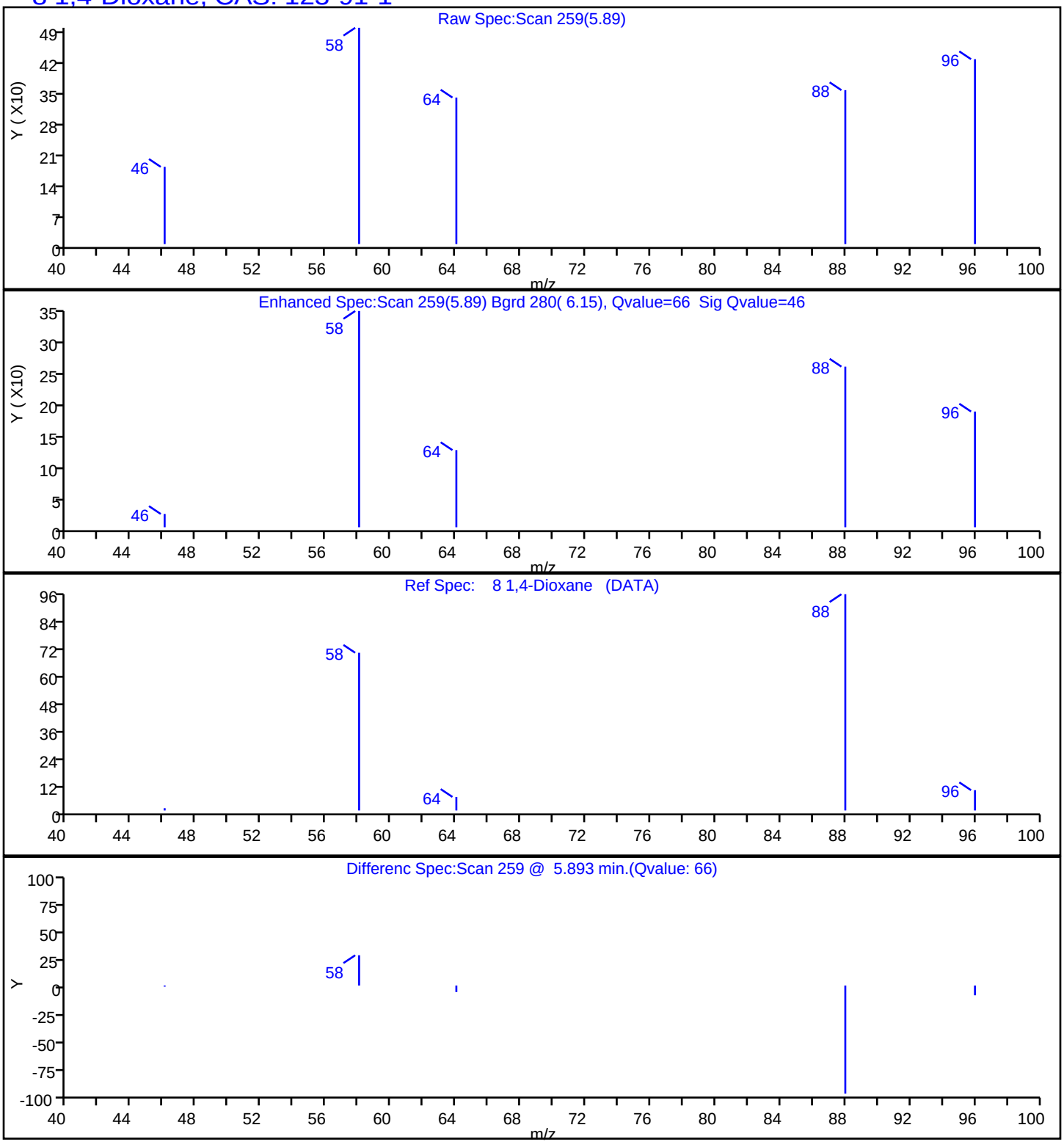
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5014	100.27

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055139.D

Injection Date:	18-Jan-2022 23:16:05	Instrument ID:	CVOAMS14
Lims ID:	460-250807-D-12	Lab Sample ID:	460-250807-12
Client ID:	SL-11_011222		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

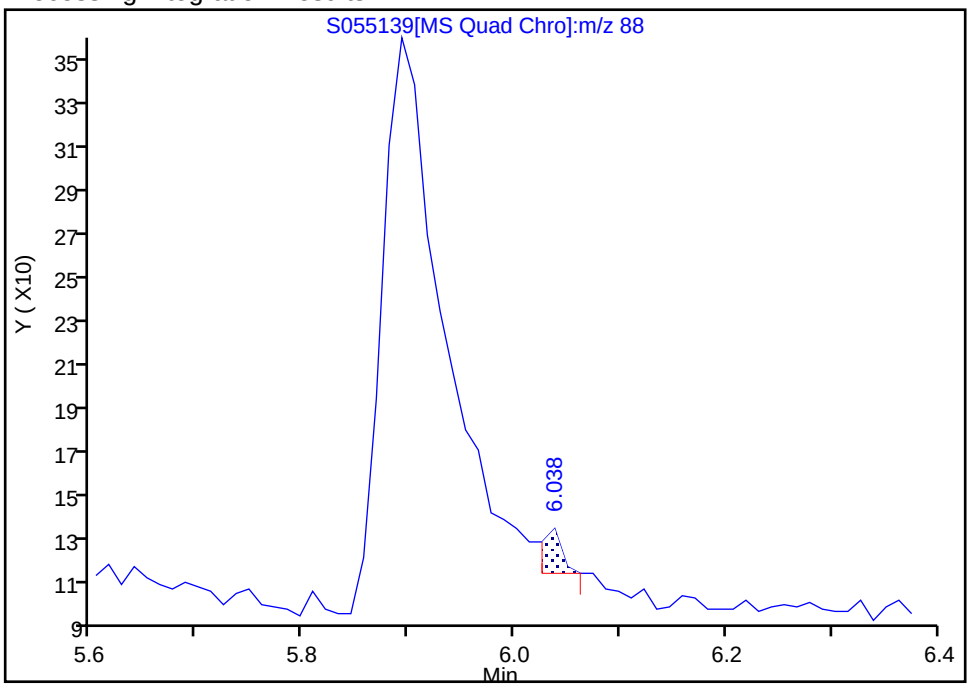
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055139.D				
Injection Date:	18-Jan-2022 23:16:05	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-12	Lab Sample ID:	460-250807-12		
Client ID:	SL-11_011222				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

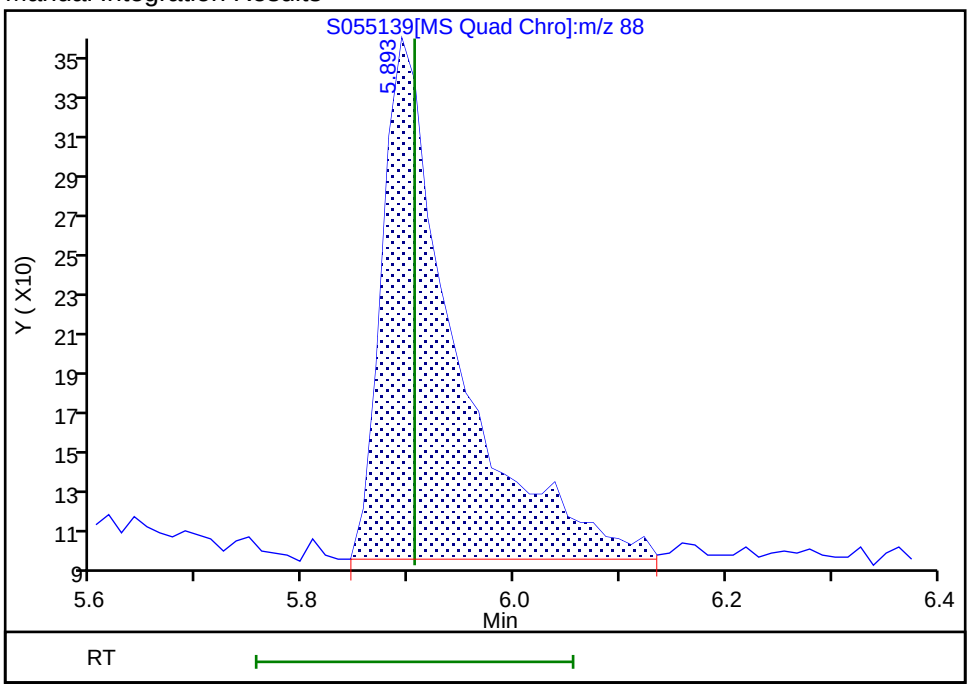
Processing Integration Results

RT: 6.04
Area: 27
Amount: 0.060076
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1241
Amount: 2.761280
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:47:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-23_011322 | Lab Sample ID: 460-250807-13

Matrix: Water | Lab File ID: S055140.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 09:25

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 23:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.7		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055140.D
Lims ID: 460-250807-D-13
Client ID: SL-23_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 23:37:50 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-13
Misc. Info.: 460-0140361-012
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:47:31 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: boykink Date: 19-Jan-2022 00:33:35

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10242	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	61	1825	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	8625	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	22544	0.5023	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	74	1273	2.67	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

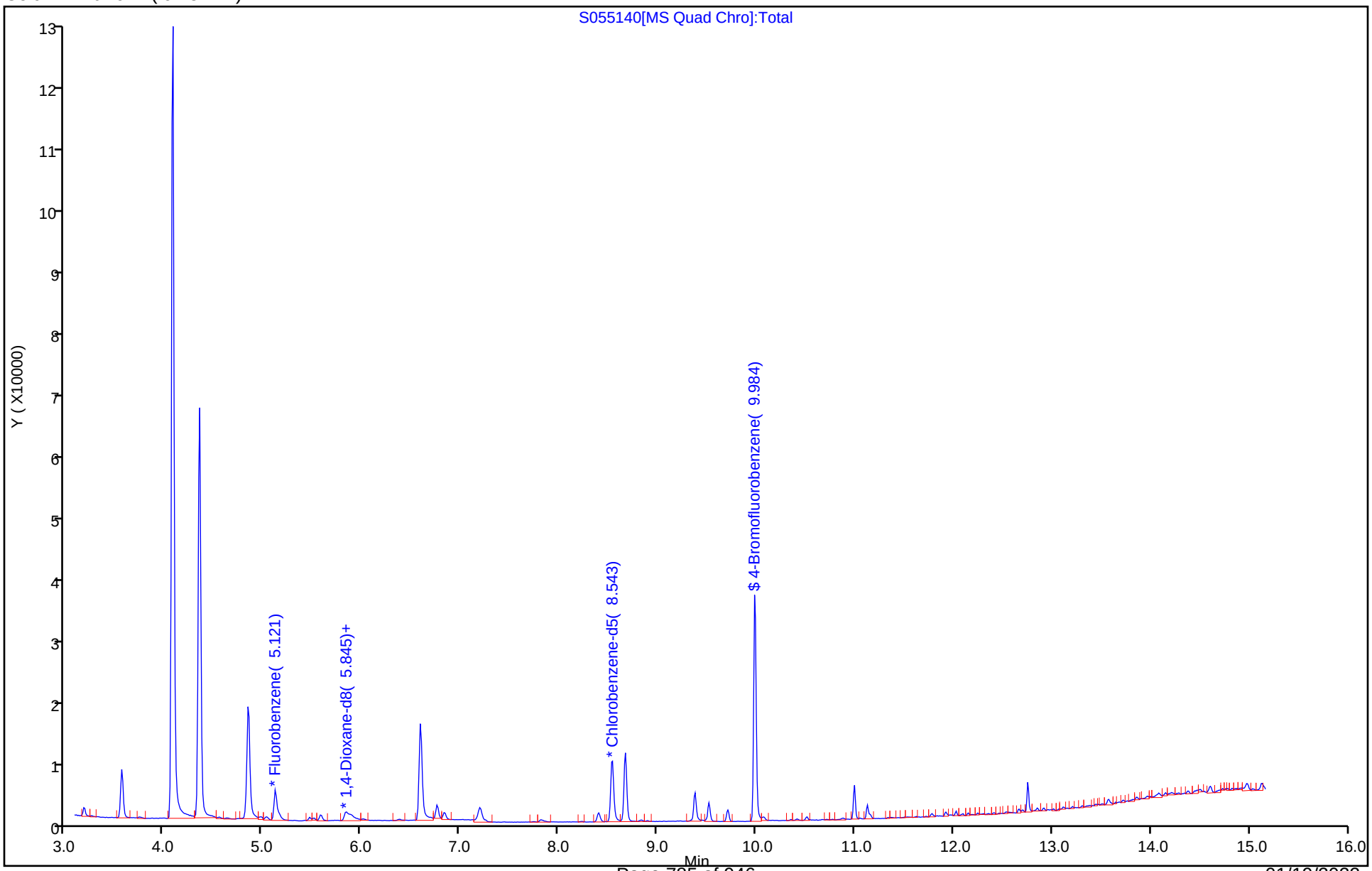
Report Date: 19-Jan-2022 10:47:31 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055140.D

Injection Date:	18-Jan-2022 23:37:50	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-13	Lab Sample ID:	460-250807-13	Worklist Smp#:	12
Client ID:	SL-23_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055140.D				
Lims ID:	460-250807-D-13				
Client ID:	SL-23_011322				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 23:37:50	ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-13				
Misc. Info.:	460-0140361-012				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:47:31	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

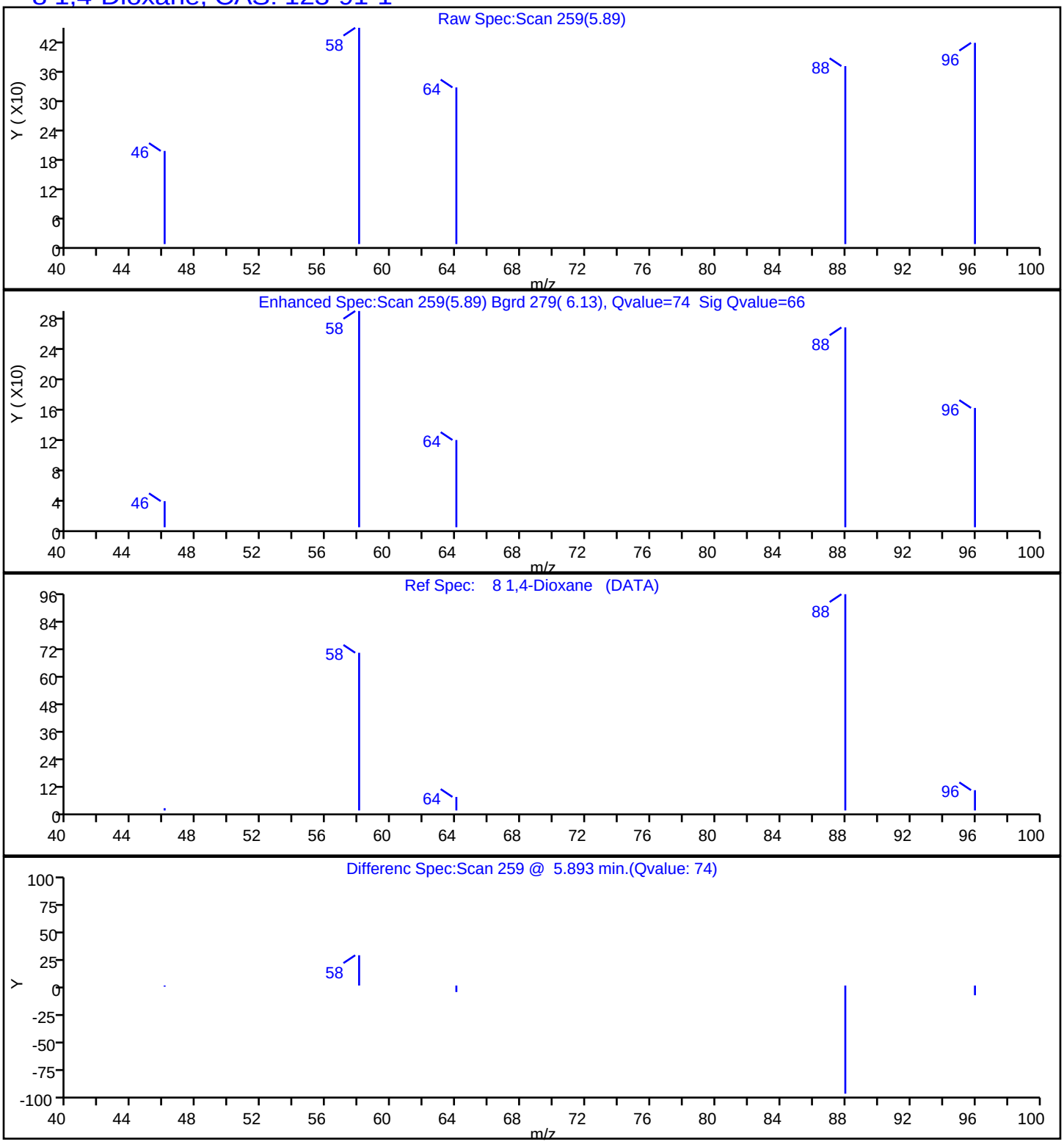
First Level Reviewer: boykink Date: 19-Jan-2022 00:33:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5023	100.45

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055140.D		
Injection Date:	18-Jan-2022 23:37:50	Instrument ID:	CVOAMS14
Lims ID:	460-250807-D-13	Lab Sample ID:	460-250807-13
Client ID:	SL-23_011322		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

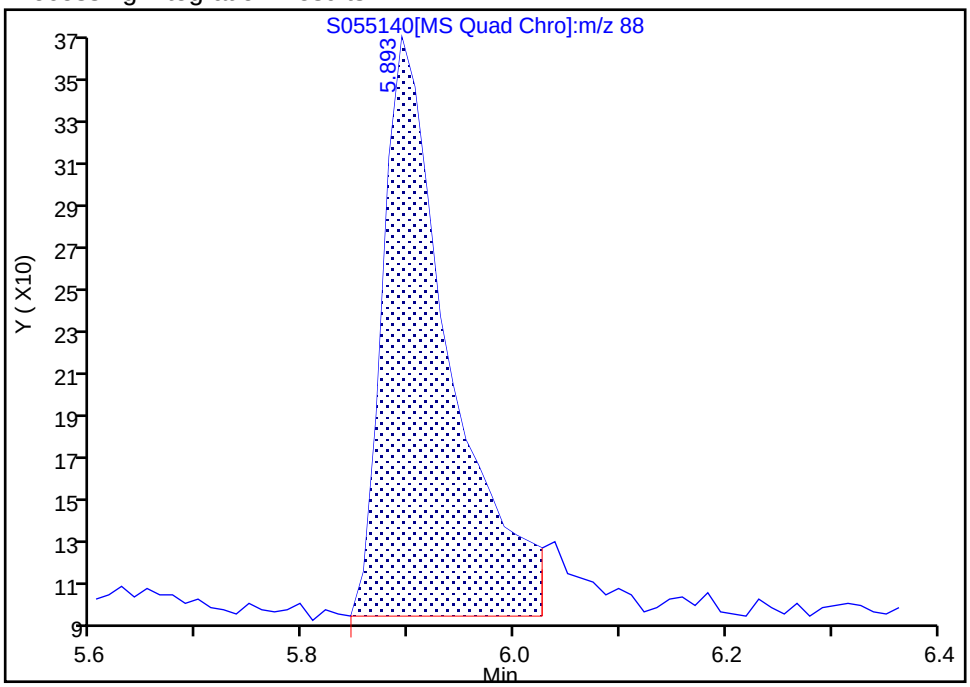
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055140.D				
Injection Date:	18-Jan-2022 23:37:50	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-13	Lab Sample ID:	460-250807-13		
Client ID:	SL-23_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

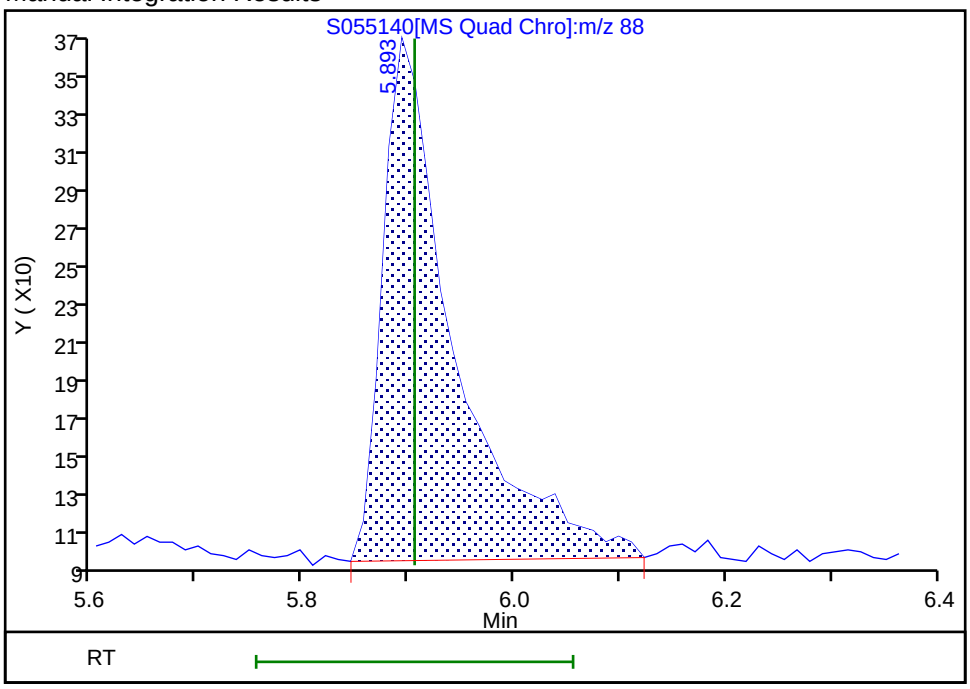
Processing Integration Results

RT: 5.89
Area: 1201
Amount: 2.522923
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1273
Amount: 2.674173
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:47:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-12_011322 | Lab Sample ID: 460-250807-14

Matrix: Water | Lab File ID: S055141.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 09:50

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 23:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.4	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055141.D
Lims ID: 460-250807-D-14
Client ID: SL-12_011322
Sample Type: Client
Inject. Date: 18-Jan-2022 23:59:35 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-14
Misc. Info.: 460-0140361-013
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 00:33:50 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: boykink Date: 19-Jan-2022 00:33:50

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10576	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	2020	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	9067	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	23530	0.4987	
	8 1,4-Dioxane	88	5.893	5.893	0.000	58	720	1.37	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

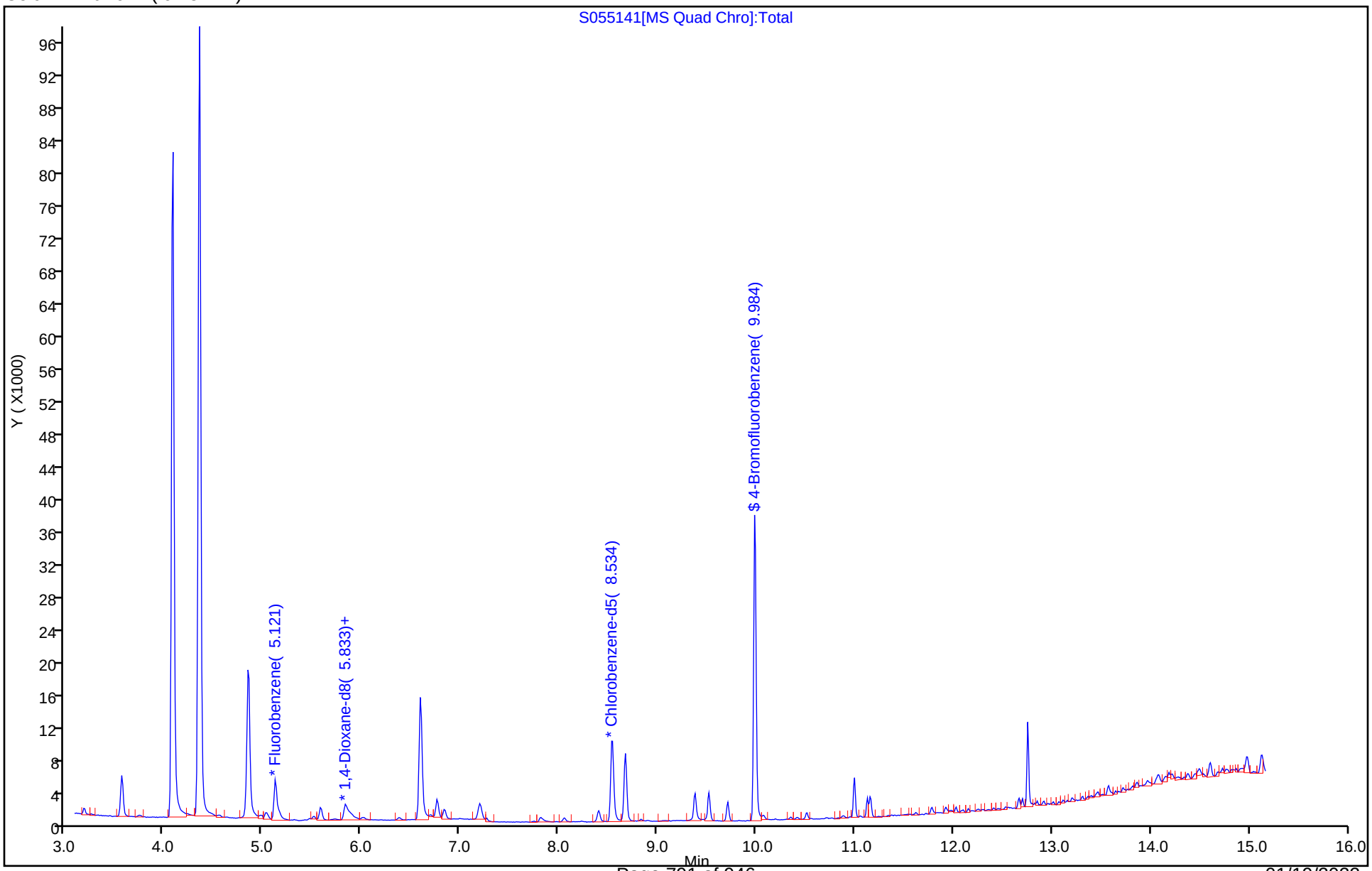
Report Date: 19-Jan-2022 00:33:50 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055141.D

Injection Date:	18-Jan-2022 23:59:35	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-14	Lab Sample ID:	460-250807-14	Worklist Smp#:	13
Client ID:	SL-12_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055141.D				
Lims ID:	460-250807-D-14				
Client ID:	SL-12_011322				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 23:59:35	ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-14				
Misc. Info.:	460-0140361-013				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 00:33:50	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1658				

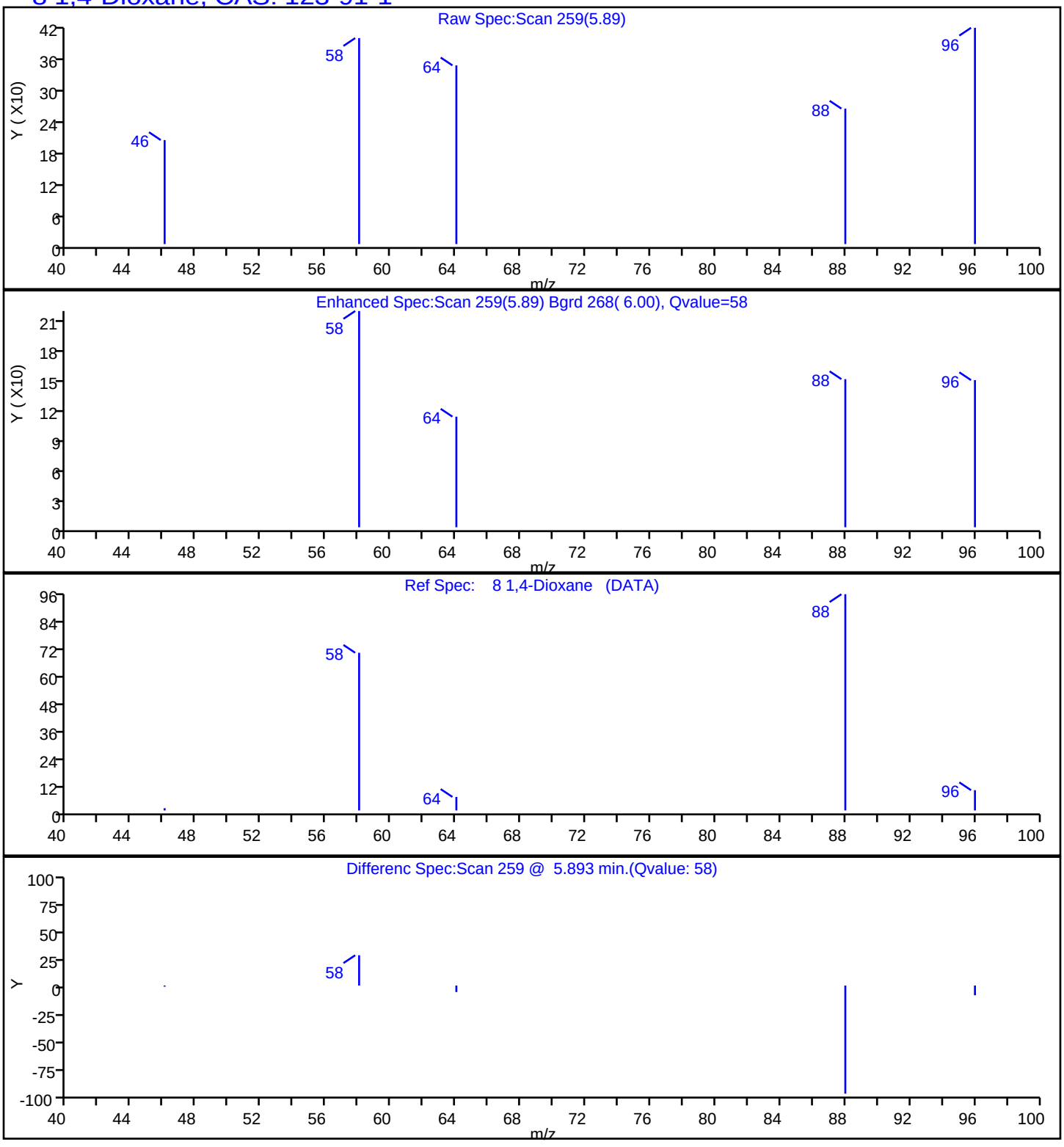
First Level Reviewer: boykink Date: 19-Jan-2022 00:33:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4987	99.74

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055141.D				
Injection Date:	18-Jan-2022 23:59:35	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-14	Lab Sample ID:	460-250807-14		
Client ID:	SL-12_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

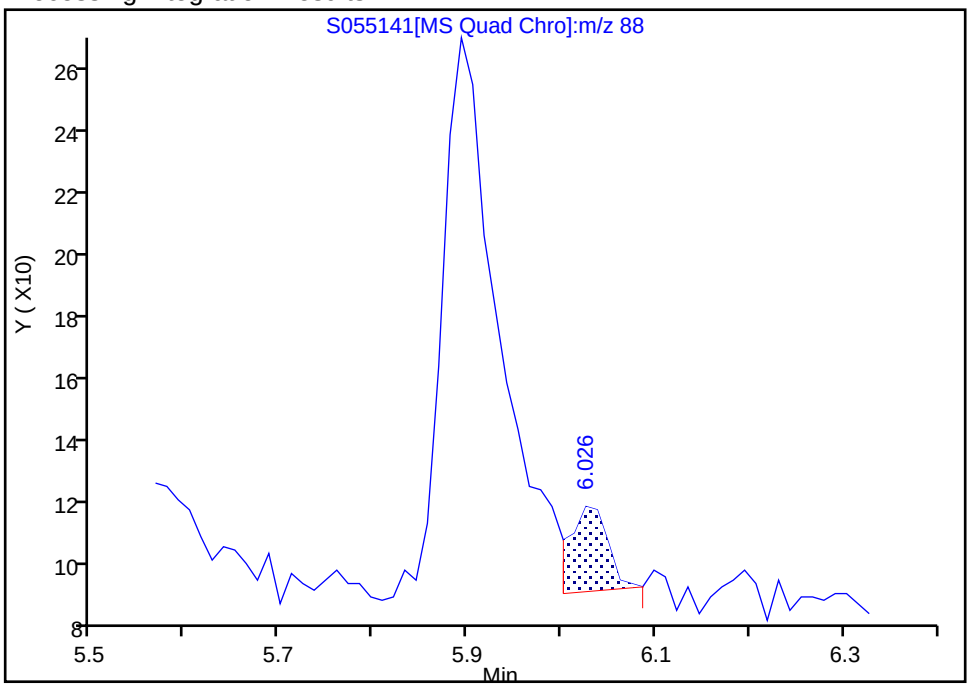
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055141.D				
Injection Date:	18-Jan-2022 23:59:35	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-14	Lab Sample ID:	460-250807-14		
Client ID:	SL-12_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

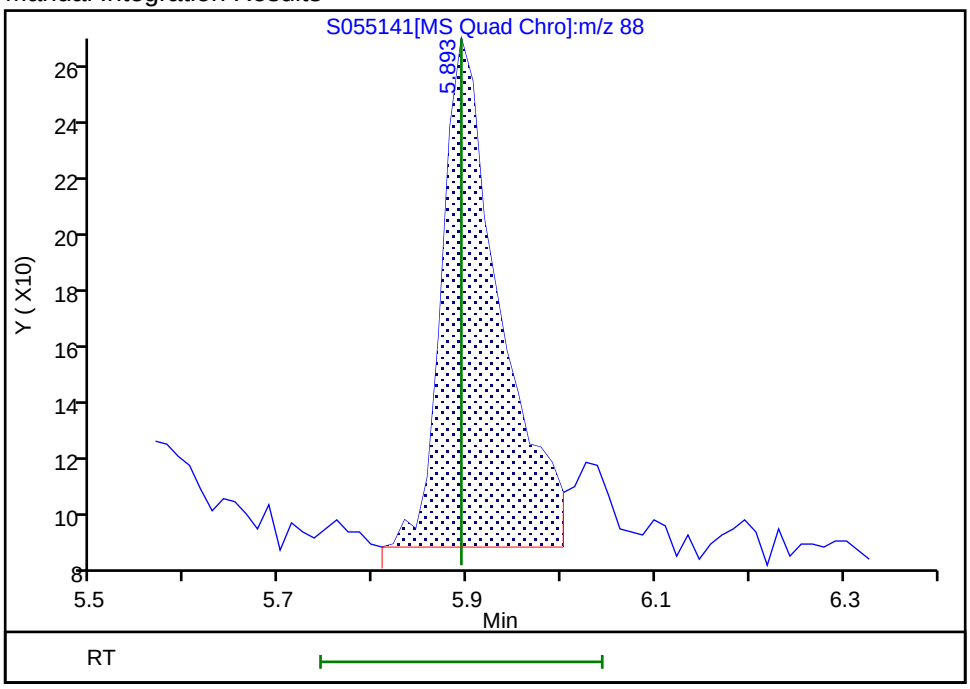
Processing Integration Results

RT: 6.03
Area: 73
Amount: 0.138546
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 720
Amount: 1.366486
Amount Units: ug/l



Reviewer: boykink, 19-Jan-2022 00:33:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-19_011322 | Lab Sample ID: 460-250807-15

Matrix: Water | Lab File ID: S055142.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 10:20

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 00:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	103		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055142.D
Lims ID: 460-250807-D-15
Client ID: SL-19_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 00:21:20 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-15
Misc. Info.: 460-0140361-014
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:20:44 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:20:49

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	11211	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	2023	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	9623	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	90	25786	0.5149	

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

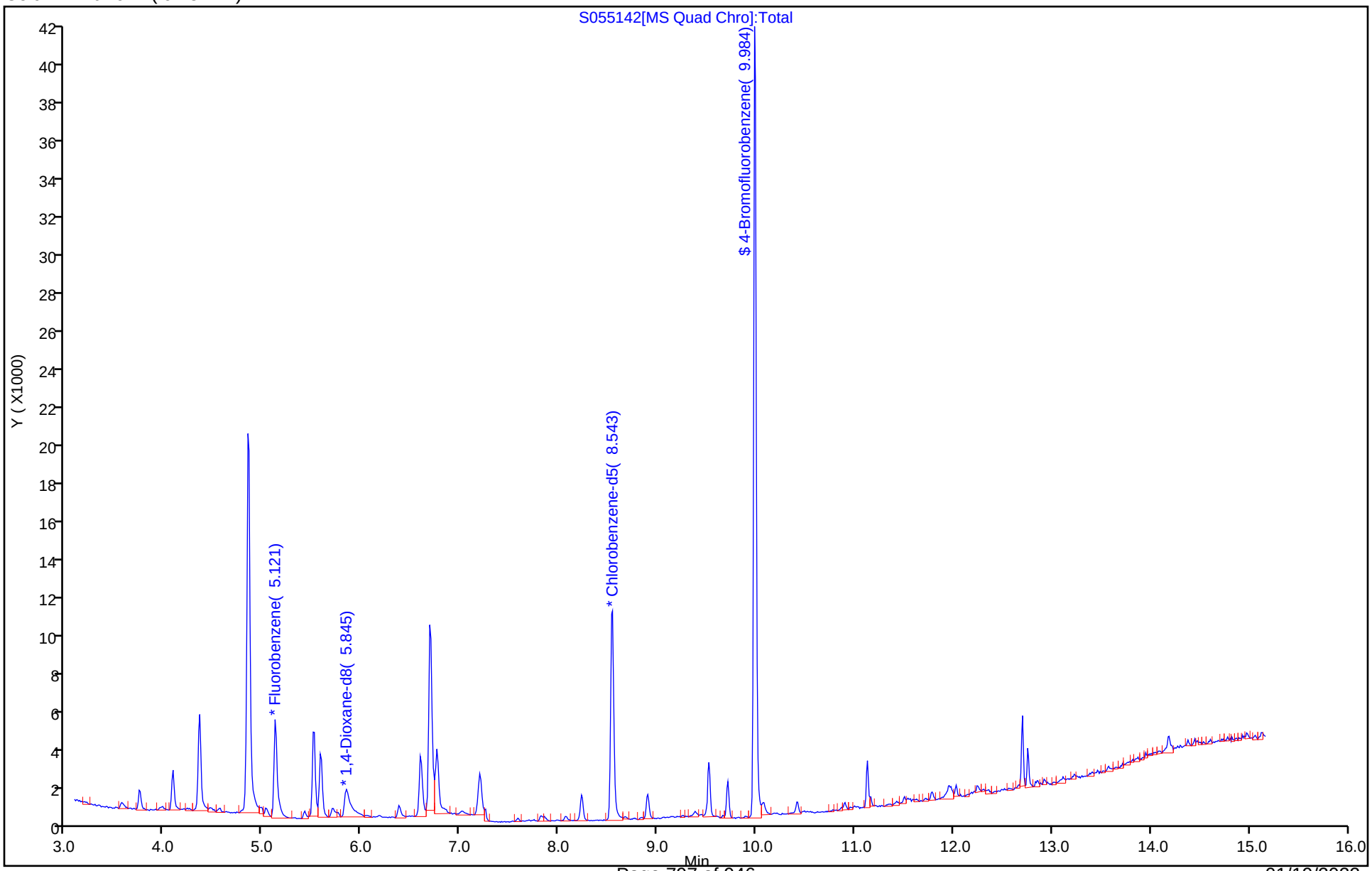
Report Date: 19-Jan-2022 09:20:49 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055142.D

Injection Date:	19-Jan-2022 00:21:20	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-15	Lab Sample ID:	460-250807-15	Worklist Smp#:	14
Client ID:	SL-19_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055142.D				
Lims ID:	460-250807-D-15				
Client ID:	SL-19_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 00:21:20	ALS Bottle#:	0	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-15				
Misc. Info.:	460-0140361-014				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:20:44	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

First Level Reviewer: starzecm Date: 19-Jan-2022 09:20:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5149	102.98

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-22_011322 | Lab Sample ID: 460-250807-16

Matrix: Water | Lab File ID: S055143.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 10:50

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 00:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055143.D
Lims ID: 460-250807-D-16
Client ID: SL-22_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 00:43:05 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-16
Misc. Info.: 460-0140361-015
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:48:20 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:09

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	9948	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	56	1731	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	8351	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.992	0.001	92	22051	0.5074	
	8 1,4-Dioxane	88	5.894	5.905	-0.011	40	126	0.2791	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

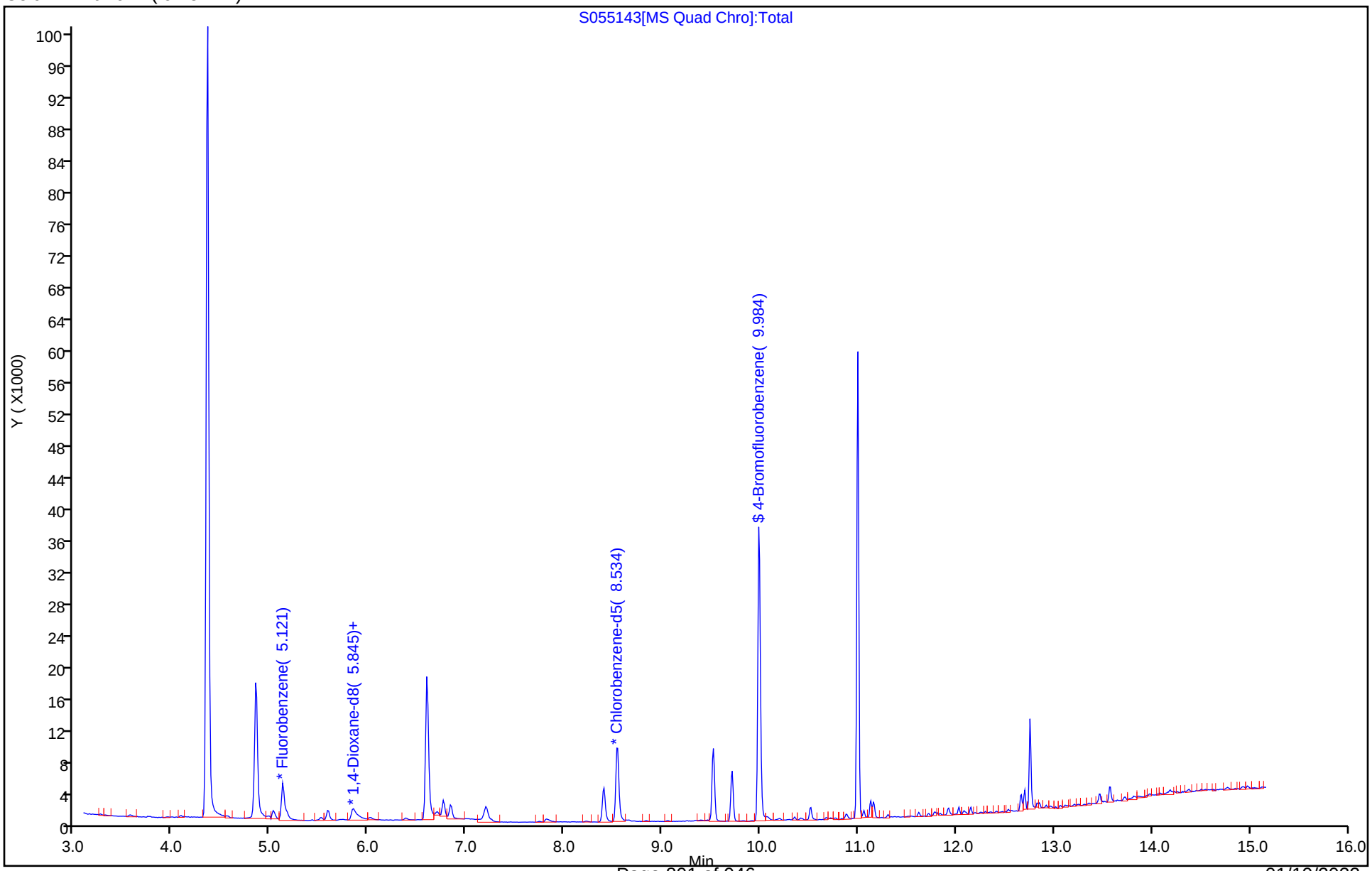
Report Date: 19-Jan-2022 10:48:21 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055143.D

Injection Date:	19-Jan-2022 00:43:05	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-16	Lab Sample ID:	460-250807-16	Worklist Smp#:	15
Client ID:	SL-22_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055143.D				
Lims ID:	460-250807-D-16				
Client ID:	SL-22_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 00:43:05	ALS Bottle#:	0	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-16				
Misc. Info.:	460-0140361-015				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:48:20	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5074	101.48

Manual Integration/User Assign Peak Report

Eurofins Edison

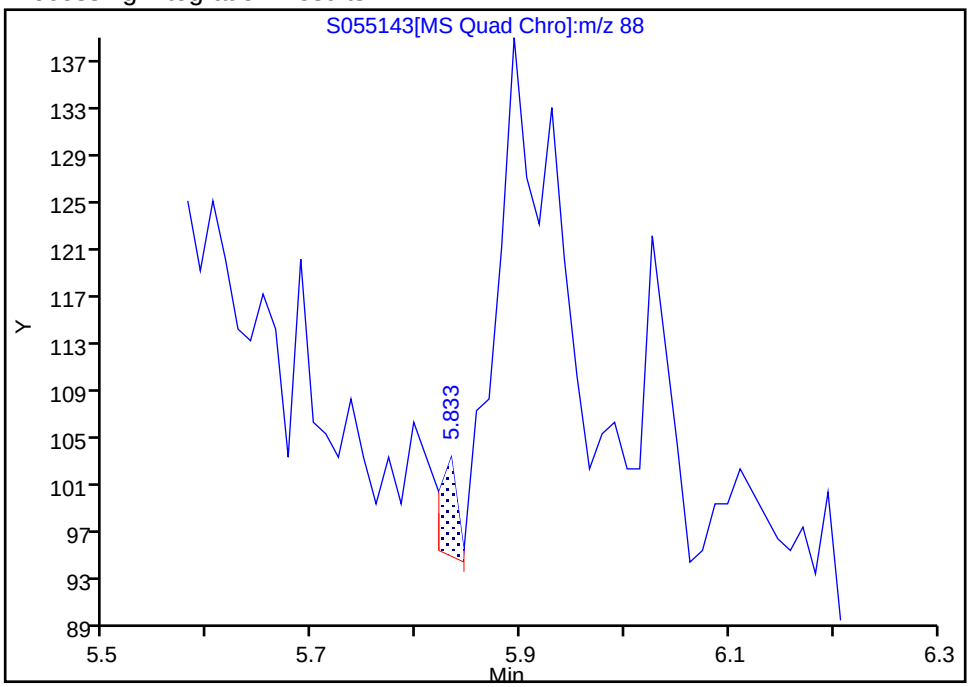
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055143.D				
Injection Date:	19-Jan-2022 00:43:05	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-16	Lab Sample ID:	460-250807-16		
Client ID:	SL-22_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

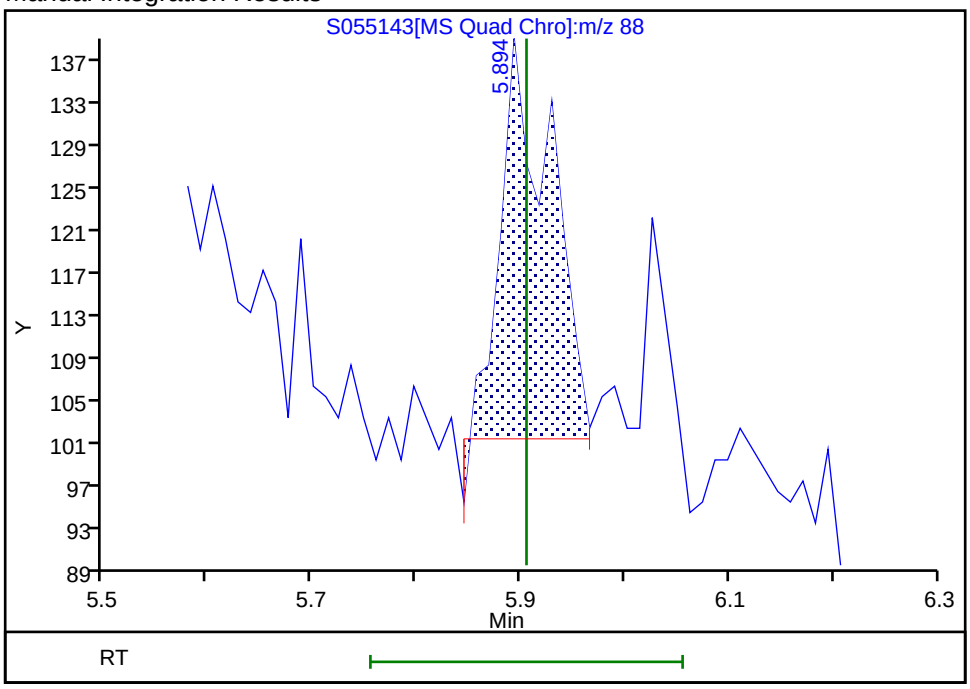
Processing Integration Results

RT: 5.83
Area: 10
Amount: 0.022148
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 126
Amount: 0.279060
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:48:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-20_011322 | Lab Sample ID: 460-250807-18

Matrix: Water | Lab File ID: S055144.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 13:20

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 01:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055144.D
Lims ID: 460-250807-D-18
Client ID: SL-20_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 01:04:44 ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-18
Misc. Info.: 460-0140361-016
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:21:25 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	9846	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1704	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	8204	0.5000	
$ 4 4-Bromofluorobenzene	174	9.993	9.992	0.000	92	21598	0.5059	
8 1,4-Dioxane	88	5.893	5.893	0.000	36	374	0.8414	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

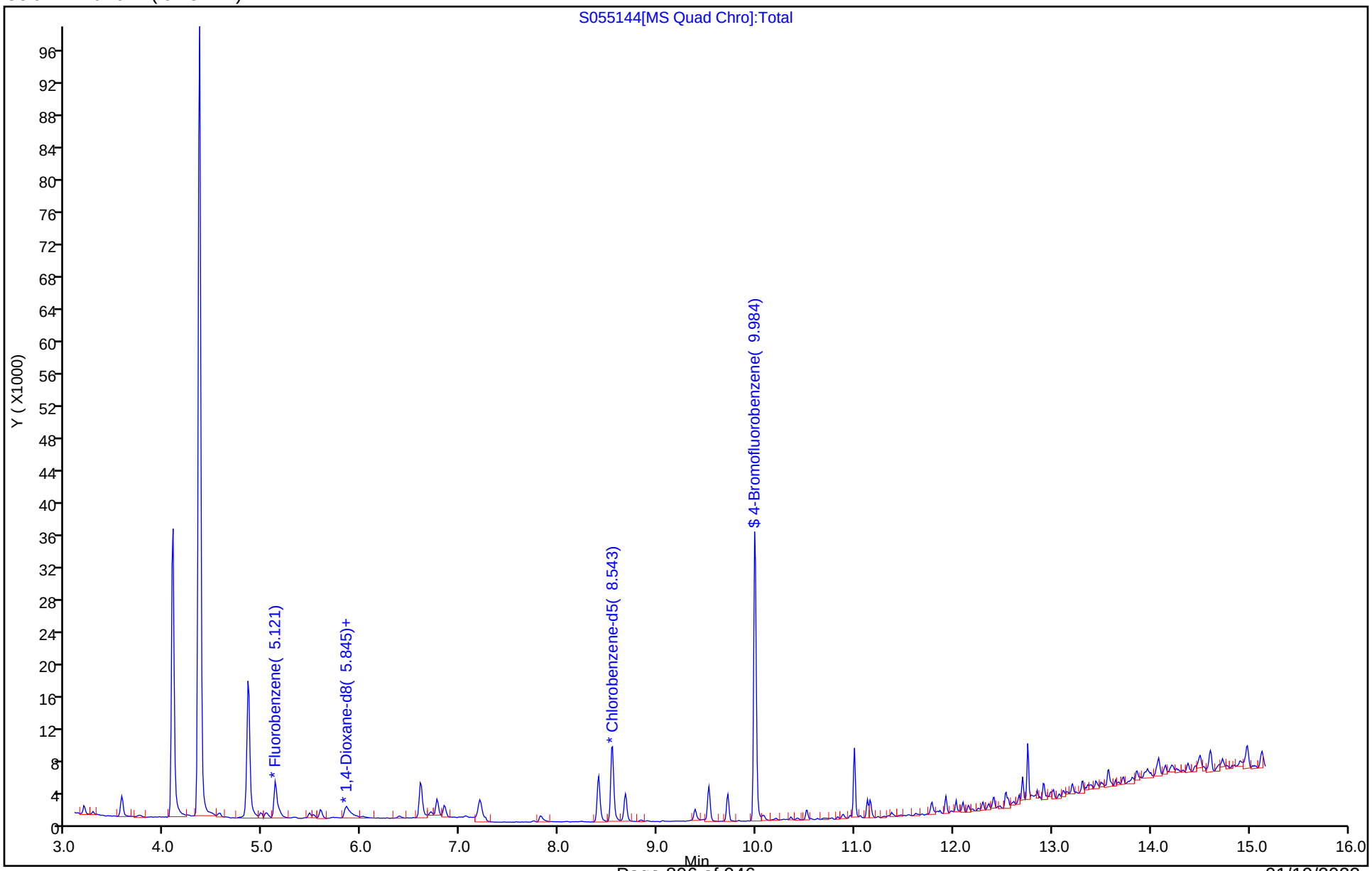
Report Date: 19-Jan-2022 09:21:30 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055144.D

Injection Date:	19-Jan-2022 01:04:44	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-18	Lab Sample ID:	460-250807-18	Worklist Smp#:	16
Client ID:	SL-20_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055144.D				
Lims ID:	460-250807-D-18				
Client ID:	SL-20_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 01:04:44	ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-18				
Misc. Info.:	460-0140361-016				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:21:25	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5059	101.18

Manual Integration/User Assign Peak Report

Eurofins Edison

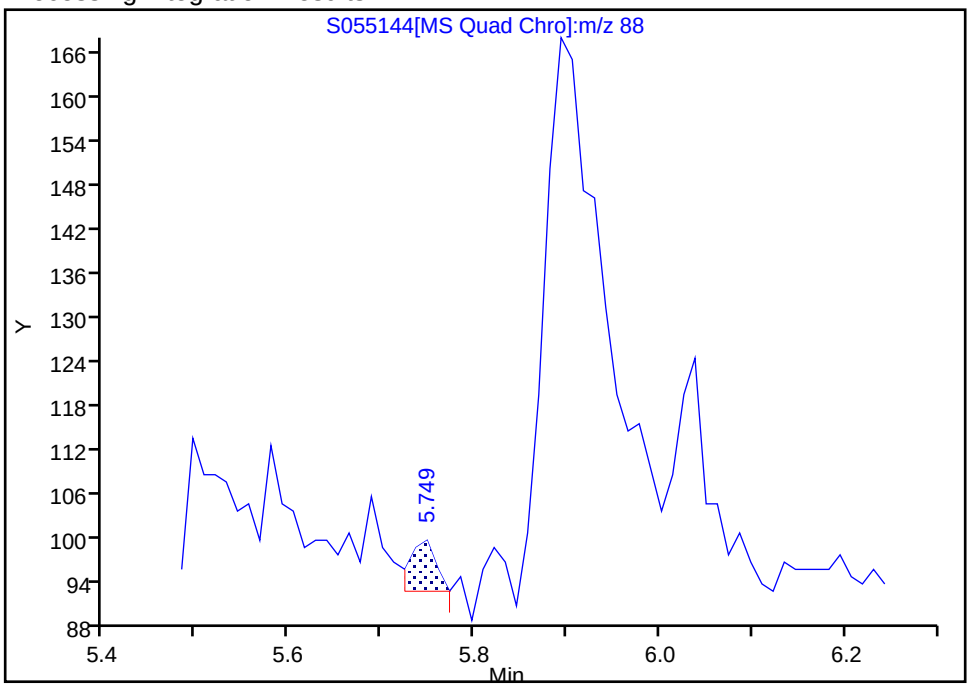
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055144.D				
Injection Date:	19-Jan-2022 01:04:44	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-18	Lab Sample ID:	460-250807-18		
Client ID:	SL-20_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

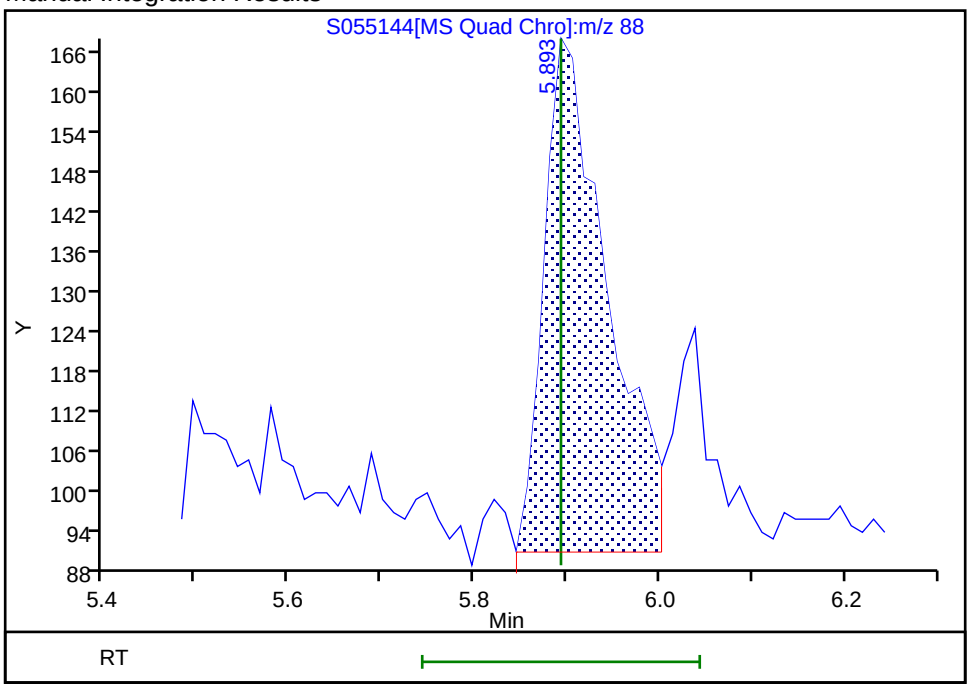
Processing Integration Results

RT: 5.75
Area: 14
Amount: 0.031498
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 374
Amount: 0.841445
Amount Units: ug/l



Reviewer: delpolitov, 19-Jan-2022 07:40:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-4_011322 | Lab Sample ID: 460-250807-19

Matrix: Water | Lab File ID: S055145.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 14:15

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 01:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	8.5		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055145.D
Lims ID: 460-250807-D-19
Client ID: SL-4_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 01:26:28 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-19
Misc. Info.: 460-0140361-017
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:21:45 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	9212	0.5000	
* 2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	1784	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	7455	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	90	19191	0.4947	
8 1,4-Dioxane	88	5.893	5.893	0.000	96	3968	8.53	

QC Flag Legend
Processing Flags

Reagents:
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

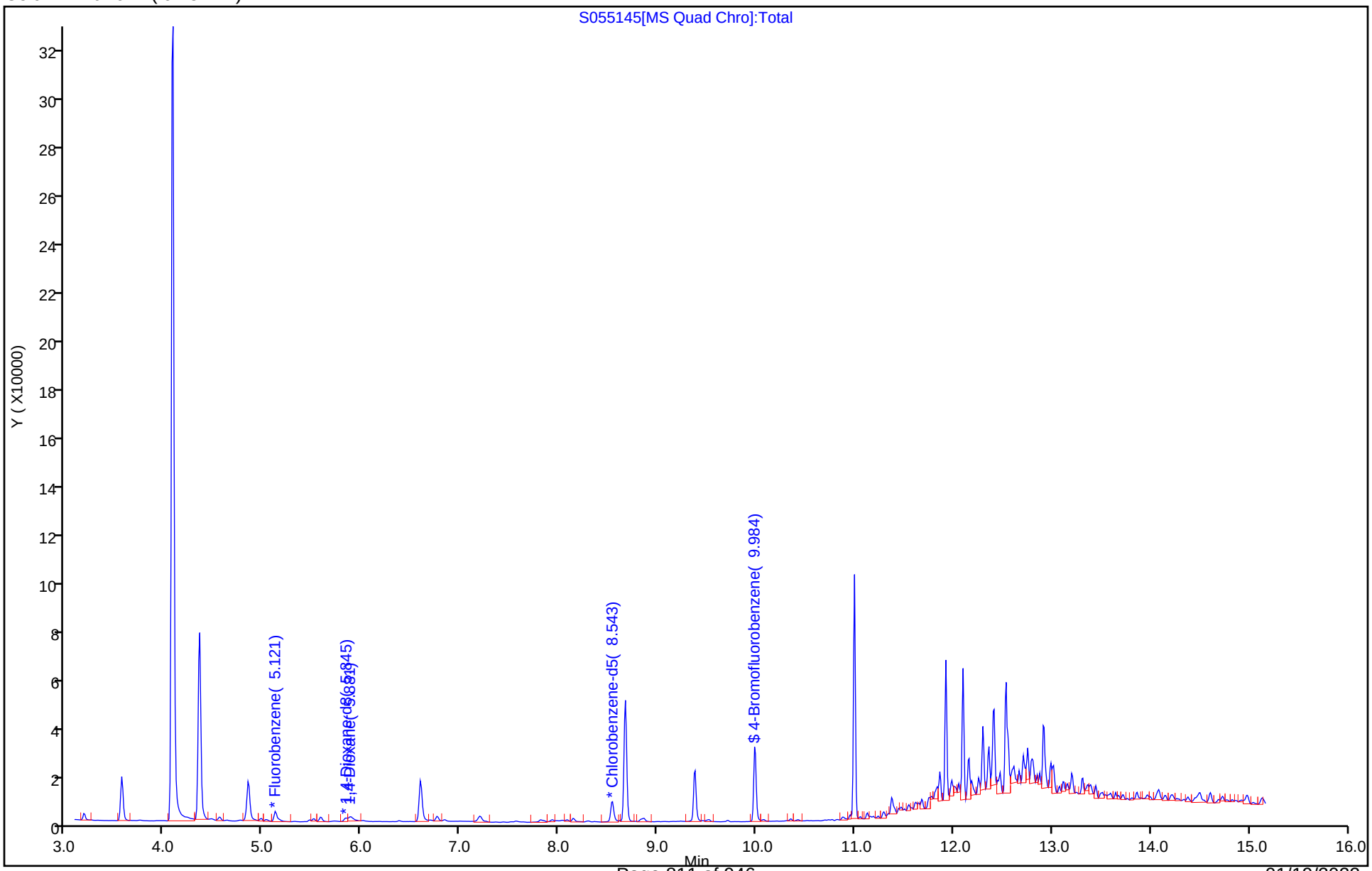
Report Date: 19-Jan-2022 09:21:49 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055145.D

Injection Date:	19-Jan-2022 01:26:28	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-19	Lab Sample ID:	460-250807-19	Worklist Smp#:	17
Client ID:	SL-4_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055145.D				
Lims ID:	460-250807-D-19				
Client ID:	SL-4_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 01:26:28	ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-19				
Misc. Info.:	460-0140361-017				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:21:45	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

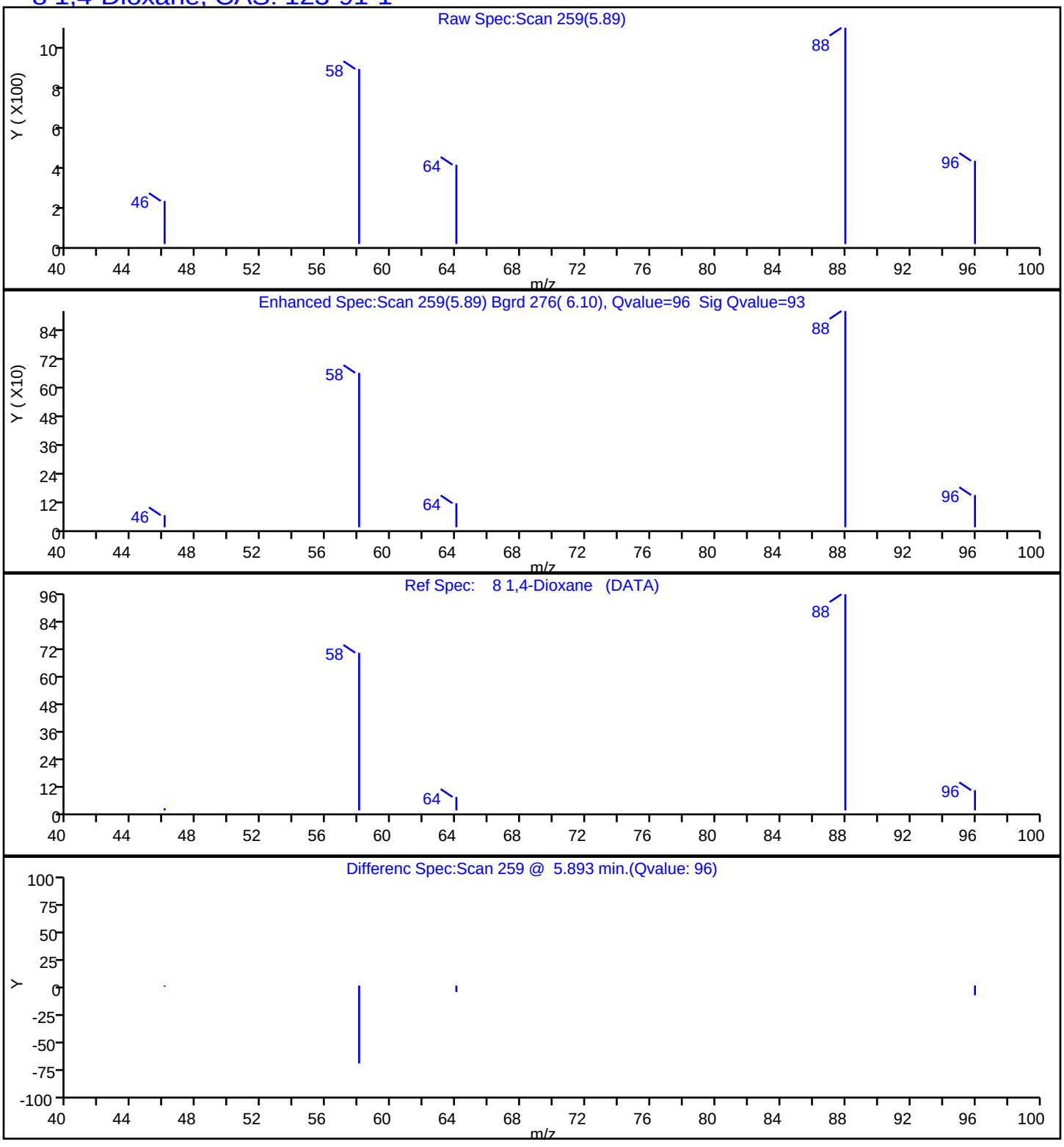
First Level Reviewer: starzecm Date: 19-Jan-2022 09:21:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4947	98.93

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055145.D				
Injection Date:	19-Jan-2022 01:26:28	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-19	Lab Sample ID:	460-250807-19		
Client ID:	SL-4_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-18_011322 | Lab Sample ID: 460-250807-20

Matrix: Water | Lab File ID: S055146.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 14:50

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 01:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.2		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055146.D
Lims ID: 460-250807-D-20
Client ID: SL-18_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 01:48:10 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-20
Misc. Info.: 460-0140361-018
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:48:39 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:22:07

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10579	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	52	1919	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	89	8931	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	23784	0.5117	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	84	2084	4.16	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

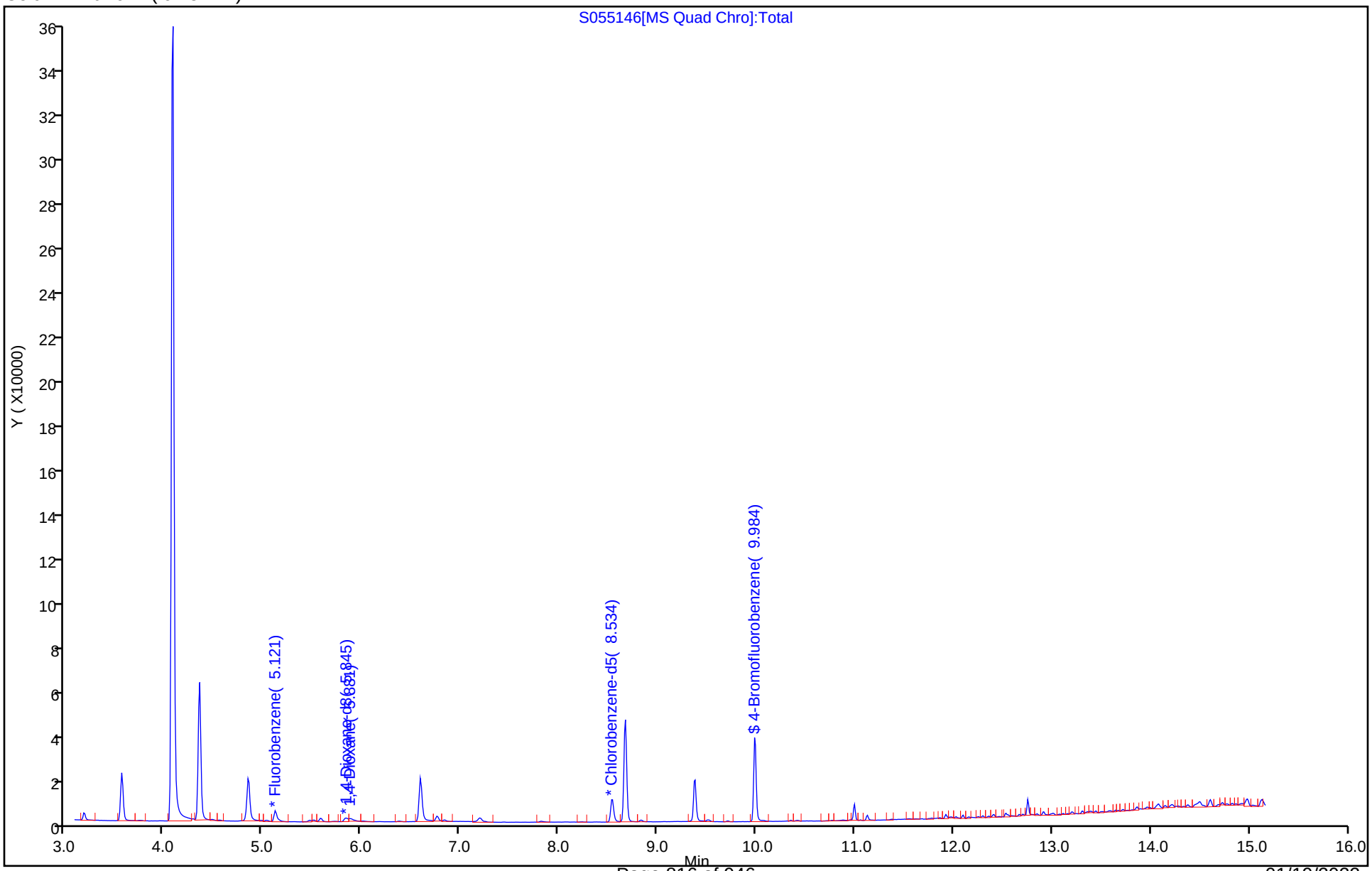
Report Date: 19-Jan-2022 10:48:40 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055146.D

Injection Date:	19-Jan-2022 01:48:10	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-20	Lab Sample ID:	460-250807-20	Worklist Smp#:	18
Client ID:	SL-18_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055146.D				
Lims ID:	460-250807-D-20				
Client ID:	SL-18_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 01:48:10	ALS Bottle#:	0	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-20				
Misc. Info.:	460-0140361-018				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:48:39	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

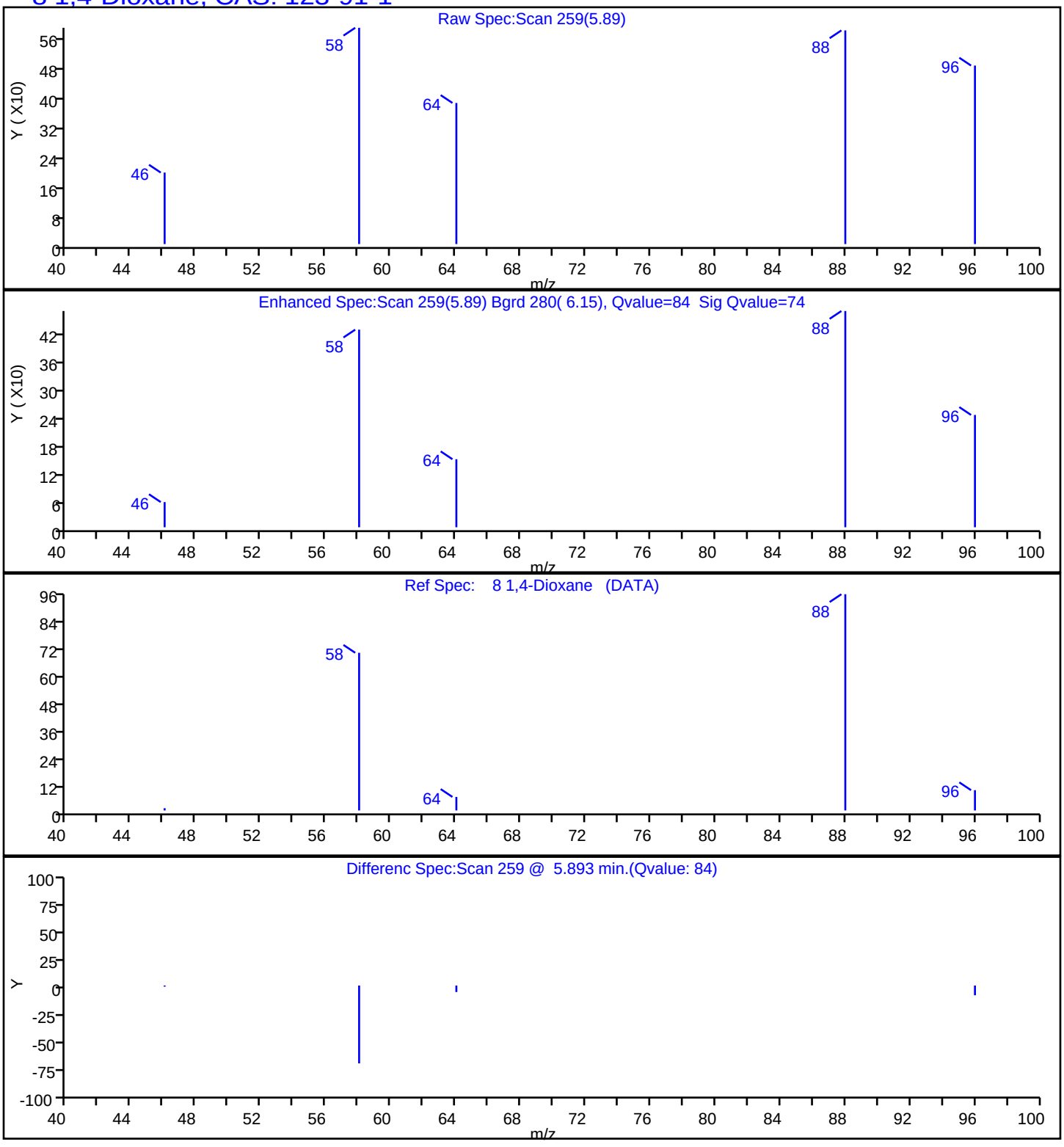
First Level Reviewer: starzecm Date: 19-Jan-2022 09:22:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5117	102.35

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055146.D				
Injection Date:	19-Jan-2022 01:48:10	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-20	Lab Sample ID:	460-250807-20		
Client ID:	SL-18_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

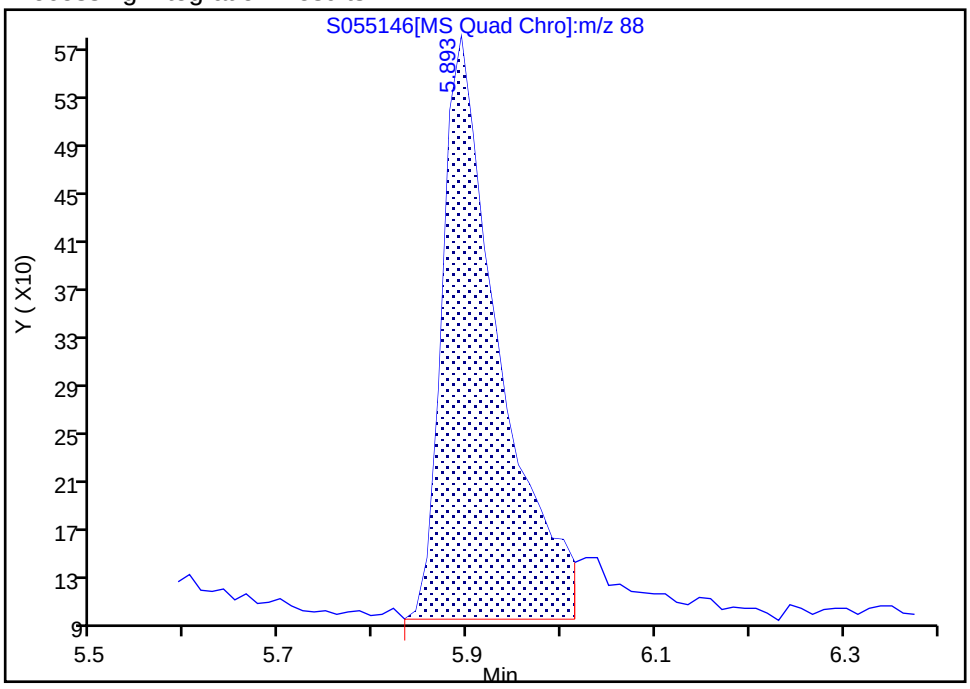
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055146.D				
Injection Date:	19-Jan-2022 01:48:10	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-20	Lab Sample ID:	460-250807-20		
Client ID:	SL-18_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

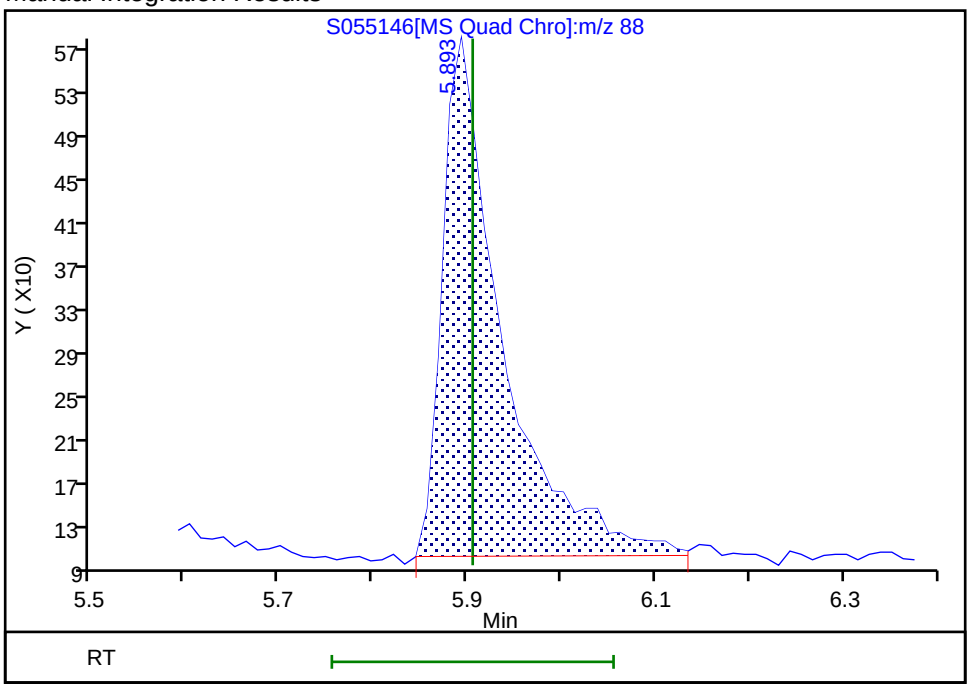
Processing Integration Results

RT: 5.89
Area: 2023
Amount: 4.041521
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 2084
Amount: 4.163386
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:48:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 460-250807-21

Matrix: Water | Lab File ID: S055138.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 22:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055138.D				
Lims ID:	460-250807-D-21				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 22:54:18	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-21				
Misc. Info.:	460-0140361-010				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 21:32:58	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1658				
First Level Reviewer: boykink		Date:	18-Jan-2022 23:53:36		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10131	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1502	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9056	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	23637	0.5016	

QC Flag Legend

Processing Flags

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

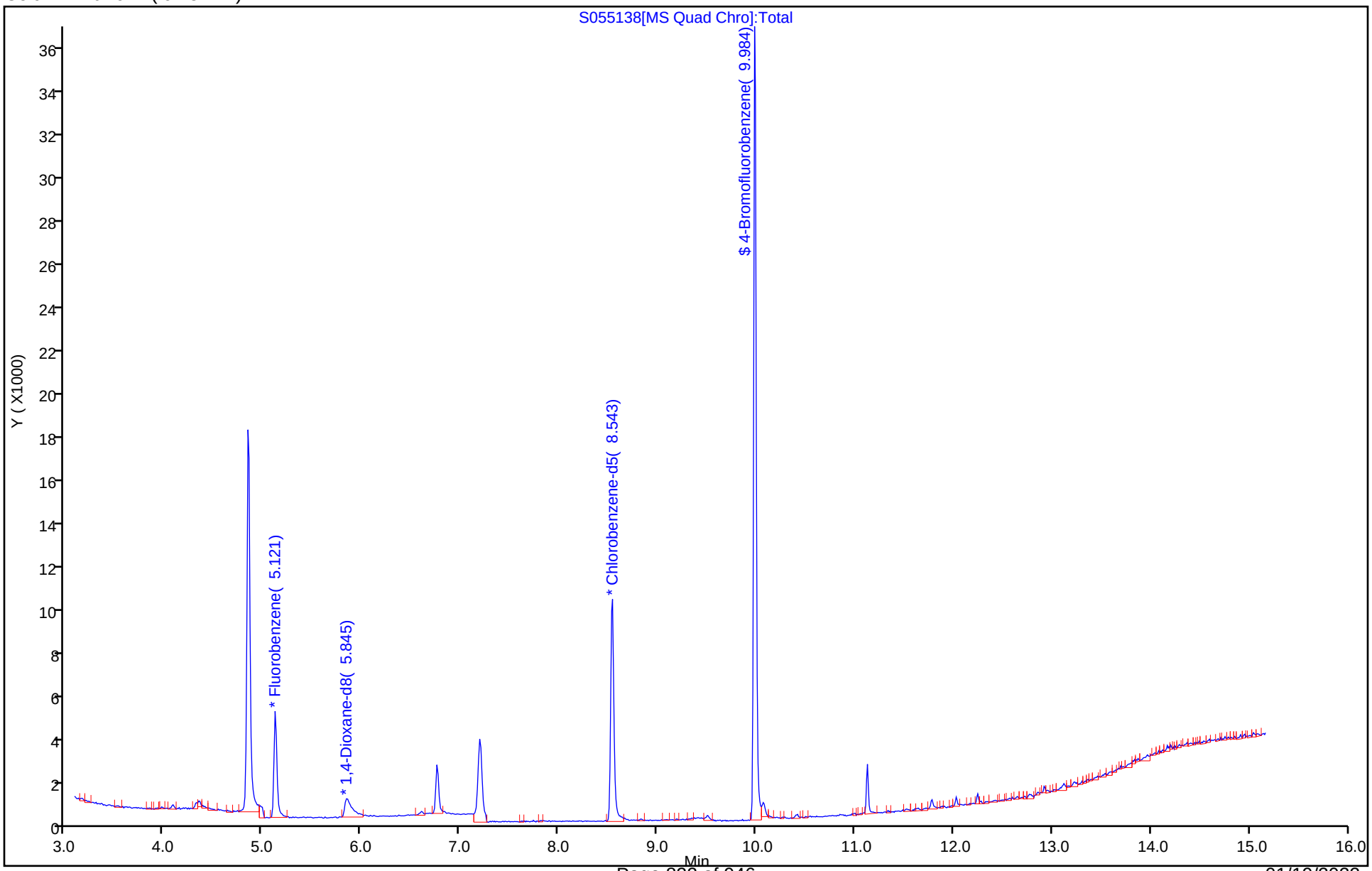
Report Date: 18-Jan-2022 23:53:36 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055138.D

Injection Date:	18-Jan-2022 22:54:18	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-21	Lab Sample ID:	460-250807-21	Worklist Smp#:	10
Client ID:	TRIP BLANK				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055138.D				
Lims ID:	460-250807-D-21				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	18-Jan-2022 22:54:18	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-21				
Misc. Info.:	460-0140361-010				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 21:32:58	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1658				

First Level Reviewer: boykink Date: 18-Jan-2022 23:53:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5016	100.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-17_011322 | Lab Sample ID: 460-250807-22

Matrix: Water | Lab File ID: S055148.D

Analysis Method: 8260D SIM | Date Collected: 01/13/2022 15:10

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 02:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.9		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055148.D
Lims ID: 460-250807-D-22
Client ID: SL-17_011322
Sample Type: Client
Inject. Date: 19-Jan-2022 02:31:38 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-22
Misc. Info.: 460-0140361-020
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:49:01 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:22:48

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10735	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	71	2015	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9278	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	24100	0.4991	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	78	1503	2.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

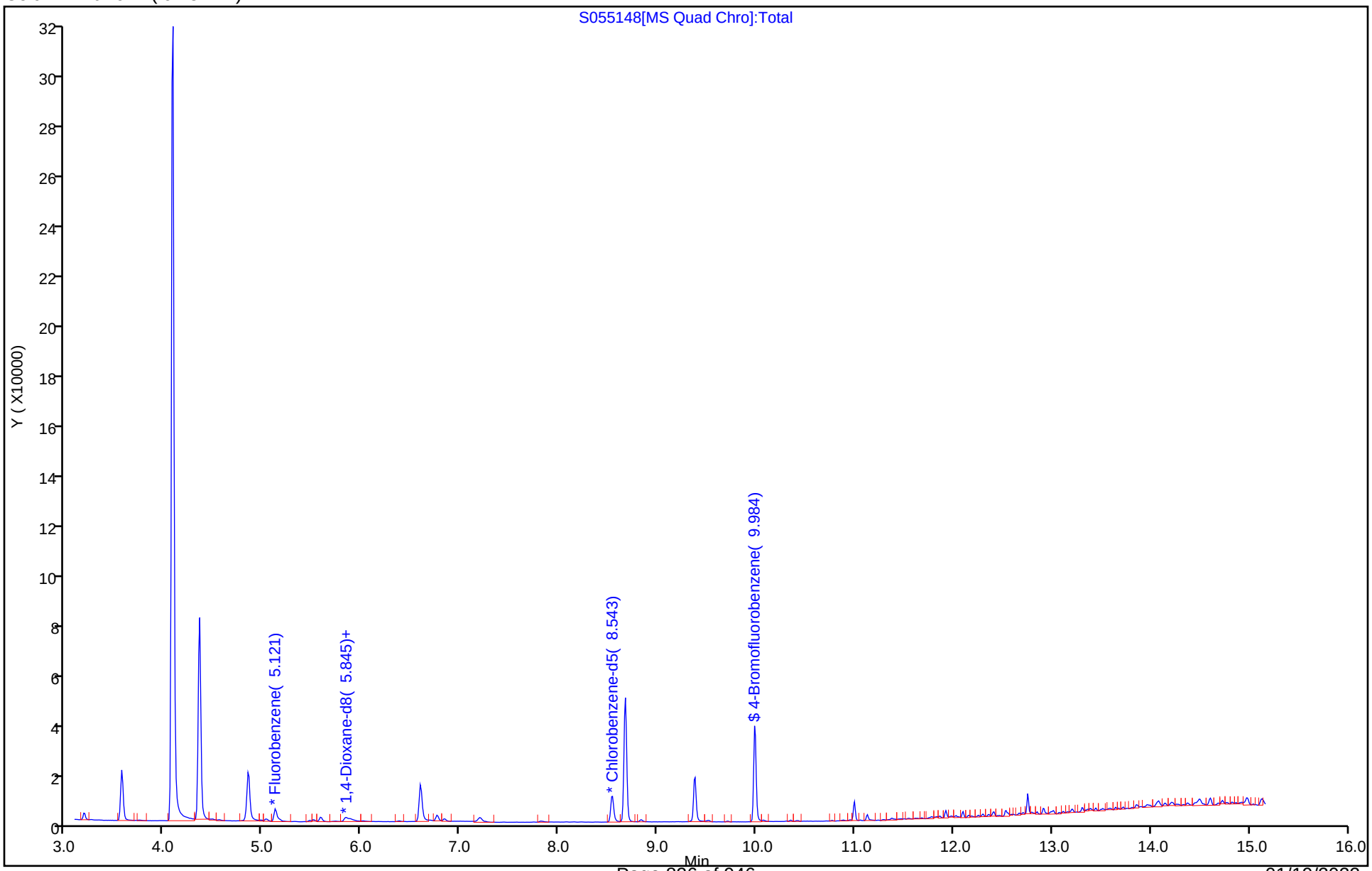
Report Date: 19-Jan-2022 10:49:01 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055148.D

Injection Date:	19-Jan-2022 02:31:38	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-22	Lab Sample ID:	460-250807-22	Worklist Smp#:	20
Client ID:	SL-17_011322				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

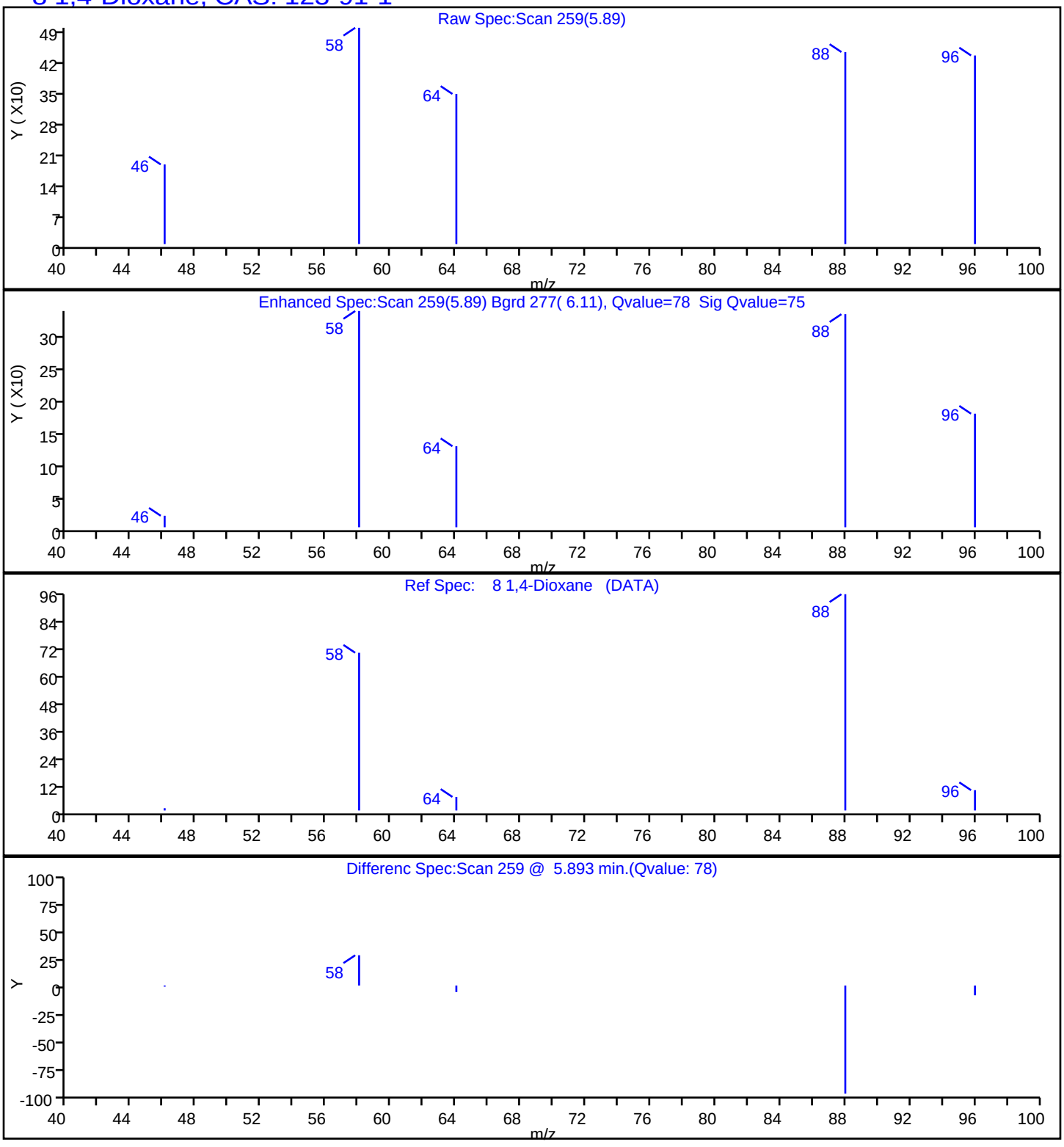
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055148.D				
Lims ID:	460-250807-D-22				
Client ID:	SL-17_011322				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 02:31:38	ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-22				
Misc. Info.:	460-0140361-020				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:49:01	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				
First Level Reviewer: starzecm		Date:	19-Jan-2022 09:22:48		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4991	99.83

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055148.D				
Injection Date:	19-Jan-2022 02:31:38	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-22	Lab Sample ID:	460-250807-22		
Client ID:	SL-17_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

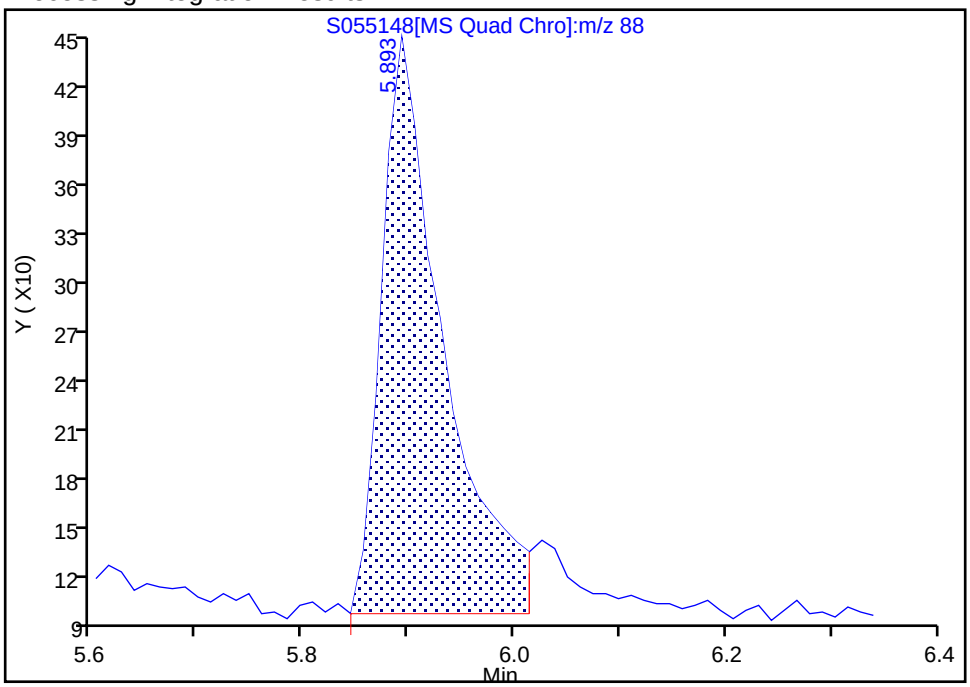
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055148.D				
Injection Date:	19-Jan-2022 02:31:38	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-22	Lab Sample ID:	460-250807-22		
Client ID:	SL-17_011322				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

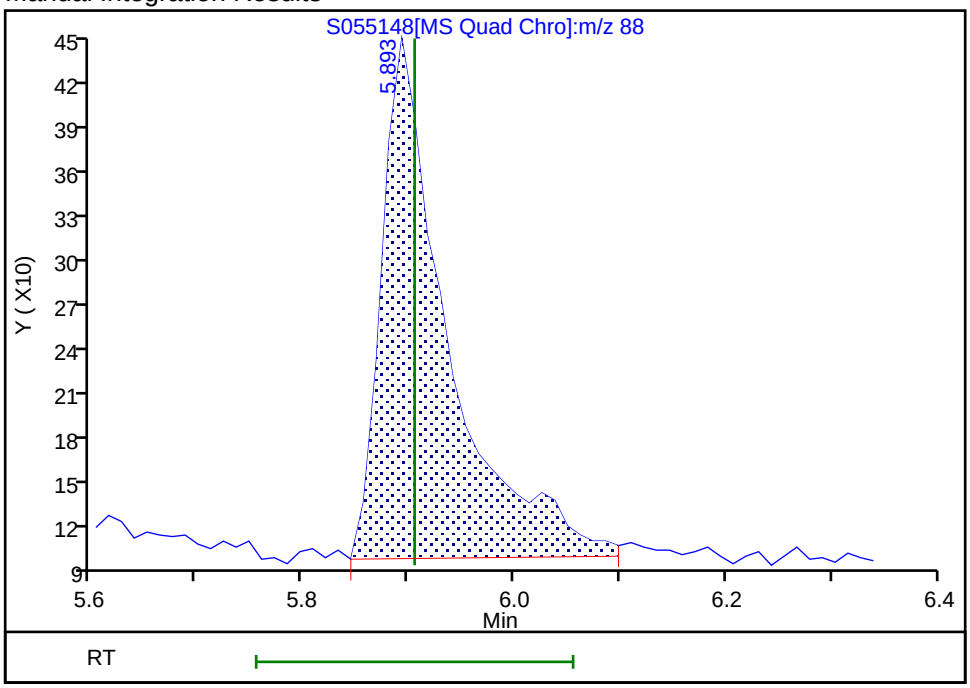
Processing Integration Results

RT: 5.89
Area: 1408
Amount: 2.678869
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 1503
Amount: 2.859617
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:48:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-21_011422 | Lab Sample ID: 460-250807-23

Matrix: Water | Lab File ID: S055149.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 09:15

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 02:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.4	J	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055149.D
Lims ID: 460-250807-D-23
Client ID: SL-21_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 02:53:22 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-23
Misc. Info.: 460-0140361-021
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:23:02 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:07

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10278	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	1845	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	91	8360	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	22245	0.5113	
	8 1,4-Dioxane	88	5.893	5.893	0.000	57	662	1.38	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

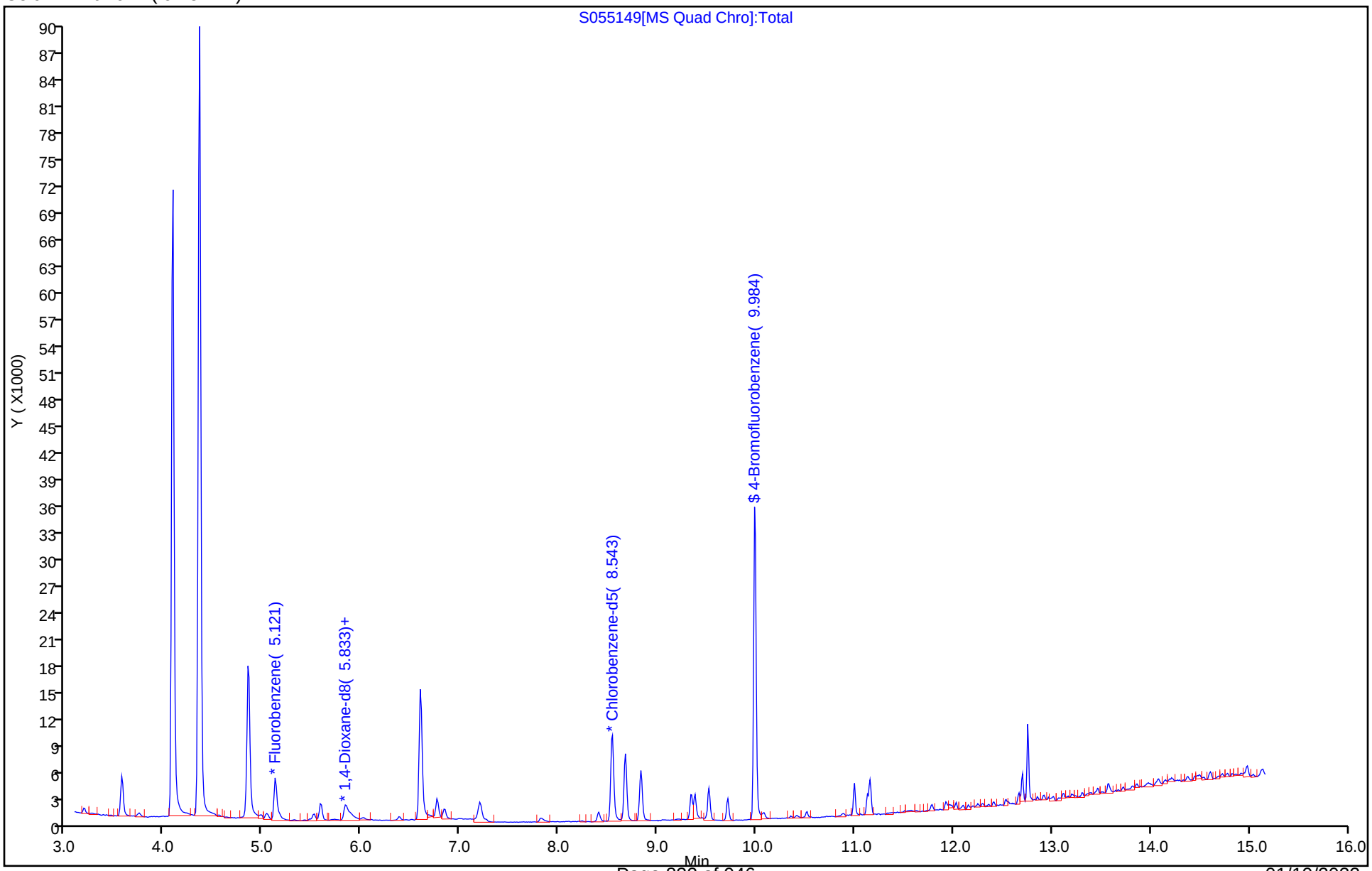
Report Date: 19-Jan-2022 09:23:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055149.D

Injection Date:	19-Jan-2022 02:53:22	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-23	Lab Sample ID:	460-250807-23	Worklist Smp#:	21
Client ID:	SL-21_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055149.D				
Lims ID:	460-250807-D-23				
Client ID:	SL-21_011422				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 02:53:22	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-23				
Misc. Info.:	460-0140361-021				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:23:02	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

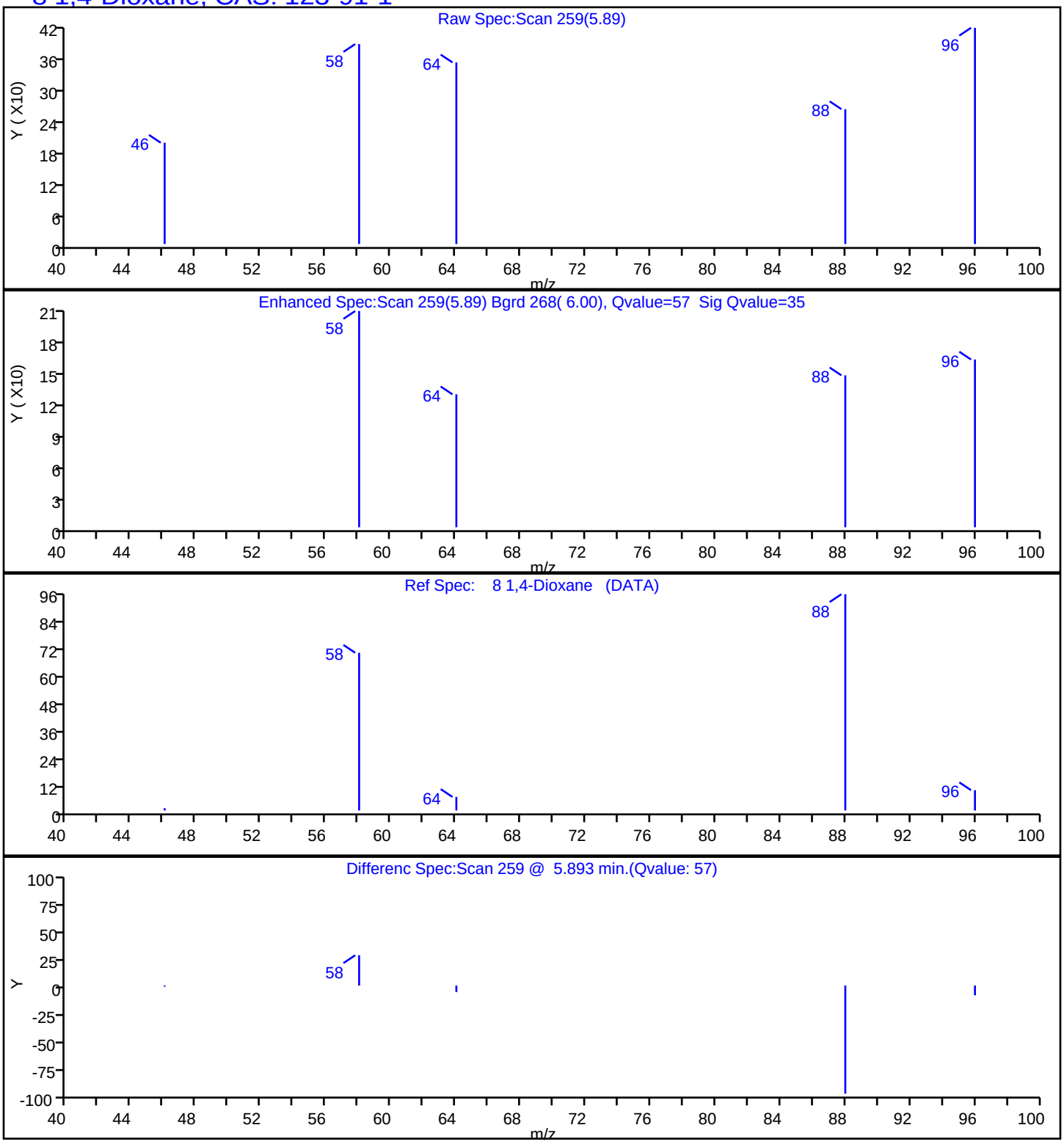
First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5113	102.26

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055149.D
Injection Date: 19-Jan-2022 02:53:22 Instrument ID: CVOAMS14
Lims ID: 460-250807-D-23 Lab Sample ID: 460-250807-23
Client ID: SL-21_011422
Operator ID: ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

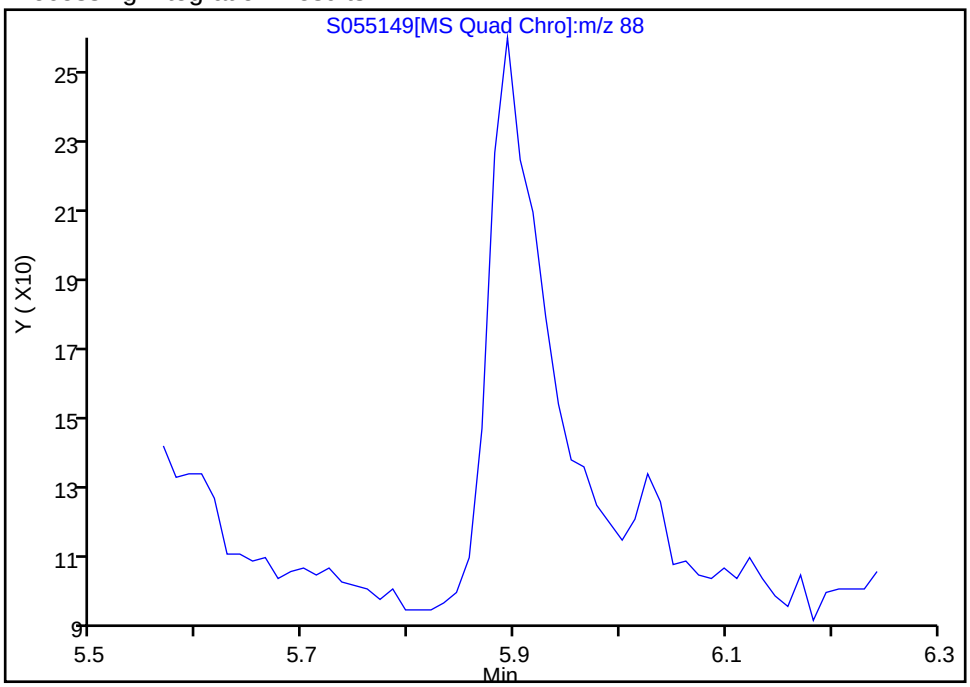
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055149.D				
Injection Date:	19-Jan-2022 02:53:22	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-23	Lab Sample ID:	460-250807-23		
Client ID:	SL-21_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

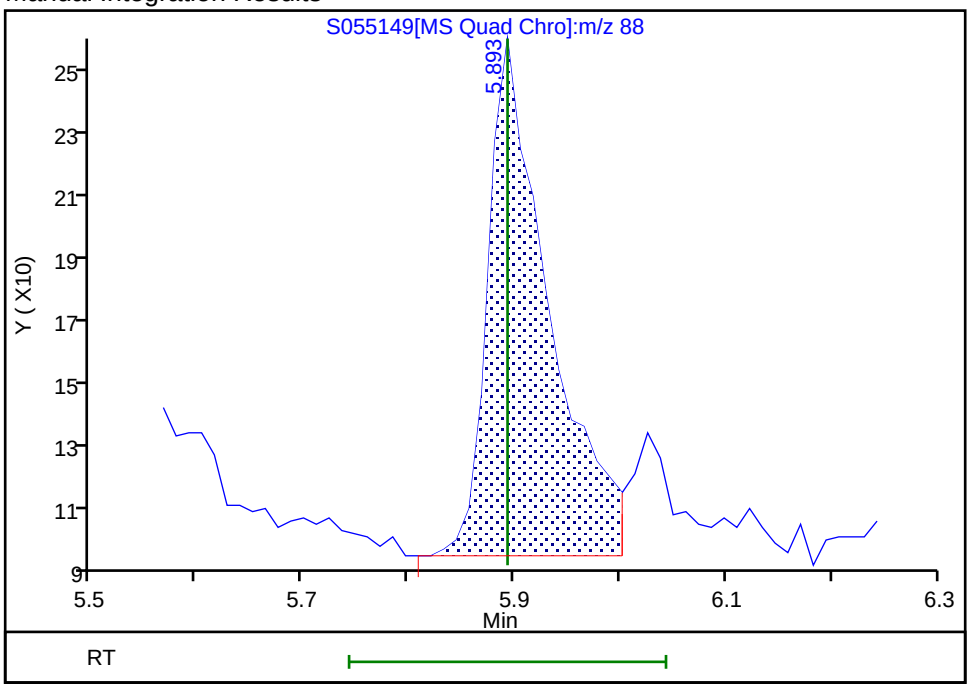
Not Detected
Expected RT: 5.89

Processing Integration Results



Manual Integration Results

RT: 5.89
Area: 662
Amount: 1.375579
Amount Units: ug/l



Reviewer: delpolitov, 19-Jan-2022 07:41:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-16_011422 | Lab Sample ID: 460-250807-24

Matrix: Water | Lab File ID: S055150.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 09:40

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 03:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.3		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055150.D
Lims ID: 460-250807-D-24
Client ID: SL-16_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 03:15:09 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-24
Misc. Info.: 460-0140361-022
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:23:25 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:30

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10337	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	1892	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	88	8412	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	22324	0.5100	
	8 1,4-Dioxane	88	5.893	5.893	0.000	84	2131	4.32	

QC Flag Legend
Processing Flags

Reagents:
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

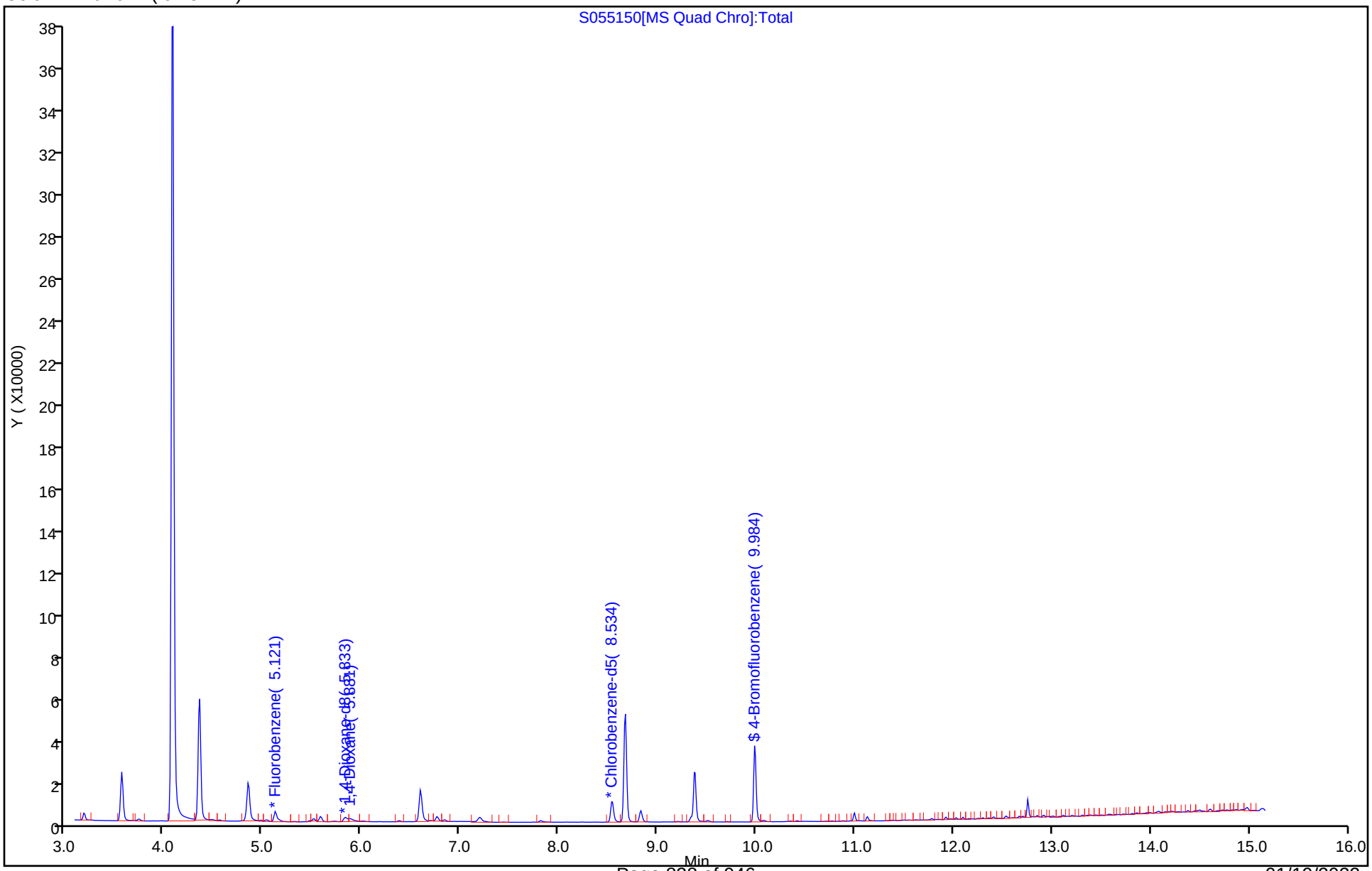
Report Date: 19-Jan-2022 09:23:31 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055150.D

Injection Date:	19-Jan-2022 03:15:09	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-24	Lab Sample ID:	460-250807-24	Worklist Smp#:	22
Client ID:	SL-16_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055150.D				
Lims ID:	460-250807-D-24				
Client ID:	SL-16_011422				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 03:15:09	ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-24				
Misc. Info.:	460-0140361-022				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:23:25	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

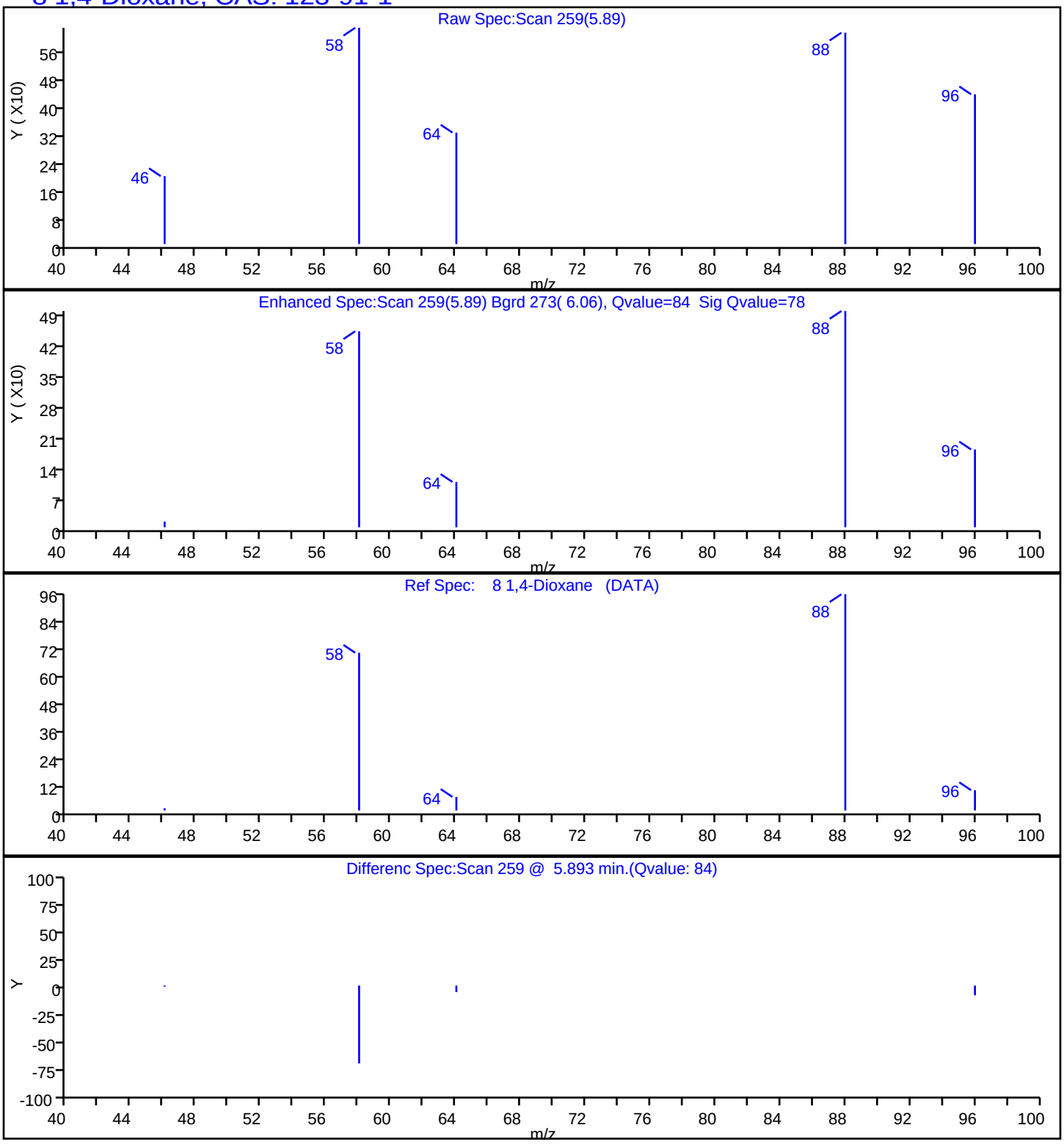
First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5100	101.99

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055150.D				
Injection Date:	19-Jan-2022 03:15:09	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-24	Lab Sample ID:	460-250807-24		
Client ID:	SL-16_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-3_011422 | Lab Sample ID: 460-250807-25

Matrix: Water | Lab File ID: S055151.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 10:25

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 03:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	103		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055151.D
Lims ID: 460-250807-D-25
Client ID: SL-3_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 03:36:53 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-25
Misc. Info.: 460-0140361-023
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:49:28 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:51

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	10782	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	58	1889	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	96	8944	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.992	0.001	96	24069	0.5171	
	8 1,4-Dioxane	88	5.906	5.905	0.001	40	383	0.7773	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

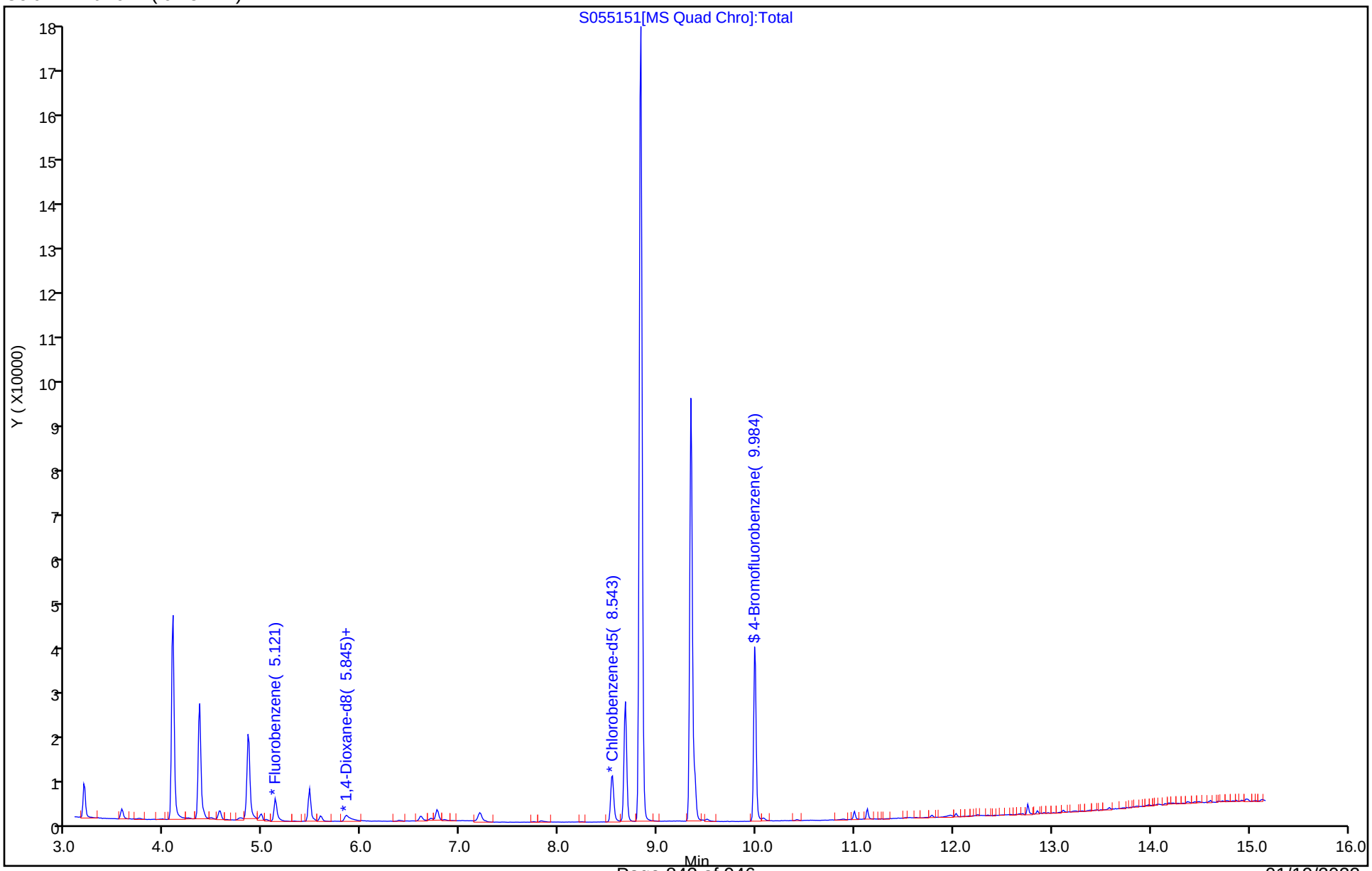
Report Date: 19-Jan-2022 10:49:28 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055151.D

Injection Date:	19-Jan-2022 03:36:53	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-25	Lab Sample ID:	460-250807-25	Worklist Smp#:	23
Client ID:	SL-3_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055151.D				
Lims ID:	460-250807-D-25				
Client ID:	SL-3_011422				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 03:36:53	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-25				
Misc. Info.:	460-0140361-023				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:49:28	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: starzecm Date: 19-Jan-2022 09:23:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5171	103.42

Manual Integration/User Assign Peak Report

Eurofins Edison

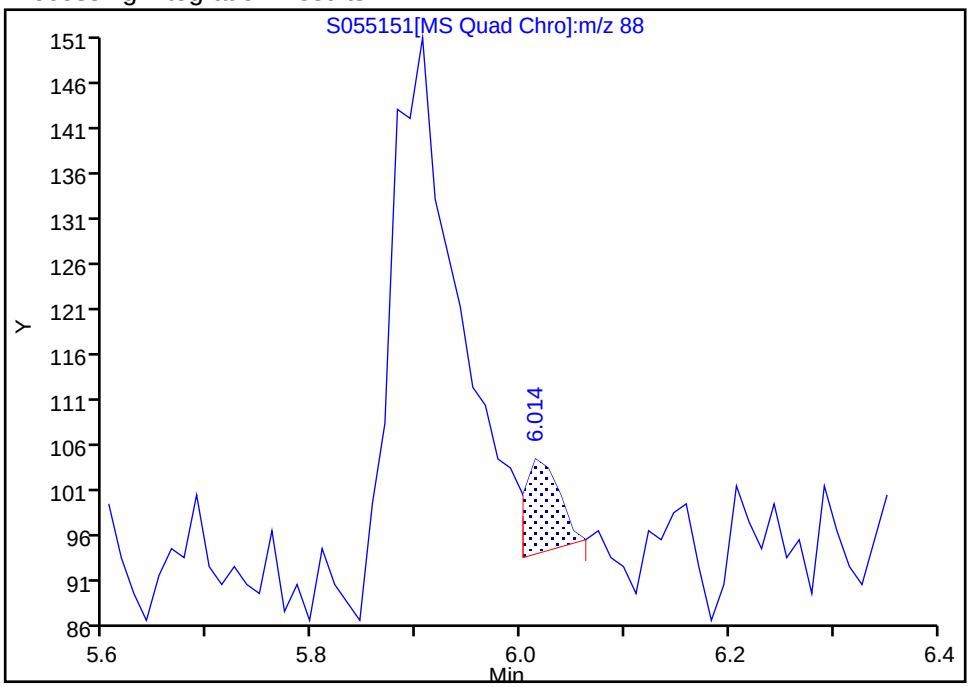
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055151.D				
Injection Date:	19-Jan-2022 03:36:53	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-25	Lab Sample ID:	460-250807-25		
Client ID:	SL-3_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

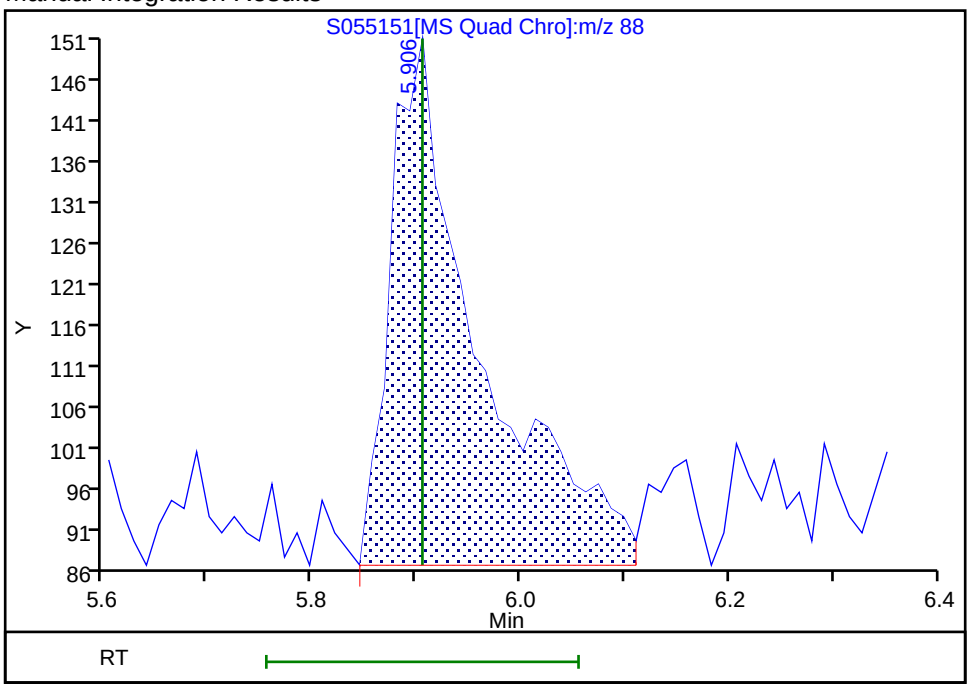
Processing Integration Results

RT: 6.01
Area: 25
Amount: 0.050738
Amount Units: ug/l



Manual Integration Results

RT: 5.91
Area: 383
Amount: 0.777304
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:49:25
Audit Action: Manually Integrated Audit Reason: Wrong peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: SL-2_011422 | Lab Sample ID: 460-250807-26

Matrix: Water | Lab File ID: S055152.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 10:45

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 03:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.4		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055152.D
Lims ID: 460-250807-D-26
Client ID: SL-2_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 03:58:37 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-26
Misc. Info.: 460-0140361-024
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:24:06 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10763	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.845	-0.012	0	2026	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9044	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	23250	0.4940	
	8 1,4-Dioxane	88	5.893	5.893	0.000	82	2841	5.38	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

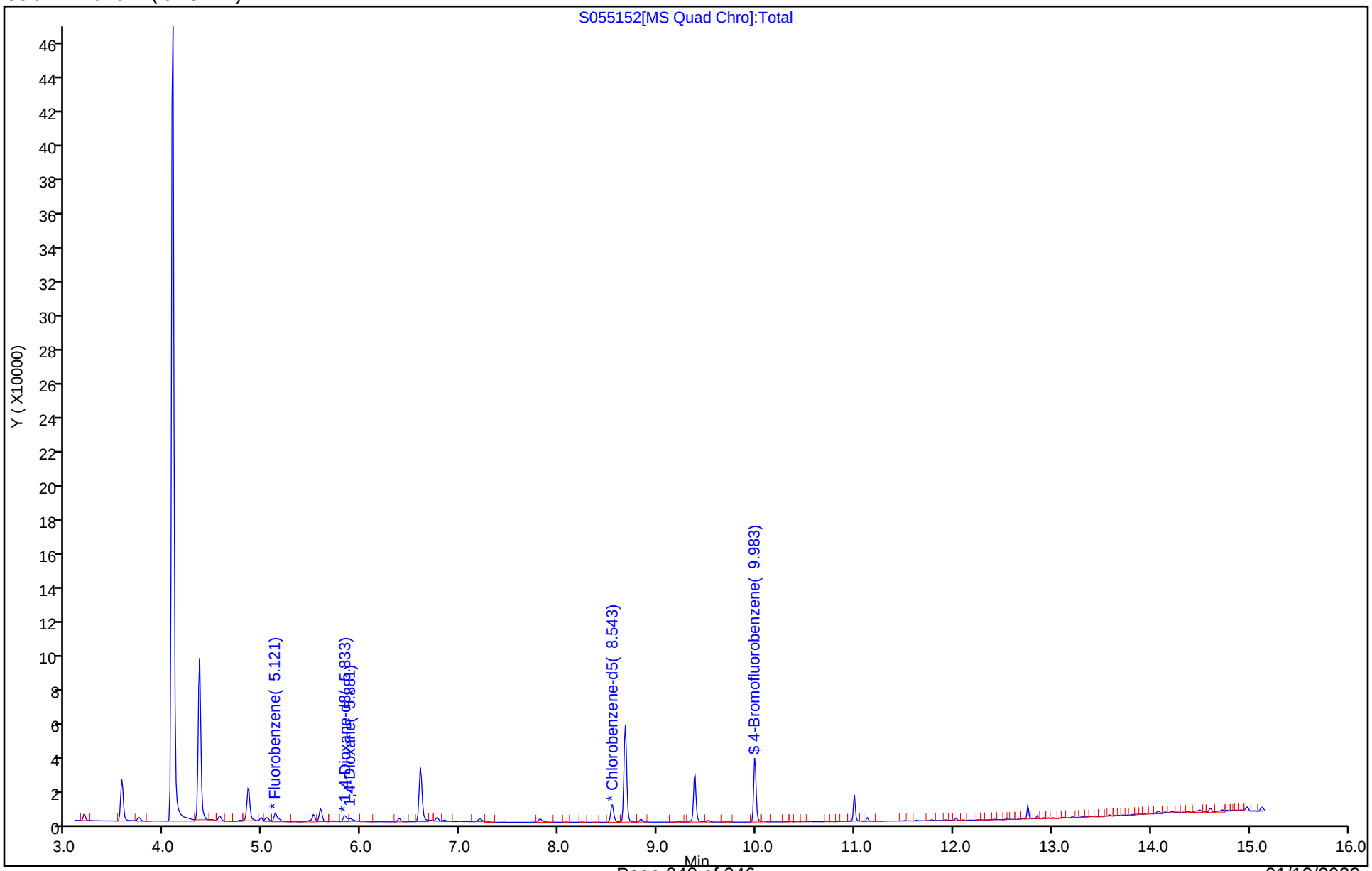
Report Date: 19-Jan-2022 09:24:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055152.D

Injection Date:	19-Jan-2022 03:58:37	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-26	Lab Sample ID:	460-250807-26	Worklist Smp#:	24
Client ID:	SL-2_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055152.D				
Lims ID:	460-250807-D-26				
Client ID:	SL-2_011422				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 03:58:37	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-26				
Misc. Info.:	460-0140361-024				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:24:06	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

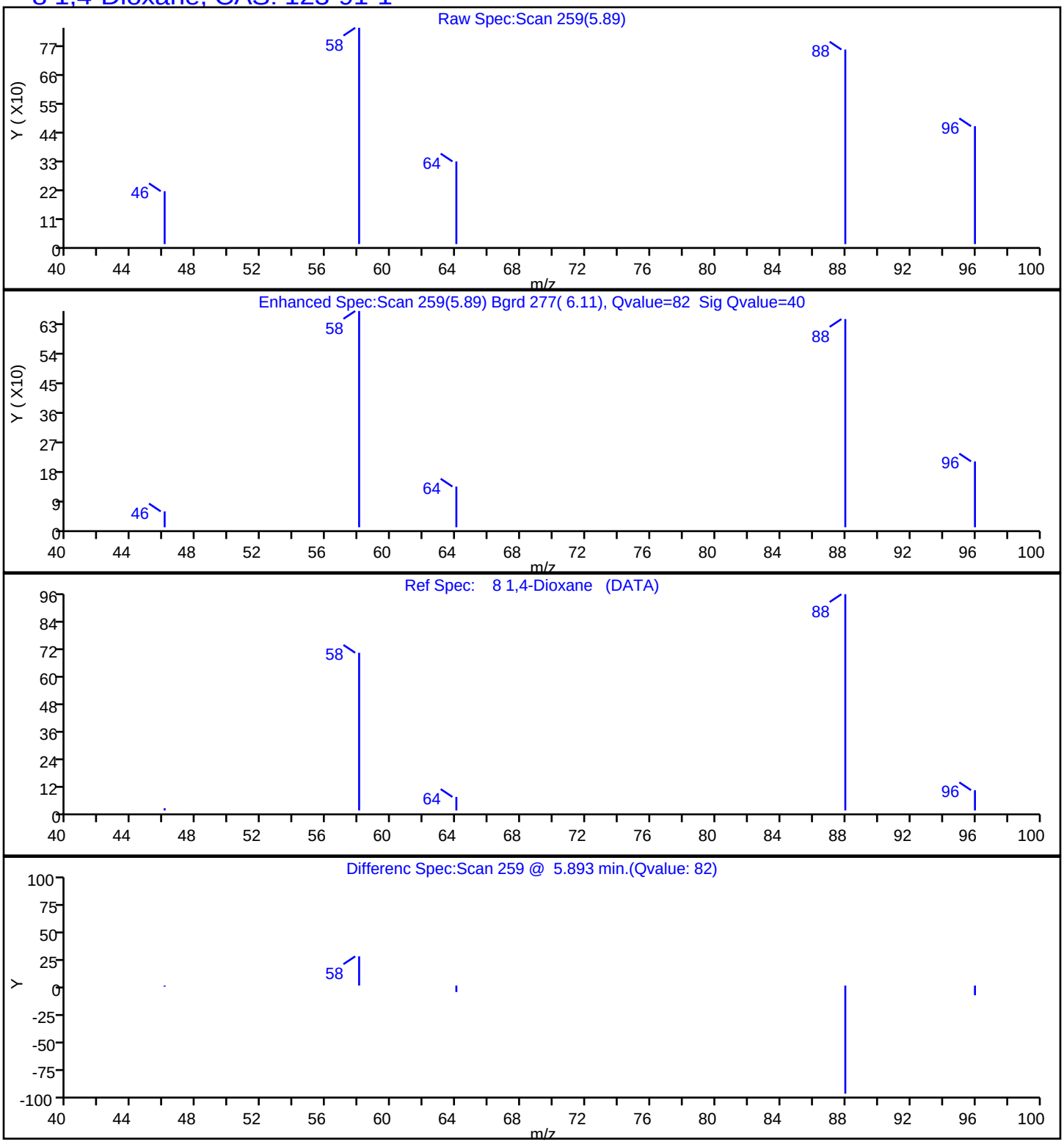
First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.4940	98.80

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055152.D				
Injection Date:	19-Jan-2022 03:58:37	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-26	Lab Sample ID:	460-250807-26		
Client ID:	SL-2_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

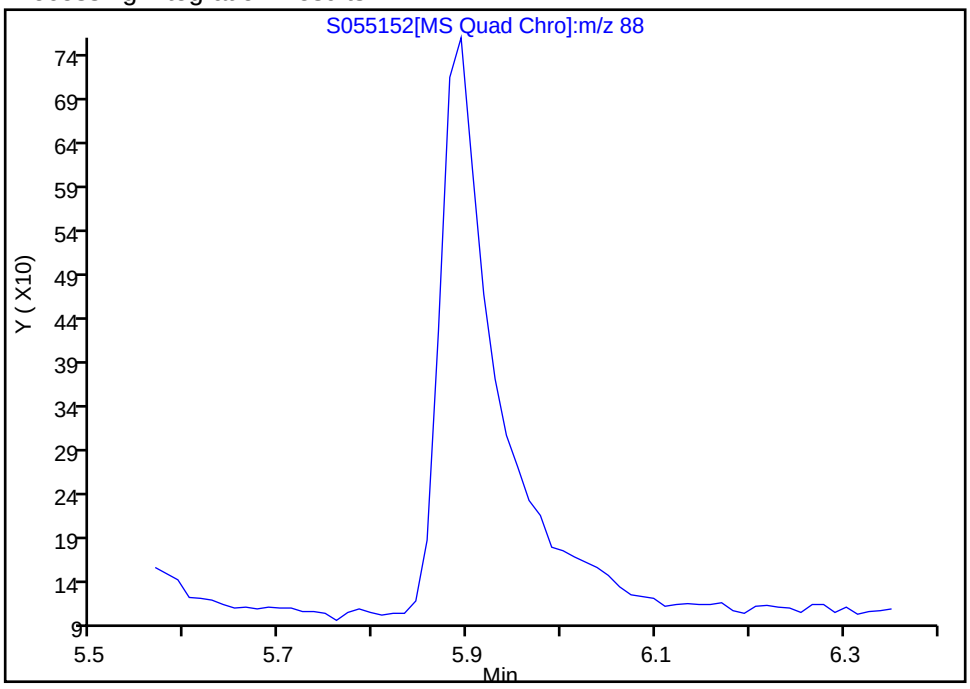
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055152.D				
Injection Date:	19-Jan-2022 03:58:37	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-26	Lab Sample ID:	460-250807-26		
Client ID:	SL-2_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

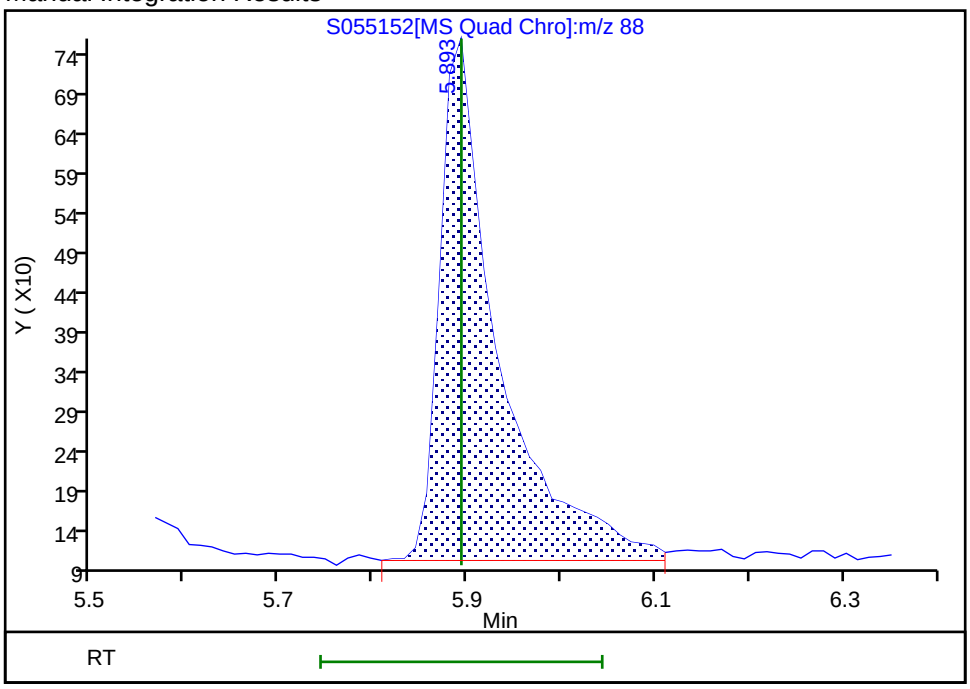
Not Detected
Expected RT: 5.89

Processing Integration Results



Manual Integration Results

RT: 5.89
Area: 2841
Amount: 5.375956
Amount Units: ug/l



Reviewer: delpolitov, 19-Jan-2022 07:41:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: MH-1231_011422 | Lab Sample ID: 460-250807-27

Matrix: Water | Lab File ID: S055153.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 11:35

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 04:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.1		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055153.D
Lims ID: 460-250807-D-27
Client ID: SAMH-1231_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 04:20:21 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-27
Misc. Info.: 460-0140361-025
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:49:44 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:29

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10266	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	83	2160	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	8721	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	90	23015	0.5071	
	8 1,4-Dioxane	88	5.893	5.905	-0.012	86	2863	5.08	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

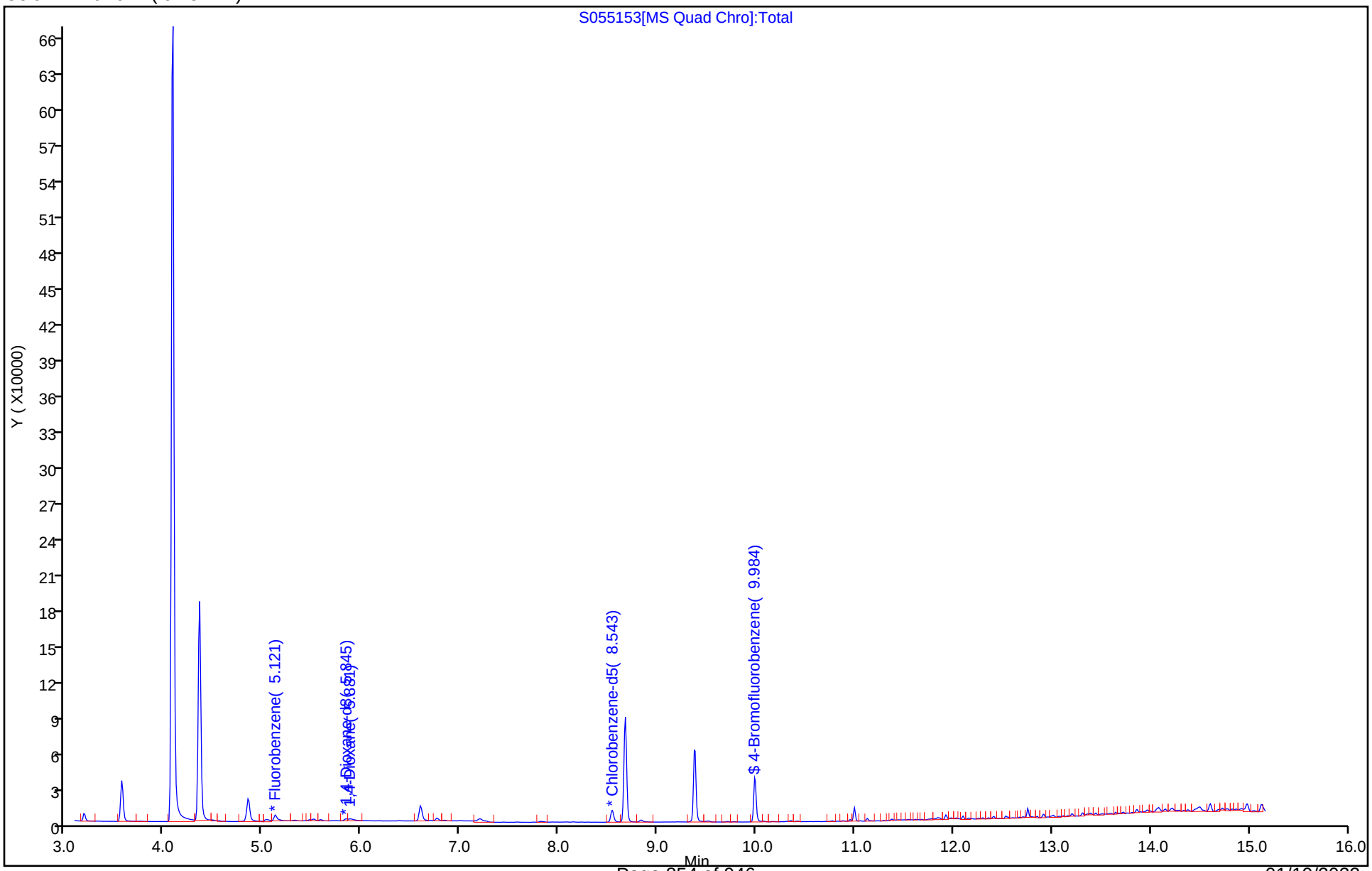
Report Date: 19-Jan-2022 10:49:44 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055153.D

Injection Date:	19-Jan-2022 04:20:21	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-27	Lab Sample ID:	460-250807-27	Worklist Smp#:	25
Client ID:	SAMH-1231_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055153.D
Lims ID: 460-250807-D-27
Client ID: SAMH-1231_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 04:20:21 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-27
Misc. Info.: 460-0140361-025
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:49:44 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

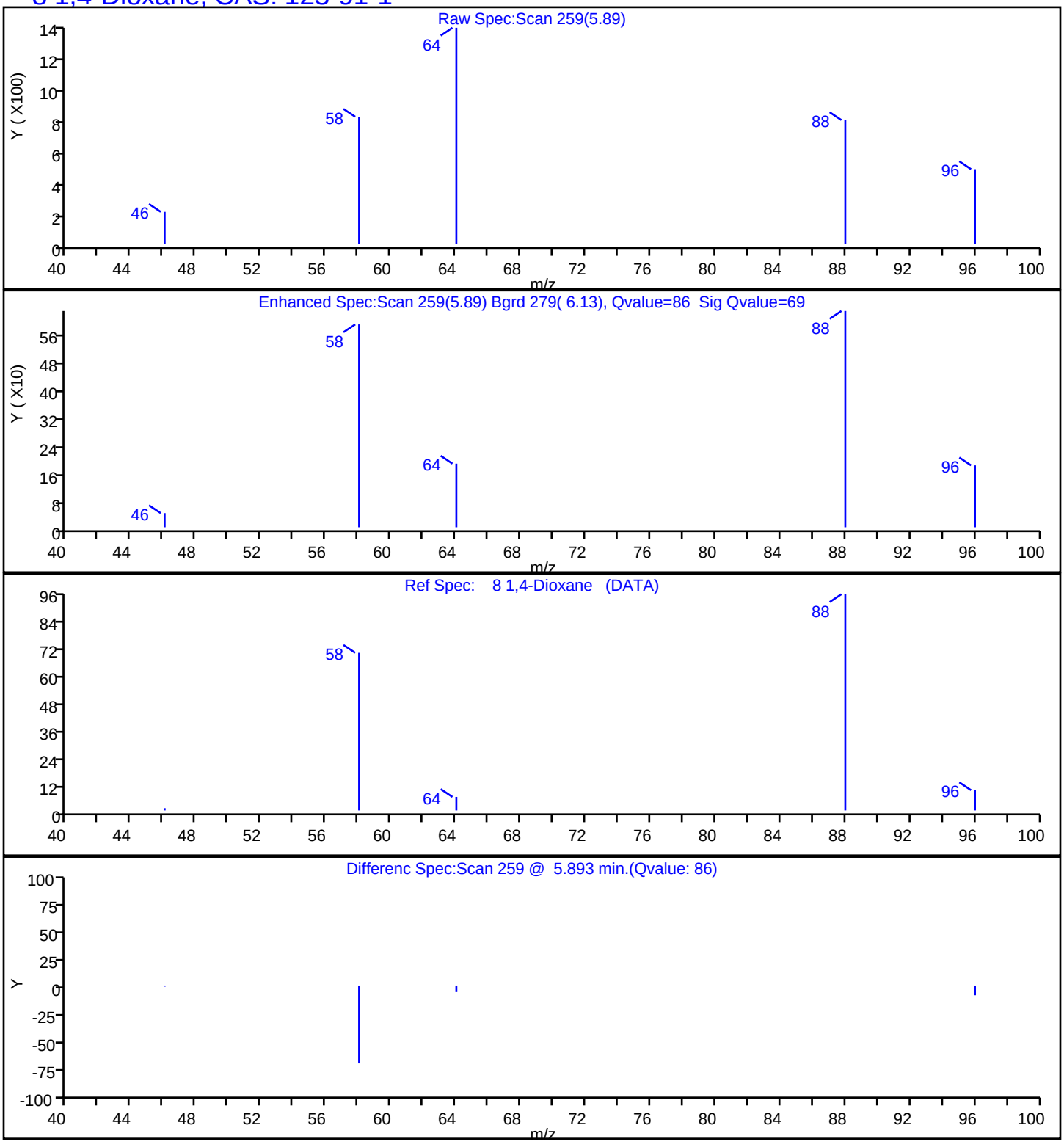
First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5071	101.42

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055153.D				
Injection Date:	19-Jan-2022 04:20:21	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-27	Lab Sample ID:	460-250807-27		
Client ID:	SAMH-1231_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



Manual Integration/User Assign Peak Report

Eurofins Edison

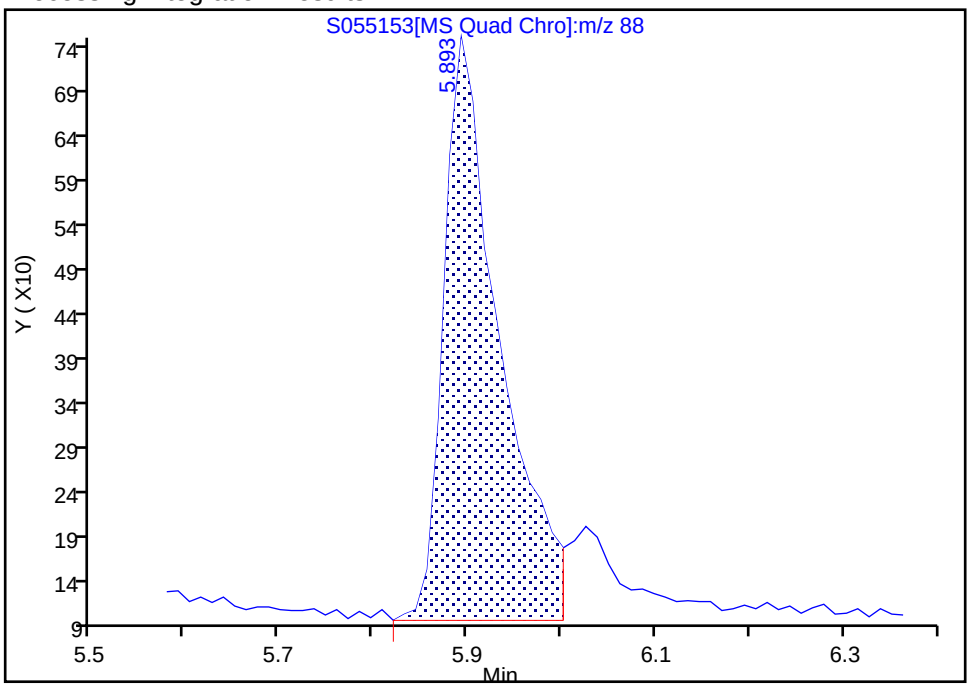
Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055153.D				
Injection Date:	19-Jan-2022 04:20:21	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-27	Lab Sample ID:	460-250807-27		
Client ID:	SAMH-1231_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

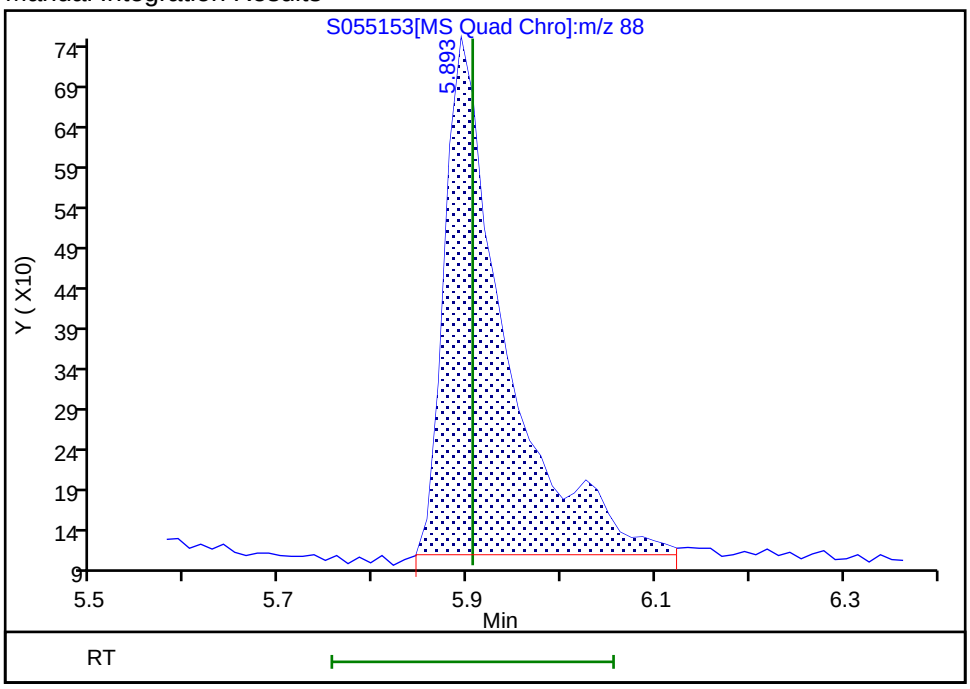
Processing Integration Results

RT: 5.89
Area: 2705
Amount: 4.801063
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 2863
Amount: 5.081495
Amount Units: ug/l



Reviewer: xuyvo, 19-Jan-2022 10:49:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: MH-1244_011422 | Lab Sample ID: 460-250807-28

Matrix: Water | Lab File ID: S055154.D

Analysis Method: 8260D SIM | Date Collected: 01/14/2022 12:00

Sample wt/vol: 10(mL) | Date Analyzed: 01/19/2022 04:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	22		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055154.D
Lims ID: 460-250807-D-28
Client ID: SAMH-1244_011422
Sample Type: Client
Inject. Date: 19-Jan-2022 04:42:06 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 460-250807-D-28
Misc. Info.: 460-0140361-026
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 09:24:46 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:52

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	11227	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	2096	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9669	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	25750	0.5118	
	8 1,4-Dioxane	88	5.881	5.893	-0.012	95	12090	22.1	

QC Flag Legend
Processing Flags

Reagents:
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

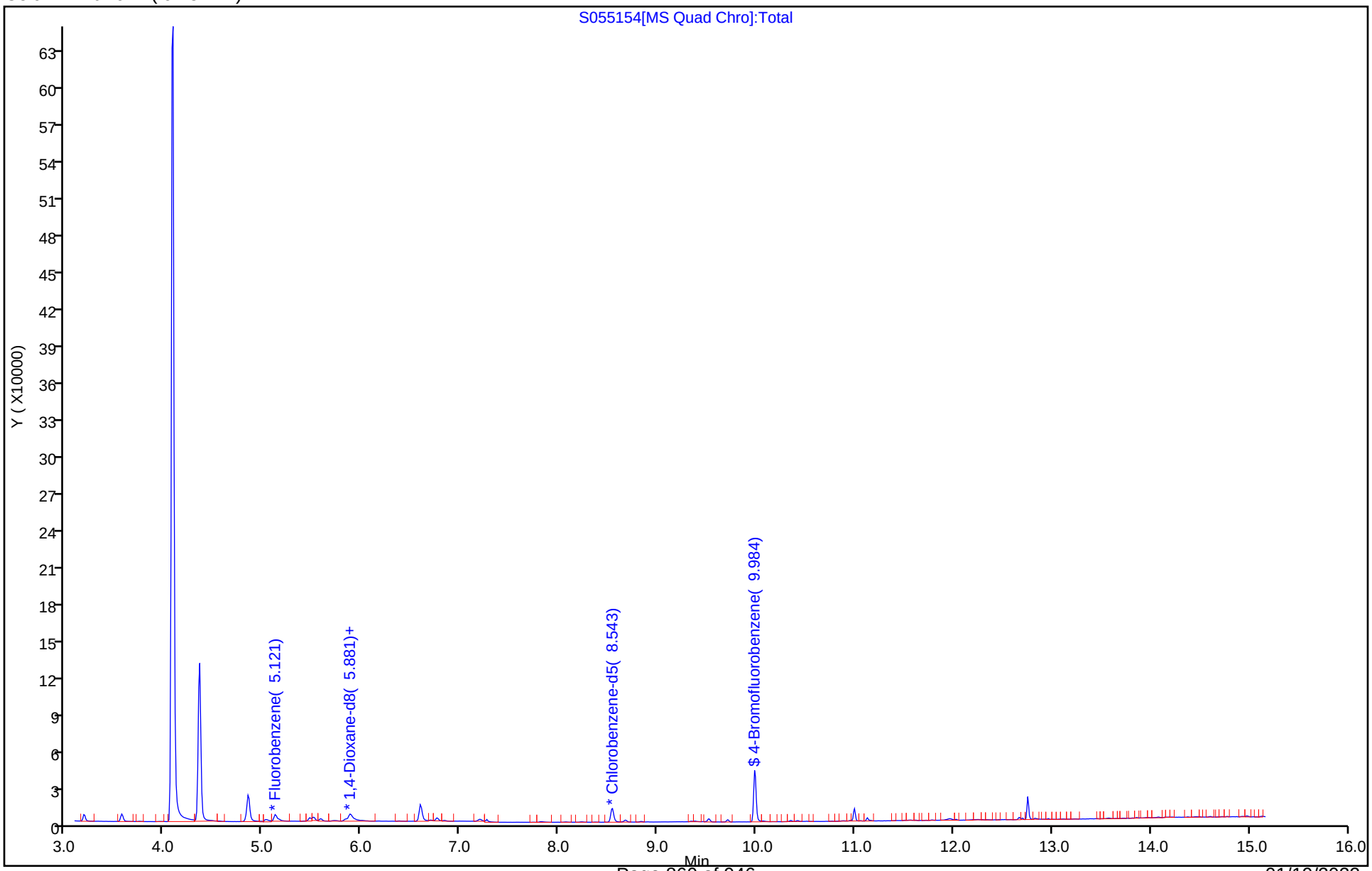
Report Date: 19-Jan-2022 09:24:53 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055154.D

Injection Date:	19-Jan-2022 04:42:06	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	460-250807-D-28	Lab Sample ID:	460-250807-28	Worklist Smp#:	26
Client ID:	SAMH-1244_011422				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055154.D				
Lims ID:	460-250807-D-28				
Client ID:	SAMH-1244_011422				
Sample Type:	Client				
Inject. Date:	19-Jan-2022 04:42:06	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	460-250807-D-28				
Misc. Info.:	460-0140361-026				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 09:24:46	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

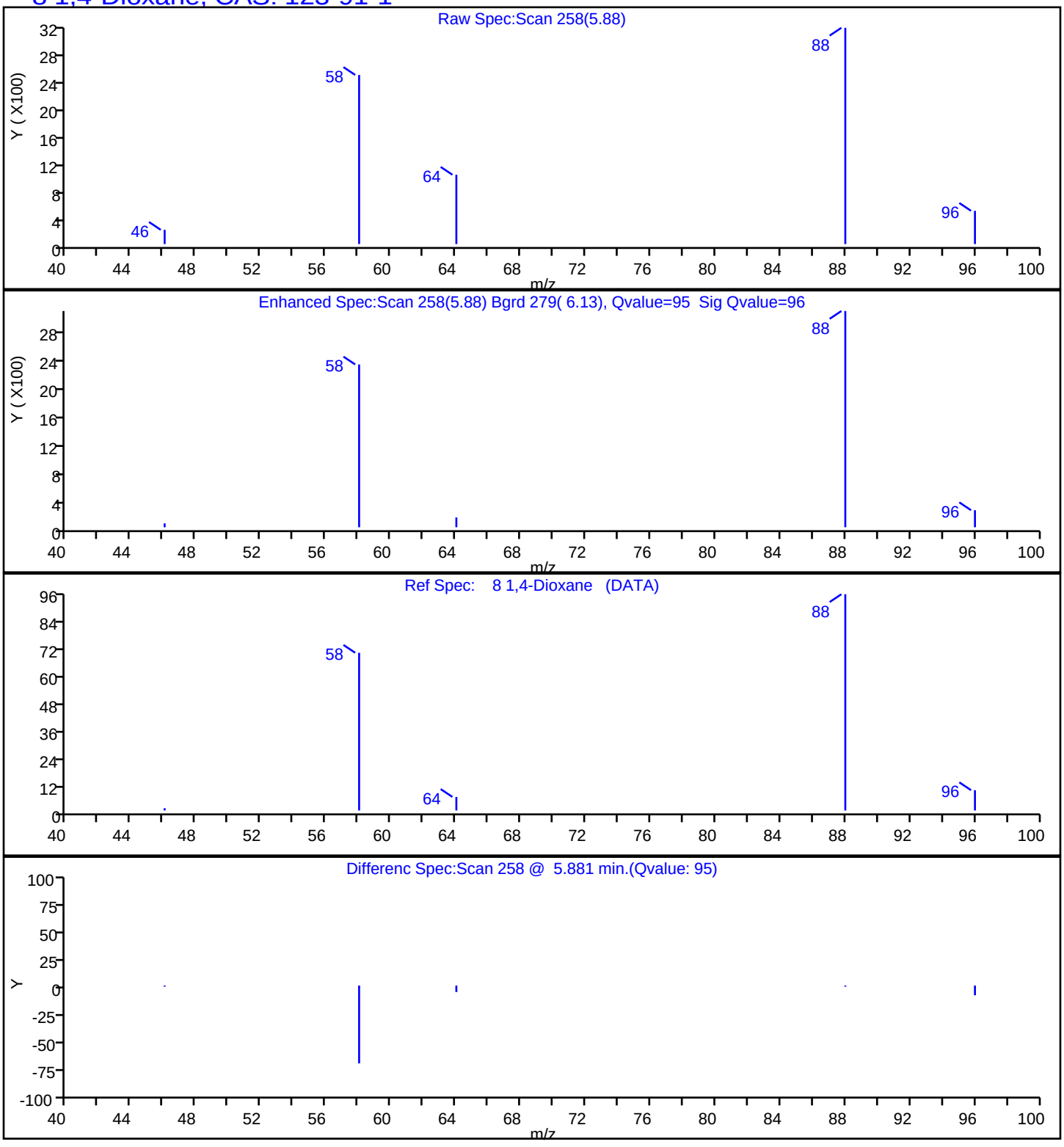
First Level Reviewer: starzecm Date: 19-Jan-2022 09:24:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5118	102.35

Eurofins Edison

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055154.D				
Injection Date:	19-Jan-2022 04:42:06	Instrument ID:	CVOAMS14		
Lims ID:	460-250807-D-28	Lab Sample ID:	460-250807-28		
Client ID:	SAMH-1244_011422				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

8 1,4-Dioxane, CAS: 123-91-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 820935

SDG No.:

Instrument ID: CVOAMS14 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 12/27/2021 13:10 Calibration End Date: 12/27/2021 15:42 Calibration ID: 88511

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD04 460-820935/3	S054839.D
Level 2	STD1 460-820935/4	S054840.D
Level 3	STD5 460-820935/5	S054841.D
Level 4	STD10 460-820935/6	S054842.D
Level 5	STD20 460-820935/7	S054843.D
Level 6	STD30 460-820935/8	S054844.D
Level 7	STD40 460-820935/9	S054845.D
Level 8	STD50 460-820935/10	S054846.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chloroform	+++++ 7.5843	8.0378 6.9883	8.2558 7.3100	7.7131	7.5000	Ave		7.6271			0.2000	5.6		20.0			
Benzene	+++++ 16.896	20.652 16.054	20.305 16.755	17.478	18.788	Ave		18.133			0.5000	10.0		20.0			
1,4-Dioxane	3.0527 2.5559	2.7327 2.2131	2.9359 2.4892	2.4909	2.3968	Ave		2.6084				10.8		20.0			
Ethylene Dibromide	2.4661 2.5547	2.5087 2.5384	2.6993 2.6248	2.5882	2.4829	Ave		2.5579			0.1000	3.0		20.0			
1,2,3-Trichloropropane	0.9119 0.9101	0.8668 0.8935	1.0689 0.9180	0.9060	0.9184	Ave		0.9242				6.6		20.0			
1,2-Dibromo-3-Chloropropane	0.7362 0.5221	0.5759 0.5097	0.5947 0.5315	0.5225	0.5260	Ave		0.5648			0.0500	13.3		20.0			
4-Bromofluorobenzene	2.6066 2.6619	2.5813 2.6377	2.5352 2.5985	2.6309	2.5636	Ave		2.6020				1.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Edison Job No.: 460-250807-1 Analy Batch No.: 820935

SDG No.:

Instrument ID: CVOAMS14 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 12/27/2021 13:10 Calibration End Date: 12/27/2021 15:42 Calibration ID: 88511

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD04 460-820935/3	S054839.D
Level 2	STD1 460-820935/4	S054840.D
Level 3	STD5 460-820935/5	S054841.D
Level 4	STD10 460-820935/6	S054842.D
Level 5	STD20 460-820935/7	S054843.D
Level 6	STD30 460-820935/8	S054844.D
Level 7	STD40 460-820935/9	S054845.D
Level 8	STD50 460-820935/10	S054846.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	FB	Ave	+++++	6184	7848	15636	27849	+++++	0.0400	0.0500	0.100	0.200
			73909	137865	276026			0.500	1.00	2.00		
Benzene	FB	Ave	+++++	15889	19302	35432	69764	+++++	0.0400	0.0500	0.100	0.200
			164649	316720	632685			0.500	1.00	2.00		
1,4-Dioxane	DXE	Ave	190	408	2017	3841	7924	0.400	1.00	5.00	10.0	20.0
			12345	16297	21183			30.0	40.0	50.0		
Ethylene Dibromide	CBNZ d5	Ave	814	1725	2197	4488	8138	0.0200	0.0400	0.0500	0.100	0.200
			20910	42128	84929			0.500	1.00	2.00		
1,2,3-Trichloropropane	CBNZ d5	Ave	301	596	870	1571	3010	0.0200	0.0400	0.0500	0.100	0.200
			7449	14829	29704			0.500	1.00	2.00		
1,2-Dibromo-3-Chloropropane	CBNZ d5	Ave	243	396	484	906	1724	0.0200	0.0400	0.0500	0.100	0.200
			4273	8459	17197			0.500	1.00	2.00		
4-Bromofluorobenzene	CBNZ d5	Ave	21510	22186	20634	22810	21006	0.500	0.500	0.500	0.500	0.500
			21788	21888	21019			0.500	0.500	0.500		

Curve Type Legend
Ave = Average ISTD

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054839.D
Lims ID: STD04
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Dec-2021 13:10:35 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD04
Misc. Info.: 460-0139637-003
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:07 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 11:09:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	9661	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	32	1556	10.0	10.0	M
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	8252	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	21510	0.5000	0.5009	
	6 Chloroform	83	4.357	4.357	0.000	100	3641	0.0200	0.0247	
	7 Benzene	78	4.836	4.836	0.000	100	9005	0.0200	0.0257	
	8 1,4-Dioxane	88	5.930	5.893	0.037	17	190	0.4000	0.4681	M
	9 Ethylene Dibromide	109	8.002	8.002	0.000	99	814	0.0200	0.0193	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	97	301	0.0200	0.0197	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	89	243	0.0200	0.0261	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SIMDIOX50_00068	Amount Added:	4.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added:	1.00	Units: uL	
SimissurNEW_00053	Amount Added:	2.00	Units: uL	Run Reagent

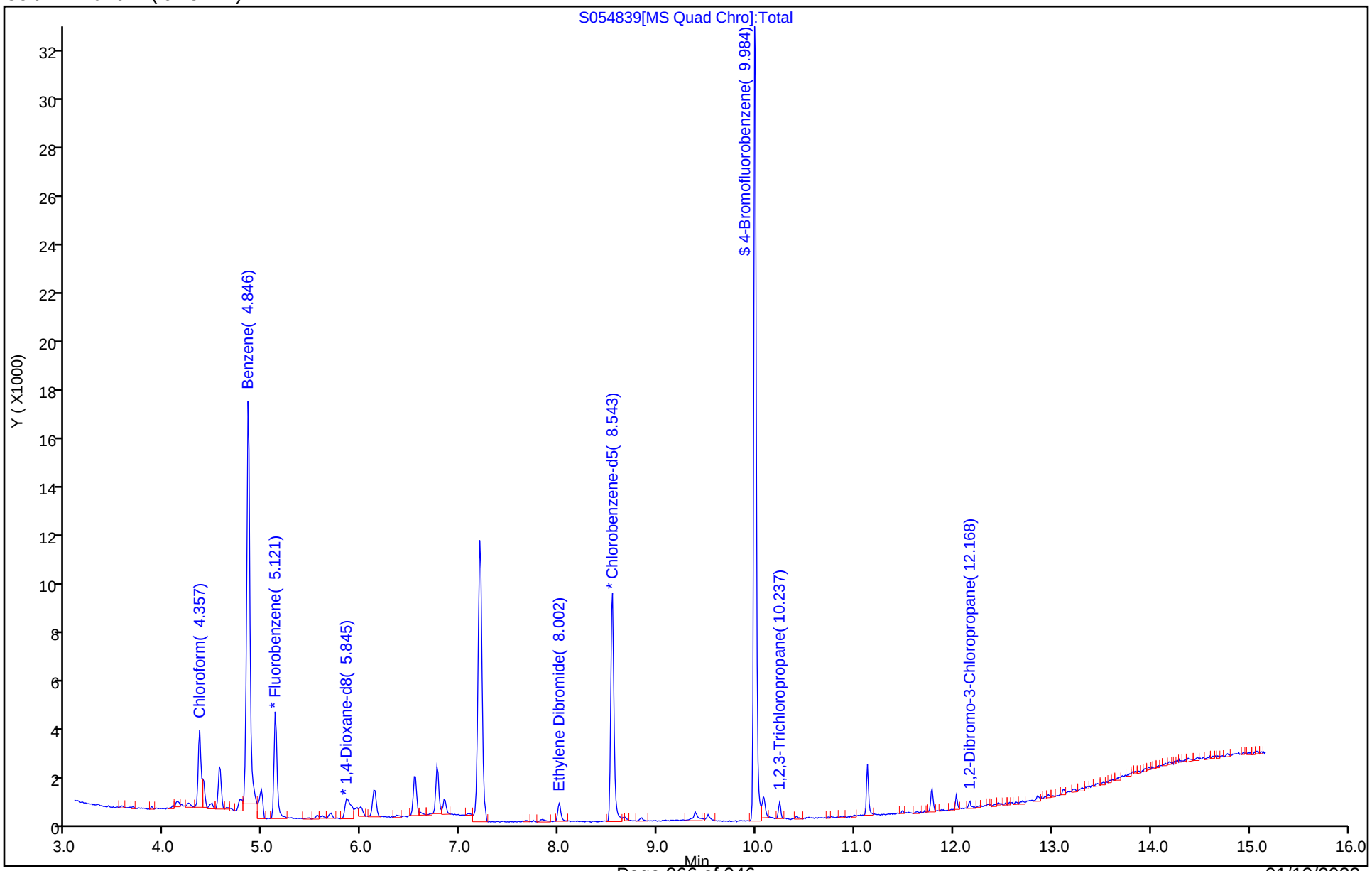
Report Date: 28-Dec-2021 11:10:08 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054839.D

Injection Date:	27-Dec-2021 13:10:35	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD04			Worklist Smp#:	3
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

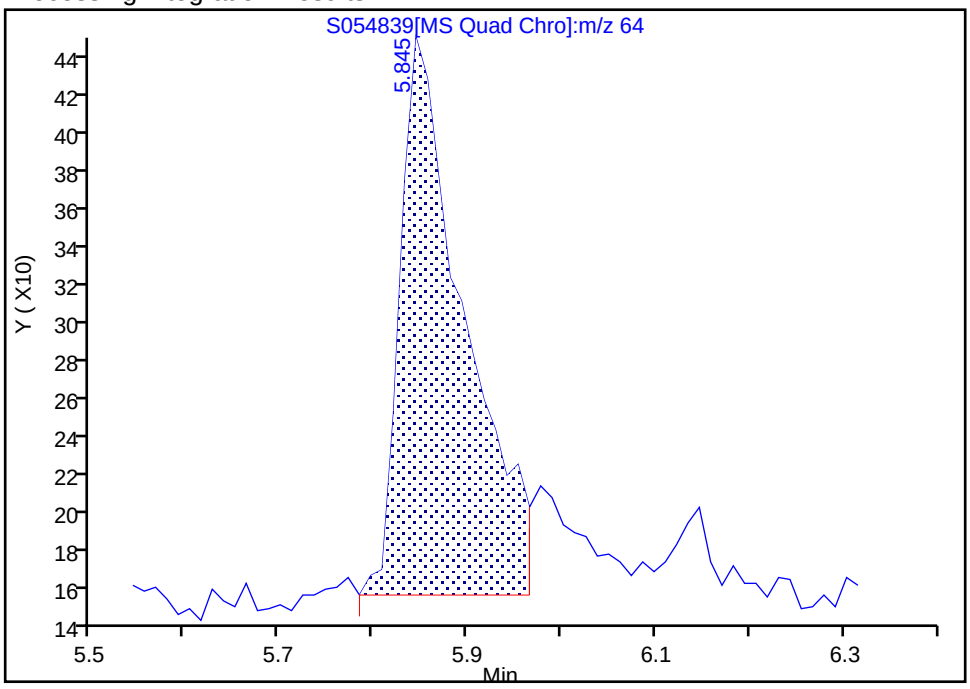
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054839.D
Injection Date: 27-Dec-2021 13:10:35 Instrument ID: CVOAMS14
Lims ID: STD04
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 2 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

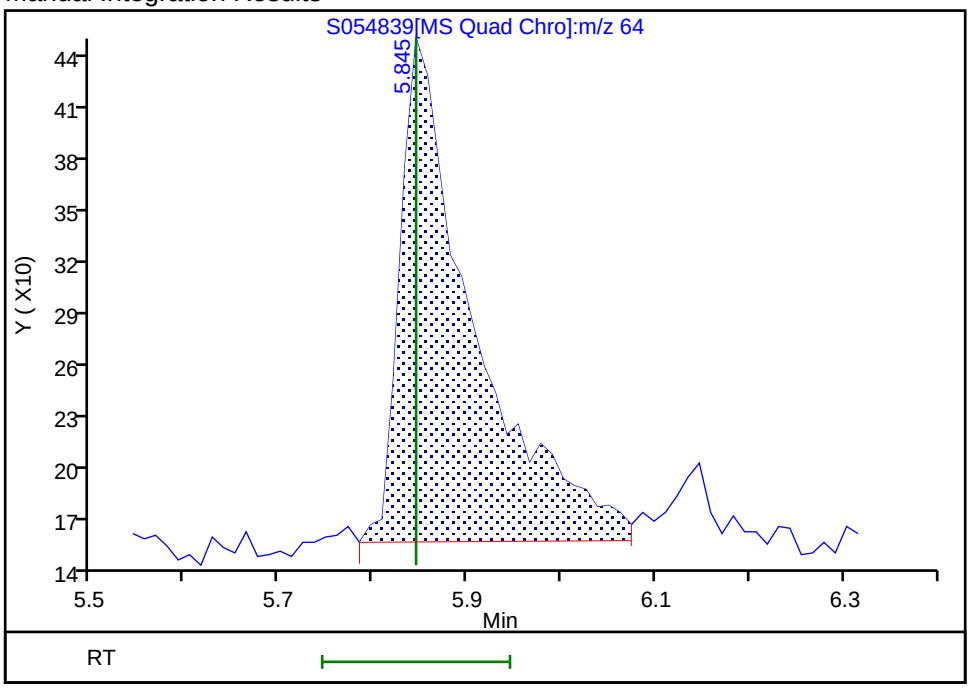
Processing Integration Results

RT: 5.85
Area: 1368
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 5.85
Area: 1556
Amount: 10.000000
Amount Units: ug/l



Reviewer: xuyvo, 28-Dec-2021 10:37:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

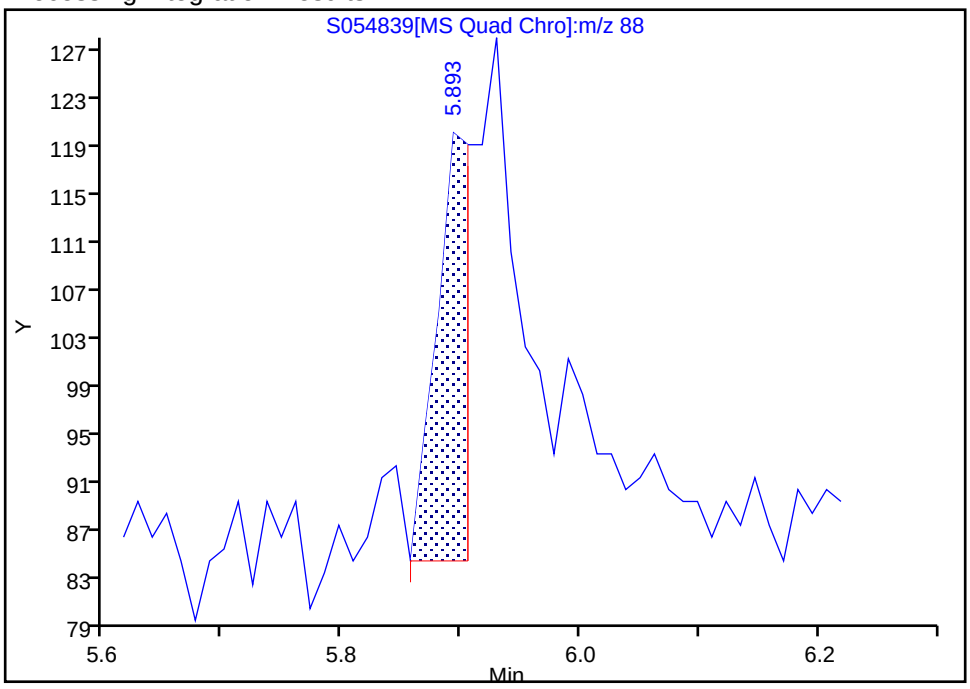
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054839.D
Injection Date: 27-Dec-2021 13:10:35 Instrument ID: CVOAMS14
Lims ID: STD04
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

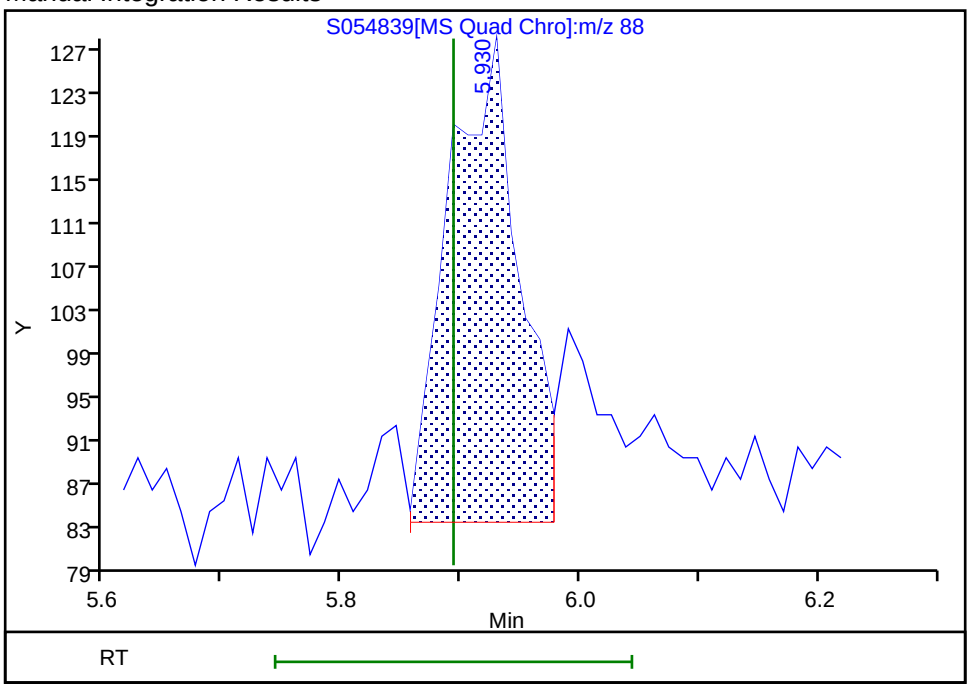
Processing Integration Results

RT: 5.89
Area: 75
Amount: 0.212615
Amount Units: ug/l



Manual Integration Results

RT: 5.93
Area: 190
Amount: 0.468132
Amount Units: ug/l



Reviewer: starzecm, 27-Dec-2021 14:43:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054840.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Dec-2021 13:32:20 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0139637-004
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:09 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: starzecm Date: 27-Dec-2021 14:42:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	66	9617	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	34	1493	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	97	8595	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	98	22186	0.5000	0.4960	
6 Chloroform	83	4.357	4.357	0.000	100	6184	0.0400	0.0422	
7 Benzene	78	4.836	4.836	0.000	73	15889	0.0400	0.0456	
8 1,4-Dioxane	88	5.905	5.893	0.012	45	408	1.00	1.05	M
9 Ethylene Dibromide	109	8.002	8.002	0.000	100	1725	0.0400	0.0392	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	98	596	0.0400	0.0375	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	92	396	0.0400	0.0408	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SIMDIOX50_00068 Amount Added: 10.00 Units: uL
VMB/C/MIX1SIM_00046 Amount Added: 2.00 Units: uL
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

Report Date: 28-Dec-2021 11:10:09 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054840.D

Injection Date: 27-Dec-2021 13:32:20 Instrument ID: CVOAMS14 Operator ID:

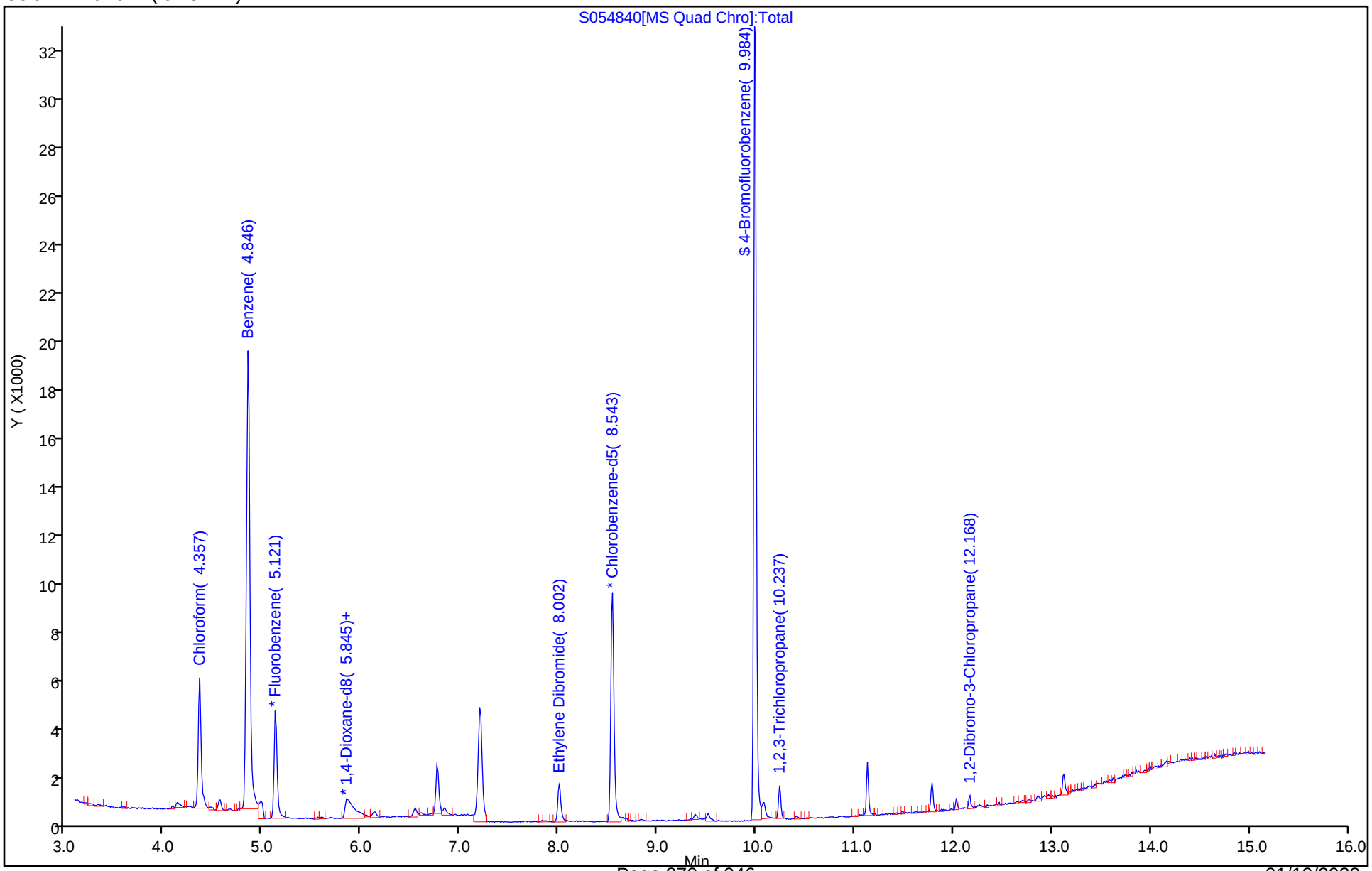
Lims ID: STD1 Worklist Smp#: 4

Client ID:

Purge Vol: 10.000 mL Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

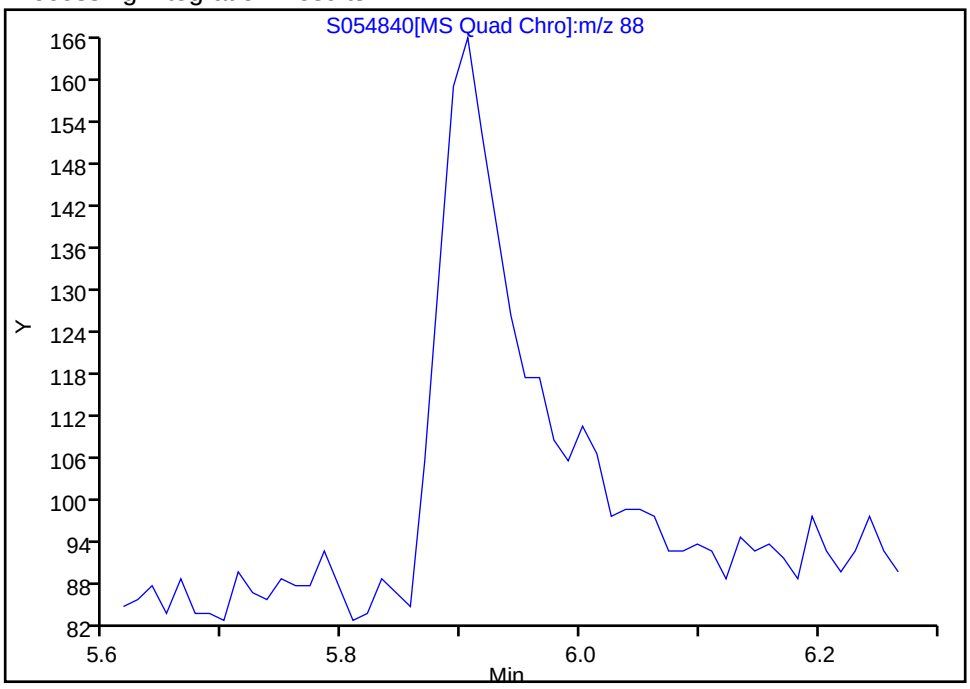
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054840.D
Injection Date: 27-Dec-2021 13:32:20 Instrument ID: CVOAMS14
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

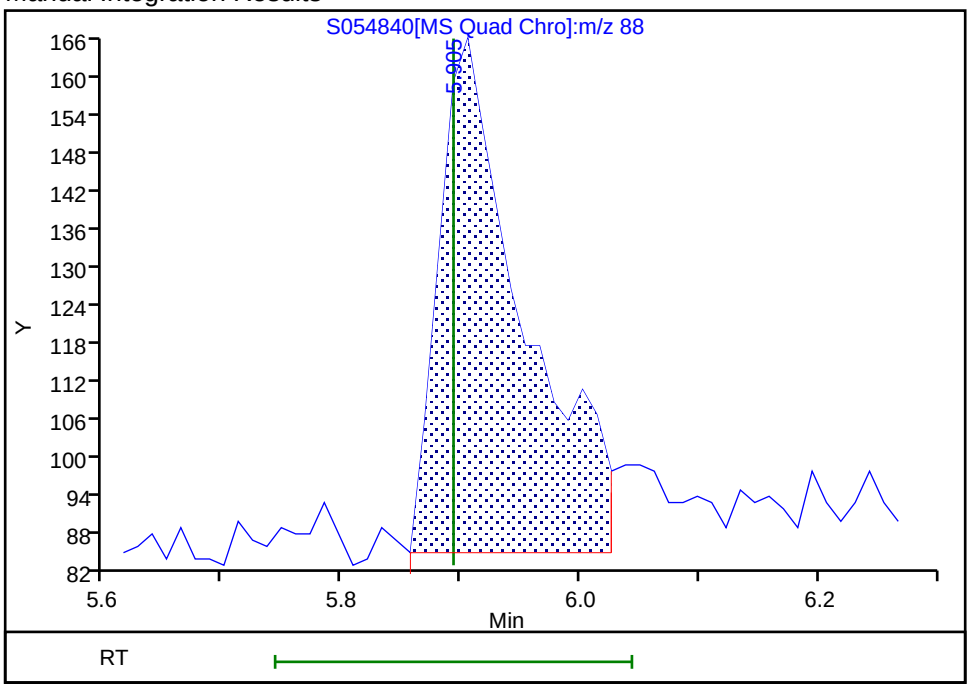
Not Detected
Expected RT: 5.89

Processing Integration Results



Manual Integration Results

RT: 5.91
Area: 408
Amount: 1.047669
Amount Units: ug/l



Reviewer: xuyvo, 28-Dec-2021 10:40:49
Audit Action: Split an Integrated Peak Audit Reason: Assign Peak

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054841.D
Lims ID: STD5
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 27-Dec-2021 13:54:03 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0139637-005
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:10 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 10:38:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	66	9506	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	31	1374	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	98	8139	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	98	20634	0.5000	0.4872	
6 Chloroform	83	4.357	4.357	0.000	98	7848	0.0500	0.0541	
7 Benzene	78	4.836	4.836	0.000	65	19302	0.0500	0.0560	
8 1,4-Dioxane	88	5.893	5.893	0.000	90	2017	5.00	5.63	
9 Ethylene Dibromide	109	8.002	8.002	0.000	98	2197	0.0500	0.0528	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	98	870	0.0500	0.0578	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	88	484	0.0500	0.0526	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00068	Amount Added: 20.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added: 1.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

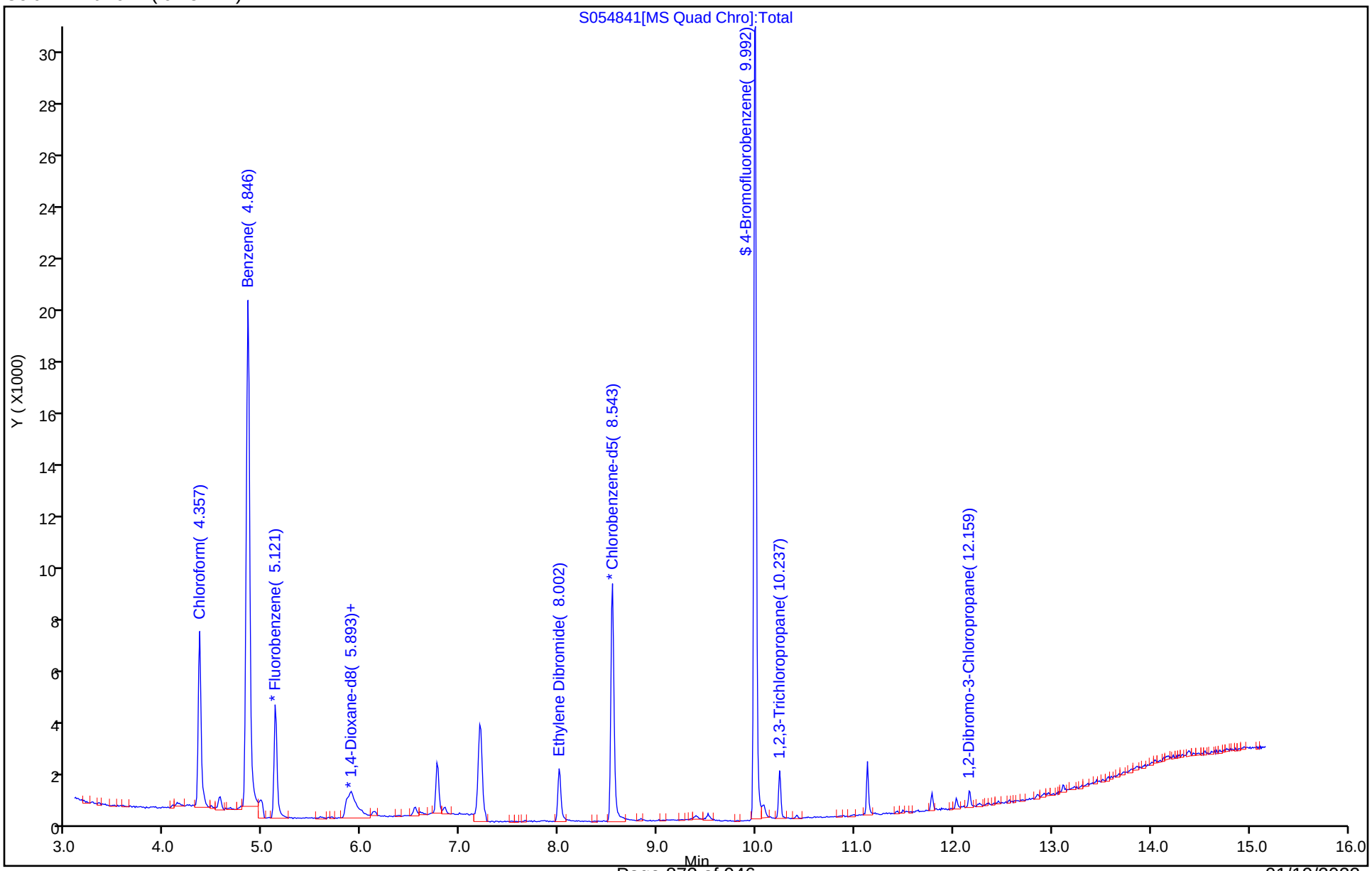
Report Date: 28-Dec-2021 11:10:10 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054841.D

Injection Date:	27-Dec-2021 13:54:03	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD5			Worklist Smp#:	5
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054842.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Dec-2021 14:15:51 ALS Bottle#: 0 Worklist Smp#: 6
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Misc. Info.: 460-0139637-006
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:12 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 10:39:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	66	10136	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	30	1542	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	97	8670	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	96	22810	0.5000	0.5056	
6 Chloroform	83	4.357	4.357	0.000	98	15636	0.1000	0.1011	
7 Benzene	78	4.836	4.836	0.000	49	35432	0.1000	0.0964	
8 1,4-Dioxane	88	5.893	5.893	0.000	94	3841	10.0	9.55	
9 Ethylene Dibromide	109	8.002	8.002	0.000	97	4488	0.1000	0.1012	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	98	1571	0.1000	0.0980	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	92	906	0.1000	0.0925	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00068	Amount Added: 20.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added: 1.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

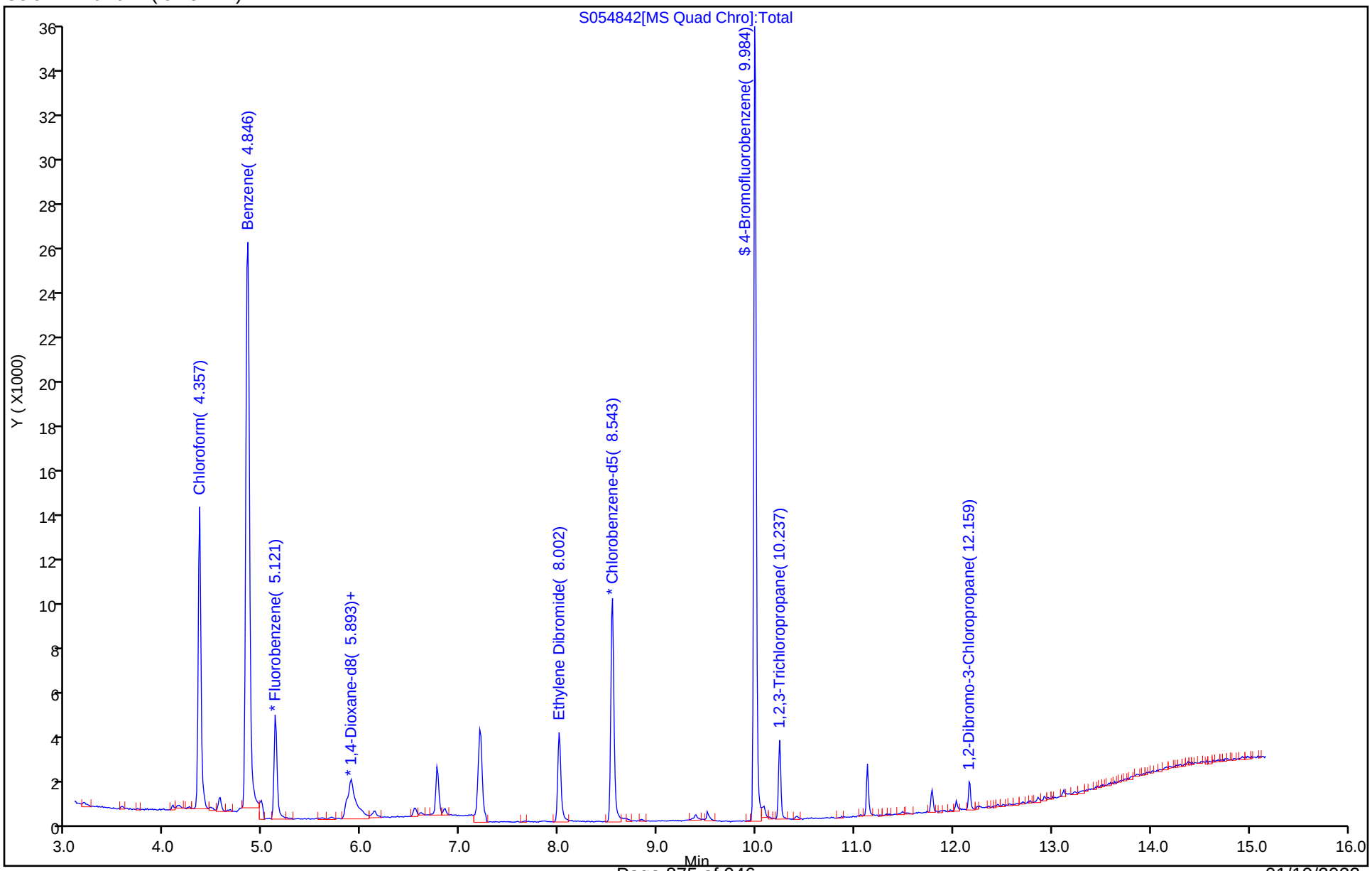
Report Date: 28-Dec-2021 11:10:12 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054842.D

Injection Date:	27-Dec-2021 14:15:51	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD10			Worklist Smp#:	6
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054843.D
Lims ID: STD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Dec-2021 14:37:37 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0139637-007
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:13 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: starzecm Date: 27-Dec-2021 14:59:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	9283	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	33	1653	10.0	10.0	M
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	92	8194	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	21006	0.5000	0.4926	
6 Chloroform	83	4.357	4.357	0.000	99	27849	0.2000	0.1967	
7 Benzene	78	4.836	4.836	0.000	39	69764	0.2000	0.2072	
8 1,4-Dioxane	88	5.893	5.893	0.000	98	7924	20.0	18.4	
9 Ethylene Dibromide	109	8.002	8.002	0.000	99	8138	0.2000	0.1941	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	3010	0.2000	0.1987	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	86	1724	0.2000	0.1863	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SIMDIOX50_00068 Amount Added: 20.00 Units: uL
VMB/C/MIX1SIM_00046 Amount Added: 1.00 Units: uL
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

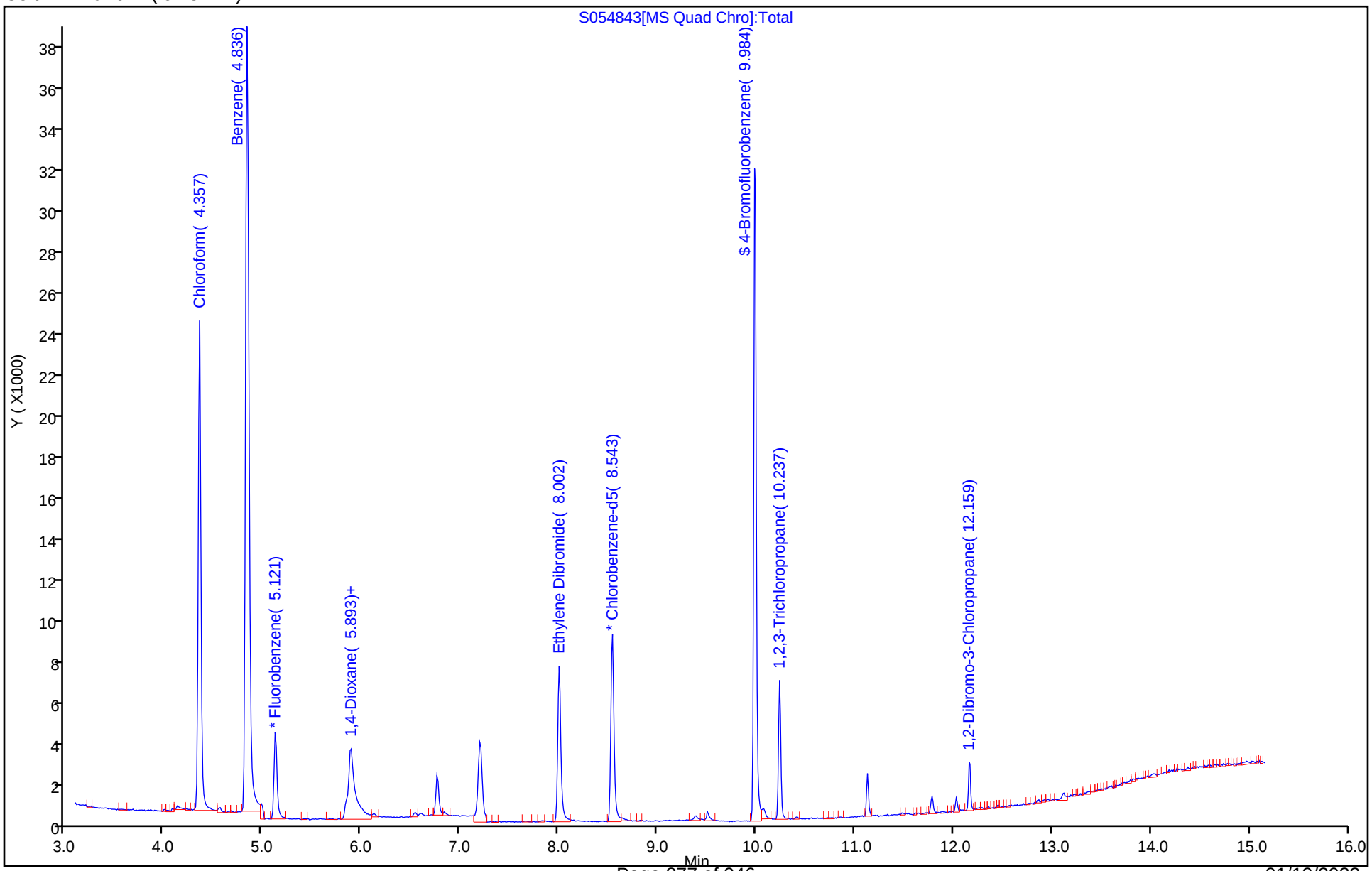
Report Date: 28-Dec-2021 11:10:13 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054843.D

Injection Date:	27-Dec-2021 14:37:37	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD20			Worklist Smp#:	7
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

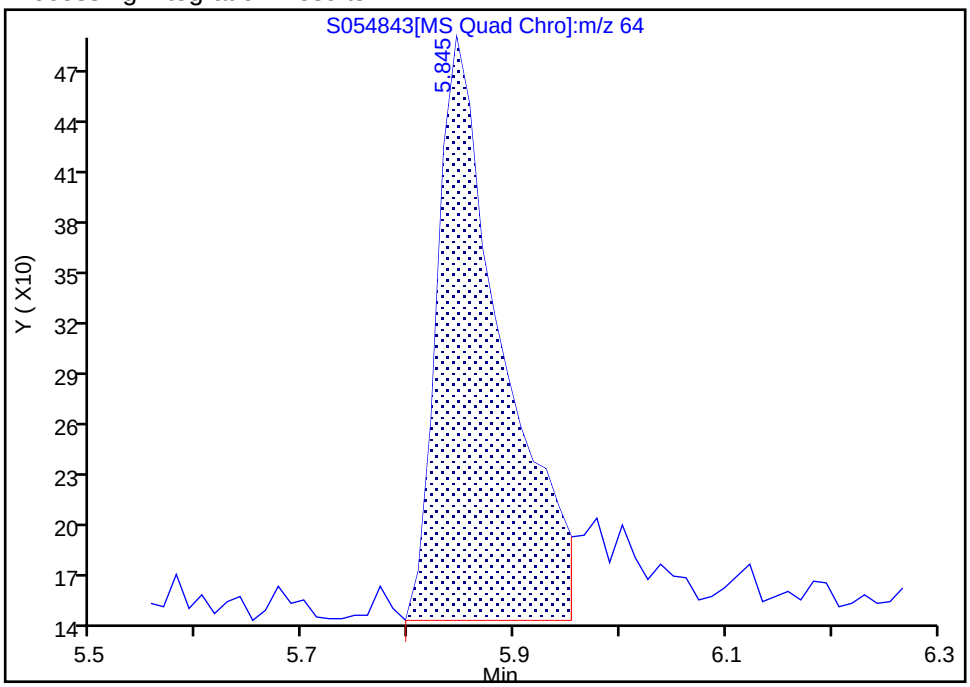
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054843.D
Injection Date: 27-Dec-2021 14:37:37 Instrument ID: CVOAMS14
Lims ID: STD20
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 2 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

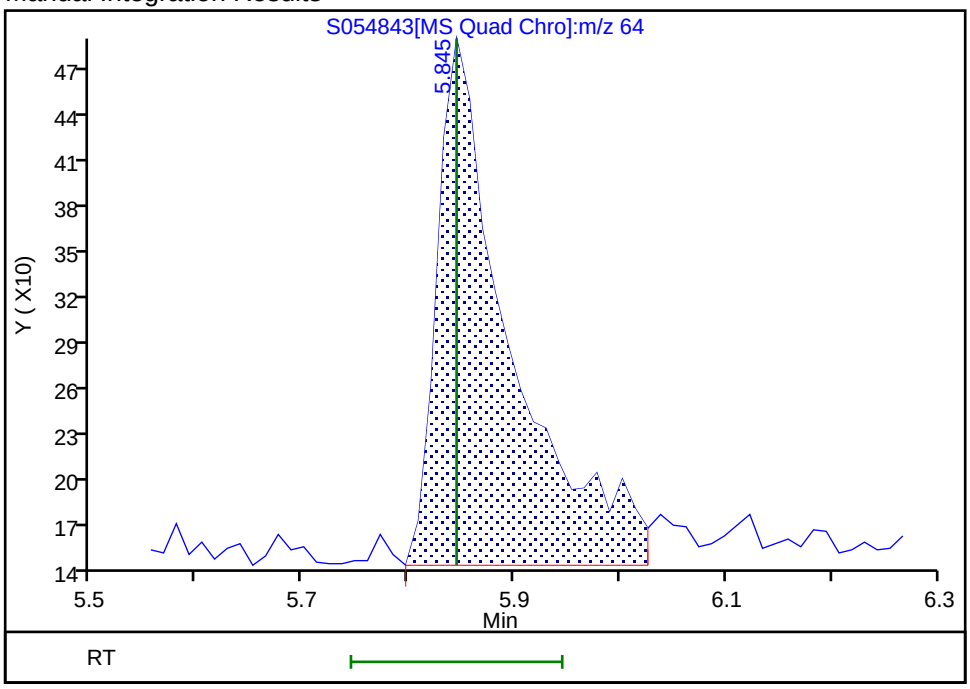
Processing Integration Results

RT: 5.85
Area: 1464
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 5.85
Area: 1653
Amount: 10.000000
Amount Units: ug/l



Reviewer: xuyvo, 28-Dec-2021 10:41:37
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054844.D
Lims ID: STD30
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Dec-2021 14:59:21 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD30
Misc. Info.: 460-0139637-008
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:14 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 10:42:00

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	9745	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	36	1610	10.0	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	97	8185	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	97	21788	0.5000	0.5115	
	6 Chloroform	83	4.357	4.357	0.000	99	73909	0.5000	0.4972	
	7 Benzene	78	4.836	4.836	0.000	33	164649	0.5000	0.4659	
	8 1,4-Dioxane	88	5.893	5.893	0.000	95	12345	30.0	29.4	
	9 Ethylene Dibromide	109	8.002	8.002	0.000	99	20910	0.5000	0.4994	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	99	7449	0.5000	0.4924	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	91	4273	0.5000	0.4621	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00068	Amount Added: 30.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added: 2.50	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

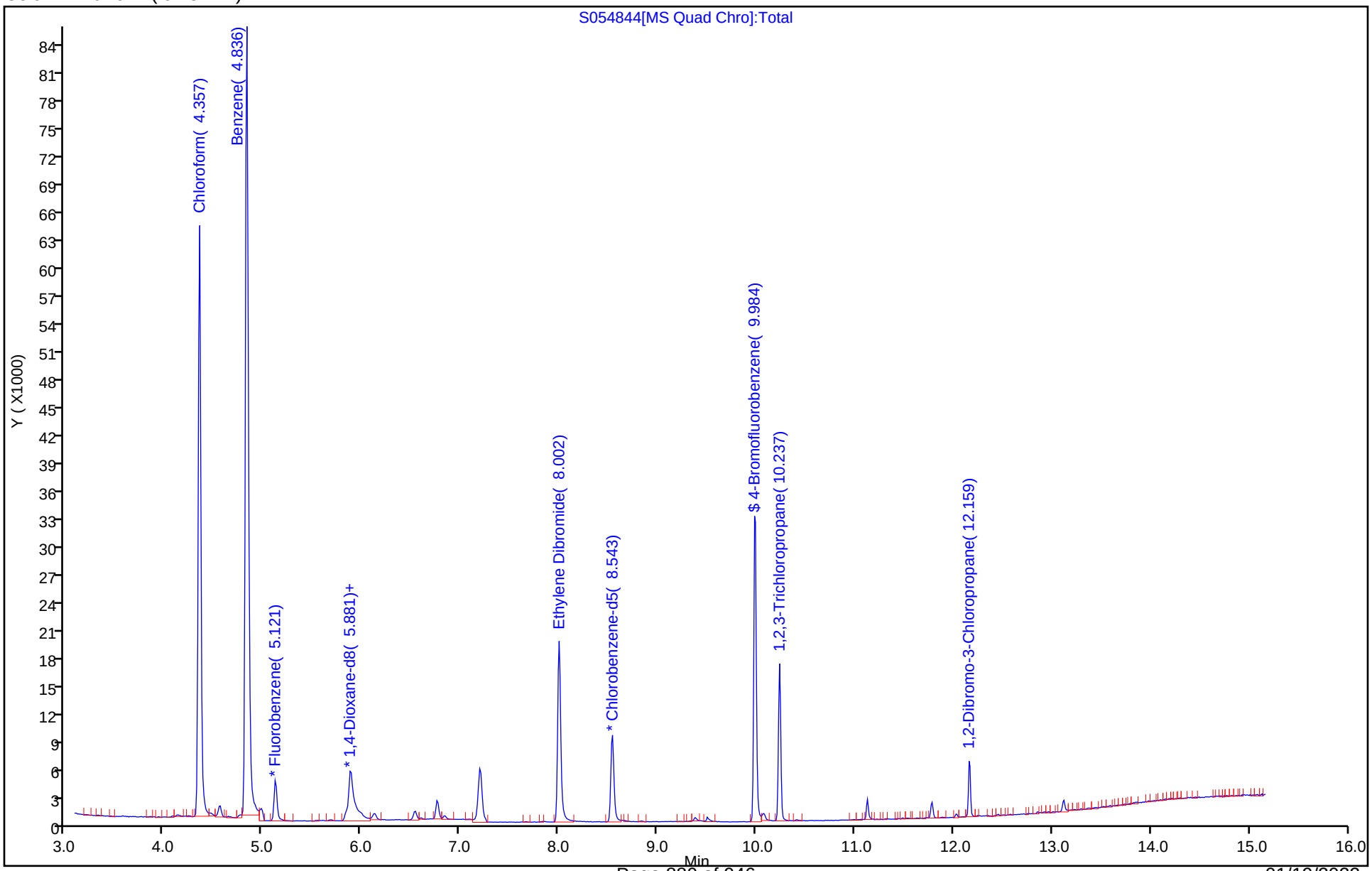
Report Date: 28-Dec-2021 11:10:14 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054844.D

Injection Date:	27-Dec-2021 14:59:21	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD30			Worklist Smp#:	8
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054845.D
Lims ID: STD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Dec-2021 15:21:07 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD40
Misc. Info.: 460-0139637-009
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:15 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 10:42:33

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	9864	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	34	1841	10.0	10.0	M
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	91	8298	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	21888	0.5000	0.5069	
	6 Chloroform	83	4.357	4.357	0.000	0	137865	1.00	0.9163	
	7 Benzene	78	4.836	4.836	0.000	30	316720	1.00	0.8854	
	8 1,4-Dioxane	88	5.881	5.893	-0.012	97	16297	40.0	33.9	
	9 Ethylene Dibromide	109	8.002	8.002	0.000	98	42128	1.00	0.99	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	14829	1.00	0.9668	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	86	8459	1.00	0.9024	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SIMDIOX50_00068	Amount Added: 40.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added: 5.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 28-Dec-2021 11:10:15 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054845.D

Injection Date: 27-Dec-2021 15:21:07 Instrument ID: CVOAMS14 Operator ID:

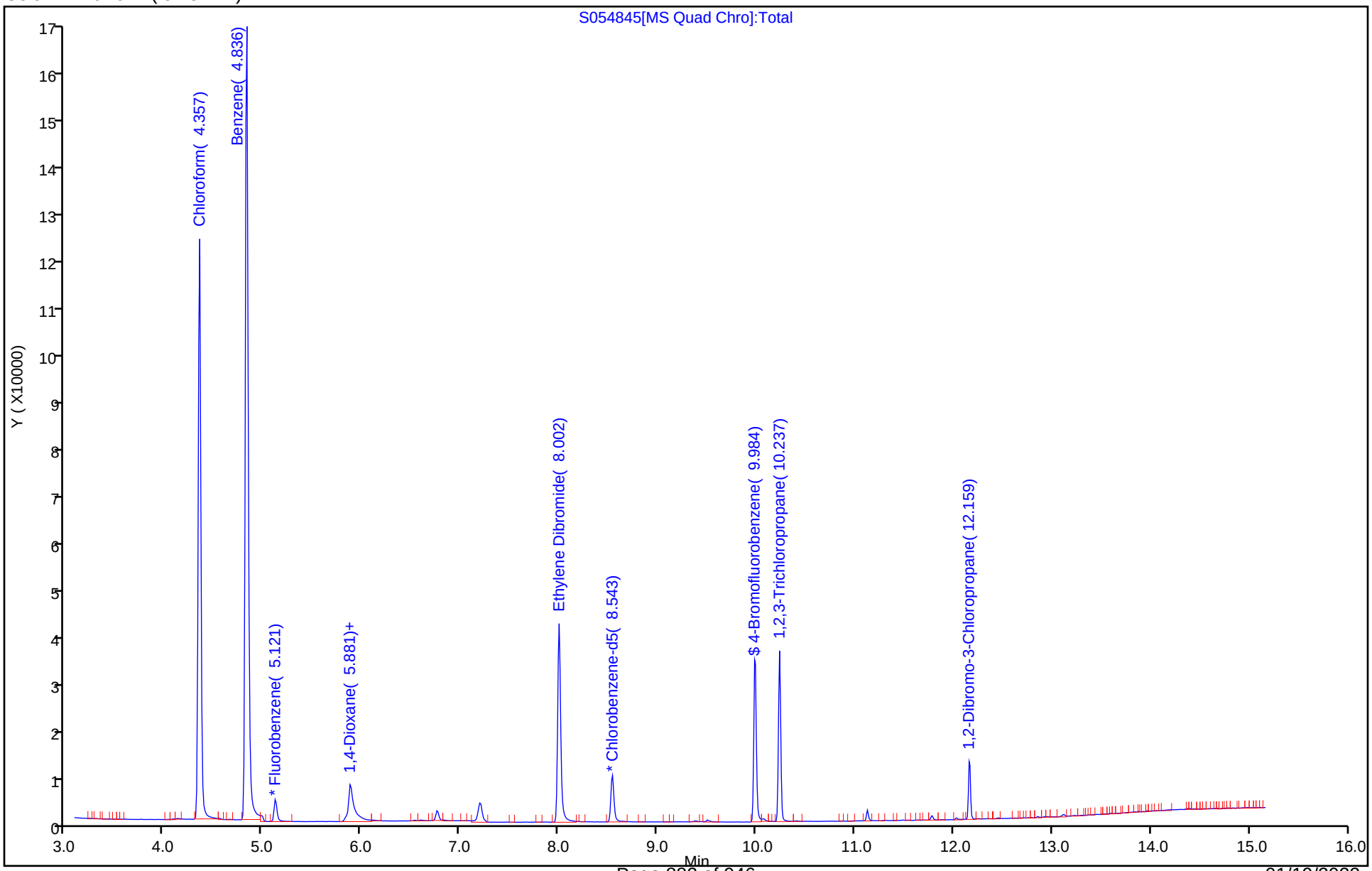
Lims ID: STD40 Worklist Smp#: 9

Client ID:

Purge Vol: 10.000 mL Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

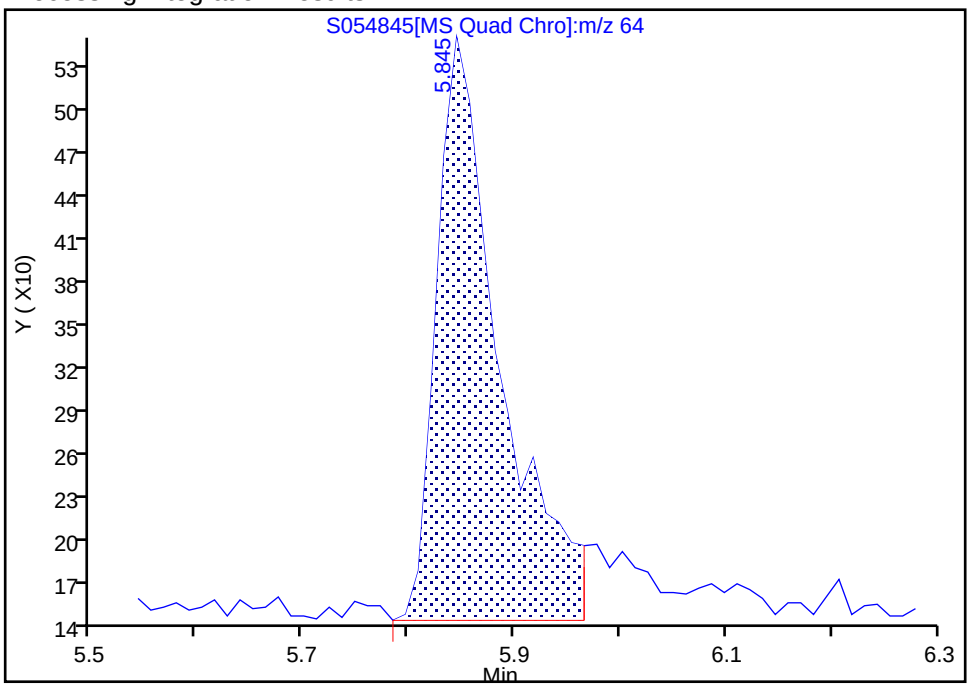
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054845.D
Injection Date: 27-Dec-2021 15:21:07 Instrument ID: CVOAMS14
Lims ID: STD40
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 2 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

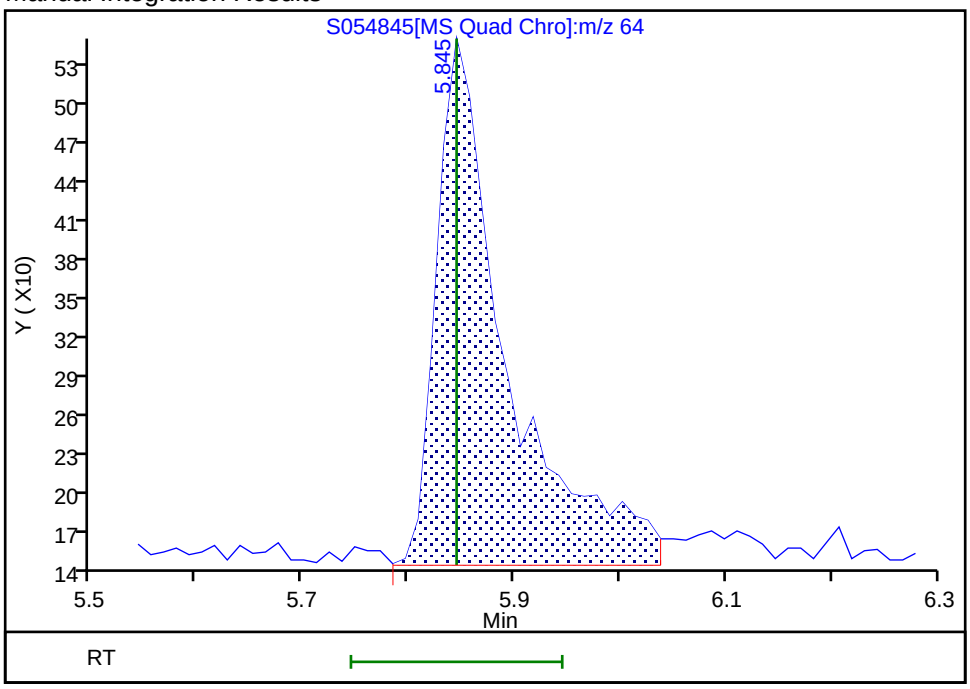
Processing Integration Results

RT: 5.85
Area: 1664
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 5.85
Area: 1841
Amount: 10.000000
Amount Units: ug/l



Reviewer: xuyvo, 28-Dec-2021 10:42:26
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 27-Dec-2021 15:42:55 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0139637-010
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:10:16 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: xuyvo Date: 28-Dec-2021 10:42:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	9440	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	32	1702	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	92	8089	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	89	21019	0.5000	0.4993	
6 Chloroform	83	4.357	4.357	0.000	99	276026	2.00	1.92	
7 Benzene	78	4.836	4.836	0.000	29	632685	2.00	1.85	
8 1,4-Dioxane	88	5.881	5.893	-0.012	98	21183	50.0	47.7	
9 Ethylene Dibromide	109	8.002	8.002	0.000	97	84929	2.00	2.05	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	29704	2.00	1.99	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	87	17197	2.00	1.88	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00068	Amount Added: 50.00	Units: uL	
VMB/C/MIX1SIM_00046	Amount Added: 10.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

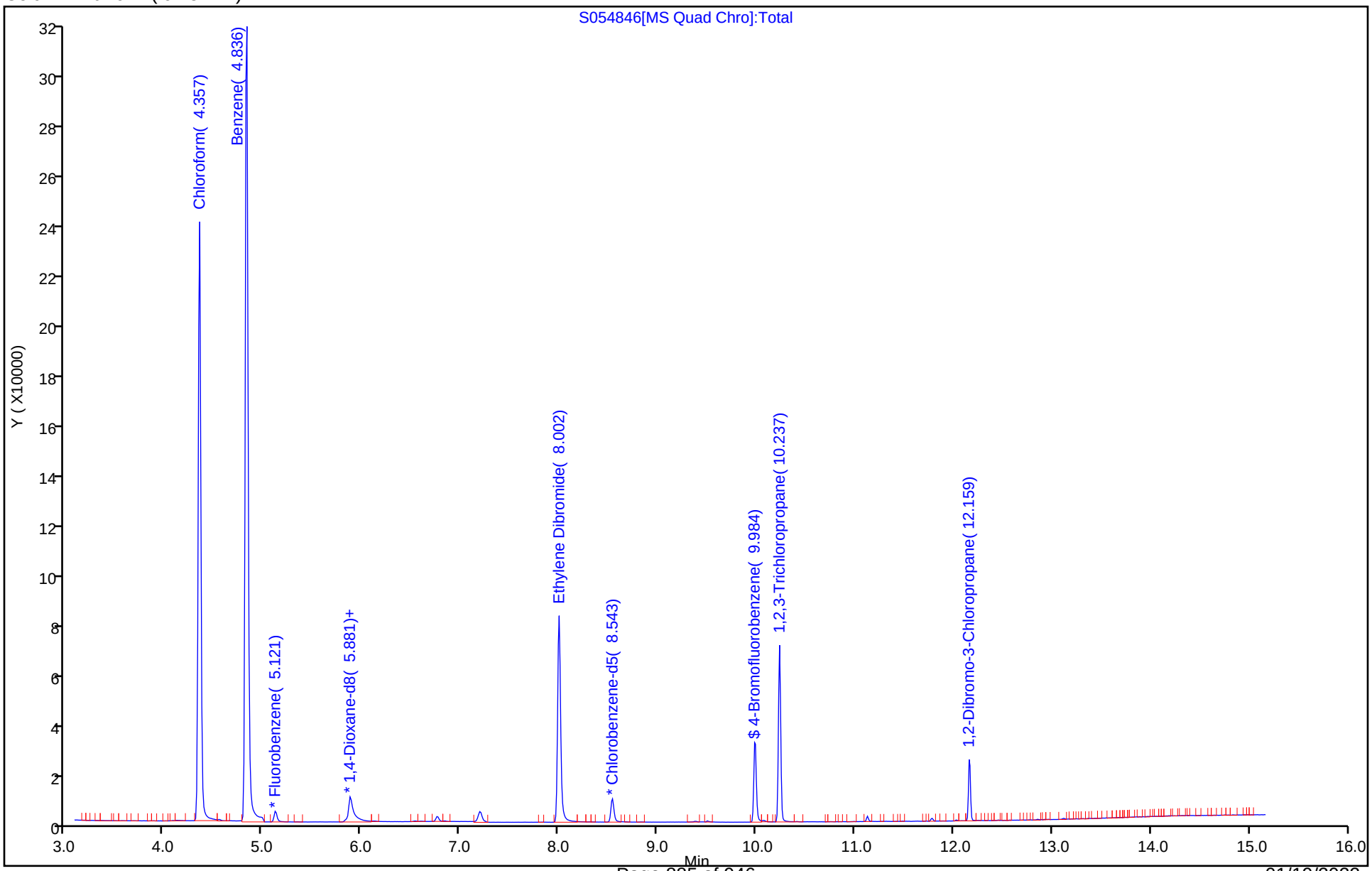
Report Date: 28-Dec-2021 11:10:16 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Injection Date:	27-Dec-2021 15:42:55	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	STD50			Worklist Smp#:	10
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

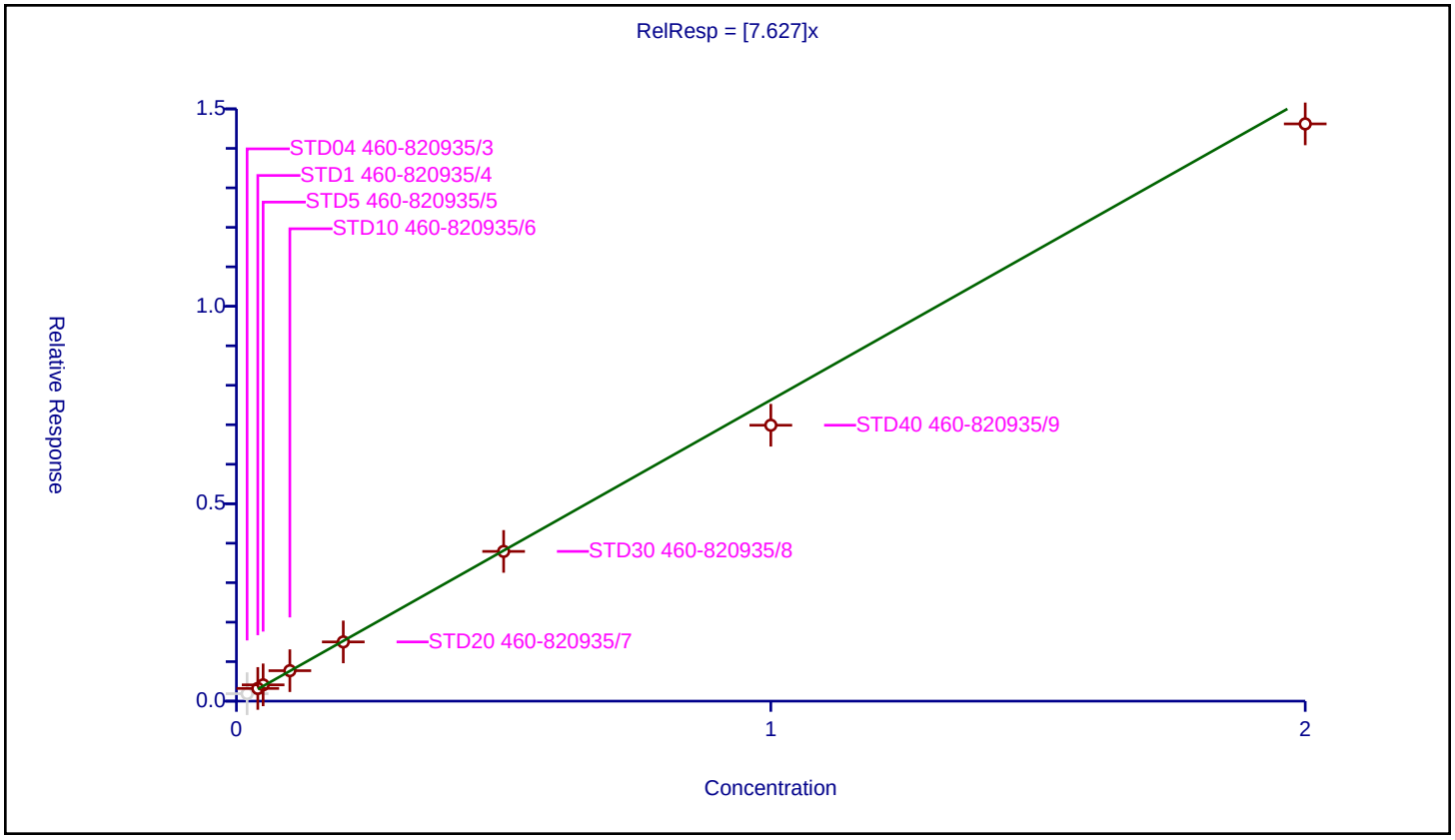
Curve Coefficients

Intercept:	0
Slope:	7.627

Error Coefficients

Standard Error:	130000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.02	0.188438	0.5	9661.0	9.421902	N
2	STD1 460-820935/4	0.04	0.321514	0.5	9617.0	8.03785	Y
3	STD5 460-820935/5	0.05	0.412792	0.5	9506.0	8.255838	Y
4	STD10 460-820935/6	0.1	0.77131	0.5	10136.0	7.713102	Y
5	STD20 460-820935/7	0.2	1.5	0.5	9283.0	7.5	Y
6	STD30 460-820935/8	0.5	3.79215	0.5	9745.0	7.5843	Y
7	STD40 460-820935/9	1.0	6.988291	0.5	9864.0	6.988291	Y
8	STD50 460-820935/10	2.0	14.620021	0.5	9440.0	7.310011	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

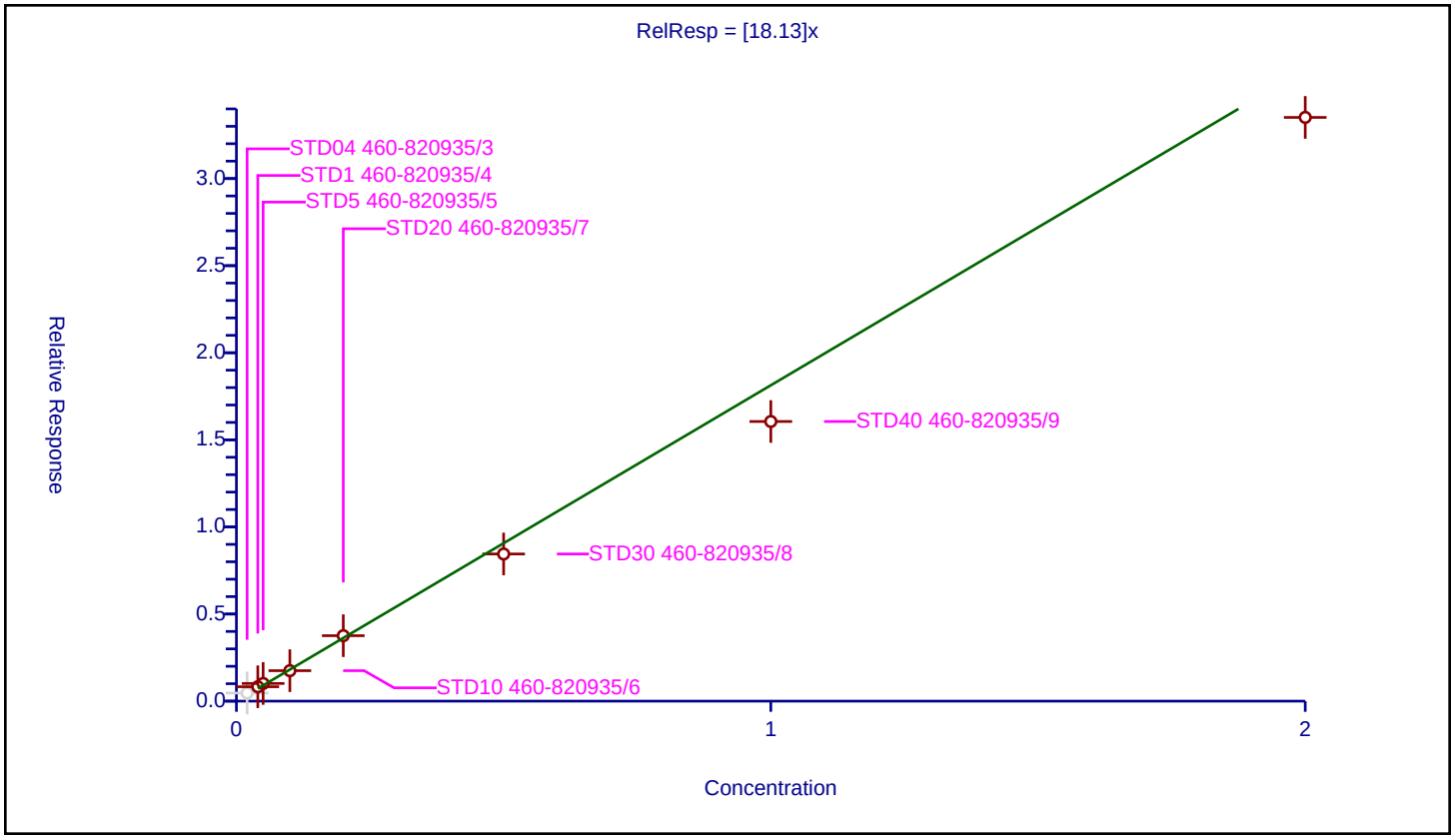
Curve Coefficients

Intercept:	0
Slope:	18.13

Error Coefficients

Standard Error:	298000
Relative Standard Error:	10.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.02	0.466049	0.5	9661.0	23.302453	N
2	STD1 460-820935/4	0.04	0.826089	0.5	9617.0	20.65223	Y
3	STD5 460-820935/5	0.05	1.015254	0.5	9506.0	20.30507	Y
4	STD10 460-820935/6	0.1	1.74783	0.5	10136.0	17.478295	Y
5	STD20 460-820935/7	0.2	3.757621	0.5	9283.0	18.788107	Y
6	STD30 460-820935/8	0.5	8.447871	0.5	9745.0	16.895741	Y
7	STD40 460-820935/9	1.0	16.054339	0.5	9864.0	16.054339	Y
8	STD50 460-820935/10	2.0	33.510858	0.5	9440.0	16.755429	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

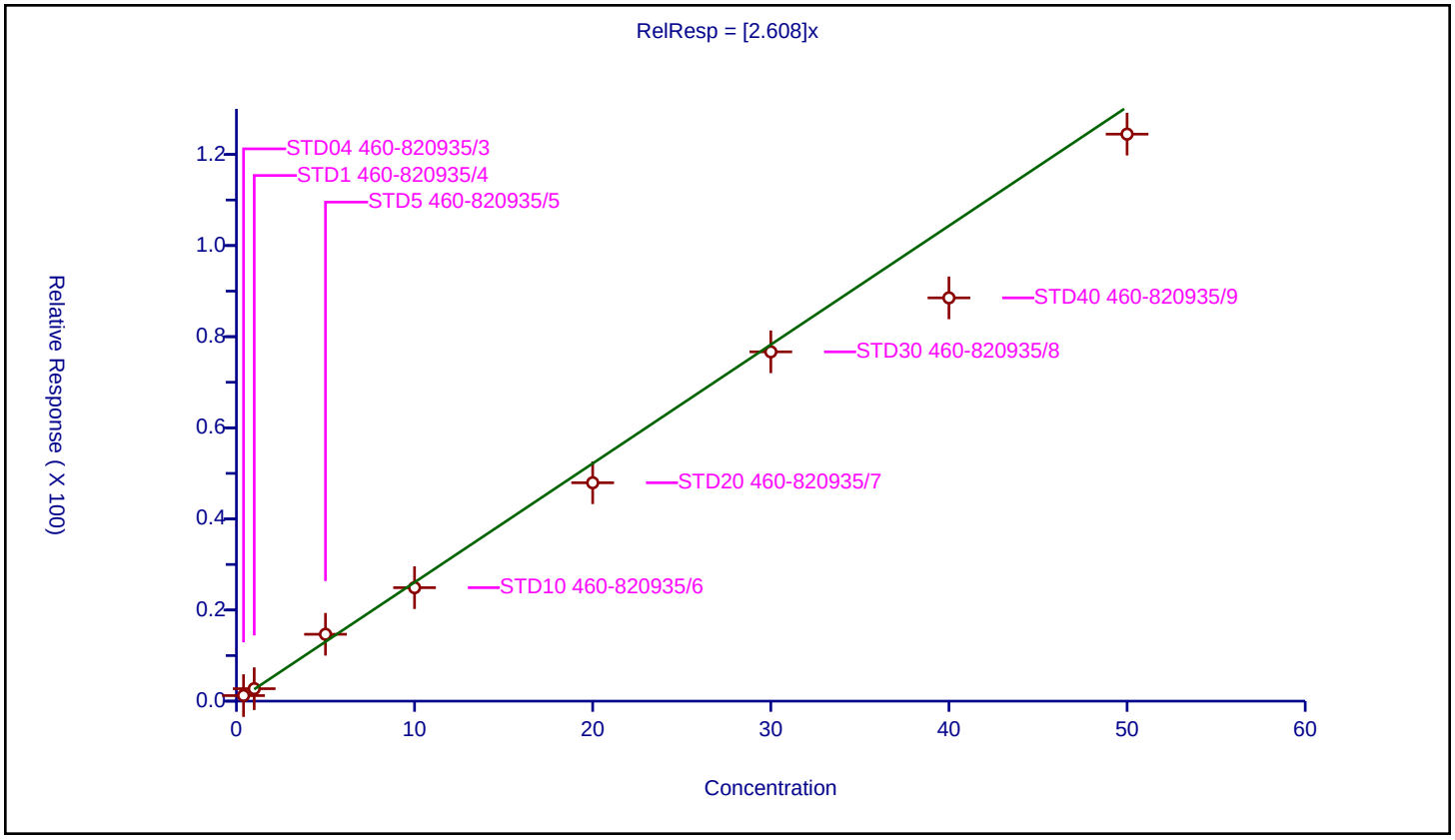
Curve Coefficients

Intercept:	0
Slope:	2.608

Error Coefficients

Standard Error:	11600
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.400001	1.22108	10.0	1556.0	3.052693	Y
2	STD1 460-820935/4	1.000002	2.732753	10.0	1493.0	2.732747	Y
3	STD5 460-820935/5	5.00001	14.679767	10.0	1374.0	2.935947	Y
4	STD10 460-820935/6	10.000021	24.909209	10.0	1542.0	2.490916	Y
5	STD20 460-820935/7	20.000042	47.937084	10.0	1653.0	2.396849	Y
6	STD30 460-820935/8	30.000062	76.677019	10.0	1610.0	2.555895	Y
7	STD40 460-820935/9	40.000083	88.522542	10.0	1841.0	2.213059	Y
8	STD50 460-820935/10	50.000104	124.459459	10.0	1702.0	2.489184	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

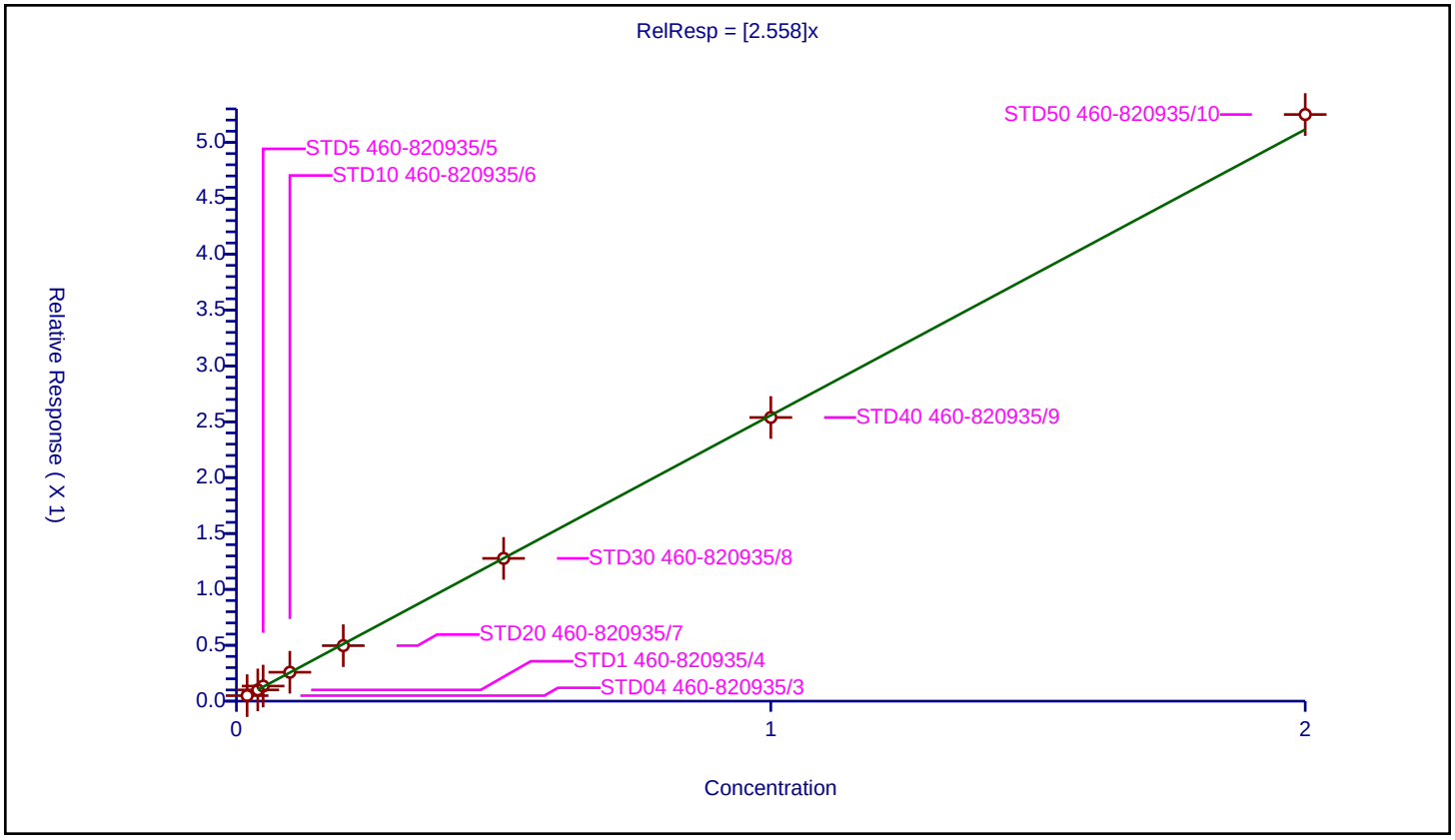
Curve Coefficients

Intercept:	0
Slope:	2.558

Error Coefficients

Standard Error:	36900
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.02	0.049321	0.5	8252.0	2.466069	Y
2	STD1 460-820935/4	0.04	0.100349	0.5	8595.0	2.508726	Y
3	STD5 460-820935/5	0.05	0.134967	0.5	8139.0	2.699349	Y
4	STD10 460-820935/6	0.1	0.258824	0.5	8670.0	2.588235	Y
5	STD20 460-820935/7	0.2	0.496583	0.5	8194.0	2.482914	Y
6	STD30 460-820935/8	0.5	1.277337	0.5	8185.0	2.554673	Y
7	STD40 460-820935/9	1.0	2.538443	0.5	8298.0	2.538443	Y
8	STD50 460-820935/10	2.0	5.24966	0.5	8089.0	2.62483	Y



Calibration / 4-Bromofluorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

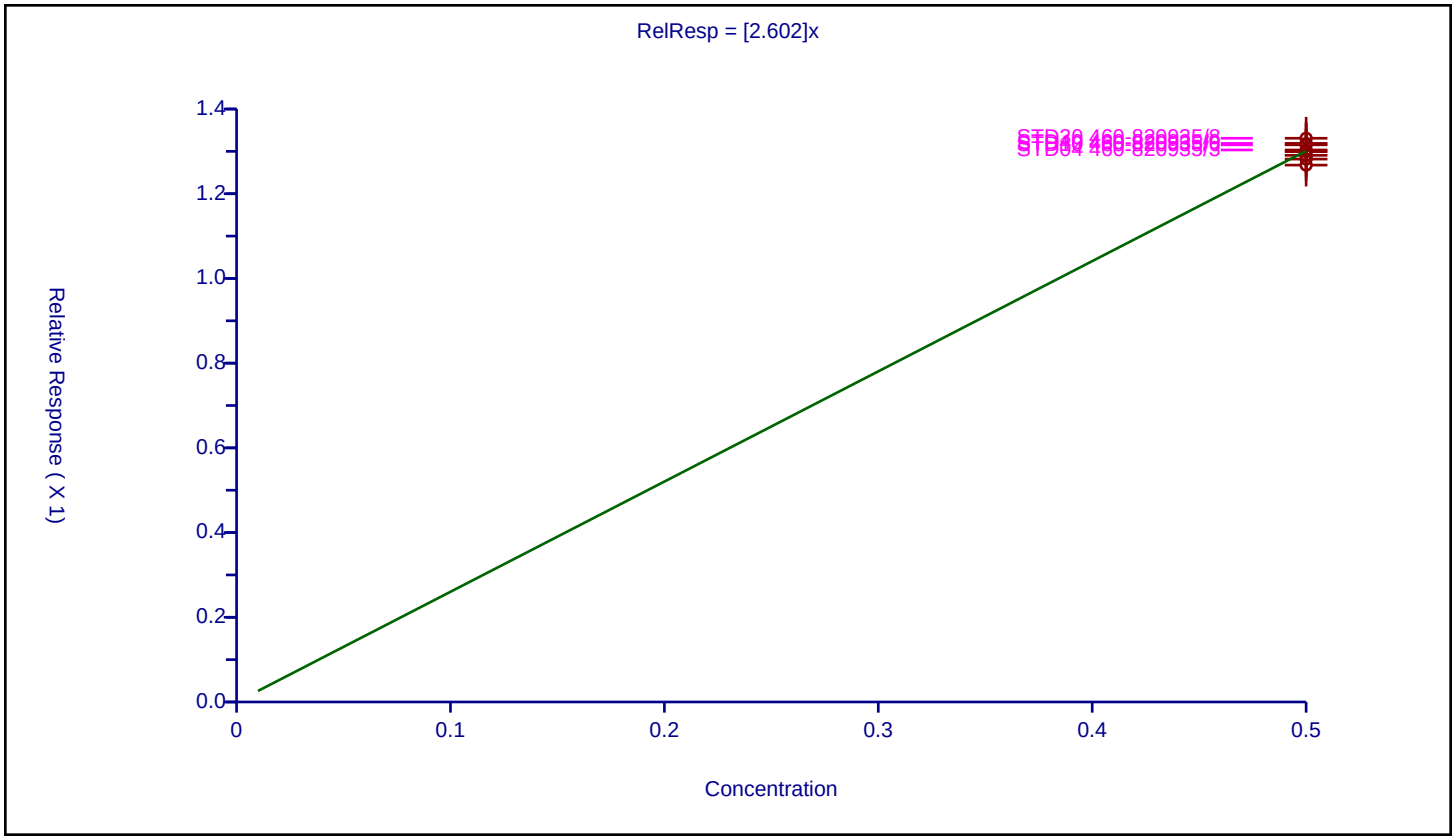
Curve Coefficients

Intercept:	0
Slope:	2.602

Error Coefficients

Standard Error:	23100
Relative Standard Error:	1.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.5	1.30332	0.5	8252.0	2.606641	Y
2	STD1 460-820935/4	0.5	1.290634	0.5	8595.0	2.581268	Y
3	STD5 460-820935/5	0.5	1.2676	0.5	8139.0	2.535201	Y
4	STD10 460-820935/6	0.5	1.315456	0.5	8670.0	2.630911	Y
5	STD20 460-820935/7	0.5	1.281792	0.5	8194.0	2.563583	Y
6	STD30 460-820935/8	0.5	1.330971	0.5	8185.0	2.661943	Y
7	STD40 460-820935/9	0.5	1.318872	0.5	8298.0	2.637744	Y
8	STD50 460-820935/10	0.5	1.299234	0.5	8089.0	2.598467	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

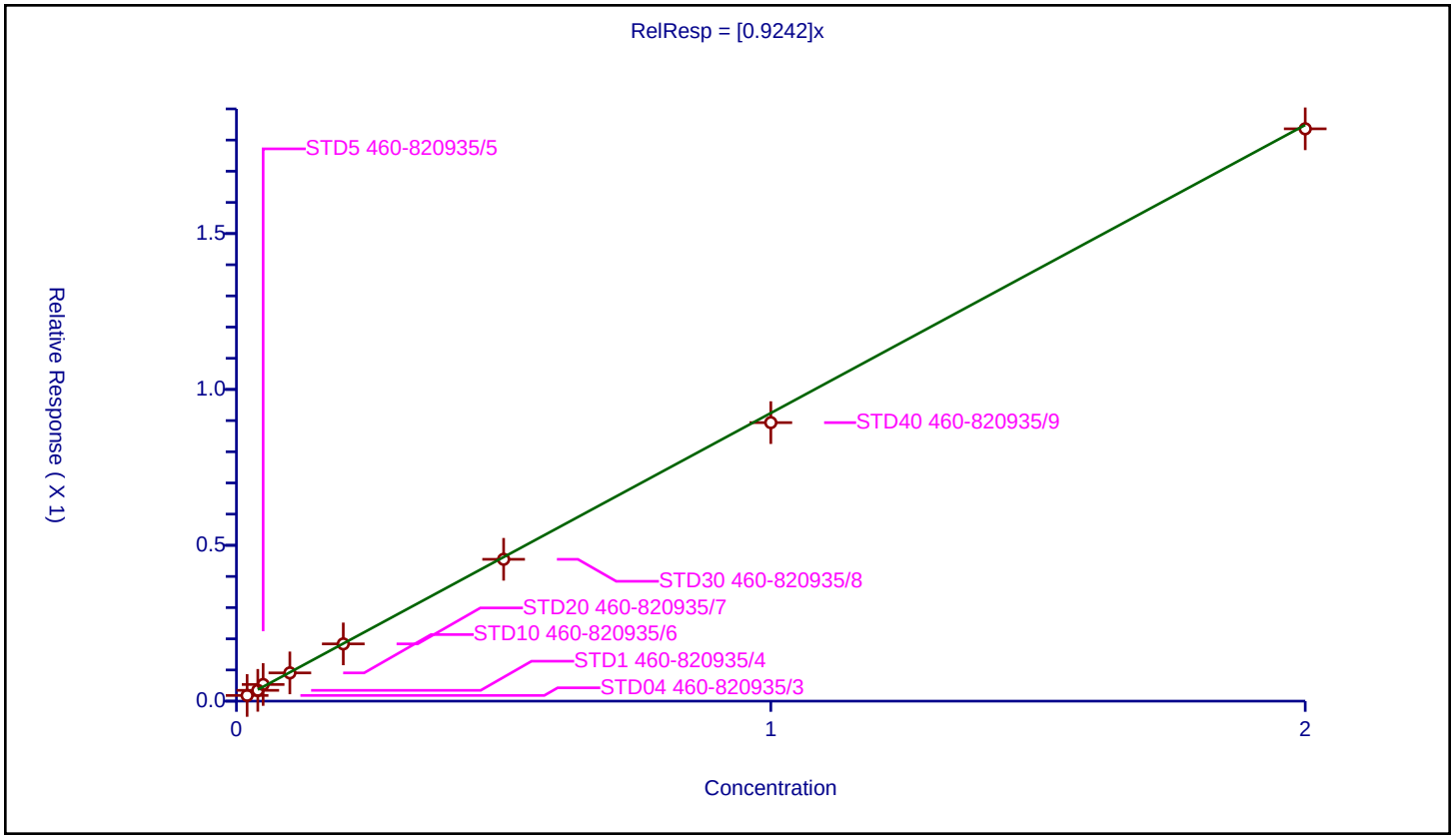
Curve Coefficients

Intercept:	0
Slope:	0.9242

Error Coefficients

Standard Error:	12900
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.02	0.018238	0.5	8252.0	0.9119	Y
2	STD1 460-820935/4	0.04	0.034671	0.5	8595.0	0.866783	Y
3	STD5 460-820935/5	0.05	0.053446	0.5	8139.0	1.068927	Y
4	STD10 460-820935/6	0.1	0.0906	0.5	8670.0	0.905998	Y
5	STD20 460-820935/7	0.2	0.183671	0.5	8194.0	0.918355	Y
6	STD30 460-820935/8	0.5	0.45504	0.5	8185.0	0.910079	Y
7	STD40 460-820935/9	1.0	0.893529	0.5	8298.0	0.893529	Y
8	STD50 460-820935/10	2.0	1.836074	0.5	8089.0	0.918037	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

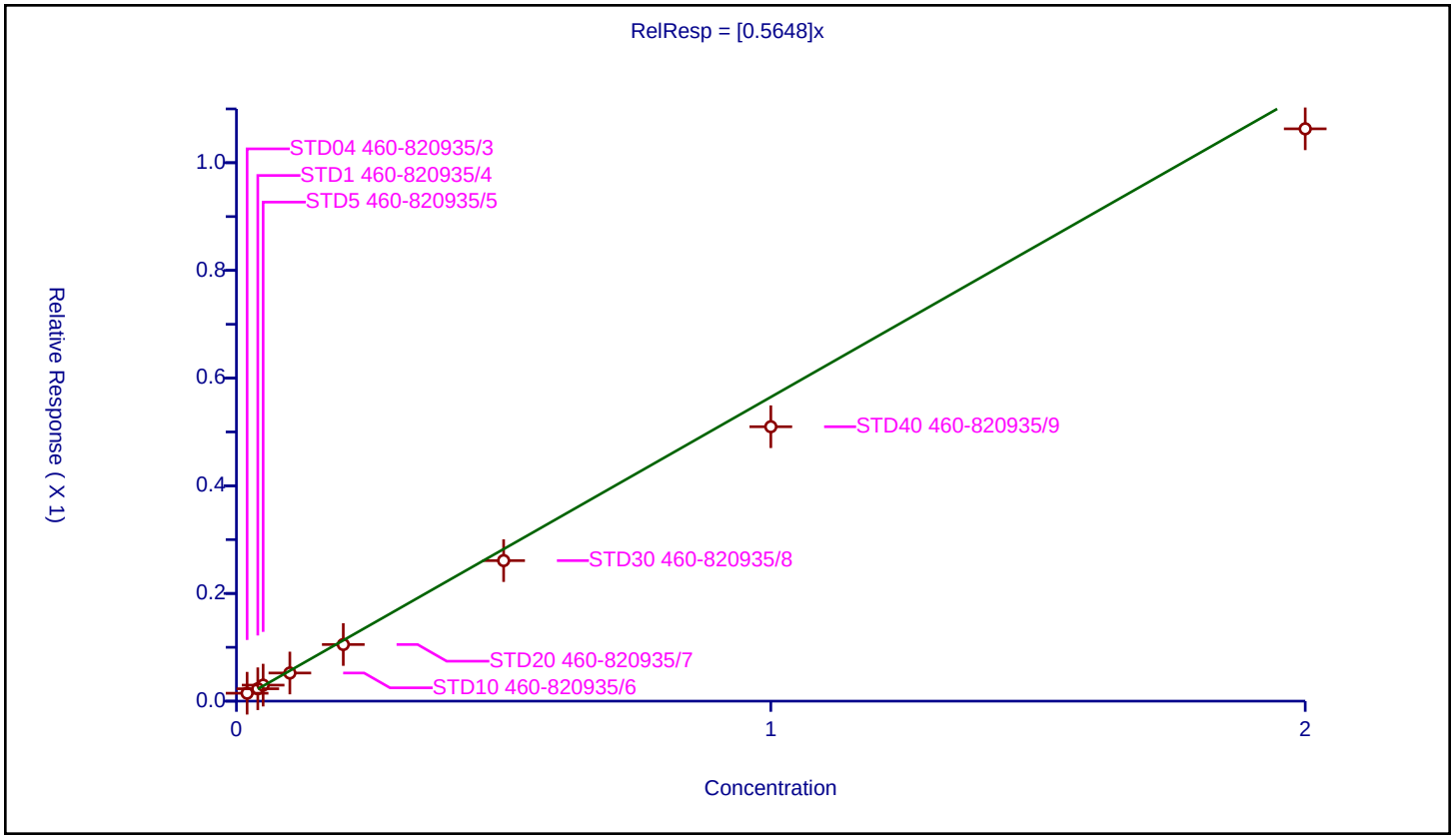
Curve Coefficients

Intercept:	0
Slope:	0.5648

Error Coefficients

Standard Error:	7460
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD04 460-820935/3	0.02	0.014724	0.5	8252.0	0.736185	Y
2	STD1 460-820935/4	0.04	0.023037	0.5	8595.0	0.575916	Y
3	STD5 460-820935/5	0.05	0.029733	0.5	8139.0	0.594668	Y
4	STD10 460-820935/6	0.1	0.052249	0.5	8670.0	0.522491	Y
5	STD20 460-820935/7	0.2	0.105199	0.5	8194.0	0.525995	Y
6	STD30 460-820935/8	0.5	0.261026	0.5	8185.0	0.522053	Y
7	STD40 460-820935/9	1.0	0.509701	0.5	8298.0	0.509701	Y
8	STD50 460-820935/10	2.0	1.062987	0.5	8089.0	0.531493	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: ICV 460-820935/13 Calibration Date: 12/27/2021 16:48

Instrument ID: CVOAMS14 Calib Start Date: 12/27/2021 13:10

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/27/2021 15:42

Lab File ID: S054849.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	7.627	7.790	0.2000	0.100	0.0500	2.1	30.0
Benzene	Ave	18.13	19.97	0.5000	0.100	0.0500	10.2	30.0
1,4-Dioxane	Ave	2.608	2.603		4.99	5.00	-0.2	30.0
Ethylene Dibromide	Ave	2.558	2.764	0.1000	0.0540	0.0500	8.1	30.0
1,2,3-Trichloropropane	Ave	0.9242	0.9903		0.0536	0.0500	7.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5648	0.6135	0.0500	0.0543	0.0500	8.6	30.0
4-Bromofluorobenzene	Ave	2.602	2.713		0.521	0.500	4.3	30.0

Eurofins TestAmerica, Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054849.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Dec-2021 16:48:20 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 460-0139637-013
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 28-Dec-2021 11:17:41 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: starzecm Date: 28-Dec-2021 07:18:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	66	9510	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	32	1533	10.0	10.0	M
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	97	8068	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.992	9.992	0.000	98	21892	0.5000	0.5214	
	6 Chloroform	83	4.357	4.357	0.000	98	7408	0.0500	0.0511	
	7 Benzene	78	4.836	4.836	0.000	62	18995	0.0500	0.0551	
	8 1,4-Dioxane	88	5.905	5.905	0.000	79	1995	5.00	4.99	
	9 Ethylene Dibromide	109	8.002	8.002	0.000	97	2230	0.0500	0.0540	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	98	799	0.0500	0.0536	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	89	495	0.0500	0.0543	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SIMMIX1SS_00039	Amount Added: 1.00	Units: uL	
1,4DIOXSP_00116	Amount Added: 20.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

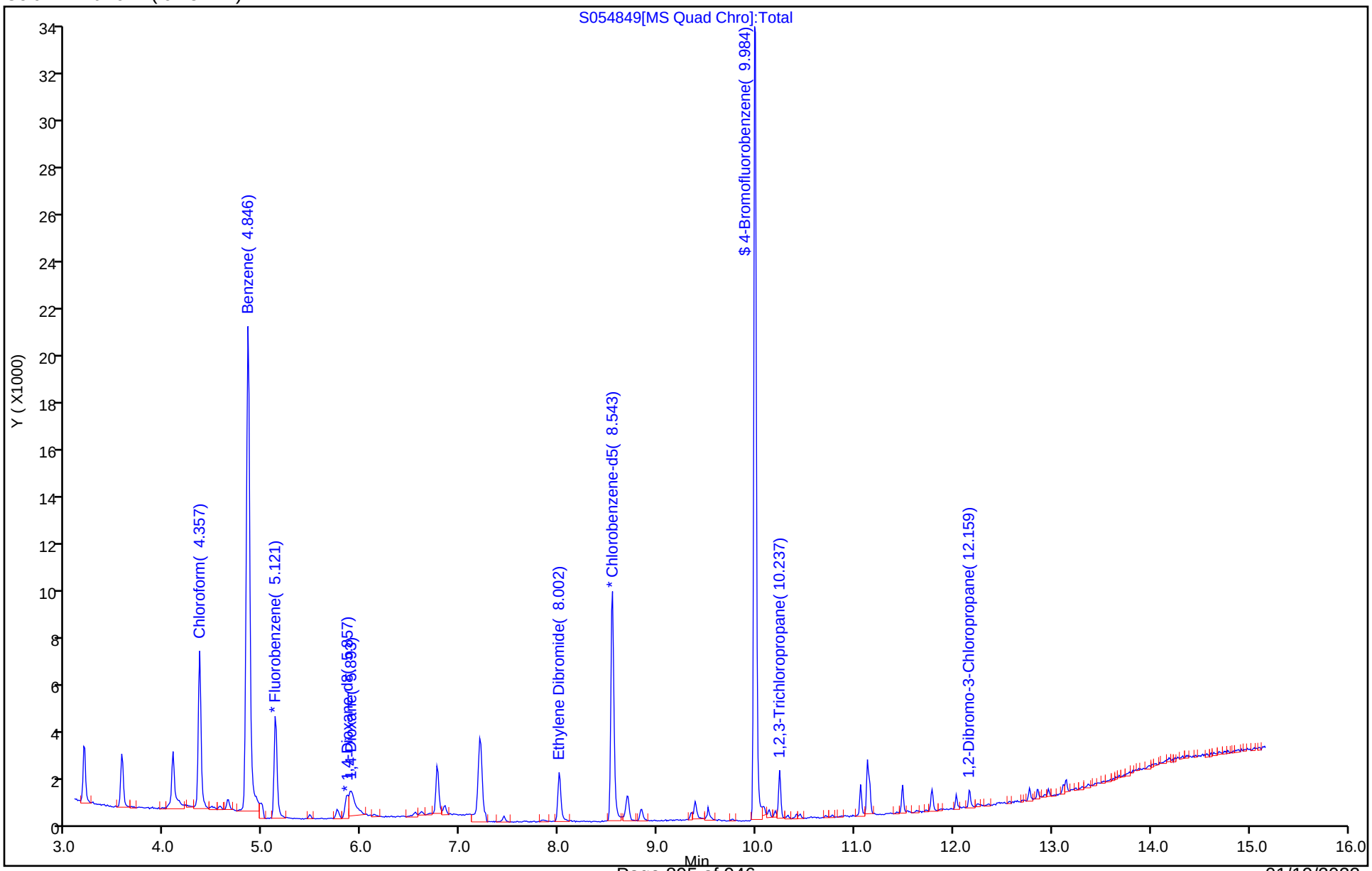
Report Date: 28-Dec-2021 11:17:41 Chrom Revision: 2.3 27-Dec-2021 07:44:32

Eurofins TestAmerica, Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054849.D

Injection Date:	27-Dec-2021 16:48:20	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Edison

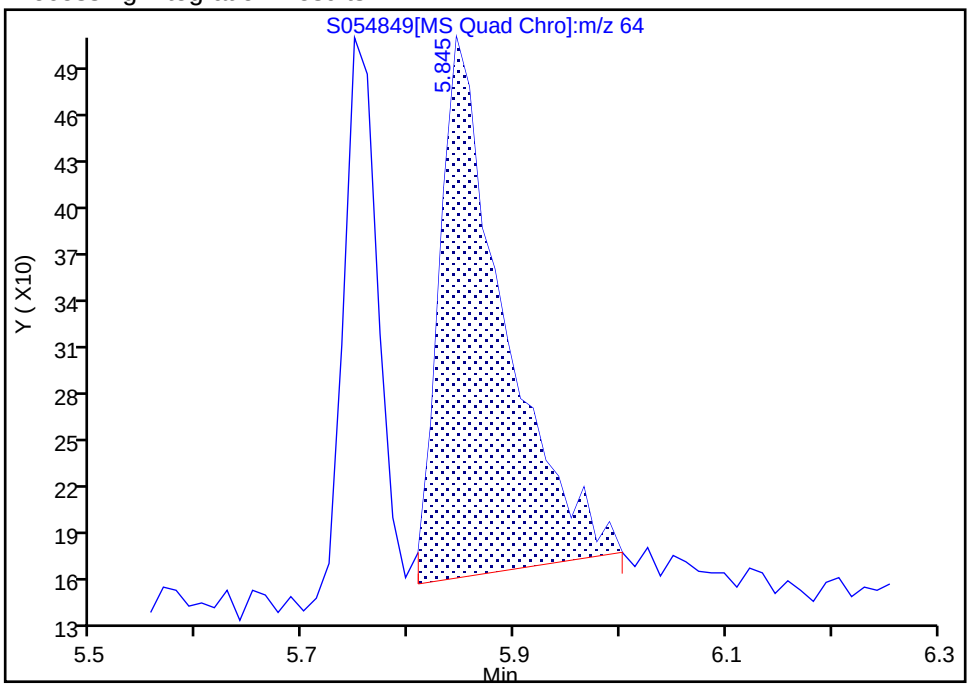
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054849.D
Injection Date: 27-Dec-2021 16:48:20 Instrument ID: CVOAMS14
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

* 2 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

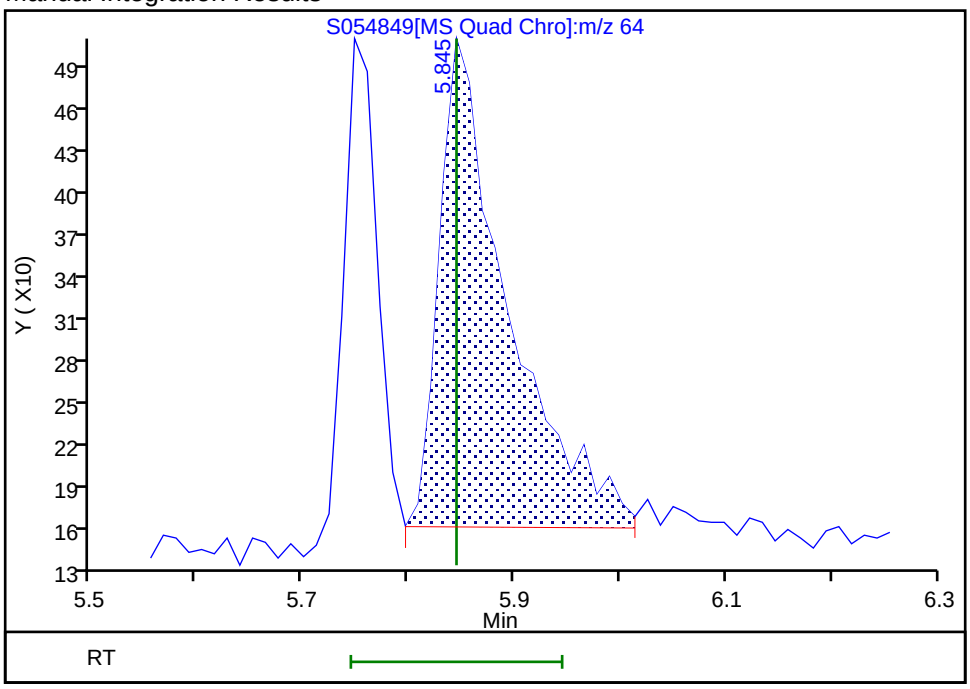
Processing Integration Results

RT: 5.84
Area: 1447
Amount: 10.000000
Amount Units: ug/l



Manual Integration Results

RT: 5.84
Area: 1533
Amount: 10.000000
Amount Units: ug/l



Reviewer: xuyvo, 28-Dec-2021 10:43:17
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823803/2 Calibration Date: 01/18/2022 08:35

Instrument ID: CVOAMS14 Calib Start Date: 12/27/2021 13:10

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/27/2021 15:42

Lab File ID: S055102.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	7.627	6.236	0.2000	0.100	0.0500	-18.2	20.0
Benzene	Ave	18.13	16.28	0.5000	0.100	0.0500	-10.2	20.0
1,4-Dioxane	Ave	2.608	2.251		4.32	5.00	-13.7	50.0
Ethylene Dibromide	Ave	2.558	2.264	0.1000	0.0442	0.0500	-11.5	20.0
1,2,3-Trichloropropane	Ave	0.9242	0.8094		0.0438	0.0500	-12.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.5648	0.5300	0.0500	0.0469	0.0500	-6.2	50.0
4-Bromofluorobenzene	Ave	2.602	2.654		0.510	0.500	2.0	20.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055102.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Jan-2022 08:35:59 ALS Bottle#: 0 Worklist Smp#: 2
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0140338-002
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:35:29 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 18-Jan-2022 09:17:51

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	10559	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.833	5.833	0.000	33	1639	10.0	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	87	8698	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.993	0.000	83	23083	0.5000	0.5100	
	6 Chloroform	83	4.347	4.347	0.000	0	6585	0.0500	0.0409	
	7 Benzene	78	4.825	4.825	0.000	45	17188	0.0500	0.0449	
	8 1,4-Dioxane	88	5.893	5.893	0.000	94	1845	5.00	4.32	
	9 Ethylene Dibromide	109	8.002	8.002	0.000	97	1969	0.0500	0.0442	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	98	704	0.0500	0.0438	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	86	461	0.0500	0.0469	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00069	Amount Added: 20.00	Units: uL	
VMB/C/MIX1SIM_00047	Amount Added: 1.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

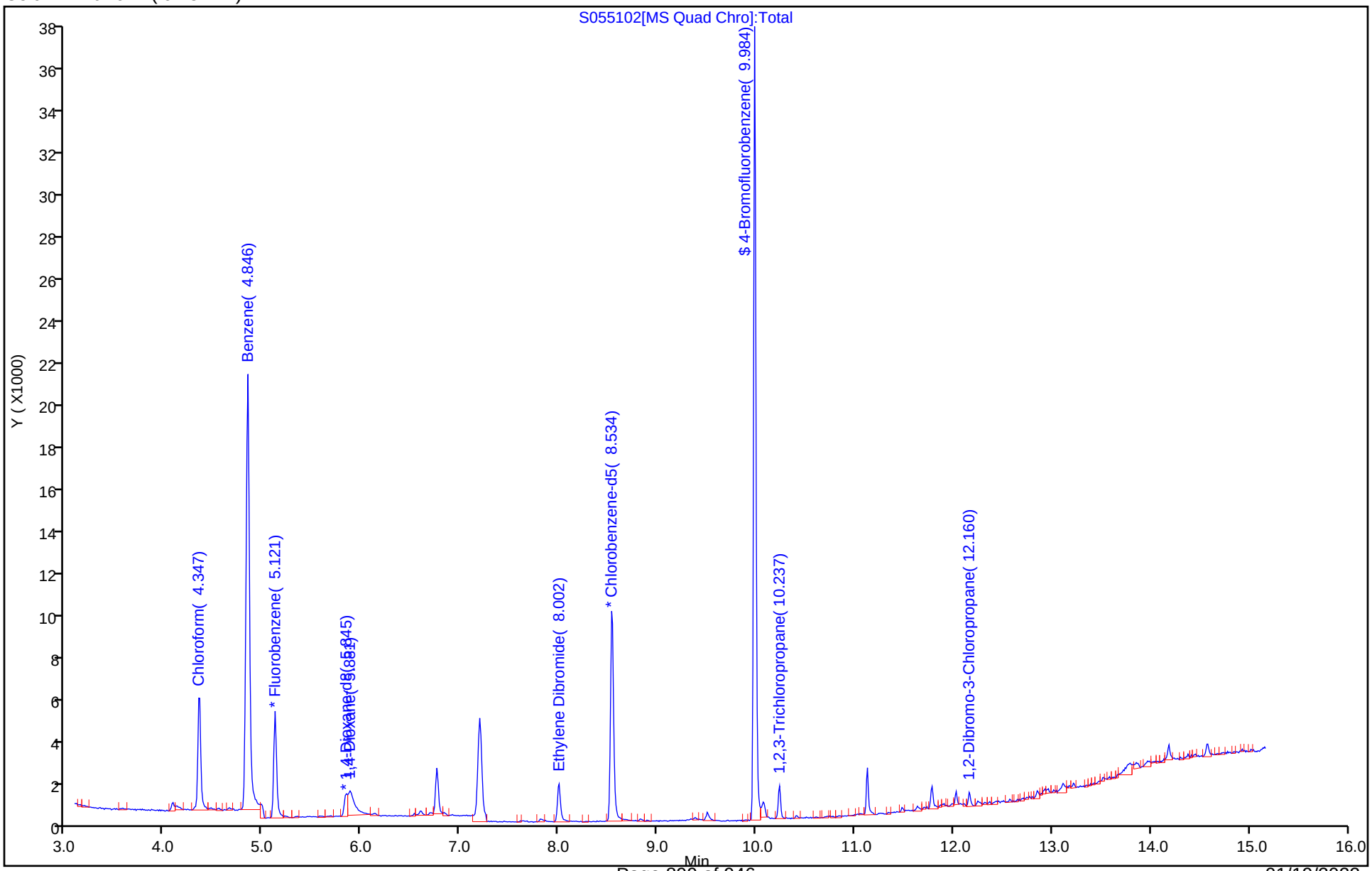
Report Date: 19-Jan-2022 10:35:29 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055102.D

Injection Date:	18-Jan-2022 08:35:59	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Lab Sample ID: CCVIS 460-823919/2 Calibration Date: 01/18/2022 20:00

Instrument ID: CVOAMS14 Calib Start Date: 12/27/2021 13:10

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/27/2021 15:42

Lab File ID: S055130.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloroform	Ave	7.627	8.005	0.2000	0.100	0.0500	4.9	20.0
Benzene	Ave	18.13	20.26	0.5000	0.100	0.0500	11.7	20.0
1,4-Dioxane	Ave	2.608	2.126		4.08	5.00	-18.5	50.0
Ethylene Dibromide	Ave	2.558	2.633	0.1000	0.0515	0.0500	2.9	20.0
1,2,3-Trichloropropane	Ave	0.9242	0.9551		0.0517	0.0500	3.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.5648	0.5709	0.0500	0.0505	0.0500	1.1	50.0
4-Bromofluorobenzene	Ave	2.602	2.658		0.511	0.500	2.2	20.0

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055130.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Jan-2022 20:00:29 ALS Bottle#: 0 Worklist Smp#: 2
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0140361-002
Operator ID: Instrument ID: CVOAMS14
Sublist: chrom-8260SIM_14*sub8

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 20:19:24 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1601

First Level Reviewer: boykink Date: 18-Jan-2022 20:19:23

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	11531	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1778	10.0	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	85	9528	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.993	0.000	84	25328	0.5000	0.5108	
	6 Chloroform	83	4.347	4.347	0.000	0	9230	0.0500	0.0525	
	7 Benzene	78	4.825	4.825	0.000	0	23359	0.0500	0.0559	
	8 1,4-Dioxane	88	5.893	5.893	0.000	92	1890	5.00	4.08	
	9 Ethylene Dibromide	109	8.002	8.002	0.000	96	2509	0.0500	0.0515	
	10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	97	910	0.0500	0.0517	
	11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	90	544	0.0500	0.0505	

QC Flag Legend
Processing Flags

Reagents:

SIMDIOX50_00069	Amount Added: 20.00	Units: uL	
VMB/C/MIX1SIM_00047	Amount Added: 1.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

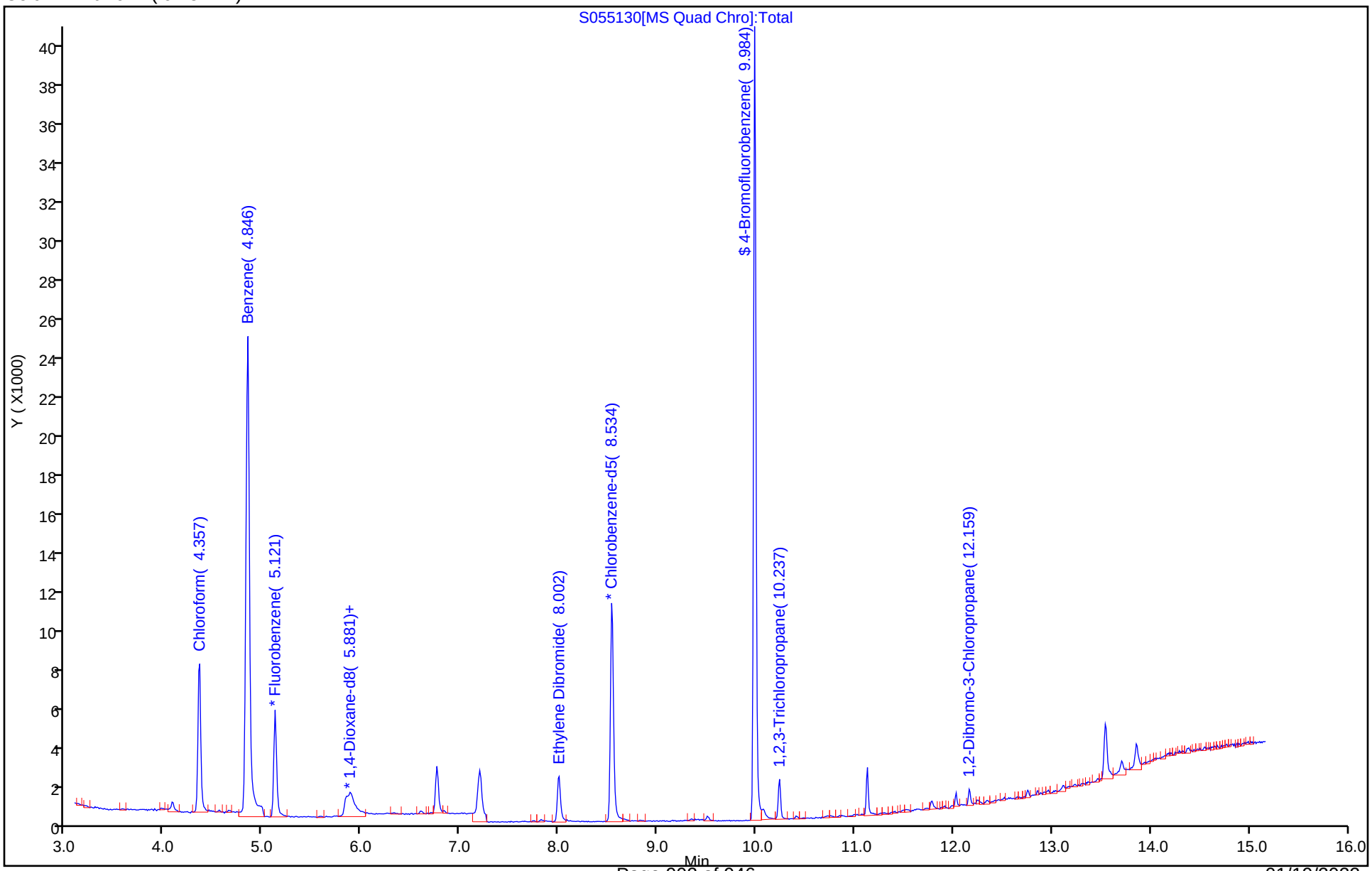
Report Date: 18-Jan-2022 20:19:24 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055130.D

Injection Date:	18-Jan-2022 20:00:29	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Target Compound Quantitation Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054837.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Dec-2021 12:24:16	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	10.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	460-0139637-001				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	14-Jan-2022 14:41:02	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1644				
First Level Reviewer: starzecm		Date:	27-Dec-2021 12:34:21		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 5 BFB

QC Flag Legend

Processing Flags

Reagents:

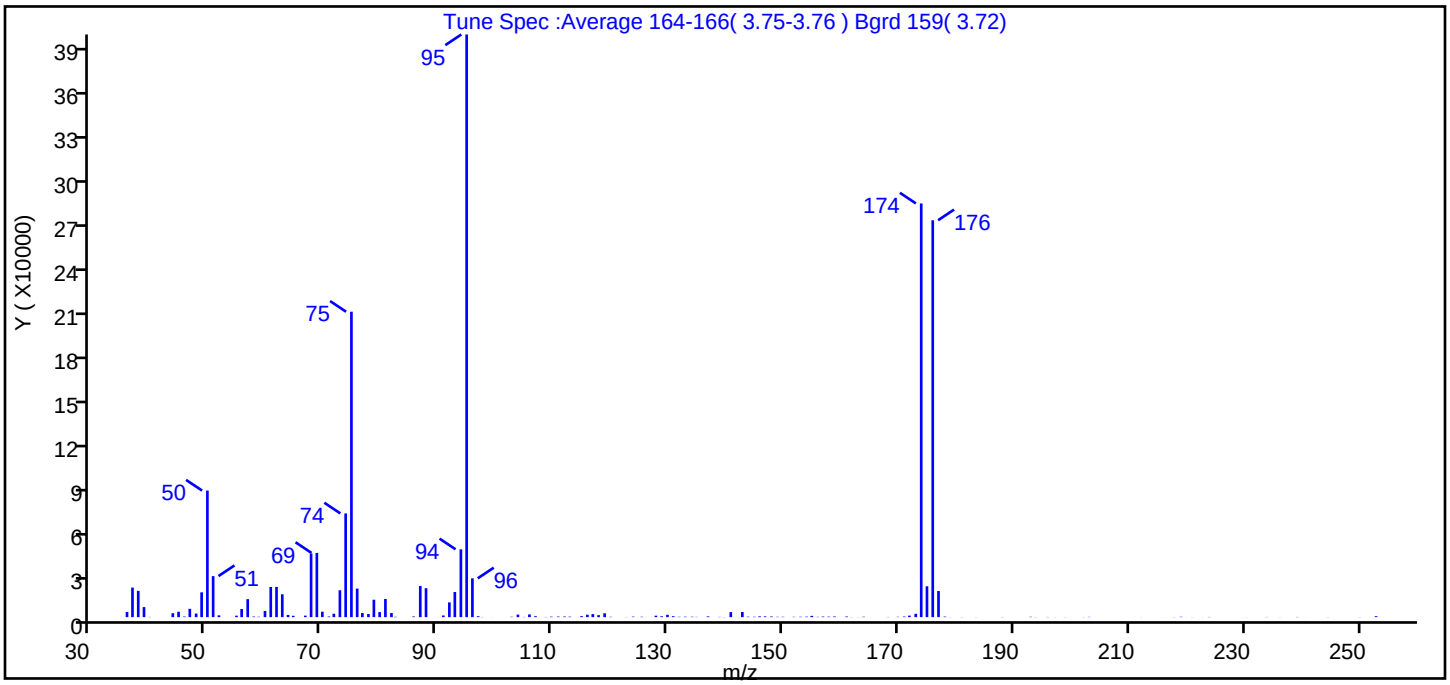
BFB_00030 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054837.D
Injection Date: 27-Dec-2021 12:24:16 Instrument ID: CVOAMS14
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Tune Method: BFB Method 8260D

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	50 to 200% of m/z 174	100.0 (140.8)
96	5 to 9% of m/z 95	6.7
173	<2% of m/z 174	0.6 (0.8)
174	50 to 200% of m/z 95	71.0
175	5 to 9% of m/z 174	5.3 (7.5)
176	95 to 105% of m/z 174	68.1 (95.9)
177	5 to 10% of m/z 176	4.5 (6.6)

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054837.D\8260SIM_14.rslt\spectra.d
Injection Date: 27-Dec-2021 12:24:16
Spectrum: Tune Spec :Average 164-166(3.75-3.76) Bgrd 159(3.72)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 152

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	18	79.00	11861	125.00	266	171.00	383
36.00	3522	80.00	3442	126.00	47	172.00	1053
37.00	20144	81.00	12406	128.00	995	173.00	2278
38.00	17904	82.00	2806	129.00	578	174.00	281920
39.00	6847	83.00	251	130.00	1618	175.00	21048
40.00	154	86.00	451	131.00	639	176.00	270464
44.00	2692	87.00	21248	132.00	243	177.00	17824
45.00	3688	88.00	19736	133.00	306	178.00	371
46.00	409	90.00	45	134.00	289	179.00	51
47.00	5664	91.00	1142	135.00	161	181.00	86
48.00	2452	92.00	10045	137.00	505	184.00	70
49.00	16904	93.00	17136	139.00	151	188.00	96
50.00	86272	94.00	46224	140.00	98	190.00	16
51.00	27976	95.00	397056	141.00	3418	193.00	241
52.00	1230	96.00	26448	142.00	49	194.00	76
55.00	1002	97.00	627	143.00	3529	196.00	127
56.00	5523	98.00	109	144.00	322	197.00	64
57.00	12277	99.00	28	145.00	261	199.00	79
58.00	401	102.00	9	146.00	541	202.00	65
59.00	255	103.00	246	147.00	519	203.00	176
60.00	4226	104.00	1749	148.00	431	205.00	3
61.00	20560	105.00	140	149.00	239	212.00	54
62.00	20616	106.00	1867	150.00	253	216.00	19
63.00	15587	107.00	641	151.00	14	218.00	85
64.00	1494	108.00	14	152.00	228	219.00	255
65.00	924	109.00	133	153.00	266	220.00	19
67.00	1033	110.00	342	154.00	331	221.00	61
68.00	43400	111.00	388	155.00	880	223.00	30
69.00	43752	112.00	419	156.00	198	224.00	133
70.00	3730	113.00	326	157.00	396	230.00	45
71.00	450	115.00	667	158.00	342	234.00	129
72.00	2332	116.00	1667	159.00	456	236.00	59
73.00	18320	117.00	2090	161.00	440	239.00	148

Report Date: 14-Jan-2022 14:41:02 Chrom Revision: 2.3 03-Jan-2022 17:03:12
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054837.D\8260SIM_14.rslt\spectra.d
Injection Date: 27-Dec-2021 12:24:16
Spectrum: Tune Spec :Average 164-166(3.75-3.76) Bgrd 159(3.72)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 152

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	70688	118.00	1370	162.00	94	241.00	21
75.00	208128	119.00	2632	163.00	77	245.00	85
76.00	19472	120.00	241	164.00	285	250.00	85
77.00	2793	123.00	84	168.00	120	252.00	23
78.00	2120	124.00	354	170.00	227	253.00	644

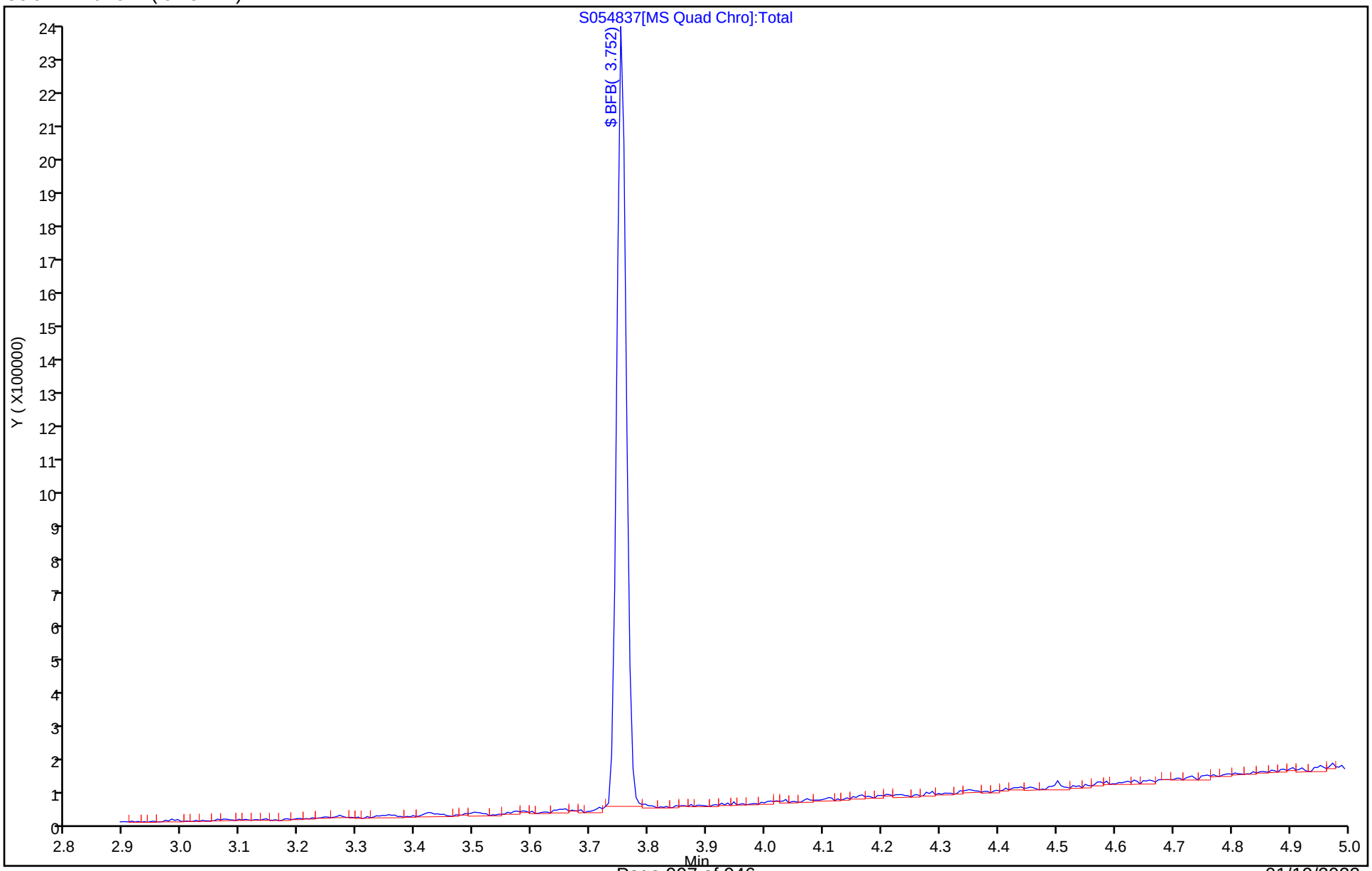
Report Date: 14-Jan-2022 14:41:02 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054837.D

Injection Date:	27-Dec-2021 12:24:16	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-823803/7

Matrix: Water | Lab File ID: S055107.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 10:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055107.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jan-2022 10:24:45 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140338-007
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:35:36 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: xuyvo Date: 19-Jan-2022 10:36:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10031	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	33	1670	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	8683	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	88	23003	0.5000	0.5091	
7 Benzene	78	4.836	4.836	0.000	0	2868		0.007884	

QC Flag Legend
Processing Flags

Reagents:
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

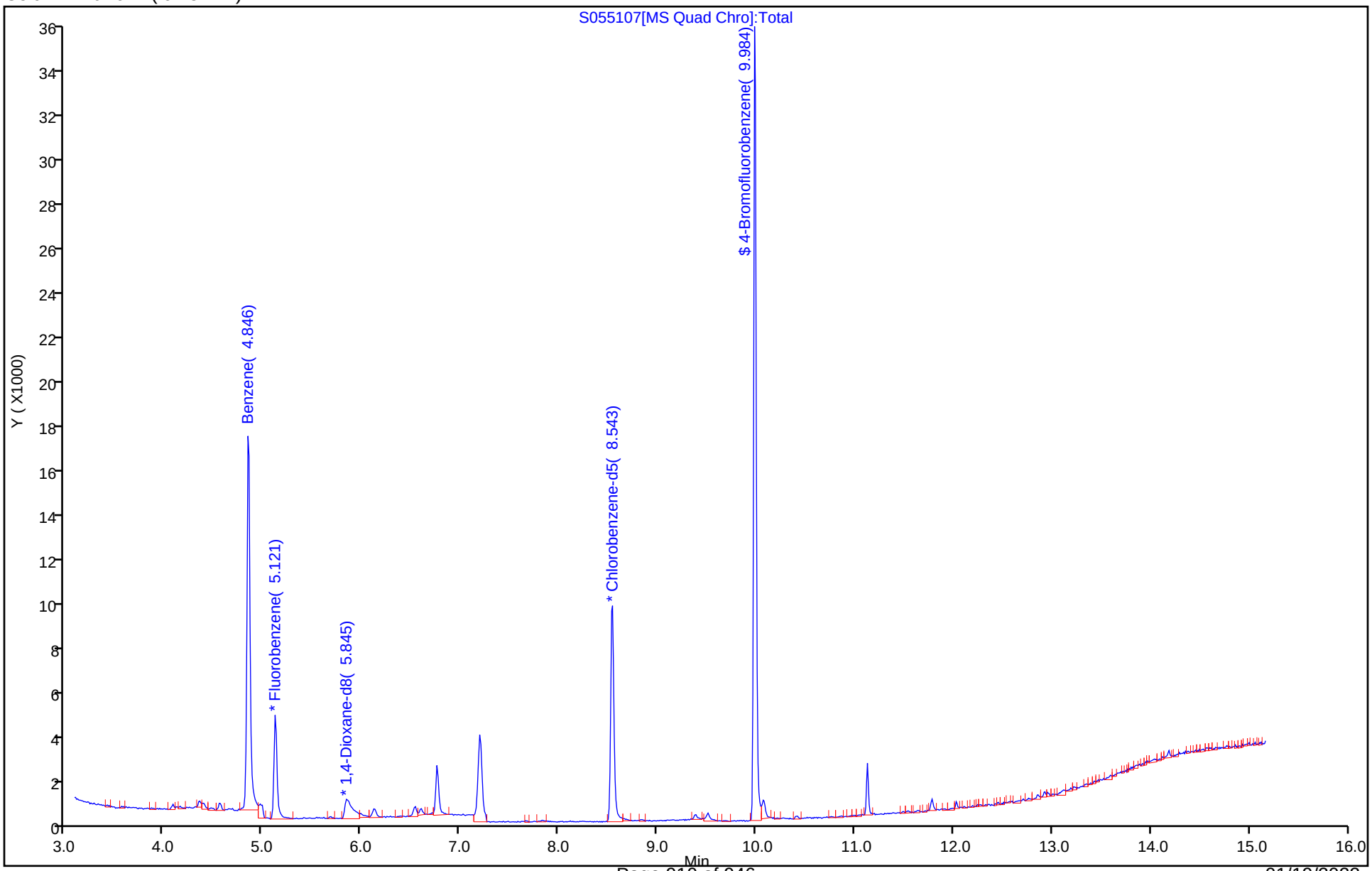
Report Date: 19-Jan-2022 10:36:03 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055107.D

Injection Date:	18-Jan-2022 10:24:45	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055107.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	18-Jan-2022 10:24:45	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Misc. Info.:	460-0140338-007				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:35:36	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: xuyvo Date: 19-Jan-2022 10:36:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5091	101.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-823919/8

Matrix: Water | Lab File ID: S055136.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 22:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055136.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jan-2022 22:10:47 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0140361-008
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 07:41:23 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1617

First Level Reviewer: boykink Date: 18-Jan-2022 23:47:20

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.121	5.121	0.000	63	11351	0.5000	0.5000	
*	2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1970	10.0	10.0	
*	3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9471	0.5000	0.5000	
$	4 4-Bromofluorobenzene	174	9.993	9.992	0.001	87	25224	0.5000	0.5118	

QC Flag Legend
Processing Flags

Reagents:
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

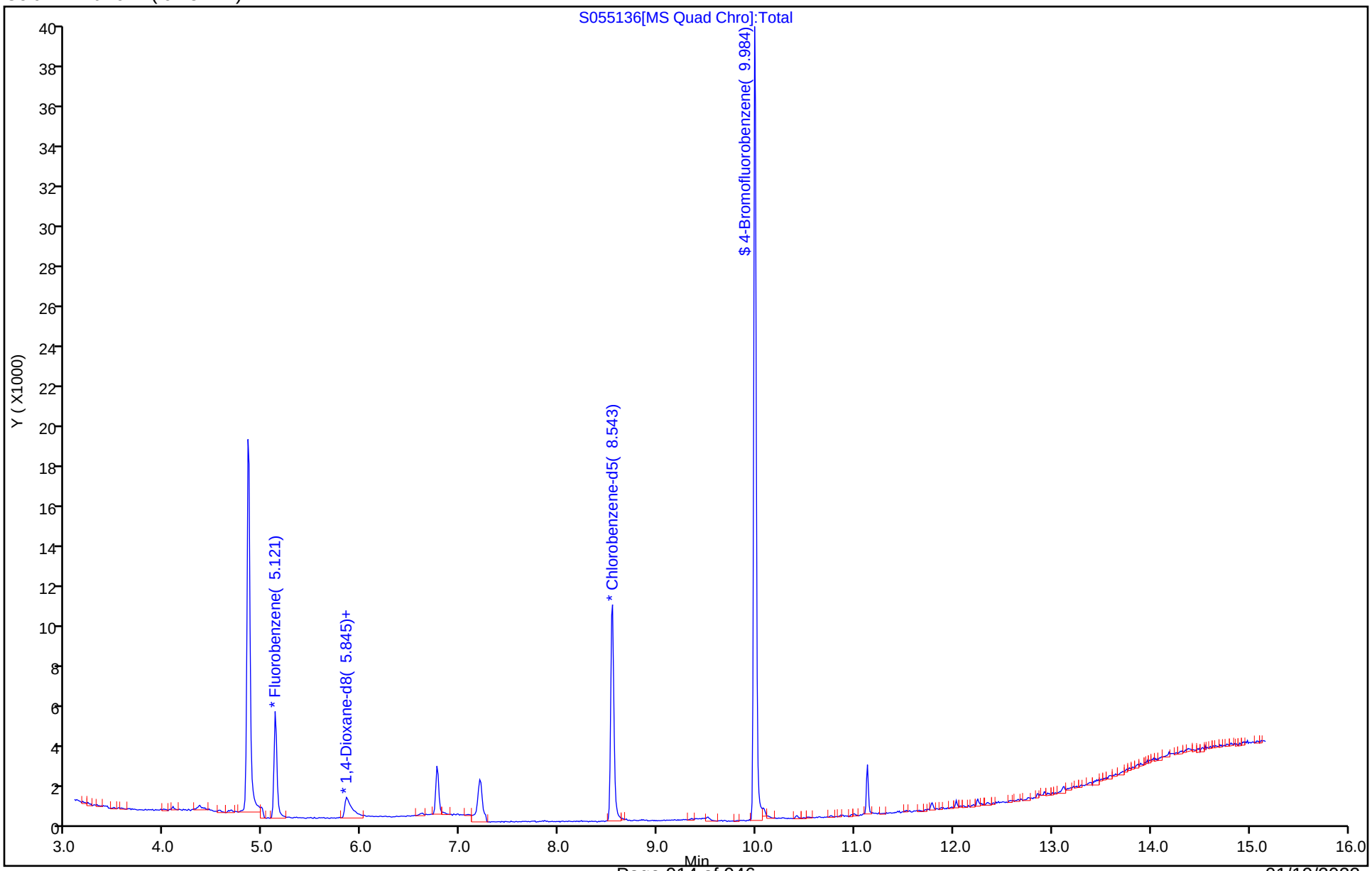
Report Date: 19-Jan-2022 09:17:45 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055136.D

Injection Date:	18-Jan-2022 22:10:47	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055136.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	18-Jan-2022 22:10:47	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Misc. Info.:	460-0140361-008				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 07:41:23	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1617				

First Level Reviewer: boykink Date: 18-Jan-2022 23:47:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5118	102.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-823803/3

Matrix: Water | Lab File ID: S055103.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 08:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.33		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	102		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055103.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jan-2022 08:57:45 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140338-003
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:35:36 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 18-Jan-2022 09:18:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	11031	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	35	1800	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	9667	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	87	25703	0.5000	0.5109	
6 Chloroform	83	4.357	4.357	0.000	0	7607	0.0500	0.0452	
7 Benzene	78	4.836	4.836	0.000	0	18877	0.0500	0.0472	
8 1,4-Dioxane	88	5.893	5.893	0.000	92	2035	5.00	4.33	
9 Ethylene Dibromide	109	8.002	8.002	0.000	98	2127	0.0500	0.0430	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	786	0.0500	0.0440	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	81	515	0.0500	0.0472	

QC Flag Legend
Processing Flags

Reagents:

VMB/C/MIX1SIM_00047	Amount Added: 1.00	Units: uL	
SIMDIOX50_00069	Amount Added: 20.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

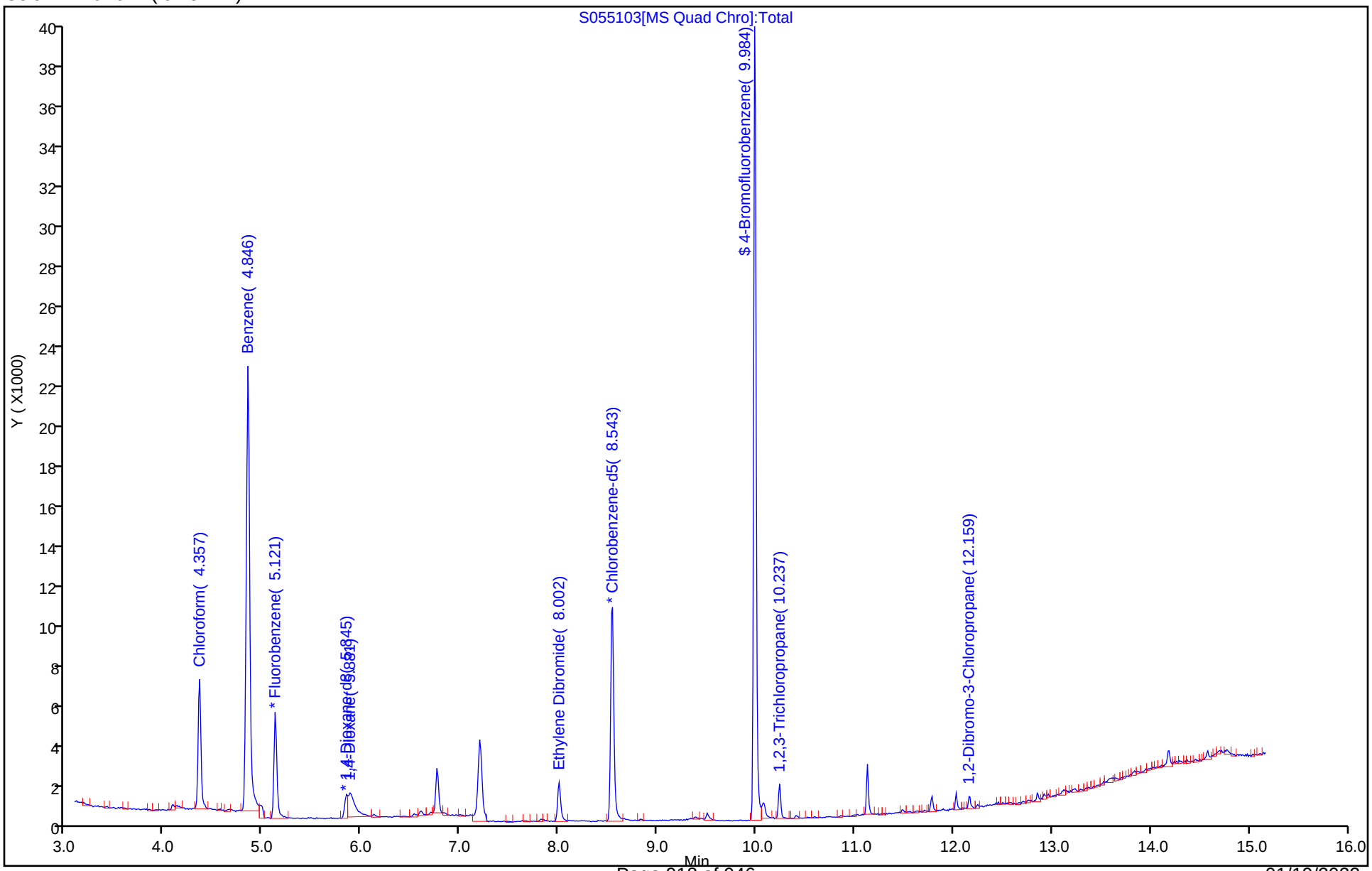
Report Date: 19-Jan-2022 10:35:36 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055103.D

Injection Date:	18-Jan-2022 08:57:45	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055103.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	18-Jan-2022 08:57:45	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS				
Misc. Info.:	460-0140338-003				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:35:36	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: starzecm Date: 18-Jan-2022 09:18:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5109	102.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-823919/4

Matrix: Water | Lab File ID: S055132.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 20:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.35		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	104		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055132.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jan-2022 20:43:54 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0140361-004
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 21:57:16 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: boykink Date: 18-Jan-2022 21:57:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	11751	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1898	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	10376	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	86	28155	0.5000	0.5214	
6 Chloroform	83	4.357	4.357	0.000	0	8335	0.0500	0.0465	
7 Benzene	78	4.836	4.836	0.000	0	20943	0.0500	0.0491	
8 1,4-Dioxane	88	5.893	5.893	0.000	91	2155	5.00	4.35	
9 Ethylene Dibromide	109	8.002	8.002	0.000	99	2282	0.0500	0.0430	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	837	0.0500	0.0436	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	66	549	0.0500	0.0468	

QC Flag Legend
Processing Flags

Reagents:
VMB/C/MIX1SIM_00047 Amount Added: 1.00 Units: uL
SIMDIOX50_00069 Amount Added: 20.00 Units: uL
SimissurNEW_00053 Amount Added: 2.00 Units: uL Run Reagent

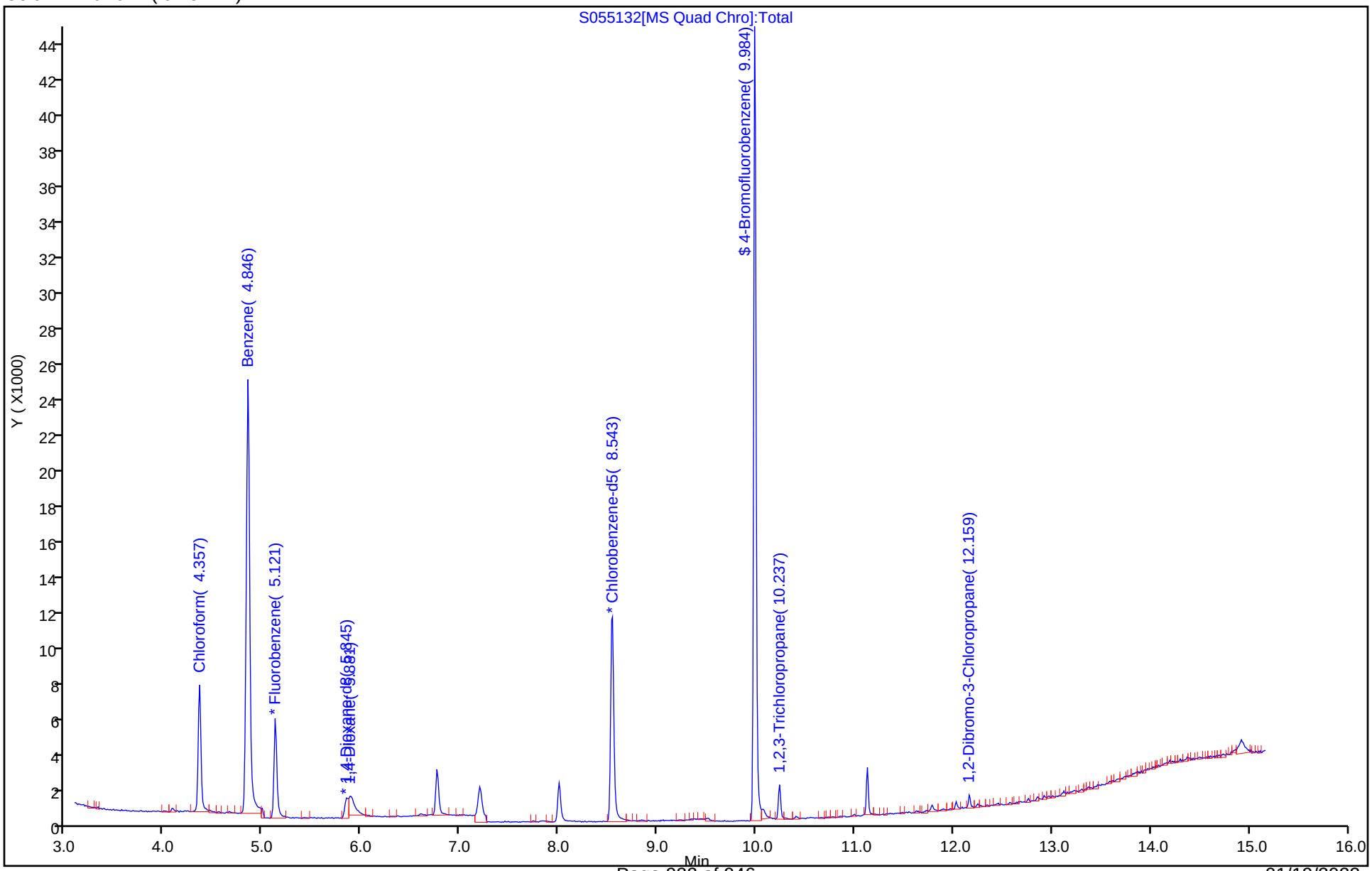
Report Date: 18-Jan-2022 21:57:17 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055132.D

Injection Date:	18-Jan-2022 20:43:54	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055132.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	18-Jan-2022 20:43:54	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS				
Misc. Info.:	460-0140361-004				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 21:57:16	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1658				

First Level Reviewer: boykink Date: 18-Jan-2022 21:57:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5214	104.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-823803/4

Matrix: Water | Lab File ID: S055104.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 09:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823803 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.85		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	104		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055104.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jan-2022 09:19:31 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140338-004
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 19-Jan-2022 10:35:36 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: starzecm Date: 18-Jan-2022 09:51:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	10606	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	33	2087	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	90	8745	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	86	23582	0.5000	0.5182	
6 Chloroform	83	4.357	4.357	0.000	0	7135	0.0500	0.0441	
7 Benzene	78	4.836	4.836	0.000	0	18139	0.0500	0.0472	
8 1,4-Dioxane	88	5.893	5.893	0.000	94	2096	5.00	3.85	
9 Ethylene Dibromide	109	8.002	8.002	0.000	100	1932	0.0500	0.0432	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	96	736	0.0500	0.0455	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	85	480	0.0500	0.0486	

QC Flag Legend
Processing Flags

Reagents:

VMB/C/MIX1SIM_00047	Amount Added: 1.00	Units: uL	
SIMDIOX50_00069	Amount Added: 20.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

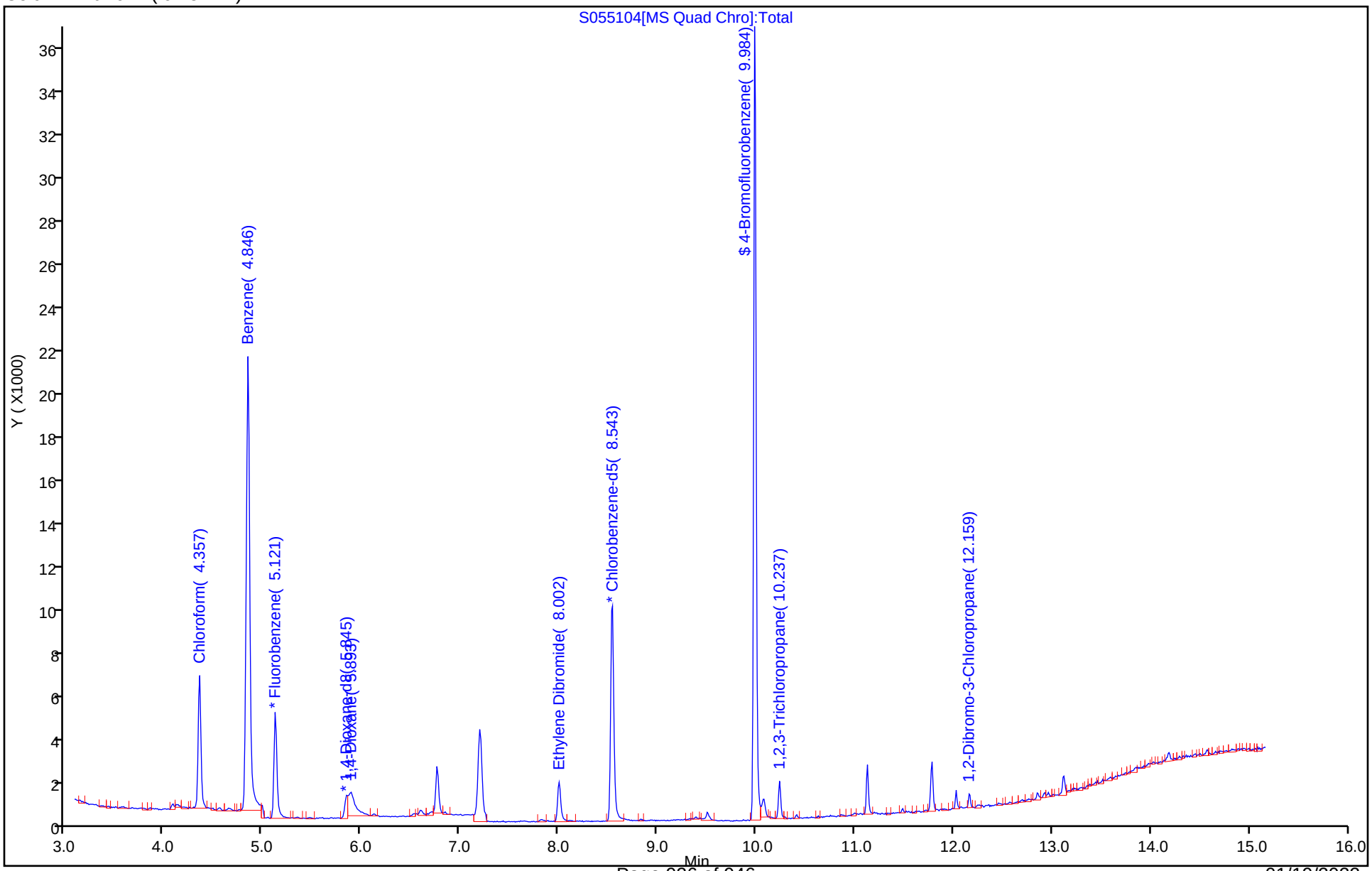
Report Date: 19-Jan-2022 10:35:47 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055104.D

Injection Date:	18-Jan-2022 09:19:31	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	4
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\S055104.D				
Lims ID:	LCSD				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	18-Jan-2022 09:19:31	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCSD				
Misc. Info.:	460-0140338-004				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140338.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	19-Jan-2022 10:35:36	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1645				

First Level Reviewer: starzecm Date: 18-Jan-2022 09:51:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5182	103.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Edison | Job No.: 460-250807-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-823919/5

Matrix: Water | Lab File ID: S055133.D

Analysis Method: 8260D SIM | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 01/18/2022 21:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 823919 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.24		2.0	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		65-133

Eurofins Edison
Target Compound Quantitation Report

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055133.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jan-2022 21:05:38 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0140361-005
Operator ID: Instrument ID: CVOAMS14

Method: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m
Limit Group: VOA - 8260D Water and Solid
Last Update: 18-Jan-2022 21:58:36 Calib Date: 27-Dec-2021 15:42:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1658

First Level Reviewer: boykink Date: 18-Jan-2022 21:58:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.121	5.121	0.000	63	11740	0.5000	0.5000	
* 2 1,4-Dioxane-d8	64	5.845	5.845	0.000	0	1972	10.0	10.0	
* 3 Chlorobenzene-d5	119	8.543	8.543	0.000	91	10042	0.5000	0.5000	
$ 4 4-Bromofluorobenzene	174	9.992	9.992	0.000	87	26491	0.5000	0.5069	
6 Chloroform	83	4.357	4.357	0.000	0	8175	0.0500	0.0456	
7 Benzene	78	4.836	4.836	0.000	0	20458	0.0500	0.0481	
8 1,4-Dioxane	88	5.893	5.893	0.000	91	2183	5.00	4.24	M
9 Ethylene Dibromide	109	8.002	8.002	0.000	96	2341	0.0500	0.0456	
10 1,2,3-Trichloropropane	110	10.237	10.237	0.000	95	899	0.0500	0.0484	
11 1,2-Dibromo-3-Chloropropane	157	12.168	12.168	0.000	79	592	0.0500	0.0522	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

VMB/C/MIX1SIM_00047	Amount Added: 1.00	Units: uL	
SIMDIOX50_00069	Amount Added: 20.00	Units: uL	
SimissurNEW_00053	Amount Added: 2.00	Units: uL	Run Reagent

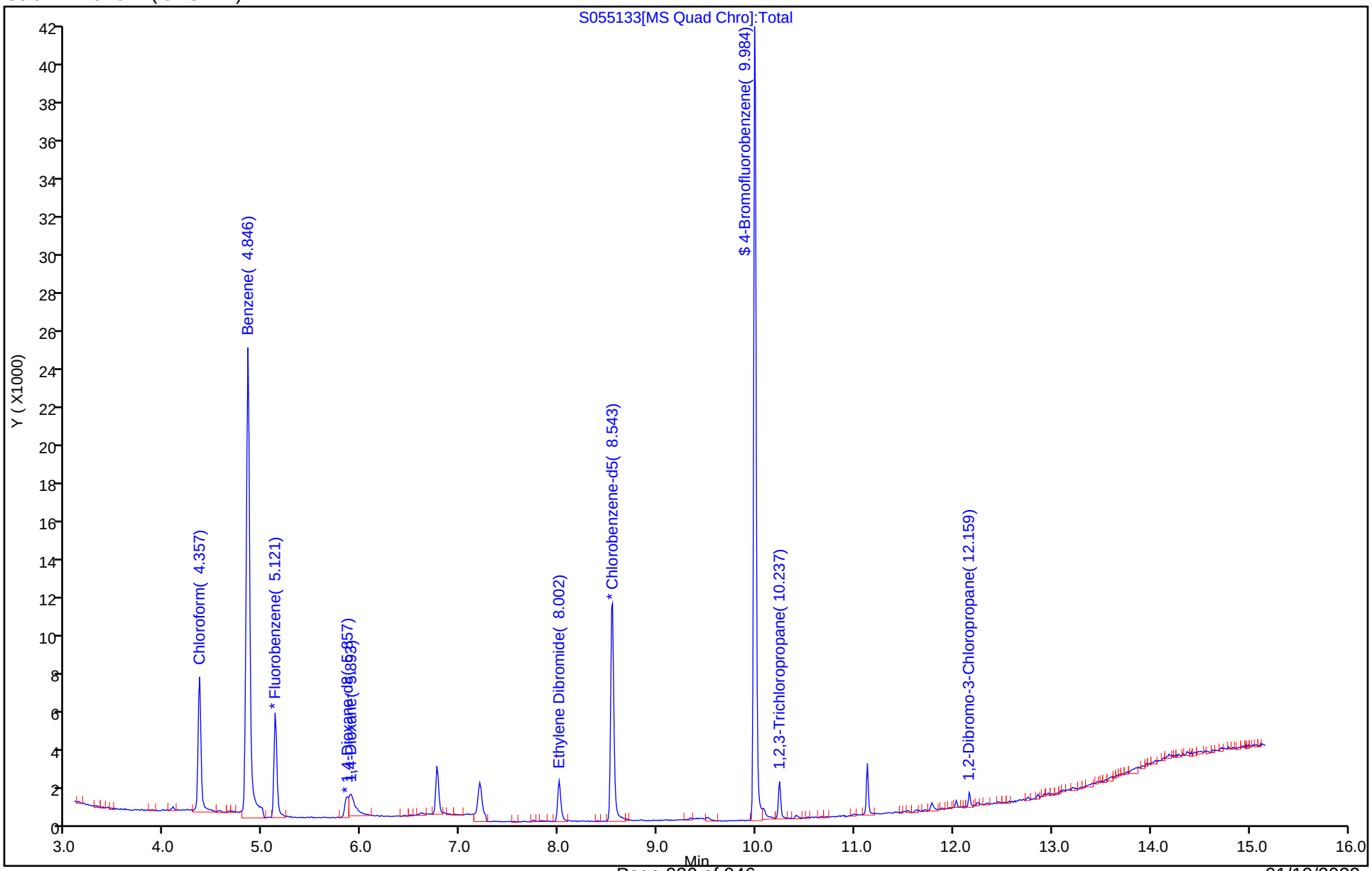
Report Date: 18-Jan-2022 21:58:36 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins Edison

Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055133.D

Injection Date:	18-Jan-2022 21:05:38	Instrument ID:	CVOAMS14	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260SIM_14	Limit Group:	VOA - 8260D Water and Solid		

Column: Rtx-624 (0.25 mm)



Eurofins Edison
Recovery Report

Data File:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055133.D				
Lims ID:	LCSD				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	18-Jan-2022 21:05:38	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCSD				
Misc. Info.:	460-0140361-005				
Operator ID:		Instrument ID:	CVOAMS14		
Method:	\\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\8260SIM_14.m				
Limit Group:	VOA - 8260D Water and Solid				
Last Update:	18-Jan-2022 21:58:36	Calib Date:	27-Dec-2021 15:42:55		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Edison\ChromData\CVOAMS14\20211227-139637.b\S054846.D				
Column 1 :	Rtx-624 (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1658				

First Level Reviewer: boykink Date: 18-Jan-2022 21:58:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene	0.5000	0.5069	101.39

Manual Integration/User Assign Peak Report

Eurofins Edison

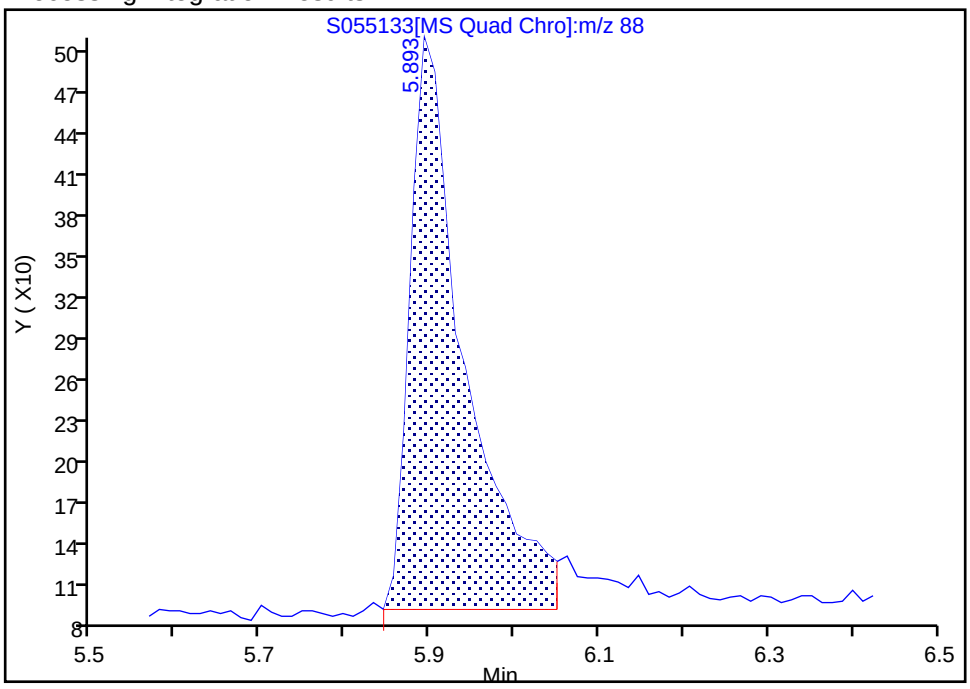
Data File: \\chromfs\Edison\ChromData\CVOAMS14\20220118-140361.b\S055133.D
Injection Date: 18-Jan-2022 21:05:38 Instrument ID: CVOAMS14
Lims ID: LCSD
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260SIM_14 Limit Group: VOA - 8260D Water and Solid
Column: Rtx-624 (0.25 mm) Detector MS SCAN

8 1,4-Dioxane, CAS: 123-91-1

Signal: 1

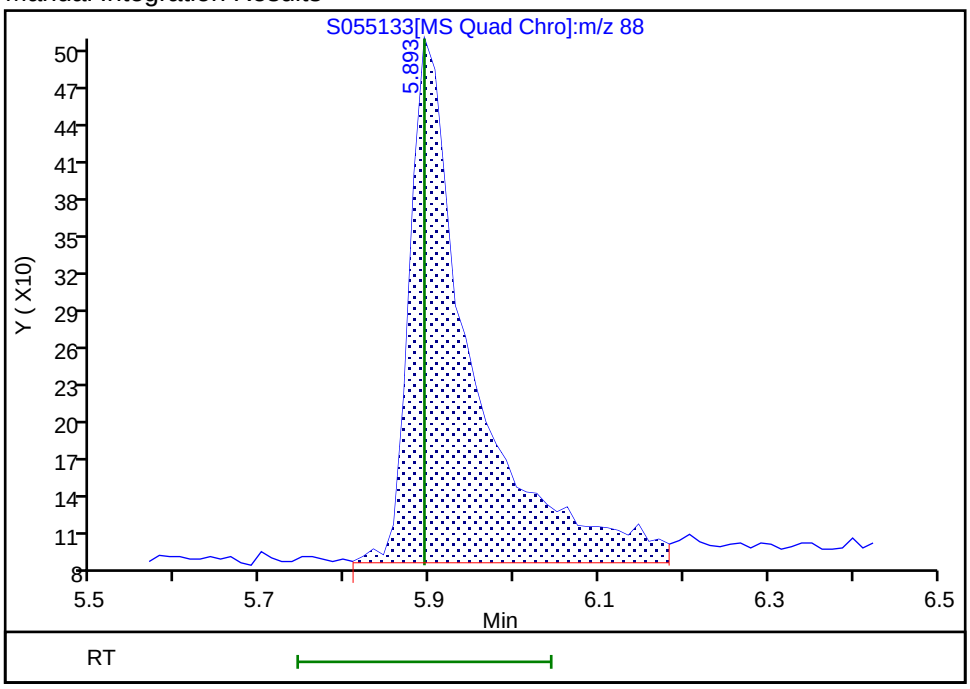
Processing Integration Results

RT: 5.89
Area: 1882
Amount: 3.658783
Amount Units: ug/l



Manual Integration Results

RT: 5.89
Area: 2183
Amount: 4.243955
Amount Units: ug/l



Reviewer: boykink, 18-Jan-2022 21:57:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Start Date: 12/27/2021 12:24

Analysis Batch Number: 820935 End Date: 12/27/2021 23:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-820935/1		12/27/2021 12:24	1	S054837.D	Rtx-624 0.25(mm)
STD04 460-820935/3 IC		12/27/2021 13:10	1	S054839.D	Rtx-624 0.25(mm)
STD1 460-820935/4 IC		12/27/2021 13:32	1	S054840.D	Rtx-624 0.25(mm)
STD5 460-820935/5 ICIS		12/27/2021 13:54	1	S054841.D	Rtx-624 0.25(mm)
STD10 460-820935/6 IC		12/27/2021 14:15	1	S054842.D	Rtx-624 0.25(mm)
STD20 460-820935/7 IC		12/27/2021 14:37	1	S054843.D	Rtx-624 0.25(mm)
STD30 460-820935/8 IC		12/27/2021 14:59	1	S054844.D	Rtx-624 0.25(mm)
STD40 460-820935/9 IC		12/27/2021 15:21	1	S054845.D	Rtx-624 0.25(mm)
STD50 460-820935/10 IC		12/27/2021 15:42	1	S054846.D	Rtx-624 0.25(mm)
ICV 460-820935/13		12/27/2021 16:48	1	S054849.D	Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 17:10	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 17:31	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 18:15	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 18:37	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 18:59	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 19:20	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 19:42	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 20:04	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 20:26	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 21:10	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 21:31	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 22:15	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 22:37	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 23:21	1		Rtx-624 0.25(mm)
ZZZZZ		12/27/2021 23:42	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Start Date: 01/18/2022 08:35

Analysis Batch Number: 823803 End Date: 01/18/2022 17:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 460-823803/2		01/18/2022 08:35	1	S055102.D	Rtx-624 0.25(mm)
LCS 460-823803/3		01/18/2022 08:57	1	S055103.D	Rtx-624 0.25(mm)
LCSD 460-823803/4		01/18/2022 09:19	1	S055104.D	Rtx-624 0.25(mm)
MB 460-823803/7		01/18/2022 10:24	1	S055107.D	Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 10:46	5		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 11:08	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 11:30	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 11:51	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 12:13	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 12:35	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 12:57	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 13:19	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 13:40	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 14:02	1		Rtx-624 0.25(mm)
ZZZZZ		01/18/2022 14:24	1		Rtx-624 0.25(mm)
460-250807-1	TRIP BLANK	01/18/2022 14:46	1	S055119.D	Rtx-624 0.25(mm)
460-250807-2	SL-15_011222	01/18/2022 15:07	1	S055120.D	Rtx-624 0.25(mm)
460-250807-3	SL-14_011222	01/18/2022 15:29	1	S055121.D	Rtx-624 0.25(mm)
460-250807-4	SL-13_011222	01/18/2022 15:51	1	S055122.D	Rtx-624 0.25(mm)
460-250807-5	SL-7_011222	01/18/2022 16:13	1	S055123.D	Rtx-624 0.25(mm)
460-250807-6	SL-6_011222	01/18/2022 16:35	1	S055124.D	Rtx-624 0.25(mm)
460-250807-8	SL-8_011222	01/18/2022 17:18	1	S055126.D	Rtx-624 0.25(mm)
460-250807-9	SL-9_011222	01/18/2022 17:40	1	S055127.D	Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Instrument ID: CVOAMS14 Start Date: 01/18/2022 20:00

Analysis Batch Number: 823919 End Date: 01/19/2022 05:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 460-823919/2		01/18/2022 20:00	1	S055130.D	Rtx-624 0.25(mm)
LCS 460-823919/4		01/18/2022 20:43	1	S055132.D	Rtx-624 0.25(mm)
LCSD 460-823919/5		01/18/2022 21:05	1	S055133.D	Rtx-624 0.25(mm)
MB 460-823919/8		01/18/2022 22:10	1	S055136.D	Rtx-624 0.25(mm)
460-250807-11	TRIP BLANK	01/18/2022 22:32	1	S055137.D	Rtx-624 0.25(mm)
460-250807-21	TRIP BLANK	01/18/2022 22:54	1	S055138.D	Rtx-624 0.25(mm)
460-250807-12	SL-11_011222	01/18/2022 23:16	1	S055139.D	Rtx-624 0.25(mm)
460-250807-13	SL-23_011322	01/18/2022 23:37	1	S055140.D	Rtx-624 0.25(mm)
460-250807-14	SL-12_011322	01/18/2022 23:59	1	S055141.D	Rtx-624 0.25(mm)
460-250807-15	SL-19_011322	01/19/2022 00:21	1	S055142.D	Rtx-624 0.25(mm)
460-250807-16	SL-22_011322	01/19/2022 00:43	1	S055143.D	Rtx-624 0.25(mm)
460-250807-18	SL-20_011322	01/19/2022 01:04	1	S055144.D	Rtx-624 0.25(mm)
460-250807-19	SL-4_011322	01/19/2022 01:26	1	S055145.D	Rtx-624 0.25(mm)
460-250807-20	SL-18_011322	01/19/2022 01:48	1	S055146.D	Rtx-624 0.25(mm)
460-250807-10	SL-10_011222	01/19/2022 02:09	1	S055147.D	Rtx-624 0.25(mm)
460-250807-22	SL-17_011322	01/19/2022 02:31	1	S055148.D	Rtx-624 0.25(mm)
460-250807-23	SL-21_011422	01/19/2022 02:53	1	S055149.D	Rtx-624 0.25(mm)
460-250807-24	SL-16_011422	01/19/2022 03:15	1	S055150.D	Rtx-624 0.25(mm)
460-250807-25	SL-3_011422	01/19/2022 03:36	1	S055151.D	Rtx-624 0.25(mm)
460-250807-26	SL-2_011422	01/19/2022 03:58	1	S055152.D	Rtx-624 0.25(mm)
460-250807-27	MH-1231_011422	01/19/2022 04:20	1	S055153.D	Rtx-624 0.25(mm)
460-250807-28	MH-1244_011422	01/19/2022 04:42	1	S055154.D	Rtx-624 0.25(mm)
460-250807-7	SL-5_011222	01/19/2022 05:03	1	S055155.D	Rtx-624 0.25(mm)
ZZZZZ		01/19/2022 05:25	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 820935 Batch Start Date: 12/27/21 12:24 Batch Analyst: Starzec, Margaret

Batch Method: 8260D SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	1,4DIOXSP 00116	BFB 00030	SIMDIOX50 00068	SimissurNEW 00053
BFB 460-820935/1		8260D SIM		10 mL	10 mL		1 uL		
STD04 460-820935/3 IC		8260D SIM		10 mL	10 mL			4 uL	2 uL
STD1 460-820935/4 IC		8260D SIM		10 mL	10 mL			10 uL	2 uL
STD5 460-820935/5 ICIS		8260D SIM		10 mL	10 mL			20 uL	2 uL
STD10 460-820935/6 IC		8260D SIM		10 mL	10 mL			20 uL	2 uL
STD20 460-820935/7 IC		8260D SIM		10 mL	10 mL			20 uL	2 uL
STD30 460-820935/8 IC		8260D SIM		10 mL	10 mL			30 uL	2 uL
STD40 460-820935/9 IC		8260D SIM		10 mL	10 mL			40 uL	2 uL
STD50 460-820935/10 IC		8260D SIM		10 mL	10 mL			50 uL	2 uL
ICV 460-820935/13		8260D SIM		10 mL	10 mL	20 uL			2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SIMMIX1SS 00039	VMB/C/MIX1SIM 00046				
BFB 460-820935/1		8260D SIM							
STD04 460-820935/3 IC		8260D SIM			1 uL				
STD1 460-820935/4 IC		8260D SIM			2 uL				
STD5 460-820935/5 ICIS		8260D SIM			1 uL				
STD10 460-820935/6 IC		8260D SIM			1 uL				
STD20 460-820935/7 IC		8260D SIM			1 uL				
STD30 460-820935/8 IC		8260D SIM			2.5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 820935 Batch Start Date: 12/27/21 12:24 Batch Analyst: Starzec, Margaret

Batch Method: 8260D SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	SIMMIX1SS 00039	VMB/C/MIX1SIM 00046				
STD40 460-820935/9 IC		8260D SIM			5 uL				
STD50 460-820935/10 IC		8260D SIM			10 uL				
ICV 460-820935/13		8260D SIM		1 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823803 Batch Start Date: 01/18/22 08:35 Batch Analyst: Starzec, Margaret

Batch Method: 8260D SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	SIMDIOX50 00069	SimissurNEW 00053	VMB/C/MIX1SIM 00047
CCVIS 460-823803/2		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
LCS 460-823803/3		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
LCSD 460-823803/4		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
MB 460-823803/7		8260D SIM		10 mL	10 mL			2 uL	
460-250807-C-1	TRIP BLANK	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-2	SL-15_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-3	SL-14_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-4	SL-13_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-5	SL-7_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-6	SL-6_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-8	SL-8_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-9	SL-9_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823919 Batch Start Date: 01/18/22 20:00 Batch Analyst: Starzec, Margaret

Batch Method: 8260D SIM Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	SIMDIOX50 00069	SimissurNEW 00053	VMB/C/MIX1SIM 00047
CCVIS 460-823919/2		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
LCS 460-823919/4		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
LCSD 460-823919/5		8260D SIM		10 mL	10 mL		20 uL	2 uL	1 uL
MB 460-823919/8		8260D SIM		10 mL	10 mL			2 uL	
460-250807-C-11	TRIP BLANK	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-21	TRIP BLANK	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-12	SL-11_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-13	SL-23_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-14	SL-12_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-15	SL-19_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-16	SL-22_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-18	SL-20_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-19	SL-4_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-20	SL-18_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-10	SL-10_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-22	SL-17_011322	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-23	SL-21_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-24	SL-16_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-25	SL-3_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-26	SL-2_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-27	SAMH-1231_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-28	SAMH-1244_011422	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	
460-250807-D-7	SL-5_011222	8260D SIM	T	10 mL	10 mL	<2 PH Units		2 uL	

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Edison Job No.: 460-250807-1

SDG No.:

Batch Number: 823919 Batch Start Date: 01/18/22 20:00 Batch Analyst: Starzec, Margaret

Batch Method: 8260D SIM Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

MICHIGAN 190

Chain of Custody Record

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

250807

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐ 3 day		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			
PO # 30080642.701.04				

3-Day RUSH

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM			Total # of containers	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X			1	1 Trip Blank
SL-15_011222	1-12-22	0915		X						6																2	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-14_011222		0950		X						6																3	
SL-13_011222		1045		X						6																4	
SL-7_011222		1115		X						6																5	
SL-6_011222		1145		X						6																6	
SL-5_011222		1205		X						6																7	
SL-8_011222		1315		X						6																8	
SL-9_011222		1340		X						6																9	
SL-10_011222		1410		X						6																10	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	1535 1/14/22		Eurofins	1-14-22 1536
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Eurofins	1-14-22 1537		FedEx	1/15/22 1100
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

CS 826988 IR 1.4/1.3°C 2.3/2.2°C

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460-250807-A-1 Chain of Custody

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 30080642.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM				Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X			11	1 Trip Blank
SL-11_011222	1-12-22	1435		X						6																12	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-23_011322	1-13-22	0925		X						6																13	
SL-12_011322	↓	0950		X						6																	14
SL-19_011322		1020		X						6																	15
SL-22_011322		1050		X						6																	16
SL-21_011322		1300		X						6					—	—	DONT RUN SAMPLE										17
SL-20_011322		1320		X						6					N	G	X	X	X	X	X	X	X				18
SL-4_011322		1415		X						6																	19
SL-18_011322	↓	1450		X						6																	20

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ARCADIS	1/14/22 1533		Eurofins	1-14-22 1536
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Eurofins	1-14-22 1537		FAO1	1/15/22 1100
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

250607

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No:
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐	COCs
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐	For lab use only
Project Number: 30080642.701.04	Shipping/Tracking No:		Walk-in client
PO # 30080642.701.04			Lab sampling
			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM				Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X			21	1 Trip Blank
SL-17_011322	1-13-22	1510		X						6																22	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-21_011422	1-14-22	0915		X						6																23	
SL-16_011422	|	0940		X						6																24	
SL-3_011422		1025		X						6																25	
SL-2_011422		1045		X						6																26	
SAMH-1231_011422		1135		X						6																27	
SAMH-1244_011422	↓	1200		X						6					↓	↓	↓	↓	↓	↓	↓	↓	↓			28	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ARCADIS	1/14/22 1535	Jeri Hall	EIA	1-14-22 1536
Relinquished by: Jeri Hall	Company: Eurofins	Date/Time: 1-14-22 1537	Received by:	Company: FedEx	Date/Time: 1/15/22 1100
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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01/19/2022

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 250807

Number of Coolers: 2 **IR Gun #** 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.4 °C	1.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.3 °C	2.2 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 1/15/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-250807-1

Login Number: 250807
List Number: 1
Creator: Meyers, Gary

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-251063-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
1/27/2022 10:16:35 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-251063-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-251063-1

Comments
No additional comments.

Receipt
The samples were received on 1/21/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01 — Lab Sample ID: 460-251063-1

No Detections.

Client Sample ID: SL-18_011822 — Lab Sample ID: 460-251063-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_011822 — Lab Sample ID: 460-251063-3

No Detections.

Client Sample ID: SL-21_011822 — Lab Sample ID: 460-251063-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.84	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_011822 — Lab Sample ID: 460-251063-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_011822 — Lab Sample ID: 460-251063-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_011922 — Lab Sample ID: 460-251063-7

No Detections.

Client Sample ID: SL-14_011922 — Lab Sample ID: 460-251063-8

No Detections.

Client Sample ID: SL-13_011922 — Lab Sample ID: 460-251063-9

No Detections.

Client Sample ID: SL-7_011922 — Lab Sample ID: 460-251063-10

No Detections.

Client Sample ID: TRIP BLANK_02 — Lab Sample ID: 460-251063-11

No Detections.

Client Sample ID: SL-6_011922 — Lab Sample ID: 460-251063-12

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_011922 — Lab Sample ID: 460-251063-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_011922 — Lab Sample ID: 460-251063-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_011922 — Lab Sample ID: 460-251063-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_011922 — Lab Sample ID: 460-251063-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_011922 — Lab Sample ID: 460-251063-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_011922 — Lab Sample ID: 460-251063-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_011922 — Lab Sample ID: 460-251063-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.47	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_011922 — Lab Sample ID: 460-251063-20

No Detections.

Client Sample ID: TRIP BLANK_03 — Lab Sample ID: 460-251063-21

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Edison

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-16_012022 — Lab Sample ID: 460-251063-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_012022 — Lab Sample ID: 460-251063-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_012022 — Lab Sample ID: 460-251063-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_012022 — Lab Sample ID: 460-251063-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	13		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_012022 — Lab Sample ID: 460-251063-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.9		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 460-251063-1
Date Collected: 01/18/22 13:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/25/22 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*65 - 133*		*01/25/22 02:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 07:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 07:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 07:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 07:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 07:52	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 07:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*		*01/23/22 07:52*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*01/23/22 07:52*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/23/22 07:52*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*01/23/22 07:52*	*1*

Client Sample ID: SL-18_011822
Lab Sample ID: 460-251063-2
Date Collected: 01/18/22 13:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			01/22/22 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*65 - 133*		*01/22/22 15:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 09:24	1
cis-1,2-Dichloroethene	**6.2**		1.0	0.46	ug/L			01/23/22 09:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 09:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 09:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 09:24	1
Vinyl chloride	**5.3**		1.0	0.45	ug/L			01/23/22 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 123*		*01/23/22 09:24*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*01/23/22 09:24*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/23/22 09:24*	*1*
4-Bromofluorobenzene	*85*		*76 - 120*		*01/23/22 09:24*	*1*

Client Sample ID: SL-22_011822
Lab Sample ID: 460-251063-3
Date Collected: 01/18/22 10:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*65 - 133*		*01/22/22 15:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 09:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 09:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 09:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 09:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 09:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 09:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 09:47*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*01/23/22 09:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/23/22 09:47*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 09:47*	*1*

Client Sample ID: SL-21_011822
Lab Sample ID: 460-251063-4
Date Collected: 01/18/22 11:10
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			01/22/22 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*65 - 133*		*01/22/22 16:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 10:10	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			01/23/22 10:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 10:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:10	1
Vinyl chloride	**0.84**	**J**	1.0	0.45	ug/L			01/23/22 10:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*		*01/23/22 10:10*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*01/23/22 10:10*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/23/22 10:10*	*1*
4-Bromofluorobenzene	*83*		*76 - 120*		*01/23/22 10:10*	*1*

Client Sample ID: SL-20_011822
Lab Sample ID: 460-251063-5
Date Collected: 01/18/22 11:25
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			01/22/22 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*65 - 133*		*01/22/22 16:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 10:33	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			01/23/22 10:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 10:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:33	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			01/23/22 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*01/23/22 10:33*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 124*		*01/23/22 10:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/23/22 10:33*	*1*
4-Bromofluorobenzene	*81*		*76 - 120*		*01/23/22 10:33*	*1*

Client Sample ID: SL-4_011822
Lab Sample ID: 460-251063-6
Date Collected: 01/18/22 13:00
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			01/22/22 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*65 - 133*		*01/22/22 16:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 10:57	1
cis-1,2-Dichloroethene	**5.3**		1.0	0.46	ug/L			01/23/22 10:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 10:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 10:57	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			01/23/22 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 10:57*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*01/23/22 10:57*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/23/22 10:57*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 10:57*	*1*

Client Sample ID: SL-15_011922
Lab Sample ID: 460-251063-7
Date Collected: 01/19/22 09:00
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*65 - 133*		*01/22/22 17:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 11:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 11:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 11:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 11:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 11:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*01/23/22 11:20*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*01/23/22 11:20*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/23/22 11:20*	*1*
4-Bromofluorobenzene	*83*		*76 - 120*		*01/23/22 11:20*	*1*

Client Sample ID: SL-14_011922
Lab Sample ID: 460-251063-8
Date Collected: 01/19/22 09:20
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*65 - 133*		*01/22/22 17:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 11:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 11:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 11:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 11:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 11:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*01/23/22 11:43*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*01/23/22 11:43*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/23/22 11:43*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 11:43*	*1*

Client Sample ID: SL-13_011922
Lab Sample ID: 460-251063-9
Date Collected: 01/19/22 09:35
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*65 - 133*		*01/22/22 17:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 12:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 12:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 12:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 12:06*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*01/23/22 12:06*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/23/22 12:06*	*1*
4-Bromofluorobenzene	*84*		*76 - 120*		*01/23/22 12:06*	*1*

Client Sample ID: SL-7_011922
Lab Sample ID: 460-251063-10
Date Collected: 01/19/22 09:55
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*65 - 133*		*01/22/22 18:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 12:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 12:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 12:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 12:30*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*01/23/22 12:30*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/23/22 12:30*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 12:30*	*1*

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 460-251063-11
Date Collected: 01/19/22 14:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/25/22 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*65 - 133*		*01/25/22 02:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 08:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 08:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 08:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 08:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 08:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 08:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*01/23/22 08:15*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*01/23/22 08:15*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/23/22 08:15*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*01/23/22 08:15*	*1*

Client Sample ID: SL-6_011922
Lab Sample ID: 460-251063-12
Date Collected: 01/19/22 10:15
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*65 - 133*		*01/22/22 18:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 12:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 12:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 12:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 12:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 12:53*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*01/23/22 12:53*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/23/22 12:53*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 12:53*	*1*

Client Sample ID: SL-5_011922 — Lab Sample ID: 460-251063-13

Date Collected: 01/19/22 10:40 **Matrix: Water**
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			01/22/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*65 - 133*		*01/22/22 18:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 13:16	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			01/23/22 13:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 13:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 13:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 13:16	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			01/23/22 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*01/23/22 13:16*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*01/23/22 13:16*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/23/22 13:16*	*1*
4-Bromofluorobenzene	*81*		*76 - 120*		*01/23/22 13:16*	*1*

Client Sample ID: SL-8_011922 — Lab Sample ID: 460-251063-14

Date Collected: 01/19/22 10:55 **Matrix: Water**
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			01/22/22 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*65 - 133*		*01/22/22 19:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 13:39	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			01/23/22 13:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 13:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 13:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 13:39	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			01/23/22 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*01/23/22 13:39*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*01/23/22 13:39*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/23/22 13:39*	*1*
4-Bromofluorobenzene	*83*		*76 - 120*		*01/23/22 13:39*	*1*

Client Sample ID: SL-9_011922
Lab Sample ID: 460-251063-15
Date Collected: 01/19/22 11:20
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.7**		2.0	0.86	ug/L			01/25/22 05:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*01/25/22 05:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 14:03	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			01/23/22 14:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 14:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:03	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			01/23/22 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*01/23/22 14:03*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*01/23/22 14:03*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/23/22 14:03*	*1*
4-Bromofluorobenzene	*85*		*76 - 120*		*01/23/22 14:03*	*1*

Client Sample ID: SL-10_011922
Lab Sample ID: 460-251063-16
Date Collected: 01/19/22 12:45
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.8**	**J**	2.0	0.86	ug/L			01/22/22 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*65 - 133*		*01/22/22 20:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 14:26	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			01/23/22 14:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 14:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:26	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			01/23/22 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*01/23/22 14:26*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*01/23/22 14:26*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/23/22 14:26*	*1*
4-Bromofluorobenzene	*84*		*76 - 120*		*01/23/22 14:26*	*1*

Client Sample ID: SL-11_011922
Lab Sample ID: 460-251063-17
Date Collected: 01/19/22 13:25
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			01/22/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*65 - 133*		*01/22/22 20:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 15:36	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			01/23/22 15:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 15:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 15:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 15:36	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			01/23/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*01/23/22 15:36*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*01/23/22 15:36*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/23/22 15:36*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 15:36*	*1*

Client Sample ID: SL-23_011922
Lab Sample ID: 460-251063-18
Date Collected: 01/19/22 14:05
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			01/22/22 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*65 - 133*		*01/22/22 20:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 14:49	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			01/23/22 14:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 14:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 14:49	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			01/23/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*01/23/22 14:49*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*01/23/22 14:49*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/23/22 14:49*	*1*
4-Bromofluorobenzene	*80*		*76 - 120*		*01/23/22 14:49*	*1*

Client Sample ID: SL-12_011922
Lab Sample ID: 460-251063-19
Date Collected: 01/19/22 14:30
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			01/22/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*65 - 133*		*01/22/22 21:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 15:13	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.46	ug/L			01/23/22 15:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 15:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 15:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 15:13	1
Vinyl chloride	**0.47**	**J**	1.0	0.45	ug/L			01/23/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*01/23/22 15:13*	*1*
Dibromofluoromethane (Surr)	*93*		*77 - 124*		*01/23/22 15:13*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/23/22 15:13*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*01/23/22 15:13*	*1*

Client Sample ID: SL-19_011922
Lab Sample ID: 460-251063-20
Date Collected: 01/19/22 14:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*65 - 133*		*01/22/22 21:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 20:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/24/22 20:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 20:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:12	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/24/22 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 123*		*01/24/22 20:12*	*1*
Dibromofluoromethane (Surr)	*114*		*77 - 124*		*01/24/22 20:12*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/24/22 20:12*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*01/24/22 20:12*	*1*

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 460-251063-21
Date Collected: 01/20/22 11:25
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/25/22 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*01/25/22 03:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 19:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/24/22 19:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 19:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 19:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 19:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/24/22 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 123*		*01/24/22 19:51*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*01/24/22 19:51*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/24/22 19:51*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*01/24/22 19:51*	*1*

Client Sample ID: SL-16_012022
Lab Sample ID: 460-251063-22
Date Collected: 01/20/22 10:10
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		2.0	0.86	ug/L			01/22/22 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*65 - 133*		*01/22/22 14:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 20:33	1
cis-1,2-Dichloroethene	**6.8**		1.0	0.46	ug/L			01/24/22 20:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 20:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:33	1
Vinyl chloride	**5.0**		1.0	0.45	ug/L			01/24/22 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 123*		*01/24/22 20:33*	*1*
Dibromofluoromethane (Surr)	*113*		*77 - 124*		*01/24/22 20:33*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/24/22 20:33*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*01/24/22 20:33*	*1*

Client Sample ID: SL-3_012022
Lab Sample ID: 460-251063-23
Date Collected: 01/20/22 10:25
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.6**		2.0	0.86	ug/L			01/22/22 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*65 - 133*		*01/22/22 14:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 20:54	1
cis-1,2-Dichloroethene	**9.0**		1.0	0.46	ug/L			01/24/22 20:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 20:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 20:54	1
Vinyl chloride	**7.0**		1.0	0.45	ug/L			01/24/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 123*		*01/24/22 20:54*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*01/24/22 20:54*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/24/22 20:54*	*1*
4-Bromofluorobenzene	*107*		*76 - 120*		*01/24/22 20:54*	*1*

Client Sample ID: SL-2_012022
Lab Sample ID: 460-251063-24
Date Collected: 01/20/22 10:40
Matrix: Water
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		2.0	0.86	ug/L			01/25/22 05:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*01/25/22 05:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 21:15	1
cis-1,2-Dichloroethene	**6.5**		1.0	0.46	ug/L			01/24/22 21:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 21:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 21:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 21:15	1
Vinyl chloride	**5.1**		1.0	0.45	ug/L			01/24/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 123*		*01/24/22 21:15*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*01/24/22 21:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/24/22 21:15*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*01/24/22 21:15*	*1*

Client Sample ID: MH-1231_012022 — Lab Sample ID: 460-251063-25

Date Collected: 01/20/22 11:00 — **Matrix: Water**
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.2**		2.0	0.86	ug/L			01/25/22 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*01/25/22 05:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 21:36	1
cis-1,2-Dichloroethene	**16**		1.0	0.46	ug/L			01/24/22 21:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 21:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 21:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 21:36	1
Vinyl chloride	**13**		1.0	0.45	ug/L			01/24/22 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 123*		*01/24/22 21:36*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*01/24/22 21:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/24/22 21:36*	*1*
4-Bromofluorobenzene	*109*		*76 - 120*		*01/24/22 21:36*	*1*

Client Sample ID: SL-17_012022 — Lab Sample ID: 460-251063-26

Date Collected: 01/20/22 11:25 — **Matrix: Water**
Date Received: 01/21/22 10:30

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.2**		2.0	0.86	ug/L			01/25/22 06:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*01/25/22 06:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/25/22 12:36	1
cis-1,2-Dichloroethene	**8.5**		1.0	0.46	ug/L			01/25/22 12:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/25/22 12:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/25/22 12:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/25/22 12:36	1
Vinyl chloride	**5.9**		1.0	0.45	ug/L			01/25/22 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 123*		*01/25/22 12:36*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*01/25/22 12:36*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/25/22 12:36*	*1*
4-Bromofluorobenzene	*107*		*76 - 120*		*01/25/22 12:36*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-251063-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-251063-1	TRIP BLANK_01	99	96	106	86
460-251063-2	SL-18_011822	103	97	107	85
460-251063-3	SL-22_011822	100	95	103	82
460-251063-4	SL-21_011822	99	97	106	83
460-251063-5	SL-20_011822	95	92	104	81
460-251063-6	SL-4_011822	100	97	104	82
460-251063-7	SL-15_011922	102	96	105	83
460-251063-8	SL-14_011922	98	94	104	82
460-251063-9	SL-13_011922	100	94	104	84
460-251063-10	SL-7_011922	100	94	104	82
460-251063-11	TRIP BLANK_02	101	97	107	87
460-251063-12	SL-6_011922	100	95	105	82
460-251063-13	SL-5_011922	101	95	105	81
460-251063-14	SL-8_011922	101	96	103	83
460-251063-15	SL-9_011922	101	96	107	85
460-251063-16	SL-10_011922	102	97	105	84
460-251063-17	SL-11_011922	97	95	108	82
460-251063-18	SL-23_011922	96	94	106	80
460-251063-19	SL-12_011922	97	93	106	82
460-251063-20	SL-19_011922	113	114	102	106
460-251063-21	TRIP BLANK_03	108	112	102	105
460-251063-22	SL-16_012022	109	113	101	106
460-251063-23	SL-3_012022	108	111	100	107
460-251063-24	SL-2_012022	108	111	101	106
460-251063-25	MH-1231_012022	108	110	101	109
460-251063-26	SL-17_012022	108	110	102	107
LCS 460-824696/4	Lab Control Sample	97	93	105	89
LCS 460-824838/5	Lab Control Sample	104	108	99	105
LCS 460-824970/5	Lab Control Sample	103	107	100	106
LCSD 460-824696/5	Lab Control Sample Dup	97	94	106	89
LCSD 460-824838/7	Lab Control Sample Dup	107	107	102	106
LCSD 460-824970/8	Lab Control Sample Dup	105	109	101	105
MB 460-824696/8	Method Blank	100	96	106	85
MB 460-824838/10	Method Blank	104	112	100	106
MB 460-824970/11	Method Blank	107	111	101	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(65-133)
460-251063-1	TRIP BLANK_01	110
460-251063-2	SL-18_011822	123

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		BFB						
Lab Sample ID	Client Sample ID	(65-133)						
460-251063-3	SL-22_011822	117						
460-251063-4	SL-21_011822	120						
460-251063-5	SL-20_011822	121						
460-251063-6	SL-4_011822	120						
460-251063-7	SL-15_011922	122						
460-251063-8	SL-14_011922	119						
460-251063-9	SL-13_011922	119						
460-251063-10	SL-7_011922	117						
460-251063-11	TRIP BLANK_02	109						
460-251063-12	SL-6_011922	119						
460-251063-13	SL-5_011922	120						
460-251063-14	SL-8_011922	120						
460-251063-15	SL-9_011922	107						
460-251063-16	SL-10_011922	121						
460-251063-17	SL-11_011922	115						
460-251063-18	SL-23_011922	116						
460-251063-19	SL-12_011922	119						
460-251063-20	SL-19_011922	124						
460-251063-21	TRIP BLANK_03	107						
460-251063-22	SL-16_012022	121						
460-251063-23	SL-3_012022	121						
460-251063-24	SL-2_012022	108						
460-251063-25	MH-1231_012022	105						
460-251063-26	SL-17_012022	107						
LCS 460-824641/4	Lab Control Sample	119						
LCS 460-824923/4	Lab Control Sample	108						
LCSD 460-824641/5	Lab Control Sample Dup	119						
LCSD 460-824923/5	Lab Control Sample Dup	109						
MB 460-824641/8	Method Blank	120						
MB 460-824923/8	Method Blank	114						

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-824696/8
Matrix: Water
Analysis Batch: 824696

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/23/22 07:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/23/22 07:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 07:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/23/22 07:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/23/22 07:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/23/22 07:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*01/23/22 07:29*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*01/23/22 07:29*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/23/22 07:29*	*1*
4-Bromofluorobenzene	*85*		*76 - 120*		*01/23/22 07:29*	*1*

Lab Sample ID: LCS 460-824696/4
Matrix: Water
Analysis Batch: 824696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	16.4		ug/L		82	68 - 133
cis-1,2-Dichloroethene	20.0	18.0		ug/L		90	78 - 121
Tetrachloroethene	20.0	15.8		ug/L		79	70 - 127
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	74 - 126
Trichloroethene	20.0	17.7		ug/L		88	71 - 121
Vinyl chloride	20.0	18.0		ug/L		90	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*
Dibromofluoromethane (Surr)	*93*		*77 - 124*
Toluene-d8 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene	*89*		*76 - 120*

Lab Sample ID: LCSD 460-824696/5
Matrix: Water
Analysis Batch: 824696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	17.2		ug/L		86	68 - 133	4	30
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	78 - 121	2	30
Tetrachloroethene	20.0	17.1		ug/L		86	70 - 127	8	30
trans-1,2-Dichloroethene	20.0	19.6		ug/L		98	74 - 126	7	30
Trichloroethene	20.0	18.5		ug/L		93	71 - 121	5	30
Vinyl chloride	20.0	19.7		ug/L		98	61 - 144	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*
Dibromofluoromethane (Surr)	*94*		*77 - 124*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-824696/5
Matrix: Water
Analysis Batch: 824696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	89		76 - 120

Lab Sample ID: MB 460-824838/10
Matrix: Water
Analysis Batch: 824838

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/24/22 14:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/24/22 14:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 14:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/24/22 14:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/24/22 14:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/24/22 14:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 123		01/24/22 14:40	1
Dibromofluoromethane (Surr)	112		77 - 124		01/24/22 14:40	1
Toluene-d8 (Surr)	100		80 - 120		01/24/22 14:40	1
4-Bromofluorobenzene	106		76 - 120		01/24/22 14:40	1

Lab Sample ID: LCS 460-824838/5
Matrix: Water
Analysis Batch: 824838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	19.5		ug/L		98	68 - 133
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	78 - 121
Tetrachloroethene	20.0	20.4		ug/L		102	70 - 127
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	74 - 126
Trichloroethene	20.0	19.3		ug/L		96	71 - 121
Vinyl chloride	20.0	18.7		ug/L		94	61 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 123
Dibromofluoromethane (Surr)	108		77 - 124
Toluene-d8 (Surr)	99		80 - 120
4-Bromofluorobenzene	105		76 - 120

Lab Sample ID: LCSD 460-824838/7
Matrix: Water
Analysis Batch: 824838

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	18.1		ug/L		90	68 - 133	8	30
cis-1,2-Dichloroethene	20.0	18.4		ug/L		92	78 - 121	7	30
Tetrachloroethene	20.0	18.6		ug/L		93	70 - 127	9	30
trans-1,2-Dichloroethene	20.0	17.9		ug/L		90	74 - 126	11	30
Trichloroethene	20.0	17.8		ug/L		89	71 - 121	8	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-824838/7
Matrix: Water
Analysis Batch: 824838

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			20.0	17.6		ug/L		88	61 - 144	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*
Dibromofluoromethane (Surr)	*107*		*77 - 124*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene	*106*		*76 - 120*

Lab Sample ID: MB 460-824970/11
Matrix: Water
Analysis Batch: 824970

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			01/25/22 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			01/25/22 11:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			01/25/22 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			01/25/22 11:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			01/25/22 11:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			01/25/22 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*		*01/25/22 11:34*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*01/25/22 11:34*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/25/22 11:34*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*01/25/22 11:34*	*1*

Lab Sample ID: LCS 460-824970/5
Matrix: Water
Analysis Batch: 824970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene			20.0	20.1		ug/L		101	68 - 133
cis-1,2-Dichloroethene			20.0	20.7		ug/L		103	78 - 121
Tetrachloroethene			20.0	20.8		ug/L		104	70 - 127
trans-1,2-Dichloroethene			20.0	20.3		ug/L		102	74 - 126
Trichloroethene			20.0	19.8		ug/L		99	71 - 121
Vinyl chloride			20.0	19.1		ug/L		95	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 123*
Dibromofluoromethane (Surr)	*107*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene	*106*		*76 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-824970/8
Matrix: Water
Analysis Batch: 824970

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	19.9		ug/L		99	68 - 133	1	30
cis-1,2-Dichloroethene			20.0	20.0		ug/L		100	78 - 121	3	30
Tetrachloroethene			20.0	20.8		ug/L		104	70 - 127	0	30
trans-1,2-Dichloroethene			20.0	19.9		ug/L		100	74 - 126	2	30
Trichloroethene			20.0	19.5		ug/L		97	71 - 121	2	30
Vinyl chloride			20.0	19.3		ug/L		97	61 - 144	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 123*
Dibromofluoromethane (Surr)	*109*		*77 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene	*105*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-824641/8
Matrix: Water
Analysis Batch: 824641

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/22/22 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*65 - 133*		*01/22/22 14:14*	*1*

Lab Sample ID: LCS 460-824641/4
Matrix: Water
Analysis Batch: 824641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.30		ug/L		86	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*119*		*65 - 133*

Lab Sample ID: LCSD 460-824641/5
Matrix: Water
Analysis Batch: 824641

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	3.94		ug/L		79	72 - 124	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*119*		*65 - 133*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-824923/8
Matrix: Water
Analysis Batch: 824923

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			01/25/22 00:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*65 - 133*		*01/25/22 00:54*	*1*

Lab Sample ID: LCS 460-824923/4
Matrix: Water
Analysis Batch: 824923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.44		ug/L		89	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*65 - 133*

Lab Sample ID: LCSD 460-824923/5
Matrix: Water
Analysis Batch: 824923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.57		ug/L		91	72 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*65 - 133*

GC/MS VOA

Analysis Batch: 824641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-2	SL-18_011822	Total/NA	Water	8260D SIM	
460-251063-3	SL-22_011822	Total/NA	Water	8260D SIM	
460-251063-4	SL-21_011822	Total/NA	Water	8260D SIM	
460-251063-5	SL-20_011822	Total/NA	Water	8260D SIM	
460-251063-6	SL-4_011822	Total/NA	Water	8260D SIM	
460-251063-7	SL-15_011922	Total/NA	Water	8260D SIM	
460-251063-8	SL-14_011922	Total/NA	Water	8260D SIM	
460-251063-9	SL-13_011922	Total/NA	Water	8260D SIM	
460-251063-10	SL-7_011922	Total/NA	Water	8260D SIM	
460-251063-12	SL-6_011922	Total/NA	Water	8260D SIM	
460-251063-13	SL-5_011922	Total/NA	Water	8260D SIM	
460-251063-14	SL-8_011922	Total/NA	Water	8260D SIM	
460-251063-16	SL-10_011922	Total/NA	Water	8260D SIM	
460-251063-17	SL-11_011922	Total/NA	Water	8260D SIM	
460-251063-18	SL-23_011922	Total/NA	Water	8260D SIM	
460-251063-19	SL-12_011922	Total/NA	Water	8260D SIM	
460-251063-20	SL-19_011922	Total/NA	Water	8260D SIM	
460-251063-22	SL-16_012022	Total/NA	Water	8260D SIM	
460-251063-23	SL-3_012022	Total/NA	Water	8260D SIM	
MB 460-824641/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-824641/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-824641/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 824696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-1	TRIP BLANK_01	Total/NA	Water	8260D	
460-251063-2	SL-18_011822	Total/NA	Water	8260D	
460-251063-3	SL-22_011822	Total/NA	Water	8260D	
460-251063-4	SL-21_011822	Total/NA	Water	8260D	
460-251063-5	SL-20_011822	Total/NA	Water	8260D	
460-251063-6	SL-4_011822	Total/NA	Water	8260D	
460-251063-7	SL-15_011922	Total/NA	Water	8260D	
460-251063-8	SL-14_011922	Total/NA	Water	8260D	
460-251063-9	SL-13_011922	Total/NA	Water	8260D	
460-251063-10	SL-7_011922	Total/NA	Water	8260D	
460-251063-11	TRIP BLANK_02	Total/NA	Water	8260D	
460-251063-12	SL-6_011922	Total/NA	Water	8260D	
460-251063-13	SL-5_011922	Total/NA	Water	8260D	
460-251063-14	SL-8_011922	Total/NA	Water	8260D	
460-251063-15	SL-9_011922	Total/NA	Water	8260D	
460-251063-16	SL-10_011922	Total/NA	Water	8260D	
460-251063-17	SL-11_011922	Total/NA	Water	8260D	
460-251063-18	SL-23_011922	Total/NA	Water	8260D	
460-251063-19	SL-12_011922	Total/NA	Water	8260D	
MB 460-824696/8	Method Blank	Total/NA	Water	8260D	
LCS 460-824696/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-824696/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 824838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-20	SL-19_011922	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 824838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-21	TRIP BLANK_03	Total/NA	Water	8260D	
460-251063-22	SL-16_012022	Total/NA	Water	8260D	
460-251063-23	SL-3_012022	Total/NA	Water	8260D	
460-251063-24	SL-2_012022	Total/NA	Water	8260D	
460-251063-25	MH-1231_012022	Total/NA	Water	8260D	
MB 460-824838/10	Method Blank	Total/NA	Water	8260D	
LCS 460-824838/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-824838/7	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 824923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-1	TRIP BLANK_01	Total/NA	Water	8260D SIM	
460-251063-11	TRIP BLANK_02	Total/NA	Water	8260D SIM	
460-251063-15	SL-9_011922	Total/NA	Water	8260D SIM	
460-251063-21	TRIP BLANK_03	Total/NA	Water	8260D SIM	
460-251063-24	SL-2_012022	Total/NA	Water	8260D SIM	
460-251063-25	MH-1231_012022	Total/NA	Water	8260D SIM	
460-251063-26	SL-17_012022	Total/NA	Water	8260D SIM	
MB 460-824923/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-824923/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-824923/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 824970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251063-26	SL-17_012022	Total/NA	Water	8260D	
MB 460-824970/11	Method Blank	Total/NA	Water	8260D	
LCS 460-824970/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-824970/8	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 460-251063-1
Date Collected: 01/18/22 13:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 07:52	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 02:21	MZS	TAL EDI

Client Sample ID: SL-18_011822
Lab Sample ID: 460-251063-2
Date Collected: 01/18/22 13:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 09:24	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 15:19	MZS	TAL EDI

Client Sample ID: SL-22_011822
Lab Sample ID: 460-251063-3
Date Collected: 01/18/22 10:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 09:47	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 15:41	MZS	TAL EDI

Client Sample ID: SL-21_011822
Lab Sample ID: 460-251063-4
Date Collected: 01/18/22 11:10
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 10:10	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 16:03	MZS	TAL EDI

Client Sample ID: SL-20_011822
Lab Sample ID: 460-251063-5
Date Collected: 01/18/22 11:25
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 10:33	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 16:25	MZS	TAL EDI

Client Sample ID: SL-4_011822
Lab Sample ID: 460-251063-6
Date Collected: 01/18/22 13:00
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 10:57	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 16:46	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_011922
Lab Sample ID: 460-251063-7
Date Collected: 01/19/22 09:00
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 11:20	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 17:08	MZS	TAL EDI

Client Sample ID: SL-14_011922
Lab Sample ID: 460-251063-8
Date Collected: 01/19/22 09:20
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 11:43	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 17:30	MZS	TAL EDI

Client Sample ID: SL-13_011922
Lab Sample ID: 460-251063-9
Date Collected: 01/19/22 09:35
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 12:06	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 17:52	MZS	TAL EDI

Client Sample ID: SL-7_011922
Lab Sample ID: 460-251063-10
Date Collected: 01/19/22 09:55
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 12:30	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 18:13	MZS	TAL EDI

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 460-251063-11
Date Collected: 01/19/22 14:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 08:15	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 02:43	MZS	TAL EDI

Client Sample ID: SL-6_011922
Lab Sample ID: 460-251063-12
Date Collected: 01/19/22 10:15
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 12:53	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 18:35	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_011922
Lab Sample ID: 460-251063-13
Date Collected: 01/19/22 10:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 13:16	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 18:57	MZS	TAL EDI

Client Sample ID: SL-8_011922
Lab Sample ID: 460-251063-14
Date Collected: 01/19/22 10:55
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 13:39	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 19:19	MZS	TAL EDI

Client Sample ID: SL-9_011922
Lab Sample ID: 460-251063-15
Date Collected: 01/19/22 11:20
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 14:03	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 05:15	MZS	TAL EDI

Client Sample ID: SL-10_011922
Lab Sample ID: 460-251063-16
Date Collected: 01/19/22 12:45
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 14:26	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 20:02	MZS	TAL EDI

Client Sample ID: SL-11_011922
Lab Sample ID: 460-251063-17
Date Collected: 01/19/22 13:25
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 15:36	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 20:24	MZS	TAL EDI

Client Sample ID: SL-23_011922
Lab Sample ID: 460-251063-18
Date Collected: 01/19/22 14:05
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 14:49	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 20:46	MZS	TAL EDI

Client Sample ID: SL-12_011922
Lab Sample ID: 460-251063-19
Date Collected: 01/19/22 14:30
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824696	01/23/22 15:13	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 21:07	MZS	TAL EDI

Client Sample ID: SL-19_011922
Lab Sample ID: 460-251063-20
Date Collected: 01/19/22 14:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 20:12	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 21:29	MZS	TAL EDI

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 460-251063-21
Date Collected: 01/20/22 11:25
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 19:51	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 03:04	MZS	TAL EDI

Client Sample ID: SL-16_012022
Lab Sample ID: 460-251063-22
Date Collected: 01/20/22 10:10
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 20:33	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 14:36	MZS	TAL EDI

Client Sample ID: SL-3_012022
Lab Sample ID: 460-251063-23
Date Collected: 01/20/22 10:25
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 20:54	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824641	01/22/22 14:58	MZS	TAL EDI

Client Sample ID: SL-2_012022
Lab Sample ID: 460-251063-24
Date Collected: 01/20/22 10:40
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 21:15	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 05:37	MZS	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_012022
Lab Sample ID: 460-251063-25
Date Collected: 01/20/22 11:00
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824838	01/24/22 21:36	MZS	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 05:59	MZS	TAL EDI

Client Sample ID: SL-17_012022
Lab Sample ID: 460-251063-26
Date Collected: 01/20/22 11:25
Matrix: Water
Date Received: 01/21/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	824970	01/25/22 12:36	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	824923	01/25/22 06:20	MZS	TAL EDI

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-22
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251063-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-251063-1	TRIP BLANK_01	Water	01/18/22 13:40	01/21/22 10:30
460-251063-2	SL-18_011822	Water	01/18/22 13:40	01/21/22 10:30
460-251063-3	SL-22_011822	Water	01/18/22 10:40	01/21/22 10:30
460-251063-4	SL-21_011822	Water	01/18/22 11:10	01/21/22 10:30
460-251063-5	SL-20_011822	Water	01/18/22 11:25	01/21/22 10:30
460-251063-6	SL-4_011822	Water	01/18/22 13:00	01/21/22 10:30
460-251063-7	SL-15_011922	Water	01/19/22 09:00	01/21/22 10:30
460-251063-8	SL-14_011922	Water	01/19/22 09:20	01/21/22 10:30
460-251063-9	SL-13_011922	Water	01/19/22 09:35	01/21/22 10:30
460-251063-10	SL-7_011922	Water	01/19/22 09:55	01/21/22 10:30
460-251063-11	TRIP BLANK_02	Water	01/19/22 14:40	01/21/22 10:30
460-251063-12	SL-6_011922	Water	01/19/22 10:15	01/21/22 10:30
460-251063-13	SL-5_011922	Water	01/19/22 10:40	01/21/22 10:30
460-251063-14	SL-8_011922	Water	01/19/22 10:55	01/21/22 10:30
460-251063-15	SL-9_011922	Water	01/19/22 11:20	01/21/22 10:30
460-251063-16	SL-10_011922	Water	01/19/22 12:45	01/21/22 10:30
460-251063-17	SL-11_011922	Water	01/19/22 13:25	01/21/22 10:30
460-251063-18	SL-23_011922	Water	01/19/22 14:05	01/21/22 10:30
460-251063-19	SL-12_011922	Water	01/19/22 14:30	01/21/22 10:30
460-251063-20	SL-19_011922	Water	01/19/22 14:40	01/21/22 10:30
460-251063-21	TRIP BLANK_03	Water	01/20/22 11:25	01/21/22 10:30
460-251063-22	SL-16_012022	Water	01/20/22 10:10	01/21/22 10:30
460-251063-23	SL-3_012022	Water	01/20/22 10:25	01/21/22 10:30
460-251063-24	SL-2_012022	Water	01/20/22 10:40	01/21/22 10:30
460-251063-25	MH-1231_012022	Water	01/20/22 11:00	01/21/22 10:30
460-251063-26	SL-17_012022	Water	01/20/22 11:25	01/21/22 10:30

MICHIGAN 190

Chain of Custody Record

251063

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No:
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐ 3 day	COCs
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		For lab use only
Project Number: 30080642.701.04	Shipping/Tracking No:		Walk-in client
PO # 30080642.701.04			Lab sampling
			/SDG No: ,

3-Day RUSH

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
1	TRIP BLANK_01	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
2 ✓	SL-18_011822	1/18/22	13:40		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
3 ✓	SL-22_011822	1/18/22	10:40		X						6					N	G	X	X	X	X	X	X	X	" "
4 ✓	SL-21_011822	1/18/22	11:10		X						6					N	G	X	X	X	X	X	X	X	" "
5 ✓	SL-20_011822	1/18/22	11:25		X						6					N	G	X	X	X	X	X	X	X	" "
6 ✓	SL-4_011822	1/18/22	13:00		X						6					N	G	X	X	X	X	X	X	X	" "
7 ✓	SL-15_011922	1/19/22	9:00		X						6					N	G	X	X	X	X	X	X	X	" "
8 ✓	SL-14_011922	1/19/22	9:20		X						6					N	G	X	X	X	X	X	X	X	" "
9 ✓	SL-13_011922	1/19/22	9:35		X						6					N	G	X	X	X	X	X	X	X	" "
10 ✓	SL-7_011922	1/19/22	9:55		X						6					N	G	X	X	X	X	X	X	X	" "

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

	Company	Date/Time		Company	Date/Time
Relinquished by: Sommer Guy	Arcadis	1/20/22 13:00	Received by:	ARCADIS	1/20/22 1530
Relinquished by:	ARCADIS	1/20/22 1530	Received by:	Eurofins	1-20-22 1535
Relinquished by:	Eurofins	1-20-22 1537	Received in Laboratory by: Via FedEx	ER	1/21/22 10:30

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460-251063 Chain of Custody

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1/27/2022

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Chain of Custody Record

251063

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
11 TRIP BLANK_07	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
12 ✓ SL-6-011922	1/19/22	10:15		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
13 ✓ SL-5_011922	1/19/22	10:40		X						6					N	G	X	X	X	X	X	X	X	" "
14 ✓ SL-8_011922	1/19/22	10:55		X						6					N	G	X	X	X	X	X	X	X	" "
15 ✓ SL-9_011922	1/19/22	11:20		X						6					N	G	X	X	X	X	X	X	X	" "
✓ SL-10_011922	1/19/22	12:45		X						6					N	G	X	X	X	X	X	X	X	" "
17 ✓ SL-11_011922	1/19/22	13:25		X						6					N	G	X	X	X	X	X	X	X	" "
18 ✓ SL-23_011922	1/19/22	14:05		X						6					N	G	X	X	X	X	X	X	X	" "
19 ✓ SL-12_011922	1/19/22	14:30		X						6					N	G	X	X	X	X	X	X	X	" "
20 ✓ SL-19_011922	1/19/22	14:40		X						6					N	G	X	X	X	X	X	X	X	" "

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	1/20/22 13:00		ARCADIS	1/20/22 1530
	ARCADIS	1/20/22 1530		Eurofins	1-20-22 1535
	Eurofins	1-20-22 1537	... / ViaFedEx	ER	1/21/22 10:30

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Project 46037022

1/27/2022

251063

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐ 3 day ☐		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 30080642.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK - 03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-16-012022	1/20/22	10:10		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-3-012022	1/20/22	10:25		X						6					N	G	X	X	X	X	X	X	X					" "
SL-2-012022	1/20/22	10:40		X						6					N	G	X	X	X	X	X	X	X					" "
MH-1231-012022	1/20/22	11:00		X						6					N	G	X	X	X	X	X	X	X					" "
SL-17-012022	1/20/22	11:25		X						6					N	G	X	X	X	X	X	X	X					" "

Sga 1/20/22

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	1/20/22 13:00		Arcadis	1/20/22 1530
	Arcadis	1/20/22 1531		Eurofins	1-20-22 1535
Jen Hale	Eurofins	1-20-22 1537	Received in Laboratory by: / ViaFedEx	ER	1/21/22 10:30

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Project 46037022

1/27/2022

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 251063

Number of Coolers: 1 **IR Gun #** 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.9 °C	1.8 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: FT **Date:** 1/21/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-251063-1

Login Number: 251063
List Number: 1
Creator: Sgro, Angela M

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-251957-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
2/9/2022 5:16:29 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-251957-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-251957-1

Comments
No additional comments.

Receipt
The samples were received on 2/5/2022 5:51 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8º C and 2.1º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK — Lab Sample ID: 460-251957-1

No Detections.

Client Sample ID: DUP_01_020122 — Lab Sample ID: 460-251957-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.48	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	4.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP_02_020122 — Lab Sample ID: 460-251957-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_020122 — Lab Sample ID: 460-251957-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_020122 — Lab Sample ID: 460-251957-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_020122 — Lab Sample ID: 460-251957-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_020122 — Lab Sample ID: 460-251957-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_020122 — Lab Sample ID: 460-251957-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_020122 — Lab Sample ID: 460-251957-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: SL-12_020122 (Continued) — Lab Sample ID: 460-251957-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.89	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_020122 — Lab Sample ID: 460-251957-10

No Detections.

Client Sample ID: SL-22_020122 — Lab Sample ID: 460-251957-11

No Detections.

Client Sample ID: SL-4_020122 — Lab Sample ID: 460-251957-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_020122 — Lab Sample ID: 460-251957-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.3		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	2.5		1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	27		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_020122 — Lab Sample ID: 460-251957-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_020122 — Lab Sample ID: 460-251957-15

No Detections.

Client Sample ID: SL-20_020122 — Lab Sample ID: 460-251957-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_013122 — Lab Sample ID: 460-251957-17

No Detections.

Client Sample ID: SL-14_013122 — Lab Sample ID: 460-251957-18

No Detections.

Client Sample ID: SL-13_013122 — Lab Sample ID: 460-251957-19

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_013122 — Lab Sample ID: 460-251957-20

No Detections.

Client Sample ID: SL-6_013122 — Lab Sample ID: 460-251957-21

No Detections.

Client Sample ID: SL-5_013122 — Lab Sample ID: 460-251957-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_013122 — Lab Sample ID: 460-251957-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.98	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.73	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_013122 — Lab Sample ID: 460-251957-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_013122 — Lab Sample ID: 460-251957-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_013122 — Lab Sample ID: 460-251957-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_013122 — Lab Sample ID: 460-251957-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	12		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_020422 — Lab Sample ID: 460-251957-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	11		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	28		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.53	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	39		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_020422 — Lab Sample ID: 460-251957-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	61		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.65	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	1.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	100		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1256_020422 — Lab Sample ID: 460-251957-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: MH-1260A_020422 — Lab Sample ID: 460-251957-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.6		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.7		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 460-251957-1
Date Collected: 02/04/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 12:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 12:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 12:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 12:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 12:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 123*		*02/08/22 12:41*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*02/08/22 12:41*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/08/22 12:41*	*1*
4-Bromofluorobenzene	*90*		*76 - 120*		*02/08/22 12:41*	*1*

Client Sample ID: DUP_01_020122
Lab Sample ID: 460-251957-2
Date Collected: 02/01/22 00:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			02/07/22 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*65 - 133*		*02/07/22 09:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 17:59	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			02/08/22 17:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 17:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 17:59	1
Trichloroethene	**0.48**	**J**	1.0	0.44	ug/L			02/08/22 17:59	1
Vinyl chloride	**4.9**		1.0	0.45	ug/L			02/08/22 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 123*		*02/08/22 17:59*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/08/22 17:59*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/08/22 17:59*	*1*
4-Bromofluorobenzene	*91*		*76 - 120*		*02/08/22 17:59*	*1*

Client Sample ID: DUP_02_020122
Lab Sample ID: 460-251957-3
Date Collected: 02/01/22 00:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			02/07/22 09:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*65 - 133*		*02/07/22 09:40*	*1*

Client Sample ID: DUP_02_020122
Lab Sample ID: 460-251957-3
Date Collected: 02/01/22 00:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 14:13	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			02/08/22 14:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 14:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:13	1
Vinyl chloride	**6.4**		1.0	0.45	ug/L			02/08/22 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 123*		*02/08/22 14:13*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/08/22 14:13*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/08/22 14:13*	*1*
4-Bromofluorobenzene	*90*		*76 - 120*		*02/08/22 14:13*	*1*

Client Sample ID: SL-8_020122
Lab Sample ID: 460-251957-4
Date Collected: 02/01/22 09:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			02/07/22 10:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*65 - 133*		*02/07/22 10:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 14:36	1
cis-1,2-Dichloroethene	**4.7**		1.0	0.46	ug/L			02/08/22 14:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 14:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:36	1
Vinyl chloride	**3.8**		1.0	0.45	ug/L			02/08/22 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/08/22 14:36*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*02/08/22 14:36*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/08/22 14:36*	*1*
4-Bromofluorobenzene	*85*		*76 - 120*		*02/08/22 14:36*	*1*

Client Sample ID: SL-9_020122
Lab Sample ID: 460-251957-5
Date Collected: 02/01/22 10:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			02/07/22 10:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*65 - 133*		*02/07/22 10:24*	*1*

Client Sample ID: SL-9_020122
Lab Sample ID: 460-251957-5
Date Collected: 02/01/22 10:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 14:58	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			02/08/22 14:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 14:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 14:58	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			02/08/22 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/08/22 14:58*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*02/08/22 14:58*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/08/22 14:58*	*1*
4-Bromofluorobenzene	*83*		*76 - 120*		*02/08/22 14:58*	*1*

Client Sample ID: SL-10_020122
Lab Sample ID: 460-251957-6
Date Collected: 02/01/22 10:50
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			02/07/22 10:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*65 - 133*		*02/07/22 10:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 15:21	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.46	ug/L			02/08/22 15:21	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 15:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 15:21	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 15:21	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			02/08/22 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/08/22 15:21*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*02/08/22 15:21*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/08/22 15:21*	*1*
4-Bromofluorobenzene	*83*		*76 - 120*		*02/08/22 15:21*	*1*

Client Sample ID: SL-11_020122
Lab Sample ID: 460-251957-7
Date Collected: 02/01/22 11:20
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			02/07/22 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/07/22 11:07*	*1*

Client Sample ID: SL-11_020122
Lab Sample ID: 460-251957-7
Date Collected: 02/01/22 11:20
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 15:43	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			02/08/22 15:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 15:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 15:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 15:43	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			02/08/22 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/08/22 15:43*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/08/22 15:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/08/22 15:43*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/08/22 15:43*	*1*

Client Sample ID: SL-23_020122
Lab Sample ID: 460-251957-8
Date Collected: 02/01/22 11:40
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			02/07/22 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/07/22 11:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 16:06	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			02/08/22 16:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 16:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:06	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			02/08/22 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/08/22 16:06*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 124*		*02/08/22 16:06*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/08/22 16:06*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/08/22 16:06*	*1*

Client Sample ID: SL-12_020122
Lab Sample ID: 460-251957-9
Date Collected: 02/01/22 12:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			02/07/22 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*65 - 133*		*02/07/22 11:50*	*1*

Client Sample ID: SL-12_020122
Lab Sample ID: 460-251957-9
Date Collected: 02/01/22 12:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 16:28	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			02/08/22 16:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 16:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:28	1
Vinyl chloride	**0.89**	**J**	1.0	0.45	ug/L			02/08/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/08/22 16:28*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*02/08/22 16:28*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*02/08/22 16:28*	*1*
4-Bromofluorobenzene	*85*		*76 - 120*		*02/08/22 16:28*	*1*

Client Sample ID: SL-19_020122
Lab Sample ID: 460-251957-10
Date Collected: 02/01/22 12:25
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*02/07/22 12:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 16:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 16:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 16:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 16:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*02/08/22 16:51*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*02/08/22 16:51*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/08/22 16:51*	*1*
4-Bromofluorobenzene	*82*		*76 - 120*		*02/08/22 16:51*	*1*

Client Sample ID: SL-22_020122
Lab Sample ID: 460-251957-11
Date Collected: 02/01/22 13:50
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/07/22 12:34*	*1*

Client Sample ID: SL-22_020122
Lab Sample ID: 460-251957-11
Date Collected: 02/01/22 13:50
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 17:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 17:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 17:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 17:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 17:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 123*		*02/08/22 17:13*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/08/22 17:13*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/08/22 17:13*	*1*
4-Bromofluorobenzene	*89*		*76 - 120*		*02/08/22 17:13*	*1*

Client Sample ID: SL-4_020122
Lab Sample ID: 460-251957-12
Date Collected: 02/01/22 14:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			02/07/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/07/22 12:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 17:36	1
cis-1,2-Dichloroethene	**4.4**		1.0	0.46	ug/L			02/08/22 17:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 17:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 17:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 17:36	1
Vinyl chloride	**4.3**		1.0	0.45	ug/L			02/08/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/08/22 17:36*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*02/08/22 17:36*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/08/22 17:36*	*1*
4-Bromofluorobenzene	*84*		*76 - 120*		*02/08/22 17:36*	*1*

Client Sample ID: SL-2_020122
Lab Sample ID: 460-251957-13
Date Collected: 02/01/22 14:40
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/07/22 13:17*	*1*

Client Sample ID: SL-2_020122
Lab Sample ID: 460-251957-13
Date Collected: 02/01/22 14:40
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 21:47	1
cis-1,2-Dichloroethene	**7.3**		1.0	0.46	ug/L			02/08/22 21:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 21:47	1
trans-1,2-Dichloroethene	**2.5**		1.0	0.51	ug/L			02/08/22 21:47	1
Trichloroethene	**27**		1.0	0.44	ug/L			02/08/22 21:47	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			02/08/22 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/08/22 21:47*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*02/08/22 21:47*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/08/22 21:47*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/08/22 21:47*	*1*

Client Sample ID: MH-1231_020122
Lab Sample ID: 460-251957-14
Date Collected: 02/01/22 15:00
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			02/07/22 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*65 - 133*		*02/07/22 16:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 22:10	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			02/08/22 22:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 22:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:10	1
Vinyl chloride	**5.6**		1.0	0.45	ug/L			02/08/22 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/08/22 22:10*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 124*		*02/08/22 22:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/08/22 22:10*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/08/22 22:10*	*1*

Client Sample ID: MH-1244_020122
Lab Sample ID: 460-251957-15
Date Collected: 02/01/22 15:30
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/07/22 14:23*	*1*

Client Sample ID: MH-1244_020122
Lab Sample ID: 460-251957-15
Date Collected: 02/01/22 15:30
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 22:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 22:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 22:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/08/22 22:33*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*02/08/22 22:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/08/22 22:33*	*1*
4-Bromofluorobenzene	*90*		*76 - 120*		*02/08/22 22:33*	*1*

Client Sample ID: SL-20_020122
Lab Sample ID: 460-251957-16
Date Collected: 02/01/22 13:30
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			02/07/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*02/07/22 14:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 22:56	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			02/08/22 22:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 22:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 22:56	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			02/08/22 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 123*		*02/08/22 22:56*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/08/22 22:56*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/08/22 22:56*	*1*
4-Bromofluorobenzene	*96*		*76 - 120*		*02/08/22 22:56*	*1*

Client Sample ID: SL-15_013122
Lab Sample ID: 460-251957-17
Date Collected: 01/31/22 10:05
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/07/22 15:07*	*1*

Client Sample ID: SL-15_013122
Lab Sample ID: 460-251957-17
Date Collected: 01/31/22 10:05
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 23:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 23:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 23:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 23:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 23:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*		*02/08/22 23:18*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*02/08/22 23:18*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/08/22 23:18*	*1*
4-Bromofluorobenzene	*91*		*76 - 120*		*02/08/22 23:18*	*1*

Client Sample ID: SL-14_013122
Lab Sample ID: 460-251957-18
Date Collected: 01/31/22 10:20
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/07/22 15:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 23:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 23:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 23:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 23:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 23:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 123*		*02/08/22 23:41*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/08/22 23:41*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/08/22 23:41*	*1*
4-Bromofluorobenzene	*93*		*76 - 120*		*02/08/22 23:41*	*1*

Client Sample ID: SL-13_013122
Lab Sample ID: 460-251957-19
Date Collected: 01/31/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*65 - 133*		*02/07/22 15:50*	*1*

Client Sample ID: SL-13_013122
Lab Sample ID: 460-251957-19

Date Collected: 01/31/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 00:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/09/22 00:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 00:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 123*		*02/09/22 00:04*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*02/09/22 00:04*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/09/22 00:04*	*1*
4-Bromofluorobenzene	*93*		*76 - 120*		*02/09/22 00:04*	*1*

Client Sample ID: SL-7_013122
Lab Sample ID: 460-251957-20

Date Collected: 01/31/22 11:40
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/07/22 16:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 00:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/09/22 00:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 00:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*02/09/22 00:27*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*02/09/22 00:27*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/09/22 00:27*	*1*
4-Bromofluorobenzene	*84*		*76 - 120*		*02/09/22 00:27*	*1*

Client Sample ID: SL-6_013122
Lab Sample ID: 460-251957-21

Date Collected: 01/31/22 12:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/08/22 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/08/22 11:39*	*1*

Client Sample ID: SL-6_013122
Lab Sample ID: 460-251957-21
Date Collected: 01/31/22 12:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 00:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/09/22 00:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 00:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 00:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/09/22 00:50*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 124*		*02/09/22 00:50*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/09/22 00:50*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/09/22 00:50*	*1*

Client Sample ID: SL-5_013122
Lab Sample ID: 460-251957-22
Date Collected: 01/31/22 12:30
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			02/09/22 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*02/09/22 10:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 01:12	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			02/09/22 01:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 01:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:12	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			02/09/22 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/09/22 01:12*	*1*
Dibromofluoromethane (Surr)	*93*		*77 - 124*		*02/09/22 01:12*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*02/09/22 01:12*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/09/22 01:12*	*1*

Client Sample ID: SL-21_013122
Lab Sample ID: 460-251957-23
Date Collected: 01/31/22 13:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.98**	**J**	2.0	0.86	ug/L			02/08/22 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*65 - 133*		*02/08/22 12:23*	*1*

Client Sample ID: SL-21_013122
Lab Sample ID: 460-251957-23
Date Collected: 01/31/22 13:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 01:35	1
cis-1,2-Dichloroethene	**0.73**	**J**	1.0	0.46	ug/L			02/09/22 01:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 01:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/09/22 01:35*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*02/09/22 01:35*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/09/22 01:35*	*1*
4-Bromofluorobenzene	*88*		*76 - 120*		*02/09/22 01:35*	*1*

Client Sample ID: SL-18_013122
Lab Sample ID: 460-251957-24
Date Collected: 01/31/22 14:30
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.2**		2.0	0.86	ug/L			02/08/22 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/08/22 12:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 01:58	1
cis-1,2-Dichloroethene	**8.5**		1.0	0.46	ug/L			02/09/22 01:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 01:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 01:58	1
Vinyl chloride	**7.5**		1.0	0.45	ug/L			02/09/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*02/09/22 01:58*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/09/22 01:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/09/22 01:58*	*1*
4-Bromofluorobenzene	*91*		*76 - 120*		*02/09/22 01:58*	*1*

Client Sample ID: SL-17_013122
Lab Sample ID: 460-251957-25
Date Collected: 01/31/22 14:55
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			02/09/22 09:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*65 - 133*		*02/09/22 09:50*	*1*

Client Sample ID: SL-17_013122
Lab Sample ID: 460-251957-25
Date Collected: 01/31/22 14:55
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 02:33	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.46	ug/L			02/09/22 02:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 02:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 02:33	1
Trichloroethene	**1.0**		1.0	0.44	ug/L			02/09/22 02:33	1
Vinyl chloride	**3.4**		1.0	0.45	ug/L			02/09/22 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/09/22 02:33*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 124*		*02/09/22 02:33*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/09/22 02:33*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/09/22 02:33*	*1*

Client Sample ID: SL-16_013122
Lab Sample ID: 460-251957-26
Date Collected: 01/31/22 15:15
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			02/08/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/08/22 13:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 02:55	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.46	ug/L			02/09/22 02:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 02:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 02:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 02:55	1
Vinyl chloride	**4.1**		1.0	0.45	ug/L			02/09/22 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 123*		*02/09/22 02:55*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/09/22 02:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/09/22 02:55*	*1*
4-Bromofluorobenzene	*95*		*76 - 120*		*02/09/22 02:55*	*1*

Client Sample ID: SL-3_013122
Lab Sample ID: 460-251957-27
Date Collected: 01/31/22 15:45
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.7**		2.0	0.86	ug/L			02/08/22 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/08/22 13:50*	*1*

Client Sample ID: SL-3_013122
Lab Sample ID: 460-251957-27
Date Collected: 01/31/22 15:45
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 03:18	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			02/09/22 03:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 03:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 03:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 03:18	1
Vinyl chloride	**12**		1.0	0.45	ug/L			02/09/22 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*		*02/09/22 03:18*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*02/09/22 03:18*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/09/22 03:18*	*1*
4-Bromofluorobenzene	*94*		*76 - 120*		*02/09/22 03:18*	*1*

Client Sample ID: MH-1231A_020422
Lab Sample ID: 460-251957-28
Date Collected: 02/04/22 09:10
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		2.0	0.86	ug/L			02/08/22 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/08/22 14:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 03:41	1
cis-1,2-Dichloroethene	**28**		1.0	0.46	ug/L			02/09/22 03:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 03:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 03:41	1
Trichloroethene	**0.53**	**J**	1.0	0.44	ug/L			02/09/22 03:41	1
Vinyl chloride	**39**		1.0	0.45	ug/L			02/09/22 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*02/09/22 03:41*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*02/09/22 03:41*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/09/22 03:41*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/09/22 03:41*	*1*

Client Sample ID: MH-1255_020422
Lab Sample ID: 460-251957-29
Date Collected: 02/04/22 09:40
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			02/08/22 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/08/22 14:34*	*1*

Client Sample ID: MH-1255_020422 — Lab Sample ID: 460-251957-29

Date Collected: 02/04/22 09:40 — **Matrix: Water**
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 04:03	1
cis-1,2-Dichloroethene	**61**		1.0	0.46	ug/L			02/09/22 04:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 04:03	1
trans-1,2-Dichloroethene	**0.65**	**J**	1.0	0.51	ug/L			02/09/22 04:03	1
Trichloroethene	**1.0**		1.0	0.44	ug/L			02/09/22 04:03	1
Vinyl chloride	**100**		1.0	0.45	ug/L			02/09/22 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 123*		*02/09/22 04:03*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 124*		*02/09/22 04:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/09/22 04:03*	*1*
4-Bromofluorobenzene	*89*		*76 - 120*		*02/09/22 04:03*	*1*

Client Sample ID: MH-1256_020422 — Lab Sample ID: 460-251957-30

Date Collected: 02/04/22 10:10 — **Matrix: Water**
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			02/08/22 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*02/08/22 14:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 10:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/09/22 10:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 10:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 10:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 10:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*02/09/22 10:59*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*02/09/22 10:59*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*02/09/22 10:59*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/09/22 10:59*	*1*

Client Sample ID: MH-1260A_020422 — Lab Sample ID: 460-251957-31

Date Collected: 02/04/22 10:35 — **Matrix: Water**
Date Received: 02/05/22 17:51

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.1**		2.0	0.86	ug/L			02/08/22 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/08/22 15:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1260A_020422
Lab Sample ID: 460-251957-31
Date Collected: 02/04/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 04:49	1
cis-1,2-Dichloroethene	**6.5**		1.0	0.46	ug/L			02/09/22 04:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 04:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 04:49	1
Trichloroethene	**1.6**		1.0	0.44	ug/L			02/09/22 04:49	1
Vinyl chloride	**3.7**		1.0	0.45	ug/L			02/09/22 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 123*		*02/09/22 04:49*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/09/22 04:49*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/09/22 04:49*	*1*
4-Bromofluorobenzene	*91*		*76 - 120*		*02/09/22 04:49*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-251957-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-251957-1	TRIP BLANK	110	105	105	90
460-251957-2	DUP_01_020122	105	104	104	91
460-251957-3	DUP_02_020122	103	99	101	90
460-251957-4	SL-8_020122	96	94	98	85
460-251957-5	SL-9_020122	96	94	97	83
460-251957-6	SL-10_020122	98	95	97	83
460-251957-7	SL-11_020122	102	102	102	86
460-251957-8	SL-23_020122	98	98	100	86
460-251957-9	SL-12_020122	96	95	94	85
460-251957-10	SL-19_020122	100	94	98	82
460-251957-11	SL-22_020122	103	100	100	89
460-251957-12	SL-4_020122	98	96	96	84
460-251957-13	SL-2_020122	97	96	97	87
460-251957-14	MH-1231_020122	102	98	101	86
460-251957-15	MH-1244_020122	102	101	99	90
460-251957-16	SL-20_020122	105	104	105	96
460-251957-17	SL-15_013122	107	103	102	91
460-251957-18	SL-14_013122	105	104	103	93
460-251957-19	SL-13_013122	106	103	104	93
460-251957-20	SL-7_013122	95	97	96	84
460-251957-21	SL-6_013122	97	97	96	86
460-251957-22	SL-5_013122	97	93	94	86
460-251957-23	SL-21_013122	96	94	96	88
460-251957-24	SL-18_013122	100	99	99	91
460-251957-25	SL-17_013122	102	98	97	86
460-251957-26	SL-16_013122	105	102	104	95
460-251957-27	SL-3_013122	107	105	105	94
460-251957-28	MH-1231A_020422	100	95	96	86
460-251957-29	MH-1255_020422	103	98	98	89
460-251957-30	MH-1256_020422	95	95	95	87
460-251957-31	MH-1260A_020422	106	104	104	91
LCS 460-827098/4	Lab Control Sample	102	100	99	87
LCS 460-827184/3	Lab Control Sample	107	105	104	93
LCS 460-827272/4	Lab Control Sample	99	101	102	93
LCSD 460-827098/5	Lab Control Sample Dup	109	108	107	92
LCSD 460-827184/5	Lab Control Sample Dup	106	105	107	96
LCSD 460-827272/5	Lab Control Sample Dup	95	95	97	87
MB 460-827098/9	Method Blank	100	96	99	84
MB 460-827184/9	Method Blank	101	105	104	96
MB 460-827272/9	Method Blank	102	102	99	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (65-133)								
460-251957-2	DUP_01_020122	110								
460-251957-3	DUP_02_020122	109								
460-251957-4	SL-8_020122	112								
460-251957-5	SL-9_020122	109								
460-251957-6	SL-10_020122	109								
460-251957-7	SL-11_020122	104								
460-251957-8	SL-23_020122	108								
460-251957-9	SL-12_020122	109								
460-251957-10	SL-19_020122	105								
460-251957-11	SL-22_020122	106								
460-251957-12	SL-4_020122	106								
460-251957-13	SL-2_020122	103								
460-251957-14	MH-1231_020122	111								
460-251957-15	MH-1244_020122	106								
460-251957-16	SL-20_020122	101								
460-251957-17	SL-15_013122	106								
460-251957-18	SL-14_013122	104								
460-251957-19	SL-13_013122	110								
460-251957-20	SL-7_013122	103								
460-251957-21	SL-6_013122	108								
460-251957-22	SL-5_013122	102								
460-251957-23	SL-21_013122	112								
460-251957-24	SL-18_013122	106								
460-251957-25	SL-17_013122	110								
460-251957-26	SL-16_013122	104								
460-251957-27	SL-3_013122	108								
460-251957-28	MH-1231A_020422	108								
460-251957-29	MH-1255_020422	103								
460-251957-30	MH-1256_020422	102								
460-251957-31	MH-1260A_020422	104								
LCS 460-826951/3	Lab Control Sample	109								
LCS 460-827092/3	Lab Control Sample	112								
LCS 460-827263/4	Lab Control Sample	109								
LCSD 460-826951/4	Lab Control Sample Dup	111								
LCSD 460-827092/4	Lab Control Sample Dup	116								
LCSD 460-827263/5	Lab Control Sample Dup	109								
MB 460-826951/7	Method Blank	112								
MB 460-827092/7	Method Blank	108								
MB 460-827263/8	Method Blank	107								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-827098/9
Matrix: Water
Analysis Batch: 827098

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 09:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 09:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 09:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 09:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 09:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 09:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*02/08/22 09:49*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 124*		*02/08/22 09:49*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/08/22 09:49*	*1*
4-Bromofluorobenzene	*84*		*76 - 120*		*02/08/22 09:49*	*1*

Lab Sample ID: LCS 460-827098/4
Matrix: Water
Analysis Batch: 827098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	17.9		ug/L		89	68 - 133		
cis-1,2-Dichloroethene			20.0	17.8		ug/L		89	78 - 121		
Tetrachloroethene			20.0	17.2		ug/L		86	70 - 127		
trans-1,2-Dichloroethene			20.0	16.9		ug/L		85	74 - 126		
Trichloroethene			20.0	16.8		ug/L		84	71 - 121		
Vinyl chloride			20.0	20.6		ug/L		103	61 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*
Dibromofluoromethane (Surr)	*100*		*77 - 124*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene	*87*		*76 - 120*

Lab Sample ID: LCSD 460-827098/5
Matrix: Water
Analysis Batch: 827098

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	18.1		ug/L		90	68 - 133	1	30
cis-1,2-Dichloroethene			20.0	19.5		ug/L		98	78 - 121	10	30
Tetrachloroethene			20.0	18.9		ug/L		94	70 - 127	9	30
trans-1,2-Dichloroethene			20.0	18.5		ug/L		93	74 - 126	9	30
Trichloroethene			20.0	19.4		ug/L		97	71 - 121	15	30
Vinyl chloride			20.0	22.0		ug/L		110	61 - 144	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 123*
Dibromofluoromethane (Surr)	*108*		*77 - 124*
Toluene-d8 (Surr)	*107*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-827098/5
Matrix: Water
Analysis Batch: 827098

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*92*		*76 - 120*

Lab Sample ID: MB 460-827184/9
Matrix: Water
Analysis Batch: 827184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/08/22 21:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/08/22 21:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 21:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/08/22 21:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/08/22 21:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/08/22 21:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*02/08/22 21:25*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*02/08/22 21:25*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/08/22 21:25*	*1*
4-Bromofluorobenzene	*96*		*76 - 120*		*02/08/22 21:25*	*1*

Lab Sample ID: LCS 460-827184/3
Matrix: Water
Analysis Batch: 827184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	18.5		ug/L		92	68 - 133
cis-1,2-Dichloroethene	20.0	19.7		ug/L		98	78 - 121
Tetrachloroethene	20.0	17.9		ug/L		89	70 - 127
trans-1,2-Dichloroethene	20.0	18.5		ug/L		93	74 - 126
Trichloroethene	20.0	19.5		ug/L		98	71 - 121
Vinyl chloride	20.0	22.1		ug/L		111	61 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*
Dibromofluoromethane (Surr)	*105*		*77 - 124*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene	*93*		*76 - 120*

Lab Sample ID: LCSD 460-827184/5
Matrix: Water
Analysis Batch: 827184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	16.8		ug/L		84	68 - 133	9	30
cis-1,2-Dichloroethene	20.0	17.8		ug/L		89	78 - 121	10	30
Tetrachloroethene	20.0	17.7		ug/L		89	70 - 127	1	30
trans-1,2-Dichloroethene	20.0	16.8		ug/L		84	74 - 126	10	30
Trichloroethene	20.0	17.6		ug/L		88	71 - 121	10	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-827184/5
Matrix: Water
Analysis Batch: 827184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			20.0	20.5		ug/L		103	61 - 144	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 123*
Dibromofluoromethane (Surr)	*105*		*77 - 124*
Toluene-d8 (Surr)	*107*		*80 - 120*
4-Bromofluorobenzene	*96*		*76 - 120*

Lab Sample ID: MB 460-827272/9
Matrix: Water
Analysis Batch: 827272

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/09/22 09:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/09/22 09:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 09:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/09/22 09:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/09/22 09:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/09/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/09/22 09:28*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/09/22 09:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/09/22 09:28*	*1*
4-Bromofluorobenzene	*92*		*76 - 120*		*02/09/22 09:28*	*1*

Lab Sample ID: LCS 460-827272/4
Matrix: Water
Analysis Batch: 827272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene			20.0	18.2		ug/L		91	68 - 133
cis-1,2-Dichloroethene			20.0	18.7		ug/L		94	78 - 121
Tetrachloroethene			20.0	19.2		ug/L		96	70 - 127
trans-1,2-Dichloroethene			20.0	18.3		ug/L		91	74 - 126
Trichloroethene			20.0	17.8		ug/L		89	71 - 121
Vinyl chloride			20.0	21.0		ug/L		105	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*
Dibromofluoromethane (Surr)	*101*		*77 - 124*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene	*93*		*76 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-827272/5
Matrix: Water
Analysis Batch: 827272

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	17.2		ug/L		86	68 - 133	6	30
cis-1,2-Dichloroethene			20.0	17.1		ug/L		86	78 - 121	9	30
Tetrachloroethene			20.0	16.8		ug/L		84	70 - 127	13	30
trans-1,2-Dichloroethene			20.0	16.8		ug/L		84	74 - 126	8	30
Trichloroethene			20.0	16.9		ug/L		84	71 - 121	5	30
Vinyl chloride			20.0	20.3		ug/L		102	61 - 144	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*
Dibromofluoromethane (Surr)	*95*		*77 - 124*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene	*87*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-826951/7
Matrix: Water
Analysis Batch: 826951

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/07/22 08:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*65 - 133*		*02/07/22 08:35*	*1*

Lab Sample ID: LCS 460-826951/3
Matrix: Water
Analysis Batch: 826951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			5.00	4.62		ug/L		92	72 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*65 - 133*

Lab Sample ID: LCSD 460-826951/4
Matrix: Water
Analysis Batch: 826951

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.73		ug/L		95	72 - 124	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*65 - 133*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-827092/7
Matrix: Water
Analysis Batch: 827092

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/08/22 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/08/22 08:02*	*1*

Lab Sample ID: LCS 460-827092/3
Matrix: Water
Analysis Batch: 827092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	3.75		ug/L		75	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*65 - 133*

Lab Sample ID: LCSD 460-827092/4
Matrix: Water
Analysis Batch: 827092

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.35		ug/L		87	72 - 124	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*65 - 133*

Lab Sample ID: MB 460-827263/8
Matrix: Water
Analysis Batch: 827263

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/09/22 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*02/09/22 08:23*	*1*

Lab Sample ID: LCS 460-827263/4
Matrix: Water
Analysis Batch: 827263

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.78		ug/L		96	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*65 - 133*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-827263/5
Matrix: Water
Analysis Batch: 827263

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.63		ug/L		93	72 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*65 - 133*

GC/MS VOA

Analysis Batch: 826951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-2	DUP_01_020122	Total/NA	Water	8260D SIM	
460-251957-3	DUP_02_020122	Total/NA	Water	8260D SIM	
460-251957-4	SL-8_020122	Total/NA	Water	8260D SIM	
460-251957-5	SL-9_020122	Total/NA	Water	8260D SIM	
460-251957-6	SL-10_020122	Total/NA	Water	8260D SIM	
460-251957-7	SL-11_020122	Total/NA	Water	8260D SIM	
460-251957-8	SL-23_020122	Total/NA	Water	8260D SIM	
460-251957-9	SL-12_020122	Total/NA	Water	8260D SIM	
460-251957-10	SL-19_020122	Total/NA	Water	8260D SIM	
460-251957-11	SL-22_020122	Total/NA	Water	8260D SIM	
460-251957-12	SL-4_020122	Total/NA	Water	8260D SIM	
460-251957-13	SL-2_020122	Total/NA	Water	8260D SIM	
460-251957-14	MH-1231_020122	Total/NA	Water	8260D SIM	
460-251957-15	MH-1244_020122	Total/NA	Water	8260D SIM	
460-251957-16	SL-20_020122	Total/NA	Water	8260D SIM	
460-251957-17	SL-15_013122	Total/NA	Water	8260D SIM	
460-251957-18	SL-14_013122	Total/NA	Water	8260D SIM	
460-251957-19	SL-13_013122	Total/NA	Water	8260D SIM	
460-251957-20	SL-7_013122	Total/NA	Water	8260D SIM	
MB 460-826951/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-826951/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-826951/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 827092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-21	SL-6_013122	Total/NA	Water	8260D SIM	
460-251957-23	SL-21_013122	Total/NA	Water	8260D SIM	
460-251957-24	SL-18_013122	Total/NA	Water	8260D SIM	
460-251957-26	SL-16_013122	Total/NA	Water	8260D SIM	
460-251957-27	SL-3_013122	Total/NA	Water	8260D SIM	
460-251957-28	MH-1231A_020422	Total/NA	Water	8260D SIM	
460-251957-29	MH-1255_020422	Total/NA	Water	8260D SIM	
460-251957-30	MH-1256_020422	Total/NA	Water	8260D SIM	
460-251957-31	MH-1260A_020422	Total/NA	Water	8260D SIM	
MB 460-827092/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-827092/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-827092/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 827098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-1	TRIP BLANK	Total/NA	Water	8260D	
460-251957-2	DUP_01_020122	Total/NA	Water	8260D	
460-251957-3	DUP_02_020122	Total/NA	Water	8260D	
460-251957-4	SL-8_020122	Total/NA	Water	8260D	
460-251957-5	SL-9_020122	Total/NA	Water	8260D	
460-251957-6	SL-10_020122	Total/NA	Water	8260D	
460-251957-7	SL-11_020122	Total/NA	Water	8260D	
460-251957-8	SL-23_020122	Total/NA	Water	8260D	
460-251957-9	SL-12_020122	Total/NA	Water	8260D	
460-251957-10	SL-19_020122	Total/NA	Water	8260D	
460-251957-11	SL-22_020122	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 827098 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-12	SL-4_020122	Total/NA	Water	8260D	
MB 460-827098/9	Method Blank	Total/NA	Water	8260D	
LCS 460-827098/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-827098/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 827184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-13	SL-2_020122	Total/NA	Water	8260D	
460-251957-14	MH-1231_020122	Total/NA	Water	8260D	
460-251957-15	MH-1244_020122	Total/NA	Water	8260D	
460-251957-16	SL-20_020122	Total/NA	Water	8260D	
460-251957-17	SL-15_013122	Total/NA	Water	8260D	
460-251957-18	SL-14_013122	Total/NA	Water	8260D	
460-251957-19	SL-13_013122	Total/NA	Water	8260D	
460-251957-20	SL-7_013122	Total/NA	Water	8260D	
460-251957-21	SL-6_013122	Total/NA	Water	8260D	
460-251957-22	SL-5_013122	Total/NA	Water	8260D	
460-251957-23	SL-21_013122	Total/NA	Water	8260D	
460-251957-24	SL-18_013122	Total/NA	Water	8260D	
460-251957-25	SL-17_013122	Total/NA	Water	8260D	
460-251957-26	SL-16_013122	Total/NA	Water	8260D	
460-251957-27	SL-3_013122	Total/NA	Water	8260D	
460-251957-28	MH-1231A_020422	Total/NA	Water	8260D	
460-251957-29	MH-1255_020422	Total/NA	Water	8260D	
460-251957-31	MH-1260A_020422	Total/NA	Water	8260D	
MB 460-827184/9	Method Blank	Total/NA	Water	8260D	
LCS 460-827184/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-827184/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 827263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-22	SL-5_013122	Total/NA	Water	8260D SIM	
460-251957-25	SL-17_013122	Total/NA	Water	8260D SIM	
MB 460-827263/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-827263/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-827263/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 827272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-251957-30	MH-1256_020422	Total/NA	Water	8260D	
MB 460-827272/9	Method Blank	Total/NA	Water	8260D	
LCS 460-827272/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-827272/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK
Lab Sample ID: 460-251957-1
Date Collected: 02/04/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 12:41	CJM	TAL EDI

Client Sample ID: DUP_01_020122
Lab Sample ID: 460-251957-2
Date Collected: 02/01/22 00:00
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 17:59	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 09:18	SZD	TAL EDI

Client Sample ID: DUP_02_020122
Lab Sample ID: 460-251957-3
Date Collected: 02/01/22 00:00
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 14:13	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 09:40	SZD	TAL EDI

Client Sample ID: SL-8_020122
Lab Sample ID: 460-251957-4
Date Collected: 02/01/22 09:35
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 14:36	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 10:02	SZD	TAL EDI

Client Sample ID: SL-9_020122
Lab Sample ID: 460-251957-5
Date Collected: 02/01/22 10:10
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 14:58	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 10:24	SZD	TAL EDI

Client Sample ID: SL-10_020122
Lab Sample ID: 460-251957-6
Date Collected: 02/01/22 10:50
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 15:21	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 10:45	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_020122
Lab Sample ID: 460-251957-7
Date Collected: 02/01/22 11:20
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 15:43	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 11:07	SZD	TAL EDI

Client Sample ID: SL-23_020122
Lab Sample ID: 460-251957-8
Date Collected: 02/01/22 11:40
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 16:06	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 11:29	SZD	TAL EDI

Client Sample ID: SL-12_020122
Lab Sample ID: 460-251957-9
Date Collected: 02/01/22 12:00
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 16:28	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 11:50	SZD	TAL EDI

Client Sample ID: SL-19_020122
Lab Sample ID: 460-251957-10
Date Collected: 02/01/22 12:25
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 16:51	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 12:12	SZD	TAL EDI

Client Sample ID: SL-22_020122
Lab Sample ID: 460-251957-11
Date Collected: 02/01/22 13:50
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 17:13	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 12:34	SZD	TAL EDI

Client Sample ID: SL-4_020122
Lab Sample ID: 460-251957-12
Date Collected: 02/01/22 14:10
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827098	02/08/22 17:36	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 12:56	SZD	TAL EDI

Client Sample ID: SL-2_020122
Lab Sample ID: 460-251957-13
Date Collected: 02/01/22 14:40
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 21:47	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 13:17	SZD	TAL EDI

Client Sample ID: MH-1231_020122
Lab Sample ID: 460-251957-14
Date Collected: 02/01/22 15:00
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 22:10	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 16:34	SZD	TAL EDI

Client Sample ID: MH-1244_020122
Lab Sample ID: 460-251957-15
Date Collected: 02/01/22 15:30
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 22:33	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 14:23	SZD	TAL EDI

Client Sample ID: SL-20_020122
Lab Sample ID: 460-251957-16
Date Collected: 02/01/22 13:30
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 22:56	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 14:45	SZD	TAL EDI

Client Sample ID: SL-15_013122
Lab Sample ID: 460-251957-17
Date Collected: 01/31/22 10:05
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 23:18	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 15:07	SZD	TAL EDI

Client Sample ID: SL-14_013122
Lab Sample ID: 460-251957-18
Date Collected: 01/31/22 10:20
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/08/22 23:41	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 15:29	SZD	TAL EDI

Client Sample ID: SL-13_013122
Lab Sample ID: 460-251957-19
Date Collected: 01/31/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 00:04	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 15:50	SZD	TAL EDI

Client Sample ID: SL-7_013122
Lab Sample ID: 460-251957-20
Date Collected: 01/31/22 11:40
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 00:27	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	826951	02/07/22 16:12	SZD	TAL EDI

Client Sample ID: SL-6_013122
Lab Sample ID: 460-251957-21
Date Collected: 01/31/22 12:10
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 00:50	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 11:39	SZD	TAL EDI

Client Sample ID: SL-5_013122
Lab Sample ID: 460-251957-22
Date Collected: 01/31/22 12:30
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 01:12	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827263	02/09/22 10:12	SZD	TAL EDI

Client Sample ID: SL-21_013122
Lab Sample ID: 460-251957-23
Date Collected: 01/31/22 13:35
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 01:35	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 12:23	SZD	TAL EDI

Client Sample ID: SL-18_013122
Lab Sample ID: 460-251957-24
Date Collected: 01/31/22 14:30
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 01:58	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 12:45	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_013122
Lab Sample ID: 460-251957-25
Date Collected: 01/31/22 14:55
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 02:33	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827263	02/09/22 09:50	SZD	TAL EDI

Client Sample ID: SL-16_013122
Lab Sample ID: 460-251957-26
Date Collected: 01/31/22 15:15
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 02:55	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 13:28	SZD	TAL EDI

Client Sample ID: SL-3_013122
Lab Sample ID: 460-251957-27
Date Collected: 01/31/22 15:45
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 03:18	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 13:50	SZD	TAL EDI

Client Sample ID: MH-1231A_020422
Lab Sample ID: 460-251957-28
Date Collected: 02/04/22 09:10
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 03:41	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 14:12	SZD	TAL EDI

Client Sample ID: MH-1255_020422
Lab Sample ID: 460-251957-29
Date Collected: 02/04/22 09:40
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 04:03	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 14:34	SZD	TAL EDI

Client Sample ID: MH-1256_020422
Lab Sample ID: 460-251957-30
Date Collected: 02/04/22 10:10
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827272	02/09/22 10:59	CJM	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 14:55	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1260A_020422
Lab Sample ID: 460-251957-31
Date Collected: 02/04/22 10:35
Matrix: Water
Date Received: 02/05/22 17:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	827184	02/09/22 04:49	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	827092	02/08/22 15:17	SZD	TAL EDI

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-251957-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-251957-1	TRIP BLANK	Water	02/04/22 10:35	02/05/22 17:51
460-251957-2	DUP_01_020122	Water	02/01/22 00:00	02/05/22 17:51
460-251957-3	DUP_02_020122	Water	02/01/22 00:00	02/05/22 17:51
460-251957-4	SL-8_020122	Water	02/01/22 09:35	02/05/22 17:51
460-251957-5	SL-9_020122	Water	02/01/22 10:10	02/05/22 17:51
460-251957-6	SL-10_020122	Water	02/01/22 10:50	02/05/22 17:51
460-251957-7	SL-11_020122	Water	02/01/22 11:20	02/05/22 17:51
460-251957-8	SL-23_020122	Water	02/01/22 11:40	02/05/22 17:51
460-251957-9	SL-12_020122	Water	02/01/22 12:00	02/05/22 17:51
460-251957-10	SL-19_020122	Water	02/01/22 12:25	02/05/22 17:51
460-251957-11	SL-22_020122	Water	02/01/22 13:50	02/05/22 17:51
460-251957-12	SL-4_020122	Water	02/01/22 14:10	02/05/22 17:51
460-251957-13	SL-2_020122	Water	02/01/22 14:40	02/05/22 17:51
460-251957-14	MH-1231_020122	Water	02/01/22 15:00	02/05/22 17:51
460-251957-15	MH-1244_020122	Water	02/01/22 15:30	02/05/22 17:51
460-251957-16	SL-20_020122	Water	02/01/22 13:30	02/05/22 17:51
460-251957-17	SL-15_013122	Water	01/31/22 10:05	02/05/22 17:51
460-251957-18	SL-14_013122	Water	01/31/22 10:20	02/05/22 17:51
460-251957-19	SL-13_013122	Water	01/31/22 10:35	02/05/22 17:51
460-251957-20	SL-7_013122	Water	01/31/22 11:40	02/05/22 17:51
460-251957-21	SL-6_013122	Water	01/31/22 12:10	02/05/22 17:51
460-251957-22	SL-5_013122	Water	01/31/22 12:30	02/05/22 17:51
460-251957-23	SL-21_013122	Water	01/31/22 13:35	02/05/22 17:51
460-251957-24	SL-18_013122	Water	01/31/22 14:30	02/05/22 17:51
460-251957-25	SL-17_013122	Water	01/31/22 14:55	02/05/22 17:51
460-251957-26	SL-16_013122	Water	01/31/22 15:15	02/05/22 17:51
460-251957-27	SL-3_013122	Water	01/31/22 15:45	02/05/22 17:51
460-251957-28	MH-1231A_020422	Water	02/04/22 09:10	02/05/22 17:51
460-251957-29	MH-1255_020422	Water	02/04/22 09:40	02/05/22 17:51
460-251957-30	MH-1256_020422	Water	02/04/22 10:10	02/05/22 17:51
460-251957-31	MH-1260A_020422	Water	02/04/22 10:35	02/05/22 17:51

Chain of Custody Record

MICHIGAN 190

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

251957

TestAmerica Laboratories, Inc.

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	QC check
1	TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
2	DUP-01-020122	2/1/22	—		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
3	DUP-02-020122	2/1/22	—		X						6					N	G	X	X	X	X	X	X	X	" "	✓
4	SL-8-020122	2/1/22	9:35		X						6					N	G	X	X	X	X	X	X	X	" "	✓
5	SL-9-020122	2/1/22	10:10		X						6					N	G	X	X	X	X	X	X	X	" "	✓
6	SL-10-020122	2/1/22	10:50		X						6					N	G	X	X	X	X	X	X	X	" "	✓
7	SL-11-020122	2/1/22	11:20		X						6					N	G	X	X	X	X	X	X	X	" "	✓
8	SL-23-020122	2/1/22	11:40		X						6					N	G	X	X	X	X	X	X	X	" "	✓
9	SL-12-020122	2/1/22	12:00		X						6					N	G	X	X	X	X	X	X	X	" "	✓
10	SL-19-020122	2/1/22	12:25		X						6					N	G	X	X	X	X	X	X	X	" "	✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

CS# 855569, 855568 IR9 1.9/18 2.2/2.1°C

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/4/22 13:00	Jeni Hall	EETA	2/4/22 13:00
Jeni Hall	EETA	2/4/22 1301	Kim Fedex	EETA01	2/5/22 14:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3-Day RUSH

460-251957 Chain of Custody

2/9/2022

Chain of Custody Record

MICHIGAN 190 TestAmerica — THE LEADER IN ENVIRONMENTAL TESTING

25195?

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377				COCs
Phone: 248-994-2240	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Project Number: 30080642.701.04	Method of Shipment/Carrier:	3 day ☐		Lab sampling
PO # 30080642.701.04	Shipping/Tracking No:			Job/SDG No:

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	QC check
1	TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
11	SL-22_020122	2/1/22	13:50		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
12	SL-4_020122	2/1/22	14:10		X						6					N	G	X	X	X	X	X	X	X	" "	✓
13	SL-2_020122	2/1/22	14:40		X						6					N	G	X	X	X	X	X	X	X	" "	✓
14	MH-1231_020122	2/1/22	15:00		X						6					N	G	X	X	X	X	X	X	X	" "	✓
15	MH-1244_020122	2/1/22	15:30		X						6					N	G	X	X	X	X	X	X	X	" "	✓
16	SL-20_020122	2/1/22	13:30		X						6					N	G	X	X	X	X	X	X	X	" "	✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/4/22 13:00	Jeri Hall	EETA	2/4/22 13:00
Jeri Hall	EETA	2/4/22 1900 1301	Lon	FedEx EETA	2/5/22 14:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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2/9/2022

Chain of Custody Record

MICHIGAN 190

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

751957

TestAmerica Laboratories, Inc.

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	COCs
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below: 3 day		For lab use only: Walk-in client; Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Job/SDG No:
Project Number: 30080642.701.04	Shipping/Tracking No:			
PO # 30080642.701.04				

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	QC check
1	TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
17	SL-15_013122	1/31/22	10:05		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
KR 18	SL-14_013122	1/31/22	10:20		X						6					N	G	X	X	X	X	X	X	X	" "	✓
19	SL-13_013122	1/31/22	10:35		X						6					N	G	X	X	X	X	X	X	X	" "	✓
20	SL-7_013122	1/31/22	11:40		X						6					N	G	X	X	X	X	X	X	X	" "	✓
21	SL-6_013122	1/31/22	12:10		X						6					N	G	X	X	X	X	X	X	X	" "	✓
22	SL-5_013122	1/31/22	12:30		X						6					N	G	X	X	X	X	X	X	X	" "	✓
23	SL-21_013122	1/31/22	13:35		X						6					N	G	X	X	X	X	X	X	X	" "	✓
24	SL-18_013122	1/31/22	14:30		X						6					N	G	X	X	X	X	X	X	X	" "	✓
25	SL-19_013122	1/31/22	14:55		X						6					N	G	X	X	X	X	X	X	X	" "	✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/4/22 13:00	Jei Hale	EETA	2/4/22 13:00
Jei Hale	EETA	2/4/22 1301	[illegible]	FedEx	2/5/22 1430
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

MICHIGAN TestAmerica 190
THE LEADER IN ENVIRONMENTAL TESTING

251957

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle	TAT if different from below ☐ 3 day		For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Walk-in client ☐
Project Number: 30080642.701.04	Shipping/Tracking No:			Lab sampling ☐
PO # 30080642.701.04				Job/SDG No:

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
1	TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
26	SL-16_013122	1/31/22	15:15		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
27	SL-3_013122	1/31/22	15:45		X						6					N	G	X	X	X	X	X	X	X					" "
28	MH-1231A_020422	2/4/22	9:10		X						6					N	G	X	X	X	X	X	X	X					" "
29	MH-1255_020422	2/4/22	9:40		X						6					N	G	X	X	X	X	X	X	X					" "
30	MH-1256_020422	2/4/22	10:10		X						6					N	G	X	X	X	X	X	X	X					" "
31	MH-1260A_020422	2/4/22	10:35		X						6					N	G	X	X	X	X	X	X	X					" "

QC'ed ✓

Page 47 of 49

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Gray	Arcadis	2/4/22 13:00	Jeri Hall	EETA	2/4/22 13:00
Jeri Hall	EETA	2/4/22 1301	Ken Fedex	FedEx	2/5/22 14:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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2/9/2022

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 251957

Number of Coolers: 2 **IR Gun #** 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.9 °C	1.8 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.2 °C	2.1 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: JR **Date:** 2/5/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-251957-1

Login Number: 251957
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1855569, 1855568
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-252920-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
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Authorized for release by:
2/24/2022 3:40:31 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01 — Lab Sample ID: 460-252920-1

No Detections.

Client Sample ID: SL-15_021522 — Lab Sample ID: 460-252920-2

No Detections.

Client Sample ID: SL-14_021522 — Lab Sample ID: 460-252920-3

No Detections.

Client Sample ID: SL-13_021522 — Lab Sample ID: 460-252920-4

No Detections.

Client Sample ID: SL-7_021522 — Lab Sample ID: 460-252920-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_021522 — Lab Sample ID: 460-252920-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_021522 — Lab Sample ID: 460-252920-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_021522 — Lab Sample ID: 460-252920-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_021522 — Lab Sample ID: 460-252920-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_021522 — Lab Sample ID: 460-252920-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.95	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_02 — Lab Sample ID: 460-252920-11

No Detections.

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_021522 — Lab Sample ID: 460-252920-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_021622 — Lab Sample ID: 460-252920-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_021622 — Lab Sample ID: 460-252920-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_021622 — Lab Sample ID: 460-252920-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_021622 — Lab Sample ID: 460-252920-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_021622 — Lab Sample ID: 460-252920-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_021622 — Lab Sample ID: 460-252920-18

No Detections.

Client Sample ID: SL-22_021622 — Lab Sample ID: 460-252920-19

No Detections.

Client Sample ID: SL-4_021622 — Lab Sample ID: 460-252920-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.6		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_03 — Lab Sample ID: 460-252920-21

No Detections.

Client Sample ID: SL-18_021622 — Lab Sample ID: 460-252920-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_021622 — Lab Sample ID: 460-252920-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_021622 — Lab Sample ID: 460-252920-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	31		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	61		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.52	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	0.46	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	61		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_021622 — Lab Sample ID: 460-252920-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.84	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1256_021622 — Lab Sample ID: 460-252920-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.85	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_021622 — Lab Sample ID: 460-252920-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.69	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MW-1231A_021622 — Lab Sample ID: 460-252920-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	20		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	29		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	19		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_021822 — Lab Sample ID: 460-252920-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: DUP-02_021822 (Continued) — Lab Sample ID: 460-252920-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_021682 — Lab Sample ID: 460-252920-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.5		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_04 — Lab Sample ID: 460-252920-31

No Detections.

Client Sample ID: SL-3_021822 — Lab Sample ID: 460-252920-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.9		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_021822 — Lab Sample ID: 460-252920-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_021822 — Lab Sample ID: 460-252920-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 460-252920-1
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 18:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 18:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 18:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 18:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 18:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 123*		*02/22/22 18:55*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 18:55*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 18:55*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 18:55*	*1*

Client Sample ID: SL-15_021522
Lab Sample ID: 460-252920-2
Date Collected: 02/15/22 09:25
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/23/22 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*02/23/22 23:17*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 19:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 19:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 19:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 123*		*02/22/22 19:38*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/22/22 19:38*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*02/22/22 19:38*	*1*
4-Bromofluorobenzene	*86*		*76 - 120*		*02/22/22 19:38*	*1*

Client Sample ID: SL-14_021522
Lab Sample ID: 460-252920-3
Date Collected: 02/15/22 09:40
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/23/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/23/22 23:39*	*1*

Client Sample ID: SL-14_021522
Lab Sample ID: 460-252920-3
Date Collected: 02/15/22 09:40
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 19:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 19:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 19:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 123*		*02/22/22 19:59*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 124*		*02/22/22 19:59*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 19:59*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 19:59*	*1*

Client Sample ID: SL-13_021522
Lab Sample ID: 460-252920-4
Date Collected: 02/15/22 09:50
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 00:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 20:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 20:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 20:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 20:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 20:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 123*		*02/22/22 20:20*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*02/22/22 20:20*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 20:20*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 20:20*	*1*

Client Sample ID: SL-7_021522
Lab Sample ID: 460-252920-5
Date Collected: 02/15/22 10:50
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			02/24/22 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 00:22*	*1*

Client Sample ID: SL-7_021522
Lab Sample ID: 460-252920-5
Date Collected: 02/15/22 10:50
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 20:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 20:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 20:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 20:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 20:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 123*		*02/22/22 20:42*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 20:42*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*02/22/22 20:42*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 20:42*	*1*

Client Sample ID: SL-6_021522
Lab Sample ID: 460-252920-6
Date Collected: 02/15/22 11:10
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			02/24/22 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/24/22 00:44*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 21:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 21:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 21:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*	*S1+*	*75 - 123*		*02/22/22 21:03*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 21:03*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 21:03*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 21:03*	*1*

Client Sample ID: SL-5_021522
Lab Sample ID: 460-252920-7
Date Collected: 02/15/22 11:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.6**		2.0	0.86	ug/L			02/24/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/24/22 01:05*	*1*

Client Sample ID: SL-5_021522
Lab Sample ID: 460-252920-7
Date Collected: 02/15/22 11:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 21:24	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			02/22/22 21:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 21:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:24	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			02/22/22 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 123*		*02/22/22 21:24*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 21:24*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 21:24*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 21:24*	*1*

Client Sample ID: SL-8_021522
Lab Sample ID: 460-252920-8
Date Collected: 02/15/22 12:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			02/24/22 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 01:27*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 21:45	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			02/22/22 21:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 21:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 21:45	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			02/22/22 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*	*S1+*	*75 - 123*		*02/22/22 21:45*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/22/22 21:45*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/22/22 21:45*	*1*
4-Bromofluorobenzene	*90*		*76 - 120*		*02/22/22 21:45*	*1*

Client Sample ID: SL-9_021522
Lab Sample ID: 460-252920-9
Date Collected: 02/15/22 12:45
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			02/24/22 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/24/22 01:49*	*1*

Client Sample ID: SL-9_021522
Lab Sample ID: 460-252920-9
Date Collected: 02/15/22 12:45
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 22:07	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.46	ug/L			02/22/22 22:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 22:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:07	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			02/22/22 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 123*		*02/22/22 22:07*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/22/22 22:07*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 22:07*	*1*
4-Bromofluorobenzene	*89*		*76 - 120*		*02/22/22 22:07*	*1*

Client Sample ID: SL-21_021522
Lab Sample ID: 460-252920-10
Date Collected: 02/15/22 13:20
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			02/24/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*02/24/22 02:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 22:28	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			02/22/22 22:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 22:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:28	1
Vinyl chloride	**0.95**	**J**	1.0	0.45	ug/L			02/22/22 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 123*		*02/22/22 22:28*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 22:28*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/22/22 22:28*	*1*
4-Bromofluorobenzene	*88*		*76 - 120*		*02/22/22 22:28*	*1*

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 460-252920-11
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 19:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 19:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 19:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 19:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 19:16	1

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 460-252920-11
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		75 - 123		02/22/22 19:16	1
Dibromofluoromethane (Surr)	99		77 - 124		02/22/22 19:16	1
Toluene-d8 (Surr)	107		80 - 120		02/22/22 19:16	1
4-Bromofluorobenzene	87		76 - 120		02/22/22 19:16	1

Client Sample ID: SL-20_021522
Lab Sample ID: 460-252920-12
Date Collected: 02/15/22 13:40
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			02/24/22 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		65 - 133		02/24/22 02:32	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 22:50	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.46	ug/L			02/22/22 22:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 22:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 22:50	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			02/22/22 22:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124	S1+	75 - 123		02/22/22 22:50	1
Dibromofluoromethane (Surr)	102		77 - 124		02/22/22 22:50	1
Toluene-d8 (Surr)	106		80 - 120		02/22/22 22:50	1
4-Bromofluorobenzene	89		76 - 120		02/22/22 22:50	1

Client Sample ID: DUP-01_021622
Lab Sample ID: 460-252920-13
Date Collected: 02/16/22 00:00
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			02/24/22 02:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		65 - 133		02/24/22 02:54	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 23:11	1
cis-1,2-Dichloroethene	**8.8**		1.0	0.46	ug/L			02/22/22 23:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 23:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:11	1
Vinyl chloride	**7.4**		1.0	0.45	ug/L			02/22/22 23:11	1

Client Sample ID: DUP-01_021622 — Lab Sample ID: 460-252920-13

Date Collected: 02/16/22 00:00 **Matrix: Water**
Date Received: 02/19/22 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124	S1+	75 - 123		02/22/22 23:11	1
Dibromofluoromethane (Surr)	100		77 - 124		02/22/22 23:11	1
Toluene-d8 (Surr)	106		80 - 120		02/22/22 23:11	1
4-Bromofluorobenzene	88		76 - 120		02/22/22 23:11	1

Client Sample ID: SL-10_021622 — Lab Sample ID: 460-252920-14

Date Collected: 02/16/22 08:55 **Matrix: Water**
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		2.0	0.86	ug/L			02/24/22 03:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		65 - 133		02/24/22 03:16	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 23:32	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			02/22/22 23:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 23:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:32	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			02/22/22 23:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125	S1+	75 - 123		02/22/22 23:32	1
Dibromofluoromethane (Surr)	102		77 - 124		02/22/22 23:32	1
Toluene-d8 (Surr)	106		80 - 120		02/22/22 23:32	1
4-Bromofluorobenzene	88		76 - 120		02/22/22 23:32	1

Client Sample ID: SL-11_021622 — Lab Sample ID: 460-252920-15

Date Collected: 02/16/22 09:20 **Matrix: Water**
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.3**		2.0	0.86	ug/L			02/24/22 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		65 - 133		02/24/22 03:38	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 23:53	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			02/22/22 23:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 23:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 23:53	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			02/22/22 23:53	1

Client Sample ID: SL-11_021622
Lab Sample ID: 460-252920-15
Date Collected: 02/16/22 09:20
Matrix: Water
Date Received: 02/19/22 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		75 - 123		02/22/22 23:53	1
Dibromofluoromethane (Surr)	101		77 - 124		02/22/22 23:53	1
Toluene-d8 (Surr)	106		80 - 120		02/22/22 23:53	1
4-Bromofluorobenzene	88		76 - 120		02/22/22 23:53	1

Client Sample ID: SL-23_021622
Lab Sample ID: 460-252920-16
Date Collected: 02/16/22 09:35
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.2**		2.0	0.86	ug/L			02/24/22 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		65 - 133		02/24/22 03:59	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 00:15	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.46	ug/L			02/23/22 00:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 00:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:15	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			02/23/22 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125	S1+	75 - 123		02/23/22 00:15	1
Dibromofluoromethane (Surr)	102		77 - 124		02/23/22 00:15	1
Toluene-d8 (Surr)	106		80 - 120		02/23/22 00:15	1
4-Bromofluorobenzene	89		76 - 120		02/23/22 00:15	1

Client Sample ID: SL-12_021622
Lab Sample ID: 460-252920-17
Date Collected: 02/16/22 10:10
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.3**		2.0	0.86	ug/L			02/24/22 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		65 - 133		02/24/22 04:21	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 00:36	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.46	ug/L			02/23/22 00:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 00:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:36	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			02/23/22 00:36	1

Client Sample ID: SL-12_021622
Lab Sample ID: 460-252920-17
Date Collected: 02/16/22 10:10
Matrix: Water
Date Received: 02/19/22 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124	S1+	75 - 123		02/23/22 00:36	1
Dibromofluoromethane (Surr)	102		77 - 124		02/23/22 00:36	1
Toluene-d8 (Surr)	106		80 - 120		02/23/22 00:36	1
4-Bromofluorobenzene	89		76 - 120		02/23/22 00:36	1

Client Sample ID: SL-19_021622
Lab Sample ID: 460-252920-18
Date Collected: 02/16/22 10:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 04:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		65 - 133		02/24/22 04:43	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 00:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/23/22 00:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 00:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 00:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124	S1+	75 - 123		02/23/22 00:57	1
Dibromofluoromethane (Surr)	100		77 - 124		02/23/22 00:57	1
Toluene-d8 (Surr)	107		80 - 120		02/23/22 00:57	1
4-Bromofluorobenzene	89		76 - 120		02/23/22 00:57	1

Client Sample ID: SL-22_021622
Lab Sample ID: 460-252920-19
Date Collected: 02/16/22 10:40
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 05:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		65 - 133		02/24/22 05:05	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 01:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/23/22 01:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 01:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 01:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 01:19	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 01:19	1

Client Sample ID: SL-22_021622
Lab Sample ID: 460-252920-19
Date Collected: 02/16/22 10:40
Matrix: Water
Date Received: 02/19/22 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		75 - 123		02/23/22 01:19	1
Dibromofluoromethane (Surr)	98		77 - 124		02/23/22 01:19	1
Toluene-d8 (Surr)	105		80 - 120		02/23/22 01:19	1
4-Bromofluorobenzene	86		76 - 120		02/23/22 01:19	1

Client Sample ID: SL-4_021622
Lab Sample ID: 460-252920-20
Date Collected: 02/16/22 11:10
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		2.0	0.86	ug/L			02/24/22 05:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		65 - 133		02/24/22 05:26	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 01:40	1
cis-1,2-Dichloroethene	**8.3**		1.0	0.46	ug/L			02/23/22 01:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 01:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 01:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 01:40	1
Vinyl chloride	**6.6**		1.0	0.45	ug/L			02/23/22 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124	S1+	75 - 123		02/23/22 01:40	1
Dibromofluoromethane (Surr)	99		77 - 124		02/23/22 01:40	1
Toluene-d8 (Surr)	106		80 - 120		02/23/22 01:40	1
4-Bromofluorobenzene	86		76 - 120		02/23/22 01:40	1

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 460-252920-21
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 12:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/23/22 12:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 12:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 12:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 12:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		75 - 123		02/23/22 12:49	1
Dibromofluoromethane (Surr)	102		77 - 124		02/23/22 12:49	1
Toluene-d8 (Surr)	102		80 - 120		02/23/22 12:49	1
4-Bromofluorobenzene	104		76 - 120		02/23/22 12:49	1

Client Sample ID: SL-18_021622
Lab Sample ID: 460-252920-22
Date Collected: 02/16/22 11:45
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			02/24/22 05:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*65 - 133*		*02/24/22 05:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 13:30	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			02/23/22 13:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 13:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:30	1
Vinyl chloride	**6.3**		1.0	0.45	ug/L			02/23/22 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*02/23/22 13:30*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*02/23/22 13:30*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/23/22 13:30*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*02/23/22 13:30*	*1*

Client Sample ID: SL-17_021622
Lab Sample ID: 460-252920-23
Date Collected: 02/16/22 12:00
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			02/24/22 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/24/22 06:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 13:51	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			02/23/22 13:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 13:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:51	1
Vinyl chloride	**6.2**		1.0	0.45	ug/L			02/23/22 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*02/23/22 13:51*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/23/22 13:51*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/23/22 13:51*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*02/23/22 13:51*	*1*

Client Sample ID: MH-1255_021622
Lab Sample ID: 460-252920-24
Date Collected: 02/16/22 13:05
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**31**		2.0	0.86	ug/L			02/24/22 08:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*65 - 133*		*02/24/22 08:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 14:12	1
cis-1,2-Dichloroethene	**61**		1.0	0.46	ug/L			02/23/22 14:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 14:12	1
trans-1,2-Dichloroethene	**0.52**	**J**	1.0	0.51	ug/L			02/23/22 14:12	1
Trichloroethene	**0.46**	**J**	1.0	0.44	ug/L			02/23/22 14:12	1
Vinyl chloride	**61**		1.0	0.45	ug/L			02/23/22 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*02/23/22 14:12*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*02/23/22 14:12*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/23/22 14:12*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*02/23/22 14:12*	*1*

Client Sample ID: MH-1259_021622
Lab Sample ID: 460-252920-25
Date Collected: 02/16/22 13:40
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.0**		2.0	0.86	ug/L			02/24/22 09:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/24/22 09:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 14:33	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			02/23/22 14:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 14:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 14:33	1
Trichloroethene	**0.84**	**J**	1.0	0.44	ug/L			02/23/22 14:33	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			02/23/22 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*02/23/22 14:33*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/23/22 14:33*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/23/22 14:33*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*02/23/22 14:33*	*1*

Client Sample ID: MH-1256_021622
Lab Sample ID: 460-252920-26
Date Collected: 02/16/22 14:00
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 09:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 14:54	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			02/23/22 14:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 14:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 14:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 14:54	1
Vinyl chloride	**0.85**	**J**	1.0	0.45	ug/L			02/23/22 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 123*		*02/23/22 14:54*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/23/22 14:54*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/23/22 14:54*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*02/23/22 14:54*	*1*

Client Sample ID: MH-1244_021622
Lab Sample ID: 460-252920-27
Date Collected: 02/16/22 14:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			02/24/22 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*02/24/22 10:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 15:15	1
cis-1,2-Dichloroethene	**0.69**	**J**	1.0	0.46	ug/L			02/23/22 15:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 15:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*02/23/22 15:15*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*02/23/22 15:15*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*02/23/22 15:15*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*02/23/22 15:15*	*1*

Client Sample ID: MW-1231A_021622
Lab Sample ID: 460-252920-28
Date Collected: 02/16/22 14:45
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**20**		2.0	0.86	ug/L			02/24/22 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 10:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 15:35	1
cis-1,2-Dichloroethene	**29**		1.0	0.46	ug/L			02/23/22 15:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 15:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:35	1
Vinyl chloride	**19**		1.0	0.45	ug/L			02/23/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*02/23/22 15:35*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/23/22 15:35*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/23/22 15:35*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*02/23/22 15:35*	*1*

Client Sample ID: DUP-02_021822
Lab Sample ID: 460-252920-29
Date Collected: 02/18/22 00:00
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.6**		2.0	0.86	ug/L			02/24/22 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/24/22 10:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 15:56	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.46	ug/L			02/23/22 15:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 15:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 15:56	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			02/23/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*02/23/22 15:56*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/23/22 15:56*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/23/22 15:56*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*02/23/22 15:56*	*1*

Client Sample ID: SL-16_021682
Lab Sample ID: 460-252920-30
Date Collected: 02/18/22 09:10
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*02/24/22 11:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 16:17	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			02/23/22 16:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 16:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 16:17	1
Trichloroethene	**2.5**		1.0	0.44	ug/L			02/23/22 16:17	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			02/23/22 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*02/23/22 16:17*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/23/22 16:17*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/23/22 16:17*	*1*
4-Bromofluorobenzene	*109*		*76 - 120*		*02/23/22 16:17*	*1*

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 460-252920-31
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 13:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/23/22 13:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 13:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 13:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*		*02/23/22 13:10*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*02/23/22 13:10*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/23/22 13:10*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*02/23/22 13:10*	*1*

Client Sample ID: SL-3_021822
Lab Sample ID: 460-252920-32
Date Collected: 02/18/22 09:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			02/24/22 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*02/24/22 11:31*	*1*

Client Sample ID: SL-3_021822
Lab Sample ID: 460-252920-32
Date Collected: 02/18/22 09:30
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 16:37	1
cis-1,2-Dichloroethene	**4.0**		1.0	0.46	ug/L			02/23/22 16:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 16:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 16:37	1
Trichloroethene	**1.9**		1.0	0.44	ug/L			02/23/22 16:37	1
Vinyl chloride	**3.7**		1.0	0.45	ug/L			02/23/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*02/23/22 16:37*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/23/22 16:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/23/22 16:37*	*1*
4-Bromofluorobenzene	*108*		*76 - 120*		*02/23/22 16:37*	*1*

Client Sample ID: SL-2_021822
Lab Sample ID: 460-252920-33
Date Collected: 02/18/22 09:50
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			02/24/22 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*02/24/22 11:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 16:58	1
cis-1,2-Dichloroethene	**5.7**		1.0	0.46	ug/L			02/23/22 16:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 16:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 16:58	1
Vinyl chloride	**5.3**		1.0	0.45	ug/L			02/23/22 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*02/23/22 16:58*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/23/22 16:58*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/23/22 16:58*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*02/23/22 16:58*	*1*

Client Sample ID: MH-1231_021822
Lab Sample ID: 460-252920-34
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.7**		2.0	0.86	ug/L			02/24/22 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*02/24/22 12:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_021822
Lab Sample ID: 460-252920-34
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 17:19	1
cis-1,2-Dichloroethene	**3.4**		1.0	0.46	ug/L			02/23/22 17:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 17:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 17:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 17:19	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			02/23/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 123*		*02/23/22 17:19*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 124*		*02/23/22 17:19*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/23/22 17:19*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*02/23/22 17:19*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-252920-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-252920-1	TRIP BLANK_01	121	99	106	87
460-252920-2	SL-15_021522	123	100	107	86
460-252920-3	SL-14_021522	120	98	106	87
460-252920-4	SL-13_021522	123	101	106	87
460-252920-5	SL-7_021522	122	99	107	87
460-252920-6	SL-6_021522	124 S1+	99	106	87
460-252920-7	SL-5_021522	122	99	106	87
460-252920-8	SL-8_021522	124 S1+	100	105	90
460-252920-9	SL-9_021522	123	100	106	89
460-252920-10	SL-21_021522	122	99	106	88
460-252920-11	TRIP BLANK_02	120	99	107	87
460-252920-12	SL-20_021522	124 S1+	102	106	89
460-252920-13	DUP-01_021622	124 S1+	100	106	88
460-252920-14	SL-10_021622	125 S1+	102	106	88
460-252920-15	SL-11_021622	122	101	106	88
460-252920-16	SL-23_021622	125 S1+	102	106	89
460-252920-17	SL-12_021622	124 S1+	102	106	89
460-252920-18	SL-19_021622	124 S1+	100	107	89
460-252920-19	SL-22_021622	121	98	105	86
460-252920-20	SL-4_021622	124 S1+	99	106	86
460-252920-21	TRIP BLANK_03	89	102	102	104
460-252920-22	SL-18_021622	89	103	102	105
460-252920-23	SL-17_021622	91	104	103	106
460-252920-24	MH-1255_021622	89	103	103	105
460-252920-25	MH-1259_021622	90	102	102	106
460-252920-26	MH-1256_021622	88	102	103	106
460-252920-27	MH-1244_021622	89	101	103	106
460-252920-28	MW-1231A_021622	90	100	105	104
460-252920-29	DUP-02_021822	91	100	101	106
460-252920-30	SL-16_021682	91	104	100	109
460-252920-31	TRIP BLANK_04	89	104	102	104
460-252920-32	SL-3_021822	90	99	100	108
460-252920-33	SL-2_021822	90	99	100	105
460-252920-34	MH-1231_021822	91	100	104	104
LCS 460-829687/4	Lab Control Sample	117	99	107	90
LCS 460-829787/5	Lab Control Sample	90	100	103	102
LCSD 460-829687/5	Lab Control Sample Dup	122	98	106	88
LCSD 460-829787/6	Lab Control Sample Dup	89	102	103	101
MB 460-829687/8	Method Blank	121	99	107	87
MB 460-829787/9	Method Blank	90	102	104	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (65-133)								
460-252920-2	SL-15_021522	105								
460-252920-3	SL-14_021522	106								
460-252920-4	SL-13_021522	106								
460-252920-5	SL-7_021522	106								
460-252920-6	SL-6_021522	103								
460-252920-7	SL-5_021522	108								
460-252920-8	SL-8_021522	106								
460-252920-9	SL-9_021522	108								
460-252920-10	SL-21_021522	107								
460-252920-12	SL-20_021522	108								
460-252920-13	DUP-01_021622	105								
460-252920-14	SL-10_021622	107								
460-252920-15	SL-11_021622	105								
460-252920-16	SL-23_021622	106								
460-252920-17	SL-12_021622	102								
460-252920-18	SL-19_021622	107								
460-252920-19	SL-22_021622	106								
460-252920-20	SL-4_021622	103								
460-252920-22	SL-18_021622	107								
460-252920-23	SL-17_021622	103								
460-252920-24	MH-1255_021622	108								
460-252920-25	MH-1259_021622	103								
460-252920-26	MH-1256_021622	106								
460-252920-27	MH-1244_021622	100								
460-252920-28	MW-1231A_021622	106								
460-252920-29	DUP-02_021822	104								
460-252920-30	SL-16_021682	104								
460-252920-32	SL-3_021822	103								
460-252920-33	SL-2_021822	105								
460-252920-34	MH-1231_021822	106								
LCS 460-829973/4	Lab Control Sample	105								
LCS 460-830032/3	Lab Control Sample	104								
LCSD 460-829973/5	Lab Control Sample Dup	106								
LCSD 460-830032/4	Lab Control Sample Dup	105								
MB 460-829973/8	Method Blank	105								
MB 460-830032/7	Method Blank	105								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-829687/8
Matrix: Water
Analysis Batch: 829687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/22/22 18:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/22/22 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/22/22 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/22/22 18:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/22/22 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 123*		*02/22/22 18:33*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 124*		*02/22/22 18:33*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*02/22/22 18:33*	*1*
4-Bromofluorobenzene	*87*		*76 - 120*		*02/22/22 18:33*	*1*

Lab Sample ID: LCS 460-829687/4
Matrix: Water
Analysis Batch: 829687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	18.5		ug/L		92	68 - 133
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	78 - 121
Tetrachloroethene	20.0	17.4		ug/L		87	70 - 127
trans-1,2-Dichloroethene	20.0	18.8		ug/L		94	74 - 126
Trichloroethene	20.0	18.7		ug/L		94	71 - 121
Vinyl chloride	20.0	20.0		ug/L		100	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 123*
Dibromofluoromethane (Surr)	*99*		*77 - 124*
Toluene-d8 (Surr)	*107*		*80 - 120*
4-Bromofluorobenzene	*90*		*76 - 120*

Lab Sample ID: LCSD 460-829687/5
Matrix: Water
Analysis Batch: 829687

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	19.2		ug/L		96	68 - 133	4	30
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	78 - 121	5	30
Tetrachloroethene	20.0	18.3		ug/L		91	70 - 127	5	30
trans-1,2-Dichloroethene	20.0	19.8		ug/L		99	74 - 126	5	30
Trichloroethene	20.0	19.7		ug/L		98	71 - 121	5	30
Vinyl chloride	20.0	21.1		ug/L		106	61 - 144	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 123*
Dibromofluoromethane (Surr)	*98*		*77 - 124*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-829687/5
Matrix: Water
Analysis Batch: 829687

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*88*		*76 - 120*

Lab Sample ID: MB 460-829787/9
Matrix: Water
Analysis Batch: 829787

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/23/22 10:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/23/22 10:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 10:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/23/22 10:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/23/22 10:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/23/22 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*		*02/23/22 10:24*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*02/23/22 10:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/23/22 10:24*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*02/23/22 10:24*	*1*

Lab Sample ID: LCS 460-829787/5
Matrix: Water
Analysis Batch: 829787

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	20.4		ug/L		102	68 - 133
cis-1,2-Dichloroethene	20.0	21.9		ug/L		110	78 - 121
Tetrachloroethene	20.0	20.3		ug/L		102	70 - 127
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	74 - 126
Trichloroethene	20.0	19.9		ug/L		100	71 - 121
Vinyl chloride	20.0	20.1		ug/L		100	61 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 123*
Dibromofluoromethane (Surr)	*100*		*77 - 124*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene	*102*		*76 - 120*

Lab Sample ID: LCSD 460-829787/6
Matrix: Water
Analysis Batch: 829787

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	18.0		ug/L		90	68 - 133	12	30
cis-1,2-Dichloroethene	20.0	19.3		ug/L		96	78 - 121	13	30
Tetrachloroethene	20.0	17.7		ug/L		89	70 - 127	14	30
trans-1,2-Dichloroethene	20.0	18.4		ug/L		92	74 - 126	14	30
Trichloroethene	20.0	17.8		ug/L		89	71 - 121	11	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-829787/6
Matrix: Water
Analysis Batch: 829787

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			20.0	17.2		ug/L		86	61 - 144	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 123*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene	*101*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-829973/8
Matrix: Water
Analysis Batch: 829973

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/23/22 22:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*02/23/22 22:55*	*1*

Lab Sample ID: LCS 460-829973/4
Matrix: Water
Analysis Batch: 829973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.69		ug/L		94	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*65 - 133*

Lab Sample ID: LCSD 460-829973/5
Matrix: Water
Analysis Batch: 829973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.66		ug/L		93	72 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*65 - 133*

Lab Sample ID: MB 460-830032/7
Matrix: Water
Analysis Batch: 830032

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			02/24/22 08:37	1

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-830032/7
Matrix: Water
Analysis Batch: 830032

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		65 - 133		02/24/22 08:37	1

Lab Sample ID: LCS 460-830032/3
Matrix: Water
Analysis Batch: 830032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.10		ug/L		82	72 - 124		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		65 - 133

Lab Sample ID: LCSD 460-830032/4
Matrix: Water
Analysis Batch: 830032

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	3.86		ug/L		77	72 - 124	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	105		65 - 133

GC/MS VOA

Analysis Batch: 829687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-252920-1	TRIP BLANK_01	Total/NA	Water	8260D	
460-252920-2	SL-15_021522	Total/NA	Water	8260D	
460-252920-3	SL-14_021522	Total/NA	Water	8260D	
460-252920-4	SL-13_021522	Total/NA	Water	8260D	
460-252920-5	SL-7_021522	Total/NA	Water	8260D	
460-252920-6	SL-6_021522	Total/NA	Water	8260D	
460-252920-7	SL-5_021522	Total/NA	Water	8260D	
460-252920-8	SL-8_021522	Total/NA	Water	8260D	
460-252920-9	SL-9_021522	Total/NA	Water	8260D	
460-252920-10	SL-21_021522	Total/NA	Water	8260D	
460-252920-11	TRIP BLANK_02	Total/NA	Water	8260D	
460-252920-12	SL-20_021522	Total/NA	Water	8260D	
460-252920-13	DUP-01_021622	Total/NA	Water	8260D	
460-252920-14	SL-10_021622	Total/NA	Water	8260D	
460-252920-15	SL-11_021622	Total/NA	Water	8260D	
460-252920-16	SL-23_021622	Total/NA	Water	8260D	
460-252920-17	SL-12_021622	Total/NA	Water	8260D	
460-252920-18	SL-19_021622	Total/NA	Water	8260D	
460-252920-19	SL-22_021622	Total/NA	Water	8260D	
460-252920-20	SL-4_021622	Total/NA	Water	8260D	
MB 460-829687/8	Method Blank	Total/NA	Water	8260D	
LCS 460-829687/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-829687/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 829787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-252920-21	TRIP BLANK_03	Total/NA	Water	8260D	
460-252920-22	SL-18_021622	Total/NA	Water	8260D	
460-252920-23	SL-17_021622	Total/NA	Water	8260D	
460-252920-24	MH-1255_021622	Total/NA	Water	8260D	
460-252920-25	MH-1259_021622	Total/NA	Water	8260D	
460-252920-26	MH-1256_021622	Total/NA	Water	8260D	
460-252920-27	MH-1244_021622	Total/NA	Water	8260D	
460-252920-28	MW-1231A_021622	Total/NA	Water	8260D	
460-252920-29	DUP-02_021822	Total/NA	Water	8260D	
460-252920-30	SL-16_021682	Total/NA	Water	8260D	
460-252920-31	TRIP BLANK_04	Total/NA	Water	8260D	
460-252920-32	SL-3_021822	Total/NA	Water	8260D	
460-252920-33	SL-2_021822	Total/NA	Water	8260D	
460-252920-34	MH-1231_021822	Total/NA	Water	8260D	
MB 460-829787/9	Method Blank	Total/NA	Water	8260D	
LCS 460-829787/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-829787/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 829973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-252920-2	SL-15_021522	Total/NA	Water	8260D SIM	
460-252920-3	SL-14_021522	Total/NA	Water	8260D SIM	
460-252920-4	SL-13_021522	Total/NA	Water	8260D SIM	
460-252920-5	SL-7_021522	Total/NA	Water	8260D SIM	
460-252920-6	SL-6_021522	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 829973 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-252920-7	SL-5_021522	Total/NA	Water	8260D SIM	
460-252920-8	SL-8_021522	Total/NA	Water	8260D SIM	
460-252920-9	SL-9_021522	Total/NA	Water	8260D SIM	
460-252920-10	SL-21_021522	Total/NA	Water	8260D SIM	
460-252920-12	SL-20_021522	Total/NA	Water	8260D SIM	
460-252920-13	DUP-01_021622	Total/NA	Water	8260D SIM	
460-252920-14	SL-10_021622	Total/NA	Water	8260D SIM	
460-252920-15	SL-11_021622	Total/NA	Water	8260D SIM	
460-252920-16	SL-23_021622	Total/NA	Water	8260D SIM	
460-252920-17	SL-12_021622	Total/NA	Water	8260D SIM	
460-252920-18	SL-19_021622	Total/NA	Water	8260D SIM	
460-252920-19	SL-22_021622	Total/NA	Water	8260D SIM	
460-252920-20	SL-4_021622	Total/NA	Water	8260D SIM	
460-252920-22	SL-18_021622	Total/NA	Water	8260D SIM	
460-252920-23	SL-17_021622	Total/NA	Water	8260D SIM	
MB 460-829973/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-829973/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-829973/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 830032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-252920-24	MH-1255_021622	Total/NA	Water	8260D SIM	
460-252920-25	MH-1259_021622	Total/NA	Water	8260D SIM	
460-252920-26	MH-1256_021622	Total/NA	Water	8260D SIM	
460-252920-27	MH-1244_021622	Total/NA	Water	8260D SIM	
460-252920-28	MW-1231A_021622	Total/NA	Water	8260D SIM	
460-252920-29	DUP-02_021822	Total/NA	Water	8260D SIM	
460-252920-30	SL-16_021682	Total/NA	Water	8260D SIM	
460-252920-32	SL-3_021822	Total/NA	Water	8260D SIM	
460-252920-33	SL-2_021822	Total/NA	Water	8260D SIM	
460-252920-34	MH-1231_021822	Total/NA	Water	8260D SIM	
MB 460-830032/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-830032/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-830032/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 460-252920-1
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 18:55	VBP	TAL EDI

Client Sample ID: SL-15_021522
Lab Sample ID: 460-252920-2
Date Collected: 02/15/22 09:25
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 19:38	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/23/22 23:17	KLB	TAL EDI

Client Sample ID: SL-14_021522
Lab Sample ID: 460-252920-3
Date Collected: 02/15/22 09:40
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 19:59	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/23/22 23:39	KLB	TAL EDI

Client Sample ID: SL-13_021522
Lab Sample ID: 460-252920-4
Date Collected: 02/15/22 09:50
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 20:20	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 00:00	KLB	TAL EDI

Client Sample ID: SL-7_021522
Lab Sample ID: 460-252920-5
Date Collected: 02/15/22 10:50
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 20:42	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 00:22	KLB	TAL EDI

Client Sample ID: SL-6_021522
Lab Sample ID: 460-252920-6
Date Collected: 02/15/22 11:10
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 21:03	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 00:44	KLB	TAL EDI

Client Sample ID: SL-5_021522
Lab Sample ID: 460-252920-7
Date Collected: 02/15/22 11:30
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 21:24	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 01:05	KLB	TAL EDI

Client Sample ID: SL-8_021522
Lab Sample ID: 460-252920-8
Date Collected: 02/15/22 12:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 21:45	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 01:27	KLB	TAL EDI

Client Sample ID: SL-9_021522
Lab Sample ID: 460-252920-9
Date Collected: 02/15/22 12:45
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 22:07	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 01:49	KLB	TAL EDI

Client Sample ID: SL-21_021522
Lab Sample ID: 460-252920-10
Date Collected: 02/15/22 13:20
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 22:28	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 02:11	KLB	TAL EDI

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 460-252920-11
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 19:16	VBP	TAL EDI

Client Sample ID: SL-20_021522
Lab Sample ID: 460-252920-12
Date Collected: 02/15/22 13:40
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 22:50	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 02:32	KLB	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_021622
Lab Sample ID: 460-252920-13
Date Collected: 02/16/22 00:00
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 23:11	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 02:54	KLB	TAL EDI

Client Sample ID: SL-10_021622
Lab Sample ID: 460-252920-14
Date Collected: 02/16/22 08:55
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 23:32	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 03:16	KLB	TAL EDI

Client Sample ID: SL-11_021622
Lab Sample ID: 460-252920-15
Date Collected: 02/16/22 09:20
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/22/22 23:53	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 03:38	KLB	TAL EDI

Client Sample ID: SL-23_021622
Lab Sample ID: 460-252920-16
Date Collected: 02/16/22 09:35
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/23/22 00:15	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 03:59	KLB	TAL EDI

Client Sample ID: SL-12_021622
Lab Sample ID: 460-252920-17
Date Collected: 02/16/22 10:10
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/23/22 00:36	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 04:21	KLB	TAL EDI

Client Sample ID: SL-19_021622
Lab Sample ID: 460-252920-18
Date Collected: 02/16/22 10:30
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/23/22 00:57	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 04:43	KLB	TAL EDI

Client Sample ID: SL-22_021622
Lab Sample ID: 460-252920-19
Date Collected: 02/16/22 10:40
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/23/22 01:19	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 05:05	KLB	TAL EDI

Client Sample ID: SL-4_021622
Lab Sample ID: 460-252920-20
Date Collected: 02/16/22 11:10
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829687	02/23/22 01:40	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 05:26	KLB	TAL EDI

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 460-252920-21
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 12:49	SZD	TAL EDI

Client Sample ID: SL-18_021622
Lab Sample ID: 460-252920-22
Date Collected: 02/16/22 11:45
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 13:30	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 05:48	KLB	TAL EDI

Client Sample ID: SL-17_021622
Lab Sample ID: 460-252920-23
Date Collected: 02/16/22 12:00
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 13:51	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	829973	02/24/22 06:10	KLB	TAL EDI

Client Sample ID: MH-1255_021622
Lab Sample ID: 460-252920-24
Date Collected: 02/16/22 13:05
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 14:12	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 08:58	SZD	TAL EDI

Client Sample ID: MH-1259_021622
Lab Sample ID: 460-252920-25
Date Collected: 02/16/22 13:40
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 14:33	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 09:20	SZD	TAL EDI

Client Sample ID: MH-1256_021622
Lab Sample ID: 460-252920-26
Date Collected: 02/16/22 14:00
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 14:54	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 09:42	SZD	TAL EDI

Client Sample ID: MH-1244_021622
Lab Sample ID: 460-252920-27
Date Collected: 02/16/22 14:30
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 15:15	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 10:04	SZD	TAL EDI

Client Sample ID: MW-1231A_021622
Lab Sample ID: 460-252920-28
Date Collected: 02/16/22 14:45
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 15:35	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 10:25	SZD	TAL EDI

Client Sample ID: DUP-02_021822
Lab Sample ID: 460-252920-29
Date Collected: 02/18/22 00:00
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 15:56	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 10:47	SZD	TAL EDI

Client Sample ID: SL-16_021682
Lab Sample ID: 460-252920-30
Date Collected: 02/18/22 09:10
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 16:17	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 11:09	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 460-252920-31
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 13:10	SZD	TAL EDI

Client Sample ID: SL-3_021822
Lab Sample ID: 460-252920-32
Date Collected: 02/18/22 09:30
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 16:37	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 11:31	SZD	TAL EDI

Client Sample ID: SL-2_021822
Lab Sample ID: 460-252920-33
Date Collected: 02/18/22 09:50
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 16:58	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 11:52	SZD	TAL EDI

Client Sample ID: MH-1231_021822
Lab Sample ID: 460-252920-34
Date Collected: 02/18/22 10:15
Matrix: Water
Date Received: 02/19/22 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	829787	02/23/22 17:19	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	830032	02/24/22 12:14	SZD	TAL EDI

Laboratory References:
TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-22
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-252920-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-252920-1	TRIP BLANK_01	Water	02/18/22 10:15	02/19/22 10:45
460-252920-2	SL-15_021522	Water	02/15/22 09:25	02/19/22 10:45
460-252920-3	SL-14_021522	Water	02/15/22 09:40	02/19/22 10:45
460-252920-4	SL-13_021522	Water	02/15/22 09:50	02/19/22 10:45
460-252920-5	SL-7_021522	Water	02/15/22 10:50	02/19/22 10:45
460-252920-6	SL-6_021522	Water	02/15/22 11:10	02/19/22 10:45
460-252920-7	SL-5_021522	Water	02/15/22 11:30	02/19/22 10:45
460-252920-8	SL-8_021522	Water	02/15/22 12:15	02/19/22 10:45
460-252920-9	SL-9_021522	Water	02/15/22 12:45	02/19/22 10:45
460-252920-10	SL-21_021522	Water	02/15/22 13:20	02/19/22 10:45
460-252920-11	TRIP BLANK_02	Water	02/18/22 10:15	02/19/22 10:45
460-252920-12	SL-20_021522	Water	02/15/22 13:40	02/19/22 10:45
460-252920-13	DUP-01_021622	Water	02/16/22 00:00	02/19/22 10:45
460-252920-14	SL-10_021622	Water	02/16/22 08:55	02/19/22 10:45
460-252920-15	SL-11_021622	Water	02/16/22 09:20	02/19/22 10:45
460-252920-16	SL-23_021622	Water	02/16/22 09:35	02/19/22 10:45
460-252920-17	SL-12_021622	Water	02/16/22 10:10	02/19/22 10:45
460-252920-18	SL-19_021622	Water	02/16/22 10:30	02/19/22 10:45
460-252920-19	SL-22_021622	Water	02/16/22 10:40	02/19/22 10:45
460-252920-20	SL-4_021622	Water	02/16/22 11:10	02/19/22 10:45
460-252920-21	TRIP BLANK_03	Water	02/18/22 10:15	02/19/22 10:45
460-252920-22	SL-18_021622	Water	02/16/22 11:45	02/19/22 10:45
460-252920-23	SL-17_021622	Water	02/16/22 12:00	02/19/22 10:45
460-252920-24	MH-1255_021622	Water	02/16/22 13:05	02/19/22 10:45
460-252920-25	MH-1259_021622	Water	02/16/22 13:40	02/19/22 10:45
460-252920-26	MH-1256_021622	Water	02/16/22 14:00	02/19/22 10:45
460-252920-27	MH-1244_021622	Water	02/16/22 14:30	02/19/22 10:45
460-252920-28	MW-1231A_021622	Water	02/16/22 14:45	02/19/22 10:45
460-252920-29	DUP-02_021822	Water	02/18/22 00:00	02/19/22 10:45
460-252920-30	SL-16_021682	Water	02/18/22 09:10	02/19/22 10:45
460-252920-31	TRIP BLANK_04	Water	02/18/22 10:15	02/19/22 10:45
460-252920-32	SL-3_021822	Water	02/18/22 09:30	02/19/22 10:45
460-252920-33	SL-2_021822	Water	02/18/22 09:50	02/19/22 10:45
460-252920-34	MH-1231_021822	Water	02/18/22 10:15	02/19/22 10:45

MICHIGAN
190

252920

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Sommer Guy, Seth Turner, Mary Peterson, Samantha Hinds	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:	QC check
1	TRIP BLANK_01	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank	✓
2	SL-15_021522	2/15/22	9:25		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
3	SL-14_021522	2/15/22	9:40		X						6					N	G	X	X	X	X	X	X	X					"	✓
4	SL-13_021522	2/15/22	9:50		X						6					N	G	X	X	X	X	X	X	X					"	✓
5	SL-7_021522	2/15/22	10:50		X						6					N	G	X	X	X	X	X	X	X					"	✓
6	SL-6_021522	2/15/22	11:10		X						6					N	G	X	X	X	X	X	X	X					"	✓
7	SL-5_021522	2/15/22	11:30		X						6					N	G	X	X	X	X	X	X	X					"	✓
8	SL-8_021522	2/15/22	12:15		X						6					N	G	X	X	X	X	X	X	X					"	✓
9	SL-9_021522	2/15/22	12:45		X						6					N	G	X	X	X	X	X	X	X					"	✓
10	SL-21_021522	2/15/22	13:20		X						6					N	G	X	X	X	X	X	X	X					"	✓

460-252920 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/18/22 13:00		EETA	2/18/22 1300
	EETA	2/18/22		EETA	2/19/22 1045
			Received in Laboratory by:		

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2/24/2022

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CS #'s: 1855649
1855664
1855668

3.7°C/3.6°C

6.3°C/6.2°C

Project 46037022

3.7°C/3.6°C

MICHIGAN 190

Chain of Custody Record

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No:
Phone: 248-994-2240	Sampler Name: Seth Turner, Sommer Guy	TAT if different from below ☐	COCs
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐	For lab use only
Project Number: 30080642.701.04	Shipping/Tracking No:		Walk-in client
PO # 30080642.701.04			Lab sampling
			Job/SDG No:

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM				Sample Specific Notes / Special Instructions:
11	TRIP BLANK_02	---	---		X						1					N	G	X	X	X	X	X	X	X				1 Trip Blank
12	SL-20_021522	2/15/22	13:40		X						6					N	G	X	X	X	X	X	X	X				3 VOAs for 8260B 3 VOAs for 8260B SIM
13	DUP-01_021622	2/16/22	—		X						6					N	G	X	X	X	X	X	X	X				" "
14	SL-10_021622	2/16/22	8:55		X						6					N	G	X	X	X	X	X	X	X				" "
15	SL-11_021622	2/16/22	9:20		X						6					N	G	X	X	X	X	X	X	X				" "
16	SL-23_021622	2/16/22	9:35		X						6					N	G	X	X	X	X	X	X	X				" "
17	SL-12_021622	2/16/22	10:10		X						6					N	G	X	X	X	X	X	X	X				" "
18	SL-19_021622	2/16/22	10:30		X						6					N	G	X	X	X	X	X	X	X				" "
19	SL-22_021622	2/16/22	10:40		X						6					N	G	X	X	X	X	X	X	X				" "
20	SL-4_021622	2/16/22	11:10		X						6					N	G	X	X	X	X	X	X	X				" "

QC check ✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/18/22 13:00		EETA	2/18/22 1300
	EETA	2/18/22		EETA	2/19/22 1045
			Received in Laboratory by:		

3.7°C/3.6°C 6.3°C/6.2°C

3.7°C/3.6°C

Project 46037022

CS #13: 1855669
1855664
1855668

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2/24/2022

MICHIGAN
190

252476

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 30080642.701.04				Job/SDG No.
PO # 30080642.701.04				

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:	QC check
21	TRIP BLANK_03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank	✓
22	SL-18_021622	2/16/22	11:45		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
23	SL-17_021622	2/16/22	12:00		X						6					N	G	X	X	X	X	X	X	X					" "	✓
24	MH-1255_021622	2/16/22	13:05		X						6					N	G	X	X	X	X	X	X	X					" "	✓
25	MH-1259_021622	2/16/22	13:40		X						6					N	G	X	X	X	X	X	X	X					" "	✓
26	MH-1256_021622	2/16/22	14:00		X						6					N	G	X	X	X	X	X	X	X					" "	✓
27	MH-1244_021622	2/16/22	14:30		X						6					N	G	X	X	X	X	X	X	X					" "	✓
28	MH-1231A_021622	2/16/22	14:45		X						6					N	G	X	X	X	X	X	X	X					" "	✓
29	DUP-02_021822	2/18/22	—		X						6					N	G	X	X	X	X	X	X	X					" "	✓
30	SL-16_021822	2/18/22	9:10		X						6					N	G	X	X	X	X	X	X	X					" "	✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/18/22 13:00		EETA	2/18/22 1300
	EETA	2/18/22	Fedex	FEDEX	2/19/22 1048

CS #'s: 1855669 3.7°C/3.6°C 6.3°C/6.2°C
1855664 3.7°C/3.6°C
1855668

Project 460 37022

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2/24/2022

MICHIGAN 190

Chain of Custody Record

252920

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day		Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

	Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
31	TRIP BLANK _04	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
32	SL-3_021822	2/18/22	9:30		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
33	SL-2_021822	2/18/22	9:50		X						6					N	G	X	X	X	X	X	X	X	" "
34	MH-1231_021822	2/18/22	10:15		X						6					N	G	X	X	X	X	X	X	X	" "

QC check ✓ ✓ ✓ ✓

3-Day PUSH

Page 45 of 47

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205102
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/18/22 13:00		EETA	2/18/22 1360
	EETA	2/18/22		EETA	2/19/22 1045
			Received in Laboratory by:		

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CS #: 1855669
1855664
1855668

3.7°C / 3.6°C
3.7°C / 3.6°C

6.3°C / 6.2°C

Project: 46037022

2/24/2022

14 13 12 11 10 9 8 7 6 5 4 3 2 1

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 252920

Number of Coolers: 3 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.7 °C	3.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.7 °C	3.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	6.3 °C	6.2 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: JD Date: 2/19/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-252920-1

Login Number: 252920
List Number: 1
Creator: Sgro, Angela M

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1555669/664/668
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-253298-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
3/4/2022 10:51:21 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-253298-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-253298-1

Comments
No additional comments.

Receipt
The samples were received on 2/25/2022 10:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 3.2º C and 3.8º C.

Receipt Exceptions
One vial for the following sample was received broken upon receipt: SL-4-022122 (460-253298-18).

The following sample was listed on the Chain of Custody (COC); however, no samples were received: SL-14-022222 (460-253298-5).

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 460-253298-1

Client Sample ID: TRIP BLANK_165 — Lab Sample ID: 460-253298-1

No Detections.

Client Sample ID: SL-11-022222 — Lab Sample ID: 460-253298-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23-022222 — Lab Sample ID: 460-253298-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12-022222 — Lab Sample ID: 460-253298-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.90	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1256_022222 — Lab Sample ID: 460-253298-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_022222 — Lab Sample ID: 460-253298-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.91	J	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.53	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_022322 — Lab Sample ID: 460-253298-8

No Detections.

Client Sample ID: SL-14_022322 — Lab Sample ID: 460-253298-9

No Detections.

Client Sample ID: SL-13_022322 — Lab Sample ID: 460-253298-10

No Detections.

Client Sample ID: TRIP BLANK_167 — Lab Sample ID: 460-253298-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 460-253298-1

Client Sample ID: DUP-02 — Lab Sample ID: 460-253298-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_022422 — Lab Sample ID: 460-253298-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	51		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	68		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_022422 — Lab Sample ID: 460-253298-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.7		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_022322 — Lab Sample ID: 460-253298-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.75	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_022222 — Lab Sample ID: 460-253298-16

No Detections.

Client Sample ID: TRIP BLANK_164 — Lab Sample ID: 460-253298-17

No Detections.

Client Sample ID: SL-4-022122 — Lab Sample ID: 460-253298-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.9		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_022122 — Lab Sample ID: 460-253298-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	4.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.73	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_022122 — Lab Sample ID: 460-253298-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Edison

Client Sample ID: SL-17_022122 (Continued) — Lab Sample ID: 460-253298-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.6		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.51	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_022122 — Lab Sample ID: 460-253298-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.2		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.52	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	5.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_022122 — Lab Sample ID: 460-253298-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.9		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.58	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	5.7		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 460-253298-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.3		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_022222 — Lab Sample ID: 460-253298-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_022222 — Lab Sample ID: 460-253298-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	4.5		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_022222 — Lab Sample ID: 460-253298-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	4.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_166 — Lab Sample ID: 460-253298-27

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_022322 — Lab Sample ID: 460-253298-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_022322 — Lab Sample ID: 460-253298-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_022322 — Lab Sample ID: 460-253298-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_022322 — Lab Sample ID: 460-253298-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.78	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_022322 — Lab Sample ID: 460-253298-32

No Detections.

Client Sample ID: SL-2_022322 — Lab Sample ID: 460-253298-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231-022422 — Lab Sample ID: 460-253298-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A-022422 — Lab Sample ID: 460-253298-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	20		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.49	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	47		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	40		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK_165
Lab Sample ID: 460-253298-1
Date Collected: 02/22/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 09:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 09:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 09:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/28/22 09:32*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 09:32*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 09:32*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 09:32*	*1*

Client Sample ID: SL-11-022222
Lab Sample ID: 460-253298-2
Date Collected: 02/22/22 10:15
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			03/02/22 07:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 07:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 11:27	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			02/28/22 11:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 11:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 11:27	1
Trichloroethene	**1.3**		1.0	0.44	ug/L			02/28/22 11:27	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			02/28/22 11:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/28/22 11:27*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 11:27*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 11:27*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 11:27*	*1*

Client Sample ID: SL-23-022222
Lab Sample ID: 460-253298-3
Date Collected: 02/22/22 10:35
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			03/02/22 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 07:47*	*1*

Client Sample ID: SL-23-022222
Lab Sample ID: 460-253298-3
Date Collected: 02/22/22 10:35
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 11:50	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			02/28/22 11:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 11:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 11:50	1
Trichloroethene	**2.0**		1.0	0.44	ug/L			02/28/22 11:50	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			02/28/22 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*02/28/22 11:50*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*02/28/22 11:50*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/28/22 11:50*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*02/28/22 11:50*	*1*

Client Sample ID: SL-12-022222
Lab Sample ID: 460-253298-4
Date Collected: 02/22/22 10:55
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.90**	**J**	2.0	0.86	ug/L			03/02/22 08:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*65 - 133*		*03/02/22 08:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 12:14	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			02/28/22 12:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 12:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 12:14	1
Trichloroethene	**1.0**		1.0	0.44	ug/L			02/28/22 12:14	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			02/28/22 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 12:14*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 12:14*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/28/22 12:14*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 12:14*	*1*

Client Sample ID: MH-1256_022222
Lab Sample ID: 460-253298-6
Date Collected: 02/22/22 13:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			03/02/22 08:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 08:31*	*1*

Client Sample ID: MH-1256_022222
Lab Sample ID: 460-253298-6
Date Collected: 02/22/22 13:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 12:36	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			02/28/22 12:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 12:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 12:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 12:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/28/22 12:36*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 124*		*02/28/22 12:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 12:36*	*1*
4-Bromofluorobenzene	*99*		*76 - 120*		*02/28/22 12:36*	*1*

Client Sample ID: MH-1244_022222
Lab Sample ID: 460-253298-7
Date Collected: 02/22/22 13:40
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			03/02/22 08:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 08:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 13:00	1
cis-1,2-Dichloroethene	**0.91**	**J**	1.0	0.46	ug/L			02/28/22 13:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 13:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:00	1
Vinyl chloride	**0.53**	**J**	1.0	0.45	ug/L			02/28/22 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 13:00*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*02/28/22 13:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/28/22 13:00*	*1*
4-Bromofluorobenzene	*99*		*76 - 120*		*02/28/22 13:00*	*1*

Client Sample ID: SL-15_022322
Lab Sample ID: 460-253298-8
Date Collected: 02/23/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 09:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/02/22 09:14*	*1*

Client Sample ID: SL-15_022322 — Lab Sample ID: 460-253298-8

Date Collected: 02/23/22 09:10 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 13:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 13:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 13:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 13:23*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 13:23*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 13:23*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 13:23*	*1*

Client Sample ID: SL-14_022322 — Lab Sample ID: 460-253298-9

Date Collected: 02/23/22 09:25 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/02/22 09:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 13:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 13:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 13:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 13:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 13:46*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*02/28/22 13:46*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 13:46*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 13:46*	*1*

Client Sample ID: SL-13_022322 — Lab Sample ID: 460-253298-10

Date Collected: 02/23/22 09:35 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 09:58*	*1*

Client Sample ID: SL-13_022322
Lab Sample ID: 460-253298-10
Date Collected: 02/23/22 09:35
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 14:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 14:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 14:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 14:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 14:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*02/28/22 14:10*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 14:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/28/22 14:10*	*1*
4-Bromofluorobenzene	*98*		*76 - 120*		*02/28/22 14:10*	*1*

Client Sample ID: TRIP BLANK_167
Lab Sample ID: 460-253298-11
Date Collected: 02/24/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 09:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 09:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 09:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 09:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*02/28/22 09:55*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*02/28/22 09:55*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/28/22 09:55*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 09:55*	*1*

Client Sample ID: DUP-02
Lab Sample ID: 460-253298-12
Date Collected: 02/24/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.3**		2.0	0.86	ug/L			03/02/22 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 10:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 14:32	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.46	ug/L			02/28/22 14:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 14:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 14:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 14:32	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			02/28/22 14:32	1

Client Sample ID: DUP-02
Lab Sample ID: 460-253298-12
Date Collected: 02/24/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 123		02/28/22 14:32	1
Dibromofluoromethane (Surr)	108		77 - 124		02/28/22 14:32	1
Toluene-d8 (Surr)	100		80 - 120		02/28/22 14:32	1
4-Bromofluorobenzene	103		76 - 120		02/28/22 14:32	1

Client Sample ID: MH-1255_022422
Lab Sample ID: 460-253298-13
Date Collected: 02/24/22 11:05
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			03/02/22 10:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		65 - 133		03/02/22 10:41	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 14:56	1
cis-1,2-Dichloroethene	**51**		1.0	0.46	ug/L			02/28/22 14:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 14:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 14:56	1
Trichloroethene	**1.2**		1.0	0.44	ug/L			02/28/22 14:56	1
Vinyl chloride	**68**		1.0	0.45	ug/L			02/28/22 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 123		02/28/22 14:56	1
Dibromofluoromethane (Surr)	110		77 - 124		02/28/22 14:56	1
Toluene-d8 (Surr)	98		80 - 120		02/28/22 14:56	1
4-Bromofluorobenzene	99		76 - 120		02/28/22 14:56	1

Client Sample ID: MH-1259_022422
Lab Sample ID: 460-253298-14
Date Collected: 02/24/22 11:55
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.2**		2.0	0.86	ug/L			03/02/22 11:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		65 - 133		03/02/22 11:03	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 15:19	1
cis-1,2-Dichloroethene	**8.1**		1.0	0.46	ug/L			02/28/22 15:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 15:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 15:19	1
Trichloroethene	**1.7**		1.0	0.44	ug/L			02/28/22 15:19	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			02/28/22 15:19	1

Client Sample ID: MH-1259_022422
Lab Sample ID: 460-253298-14
Date Collected: 02/24/22 11:55
Matrix: Water
Date Received: 02/25/22 10:35

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 15:19*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 15:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/28/22 15:19*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*02/28/22 15:19*	*1*

Client Sample ID: SL-21_022322
Lab Sample ID: 460-253298-15
Date Collected: 02/23/22 12:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			03/02/22 11:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*96*		*65 - 133*		*03/02/22 11:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 20:27	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			02/28/22 20:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 20:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:27	1
Vinyl chloride	**0.75**	**J**	1.0	0.45	ug/L			02/28/22 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*02/28/22 20:27*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 20:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 20:27*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*02/28/22 20:27*	*1*

Client Sample ID: SL-19_022222
Lab Sample ID: 460-253298-16
Date Collected: 02/22/22 11:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 11:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*97*		*65 - 133*		*03/02/22 11:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 20:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 20:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 20:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 20:50	1

Client Sample ID: SL-19_022222
Lab Sample ID: 460-253298-16
Date Collected: 02/22/22 11:10
Matrix: Water
Date Received: 02/25/22 10:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 20:50*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 20:50*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/28/22 20:50*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*02/28/22 20:50*	*1*

Client Sample ID: TRIP BLANK_164
Lab Sample ID: 460-253298-17
Date Collected: 02/21/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 10:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 10:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 10:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 10:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 10:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 10:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*02/28/22 10:18*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 10:18*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 10:18*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 10:18*	*1*

Client Sample ID: SL-4-022122
Lab Sample ID: 460-253298-18
Date Collected: 02/21/22 11:50
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.1**		2.0	0.86	ug/L			03/02/22 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*03/02/22 12:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 21:13	1
cis-1,2-Dichloroethene	**3.9**		1.0	0.46	ug/L			02/28/22 21:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 21:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 21:13	1
Trichloroethene	**1.2**		1.0	0.44	ug/L			02/28/22 21:13	1
Vinyl chloride	**3.0**		1.0	0.45	ug/L			02/28/22 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 21:13*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 21:13*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 21:13*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 21:13*	*1*

Client Sample ID: SL-18_022122
Lab Sample ID: 460-253298-19
Date Collected: 02/21/22 12:15
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			03/02/22 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 12:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 21:36	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			02/28/22 21:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 21:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 21:36	1
Trichloroethene	**4.0**		1.0	0.44	ug/L			02/28/22 21:36	1
Vinyl chloride	**0.73**	**J**	1.0	0.45	ug/L			02/28/22 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 21:36*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 21:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 21:36*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 21:36*	*1*

Client Sample ID: SL-17_022122
Lab Sample ID: 460-253298-20
Date Collected: 02/21/22 12:30
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 12:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 21:59	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			02/28/22 21:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 21:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 21:59	1
Trichloroethene	**4.6**		1.0	0.44	ug/L			02/28/22 21:59	1
Vinyl chloride	**0.51**	**J**	1.0	0.45	ug/L			02/28/22 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 21:59*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 21:59*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 21:59*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*02/28/22 21:59*	*1*

Client Sample ID: SL-16_022122
Lab Sample ID: 460-253298-21
Date Collected: 02/21/22 12:50
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			03/02/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/02/22 13:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 22:22	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.46	ug/L			02/28/22 22:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 22:22	1
trans-1,2-Dichloroethene	**0.52**	**J**	1.0	0.51	ug/L			02/28/22 22:22	1
Trichloroethene	**5.3**		1.0	0.44	ug/L			02/28/22 22:22	1
Vinyl chloride	**3.3**		1.0	0.45	ug/L			02/28/22 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 22:22*	*1*
Dibromofluoromethane (Surr)	*109*		*77 - 124*		*02/28/22 22:22*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 22:22*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 22:22*	*1*

Client Sample ID: SL-3_022122
Lab Sample ID: 460-253298-22
Date Collected: 02/21/22 13:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			03/02/22 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/02/22 13:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 22:45	1
cis-1,2-Dichloroethene	**2.9**		1.0	0.46	ug/L			02/28/22 22:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 22:45	1
trans-1,2-Dichloroethene	**0.58**	**J**	1.0	0.51	ug/L			02/28/22 22:45	1
Trichloroethene	**5.7**		1.0	0.44	ug/L			02/28/22 22:45	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			02/28/22 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 123*		*02/28/22 22:45*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 22:45*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 22:45*	*1*
4-Bromofluorobenzene	*99*		*76 - 120*		*02/28/22 22:45*	*1*

Client Sample ID: DUP-01
Lab Sample ID: 460-253298-23
Date Collected: 02/21/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			03/02/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/02/22 13:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 23:08	1
cis-1,2-Dichloroethene	**5.3**		1.0	0.46	ug/L			02/28/22 23:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 23:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 23:08	1
Trichloroethene	**1.2**		1.0	0.44	ug/L			02/28/22 23:08	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			02/28/22 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*		*02/28/22 23:08*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 23:08*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/28/22 23:08*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*02/28/22 23:08*	*1*

Client Sample ID: SL-8_022222
Lab Sample ID: 460-253298-24
Date Collected: 02/22/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			03/02/22 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 14:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 23:31	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			02/28/22 23:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 23:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 23:31	1
Trichloroethene	**2.3**		1.0	0.44	ug/L			02/28/22 23:31	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			02/28/22 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 123*		*02/28/22 23:31*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 23:31*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 23:31*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 23:31*	*1*

Client Sample ID: SL-9_022222 — Lab Sample ID: 460-253298-25

Date Collected: 02/22/22 09:35 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 17:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 23:54	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			02/28/22 23:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 23:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 23:54	1
Trichloroethene	**4.5**		1.0	0.44	ug/L			02/28/22 23:54	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			02/28/22 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*02/28/22 23:54*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 23:54*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 23:54*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*02/28/22 23:54*	*1*

Client Sample ID: SL-10_022222 — Lab Sample ID: 460-253298-26

Date Collected: 02/22/22 09:50 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			03/02/22 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 18:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 00:17	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			03/01/22 00:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 00:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 00:17	1
Trichloroethene	**4.2**		1.0	0.44	ug/L			03/01/22 00:17	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			03/01/22 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*		*03/01/22 00:17*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*03/01/22 00:17*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/01/22 00:17*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*03/01/22 00:17*	*1*

Client Sample ID: TRIP BLANK_166 — Lab Sample ID: 460-253298-27

Date Collected: 02/23/22 00:00 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 20:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 20:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 20:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 20:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 20:04*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*02/28/22 20:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/28/22 20:04*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*02/28/22 20:04*	*1*

Client Sample ID: SL-7_022322 — Lab Sample ID: 460-253298-28

Date Collected: 02/23/22 10:15 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		2.0	0.86	ug/L			03/03/22 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/03/22 13:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 00:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/22 00:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 00:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 00:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 00:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/22 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*03/01/22 00:40*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*03/01/22 00:40*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 00:40*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/01/22 00:40*	*1*

Client Sample ID: SL-6_022322 — Lab Sample ID: 460-253298-29

Date Collected: 02/23/22 10:25 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			03/02/22 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*65 - 133*		*03/02/22 19:02*	*1*

Client Sample ID: SL-6_022322
Lab Sample ID: 460-253298-29
Date Collected: 02/23/22 10:25
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 01:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/22 01:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 01:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/22 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*03/01/22 01:03*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*03/01/22 01:03*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/01/22 01:03*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/01/22 01:03*	*1*

Client Sample ID: SL-5_022322
Lab Sample ID: 460-253298-30
Date Collected: 02/23/22 10:50
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.0**		2.0	0.86	ug/L			03/03/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*03/03/22 17:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 01:26	1
cis-1,2-Dichloroethene	**5.4**		1.0	0.46	ug/L			03/01/22 01:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 01:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:26	1
Vinyl chloride	**2.7**		1.0	0.45	ug/L			03/01/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 123*		*03/01/22 01:26*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*03/01/22 01:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 01:26*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/01/22 01:26*	*1*

Client Sample ID: SL-20_022322
Lab Sample ID: 460-253298-31
Date Collected: 02/23/22 12:25
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			03/03/22 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/03/22 13:55*	*1*

Client Sample ID: SL-20_022322 — Lab Sample ID: 460-253298-31

Date Collected: 02/23/22 12:25 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 01:49	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			03/01/22 01:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 01:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 01:49	1
Vinyl chloride	**0.78**	**J**	1.0	0.45	ug/L			03/01/22 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*03/01/22 01:49*	*1*
Dibromofluoromethane (Surr)	*113*		*77 - 124*		*03/01/22 01:49*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 01:49*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*03/01/22 01:49*	*1*

Client Sample ID: SL-22_022322 — Lab Sample ID: 460-253298-32

Date Collected: 02/23/22 12:40 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 20:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 02:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/01/22 02:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 02:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:12	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/01/22 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 123*		*03/01/22 02:12*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*03/01/22 02:12*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 02:12*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/01/22 02:12*	*1*

Client Sample ID: SL-2_022322 — Lab Sample ID: 460-253298-33

Date Collected: 02/24/22 08:55 — **Matrix: Water**
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			03/03/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/03/22 14:17*	*1*

Client Sample ID: SL-2_022322
Lab Sample ID: 460-253298-33
Date Collected: 02/24/22 08:55
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 02:34	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			03/01/22 02:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 02:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:34	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			03/01/22 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*03/01/22 02:34*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*03/01/22 02:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 02:34*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/01/22 02:34*	*1*

Client Sample ID: MH-1231-022422
Lab Sample ID: 460-253298-34
Date Collected: 02/24/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			03/03/22 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/03/22 14:39*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/01/22 02:57	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			03/01/22 02:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 02:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 02:57	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			03/01/22 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*03/01/22 02:57*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*03/01/22 02:57*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 02:57*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/01/22 02:57*	*1*

Client Sample ID: MH-1231A-022422
Lab Sample ID: 460-253298-35
Date Collected: 02/24/22 09:30
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**20**		2.0	0.86	ug/L			03/02/22 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/02/22 21:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A-022422
Lab Sample ID: 460-253298-35
Date Collected: 02/24/22 09:30
Matrix: Water
Date Received: 02/25/22 10:35

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.49**	**J**	1.0	0.49	ug/L			03/01/22 03:20	1
cis-1,2-Dichloroethene	**47**		1.0	0.46	ug/L			03/01/22 03:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/01/22 03:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/01/22 03:20	1
Trichloroethene	**2.4**		1.0	0.44	ug/L			03/01/22 03:20	1
Vinyl chloride	**40**		1.0	0.45	ug/L			03/01/22 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 123*		*03/01/22 03:20*	*1*
Dibromofluoromethane (Surr)	*112*		*77 - 124*		*03/01/22 03:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/01/22 03:20*	*1*
4-Bromofluorobenzene	*99*		*76 - 120*		*03/01/22 03:20*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 460-253298-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-253298-1	TRIP BLANK_165	96	109	99	100
460-253298-2	SL-11-022222	96	110	99	100
460-253298-3	SL-23-022222	95	108	101	105
460-253298-4	SL-12-022222	98	109	101	102
460-253298-6	MH-1256_022222	96	106	99	99
460-253298-7	MH-1244_022222	97	108	101	99
460-253298-8	SL-15_022322	97	109	100	100
460-253298-9	SL-14_022322	97	108	99	100
460-253298-10	SL-13_022322	100	110	98	98
460-253298-11	TRIP BLANK_167	95	108	101	102
460-253298-12	DUP-02	95	108	100	103
460-253298-13	MH-1255_022422	96	110	98	99
460-253298-14	MH-1259_022422	98	109	101	103
460-253298-15	SL-21_022322	96	110	100	101
460-253298-16	SL-19_022222	98	110	97	101
460-253298-17	TRIP BLANK_164	95	109	100	102
460-253298-18	SL-4-022122	97	109	100	102
460-253298-19	SL-18_022122	98	110	100	102
460-253298-20	SL-17_022122	97	110	100	103
460-253298-21	SL-16_022122	98	109	100	102
460-253298-22	SL-3_022122	101	110	99	99
460-253298-23	DUP-01	99	110	102	103
460-253298-24	SL-8_022222	102	110	100	100
460-253298-25	SL-9_022222	98	110	100	103
460-253298-26	SL-10_022222	99	111	101	100
460-253298-27	TRIP BLANK_166	97	110	98	102
460-253298-28	SL-7_022322	98	110	100	101
460-253298-29	SL-6_022322	100	112	101	101
460-253298-30	SL-5_022322	99	111	100	101
460-253298-31	SL-20_022322	100	113	100	100
460-253298-32	SL-22_022322	98	112	100	101
460-253298-33	SL-2_022322	100	111	100	101
460-253298-34	MH-1231-022422	100	111	100	102
460-253298-35	MH-1231A-022422	100	112	100	99
LCS 460-830722/4	Lab Control Sample	95	107	100	99
LCS 460-830823/4	Lab Control Sample	97	108	100	100
LCSD 460-830722/5	Lab Control Sample Dup	95	109	101	101
LCSD 460-830823/5	Lab Control Sample Dup	95	109	100	101
MB 460-830722/8	Method Blank	97	107	99	100
MB 460-830823/8	Method Blank	97	108	100	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (65-133)								
460-253298-2	SL-11-022222	99								
460-253298-3	SL-23-022222	99								
460-253298-4	SL-12-022222	94								
460-253298-6	MH-1256_022222	100								
460-253298-7	MH-1244_022222	100								
460-253298-8	SL-15_022322	97								
460-253298-9	SL-14_022322	97								
460-253298-10	SL-13_022322	99								
460-253298-12	DUP-02	100								
460-253298-13	MH-1255_022422	101								
460-253298-14	MH-1259_022422	99								
460-253298-15	SL-21_022322	96								
460-253298-16	SL-19_022222	97								
460-253298-18	SL-4-022122	102								
460-253298-19	SL-18_022122	99								
460-253298-20	SL-17_022122	100								
460-253298-21	SL-16_022122	101								
460-253298-22	SL-3_022122	97								
460-253298-23	DUP-01	97								
460-253298-24	SL-8_022222	99								
460-253298-25	SL-9_022222	100								
460-253298-26	SL-10_022222	99								
460-253298-28	SL-7_022322	101								
460-253298-29	SL-6_022322	98								
460-253298-30	SL-5_022322	105								
460-253298-31	SL-20_022322	103								
460-253298-32	SL-22_022322	100								
460-253298-33	SL-2_022322	101								
460-253298-34	MH-1231-022422	103								
460-253298-35	MH-1231A-022422	100								
LCS 460-831090/17	Lab Control Sample	101								
LCS 460-831232/3	Lab Control Sample	98								
LCS 460-831428/3	Lab Control Sample	98								
LCSD 460-831090/18	Lab Control Sample Dup	101								
LCSD 460-831232/4	Lab Control Sample Dup	97								
LCSD 460-831428/4	Lab Control Sample Dup	105								
MB 460-831090/20	Method Blank	99								
MB 460-831232/8	Method Blank	97								
MB 460-831428/7	Method Blank	101								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-830722/8
Matrix: Water
Analysis Batch: 830722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 09:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 09:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 09:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 09:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 09:09*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 124*		*02/28/22 09:09*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/28/22 09:09*	*1*
4-Bromofluorobenzene	*100*		*76 - 120*		*02/28/22 09:09*	*1*

Lab Sample ID: LCS 460-830722/4
Matrix: Water
Analysis Batch: 830722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	19.1		ug/L		95	68 - 133
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	78 - 121
Tetrachloroethene	20.0	19.1		ug/L		96	70 - 127
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	74 - 126
Trichloroethene	20.0	19.5		ug/L		98	71 - 121
Vinyl chloride	20.0	19.3		ug/L		96	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*
Dibromofluoromethane (Surr)	*107*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene	*99*		*76 - 120*

Lab Sample ID: LCSD 460-830722/5
Matrix: Water
Analysis Batch: 830722

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	18.9		ug/L		95	68 - 133	1	30
cis-1,2-Dichloroethene	20.0	19.9		ug/L		100	78 - 121	0	30
Tetrachloroethene	20.0	19.8		ug/L		99	70 - 127	4	30
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	74 - 126	3	30
Trichloroethene	20.0	19.3		ug/L		96	71 - 121	1	30
Vinyl chloride	20.0	18.3		ug/L		91	61 - 144	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*
Dibromofluoromethane (Surr)	*109*		*77 - 124*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-830722/5
Matrix: Water
Analysis Batch: 830722

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*101*		*76 - 120*

Lab Sample ID: MB 460-830823/8
Matrix: Water
Analysis Batch: 830823

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			02/28/22 19:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			02/28/22 19:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 19:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			02/28/22 19:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			02/28/22 19:41	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			02/28/22 19:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*		*02/28/22 19:41*	*1*
Dibromofluoromethane (Surr)	*108*		*77 - 124*		*02/28/22 19:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/22 19:41*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*02/28/22 19:41*	*1*

Lab Sample ID: LCS 460-830823/4
Matrix: Water
Analysis Batch: 830823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	18.2		ug/L		91	68 - 133
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	78 - 121
Tetrachloroethene	20.0	19.5		ug/L		97	70 - 127
trans-1,2-Dichloroethene	20.0	18.9		ug/L		95	74 - 126
Trichloroethene	20.0	18.9		ug/L		95	71 - 121
Vinyl chloride	20.0	18.5		ug/L		93	61 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 123*
Dibromofluoromethane (Surr)	*108*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene	*100*		*76 - 120*

Lab Sample ID: LCSD 460-830823/5
Matrix: Water
Analysis Batch: 830823

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	19.3		ug/L		97	68 - 133	6	30
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	78 - 121	4	30
Tetrachloroethene	20.0	19.8		ug/L		99	70 - 127	1	30
trans-1,2-Dichloroethene	20.0	19.8		ug/L		99	74 - 126	5	30
Trichloroethene	20.0	19.6		ug/L		98	71 - 121	3	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-830823/5
Matrix: Water
Analysis Batch: 830823

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			20.0	18.7		ug/L		94	61 - 144	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*
Dibromofluoromethane (Surr)	*109*		*77 - 124*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene	*101*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-831090/20
Matrix: Water
Analysis Batch: 831090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 07:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/02/22 07:04*	*1*

Lab Sample ID: LCS 460-831090/17
Matrix: Water
Analysis Batch: 831090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.17		ug/L		103	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*65 - 133*

Lab Sample ID: LCSD 460-831090/18
Matrix: Water
Analysis Batch: 831090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	5.24		ug/L		105	72 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*65 - 133*

Lab Sample ID: MB 460-831232/8
Matrix: Water
Analysis Batch: 831232

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/02/22 17:35	1

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-831232/8
Matrix: Water
Analysis Batch: 831232

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		65 - 133		03/02/22 17:35	1

Lab Sample ID: LCS 460-831232/3
Matrix: Water
Analysis Batch: 831232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	4.94		ug/L		99	72 - 124		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	98		65 - 133

Lab Sample ID: LCSD 460-831232/4
Matrix: Water
Analysis Batch: 831232

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.78		ug/L		96	72 - 124	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	97		65 - 133

Lab Sample ID: MB 460-831428/7
Matrix: Water
Analysis Batch: 831428

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/03/22 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		65 - 133		03/03/22 12:07	1

Lab Sample ID: LCS 460-831428/3
Matrix: Water
Analysis Batch: 831428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.44		ug/L		109	72 - 124		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	98		65 - 133

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-831428/4
Matrix: Water
Analysis Batch: 831428

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.44		ug/L		89	72 - 124	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*65 - 133*

GC/MS VOA

Analysis Batch: 830722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-1	TRIP BLANK_165	Total/NA	Water	8260D	
460-253298-2	SL-11-022222	Total/NA	Water	8260D	
460-253298-3	SL-23-022222	Total/NA	Water	8260D	
460-253298-4	SL-12-022222	Total/NA	Water	8260D	
460-253298-6	MH-1256_022222	Total/NA	Water	8260D	
460-253298-7	MH-1244_022222	Total/NA	Water	8260D	
460-253298-8	SL-15_022322	Total/NA	Water	8260D	
460-253298-9	SL-14_022322	Total/NA	Water	8260D	
460-253298-10	SL-13_022322	Total/NA	Water	8260D	
460-253298-11	TRIP BLANK_167	Total/NA	Water	8260D	
460-253298-12	DUP-02	Total/NA	Water	8260D	
460-253298-13	MH-1255_022422	Total/NA	Water	8260D	
460-253298-14	MH-1259_022422	Total/NA	Water	8260D	
460-253298-17	TRIP BLANK_164	Total/NA	Water	8260D	
MB 460-830722/8	Method Blank	Total/NA	Water	8260D	
LCS 460-830722/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-830722/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 830823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-15	SL-21_022322	Total/NA	Water	8260D	
460-253298-16	SL-19_022222	Total/NA	Water	8260D	
460-253298-18	SL-4-022122	Total/NA	Water	8260D	
460-253298-19	SL-18_022122	Total/NA	Water	8260D	
460-253298-20	SL-17_022122	Total/NA	Water	8260D	
460-253298-21	SL-16_022122	Total/NA	Water	8260D	
460-253298-22	SL-3_022122	Total/NA	Water	8260D	
460-253298-23	DUP-01	Total/NA	Water	8260D	
460-253298-24	SL-8_022222	Total/NA	Water	8260D	
460-253298-25	SL-9_022222	Total/NA	Water	8260D	
460-253298-26	SL-10_022222	Total/NA	Water	8260D	
460-253298-27	TRIP BLANK_166	Total/NA	Water	8260D	
460-253298-28	SL-7_022322	Total/NA	Water	8260D	
460-253298-29	SL-6_022322	Total/NA	Water	8260D	
460-253298-30	SL-5_022322	Total/NA	Water	8260D	
460-253298-31	SL-20_022322	Total/NA	Water	8260D	
460-253298-32	SL-22_022322	Total/NA	Water	8260D	
460-253298-33	SL-2_022322	Total/NA	Water	8260D	
460-253298-34	MH-1231-022422	Total/NA	Water	8260D	
460-253298-35	MH-1231A-022422	Total/NA	Water	8260D	
MB 460-830823/8	Method Blank	Total/NA	Water	8260D	
LCS 460-830823/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-830823/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 831090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-2	SL-11-022222	Total/NA	Water	8260D SIM	
460-253298-3	SL-23-022222	Total/NA	Water	8260D SIM	
460-253298-4	SL-12-022222	Total/NA	Water	8260D SIM	
460-253298-6	MH-1256_022222	Total/NA	Water	8260D SIM	
460-253298-7	MH-1244_022222	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 831090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-8	SL-15_022322	Total/NA	Water	8260D SIM	
460-253298-9	SL-14_022322	Total/NA	Water	8260D SIM	
460-253298-10	SL-13_022322	Total/NA	Water	8260D SIM	
460-253298-12	DUP-02	Total/NA	Water	8260D SIM	
460-253298-13	MH-1255_022422	Total/NA	Water	8260D SIM	
460-253298-14	MH-1259_022422	Total/NA	Water	8260D SIM	
460-253298-15	SL-21_022322	Total/NA	Water	8260D SIM	
460-253298-16	SL-19_022222	Total/NA	Water	8260D SIM	
460-253298-18	SL-4-022122	Total/NA	Water	8260D SIM	
460-253298-19	SL-18_022122	Total/NA	Water	8260D SIM	
460-253298-20	SL-17_022122	Total/NA	Water	8260D SIM	
460-253298-21	SL-16_022122	Total/NA	Water	8260D SIM	
460-253298-22	SL-3_022122	Total/NA	Water	8260D SIM	
460-253298-23	DUP-01	Total/NA	Water	8260D SIM	
460-253298-24	SL-8_022222	Total/NA	Water	8260D SIM	
MB 460-831090/20	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-831090/17	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-831090/18	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 831232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-25	SL-9_022222	Total/NA	Water	8260D SIM	
460-253298-26	SL-10_022222	Total/NA	Water	8260D SIM	
460-253298-29	SL-6_022322	Total/NA	Water	8260D SIM	
460-253298-32	SL-22_022322	Total/NA	Water	8260D SIM	
460-253298-35	MH-1231A-022422	Total/NA	Water	8260D SIM	
MB 460-831232/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-831232/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-831232/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 831428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253298-28	SL-7_022322	Total/NA	Water	8260D SIM	
460-253298-30	SL-5_022322	Total/NA	Water	8260D SIM	
460-253298-31	SL-20_022322	Total/NA	Water	8260D SIM	
460-253298-33	SL-2_022322	Total/NA	Water	8260D SIM	
460-253298-34	MH-1231-022422	Total/NA	Water	8260D SIM	
MB 460-831428/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-831428/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-831428/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_165
Lab Sample ID: 460-253298-1
Date Collected: 02/22/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 09:32	SZD	TAL EDI

Client Sample ID: SL-11-022222
Lab Sample ID: 460-253298-2
Date Collected: 02/22/22 10:15
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 11:27	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 07:25	KLB	TAL EDI

Client Sample ID: SL-23-022222
Lab Sample ID: 460-253298-3
Date Collected: 02/22/22 10:35
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 11:50	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 07:47	KLB	TAL EDI

Client Sample ID: SL-12-022222
Lab Sample ID: 460-253298-4
Date Collected: 02/22/22 10:55
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 12:14	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 08:09	KLB	TAL EDI

Client Sample ID: MH-1256_022222
Lab Sample ID: 460-253298-6
Date Collected: 02/22/22 13:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 12:36	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 08:31	KLB	TAL EDI

Client Sample ID: MH-1244_022222
Lab Sample ID: 460-253298-7
Date Collected: 02/22/22 13:40
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 13:00	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 08:52	KLB	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_022322
Lab Sample ID: 460-253298-8
Date Collected: 02/23/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 13:23	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 09:14	KLB	TAL EDI

Client Sample ID: SL-14_022322
Lab Sample ID: 460-253298-9
Date Collected: 02/23/22 09:25
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 13:46	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 09:36	KLB	TAL EDI

Client Sample ID: SL-13_022322
Lab Sample ID: 460-253298-10
Date Collected: 02/23/22 09:35
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 14:10	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 09:58	KLB	TAL EDI

Client Sample ID: TRIP BLANK_167
Lab Sample ID: 460-253298-11
Date Collected: 02/24/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 09:55	SZD	TAL EDI

Client Sample ID: DUP-02
Lab Sample ID: 460-253298-12
Date Collected: 02/24/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 14:32	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 10:19	KLB	TAL EDI

Client Sample ID: MH-1255_022422
Lab Sample ID: 460-253298-13
Date Collected: 02/24/22 11:05
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 14:56	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 10:41	KLB	TAL EDI

Client Sample ID: MH-1259_022422
Lab Sample ID: 460-253298-14
Date Collected: 02/24/22 11:55
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 15:19	SZD	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 11:03	KLB	TAL EDI

Client Sample ID: SL-21_022322
Lab Sample ID: 460-253298-15
Date Collected: 02/23/22 12:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 20:27	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 11:25	KLB	TAL EDI

Client Sample ID: SL-19_022222
Lab Sample ID: 460-253298-16
Date Collected: 02/22/22 11:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 20:50	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 11:46	KLB	TAL EDI

Client Sample ID: TRIP BLANK_164
Lab Sample ID: 460-253298-17
Date Collected: 02/21/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830722	02/28/22 10:18	SZD	TAL EDI

Client Sample ID: SL-4-022122
Lab Sample ID: 460-253298-18
Date Collected: 02/21/22 11:50
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 21:13	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 12:08	KLB	TAL EDI

Client Sample ID: SL-18_022122
Lab Sample ID: 460-253298-19
Date Collected: 02/21/22 12:15
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 21:36	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 12:30	KLB	TAL EDI

Client Sample ID: SL-17_022122
Lab Sample ID: 460-253298-20
Date Collected: 02/21/22 12:30
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 21:59	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 12:52	KLB	TAL EDI

Client Sample ID: SL-16_022122
Lab Sample ID: 460-253298-21
Date Collected: 02/21/22 12:50
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 22:22	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 13:13	KLB	TAL EDI

Client Sample ID: SL-3_022122
Lab Sample ID: 460-253298-22
Date Collected: 02/21/22 13:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 22:45	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 13:35	KLB	TAL EDI

Client Sample ID: DUP-01
Lab Sample ID: 460-253298-23
Date Collected: 02/21/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 23:08	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 13:57	KLB	TAL EDI

Client Sample ID: SL-8_022222
Lab Sample ID: 460-253298-24
Date Collected: 02/22/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 23:31	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831090	03/02/22 14:19	KLB	TAL EDI

Client Sample ID: SL-9_022222
Lab Sample ID: 460-253298-25
Date Collected: 02/22/22 09:35
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 23:54	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831232	03/02/22 17:57	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_022222
Lab Sample ID: 460-253298-26
Date Collected: 02/22/22 09:50
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 00:17	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831232	03/02/22 18:18	SZD	TAL EDI

Client Sample ID: TRIP BLANK_166
Lab Sample ID: 460-253298-27
Date Collected: 02/23/22 00:00
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	02/28/22 20:04	VBP	TAL EDI

Client Sample ID: SL-7_022322
Lab Sample ID: 460-253298-28
Date Collected: 02/23/22 10:15
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 00:40	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831428	03/03/22 13:12	SZD	TAL EDI

Client Sample ID: SL-6_022322
Lab Sample ID: 460-253298-29
Date Collected: 02/23/22 10:25
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 01:03	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831232	03/02/22 19:02	SZD	TAL EDI

Client Sample ID: SL-5_022322
Lab Sample ID: 460-253298-30
Date Collected: 02/23/22 10:50
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 01:26	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831428	03/03/22 17:11	SZD	TAL EDI

Client Sample ID: SL-20_022322
Lab Sample ID: 460-253298-31
Date Collected: 02/23/22 12:25
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 01:49	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831428	03/03/22 13:55	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-22_022322
Lab Sample ID: 460-253298-32
Date Collected: 02/23/22 12:40
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 02:12	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831232	03/02/22 20:08	SZD	TAL EDI

Client Sample ID: SL-2_022322
Lab Sample ID: 460-253298-33
Date Collected: 02/24/22 08:55
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 02:34	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831428	03/03/22 14:17	SZD	TAL EDI

Client Sample ID: MH-1231-022422
Lab Sample ID: 460-253298-34
Date Collected: 02/24/22 09:10
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 02:57	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831428	03/03/22 14:39	SZD	TAL EDI

Client Sample ID: MH-1231A-022422
Lab Sample ID: 460-253298-35
Date Collected: 02/24/22 09:30
Matrix: Water
Date Received: 02/25/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	830823	03/01/22 03:20	VBP	TAL EDI
Total/NA	Analysis	8260D SIM		1	831232	03/02/22 21:14	SZD	TAL EDI

Laboratory References:
TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	06-30-22
New York	NELAP	11452	04-01-22
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253298-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-253298-1	TRIP BLANK_165	Water	02/22/22 00:00	02/25/22 10:35
460-253298-2	SL-11-022222	Water	02/22/22 10:15	02/25/22 10:35
460-253298-3	SL-23-022222	Water	02/22/22 10:35	02/25/22 10:35
460-253298-4	SL-12-022222	Water	02/22/22 10:55	02/25/22 10:35
460-253298-6	MH-1256_022222	Water	02/22/22 13:10	02/25/22 10:35
460-253298-7	MH-1244_022222	Water	02/22/22 13:40	02/25/22 10:35
460-253298-8	SL-15_022322	Water	02/23/22 09:10	02/25/22 10:35
460-253298-9	SL-14_022322	Water	02/23/22 09:25	02/25/22 10:35
460-253298-10	SL-13_022322	Water	02/23/22 09:35	02/25/22 10:35
460-253298-11	TRIP BLANK_167	Water	02/24/22 00:00	02/25/22 10:35
460-253298-12	DUP-02	Water	02/24/22 00:00	02/25/22 10:35
460-253298-13	MH-1255_022422	Water	02/24/22 11:05	02/25/22 10:35
460-253298-14	MH-1259_022422	Water	02/24/22 11:55	02/25/22 10:35
460-253298-15	SL-21_022322	Water	02/23/22 12:10	02/25/22 10:35
460-253298-16	SL-19_022222	Water	02/22/22 11:10	02/25/22 10:35
460-253298-17	TRIP BLANK_164	Water	02/21/22 00:00	02/25/22 10:35
460-253298-18	SL-4-022122	Water	02/21/22 11:50	02/25/22 10:35
460-253298-19	SL-18_022122	Water	02/21/22 12:15	02/25/22 10:35
460-253298-20	SL-17_022122	Water	02/21/22 12:30	02/25/22 10:35
460-253298-21	SL-16_022122	Water	02/21/22 12:50	02/25/22 10:35
460-253298-22	SL-3_022122	Water	02/21/22 13:10	02/25/22 10:35
460-253298-23	DUP-01	Water	02/21/22 00:00	02/25/22 10:35
460-253298-24	SL-8_022222	Water	02/22/22 09:10	02/25/22 10:35
460-253298-25	SL-9_022222	Water	02/22/22 09:35	02/25/22 10:35
460-253298-26	SL-10_022222	Water	02/22/22 09:50	02/25/22 10:35
460-253298-27	TRIP BLANK_166	Water	02/23/22 00:00	02/25/22 10:35
460-253298-28	SL-7_022322	Water	02/23/22 10:15	02/25/22 10:35
460-253298-29	SL-6_022322	Water	02/23/22 10:25	02/25/22 10:35
460-253298-30	SL-5_022322	Water	02/23/22 10:50	02/25/22 10:35
460-253298-31	SL-20_022322	Water	02/23/22 12:25	02/25/22 10:35
460-253298-32	SL-22_022322	Water	02/23/22 12:40	02/25/22 10:35
460-253298-33	SL-2_022322	Water	02/24/22 08:55	02/25/22 10:35
460-253298-34	MH-1231-022422	Water	02/24/22 09:10	02/25/22 10:35
460-253298-35	MH-1231A-022422	Water	02/24/22 09:30	02/25/22 10:35

MICHIGAN 190

Chain of Custody Record

3 coolers.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

460-253298 Chain of Custody

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day	
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		
Project Number: 30080642.701.04	Shipping/Tracking No:		
PO # 30080642.701.04			

Lab sampling

Job/SDG No: 253298

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_165	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-11_022222	2/22/22	1015		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-23_022222		1035		X						6					N	G	X	X	X	X	X	X	X	
SL-12_022222		1055		X						6					N	G	X	X	X	X	X	X	X	
SL-14_022222		1110		X						6					N	G	X	X	X	X	X	X	X	
MH-1256_022222		1310		X						6					N	G	X	X	X	X	X	X	X	
MH-1244_022222		1340		X						6					N	G	X	X	X	X	X	X	X	
SL-15_022322	2/23/22	910		X						6					N	G	X	X	X	X	X	X	X	
SL-14_022322		925		X						6					N	G	X	X	X	X	X	X	X	
SL-13_022322		935		X						6					N	G	X	X	X	X	X	X	X	

3-Day RUSH

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/24/22 14:30		CETA	2/24/22 1430
Relinquished by:	Company:	Date/Time:	Received by: via Fedex	Company:	Date/Time:
	CETA	2/24/22 1431		ER	2/25/22 10:35
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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CS-1855691
692

FD#9-2.6=2.8/3.0=3.2/2.5=2.7

3/4/2022

MICHIGAN
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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client:
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No: 253298
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_167	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
Dup-02				X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1255_022422	2/24/22	1105		X						6					N	G	X	X	X	X	X	X	X	
MH-1254_022422	"	1155		X						6					N	G	X	X	X	X	X	X	X	
SL-21_022322	2/23/22	1210		X						6					N	G	X	X	X	X	X	X	X	
SL-19_022222	2/22/22	1110		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/24/22 14:30		CETA	2/24/22 1430
	CETA	2/24/22 1431			
			Received in Laboratory by:		

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton -- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program:	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis					
Address: 28550 Cabot Drive, Suite 500		Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377		Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240		Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling		Method of Shipment/Carrier:			Lab sampling
Project Number: 30080642.701.04		Shipping/Tracking No:			Job/SDG No.: 253298
PO # 30080642.701.04					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_1164	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-4_022322	2/21/22	11:50		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-18_022122		1215		X						6					N	G	X	X	X	X	X	X	X	
SL-17_022122		1230		X						6					N	G	X	X	X	X	X	X	X	
SL-16_022122		1250		X						6					N	G	X	X	X	X	X	X	X	
SL-3_022122		1310		X						6					N	G	X	X	X	X	X	X	X	
DUP-9				X						6					N	G	X	X	X	X	X	X	X	
SL-8_022222	2/22/22	910		X						6					N	G	X	X	X	X	X	X	X	
SL-9_022222		935		X						6					N	G	X	X	X	X	X	X	X	
SL-10_022222		950		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: Non-Hazard; Flammable; Skin Irritant; Poison B; Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return to Client; Disposal By Lab; Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/24/22 14:30		CETA	2/24/22 1432
	CETA	2/24/22 1431			
			Received in Laboratory by:		

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17 18 19 20 21 ~~22~~ 23 24 25 26

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No: 253298
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_166	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-7_022322	2/23/22	1015		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-6_022322		1025		X						6					N	G	X	X	X	X	X	X	X	
SL-5_022322		1050		X						6					N	G	X	X	X	X	X	X	X	
SL-4_022322		1240		X						6					N	G	X	X	X	X	X	X	X	
SL-20_022322		1225		X						6					N	G	X	X	X	X	X	X	X	
SL-22_022322		1240		X						6					N	G	X	X	X	X	X	X	X	
SL-2_022422	2/24/22	855		X						6					N	G	X	X	X	X	X	X	X	
MW-1231_022422		910		X						6					N	G	X	X	X	X	X	X	X	
MW-1231A_022422		930		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	2/24/22 14:30		CETA	2/24/22 1430
Relinquished by:	Company: CETA	Date/Time: 2/24/22 1411	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 253298

Number of Coolers: 3 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.8 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.0 °C	3.2 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.5 °C	2.7 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: E.S. Date: 2/25/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-253298-1

Login Number: 253298
List Number: 1
Creator: Narinkhum, Nudjarin 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1855691, 1855692
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-253744-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
3/10/2022 3:14:15 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-253744-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-253744-1

Comments
No additional comments.

Receipt
The samples were received on 3/4/2022 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7º C.

Receipt Exceptions
Sample ID on 2 vials from sample 4 is SL-22_022822 however SL-21_022822 is recorded on the COC. Sample time matches the COC.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_169 — Lab Sample ID: 460-253744-1

No Detections.

Client Sample ID: SL-18_022822 — Lab Sample ID: 460-253744-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_022822 — Lab Sample ID: 460-253744-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_022822 — Lab Sample ID: 460-253744-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.88	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_022822 — Lab Sample ID: 460-253744-5

No Detections.

Client Sample ID: SL-20_022822 — Lab Sample ID: 460-253744-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.1		1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_022822 — Lab Sample ID: 460-253744-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_030222 — Lab Sample ID: 460-253744-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	21		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	34		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	22		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_103 — Lab Sample ID: 460-253744-9

No Detections.

Client Sample ID: SL-15_030122 — Lab Sample ID: 460-253744-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Edison

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_030122 — Lab Sample ID: 460-253744-11

No Detections.

Client Sample ID: SL-13_030122 — Lab Sample ID: 460-253744-12

No Detections.

Client Sample ID: SL-7_030122 — Lab Sample ID: 460-253744-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_030122 — Lab Sample ID: 460-253744-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_030122 — Lab Sample ID: 460-253744-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_030122 — Lab Sample ID: 460-253744-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_030122 — Lab Sample ID: 460-253744-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_030222 — Lab Sample ID: 460-253744-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	27		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	21		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_168 — Lab Sample ID: 460-253744-19

No Detections.

Client Sample ID: SL-10_030222 — Lab Sample ID: 460-253744-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	15		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.0		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_030222 — Lab Sample ID: 460-253744-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_030222 — Lab Sample ID: 460-253744-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_030222 — Lab Sample ID: 460-253744-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.65	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_030222 — Lab Sample ID: 460-253744-24

No Detections.

Client Sample ID: SL-17_030222 — Lab Sample ID: 460-253744-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.65	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_030222 — Lab Sample ID: 460-253744-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_030222 — Lab Sample ID: 460-253744-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.97	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.94	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_030222 — Lab Sample ID: 460-253744-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_163 — Lab Sample ID: 460-253744-29

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_030322 — Lab Sample ID: 460-253744-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_030322 — Lab Sample ID: 460-253744-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_030322 — Lab Sample ID: 460-253744-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	29		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	67		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.65	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	1.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	80		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1256_030322 — Lab Sample ID: 460-253744-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_030322 — Lab Sample ID: 460-253744-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	14		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	26		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK_169
Lab Sample ID: 460-253744-1
Date Collected: 02/28/22 14:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/07/22 22:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/07/22 22:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 22:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/07/22 22:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 22:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/07/22 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/07/22 22:51*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/07/22 22:51*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/22 22:51*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/07/22 22:51*	*1*

Client Sample ID: SL-18_022822
Lab Sample ID: 460-253744-2
Date Collected: 02/28/22 14:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			03/08/22 11:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/08/22 11:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/07/22 23:12	1
cis-1,2-Dichloroethene	**3.8**		1.0	0.46	ug/L			03/07/22 23:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 23:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/07/22 23:12	1
Trichloroethene	**1.4**		1.0	0.44	ug/L			03/07/22 23:12	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/07/22 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/07/22 23:12*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*03/07/22 23:12*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/07/22 23:12*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/07/22 23:12*	*1*

Client Sample ID: SL-4_022822
Lab Sample ID: 460-253744-3
Date Collected: 02/28/22 13:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.5**		2.0	0.86	ug/L			03/08/22 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/08/22 12:10*	*1*

Client Sample ID: SL-4_022822
Lab Sample ID: 460-253744-3
Date Collected: 02/28/22 13:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/07/22 23:33	1
cis-1,2-Dichloroethene	**7.4**		1.0	0.46	ug/L			03/07/22 23:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 23:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/07/22 23:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 23:33	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			03/07/22 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*03/07/22 23:33*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/07/22 23:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/07/22 23:33*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/07/22 23:33*	*1*

Client Sample ID: SL-21_022822
Lab Sample ID: 460-253744-4
Date Collected: 02/28/22 11:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			03/08/22 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/08/22 12:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/07/22 23:53	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			03/07/22 23:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 23:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/07/22 23:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 23:53	1
Vinyl chloride	**0.88**	**J**	1.0	0.45	ug/L			03/07/22 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/07/22 23:53*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/07/22 23:53*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/07/22 23:53*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/07/22 23:53*	*1*

Client Sample ID: SL-22_022822
Lab Sample ID: 460-253744-5
Date Collected: 02/28/22 12:30
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/08/22 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/08/22 12:53*	*1*

Client Sample ID: SL-22_022822
Lab Sample ID: 460-253744-5
Date Collected: 02/28/22 12:30
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 00:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 00:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 00:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*03/08/22 00:14*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*03/08/22 00:14*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 00:14*	*1*
4-Bromofluorobenzene	*108*		*76 - 120*		*03/08/22 00:14*	*1*

Client Sample ID: SL-20_022822
Lab Sample ID: 460-253744-6
Date Collected: 02/28/22 12:10
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			03/08/22 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*65 - 133*		*03/08/22 13:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 00:35	1
cis-1,2-Dichloroethene	**1.1**		1.0	0.46	ug/L			03/08/22 00:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 00:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/08/22 00:35*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*03/08/22 00:35*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/08/22 00:35*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*03/08/22 00:35*	*1*

Client Sample ID: DUP-01_022822
Lab Sample ID: 460-253744-7
Date Collected: 02/28/22 00:00
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.0**		2.0	0.86	ug/L			03/08/22 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*03/08/22 13:37*	*1*

Client Sample ID: DUP-01_022822 — Lab Sample ID: 460-253744-7

Date Collected: 02/28/22 00:00 — **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 00:55	1
cis-1,2-Dichloroethene	**8.2**		1.0	0.46	ug/L			03/08/22 00:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 00:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 00:55	1
Vinyl chloride	**6.0**		1.0	0.45	ug/L			03/08/22 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/08/22 00:55*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 00:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/08/22 00:55*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/08/22 00:55*	*1*

Client Sample ID: DUP-02_030222 — Lab Sample ID: 460-253744-8

Date Collected: 03/02/22 00:00 — **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**21**		2.0	0.86	ug/L			03/08/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/08/22 13:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 01:16	1
cis-1,2-Dichloroethene	**34**		1.0	0.46	ug/L			03/08/22 01:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 01:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:16	1
Vinyl chloride	**22**		1.0	0.45	ug/L			03/08/22 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 01:16*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/08/22 01:16*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/08/22 01:16*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 01:16*	*1*

Client Sample ID: TRIP BLANK_103 — Lab Sample ID: 460-253744-9

Date Collected: 03/01/22 13:45 — **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 01:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 01:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 01:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 01:37	1

Client Sample ID: TRIP BLANK_103
Lab Sample ID: 460-253744-9
Date Collected: 03/01/22 13:45
Matrix: Water
Date Received: 03/04/22 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 01:37*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 01:37*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/08/22 01:37*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/08/22 01:37*	*1*

Client Sample ID: SL-15_030122
Lab Sample ID: 460-253744-10
Date Collected: 03/01/22 09:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/09/22 10:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*65 - 133*		*03/09/22 10:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 01:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 01:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 01:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 01:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*		*03/08/22 01:58*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 01:58*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 01:58*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*03/08/22 01:58*	*1*

Client Sample ID: SL-14_030122
Lab Sample ID: 460-253744-11
Date Collected: 03/01/22 10:15
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/08/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/08/22 14:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 02:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 02:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 02:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 02:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 02:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 02:18	1

Client Sample ID: SL-14_030122
Lab Sample ID: 460-253744-11
Date Collected: 03/01/22 10:15
Matrix: Water
Date Received: 03/04/22 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 02:18*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/08/22 02:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/08/22 02:18*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 02:18*	*1*

Client Sample ID: SL-13_030122
Lab Sample ID: 460-253744-12
Date Collected: 03/01/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/08/22 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*65 - 133*		*03/08/22 15:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 02:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 02:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 02:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 02:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 02:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/08/22 02:39*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*03/08/22 02:39*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 02:39*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/08/22 02:39*	*1*

Client Sample ID: SL-7_030122
Lab Sample ID: 460-253744-13
Date Collected: 03/01/22 11:25
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		2.0	0.86	ug/L			03/09/22 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*65 - 133*		*03/09/22 01:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 03:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 03:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 03:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:00	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 03:00	1

Client Sample ID: SL-7_030122
Lab Sample ID: 460-253744-13
Date Collected: 03/01/22 11:25
Matrix: Water
Date Received: 03/04/22 10:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 03:00*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 03:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 03:00*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/08/22 03:00*	*1*

Client Sample ID: SL-6_030122
Lab Sample ID: 460-253744-14
Date Collected: 03/01/22 11:50
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			03/08/22 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*65 - 133*		*03/08/22 15:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 03:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 03:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 03:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/08/22 03:20*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*03/08/22 03:20*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/08/22 03:20*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 03:20*	*1*

Client Sample ID: SL-5_030122
Lab Sample ID: 460-253744-15
Date Collected: 03/01/22 12:10
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.8**		2.0	0.86	ug/L			03/08/22 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*98*		*65 - 133*		*03/08/22 16:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 03:41	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.46	ug/L			03/08/22 03:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 03:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 03:41	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/08/22 03:41	1

Client Sample ID: SL-5_030122
Lab Sample ID: 460-253744-15
Date Collected: 03/01/22 12:10
Matrix: Water
Date Received: 03/04/22 10:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 123		03/08/22 03:41	1
Dibromofluoromethane (Surr)	102		77 - 124		03/08/22 03:41	1
Toluene-d8 (Surr)	106		80 - 120		03/08/22 03:41	1
4-Bromofluorobenzene	104		76 - 120		03/08/22 03:41	1

Client Sample ID: SL-8_030122
Lab Sample ID: 460-253744-16
Date Collected: 03/01/22 13:00
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			03/09/22 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		65 - 133		03/09/22 02:08	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 04:02	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.46	ug/L			03/08/22 04:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 04:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:02	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			03/08/22 04:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 123		03/08/22 04:02	1
Dibromofluoromethane (Surr)	102		77 - 124		03/08/22 04:02	1
Toluene-d8 (Surr)	104		80 - 120		03/08/22 04:02	1
4-Bromofluorobenzene	102		76 - 120		03/08/22 04:02	1

Client Sample ID: SL-9_030122
Lab Sample ID: 460-253744-17
Date Collected: 03/01/22 13:35
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.5**		2.0	0.86	ug/L			03/09/22 02:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		65 - 133		03/09/22 02:30	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 04:23	1
cis-1,2-Dichloroethene	**3.4**		1.0	0.46	ug/L			03/08/22 04:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 04:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:23	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/08/22 04:23	1

Client Sample ID: SL-9_030122
Lab Sample ID: 460-253744-17
Date Collected: 03/01/22 13:35
Matrix: Water
Date Received: 03/04/22 10:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 04:23*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*03/08/22 04:23*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/08/22 04:23*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/08/22 04:23*	*1*

Client Sample ID: MH-1231_030222
Lab Sample ID: 460-253744-18
Date Collected: 03/02/22 13:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			03/09/22 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*106*		*65 - 133*		*03/09/22 02:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 04:45	1
cis-1,2-Dichloroethene	**27**		1.0	0.46	ug/L			03/08/22 04:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 04:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 04:45	1
Vinyl chloride	**21**		1.0	0.45	ug/L			03/08/22 04:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/08/22 04:45*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*03/08/22 04:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 04:45*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 04:45*	*1*

Client Sample ID: TRIP BLANK_168
Lab Sample ID: 460-253744-19
Date Collected: 03/02/22 13:20
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 05:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 05:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 05:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 05:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 05:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 05:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/08/22 05:06*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 05:06*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/08/22 05:06*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 05:06*	*1*

Client Sample ID: SL-10_030222
Lab Sample ID: 460-253744-20
Date Collected: 03/02/22 09:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		2.0	0.86	ug/L			03/09/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*65 - 133*		*03/09/22 03:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 05:27	1
cis-1,2-Dichloroethene	**15**		1.0	0.46	ug/L			03/08/22 05:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 05:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 05:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 05:27	1
Vinyl chloride	**4.0**		1.0	0.45	ug/L			03/08/22 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/08/22 05:27*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/08/22 05:27*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/08/22 05:27*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/08/22 05:27*	*1*

Client Sample ID: SL-11_030222
Lab Sample ID: 460-253744-21
Date Collected: 03/02/22 09:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.6**		2.0	0.86	ug/L			03/09/22 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/09/22 03:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 23:24	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			03/08/22 23:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 23:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 23:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 23:24	1
Vinyl chloride	**3.1**		1.0	0.45	ug/L			03/08/22 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/08/22 23:24*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 124*		*03/08/22 23:24*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/08/22 23:24*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/08/22 23:24*	*1*

Client Sample ID: SL-23_030222
Lab Sample ID: 460-253744-22
Date Collected: 03/02/22 10:10
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.1**		2.0	0.86	ug/L			03/09/22 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/09/22 03:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 23:45	1
cis-1,2-Dichloroethene	**8.0**		1.0	0.46	ug/L			03/08/22 23:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 23:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 23:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 23:45	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/08/22 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/08/22 23:45*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/08/22 23:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/22 23:45*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/08/22 23:45*	*1*

Client Sample ID: SL-12_030222
Lab Sample ID: 460-253744-23
Date Collected: 03/02/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			03/09/22 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/09/22 04:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 00:06	1
cis-1,2-Dichloroethene	**3.8**		1.0	0.46	ug/L			03/09/22 00:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 00:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:06	1
Vinyl chloride	**0.65**	**J**	1.0	0.45	ug/L			03/09/22 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/09/22 00:06*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/09/22 00:06*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/09/22 00:06*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/09/22 00:06*	*1*

Client Sample ID: SL-19_030222 — Lab Sample ID: 460-253744-24

Date Collected: 03/02/22 10:55 — **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/09/22 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/09/22 04:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 00:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/09/22 00:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 00:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/09/22 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/09/22 00:27*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/09/22 00:27*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/09/22 00:27*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/09/22 00:27*	*1*

Client Sample ID: SL-17_030222 — Lab Sample ID: 460-253744-25

Date Collected: 03/02/22 12:20 — **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.3**		2.0	0.86	ug/L			03/09/22 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/09/22 05:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 00:48	1
cis-1,2-Dichloroethene	**0.65**	**J**	1.0	0.46	ug/L			03/09/22 00:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 00:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 00:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/09/22 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/09/22 00:48*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 124*		*03/09/22 00:48*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 00:48*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/09/22 00:48*	*1*

Client Sample ID: SL-16_030222
Lab Sample ID: 460-253744-26

Date Collected: 03/02/22 12:45
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			03/09/22 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/09/22 05:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 01:09	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			03/09/22 01:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 01:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:09	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			03/09/22 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/09/22 01:09*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*03/09/22 01:09*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 01:09*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/09/22 01:09*	*1*

Client Sample ID: SL-3_030222
Lab Sample ID: 460-253744-27

Date Collected: 03/02/22 13:00
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.97**	**J**	2.0	0.86	ug/L			03/09/22 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*65 - 133*		*03/09/22 05:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 01:30	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			03/09/22 01:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 01:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:30	1
Vinyl chloride	**0.94**	**J**	1.0	0.45	ug/L			03/09/22 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/09/22 01:30*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/09/22 01:30*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 01:30*	*1*
4-Bromofluorobenzene	*102*		*76 - 120*		*03/09/22 01:30*	*1*

Client Sample ID: SL-2_030222
Lab Sample ID: 460-253744-28
Date Collected: 03/02/22 13:20
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			03/09/22 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/09/22 06:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 01:51	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			03/09/22 01:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 01:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 01:51	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/09/22 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/09/22 01:51*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/09/22 01:51*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 01:51*	*1*
4-Bromofluorobenzene	*101*		*76 - 120*		*03/09/22 01:51*	*1*

Client Sample ID: TRIP BLANK_163
Lab Sample ID: 460-253744-29
Date Collected: 03/03/22 11:40
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 02:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/09/22 02:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 02:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 02:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 02:11	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/09/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/09/22 02:11*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*03/09/22 02:11*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/09/22 02:11*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/09/22 02:11*	*1*

Client Sample ID: MH-1259_030322
Lab Sample ID: 460-253744-30
Date Collected: 03/03/22 11:40
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.8**		2.0	0.86	ug/L			03/09/22 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*03/09/22 06:29*	*1*

Client Sample ID: MH-1259_030322 — Lab Sample ID: 460-253744-30

Date Collected: 03/03/22 11:40 **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 02:32	1
cis-1,2-Dichloroethene	**7.1**		1.0	0.46	ug/L			03/09/22 02:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 02:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 02:32	1
Trichloroethene	**1.4**		1.0	0.44	ug/L			03/09/22 02:32	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			03/09/22 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/09/22 02:32*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*03/09/22 02:32*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 02:32*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/09/22 02:32*	*1*

Client Sample ID: MH-1244_030322 — Lab Sample ID: 460-253744-31

Date Collected: 03/03/22 09:30 **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			03/09/22 06:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/09/22 06:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 02:53	1
cis-1,2-Dichloroethene	**3.4**		1.0	0.46	ug/L			03/09/22 02:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 02:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 02:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 02:53	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			03/09/22 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*		*03/09/22 02:53*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/09/22 02:53*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 02:53*	*1*
4-Bromofluorobenzene	*106*		*76 - 120*		*03/09/22 02:53*	*1*

Client Sample ID: MH-1255_030322 — Lab Sample ID: 460-253744-32

Date Collected: 03/03/22 11:00 **Matrix: Water**
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**29**		2.0	0.86	ug/L			03/09/22 07:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*65 - 133*		*03/09/22 07:13*	*1*

Client Sample ID: MH-1255_030322
Lab Sample ID: 460-253744-32
Date Collected: 03/03/22 11:00
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 03:13	1
cis-1,2-Dichloroethene	**67**		1.0	0.46	ug/L			03/09/22 03:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 03:13	1
trans-1,2-Dichloroethene	**0.65**	**J**	1.0	0.51	ug/L			03/09/22 03:13	1
Trichloroethene	**1.3**		1.0	0.44	ug/L			03/09/22 03:13	1
Vinyl chloride	**80**		1.0	0.45	ug/L			03/09/22 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/09/22 03:13*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*03/09/22 03:13*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*03/09/22 03:13*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/09/22 03:13*	*1*

Client Sample ID: MH-1256_030322
Lab Sample ID: 460-253744-33
Date Collected: 03/03/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.8**		2.0	0.86	ug/L			03/09/22 07:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*65 - 133*		*03/09/22 07:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 03:34	1
cis-1,2-Dichloroethene	**17**		1.0	0.46	ug/L			03/09/22 03:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 03:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 03:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 03:34	1
Vinyl chloride	**7.8**		1.0	0.45	ug/L			03/09/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*		*03/09/22 03:34*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 124*		*03/09/22 03:34*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/09/22 03:34*	*1*
4-Bromofluorobenzene	*105*		*76 - 120*		*03/09/22 03:34*	*1*

Client Sample ID: MH-1231A_030322
Lab Sample ID: 460-253744-34
Date Collected: 03/03/22 09:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**14**		2.0	0.86	ug/L			03/09/22 11:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*65 - 133*		*03/09/22 11:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_030322
Lab Sample ID: 460-253744-34
Date Collected: 03/03/22 09:55
Matrix: Water
Date Received: 03/04/22 10:10

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/09/22 03:55	1
cis-1,2-Dichloroethene	**26**		1.0	0.46	ug/L			03/09/22 03:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 03:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/09/22 03:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/09/22 03:55	1
Vinyl chloride	**26**		1.0	0.45	ug/L			03/09/22 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*		*03/09/22 03:55*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 124*		*03/09/22 03:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/09/22 03:55*	*1*
4-Bromofluorobenzene	*104*		*76 - 120*		*03/09/22 03:55*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 460-253744-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(75-123)	(77-124)	(80-120)	(76-120)
460-253744-1	TRIP BLANK_169	93	102	106	105
460-253744-2	SL-18_022822	95	103	105	103
460-253744-3	SL-4_022822	92	102	104	105
460-253744-4	SL-21_022822	95	104	105	105
460-253744-5	SL-22_022822	92	105	101	108
460-253744-6	SL-20_022822	93	103	104	106
460-253744-7	DUP-01_022822	93	102	104	105
460-253744-8	DUP-02_030222	94	104	106	104
460-253744-9	TRIP BLANK_103	94	102	103	102
460-253744-10	SL-15_030122	92	102	101	106
460-253744-11	SL-14_030122	94	104	99	104
460-253744-11 MS	SL-14_030122	95	102	106	100
460-253744-11 MSD	SL-14_030122	93	103	105	99
460-253744-12	SL-13_030122	93	101	101	105
460-253744-13	SL-7_030122	94	102	101	105
460-253744-14	SL-6_030122	93	103	102	104
460-253744-15	SL-5_030122	94	102	106	104
460-253744-16	SL-8_030122	95	102	104	102
460-253744-17	SL-9_030122	94	101	105	103
460-253744-18	MH-1231_030222	96	105	101	104
460-253744-19	TRIP BLANK_168	96	102	104	104
460-253744-20	SL-10_030222	94	102	106	104
460-253744-21	SL-11_030222	95	106	103	105
460-253744-22	SL-23_030222	95	104	101	102
460-253744-23	SL-12_030222	94	104	102	103
460-253744-24	SL-19_030222	94	104	102	104
460-253744-25	SL-17_030222	95	105	103	102
460-253744-26	SL-16_030222	96	103	103	102
460-253744-27	SL-3_030222	95	102	103	102
460-253744-28	SL-2_030222	96	102	103	101
460-253744-29	TRIP BLANK_163	94	101	104	103
460-253744-30	MH-1259_030322	96	102	103	103
460-253744-31	MH-1244_030322	93	104	103	106
460-253744-32	MH-1255_030322	95	101	103	104
460-253744-33	MH-1256_030322	94	104	102	105
460-253744-34	MH-1231A_030322	95	101	104	104
LCS 460-832147/5	Lab Control Sample	94	101	106	100
LCS 460-832324/4	Lab Control Sample	92	104	104	99
LCSD 460-832324/5	Lab Control Sample Dup	93	102	104	101
MB 460-832147/8	Method Blank	96	103	104	103
MB 460-832324/8	Method Blank	95	102	102	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (65-133)								
460-253744-2	SL-18_022822	99								
460-253744-3	SL-4_022822	103								
460-253744-4	SL-21_022822	97								
460-253744-5	SL-22_022822	103								
460-253744-6	SL-20_022822	96								
460-253744-7	DUP-01_022822	102								
460-253744-8	DUP-02_030222	103								
460-253744-10	SL-15_030122	104								
460-253744-11	SL-14_030122	101								
460-253744-12	SL-13_030122	97								
460-253744-13	SL-7_030122	94								
460-253744-14	SL-6_030122	99								
460-253744-15	SL-5_030122	98								
460-253744-16	SL-8_030122	105								
460-253744-17	SL-9_030122	102								
460-253744-18	MH-1231_030222	106								
460-253744-20	SL-10_030222	102								
460-253744-21	SL-11_030222	100								
460-253744-22	SL-23_030222	101								
460-253744-23	SL-12_030222	101								
460-253744-24	SL-19_030222	103								
460-253744-25	SL-17_030222	101								
460-253744-26	SL-16_030222	100								
460-253744-27	SL-3_030222	99								
460-253744-28	SL-2_030222	103								
460-253744-30	MH-1259_030322	106								
460-253744-31	MH-1244_030322	103								
460-253744-32	MH-1255_030322	106								
460-253744-33	MH-1256_030322	105								
460-253744-34	MH-1231A_030322	100								
LCS 460-832189/3	Lab Control Sample	100								
LCS 460-832322/4	Lab Control Sample	101								
LCS 460-832390/3	Lab Control Sample	104								
LCSD 460-832189/4	Lab Control Sample Dup	98								
LCSD 460-832322/5	Lab Control Sample Dup	105								
LCSD 460-832390/4	Lab Control Sample Dup	103								
MB 460-832189/7	Method Blank	101								
MB 460-832322/8	Method Blank	103								
MB 460-832390/7	Method Blank	101								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-832147/8
Matrix: Water
Analysis Batch: 832147

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/07/22 22:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/07/22 22:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 22:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/07/22 22:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/07/22 22:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/07/22 22:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 123*		*03/07/22 22:31*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 124*		*03/07/22 22:31*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/07/22 22:31*	*1*
4-Bromofluorobenzene	*103*		*76 - 120*		*03/07/22 22:31*	*1*

Lab Sample ID: LCS 460-832147/5
Matrix: Water
Analysis Batch: 832147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	20.9		ug/L		105	68 - 133
cis-1,2-Dichloroethene	20.0	21.2		ug/L		106	78 - 121
Tetrachloroethene	20.0	20.7		ug/L		103	70 - 127
trans-1,2-Dichloroethene	20.0	20.7		ug/L		104	74 - 126
Trichloroethene	20.0	19.6		ug/L		98	71 - 121
Vinyl chloride	20.0	19.2		ug/L		96	61 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 123*
Dibromofluoromethane (Surr)	*101*		*77 - 124*
Toluene-d8 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene	*100*		*76 - 120*

Lab Sample ID: 460-253744-11 MS
Matrix: Water
Analysis Batch: 832147

Client Sample ID: SL-14_030122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	20.0	21.3		ug/L		107	68 - 133
cis-1,2-Dichloroethene	1.0	U	20.0	21.6		ug/L		108	78 - 121
Tetrachloroethene	1.0	U	20.0	20.3		ug/L		101	70 - 127
trans-1,2-Dichloroethene	1.0	U	20.0	20.8		ug/L		104	74 - 126
Trichloroethene	1.0	U	20.0	19.6		ug/L		98	71 - 121
Vinyl chloride	1.0	U	20.0	20.1		ug/L		101	61 - 144

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 123*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-253744-11 MS
Matrix: Water
Analysis Batch: 832147

Client Sample ID: SL-14_030122
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	100		76 - 120

Lab Sample ID: 460-253744-11 MSD
Matrix: Water
Analysis Batch: 832147

Client Sample ID: SL-14_030122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	20.0	20.4		ug/L		102	68 - 133	5	30
cis-1,2-Dichloroethene	1.0	U	20.0	19.8		ug/L		99	78 - 121	9	30
Tetrachloroethene	1.0	U	20.0	19.4		ug/L		97	70 - 127	4	30
trans-1,2-Dichloroethene	1.0	U	20.0	19.8		ug/L		99	74 - 126	5	30
Trichloroethene	1.0	U	20.0	18.3		ug/L		91	71 - 121	7	30
Vinyl chloride	1.0	U	20.0	19.5		ug/L		98	61 - 144	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		75 - 123
Dibromofluoromethane (Surr)	103		77 - 124
Toluene-d8 (Surr)	105		80 - 120
4-Bromofluorobenzene	99		76 - 120

Lab Sample ID: MB 460-832324/8
Matrix: Water
Analysis Batch: 832324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/08/22 20:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/08/22 20:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 20:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/08/22 20:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/08/22 20:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/08/22 20:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 123		03/08/22 20:59	1
Dibromofluoromethane (Surr)	102		77 - 124		03/08/22 20:59	1
Toluene-d8 (Surr)	102		80 - 120		03/08/22 20:59	1
4-Bromofluorobenzene	104		76 - 120		03/08/22 20:59	1

Lab Sample ID: LCS 460-832324/4
Matrix: Water
Analysis Batch: 832324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	20.6		ug/L		103	68 - 133
cis-1,2-Dichloroethene	20.0	21.4		ug/L		107	78 - 121
Tetrachloroethene	20.0	20.5		ug/L		102	70 - 127
trans-1,2-Dichloroethene	20.0	21.3		ug/L		106	74 - 126
Trichloroethene	20.0	19.4		ug/L		97	71 - 121

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-832324/4
Matrix: Water
Analysis Batch: 832324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			20.0	19.1		ug/L		95	61 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 123*
Dibromofluoromethane (Surr)	*104*		*77 - 124*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene	*99*		*76 - 120*

Lab Sample ID: LCSD 460-832324/5
Matrix: Water
Analysis Batch: 832324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	21.2		ug/L		106	68 - 133	3	30
cis-1,2-Dichloroethene			20.0	22.2		ug/L		111	78 - 121	4	30
Tetrachloroethene			20.0	21.2		ug/L		106	70 - 127	3	30
trans-1,2-Dichloroethene			20.0	21.9		ug/L		109	74 - 126	3	30
Trichloroethene			20.0	20.7		ug/L		104	71 - 121	7	30
Vinyl chloride			20.0	19.1		ug/L		96	61 - 144	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 123*
Dibromofluoromethane (Surr)	*102*		*77 - 124*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene	*101*		*76 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-832189/7
Matrix: Water
Analysis Batch: 832189

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/08/22 08:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/08/22 08:27*	*1*

Lab Sample ID: LCS 460-832189/3
Matrix: Water
Analysis Batch: 832189

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	6.05		ug/L		121	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*65 - 133*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-832189/4
Matrix: Water
Analysis Batch: 832189

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	5.90		ug/L		118	72 - 124	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*65 - 133*

Lab Sample ID: MB 460-832322/8
Matrix: Water
Analysis Batch: 832322

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/08/22 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*65 - 133*		*03/08/22 23:58*	*1*

Lab Sample ID: LCS 460-832322/4
Matrix: Water
Analysis Batch: 832322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.42		ug/L		108	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*65 - 133*

Lab Sample ID: LCSD 460-832322/5
Matrix: Water
Analysis Batch: 832322

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	4.96		ug/L		99	72 - 124	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*65 - 133*

Lab Sample ID: MB 460-832390/7
Matrix: Water
Analysis Batch: 832390

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/09/22 10:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*65 - 133*		*03/09/22 10:18*	*1*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-832390/3
Matrix: Water
Analysis Batch: 832390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			5.00	5.09		ug/L		102	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*65 - 133*

Lab Sample ID: LCSD 460-832390/4
Matrix: Water
Analysis Batch: 832390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			5.00	5.71		ug/L		114	72 - 124	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*65 - 133*

GC/MS VOA

Analysis Batch: 832147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-1	TRIP BLANK_169	Total/NA	Water	8260D	
460-253744-2	SL-18_022822	Total/NA	Water	8260D	
460-253744-3	SL-4_022822	Total/NA	Water	8260D	
460-253744-4	SL-21_022822	Total/NA	Water	8260D	
460-253744-5	SL-22_022822	Total/NA	Water	8260D	
460-253744-6	SL-20_022822	Total/NA	Water	8260D	
460-253744-7	DUP-01_022822	Total/NA	Water	8260D	
460-253744-8	DUP-02_030222	Total/NA	Water	8260D	
460-253744-9	TRIP BLANK_103	Total/NA	Water	8260D	
460-253744-10	SL-15_030122	Total/NA	Water	8260D	
460-253744-11	SL-14_030122	Total/NA	Water	8260D	
460-253744-12	SL-13_030122	Total/NA	Water	8260D	
460-253744-13	SL-7_030122	Total/NA	Water	8260D	
460-253744-14	SL-6_030122	Total/NA	Water	8260D	
460-253744-15	SL-5_030122	Total/NA	Water	8260D	
460-253744-16	SL-8_030122	Total/NA	Water	8260D	
460-253744-17	SL-9_030122	Total/NA	Water	8260D	
460-253744-18	MH-1231_030222	Total/NA	Water	8260D	
460-253744-19	TRIP BLANK_168	Total/NA	Water	8260D	
460-253744-20	SL-10_030222	Total/NA	Water	8260D	
MB 460-832147/8	Method Blank	Total/NA	Water	8260D	
LCS 460-832147/5	Lab Control Sample	Total/NA	Water	8260D	
460-253744-11 MS	SL-14_030122	Total/NA	Water	8260D	
460-253744-11 MSD	SL-14_030122	Total/NA	Water	8260D	

Analysis Batch: 832189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-2	SL-18_022822	Total/NA	Water	8260D SIM	
460-253744-3	SL-4_022822	Total/NA	Water	8260D SIM	
460-253744-4	SL-21_022822	Total/NA	Water	8260D SIM	
460-253744-5	SL-22_022822	Total/NA	Water	8260D SIM	
460-253744-6	SL-20_022822	Total/NA	Water	8260D SIM	
460-253744-7	DUP-01_022822	Total/NA	Water	8260D SIM	
460-253744-8	DUP-02_030222	Total/NA	Water	8260D SIM	
460-253744-11	SL-14_030122	Total/NA	Water	8260D SIM	
460-253744-12	SL-13_030122	Total/NA	Water	8260D SIM	
460-253744-14	SL-6_030122	Total/NA	Water	8260D SIM	
460-253744-15	SL-5_030122	Total/NA	Water	8260D SIM	
MB 460-832189/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-832189/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-832189/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 832322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-13	SL-7_030122	Total/NA	Water	8260D SIM	
460-253744-16	SL-8_030122	Total/NA	Water	8260D SIM	
460-253744-17	SL-9_030122	Total/NA	Water	8260D SIM	
460-253744-18	MH-1231_030222	Total/NA	Water	8260D SIM	
460-253744-20	SL-10_030222	Total/NA	Water	8260D SIM	
460-253744-21	SL-11_030222	Total/NA	Water	8260D SIM	
460-253744-22	SL-23_030222	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 832322 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-23	SL-12_030222	Total/NA	Water	8260D SIM	
460-253744-24	SL-19_030222	Total/NA	Water	8260D SIM	
460-253744-25	SL-17_030222	Total/NA	Water	8260D SIM	
460-253744-26	SL-16_030222	Total/NA	Water	8260D SIM	
460-253744-27	SL-3_030222	Total/NA	Water	8260D SIM	
460-253744-28	SL-2_030222	Total/NA	Water	8260D SIM	
460-253744-30	MH-1259_030322	Total/NA	Water	8260D SIM	
460-253744-31	MH-1244_030322	Total/NA	Water	8260D SIM	
460-253744-32	MH-1255_030322	Total/NA	Water	8260D SIM	
460-253744-33	MH-1256_030322	Total/NA	Water	8260D SIM	
MB 460-832322/8	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-832322/4	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-832322/5	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Analysis Batch: 832324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-21	SL-11_030222	Total/NA	Water	8260D	
460-253744-22	SL-23_030222	Total/NA	Water	8260D	
460-253744-23	SL-12_030222	Total/NA	Water	8260D	
460-253744-24	SL-19_030222	Total/NA	Water	8260D	
460-253744-25	SL-17_030222	Total/NA	Water	8260D	
460-253744-26	SL-16_030222	Total/NA	Water	8260D	
460-253744-27	SL-3_030222	Total/NA	Water	8260D	
460-253744-28	SL-2_030222	Total/NA	Water	8260D	
460-253744-29	TRIP BLANK_163	Total/NA	Water	8260D	
460-253744-30	MH-1259_030322	Total/NA	Water	8260D	
460-253744-31	MH-1244_030322	Total/NA	Water	8260D	
460-253744-32	MH-1255_030322	Total/NA	Water	8260D	
460-253744-33	MH-1256_030322	Total/NA	Water	8260D	
460-253744-34	MH-1231A_030322	Total/NA	Water	8260D	
MB 460-832324/8	Method Blank	Total/NA	Water	8260D	
LCS 460-832324/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 460-832324/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 832390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-253744-10	SL-15_030122	Total/NA	Water	8260D SIM	
460-253744-34	MH-1231A_030322	Total/NA	Water	8260D SIM	
MB 460-832390/7	Method Blank	Total/NA	Water	8260D SIM	
LCS 460-832390/3	Lab Control Sample	Total/NA	Water	8260D SIM	
LCSD 460-832390/4	Lab Control Sample Dup	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_169
Lab Sample ID: 460-253744-1
Date Collected: 02/28/22 14:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/07/22 22:51	KLB	TAL EDI

Client Sample ID: SL-18_022822
Lab Sample ID: 460-253744-2
Date Collected: 02/28/22 14:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/07/22 23:12	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 11:48	SZD	TAL EDI

Client Sample ID: SL-4_022822
Lab Sample ID: 460-253744-3
Date Collected: 02/28/22 13:55
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/07/22 23:33	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 12:10	SZD	TAL EDI

Client Sample ID: SL-21_022822
Lab Sample ID: 460-253744-4
Date Collected: 02/28/22 11:55
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/07/22 23:53	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 12:31	SZD	TAL EDI

Client Sample ID: SL-22_022822
Lab Sample ID: 460-253744-5
Date Collected: 02/28/22 12:30
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 00:14	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 12:53	SZD	TAL EDI

Client Sample ID: SL-20_022822
Lab Sample ID: 460-253744-6
Date Collected: 02/28/22 12:10
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 00:35	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 13:15	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_022822
Lab Sample ID: 460-253744-7
Date Collected: 02/28/22 00:00
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 00:55	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 13:37	SZD	TAL EDI

Client Sample ID: DUP-02_030222
Lab Sample ID: 460-253744-8
Date Collected: 03/02/22 00:00
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 01:16	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 13:58	SZD	TAL EDI

Client Sample ID: TRIP BLANK_103
Lab Sample ID: 460-253744-9
Date Collected: 03/01/22 13:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 01:37	KLB	TAL EDI

Client Sample ID: SL-15_030122
Lab Sample ID: 460-253744-10
Date Collected: 03/01/22 09:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 01:58	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832390	03/09/22 10:40	SZD	TAL EDI

Client Sample ID: SL-14_030122
Lab Sample ID: 460-253744-11
Date Collected: 03/01/22 10:15
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 02:18	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 14:42	SZD	TAL EDI

Client Sample ID: SL-13_030122
Lab Sample ID: 460-253744-12
Date Collected: 03/01/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 02:39	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 15:04	SZD	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_030122
Lab Sample ID: 460-253744-13
Date Collected: 03/01/22 11:25
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 03:00	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 01:03	KLB	TAL EDI

Client Sample ID: SL-6_030122
Lab Sample ID: 460-253744-14
Date Collected: 03/01/22 11:50
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 03:20	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 15:47	SZD	TAL EDI

Client Sample ID: SL-5_030122
Lab Sample ID: 460-253744-15
Date Collected: 03/01/22 12:10
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 03:41	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832189	03/08/22 16:09	SZD	TAL EDI

Client Sample ID: SL-8_030122
Lab Sample ID: 460-253744-16
Date Collected: 03/01/22 13:00
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 04:02	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 02:08	KLB	TAL EDI

Client Sample ID: SL-9_030122
Lab Sample ID: 460-253744-17
Date Collected: 03/01/22 13:35
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 04:23	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 02:30	KLB	TAL EDI

Client Sample ID: MH-1231_030222
Lab Sample ID: 460-253744-18
Date Collected: 03/02/22 13:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 04:45	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 02:52	KLB	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_168
Lab Sample ID: 460-253744-19
Date Collected: 03/02/22 13:20
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 05:06	KLB	TAL EDI

Client Sample ID: SL-10_030222
Lab Sample ID: 460-253744-20
Date Collected: 03/02/22 09:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832147	03/08/22 05:27	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 03:14	KLB	TAL EDI

Client Sample ID: SL-11_030222
Lab Sample ID: 460-253744-21
Date Collected: 03/02/22 09:55
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/08/22 23:24	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 03:35	KLB	TAL EDI

Client Sample ID: SL-23_030222
Lab Sample ID: 460-253744-22
Date Collected: 03/02/22 10:10
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/08/22 23:45	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 03:57	KLB	TAL EDI

Client Sample ID: SL-12_030222
Lab Sample ID: 460-253744-23
Date Collected: 03/02/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 00:06	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 04:19	KLB	TAL EDI

Client Sample ID: SL-19_030222
Lab Sample ID: 460-253744-24
Date Collected: 03/02/22 10:55
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 00:27	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 04:41	KLB	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_030222
Lab Sample ID: 460-253744-25
Date Collected: 03/02/22 12:20
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 00:48	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 05:02	KLB	TAL EDI

Client Sample ID: SL-16_030222
Lab Sample ID: 460-253744-26
Date Collected: 03/02/22 12:45
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 01:09	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 05:24	KLB	TAL EDI

Client Sample ID: SL-3_030222
Lab Sample ID: 460-253744-27
Date Collected: 03/02/22 13:00
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 01:30	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 05:46	KLB	TAL EDI

Client Sample ID: SL-2_030222
Lab Sample ID: 460-253744-28
Date Collected: 03/02/22 13:20
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 01:51	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 06:08	KLB	TAL EDI

Client Sample ID: TRIP BLANK_163
Lab Sample ID: 460-253744-29
Date Collected: 03/03/22 11:40
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 02:11	KLB	TAL EDI

Client Sample ID: MH-1259_030322
Lab Sample ID: 460-253744-30
Date Collected: 03/03/22 11:40
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 02:32	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 06:29	KLB	TAL EDI

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1244_030322
Lab Sample ID: 460-253744-31
Date Collected: 03/03/22 09:30
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 02:53	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 06:51	KLB	TAL EDI

Client Sample ID: MH-1255_030322
Lab Sample ID: 460-253744-32
Date Collected: 03/03/22 11:00
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 03:13	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 07:13	KLB	TAL EDI

Client Sample ID: MH-1256_030322
Lab Sample ID: 460-253744-33
Date Collected: 03/03/22 10:30
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 03:34	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832322	03/09/22 07:35	KLB	TAL EDI

Client Sample ID: MH-1231A_030322
Lab Sample ID: 460-253744-34
Date Collected: 03/03/22 09:55
Matrix: Water
Date Received: 03/04/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	832324	03/09/22 03:55	KLB	TAL EDI
Total/NA	Analysis	8260D SIM		1	832390	03/09/22 11:02	SZD	TAL EDI

Laboratory References:
TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	06-30-22
New York	NELAP	11452	04-01-22
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 460-253744-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-253744-1	TRIP BLANK_169	Water	02/28/22 14:45	03/04/22 10:10
460-253744-2	SL-18_022822	Water	02/28/22 14:45	03/04/22 10:10
460-253744-3	SL-4_022822	Water	02/28/22 13:55	03/04/22 10:10
460-253744-4	SL-21_022822	Water	02/28/22 11:55	03/04/22 10:10
460-253744-5	SL-22_022822	Water	02/28/22 12:30	03/04/22 10:10
460-253744-6	SL-20_022822	Water	02/28/22 12:10	03/04/22 10:10
460-253744-7	DUP-01_022822	Water	02/28/22 00:00	03/04/22 10:10
460-253744-8	DUP-02_030222	Water	03/02/22 00:00	03/04/22 10:10
460-253744-9	TRIP BLANK_103	Water	03/01/22 13:45	03/04/22 10:10
460-253744-10	SL-15_030122	Water	03/01/22 09:45	03/04/22 10:10
460-253744-11	SL-14_030122	Water	03/01/22 10:15	03/04/22 10:10
460-253744-12	SL-13_030122	Water	03/01/22 10:30	03/04/22 10:10
460-253744-13	SL-7_030122	Water	03/01/22 11:25	03/04/22 10:10
460-253744-14	SL-6_030122	Water	03/01/22 11:50	03/04/22 10:10
460-253744-15	SL-5_030122	Water	03/01/22 12:10	03/04/22 10:10
460-253744-16	SL-8_030122	Water	03/01/22 13:00	03/04/22 10:10
460-253744-17	SL-9_030122	Water	03/01/22 13:35	03/04/22 10:10
460-253744-18	MH-1231_030222	Water	03/02/22 13:45	03/04/22 10:10
460-253744-19	TRIP BLANK_168	Water	03/02/22 13:20	03/04/22 10:10
460-253744-20	SL-10_030222	Water	03/02/22 09:45	03/04/22 10:10
460-253744-21	SL-11_030222	Water	03/02/22 09:55	03/04/22 10:10
460-253744-22	SL-23_030222	Water	03/02/22 10:10	03/04/22 10:10
460-253744-23	SL-12_030222	Water	03/02/22 10:30	03/04/22 10:10
460-253744-24	SL-19_030222	Water	03/02/22 10:55	03/04/22 10:10
460-253744-25	SL-17_030222	Water	03/02/22 12:20	03/04/22 10:10
460-253744-26	SL-16_030222	Water	03/02/22 12:45	03/04/22 10:10
460-253744-27	SL-3_030222	Water	03/02/22 13:00	03/04/22 10:10
460-253744-28	SL-2_030222	Water	03/02/22 13:20	03/04/22 10:10
460-253744-29	TRIP BLANK_163	Water	03/03/22 11:40	03/04/22 10:10
460-253744-30	MH-1259_030322	Water	03/03/22 11:40	03/04/22 10:10
460-253744-31	MH-1244_030322	Water	03/03/22 09:30	03/04/22 10:10
460-253744-32	MH-1255_030322	Water	03/03/22 11:00	03/04/22 10:10
460-253744-33	MH-1256_030322	Water	03/03/22 10:30	03/04/22 10:10
460-253744-34	MH-1231A_030322	Water	03/03/22 09:55	03/04/22 10:10

MICHIGAN 190

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

253744

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		TestAmerica Laboratories, Inc.
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 1 / 4
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: SETH TURNER ~~Korey Pearson~~, Samantha Hindle, ~~Sommer Guy~~	TAT if different from below: 3 day		Walk-in client: Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			DG No:
Project Number: 30080642.701.04	Shipping/Tracking No:			
PO # 30080642.701.04				

3-Day RUSH

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAcNaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	
TRIP BLANK – 169	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	-1
SL-18_022822	2/28/22	14:45		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	-2
SL-4_022822	2/28/22	13:55		X						6					N	G	X	X	X	X	X	X	X	" "	-3
SL-21_022822	2/28/22	11:55		X						6					N	G	X	X	X	X	X	X	X	" "	-4
SL-22_022822	2/28/22	12:30		X						6					N	G	X	X	X	X	X	X	X	" "	-5
SL-20_022822	2/28/22	12:10		X						6					N	G	X	X	X	X	X	X	X	" "	-6
~~SL-15_022822~~	~~2/28/22~~	~~9:45~~		~~X~~						~~6~~															
		~~10:15~~																							
DUP-01_022822	2/28/22	—		X						6					N	G	X	X	X	X	X	X	X	" "	-7
DUP-02_030222	3/2/22	—		X						6					N	G	X	X	X	X	X	X	X	" "	-8

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Samantha Hindle	ARCADIS	3/3/22 15:20		ETA	3/3/22 1521
Relinquished by:	Company:	Date/Time:	Received by: FedEx	Company:	Date/Time:
	ETA	3/3/22 1520		ER	3/04/22 10:10
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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460-253744 Chain of Custody

3/10/2022

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

2537744

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: 2/4
Phone: 248-994-2240	Sampler Name: SETH TURNER	TAT if different from below	COCs
Project Name: Ford LTP Utility Corridor Sampling	Korey Pearson, Samantha Hindle, ~~Sommer Guy~~	3 day	For lab use only
Project Number: 30080642.701.04	Method of Shipment/Carrier:		Walk-in client
PO # 30080642.701.04	Shipping/Tracking No:		Lab sampling
			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	QC Check
TRIP BLANK_103	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	-9
SL-15_030122	3/1/22	9:45		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	-10
SL-14_030122	3/1/22	10:15		X						6					N	G	X	X	X	X	X	X	X	" "	-11
SL-13_030122	3/1/22	10:30		X						6					N	G	X	X	X	X	X	X	X	" "	-12
SL-7_030122	3/1/22	11:25		X						6					N	G	X	X	X	X	X	X	X	" "	-13
SL-6_030122	3/1/22	11:50		X						6					N	G	X	X	X	X	X	X	X	" "	-14
SL-5_030122	3/1/22	12:10		X						6					N	G	X	X	X	X	X	X	X	" "	-15
SL-8_030122	3/1/22	13:00		X						6					N	G	X	X	X	X	X	X	X	" "	-16
SL-9_030122	3/1/22	13:35		X						6					N	G	X	X	X	X	X	X	X	" "	-17
MH-1231_030222	3/2/22	13:45		X						6					N	G	X	X	X	X	X	X	X	" "	-18

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Samantha Hindle	ARCADIS	3/3/22 15:20		GEL	3/3/22 1521
Relinquished by:	Company: GEL	Date/Time: 3/3/22 1526	Received by: FedEx	Company: ER	Date/Time: 3/04/22 10:10
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/10/2022

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

253744

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: 3/4 COCs
Phone: 248-994-2240	Sampler Name: SETH TURNER ~~Koroy Pearson~~, Samantha Hindle, ~~Sommer Guy~~	TAT if different from below ☐ 3 day	For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		Walk-in client
Project Number: 30080642.701.04	Shipping/Tracking No:		Lab sampling
PO # 30080642.701.04			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK – 168	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank -19
SL-10_030222	3/2/22	9:45		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM -20
SL-11_030222	3/2/22	9:55		X						6					N	G	X	X	X	X	X	X	X	" " -21
SL-23_030222	3/2/22	10:10		X						6					N	G	X	X	X	X	X	X	X	" " -22
SL-12_030222	3/2/22	10:30		X						6					N	G	X	X	X	X	X	X	X	" " -23
SL-19_030222	3/2/22	10:55		X						6					N	G	X	X	X	X	X	X	X	" " -24
SL-17_030222	3/2/22	12:20		X						6					N	G	X	X	X	X	X	X	X	" " -25
SL-16_030222	3/2/22	12:45		X						6					N	G	X	X	X	X	X	X	X	" " -26
SL-3_030222	3/2/22	13:00		X						6					N	G	X	X	X	X	X	X	X	" " -27
SL-2_030222	3/2/22	13:20		X						6					N	G	X	X	X	X	X	X	X	" " -28

DC Check

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Samantha Hindle	ARCADIS	3/3/22 15:20		ETA	3/3/22 1521
	ETA	3/3/22 1520	FedEx	ER	3/04/22 10:10
	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/10/2022

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

253744

TestAmerica Laboratories, Inc.

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 4 | 4
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: SETH TURNER ~~Korey Pearson~~, Samantha Hindle, ~~Summer Guy~~	TAT if different from below: 3 day		Walk-in client: Lab sampling: Job/SDG No:
Phone: 248-994-2240	Method of Shipment/Carrier:			
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_163	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1259_030322	3/3/22	11:40		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1244_030322	3/3/22	9:30		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1255_030322	3/3/22	11:00		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1256_030322	3/3/22	10:30		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1231A_030322	3/3/22	9:55		X						6					N	G	X	X	X	X	X	X	X	" "

QC check
• -30
• -31
• -32
• -33
• -34

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Samantha Hindle	ARCADIS	3/3/22 15:20	FedEX	ER	3/04/22 10:10
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECP	3/3/22 1720			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/10/2022

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 253744

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.5 °C	1.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: F T **Date:** 3/04/22

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-253744-1

Login Number: 253744
List Number: 1
Creator: Lysy, Susan

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	Refer to Job Narrative for details.
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-163560-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
3/17/2022 9:16:41 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-163560-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-163560-1

Comments
No additional comments.

Receipt
The samples were received on 3/11/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0º C and 1.1º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 240-519826 recovered above the upper control limit for Vinyl Chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. TRIP BLANK_160 (240-163560-1), SL-15_030822 (240-163560-2), SL-14_030822 (240-163560-3), SL-13_030822 (240-163560-4), SL-7_030822 (240-163560-5), SL-6_030822 (240-163560-6), TRIP BLANK_161 (240-163560-10), SL-22_030722 (240-163560-13), TRIP BLANK_159 (240-163560-20) and (CCVIS 240-519826/3).

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-519826.

Method 8260D: Surrogate recovery for the following samples were outside the upper control limit: SL-13_030822 (240-163560-4), SL-7_030822 (240-163560-5) and SL-6_030822 (240-163560-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: Surrogate recovery for the following sample was outside control limits: SL-23_030922 (240-163560-29) and SL-12_030922 (240-163560-30). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The surrogate recovery for the continuing calibration verification (CCV) standard was outside the CCV control limit (20%), but it was within the sample recovery control limit, so no corrective action was needed: (CCVIS 240-519911/4).

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-519920.

Method 8260D: The surrogate recovery for the continuing calibration verification (CCV) standard was outside the CCV control limit (20%), but it was within the sample recovery control limit, so no corrective action was needed.

Method 8260D: Method required MS/MSD was prepared and analyzed at required batch frequency for analytical batch 240-520075 using samples from other sites, and are not reported with this project.

Method 8260D: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: SL-5_030822 (240-163560-7), SL-8_030822 (240-163560-8), SL-9_030822 (240-163560-9), SL-17_030722 (240-163560-16) and SL-3_030722 (240-163560-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-163560-1	TRIP BLANK_160	Water	03/08/22 00:00	03/11/22 08:00
240-163560-2	SL-15_030822	Water	03/08/22 09:40	03/11/22 08:00
240-163560-3	SL-14_030822	Water	03/08/22 09:55	03/11/22 08:00
240-163560-4	SL-13_030822	Water	03/08/22 10:10	03/11/22 08:00
240-163560-5	SL-7_030822	Water	03/08/22 11:10	03/11/22 08:00
240-163560-6	SL-6_030822	Water	03/08/22 11:23	03/11/22 08:00
240-163560-7	SL-5_030822	Water	03/08/22 11:33	03/11/22 08:00
240-163560-8	SL-8_030822	Water	03/08/22 12:20	03/11/22 08:00
240-163560-9	SL-9_030822	Water	03/08/22 12:40	03/11/22 08:00
240-163560-10	TRIP BLANK_161	Water	03/07/22 00:00	03/11/22 08:00
240-163560-11	SL-21_030722	Water	03/07/22 09:50	03/11/22 08:00
240-163560-12	SL-20_030722	Water	03/07/22 10:15	03/11/22 08:00
240-163560-13	SL-22_030722	Water	03/07/22 10:35	03/11/22 08:00
240-163560-14	SL-4_030722	Water	03/07/22 10:55	03/11/22 08:00
240-163560-15	SL-18_030722	Water	03/07/22 11:15	03/11/22 08:00
240-163560-16	SL-17_030722	Water	03/07/22 11:30	03/11/22 08:00
240-163560-17	SL-16_030722	Water	03/07/22 11:45	03/11/22 08:00
240-163560-18	SL-3_030722	Water	03/07/22 12:00	03/11/22 08:00
240-163560-19	DUP-01_030722	Water	03/07/22 00:00	03/11/22 08:00
240-163560-20	TRIP BLANK_159	Water	03/10/22 00:00	03/11/22 08:00
240-163560-21	MH-1244_031022	Water	03/10/22 09:30	03/11/22 08:00
240-163560-22	MH-1231A_031022	Water	03/10/22 09:40	03/11/22 08:00
240-163560-23	MH-1255_031022	Water	03/10/22 10:10	03/11/22 08:00
240-163560-24	MH-1256_031022	Water	03/10/22 10:30	03/11/22 08:00
240-163560-25	MH-1259_031022	Water	03/10/22 11:30	03/11/22 08:00
240-163560-26	TRIP BLANK_162	Water	03/09/22 00:00	03/11/22 08:00
240-163560-27	SL-10_030922	Water	03/09/22 09:30	03/11/22 08:00
240-163560-28	SL-11_030922	Water	03/09/22 09:45	03/11/22 08:00
240-163560-29	SL-23_030922	Water	03/09/22 10:00	03/11/22 08:00
240-163560-30	SL-12_030922	Water	03/09/22 10:10	03/11/22 08:00
240-163560-31	SL-19_030922	Water	03/09/22 10:20	03/11/22 08:00
240-163560-32	SL-2_030922	Water	03/09/22 10:45	03/11/22 08:00
240-163560-33	MH-1231_030922	Water	03/09/22 11:00	03/11/22 08:00
240-163560-34	DUP-02_030922	Water	03/09/22 00:00	03/11/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_160 — Lab Sample ID: 240-163560-1

No Detections.

Client Sample ID: SL-15_030822 — Lab Sample ID: 240-163560-2

No Detections.

Client Sample ID: SL-14_030822 — Lab Sample ID: 240-163560-3

No Detections.

Client Sample ID: SL-13_030822 — Lab Sample ID: 240-163560-4

No Detections.

Client Sample ID: SL-7_030822 — Lab Sample ID: 240-163560-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_030822 — Lab Sample ID: 240-163560-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_030822 — Lab Sample ID: 240-163560-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.2	J	2.0	0.92	ug/L	2		8260D	Total/NA

Client Sample ID: SL-8_030822 — Lab Sample ID: 240-163560-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	1.2	J	2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-9_030822 — Lab Sample ID: 240-163560-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	1.4	J	2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: TRIP BLANK_161 — Lab Sample ID: 240-163560-10

No Detections.

Client Sample ID: SL-21_030722 — Lab Sample ID: 240-163560-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.63	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.70	J	1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_030722 — Lab Sample ID: 240-163560-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_030722 — Lab Sample ID: 240-163560-13

No Detections.

Client Sample ID: SL-4_030722 — Lab Sample ID: 240-163560-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.68	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_030722 — Lab Sample ID: 240-163560-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.94	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_030722 — Lab Sample ID: 240-163560-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0	J	2.0	0.92	ug/L	2		8260D	Total/NA

Client Sample ID: SL-16_030722 — Lab Sample ID: 240-163560-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.86	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_030722 — Lab Sample ID: 240-163560-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3	J	2.0	0.92	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-01_030722 — Lab Sample ID: 240-163560-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.47	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_159 — Lab Sample ID: 240-163560-20

No Detections.

Client Sample ID: MH-1244_031022 — Lab Sample ID: 240-163560-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample ID: MH-1244_031022 (Continued) — Lab Sample ID: 240-163560-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	15		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_031022 — Lab Sample ID: 240-163560-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	28		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.45	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	18		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1255_031022 — Lab Sample ID: 240-163560-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	18		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	59		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.87	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	69		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1256_031022 — Lab Sample ID: 240-163560-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	23		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	58		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	22		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_031022 — Lab Sample ID: 240-163560-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.7		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.99	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_162 — Lab Sample ID: 240-163560-26

No Detections.

Client Sample ID: SL-10_030922 — Lab Sample ID: 240-163560-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.66	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_030922 — Lab Sample ID: 240-163560-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.5	F2 F1	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_030922 — Lab Sample ID: 240-163560-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_030922 — Lab Sample ID: 240-163560-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.67	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_030922 — Lab Sample ID: 240-163560-31

No Detections.

Client Sample ID: SL-2_030922 — Lab Sample ID: 240-163560-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_030922 — Lab Sample ID: 240-163560-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	9.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_030922 — Lab Sample ID: 240-163560-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_160
Lab Sample ID: 240-163560-1
Date Collected: 03/08/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 13:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 13:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 13:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*62 - 137*		*03/14/22 13:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/14/22 13:53*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*03/14/22 13:53*	*1*
Dibromofluoromethane (Surr)	*118*		*73 - 120*		*03/14/22 13:53*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_030822
Lab Sample ID: 240-163560-2
Date Collected: 03/08/22 09:40
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*03/14/22 21:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 14:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 14:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 14:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 14:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*62 - 137*		*03/14/22 14:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/14/22 14:17*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 14:17*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*03/14/22 14:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_030822
Lab Sample ID: 240-163560-3
Date Collected: 03/08/22 09:55
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*03/14/22 22:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 14:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 14:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 14:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 14:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 14:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*62 - 137*		*03/14/22 14:42*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*03/14/22 14:42*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 14:42*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*03/14/22 14:42*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_030822
Lab Sample ID: 240-163560-4
Date Collected: 03/08/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*03/14/22 22:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 15:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 15:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 15:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:07	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*62 - 137*		*03/14/22 15:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/14/22 15:07*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/14/22 15:07*	*1*
Dibromofluoromethane (Surr)	*121*	*S1+*	*73 - 120*		*03/14/22 15:07*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_030822
Lab Sample ID: 240-163560-5
Date Collected: 03/08/22 11:10
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.3	J	2.0	0.86	ug/L			03/14/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*03/14/22 23:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 15:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 15:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 15:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*62 - 137*		*03/14/22 15:32*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/14/22 15:32*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/14/22 15:32*	*1*
Dibromofluoromethane (Surr)	*123*	*S1+*	*73 - 120*		*03/14/22 15:32*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-6_030822
Lab Sample ID: 240-163560-6
Date Collected: 03/08/22 11:23
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2	J	2.0	0.86	ug/L			03/15/22 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*03/15/22 00:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 15:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 15:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 15:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 15:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*62 - 137*		*03/14/22 15:57*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/14/22 15:57*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/14/22 15:57*	*1*
Dibromofluoromethane (Surr)	*121*	*S1+*	*73 - 120*		*03/14/22 15:57*	*1*

Client Sample ID: SL-5_030822
Lab Sample ID: 240-163560-7
Date Collected: 03/08/22 11:33
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			03/15/22 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*03/15/22 00:44*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/16/22 14:59	2
cis-1,2-Dichloroethene	**1.2**	**J**	2.0	0.92	ug/L			03/16/22 14:59	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 14:59	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/16/22 14:59	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 14:59	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			03/16/22 14:59	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*62 - 137*		*03/16/22 14:59*	*2*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*03/16/22 14:59*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/16/22 14:59*	*2*
Dibromofluoromethane (Surr)	*77*		*73 - 120*		*03/16/22 14:59*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-8_030822
Lab Sample ID: 240-163560-8
Date Collected: 03/08/22 12:20
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		2.0	0.86	ug/L			03/15/22 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*03/15/22 01:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/16/22 15:21	2
cis-1,2-Dichloroethene	**2.0**		2.0	0.92	ug/L			03/16/22 15:21	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 15:21	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/16/22 15:21	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 15:21	2
Vinyl chloride	**1.2**	**J**	2.0	0.90	ug/L			03/16/22 15:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*62 - 137*		*03/16/22 15:21*	*2*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/16/22 15:21*	*2*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/16/22 15:21*	*2*
Dibromofluoromethane (Surr)	*79*		*73 - 120*		*03/16/22 15:21*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-9_030822
Lab Sample ID: 240-163560-9
Date Collected: 03/08/22 12:40
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			03/15/22 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*03/15/22 01:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/16/22 15:43	2
cis-1,2-Dichloroethene	**2.1**		2.0	0.92	ug/L			03/16/22 15:43	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 15:43	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/16/22 15:43	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 15:43	2
Vinyl chloride	**1.4**	**J**	2.0	0.90	ug/L			03/16/22 15:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*62 - 137*		*03/16/22 15:43*	*2*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*03/16/22 15:43*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/16/22 15:43*	*2*
Dibromofluoromethane (Surr)	*78*		*73 - 120*		*03/16/22 15:43*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_161
Lab Sample ID: 240-163560-10
Date Collected: 03/07/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 16:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 16:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 16:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 16:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 16:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*62 - 137*		*03/14/22 16:22*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/14/22 16:22*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 16:22*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*03/14/22 16:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-21_030722
Lab Sample ID: 240-163560-11
Date Collected: 03/07/22 09:50
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			03/15/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*03/15/22 01:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 14:16	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			03/15/22 14:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 14:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 14:16	1
Trichloroethene	**0.63**	**J**	1.0	0.44	ug/L			03/15/22 14:16	1
Vinyl chloride	**0.70**	**J**	1.0	0.45	ug/L			03/15/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*03/15/22 14:16*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*03/15/22 14:16*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*03/15/22 14:16*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*03/15/22 14:16*	*1*

Client Sample ID: SL-20_030722
Lab Sample ID: 240-163560-12

Date Collected: 03/07/22 10:15
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.8**	**J**	2.0	0.86	ug/L			03/15/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*03/15/22 02:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 14:39	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			03/15/22 14:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 14:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 14:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 14:39	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			03/15/22 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/15/22 14:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*03/15/22 14:39*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*03/15/22 14:39*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 120*		*03/15/22 14:39*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_030722
Lab Sample ID: 240-163560-13
Date Collected: 03/07/22 10:35
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/15/22 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*03/15/22 02:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 17:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 17:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 17:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 17:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 17:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*03/14/22 17:37*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/14/22 17:37*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 17:37*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 120*		*03/14/22 17:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-4_030722
Lab Sample ID: 240-163560-14
Date Collected: 03/07/22 10:55
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			03/15/22 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*03/15/22 03:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 18:02	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.46	ug/L			03/14/22 18:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 18:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 18:02	1
Trichloroethene	**0.68**	**J**	1.0	0.44	ug/L			03/14/22 18:02	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			03/15/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*62 - 137*		*03/14/22 18:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*03/15/22 15:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/14/22 18:02*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*03/15/22 15:01*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/14/22 18:02*	*1*
Toluene-d8 (Surr)	*88*		*78 - 122*		*03/15/22 15:01*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 120*		*03/14/22 18:02*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*03/15/22 15:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_030722
Lab Sample ID: 240-163560-15
Date Collected: 03/07/22 11:15
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			03/15/22 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*03/15/22 03:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 15:24	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			03/15/22 15:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 15:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 15:24	1
Trichloroethene	**1.0**		1.0	0.44	ug/L			03/15/22 15:24	1
Vinyl chloride	**0.94**	**J**	1.0	0.45	ug/L			03/15/22 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*62 - 137*		*03/15/22 15:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/15/22 15:24*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*03/15/22 15:24*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*03/15/22 15:24*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_030722
Lab Sample ID: 240-163560-16
Date Collected: 03/07/22 11:30
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*03/14/22 20:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/16/22 16:05	2
cis-1,2-Dichloroethene	**1.0**	**J**	2.0	0.92	ug/L			03/16/22 16:05	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 16:05	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/16/22 16:05	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 16:05	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			03/16/22 16:05	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*62 - 137*		*03/16/22 16:05*	*2*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/16/22 16:05*	*2*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/16/22 16:05*	*2*
Dibromofluoromethane (Surr)	*81*		*73 - 120*		*03/16/22 16:05*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-16_030722
Lab Sample ID: 240-163560-17
Date Collected: 03/07/22 11:45
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/14/22 21:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 16:08	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			03/15/22 16:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 16:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 16:08	1
Trichloroethene	**0.86**	**J**	1.0	0.44	ug/L			03/15/22 16:08	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			03/15/22 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/15/22 16:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/15/22 16:08*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*03/15/22 16:08*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*03/15/22 16:08*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-3_030722
Lab Sample ID: 240-163560-18
Date Collected: 03/07/22 12:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/14/22 21:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/16/22 16:28	2
cis-1,2-Dichloroethene	**1.3**	**J**	2.0	0.92	ug/L			03/16/22 16:28	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 16:28	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/16/22 16:28	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/16/22 16:28	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			03/16/22 16:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*62 - 137*		*03/16/22 16:28*	*2*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/16/22 16:28*	*2*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/16/22 16:28*	*2*
Dibromofluoromethane (Surr)	*80*		*73 - 120*		*03/16/22 16:28*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_030722
Lab Sample ID: 240-163560-19
Date Collected: 03/07/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*03/14/22 22:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 20:07	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			03/14/22 20:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 20:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 20:07	1
Trichloroethene	**0.47**	**J**	1.0	0.44	ug/L			03/14/22 20:07	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			03/15/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*03/14/22 20:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/15/22 16:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/14/22 20:07*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*03/15/22 16:51*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*03/14/22 20:07*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/15/22 16:51*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*03/14/22 20:07*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*03/15/22 16:51*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_159
Lab Sample ID: 240-163560-20
Date Collected: 03/10/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 20:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 20:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 20:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 20:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 20:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*62 - 137*		*03/14/22 20:32*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/14/22 20:32*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 20:32*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 120*		*03/14/22 20:32*	*1*

Client Sample ID: MH-1244_031022
Lab Sample ID: 240-163560-21

Date Collected: 03/10/22 09:30
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.5**		2.0	0.86	ug/L			03/14/22 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*03/14/22 22:27*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 20:57	1
cis-1,2-Dichloroethene	**15**		1.0	0.46	ug/L			03/14/22 20:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 20:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 20:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 20:57	1
Vinyl chloride	**6.8**		1.0	0.45	ug/L			03/15/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*62 - 137*		*03/14/22 20:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*62 - 137*		*03/15/22 17:13*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/14/22 20:57*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*03/15/22 17:13*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/14/22 20:57*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*03/15/22 17:13*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 120*		*03/14/22 20:57*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*03/15/22 17:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_031022
Lab Sample ID: 240-163560-22
Date Collected: 03/10/22 09:40
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.8**		2.0	0.86	ug/L			03/14/22 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 120*		*03/14/22 22:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 21:22	1
cis-1,2-Dichloroethene	**28**		1.0	0.46	ug/L			03/14/22 21:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 21:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 21:22	1
Trichloroethene	**0.45**	**J**	1.0	0.44	ug/L			03/14/22 21:22	1
Vinyl chloride	**18**		2.0	0.90	ug/L			03/16/22 16:50	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*03/14/22 21:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*62 - 137*		*03/16/22 16:50*	*2*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/14/22 21:22*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*03/16/22 16:50*	*2*
Toluene-d8 (Surr)	*98*		*78 - 122*		*03/14/22 21:22*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/16/22 16:50*	*2*
Dibromofluoromethane (Surr)	*119*		*73 - 120*		*03/14/22 21:22*	*1*
Dibromofluoromethane (Surr)	*82*		*73 - 120*		*03/16/22 16:50*	*2*

Client Sample ID: MH-1255_031022
Lab Sample ID: 240-163560-23

Date Collected: 03/10/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**18**		2.0	0.86	ug/L			03/14/22 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 120*		*03/14/22 23:17*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 21:47	1
cis-1,2-Dichloroethene	**59**		1.0	0.46	ug/L			03/14/22 21:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 21:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 21:47	1
Trichloroethene	**0.87**	**J**	1.0	0.44	ug/L			03/14/22 21:47	1
Vinyl chloride	**69**		2.0	0.90	ug/L			03/15/22 17:57	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*03/14/22 21:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*03/15/22 17:57*	*2*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*03/14/22 21:47*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*03/15/22 17:57*	*2*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/14/22 21:47*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*03/15/22 17:57*	*2*
Dibromofluoromethane (Surr)	*120*		*73 - 120*		*03/14/22 21:47*	*1*
Dibromofluoromethane (Surr)	*86*		*73 - 120*		*03/15/22 17:57*	*2*

Client Sample ID: MH-1256_031022
Lab Sample ID: 240-163560-24

Date Collected: 03/10/22 10:30
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**23**		2.0	0.86	ug/L			03/14/22 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 120*		*03/14/22 23:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 18:19	1
cis-1,2-Dichloroethene	**58**		1.0	0.46	ug/L			03/15/22 18:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 18:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 18:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 18:19	1
Vinyl chloride	**22**		1.0	0.45	ug/L			03/15/22 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/15/22 18:19*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*03/15/22 18:19*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*03/15/22 18:19*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*03/15/22 18:19*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_031022
Lab Sample ID: 240-163560-25
Date Collected: 03/10/22 11:30
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			03/15/22 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*03/15/22 00:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 18:41	1
cis-1,2-Dichloroethene	**4.7**		1.0	0.46	ug/L			03/15/22 18:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 18:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 18:41	1
Trichloroethene	**0.99**	**J**	1.0	0.44	ug/L			03/15/22 18:41	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			03/15/22 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*03/15/22 18:41*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*03/15/22 18:41*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*03/15/22 18:41*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*03/15/22 18:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_162
Lab Sample ID: 240-163560-26
Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 19:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/15/22 19:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 19:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 19:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 19:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/15/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*03/15/22 19:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*03/15/22 19:03*	*1*
Toluene-d8 (Surr)	*88*		*78 - 122*		*03/15/22 19:03*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*03/15/22 19:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-10_030922
Lab Sample ID: 240-163560-27
Date Collected: 03/09/22 09:30
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/15/22 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*03/15/22 00:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 19:25	1
cis-1,2-Dichloroethene	**5.8**		1.0	0.46	ug/L			03/15/22 19:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 19:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 19:25	1
Trichloroethene	**0.66**	**J**	1.0	0.44	ug/L			03/15/22 19:25	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			03/15/22 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*03/15/22 19:25*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/15/22 19:25*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*03/15/22 19:25*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*03/15/22 19:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_030922
Lab Sample ID: 240-163560-28
Date Collected: 03/09/22 09:45
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			03/15/22 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*03/15/22 00:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 12:44	1
cis-1,2-Dichloroethene	**9.5**	**F2 F1**	1.0	0.46	ug/L			03/15/22 12:44	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 12:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 12:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 12:44	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			03/15/22 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*62 - 137*		*03/15/22 12:44*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*03/15/22 12:44*	*1*
Toluene-d8 (Surr)	*79*		*78 - 122*		*03/15/22 12:44*	*1*
Dibromofluoromethane (Surr)	*81*		*73 - 120*		*03/15/22 12:44*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_030922
Lab Sample ID: 240-163560-29
Date Collected: 03/09/22 10:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			03/15/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*03/15/22 01:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 13:09	1
cis-1,2-Dichloroethene	**9.2**		1.0	0.46	ug/L			03/15/22 13:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 13:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 13:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 13:09	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			03/15/22 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*62 - 137*		*03/15/22 13:09*	*1*
4-Bromofluorobenzene (Surr)	*82*		*56 - 136*		*03/15/22 13:09*	*1*
Toluene-d8 (Surr)	*76*	*S1-*	*78 - 122*		*03/15/22 13:09*	*1*
Dibromofluoromethane (Surr)	*79*		*73 - 120*		*03/15/22 13:09*	*1*

Client Sample ID: SL-12_030922
Lab Sample ID: 240-163560-30

Date Collected: 03/09/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			03/15/22 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/15/22 01:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 15:59	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			03/15/22 15:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 15:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 15:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 15:59	1
Vinyl chloride	**0.67**	**J**	1.0	0.45	ug/L			03/15/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*62 - 137*		*03/15/22 15:59*	*1*
4-Bromofluorobenzene (Surr)	*78*		*56 - 136*		*03/15/22 15:59*	*1*
Toluene-d8 (Surr)	*76*	*S1-*	*78 - 122*		*03/15/22 15:59*	*1*
Dibromofluoromethane (Surr)	*78*		*73 - 120*		*03/15/22 15:59*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_030922
Lab Sample ID: 240-163560-31
Date Collected: 03/09/22 10:20
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/15/22 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 120*		*03/15/22 03:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 13:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/15/22 13:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 13:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 13:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 13:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/15/22 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 137*		*03/15/22 13:54*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*03/15/22 13:54*	*1*
Toluene-d8 (Surr)	*79*		*78 - 122*		*03/15/22 13:54*	*1*
Dibromofluoromethane (Surr)	*82*		*73 - 120*		*03/15/22 13:54*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_030922
Lab Sample ID: 240-163560-32
Date Collected: 03/09/22 10:45
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			03/15/22 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*03/15/22 03:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 14:19	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			03/15/22 14:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 14:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 14:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 14:19	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			03/15/22 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*66*		*62 - 137*		*03/15/22 14:19*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*03/15/22 14:19*	*1*
Toluene-d8 (Surr)	*78*		*78 - 122*		*03/15/22 14:19*	*1*
Dibromofluoromethane (Surr)	*78*		*73 - 120*		*03/15/22 14:19*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_030922
Lab Sample ID: 240-163560-33
Date Collected: 03/09/22 11:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.8**		2.0	0.86	ug/L			03/15/22 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 120*		*03/15/22 03:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 16:24	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			03/15/22 16:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 16:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 16:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 16:24	1
Vinyl chloride	**9.6**		1.0	0.45	ug/L			03/15/22 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*62 - 137*		*03/15/22 16:24*	*1*
4-Bromofluorobenzene (Surr)	*59*		*56 - 136*		*03/15/22 16:24*	*1*
Toluene-d8 (Surr)	*79*		*78 - 122*		*03/15/22 16:24*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*03/15/22 16:24*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02_030922
Lab Sample ID: 240-163560-34
Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.9**		2.0	0.86	ug/L			03/15/22 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 120*		*03/15/22 04:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 15:09	1
cis-1,2-Dichloroethene	**7.1**		1.0	0.46	ug/L			03/15/22 15:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 15:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 15:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 15:09	1
Vinyl chloride	**6.1**		1.0	0.45	ug/L			03/15/22 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*62 - 137*		*03/15/22 15:09*	*1*
4-Bromofluorobenzene (Surr)	*81*		*56 - 136*		*03/15/22 15:09*	*1*
Toluene-d8 (Surr)	*78*		*78 - 122*		*03/15/22 15:09*	*1*
Dibromofluoromethane (Surr)	*78*		*73 - 120*		*03/15/22 15:09*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-163560-1	TRIP BLANK_160	117	101	98	118
240-163560-2	SL-15_030822	116	101	100	115
240-163560-3	SL-14_030822	119	104	100	115
240-163560-4	SL-13_030822	116	101	99	121 S1+
240-163560-5	SL-7_030822	116	102	99	123 S1+
240-163560-6	SL-6_030822	117	100	99	121 S1+
240-163560-7	SL-5_030822	76	89	95	77
240-163560-8	SL-8_030822	78	92	97	79
240-163560-9	SL-9_030822	77	89	95	78
240-163560-10	TRIP BLANK_161	120	102	100	115
240-163560-11	SL-21_030722	104	97	91	93
240-163560-12	SL-20_030722	96	91	89	85
240-163560-13	SL-22_030722	115	102	100	117
240-163560-14	SL-4_030722	112	103	99	117
240-163560-14	SL-4_030722	94	89	88	87
240-163560-15	SL-18_030722	107	102	98	106
240-163560-16	SL-17_030722	81	92	100	81
240-163560-17	SL-16_030722	99	96	93	90
240-163560-18	SL-3_030722	79	92	97	80
240-163560-19	DUP-01_030722	115	101	98	115
240-163560-19	DUP-01_030722	97	104	96	97
240-163560-20	TRIP BLANK_159	113	102	100	116
240-163560-21	MH-1244_031022	117	103	100	117
240-163560-21	MH-1244_031022	83	93	86	87
240-163560-22	MH-1231A_031022	115	102	98	119
240-163560-22	MH-1231A_031022	79	91	97	82
240-163560-23	MH-1255_031022	115	104	101	120
240-163560-23	MH-1255_031022	95	91	90	86
240-163560-24	MH-1256_031022	98	94	93	91
240-163560-25	MH-1259_031022	91	89	90	84
240-163560-26	TRIP BLANK_162	94	91	88	88
240-163560-27	SL-10_030922	105	100	94	97
240-163560-28	SL-11_030922	77	80	79	81
240-163560-28 MS	SL-11_030922	75	87	77 S1-	81
240-163560-28 MSD	SL-11_030922	78	86	75 S1-	82
240-163560-29	SL-23_030922	75	82	76 S1-	79
240-163560-30	SL-12_030922	75	78	76 S1-	78
240-163560-31	SL-19_030922	74	80	79	82
240-163560-32	SL-2_030922	66	81	78	78
240-163560-33	MH-1231_030922	76	59	79	84
240-163560-34	DUP-02_030922	77	81	78	78
LCS 240-519826/5	Lab Control Sample	107	103	101	104
LCS 240-519911/5	Lab Control Sample	70	84	79	83
LCS 240-519920/5	Lab Control Sample	89	88	83	83
LCS 240-520075/5	Lab Control Sample	74	90	95	79
LCSD 240-519826/9	Lab Control Sample Dup	106	103	102	103
MB 240-519826/10	Method Blank	115	101	99	113
MB 240-519911/8	Method Blank	76	80	79	83
MB 240-519920/8	Method Blank	103	95	91	94

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
MB 240-520075/8	Method Blank	80	92	99	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-163560-2	SL-15_030822	81
240-163560-3	SL-14_030822	80
240-163560-4	SL-13_030822	81
240-163560-5	SL-7_030822	82
240-163560-5 MS	SL-7_030822	82
240-163560-5 MSD	SL-7_030822	83
240-163560-6	SL-6_030822	83
240-163560-7	SL-5_030822	82
240-163560-8	SL-8_030822	82
240-163560-9	SL-9_030822	83
240-163560-11	SL-21_030722	82
240-163560-12	SL-20_030722	83
240-163560-13	SL-22_030722	82
240-163560-14	SL-4_030722	85
240-163560-15	SL-18_030722	85
240-163560-16	SL-17_030722	102
240-163560-17	SL-16_030722	103
240-163560-18	SL-3_030722	103
240-163560-19	DUP-01_030722	99
240-163560-21	MH-1244_031022	99
240-163560-22	MH-1231A_031022	98
240-163560-23	MH-1255_031022	98
240-163560-24	MH-1256_031022	98
240-163560-25	MH-1259_031022	100
240-163560-27	SL-10_030922	105
240-163560-28	SL-11_030922	101
240-163560-29	SL-23_030922	102
240-163560-30	SL-12_030922	103
240-163560-30 MS	SL-12_030922	100
240-163560-30 MSD	SL-12_030922	100
240-163560-31	SL-19_030922	95
240-163560-32	SL-2_030922	101
240-163560-33	MH-1231_030922	98
240-163560-34	DUP-02_030922	97
LCS 240-519881/4	Lab Control Sample	80
LCS 240-519885/3	Lab Control Sample	96
MB 240-519881/5	Method Blank	80

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA								
Lab Sample ID	Client Sample ID	(66-120)								
MB 240-519885/4	Method Blank	95								

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-519826/10
Matrix: Water
Analysis Batch: 519826

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/14/22 13:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/14/22 13:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 13:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/14/22 13:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/14/22 13:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/14/22 13:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*62 - 137*		*03/14/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/14/22 13:28*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/14/22 13:28*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*03/14/22 13:28*	*1*

Lab Sample ID: LCS 240-519826/5
Matrix: Water
Analysis Batch: 519826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	21.1		ug/L		105	63 - 134		
cis-1,2-Dichloroethene			20.0	18.3		ug/L		91	77 - 123		
Tetrachloroethene			20.0	16.7		ug/L		83	76 - 123		
trans-1,2-Dichloroethene			20.0	19.2		ug/L		96	75 - 124		
Trichloroethene			20.0	18.0		ug/L		90	70 - 122		
Vinyl chloride			20.0	19.7		ug/L		98	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*62 - 137*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
Toluene-d8 (Surr)	*101*		*78 - 122*
Dibromofluoromethane (Surr)	*104*		*73 - 120*

Lab Sample ID: LCSD 240-519826/9
Matrix: Water
Analysis Batch: 519826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	21.1		ug/L		105	63 - 134	0	35
cis-1,2-Dichloroethene			20.0	18.7		ug/L		93	77 - 123	2	35
Tetrachloroethene			20.0	16.8		ug/L		84	76 - 123	1	35
trans-1,2-Dichloroethene			20.0	20.5		ug/L		102	75 - 124	7	35
Trichloroethene			20.0	18.2		ug/L		91	70 - 122	1	35
Vinyl chloride			20.0	17.5		ug/L		88	60 - 144	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-519826/9
Matrix: Water
Analysis Batch: 519826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Lab Sample ID: MB 240-519911/8
Matrix: Water
Analysis Batch: 519911

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 11:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/15/22 11:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 11:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 11:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 11:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/15/22 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*76*		*62 - 137*		*03/15/22 11:54*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*03/15/22 11:54*	*1*
Toluene-d8 (Surr)	*79*		*78 - 122*		*03/15/22 11:54*	*1*
Dibromofluoromethane (Surr)	*83*		*73 - 120*		*03/15/22 11:54*	*1*

Lab Sample ID: LCS 240-519911/5
Matrix: Water
Analysis Batch: 519911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	17.2		ug/L		86	63 - 134
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	77 - 123
Tetrachloroethene	20.0	20.2		ug/L		101	76 - 123
trans-1,2-Dichloroethene	20.0	18.0		ug/L		90	75 - 124
Trichloroethene	20.0	20.3		ug/L		101	70 - 122
Vinyl chloride	20.0	16.9		ug/L		84	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*70*		*62 - 137*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*
Toluene-d8 (Surr)	*79*		*78 - 122*
Dibromofluoromethane (Surr)	*83*		*73 - 120*

Lab Sample ID: 240-163560-28 MS
Matrix: Water
Analysis Batch: 519911

Client Sample ID: SL-11_030922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	20.0	11.8		ug/L		59	56 - 135
cis-1,2-Dichloroethene	9.5	F2 F1	20.0	18.5	F1	ug/L		45	66 - 128
Tetrachloroethene	1.0	U	20.0	14.3		ug/L		71	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	13.3		ug/L		66	56 - 136
Trichloroethene	1.0	U	20.0	14.7		ug/L		74	61 - 124

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-163560-28 MS
Matrix: Water
Analysis Batch: 519911

Client Sample ID: SL-11_030922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride	2.3		20.0	13.6		ug/L		57	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*62 - 137*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*
Toluene-d8 (Surr)	*77*	*S1-*	*78 - 122*
Dibromofluoromethane (Surr)	*81*		*73 - 120*

Lab Sample ID: 240-163560-28 MSD
Matrix: Water
Analysis Batch: 519911

Client Sample ID: SL-11_030922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	20.0	12.5		ug/L		62	56 - 135	6	26
cis-1,2-Dichloroethene	9.5	F2 F1	20.0	22.0	F2 F1	ug/L		63	66 - 128	17	14
Tetrachloroethene	1.0	U	20.0	14.8		ug/L		74	62 - 131	4	20
trans-1,2-Dichloroethene	1.0	U	20.0	14.6		ug/L		73	56 - 136	9	15
Trichloroethene	1.0	U	20.0	16.7		ug/L		84	61 - 124	13	15
Vinyl chloride	2.3		20.0	15.2		ug/L		65	43 - 157	11	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*62 - 137*
4-Bromofluorobenzene (Surr)	*86*		*56 - 136*
Toluene-d8 (Surr)	*75*	*S1-*	*78 - 122*
Dibromofluoromethane (Surr)	*82*		*73 - 120*

Lab Sample ID: MB 240-519920/8
Matrix: Water
Analysis Batch: 519920

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/15/22 11:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/15/22 11:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 11:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/15/22 11:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/15/22 11:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/15/22 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*03/15/22 11:55*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*03/15/22 11:55*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*03/15/22 11:55*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*03/15/22 11:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-519920/5
Matrix: Water
Analysis Batch: 519920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	22.4		ug/L		112	63 - 134		
cis-1,2-Dichloroethene			20.0	20.0		ug/L		100	77 - 123		
Tetrachloroethene			20.0	20.2		ug/L		101	76 - 123		
trans-1,2-Dichloroethene			20.0	20.8		ug/L		104	75 - 124		
Trichloroethene			20.0	19.4		ug/L		97	70 - 122		
Vinyl chloride			20.0	19.7		ug/L		99	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*
Toluene-d8 (Surr)	*83*		*78 - 122*
Dibromofluoromethane (Surr)	*83*		*73 - 120*

Lab Sample ID: MB 240-520075/8
Matrix: Water
Analysis Batch: 520075

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/16/22 13:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/16/22 13:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/16/22 13:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/16/22 13:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/16/22 13:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/16/22 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 137*		*03/16/22 13:17*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/16/22 13:17*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/16/22 13:17*	*1*
Dibromofluoromethane (Surr)	*81*		*73 - 120*		*03/16/22 13:17*	*1*

Lab Sample ID: LCS 240-520075/5
Matrix: Water
Analysis Batch: 520075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	18.0		ug/L		90	63 - 134		
cis-1,2-Dichloroethene			20.0	18.1		ug/L		90	77 - 123		
Tetrachloroethene			20.0	19.5		ug/L		97	76 - 123		
trans-1,2-Dichloroethene			20.0	17.5		ug/L		87	75 - 124		
Trichloroethene			20.0	17.4		ug/L		87	70 - 122		
Vinyl chloride			20.0	17.7		ug/L		88	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-520075/5
Matrix: Water
Analysis Batch: 520075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*79*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-519881/5
Matrix: Water
Analysis Batch: 519881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 18:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*03/14/22 18:24*	*1*

Lab Sample ID: LCS 240-519881/4
Matrix: Water
Analysis Batch: 519881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.6		ug/L		106	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*

Lab Sample ID: 240-163560-5 MS
Matrix: Water
Analysis Batch: 519881

Client Sample ID: SL-7_030822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	1.3	J	10.0	12.1		ug/L		108	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*

Lab Sample ID: 240-163560-5 MSD
Matrix: Water
Analysis Batch: 519881

Client Sample ID: SL-7_030822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.3	J	10.0	12.1		ug/L		108	51 - 153	0	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-519885/4
Matrix: Water
Analysis Batch: 519885

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/14/22 19:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 120*		*03/14/22 19:29*	*1*

Lab Sample ID: LCS 240-519885/3
Matrix: Water
Analysis Batch: 519885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.71		ug/L		97	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 120*

Lab Sample ID: 240-163560-30 MS
Matrix: Water
Analysis Batch: 519885

Client Sample ID: SL-12_030922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	1.3	J	10.0	11.8		ug/L		105	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*

Lab Sample ID: 240-163560-30 MSD
Matrix: Water
Analysis Batch: 519885

Client Sample ID: SL-12_030922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.3	J	10.0	12.3		ug/L		110	51 - 153	4	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*

GC/MS VOA

Analysis Batch: 519826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-1	TRIP BLANK_160	Total/NA	Water	8260D	
240-163560-2	SL-15_030822	Total/NA	Water	8260D	
240-163560-3	SL-14_030822	Total/NA	Water	8260D	
240-163560-4	SL-13_030822	Total/NA	Water	8260D	
240-163560-5	SL-7_030822	Total/NA	Water	8260D	
240-163560-6	SL-6_030822	Total/NA	Water	8260D	
240-163560-10	TRIP BLANK_161	Total/NA	Water	8260D	
240-163560-13	SL-22_030722	Total/NA	Water	8260D	
240-163560-14	SL-4_030722	Total/NA	Water	8260D	
240-163560-19	DUP-01_030722	Total/NA	Water	8260D	
240-163560-20	TRIP BLANK_159	Total/NA	Water	8260D	
240-163560-21	MH-1244_031022	Total/NA	Water	8260D	
240-163560-22	MH-1231A_031022	Total/NA	Water	8260D	
240-163560-23	MH-1255_031022	Total/NA	Water	8260D	
MB 240-519826/10	Method Blank	Total/NA	Water	8260D	
LCS 240-519826/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-519826/9	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 519881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-2	SL-15_030822	Total/NA	Water	8260D SIM	
240-163560-3	SL-14_030822	Total/NA	Water	8260D SIM	
240-163560-4	SL-13_030822	Total/NA	Water	8260D SIM	
240-163560-5	SL-7_030822	Total/NA	Water	8260D SIM	
240-163560-6	SL-6_030822	Total/NA	Water	8260D SIM	
240-163560-7	SL-5_030822	Total/NA	Water	8260D SIM	
240-163560-8	SL-8_030822	Total/NA	Water	8260D SIM	
240-163560-9	SL-9_030822	Total/NA	Water	8260D SIM	
240-163560-11	SL-21_030722	Total/NA	Water	8260D SIM	
240-163560-12	SL-20_030722	Total/NA	Water	8260D SIM	
240-163560-13	SL-22_030722	Total/NA	Water	8260D SIM	
240-163560-14	SL-4_030722	Total/NA	Water	8260D SIM	
240-163560-15	SL-18_030722	Total/NA	Water	8260D SIM	
MB 240-519881/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-519881/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-163560-5 MS	SL-7_030822	Total/NA	Water	8260D SIM	
240-163560-5 MSD	SL-7_030822	Total/NA	Water	8260D SIM	

Analysis Batch: 519885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-16	SL-17_030722	Total/NA	Water	8260D SIM	
240-163560-17	SL-16_030722	Total/NA	Water	8260D SIM	
240-163560-18	SL-3_030722	Total/NA	Water	8260D SIM	
240-163560-19	DUP-01_030722	Total/NA	Water	8260D SIM	
240-163560-21	MH-1244_031022	Total/NA	Water	8260D SIM	
240-163560-22	MH-1231A_031022	Total/NA	Water	8260D SIM	
240-163560-23	MH-1255_031022	Total/NA	Water	8260D SIM	
240-163560-24	MH-1256_031022	Total/NA	Water	8260D SIM	
240-163560-25	MH-1259_031022	Total/NA	Water	8260D SIM	
240-163560-27	SL-10_030922	Total/NA	Water	8260D SIM	
240-163560-28	SL-11_030922	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 519885 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-29	SL-23_030922	Total/NA	Water	8260D SIM	
240-163560-30	SL-12_030922	Total/NA	Water	8260D SIM	
240-163560-31	SL-19_030922	Total/NA	Water	8260D SIM	
240-163560-32	SL-2_030922	Total/NA	Water	8260D SIM	
240-163560-33	MH-1231_030922	Total/NA	Water	8260D SIM	
240-163560-34	DUP-02_030922	Total/NA	Water	8260D SIM	
MB 240-519885/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-519885/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-163560-30 MS	SL-12_030922	Total/NA	Water	8260D SIM	
240-163560-30 MSD	SL-12_030922	Total/NA	Water	8260D SIM	

Analysis Batch: 519911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-28	SL-11_030922	Total/NA	Water	8260D	
240-163560-29	SL-23_030922	Total/NA	Water	8260D	
240-163560-30	SL-12_030922	Total/NA	Water	8260D	
240-163560-31	SL-19_030922	Total/NA	Water	8260D	
240-163560-32	SL-2_030922	Total/NA	Water	8260D	
240-163560-33	MH-1231_030922	Total/NA	Water	8260D	
240-163560-34	DUP-02_030922	Total/NA	Water	8260D	
MB 240-519911/8	Method Blank	Total/NA	Water	8260D	
LCS 240-519911/5	Lab Control Sample	Total/NA	Water	8260D	
240-163560-28 MS	SL-11_030922	Total/NA	Water	8260D	
240-163560-28 MSD	SL-11_030922	Total/NA	Water	8260D	

Analysis Batch: 519920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-11	SL-21_030722	Total/NA	Water	8260D	
240-163560-12	SL-20_030722	Total/NA	Water	8260D	
240-163560-14	SL-4_030722	Total/NA	Water	8260D	
240-163560-15	SL-18_030722	Total/NA	Water	8260D	
240-163560-17	SL-16_030722	Total/NA	Water	8260D	
240-163560-19	DUP-01_030722	Total/NA	Water	8260D	
240-163560-21	MH-1244_031022	Total/NA	Water	8260D	
240-163560-23	MH-1255_031022	Total/NA	Water	8260D	
240-163560-24	MH-1256_031022	Total/NA	Water	8260D	
240-163560-25	MH-1259_031022	Total/NA	Water	8260D	
240-163560-26	TRIP BLANK_162	Total/NA	Water	8260D	
240-163560-27	SL-10_030922	Total/NA	Water	8260D	
MB 240-519920/8	Method Blank	Total/NA	Water	8260D	
LCS 240-519920/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 520075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163560-7	SL-5_030822	Total/NA	Water	8260D	
240-163560-8	SL-8_030822	Total/NA	Water	8260D	
240-163560-9	SL-9_030822	Total/NA	Water	8260D	
240-163560-16	SL-17_030722	Total/NA	Water	8260D	
240-163560-18	SL-3_030722	Total/NA	Water	8260D	
240-163560-22	MH-1231A_031022	Total/NA	Water	8260D	
MB 240-520075/8	Method Blank	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 520075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-520075/5	Lab Control Sample	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_160
Lab Sample ID: 240-163560-1
Date Collected: 03/08/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 13:53	HMB	TAL CAN

Client Sample ID: SL-15_030822
Lab Sample ID: 240-163560-2
Date Collected: 03/08/22 09:40
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 14:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/14/22 21:58	CS	TAL CAN

Client Sample ID: SL-14_030822
Lab Sample ID: 240-163560-3
Date Collected: 03/08/22 09:55
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 14:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/14/22 22:21	CS	TAL CAN

Client Sample ID: SL-13_030822
Lab Sample ID: 240-163560-4
Date Collected: 03/08/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 15:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/14/22 22:45	CS	TAL CAN

Client Sample ID: SL-7_030822
Lab Sample ID: 240-163560-5
Date Collected: 03/08/22 11:10
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 15:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/14/22 23:09	CS	TAL CAN

Client Sample ID: SL-6_030822
Lab Sample ID: 240-163560-6
Date Collected: 03/08/22 11:23
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 15:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 00:20	CS	TAL CAN

Client Sample ID: SL-5_030822
Lab Sample ID: 240-163560-7
Date Collected: 03/08/22 11:33
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520075	03/16/22 14:59	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 00:44	CS	TAL CAN

Client Sample ID: SL-8_030822
Lab Sample ID: 240-163560-8
Date Collected: 03/08/22 12:20
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520075	03/16/22 15:21	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 01:08	CS	TAL CAN

Client Sample ID: SL-9_030822
Lab Sample ID: 240-163560-9
Date Collected: 03/08/22 12:40
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520075	03/16/22 15:43	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 01:32	CS	TAL CAN

Client Sample ID: TRIP BLANK_161
Lab Sample ID: 240-163560-10
Date Collected: 03/07/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 16:22	HMB	TAL CAN

Client Sample ID: SL-21_030722
Lab Sample ID: 240-163560-11
Date Collected: 03/07/22 09:50
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 14:16	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 01:55	CS	TAL CAN

Client Sample ID: SL-20_030722
Lab Sample ID: 240-163560-12
Date Collected: 03/07/22 10:15
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 14:39	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 02:19	CS	TAL CAN

Client Sample ID: SL-22_030722
Lab Sample ID: 240-163560-13
Date Collected: 03/07/22 10:35
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 17:37	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 02:43	CS	TAL CAN

Client Sample ID: SL-4_030722
Lab Sample ID: 240-163560-14
Date Collected: 03/07/22 10:55
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 15:01	TJL1	TAL CAN
Total/NA	Analysis	8260D		1	519826	03/14/22 18:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 03:07	CS	TAL CAN

Client Sample ID: SL-18_030722
Lab Sample ID: 240-163560-15
Date Collected: 03/07/22 11:15
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 15:24	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519881	03/15/22 03:31	CS	TAL CAN

Client Sample ID: SL-17_030722
Lab Sample ID: 240-163560-16
Date Collected: 03/07/22 11:30
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520075	03/16/22 16:05	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 20:48	CS	TAL CAN

Client Sample ID: SL-16_030722
Lab Sample ID: 240-163560-17
Date Collected: 03/07/22 11:45
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 16:08	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 21:12	CS	TAL CAN

Client Sample ID: SL-3_030722
Lab Sample ID: 240-163560-18
Date Collected: 03/07/22 12:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520075	03/16/22 16:28	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 21:37	CS	TAL CAN

Client Sample ID: DUP-01_030722
Lab Sample ID: 240-163560-19
Date Collected: 03/07/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 16:51	TJL1	TAL CAN
Total/NA	Analysis	8260D		1	519826	03/14/22 20:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 22:02	CS	TAL CAN

Client Sample ID: TRIP BLANK_159
Lab Sample ID: 240-163560-20
Date Collected: 03/10/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 20:32	HMB	TAL CAN

Client Sample ID: MH-1244_031022
Lab Sample ID: 240-163560-21
Date Collected: 03/10/22 09:30
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 17:13	TJL1	TAL CAN
Total/NA	Analysis	8260D		1	519826	03/14/22 20:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 22:27	CS	TAL CAN

Client Sample ID: MH-1231A_031022
Lab Sample ID: 240-163560-22
Date Collected: 03/10/22 09:40
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519826	03/14/22 21:22	HMB	TAL CAN
Total/NA	Analysis	8260D		2	520075	03/16/22 16:50	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 22:52	CS	TAL CAN

Client Sample ID: MH-1255_031022
Lab Sample ID: 240-163560-23
Date Collected: 03/10/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	519920	03/15/22 17:57	TJL1	TAL CAN
Total/NA	Analysis	8260D		1	519826	03/14/22 21:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 23:17	CS	TAL CAN

Client Sample ID: MH-1256_031022
Lab Sample ID: 240-163560-24
Date Collected: 03/10/22 10:30
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 18:19	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/14/22 23:41	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_031022
Lab Sample ID: 240-163560-25
Date Collected: 03/10/22 11:30
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 18:41	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 00:06	CS	TAL CAN

Client Sample ID: TRIP BLANK_162
Lab Sample ID: 240-163560-26
Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 19:03	TJL1	TAL CAN

Client Sample ID: SL-10_030922
Lab Sample ID: 240-163560-27
Date Collected: 03/09/22 09:30
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519920	03/15/22 19:25	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 00:31	CS	TAL CAN

Client Sample ID: SL-11_030922
Lab Sample ID: 240-163560-28
Date Collected: 03/09/22 09:45
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 12:44	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 00:56	CS	TAL CAN

Client Sample ID: SL-23_030922
Lab Sample ID: 240-163560-29
Date Collected: 03/09/22 10:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 13:09	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 01:21	CS	TAL CAN

Client Sample ID: SL-12_030922
Lab Sample ID: 240-163560-30
Date Collected: 03/09/22 10:10
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 15:59	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 01:45	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_030922
Lab Sample ID: 240-163560-31
Date Collected: 03/09/22 10:20
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 13:54	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 03:00	CS	TAL CAN

Client Sample ID: SL-2_030922
Lab Sample ID: 240-163560-32
Date Collected: 03/09/22 10:45
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 14:19	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 03:25	CS	TAL CAN

Client Sample ID: MH-1231_030922
Lab Sample ID: 240-163560-33
Date Collected: 03/09/22 11:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 16:24	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 03:50	CS	TAL CAN

Client Sample ID: DUP-02_030922
Lab Sample ID: 240-163560-34
Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	519911	03/15/22 15:09	LEE	TAL CAN
Total/NA	Analysis	8260D SIM		1	519885	03/15/22 04:14	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163560-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22 *
Connecticut	State	PH-0590	12-31-21 *
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	03-31-22
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-21-14	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Christian Garrido Korey Pearson, Samantha Hindle ~~Sommer Guy~~ Gary Schafer	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642 701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_160	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-15_030822	3/8/22	940		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B
SL-14_030822		955		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B SIM
SL-13_030822		1010		X						6					N	G	X	X	X	X	X	X	X	
SL-7_030822		1110		X						6					N	G	X	X	X	X	X	X	X	
SL-6_030822		1125		X						6					N	G	X	X	X	X	X	X	X	
SL-5_030822		1135		X						6					N	G	X	X	X	X	X	X	X	
SL-8-030822		1220		X						6					N	G	X	X	X	X	X	X	X	
SL-9_030822		1240		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client Disposal By Lab

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples: 240-163560 Chain of Custody

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Christian Garrido	Arcadis	3/10/22	Jen Hall	EETA	3/10/22 1345
Relinquished by: Jen Hall	Company: EETA	Date/Time: 3/10/22 1320	Received by: Brandon	Company:	Date/Time: 3-11-22 0700
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 1 /
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497 9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Gary Schafer, ~~Korey Pearson~~, Samantha Hindle, ~~Sommer Guy~~, Brendan Gamache	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Znad NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_161	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-21_030722	3/07/22	9:50		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20_030722	3/07/22	10:15		X						6					N	G	X	X	X	X	X	X	X					" "
SL-22-030722	3/07/22	10:35		X						6					N	G	X	X	X	X	X	X	X					" "
SL-4_030722	3/07/22	10:55		X						6					N	G	X	X	X	X	X	X	X					" "
SL-18_030722	3/07/22	11 15		X						6					N	G	X	X	X	X	X	X	X					" "
SL-17_030722	3/07/22	11. 30		X						6					N	G	X	X	X	X	X	X	X					" "
SL-16_030722	3/07/22	11.45		X						6					N	G	X	X	X	X	X	X	X					" "
SL-3_030722	3/07/22	12.00		X						6					N	G	X	X	X	X	X	X	X					" "
DUP-01_030722	3/07/22	—		X						6					N	G	X	X	X	X	X	X	X					" "

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalla@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Samantha Hindle	ARCADIS	3/10/22	Jen Hall	EET1	3/10/22 1318
Relinquished by: Jen Hall	Company: EET1	Date/Time: 3/10/22 1320	Received by:	Company: TA	Date/Time: 3-11-22 0800
Relinquished by	Company	Date/Time	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Christian Gurnee ~~Korey Pearson, Samantha Hindle~~ Sommer Guy Seth Turner	TAT if different from below: 3 day		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 30080642.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_159	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1244_031022	3/10/22	930		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1231A=031022	3/10/22	940		X						6					N	G	X	X	X	X	X	X	X	
MH-1255_031022	3/10/22	1010		X						6					N	G	X	X	X	X	X	X	X	
MH-1256_031022	3/10/22	1030		X						6					N	G	X	X	X	X	X	X	X	
MH-1259_031022	3/10/22	1130		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Christian Gurnee	Arcadis	3/10/22		EETA	3/10/22 1315
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	3/10/22 1320		FT	3-11-22 0840
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
		3			

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3/17/2022

AN

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: DW NPDES RCRA Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer hinskey@arcadis.com	Analysis Turnaround Time	COC No: of COCs
Phone: 248-994-2240	Sampler Name: Gary Schafer, Christian Garrido, Seth Turner	TAT if different from below: 10 day (✓ 2 weeks; 3 weeks; 1 week; 2 days; 1 day)	For lab use only: Walk-in client; Lab sampling; Job/SDG No:
Project Name: Ford LTP On-Site	Method of Shipment/Carrier:		
Project Number: 30080642.401 09	Shipping/Tracking No.:		
PO # 30080642.401 03			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2 DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions
TRIP BLANK_102	---	---		X						X					N	G	X	X	X	X	X	X		1 Trip Blank
SL-10_030922	3/9/22	0930								6														3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11_030922		945								6														
SL-23_030922		1000								6														
SL-12=030922		1010								6														
SL-19=030922		1020								6														
SL-2_030922		1045								6														
MH-1231_030922		1100								6														
DUP-02_030922		---								6														

Possible Hazard Identification: ✓ Non-Hazard; Flammable; Skin Irritant; Poison B; Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return to Client; ✓ Disposal By Lab; Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco com Cadena #E203728
Level IV Reporting requested

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Seth Turner	Arcadis	3/10/22	Jen Hall	EETA	3/10/22 1315
Jen Hall	EETA	3/10/22 1320	Brandon	TA	3-11-22 0800
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

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3/17/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 163560**
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by Brandon

Cooler Received on 3-11-22 Opened on 3-11-22

FedEx 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 4 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT. Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-14 (CF **-0.2** °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C
   IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3.	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11.	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# **HC157842**
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes No NA
16.	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by

Trip Blank not logged for SIM due to insufficient Volume. TME 3/11/22
*The COC with TB 162 is not marked for SIM analysis. Logged Samples for SIM per comment column and PM instructions
TME 3-11-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # : 163560

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	1.3	1.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	1.2	1.0	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

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ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-163834-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
3/24/2022 1:33:13 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-163834-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-163834-1

Comments
No additional comments.

Receipt
The samples were received on 3/18/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7º C.

GC/MS VOA
Method 8260D: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: SL-4_031422 (240-163834-5), SL-17_031422 (240-163834-7), SL-3_031422 (240-163834-9), SL-5_031522 (240-163834-18), SL-8_031522 (240-163834-19) and SL-9_031522 (240-163834-20). Elevated reporting limits (RLs) are provided.

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-520333.

Method 8260D: Sample MH-1256_031722 (240-163834-29) had a reanalysis that had different results than the original analysis. This is most likely due to non-homogeneity in the sample. Both runs are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-163834-2	SL-21_031422	Water	03/14/22 10:15	03/18/22 08:00
240-163834-3	SL-20_031422	Water	03/14/22 10:35	03/18/22 08:00
240-163834-4	SL-22_031422	Water	03/14/22 10:55	03/18/22 08:00
240-163834-5	SL-4_031422	Water	03/14/22 11:10	03/18/22 08:00
240-163834-6	SL-18_031422	Water	03/14/22 11:30	03/18/22 08:00
240-163834-7	SL-17_031422	Water	03/14/22 13:00	03/18/22 08:00
240-163834-8	SL-16_031422	Water	03/14/22 13:35	03/18/22 08:00
240-163834-9	SL-3_031422	Water	03/14/22 14:05	03/18/22 08:00
240-163834-10	SL-2_031422	Water	03/14/22 14:20	03/18/22 08:00
240-163834-12	MH-1231_031422	Water	03/14/22 14:45	03/18/22 08:00
240-163834-13	SL-15_031522	Water	03/15/22 09:40	03/18/22 08:00
240-163834-14	SL-14_031522	Water	03/15/22 09:50	03/18/22 08:00
240-163834-15	SL-13_031522	Water	03/15/22 10:05	03/18/22 08:00
240-163834-16	SL-7_301522	Water	03/15/22 11:00	03/18/22 08:00
240-163834-17	SL-6_031522	Water	03/15/22 11:13	03/18/22 08:00
240-163834-18	SL-5_031522	Water	03/15/22 11:27	03/18/22 08:00
240-163834-19	SL-8_031522	Water	03/15/22 12:50	03/18/22 08:00
240-163834-20	SL-9_031522	Water	03/15/22 13:12	03/18/22 08:00
240-163834-22	SL-10_031622	Water	03/16/22 09:06	03/18/22 08:00
240-163834-23	SL-11_031622	Water	03/16/22 09:25	03/18/22 08:00
240-163834-24	SL-23_031622	Water	03/16/22 09:43	03/18/22 08:00
240-163834-25	SL-12_031622	Water	03/16/22 09:55	03/18/22 08:00
240-163834-26	SL-19_031622	Water	03/16/22 10:07	03/18/22 08:00
240-163834-27	MH-1259_031722	Water	03/16/22 11:27	03/18/22 08:00
240-163834-28	MH-1255_031722	Water	03/17/22 09:42	03/18/22 08:00
240-163834-29	MH-1256_031722	Water	03/17/22 10:05	03/18/22 08:00
240-163834-30	MH-1244_031722	Water	03/17/22 10:31	03/18/22 08:00
240-163834-32	MH-1231A_031722	Water	03/17/22 10:53	03/18/22 08:00
240-163834-33	DUP-01_031422	Water	03/14/22 00:00	03/18/22 08:00
240-163834-34	DUP-02_031422	Water	03/14/22 00:00	03/18/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-163834-1

Client Sample ID: SL-21_031422 — Lab Sample ID: 240-163834-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.92	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_031422 — Lab Sample ID: 240-163834-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.90	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_031422 — Lab Sample ID: 240-163834-4

No Detections.

Client Sample ID: SL-4_031422 — Lab Sample ID: 240-163834-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.6		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	3.5		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-18_031422 — Lab Sample ID: 240-163834-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_031422 — Lab Sample ID: 240-163834-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.0		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	5.6		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-16_031422 — Lab Sample ID: 240-163834-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_031422 — Lab Sample ID: 240-163834-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.6		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	5.5		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-2_031422 — Lab Sample ID: 240-163834-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.0		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SL-2_031422 (Continued) — Lab Sample ID: 240-163834-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	5.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_031422 — Lab Sample ID: 240-163834-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	13		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	27		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	16		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_031522 — Lab Sample ID: 240-163834-13

No Detections.

Client Sample ID: SL-14_031522 — Lab Sample ID: 240-163834-14

No Detections.

Client Sample ID: SL-13_031522 — Lab Sample ID: 240-163834-15

No Detections.

Client Sample ID: SL-7_301522 — Lab Sample ID: 240-163834-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_031522 — Lab Sample ID: 240-163834-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_031522 — Lab Sample ID: 240-163834-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.9		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	1.6	J	2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-8_031522 — Lab Sample ID: 240-163834-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.6	J	2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	0.90	J	2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-9_031522 — Lab Sample ID: 240-163834-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.5	J	2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	0.94	J	2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-10_031622 — Lab Sample ID: 240-163834-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SL-10_031622 (Continued) — Lab Sample ID: 240-163834-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_031622 — Lab Sample ID: 240-163834-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_031622 — Lab Sample ID: 240-163834-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.59	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.85	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_031622 — Lab Sample ID: 240-163834-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_031622 — Lab Sample ID: 240-163834-26

No Detections.

Client Sample ID: MH-1259_031722 — Lab Sample ID: 240-163834-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_031722 — Lab Sample ID: 240-163834-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	48		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	60		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1256_031722 — Lab Sample ID: 240-163834-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	76	E	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	18		1.0	0.45	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene - RA	89		5.0	2.3	ug/L	5		8260D	Total/NA
Vinyl chloride - RA	25		5.0	2.3	ug/L	5		8260D	Total/NA

Client Sample ID: MH-1244_031722 — Lab Sample ID: 240-163834-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MH-1244_031722 (Continued) — Lab Sample ID: 240-163834-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	29		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_031722 — Lab Sample ID: 240-163834-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	20		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	49		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	57		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-01_031422 — Lab Sample ID: 240-163834-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.48	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_031422 — Lab Sample ID: 240-163834-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	13		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	18		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SL-21_031422
Lab Sample ID: 240-163834-2
Date Collected: 03/14/22 10:15
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			03/21/22 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/21/22 22:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 13:08	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			03/21/22 13:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 13:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:08	1
Vinyl chloride	**0.92**	**J**	1.0	0.45	ug/L			03/21/22 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/21/22 13:08*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 13:08*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 13:08*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/21/22 13:08*	*1*

Client Sample ID: SL-20_031422
Lab Sample ID: 240-163834-3

Date Collected: 03/14/22 10:35
Matrix: Water

Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			03/21/22 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*03/21/22 23:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 13:33	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			03/21/22 13:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 13:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:33	1
Vinyl chloride	**0.90**	**J**	1.0	0.45	ug/L			03/21/22 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/21/22 13:33*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 13:33*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 13:33*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 13:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-22_031422
Lab Sample ID: 240-163834-4
Date Collected: 03/14/22 10:55
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/21/22 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*03/21/22 23:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 13:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 13:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 13:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 13:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/21/22 13:58*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 13:58*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/21/22 13:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_031422
Lab Sample ID: 240-163834-5
Date Collected: 03/14/22 11:10
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			03/22/22 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/22/22 00:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 14:23	2
cis-1,2-Dichloroethene	**5.6**		2.0	0.92	ug/L			03/21/22 14:23	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 14:23	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 14:23	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 14:23	2
Vinyl chloride	**3.5**		2.0	0.90	ug/L			03/21/22 14:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/21/22 14:23*	*2*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 14:23*	*2*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 14:23*	*2*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/21/22 14:23*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-18_031422
Lab Sample ID: 240-163834-6
Date Collected: 03/14/22 11:30
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.1**		2.0	0.86	ug/L			03/22/22 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/22/22 00:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 14:48	1
cis-1,2-Dichloroethene	**6.3**		1.0	0.46	ug/L			03/21/22 14:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 14:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 14:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 14:48	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			03/21/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 14:48*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 14:48*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 14:48*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/21/22 14:48*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-17_031422
Lab Sample ID: 240-163834-7
Date Collected: 03/14/22 13:00
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.0**		2.0	0.86	ug/L			03/22/22 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/22/22 00:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 15:13	2
cis-1,2-Dichloroethene	**8.0**		2.0	0.92	ug/L			03/21/22 15:13	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 15:13	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 15:13	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 15:13	2
Vinyl chloride	**5.6**		2.0	0.90	ug/L			03/21/22 15:13	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 15:13*	*2*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/21/22 15:13*	*2*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 15:13*	*2*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/21/22 15:13*	*2*

Client Sample ID: SL-16_031422
Lab Sample ID: 240-163834-8

Date Collected: 03/14/22 13:35
Matrix: Water

Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			03/22/22 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/22/22 01:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 15:38	1
cis-1,2-Dichloroethene	**8.2**		1.0	0.46	ug/L			03/21/22 15:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 15:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 15:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 15:38	1
Vinyl chloride	**6.5**		1.0	0.45	ug/L			03/21/22 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/21/22 15:38*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/21/22 15:38*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*03/21/22 15:38*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 15:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_031422
Lab Sample ID: 240-163834-9
Date Collected: 03/14/22 14:05
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.8**		2.0	0.86	ug/L			03/22/22 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/22/22 01:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 16:03	2
cis-1,2-Dichloroethene	**7.6**		2.0	0.92	ug/L			03/21/22 16:03	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 16:03	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 16:03	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 16:03	2
Vinyl chloride	**5.5**		2.0	0.90	ug/L			03/21/22 16:03	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/21/22 16:03*	*2*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/21/22 16:03*	*2*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 16:03*	*2*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 16:03*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-2_031422
Lab Sample ID: 240-163834-10
Date Collected: 03/14/22 14:20
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			03/22/22 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/22/22 02:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 16:28	1
cis-1,2-Dichloroethene	**7.0**		1.0	0.46	ug/L			03/21/22 16:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 16:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 16:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 16:28	1
Vinyl chloride	**5.6**		1.0	0.45	ug/L			03/21/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 16:28*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 16:28*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 16:28*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/21/22 16:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231_031422
Lab Sample ID: 240-163834-12
Date Collected: 03/14/22 14:45
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**13**		2.0	0.86	ug/L			03/22/22 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*03/22/22 02:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 16:53	1
cis-1,2-Dichloroethene	**27**		1.0	0.46	ug/L			03/21/22 16:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 16:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 16:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 16:53	1
Vinyl chloride	**16**		1.0	0.45	ug/L			03/21/22 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*03/21/22 16:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/21/22 16:53*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/21/22 16:53*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*03/21/22 16:53*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_031522
Lab Sample ID: 240-163834-13
Date Collected: 03/15/22 09:40
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/22/22 02:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 17:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 17:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 17:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 17:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 17:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/21/22 17:18*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/21/22 17:18*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/21/22 17:18*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*03/21/22 17:18*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-14_031522
Lab Sample ID: 240-163834-14
Date Collected: 03/15/22 09:50
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/22/22 04:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 17:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 17:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 17:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 17:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 17:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/21/22 17:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/21/22 17:43*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/21/22 17:43*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*03/21/22 17:43*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-13_031522
Lab Sample ID: 240-163834-15
Date Collected: 03/15/22 10:05
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*03/22/22 04:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 18:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 18:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 18:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 18:08*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 18:08*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 18:08*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 18:08*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_301522
Lab Sample ID: 240-163834-16
Date Collected: 03/15/22 11:00
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.1		2.0	0.86	ug/L			03/22/22 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*03/22/22 05:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 18:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 18:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/21/22 18:33*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 18:33*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/21/22 18:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-6_031522
Lab Sample ID: 240-163834-17
Date Collected: 03/15/22 11:13
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.9		2.0	0.86	ug/L			03/22/22 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/22/22 05:27*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 18:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 18:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 18:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 18:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/21/22 18:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 18:58*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 18:58*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*03/21/22 18:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-5_031522
Lab Sample ID: 240-163834-18
Date Collected: 03/15/22 11:27
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			03/22/22 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/22/22 05:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 19:23	2
cis-1,2-Dichloroethene	**2.9**		2.0	0.92	ug/L			03/21/22 19:23	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 19:23	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 19:23	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 19:23	2
Vinyl chloride	**1.6**	**J**	2.0	0.90	ug/L			03/21/22 19:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/21/22 19:23*	*2*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 19:23*	*2*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 19:23*	*2*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/21/22 19:23*	*2*

Client Sample ID: SL-8_031522
Lab Sample ID: 240-163834-19

Date Collected: 03/15/22 12:50
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			03/22/22 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*03/22/22 06:17*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 19:48	2
cis-1,2-Dichloroethene	**1.6**	**J**	2.0	0.92	ug/L			03/21/22 19:48	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 19:48	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 19:48	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 19:48	2
Vinyl chloride	**0.90**	**J**	2.0	0.90	ug/L			03/21/22 19:48	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/21/22 19:48*	*2*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/21/22 19:48*	*2*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/21/22 19:48*	*2*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/21/22 19:48*	*2*

Client Sample ID: SL-9_031522
Lab Sample ID: 240-163834-20
Date Collected: 03/15/22 13:12
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			03/22/22 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*03/22/22 06:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/21/22 20:13	2
cis-1,2-Dichloroethene	**1.5**	**J**	2.0	0.92	ug/L			03/21/22 20:13	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 20:13	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/21/22 20:13	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/21/22 20:13	2
Vinyl chloride	**0.94**	**J**	2.0	0.90	ug/L			03/21/22 20:13	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/21/22 20:13*	*2*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/21/22 20:13*	*2*
Toluene-d8 (Surr)	*103*		*78 - 122*		*03/21/22 20:13*	*2*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/21/22 20:13*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_031622
Lab Sample ID: 240-163834-22
Date Collected: 03/16/22 09:06
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			03/22/22 07:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*03/22/22 07:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 20:38	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			03/21/22 20:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 20:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 20:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 20:38	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			03/21/22 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/21/22 20:38*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 20:38*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/21/22 20:38*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 20:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-11_031622
Lab Sample ID: 240-163834-23
Date Collected: 03/16/22 09:25
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		2.0	0.86	ug/L			03/22/22 07:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/22/22 07:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 21:03	1
cis-1,2-Dichloroethene	**7.2**		1.0	0.46	ug/L			03/21/22 21:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 21:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 21:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 21:03	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			03/21/22 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/21/22 21:03*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/21/22 21:03*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*03/21/22 21:03*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/21/22 21:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-23_031622
Lab Sample ID: 240-163834-24
Date Collected: 03/16/22 09:43
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			03/21/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*03/21/22 23:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 15:12	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			03/22/22 15:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 15:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 15:12	1
Trichloroethene	**0.59**	**J**	1.0	0.44	ug/L			03/22/22 15:12	1
Vinyl chloride	**0.85**	**J**	1.0	0.45	ug/L			03/22/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/22/22 15:12*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/22/22 15:12*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*03/22/22 15:12*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*03/22/22 15:12*	*1*

Client Sample ID: SL-12_031622
Lab Sample ID: 240-163834-25

Date Collected: 03/16/22 09:55
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			03/21/22 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 120*		*03/21/22 23:54*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 15:36	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			03/22/22 15:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 15:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 15:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 15:36	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			03/22/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/22/22 15:36*	*1*
4-Bromofluorobenzene (Surr)	*108*		*56 - 136*		*03/22/22 15:36*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*03/22/22 15:36*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/22/22 15:36*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-19_031622
Lab Sample ID: 240-163834-26
Date Collected: 03/16/22 10:07
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*03/22/22 00:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 15:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/22/22 15:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 15:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 15:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 15:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/22/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*03/22/22 15:59*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*03/22/22 15:59*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*03/22/22 15:59*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/22/22 15:59*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_031722
Lab Sample ID: 240-163834-27
Date Collected: 03/16/22 11:27
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.9**		2.0	0.86	ug/L			03/22/22 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*03/22/22 00:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 16:23	1
cis-1,2-Dichloroethene	**6.6**		1.0	0.46	ug/L			03/22/22 16:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 16:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 16:23	1
Trichloroethene	**1.4**		1.0	0.44	ug/L			03/22/22 16:23	1
Vinyl chloride	**2.9**		1.0	0.45	ug/L			03/22/22 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/22/22 16:23*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*03/22/22 16:23*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*03/22/22 16:23*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/22/22 16:23*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_031722
Lab Sample ID: 240-163834-28
Date Collected: 03/17/22 09:42
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			03/22/22 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 120*		*03/22/22 01:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/22/22 18:21	2
cis-1,2-Dichloroethene	**48**		2.0	0.92	ug/L			03/22/22 18:21	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/22/22 18:21	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/22/22 18:21	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/22/22 18:21	2
Vinyl chloride	**60**		2.0	0.90	ug/L			03/22/22 18:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/22/22 18:21*	*2*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/22/22 18:21*	*2*
Toluene-d8 (Surr)	*108*		*78 - 122*		*03/22/22 18:21*	*2*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/22/22 18:21*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1256_031722
Lab Sample ID: 240-163834-29
Date Collected: 03/17/22 10:05
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 120*		*03/22/22 01:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 16:46	1
cis-1,2-Dichloroethene	**76**	**E**	1.0	0.46	ug/L			03/22/22 16:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 16:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 16:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 16:46	1
Vinyl chloride	**18**		1.0	0.45	ug/L			03/22/22 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/22/22 16:46*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*03/22/22 16:46*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*03/22/22 16:46*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/22/22 16:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**89**		5.0	2.3	ug/L			03/23/22 15:32	5
Vinyl chloride	**25**		5.0	2.3	ug/L			03/23/22 15:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*03/23/22 15:32*	*5*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/23/22 15:32*	*5*
Toluene-d8 (Surr)	*93*		*78 - 122*		*03/23/22 15:32*	*5*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*03/23/22 15:32*	*5*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1244_031722
Lab Sample ID: 240-163834-30
Date Collected: 03/17/22 10:31
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.3**		2.0	0.86	ug/L			03/22/22 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 120*		*03/22/22 01:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 17:10	1
cis-1,2-Dichloroethene	**29**		1.0	0.46	ug/L			03/22/22 17:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 17:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 17:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 17:10	1
Vinyl chloride	**8.2**		1.0	0.45	ug/L			03/22/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/22/22 17:10*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/22/22 17:10*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*03/22/22 17:10*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/22/22 17:10*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_031722
Lab Sample ID: 240-163834-32
Date Collected: 03/17/22 10:53
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**20**		2.0	0.86	ug/L			03/22/22 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*03/22/22 02:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/22/22 18:45	2
cis-1,2-Dichloroethene	**49**		2.0	0.92	ug/L			03/22/22 18:45	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/22/22 18:45	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/22/22 18:45	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/22/22 18:45	2
Vinyl chloride	**57**		2.0	0.90	ug/L			03/22/22 18:45	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*03/22/22 18:45*	*2*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*03/22/22 18:45*	*2*
Toluene-d8 (Surr)	*109*		*78 - 122*		*03/22/22 18:45*	*2*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*03/22/22 18:45*	*2*

Client Sample ID: DUP-01_031422
Lab Sample ID: 240-163834-33
Date Collected: 03/14/22 00:00
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			03/22/22 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*66 - 120*		*03/22/22 19:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 17:34	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			03/22/22 17:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 17:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 17:34	1
Trichloroethene	**0.48**	**J**	1.0	0.44	ug/L			03/22/22 17:34	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			03/22/22 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/22/22 17:34*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/22/22 17:34*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*03/22/22 17:34*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/22/22 17:34*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-02_031422
Lab Sample ID: 240-163834-34
Date Collected: 03/14/22 00:00
Matrix: Water
Date Received: 03/18/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**13**		2.0	0.86	ug/L			03/22/22 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*03/22/22 20:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 17:57	1
cis-1,2-Dichloroethene	**26**		1.0	0.46	ug/L			03/22/22 17:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 17:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 17:57	1
Vinyl chloride	**18**		1.0	0.45	ug/L			03/22/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/22/22 17:57*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*03/22/22 17:57*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*03/22/22 17:57*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/22/22 17:57*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-163834-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-163574-E-22 MS	Matrix Spike	94	99	95	103
240-163574-H-22 MSD	Matrix Spike Duplicate	94	100	97	103
240-163834-2	SL-21_031422	96	102	102	108
240-163834-3	SL-20_031422	97	102	102	109
240-163834-4	SL-22_031422	99	103	101	107
240-163834-5	SL-4_031422	98	102	101	110
240-163834-6	SL-18_031422	99	102	101	110
240-163834-7	SL-17_031422	99	103	101	108
240-163834-8	SL-16_031422	101	103	103	109
240-163834-9	SL-3_031422	98	101	101	109
240-163834-10	SL-2_031422	99	102	102	108
240-163834-12	MH-1231_031422	94	99	100	106
240-163834-13	SL-15_031522	96	101	100	106
240-163834-14	SL-14_031522	97	101	99	106
240-163834-15	SL-13_031522	99	102	102	109
240-163834-16	SL-7_301522	99	101	102	110
240-163834-17	SL-6_031522	97	102	101	106
240-163834-18	SL-5_031522	97	102	101	108
240-163834-19	SL-8_031522	100	103	100	111
240-163834-20	SL-9_031522	100	103	103	111
240-163834-22	SL-10_031622	99	102	102	109
240-163834-23	SL-11_031622	97	102	103	109
240-163834-24	SL-23_031622	101	103	109	113
240-163834-25	SL-12_031622	101	108	109	112
240-163834-26	SL-19_031622	102	107	107	112
240-163834-27	MH-1259_031722	100	105	106	112
240-163834-28	MH-1255_031722	97	103	108	112
240-163834-29	MH-1256_031722	98	105	108	111
240-163834-29 - RA	MH-1256_031722	91	96	93	98
240-163834-30	MH-1244_031722	100	100	109	112
240-163834-32	MH-1231A_031722	104	107	109	113
240-163834-33	DUP-01_031422	99	100	108	111
240-163834-34	DUP-02_031422	97	105	110	108
LCS 240-520333/5	Lab Control Sample	91	103	106	95
LCS 240-520557/5	Lab Control Sample	90	96	98	99
LCS 240-520596/5	Lab Control Sample	89	98	94	98
LCSD 240-520333/6	Lab Control Sample Dup	89	101	102	94
MB 240-520333/9	Method Blank	98	101	101	107
MB 240-520557/9	Method Blank	101	96	101	104
MB 240-520596/8	Method Blank	97	101	97	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-163556-B-3 MS	Matrix Spike	77						
240-163556-B-3 MSD	Matrix Spike Duplicate	77						
240-163834-2	SL-21_031422	103						
240-163834-3	SL-20_031422	101						
240-163834-4	SL-22_031422	102						
240-163834-5	SL-4_031422	107						
240-163834-6	SL-18_031422	107						
240-163834-7	SL-17_031422	104						
240-163834-8	SL-16_031422	103						
240-163834-9	SL-3_031422	104						
240-163834-10	SL-2_031422	103						
240-163834-12	MH-1231_031422	103						
240-163834-13	SL-15_031522	107						
240-163834-13 MS	SL-15_031522	105						
240-163834-13 MSD	SL-15_031522	107						
240-163834-14	SL-14_031522	104						
240-163834-15	SL-13_031522	102						
240-163834-16	SL-7_301522	102						
240-163834-17	SL-6_031522	104						
240-163834-18	SL-5_031522	104						
240-163834-19	SL-8_031522	106						
240-163834-20	SL-9_031522	106						
240-163834-22	SL-10_031622	106						
240-163834-23	SL-11_031622	107						
240-163834-24	SL-23_031622	92						
240-163834-25	SL-12_031622	93						
240-163834-26	SL-19_031622	91						
240-163834-27	MH-1259_031722	94						
240-163834-28	MH-1255_031722	93						
240-163834-29	MH-1256_031722	93						
240-163834-30	MH-1244_031722	94						
240-163834-32	MH-1231A_031722	91						
240-163834-33	DUP-01_031422	79						
240-163834-34	DUP-02_031422	80						
LCS 240-520438/3	Lab Control Sample	99						
LCS 240-520439/3	Lab Control Sample	92						
LCS 240-520568/4	Lab Control Sample	76						
MB 240-520438/4	Method Blank	99						
MB 240-520439/4	Method Blank	90						
MB 240-520568/5	Method Blank	78						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-520333/9
Matrix: Water
Analysis Batch: 520333

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/21/22 12:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/21/22 12:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 12:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/21/22 12:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/21/22 12:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/21/22 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/21/22 12:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/21/22 12:43*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/21/22 12:43*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/21/22 12:43*	*1*

Lab Sample ID: LCS 240-520333/5
Matrix: Water
Analysis Batch: 520333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	22.6		ug/L		113	63 - 134		
cis-1,2-Dichloroethene			20.0	20.4		ug/L		102	77 - 123		
Tetrachloroethene			20.0	19.5		ug/L		98	76 - 123		
trans-1,2-Dichloroethene			20.0	21.1		ug/L		106	75 - 124		
Trichloroethene			20.0	19.6		ug/L		98	70 - 122		
Vinyl chloride			20.0	20.0		ug/L		100	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
Toluene-d8 (Surr)	*106*		*78 - 122*
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: LCSD 240-520333/6
Matrix: Water
Analysis Batch: 520333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	19.2		ug/L		96	63 - 134	16	35
cis-1,2-Dichloroethene			20.0	16.8		ug/L		84	77 - 123	19	35
Tetrachloroethene			20.0	16.2		ug/L		81	76 - 123	18	35
trans-1,2-Dichloroethene			20.0	17.9		ug/L		90	75 - 124	16	35
Trichloroethene			20.0	16.1		ug/L		80	70 - 122	20	35
Vinyl chloride			20.0	18.3		ug/L		92	60 - 144	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-520333/6
Matrix: Water
Analysis Batch: 520333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*94*		*73 - 120*

Lab Sample ID: MB 240-520557/9
Matrix: Water
Analysis Batch: 520557

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/22/22 14:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/22/22 14:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 14:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/22/22 14:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/22/22 14:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/22/22 14:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/22/22 14:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/22/22 14:48*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/22/22 14:48*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*03/22/22 14:48*	*1*

Lab Sample ID: LCS 240-520557/5
Matrix: Water
Analysis Batch: 520557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	25.9		ug/L		104	63 - 134
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	77 - 123
Tetrachloroethene	25.0	23.2		ug/L		93	76 - 123
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	75 - 124
Trichloroethene	25.0	23.5		ug/L		94	70 - 122
Vinyl chloride	25.0	25.1		ug/L		100	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Lab Sample ID: MB 240-520596/8
Matrix: Water
Analysis Batch: 520596

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/23/22 11:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/23/22 11:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/23/22 11:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/23/22 11:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/23/22 11:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-520596/8
Matrix: Water
Analysis Batch: 520596

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/23/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/23/22 11:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/23/22 11:52*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/23/22 11:52*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*03/23/22 11:52*	*1*

Lab Sample ID: LCS 240-520596/5
Matrix: Water
Analysis Batch: 520596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	23.7		ug/L		118	63 - 134
cis-1,2-Dichloroethene	20.0	22.5		ug/L		112	77 - 123
Tetrachloroethene	20.0	22.9		ug/L		115	76 - 123
trans-1,2-Dichloroethene	20.0	22.1		ug/L		111	75 - 124
Trichloroethene	20.0	22.2		ug/L		111	70 - 122
Vinyl chloride	20.0	21.2		ug/L		106	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*94*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-163574-E-22 MS
Matrix: Water
Analysis Batch: 520596

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	20.0	20.9		ug/L		104	56 - 135
cis-1,2-Dichloroethene	1.0	U	20.0	19.7		ug/L		98	66 - 128
Tetrachloroethene	1.0	U	20.0	19.4		ug/L		97	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	19.6		ug/L		98	56 - 136
Trichloroethene	1.0	U	20.0	19.5		ug/L		98	61 - 124
Vinyl chloride	1.0	U	20.0	19.5		ug/L		97	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-163574-H-22 MSD
Matrix: Water
Analysis Batch: 520596

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	20.0	21.3		ug/L		107	56 - 135	2	26
cis-1,2-Dichloroethene	1.0	U	20.0	19.7		ug/L		98	66 - 128	0	14
Tetrachloroethene	1.0	U	20.0	19.9		ug/L		100	62 - 131	3	20
trans-1,2-Dichloroethene	1.0	U	20.0	19.9		ug/L		100	56 - 136	2	15
Trichloroethene	1.0	U	20.0	19.7		ug/L		98	61 - 124	1	15
Vinyl chloride	1.0	U	20.0	20.3		ug/L		101	43 - 157	4	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*
Toluene-d8 (Surr)	*97*		*78 - 122*
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-520438/4
Matrix: Water
Analysis Batch: 520438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/21/22 21:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*		*03/21/22 21:58*	*1*

Lab Sample ID: LCS 240-520438/3
Matrix: Water
Analysis Batch: 520438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.61		ug/L		96	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 120*

Lab Sample ID: 240-163834-13 MS
Matrix: Water
Analysis Batch: 520438

Client Sample ID: SL-15_031522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	11.2		ug/L		112	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-163834-13 MSD
Matrix: Water
Analysis Batch: 520438

Client Sample ID: SL-15_031522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	11.0		ug/L		110	51 - 153	2	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Lab Sample ID: MB 240-520439/4
Matrix: Water
Analysis Batch: 520439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/21/22 21:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*66 - 120*		*03/21/22 21:55*	*1*

Lab Sample ID: LCS 240-520439/3
Matrix: Water
Analysis Batch: 520439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.4		ug/L		104	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*

Lab Sample ID: MB 240-520568/5
Matrix: Water
Analysis Batch: 520568

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/22/22 18:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*66 - 120*		*03/22/22 18:53*	*1*

Lab Sample ID: LCS 240-520568/4
Matrix: Water
Analysis Batch: 520568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.7		ug/L		107	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-163556-B-3 MS
Matrix: Water
Analysis Batch: 520568

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	4.9		10.0	15.9		ug/L		110	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*66 - 120*

Lab Sample ID: 240-163556-B-3 MSD
Matrix: Water
Analysis Batch: 520568

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	4.9		10.0	15.2		ug/L		103	51 - 153	4	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*66 - 120*

GC/MS VOA

Analysis Batch: 520333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-2	SL-21_031422	Total/NA	Water	8260D	
240-163834-3	SL-20_031422	Total/NA	Water	8260D	
240-163834-4	SL-22_031422	Total/NA	Water	8260D	
240-163834-5	SL-4_031422	Total/NA	Water	8260D	
240-163834-6	SL-18_031422	Total/NA	Water	8260D	
240-163834-7	SL-17_031422	Total/NA	Water	8260D	
240-163834-8	SL-16_031422	Total/NA	Water	8260D	
240-163834-9	SL-3_031422	Total/NA	Water	8260D	
240-163834-10	SL-2_031422	Total/NA	Water	8260D	
240-163834-12	MH-1231_031422	Total/NA	Water	8260D	
240-163834-13	SL-15_031522	Total/NA	Water	8260D	
240-163834-14	SL-14_031522	Total/NA	Water	8260D	
240-163834-15	SL-13_031522	Total/NA	Water	8260D	
240-163834-16	SL-7_301522	Total/NA	Water	8260D	
240-163834-17	SL-6_031522	Total/NA	Water	8260D	
240-163834-18	SL-5_031522	Total/NA	Water	8260D	
240-163834-19	SL-8_031522	Total/NA	Water	8260D	
240-163834-20	SL-9_031522	Total/NA	Water	8260D	
240-163834-22	SL-10_031622	Total/NA	Water	8260D	
240-163834-23	SL-11_031622	Total/NA	Water	8260D	
MB 240-520333/9	Method Blank	Total/NA	Water	8260D	
LCS 240-520333/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-520333/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 520438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-2	SL-21_031422	Total/NA	Water	8260D SIM	
240-163834-3	SL-20_031422	Total/NA	Water	8260D SIM	
240-163834-4	SL-22_031422	Total/NA	Water	8260D SIM	
240-163834-5	SL-4_031422	Total/NA	Water	8260D SIM	
240-163834-6	SL-18_031422	Total/NA	Water	8260D SIM	
240-163834-7	SL-17_031422	Total/NA	Water	8260D SIM	
240-163834-8	SL-16_031422	Total/NA	Water	8260D SIM	
240-163834-9	SL-3_031422	Total/NA	Water	8260D SIM	
240-163834-10	SL-2_031422	Total/NA	Water	8260D SIM	
240-163834-12	MH-1231_031422	Total/NA	Water	8260D SIM	
240-163834-13	SL-15_031522	Total/NA	Water	8260D SIM	
240-163834-14	SL-14_031522	Total/NA	Water	8260D SIM	
240-163834-15	SL-13_031522	Total/NA	Water	8260D SIM	
240-163834-16	SL-7_301522	Total/NA	Water	8260D SIM	
240-163834-17	SL-6_031522	Total/NA	Water	8260D SIM	
240-163834-18	SL-5_031522	Total/NA	Water	8260D SIM	
240-163834-19	SL-8_031522	Total/NA	Water	8260D SIM	
240-163834-20	SL-9_031522	Total/NA	Water	8260D SIM	
240-163834-22	SL-10_031622	Total/NA	Water	8260D SIM	
240-163834-23	SL-11_031622	Total/NA	Water	8260D SIM	
MB 240-520438/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-520438/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-163834-13 MS	SL-15_031522	Total/NA	Water	8260D SIM	
240-163834-13 MSD	SL-15_031522	Total/NA	Water	8260D SIM	

GC/MS VOA

Analysis Batch: 520439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-24	SL-23_031622	Total/NA	Water	8260D SIM	
240-163834-25	SL-12_031622	Total/NA	Water	8260D SIM	
240-163834-26	SL-19_031622	Total/NA	Water	8260D SIM	
240-163834-27	MH-1259_031722	Total/NA	Water	8260D SIM	
240-163834-28	MH-1255_031722	Total/NA	Water	8260D SIM	
240-163834-29	MH-1256_031722	Total/NA	Water	8260D SIM	
240-163834-30	MH-1244_031722	Total/NA	Water	8260D SIM	
240-163834-32	MH-1231A_031722	Total/NA	Water	8260D SIM	
MB 240-520439/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-520439/3	Lab Control Sample	Total/NA	Water	8260D SIM	

Analysis Batch: 520557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-24	SL-23_031622	Total/NA	Water	8260D	
240-163834-25	SL-12_031622	Total/NA	Water	8260D	
240-163834-26	SL-19_031622	Total/NA	Water	8260D	
240-163834-27	MH-1259_031722	Total/NA	Water	8260D	
240-163834-28	MH-1255_031722	Total/NA	Water	8260D	
240-163834-29	MH-1256_031722	Total/NA	Water	8260D	
240-163834-30	MH-1244_031722	Total/NA	Water	8260D	
240-163834-32	MH-1231A_031722	Total/NA	Water	8260D	
240-163834-33	DUP-01_031422	Total/NA	Water	8260D	
240-163834-34	DUP-02_031422	Total/NA	Water	8260D	
MB 240-520557/9	Method Blank	Total/NA	Water	8260D	
LCS 240-520557/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 520568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-33	DUP-01_031422	Total/NA	Water	8260D SIM	
240-163834-34	DUP-02_031422	Total/NA	Water	8260D SIM	
MB 240-520568/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-520568/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-163556-B-3 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-163556-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 520596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-163834-29 - RA	MH-1256_031722	Total/NA	Water	8260D	
MB 240-520596/8	Method Blank	Total/NA	Water	8260D	
LCS 240-520596/5	Lab Control Sample	Total/NA	Water	8260D	
240-163574-E-22 MS	Matrix Spike	Total/NA	Water	8260D	
240-163574-H-22 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-21_031422
Lab Sample ID: 240-163834-2
Date Collected: 03/14/22 10:15
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 13:08	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/21/22 22:48	CS	TAL CAN

Client Sample ID: SL-20_031422
Lab Sample ID: 240-163834-3
Date Collected: 03/14/22 10:35
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 13:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/21/22 23:13	CS	TAL CAN

Client Sample ID: SL-22_031422
Lab Sample ID: 240-163834-4
Date Collected: 03/14/22 10:55
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 13:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/21/22 23:38	CS	TAL CAN

Client Sample ID: SL-4_031422
Lab Sample ID: 240-163834-5
Date Collected: 03/14/22 11:10
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 14:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 00:03	CS	TAL CAN

Client Sample ID: SL-18_031422
Lab Sample ID: 240-163834-6
Date Collected: 03/14/22 11:30
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 14:48	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 00:28	CS	TAL CAN

Client Sample ID: SL-17_031422
Lab Sample ID: 240-163834-7
Date Collected: 03/14/22 13:00
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 15:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 00:53	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-16_031422
Lab Sample ID: 240-163834-8
Date Collected: 03/14/22 13:35
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 15:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 01:18	CS	TAL CAN

Client Sample ID: SL-3_031422
Lab Sample ID: 240-163834-9
Date Collected: 03/14/22 14:05
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 16:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 01:43	CS	TAL CAN

Client Sample ID: SL-2_031422
Lab Sample ID: 240-163834-10
Date Collected: 03/14/22 14:20
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 16:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 02:08	CS	TAL CAN

Client Sample ID: MH-1231_031422
Lab Sample ID: 240-163834-12
Date Collected: 03/14/22 14:45
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 16:53	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 02:33	CS	TAL CAN

Client Sample ID: SL-15_031522
Lab Sample ID: 240-163834-13
Date Collected: 03/15/22 09:40
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 17:18	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 02:57	CS	TAL CAN

Client Sample ID: SL-14_031522
Lab Sample ID: 240-163834-14
Date Collected: 03/15/22 09:50
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 17:43	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 04:12	CS	TAL CAN

Client Sample ID: SL-13_031522
Lab Sample ID: 240-163834-15
Date Collected: 03/15/22 10:05
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 18:08	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 04:37	CS	TAL CAN

Client Sample ID: SL-7_301522
Lab Sample ID: 240-163834-16
Date Collected: 03/15/22 11:00
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 18:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 05:02	CS	TAL CAN

Client Sample ID: SL-6_031522
Lab Sample ID: 240-163834-17
Date Collected: 03/15/22 11:13
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 18:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 05:27	CS	TAL CAN

Client Sample ID: SL-5_031522
Lab Sample ID: 240-163834-18
Date Collected: 03/15/22 11:27
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 19:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 05:52	CS	TAL CAN

Client Sample ID: SL-8_031522
Lab Sample ID: 240-163834-19
Date Collected: 03/15/22 12:50
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 19:48	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 06:17	CS	TAL CAN

Client Sample ID: SL-9_031522
Lab Sample ID: 240-163834-20
Date Collected: 03/15/22 13:12
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520333	03/21/22 20:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 06:42	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_031622
Lab Sample ID: 240-163834-22
Date Collected: 03/16/22 09:06
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 20:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 07:07	CS	TAL CAN

Client Sample ID: SL-11_031622
Lab Sample ID: 240-163834-23
Date Collected: 03/16/22 09:25
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520333	03/21/22 21:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520438	03/22/22 07:32	CS	TAL CAN

Client Sample ID: SL-23_031622
Lab Sample ID: 240-163834-24
Date Collected: 03/16/22 09:43
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 15:12	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/21/22 23:30	CS	TAL CAN

Client Sample ID: SL-12_031622
Lab Sample ID: 240-163834-25
Date Collected: 03/16/22 09:55
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 15:36	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/21/22 23:54	CS	TAL CAN

Client Sample ID: SL-19_031622
Lab Sample ID: 240-163834-26
Date Collected: 03/16/22 10:07
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 15:59	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 00:18	CS	TAL CAN

Client Sample ID: MH-1259_031722
Lab Sample ID: 240-163834-27
Date Collected: 03/16/22 11:27
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 16:23	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 00:42	CS	TAL CAN

Client Sample ID: MH-1255_031722
Lab Sample ID: 240-163834-28
Date Collected: 03/17/22 09:42
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520557	03/22/22 18:21	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 01:06	CS	TAL CAN

Client Sample ID: MH-1256_031722
Lab Sample ID: 240-163834-29
Date Collected: 03/17/22 10:05
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 16:46	SAM	TAL CAN
Total/NA	Analysis	8260D	RA	5	520596	03/23/22 15:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 01:30	CS	TAL CAN

Client Sample ID: MH-1244_031722
Lab Sample ID: 240-163834-30
Date Collected: 03/17/22 10:31
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 17:10	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 01:53	CS	TAL CAN

Client Sample ID: MH-1231A_031722
Lab Sample ID: 240-163834-32
Date Collected: 03/17/22 10:53
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520557	03/22/22 18:45	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520439	03/22/22 02:16	CS	TAL CAN

Client Sample ID: DUP-01_031422
Lab Sample ID: 240-163834-33
Date Collected: 03/14/22 00:00
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 17:34	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520568	03/22/22 19:40	CS	TAL CAN

Client Sample ID: DUP-02_031422
Lab Sample ID: 240-163834-34
Date Collected: 03/14/22 00:00
Matrix: Water
Date Received: 03/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520557	03/22/22 17:57	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520568	03/22/22 20:04	CS	TAL CAN

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-163834-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22 *
Connecticut	State	PH-0590	12-31-21 *
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	03-31-22
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-21-14	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No 1 | 4
Company Name: Arcadis	DW NPDES RCRA Other	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500		Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377		Sampler Name: Mary Schafer, Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240		Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling		Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04					
PO # 30080642.701.04					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-21_031422	3/14/22	10.15		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20_031422	3/14/22	10.35		X						6					N	G	X	X	X	X	X	X	X	" "
SL-22_031422	3/14/22	10.55		X						6					N	G	X	X	X	X	X	X	X	" "
SL-4_031422	3/14/22	11.10		X						6					N	G	X	X	X	X	X	X	X	" "
SL-18_031422	3/14/22	11.30		X						6					N	G	X	X	X	X	X	X	X	" "
SL-17_031422	3/14/22	13.00		X						6					N	G	X	X	X	X	X	X	X	" "
SL-16_031422	3/14/22	13.35		X						6					N	G	X	X	X	X	X	X	X	" "
SL-3_031422	3/14/22	14.05		X						6					N	G	X	X	X	X	X	X	X	" "
SL-2_031422	3/14/22	14.20		X						6					N	G	X	X	X	X	X	X	X	" "

QC Check

Possible Hazard Identification: ✓ Non-Hazard; Flammable; Skin Irritant; Poison B; Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return to Client; ✓ Disposal By Lab; Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Mary Schafer	Arcadis	3/17/22 1455		FEETA	3/17/22 1456
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	FEETA	3/17/22 1458		FEETNC	3-18-22 800
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

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240-163834 Chain of Custody

3/24/2022

MICHIGAN
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Chain of Custody Record

0.9/0.7

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive Suite 200 / Brighton, MI 48116 / 810-229-2763

Client Contact	Regulatory program					TestAmerica Laboratories, Inc.
Company Name: Arcadis		DW	NPDES	RCRA	Other	COC No. 2/4
Address: 28550 Cabot Drive, Suite 500	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico			COCs
City/State/Zip: Novi, MI, 48377	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396			For lab use only
Phone: 248-994-2240	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time				Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Sampler Name: Gary Schafer, Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day				Lab sampling
Project Number: 30080642.701.04	Method of Shipment/Carrier:					Job/SDG No:
PO # 30080642.701.04	Shipping/Tracking No:					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions	QC check
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	
MH-1231_031422	3/14/22	14.45		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
SL-15_031522	3/15/22	09.40		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-14_031522	3/15/22	09.50		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-13_031522	3/15/22	10.05		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-7_031522	3/15/22	11.00		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-6_031522	3/15/22	11.13		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-5_031522	3/15/22	11.27		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-8_031522	3/15/22	12.50		X						6					N	G	X	X	X	X	X	X	X	" "	✓
SL-9_031522	3/15/22	13.12		X						6					N	G	X	X	X	X	X	X	X	" "	✓

Possible Hazard Identification
✓ Non-Hazard Flammable An Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client ✓ Disposal By Lab Archive For [ ] Months

Special Instructions/QC Requirements & Comments

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
[signature]	Arcadis	3/17/22 1455	[signature]	EETA	3/17/22 1556
[signature]	EETA	3/17/22 1458	[signature]	EETNC	3-18-22 800
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

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3/24/2022

MICHIGAN 190

Chain of Custody Record

0.9|0.7

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: DW NPDES RCRA Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: 3|4
Phone: 248-994-2240	Sampler Name: Gary Schafer	TAT if different from below	COCs
Project Name: Ford LTP Utility Corridor Sampling	Korey Pearson, Samantha Hindle Sommer Guy	3 day	For lab use only
Project Number: 30080642.701.04	Method of Shipment/Carrier:		Walk-in client
PO # 30080642.701.04	Shipping/Tracking No:		Lab sampling
			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-10_031622	3/16/22	9:06		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11_031622	3/16/22	09:25		X						6					N	G	X	X	X	X	X	X	X	" "
SL-23_031622	3/16/22	0943		X						6					N	G	X	X	X	X	X	X	X	" "
SL-12_031622	3/16/22	0955		X						6					N	G	X	X	X	X	X	X	X	" "
SL-19_031622	3/16/22	10:07		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1259_031622	3/16/22	1127		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1255_031722	3/17/22	0942		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1256_031722	3/17/22	10:05		X						6					N	G	X	X	X	X	X	X	X	" "
MH-1244_031722	3/17/22	10:31		X						4					N	G	X	X	X	X	X	X	X	" "

QC check

Possible Hazard Identification: ✓ Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return to Client ✓ Disposal By Lab Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
G. Schafer	Arcadis	3/17/22 1455		FLTA	3 17-22 1456
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	FEETA	3/17/22 1458		FEETNC	3-18-22 800
Relinquished by	Company	Date/Time	Received in Laboratory by:	Company:	Date/Time:

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3/24/2022

MICHIGAN 190

Chain of Custody Record

0.9|0.7

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive Suite 200 / Brighton, MI 48116 / 810-229-2763

Client Contact

Company Name: Arcadis
Address: 28550 Cabot Drive, Suite 500
City/State/Zip: Novi, MI, 48377
Phone: 248-994-2240
Project Name: Ford LTP Utility Corridor Sampling
Project Number: 30080642.701 04
PO # 30080642.701 04

Regulatory program: DW NPDES RCRA Other

Client Project Manager: Kris Hinskey
Telephone: 248-994-2240
Email: kristoffer.hinskey@arcadis.com

Site Contact: Quinn Carnahan
Telephone: 585-662-4023

Lab Contact: Mike DelMonico
Telephone: 330-497-9396

Sampler Name: Gary Schafer
Korey Pearson Samantha Hindle Sommer Guy
Method of Shipment/Carrier:
Shipping/Tracking No:

Analysis Turnaround Time
TAT (if different from below)
3 day

TestAmerica Laboratories, Inc.
COC No: 4 | 4
COCs
For lab use only
Walk-in client
Lab sampling
Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions
TRIP BLANK	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231A-031722	3/17/22	1053		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM ✓
DUP-01-031422	3/14/22	—		X						6					N	G	X	X	X	X	X	X	X	" " ✓
DUP-02-031422	3/14/22	—		X						6					N	G	X	X	X	X	X	X	X	" " ✓

Received

Possible Hazard Identification
✓ Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return to Client ✓ Disposal By Lab Archive For ___ Months

Special Instructions/QC Requirements & Comments
Submit all results through Cadena at jtomalia@cadenaco.com Cadena #E205162
Level IV Reporting requested

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	Arcadis	3/17/22 1455		EETA	3/17/22 1456
	EETA	3/17/22 1458		EETNC	3-18-22 800
	Company	Date/Time	Received in Laboratory by	Company	Date/Time

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3/24/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 163834**
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by Tammy Boyer

Cooler Received on 3-18-22 Opened on 3-18-22

FedEx 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1 Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-14 (CF **-0.2** °C) Observed Cooler Temp 0.9 °C Corrected Cooler Temp 0.7 °C

IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No NAK 3/22/22
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No NAK 3/22/22
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC157842
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by

no trip blanks received, Client wants to continue with Analysis

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

WI-NC-099

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-164043-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
3/29/2022 2:28:25 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-164043-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-164043-1

Comments
No additional comments.

Receipt
The samples were received on 3/24/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7º C.

GC/MS VOA
Method 8260D SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-8_032222 (240-164043-19).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164043-1	TRIP BLANK_156	Water	03/23/22 00:00	03/24/22 08:00
240-164043-2	SL-21_032122	Water	03/21/22 10:10	03/24/22 08:00
240-164043-3	SL-20_032122	Water	03/21/22 10:25	03/24/22 08:00
240-164043-4	SL-22_032122	Water	03/21/22 10:40	03/24/22 08:00
240-164043-5	SL-4_032122	Water	03/21/22 11:00	03/24/22 08:00
240-164043-6	SL-18_032122	Water	03/21/22 12:20	03/24/22 08:00
240-164043-7	SL-17_032122	Water	03/21/22 12:40	03/24/22 08:00
240-164043-8	SL-16_032122	Water	03/21/22 13:10	03/24/22 08:00
240-164043-9	SL-3_032122	Water	03/21/22 13:40	03/24/22 08:00
240-164043-10	SL-2_032122	Water	03/21/22 14:00	03/24/22 08:00
240-164043-11	TRIP BLANK_157	Water	03/23/22 00:00	03/24/22 08:00
240-164043-12	MH-1231_032122	Water	03/21/22 14:20	03/24/22 08:00
240-164043-13	SL-15_032222	Water	03/22/22 09:25	03/24/22 08:00
240-164043-14	SL-14_032222	Water	03/22/22 09:40	03/24/22 08:00
240-164043-15	SL-13_032222	Water	03/22/22 09:55	03/24/22 08:00
240-164043-16	SL-7_032222	Water	03/22/22 10:35	03/24/22 08:00
240-164043-17	SL-6_032222	Water	03/22/22 10:50	03/24/22 08:00
240-164043-18	SL-5_032222	Water	03/22/22 11:05	03/24/22 08:00
240-164043-19	SL-8_032222	Water	03/22/22 11:50	03/24/22 08:00
240-164043-20	SL-9_032222	Water	03/22/22 12:15	03/24/22 08:00
240-164043-21	TRIP BLANK_158	Water	03/23/22 00:00	03/24/22 08:00
240-164043-22	SL-10_032222	Water	03/22/22 12:35	03/24/22 08:00
240-164043-23	SL-11_032222	Water	03/22/22 12:50	03/24/22 08:00
240-164043-24	SL-23_032222	Water	03/22/22 13:00	03/24/22 08:00
240-164043-25	SL-12_032222	Water	03/22/22 13:15	03/24/22 08:00
240-164043-26	SL-19_032222	Water	03/22/22 13:30	03/24/22 08:00
240-164043-27	MH-1255_032222	Water	03/22/22 14:20	03/24/22 08:00
240-164043-28	MH-1231A_032222	Water	03/22/22 14:40	03/24/22 08:00
240-164043-29	MH-1256_032322	Water	03/23/22 09:40	03/24/22 08:00
240-164043-30	MH-1259_032322	Water	03/23/22 10:00	03/24/22 08:00
240-164043-31	TRIP BLANK_155	Water	03/23/22 00:00	03/24/22 08:00
240-164043-32	MH-1244_032322	Water	03/23/22 10:20	03/24/22 08:00
240-164043-33	DUP-01	Water	03/21/22 00:00	03/24/22 08:00
240-164043-34	DUP-02	Water	03/21/22 00:00	03/24/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_156 — Lab Sample ID: 240-164043-1

No Detections.

Client Sample ID: SL-21_032122 — Lab Sample ID: 240-164043-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_032122 — Lab Sample ID: 240-164043-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.88	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_032122 — Lab Sample ID: 240-164043-4

No Detections.

Client Sample ID: SL-4_032122 — Lab Sample ID: 240-164043-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_032122 — Lab Sample ID: 240-164043-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_032122 — Lab Sample ID: 240-164043-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.64	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_032122 — Lab Sample ID: 240-164043-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.7		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.8		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	4.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_032122 — Lab Sample ID: 240-164043-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-2_032122 — Lab Sample ID: 240-164043-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_157 — Lab Sample ID: 240-164043-11

No Detections.

Client Sample ID: MH-1231_032122 — Lab Sample ID: 240-164043-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	14		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_032222 — Lab Sample ID: 240-164043-13

No Detections.

Client Sample ID: SL-14_032222 — Lab Sample ID: 240-164043-14

No Detections.

Client Sample ID: SL-13_032222 — Lab Sample ID: 240-164043-15

No Detections.

Client Sample ID: SL-7_032222 — Lab Sample ID: 240-164043-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_032222 — Lab Sample ID: 240-164043-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_032222 — Lab Sample ID: 240-164043-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_032222 — Lab Sample ID: 240-164043-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_032222 — Lab Sample ID: 240-164043-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_158
Lab Sample ID: 240-164043-21

No Detections.

Client Sample ID: SL-10_032222
Lab Sample ID: 240-164043-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_032222
Lab Sample ID: 240-164043-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.93	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_032222
Lab Sample ID: 240-164043-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_032222
Lab Sample ID: 240-164043-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_032222
Lab Sample ID: 240-164043-26

No Detections.

Client Sample ID: MH-1255_032222
Lab Sample ID: 240-164043-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	47		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	63		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1231A_032222
Lab Sample ID: 240-164043-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	16		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	38		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	42		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1256_032322
Lab Sample ID: 240-164043-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_032322
Lab Sample ID: 240-164043-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MH-1259_032322 (Continued) — Lab Sample ID: 240-164043-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_155 — Lab Sample ID: 240-164043-31

No Detections.

Client Sample ID: MH-1244_032322 — Lab Sample ID: 240-164043-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	180		3.3	1.5	ug/L	3.333		8260D	Total/NA
Vinyl chloride	26		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-164043-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 240-164043-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	23		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	18		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_156
Lab Sample ID: 240-164043-1
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 14:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 14:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 14:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 14:23*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/25/22 14:23*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*03/25/22 14:23*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/25/22 14:23*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-21_032122
Lab Sample ID: 240-164043-2
Date Collected: 03/21/22 10:10
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			03/25/22 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/25/22 21:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 14:48	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			03/25/22 14:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 14:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:48	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			03/25/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/25/22 14:48*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/25/22 14:48*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/25/22 14:48*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/25/22 14:48*	*1*

Client Sample ID: SL-20_032122
Lab Sample ID: 240-164043-3

Date Collected: 03/21/22 10:25
Matrix: Water

Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			03/25/22 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/25/22 21:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 15:13	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.46	ug/L			03/25/22 15:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 15:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:13	1
Vinyl chloride	**0.88**	**J**	1.0	0.45	ug/L			03/25/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 15:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 15:13*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 15:13*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/25/22 15:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-22_032122
Lab Sample ID: 240-164043-4
Date Collected: 03/21/22 10:40
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/25/22 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/25/22 21:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 15:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 15:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 15:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 15:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 15:38*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 15:38*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/25/22 15:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_032122
Lab Sample ID: 240-164043-5
Date Collected: 03/21/22 11:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.5**		2.0	0.86	ug/L			03/25/22 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/25/22 22:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 16:03	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			03/25/22 16:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 16:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:03	1
Vinyl chloride	**6.4**		1.0	0.45	ug/L			03/25/22 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 16:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 16:03*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 16:03*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/25/22 16:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-18_032122
Lab Sample ID: 240-164043-6
Date Collected: 03/21/22 12:20
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			03/25/22 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*03/25/22 22:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 16:28	1
cis-1,2-Dichloroethene	**8.4**		1.0	0.46	ug/L			03/25/22 16:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 16:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:28	1
Vinyl chloride	**4.7**		1.0	0.45	ug/L			03/25/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 16:28*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/25/22 16:28*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*03/25/22 16:28*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/25/22 16:28*	*1*

Client Sample ID: SL-17_032122
Lab Sample ID: 240-164043-7

Date Collected: 03/21/22 12:40
Matrix: Water

Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.0**		2.0	0.86	ug/L			03/25/22 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*03/25/22 23:05*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 13:22	1
cis-1,2-Dichloroethene	**9.6**		1.0	0.46	ug/L			03/28/22 13:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 13:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 13:22	1
Trichloroethene	**0.64**	**J**	1.0	0.44	ug/L			03/28/22 13:22	1
Vinyl chloride	**6.2**		1.0	0.45	ug/L			03/28/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/28/22 13:22*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*03/28/22 13:22*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/28/22 13:22*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*03/28/22 13:22*	*1*

Client Sample ID: SL-16_032122
Lab Sample ID: 240-164043-8

Date Collected: 03/21/22 13:10
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			03/25/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*03/25/22 23:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 17:18	1
cis-1,2-Dichloroethene	**9.7**		1.0	0.46	ug/L			03/25/22 17:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 17:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 17:18	1
Trichloroethene	**1.8**		1.0	0.44	ug/L			03/25/22 17:18	1
Vinyl chloride	**4.7**		1.0	0.45	ug/L			03/25/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 17:18*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 17:18*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/25/22 17:18*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/25/22 17:18*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_032122
Lab Sample ID: 240-164043-9
Date Collected: 03/21/22 13:40
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.0**		2.0	0.86	ug/L			03/25/22 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/25/22 23:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 13:45	1
cis-1,2-Dichloroethene	**19**		1.0	0.46	ug/L			03/28/22 13:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 13:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 13:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 13:45	1
Vinyl chloride	**8.1**		1.0	0.45	ug/L			03/28/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/28/22 13:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*03/28/22 13:45*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/28/22 13:45*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*03/28/22 13:45*	*1*

Client Sample ID: SL-2_032122
Lab Sample ID: 240-164043-10
Date Collected: 03/21/22 14:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			03/26/22 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/26/22 00:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 18:08	1
cis-1,2-Dichloroethene	**8.5**		1.0	0.46	ug/L			03/25/22 18:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 18:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:08	1
Vinyl chloride	**6.0**		1.0	0.45	ug/L			03/25/22 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 18:08*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 18:08*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 18:08*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/25/22 18:08*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_157
Lab Sample ID: 240-164043-11
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 18:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/25/22 18:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*03/25/22 18:33*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 18:33*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*03/25/22 18:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231_032122
Lab Sample ID: 240-164043-12
Date Collected: 03/21/22 14:20
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.8**		2.0	0.86	ug/L			03/26/22 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/26/22 01:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 18:58	1
cis-1,2-Dichloroethene	**19**		1.0	0.46	ug/L			03/25/22 18:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 18:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 18:58	1
Vinyl chloride	**14**		1.0	0.45	ug/L			03/25/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/25/22 18:58*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/25/22 18:58*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/25/22 18:58*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/25/22 18:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_032222
Lab Sample ID: 240-164043-13
Date Collected: 03/22/22 09:25
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/26/22 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/26/22 01:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 19:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 19:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 19:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 19:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 19:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/25/22 19:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*03/25/22 19:23*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/25/22 19:23*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/25/22 19:23*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-14_032222
Lab Sample ID: 240-164043-14
Date Collected: 03/22/22 09:40
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/26/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/26/22 02:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 19:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 19:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 19:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 19:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 19:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 19:48*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 19:48*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*03/25/22 19:48*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/25/22 19:48*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-13_032222
Lab Sample ID: 240-164043-15
Date Collected: 03/22/22 09:55
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/26/22 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*03/26/22 02:49*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 20:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 20:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 20:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 20:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 20:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 20:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 20:13*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*03/25/22 20:13*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/25/22 20:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_032222
Lab Sample ID: 240-164043-16
Date Collected: 03/22/22 10:35
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.4	J	2.0	0.86	ug/L			03/26/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*03/26/22 03:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 20:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 20:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 20:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 20:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 20:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*03/25/22 20:38*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*03/25/22 20:38*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/25/22 20:38*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*03/25/22 20:38*	*1*

Client Sample ID: SL-6_032222
Lab Sample ID: 240-164043-17

Date Collected: 03/22/22 10:50
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.1		2.0	0.86	ug/L			03/26/22 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*03/26/22 03:39*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 14:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 14:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 14:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 14:34*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*03/25/22 14:34*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/25/22 14:34*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*03/25/22 14:34*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-5_032222
Lab Sample ID: 240-164043-18
Date Collected: 03/22/22 11:05
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			03/26/22 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/26/22 04:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 16:54	1
cis-1,2-Dichloroethene	**6.3**		1.0	0.46	ug/L			03/28/22 16:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 16:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 16:54	1
Vinyl chloride	**3.3**		1.0	0.45	ug/L			03/28/22 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/28/22 16:54*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*03/28/22 16:54*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*03/28/22 16:54*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*03/28/22 16:54*	*1*

Client Sample ID: SL-8_032222
Lab Sample ID: 240-164043-19

Date Collected: 03/22/22 11:50
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		2.0	0.86	ug/L			03/26/22 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*03/26/22 04:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 17:17	1
cis-1,2-Dichloroethene	**4.0**		1.0	0.46	ug/L			03/28/22 17:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 17:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 17:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 17:17	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			03/28/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*03/28/22 17:17*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/28/22 17:17*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*03/28/22 17:17*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*03/28/22 17:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-9_032222
Lab Sample ID: 240-164043-20
Date Collected: 03/22/22 12:15
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			03/26/22 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*03/26/22 04:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 17:41	1
cis-1,2-Dichloroethene	**2.9**		1.0	0.46	ug/L			03/28/22 17:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 17:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 17:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 17:41	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			03/28/22 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*03/28/22 17:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*03/28/22 17:41*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*03/28/22 17:41*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/28/22 17:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_158
Lab Sample ID: 240-164043-21
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 13:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 13:44	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 13:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 13:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 13:44	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/25/22 13:44*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*03/25/22 13:44*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/25/22 13:44*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*03/25/22 13:44*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_032222
Lab Sample ID: 240-164043-22
Date Collected: 03/22/22 12:35
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			03/26/22 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/26/22 05:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 14:59	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			03/25/22 14:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 14:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:59	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			03/25/22 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*03/25/22 14:59*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*03/25/22 14:59*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*03/25/22 14:59*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*03/25/22 14:59*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-11_032222
Lab Sample ID: 240-164043-23
Date Collected: 03/22/22 12:50
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			03/27/22 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/27/22 15:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 15:24	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			03/25/22 15:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 15:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:24	1
Vinyl chloride	**0.93**	**J**	1.0	0.45	ug/L			03/25/22 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/25/22 15:24*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*03/25/22 15:24*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/25/22 15:24*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*03/25/22 15:24*	*1*

Client Sample ID: SL-23_032222
Lab Sample ID: 240-164043-24

Date Collected: 03/22/22 13:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.6**		2.0	0.86	ug/L			03/27/22 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*03/27/22 15:49*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 15:49	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.46	ug/L			03/25/22 15:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 15:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 15:49	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			03/25/22 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*03/25/22 15:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/25/22 15:49*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*03/25/22 15:49*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*03/25/22 15:49*	*1*

Client Sample ID: SL-12_032222
Lab Sample ID: 240-164043-25

Date Collected: 03/22/22 13:15
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		2.0	0.86	ug/L			03/27/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*03/27/22 16:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 16:15	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			03/25/22 16:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 16:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:15	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			03/25/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*03/25/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*03/25/22 16:15*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 16:15*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 120*		*03/25/22 16:15*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-19_032222
Lab Sample ID: 240-164043-26
Date Collected: 03/22/22 13:30
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/27/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*03/27/22 17:29*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 16:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 16:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 16:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 16:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 16:40*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*03/25/22 16:40*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 16:40*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*03/25/22 16:40*	*1*

Client Sample ID: MH-1255_032222
Lab Sample ID: 240-164043-27
Date Collected: 03/22/22 14:20
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			03/27/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*03/27/22 17:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/25/22 19:10	2
cis-1,2-Dichloroethene	**47**		2.0	0.92	ug/L			03/25/22 19:10	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/25/22 19:10	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/25/22 19:10	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/25/22 19:10	2
Vinyl chloride	**63**		2.0	0.90	ug/L			03/25/22 19:10	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*03/25/22 19:10*	*2*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*03/25/22 19:10*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 19:10*	*2*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*03/25/22 19:10*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_032222
Lab Sample ID: 240-164043-28
Date Collected: 03/22/22 14:40
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**16**		2.0	0.86	ug/L			03/27/22 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*03/27/22 18:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			03/25/22 19:35	2
cis-1,2-Dichloroethene	**38**		2.0	0.92	ug/L			03/25/22 19:35	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			03/25/22 19:35	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			03/25/22 19:35	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			03/25/22 19:35	2
Vinyl chloride	**42**		2.0	0.90	ug/L			03/25/22 19:35	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/25/22 19:35*	*2*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/25/22 19:35*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 19:35*	*2*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*03/25/22 19:35*	*2*

Client Sample ID: MH-1256_032322
Lab Sample ID: 240-164043-29

Date Collected: 03/23/22 09:40
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/27/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*03/27/22 18:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 18:04	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			03/28/22 18:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 18:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 18:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 18:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/28/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*03/28/22 18:04*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*03/28/22 18:04*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/28/22 18:04*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/28/22 18:04*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_032322
Lab Sample ID: 240-164043-30
Date Collected: 03/23/22 10:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.3**		2.0	0.86	ug/L			03/27/22 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*03/27/22 19:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 17:05	1
cis-1,2-Dichloroethene	**6.5**		1.0	0.46	ug/L			03/25/22 17:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 17:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 17:05	1
Trichloroethene	**1.2**		1.0	0.44	ug/L			03/25/22 17:05	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			03/25/22 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 17:05*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*03/25/22 17:05*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*03/25/22 17:05*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*03/25/22 17:05*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_155
Lab Sample ID: 240-164043-31
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 14:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 14:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 14:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 14:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 14:09*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*03/25/22 14:09*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 14:09*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*03/25/22 14:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1244_032322
Lab Sample ID: 240-164043-32
Date Collected: 03/23/22 10:20
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.2**		2.0	0.86	ug/L			03/27/22 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*03/27/22 19:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 17:30	1
cis-1,2-Dichloroethene	**180**		3.3	1.5	ug/L			03/28/22 18:28	3.333
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 17:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 17:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 17:30	1
Vinyl chloride	**26**		1.0	0.45	ug/L			03/25/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*03/25/22 17:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*03/28/22 18:28*	*3.333*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*03/25/22 17:30*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/28/22 18:28*	*3.333*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/25/22 17:30*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*03/28/22 18:28*	*3.333*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*03/25/22 17:30*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/28/22 18:28*	*3.333*

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-01
Lab Sample ID: 240-164043-33
Date Collected: 03/21/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.7**		2.0	0.86	ug/L			03/27/22 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*03/27/22 19:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 18:52	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			03/28/22 18:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 18:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 18:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 18:52	1
Vinyl chloride	**7.1**		1.0	0.45	ug/L			03/28/22 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/28/22 18:52*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*03/28/22 18:52*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*03/28/22 18:52*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/28/22 18:52*	*1*

Client Sample ID: DUP-02
Lab Sample ID: 240-164043-34

Date Collected: 03/21/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.7**		2.0	0.86	ug/L			03/27/22 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/27/22 20:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 19:15	1
cis-1,2-Dichloroethene	**23**		1.0	0.46	ug/L			03/28/22 19:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 19:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 19:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 19:15	1
Vinyl chloride	**18**		1.0	0.45	ug/L			03/28/22 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*03/28/22 19:15*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*03/28/22 19:15*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*03/28/22 19:15*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*03/28/22 19:15*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164043-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-163760-B-2 MS	Matrix Spike	98	113	109	103
240-163760-B-2 MSD	Matrix Spike Duplicate	96	106	106	103
240-163990-B-2 MS	Matrix Spike	93	87	91	90
240-163990-B-2 MSD	Matrix Spike Duplicate	97	88	95	92
240-164043-1	TRIP BLANK_156	98	100	103	108
240-164043-2	SL-21_032122	96	101	101	108
240-164043-3	SL-20_032122	97	99	100	110
240-164043-4	SL-22_032122	98	99	100	108
240-164043-5	SL-4_032122	98	99	100	111
240-164043-6	SL-18_032122	97	100	101	108
240-164043-7	SL-17_032122	98	89	96	93
240-164043-8	SL-16_032122	97	99	99	108
240-164043-9	SL-3_032122	100	94	99	97
240-164043-10	SL-2_032122	97	99	100	109
240-164043-11	TRIP BLANK_157	99	98	100	109
240-164043-12	MH-1231_032122	96	96	97	107
240-164043-13	SL-15_032222	96	98	99	110
240-164043-14	SL-14_032222	97	99	99	110
240-164043-15	SL-13_032222	98	99	102	107
240-164043-16	SL-7_032222	100	98	97	112
240-164043-17	SL-6_032222	98	94	96	95
240-164043-18	SL-5_032222	96	101	105	108
240-164043-19	SL-8_032222	92	102	108	104
240-164043-20	SL-9_032222	95	100	104	107
240-164043-21	TRIP BLANK_158	96	90	97	90
240-164043-22	SL-10_032222	99	93	94	95
240-164043-23	SL-11_032222	101	95	96	97
240-164043-24	SL-23_032222	94	92	94	90
240-164043-25	SL-12_032222	95	94	95	85
240-164043-26	SL-19_032222	97	98	95	95
240-164043-27	MH-1255_032222	93	93	95	91
240-164043-28	MH-1231A_032222	97	96	95	94
240-164043-29	MH-1256_032322	94	102	96	111
240-164043-30	MH-1259_032322	98	96	96	96
240-164043-31	TRIP BLANK_155	98	91	95	93
240-164043-32	MH-1244_032322	96	93	95	95
240-164043-32	MH-1244_032322	103	103	109	107
240-164043-33	DUP-01	98	105	107	111
240-164043-34	DUP-02	97	107	107	111
LCS 240-520820/4	Lab Control Sample	85	101	103	92
LCS 240-520907/4	Lab Control Sample	96	97	97	97
LCS 240-520976/5	Lab Control Sample	97	99	102	98
LCS 240-521046/5	Lab Control Sample	97	108	110	108
LCSD 240-520820/7	Lab Control Sample Dup	86	101	105	94
MB 240-520820/8	Method Blank	95	99	100	107
MB 240-520907/7	Method Blank	98	92	97	92
MB 240-520976/8	Method Blank	95	90	95	92
MB 240-521046/8	Method Blank	101	103	104	110

Surrogate Legend

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCA (66-120)
240-164043-2	SL-21_032122	110
240-164043-3	SL-20_032122	107
240-164043-4	SL-22_032122	107
240-164043-5	SL-4_032122	110
240-164043-6	SL-18_032122	112
240-164043-7	SL-17_032122	109
240-164043-8	SL-16_032122	109
240-164043-9	SL-3_032122	107
240-164043-10	SL-2_032122	107
240-164043-10 MS	SL-2_032122	107
240-164043-10 MSD	SL-2_032122	111
240-164043-12	MH-1231_032122	110
240-164043-13	SL-15_032222	110
240-164043-14	SL-14_032222	104
240-164043-15	SL-13_032222	105
240-164043-16	SL-7_032222	108
240-164043-17	SL-6_032222	109
240-164043-18	SL-5_032222	110
240-164043-19	SL-8_032222	111
240-164043-20	SL-9_032222	111
240-164043-22	SL-10_032222	110
240-164043-23	SL-11_032222	110
240-164043-24	SL-23_032222	109
240-164043-25	SL-12_032222	110
240-164043-25 MS	SL-12_032222	113
240-164043-25 MSD	SL-12_032222	113
240-164043-26	SL-19_032222	104
240-164043-27	MH-1255_032222	106
240-164043-28	MH-1231A_032222	108
240-164043-29	MH-1256_032322	109
240-164043-30	MH-1259_032322	111
240-164043-32	MH-1244_032322	111
240-164043-33	DUP-01	113
240-164043-34	DUP-02	107
LCS 240-520915/4	Lab Control Sample	103
LCS 240-520932/3	Lab Control Sample	107
MB 240-520915/5	Method Blank	105
MB 240-520932/4	Method Blank	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-520820/8
Matrix: Water
Analysis Batch: 520820

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 11:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 11:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 11:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 11:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 11:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*03/25/22 11:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*03/25/22 11:53*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*03/25/22 11:53*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*03/25/22 11:53*	*1*

Lab Sample ID: LCS 240-520820/4
Matrix: Water
Analysis Batch: 520820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			20.0	20.9		ug/L		104	63 - 134		
cis-1,2-Dichloroethene			20.0	17.8		ug/L		89	77 - 123		
Tetrachloroethene			20.0	17.8		ug/L		89	76 - 123		
trans-1,2-Dichloroethene			20.0	18.8		ug/L		94	75 - 124		
Trichloroethene			20.0	17.9		ug/L		89	70 - 122		
Vinyl chloride			20.0	17.7		ug/L		89	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*103*		*78 - 122*
Dibromofluoromethane (Surr)	*92*		*73 - 120*

Lab Sample ID: LCSD 240-520820/7
Matrix: Water
Analysis Batch: 520820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	20.5		ug/L		103	63 - 134	2	35
cis-1,2-Dichloroethene			20.0	17.7		ug/L		89	77 - 123	1	35
Tetrachloroethene			20.0	17.2		ug/L		86	76 - 123	3	35
trans-1,2-Dichloroethene			20.0	18.9		ug/L		94	75 - 124	1	35
Trichloroethene			20.0	17.1		ug/L		85	70 - 122	5	35
Vinyl chloride			20.0	15.5		ug/L		78	60 - 144	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*105*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-520820/7
Matrix: Water
Analysis Batch: 520820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*94*		*73 - 120*

Lab Sample ID: MB 240-520907/7
Matrix: Water
Analysis Batch: 520907

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/25/22 13:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/25/22 13:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 13:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/25/22 13:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/25/22 13:19	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/25/22 13:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*03/25/22 13:19*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*03/25/22 13:19*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*03/25/22 13:19*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*03/25/22 13:19*	*1*

Lab Sample ID: LCS 240-520907/4
Matrix: Water
Analysis Batch: 520907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	26.8		ug/L		107	63 - 134
cis-1,2-Dichloroethene	25.0	25.9		ug/L		103	77 - 123
Tetrachloroethene	25.0	27.0		ug/L		108	76 - 123
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	75 - 124
Trichloroethene	25.0	25.3		ug/L		101	70 - 122
Vinyl chloride	25.0	26.3		ug/L		105	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*
Toluene-d8 (Surr)	*97*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: MB 240-520976/8
Matrix: Water
Analysis Batch: 520976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 12:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/28/22 12:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 12:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 12:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 12:27	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-520976/8
Matrix: Water
Analysis Batch: 520976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/28/22 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*03/28/22 12:27*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*03/28/22 12:27*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*03/28/22 12:27*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*03/28/22 12:27*	*1*

Lab Sample ID: LCS 240-520976/5
Matrix: Water
Analysis Batch: 520976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	19.8		ug/L		99	63 - 134
cis-1,2-Dichloroethene	20.0	17.9		ug/L		90	77 - 123
Tetrachloroethene	20.0	19.8		ug/L		99	76 - 123
trans-1,2-Dichloroethene	20.0	18.4		ug/L		92	75 - 124
Trichloroethene	20.0	18.6		ug/L		93	70 - 122
Vinyl chloride	20.0	22.8		ug/L		114	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-163990-B-2 MS
Matrix: Water
Analysis Batch: 520976

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	100	U	2000	1870		ug/L		93	56 - 135
cis-1,2-Dichloroethene	100	U	2000	1810		ug/L		90	66 - 128
Tetrachloroethene	100	U	2000	1810		ug/L		90	62 - 131
trans-1,2-Dichloroethene	100	U	2000	1790		ug/L		90	56 - 136
Trichloroethene	2400		2000	3920		ug/L		78	61 - 124
Vinyl chloride	100	U	2000	1880		ug/L		94	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*
Toluene-d8 (Surr)	*91*		*78 - 122*
Dibromofluoromethane (Surr)	*90*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-163990-B-2 MSD
Matrix: Water
Analysis Batch: 520976

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	100	U	2000	2060		ug/L		103	56 - 135	10	26
cis-1,2-Dichloroethene	100	U	2000	1940		ug/L		97	66 - 128	7	14
Tetrachloroethene	100	U	2000	1890		ug/L		95	62 - 131	4	20
trans-1,2-Dichloroethene	100	U	2000	1940		ug/L		97	56 - 136	8	15
Trichloroethene	2400		2000	4090		ug/L		86	61 - 124	4	15
Vinyl chloride	100	U	2000	2070		ug/L		103	43 - 157	10	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*92*		*73 - 120*

Lab Sample ID: MB 240-521046/8
Matrix: Water
Analysis Batch: 521046

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			03/28/22 15:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			03/28/22 15:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 15:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			03/28/22 15:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			03/28/22 15:19	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			03/28/22 15:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*03/28/22 15:19*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*03/28/22 15:19*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*03/28/22 15:19*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*03/28/22 15:19*	*1*

Lab Sample ID: LCS 240-521046/5
Matrix: Water
Analysis Batch: 521046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene			25.0	26.0		ug/L		104	63 - 134		
cis-1,2-Dichloroethene			25.0	24.4		ug/L		98	77 - 123		
Tetrachloroethene			25.0	22.3		ug/L		89	76 - 123		
trans-1,2-Dichloroethene			25.0	24.8		ug/L		99	75 - 124		
Trichloroethene			25.0	22.0		ug/L		88	70 - 122		
Vinyl chloride			25.0	26.6		ug/L		106	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*108*		*56 - 136*
Toluene-d8 (Surr)	*110*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-521046/5
Matrix: Water
Analysis Batch: 521046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*108*		*73 - 120*

Lab Sample ID: 240-163760-B-2 MS
Matrix: Water
Analysis Batch: 521046

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	200	U	5000	4920		ug/L		98	56 - 135
cis-1,2-Dichloroethene	200	U	5000	4710		ug/L		94	66 - 128
Tetrachloroethene	200	U	5000	4380		ug/L		88	62 - 131
trans-1,2-Dichloroethene	200	U	5000	4580		ug/L		92	56 - 136
Trichloroethene	7500		5000	11300		ug/L		75	61 - 124
Vinyl chloride	200	U	5000	5370		ug/L		107	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
4-Bromofluorobenzene (Surr)	*113*		*56 - 136*
Toluene-d8 (Surr)	*109*		*78 - 122*
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Lab Sample ID: 240-163760-B-2 MSD
Matrix: Water
Analysis Batch: 521046

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	200	U	5000	5050		ug/L		101	56 - 135	3	26
cis-1,2-Dichloroethene	200	U	5000	4730		ug/L		95	66 - 128	1	14
Tetrachloroethene	200	U	5000	4430		ug/L		89	62 - 131	1	20
trans-1,2-Dichloroethene	200	U	5000	4670		ug/L		93	56 - 136	2	15
Trichloroethene	7500		5000	11600		ug/L		81	61 - 124	3	15
Vinyl chloride	200	U	5000	5710		ug/L		114	43 - 157	6	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*
Toluene-d8 (Surr)	*106*		*78 - 122*
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-520915/5
Matrix: Water
Analysis Batch: 520915

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/25/22 19:45	1

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-520915/5
Matrix: Water
Analysis Batch: 520915

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 120		03/25/22 19:45	1

Lab Sample ID: LCS 240-520915/4
Matrix: Water
Analysis Batch: 520915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.3		ug/L		103	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 120

Lab Sample ID: 240-164043-10 MS
Matrix: Water
Analysis Batch: 520915

Client Sample ID: SL-2_032122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	6.5		10.0	16.1		ug/L		96	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		66 - 120

Lab Sample ID: 240-164043-10 MSD
Matrix: Water
Analysis Batch: 520915

Client Sample ID: SL-2_032122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	6.5		10.0	16.5		ug/L		100	51 - 153	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		66 - 120

Lab Sample ID: MB 240-520932/4
Matrix: Water
Analysis Batch: 520932

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/27/22 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 120		03/27/22 14:10	1

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-520932/3
Matrix: Water
Analysis Batch: 520932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	10.5		ug/L		105	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Lab Sample ID: 240-164043-25 MS
Matrix: Water
Analysis Batch: 520932

Client Sample ID: SL-12_032222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.3		10.0	12.7		ug/L		104	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*

Lab Sample ID: 240-164043-25 MSD
Matrix: Water
Analysis Batch: 520932

Client Sample ID: SL-12_032222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.3		10.0	12.5		ug/L		102	51 - 153	2	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*

GC/MS VOA

Analysis Batch: 520820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-1	TRIP BLANK_156	Total/NA	Water	8260D	
240-164043-2	SL-21_032122	Total/NA	Water	8260D	
240-164043-3	SL-20_032122	Total/NA	Water	8260D	
240-164043-4	SL-22_032122	Total/NA	Water	8260D	
240-164043-5	SL-4_032122	Total/NA	Water	8260D	
240-164043-6	SL-18_032122	Total/NA	Water	8260D	
240-164043-8	SL-16_032122	Total/NA	Water	8260D	
240-164043-10	SL-2_032122	Total/NA	Water	8260D	
240-164043-11	TRIP BLANK_157	Total/NA	Water	8260D	
240-164043-12	MH-1231_032122	Total/NA	Water	8260D	
240-164043-13	SL-15_032222	Total/NA	Water	8260D	
240-164043-14	SL-14_032222	Total/NA	Water	8260D	
240-164043-15	SL-13_032222	Total/NA	Water	8260D	
240-164043-16	SL-7_032222	Total/NA	Water	8260D	
MB 240-520820/8	Method Blank	Total/NA	Water	8260D	
LCS 240-520820/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-520820/7	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 520907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-17	SL-6_032222	Total/NA	Water	8260D	
240-164043-21	TRIP BLANK_158	Total/NA	Water	8260D	
240-164043-22	SL-10_032222	Total/NA	Water	8260D	
240-164043-23	SL-11_032222	Total/NA	Water	8260D	
240-164043-24	SL-23_032222	Total/NA	Water	8260D	
240-164043-25	SL-12_032222	Total/NA	Water	8260D	
240-164043-26	SL-19_032222	Total/NA	Water	8260D	
240-164043-27	MH-1255_032222	Total/NA	Water	8260D	
240-164043-28	MH-1231A_032222	Total/NA	Water	8260D	
240-164043-30	MH-1259_032322	Total/NA	Water	8260D	
240-164043-31	TRIP BLANK_155	Total/NA	Water	8260D	
240-164043-32	MH-1244_032322	Total/NA	Water	8260D	
MB 240-520907/7	Method Blank	Total/NA	Water	8260D	
LCS 240-520907/4	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 520915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-2	SL-21_032122	Total/NA	Water	8260D SIM	
240-164043-3	SL-20_032122	Total/NA	Water	8260D SIM	
240-164043-4	SL-22_032122	Total/NA	Water	8260D SIM	
240-164043-5	SL-4_032122	Total/NA	Water	8260D SIM	
240-164043-6	SL-18_032122	Total/NA	Water	8260D SIM	
240-164043-7	SL-17_032122	Total/NA	Water	8260D SIM	
240-164043-8	SL-16_032122	Total/NA	Water	8260D SIM	
240-164043-9	SL-3_032122	Total/NA	Water	8260D SIM	
240-164043-10	SL-2_032122	Total/NA	Water	8260D SIM	
240-164043-12	MH-1231_032122	Total/NA	Water	8260D SIM	
240-164043-13	SL-15_032222	Total/NA	Water	8260D SIM	
240-164043-14	SL-14_032222	Total/NA	Water	8260D SIM	
240-164043-15	SL-13_032222	Total/NA	Water	8260D SIM	
240-164043-16	SL-7_032222	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 520915 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-17	SL-6_032222	Total/NA	Water	8260D SIM	
240-164043-18	SL-5_032222	Total/NA	Water	8260D SIM	
240-164043-19	SL-8_032222	Total/NA	Water	8260D SIM	
240-164043-20	SL-9_032222	Total/NA	Water	8260D SIM	
240-164043-22	SL-10_032222	Total/NA	Water	8260D SIM	
MB 240-520915/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-520915/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164043-10 MS	SL-2_032122	Total/NA	Water	8260D SIM	
240-164043-10 MSD	SL-2_032122	Total/NA	Water	8260D SIM	

Analysis Batch: 520932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-23	SL-11_032222	Total/NA	Water	8260D SIM	
240-164043-24	SL-23_032222	Total/NA	Water	8260D SIM	
240-164043-25	SL-12_032222	Total/NA	Water	8260D SIM	
240-164043-26	SL-19_032222	Total/NA	Water	8260D SIM	
240-164043-27	MH-1255_032222	Total/NA	Water	8260D SIM	
240-164043-28	MH-1231A_032222	Total/NA	Water	8260D SIM	
240-164043-29	MH-1256_032322	Total/NA	Water	8260D SIM	
240-164043-30	MH-1259_032322	Total/NA	Water	8260D SIM	
240-164043-32	MH-1244_032322	Total/NA	Water	8260D SIM	
240-164043-33	DUP-01	Total/NA	Water	8260D SIM	
240-164043-34	DUP-02	Total/NA	Water	8260D SIM	
MB 240-520932/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-520932/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164043-25 MS	SL-12_032222	Total/NA	Water	8260D SIM	
240-164043-25 MSD	SL-12_032222	Total/NA	Water	8260D SIM	

Analysis Batch: 520976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-7	SL-17_032122	Total/NA	Water	8260D	
240-164043-9	SL-3_032122	Total/NA	Water	8260D	
MB 240-520976/8	Method Blank	Total/NA	Water	8260D	
LCS 240-520976/5	Lab Control Sample	Total/NA	Water	8260D	
240-163990-B-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-163990-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 521046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164043-18	SL-5_032222	Total/NA	Water	8260D	
240-164043-19	SL-8_032222	Total/NA	Water	8260D	
240-164043-20	SL-9_032222	Total/NA	Water	8260D	
240-164043-29	MH-1256_032322	Total/NA	Water	8260D	
240-164043-32	MH-1244_032322	Total/NA	Water	8260D	
240-164043-33	DUP-01	Total/NA	Water	8260D	
240-164043-34	DUP-02	Total/NA	Water	8260D	
MB 240-521046/8	Method Blank	Total/NA	Water	8260D	
LCS 240-521046/5	Lab Control Sample	Total/NA	Water	8260D	
240-163760-B-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-163760-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164043-1

Client Sample ID: TRIP BLANK_156
Date Collected: 03/23/22 00:00
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 14:23	HMB	TAL CAN

Client Sample ID: SL-21_032122
Date Collected: 03/21/22 10:10
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 14:48	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 21:00	CS	TAL CAN

Client Sample ID: SL-20_032122
Date Collected: 03/21/22 10:25
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 15:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 21:25	CS	TAL CAN

Client Sample ID: SL-22_032122
Date Collected: 03/21/22 10:40
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 15:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 21:50	CS	TAL CAN

Client Sample ID: SL-4_032122
Date Collected: 03/21/22 11:00
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 16:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 22:15	CS	TAL CAN

Client Sample ID: SL-18_032122
Date Collected: 03/21/22 12:20
Date Received: 03/24/22 08:00

Lab Sample ID: 240-164043-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 16:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 22:40	CS	TAL CAN

Client Sample ID: SL-17_032122
Lab Sample ID: 240-164043-7
Date Collected: 03/21/22 12:40
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520976	03/28/22 13:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 23:05	CS	TAL CAN

Client Sample ID: SL-16_032122
Lab Sample ID: 240-164043-8
Date Collected: 03/21/22 13:10
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 17:18	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 23:30	CS	TAL CAN

Client Sample ID: SL-3_032122
Lab Sample ID: 240-164043-9
Date Collected: 03/21/22 13:40
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520976	03/28/22 13:45	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/25/22 23:55	CS	TAL CAN

Client Sample ID: SL-2_032122
Lab Sample ID: 240-164043-10
Date Collected: 03/21/22 14:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 18:08	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 00:19	CS	TAL CAN

Client Sample ID: TRIP BLANK_157
Lab Sample ID: 240-164043-11
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 18:33	HMB	TAL CAN

Client Sample ID: MH-1231_032122
Lab Sample ID: 240-164043-12
Date Collected: 03/21/22 14:20
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 18:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 01:34	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_032222
Lab Sample ID: 240-164043-13
Date Collected: 03/22/22 09:25
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 19:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 01:59	CS	TAL CAN

Client Sample ID: SL-14_032222
Lab Sample ID: 240-164043-14
Date Collected: 03/22/22 09:40
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 19:48	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 02:24	CS	TAL CAN

Client Sample ID: SL-13_032222
Lab Sample ID: 240-164043-15
Date Collected: 03/22/22 09:55
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 20:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 02:49	CS	TAL CAN

Client Sample ID: SL-7_032222
Lab Sample ID: 240-164043-16
Date Collected: 03/22/22 10:35
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520820	03/25/22 20:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 03:14	CS	TAL CAN

Client Sample ID: SL-6_032222
Lab Sample ID: 240-164043-17
Date Collected: 03/22/22 10:50
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 14:34	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 03:39	CS	TAL CAN

Client Sample ID: SL-5_032222
Lab Sample ID: 240-164043-18
Date Collected: 03/22/22 11:05
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 16:54	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 04:04	CS	TAL CAN

Client Sample ID: SL-8_032222
Lab Sample ID: 240-164043-19
Date Collected: 03/22/22 11:50
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 17:17	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 04:29	CS	TAL CAN

Client Sample ID: SL-9_032222
Lab Sample ID: 240-164043-20
Date Collected: 03/22/22 12:15
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 17:41	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 04:53	CS	TAL CAN

Client Sample ID: TRIP BLANK_158
Lab Sample ID: 240-164043-21
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 13:44	SAM	TAL CAN

Client Sample ID: SL-10_032222
Lab Sample ID: 240-164043-22
Date Collected: 03/22/22 12:35
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 14:59	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520915	03/26/22 05:18	CS	TAL CAN

Client Sample ID: SL-11_032222
Lab Sample ID: 240-164043-23
Date Collected: 03/22/22 12:50
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 15:24	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 15:24	CS	TAL CAN

Client Sample ID: SL-23_032222
Lab Sample ID: 240-164043-24
Date Collected: 03/22/22 13:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 15:49	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 15:49	CS	TAL CAN

Client Sample ID: SL-12_032222
Lab Sample ID: 240-164043-25
Date Collected: 03/22/22 13:15
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 16:15	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 16:14	CS	TAL CAN

Client Sample ID: SL-19_032222
Lab Sample ID: 240-164043-26
Date Collected: 03/22/22 13:30
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 16:40	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 17:29	CS	TAL CAN

Client Sample ID: MH-1255_032222
Lab Sample ID: 240-164043-27
Date Collected: 03/22/22 14:20
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520907	03/25/22 19:10	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 17:53	CS	TAL CAN

Client Sample ID: MH-1231A_032222
Lab Sample ID: 240-164043-28
Date Collected: 03/22/22 14:40
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	520907	03/25/22 19:35	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 18:18	CS	TAL CAN

Client Sample ID: MH-1256_032322
Lab Sample ID: 240-164043-29
Date Collected: 03/23/22 09:40
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 18:04	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 18:43	CS	TAL CAN

Client Sample ID: MH-1259_032322
Lab Sample ID: 240-164043-30
Date Collected: 03/23/22 10:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 17:05	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 19:08	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_155
Lab Sample ID: 240-164043-31
Date Collected: 03/23/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	520907	03/25/22 14:09	SAM	TAL CAN

Client Sample ID: MH-1244_032322
Lab Sample ID: 240-164043-32
Date Collected: 03/23/22 10:20
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		3.333	521046	03/28/22 18:28	SAM	TAL CAN
Total/NA	Analysis	8260D		1	520907	03/25/22 17:30	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 19:33	CS	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-164043-33
Date Collected: 03/21/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 18:52	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 19:58	CS	TAL CAN

Client Sample ID: DUP-02
Lab Sample ID: 240-164043-34
Date Collected: 03/21/22 00:00
Matrix: Water
Date Received: 03/24/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521046	03/28/22 19:15	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	520932	03/27/22 20:23	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164043-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22 *
Connecticut	State	PH-0590	12-31-21 *
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	03-31-22
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-21-14	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

0.9/0.7

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No.
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK _156	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-21_032122	3-21-22	10:10		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20_032122	3-21-22	10:25		X						6					N	G	X	X	X	X	X	X	X	
SL-22_032122	3-21-22	10:40		X						6					N	G	X	X	X	X	X	X	X	
SL-4_032122	3-21-22	11:00		X						6					N	G	X	X	X	X	X	X	X	
SL-18_032122	3-21-22	12:20		X						6					N	G	X	X	X	X	X	X	X	
SL-17_032122	3-21-22	12:40		X						6					N	G	X	X	X	X	X	X	X	
SL-16_032122	3-21-22	13:10		X						6					N	G	X	X	X	X	X	X	X	
SL-3_032122	3-21-22	13:40		X						6					N	G	X	X	X	X	X	X	X	
SL-2_032122	3-21-22	14:00		X						6					N	G	X	X	X	X	X	X	X	

240-164043 Chain of Custody

check ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205182
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	3/23/22 14:00	Jen Hall	EETA	3/23/22 1400
Jen Hall	EETA	3/23/22 1405	Brownson	TA	3-24-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/29/2022

09/07

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	Check
TRIP BLANK – 157	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
MH-123_032122	3-21-22	14:20		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
SL-15_032222	3-22-22	9:25		X						6					N	G	X	X	X	X	X	X	X		✓
SL-14_032222	3-22-22	9:40		X						6					N	G	X	X	X	X	X	X	X		✓
SL-13_032222	3-22-22	9:55		X						6					N	G	X	X	X	X	X	X	X		✓
SL-7_032222	3-22-22	10:35		X						6					N	G	X	X	X	X	X	X	X		✓
SL-6_032222	3-22-22	10:50		X						6					N	G	X	X	X	X	X	X	X		✓
SL-5_032222	3-22-22	11:05		X						6					N	G	X	X	X	X	X	X	X		✓
SL-8_032222	3-22-22	11:50		X						6					N	G	X	X	X	X	X	X	X		✓
SL-9_032222	3-22-22	12:15		X						6					N	G	X	X	X	X	X	X	X		✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	3/23/22 14:00		EETA	3/23/22 1400
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	3/23/22 1405			3-24-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/29/2022

09/07

Chain of Custody Record

MICHIGAN TestAmerica 190

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	Check
TRIP BLANK _ 158	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
SL-10_032222	3-22-22	12:35		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
SL-11_032222	3-22-22	12:50		X						6					N	G	X	X	X	X	X	X	X		✓
SL-23_032222	3-22-22	13:00		X						6					N	G	X	X	X	X	X	X	X		✓
SL-12_032222	3-22-22	13:15		X						6					N	G	X	X	X	X	X	X	X		✓
SL-19_032222	3-22-22	13:30		X						6					N	G	X	X	X	X	X	X	X		✓
MH-1255_032222	3-22-22	14:20		X						6					N	G	X	X	X	X	X	X	X		✓
MH-1231A_032222	3-22-22	14:40		X						6					N	G	X	X	X	X	X	X	X		✓
MH-1256_032322	3-23-22	9:40		X						6					N	G	X	X	X	X	X	X	X		✓
MH-1259_032322	3-23-22	10:00		X						6					N	G	X	X	X	X	X	X	X		✓

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	3/23/22 14:00	Jen Hall	EETA	3/23/22 1400
Jen Hall	EETA	3/23/22 1405	[signature]	TA	3-24-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/29/2022

09/07

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:	Check
TRIP BLANK _155	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank	✓
MH-1244-032322	3-23-22	10:20		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
Dup-01	3-21-22	—		X						6					N	G	X	X	X	X	X	X	X		✓
Dup-02	3-21-22	—		X						6					N	G	X	X	X	X	X	X	X		✓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	3/23/22 14:00		EETA	3/23/22 1400
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	3/23/22 1405		TA	3-24-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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3/29/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 164043**
Canton Facility

Client Arcadis Site Name

Cooler unpacked by: Brandon

Cooler Received on 3-24-22 Opened on 3-24-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # 1 Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. 0.9 °C Corrected Cooler Temp. 0.7 °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 — Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? — Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? — Yes No
   -Were tamper/custody seals intact and uncompromised? — Yes No NA
3. Shippers' packing slip attached to the cooler(s)? — Yes No
4. Did custody papers accompany the sample(s)? — Yes No
5. Were the custody papers relinquished & signed in the appropriate place? — Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? — Yes No
7. Did all bottles arrive in good condition (Unbroken)? — Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? — Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? — Yes No
11. Sufficient quantity received to perform indicated analyses? — Yes No
12. Are these work share samples and all listed on the COC? — Yes No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? — Yes No NA pH Strip Lot# HC157842
14. Were VOAs on the COC? — Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. — Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #____ — Yes No
17. Was a LL Hg or Me Hg trip blank present? ____ — Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

VOA Sample Preservation - Date/Time VOAs Frozen: ____

WI-NC-099

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-164428-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
4/6/2022 1:40:09 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164428-1

Job ID: 240-164428-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-164428-1

Comments
No additional comments.

Receipt
The samples were received on 4/1/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.2º C, 0.2º C, 0.2º C and 0.2º C.

GC/MS VOA
Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with significant headspace in the sample containers: MH-1244_033022 (240-164433-9). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method 8260D SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-13_03312022 (240-164432-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164428-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164428-1	TRIP BLANK_04	Water	03/31/22 00:00	04/01/22 08:00
240-164428-2	SL-23_033122	Water	03/31/22 12:43	04/01/22 08:00
240-164428-3	SL-12_033122	Water	03/31/22 13:05	04/01/22 08:00
240-164428-4	SL-19_033122	Water	03/31/22 13:15	04/01/22 08:00
240-164431-1	TRIP BLANK_01	Water	03/28/22 00:00	04/01/22 08:00
240-164431-2	SL-4_032822	Water	03/28/22 10:35	04/01/22 08:00
240-164431-3	SL-18_032822	Water	03/28/22 11:13	04/01/22 08:00
240-164431-4	SL-17_032822	Water	03/28/22 11:33	04/01/22 08:00
240-164431-5	SL-16_032822	Water	03/28/22 12:05	04/01/22 08:00
240-164431-6	DUP-01_032822	Water	03/28/22 00:00	04/01/22 08:00
240-164431-7	SL-21_032822	Water	03/29/22 08:30	04/01/22 08:00
240-164431-8	SL-20_032822	Water	03/29/22 09:05	04/01/22 08:00
240-164431-9	SL-22_032822	Water	03/29/22 09:15	04/01/22 08:00
240-164431-10	SL-3_032822	Water	03/29/22 09:30	04/01/22 08:00
240-164432-1	TRIP BLANK_03	Water	03/31/22 00:00	04/01/22 08:00
240-164432-2	SL-14_03312022	Water	03/31/22 09:40	04/01/22 08:00
240-164432-3	SL-13_03312022	Water	03/31/22 09:55	04/01/22 08:00
240-164432-4	SL-7_03312022	Water	03/31/22 10:43	04/01/22 08:00
240-164432-5	SL-6_03312022	Water	03/31/22 10:55	04/01/22 08:00
240-164432-6	SL-5_03312022	Water	03/31/22 11:03	04/01/22 08:00
240-164432-7	SL-8_03312022	Water	03/31/22 11:50	04/01/22 08:00
240-164432-8	SL-9_03312022	Water	03/31/22 12:15	04/01/22 08:00
240-164432-9	SL-10_03312022	Water	03/31/22 12:35	04/01/22 08:00
240-164432-10	SL-11_03312022	Water	03/31/22 12:45	04/01/22 08:00
240-164433-1	TRIP BLANK_02	Water	03/29/22 00:00	04/01/22 08:00
240-164433-2	SL-02_032922	Water	03/29/22 09:45	04/01/22 08:00
240-164433-3	MH-1231_032922	Water	03/29/22 10:00	04/01/22 08:00
240-164433-4	DUP-02_032922	Water	03/29/22 00:00	04/01/22 08:00
240-164433-5	MH-1259_033022	Water	03/30/22 09:50	04/01/22 08:00
240-164433-6	MH-1255_033022	Water	03/30/22 09:20	04/01/22 08:00
240-164433-7	MH-1256_033022	Water	03/30/22 09:30	04/01/22 08:00
240-164433-8	MH-1231A_033022	Water	03/30/22 09:00	04/01/22 08:00
240-164433-9	MH-1244_033022	Water	03/30/22 08:50	04/01/22 08:00
240-164433-10	SL-15_033022	Water	03/30/22 09:30	04/01/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164428-1

Client Sample ID: TRIP BLANK_04 — Lab Sample ID: 240-164428-1

No Detections.

Client Sample ID: SL-23_033122 — Lab Sample ID: 240-164428-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_033122 — Lab Sample ID: 240-164428-3

No Detections.

Client Sample ID: SL-19_033122 — Lab Sample ID: 240-164428-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_01 — Lab Sample ID: 240-164431-1

No Detections.

Client Sample ID: SL-4_032822 — Lab Sample ID: 240-164431-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.7		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.79	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_032822 — Lab Sample ID: 240-164431-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_032822 — Lab Sample ID: 240-164431-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.46	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	5.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_032822 — Lab Sample ID: 240-164431-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.86	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.8		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164428-1

Client Sample ID: DUP-01_032822 — Lab Sample ID: 240-164431-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_032822 — Lab Sample ID: 240-164431-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.50	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_032822 — Lab Sample ID: 240-164431-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_032822 — Lab Sample ID: 240-164431-9

No Detections.

Client Sample ID: SL-3_032822 — Lab Sample ID: 240-164431-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	11		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_03 — Lab Sample ID: 240-164432-1

No Detections.

Client Sample ID: SL-14_03312022 — Lab Sample ID: 240-164432-2

No Detections.

Client Sample ID: SL-13_03312022 — Lab Sample ID: 240-164432-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.50	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-7_03312022 — Lab Sample ID: 240-164432-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_03312022 — Lab Sample ID: 240-164432-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_03312022 — Lab Sample ID: 240-164432-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-5_03312022 (Continued) — Lab Sample ID: 240-164432-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_03312022 — Lab Sample ID: 240-164432-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_03312022 — Lab Sample ID: 240-164432-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_03312022 — Lab Sample ID: 240-164432-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_03312022 — Lab Sample ID: 240-164432-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_02 — Lab Sample ID: 240-164433-1

No Detections.

Client Sample ID: SL-02_032922 — Lab Sample ID: 240-164433-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.72	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_032922 — Lab Sample ID: 240-164433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	13		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_032922 — Lab Sample ID: 240-164433-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	14		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_033022 — Lab Sample ID: 240-164433-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.9		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_033022 — Lab Sample ID: 240-164433-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	21		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	70		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.2	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	84		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1256_033022 — Lab Sample ID: 240-164433-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	3.5		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_033022 — Lab Sample ID: 240-164433-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	63		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.2	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	65		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1244_033022 — Lab Sample ID: 240-164433-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	30		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.5		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	11		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_033022 — Lab Sample ID: 240-164433-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 240-164428-1
Date Collected: 03/31/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 13:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 13:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 13:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 13:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 13:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*04/04/22 13:48*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 13:48*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/04/22 13:48*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*04/04/22 13:48*	*1*

Client Sample ID: SL-23_033122
Lab Sample ID: 240-164428-2
Date Collected: 03/31/22 12:43
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.5**		2.0	0.86	ug/L			04/01/22 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/01/22 18:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 14:13	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			04/04/22 14:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 14:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:13	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			04/04/22 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/04/22 14:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 14:13*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/04/22 14:13*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 120*		*04/04/22 14:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-12_033122
Lab Sample ID: 240-164428-3
Date Collected: 03/31/22 13:05
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/22 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/01/22 19:17*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 14:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 14:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 14:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*04/04/22 14:38*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/04/22 14:38*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/04/22 14:38*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/04/22 14:38*	*1*

Client Sample ID: SL-19_033122
Lab Sample ID: 240-164428-4

Date Collected: 03/31/22 13:15
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.8**	**J**	2.0	0.86	ug/L			04/01/22 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/01/22 19:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 15:02	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			04/04/22 15:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 15:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:02	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			04/04/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/04/22 15:02*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 15:02*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 15:02*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 120*		*04/04/22 15:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 240-164431-1
Date Collected: 03/28/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 15:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 15:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 15:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/04/22 15:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 15:27*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 15:27*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/04/22 15:27*	*1*

Client Sample ID: SL-4_032822
Lab Sample ID: 240-164431-2

Date Collected: 03/28/22 10:35
Matrix: Water

Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			04/01/22 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/01/22 20:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 15:52	1
cis-1,2-Dichloroethene	**5.7**		1.0	0.46	ug/L			04/04/22 15:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 15:52	1
Trichloroethene	**0.79**	**J**	1.0	0.44	ug/L			04/04/22 15:52	1
Vinyl chloride	**3.0**		1.0	0.45	ug/L			04/04/22 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*04/04/22 15:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 15:52*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 15:52*	*1*
Dibromofluoromethane (Surr)	*118*		*73 - 120*		*04/04/22 15:52*	*1*

Client Sample ID: SL-18_032822
Lab Sample ID: 240-164431-3

Date Collected: 03/28/22 11:13
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			04/01/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/01/22 20:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 16:17	1
cis-1,2-Dichloroethene	**9.9**		1.0	0.46	ug/L			04/04/22 16:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 16:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:17	1
Vinyl chloride	**5.1**		1.0	0.45	ug/L			04/04/22 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/04/22 16:17*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 16:17*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/04/22 16:17*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*04/04/22 16:17*	*1*

Client Sample ID: SL-17_032822
Lab Sample ID: 240-164431-4

Date Collected: 03/28/22 11:33
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		2.0	0.86	ug/L			04/01/22 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*04/01/22 20:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 16:42	1
cis-1,2-Dichloroethene	**7.6**		1.0	0.46	ug/L			04/04/22 16:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 16:42	1
Trichloroethene	**0.46**	**J**	1.0	0.44	ug/L			04/04/22 16:42	1
Vinyl chloride	**5.3**		1.0	0.45	ug/L			04/04/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*04/04/22 16:42*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 16:42*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 16:42*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*04/04/22 16:42*	*1*

Client Sample ID: SL-16_032822
Lab Sample ID: 240-164431-5
Date Collected: 03/28/22 12:05
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.9**		2.0	0.86	ug/L			04/02/22 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/02/22 00:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 17:08	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			04/04/22 17:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 17:08	1
Trichloroethene	**0.86**	**J**	1.0	0.44	ug/L			04/04/22 17:08	1
Vinyl chloride	**6.8**		1.0	0.45	ug/L			04/04/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/04/22 17:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 17:08*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 17:08*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/04/22 17:08*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-01_032822
Lab Sample ID: 240-164431-6
Date Collected: 03/28/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			04/02/22 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/02/22 00:49*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 17:32	1
cis-1,2-Dichloroethene	**7.8**		1.0	0.46	ug/L			04/04/22 17:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 17:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:32	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			04/04/22 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*04/04/22 17:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/04/22 17:32*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/04/22 17:32*	*1*
Dibromofluoromethane (Surr)	*119*		*73 - 120*		*04/04/22 17:32*	*1*

Client Sample ID: SL-21_032822
Lab Sample ID: 240-164431-7
Date Collected: 03/29/22 08:30
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			04/02/22 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/02/22 01:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 17:57	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			04/04/22 17:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 17:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:57	1
Vinyl chloride	**0.50**	**J**	1.0	0.45	ug/L			04/04/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/04/22 17:57*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 17:57*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/04/22 17:57*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/04/22 17:57*	*1*

Client Sample ID: SL-20_032822
Lab Sample ID: 240-164431-8

Date Collected: 03/29/22 09:05
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			04/02/22 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/02/22 01:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 18:22	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.46	ug/L			04/04/22 18:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 18:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:22	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			04/04/22 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/04/22 18:22*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/04/22 18:22*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 18:22*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 120*		*04/04/22 18:22*	*1*

Client Sample ID: SL-22_032822
Lab Sample ID: 240-164431-9

Date Collected: 03/29/22 09:15
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/02/22 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/02/22 02:01*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 18:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 18:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 18:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*04/04/22 18:47*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/04/22 18:47*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/04/22 18:47*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*04/04/22 18:47*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_032822
Lab Sample ID: 240-164431-10
Date Collected: 03/29/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.2**		2.0	0.86	ug/L			04/02/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/02/22 02:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 19:12	1
cis-1,2-Dichloroethene	**20**		1.0	0.46	ug/L			04/04/22 19:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 19:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 19:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 19:12	1
Vinyl chloride	**11**		1.0	0.45	ug/L			04/04/22 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/04/22 19:12*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/04/22 19:12*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 19:12*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/04/22 19:12*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 240-164432-1
Date Collected: 03/31/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 19:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 19:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 19:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 19:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 19:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*04/04/22 19:37*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 19:37*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/04/22 19:37*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/04/22 19:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-14_03312022
Lab Sample ID: 240-164432-2
Date Collected: 03/31/22 09:40
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/01/22 21:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 20:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 20:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 20:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:02	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/04/22 20:02*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/04/22 20:02*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/04/22 20:02*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/04/22 20:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-13_03312022
Lab Sample ID: 240-164432-3
Date Collected: 03/31/22 09:55
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/22 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/01/22 21:39*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 20:27	1
cis-1,2-Dichloroethene	**0.50**	**J**	1.0	0.46	ug/L			04/04/22 20:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 20:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/04/22 20:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 20:27*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*04/04/22 20:27*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*04/04/22 20:27*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_03312022
Lab Sample ID: 240-164432-4
Date Collected: 03/31/22 10:43
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1	J	2.0	0.86	ug/L			04/01/22 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*04/01/22 22:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 20:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 20:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 20:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:52	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*04/04/22 20:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 20:52*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/04/22 20:52*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/04/22 20:52*	*1*

Client Sample ID: SL-6_03312022
Lab Sample ID: 240-164432-5

Date Collected: 03/31/22 10:55
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.3	J	2.0	0.86	ug/L			04/02/22 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*04/02/22 02:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 21:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 21:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 21:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 21:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 21:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/04/22 21:17*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 21:17*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/04/22 21:17*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*04/04/22 21:17*	*1*

Client Sample ID: SL-5_03312022
Lab Sample ID: 240-164432-6

Date Collected: 03/31/22 11:03
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		2.0	0.86	ug/L			04/05/22 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/05/22 15:39*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 14:49	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			04/04/22 14:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 14:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 14:49	1
Vinyl chloride	**2.9**		1.0	0.45	ug/L			04/04/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/04/22 14:49*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/04/22 14:49*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/04/22 14:49*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/04/22 14:49*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-8_03312022
Lab Sample ID: 240-164432-7
Date Collected: 03/31/22 11:50
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			04/05/22 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/05/22 16:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 15:13	1
cis-1,2-Dichloroethene	**2.9**		1.0	0.46	ug/L			04/04/22 15:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 15:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:13	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			04/04/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/04/22 15:13*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/04/22 15:13*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/04/22 15:13*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/04/22 15:13*	*1*

Client Sample ID: SL-9_03312022
Lab Sample ID: 240-164432-8
Date Collected: 03/31/22 12:15
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			04/05/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/05/22 16:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 15:38	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			04/04/22 15:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 15:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 15:38	1
Vinyl chloride	**2.1**		1.0	0.45	ug/L			04/04/22 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/04/22 15:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 15:38*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/04/22 15:38*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/04/22 15:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_03312022
Lab Sample ID: 240-164432-9
Date Collected: 03/31/22 12:35
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			04/05/22 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/05/22 16:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 16:02	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			04/04/22 16:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 16:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:02	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			04/04/22 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/04/22 16:02*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/04/22 16:02*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/04/22 16:02*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/04/22 16:02*	*1*

Client Sample ID: SL-11_03312022
Lab Sample ID: 240-164432-10

Date Collected: 03/31/22 12:45
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			04/05/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/05/22 17:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 16:27	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			04/04/22 16:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 16:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:27	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			04/04/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/04/22 16:27*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/04/22 16:27*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/04/22 16:27*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*04/04/22 16:27*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 240-164433-1
Date Collected: 03/29/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 16:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 16:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 16:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 16:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*04/04/22 16:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/04/22 16:51*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/04/22 16:51*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/04/22 16:51*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-02_032922
Lab Sample ID: 240-164433-2
Date Collected: 03/29/22 09:45
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.1**		2.0	0.86	ug/L			04/01/22 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/01/22 22:27*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 17:16	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			04/04/22 17:16	1
Tetrachloroethene	**0.72**	**J**	1.0	0.44	ug/L			04/04/22 17:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 17:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 17:16	1
Vinyl chloride	**6.1**		1.0	0.45	ug/L			04/04/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/04/22 17:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 17:16*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/04/22 17:16*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/04/22 17:16*	*1*

Client Sample ID: MH-1231_032922
Lab Sample ID: 240-164433-3

Date Collected: 03/29/22 10:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.4**		2.0	0.86	ug/L			04/01/22 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*04/01/22 23:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/05/22 12:24	1
cis-1,2-Dichloroethene	**16**		1.0	0.46	ug/L			04/05/22 12:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/05/22 12:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/05/22 12:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/05/22 12:24	1
Vinyl chloride	**13**		1.0	0.45	ug/L			04/05/22 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/05/22 12:24*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/05/22 12:24*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/05/22 12:24*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/05/22 12:24*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-02_032922
Lab Sample ID: 240-164433-4
Date Collected: 03/29/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.3**		2.0	0.86	ug/L			04/02/22 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/02/22 00:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 18:05	1
cis-1,2-Dichloroethene	**17**		1.0	0.46	ug/L			04/04/22 18:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 18:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:05	1
Vinyl chloride	**14**		1.0	0.45	ug/L			04/04/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/04/22 18:05*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 18:05*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/04/22 18:05*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/04/22 18:05*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_033022
Lab Sample ID: 240-164433-5
Date Collected: 03/30/22 09:50
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.2**		2.0	0.86	ug/L			04/05/22 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/05/22 17:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 18:29	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			04/04/22 18:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 18:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 18:29	1
Trichloroethene	**1.9**		1.0	0.44	ug/L			04/04/22 18:29	1
Vinyl chloride	**6.5**		1.0	0.45	ug/L			04/04/22 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/04/22 18:29*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/04/22 18:29*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/04/22 18:29*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/04/22 18:29*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_033022
Lab Sample ID: 240-164433-6
Date Collected: 03/30/22 09:20
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**21**		2.0	0.86	ug/L			04/05/22 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/05/22 18:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/04/22 18:54	2
cis-1,2-Dichloroethene	**70**		2.0	0.92	ug/L			04/04/22 18:54	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/04/22 18:54	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/04/22 18:54	2
Trichloroethene	**1.2**	**J**	2.0	0.88	ug/L			04/04/22 18:54	2
Vinyl chloride	**84**		2.0	0.90	ug/L			04/04/22 18:54	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/04/22 18:54*	*2*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 18:54*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/04/22 18:54*	*2*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/04/22 18:54*	*2*

Client Sample ID: MH-1256_033022
Lab Sample ID: 240-164433-7

Date Collected: 03/30/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			04/05/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/05/22 18:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 19:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 19:18	1
Tetrachloroethene	**3.5**		1.0	0.44	ug/L			04/04/22 19:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 19:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 19:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/04/22 19:18*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 19:18*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/04/22 19:18*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/04/22 19:18*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_033022
Lab Sample ID: 240-164433-8
Date Collected: 03/30/22 09:00
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			04/05/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/05/22 18:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/04/22 19:43	2
cis-1,2-Dichloroethene	**63**		2.0	0.92	ug/L			04/04/22 19:43	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/04/22 19:43	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/04/22 19:43	2
Trichloroethene	**1.2**	**J**	2.0	0.88	ug/L			04/04/22 19:43	2
Vinyl chloride	**65**		2.0	0.90	ug/L			04/04/22 19:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/04/22 19:43*	*2*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/04/22 19:43*	*2*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/04/22 19:43*	*2*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/04/22 19:43*	*2*

Client Sample ID: MH-1244_033022
Lab Sample ID: 240-164433-9
Date Collected: 03/30/22 08:50
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.5**		2.0	0.86	ug/L			04/05/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*04/05/22 19:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/05/22 12:49	1
cis-1,2-Dichloroethene	**30**		1.0	0.46	ug/L			04/05/22 12:49	1
Tetrachloroethene	**1.5**		1.0	0.44	ug/L			04/05/22 12:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/05/22 12:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/05/22 12:49	1
Vinyl chloride	**11**		1.0	0.45	ug/L			04/05/22 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/05/22 12:49*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/05/22 12:49*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/05/22 12:49*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/05/22 12:49*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_033022
Lab Sample ID: 240-164433-10
Date Collected: 03/30/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/05/22 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/05/22 19:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 20:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 20:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 20:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 20:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*04/04/22 20:32*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/04/22 20:32*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/04/22 20:32*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/04/22 20:32*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164428-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164171-A-3 MS	Matrix Spike	92	101	95	97
240-164171-A-3 MSD	Matrix Spike Duplicate	92	102	96	98
240-164250-E-2 MS	Matrix Spike	88	101	103	95
240-164250-E-2 MSD	Matrix Spike Duplicate	87	102	104	95
240-164347-B-6 MS	Matrix Spike	92	99	93	96
240-164347-B-6 MSD	Matrix Spike Duplicate	93	101	96	100
240-164428-1	TRIP BLANK_04	97	99	101	109
240-164428-2	SL-23_033122	99	99	100	114
240-164428-3	SL-12_033122	100	101	101	111
240-164428-4	SL-19_033122	101	99	99	114
240-164431-1	TRIP BLANK_01	99	100	99	110
240-164431-2	SL-4_032822	106	100	99	118
240-164431-3	SL-18_032822	99	100	102	113
240-164431-4	SL-17_032822	98	100	99	108
240-164431-5	SL-16_032822	101	100	99	112
240-164431-6	DUP-01_032822	105	98	98	119
240-164431-7	SL-21_032822	101	99	98	112
240-164431-8	SL-20_032822	102	101	99	116
240-164431-9	SL-22_032822	100	101	100	113
240-164431-10	SL-3_032822	99	101	99	110
240-164432-1	TRIP BLANK_03	100	100	100	110
240-164432-2	SL-14_03312022	101	98	97	112
240-164432-3	SL-13_03312022	101	99	99	115
240-164432-4	SL-7_03312022	100	100	98	112
240-164432-5	SL-6_03312022	102	100	98	115
240-164432-6	SL-5_03312022	89	98	94	97
240-164432-7	SL-8_03312022	92	100	96	98
240-164432-8	SL-9_03312022	92	99	96	98
240-164432-9	SL-10_03312022	93	102	96	99
240-164432-10	SL-11_03312022	88	96	93	94
240-164433-1	TRIP BLANK_02	94	98	94	97
240-164433-2	SL-02_032922	91	99	95	97
240-164433-3	MH-1231_032922	91	97	93	96
240-164433-4	DUP-02_032922	92	99	95	97
240-164433-5	MH-1259_033022	91	97	94	98
240-164433-6	MH-1255_033022	93	99	95	99
240-164433-7	MH-1256_033022	92	99	94	96
240-164433-8	MH-1231A_033022	95	102	98	100
240-164433-9	MH-1244_033022	93	99	96	100
240-164433-10	SL-15_033022	94	101	94	98
LCS 240-521623/5	Lab Control Sample	89	102	104	96
LCS 240-521655/5	Lab Control Sample	92	101	96	97
LCS 240-521750/5	Lab Control Sample	91	100	94	96
MB 240-521623/8	Method Blank	97	99	100	111
MB 240-521655/8	Method Blank	95	98	92	97
MB 240-521750/8	Method Blank	93	99	91	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-164428-2	SL-23_033122	85						
240-164428-3	SL-12_033122	84						
240-164428-4	SL-19_033122	85						
240-164431-2	SL-4_032822	83						
240-164431-3	SL-18_032822	83						
240-164431-4	SL-17_032822	80						
240-164431-5	SL-16_032822	84						
240-164431-6	DUP-01_032822	83						
240-164431-7	SL-21_032822	82						
240-164431-8	SL-20_032822	85						
240-164431-9	SL-22_032822	85						
240-164431-10	SL-3_032822	84						
240-164432-2	SL-14_03312022	82						
240-164432-3	SL-13_03312022	84						
240-164432-4	SL-7_03312022	81						
240-164432-5	SL-6_03312022	81						
240-164432-6	SL-5_03312022	106						
240-164432-7	SL-8_03312022	109						
240-164432-8	SL-9_03312022	108						
240-164432-9	SL-10_03312022	109						
240-164432-10	SL-11_03312022	107						
240-164433-2	SL-02_032922	85						
240-164433-2 MS	SL-02_032922	87						
240-164433-2 MSD	SL-02_032922	84						
240-164433-3	MH-1231_032922	86						
240-164433-4	DUP-02_032922	83						
240-164433-5	MH-1259_033022	110						
240-164433-6	MH-1255_033022	108						
240-164433-7	MH-1256_033022	107						
240-164433-8	MH-1231A_033022	108						
240-164433-9	MH-1244_033022	101						
240-164433-10	SL-15_033022	103						
240-164508-B-1 MS	Matrix Spike	102						
240-164508-B-1 MSD	Matrix Spike Duplicate	102						
LCS 240-521566/4	Lab Control Sample	84						
LCS 240-521812/3	Lab Control Sample	104						
MB 240-521566/5	Method Blank	83						
MB 240-521812/4	Method Blank	105						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA								
Lab Sample ID	Client Sample ID	(10-150)								
MRL 240-521812/5	Lab Control Sample	99								

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-521623/8
Matrix: Water
Analysis Batch: 521623

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 12:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 12:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 12:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 12:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 12:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*04/04/22 12:08*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/04/22 12:08*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/04/22 12:08*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/04/22 12:08*	*1*

Lab Sample ID: LCS 240-521623/5
Matrix: Water
Analysis Batch: 521623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	21.5		ug/L		107	63 - 134
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	77 - 123
Tetrachloroethene	20.0	18.1		ug/L		91	76 - 123
trans-1,2-Dichloroethene	20.0	20.1		ug/L		100	75 - 124
Trichloroethene	20.0	18.8		ug/L		94	70 - 122
Vinyl chloride	20.0	23.5		ug/L		117	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*104*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: 240-164250-E-2 MS
Matrix: Water
Analysis Batch: 521623

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	10	U	200	205		ug/L		103	56 - 135
cis-1,2-Dichloroethene	10	U	200	187		ug/L		93	66 - 128
Tetrachloroethene	10	U	200	177		ug/L		88	62 - 131
trans-1,2-Dichloroethene	10	U	200	188		ug/L		94	56 - 136
Trichloroethene	660		200	835	E	ug/L		86	61 - 124
Vinyl chloride	10	U	200	208		ug/L		104	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*103*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-164250-E-2 MS
Matrix: Water
Analysis Batch: 521623

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: 240-164250-E-2 MSD
Matrix: Water
Analysis Batch: 521623

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	10	U	200	212		ug/L		106	56 - 135	3	26
cis-1,2-Dichloroethene	10	U	200	191		ug/L		96	66 - 128	2	14
Tetrachloroethene	10	U	200	183		ug/L		92	62 - 131	4	20
trans-1,2-Dichloroethene	10	U	200	196		ug/L		98	56 - 136	4	15
Trichloroethene	660		200	807	E	ug/L		73	61 - 124	3	15
Vinyl chloride	10	U	200	207		ug/L		103	43 - 157	0	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*104*		*78 - 122*
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 240-521655/8
Matrix: Water
Analysis Batch: 521655

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/04/22 13:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/04/22 13:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 13:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/04/22 13:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/04/22 13:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/04/22 13:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/04/22 13:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/04/22 13:35*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/04/22 13:35*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/04/22 13:35*	*1*

Lab Sample ID: LCS 240-521655/5
Matrix: Water
Analysis Batch: 521655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	22.0		ug/L		110	63 - 134
cis-1,2-Dichloroethene	20.0	21.5		ug/L		107	77 - 123
Tetrachloroethene	20.0	20.5		ug/L		102	76 - 123
trans-1,2-Dichloroethene	20.0	21.5		ug/L		107	75 - 124
Trichloroethene	20.0	21.1		ug/L		105	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-521655/5
Matrix: Water
Analysis Batch: 521655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	23.6		ug/L		118	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: 240-164171-A-3 MS
Matrix: Water
Analysis Batch: 521655

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	8.0	U	160	152		ug/L		95	56 - 135		
cis-1,2-Dichloroethene	170		160	319		ug/L		96	66 - 128		
Tetrachloroethene	8.0	U	160	136		ug/L		85	62 - 131		
trans-1,2-Dichloroethene	8.0	U	160	152		ug/L		95	56 - 136		
Trichloroethene	8.0	U	160	146		ug/L		91	61 - 124		
Vinyl chloride	8.0	U	160	166		ug/L		104	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: 240-164171-A-3 MSD
Matrix: Water
Analysis Batch: 521655

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	8.0	U	160	162		ug/L		101	56 - 135	7	26
cis-1,2-Dichloroethene	170		160	325		ug/L		100	66 - 128	2	14
Tetrachloroethene	8.0	U	160	141		ug/L		88	62 - 131	4	20
trans-1,2-Dichloroethene	8.0	U	160	162		ug/L		101	56 - 136	7	15
Trichloroethene	8.0	U	160	155		ug/L		97	61 - 124	6	15
Vinyl chloride	8.0	U	160	169		ug/L		106	43 - 157	2	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-521750/8
Matrix: Water
Analysis Batch: 521750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/05/22 12:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/05/22 12:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/05/22 12:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/05/22 12:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/05/22 12:00	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/05/22 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/05/22 12:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/05/22 12:00*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/05/22 12:00*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/05/22 12:00*	*1*

Lab Sample ID: LCS 240-521750/5
Matrix: Water
Analysis Batch: 521750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	20.5		ug/L		102	63 - 134
cis-1,2-Dichloroethene	20.0	20.5		ug/L		103	77 - 123
Tetrachloroethene	20.0	19.1		ug/L		96	76 - 123
trans-1,2-Dichloroethene	20.0	20.3		ug/L		102	75 - 124
Trichloroethene	20.0	19.8		ug/L		99	70 - 122
Vinyl chloride	20.0	22.7		ug/L		114	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*
Toluene-d8 (Surr)	*94*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: 240-164347-B-6 MS
Matrix: Water
Analysis Batch: 521750

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	10	U	200	187		ug/L		94	56 - 135
cis-1,2-Dichloroethene	11		200	193		ug/L		91	66 - 128
Tetrachloroethene	10	U	200	165		ug/L		83	62 - 131
trans-1,2-Dichloroethene	10	U	200	184		ug/L		92	56 - 136
Trichloroethene	9.9	J	200	183		ug/L		87	61 - 124
Vinyl chloride	10	U	200	200		ug/L		100	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*93*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-164347-B-6 MS
Matrix: Water
Analysis Batch: 521750

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: 240-164347-B-6 MSD
Matrix: Water
Analysis Batch: 521750

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	10	U	200	201		ug/L		100	56 - 135	7	26
cis-1,2-Dichloroethene	11		200	214		ug/L		101	66 - 128	10	14
Tetrachloroethene	10	U	200	172		ug/L		86	62 - 131	4	20
trans-1,2-Dichloroethene	10	U	200	196		ug/L		98	56 - 136	6	15
Trichloroethene	9.9	J	200	195		ug/L		93	61 - 124	7	15
Vinyl chloride	10	U	200	207		ug/L		103	43 - 157	3	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-521566/5
Matrix: Water
Analysis Batch: 521566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/01/22 17:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/01/22 17:42*	*1*

Lab Sample ID: LCS 240-521566/4
Matrix: Water
Analysis Batch: 521566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	10.0	10.4		ug/L		104	80 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*

Lab Sample ID: 240-164433-2 MS
Matrix: Water
Analysis Batch: 521566

Client Sample ID: SL-02_032922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	5.1		10.0	15.2		ug/L		101	51 - 153

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*

Lab Sample ID: 240-164433-2 MSD
Matrix: Water
Analysis Batch: 521566

Client Sample ID: SL-02_032922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	5.1		10.0	14.7		ug/L		96	51 - 153	3	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*

Lab Sample ID: MB 240-521812/4
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/05/22 14:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/05/22 14:40*	*1*

Lab Sample ID: LCS 240-521812/3
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	9.73		ug/L		97	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Lab Sample ID: MRL 240-521812/5
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			0.00100	0.00113	J	ng/uL		113	10 - 150		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*10 - 150*

Lab Sample ID: 240-164508-B-1 MS
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0		10.0	11.9		ug/L		98	51 - 153		

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-164508-B-1 MS
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*

Lab Sample ID: 240-164508-B-1 MSD
Matrix: Water
Analysis Batch: 521812

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0		10.0	12.6		ug/L		106	51 - 153	6	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*

GC/MS VOA

Analysis Batch: 521566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164428-2	SL-23_033122	Total/NA	Water	8260D SIM	
240-164428-3	SL-12_033122	Total/NA	Water	8260D SIM	
240-164428-4	SL-19_033122	Total/NA	Water	8260D SIM	
240-164431-2	SL-4_032822	Total/NA	Water	8260D SIM	
240-164431-3	SL-18_032822	Total/NA	Water	8260D SIM	
240-164431-4	SL-17_032822	Total/NA	Water	8260D SIM	
240-164431-5	SL-16_032822	Total/NA	Water	8260D SIM	
240-164431-6	DUP-01_032822	Total/NA	Water	8260D SIM	
240-164431-7	SL-21_032822	Total/NA	Water	8260D SIM	
240-164431-8	SL-20_032822	Total/NA	Water	8260D SIM	
240-164431-9	SL-22_032822	Total/NA	Water	8260D SIM	
240-164431-10	SL-3_032822	Total/NA	Water	8260D SIM	
240-164432-2	SL-14_03312022	Total/NA	Water	8260D SIM	
240-164432-3	SL-13_03312022	Total/NA	Water	8260D SIM	
240-164432-4	SL-7_03312022	Total/NA	Water	8260D SIM	
240-164432-5	SL-6_03312022	Total/NA	Water	8260D SIM	
240-164433-2	SL-02_032922	Total/NA	Water	8260D SIM	
240-164433-3	MH-1231_032922	Total/NA	Water	8260D SIM	
240-164433-4	DUP-02_032922	Total/NA	Water	8260D SIM	
MB 240-521566/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-521566/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164433-2 MS	SL-02_032922	Total/NA	Water	8260D SIM	
240-164433-2 MSD	SL-02_032922	Total/NA	Water	8260D SIM	

Analysis Batch: 521623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164428-1	TRIP BLANK_04	Total/NA	Water	8260D	
240-164428-2	SL-23_033122	Total/NA	Water	8260D	
240-164428-3	SL-12_033122	Total/NA	Water	8260D	
240-164428-4	SL-19_033122	Total/NA	Water	8260D	
240-164431-1	TRIP BLANK_01	Total/NA	Water	8260D	
240-164431-2	SL-4_032822	Total/NA	Water	8260D	
240-164431-3	SL-18_032822	Total/NA	Water	8260D	
240-164431-4	SL-17_032822	Total/NA	Water	8260D	
240-164431-5	SL-16_032822	Total/NA	Water	8260D	
240-164431-6	DUP-01_032822	Total/NA	Water	8260D	
240-164431-7	SL-21_032822	Total/NA	Water	8260D	
240-164431-8	SL-20_032822	Total/NA	Water	8260D	
240-164431-9	SL-22_032822	Total/NA	Water	8260D	
240-164431-10	SL-3_032822	Total/NA	Water	8260D	
240-164432-1	TRIP BLANK_03	Total/NA	Water	8260D	
240-164432-2	SL-14_03312022	Total/NA	Water	8260D	
240-164432-3	SL-13_03312022	Total/NA	Water	8260D	
240-164432-4	SL-7_03312022	Total/NA	Water	8260D	
240-164432-5	SL-6_03312022	Total/NA	Water	8260D	
MB 240-521623/8	Method Blank	Total/NA	Water	8260D	
LCS 240-521623/5	Lab Control Sample	Total/NA	Water	8260D	
240-164250-E-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-164250-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS VOA

Analysis Batch: 521655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164432-6	SL-5_03312022	Total/NA	Water	8260D	
240-164432-7	SL-8_03312022	Total/NA	Water	8260D	
240-164432-8	SL-9_03312022	Total/NA	Water	8260D	
240-164432-9	SL-10_03312022	Total/NA	Water	8260D	
240-164432-10	SL-11_03312022	Total/NA	Water	8260D	
240-164433-1	TRIP BLANK_02	Total/NA	Water	8260D	
240-164433-2	SL-02_032922	Total/NA	Water	8260D	
240-164433-4	DUP-02_032922	Total/NA	Water	8260D	
240-164433-5	MH-1259_033022	Total/NA	Water	8260D	
240-164433-6	MH-1255_033022	Total/NA	Water	8260D	
240-164433-7	MH-1256_033022	Total/NA	Water	8260D	
240-164433-8	MH-1231A_033022	Total/NA	Water	8260D	
240-164433-10	SL-15_033022	Total/NA	Water	8260D	
MB 240-521655/8	Method Blank	Total/NA	Water	8260D	
LCS 240-521655/5	Lab Control Sample	Total/NA	Water	8260D	
240-164171-A-3 MS	Matrix Spike	Total/NA	Water	8260D	
240-164171-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 521750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164433-3	MH-1231_032922	Total/NA	Water	8260D	
240-164433-9	MH-1244_033022	Total/NA	Water	8260D	
MB 240-521750/8	Method Blank	Total/NA	Water	8260D	
LCS 240-521750/5	Lab Control Sample	Total/NA	Water	8260D	
240-164347-B-6 MS	Matrix Spike	Total/NA	Water	8260D	
240-164347-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 521812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164432-6	SL-5_03312022	Total/NA	Water	8260D SIM	
240-164432-7	SL-8_03312022	Total/NA	Water	8260D SIM	
240-164432-8	SL-9_03312022	Total/NA	Water	8260D SIM	
240-164432-9	SL-10_03312022	Total/NA	Water	8260D SIM	
240-164432-10	SL-11_03312022	Total/NA	Water	8260D SIM	
240-164433-5	MH-1259_033022	Total/NA	Water	8260D SIM	
240-164433-6	MH-1255_033022	Total/NA	Water	8260D SIM	
240-164433-7	MH-1256_033022	Total/NA	Water	8260D SIM	
240-164433-8	MH-1231A_033022	Total/NA	Water	8260D SIM	
240-164433-9	MH-1244_033022	Total/NA	Water	8260D SIM	
240-164433-10	SL-15_033022	Total/NA	Water	8260D SIM	
MB 240-521812/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-521812/3	Lab Control Sample	Total/NA	Water	8260D SIM	
MRL 240-521812/5	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164508-B-1 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-164508-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 240-164428-1
Date Collected: 03/31/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 13:48	HMB	TAL CAN

Client Sample ID: SL-23_033122
Lab Sample ID: 240-164428-2
Date Collected: 03/31/22 12:43
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 14:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 18:53	CS	TAL CAN

Client Sample ID: SL-12_033122
Lab Sample ID: 240-164428-3
Date Collected: 03/31/22 13:05
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 14:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 19:17	CS	TAL CAN

Client Sample ID: SL-19_033122
Lab Sample ID: 240-164428-4
Date Collected: 03/31/22 13:15
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 15:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 19:40	CS	TAL CAN

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 240-164431-1
Date Collected: 03/28/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 15:27	HMB	TAL CAN

Client Sample ID: SL-4_032822
Lab Sample ID: 240-164431-2
Date Collected: 03/28/22 10:35
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 15:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 20:04	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-18_032822
Lab Sample ID: 240-164431-3
Date Collected: 03/28/22 11:13
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 16:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 20:28	CS	TAL CAN

Client Sample ID: SL-17_032822
Lab Sample ID: 240-164431-4
Date Collected: 03/28/22 11:33
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 16:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 20:51	CS	TAL CAN

Client Sample ID: SL-16_032822
Lab Sample ID: 240-164431-5
Date Collected: 03/28/22 12:05
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 17:08	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 00:25	CS	TAL CAN

Client Sample ID: DUP-01_032822
Lab Sample ID: 240-164431-6
Date Collected: 03/28/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 17:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 00:49	CS	TAL CAN

Client Sample ID: SL-21_032822
Lab Sample ID: 240-164431-7
Date Collected: 03/29/22 08:30
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 17:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 01:13	CS	TAL CAN

Client Sample ID: SL-20_032822
Lab Sample ID: 240-164431-8
Date Collected: 03/29/22 09:05
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 18:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 01:37	CS	TAL CAN

Client Sample ID: SL-22_032822
Lab Sample ID: 240-164431-9
Date Collected: 03/29/22 09:15
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 18:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 02:01	CS	TAL CAN

Client Sample ID: SL-3_032822
Lab Sample ID: 240-164431-10
Date Collected: 03/29/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 19:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 02:24	CS	TAL CAN

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 240-164432-1
Date Collected: 03/31/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 19:37	HMB	TAL CAN

Client Sample ID: SL-14_03312022
Lab Sample ID: 240-164432-2
Date Collected: 03/31/22 09:40
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 20:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 21:15	CS	TAL CAN

Client Sample ID: SL-13_03312022
Lab Sample ID: 240-164432-3
Date Collected: 03/31/22 09:55
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 20:27	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 21:39	CS	TAL CAN

Client Sample ID: SL-7_03312022
Lab Sample ID: 240-164432-4
Date Collected: 03/31/22 10:43
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 20:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 22:03	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-6_03312022
Lab Sample ID: 240-164432-5
Date Collected: 03/31/22 10:55
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521623	04/04/22 21:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 02:48	CS	TAL CAN

Client Sample ID: SL-5_03312022
Lab Sample ID: 240-164432-6
Date Collected: 03/31/22 11:03
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 14:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 15:39	CS	TAL CAN

Client Sample ID: SL-8_03312022
Lab Sample ID: 240-164432-7
Date Collected: 03/31/22 11:50
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 15:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 16:04	CS	TAL CAN

Client Sample ID: SL-9_03312022
Lab Sample ID: 240-164432-8
Date Collected: 03/31/22 12:15
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 15:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 16:28	CS	TAL CAN

Client Sample ID: SL-10_03312022
Lab Sample ID: 240-164432-9
Date Collected: 03/31/22 12:35
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 16:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 16:53	CS	TAL CAN

Client Sample ID: SL-11_03312022
Lab Sample ID: 240-164432-10
Date Collected: 03/31/22 12:45
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 16:27	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 17:18	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 240-164433-1
Date Collected: 03/29/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 16:51	HMB	TAL CAN

Client Sample ID: SL-02_032922
Lab Sample ID: 240-164433-2
Date Collected: 03/29/22 09:45
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 17:16	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 22:27	CS	TAL CAN

Client Sample ID: MH-1231_032922
Lab Sample ID: 240-164433-3
Date Collected: 03/29/22 10:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521750	04/05/22 12:24	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/01/22 23:38	CS	TAL CAN

Client Sample ID: DUP-02_032922
Lab Sample ID: 240-164433-4
Date Collected: 03/29/22 00:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 18:05	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521566	04/02/22 00:02	CS	TAL CAN

Client Sample ID: MH-1259_033022
Lab Sample ID: 240-164433-5
Date Collected: 03/30/22 09:50
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 18:29	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 17:43	CS	TAL CAN

Client Sample ID: MH-1255_033022
Lab Sample ID: 240-164433-6
Date Collected: 03/30/22 09:20
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	521655	04/04/22 18:54	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 18:08	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1256_033022
Lab Sample ID: 240-164433-7
Date Collected: 03/30/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 19:18	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 18:33	CS	TAL CAN

Client Sample ID: MH-1231A_033022
Lab Sample ID: 240-164433-8
Date Collected: 03/30/22 09:00
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	521655	04/04/22 19:43	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 18:58	CS	TAL CAN

Client Sample ID: MH-1244_033022
Lab Sample ID: 240-164433-9
Date Collected: 03/30/22 08:50
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521750	04/05/22 12:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 19:23	CS	TAL CAN

Client Sample ID: SL-15_033022
Lab Sample ID: 240-164433-10
Date Collected: 03/30/22 09:30
Matrix: Water
Date Received: 04/01/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	521655	04/04/22 20:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	521812	04/05/22 19:48	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164428-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-21-14	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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0-410-2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 1
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:	☐ ☐ ☐ ☐		Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK _01	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-4_032822	3/28/22	1055		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-18_032822	3/28/22	1115		X						6					N	G	X	X	X	X	X	X	X	
SL-17_032822	3/28/22	1135		X						6					N	G	X	X	X	X	X	X	X	
SL-16-032822	3/28/22	1205		X						6					N	G	X	X	X	X	X	X	X	
DUP-01_032822	3/28/22	---		X						6					N	G	X	X	X	X	X	X	X	
SL-21_032922	3/29/22	850		X						6					N	G	X	X	X	X	X	X	X	
SL-20_032922	3/29/22	905		X						6					N	G	X	X	X	X	X	X	X	
SL-22_032922	3/29/22	915		X						6					N	G	X	X	X	X	X	X	X	
SL-3_032922	3/29/22	930		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	3/31/22	[signature]	TestAmerica	3/31/22 1433
Relinquished by: [signature]	Company: EETA	Date/Time: 3/31/22 1435	Received by: [signature]	Company: EETNC	Date/Time: 4-1-22 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

0-4/0-2

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 2
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNG3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_02	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL_02_032922	3/29/22	945		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1231_032922	3/29/22	1000		X						6					N	G	X	X	X	X	X	X	X	
DUP-02_032922	3/29/22	—		X						6					N	G	X	X	X	X	X	X	X	
MH-1259_033022	3/30/22	950		X						6					N	G	X	X	X	X	X	X	X	
MH-1255_033022	3/30/22	920		X						6					N	G	X	X	X	X	X	X	X	
MH-1256_033022	3/30/22	930		X						6					N	G	X	X	X	X	X	X	X	
MH-1231A_033022	3/30/22	900		X						6					N	G	X	X	X	X	X	X	X	
MH-1244_033022	3/30/22	850		X						6					N	G	X	X	X	X	X	X	X	
SL-15_033122	3/31/22	930		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	3/31/22	[signature]	Test America	3/31/22 1433
Relinquished by: [signature]	Company: FEDEX	Date/Time: 3/31/22 1435	Received by: Rachella Hirdler	Company: FEDEX	Date/Time: 4-1-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

04/02

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 3
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-14_033122	3/31/22	940		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-13_033122		955		X						6					N	G	X	X	X	X	X	X	X					
SL-7_033122		1045		X						6					N	G	X	X	X	X	X	X	X					
SL-6_033122		1055		X						6					N	G	X	X	X	X	X	X	X					
SL-5_033122		1105		X						6					N	G	X	X	X	X	X	X	X					
SL-F_033122		1150		X						6					N	G	X	X	X	X	X	X	X					
SL-9_033122		1215		X						6					N	G	X	X	X	X	X	X	X					
SL-10_033122		1235		X						6					N	G	X	X	X	X	X	X	X					
SL-11_033122		1245		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	3/31/22	[signature]	Test America	3/31/22 1433
Relinquished by: [signature]	Company: EETM	Date/Time: 3/31/22 1435	Received by: [signature]	Company: ETNC	Date/Time: 4-1-22 8:45
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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MICHIGAN 190

Chain of Custody Record

0-4/0-2

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 4
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client:
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK -04	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-23_03122	3/31/22	1245		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B
SL-12_03122	"	1305		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B SIM
SL-14_03122	"	1315		X						6					N	G	X	X	X	X	X	X	X	"

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Kristoffer Hinskey	Arcadis	3/31/22	[illegible]	Test America	3/31/22 1633
[illegible]	EETA	3/31/22 1435	Rachelle Nardelli	EETA	4-1-22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/6/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 164405

Client Arcadis Site Name _____

Cooler Received on 4-1-22 Opened on 4-1-22

FedEx: 1st Grd Exp UPS FAS ~~Clipper~~ Client Drop Off TestAmerica Courier Other _____

Cooler unpacked by: Rachelle

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp 2.4 °C Corrected Cooler Temp. 0.2 °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)
-Were tamper/custody seals intact and uncompromised?	(Yes) No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes (No)
4. Did custody papers accompany the sample(s)?	(Yes) No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes) No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	(Yes) No
10. Were correct bottle(s) used for the test(s) indicated?	(Yes) No
11. Sufficient quantity received to perform indicated analyses?	(Yes) No
12. Are these work share samples and all listed on the COC?	Yes (No)
If yes, Questions 13-17 have been checked at the originating laboratory.	
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC?	(Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ⇐ Larger than this.	(Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 01042016	(Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

TB does not receive 1-4 Dioxane analysis

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-164428-1

Login Number: 164431
List Number: 1
Creator: Garrett, Adam J

List Source: Eurofins Canton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-164428-1

Login Number: 164433
List Number: 1
Creator: Garrett, Adam J

List Source: Eurofins Canton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

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ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-164735-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
4/13/2022 12:19:42 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164735-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-164735-1

Comments
No additional comments.

Receipt
The samples were received on 4/8/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1º C.

Receipt Exceptions
Trip blank 145 was listed twice and trip blank 144 was not listed at all, this has been corrected.

Sample DUP-02 was received in the cooler but was not listed, it has been added.

GC/MS VOA
Method 8260D: The pH of sample SL-13_040522 (240-164735-10) was greater than 2. The sample was analyzed within the 7 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably, Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-522301.

Method 8260D: The MS/MSD for batch 522304 was not reported because the parent sample needs analyzed straight: TRIP BLANK_143 (240-164735-21), SL-19_040522 (240-164735-22), SL-17_040622 (240-164735-23), SL-16_040622 (240-164735-24), SL-3_040622 (240-164735-25), SL-2_040622 (240-164735-26), DUP-02_040622 (240-164735-29), MH-1231A_040722 (240-164735-30), MH-1255_040722 (240-164735-31), TRIP BLANK_145 (240-164735-32), MH-1256_040722 (240-164735-33) and MH-1259_040722 (240-164735-34)

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-522443.

Method 8260D SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SL-19_040522 (240-164735-22). Elevated reporting limits (RLs) are provided.

Method 8260D SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-9_040522 (240-164735-16).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164735-1	TRIP BLANK_144	Water	04/04/22 00:00	04/08/22 08:00
240-164735-2	SL-20_040422	Water	04/04/22 10:55	04/08/22 08:00
240-164735-3	SL-21_040422	Water	04/04/22 10:40	04/08/22 08:00
240-164735-4	SL-22_040422	Water	04/04/22 11:10	04/08/22 08:00
240-164735-5	SL-18_040422	Water	04/04/22 11:50	04/08/22 08:00
240-164735-6	SL-4_040422	Water	04/04/22 11:30	04/08/22 08:00
240-164735-7	DUP-01_040422	Water	04/04/22 00:00	04/08/22 08:00
240-164735-8	SL-15_040522	Water	04/05/22 09:15	04/08/22 08:00
240-164735-9	SL-14_040522	Water	04/05/22 09:40	04/08/22 08:00
240-164735-10	SL-13_040522	Water	04/05/22 09:50	04/08/22 08:00
240-164735-11	TRIP BLANK_100	Water	04/05/22 00:00	04/08/22 08:00
240-164735-12	SL-7_040522	Water	04/05/22 10:10	04/08/22 08:00
240-164735-13	SL-6_040522	Water	04/05/22 10:30	04/08/22 08:00
240-164735-14	SL-5_040522	Water	04/05/22 10:55	04/08/22 08:00
240-164735-15	SL-8_040522	Water	04/05/22 11:30	04/08/22 08:00
240-164735-16	SL-9_040522	Water	04/05/22 12:00	04/08/22 08:00
240-164735-17	SL-10_040522	Water	04/05/22 12:15	04/08/22 08:00
240-164735-18	SL-11_040522	Water	04/05/22 12:35	04/08/22 08:00
240-164735-19	SL-23_040522	Water	04/05/22 12:55	04/08/22 08:00
240-164735-20	SL-12_040522	Water	04/05/22 13:10	04/08/22 08:00
240-164735-21	TRIP BLANK_143	Water	04/05/22 00:00	04/08/22 08:00
240-164735-22	SL-19_040522	Water	04/05/22 13:30	04/08/22 08:00
240-164735-23	SL-17_040622	Water	04/06/22 09:25	04/08/22 08:00
240-164735-24	SL-16_040622	Water	04/06/22 09:25	04/08/22 08:00
240-164735-25	SL-3_040622	Water	04/06/22 10:00	04/08/22 08:00
240-164735-26	SL-2_040622	Water	04/06/22 10:20	04/08/22 08:00
240-164735-27	MH-1231_040622	Water	04/06/22 10:40	04/08/22 08:00
240-164735-28	MH-1244_040622	Water	04/06/22 11:00	04/08/22 08:00
240-164735-29	DUP-02_040622	Water	04/06/22 00:00	04/08/22 08:00
240-164735-30	MH-1231A_040722	Water	04/07/22 08:40	04/08/22 08:00
240-164735-31	MH-1255_040722	Water	04/07/22 09:00	04/08/22 08:00
240-164735-32	TRIP BLANK_145	Water	04/07/22 00:00	04/08/22 08:00
240-164735-33	MH-1256_040722	Water	04/07/22 09:15	04/08/22 08:00
240-164735-34	MH-1259_040722	Water	04/07/22 09:40	04/08/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_144 — Lab Sample ID: 240-164735-1

No Detections.

Client Sample ID: SL-20_040422 — Lab Sample ID: 240-164735-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_040422 — Lab Sample ID: 240-164735-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.95	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.60	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_040422 — Lab Sample ID: 240-164735-4

No Detections.

Client Sample ID: SL-18_040422 — Lab Sample ID: 240-164735-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	15		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_040422 — Lab Sample ID: 240-164735-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.93	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.73	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	8.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_040422 — Lab Sample ID: 240-164735-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.89	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.71	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	8.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_040522 — Lab Sample ID: 240-164735-8

No Detections.

Client Sample ID: SL-14_040522 — Lab Sample ID: 240-164735-9

No Detections.

Client Sample ID: SL-13_040522 — Lab Sample ID: 240-164735-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_100 — Lab Sample ID: 240-164735-11

No Detections.

Client Sample ID: SL-7_040522 — Lab Sample ID: 240-164735-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-6_040522 — Lab Sample ID: 240-164735-13

No Detections.

Client Sample ID: SL-5_040522 — Lab Sample ID: 240-164735-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_040522 — Lab Sample ID: 240-164735-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_040522 — Lab Sample ID: 240-164735-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.88	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_040522 — Lab Sample ID: 240-164735-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.93	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_040522 — Lab Sample ID: 240-164735-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.68	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_040522 — Lab Sample ID: 240-164735-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_040522 — Lab Sample ID: 240-164735-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.91	J	1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_143 — Lab Sample ID: 240-164735-21

No Detections.

Client Sample ID: SL-19_040522 — Lab Sample ID: 240-164735-22

No Detections.

Client Sample ID: SL-17_040622 — Lab Sample ID: 240-164735-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_040622 — Lab Sample ID: 240-164735-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_040622 — Lab Sample ID: 240-164735-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	7.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_040622 — Lab Sample ID: 240-164735-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_040622 — Lab Sample ID: 240-164735-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	19		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_040622 — Lab Sample ID: 240-164735-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_040622 — Lab Sample ID: 240-164735-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	19		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_040722 — Lab Sample ID: 240-164735-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	27		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	52		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	36		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1255_040722 — Lab Sample ID: 240-164735-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	25	F1	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	64		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	84		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: TRIP BLANK_145 — Lab Sample ID: 240-164735-32

No Detections.

Client Sample ID: MH-1256_040722 — Lab Sample ID: 240-164735-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.78	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_040722 — Lab Sample ID: 240-164735-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.52	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	9.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.6		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.9		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_144
Lab Sample ID: 240-164735-1
Date Collected: 04/04/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 13:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 13:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 13:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*04/11/22 13:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/11/22 13:33*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 13:33*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/11/22 13:33*	*1*

Client Sample ID: SL-20_040422
Lab Sample ID: 240-164735-2

Date Collected: 04/04/22 10:55
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			04/08/22 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/08/22 18:52*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 13:58	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			04/11/22 13:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 13:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:58	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			04/11/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/11/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/11/22 13:58*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/11/22 13:58*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/11/22 13:58*	*1*

Client Sample ID: SL-21_040422
Lab Sample ID: 240-164735-3

Date Collected: 04/04/22 10:40
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.95**	**J**	2.0	0.86	ug/L			04/08/22 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/08/22 19:17*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 14:22	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			04/11/22 14:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 14:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:22	1
Vinyl chloride	**0.60**	**J**	1.0	0.45	ug/L			04/11/22 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 14:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/11/22 14:22*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 14:22*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/11/22 14:22*	*1*

Client Sample ID: SL-22_040422
Lab Sample ID: 240-164735-4

Date Collected: 04/04/22 11:10
Matrix: Water

Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/08/22 19:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 14:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 14:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 14:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/11/22 14:47*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 14:47*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/11/22 14:47*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 14:47*	*1*

Client Sample ID: SL-18_040422
Lab Sample ID: 240-164735-5

Date Collected: 04/04/22 11:50
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			04/08/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/08/22 20:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 15:11	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			04/11/22 15:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 15:11	1
trans-1,2-Dichloroethene	**1.4**		1.0	0.51	ug/L			04/11/22 15:11	1
Trichloroethene	**15**		1.0	0.44	ug/L			04/11/22 15:11	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			04/11/22 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 15:11*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/11/22 15:11*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/11/22 15:11*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/11/22 15:11*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_040422
Lab Sample ID: 240-164735-6
Date Collected: 04/04/22 11:30
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.93**	**J**	2.0	0.86	ug/L			04/08/22 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*04/08/22 21:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 15:36	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			04/11/22 15:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 15:36	1
trans-1,2-Dichloroethene	**0.73**	**J**	1.0	0.51	ug/L			04/11/22 15:36	1
Trichloroethene	**8.4**		1.0	0.44	ug/L			04/11/22 15:36	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			04/11/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/11/22 15:36*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/11/22 15:36*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 15:36*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/11/22 15:36*	*1*

Client Sample ID: DUP-01_040422
Lab Sample ID: 240-164735-7

Date Collected: 04/04/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.89**	**J**	2.0	0.86	ug/L			04/08/22 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/08/22 21:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 16:00	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			04/11/22 16:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:00	1
trans-1,2-Dichloroethene	**0.71**	**J**	1.0	0.51	ug/L			04/11/22 16:00	1
Trichloroethene	**8.2**		1.0	0.44	ug/L			04/11/22 16:00	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			04/11/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 16:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 16:00*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 16:00*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/11/22 16:00*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_040522
Lab Sample ID: 240-164735-8
Date Collected: 04/05/22 09:15
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/08/22 22:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 16:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 16:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 16:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/11/22 16:25*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/11/22 16:25*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/11/22 16:25*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 16:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-14_040522
Lab Sample ID: 240-164735-9
Date Collected: 04/05/22 09:40
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/08/22 22:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 16:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 16:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 16:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:49	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/11/22 16:49*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 16:49*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/11/22 16:49*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 16:49*	*1*

Client Sample ID: SL-13_040522
Lab Sample ID: 240-164735-10

Date Collected: 04/05/22 09:50
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/08/22 23:01*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 17:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 17:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 17:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/11/22 17:14*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/11/22 17:14*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/11/22 17:14*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/11/22 17:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_100
Lab Sample ID: 240-164735-11
Date Collected: 04/05/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 17:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 17:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 17:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*04/11/22 17:39*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 17:39*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 17:39*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/11/22 17:39*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_040522
Lab Sample ID: 240-164735-12
Date Collected: 04/05/22 10:10
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.6		2.0	0.86	ug/L			04/08/22 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/08/22 23:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 18:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 18:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 18:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 18:03*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/11/22 18:03*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/11/22 18:03*	*1*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*04/11/22 18:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-6_040522
Lab Sample ID: 240-164735-13
Date Collected: 04/05/22 10:30
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/08/22 23:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 18:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 18:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 18:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/11/22 18:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 18:28*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/11/22 18:28*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 18:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-5_040522
Lab Sample ID: 240-164735-14
Date Collected: 04/05/22 10:55
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			04/09/22 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/09/22 00:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 18:52	1
cis-1,2-Dichloroethene	**3.9**		1.0	0.46	ug/L			04/11/22 18:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 18:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:52	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			04/11/22 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*04/11/22 18:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/11/22 18:52*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/11/22 18:52*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/11/22 18:52*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-8_040522
Lab Sample ID: 240-164735-15
Date Collected: 04/05/22 11:30
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			04/09/22 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*04/09/22 00:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 19:17	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			04/11/22 19:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 19:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 19:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 19:17	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			04/11/22 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/11/22 19:17*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/11/22 19:17*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 19:17*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/11/22 19:17*	*1*

Client Sample ID: SL-9_040522
Lab Sample ID: 240-164735-16

Date Collected: 04/05/22 12:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.88**	**J**	2.0	0.86	ug/L			04/09/22 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*04/09/22 01:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 19:41	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			04/11/22 19:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 19:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 19:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 19:41	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			04/11/22 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/11/22 19:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/11/22 19:41*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/11/22 19:41*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/11/22 19:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_040522
Lab Sample ID: 240-164735-17
Date Collected: 04/05/22 12:15
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.93**	**J**	2.0	0.86	ug/L			04/09/22 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/09/22 01:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 20:06	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			04/11/22 20:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 20:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:06	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			04/11/22 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 20:06*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/11/22 20:06*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/11/22 20:06*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 20:06*	*1*

Client Sample ID: SL-11_040522
Lab Sample ID: 240-164735-18

Date Collected: 04/05/22 12:35
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/09/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/09/22 01:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 20:30	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.46	ug/L			04/11/22 20:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 20:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:30	1
Vinyl chloride	**0.68**	**J**	1.0	0.45	ug/L			04/11/22 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/11/22 20:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/11/22 20:30*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/11/22 20:30*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/11/22 20:30*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-23_040522
Lab Sample ID: 240-164735-19
Date Collected: 04/05/22 12:55
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			04/09/22 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/09/22 02:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 20:55	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			04/11/22 20:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 20:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 20:55	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			04/11/22 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/11/22 20:55*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 20:55*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/11/22 20:55*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 20:55*	*1*

Client Sample ID: SL-12_040522
Lab Sample ID: 240-164735-20

Date Collected: 04/05/22 13:10
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/09/22 02:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/09/22 02:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 21:20	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			04/11/22 21:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 21:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 21:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 21:20	1
Vinyl chloride	**0.91**	**J**	1.0	0.45	ug/L			04/11/22 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/11/22 21:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/11/22 21:20*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/11/22 21:20*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/11/22 21:20*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_143
Lab Sample ID: 240-164735-21
Date Collected: 04/05/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 13:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 13:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 13:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/11/22 13:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 13:13*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/11/22 13:13*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*04/11/22 13:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-19_040522
Lab Sample ID: 240-164735-22
Date Collected: 04/05/22 13:30
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			04/09/22 03:10	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/09/22 03:10*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 13:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 13:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 13:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*04/11/22 13:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 13:38*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/11/22 13:38*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*04/11/22 13:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-17_040622
Lab Sample ID: 240-164735-23
Date Collected: 04/06/22 09:25
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			04/09/22 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/09/22 03:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 14:03	1
cis-1,2-Dichloroethene	**7.4**		1.0	0.46	ug/L			04/11/22 14:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 14:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:03	1
Vinyl chloride	**5.9**		1.0	0.45	ug/L			04/11/22 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/11/22 14:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 14:03*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/11/22 14:03*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*04/11/22 14:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-16_040622
Lab Sample ID: 240-164735-24
Date Collected: 04/06/22 09:25
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		2.0	0.86	ug/L			04/08/22 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/08/22 18:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 14:28	1
cis-1,2-Dichloroethene	**9.1**		1.0	0.46	ug/L			04/11/22 14:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 14:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:28	1
Vinyl chloride	**7.1**		1.0	0.45	ug/L			04/11/22 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/11/22 14:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/11/22 14:28*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/11/22 14:28*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/11/22 14:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_040622
Lab Sample ID: 240-164735-25
Date Collected: 04/06/22 10:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.5**		2.0	0.86	ug/L			04/08/22 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/08/22 19:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 14:52	1
cis-1,2-Dichloroethene	**7.8**		1.0	0.46	ug/L			04/11/22 14:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 14:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 14:52	1
Trichloroethene	**2.0**		1.0	0.44	ug/L			04/11/22 14:52	1
Vinyl chloride	**7.3**		1.0	0.45	ug/L			04/11/22 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*04/11/22 14:52*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/11/22 14:52*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/11/22 14:52*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/11/22 14:52*	*1*

Client Sample ID: SL-2_040622
Lab Sample ID: 240-164735-26

Date Collected: 04/06/22 10:20
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			04/08/22 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/08/22 19:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 15:17	1
cis-1,2-Dichloroethene	**8.9**		1.0	0.46	ug/L			04/11/22 15:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 15:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 15:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 15:17	1
Vinyl chloride	**7.6**		1.0	0.45	ug/L			04/11/22 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/11/22 15:17*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/11/22 15:17*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/11/22 15:17*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/11/22 15:17*	*1*

Client Sample ID: MH-1231_040622
Lab Sample ID: 240-164735-27

Date Collected: 04/06/22 10:40
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.8**		2.0	0.86	ug/L			04/08/22 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/08/22 20:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/12/22 13:57	1
cis-1,2-Dichloroethene	**19**		1.0	0.46	ug/L			04/12/22 13:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 13:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/12/22 13:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 13:57	1
Vinyl chloride	**19**		1.0	0.45	ug/L			04/12/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/12/22 13:57*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/12/22 13:57*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/12/22 13:57*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/12/22 13:57*	*1*

Client Sample ID: MH-1244_040622
Lab Sample ID: 240-164735-28

Date Collected: 04/06/22 11:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.4**		2.0	0.86	ug/L			04/08/22 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/08/22 20:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/12/22 14:22	1
cis-1,2-Dichloroethene	**8.7**		1.0	0.46	ug/L			04/12/22 14:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/12/22 14:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 14:22	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			04/12/22 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*04/12/22 14:22*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/12/22 14:22*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*04/12/22 14:22*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/12/22 14:22*	*1*

Client Sample ID: DUP-02_040622
Lab Sample ID: 240-164735-29

Date Collected: 04/06/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.6**		2.0	0.86	ug/L			04/08/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/08/22 20:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 16:33	1
cis-1,2-Dichloroethene	**19**		1.0	0.46	ug/L			04/11/22 16:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 16:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 16:33	1
Vinyl chloride	**19**		1.0	0.45	ug/L			04/11/22 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/11/22 16:33*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/11/22 16:33*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/11/22 16:33*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/11/22 16:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_040722
Lab Sample ID: 240-164735-30
Date Collected: 04/07/22 08:40
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**27**		2.0	0.86	ug/L			04/08/22 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/08/22 21:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/11/22 16:58	2
cis-1,2-Dichloroethene	**52**		2.0	0.92	ug/L			04/11/22 16:58	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/11/22 16:58	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/11/22 16:58	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			04/11/22 16:58	2
Vinyl chloride	**36**		2.0	0.90	ug/L			04/11/22 16:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/11/22 16:58*	*2*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/11/22 16:58*	*2*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/11/22 16:58*	*2*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/11/22 16:58*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_040722
Lab Sample ID: 240-164735-31
Date Collected: 04/07/22 09:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**25**	**F1**	2.0	0.86	ug/L			04/08/22 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/08/22 21:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/11/22 17:23	2
cis-1,2-Dichloroethene	**64**		2.0	0.92	ug/L			04/11/22 17:23	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/11/22 17:23	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/11/22 17:23	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			04/11/22 17:23	2
Vinyl chloride	**84**		2.0	0.90	ug/L			04/11/22 17:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*04/11/22 17:23*	*2*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/11/22 17:23*	*2*
Toluene-d8 (Surr)	*105*		*78 - 122*		*04/11/22 17:23*	*2*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*04/11/22 17:23*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_145
Lab Sample ID: 240-164735-32
Date Collected: 04/07/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 17:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 17:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 17:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 17:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*04/11/22 17:48*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/11/22 17:48*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/11/22 17:48*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*04/11/22 17:48*	*1*

Client Sample ID: MH-1256_040722
Lab Sample ID: 240-164735-33

Date Collected: 04/07/22 09:15
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.9**		2.0	0.86	ug/L			04/08/22 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/08/22 22:49*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 18:13	1
cis-1,2-Dichloroethene	**0.78**	**J**	1.0	0.46	ug/L			04/11/22 18:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 18:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*04/11/22 18:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 18:13*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/11/22 18:13*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/11/22 18:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_040722
Lab Sample ID: 240-164735-34
Date Collected: 04/07/22 09:40
Matrix: Water
Date Received: 04/08/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.0**		2.0	0.86	ug/L			04/08/22 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/08/22 23:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.52**	**J**	1.0	0.49	ug/L			04/11/22 18:38	1
cis-1,2-Dichloroethene	**9.1**		1.0	0.46	ug/L			04/11/22 18:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 18:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 18:38	1
Trichloroethene	**1.6**		1.0	0.44	ug/L			04/11/22 18:38	1
Vinyl chloride	**3.9**		1.0	0.45	ug/L			04/11/22 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/11/22 18:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 18:38*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/11/22 18:38*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/11/22 18:38*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164735-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164735-1	TRIP BLANK_144	96	98	93	99
240-164735-2	SL-20_040422	92	100	95	99
240-164735-3	SL-21_040422	91	97	93	97
240-164735-4	SL-22_040422	90	99	97	98
240-164735-5	SL-18_040422	91	96	92	95
240-164735-6	SL-4_040422	90	95	93	95
240-164735-7	DUP-01_040422	91	99	93	96
240-164735-8	SL-15_040522	90	98	95	98
240-164735-9	SL-14_040522	93	99	95	98
240-164735-10	SL-13_040522	90	95	91	95
240-164735-11	TRIP BLANK_100	97	99	93	100
240-164735-12	SL-7_040522	91	95	92	94
240-164735-13	SL-6_040522	93	99	95	98
240-164735-14	SL-5_040522	96	101	97	100
240-164735-15	SL-8_040522	89	96	93	96
240-164735-16	SL-9_040522	92	96	93	99
240-164735-17	SL-10_040522	91	98	96	98
240-164735-18	SL-11_040522	88	96	94	95
240-164735-19	SL-23_040522	92	99	95	98
240-164735-20	SL-12_040522	91	98	94	99
240-164735-21	TRIP BLANK_143	99	99	101	108
240-164735-22	SL-19_040522	97	99	100	107
240-164735-23	SL-17_040622	99	99	103	109
240-164735-24	SL-16_040622	101	101	103	110
240-164735-25	SL-3_040622	103	102	103	112
240-164735-26	SL-2_040622	99	100	103	110
240-164735-27	MH-1231_040622	104	101	102	111
240-164735-28	MH-1244_040622	106	99	104	110
240-164735-29	DUP-02_040622	102	100	101	112
240-164735-30	MH-1231A_040722	102	102	103	111
240-164735-31	MH-1255_040722	100	101	105	108
240-164735-32	TRIP BLANK_145	101	98	100	108
240-164735-33	MH-1256_040722	103	99	102	111
240-164735-34	MH-1259_040722	102	99	101	110
LCS 240-522301/5	Lab Control Sample	89	97	92	93
LCS 240-522304/5	Lab Control Sample	88	104	107	95
LCS 240-522443/5	Lab Control Sample	92	103	107	96
LCSD 240-522301/6	Lab Control Sample Dup	89	99	95	97
LCSD 240-522443/6	Lab Control Sample Dup	89	100	104	93
MB 240-522301/9	Method Blank	95	99	94	98
MB 240-522304/8	Method Blank	98	99	102	109
MB 240-522443/9	Method Blank	105	100	102	110

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-164735-2	SL-20_040422	111
240-164735-3	SL-21_040422	110
240-164735-4	SL-22_040422	110
240-164735-5	SL-18_040422	108
240-164735-5 MS	SL-18_040422	107
240-164735-5 MSD	SL-18_040422	107
240-164735-6	SL-4_040422	104
240-164735-7	DUP-01_040422	106
240-164735-8	SL-15_040522	107
240-164735-9	SL-14_040522	107
240-164735-10	SL-13_040522	106
240-164735-12	SL-7_040522	106
240-164735-13	SL-6_040522	106
240-164735-14	SL-5_040522	110
240-164735-15	SL-8_040522	113
240-164735-16	SL-9_040522	112
240-164735-17	SL-10_040522	111
240-164735-18	SL-11_040522	109
240-164735-19	SL-23_040522	111
240-164735-20	SL-12_040522	111
240-164735-22	SL-19_040522	103
240-164735-23	SL-17_040622	109
240-164735-24	SL-16_040622	83
240-164735-25	SL-3_040622	82
240-164735-26	SL-2_040622	83
240-164735-27	MH-1231_040622	85
240-164735-28	MH-1244_040622	83
240-164735-29	DUP-02_040622	82
240-164735-30	MH-1231A_040722	84
240-164735-31	MH-1255_040722	84
240-164735-31 MS	MH-1255_040722	83
240-164735-31 MSD	MH-1255_040722	83
240-164735-33	MH-1256_040722	82
240-164735-34	MH-1259_040722	84
LCS 240-522224/4	Lab Control Sample	106
LCS 240-522226/4	Lab Control Sample	81
MB 240-522224/5	Method Blank	107
MB 240-522226/5	Method Blank	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(10-150)
MRL 240-522224/6	Lab Control Sample	107
MRL 240-522226/6	Lab Control Sample	84

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-164735-1

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-522301/9
Matrix: Water
Analysis Batch: 522301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 13:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 13:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 13:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 13:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 13:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/11/22 13:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 13:09*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/11/22 13:09*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/11/22 13:09*	*1*

Lab Sample ID: LCS 240-522301/5
Matrix: Water
Analysis Batch: 522301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.0	19.1		ug/L		96	63 - 134		
cis-1,2-Dichloroethene			20.0	18.7		ug/L		93	77 - 123		
Tetrachloroethene			20.0	17.5		ug/L		87	76 - 123		
trans-1,2-Dichloroethene			20.0	18.7		ug/L		94	75 - 124		
Trichloroethene			20.0	18.4		ug/L		92	70 - 122		
Vinyl chloride			20.0	20.2		ug/L		101	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*93*		*73 - 120*

Lab Sample ID: LCSD 240-522301/6
Matrix: Water
Analysis Batch: 522301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	20.0		ug/L		100	63 - 134	4	35
cis-1,2-Dichloroethene			20.0	19.2		ug/L		96	77 - 123	2	35
Tetrachloroethene			20.0	18.2		ug/L		91	76 - 123	4	35
trans-1,2-Dichloroethene			20.0	19.6		ug/L		98	75 - 124	4	35
Trichloroethene			20.0	18.9		ug/L		94	70 - 122	3	35
Vinyl chloride			20.0	20.4		ug/L		102	60 - 144	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-522301/6
Matrix: Water
Analysis Batch: 522301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: MB 240-522304/8
Matrix: Water
Analysis Batch: 522304

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/11/22 12:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/11/22 12:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 12:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/11/22 12:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/11/22 12:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/11/22 12:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*04/11/22 12:48*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/11/22 12:48*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/11/22 12:48*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*04/11/22 12:48*	*1*

Lab Sample ID: LCS 240-522304/5
Matrix: Water
Analysis Batch: 522304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	21.1		ug/L		105	63 - 134
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	77 - 123
Tetrachloroethene	20.0	18.4		ug/L		92	76 - 123
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	75 - 124
Trichloroethene	20.0	18.4		ug/L		92	70 - 122
Vinyl chloride	20.0	21.6		ug/L		108	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*
Toluene-d8 (Surr)	*107*		*78 - 122*
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 240-522443/9
Matrix: Water
Analysis Batch: 522443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/12/22 13:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/12/22 13:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 13:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/12/22 13:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/12/22 13:32	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-522443/9
Matrix: Water
Analysis Batch: 522443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/12/22 13:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*04/12/22 13:32*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/12/22 13:32*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/12/22 13:32*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/12/22 13:32*	*1*

Lab Sample ID: LCS 240-522443/5
Matrix: Water
Analysis Batch: 522443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.0	21.6		ug/L		108	63 - 134		
cis-1,2-Dichloroethene			20.0	20.0		ug/L		100	77 - 123		
Tetrachloroethene			20.0	19.1		ug/L		96	76 - 123		
trans-1,2-Dichloroethene			20.0	20.7		ug/L		103	75 - 124		
Trichloroethene			20.0	19.3		ug/L		97	70 - 122		
Vinyl chloride			20.0	24.1		ug/L		120	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
Toluene-d8 (Surr)	*107*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: LCSD 240-522443/6
Matrix: Water
Analysis Batch: 522443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	19.9		ug/L		99	63 - 134	8	35
cis-1,2-Dichloroethene			20.0	17.6		ug/L		88	77 - 123	13	35
Tetrachloroethene			20.0	17.2		ug/L		86	76 - 123	11	35
trans-1,2-Dichloroethene			20.0	18.1		ug/L		90	75 - 124	13	35
Trichloroethene			20.0	17.1		ug/L		85	70 - 122	12	35
Vinyl chloride			20.0	21.7		ug/L		109	60 - 144	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*
Toluene-d8 (Surr)	*104*		*78 - 122*
Dibromofluoromethane (Surr)	*93*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522224/5
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/08/22 18:02*	*1*

Lab Sample ID: LCS 240-522224/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522224

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.1		ug/L		101	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*

Lab Sample ID: MRL 240-522224/6
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522224

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			0.00100	0.00103	J	ng/uL		103	10 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*10 - 150*

Lab Sample ID: 240-164735-5 MS
Client Sample ID: SL-18_040422
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	1.0	J	10.0	11.0		ug/L		100	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Lab Sample ID: 240-164735-5 MSD
Client Sample ID: SL-18_040422
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	1.0	J	10.0	11.0		ug/L		99	51 - 153	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-522226/5
Matrix: Water
Analysis Batch: 522226

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/08/22 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*04/08/22 18:02*	*1*

Lab Sample ID: LCS 240-522226/4
Matrix: Water
Analysis Batch: 522226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.7		ug/L		107	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*

Lab Sample ID: MRL 240-522226/6
Matrix: Water
Analysis Batch: 522226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			0.00100	0.00143	J	ng/uL		143	10 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*10 - 150*

Lab Sample ID: 240-164735-31 MS
Matrix: Water
Analysis Batch: 522226

Client Sample ID: MH-1255_040722
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	25	F1	10.0	35.3		ug/L		100	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Lab Sample ID: 240-164735-31 MSD
Matrix: Water
Analysis Batch: 522226

Client Sample ID: MH-1255_040722
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	25	F1	10.0	37.7		ug/L		124	51 - 153	7	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

GC/MS VOA

Analysis Batch: 522224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-2	SL-20_040422	Total/NA	Water	8260D SIM	
240-164735-3	SL-21_040422	Total/NA	Water	8260D SIM	
240-164735-4	SL-22_040422	Total/NA	Water	8260D SIM	
240-164735-5	SL-18_040422	Total/NA	Water	8260D SIM	
240-164735-6	SL-4_040422	Total/NA	Water	8260D SIM	
240-164735-7	DUP-01_040422	Total/NA	Water	8260D SIM	
240-164735-8	SL-15_040522	Total/NA	Water	8260D SIM	
240-164735-9	SL-14_040522	Total/NA	Water	8260D SIM	
240-164735-10	SL-13_040522	Total/NA	Water	8260D SIM	
240-164735-12	SL-7_040522	Total/NA	Water	8260D SIM	
240-164735-13	SL-6_040522	Total/NA	Water	8260D SIM	
240-164735-14	SL-5_040522	Total/NA	Water	8260D SIM	
240-164735-15	SL-8_040522	Total/NA	Water	8260D SIM	
240-164735-16	SL-9_040522	Total/NA	Water	8260D SIM	
240-164735-17	SL-10_040522	Total/NA	Water	8260D SIM	
240-164735-18	SL-11_040522	Total/NA	Water	8260D SIM	
240-164735-19	SL-23_040522	Total/NA	Water	8260D SIM	
240-164735-20	SL-12_040522	Total/NA	Water	8260D SIM	
240-164735-22	SL-19_040522	Total/NA	Water	8260D SIM	
240-164735-23	SL-17_040622	Total/NA	Water	8260D SIM	
MB 240-522224/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-522224/4	Lab Control Sample	Total/NA	Water	8260D SIM	
MRL 240-522224/6	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164735-5 MS	SL-18_040422	Total/NA	Water	8260D SIM	
240-164735-5 MSD	SL-18_040422	Total/NA	Water	8260D SIM	

Analysis Batch: 522226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-24	SL-16_040622	Total/NA	Water	8260D SIM	
240-164735-25	SL-3_040622	Total/NA	Water	8260D SIM	
240-164735-26	SL-2_040622	Total/NA	Water	8260D SIM	
240-164735-27	MH-1231_040622	Total/NA	Water	8260D SIM	
240-164735-28	MH-1244_040622	Total/NA	Water	8260D SIM	
240-164735-29	DUP-02_040622	Total/NA	Water	8260D SIM	
240-164735-30	MH-1231A_040722	Total/NA	Water	8260D SIM	
240-164735-31	MH-1255_040722	Total/NA	Water	8260D SIM	
240-164735-33	MH-1256_040722	Total/NA	Water	8260D SIM	
240-164735-34	MH-1259_040722	Total/NA	Water	8260D SIM	
MB 240-522226/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-522226/4	Lab Control Sample	Total/NA	Water	8260D SIM	
MRL 240-522226/6	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164735-31 MS	MH-1255_040722	Total/NA	Water	8260D SIM	
240-164735-31 MSD	MH-1255_040722	Total/NA	Water	8260D SIM	

Analysis Batch: 522301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-1	TRIP BLANK_144	Total/NA	Water	8260D	
240-164735-2	SL-20_040422	Total/NA	Water	8260D	
240-164735-3	SL-21_040422	Total/NA	Water	8260D	
240-164735-4	SL-22_040422	Total/NA	Water	8260D	
240-164735-5	SL-18_040422	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 522301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-6	SL-4_040422	Total/NA	Water	8260D	
240-164735-7	DUP-01_040422	Total/NA	Water	8260D	
240-164735-8	SL-15_040522	Total/NA	Water	8260D	
240-164735-9	SL-14_040522	Total/NA	Water	8260D	
240-164735-10	SL-13_040522	Total/NA	Water	8260D	
240-164735-11	TRIP BLANK_100	Total/NA	Water	8260D	
240-164735-12	SL-7_040522	Total/NA	Water	8260D	
240-164735-13	SL-6_040522	Total/NA	Water	8260D	
240-164735-14	SL-5_040522	Total/NA	Water	8260D	
240-164735-15	SL-8_040522	Total/NA	Water	8260D	
240-164735-16	SL-9_040522	Total/NA	Water	8260D	
240-164735-17	SL-10_040522	Total/NA	Water	8260D	
240-164735-18	SL-11_040522	Total/NA	Water	8260D	
240-164735-19	SL-23_040522	Total/NA	Water	8260D	
240-164735-20	SL-12_040522	Total/NA	Water	8260D	
MB 240-522301/9	Method Blank	Total/NA	Water	8260D	
LCS 240-522301/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-522301/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 522304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-21	TRIP BLANK_143	Total/NA	Water	8260D	
240-164735-22	SL-19_040522	Total/NA	Water	8260D	
240-164735-23	SL-17_040622	Total/NA	Water	8260D	
240-164735-24	SL-16_040622	Total/NA	Water	8260D	
240-164735-25	SL-3_040622	Total/NA	Water	8260D	
240-164735-26	SL-2_040622	Total/NA	Water	8260D	
240-164735-29	DUP-02_040622	Total/NA	Water	8260D	
240-164735-30	MH-1231A_040722	Total/NA	Water	8260D	
240-164735-31	MH-1255_040722	Total/NA	Water	8260D	
240-164735-32	TRIP BLANK_145	Total/NA	Water	8260D	
240-164735-33	MH-1256_040722	Total/NA	Water	8260D	
240-164735-34	MH-1259_040722	Total/NA	Water	8260D	
MB 240-522304/8	Method Blank	Total/NA	Water	8260D	
LCS 240-522304/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 522443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164735-27	MH-1231_040622	Total/NA	Water	8260D	
240-164735-28	MH-1244_040622	Total/NA	Water	8260D	
MB 240-522443/9	Method Blank	Total/NA	Water	8260D	
LCS 240-522443/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-522443/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_144
Lab Sample ID: 240-164735-1
Date Collected: 04/04/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 13:33	HMB	TAL CAN

Client Sample ID: SL-20_040422
Lab Sample ID: 240-164735-2
Date Collected: 04/04/22 10:55
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 13:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 18:52	CS	TAL CAN

Client Sample ID: SL-21_040422
Lab Sample ID: 240-164735-3
Date Collected: 04/04/22 10:40
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 14:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 19:17	CS	TAL CAN

Client Sample ID: SL-22_040422
Lab Sample ID: 240-164735-4
Date Collected: 04/04/22 11:10
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 14:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 19:42	CS	TAL CAN

Client Sample ID: SL-18_040422
Lab Sample ID: 240-164735-5
Date Collected: 04/04/22 11:50
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 15:11	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 20:07	CS	TAL CAN

Client Sample ID: SL-4_040422
Lab Sample ID: 240-164735-6
Date Collected: 04/04/22 11:30
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 15:36	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 21:21	CS	TAL CAN

Client Sample ID: DUP-01_040422
Lab Sample ID: 240-164735-7
Date Collected: 04/04/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 16:00	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 21:46	CS	TAL CAN

Client Sample ID: SL-15_040522
Lab Sample ID: 240-164735-8
Date Collected: 04/05/22 09:15
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 16:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 22:11	CS	TAL CAN

Client Sample ID: SL-14_040522
Lab Sample ID: 240-164735-9
Date Collected: 04/05/22 09:40
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 16:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 22:36	CS	TAL CAN

Client Sample ID: SL-13_040522
Lab Sample ID: 240-164735-10
Date Collected: 04/05/22 09:50
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 17:14	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 23:01	CS	TAL CAN

Client Sample ID: TRIP BLANK_100
Lab Sample ID: 240-164735-11
Date Collected: 04/05/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 17:39	HMB	TAL CAN

Client Sample ID: SL-7_040522
Lab Sample ID: 240-164735-12
Date Collected: 04/05/22 10:10
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 18:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 23:26	CS	TAL CAN

Client Sample ID: SL-6_040522
Lab Sample ID: 240-164735-13
Date Collected: 04/05/22 10:30
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 18:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/08/22 23:51	CS	TAL CAN

Client Sample ID: SL-5_040522
Lab Sample ID: 240-164735-14
Date Collected: 04/05/22 10:55
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 18:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 00:16	CS	TAL CAN

Client Sample ID: SL-8_040522
Lab Sample ID: 240-164735-15
Date Collected: 04/05/22 11:30
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 19:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 00:41	CS	TAL CAN

Client Sample ID: SL-9_040522
Lab Sample ID: 240-164735-16
Date Collected: 04/05/22 12:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 19:41	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 01:06	CS	TAL CAN

Client Sample ID: SL-10_040522
Lab Sample ID: 240-164735-17
Date Collected: 04/05/22 12:15
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 20:06	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 01:31	CS	TAL CAN

Client Sample ID: SL-11_040522
Lab Sample ID: 240-164735-18
Date Collected: 04/05/22 12:35
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 20:30	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 01:55	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-23_040522
Lab Sample ID: 240-164735-19
Date Collected: 04/05/22 12:55
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 20:55	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 02:20	CS	TAL CAN

Client Sample ID: SL-12_040522
Lab Sample ID: 240-164735-20
Date Collected: 04/05/22 13:10
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522301	04/11/22 21:20	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 02:45	CS	TAL CAN

Client Sample ID: TRIP BLANK_143
Lab Sample ID: 240-164735-21
Date Collected: 04/05/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 13:13	HMB	TAL CAN

Client Sample ID: SL-19_040522
Lab Sample ID: 240-164735-22
Date Collected: 04/05/22 13:30
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 13:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		2	522224	04/09/22 03:10	CS	TAL CAN

Client Sample ID: SL-17_040622
Lab Sample ID: 240-164735-23
Date Collected: 04/06/22 09:25
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 14:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522224	04/09/22 03:35	CS	TAL CAN

Client Sample ID: SL-16_040622
Lab Sample ID: 240-164735-24
Date Collected: 04/06/22 09:25
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 14:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 18:50	CS	TAL CAN

Client Sample ID: SL-3_040622
Lab Sample ID: 240-164735-25
Date Collected: 04/06/22 10:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 14:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 19:14	CS	TAL CAN

Client Sample ID: SL-2_040622
Lab Sample ID: 240-164735-26
Date Collected: 04/06/22 10:20
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 15:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 19:38	CS	TAL CAN

Client Sample ID: MH-1231_040622
Lab Sample ID: 240-164735-27
Date Collected: 04/06/22 10:40
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522443	04/12/22 13:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 20:02	CS	TAL CAN

Client Sample ID: MH-1244_040622
Lab Sample ID: 240-164735-28
Date Collected: 04/06/22 11:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522443	04/12/22 14:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 20:26	CS	TAL CAN

Client Sample ID: DUP-02_040622
Lab Sample ID: 240-164735-29
Date Collected: 04/06/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 16:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 20:50	CS	TAL CAN

Client Sample ID: MH-1231A_040722
Lab Sample ID: 240-164735-30
Date Collected: 04/07/22 08:40
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	522304	04/11/22 16:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 21:13	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_040722
Lab Sample ID: 240-164735-31
Date Collected: 04/07/22 09:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	522304	04/11/22 17:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 21:37	CS	TAL CAN

Client Sample ID: TRIP BLANK_145
Lab Sample ID: 240-164735-32
Date Collected: 04/07/22 00:00
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 17:48	HMB	TAL CAN

Client Sample ID: MH-1256_040722
Lab Sample ID: 240-164735-33
Date Collected: 04/07/22 09:15
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 18:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 22:49	CS	TAL CAN

Client Sample ID: MH-1259_040722
Lab Sample ID: 240-164735-34
Date Collected: 04/07/22 09:40
Matrix: Water
Date Received: 04/08/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522304	04/11/22 18:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522226	04/08/22 23:12	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164735-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record

0.3/0.1

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_145	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-20_040422	04/04/22	1055		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-21_040422	04/04/22	1040		X						6					N	G	X	X	X	X	X	X	X	
SL-22_040422	04/04/22	1110		X						6					N	G	X	X	X	X	X	X	X	
SL-18_040422	04/04/22	1150		X						6					N	G	X	X	X	X	X	X	X	
SL-4_040422	04/04/22	1130		X						6					N	G	X	X	X	X	X	X	X	
DUP-01_040422	04/04/22	---		X						6					N	G	X	X	X	X	X	X	X	
SL-15_040522	4/5/22	915		X						6					N	G	X	X	X	X	X	X	X	
SL-14_040522	4/5/22	940		X						6					N	G	X	X	X	X	X	X	X	
SL-13_040522	4/5/22	950		X						6					N	G	X	X	X	X	X	X	X	

240-164735 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
[signature]	Arcadis	4/7/22 1210	[signature]	EEPA	4-7-22 1211
[signature]	EEPA	4-7-22 1212	[signature]	EETNC	4/8/22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/13/2022

MICHIGAN 190

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Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_100	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-7_040522	4/5/22	1010		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-6_040522	4/5/22	1030		X						6					N	G	X	X	X	X	X	X	X	
SL-5_040522	4/5/22	1055		X						6					N	G	X	X	X	X	X	X	X	
SL-8_040522	4/5/22	1130		X						6					N	G	X	X	X	X	X	X	X	
SL-9_040522	4/5/22	1200		X						6					N	G	X	X	X	X	X	X	X	
SL-10_040522	4/5/22	1215		X						6					N	G	X	X	X	X	X	X	X	
SL-11_040522	4/5/22	1235		X						6					N	G	X	X	X	X	X	X	X	
SL-23_040522	4/5/22	1255		X						6					N	G	X	X	X	X	X	X	X	
SL-12_040522	4/5/22	1310		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_143	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-19_040522	4/5/22	1330		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-17_040622	4/6/22	925		X						6					N	G	X	X	X	X	X	X	X	
SL-16_040622	4/6/22	925		X						6					N	G	X	X	X	X	X	X	X	
SL-3_040622	4/6/22	1000		X						6					N	G	X	X	X	X	X	X	X	
SL-2_040622	4/6/22	1020		X						6					N	G	X	X	X	X	X	X	X	
MH-1231_040622	4/6/22	1040		X						6					N	G	X	X	X	X	X	X	X	
MH-1244_040622	4/6/22	1100		X						6					N	G	X	X	X	X	X	X	X	
MH-1231A_040722	4/7/22	840		X						6					N	G	X	X	X	X	X	X	X	
MH-1255_040722	4/7/22	900		X						6					N	G	X	X	X	X	X	X	X	2

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
[signature]	Arcadis	4/7/22 1210	[signature]	EETA	4-7-22 1211
[signature]	EETA	4-7-22 1212	[signature]	EETNC	4/8/22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/13/2022

MICHIGAN 190

Chain of Custody Record

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_145	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1256_040722	4/7/22	915		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1259_040722	4/7/22	940		X						6					N	G	X	X	X	X	X	X	X	1

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	4/7/22 / 1210	[signature]	EETA	4-7-22 1211
[signature]	EETA	4-7-22 1212	[signature]	EETNC	4/8/22 0:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/13/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: Matthew Surma

Cooler Received on 4/8/22 Opened on 4/8/22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. 0.3 °C Corrected Cooler Temp. 0.1 °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)
-Were tamper/custody seals intact and uncompromised?	(Yes) No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes (No)
4. Did custody papers accompany the sample(s)?	(Yes) No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes) No MJL 4/8/22 16:00
7. Did all bottles arrive in good condition (Unbroken)?	(Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10. Were correct bottle(s) used for the test(s) indicated?	(Yes) No
11. Sufficient quantity received to perform indicated analyses?	(Yes) No
12. Are these work share samples and all listed on the COC?	Yes (No)
If yes, Questions 13-17 have been checked at the originating laboratory.	
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC?	(Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	(Yes) No NA MJL 4/8/22 11:20
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	(Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

1- Trip Blanks do not ~~recie~~ receive 1,4 Dioxane test despite being listed for it on the CoC.

2- Two samples are listed as TRIP_BLANK_145 when one is TRIP BLANK_144 Plead in login. Sample DUP_2_040622 was not listed on CoC and was added on login but was found in cooler and added to the login.

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) SL-I, SL-II (1x VOA 40ml HCL each) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-164986-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
4/19/2022 8:34:20 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-164986-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-164986-1

Comments
No additional comments.

Receipt
The samples were received on 4/14/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.0º C, 1.0º C, 1.0º C, 1.1º C, 1.1º C and 1.1º C.

GC/MS VOA
Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-522876.

Method 8260D SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SL-19_041222 (240-164990-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-164986-1	TRIP BLANK-150	Water	04/13/22 00:00	04/14/22 08:00
240-164986-2	MH-1231A_041322	Water	04/13/22 10:00	04/14/22 08:00
240-164986-3	MH-1256_041322	Water	04/13/22 09:07	04/14/22 08:00
240-164986-4	MH-1244_041322	Water	04/13/22 09:45	04/14/22 08:00
240-164987-1	TRIP BLANK_154	Water	04/11/22 00:00	04/14/22 08:00
240-164987-2	SL-20_041122	Water	04/11/22 10:35	04/14/22 08:00
240-164987-3	SL-21_041122	Water	04/11/22 10:19	04/14/22 08:00
240-164987-4	DUP-02_041122	Water	04/11/22 00:00	04/14/22 08:00
240-164987-5	SL-11_041222	Water	04/12/22 13:07	04/14/22 08:00
240-164987-6	SL-23_041222	Water	04/12/22 13:20	04/14/22 08:00
240-164987-7	SL-9_041222	Water	04/12/22 12:14	04/14/22 08:00
240-164987-8	SL-15_041222	Water	04/12/22 09:44	04/14/22 08:00
240-164987-9	SL-13_041222	Water	04/12/22 10:15	04/14/22 08:00
240-164987-10	SL-16_041222	Water	04/12/22 11:03	04/14/22 08:00
240-164990-1	TRIP BLANK_149	Water	04/12/22 00:00	04/14/22 08:00
240-164990-2	SL-14_041222	Water	04/12/22 09:55	04/14/22 08:00
240-164990-3	SL-12_041222	Water	04/12/22 13:34	04/14/22 08:00
240-164990-4	SL-7_041222	Water	04/12/22 10:51	04/14/22 08:00
240-164990-5	SL-5_041222	Water	04/12/22 11:21	04/14/22 08:00
240-164990-6	SL-8_041222	Water	04/12/22 11:46	04/14/22 08:00
240-164990-7	SL-19_041222	Water	04/12/22 13:45	04/14/22 08:00
240-164990-8	SL-10_041222	Water	04/12/22 12:52	04/14/22 08:00
240-164990-9	MH-1259_041322	Water	04/13/22 09:25	04/14/22 08:00
240-164990-10	MH-1255_041322	Water	04/13/22 08:52	04/14/22 08:00
240-164995-1	TRIP BLANK_151	Water	04/11/22 00:00	04/14/22 08:00
240-164995-2	MH-1231_041122	Water	04/11/22 13:14	04/14/22 08:00
240-164995-3	SL-16_041122	Water	04/11/22 11:50	04/14/22 08:00
240-164995-4	SL-22_041122	Water	04/11/22 10:49	04/14/22 08:00
240-164995-5	SL-3_041122	Water	04/11/22 12:32	04/14/22 08:00
240-164995-6	SL-17_041122	Water	04/11/22 11:35	04/14/22 08:00
240-164995-7	SL-4_041122	Water	04/11/22 11:04	04/14/22 08:00
240-164995-8	SL-2_041122	Water	04/11/22 12:55	04/14/22 08:00
240-164995-9	SL-18_041122	Water	04/11/22 11:23	04/14/22 08:00
240-164995-10	DUP-01_041122	Water	04/11/22 00:00	04/14/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-150 — Lab Sample ID: 240-164986-1

No Detections.

Client Sample ID: MH-1231A_041322 — Lab Sample ID: 240-164986-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	24		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	60		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.1	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	59		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1256_041322 — Lab Sample ID: 240-164986-3

No Detections.

Client Sample ID: MH-1244_041322 — Lab Sample ID: 240-164986-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.48	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_154 — Lab Sample ID: 240-164987-1

No Detections.

Client Sample ID: SL-20_041122 — Lab Sample ID: 240-164987-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_041122 — Lab Sample ID: 240-164987-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.85	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_041122 — Lab Sample ID: 240-164987-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_041222 — Lab Sample ID: 240-164987-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.7		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.53	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.7		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_041222 — Lab Sample ID: 240-164987-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.0		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.48	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_041222 — Lab Sample ID: 240-164987-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.2		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.98	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_041222 — Lab Sample ID: 240-164987-8

No Detections.

Client Sample ID: SL-13_041222 — Lab Sample ID: 240-164987-9

No Detections.

Client Sample ID: SL-16_041222 — Lab Sample ID: 240-164987-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.86	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	4.9		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_149 — Lab Sample ID: 240-164990-1

No Detections.

Client Sample ID: SL-14_041222 — Lab Sample ID: 240-164990-2

No Detections.

Client Sample ID: SL-12_041222 — Lab Sample ID: 240-164990-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.83	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-7_041222 — Lab Sample ID: 240-164990-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	3.7		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-5_041222 — Lab Sample ID: 240-164990-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-8_041222 — Lab Sample ID: 240-164990-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.73	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_041222 — Lab Sample ID: 240-164990-7

No Detections.

Client Sample ID: SL-10_041222 — Lab Sample ID: 240-164990-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.4		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.66	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_041322 — Lab Sample ID: 240-164990-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.89	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.1		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	7.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_041322 — Lab Sample ID: 240-164990-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	26		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	78		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.2	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	110		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: TRIP BLANK_151 — Lab Sample ID: 240-164995-1

No Detections.

Client Sample ID: MH-1231_041122 — Lab Sample ID: 240-164995-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_041122 — Lab Sample ID: 240-164995-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_041122 — Lab Sample ID: 240-164995-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-3_041122 — Lab Sample ID: 240-164995-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_041122 — Lab Sample ID: 240-164995-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	6.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_041122 — Lab Sample ID: 240-164995-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.99	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.4		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	4.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_041122 — Lab Sample ID: 240-164995-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_041122 — Lab Sample ID: 240-164995-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_041122 — Lab Sample ID: 240-164995-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.8		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-150
Lab Sample ID: 240-164986-1
Date Collected: 04/13/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 13:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 13:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 13:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*04/15/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 13:28*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/15/22 13:28*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/15/22 13:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_041322
Lab Sample ID: 240-164986-2
Date Collected: 04/13/22 10:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**24**		2.0	0.86	ug/L			04/15/22 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 16:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/15/22 13:52	2
cis-1,2-Dichloroethene	**60**		2.0	0.92	ug/L			04/15/22 13:52	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/15/22 13:52	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/15/22 13:52	2
Trichloroethene	**1.1**	**J**	2.0	0.88	ug/L			04/15/22 13:52	2
Vinyl chloride	**59**		2.0	0.90	ug/L			04/15/22 13:52	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 137*		*04/15/22 13:52*	*2*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/15/22 13:52*	*2*
Toluene-d8 (Surr)	*90*		*78 - 122*		*04/15/22 13:52*	*2*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*04/15/22 13:52*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1256_041322
Lab Sample ID: 240-164986-3
Date Collected: 04/13/22 09:07
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/15/22 17:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 14:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 14:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 14:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/15/22 14:17*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/15/22 14:17*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*04/15/22 14:17*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/15/22 14:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1244_041322
Lab Sample ID: 240-164986-4
Date Collected: 04/13/22 09:45
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/15/22 17:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 14:41	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			04/15/22 14:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 14:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:41	1
Vinyl chloride	**0.48**	**J**	1.0	0.45	ug/L			04/15/22 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/15/22 14:41*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 14:41*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/15/22 14:41*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/15/22 14:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_154
Lab Sample ID: 240-164987-1
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 15:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 15:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 15:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*04/15/22 15:06*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 15:06*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/15/22 15:06*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/15/22 15:06*	*1*

Client Sample ID: SL-20_041122
Lab Sample ID: 240-164987-2

Date Collected: 04/11/22 10:35
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			04/15/22 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/15/22 17:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 15:30	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.46	ug/L			04/15/22 15:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 15:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:30	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			04/15/22 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/15/22 15:30*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/15/22 15:30*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*04/15/22 15:30*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/15/22 15:30*	*1*

Client Sample ID: SL-21_041122
Lab Sample ID: 240-164987-3

Date Collected: 04/11/22 10:19
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			04/15/22 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*04/15/22 19:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 15:55	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			04/15/22 15:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 15:55	1
Trichloroethene	**0.85**	**J**	1.0	0.44	ug/L			04/15/22 15:55	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			04/15/22 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/15/22 15:55*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 15:55*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/15/22 15:55*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/15/22 15:55*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02_041122
Lab Sample ID: 240-164987-4
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.8**		2.0	0.86	ug/L			04/15/22 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 19:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 16:19	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			04/15/22 16:19	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 16:19	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:19	1
Vinyl chloride	**7.0**		1.0	0.45	ug/L			04/15/22 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/15/22 16:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/15/22 16:19*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/15/22 16:19*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/15/22 16:19*	*1*

Client Sample ID: SL-11_041222
Lab Sample ID: 240-164987-5

Date Collected: 04/12/22 13:07
Matrix: Water

Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			04/15/22 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/15/22 20:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 16:44	1
cis-1,2-Dichloroethene	**4.7**		1.0	0.46	ug/L			04/15/22 16:44	1
Tetrachloroethene	**0.53**	**J**	1.0	0.44	ug/L			04/15/22 16:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 16:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:44	1
Vinyl chloride	**2.7**		1.0	0.45	ug/L			04/15/22 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/15/22 16:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 16:44*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/15/22 16:44*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/15/22 16:44*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_041222
Lab Sample ID: 240-164987-6
Date Collected: 04/12/22 13:20
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			04/15/22 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/15/22 20:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 17:08	1
cis-1,2-Dichloroethene	**5.0**		1.0	0.46	ug/L			04/15/22 17:08	1
Tetrachloroethene	**0.48**	**J**	1.0	0.44	ug/L			04/15/22 17:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 17:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:08	1
Vinyl chloride	**2.9**		1.0	0.45	ug/L			04/15/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/15/22 17:08*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/15/22 17:08*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/15/22 17:08*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*04/15/22 17:08*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-9_041222
Lab Sample ID: 240-164987-7
Date Collected: 04/12/22 12:14
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			04/15/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 20:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 17:33	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.46	ug/L			04/15/22 17:33	1
Tetrachloroethene	**0.98**	**J**	1.0	0.44	ug/L			04/15/22 17:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 17:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:33	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			04/15/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/15/22 17:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/15/22 17:33*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/15/22 17:33*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/15/22 17:33*	*1*

Client Sample ID: SL-15_041222
Lab Sample ID: 240-164987-8

Date Collected: 04/12/22 09:44
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 21:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 17:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 17:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 17:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/15/22 17:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/15/22 17:57*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/15/22 17:57*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/15/22 17:57*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_041222
Lab Sample ID: 240-164987-9
Date Collected: 04/12/22 10:15
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*04/15/22 21:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 18:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 18:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/15/22 18:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/15/22 18:22*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/15/22 18:22*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/15/22 18:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-16_041222
Lab Sample ID: 240-164987-10
Date Collected: 04/12/22 11:03
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.86**	**J**	2.0	0.86	ug/L			04/15/22 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*04/15/22 22:05*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 18:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 18:46	1
Tetrachloroethene	**4.9**		1.0	0.44	ug/L			04/15/22 18:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 18:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/15/22 18:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 18:46*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/15/22 18:46*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/15/22 18:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_149
Lab Sample ID: 240-164990-1
Date Collected: 04/12/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 19:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 19:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 19:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 19:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 19:11	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*04/15/22 19:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 19:11*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/15/22 19:11*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/15/22 19:11*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_041222
Lab Sample ID: 240-164990-2
Date Collected: 04/12/22 09:55
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/15/22 22:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 19:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 19:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 19:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 19:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 19:35	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/15/22 19:35*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/15/22 19:35*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/15/22 19:35*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*04/15/22 19:35*	*1*

Client Sample ID: SL-12_041222
Lab Sample ID: 240-164990-3

Date Collected: 04/12/22 13:34
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			04/15/22 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/15/22 22:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 20:00	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			04/15/22 20:00	1
Tetrachloroethene	**0.83**	**J**	1.0	0.44	ug/L			04/15/22 20:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 20:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 20:00	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			04/15/22 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/15/22 20:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 20:00*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/15/22 20:00*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/15/22 20:00*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_041222
Lab Sample ID: 240-164990-4
Date Collected: 04/12/22 10:51
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			04/15/22 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 23:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 20:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 20:24	1
Tetrachloroethene	**3.7**		1.0	0.44	ug/L			04/15/22 20:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 20:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 20:24	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*04/15/22 20:24*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 20:24*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/15/22 20:24*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*04/15/22 20:24*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_041222
Lab Sample ID: 240-164990-5
Date Collected: 04/12/22 11:21
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.0**		2.0	0.86	ug/L			04/15/22 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/15/22 23:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 13:07	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.46	ug/L			04/15/22 13:07	1
Tetrachloroethene	**1.2**		1.0	0.44	ug/L			04/15/22 13:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 13:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:07	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			04/15/22 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*04/15/22 13:07*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 13:07*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 13:07*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*04/15/22 13:07*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-8_041222
Lab Sample ID: 240-164990-6
Date Collected: 04/12/22 11:46
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			04/16/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/16/22 00:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 13:32	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			04/15/22 13:32	1
Tetrachloroethene	**0.73**	**J**	1.0	0.44	ug/L			04/15/22 13:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 13:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:32	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			04/15/22 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*04/15/22 13:32*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/15/22 13:32*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 13:32*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/15/22 13:32*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_041222
Lab Sample ID: 240-164990-7
Date Collected: 04/12/22 13:45
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			04/16/22 00:35	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*04/16/22 00:35*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 13:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 13:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 13:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 13:57	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/15/22 13:57*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/15/22 13:57*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/15/22 13:57*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 13:57*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-10_041222
Lab Sample ID: 240-164990-8
Date Collected: 04/12/22 12:52
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			04/16/22 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/16/22 01:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 14:22	1
cis-1,2-Dichloroethene	**4.4**		1.0	0.46	ug/L			04/15/22 14:22	1
Tetrachloroethene	**0.66**	**J**	1.0	0.44	ug/L			04/15/22 14:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 14:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:22	1
Vinyl chloride	**3.1**		1.0	0.45	ug/L			04/15/22 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*04/15/22 14:22*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 14:22*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*04/15/22 14:22*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/15/22 14:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_041322
Lab Sample ID: 240-164990-9
Date Collected: 04/13/22 09:25
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		2.0	0.86	ug/L			04/16/22 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/16/22 01:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.89	J	1.0	0.49	ug/L			04/15/22 14:47	1
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L			04/15/22 14:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 14:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 14:47	1
Trichloroethene	3.1		1.0	0.44	ug/L			04/15/22 14:47	1
Vinyl chloride	7.4		1.0	0.45	ug/L			04/15/22 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*04/15/22 14:47*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/15/22 14:47*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 14:47*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 14:47*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_041322
Lab Sample ID: 240-164990-10
Date Collected: 04/13/22 08:52
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**26**		2.0	0.86	ug/L			04/15/22 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*66 - 120*		*04/15/22 16:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/15/22 15:12	2
cis-1,2-Dichloroethene	**78**		2.0	0.92	ug/L			04/15/22 15:12	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/15/22 15:12	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/15/22 15:12	2
Trichloroethene	**1.2**	**J**	2.0	0.88	ug/L			04/15/22 15:12	2
Vinyl chloride	**110**		2.0	0.90	ug/L			04/15/22 15:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*04/15/22 15:12*	*2*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/15/22 15:12*	*2*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 15:12*	*2*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*04/15/22 15:12*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_151
Lab Sample ID: 240-164995-1
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 15:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 15:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 15:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 15:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/15/22 15:37*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 15:37*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 15:37*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 15:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_041122
Lab Sample ID: 240-164995-2
Date Collected: 04/11/22 13:14
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			04/15/22 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*04/15/22 17:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 16:02	1
cis-1,2-Dichloroethene	**5.6**		1.0	0.46	ug/L			04/15/22 16:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 16:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:02	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			04/15/22 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/15/22 16:02*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 16:02*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/15/22 16:02*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*04/15/22 16:02*	*1*

Client Sample ID: SL-16_041122
Lab Sample ID: 240-164995-3

Date Collected: 04/11/22 11:50
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			04/15/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*04/15/22 17:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 16:27	1
cis-1,2-Dichloroethene	**9.6**		1.0	0.46	ug/L			04/15/22 16:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 16:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:27	1
Vinyl chloride	**8.1**		1.0	0.45	ug/L			04/15/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/15/22 16:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 16:27*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/15/22 16:27*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 16:27*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_041122
Lab Sample ID: 240-164995-4
Date Collected: 04/11/22 10:49
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/15/22 19:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 16:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 16:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 16:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 16:52	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*62 - 137*		*04/15/22 16:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*04/15/22 16:52*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*04/15/22 16:52*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/15/22 16:52*	*1*

Client Sample ID: SL-3_041122
Lab Sample ID: 240-164995-5

Date Collected: 04/11/22 12:32
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		2.0	0.86	ug/L			04/15/22 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/15/22 19:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 17:17	1
cis-1,2-Dichloroethene	**6.9**		1.0	0.46	ug/L			04/15/22 17:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 17:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:17	1
Vinyl chloride	**5.2**		1.0	0.45	ug/L			04/15/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*62 - 137*		*04/15/22 17:17*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 17:17*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/15/22 17:17*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 120*		*04/15/22 17:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_041122
Lab Sample ID: 240-164995-6
Date Collected: 04/11/22 11:35
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.1**		2.0	0.86	ug/L			04/15/22 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/15/22 19:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 17:42	1
cis-1,2-Dichloroethene	**7.0**		1.0	0.46	ug/L			04/15/22 17:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 17:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 17:42	1
Vinyl chloride	**6.1**		1.0	0.45	ug/L			04/15/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*62 - 137*		*04/15/22 17:42*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 17:42*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/15/22 17:42*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 120*		*04/15/22 17:42*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-4_041122
Lab Sample ID: 240-164995-7
Date Collected: 04/11/22 11:04
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.99**	**J**	2.0	0.86	ug/L			04/15/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/15/22 20:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 18:07	1
cis-1,2-Dichloroethene	**4.4**		1.0	0.46	ug/L			04/15/22 18:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 18:07	1
Trichloroethene	**4.3**		1.0	0.44	ug/L			04/15/22 18:07	1
Vinyl chloride	**3.3**		1.0	0.45	ug/L			04/15/22 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*62 - 137*		*04/15/22 18:07*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*04/15/22 18:07*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 18:07*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*04/15/22 18:07*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_041122
Lab Sample ID: 240-164995-8
Date Collected: 04/11/22 12:55
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.0**		2.0	0.86	ug/L			04/15/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*04/15/22 20:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 18:32	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			04/15/22 18:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 18:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:32	1
Vinyl chloride	**8.7**		1.0	0.45	ug/L			04/15/22 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*		*04/15/22 18:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 18:32*	*1*
Toluene-d8 (Surr)	*101*		*78 - 122*		*04/15/22 18:32*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*04/15/22 18:32*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_041122
Lab Sample ID: 240-164995-9
Date Collected: 04/11/22 11:23
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			04/15/22 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*04/15/22 21:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 18:57	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			04/15/22 18:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 18:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 18:57	1
Vinyl chloride	**4.0**		1.0	0.45	ug/L			04/15/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*04/15/22 18:57*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*04/15/22 18:57*	*1*
Toluene-d8 (Surr)	*102*		*78 - 122*		*04/15/22 18:57*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 18:57*	*1*

Client Sample ID: DUP-01_041122
Lab Sample ID: 240-164995-10

Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**	**J**	2.0	0.86	ug/L			04/15/22 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*04/15/22 21:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 19:22	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			04/15/22 19:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 19:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 19:22	1
Trichloroethene	**2.0**		1.0	0.44	ug/L			04/15/22 19:22	1
Vinyl chloride	**3.8**		1.0	0.45	ug/L			04/15/22 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*62 - 137*		*04/15/22 19:22*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*04/15/22 19:22*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 19:22*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*04/15/22 19:22*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-164986-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164893-E-1 MS	Matrix Spike	96	103	98	101
240-164893-E-1 MSD	Matrix Spike Duplicate	92	98	94	98
240-164986-1	TRIP BLANK-150	97	100	92	97
240-164986-2	MH-1231A_041322	87	95	90	92
240-164986-3	MH-1256_041322	89	95	90	96
240-164986-4	MH-1244_041322	92	98	95	97
240-164987-1	TRIP BLANK_154	98	99	93	99
240-164987-2	SL-20_041122	90	95	90	96
240-164987-3	SL-21_041122	90	98	94	96
240-164987-4	DUP-02_041122	89	96	92	95
240-164987-5	SL-11_041222	91	98	94	97
240-164987-6	SL-23_041222	89	95	92	95
240-164987-7	SL-9_041222	90	96	92	96
240-164987-8	SL-15_041222	92	97	93	97
240-164987-9	SL-13_041222	93	97	93	97
240-164987-10	SL-16_041222	93	99	95	98
240-164990-1	TRIP BLANK_149	96	98	93	99
240-164990-2	SL-14_041222	93	96	93	96
240-164990-3	SL-12_041222	93	99	96	100
240-164990-4	SL-7_041222	94	100	97	101
240-164990-5	SL-5_041222	103	99	103	113
240-164990-6	SL-8_041222	106	101	103	112
240-164990-7	SL-19_041222	104	102	102	110
240-164990-8	SL-10_041222	105	100	100	111
240-164990-9	MH-1259_041322	106	102	103	110
240-164990-10	MH-1255_041322	102	101	103	109
240-164995-1	TRIP BLANK_151	104	100	103	110
240-164995-2	MH-1231_041122	104	99	101	109
240-164995-3	SL-16_041122	104	100	102	110
240-164995-4	SL-22_041122	109	101	104	112
240-164995-5	SL-3_041122	107	100	101	114
240-164995-6	SL-17_041122	108	99	101	116
240-164995-7	SL-4_041122	107	102	103	115
240-164995-8	SL-2_041122	106	98	101	111
240-164995-9	SL-18_041122	104	99	102	110
240-164995-10	DUP-01_041122	109	98	103	112
LCS 240-522876/5	Lab Control Sample	93	101	107	97
LCS 240-522881/5	Lab Control Sample	89	97	91	95
LCSD 240-522876/6	Lab Control Sample Dup	96	101	106	100
MB 240-522876/9	Method Blank	105	100	103	110
MB 240-522881/8	Method Blank	89	97	91	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-164986-2	MH-1231A_041322	103						
240-164986-3	MH-1256_041322	108						
240-164986-4	MH-1244_041322	107						
240-164987-2	SL-20_041122	109						
240-164987-2 MS	SL-20_041122	108						
240-164987-2 MSD	SL-20_041122	105						
240-164987-3	SL-21_041122	104						
240-164987-4	DUP-02_041122	103						
240-164987-5	SL-11_041222	105						
240-164987-6	SL-23_041222	105						
240-164987-7	SL-9_041222	103						
240-164987-8	SL-15_041222	103						
240-164987-9	SL-13_041222	101						
240-164987-10	SL-16_041222	104						
240-164990-2	SL-14_041222	105						
240-164990-3	SL-12_041222	108						
240-164990-4	SL-7_041222	103						
240-164990-5	SL-5_041222	105						
240-164990-6	SL-8_041222	103						
240-164990-7	SL-19_041222	100						
240-164990-8	SL-10_041222	105						
240-164990-9	MH-1259_041322	107						
240-164990-10	MH-1255_041322	79						
240-164995-2	MH-1231_041122	81						
240-164995-3	SL-16_041122	81						
240-164995-3 MS	SL-16_041122	82						
240-164995-3 MSD	SL-16_041122	84						
240-164995-4	SL-22_041122	84						
240-164995-5	SL-3_041122	83						
240-164995-6	SL-17_041122	84						
240-164995-7	SL-4_041122	85						
240-164995-8	SL-2_041122	85						
240-164995-9	SL-18_041122	84						
240-164995-10	DUP-01_041122	83						
LCS 240-522934/4	Lab Control Sample	104						
LCS 240-522935/4	Lab Control Sample	83						
MB 240-522934/5	Method Blank	103						
MB 240-522935/5	Method Blank	82						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-522876/9
Matrix: Water
Analysis Batch: 522876

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 12:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 12:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 12:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 12:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 12:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 12:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*04/15/22 12:42*	*1*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*		*04/15/22 12:42*	*1*
Toluene-d8 (Surr)	*103*		*78 - 122*		*04/15/22 12:42*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*04/15/22 12:42*	*1*

Lab Sample ID: LCS 240-522876/5
Matrix: Water
Analysis Batch: 522876

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	20.5		ug/L		102	63 - 134
cis-1,2-Dichloroethene	20.0	18.0		ug/L		90	77 - 123
Tetrachloroethene	20.0	17.8		ug/L		89	76 - 123
trans-1,2-Dichloroethene	20.0	18.8		ug/L		94	75 - 124
Trichloroethene	20.0	17.8		ug/L		89	70 - 122
Vinyl chloride	20.0	23.6		ug/L		118	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*107*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: LCSD 240-522876/6
Matrix: Water
Analysis Batch: 522876

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	20.7		ug/L		103	63 - 134	1	35
cis-1,2-Dichloroethene	20.0	18.3		ug/L		91	77 - 123	2	35
Tetrachloroethene	20.0	18.1		ug/L		90	76 - 123	1	35
trans-1,2-Dichloroethene	20.0	19.7		ug/L		98	75 - 124	4	35
Trichloroethene	20.0	17.9		ug/L		89	70 - 122	0	35
Vinyl chloride	20.0	23.4		ug/L		117	60 - 144	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*106*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-522876/6
Matrix: Water
Analysis Batch: 522876

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: MB 240-522881/8
Matrix: Water
Analysis Batch: 522881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/15/22 12:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/15/22 12:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 12:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/15/22 12:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/15/22 12:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/15/22 12:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/15/22 12:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*04/15/22 12:14*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/15/22 12:14*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*04/15/22 12:14*	*1*

Lab Sample ID: LCS 240-522881/5
Matrix: Water
Analysis Batch: 522881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	20.0		ug/L		100	63 - 134
cis-1,2-Dichloroethene	20.0	20.3		ug/L		102	77 - 123
Tetrachloroethene	20.0	18.5		ug/L		92	76 - 123
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	75 - 124
Trichloroethene	20.0	19.6		ug/L		98	70 - 122
Vinyl chloride	20.0	21.5		ug/L		107	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*
Toluene-d8 (Surr)	*91*		*78 - 122*
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: 240-164893-E-1 MS
Matrix: Water
Analysis Batch: 522881

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	10000	U	200000	192000		ug/L		96	56 - 135
cis-1,2-Dichloroethene	10000	U	200000	202000		ug/L		101	66 - 128
Tetrachloroethene	10000	U	200000	164000		ug/L		82	62 - 131
trans-1,2-Dichloroethene	10000	U	200000	191000		ug/L		96	56 - 136
Trichloroethene	10000	U	200000	186000		ug/L		93	61 - 124

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-164893-E-1 MS
Matrix: Water
Analysis Batch: 522881

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10000	U	200000	222000		ug/L		111	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: 240-164893-E-1 MSD
Matrix: Water
Analysis Batch: 522881

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	10000	U	200000	200000		ug/L		100	56 - 135	4	26
cis-1,2-Dichloroethene	10000	U	200000	204000		ug/L		102	66 - 128	1	14
Tetrachloroethene	10000	U	200000	176000		ug/L		88	62 - 131	7	20
trans-1,2-Dichloroethene	10000	U	200000	200000		ug/L		100	56 - 136	4	15
Trichloroethene	10000	U	200000	194000		ug/L		97	61 - 124	4	15
Vinyl chloride	10000	U	200000	199000		ug/L		100	43 - 157	11	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*94*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-522934/5
Matrix: Water
Analysis Batch: 522934

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 15:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/15/22 15:51*	*1*

Lab Sample ID: LCS 240-522934/4
Matrix: Water
Analysis Batch: 522934

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane			10.0	9.99		ug/L		100	80 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-164987-2 MS
Matrix: Water
Analysis Batch: 522934

Client Sample ID: SL-20_041122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	1.5	J	10.0	13.3		ug/L		118	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*

Lab Sample ID: 240-164987-2 MSD
Matrix: Water
Analysis Batch: 522934

Client Sample ID: SL-20_041122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	1.5	J	10.0	11.9		ug/L		104	51 - 153	11	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

Lab Sample ID: MB 240-522935/5
Matrix: Water
Analysis Batch: 522935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/15/22 15:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*04/15/22 15:48*	*1*

Lab Sample ID: LCS 240-522935/4
Matrix: Water
Analysis Batch: 522935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	11.0		ug/L		110	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Lab Sample ID: 240-164995-3 MS
Matrix: Water
Analysis Batch: 522935

Client Sample ID: SL-16_041122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	4.4		10.0	15.4		ug/L		110	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-164995-3 MSD
Client Sample ID: SL-16_041122
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 522935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	4.4		10.0	15.1		ug/L		107	51 - 153	2	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*

GC/MS VOA

Analysis Batch: 522876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164990-5	SL-5_041222	Total/NA	Water	8260D	
240-164990-6	SL-8_041222	Total/NA	Water	8260D	
240-164990-7	SL-19_041222	Total/NA	Water	8260D	
240-164990-8	SL-10_041222	Total/NA	Water	8260D	
240-164990-9	MH-1259_041322	Total/NA	Water	8260D	
240-164990-10	MH-1255_041322	Total/NA	Water	8260D	
240-164995-1	TRIP BLANK_151	Total/NA	Water	8260D	
240-164995-2	MH-1231_041122	Total/NA	Water	8260D	
240-164995-3	SL-16_041122	Total/NA	Water	8260D	
240-164995-4	SL-22_041122	Total/NA	Water	8260D	
240-164995-5	SL-3_041122	Total/NA	Water	8260D	
240-164995-6	SL-17_041122	Total/NA	Water	8260D	
240-164995-7	SL-4_041122	Total/NA	Water	8260D	
240-164995-8	SL-2_041122	Total/NA	Water	8260D	
240-164995-9	SL-18_041122	Total/NA	Water	8260D	
240-164995-10	DUP-01_041122	Total/NA	Water	8260D	
MB 240-522876/9	Method Blank	Total/NA	Water	8260D	
LCS 240-522876/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-522876/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 522881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164986-1	TRIP BLANK-150	Total/NA	Water	8260D	
240-164986-2	MH-1231A_041322	Total/NA	Water	8260D	
240-164986-3	MH-1256_041322	Total/NA	Water	8260D	
240-164986-4	MH-1244_041322	Total/NA	Water	8260D	
240-164987-1	TRIP BLANK_154	Total/NA	Water	8260D	
240-164987-2	SL-20_041122	Total/NA	Water	8260D	
240-164987-3	SL-21_041122	Total/NA	Water	8260D	
240-164987-4	DUP-02_041122	Total/NA	Water	8260D	
240-164987-5	SL-11_041222	Total/NA	Water	8260D	
240-164987-6	SL-23_041222	Total/NA	Water	8260D	
240-164987-7	SL-9_041222	Total/NA	Water	8260D	
240-164987-8	SL-15_041222	Total/NA	Water	8260D	
240-164987-9	SL-13_041222	Total/NA	Water	8260D	
240-164987-10	SL-16_041222	Total/NA	Water	8260D	
240-164990-1	TRIP BLANK_149	Total/NA	Water	8260D	
240-164990-2	SL-14_041222	Total/NA	Water	8260D	
240-164990-3	SL-12_041222	Total/NA	Water	8260D	
240-164990-4	SL-7_041222	Total/NA	Water	8260D	
MB 240-522881/8	Method Blank	Total/NA	Water	8260D	
LCS 240-522881/5	Lab Control Sample	Total/NA	Water	8260D	
240-164893-E-1 MS	Matrix Spike	Total/NA	Water	8260D	
240-164893-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 522934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164986-2	MH-1231A_041322	Total/NA	Water	8260D SIM	
240-164986-3	MH-1256_041322	Total/NA	Water	8260D SIM	
240-164986-4	MH-1244_041322	Total/NA	Water	8260D SIM	
240-164987-2	SL-20_041122	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 522934 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164987-3	SL-21_041122	Total/NA	Water	8260D SIM	
240-164987-4	DUP-02_041122	Total/NA	Water	8260D SIM	
240-164987-5	SL-11_041222	Total/NA	Water	8260D SIM	
240-164987-6	SL-23_041222	Total/NA	Water	8260D SIM	
240-164987-7	SL-9_041222	Total/NA	Water	8260D SIM	
240-164987-8	SL-15_041222	Total/NA	Water	8260D SIM	
240-164987-9	SL-13_041222	Total/NA	Water	8260D SIM	
240-164987-10	SL-16_041222	Total/NA	Water	8260D SIM	
240-164990-2	SL-14_041222	Total/NA	Water	8260D SIM	
240-164990-3	SL-12_041222	Total/NA	Water	8260D SIM	
240-164990-4	SL-7_041222	Total/NA	Water	8260D SIM	
240-164990-5	SL-5_041222	Total/NA	Water	8260D SIM	
240-164990-6	SL-8_041222	Total/NA	Water	8260D SIM	
240-164990-7	SL-19_041222	Total/NA	Water	8260D SIM	
240-164990-8	SL-10_041222	Total/NA	Water	8260D SIM	
240-164990-9	MH-1259_041322	Total/NA	Water	8260D SIM	
MB 240-522934/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-522934/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164987-2 MS	SL-20_041122	Total/NA	Water	8260D SIM	
240-164987-2 MSD	SL-20_041122	Total/NA	Water	8260D SIM	

Analysis Batch: 522935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-164990-10	MH-1255_041322	Total/NA	Water	8260D SIM	
240-164995-2	MH-1231_041122	Total/NA	Water	8260D SIM	
240-164995-3	SL-16_041122	Total/NA	Water	8260D SIM	
240-164995-4	SL-22_041122	Total/NA	Water	8260D SIM	
240-164995-5	SL-3_041122	Total/NA	Water	8260D SIM	
240-164995-6	SL-17_041122	Total/NA	Water	8260D SIM	
240-164995-7	SL-4_041122	Total/NA	Water	8260D SIM	
240-164995-8	SL-2_041122	Total/NA	Water	8260D SIM	
240-164995-9	SL-18_041122	Total/NA	Water	8260D SIM	
240-164995-10	DUP-01_041122	Total/NA	Water	8260D SIM	
MB 240-522935/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-522935/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-164995-3 MS	SL-16_041122	Total/NA	Water	8260D SIM	
240-164995-3 MSD	SL-16_041122	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-150
Lab Sample ID: 240-164986-1
Date Collected: 04/13/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 13:28	HMB	TAL CAN

Client Sample ID: MH-1231A_041322
Lab Sample ID: 240-164986-2
Date Collected: 04/13/22 10:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	522881	04/15/22 13:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 16:41	CS	TAL CAN

Client Sample ID: MH-1256_041322
Lab Sample ID: 240-164986-3
Date Collected: 04/13/22 09:07
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 14:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 17:06	CS	TAL CAN

Client Sample ID: MH-1244_041322
Lab Sample ID: 240-164986-4
Date Collected: 04/13/22 09:45
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 14:41	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 17:30	CS	TAL CAN

Client Sample ID: TRIP BLANK_154
Lab Sample ID: 240-164987-1
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 15:06	HMB	TAL CAN

Client Sample ID: SL-20_041122
Lab Sample ID: 240-164987-2
Date Collected: 04/11/22 10:35
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 15:30	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 17:55	CS	TAL CAN

Client Sample ID: SL-21_041122
Lab Sample ID: 240-164987-3
Date Collected: 04/11/22 10:19
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 15:55	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 19:10	CS	TAL CAN

Client Sample ID: DUP-02_041122
Lab Sample ID: 240-164987-4
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 16:19	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 19:35	CS	TAL CAN

Client Sample ID: SL-11_041222
Lab Sample ID: 240-164987-5
Date Collected: 04/12/22 13:07
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 16:44	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 20:00	CS	TAL CAN

Client Sample ID: SL-23_041222
Lab Sample ID: 240-164987-6
Date Collected: 04/12/22 13:20
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 17:08	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 20:25	CS	TAL CAN

Client Sample ID: SL-9_041222
Lab Sample ID: 240-164987-7
Date Collected: 04/12/22 12:14
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 17:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 20:50	CS	TAL CAN

Client Sample ID: SL-15_041222
Lab Sample ID: 240-164987-8
Date Collected: 04/12/22 09:44
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 17:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 21:15	CS	TAL CAN

Client Sample ID: SL-13_041222
Lab Sample ID: 240-164987-9
Date Collected: 04/12/22 10:15
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 18:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 21:40	CS	TAL CAN

Client Sample ID: SL-16_041222
Lab Sample ID: 240-164987-10
Date Collected: 04/12/22 11:03
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 18:46	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 22:05	CS	TAL CAN

Client Sample ID: TRIP BLANK_149
Lab Sample ID: 240-164990-1
Date Collected: 04/12/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 19:11	HMB	TAL CAN

Client Sample ID: SL-14_041222
Lab Sample ID: 240-164990-2
Date Collected: 04/12/22 09:55
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 19:35	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 22:30	CS	TAL CAN

Client Sample ID: SL-12_041222
Lab Sample ID: 240-164990-3
Date Collected: 04/12/22 13:34
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 20:00	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 22:55	CS	TAL CAN

Client Sample ID: SL-7_041222
Lab Sample ID: 240-164990-4
Date Collected: 04/12/22 10:51
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522881	04/15/22 20:24	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 23:20	CS	TAL CAN

Client Sample ID: SL-5_041222
Lab Sample ID: 240-164990-5
Date Collected: 04/12/22 11:21
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 13:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/15/22 23:45	CS	TAL CAN

Client Sample ID: SL-8_041222
Lab Sample ID: 240-164990-6
Date Collected: 04/12/22 11:46
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 13:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/16/22 00:10	CS	TAL CAN

Client Sample ID: SL-19_041222
Lab Sample ID: 240-164990-7
Date Collected: 04/12/22 13:45
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 13:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		2	522934	04/16/22 00:35	CS	TAL CAN

Client Sample ID: SL-10_041222
Lab Sample ID: 240-164990-8
Date Collected: 04/12/22 12:52
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 14:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/16/22 01:00	CS	TAL CAN

Client Sample ID: MH-1259_041322
Lab Sample ID: 240-164990-9
Date Collected: 04/13/22 09:25
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 14:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522934	04/16/22 01:25	CS	TAL CAN

Client Sample ID: MH-1255_041322
Lab Sample ID: 240-164990-10
Date Collected: 04/13/22 08:52
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	522876	04/15/22 15:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 16:36	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_151
Lab Sample ID: 240-164995-1
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 15:37	HMB	TAL CAN

Client Sample ID: MH-1231_041122
Lab Sample ID: 240-164995-2
Date Collected: 04/11/22 13:14
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 16:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 17:34	CS	TAL CAN

Client Sample ID: SL-16_041122
Lab Sample ID: 240-164995-3
Date Collected: 04/11/22 11:50
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 16:27	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 17:57	CS	TAL CAN

Client Sample ID: SL-22_041122
Lab Sample ID: 240-164995-4
Date Collected: 04/11/22 10:49
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 16:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 19:09	CS	TAL CAN

Client Sample ID: SL-3_041122
Lab Sample ID: 240-164995-5
Date Collected: 04/11/22 12:32
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 17:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 19:33	CS	TAL CAN

Client Sample ID: SL-17_041122
Lab Sample ID: 240-164995-6
Date Collected: 04/11/22 11:35
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 17:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 19:57	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-4_041122
Lab Sample ID: 240-164995-7
Date Collected: 04/11/22 11:04
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 18:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 20:21	CS	TAL CAN

Client Sample ID: SL-2_041122
Lab Sample ID: 240-164995-8
Date Collected: 04/11/22 12:55
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 18:32	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 20:45	CS	TAL CAN

Client Sample ID: SL-18_041122
Lab Sample ID: 240-164995-9
Date Collected: 04/11/22 11:23
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 18:57	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 21:09	CS	TAL CAN

Client Sample ID: DUP-01_041122
Lab Sample ID: 240-164995-10
Date Collected: 04/11/22 00:00
Matrix: Water
Date Received: 04/14/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	522876	04/15/22 19:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	522935	04/15/22 21:32	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-164986-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	11-06-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day		For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Walk-in client
Project Number: 30080642.701.04	Shipping/Tracking No:			Lab sampling
PO # 30080642.701.04				Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK 150	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231A_041322	04/13/22	1000		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1256_041322	04/13/22	0907		X						6					N	G	X	X	X	X	X	X	X	
MH-1244_041322	04/13/22	0945		X						6					N	G	X	X	X	X	X	X	X	

240-164986 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	4/13/22 1246	[signature]	EFT	4/13/22 1250
Relinquished by: [signature]	Company: EFT	Date/Time: 4/13/22 1250	Received by: [signature]	Company: EFTNL	Date/Time: 4-14-22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/19/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 164986**
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4-14-22 Opened on 4-14-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC157842
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

Trip Blank not logged for SIM due to insufficient volume. 4-14-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login #: 164986

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	1.8	~~1.1~~ 4/14/22	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	1.9	1.0	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

MICHIGAN
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program:	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	☐ DW ☐ NPDES ☐ RCRA ☐ Other	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500		Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377		Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day ☐		Walk-in client
Phone: 248-994-2240		Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling		Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04					
PO # 30080642.701.04					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK - 154	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-20-041122	4/11/22	1035		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-21-041122	4/11/22	1019		X						6					N	G	X	X	X	X	X	X	X	
DUP-02-041122	4/11/22			X						6					N	G	X	X	X	X	X	X	X	
SL-11-041222	4/12/22	1307		X						6					N	G	X	X	X	X	X	X	X	
SL-23-041222	4/12/22	1320		X						6					N	G	X	X	X	X	X	X	X	
SL-9-041222	4/12/22	1214		X						6					N	G	X	X	X	X	X	X	X	
SL-15-041222	4/12/22	0944		X						6					N	G	X	X	X	X	X	X	X	
SL-13-041222	4/12/22	1015		X						6					N	G	X	X	X	X	X	X	X	
SL-6-041222	4/12/22	1103		X						6					N	G	X	X	X	X	X	X	X	

240-164987 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Mary Arbaugh	Arcadis	4/13/22 1246		GFA	4/13/22 1250
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GFA	4/13/22 1253	Rachelle Nauclér	EETNC	4-14-22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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4/19/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 164987**
Canton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4-14-22 Opened on 4-14-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt: ☒ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC157842
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⇐ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

Trip blank not logged for STM due to insufficient volume. 4-14-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : 164987

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	1.8	1.1 ~~1.7~~ 4-19	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	1.4	1.0	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below ☐ 3 day ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK 150	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-14_041222	4/12/22	0955		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12_041222	4/12/22	1334		X						6					N	G	X	X	X	X	X	X	X					
SL-7_041222	4/12/22	1051		X						6					N	G	X	X	X	X	X	X	X					
SL-5_041222	4/12/22	1121		X						6					N	G	X	X	X	X	X	X	X					
SL-8_041222	4/12/22	1146		X						6					N	G	X	X	X	X	X	X	X					
SL-19_041222	4/12/22	1345		X						6					N	G	X	X	X	X	X	X	X					
SL-10_041222	4/12/22	1252		X						6					N	G	X	X	X	X	X	X	X					
MH-1259_041322	4/13/22	0925		X						6					N	G	X	X	X	X	X	X	X					
MH-1255_041322	4/13/22	0852		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	4/13/22 1246	[signature]	CTA	4/13/22 1250
Relinquished by: [signature]	Company: CTA	Date/Time: 4/13/22 1252	Received by: [signature]	Company: EETNC	Date/Time: 4-14-22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

240-164990 Chain of Custody

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4/19/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 164960**
Canton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4-14-22 Opened on 4-14-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ **Storage Location** _____

TestAmerica Cooler # IA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt — See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC157842
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0401201G	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

COC says Trip Blank 150, but should be Trip Blank 149. Logged as 149.
Trip blank not logged for SM due to insufficient quantity. 4-14-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) 1-VOA SL-K1-041222 were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : 164990

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	1.8	1.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	1.7	1.0	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers

MICHIGAN
190

1.8/17

Chain of Custody Record

1.7/1.0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK - 151	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231-041122	4/11/22	1314		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11-041122	4/11/22	1150		X						6					N	G	X	X	X	X	X	X	X	
SL-22-041122	4/11/22	1049		X						6					N	G	X	X	X	X	X	X	X	
SL-3-041122	4/11/22	1232		X						6					N	G	X	X	X	X	X	X	X	
SL-17-041122	4/11/22	11:35		X						6					N	G	X	X	X	X	X	X	X	
SL-4-041122	4/11/22	11:04		X						6					N	G	X	X	X	X	X	X	X	
SL-2-041122	4/11/22	1255		X						6					N	G	X	X	X	X	X	X	X	
SL-18-041122	4/11/22	1123		X						6					N	G	X	X	X	X	X	X	X	
DUP-01-041122	4/11/22			X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	4/15/22 1246	[signature]	ETV	4/13/22 1250
Relinquished by: [signature]	Company: ETV	Date/Time: 4/13/22 1251	Received by: [signature]	Company: EFTNC	Date/Time: 4-13-22 8:00
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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240-164995 Chain of Custody

4/19/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 164995**
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4-14-22 Opened on 4-14-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-14 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 — Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? — Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? — Yes No
   -Were tamper/custody seals intact and uncompromised? — Yes No NA
3. Shippers' packing slip attached to the cooler(s)? — Yes No
4. Did custody papers accompany the sample(s)? — Yes No
5. Were the custody papers relinquished & signed in the appropriate place? — Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? — Yes No
7. Did all bottles arrive in good condition (Unbroken)? — Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? — Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? — Yes No
11. Sufficient quantity received to perform indicated analyses? — Yes No
12. Are these work share samples and all listed on the COC? — Yes No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? — Yes No NA pH Strip Lot# HC157842
14. Were VOAs on the COC? — Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. — Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered — Yes No
17. Was a LL Hg or Me Hg trip blank present? _____ — Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page — Samples processed by:

Trip Blank is not logged for STM due to insufficient volume. ENE 4-14-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : 164995

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-14 IR-15	1.8	1.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15	1.4	1.0	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-164986-1

Login Number: 164990
List Number: 1
Creator: Rigdon, Jessica M

List Source: Eurofins Canton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-165362-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
4/27/2022 11:15:28 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-165362-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-165362-1

Comments
No additional comments.

Receipt
The samples were received on 4/22/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

Receipt Exceptions
Lab received sample Dup-02 that was not listed on the CoC. This sample was added to the end of the login.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-165362-1	TRIP BLANK_01	Water	04/19/22 00:00	04/22/22 08:00
240-165362-2	SL-15_04192022	Water	04/19/22 09:15	04/22/22 08:00
240-165362-3	SL-14_04192022	Water	04/19/22 09:30	04/22/22 08:00
240-165362-4	SL-13_04192022	Water	04/19/22 09:45	04/22/22 08:00
240-165362-5	SL-7_04192022	Water	04/19/22 10:35	04/22/22 08:00
240-165362-6	SL-6_04192022	Water	04/19/22 10:45	04/22/22 08:00
240-165362-7	SL-5_04192022	Water	04/19/22 10:55	04/22/22 08:00
240-165362-8	SL-8_04192022	Water	04/19/22 11:45	04/22/22 08:00
240-165362-9	SL-9_04192022	Water	04/19/22 12:10	04/22/22 08:00
240-165362-10	SL-10_04192022	Water	04/19/22 12:35	04/22/22 08:00
240-165362-11	TRIP BLANK_02	Water	04/19/22 00:00	04/22/22 08:00
240-165362-12	DUP-01	Water	04/19/22 00:00	04/22/22 08:00
240-165362-13	SL-11_04192022	Water	04/19/22 12:45	04/22/22 08:00
240-165362-14	SL-23_04192022	Water	04/19/22 13:00	04/22/22 08:00
240-165362-15	SL-12_04192022	Water	04/19/22 13:10	04/22/22 08:00
240-165362-16	SL-19_04192022	Water	04/19/22 13:20	04/22/22 08:00
240-165362-17	SL-21_04182022	Water	04/18/22 10:30	04/22/22 08:00
240-165362-18	SL-20_04182022	Water	04/18/22 10:40	04/22/22 08:00
240-165362-19	SL-22_04182022	Water	04/18/22 10:55	04/22/22 08:00
240-165362-20	SL-4_04182022	Water	04/18/22 11:10	04/22/22 08:00
240-165362-21	TRIP BLANK_03	Water	04/18/22 00:00	04/22/22 08:00
240-165362-22	SL-18_042022	Water	04/20/22 09:05	04/22/22 08:00
240-165362-23	SL-17_042022	Water	04/20/22 09:15	04/22/22 08:00
240-165362-24	SL-16_042022	Water	04/20/22 09:30	04/22/22 08:00
240-165362-25	SL-3_042022	Water	04/20/22 09:40	04/22/22 08:00
240-165362-26	SL-2_042022	Water	04/20/22 09:50	04/22/22 08:00
240-165362-27	MH-1231_042022	Water	04/20/22 10:10	04/22/22 08:00
240-165362-28	MH-1244_042122	Water	04/21/22 08:55	04/22/22 08:00
240-165362-29	MH-1231A_042122	Water	04/21/22 09:05	04/22/22 08:00
240-165362-30	MH-1255_042122	Water	04/21/22 09:30	04/22/22 08:00
240-165362-31	TRIP BLANK_04	Water	04/21/22 00:00	04/22/22 08:00
240-165362-32	MH-1256_042122	Water	04/21/22 09:45	04/22/22 08:00
240-165362-33	MH-1259_042122	Water	04/21/22 10:00	04/22/22 08:00
240-165362-34	DUP-02	Water	04/21/22 00:00	04/22/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01 — Lab Sample ID: 240-165362-1

No Detections.

Client Sample ID: SL-15_04192022 — Lab Sample ID: 240-165362-2

No Detections.

Client Sample ID: SL-14_04192022 — Lab Sample ID: 240-165362-3

No Detections.

Client Sample ID: SL-13_04192022 — Lab Sample ID: 240-165362-4

No Detections.

Client Sample ID: SL-7_04192022 — Lab Sample ID: 240-165362-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	0.46	J	1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-6_04192022 — Lab Sample ID: 240-165362-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_04192022 — Lab Sample ID: 240-165362-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.5	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.9		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.90	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_04192022 — Lab Sample ID: 240-165362-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.9		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.98	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_04192022 — Lab Sample ID: 240-165362-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	4.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_04192022 — Lab Sample ID: 240-165362-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.5		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_02 — Lab Sample ID: 240-165362-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-01 — Lab Sample ID: 240-165362-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_04192022 — Lab Sample ID: 240-165362-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.92	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_04192022 — Lab Sample ID: 240-165362-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.81	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_04192022 — Lab Sample ID: 240-165362-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.9		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.54	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_04192022 — Lab Sample ID: 240-165362-16

No Detections.

Client Sample ID: SL-21_04182022 — Lab Sample ID: 240-165362-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.72	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_04182022 — Lab Sample ID: 240-165362-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.62	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_04182022 — Lab Sample ID: 240-165362-19

No Detections.

Client Sample ID: SL-4_04182022 — Lab Sample ID: 240-165362-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_03 — Lab Sample ID: 240-165362-21

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-165362-1

Client Sample ID: SL-18_042022 — Lab Sample ID: 240-165362-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_042022 — Lab Sample ID: 240-165362-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.79	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_042022 — Lab Sample ID: 240-165362-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_042022 — Lab Sample ID: 240-165362-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.60	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_042022 — Lab Sample ID: 240-165362-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_042022 — Lab Sample ID: 240-165362-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	18		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_042122 — Lab Sample ID: 240-165362-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.66	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_042122 — Lab Sample ID: 240-165362-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	20		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	34		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	19		2.0	0.90	ug/L	2		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_042122 — Lab Sample ID: 240-165362-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	25		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	60		2.0	0.92	ug/L	2		8260D	Total/NA
Vinyl chloride	33		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: TRIP BLANK_04 — Lab Sample ID: 240-165362-31

No Detections.

Client Sample ID: MH-1256_042122 — Lab Sample ID: 240-165362-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: MH-1259_042122 — Lab Sample ID: 240-165362-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.1		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 240-165362-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	8.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	12		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 240-165362-1
Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 15:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 15:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 15:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 15:26	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*04/22/22 15:26*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/22/22 15:26*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/22/22 15:26*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*04/22/22 15:26*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_04192022
Lab Sample ID: 240-165362-2
Date Collected: 04/19/22 09:15
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/23/22 19:44*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 15:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 15:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 15:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 15:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 15:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/22/22 15:51*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 15:51*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/22/22 15:51*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*04/22/22 15:51*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-14_04192022
Lab Sample ID: 240-165362-3
Date Collected: 04/19/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/23/22 20:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 16:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 16:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 16:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 16:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 16:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/22/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 16:15*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/22/22 16:15*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*04/22/22 16:15*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-13_04192022
Lab Sample ID: 240-165362-4
Date Collected: 04/19/22 09:45
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/23/22 20:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 16:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 16:40	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 16:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 16:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 16:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/22/22 16:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*04/22/22 16:40*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/22/22 16:40*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*04/22/22 16:40*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-7_04192022
Lab Sample ID: 240-165362-5
Date Collected: 04/19/22 10:35
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.1**		2.0	0.86	ug/L			04/23/22 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/23/22 20:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 17:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 17:05	1
Tetrachloroethene	**0.46**	**J**	1.0	0.44	ug/L			04/22/22 17:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 17:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 17:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/22/22 17:05*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 17:05*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/22/22 17:05*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*04/22/22 17:05*	*1*

Client Sample ID: SL-6_04192022
Lab Sample ID: 240-165362-6

Date Collected: 04/19/22 10:45
Matrix: Water

Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.9		2.0	0.86	ug/L			04/23/22 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/23/22 21:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 17:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 17:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 17:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 17:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 17:29	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/22/22 17:29*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/22/22 17:29*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/22/22 17:29*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/22/22 17:29*	*1*

Client Sample ID: SL-5_04192022
Lab Sample ID: 240-165362-7

Date Collected: 04/19/22 10:55
Matrix: Water

Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	0.86	ug/L			04/23/22 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/23/22 21:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 17:54	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			04/22/22 17:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 17:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 17:54	1
Trichloroethene	**3.9**		1.0	0.44	ug/L			04/22/22 17:54	1
Vinyl chloride	**0.90**	**J**	1.0	0.45	ug/L			04/22/22 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/22/22 17:54*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/22/22 17:54*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/22/22 17:54*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*04/22/22 17:54*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-8_04192022
Lab Sample ID: 240-165362-8
Date Collected: 04/19/22 11:45
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/23/22 23:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 18:18	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			04/22/22 18:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 18:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 18:18	1
Trichloroethene	**3.9**		1.0	0.44	ug/L			04/22/22 18:18	1
Vinyl chloride	**0.98**	**J**	1.0	0.45	ug/L			04/22/22 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/22/22 18:18*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*04/22/22 18:18*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/22/22 18:18*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*04/22/22 18:18*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-9_04192022
Lab Sample ID: 240-165362-9
Date Collected: 04/19/22 12:10
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/23/22 23:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 18:43	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			04/22/22 18:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 18:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 18:43	1
Trichloroethene	**4.0**		1.0	0.44	ug/L			04/22/22 18:43	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			04/22/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/22/22 18:43*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*04/22/22 18:43*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/22/22 18:43*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*04/22/22 18:43*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-10_04192022
Lab Sample ID: 240-165362-10
Date Collected: 04/19/22 12:35
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*04/23/22 23:53*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 19:07	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			04/22/22 19:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 19:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 19:07	1
Trichloroethene	**3.5**		1.0	0.44	ug/L			04/22/22 19:07	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			04/22/22 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*04/22/22 19:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 19:07*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/22/22 19:07*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*04/22/22 19:07*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 240-165362-11
Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 19:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 19:32	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 19:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 19:32	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 19:32	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/22/22 19:32*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*04/22/22 19:32*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/22/22 19:32*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*04/22/22 19:32*	*1*

Client Sample ID: DUP-01
Lab Sample ID: 240-165362-12

Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		2.0	0.86	ug/L			04/24/22 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/24/22 00:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 19:56	1
cis-1,2-Dichloroethene	**7.3**		1.0	0.46	ug/L			04/22/22 19:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 19:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 19:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 19:56	1
Vinyl chloride	**3.9**		1.0	0.45	ug/L			04/22/22 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 137*		*04/22/22 19:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*04/22/22 19:56*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/22/22 19:56*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/22/22 19:56*	*1*

Client Sample ID: SL-11_04192022
Lab Sample ID: 240-165362-13

Date Collected: 04/19/22 12:45
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/24/22 00:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 20:21	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			04/22/22 20:21	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 20:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 20:21	1
Trichloroethene	**3.2**		1.0	0.44	ug/L			04/22/22 20:21	1
Vinyl chloride	**0.92**	**J**	1.0	0.45	ug/L			04/22/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/22/22 20:21*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*04/22/22 20:21*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/22/22 20:21*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*04/22/22 20:21*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-23_04192022
Lab Sample ID: 240-165362-14
Date Collected: 04/19/22 13:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/24/22 01:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 20:45	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			04/22/22 20:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 20:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 20:45	1
Trichloroethene	**3.0**		1.0	0.44	ug/L			04/22/22 20:45	1
Vinyl chloride	**0.81**	**J**	1.0	0.45	ug/L			04/22/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/22/22 20:45*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*04/22/22 20:45*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/22/22 20:45*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*04/22/22 20:45*	*1*

Client Sample ID: SL-12_04192022
Lab Sample ID: 240-165362-15

Date Collected: 04/19/22 13:10
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/24/22 01:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 21:10	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			04/22/22 21:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 21:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 21:10	1
Trichloroethene	**1.9**		1.0	0.44	ug/L			04/22/22 21:10	1
Vinyl chloride	**0.54**	**J**	1.0	0.45	ug/L			04/22/22 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/22/22 21:10*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/22/22 21:10*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*04/22/22 21:10*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/22/22 21:10*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-19_04192022
Lab Sample ID: 240-165362-16
Date Collected: 04/19/22 13:20
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*04/24/22 01:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 21:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 21:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 21:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 21:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 21:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/22/22 21:34*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*04/22/22 21:34*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/22/22 21:34*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*04/22/22 21:34*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-21_04182022
Lab Sample ID: 240-165362-17
Date Collected: 04/18/22 10:30
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			04/24/22 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/24/22 02:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 21:59	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			04/22/22 21:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 21:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 21:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 21:59	1
Vinyl chloride	**0.72**	**J**	1.0	0.45	ug/L			04/22/22 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/22/22 21:59*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 21:59*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/22/22 21:59*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*04/22/22 21:59*	*1*

Client Sample ID: SL-20_04182022
Lab Sample ID: 240-165362-18

Date Collected: 04/18/22 10:40
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/24/22 02:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 12:45	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.46	ug/L			04/25/22 12:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 12:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 12:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 12:45	1
Vinyl chloride	**0.62**	**J**	1.0	0.45	ug/L			04/25/22 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/25/22 12:45*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*04/25/22 12:45*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/25/22 12:45*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*04/25/22 12:45*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-22_04182022
Lab Sample ID: 240-165362-19
Date Collected: 04/18/22 10:55
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/24/22 03:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 13:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/25/22 13:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 13:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/25/22 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/25/22 13:09*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*04/25/22 13:09*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/25/22 13:09*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/25/22 13:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_04182022
Lab Sample ID: 240-165362-20
Date Collected: 04/18/22 11:10
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.6**		2.0	0.86	ug/L			04/24/22 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/24/22 03:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 13:34	1
cis-1,2-Dichloroethene	**7.5**		1.0	0.46	ug/L			04/25/22 13:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 13:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:34	1
Vinyl chloride	**3.7**		1.0	0.45	ug/L			04/25/22 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/25/22 13:34*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/25/22 13:34*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/25/22 13:34*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*04/25/22 13:34*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 240-165362-21
Date Collected: 04/18/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 13:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/25/22 13:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 13:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 13:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/25/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/25/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*04/25/22 13:58*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*04/25/22 13:58*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*04/25/22 13:58*	*1*

Client Sample ID: SL-18_042022
Lab Sample ID: 240-165362-22
Date Collected: 04/20/22 09:05
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.2**		2.0	0.86	ug/L			04/25/22 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/25/22 22:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 16:50	1
cis-1,2-Dichloroethene	**8.5**		1.0	0.46	ug/L			04/25/22 16:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 16:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 16:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 16:50	1
Vinyl chloride	**4.0**		1.0	0.45	ug/L			04/25/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*04/25/22 16:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*04/25/22 16:50*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/25/22 16:50*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*04/25/22 16:50*	*1*

Client Sample ID: SL-17_042022
Lab Sample ID: 240-165362-23

Date Collected: 04/20/22 09:15
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.5**		2.0	0.86	ug/L			04/26/22 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/26/22 00:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 17:15	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			04/25/22 17:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 17:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 17:15	1
Trichloroethene	**0.79**	**J**	1.0	0.44	ug/L			04/25/22 17:15	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			04/25/22 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/25/22 17:15*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*04/25/22 17:15*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/25/22 17:15*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*04/25/22 17:15*	*1*

Client Sample ID: SL-16_042022
Lab Sample ID: 240-165362-24
Date Collected: 04/20/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.0**		2.0	0.86	ug/L			04/26/22 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/26/22 00:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 17:39	1
cis-1,2-Dichloroethene	**9.6**		1.0	0.46	ug/L			04/25/22 17:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 17:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 17:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 17:39	1
Vinyl chloride	**5.7**		1.0	0.45	ug/L			04/25/22 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/25/22 17:39*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/25/22 17:39*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/25/22 17:39*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*04/25/22 17:39*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_042022
Lab Sample ID: 240-165362-25
Date Collected: 04/20/22 09:40
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/26/22 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*04/26/22 00:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 18:04	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			04/25/22 18:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 18:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 18:04	1
Trichloroethene	**0.60**	**J**	1.0	0.44	ug/L			04/25/22 18:04	1
Vinyl chloride	**6.3**		1.0	0.45	ug/L			04/25/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*04/25/22 18:04*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*04/25/22 18:04*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/25/22 18:04*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*04/25/22 18:04*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-2_042022
Lab Sample ID: 240-165362-26
Date Collected: 04/20/22 09:50
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.1**		2.0	0.86	ug/L			04/26/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*04/26/22 01:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 18:28	1
cis-1,2-Dichloroethene	**5.0**		1.0	0.46	ug/L			04/25/22 18:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 18:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 18:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 18:28	1
Vinyl chloride	**2.7**		1.0	0.45	ug/L			04/25/22 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/25/22 18:28*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*04/25/22 18:28*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/25/22 18:28*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*04/25/22 18:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231_042022
Lab Sample ID: 240-165362-27
Date Collected: 04/20/22 10:10
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.9**		2.0	0.86	ug/L			04/26/22 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*04/26/22 01:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 18:53	1
cis-1,2-Dichloroethene	**26**		1.0	0.46	ug/L			04/25/22 18:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 18:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 18:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 18:53	1
Vinyl chloride	**18**		1.0	0.45	ug/L			04/25/22 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/25/22 18:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*04/25/22 18:53*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*04/25/22 18:53*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*04/25/22 18:53*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1244_042122
Lab Sample ID: 240-165362-28
Date Collected: 04/21/22 08:55
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/24/22 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*04/24/22 04:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 14:23	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.46	ug/L			04/25/22 14:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 14:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 14:23	1
Vinyl chloride	**0.66**	**J**	1.0	0.45	ug/L			04/25/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*04/25/22 14:23*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*04/25/22 14:23*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/25/22 14:23*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*04/25/22 14:23*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1231A_042122
Lab Sample ID: 240-165362-29
Date Collected: 04/21/22 09:05
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**20**		2.0	0.86	ug/L			04/24/22 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/24/22 04:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/25/22 14:47	2
cis-1,2-Dichloroethene	**34**		2.0	0.92	ug/L			04/25/22 14:47	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/25/22 14:47	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/25/22 14:47	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			04/25/22 14:47	2
Vinyl chloride	**19**		2.0	0.90	ug/L			04/25/22 14:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*04/25/22 14:47*	*2*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*04/25/22 14:47*	*2*
Toluene-d8 (Surr)	*91*		*78 - 122*		*04/25/22 14:47*	*2*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*04/25/22 14:47*	*2*

Client Sample ID: MH-1255_042122
Lab Sample ID: 240-165362-30

Date Collected: 04/21/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**25**		2.0	0.86	ug/L			04/23/22 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*		*04/23/22 21:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			04/25/22 15:12	2
cis-1,2-Dichloroethene	**60**		2.0	0.92	ug/L			04/25/22 15:12	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			04/25/22 15:12	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			04/25/22 15:12	2
Trichloroethene	2.0	U	2.0	0.88	ug/L			04/25/22 15:12	2
Vinyl chloride	**33**		2.0	0.90	ug/L			04/25/22 15:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*04/25/22 15:12*	*2*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/25/22 15:12*	*2*
Toluene-d8 (Surr)	*93*		*78 - 122*		*04/25/22 15:12*	*2*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*04/25/22 15:12*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 240-165362-31
Date Collected: 04/21/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 15:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/25/22 15:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 15:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 15:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 15:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/25/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*04/25/22 15:37*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/25/22 15:37*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*04/25/22 15:37*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*04/25/22 15:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1256_042122
Lab Sample ID: 240-165362-32
Date Collected: 04/21/22 09:45
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.1		2.0	0.86	ug/L			04/23/22 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*		*04/23/22 22:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 16:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/25/22 16:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 16:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 16:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 16:01	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/25/22 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*04/25/22 16:01*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/25/22 16:01*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*04/25/22 16:01*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*04/25/22 16:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_042122
Lab Sample ID: 240-165362-33
Date Collected: 04/21/22 10:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.4**		2.0	0.86	ug/L			04/23/22 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*66 - 120*		*04/23/22 22:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 16:26	1
cis-1,2-Dichloroethene	**9.2**		1.0	0.46	ug/L			04/25/22 16:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 16:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 16:26	1
Trichloroethene	**2.1**		1.0	0.44	ug/L			04/25/22 16:26	1
Vinyl chloride	**3.2**		1.0	0.45	ug/L			04/25/22 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*04/25/22 16:26*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*04/25/22 16:26*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/25/22 16:26*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*04/25/22 16:26*	*1*

Client Sample ID: DUP-02
Lab Sample ID: 240-165362-34

Date Collected: 04/21/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.3**		2.0	0.86	ug/L			04/26/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*04/26/22 02:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 19:17	1
cis-1,2-Dichloroethene	**20**		1.0	0.46	ug/L			04/25/22 19:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 19:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 19:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 19:17	1
Vinyl chloride	**12**		1.0	0.45	ug/L			04/25/22 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*04/25/22 19:17*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/25/22 19:17*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*04/25/22 19:17*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*04/25/22 19:17*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-165362-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-164976-C-17 MS	Matrix Spike	93	98	96	99
240-164976-C-17 MSD	Matrix Spike Duplicate	101	101	99	106
240-165183-E-4 MS	Matrix Spike	93	96	94	104
240-165183-H-4 MSD	Matrix Spike Duplicate	94	97	93	102
240-165362-1	TRIP BLANK_01	99	95	97	105
240-165362-2	SL-15_04192022	93	94	98	102
240-165362-3	SL-14_04192022	95	94	97	103
240-165362-4	SL-13_04192022	93	93	95	102
240-165362-5	SL-7_04192022	92	94	97	104
240-165362-6	SL-6_04192022	88	91	95	100
240-165362-7	SL-5_04192022	91	91	95	101
240-165362-8	SL-8_04192022	93	92	96	104
240-165362-9	SL-9_04192022	91	93	96	103
240-165362-10	SL-10_04192022	94	94	98	103
240-165362-11	TRIP BLANK_02	95	92	93	103
240-165362-12	DUP-01	87	90	92	98
240-165362-13	SL-11_04192022	91	93	95	102
240-165362-14	SL-23_04192022	88	90	94	99
240-165362-15	SL-12_04192022	89	91	94	100
240-165362-16	SL-19_04192022	92	92	96	102
240-165362-17	SL-21_04182022	92	94	97	104
240-165362-18	SL-20_04182022	88	90	91	97
240-165362-19	SL-22_04182022	89	88	91	98
240-165362-20	SL-4_04182022	89	91	92	101
240-165362-21	TRIP BLANK_03	91	88	89	98
240-165362-22	SL-18_042022	96	95	98	107
240-165362-23	SL-17_042022	90	92	96	104
240-165362-24	SL-16_042022	93	94	97	107
240-165362-25	SL-3_042022	91	93	96	105
240-165362-26	SL-2_042022	93	92	93	107
240-165362-27	MH-1231_042022	93	96	98	107
240-165362-28	MH-1244_042122	89	90	92	101
240-165362-29	MH-1231A_042122	88	90	91	100
240-165362-30	MH-1255_042122	90	91	93	101
240-165362-31	TRIP BLANK_04	96	91	92	105
240-165362-32	MH-1256_042122	93	94	96	104
240-165362-33	MH-1259_042122	92	91	95	103
240-165362-34	DUP-02	94	94	97	106
LCS 240-523648/5	Lab Control Sample	96	98	96	101
LCS 240-523828/5	Lab Control Sample	91	96	93	98
LCSD 240-523648/6	Lab Control Sample Dup	94	96	95	101
MB 240-523648/9	Method Blank	95	94	95	105
MB 240-523828/8	Method Blank	91	89	91	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-165281-C-1 MS	Matrix Spike	91						
240-165281-C-1 MSD	Matrix Spike Duplicate	92						
240-165362-2	SL-15_04192022	109						
240-165362-3	SL-14_04192022	109						
240-165362-4	SL-13_04192022	106						
240-165362-5	SL-7_04192022	107						
240-165362-6	SL-6_04192022	105						
240-165362-7	SL-5_04192022	108						
240-165362-7 MS	SL-5_04192022	107						
240-165362-7 MSD	SL-5_04192022	106						
240-165362-8	SL-8_04192022	106						
240-165362-9	SL-9_04192022	108						
240-165362-10	SL-10_04192022	105						
240-165362-12	DUP-01	107						
240-165362-13	SL-11_04192022	106						
240-165362-14	SL-23_04192022	109						
240-165362-15	SL-12_04192022	109						
240-165362-16	SL-19_04192022	103						
240-165362-17	SL-21_04182022	107						
240-165362-18	SL-20_04182022	107						
240-165362-19	SL-22_04182022	107						
240-165362-20	SL-4_04182022	108						
240-165362-22	SL-18_042022	109						
240-165362-22 MS	SL-18_042022	109						
240-165362-22 MSD	SL-18_042022	109						
240-165362-23	SL-17_042022	110						
240-165362-24	SL-16_042022	110						
240-165362-25	SL-3_042022	109						
240-165362-26	SL-2_042022	107						
240-165362-27	MH-1231_042022	110						
240-165362-28	MH-1244_042122	108						
240-165362-29	MH-1231A_042122	111						
240-165362-30	MH-1255_042122	92						
240-165362-32	MH-1256_042122	91						
240-165362-33	MH-1259_042122	90						
240-165362-34	DUP-02	111						
LCS 240-523741/3	Lab Control Sample	107						
LCS 240-523742/3	Lab Control Sample	87						
LCS 240-523905/4	Lab Control Sample	104						
MB 240-523741/4	Method Blank	106						
MB 240-523742/4	Method Blank	88						
MB 240-523905/5	Method Blank	102						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-523648/9
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/22/22 13:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/22/22 13:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 13:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/22/22 13:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/22/22 13:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/22/22 13:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*04/22/22 13:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*04/22/22 13:20*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*04/22/22 13:20*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*04/22/22 13:20*	*1*

Lab Sample ID: LCS 240-523648/5
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	16.5		ug/L		82	63 - 134
cis-1,2-Dichloroethene	20.0	17.1		ug/L		86	77 - 123
Tetrachloroethene	20.0	17.8		ug/L		89	76 - 123
trans-1,2-Dichloroethene	20.0	15.8		ug/L		79	75 - 124
Trichloroethene	20.0	18.2		ug/L		91	70 - 122
Vinyl chloride	20.0	16.5		ug/L		82	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: LCSD 240-523648/6
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	20.0	17.5		ug/L		87	63 - 134	6	35
cis-1,2-Dichloroethene	20.0	18.9		ug/L		94	77 - 123	10	35
Tetrachloroethene	20.0	19.9		ug/L		100	76 - 123	11	35
trans-1,2-Dichloroethene	20.0	16.8		ug/L		84	75 - 124	6	35
Trichloroethene	20.0	19.8		ug/L		99	70 - 122	9	35
Vinyl chloride	20.0	17.2		ug/L		86	60 - 144	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 240-523648/6
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: 240-164976-C-17 MS
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	200		200	372		ug/L		86	66 - 128
trans-1,2-Dichloroethene	5.8	J	200	172		ug/L		83	56 - 136
Trichloroethene	20		200	214		ug/L		97	61 - 124
Vinyl chloride	82		200	242		ug/L		80	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Lab Sample ID: 240-164976-C-17 MSD
Matrix: Water
Analysis Batch: 523648

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	200		200	390		ug/L		95	66 - 128	5	14
trans-1,2-Dichloroethene	5.8	J	200	185		ug/L		90	56 - 136	8	15
Trichloroethene	20		200	227		ug/L		103	61 - 124	6	15
Vinyl chloride	82		200	248		ug/L		83	43 - 157	2	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*99*		*78 - 122*
Dibromofluoromethane (Surr)	*106*		*73 - 120*

Lab Sample ID: MB 240-523828/8
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			04/25/22 12:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			04/25/22 12:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 12:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			04/25/22 12:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			04/25/22 12:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			04/25/22 12:20	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-523828/8
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		62 - 137		04/25/22 12:20	1
4-Bromofluorobenzene (Surr)	89		56 - 136		04/25/22 12:20	1
Toluene-d8 (Surr)	91		78 - 122		04/25/22 12:20	1
Dibromofluoromethane (Surr)	99		73 - 120		04/25/22 12:20	1

Lab Sample ID: LCS 240-523828/5
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.0	17.5		ug/L		87	63 - 134		
cis-1,2-Dichloroethene			20.0	19.1		ug/L		96	77 - 123		
Tetrachloroethene			20.0	19.4		ug/L		97	76 - 123		
trans-1,2-Dichloroethene			20.0	17.4		ug/L		87	75 - 124		
Trichloroethene			20.0	19.8		ug/L		99	70 - 122		
Vinyl chloride			20.0	15.7		ug/L		79	60 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	93		78 - 122
Dibromofluoromethane (Surr)	98		73 - 120

Lab Sample ID: 240-165183-E-4 MS
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichloroethene	1.0	U	20.0	19.1		ug/L		95	61 - 124		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	94		78 - 122
Dibromofluoromethane (Surr)	104		73 - 120

Lab Sample ID: 240-165183-H-4 MSD
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichloroethene	1.0	U	20.0	18.3		ug/L		91	61 - 124	4	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	93		78 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-165183-H-4 MSD
Matrix: Water
Analysis Batch: 523828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-523741/4
Matrix: Water
Analysis Batch: 523741

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 18:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*04/23/22 18:54*	*1*

Lab Sample ID: LCS 240-523741/3
Matrix: Water
Analysis Batch: 523741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	9.29		ug/L		93	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Lab Sample ID: 240-165362-7 MS
Matrix: Water
Analysis Batch: 523741

Client Sample ID: SL-5_04192022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	1.5	J	10.0	11.7		ug/L		102	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*

Lab Sample ID: 240-165362-7 MSD
Matrix: Water
Analysis Batch: 523741

Client Sample ID: SL-5_04192022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	1.5	J	10.0	11.3		ug/L		98	51 - 153	4	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-523742/4
Matrix: Water
Analysis Batch: 523742

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/23/22 19:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*04/23/22 19:13*	*1*

Lab Sample ID: LCS 240-523742/3
Matrix: Water
Analysis Batch: 523742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.8		ug/L		108	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*

Lab Sample ID: 240-165281-C-1 MS
Matrix: Water
Analysis Batch: 523742

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	46		10.0	55.7	4	ug/L		98	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 120*

Lab Sample ID: 240-165281-C-1 MSD
Matrix: Water
Analysis Batch: 523742

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	46		10.0	55.5	4	ug/L		96	51 - 153	0	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 120*

Lab Sample ID: MB 240-523905/5
Matrix: Water
Analysis Batch: 523905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			04/25/22 21:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*04/25/22 21:36*	*1*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-523905/4
Matrix: Water
Analysis Batch: 523905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	8.72		ug/L		87	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Lab Sample ID: 240-165362-22 MS
Matrix: Water
Analysis Batch: 523905

Client Sample ID: SL-18_042022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	3.2		10.0	13.2		ug/L		100	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*

Lab Sample ID: 240-165362-22 MSD
Matrix: Water
Analysis Batch: 523905

Client Sample ID: SL-18_042022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	3.2		10.0	12.7		ug/L		95	51 - 153	4	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*

GC/MS VOA

Analysis Batch: 523648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165362-1	TRIP BLANK_01	Total/NA	Water	8260D	
240-165362-2	SL-15_04192022	Total/NA	Water	8260D	
240-165362-3	SL-14_04192022	Total/NA	Water	8260D	
240-165362-4	SL-13_04192022	Total/NA	Water	8260D	
240-165362-5	SL-7_04192022	Total/NA	Water	8260D	
240-165362-6	SL-6_04192022	Total/NA	Water	8260D	
240-165362-7	SL-5_04192022	Total/NA	Water	8260D	
240-165362-8	SL-8_04192022	Total/NA	Water	8260D	
240-165362-9	SL-9_04192022	Total/NA	Water	8260D	
240-165362-10	SL-10_04192022	Total/NA	Water	8260D	
240-165362-11	TRIP BLANK_02	Total/NA	Water	8260D	
240-165362-12	DUP-01	Total/NA	Water	8260D	
240-165362-13	SL-11_04192022	Total/NA	Water	8260D	
240-165362-14	SL-23_04192022	Total/NA	Water	8260D	
240-165362-15	SL-12_04192022	Total/NA	Water	8260D	
240-165362-16	SL-19_04192022	Total/NA	Water	8260D	
240-165362-17	SL-21_04182022	Total/NA	Water	8260D	
MB 240-523648/9	Method Blank	Total/NA	Water	8260D	
LCS 240-523648/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-523648/6	Lab Control Sample Dup	Total/NA	Water	8260D	
240-164976-C-17 MS	Matrix Spike	Total/NA	Water	8260D	
240-164976-C-17 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 523741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165362-2	SL-15_04192022	Total/NA	Water	8260D SIM	
240-165362-3	SL-14_04192022	Total/NA	Water	8260D SIM	
240-165362-4	SL-13_04192022	Total/NA	Water	8260D SIM	
240-165362-5	SL-7_04192022	Total/NA	Water	8260D SIM	
240-165362-6	SL-6_04192022	Total/NA	Water	8260D SIM	
240-165362-7	SL-5_04192022	Total/NA	Water	8260D SIM	
240-165362-8	SL-8_04192022	Total/NA	Water	8260D SIM	
240-165362-9	SL-9_04192022	Total/NA	Water	8260D SIM	
240-165362-10	SL-10_04192022	Total/NA	Water	8260D SIM	
240-165362-12	DUP-01	Total/NA	Water	8260D SIM	
240-165362-13	SL-11_04192022	Total/NA	Water	8260D SIM	
240-165362-14	SL-23_04192022	Total/NA	Water	8260D SIM	
240-165362-15	SL-12_04192022	Total/NA	Water	8260D SIM	
240-165362-16	SL-19_04192022	Total/NA	Water	8260D SIM	
240-165362-17	SL-21_04182022	Total/NA	Water	8260D SIM	
240-165362-18	SL-20_04182022	Total/NA	Water	8260D SIM	
240-165362-19	SL-22_04182022	Total/NA	Water	8260D SIM	
240-165362-20	SL-4_04182022	Total/NA	Water	8260D SIM	
240-165362-28	MH-1244_042122	Total/NA	Water	8260D SIM	
240-165362-29	MH-1231A_042122	Total/NA	Water	8260D SIM	
MB 240-523741/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-523741/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165362-7 MS	SL-5_04192022	Total/NA	Water	8260D SIM	
240-165362-7 MSD	SL-5_04192022	Total/NA	Water	8260D SIM	

GC/MS VOA

Analysis Batch: 523742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165362-30	MH-1255_042122	Total/NA	Water	8260D SIM	
240-165362-32	MH-1256_042122	Total/NA	Water	8260D SIM	
240-165362-33	MH-1259_042122	Total/NA	Water	8260D SIM	
MB 240-523742/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-523742/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165281-C-1 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-165281-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 523828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165362-18	SL-20_04182022	Total/NA	Water	8260D	
240-165362-19	SL-22_04182022	Total/NA	Water	8260D	
240-165362-20	SL-4_04182022	Total/NA	Water	8260D	
240-165362-21	TRIP BLANK_03	Total/NA	Water	8260D	
240-165362-22	SL-18_042022	Total/NA	Water	8260D	
240-165362-23	SL-17_042022	Total/NA	Water	8260D	
240-165362-24	SL-16_042022	Total/NA	Water	8260D	
240-165362-25	SL-3_042022	Total/NA	Water	8260D	
240-165362-26	SL-2_042022	Total/NA	Water	8260D	
240-165362-27	MH-1231_042022	Total/NA	Water	8260D	
240-165362-28	MH-1244_042122	Total/NA	Water	8260D	
240-165362-29	MH-1231A_042122	Total/NA	Water	8260D	
240-165362-30	MH-1255_042122	Total/NA	Water	8260D	
240-165362-31	TRIP BLANK_04	Total/NA	Water	8260D	
240-165362-32	MH-1256_042122	Total/NA	Water	8260D	
240-165362-33	MH-1259_042122	Total/NA	Water	8260D	
240-165362-34	DUP-02	Total/NA	Water	8260D	
MB 240-523828/8	Method Blank	Total/NA	Water	8260D	
LCS 240-523828/5	Lab Control Sample	Total/NA	Water	8260D	
240-165183-E-4 MS	Matrix Spike	Total/NA	Water	8260D	
240-165183-H-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 523905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165362-22	SL-18_042022	Total/NA	Water	8260D SIM	
240-165362-23	SL-17_042022	Total/NA	Water	8260D SIM	
240-165362-24	SL-16_042022	Total/NA	Water	8260D SIM	
240-165362-25	SL-3_042022	Total/NA	Water	8260D SIM	
240-165362-26	SL-2_042022	Total/NA	Water	8260D SIM	
240-165362-27	MH-1231_042022	Total/NA	Water	8260D SIM	
240-165362-34	DUP-02	Total/NA	Water	8260D SIM	
MB 240-523905/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-523905/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165362-22 MS	SL-18_042022	Total/NA	Water	8260D SIM	
240-165362-22 MSD	SL-18_042022	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_01
Lab Sample ID: 240-165362-1
Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 15:26	HMB	TAL CAN

Client Sample ID: SL-15_04192022
Lab Sample ID: 240-165362-2
Date Collected: 04/19/22 09:15
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 15:51	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 19:44	CS	TAL CAN

Client Sample ID: SL-14_04192022
Lab Sample ID: 240-165362-3
Date Collected: 04/19/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 16:15	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 20:08	CS	TAL CAN

Client Sample ID: SL-13_04192022
Lab Sample ID: 240-165362-4
Date Collected: 04/19/22 09:45
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 16:40	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 20:33	CS	TAL CAN

Client Sample ID: SL-7_04192022
Lab Sample ID: 240-165362-5
Date Collected: 04/19/22 10:35
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 17:05	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 20:58	CS	TAL CAN

Client Sample ID: SL-6_04192022
Lab Sample ID: 240-165362-6
Date Collected: 04/19/22 10:45
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 17:29	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 21:23	CS	TAL CAN

Client Sample ID: SL-5_04192022
Lab Sample ID: 240-165362-7
Date Collected: 04/19/22 10:55
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 17:54	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 21:48	CS	TAL CAN

Client Sample ID: SL-8_04192022
Lab Sample ID: 240-165362-8
Date Collected: 04/19/22 11:45
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 18:18	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 23:03	CS	TAL CAN

Client Sample ID: SL-9_04192022
Lab Sample ID: 240-165362-9
Date Collected: 04/19/22 12:10
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 18:43	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 23:28	CS	TAL CAN

Client Sample ID: SL-10_04192022
Lab Sample ID: 240-165362-10
Date Collected: 04/19/22 12:35
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 19:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/23/22 23:53	CS	TAL CAN

Client Sample ID: TRIP BLANK_02
Lab Sample ID: 240-165362-11
Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 19:32	HMB	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-165362-12
Date Collected: 04/19/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 19:56	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 00:18	CS	TAL CAN

Client Sample ID: SL-11_04192022
Lab Sample ID: 240-165362-13
Date Collected: 04/19/22 12:45
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 20:21	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 00:43	CS	TAL CAN

Client Sample ID: SL-23_04192022
Lab Sample ID: 240-165362-14
Date Collected: 04/19/22 13:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 20:45	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 01:08	CS	TAL CAN

Client Sample ID: SL-12_04192022
Lab Sample ID: 240-165362-15
Date Collected: 04/19/22 13:10
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 21:10	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 01:33	CS	TAL CAN

Client Sample ID: SL-19_04192022
Lab Sample ID: 240-165362-16
Date Collected: 04/19/22 13:20
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 21:34	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 01:58	CS	TAL CAN

Client Sample ID: SL-21_04182022
Lab Sample ID: 240-165362-17
Date Collected: 04/18/22 10:30
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523648	04/22/22 21:59	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 02:23	CS	TAL CAN

Client Sample ID: SL-20_04182022
Lab Sample ID: 240-165362-18
Date Collected: 04/18/22 10:40
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 12:45	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 02:48	CS	TAL CAN

Client Sample ID: SL-22_04182022
Lab Sample ID: 240-165362-19
Date Collected: 04/18/22 10:55
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 13:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 03:13	CS	TAL CAN

Client Sample ID: SL-4_04182022
Lab Sample ID: 240-165362-20
Date Collected: 04/18/22 11:10
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 13:34	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 03:38	CS	TAL CAN

Client Sample ID: TRIP BLANK_03
Lab Sample ID: 240-165362-21
Date Collected: 04/18/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 13:58	HMB	TAL CAN

Client Sample ID: SL-18_042022
Lab Sample ID: 240-165362-22
Date Collected: 04/20/22 09:05
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 16:50	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/25/22 22:51	CS	TAL CAN

Client Sample ID: SL-17_042022
Lab Sample ID: 240-165362-23
Date Collected: 04/20/22 09:15
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 17:15	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 00:06	CS	TAL CAN

Client Sample ID: SL-16_042022
Lab Sample ID: 240-165362-24
Date Collected: 04/20/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 17:39	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 00:31	CS	TAL CAN

Client Sample ID: SL-3_042022
Lab Sample ID: 240-165362-25
Date Collected: 04/20/22 09:40
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 18:04	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 00:56	CS	TAL CAN

Client Sample ID: SL-2_042022
Lab Sample ID: 240-165362-26
Date Collected: 04/20/22 09:50
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 18:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 01:21	CS	TAL CAN

Client Sample ID: MH-1231_042022
Lab Sample ID: 240-165362-27
Date Collected: 04/20/22 10:10
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 18:53	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 01:46	CS	TAL CAN

Client Sample ID: MH-1244_042122
Lab Sample ID: 240-165362-28
Date Collected: 04/21/22 08:55
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 14:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 04:03	CS	TAL CAN

Client Sample ID: MH-1231A_042122
Lab Sample ID: 240-165362-29
Date Collected: 04/21/22 09:05
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	523828	04/25/22 14:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523741	04/24/22 04:28	CS	TAL CAN

Client Sample ID: MH-1255_042122
Lab Sample ID: 240-165362-30
Date Collected: 04/21/22 09:30
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	523828	04/25/22 15:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523742	04/23/22 21:36	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_04
Lab Sample ID: 240-165362-31
Date Collected: 04/21/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 15:37	HMB	TAL CAN

Client Sample ID: MH-1256_042122
Lab Sample ID: 240-165362-32
Date Collected: 04/21/22 09:45
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 16:01	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523742	04/23/22 22:00	CS	TAL CAN

Client Sample ID: MH-1259_042122
Lab Sample ID: 240-165362-33
Date Collected: 04/21/22 10:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 16:26	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523742	04/23/22 22:24	CS	TAL CAN

Client Sample ID: DUP-02
Lab Sample ID: 240-165362-34
Date Collected: 04/21/22 00:00
Matrix: Water
Date Received: 04/22/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	523828	04/25/22 19:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	523905	04/26/22 02:11	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165362-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

0.3/0.3

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program:	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 1 of 4
Company Name: Arcadis	☐ DW ☐ NPDES ☐ RCRA ☐ Other	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500		Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377		Sampler Name: Christian Gamboa Katie Jay Gary Schultz	TAT if different from below		Walk-in client
Phone: 248-994-2240		Method of Shipment/Carrier:	3 day		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling		Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04					
PO # 30080642.701.04					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_01	---	---		X						1					N	G	X	X	X	X	X	X	X	Trip Blank
SL-15_041922	4/19/22	915		X						6					N	G	X	X	X	X	X	X	X	VOAs for 8260B
SL-14_041922		930		X						6					N	G	X	X	X	X	X	X	X	VOAs for 8260B SIM
SL-13_041922		945		X						6					N	G	X	X	X	X	X	X	X	
SL-7_041922		1035		X						6					N	G	X	X	X	X	X	X	X	
SL-6_041922		1045		X						6					N	G	X	X	X	X	X	X	X	
SL-5_041922		1055		X						6					N	G	X	X	X	X	X	X	X	
SL-8_041922		1145		X						6					N	G	X	X	X	X	X	X	X	
SL-9_041922		1240		X						6					N	G	X	X	X	X	X	X	X	
SL-10_041922	—	1235		X						6					N	G	X	X	X	X	X	X	X	

240-165362 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ___ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Christian Gamboa	Arcadis	4/21/22	TestAmerica	Arcadis	4/21/22
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			Jen Hall	EETA	4-21-22 1153
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Jen Hall	EETA	4-21-22 1153		TA	4-22-22 0800

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Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 2 of 4
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_02	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
DUP-01	〃	〃		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11_041422	4/19/22	1245		X						6					N	G	X	X	X	X	X	X	X	
SL-23_041922		1300		X						6					N	G	X	X	X	X	X	X	X	
SL-12_041922		1310		X						6					N	G	X	X	X	X	X	X	X	
SL-19_041922	〃	1320		X						6					N	G	X	X	X	X	X	X	X	
SL-21_041822	4/18/22	1030		X						6					N	G	X	X	X	X	X	X	X	
SL-20_041822		1040		X						6					N	G	X	X	X	X	X	X	X	
SL-22_041822		1055		X						6					N	G	X	X	X	X	X	X	X	
SL-4_041822	〃	1110		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Adrian Herrera	Arcadis	4/21/22	TestAmerica	TestAmerica	4/21/22
Relinquished by:	Company:	Date/Time:	Received by: Jeri Hall	Company: EETA	Date/Time: 4-21-22 1152
Relinquished by: Jeri Hall	Company: EETA	Date/Time: 4-21-22 1153	Received in Laboratory by:	Company: TA	Date/Time: 4-22-22 0800

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Chain of Custody Record

MICHIGAN 190 TestAmerica — THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 3 of 4 COCs
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		Walk-in client:
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling:
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No.:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_03	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-18_042022	4/20/22	905		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-17_042022		913		X						6					N	G	X	X	X	X	X	X	X	
SL-14_042022		930		X						6					N	G	X	X	X	X	X	X	X	
SL-3_042022		940		X						6					N	G	X	X	X	X	X	X	X	
SL-2_042022		950		X						6					N	G	X	X	X	X	X	X	X	
MH-1231_042022		1010		X						6					N	G	X	X	X	X	X	X	X	
MH-124H_042122	4/21/22	855		X						6					N	G	X	X	X	X	X	X	X	
MH-123A_042122		905		X						6					N	G	X	X	X	X	X	X	X	
MH-1255_042122		930		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Austin Gullot	Arcadis	4/21/22	Test America	Test America	4/21/22
Relinquished by:	Company:	Date/Time:	Received by: Jen Hall	Company: EETA	Date/Time: 4-21-22 1152
Relinquished by: Jen Hall	Company: EETA	Date/Time: 4-21-22 1153	Received in Laboratory by: Brandon	Company: TA	Date/Time: 4-22-22 0800

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0-3/0-3 MICHIGAN 190

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 4 of 4
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_04	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
MH-1256_042122	4/21/22	945		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1259_042122	4/21/22	1020		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Korey Pearson	Arcadis	4/21/22	TestAmerica	TestAmerica	4/21/22
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			Jen Hall	EETA	4-21-22 1153
Relinquished by: Jen Hall	Company: EETA	Date/Time: 4-21-22 1153	Received in Laboratory by:	Company: TA	Date/Time: 4-22-22 0800

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Brandon

Cooler Received on 4-22-22 Opened on 4-22-22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 10 Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp. 0.3 °C Corrected Cooler Temp. 0.3 °C
   IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC157842**
14. Were VOAs on the COC?	(Yes)	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	(No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	(Yes)	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

All Trip Blanks to receive 1,4-Dioxane analysis.
Missing Samples: SL-18, 17, 16, 3, 2, and MH-1231

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-165715-1
Client Project/Site: Ford LTP Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
5/4/2022 1:36:52 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-165715-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-165715-1

Comments
No additional comments.

Receipt
The samples were received on 4/29/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8º C and 1.1º C.

GC/MS VOA
Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-524710.

Method 8260D SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-4_042722 (240-165715-30).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-165715-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-165715-1	TRIP BLANK_147	Water	04/28/22 00:00	04/29/22 08:00
240-165715-2	MH-1259_042822	Water	04/28/22 11:40	04/29/22 08:00
240-165715-3	MH-1244_042822	Water	04/28/22 11:55	04/29/22 08:00
240-165715-4	MH-1256_042822	Water	04/28/22 11:25	04/29/22 08:00
240-165715-5	TRIP BLANK_152	Water	04/26/22 00:00	04/29/22 08:00
240-165715-6	SL-6_042622	Water	04/26/22 11:25	04/29/22 08:00
240-165715-7	SL-5_042622	Water	04/26/22 11:40	04/29/22 08:00
240-165715-8	SL-8_042622	Water	04/26/22 12:35	04/29/22 08:00
240-165715-9	SL-9_042622	Water	04/26/22 12:52	04/29/22 08:00
240-165715-10	SL-10_042622	Water	04/26/22 13:15	04/29/22 08:00
240-165715-11	SL-11_042622	Water	04/26/22 13:30	04/29/22 08:00
240-165715-12	SL-23_042622	Water	04/26/22 13:50	04/29/22 08:00
240-165715-13	SL-12_042622	Water	04/26/22 14:00	04/29/22 08:00
240-165715-14	SL-19_042622	Water	04/26/22 14:15	04/29/22 08:00
240-165715-15	TRIP BLANK_153	Water	04/25/22 00:00	04/29/22 08:00
240-165715-16	SL-21_042522	Water	04/25/22 13:21	04/29/22 08:00
240-165715-17	SL-20_042522	Water	04/25/22 13:45	04/29/22 08:00
240-165715-18	SL-22_042522	Water	04/25/22 14:00	04/29/22 08:00
240-165715-19	SL-18_042522	Water	04/25/22 14:20	04/29/22 08:00
240-165715-20	SL-17_042522	Water	04/25/22 14:40	04/29/22 08:00
240-165715-21	SL-15_042622	Water	04/26/22 10:19	04/29/22 08:00
240-165715-22	SL-14_042622	Water	04/26/22 10:40	04/29/22 08:00
240-165715-23	SL-13_042622	Water	04/26/22 10:50	04/29/22 08:00
240-165715-24	SL-7_042622	Water	04/26/22 11:10	04/29/22 08:00
240-165715-25	TRIP BLANK_148	Water	04/27/22 00:00	04/29/22 08:00
240-165715-26	SL-16_042722	Water	04/27/22 09:40	04/29/22 08:00
240-165715-27	SL-3_042722	Water	04/27/22 09:55	04/29/22 08:00
240-165715-28	SL-2_042722	Water	04/27/22 10:25	04/29/22 08:00
240-165715-29	MH-1231_042722	Water	04/27/22 10:50	04/29/22 08:00
240-165715-30	SL-4_042722	Water	04/27/22 11:20	04/29/22 08:00
240-165715-31	MH-1255_042722	Water	04/27/22 12:30	04/29/22 08:00
240-165715-32	MH-1231A_042722	Water	04/27/22 12:55	04/29/22 08:00
240-165715-33	DUP-01	Water	04/27/22 00:00	04/29/22 08:00
240-165715-34	DUP-02	Water	04/27/22 00:00	04/29/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_147 — Lab Sample ID: 240-165715-1

No Detections.

Client Sample ID: MH-1259_042822 — Lab Sample ID: 240-165715-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	11		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.74	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	3.6		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	6.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_042822 — Lab Sample ID: 240-165715-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	28		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1256_042822 — Lab Sample ID: 240-165715-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.97	J	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.94	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_152 — Lab Sample ID: 240-165715-5

No Detections.

Client Sample ID: SL-6_042622 — Lab Sample ID: 240-165715-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.96	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_042622 — Lab Sample ID: 240-165715-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_042622 — Lab Sample ID: 240-165715-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_042622 — Lab Sample ID: 240-165715-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_042622 — Lab Sample ID: 240-165715-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.5		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample ID: SL-10_042622 (Continued) — Lab Sample ID: 240-165715-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_042622 — Lab Sample ID: 240-165715-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_042622 — Lab Sample ID: 240-165715-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.83	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_042622 — Lab Sample ID: 240-165715-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.84	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_042622 — Lab Sample ID: 240-165715-14

No Detections.

Client Sample ID: TRIP BLANK_153 — Lab Sample ID: 240-165715-15

No Detections.

Client Sample ID: SL-21_042522 — Lab Sample ID: 240-165715-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.64	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_042522 — Lab Sample ID: 240-165715-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.94	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_042522 — Lab Sample ID: 240-165715-18

No Detections.

Client Sample ID: SL-18_042522 — Lab Sample ID: 240-165715-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.86	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_042522 — Lab Sample ID: 240-165715-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.3		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SL-17_042522 (Continued) — Lab Sample ID: 240-165715-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.2		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_042622 — Lab Sample ID: 240-165715-21

No Detections.

Client Sample ID: SL-14_042622 — Lab Sample ID: 240-165715-22

No Detections.

Client Sample ID: SL-13_042622 — Lab Sample ID: 240-165715-23

No Detections.

Client Sample ID: SL-7_042622 — Lab Sample ID: 240-165715-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	0.48	J	1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK_148 — Lab Sample ID: 240-165715-25

No Detections.

Client Sample ID: SL-16_042722 — Lab Sample ID: 240-165715-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_042722 — Lab Sample ID: 240-165715-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.5		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.49	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_042722 — Lab Sample ID: 240-165715-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.44	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_042722 — Lab Sample ID: 240-165715-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	19		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_042722 — Lab Sample ID: 240-165715-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.95	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_042722 — Lab Sample ID: 240-165715-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	69		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.1	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	93		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: MH-1231A_042722 — Lab Sample ID: 240-165715-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	21		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	53		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	0.95	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	63		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 240-165715-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 240-165715-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.3		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_147
Lab Sample ID: 240-165715-1
Date Collected: 04/28/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 13:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 13:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 13:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 13:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 13:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*05/02/22 13:48*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/02/22 13:48*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/02/22 13:48*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/02/22 13:48*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1259_042822
Lab Sample ID: 240-165715-2
Date Collected: 04/28/22 11:40
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		2.0	0.86	ug/L			05/02/22 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/02/22 19:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.74**	**J**	1.0	0.49	ug/L			05/02/22 14:12	1
cis-1,2-Dichloroethene	**16**		1.0	0.46	ug/L			05/02/22 14:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 14:12	1
Trichloroethene	**3.6**		1.0	0.44	ug/L			05/02/22 14:12	1
Vinyl chloride	**6.1**		1.0	0.45	ug/L			05/02/22 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 14:12*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/02/22 14:12*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/02/22 14:12*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/02/22 14:12*	*1*

Client Sample ID: MH-1244_042822
Lab Sample ID: 240-165715-3

Date Collected: 04/28/22 11:55
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.4**		2.0	0.86	ug/L			05/02/22 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*05/02/22 20:01*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 14:37	1
cis-1,2-Dichloroethene	**28**		1.0	0.46	ug/L			05/02/22 14:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 14:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:37	1
Vinyl chloride	**5.3**		1.0	0.45	ug/L			05/02/22 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/02/22 14:37*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/02/22 14:37*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/02/22 14:37*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/02/22 14:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1256_042822
Lab Sample ID: 240-165715-4
Date Collected: 04/28/22 11:25
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/02/22 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*05/02/22 20:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:01	1
cis-1,2-Dichloroethene	**0.97**	**J**	1.0	0.46	ug/L			05/02/22 15:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:01	1
Vinyl chloride	**0.94**	**J**	1.0	0.45	ug/L			05/02/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/02/22 15:01*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/02/22 15:01*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/02/22 15:01*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 15:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_152
Lab Sample ID: 240-165715-5
Date Collected: 04/26/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 15:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:26	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/02/22 15:26*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/02/22 15:26*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/02/22 15:26*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/02/22 15:26*	*1*

Client Sample ID: SL-6_042622
Lab Sample ID: 240-165715-6

Date Collected: 04/26/22 11:25
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.96	J	2.0	0.86	ug/L			05/02/22 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*05/02/22 20:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 15:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/02/22 15:50*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/02/22 15:50*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/02/22 15:50*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 15:50*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-5_042622
Lab Sample ID: 240-165715-7
Date Collected: 04/26/22 11:40
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.8**		2.0	0.86	ug/L			05/02/22 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 120*		*05/02/22 21:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 16:15	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.46	ug/L			05/02/22 16:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 16:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:15	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			05/02/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/02/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/02/22 16:15*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/02/22 16:15*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/02/22 16:15*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-8_042622
Lab Sample ID: 240-165715-8
Date Collected: 04/26/22 12:35
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/02/22 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 120*		*05/02/22 21:42*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 16:39	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.46	ug/L			05/02/22 16:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 16:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:39	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/02/22 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/02/22 16:39*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/02/22 16:39*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/02/22 16:39*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/02/22 16:39*	*1*

Client Sample ID: SL-9_042622
Lab Sample ID: 240-165715-9

Date Collected: 04/26/22 12:52
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			05/02/22 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*05/02/22 22:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:04	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.46	ug/L			05/02/22 17:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:04	1
Vinyl chloride	**2.2**		1.0	0.45	ug/L			05/02/22 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/02/22 17:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/02/22 17:04*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/02/22 17:04*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/02/22 17:04*	*1*

Client Sample ID: SL-10_042622
Lab Sample ID: 240-165715-10
Date Collected: 04/26/22 13:15
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/02/22 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*05/02/22 23:22*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:29	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.46	ug/L			05/02/22 17:29	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:29	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:29	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			05/02/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/02/22 17:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/02/22 17:29*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/02/22 17:29*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/02/22 17:29*	*1*

Client Sample ID: SL-11_042622
Lab Sample ID: 240-165715-11

Date Collected: 04/26/22 13:30
Matrix: Water

Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/02/22 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*05/02/22 23:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:53	1
cis-1,2-Dichloroethene	**4.1**		1.0	0.46	ug/L			05/02/22 17:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:53	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			05/02/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*05/02/22 17:53*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/02/22 17:53*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 17:53*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/02/22 17:53*	*1*

Client Sample ID: SL-23_042622
Lab Sample ID: 240-165715-12
Date Collected: 04/26/22 13:50
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			05/03/22 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/03/22 00:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 18:17	1
cis-1,2-Dichloroethene	**3.0**		1.0	0.46	ug/L			05/02/22 18:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 18:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:17	1
Vinyl chloride	**0.83**	**J**	1.0	0.45	ug/L			05/02/22 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/02/22 18:17*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/02/22 18:17*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/02/22 18:17*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 18:17*	*1*

Client Sample ID: SL-12_042622
Lab Sample ID: 240-165715-13
Date Collected: 04/26/22 14:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/03/22 00:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 18:42	1
cis-1,2-Dichloroethene	**0.84**	**J**	1.0	0.46	ug/L			05/02/22 18:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 18:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 18:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/02/22 18:42*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/02/22 18:42*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 18:42*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-19_042622
Lab Sample ID: 240-165715-14
Date Collected: 04/26/22 14:15
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/03/22 01:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 19:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 19:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 19:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/02/22 19:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/02/22 19:06*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/02/22 19:06*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/02/22 19:06*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_153
Lab Sample ID: 240-165715-15
Date Collected: 04/25/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 19:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 19:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 19:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/02/22 19:31*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/02/22 19:31*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/02/22 19:31*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/02/22 19:31*	*1*

Client Sample ID: SL-21_042522
Lab Sample ID: 240-165715-16
Date Collected: 04/25/22 13:21
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/03/22 01:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 19:56	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			05/02/22 19:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 19:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:56	1
Vinyl chloride	**0.64**	**J**	1.0	0.45	ug/L			05/02/22 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 19:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*05/02/22 19:56*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 19:56*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/02/22 19:56*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-20_042522
Lab Sample ID: 240-165715-17
Date Collected: 04/25/22 13:45
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/03/22 01:54*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 20:20	1
cis-1,2-Dichloroethene	**2.2**		1.0	0.46	ug/L			05/02/22 20:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 20:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:20	1
Vinyl chloride	**0.94**	**J**	1.0	0.45	ug/L			05/02/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*05/02/22 20:20*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*05/02/22 20:20*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 20:20*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/02/22 20:20*	*1*

Client Sample ID: SL-22_042522
Lab Sample ID: 240-165715-18

Date Collected: 04/25/22 14:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/03/22 02:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 20:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 20:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 20:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 20:45*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/02/22 20:45*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 20:45*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 20:45*	*1*

Client Sample ID: SL-18_042522
Lab Sample ID: 240-165715-19

Date Collected: 04/25/22 14:20
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.86**	**J**	2.0	0.86	ug/L			05/03/22 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/03/22 02:44*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 21:10	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			05/02/22 21:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 21:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 21:10	1
Trichloroethene	**1.3**		1.0	0.44	ug/L			05/02/22 21:10	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			05/02/22 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*05/02/22 21:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*05/02/22 21:10*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/02/22 21:10*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/02/22 21:10*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-17_042522
Lab Sample ID: 240-165715-20
Date Collected: 04/25/22 14:40
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/03/22 03:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 14:41	1
cis-1,2-Dichloroethene	**3.3**		1.0	0.46	ug/L			05/02/22 14:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 14:41	1
Trichloroethene	**2.2**		1.0	0.44	ug/L			05/02/22 14:41	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			05/02/22 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*05/02/22 14:41*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*05/02/22 14:41*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 14:41*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*05/02/22 14:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-15_042622
Lab Sample ID: 240-165715-21
Date Collected: 04/26/22 10:19
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/03/22 03:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 15:05	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*05/02/22 15:05*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/02/22 15:05*	*1*
Toluene-d8 (Surr)	*88*		*78 - 122*		*05/02/22 15:05*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*05/02/22 15:05*	*1*

Client Sample ID: SL-14_042622
Lab Sample ID: 240-165715-22
Date Collected: 04/26/22 10:40
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/03/22 03:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 15:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*05/02/22 15:28*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/02/22 15:28*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/02/22 15:28*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/02/22 15:28*	*1*

Client Sample ID: SL-13_042622
Lab Sample ID: 240-165715-23
Date Collected: 04/26/22 10:50
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/03/22 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/03/22 04:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 15:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 15:52	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 15:52	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 15:52	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 15:52*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*05/02/22 15:52*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/02/22 15:52*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/02/22 15:52*	*1*

Client Sample ID: SL-7_042622
Lab Sample ID: 240-165715-24
Date Collected: 04/26/22 11:10
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			05/02/22 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/02/22 19:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 16:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 16:15	1
Tetrachloroethene	**0.48**	**J**	1.0	0.44	ug/L			05/02/22 16:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 16:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/02/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/02/22 16:15*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/02/22 16:15*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*05/02/22 16:15*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_148
Lab Sample ID: 240-165715-25
Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 16:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 16:39	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 16:39	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 16:39	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*05/02/22 16:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/02/22 16:39*	*1*
Toluene-d8 (Surr)	*87*		*78 - 122*		*05/02/22 16:39*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 120*		*05/02/22 16:39*	*1*

Client Sample ID: SL-16_042722
Lab Sample ID: 240-165715-26
Date Collected: 04/27/22 09:40
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.2**		2.0	0.86	ug/L			05/02/22 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/02/22 19:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:02	1
cis-1,2-Dichloroethene	**14**		1.0	0.46	ug/L			05/02/22 17:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:02	1
Vinyl chloride	**8.0**		1.0	0.45	ug/L			05/02/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/02/22 17:02*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/02/22 17:02*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/02/22 17:02*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/02/22 17:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-3_042722
Lab Sample ID: 240-165715-27
Date Collected: 04/27/22 09:55
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			05/02/22 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/02/22 20:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:25	1
cis-1,2-Dichloroethene	**1.1**		1.0	0.46	ug/L			05/02/22 17:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:25	1
Trichloroethene	**1.5**		1.0	0.44	ug/L			05/02/22 17:25	1
Vinyl chloride	**0.49**	**J**	1.0	0.45	ug/L			05/02/22 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 17:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/02/22 17:25*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 17:25*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*05/02/22 17:25*	*1*

Client Sample ID: SL-2_042722
Lab Sample ID: 240-165715-28

Date Collected: 04/27/22 10:25
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			05/02/22 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*05/02/22 20:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 17:48	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.46	ug/L			05/02/22 17:48	1
Tetrachloroethene	**0.44**	**J**	1.0	0.44	ug/L			05/02/22 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 17:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 17:48	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			05/02/22 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*05/02/22 17:48*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/02/22 17:48*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/02/22 17:48*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/02/22 17:48*	*1*

Client Sample ID: MH-1231_042722
Lab Sample ID: 240-165715-29
Date Collected: 04/27/22 10:50
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.1**		2.0	0.86	ug/L			05/02/22 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/02/22 21:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 18:12	1
cis-1,2-Dichloroethene	**20**		1.0	0.46	ug/L			05/02/22 18:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 18:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:12	1
Vinyl chloride	**19**		1.0	0.45	ug/L			05/02/22 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*05/02/22 18:12*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/02/22 18:12*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/02/22 18:12*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/02/22 18:12*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: SL-4_042722
Lab Sample ID: 240-165715-30
Date Collected: 04/27/22 11:20
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.95**	**J**	2.0	0.86	ug/L			05/02/22 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/02/22 21:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 18:35	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.46	ug/L			05/02/22 18:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 18:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 18:35	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			05/02/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/02/22 18:35*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*05/02/22 18:35*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/02/22 18:35*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/02/22 18:35*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_042722
Lab Sample ID: 240-165715-31
Date Collected: 04/27/22 12:30
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		2.0	0.86	ug/L			05/02/22 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/02/22 21:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/02/22 18:58	2
cis-1,2-Dichloroethene	**69**		2.0	0.92	ug/L			05/02/22 18:58	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/02/22 18:58	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			05/02/22 18:58	2
Trichloroethene	**1.1**	**J**	2.0	0.88	ug/L			05/02/22 18:58	2
Vinyl chloride	**93**		2.0	0.90	ug/L			05/02/22 18:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*05/02/22 18:58*	*2*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/02/22 18:58*	*2*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/02/22 18:58*	*2*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*05/02/22 18:58*	*2*

Client Sample ID: MH-1231A_042722
Lab Sample ID: 240-165715-32
Date Collected: 04/27/22 12:55
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**21**		2.0	0.86	ug/L			05/02/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/02/22 22:14*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/02/22 19:22	2
cis-1,2-Dichloroethene	**53**		2.0	0.92	ug/L			05/02/22 19:22	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/02/22 19:22	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			05/02/22 19:22	2
Trichloroethene	**0.95**	**J**	2.0	0.88	ug/L			05/02/22 19:22	2
Vinyl chloride	**63**		2.0	0.90	ug/L			05/02/22 19:22	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/02/22 19:22*	*2*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/02/22 19:22*	*2*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/02/22 19:22*	*2*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*05/02/22 19:22*	*2*

Client Sample ID: DUP-01
Lab Sample ID: 240-165715-33

Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/02/22 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*05/02/22 22:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 19:46	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			05/02/22 19:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 19:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 19:46	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/02/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 137*		*05/02/22 19:46*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*05/02/22 19:46*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/02/22 19:46*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*05/02/22 19:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: DUP-02
Lab Sample ID: 240-165715-34
Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		2.0	0.86	ug/L			05/02/22 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/02/22 23:02*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 20:09	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			05/02/22 20:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 20:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 20:09	1
Vinyl chloride	**4.3**		1.0	0.45	ug/L			05/02/22 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/02/22 20:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/02/22 20:09*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/02/22 20:09*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/02/22 20:09*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Utility Corridor Sampling

Job ID: 240-165715-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-165675-I-2 MS	Matrix Spike	94	96	94	99
240-165675-I-2 MSD	Matrix Spike Duplicate	96	97	95	101
240-165715-1	TRIP BLANK_147	104	98	98	108
240-165715-2	MH-1259_042822	93	91	93	101
240-165715-3	MH-1244_042822	96	97	99	107
240-165715-4	MH-1256_042822	95	96	96	104
240-165715-5	TRIP BLANK_152	97	93	93	105
240-165715-6	SL-6_042622	95	93	95	104
240-165715-7	SL-5_042622	97	96	98	108
240-165715-8	SL-8_042622	95	95	97	105
240-165715-9	SL-9_042622	96	92	95	105
240-165715-10	SL-10_042622	97	95	96	107
240-165715-11	SL-11_042622	90	91	94	101
240-165715-12	SL-23_042622	96	98	98	104
240-165715-13	SL-12_042622	93	95	97	104
240-165715-14	SL-19_042622	97	93	96	105
240-165715-15	TRIP BLANK_153	94	91	91	101
240-165715-16	SL-21_042522	93	90	94	101
240-165715-17	SL-20_042522	89	89	94	100
240-165715-18	SL-22_042522	93	92	94	104
240-165715-19	SL-18_042522	89	88	92	99
240-165715-20	SL-17_042522	91	99	94	90
240-165715-21	SL-15_042622	88	94	88	84
240-165715-22	SL-14_042622	91	94	91	88
240-165715-23	SL-13_042622	93	99	96	89
240-165715-24	SL-7_042622	100	107	99	95
240-165715-25	TRIP BLANK_148	91	92	87	85
240-165715-26	SL-16_042722	92	98	91	89
240-165715-27	SL-3_042722	93	97	94	91
240-165715-28	SL-2_042722	88	93	91	88
240-165715-29	MH-1231_042722	90	94	89	89
240-165715-30	SL-4_042722	93	101	98	89
240-165715-31	MH-1255_042722	91	95	89	87
240-165715-32	MH-1231A_042722	92	97	89	87
240-165715-33	DUP-01	85	90	91	87
240-165715-34	DUP-02	92	98	94	88
LCS 240-524633/5	Lab Control Sample	98	99	98	105
LCS 240-524710/5	Lab Control Sample	83	91	88	88
MB 240-524633/8	Method Blank	97	94	95	104
MB 240-524710/8	Method Blank	90	93	93	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-165546-E-7 MS	Matrix Spike	86						
240-165546-E-7 MSD	Matrix Spike Duplicate	84						
240-165715-2	MH-1259_042822	107						
240-165715-3	MH-1244_042822	113						
240-165715-4	MH-1256_042822	111						
240-165715-6	SL-6_042622	113						
240-165715-7	SL-5_042622	116						
240-165715-8	SL-8_042622	114						
240-165715-8 MS	SL-8_042622	114						
240-165715-8 MSD	SL-8_042622	111						
240-165715-9	SL-9_042622	113						
240-165715-10	SL-10_042622	112						
240-165715-11	SL-11_042622	112						
240-165715-12	SL-23_042622	110						
240-165715-13	SL-12_042622	110						
240-165715-14	SL-19_042622	104						
240-165715-16	SL-21_042522	105						
240-165715-17	SL-20_042522	107						
240-165715-18	SL-22_042522	104						
240-165715-19	SL-18_042522	104						
240-165715-20	SL-17_042522	104						
240-165715-21	SL-15_042622	110						
240-165715-22	SL-14_042622	107						
240-165715-23	SL-13_042622	108						
240-165715-24	SL-7_042622	83						
240-165715-26	SL-16_042722	84						
240-165715-27	SL-3_042722	82						
240-165715-28	SL-2_042722	88						
240-165715-29	MH-1231_042722	86						
240-165715-30	SL-4_042722	86						
240-165715-31	MH-1255_042722	87						
240-165715-32	MH-1231A_042722	85						
240-165715-33	DUP-01	88						
240-165715-34	DUP-02	85						
LCS 240-524782/3	Lab Control Sample	83						
LCS 240-524784/4	Lab Control Sample	104						
MB 240-524782/4	Method Blank	85						
MB 240-524784/5	Method Blank	107						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-524633/8
Matrix: Water
Analysis Batch: 524633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 12:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 12:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 12:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/02/22 12:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/02/22 12:10*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/02/22 12:10*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/02/22 12:10*	*1*

Lab Sample ID: LCS 240-524633/5
Matrix: Water
Analysis Batch: 524633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	19.8		ug/L		99	63 - 134
cis-1,2-Dichloroethene	20.0	19.3		ug/L		96	77 - 123
Tetrachloroethene	20.0	18.8		ug/L		94	76 - 123
trans-1,2-Dichloroethene	20.0	18.3		ug/L		92	75 - 124
Trichloroethene	20.0	19.9		ug/L		99	70 - 122
Vinyl chloride	20.0	18.7		ug/L		94	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*
Dibromofluoromethane (Surr)	*105*		*73 - 120*

Lab Sample ID: 240-165675-I-2 MS
Matrix: Water
Analysis Batch: 524633

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	2.0	U	40.0	36.9		ug/L		92	56 - 135
cis-1,2-Dichloroethene	4.1		40.0	40.3		ug/L		90	66 - 128
Tetrachloroethene	2.0	U	40.0	36.6		ug/L		92	62 - 131
trans-1,2-Dichloroethene	2.0	U	40.0	33.9		ug/L		85	56 - 136
Trichloroethene	91		40.0	130	E	ug/L		98	61 - 124
Vinyl chloride	2.0	U	40.0	35.3		ug/L		88	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*
Toluene-d8 (Surr)	*94*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-165675-I-2 MS
Matrix: Water
Analysis Batch: 524633

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	99		73 - 120

Lab Sample ID: 240-165675-I-2 MSD
Matrix: Water
Analysis Batch: 524633

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	2.0	U	40.0	40.6		ug/L		102	56 - 135	10	26
cis-1,2-Dichloroethene	4.1		40.0	44.0		ug/L		100	66 - 128	9	14
Tetrachloroethene	2.0	U	40.0	40.2		ug/L		101	62 - 131	9	20
trans-1,2-Dichloroethene	2.0	U	40.0	38.0		ug/L		95	56 - 136	12	15
Trichloroethene	91		40.0	131	E	ug/L		101	61 - 124	1	15
Vinyl chloride	2.0	U	40.0	36.3		ug/L		91	43 - 157	3	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		62 - 137
4-Bromofluorobenzene (Surr)	97		56 - 136
Toluene-d8 (Surr)	95		78 - 122
Dibromofluoromethane (Surr)	101		73 - 120

Lab Sample ID: MB 240-524710/8
Matrix: Water
Analysis Batch: 524710

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/02/22 14:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/02/22 14:18	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/02/22 14:18	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/02/22 14:18	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/02/22 14:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		62 - 137		05/02/22 14:18	1
4-Bromofluorobenzene (Surr)	93		56 - 136		05/02/22 14:18	1
Toluene-d8 (Surr)	93		78 - 122		05/02/22 14:18	1
Dibromofluoromethane (Surr)	89		73 - 120		05/02/22 14:18	1

Lab Sample ID: LCS 240-524710/5
Matrix: Water
Analysis Batch: 524710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	18.1		ug/L		90	63 - 134
cis-1,2-Dichloroethene	20.0	17.7		ug/L		88	77 - 123
Tetrachloroethene	20.0	18.0		ug/L		90	76 - 123
trans-1,2-Dichloroethene	20.0	16.8		ug/L		84	75 - 124
Trichloroethene	20.0	18.3		ug/L		91	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-524710/5
Matrix: Water
Analysis Batch: 524710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	21.1		ug/L		106	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*62 - 137*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*
Toluene-d8 (Surr)	*88*		*78 - 122*
Dibromofluoromethane (Surr)	*88*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-524782/4
Matrix: Water
Analysis Batch: 524782

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/02/22 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/02/22 18:33*	*1*

Lab Sample ID: LCS 240-524782/3
Matrix: Water
Analysis Batch: 524782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.4		ug/L		104	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Lab Sample ID: 240-165546-E-7 MS
Matrix: Water
Analysis Batch: 524782

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	9.86		ug/L		99	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*

Lab Sample ID: 240-165546-E-7 MSD
Matrix: Water
Analysis Batch: 524782

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.9		ug/L		109	51 - 153	10	16

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-165546-E-7 MSD
Matrix: Water
Analysis Batch: 524782

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*

Lab Sample ID: MB 240-524784/5
Matrix: Water
Analysis Batch: 524784

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/02/22 18:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/02/22 18:45*	*1*

Lab Sample ID: LCS 240-524784/4
Matrix: Water
Analysis Batch: 524784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	9.56		ug/L		96	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Lab Sample ID: 240-165715-8 MS
Matrix: Water
Analysis Batch: 524784

Client Sample ID: SL-8_042622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	10.8		ug/L		108	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 120*

Lab Sample ID: 240-165715-8 MSD
Matrix: Water
Analysis Batch: 524784

Client Sample ID: SL-8_042622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	11.2		ug/L		112	51 - 153	3	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*

GC/MS VOA

Analysis Batch: 524633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165715-1	TRIP BLANK_147	Total/NA	Water	8260D	
240-165715-2	MH-1259_042822	Total/NA	Water	8260D	
240-165715-3	MH-1244_042822	Total/NA	Water	8260D	
240-165715-4	MH-1256_042822	Total/NA	Water	8260D	
240-165715-5	TRIP BLANK_152	Total/NA	Water	8260D	
240-165715-6	SL-6_042622	Total/NA	Water	8260D	
240-165715-7	SL-5_042622	Total/NA	Water	8260D	
240-165715-8	SL-8_042622	Total/NA	Water	8260D	
240-165715-9	SL-9_042622	Total/NA	Water	8260D	
240-165715-10	SL-10_042622	Total/NA	Water	8260D	
240-165715-11	SL-11_042622	Total/NA	Water	8260D	
240-165715-12	SL-23_042622	Total/NA	Water	8260D	
240-165715-13	SL-12_042622	Total/NA	Water	8260D	
240-165715-14	SL-19_042622	Total/NA	Water	8260D	
240-165715-15	TRIP BLANK_153	Total/NA	Water	8260D	
240-165715-16	SL-21_042522	Total/NA	Water	8260D	
240-165715-17	SL-20_042522	Total/NA	Water	8260D	
240-165715-18	SL-22_042522	Total/NA	Water	8260D	
240-165715-19	SL-18_042522	Total/NA	Water	8260D	
MB 240-524633/8	Method Blank	Total/NA	Water	8260D	
LCS 240-524633/5	Lab Control Sample	Total/NA	Water	8260D	
240-165675-I-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-165675-I-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 524710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165715-20	SL-17_042522	Total/NA	Water	8260D	
240-165715-21	SL-15_042622	Total/NA	Water	8260D	
240-165715-22	SL-14_042622	Total/NA	Water	8260D	
240-165715-23	SL-13_042622	Total/NA	Water	8260D	
240-165715-24	SL-7_042622	Total/NA	Water	8260D	
240-165715-25	TRIP BLANK_148	Total/NA	Water	8260D	
240-165715-26	SL-16_042722	Total/NA	Water	8260D	
240-165715-27	SL-3_042722	Total/NA	Water	8260D	
240-165715-28	SL-2_042722	Total/NA	Water	8260D	
240-165715-29	MH-1231_042722	Total/NA	Water	8260D	
240-165715-30	SL-4_042722	Total/NA	Water	8260D	
240-165715-31	MH-1255_042722	Total/NA	Water	8260D	
240-165715-32	MH-1231A_042722	Total/NA	Water	8260D	
240-165715-33	DUP-01	Total/NA	Water	8260D	
240-165715-34	DUP-02	Total/NA	Water	8260D	
MB 240-524710/8	Method Blank	Total/NA	Water	8260D	
LCS 240-524710/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 524782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165715-24	SL-7_042622	Total/NA	Water	8260D SIM	
240-165715-26	SL-16_042722	Total/NA	Water	8260D SIM	
240-165715-27	SL-3_042722	Total/NA	Water	8260D SIM	
240-165715-28	SL-2_042722	Total/NA	Water	8260D SIM	
240-165715-29	MH-1231_042722	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 524782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165715-30	SL-4_042722	Total/NA	Water	8260D SIM	
240-165715-31	MH-1255_042722	Total/NA	Water	8260D SIM	
240-165715-32	MH-1231A_042722	Total/NA	Water	8260D SIM	
240-165715-33	DUP-01	Total/NA	Water	8260D SIM	
240-165715-34	DUP-02	Total/NA	Water	8260D SIM	
MB 240-524782/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-524782/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165546-E-7 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-165546-E-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 524784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-165715-2	MH-1259_042822	Total/NA	Water	8260D SIM	
240-165715-3	MH-1244_042822	Total/NA	Water	8260D SIM	
240-165715-4	MH-1256_042822	Total/NA	Water	8260D SIM	
240-165715-6	SL-6_042622	Total/NA	Water	8260D SIM	
240-165715-7	SL-5_042622	Total/NA	Water	8260D SIM	
240-165715-8	SL-8_042622	Total/NA	Water	8260D SIM	
240-165715-9	SL-9_042622	Total/NA	Water	8260D SIM	
240-165715-10	SL-10_042622	Total/NA	Water	8260D SIM	
240-165715-11	SL-11_042622	Total/NA	Water	8260D SIM	
240-165715-12	SL-23_042622	Total/NA	Water	8260D SIM	
240-165715-13	SL-12_042622	Total/NA	Water	8260D SIM	
240-165715-14	SL-19_042622	Total/NA	Water	8260D SIM	
240-165715-16	SL-21_042522	Total/NA	Water	8260D SIM	
240-165715-17	SL-20_042522	Total/NA	Water	8260D SIM	
240-165715-18	SL-22_042522	Total/NA	Water	8260D SIM	
240-165715-19	SL-18_042522	Total/NA	Water	8260D SIM	
240-165715-20	SL-17_042522	Total/NA	Water	8260D SIM	
240-165715-21	SL-15_042622	Total/NA	Water	8260D SIM	
240-165715-22	SL-14_042622	Total/NA	Water	8260D SIM	
240-165715-23	SL-13_042622	Total/NA	Water	8260D SIM	
MB 240-524784/5	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-524784/4	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165715-8 MS	SL-8_042622	Total/NA	Water	8260D SIM	
240-165715-8 MSD	SL-8_042622	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_147
Lab Sample ID: 240-165715-1
Date Collected: 04/28/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 13:48	HMB	TAL CAN

Client Sample ID: MH-1259_042822
Lab Sample ID: 240-165715-2
Date Collected: 04/28/22 11:40
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 14:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 19:36	CS	TAL CAN

Client Sample ID: MH-1244_042822
Lab Sample ID: 240-165715-3
Date Collected: 04/28/22 11:55
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 14:37	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 20:01	CS	TAL CAN

Client Sample ID: MH-1256_042822
Lab Sample ID: 240-165715-4
Date Collected: 04/28/22 11:25
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 15:01	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 20:26	CS	TAL CAN

Client Sample ID: TRIP BLANK_152
Lab Sample ID: 240-165715-5
Date Collected: 04/26/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 15:26	HMB	TAL CAN

Client Sample ID: SL-6_042622
Lab Sample ID: 240-165715-6
Date Collected: 04/26/22 11:25
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 15:50	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 20:51	CS	TAL CAN

Client Sample ID: SL-5_042622
Lab Sample ID: 240-165715-7
Date Collected: 04/26/22 11:40
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 16:15	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 21:16	CS	TAL CAN

Client Sample ID: SL-8_042622
Lab Sample ID: 240-165715-8
Date Collected: 04/26/22 12:35
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 16:39	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 21:42	CS	TAL CAN

Client Sample ID: SL-9_042622
Lab Sample ID: 240-165715-9
Date Collected: 04/26/22 12:52
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 17:04	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 22:57	CS	TAL CAN

Client Sample ID: SL-10_042622
Lab Sample ID: 240-165715-10
Date Collected: 04/26/22 13:15
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 17:29	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 23:22	CS	TAL CAN

Client Sample ID: SL-11_042622
Lab Sample ID: 240-165715-11
Date Collected: 04/26/22 13:30
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 17:53	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/02/22 23:48	CS	TAL CAN

Client Sample ID: SL-23_042622
Lab Sample ID: 240-165715-12
Date Collected: 04/26/22 13:50
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 18:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 00:13	CS	TAL CAN

Client Sample ID: SL-12_042622
Lab Sample ID: 240-165715-13
Date Collected: 04/26/22 14:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 18:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 00:38	CS	TAL CAN

Client Sample ID: SL-19_042622
Lab Sample ID: 240-165715-14
Date Collected: 04/26/22 14:15
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 19:06	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 01:03	CS	TAL CAN

Client Sample ID: TRIP BLANK_153
Lab Sample ID: 240-165715-15
Date Collected: 04/25/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 19:31	HMB	TAL CAN

Client Sample ID: SL-21_042522
Lab Sample ID: 240-165715-16
Date Collected: 04/25/22 13:21
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 19:56	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 01:28	CS	TAL CAN

Client Sample ID: SL-20_042522
Lab Sample ID: 240-165715-17
Date Collected: 04/25/22 13:45
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 20:20	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 01:54	CS	TAL CAN

Client Sample ID: SL-22_042522
Lab Sample ID: 240-165715-18
Date Collected: 04/25/22 14:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 20:45	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 02:19	CS	TAL CAN

Client Sample ID: SL-18_042522
Lab Sample ID: 240-165715-19
Date Collected: 04/25/22 14:20
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524633	05/02/22 21:10	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 02:44	CS	TAL CAN

Client Sample ID: SL-17_042522
Lab Sample ID: 240-165715-20
Date Collected: 04/25/22 14:40
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 14:41	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 03:09	CS	TAL CAN

Client Sample ID: SL-15_042622
Lab Sample ID: 240-165715-21
Date Collected: 04/26/22 10:19
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 15:05	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 03:34	CS	TAL CAN

Client Sample ID: SL-14_042622
Lab Sample ID: 240-165715-22
Date Collected: 04/26/22 10:40
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 15:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 03:59	CS	TAL CAN

Client Sample ID: SL-13_042622
Lab Sample ID: 240-165715-23
Date Collected: 04/26/22 10:50
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 15:52	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524784	05/03/22 04:25	CS	TAL CAN

Client Sample ID: SL-7_042622
Lab Sample ID: 240-165715-24
Date Collected: 04/26/22 11:10
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 16:15	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 19:20	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: TRIP BLANK_148
Lab Sample ID: 240-165715-25
Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 16:39	HMB	TAL CAN

Client Sample ID: SL-16_042722
Lab Sample ID: 240-165715-26
Date Collected: 04/27/22 09:40
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 17:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 19:48	CS	TAL CAN

Client Sample ID: SL-3_042722
Lab Sample ID: 240-165715-27
Date Collected: 04/27/22 09:55
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 17:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 20:14	CS	TAL CAN

Client Sample ID: SL-2_042722
Lab Sample ID: 240-165715-28
Date Collected: 04/27/22 10:25
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 17:48	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 20:38	CS	TAL CAN

Client Sample ID: MH-1231_042722
Lab Sample ID: 240-165715-29
Date Collected: 04/27/22 10:50
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 18:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 21:02	CS	TAL CAN

Client Sample ID: SL-4_042722
Lab Sample ID: 240-165715-30
Date Collected: 04/27/22 11:20
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 18:35	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 21:26	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Client Sample ID: MH-1255_042722
Lab Sample ID: 240-165715-31
Date Collected: 04/27/22 12:30
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	524710	05/02/22 18:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 21:50	CS	TAL CAN

Client Sample ID: MH-1231A_042722
Lab Sample ID: 240-165715-32
Date Collected: 04/27/22 12:55
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	524710	05/02/22 19:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 22:14	CS	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-165715-33
Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 19:46	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 22:38	CS	TAL CAN

Client Sample ID: DUP-02
Lab Sample ID: 240-165715-34
Date Collected: 04/27/22 00:00
Matrix: Water
Date Received: 04/29/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	524710	05/02/22 20:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	524782	05/02/22 23:02	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-165715-1
Project/Site: Ford LTP Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-23-22 *
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 30080642.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM				Sample Specific Notes / Special Instructions:
TRIP BLANK _147	---	---		X						1					N	G	X	X	X	X	X	X	X				1 Trip Blank
MH-1259_042822	4/28/22	1140		X						6					N	G	X	X	X	X	X	X	X				3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1244_042822	4/28/22	1155		X						6					N	G	X	X	X	X	X	X	X				" "
MH-1256_042822	4/28/22	1125		X						6					N	G	X	X	X	X	X	X	X				" "

240-165715 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
LeaCadia Jay	Arcadis	4/28/22 1500		EETM	4/28/22 1500
	EETM	4/28/22 1510		EETNL	4-29-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Lotte Jay ~~Korey Pearson, Samantha Hindle~~, Sommer Guy	TAT if different from below ☐		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:	
TRIP BLANK_152	—	—		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank	✓
SL-6_042622	4/26/22	1125		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM	✓
SL-5_042622	4/26/22	1140																										" "	✓
SL-8_042622	4/26/22	1235																										" "	✓
SL-9_042622	4/26/22	1252																										" "	✓
SL-10_042622	4/26/22	1315																										" "	✓
SL-11_042622	4/26/22	1330																										" "	✓
SL-23_042622	4/26/22	1350																										" "	✓
SL-12_042622	4/26/22	1400																										" "	✓
SL-19_042622	4/26/22	1415																										" "	✓

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Leacadia Jay	Arcadis	4/28/22 1500		EETH	4/28/22 1500
	EETH	4/28/22 1310		EETNC	4-29-22 0800
			Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Lottie Jay (Katey Pearson, ~~Samantha Lindle~~, Sommer Guy)	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_153	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-21_042522	4/25/22	1321		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20_042522	4/25/22	1345		X						6					N	G	X	X	X	X	X	X	X					" "
SL-22_042522	4/25/22	1400		|					|					|	|	|	|	|	|	|	|	|					" "
SL-18_042522	4/25/22	1420		|					|					|	|	|	|	|	|	|	|	|					" "
SL-17_042522	4/25/22	1440		|					|					|	|	|	|	|	|	|	|	|					" "
SL-15_042622	4/26/22	1019		|					|					|	|	|	|	|	|	|	|	|					" "
SL-14_042622	4/26/22	1040		|					|					|	|	|	|	|	|	|	|	|					" "
SL-13_042622	4/26/22	1050		|					|					|	|	|	|	|	|	|	|	|					" "
SL-7_042622	4/26/22	1110		|					|					|	|	|	|	|	|	|	|	|					" "

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Leacadia Jay	Arcadis	4/28/22 1500		EETA	4/28/22 1500
	EETA	4/28/22 1510		EETNC	4-29-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Lothe Jay, ~~Korey Pearson, Samantha Hindle~~, Sommer Guy	TAT if different from below ☐		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No.
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_148	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-16_042722	4/27/22	9:40		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-3_042722	4/27/22	9:55																										" "
SL-2_042722	4/27/22	1025																										" "
MH-1231_042722	4/27/22	1050																										" "
SL-4_042722	4/27/22	1120																										" "
MH-1255_042722	4/27/22	1230																										" "
MH-1231A_042722	4/27/22	1255																										" "
DUP-01	4/27/22	—																										" "
DUP-02	4/27/22	—																										" "

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Leacadia Jay	Arcadis	4/28/22 1500		EETA	4/28/22 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	4/28/22 1510		EETNC	4-29-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/4/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 165715**
Canton Facility

Client Arcadis Site Name Ford LTP
Cooler Received on 4-29-22 Opened on 4-29-22
FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other
Receipt After-hours: Drop-off Date/Time Storage Location

Cooler unpacked by: DMC

TestAmerica Cooler # TA Foam Box Client Cooler Box Other
Packing material used: (Bubble Wrap) Foam Plastic Bag None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	(Y)	(Y) (Y)
10. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11. Sufficient quantity received to perform indicated analyses?	Yes	(No)
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC?	(Yes)	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	(No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered	(Yes)	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

TB not logged for SIM due to insufficient volume. DMC 4-29-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 165715

Eurofins - Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(TA) Client Box Other	(IR-13) IR-15	0.8	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-13) IR-15	1.1	1.1	(Wet Ice) Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
				☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-166037-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
5/11/2022 7:20:29 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-166037-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-166037-1

Comments
No additional comments.

Receipt
The samples were received on 5/5/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.9º C, 1.1º C and 1.2º C.

GC/MS VOA
Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-525400.

Method 8260D SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SL-15_050322 (240-166037-6) and MH-1256_050322 (240-166037-29). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-166037-1	TRIP BLANK-01	Water	05/03/22 00:00	05/05/22 08:00
240-166037-2	SL-7_050322	Water	05/03/22 11:00	05/05/22 08:00
240-166037-3	SL-14_050322	Water	05/03/22 10:10	05/05/22 08:00
240-166037-4	MH-1255_050322	Water	05/03/22 08:48	05/05/22 08:00
240-166037-5	SL-6_050322	Water	05/03/22 11:15	05/05/22 08:00
240-166037-6	SL-15_050322	Water	05/03/22 10:00	05/05/22 08:00
240-166037-7	SL-11_050422	Water	05/04/22 09:50	05/05/22 08:00
240-166037-8	SL-8_050422	Water	05/04/22 09:00	05/05/22 08:00
240-166037-9	SL-19_050422	Water	05/04/22 10:23	05/05/22 08:00
240-166037-10	SL-23_050422	Water	05/04/22 10:03	05/05/22 08:00
240-166037-11	TRIP BLANK-02	Water	05/02/22 00:00	05/05/22 08:00
240-166037-12	SL-20_050222	Water	05/02/22 10:54	05/05/22 08:00
240-166037-13	SL-4_050222	Water	05/02/22 11:23	05/05/22 08:00
240-166037-14	SL-22_050222	Water	05/02/22 11:07	05/05/22 08:00
240-166037-15	MH-1231_050222	Water	05/02/22 13:05	05/05/22 08:00
240-166037-16	SL-17_050222	Water	05/02/22 11:55	05/05/22 08:00
240-166037-17	SL-21_050222	Water	05/02/22 10:41	05/05/22 08:00
240-166037-18	SL-18_050222	Water	05/02/22 11:39	05/05/22 08:00
240-166037-19	DUP-01_050222	Water	05/02/22 00:00	05/05/22 08:00
240-166037-20	DUP-02_050222	Water	05/02/22 00:00	05/05/22 08:00
240-166037-21	TRIP BLANK-03	Water	05/02/22 00:00	05/05/22 08:00
240-166037-22	SL-16_050222	Water	05/02/22 12:08	05/05/22 08:00
240-166037-23	SL-3_050222	Water	05/02/22 12:30	05/05/22 08:00
240-166037-24	SL-2_050222	Water	05/02/22 12:50	05/05/22 08:00
240-166037-25	MH-1259_050322	Water	05/03/22 12:50	05/05/22 08:00
240-166037-26	MH-1244_050322	Water	05/03/22 12:20	05/05/22 08:00
240-166037-27	SL-13_050322	Water	05/03/22 10:22	05/05/22 08:00
240-166037-28	SL-5_050322	Water	05/03/22 11:30	05/05/22 08:00
240-166037-29	MH-1256_050322	Water	05/03/22 12:38	05/05/22 08:00
240-166037-30	MH-1231A_050322	Water	05/03/22 09:08	05/05/22 08:00
240-166037-31	TRIP BLANK-04	Water	05/04/22 00:00	05/05/22 08:00
240-166037-32	SL-10_050422	Water	05/04/22 09:40	05/05/22 08:00
240-166037-33	SL-12_050422	Water	05/04/22 10:12	05/05/22 08:00
240-166037-34	SL-9_050422	Water	05/04/22 09:18	05/05/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01 — Lab Sample ID: 240-166037-1

No Detections.

Client Sample ID: SL-7_050322 — Lab Sample ID: 240-166037-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-14_050322 — Lab Sample ID: 240-166037-3

No Detections.

Client Sample ID: MH-1255_050322 — Lab Sample ID: 240-166037-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	30		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	94		4.0	1.8	ug/L	4		8260D	Total/NA
trans-1,2-Dichloroethene	0.80	J	1.0	0.51	ug/L	1		8260D	Total/NA
Trichloroethene	1.3		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	100		4.0	1.8	ug/L	4		8260D	Total/NA

Client Sample ID: SL-6_050322 — Lab Sample ID: 240-166037-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-15_050322 — Lab Sample ID: 240-166037-6

No Detections.

Client Sample ID: SL-11_050422 — Lab Sample ID: 240-166037-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.81	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_050422 — Lab Sample ID: 240-166037-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_050422 — Lab Sample ID: 240-166037-9

No Detections.

Client Sample ID: SL-23_050422 — Lab Sample ID: 240-166037-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.84	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-02 — Lab Sample ID: 240-166037-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_050222 — Lab Sample ID: 240-166037-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.86	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-4_050222 — Lab Sample ID: 240-166037-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_050222 — Lab Sample ID: 240-166037-14

No Detections.

Client Sample ID: MH-1231_050222 — Lab Sample ID: 240-166037-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.57	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	20		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_050222 — Lab Sample ID: 240-166037-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_050222 — Lab Sample ID: 240-166037-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.99	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_050222 — Lab Sample ID: 240-166037-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_050222 — Lab Sample ID: 240-166037-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_050222 — Lab Sample ID: 240-166037-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	10		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02_050222 (Continued)
Lab Sample ID: 240-166037-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	28		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.71	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	24		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166037-21

No Detections.

Client Sample ID: SL-16_050222
Lab Sample ID: 240-166037-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_050222
Lab Sample ID: 240-166037-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_050222
Lab Sample ID: 240-166037-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_050322
Lab Sample ID: 240-166037-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.49	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.7		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	4.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_050322
Lab Sample ID: 240-166037-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.98	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: SL-13_050322
Lab Sample ID: 240-166037-27

No Detections.

Client Sample ID: SL-5_050322
Lab Sample ID: 240-166037-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1256_050322 — Lab Sample ID: 240-166037-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.51	J	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.85	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231A_050322 — Lab Sample ID: 240-166037-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	67		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	0.93	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	61		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: TRIP BLANK-04 — Lab Sample ID: 240-166037-31

No Detections.

Client Sample ID: SL-10_050422 — Lab Sample ID: 240-166037-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_050422 — Lab Sample ID: 240-166037-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.53	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_050422 — Lab Sample ID: 240-166037-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.4		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166037-1
Date Collected: 05/03/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 13:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 13:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 13:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 13:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/05/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*05/05/22 13:58*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/05/22 13:58*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/05/22 13:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_050322
Lab Sample ID: 240-166037-2
Date Collected: 05/03/22 11:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.3		2.0	0.86	ug/L			05/07/22 05:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/07/22 05:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 14:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 14:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 14:23	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 14:23	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/05/22 14:23*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/05/22 14:23*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/05/22 14:23*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/05/22 14:23*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_050322
Lab Sample ID: 240-166037-3
Date Collected: 05/03/22 10:10
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/07/22 06:01*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 14:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 14:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 14:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 14:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 14:56	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/05/22 14:56*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/05/22 14:56*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/05/22 14:56*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/05/22 14:56*	*1*

Client Sample ID: MH-1255_050322
Lab Sample ID: 240-166037-4
Date Collected: 05/03/22 08:48
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**30**		2.0	0.86	ug/L			05/06/22 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/06/22 21:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 15:21	1
cis-1,2-Dichloroethene	**94**		4.0	1.8	ug/L			05/06/22 13:13	4
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 15:21	1
trans-1,2-Dichloroethene	**0.80**	**J**	1.0	0.51	ug/L			05/05/22 15:21	1
Trichloroethene	**1.3**		1.0	0.44	ug/L			05/05/22 15:21	1
Vinyl chloride	**100**		4.0	1.8	ug/L			05/06/22 13:13	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/05/22 15:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/06/22 13:13*	*4*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/05/22 15:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/06/22 13:13*	*4*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/05/22 15:21*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/06/22 13:13*	*4*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/05/22 15:21*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/06/22 13:13*	*4*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-6_050322
Lab Sample ID: 240-166037-5
Date Collected: 05/03/22 11:15
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.3		2.0	0.86	ug/L			05/06/22 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/06/22 21:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 15:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 15:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 15:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 15:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 15:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/05/22 15:46*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/05/22 15:46*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/05/22 15:46*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/05/22 15:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_050322
Lab Sample ID: 240-166037-6
Date Collected: 05/03/22 10:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			05/06/22 22:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*66 - 120*		*05/06/22 22:23*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 16:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 16:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 16:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 16:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 16:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/05/22 16:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/05/22 16:10*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/05/22 16:10*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/05/22 16:10*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_050422
Lab Sample ID: 240-166037-7
Date Collected: 05/04/22 09:50
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/06/22 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*05/06/22 22:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 16:35	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.46	ug/L			05/05/22 16:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 16:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 16:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 16:35	1
Vinyl chloride	**0.81**	**J**	1.0	0.45	ug/L			05/05/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/05/22 16:35*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/05/22 16:35*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*05/05/22 16:35*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/05/22 16:35*	*1*

Client Sample ID: SL-8_050422
Lab Sample ID: 240-166037-8

Date Collected: 05/04/22 09:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/06/22 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/06/22 23:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 17:00	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			05/05/22 17:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 17:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:00	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/05/22 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/05/22 17:00*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/05/22 17:00*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/05/22 17:00*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/05/22 17:00*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_050422
Lab Sample ID: 240-166037-9
Date Collected: 05/04/22 10:23
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*05/07/22 00:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 17:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 17:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 17:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:25	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/05/22 17:25*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/05/22 17:25*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/05/22 17:25*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/05/22 17:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_050422
Lab Sample ID: 240-166037-10
Date Collected: 05/04/22 10:03
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/07/22 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/07/22 00:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 17:49	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.46	ug/L			05/05/22 17:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 17:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 17:49	1
Vinyl chloride	**0.84**	**J**	1.0	0.45	ug/L			05/05/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/05/22 17:49*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/05/22 17:49*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/05/22 17:49*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/05/22 17:49*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166037-11
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 18:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 18:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 18:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 18:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 18:14	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*05/05/22 18:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/05/22 18:14*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/05/22 18:14*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/05/22 18:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_050222
Lab Sample ID: 240-166037-12
Date Collected: 05/02/22 10:54
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			05/07/22 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/07/22 01:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 18:38	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.46	ug/L			05/05/22 18:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 18:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 18:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 18:38	1
Vinyl chloride	**0.86**	**J**	1.0	0.45	ug/L			05/05/22 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/05/22 18:38*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/05/22 18:38*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/05/22 18:38*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/05/22 18:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-4_050222
Lab Sample ID: 240-166037-13
Date Collected: 05/02/22 11:23
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		2.0	0.86	ug/L			05/07/22 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/07/22 01:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 19:03	1
cis-1,2-Dichloroethene	**7.0**		1.0	0.46	ug/L			05/05/22 19:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 19:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 19:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 19:03	1
Vinyl chloride	**4.3**		1.0	0.45	ug/L			05/05/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/05/22 19:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/05/22 19:03*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*05/05/22 19:03*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/05/22 19:03*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_050222
Lab Sample ID: 240-166037-14
Date Collected: 05/02/22 11:07
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/07/22 01:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 19:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 19:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 19:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 19:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 19:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/05/22 19:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/05/22 19:28*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*05/05/22 19:28*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/05/22 19:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_050222
Lab Sample ID: 240-166037-15
Date Collected: 05/02/22 13:05
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.7**		2.0	0.86	ug/L			05/07/22 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/07/22 02:22*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 13:27	1
cis-1,2-Dichloroethene	**26**		1.0	0.46	ug/L			05/06/22 13:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 13:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 13:27	1
Trichloroethene	**0.57**	**J**	1.0	0.44	ug/L			05/06/22 13:27	1
Vinyl chloride	**20**		1.0	0.45	ug/L			05/06/22 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/06/22 13:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/06/22 13:27*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/06/22 13:27*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 13:27*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_050222
Lab Sample ID: 240-166037-16
Date Collected: 05/02/22 11:55
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		2.0	0.86	ug/L			05/07/22 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/07/22 02:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 13:51	1
cis-1,2-Dichloroethene	**8.1**		1.0	0.46	ug/L			05/06/22 13:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 13:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 13:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 13:51	1
Vinyl chloride	**5.4**		1.0	0.45	ug/L			05/06/22 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*05/06/22 13:51*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/06/22 13:51*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/06/22 13:51*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 13:51*	*1*

Client Sample ID: SL-21_050222
Lab Sample ID: 240-166037-17

Date Collected: 05/02/22 10:41
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			05/07/22 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/07/22 03:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 14:14	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			05/06/22 14:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 14:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 14:14	1
Vinyl chloride	**0.99**	**J**	1.0	0.45	ug/L			05/06/22 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*05/06/22 14:14*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/06/22 14:14*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/06/22 14:14*	*1*
Dibromofluoromethane (Surr)	*85*		*73 - 120*		*05/06/22 14:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_050222
Lab Sample ID: 240-166037-18
Date Collected: 05/02/22 11:39
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		2.0	0.86	ug/L			05/07/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/07/22 03:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 14:38	1
cis-1,2-Dichloroethene	**8.4**		1.0	0.46	ug/L			05/06/22 14:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 14:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 14:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 14:38	1
Vinyl chloride	**5.8**		1.0	0.45	ug/L			05/06/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/06/22 14:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/06/22 14:38*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/06/22 14:38*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/06/22 14:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_050222
Lab Sample ID: 240-166037-19
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.4**		2.0	0.86	ug/L			05/07/22 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/07/22 03:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 15:01	1
cis-1,2-Dichloroethene	**6.8**		1.0	0.46	ug/L			05/06/22 15:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 15:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 15:01	1
Vinyl chloride	**4.6**		1.0	0.45	ug/L			05/06/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/06/22 15:01*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/06/22 15:01*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/06/22 15:01*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*05/06/22 15:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02_050222
Lab Sample ID: 240-166037-20
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**10**		2.0	0.86	ug/L			05/07/22 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*05/07/22 04:22*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 15:25	1
cis-1,2-Dichloroethene	**28**		1.0	0.46	ug/L			05/06/22 15:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 15:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 15:25	1
Trichloroethene	**0.71**	**J**	1.0	0.44	ug/L			05/06/22 15:25	1
Vinyl chloride	**24**		1.0	0.45	ug/L			05/06/22 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*05/06/22 15:25*	*1*
4-Bromofluorobenzene (Surr)	*110*		*56 - 136*		*05/06/22 15:25*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*05/06/22 15:25*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/06/22 15:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166037-21
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 15:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/06/22 15:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 15:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 15:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 15:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/06/22 15:48*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*05/06/22 15:48*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/06/22 15:48*	*1*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*05/06/22 15:48*	*1*

Client Sample ID: SL-16_050222
Lab Sample ID: 240-166037-22

Date Collected: 05/02/22 12:08
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.4**		2.0	0.86	ug/L			05/07/22 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/07/22 04:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 16:12	1
cis-1,2-Dichloroethene	**7.7**		1.0	0.46	ug/L			05/06/22 16:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 16:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:12	1
Vinyl chloride	**5.0**		1.0	0.45	ug/L			05/06/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/06/22 16:12*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/06/22 16:12*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*05/06/22 16:12*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/06/22 16:12*	*1*

Client Sample ID: SL-3_050222
Lab Sample ID: 240-166037-23

Date Collected: 05/02/22 12:30
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			05/07/22 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/07/22 05:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 16:35	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			05/06/22 16:35	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 16:35	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:35	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			05/06/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/06/22 16:35*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/06/22 16:35*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/06/22 16:35*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 16:35*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_050222
Lab Sample ID: 240-166037-24
Date Collected: 05/02/22 12:50
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			05/07/22 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/07/22 05:34*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 16:59	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			05/06/22 16:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 16:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 16:59	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			05/06/22 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/06/22 16:59*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/06/22 16:59*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/06/22 16:59*	*1*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*05/06/22 16:59*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_050322
Lab Sample ID: 240-166037-25
Date Collected: 05/03/22 12:50
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.6**		2.0	0.86	ug/L			05/07/22 05:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/07/22 05:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.49**	**J**	1.0	0.49	ug/L			05/06/22 17:22	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			05/06/22 17:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 17:22	1
Trichloroethene	**1.7**		1.0	0.44	ug/L			05/06/22 17:22	1
Vinyl chloride	**4.1**		1.0	0.45	ug/L			05/06/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/06/22 17:22*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/06/22 17:22*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/06/22 17:22*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 17:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1244_050322
Lab Sample ID: 240-166037-26
Date Collected: 05/03/22 12:20
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/07/22 19:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 17:46	1
cis-1,2-Dichloroethene	**0.98**	**J**	1.0	0.46	ug/L			05/06/22 17:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 17:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 17:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 17:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/06/22 17:46*	*1*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*05/06/22 17:46*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/06/22 17:46*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 17:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_050322
Lab Sample ID: 240-166037-27
Date Collected: 05/03/22 10:22
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/07/22 21:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 18:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/06/22 18:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 18:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/06/22 18:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/06/22 18:09*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/06/22 18:09*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 18:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_050322
Lab Sample ID: 240-166037-28
Date Collected: 05/03/22 11:30
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			05/07/22 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/07/22 21:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 18:33	1
cis-1,2-Dichloroethene	**6.0**		1.0	0.46	ug/L			05/06/22 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:33	1
Vinyl chloride	**4.1**		1.0	0.45	ug/L			05/06/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/06/22 18:33*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/06/22 18:33*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/06/22 18:33*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*05/06/22 18:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1256_050322
Lab Sample ID: 240-166037-29
Date Collected: 05/03/22 12:38
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			05/07/22 22:06	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/07/22 22:06*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 18:56	1
cis-1,2-Dichloroethene	**0.51**	**J**	1.0	0.46	ug/L			05/06/22 18:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 18:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 18:56	1
Vinyl chloride	**0.85**	**J**	1.0	0.45	ug/L			05/06/22 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/06/22 18:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*05/06/22 18:56*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/06/22 18:56*	*1*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*05/06/22 18:56*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_050322
Lab Sample ID: 240-166037-30
Date Collected: 05/03/22 09:08
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			05/07/22 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*05/07/22 22:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/06/22 19:20	2
cis-1,2-Dichloroethene	**67**		2.0	0.92	ug/L			05/06/22 19:20	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/06/22 19:20	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			05/06/22 19:20	2
Trichloroethene	**0.93**	**J**	2.0	0.88	ug/L			05/06/22 19:20	2
Vinyl chloride	**61**		2.0	0.90	ug/L			05/06/22 19:20	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/06/22 19:20*	*2*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*		*05/06/22 19:20*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/06/22 19:20*	*2*
Dibromofluoromethane (Surr)	*90*		*73 - 120*		*05/06/22 19:20*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166037-31
Date Collected: 05/04/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 19:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/06/22 19:43	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 19:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 19:43	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 19:43	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*05/06/22 19:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/06/22 19:43*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/06/22 19:43*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*05/06/22 19:43*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-10_050422
Lab Sample ID: 240-166037-32
Date Collected: 05/04/22 09:40
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/07/22 22:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 20:07	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			05/06/22 20:07	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 20:07	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:07	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			05/06/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/06/22 20:07*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/06/22 20:07*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/06/22 20:07*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*05/06/22 20:07*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_050422
Lab Sample ID: 240-166037-33
Date Collected: 05/04/22 10:12
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/07/22 23:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 20:30	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.46	ug/L			05/06/22 20:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 20:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:30	1
Vinyl chloride	**0.53**	**J**	1.0	0.45	ug/L			05/06/22 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*		*05/06/22 20:30*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/06/22 20:30*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/06/22 20:30*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*05/06/22 20:30*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-9_050422
Lab Sample ID: 240-166037-34
Date Collected: 05/04/22 09:18
Matrix: Water
Date Received: 05/05/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/07/22 23:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 20:54	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.46	ug/L			05/06/22 20:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 20:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 20:54	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			05/06/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/06/22 20:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/06/22 20:54*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/06/22 20:54*	*1*
Dibromofluoromethane (Surr)	*88*		*73 - 120*		*05/06/22 20:54*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-166037-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-165877-B-2 MS	Matrix Spike	98	100	97	103
240-165877-B-2 MSD	Matrix Spike Duplicate	98	96	97	102
240-166037-1	TRIP BLANK-01	97	90	93	100
240-166037-2	SL-7_050322	95	93	94	101
240-166037-3	SL-14_050322	92	91	94	99
240-166037-4	MH-1255_050322	95	93	96	101
240-166037-4	MH-1255_050322	96	91	95	102
240-166037-4 MS	MH-1255_050322	89	92	93	97
240-166037-4 MSD	MH-1255_050322	90	90	91	95
240-166037-5	SL-6_050322	97	94	98	102
240-166037-6	SL-15_050322	94	94	93	99
240-166037-7	SL-11_050422	98	95	100	104
240-166037-8	SL-8_050422	96	93	96	100
240-166037-9	SL-19_050422	99	93	97	103
240-166037-10	SL-23_050422	96	94	98	102
240-166037-11	TRIP BLANK-02	103	97	97	106
240-166037-12	SL-20_050222	97	95	98	103
240-166037-13	SL-4_050222	100	97	100	106
240-166037-14	SL-22_050222	98	97	100	106
240-166037-15	MH-1231_050222	95	95	93	88
240-166037-16	SL-17_050222	89	93	89	88
240-166037-17	SL-21_050222	90	92	89	85
240-166037-18	SL-18_050222	93	97	92	89
240-166037-19	DUP-01_050222	95	97	95	87
240-166037-20	DUP-02_050222	104	110	104	99
240-166037-21	TRIP BLANK-03	98	102	97	92
240-166037-22	SL-16_050222	93	94	90	89
240-166037-23	SL-3_050222	92	93	91	88
240-166037-24	SL-2_050222	93	94	92	89
240-166037-25	MH-1259_050322	93	95	91	88
240-166037-26	MH-1244_050322	94	101	97	88
240-166037-27	SL-13_050322	95	98	97	88
240-166037-28	SL-5_050322	92	97	93	87
240-166037-29	MH-1256_050322	95	102	99	90
240-166037-30	MH-1231A_050322	96	101	95	90
240-166037-31	TRIP BLANK-04	102	103	98	93
240-166037-32	SL-10_050422	97	103	99	93
240-166037-33	SL-12_050422	88	94	89	84
240-166037-34	SL-9_050422	93	95	91	88
LCS 240-525230/5	Lab Control Sample	93	95	95	97
LCS 240-525400/5	Lab Control Sample	88	94	89	88
LCS 240-525405/5	Lab Control Sample	92	92	93	98
LCSD 240-525400/6	Lab Control Sample Dup	88	93	88	89
MB 240-525230/8	Method Blank	99	96	99	103
MB 240-525400/9	Method Blank	92	97	93	86
MB 240-525405/8	Method Blank	99	92	94	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-165896-H-4 MS	Matrix Spike	106						
240-165896-M-4 MSD	Matrix Spike Duplicate	106						
240-166037-2	SL-7_050322	108						
240-166037-3	SL-14_050322	107						
240-166037-4	MH-1255_050322	82						
240-166037-5	SL-6_050322	82						
240-166037-6	SL-15_050322	80						
240-166037-7	SL-11_050422	81						
240-166037-8	SL-8_050422	83						
240-166037-8 MS	SL-8_050422	83						
240-166037-8 MSD	SL-8_050422	82						
240-166037-9	SL-19_050422	81						
240-166037-10	SL-23_050422	82						
240-166037-12	SL-20_050222	82						
240-166037-13	SL-4_050222	83						
240-166037-14	SL-22_050222	83						
240-166037-15	MH-1231_050222	82						
240-166037-16	SL-17_050222	83						
240-166037-17	SL-21_050222	84						
240-166037-18	SL-18_050222	82						
240-166037-19	DUP-01_050222	84						
240-166037-20	DUP-02_050222	81						
240-166037-22	SL-16_050222	83						
240-166037-23	SL-3_050222	84						
240-166037-24	SL-2_050222	83						
240-166037-25	MH-1259_050322	82						
240-166037-26	MH-1244_050322	108						
240-166037-26 MS	MH-1244_050322	105						
240-166037-26 MSD	MH-1244_050322	105						
240-166037-27	SL-13_050322	107						
240-166037-28	SL-5_050322	108						
240-166037-29	MH-1256_050322	105						
240-166037-30	MH-1231A_050322	103						
240-166037-32	SL-10_050422	110						
240-166037-33	SL-12_050422	109						
240-166037-34	SL-9_050422	110						
LCS 240-525508/3	Lab Control Sample	108						
LCS 240-525509/3	Lab Control Sample	83						
LCS 240-525514/3	Lab Control Sample	105						
MB 240-525508/4	Method Blank	107						
MB 240-525509/4	Method Blank	81						
MB 240-525514/9	Method Blank	100						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-525230/8
Matrix: Water
Analysis Batch: 525230

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/05/22 12:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/05/22 12:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 12:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/05/22 12:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/05/22 12:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/05/22 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/05/22 12:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/05/22 12:08*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/05/22 12:08*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/05/22 12:08*	*1*

Lab Sample ID: LCS 240-525230/5
Matrix: Water
Analysis Batch: 525230

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	18.4		ug/L		92	63 - 134
cis-1,2-Dichloroethene	20.0	18.5		ug/L		92	77 - 123
Tetrachloroethene	20.0	18.7		ug/L		94	76 - 123
trans-1,2-Dichloroethene	20.0	17.6		ug/L		88	75 - 124
Trichloroethene	20.0	18.9		ug/L		95	70 - 122
Vinyl chloride	20.0	17.1		ug/L		85	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: 240-165877-B-2 MS
Matrix: Water
Analysis Batch: 525230

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	14		200	195		ug/L		90	56 - 135
cis-1,2-Dichloroethene	15		200	200		ug/L		93	66 - 128
Tetrachloroethene	10	U	200	170		ug/L		85	62 - 131
trans-1,2-Dichloroethene	10	U	200	171		ug/L		85	56 - 136
Trichloroethene	480		200	654	E	ug/L		86	61 - 124
Vinyl chloride	10	U	200	180		ug/L		90	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
4-Bromofluorobenzene (Surr)	*100*		*56 - 136*
Toluene-d8 (Surr)	*97*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-165877-B-2 MS
Matrix: Water
Analysis Batch: 525230

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	103		73 - 120

Lab Sample ID: 240-165877-B-2 MSD
Matrix: Water
Analysis Batch: 525230

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	14		200	199		ug/L		92	56 - 135	2	26
cis-1,2-Dichloroethene	15		200	209		ug/L		97	66 - 128	4	14
Tetrachloroethene	10	U	200	167		ug/L		84	62 - 131	1	20
trans-1,2-Dichloroethene	10	U	200	176		ug/L		88	56 - 136	3	15
Trichloroethene	480		200	626	E	ug/L		72	61 - 124	4	15
Vinyl chloride	10	U	200	179		ug/L		89	43 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	102		73 - 120

Lab Sample ID: MB 240-525400/9
Matrix: Water
Analysis Batch: 525400

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 13:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/06/22 13:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 13:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 13:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 13:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 13:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		62 - 137		05/06/22 13:04	1
4-Bromofluorobenzene (Surr)	97		56 - 136		05/06/22 13:04	1
Toluene-d8 (Surr)	93		78 - 122		05/06/22 13:04	1
Dibromofluoromethane (Surr)	86		73 - 120		05/06/22 13:04	1

Lab Sample ID: LCS 240-525400/5
Matrix: Water
Analysis Batch: 525400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	19.0		ug/L		95	63 - 134
cis-1,2-Dichloroethene	20.0	18.6		ug/L		93	77 - 123
Tetrachloroethene	20.0	17.8		ug/L		89	76 - 123
trans-1,2-Dichloroethene	20.0	17.4		ug/L		87	75 - 124
Trichloroethene	20.0	18.1		ug/L		91	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-525400/5
Matrix: Water
Analysis Batch: 525400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	19.7		ug/L		99	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*
Toluene-d8 (Surr)	*89*		*78 - 122*
Dibromofluoromethane (Surr)	*88*		*73 - 120*

Lab Sample ID: LCSD 240-525400/6
Matrix: Water
Analysis Batch: 525400

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	20.4		ug/L		102	63 - 134	7	35
cis-1,2-Dichloroethene			20.0	20.1		ug/L		101	77 - 123	8	35
Tetrachloroethene			20.0	19.5		ug/L		97	76 - 123	9	35
trans-1,2-Dichloroethene			20.0	19.3		ug/L		96	75 - 124	10	35
Trichloroethene			20.0	20.1		ug/L		101	70 - 122	11	35
Vinyl chloride			20.0	21.8		ug/L		109	60 - 144	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*
Toluene-d8 (Surr)	*88*		*78 - 122*
Dibromofluoromethane (Surr)	*89*		*73 - 120*

Lab Sample ID: MB 240-525405/8
Matrix: Water
Analysis Batch: 525405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/06/22 12:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/06/22 12:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 12:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/06/22 12:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/06/22 12:48	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/06/22 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/06/22 12:48*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/06/22 12:48*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/06/22 12:48*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/06/22 12:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-525405/5
Matrix: Water
Analysis Batch: 525405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.0	18.1		ug/L		91	63 - 134		
cis-1,2-Dichloroethene			20.0	17.8		ug/L		89	77 - 123		
Tetrachloroethene			20.0	17.5		ug/L		87	76 - 123		
trans-1,2-Dichloroethene			20.0	17.1		ug/L		86	75 - 124		
Trichloroethene			20.0	18.5		ug/L		93	70 - 122		
Vinyl chloride			20.0	17.2		ug/L		86	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*
Toluene-d8 (Surr)	*93*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-166037-4 MS
Matrix: Water
Analysis Batch: 525405

Client Sample ID: MH-1255_050322
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	4.0	U	80.0	77.0		ug/L		96	56 - 135		
cis-1,2-Dichloroethene	94		80.0	165		ug/L		89	66 - 128		
Tetrachloroethene	4.0	U	80.0	72.7		ug/L		91	62 - 131		
trans-1,2-Dichloroethene	4.0	U	80.0	70.9		ug/L		89	56 - 136		
Trichloroethene	4.0	U	80.0	76.6		ug/L		96	61 - 124		
Vinyl chloride	100		80.0	163		ug/L		79	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*
Toluene-d8 (Surr)	*93*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: 240-166037-4 MSD
Matrix: Water
Analysis Batch: 525405

Client Sample ID: MH-1255_050322
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	4.0	U	80.0	78.9		ug/L		99	56 - 135	2	26
cis-1,2-Dichloroethene	94		80.0	166		ug/L		90	66 - 128	0	14
Tetrachloroethene	4.0	U	80.0	76.1		ug/L		95	62 - 131	5	20
trans-1,2-Dichloroethene	4.0	U	80.0	74.8		ug/L		93	56 - 136	5	15
Trichloroethene	4.0	U	80.0	79.8		ug/L		100	61 - 124	4	15
Vinyl chloride	100		80.0	163		ug/L		79	43 - 157	0	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*
Toluene-d8 (Surr)	*91*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166037-4 MSD
Matrix: Water
Analysis Batch: 525405

Client Sample ID: MH-1255_050322
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	95		73 - 120

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-525508/4
Matrix: Water
Analysis Batch: 525508

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/06/22 20:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 120		05/06/22 20:26	1

Lab Sample ID: LCS 240-525508/3
Matrix: Water
Analysis Batch: 525508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.0		ug/L		100	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 120

Lab Sample ID: 240-165896-H-4 MS
Matrix: Water
Analysis Batch: 525508

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	10.1		ug/L		101	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 120

Lab Sample ID: 240-165896-M-4 MSD
Matrix: Water
Analysis Batch: 525508

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.3		ug/L		103	51 - 153	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 120

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-525509/4
Matrix: Water
Analysis Batch: 525509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/06/22 20:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*		*05/06/22 20:48*	*1*

Lab Sample ID: LCS 240-525509/3
Matrix: Water
Analysis Batch: 525509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.2		ug/L		102	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Lab Sample ID: 240-166037-8 MS
Matrix: Water
Analysis Batch: 525509

Client Sample ID: SL-8_050422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	11.4		ug/L		114	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*

Lab Sample ID: 240-166037-8 MSD
Matrix: Water
Analysis Batch: 525509

Client Sample ID: SL-8_050422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	11.6		ug/L		116	51 - 153	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*

Lab Sample ID: MB 240-525514/9
Matrix: Water
Analysis Batch: 525514

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/07/22 20:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*05/07/22 20:52*	*1*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-525514/3
Matrix: Water
Analysis Batch: 525514

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.0		ug/L		100	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

Lab Sample ID: 240-166037-26 MS
Matrix: Water
Analysis Batch: 525514

Client Sample ID: MH-1244_050322
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	9.71		ug/L		97	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

Lab Sample ID: 240-166037-26 MSD
Matrix: Water
Analysis Batch: 525514

Client Sample ID: MH-1244_050322
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	51 - 153	7	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

GC/MS VOA

Analysis Batch: 525230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-1	TRIP BLANK-01	Total/NA	Water	8260D	
240-166037-2	SL-7_050322	Total/NA	Water	8260D	
240-166037-3	SL-14_050322	Total/NA	Water	8260D	
240-166037-4	MH-1255_050322	Total/NA	Water	8260D	
240-166037-5	SL-6_050322	Total/NA	Water	8260D	
240-166037-6	SL-15_050322	Total/NA	Water	8260D	
240-166037-7	SL-11_050422	Total/NA	Water	8260D	
240-166037-8	SL-8_050422	Total/NA	Water	8260D	
240-166037-9	SL-19_050422	Total/NA	Water	8260D	
240-166037-10	SL-23_050422	Total/NA	Water	8260D	
240-166037-11	TRIP BLANK-02	Total/NA	Water	8260D	
240-166037-12	SL-20_050222	Total/NA	Water	8260D	
240-166037-13	SL-4_050222	Total/NA	Water	8260D	
240-166037-14	SL-22_050222	Total/NA	Water	8260D	
MB 240-525230/8	Method Blank	Total/NA	Water	8260D	
LCS 240-525230/5	Lab Control Sample	Total/NA	Water	8260D	
240-165877-B-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-165877-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 525400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-15	MH-1231_050222	Total/NA	Water	8260D	
240-166037-16	SL-17_050222	Total/NA	Water	8260D	
240-166037-17	SL-21_050222	Total/NA	Water	8260D	
240-166037-18	SL-18_050222	Total/NA	Water	8260D	
240-166037-19	DUP-01_050222	Total/NA	Water	8260D	
240-166037-20	DUP-02_050222	Total/NA	Water	8260D	
240-166037-21	TRIP BLANK-03	Total/NA	Water	8260D	
240-166037-22	SL-16_050222	Total/NA	Water	8260D	
240-166037-23	SL-3_050222	Total/NA	Water	8260D	
240-166037-24	SL-2_050222	Total/NA	Water	8260D	
240-166037-25	MH-1259_050322	Total/NA	Water	8260D	
240-166037-26	MH-1244_050322	Total/NA	Water	8260D	
240-166037-27	SL-13_050322	Total/NA	Water	8260D	
240-166037-28	SL-5_050322	Total/NA	Water	8260D	
240-166037-29	MH-1256_050322	Total/NA	Water	8260D	
240-166037-30	MH-1231A_050322	Total/NA	Water	8260D	
240-166037-31	TRIP BLANK-04	Total/NA	Water	8260D	
240-166037-32	SL-10_050422	Total/NA	Water	8260D	
240-166037-33	SL-12_050422	Total/NA	Water	8260D	
240-166037-34	SL-9_050422	Total/NA	Water	8260D	
MB 240-525400/9	Method Blank	Total/NA	Water	8260D	
LCS 240-525400/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-525400/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 525405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-4	MH-1255_050322	Total/NA	Water	8260D	
MB 240-525405/8	Method Blank	Total/NA	Water	8260D	
LCS 240-525405/5	Lab Control Sample	Total/NA	Water	8260D	
240-166037-4 MS	MH-1255_050322	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 525405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-4 MSD	MH-1255_050322	Total/NA	Water	8260D	

Analysis Batch: 525508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-2	SL-7_050322	Total/NA	Water	8260D SIM	
240-166037-3	SL-14_050322	Total/NA	Water	8260D SIM	
MB 240-525508/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-525508/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-165896-H-4 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-165896-M-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 525509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-4	MH-1255_050322	Total/NA	Water	8260D SIM	
240-166037-5	SL-6_050322	Total/NA	Water	8260D SIM	
240-166037-6	SL-15_050322	Total/NA	Water	8260D SIM	
240-166037-7	SL-11_050422	Total/NA	Water	8260D SIM	
240-166037-8	SL-8_050422	Total/NA	Water	8260D SIM	
240-166037-9	SL-19_050422	Total/NA	Water	8260D SIM	
240-166037-10	SL-23_050422	Total/NA	Water	8260D SIM	
240-166037-12	SL-20_050222	Total/NA	Water	8260D SIM	
240-166037-13	SL-4_050222	Total/NA	Water	8260D SIM	
240-166037-14	SL-22_050222	Total/NA	Water	8260D SIM	
240-166037-15	MH-1231_050222	Total/NA	Water	8260D SIM	
240-166037-16	SL-17_050222	Total/NA	Water	8260D SIM	
240-166037-17	SL-21_050222	Total/NA	Water	8260D SIM	
240-166037-18	SL-18_050222	Total/NA	Water	8260D SIM	
240-166037-19	DUP-01_050222	Total/NA	Water	8260D SIM	
240-166037-20	DUP-02_050222	Total/NA	Water	8260D SIM	
240-166037-22	SL-16_050222	Total/NA	Water	8260D SIM	
240-166037-23	SL-3_050222	Total/NA	Water	8260D SIM	
240-166037-24	SL-2_050222	Total/NA	Water	8260D SIM	
240-166037-25	MH-1259_050322	Total/NA	Water	8260D SIM	
MB 240-525509/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-525509/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166037-8 MS	SL-8_050422	Total/NA	Water	8260D SIM	
240-166037-8 MSD	SL-8_050422	Total/NA	Water	8260D SIM	

Analysis Batch: 525514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-26	MH-1244_050322	Total/NA	Water	8260D SIM	
240-166037-27	SL-13_050322	Total/NA	Water	8260D SIM	
240-166037-28	SL-5_050322	Total/NA	Water	8260D SIM	
240-166037-29	MH-1256_050322	Total/NA	Water	8260D SIM	
240-166037-30	MH-1231A_050322	Total/NA	Water	8260D SIM	
240-166037-32	SL-10_050422	Total/NA	Water	8260D SIM	
240-166037-33	SL-12_050422	Total/NA	Water	8260D SIM	
240-166037-34	SL-9_050422	Total/NA	Water	8260D SIM	
MB 240-525514/9	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-525514/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166037-26 MS	MH-1244_050322	Total/NA	Water	8260D SIM	

GC/MS VOA (Continued)

Analysis Batch: 525514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166037-26 MSD	MH-1244_050322	Total/NA	Water	8260D SIM	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166037-1
Date Collected: 05/03/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 13:58	HMB	TAL CAN

Client Sample ID: SL-7_050322
Lab Sample ID: 240-166037-2
Date Collected: 05/03/22 11:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 14:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525508	05/07/22 05:36	CS	TAL CAN

Client Sample ID: SL-14_050322
Lab Sample ID: 240-166037-3
Date Collected: 05/03/22 10:10
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 14:56	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525508	05/07/22 06:01	CS	TAL CAN

Client Sample ID: MH-1255_050322
Lab Sample ID: 240-166037-4
Date Collected: 05/03/22 08:48
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 15:21	HMB	TAL CAN
Total/NA	Analysis	8260D		4	525405	05/06/22 13:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/06/22 21:36	CS	TAL CAN

Client Sample ID: SL-6_050322
Lab Sample ID: 240-166037-5
Date Collected: 05/03/22 11:15
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 15:46	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/06/22 21:59	CS	TAL CAN

Client Sample ID: SL-15_050322
Lab Sample ID: 240-166037-6
Date Collected: 05/03/22 10:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 16:10	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		2	525509	05/06/22 22:23	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_050422
Lab Sample ID: 240-166037-7
Date Collected: 05/04/22 09:50
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 16:35	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/06/22 22:47	CS	TAL CAN

Client Sample ID: SL-8_050422
Lab Sample ID: 240-166037-8
Date Collected: 05/04/22 09:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 17:00	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/06/22 23:11	CS	TAL CAN

Client Sample ID: SL-19_050422
Lab Sample ID: 240-166037-9
Date Collected: 05/04/22 10:23
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 17:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 00:23	CS	TAL CAN

Client Sample ID: SL-23_050422
Lab Sample ID: 240-166037-10
Date Collected: 05/04/22 10:03
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 17:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 00:47	CS	TAL CAN

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166037-11
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 18:14	HMB	TAL CAN

Client Sample ID: SL-20_050222
Lab Sample ID: 240-166037-12
Date Collected: 05/02/22 10:54
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 18:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 01:11	CS	TAL CAN

Client Sample ID: SL-4_050222
Lab Sample ID: 240-166037-13
Date Collected: 05/02/22 11:23
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 19:03	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 01:35	CS	TAL CAN

Client Sample ID: SL-22_050222
Lab Sample ID: 240-166037-14
Date Collected: 05/02/22 11:07
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525230	05/05/22 19:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 01:59	CS	TAL CAN

Client Sample ID: MH-1231_050222
Lab Sample ID: 240-166037-15
Date Collected: 05/02/22 13:05
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 13:27	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 02:22	CS	TAL CAN

Client Sample ID: SL-17_050222
Lab Sample ID: 240-166037-16
Date Collected: 05/02/22 11:55
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 13:51	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 02:46	CS	TAL CAN

Client Sample ID: SL-21_050222
Lab Sample ID: 240-166037-17
Date Collected: 05/02/22 10:41
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 14:14	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 03:10	CS	TAL CAN

Client Sample ID: SL-18_050222
Lab Sample ID: 240-166037-18
Date Collected: 05/02/22 11:39
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 14:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 03:34	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_050222
Lab Sample ID: 240-166037-19
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 15:01	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 03:58	CS	TAL CAN

Client Sample ID: DUP-02_050222
Lab Sample ID: 240-166037-20
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 15:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 04:22	CS	TAL CAN

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166037-21
Date Collected: 05/02/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 15:48	HMB	TAL CAN

Client Sample ID: SL-16_050222
Lab Sample ID: 240-166037-22
Date Collected: 05/02/22 12:08
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 16:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 04:46	CS	TAL CAN

Client Sample ID: SL-3_050222
Lab Sample ID: 240-166037-23
Date Collected: 05/02/22 12:30
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 16:35	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 05:10	CS	TAL CAN

Client Sample ID: SL-2_050222
Lab Sample ID: 240-166037-24
Date Collected: 05/02/22 12:50
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 16:59	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 05:34	CS	TAL CAN

Client Sample ID: MH-1259_050322
Lab Sample ID: 240-166037-25
Date Collected: 05/03/22 12:50
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 17:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525509	05/07/22 05:57	CS	TAL CAN

Client Sample ID: MH-1244_050322
Lab Sample ID: 240-166037-26
Date Collected: 05/03/22 12:20
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 17:46	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 19:37	CS	TAL CAN

Client Sample ID: SL-13_050322
Lab Sample ID: 240-166037-27
Date Collected: 05/03/22 10:22
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 18:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 21:16	CS	TAL CAN

Client Sample ID: SL-5_050322
Lab Sample ID: 240-166037-28
Date Collected: 05/03/22 11:30
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 18:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 21:41	CS	TAL CAN

Client Sample ID: MH-1256_050322
Lab Sample ID: 240-166037-29
Date Collected: 05/03/22 12:38
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 18:56	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		2	525514	05/07/22 22:06	CS	TAL CAN

Client Sample ID: MH-1231A_050322
Lab Sample ID: 240-166037-30
Date Collected: 05/03/22 09:08
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	525400	05/06/22 19:20	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 22:31	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166037-31
Date Collected: 05/04/22 00:00
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 19:43	HMB	TAL CAN

Client Sample ID: SL-10_050422
Lab Sample ID: 240-166037-32
Date Collected: 05/04/22 09:40
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 20:07	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 22:56	CS	TAL CAN

Client Sample ID: SL-12_050422
Lab Sample ID: 240-166037-33
Date Collected: 05/04/22 10:12
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 20:30	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 23:21	CS	TAL CAN

Client Sample ID: SL-9_050422
Lab Sample ID: 240-166037-34
Date Collected: 05/04/22 09:18
Matrix: Water
Date Received: 05/05/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	525400	05/06/22 20:54	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	525514	05/07/22 23:46	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166037-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
Phone: 248-994-2240	Sampler Name: Korey Pearson, ~~Samantha Hindle~~, Sommer Guy, Gary Schaffer	TAT if different from below: 3 day		For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Walk-in client
Project Number: 30080642.701.04	Shipping/Tracking No:			Lab sampling
PO # 30080642.701.04				Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK -01	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-7_050322	5/3/22	1100		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-14_050322	5/3/22	1010		X						6					N	G	X	X	X	X	X	X	X					
MH-1255_050322	5/3/22	0848		X						6					N	G	X	X	X	X	X	X	X					
SL-6_050322	5/3/22	1115		X						6					N	G	X	X	X	X	X	X	X					
SL-15_050322	5/3/22	1000		X						6					N	G	X	X	X	X	X	X	X					
SL-11_050422	5/4/22	0950		X						6					N	G	X	X	X	X	X	X	X					
SL-8_050422	5/4/22	0900		X						6					N	G	X	X	X	X	X	X	X					
SL-19_050422	5/4/22	1023		X						6					N	G	X	X	X	X	X	X	X					
SL-23_050422	5/4/22	1003		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Gary Schaffer	Arcadis	5/4/22 1237	Jeri Hare	EETA	5/4/22 1240
Relinquished by: Jeri Hare	Company: EETA	Date/Time: 5/4/22 1244	Received by: Tammy Reed	Company: EETNC	Date/Time: 5-5-22 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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240-166037 Chain of Custody

5/11/2022

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Gary Schafer ~~Koroy Pearson~~, ~~Samantha Hindle~~, Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK – 02	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-20-050222	5/2/22	1054		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-4-050222	5/2/22	1123		X						6					N	G	X	X	X	X	X	X	X	
SL-22-050222	5/2/22	1107		X						6					N	G	X	X	X	X	X	X	X	
MH-1231-050222	5/2/22	1305		X						6					N	G	X	X	X	X	X	X	X	
SL-17-050222	5/2/22	1155		X						6					N	G	X	X	X	X	X	X	X	
SL-21-050222	5/2/22	1041		X						6					N	G	X	X	X	X	X	X	X	
SL-18-050222	5/2/22	1139		X						6					N	G	X	X	X	X	X	X	X	
DUP-01-050222	5/2/22			X						6					N	G	X	X	X	X	X	X	X	
DUP-02-050222	5/2/22			X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Gary Schafer	Arcadis	5/4/22 1237	Lei Hall	EETM	5/4/22 1240
Lei Hall	EETM	5/4/22 1244	Jenny Berger	EETNC	5-5-22800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: ~~Korey Pearson~~, ~~Samantha Hindle~~, Sommer Guy + Ivey Schaefer	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No.
Project Number: 300806-42.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK – 03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-16-050222	5/2/22	1208		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-3-050222	5/2/22	1230		X						6					N	G	X	X	X	X	X	X	X					
SL-2-050222	5/2/22	1250		X						6					N	G	X	X	X	X	X	X	X					
MH-1259-050322	5/3/22	1250		X						6					N	G	X	X	X	X	X	X	X					
MH-1244-050322	5/3/22	1220		X						6					N	G	X	X	X	X	X	X	X					
SL-13-050322	5/3/22	1022		X						6					N	G	X	X	X	X	X	X	X					
SL-5-050322	5/3/22	1130		X						6					N	G	X	X	X	X	X	X	X					
MH-1256-050322	5/3/22	1238		X						6					N	G	X	X	X	X	X	X	X					
MH-1231A-050322	5/3/22	9:08		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ivey Schaefer	Arcadis	5/4/22 1237	Jeri Hall	EETA	5/4/22 1240
Jeri Hall	EETA	5/4/22 1244	Tammy Borja	EETNC	5-5 7280
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/11/2022

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: ~~Korey Pearson~~, ~~Samantha Hindle~~, Sommer Guy, Gary Schaft	TAT if different from below: 3 day		Walk-in client / Lab sampling
Phone: 248-994-2240	Method of Shipment/Carrier:			
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK - 04	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-10-050422	5/4/22	0940		X						6					N	G	X	X	X	X	X	X	X					3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12-050422	5/4/22	1012		X						6					N	G	X	X	X	X	X	X	X					
SL-9-050422	5/4/22	0918		X						6					N	G	X	X	X	X	X	X	X					

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company	Date/Time:
Mary Schafer	Arcadis	5/4/22 1237	Jeri Hall	EETM	5/4/22 1240
Jeri Hall	EETM	5/4/22 1240	Jamy Daya	EETNC	5-5-22 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/11/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166037
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Tanya Page

Cooler Received on 5-5-22 Opened on 5-5-22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # NA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1each	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Yes)	No
10. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11. Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC157842**
14. Were VOAs on the COC?	(Yes)	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	(No) NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 61109	(Yes)	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

Trip Blanks are not logged for SIM due to limited volume received one 5-5-22

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : 166037

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-13 IR-15	1.1	1.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15	0.9	0.9	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15	1.2	1.2	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

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ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-166428-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
5/17/2022 12:13:23 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-166428-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-166428-1

Comments
No additional comments.

Receipt
The samples were received on 5/12/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1º C and 0.6º C.

GC/MS VOA
Method 8260D SIM: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SL-11_051022 (240-166428-23).

Method 8260D SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MH-1256_051122 (240-166428-28). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-166428-1	TRIP BLANK-01	Water	05/09/22 00:00	05/12/22 08:00
240-166428-2	SL-21_050922	Water	05/09/22 12:00	05/12/22 08:00
240-166428-3	SL-20_050922	Water	05/09/22 12:20	05/12/22 08:00
240-166428-4	SL-22_050922	Water	05/09/22 12:40	05/12/22 08:00
240-166428-5	SL-4_050922	Water	05/09/22 13:00	05/12/22 08:00
240-166428-6	SL-18_050922	Water	05/09/22 13:45	05/12/22 08:00
240-166428-7	SL-17_050922	Water	05/09/22 14:00	05/12/22 08:00
240-166428-8	SL-16_050922	Water	05/09/22 14:35	05/12/22 08:00
240-166428-9	SL-3_050922	Water	05/09/22 15:30	05/12/22 08:00
240-166428-10	SL-2_050922	Water	05/09/22 15:50	05/12/22 08:00
240-166428-11	TRIP BLANK-02	Water	05/09/22 00:00	05/12/22 08:00
240-166428-12	MH-1231_050922	Water	05/09/22 16:05	05/12/22 08:00
240-166428-13	SL-15_051022	Water	05/10/22 09:15	05/12/22 08:00
240-166428-14	SL-14_051022	Water	05/10/22 09:30	05/12/22 08:00
240-166428-15	SL-13_051022	Water	05/10/22 09:40	05/12/22 08:00
240-166428-16	SL-7_051022	Water	05/10/22 10:25	05/12/22 08:00
240-166428-17	SL-6_051022	Water	05/10/22 10:40	05/12/22 08:00
240-166428-18	SL-5_051022	Water	05/10/22 11:00	05/12/22 08:00
240-166428-19	SL-8_051022	Water	05/10/22 12:20	05/12/22 08:00
240-166428-20	SL-9_051022	Water	05/10/22 12:45	05/12/22 08:00
240-166428-21	TRIP BLANK-03	Water	05/10/22 00:00	05/12/22 08:00
240-166428-22	SL-10_051022	Water	05/10/22 13:05	05/12/22 08:00
240-166428-23	SL-11_051022	Water	05/10/22 13:20	05/12/22 08:00
240-166428-24	SL-23_051022	Water	05/10/22 13:35	05/12/22 08:00
240-166428-25	SL-12_051022	Water	05/10/22 13:50	05/12/22 08:00
240-166428-26	SL-19_051022	Water	05/10/22 14:05	05/12/22 08:00
240-166428-27	MH-1255_051122	Water	05/11/22 08:40	05/12/22 08:00
240-166428-28	MH-1256_051122	Water	05/11/22 09:00	05/12/22 08:00
240-166428-29	MH-1259_051122	Water	05/11/22 09:20	05/12/22 08:00
240-166428-30	MH-1244_051122	Water	05/11/22 09:50	05/12/22 08:00
240-166428-31	TRIP BLANK-04	Water	05/11/22 00:00	05/12/22 08:00
240-166428-32	MH-1231A_051122	Water	05/11/22 10:10	05/12/22 08:00
240-166428-33	DUP-01	Water	05/10/22 00:00	05/12/22 08:00
240-166428-34	DUP-02	Water	05/10/22 00:00	05/12/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01 — Lab Sample ID: 240-166428-1

No Detections.

Client Sample ID: SL-21_050922 — Lab Sample ID: 240-166428-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.5		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.63	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_050922 — Lab Sample ID: 240-166428-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.88	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_050922 — Lab Sample ID: 240-166428-4

No Detections.

Client Sample ID: SL-4_050922 — Lab Sample ID: 240-166428-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.91	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_050922 — Lab Sample ID: 240-166428-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_050922 — Lab Sample ID: 240-166428-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_050922 — Lab Sample ID: 240-166428-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_050922 — Lab Sample ID: 240-166428-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_050922 — Lab Sample ID: 240-166428-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	7.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-02 — Lab Sample ID: 240-166428-11

No Detections.

Client Sample ID: MH-1231_050922 — Lab Sample ID: 240-166428-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_051022 — Lab Sample ID: 240-166428-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-14_051022 — Lab Sample ID: 240-166428-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.91	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-13_051022 — Lab Sample ID: 240-166428-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-7_051022 — Lab Sample ID: 240-166428-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
Tetrachloroethene	1.6		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-6_051022 — Lab Sample ID: 240-166428-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-5_051022 — Lab Sample ID: 240-166428-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_051022 — Lab Sample ID: 240-166428-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-9_051022 — Lab Sample ID: 240-166428-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.85	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-03 — Lab Sample ID: 240-166428-21

No Detections.

Client Sample ID: SL-10_051022 — Lab Sample ID: 240-166428-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_051022 — Lab Sample ID: 240-166428-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.87	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_051022 — Lab Sample ID: 240-166428-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.80	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_051022 — Lab Sample ID: 240-166428-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.94	J	1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.48	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_051022 — Lab Sample ID: 240-166428-26

No Detections.

Client Sample ID: MH-1255_051122 — Lab Sample ID: 240-166428-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	23		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	83		4.0	1.8	ug/L	4		8260D	Total/NA
Vinyl chloride	63		4.0	1.8	ug/L	4		8260D	Total/NA

Client Sample ID: MH-1256_051122 — Lab Sample ID: 240-166428-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		4.0	1.7	ug/L	2		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_051122 — Lab Sample ID: 240-166428-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: MH-1259_051122 (Continued)
Lab Sample ID: 240-166428-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	1.4		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_051122
Lab Sample ID: 240-166428-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	38		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.76	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	9.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166428-31

No Detections.

Client Sample ID: MH-1231A_051122
Lab Sample ID: 240-166428-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	69		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	1.1	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	44		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-01
Lab Sample ID: 240-166428-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02
Lab Sample ID: 240-166428-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	7.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166428-1
Date Collected: 05/09/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 10:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/22 10:44	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 10:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 10:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 10:44	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/22 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/16/22 10:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/16/22 10:44*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/16/22 10:44*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/16/22 10:44*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-21_050922
Lab Sample ID: 240-166428-2
Date Collected: 05/09/22 12:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/12/22 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/12/22 21:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 11:09	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.46	ug/L			05/16/22 11:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 11:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:09	1
Vinyl chloride	**0.63**	**J**	1.0	0.45	ug/L			05/16/22 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/16/22 11:09*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/16/22 11:09*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/16/22 11:09*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/16/22 11:09*	*1*

Client Sample ID: SL-20_050922
Lab Sample ID: 240-166428-3
Date Collected: 05/09/22 12:20
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			05/12/22 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/12/22 22:59*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 11:33	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.46	ug/L			05/16/22 11:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 11:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:33	1
Vinyl chloride	**0.88**	**J**	1.0	0.45	ug/L			05/16/22 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/16/22 11:33*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/16/22 11:33*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/16/22 11:33*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/16/22 11:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_050922
Lab Sample ID: 240-166428-4
Date Collected: 05/09/22 12:40
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/12/22 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/12/22 23:23*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 11:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/22 11:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 11:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 11:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/22 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/16/22 11:58*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/16/22 11:58*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/16/22 11:58*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/16/22 11:58*	*1*

Client Sample ID: SL-4_050922
Lab Sample ID: 240-166428-5

Date Collected: 05/09/22 13:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		2.0	0.86	ug/L			05/12/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/12/22 23:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 12:22	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.46	ug/L			05/16/22 12:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 12:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 12:22	1
Trichloroethene	**0.91**	**J**	1.0	0.44	ug/L			05/16/22 12:22	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			05/16/22 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/16/22 12:22*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/16/22 12:22*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/16/22 12:22*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/16/22 12:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_050922
Lab Sample ID: 240-166428-6
Date Collected: 05/09/22 13:45
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			05/13/22 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/13/22 00:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 12:47	1
cis-1,2-Dichloroethene	**9.0**		1.0	0.46	ug/L			05/16/22 12:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 12:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 12:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 12:47	1
Vinyl chloride	**5.0**		1.0	0.45	ug/L			05/16/22 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/16/22 12:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/16/22 12:47*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/16/22 12:47*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/16/22 12:47*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_050922
Lab Sample ID: 240-166428-7
Date Collected: 05/09/22 14:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		2.0	0.86	ug/L			05/13/22 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/13/22 00:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 13:11	1
cis-1,2-Dichloroethene	**11**		1.0	0.46	ug/L			05/16/22 13:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 13:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 13:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 13:11	1
Vinyl chloride	**5.9**		1.0	0.45	ug/L			05/16/22 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/16/22 13:11*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/16/22 13:11*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/16/22 13:11*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/16/22 13:11*	*1*

Client Sample ID: SL-16_050922
Lab Sample ID: 240-166428-8

Date Collected: 05/09/22 14:35
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		2.0	0.86	ug/L			05/13/22 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/13/22 00:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 16:24	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			05/13/22 16:24	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 16:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 16:24	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 16:24	1
Vinyl chloride	**5.8**		1.0	0.45	ug/L			05/13/22 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/13/22 16:24*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*05/13/22 16:24*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/13/22 16:24*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*05/13/22 16:24*	*1*

Client Sample ID: SL-3_050922
Lab Sample ID: 240-166428-9

Date Collected: 05/09/22 15:30
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			05/13/22 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/13/22 01:22*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 16:49	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			05/13/22 16:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 16:49	1
Trichloroethene	**2.0**		1.0	0.44	ug/L			05/13/22 16:49	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/13/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/13/22 16:49*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*05/13/22 16:49*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*05/13/22 16:49*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*05/13/22 16:49*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_050922
Lab Sample ID: 240-166428-10
Date Collected: 05/09/22 15:50
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.0**		2.0	0.86	ug/L			05/13/22 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/13/22 01:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 17:13	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			05/13/22 17:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 17:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:13	1
Vinyl chloride	**7.5**		1.0	0.45	ug/L			05/13/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*05/13/22 17:13*	*1*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*		*05/13/22 17:13*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/13/22 17:13*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*05/13/22 17:13*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166428-11
Date Collected: 05/09/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 17:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 17:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 17:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/13/22 17:38*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/13/22 17:38*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*05/13/22 17:38*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/13/22 17:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_050922
Lab Sample ID: 240-166428-12
Date Collected: 05/09/22 16:05
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			05/13/22 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/13/22 02:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 18:02	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.46	ug/L			05/13/22 18:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 18:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:02	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/13/22 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/13/22 18:02*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*05/13/22 18:02*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/13/22 18:02*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/13/22 18:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_051022
Lab Sample ID: 240-166428-13
Date Collected: 05/10/22 09:15
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.8	J	2.0	0.86	ug/L			05/13/22 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/13/22 02:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 18:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 18:27	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 18:27	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:27	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*05/13/22 18:27*	*1*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*		*05/13/22 18:27*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*05/13/22 18:27*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*05/13/22 18:27*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_051022
Lab Sample ID: 240-166428-14
Date Collected: 05/10/22 09:30
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.91	J	2.0	0.86	ug/L			05/13/22 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/13/22 02:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 18:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 18:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 18:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:51	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/13/22 18:51*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/13/22 18:51*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/13/22 18:51*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/13/22 18:51*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_051022
Lab Sample ID: 240-166428-15
Date Collected: 05/10/22 09:40
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1	J	2.0	0.86	ug/L			05/13/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/13/22 03:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 19:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 19:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 19:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 19:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 19:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/13/22 19:16*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/13/22 19:16*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/13/22 19:16*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/13/22 19:16*	*1*

Client Sample ID: SL-7_051022
Lab Sample ID: 240-166428-16

Date Collected: 05/10/22 10:25
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			05/13/22 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/13/22 03:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 19:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 19:40	1
Tetrachloroethene	**1.6**		1.0	0.44	ug/L			05/13/22 19:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 19:40	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 19:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*05/13/22 19:40*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/13/22 19:40*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/13/22 19:40*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*05/13/22 19:40*	*1*

Client Sample ID: SL-6_051022
Lab Sample ID: 240-166428-17

Date Collected: 05/10/22 10:40
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/13/22 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/13/22 04:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 20:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 20:05	1
Tetrachloroethene	**1.2**		1.0	0.44	ug/L			05/13/22 20:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 20:05	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 20:05	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/13/22 20:05*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/13/22 20:05*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/13/22 20:05*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/13/22 20:05*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_051022
Lab Sample ID: 240-166428-18
Date Collected: 05/10/22 11:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.0**		2.0	0.86	ug/L			05/13/22 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/13/22 04:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 20:30	1
cis-1,2-Dichloroethene	**3.0**		1.0	0.46	ug/L			05/13/22 20:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 20:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 20:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 20:30	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			05/13/22 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/13/22 20:30*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/13/22 20:30*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/13/22 20:30*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/13/22 20:30*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-8_051022
Lab Sample ID: 240-166428-19
Date Collected: 05/10/22 12:20
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/13/22 04:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/13/22 04:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 20:54	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.46	ug/L			05/13/22 20:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 20:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 20:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 20:54	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/13/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/13/22 20:54*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/13/22 20:54*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/13/22 20:54*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/13/22 20:54*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-9_051022
Lab Sample ID: 240-166428-20
Date Collected: 05/10/22 12:45
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			05/13/22 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/13/22 05:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 13:28	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			05/13/22 13:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 13:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 13:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 13:28	1
Vinyl chloride	**0.85**	**J**	1.0	0.45	ug/L			05/13/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/13/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*		*05/13/22 13:28*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/13/22 13:28*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*05/13/22 13:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166428-21
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 13:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 13:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 13:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/13/22 13:53*	*1*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*		*05/13/22 13:53*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/13/22 13:53*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/13/22 13:53*	*1*

Client Sample ID: SL-10_051022
Lab Sample ID: 240-166428-22

Date Collected: 05/10/22 13:05
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.6**		2.0	0.86	ug/L			05/13/22 05:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/13/22 05:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 14:17	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			05/13/22 14:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 14:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 14:17	1
Vinyl chloride	**1.8**		1.0	0.45	ug/L			05/13/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/13/22 14:17*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/13/22 14:17*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/13/22 14:17*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/13/22 14:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_051022
Lab Sample ID: 240-166428-23
Date Collected: 05/10/22 13:20
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.8**	**J**	2.0	0.86	ug/L			05/13/22 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*		*05/13/22 06:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 14:42	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			05/13/22 14:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 14:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 14:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 14:42	1
Vinyl chloride	**0.87**	**J**	1.0	0.45	ug/L			05/13/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/13/22 14:42*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/13/22 14:42*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/13/22 14:42*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/13/22 14:42*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_051022
Lab Sample ID: 240-166428-24
Date Collected: 05/10/22 13:35
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/13/22 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 120*		*05/13/22 22:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 15:06	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			05/13/22 15:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 15:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:06	1
Vinyl chloride	**0.80**	**J**	1.0	0.45	ug/L			05/13/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/13/22 15:06*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/13/22 15:06*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/13/22 15:06*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*05/13/22 15:06*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_051022
Lab Sample ID: 240-166428-25
Date Collected: 05/10/22 13:50
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/13/22 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*05/13/22 22:38*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 15:31	1
cis-1,2-Dichloroethene	**0.94**	**J**	1.0	0.46	ug/L			05/13/22 15:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 15:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:31	1
Vinyl chloride	**0.48**	**J**	1.0	0.45	ug/L			05/13/22 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/13/22 15:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/13/22 15:31*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/13/22 15:31*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/13/22 15:31*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_051022
Lab Sample ID: 240-166428-26
Date Collected: 05/10/22 14:05
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/13/22 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*05/13/22 23:03*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 15:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 15:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 15:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 15:56	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 15:56*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/13/22 15:56*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/13/22 15:56*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/13/22 15:56*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_051122
Lab Sample ID: 240-166428-27
Date Collected: 05/11/22 08:40
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**23**		2.0	0.86	ug/L			05/13/22 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/13/22 23:28*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	4.0	U	4.0	2.0	ug/L			05/13/22 16:21	4
cis-1,2-Dichloroethene	**83**		4.0	1.8	ug/L			05/13/22 16:21	4
Tetrachloroethene	4.0	U	4.0	1.8	ug/L			05/13/22 16:21	4
trans-1,2-Dichloroethene	4.0	U	4.0	2.0	ug/L			05/13/22 16:21	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			05/13/22 16:21	4
Vinyl chloride	**63**		4.0	1.8	ug/L			05/13/22 16:21	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/13/22 16:21*	*4*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/13/22 16:21*	*4*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/13/22 16:21*	*4*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/13/22 16:21*	*4*

Client Sample ID: MH-1256_051122
Lab Sample ID: 240-166428-28

Date Collected: 05/11/22 09:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		4.0	1.7	ug/L			05/13/22 23:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/13/22 23:53*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 16:46	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			05/13/22 16:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 16:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 16:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 16:46	1
Vinyl chloride	**3.0**		1.0	0.45	ug/L			05/13/22 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/13/22 16:46*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/13/22 16:46*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/13/22 16:46*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/13/22 16:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_051122
Lab Sample ID: 240-166428-29
Date Collected: 05/11/22 09:20
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.0**		2.0	0.86	ug/L			05/14/22 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/14/22 00:18*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 17:11	1
cis-1,2-Dichloroethene	**8.6**		1.0	0.46	ug/L			05/13/22 17:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 17:11	1
Trichloroethene	**1.4**		1.0	0.44	ug/L			05/13/22 17:11	1
Vinyl chloride	**1.4**		1.0	0.45	ug/L			05/13/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 17:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*05/13/22 17:11*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/13/22 17:11*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/13/22 17:11*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1244_051122
Lab Sample ID: 240-166428-30
Date Collected: 05/11/22 09:50
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			05/14/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/14/22 00:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 17:36	1
cis-1,2-Dichloroethene	**38**		1.0	0.46	ug/L			05/13/22 17:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 17:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 17:36	1
Trichloroethene	**0.76**	**J**	1.0	0.44	ug/L			05/13/22 17:36	1
Vinyl chloride	**9.1**		1.0	0.45	ug/L			05/13/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 17:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/13/22 17:36*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/13/22 17:36*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/13/22 17:36*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166428-31
Date Collected: 05/11/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 18:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 18:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 18:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:01	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 18:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/13/22 18:01*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/13/22 18:01*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/13/22 18:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_051122
Lab Sample ID: 240-166428-32
Date Collected: 05/11/22 10:10
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**22**		2.0	0.86	ug/L			05/14/22 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/14/22 01:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/13/22 18:26	2
cis-1,2-Dichloroethene	**69**		2.0	0.92	ug/L			05/13/22 18:26	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/13/22 18:26	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			05/13/22 18:26	2
Trichloroethene	**1.1**	**J**	2.0	0.88	ug/L			05/13/22 18:26	2
Vinyl chloride	**44**		2.0	0.90	ug/L			05/13/22 18:26	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 18:26*	*2*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/13/22 18:26*	*2*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/13/22 18:26*	*2*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/13/22 18:26*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01
Lab Sample ID: 240-166428-33
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.3**		2.0	0.86	ug/L			05/14/22 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*05/14/22 01:33*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 18:51	1
cis-1,2-Dichloroethene	**5.0**		1.0	0.46	ug/L			05/13/22 18:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 18:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 18:51	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			05/13/22 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*05/13/22 18:51*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/13/22 18:51*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/13/22 18:51*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*05/13/22 18:51*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02
Lab Sample ID: 240-166428-34
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	2.0	0.86	ug/L			05/14/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/14/22 01:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 19:16	1
cis-1,2-Dichloroethene	**7.1**		1.0	0.46	ug/L			05/13/22 19:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 19:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 19:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 19:16	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/13/22 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/13/22 19:16*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/13/22 19:16*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/13/22 19:16*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/13/22 19:16*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-166428-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-166116-F-2 MS	Matrix Spike	94	95	92	98
240-166116-F-2 MSD	Matrix Spike Duplicate	93	94	92	98
240-166235-H-2 MS	Matrix Spike	96	95	95	100
240-166235-N-2 MSD	Matrix Spike Duplicate	95	94	93	99
240-166428-1	TRIP BLANK-01	101	97	94	104
240-166428-2	SL-21_050922	95	94	96	101
240-166428-3	SL-20_050922	92	92	96	102
240-166428-4	SL-22_050922	96	96	96	101
240-166428-5	SL-4_050922	99	97	97	104
240-166428-6	SL-18_050922	96	94	95	102
240-166428-7	SL-17_050922	94	91	94	99
240-166428-8	SL-16_050922	92	89	89	97
240-166428-9	SL-3_050922	93	90	90	97
240-166428-10	SL-2_050922	91	87	89	95
240-166428-11	TRIP BLANK-02	99	92	91	99
240-166428-12	MH-1231_050922	93	89	93	99
240-166428-13	SL-15_051022	90	87	89	95
240-166428-14	SL-14_051022	93	91	93	99
240-166428-15	SL-13_051022	92	91	92	98
240-166428-16	SL-7_051022	89	91	93	97
240-166428-17	SL-6_051022	92	92	94	98
240-166428-18	SL-5_051022	94	92	94	98
240-166428-19	SL-8_051022	92	94	94	98
240-166428-20	SL-9_051022	101	106	97	112
240-166428-21	TRIP BLANK-03	100	106	98	107
240-166428-22	SL-10_051022	101	107	96	108
240-166428-23	SL-11_051022	101	107	97	108
240-166428-24	SL-23_051022	99	107	95	109
240-166428-25	SL-12_051022	99	105	95	108
240-166428-26	SL-19_051022	98	103	97	104
240-166428-27	MH-1255_051122	99	104	96	107
240-166428-27 MS	MH-1255_051122	89	106	99	95
240-166428-27 MSD	MH-1255_051122	88	106	99	94
240-166428-28	MH-1256_051122	97	104	97	103
240-166428-29	MH-1259_051122	98	102	95	104
240-166428-30	MH-1244_051122	98	103	96	105
240-166428-31	TRIP BLANK-04	98	103	96	103
240-166428-32	MH-1231A_051122	98	104	95	103
240-166428-33	DUP-01	104	107	97	110
240-166428-34	DUP-02	98	104	96	104
LCS 240-526327/5	Lab Control Sample	94	93	92	99
LCS 240-526336/5	Lab Control Sample	90	109	100	96
LCS 240-526489/5	Lab Control Sample	97	98	96	101
MB 240-526327/8	Method Blank	100	93	93	101
MB 240-526336/8	Method Blank	103	103	94	113
MB 240-526489/8	Method Blank	103	95	97	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-166275-I-4 MS	Matrix Spike	105						
240-166275-O-4 MSD	Matrix Spike Duplicate	103						
240-166428-2	SL-21_050922	85						
240-166428-2 MS	SL-21_050922	85						
240-166428-2 MSD	SL-21_050922	85						
240-166428-3	SL-20_050922	85						
240-166428-4	SL-22_050922	86						
240-166428-5	SL-4_050922	84						
240-166428-6	SL-18_050922	85						
240-166428-7	SL-17_050922	85						
240-166428-8	SL-16_050922	86						
240-166428-9	SL-3_050922	86						
240-166428-10	SL-2_050922	84						
240-166428-12	MH-1231_050922	83						
240-166428-13	SL-15_051022	85						
240-166428-14	SL-14_051022	84						
240-166428-15	SL-13_051022	84						
240-166428-16	SL-7_051022	84						
240-166428-17	SL-6_051022	85						
240-166428-18	SL-5_051022	85						
240-166428-19	SL-8_051022	87						
240-166428-20	SL-9_051022	86						
240-166428-22	SL-10_051022	86						
240-166428-23	SL-11_051022	88						
240-166428-24	SL-23_051022	113						
240-166428-25	SL-12_051022	111						
240-166428-26	SL-19_051022	106						
240-166428-27	MH-1255_051122	109						
240-166428-28	MH-1256_051122	108						
240-166428-29	MH-1259_051122	107						
240-166428-30	MH-1244_051122	109						
240-166428-32	MH-1231A_051122	107						
240-166428-33	DUP-01	103						
240-166428-34	DUP-02	104						
LCS 240-526249/3	Lab Control Sample	81						
LCS 240-526433/3	Lab Control Sample	108						
MB 240-526249/4	Method Blank	83						
MB 240-526433/4	Method Blank	105						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-526327/8
Matrix: Water
Analysis Batch: 526327

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 11:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 11:54	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 11:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 11:54	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 11:54	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/13/22 11:54*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/13/22 11:54*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/13/22 11:54*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/13/22 11:54*	*1*

Lab Sample ID: LCS 240-526327/5
Matrix: Water
Analysis Batch: 526327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	20.4		ug/L		102	63 - 134
cis-1,2-Dichloroethene	20.0	20.3		ug/L		101	77 - 123
Tetrachloroethene	20.0	18.7		ug/L		94	76 - 123
trans-1,2-Dichloroethene	20.0	19.3		ug/L		97	75 - 124
Trichloroethene	20.0	19.9		ug/L		100	70 - 122
Vinyl chloride	20.0	20.4		ug/L		102	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Lab Sample ID: 240-166116-F-2 MS
Matrix: Water
Analysis Batch: 526327

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20	U	400	380		ug/L		95	56 - 135
cis-1,2-Dichloroethene	73		400	449		ug/L		94	66 - 128
Tetrachloroethene	20	U	400	353		ug/L		88	62 - 131
trans-1,2-Dichloroethene	20	U	400	371		ug/L		93	56 - 136
Trichloroethene	20	U	400	372		ug/L		93	61 - 124
Vinyl chloride	980		400	1270	E	ug/L		74	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166116-F-2 MS
Matrix: Water
Analysis Batch: 526327

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-166116-F-2 MSD
Matrix: Water
Analysis Batch: 526327

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	20	U	400	392		ug/L		98	56 - 135	3	26
cis-1,2-Dichloroethene	73		400	465		ug/L		98	66 - 128	3	14
Tetrachloroethene	20	U	400	371		ug/L		93	62 - 131	5	20
trans-1,2-Dichloroethene	20	U	400	390		ug/L		97	56 - 136	5	15
Trichloroethene	20	U	400	393		ug/L		98	61 - 124	5	15
Vinyl chloride	980		400	1330	E	ug/L		88	43 - 157	4	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: MB 240-526336/8
Matrix: Water
Analysis Batch: 526336

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/13/22 12:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/13/22 12:13	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 12:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/13/22 12:13	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/13/22 12:13	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/13/22 12:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*05/13/22 12:13*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/13/22 12:13*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/13/22 12:13*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*05/13/22 12:13*	*1*

Lab Sample ID: LCS 240-526336/5
Matrix: Water
Analysis Batch: 526336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	24.5		ug/L		122	63 - 134
cis-1,2-Dichloroethene	20.0	23.4		ug/L		117	77 - 123
Tetrachloroethene	20.0	23.2		ug/L		116	76 - 123
trans-1,2-Dichloroethene	20.0	23.6		ug/L		118	75 - 124
Trichloroethene	20.0	22.6		ug/L		113	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-526336/5
Matrix: Water
Analysis Batch: 526336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	17.0		ug/L		85	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*
4-Bromofluorobenzene (Surr)	*109*		*56 - 136*
Toluene-d8 (Surr)	*100*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: 240-166428-27 MS
Matrix: Water
Analysis Batch: 526336

Client Sample ID: MH-1255_051122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	4.0	U	80.0	84.8		ug/L		106	56 - 135		
cis-1,2-Dichloroethene	83		80.0	159		ug/L		95	66 - 128		
Tetrachloroethene	4.0	U	80.0	76.6		ug/L		96	62 - 131		
trans-1,2-Dichloroethene	4.0	U	80.0	82.5		ug/L		103	56 - 136		
Trichloroethene	4.0	U	80.0	79.1		ug/L		99	61 - 124		
Vinyl chloride	63		80.0	119		ug/L		70	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*
Toluene-d8 (Surr)	*99*		*78 - 122*
Dibromofluoromethane (Surr)	*95*		*73 - 120*

Lab Sample ID: 240-166428-27 MSD
Matrix: Water
Analysis Batch: 526336

Client Sample ID: MH-1255_051122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	4.0	U	80.0	89.4		ug/L		112	56 - 135	5	26
cis-1,2-Dichloroethene	83		80.0	159		ug/L		95	66 - 128	0	14
Tetrachloroethene	4.0	U	80.0	82.2		ug/L		103	62 - 131	7	20
trans-1,2-Dichloroethene	4.0	U	80.0	83.7		ug/L		105	56 - 136	2	15
Trichloroethene	4.0	U	80.0	82.5		ug/L		103	61 - 124	4	15
Vinyl chloride	63		80.0	113		ug/L		62	43 - 157	5	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 137*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*
Toluene-d8 (Surr)	*99*		*78 - 122*
Dibromofluoromethane (Surr)	*94*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-526489/8
Matrix: Water
Analysis Batch: 526489

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/16/22 10:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/16/22 10:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 10:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/16/22 10:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/16/22 10:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/16/22 10:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*05/16/22 10:20*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/16/22 10:20*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/16/22 10:20*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/16/22 10:20*	*1*

Lab Sample ID: LCS 240-526489/5
Matrix: Water
Analysis Batch: 526489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	22.2		ug/L		111	63 - 134
cis-1,2-Dichloroethene	20.0	21.6		ug/L		108	77 - 123
Tetrachloroethene	20.0	19.3		ug/L		96	76 - 123
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	75 - 124
Trichloroethene	20.0	21.4		ug/L		107	70 - 122
Vinyl chloride	20.0	22.1		ug/L		110	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: 240-166235-H-2 MS
Matrix: Water
Analysis Batch: 526489

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	1.0	U	20.0	18.4		ug/L		92	56 - 135
cis-1,2-Dichloroethene	1.0	U	20.0	18.2		ug/L		91	66 - 128
Tetrachloroethene	1.0	U	20.0	16.0		ug/L		80	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	17.8		ug/L		89	56 - 136
Trichloroethene	1.0	U	20.0	17.6		ug/L		88	61 - 124
Vinyl chloride	1.0	U	20.0	17.4		ug/L		87	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166235-H-2 MS
Matrix: Water
Analysis Batch: 526489

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: 240-166235-N-2 MSD
Matrix: Water
Analysis Batch: 526489

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	20.0	20.2		ug/L		101	56 - 135	9	26
cis-1,2-Dichloroethene	1.0	U	20.0	19.8		ug/L		99	66 - 128	8	14
Tetrachloroethene	1.0	U	20.0	17.0		ug/L		85	62 - 131	6	20
trans-1,2-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	56 - 136	7	15
Trichloroethene	1.0	U	20.0	19.2		ug/L		96	61 - 124	8	15
Vinyl chloride	1.0	U	20.0	19.1		ug/L		96	43 - 157	10	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*
Toluene-d8 (Surr)	*93*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-526249/4
Matrix: Water
Analysis Batch: 526249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/12/22 21:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/12/22 21:00*	*1*

Lab Sample ID: LCS 240-526249/3
Matrix: Water
Analysis Batch: 526249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	10.0	10.8		ug/L		108	80 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 120*

Lab Sample ID: 240-166428-2 MS
Matrix: Water
Analysis Batch: 526249

Client Sample ID: SL-21_050922
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.0	U	10.0	10.7		ug/L		107	51 - 153

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		66 - 120

Lab Sample ID: 240-166428-2 MSD — **Client Sample ID: SL-21_050922**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 526249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	11.3		ug/L		113	51 - 153	5	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		66 - 120

Lab Sample ID: MB 240-526433/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 526433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/13/22 20:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 120		05/13/22 20:08	1

Lab Sample ID: LCS 240-526433/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 526433

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	8.93		ug/L		89	80 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 120

Lab Sample ID: 240-166275-I-4 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 526433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	10.0		ug/L		100	51 - 153		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 120

Lab Sample ID: 240-166275-O-4 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 526433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.6		ug/L		106	51 - 153	6	16

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-166275-O-4 MSD
Matrix: Water
Analysis Batch: 526433

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*

GC/MS VOA

Analysis Batch: 526249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-2	SL-21_050922	Total/NA	Water	8260D SIM	
240-166428-3	SL-20_050922	Total/NA	Water	8260D SIM	
240-166428-4	SL-22_050922	Total/NA	Water	8260D SIM	
240-166428-5	SL-4_050922	Total/NA	Water	8260D SIM	
240-166428-6	SL-18_050922	Total/NA	Water	8260D SIM	
240-166428-7	SL-17_050922	Total/NA	Water	8260D SIM	
240-166428-8	SL-16_050922	Total/NA	Water	8260D SIM	
240-166428-9	SL-3_050922	Total/NA	Water	8260D SIM	
240-166428-10	SL-2_050922	Total/NA	Water	8260D SIM	
240-166428-12	MH-1231_050922	Total/NA	Water	8260D SIM	
240-166428-13	SL-15_051022	Total/NA	Water	8260D SIM	
240-166428-14	SL-14_051022	Total/NA	Water	8260D SIM	
240-166428-15	SL-13_051022	Total/NA	Water	8260D SIM	
240-166428-16	SL-7_051022	Total/NA	Water	8260D SIM	
240-166428-17	SL-6_051022	Total/NA	Water	8260D SIM	
240-166428-18	SL-5_051022	Total/NA	Water	8260D SIM	
240-166428-19	SL-8_051022	Total/NA	Water	8260D SIM	
240-166428-20	SL-9_051022	Total/NA	Water	8260D SIM	
240-166428-22	SL-10_051022	Total/NA	Water	8260D SIM	
240-166428-23	SL-11_051022	Total/NA	Water	8260D SIM	
MB 240-526249/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-526249/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166428-2 MS	SL-21_050922	Total/NA	Water	8260D SIM	
240-166428-2 MSD	SL-21_050922	Total/NA	Water	8260D SIM	

Analysis Batch: 526327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-8	SL-16_050922	Total/NA	Water	8260D	
240-166428-9	SL-3_050922	Total/NA	Water	8260D	
240-166428-10	SL-2_050922	Total/NA	Water	8260D	
240-166428-11	TRIP BLANK-02	Total/NA	Water	8260D	
240-166428-12	MH-1231_050922	Total/NA	Water	8260D	
240-166428-13	SL-15_051022	Total/NA	Water	8260D	
240-166428-14	SL-14_051022	Total/NA	Water	8260D	
240-166428-15	SL-13_051022	Total/NA	Water	8260D	
240-166428-16	SL-7_051022	Total/NA	Water	8260D	
240-166428-17	SL-6_051022	Total/NA	Water	8260D	
240-166428-18	SL-5_051022	Total/NA	Water	8260D	
240-166428-19	SL-8_051022	Total/NA	Water	8260D	
MB 240-526327/8	Method Blank	Total/NA	Water	8260D	
LCS 240-526327/5	Lab Control Sample	Total/NA	Water	8260D	
240-166116-F-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-166116-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 526336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-20	SL-9_051022	Total/NA	Water	8260D	
240-166428-21	TRIP BLANK-03	Total/NA	Water	8260D	
240-166428-22	SL-10_051022	Total/NA	Water	8260D	
240-166428-23	SL-11_051022	Total/NA	Water	8260D	
240-166428-24	SL-23_051022	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 526336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-25	SL-12_051022	Total/NA	Water	8260D	
240-166428-26	SL-19_051022	Total/NA	Water	8260D	
240-166428-27	MH-1255_051122	Total/NA	Water	8260D	
240-166428-28	MH-1256_051122	Total/NA	Water	8260D	
240-166428-29	MH-1259_051122	Total/NA	Water	8260D	
240-166428-30	MH-1244_051122	Total/NA	Water	8260D	
240-166428-31	TRIP BLANK-04	Total/NA	Water	8260D	
240-166428-32	MH-1231A_051122	Total/NA	Water	8260D	
240-166428-33	DUP-01	Total/NA	Water	8260D	
240-166428-34	DUP-02	Total/NA	Water	8260D	
MB 240-526336/8	Method Blank	Total/NA	Water	8260D	
LCS 240-526336/5	Lab Control Sample	Total/NA	Water	8260D	
240-166428-27 MS	MH-1255_051122	Total/NA	Water	8260D	
240-166428-27 MSD	MH-1255_051122	Total/NA	Water	8260D	

Analysis Batch: 526433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-24	SL-23_051022	Total/NA	Water	8260D SIM	
240-166428-25	SL-12_051022	Total/NA	Water	8260D SIM	
240-166428-26	SL-19_051022	Total/NA	Water	8260D SIM	
240-166428-27	MH-1255_051122	Total/NA	Water	8260D SIM	
240-166428-28	MH-1256_051122	Total/NA	Water	8260D SIM	
240-166428-29	MH-1259_051122	Total/NA	Water	8260D SIM	
240-166428-30	MH-1244_051122	Total/NA	Water	8260D SIM	
240-166428-32	MH-1231A_051122	Total/NA	Water	8260D SIM	
240-166428-33	DUP-01	Total/NA	Water	8260D SIM	
240-166428-34	DUP-02	Total/NA	Water	8260D SIM	
MB 240-526433/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-526433/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166275-I-4 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-166275-O-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 526489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166428-1	TRIP BLANK-01	Total/NA	Water	8260D	
240-166428-2	SL-21_050922	Total/NA	Water	8260D	
240-166428-3	SL-20_050922	Total/NA	Water	8260D	
240-166428-4	SL-22_050922	Total/NA	Water	8260D	
240-166428-5	SL-4_050922	Total/NA	Water	8260D	
240-166428-6	SL-18_050922	Total/NA	Water	8260D	
240-166428-7	SL-17_050922	Total/NA	Water	8260D	
MB 240-526489/8	Method Blank	Total/NA	Water	8260D	
LCS 240-526489/5	Lab Control Sample	Total/NA	Water	8260D	
240-166235-H-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-166235-N-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166428-1
Date Collected: 05/09/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 10:44	HMB	TAL CAN

Client Sample ID: SL-21_050922
Lab Sample ID: 240-166428-2
Date Collected: 05/09/22 12:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 11:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/12/22 21:48	CS	TAL CAN

Client Sample ID: SL-20_050922
Lab Sample ID: 240-166428-3
Date Collected: 05/09/22 12:20
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 11:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/12/22 22:59	CS	TAL CAN

Client Sample ID: SL-22_050922
Lab Sample ID: 240-166428-4
Date Collected: 05/09/22 12:40
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 11:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/12/22 23:23	CS	TAL CAN

Client Sample ID: SL-4_050922
Lab Sample ID: 240-166428-5
Date Collected: 05/09/22 13:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 12:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/12/22 23:47	CS	TAL CAN

Client Sample ID: SL-18_050922
Lab Sample ID: 240-166428-6
Date Collected: 05/09/22 13:45
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 12:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 00:11	CS	TAL CAN

Client Sample ID: SL-17_050922
Lab Sample ID: 240-166428-7
Date Collected: 05/09/22 14:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526489	05/16/22 13:11	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 00:35	CS	TAL CAN

Client Sample ID: SL-16_050922
Lab Sample ID: 240-166428-8
Date Collected: 05/09/22 14:35
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 16:24	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 00:58	CS	TAL CAN

Client Sample ID: SL-3_050922
Lab Sample ID: 240-166428-9
Date Collected: 05/09/22 15:30
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 16:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 01:22	CS	TAL CAN

Client Sample ID: SL-2_050922
Lab Sample ID: 240-166428-10
Date Collected: 05/09/22 15:50
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 17:13	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 01:46	CS	TAL CAN

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166428-11
Date Collected: 05/09/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 17:38	HMB	TAL CAN

Client Sample ID: MH-1231_050922
Lab Sample ID: 240-166428-12
Date Collected: 05/09/22 16:05
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 18:02	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 02:09	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_051022
Lab Sample ID: 240-166428-13
Date Collected: 05/10/22 09:15
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 18:27	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 02:33	CS	TAL CAN

Client Sample ID: SL-14_051022
Lab Sample ID: 240-166428-14
Date Collected: 05/10/22 09:30
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 18:51	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 02:57	CS	TAL CAN

Client Sample ID: SL-13_051022
Lab Sample ID: 240-166428-15
Date Collected: 05/10/22 09:40
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 19:16	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 03:21	CS	TAL CAN

Client Sample ID: SL-7_051022
Lab Sample ID: 240-166428-16
Date Collected: 05/10/22 10:25
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 19:40	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 03:45	CS	TAL CAN

Client Sample ID: SL-6_051022
Lab Sample ID: 240-166428-17
Date Collected: 05/10/22 10:40
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 20:05	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 04:09	CS	TAL CAN

Client Sample ID: SL-5_051022
Lab Sample ID: 240-166428-18
Date Collected: 05/10/22 11:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 20:30	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 04:32	CS	TAL CAN

Client Sample ID: SL-8_051022
Lab Sample ID: 240-166428-19
Date Collected: 05/10/22 12:20
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526327	05/13/22 20:54	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 04:56	CS	TAL CAN

Client Sample ID: SL-9_051022
Lab Sample ID: 240-166428-20
Date Collected: 05/10/22 12:45
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 13:28	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 05:20	CS	TAL CAN

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166428-21
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 13:53	HMB	TAL CAN

Client Sample ID: SL-10_051022
Lab Sample ID: 240-166428-22
Date Collected: 05/10/22 13:05
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 14:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 05:43	CS	TAL CAN

Client Sample ID: SL-11_051022
Lab Sample ID: 240-166428-23
Date Collected: 05/10/22 13:20
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 14:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526249	05/13/22 06:31	CS	TAL CAN

Client Sample ID: SL-23_051022
Lab Sample ID: 240-166428-24
Date Collected: 05/10/22 13:35
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 15:06	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/13/22 22:13	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_051022
Lab Sample ID: 240-166428-25
Date Collected: 05/10/22 13:50
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 15:31	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/13/22 22:38	CS	TAL CAN

Client Sample ID: SL-19_051022
Lab Sample ID: 240-166428-26
Date Collected: 05/10/22 14:05
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 15:56	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/13/22 23:03	CS	TAL CAN

Client Sample ID: MH-1255_051122
Lab Sample ID: 240-166428-27
Date Collected: 05/11/22 08:40
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		4	526336	05/13/22 16:21	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/13/22 23:28	CS	TAL CAN

Client Sample ID: MH-1256_051122
Lab Sample ID: 240-166428-28
Date Collected: 05/11/22 09:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 16:46	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		2	526433	05/13/22 23:53	CS	TAL CAN

Client Sample ID: MH-1259_051122
Lab Sample ID: 240-166428-29
Date Collected: 05/11/22 09:20
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 17:11	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/14/22 00:18	CS	TAL CAN

Client Sample ID: MH-1244_051122
Lab Sample ID: 240-166428-30
Date Collected: 05/11/22 09:50
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 17:36	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/14/22 00:43	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166428-31
Date Collected: 05/11/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 18:01	HMB	TAL CAN

Client Sample ID: MH-1231A_051122
Lab Sample ID: 240-166428-32
Date Collected: 05/11/22 10:10
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	526336	05/13/22 18:26	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/14/22 01:08	CS	TAL CAN

Client Sample ID: DUP-01
Lab Sample ID: 240-166428-33
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 18:51	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/14/22 01:33	CS	TAL CAN

Client Sample ID: DUP-02
Lab Sample ID: 240-166428-34
Date Collected: 05/10/22 00:00
Matrix: Water
Date Received: 05/12/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526336	05/13/22 19:16	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	526433	05/14/22 01:58	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166428-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Kaitlyn Fleming + ~~Corey Pearson, Samantha Liddle~~, Sommer Guy	TAT if different from below: 3 day		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 300806-42.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H_2SO_4	HNO_3	HCl	NaOH	$ZnAc/NaOH$	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK_01	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-21_050922	5/9/22	1200								6																		3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20_050922	5/9/22	1220																										
SL-22_050922	5/9/22	1240																										
SL-4_050922	5/9/22	1300																										
SL-18_050922	5/9/22	1345																										
SL-17_050922	5/9/22	1400																										
SL-16_050922	5/9/22	1435																										
SL-3_050922	5/9/22	1530																										
SL-2_050922	5/9/22	1550																										

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	5/11/22 1300		EETA	5/11/22 1300
Relinquished by:	Company: EETA	Date/Time: 5/11/22 1305	Received by:	Company: EETNC	Date/Time: 5-12-22 0800
Relinquished by:	Company:	Date/Time:	Received in Lab:	Company:	Date/Time:

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240-166428 Chain of Custody

5/17/2022

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0.1/0.1 0.6/0.6

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No:
Phone: 248-994-2240	Sampler Name: Kaitlyn Fleming, ~~Korey Pearson, Sandeena Biddle,~~ Sommer Guy	TAT if different from below: 3 day	COCs
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		For lab use only: Walk-in client; Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:		Job/SDG No:
PO # 30080642.701.04			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_02	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231-050922	5/9/22	1605								6														3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-15_051022	5/10/22	0915																						
SL-14_051022	5/10/22	0930																						
SL-13-051022	5/10/22	0940																						
SL-7-051022	5/10/22	1025																						
SL-6_051022	5/10/22	1040																						
SL-5-051022	5/10/22	1100																						
SL-8-051022	5/10/22	1220																						
SL-9_051022	5/10/22	1245																						

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	5/11/22 1300		EETA	5/11/22 1300
	EETA	5/11/22 1305		EETNC	5-12-22 0800
			Received in Laboratory by:		

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Kaitlyn Fleming, ~~Drew Pearson, Samantha Biddle,~~ Sommer Guy	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK _ 03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-10-051022	5/10/22	1305								6																		3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11-051022	5/10/22	1320																										
SL-23-051022	5/10/22	1335																										
SL-12-051022	5/10/22	1350																										
SL-19_051022	5/10/22	1405																										
MH-1255_051122	5/11/22	0810																										
MH-1256-051122	5/11/22	0900																										
MH-1259_051122	5/11/22	0920																										
MH-1244-051122	5/11/22	0950																										

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (possible sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	5/11/22 1300		FETA	5/11/22 1300
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	FETA	5/11/22 1305		FETNC	5-12-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/17/2022

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Kaitlyn Fleming + ~~Corey Pearson~~ ~~Samantha Hindle~~, Sommer Guy	TAT if different from below ☐		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐		Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAcf NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK -04	—	—		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
MH-1231A-051122	5/11/22	1010		↓						↓					↓	↓	↓	↓	↓	↓	↓	↓	↓					3 VOAs for 8260B 3 VOAs for 8260B SIM
DUP-01	5/9/22	↓																										↓
DUP-02	5/9/22	↓		↓						↓					↓	↓	↓	↓	↓	↓	↓	↓	↓					↓

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalis@cadenaco.com. Cadena #E205182
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	5/11/22 1300		EETA	5/11/22 1300
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	5/11/22 1305		EETNC	5-12-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/17/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 166428**
Canton Facility

Client Arcadis Site Name Ford - UC

Cooler unpacked by: OKW

Cooler Received on 5-12-22 Opened on 5-12-22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt [X] See Multiple Cooler Form
   IR GUN# IR-13 (CF 0.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. (Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 010420 16 (Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) 2x40mL SL15, 1x40 SL7, 15x40 SL6, 1x40 SL9 were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166428
Canton Facility

Client Arcadis Site Name Ford - UC

Cooler Received on 5-12-22 Opened on 5-12-22

Cooler unpacked by: OMW

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt [X] See Multiple Cooler Form
   IR GUN# IR-13 (CF 0.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. (Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ (Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) 2x40 SL10, 2x40 SL11, 1x40 SL23, 2x40 SL12, 1x40 MH1259 were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166428
Canton Facility

Client Arcadis Site Name Ford - UC | Cooler unpacked by: Omw

Cooler Received on 5-12-22 Opened on 5-12-22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-13 (CF 0.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. (Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 01042016 (Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) 1x40mL DUP-01 ~~were~~ received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166428
Canton Facility

Client Arcadis Site Name Ford - UC

Cooler Received on 5-12-22 Opened on 5-12-22

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea	(Yes) No	
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No NA	
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)	
-Were tamper/custody seals intact and uncompromised?	(Yes) No NA	
3. Shippers' packing slip attached to the cooler(s)?	Yes (No)	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes) No	
7. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No	
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Y) (Y) (Y)	
10. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11. Sufficient quantity received to perform indicated analyses?	(Yes) No	
12. Are these work share samples and all listed on the COC?	Yes (No)	
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No (NA)	pH Strip Lot# HC157842
14. Were VOAs on the COC?	(Yes) No	
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	(Yes) No NA	
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0104301C	(Yes) No	
17. Was a LL Hg or Me Hg trip blank present? _____	Yes (No)	

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 166428

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-13 IR-15	0.1	0.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15	0.6	0.6	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-166860-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
5/26/2022 4:12:26 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-166860-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-166860-1

Comments
No additional comments.

Receipt
The samples were received on 5/19/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1º C and 0.4º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-527778 was outside the method criteria for the following analyte: Tetrachloroethene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated: MH-1231_051622 (240-166860-2), SL-15_051722 (240-166860-3), SL-14_051722 (240-166860-4), SL-13_051722 (240-166860-5), SL-7_051722 (240-166860-6), SL-6_051722 (240-166860-7), SL-5_051722 (240-166860-8), SL-8_051722 (240-166860-9), SL-9_051722 (240-166860-10), SL-10_051722 (240-166860-12), SL-11_051722 (240-166860-13), SL-23_051722 (240-166860-14), SL-12_051722 (240-166860-15), SL-19_051722 (240-166860-16), MH-1255_051822 (240-166860-17), MH-1256_051822 (240-166860-18), MH-1259_051822 (240-166860-19), MH-1244_051822 (240-166860-20), SL-21_051622 (240-166860-22), SL-20_051622 (240-166860-23) and (CCVIS 240-527778/4).

Method 8260D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-527862.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-166860-1	TRIP BLANK-02	Water	05/16/22 00:00	05/19/22 08:00
240-166860-2	MH-1231_051622	Water	05/16/22 13:45	05/19/22 08:00
240-166860-3	SL-15_051722	Water	05/17/22 09:35	05/19/22 08:00
240-166860-4	SL-14_051722	Water	05/17/22 09:50	05/19/22 08:00
240-166860-5	SL-13_051722	Water	05/17/22 10:00	05/19/22 08:00
240-166860-6	SL-7_051722	Water	05/17/22 10:55	05/19/22 08:00
240-166860-7	SL-6_051722	Water	05/17/22 11:05	05/19/22 08:00
240-166860-8	SL-5_051722	Water	05/17/22 11:30	05/19/22 08:00
240-166860-9	SL-8_051722	Water	05/17/22 12:25	05/19/22 08:00
240-166860-10	SL-9_051722	Water	05/17/22 12:50	05/19/22 08:00
240-166860-11	TRIP BLANK-03	Water	05/17/22 00:00	05/19/22 08:00
240-166860-12	SL-10_051722	Water	05/17/22 13:20	05/19/22 08:00
240-166860-13	SL-11_051722	Water	05/17/22 13:40	05/19/22 08:00
240-166860-14	SL-23_051722	Water	05/17/22 13:55	05/19/22 08:00
240-166860-15	SL-12_051722	Water	05/17/22 14:10	05/19/22 08:00
240-166860-16	SL-19_051722	Water	05/17/22 14:25	05/19/22 08:00
240-166860-17	MH-1255_051822	Water	05/18/22 09:10	05/19/22 08:00
240-166860-18	MH-1256_051822	Water	05/18/22 09:25	05/19/22 08:00
240-166860-19	MH-1259_051822	Water	05/18/22 09:40	05/19/22 08:00
240-166860-20	MH-1244_051822	Water	05/18/22 00:00	05/19/22 08:00
240-166860-21	TRIP BLANK-01	Water	05/16/22 00:00	05/19/22 08:00
240-166860-22	SL-21_051622	Water	05/16/22 10:55	05/19/22 08:00
240-166860-23	SL-20_051622	Water	05/16/22 11:20	05/19/22 08:00
240-166860-24	SL-22_051622	Water	05/16/22 11:35	05/19/22 08:00
240-166860-25	SL-4_051622	Water	05/16/22 12:00	05/19/22 08:00
240-166860-26	SL-18_051622	Water	05/16/22 12:25	05/19/22 08:00
240-166860-27	SL-17_051622	Water	05/16/22 12:35	05/19/22 08:00
240-166860-28	SL-16_051622	Water	05/16/22 12:50	05/19/22 08:00
240-166860-29	SL-3_051622	Water	05/16/22 13:05	05/19/22 08:00
240-166860-30	SL-2_051622	Water	05/16/22 13:25	05/19/22 08:00
240-166860-31	TRIP BLANK-04	Water	05/17/22 00:00	05/19/22 08:00
240-166860-32	MH-1231A_051822	Water	05/18/22 10:25	05/19/22 08:00
240-166860-33	DUP-01_05162022	Water	05/16/22 00:00	05/19/22 08:00
240-166860-34	DUP-02_05162022	Water	05/16/22 00:00	05/19/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-02 — Lab Sample ID: 240-166860-1

No Detections.

Client Sample ID: MH-1231_051622 — Lab Sample ID: 240-166860-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	17		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.47	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	10		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_051722 — Lab Sample ID: 240-166860-3

No Detections.

Client Sample ID: SL-14_051722 — Lab Sample ID: 240-166860-4

No Detections.

Client Sample ID: SL-13_051722 — Lab Sample ID: 240-166860-5

No Detections.

Client Sample ID: SL-7_051722 — Lab Sample ID: 240-166860-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	0.46	J	1.0	0.46	ug/L	1		8260D	Total/NA
Tetrachloroethene	14		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-6_051722 — Lab Sample ID: 240-166860-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.5		1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: SL-5_051722 — Lab Sample ID: 240-166860-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_051722 — Lab Sample ID: 240-166860-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_051722 — Lab Sample ID: 240-166860-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-03 — Lab Sample ID: 240-166860-11

No Detections.

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-10_051722 — Lab Sample ID: 240-166860-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_051722 — Lab Sample ID: 240-166860-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.0	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_051722 — Lab Sample ID: 240-166860-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-12_051722 — Lab Sample ID: 240-166860-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.95	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-19_051722 — Lab Sample ID: 240-166860-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.62	J	1.0	0.46	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1255_051822 — Lab Sample ID: 240-166860-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	26		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	91		4.0	1.8	ug/L	4		8260D	Total/NA
Vinyl chloride	94		4.0	1.8	ug/L	4		8260D	Total/NA

Client Sample ID: MH-1256_051822 — Lab Sample ID: 240-166860-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: MH-1259_051822 — Lab Sample ID: 240-166860-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.0		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_051822 — Lab Sample ID: 240-166860-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.2		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MH-1244_051822 (Continued) — Lab Sample ID: 240-166860-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-01 — Lab Sample ID: 240-166860-21

No Detections.

Client Sample ID: SL-21_051622 — Lab Sample ID: 240-166860-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.65	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_051622 — Lab Sample ID: 240-166860-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.1	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.68	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_051622 — Lab Sample ID: 240-166860-24

No Detections.

Client Sample ID: SL-4_051622 — Lab Sample ID: 240-166860-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_051622 — Lab Sample ID: 240-166860-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.70	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	1.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_051622 — Lab Sample ID: 240-166860-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.2		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.56	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_051622 — Lab Sample ID: 240-166860-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.7		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.69	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-3_051622 — Lab Sample ID: 240-166860-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.6		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.90	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	2.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_051622 — Lab Sample ID: 240-166860-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	11		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK-04 — Lab Sample ID: 240-166860-31

No Detections.

Client Sample ID: MH-1231A_051822 — Lab Sample ID: 240-166860-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	19		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	57		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	0.99	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	56		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: DUP-01_05162022 — Lab Sample ID: 240-166860-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.8		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_05162022 — Lab Sample ID: 240-166860-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	15		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	9.1		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166860-1

Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 14:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 14:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 14:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 14:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 14:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*05/25/22 14:09*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/25/22 14:09*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/25/22 14:09*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/25/22 14:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231_051622
Lab Sample ID: 240-166860-2
Date Collected: 05/16/22 13:45
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.7**		2.0	0.86	ug/L			05/20/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 120*		*05/20/22 20:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 00:53	1
cis-1,2-Dichloroethene	**17**		1.0	0.46	ug/L			05/25/22 00:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 00:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 00:53	1
Trichloroethene	**0.47**	**J**	1.0	0.44	ug/L			05/25/22 00:53	1
Vinyl chloride	**10**		1.0	0.45	ug/L			05/25/22 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/25/22 00:53*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/25/22 00:53*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/25/22 00:53*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/25/22 00:53*	*1*

Client Sample ID: SL-15_051722
Lab Sample ID: 240-166860-3

Date Collected: 05/17/22 09:35
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/20/22 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/20/22 23:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 01:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 01:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 01:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 01:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 01:17	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 01:17*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/25/22 01:17*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/25/22 01:17*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 01:17*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_051722
Lab Sample ID: 240-166860-4
Date Collected: 05/17/22 09:50
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*05/21/22 00:06*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 01:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 01:42	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 01:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 01:42	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 01:42	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/25/22 01:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/25/22 01:42*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/25/22 01:42*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/25/22 01:42*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_051722
Lab Sample ID: 240-166860-5
Date Collected: 05/17/22 10:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*05/21/22 00:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 02:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 02:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 02:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 02:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 02:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/25/22 02:06*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/25/22 02:06*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*05/25/22 02:06*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/25/22 02:06*	*1*

Client Sample ID: SL-7_051722
Lab Sample ID: 240-166860-6

Date Collected: 05/17/22 10:55
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/21/22 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/21/22 00:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 02:31	1
cis-1,2-Dichloroethene	**0.46**	**J**	1.0	0.46	ug/L			05/25/22 02:31	1
Tetrachloroethene	**14**		1.0	0.44	ug/L			05/25/22 14:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 02:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 02:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/25/22 02:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/25/22 14:33*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/25/22 02:31*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/25/22 14:33*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/25/22 02:31*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/25/22 14:33*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/25/22 02:31*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*05/25/22 14:33*	*1*

Client Sample ID: SL-6_051722
Lab Sample ID: 240-166860-7

Date Collected: 05/17/22 11:05
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*05/21/22 01:21*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 02:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 02:55	1
Tetrachloroethene	**1.5**		1.0	0.44	ug/L			05/25/22 14:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 02:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 02:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 02:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/25/22 14:58*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 02:55*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*05/25/22 14:58*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/25/22 02:55*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/25/22 14:58*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/25/22 02:55*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/25/22 14:58*	*1*

Client Sample ID: SL-5_051722
Lab Sample ID: 240-166860-8

Date Collected: 05/17/22 11:30
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		2.0	0.86	ug/L			05/21/22 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/21/22 01:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 03:20	1
cis-1,2-Dichloroethene	**9.2**		1.0	0.46	ug/L			05/25/22 03:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 03:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 03:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 03:20	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			05/25/22 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/25/22 03:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/25/22 03:20*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/25/22 03:20*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/25/22 03:20*	*1*

Client Sample ID: SL-8_051722
Lab Sample ID: 240-166860-9

Date Collected: 05/17/22 12:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/21/22 02:11*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 03:44	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.46	ug/L			05/25/22 03:44	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 03:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 03:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 03:44	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/25/22 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 03:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 03:44*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/25/22 03:44*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*05/25/22 03:44*	*1*

Client Sample ID: SL-9_051722
Lab Sample ID: 240-166860-10

Date Collected: 05/17/22 12:50
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			05/21/22 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/21/22 02:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 04:09	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.46	ug/L			05/25/22 04:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 04:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:09	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/25/22 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 04:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/25/22 04:09*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/25/22 04:09*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 04:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166860-11
Date Collected: 05/17/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 15:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 15:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 15:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 15:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 15:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/25/22 15:22*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/25/22 15:22*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/25/22 15:22*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/25/22 15:22*	*1*

Client Sample ID: SL-10_051722
Lab Sample ID: 240-166860-12
Date Collected: 05/17/22 13:20
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			05/21/22 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/21/22 03:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 04:33	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			05/25/22 04:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 04:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:33	1
Vinyl chloride	**1.3**		1.0	0.45	ug/L			05/25/22 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/25/22 04:33*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 04:33*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/25/22 04:33*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 04:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_051722
Lab Sample ID: 240-166860-13
Date Collected: 05/17/22 13:40
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**	**J**	2.0	0.86	ug/L			05/21/22 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/21/22 03:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 04:58	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			05/25/22 04:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 04:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 04:58	1
Vinyl chloride	**1.5**		1.0	0.45	ug/L			05/25/22 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/25/22 04:58*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/25/22 04:58*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/25/22 04:58*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/25/22 04:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_051722
Lab Sample ID: 240-166860-14
Date Collected: 05/17/22 13:55
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.2**	**J**	2.0	0.86	ug/L			05/21/22 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/21/22 03:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 05:22	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.46	ug/L			05/25/22 05:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 05:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 05:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 05:22	1
Vinyl chloride	**1.7**		1.0	0.45	ug/L			05/25/22 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 05:22*	*1*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*		*05/25/22 05:22*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/25/22 05:22*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/25/22 05:22*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_051722
Lab Sample ID: 240-166860-15
Date Collected: 05/17/22 14:10
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.95**	**J**	2.0	0.86	ug/L			05/21/22 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/21/22 04:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 05:47	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.46	ug/L			05/25/22 05:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 05:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 05:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 05:47	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/25/22 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 05:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/25/22 05:47*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*05/25/22 05:47*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/25/22 05:47*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-19_051722
Lab Sample ID: 240-166860-16
Date Collected: 05/17/22 14:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*05/21/22 04:40*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 06:11	1
cis-1,2-Dichloroethene	**0.62**	**J**	1.0	0.46	ug/L			05/25/22 06:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 06:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 06:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 06:11	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 06:11*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 06:11*	*1*
Toluene-d8 (Surr)	*99*		*78 - 122*		*05/25/22 06:11*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 06:11*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_051822
Lab Sample ID: 240-166860-17
Date Collected: 05/18/22 09:10
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**26**		2.0	0.86	ug/L			05/21/22 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/21/22 05:05*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	4.0	U	4.0	2.0	ug/L			05/25/22 06:36	4
cis-1,2-Dichloroethene	**91**		4.0	1.8	ug/L			05/25/22 06:36	4
Tetrachloroethene	4.0	U	4.0	1.8	ug/L			05/25/22 06:36	4
trans-1,2-Dichloroethene	4.0	U	4.0	2.0	ug/L			05/25/22 06:36	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			05/25/22 06:36	4
Vinyl chloride	**94**		4.0	1.8	ug/L			05/25/22 06:36	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*05/25/22 06:36*	*4*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 06:36*	*4*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/25/22 06:36*	*4*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/25/22 06:36*	*4*

Client Sample ID: MH-1256_051822
Lab Sample ID: 240-166860-18

Date Collected: 05/18/22 09:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1	J	2.0	0.86	ug/L			05/21/22 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 120*		*05/21/22 05:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 07:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 07:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 07:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 07:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 07:00	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*05/25/22 07:00*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 07:00*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/25/22 07:00*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/25/22 07:00*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_051822
Lab Sample ID: 240-166860-19
Date Collected: 05/18/22 09:40
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.0**		2.0	0.86	ug/L			05/20/22 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*05/20/22 20:47*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 07:25	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			05/25/22 07:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 07:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 07:25	1
Trichloroethene	**2.0**		1.0	0.44	ug/L			05/25/22 07:25	1
Vinyl chloride	**3.5**		1.0	0.45	ug/L			05/25/22 07:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 07:25*	*1*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*		*05/25/22 07:25*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/25/22 07:25*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/25/22 07:25*	*1*

Client Sample ID: MH-1244_051822
Lab Sample ID: 240-166860-20

Date Collected: 05/18/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			05/20/22 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/20/22 21:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 07:49	1
cis-1,2-Dichloroethene	**3.2**		1.0	0.46	ug/L			05/25/22 07:49	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 07:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 07:49	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 07:49	1
Vinyl chloride	**1.2**		1.0	0.45	ug/L			05/25/22 07:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/25/22 07:49*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 07:49*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/25/22 07:49*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*05/25/22 07:49*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166860-21
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 15:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 15:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 15:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 15:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 15:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 15:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/25/22 15:47*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/25/22 15:47*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/25/22 15:47*	*1*

Client Sample ID: SL-21_051622
Lab Sample ID: 240-166860-22

Date Collected: 05/16/22 10:55
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/20/22 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/20/22 22:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 08:14	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.46	ug/L			05/25/22 08:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 08:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 08:14	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 08:14	1
Vinyl chloride	**0.65**	**J**	1.0	0.45	ug/L			05/25/22 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 08:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 08:14*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/25/22 08:14*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 08:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_051622
Lab Sample ID: 240-166860-23
Date Collected: 05/16/22 11:20
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**	**J**	2.0	0.86	ug/L			05/20/22 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/20/22 22:44*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 08:38	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.46	ug/L			05/25/22 08:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 08:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 08:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 08:38	1
Vinyl chloride	**0.68**	**J**	1.0	0.45	ug/L			05/25/22 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 08:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*05/25/22 08:38*	*1*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/25/22 08:38*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/25/22 08:38*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_051622
Lab Sample ID: 240-166860-24
Date Collected: 05/16/22 11:35
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/20/22 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/20/22 23:08*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 16:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 16:38	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 16:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 16:38	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 16:38	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*05/25/22 16:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/25/22 16:38*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*05/25/22 16:38*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*05/25/22 16:38*	*1*

Client Sample ID: SL-4_051622
Lab Sample ID: 240-166860-25
Date Collected: 05/16/22 12:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/20/22 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/20/22 23:32*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 17:02	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.46	ug/L			05/25/22 17:02	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 17:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 17:02	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 17:02	1
Vinyl chloride	**2.7**		1.0	0.45	ug/L			05/25/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 17:02*	*1*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*		*05/25/22 17:02*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*05/25/22 17:02*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*05/25/22 17:02*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-18_051622
Lab Sample ID: 240-166860-26
Date Collected: 05/16/22 12:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**	**J**	2.0	0.86	ug/L			05/20/22 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/20/22 23:56*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 17:26	1
cis-1,2-Dichloroethene	**3.0**		1.0	0.46	ug/L			05/25/22 17:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 17:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 17:26	1
Trichloroethene	**0.70**	**J**	1.0	0.44	ug/L			05/25/22 17:26	1
Vinyl chloride	**1.6**		1.0	0.45	ug/L			05/25/22 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/25/22 17:26*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/25/22 17:26*	*1*
Toluene-d8 (Surr)	*110*		*78 - 122*		*05/25/22 17:26*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/25/22 17:26*	*1*

Client Sample ID: SL-17_051622
Lab Sample ID: 240-166860-27

Date Collected: 05/16/22 12:35
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			05/21/22 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/21/22 00:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 17:50	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.46	ug/L			05/25/22 17:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 17:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 17:50	1
Trichloroethene	**0.56**	**J**	1.0	0.44	ug/L			05/25/22 17:50	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			05/25/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*05/25/22 17:50*	*1*
4-Bromofluorobenzene (Surr)	*106*		*56 - 136*		*05/25/22 17:50*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*05/25/22 17:50*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*05/25/22 17:50*	*1*

Client Sample ID: SL-16_051622
Lab Sample ID: 240-166860-28

Date Collected: 05/16/22 12:50
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			05/21/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/21/22 00:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 18:14	1
cis-1,2-Dichloroethene	**4.7**		1.0	0.46	ug/L			05/25/22 18:14	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 18:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 18:14	1
Trichloroethene	**0.69**	**J**	1.0	0.44	ug/L			05/25/22 18:14	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			05/25/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/25/22 18:14*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/25/22 18:14*	*1*
Toluene-d8 (Surr)	*107*		*78 - 122*		*05/25/22 18:14*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*05/25/22 18:14*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-3_051622
Lab Sample ID: 240-166860-29
Date Collected: 05/16/22 13:05
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/21/22 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/21/22 01:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 18:37	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.46	ug/L			05/25/22 18:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 18:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 18:37	1
Trichloroethene	**0.90**	**J**	1.0	0.44	ug/L			05/25/22 18:37	1
Vinyl chloride	**2.0**		1.0	0.45	ug/L			05/25/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/25/22 18:37*	*1*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/25/22 18:37*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*05/25/22 18:37*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*05/25/22 18:37*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-2_051622
Lab Sample ID: 240-166860-30
Date Collected: 05/16/22 13:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.0**		2.0	0.86	ug/L			05/21/22 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/21/22 01:31*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 19:01	1
cis-1,2-Dichloroethene	**16**		1.0	0.46	ug/L			05/25/22 19:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 19:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:01	1
Vinyl chloride	**11**		1.0	0.45	ug/L			05/25/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*05/25/22 19:01*	*1*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*		*05/25/22 19:01*	*1*
Toluene-d8 (Surr)	*105*		*78 - 122*		*05/25/22 19:01*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/25/22 19:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166860-31
Date Collected: 05/17/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 13:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 13:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 13:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*		*05/25/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*109*		*56 - 136*		*05/25/22 13:28*	*1*
Toluene-d8 (Surr)	*109*		*78 - 122*		*05/25/22 13:28*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*05/25/22 13:28*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_051822
Lab Sample ID: 240-166860-32
Date Collected: 05/18/22 10:25
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		2.0	0.86	ug/L			05/21/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/21/22 01:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/25/22 20:12	2
cis-1,2-Dichloroethene	**57**		2.0	0.92	ug/L			05/25/22 20:12	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/25/22 20:12	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			05/25/22 20:12	2
Trichloroethene	**0.99**	**J**	2.0	0.88	ug/L			05/25/22 20:12	2
Vinyl chloride	**56**		2.0	0.90	ug/L			05/25/22 20:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/25/22 20:12*	*2*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*		*05/25/22 20:12*	*2*
Toluene-d8 (Surr)	*105*		*78 - 122*		*05/25/22 20:12*	*2*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 20:12*	*2*

Client Sample ID: DUP-01_05162022
Lab Sample ID: 240-166860-33

Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.4**		2.0	0.86	ug/L			05/21/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/21/22 02:19*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 19:25	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.46	ug/L			05/25/22 19:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 19:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:25	1
Vinyl chloride	**2.8**		1.0	0.45	ug/L			05/25/22 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 19:25*	*1*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/25/22 19:25*	*1*
Toluene-d8 (Surr)	*106*		*78 - 122*		*05/25/22 19:25*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*05/25/22 19:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02_05162022
Lab Sample ID: 240-166860-34
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.8**		2.0	0.86	ug/L			05/21/22 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*66 - 120*		*05/21/22 02:43*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 19:48	1
cis-1,2-Dichloroethene	**15**		1.0	0.46	ug/L			05/25/22 19:48	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 19:48	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 19:48	1
Vinyl chloride	**9.1**		1.0	0.45	ug/L			05/25/22 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/25/22 19:48*	*1*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*		*05/25/22 19:48*	*1*
Toluene-d8 (Surr)	*104*		*78 - 122*		*05/25/22 19:48*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*05/25/22 19:48*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-166860-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-166782-F-3 MS	Matrix Spike	92	104	105	100
240-166782-F-3 MSD	Matrix Spike Duplicate	91	101	103	99
240-166860-1	TRIP BLANK-02	102	94	94	102
240-166860-2	MH-1231_051622	96	93	94	101
240-166860-3	SL-15_051722	99	94	93	104
240-166860-4	SL-14_051722	97	94	95	103
240-166860-5	SL-13_051722	94	94	93	100
240-166860-6	SL-7_051722	97	96	97	103
240-166860-6	SL-7_051722	97	93	95	102
240-166860-7	SL-6_051722	99	97	97	107
240-166860-7	SL-6_051722	94	92	94	98
240-166860-8	SL-5_051722	101	96	95	107
240-166860-9	SL-8_051722	100	97	95	103
240-166860-10	SL-9_051722	100	96	96	104
240-166860-11	TRIP BLANK-03	98	93	92	98
240-166860-12	SL-10_051722	98	97	97	104
240-166860-13	SL-11_051722	101	98	98	106
240-166860-14	SL-23_051722	99	99	98	105
240-166860-15	SL-12_051722	100	96	97	105
240-166860-16	SL-19_051722	100	97	99	104
240-166860-17	MH-1255_051822	104	97	98	108
240-166860-17 MS	MH-1255_051822	99	99	98	103
240-166860-17 MSD	MH-1255_051822	99	101	99	104
240-166860-18	MH-1256_051822	104	97	96	106
240-166860-19	MH-1259_051822	99	98	98	106
240-166860-20	MH-1244_051822	101	97	96	105
240-166860-21	TRIP BLANK-01	100	94	94	100
240-166860-22	SL-21_051622	100	97	96	104
240-166860-23	SL-20_051622	99	97	98	106
240-166860-24	SL-22_051622	98	105	109	110
240-166860-25	SL-4_051622	99	107	110	111
240-166860-26	SL-18_051622	94	104	110	108
240-166860-27	SL-17_051622	97	106	109	109
240-166860-28	SL-16_051622	95	105	107	109
240-166860-29	SL-3_051622	94	103	105	106
240-166860-30	SL-2_051622	96	104	105	108
240-166860-31	TRIP BLANK-04	103	109	109	112
240-166860-32	MH-1231A_051822	93	103	105	104
240-166860-33	DUP-01_05162022	99	105	106	108
240-166860-34	DUP-02_05162022	92	102	104	104
LCS 240-527778/5	Lab Control Sample	94	95	92	97
LCS 240-527862/5	Lab Control Sample	97	97	95	101
LCS 240-527906/5	Lab Control Sample	96	107	110	105
LCSD 240-527862/8	Lab Control Sample Dup	99	98	96	100
MB 240-527778/8	Method Blank	100	93	92	101
MB 240-527862/9	Method Blank	99	96	94	100
MB 240-527906/8	Method Blank	102	108	108	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DCA						
Lab Sample ID	Client Sample ID	(66-120)						
240-166860-2	MH-1231_051622	82						
240-166860-2 MS	MH-1231_051622	85						
240-166860-2 MSD	MH-1231_051622	83						
240-166860-3	SL-15_051722	104						
240-166860-4	SL-14_051722	103						
240-166860-5	SL-13_051722	106						
240-166860-6	SL-7_051722	105						
240-166860-7	SL-6_051722	103						
240-166860-8	SL-5_051722	104						
240-166860-9	SL-8_051722	105						
240-166860-10	SL-9_051722	108						
240-166860-12	SL-10_051722	105						
240-166860-13	SL-11_051722	109						
240-166860-14	SL-23_051722	108						
240-166860-15	SL-12_051722	109						
240-166860-16	SL-19_051722	102						
240-166860-17	MH-1255_051822	107						
240-166860-18	MH-1256_051822	100						
240-166860-19	MH-1259_051822	101						
240-166860-19 MS	MH-1259_051822	104						
240-166860-19 MSD	MH-1259_051822	105						
240-166860-20	MH-1244_051822	85						
240-166860-22	SL-21_051622	87						
240-166860-23	SL-20_051622	86						
240-166860-24	SL-22_051622	87						
240-166860-25	SL-4_051622	86						
240-166860-26	SL-18_051622	84						
240-166860-27	SL-17_051622	83						
240-166860-28	SL-16_051622	83						
240-166860-29	SL-3_051622	86						
240-166860-30	SL-2_051622	83						
240-166860-32	MH-1231A_051822	84						
240-166860-33	DUP-01_05162022	85						
240-166860-34	DUP-02_05162022	83						
LCS 240-527374/3	Lab Control Sample	85						
LCS 240-527375/3	Lab Control Sample	103						
MB 240-527374/4	Method Blank	83						
MB 240-527375/4	Method Blank	104						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-527778/8
Matrix: Water
Analysis Batch: 527778

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 00:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 00:28	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 00:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 00:28	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 00:28	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 00:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 00:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/25/22 00:28*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*05/25/22 00:28*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*05/25/22 00:28*	*1*

Lab Sample ID: LCS 240-527778/5
Matrix: Water
Analysis Batch: 527778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	18.7		ug/L		94	63 - 134
cis-1,2-Dichloroethene	20.0	18.3		ug/L		91	77 - 123
Tetrachloroethene	20.0	15.5		ug/L		78	76 - 123
trans-1,2-Dichloroethene	20.0	18.0		ug/L		90	75 - 124
Trichloroethene	20.0	18.1		ug/L		91	70 - 122
Vinyl chloride	20.0	19.2		ug/L		96	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: 240-166860-17 MS
Matrix: Water
Analysis Batch: 527778

Client Sample ID: MH-1255_051822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	4.0	U	80.0	75.0		ug/L		94	56 - 135
cis-1,2-Dichloroethene	91		80.0	157		ug/L		81	66 - 128
Tetrachloroethene	4.0	U	80.0	55.7		ug/L		70	62 - 131
trans-1,2-Dichloroethene	4.0	U	80.0	71.6		ug/L		90	56 - 136
Trichloroethene	4.0	U	80.0	66.2		ug/L		83	61 - 124
Vinyl chloride	94		80.0	152		ug/L		72	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*
4-Bromofluorobenzene (Surr)	*99*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166860-17 MS
Matrix: Water
Analysis Batch: 527778

Client Sample ID: MH-1255_051822
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*103*		*73 - 120*

Lab Sample ID: 240-166860-17 MSD
Matrix: Water
Analysis Batch: 527778

Client Sample ID: MH-1255_051822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	4.0	U	80.0	75.6		ug/L		94	56 - 135	1	26
cis-1,2-Dichloroethene	91		80.0	154		ug/L		78	66 - 128	2	14
Tetrachloroethene	4.0	U	80.0	55.0		ug/L		69	62 - 131	1	20
trans-1,2-Dichloroethene	4.0	U	80.0	72.6		ug/L		91	56 - 136	1	15
Trichloroethene	4.0	U	80.0	67.2		ug/L		84	61 - 124	2	15
Vinyl chloride	94		80.0	148		ug/L		68	43 - 157	2	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*99*		*78 - 122*
Dibromofluoromethane (Surr)	*104*		*73 - 120*

Lab Sample ID: MB 240-527862/9
Matrix: Water
Analysis Batch: 527862

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 12:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 12:55	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 12:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 12:55	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 12:55	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 12:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*05/25/22 12:55*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*05/25/22 12:55*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*05/25/22 12:55*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/25/22 12:55*	*1*

Lab Sample ID: LCS 240-527862/5
Matrix: Water
Analysis Batch: 527862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	20.7		ug/L		104	63 - 134
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	77 - 123
Tetrachloroethene	20.0	16.9		ug/L		85	76 - 123
trans-1,2-Dichloroethene	20.0	19.5		ug/L		98	75 - 124
Trichloroethene	20.0	19.0		ug/L		95	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-527862/5
Matrix: Water
Analysis Batch: 527862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	19.0		ug/L		95	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: LCSD 240-527862/8
Matrix: Water
Analysis Batch: 527862

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene			20.0	20.7		ug/L		104	63 - 134	0	35
cis-1,2-Dichloroethene			20.0	19.7		ug/L		99	77 - 123	1	35
Tetrachloroethene			20.0	17.1		ug/L		85	76 - 123	1	35
trans-1,2-Dichloroethene			20.0	19.8		ug/L		99	75 - 124	2	35
Trichloroethene			20.0	19.5		ug/L		97	70 - 122	3	35
Vinyl chloride			20.0	18.2		ug/L		91	60 - 144	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: MB 240-527906/8
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 13:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 13:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 13:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*05/25/22 13:04*	*1*
4-Bromofluorobenzene (Surr)	*108*		*56 - 136*		*05/25/22 13:04*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*05/25/22 13:04*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*05/25/22 13:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-527906/5
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			25.0	25.7		ug/L		103	63 - 134		
cis-1,2-Dichloroethene			25.0	25.2		ug/L		101	77 - 123		
Tetrachloroethene			25.0	26.3		ug/L		105	76 - 123		
trans-1,2-Dichloroethene			25.0	24.9		ug/L		100	75 - 124		
Trichloroethene			25.0	26.1		ug/L		104	70 - 122		
Vinyl chloride			25.0	23.0		ug/L		92	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*
Toluene-d8 (Surr)	*110*		*78 - 122*
Dibromofluoromethane (Surr)	*105*		*73 - 120*

Lab Sample ID: 240-166782-F-3 MS
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	13	U	313	304		ug/L		97	56 - 135		
cis-1,2-Dichloroethene	250		313	526		ug/L		87	66 - 128		
Tetrachloroethene	13	U	313	294		ug/L		94	62 - 131		
trans-1,2-Dichloroethene	94		313	381		ug/L		92	56 - 136		
Trichloroethene	470		313	734		ug/L		84	61 - 124		
Vinyl chloride	13	U	313	274		ug/L		88	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*
Toluene-d8 (Surr)	*105*		*78 - 122*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: 240-166782-F-3 MSD
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	13	U	313	302		ug/L		97	56 - 135	1	26
cis-1,2-Dichloroethene	250		313	525		ug/L		87	66 - 128	0	14
Tetrachloroethene	13	U	313	295		ug/L		94	62 - 131	0	20
trans-1,2-Dichloroethene	94		313	377		ug/L		91	56 - 136	1	15
Trichloroethene	470		313	734		ug/L		84	61 - 124	0	15
Vinyl chloride	13	U	313	275		ug/L		88	43 - 157	0	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*103*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166782-F-3 MSD
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	99		73 - 120

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-527374/4
Matrix: Water
Analysis Batch: 527374

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/20/22 19:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		66 - 120		05/20/22 19:13	1

Lab Sample ID: LCS 240-527374/3
Matrix: Water
Analysis Batch: 527374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	10.0	11.6		ug/L		116	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		66 - 120

Lab Sample ID: 240-166860-2 MS
Matrix: Water
Analysis Batch: 527374

Client Sample ID: MH-1231_051622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	5.7		10.0	15.9		ug/L		102	51 - 153

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		66 - 120

Lab Sample ID: 240-166860-2 MSD
Matrix: Water
Analysis Batch: 527374

Client Sample ID: MH-1231_051622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	5.7		10.0	15.7		ug/L		100	51 - 153	1	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	83		66 - 120

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-527375/4
Matrix: Water
Analysis Batch: 527375

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/20/22 19:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/20/22 19:44*	*1*

Lab Sample ID: LCS 240-527375/3
Matrix: Water
Analysis Batch: 527375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	9.50		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*

Lab Sample ID: 240-166860-19 MS
Matrix: Water
Analysis Batch: 527375

Client Sample ID: MH-1259_051822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	5.0		10.0	17.7		ug/L		127	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Lab Sample ID: 240-166860-19 MSD
Matrix: Water
Analysis Batch: 527375

Client Sample ID: MH-1259_051822
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	5.0		10.0	17.3		ug/L		123	51 - 153	2	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*

GC/MS VOA

Analysis Batch: 527374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-2	MH-1231_051622	Total/NA	Water	8260D SIM	
240-166860-20	MH-1244_051822	Total/NA	Water	8260D SIM	
240-166860-22	SL-21_051622	Total/NA	Water	8260D SIM	
240-166860-23	SL-20_051622	Total/NA	Water	8260D SIM	
240-166860-24	SL-22_051622	Total/NA	Water	8260D SIM	
240-166860-25	SL-4_051622	Total/NA	Water	8260D SIM	
240-166860-26	SL-18_051622	Total/NA	Water	8260D SIM	
240-166860-27	SL-17_051622	Total/NA	Water	8260D SIM	
240-166860-28	SL-16_051622	Total/NA	Water	8260D SIM	
240-166860-29	SL-3_051622	Total/NA	Water	8260D SIM	
240-166860-30	SL-2_051622	Total/NA	Water	8260D SIM	
240-166860-32	MH-1231A_051822	Total/NA	Water	8260D SIM	
240-166860-33	DUP-01_05162022	Total/NA	Water	8260D SIM	
240-166860-34	DUP-02_05162022	Total/NA	Water	8260D SIM	
MB 240-527374/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-527374/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166860-2 MS	MH-1231_051622	Total/NA	Water	8260D SIM	
240-166860-2 MSD	MH-1231_051622	Total/NA	Water	8260D SIM	

Analysis Batch: 527375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-3	SL-15_051722	Total/NA	Water	8260D SIM	
240-166860-4	SL-14_051722	Total/NA	Water	8260D SIM	
240-166860-5	SL-13_051722	Total/NA	Water	8260D SIM	
240-166860-6	SL-7_051722	Total/NA	Water	8260D SIM	
240-166860-7	SL-6_051722	Total/NA	Water	8260D SIM	
240-166860-8	SL-5_051722	Total/NA	Water	8260D SIM	
240-166860-9	SL-8_051722	Total/NA	Water	8260D SIM	
240-166860-10	SL-9_051722	Total/NA	Water	8260D SIM	
240-166860-12	SL-10_051722	Total/NA	Water	8260D SIM	
240-166860-13	SL-11_051722	Total/NA	Water	8260D SIM	
240-166860-14	SL-23_051722	Total/NA	Water	8260D SIM	
240-166860-15	SL-12_051722	Total/NA	Water	8260D SIM	
240-166860-16	SL-19_051722	Total/NA	Water	8260D SIM	
240-166860-17	MH-1255_051822	Total/NA	Water	8260D SIM	
240-166860-18	MH-1256_051822	Total/NA	Water	8260D SIM	
240-166860-19	MH-1259_051822	Total/NA	Water	8260D SIM	
MB 240-527375/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-527375/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166860-19 MS	MH-1259_051822	Total/NA	Water	8260D SIM	
240-166860-19 MSD	MH-1259_051822	Total/NA	Water	8260D SIM	

Analysis Batch: 527778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-2	MH-1231_051622	Total/NA	Water	8260D	
240-166860-3	SL-15_051722	Total/NA	Water	8260D	
240-166860-4	SL-14_051722	Total/NA	Water	8260D	
240-166860-5	SL-13_051722	Total/NA	Water	8260D	
240-166860-6	SL-7_051722	Total/NA	Water	8260D	
240-166860-7	SL-6_051722	Total/NA	Water	8260D	
240-166860-8	SL-5_051722	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 527778 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-9	SL-8_051722	Total/NA	Water	8260D	
240-166860-10	SL-9_051722	Total/NA	Water	8260D	
240-166860-12	SL-10_051722	Total/NA	Water	8260D	
240-166860-13	SL-11_051722	Total/NA	Water	8260D	
240-166860-14	SL-23_051722	Total/NA	Water	8260D	
240-166860-15	SL-12_051722	Total/NA	Water	8260D	
240-166860-16	SL-19_051722	Total/NA	Water	8260D	
240-166860-17	MH-1255_051822	Total/NA	Water	8260D	
240-166860-18	MH-1256_051822	Total/NA	Water	8260D	
240-166860-19	MH-1259_051822	Total/NA	Water	8260D	
240-166860-20	MH-1244_051822	Total/NA	Water	8260D	
240-166860-22	SL-21_051622	Total/NA	Water	8260D	
240-166860-23	SL-20_051622	Total/NA	Water	8260D	
MB 240-527778/8	Method Blank	Total/NA	Water	8260D	
LCS 240-527778/5	Lab Control Sample	Total/NA	Water	8260D	
240-166860-17 MS	MH-1255_051822	Total/NA	Water	8260D	
240-166860-17 MSD	MH-1255_051822	Total/NA	Water	8260D	

Analysis Batch: 527862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-1	TRIP BLANK-02	Total/NA	Water	8260D	
240-166860-6	SL-7_051722	Total/NA	Water	8260D	
240-166860-7	SL-6_051722	Total/NA	Water	8260D	
240-166860-11	TRIP BLANK-03	Total/NA	Water	8260D	
240-166860-21	TRIP BLANK-01	Total/NA	Water	8260D	
MB 240-527862/9	Method Blank	Total/NA	Water	8260D	
LCS 240-527862/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 240-527862/8	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 527906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166860-24	SL-22_051622	Total/NA	Water	8260D	
240-166860-25	SL-4_051622	Total/NA	Water	8260D	
240-166860-26	SL-18_051622	Total/NA	Water	8260D	
240-166860-27	SL-17_051622	Total/NA	Water	8260D	
240-166860-28	SL-16_051622	Total/NA	Water	8260D	
240-166860-29	SL-3_051622	Total/NA	Water	8260D	
240-166860-30	SL-2_051622	Total/NA	Water	8260D	
240-166860-31	TRIP BLANK-04	Total/NA	Water	8260D	
240-166860-32	MH-1231A_051822	Total/NA	Water	8260D	
240-166860-33	DUP-01_05162022	Total/NA	Water	8260D	
240-166860-34	DUP-02_05162022	Total/NA	Water	8260D	
MB 240-527906/8	Method Blank	Total/NA	Water	8260D	
LCS 240-527906/5	Lab Control Sample	Total/NA	Water	8260D	
240-166782-F-3 MS	Matrix Spike	Total/NA	Water	8260D	
240-166782-F-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-02
Lab Sample ID: 240-166860-1
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527862	05/25/22 14:09	HMB	TAL CAN

Client Sample ID: MH-1231_051622
Lab Sample ID: 240-166860-2
Date Collected: 05/16/22 13:45
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 00:53	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 20:45	CS	TAL CAN

Client Sample ID: SL-15_051722
Lab Sample ID: 240-166860-3
Date Collected: 05/17/22 09:35
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 01:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/20/22 23:41	CS	TAL CAN

Client Sample ID: SL-14_051722
Lab Sample ID: 240-166860-4
Date Collected: 05/17/22 09:50
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 01:42	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 00:06	CS	TAL CAN

Client Sample ID: SL-13_051722
Lab Sample ID: 240-166860-5
Date Collected: 05/17/22 10:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 02:06	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 00:31	CS	TAL CAN

Client Sample ID: SL-7_051722
Lab Sample ID: 240-166860-6
Date Collected: 05/17/22 10:55
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 02:31	HMB	TAL CAN
Total/NA	Analysis	8260D		1	527862	05/25/22 14:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 00:56	CS	TAL CAN

Client Sample ID: SL-6_051722
Lab Sample ID: 240-166860-7
Date Collected: 05/17/22 11:05
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 02:55	HMB	TAL CAN
Total/NA	Analysis	8260D		1	527862	05/25/22 14:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 01:21	CS	TAL CAN

Client Sample ID: SL-5_051722
Lab Sample ID: 240-166860-8
Date Collected: 05/17/22 11:30
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 03:20	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 01:46	CS	TAL CAN

Client Sample ID: SL-8_051722
Lab Sample ID: 240-166860-9
Date Collected: 05/17/22 12:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 03:44	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 02:11	CS	TAL CAN

Client Sample ID: SL-9_051722
Lab Sample ID: 240-166860-10
Date Collected: 05/17/22 12:50
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 04:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 02:36	CS	TAL CAN

Client Sample ID: TRIP BLANK-03
Lab Sample ID: 240-166860-11
Date Collected: 05/17/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527862	05/25/22 15:22	HMB	TAL CAN

Client Sample ID: SL-10_051722
Lab Sample ID: 240-166860-12
Date Collected: 05/17/22 13:20
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 04:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 03:00	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_051722
Lab Sample ID: 240-166860-13
Date Collected: 05/17/22 13:40
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 04:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 03:25	CS	TAL CAN

Client Sample ID: SL-23_051722
Lab Sample ID: 240-166860-14
Date Collected: 05/17/22 13:55
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 05:22	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 03:50	CS	TAL CAN

Client Sample ID: SL-12_051722
Lab Sample ID: 240-166860-15
Date Collected: 05/17/22 14:10
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 05:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 04:15	CS	TAL CAN

Client Sample ID: SL-19_051722
Lab Sample ID: 240-166860-16
Date Collected: 05/17/22 14:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 06:11	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 04:40	CS	TAL CAN

Client Sample ID: MH-1255_051822
Lab Sample ID: 240-166860-17
Date Collected: 05/18/22 09:10
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		4	527778	05/25/22 06:36	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 05:05	CS	TAL CAN

Client Sample ID: MH-1256_051822
Lab Sample ID: 240-166860-18
Date Collected: 05/18/22 09:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 07:00	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/21/22 05:30	CS	TAL CAN

Client Sample ID: MH-1259_051822
Lab Sample ID: 240-166860-19
Date Collected: 05/18/22 09:40
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 07:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527375	05/20/22 20:47	CS	TAL CAN

Client Sample ID: MH-1244_051822
Lab Sample ID: 240-166860-20
Date Collected: 05/18/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 07:49	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 21:56	CS	TAL CAN

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 240-166860-21
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527862	05/25/22 15:47	HMB	TAL CAN

Client Sample ID: SL-21_051622
Lab Sample ID: 240-166860-22
Date Collected: 05/16/22 10:55
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 08:14	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 22:20	CS	TAL CAN

Client Sample ID: SL-20_051622
Lab Sample ID: 240-166860-23
Date Collected: 05/16/22 11:20
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527778	05/25/22 08:38	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 22:44	CS	TAL CAN

Client Sample ID: SL-22_051622
Lab Sample ID: 240-166860-24
Date Collected: 05/16/22 11:35
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 16:38	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 23:08	CS	TAL CAN

Client Sample ID: SL-4_051622
Lab Sample ID: 240-166860-25
Date Collected: 05/16/22 12:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 17:02	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 23:32	CS	TAL CAN

Client Sample ID: SL-18_051622
Lab Sample ID: 240-166860-26
Date Collected: 05/16/22 12:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 17:26	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/20/22 23:56	CS	TAL CAN

Client Sample ID: SL-17_051622
Lab Sample ID: 240-166860-27
Date Collected: 05/16/22 12:35
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 17:50	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 00:20	CS	TAL CAN

Client Sample ID: SL-16_051622
Lab Sample ID: 240-166860-28
Date Collected: 05/16/22 12:50
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 18:14	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 00:43	CS	TAL CAN

Client Sample ID: SL-3_051622
Lab Sample ID: 240-166860-29
Date Collected: 05/16/22 13:05
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 18:37	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 01:07	CS	TAL CAN

Client Sample ID: SL-2_051622
Lab Sample ID: 240-166860-30
Date Collected: 05/16/22 13:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 19:01	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 01:31	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK-04
Lab Sample ID: 240-166860-31
Date Collected: 05/17/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 13:28	SAM	TAL CAN

Client Sample ID: MH-1231A_051822
Lab Sample ID: 240-166860-32
Date Collected: 05/18/22 10:25
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	527906	05/25/22 20:12	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 01:55	CS	TAL CAN

Client Sample ID: DUP-01_05162022
Lab Sample ID: 240-166860-33
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 19:25	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 02:19	CS	TAL CAN

Client Sample ID: DUP-02_05162022
Lab Sample ID: 240-166860-34
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	527906	05/25/22 19:48	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527374	05/21/22 02:43	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-166860-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

0-4/6.4 0-1/0.1

Chain of Custody Record

MICHIGAN 190

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
Phone: 248-994-2240	Sampler Name: KaiHyn 3 Gary ~~Korey/Pearson/Dannemiller/Stadler/Schaefer/Gary~~	TAT if different from below: 3 day		For lab use only: Walk-in client; Lab sampling; Job/SDG No:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			
Project Number: 30080642.701.04	Shipping/Tracking No:			
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK -02	---	---		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231-051622	5/16/22	1345								6														3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-15-051722	5/17/22	0935																						
SL-14-051722	5/17/22	0950																						
SL-13-051722	5/17/22	1000																						
SL-7-051722	5/17/22	1055																						
SL-6-051722	5/17/22	1105																						
SL-5-051722	5/17/22	1130																						
SL-8-051722	5/17/22	1225																						
SL-9-051722	5/17/22	1250																						

240-166860 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Gary Schaefer	Arcadis	5/18/22 1334		EEN	5/19/22
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	EEN	5/19/22		EETC	5-19-22
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

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5/26/2022

Chain of Custody Record

MICHIGAN 190 TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		COCs
City/State/Zip: Novi, MI, 48377	Sampler Name: Kaitlyn B Gary ~~Korey Pearson, Samantha Hindle, Brennan Day~~	TAT if different from below: 3 day		For lab use only
Phone: 248-994-2240	Method of Shipment/Carrier:			Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Lab sampling
Project Number: 300806-42.701.04				Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM					Sample Specific Notes / Special Instructions:
TRIP BLANK - 03	---	---		X						1					N	G	X	X	X	X	X	X	X					1 Trip Blank
SL-10-051722	5/17/22	1320								6																		3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-11-051722	5/17/22	1340																										
SL-23-051722	5/17/22	1355																										
SL-12-051722	5/17/22	1410																										
SL-19-051722	5/17/22	1425																										
MH-1255-051822	5/18/22	0910																										
MH-1256-051822	5/18/22	0925																										
MH-1259-051822	5/18/22	0940																										
MH-1244-051822	5/18/22	1010																										

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Gary Archuleta	Arcadis	5/18/22 1334	Cathy McLean	EEM	5/18/22
Relinquished by: Cathy McLean	Company: EEM	Date/Time: 5/18/22	Received by: Gary Garrett	Company: EEMC	Date/Time: 5-19-22 0850
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/26/2022

Chain of Custody Record

MICHIGAN 190

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: / COCs
Phone: 248-994-2240	Sampler Name: Kaitlyn Fleming + ~~Kdrey Pearson, Samantha Birdle, Sammon Say~~ Gary	TAT if different from below ☐	For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐	Walk-in client
Project Number: 30080642.701.04	Shipping/Tracking No:		Lab sampling
PO # 30080642.701.04			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK - 01	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-21_051622	5/16/22	1055								6														3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-20-051622	5/16/22	1120																						
SL-22_051622	5/16/22	1135																						
SL-4-051622	5/16/22	1200																						
SL-18_051622	5/16/22	1225																						
SL-17-051622	5/16/22	1235																						
SL-16_051622	5/16/22	1250																						
SL-3_051622	5/16/22	1305																						
SL-2_051622	5/16/22	1325		↓						↓					↓	↓	↓	↓	↓	↓	↓	↓	↓	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Kaitlyn Schafer	Arcadis	5/18/22 1334		EETA	5/18/22
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETA	5/18/22		EETNC	5-19-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/26/2022

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
Address: 28550 Cabot Drive, Suite 500	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377	Sampler Name: Kaitlyn B Gary ~~Korey Pearson, Samantha Hindle, Sommer Gut~~	TAT if different from below: 3 day		Walk-in client
Phone: 248-994-2240	Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP Utility Corridor Sampling	Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.701.04				
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK - 04	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1231A-051822	5/18/22	1025		↓						6					↓	↓	↓	↓	↓	↓	↓	↓	↓	3 VOAs for 8260B 3 VOAs for 8260B SIM
DUP-01-051622	5/16/22	—								6														
DUP-02-051622	5/16/22	—		↓						6					↓	↓	↓	↓	↓	↓	↓	↓	↓	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	5/18/22 1334	[signature]	EEN	5/18/22
Relinquished by: [signature]	Company: EEN	Date/Time: 5/18/22	Received by: [signature]	Company: EBTWC	Date/Time: 5-19-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by: Adam Garrett
Cooler Received on 5-19-22 Opened on 5-19-22
FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other
Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Qa (Yes) No
-Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
-Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC157842**
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. (Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ (Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

19. SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) 2x SL-15, 2x SL-14, 1x SL-13, 3x SL-6, 3x SL-8, 2x SL-20, 1x SL-22 were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____
VOA Sample Preservation - Date/Time VOAs Frozen: _____

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-167259-1
Client Project/Site: Ford LTP - Utility Corridor Sampling

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
6/9/2022 7:17:17 AM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-167259-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-167259-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9º C and 1.2º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 240-529192 recovered above the upper control limit for Carbon Disulfide, Carbon Tetrachloride, and 1,1,2-Trichloro-1,2,2-Trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCVIS 240-529192/3), (LCS 240-529192/4), (MB 240-529192/6), (240-167235-C-1), (240-167235-D-1 MS) and (240-167235-I-1 MSD).

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 240-529192 was outside the method criteria for the following analyte: Vinyl Chloride. An MRL standard at or below the reporting limit (RL) was analyzed with the affected samples: SL-15_052422 (240-167259-8), SL-14_052422 (240-167259-9), SL-7_052422 (240-167259-10), TRIP BLANK_2 (240-167259-11), SL-4_052522 (240-167259-12), DUP-01_052522 (240-167259-13), SL-18_052522 (240-167259-14), SL-17_052522 (240-167259-15), SL-16_052522 (240-167259-16), SL-3_052522 (240-167259-17), SL-20_052522 (240-167259-18), SL-21_052522 (240-167259-19), SL-22_052522 (240-167259-20), TRIP BLANK_3 (240-167259-21), SL-19_052422 (240-167259-22), (CCVIS 240-529192/3), (LCS 240-529192/4), (MB 240-529192/6), (240-167235-C-1), (240-167235-D-1 MS) and (240-167235-I-1 MSD) and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260D: The continuing calibration verification (CCV) associated with batch 240-529325 recovered above the upper control limit for 1,1-Dichloroethene and Carbon Disulfide. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SL-4_052522 (240-167259-12), DUP-01_052522 (240-167259-13), SL-18_052522 (240-167259-14), SL-17_052522 (240-167259-15), SL-16_052522 (240-167259-16), SL-3_052522 (240-167259-17), (CCVIS 240-529325/3), (LCS 240-529325/4), (MB 240-529325/6), (240-167335-C-6), (240-167335-C-6 MS) and (240-167335-C-6 MSD).

Method 8260D: The laboratory control sample (LCS) for analytical batch 240-529325 recovered outside control limits for the following analyte: 1,1-Dichloroethene. This analyte was biased high in the LCS and was not detected in the associated samples: SL-4_052522 (240-167259-12), DUP-01_052522 (240-167259-13), SL-18_052522 (240-167259-14), SL-17_052522 (240-167259-15), SL-16_052522 (240-167259-16), SL-3_052522 (240-167259-17), (LCS 240-529325/4), (MB 240-529325/6), (240-167335-C-6), (240-167335-C-6 MS) and (240-167335-C-6 MSD); therefore, the data have been reported.

Method 8260D SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SL-19_052422 (240-167259-22). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-167259-1	TRIP BLANK_1	Water	05/23/22 00:00	05/26/22 08:00
240-167259-2	MH-1256_052322	Water	05/23/22 12:28	05/26/22 08:00
240-167259-3	MH-1259_052322	Water	05/23/22 12:55	05/26/22 08:00
240-167259-4	MH-1244_052322	Water	05/23/22 13:20	05/26/22 08:00
240-167259-5	MH-1231_052322	Water	05/23/22 13:40	05/26/22 08:00
240-167259-6	SL-2_052322	Water	05/23/22 14:20	05/26/22 08:00
240-167259-7	DUP-02_052322	Water	05/23/22 00:00	05/26/22 08:00
240-167259-8	SL-15_052422	Water	05/24/22 09:26	05/26/22 08:00
240-167259-9	SL-14_052422	Water	05/24/22 09:41	05/26/22 08:00
240-167259-10	SL-7_052422	Water	05/24/22 11:04	05/26/22 08:00
240-167259-11	TRIP BLANK_2	Water	05/25/22 00:00	05/26/22 08:00
240-167259-12	SL-4_052522	Water	05/25/22 09:45	05/26/22 08:00
240-167259-13	DUP-01_052522	Water	05/25/22 00:00	05/26/22 08:00
240-167259-14	SL-18_052522	Water	05/25/22 10:30	05/26/22 08:00
240-167259-15	SL-17_052522	Water	05/25/22 10:50	05/26/22 08:00
240-167259-16	SL-16_052522	Water	05/25/22 11:10	05/26/22 08:00
240-167259-17	SL-3_052522	Water	05/25/22 11:32	05/26/22 08:00
240-167259-18	SL-20_052522	Water	05/25/22 14:51	05/26/22 08:00
240-167259-19	SL-21_052522	Water	05/25/22 14:34	05/26/22 08:00
240-167259-20	SL-22_052522	Water	05/25/22 15:00	05/26/22 08:00
240-167259-21	TRIP BLANK_3	Water	05/24/22 00:00	05/26/22 08:00
240-167259-22	SL-19_052422	Water	05/24/22 15:20	05/26/22 08:00
240-167259-23	SL-12_052422	Water	05/24/22 14:46	05/26/22 08:00
240-167259-24	SL-23_052422	Water	05/24/22 14:24	05/26/22 08:00
240-167259-25	SL-11_052422	Water	05/24/22 14:05	05/26/22 08:00
240-167259-26	SL-10_052422	Water	05/24/22 13:50	05/26/22 08:00
240-167259-27	SL-9_052422	Water	05/24/22 13:20	05/26/22 08:00
240-167259-28	SL-8_052422	Water	05/24/22 13:00	05/26/22 08:00
240-167259-29	MH-1255_052422	Water	05/24/22 16:05	05/26/22 08:00
240-167259-30	TRIP BLANK_4	Water	05/24/22 00:00	05/26/22 08:00
240-167259-31	MH-1231A_052422	Water	05/24/22 16:30	05/26/22 08:00
240-167259-32	SL-6_052422	Water	05/24/22 11:20	05/26/22 08:00
240-167259-33	SL-5_052422	Water	05/24/22 11:38	05/26/22 08:00
240-167259-34	SL-13_052422	Water	05/24/22 09:56	05/26/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_1 — Lab Sample ID: 240-167259-1

No Detections.

Client Sample ID: MH-1256_052322 — Lab Sample ID: 240-167259-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.95	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1259_052322 — Lab Sample ID: 240-167259-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
1,1-Dichloroethene	0.50	J	1.0	0.49	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	2.1		1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	3.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1244_052322 — Lab Sample ID: 240-167259-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	32		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.91	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	8.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MH-1231_052322 — Lab Sample ID: 240-167259-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-2_052322 — Lab Sample ID: 240-167259-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	8.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-02_052322 — Lab Sample ID: 240-167259-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	25		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	18		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-15_052422 — Lab Sample ID: 240-167259-8

No Detections.

Client Sample ID: SL-14_052422 — Lab Sample ID: 240-167259-9

No Detections.

Client Sample ID: SL-7_052422 — Lab Sample ID: 240-167259-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_2 — Lab Sample ID: 240-167259-11

No Detections.

Client Sample ID: SL-4_052522 — Lab Sample ID: 240-167259-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	3.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-01_052522 — Lab Sample ID: 240-167259-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	9.2		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.2		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-18_052522 — Lab Sample ID: 240-167259-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.9		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-17_052522 — Lab Sample ID: 240-167259-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.0		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	8.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	4.5		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-16_052522 — Lab Sample ID: 240-167259-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.5		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	3.0		1.0	0.46	ug/L	1		8260D	Total/NA
Trichloroethene	0.81	J	1.0	0.44	ug/L	1		8260D	Total/NA
Vinyl chloride	0.74	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-3_052522 — Lab Sample ID: 240-167259-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.3		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	5.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-20_052522 — Lab Sample ID: 240-167259-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.89	J	2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	1.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.76	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-21_052522 — Lab Sample ID: 240-167259-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9		1.0	0.46	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: SL-21_052522 (Continued) — Lab Sample ID: 240-167259-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.84	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-22_052522 — Lab Sample ID: 240-167259-20

No Detections.

Client Sample ID: TRIP BLANK_3 — Lab Sample ID: 240-167259-21

No Detections.

Client Sample ID: SL-19_052422 — Lab Sample ID: 240-167259-22

No Detections.

Client Sample ID: SL-12_052422 — Lab Sample ID: 240-167259-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.7		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	0.72	J	1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-23_052422 — Lab Sample ID: 240-167259-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.3		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-11_052422 — Lab Sample ID: 240-167259-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.6		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-10_052422 — Lab Sample ID: 240-167259-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.7		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-9_052422 — Lab Sample ID: 240-167259-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.6		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	5.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.4		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-8_052422 — Lab Sample ID: 240-167259-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.7		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	6.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	2.5		1.0	0.45	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_052422 — Lab Sample ID: 240-167259-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	26		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	68		4.0	1.8	ug/L	4		8260D	Total/NA
Vinyl chloride	62		4.0	1.8	ug/L	4		8260D	Total/NA

Client Sample ID: TRIP BLANK_4 — Lab Sample ID: 240-167259-30

No Detections.

Client Sample ID: MH-1231A_052422 — Lab Sample ID: 240-167259-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	25		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	62		2.0	0.92	ug/L	2		8260D	Total/NA
Trichloroethene	0.99	J	2.0	0.88	ug/L	2		8260D	Total/NA
Vinyl chloride	53		2.0	0.90	ug/L	2		8260D	Total/NA

Client Sample ID: SL-6_052422 — Lab Sample ID: 240-167259-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA

Client Sample ID: SL-5_052422 — Lab Sample ID: 240-167259-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260D SIM	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.46	ug/L	1		8260D	Total/NA
Vinyl chloride	1.9		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: SL-13_052422 — Lab Sample ID: 240-167259-34

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_1
Lab Sample ID: 240-167259-1
Date Collected: 05/23/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 16:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 16:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/04/22 16:09*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/04/22 16:09*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/04/22 16:09*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*06/04/22 16:09*	*1*

Client Sample ID: MH-1256_052322
Lab Sample ID: 240-167259-2
Date Collected: 05/23/22 12:28
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*05/28/22 17:26*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 16:33	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.46	ug/L			06/04/22 16:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 16:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:33	1
Vinyl chloride	**0.95**	**J**	1.0	0.45	ug/L			06/04/22 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/04/22 16:33*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/04/22 16:33*	*1*
Toluene-d8 (Surr)	*87*		*78 - 122*		*06/04/22 16:33*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*06/04/22 16:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1259_052322
Lab Sample ID: 240-167259-3
Date Collected: 05/23/22 12:55
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**7.6**		2.0	0.86	ug/L			05/28/22 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/28/22 17:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**0.50**	**J**	1.0	0.49	ug/L			06/04/22 16:58	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			06/04/22 16:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 16:58	1
Trichloroethene	**2.1**		1.0	0.44	ug/L			06/04/22 16:58	1
Vinyl chloride	**3.4**		1.0	0.45	ug/L			06/04/22 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/04/22 16:58*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/04/22 16:58*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*06/04/22 16:58*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*06/04/22 16:58*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1244_052322
Lab Sample ID: 240-167259-4
Date Collected: 05/23/22 13:20
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		2.0	0.86	ug/L			05/28/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*		*05/28/22 18:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 17:23	1
cis-1,2-Dichloroethene	**32**		1.0	0.46	ug/L			06/04/22 17:23	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 17:23	1
Trichloroethene	**0.91**	**J**	1.0	0.44	ug/L			06/04/22 17:23	1
Vinyl chloride	**8.0**		1.0	0.45	ug/L			06/04/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 137*		*06/04/22 17:23*	*1*
4-Bromofluorobenzene (Surr)	*87*		*56 - 136*		*06/04/22 17:23*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/04/22 17:23*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*06/04/22 17:23*	*1*

Client Sample ID: MH-1231_052322
Lab Sample ID: 240-167259-5

Date Collected: 05/23/22 13:40
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**	**J**	2.0	0.86	ug/L			05/28/22 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/28/22 18:41*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 17:47	1
cis-1,2-Dichloroethene	**5.9**		1.0	0.46	ug/L			06/04/22 17:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 17:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:47	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			06/04/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*06/04/22 17:47*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/04/22 17:47*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/04/22 17:47*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*06/04/22 17:47*	*1*

Client Sample ID: SL-2_052322
Lab Sample ID: 240-167259-6

Date Collected: 05/23/22 14:20
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.1**		2.0	0.86	ug/L			05/28/22 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*05/28/22 19:05*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 18:12	1
cis-1,2-Dichloroethene	**13**		1.0	0.46	ug/L			06/04/22 18:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 18:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:12	1
Vinyl chloride	**8.5**		1.0	0.45	ug/L			06/04/22 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*06/04/22 18:12*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*06/04/22 18:12*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/04/22 18:12*	*1*
Dibromofluoromethane (Surr)	*96*		*73 - 120*		*06/04/22 18:12*	*1*

Client Sample ID: DUP-02_052322
Lab Sample ID: 240-167259-7

Date Collected: 05/23/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.1**		2.0	0.86	ug/L			05/28/22 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/28/22 19:30*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 18:36	1
cis-1,2-Dichloroethene	**25**		1.0	0.46	ug/L			06/04/22 18:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 18:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:36	1
Vinyl chloride	**18**		1.0	0.45	ug/L			06/04/22 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*		*06/04/22 18:36*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*06/04/22 18:36*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/04/22 18:36*	*1*
Dibromofluoromethane (Surr)	*95*		*73 - 120*		*06/04/22 18:36*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-15_052422
Lab Sample ID: 240-167259-8
Date Collected: 05/24/22 09:26
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/28/22 19:55*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 14:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 14:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 14:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 14:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 14:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 14:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*06/04/22 14:10*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*06/04/22 14:10*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*06/04/22 14:10*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-14_052422
Lab Sample ID: 240-167259-9
Date Collected: 05/24/22 09:41
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/28/22 20:20*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 14:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 14:36	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 14:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 14:36	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 14:36	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*06/04/22 14:36*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*06/04/22 14:36*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 14:36*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*06/04/22 14:36*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-7_052422
Lab Sample ID: 240-167259-10
Date Collected: 05/24/22 11:04
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*05/28/22 20:45*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 15:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 15:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 15:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:01	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*06/04/22 15:01*	*1*
4-Bromofluorobenzene (Surr)	*85*		*56 - 136*		*06/04/22 15:01*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 15:01*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*06/04/22 15:01*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_2
Lab Sample ID: 240-167259-11
Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 13:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 13:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 13:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 13:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 13:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*06/04/22 13:20*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*06/04/22 13:20*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 13:20*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*06/04/22 13:20*	*1*

Client Sample ID: SL-4_052522
Lab Sample ID: 240-167259-12

Date Collected: 05/25/22 09:45
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		2.0	0.86	ug/L			05/28/22 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*05/28/22 21:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 15:26	1
cis-1,2-Dichloroethene	**9.3**		1.0	0.46	ug/L			06/04/22 15:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 15:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:26	1
Vinyl chloride	**3.9**		1.0	0.45	ug/L			06/06/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*06/04/22 15:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*06/06/22 15:36*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*06/04/22 15:26*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*06/06/22 15:36*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 15:26*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/06/22 15:36*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*06/04/22 15:26*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*06/06/22 15:36*	*1*

Client Sample ID: DUP-01_052522
Lab Sample ID: 240-167259-13

Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		2.0	0.86	ug/L			05/28/22 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/28/22 21:35*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 15:51	1
cis-1,2-Dichloroethene	**9.2**		1.0	0.46	ug/L			06/04/22 15:51	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 15:51	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 15:51	1
Vinyl chloride	**4.2**		1.0	0.45	ug/L			06/06/22 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*06/04/22 15:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/06/22 16:01*	*1*
4-Bromofluorobenzene (Surr)	*83*		*56 - 136*		*06/04/22 15:51*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*06/06/22 16:01*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*06/04/22 15:51*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/06/22 16:01*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*06/04/22 15:51*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*06/06/22 16:01*	*1*

Client Sample ID: SL-18_052522
Lab Sample ID: 240-167259-14

Date Collected: 05/25/22 10:30
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**	**J**	2.0	0.86	ug/L			05/28/22 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 120*		*05/28/22 22:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 16:16	1
cis-1,2-Dichloroethene	**4.9**		1.0	0.46	ug/L			06/04/22 16:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 16:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:16	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			06/06/22 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 16:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/06/22 16:26*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/04/22 16:16*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/06/22 16:26*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 16:16*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*06/06/22 16:26*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 120*		*06/04/22 16:16*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*06/06/22 16:26*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-17_052522
Lab Sample ID: 240-167259-15
Date Collected: 05/25/22 10:50
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.0**		2.0	0.86	ug/L			05/28/22 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 120*		*05/28/22 22:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 16:41	1
cis-1,2-Dichloroethene	**8.3**		1.0	0.46	ug/L			06/04/22 16:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 16:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 16:41	1
Vinyl chloride	**4.5**		1.0	0.45	ug/L			06/06/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*06/04/22 16:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*06/06/22 16:51*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/04/22 16:41*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*06/06/22 16:51*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 16:41*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*06/06/22 16:51*	*1*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*06/04/22 16:41*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*06/06/22 16:51*	*1*

Client Sample ID: SL-16_052522
Lab Sample ID: 240-167259-16

Date Collected: 05/25/22 11:10
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		2.0	0.86	ug/L			05/28/22 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 120*		*05/28/22 22:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 17:06	1
cis-1,2-Dichloroethene	**3.0**		1.0	0.46	ug/L			06/04/22 17:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 17:06	1
Trichloroethene	**0.81**	**J**	1.0	0.44	ug/L			06/04/22 17:06	1
Vinyl chloride	**0.74**	**J**	1.0	0.45	ug/L			06/06/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*06/04/22 17:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*06/06/22 17:16*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*06/04/22 17:06*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/06/22 17:16*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*06/04/22 17:06*	*1*
Toluene-d8 (Surr)	*91*		*78 - 122*		*06/06/22 17:16*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*06/04/22 17:06*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*06/06/22 17:16*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-3_052522
Lab Sample ID: 240-167259-17
Date Collected: 05/25/22 11:32
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.3**		2.0	0.86	ug/L			05/28/22 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 120*		*05/28/22 23:15*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 17:31	1
cis-1,2-Dichloroethene	**10**		1.0	0.46	ug/L			06/04/22 17:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 17:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:31	1
Vinyl chloride	**5.9**		1.0	0.45	ug/L			06/06/22 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/04/22 17:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/06/22 17:41*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/04/22 17:31*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/06/22 17:41*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*06/04/22 17:31*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*06/06/22 17:41*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*06/04/22 17:31*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*06/06/22 17:41*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-20_052522
Lab Sample ID: 240-167259-18
Date Collected: 05/25/22 14:51
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.89**	**J**	2.0	0.86	ug/L			05/28/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/28/22 23:39*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 17:56	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.46	ug/L			06/04/22 17:56	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 17:56	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 17:56	1
Vinyl chloride	**0.76**	**J**	1.0	0.45	ug/L			06/04/22 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 17:56*	*1*
4-Bromofluorobenzene (Surr)	*88*		*56 - 136*		*06/04/22 17:56*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*06/04/22 17:56*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*06/04/22 17:56*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-21_052522
Lab Sample ID: 240-167259-19
Date Collected: 05/25/22 14:34
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/29/22 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/29/22 00:04*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 18:21	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.46	ug/L			06/04/22 18:21	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 18:21	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:21	1
Vinyl chloride	**0.84**	**J**	1.0	0.45	ug/L			06/04/22 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 18:21*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/04/22 18:21*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*06/04/22 18:21*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*06/04/22 18:21*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-22_052522
Lab Sample ID: 240-167259-20
Date Collected: 05/25/22 15:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/28/22 19:50*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 18:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 18:46	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 18:46	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 18:46	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 18:46*	*1*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/04/22 18:46*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*06/04/22 18:46*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*06/04/22 18:46*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_3
Lab Sample ID: 240-167259-21
Date Collected: 05/24/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 13:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 13:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 13:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 13:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 13:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 13:45*	*1*
4-Bromofluorobenzene (Surr)	*80*		*56 - 136*		*06/04/22 13:45*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*06/04/22 13:45*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*06/04/22 13:45*	*1*

Client Sample ID: SL-19_052422
Lab Sample ID: 240-167259-22

Date Collected: 05/24/22 15:20
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			05/28/22 21:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/28/22 21:01*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 19:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 19:11	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 19:11	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:11	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*		*06/04/22 19:11*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*06/04/22 19:11*	*1*
Toluene-d8 (Surr)	*94*		*78 - 122*		*06/04/22 19:11*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*06/04/22 19:11*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-12_052422
Lab Sample ID: 240-167259-23
Date Collected: 05/24/22 14:46
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/28/22 21:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 19:01	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.46	ug/L			06/04/22 19:01	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 19:01	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:01	1
Vinyl chloride	**0.72**	**J**	1.0	0.45	ug/L			06/04/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*06/04/22 19:01*	*1*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*		*06/04/22 19:01*	*1*
Toluene-d8 (Surr)	*93*		*78 - 122*		*06/04/22 19:01*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*06/04/22 19:01*	*1*

Client Sample ID: SL-23_052422
Lab Sample ID: 240-167259-24

Date Collected: 05/24/22 14:24
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		2.0	0.86	ug/L			05/28/22 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/28/22 21:49*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 19:25	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.46	ug/L			06/04/22 19:25	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 19:25	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 19:25	1
Vinyl chloride	**2.3**		1.0	0.45	ug/L			06/04/22 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/04/22 19:25*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*06/04/22 19:25*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*06/04/22 19:25*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*06/04/22 19:25*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-11_052422
Lab Sample ID: 240-167259-25
Date Collected: 05/24/22 14:05
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		2.0	0.86	ug/L			05/28/22 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/28/22 22:13*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 15:17	1
cis-1,2-Dichloroethene	**5.3**		1.0	0.46	ug/L			06/06/22 15:17	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 15:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 15:17	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 15:17	1
Vinyl chloride	**2.6**		1.0	0.45	ug/L			06/06/22 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*		*06/06/22 15:17*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/06/22 15:17*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*06/06/22 15:17*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*06/06/22 15:17*	*1*

Client Sample ID: SL-10_052422
Lab Sample ID: 240-167259-26

Date Collected: 05/24/22 13:50
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.6**		2.0	0.86	ug/L			05/28/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/28/22 22:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 15:41	1
cis-1,2-Dichloroethene	**6.0**		1.0	0.46	ug/L			06/06/22 15:41	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 15:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 15:41	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 15:41	1
Vinyl chloride	**2.7**		1.0	0.45	ug/L			06/06/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*06/06/22 15:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*		*06/06/22 15:41*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*06/06/22 15:41*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*06/06/22 15:41*	*1*

Client Sample ID: SL-9_052422
Lab Sample ID: 240-167259-27
Date Collected: 05/24/22 13:20
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.6**		2.0	0.86	ug/L			05/28/22 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/28/22 23:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 16:06	1
cis-1,2-Dichloroethene	**5.3**		1.0	0.46	ug/L			06/06/22 16:06	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 16:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 16:06	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 16:06	1
Vinyl chloride	**2.4**		1.0	0.45	ug/L			06/06/22 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/06/22 16:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*06/06/22 16:06*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*06/06/22 16:06*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*06/06/22 16:06*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-8_052422
Lab Sample ID: 240-167259-28
Date Collected: 05/24/22 13:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.7**		2.0	0.86	ug/L			05/28/22 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*		*05/28/22 23:24*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 16:30	1
cis-1,2-Dichloroethene	**6.3**		1.0	0.46	ug/L			06/06/22 16:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 16:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 16:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 16:30	1
Vinyl chloride	**2.5**		1.0	0.45	ug/L			06/06/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/06/22 16:30*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/06/22 16:30*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*06/06/22 16:30*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*06/06/22 16:30*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1255_052422
Lab Sample ID: 240-167259-29
Date Collected: 05/24/22 16:05
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**26**		2.0	0.86	ug/L			05/28/22 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 120*		*05/28/22 23:48*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	4.0	U	4.0	2.0	ug/L			06/06/22 16:55	4
cis-1,2-Dichloroethene	**68**		4.0	1.8	ug/L			06/06/22 16:55	4
Tetrachloroethene	4.0	U	4.0	1.8	ug/L			06/06/22 16:55	4
trans-1,2-Dichloroethene	4.0	U	4.0	2.0	ug/L			06/06/22 16:55	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			06/06/22 16:55	4
Vinyl chloride	**62**		4.0	1.8	ug/L			06/06/22 16:55	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/06/22 16:55*	*4*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/06/22 16:55*	*4*
Toluene-d8 (Surr)	*87*		*78 - 122*		*06/06/22 16:55*	*4*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*06/06/22 16:55*	*4*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_4
Lab Sample ID: 240-167259-30
Date Collected: 05/24/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 17:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/06/22 17:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 17:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 17:20	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 17:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/06/22 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*06/06/22 17:20*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*06/06/22 17:20*	*1*
Toluene-d8 (Surr)	*86*		*78 - 122*		*06/06/22 17:20*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*06/06/22 17:20*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: MH-1231A_052422
Lab Sample ID: 240-167259-31
Date Collected: 05/24/22 16:30
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**25**		2.0	0.86	ug/L			05/29/22 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/29/22 00:12*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			06/06/22 17:44	2
cis-1,2-Dichloroethene	**62**		2.0	0.92	ug/L			06/06/22 17:44	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			06/06/22 17:44	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.0	ug/L			06/06/22 17:44	2
Trichloroethene	**0.99**	**J**	2.0	0.88	ug/L			06/06/22 17:44	2
Vinyl chloride	**53**		2.0	0.90	ug/L			06/06/22 17:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/06/22 17:44*	*2*
4-Bromofluorobenzene (Surr)	*89*		*56 - 136*		*06/06/22 17:44*	*2*
Toluene-d8 (Surr)	*87*		*78 - 122*		*06/06/22 17:44*	*2*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*06/06/22 17:44*	*2*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-6_052422
Lab Sample ID: 240-167259-32
Date Collected: 05/24/22 11:20
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.2		2.0	0.86	ug/L			05/29/22 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/29/22 00:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 18:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/06/22 18:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 18:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/06/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*06/06/22 18:09*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*06/06/22 18:09*	*1*
Toluene-d8 (Surr)	*89*		*78 - 122*		*06/06/22 18:09*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*06/06/22 18:09*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-5_052422
Lab Sample ID: 240-167259-33
Date Collected: 05/24/22 11:38
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**		2.0	0.86	ug/L			05/29/22 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/29/22 01:00*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 18:33	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.46	ug/L			06/06/22 18:33	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 18:33	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:33	1
Vinyl chloride	**1.9**		1.0	0.45	ug/L			06/06/22 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/06/22 18:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*06/06/22 18:33*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*06/06/22 18:33*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*06/06/22 18:33*	*1*

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-13_052422
Lab Sample ID: 240-167259-34
Date Collected: 05/24/22 09:56
Matrix: Water
Date Received: 05/26/22 08:00

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/31/22 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/31/22 22:46*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 18:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/06/22 18:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 18:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 18:58	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/06/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/06/22 18:58*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*06/06/22 18:58*	*1*
Toluene-d8 (Surr)	*92*		*78 - 122*		*06/06/22 18:58*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 120*		*06/06/22 18:58*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Utility Corridor Sampling

Job ID: 240-167259-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-167012-F-7 MS	Matrix Spike	91	93	90	96
240-167012-G-7 MSD	Matrix Spike Duplicate	91	95	87	97
240-167178-B-11 MS	Matrix Spike	95	95	89	100
240-167178-B-11 MSD	Matrix Spike Duplicate	94	96	92	101
240-167235-D-1 MS	Matrix Spike	95	97	97	111
240-167235-I-1 MSD	Matrix Spike Duplicate	96	94	95	109
240-167259-1	TRIP BLANK_1	94	89	86	98
240-167259-2	MH-1256_052322	93	91	87	98
240-167259-3	MH-1259_052322	94	91	89	99
240-167259-4	MH-1244_052322	89	87	86	96
240-167259-5	MH-1231_052322	92	89	86	99
240-167259-6	SL-2_052322	90	88	86	96
240-167259-7	DUP-02_052322	90	88	86	95
240-167259-8	SL-15_052422	97	88	97	106
240-167259-9	SL-14_052422	96	83	95	106
240-167259-10	SL-7_052422	100	85	95	113
240-167259-11	TRIP BLANK_2	96	83	95	108
240-167259-12	SL-4_052522	99	84	95	113
240-167259-12	SL-4_052522	95	83	95	112
240-167259-13	DUP-01_052522	100	83	97	115
240-167259-13	DUP-01_052522	97	84	95	112
240-167259-14	SL-18_052522	97	90	95	114
240-167259-14	SL-18_052522	94	89	93	109
240-167259-15	SL-17_052522	95	91	95	111
240-167259-15	SL-17_052522	91	88	93	106
240-167259-16	SL-16_052522	96	92	94	108
240-167259-16	SL-16_052522	95	90	91	108
240-167259-17	SL-3_052522	94	91	93	107
240-167259-17	SL-3_052522	94	90	94	110
240-167259-18	SL-20_052522	97	88	92	107
240-167259-19	SL-21_052522	97	89	94	108
240-167259-20	SL-22_052522	97	89	95	109
240-167259-21	TRIP BLANK_3	97	80	92	107
240-167259-22	SL-19_052422	97	84	94	109
240-167259-23	SL-12_052422	96	97	93	103
240-167259-24	SL-23_052422	93	95	92	102
240-167259-25	SL-11_052422	91	91	89	99
240-167259-26	SL-10_052422	98	96	92	104
240-167259-27	SL-9_052422	93	93	90	101
240-167259-28	SL-8_052422	93	90	89	101
240-167259-29	MH-1255_052422	93	90	87	98
240-167259-30	TRIP BLANK_4	95	90	86	98
240-167259-31	MH-1231A_052422	93	89	87	97
240-167259-32	SL-6_052422	93	92	89	98
240-167259-33	SL-5_052422	94	93	90	101
240-167259-34	SL-13_052422	94	94	92	104
240-167335-C-6 MS	Matrix Spike	93	93	95	112
240-167335-C-6 MSD	Matrix Spike Duplicate	93	91	95	112
LCS 240-529183/5	Lab Control Sample	90	95	89	96

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
LCS 240-529192/4	Lab Control Sample	93	94	98	107
LCS 240-529287/5	Lab Control Sample	96	98	92	101
LCS 240-529325/4	Lab Control Sample	94	91	96	112
MB 240-529183/8	Method Blank	94	91	87	97
MB 240-529192/6	Method Blank	98	84	97	105
MB 240-529287/8	Method Blank	99	94	90	103
MB 240-529325/6	Method Blank	96	84	96	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-166981-B-8 MS	Matrix Spike	101
240-166981-B-8 MSD	Matrix Spike Duplicate	103
240-167067-G-2 MS	Matrix Spike	88
240-167067-M-2 MSD	Matrix Spike Duplicate	89
240-167259-2	MH-1256_052322	102
240-167259-3	MH-1259_052322	107
240-167259-4	MH-1244_052322	102
240-167259-5	MH-1231_052322	105
240-167259-6	SL-2_052322	112
240-167259-7	DUP-02_052322	105
240-167259-8	SL-15_052422	105
240-167259-9	SL-14_052422	109
240-167259-10	SL-7_052422	106
240-167259-12	SL-4_052522	106
240-167259-13	DUP-01_052522	108
240-167259-14	SL-18_052522	112
240-167259-15	SL-17_052522	114
240-167259-16	SL-16_052522	110
240-167259-17	SL-3_052522	111
240-167259-18	SL-20_052522	105
240-167259-19	SL-21_052522	107
240-167259-20	SL-22_052522	86
240-167259-20 MS	SL-22_052522	86
240-167259-20 MSD	SL-22_052522	87
240-167259-22	SL-19_052422	84
240-167259-23	SL-12_052422	87
240-167259-24	SL-23_052422	86
240-167259-25	SL-11_052422	84
240-167259-26	SL-10_052422	85
240-167259-27	SL-9_052422	85
240-167259-28	SL-8_052422	86

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCA (66-120)						
240-167259-29	MH-1255_052422	85						
240-167259-31	MH-1231A_052422	84						
240-167259-32	SL-6_052422	87						
240-167259-33	SL-5_052422	84						
240-167259-34	SL-13_052422	87						
LCS 240-528391/3	Lab Control Sample	104						
LCS 240-528392/14	Lab Control Sample	87						
LCS 240-528626/3	Lab Control Sample	86						
MB 240-528391/4	Method Blank	103						
MB 240-528392/15	Method Blank	84						
MB 240-528626/4	Method Blank	87						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-529183/8
Matrix: Water
Analysis Batch: 529183

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 12:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 12:03	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 12:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 12:03	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 12:03	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*06/04/22 12:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*06/04/22 12:03*	*1*
Toluene-d8 (Surr)	*87*		*78 - 122*		*06/04/22 12:03*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*06/04/22 12:03*	*1*

Lab Sample ID: LCS 240-529183/5
Matrix: Water
Analysis Batch: 529183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.0	19.5		ug/L		98	63 - 134
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	77 - 123
Tetrachloroethene	20.0	16.6		ug/L		83	76 - 123
trans-1,2-Dichloroethene	20.0	18.5		ug/L		93	75 - 124
Trichloroethene	20.0	19.0		ug/L		95	70 - 122
Vinyl chloride	20.0	21.0		ug/L		105	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*89*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Lab Sample ID: 240-167012-F-7 MS
Matrix: Water
Analysis Batch: 529183

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	1.0	U	20.0	18.4		ug/L		92	66 - 128
trans-1,2-Dichloroethene	1.0	U	20.0	17.8		ug/L		89	56 - 136
Trichloroethene	1.0	U	20.0	17.8		ug/L		89	61 - 124
Vinyl chloride	1.7		20.0	22.2		ug/L		103	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*
Toluene-d8 (Surr)	*90*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-167012-G-7 MSD
Matrix: Water
Analysis Batch: 529183

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1.0	U	20.0	19.8		ug/L		99	66 - 128	7	14
trans-1,2-Dichloroethene	1.0	U	20.0	19.2		ug/L		96	56 - 136	8	15
Trichloroethene	1.0	U	20.0	19.2		ug/L		96	61 - 124	8	15
Vinyl chloride	1.7		20.0	22.9		ug/L		106	43 - 157	3	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*87*		*78 - 122*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

Lab Sample ID: MB 240-529192/6
Matrix: Water
Analysis Batch: 529192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/04/22 11:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/04/22 11:15	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 11:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/04/22 11:15	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/04/22 11:15	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/04/22 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*		*06/04/22 11:15*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*06/04/22 11:15*	*1*
Toluene-d8 (Surr)	*97*		*78 - 122*		*06/04/22 11:15*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*06/04/22 11:15*	*1*

Lab Sample ID: LCS 240-529192/4
Matrix: Water
Analysis Batch: 529192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	25.0	29.1		ug/L		116	63 - 134
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	77 - 123
Tetrachloroethene	25.0	26.8		ug/L		107	76 - 123
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	75 - 124
Trichloroethene	25.0	27.4		ug/L		109	70 - 122
Vinyl chloride	12.5	10.9		ug/L		87	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*
Toluene-d8 (Surr)	*98*		*78 - 122*
Dibromofluoromethane (Surr)	*107*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-167235-D-1 MS
Matrix: Water
Analysis Batch: 529192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	1.0	U	25.0	29.8		ug/L		119	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	26.1		ug/L		104	66 - 128
Tetrachloroethene	1.0	U	25.0	24.1		ug/L		96	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	26.9		ug/L		107	56 - 136
Trichloroethene	1.0	U	25.0	25.5		ug/L		102	61 - 124
Vinyl chloride	1.0	U	25.0	22.1		ug/L		88	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
4-Bromofluorobenzene (Surr)	*97*		*56 - 136*
Toluene-d8 (Surr)	*97*		*78 - 122*
Dibromofluoromethane (Surr)	*111*		*73 - 120*

Lab Sample ID: 240-167235-I-1 MSD
Matrix: Water
Analysis Batch: 529192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	25.0	28.8		ug/L		115	56 - 135	4	26
cis-1,2-Dichloroethene	1.0	U	25.0	26.0		ug/L		104	66 - 128	0	14
Tetrachloroethene	1.0	U	25.0	22.3		ug/L		89	62 - 131	8	20
trans-1,2-Dichloroethene	1.0	U	25.0	26.6		ug/L		106	56 - 136	1	15
Trichloroethene	1.0	U	25.0	24.4		ug/L		98	61 - 124	5	15
Vinyl chloride	1.0	U	25.0	23.4		ug/L		94	43 - 157	6	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*109*		*73 - 120*

Lab Sample ID: MB 240-529287/8
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 12:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/06/22 12:10	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 12:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 12:10	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 12:10	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/06/22 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*		*06/06/22 12:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*06/06/22 12:10*	*1*
Toluene-d8 (Surr)	*90*		*78 - 122*		*06/06/22 12:10*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-529287/8
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*06/06/22 12:10*	*1*

Lab Sample ID: LCS 240-529287/5
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.0	21.1		ug/L		105	63 - 134		
cis-1,2-Dichloroethene			20.0	20.3		ug/L		102	77 - 123		
Tetrachloroethene			20.0	17.8		ug/L		89	76 - 123		
trans-1,2-Dichloroethene			20.0	20.2		ug/L		101	75 - 124		
Trichloroethene			20.0	20.4		ug/L		102	70 - 122		
Vinyl chloride			20.0	21.0		ug/L		105	60 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: 240-167178-B-11 MS
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	25	U	500	479		ug/L		96	56 - 135		
cis-1,2-Dichloroethene	25	U	500	471		ug/L		94	66 - 128		
Tetrachloroethene	25	U	500	385		ug/L		77	62 - 131		
trans-1,2-Dichloroethene	25	U	500	457		ug/L		91	56 - 136		
Trichloroethene	550		500	960		ug/L		82	61 - 124		
Vinyl chloride	25	U	500	535		ug/L		107	43 - 157		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*
Toluene-d8 (Surr)	*89*		*78 - 122*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: 240-167178-B-11 MSD
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	25	U	500	521		ug/L		104	56 - 135	8	26
cis-1,2-Dichloroethene	25	U	500	509		ug/L		102	66 - 128	8	14
Tetrachloroethene	25	U	500	424		ug/L		85	62 - 131	10	20
trans-1,2-Dichloroethene	25	U	500	493		ug/L		99	56 - 136	8	15
Trichloroethene	550		500	1020		ug/L		94	61 - 124	6	15

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-167178-B-11 MSD
Matrix: Water
Analysis Batch: 529287

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride	25	U	500	548		ug/L		110	43 - 157	2	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*96*		*56 - 136*
Toluene-d8 (Surr)	*92*		*78 - 122*
Dibromofluoromethane (Surr)	*101*		*73 - 120*

Lab Sample ID: MB 240-529325/6
Matrix: Water
Analysis Batch: 529325

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			06/06/22 13:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/06/22 13:30	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 13:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/06/22 13:30	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/06/22 13:30	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/06/22 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*		*06/06/22 13:30*	*1*
4-Bromofluorobenzene (Surr)	*84*		*56 - 136*		*06/06/22 13:30*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*06/06/22 13:30*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*06/06/22 13:30*	*1*

Lab Sample ID: LCS 240-529325/4
Matrix: Water
Analysis Batch: 529325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	25.0	34.7	*+	ug/L		139	63 - 134
cis-1,2-Dichloroethene	25.0	29.2		ug/L		117	77 - 123
Tetrachloroethene	25.0	26.4		ug/L		106	76 - 123
trans-1,2-Dichloroethene	25.0	30.4		ug/L		122	75 - 124
Trichloroethene	25.0	29.3		ug/L		117	70 - 122
Vinyl chloride	12.5	13.0		ug/L		104	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*
Toluene-d8 (Surr)	*96*		*78 - 122*
Dibromofluoromethane (Surr)	*112*		*73 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-167335-C-6 MS
Matrix: Water
Analysis Batch: 529325

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	10	U *+	250	333		ug/L		133	56 - 135
cis-1,2-Dichloroethene	220		250	510		ug/L		114	66 - 128
Tetrachloroethene	10	U	250	260		ug/L		104	62 - 131
trans-1,2-Dichloroethene	10	U	250	291		ug/L		116	56 - 136
Trichloroethene	9.0	J	250	294		ug/L		114	61 - 124
Vinyl chloride	10	U	250	250		ug/L		100	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*112*		*73 - 120*

Lab Sample ID: 240-167335-C-6 MSD
Matrix: Water
Analysis Batch: 529325

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	10	U *+	250	318		ug/L		127	56 - 135	5	26
cis-1,2-Dichloroethene	220		250	516		ug/L		117	66 - 128	1	14
Tetrachloroethene	10	U	250	246		ug/L		99	62 - 131	6	20
trans-1,2-Dichloroethene	10	U	250	285		ug/L		114	56 - 136	2	15
Trichloroethene	9.0	J	250	282		ug/L		109	61 - 124	4	15
Vinyl chloride	10	U	250	243		ug/L		97	43 - 157	3	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*
Toluene-d8 (Surr)	*95*		*78 - 122*
Dibromofluoromethane (Surr)	*112*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-528391/4
Matrix: Water
Analysis Batch: 528391

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 14:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*		*05/28/22 14:31*	*1*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-528391/3
Matrix: Water
Analysis Batch: 528391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.9		ug/L		109	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*

Lab Sample ID: 240-166981-B-8 MS
Matrix: Water
Analysis Batch: 528391

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	4.7		10.0	17.4		ug/L		127	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*

Lab Sample ID: 240-166981-B-8 MSD
Matrix: Water
Analysis Batch: 528391

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	4.7		10.0	17.9		ug/L		132	51 - 153	3	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*

Lab Sample ID: MB 240-528392/15
Matrix: Water
Analysis Batch: 528392

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/28/22 19:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*66 - 120*		*05/28/22 19:02*	*1*

Lab Sample ID: LCS 240-528392/14
Matrix: Water
Analysis Batch: 528392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	10.1		ug/L		101	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-167259-20 MS
Matrix: Water
Analysis Batch: 528392

Client Sample ID: SL-22_052522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	11.5		ug/L		115	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*

Lab Sample ID: 240-167259-20 MSD
Matrix: Water
Analysis Batch: 528392

Client Sample ID: SL-22_052522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.5		ug/L		105	51 - 153	8	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*

Lab Sample ID: MB 240-528626/4
Matrix: Water
Analysis Batch: 528626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/31/22 20:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*05/31/22 20:47*	*1*

Lab Sample ID: LCS 240-528626/3
Matrix: Water
Analysis Batch: 528626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	11.7		ug/L		117	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*66 - 120*

Lab Sample ID: 240-167067-G-2 MS
Matrix: Water
Analysis Batch: 528626

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	10.9		ug/L		109	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-167067-M-2 MSD
Matrix: Water
Analysis Batch: 528626

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	11.9		ug/L		119	51 - 153	9	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*66 - 120*

GC/MS VOA

Analysis Batch: 528391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-2	MH-1256_052322	Total/NA	Water	8260D SIM	
240-167259-3	MH-1259_052322	Total/NA	Water	8260D SIM	
240-167259-4	MH-1244_052322	Total/NA	Water	8260D SIM	
240-167259-5	MH-1231_052322	Total/NA	Water	8260D SIM	
240-167259-6	SL-2_052322	Total/NA	Water	8260D SIM	
240-167259-7	DUP-02_052322	Total/NA	Water	8260D SIM	
240-167259-8	SL-15_052422	Total/NA	Water	8260D SIM	
240-167259-9	SL-14_052422	Total/NA	Water	8260D SIM	
240-167259-10	SL-7_052422	Total/NA	Water	8260D SIM	
240-167259-12	SL-4_052522	Total/NA	Water	8260D SIM	
240-167259-13	DUP-01_052522	Total/NA	Water	8260D SIM	
240-167259-14	SL-18_052522	Total/NA	Water	8260D SIM	
240-167259-15	SL-17_052522	Total/NA	Water	8260D SIM	
240-167259-16	SL-16_052522	Total/NA	Water	8260D SIM	
240-167259-17	SL-3_052522	Total/NA	Water	8260D SIM	
240-167259-18	SL-20_052522	Total/NA	Water	8260D SIM	
240-167259-19	SL-21_052522	Total/NA	Water	8260D SIM	
MB 240-528391/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-528391/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166981-B-8 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-166981-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 528392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-20	SL-22_052522	Total/NA	Water	8260D SIM	
240-167259-22	SL-19_052422	Total/NA	Water	8260D SIM	
240-167259-23	SL-12_052422	Total/NA	Water	8260D SIM	
240-167259-24	SL-23_052422	Total/NA	Water	8260D SIM	
240-167259-25	SL-11_052422	Total/NA	Water	8260D SIM	
240-167259-26	SL-10_052422	Total/NA	Water	8260D SIM	
240-167259-27	SL-9_052422	Total/NA	Water	8260D SIM	
240-167259-28	SL-8_052422	Total/NA	Water	8260D SIM	
240-167259-29	MH-1255_052422	Total/NA	Water	8260D SIM	
240-167259-31	MH-1231A_052422	Total/NA	Water	8260D SIM	
240-167259-32	SL-6_052422	Total/NA	Water	8260D SIM	
240-167259-33	SL-5_052422	Total/NA	Water	8260D SIM	
MB 240-528392/15	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-528392/14	Lab Control Sample	Total/NA	Water	8260D SIM	
240-167259-20 MS	SL-22_052522	Total/NA	Water	8260D SIM	
240-167259-20 MSD	SL-22_052522	Total/NA	Water	8260D SIM	

Analysis Batch: 528626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-34	SL-13_052422	Total/NA	Water	8260D SIM	
MB 240-528626/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-528626/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-167067-G-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-167067-M-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

GC/MS VOA

Analysis Batch: 529183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-1	TRIP BLANK_1	Total/NA	Water	8260D	
240-167259-2	MH-1256_052322	Total/NA	Water	8260D	
240-167259-3	MH-1259_052322	Total/NA	Water	8260D	
240-167259-4	MH-1244_052322	Total/NA	Water	8260D	
240-167259-5	MH-1231_052322	Total/NA	Water	8260D	
240-167259-6	SL-2_052322	Total/NA	Water	8260D	
240-167259-7	DUP-02_052322	Total/NA	Water	8260D	
240-167259-23	SL-12_052422	Total/NA	Water	8260D	
240-167259-24	SL-23_052422	Total/NA	Water	8260D	
MB 240-529183/8	Method Blank	Total/NA	Water	8260D	
LCS 240-529183/5	Lab Control Sample	Total/NA	Water	8260D	
240-167012-F-7 MS	Matrix Spike	Total/NA	Water	8260D	
240-167012-G-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 529192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-8	SL-15_052422	Total/NA	Water	8260D	
240-167259-9	SL-14_052422	Total/NA	Water	8260D	
240-167259-10	SL-7_052422	Total/NA	Water	8260D	
240-167259-11	TRIP BLANK_2	Total/NA	Water	8260D	
240-167259-12	SL-4_052522	Total/NA	Water	8260D	
240-167259-13	DUP-01_052522	Total/NA	Water	8260D	
240-167259-14	SL-18_052522	Total/NA	Water	8260D	
240-167259-15	SL-17_052522	Total/NA	Water	8260D	
240-167259-16	SL-16_052522	Total/NA	Water	8260D	
240-167259-17	SL-3_052522	Total/NA	Water	8260D	
240-167259-18	SL-20_052522	Total/NA	Water	8260D	
240-167259-19	SL-21_052522	Total/NA	Water	8260D	
240-167259-20	SL-22_052522	Total/NA	Water	8260D	
240-167259-21	TRIP BLANK_3	Total/NA	Water	8260D	
240-167259-22	SL-19_052422	Total/NA	Water	8260D	
MB 240-529192/6	Method Blank	Total/NA	Water	8260D	
LCS 240-529192/4	Lab Control Sample	Total/NA	Water	8260D	
240-167235-D-1 MS	Matrix Spike	Total/NA	Water	8260D	
240-167235-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 529287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-25	SL-11_052422	Total/NA	Water	8260D	
240-167259-26	SL-10_052422	Total/NA	Water	8260D	
240-167259-27	SL-9_052422	Total/NA	Water	8260D	
240-167259-28	SL-8_052422	Total/NA	Water	8260D	
240-167259-29	MH-1255_052422	Total/NA	Water	8260D	
240-167259-30	TRIP BLANK_4	Total/NA	Water	8260D	
240-167259-31	MH-1231A_052422	Total/NA	Water	8260D	
240-167259-32	SL-6_052422	Total/NA	Water	8260D	
240-167259-33	SL-5_052422	Total/NA	Water	8260D	
240-167259-34	SL-13_052422	Total/NA	Water	8260D	
MB 240-529287/8	Method Blank	Total/NA	Water	8260D	
LCS 240-529287/5	Lab Control Sample	Total/NA	Water	8260D	
240-167178-B-11 MS	Matrix Spike	Total/NA	Water	8260D	

GC/MS VOA (Continued)

Analysis Batch: 529287 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167178-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 529325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167259-12	SL-4_052522	Total/NA	Water	8260D	
240-167259-13	DUP-01_052522	Total/NA	Water	8260D	
240-167259-14	SL-18_052522	Total/NA	Water	8260D	
240-167259-15	SL-17_052522	Total/NA	Water	8260D	
240-167259-16	SL-16_052522	Total/NA	Water	8260D	
240-167259-17	SL-3_052522	Total/NA	Water	8260D	
MB 240-529325/6	Method Blank	Total/NA	Water	8260D	
LCS 240-529325/4	Lab Control Sample	Total/NA	Water	8260D	
240-167335-C-6 MS	Matrix Spike	Total/NA	Water	8260D	
240-167335-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_1
Lab Sample ID: 240-167259-1
Date Collected: 05/23/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 16:09	HMB	TAL CAN

Client Sample ID: MH-1256_052322
Lab Sample ID: 240-167259-2
Date Collected: 05/23/22 12:28
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 16:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 17:26	CS	TAL CAN

Client Sample ID: MH-1259_052322
Lab Sample ID: 240-167259-3
Date Collected: 05/23/22 12:55
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 16:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 17:51	CS	TAL CAN

Client Sample ID: MH-1244_052322
Lab Sample ID: 240-167259-4
Date Collected: 05/23/22 13:20
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 17:23	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 18:16	CS	TAL CAN

Client Sample ID: MH-1231_052322
Lab Sample ID: 240-167259-5
Date Collected: 05/23/22 13:40
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 17:47	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 18:41	CS	TAL CAN

Client Sample ID: SL-2_052322
Lab Sample ID: 240-167259-6
Date Collected: 05/23/22 14:20
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 18:12	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 19:05	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-02_052322
Lab Sample ID: 240-167259-7
Date Collected: 05/23/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 18:36	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 19:30	CS	TAL CAN

Client Sample ID: SL-15_052422
Lab Sample ID: 240-167259-8
Date Collected: 05/24/22 09:26
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 14:10	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 19:55	CS	TAL CAN

Client Sample ID: SL-14_052422
Lab Sample ID: 240-167259-9
Date Collected: 05/24/22 09:41
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 14:36	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 20:20	CS	TAL CAN

Client Sample ID: SL-7_052422
Lab Sample ID: 240-167259-10
Date Collected: 05/24/22 11:04
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 15:01	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 20:45	CS	TAL CAN

Client Sample ID: TRIP BLANK_2
Lab Sample ID: 240-167259-11
Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 13:20	SAM	TAL CAN

Client Sample ID: SL-4_052522
Lab Sample ID: 240-167259-12
Date Collected: 05/25/22 09:45
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 15:26	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 15:36	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 21:10	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: DUP-01_052522
Lab Sample ID: 240-167259-13
Date Collected: 05/25/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 15:51	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 16:01	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 21:35	CS	TAL CAN

Client Sample ID: SL-18_052522
Lab Sample ID: 240-167259-14
Date Collected: 05/25/22 10:30
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 16:16	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 16:26	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 22:00	CS	TAL CAN

Client Sample ID: SL-17_052522
Lab Sample ID: 240-167259-15
Date Collected: 05/25/22 10:50
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 16:41	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 16:51	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 22:25	CS	TAL CAN

Client Sample ID: SL-16_052522
Lab Sample ID: 240-167259-16
Date Collected: 05/25/22 11:10
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 17:06	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 17:16	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 22:50	CS	TAL CAN

Client Sample ID: SL-3_052522
Lab Sample ID: 240-167259-17
Date Collected: 05/25/22 11:32
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 17:31	SAM	TAL CAN
Total/NA	Analysis	8260D		1	529325	06/06/22 17:41	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 23:15	CS	TAL CAN

Client Sample ID: SL-20_052522
Lab Sample ID: 240-167259-18
Date Collected: 05/25/22 14:51
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 17:56	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/28/22 23:39	CS	TAL CAN

Client Sample ID: SL-21_052522
Lab Sample ID: 240-167259-19
Date Collected: 05/25/22 14:34
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 18:21	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528391	05/29/22 00:04	CS	TAL CAN

Client Sample ID: SL-22_052522
Lab Sample ID: 240-167259-20
Date Collected: 05/25/22 15:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 18:46	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 19:50	CS	TAL CAN

Client Sample ID: TRIP BLANK_3
Lab Sample ID: 240-167259-21
Date Collected: 05/24/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 13:45	SAM	TAL CAN

Client Sample ID: SL-19_052422
Lab Sample ID: 240-167259-22
Date Collected: 05/24/22 15:20
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529192	06/04/22 19:11	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		2	528392	05/28/22 21:01	CS	TAL CAN

Client Sample ID: SL-12_052422
Lab Sample ID: 240-167259-23
Date Collected: 05/24/22 14:46
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 19:01	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 21:25	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: SL-23_052422
Lab Sample ID: 240-167259-24
Date Collected: 05/24/22 14:24
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529183	06/04/22 19:25	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 21:49	CS	TAL CAN

Client Sample ID: SL-11_052422
Lab Sample ID: 240-167259-25
Date Collected: 05/24/22 14:05
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 15:17	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 22:13	CS	TAL CAN

Client Sample ID: SL-10_052422
Lab Sample ID: 240-167259-26
Date Collected: 05/24/22 13:50
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 15:41	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 22:36	CS	TAL CAN

Client Sample ID: SL-9_052422
Lab Sample ID: 240-167259-27
Date Collected: 05/24/22 13:20
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 16:06	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 23:00	CS	TAL CAN

Client Sample ID: SL-8_052422
Lab Sample ID: 240-167259-28
Date Collected: 05/24/22 13:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 16:30	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 23:24	CS	TAL CAN

Client Sample ID: MH-1255_052422
Lab Sample ID: 240-167259-29
Date Collected: 05/24/22 16:05
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		4	529287	06/06/22 16:55	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/28/22 23:48	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Client Sample ID: TRIP BLANK_4
Lab Sample ID: 240-167259-30
Date Collected: 05/24/22 00:00
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 17:20	HMB	TAL CAN

Client Sample ID: MH-1231A_052422
Lab Sample ID: 240-167259-31
Date Collected: 05/24/22 16:30
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	529287	06/06/22 17:44	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/29/22 00:12	CS	TAL CAN

Client Sample ID: SL-6_052422
Lab Sample ID: 240-167259-32
Date Collected: 05/24/22 11:20
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 18:09	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/29/22 00:36	CS	TAL CAN

Client Sample ID: SL-5_052422
Lab Sample ID: 240-167259-33
Date Collected: 05/24/22 11:38
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 18:33	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528392	05/29/22 01:00	CS	TAL CAN

Client Sample ID: SL-13_052422
Lab Sample ID: 240-167259-34
Date Collected: 05/24/22 09:56
Matrix: Water
Date Received: 05/26/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	529287	06/06/22 18:58	HMB	TAL CAN
Total/NA	Analysis	8260D SIM		1	528626	05/31/22 22:46	CS	TAL CAN

Laboratory References:
TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Job ID: 240-167259-1
Project/Site: Ford LTP - Utility Corridor Sampling

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

1.2/1.2 0.9/0.9

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: / COCs
Phone: 248-994-2240	Sampler Name: James Unsworth Korey Pearson, Samantha Hindle, ~~Sommer Guy~~ Sara Sykacia ~~Joe~~	TAT if different from below: 3 day	For lab use only: Walk-in client; Lab sampling; Job/SDG No:
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		
Project Number: 30080642.701.04	Shipping/Tracking No:		
PO # 30080642.701.04			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_1	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-1256_052322	5/23/22	12:28		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1259_052322	5/23/22	12:55		X						6					N	G	X	X	X	X	X	X	X	
MH-1244_052322	5/23/22	13:20		X						6					N	G	X	X	X	X	X	X	X	
MH-1231_052322	5/23/22	13:40		X						6					N	G	X	X	X	X	X	X	X	
SL-2_052322	5/23/22	14:20		X						6					N	G	X	X	X	X	X	X	X	
DUP-02_052322	5/23/22	~~13:00~~		X						6					N	G	X	X	X	X	X	X	X	
SL-15_052422	5/24/22	9:26		X						6					N	G	X	X	X	X	X	X	X	
SL-14_052422	5/24/22	9:41		X						6					N	G	X	X	X	X	X	X	X	
SL-7_052422	5/24/22	11:04		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Dye testing took place, which effected sample color

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Korey Pearson	Arcadis	5/25/22 15:28	Kelly Mc	EEA	5/25/22 1500
Relinquished by: Kelly Mc	Company: EEA	Date/Time: 5/25/22 1500	Received by:	Company: EETNC	Date/Time: 5/26/22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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240-167259 Chain of Custody

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: 1 of 2 COCs
Phone: 248-994-2240	Sampler Name: Korey Pearson, Samantha Hindle, Sommer Guy	TAT if different from below: 3 day	For lab use only
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:		Walk-in client
Project Number: 30080642.701.04	Shipping/Tracking No:		Lab sampling
PO # 30080642.701.04			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_2	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-4_052522	05/25/22	0945		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
DUP-01_052522	05/25/22	—		X						6					N	G	X	X	X	X	X	X	X	
SL-18_052522	05/25/22	10:30		X						6					N	G	X	X	X	X	X	X	X	
SL-17_052522	05/25/22	1050		X						6					N	G	X	X	X	X	X	X	X	
SL-16_052522	05/25/22	1110		X						6					N	G	X	X	X	X	X	X	X	
SL-3_052522	05/25/22	1132		X						6					N	G	X	X	X	X	X	X	X	
SL-20_052322	05/23/22	1451		X						6					N	G	X	X	X	X	X	X	X	
SL-21_052322	05/23/22	1434		X						6					N	G	X	X	X	X	X	X	X	
SL-22_052422	05/24/22	1500		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

	Company	Date/Time		Company	Date/Time
Relinquished by: [signature]	Arcadis	5/25/22 15:00	Received by: [signature]	EETA	5/25/22 1500
Relinquished by: [signature]	EETA	5/25/22 1500	Received by: [signature]	EETNC	5-26-22 0800
Relinquished by:			Received in Laboratory by: [signature]		

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Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other		
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	COC No: 3
Phone: 248-994-2240	Sampler Name: James Unsworth Sam Sukey ~~Korey Pearson~~, Samantha Hindle, ~~Sommer Guy~~	TAT if different from below ☐	COCs
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:	3 day ☐	For lab use only
Project Number: 30080642.701.04	Shipping/Tracking No:		Walk-in client
PO # 30080642.701.04			Lab sampling
			Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK _3	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
SL-14_052422	05/24/22	1520		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-12_052422	05/24/22	1446		X						6					N	G	X	X	X	X	X	X	X	
SL-23_052422	05/24/22	1424		X						6					N	G	X	X	X	X	X	X	X	
SL-11_052422	05/24/22	1405		X						6					N	G	X	X	X	X	X	X	X	
SL-10_052422	05/24/22	1350		X						6					N	G	X	X	X	X	X	X	X	
SL-9_052422	05/24/22	1320		X						6					N	G	X	X	X	X	X	X	X	
SL-8_052422	05/24/22	1300		X						6					N	G	X	X	X	X	X	X	X	
MH_																								
MH-125_052422	05/24/22	16:05		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
James Unsworth	Arcadis	5/25/22 15:00	Cally Moore	EETA	5/25/22 1500
Relinquished by: Cally Moore	Company: EETA	Date/Time: 5/25/22 1500	Received by:	Company: EETNC	Date/Time: 5-26-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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6/9/2022

MICHIGAN 190

Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Quinn Carnahan	Lab Contact: Mike DelMonico	COC No: 4
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 585-662-4023	Telephone: 330-497-9396	COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240	Sampler Name: James Unsworth, Korey Pearson, Samantha Hindle, ~~Sommer Day~~ SamSalvaggio	TAT if different from below ☐ 3 day		Walk-in client
Project Name: Ford LTP Utility Corridor Sampling	Method of Shipment/Carrier:			Lab sampling
Project Number: 30080642.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30080642.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_4	—	—		X						1					N	G	X	X	X	X	X	X	X	1 Trip Blank
MH-123A_052422	05/24/22	16:30		X						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
SL-6_052422	05/24/22	11:20		X						6					N	G	X	X	X	X	X	X	X	
SL-5_052422	05/24/22	11:38		X						6					N	G	X	X	X	X	X	X	X	
SL-13_052422	05/24/22	9:56		X						6					N	G	X	X	X	X	X	X	X	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E205162
Level IV Reporting requested.

All Samples collected from sanitary sewers (contain sanitary waste)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
James Unsworth	Arcadis	5/25/22 15:00		EEA	5/25/22 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EEA	5/05/22 1500		EETNC	5-26-22 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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6/9/2022

Eurofins - Canton Sample Receipt Form/Narrative **Login # :** 164259
Barberton Facility

Client Arcadis Site Name Ford LTP

Cooler unpacked by:

Cooler Received on 5-26-22 Opened on

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

Eurofins Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-13 (CF **0.0** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF **-0.7**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Y)	(Y) (Y)
10. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11. Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No	(NA) pH Strip Lot# **HC157842**
14. Were VOAs on the COC?	(Yes)	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	(Yes)	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0104201G	(Yes)	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) 1x40mL vial for SL-17 were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 167259

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	**IR-13** IR-15	1.2	1.2	**Wet Ice** Blue Ice Dry Ice Water None
TA Client Box Other	**IR-13** IR-15	0.9	0.9	**Wet Ice** Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-132013-1
Client Project/Site: Ford LTP

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
6/30/2020 11:58:51 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-132013-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP

Report Number: 240-132013-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/17/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-132013-1), MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3), MH-1020_061620 (240-132013-4) and MH-1219_061620 (240-132013-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/25/2020.

Samples MH-1043_061620 (240-132013-2)[5X], MH-1067_061620 (240-132013-3)[5X] and MH-1020_061620 (240-132013-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3) and MH-1020_061620 (240-132013-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS

Sample MH-1020_061620 (240-132013-7) was analyzed for volatile organic compounds in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/26/2020.

Job ID: 240-132013-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MH-1043_061620 (240-132013-2), MH-1067_061620 (240-132013-3), MH-1020_061620 (240-132013-4) and MH-1219_061620 (240-132013-6) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/26/2020.

Sample MH-1020_061620 (240-132013-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MH-1020_061620 (240-132013-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Sample MH-1020_061620 (240-132013-7) was analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 06/23/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-132013-1	TRIP BLANK	Water	06/16/20 00:00	06/17/20 09:30	
240-132013-2	MH-1043_061620	Water	06/16/20 08:30	06/17/20 09:30	
240-132013-3	MH-1067_061620	Water	06/16/20 09:00	06/17/20 09:30	
240-132013-4	MH-1020_061620	Water	06/16/20 09:38	06/17/20 09:30	
240-132013-6	MH-1219_061620	Water	06/16/20 14:22	06/17/20 09:30	
240-132013-7	MH-1020_061620	Solid	06/16/20 09:45	06/17/20 09:30	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-132013-1

No Detections.

Client Sample ID: MH-1043_061620 — Lab Sample ID: 240-132013-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.2	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MH-1067_061620 — Lab Sample ID: 240-132013-3

No Detections.

Client Sample ID: MH-1020_061620 — Lab Sample ID: 240-132013-4

No Detections.

Client Sample ID: MH-1219_061620 — Lab Sample ID: 240-132013-6

No Detections.

Client Sample ID: MH-1020_061620 — Lab Sample ID: 240-132013-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK

Date Collected: 06/16/20 00:00
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 04:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 04:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 04:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 04:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 04:12	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 130*		*06/25/20 04:12*	*1*
4-Bromofluorobenzene (Surr)	*84*		*47 - 134*		*06/25/20 04:12*	*1*
Toluene-d8 (Surr)	*87*		*69 - 122*		*06/25/20 04:12*	*1*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 04:12*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1043_061620
Date Collected: 06/16/20 08:30
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.2	J	2.0	0.86	ug/L			06/26/20 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*06/26/20 12:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:35	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 04:35	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 04:35	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:35	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 04:35	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 04:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 04:35*	*5*
4-Bromofluorobenzene (Surr)	*78*		*47 - 134*		*06/25/20 04:35*	*5*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 04:35*	*5*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 04:35*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1067_061620

Date Collected: 06/16/20 09:00
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/26/20 13:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:58	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 04:58	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 04:58	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 04:58	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 04:58	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 04:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 04:58*	*5*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*06/25/20 04:58*	*5*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/25/20 04:58*	*5*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/25/20 04:58*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620

Date Collected: 06/16/20 09:38
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	10	U	10	4.3	ug/L			06/26/20 13:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 133*		*06/26/20 13:50*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 05:21	5
cis-1,2-Dichloroethene	5.0	U	5.0	0.80	ug/L			06/25/20 05:21	5
Tetrachloroethene	5.0	U	5.0	0.75	ug/L			06/25/20 05:21	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.95	ug/L			06/25/20 05:21	5
Trichloroethene	5.0	U	5.0	0.50	ug/L			06/25/20 05:21	5
Vinyl chloride	5.0	U	5.0	1.0	ug/L			06/25/20 05:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 05:21*	*5*
4-Bromofluorobenzene (Surr)	*80*		*47 - 134*		*06/25/20 05:21*	*5*
Toluene-d8 (Surr)	*87*		*69 - 122*		*06/25/20 05:21*	*5*
Dibromofluoromethane (Surr)	*95*		*78 - 129*		*06/25/20 05:21*	*5*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1219_061620
Date Collected: 06/16/20 14:22
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-6
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*06/26/20 14:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 05:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 05:45	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 05:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 05:45	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 05:45	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 130*		*06/25/20 05:45*	*1*
4-Bromofluorobenzene (Surr)	*78*		*47 - 134*		*06/25/20 05:45*	*1*
Toluene-d8 (Surr)	*86*		*69 - 122*		*06/25/20 05:45*	*1*
Dibromofluoromethane (Surr)	*97*		*78 - 129*		*06/25/20 05:45*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620
Date Collected: 06/16/20 09:45
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-7
Matrix: Solid
Percent Solids: 63.9

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	83	U	83	33	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
1,4-Dioxane	26000	U	26000	2300	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
cis-1,2-Dichloroethene	83	U	83	19	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Tetrachloroethene	83	U	83	37	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
trans-1,2-Dichloroethene	83	U	83	21	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Trichloroethene	83	U	83	23	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1
Vinyl chloride	66	U	66	25	ug/Kg	☼	06/22/20 21:58	06/26/20 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*47 - 136*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
Dibromofluoromethane (Surr)	*86*		*49 - 122*	*06/22/20 21:58*	*06/26/20 19:47*	*1*
Toluene-d8 (Surr)	*91*		*55 - 123*	*06/22/20 21:58*	*06/26/20 19:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**63.9**		0.1	0.1	%			06/23/20 15:14	1
Percent Moisture	**36.1**		0.1	0.1	%			06/23/20 15:14	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-132013-1	TRIP BLANK	88	84	87	95
240-132013-2	MH-1043_061620	87	78	86	95
240-132013-3	MH-1067_061620	89	80	88	96
240-132013-4	MH-1020_061620	87	80	87	95
240-132013-6	MH-1219_061620	89	78	86	97
240-132049-E-1 MS	Matrix Spike	79	89	92	91
240-132049-F-1 MSD	Matrix Spike Duplicate	80	87	91	91
LCS 240-439903/4	Lab Control Sample	80	87	91	92
MB 240-439903/7	Method Blank	87	77	88	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(47-136)	(51-124)	(49-122)	(55-123)
240-132013-7	MH-1020_061620	103	83	86	91
240-132013-7 MS	MH-1020_061620	99	83	89	88
240-132013-7 MSD	MH-1020_061620	97	82	87	87
LCS 240-439507/2-A	Lab Control Sample	97	83	89	89
MB 240-439507/1-A	Method Blank	95	79	81	87

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(70-133)
240-132013-2	MH-1043_061620	98
240-132013-3	MH-1067_061620	97
240-132013-4	MH-1020_061620	94
240-132013-6	MH-1219_061620	98
240-132112-A-9 MS	Matrix Spike	101
240-132112-A-9 MSD	Matrix Spike Duplicate	102
LCS 240-440164/4	Lab Control Sample	96
MB 240-440164/5	Method Blank	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439903/7
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/25/20 01:53	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/25/20 01:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/25/20 01:53	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/25/20 01:53	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/25/20 01:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*06/25/20 01:53*	*1*
4-Bromofluorobenzene (Surr)	*77*		*47 - 134*		*06/25/20 01:53*	*1*
Toluene-d8 (Surr)	*88*		*69 - 122*		*06/25/20 01:53*	*1*
Dibromofluoromethane (Surr)	*96*		*78 - 129*		*06/25/20 01:53*	*1*

Lab Sample ID: LCS 240-439903/4
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.29		ug/L		93	73 - 129
cis-1,2-Dichloroethene	10.0	9.83		ug/L		98	75 - 124
Tetrachloroethene	10.0	11.0		ug/L		110	70 - 125
trans-1,2-Dichloroethene	10.0	9.50		ug/L		95	74 - 130
Trichloroethene	10.0	10.1		ug/L		101	71 - 121
Vinyl chloride	10.0	9.48		ug/L		95	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 130*
4-Bromofluorobenzene (Surr)	*87*		*47 - 134*
Toluene-d8 (Surr)	*91*		*69 - 122*
Dibromofluoromethane (Surr)	*92*		*78 - 129*

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.83	J	10.0	9.22		ug/L		84	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.31		ug/L		93	68 - 121
Tetrachloroethene	1.0	U	10.0	9.71		ug/L		97	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	8.98		ug/L		90	69 - 126
Trichloroethene	1.0	U	10.0	8.81		ug/L		88	56 - 124
Vinyl chloride	0.86	J	10.0	8.90		ug/L		80	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 130*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*
Toluene-d8 (Surr)	*92*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-132049-E-1 MS
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	91		78 - 129

Lab Sample ID: 240-132049-F-1 MSD
Matrix: Water
Analysis Batch: 439903

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.83	J	10.0	9.96		ug/L		91	64 - 132	8	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.60		ug/L		96	68 - 121	3	35
Tetrachloroethene	1.0	U	10.0	10.5		ug/L		105	52 - 129	8	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.47		ug/L		95	69 - 126	5	35
Trichloroethene	1.0	U	10.0	9.53		ug/L		95	56 - 124	8	35
Vinyl chloride	0.86	J	10.0	9.55		ug/L		87	49 - 136	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	80		75 - 130
4-Bromofluorobenzene (Surr)	87		47 - 134
Toluene-d8 (Surr)	91		69 - 122
Dibromofluoromethane (Surr)	91		78 - 129

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-439507/1-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	40	U	40	16	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
1,4-Dioxane	13000	U	13000	1100	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Tetrachloroethene	40	U	40	18	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Trichloroethene	40	U	40	11	ug/Kg		06/22/20 21:58	06/26/20 18:39	1
Vinyl chloride	32	U	32	12	ug/Kg		06/22/20 21:58	06/26/20 18:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		47 - 136	06/22/20 21:58	06/26/20 18:39	1
4-Bromofluorobenzene (Surr)	79		51 - 124	06/22/20 21:58	06/26/20 18:39	1
Dibromofluoromethane (Surr)	81		49 - 122	06/22/20 21:58	06/26/20 18:39	1
Toluene-d8 (Surr)	87		55 - 123	06/22/20 21:58	06/26/20 18:39	1

Lab Sample ID: LCS 240-439507/2-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1000	1190		ug/Kg		119	48 - 140
1,4-Dioxane	20000	21800		ug/Kg		109	44 - 154

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-439507/2-A
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	1000	964		ug/Kg		96	76 - 120
Tetrachloroethene	1000	970		ug/Kg		97	75 - 124
trans-1,2-Dichloroethene	1000	1050		ug/Kg		105	74 - 125
Trichloroethene	1000	976		ug/Kg		98	75 - 123
Vinyl chloride	1000	880		ug/Kg		88	39 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*47 - 136*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*
Dibromofluoromethane (Surr)	*89*		*49 - 122*
Toluene-d8 (Surr)	*89*		*55 - 123*

Lab Sample ID: 240-132013-7 MS
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	83	U	1540	1670		ug/Kg	☼	108	20 - 150
1,4-Dioxane	26000	U	30700	32800		ug/Kg	☼	107	48 - 149
cis-1,2-Dichloroethene	83	U	1540	1470		ug/Kg	☼	95	35 - 130
Tetrachloroethene	83	U	1540	1370		ug/Kg	☼	89	13 - 144
trans-1,2-Dichloroethene	83	U	1540	1510		ug/Kg	☼	99	31 - 138
Trichloroethene	83	U	1540	1420		ug/Kg	☼	93	10 - 162
Vinyl chloride	66	U	1540	1240		ug/Kg	☼	81	15 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*47 - 136*
4-Bromofluorobenzene (Surr)	*83*		*51 - 124*
Dibromofluoromethane (Surr)	*89*		*49 - 122*
Toluene-d8 (Surr)	*88*		*55 - 123*

Lab Sample ID: 240-132013-7 MSD
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	83	U	1500	1590		ug/Kg	☼	106	20 - 150	5	40
1,4-Dioxane	26000	U	29900	32400		ug/Kg	☼	108	48 - 149	1	40
cis-1,2-Dichloroethene	83	U	1500	1420		ug/Kg	☼	95	35 - 130	3	40
Tetrachloroethene	83	U	1500	1370		ug/Kg	☼	92	13 - 144	0	40
trans-1,2-Dichloroethene	83	U	1500	1470		ug/Kg	☼	99	31 - 138	3	40
Trichloroethene	83	U	1500	1380		ug/Kg	☼	92	10 - 162	3	40
Vinyl chloride	66	U	1500	1210		ug/Kg	☼	81	15 - 150	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*47 - 136*
4-Bromofluorobenzene (Surr)	*82*		*51 - 124*
Dibromofluoromethane (Surr)	*87*		*49 - 122*

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-132013-7 MSD
Matrix: Solid
Analysis Batch: 440287

Client Sample ID: MH-1020_061620
Prep Type: Total/NA
Prep Batch: 439507

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*87*		*55 - 123*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-440164/5
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			06/26/20 07:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*		*06/26/20 07:43*	*1*

Lab Sample ID: LCS 240-440164/4
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	9.95		ug/L		99	80 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MS
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	2.0	U	10.0	9.11		ug/L		91	46 - 170		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 133*

Lab Sample ID: 240-132112-A-9 MSD
Matrix: Water
Analysis Batch: 440164

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.4		ug/L		104	46 - 170	13	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 133*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Method: Moisture - Percent Moisture

Lab Sample ID: 240-132218-A-3 DU
Matrix: Solid
Analysis Batch: 439665

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	97.3			97.4		%				0.2	20
Percent Moisture	2.7			2.6		%				6	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

GC/MS VOA

Prep Batch: 439507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	5030B	
MB 240-439507/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 240-439507/2-A	Lab Control Sample	Total/NA	Solid	5030B	
240-132013-7 MS	MH-1020_061620	Total/NA	Solid	5030B	
240-132013-7 MSD	MH-1020_061620	Total/NA	Solid	5030B	

Analysis Batch: 439903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-1	TRIP BLANK	Total/NA	Water	8260B	
240-132013-2	MH-1043_061620	Total/NA	Water	8260B	
240-132013-3	MH-1067_061620	Total/NA	Water	8260B	
240-132013-4	MH-1020_061620	Total/NA	Water	8260B	
240-132013-6	MH-1219_061620	Total/NA	Water	8260B	
MB 240-439903/7	Method Blank	Total/NA	Water	8260B	
LCS 240-439903/4	Lab Control Sample	Total/NA	Water	8260B	
240-132049-E-1 MS	Matrix Spike	Total/NA	Water	8260B	
240-132049-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 440164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-2	MH-1043_061620	Total/NA	Water	8260B SIM	
240-132013-3	MH-1067_061620	Total/NA	Water	8260B SIM	
240-132013-4	MH-1020_061620	Total/NA	Water	8260B SIM	
240-132013-6	MH-1219_061620	Total/NA	Water	8260B SIM	
MB 240-440164/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-440164/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-132112-A-9 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-132112-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 440287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	8260B MI	439507
MB 240-439507/1-A	Method Blank	Total/NA	Solid	8260B MI	439507
LCS 240-439507/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	439507
240-132013-7 MS	MH-1020_061620	Total/NA	Solid	8260B MI	439507
240-132013-7 MSD	MH-1020_061620	Total/NA	Solid	8260B MI	439507

General Chemistry

Analysis Batch: 439665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132013-7	MH-1020_061620	Total/NA	Solid	Moisture	
240-132218-A-3 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 240-132013-1
Date Collected: 06/16/20 00:00
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 04:12	LRW	TAL CAN

Client Sample ID: MH-1043_061620
Lab Sample ID: 240-132013-2
Date Collected: 06/16/20 08:30
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 04:35	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 12:57	TJL2	TAL CAN

Client Sample ID: MH-1067_061620
Lab Sample ID: 240-132013-3
Date Collected: 06/16/20 09:00
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 04:58	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 13:23	TJL2	TAL CAN

Client Sample ID: MH-1020_061620
Lab Sample ID: 240-132013-4
Date Collected: 06/16/20 09:38
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	439903	06/25/20 05:21	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		5	440164	06/26/20 13:50	TJL2	TAL CAN

Client Sample ID: MH-1219_061620
Lab Sample ID: 240-132013-6
Date Collected: 06/16/20 14:22
Matrix: Water
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	439903	06/25/20 05:45	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	440164	06/26/20 14:16	TJL2	TAL CAN

Client Sample ID: MH-1020_061620
Lab Sample ID: 240-132013-7
Date Collected: 06/16/20 09:45
Matrix: Solid
Date Received: 06/17/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	439665	06/23/20 15:14	BLW	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Client Sample ID: MH-1020_061620
Date Collected: 06/16/20 09:45
Date Received: 06/17/20 09:30

Lab Sample ID: 240-132013-7
Matrix: Solid
Percent Solids: 63.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			439507	06/22/20 21:58	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	440287	06/26/20 19:47	TJL1	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP

Job ID: 240-132013-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

3.2/4.1

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	} of } COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: RACHEL BIELAK/EMMA WITHERSPOON	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client: Lab sampling:
Project Name: Ford LTP ~~Off Site~~	Method of Shipment/Carrier:			Job/SDG No:
Project Number: 30050315.~~402.04~~ 701	Shipping/Tracking No:			
PO # 30050315.~~402.04~~ 701				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1																				1 TRIP BLANK
MH-1043_06/16/20	6/16/20	0830		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM
MH-1067_06/16/20	6/16/20	0900		6						6					N	G	X	X	X	X	X	X	X	
MH-1020_06/16/20	6/16/20	0938		6						6					N	G	X	X	X	X	X	X	X	
MH-1020_06/16/20	6/16/20	0945			2								2		N	G	X	X	X	X	X	X	X	2 jars, 1 for 8260B 1 for 8260B SIM
MH-1219_06/16/20	6/16/20	1422		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM

240-132013 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For [ ] Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631
Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/16/20 1625		ETA	6/16/20 1625
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETA	6/16/20 1629		ETA Can	6/17/20 0930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 132013

Client Accadis Site Name

Cooler unpacked by: Anonymous

Cooler Received on 6/17/20 Opened on 6/17/20

FedEx: 1st (Grd) Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap (Foam) Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF **+0.7** °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   IR GUN #IR-11 (CF **+0.9**°C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 4.1 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC902937**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0117701E (Yes) No
16. Was a LL Hg or Me Hg trip blank present? Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

WI-NC-099

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-142241-1
Client Project/Site: Ford LTP - Off Site

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
12/30/2020 1:48:05 PM

Michael DelMonico, Project Manager I
(330)497-9396
Michael.DelMonico@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-142241-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP - Off Site

Report Number: 240-142241-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 12/19/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TRIP BLANK (240-142241-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 12/24/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS

Sample MH-1122_121720 (240-142241-2) was analyzed for volatile organic compounds in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 12/22/2020.

The continuing calibration verification (CCV) associated with batch 240-466627 recovered above the upper control limit for 1,4-dioxane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MH-1122_121720 (240-142241-2) and (CCVIS 240-466627/4).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-142241-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

PERCENT SOLIDS

Sample MH-1122_121720 (240-142241-2) was analyzed for percent solids in accordance with ASTM Method D2216-80. The sample was analyzed on 12/22/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B MI	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-142241-1	TRIP BLANK	Water	12/17/20 00:00	12/19/20 08:00	
240-142241-2	MH-1122_121720	Solid	12/17/20 09:46	12/19/20 08:00	

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-142241-1

No Detections.

Client Sample ID: MH-1122_121720 — Lab Sample ID: 240-142241-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Client Sample ID: TRIP BLANK
Date Collected: 12/17/20 00:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142241-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 17:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 17:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 17:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 17:39	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 17:39	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 17:39	1
1,4-Dioxane	50	U	50	13	ug/L			12/24/20 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 130*		*12/24/20 17:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*47 - 134*		*12/24/20 17:39*	*1*
Toluene-d8 (Surr)	*101*		*69 - 122*		*12/24/20 17:39*	*1*
Dibromofluoromethane (Surr)	*123*		*78 - 129*		*12/24/20 17:39*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Client Sample ID: MH-1122_121720
Date Collected: 12/17/20 09:46
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142241-2
Matrix: Solid
Percent Solids: 63.3

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	86	U	86	34	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
1,4-Dioxane	27000	U	27000	2300	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
cis-1,2-Dichloroethene	86	U	86	19	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
Tetrachloroethene	86	U	86	39	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
trans-1,2-Dichloroethene	86	U	86	22	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
Trichloroethene	86	U	86	24	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1
Vinyl chloride	69	U	69	26	ug/Kg	☼	12/21/20 19:37	12/22/20 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*47 - 136*	*12/21/20 19:37*	*12/22/20 19:30*	*1*
4-Bromofluorobenzene (Surr)	*84*		*51 - 124*	*12/21/20 19:37*	*12/22/20 19:30*	*1*
Dibromofluoromethane (Surr)	*93*		*49 - 122*	*12/21/20 19:37*	*12/22/20 19:30*	*1*
Toluene-d8 (Surr)	*92*		*55 - 123*	*12/21/20 19:37*	*12/22/20 19:30*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**63.3**		0.1	0.1	%			12/22/20 18:32	1
Percent Moisture	**36.7**		0.1	0.1	%			12/22/20 18:32	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-141832-C-7 MS	Matrix Spike	141 S1+	100	69	134 S1+
240-141832-C-7 MSD	Matrix Spike Duplicate	129	112	109	126
240-142241-1	TRIP BLANK	118	91	101	123
LCS 240-466994/4	Lab Control Sample	120	103	101	128
MB 240-466994/6	Method Blank	117	97	97	118

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(47-136)	(51-124)	(49-122)	(55-123)
240-142241-2	MH-1122_121720	100	84	93	92
240-142241-2 MS	MH-1122_121720	103	94	98	98
240-142241-2 MSD	MH-1122_121720	93	88	90	90
LCS 240-466442/2-A	Lab Control Sample	89	88	86	90
LCSD 240-466442/3-A	Lab Control Sample Dup	90	89	91	92
MB 240-466442/1-A	Method Blank	96	81	89	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466994/6
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			12/24/20 13:36	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			12/24/20 13:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			12/24/20 13:36	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			12/24/20 13:36	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			12/24/20 13:36	1
1,4-Dioxane	50	U	50	13	ug/L			12/24/20 13:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 130*		*12/24/20 13:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*12/24/20 13:36*	*1*
Toluene-d8 (Surr)	*97*		*69 - 122*		*12/24/20 13:36*	*1*
Dibromofluoromethane (Surr)	*118*		*78 - 129*		*12/24/20 13:36*	*1*

Lab Sample ID: LCS 240-466994/4
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	10.5		ug/L		105	73 - 129
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	75 - 124
Tetrachloroethene	10.0	9.00		ug/L		90	70 - 125
trans-1,2-Dichloroethene	10.0	9.76		ug/L		98	74 - 130
Trichloroethene	10.0	9.05		ug/L		91	71 - 121
Vinyl chloride	10.0	9.04		ug/L		90	61 - 134
1,4-Dioxane	200	107		ug/L		53	10 - 172

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*101*		*69 - 122*
Dibromofluoromethane (Surr)	*128*		*78 - 129*

Lab Sample ID: 240-141832-C-7 MS
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	2200	F1	2000	3970		ug/L		88	68 - 121
trans-1,2-Dichloroethene	200	U F1	2000	3010	F1	ug/L		150	69 - 126
Trichloroethene	200	U	2000	1970		ug/L		98	56 - 124
Vinyl chloride	4200	F1	2000	7940	F1	ug/L		185	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*141*	*S1+*	*75 - 130*
4-Bromofluorobenzene (Surr)	*100*		*47 - 134*
Toluene-d8 (Surr)	*69*		*69 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-141832-C-7 MS
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*134*	*S1+*	*78 - 129*

Lab Sample ID: 240-141832-C-7 MSD
Matrix: Water
Analysis Batch: 466994

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	2200	F1	2000	4690	F1	ug/L		124	68 - 121	17	35
trans-1,2-Dichloroethene	200	U F1	2000	3120	F1	ug/L		156	69 - 126	4	35
Trichloroethene	200	U	2000	2080		ug/L		104	56 - 124	6	35
Vinyl chloride	4200	F1	2000	8640	E F1	ug/L		220	49 - 136	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*129*		*75 - 130*
4-Bromofluorobenzene (Surr)	*112*		*47 - 134*
Toluene-d8 (Surr)	*109*		*69 - 122*
Dibromofluoromethane (Surr)	*126*		*78 - 129*

Method: 8260B MI - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-466442/1-A
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	40	U	40	16	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
1,4-Dioxane	13000	U	13000	1100	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
cis-1,2-Dichloroethene	40	U	40	9.0	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
Tetrachloroethene	40	U	40	18	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
trans-1,2-Dichloroethene	40	U	40	10	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
Trichloroethene	40	U	40	11	ug/Kg		12/21/20 19:37	12/22/20 18:24	1
Vinyl chloride	32	U	32	12	ug/Kg		12/21/20 19:37	12/22/20 18:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*47 - 136*	*12/21/20 19:37*	*12/22/20 18:24*	*1*
4-Bromofluorobenzene (Surr)	*81*		*51 - 124*	*12/21/20 19:37*	*12/22/20 18:24*	*1*
Dibromofluoromethane (Surr)	*89*		*49 - 122*	*12/21/20 19:37*	*12/22/20 18:24*	*1*
Toluene-d8 (Surr)	*89*		*55 - 123*	*12/21/20 19:37*	*12/22/20 18:24*	*1*

Lab Sample ID: LCS 240-466442/2-A
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1000	1060		ug/Kg		106	48 - 140
1,4-Dioxane	20000	23400		ug/Kg		117	44 - 154
cis-1,2-Dichloroethene	1000	991		ug/Kg		99	76 - 120
Tetrachloroethene	1000	971		ug/Kg		97	75 - 124

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-466442/2-A
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466442

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,2-Dichloroethene			1000	1050		ug/Kg		105	74 - 125		
Trichloroethene			1000	970		ug/Kg		97	75 - 123		
Vinyl chloride			1000	923		ug/Kg		92	39 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*47 - 136*
4-Bromofluorobenzene (Surr)	*88*		*51 - 124*
Dibromofluoromethane (Surr)	*86*		*49 - 122*
Toluene-d8 (Surr)	*90*		*55 - 123*

Lab Sample ID: LCSD 240-466442/3-A
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 466442

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			1000	1080		ug/Kg		108	48 - 140	3	40
1,4-Dioxane			20000	24400		ug/Kg		122	44 - 154	4	40
cis-1,2-Dichloroethene			1000	1020		ug/Kg		102	76 - 120	3	40
Tetrachloroethene			1000	986		ug/Kg		99	75 - 124	1	40
trans-1,2-Dichloroethene			1000	1070		ug/Kg		107	74 - 125	2	40
Trichloroethene			1000	958		ug/Kg		96	75 - 123	1	40
Vinyl chloride			1000	965		ug/Kg		96	39 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*47 - 136*
4-Bromofluorobenzene (Surr)	*89*		*51 - 124*
Dibromofluoromethane (Surr)	*91*		*49 - 122*
Toluene-d8 (Surr)	*92*		*55 - 123*

Lab Sample ID: 240-142241-2 MS
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: MH-1122_121720
Prep Type: Total/NA
Prep Batch: 466442

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	86	U	1550	1760		ug/Kg	☼	114	20 - 150		
1,4-Dioxane	27000	U	31000	45800		ug/Kg	☼	148	48 - 149		
cis-1,2-Dichloroethene	86	U	1550	1740		ug/Kg	☼	112	35 - 130		
Tetrachloroethene	86	U	1550	1590		ug/Kg	☼	103	13 - 144		
trans-1,2-Dichloroethene	86	U	1550	1810		ug/Kg	☼	117	31 - 138		
Trichloroethene	86	U	1550	1630		ug/Kg	☼	105	10 - 162		
Vinyl chloride	69	U	1550	1560		ug/Kg	☼	101	15 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*47 - 136*
4-Bromofluorobenzene (Surr)	*94*		*51 - 124*
Dibromofluoromethane (Surr)	*98*		*49 - 122*
Toluene-d8 (Surr)	*98*		*55 - 123*

Method: 8260B MI - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-142241-2 MSD
Matrix: Solid
Analysis Batch: 466627

Client Sample ID: MH-1122_121720
Prep Type: Total/NA
Prep Batch: 466442

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	86	U	1570	1620		ug/Kg	☼	103	20 - 150	8	40
1,4-Dioxane	27000	U	31400	40500		ug/Kg	☼	129	48 - 149	12	40
cis-1,2-Dichloroethene	86	U	1570	1610		ug/Kg	☼	103	35 - 130	7	40
Tetrachloroethene	86	U	1570	1480		ug/Kg	☼	94	13 - 144	7	40
trans-1,2-Dichloroethene	86	U	1570	1680		ug/Kg	☼	107	31 - 138	8	40
Trichloroethene	86	U	1570	1520		ug/Kg	☼	97	10 - 162	7	40
Vinyl chloride	69	U	1570	1430		ug/Kg	☼	91	15 - 150	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*47 - 136*
4-Bromofluorobenzene (Surr)	*88*		*51 - 124*
Dibromofluoromethane (Surr)	*90*		*49 - 122*
Toluene-d8 (Surr)	*90*		*55 - 123*

Method: Moisture - Percent Moisture

Lab Sample ID: 240-142257-A-11 DU
Matrix: Solid
Analysis Batch: 466650

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	80.4			79.9		%				0.7	20
Percent Moisture	19.6			20.1		%				3	20

GC/MS VOA

Prep Batch: 466442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142241-2	MH-1122_121720	Total/NA	Solid	5030B	
MB 240-466442/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 240-466442/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 240-466442/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
240-142241-2 MS	MH-1122_121720	Total/NA	Solid	5030B	
240-142241-2 MSD	MH-1122_121720	Total/NA	Solid	5030B	

Analysis Batch: 466627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142241-2	MH-1122_121720	Total/NA	Solid	8260B MI	466442
MB 240-466442/1-A	Method Blank	Total/NA	Solid	8260B MI	466442
LCS 240-466442/2-A	Lab Control Sample	Total/NA	Solid	8260B MI	466442
LCSD 240-466442/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B MI	466442
240-142241-2 MS	MH-1122_121720	Total/NA	Solid	8260B MI	466442
240-142241-2 MSD	MH-1122_121720	Total/NA	Solid	8260B MI	466442

Analysis Batch: 466994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142241-1	TRIP BLANK	Total/NA	Water	8260B	
MB 240-466994/6	Method Blank	Total/NA	Water	8260B	
LCS 240-466994/4	Lab Control Sample	Total/NA	Water	8260B	
240-141832-C-7 MS	Matrix Spike	Total/NA	Water	8260B	
240-141832-C-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 466650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-142241-2	MH-1122_121720	Total/NA	Solid	Moisture	
240-142257-A-11 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Client Sample ID: TRIP BLANK
Date Collected: 12/17/20 00:00
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142241-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	466994	12/24/20 17:39	LEE	TAL CAN

Client Sample ID: MH-1122_121720
Date Collected: 12/17/20 09:46
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142241-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	466650	12/22/20 18:32	AJ	TAL CAN

Client Sample ID: MH-1122_121720
Date Collected: 12/17/20 09:46
Date Received: 12/19/20 08:00

Lab Sample ID: 240-142241-2
Matrix: Solid
Percent Solids: 63.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			466442	12/21/20 19:37	LAM	TAL CAN
Total/NA	Analysis	8260B MI		1	466627	12/22/20 19:30	TJL1	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - Off Site

Job ID: 240-142241-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

MICHIGAN
190

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton --- 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	of COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
Phone: 248-994-2240	Sampler Name: Emma Witherspoon	TAT if different from below ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day; 10 day		Walk-in client
Project Name: Ford LTP Off-Site	Method of Shipment/Carrier:			Lab sampling
Project Number: 30050315.701.04	Shipping/Tracking No:			Job/SDG No:
PO # 30050315.701.04				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C/Grab=G	Analyses: 1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—		1						1					N	G	X	X	X	X	X	X	X	1 Trip blank
MH-1122-121720	12/17/20	946			1										N	G	X	X	X	X	X	X	X	Method 8260B and 8260B SIM

240-142241 Chain of Custody

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com.
Level IV Reporting requested.

CADENA # E205162

ALL SAMPLES COLLECTED FROM SANITARY SEWERS (CONTAIN SANITARY WASTE)

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
E Witherspoon	Arcadis	12/17/20 1600	Andrew Baritt	Arcadis	12/17/20 1600
Andrew Baritt	Arcadis	12/17/20 1635	Novi Cold Storage	Arcadis	12/17/20 1635
E Witherspoon Novi Cold Storage	Arcadis	12/18/20 1500	E Witherspoon	Arcadis	12/18/20 1500
E Witherspoon	Arcadis	12/18/20 1530	Amanda Battershell	ETA	12/18/20 1532
Amanda Battershell	ETA	12/18/20 1532	Danny Dorer	ETA	12-19-20 800

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12/30/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 42241
Canton Facility

Client ARCADIS Site Name

Cooler unpacked by: Tammy Rizzo

Cooler Received on 12-19-20 Opened on 12-21-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF **+0.9** °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 1.3 °C
   IR GUN #IR-12 (CF **+0.5**°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N) and sample type of grab/comp (Y/N)? Yes No
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC907861**
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 59702 Yes No
17. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

WI-NC-099

eurofins | Air Toxics

6/25/2020
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30050315.701
Workorder #: 2006536

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/18/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 2006536

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30042006
FAX:		**PROJECT #**	30050315.701 Ford LTP
DATE RECEIVED:	06/18/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/25/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MH-1067_061620	TO-15	6.1 "Hg	16.1 psi
02A	MH-1043_061620	TO-15	7.8 "Hg	15.6 psi
03A	MH-1020_061620	TO-15	7.8 "Hg	15.3 psi
04A	MH-1123_061520	TO-15	9.2 "Hg	15.3 psi
05A	MH-1082_061520	TO-15	6.3 "Hg	15.6 psi
06A	DUP-01	TO-15	6.1 "Hg	15.9 psi
07A	MH-1210_061020	TO-15	9 "Hg	16.3 psi
08A	MH-1113_061520	TO-15	9.6 "Hg	14.9 psi
09A	MH-1116_061520	TO-15	4.5 "Hg	16.4 psi
10A	MH-1181_061520	TO-15	5.9 "Hg	15.4 psi
11A	MH-1096_061520	TO-15	9 "Hg	14.9 psi
12A	MH-1171_061020	TO-15	7.8 "Hg	15.7 psi
13A	MH-1122_061020	TO-15	6.3 "Hg	16.2 psi
14A	MH-1001_061020	TO-15	9 "Hg	15.5 psi
15A	MH-1088_060920	TO-15	8.6 "Hg	15.6 psi
16A	MH-1041_060920	TO-15	8.6 "Hg	15.6 psi
17A	MH-1066_060920	TO-15	9.4 "Hg	15.1 psi
18A	MH-1231_060920	TO-15	7.1 "Hg	16.1 psi
19A	EDC_060920	TO-15	7.8 "Hg	15.7 psi
20A	WDC_060920	TO-15	6.1 "Hg	16.1 psi
21A	SL-2_060920	TO-15	8.6 "Hg	15.6 psi
22A	MH-1219_061620	TO-15	7.1 "Hg	15.2 psi
23A	Lab Blank	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2006536

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30042006
FAX:		**PROJECT #**	30050315.701 Ford LTP
DATE RECEIVED:	06/18/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	06/25/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
23B	Lab Blank	TO-15	NA	NA
24A	CCV	TO-15	NA	NA
24B	CCV	TO-15	NA	NA
25A	LCS	TO-15	NA	NA
25AA	LCSD	TO-15	NA	NA
25B	LCS	TO-15	NA	NA
25BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/25/20

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2006536

Twenty-two 1 Liter Summa Canister (100% Certified) samples were received on June 18, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on sample MH-1231_060920 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_061620		
Lab ID:	2006536-01A	**Date/Time Analyzed:**	6/24/20 03:14 PM
Date/Time Collected:	6/16/20 08:50 AM	**Dilution Factor:**	2.63
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062412

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.1	5.2	Not Detected
1,4-Dioxane	123-91-1	4.6	6.6	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.1	5.2	Not Detected
Tetrachloroethene	127-18-4	2.5	5.4	8.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.1	5.2	Not Detected
Trichloroethene	79-01-6	1.7	4.2	7.1	97
Vinyl Chloride	75-01-4	0.60	2.0	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_061620		
Lab ID:	2006536-02A	**Date/Time Analyzed:**	6/24/20 03:40 PM
Date/Time Collected:	6/16/20 08:18 AM	**Dilution Factor:**	2.78
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062413

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.3	5.5	Not Detected
1,4-Dioxane	123-91-1	4.9	7.0	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.3	5.5	Not Detected
Tetrachloroethene	127-18-4	2.6	5.6	9.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.3	5.5	Not Detected
Trichloroethene	79-01-6	1.8	4.5	7.5	Not Detected
Vinyl Chloride	75-01-4	0.64	2.1	3.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	84
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_061620		
Lab ID:	2006536-03A	**Date/Time Analyzed:**	6/24/20 04:07 PM
Date/Time Collected:	6/16/20 09:28 AM	**Dilution Factor:**	2.76
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062414

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.3	5.5	Not Detected
1,4-Dioxane	123-91-1	4.9	7.0	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.3	5.5	Not Detected
Tetrachloroethene	127-18-4	2.6	5.6	9.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.3	5.5	Not Detected
Trichloroethene	79-01-6	1.8	4.4	7.4	Not Detected
Vinyl Chloride	75-01-4	0.63	2.1	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	86
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_061520		
Lab ID:	2006536-04A	**Date/Time Analyzed:**	6/24/20 04:33 PM
Date/Time Collected:	6/15/20 08:52 AM	**Dilution Factor:**	2.94
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062415

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.5	5.8	Not Detected
1,4-Dioxane	123-91-1	5.2	7.4	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.5	5.8	Not Detected
Tetrachloroethene	127-18-4	2.8	6.0	10	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	5.8	Not Detected
Trichloroethene	79-01-6	1.9	4.7	7.9	Not Detected
Vinyl Chloride	75-01-4	0.68	2.2	3.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_061520		
Lab ID:	2006536-05A	**Date/Time Analyzed:**	6/24/20 05:00 PM
Date/Time Collected:	6/15/20 12:09 PM	**Dilution Factor:**	2.61
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062416

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.1	5.2	Not Detected
1,4-Dioxane	123-91-1	4.6	6.6	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.1	5.2	Not Detected
Tetrachloroethene	127-18-4	2.5	5.3	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.1	5.2	Not Detected
Trichloroethene	79-01-6	1.7	4.2	7.0	3.7 J
Vinyl Chloride	75-01-4	0.60	2.0	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2006536-06A	**Date/Time Analyzed:**	6/24/20 05:26 PM
Date/Time Collected:	6/10/20 12:00 AM	**Dilution Factor:**	2.61
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062417

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.1	5.2	Not Detected
1,4-Dioxane	123-91-1	4.6	6.6	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.1	5.2	Not Detected
Tetrachloroethene	127-18-4	2.5	5.3	8.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.1	5.2	Not Detected
Trichloroethene	79-01-6	1.7	4.2	7.0	4.6 J
Vinyl Chloride	75-01-4	0.60	2.0	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_061020		
Lab ID:	2006536-07A	**Date/Time Analyzed:**	6/23/20 07:55 PM
Date/Time Collected:	6/10/20 12:31 PM	**Dilution Factor:**	3.01
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062321

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.6	6.0	Not Detected
1,4-Dioxane	123-91-1	5.3	7.6	22	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.6	6.0	Not Detected
Tetrachloroethene	127-18-4	2.8	6.1	10	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.6	6.0	Not Detected
Trichloroethene	79-01-6	1.9	4.8	8.1	6.7 J
Vinyl Chloride	75-01-4	0.69	2.3	3.8	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_061520		
Lab ID:	2006536-08A	**Date/Time Analyzed:**	6/24/20 03:31 AM
Date/Time Collected:	6/15/20 08:29 AM	**Dilution Factor:**	2.96
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062332

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.5	5.9	Not Detected
1,4-Dioxane	123-91-1	5.2	7.5	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.5	5.9	Not Detected
Tetrachloroethene	127-18-4	2.8	6.0	10	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	5.9	Not Detected
Trichloroethene	79-01-6	1.9	4.8	8.0	Not Detected
Vinyl Chloride	75-01-4	0.68	2.3	3.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	91
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_061520		
Lab ID:	2006536-09A	**Date/Time Analyzed:**	6/24/20 03:58 AM
Date/Time Collected:	6/15/20 08:05 AM	**Dilution Factor:**	2.49
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062333

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.0	4.9	Not Detected
1,4-Dioxane	123-91-1	4.4	6.3	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.0	4.9	Not Detected
Tetrachloroethene	127-18-4	2.4	5.1	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.99	3.0	4.9	Not Detected
Trichloroethene	79-01-6	1.6	4.0	6.7	44
Vinyl Chloride	75-01-4	0.57	1.9	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_061520		
Lab ID:	2006536-10A	**Date/Time Analyzed:**	6/24/20 07:37 PM
Date/Time Collected:	6/15/20 10:18 AM	**Dilution Factor:**	2.55
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062420

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	4.5	6.4	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	2.4	5.2	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.6	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.59	2.0	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	104
4-Bromofluorobenzene	460-00-4	70-130	91
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_061520		
Lab ID:	2006536-11A	**Date/Time Analyzed:**	6/24/20 06:18 PM
Date/Time Collected:	6/15/20 11:30 AM	**Dilution Factor:**	2.88
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.4	5.7	Not Detected
1,4-Dioxane	123-91-1	5.1	7.3	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.4	5.7	Not Detected
Tetrachloroethene	127-18-4	2.7	5.9	9.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.4	5.7	Not Detected
Trichloroethene	79-01-6	1.8	4.6	7.7	Not Detected
Vinyl Chloride	75-01-4	0.66	2.2	3.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_061020		
Lab ID:	2006536-12A	**Date/Time Analyzed:**	6/24/20 10:19 PM
Date/Time Collected:	6/10/20 10:49 AM	**Dilution Factor:**	2.79
Media:	1 Liter Summa Canister (100% Certified C	**Instrument/Filename:**	msdj.i / j062421

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.3	5.5	Not Detected
1,4-Dioxane	123-91-1	4.9	7.0	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.3	5.5	79
Tetrachloroethene	127-18-4	2.6	5.7	9.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.3	5.5	Not Detected
Trichloroethene	79-01-6	1.8	4.5	7.5	67
Vinyl Chloride	75-01-4	0.64	2.1	3.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_061020		
Lab ID:	2006536-13A	**Date/Time Analyzed:**	6/24/20 10:45 PM
Date/Time Collected:	6/10/20 10:12 AM	**Dilution Factor:**	2.66
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062422

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.2	5.3	Not Detected
1,4-Dioxane	123-91-1	4.7	6.7	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.2	5.3	6.4
Tetrachloroethene	127-18-4	2.5	5.4	9.0	9.4
trans-1,2-Dichloroethene	156-60-5	1.0	3.2	5.3	5.1 J
Trichloroethene	79-01-6	1.7	4.3	7.1	25
Vinyl Chloride	75-01-4	0.61	2.0	3.4	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	85
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_061020		
Lab ID:	2006536-14A	**Date/Time Analyzed:**	6/24/20 11:12 PM
Date/Time Collected:	6/10/20 11:41 AM	**Dilution Factor:**	2.93
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062423

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.5	5.8	Not Detected
1,4-Dioxane	123-91-1	5.2	7.4	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.5	5.8	Not Detected
Tetrachloroethene	127-18-4	2.8	6.0	9.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	5.8	Not Detected
Trichloroethene	79-01-6	1.9	4.7	7.9	26
Vinyl Chloride	75-01-4	0.67	2.2	3.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_060920		
Lab ID:	2006536-15A	**Date/Time Analyzed:**	6/24/20 11:38 PM
Date/Time Collected:	6/9/20 04:37 PM	**Dilution Factor:**	2.89
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.4	5.7	Not Detected
1,4-Dioxane	123-91-1	5.1	7.3	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.4	5.7	Not Detected
Tetrachloroethene	127-18-4	2.7	5.9	9.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.4	5.7	Not Detected
Trichloroethene	79-01-6	1.9	4.6	7.8	Not Detected
Vinyl Chloride	75-01-4	0.66	2.2	3.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	91
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_060920		
Lab ID:	2006536-16A	**Date/Time Analyzed:**	6/24/20 02:47 PM
Date/Time Collected:	6/9/20 06:16 PM	**Dilution Factor:**	2.89
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062411

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.4	5.7	Not Detected
1,4-Dioxane	123-91-1	5.1	7.3	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.4	5.7	Not Detected
Tetrachloroethene	127-18-4	2.7	5.9	9.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.4	5.7	Not Detected
Trichloroethene	79-01-6	1.9	4.6	7.8	47
Vinyl Chloride	75-01-4	0.66	2.2	3.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_060920		
Lab ID:	2006536-17A	**Date/Time Analyzed:**	6/25/20 12:05 AM
Date/Time Collected:	6/9/20 05:37 PM	**Dilution Factor:**	2.95
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	3.5	5.8	Not Detected
1,4-Dioxane	123-91-1	5.2	7.4	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.5	5.8	Not Detected
Tetrachloroethene	127-18-4	2.8	6.0	10	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	3.5	5.8	Not Detected
Trichloroethene	79-01-6	1.9	4.8	7.9	Not Detected
Vinyl Chloride	75-01-4	0.68	2.3	3.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	86
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_060920		
Lab ID:	2006536-18A	**Date/Time Analyzed:**	6/25/20 02:13 AM
Date/Time Collected:	6/9/20 02:44 PM	**Dilution Factor:**	54.9
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062430

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	37	65	110	Not Detected
1,4-Dioxane	123-91-1	97	140	400	Not Detected
cis-1,2-Dichloroethene	156-59-2	28	65	110	25000
Tetrachloroethene	127-18-4	52	110	190	Not Detected
trans-1,2-Dichloroethene	156-60-5	22	65	110	270
Trichloroethene	79-01-6	35	88	150	15000
Vinyl Chloride	75-01-4	13	42	70	9600

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_060920		
Lab ID:	2006536-19A	**Date/Time Analyzed:**	6/25/20 12:31 AM
Date/Time Collected:	6/9/20 03:32 PM	**Dilution Factor:**	2.79
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062426

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.3	5.5	Not Detected
1,4-Dioxane	123-91-1	4.9	7.0	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.3	5.5	Not Detected
Tetrachloroethene	127-18-4	2.6	5.7	9.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.3	5.5	Not Detected
Trichloroethene	79-01-6	1.8	4.5	7.5	16
Vinyl Chloride	75-01-4	0.64	2.1	3.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	87
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_060920		
Lab ID:	2006536-20A	**Date/Time Analyzed:**	6/25/20 12:57 AM
Date/Time Collected:	6/9/20 01:57 PM	**Dilution Factor:**	2.63
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062427

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.1	5.2	Not Detected
1,4-Dioxane	123-91-1	4.6	6.6	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.1	5.2	Not Detected
Tetrachloroethene	127-18-4	2.5	5.4	8.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.1	5.2	Not Detected
Trichloroethene	79-01-6	1.7	4.2	7.1	3.5 J
Vinyl Chloride	75-01-4	0.60	2.0	3.4	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_060920		
Lab ID:	2006536-21A	**Date/Time Analyzed:**	6/25/20 06:42 AM
Date/Time Collected:	6/9/20 03:58 PM	**Dilution Factor:**	2.89
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062432

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	3.4	5.7	9.5
1,4-Dioxane	123-91-1	5.1	7.3	21	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	3.4	5.7	1900
Tetrachloroethene	127-18-4	2.7	5.9	9.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	3.4	5.7	29
Trichloroethene	79-01-6	1.9	4.6	7.8	1500
Vinyl Chloride	75-01-4	0.66	2.2	3.7	520

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_061620		
Lab ID:	2006536-22A	**Date/Time Analyzed:**	6/25/20 01:49 AM
Date/Time Collected:	6/16/20 02:08 PM	**Dilution Factor:**	2.66
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j062429

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.8	3.2	5.3	Not Detected
1,4-Dioxane	123-91-1	4.7	6.7	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	3.2	5.3	31
Tetrachloroethene	127-18-4	2.5	5.4	9.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	3.2	5.3	Not Detected
Trichloroethene	79-01-6	1.7	4.3	7.1	Not Detected
Vinyl Chloride	75-01-4	0.61	2.0	3.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2006536-23A	**Date/Time Analyzed:**	6/23/20 01:42 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062309d

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.67	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	1.8	2.5	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.52	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.95	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.40	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.64	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.23	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2006536-23B	**Date/Time Analyzed:**	6/24/20 12:49 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062408a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.67	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	1.8	2.5	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.52	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.95	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.40	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.64	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.23	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2006536-24A	**Date/Time Analyzed:**	6/23/20 10:14 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062302

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	107
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	96
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	97

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2006536-24B	**Date/Time Analyzed:**	6/24/20 09:54 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062403

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	105
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2006536-25A	**Date/Time Analyzed:**	6/23/20 10:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062303

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	94
trans-1,2-Dichloroethene	156-60-5	111
Trichloroethene	79-01-6	95
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	97

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2006536-25AA	**Date/Time Analyzed:**	6/23/20 11:04 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062304

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	114
cis-1,2-Dichloroethene	156-59-2	92
Tetrachloroethene	127-18-4	98
trans-1,2-Dichloroethene	156-60-5	115
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	97

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2006536-25B	**Date/Time Analyzed:**	6/24/20 10:19 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062404

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	88
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	87
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	106
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	99

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2006536-25BB	**Date/Time Analyzed:**	6/24/20 10:43 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j062405

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	110
cis-1,2-Dichloroethene	156-59-2	89
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	109
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	102

* % Recovery is calculated using unrounded analytical results.

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9/30/2020
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30050315.701.01
Workorder #: 2009644

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 9/23/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 2009644

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.0302.04
FAX:		**PROJECT #**	30050315.701.01 Ford LTP
DATE RECEIVED:	09/23/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-2_091520	TO-15	6.7 "Hg	14.9 psi
02A	MH-1001_091520	TO-15	6.1 "Hg	15 psi
03A	MH-1041_091520	TO-15	6.3 "Hg	14.9 psi
04A	MH-1066_091620	TO-15	5.1 "Hg	14.8 psi
05A	MH-1088_091620	TO-15	5.7 "Hg	15.2 psi
06A	MH-1171_091620	TO-15	6.5 "Hg	14.8 psi
07A	MH-1219_091620	TO-15	5.5 "Hg	14.8 psi
08A	MH-1210_091620	TO-15	5.9 "Hg	15.1 psi
09A	MH-1122_091620	TO-15	7.1 "Hg	14.6 psi
10A	EDC_091620	TO-15	8 "Hg	14.8 psi
11A	WDC_091620	TO-15	5.1 "Hg	14.9 psi
12A	MH-1231_091620	TO-15	6.7 "Hg	14.9 psi
13A	MH-1123_091720	TO-15	6.7 "Hg	14.9 psi
14A	MH-1116_091720	TO-15	8.2 "Hg	14.7 psi
15A	MH-1113_091720	TO-15	5.5 "Hg	15 psi
16A	DUP-01	TO-15	3.9 "Hg	14.9 psi
17A	Lab Blank	TO-15	NA	NA
17B	Lab Blank	TO-15	NA	NA
18A	CCV	TO-15	NA	NA
18B	CCV	TO-15	NA	NA
19A	LCS	TO-15	NA	NA
19AA	LCSD	TO-15	NA	NA
19B	LCS	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2009644

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.0302.04
FAX:		**PROJECT #**	30050315.701.01 Ford LTP
DATE RECEIVED:	09/23/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
19BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 09/30/20

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209219, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-19-14, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-013, Effective date: 10/18/2019, Expiration date: 10/17/2020.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2009644

Sixteen 1 Liter Summa Canister (100% Certified) samples were received on September 23, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples SL-2_091520 and MH-1231_091620 due to the presence of high level target species.

Dilution was performed on samples MH-1219_091620 and EDC_091620 due to the presence of high level non-target species.

Dilution was performed on samples MH-1122_091620 due to matrix interference.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_091520		
Lab ID:	2009644-01A	**Date/Time Analyzed:**	9/29/20 10:41 PM
Date/Time Collected:	9/15/20 12:56 PM	**Dilution Factor:**	7.41
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092917

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	3.8	8.8	15	16
1,4-Dioxane	123-91-1	8.5	27	53	Not Detected
cis-1,2-Dichloroethene	156-59-2	4.7	8.8	15	4600
Tetrachloroethene	127-18-4	5.5	15	25	Not Detected
trans-1,2-Dichloroethene	156-60-5	5.3	8.8	15	48
Trichloroethene	79-01-6	5.2	12	20	2000
Vinyl Chloride	75-01-4	2.5	5.7	9.5	1700

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_091520		
Lab ID:	2009644-02A	**Date/Time Analyzed:**	9/29/20 04:39 PM
Date/Time Collected:	9/15/20 01:50 PM	**Dilution Factor:**	2.54
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092908

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.2	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	2.1 J
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.84	1.9	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_091520		
Lab ID:	2009644-03A	**Date/Time Analyzed:**	9/29/20 05:06 PM
Date/Time Collected:	9/15/20 02:44 PM	**Dilution Factor:**	2.55
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092909

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.2	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.85	2.0	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_091620		
Lab ID:	2009644-04A	**Date/Time Analyzed:**	9/29/20 11:07 PM
Date/Time Collected:	9/16/20 09:05 AM	**Dilution Factor:**	2.42
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092918

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.9	4.8	Not Detected
1,4-Dioxane	123-91-1	2.8	8.7	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.8	4.9	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	2.9	4.8	Not Detected
Trichloroethene	79-01-6	1.7	3.9	6.5	Not Detected
Vinyl Chloride	75-01-4	0.80	1.8	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_091620		
Lab ID:	2009644-05A	**Date/Time Analyzed:**	9/29/20 05:57 PM
Date/Time Collected:	9/16/20 09:41 AM	**Dilution Factor:**	2.51
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092911

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.1	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.0	6.7	Not Detected
Vinyl Chloride	75-01-4	0.83	1.9	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_091620		
Lab ID:	2009644-06A	**Date/Time Analyzed:**	9/29/20 06:23 PM
Date/Time Collected:	9/16/20 10:46 AM	**Dilution Factor:**	2.56
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092912

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.1	Not Detected
1,4-Dioxane	123-91-1	3.0	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.1	6.1
Tetrachloroethene	127-18-4	1.9	5.2	8.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.1	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.9	Not Detected
Vinyl Chloride	75-01-4	0.85	2.0	3.3	3.3

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_091620		
Lab ID:	2009644-07A	**Date/Time Analyzed:**	9/30/20 02:34 PM
Date/Time Collected:	9/16/20 11:29 AM	**Dilution Factor:**	32.8
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093006

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	17	39	65	Not Detected
1,4-Dioxane	123-91-1	38	120	240	41 J
cis-1,2-Dichloroethene	156-59-2	21	39	65	Not Detected
Tetrachloroethene	127-18-4	24	67	110	Not Detected
trans-1,2-Dichloroethene	156-60-5	23	39	65	Not Detected
Trichloroethene	79-01-6	23	53	88	Not Detected
Vinyl Chloride	75-01-4	11	25	42	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_091620		
Lab ID:	2009644-08A	**Date/Time Analyzed:**	9/29/20 07:14 PM
Date/Time Collected:	9/16/20 12:23 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092914

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.1	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	4.0 J
Tetrachloroethene	127-18-4	1.9	5.1	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.84	1.9	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_091620		
Lab ID:	2009644-09A	**Date/Time Analyzed:**	9/30/20 07:04 PM
Date/Time Collected:	9/16/20 08:38 AM	**Dilution Factor:**	8.70
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093016

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.5	10	17	Not Detected
1,4-Dioxane	123-91-1	10	31	63	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.5	10	17	Not Detected
Tetrachloroethene	127-18-4	6.5	18	30	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.2	10	17	Not Detected
Trichloroethene	79-01-6	6.1	14	23	Not Detected
Vinyl Chloride	75-01-4	2.9	6.7	11	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_091620		
Lab ID:	2009644-10A	**Date/Time Analyzed:**	9/30/20 06:27 PM
Date/Time Collected:	9/16/20 01:13 PM	**Dilution Factor:**	10.9
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093015

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	5.6	13	22	Not Detected
1,4-Dioxane	123-91-1	12	39	78	Not Detected
cis-1,2-Dichloroethene	156-59-2	6.9	13	22	Not Detected
Tetrachloroethene	127-18-4	8.1	22	37	48
trans-1,2-Dichloroethene	156-60-5	7.8	13	22	Not Detected
Trichloroethene	79-01-6	7.6	18	29	Not Detected
Vinyl Chloride	75-01-4	3.6	8.4	14	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_091620		
Lab ID:	2009644-11A	**Date/Time Analyzed:**	9/30/20 03:01 PM
Date/Time Collected:	9/16/20 02:34 PM	**Dilution Factor:**	2.43
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093007

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.9	4.8	Not Detected
1,4-Dioxane	123-91-1	2.8	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.8	4.9	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	2.9	4.8	Not Detected
Trichloroethene	79-01-6	1.7	3.9	6.5	17
Vinyl Chloride	75-01-4	0.81	1.9	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_091620		
Lab ID:	2009644-12A	**Date/Time Analyzed:**	9/30/20 03:25 PM
Date/Time Collected:	9/16/20 03:15 PM	**Dilution Factor:**	130
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093008

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	67	150	260	240 J
1,4-Dioxane	123-91-1	150	470	940	Not Detected
cis-1,2-Dichloroethene	156-59-2	82	150	260	42000
Tetrachloroethene	127-18-4	97	260	440	Not Detected
trans-1,2-Dichloroethene	156-60-5	93	150	260	440
Trichloroethene	79-01-6	91	210	350	18000
Vinyl Chloride	75-01-4	43	100	170	16000

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_091720		
Lab ID:	2009644-13A	**Date/Time Analyzed:**	9/30/20 04:18 PM
Date/Time Collected:	9/17/20 11:10 AM	**Dilution Factor:**	2.59
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093010

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.1	5.1	Not Detected
1,4-Dioxane	123-91-1	3.0	9.3	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.1	5.1	Not Detected
Tetrachloroethene	127-18-4	1.9	5.3	8.8	7.0 J
trans-1,2-Dichloroethene	156-60-5	1.8	3.1	5.1	Not Detected
Trichloroethene	79-01-6	1.8	4.2	7.0	2.2 J
Vinyl Chloride	75-01-4	0.86	2.0	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_091720		
Lab ID:	2009644-14A	**Date/Time Analyzed:**	9/30/20 04:44 PM
Date/Time Collected:	9/17/20 11:29 AM	**Dilution Factor:**	2.75
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093011

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	3.3	5.4	Not Detected
1,4-Dioxane	123-91-1	3.2	9.9	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.3	5.4	Not Detected
Tetrachloroethene	127-18-4	2.0	5.6	9.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.3	5.4	Not Detected
Trichloroethene	79-01-6	1.9	4.4	7.4	Not Detected
Vinyl Chloride	75-01-4	0.91	2.1	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_091720		
Lab ID:	2009644-15A	**Date/Time Analyzed:**	9/30/20 07:30 PM
Date/Time Collected:	9/17/20 10:51 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093017

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.8	8.9	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.8	5.0	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.9	4.9	Not Detected
Trichloroethene	79-01-6	1.7	4.0	6.6	Not Detected
Vinyl Chloride	75-01-4	0.82	1.9	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2009644-16A	**Date/Time Analyzed:**	9/30/20 05:11 PM
Date/Time Collected:	9/15/20 12:00 AM	**Dilution Factor:**	2.31
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093012

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.7	4.6	Not Detected
1,4-Dioxane	123-91-1	2.7	8.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.7	4.7	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	2.7	4.6	Not Detected
Trichloroethene	79-01-6	1.6	3.7	6.2	Not Detected
Vinyl Chloride	75-01-4	0.77	1.8	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2009644-17A	**Date/Time Analyzed:**	9/29/20 02:46 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a092906a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.52	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	1.2	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.63	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.75	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.71	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.70	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.33	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2009644-17B	**Date/Time Analyzed:**	9/30/20 01:31 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a093005a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.52	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	1.2	3.6	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.63	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.75	2.0	3.4	1.6 J
trans-1,2-Dichloroethene	156-60-5	0.71	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.70	1.6	2.7	0.77 J
Vinyl Chloride	75-01-4	0.33	0.77	1.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2009644-18A	**Date/Time Analyzed:**	9/29/20 12:21 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a092902

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	89
cis-1,2-Dichloroethene	156-59-2	86
Tetrachloroethene	127-18-4	91
trans-1,2-Dichloroethene	156-60-5	95
Trichloroethene	79-01-6	90
Vinyl Chloride	75-01-4	88

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2009644-18B	**Date/Time Analyzed:**	9/30/20 11:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a093002

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	92
Tetrachloroethene	127-18-4	96
trans-1,2-Dichloroethene	156-60-5	103
Trichloroethene	79-01-6	94
Vinyl Chloride	75-01-4	92

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2009644-19A	**Date/Time Analyzed:**	9/29/20 12:46 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a092903

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	95
cis-1,2-Dichloroethene	156-59-2	95
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	104
Trichloroethene	79-01-6	96
Vinyl Chloride	75-01-4	96

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	104

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2009644-19AA	**Date/Time Analyzed:**	9/29/20 01:11 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a092904

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	90
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	103
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	106

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2009644-19B	**Date/Time Analyzed:**	9/30/20 12:15 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a093003

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	93
Tetrachloroethene	127-18-4	96
trans-1,2-Dichloroethene	156-60-5	102
Trichloroethene	79-01-6	92
Vinyl Chloride	75-01-4	93

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	104
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	104

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2009644-19BB	**Date/Time Analyzed:**	9/30/20 12:40 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a093004

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	102
1,4-Dioxane	123-91-1	95
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	109
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

October 1, 2020

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evaluation Vapor Testing
Project number: 30050315.0701.01
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics Folsom
Laboratory submittal: 2009644
Sample date: 2020-09-15, 2020-09-16, 2020-09-17
Report received by CADENA: 2020-10-01
Initial Data Verification completed: 2020-10-01

16 Air samples were analyzed for TO-15 parameters.

MBK - METHOD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags : TO-15 - QC batch dated 9/30/2020 - TETRACHLOROETHYLENE - B flag sample -010, UB flag sample -013. TRICHLOROETHYLENE - UB flag - sample -013.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

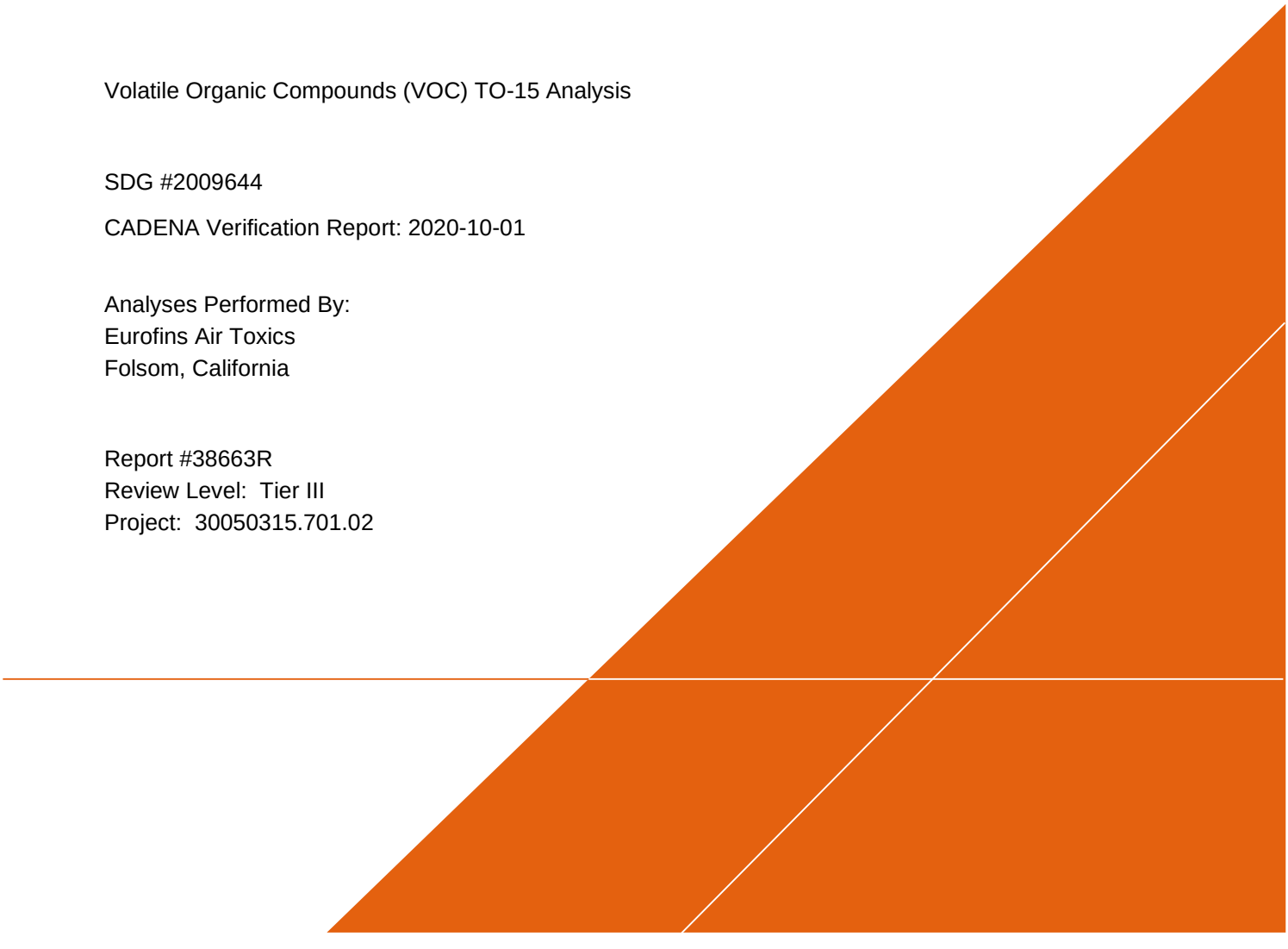
Volatile Organic Compounds (VOC) TO-15 Analysis

SDG #2009644

CADENA Verification Report: 2020-10-01

Analyses Performed By:
Eurofins Air Toxics
Folsom, California

Report #38663R
Review Level: Tier III
Project: 30050315.701.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 2009644 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						TO-15 (Full Scan)	TO-15 (SIM)	MISC
2009644	SL-2_091520	2009644-01A	Air	9/15/2020		X		
	MH-1001_091520_AIR	2009644-02A	Air	9/15/2020		X		
	MH-1041_091520	2009644-03A	Air	9/15/2020		X		
	MH-1066_091620_AIR	2009644-04A	Air	9/16/2020		X		
	MH-1088_091620	2009644-05A	Air	9/16/2020		X		
	MH-1171_091620_AIR	2009644-06A	Air	9/16/2020		X		
	MH-1219_091620_AIR	2009644-07A	Air	9/16/2020		X		
	MH-1210_091620	2009644-08A	Air	9/16/2020		X		
	MH-1122_091620	2009644-09A	Air	9/16/2020		X		
	EDC_091620	2009644-10A	Air	9/16/2020		X		
	WDC_091620	2009644-11A	Air	9/16/2020		X		
	MH-1231_091620	2009644-12A	Air	9/16/2020		X		
	MH-1123_091720	2009644-13A	Air	9/17/2020		X		
	MH-1116_091720	2009644-14A	Air	9/17/2020		X		
	MH-1113_091720	2009644-15A	Air	9/17/2020		X		
	DUP-01_091520	2009644-16A	Air	9/15/2020	MH-1041_091520	X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 (Full Scan). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
USEPA TO-15	Air	30 days from collection to analysis (Canister)	Ambient Temperature	< -2" Hg

All samples were analyzed within the specified holding time and canister return pressure / vacuum criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 140% or less than 60% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

6. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 35% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are not greater than five times the RL, a control limit of three times the RL is applied to the difference between the duplicate sample results.

Results (in µg/m^3) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MH-1041_091520/ DUP-01_091520	All compounds	U	U	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Note: The compound Tetrachloroethene was detected in the associated Method Blank. The Cadena evaluation omitted the qualifications of the samples in the following table:

Sample Locations	Analytes	Sample Result	Qualification
EDC_091620	Tetrachloroethene	Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
RL Reporting limit

Note: Dilution was performed on samples SL-2_091520 and MH-1231_091620 due to the presence of high-level target species.

Dilution was performed on samples MH-1219_091620 and EDC_091620 due to the presence of high-level non-target species.

Dilution was performed on samples MH-1122_091620 due to matrix interference.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15 (Full Scan)	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-2"Hg)		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Field Duplicate Sample RPD		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: October 13, 2020

PEER REVIEW: Dennis Capria

DATE: October 14, 2020

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_091520		
Lab ID:	2009644-01A	**Date/Time Analyzed:**	9/29/20 10:41 PM
Date/Time Collected:	9/15/20 12:56 PM	**Dilution Factor:**	7.41
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092917

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	3.8	8.8	15	16
1,4-Dioxane	123-91-1	8.5	27	53	Not Detected
cis-1,2-Dichloroethene	156-59-2	4.7	8.8	15	4600
Tetrachloroethene	127-18-4	5.5	15	25	Not Detected
trans-1,2-Dichloroethene	156-60-5	5.3	8.8	15	48
Trichloroethene	79-01-6	5.2	12	20	2000
Vinyl Chloride	75-01-4	2.5	5.7	9.5	1700

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_091520		
Lab ID:	2009644-02A	**Date/Time Analyzed:**	9/29/20 04:39 PM
Date/Time Collected:	9/15/20 01:50 PM	**Dilution Factor:**	2.54
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092908

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.2	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	2.1 J
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.84	1.9	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_091520		
Lab ID:	2009644-03A	**Date/Time Analyzed:**	9/29/20 05:06 PM
Date/Time Collected:	9/15/20 02:44 PM	**Dilution Factor:**	2.55
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092909

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.2	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.85	2.0	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_091620		
Lab ID:	2009644-04A	**Date/Time Analyzed:**	9/29/20 11:07 PM
Date/Time Collected:	9/16/20 09:05 AM	**Dilution Factor:**	2.42
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092918

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.9	4.8	Not Detected
1,4-Dioxane	123-91-1	2.8	8.7	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.8	4.9	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	2.9	4.8	Not Detected
Trichloroethene	79-01-6	1.7	3.9	6.5	Not Detected
Vinyl Chloride	75-01-4	0.80	1.8	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_091620		
Lab ID:	2009644-05A	**Date/Time Analyzed:**	9/29/20 05:57 PM
Date/Time Collected:	9/16/20 09:41 AM	**Dilution Factor:**	2.51
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092911

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.0	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	Not Detected
Tetrachloroethene	127-18-4	1.9	5.1	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.0	6.7	Not Detected
Vinyl Chloride	75-01-4	0.83	1.9	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_091620		
Lab ID:	2009644-06A	**Date/Time Analyzed:**	9/29/20 06:23 PM
Date/Time Collected:	9/16/20 10:46 AM	**Dilution Factor:**	2.56
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092912

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.1	Not Detected
1,4-Dioxane	123-91-1	3.0	9.2	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.1	6.1
Tetrachloroethene	127-18-4	1.9	5.2	8.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.1	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.9	Not Detected
Vinyl Chloride	75-01-4	0.85	2.0	3.3	3.3

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_091620		
Lab ID:	2009644-07A	**Date/Time Analyzed:**	9/30/20 02:34 PM
Date/Time Collected:	9/16/20 11:29 AM	**Dilution Factor:**	32.8
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093006

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	17	39	65	Not Detected
1,4-Dioxane	123-91-1	38	120	240	41 J
cis-1,2-Dichloroethene	156-59-2	21	39	65	Not Detected
Tetrachloroethene	127-18-4	24	67	110	Not Detected
trans-1,2-Dichloroethene	156-60-5	23	39	65	Not Detected
Trichloroethene	79-01-6	23	53	88	Not Detected
Vinyl Chloride	75-01-4	11	25	42	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_091620		
Lab ID:	2009644-08A	**Date/Time Analyzed:**	9/29/20 07:14 PM
Date/Time Collected:	9/16/20 12:23 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a092914

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.0	5.0	Not Detected
1,4-Dioxane	123-91-1	2.9	9.1	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.0	5.0	4.0 J
Tetrachloroethene	127-18-4	1.9	5.1	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	3.0	5.0	Not Detected
Trichloroethene	79-01-6	1.8	4.1	6.8	Not Detected
Vinyl Chloride	75-01-4	0.84	1.9	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_091620		
Lab ID:	2009644-09A	**Date/Time Analyzed:**	9/30/20 07:04 PM
Date/Time Collected:	9/16/20 08:38 AM	**Dilution Factor:**	8.70
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093016

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.5	10	17	Not Detected
1,4-Dioxane	123-91-1	10	31	63	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.5	10	17	Not Detected
Tetrachloroethene	127-18-4	6.5	18	30	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.2	10	17	Not Detected
Trichloroethene	79-01-6	6.1	14	23	Not Detected
Vinyl Chloride	75-01-4	2.9	6.7	11	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_091620		
Lab ID:	2009644-10A	**Date/Time Analyzed:**	9/30/20 06:27 PM
Date/Time Collected:	9/16/20 01:13 PM	**Dilution Factor:**	10.9
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093015

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
1,1-Dichloroethene	75-35-4	5.6	13	22	Not Detected	
1,4-Dioxane	123-91-1	12	39	78	Not Detected	
cis-1,2-Dichloroethene	156-59-2	6.9	13	22	Not Detected	
Tetrachloroethene	127-18-4	8.1	22	37	48	UB
trans-1,2-Dichloroethene	156-60-5	7.8	13	22	Not Detected	
Trichloroethene	79-01-6	7.6	18	29	Not Detected	
Vinyl Chloride	75-01-4	3.6	8.4	14	Not Detected	

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_091620		
Lab ID:	2009644-11A	**Date/Time Analyzed:**	9/30/20 03:01 PM
Date/Time Collected:	9/16/20 02:34 PM	**Dilution Factor:**	2.43
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093007

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.9	4.8	Not Detected
1,4-Dioxane	123-91-1	2.8	8.8	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.9	4.8	Not Detected
Tetrachloroethene	127-18-4	1.8	4.9	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	2.9	4.8	Not Detected
Trichloroethene	79-01-6	1.7	3.9	6.5	17
Vinyl Chloride	75-01-4	0.81	1.9	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_091620		
Lab ID:	2009644-12A	**Date/Time Analyzed:**	9/30/20 03:25 PM
Date/Time Collected:	9/16/20 03:15 PM	**Dilution Factor:**	130
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093008

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	67	150	260	240 J
1,4-Dioxane	123-91-1	150	470	940	Not Detected
cis-1,2-Dichloroethene	156-59-2	82	150	260	42000
Tetrachloroethene	127-18-4	97	260	440	Not Detected
trans-1,2-Dichloroethene	156-60-5	93	150	260	440
Trichloroethene	79-01-6	91	210	350	18000
Vinyl Chloride	75-01-4	43	100	170	16000

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_091720		
Lab ID:	2009644-13A	**Date/Time Analyzed:**	9/30/20 04:18 PM
Date/Time Collected:	9/17/20 11:10 AM	**Dilution Factor:**	2.59
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093010

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	3.1	5.1	Not Detected
1,4-Dioxane	123-91-1	3.0	9.3	19	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	3.1	5.1	Not Detected
Tetrachloroethene	127-18-4	1.9	5.3	8.8	~~7.0 J~~ 8.8 UB
trans-1,2-Dichloroethene	156-60-5	1.8	3.1	5.1	Not Detected
Trichloroethene	79-01-6	1.8	4.2	7.0	~~2.2 J~~ 7.0 UB
Vinyl Chloride	75-01-4	0.86	2.0	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_091720		
Lab ID:	2009644-14A	**Date/Time Analyzed:**	9/30/20 04:44 PM
Date/Time Collected:	9/17/20 11:29 AM	**Dilution Factor:**	2.75
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093011

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	3.3	5.4	Not Detected
1,4-Dioxane	123-91-1	3.2	9.9	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.3	5.4	Not Detected
Tetrachloroethene	127-18-4	2.0	5.6	9.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.3	5.4	Not Detected
Trichloroethene	79-01-6	1.9	4.4	7.4	Not Detected
Vinyl Chloride	75-01-4	0.91	2.1	3.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_091720		
Lab ID:	2009644-15A	**Date/Time Analyzed:**	9/30/20 07:30 PM
Date/Time Collected:	9/17/20 10:51 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093017

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.9	4.9	Not Detected
1,4-Dioxane	123-91-1	2.8	8.9	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	4.9	Not Detected
Tetrachloroethene	127-18-4	1.8	5.0	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.9	4.9	Not Detected
Trichloroethene	79-01-6	1.7	4.0	6.6	Not Detected
Vinyl Chloride	75-01-4	0.82	1.9	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2009644-16A	**Date/Time Analyzed:**	9/30/20 05:11 PM
Date/Time Collected:	9/15/20 12:00 AM	**Dilution Factor:**	2.31
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a093012

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.7	4.6	Not Detected
1,4-Dioxane	123-91-1	2.7	8.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.7	4.6	Not Detected
Tetrachloroethene	127-18-4	1.7	4.7	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	2.7	4.6	Not Detected
Trichloroethene	79-01-6	1.6	3.7	6.2	Not Detected
Vinyl Chloride	75-01-4	0.77	1.8	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	105

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2009644

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: ARCADIS
Project Name: FORD LTP
Project Manager: K. HINSKEY Project # 30050315.701.01
Sampler: C. WEAVER; J. MCCLAGHERTY
Site Name: LIVONIA FORD

Special Instructions/Notes: REPORT ONLY: 1,1-DCE; cis-1,2-DCE; trans-1,2-DCE; 1,4-Dioxane; PCE; TCE; and VC. Submit results through Cadena at sim.tomcua@cadena.com #E205162 Level IV reporting

Turnaround Time (Rush surcharges may apply)
Standard ✓ 10-DAY Rush _____ (specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15 (SEE SPECIAL INST.)			
01A	SL-2_091520	IL2786	2028	9/15/20	1255	9/15/20	1256	-29.5	-6.5			X			
02A	MH-1001_091520	IL2631	1902	9/15/20	1349	9/15/20	1350	-30	-6			X			
03A	MH-1041_091520	IL2748	1910	9/15/20	1443	9/15/20	1444	-29.5	-6.5			X			
04A	MH-1066_091620	IL2470	2028	9/16/20	0904	9/16/20	0905	-29.5	-6			X			
05A	MH-1088_091620	IL3116	2028	9/16/20	0940	9/16/20	0941	-29.5	-6.5			X			
06A	MH-1171_091620	IL3086	2028	9/16/20	1045	9/16/20	1046	-29.5	-7			X			
07A	MH-1219_091620	000001352	2020	9/16/20	1128	9/16/20	1129	-30	-6			X			
08A	MH-1210_091620	IL2870	2028	9/16/20	1222	9/16/20	1223	-29.5	-5.5			X			
09A	MH-1122_091620	IL2482	1912	9/16/20	0837	9/16/20	0838	-29.5	-8			X			
10A	EDC_091620	IL2711	1938	9/16/20	1312	9/16/20	1313	-29	-8			X			
11A	WDC_091620	IL1990	1902	9/16/20	1433	9/16/20	1434	-30	-5.5			X			
12A	MH-1231-091620	IL3256	2014	9/16/20	1514	9/16/20	1515	-29.5	-7			X			
13A	MH-1123_091720	IL3203	1922	9/17/20	1109	9/17/20	1110	-30	-7			X			
14A	MH-1116_091720	IL2481	2014	9/17/20	1128	9/17/20	1129	-29	-8			X			
15A	MH-1113_091720	IL3830	2005	9/17/20	1050	9/17/20	1051	-30	-6			X			
16A	DUP-01	IL3207	2005	9/15/20	—	9/15/20	—	-29.5	-4			X			

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Julia Mullaney / ARCADIS	9/21/2020	1350	[signature] EXP	9-23-2020	1052
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: FedEx | Custody Seals Intact? (Yes) No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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9/30/2020
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30050315.701.01
Workorder #: 2009645

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 9/23/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 2009645

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.0302.04
FAX:		**PROJECT #**	30050315.701.01 Ford LTP
DATE RECEIVED:	09/23/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MH-1181_091820	TO-15	6.1 "Hg	14.9 psi
02A	MH-1096_091820	TO-15	5.9 "Hg	15 psi
03A	MH-1020_091820	TO-15	5.5 "Hg	14.8 psi
04A	MH-1067_091820	TO-15	2.2 "Hg	14.9 psi
05A	MH-1082_091820	TO-15	4.3 "Hg	14.9 psi
06A	MH-1043_091820	TO-15	6.1 "Hg	15.1 psi
07A	Lab Blank	TO-15	NA	NA
07B	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
08B	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA
09B	LCS	TO-15	NA	NA
09BB	LCSD	TO-15	NA	NA

CERTIFIED BY: DATE: 09/30/20

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209219, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-19-14, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-013, Effective date: 10/18/2019, Expiration date: 10/17/2020.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2009645

Six 1 Liter Summa Canister (100% Certified) samples were received on September 23, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_091820		
Lab ID:	2009645-01A	**Date/Time Analyzed:**	9/28/20 10:54 PM
Date/Time Collected:	9/18/20 10:51 AM	**Dilution Factor:**	2.53
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092824

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	0.92	4.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.70	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.1	4.3	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.57	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.47	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_091820		
Lab ID:	2009645-02A	**Date/Time Analyzed:**	9/28/20 11:20 PM
Date/Time Collected:	9/18/20 11:23 AM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092825

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	0.91	4.5	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.70	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.0	4.3	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.56	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.47	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_091820		
Lab ID:	2009645-03A	**Date/Time Analyzed:**	9/28/20 11:47 PM
Date/Time Collected:	9/18/20 10:00 AM	**Dilution Factor:**	2.46
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092826

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	0.89	4.4	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.68	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	4.2	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.55	3.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.46	1.6	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_091820		
Lab ID:	2009645-04A	**Date/Time Analyzed:**	9/29/20 12:13 AM
Date/Time Collected:	9/18/20 09:19 AM	**Dilution Factor:**	2.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092827

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.1	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	0.79	3.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.60	2.2	4.3	Not Detected
Tetrachloroethene	127-18-4	0.91	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.97	2.2	4.3	Not Detected
Trichloroethene	79-01-6	0.49	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.40	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_091820		
Lab ID:	2009645-05A	**Date/Time Analyzed:**	9/29/20 07:45 PM
Date/Time Collected:	9/18/20 09:47 AM	**Dilution Factor:**	2.35
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3092918

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.68	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	1.2	5.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.76	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	0.87	4.0	8.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.92	3.2	6.3	Not Detected
Vinyl Chloride	75-01-4	0.55	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_091820		
Lab ID:	2009645-06A	**Date/Time Analyzed:**	9/29/20 08:15 PM
Date/Time Collected:	9/18/20 08:26 AM	**Dilution Factor:**	2.54
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3092919

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.73	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	1.3	5.7	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.83	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	0.94	4.3	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.99	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.59	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	91
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2009645-07A	**Date/Time Analyzed:**	9/28/20 12:06 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p092807d

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.50	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	0.36	1.8	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.28	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.42	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.45	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.22	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.19	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2009645-07B	**Date/Time Analyzed:**	9/29/20 01:10 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3092907d

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.29	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	0.52	2.2	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.32	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.37	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.47	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.39	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.23	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	87
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2009645-08A	**Date/Time Analyzed:**	9/28/20 09:40 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p092802

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	88
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	111
trans-1,2-Dichloroethene	156-60-5	96
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2009645-08B	**Date/Time Analyzed:**	9/29/20 10:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3092902

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	93
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	99
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	100
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	75

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2009645-09A	**Date/Time Analyzed:**	9/28/20 10:48 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p092804

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	95
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	97

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2009645-09AA	**Date/Time Analyzed:**	9/28/20 11:13 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p092805

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	92
1,4-Dioxane	123-91-1	94
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	108
trans-1,2-Dichloroethene	156-60-5	94
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2009645-09B	**Date/Time Analyzed:**	9/29/20 11:43 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3092904

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	99
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	71

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2009645-09BB	**Date/Time Analyzed:**	9/29/20 12:40 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3092906

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	100
Tetrachloroethene	127-18-4	98
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	75

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

September 30, 2020

Kris Hinskey
Arcadis Inc
10559 Citation Ave
Suite 100
Brighton, MI 48116

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2020 Utility Corridor Evaluation Vapor Testing
Project number: 30050315.0701.01
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: Eurofins Air Toxics -Folsom
Laboratory submittal: 2009645
Sample date: 2020-09-18
Report received by CADENA: 2020-09-30
Initial Data Verification completed: 2020-09-30

6 Air samples were analyzed for TO-15 parameters.

No data qualifications or sample integrity issues were observed.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

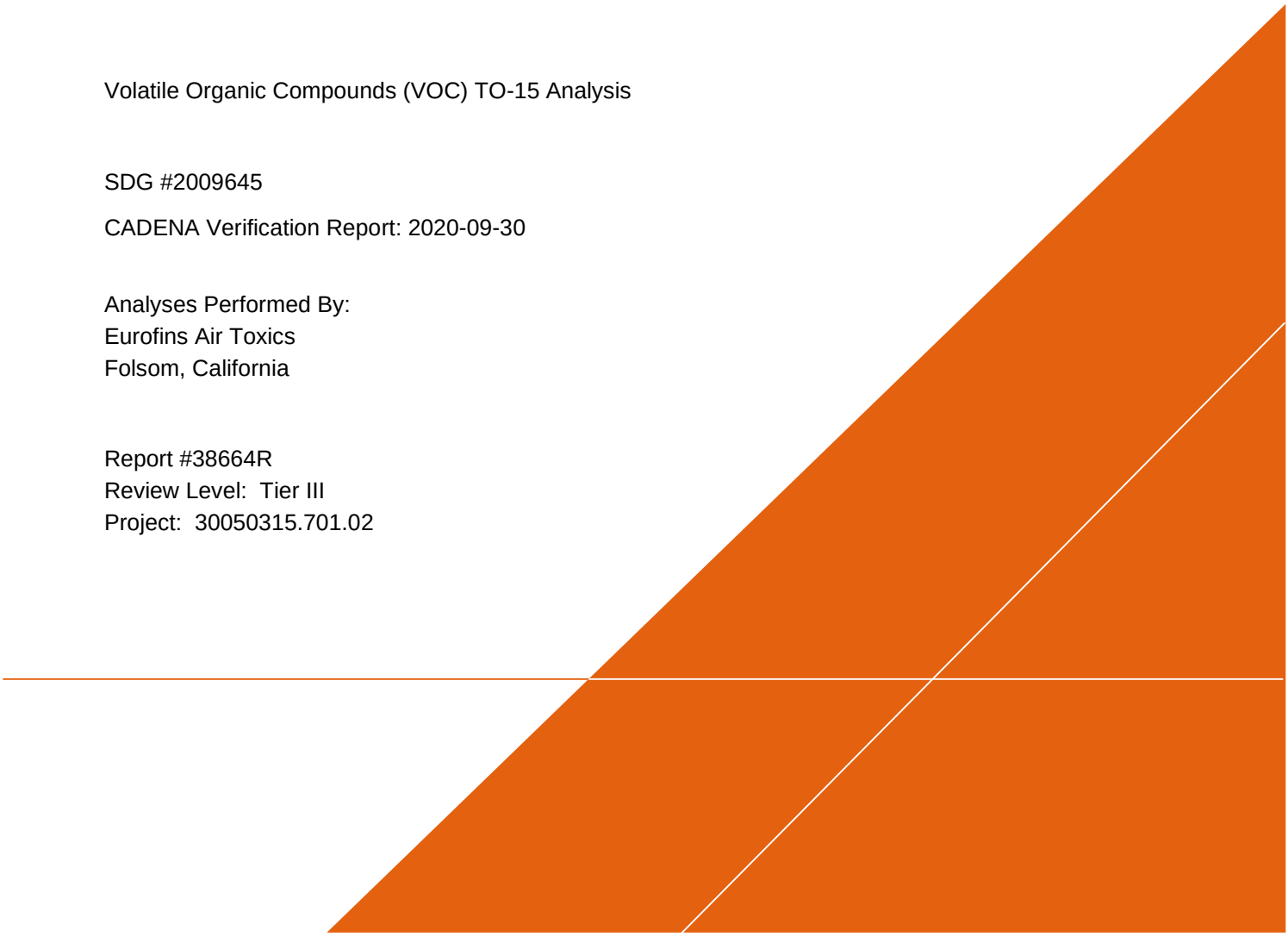
Volatile Organic Compounds (VOC) TO-15 Analysis

SDG #2009645

CADENA Verification Report: 2020-09-30

Analyses Performed By:
Eurofins Air Toxics
Folsom, California

Report #38664R
Review Level: Tier III
Project: 30050315.701.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 2009645 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						TO-15 (Full Scan)	TO-15 (SIM)	MISC
2009645	MH-1181_091820_AIR	2009645-01A	Air	9/18/2020		X		
	MH-1096_091820_AIR	2009645-02A	Air	9/18/2020		X		
	MH-1020_091820_AIR	2009645-03A	Air	9/18/2020		X		
	MH-1067_091820	2009645-04A	Air	9/18/2020		X		
	MH-1082_091820	2009645-05A	Air	9/18/2020		X		
	MH-1043_091820_AIR	2009645-06A	Air	9/18/2020		X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 (Full Scan). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
USEPA TO-15	Air	30 days from collection to analysis (Canister)	Ambient Temperature	< -2" Hg

All samples were analyzed within the specified holding time and canister return pressure / vacuum criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 140% or less than 60% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

6. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 35% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are not greater than five times the RL, a control limit of three times the RL is applied to the difference between the duplicate sample results.

A field duplicate was not performed on a sample location within this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15 (Full Scan)	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-2"Hg)		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Field Duplicate Sample RPD	X				X
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: October 13, 2020

PEER REVIEW: Dennis Capria

DATE: October 14, 2020

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_091820		
Lab ID:	2009645-01A	**Date/Time Analyzed:**	9/28/20 10:54 PM
Date/Time Collected:	9/18/20 10:51 AM	**Dilution Factor:**	2.53
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092824

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	0.92	4.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.70	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.1	4.3	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.57	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.47	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_091820		
Lab ID:	2009645-02A	**Date/Time Analyzed:**	9/28/20 11:20 PM
Date/Time Collected:	9/18/20 11:23 AM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092825

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	0.91	4.5	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.70	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.0	4.3	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.56	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.47	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_091820		
Lab ID:	2009645-03A	**Date/Time Analyzed:**	9/28/20 11:47 PM
Date/Time Collected:	9/18/20 10:00 AM	**Dilution Factor:**	2.46
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092826

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	0.89	4.4	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.68	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	1.0	4.2	8.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.55	3.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.46	1.6	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_091820		
Lab ID:	2009645-04A	**Date/Time Analyzed:**	9/29/20 12:13 AM
Date/Time Collected:	9/18/20 09:19 AM	**Dilution Factor:**	2.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p092827

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.1	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	0.79	3.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.60	2.2	4.3	Not Detected
Tetrachloroethene	127-18-4	0.91	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.97	2.2	4.3	Not Detected
Trichloroethene	79-01-6	0.49	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.40	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_091820		
Lab ID:	2009645-05A	**Date/Time Analyzed:**	9/29/20 07:45 PM
Date/Time Collected:	9/18/20 09:47 AM	**Dilution Factor:**	2.35
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3092918

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.68	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	1.2	5.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.76	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	0.87	4.0	8.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.92	3.2	6.3	Not Detected
Vinyl Chloride	75-01-4	0.55	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_091820		
Lab ID:	2009645-06A	**Date/Time Analyzed:**	9/29/20 08:15 PM
Date/Time Collected:	9/18/20 08:26 AM	**Dilution Factor:**	2.54
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3092919

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.73	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	1.3	5.7	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.83	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	0.94	4.3	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.99	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.59	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	91
Toluene-d8	2037-26-5	70-130	96

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2009645

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: Arcadis
Project Name: Ford LTP
Project Manager: K. Hinskey
Project # 30050315.701.01
Sampler: R.Blalock ~~C.Weaver~~ 9/21/20 S.McClafferty
Site Name: Livonia Ford

Special Instructions/Notes: Report Only:
1,1-DCE; cis-1,2-DCE; trans-1,2-DCE
1,4-Dioxane; PCE; TCE; & VC
Submit results through Cadena at jim.tomalia@cadena.com Level IV reporting
#E205162

Turnaround Time (Rush surcharges may apply)
Standard ✓ 10-day Rush _____(specify)

Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15 (see special inst.)			
01A	MH-1181_091820	IL3042	2014	9/18/20	1050	9/18/20	1051	-30	-7			X			
02A	MH-1096_091820	IL1803	2014	9/18/20	1122	9/18/20	1123	-30	-8			X			
03A	MH-1020_091820	IL2609	2005	9/18/20	0959	9/18/20	1000	-30	-7			X			
04A	MH-1067_091820	IL1527	2014	9/18/20	0918	9/18/20	0919	-30	-4			X			
05A	MH-1082_091820	IL1865	1946	9/18/20	0946	9/18/20	0947	-30	-6			X			
06A	MH-1043_091820	IL3897	2020	9/18/20	0826	9/18/20	0826	-30	-8			X			

	Date	Time		Date	Time
Relinquished by: (Signature/Affiliation) Julia McClafferty / Arcadis	9/21/2020	1350	Received by: (Signature/Affiliation) [signature] CDXC	9.23.20	1052
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: FedEx | Custody Seals Intact? ~~Yes~~ No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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12/30/2020
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2012569A

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 12/21/2020 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 2012569A

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.701.01
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	12/21/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-2_121520	TO-15	5.5 "Hg	14.8 psi
02A	SL-3_121620	TO-15	3.9 "Hg	14.9 psi
03A	MH-1041_121520	TO-15	4.9 "Hg	14.9 psi
04A	MH-1066_121520	TO-15	5.7 "Hg	14.9 psi
05A	MH-1088_121520	TO-15	4.7 "Hg	15 psi
06A	MH-1245_121520	TO-15	2.2 "Hg	15 psi
07A	MH-1258_121620	TO-15	4.9 "Hg	14.9 psi
08A	MH-1001_121620	TO-15	5.1 "Hg	14.9 psi
09A	MH-1210_121620	TO-15	5.7 "Hg	14.8 psi
10A	MH-1219_121620	TO-15	3.7 "Hg	14.9 psi
11A	MH-1171_121520	TO-15	4.7 "Hg	15 psi
12A	MH-1244_121520	TO-15	3.5 "Hg	14.9 psi
13A	MH-1116_121720	TO-15	5.7 "Hg	14.9 psi
14A	WDC_121520	TO-15	5.9 "Hg	15 psi
15A	EDC_121520	TO-15	3.7 "Hg	15 psi
16A	MH-1255_121620	TO-15	5.1 "Hg	14.9 psi
17A	MH-1256_121620	TO-15	6.3 "Hg	14.8 psi
18A	MH-1113_121620	TO-15	5.7 "Hg	14.9 psi
19A	MH-1096_121620	TO-15	4.5 "Hg	14.9 psi
20A	MH-1231_121520	TO-15	4.9 "Hg	14.9 psi
21A	Lab Blank	TO-15	NA	NA
22A	CCV	TO-15	NA	NA
23A	LCS	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2012569A

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.701.01
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	12/21/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
23AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/30/20

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2012569A

Twenty 1 Liter Summa Canister (100% Certified) samples were received on December 21, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples SL-2_121520, SL-3_121620, MH-1255_121620 and MH-1231_121520 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_121520		
Lab ID:	2012569A-01A	**Date/Time Analyzed:**	12/28/20 08:31 PM
Date/Time Collected:	12/15/20 12:10 PM	**Dilution Factor:**	12.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122818

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	3.5	12	24	14 J
1,4-Dioxane	123-91-1	6.3	28	89	Not Detected
cis-1,2-Dichloroethene	156-59-2	4.0	12	24	6800
Tetrachloroethene	127-18-4	4.6	21	42	Not Detected
trans-1,2-Dichloroethene	156-60-5	5.8	12	24	44
Trichloroethene	79-01-6	4.8	16	33	2200
Vinyl Chloride	75-01-4	2.9	7.9	16	1700

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_121620		
Lab ID:	2012569A-02A	**Date/Time Analyzed:**	12/28/20 08:58 PM
Date/Time Collected:	12/16/20 12:16 PM	**Dilution Factor:**	5.79
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122819

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	5.7	11	7.6 J
1,4-Dioxane	123-91-1	3.0	13	42	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.9	5.7	11	4300
Tetrachloroethene	127-18-4	2.1	9.8	20	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.7	5.7	11	28
Trichloroethene	79-01-6	2.3	7.8	16	1400
Vinyl Chloride	75-01-4	1.3	3.7	7.4	1100

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_121520		
Lab ID:	2012569A-03A	**Date/Time Analyzed:**	12/28/20 01:10 PM
Date/Time Collected:	12/15/20 12:42 PM	**Dilution Factor:**	2.41
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122806

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.69	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	1.2	5.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.78	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	0.89	4.1	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.8	Not Detected
Trichloroethene	79-01-6	0.94	3.2	6.5	Not Detected
Vinyl Chloride	75-01-4	0.56	1.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_121520		
Lab ID:	2012569A-04A	**Date/Time Analyzed:**	12/28/20 01:39 PM
Date/Time Collected:	12/15/20 01:28 PM	**Dilution Factor:**	2.48
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122807

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	1.3	5.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.81	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	0.92	4.2	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.97	3.3	6.7	Not Detected
Vinyl Chloride	75-01-4	0.58	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_121520		
Lab ID:	2012569A-05A	**Date/Time Analyzed:**	12/28/20 02:08 PM
Date/Time Collected:	12/15/20 02:47 PM	**Dilution Factor:**	2.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122808

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.69	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	1.2	5.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.78	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	0.89	4.1	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.8	Not Detected
Trichloroethene	79-01-6	0.94	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.56	1.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1245_121520		
Lab ID:	2012569A-06A	**Date/Time Analyzed:**	12/28/20 02:38 PM
Date/Time Collected:	12/15/20 10:10 AM	**Dilution Factor:**	2.18
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122809

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.63	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	1.1	4.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.71	2.2	4.3	150
Tetrachloroethene	127-18-4	0.81	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.2	4.3	2.6 J
Trichloroethene	79-01-6	0.85	2.9	5.8	120
Vinyl Chloride	75-01-4	0.51	1.4	2.8	45

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1258_121620		
Lab ID:	2012569A-07A	**Date/Time Analyzed:**	12/28/20 03:07 PM
Date/Time Collected:	12/16/20 10:53 AM	**Dilution Factor:**	2.41
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122810

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.69	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	1.2	5.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.78	2.4	4.8	860
Tetrachloroethene	127-18-4	0.89	4.1	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.8	3.7 J
Trichloroethene	79-01-6	0.94	3.2	6.5	70
Vinyl Chloride	75-01-4	0.56	1.5	3.1	100

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_121620		
Lab ID:	2012569A-08A	**Date/Time Analyzed:**	12/28/20 03:37 PM
Date/Time Collected:	12/16/20 08:36 AM	**Dilution Factor:**	2.43
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122811

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.70	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	1.2	5.5	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.79	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	0.90	4.1	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.8	Not Detected
Trichloroethene	79-01-6	0.95	3.3	6.5	Not Detected
Vinyl Chloride	75-01-4	0.57	1.6	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_121620		
Lab ID:	2012569A-09A	**Date/Time Analyzed:**	12/28/20 04:06 PM
Date/Time Collected:	12/16/20 09:08 AM	**Dilution Factor:**	2.48
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122812

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	1.3	5.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.81	2.4	4.9	5.2
Tetrachloroethene	127-18-4	0.92	4.2	8.4	4.5 J
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.97	3.3	6.7	Not Detected
Vinyl Chloride	75-01-4	0.58	1.6	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_121620		
Lab ID:	2012569A-10A	**Date/Time Analyzed:**	12/28/20 04:35 PM
Date/Time Collected:	12/16/20 09:44 AM	**Dilution Factor:**	2.30
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122813

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.66	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	1.2	5.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.75	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	0.85	3.9	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.90	3.1	6.2	Not Detected
Vinyl Chloride	75-01-4	0.54	1.5	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_121520		
Lab ID:	2012569A-11A	**Date/Time Analyzed:**	12/28/20 05:04 PM
Date/Time Collected:	12/15/20 03:17 PM	**Dilution Factor:**	2.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122814

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.69	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	1.2	5.4	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.78	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	0.89	4.1	8.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.4	4.8	Not Detected
Trichloroethene	79-01-6	0.94	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.56	1.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1244_121520		
Lab ID:	2012569A-12A	**Date/Time Analyzed:**	12/28/20 05:33 PM
Date/Time Collected:	12/15/20 11:05 AM	**Dilution Factor:**	2.28
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122815

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.66	2.3	4.5	Not Detected
1,4-Dioxane	123-91-1	1.2	5.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.74	2.2	4.5	400
Tetrachloroethene	127-18-4	0.85	3.9	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.5	3.7 J
Trichloroethene	79-01-6	0.89	3.1	6.1	280
Vinyl Chloride	75-01-4	0.53	1.4	2.9	100

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_121720		
Lab ID:	2012569A-13A	**Date/Time Analyzed:**	12/28/20 06:02 PM
Date/Time Collected:	12/17/20 09:21 AM	**Dilution Factor:**	2.48
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122816

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	1.3	5.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.81	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	0.92	4.2	8.4	1.2 J
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.97	3.3	6.7	Not Detected
Vinyl Chloride	75-01-4	0.58	1.6	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_121520		
Lab ID:	2012569A-14A	**Date/Time Analyzed:**	12/28/20 09:27 PM
Date/Time Collected:	12/15/20 09:34 AM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122820

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.72	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	1.3	5.7	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.82	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	0.94	4.3	8.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.98	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.59	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_121520		
Lab ID:	2012569A-15A	**Date/Time Analyzed:**	12/28/20 09:56 PM
Date/Time Collected:	12/15/20 08:58 AM	**Dilution Factor:**	2.30
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122821

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.66	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	1.2	5.2	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.75	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	0.85	3.9	7.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.90	3.1	6.2	Not Detected
Vinyl Chloride	75-01-4	0.54	1.5	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1255_121620		
Lab ID:	2012569A-16A	**Date/Time Analyzed:**	12/28/20 11:51 PM
Date/Time Collected:	12/16/20 11:38 AM	**Dilution Factor:**	16.2
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122825

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.6	16	32	32
1,4-Dioxane	123-91-1	8.4	36	120	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.3	16	32	510
Tetrachloroethene	127-18-4	6.0	27	55	Not Detected
trans-1,2-Dichloroethene	156-60-5	7.6	16	32	20 J
Trichloroethene	79-01-6	6.3	22	44	83
Vinyl Chloride	75-01-4	3.8	10	21	5600

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1256_121620		
Lab ID:	2012569A-17A	**Date/Time Analyzed:**	12/28/20 10:26 PM
Date/Time Collected:	12/16/20 11:15 AM	**Dilution Factor:**	2.54
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122822

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.73	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	1.3	5.7	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.83	2.5	5.0	150
Tetrachloroethene	127-18-4	0.94	4.3	8.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.99	3.4	6.8	15
Vinyl Chloride	75-01-4	0.59	1.6	3.2	10

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_121620		
Lab ID:	2012569A-18A	**Date/Time Analyzed:**	12/28/20 10:55 PM
Date/Time Collected:	12/16/20 03:15 PM	**Dilution Factor:**	2.48
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122823

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.71	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	1.3	5.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.81	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	0.92	4.2	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.97	3.3	6.7	Not Detected
Vinyl Chloride	75-01-4	0.58	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_121620		
Lab ID:	2012569A-19A	**Date/Time Analyzed:**	12/28/20 11:24 PM
Date/Time Collected:	12/16/20 02:09 PM	**Dilution Factor:**	2.37
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122824

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.68	2.3	4.7	Not Detected
1,4-Dioxane	123-91-1	1.2	5.3	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.77	2.3	4.7	Not Detected
Tetrachloroethene	127-18-4	0.88	4.0	8.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.3	4.7	Not Detected
Trichloroethene	79-01-6	0.93	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.55	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_121520		
Lab ID:	2012569A-20A	**Date/Time Analyzed:**	12/28/20 08:04 PM
Date/Time Collected:	12/15/20 11:43 AM	**Dilution Factor:**	96.2
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3122817

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	28	95	190	100 J
1,4-Dioxane	123-91-1	50	220	690	Not Detected
cis-1,2-Dichloroethene	156-59-2	31	95	190	37000
Tetrachloroethene	127-18-4	36	160	330	Not Detected
trans-1,2-Dichloroethene	156-60-5	45	95	190	260
Trichloroethene	79-01-6	38	130	260	14000
Vinyl Chloride	75-01-4	22	61	120	11000

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2012569A-21A	**Date/Time Analyzed:**	12/28/20 11:35 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3122805a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.29	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	0.52	2.2	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.32	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.37	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.47	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.39	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.23	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2012569A-22A	**Date/Time Analyzed:**	12/28/20 10:01 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3122802

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	86
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	95
Tetrachloroethene	127-18-4	105
trans-1,2-Dichloroethene	156-60-5	90
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	78

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2012569A-23A	**Date/Time Analyzed:**	12/28/20 10:29 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3122803

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	95
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	90
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	79

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2012569A-23AA	**Date/Time Analyzed:**	12/28/20 10:56 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3122804

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	91
1,4-Dioxane	123-91-1	101
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	108
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	81

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

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12/30/2020
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2012569B

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 12/21/2020 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

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WORK ORDER #: 2012569B

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30050315.701.01
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	12/21/2020	**CONTACT:**	Ausha Scott
DATE COMPLETED:	12/30/2020		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
21A	MH-1082_121720	TO-15	5.5 "Hg	15 psi
22A	MH-1067_121720	TO-15	6.0 "Hg	15 psi
23A	MH-1043_121720	TO-15	6.5 "Hg	15 psi
24A	MH-1020_121720	TO-15	5.0 "Hg	15 psi
25A	MH-1181_121720	TO-15	4.5 "Hg	15 psi
26A	MH-1123_121720	TO-15	5.5 "Hg	15 psi
27A	MH-1122_121720	TO-15	5.5 "Hg	15 psi
28A	DUP-01_121620	TO-15	4.0 "Hg	15 psi
29A	Lab Blank	TO-15	NA	NA
30A	CCV	TO-15	NA	NA
31A	LCS	TO-15	NA	NA
31AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/30/20

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2012569B

Eight 1 Liter Summa Canister (100% Certified) samples were received on December 21, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_121720		
Lab ID:	2012569B-21A	**Date/Time Analyzed:**	12/23/20 06:34 PM
Date/Time Collected:	12/17/20 02:29 PM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122313

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	5.3	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	1.4	4.2	8.4	20
trans-1,2-Dichloroethene	156-60-5	1.3	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.96	3.3	6.6	2.5 J
Vinyl Chloride	75-01-4	0.80	1.6	3.2	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_121720		
Lab ID:	2012569B-22A	**Date/Time Analyzed:**	12/23/20 07:03 PM
Date/Time Collected:	12/17/20 02:01 PM	**Dilution Factor:**	2.52
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122314

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.5	5.0	Not Detected
1,4-Dioxane	123-91-1	2.7	5.4	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	2.5	5.0	Not Detected
Tetrachloroethene	127-18-4	1.4	4.3	8.5	22
trans-1,2-Dichloroethene	156-60-5	1.3	2.5	5.0	Not Detected
Trichloroethene	79-01-6	0.98	3.4	6.8	Not Detected
Vinyl Chloride	75-01-4	0.81	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_121720		
Lab ID:	2012569B-23A	**Date/Time Analyzed:**	12/23/20 07:33 PM
Date/Time Collected:	12/17/20 12:15 PM	**Dilution Factor:**	2.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122315

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.7	2.6	5.1	Not Detected
1,4-Dioxane	123-91-1	2.7	5.6	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	2.6	5.1	Not Detected
Tetrachloroethene	127-18-4	1.4	4.4	8.8	2.9 J
trans-1,2-Dichloroethene	156-60-5	1.3	2.6	5.1	Not Detected
Trichloroethene	79-01-6	1.0	3.5	6.9	Not Detected
Vinyl Chloride	75-01-4	0.83	1.6	3.3	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_121720		
Lab ID:	2012569B-24A	**Date/Time Analyzed:**	12/23/20 08:02 PM
Date/Time Collected:	12/17/20 11:33 AM	**Dilution Factor:**	2.42
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122316

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.4	4.8	Not Detected
1,4-Dioxane	123-91-1	2.6	5.2	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.4	4.8	Not Detected
Tetrachloroethene	127-18-4	1.3	4.1	8.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.8	Not Detected
Trichloroethene	79-01-6	0.94	3.2	6.5	Not Detected
Vinyl Chloride	75-01-4	0.78	1.5	3.1	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_121720		
Lab ID:	2012569B-25A	**Date/Time Analyzed:**	12/24/20 01:50 AM
Date/Time Collected:	12/17/20 10:52 AM	**Dilution Factor:**	2.38
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122325

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.4	4.7	Not Detected
1,4-Dioxane	123-91-1	2.5	5.1	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.4	4.7	Not Detected
Tetrachloroethene	127-18-4	1.3	4.0	8.1	1.4 J
trans-1,2-Dichloroethene	156-60-5	1.2	2.4	4.7	Not Detected
Trichloroethene	79-01-6	0.92	3.2	6.4	Not Detected
Vinyl Chloride	75-01-4	0.77	1.5	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	87
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_121720		
Lab ID:	2012569B-26A	**Date/Time Analyzed:**	12/24/20 02:20 AM
Date/Time Collected:	12/17/20 10:27 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122326

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	5.3	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	1.4	4.2	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.96	3.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.80	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_121720		
Lab ID:	2012569B-27A	**Date/Time Analyzed:**	12/24/20 12:52 AM
Date/Time Collected:	12/17/20 09:43 AM	**Dilution Factor:**	2.47
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122323

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.4	4.9	Not Detected
1,4-Dioxane	123-91-1	2.6	5.3	18	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	2.4	4.9	Not Detected
Tetrachloroethene	127-18-4	1.4	4.2	8.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.3	2.4	4.9	Not Detected
Trichloroethene	79-01-6	0.96	3.3	6.6	Not Detected
Vinyl Chloride	75-01-4	0.80	1.6	3.2	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01_121620		
Lab ID:	2012569B-28A	**Date/Time Analyzed:**	12/24/20 01:21 AM
Date/Time Collected:	12/16/20 12:00 AM	**Dilution Factor:**	2.33
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p122324

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	2.5	5.0	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	1.3	4.0	7.9	2.4 J
trans-1,2-Dichloroethene	156-60-5	1.2	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.90	3.1	6.3	Not Detected
Vinyl Chloride	75-01-4	0.75	1.5	3.0	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2012569B-29A	**Date/Time Analyzed:**	12/23/20 03:34 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p122308a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.65	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	1.1	2.2	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.72	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.55	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.51	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.39	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.32	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2012569B-30A	**Date/Time Analyzed:**	12/23/20 10:51 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p122302

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	102
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	90

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2012569B-31A	**Date/Time Analyzed:**	12/23/20 11:19 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p122303

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	100
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	96
Vinyl Chloride	75-01-4	88

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	87
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2012569B-31AA	**Date/Time Analyzed:**	12/23/20 11:47 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p122304

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	97
cis-1,2-Dichloroethene	156-59-2	100
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	96
Vinyl Chloride	75-01-4	84

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

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4/5/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2103778

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/29/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2103778

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	03/29/2021	**CONTACT:**	Jade White
DATE COMPLETED:	04/05/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-4_032221	TO-15	5.5 "Hg	9.8 psi
02A	MH-1096_032221	TO-15	7.8 "Hg	10 psi
03A	MH-1245_032221	TO-15	6.5 "Hg	9.9 psi
04A	MH-1244_032221	TO-15	6.1 "Hg	9.7 psi
05A	MH-1231_032221	TO-15	5.1 "Hg	9.9 psi
06A	SL-5_032321	TO-15	4.3 "Hg	9.9 psi
07A	WDC_032321	TO-15	4.5 "Hg	9.9 psi
08A	EDC_032321	TO-15	5.5 "Hg	9.8 psi
09A	MH-1181_032321	TO-15	7.6 "Hg	9.9 psi
10A	MH-1123_032321	TO-15	6.7 "Hg	9.8 psi
11A	MH-1116_032321	TO-15	6.3 "Hg	10 psi
12A	MH-1113_032321	TO-15	5.7 "Hg	10 psi
13A	MH-1259_032321	TO-15	6.9 "Hg	9.9 psi
14A	MH-1122_032421	TO-15	6.3 "Hg	9.9 psi
15A	MH-1020_032421	TO-15	7.3 "Hg	10 psi
16A	Lab Blank	TO-15	NA	NA
17A	CCV	TO-15	NA	NA
18A	LCS	TO-15	NA	NA
18AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/05/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2103778

Fifteen 1 Liter Summa Canister (100% Certified) samples were received on March 29, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples SL-4_032221, MH-1244_032221 and MH-1231_032221 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-4_032221		
Lab ID:	2103778-01A	**Date/Time Analyzed:**	4/1/21 02:59 AM
Date/Time Collected:	3/22/21 04:11 PM	**Dilution Factor:**	16.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033125

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	19	32	33
1,4-Dioxane	123-91-1	29	79	120	Not Detected
cis-1,2-Dichloroethene	156-59-2	8.4	19	32	7200
Tetrachloroethene	127-18-4	15	33	55	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.5	19	32	75
Trichloroethene	79-01-6	10	26	44	4400
Vinyl Chloride	75-01-4	3.8	12	21	3100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_032221		
Lab ID:	2103778-02A	**Date/Time Analyzed:**	3/31/21 03:42 PM
Date/Time Collected:	3/22/21 04:26 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033108

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.7	4.5	Not Detected
1,4-Dioxane	123-91-1	4.0	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	2.7	4.5	Not Detected
Tetrachloroethene	127-18-4	2.2	4.6	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.90	2.7	4.5	Not Detected
Trichloroethene	79-01-6	1.5	3.6	6.1	Not Detected
Vinyl Chloride	75-01-4	0.52	1.7	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1245_032221		
Lab ID:	2103778-03A	**Date/Time Analyzed:**	3/31/21 04:13 PM
Date/Time Collected:	3/22/21 01:35 PM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033109

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	2.2 J
Tetrachloroethene	127-18-4	2.0	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.85	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.8	2.0 J
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1244_032221		
Lab ID:	2103778-04A	**Date/Time Analyzed:**	3/31/21 04:40 PM
Date/Time Collected:	3/22/21 01:48 PM	**Dilution Factor:**	4.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033110

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.8	5.0	8.3	14
1,4-Dioxane	123-91-1	7.4	20	30	Not Detected
cis-1,2-Dichloroethene	156-59-2	2.1	5.0	8.3	1000
Tetrachloroethene	127-18-4	4.0	8.5	14	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	5.0	8.3	20
Trichloroethene	79-01-6	2.7	6.7	11	1100
Vinyl Chloride	75-01-4	0.96	3.2	5.3	1200

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_032221		
Lab ID:	2103778-05A	**Date/Time Analyzed:**	4/1/21 03:26 AM
Date/Time Collected:	3/22/21 02:05 PM	**Dilution Factor:**	101
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033126

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	68	120	200	190 J
1,4-Dioxane	123-91-1	180	490	730	Not Detected
cis-1,2-Dichloroethene	156-59-2	52	120	200	46000
Tetrachloroethene	127-18-4	96	200	340	Not Detected
trans-1,2-Dichloroethene	156-60-5	40	120	200	400
Trichloroethene	79-01-6	65	160	270	19000
Vinyl Chloride	75-01-4	23	77	130	23000

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_032321		
Lab ID:	2103778-06A	**Date/Time Analyzed:**	3/31/21 05:11 PM
Date/Time Collected:	3/23/21 09:15 AM	**Dilution Factor:**	1.95
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033111

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.3	3.9	Not Detected
1,4-Dioxane	123-91-1	3.4	9.5	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.3	3.9	230
Tetrachloroethene	127-18-4	1.8	4.0	6.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.77	2.3	3.9	3.5 J
Trichloroethene	79-01-6	1.2	3.1	5.2	110
Vinyl Chloride	75-01-4	0.45	1.5	2.5	71

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_032321		
Lab ID:	2103778-07A	**Date/Time Analyzed:**	3/31/21 05:42 PM
Date/Time Collected:	3/23/21 09:56 AM	**Dilution Factor:**	1.97
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033112

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.3	3.9	Not Detected
1,4-Dioxane	123-91-1	3.5	9.6	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.3	3.9	Not Detected
Tetrachloroethene	127-18-4	1.9	4.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.78	2.3	3.9	Not Detected
Trichloroethene	79-01-6	1.3	3.2	5.3	5.6
Vinyl Chloride	75-01-4	0.45	1.5	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_032321		
Lab ID:	2103778-08A	**Date/Time Analyzed:**	3/31/21 06:12 PM
Date/Time Collected:	3/23/21 10:16 AM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033113

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.4	4.0	Not Detected
1,4-Dioxane	123-91-1	3.6	9.9	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.4	4.0	4.6
Tetrachloroethene	127-18-4	1.9	4.2	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.81	2.4	4.0	Not Detected
Trichloroethene	79-01-6	1.3	3.3	5.5	7.5
Vinyl Chloride	75-01-4	0.47	1.6	2.6	0.58 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_032321		
Lab ID:	2103778-09A	**Date/Time Analyzed:**	3/31/21 06:43 PM
Date/Time Collected:	3/23/21 03:22 PM	**Dilution Factor:**	2.24
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.7	4.4	Not Detected
1,4-Dioxane	123-91-1	4.0	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	2.7	4.4	Not Detected
Tetrachloroethene	127-18-4	2.1	4.6	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.89	2.7	4.4	Not Detected
Trichloroethene	79-01-6	1.4	3.6	6.0	Not Detected
Vinyl Chloride	75-01-4	0.52	1.7	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_032321		
Lab ID:	2103778-10A	**Date/Time Analyzed:**	3/31/21 07:13 PM
Date/Time Collected:	3/23/21 03:48 PM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.85	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.8	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_032321		
Lab ID:	2103778-11A	**Date/Time Analyzed:**	4/1/21 12:30 AM
Date/Time Collected:	3/23/21 03:59 PM	**Dilution Factor:**	2.13
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033120

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.84	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.7	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_032321		
Lab ID:	2103778-12A	**Date/Time Analyzed:**	4/1/21 01:01 AM
Date/Time Collected:	3/23/21 04:13 PM	**Dilution Factor:**	2.07
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033121

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.1	Not Detected
1,4-Dioxane	123-91-1	3.6	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.1	Not Detected
Tetrachloroethene	127-18-4	2.0	4.2	7.0	2.6 J
trans-1,2-Dichloroethene	156-60-5	0.82	2.5	4.1	Not Detected
Trichloroethene	79-01-6	1.3	3.3	5.6	Not Detected
Vinyl Chloride	75-01-4	0.48	1.6	2.6	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1259_032321		
Lab ID:	2103778-13A	**Date/Time Analyzed:**	4/1/21 01:31 AM
Date/Time Collected:	3/23/21 05:11 PM	**Dilution Factor:**	2.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033122

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.6	4.3	Not Detected
1,4-Dioxane	123-91-1	3.8	10	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.6	4.3	Not Detected
Tetrachloroethene	127-18-4	2.1	4.4	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.86	2.6	4.3	Not Detected
Trichloroethene	79-01-6	1.4	3.5	5.8	1.7 J
Vinyl Chloride	75-01-4	0.50	1.7	2.8	0.56 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_032421		
Lab ID:	2103778-14A	**Date/Time Analyzed:**	4/1/21 02:02 AM
Date/Time Collected:	3/24/21 08:47 AM	**Dilution Factor:**	2.12
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033123

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.7	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.84	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.7	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_032421		
Lab ID:	2103778-15A	**Date/Time Analyzed:**	4/1/21 02:33 AM
Date/Time Collected:	3/24/21 09:09 AM	**Dilution Factor:**	2.22
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033124

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.6	4.4	Not Detected
1,4-Dioxane	123-91-1	3.9	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.6	4.4	Not Detected
Tetrachloroethene	127-18-4	2.1	4.5	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.88	2.6	4.4	Not Detected
Trichloroethene	79-01-6	1.4	3.6	6.0	Not Detected
Vinyl Chloride	75-01-4	0.51	1.7	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2103778-16A	**Date/Time Analyzed:**	3/31/21 12:32 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j033105a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.67	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	1.8	4.9	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.52	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.95	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.40	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.64	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.23	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2103778-17A	**Date/Time Analyzed:**	3/31/21 10:30 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j033102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	88
1,4-Dioxane	123-91-1	87
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	101
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	89

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2103778-18A	**Date/Time Analyzed:**	3/31/21 10:56 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j033103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	105
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	87
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	86

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2103778-18AA	**Date/Time Analyzed:**	3/31/21 11:22 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j033104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	93
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	88
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	87

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	103

* % Recovery is calculated using unrounded analytical results.

DATA VERIFICATION REPORT

April 5, 2021

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2021 Utility Corridor Evaluation Vapor Testing
Project number: 30080642.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: EUROFINS-FOLSOM
Laboratory submittal: 2103778
Sample date: 2021-03-22, 03-23, 03-24
Report received by CADENA: 2021-04-05
Initial Data Verification completed by CADENA: 2021-04-05
Number of Samples: 15
Sample Matrices: AIR
Test Categories: TO-15 GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

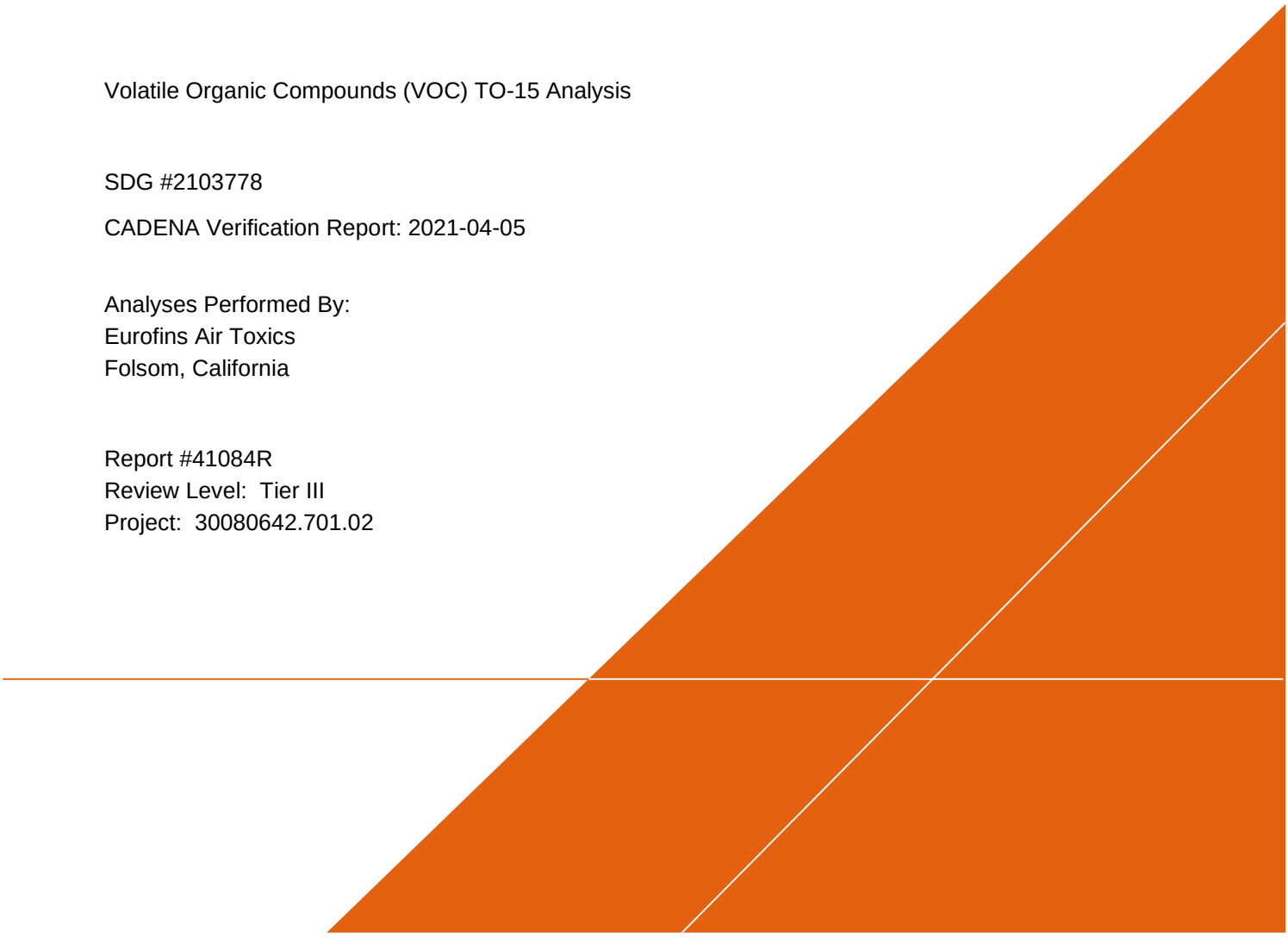
Volatile Organic Compounds (VOC) TO-15 Analysis

SDG #2103778

CADENA Verification Report: 2021-04-05

Analyses Performed By:
Eurofins Air Toxics
Folsom, California

Report #41084R
Review Level: Tier III
Project: 30080642.701.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 2103778 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						TO-15 (Full Scan)	TO-15 (SIM)	MISC
2103778	SL-4_032221	2103778-01A	Air	3/22/2021		X		
	MH-1096_032221	2103778-02A	Air	3/22/2021		X		
	MH-1245_032221	2103778-03A	Air	3/22/2021		X		
	MH-1244_032221	2103778-04A	Air	3/22/2021		X		
	MH-1231_032221	2103778-05A	Air	3/22/2021		X		
	SL-5_032321	2103778-06A	Air	3/23/2021		X		
	WDC_032321	2103778-07A	Air	3/23/2021		X		
	EDC_032321	2103778-08A	Air	3/23/2021		X		
	MH-1181_032321	2103778-09A	Air	3/23/2021		X		
	MH-1123_032321	2103778-10A	Air	3/23/2021		X		
	MH-1116_032321	2103778-11A	Air	3/23/2021		X		
	MH-1113_032321	2103778-12A	Air	3/23/2021		X		
	MH-1259_032321	2103778-13A	Air	3/23/2021		X		
	MH-1122_032421	2103778-14A	Air	3/24/2021		X		
	MH-1020_032421	2103778-15A	Air	3/24/2021		X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 (Full Scan). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
USEPA TO-15	Air	30 days from collection to analysis (Canister)	Ambient Temperature	< -2" Hg

All samples were analyzed within the specified holding time and canister return pressure / vacuum criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 140% or less than 60% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

5. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

6. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 35% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are not greater than five times the RL, a control limit of three times the RL is applied to the difference between the duplicate sample results.

A field duplicate was not performed on a sample location within this SDG.

7. System Performance and Overall Assessment

Note: Dilution was performed on samples SL-4_032221, MH-1244_032221 and MH-1231_032221 due to the presence of high-level target species.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15 (Full Scan)	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-2"Hg)		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Field Duplicate Sample RPD	X				X
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: April 21, 2021

PEER REVIEW: Dennis Capria

DATE: April 27, 2021

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-4_032221		
Lab ID:	2103778-01A	**Date/Time Analyzed:**	4/1/21 02:59 AM
Date/Time Collected:	3/22/21 04:11 PM	**Dilution Factor:**	16.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033125

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	19	32	33
1,4-Dioxane	123-91-1	29	79	120	Not Detected
cis-1,2-Dichloroethene	156-59-2	8.4	19	32	7200
Tetrachloroethene	127-18-4	15	33	55	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.5	19	32	75
Trichloroethene	79-01-6	10	26	44	4400
Vinyl Chloride	75-01-4	3.8	12	21	3100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1096_032221		
Lab ID:	2103778-02A	**Date/Time Analyzed:**	3/31/21 03:42 PM
Date/Time Collected:	3/22/21 04:26 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033108

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.7	4.5	Not Detected
1,4-Dioxane	123-91-1	4.0	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	2.7	4.5	Not Detected
Tetrachloroethene	127-18-4	2.2	4.6	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.90	2.7	4.5	Not Detected
Trichloroethene	79-01-6	1.5	3.6	6.1	Not Detected
Vinyl Chloride	75-01-4	0.52	1.7	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1245_032221		
Lab ID:	2103778-03A	**Date/Time Analyzed:**	3/31/21 04:13 PM
Date/Time Collected:	3/22/21 01:35 PM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033109

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	2.2 J
Tetrachloroethene	127-18-4	2.0	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.85	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.8	2.0 J
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1244_032221		
Lab ID:	2103778-04A	**Date/Time Analyzed:**	3/31/21 04:40 PM
Date/Time Collected:	3/22/21 01:48 PM	**Dilution Factor:**	4.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033110

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.8	5.0	8.3	14
1,4-Dioxane	123-91-1	7.4	20	30	Not Detected
cis-1,2-Dichloroethene	156-59-2	2.1	5.0	8.3	1000
Tetrachloroethene	127-18-4	4.0	8.5	14	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	5.0	8.3	20
Trichloroethene	79-01-6	2.7	6.7	11	1100
Vinyl Chloride	75-01-4	0.96	3.2	5.3	1200

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_032221		
Lab ID:	2103778-05A	**Date/Time Analyzed:**	4/1/21 03:26 AM
Date/Time Collected:	3/22/21 02:05 PM	**Dilution Factor:**	101
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033126

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	68	120	200	190 J
1,4-Dioxane	123-91-1	180	490	730	Not Detected
cis-1,2-Dichloroethene	156-59-2	52	120	200	46000
Tetrachloroethene	127-18-4	96	200	340	Not Detected
trans-1,2-Dichloroethene	156-60-5	40	120	200	400
Trichloroethene	79-01-6	65	160	270	19000
Vinyl Chloride	75-01-4	23	77	130	23000

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_032321		
Lab ID:	2103778-06A	**Date/Time Analyzed:**	3/31/21 05:11 PM
Date/Time Collected:	3/23/21 09:15 AM	**Dilution Factor:**	1.95
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033111

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.3	3.9	Not Detected
1,4-Dioxane	123-91-1	3.4	9.5	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.3	3.9	230
Tetrachloroethene	127-18-4	1.8	4.0	6.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.77	2.3	3.9	3.5 J
Trichloroethene	79-01-6	1.2	3.1	5.2	110
Vinyl Chloride	75-01-4	0.45	1.5	2.5	71

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	WDC_032321		
Lab ID:	2103778-07A	**Date/Time Analyzed:**	3/31/21 05:42 PM
Date/Time Collected:	3/23/21 09:56 AM	**Dilution Factor:**	1.97
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033112

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.3	3.9	Not Detected
1,4-Dioxane	123-91-1	3.5	9.6	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.3	3.9	Not Detected
Tetrachloroethene	127-18-4	1.9	4.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.78	2.3	3.9	Not Detected
Trichloroethene	79-01-6	1.3	3.2	5.3	5.6
Vinyl Chloride	75-01-4	0.45	1.5	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	EDC_032321		
Lab ID:	2103778-08A	**Date/Time Analyzed:**	3/31/21 06:12 PM
Date/Time Collected:	3/23/21 10:16 AM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033113

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.4	4.0	Not Detected
1,4-Dioxane	123-91-1	3.6	9.9	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.0	2.4	4.0	4.6
Tetrachloroethene	127-18-4	1.9	4.2	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.81	2.4	4.0	Not Detected
Trichloroethene	79-01-6	1.3	3.3	5.5	7.5
Vinyl Chloride	75-01-4	0.47	1.6	2.6	0.58 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1181_032321		
Lab ID:	2103778-09A	**Date/Time Analyzed:**	3/31/21 06:43 PM
Date/Time Collected:	3/23/21 03:22 PM	**Dilution Factor:**	2.24
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.7	4.4	Not Detected
1,4-Dioxane	123-91-1	4.0	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	2.7	4.4	Not Detected
Tetrachloroethene	127-18-4	2.1	4.6	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.89	2.7	4.4	Not Detected
Trichloroethene	79-01-6	1.4	3.6	6.0	Not Detected
Vinyl Chloride	75-01-4	0.52	1.7	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1123_032321		
Lab ID:	2103778-10A	**Date/Time Analyzed:**	3/31/21 07:13 PM
Date/Time Collected:	3/23/21 03:48 PM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.85	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.8	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1116_032321		
Lab ID:	2103778-11A	**Date/Time Analyzed:**	4/1/21 12:30 AM
Date/Time Collected:	3/23/21 03:59 PM	**Dilution Factor:**	2.13
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033120

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.8	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.84	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.7	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1113_032321		
Lab ID:	2103778-12A	**Date/Time Analyzed:**	4/1/21 01:01 AM
Date/Time Collected:	3/23/21 04:13 PM	**Dilution Factor:**	2.07
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033121

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.1	Not Detected
1,4-Dioxane	123-91-1	3.6	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.1	Not Detected
Tetrachloroethene	127-18-4	2.0	4.2	7.0	2.6 J
trans-1,2-Dichloroethene	156-60-5	0.82	2.5	4.1	Not Detected
Trichloroethene	79-01-6	1.3	3.3	5.6	Not Detected
Vinyl Chloride	75-01-4	0.48	1.6	2.6	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1259_032321		
Lab ID:	2103778-13A	**Date/Time Analyzed:**	4/1/21 01:31 AM
Date/Time Collected:	3/23/21 05:11 PM	**Dilution Factor:**	2.17
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033122

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.6	4.3	Not Detected
1,4-Dioxane	123-91-1	3.8	10	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.6	4.3	Not Detected
Tetrachloroethene	127-18-4	2.1	4.4	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.86	2.6	4.3	Not Detected
Trichloroethene	79-01-6	1.4	3.5	5.8	1.7 J
Vinyl Chloride	75-01-4	0.50	1.7	2.8	0.56 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1122_032421		
Lab ID:	2103778-14A	**Date/Time Analyzed:**	4/1/21 02:02 AM
Date/Time Collected:	3/24/21 08:47 AM	**Dilution Factor:**	2.12
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033123

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	3.7	10	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	2.0	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.84	2.5	4.2	Not Detected
Trichloroethene	79-01-6	1.4	3.4	5.7	Not Detected
Vinyl Chloride	75-01-4	0.49	1.6	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1020_032421		
Lab ID:	2103778-15A	**Date/Time Analyzed:**	4/1/21 02:33 AM
Date/Time Collected:	3/24/21 09:09 AM	**Dilution Factor:**	2.22
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j033124

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.6	4.4	Not Detected
1,4-Dioxane	123-91-1	3.9	11	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.1	2.6	4.4	Not Detected
Tetrachloroethene	127-18-4	2.1	4.5	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.88	2.6	4.4	Not Detected
Trichloroethene	79-01-6	1.4	3.6	6.0	Not Detected
Vinyl Chloride	75-01-4	0.51	1.7	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	102
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	101

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2103778

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Click links below to view:
Canister Sampling Guide
Helium Shroud Video

Client:	Ford	PID:	NA
Project Name:	Ford LTP		
Project Manager:	Kris Hinskey	P.O.#	30080642.701.04
Sampler:	Emma Witherspoon Andrew Banitt		
Site Name:	Ford LTP		

Special Instructions/Notes: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162 Level IV Reporting

Turnaround Time (Rush surcharges may apply)
5 Day Turnaround Time

Lab ID	Sample Identification	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15 (See Special Instructions/Notes)	Do Not Analyze		
01A	SL-4_032221	1L1941	1910	3/22/21	1610	3/22/21	1611	-29	-4			X			
02A	MH-1096_032221	1L1788	1910	3/22/21	1625	3/22/21	1626	-29	-6.5			X			
03A	MH-1245_032221	1L2943	2028	3/22/21	1334	3/22/21	1335	-29	-5.5			X			
04A	MH-1244_032221	1L3272	1946	3/22/21	1347	3/22/21	1348	-29	-5.5			X			
05A	MH-1231_032221	3400L498	1946	3/22/21	1404	3/22/21	1405	-29	-4			X			
06A	SL-5_032321	1L3238	2046	3/23/21	0914	3/23/21	0915	-29	-4			X			
07A	WDC_032321	1L3287	1913	3/23/21	0955	3/23/21	0956	-28.5	-4.5			X			
08A	EDC_032321	1L2839	1545	3/23/21	1015	3/23/21	1016	-29	-5			X			
09A	MH-1181_032321	1L2651	2035	3/23/21	1520	3/23/21	1522	-29	-6			X			
10A	MH-1123_032321	1L2641	1922	3/23/21	1547	3/23/21	1548	-29.5	-6			X			
11A	MH-1116_032321	1L3222	2028	3/23/21	1558	3/23/21	1559	-29	-6			X			
12A	MH-1113_032321	1L2579	1910	3/23/21	1612	3/23/21	1613	-29	-4.5			X			
13A	MH-1259_032321	1L3216	19380	3/23/21	1710	3/23/21	1711	-29	-6			X			
14A	MH-1122_032421	1L1612	1913	3/24/21	0846	3/24/21	0847	-28.5	-5.5			X			
15A	MH-1020_032421	1L2620	1922	3/24/21	0908	3/24/21	0909	-28.5	-6			X			

Relinquished by: (Signature/Affiliation) E Witherspoon / Arcadis	Date 3/25/21	Time 1200	Received by: (Signature/Affiliation)	Date 3-29-21	Time 0919
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: Fed Ex | Custody Seals Intact? | Yes | No | None

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4/5/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2103779

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 3/29/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2103779

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	03/29/2021	**CONTACT:**	Jade White
DATE COMPLETED:	04/05/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MH-1043_032421	TO-15	8 "Hg	9.8 psi
02A	MH-1067_032421	TO-15	8.6 "Hg	9.9 psi
03A	MH-1082_032421	TO-15	7.3 "Hg	10 psi
04A	DUP-01	TO-15	6.9 "Hg	10.1 psi
05A	DUP-02	TO-15	5.9 "Hg	9.9 psi
06A	MH-1001_032321	TO-15	5.9 "Hg	10 psi
07A	MH-1041_032321	TO-15	6.7 "Hg	10 psi
08A	MH-1066_032321	TO-15	6.5 "Hg	10 psi
09A	MH-1088_032321	TO-15	5.3 "Hg	10 psi
10A	MH-1210_032321	TO-15	6.1 "Hg	10.1 psi
11A	MH-1219_032321	TO-15	7.8 "Hg	10 psi
12A	MH-1171_032321	TO-15	7.1 "Hg	10.1 psi
13A	MH-1255_032321	TO-15	7.8 "Hg	10 psi
14A	MH-1248_032221	TO-15	7.1 "Hg	10 psi
15A	MH-1258_032221	TO-15	5.7 "Hg	10 psi
16A	MH-1256_032221	TO-15	7.1 "Hg	10 psi
17A	SL-3_032221	TO-15	6.3 "Hg	10 psi
18A	Lab Blank	TO-15	NA	NA
18B	Lab Blank	TO-15	NA	NA
19A	CCV	TO-15	NA	NA
19B	CCV	TO-15	NA	NA
20A	LCS	TO-15	NA	NA
20AA	LCSD	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2103779

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	03/29/2021	**CONTACT:**	Jade White
DATE COMPLETED:	04/05/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
20B	LCS	TO-15	NA	NA
20BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/05/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2103779

Seventeen 1 Liter Summa Canister (100% Certified) samples were received on March 29, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples MH-1255_032321, MH-1256_032221 and SL-3_032221 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_032421		
Lab ID:	2103779-01A	**Date/Time Analyzed:**	3/31/21 11:45 PM
Date/Time Collected:	3/24/21 09:48 AM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033122

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.5	Not Detected
1,4-Dioxane	123-91-1	2.4	4.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.5	Not Detected
Tetrachloroethene	127-18-4	1.2	3.8	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.2	4.5	Not Detected
Trichloroethene	79-01-6	0.88	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.73	1.4	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	113
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_032421		
Lab ID:	2103779-02A	**Date/Time Analyzed:**	4/1/21 12:15 AM
Date/Time Collected:	3/24/21 10:27 AM	**Dilution Factor:**	2.34
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033123

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	2.5	5.0	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	1.3	4.0	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.91	3.1	6.3	Not Detected
Vinyl Chloride	75-01-4	0.76	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_032421		
Lab ID:	2103779-03A	**Date/Time Analyzed:**	4/1/21 12:44 AM
Date/Time Collected:	3/24/21 10:50 AM	**Dilution Factor:**	2.22
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033124

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.4	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	Not Detected
Tetrachloroethene	127-18-4	1.2	3.8	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.86	3.0	6.0	Not Detected
Vinyl Chloride	75-01-4	0.72	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2103779-04A	**Date/Time Analyzed:**	4/1/21 01:13 AM
Date/Time Collected:	3/22/21 12:00 AM	**Dilution Factor:**	2.19
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033125

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	2.3	4.7	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.3	6.8
Tetrachloroethene	127-18-4	1.2	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.3	Not Detected
Trichloroethene	79-01-6	0.85	2.9	5.9	10
Vinyl Chloride	75-01-4	0.71	1.4	2.8	0.89 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-02		
Lab ID:	2103779-05A	**Date/Time Analyzed:**	4/1/21 01:43 AM
Date/Time Collected:	3/23/21 12:00 AM	**Dilution Factor:**	2.08
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033126

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.1	5.7
Tetrachloroethene	127-18-4	1.1	3.5	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.1	Not Detected
Trichloroethene	79-01-6	0.80	2.8	5.6	Not Detected
Vinyl Chloride	75-01-4	0.67	1.3	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	113
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_032321		
Lab ID:	2103779-06A	**Date/Time Analyzed:**	4/1/21 09:35 PM
Date/Time Collected:	3/23/21 10:48 AM	**Dilution Factor:**	2.09
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.1	7.5
Tetrachloroethene	127-18-4	1.1	3.5	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.1	Not Detected
Trichloroethene	79-01-6	0.81	2.8	5.6	Not Detected
Vinyl Chloride	75-01-4	0.67	1.3	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	93

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_032321		
Lab ID:	2103779-07A	**Date/Time Analyzed:**	4/1/21 10:05 PM
Date/Time Collected:	3/23/21 11:19 AM	**Dilution Factor:**	2.16
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.3	Not Detected
1,4-Dioxane	123-91-1	2.3	4.7	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.1	4.3	Not Detected
Tetrachloroethene	127-18-4	1.2	3.7	7.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.3	Not Detected
Trichloroethene	79-01-6	0.84	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.70	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_032321		
Lab ID:	2103779-08A	**Date/Time Analyzed:**	4/1/21 10:34 PM
Date/Time Collected:	3/23/21 11:48 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.2	Not Detected
1,4-Dioxane	123-91-1	2.3	4.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.2	3.6	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.2	Not Detected
Trichloroethene	79-01-6	0.83	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.69	1.4	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_032321		
Lab ID:	2103779-09A	**Date/Time Analyzed:**	3/31/21 05:36 PM
Date/Time Collected:	3/23/21 12:12 PM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.0	4.0	Not Detected
1,4-Dioxane	123-91-1	2.2	4.4	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.1	3.4	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.0	4.0	Not Detected
Trichloroethene	79-01-6	0.79	2.7	5.5	Not Detected
Vinyl Chloride	75-01-4	0.66	1.3	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_032321		
Lab ID:	2103779-10A	**Date/Time Analyzed:**	3/31/21 06:06 PM
Date/Time Collected:	3/23/21 01:21 PM	**Dilution Factor:**	2.12
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.2	Not Detected
1,4-Dioxane	123-91-1	2.2	4.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.2	3.6	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.2	Not Detected
Trichloroethene	79-01-6	0.82	2.8	5.7	Not Detected
Vinyl Chloride	75-01-4	0.68	1.4	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_032321		
Lab ID:	2103779-11A	**Date/Time Analyzed:**	3/31/21 06:35 PM
Date/Time Collected:	3/23/21 02:28 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.5	Not Detected
1,4-Dioxane	123-91-1	2.4	4.9	16	7.3 J
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.5	7.3
Tetrachloroethene	127-18-4	1.2	3.8	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.2	4.5	Not Detected
Trichloroethene	79-01-6	0.88	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.73	1.4	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_032321		
Lab ID:	2103779-12A	**Date/Time Analyzed:**	3/31/21 09:20 PM
Date/Time Collected:	3/23/21 02:56 PM	**Dilution Factor:**	2.21
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.3	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	40
Tetrachloroethene	127-18-4	1.2	3.7	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.86	3.0	5.9	1.7 J
Vinyl Chloride	75-01-4	0.71	1.4	2.8	1.8 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1255_032321		
Lab ID:	2103779-13A	**Date/Time Analyzed:**	4/1/21 02:10 AM
Date/Time Collected:	3/23/21 04:38 PM	**Dilution Factor:**	30.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033127

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	20	30	60	37 J
1,4-Dioxane	123-91-1	32	66	220	Not Detected
cis-1,2-Dichloroethene	156-59-2	22	30	60	810
Tetrachloroethene	127-18-4	16	51	100	Not Detected
trans-1,2-Dichloroethene	156-60-5	16	30	60	37 J
Trichloroethene	79-01-6	12	41	81	140
Vinyl Chloride	75-01-4	9.8	19	39	7800

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1248_032221		
Lab ID:	2103779-14A	**Date/Time Analyzed:**	3/31/21 09:50 PM
Date/Time Collected:	3/22/21 01:17 PM	**Dilution Factor:**	2.20
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.3	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	6.0
Tetrachloroethene	127-18-4	1.2	3.7	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.85	3.0	5.9	12
Vinyl Chloride	75-01-4	0.71	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	115
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1258_032221		
Lab ID:	2103779-15A	**Date/Time Analyzed:**	3/31/21 10:19 PM
Date/Time Collected:	3/22/21 02:30 PM	**Dilution Factor:**	2.07
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033119

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.0	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.0	4.1	43
Tetrachloroethene	127-18-4	1.1	3.5	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.0	4.1	Not Detected
Trichloroethene	79-01-6	0.80	2.8	5.6	3.4 J
Vinyl Chloride	75-01-4	0.67	1.3	2.6	5.8

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1256_032221		
Lab ID:	2103779-16A	**Date/Time Analyzed:**	3/31/21 10:47 PM
Date/Time Collected:	3/22/21 02:42 PM	**Dilution Factor:**	17.6
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033120

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	17	35	35
1,4-Dioxane	123-91-1	19	38	130	Not Detected
cis-1,2-Dichloroethene	156-59-2	13	17	35	7400
Tetrachloroethene	127-18-4	9.6	30	60	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.0	17	35	63
Trichloroethene	79-01-6	6.8	24	47	2100
Vinyl Chloride	75-01-4	5.7	11	22	3100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	93

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_032221		
Lab ID:	2103779-17A	**Date/Time Analyzed:**	3/31/21 11:16 PM
Date/Time Collected:	3/22/21 03:49 PM	**Dilution Factor:**	3.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033121

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.4	6.7	6.6 J
1,4-Dioxane	123-91-1	3.6	7.4	24	Not Detected
cis-1,2-Dichloroethene	156-59-2	2.4	3.4	6.7	1700
Tetrachloroethene	127-18-4	1.9	5.8	12	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	3.4	6.7	14
Trichloroethene	79-01-6	1.3	4.6	9.1	1000
Vinyl Chloride	75-01-4	1.1	2.2	4.3	650

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2103779-18A	**Date/Time Analyzed:**	3/31/21 11:46 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p033105a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.65	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	1.1	2.2	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.72	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.55	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.51	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.39	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.32	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2103779-18B	**Date/Time Analyzed:**	4/1/21 12:34 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p040106c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.65	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	1.1	2.2	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.72	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	0.55	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.51	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.39	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.32	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2103779-19A	**Date/Time Analyzed:**	3/31/21 10:04 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p033102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	100
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	119
trans-1,2-Dichloroethene	156-60-5	94
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	119
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2103779-19B	**Date/Time Analyzed:**	4/1/21 10:00 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p040102

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	100
1,4-Dioxane	123-91-1	95
cis-1,2-Dichloroethene	156-59-2	99
Tetrachloroethene	127-18-4	119
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	108
Vinyl Chloride	75-01-4	98

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	120
4-Bromofluorobenzene	460-00-4	70-130	117
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2103779-20A	**Date/Time Analyzed:**	3/31/21 10:32 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p033103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	106
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	98
Tetrachloroethene	127-18-4	118
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	105
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	117
4-Bromofluorobenzene	460-00-4	70-130	120
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2103779-20AA	**Date/Time Analyzed:**	3/31/21 11:00 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p033104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	99
Tetrachloroethene	127-18-4	117
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	106
Vinyl Chloride	75-01-4	102

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	115
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2103779-20B	**Date/Time Analyzed:**	4/1/21 10:29 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p040103

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	108
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	99
Tetrachloroethene	127-18-4	117
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	109
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	116
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2103779-20BB	**Date/Time Analyzed:**	4/1/21 10:58 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p040104

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	105
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	100
Tetrachloroethene	127-18-4	117
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	116
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

DATA VERIFICATION REPORT

April 5, 2021

Kris Hinskey
Arcadis of Michigan
28550 Cabot Drive
Suite 500
Novi, MI US 48377

CADENA project ID: E205162
Project: Ford Livonia Transmission Plant - 2021 Utility Corridor Evaluation Vapor Testing
Project number: 30080642.701.04
Event Specific Scope of Work References: Sample COC
Laboratory: EUROFINS-FOLSOM
Laboratory submittal: 2103779
Sample date: 2021-03-22, 03-23, 03-24
Report received by CADENA: 2021-04-05
Initial Data Verification completed by CADENA: 2021-04-05
Number of Samples: 17
Sample Matrices: AIR
Test Categories: TO-15 GCMS VOC
Please see attached criteria report or sample result/qualified analytical result summary for qualifier flags assigned to sample data.

There were no significant QC anomalies or exceptions to report.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

ARCADIS Design & Consultancy for natural and built assets

Ford Motor Company – Livonia Transmission Project

DATA REVIEW

Livonia, Michigan

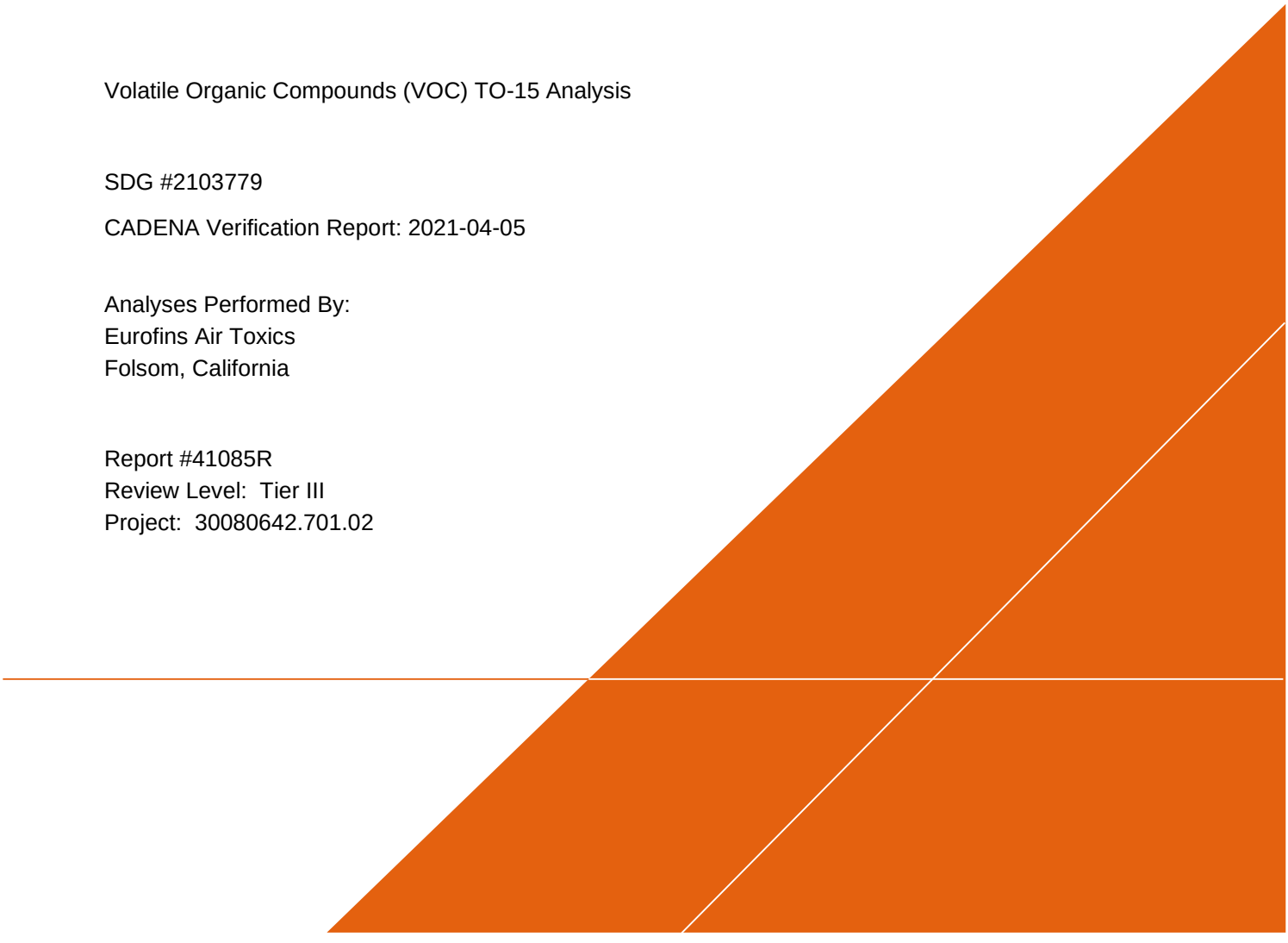
Volatile Organic Compounds (VOC) TO-15 Analysis

SDG #2103779

CADENA Verification Report: 2021-04-05

Analyses Performed By:
Eurofins Air Toxics
Folsom, California

Report #41085R
Review Level: Tier III
Project: 30080642.701.02



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 2103779 for samples collected in association with the Ford – Livonia, Michigan site. The review was conducted as a Tier III validation in addition to a verification/Tier II validation review performed by CADENA Inc. and included review of level IV laboratory data package completeness. Only elements of a Tier III validation effort (Tier III includes a detailed review of laboratory raw data to check for errors in calculation, calibration review, internal standard review and compound identification) and omitted deviations from the CADENA verification/Tier II report are documented in this report. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						TO-15 (Full Scan)	TO-15 (SIM)	MISC
2103779	MH-1043_032421	2103779-01A	Air	3/24/2021		X		
	MH-1067_032421	2103779-02A	Air	3/24/2021		X		
	MH-1082_032421	2103779-03A	Air	3/24/2021		X		
	DUP-01	2103779-04A	Air	3/22/2021	MH-1248_032221	X		
	DUP-02	2103779-05A	Air	3/23/2021	MH-1219_032321	X		
	MH-1001_032321	2103779-06A	Air	3/23/2021		X		
	MH-1041_032321	2103779-07A	Air	3/23/2021		X		
	MH-1066_032321	2103779-08A	Air	3/23/2021		X		
	MH-1088_032321	2103779-09A	Air	3/23/2021		X		
	MH-1210_032321	2103779-10A	Air	3/23/2021		X		
	MH-1219_032321	2103779-11A	Air	3/23/2021		X		
	MH-1171_032321	2103779-12A	Air	3/23/2021		X		
	MH-1255_032321	2103779-13A	Air	3/23/2021		X		
	MH-1248_032221	2103779-14A	Air	3/22/2021		X		
	MH-1258_032221	2103779-15A	Air	3/22/2021		X		
	MH-1256_032221	2103779-16A	Air	3/22/2021		X		
	SL-3_032221	2103779-17A	Air	3/22/2021		X		

DATA REVIEW

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of Quality Assurance or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

DATA REVIEW

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 (Full Scan). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

  UJ The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
USEPA TO-15	Air	30 days from collection to analysis (Canister)	Ambient Temperature	< -2" Hg

All samples were analyzed within the specified holding time and canister return pressure / vacuum criteria.

2. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

3. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

3.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 140% or less than 60% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

DATA REVIEW

5. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

6. Field Duplicate Sample Analysis

The field duplicate analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 35% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are not greater than five times the RL, a control limit of three times the RL is applied to the difference between the duplicate sample results.

Results (in µg/m^3) for the field duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MH-1248_032221/ DUP-01	cis-1,2-Dichloroethene	6.0	6.8	AC
	Trichloroethene	12	10	AC
	Vinyl Chloride	2.8 U	0.89 J	AC
MH-1219_032321/ DUP-02	1,4-Dioxane	7.3 J	15 U	AC
	cis-1,2-Dichloroethene	7.3	5.7	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Note: Dilution was performed on samples MH-1255_032321, MH-1256_032221 and SL-3_032221 due to the presence of high-level target species.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15 (Full Scan)	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-2"Hg)		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Field Duplicate Sample RPD		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: April 21, 2021

PEER REVIEW: Dennis Capria

DATE: April 27, 2021

CHAIN OF CUSTODY

CORRECTED SAMPLE ANALYSIS DATA SHEETS

NO CORRECTIONS/QUALIFERS ADDED TO SAMPLE ANALYSIS DATA SHEETS

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1043_032421		
Lab ID:	2103779-01A	**Date/Time Analyzed:**	3/31/21 11:45 PM
Date/Time Collected:	3/24/21 09:48 AM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033122

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.5	Not Detected
1,4-Dioxane	123-91-1	2.4	4.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.5	Not Detected
Tetrachloroethene	127-18-4	1.2	3.8	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.2	4.5	Not Detected
Trichloroethene	79-01-6	0.88	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.73	1.4	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	113
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1067_032421		
Lab ID:	2103779-02A	**Date/Time Analyzed:**	4/1/21 12:15 AM
Date/Time Collected:	3/24/21 10:27 AM	**Dilution Factor:**	2.34
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033123

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	2.5	5.0	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	1.3	4.0	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.3	4.6	Not Detected
Trichloroethene	79-01-6	0.91	3.1	6.3	Not Detected
Vinyl Chloride	75-01-4	0.76	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1082_032421		
Lab ID:	2103779-03A	**Date/Time Analyzed:**	4/1/21 12:44 AM
Date/Time Collected:	3/24/21 10:50 AM	**Dilution Factor:**	2.22
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033124

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.4	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	Not Detected
Tetrachloroethene	127-18-4	1.2	3.8	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.86	3.0	6.0	Not Detected
Vinyl Chloride	75-01-4	0.72	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	114
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2103779-04A	**Date/Time Analyzed:**	4/1/21 01:13 AM
Date/Time Collected:	3/22/21 12:00 AM	**Dilution Factor:**	2.19
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033125

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	2.3	4.7	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.3	6.8
Tetrachloroethene	127-18-4	1.2	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.3	Not Detected
Trichloroethene	79-01-6	0.85	2.9	5.9	10
Vinyl Chloride	75-01-4	0.71	1.4	2.8	0.89 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-02		
Lab ID:	2103779-05A	**Date/Time Analyzed:**	4/1/21 01:43 AM
Date/Time Collected:	3/23/21 12:00 AM	**Dilution Factor:**	2.08
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033126

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.1	5.7
Tetrachloroethene	127-18-4	1.1	3.5	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.1	Not Detected
Trichloroethene	79-01-6	0.80	2.8	5.6	Not Detected
Vinyl Chloride	75-01-4	0.67	1.3	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	113
4-Bromofluorobenzene	460-00-4	70-130	112
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1001_032321		
Lab ID:	2103779-06A	**Date/Time Analyzed:**	4/1/21 09:35 PM
Date/Time Collected:	3/23/21 10:48 AM	**Dilution Factor:**	2.09
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.1	7.5
Tetrachloroethene	127-18-4	1.1	3.5	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.1	Not Detected
Trichloroethene	79-01-6	0.81	2.8	5.6	Not Detected
Vinyl Chloride	75-01-4	0.67	1.3	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	93

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1041_032321		
Lab ID:	2103779-07A	**Date/Time Analyzed:**	4/1/21 10:05 PM
Date/Time Collected:	3/23/21 11:19 AM	**Dilution Factor:**	2.16
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.3	Not Detected
1,4-Dioxane	123-91-1	2.3	4.7	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.1	4.3	Not Detected
Tetrachloroethene	127-18-4	1.2	3.7	7.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.3	Not Detected
Trichloroethene	79-01-6	0.84	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.70	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1066_032321		
Lab ID:	2103779-08A	**Date/Time Analyzed:**	4/1/21 10:34 PM
Date/Time Collected:	3/23/21 11:48 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p040118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.2	Not Detected
1,4-Dioxane	123-91-1	2.3	4.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.2	3.6	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.2	Not Detected
Trichloroethene	79-01-6	0.83	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.69	1.4	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1088_032321		
Lab ID:	2103779-09A	**Date/Time Analyzed:**	3/31/21 05:36 PM
Date/Time Collected:	3/23/21 12:12 PM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033114

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.0	4.0	Not Detected
1,4-Dioxane	123-91-1	2.2	4.4	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.1	3.4	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.0	4.0	Not Detected
Trichloroethene	79-01-6	0.79	2.7	5.5	Not Detected
Vinyl Chloride	75-01-4	0.66	1.3	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1210_032321		
Lab ID:	2103779-10A	**Date/Time Analyzed:**	3/31/21 06:06 PM
Date/Time Collected:	3/23/21 01:21 PM	**Dilution Factor:**	2.12
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033115

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.2	Not Detected
1,4-Dioxane	123-91-1	2.2	4.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.2	3.6	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.1	4.2	Not Detected
Trichloroethene	79-01-6	0.82	2.8	5.7	Not Detected
Vinyl Chloride	75-01-4	0.68	1.4	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1219_032321		
Lab ID:	2103779-11A	**Date/Time Analyzed:**	3/31/21 06:35 PM
Date/Time Collected:	3/23/21 02:28 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033116

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.5	Not Detected
1,4-Dioxane	123-91-1	2.4	4.9	16	7.3 J
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.5	7.3
Tetrachloroethene	127-18-4	1.2	3.8	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.2	2.2	4.5	Not Detected
Trichloroethene	79-01-6	0.88	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.73	1.4	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1171_032321		
Lab ID:	2103779-12A	**Date/Time Analyzed:**	3/31/21 09:20 PM
Date/Time Collected:	3/23/21 02:56 PM	**Dilution Factor:**	2.21
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033117

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.3	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	40
Tetrachloroethene	127-18-4	1.2	3.7	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.86	3.0	5.9	1.7 J
Vinyl Chloride	75-01-4	0.71	1.4	2.8	1.8 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1255_032321		
Lab ID:	2103779-13A	**Date/Time Analyzed:**	4/1/21 02:10 AM
Date/Time Collected:	3/23/21 04:38 PM	**Dilution Factor:**	30.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033127

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	20	30	60	37 J
1,4-Dioxane	123-91-1	32	66	220	Not Detected
cis-1,2-Dichloroethene	156-59-2	22	30	60	810
Tetrachloroethene	127-18-4	16	51	100	Not Detected
trans-1,2-Dichloroethene	156-60-5	16	30	60	37 J
Trichloroethene	79-01-6	12	41	81	140
Vinyl Chloride	75-01-4	9.8	19	39	7800

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1248_032221		
Lab ID:	2103779-14A	**Date/Time Analyzed:**	3/31/21 09:50 PM
Date/Time Collected:	3/22/21 01:17 PM	**Dilution Factor:**	2.20
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033118

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.2	4.4	Not Detected
1,4-Dioxane	123-91-1	2.3	4.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.2	4.4	6.0
Tetrachloroethene	127-18-4	1.2	3.7	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.2	4.4	Not Detected
Trichloroethene	79-01-6	0.85	3.0	5.9	12
Vinyl Chloride	75-01-4	0.71	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	115
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1258_032221		
Lab ID:	2103779-15A	**Date/Time Analyzed:**	3/31/21 10:19 PM
Date/Time Collected:	3/22/21 02:30 PM	**Dilution Factor:**	2.07
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033119

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.0	4.1	Not Detected
1,4-Dioxane	123-91-1	2.2	4.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.0	4.1	43
Tetrachloroethene	127-18-4	1.1	3.5	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.1	2.0	4.1	Not Detected
Trichloroethene	79-01-6	0.80	2.8	5.6	3.4 J
Vinyl Chloride	75-01-4	0.67	1.3	2.6	5.8

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1256_032221		
Lab ID:	2103779-16A	**Date/Time Analyzed:**	3/31/21 10:47 PM
Date/Time Collected:	3/22/21 02:42 PM	**Dilution Factor:**	17.6
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033120

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	17	35	35
1,4-Dioxane	123-91-1	19	38	130	Not Detected
cis-1,2-Dichloroethene	156-59-2	13	17	35	7400
Tetrachloroethene	127-18-4	9.6	30	60	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.0	17	35	63
Trichloroethene	79-01-6	6.8	24	47	2100
Vinyl Chloride	75-01-4	5.7	11	22	3100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	93

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_032221		
Lab ID:	2103779-17A	**Date/Time Analyzed:**	3/31/21 11:16 PM
Date/Time Collected:	3/22/21 03:49 PM	**Dilution Factor:**	3.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p033121

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.4	6.7	6.6 J
1,4-Dioxane	123-91-1	3.6	7.4	24	Not Detected
cis-1,2-Dichloroethene	156-59-2	2.4	3.4	6.7	1700
Tetrachloroethene	127-18-4	1.9	5.8	12	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.7	3.4	6.7	14
Trichloroethene	79-01-6	1.3	4.6	9.1	1000
Vinyl Chloride	75-01-4	1.1	2.2	4.3	650

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	94

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2103779

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Click links below to view:
Canister Sampling Guide
Helium Shroud Video

Client: Ford PID: NA
Project Name: Ford LTP
Project Manager: Kris Hinskey P.O.# 30080642.701.04
Sampler: Emma Witherspoon Andrew Banitt
Site Name: Ford LTP

Special Instructions/Notes: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162 Level IV Reporting

Turnaround Time (Rush surcharges may apply)
5 Day Turnaround Time

Lab ID	Sample Identification	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15 (See Special Instructions/Notes)	Do Not Analyze		
01A	MH-1043_032421	1L2566	1824	3/24/21	0947	3/24/21	0948	-28.5	-6.5			X			
02A	MH-1067_032421	1L2677	1910	3/24/21	1026	3/24/21	1027	-28.5	-7			X			
03A	MH-1082_032421	1L2058	1938	3/24/21	1049	3/24/21	1050	-28.5	-5.5			X			
04A	DUP-01	1L3952	1910	3/22/21	—	3/22/21	—	-29	-6.5			X			
05A	DUP-02	1L2201	1922	3/23/21	—	3/23/21	—	-28.5	-5			X			
06A	MH-1001_032321	1L1753	1922	3/23/21	1046	3/23/21	1048	-29	-6			X			
07A	MH-1041_032321	1L1691	2023	3/23/21	1118	3/23/21	1119	-29	-6			V			
08A	MH-1066_032321	34000742	2005	3/23/21	1147	3/23/21	1148	-29	-5.5			X			
09A	MH-1088_032321	1L1861	1920	3/23/21	1211	3/23/21	1212	-29	-4			X			
10A	MH-1210_032321	1L2737	1913	3/23/21	1320	3/23/21	1321	-29	-4.5			X			
11A	MH-1219_032321	1L3050	2011	3/23/21	1427	3/23/21	1428	-29	-6.5			X			
12A	MH-1171_032321	1L2471	1922	3/23/21	1455	3/23/21	1456	-29.5	-6			X			
13A	MH-1255_032321	1L1594	1928	3/23/21	1637	3/23/21	1638	-29	-6.5			X			
14A	MH-1248_032221	1L2107	2005	3/22/21	1315	3/22/21	1317	-29	-6			X			
15A	MH-1258_032221	1L2380	1946	3/22/21	1429	3/22/21	1430	-29	-4.5			X			

Relinquished by: (Signature/Affiliation) E Witherspoon / Arcadis	Date 3/25/21	Time 1200	Received by: (Signature/Affiliation)	Date 3-29-21 Time 0919
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date Time

Lab Use Only

Shipper Name: Fed Ex | Custody Seals Intact? (Yes) No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2103779

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Click links below to view:
Canister Sampling Guide
Helium Shroud Video

Client: Ford PID: NA
Project Name: Ford LTP
Project Manager: Kris Hinskey P.O.# 30080642.701.04
Sampler: Emma Witherspoon Andrew Banitt
Site Name: Ford LTP

Special Instructions/Notes: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162 Level IV Reporting

Turnaround Time (Rush surcharges may apply)
5 Day Turnaround Time

Lab ID	Sample Identification	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	TO-15 (See Special Instructions/Notes)	Do Not Analyze		
16A	MH-1256-032221	1L3342	2020	3/22/21	1440	3/22/21	1442	-26.5	-6			X			
17A	SL-3-032221	1L2533	01938	3/22/21	1548	3/22/21	1549	-29	-5			X			

Relinquished by: (Signature/Affiliation) Ewitherspoon/Arcadis	Date 3/25/21	Time 1200	Received by: (Signature/Affiliation)	Date 3-29-21	Time 0914
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: FedEx | Custody Seals Intact? (Yes) No None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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6/15/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2106318

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 6/14/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

eurofins | Air Toxics

WORK ORDER #: 2106318

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	06/14/2021	**CONTACT:**	Jade White
DATE COMPLETED:	06/15/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-7_061021	TO-15	6.3 "Hg	10 psi
02A	SL-6_061021	TO-15	6.5 "Hg	10 psi
03A	SL-5_061021	TO-15	5.7 "Hg	10 psi
04A	SL-8_061021	TO-15	5.5 "Hg	9.9 psi
05A	SL-9_061021	TO-15	8.4 "Hg	9.9 psi
06A	MH-1234_061021	TO-15	6.3 "Hg	10 psi
07A	MH-1233_061021	TO-15	8.4 "Hg	9.9 psi
08A	MH-1252_061021	TO-15	5.3 "Hg	9.8 psi
09A	MH-1261_061021	TO-15	8 "Hg	9.8 psi
10A	DUP-01	TO-15	4.3 "Hg	10 psi
11A	Lab Blank	TO-15	NA	NA
12A	CCV	TO-15	NA	NA
13A	LCS	TO-15	NA	NA
13AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/15/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2106318

Ten 1 Liter Summa Canister (100% Certified) samples were received on June 14, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples SL-5_061021 and DUP-01 due to the presence of high level target species.

Dilution was performed on samples SL-7_061021 and SL-6_061021 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.
M - Reported value may be biased due to apparent matrix interferences.
CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_061021		
Lab ID:	2106318-01A	**Date/Time Analyzed:**	6/14/21 09:30 PM
Date/Time Collected:	6/10/21 09:00 AM	**Dilution Factor:**	8.51
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061417

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.7	10	17	Not Detected
1,4-Dioxane	123-91-1	4.0	15	61	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.4	10	17	20
Tetrachloroethene	127-18-4	3.7	17	29	Not Detected
trans-1,2-Dichloroethene	156-60-5	3.7	10	17	Not Detected
Trichloroethene	79-01-6	3.4	14	23	28
Vinyl Chloride	75-01-4	2.8	6.5	11	12

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	107

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_061021		
Lab ID:	2106318-02A	**Date/Time Analyzed:**	6/14/21 09:54 PM
Date/Time Collected:	6/10/21 09:30 AM	**Dilution Factor:**	6.13
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061418

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	3.4	7.3	12	Not Detected
1,4-Dioxane	123-91-1	2.9	11	44	Not Detected
cis-1,2-Dichloroethene	156-59-2	3.9	7.3	12	27
Tetrachloroethene	127-18-4	2.7	12	21	2.9 J
trans-1,2-Dichloroethene	156-60-5	2.7	7.3	12	Not Detected
Trichloroethene	79-01-6	2.5	9.9	16	25
Vinyl Chloride	75-01-4	2.0	4.7	7.8	5.6 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_061021		
Lab ID:	2106318-03A	**Date/Time Analyzed:**	6/14/21 10:19 PM
Date/Time Collected:	6/10/21 09:55 AM	**Dilution Factor:**	20.7
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061419

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	25	41	55
1,4-Dioxane	123-91-1	9.7	37	150	Not Detected
cis-1,2-Dichloroethene	156-59-2	13	25	41	13000
Tetrachloroethene	127-18-4	9.0	42	70	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.1	25	41	140
Trichloroethene	79-01-6	8.3	33	56	7800
Vinyl Chloride	75-01-4	6.9	16	26	6500

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_061021		
Lab ID:	2106318-04A	**Date/Time Analyzed:**	6/14/21 10:45 PM
Date/Time Collected:	6/10/21 10:23 AM	**Dilution Factor:**	2.05
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061420

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.1	2.4	4.1	1.5 J
1,4-Dioxane	123-91-1	0.96	3.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	2.4	4.1	550
Tetrachloroethene	127-18-4	0.89	4.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.90	2.4	4.1	4.3
Trichloroethene	79-01-6	0.82	3.3	5.5	290
Vinyl Chloride	75-01-4	0.68	1.6	2.6	210

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_061021		
Lab ID:	2106318-05A	**Date/Time Analyzed:**	6/14/21 11:12 PM
Date/Time Collected:	6/10/21 10:43 AM	**Dilution Factor:**	2.32
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061421

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.8	4.6	7.4
1,4-Dioxane	123-91-1	1.1	4.2	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.8	4.6	1400
Tetrachloroethene	127-18-4	1.0	4.7	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.8	4.6	13
Trichloroethene	79-01-6	0.93	3.7	6.2	1000
Vinyl Chloride	75-01-4	0.77	1.8	3.0	310

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	110

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1234_061021		
Lab ID:	2106318-06A	**Date/Time Analyzed:**	6/14/21 11:38 PM
Date/Time Collected:	6/10/21 01:26 PM	**Dilution Factor:**	2.13
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061422

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	1.0	3.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	2.5	4.2	1.9 J
Tetrachloroethene	127-18-4	0.93	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.94	2.5	4.2	1.9 J
Trichloroethene	79-01-6	0.86	3.4	5.7	3.8 J
Vinyl Chloride	75-01-4	0.71	1.6	2.7	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1233_061021		
Lab ID:	2106318-07A	**Date/Time Analyzed:**	6/15/21 12:05 AM
Date/Time Collected:	6/10/21 01:49 PM	**Dilution Factor:**	2.32
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061423

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.3	2.8	4.6	Not Detected
1,4-Dioxane	123-91-1	1.1	4.2	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.8	4.6	5.7
Tetrachloroethene	127-18-4	1.0	4.7	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.8	4.6	Not Detected
Trichloroethene	79-01-6	0.93	3.7	6.2	8.2
Vinyl Chloride	75-01-4	0.77	1.8	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1252_061021		
Lab ID:	2106318-08A	**Date/Time Analyzed:**	6/15/21 12:31 AM
Date/Time Collected:	6/10/21 02:09 PM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061424

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.1	2.4	4.0	Not Detected
1,4-Dioxane	123-91-1	0.94	3.6	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	2.4	4.0	2.8 J
Tetrachloroethene	127-18-4	0.88	4.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.89	2.4	4.0	Not Detected
Trichloroethene	79-01-6	0.81	3.2	5.4	3.2 J
Vinyl Chloride	75-01-4	0.67	1.5	2.6	0.88 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1261_061021		
Lab ID:	2106318-09A	**Date/Time Analyzed:**	6/15/21 12:58 AM
Date/Time Collected:	6/10/21 02:43 PM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061425

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.7	4.5	Not Detected
1,4-Dioxane	123-91-1	1.1	4.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	2.7	4.5	2.0 J
Tetrachloroethene	127-18-4	0.99	4.6	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.0	2.7	4.5	Not Detected
Trichloroethene	79-01-6	0.91	3.6	6.1	2.9 J
Vinyl Chloride	75-01-4	0.76	1.7	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	110

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2106318-10A	**Date/Time Analyzed:**	6/15/21 01:22 AM
Date/Time Collected:	6/10/21 12:00 AM	**Dilution Factor:**	26.2
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a061426

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	14	31	52	64
1,4-Dioxane	123-91-1	12	47	190	Not Detected
cis-1,2-Dichloroethene	156-59-2	17	31	52	17000
Tetrachloroethene	127-18-4	11	53	89	Not Detected
trans-1,2-Dichloroethene	156-60-5	12	31	52	170
Trichloroethene	79-01-6	10	42	70	9700
Vinyl Chloride	75-01-4	8.7	20	33	8100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	110

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2106318-11A	**Date/Time Analyzed:**	6/14/21 12:42 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a061407c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.55	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	0.47	1.8	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.63	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.44	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.44	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.40	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.33	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	90
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2106318-12A	**Date/Time Analyzed:**	6/14/21 09:38 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a061405

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	112
cis-1,2-Dichloroethene	156-59-2	109
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	100
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	114

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	109

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2106318-13A	**Date/Time Analyzed:**	6/14/21 08:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a061403

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	111
cis-1,2-Dichloroethene	156-59-2	107
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	109

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	108

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2106318-13AA	**Date/Time Analyzed:**	6/14/21 08:53 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a061404

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	111
cis-1,2-Dichloroethene	156-59-2	110
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	100
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	114

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	109

* % Recovery is calculated using unrounded analytical results.

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7/23/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30050315/30080642
Workorder #: 2107380

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 7/16/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2107380

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	30050315/30080642 Ford LTP
DATE RECEIVED:	07/16/2021	**CONTACT:**	Jade White
DATE COMPLETED:	07/23/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-15_071321	TO-15	6.0 "Hg	10.4 psi
02A	SL-14_071321	TO-15	6.5 "Hg	10 psi
03A	SL-13_071321	TO-15	6.5 "Hg	10 psi
04A	SL-7_071321	TO-15	6.0 "Hg	10 psi
05A	SL-6_071321	TO-15	6.5 "Hg	10 psi
06A	SL-5_071321	TO-15	7.5 "Hg	10 psi
07A	SL-8_071321	TO-15	7.5 "Hg	10 psi
08A	SL-9_071321	TO-15	6.0 "Hg	10 psi
09A	SL-10_071321	TO-15	7.0 "Hg	10 psi
10A	SL-11_071321	TO-15	5.5 "Hg	10 psi
11A	SL-12_071321	TO-15	6.5 "Hg	10 psi
12A	DUP-01	TO-15	6.5 "Hg	10 psi
13A	Lab Blank	TO-15	NA	NA
14A	CCV	TO-15	NA	NA
15A	LCS	TO-15	NA	NA
15AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 07/23/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2107380

Twelve 1 Liter Summa Canister (100% Certified) samples were received on July 16, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

A revised Chain of Custody (COC) was provided by the client on 07/14/21.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on sample SL-5_071321 due to the presence of high level non-target species.

Dilution was performed on samples SL-8_071321, SL-9_071321, SL-10_071321, SL-12_071321 and DUP-01 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-15_071321		
Lab ID:	2107380-01A	**Date/Time Analyzed:**	7/22/21 08:50 PM
Date/Time Collected:	7/13/21 09:08 AM	**Dilution Factor:**	2.13
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072216

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	1.0	3.8	15	2.3 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.5	4.2	Not Detected
Tetrachloroethene	127-18-4	0.93	4.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.94	2.5	4.2	Not Detected
Trichloroethene	79-01-6	0.86	3.4	5.7	1.9 J
Vinyl Chloride	75-01-4	0.71	1.6	2.7	1.8 J

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	89
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-14_071321		
Lab ID:	2107380-02A	**Date/Time Analyzed:**	7/22/21 02:27 PM
Date/Time Collected:	7/13/21 09:39 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072207

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	1.0	3.8	15	2.4 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.5	4.2	1.5 J
Tetrachloroethene	127-18-4	0.93	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.94	2.5	4.2	Not Detected
Trichloroethene	79-01-6	0.86	3.4	5.8	4.0 J
Vinyl Chloride	75-01-4	0.71	1.6	2.7	9.1

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-13_071321		
Lab ID:	2107380-03A	**Date/Time Analyzed:**	7/22/21 02:54 PM
Date/Time Collected:	7/13/21 10:03 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072208

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	Not Detected
1,4-Dioxane	123-91-1	1.0	3.8	15	2.9 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.5	4.2	7.1
Tetrachloroethene	127-18-4	0.93	4.4	7.2	2.9 J
trans-1,2-Dichloroethene	156-60-5	0.94	2.5	4.2	Not Detected
Trichloroethene	79-01-6	0.86	3.4	5.8	5.3 J
Vinyl Chloride	75-01-4	0.71	1.6	2.7	3.1

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	89
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_071321		
Lab ID:	2107380-04A	**Date/Time Analyzed:**	7/22/21 03:20 PM
Date/Time Collected:	7/13/21 10:27 AM	**Dilution Factor:**	2.10
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072209

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	3.6 J
1,4-Dioxane	123-91-1	0.98	3.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.3	2.5	4.2	610
Tetrachloroethene	127-18-4	0.92	4.3	7.1	2.3 J
trans-1,2-Dichloroethene	156-60-5	0.92	2.5	4.2	8.6
Trichloroethene	79-01-6	0.84	3.4	5.6	380
Vinyl Chloride	75-01-4	0.70	1.6	2.7	420

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	87
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_071321		
Lab ID:	2107380-05A	**Date/Time Analyzed:**	7/22/21 03:47 PM
Date/Time Collected:	7/13/21 10:51 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072210

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.2	2.5	4.2	8.9
1,4-Dioxane	123-91-1	1.0	3.8	15	2.9 J
cis-1,2-Dichloroethene	156-59-2	1.4	2.5	4.2	1600
Tetrachloroethene	127-18-4	0.93	4.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.94	2.5	4.2	21
Trichloroethene	79-01-6	0.86	3.4	5.8	970
Vinyl Chloride	75-01-4	0.71	1.6	2.7	890

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_071321		
Lab ID:	2107380-06A	**Date/Time Analyzed:**	7/22/21 05:53 PM
Date/Time Collected:	7/13/21 12:15 PM	**Dilution Factor:**	22.4
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072215

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	12	27	44	19 J
1,4-Dioxane	123-91-1	10	40	160	Not Detected
cis-1,2-Dichloroethene	156-59-2	14	27	44	3300
Tetrachloroethene	127-18-4	9.8	46	76	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.8	27	44	36 J
Trichloroethene	79-01-6	9.0	36	60	2200
Vinyl Chloride	75-01-4	7.5	17	29	1600

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_071321		
Lab ID:	2107380-07A	**Date/Time Analyzed:**	7/22/21 04:11 PM
Date/Time Collected:	7/13/21 12:41 PM	**Dilution Factor:**	8.96
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072211

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.9	11	18	23
1,4-Dioxane	123-91-1	4.2	16	64	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.7	11	18	4100
Tetrachloroethene	127-18-4	3.9	18	30	Not Detected
trans-1,2-Dichloroethene	156-60-5	3.9	11	18	58
Trichloroethene	79-01-6	3.6	14	24	3100
Vinyl Chloride	75-01-4	3.0	6.9	11	2400

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	89
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_071321		
Lab ID:	2107380-08A	**Date/Time Analyzed:**	7/22/21 04:36 PM
Date/Time Collected:	7/13/21 01:04 PM	**Dilution Factor:**	14.0
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072212

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	7.7	17	28	44
1,4-Dioxane	123-91-1	6.5	25	100	Not Detected
cis-1,2-Dichloroethene	156-59-2	8.9	17	28	7300
Tetrachloroethene	127-18-4	6.1	28	47	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.2	17	28	110
Trichloroethene	79-01-6	5.6	22	38	5900
Vinyl Chloride	75-01-4	4.7	11	18	4100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-10_071321		
Lab ID:	2107380-09A	**Date/Time Analyzed:**	7/22/21 05:02 PM
Date/Time Collected:	7/13/21 01:31 PM	**Dilution Factor:**	14.6
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072213

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	8.0	17	29	33
1,4-Dioxane	123-91-1	6.8	26	100	Not Detected
cis-1,2-Dichloroethene	156-59-2	9.2	17	29	6900
Tetrachloroethene	127-18-4	6.4	30	50	Not Detected
trans-1,2-Dichloroethene	156-60-5	6.4	17	29	91
Trichloroethene	79-01-6	5.9	24	39	5400
Vinyl Chloride	75-01-4	4.9	11	19	3400

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-11_071321		
Lab ID:	2107380-10A	**Date/Time Analyzed:**	7/22/21 05:28 PM
Date/Time Collected:	7/13/21 01:52 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072214

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.1	2.4	4.1	Not Detected
1,4-Dioxane	123-91-1	0.96	3.7	15	1.3 J
cis-1,2-Dichloroethene	156-59-2	1.3	2.4	4.1	32
Tetrachloroethene	127-18-4	0.90	4.2	7.0	2.2 J
trans-1,2-Dichloroethene	156-60-5	0.90	2.4	4.1	Not Detected
Trichloroethene	79-01-6	0.83	3.3	5.5	28
Vinyl Chloride	75-01-4	0.69	1.6	2.6	19

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-12_071321		
Lab ID:	2107380-11A	**Date/Time Analyzed:**	7/22/21 09:15 PM
Date/Time Collected:	7/13/21 02:16 PM	**Dilution Factor:**	8.58
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072217

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.7	10	17	33
1,4-Dioxane	123-91-1	4.0	15	62	Not Detected
cis-1,2-Dichloroethene	156-59-2	5.4	10	17	4200
Tetrachloroethene	127-18-4	3.7	17	29	Not Detected
trans-1,2-Dichloroethene	156-60-5	3.8	10	17	81
Trichloroethene	79-01-6	3.4	14	23	3900
Vinyl Chloride	75-01-4	2.9	6.6	11	3100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	88
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2107380-12A	**Date/Time Analyzed:**	7/22/21 09:39 PM
Date/Time Collected:	7/13/21 12:00 AM	**Dilution Factor:**	7.15
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a072218

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	3.9	8.5	14	16
1,4-Dioxane	123-91-1	3.3	13	52	Not Detected
cis-1,2-Dichloroethene	156-59-2	4.5	8.5	14	3600
Tetrachloroethene	127-18-4	3.1	14	24	Not Detected
trans-1,2-Dichloroethene	156-60-5	3.1	8.5	14	39
Trichloroethene	79-01-6	2.9	12	19	2300
Vinyl Chloride	75-01-4	2.4	5.5	9.1	1600

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2107380-13A	**Date/Time Analyzed:**	7/22/21 12:52 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a072206a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.55	1.2	2.0	Not Detected
1,4-Dioxane	123-91-1	0.47	1.8	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.63	1.2	2.0	Not Detected
Tetrachloroethene	127-18-4	0.44	2.0	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.44	1.2	2.0	Not Detected
Trichloroethene	79-01-6	0.40	1.6	2.7	Not Detected
Vinyl Chloride	75-01-4	0.33	0.77	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2107380-14A	**Date/Time Analyzed:**	7/22/21 09:38 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a072202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	92
1,4-Dioxane	123-91-1	109
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	110
trans-1,2-Dichloroethene	156-60-5	91
Trichloroethene	79-01-6	107
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2107380-15A	**Date/Time Analyzed:**	7/22/21 10:03 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a072203

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	92
1,4-Dioxane	123-91-1	107
cis-1,2-Dichloroethene	156-59-2	92
Tetrachloroethene	127-18-4	111
trans-1,2-Dichloroethene	156-60-5	90
Trichloroethene	79-01-6	106
Vinyl Chloride	75-01-4	92

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2107380-15AA	**Date/Time Analyzed:**	7/22/21 10:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a072204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	112
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	108
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	97

* % Recovery is calculated using unrounded analytical results.

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10/13/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2110246

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 10/12/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2110246

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	10/12/2021	**CONTACT:**	Jade White
DATE COMPLETED:	10/13/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-15_100721	TO-15	7.1 "Hg	10 psi
02A	SL-14_100721	TO-15	6.3 "Hg	10 psi
03A	SL-13_100721	TO-15	5.9 "Hg	9.9 psi
04A	SL-7_100721	TO-15	6.1 "Hg	9.8 psi
05A	SL-6_100721	TO-15	7.1 "Hg	9.9 psi
06A	SL-5_100721	TO-15	3.9 "Hg	9.8 psi
07A	SL-8_100721	TO-15	5.3 "Hg	9.9 psi
08A	SL-9_100721	TO-15	7.8 "Hg	9.9 psi
09A	SL-10_100721	TO-15	6.1 "Hg	9.8 psi
10A	SL-11_100721	TO-15	6.3 "Hg	9.9 psi
11A	SL-12_100721	TO-15	5.9 "Hg	10 psi
12A	MH-1231_100721	TO-15	7.3 "Hg	10 psi
13A	SL-2_100721	TO-15	5.5 "Hg	9.9 psi
14A	SL-3_100721	TO-15	5.5 "Hg	9.8 psi
15A	SL-4_100721	TO-15	5.9 "Hg	10 psi
16A	DUP-01	TO-15	4.3 "Hg	10 psi
17A	Lab Blank	TO-15	NA	NA
17B	Lab Blank	TO-15	NA	NA
18A	CCV	TO-15	NA	NA
18B	CCV	TO-15	NA	NA
19A	LCS	TO-15	NA	NA
19AA	LCSD	TO-15	NA	NA
19B	LCS	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2110246

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	10/12/2021	**CONTACT:**	Jade White
DATE COMPLETED:	10/13/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
19BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 10/13/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209220, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-20-16, UT NELAP – CA009332020-12, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-014, Effective date: 10/18/2020, Expiration date: 10/17/2021.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2110246

Sixteen 1 Liter Summa Canister (100% Certified) samples were received on October 12, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples SL-11_100721, SL-12_100721 and SL-4_100721 due to the presence of high level target species.

Dilution was performed on samples SL-15_100721, SL-14_100721, SL-13_100721, SL-7_100721, SL-6_100721, SL-9_100721, SL-10_100721 and MH-1231_100721 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-15_100721		
Lab ID:	2110246-01A	**Date/Time Analyzed:**	10/12/21 09:40 PM
Date/Time Collected:	10/7/21 09:53 AM	**Dilution Factor:**	8.80
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101217

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	9.3	13	17	Not Detected
1,4-Dioxane	123-91-1	6.9	24	63	Not Detected
cis-1,2-Dichloroethene	156-59-2	7.4	13	17	Not Detected
Tetrachloroethene	127-18-4	7.6	22	30	Not Detected
trans-1,2-Dichloroethene	156-60-5	8.3	13	17	Not Detected
Trichloroethene	79-01-6	10	17	24	Not Detected
Vinyl Chloride	75-01-4	8.1	8.3	11	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-14_100721		
Lab ID:	2110246-02A	**Date/Time Analyzed:**	10/12/21 10:07 PM
Date/Time Collected:	10/7/21 10:14 AM	**Dilution Factor:**	21.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101218

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	22	31	42	Not Detected
1,4-Dioxane	123-91-1	17	58	150	Not Detected
cis-1,2-Dichloroethene	156-59-2	18	31	42	Not Detected
Tetrachloroethene	127-18-4	18	53	72	Not Detected
trans-1,2-Dichloroethene	156-60-5	20	31	42	Not Detected
Trichloroethene	79-01-6	25	42	57	Not Detected
Vinyl Chloride	75-01-4	20	20	27	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-13_100721		
Lab ID:	2110246-03A	**Date/Time Analyzed:**	10/12/21 10:33 PM
Date/Time Collected:	10/7/21 10:33 AM	**Dilution Factor:**	20.8
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101219

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	22	30	41	Not Detected
1,4-Dioxane	123-91-1	16	56	150	Not Detected
cis-1,2-Dichloroethene	156-59-2	17	30	41	Not Detected
Tetrachloroethene	127-18-4	18	52	70	Not Detected
trans-1,2-Dichloroethene	156-60-5	20	30	41	Not Detected
Trichloroethene	79-01-6	24	41	56	Not Detected
Vinyl Chloride	75-01-4	19	20	26	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_100721		
Lab ID:	2110246-04A	**Date/Time Analyzed:**	10/12/21 11:10 PM
Date/Time Collected:	10/7/21 10:53 AM	**Dilution Factor:**	10.5
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101220

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	15	21	Not Detected
1,4-Dioxane	123-91-1	8.2	28	76	Not Detected
cis-1,2-Dichloroethene	156-59-2	8.8	15	21	Not Detected
Tetrachloroethene	127-18-4	9.0	26	36	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.9	15	21	Not Detected
Trichloroethene	79-01-6	12	21	28	Not Detected
Vinyl Chloride	75-01-4	9.6	9.9	13	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_100721		
Lab ID:	2110246-05A	**Date/Time Analyzed:**	10/12/21 11:38 PM
Date/Time Collected:	10/7/21 11:10 AM	**Dilution Factor:**	11.0
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101221

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	12	16	22	Not Detected
1,4-Dioxane	123-91-1	8.6	30	79	Not Detected
cis-1,2-Dichloroethene	156-59-2	9.2	16	22	Not Detected
Tetrachloroethene	127-18-4	9.4	28	37	Not Detected
trans-1,2-Dichloroethene	156-60-5	10	16	22	Not Detected
Trichloroethene	79-01-6	13	22	30	Not Detected
Vinyl Chloride	75-01-4	10	10	14	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_100721		
Lab ID:	2110246-06A	**Date/Time Analyzed:**	10/13/21 07:46 AM
Date/Time Collected:	10/7/21 12:25 PM	**Dilution Factor:**	1.92
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101226

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	2.8	3.8	Not Detected
1,4-Dioxane	123-91-1	1.5	5.2	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.8	3.8	440
Tetrachloroethene	127-18-4	1.6	4.8	6.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.8	3.8	4.8
Trichloroethene	79-01-6	2.2	3.8	5.2	140
Vinyl Chloride	75-01-4	1.8	1.8	2.4	97

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_100721		
Lab ID:	2110246-07A	**Date/Time Analyzed:**	10/13/21 12:35 AM
Date/Time Collected:	10/7/21 12:47 PM	**Dilution Factor:**	2.03
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101223

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	390
Tetrachloroethene	127-18-4	1.7	5.1	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	4.4
Trichloroethene	79-01-6	2.4	4.0	5.4	140
Vinyl Chloride	75-01-4	1.9	1.9	2.6	93

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_100721		
Lab ID:	2110246-08A	**Date/Time Analyzed:**	10/13/21 01:02 AM
Date/Time Collected:	10/7/21 01:11 PM	**Dilution Factor:**	11.3
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101224

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	12	16	22	Not Detected
1,4-Dioxane	123-91-1	8.9	30	81	Not Detected
cis-1,2-Dichloroethene	156-59-2	9.4	16	22	930
Tetrachloroethene	127-18-4	9.7	28	38	Not Detected
trans-1,2-Dichloroethene	156-60-5	11	16	22	13 J
Trichloroethene	79-01-6	13	22	30	370
Vinyl Chloride	75-01-4	10	11	14	260

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-10_100721		
Lab ID:	2110246-09A	**Date/Time Analyzed:**	10/13/21 01:29 AM
Date/Time Collected:	10/7/21 01:27 PM	**Dilution Factor:**	10.5
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3101225

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	11	15	21	Not Detected
1,4-Dioxane	123-91-1	8.2	28	76	Not Detected
cis-1,2-Dichloroethene	156-59-2	8.8	15	21	1800
Tetrachloroethene	127-18-4	9.0	26	36	Not Detected
trans-1,2-Dichloroethene	156-60-5	9.9	15	21	18 J
Trichloroethene	79-01-6	12	21	28	570
Vinyl Chloride	75-01-4	9.6	9.9	13	360

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-11_100721		
Lab ID:	2110246-10A	**Date/Time Analyzed:**	10/12/21 11:17 PM
Date/Time Collected:	10/7/21 01:51 PM	**Dilution Factor:**	4.24
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101221

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.5	6.2	8.4	Not Detected
1,4-Dioxane	123-91-1	3.3	11	30	Not Detected
cis-1,2-Dichloroethene	156-59-2	3.5	6.2	8.4	2100
Tetrachloroethene	127-18-4	3.6	11	14	Not Detected
trans-1,2-Dichloroethene	156-60-5	4.0	6.2	8.4	24
Trichloroethene	79-01-6	5.0	8.4	11	610
Vinyl Chloride	75-01-4	3.9	4.0	5.4	390

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	92

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-12_100721		
Lab ID:	2110246-11A	**Date/Time Analyzed:**	10/12/21 11:46 PM
Date/Time Collected:	10/7/21 02:11 PM	**Dilution Factor:**	4.18
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101222

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	4.4	6.1	8.3	Not Detected
1,4-Dioxane	123-91-1	3.3	11	30	Not Detected
cis-1,2-Dichloroethene	156-59-2	3.5	6.1	8.3	1500
Tetrachloroethene	127-18-4	3.6	10	14	Not Detected
trans-1,2-Dichloroethene	156-60-5	4.0	6.1	8.3	18
Trichloroethene	79-01-6	4.9	8.3	11	490
Vinyl Chloride	75-01-4	3.8	4.0	5.3	320

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	92

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_100721		
Lab ID:	2110246-12A	**Date/Time Analyzed:**	10/13/21 12:14 AM
Date/Time Collected:	10/7/21 02:46 PM	**Dilution Factor:**	14.8
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101223

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	16	22	29	Not Detected
1,4-Dioxane	123-91-1	12	40	110	Not Detected
cis-1,2-Dichloroethene	156-59-2	12	22	29	4400
Tetrachloroethene	127-18-4	13	37	50	Not Detected
trans-1,2-Dichloroethene	156-60-5	14	22	29	53
Trichloroethene	79-01-6	17	29	40	1600
Vinyl Chloride	75-01-4	14	14	19	1500

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_100721		
Lab ID:	2110246-13A	**Date/Time Analyzed:**	10/13/21 12:43 AM
Date/Time Collected:	10/7/21 03:22 PM	**Dilution Factor:**	2.05
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101224

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	880
Tetrachloroethene	127-18-4	1.8	5.1	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.1	12
Trichloroethene	79-01-6	2.4	4.1	5.5	320
Vinyl Chloride	75-01-4	1.9	1.9	2.6	250

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_100721		
Lab ID:	2110246-14A	**Date/Time Analyzed:**	10/13/21 01:13 AM
Date/Time Collected:	10/7/21 03:42 PM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101225

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	120
Tetrachloroethene	127-18-4	1.8	5.1	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.5	36
Vinyl Chloride	75-01-4	1.9	1.9	2.6	18

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-4_100721		
Lab ID:	2110246-15A	**Date/Time Analyzed:**	10/13/21 09:20 AM
Date/Time Collected:	10/7/21 04:16 PM	**Dilution Factor:**	13.9
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101231

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	15	20	28	30
1,4-Dioxane	123-91-1	11	38	100	Not Detected
cis-1,2-Dichloroethene	156-59-2	12	20	28	8200
Tetrachloroethene	127-18-4	12	35	47	Not Detected
trans-1,2-Dichloroethene	156-60-5	13	20	28	130
Trichloroethene	79-01-6	16	28	37	4000
Vinyl Chloride	75-01-4	13	13	18	2800

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	93

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2110246-16A	**Date/Time Analyzed:**	10/13/21 01:42 AM
Date/Time Collected:	10/7/21 12:00 AM	**Dilution Factor:**	1.96
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p101226

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.5	5.3	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	390
Tetrachloroethene	127-18-4	1.7	4.9	6.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.9	3.9	5.6
Trichloroethene	79-01-6	2.3	3.9	5.3	110
Vinyl Chloride	75-01-4	1.8	1.8	2.5	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	107
Toluene-d8	2037-26-5	70-130	92

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2110246-17A	**Date/Time Analyzed:**	10/12/21 12:03 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3101205d

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2110246-17B	**Date/Time Analyzed:**	10/12/21 01:07 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p101206c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	103
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2110246-18A	**Date/Time Analyzed:**	10/12/21 10:13 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3101202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	102
1,4-Dioxane	123-91-1	106
cis-1,2-Dichloroethene	156-59-2	104
Tetrachloroethene	127-18-4	105
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	104

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2110246-18B	**Date/Time Analyzed:**	10/12/21 10:41 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p101202

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	109
1,4-Dioxane	123-91-1	99
cis-1,2-Dichloroethene	156-59-2	117
Tetrachloroethene	127-18-4	105
trans-1,2-Dichloroethene	156-60-5	111
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2110246-19A	**Date/Time Analyzed:**	10/12/21 10:41 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3101203

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	102
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	105
Vinyl Chloride	75-01-4	101

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	97
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2110246-19AA	**Date/Time Analyzed:**	10/12/21 11:08 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3101204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	98
1,4-Dioxane	123-91-1	96
cis-1,2-Dichloroethene	156-59-2	102
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	96

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2110246-19B	**Date/Time Analyzed:**	10/12/21 11:10 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p101203

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	110
1,4-Dioxane	123-91-1	100
cis-1,2-Dichloroethene	156-59-2	114
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	116
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	98

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2110246-19BB	**Date/Time Analyzed:**	10/12/21 11:39 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p101204

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	107
1,4-Dioxane	123-91-1	97
cis-1,2-Dichloroethene	156-59-2	117
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	111
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

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11/8/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30080642.701.04
Workorder #: 2111093

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 11/4/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2111093

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	30080642.701.04 Ford LTP
DATE RECEIVED:	11/04/2021	**CONTACT:**	Jade White
DATE COMPLETED:	11/08/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	MH-1231_110221	TO-15	6.0 "Hg	10 psi
02A	SL-2_110221	TO-15	5.5 "Hg	10 psi
03A	SL-3_110221	TO-15	5.5 "Hg	10 psi
04A	SL-5_110221	TO-15	4.0 "Hg	10 psi
05A	SL-6_110221	TO-15	5.0 "Hg	10 psi
06A	SL-7_110221	TO-15	4.5 "Hg	10 psi
07A	SL-8_110221	TO-15	6.5 "Hg	10 psi
08A	SL-9_110221	TO-15	5.0 "Hg	10 psi
09A	SL-10_110221	TO-15	6.0 "Hg	10 psi
10A	SL-11_110221	TO-15	4.5 "Hg	10 psi
11A	SL-12_110221	TO-15	4.5 "Hg	10 psi
12A	SL-13_110221	TO-15	4.5 "Hg	10 psi
13A	SL-14_110221	TO-15	6.0 "Hg	10 psi
14A	SL-15_110221	TO-15	5.0 "Hg	10 psi
15A	SL-16_110221	TO-15	5.0 "Hg	10 psi
16A	Dup-01	TO-15	6.0 "Hg	10 psi
17A	Lab Blank	TO-15	NA	NA
18A	CCV	TO-15	NA	NA
19A	LCS	TO-15	NA	NA
19AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/08/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2111093

Sixteen 1 Liter Summa Canister (100% Certified) samples were received on November 04, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on sample MH-1231_110221 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_110221		
Lab ID:	2111093-01A	**Date/Time Analyzed:**	11/6/21 08:10 AM
Date/Time Collected:	11/2/21 02:20 PM	**Dilution Factor:**	8.40
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110527

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	8.9	12	17	12 J
1,4-Dioxane	123-91-1	6.6	23	60	Not Detected
cis-1,2-Dichloroethene	156-59-2	7.0	12	17	880
Tetrachloroethene	127-18-4	7.2	21	28	7.3 J
trans-1,2-Dichloroethene	156-60-5	8.0	12	17	13 J
Trichloroethene	79-01-6	9.8	17	22	33
Vinyl Chloride	75-01-4	7.7	7.9	11	1300

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	94

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_110221		
Lab ID:	2111093-02A	**Date/Time Analyzed:**	11/5/21 03:04 PM
Date/Time Collected:	11/2/21 02:46 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110506

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	11
Tetrachloroethene	127-18-4	1.8	5.2	7.0	3.0 J
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	14

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	89

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_110221		
Lab ID:	2111093-03A	**Date/Time Analyzed:**	11/5/21 03:37 PM
Date/Time Collected:	11/2/21 03:09 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110507

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	3.9 J
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_110221		
Lab ID:	2111093-04A	**Date/Time Analyzed:**	11/5/21 04:10 PM
Date/Time Collected:	11/2/21 10:48 AM	**Dilution Factor:**	1.94
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110508

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	2.8	3.8	Not Detected
1,4-Dioxane	123-91-1	1.5	5.2	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.8	3.8	Not Detected
Tetrachloroethene	127-18-4	1.7	4.9	6.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.8	3.8	Not Detected
Trichloroethene	79-01-6	2.3	3.8	5.2	Not Detected
Vinyl Chloride	75-01-4	1.8	1.8	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	91

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_110221		
Lab ID:	2111093-05A	**Date/Time Analyzed:**	11/5/21 07:10 PM
Date/Time Collected:	11/2/21 10:06 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110513

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	101
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	91

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_110221		
Lab ID:	2111093-06A	**Date/Time Analyzed:**	11/5/21 10:06 PM
Date/Time Collected:	11/2/21 09:46 AM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110516

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	88

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_110221		
Lab ID:	2111093-07A	**Date/Time Analyzed:**	11/5/21 10:39 PM
Date/Time Collected:	11/2/21 11:11 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110517

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_110221		
Lab ID:	2111093-08A	**Date/Time Analyzed:**	11/5/21 11:12 PM
Date/Time Collected:	11/2/21 12:29 PM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110518

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-10_110221		
Lab ID:	2111093-09A	**Date/Time Analyzed:**	11/5/21 11:45 PM
Date/Time Collected:	11/2/21 12:49 PM	**Dilution Factor:**	2.10
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110519

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-11_110221		
Lab ID:	2111093-10A	**Date/Time Analyzed:**	11/6/21 12:19 AM
Date/Time Collected:	11/2/21 01:10 PM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110520

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-12_110221		
Lab ID:	2111093-11A	**Date/Time Analyzed:**	11/6/21 12:52 AM
Date/Time Collected:	11/2/21 01:32 PM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110521

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	10
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	2.5 J
Vinyl Chloride	75-01-4	1.8	1.9	2.5	14

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	88

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-13_110221		
Lab ID:	2111093-12A	**Date/Time Analyzed:**	11/6/21 08:43 AM
Date/Time Collected:	11/2/21 09:24 AM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110528

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	89

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-14_110221		
Lab ID:	2111093-13A	**Date/Time Analyzed:**	11/6/21 01:25 AM
Date/Time Collected:	11/2/21 09:02 AM	**Dilution Factor:**	2.10
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110522

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-15_110221		
Lab ID:	2111093-14A	**Date/Time Analyzed:**	11/6/21 01:58 AM
Date/Time Collected:	11/2/21 08:39 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110523

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	98
4-Bromofluorobenzene	460-00-4	70-130	96
Toluene-d8	2037-26-5	70-130	89

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-16_110221		
Lab ID:	2111093-15A	**Date/Time Analyzed:**	11/6/21 02:32 AM
Date/Time Collected:	11/2/21 03:40 PM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110524

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	89

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Dup-01		
Lab ID:	2111093-16A	**Date/Time Analyzed:**	11/6/21 03:05 AM
Date/Time Collected:	11/2/21 12:00 AM	**Dilution Factor:**	2.10
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j110525

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	95
Toluene-d8	2037-26-5	70-130	89

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2111093-17A	**Date/Time Analyzed:**	11/5/21 12:47 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j110505a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	94
Toluene-d8	2037-26-5	70-130	90

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2111093-18A	**Date/Time Analyzed:**	11/5/21 10:27 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j110502

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	97
1,4-Dioxane	123-91-1	101
cis-1,2-Dichloroethene	156-59-2	101
Tetrachloroethene	127-18-4	113
trans-1,2-Dichloroethene	156-60-5	104
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	91

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	95

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2111093-19A	**Date/Time Analyzed:**	11/5/21 10:58 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j110503

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	100
1,4-Dioxane	123-91-1	102
cis-1,2-Dichloroethene	156-59-2	103
Tetrachloroethene	127-18-4	112
trans-1,2-Dichloroethene	156-60-5	106
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	93

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	99
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2111093-19AA	**Date/Time Analyzed:**	11/5/21 11:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j110504

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	103
1,4-Dioxane	123-91-1	102
cis-1,2-Dichloroethene	156-59-2	105
Tetrachloroethene	127-18-4	115
trans-1,2-Dichloroethene	156-60-5	107
Trichloroethene	79-01-6	101
Vinyl Chloride	75-01-4	96

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	100
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	94

* % Recovery is calculated using unrounded analytical results.

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12/7/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #:
Workorder #: 2111739

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 11/30/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2111739

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	11/30/2021	**CONTACT:**	Jade White
DATE COMPLETED:	12/07/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-15_112321	TO-15	5.3 "Hg	9.8 psi
02A	SL-14_112321	TO-15	6.3 "Hg	9.9 psi
03A	SL-13_112321	TO-15	5.5 "Hg	10 psi
04A	SL-7_112321	TO-15	4.7 "Hg	9.9 psi
05A	SL-6_112321	TO-15	5.1 "Hg	10 psi
06A	SL-5_112321	TO-15	5.9 "Hg	10 psi
07A	SL-8_112321	TO-15	6.5 "Hg	10.2 psi
08A	SL-9_112321	TO-15	5.5 "Hg	10 psi
09A	SL-10_112321	TO-15	6.1 "Hg	10 psi
10A	SL-11_112321	TO-15	5.5 "Hg	10 psi
11A	MH-1231_112421	TO-15	4.5 "Hg	10 psi
12A	SL-2_112421	TO-15	4.5 "Hg	9.7 psi
13A	SL-3_112421	TO-15	4.7 "Hg	10 psi
14A	SL-16_112421	TO-15	5.1 "Hg	10 psi
15A	SL-17_112421	TO-15	4.7 "Hg	10 psi
16A	SL-18_112421	TO-15	5.7 "Hg	9.9 psi
17A	SL-4_112421	TO-15	5.5 "Hg	10 psi
18A	DUP-01	TO-15	4.5 "Hg	9.7 psi
19A	DUP-02	TO-15	4.9 "Hg	9.8 psi
20A	Lab Blank	TO-15	NA	NA
20B	Lab Blank	TO-15	NA	NA
20C	Lab Blank	TO-15	NA	NA
21A	CCV	TO-15	NA	NA

Continued on next page

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WORK ORDER #: 2111739

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	Ford LTP
DATE RECEIVED:	11/30/2021	**CONTACT:**	Jade White
DATE COMPLETED:	12/07/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
21B	CCV	TO-15	NA	NA
21C	CCV	TO-15	NA	NA
22A	LCS	TO-15	NA	NA
22AA	LCSD	TO-15	NA	NA
22B	LCS	TO-15	NA	NA
22BB	LCSD	TO-15	NA	NA
22C	LCS	TO-15	NA	NA
22CC	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 12/07/21

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2111739

Nineteen 1 Liter Summa Canister (100% Certified) samples were received on November 30, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-15_112321		
Lab ID:	2111739-01A	**Date/Time Analyzed:**	12/4/21 03:35 PM
Date/Time Collected:	11/23/21 09:31 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120410

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-14_112321		
Lab ID:	2111739-02A	**Date/Time Analyzed:**	12/6/21 01:21 PM
Date/Time Collected:	11/23/21 09:54 AM	**Dilution Factor:**	2.12
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120606

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.7	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.7	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-13_112321		
Lab ID:	2111739-03A	**Date/Time Analyzed:**	12/6/21 01:51 PM
Date/Time Collected:	11/23/21 10:18 AM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120607

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_112321		
Lab ID:	2111739-04A	**Date/Time Analyzed:**	12/6/21 02:20 PM
Date/Time Collected:	11/23/21 10:58 AM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120608

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_112321		
Lab ID:	2111739-05A	**Date/Time Analyzed:**	12/6/21 02:50 PM
Date/Time Collected:	11/23/21 11:22 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120609

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_112321		
Lab ID:	2111739-06A	**Date/Time Analyzed:**	12/6/21 03:19 PM
Date/Time Collected:	11/23/21 12:53 PM	**Dilution Factor:**	2.09
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120610

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.1	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.1	7.6
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_112321		
Lab ID:	2111739-07A	**Date/Time Analyzed:**	12/6/21 03:48 PM
Date/Time Collected:	11/23/21 01:18 PM	**Dilution Factor:**	2.16
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120611

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.2	4.3	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.2	4.3	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.2	4.3	Not Detected
Trichloroethene	79-01-6	2.5	4.3	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_112321		
Lab ID:	2111739-08A	**Date/Time Analyzed:**	12/6/21 04:18 PM
Date/Time Collected:	11/23/21 01:40 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdp.i / p120612

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	99
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-10_112321		
Lab ID:	2111739-09A	**Date/Time Analyzed:**	12/4/21 03:20 PM
Date/Time Collected:	11/23/21 01:59 PM	**Dilution Factor:**	2.11
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120406

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.7	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-11_112321		
Lab ID:	2111739-10A	**Date/Time Analyzed:**	12/4/21 03:49 PM
Date/Time Collected:	11/23/21 02:21 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120407

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_112421		
Lab ID:	2111739-11A	**Date/Time Analyzed:**	12/4/21 04:18 PM
Date/Time Collected:	11/24/21 08:56 AM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120408

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	2.7 J
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	440
Tetrachloroethene	127-18-4	1.7	5.0	6.7	2.9 J
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	4.4
Trichloroethene	79-01-6	2.3	3.9	5.3	9.3
Vinyl Chloride	75-01-4	1.8	1.9	2.5	460

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_112421		
Lab ID:	2111739-12A	**Date/Time Analyzed:**	12/4/21 04:48 PM
Date/Time Collected:	11/24/21 09:38 AM	**Dilution Factor:**	1.95
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120409

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.5	5.3	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	4.6
Tetrachloroethene	127-18-4	1.7	4.9	6.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.2	Not Detected
Vinyl Chloride	75-01-4	1.8	1.8	2.5	4.4

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	96
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_112421		
Lab ID:	2111739-13A	**Date/Time Analyzed:**	12/4/21 05:17 PM
Date/Time Collected:	11/24/21 10:02 AM	**Dilution Factor:**	1.99
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120410

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	4.0	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-16_112421		
Lab ID:	2111739-14A	**Date/Time Analyzed:**	12/4/21 05:47 PM
Date/Time Collected:	11/24/21 10:20 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120411

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	17
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-17_112421		
Lab ID:	2111739-15A	**Date/Time Analyzed:**	12/4/21 06:16 PM
Date/Time Collected:	11/24/21 10:48 AM	**Dilution Factor:**	1.99
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120412

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	4.0	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-18_112421		
Lab ID:	2111739-16A	**Date/Time Analyzed:**	12/4/21 06:45 PM
Date/Time Collected:	11/24/21 11:42 AM	**Dilution Factor:**	2.07
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120413

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-4_112421		
Lab ID:	2111739-17A	**Date/Time Analyzed:**	12/4/21 07:14 PM
Date/Time Collected:	11/24/21 12:11 PM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120414

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.5	Not Detected
Vinyl Chloride	75-01-4	1.9	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2111739-18A	**Date/Time Analyzed:**	12/4/21 07:44 PM
Date/Time Collected:	11/24/21 12:00 AM	**Dilution Factor:**	1.95
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120415

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	2.9	3.9	2.6 J
1,4-Dioxane	123-91-1	1.5	5.3	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	370
Tetrachloroethene	127-18-4	1.7	4.9	6.6	2.5 J
trans-1,2-Dichloroethene	156-60-5	1.8	2.9	3.9	3.8 J
Trichloroethene	79-01-6	2.3	3.9	5.2	8.0
Vinyl Chloride	75-01-4	1.8	1.8	2.5	380

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-02		
Lab ID:	2111739-19A	**Date/Time Analyzed:**	12/4/21 08:13 PM
Date/Time Collected:	11/24/21 12:00 AM	**Dilution Factor:**	1.99
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msd3.i / 3120416

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	4.0	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2111739-20A	**Date/Time Analyzed:**	12/4/21 11:59 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120405c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2111739-20B	**Date/Time Analyzed:**	12/4/21 01:48 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3120405a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2111739-20C	**Date/Time Analyzed:**	12/6/21 12:09 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120605e

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	100
Toluene-d8	2037-26-5	70-130	97

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2111739-21A	**Date/Time Analyzed:**	12/4/21 10:10 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120402

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	96
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	93
Tetrachloroethene	127-18-4	106
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	95
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2111739-21B	**Date/Time Analyzed:**	12/4/21 12:12 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3120402

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	97
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	112
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	81

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2111739-21C	**Date/Time Analyzed:**	12/6/21 10:33 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120602

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	89
cis-1,2-Dichloroethene	156-59-2	93
Tetrachloroethene	127-18-4	104
trans-1,2-Dichloroethene	156-60-5	96
Trichloroethene	79-01-6	98
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	94
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	96

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2111739-22A	**Date/Time Analyzed:**	12/4/21 10:38 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120403

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	92
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	90
Tetrachloroethene	127-18-4	107
trans-1,2-Dichloroethene	156-60-5	94
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	98

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2111739-22AA	**Date/Time Analyzed:**	12/4/21 11:05 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120404

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	93
1,4-Dioxane	123-91-1	93
cis-1,2-Dichloroethene	156-59-2	92
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	96

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	96

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2111739-22B	**Date/Time Analyzed:**	12/4/21 12:40 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3120403

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	89
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	111
trans-1,2-Dichloroethene	156-60-5	89
Trichloroethene	79-01-6	108
Vinyl Chloride	75-01-4	76

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	102

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2111739-22BB	**Date/Time Analyzed:**	12/4/21 01:07 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msd3.i / 3120404

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	89
1,4-Dioxane	123-91-1	98
cis-1,2-Dichloroethene	156-59-2	96
Tetrachloroethene	127-18-4	115
trans-1,2-Dichloroethene	156-60-5	92
Trichloroethene	79-01-6	111
Vinyl Chloride	75-01-4	77

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	108
Toluene-d8	2037-26-5	70-130	105

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2111739-22C	**Date/Time Analyzed:**	12/6/21 11:01 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120603

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	94
cis-1,2-Dichloroethene	156-59-2	90
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	98

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	102
Toluene-d8	2037-26-5	70-130	95

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2111739-22CC	**Date/Time Analyzed:**	12/6/21 11:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdp.i / p120604

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	94
1,4-Dioxane	123-91-1	95
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	111
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	99

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	97

* % Recovery is calculated using unrounded analytical results.

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12/28/2021
Mr. Jim Tomalia
Arcadis U.S., Inc.
28550 Cabot Dr.
Suite 500
Novi MI 48377

Project Name: Ford LTP
Project #: 30080642.701.04
Workorder #: 2112568

Dear Mr. Jim Tomalia

The following report includes the data for the above referenced project for sample(s) received on 12/17/2021 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Jade White

Project Manager

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WORK ORDER #: 2112568

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	30080642.701.04 Ford LTP
DATE RECEIVED:	12/17/2021	**CONTACT:**	Jade White
DATE COMPLETED:	12/28/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SL-4_121421	TO-15	4.9 "Hg	10 psi
02A	SL-18_121421	TO-15	4.5 "Hg	10.1 psi
03A	SL-17_121421	TO-15	5.3 "Hg	9.8 psi
04A	SL-16_121421	TO-15	4.5 "Hg	9.9 psi
05A	SL-3_121421	TO-15	5.5 "Hg	10 psi
06A	SL-2_121421	TO-15	5.3 "Hg	10 psi
07A	MH-1231_121421	TO-15	5.3 "Hg	10 psi
08A	SL-21_121421	TO-15	5.1 "Hg	10 psi
09A	SL-20_121421	TO-15	6.7 "Hg	9.9 psi
10A	SL-22_121421	TO-15	5.9 "Hg	9.9 psi
11A	DUP-01	TO-15	3.7 "Hg	9.9 psi
12A	DUP-02	TO-15	4.9 "Hg	10.1 psi
13A	SL-15_121621	TO-15	6.7 "Hg	9.9 psi
14A	SL-14_121621	TO-15	7.3 "Hg	9.9 psi
15A	SL-13_121621	TO-15	6.1 "Hg	10 psi
16A	SL-7_121621	TO-15	6.1 "Hg	9.9 psi
17A	SL-6_121621	TO-15	7.1 "Hg	9.9 psi
18A	SL-5_121621	TO-15	6.5 "Hg	9.9 psi
19A	SL-8_121621	TO-15	6.5 "Hg	10 psi
20A	SL-9_121621	TO-15	5.9 "Hg	10 psi
21A	SL-10_121621	TO-15	7.8 "Hg	10 psi
22A	SL-11_121621	TO-15	5.9 "Hg	10 psi
23A	SL-12_121621	TO-15	6.1 "Hg	10 psi

Continued on next page

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WORK ORDER #: 2112568

Work Order Summary

CLIENT:	Mr. Jim Tomalia Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	517-819-0356	**P.O. #**	30080642.701.04
FAX:		**PROJECT #**	30080642.701.04 Ford LTP
DATE RECEIVED:	12/17/2021	**CONTACT:**	Jade White
DATE COMPLETED:	12/28/2021		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
24A	SL-19_121621	TO-15	7.6 "Hg	10 psi
25A	Lab Blank	TO-15	NA	NA
25B	Lab Blank	TO-15	NA	NA
26A	CCV	TO-15	NA	NA
26B	CCV	TO-15	NA	NA
27A	LCS	TO-15	NA	NA
27AA	LCSD	TO-15	NA	NA
27B	LCS	TO-15	NA	NA
27BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/28/21

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2112568

Twenty-four 1 Liter Summa Canister (100% Certified) samples were received on December 17, 2021. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

The Chain of Custody (COC) information for samples SL-20_121421 and SL-22_121421 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the sample tags was used to process and report the samples.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-4_121421		
Lab ID:	2112568-01A	**Date/Time Analyzed:**	12/27/21 01:37 PM
Date/Time Collected:	12/14/21 09:41 AM	**Dilution Factor:**	2.01
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a122706

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	2.9	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	101
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-18_121421		
Lab ID:	2112568-02A	**Date/Time Analyzed:**	12/27/21 02:04 PM
Date/Time Collected:	12/14/21 10:06 AM	**Dilution Factor:**	1.98
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a122707

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	Not Detected
Tetrachloroethene	127-18-4	1.7	5.0	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	85
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-17_121421		
Lab ID:	2112568-03A	**Date/Time Analyzed:**	12/27/21 02:31 PM
Date/Time Collected:	12/14/21 10:28 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a122708

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-16_121421		
Lab ID:	2112568-04A	**Date/Time Analyzed:**	12/27/21 02:57 PM
Date/Time Collected:	12/14/21 10:50 AM	**Dilution Factor:**	1.97
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a122709

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	2.9	3.9	Not Detected
1,4-Dioxane	123-91-1	1.5	5.3	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.9	3.9	3.8 J
Tetrachloroethene	127-18-4	1.7	4.9	6.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.9	3.9	Not Detected
Trichloroethene	79-01-6	2.3	3.9	5.3	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.5	2.9

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	86
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-3_121421		
Lab ID:	2112568-05A	**Date/Time Analyzed:**	12/27/21 03:24 PM
Date/Time Collected:	12/14/21 11:21 AM	**Dilution Factor:**	2.06
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msda.i / a122710

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	4.2
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	390
Tetrachloroethene	127-18-4	1.8	5.2	7.0	2.9 J
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	7.0
Trichloroethene	79-01-6	2.4	4.1	5.5	27
Vinyl Chloride	75-01-4	1.9	1.9	2.6	480

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	84
4-Bromofluorobenzene	460-00-4	70-130	103
Toluene-d8	2037-26-5	70-130	99

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-2_121421		
Lab ID:	2112568-06A	**Date/Time Analyzed:**	12/27/21 02:52 PM
Date/Time Collected:	12/14/21 11:52 AM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122707

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	65
Tetrachloroethene	127-18-4	1.8	5.1	6.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.5	2.5 J
Vinyl Chloride	75-01-4	1.9	1.9	2.6	62

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	MH-1231_121421		
Lab ID:	2112568-07A	**Date/Time Analyzed:**	12/27/21 03:26 PM
Date/Time Collected:	12/14/21 12:16 PM	**Dilution Factor:**	2.04
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122708

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.0	4.1
1,4-Dioxane	123-91-1	1.6	5.5	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	710
Tetrachloroethene	127-18-4	1.8	5.1	6.9	4.1 J
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	6.4
Trichloroethene	79-01-6	2.4	4.0	5.5	18
Vinyl Chloride	75-01-4	1.9	1.9	2.6	770

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	84
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-21_121421		
Lab ID:	2112568-08A	**Date/Time Analyzed:**	12/27/21 03:59 PM
Date/Time Collected:	12/14/21 01:54 PM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122709

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	Not Detected
1,4-Dioxane	123-91-1	1.6	5.4	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	Not Detected
Tetrachloroethene	127-18-4	1.7	5.1	6.8	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	Not Detected
Trichloroethene	79-01-6	2.4	4.0	5.4	Not Detected
Vinyl Chloride	75-01-4	1.8	1.9	2.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	83
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-20_121421		
Lab ID:	2112568-09A	**Date/Time Analyzed:**	12/27/21 04:33 PM
Date/Time Collected:	12/14/21 02:07 PM	**Dilution Factor:**	2.15
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122710

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.2	4.3	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.2	4.3	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.2	4.3	Not Detected
Trichloroethene	79-01-6	2.5	4.3	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	81
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-22_121421		
Lab ID:	2112568-10A	**Date/Time Analyzed:**	12/27/21 09:45 PM
Date/Time Collected:	12/14/21 02:34 PM	**Dilution Factor:**	2.08
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122716

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.0	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	2.4 J
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.0	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.0	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.1	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.6	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-01		
Lab ID:	2112568-11A	**Date/Time Analyzed:**	12/27/21 05:06 PM
Date/Time Collected:	12/14/21 12:00 AM	**Dilution Factor:**	1.91
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122711

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.0	2.8	3.8	Not Detected
1,4-Dioxane	123-91-1	1.5	5.2	14	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.8	3.8	Not Detected
Tetrachloroethene	127-18-4	1.6	4.8	6.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.8	2.8	3.8	Not Detected
Trichloroethene	79-01-6	2.2	3.8	5.1	Not Detected
Vinyl Chloride	75-01-4	1.8	1.8	2.4	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	81
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	DUP-02		
Lab ID:	2112568-12A	**Date/Time Analyzed:**	12/27/21 05:39 PM
Date/Time Collected:	12/14/21 12:00 AM	**Dilution Factor:**	2.02
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122712

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.1	3.0	4.0	3.0 J
1,4-Dioxane	123-91-1	1.6	5.4	14	2.7 J
cis-1,2-Dichloroethene	156-59-2	1.7	3.0	4.0	660
Tetrachloroethene	127-18-4	1.7	5.1	6.8	3.9 J
trans-1,2-Dichloroethene	156-60-5	1.9	3.0	4.0	6.1
Trichloroethene	79-01-6	2.4	4.0	5.4	18
Vinyl Chloride	75-01-4	1.8	1.9	2.6	480

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	84
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-15_121621		
Lab ID:	2112568-13A	**Date/Time Analyzed:**	12/27/21 06:13 PM
Date/Time Collected:	12/16/21 08:21 AM	**Dilution Factor:**	2.15
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122713

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.2	4.3	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.2	4.3	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.3	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.2	4.3	Not Detected
Trichloroethene	79-01-6	2.5	4.3	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	83
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-14_121621		
Lab ID:	2112568-14A	**Date/Time Analyzed:**	12/27/21 06:46 PM
Date/Time Collected:	12/16/21 08:38 AM	**Dilution Factor:**	2.21
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122714

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.2	4.4	Not Detected
1,4-Dioxane	123-91-1	1.7	6.0	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.2	4.4	2.5 J
Tetrachloroethene	127-18-4	1.9	5.5	7.5	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.1	3.2	4.4	Not Detected
Trichloroethene	79-01-6	2.6	4.4	5.9	Not Detected
Vinyl Chloride	75-01-4	2.0	2.1	2.8	5.9

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	81
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-13_121621		
Lab ID:	2112568-15A	**Date/Time Analyzed:**	12/27/21 07:20 PM
Date/Time Collected:	12/16/21 08:54 AM	**Dilution Factor:**	2.11
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122715

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.7	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	105
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-7_121621		
Lab ID:	2112568-16A	**Date/Time Analyzed:**	12/27/21 10:19 PM
Date/Time Collected:	12/16/21 09:07 AM	**Dilution Factor:**	2.10
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122717

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.3	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	2.6 J
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-6_121621		
Lab ID:	2112568-17A	**Date/Time Analyzed:**	12/27/21 10:52 PM
Date/Time Collected:	12/16/21 09:36 AM	**Dilution Factor:**	2.19
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122718

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.2	4.3	Not Detected
1,4-Dioxane	123-91-1	1.7	5.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.2	4.3	Not Detected
Tetrachloroethene	127-18-4	1.9	5.5	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.1	3.2	4.3	Not Detected
Trichloroethene	79-01-6	2.6	4.4	5.9	Not Detected
Vinyl Chloride	75-01-4	2.0	2.1	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-5_121621		
Lab ID:	2112568-18A	**Date/Time Analyzed:**	12/27/21 11:25 PM
Date/Time Collected:	12/16/21 09:57 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122719

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-8_121621		
Lab ID:	2112568-19A	**Date/Time Analyzed:**	12/27/21 11:59 PM
Date/Time Collected:	12/16/21 10:08 AM	**Dilution Factor:**	2.14
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122720

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.3	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.7	5.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	Not Detected
Tetrachloroethene	127-18-4	1.8	5.4	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.8	Not Detected
Vinyl Chloride	75-01-4	2.0	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-9_121621		
Lab ID:	2112568-20A	**Date/Time Analyzed:**	12/28/21 12:32 AM
Date/Time Collected:	12/16/21 10:24 AM	**Dilution Factor:**	2.09
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122721

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.1	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	84
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-10_121621		
Lab ID:	2112568-21A	**Date/Time Analyzed:**	12/28/21 01:05 AM
Date/Time Collected:	12/16/21 10:37 AM	**Dilution Factor:**	2.27
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122722

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.4	3.3	4.5	Not Detected
1,4-Dioxane	123-91-1	1.8	6.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.9	3.3	4.5	Not Detected
Tetrachloroethene	127-18-4	1.9	5.7	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.2	3.3	4.5	Not Detected
Trichloroethene	79-01-6	2.6	4.5	6.1	Not Detected
Vinyl Chloride	75-01-4	2.1	2.1	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	85
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-11_121621		
Lab ID:	2112568-22A	**Date/Time Analyzed:**	12/28/21 01:39 AM
Date/Time Collected:	12/16/21 10:51 AM	**Dilution Factor:**	2.09
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122723

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.1	Not Detected
1,4-Dioxane	123-91-1	1.6	5.6	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.7	3.1	4.1	Not Detected
Tetrachloroethene	127-18-4	1.8	5.2	7.1	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.1	Not Detected
Trichloroethene	79-01-6	2.4	4.2	5.6	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	86
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-12_121621		
Lab ID:	2112568-23A	**Date/Time Analyzed:**	12/28/21 02:12 AM
Date/Time Collected:	12/16/21 11:06 AM	**Dilution Factor:**	2.11
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122724

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.2	3.1	4.2	Not Detected
1,4-Dioxane	123-91-1	1.6	5.7	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.8	3.1	4.2	2.5 J
Tetrachloroethene	127-18-4	1.8	5.3	7.2	2.0 J
trans-1,2-Dichloroethene	156-60-5	2.0	3.1	4.2	Not Detected
Trichloroethene	79-01-6	2.5	4.2	5.7	Not Detected
Vinyl Chloride	75-01-4	1.9	2.0	2.7	4.4

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	85
Toluene-d8	2037-26-5	70-130	105

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	SL-19_121621		
Lab ID:	2112568-24A	**Date/Time Analyzed:**	12/28/21 02:46 AM
Date/Time Collected:	12/16/21 11:19 AM	**Dilution Factor:**	2.25
Media:	1 Liter Summa Canister (100% Certified)	**Instrument/Filename:**	msdj.i / j122725

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	2.4	3.3	4.5	Not Detected
1,4-Dioxane	123-91-1	1.8	6.1	16	2.1 J
cis-1,2-Dichloroethene	156-59-2	1.9	3.3	4.5	Not Detected
Tetrachloroethene	127-18-4	1.9	5.6	7.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	2.1	3.3	4.5	Not Detected
Trichloroethene	79-01-6	2.6	4.5	6.0	Not Detected
Vinyl Chloride	75-01-4	2.1	2.1	2.9	Not Detected

J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	83
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2112568-25A	**Date/Time Analyzed:**	12/27/21 11:36 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a122705a

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	Lab Blank		
Lab ID:	2112568-25B	**Date/Time Analyzed:**	12/27/21 12:16 PM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j122705c

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.0	1.5	2.0	Not Detected
1,4-Dioxane	123-91-1	0.79	2.7	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.84	1.5	2.0	Not Detected
Tetrachloroethene	127-18-4	0.86	2.5	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.95	1.5	2.0	Not Detected
Trichloroethene	79-01-6	1.2	2.0	2.7	Not Detected
Vinyl Chloride	75-01-4	0.92	0.94	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	82
Toluene-d8	2037-26-5	70-130	101

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2112568-26A	**Date/Time Analyzed:**	12/27/21 09:38 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a122702

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	90
1,4-Dioxane	123-91-1	89
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	102
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	94
Vinyl Chloride	75-01-4	88

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	98

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	CCV		
Lab ID:	2112568-26B	**Date/Time Analyzed:**	12/27/21 09:46 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j122702

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	108
cis-1,2-Dichloroethene	156-59-2	107
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	97
Trichloroethene	79-01-6	107
Vinyl Chloride	75-01-4	94

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	103

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2112568-27A	**Date/Time Analyzed:**	12/27/21 10:03 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a122703

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	92
Tetrachloroethene	127-18-4	103
trans-1,2-Dichloroethene	156-60-5	95
Trichloroethene	79-01-6	94
Vinyl Chloride	75-01-4	89

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	105
Toluene-d8	2037-26-5	70-130	99

* % Recovery is calculated using unrounded analytical results.

Client ID:	LCSD		
Lab ID:	2112568-27AA	**Date/Time Analyzed:**	12/27/21 10:28 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msda.i / a122704

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	88
1,4-Dioxane	123-91-1	90
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	105
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	97
Vinyl Chloride	75-01-4	88

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	91
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	100

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCS		
Lab ID:	2112568-27B	**Date/Time Analyzed:**	12/27/21 10:17 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j122703

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	85
1,4-Dioxane	123-91-1	103
cis-1,2-Dichloroethene	156-59-2	106
Tetrachloroethene	127-18-4	105
trans-1,2-Dichloroethene	156-60-5	98
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	93

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	101

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN
Ford LTP

Client ID:	LCSD		
Lab ID:	2112568-27BB	**Date/Time Analyzed:**	12/27/21 10:47 AM
Date/Time Collected:	NA - Not Applicable	**Dilution Factor:**	1.00
Media:	NA - Not Applicable	**Instrument/Filename:**	msdj.i / j122704

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	88
1,4-Dioxane	123-91-1	104
cis-1,2-Dichloroethene	156-59-2	108
Tetrachloroethene	127-18-4	109
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	105
Vinyl Chloride	75-01-4	96

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	106
4-Bromofluorobenzene	460-00-4	70-130	90
Toluene-d8	2037-26-5	70-130	99

* % Recovery is calculated using unrounded analytical results.

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January 20, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22A0844

Enclosed are results of analyses for samples as received by the laboratory on January 15, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 1/20/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22A0844

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-8_011222	22A0844-01	Indoor air		EPA TO-15	
SL-5_011222	22A0844-02	Indoor air		EPA TO-15	
SL-19_011322	22A0844-03	Indoor air		EPA TO-15	
SL-9_011322	22A0844-04	Indoor air		EPA TO-15	
SL-13_011222	22A0844-05	Indoor air		EPA TO-15	
SL-4_011322	22A0844-06	Indoor air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-8_011222
Sample ID: 22A0844-01
Sample Matrix: Indoor air
Sampled: 1/12/2022 13:23

Sample Description/Location:
Sub Description/Location:
Canister ID: 2326
Canister Size: 1 liter
Flow Controller ID: 7036
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:48	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:48	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:48	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 21:48	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 21:48	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 21:48	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 21:48	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 21:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-5_011222
Sample ID: 22A0844-02
Sample Matrix: Indoor air
Sampled: 1/12/2022 12:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 2121
Canister Size: 1 liter
Flow Controller ID: 7037
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 22:28	BRF
cis-1,2-Dichloroethylene	0.27	0.20		1.1	0.79	4	1/18/22 22:28	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 22:28	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 22:28	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 22:28	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 22:28	BRF
Vinyl Chloride	0.40	0.20		1.0	0.51	4	1/18/22 22:28	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/18/22 22:28

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-19_011322
Sample ID: 22A0844-03
Sample Matrix: Indoor air
Sampled: 1/13/2022 10:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2666
Canister Size: 1 liter
Flow Controller ID: 5060
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:09	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:09	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:09	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 23:09	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 23:09	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 23:09	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 23:09	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/18/22 23:09

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-9_011322
Sample ID: 22A0844-04
Sample Matrix: Indoor air
Sampled: 1/13/2022 08:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 2678
Canister Size: 1 liter
Flow Controller ID: 5069
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:49	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:49	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 23:49	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 23:49	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 23:49	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 23:49	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 23:49	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 23:49

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-13_011222
Sample ID: 22A0844-05
Sample Matrix: Indoor air
Sampled: 1/12/2022 10:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 2328
Canister Size: 1 liter
Flow Controller ID: 5058
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 0:29	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 0:29	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 0:29	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 0:29	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 0:29	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 0:29	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/19/22 0:29	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/19/22 0:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-4_011322
Sample ID: 22A0844-06
Sample Matrix: Indoor air
Sampled: 1/13/2022 14:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2663
Canister Size: 1 liter
Flow Controller ID: 7034
Sample Type: Grab

Work Order: 22A0844
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:09	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:09	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:09	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 1:09	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 1:09	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 1:09	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/19/22 1:09	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/19/22 1:09

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22A0844-01 [SL-8_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0844-02 [SL-5_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0844-03 [SL-19_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0844-04 [SL-9_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0844-05 [SL-13_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0844-06 [SL-4_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B299322 - TO-15 Prep											
Blank (B299322-BLK1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.90*				*8.00*		*111*	*70-130*			
LCS (B299322-BS1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	4.17				5.00		83.5	70-130			
cis-1,2-Dichloroethylene	3.89				5.00		77.8	70-130			
trans-1,2-Dichloroethylene	3.82				5.00		76.3	70-130			
1,4-Dioxane	3.81				5.00		76.2	70-130			
Tetrachloroethylene	4.92				5.00		98.4	70-130			
Trichloroethylene	4.12				5.00		82.5	70-130			
Vinyl Chloride	3.75				5.00		75.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.19*				*8.00*		*115*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S066182-ICV1)			Lab File ID: G21A342016.D			Analyzed: 12/08/21 16:58			
Bromochloromethane (1)	1512635	8.497	1402037	8.503	108	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3688445	10.271	3621476	10.277	102	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3527556	14.642	3493930	14.642	101	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S067502-CCV1)			Lab File ID: G22A018004.D			Analyzed: 01/18/22 13:40			
Bromochloromethane (1)	1590172	8.497	1402037	8.503	113	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3989877	10.271	3621476	10.277	110	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3615847	14.642	3493930	14.642	103	60 - 140	0.0000	+/-0.50	
LCS (B299322-BS1)			Lab File ID: G22A018005.D			Analyzed: 01/18/22 14:20			
Bromochloromethane (1)	1571189	8.497	1590172	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3960285	10.271	3989877	10.271	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3617197	14.642	3615847	14.642	100	60 - 140	0.0000	+/-0.50	
Blank (B299322-BLK1)			Lab File ID: G22A018008.D			Analyzed: 01/18/22 16:27			
Bromochloromethane (1)	1558515	8.497	1590172	8.497	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3803952	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3534005	14.642	3615847	14.642	98	60 - 140	0.0000	+/-0.50	
SL-8_011222 (22A0844-01)			Lab File ID: G22A018016.D			Analyzed: 01/18/22 21:48			
Bromochloromethane (1)	1536391	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3727684	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3512275	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-5_011222 (22A0844-02)			Lab File ID: G22A018017.D			Analyzed: 01/18/22 22:28			
Bromochloromethane (1)	1542642	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3748242	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3518936	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-19_011322 (22A0844-03)			Lab File ID: G22A018018.D			Analyzed: 01/18/22 23:09			
Bromochloromethane (1)	1547858	8.503	1590172	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3743808	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3490140	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-9_011322 (22A0844-04)			Lab File ID: G22A018019.D			Analyzed: 01/18/22 23:49			
Bromochloromethane (1)	1542380	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3740276	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3475829	14.642	3615847	14.642	96	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-13_011222 (22A0844-05)			Lab File ID: G22A018020.D			Analyzed: 01/19/22 00:29			
Bromochloromethane (1)	1540254	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3732436	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3489703	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-4_011322 (22A0844-06)			Lab File ID: G22A018021.D			Analyzed: 01/19/22 01:09			
Bromochloromethane (1)	1534357	8.497	1590172	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3717399	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3465575	14.642	3615847	14.642	96	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S067502-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.14	1.135823	0.9408783		-17.2	30
cis-1,2-Dichloroethylene	A	5.00	3.90	1.005957	0.7848791		-22.0	30
trans-1,2-Dichloroethylene	A	5.00	3.90	1.067538	0.8334827		-21.9	30
1,4-Dioxane	A	5.00	3.89	0.1952184	0.1520472		-22.1	30
Tetrachloroethylene	A	5.00	5.12	0.4242595	0.4341414		2.3	30
Trichloroethylene	A	5.00	4.24	0.3926852	0.3328022		-15.2	30
Vinyl Chloride	A	5.00	3.84	0.6993653	0.5378286		-23.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

22A0844

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
Invoice Recipient:
Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: 1/20/2022

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; julia.mcclafferty@arcadis.com; kris.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-8_011222	1/12/22 13:22	1/12/22 13:23	--	--	IA	--	X				-29	-6	-5.4	2336	7036
02	SL-5_011222	1/12/22 12:09	1/12/22 12:10	—	—	IA	—	X				-29	-5	-4.9	2221	7037
03	SL-19_011322	1/13/22 10:20	1/13/22 10:21	—	—	IA	—	X				-29.5	-7	-6.2	2606	5060
04	SL-9_011322	6:58 1/13/22	6:59 1/13/22	—	—	IA	—	X				-29.5	-6	-5.1	2678	5069
05	SL-13_011222	1/12/22 18:52	1/12/22 20:53	—	—	IA	—	X				-29	-5.5	-4.9	2328	5058
06	SL-4_011322	1/13/22 14:20	1/13/22 14:21	—	—	IA	—	X				-29.5	-6	-5.4	2663	7034

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 1/14/22 16:30	Detection Limit Requirements: MA, CT, Other:
Received by: (signature) FEDEX	Date/Time: " "	Special Requirements: ☐ MA MCP Required; MCP Certification Form Required; ☐ CT RCP Required; RCP Certification Form Required; ☐ Other
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 1/15/22 1138	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

TRACK ANOTHER SHIPMENT

288760574460

ADD NICKNAME

Delivered
Saturday, 1/15/2022 at 11:38 am

THIS IS 1 OF 5 PIECES

DELIVERED

Signed for by: J.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

5 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
288760574460 (master)	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574471	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574482	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574493	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574508	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA

Travel History

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By PKF Date 1/15/22 Time 1138

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Client T Analysis T Sampler Name T

Pertinent Information? Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (3)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	6	1L	6	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2336					7086				
2121					7037				
21616					5260				
2678					5269				
2328					5558				
21613					7034				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/14/2021 **Batch #:** 21CC1037

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2336 BC2666

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/14/2021 **Batch #:** 21CC1042

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2121

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/14/2021 **Batch #:** 21CC1041

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2678

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/9/2021 **Batch #:** 21CC1018

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2328

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/23/2021 **Batch #:** 21CC1075

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2663

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

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January 20, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22A0847

Enclosed are results of analyses for samples as received by the laboratory on January 15, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 1/20/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22A0847

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-18_011322	22A0847-01	Indoor air		EPA TO-15	
SL-17_011322	22A0847-02	Indoor air		EPA TO-15	
SL-14_011222	22A0847-03	Indoor air		EPA TO-15	
SL-11_011222	22A0847-04	Indoor air		EPA TO-15	
SL-10_011222	22A0847-05	Indoor air		EPA TO-15	
SL-15_011222	22A0847-06	Indoor air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-18_011322
Sample ID: 22A0847-01
Sample Matrix: Indoor air
Sampled: 1/13/2022 14:54

Sample Description/Location:
Sub Description/Location:
Canister ID: 2331
Canister Size: 1 liter
Flow Controller ID: 47025
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -3.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 17:07	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 17:07	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 17:07	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 17:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 17:07	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 17:07	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 17:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 17:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-17_011322
Sample ID: 22A0847-02
Sample Matrix: Indoor air
Sampled: 1/12/2022 15:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2112
Canister Size: 1 liter
Flow Controller ID: 7024
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 17:47	BRF
cis-1,2-Dichloroethylene	0.16	0.20	J	0.63	0.79	4	1/18/22 17:47	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 17:47	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 17:47	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 17:47	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 17:47	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 17:47	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 17:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-14_011222
Sample ID: 22A0847-03
Sample Matrix: Indoor air
Sampled: 1/12/2022 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2644
Canister Size: 1 liter
Flow Controller ID: 5030
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:07	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:07	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:07	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 19:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 19:07	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 19:07	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 19:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/18/22 19:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-11_011222
Sample ID: 22A0847-04
Sample Matrix: Indoor air
Sampled: 1/12/2022 14:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 2679
Canister Size: 1 liter
Flow Controller ID: 5023
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:47	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:47	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 19:47	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 19:47	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 19:47	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 19:47	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 19:47	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 19:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-10_011222
Sample ID: 22A0847-05
Sample Matrix: Indoor air
Sampled: 1/12/2022 14:24

Sample Description/Location:
Sub Description/Location:
Canister ID: 2620
Canister Size: 1 liter
Flow Controller ID: 5024
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 20:27	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 20:27	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 20:27	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 20:27	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 20:27	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 20:27	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 20:27	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/18/22 20:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-15_011222
Sample ID: 22A0847-06
Sample Matrix: Indoor air
Sampled: 1/12/2022 09:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2621
Canister Size: 1 liter
Flow Controller ID: 5059
Sample Type: Grab

Work Order: 22A0847
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:08	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:08	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/18/22 21:08	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/18/22 21:08	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/18/22 21:08	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/18/22 21:08	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/18/22 21:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/18/22 21:08

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22A0847-01 [SL-18_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0847-02 [SL-17_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0847-03 [SL-14_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0847-04 [SL-11_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0847-05 [SL-10_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0847-06 [SL-15_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B299322 - TO-15 Prep											
Blank (B299322-BLK1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.90*				*8.00*		*111*	*70-130*			
LCS (B299322-BS1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	4.17				5.00		83.5	70-130			
cis-1,2-Dichloroethylene	3.89				5.00		77.8	70-130			
trans-1,2-Dichloroethylene	3.82				5.00		76.3	70-130			
1,4-Dioxane	3.81				5.00		76.2	70-130			
Tetrachloroethylene	4.92				5.00		98.4	70-130			
Trichloroethylene	4.12				5.00		82.5	70-130			
Vinyl Chloride	3.75				5.00		75.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.19*				*8.00*		*115*	*70-130*			
Duplicate (B299322-DUP1)			**Source: 22A0847-02**		Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	0.19	0.20	0.76	0.79		0.16			18.2	25	J
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	0.080	0.20	0.43	1.1		ND				25	J
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*8.86*				*8.00*		*111*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S066182-ICV1)			Lab File ID: G21A342016.D			Analyzed: 12/08/21 16:58			
Bromochloromethane (1)	1512635	8.497	1402037	8.503	108	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3688445	10.271	3621476	10.277	102	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3527556	14.642	3493930	14.642	101	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S067502-CCV1)			Lab File ID: G22A018004.D			Analyzed: 01/18/22 13:40			
Bromochloromethane (1)	1590172	8.497	1402037	8.503	113	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3989877	10.271	3621476	10.277	110	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3615847	14.642	3493930	14.642	103	60 - 140	0.0000	+/-0.50	
LCS (B299322-BS1)			Lab File ID: G22A018005.D			Analyzed: 01/18/22 14:20			
Bromochloromethane (1)	1571189	8.497	1590172	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3960285	10.271	3989877	10.271	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3617197	14.642	3615847	14.642	100	60 - 140	0.0000	+/-0.50	
Blank (B299322-BLK1)			Lab File ID: G22A018008.D			Analyzed: 01/18/22 16:27			
Bromochloromethane (1)	1558515	8.497	1590172	8.497	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3803952	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3534005	14.642	3615847	14.642	98	60 - 140	0.0000	+/-0.50	
SL-18_011322 (22A0847-01)			Lab File ID: G22A018009.D			Analyzed: 01/18/22 17:07			
Bromochloromethane (1)	1559442	8.503	1590172	8.497	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3798018	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3574776	14.642	3615847	14.642	99	60 - 140	0.0000	+/-0.50	
SL-17_011322 (22A0847-02)			Lab File ID: G22A018010.D			Analyzed: 01/18/22 17:47			
Bromochloromethane (1)	1559536	8.503	1590172	8.497	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3812708	10.271	3989877	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3552046	14.642	3615847	14.642	98	60 - 140	0.0000	+/-0.50	
Duplicate (B299322-DUP1)			Lab File ID: G22A018011.D			Analyzed: 01/18/22 18:27			
Bromochloromethane (1)	1544684	8.503	1590172	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3760359	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3485749	14.642	3615847	14.642	96	60 - 140	0.0000	+/-0.50	
SL-14_011222 (22A0847-03)			Lab File ID: G22A018012.D			Analyzed: 01/18/22 19:07			
Bromochloromethane (1)	1540028	8.503	1590172	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3782410	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3497624	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-11_011222 (22A0847-04)			Lab File ID: G22A018013.D			Analyzed: 01/18/22 19:47			
Bromochloromethane (1)	1553384	8.503	1590172	8.497	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3779294	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3507139	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-10_011222 (22A0847-05)			Lab File ID: G22A018014.D			Analyzed: 01/18/22 20:27			
Bromochloromethane (1)	1538734	8.503	1590172	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3769558	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3507178	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-15_011222 (22A0847-06)			Lab File ID: G22A018015.D			Analyzed: 01/18/22 21:08			
Bromochloromethane (1)	1549328	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3768499	10.271	3989877	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3508749	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S067502-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.14	1.135823	0.9408783		-17.2	30
cis-1,2-Dichloroethylene	A	5.00	3.90	1.005957	0.7848791		-22.0	30
trans-1,2-Dichloroethylene	A	5.00	3.90	1.067538	0.8334827		-21.9	30
1,4-Dioxane	A	5.00	3.89	0.1952184	0.1520472		-22.1	30
Tetrachloroethylene	A	5.00	5.12	0.4242595	0.4341414		2.3	30
Trichloroethylene	A	5.00	4.24	0.3926852	0.3328022		-15.2	30
Vinyl Chloride	A	5.00	3.84	0.6993653	0.5378286		-23.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis	
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377	
Phone: 248-994-2240	
Project Name: Ford LTP	
Project Location: Livonia, MI	
Project Number: 30080642.701.04	
Project Manager: Kristoffer Hinskey	
Pace Analytical Quote Name/Number: 00105825	
Invoice Recipient:	
Sampled By: Korey Pearson, Samantha Hindle	

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: 1/20/2022

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; julia.mcclafferty@arcadis.com; kris.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
01	SL-18_φ11322	1/13/22 14:53	1/13/22 14:54	--	--	IA	--	X				-29	-4.5	-5.2			2331	7φ25
02	SL-17_φ11322	1/13/22 15:26	1/13/22 15:27	—	—	IA	—	X				-29.5	-7	-7.2			2112	7φ24
03	SL-14_φ11222	1/12/22 10:04	1/12/22 10:05	—	—	IA	—	X				-28	-6.5	-5.9			2644	5φ3φ
04	SL-11_φ11222	1/12/22 14:54	1/12/22 14:55	—	—	IA	—	X				-29	-6	-5.7			2679	5φ23
05	SL-19_φ11222	1/12/22 14:23	1/12/22 14:24	—	—	IA	—	X				-29	-6	-5.7			262φ	5φ24
06	SL-15_φ11222	1/12/22 9:3φ	1/12/22 9:31	—	—	IA	—	X				-29	-5	-4.8			2621	5φ59

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 01/14/22 16:30	Detection Limit Requirements	Special Requirements
Received by: (signature) FEDEX	Date/Time: " "	MA	☐ MA MCP Required
Relinquished by: (signature)	Date/Time:		MCP Certification Form Required
Received by: (signature)	Date/Time: 1/15 1138	CT	☐ CT RCP Required
Relinquished by: (signature)	Date/Time:		RCP Certification Form Required
Received by: (signature)	Date/Time:	Other:	☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

TRACK ANOTHER SHIPMENT

288760574460

ADD NICKNAME

Delivered
Saturday, 1/15/2022 at 11:38 am

THIS IS 1 OF 5 PIECES

DELIVERED

Signed for by: J.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

5 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
288760574460 (master)	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574471	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574482	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574493	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574508	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA

Travel History

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF | Date 1/15/22 | Time 1138

How were the samples received? In Cooler ____ | On Ice ____ | No Ice ____ | In Box T | Ambient ____ | Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA | By Gun # ____ | Actual Temp - ____ | By Blank # ____ | Actual Temp - ____

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? F

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	6	1L	6	9Day	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2331					7025				
2112					7024				
2644					5030				
2679					5023				
2620					5024				
2621					5059				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/14/2021 **Batch #:** 21CC1042

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2331 BC2112

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/16/2021 **Batch #:** 21CC1059

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2644

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/14/2021 **Batch #:** 21CC1037

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2679

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/29/2021 **Batch #:** 21CC1094

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2620

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/9/2021 **Batch #:** 21CC1021

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2621

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

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January 20, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22A0846

Enclosed are results of analyses for samples as received by the laboratory on January 15, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 1/20/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22A0846

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-21_011422	22A0846-01	Indoor air		EPA TO-15	
SL-7_011222	22A0846-02	Indoor air		EPA TO-15	
SL-3_011422	22A0846-03	Indoor air		EPA TO-15	
MH-1231_011422	22A0846-04	Indoor air		EPA TO-15	
SL-20_011322	22A0846-05	Indoor air		EPA TO-15	
SL-2_011422	22A0846-06	Indoor air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-21_011422
Sample ID: 22A0846-01
Sample Matrix: Indoor air
Sampled: 1/14/2022 09:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2641
Canister Size: 1 liter
Flow Controller ID: 7027
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:49	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:49	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 1:49	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 1:49	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 1:49	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 1:49	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/19/22 1:49	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/19/22 1:49

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-7_011222
Sample ID: 22A0846-02
Sample Matrix: Indoor air
Sampled: 1/12/2022 11:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 2673
Canister Size: 1 liter
Flow Controller ID: 5027
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 2:30	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 2:30	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 2:30	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 2:30	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 2:30	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 2:30	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/19/22 2:30	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/19/22 2:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-3_011422
Sample ID: 22A0846-03
Sample Matrix: Indoor air
Sampled: 1/14/2022 10:23

Sample Description/Location:
Sub Description/Location:
Canister ID: 2548
Canister Size: 1 liter
Flow Controller ID: 7031
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.14	0.20	J	0.54	0.79	4	1/19/22 3:50	BRF
cis-1,2-Dichloroethylene	6.9	0.20		27	0.79	4	1/19/22 3:50	BRF
trans-1,2-Dichloroethylene	0.084	0.20	J	0.33	0.79	4	1/19/22 3:50	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 3:50	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 3:50	BRF
Trichloroethylene	0.17	0.20	J	0.92	1.1	4	1/19/22 3:50	BRF
Vinyl Chloride	14	0.20		35	0.51	4	1/19/22 3:50	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/19/22 3:50

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: MH-1231_011422
Sample ID: 22A0846-04
Sample Matrix: Indoor air
Sampled: 1/14/2022 11:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2107
Canister Size: 1 liter
Flow Controller ID: 7029
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.96	0.20		3.8	0.79	4	1/19/22 4:30	BRF
cis-1,2-Dichloroethylene	120	0.20		480	0.79	4	1/19/22 4:30	BRF
trans-1,2-Dichloroethylene	1.0	0.20		4.1	0.79	4	1/19/22 4:30	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 4:30	BRF
Tetrachloroethylene	0.34	0.20		2.3	1.4	4	1/19/22 4:30	BRF
Trichloroethylene	2.0	0.20		11	1.1	4	1/19/22 4:30	BRF
Vinyl Chloride	200	0.50		520	1.3	10	1/19/22 8:58	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	115	70-130	1/19/22 4:30
4-Bromofluorobenzene (1)	115	70-130	1/19/22 8:58

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-20_011322
Sample ID: 22A0846-05
Sample Matrix: Indoor air
Sampled: 1/13/2022 13:23

Sample Description/Location:
Sub Description/Location:
Canister ID: 2303
Canister Size: 1 liter
Flow Controller ID: 7035
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 5:11	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 5:11	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 5:11	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 5:11	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 5:11	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 5:11	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/19/22 5:11	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/19/22 5:11

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/15/2022
Field Sample #: SL-2_011422
Sample ID: 22A0846-06
Sample Matrix: Indoor air
Sampled: 1/14/2022 10:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2570
Canister Size: 1 liter
Flow Controller ID: 7030
Sample Type: Grab

Work Order: 22A0846
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 5:52	BRF
cis-1,2-Dichloroethylene	2.2	0.20		8.7	0.79	4	1/19/22 5:52	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/19/22 5:52	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/19/22 5:52	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/19/22 5:52	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/19/22 5:52	BRF
Vinyl Chloride	4.1	0.20		10	0.51	4	1/19/22 5:52	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/19/22 5:52

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22A0846-01 [SL-21_011422]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0846-02 [SL-7_011222]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0846-03 [SL-3_011422]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0846-04 [MH-1231_011422]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0846-04RE1 [MH-1231_011422]	B299322	1.5	1	N/A	1000	400	60	01/18/22
22A0846-05 [SL-20_011322]	B299322	1.5	1	N/A	1000	400	150	01/18/22
22A0846-06 [SL-2_011422]	B299322	1.5	1	N/A	1000	400	150	01/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B299322 - TO-15 Prep											
Blank (B299322-BLK1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.90*				*8.00*		*111*	*70-130*			
LCS (B299322-BS1)					Prepared & Analyzed: 01/18/22						
1,1-Dichloroethylene	4.17				5.00		83.5	70-130			
cis-1,2-Dichloroethylene	3.89				5.00		77.8	70-130			
trans-1,2-Dichloroethylene	3.82				5.00		76.3	70-130			
1,4-Dioxane	3.81				5.00		76.2	70-130			
Tetrachloroethylene	4.92				5.00		98.4	70-130			
Trichloroethylene	4.12				5.00		82.5	70-130			
Vinyl Chloride	3.75				5.00		75.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.19*				*8.00*		*115*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S066182-ICV1)			Lab File ID: G21A342016.D			Analyzed: 12/08/21 16:58			
Bromochloromethane (1)	1512635	8.497	1402037	8.503	108	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3688445	10.271	3621476	10.277	102	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3527556	14.642	3493930	14.642	101	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S067502-CCV1)			Lab File ID: G22A018004.D			Analyzed: 01/18/22 13:40			
Bromochloromethane (1)	1590172	8.497	1402037	8.503	113	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3989877	10.271	3621476	10.277	110	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3615847	14.642	3493930	14.642	103	60 - 140	0.0000	+/-0.50	
LCS (B299322-BS1)			Lab File ID: G22A018005.D			Analyzed: 01/18/22 14:20			
Bromochloromethane (1)	1571189	8.497	1590172	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3960285	10.271	3989877	10.271	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3617197	14.642	3615847	14.642	100	60 - 140	0.0000	+/-0.50	
Blank (B299322-BLK1)			Lab File ID: G22A018008.D			Analyzed: 01/18/22 16:27			
Bromochloromethane (1)	1558515	8.497	1590172	8.497	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3803952	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3534005	14.642	3615847	14.642	98	60 - 140	0.0000	+/-0.50	
SL-21_011422 (22A0846-01)			Lab File ID: G22A018022.D			Analyzed: 01/19/22 01:49			
Bromochloromethane (1)	1539527	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3700124	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3449906	14.642	3615847	14.642	95	60 - 140	0.0000	+/-0.50	
SL-7_011222 (22A0846-02)			Lab File ID: G22A018023.D			Analyzed: 01/19/22 02:30			
Bromochloromethane (1)	1536314	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3703676	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3460515	14.642	3615847	14.642	96	60 - 140	0.0000	+/-0.50	
SL-3_011422 (22A0846-03)			Lab File ID: G22A018025.D			Analyzed: 01/19/22 03:50			
Bromochloromethane (1)	1539008	8.497	1590172	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3660592	10.271	3989877	10.271	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3415939	14.642	3615847	14.642	94	60 - 140	0.0000	+/-0.50	
MH-1231_011422 (22A0846-04)			Lab File ID: G22A018026.D			Analyzed: 01/19/22 04:30			
Bromochloromethane (1)	1584904	8.497	1590172	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3730314	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3496808	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-20_011322 (22A0846-05)			Lab File ID: G22A018027.D			Analyzed: 01/19/22 05:11			
Bromochloromethane (1)	1533915	8.497	1590172	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3785011	10.271	3989877	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3513714	14.642	3615847	14.642	97	60 - 140	0.0000	+/-0.50	
SL-2_011422 (22A0846-06)			Lab File ID: G22A018028.D			Analyzed: 01/19/22 05:52			
Bromochloromethane (1)	1531198	8.503	1590172	8.497	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3695959	10.271	3989877	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3457553	14.642	3615847	14.642	96	60 - 140	0.0000	+/-0.50	
MH-1231_011422 (22A0846-04RE1)			Lab File ID: G22A018029.D			Analyzed: 01/19/22 08:58			
Bromochloromethane (1)	1546135	8.491	1590172	8.497	97	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3708694	10.265	3989877	10.271	93	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3458342	14.636	3615847	14.642	96	60 - 140	-0.0060	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S067502-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.14	1.135823	0.9408783		-17.2	30
cis-1,2-Dichloroethylene	A	5.00	3.90	1.005957	0.7848791		-22.0	30
trans-1,2-Dichloroethylene	A	5.00	3.90	1.067538	0.8334827		-21.9	30
1,4-Dioxane	A	5.00	3.89	0.1952184	0.1520472		-22.1	30
Tetrachloroethylene	A	5.00	5.12	0.4242595	0.4341414		2.3	30
Trichloroethylene	A	5.00	4.24	0.3926852	0.3328022		-15.2	30
Vinyl Chloride	A	5.00	3.84	0.6993653	0.5378286		-23.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

22H0844

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date: 1/20/2022

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; julia.mcclafferty@arcadis.com; kris.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-21_011422	1/14/22 09:15	1/14/22 09:16	--	--	IA	--	X				29.9	-29	-8	2641	7027
02	SL-7_011222	1/12/22 11:29	1/12/22 11:30	—	—	IA	—	X				29.3	-29	-7	2673	5027
03	SL-3_011422	1/14/22 10:22	1/14/22 10:23	—	—	IA	—	X				29.2	-29	-7.5	2548	7032
04	MH-1232_011422	1/14/22 11:31	1/14/22 11:32	—	—	IA	—	X				29.5	-29.5	-8	2107	7029
05	SL-20_011322	1/13/22 13:22	1/13/22 13:23	—	—	IA	—	X				29.2	-29	-6	2303	7035
06	SL-2_011422	1/14/22 10:55	1/14/22 10:56	—	—	IA	—	X				29.2	-29.5	-7	2570	7036

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 1/14/22 16:30	
Received by: (signature) FEDEX	Date/Time: " "	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 1/15/22 1138	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

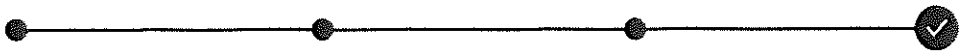
TRACK ANOTHER SHIPMENT

288760574460

ADD NICKNAME

Delivered
Saturday, 1/15/2022 at 11:38 am

THIS IS 1 OF 5 PIECES



DELIVERED

Signed for by: J.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

5 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
288760574460 (master)	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574471	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574482	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574493	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA
288760574508	Delivered	1/14/22	1/15/22	0	NOVI MI	East Longmeadow MA

Travel History

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 1/15/22 Time 1138

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(1)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	6	1L	6	6hrs	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2641					7027				
2673					5027				
2548					7031				
2107					7029				
2303					7035				
2570					7030				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/11/2021 **Batch #:** 21CC1026

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2641 BC2673

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/9/2021 **Batch #:** 21CC1023

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2548

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/16/2021 **Batch #:** 21CC1060

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2107

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/25/2021 **Batch #:** 21CC1086

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2303

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 12/30/2021 **Batch #:** 21CC1100

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2570

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: BRF 1/20/2022

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January 26, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22A1226

Enclosed are results of analyses for samples as received by the laboratory on January 22, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 1/26/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22A1226

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-15_011922	22A1226-01	Indoor air		EPA TO-15	
SL-14_011922	22A1226-02	Indoor air		EPA TO-15	
SL-8_011922	22A1226-03	Indoor air		EPA TO-15	
SL-6_011922	22A1226-04	Indoor air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-15_011922
Sample ID: 22A1226-01
Sample Matrix: Indoor air
Sampled: 1/19/2022 09:09

Sample Description/Location:
Sub Description/Location:
Canister ID: 2542
Canister Size: 1 liter
Flow Controller ID: 7049
Sample Type: Grab

Work Order: 22A1226
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 2:30	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 2:30	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 2:30	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 2:30	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 2:30	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 2:30	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 2:30	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/26/22 2:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-14_011922
Sample ID: 22A1226-02
Sample Matrix: Indoor air
Sampled: 1/19/2022 09:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2645
Canister Size: 1 liter
Flow Controller ID: 7048
Sample Type: Grab

Work Order: 22A1226
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:10	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:10	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:10	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 3:10	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 3:10	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 3:10	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 3:10	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/26/22 3:10

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-8_011922
Sample ID: 22A1226-03
Sample Matrix: Indoor air
Sampled: 1/19/2022 10:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 2099
Canister Size: 1 liter
Flow Controller ID: 7060
Sample Type: Grab

Work Order: 22A1226
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:50	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:50	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 3:50	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 3:50	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 3:50	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 3:50	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 3:50	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/26/22 3:50

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-6_011922
Sample ID: 22A1226-04
Sample Matrix: Indoor air
Sampled: 1/19/2022 10:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2249
Canister Size: 1 liter
Flow Controller ID: 7059
Sample Type: Grab

Work Order: 22A1226
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 4:31	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 4:31	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 4:31	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 4:31	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 4:31	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 4:31	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 4:31	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	1/26/22 4:31

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22A1226-01 [SL-15_011922]	B299737	1.5	1	N/A	1000	400	150	01/25/22
22A1226-02 [SL-14_011922]	B299737	1.5	1	N/A	1000	400	150	01/25/22
22A1226-03 [SL-8_011922]	B299737	1.5	1	N/A	1000	400	150	01/25/22
22A1226-04 [SL-6_011922]	B299737	1.5	1	N/A	1000	400	150	01/25/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B299737 - TO-15 Prep											
Blank (B299737-BLK1)					Prepared & Analyzed: 01/25/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.99*				*8.00*		*112*	*70-130*			
LCS (B299737-BS1)					Prepared & Analyzed: 01/25/22						
1,1-Dichloroethylene	4.34				5.00		86.9	70-130			
cis-1,2-Dichloroethylene	3.96				5.00		79.3	70-130			
trans-1,2-Dichloroethylene	3.96				5.00		79.2	70-130			
1,4-Dioxane	3.89				5.00		77.7	70-130			
Tetrachloroethylene	5.20				5.00		104	70-130			
Trichloroethylene	4.22				5.00		84.5	70-130			
Vinyl Chloride	4.02				5.00		80.3	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.29*				*8.00*		*116*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S067695-CCV1)			Lab File ID: G22A025004.D			Analyzed: 01/25/22 11:54			
Bromochloromethane (1)	1474542	8.497	1402037	8.503	105	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3824227	10.271	3621476	10.277	106	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3454738	14.642	3493930	14.642	99	60 - 140	0.0000	+/-0.50	
LCS (B299737-BS1)			Lab File ID: G22A025005.D			Analyzed: 01/25/22 12:34			
Bromochloromethane (1)	1469359	8.497	1474542	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3813826	10.271	3824227	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3444452	14.642	3454738	14.642	100	60 - 140	0.0000	+/-0.50	
Blank (B299737-BLK1)			Lab File ID: G22A025007.D			Analyzed: 01/25/22 13:58			
Bromochloromethane (1)	1418998	8.503	1474542	8.497	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3559591	10.271	3824227	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3308157	14.642	3454738	14.642	96	60 - 140	0.0000	+/-0.50	
SL-15_011922 (22A1226-01)			Lab File ID: G22A025027.D			Analyzed: 01/26/22 02:30			
Bromochloromethane (1)	1696086	8.497	1474542	8.497	115	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4189980	10.271	3824227	10.271	110	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3886172	14.642	3454738	14.642	112	60 - 140	0.0000	+/-0.50	
SL-14_011922 (22A1226-02)			Lab File ID: G22A025028.D			Analyzed: 01/26/22 03:10			
Bromochloromethane (1)	1692943	8.503	1474542	8.497	115	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	4181320	10.271	3824227	10.271	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3878416	14.642	3454738	14.642	112	60 - 140	0.0000	+/-0.50	
SL-8_011922 (22A1226-03)			Lab File ID: G22A025029.D			Analyzed: 01/26/22 03:50			
Bromochloromethane (1)	1692294	8.497	1474542	8.497	115	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4180956	10.271	3824227	10.271	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3882885	14.642	3454738	14.642	112	60 - 140	0.0000	+/-0.50	
SL-6_011922 (22A1226-04)			Lab File ID: G22A025030.D			Analyzed: 01/26/22 04:31			
Bromochloromethane (1)	1682130	8.497	1474542	8.497	114	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4156827	10.271	3824227	10.271	109	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3855603	14.642	3454738	14.642	112	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S067695-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.14	1.135823	0.9407515		-17.2	30
cis-1,2-Dichloroethylene	A	5.00	3.86	1.005957	0.7763094		-22.8	30
trans-1,2-Dichloroethylene	A	5.00	3.85	1.067538	0.8225817		-22.9	30
1,4-Dioxane	A	5.00	3.69	0.1952184	0.144191		-26.1	30
Tetrachloroethylene	A	5.00	5.10	0.4242595	0.4324663		1.9	30
Trichloroethylene	A	5.00	4.16	0.3926852	0.3264948		-16.9	30
Vinyl Chloride	A	5.00	3.91	0.6993653	0.5470423		-21.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

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Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

22A1224

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240

Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: 1/20/2022

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; julia.mcclafferty@arcadis.com; kris.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be [illegible]d within 15 days or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)			" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³				Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-15_011922	01/19/22 09:08	01/19/22 09:09	--	--	IA	--	X			-29.5	-8	-3	2542	7049
02	SL-14_011922	01/19/22 09:20	01/19/22 09:21	—	—	IA	—	X			-29.5	-7	-2	2645	7048
03	SL-8_011922	01/19/22 10:58	01/19/22 10:59	—	—	IA	—	X			-28.5	-7.5	-2	2099	7060
04	SL-6_011922	01/19/22 10:26	01/19/22 10:27	—	—	IA	—	X			-28	-6	-.8	2249	7059

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	
Received by: (signature)	1/20/22 1040
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

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NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

TRACK ANOTHER SHIPMENT

288989873950

ADD NICKNAME

Delivered
Saturday, 1/22/2022 at 10:40 am

THIS IS 1 OF 7 PIECES

DELIVERED

Signed for by: J.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

TO

EAST LONGMEADOW, MA US

MANAGE DELIVERY

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
288989873950 (master)	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873960	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873971	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873982	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873993	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989874007	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 11/22/22 Time 1040

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? ~~NA~~ T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? LA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(4)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4	9hr 40	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2312					7049				
2045					7048				
2099					7060				
2249					7059				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2542

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2645

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** J22A012014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2099

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2249

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

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January 27, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22A1227

Enclosed are results of analyses for samples as received by the laboratory on January 22, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 1/27/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22A1227

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-7_011922	22A1227-01	Indoor air		EPA TO-15	
SL-13_011922	22A1227-02	Indoor air		EPA TO-15	
SL-20_011822	22A1227-03	Indoor air		EPA TO-15	
SL-17_011922	22A1227-04	Indoor air		EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-7_011922
Sample ID: 22A1227-01
Sample Matrix: Indoor air
Sampled: 1/19/2022 10:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2553
Canister Size: 1 liter
Flow Controller ID: 7041
Sample Type: Grab

Work Order: 22A1227
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:18	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:18	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:18	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 15:18	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 15:18	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 15:18	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 15:18	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	112	70-130	1/26/22 15:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-13_011922
Sample ID: 22A1227-02
Sample Matrix: Indoor air
Sampled: 1/19/2022 09:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2563
Canister Size: 1 liter
Flow Controller ID: 7040
Sample Type: Grab

Work Order: 22A1227
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:58	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:58	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 15:58	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 15:58	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 15:58	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 15:58	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 15:58	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	110	70-130	1/26/22 15:58

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-20_011822
Sample ID: 22A1227-03
Sample Matrix: Indoor air
Sampled: 1/18/2022 11:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2544
Canister Size: 1 liter
Flow Controller ID: 7070
Sample Type: Grab

Work Order: 22A1227
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 16:38	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 16:38	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 16:38	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 16:38	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 16:38	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 16:38	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 16:38	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	111	70-130	1/26/22 16:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 1/22/2022
Field Sample #: SL-17_011922
Sample ID: 22A1227-04
Sample Matrix: Indoor air
Sampled: 1/19/2022 11:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 2306
Canister Size: 1 liter
Flow Controller ID: 7071
Sample Type: Grab

Work Order: 22A1227
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 17:19	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 17:19	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	1/26/22 17:19	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	1/26/22 17:19	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	1/26/22 17:19	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	1/26/22 17:19	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	1/26/22 17:19	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	110	70-130	1/26/22 17:19

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22A1227-01 [SL-7_011922]	B299843	1.5	1	N/A	1000	400	150	01/26/22
22A1227-02 [SL-13_011922]	B299843	1.5	1	N/A	1000	400	150	01/26/22
22A1227-03 [SL-20_011822]	B299843	1.5	1	N/A	1000	400	150	01/26/22
22A1227-04 [SL-17_011922]	B299843	1.5	1	N/A	1000	400	150	01/26/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B299843 - TO-15 Prep											
Blank (B299843-BLK1)					Prepared & Analyzed: 01/26/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*9.06*				*8.00*		*113*	*70-130*			
LCS (B299843-BS1)					Prepared & Analyzed: 01/26/22						
1,1-Dichloroethylene	4.17				5.00		83.3	70-130			
cis-1,2-Dichloroethylene	3.79				5.00		75.7	70-130			
trans-1,2-Dichloroethylene	3.75				5.00		75.1	70-130			
1,4-Dioxane	3.72				5.00		74.4	70-130			
Tetrachloroethylene	5.02				5.00		100	70-130			
Trichloroethylene	4.08				5.00		81.5	70-130			
Vinyl Chloride	3.83				5.00		76.5	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.25*				*8.00*		*116*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S067726-CCV1)			Lab File ID: G22A026004.D			Analyzed: 01/26/22 10:22			
Bromochloromethane (1)	1813458	8.497	1813458	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4633962	10.271	4633962	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	4056946	14.642	4056946	14.642	100	60 - 140	0.0000	+/-0.50	
LCS (B299843-BS1)			Lab File ID: G22A026005.D			Analyzed: 01/26/22 11:02			
Bromochloromethane (1)	1788565	8.497	1813458	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4651122	10.271	4633962	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	4169427	14.642	4056946	14.642	103	60 - 140	0.0000	+/-0.50	
Blank (B299843-BLK1)			Lab File ID: G22A026008.D			Analyzed: 01/26/22 13:11			
Bromochloromethane (1)	1734032	8.503	1813458	8.497	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	4347439	10.271	4633962	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	4032759	14.642	4056946	14.642	99	60 - 140	0.0000	+/-0.50	
SL-7_011922 (22A1227-01)			Lab File ID: G22A026011.D			Analyzed: 01/26/22 15:18			
Bromochloromethane (1)	1708739	8.497	1813458	8.497	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4279501	10.271	4633962	10.271	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3908176	14.642	4056946	14.642	96	60 - 140	0.0000	+/-0.50	
SL-13_011922 (22A1227-02)			Lab File ID: G22A026012.D			Analyzed: 01/26/22 15:58			
Bromochloromethane (1)	1741457	8.497	1813458	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4319586	10.271	4633962	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3903560	14.642	4056946	14.642	96	60 - 140	0.0000	+/-0.50	
SL-20_011822 (22A1227-03)			Lab File ID: G22A026013.D			Analyzed: 01/26/22 16:38			
Bromochloromethane (1)	1727712	8.497	1813458	8.497	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4282692	10.271	4633962	10.271	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3896521	14.642	4056946	14.642	96	60 - 140	0.0000	+/-0.50	
SL-17_011922 (22A1227-04)			Lab File ID: G22A026014.D			Analyzed: 01/26/22 17:19			
Bromochloromethane (1)	1719512	8.503	1813458	8.497	95	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	4291661	10.271	4633962	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3914670	14.642	4056946	14.642	96	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S067726-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	3.75	1.135823	0.8514535		-25.0	30
cis-1,2-Dichloroethylene	A	5.00	3.51	1.005957	0.7065961		-29.8	30
trans-1,2-Dichloroethylene	A	5.00	3.51	1.067538	0.7493247		-29.8	30
1,4-Dioxane	A	5.00	3.53	0.1952184	0.137819		-29.4	30
Tetrachloroethylene	A	5.00	4.91	0.4242595	0.4164232		-1.8	30
Trichloroethylene	A	5.00	3.94	0.3926852	0.3094164		-21.2	30
Vinyl Chloride	A	5.00	3.57	0.6993653	0.4989398		-28.7	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

22A1227

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date: 1/20/2022

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; julia.mcclafferty@arcadis.com; kris.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)			" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³				Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-7_011922	01/19/22 10:01	01/19/22 10:02	--	--	IA	--	X			-29.5	-6	-5.1	2553	7041
02	SL-13_011922	01/19/22 9:46	01/19/22 9:41	-	-	IA	-	X			-29.5	-7	-5.5	2563	7040
03	SL-20_011822	01/18/22 11:34	01/18/22 11:35	-	-	IA	-	X			-29.5	-7.5	-5.2	2544	7070
04	SL-17_012022	01/20/22 11:24	01/20/22 11:25	-	-	IA	-	X			-29	-7	-4.9	2306	7071

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Samantha Hindle	
Received by: (signature)	1/20/22 1040
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

TRACK ANOTHER SHIPMENT

288989873950

ADD NICKNAME

Delivered
Saturday, 1/22/2022 at 10:40 am

THIS IS 1 OF 7 PIECES

DELIVERED

Signed for by: J.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	EAST LONGMEADOW, MA US

MANAGE DELIVERY

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
288989873950 (master)	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873960	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873971	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873982	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989873993	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA
288989874007	Delivered	1/21/22	1/22/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 11/22/22 Time 1040

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____ NA

Was Custody Seal Intact? NA T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(4)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4	9240	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar		$1163.40	

Can #'s					Reg #'s				
2553					7041				
2563					7040				
2544					7070				
2326					7071				
Unused Media					**Pufs/TO-17s**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** J22A012024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2553

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2563

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** J22A012015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2544

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2306

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 1/26/2022

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February 9, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22B0327

Enclosed are results of analyses for samples as received by the laboratory on February 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 2/9/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22B0327

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-6_013122	22B0327-02	Indoor air		EPA TO-15	
SL-13_013122	22B0327-03	Indoor air		EPA TO-15	
SL-22_020122	22B0327-05	Indoor air		EPA TO-15	
MH-1231A_020422	22B0327-06	Indoor air		EPA TO-15	
MH-1256_020422	22B0327-07	Indoor air		EPA TO-15	
MH-1255_020422	22B0327-08	Indoor air		EPA TO-15	
MH-1260A_020422	22B0327-09	Indoor air		EPA TO-15	

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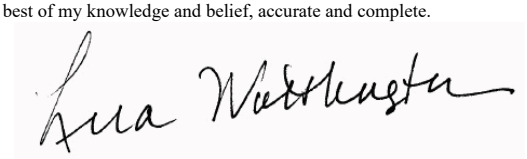
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

con-test®
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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-6_013122
Sample ID: 22B0327-02
Sample Matrix: Indoor air
Sampled: 1/31/2022 12:12

Sample Description/Location:
Sub Description/Location:
Canister ID: 2660
Canister Size: 1 liter
Flow Controller ID: 7024
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:05	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:05	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:05	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 0:05	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 0:05	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 0:05	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 0:05	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	91.8	70-130	2/8/22 0:05

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-13_013122
Sample ID: 22B0327-03
Sample Matrix: Indoor air
Sampled: 1/31/2022 10:44

Sample Description/Location:
Sub Description/Location:
Canister ID: 2531
Canister Size: 1 liter
Flow Controller ID: 7073
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:35	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:35	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:35	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 0:35	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 0:35	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 0:35	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 0:35	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	91.6	70-130	2/8/22 0:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-22_020122
Sample ID: 22B0327-05
Sample Matrix: Indoor air
Sampled: 2/1/2022 13:49

Sample Description/Location:
Sub Description/Location:
Canister ID: 2106
Canister Size: 1 liter
Flow Controller ID: 7079
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:13	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:13	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:13	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 14:13	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 14:13	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 14:13	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 14:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	85.1	70-130	2/8/22 14:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: MH-1231A_020422
Sample ID: 22B0327-06
Sample Matrix: Indoor air
Sampled: 2/4/2022 09:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2652
Canister Size: 1 liter
Flow Controller ID: 4028
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -3.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:37	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 14:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 14:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 14:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 14:37	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 14:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	85.7	70-130	2/8/22 14:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: MH-1256_020422
Sample ID: 22B0327-07
Sample Matrix: Indoor air
Sampled: 2/4/2022 10:09

Sample Description/Location:
Sub Description/Location:
Canister ID: 2686
Canister Size: 1 liter
Flow Controller ID: 7039
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:26	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:26	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:26	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 15:26	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 15:26	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 15:26	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 15:26	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	84.0	70-130	2/8/22 15:26

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: MH-1255_020422
Sample ID: 22B0327-08
Sample Matrix: Indoor air
Sampled: 2/4/2022 09:49

Sample Description/Location:
Sub Description/Location:
Canister ID: 2520
Canister Size: 1 liter
Flow Controller ID: 7035
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -1.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:51	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:51	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 15:51	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 15:51	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 15:51	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 15:51	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 15:51	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	85.2	70-130	2/8/22 15:51

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: MH-1260A_020422
Sample ID: 22B0327-09
Sample Matrix: Indoor air
Sampled: 2/4/2022 10:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 2307
Canister Size: 1 liter
Flow Controller ID: 7091
Sample Type: Grab

Work Order: 22B0327
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	3.3	0.20		13	0.79	4	2/8/22 16:16	BRF
cis-1,2-Dichloroethylene	150	0.20		580	0.79	4	2/8/22 16:16	BRF
trans-1,2-Dichloroethylene	1.8	0.20		7.1	0.79	4	2/8/22 16:16	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 16:16	BRF
Tetrachloroethylene	0.37	0.20		2.5	1.4	4	2/8/22 16:16	BRF
Trichloroethylene	5.5	0.20		29	1.1	4	2/8/22 16:16	BRF
Vinyl Chloride	330	0.50		830	1.3	10	2/9/22 7:31	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.1	70-130	2/8/22 16:16
4-Bromofluorobenzene (1)	83.6	70-130	2/9/22 7:31

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B0327-02 [SL-6_013122]	B300695	1.5	1	N/A	1000	200	75	02/07/22
22B0327-03 [SL-13_013122]	B300695	1.5	1	N/A	1000	200	75	02/07/22

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B0327-05 [SL-22_020122]	B300795	1.5	1	N/A	1000	200	75	02/08/22
22B0327-06 [MH-1231A_020422]	B300795	1.5	1	N/A	1000	200	75	02/08/22
22B0327-07 [MH-1256_020422]	B300795	1.5	1	N/A	1000	200	75	02/08/22
22B0327-08 [MH-1255_020422]	B300795	1.5	1	N/A	1000	200	75	02/08/22
22B0327-09 [MH-1260A_020422]	B300795	1.5	1	N/A	1000	200	75	02/08/22
22B0327-09RE1 [MH-1260A_020422]	B300795	1.5	1	N/A	1000	200	30	02/08/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B300695 - TO-15 Prep											
Blank (B300695-BLK1)					Prepared & Analyzed: 02/07/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.31*				*8.00*		*91.4*	*70-130*			
LCS (B300695-BS1)					Prepared & Analyzed: 02/07/22						
1,1-Dichloroethylene	4.21				5.00		84.2	70-130			
cis-1,2-Dichloroethylene	4.56				5.00		91.1	70-130			
trans-1,2-Dichloroethylene	4.57				5.00		91.3	70-130			
1,4-Dioxane	5.66				5.00		113	70-130			
Tetrachloroethylene	5.13				5.00		103	70-130			
Trichloroethylene	5.72				5.00		114	70-130			
Vinyl Chloride	3.99				5.00		79.8	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.65*				*8.00*		*95.6*	*70-130*			
Batch B300795 - TO-15 Prep											
Blank (B300795-BLK1)					Prepared & Analyzed: 02/08/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*6.90*				*8.00*		*86.2*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B300795 - TO-15 Prep											
LCS (B300795-BS1)					Prepared & Analyzed: 02/08/22						
1,1-Dichloroethylene	5.36				5.00		107	70-130			
cis-1,2-Dichloroethylene	4.65				5.00		93.0	70-130			
trans-1,2-Dichloroethylene	4.56				5.00		91.2	70-130			
1,4-Dioxane	5.93				5.00		119	70-130			
Tetrachloroethylene	4.58				5.00		91.7	70-130			
Trichloroethylene	5.19				5.00		104	70-130			
Vinyl Chloride	4.87				5.00		97.4	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.29*				*8.00*		*91.1*	*70-130*			
Duplicate (B300795-DUP1)			**Source: 22B0327-06**		Prepared & Analyzed: 02/08/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*6.73*				*8.00*		*84.1*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S065399-ICV1)			Lab File ID: K21A319019.D			Analyzed: 11/16/21 07:32			
Bromochloromethane (1)	59952	2.969	66491	2.97	90	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	200653	3.571	212037	3.571	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	188558	5.155	202159	5.156	93	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068074-CCV1)			Lab File ID: K22A038004.D			Analyzed: 02/07/22 12:03			
Bromochloromethane (1)	88779	2.945	66491	2.97	134	60 - 140	-0.0250	+/-0.50	
1,4-Difluorobenzene (1)	217225	3.556	212037	3.571	102	60 - 140	-0.0150	+/-0.50	
Chlorobenzene-d5 (1)	191995	5.154	202159	5.156	95	60 - 140	-0.0020	+/-0.50	
LCS (B300695-BS1)			Lab File ID: K22A038005.D			Analyzed: 02/07/22 12:33			
Bromochloromethane (1)	87307	2.949	88779	2.945	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	212136	3.556	217225	3.556	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	189624	5.154	191995	5.154	99	60 - 140	0.0000	+/-0.50	
Blank (B300695-BLK1)			Lab File ID: K22A038007.D			Analyzed: 02/07/22 13:43			
Bromochloromethane (1)	87876	2.945	88779	2.945	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	210392	3.556	217225	3.556	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	188467	5.154	191995	5.154	98	60 - 140	0.0000	+/-0.50	
SL-6_013122 (22B0327-02)			Lab File ID: K22A038026.D			Analyzed: 02/08/22 00:05			
Bromochloromethane (1)	87798	2.954	88779	2.945	99	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	213875	3.561	217225	3.556	98	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	193551	5.154	191995	5.154	101	60 - 140	0.0000	+/-0.50	
SL-13_013122 (22B0327-03)			Lab File ID: K22A038027.D			Analyzed: 02/08/22 00:35			
Bromochloromethane (1)	89565	2.954	88779	2.945	101	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	218510	3.561	217225	3.556	101	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	195431	5.154	191995	5.154	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068096-CCV1)			Lab File ID: J22A039004.D			Analyzed: 02/08/22 09:11			
Bromochloromethane (1)	144288	2.857	150879	2.863	96	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	517719	3.465	694423	3.468	75	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	464989	5.054	641566	5.057	72	60 - 140	-0.0030	+/-0.50	
LCS (B300795-BS1)			Lab File ID: J22A039005.D			Analyzed: 02/08/22 09:35			
Bromochloromethane (1)	140752	2.857	144288	2.857	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	510933	3.465	517719	3.465	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	461410	5.054	464989	5.054	99	60 - 140	0.0000	+/-0.50	
Blank (B300795-BLK1)			Lab File ID: J22A039008.D			Analyzed: 02/08/22 11:02			
Bromochloromethane (1)	140463	2.844	144288	2.857	97	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	487648	3.456	517719	3.465	94	60 - 140	-0.0090	+/-0.50	
Chlorobenzene-d5 (1)	433026	5.05	464989	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-22_020122 (22B0327-05)			Lab File ID: J22A039015.D			Analyzed: 02/08/22 14:13			
Bromochloromethane (1)	141530	2.847	144288	2.857	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	482889	3.456	517719	3.465	93	60 - 140	-0.0090	+/-0.50	
Chlorobenzene-d5 (1)	427729	5.05	464989	5.054	92	60 - 140	-0.0040	+/-0.50	
MH-1231A_020422 (22B0327-06)			Lab File ID: J22A039016.D			Analyzed: 02/08/22 14:37			
Bromochloromethane (1)	137261	2.844	144288	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	469779	3.456	517719	3.465	91	60 - 140	-0.0090	+/-0.50	
Chlorobenzene-d5 (1)	419163	5.051	464989	5.054	90	60 - 140	-0.0030	+/-0.50	
Duplicate (B300795-DUP1)			Lab File ID: J22A039017.D			Analyzed: 02/08/22 15:02			
Bromochloromethane (1)	137894	2.847	144288	2.857	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	471850	3.459	517719	3.465	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	422725	5.05	464989	5.054	91	60 - 140	-0.0040	+/-0.50	
MH-1256_020422 (22B0327-07)			Lab File ID: J22A039018.D			Analyzed: 02/08/22 15:26			
Bromochloromethane (1)	136722	2.844	144288	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	471634	3.456	517719	3.465	91	60 - 140	-0.0090	+/-0.50	
Chlorobenzene-d5 (1)	424873	5.05	464989	5.054	91	60 - 140	-0.0040	+/-0.50	
MH-1255_020422 (22B0327-08)			Lab File ID: J22A039019.D			Analyzed: 02/08/22 15:51			
Bromochloromethane (1)	136543	2.844	144288	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	467362	3.458	517719	3.465	90	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	414710	5.05	464989	5.054	89	60 - 140	-0.0040	+/-0.50	
MH-1260A_020422 (22B0327-09)			Lab File ID: J22A039020.D			Analyzed: 02/08/22 16:16			
Bromochloromethane (1)	155821	2.847	144288	2.857	108	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	508811	3.459	517719	3.465	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	441137	5.051	464989	5.054	95	60 - 140	-0.0030	+/-0.50	

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A Pace Analytical® Laboratory

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1260A_020422 (22B0327-09RE1)			Lab File ID: J22A039038.D			Analyzed: 02/09/22 07:31			
Bromochloromethane (1)	130436	2.847	144288	2.857	90	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	437724	3.459	517719	3.465	85	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	390140	5.05	464989	5.054	84	60 - 140	-0.0040	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068074-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	3.99	1.232676	0.9833677		-20.2	30
cis-1,2-Dichloroethylene	A	5.00	4.39	0.9906252	0.8693587		-12.2	30
trans-1,2-Dichloroethylene	A	5.00	4.49	1.050356	0.9435384		-10.2	30
1,4-Dioxane	A	5.00	5.48	0.156603	0.1715162		9.5	30
Tetrachloroethylene	A	5.00	5.04	0.3706873	0.3737431		0.8	30
Trichloroethylene	A	5.00	5.51	0.3015564	0.3325805		10.3	30
Vinyl Chloride	A	5.00	3.85	0.7834094	0.6027371		-23.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S068096-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.02	1.038306	1.04226		0.4	30
cis-1,2-Dichloroethylene	A	5.00	4.52	1.058854	0.9576735		-9.6	30
trans-1,2-Dichloroethylene	A	5.00	4.43	1.144971	1.014471		-11.4	30
1,4-Dioxane	A	5.00	5.54	0.1348394	0.1493691		10.8	30
Tetrachloroethylene	A	5.00	4.50	0.5934671	0.5343197		-10.0	30
Trichloroethylene	A	5.00	5.20	0.2950588	0.3066467		3.9	30
Vinyl Chloride	A	5.00	4.67	0.6636142	0.6196163		-6.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413) 318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

22B0327

Contact: https://www.pacelabs.com/contact-us/contact-environmental-scie

Company Name: Arcadis	
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377	
Phone: 248-994-2240	
Project Name: Ford LTP	
Project Location: Livonia, MI	
Project Number: 30080642.701.04	
Project Manager: Kristoffer Hinskey	
Pace Analytical Quote Name/Number: 00105825	
Invoice Recipient:	
Sampled By: Korey Pearson, Samantha Hindle	

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use: Pace Analytical Work Order#	Client Use: Client Sample ID / Description	Collection Data: Beginning Date/Time	Collection Data: Ending Date/Time	Duration: Total Minutes Sampled	Flow Rate: m³/min L/min	Matrix: Code	Volume: Liters m³	TO-15 (see Comments section)			Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Summa Can ID	Flow Controller ID
01	VOID/low pressure			--	--	IA	--				-25	—	-2.9	2340	7064
02	SL-6_013122	1/31/22 12:11	1/31/22 12:12	—	—	IA	—	X			-29	-6	-4.9	2660	7024
03	SL-13_013122	1/31/22 12:43	1/31/22 12:44	—	—	IA	—	X			-29	-6	-4.9	2531	7073
04	VOID/leaking in flow controller												-28.8	2550	4128
05	SL-22_020122	2/1/22 13:48	2/1/22 13:49	—	—	IA	—	X			-29.5	-7	-5.1	2106	7079
06	MH-1231A_020122	2/1/22 9:10	2/1/22 9:11	-	-	IA	-	X			-29.5	-5.5	-3.4	2652	4028

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Samantha Hindle	02/04/22 12:30
Received by: (signature) FED EX	02/04/22 12:30
Relinquished by: (signature)	
Received by: (signature)	2/7/22 913
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☐

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Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

22B0327

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
07	MH-1256_020422	2/4/22 10:08	02/04/22 10:09	--	--	IA	--	X				-29.5	-6	-4.1	2686	7039
08	MH-1255_020422	2/4/22 9:48	2/4/22 9:49	-	-	IA	-	X				-29.5	-4.5	-3.9	2520	7035
09	MH-1260A_020422	2/4/22 10:29	2/4/22 10:30	-	-	IA	-	X				-29.5	-7	-5.7	2307	7091

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Samantha Hindle	Date/Time: 02/04/22 12:30	
Received by: (signature) FEDEX	Date/Time: 02/04/22 12:30	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 2/7/22 915	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

FedEx Tracking

816459407135

ADD NICKNAME

ON TIME

Delivered
Monday, February 7, 2022 at 9:13 am

DELIVERED

Signed for by: R.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOV, US

TO

MA US

MANAGE DELIVERY

Travel History

TIME ZONE
Local Scan Time

Monday, February 7, 2022		
9:13 AM	MA	Delivered
7:36 AM	WINDSOR LOCKS, CT	Shipment arriving On-Time
7:28 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:19 AM	WINDSOR LOCKS, CT	At local FedEx facility
Saturday, February 5, 2022		
9:33 PM	EAST GRANBY, CT	Shipment arriving On-Time
9:22 PM	EAST GRANBY, CT	At destination sort facility
6:17 PM	NEWARK, NJ	Departed FedEx hub

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 2/7/22 Time 913

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(9)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	9	1L	9	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
21660	2357				7024	7091			
2531					7023				
21110					7079				
21652					4028				
21616					7039				
2520					7085				
Unused Media					**Pufs/TO-17's**				
2340	(-29.9)	7016							
2350	(-28.8)	4128							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018038.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2340

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2660

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018043.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2531

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2106

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2652

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2686

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2520

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2307

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/9/2022

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February 9, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22B0330

Enclosed are results of analyses for samples as received by the laboratory on February 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 2/9/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22B0330

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-16_013122	22B0330-01	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2293/5059	22B0330-02	Indoor air		-	
SL-9_020122	22B0330-03	Indoor air		-	
				EPA TO-15	
SL-18_013122	22B0330-04	Indoor air		-	
				EPA TO-15	
SL-21_013122	22B0330-05	Indoor air		-	
				EPA TO-15	
DUP-01_020122	22B0330-06	Indoor air		-	
				EPA TO-15	
SL-3_013122	22B0330-07	Indoor air		-	
				EPA TO-15	
SL-7_013122	22B0330-08	Indoor air		-	
				EPA TO-15	
SL-17_013122	22B0330-09	Indoor air		-	
				EPA TO-15	
SL-15_013122	22B0330-10	Indoor air		-	
				EPA TO-15	
SL-14_013122	22B0330-11	Indoor air		-	
				EPA TO-15	
SL-5_013122	22B0330-12	Indoor air		-	
				EPA TO-15	

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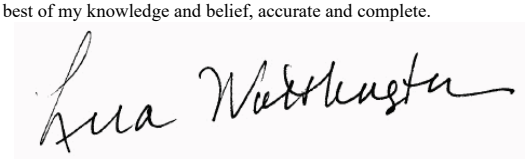
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-16_013122
Sample ID: 22B0330-01
Sample Matrix: Indoor air
Sampled: 1/31/2022 15:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2244
Canister Size: 1 liter
Flow Controller ID: 7027
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 19:54	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 19:54	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 19:54	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 19:54	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 19:54	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 19:54	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 19:54	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/7/22 19:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-9_020122
Sample ID: 22B0330-03
Sample Matrix: Indoor air
Sampled: 2/1/2022 10:15

Sample Description/Location:
Sub Description/Location:
Canister ID: 2301
Canister Size: 1 liter
Flow Controller ID: 7085
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -3.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 20:34	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 20:34	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 20:34	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 20:34	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 20:34	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 20:34	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 20:34	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/7/22 20:34

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-18_013122
Sample ID: 22B0330-04
Sample Matrix: Indoor air
Sampled: 1/31/2022 14:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2122
Canister Size: 1 liter
Flow Controller ID: 7028
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 21:14	BRF
cis-1,2-Dichloroethylene	0.076	0.20	J	0.30	0.79	4	2/7/22 21:14	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 21:14	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 21:14	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 21:14	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 21:14	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 21:14	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	2/7/22 21:14

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-21_013122
Sample ID: 22B0330-05
Sample Matrix: Indoor air
Sampled: 2/1/2022 13:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2561
Canister Size: 1 liter
Flow Controller ID: 5068
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 21:54	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 21:54	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 21:54	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 21:54	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 21:54	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 21:54	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 21:54	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.6	70-130	2/7/22 21:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: DUP-01_020122
Sample ID: 22B0330-06
Sample Matrix: Indoor air
Sampled: 1/31/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2655
Canister Size: 1 liter
Flow Controller ID: 5024
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 22:35	BRF
cis-1,2-Dichloroethylene	1.3	0.20		5.1	0.79	4	2/7/22 22:35	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 22:35	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 22:35	BRF
Tetrachloroethylene	0.18	0.20	J	1.2	1.4	4	2/7/22 22:35	BRF
Trichloroethylene	0.38	0.20		2.0	1.1	4	2/7/22 22:35	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 22:35	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/7/22 22:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-3_013122
Sample ID: 22B0330-07
Sample Matrix: Indoor air
Sampled: 1/31/2022 15:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2654
Canister Size: 1 liter
Flow Controller ID: 5067
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -3.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 23:15	BRF
cis-1,2-Dichloroethylene	0.15	0.20	J	0.59	0.79	4	2/7/22 23:15	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 23:15	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 23:15	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 23:15	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 23:15	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 23:15	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/7/22 23:15

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-7_013122
Sample ID: 22B0330-08
Sample Matrix: Indoor air
Sampled: 1/31/2022 11:48

Sample Description/Location:
Sub Description/Location:
Canister ID: 2643
Canister Size: 1 liter
Flow Controller ID: 5058
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 23:55	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 23:55	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/7/22 23:55	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/7/22 23:55	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/7/22 23:55	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/7/22 23:55	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/7/22 23:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/7/22 23:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-17_013122
Sample ID: 22B0330-09
Sample Matrix: Indoor air
Sampled: 1/31/2022 14:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 2103
Canister Size: 1 liter
Flow Controller ID: 5030
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:35	BRF
cis-1,2-Dichloroethylene	0.12	0.20	J	0.49	0.79	4	2/8/22 0:35	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 0:35	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 0:35	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 0:35	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 0:35	BRF
Vinyl Chloride	0.11	0.20	J	0.28	0.51	4	2/8/22 0:35	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/8/22 0:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-15_013122
Sample ID: 22B0330-10
Sample Matrix: Indoor air
Sampled: 1/31/2022 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2521
Canister Size: 1 liter
Flow Controller ID: 5029
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:15	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:15	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:15	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 1:15	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 1:15	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 1:15	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 1:15	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.4	70-130	2/8/22 1:15

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-14_013122
Sample ID: 22B0330-11
Sample Matrix: Indoor air
Sampled: 1/31/2022 10:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2656
Canister Size: 1 liter
Flow Controller ID: 5060
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:55	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:55	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 1:55	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 1:55	BRF
Tetrachloroethylene	0.060	0.20	J	0.41	1.4	4	2/8/22 1:55	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 1:55	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/8/22 1:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.5	70-130	2/8/22 1:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/7/2022
Field Sample #: SL-5_013122
Sample ID: 22B0330-12
Sample Matrix: Indoor air
Sampled: 1/31/2022 12:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2532
Canister Size: 1 liter
Flow Controller ID: 7033
Sample Type: Grab

Work Order: 22B0330
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 2:35	BRF
cis-1,2-Dichloroethylene	0.092	0.20	J	0.36	0.79	4	2/8/22 2:35	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/8/22 2:35	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/8/22 2:35	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/8/22 2:35	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/8/22 2:35	BRF
Vinyl Chloride	0.13	0.20	J	0.34	0.51	4	2/8/22 2:35	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/8/22 2:35

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B0330-01 [SL-16_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-03 [SL-9_020122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-04 [SL-18_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-05 [SL-21_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-06 [DUP-01_020122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-07 [SL-3_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-08 [SL-7_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-09 [SL-17_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-10 [SL-15_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-11 [SL-14_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22
22B0330-12 [SL-5_013122]	B300689	1.5	1	N/A	1000	400	150	02/07/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B300689 - TO-15 Prep											
Blank (B300689-BLK1)					Prepared & Analyzed: 02/07/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.01*				*8.00*		*100*	*70-130*			
LCS (B300689-BS1)					Prepared & Analyzed: 02/07/22						
1,1-Dichloroethylene	4.54				5.00		90.8	70-130			
cis-1,2-Dichloroethylene	4.48				5.00		89.7	70-130			
trans-1,2-Dichloroethylene	4.39				5.00		87.9	70-130			
1,4-Dioxane	4.31				5.00		86.2	70-130			
Tetrachloroethylene	4.86				5.00		97.2	70-130			
Trichloroethylene	4.27				5.00		85.4	70-130			
Vinyl Chloride	4.01				5.00		80.2	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.10*				*8.00*		*101*	*70-130*			
Duplicate (B300689-DUP1)			**Source: 22B0330-12**		Prepared: 02/07/22 Analyzed: 02/08/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	0.092	0.20	0.36	0.79		0.092			0.00	25	J
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	0.14	0.20	0.35	0.51		0.13			2.99	25	J
Surrogate: 4-Bromofluorobenzene (1)	*8.02*				*8.00*		*100*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068067-CCV1)			Lab File ID: G22A038004.D			Analyzed: 02/07/22 16:28			
Bromochloromethane (1)	1424137	8.497	1402037	8.503	102	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3904290	10.271	3621476	10.277	108	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3610247	14.642	3493930	14.642	103	60 - 140	0.0000	+/-0.50	
LCS (B300689-BS1)			Lab File ID: G22A038005.D			Analyzed: 02/07/22 17:07			
Bromochloromethane (1)	1436566	8.497	1424137	8.497	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3941373	10.271	3904290	10.271	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3630669	14.642	3610247	14.642	101	60 - 140	0.0000	+/-0.50	
Blank (B300689-BLK1)			Lab File ID: G22A038008.D			Analyzed: 02/07/22 19:14			
Bromochloromethane (1)	1387528	8.503	1424137	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3748750	10.271	3904290	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3415286	14.642	3610247	14.642	95	60 - 140	0.0000	+/-0.50	
SL-16_013122 (22B0330-01)			Lab File ID: G22A038009.D			Analyzed: 02/07/22 19:54			
Bromochloromethane (1)	1375530	8.497	1424137	8.497	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3677977	10.271	3904290	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3391486	14.642	3610247	14.642	94	60 - 140	0.0000	+/-0.50	
SL-9_020122 (22B0330-03)			Lab File ID: G22A038010.D			Analyzed: 02/07/22 20:34			
Bromochloromethane (1)	1367928	8.497	1424137	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3626417	10.271	3904290	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3324949	14.642	3610247	14.642	92	60 - 140	0.0000	+/-0.50	
SL-18_013122 (22B0330-04)			Lab File ID: G22A038011.D			Analyzed: 02/07/22 21:14			
Bromochloromethane (1)	1352220	8.497	1424137	8.497	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3560567	10.271	3904290	10.271	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3292875	14.642	3610247	14.642	91	60 - 140	0.0000	+/-0.50	
SL-21_013122 (22B0330-05)			Lab File ID: G22A038012.D			Analyzed: 02/07/22 21:54			
Bromochloromethane (1)	1342600	8.503	1424137	8.497	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3541245	10.271	3904290	10.271	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3280777	14.642	3610247	14.642	91	60 - 140	0.0000	+/-0.50	
DUP-01_020122 (22B0330-06)			Lab File ID: G22A038013.D			Analyzed: 02/07/22 22:35			
Bromochloromethane (1)	1358386	8.497	1424137	8.497	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3545705	10.271	3904290	10.271	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3230675	14.642	3610247	14.642	89	60 - 140	0.0000	+/-0.50	
SL-3_013122 (22B0330-07)			Lab File ID: G22A038014.D			Analyzed: 02/07/22 23:15			
Bromochloromethane (1)	1335476	8.497	1424137	8.497	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3444413	10.271	3904290	10.271	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3158745	14.642	3610247	14.642	87	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-7_013122 (22B0330-08)			Lab File ID: G22A038015.D			Analyzed: 02/07/22 23:55			
Bromochloromethane (1)	1306914	8.497	1424137	8.497	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3400952	10.271	3904290	10.271	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3117755	14.642	3610247	14.642	86	60 - 140	0.0000	+/-0.50	
SL-17_013122 (22B0330-09)			Lab File ID: G22A038016.D			Analyzed: 02/08/22 00:35			
Bromochloromethane (1)	1294326	8.497	1424137	8.497	91	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3345316	10.271	3904290	10.271	86	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3072634	14.642	3610247	14.642	85	60 - 140	0.0000	+/-0.50	
SL-15_013122 (22B0330-10)			Lab File ID: G22A038017.D			Analyzed: 02/08/22 01:15			
Bromochloromethane (1)	1285401	8.497	1424137	8.497	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3313722	10.271	3904290	10.271	85	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3063279	14.642	3610247	14.642	85	60 - 140	0.0000	+/-0.50	
SL-14_013122 (22B0330-11)			Lab File ID: G22A038018.D			Analyzed: 02/08/22 01:55			
Bromochloromethane (1)	1268367	8.497	1424137	8.497	89	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3264775	10.271	3904290	10.271	84	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3004532	14.636	3610247	14.642	83	60 - 140	-0.0060	+/-0.50	
SL-5_013122 (22B0330-12)			Lab File ID: G22A038019.D			Analyzed: 02/08/22 02:35			
Bromochloromethane (1)	1259954	8.497	1424137	8.497	88	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3217049	10.271	3904290	10.271	82	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2958920	14.642	3610247	14.642	82	60 - 140	0.0000	+/-0.50	
Duplicate (B300689-DUP1)			Lab File ID: G22A038020.D			Analyzed: 02/08/22 03:15			
Bromochloromethane (1)	1245231	8.497	1424137	8.497	87	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3164697	10.271	3904290	10.271	81	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2901757	14.642	3610247	14.642	80	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068067-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.20	1.135823	0.9532195		-16.1	30
cis-1,2-Dichloroethylene	A	5.00	4.27	1.005957	0.8593544		-14.6	30
trans-1,2-Dichloroethylene	A	5.00	4.22	1.067538	0.9000471		-15.7	30
1,4-Dioxane	A	5.00	4.03	0.1952184	0.1573047		-19.4	30
Tetrachloroethylene	A	5.00	4.65	0.4242595	0.3947138		-7.0	30
Trichloroethylene	A	5.00	4.14	0.3926852	0.3250082		-17.2	30
Vinyl Chloride	A	5.00	3.75	0.6993653	0.524836		-25.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical®

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis	
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377	
Phone: 248-994-2240	
Project Name: Ford LTP	
Project Location: Livonia, MI	
Project Number: 30080642.701.04	
Project Manager: Kristoffer Hinskey	
Pace Analytical Quote Name/Number: 00105825	
Invoice Recipient:	
Sampled By: Korey Pearson, Samantha Hindle	

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min L/min	Code	☐ Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement
															Summa Can ID	Flow Controller ID
01	SL-16_013122	1/31/22 15:34	1/31/22 15:35	--	--	IA	--	X				-29	-8	-7.5	2244	7027
02	VOID/leaking	~~1/31/22~~	~~1/31/22~~	-	-	IA	-	X				-	-	-28.9	2293	5059
03	SL-9_020122	2/1/22 10:14	2/1/22 10:15	-	-	IA	-	X				-29.5	-4.5	-3.9	2301	7085
04	SL-18_013122	1/31/22 14:31	1/31/22 14:32	-	-	IA	-	X				-29	-7	-4.4	2122	7028
05	SL-21_013122	1/31/22 13:41	1/31/22 13:42	-	-	IA	-	X				-29	-6.5	-5.9	2561	5068
06	DUP-01_020122	2/1/22	2/1/22	-	-	IA	-	X				-29.5	-7.5	-7.5	2655	5024

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 2/4/22 12:30
Received by: (signature) Fed Ex	Date/Time: 2/4/22 12:30
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time: 2/7/22 913
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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Doc #378 Rev 2_01122021

Pace-New England

Page 1 of 1

22B0330

CHAIN OF CUSTODY RECORD (AIR)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
Invoice Recipient:
Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
07	SL-3_013122	1/31/22 15:45	1/31/22 16:46	--	--	IA	--	X				-29.5	-4	3.4	2654	5067
08	SL-7_013122	1/31/22 11:47	1/31/22 11:48	—	—	IA	—	X				-28.5	-5.5	5	2643	5058
09	SL-17_013122	1/31/22 14:57	1/31/22 14:58	—	—	IA	—	X				-29	-5	4.1	2103	5030
10	SL-15_013122	1/31/22 10:04	1/31/22 10:05	—	—	IA	—	X				-29	-7	5.5	2521	5029
11	SL-14_013122	1/31/22 10:20	1/31/22 10:21	—	—	IA	—	X				-29.5	-6.5	5.8	2656	5060
12	SL-5_013122	1/31/22 12:25	1/31/22 12:26	—	—	IA	—	X				-29	-7	5.2	2532	7033

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 02/04/22 12:30	
Received by: (signature) FED EX	Date/Time: 02/04/22 12:30	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 2/7/22 913	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☐

Table of Contents

FedEx

FedEx Tracking

816459407135

ADD NICKNAME

ON TIME

Delivered
Monday, February 7, 2022 at 9:13 am

DELIVERED

Signed for by: R.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOV, US

TO

MA US

MANAGE DELIVERY

Travel History

TIME ZONE
Local Scan Time

Monday, February 7, 2022		
9:13 AM	MA	Delivered
7:36 AM	WINDSOR LOCKS, CT	Shipment arriving On-Time
7:28 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:19 AM	WINDSOR LOCKS, CT	At local FedEx facility
Saturday, February 5, 2022		
9:33 PM	EAST GRANBY, CT	Shipment arriving On-Time
9:22 PM	EAST GRANBY, CT	At destination sort facility
6:17 PM	NEWARK, NJ	Departed FedEx hub

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

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Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RL Date 2/7/22 Time 913

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (12)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	12	1L	12	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2244	21643				7027	5058			
2301	2103				7085	5230			
2122	2521				7078	5079			
25161	21656				5028	5061			
21655	2532				5024	7033			
21654					5067				
Unused Media					**Pufs/TO-17's**				
2293	(-28.9)	5059							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2244

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2301

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2122

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2561

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2655

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** J22A025017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2654

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2643

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2103

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018040.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2521

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2656

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/18/2022 **Batch #:** J22A018035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2532

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/8/2022

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February 24, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22B1228

Enclosed are results of analyses for samples as received by the laboratory on February 19, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 2/24/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22B1228

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1256_021622	22B1228-01	Indoor air		- EPA TO-15	
MH-1255_021622	22B1228-02	Indoor air		- EPA TO-15	
MH-1256_021622	22B1228-03	Indoor air		- EPA TO-15	
MH-1244_021622	22B1228-04	Indoor air		- EPA TO-15	
SL-9_021522	22B1228-05	Indoor air		- EPA TO-15	
MH-1231A_021622	22B1228-06	Indoor air		- EPA TO-15	
SL-15_021522	22B1228-07	Indoor air		- EPA TO-15	
SL-5_021522	22B1228-08	Indoor air		- EPA TO-15	
SL-7_021522	22B1228-09	Indoor air		- EPA TO-15	
SL-14_021522	22B1228-10	Indoor air		- EPA TO-15	
SL-13_021522	22B1228-11	Indoor air		- EPA TO-15	
SL-6_021522	22B1228-12	Indoor air		- EPA TO-15	

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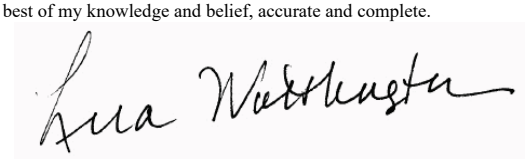
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: MH-1256_021622
Sample ID: 22B1228-01
Sample Matrix: Indoor air
Sampled: 2/16/2022 13:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2551
Canister Size: 1 liter
Flow Controller ID: 7061
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.78	0.20		3.1	0.79	4	2/21/22 21:15	BRF
cis-1,2-Dichloroethylene	44	0.20		180	0.79	4	2/21/22 21:15	BRF
trans-1,2-Dichloroethylene	0.82	0.20		3.2	0.79	4	2/21/22 21:15	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 21:15	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/21/22 21:15	BRF
Trichloroethylene	3.9	0.20		21	1.1	4	2/21/22 21:15	BRF
Vinyl Chloride	39	0.20		100	0.51	4	2/21/22 21:15	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/21/22 21:15

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: MH-1255_021622
Sample ID: 22B1228-02
Sample Matrix: Indoor air
Sampled: 2/16/2022 13:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2635
Canister Size: 1 liter
Flow Controller ID: 5055
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.34	0.20		1.4	0.79	4	2/21/22 21:44	BRF
cis-1,2-Dichloroethylene	26	0.20		100	0.79	4	2/21/22 21:44	BRF
trans-1,2-Dichloroethylene	0.34	0.20		1.3	0.79	4	2/21/22 21:44	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 21:44	BRF
Tetrachloroethylene	0.27	0.20		1.8	1.4	4	2/21/22 21:44	BRF
Trichloroethylene	0.84	0.20		4.5	1.1	4	2/21/22 21:44	BRF
Vinyl Chloride	48	0.20		120	0.51	4	2/21/22 21:44	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.2	70-130	2/21/22 21:44

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: MH-1256_021622
Sample ID: 22B1228-03
Sample Matrix: Indoor air
Sampled: 2/16/2022 14:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2115
Canister Size: 1 liter
Flow Controller ID: 4017
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.43	0.20		1.7	0.79	4	2/21/22 22:12	BRF
cis-1,2-Dichloroethylene	33	0.20		130	0.79	4	2/21/22 22:12	BRF
trans-1,2-Dichloroethylene	0.54	0.20		2.1	0.79	4	2/21/22 22:12	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 22:12	BRF
Tetrachloroethylene	0.16	0.20	J	1.1	1.4	4	2/21/22 22:12	BRF
Trichloroethylene	1.3	0.20		6.9	1.1	4	2/21/22 22:12	BRF
Vinyl Chloride	120	0.20		320	0.51	4	2/21/22 22:12	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.6	70-130	2/21/22 22:12

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: MH-1244_021622
Sample ID: 22B1228-04
Sample Matrix: Indoor air
Sampled: 2/16/2022 14:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2523
Canister Size: 1 liter
Flow Controller ID: 7041
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 22:40	BRF
cis-1,2-Dichloroethylene	3.4	0.20		14	0.79	4	2/21/22 22:40	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 22:40	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 22:40	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/21/22 22:40	BRF
Trichloroethylene	0.17	0.20	J	0.92	1.1	4	2/21/22 22:40	BRF
Vinyl Chloride	15	0.20		39	0.51	4	2/21/22 22:40	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.6	70-130	2/21/22 22:40

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-9_021522
Sample ID: 22B1228-05
Sample Matrix: Indoor air
Sampled: 2/15/2022 12:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2663
Canister Size: 1 liter
Flow Controller ID: 5041
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 23:08	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 23:08	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 23:08	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 23:08	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/21/22 23:08	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/21/22 23:08	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/21/22 23:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.7	70-130	2/21/22 23:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: MH-1231A_021622
Sample ID: 22B1228-06
Sample Matrix: Indoor air
Sampled: 2/16/2022 14:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2114
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/21/22 23:36	BRF
cis-1,2-Dichloroethylene	18	0.20		70	0.79	4	2/21/22 23:36	BRF
trans-1,2-Dichloroethylene	0.17	0.20	J	0.67	0.79	4	2/21/22 23:36	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/21/22 23:36	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/21/22 23:36	BRF
Trichloroethylene	0.48	0.20		2.6	1.1	4	2/21/22 23:36	BRF
Vinyl Chloride	36	0.20		91	0.51	4	2/21/22 23:36	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.9	70-130	2/21/22 23:36

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-15_021522
Sample ID: 22B1228-07
Sample Matrix: Indoor air
Sampled: 2/15/2022 09:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2678
Canister Size: 1 liter
Flow Controller ID: 7048
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:04	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:04	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:04	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 0:04	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 0:04	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 0:04	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 0:04	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.2	70-130	2/22/22 0:04

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-5_021522
Sample ID: 22B1228-08
Sample Matrix: Indoor air
Sampled: 2/15/2022 11:29

Sample Description/Location:
Sub Description/Location:
Canister ID: 2676
Canister Size: 1 liter
Flow Controller ID: 7072
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:32	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:32	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 0:32	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 0:32	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 0:32	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 0:32	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 0:32	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.7	70-130	2/22/22 0:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-7_021522
Sample ID: 22B1228-09
Sample Matrix: Indoor air
Sampled: 2/15/2022 10:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2296
Canister Size: 1 liter
Flow Controller ID: 7088
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:06	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:06	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:06	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 12:06	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 12:06	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 12:06	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 12:06	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.8	70-130	2/22/22 12:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-14_021522
Sample ID: 22B1228-10
Sample Matrix: Indoor air
Sampled: 2/15/2022 09:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2646
Canister Size: 1 liter
Flow Controller ID: 7057
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -4.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:36	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:36	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 12:36	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 12:36	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 12:36	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 12:36	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 12:36	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.5	70-130	2/22/22 12:36

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-13_021522
Sample ID: 22B1228-11
Sample Matrix: Indoor air
Sampled: 2/15/2022 09:54

Sample Description/Location:
Sub Description/Location:
Canister ID: 2336
Canister Size: 1 liter
Flow Controller ID: 7043
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:06	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:06	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:06	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 13:06	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 13:06	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 13:06	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 13:06	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.5	70-130	2/22/22 13:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/19/2022
Field Sample #: SL-6_021522
Sample ID: 22B1228-12
Sample Matrix: Indoor air
Sampled: 2/15/2022 11:12

Sample Description/Location:
Sub Description/Location:
Canister ID: 2569
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22B1228
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:36	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:36	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/22/22 13:36	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/22/22 13:36	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/22/22 13:36	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/22/22 13:36	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/22/22 13:36	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.9	70-130	2/22/22 13:36

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B1228-01 [MH-1256_021622]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-02 [MH-1255_021622]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-03 [MH-1256_021622]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-04 [MH-1244_021622]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-05 [SL-9_021522]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-06 [MH-1231A_021622]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-07 [SL-15_021522]	B301737	1.5	1	N/A	1000	200	75	02/21/22
22B1228-08 [SL-5_021522]	B301737	1.5	1	N/A	1000	200	75	02/21/22

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B1228-09 [SL-7_021522]	B301832	1.5	1	N/A	1000	200	75	02/22/22
22B1228-10 [SL-14_021522]	B301832	1.5	1	N/A	1000	200	75	02/22/22
22B1228-11 [SL-13_021522]	B301832	1.5	1	N/A	1000	200	75	02/22/22
22B1228-12 [SL-6_021522]	B301832	1.5	1	N/A	1000	200	75	02/22/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B301737 - TO-15 Prep											
Blank (B301737-BLK1)					Prepared & Analyzed: 02/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.04*				*8.00*		*101*	*70-130*			
LCS (B301737-BS1)					Prepared & Analyzed: 02/21/22						
1,1-Dichloroethylene	5.23				5.00		105	70-130			
cis-1,2-Dichloroethylene	5.03				5.00		101	70-130			
trans-1,2-Dichloroethylene	5.00				5.00		100	70-130			
1,4-Dioxane	5.87				5.00		117	70-130			
Tetrachloroethylene	5.17				5.00		103	70-130			
Trichloroethylene	5.64				5.00		113	70-130			
Vinyl Chloride	5.18				5.00		104	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.14*				*8.00*		*102*	*70-130*			
Batch B301832 - TO-15 Prep											
Blank (B301832-BLK1)					Prepared & Analyzed: 02/22/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.82*				*8.00*		*97.8*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B301832 - TO-15 Prep											
LCS (B301832-BS1)					Prepared & Analyzed: 02/22/22						
1,1-Dichloroethylene	5.00				5.00		100	70-130			
cis-1,2-Dichloroethylene	4.68				5.00		93.6	70-130			
trans-1,2-Dichloroethylene	4.95				5.00		99.1	70-130			
1,4-Dioxane	5.62				5.00		112	70-130			
Tetrachloroethylene	4.94				5.00		98.8	70-130			
Trichloroethylene	5.44				5.00		109	70-130			
Vinyl Chloride	4.92				5.00		98.5	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.02*				*8.00*		*100*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S068471-ICV1)			Lab File ID: K22A047020.D			Analyzed: 02/16/22 18:36			
Bromochloromethane (1)	74545	2.963	74545	2.963	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	191710	3.565	191710	3.565	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	171011	5.154	171011	5.154	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068483-CCV1)			Lab File ID: K22A052004.D			Analyzed: 02/21/22 11:33			
Bromochloromethane (1)	75601	2.959	75601	2.959	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	193881	3.565	193881	3.565	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	175567	5.155	175567	5.155	100	60 - 140	0.0000	+/-0.50	
LCS (B301737-BS1)			Lab File ID: K22A052005.D			Analyzed: 02/21/22 12:02			
Bromochloromethane (1)	74891	2.964	75601	2.959	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	193862	3.565	193881	3.565	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	174833	5.154	175567	5.155	100	60 - 140	-0.0010	+/-0.50	
Blank (B301737-BLK1)			Lab File ID: K22A052008.D			Analyzed: 02/21/22 14:12			
Bromochloromethane (1)	75023	2.964	75601	2.959	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	195587	3.565	193881	3.565	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	174043	5.155	175567	5.155	99	60 - 140	0.0000	+/-0.50	
MH-1256_021622 (22B1228-01)			Lab File ID: K22A052023.D			Analyzed: 02/21/22 21:15			
Bromochloromethane (1)	70592	2.964	75601	2.959	93	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	177928	3.565	193881	3.565	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	159285	5.155	175567	5.155	91	60 - 140	0.0000	+/-0.50	
MH-1255_021622 (22B1228-02)			Lab File ID: K22A052024.D			Analyzed: 02/21/22 21:44			
Bromochloromethane (1)	70911	2.963	75601	2.959	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	178125	3.565	193881	3.565	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	160161	5.154	175567	5.155	91	60 - 140	-0.0010	+/-0.50	
MH-1256_021622 (22B1228-03)			Lab File ID: K22A052025.D			Analyzed: 02/21/22 22:12			
Bromochloromethane (1)	72843	2.963	75601	2.959	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	183831	3.565	193881	3.565	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	164648	5.154	175567	5.155	94	60 - 140	-0.0010	+/-0.50	
MH-1244_021622 (22B1228-04)			Lab File ID: K22A052026.D			Analyzed: 02/21/22 22:40			
Bromochloromethane (1)	71796	2.964	75601	2.959	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	179094	3.565	193881	3.565	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	159397	5.154	175567	5.155	91	60 - 140	-0.0010	+/-0.50	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-9_021522 (22B1228-05)			Lab File ID: K22A052027.D			Analyzed: 02/21/22 23:08			
Bromochloromethane (1)	72879	2.964	75601	2.959	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	181103	3.565	193881	3.565	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	161726	5.154	175567	5.155	92	60 - 140	-0.0010	+/-0.50	
MH-1231A_021622 (22B1228-06)			Lab File ID: K22A052028.D			Analyzed: 02/21/22 23:36			
Bromochloromethane (1)	71982	2.964	75601	2.959	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	179423	3.565	193881	3.565	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	160668	5.154	175567	5.155	92	60 - 140	-0.0010	+/-0.50	
SL-15_021522 (22B1228-07)			Lab File ID: K22A052029.D			Analyzed: 02/22/22 00:04			
Bromochloromethane (1)	72374	2.968	75601	2.959	96	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	179401	3.57	193881	3.565	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	160427	5.154	175567	5.155	91	60 - 140	-0.0010	+/-0.50	
SL-5_021522 (22B1228-08)			Lab File ID: K22A052030.D			Analyzed: 02/22/22 00:32			
Bromochloromethane (1)	72463	2.959	75601	2.959	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	178427	3.565	193881	3.565	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	160354	5.154	175567	5.155	91	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068524-CCV1)			Lab File ID: K22A053004.D			Analyzed: 02/22/22 09:19			
Bromochloromethane (1)	105026	2.959	105026	2.959	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	260595	3.565	260595	3.565	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	233718	5.155	233718	5.155	100	60 - 140	0.0000	+/-0.50	
LCS (B301832-BS1)			Lab File ID: K22A053005.D			Analyzed: 02/22/22 09:50			
Bromochloromethane (1)	105325	2.959	105026	2.959	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	257666	3.565	260595	3.565	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	232237	5.155	233718	5.155	99	60 - 140	0.0000	+/-0.50	
Blank (B301832-BLK1)			Lab File ID: K22A053008.D			Analyzed: 02/22/22 11:37			
Bromochloromethane (1)	111425	2.964	105026	2.959	106	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	273606	3.565	260595	3.565	105	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	243557	5.155	233718	5.155	104	60 - 140	0.0000	+/-0.50	
SL-7_021522 (22B1228-09)			Lab File ID: K22A053009.D			Analyzed: 02/22/22 12:06			
Bromochloromethane (1)	107986	2.964	105026	2.959	103	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	262783	3.565	260595	3.565	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	234252	5.154	233718	5.155	100	60 - 140	-0.0010	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-14_021522 (22B1228-10)			Lab File ID: K22A053010.D			Analyzed: 02/22/22 12:36			
Bromochloromethane (1)	105789	2.964	105026	2.959	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	257975	3.565	260595	3.565	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	227146	5.155	233718	5.155	97	60 - 140	0.0000	+/-0.50	
SL-13_021522 (22B1228-11)			Lab File ID: K22A053011.D			Analyzed: 02/22/22 13:06			
Bromochloromethane (1)	107166	2.968	105026	2.959	102	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	261394	3.57	260595	3.565	100	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	229355	5.155	233718	5.155	98	60 - 140	0.0000	+/-0.50	
SL-6_021522 (22B1228-12)			Lab File ID: K22A053012.D			Analyzed: 02/22/22 13:36			
Bromochloromethane (1)	109836	2.968	105026	2.959	105	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	268226	3.57	260595	3.565	103	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	237284	5.155	233718	5.155	102	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068483-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.36	0.9442263	1.011796		7.2	30
cis-1,2-Dichloroethylene	A	5.00	5.23	0.8521572	0.8907395		4.5	30
trans-1,2-Dichloroethylene	A	5.00	5.24	0.8276484	0.8668668		4.7	30
1,4-Dioxane	A	5.00	6.19	0.1419928	0.1756954		23.7	30
Tetrachloroethylene	A	5.00	5.48	0.3548009	0.3888111		9.6	30
Trichloroethylene	A	5.00	5.92	0.2749653	0.3253955		18.3	30
Vinyl Chloride	A	5.00	5.33	0.5894949	0.6288806		6.7	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S068524-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.33	0.9442263	1.007232		6.7	30
cis-1,2-Dichloroethylene	A	5.00	5.16	0.8521572	0.8798888		3.3	30
trans-1,2-Dichloroethylene	A	5.00	5.43	0.8276484	0.8983528		8.5	30
1,4-Dioxane	A	5.00	6.12	0.1419928	0.1738974		22.5	30
Tetrachloroethylene	A	5.00	5.38	0.3548009	0.3820125		7.7	30
Trichloroethylene	A	5.00	5.96	0.2749653	0.3279265		19.3	30
Vinyl Chloride	A	5.00	5.44	0.5894949	0.6416544		8.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

CHAIN OF CUSTODY RECORD (AIR)

2251228

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Mipale~~ Sommer Guy, Seth Turner

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
01	MH-1256_021622	2/16/22 13:31	2/16/22 13:32	--	--	IA	--	X				-29.5	-5	5.5	2551	7061
02	MH-1255_021622	2/16/22 13:07	2/16/22 13:08	—	—	IA	—	X				-28	-6	5.9	2635	5055
03	MH-1256_021622	2/16/22 14:00	2/16/22 14:01	—	—	IA	—	X				-29	-6.5	6.3	2115	4017
04	MH-1244_021622	2/16/22 14:26	2/16/22 14:27	—	—	IA	—	X				-29.5	-5.5	5.9	2523	7041
05	SL-9_021522	2/15/22 12:45	2/15/22 12:46	—	—	IA	—	X				-29	-8	7.4	2663	5041
06	MH-1231A_021622	2/16/22 14:45	2/16/22 14:46	—	—	IA	—	X				-29.5	-7	6.9	2114	7047

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:	Detection Limit Requirements
Seth Turner	2/18/21/1230	MA
Received by: (signature)	Date/Time:	
FedEx	2/18/21/1230	CT
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	Other:
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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Doc #378 Rev 2_01122021

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

228/228

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Seth Turner

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
~~SL-15 021522~~ 07	SL-15_021522	2/15/22 926	2/15/22 927	--	--	IA	--	X				-29	-7	5.8	2678	7048
08	SL-5_021522	2/15/22 1128	2/15/22 1129			IA		X				-29.5	-7	5.9	2676	7072
09	SL-7_021522	2/15/22 1050	2/15/22 1051			IA		X				-29	-5	4.4	2296	7088
10	SL-14_021522	2/15/22 941	2/15/22 942			IA		X				-29.5	-6.5	4.9	2696	7057
11	SL-13_021522	2/15/22 953	2/15/22 954			IA		X				-29.5	-7	5.1	2336	7043
12	SL-6_021522	2/15/22 1111	2/15/22 1112			IA		X				-29	-7	5.7	2569	7022

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Seth Turner	2/18/22 12:30
Received by: (signature) Fed Ex	2/18/22 12:30
Relinquished by: (signature)	
Received by: (signature)	2/19/22 1000
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

MA MCP Required

MCP Certification Form Required

CT RCP Required

RCP Certification Form Required

Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

Government ☐ Municipality ☐ MWRA ☐ WRTA
Federal ☐ 21 J ☐ School
City ☐ Brownfield ☐ MBTA

Other

Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY

Soxh ☐
Non Soxh ☐

Table of Contents

FedEx

FedEx Tracking

289983825831

ADD NICKNAME

ON TIME

Delivered
Saturday, February 19, 2022 at 10:01 am

THIS IS 1 OF 6 PIECES

DELIVERED

Signed for by: L.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	EAST LONGMEADOW, MA US

MANAGE DELIVERY

6 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
289983825810 (master)	Delivered	2/18/22	2/19/22	0	NOVI MI	EAST LONGMEADOW MA
289983825820	Delivered	2/18/22	2/19/22	0	NOVI MI	EAST LONGMEADOW MA
289983825831	Delivered	2/18/22	2/19/22	0	NOVI MI	EAST LONGMEADOW MA
289983825842	Delivered	2/18/22	2/19/22	0	NOVI MI	EAST LONGMEADOW MA
289983825853	Delivered	2/18/22	2/19/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLJ Date 2/19/20 Time 1001

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (12)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	12	1L	12	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2551	21978				7061	7048			
21035	21976				5055	7012			
2115	22960				4017	7088			
2523	20416				7041	7057			
21063	23316				5041	7043			
2114	2569				7047	7022			
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/28/2022 **Batch #:** K22A028009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2551

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2635

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K2A034038.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2115

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/28/2022 **Batch #:** K22A028017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2523

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/31/2022 **Batch #:** K22A031031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2663

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2114

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/28/2022 **Batch #:** K22A028041.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2678

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** K22A025019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2676

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** K22A025030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2296

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/28/2022 **Batch #:** K22A028011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2646

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/31/2022 **Batch #:** K22A031025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2336

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/25/2022 **Batch #:** K22A025035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2569

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 2/2/2022

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March 2, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22B1631

Enclosed are results of analyses for samples as received by the laboratory on February 25, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/2/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22B1631

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-8_022222	22B1631-01	Indoor air		- EPA TO-15	
SL-22_022322	22B1631-02	Indoor air		- EPA TO-15	
SL-23_022222	22B1631-03	Indoor air		- EPA TO-15	
SL-9_022222	22B1631-04	Indoor air		- EPA TO-15	
SL-12_0222222	22B1631-05	Indoor air		- EPA TO-15	
SL-10_022222	22B1631-06	Indoor air		- EPA TO-15	
DUP-02_022422	22B1631-07	Indoor air		- EPA TO-15	
SL-7_022322	22B1631-08	Indoor air		- EPA TO-15	
SL-19_022222	22B1631-09	Indoor air		- EPA TO-15	
MH-1256_022222	22B1631-10	Indoor air		- EPA TO-15	
MH-1244_022222	22B1631-11	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-8_022222
Sample ID: 22B1631-01
Sample Matrix: Indoor air
Sampled: 2/22/2022 09:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2102
Canister Size: 1 liter
Flow Controller ID: 5009
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 15:09	BRF
cis-1,2-Dichloroethylene	0.26	0.20		1.0	0.79	4	2/27/22 15:09	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 15:09	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/27/22 15:09	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/27/22 15:09	BRF
Trichloroethylene	0.24	0.20		1.3	1.1	4	2/27/22 15:09	BRF
Vinyl Chloride	0.58	0.20		1.5	0.51	4	2/27/22 15:09	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.3	70-130	2/27/22 15:09

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-22_022322
Sample ID: 22B1631-02
Sample Matrix: Indoor air
Sampled: 2/22/2022 12:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2101
Canister Size: 1 liter
Flow Controller ID: 5039
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 15:38	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 15:38	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 15:38	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/27/22 15:38	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/27/22 15:38	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/27/22 15:38	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/27/22 15:38	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.6	70-130	2/27/22 15:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-23_022222
Sample ID: 22B1631-03
Sample Matrix: Indoor air
Sampled: 2/22/2022 10:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2529
Canister Size: 1 liter
Flow Controller ID: 5052
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 16:08	BRF
cis-1,2-Dichloroethylene	0.46	0.20		1.8	0.79	4	2/27/22 16:08	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 16:08	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/27/22 16:08	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/27/22 16:08	BRF
Trichloroethylene	0.25	0.20		1.4	1.1	4	2/27/22 16:08	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/27/22 16:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/27/22 16:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-9_022222
Sample ID: 22B1631-04
Sample Matrix: Indoor air
Sampled: 2/22/2022 09:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2649
Canister Size: 1 liter
Flow Controller ID: 7034
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 16:38	BRF
cis-1,2-Dichloroethylene	0.63	0.20		2.5	0.79	4	2/27/22 16:38	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 16:38	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/27/22 16:38	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/27/22 16:38	BRF
Trichloroethylene	0.60	0.20		3.2	1.1	4	2/27/22 16:38	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/27/22 16:38	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/27/22 16:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-12_0222222
Sample ID: 22B1631-05
Sample Matrix: Indoor air
Sampled: 2/22/2022 10:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2637
Canister Size: 1 liter
Flow Controller ID: 5025
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -4.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 17:08	BRF
cis-1,2-Dichloroethylene	1.9	0.20		7.4	0.79	4	2/27/22 17:08	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/27/22 17:08	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/27/22 17:08	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/27/22 17:08	BRF
Trichloroethylene	1.8	0.20		9.6	1.1	4	2/27/22 17:08	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/27/22 17:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/27/22 17:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-10_022222
Sample ID: 22B1631-06
Sample Matrix: Indoor air
Sampled: 2/22/2022 09:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2672
Canister Size: 1 liter
Flow Controller ID: 4018
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 13:04	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 13:04	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 13:04	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 13:04	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 13:04	BRF
Trichloroethylene	0.14	0.20	J	0.73	1.1	4	2/28/22 13:04	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 13:04	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/28/22 13:04

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: DUP-02_022422
Sample ID: 22B1631-07
Sample Matrix: Indoor air
Sampled: 2/24/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2634
Canister Size: 1 liter
Flow Controller ID: 7056
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -3.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 13:33	BRF
cis-1,2-Dichloroethylene	4.4	0.20		18	0.79	4	2/28/22 13:33	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 13:33	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 13:33	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 13:33	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 13:33	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 13:33	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/28/22 13:33

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-7_022322
Sample ID: 22B1631-08
Sample Matrix: Indoor air
Sampled: 2/23/2022 10:15

Sample Description/Location:
Sub Description/Location:
Canister ID: 2299
Canister Size: 1 liter
Flow Controller ID: 7055
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 14:03	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 14:03	BRF
trans-1,2-Dichloroethylene	0.18	0.20	J	0.71	0.79	4	2/28/22 14:03	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 14:03	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 14:03	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 14:03	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 14:03	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.6	70-130	2/28/22 14:03

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-19_022222
Sample ID: 22B1631-09
Sample Matrix: Indoor air
Sampled: 2/22/2022 11:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2302
Canister Size: 1 liter
Flow Controller ID: 7051
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 14:33	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 14:33	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 14:33	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 14:33	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 14:33	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 14:33	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 14:33	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.1	70-130	2/28/22 14:33

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: MH-1256_022222
Sample ID: 22B1631-10
Sample Matrix: Indoor air
Sampled: 2/22/2022 13:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2237
Canister Size: 1 liter
Flow Controller ID: 5006
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.5
Receipt Vacuum(in Hg): -3.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 15:02	BRF
cis-1,2-Dichloroethylene	40	0.20		160	0.79	4	2/28/22 15:02	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 15:02	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 15:02	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 15:02	BRF
Trichloroethylene	0.20	0.20		1.1	1.1	4	2/28/22 15:02	BRF
Vinyl Chloride	81	0.20		210	0.51	4	2/28/22 15:02	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	2/28/22 15:02

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: MH-1244_022222
Sample ID: 22B1631-11
Sample Matrix: Indoor air
Sampled: 2/22/2022 13:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2669
Canister Size: 1 liter
Flow Controller ID: 5020
Sample Type: Grab

Work Order: 22B1631
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:01	BRF
cis-1,2-Dichloroethylene	90	0.20		360	0.79	4	2/28/22 16:01	BRF
trans-1,2-Dichloroethylene	0.78	0.20		3.1	0.79	4	2/28/22 16:01	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 16:01	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 16:01	BRF
Trichloroethylene	2.7	0.20		15	1.1	4	2/28/22 16:01	BRF
Vinyl Chloride	140	0.20		360	0.51	4	2/28/22 16:01	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	2/28/22 16:01

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B1631-01 [SL-8_022222]	B302210	1.5	1	N/A	1000	200	75	02/27/22
22B1631-02 [SL-22_022322]	B302210	1.5	1	N/A	1000	200	75	02/27/22
22B1631-03 [SL-23_022222]	B302210	1.5	1	N/A	1000	200	75	02/27/22
22B1631-04 [SL-9_022222]	B302210	1.5	1	N/A	1000	200	75	02/27/22
22B1631-05 [SL-12_0222222]	B302210	1.5	1	N/A	1000	200	75	02/27/22

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B1631-06 [SL-10_022222]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1631-07 [DUP-02_022422]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1631-08 [SL-7_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1631-09 [SL-19_022222]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1631-10 [MH-1256_022222]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1631-11 [MH-1244_022222]	B302213	1.5	1	N/A	1000	200	75	02/28/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302210 - TO-15 Prep											
Blank (B302210-BLK1)					Prepared & Analyzed: 02/27/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.92*				*8.00*		*99.0*	*70-130*			
LCS (B302210-BS1)					Prepared & Analyzed: 02/27/22						
1,1-Dichloroethylene	4.88				5.00		97.7	70-130			
cis-1,2-Dichloroethylene	4.70				5.00		94.0	70-130			
trans-1,2-Dichloroethylene	4.68				5.00		93.7	70-130			
1,4-Dioxane	4.11				5.00		82.3	70-130			
Tetrachloroethylene	4.52				5.00		90.4	70-130			
Trichloroethylene	4.01				5.00		80.2	70-130			
Vinyl Chloride	4.95				5.00		99.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.00*				*8.00*		*100*	*70-130*			
Batch B302213 - TO-15 Prep											
Blank (B302213-BLK1)					Prepared & Analyzed: 02/28/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.00*				*8.00*		*100*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302213 - TO-15 Prep											
LCS (B302213-BS1)					Prepared & Analyzed: 02/28/22						
1,1-Dichloroethylene	5.05				5.00		101	70-130			
cis-1,2-Dichloroethylene	4.78				5.00		95.6	70-130			
trans-1,2-Dichloroethylene	4.76				5.00		95.3	70-130			
1,4-Dioxane	4.30				5.00		86.1	70-130			
Tetrachloroethylene	4.82				5.00		96.4	70-130			
Trichloroethylene	4.01				5.00		80.2	70-130			
Vinyl Chloride	5.05				5.00		101	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.22*				*8.00*		*103*	*70-130*			
Duplicate (B302213-DUP1)		**Source: 22B1631-10**			Prepared & Analyzed: 02/28/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	39	0.20	160	0.79		40			1.21	25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	0.22	0.20	1.2	1.1		0.20			7.69	25	
Vinyl Chloride	81	0.20	210	0.51		81			0.651	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.93*				*8.00*		*99.1*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068711-CCV1)			Lab File ID: K22A058004.D			Analyzed: 02/27/22 12:23			
Bromochloromethane (1)	94310	2.982	94310	2.982	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	304994	3.574	304994	3.574	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	230303	5.159	230303	5.159	100	60 - 140	0.0000	+/-0.50	
LCS (B302210-BS1)			Lab File ID: K22A058005.D			Analyzed: 02/27/22 12:54			
Bromochloromethane (1)	94234	2.982	94310	2.982	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	303013	3.579	304994	3.574	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	234901	5.159	230303	5.159	102	60 - 140	0.0000	+/-0.50	
Blank (B302210-BLK1)			Lab File ID: K22A058007.D			Analyzed: 02/27/22 14:01			
Bromochloromethane (1)	95482	2.982	94310	2.982	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	302146	3.579	304994	3.574	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	231979	5.159	230303	5.159	101	60 - 140	0.0000	+/-0.50	
SL-8_022222 (22B1631-01)			Lab File ID: K22A058009.D			Analyzed: 02/27/22 15:09			
Bromochloromethane (1)	93586	2.982	94310	2.982	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	297214	3.579	304994	3.574	97	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	226713	5.159	230303	5.159	98	60 - 140	0.0000	+/-0.50	
SL-22_022322 (22B1631-02)			Lab File ID: K22A058010.D			Analyzed: 02/27/22 15:38			
Bromochloromethane (1)	93363	2.982	94310	2.982	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	298540	3.579	304994	3.574	98	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	224762	5.159	230303	5.159	98	60 - 140	0.0000	+/-0.50	
SL-23_022222 (22B1631-03)			Lab File ID: K22A058011.D			Analyzed: 02/27/22 16:08			
Bromochloromethane (1)	98023	2.982	94310	2.982	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	304336	3.579	304994	3.574	100	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	231497	5.159	230303	5.159	101	60 - 140	0.0000	+/-0.50	
SL-9_022222 (22B1631-04)			Lab File ID: K22A058012.D			Analyzed: 02/27/22 16:38			
Bromochloromethane (1)	93678	2.987	94310	2.982	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	301822	3.579	304994	3.574	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	225637	5.159	230303	5.159	98	60 - 140	0.0000	+/-0.50	
SL-12_0222222 (22B1631-05)			Lab File ID: K22A058013.D			Analyzed: 02/27/22 17:08			
Bromochloromethane (1)	92011	2.982	94310	2.982	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	296219	3.579	304994	3.574	97	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	224464	5.159	230303	5.159	97	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068713-CCV1)			Lab File ID: K22A059004.D			Analyzed: 02/28/22 08:39			
Bromochloromethane (1)	93133	2.977	93133	2.977	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	253433	3.574	253433	3.574	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222955	5.158	222955	5.158	100	60 - 140	0.0000	+/-0.50	
LCS (B302213-BS1)			Lab File ID: K22A059008.D			Analyzed: 02/28/22 10:47			
Bromochloromethane (1)	90864	2.978	93133	2.977	98	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	292259	3.575	253433	3.574	115	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	219496	5.159	222955	5.158	98	60 - 140	0.0010	+/-0.50	
Blank (B302213-BLK1)			Lab File ID: K22A059010.D			Analyzed: 02/28/22 11:57			
Bromochloromethane (1)	93260	2.978	93133	2.977	100	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	247240	3.574	253433	3.574	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222180	5.159	222955	5.158	100	60 - 140	0.0010	+/-0.50	
SL-10_022222 (22B1631-06)			Lab File ID: K22A059012.D			Analyzed: 02/28/22 13:04			
Bromochloromethane (1)	89681	2.978	93133	2.977	96	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	286740	3.574	253433	3.574	113	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	216402	5.159	222955	5.158	97	60 - 140	0.0010	+/-0.50	
DUP-02_022422 (22B1631-07)			Lab File ID: K22A059013.D			Analyzed: 02/28/22 13:33			
Bromochloromethane (1)	92786	2.978	93133	2.977	100	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	293940	3.574	253433	3.574	116	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	220833	5.159	222955	5.158	99	60 - 140	0.0010	+/-0.50	
SL-7_022322 (22B1631-08)			Lab File ID: K22A059014.D			Analyzed: 02/28/22 14:03			
Bromochloromethane (1)	94179	2.978	93133	2.977	101	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	251313	3.574	253433	3.574	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222792	5.159	222955	5.158	100	60 - 140	0.0010	+/-0.50	
SL-19_022222 (22B1631-09)			Lab File ID: K22A059015.D			Analyzed: 02/28/22 14:33			
Bromochloromethane (1)	92580	2.982	93133	2.977	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	286960	3.579	253433	3.574	113	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	220883	5.159	222955	5.158	99	60 - 140	0.0010	+/-0.50	
MH-1256_022222 (22B1631-10)			Lab File ID: K22A059016.D			Analyzed: 02/28/22 15:02			
Bromochloromethane (1)	91577	2.978	93133	2.977	98	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	291775	3.575	253433	3.574	115	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	221477	5.159	222955	5.158	99	60 - 140	0.0010	+/-0.50	
Duplicate (B302213-DUP1)			Lab File ID: K22A059017.D			Analyzed: 02/28/22 15:31			
Bromochloromethane (1)	93590	2.978	93133	2.977	100	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	291591	3.575	253433	3.574	115	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	223708	5.159	222955	5.158	100	60 - 140	0.0010	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1244_022222 (22B1631-11)			Lab File ID: K22A059018.D			Analyzed: 02/28/22 16:01			
Bromochloromethane (1)	90150	2.977	93133	2.977	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	244314	3.574	253433	3.574	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	215305	5.159	222955	5.158	97	60 - 140	0.0010	+/-0.50	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S068711-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.22	0.9896483	1.032917		4.4	30
cis-1,2-Dichloroethylene	A	5.00	5.06	0.8700383	0.881247		1.3	30
trans-1,2-Dichloroethylene	A	5.00	5.03	0.8433475	0.8488432		0.7	30
1,4-Dioxane	A	5.00	4.41	0.1591668	0.1404618		-11.8	30
Tetrachloroethylene	A	5.00	5.00	0.4061849	0.4061085		-0.02	30
Trichloroethylene	A	5.00	4.20	0.3164814	0.2659567		-16.0	30
Vinyl Chloride	A	5.00	5.35	0.6391221	0.684042		7.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S068713-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.19	0.9896483	1.027984		3.9	30
cis-1,2-Dichloroethylene	A	5.00	4.96	0.8700383	0.8631269		-0.8	30
trans-1,2-Dichloroethylene	A	5.00	5.08	0.8433475	0.8564612		1.6	30
1,4-Dioxane	A	5.00	5.03	0.1591668	0.160036		0.5	30
Tetrachloroethylene	A	5.00	5.15	0.4061849	0.4180144		2.9	30
Trichloroethylene	A	5.00	4.94	0.3164814	0.3124329		-1.3	30
Vinyl Chloride	A	5.00	5.19	0.6391221	0.6632751		3.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22B11631

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Carson, Samantha Hindle~~ Sommer Guy, Seth Turner

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-8_022222	2/22/22 9:16	2/22/22 9:11	--	--	IA	--	X				-28	-5	-5	2102	5089
02	SL-22_022322	2/23/22 12:48	2/23/22 12:41	—	—	IA	—	X				-28	-8	-5	2101	5039
03	SL-23_022222	2/22/22 10:35	2/22/22 10:30	—	—	IA	—	X				-28.5	-7	-6	2529	5052
04	SL-9_022222	2/22/22 9:35	2/22/22 9:36	—	—	IA	—	X				-29	-5.5	-5	2649	7034
05	SL-12_022222	2/22/22 10:55	2/22/22 10:56	—	—	IA	—	X				-28	-5	-5	2637	5025
06	SL-10_022222	2/22/22 9:50	2/22/22 9:51	—	—	IA	—	X				-28.5	-4.5	-4	2672	4018

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:
Christa Ferraro	2/24/22 14:30
Received by: (signature)	Date/Time:
Fed Ex	2/24/22 14:20
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
[illegible]	2/25/22 13:4
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace Analytical

22B1631

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
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Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

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Sampled By: ~~Korey Pearsall, Samantha Findle~~ Sommer Guy, Seth Turner

Requested Turnaround Time
7-Day ☐ 10-Day ☐
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Data Delivery
Format: PDF ☑ EXCEL ☑
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CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

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For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
07	DUP-02-022322	2/24/22 —	2/24/22 —	--	--	IA	--	X				-29	-5	-5	2634	7056
08	SL-7-022322	2/23/22 10:14	2/23/22 10:15	—	—	IA	—	X				-29	-6	-2	2299	7055
09	SL-19-022222	2/22/22 1110	2/22/22 1111	—	—	IA	—	X				-29	-7	-1	2302	7051
10	MH-1256-022222	2/22/22 13:10	2/22/22 13:11	—	—	IA	—	X				-29	-3.5	-3.3	2237	5006
11	MH-1244-022222	2/22/22 13:40	2/22/22 13:41	—	—	IA	—	X				-29	-6	-2	2669	5026

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	2/24/22 14:12
Received by: (signature) Fed Ex	2/24/22 14:30
Relinquished by: (signature)	
Received by: (signature)	2/25/22 1341
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx® Tracking

270199965403

ADD NICKNAME

Delivered
Friday, February 25, 2022 at 1:41 pm

THIS IS 1 OF 7 PIECES

DELIVERED

Signature release on file

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	EAST LONGMEADOW, MA US

MANAGE DELIVERY

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270199965403 (master)	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965414	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965425	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965436	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965447	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965458	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 2/25/22 Time 1341

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(11)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	11	1C	11	9cal	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2108	21034				5049	7052			
2101	2299				2539	7045			
2529	2332				5052	7051			
21049	22351				7034	5040			
21037	21609				5025	5220			
21072					4018				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2102

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2101

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034044.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2529

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2649

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2637

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2672

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2634

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2299

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/28/2022 **Batch #:** K22A028012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2302

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034045.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2237

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2669

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

March 2, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22B1632

Enclosed are results of analyses for samples as received by the laboratory on February 25, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/2/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22B1632

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-14_022322	22B1632-01	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2674/5063	22B1632-02	Indoor air		-	
SL-6_022322	22B1632-03	Indoor air		-	
				EPA TO-15	
SL-11_022222	22B1632-04	Indoor air		-	
				EPA TO-15	
SL-15_022322	22B1632-05	Indoor air		-	
				EPA TO-15	
SL-14_022322	22B1632-06	Indoor air		-	
				EPA TO-15	
MH-1231_022422	22B1632-07	Indoor air		-	
				EPA TO-15	
SL-21_022322	22B1632-08	Indoor air		-	
				EPA TO-15	
SL-2_022422	22B1632-09	Indoor air		-	
				EPA TO-15	
SL-20_022322	22B1632-10	Indoor air		-	
				EPA TO-15	

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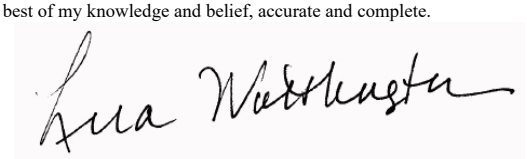
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-14_022322
Sample ID: 22B1632-01
Sample Matrix: Indoor air
Sampled: 2/23/2022 09:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 2679
Canister Size: 1 liter
Flow Controller ID: 7036
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:30	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:30	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:30	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 16:30	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 16:30	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 16:30	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 16:30	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.0	70-130	2/28/22 16:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-6_022322
Sample ID: 22B1632-03
Sample Matrix: Indoor air
Sampled: 2/23/2022 10:28

Sample Description/Location:
Sub Description/Location:
Canister ID: 2315
Canister Size: 1 liter
Flow Controller ID: 7045
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:59	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:59	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 16:59	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 16:59	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 16:59	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 16:59	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 16:59	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.8	70-130	2/28/22 16:59

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-11_022222
Sample ID: 22B1632-04
Sample Matrix: Indoor air
Sampled: 2/22/2022 10:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2110
Canister Size: 1 liter
Flow Controller ID: 4012
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:29	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:29	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:29	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 17:29	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 17:29	BRF
Trichloroethylene	0.14	0.20	J	0.73	1.1	4	2/28/22 17:29	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 17:29	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.8	70-130	2/28/22 17:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-15_022322
Sample ID: 22B1632-05
Sample Matrix: Indoor air
Sampled: 2/23/2022 09:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2666
Canister Size: 1 liter
Flow Controller ID: 7030
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:58	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:58	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 17:58	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 17:58	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 17:58	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 17:58	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 17:58	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.2	70-130	2/28/22 17:58

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-14_022322
Sample ID: 22B1632-06
Sample Matrix: Indoor air
Sampled: 2/23/2022 09:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2631
Canister Size: 1 liter
Flow Controller ID: 5069
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 18:27	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 18:27	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 18:27	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 18:27	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 18:27	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 18:27	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 18:27	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.6	70-130	2/28/22 18:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: MH-1231_022422
Sample ID: 22B1632-07
Sample Matrix: Indoor air
Sampled: 2/24/2022 09:15

Sample Description/Location:
Sub Description/Location:
Canister ID: 2100
Canister Size: 1 liter
Flow Controller ID: 7071
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 18:56	BRF
cis-1,2-Dichloroethylene	2.3	0.20		9.2	0.79	4	2/28/22 18:56	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 18:56	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 18:56	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 18:56	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 18:56	BRF
Vinyl Chloride	5.0	0.20		13	0.51	4	2/28/22 18:56	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.1	70-130	2/28/22 18:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-21_022322
Sample ID: 22B1632-08
Sample Matrix: Indoor air
Sampled: 2/23/2022 12:14

Sample Description/Location:
Sub Description/Location:
Canister ID: 2645
Canister Size: 1 liter
Flow Controller ID: 7050
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 19:25	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 19:25	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 19:25	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 19:25	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 19:25	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 19:25	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 19:25	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.0	70-130	2/28/22 19:25

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-2_022422
Sample ID: 22B1632-09
Sample Matrix: Indoor air
Sampled: 2/24/2022 08:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2667
Canister Size: 1 liter
Flow Controller ID: 7083
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 19:55	BRF
cis-1,2-Dichloroethylene	3.1	0.20		12	0.79	4	2/28/22 19:55	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 19:55	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 19:55	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 19:55	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 19:55	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 19:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.4	70-130	2/28/22 19:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 2/25/2022
Field Sample #: SL-20_022322
Sample ID: 22B1632-10
Sample Matrix: Indoor air
Sampled: 2/23/2022 12:24

Sample Description/Location:
Sub Description/Location:
Canister ID: 2341
Canister Size: 1 liter
Flow Controller ID: 7084
Sample Type: Grab

Work Order: 22B1632
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 20:25	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 20:25	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	2/28/22 20:25	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	2/28/22 20:25	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	2/28/22 20:25	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	2/28/22 20:25	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	2/28/22 20:25	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.7	70-130	2/28/22 20:25

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22B1632-01 [SL-14_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-03 [SL-6_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-04 [SL-11_022222]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-05 [SL-15_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-06 [SL-14_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-07 [MH-1231_022422]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-08 [SL-21_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-09 [SL-2_022422]	B302213	1.5	1	N/A	1000	200	75	02/28/22
22B1632-10 [SL-20_022322]	B302213	1.5	1	N/A	1000	200	75	02/28/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302213 - TO-15 Prep											
Blank (B302213-BLK1)					Prepared & Analyzed: 02/28/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.00*				*8.00*		*100*	*70-130*			
LCS (B302213-BS1)					Prepared & Analyzed: 02/28/22						
1,1-Dichloroethylene	5.05				5.00		101	70-130			
cis-1,2-Dichloroethylene	4.78				5.00		95.6	70-130			
trans-1,2-Dichloroethylene	4.76				5.00		95.3	70-130			
1,4-Dioxane	4.30				5.00		86.1	70-130			
Tetrachloroethylene	4.82				5.00		96.4	70-130			
Trichloroethylene	4.01				5.00		80.2	70-130			
Vinyl Chloride	5.05				5.00		101	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.22*				*8.00*		*103*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068713-CCV1)			Lab File ID: K22A059004.D			Analyzed: 02/28/22 08:39			
Bromochloromethane (1)	93133	2.977	93133	2.977	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	253433	3.574	253433	3.574	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222955	5.158	222955	5.158	100	60 - 140	0.0000	+/-0.50	
LCS (B302213-BS1)			Lab File ID: K22A059008.D			Analyzed: 02/28/22 10:47			
Bromochloromethane (1)	90864	2.978	93133	2.977	98	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	292259	3.575	253433	3.574	115	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	219496	5.159	222955	5.158	98	60 - 140	0.0010	+/-0.50	
Blank (B302213-BLK1)			Lab File ID: K22A059010.D			Analyzed: 02/28/22 11:57			
Bromochloromethane (1)	93260	2.978	93133	2.977	100	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	247240	3.574	253433	3.574	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222180	5.159	222955	5.158	100	60 - 140	0.0010	+/-0.50	
SL-14_022322 (22B1632-01)			Lab File ID: K22A059019.D			Analyzed: 02/28/22 16:30			
Bromochloromethane (1)	90208	2.982	93133	2.977	97	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	281454	3.579	253433	3.574	111	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	216993	5.159	222955	5.158	97	60 - 140	0.0010	+/-0.50	
SL-6_022322 (22B1632-03)			Lab File ID: K22A059020.D			Analyzed: 02/28/22 16:59			
Bromochloromethane (1)	92426	2.982	93133	2.977	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	286102	3.575	253433	3.574	113	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	217925	5.159	222955	5.158	98	60 - 140	0.0010	+/-0.50	
SL-11_022222 (22B1632-04)			Lab File ID: K22A059021.D			Analyzed: 02/28/22 17:29			
Bromochloromethane (1)	98138	2.982	93133	2.977	105	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	296297	3.579	253433	3.574	117	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	222374	5.159	222955	5.158	100	60 - 140	0.0010	+/-0.50	
SL-15_022322 (22B1632-05)			Lab File ID: K22A059022.D			Analyzed: 02/28/22 17:58			
Bromochloromethane (1)	92009	2.982	93133	2.977	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	283044	3.579	253433	3.574	112	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	219188	5.159	222955	5.158	98	60 - 140	0.0010	+/-0.50	
SL-14_022322 (22B1632-06)			Lab File ID: K22A059023.D			Analyzed: 02/28/22 18:27			
Bromochloromethane (1)	91690	2.978	93133	2.977	98	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	281343	3.575	253433	3.574	111	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	214526	5.159	222955	5.158	96	60 - 140	0.0010	+/-0.50	
MH-1231_022422 (22B1632-07)			Lab File ID: K22A059024.D			Analyzed: 02/28/22 18:56			
Bromochloromethane (1)	89721	2.982	93133	2.977	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	274201	3.579	253433	3.574	108	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	209686	5.159	222955	5.158	94	60 - 140	0.0010	+/-0.50	

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A Pace Analytical® Laboratory

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-21_022322 (22B1632-08)			Lab File ID: K22A059025.D			Analyzed: 02/28/22 19:25			
Bromochloromethane (1)	90475	2.978	93133	2.977	97	60 - 140	0.0010	+/-0.50	
1,4-Difluorobenzene (1)	274076	3.574	253433	3.574	108	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	213169	5.159	222955	5.158	96	60 - 140	0.0010	+/-0.50	
SL-2_022422 (22B1632-09)			Lab File ID: K22A059026.D			Analyzed: 02/28/22 19:55			
Bromochloromethane (1)	90926	2.982	93133	2.977	98	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	280729	3.579	253433	3.574	111	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	209706	5.159	222955	5.158	94	60 - 140	0.0010	+/-0.50	
SL-20_022322 (22B1632-10)			Lab File ID: K22A059027.D			Analyzed: 02/28/22 20:25			
Bromochloromethane (1)	92109	2.982	93133	2.977	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	283687	3.579	253433	3.574	112	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	214536	5.159	222955	5.158	96	60 - 140	0.0010	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068713-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.19	0.9896483	1.027984		3.9	30
cis-1,2-Dichloroethylene	A	5.00	4.96	0.8700383	0.8631269		-0.8	30
trans-1,2-Dichloroethylene	A	5.00	5.08	0.8433475	0.8564612		1.6	30
1,4-Dioxane	A	5.00	5.03	0.1591668	0.160036		0.5	30
Tetrachloroethylene	A	5.00	5.15	0.4061849	0.4180144		2.9	30
Trichloroethylene	A	5.00	4.94	0.3164814	0.3124329		-1.3	30
Vinyl Chloride	A	5.00	5.19	0.6391221	0.6632751		3.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22B16032

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Kody Pearson, Samantha Lindler~~ Summer Guy, Seth Turner

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-14_022322	2/23/22 9:24	2/23/22 9:25	--	--	IA	--	X				-28.5	-7.5	10.7	2679	7036
02	VOID/turned non to open	~~2/23/22~~	—	—	—	—	—	—				-29	X	11.9	2674	5063
03	SL-6_022322	2/23/22 10:27	2/23/22 10:28	—	—	IA	—	X				-29	-8	10.5	2315	7845
04	SL-11_022222	2/22/22 1015	2/22/22 1016	—	—	IA	—	X				-28.5	-5.5	5.5	2110	4012
05	SL-15_022322	2/23/22 9:10	2/23/22 9:11	—	—	IA	—	X				-29	-9	7.4	2666	7030
06	SL-14-022322	2/23/22 9:39	2/23/22 9:40	—	—	IA	—	X				-29	-6	5	2631	5069

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 2/24/22	14:10
Received by: (signature) Fed Ex	Date/Time: 2/24/22	14:30
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 2/25/22	1341
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace Analytical

22B11632

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
07	MH-1231_022422	2/24/22 9:14	2/24/22 9:15	--	--	IA	--	X				-29	-7.5	5.4	2180	7071
08	SL-21_022322	2/23/22 12:13	2/23/22 12:14	—	—	IA	—	X				-29	-8	6.2	2645	7050
09	SL-2_022422	2/24/22 8:55	2/24/22 8:56	—	—	IA	—	X				-29	-7.5	5.4	2667	7083
10	SL-20_022322	2/23/22 12:23	2/23/22 12:24	—	—	IA	—	X				-29	-8	6.2	2341	7084

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 2/24/22 14:30	
Received by: (signature) FedEx	Date/Time: 2/24/22 14:30	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 2/25/22 13:41	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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FedEx

FedEx® Tracking

270199965403

ADD NICKNAME

Delivered
Friday, February 25, 2022 at 1:41 pm

THIS IS 1 OF 7 PIECES

DELIVERED

Signature release on file

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

TO

EAST LONGMEADOW, MA US

MANAGE DELIVERY

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270199965403 (master)	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965414	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965425	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965436	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965447	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA
270199965458	Delivered	2/24/22	2/25/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 2/25/22 Time 1341

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Client T Analysis T Sampler Name T

Pertinent Information? Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? I(10)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	10	1L	10	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2679	2150				7036	7071			
RLF 2674	2645					7050			
2315	2667				7045	7083			
2110	2341				4012	7084			
2686					7030				
2631					5209				
Unused Media					**Pufs/TO-17's**				
2674	(-19)	5203							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034043.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2679

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2315

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034046.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2110

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2666

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2631

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2100

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2645

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2667

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2341

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/1/2022

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March 9, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C0293

Enclosed are results of analyses for samples as received by the laboratory on March 4, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/9/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C0293

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-15_030122	22C0293-01	Indoor air		-	
				EPA TO-15	
SL-7_030122	22C0293-02	Indoor air		-	
				EPA TO-15	
SL-5_030122	22C0293-03	Indoor air		-	
				EPA TO-15	
SL-6_030122	22C0293-04	Indoor air		-	
				EPA TO-15	
SL-4_022822	22C0293-05	Indoor air		-	
				EPA TO-15	
SL-22_022822	22C0293-06	Indoor air		-	
				EPA TO-15	
SL-20_022822	22C0293-07	Indoor air		-	
				EPA TO-15	
DUP-01_022822	22C0293-08	Indoor air		-	
				EPA TO-15	
SL-8_030122	22C0293-09	Indoor air		-	
				EPA TO-15	
SL-9_030122	22C0293-10	Indoor air		-	
				EPA TO-15	
SL-3_030222	22C0293-11	Indoor air		-	
				EPA TO-15	
SL-18_022822	22C0293-12	Indoor air		-	
				EPA TO-15	
SL-14_030122	22C0293-13	Indoor air		-	
				EPA TO-15	
SL-23_030222	22C0293-14	Indoor air		-	
				EPA TO-15	
MH-1259_030322	22C0293-15	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2514/7074	22C0293-16	Indoor air		-	

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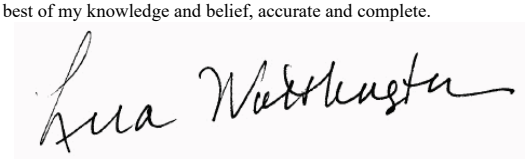
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-15_030122
Sample ID: 22C0293-01
Sample Matrix: Indoor air
Sampled: 3/1/2022 09:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2620
Canister Size: 1 liter
Flow Controller ID: 7077
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 5:35	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 5:35	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 5:35	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 5:35	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 5:35	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 5:35	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 5:35	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/7/22 5:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-7_030122
Sample ID: 22C0293-02
Sample Matrix: Indoor air
Sampled: 3/1/2022 11:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2256
Canister Size: 1 liter
Flow Controller ID: 7073
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.5
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 6:16	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 6:16	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 6:16	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 6:16	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 6:16	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 6:16	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 6:16	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/7/22 6:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-5_030122
Sample ID: 22C0293-03
Sample Matrix: Indoor air
Sampled: 3/1/2022 12:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 2625
Canister Size: 1 liter
Flow Controller ID: 5051
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 6:57	TPH
cis-1,2-Dichloroethylene	0.56	0.20		2.2	0.79	4	3/7/22 6:57	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 6:57	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 6:57	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 6:57	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 6:57	TPH
Vinyl Chloride	1.6	0.20		4.0	0.51	4	3/7/22 6:57	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/7/22 6:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-6_030122
Sample ID: 22C0293-04
Sample Matrix: Indoor air
Sampled: 3/1/2022 11:48

Sample Description/Location:
Sub Description/Location:
Canister ID: 2636
Canister Size: 1 liter
Flow Controller ID: 5050
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.54	0.20		2.2	0.79	4	3/7/22 7:38	TPH
cis-1,2-Dichloroethylene	0.45	0.20		1.8	0.79	4	3/7/22 7:38	TPH
trans-1,2-Dichloroethylene	0.49	0.20		2.0	0.79	4	3/7/22 7:38	TPH
1,4-Dioxane	0.25	2.0	J	0.91	7.2	4	3/7/22 7:38	TPH
Tetrachloroethylene	0.58	0.20		3.9	1.4	4	3/7/22 7:38	TPH
Trichloroethylene	0.46	0.20		2.5	1.1	4	3/7/22 7:38	TPH
Vinyl Chloride	0.66	0.20		1.7	0.51	4	3/7/22 7:38	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/7/22 7:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-4_022822
Sample ID: 22C0293-05
Sample Matrix: Indoor air
Sampled: 2/28/2022 14:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2571
Canister Size: 1 liter
Flow Controller ID: 7025
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 8:19	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 8:19	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 8:19	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 8:19	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 8:19	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 8:19	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 8:19	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/7/22 8:19

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-22_022822
Sample ID: 22C0293-06
Sample Matrix: Indoor air
Sampled: 2/28/2022 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2541
Canister Size: 1 liter
Flow Controller ID: 5060
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:06	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:06	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:06	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 16:06	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 16:06	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 16:06	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 16:06	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.4	70-130	3/6/22 16:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-20_022822
Sample ID: 22C0293-07
Sample Matrix: Indoor air
Sampled: 2/28/2022 12:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2662
Canister Size: 1 liter
Flow Controller ID: 5068
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:36	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:36	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 16:36	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 16:36	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 16:36	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 16:36	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 16:36	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	3/6/22 16:36

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: DUP-01_022822
Sample ID: 22C0293-08
Sample Matrix: Indoor air
Sampled: 2/28/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2563
Canister Size: 1 liter
Flow Controller ID: 7028
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 17:37	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 17:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 17:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 17:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 17:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 17:37	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 17:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.2	70-130	3/6/22 17:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-8_030122
Sample ID: 22C0293-09
Sample Matrix: Indoor air
Sampled: 3/1/2022 13:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2568
Canister Size: 1 liter
Flow Controller ID: 7089
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:07	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:07	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:07	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 18:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 18:07	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 18:07	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 18:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.4	70-130	3/6/22 18:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-9_030122
Sample ID: 22C0293-10
Sample Matrix: Indoor air
Sampled: 3/1/2022 13:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2665
Canister Size: 1 liter
Flow Controller ID: 7087
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:37	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 18:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 18:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 18:37	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 18:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	3/6/22 18:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-3_030222
Sample ID: 22C0293-11
Sample Matrix: Indoor air
Sampled: 3/2/2022 12:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 2306
Canister Size: 1 liter
Flow Controller ID: 7027
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.46	0.20		1.8	0.79	4	3/6/22 19:07	BRF
cis-1,2-Dichloroethylene	13	0.20		51	0.79	4	3/6/22 19:07	BRF
trans-1,2-Dichloroethylene	0.35	0.20		1.4	0.79	4	3/6/22 19:07	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 19:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 19:07	BRF
Trichloroethylene	0.40	0.20		2.1	1.1	4	3/6/22 19:07	BRF
Vinyl Chloride	30	0.20		76	0.51	4	3/6/22 19:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.6	70-130	3/6/22 19:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-18_022822
Sample ID: 22C0293-12
Sample Matrix: Indoor air
Sampled: 2/28/2022 14:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2572
Canister Size: 1 liter
Flow Controller ID: 7085
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 19:37	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 19:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 19:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 19:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 19:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 19:37	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 19:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	91.0	70-130	3/6/22 19:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-14_030122
Sample ID: 22C0293-13
Sample Matrix: Indoor air
Sampled: 3/1/2022 10:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2648
Canister Size: 1 liter
Flow Controller ID: 5040
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:07	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:07	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:07	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 20:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 20:07	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 20:07	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 20:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.5	70-130	3/6/22 20:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-23_030222
Sample ID: 22C0293-14
Sample Matrix: Indoor air
Sampled: 3/2/2022 10:13

Sample Description/Location:
Sub Description/Location:
Canister ID: 2633
Canister Size: 1 liter
Flow Controller ID: 7066
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:37	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 20:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 20:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 20:37	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 20:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.2	70-130	3/6/22 20:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1259_030322
Sample ID: 22C0293-15
Sample Matrix: Indoor air
Sampled: 3/3/2022 11:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2103
Canister Size: 1 liter
Flow Controller ID: 7026
Sample Type: Grab

Work Order: 22C0293
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.0	0.20		4.1	0.79	4	3/6/22 21:07	BRF
cis-1,2-Dichloroethylene	39	0.20		150	0.79	4	3/6/22 21:07	BRF
trans-1,2-Dichloroethylene	0.42	0.20		1.6	0.79	4	3/6/22 21:07	BRF
1,4-Dioxane	0.51	2.0	J	1.8	7.2	4	3/6/22 21:07	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 21:07	BRF
Trichloroethylene	1.4	0.20		7.4	1.1	4	3/6/22 21:07	BRF
Vinyl Chloride	61	0.20		160	0.51	4	3/6/22 21:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	3/6/22 21:07

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C0293-01 [SL-15_030122]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0293-02 [SL-7_030122]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0293-03 [SL-5_030122]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0293-04 [SL-6_030122]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0293-05 [SL-4_022822]	B302681	1.5	1	N/A	1000	400	150	03/06/22

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C0293-06 [SL-22_022822]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-07 [SL-20_022822]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-08 [DUP-01_022822]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-09 [SL-8_030122]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-10 [SL-9_030122]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-11 [SL-3_030222]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-12 [SL-18_022822]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-13 [SL-14_030122]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-14 [SL-23_030222]	B302688	1.5	1	N/A	1000	200	75	03/06/22
22C0293-15 [MH-1259_030322]	B302688	1.5	1	N/A	1000	200	75	03/06/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302681 - TO-15 Prep											
Blank (B302681-BLK1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.38*				*8.00*		*105*	*70-130*			
LCS (B302681-BS1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	4.60				5.00		92.0	70-130			
cis-1,2-Dichloroethylene	4.19				5.00		83.9	70-130			
trans-1,2-Dichloroethylene	4.19				5.00		83.8	70-130			
1,4-Dioxane	3.84				5.00		76.7	70-130			
Tetrachloroethylene	4.76				5.00		95.3	70-130			
Trichloroethylene	4.17				5.00		83.5	70-130			
Vinyl Chloride	4.60				5.00		91.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.38*				*8.00*		*105*	*70-130*			
Batch B302688 - TO-15 Prep											
Blank (B302688-BLK1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	ND	0.050									
cis-1,2-Dichloroethylene	ND	0.050									
trans-1,2-Dichloroethylene	ND	0.050									
1,4-Dioxane	ND	0.50									
Tetrachloroethylene	ND	0.050									
Trichloroethylene	ND	0.050									
Vinyl Chloride	ND	0.050									
Surrogate: 4-Bromofluorobenzene (1)	*7.41*				*8.00*		*92.6*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302688 - TO-15 Prep											
LCS (B302688-BS1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	5.31				5.00		106	70-130			
cis-1,2-Dichloroethylene	4.94				5.00		98.9	70-130			
trans-1,2-Dichloroethylene	4.97				5.00		99.4	70-130			
1,4-Dioxane	4.62				5.00		92.5	70-130			
Tetrachloroethylene	4.83				5.00		96.6	70-130			
Trichloroethylene	4.26				5.00		85.1	70-130			
Vinyl Chloride	5.34				5.00		107	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.88*				*8.00*		*98.5*	*70-130*			
Duplicate (B302688-DUP1)					**Source: 22C0293-07** Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.50*				*8.00*		*93.8*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068960-CCV1)			Lab File ID: G22A065004.D			Analyzed: 03/06/22 13:05			
Bromochloromethane (1)	1360828	8.497	1360828	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4017108	10.271	4017108	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3647029	14.642	3647029	14.642	100	60 - 140	0.0000	+/-0.50	
LCS (B302681-BS1)			Lab File ID: G22A065005.D			Analyzed: 03/06/22 13:44			
Bromochloromethane (1)	1368525	8.497	1360828	8.497	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4032330	10.271	4017108	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3600907	14.642	3647029	14.642	99	60 - 140	0.0000	+/-0.50	
Blank (B302681-BLK1)			Lab File ID: G22A065008.D			Analyzed: 03/06/22 15:51			
Bromochloromethane (1)	1320948	8.503	1360828	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3742790	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3468636	14.636	3647029	14.642	95	60 - 140	-0.0060	+/-0.50	
SL-15_030122 (22C0293-01)			Lab File ID: G22A065028.D			Analyzed: 03/07/22 05:35			
Bromochloromethane (1)	1304482	8.497	1360828	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3726048	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3446631	14.636	3647029	14.642	95	60 - 140	-0.0060	+/-0.50	
SL-7_030122 (22C0293-02)			Lab File ID: G22A065029.D			Analyzed: 03/07/22 06:16			
Bromochloromethane (1)	1307105	8.497	1360828	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3750454	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3478535	14.642	3647029	14.642	95	60 - 140	0.0000	+/-0.50	
SL-5_030122 (22C0293-03)			Lab File ID: G22A065030.D			Analyzed: 03/07/22 06:57			
Bromochloromethane (1)	1302523	8.497	1360828	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3725917	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3445187	14.642	3647029	14.642	94	60 - 140	0.0000	+/-0.50	
SL-6_030122 (22C0293-04)			Lab File ID: G22A065031.D			Analyzed: 03/07/22 07:38			
Bromochloromethane (1)	1301435	8.497	1360828	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3739826	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3465497	14.642	3647029	14.642	95	60 - 140	0.0000	+/-0.50	
SL-4_022822 (22C0293-05)			Lab File ID: G22A065032.D			Analyzed: 03/07/22 08:19			
Bromochloromethane (1)	1310818	8.497	1360828	8.497	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3716539	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3456400	14.642	3647029	14.642	95	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B302688-BS1)			Lab File ID: K22A065005.D			Analyzed: 03/06/22 13:35			
Bromochloromethane (1)	91498	2.987	94663	2.973	97	60 - 140	0.0140	+/-0.50	
1,4-Difluorobenzene (1)	278023	3.584	254169	3.574	109	60 - 140	0.0100	+/-0.50	
Chlorobenzene-d5 (1)	208905	5.159	227459	5.159	92	60 - 140	0.0000	+/-0.50	
Calibration Check (S068961-CCV1)			Lab File ID: K22A065006.D			Analyzed: 03/06/22 14:06			
Bromochloromethane (1)	92641	2.987	92641	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	276718	3.584	276718	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	207220	5.159	207220	5.159	100	60 - 140	0.0000	+/-0.50	
Blank (B302688-BLK1)			Lab File ID: K22A065009.D			Analyzed: 03/06/22 15:36			
Bromochloromethane (1)	89800	2.987	92641	2.987	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	261552	3.584	276718	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	196745	5.159	207220	5.159	95	60 - 140	0.0000	+/-0.50	
SL-22_022822 (22C0293-06)			Lab File ID: K22A065010.D			Analyzed: 03/06/22 16:06			
Bromochloromethane (1)	89908	2.987	92641	2.987	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	261378	3.584	276718	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	199675	5.159	207220	5.159	96	60 - 140	0.0000	+/-0.50	
SL-20_022822 (22C0293-07)			Lab File ID: K22A065011.D			Analyzed: 03/06/22 16:36			
Bromochloromethane (1)	90798	2.992	92641	2.987	98	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	262302	3.584	276718	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	202180	5.159	207220	5.159	98	60 - 140	0.0000	+/-0.50	
Duplicate (B302688-DUP1)			Lab File ID: K22A065012.D			Analyzed: 03/06/22 17:06			
Bromochloromethane (1)	88672	2.992	92641	2.987	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	260413	3.584	276718	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	197719	5.159	207220	5.159	95	60 - 140	0.0000	+/-0.50	
DUP-01_022822 (22C0293-08)			Lab File ID: K22A065013.D			Analyzed: 03/06/22 17:37			
Bromochloromethane (1)	91478	2.992	92641	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	268274	3.584	276718	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	200586	5.159	207220	5.159	97	60 - 140	0.0000	+/-0.50	
SL-8_030122 (22C0293-09)			Lab File ID: K22A065014.D			Analyzed: 03/06/22 18:07			
Bromochloromethane (1)	90751	2.987	92641	2.987	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	263212	3.584	276718	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	198179	5.159	207220	5.159	96	60 - 140	0.0000	+/-0.50	
SL-9_030122 (22C0293-10)			Lab File ID: K22A065015.D			Analyzed: 03/06/22 18:37			
Bromochloromethane (1)	91169	2.987	92641	2.987	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	264605	3.584	276718	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	198284	5.159	207220	5.159	96	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-3_030222 (22C0293-11)			Lab File ID: K22A065016.D			Analyzed: 03/06/22 19:07			
Bromochloromethane (1)	92386	2.992	92641	2.987	100	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	269041	3.584	276718	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	201982	5.159	207220	5.159	97	60 - 140	0.0000	+/-0.50	
SL-18_022822 (22C0293-12)			Lab File ID: K22A065017.D			Analyzed: 03/06/22 19:37			
Bromochloromethane (1)	89946	2.992	92641	2.987	97	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	261241	3.584	276718	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	201852	5.159	207220	5.159	97	60 - 140	0.0000	+/-0.50	
SL-14_030122 (22C0293-13)			Lab File ID: K22A065018.D			Analyzed: 03/06/22 20:07			
Bromochloromethane (1)	90286	2.987	92641	2.987	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	262662	3.584	276718	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	200998	5.159	207220	5.159	97	60 - 140	0.0000	+/-0.50	
SL-23_030222 (22C0293-14)			Lab File ID: K22A065019.D			Analyzed: 03/06/22 20:37			
Bromochloromethane (1)	89316	2.992	92641	2.987	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	257886	3.584	276718	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	199427	5.159	207220	5.159	96	60 - 140	0.0000	+/-0.50	
MH-1259_030322 (22C0293-15)			Lab File ID: K22A065020.D			Analyzed: 03/06/22 21:07			
Bromochloromethane (1)	91848	2.991	92641	2.987	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	270628	3.584	276718	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	206261	5.159	207220	5.159	100	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068960-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.62	1.135823	1.049365		-7.6	30
cis-1,2-Dichloroethylene	A	5.00	4.28	1.005957	0.8620881		-14.3	30
trans-1,2-Dichloroethylene	A	5.00	4.19	1.067538	0.8946671		-16.2	30
cis-1,3-Dichloropropene	A	5.00	4.02	0.4978307	0.4007544		-19.5	30
1,4-Dioxane	A	5.00	3.89	0.1952184	0.1518075		-22.2	30
Tetrachloroethylene	A	5.00	4.92	0.4242595	0.4172448		-1.7	30
Trichloroethylene	A	5.00	4.26	0.3926852	0.3349518		-14.7	30
Vinyl Chloride	A	5.00	4.73	0.6993653	0.661683		-5.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068961-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.86	0.9896483	0.9609914		-2.9	30
cis-1,2-Dichloroethylene	A	5.00	4.54	0.8700383	0.7902333		-9.2	30
trans-1,2-Dichloroethylene	A	5.00	4.49	0.8433475	0.7576948		-10.2	30
1,4-Dioxane	A	5.00	4.18	0.1591668	0.1329238		-16.5	30
Tetrachloroethylene	A	5.00	4.51	0.4061849	0.3663816		-9.8	30
Trichloroethylene	A	5.00	4.01	0.3164814	0.2537919		-19.8	30
Vinyl Chloride	A	5.00	4.92	0.6391221	0.6295096		-1.5	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

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22C0293

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min ☐ L/min ☐	Code	Liters ☐ m³ ☐					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-15_030122	3/1/22 949	3/1/22 950	--	--	IA	--	X				-29	-3	-4	2620	7077
02	SL-7_030122	3/1/22 1131	3/1/22 1132	—	—	IA	—	X				-29	-3.5	-5.4	2256	7073
03	SL-5_030122	3/1/22 1209	3/1/22 1210	—	—	IA	—	X				-29	-5	-5.3	2625	5051
04	SL-6_030122	3/1/22 1147	3/1/22 1148	—	—	IA	—	X				-29	-7	-5.3	2636	5050

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/3/22/1500
Received by: (signature)	3/4/22 901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required ☐
MCP Certification Form Required ☐
CT RCP Required ☐
RCP Certification Form Required ☐
Other ☐

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhl ☐
Non Soxhl ☐

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Pace Analytical

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318-0053

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

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22C0293

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min L/min	Code	☐ Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-4_022822	2/28/22 1405	2/28/22 1406	--	--	IA	--	X				-28	-7.5	-8	2571	7025
06	SL-22_022822	2/28/22 1235	2/28/22 1236	—	—	IA	—	X				-29	-8	-9	2541	5060
07	SL-20_022822	2/28/22 1210	2/28/22 1211	—	—	IA	—	X				-29	-7	-8	2662	5068
08	Dup-01_022822	2/28/22	2/28/22	—	—	IA	—	X				-29	-4.5	-5	2563	7028

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/2/22/1500
Received by: (signature)	3/4/22 901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhl
☐ Non Soxhl

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CHAIN OF CUSTODY RECORD (AIR)

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Pace-New England

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Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
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7-Day ☐ 10-Day ☐
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Format: PDF ☑ EXCEL ☑
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Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-8_030122	3/1/22 1305	3/1/22 1306	--	--	IA	--	X				-29	-5	-2	2568	7089
10	SL-9_030122	3/1/22 1344	3/1/22 1345	—	—	IA	—	X				-29	-6	-7	2665	7087
11	SL-3_030222	3/2/22 1258	3/2/22 1259	—	—	IA	—	X				-27	-6.5	-5	2306	7027
12	SL-18_022822	2/28/22 1440	2/28/22 1441	—	—	IA	—	X				-28.5	-6	-7	2572	7085

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/3/22 1500
Received by: (signature)	3/4/22 901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

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Other
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☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhl
☐ Non Soxhl

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Doc #378 Rev 2_01122021
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22C0093

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)	Do not analyze			" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
13	SL-14_030122	3/1/22 1015	3/1/22 1016	--	--	IA	--	X				-29	-7	-8			2648	5040
14	SL-23_030222	3/2/22 1012	3/2/22 1013	—	—	IA	—	X				-29	-7	-7			2633	7066
15	MH-1259_030322	3/3/22 1140	3/3/22 1141	—	—	IA	—	X				-29	-5	-6.4			2103	7026
16	VOID	—	—	—	—	—	—		X			-12		-13			2514	7074

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/3/22 1500
Received by: (signature)	3/4/22 901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☐

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FedEx®

FedEx® Tracking

270466584573

ADD NICKNAME

Delivered
Friday, March 4, 2022 at 9:01 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.REBECCA

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270466584573 (master)	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584584	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584595	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584600	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584610	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584621	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 3/4/22 Time 901

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C UA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (1e)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	1e	1L	1e	24hr	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2620	2662	2648			7077	7068	7040		
2250	2763	2633			7073	7028	7066		
2625	2685	2103			7051	7089	7026		
2630	2605				7050	7087			
2571	2326				7025	7027			
2541	2572				7060	7085			
Unused Media					**Pufs/TO-17's**				
2514	(-13.8)	7074							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034041.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2620

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2256

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2625

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2636

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2571

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2541

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 1/12/2022 **Batch #:** G22A012028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2662

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2563

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044038.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2568

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2665

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

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Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2306

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2572

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/8/2022 **Batch #:** K22A039010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2648

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/3/2022 **Batch #:** K22A034032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2633

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2103

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

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March 9, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C0294

Enclosed are results of analyses for samples as received by the laboratory on March 4, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/9/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C0294

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1244_030322	22C0294-01	Indoor air		- EPA TO-15	
MH-1255_030322	22C0294-02	Indoor air		- EPA TO-15	
MH-1231A_030322	22C0294-03	Indoor air		- EPA TO-15	
MH-1256_030322	22C0294-04	Indoor air		- EPA TO-15	
SL-13_030122	22C0294-05	Indoor air		- EPA TO-15	
SL-2_030222	22C0294-06	Indoor air		- EPA TO-15	
MH-1231_030222	22C0294-07	Indoor air		- EPA TO-15	
DUP-02_030222	22C0294-08	Indoor air		- EPA TO-15	
SL-11_030222	22C0294-09	Indoor air		- EPA TO-15	
SL-19_030222	22C0294-10	Indoor air		- EPA TO-15	
SL-12_030222	22C0294-11	Indoor air		- EPA TO-15	
SL-17_030222	22C0294-12	Indoor air		- EPA TO-15	
SL-16_030222	22C0294-13	Indoor air		- EPA TO-15	
SL-10_030222	22C0294-14	Indoor air		- EPA TO-15	
SL-21_022822	22C0294-15	Indoor air		- EPA TO-15	
Unused Can/Reg #2090/7064	22C0294-16	Indoor air		-	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1244_030322
Sample ID: 22C0294-01
Sample Matrix: Indoor air
Sampled: 3/3/2022 09:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2531
Canister Size: 1 liter
Flow Controller ID: 7037
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:08	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:08	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 18:08	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 18:08	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 18:08	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 18:08	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 18:08	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	107	70-130	3/6/22 18:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1255_030322
Sample ID: 22C0294-02
Sample Matrix: Indoor air
Sampled: 3/3/2022 11:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2632
Canister Size: 1 liter
Flow Controller ID: 7039
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.89	0.20		3.5	0.79	4	3/6/22 18:48	TPH
cis-1,2-Dichloroethylene	63	0.20		250	0.79	4	3/6/22 18:48	TPH
trans-1,2-Dichloroethylene	0.70	0.20		2.8	0.79	4	3/6/22 18:48	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 18:48	TPH
Tetrachloroethylene	0.18	0.20	J	1.2	1.4	4	3/6/22 18:48	TPH
Trichloroethylene	1.1	0.20		6.0	1.1	4	3/6/22 18:48	TPH
Vinyl Chloride	200	0.20		500	0.51	4	3/6/22 18:48	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/6/22 18:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1231A_030322
Sample ID: 22C0294-03
Sample Matrix: Indoor air
Sampled: 3/3/2022 09:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2310
Canister Size: 1 liter
Flow Controller ID: 7031
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:08	TPH
cis-1,2-Dichloroethylene	1.1	0.20		4.4	0.79	4	3/6/22 20:08	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:08	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 20:08	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 20:08	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 20:08	TPH
Vinyl Chloride	2.2	0.20		5.7	0.51	4	3/6/22 20:08	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	3/6/22 20:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1256_030322
Sample ID: 22C0294-04
Sample Matrix: Indoor air
Sampled: 3/3/2022 10:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2685
Canister Size: 1 liter
Flow Controller ID: 7035
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:48	TPH
cis-1,2-Dichloroethylene	40	0.20		160	0.79	4	3/6/22 20:48	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 20:48	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 20:48	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 20:48	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 20:48	TPH
Vinyl Chloride	57	0.20		150	0.51	4	3/6/22 20:48	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	3/6/22 20:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-13_030122
Sample ID: 22C0294-05
Sample Matrix: Indoor air
Sampled: 3/1/2022 10:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2657
Canister Size: 1 liter
Flow Controller ID: 7079
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -8.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 21:28	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 21:28	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 21:28	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 21:28	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 21:28	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 21:28	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/6/22 21:28	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/6/22 21:28

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-2_030222
Sample ID: 22C0294-06
Sample Matrix: Indoor air
Sampled: 3/2/2022 13:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2519
Canister Size: 1 liter
Flow Controller ID: 7043
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -8.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 22:08	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 22:08	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 22:08	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 22:08	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 22:08	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/6/22 22:08	TPH
Vinyl Chloride	0.36	0.20		0.91	0.51	4	3/6/22 22:08	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/6/22 22:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: MH-1231_030222
Sample ID: 22C0294-07
Sample Matrix: Indoor air
Sampled: 3/2/2022 13:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2660
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 22:48	TPH
cis-1,2-Dichloroethylene	3.5	0.20		14	0.79	4	3/6/22 22:48	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 22:48	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 22:48	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 22:48	TPH
Trichloroethylene	0.20	0.20		1.1	1.1	4	3/6/22 22:48	TPH
Vinyl Chloride	11	0.20		28	0.51	4	3/6/22 22:48	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/6/22 22:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: DUP-02_030222
Sample ID: 22C0294-08
Sample Matrix: Indoor air
Sampled: 3/2/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2526
Canister Size: 1 liter
Flow Controller ID: 7075
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.16	0.20	J	0.63	0.79	4	3/6/22 23:29	TPH
cis-1,2-Dichloroethylene	9.4	0.20		37	0.79	4	3/6/22 23:29	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/6/22 23:29	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/6/22 23:29	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/6/22 23:29	TPH
Trichloroethylene	0.16	0.20	J	0.88	1.1	4	3/6/22 23:29	TPH
Vinyl Chloride	26	0.20		65	0.51	4	3/6/22 23:29	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	107	70-130	3/6/22 23:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-11_030222
Sample ID: 22C0294-09
Sample Matrix: Indoor air
Sampled: 3/2/2022 09:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 2643
Canister Size: 1 liter
Flow Controller ID: 5053
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:09	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:09	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:09	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 0:09	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 0:09	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 0:09	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 0:09	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	3/7/22 0:09

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-19_030222
Sample ID: 22C0294-10
Sample Matrix: Indoor air
Sampled: 3/2/2022 10:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2550
Canister Size: 1 liter
Flow Controller ID: 5070
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -1.5
Receipt Vacuum(in Hg): -2.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:50	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:50	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 0:50	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 0:50	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 0:50	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 0:50	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 0:50	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	3/7/22 0:50

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-12_030222
Sample ID: 22C0294-11
Sample Matrix: Indoor air
Sampled: 3/2/2022 10:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2652
Canister Size: 1 liter
Flow Controller ID: 7069
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 1:31	TPH
cis-1,2-Dichloroethylene	4.0	0.20		16	0.79	4	3/7/22 1:31	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 1:31	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 1:31	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 1:31	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 1:31	TPH
Vinyl Chloride	5.3	0.20		14	0.51	4	3/7/22 1:31	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/7/22 1:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-17_030222
Sample ID: 22C0294-12
Sample Matrix: Indoor air
Sampled: 3/2/2022 12:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2659
Canister Size: 1 liter
Flow Controller ID: 7068
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.68	0.20		2.7	0.79	4	3/7/22 2:11	TPH
cis-1,2-Dichloroethylene	34	0.20		130	0.79	4	3/7/22 2:11	TPH
trans-1,2-Dichloroethylene	0.50	0.20		2.0	0.79	4	3/7/22 2:11	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 2:11	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 2:11	TPH
Trichloroethylene	1.9	0.20		10	1.1	4	3/7/22 2:11	TPH
Vinyl Chloride	46	0.20		120	0.51	4	3/7/22 2:11	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/7/22 2:11

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-16_030222
Sample ID: 22C0294-13
Sample Matrix: Indoor air
Sampled: 3/2/2022 12:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2522
Canister Size: 1 liter
Flow Controller ID: 5024
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.40	0.20		1.6	0.79	4	3/7/22 3:32	TPH
cis-1,2-Dichloroethylene	12	0.20		46	0.79	4	3/7/22 3:32	TPH
trans-1,2-Dichloroethylene	0.25	0.20		1.00	0.79	4	3/7/22 3:32	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 3:32	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 3:32	TPH
Trichloroethylene	0.86	0.20		4.6	1.1	4	3/7/22 3:32	TPH
Vinyl Chloride	19	0.20		50	0.51	4	3/7/22 3:32	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/7/22 3:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-10_030222
Sample ID: 22C0294-14
Sample Matrix: Indoor air
Sampled: 3/2/2022 09:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 2566
Canister Size: 1 liter
Flow Controller ID: 5041
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:13	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:13	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:13	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 4:13	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 4:13	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 4:13	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 4:13	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/7/22 4:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/4/2022
Field Sample #: SL-21_022822
Sample ID: 22C0294-15
Sample Matrix: Indoor air
Sampled: 2/28/2022 11:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2627
Canister Size: 1 liter
Flow Controller ID: 7062
Sample Type: Grab

Work Order: 22C0294
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:54	TPH
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:54	TPH
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/7/22 4:54	TPH
1,4-Dioxane	ND	2.0		ND	7.2	4	3/7/22 4:54	TPH
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/7/22 4:54	TPH
Trichloroethylene	ND	0.20		ND	1.1	4	3/7/22 4:54	TPH
Vinyl Chloride	ND	0.20		ND	0.51	4	3/7/22 4:54	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	3/7/22 4:54

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C0294-01 [MH-1244_030322]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-02 [MH-1255_030322]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-03 [MH-1231A_030322]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-04 [MH-1256_030322]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-05 [SL-13_030122]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-06 [SL-2_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-07 [MH-1231_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-08 [DUP-02_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-09 [SL-11_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-10 [SL-19_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-11 [SL-12_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-12 [SL-17_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-13 [SL-16_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-14 [SL-10_030222]	B302681	1.5	1	N/A	1000	400	150	03/06/22
22C0294-15 [SL-21_022822]	B302681	1.5	1	N/A	1000	400	150	03/06/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B302681 - TO-15 Prep											
Blank (B302681-BLK1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.38*				*8.00*		*105*	*70-130*			
LCS (B302681-BS1)					Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	4.60				5.00		92.0	70-130			
cis-1,2-Dichloroethylene	4.19				5.00		83.9	70-130			
trans-1,2-Dichloroethylene	4.19				5.00		83.8	70-130			
1,4-Dioxane	3.84				5.00		76.7	70-130			
Tetrachloroethylene	4.76				5.00		95.3	70-130			
Trichloroethylene	4.17				5.00		83.5	70-130			
Vinyl Chloride	4.60				5.00		91.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.38*				*8.00*		*105*	*70-130*			
Duplicate (B302681-DUP1)		**Source: 22C0294-02**			Prepared & Analyzed: 03/06/22						
1,1-Dichloroethylene	0.86	0.20	3.4	0.79		0.89			2.74	25	
cis-1,2-Dichloroethylene	62	0.20	250	0.79		63			0.620	25	
trans-1,2-Dichloroethylene	0.74	0.20	2.9	0.79		0.70			6.09	25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	0.17	0.20	1.2	1.4		0.18			4.55	25	J
Trichloroethylene	1.1	0.20	6.0	1.1		1.1			0.717	25	
Vinyl Chloride	190	0.20	480	0.51		200			4.12	25	
Surrogate: 4-Bromofluorobenzene (1)	*8.42*				*8.00*		*105*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S068960-CCV1)			Lab File ID: G22A065004.D			Analyzed: 03/06/22 13:05			
Bromochloromethane (1)	1360828	8.497	1360828	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4017108	10.271	4017108	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3647029	14.642	3647029	14.642	100	60 - 140	0.0000	+/-0.50	
LCS (B302681-BS1)			Lab File ID: G22A065005.D			Analyzed: 03/06/22 13:44			
Bromochloromethane (1)	1368525	8.497	1360828	8.497	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	4032330	10.271	4017108	10.271	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3600907	14.642	3647029	14.642	99	60 - 140	0.0000	+/-0.50	
Blank (B302681-BLK1)			Lab File ID: G22A065008.D			Analyzed: 03/06/22 15:51			
Bromochloromethane (1)	1320948	8.503	1360828	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3742790	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3468636	14.636	3647029	14.642	95	60 - 140	-0.0060	+/-0.50	
MH-1244_030322 (22C0294-01)			Lab File ID: G22A065011.D			Analyzed: 03/06/22 18:08			
Bromochloromethane (1)	1330753	8.503	1360828	8.497	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3742829	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3457478	14.642	3647029	14.642	95	60 - 140	0.0000	+/-0.50	
MH-1255_030322 (22C0294-02)			Lab File ID: G22A065012.D			Analyzed: 03/06/22 18:48			
Bromochloromethane (1)	1411225	8.497	1360828	8.497	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3838725	10.271	4017108	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3631816	14.642	3647029	14.642	100	60 - 140	0.0000	+/-0.50	
Duplicate (B302681-DUP1)			Lab File ID: G22A065013.D			Analyzed: 03/06/22 19:28			
Bromochloromethane (1)	1383752	8.497	1360828	8.497	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3846159	10.271	4017108	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3595238	14.642	3647029	14.642	99	60 - 140	0.0000	+/-0.50	
MH-1231A_030322 (22C0294-03)			Lab File ID: G22A065014.D			Analyzed: 03/06/22 20:08			
Bromochloromethane (1)	1319531	8.503	1360828	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3775120	10.271	4017108	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3571278	14.642	3647029	14.642	98	60 - 140	0.0000	+/-0.50	
MH-1256_030322 (22C0294-04)			Lab File ID: G22A065015.D			Analyzed: 03/06/22 20:48			
Bromochloromethane (1)	1355152	8.497	1360828	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3808947	10.271	4017108	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3544055	14.642	3647029	14.642	97	60 - 140	0.0000	+/-0.50	
SL-13_030122 (22C0294-05)			Lab File ID: G22A065016.D			Analyzed: 03/06/22 21:28			
Bromochloromethane (1)	1333046	8.497	1360828	8.497	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3820905	10.271	4017108	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3531715	14.642	3647029	14.642	97	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-2_030222 (22C0294-06)			Lab File ID: G22A065017.D			Analyzed: 03/06/22 22:08			
Bromochloromethane (1)	1342313	8.497	1360828	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3807425	10.271	4017108	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3531794	14.642	3647029	14.642	97	60 - 140	0.0000	+/-0.50	
MH-1231_030222 (22C0294-07)			Lab File ID: G22A065018.D			Analyzed: 03/06/22 22:48			
Bromochloromethane (1)	1352596	8.497	1360828	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3839759	10.271	4017108	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3561182	14.642	3647029	14.642	98	60 - 140	0.0000	+/-0.50	
DUP-02_030222 (22C0294-08)			Lab File ID: G22A065019.D			Analyzed: 03/06/22 23:29			
Bromochloromethane (1)	1354348	8.497	1360828	8.497	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3811839	10.271	4017108	10.271	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3499789	14.642	3647029	14.642	96	60 - 140	0.0000	+/-0.50	
SL-11_030222 (22C0294-09)			Lab File ID: G22A065020.D			Analyzed: 03/07/22 00:09			
Bromochloromethane (1)	1334811	8.503	1360828	8.497	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3858363	10.271	4017108	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3688094	14.642	3647029	14.642	101	60 - 140	0.0000	+/-0.50	
SL-19_030222 (22C0294-10)			Lab File ID: G22A065021.D			Analyzed: 03/07/22 00:50			
Bromochloromethane (1)	1315514	8.503	1360828	8.497	97	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3782577	10.271	4017108	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3596680	14.642	3647029	14.642	99	60 - 140	0.0000	+/-0.50	
SL-12_030222 (22C0294-11)			Lab File ID: G22A065022.D			Analyzed: 03/07/22 01:31			
Bromochloromethane (1)	1334258	8.497	1360828	8.497	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3787941	10.271	4017108	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3558265	14.642	3647029	14.642	98	60 - 140	0.0000	+/-0.50	
SL-17_030222 (22C0294-12)			Lab File ID: G22A065023.D			Analyzed: 03/07/22 02:11			
Bromochloromethane (1)	1343769	8.497	1360828	8.497	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3760845	10.271	4017108	10.271	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3518452	14.642	3647029	14.642	96	60 - 140	0.0000	+/-0.50	
SL-16_030222 (22C0294-13)			Lab File ID: G22A065025.D			Analyzed: 03/07/22 03:32			
Bromochloromethane (1)	1381129	8.497	1360828	8.497	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3863483	10.271	4017108	10.271	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3625637	14.636	3647029	14.642	99	60 - 140	-0.0060	+/-0.50	
SL-10_030222 (22C0294-14)			Lab File ID: G22A065026.D			Analyzed: 03/07/22 04:13			
Bromochloromethane (1)	1298553	8.497	1360828	8.497	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3724169	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3458278	14.642	3647029	14.642	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-21_022822 (22C0294-15)			Lab File ID: G22A065027.D			Analyzed: 03/07/22 04:54			
Bromochloromethane (1)	1290773	8.497	1360828	8.497	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3717232	10.271	4017108	10.271	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3416462	14.642	3647029	14.642	94	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S068960-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.62	1.135823	1.049365		-7.6	30
cis-1,2-Dichloroethylene	A	5.00	4.28	1.005957	0.8620881		-14.3	30
trans-1,2-Dichloroethylene	A	5.00	4.19	1.067538	0.8946671		-16.2	30
cis-1,3-Dichloropropene	A	5.00	4.02	0.4978307	0.4007544		-19.5	30
1,4-Dioxane	A	5.00	3.89	0.1952184	0.1518075		-22.2	30
Tetrachloroethylene	A	5.00	4.92	0.4242595	0.4172448		-1.7	30
Trichloroethylene	A	5.00	4.26	0.3926852	0.3349518		-14.7	30
Vinyl Chloride	A	5.00	4.73	0.6993653	0.661683		-5.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

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East Longmeadow, MA 01028 (413)
318-0053

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CHAIN OF CUSTODY RECORD (AIR)

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Pace-New England

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22C0294

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
01	MH-1244_030322	3/3/22 930	3/3/22 931	--	--	IA	--	X				-29	-7.5	-1.7	2538	7037
02	MH-1255_030322	3/3/22 1059	3/3/22 1100	—	—	IA	—	X				-24	-8	-3.7	2632	7039
03	MH-1231A_030322	3/3/22 951	3/3/22 952	—	—	IA	—	X				-29	-6	-3.7	2310	7031
04	MH-1256_030322	3/3/22 1034	3/3/22 1035	—	—	IA	—	X				-29	-5	-2.9	2695	7035

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 3/3/22/1500	
Received by: (signature)	Date/Time: 3/4/22 901	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxh
☐ Non Soxh

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East Longmeadow, MA 01028 (413)
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CHAIN OF CUSTODY RECORD (AIR)

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Pace-New England

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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-13_030122	3/1/22 1030	3/1/22 1031	--	--	IA	--	X				-29	-7.5	8.5	2657	7079
06	SL-2_030222	3/2/22 1323	3/2/22 1333	—	—	IA	—	X				-29	-7.5	8.0	2519	7043
07	MH-1231_030222	3/2/22 1355	3/2/22 1356	—	—	IA	—	X				-29	-7	7.0	2660	7047
08	DUP-02_030222	3/2/22	3/2/22	—	—	IA	—	X				-25	-4	5.0	2526	7075

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Relinquished by: (signature)	Date/Time: 3/3/22/1500	
Received by: (signature)	Date/Time: 3/4/22 901	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxh
☐ Non Soxh

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Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

2200294

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-11_030222	3/2/22 952	3/2/22 953	--	--	IA	--	X				-29	-6.5	-7.1	2693	5053
10	SL-19_030222	3/2/22 1051	3/2/22 1052	—	—	IA	—	X				-29	-1.5	-2.7	2550	5070
11	SL-12_030222	3/2/22 1035	3/2/22 1036	—	—	IA	—	X				-29	-5.5	-6.9	2652	7069
12	SL-17_030222	3/2/22 1221	3/2/22 1222	—	—	IA	—	X				-29	-7	-7.4	2659	7068

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/3/22 1500
Received by: (signature)	3/4/22 901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhl
☐ Non Soxhl

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Pace Analytical

22C0294

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

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Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)	Do not analyze			" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
13	SL-16_030222	3/2/22 1241	3/2/22 1242	--	--	IA	--	X				-29	-4	-5			2522	5024
14	SL-10_030222	3/2/22 933	3/2/22 934	—	—	IA	—	X				-29	-6.5	-7			2566	5041
15	SL-21_022822	2/28/22 1155	2/28/22 1156	—	—	IA	—	X				-29	-6.5	-7.1			2627	7062
16	VOID								X			-18		-2.7			2090	7064

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/3/22/1500
Received by: (signature)	3/4/220901
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

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Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhl
☐ Non Soxhl

Table of Contents

FedEx

FedEx® Tracking

270466584573

ADD NICKNAME

Delivered
Friday, March 4, 2022 at 9:01 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.REBECCA

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270466584573 (master)	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584584	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584595	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584600	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584610	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA
270466584621	Delivered	3/3/22	3/4/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 3/4/22 Time 901

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C UA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (10)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	10	1L	10	24hr	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2531	2610	2522			7037	7047	7024		
2632	2526	2616			7039	7075	7041		
2310	2643	2627			7031	7053	7002		
2685	2550				7035	7070	7004		
2657	2652				7079	7069			
2579	2659				7043	7068			
Unused Media					**Pufs/TO-17's**				
2090	(-193)	7004							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2531

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

con-test® A Pace Analytical® Laboratory

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2632

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2310

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

con-test® A Pace Analytical® Laboratory

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2685

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044037.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2657

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2519

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2660

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** G22A044028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2526

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054007.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2643

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2550

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2652

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2659

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2522

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2566

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/13/2022 **Batch #:** J22A044024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2627

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/8/22

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

March 14, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C0764

Enclosed are results of analyses for samples as received by the laboratory on March 11, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/14/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C0764

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-3_030722	22C0764-01	Indoor air		- EPA TO-15	
DUP-01_030722	22C0764-02	Indoor air		- EPA TO-15	
SL-7_030822	22C0764-03	Indoor air		- EPA TO-15	
SL-6_030822	22C0764-04	Indoor air		- EPA TO-15	
SL-2_030922	22C0764-05	Indoor air		- EPA TO-15	
MH-1244_031022	22C0764-06	Indoor air		- EPA TO-15	
SL-16_030722	22C0764-07	Indoor air		- EPA TO-15	
MH-1259_031022	22C0764-08	Indoor air		- EPA TO-15	
SL-12_030922	22C0764-09	Indoor air		- EPA TO-15	
MH-1231A_031022	22C0764-10	Indoor air		- EPA TO-15	
SL-9_030822	22C0764-11	Indoor air		- EPA TO-15	
SL-10_030922	22C0764-12	Indoor air		- EPA TO-15	
MH-1256_031022	22C0764-13	Indoor air		- EPA TO-15	
MH-1255_031022	22C0764-14	Indoor air		- EPA TO-15	
MH-1231_031022	22C0764-15	Indoor air		- EPA TO-15	
DUP-02_030922	22C0764-16	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For sample 22C0764-16, client's final pressure and the labs receipt pressure do not agree. Client requested sample still be analyzed.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-3_030722
Sample ID: 22C0764-01
Sample Matrix: Indoor air
Sampled: 3/7/2022 12:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2530
Canister Size: 1 liter
Flow Controller ID: 7049
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.44	0.20		1.7	0.79	4	3/13/22 14:44	BRF
cis-1,2-Dichloroethylene	8.3	0.20		33	0.79	4	3/13/22 14:44	BRF
trans-1,2-Dichloroethylene	0.77	0.20		3.0	0.79	4	3/13/22 14:44	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 14:44	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 14:44	BRF
Trichloroethylene	3.3	0.20		18	1.1	4	3/13/22 14:44	BRF
Vinyl Chloride	57	0.20		150	0.51	4	3/13/22 14:44	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.6	70-130	3/13/22 14:44

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: DUP-01_030722
Sample ID: 22C0764-02
Sample Matrix: Indoor air
Sampled: 3/7/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2333
Canister Size: 1 liter
Flow Controller ID: 7048
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.26	0.20		1.0	0.79	4	3/13/22 15:13	BRF
cis-1,2-Dichloroethylene	9.1	0.20		36	0.79	4	3/13/22 15:13	BRF
trans-1,2-Dichloroethylene	0.59	0.20		2.3	0.79	4	3/13/22 15:13	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 15:13	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 15:13	BRF
Trichloroethylene	2.6	0.20		14	1.1	4	3/13/22 15:13	BRF
Vinyl Chloride	60	0.20		150	0.51	4	3/13/22 15:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.3	70-130	3/13/22 15:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-7_030822
Sample ID: 22C0764-03
Sample Matrix: Indoor air
Sampled: 3/8/2022 11:14

Sample Description/Location:
Sub Description/Location:
Canister ID: 2122
Canister Size: 1 liter
Flow Controller ID: 7038
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 15:42	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 15:42	BRF
trans-1,2-Dichloroethylene	0.18	0.20	J	0.70	0.79	4	3/13/22 15:42	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 15:42	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 15:42	BRF
Trichloroethylene	0.19	0.20	J	1.0	1.1	4	3/13/22 15:42	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/13/22 15:42	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.5	70-130	3/13/22 15:42

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-6_030822
Sample ID: 22C0764-04
Sample Matrix: Indoor air
Sampled: 3/8/2022 11:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2546
Canister Size: 1 liter
Flow Controller ID: 7033
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 16:12	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 16:12	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 16:12	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 16:12	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 16:12	BRF
Trichloroethylene	0.21	0.20		1.1	1.1	4	3/13/22 16:12	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/13/22 16:12	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.9	70-130	3/13/22 16:12

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-2_030922
Sample ID: 22C0764-05
Sample Matrix: Indoor air
Sampled: 3/9/2022 10:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2559
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -3.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 16:41	BRF
cis-1,2-Dichloroethylene	1.1	0.20		4.5	0.79	4	3/13/22 16:41	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 16:41	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 16:41	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 16:41	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/13/22 16:41	BRF
Vinyl Chloride	1.3	0.20		3.4	0.51	4	3/13/22 16:41	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	3/13/22 16:41

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1244_031022
Sample ID: 22C0764-06
Sample Matrix: Indoor air
Sampled: 3/10/2022 09:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2309
Canister Size: 1 liter
Flow Controller ID: 7023
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -1.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 17:10	BRF
cis-1,2-Dichloroethylene	0.18	0.20	J	0.71	0.79	4	3/13/22 17:10	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 17:10	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 17:10	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 17:10	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/13/22 17:10	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/13/22 17:10	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.9	70-130	3/13/22 17:10

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-16_030722
Sample ID: 22C0764-07
Sample Matrix: Indoor air
Sampled: 3/7/2022 11:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2653
Canister Size: 1 liter
Flow Controller ID: 7029
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.62	0.20		2.5	0.79	4	3/13/22 17:40	BRF
cis-1,2-Dichloroethylene	11	0.20		42	0.79	4	3/13/22 17:40	BRF
trans-1,2-Dichloroethylene	0.98	0.20		3.9	0.79	4	3/13/22 17:40	BRF
1,4-Dioxane	0.24	2.0	J	0.88	7.2	4	3/13/22 17:40	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 17:40	BRF
Trichloroethylene	4.5	0.20		24	1.1	4	3/13/22 17:40	BRF
Vinyl Chloride	100	0.20		260	0.51	4	3/13/22 17:40	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.1	70-130	3/13/22 17:40

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1259_031022
Sample ID: 22C0764-08
Sample Matrix: Indoor air
Sampled: 3/10/2022 11:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2682
Canister Size: 1 liter
Flow Controller ID: 7086
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	2.4	0.20		9.6	0.79	4	3/13/22 18:08	BRF
cis-1,2-Dichloroethylene	100	0.20		400	0.79	4	3/13/22 18:08	BRF
trans-1,2-Dichloroethylene	1.1	0.20		4.3	0.79	4	3/13/22 18:08	BRF
1,4-Dioxane	0.87	2.0	J	3.1	7.2	4	3/13/22 18:08	BRF
Tetrachloroethylene	0.21	0.20		1.4	1.4	4	3/13/22 18:08	BRF
Trichloroethylene	3.1	0.20		16	1.1	4	3/13/22 18:08	BRF
Vinyl Chloride	170	0.20		440	0.51	4	3/13/22 18:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.0	70-130	3/13/22 18:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-12_030922
Sample ID: 22C0764-09
Sample Matrix: Indoor air
Sampled: 3/9/2022 10:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2629
Canister Size: 1 liter
Flow Controller ID: 7061
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 18:37	BRF
cis-1,2-Dichloroethylene	2.3	0.20		9.1	0.79	4	3/13/22 18:37	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 18:37	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 18:37	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 18:37	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/13/22 18:37	BRF
Vinyl Chloride	2.8	0.20		7.1	0.51	4	3/13/22 18:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.3	70-130	3/13/22 18:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1231A_031022
Sample ID: 22C0764-10
Sample Matrix: Indoor air
Sampled: 3/10/2022 09:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2340
Canister Size: 1 liter
Flow Controller ID: 7063
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.20	0.20	J	0.78	0.79	4	3/13/22 19:06	BRF
cis-1,2-Dichloroethylene	5.8	0.20		23	0.79	4	3/13/22 19:06	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 19:06	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 19:06	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 19:06	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/13/22 19:06	BRF
Vinyl Chloride	8.3	0.20		21	0.51	4	3/13/22 19:06	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.7	70-130	3/13/22 19:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-9_030822
Sample ID: 22C0764-11
Sample Matrix: Indoor air
Sampled: 3/8/2022 12:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2342
Canister Size: 1 liter
Flow Controller ID: 5061
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 19:35	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 19:35	BRF
trans-1,2-Dichloroethylene	0.40	0.20		1.6	0.79	4	3/13/22 19:35	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 19:35	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 19:35	BRF
Trichloroethylene	0.40	0.20		2.1	1.1	4	3/13/22 19:35	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/13/22 19:35	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.2	70-130	3/13/22 19:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-10_030922
Sample ID: 22C0764-12
Sample Matrix: Indoor air
Sampled: 3/9/2022 09:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2651
Canister Size: 1 liter
Flow Controller ID: 5052
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/13/22 20:03	BRF
cis-1,2-Dichloroethylene	0.28	0.20		1.1	0.79	4	3/13/22 20:03	BRF
trans-1,2-Dichloroethylene	0.25	0.20		0.98	0.79	4	3/13/22 20:03	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 20:03	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 20:03	BRF
Trichloroethylene	0.27	0.20		1.4	1.1	4	3/13/22 20:03	BRF
Vinyl Chloride	0.34	0.20		0.88	0.51	4	3/13/22 20:03	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.7	70-130	3/13/22 20:03

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1256_031022
Sample ID: 22C0764-13
Sample Matrix: Indoor air
Sampled: 3/7/2022 10:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2516
Canister Size: 1 liter
Flow Controller ID: 7065
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.66	0.20		2.6	0.79	4	3/13/22 20:31	BRF
cis-1,2-Dichloroethylene	73	0.20		290	0.79	4	3/13/22 20:31	BRF
trans-1,2-Dichloroethylene	0.34	0.20		1.4	0.79	4	3/13/22 20:31	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 20:31	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 20:31	BRF
Trichloroethylene	0.45	0.20		2.4	1.1	4	3/13/22 20:31	BRF
Vinyl Chloride	96	0.20		250	0.51	4	3/13/22 20:31	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.0	70-130	3/13/22 20:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1255_031022
Sample ID: 22C0764-14
Sample Matrix: Indoor air
Sampled: 3/7/2022 10:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2567
Canister Size: 1 liter
Flow Controller ID: 7057
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.40	0.20		1.6	0.79	4	3/13/22 20:59	BRF
cis-1,2-Dichloroethylene	9.0	0.20		36	0.79	4	3/13/22 20:59	BRF
trans-1,2-Dichloroethylene	0.37	0.20		1.5	0.79	4	3/13/22 20:59	BRF
1,4-Dioxane	0.28	2.0	J	1.0	7.2	4	3/13/22 20:59	BRF
Tetrachloroethylene	0.28	0.20		1.9	1.4	4	3/13/22 20:59	BRF
Trichloroethylene	0.42	0.20		2.3	1.1	4	3/13/22 20:59	BRF
Vinyl Chloride	24	0.20		62	0.51	4	3/13/22 20:59	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.2	70-130	3/13/22 20:59

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: MH-1231_031022
Sample ID: 22C0764-15
Sample Matrix: Indoor air
Sampled: 3/7/2022 11:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2621
Canister Size: 1 liter
Flow Controller ID: 7070
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -3.5
Receipt Vacuum(in Hg): -2.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.18	0.20	J	0.71	0.79	4	3/13/22 21:27	BRF
cis-1,2-Dichloroethylene	6.2	0.20		25	0.79	4	3/13/22 21:27	BRF
trans-1,2-Dichloroethylene	0.19	0.20	J	0.75	0.79	4	3/13/22 21:27	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 21:27	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 21:27	BRF
Trichloroethylene	0.28	0.20		1.5	1.1	4	3/13/22 21:27	BRF
Vinyl Chloride	15	0.20		39	0.51	4	3/13/22 21:27	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.6	70-130	3/13/22 21:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: DUP-02_030922
Sample ID: 22C0764-16
Sample Matrix: Indoor air
Sampled: 3/7/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2615
Canister Size: 1 liter
Flow Controller ID: 5023
Sample Type: Grab

Work Order: 22C0764
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -9.5
Receipt Vacuum(in Hg): -10.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.16	0.20	J	0.62	0.79	4	3/13/22 21:55	BRF
cis-1,2-Dichloroethylene	5.1	0.20		20	0.79	4	3/13/22 21:55	BRF
trans-1,2-Dichloroethylene	0.22	0.20		0.89	0.79	4	3/13/22 21:55	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/13/22 21:55	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/13/22 21:55	BRF
Trichloroethylene	0.28	0.20		1.5	1.1	4	3/13/22 21:55	BRF
Vinyl Chloride	13	0.20		34	0.51	4	3/13/22 21:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.7	70-130	3/13/22 21:55

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C0764-01 [SL-3_030722]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-02 [DUP-01_030722]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-03 [SL-7_030822]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-04 [SL-6_030822]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-05 [SL-2_030922]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-06 [MH-1244_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-07 [SL-16_030722]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-08 [MH-1259_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-09 [SL-12_030922]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-10 [MH-1231A_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-11 [SL-9_030822]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-12 [SL-10_030922]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-13 [MH-1256_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-14 [MH-1255_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-15 [MH-1231_031022]	B303163	1.5	1	N/A	1000	200	75	03/13/22
22C0764-16 [DUP-02_030922]	B303163	1.5	1	N/A	1000	200	75	03/13/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303163 - TO-15 Prep											
Blank (B303163-BLK1)					Prepared & Analyzed: 03/13/22						
1,1-Dichloroethylene	ND	0.050									
cis-1,2-Dichloroethylene	ND	0.050									
trans-1,2-Dichloroethylene	ND	0.050									
1,4-Dioxane	ND	0.50									
Tetrachloroethylene	ND	0.050									
Trichloroethylene	ND	0.050									
Vinyl Chloride	ND	0.050									
Surrogate: 4-Bromofluorobenzene (1)	*7.56*				*8.00*		*94.6*	*70-130*			
LCS (B303163-BS1)					Prepared & Analyzed: 03/13/22						
1,1-Dichloroethylene	5.35				5.00		107	70-130			
cis-1,2-Dichloroethylene	4.91				5.00		98.1	70-130			
trans-1,2-Dichloroethylene	5.04				5.00		101	70-130			
1,4-Dioxane	4.46				5.00		89.1	70-130			
Tetrachloroethylene	4.85				5.00		97.1	70-130			
Trichloroethylene	4.18				5.00		83.7	70-130			
Vinyl Chloride	5.47				5.00		109	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.90*				*8.00*		*98.8*	*70-130*			
Duplicate (B303163-DUP1)			**Source: 22C0764-16**		Prepared & Analyzed: 03/13/22						
1,1-Dichloroethylene	0.18	0.20	0.73	0.79		0.16			16.5	25	J
cis-1,2-Dichloroethylene	5.0	0.20	20	0.79		5.1			0.873	25	
trans-1,2-Dichloroethylene	0.24	0.20	0.95	0.79		0.22			6.90	25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	0.29	0.20	1.5	1.1		0.28			4.26	25	
Vinyl Chloride	13	0.20	34	0.51		13			0.0913	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.38*				*8.00*		*92.3*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069167-CCV1)			Lab File ID: K22A072004.D			Analyzed: 03/13/22 12:10			
Bromochloromethane (1)	80752	2.987	94663	2.973	85	60 - 140	0.0140	+/-0.50	
1,4-Difluorobenzene (1)	253372	3.579	254169	3.574	100	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	187013	5.159	227459	5.159	82	60 - 140	0.0000	+/-0.50	
LCS (B303163-BS1)			Lab File ID: K22A072005.D			Analyzed: 03/13/22 12:41			
Bromochloromethane (1)	80362	2.987	80752	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	251925	3.579	253372	3.579	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	187159	5.159	187013	5.159	100	60 - 140	0.0000	+/-0.50	
Blank (B303163-BLK1)			Lab File ID: K22A072008.D			Analyzed: 03/13/22 14:15			
Bromochloromethane (1)	81543	2.987	80752	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	241356	3.584	253372	3.579	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	180841	5.159	187013	5.159	97	60 - 140	0.0000	+/-0.50	
SL-3_030722 (22C0764-01)			Lab File ID: K22A072009.D			Analyzed: 03/13/22 14:44			
Bromochloromethane (1)	82310	2.992	80752	2.987	102	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	245658	3.584	253372	3.579	97	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	185976	5.159	187013	5.159	99	60 - 140	0.0000	+/-0.50	
DUP-01_030722 (22C0764-02)			Lab File ID: K22A072010.D			Analyzed: 03/13/22 15:13			
Bromochloromethane (1)	79663	2.987	80752	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	239008	3.584	253372	3.579	94	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	185953	5.159	187013	5.159	99	60 - 140	0.0000	+/-0.50	
SL-7_030822 (22C0764-03)			Lab File ID: K22A072011.D			Analyzed: 03/13/22 15:42			
Bromochloromethane (1)	79582	2.992	80752	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	236793	3.584	253372	3.579	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	181445	5.159	187013	5.159	97	60 - 140	0.0000	+/-0.50	
SL-6_030822 (22C0764-04)			Lab File ID: K22A072012.D			Analyzed: 03/13/22 16:12			
Bromochloromethane (1)	80173	2.992	80752	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	235600	3.584	253372	3.579	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	182804	5.159	187013	5.159	98	60 - 140	0.0000	+/-0.50	
SL-2_030922 (22C0764-05)			Lab File ID: K22A072013.D			Analyzed: 03/13/22 16:41			
Bromochloromethane (1)	80137	2.992	80752	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	241106	3.584	253372	3.579	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	181559	5.159	187013	5.159	97	60 - 140	0.0000	+/-0.50	
MH-1244_031022 (22C0764-06)			Lab File ID: K22A072014.D			Analyzed: 03/13/22 17:10			
Bromochloromethane (1)	80560	2.987	80752	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	238840	3.584	253372	3.579	94	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	183778	5.159	187013	5.159	98	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-16_030722 (22C0764-07)			Lab File ID: K22A072015.D			Analyzed: 03/13/22 17:40			
Bromochloromethane (1)	79991	2.987	80752	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	240213	3.584	253372	3.579	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	181339	5.159	187013	5.159	97	60 - 140	0.0000	+/-0.50	
MH-1259_031022 (22C0764-08)			Lab File ID: K22A072016.D			Analyzed: 03/13/22 18:08			
Bromochloromethane (1)	80796	2.987	80752	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	236944	3.579	253372	3.579	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	180107	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	
SL-12_030922 (22C0764-09)			Lab File ID: K22A072017.D			Analyzed: 03/13/22 18:37			
Bromochloromethane (1)	82840	2.987	80752	2.987	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	247795	3.584	253372	3.579	98	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	186520	5.159	187013	5.159	100	60 - 140	0.0000	+/-0.50	
MH-1231A_031022 (22C0764-10)			Lab File ID: K22A072018.D			Analyzed: 03/13/22 19:06			
Bromochloromethane (1)	79759	2.992	80752	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	241485	3.584	253372	3.579	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	180436	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	
SL-9_030822 (22C0764-11)			Lab File ID: K22A072019.D			Analyzed: 03/13/22 19:35			
Bromochloromethane (1)	79437	2.987	80752	2.987	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	235432	3.579	253372	3.579	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	180060	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	
SL-10_030922 (22C0764-12)			Lab File ID: K22A072020.D			Analyzed: 03/13/22 20:03			
Bromochloromethane (1)	80536	2.992	80752	2.987	100	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	239297	3.584	253372	3.579	94	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	180243	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	
MH-1256_031022 (22C0764-13)			Lab File ID: K22A072021.D			Analyzed: 03/13/22 20:31			
Bromochloromethane (1)	80558	2.987	80752	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	237094	3.579	253372	3.579	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	182127	5.159	187013	5.159	97	60 - 140	0.0000	+/-0.50	
MH-1255_031022 (22C0764-14)			Lab File ID: K22A072022.D			Analyzed: 03/13/22 20:59			
Bromochloromethane (1)	80544	2.992	80752	2.987	100	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	235561	3.584	253372	3.579	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	180010	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	
MH-1231_031022 (22C0764-15)			Lab File ID: K22A072023.D			Analyzed: 03/13/22 21:27			
Bromochloromethane (1)	79294	2.987	80752	2.987	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	235202	3.579	253372	3.579	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	179408	5.159	187013	5.159	96	60 - 140	0.0000	+/-0.50	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
DUP-02_030922 (22C0764-16)			Lab File ID: K22A072024.D			Analyzed: 03/13/22 21:55			
Bromochloromethane (1)	77725	2.987	80752	2.987	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	234032	3.584	253372	3.579	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	177514	5.159	187013	5.159	95	60 - 140	0.0000	+/-0.50	
Duplicate (B303163-DUP1)			Lab File ID: K22A072025.D			Analyzed: 03/13/22 22:23			
Bromochloromethane (1)	79025	2.992	80752	2.987	98	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	233036	3.584	253372	3.579	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	177123	5.159	187013	5.159	95	60 - 140	0.0000	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S069167-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.80	0.9896483	1.14898		16.1	30
cis-1,2-Dichloroethylene	A	5.00	5.38	0.8700383	0.9357044		7.5	30
trans-1,2-Dichloroethylene	A	5.00	5.54	0.8433475	0.9343372		10.8	30
1,4-Dioxane	A	5.00	4.44	0.1591668	0.1414395		-11.1	30
Tetrachloroethylene	A	5.00	5.40	0.4061849	0.4386433		8.0	30
Trichloroethylene	A	5.00	4.58	0.3164814	0.290122		-8.3	30
Vinyl Chloride	A	5.00	5.90	0.6391221	0.753933		18.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

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22C0764

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Please fill out completely, sign, date and retain the yellow copy for your records. Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply. For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³								Summa Can ID	Flow Controller ID
01	SL-3_030722	03-7-22 12:05	03-7-22 12:06	--	--	IA	--	X				-29.5	-7.0	-5.0	2630	7049
02	DUP-01_030722			--	--	IA	--	X				-29.5	-5.5	-5	2333	7048
03	SL-7_030822	3-8-22 11:13	3-8-22 11:14	--	--	IA	--	X				-29.5	-4	-5.0	2122	7038
04	SL-6_030822	3-8-22 11:26	3-8-22 11:27	--	--	IA	--	X				-29.5	-5.0	-5.0	2546	7033

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/10/22/1330
Received by: (signature)	3/11/22 941
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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Doc #378 Rev 2_01122021
Pace-New England

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CHAIN OF CUSTODY RECORD (AIR)

2260764

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
Invoice Recipient:
Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
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1-Day ☐ 3-Day ☑
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Data Delivery
Format: PDF ☑ EXCEL ☑
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Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

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Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-2_030422	3/9/22 1045	3/9/22 1046	--	--	IA	--	X				-29.2	-5	3.7	2559	7022
06	MH-1244_030122	3/10/22 925	3/10/22 926	—	—	IA	—	X				-29	-4	1.9	2309	7023
07	SL-16_030722	3/7/22 1151	3/7/22 1152	—	—	IA	—	X				-29	-8	1.3	2653	7029
08	MH-1259_031022	3/10/22 1140	3/10/22 1141	—	—	IA	—	X				-29.5	-5.5	2	2682	7086

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Received by: (signature)	Date/Time: 3/11/22 941	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
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East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

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Pace-New England

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22C07624

CHAIN OF CUSTODY RECORD (AIR)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-12_030922	3/9/22 1010	3/9/22 1011	--	--	IA	--	X				-29	-5.5	-5.1	2624	7061
10	MH-1231A_031022	3/10/22 940	3/10/22 941	—	—	IA	—	X				-29	-7	-5.4	2340	7063
11	SL-9_030822	3/8/22 1241	3/8/22 1242	—	—	IA	—	X				-28.5	-7	-5.1	2342	5061
12	SL-16_030922	3/9/22 932	3/9/22 933	—	—	IA	—	X				-29	-6	-5.9	2651	6052

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Received by: (signature)	Date/Time:

Detection Limit Requirements		Special Requirements
MA		MA MCP Required
		MCP Certification Form Required
		CT RCP Required
CT		RCP Certification Form Required
		Other
Other:		

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
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Other

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☐ AIHA-LAP,LLC

PCB ONLY

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Fax To #:

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13	MH-1256_031022	3/10/22 1030	3/10/22 1031	--	--	IA	--	X				-29	-6	20.1			2516	7065
14	MH-1255_031022	3/10/22 1010	3/10/22 1011	—	—	IA	—	X				-29	-6	20.4			2567	7057
15	MH-1231_031022	3/10/22 1100	3/10/22 1101	—	—	IA	—	X				-29.5	-3.5	20.2			2621	7070
16	Dup-02_030922	3/9/22	3/9/22	—	—	IA	—	X				-29.5	-9.5	10.3			2615	5023

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other:

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☐ MA MCP Required
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☐ RCP Certification Form Required
☐ Other

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☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

FedEx

FedEx® Tracking

270719504535

ADD NICKNAME

Delivered
Friday, March 11, 2022 at 9:41 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270719504535 (master)	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504546	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504557	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504568	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504579	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504580	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ARCADIS

Received By RLF Date 3/11/22 Time 941

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (1L)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	1L	1L	1L	9hr	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2530	2653	2516			7049	7029	7065		
2333	2682	2527			7048	7086	7057		
2122	2629	2621			7038	7061	7070		
2316	2340	2615			7033	7063	7073		
2359	2342				7022	7061			
2309	2651				7023	7052			
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054008.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2530

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2333

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061040.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2122

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2546

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2559

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2309

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2653

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2682

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2629

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2340

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2342

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2651

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061038.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2516

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2567

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061039.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2621

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061037.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2615

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

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March 14, 2022

Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C0774

Enclosed are results of analyses for samples as received by the laboratory on March 11, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/14/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C0774

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-5_030822	22C0774-01	Indoor air		-	
				EPA TO-15	
SL-13_030822	22C0774-02	Indoor air		-	
				EPA TO-15	
SL-8_030822	22C0774-03	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2236/4017	22C0774-04	Indoor air		-	
SL-4_030722	22C0774-05	Indoor air		-	
				EPA TO-15	
SL-21_030722	22C0774-06	Indoor air		-	
				EPA TO-15	
SL-18_030722	22C0774-07	Indoor air		-	
				EPA TO-15	
SL-17_030722	22C0774-08	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2521/7045	22C0774-09	Indoor air		-	
SL-15_030822	22C0774-10	Indoor air		-	
				EPA TO-15	
SL-23_030922	22C0774-11	Indoor air		-	
				EPA TO-15	
SL-14_030822	22C0774-12	Indoor air		-	
				EPA TO-15	
SL-22_030722	22C0774-13	Indoor air		-	
				EPA TO-15	
SL-11_030922	22C0774-14	Indoor air		-	
				EPA TO-15	
SL-20_030722	22C0774-15	Indoor air		-	
				EPA TO-15	
SL-19_030922	22C0774-16	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For sample 22C0774-15, client's final pressure and the labs receipt pressure do not agree. Client requested sample still be analyzed.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-5_030822
Sample ID: 22C0774-01
Sample Matrix: Indoor air
Sampled: 3/8/2022 11:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2232
Canister Size: 1 liter
Flow Controller ID: 7036
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -9.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 17:48	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 17:48	BRF
trans-1,2-Dichloroethylene	0.27	0.20		1.1	0.79	4	3/11/22 17:48	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 17:48	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 17:48	BRF
Trichloroethylene	0.39	0.20		2.1	1.1	4	3/11/22 17:48	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 17:48	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.2	70-130	3/11/22 17:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-13_030822
Sample ID: 22C0774-02
Sample Matrix: Indoor air
Sampled: 3/8/2022 10:17

Sample Description/Location:
Sub Description/Location:
Canister ID: 2558
Canister Size: 1 liter
Flow Controller ID: 7034
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 18:18	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 18:18	BRF
trans-1,2-Dichloroethylene	0.18	0.20	J	0.73	0.79	4	3/11/22 18:18	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 18:18	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 18:18	BRF
Trichloroethylene	0.27	0.20		1.5	1.1	4	3/11/22 18:18	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 18:18	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.2	70-130	3/11/22 18:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-8_030822
Sample ID: 22C0774-03
Sample Matrix: Indoor air
Sampled: 3/8/2022 12:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2244
Canister Size: 1 liter
Flow Controller ID: 4012
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg):
Final Vacuum(in Hg):
Receipt Vacuum(in Hg): -5.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 18:47	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 18:47	BRF
trans-1,2-Dichloroethylene	0.42	0.20		1.7	0.79	4	3/11/22 18:47	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 18:47	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 18:47	BRF
Trichloroethylene	0.25	0.20		1.3	1.1	4	3/11/22 18:47	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 18:47	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.1	70-130	3/11/22 18:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-4_030722
Sample ID: 22C0774-05
Sample Matrix: Indoor air
Sampled: 3/7/2022 11:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2561
Canister Size: 1 liter
Flow Controller ID: 7072
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.26	0.20		1.0	0.79	4	3/11/22 19:16	BRF
cis-1,2-Dichloroethylene	8.9	0.20		35	0.79	4	3/11/22 19:16	BRF
trans-1,2-Dichloroethylene	0.55	0.20		2.2	0.79	4	3/11/22 19:16	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 19:16	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 19:16	BRF
Trichloroethylene	2.5	0.20		13	1.1	4	3/11/22 19:16	BRF
Vinyl Chloride	58	0.20		150	0.51	4	3/11/22 19:16	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.9	70-130	3/11/22 19:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-21_030722
Sample ID: 22C0774-06
Sample Matrix: Indoor air
Sampled: 3/7/2022 10:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2630
Canister Size: 1 liter
Flow Controller ID: 7080
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 19:46	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 19:46	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 19:46	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 19:46	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 19:46	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/11/22 19:46	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 19:46	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.7	70-130	3/11/22 19:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-18_030722
Sample ID: 22C0774-07
Sample Matrix: Indoor air
Sampled: 3/7/2022 11:19

Sample Description/Location:
Sub Description/Location:
Canister ID: 2297
Canister Size: 1 liter
Flow Controller ID: 7052
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.65	0.20		2.6	0.79	4	3/11/22 20:16	BRF
cis-1,2-Dichloroethylene	16	0.20		64	0.79	4	3/11/22 20:16	BRF
trans-1,2-Dichloroethylene	1.3	0.20		5.2	0.79	4	3/11/22 20:16	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 20:16	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 20:16	BRF
Trichloroethylene	6.0	0.20		32	1.1	4	3/11/22 20:16	BRF
Vinyl Chloride	140	0.20		350	0.51	4	3/11/22 20:16	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.2	70-130	3/11/22 20:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-17_030722
Sample ID: 22C0774-08
Sample Matrix: Indoor air
Sampled: 3/7/2022 11:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2307
Canister Size: 1 liter
Flow Controller ID: 7053
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.42	0.20		1.7	0.79	4	3/11/22 20:45	BRF
cis-1,2-Dichloroethylene	9.2	0.20		36	0.79	4	3/11/22 20:45	BRF
trans-1,2-Dichloroethylene	0.90	0.20		3.6	0.79	4	3/11/22 20:45	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 20:45	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 20:45	BRF
Trichloroethylene	4.0	0.20		22	1.1	4	3/11/22 20:45	BRF
Vinyl Chloride	77	0.20		200	0.51	4	3/11/22 20:45	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.6	70-130	3/11/22 20:45

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-15_030822
Sample ID: 22C0774-10
Sample Matrix: Indoor air
Sampled: 3/8/2022 09:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2294
Canister Size: 1 liter
Flow Controller ID: 7044
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.5
Receipt Vacuum(in Hg): -2.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 21:15	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 21:15	BRF
trans-1,2-Dichloroethylene	0.32	0.20		1.3	0.79	4	3/11/22 21:15	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 21:15	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 21:15	BRF
Trichloroethylene	0.17	0.20	J	0.90	1.1	4	3/11/22 21:15	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 21:15	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.7	70-130	3/11/22 21:15

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-23_030922
Sample ID: 22C0774-11
Sample Matrix: Indoor air
Sampled: 3/9/2022 10:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2686
Canister Size: 1 liter
Flow Controller ID: 5056
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 21:44	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 21:44	BRF
trans-1,2-Dichloroethylene	0.24	0.20		0.97	0.79	4	3/11/22 21:44	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 21:44	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 21:44	BRF
Trichloroethylene	0.27	0.20		1.4	1.1	4	3/11/22 21:44	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 21:44	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.0	70-130	3/11/22 21:44

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-14_030822
Sample ID: 22C0774-12
Sample Matrix: Indoor air
Sampled: 3/8/2022 10:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2248
Canister Size: 1 liter
Flow Controller ID: 5062
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 22:14	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 22:14	BRF
trans-1,2-Dichloroethylene	0.19	0.20	J	0.75	0.79	4	3/11/22 22:14	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 22:14	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 22:14	BRF
Trichloroethylene	0.19	0.20	J	1.0	1.1	4	3/11/22 22:14	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 22:14	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.4	70-130	3/11/22 22:14

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-22_030722
Sample ID: 22C0774-13
Sample Matrix: Indoor air
Sampled: 3/7/2022 10:39

Sample Description/Location:
Sub Description/Location:
Canister ID: 2681
Canister Size: 1 liter
Flow Controller ID: 5034
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 22:44	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 22:44	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 22:44	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 22:44	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 22:44	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/11/22 22:44	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 22:44	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.1	70-130	3/11/22 22:44

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-11_030922
Sample ID: 22C0774-14
Sample Matrix: Indoor air
Sampled: 3/9/2022 09:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2677
Canister Size: 1 liter
Flow Controller ID: 5033
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:13	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:13	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:13	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 23:13	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 23:13	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/11/22 23:13	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 23:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	91.7	70-130	3/11/22 23:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-20_030722
Sample ID: 22C0774-15
Sample Matrix: Indoor air
Sampled: 3/7/2022 10:23

Sample Description/Location:
Sub Description/Location:
Canister ID: 2124
Canister Size: 1 liter
Flow Controller ID: 7041
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -0.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:44	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:44	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/11/22 23:44	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/11/22 23:44	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/11/22 23:44	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/11/22 23:44	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/11/22 23:44	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.5	70-130	3/11/22 23:44

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/11/2022
Field Sample #: SL-19_030922
Sample ID: 22C0774-16
Sample Matrix: Indoor air
Sampled: 3/9/2022 10:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2688
Canister Size: 1 liter
Flow Controller ID: 7040
Sample Type: Grab

Work Order: 22C0774
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	3/12/22 0:13	BRF
cis-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/12/22 0:13	BRF
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79	4	3/12/22 0:13	BRF
1,4-Dioxane	ND	2.0		ND	7.2	4	3/12/22 0:13	BRF
Tetrachloroethylene	ND	0.20		ND	1.4	4	3/12/22 0:13	BRF
Trichloroethylene	ND	0.20		ND	1.1	4	3/12/22 0:13	BRF
Vinyl Chloride	ND	0.20		ND	0.51	4	3/12/22 0:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.0	70-130	3/12/22 0:13

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Sample Extraction Data

Prep Method: TO-15 Prep **Analytical Method: EP**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C0774-01 [SL-5_030822]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-02 [SL-13_030822]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-03 [SL-8_030822]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-05 [SL-4_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-06 [SL-21_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-07 [SL-18_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-08 [SL-17_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-10 [SL-15_030822]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-11 [SL-23_030922]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-12 [SL-14_030822]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-13 [SL-22_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-14 [SL-11_030922]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-15 [SL-20_030722]	B303158	1.5	1	N/A	1000	200	75	03/11/22
22C0774-16 [SL-19_030922]	B303158	1.5	1	N/A	1000	200	75	03/11/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303158 - TO-15 Prep											
Blank (B303158-BLK1)					Prepared & Analyzed: 03/11/22						
1,1-Dichloroethylene	ND	0.050									
cis-1,2-Dichloroethylene	ND	0.050									
trans-1,2-Dichloroethylene	ND	0.050									
1,4-Dioxane	ND	0.50									
Tetrachloroethylene	ND	0.050									
Trichloroethylene	ND	0.050									
Vinyl Chloride	ND	0.050									
Surrogate: 4-Bromofluorobenzene (1)	*7.31*				*8.00*		*91.3*	*70-130*			
LCS (B303158-BS1)					Prepared & Analyzed: 03/11/22						
1,1-Dichloroethylene	5.08				5.00		102	70-130			
cis-1,2-Dichloroethylene	4.65				5.00		93.0	70-130			
trans-1,2-Dichloroethylene	4.71				5.00		94.3	70-130			
1,4-Dioxane	4.34				5.00		86.9	70-130			
Tetrachloroethylene	4.59				5.00		91.8	70-130			
Trichloroethylene	3.99				5.00		79.7	70-130			
Vinyl Chloride	5.14				5.00		103	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.81*				*8.00*		*97.6*	*70-130*			
Duplicate (B303158-DUP1)			**Source: 22C0774-16**		Prepared: 03/11/22 Analyzed: 03/12/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.54*				*8.00*		*94.2*	*70-130*			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069156-CCV1)			Lab File ID: K22A070004.D			Analyzed: 03/11/22 15:13			
Bromochloromethane (1)	89738	2.992	94663	2.973	95	60 - 140	0.0190	+/-0.50	
1,4-Difluorobenzene (1)	275488	3.584	254169	3.574	108	60 - 140	0.0100	+/-0.50	
Chlorobenzene-d5 (1)	204333	5.159	227459	5.159	90	60 - 140	0.0000	+/-0.50	
LCS (B303158-BS1)			Lab File ID: K22A070005.D			Analyzed: 03/11/22 15:43			
Bromochloromethane (1)	89139	2.992	89738	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	276000	3.584	275488	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	206470	5.159	204333	5.159	101	60 - 140	0.0000	+/-0.50	
Blank (B303158-BLK1)			Lab File ID: K22A070008.D			Analyzed: 03/11/22 17:18			
Bromochloromethane (1)	88470	2.992	89738	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	256857	3.584	275488	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	199101	5.159	204333	5.159	97	60 - 140	0.0000	+/-0.50	
SL-5_030822 (22C0774-01)			Lab File ID: K22A070009.D			Analyzed: 03/11/22 17:48			
Bromochloromethane (1)	86336	2.992	89738	2.992	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	256060	3.584	275488	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	197233	5.159	204333	5.159	97	60 - 140	0.0000	+/-0.50	
SL-13_030822 (22C0774-02)			Lab File ID: K22A070010.D			Analyzed: 03/11/22 18:18			
Bromochloromethane (1)	87248	2.992	89738	2.992	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	255174	3.584	275488	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	195080	5.159	204333	5.159	95	60 - 140	0.0000	+/-0.50	
SL-8_030822 (22C0774-03)			Lab File ID: K22A070011.D			Analyzed: 03/11/22 18:47			
Bromochloromethane (1)	87236	2.996	89738	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	258080	3.584	275488	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	195234	5.159	204333	5.159	96	60 - 140	0.0000	+/-0.50	
SL-4_030722 (22C0774-05)			Lab File ID: K22A070012.D			Analyzed: 03/11/22 19:16			
Bromochloromethane (1)	87421	2.992	89738	2.992	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	260586	3.584	275488	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	195502	5.159	204333	5.159	96	60 - 140	0.0000	+/-0.50	
SL-21_030722 (22C0774-06)			Lab File ID: K22A070013.D			Analyzed: 03/11/22 19:46			
Bromochloromethane (1)	86322	2.992	89738	2.992	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	253158	3.584	275488	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	191434	5.159	204333	5.159	94	60 - 140	0.0000	+/-0.50	
SL-18_030722 (22C0774-07)			Lab File ID: K22A070014.D			Analyzed: 03/11/22 20:16			
Bromochloromethane (1)	84788	2.992	89738	2.992	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	252695	3.584	275488	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	193400	5.159	204333	5.159	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-17_030722 (22C0774-08)			Lab File ID: K22A070015.D			Analyzed: 03/11/22 20:45			
Bromochloromethane (1)	86254	2.987	89738	2.992	96	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	257535	3.584	275488	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	196563	5.159	204333	5.159	96	60 - 140	0.0000	+/-0.50	
SL-15_030822 (22C0774-10)			Lab File ID: K22A070016.D			Analyzed: 03/11/22 21:15			
Bromochloromethane (1)	86939	2.992	89738	2.992	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	259303	3.584	275488	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	195030	5.159	204333	5.159	95	60 - 140	0.0000	+/-0.50	
SL-23_030922 (22C0774-11)			Lab File ID: K22A070017.D			Analyzed: 03/11/22 21:44			
Bromochloromethane (1)	85106	2.992	89738	2.992	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	250801	3.584	275488	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	189369	5.159	204333	5.159	93	60 - 140	0.0000	+/-0.50	
SL-14_030822 (22C0774-12)			Lab File ID: K22A070018.D			Analyzed: 03/11/22 22:14			
Bromochloromethane (1)	85683	2.992	89738	2.992	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	253597	3.584	275488	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	193063	5.159	204333	5.159	94	60 - 140	0.0000	+/-0.50	
SL-22_030722 (22C0774-13)			Lab File ID: K22A070019.D			Analyzed: 03/11/22 22:44			
Bromochloromethane (1)	86331	2.991	89738	2.992	96	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	254491	3.584	275488	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	193553	5.158	204333	5.159	95	60 - 140	-0.0010	+/-0.50	
SL-11_030922 (22C0774-14)			Lab File ID: K22A070020.D			Analyzed: 03/11/22 23:13			
Bromochloromethane (1)	84207	2.992	89738	2.992	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	246444	3.584	275488	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	188937	5.159	204333	5.159	92	60 - 140	0.0000	+/-0.50	
SL-20_030722 (22C0774-15)			Lab File ID: K22A070021.D			Analyzed: 03/11/22 23:44			
Bromochloromethane (1)	83395	2.992	89738	2.992	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	244959	3.584	275488	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	187725	5.159	204333	5.159	92	60 - 140	0.0000	+/-0.50	
SL-19_030922 (22C0774-16)			Lab File ID: K22A070022.D			Analyzed: 03/12/22 00:13			
Bromochloromethane (1)	83662	2.992	89738	2.992	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	250714	3.584	275488	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	187317	5.159	204333	5.159	92	60 - 140	0.0000	+/-0.50	
Duplicate (B303158-DUP1)			Lab File ID: K22A070023.D			Analyzed: 03/12/22 00:42			
Bromochloromethane (1)	83664	2.992	89738	2.992	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	246111	3.584	275488	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	187795	5.159	204333	5.159	92	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069156-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.11	0.9896483	1.011638		2.2	30
cis-1,2-Dichloroethylene	A	5.00	4.78	0.8700383	0.8313268		-4.4	30
trans-1,2-Dichloroethylene	A	5.00	4.83	0.8433475	0.8151017		-3.3	30
1,4-Dioxane	A	5.00	4.10	0.1591668	0.1305901		-18.0	30
Tetrachloroethylene	A	5.00	4.80	0.4061849	0.3896463		-4.1	30
Trichloroethylene	A	5.00	4.09	0.3164814	0.2589441		-18.2	30
Vinyl Chloride	A	5.00	5.23	0.6391221	0.6681495		4.5	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

22C0774

CHAIN OF CUSTODY RECORD (AIR)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
Invoice Recipient:
Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-5_030822	03-08-22 11:39	03-08-22 11:40	--	--	IA	--	X				-29.5	-10.6	9.4	2232	7036
02	SL-13_030822	3-8-22 10:16	3-8-22 10:17	--	--	IA	--	X				-29	-5.0	4	2558	7034
03	SL-8_030822	3-8-22 12:21	3-8-22 12:22	--	--	IA	--	X						5'	2244	4012
04	VD ID - Knob fell off in box															

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 3/10/22/1330
Received by: (signature)	Date/Time: 3/11/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☐

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Pace Analytical

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318-0053

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

220774

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
05	SL-4_030722	3-7-22 11:01	3-7-22 11:02	--	--	IA	--	X				-5	-6.5	7.1	2561	7072
06	SL-21_030722	3-7-22 10:05	3-7-22 10:06	--	--	IA	--	X				-5	-7	5.7	2430	7080
07	SL-18_030722	3-7-22 11:18	3-7-22 11:19	--	--	IA	--	X				-29	-6	5.8	2257	7052
08	SL-17_030722	3-7-22 11:35	3-7-22 11:36	--	--	IA	--	X				-29	-7.5	7.1	2307	7053

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time: 3/11/22 941
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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318-0053

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Pace-New England

Page 1 of 1

22C0774

CHAIN OF CUSTODY RECORD (AIR)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records. Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply. For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	VOID - LOW PRESSURE			--	--	IA	--					-27		20.8	2521	7045
10	SL-15_030822	3/8/22 9:41	3/8/22 9:45	—	—	IA	—	X				-29	-3.5	2.9	2294	7044
11	SL-23_030922	3-9-22 1000	3-9-22 1001	—	—	IA	—	X				-29.5	-6.5	5.2	2686	5056
12	SL-14_030722	3/8/22 10:01	3/8/22 10:02	—	—	IA	—	X				-29.5	-6	5.5	2248	5062

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Date/Time: 3/10/22 1330
Received by: (signature)	Date/Time: 3/11/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhle
☐ Non Soxhle

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

226774

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
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1-Day ☐ 3-Day ☑
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Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
13	SL-22-030722	3/7/22 10:38	3/7/22 10:35	--	--	IA	--	X				-29.0	-6.5	10.7	2681	5034
14	SL-11-030922	3/9/22 9:45	3/9/22 9:46	—	—	IA	—	X				-29.0	-7	7	2677	5033
15	SL-20-030722	3/7/22 10:22	3/7/22 10:22	—	—	IA	—	X				-29.0	-6.5	10.7	2124	7041
16	SL-19-030922	3/9/22 1020	3/9/22 1021	—	—	IA	—	X				-29.5	-5.0	5.5	2688	7040

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Date/Time: 3/10/22/1330	
Received by: (signature)	Date/Time: 3/11/22 941	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required ☐
MCP Certification Form Required ☐
CT RCP Required ☐
RCP Certification Form Required ☐
Other ☐

Pace Analytical
NELAC and AIHA LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhle ☐
Non Soxhle ☐

Table of Contents

FedEx

FedEx® Tracking

270719504535

ADD NICKNAME

Delivered
Friday, March 11, 2022 at 9:41 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

TO

East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270719504535 (master)	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504546	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504557	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504568	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504579	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504580	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By BLT Date 3/11/22 Time 941

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? N

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(11e)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	11e	1L	11e	24hr	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2232	2307	2124			7038	7053	7041		
2358	2294	2168			7034	7044	7040		
2244	2182				4012	9528			
2321	2248				7072	9062			
2630	2681				7080	9534			
2297	2677				7052	9533			
Unused Media					**Pufs/TO-17's**				
2232	(-7)	4017							
2321	(-26.8)	7045							

Comments:

Can #2232 received back without knob- note from client.

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2232

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2558

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2244

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2561

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2630

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2297

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2307

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2294

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2686

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2248

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2681

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2677

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** J22A054009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2124

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC2688

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/14/2022

WORK ORDER

Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

Below please find the login confirmation including the CoC and draft invoice.

To ensure that your needs are met, **please review** these documents to verify that:

1. The number of samples received and matrix are correct.
2. The methods are correct as well as any specific regulatory requirements.
3. The due date for the final report is correct.
4. The contact information is correct.
5. The pricing is correct.

Thank-you for choosing Con-Test Analytical Laboratories. If you need further assistance, please contact your project manager.

WORK ORDER

Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

Report To:

Arcadis US, Inc. - Novi, MI
Kristoffer Hinskey
28550 Cabot Drive, Suite 500
Novi, MI 48377
Phone: (248) 994-1745
Fax: -

Invoice To:

Arcadis US, Inc. - Novi, MI
Accounts Payable
630 Plaza Drive, Suite 600
Highlands Ranch, CO 80219
Phone :(248) 994-1745
Fax: -

Analysis	Due	TAT	Expires	Comments
22C0774-01 SL-5_030822 [Air] Sampled 03/08/22 11:40 (GMT-05:00) Eastern Time (US &				
Summa Can Rental	03/16/22 16:30	3	03/03/23 11:40	
TO-15 Select List Low Level	03/16/22 16:30	3	04/07/22 11:40	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
Individually Certified Canister	03/16/22 16:30	3	03/08/22 11:40	
22C0774-02 SL-13_030822 [Air] Sampled 03/08/22 10:17 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/08/22 10:17	
Summa Can Rental	03/16/22 16:30	3	03/03/23 10:17	
TO-15 Select List Low Level	03/16/22 16:30	3	04/07/22 10:17	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
22C0774-03 SL-8_030822 [Air] Sampled 03/08/22 12:22 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/08/22 12:22	
Summa Can Rental	03/16/22 16:30	3	03/03/23 12:22	
TO-15 Select List Low Level	03/16/22 16:30	3	04/07/22 12:22	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
22C0774-04 Unused Can/Reg #2236/4017 [Air] Sampled 03/07/22 00:00 (GMT-05:00) Eastern Time (US &				
Unused Canister(s)	03/16/22 16:30	3	03/02/23 00:00	
Unused Regulator(s)	03/16/22 16:30	3	03/02/23 00:00	
Summa Can Rental	03/16/22 16:30	3	03/02/23 00:00	
Individually Certified Canister	03/16/22 16:30	3	03/07/22 00:00	
22C0774-05 SL-4_030722 [Air] Sampled 03/07/22 11:02 (GMT-05:00) Eastern Time (US &				
Summa Can Rental	03/16/22 16:30	3	03/02/23 11:02	
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 11:02	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
Individually Certified Canister	03/16/22 16:30	3	03/07/22 11:02	

WORK ORDER

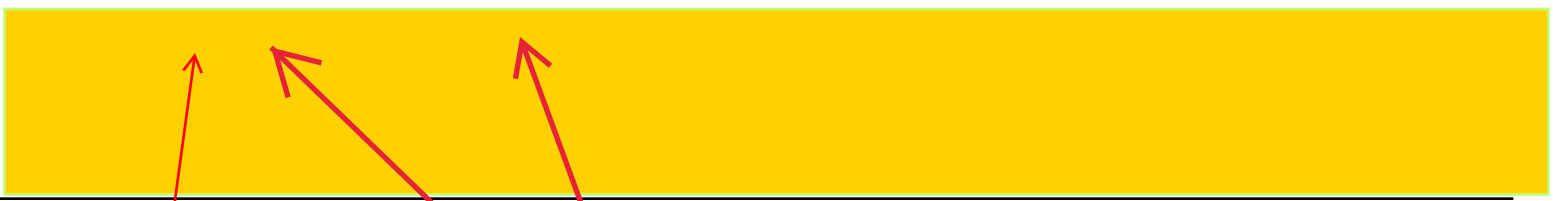
Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

Analysis	Due	TAT	Expires	Comments
22C0774-06 SL-21_030722 [Air] Sampled 03/07/22 10:06 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/07/22 10:06	
Summa Can Rental	03/16/22 16:30	3	03/02/23 10:06	
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 10:06	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE,
22C0774-07 SL-18_030722 [Air] Sampled 03/07/22 11:19 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/07/22 11:19	
Summa Can Rental	03/16/22 16:30	3	03/02/23 11:19	
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 11:19	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE,
22C0774-08 SL-17_030722 [Air] Sampled 03/07/22 11:36 (GMT-05:00) Eastern Time (US &				
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 11:36	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE,
Summa Can Rental	03/16/22 16:30	3	03/02/23 11:36	
Individually Certified Canister	03/16/22 16:30	3	03/07/22 11:36	
22C0774-09 Unused Can/Reg #2521/7045 [Air] Sampled 03/07/22 00:00 (GMT-05:00) Eastern Time (US &				
Summa Can Rental	03/16/22 16:30	3	03/02/23 00:00	
Unused Canister(s)	03/16/22 16:30	3	03/02/23 00:00	
Unused Regulator(s)	03/16/22 16:30	3	03/02/23 00:00	
Individually Certified Canister	03/16/22 16:30	3	03/07/22 00:00	
22C0774-10 SL-15_030822 [Air] Sampled 03/08/22 09:45 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/08/22 09:45	
Summa Can Rental	03/16/22 16:30	3	03/03/23 09:45	
TO-15 Select List Low Level	03/16/22 16:30	3	04/07/22 09:45	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE,
22C0774-11 SL-23_030922 [Air] Sampled 03/09/22 10:01 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/09/22 10:01	
Summa Can Rental	03/16/22 16:30	3	03/04/23 10:01	
TO-15 Select List Low Level	03/16/22 16:30	3	04/08/22 10:01	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE,



Corrected ID:
SL-14_030822

The date of sample should be:
3/8/22 not 3/9/22, COC ID was incorrect, but COC beginning date and end date was correct.
And the TO-15 Select list low level exp should be 04/07/22 instead of 04/08/22

WORK ORDER

Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

Analysis	Due	TAT	Expires	Comments
22C0774-13 SL-22_030722 [Air] Sampled 03/07/22 10:39 (GMT-05:00) Eastern Time (US &				
Summa Can Rental	03/16/22 16:30	3	03/02/23 10:39	
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 10:39	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
Individually Certified Canister	03/16/22 16:30	3	03/07/22 10:39	
22C0774-14 SL-11_030922 [Air] Sampled 03/09/22 09:46 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/09/22 09:46	
Summa Can Rental	03/16/22 16:30	3	03/04/23 09:46	
TO-15 Select List Low Level	03/16/22 16:30	3	04/08/22 09:46	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
22C0774-15 SL-20_030722 [Air] Sampled 03/07/22 10:23 (GMT-05:00) Eastern Time (US &				
Individually Certified Canister	03/16/22 16:30	3	03/07/22 10:23	
Summa Can Rental	03/16/22 16:30	3	03/02/23 10:23	
TO-15 Select List Low Level	03/16/22 16:30	3	04/06/22 10:23	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
22C0774-16 SL-19_030922 [Air] Sampled 03/09/22 10:21 (GMT-05:00) Eastern Time (US &				
TO-15 Select List Low Level	03/16/22 16:30	3	04/08/22 10:21	Report in ug/m3. 1,1-DCE, CIS+TRANS 1,2-DCE, 14-D, PCE, 1
Individually Certified Canister	03/16/22 16:30	3	03/09/22 10:21	
Summa Can Rental	03/16/22 16:30	3	03/04/23 10:21	

Reviewed By

Date

WORK ORDER

Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

DRAFT INVOICE

Item	Qty	Surcharge	Unit Price	Test Total
Individually Certified Canister	16	0.00	$125.00	$2,000.00
Summa Can Rental	16	0.00	$60.00	$960.00
TO-15 Select List Low Level	14	50.00	$130.00	$2,730.00
Unused Canister(s)	2	0.00	$50.00	$100.00
Unused Regulator(s)	2	0.00	$25.00	$50.00
				$5,840.00

Reviewed By

Date

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

22C0774

CHAIN OF CUSTODY RECORD (AIR)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825
Invoice Recipient:
Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-5_030822	03-08-22 11:39	03-08-22 11:40	--	--	IA	--	X				-29.5	-10.6	9.4	2232	7036
02	SL-13_030822	3-8-22 10:16	3-8-22 10:17	--	--	IA	--	X				-29	-5.0	4	2558	7034
03	SL-8_030822	3-8-22 12:21	3-8-22 12:22	--	--	IA	--	X						5'	2244	4012
04	VD ID - Knob fell off in box															

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 3/10/22/1330
Received by: (signature)	Date/Time: 3/11/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☑

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Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

220774

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
05	SL-4_030722	3-7-22 11:01	3-7-22 11:02	--	--	IA	--	X				-29	-6.5	21	2561	7072
06	SL-21_030722	3-7-22 10:05	3-7-22 10:06	--	--	IA	--	X				-29	-7	21	2430	7080
07	SL-18_030722	3-7-22 11:18	3-7-22 11:19	--	--	IA	--	X				-29	-6	21	2257	7052
08	SL-17_030722	3-7-22 11:35	3-7-22 11:36	--	--	IA	--	X				-29	-7.5	21	2307	7053

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
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Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time: 3/11/22 941
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace Analytical

22C0774

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records. Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply. For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	VOID - LOW PRESSURE	--	--	--	--	IA	--					-27		20.8	2521	7045
10	SL-15_030822	3/8/22 9:41	3/8/22 9:45	—	—	IA	—	X				-29	-3.5	2.9	2294	7044
11	SL-23_030922	3-9-22 1000	3-9-22 1001	—	—	IA	—	X				-29.5	-6.5	5.2	2686	5056
12	SL-14_030722	3/8/22 10:01	3/8/22 10:02	—	—	IA	—	X				-29.5	-6	5.5	2248	5062
	SL-14_030822															

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 3/10/22 1330	
Received by: (signature)	Date/Time: 3/11/22 941	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required ☐
MCP Certification Form Required
CT RCP Required ☐
RCP Certification Form Required
Other ☐

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhle ☐
Non Soxhle ☐

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Pace New England: 39 Spruce Street
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318-0053

https://www.pacelabs.com/

Doc #378 Rev 2_01122021

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

226774

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement
															Summa Can ID	Flow Controller ID
13	SL-22-030722	3/9/22 10:38	3/9/22 10:35	--	--	IA	--	X				-29.0	-6.5	-6.7	2681	5034
14	SL-11-030922	3/9/22 9:45	3/9/22 9:46	—	—	IA	—	X				-29.0	-7	-7	2677	5033
15	SL-20-030722	3/7/22 10:22	3/9/22 10:22	—	—	IA	—	X				-29.0	-6.5	-6.7	2124	7041
16	SL-19-030922	3/9/22 1020	3/9/22 1021	—	—	IA	—	X				-29.5	-5.0	-5.5	2688	7040

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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D = DUP
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O = Other_____

Relinquished by: (signature)	Date/Time: 3/10/22/1330
Received by: (signature)	Date/Time: 3/11/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhle
☐ Non Soxhle

Table of Contents

FedEx

FedEx® Tracking

270719504535

ADD NICKNAME

Delivered
Friday, March 11, 2022 at 9:41 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270719504535 (master)	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504546	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504557	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504568	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504579	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA
270719504580	Delivered	3/10/22	3/11/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By BLT Date 3/11/22 Time 941

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? N

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(11e)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	11e	1L	11e	24hr	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2232	2307	2124			7038	7053	7041		
2358	2294	2168			7034	7044	7040		
2244	2182				4012	9528			
2321	2248				7072	9062			
2630	2681				7080	9534			
2297	2677				7052	9533			
Unused Media					**Pufs/TO-17's**				
2236	(-7)	4017							
2521	(-26.8)	7045							

Comments:

Can #2236 received back without knob- note from client.

WORK ORDER

Printed: 3/14/2022 8:45:00AM

22C0774

Con-Test, a Pace Analytical Laboratory

Client:	**Arcadis US, Inc. - Novi, MI**	**Project Manager:**	**Matthew J Beaupre**
Project:	**Ford LTP WITH Level 4**	**Project Number:**	**30080642.701.04**

Reviewed By

Date

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

March 23, 2022

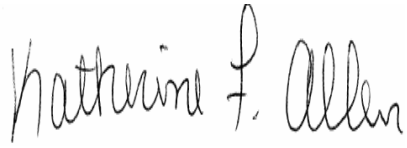
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C1262

Enclosed are results of analyses for samples as received by the laboratory on March 18, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/23/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C1262

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-14_031522	22C1262-01	Indoor air		- EPA TO-15	
SL-10_031622	22C1262-02	Indoor air		- EPA TO-15	
SL-7_031522	22C1262-03	Indoor air		- EPA TO-15	
SL-8_031522	22C1262-04	Indoor air		- EPA TO-15	
SL-5_031522	22C1262-05	Indoor air		- EPA TO-15	
MH-1231A_031722	22C1262-06	Indoor air		- EPA TO-15	
SL-3_031422	22C1262-07	Indoor air		- EPA TO-15	
DUP-02_031422	22C1262-08	Indoor air		- EPA TO-15	
SL-6_031522	22C1262-09	Indoor air		- EPA TO-15	
MH-1256_031722	22C1262-10	Indoor air		- EPA TO-15	
SL-2_031422	22C1262-11	Indoor air		- EPA TO-15	
SL-12_031622	22C1262-12	Indoor air		- EPA TO-15	
SL-15_031522	22C1262-13	Indoor air		- EPA TO-15	
MH-1244_031722	22C1262-14	Indoor air		- EPA TO-15	
SL-19_031622	22C1262-15	Indoor air		- EPA TO-15	
MH-1259_031622	22C1262-16	Indoor air		- EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

E Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

cis-1,2-Dichloroethylene, Vinyl Chloride

B303788-DUP1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-14_031522
Sample ID: 22C1262-01
Sample Matrix: Indoor air
Sampled: 3/15/2022 09:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 2639
Canister Size: 1 liter
Flow Controller ID: 5029
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 18:40	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/19/22 18:40	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 18:40	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 18:40	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 18:40	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 18:40	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/19/22 18:40	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.7	70-130	3/19/22 18:40

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-10_031622
Sample ID: 22C1262-02
Sample Matrix: Indoor air
Sampled: 3/16/2022 09:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2569
Canister Size: 1 liter
Flow Controller ID: 7043
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 19:08	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/19/22 19:08	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 19:08	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 19:08	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 19:08	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 19:08	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/19/22 19:08	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.7	70-130		3/19/22 19:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-7_031522
Sample ID: 22C1262-03
Sample Matrix: Indoor air
Sampled: 3/15/2022 11:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2645
Canister Size: 1 liter
Flow Controller ID: 5057
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 19:36	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/19/22 19:36	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 19:36	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 19:36	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 19:36	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 19:36	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/19/22 19:36	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.7	70-130		3/19/22 19:36

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-8_031522
Sample ID: 22C1262-04
Sample Matrix: Indoor air
Sampled: 3/15/2022 12:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2553
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 20:04	TPH
cis-1,2-Dichloroethylene	1.3	0.20	0.15		5.2	0.79	0.58	4	3/19/22 20:04	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 20:04	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 20:04	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 20:04	TPH
Trichloroethylene	0.16	0.20	0.13	J	0.88	1.1	0.72	4	3/19/22 20:04	TPH
Vinyl Chloride	4.0	0.20	0.18		10	0.51	0.46	4	3/19/22 20:04	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.9	70-130	3/19/22 20:04

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-5_031522
Sample ID: 22C1262-05
Sample Matrix: Indoor air
Sampled: 3/15/2022 11:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2641
Canister Size: 1 liter
Flow Controller ID: 5070
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 20:32	TPH
cis-1,2-Dichloroethylene	3.1	0.20	0.15		12	0.79	0.58	4	3/19/22 20:32	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 20:32	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 20:32	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 20:32	TPH
Trichloroethylene	0.24	0.20	0.13		1.3	1.1	0.72	4	3/19/22 20:32	TPH
Vinyl Chloride	7.2	0.20	0.18		18	0.51	0.46	4	3/19/22 20:32	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.6	70-130		3/19/22 20:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1231A_031722
Sample ID: 22C1262-06
Sample Matrix: Indoor air
Sampled: 3/17/2022 10:57

Sample Description/Location:
Sub Description/Location:
Canister ID: 2303
Canister Size: 1 liter
Flow Controller ID: 5053
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 21:01	TPH
cis-1,2-Dichloroethylene	3.8	0.20	0.15		15	0.79	0.58	4	3/19/22 21:01	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 21:01	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 21:01	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 21:01	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 21:01	TPH
Vinyl Chloride	12	0.20	0.18		30	0.51	0.46	4	3/19/22 21:01	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	93.2	70-130		3/19/22 21:01

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-3_031422
Sample ID: 22C1262-07
Sample Matrix: Indoor air
Sampled: 3/14/2022 14:04

Sample Description/Location:
Sub Description/Location:
Canister ID: 2117
Canister Size: 1 liter
Flow Controller ID: 7083
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 21:29	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/19/22 21:29	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 21:29	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 21:29	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 21:29	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 21:29	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/19/22 21:29	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.5	70-130		3/19/22 21:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: DUP-02_031422
Sample ID: 22C1262-08
Sample Matrix: Indoor air
Sampled: 3/14/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2654
Canister Size: 1 liter
Flow Controller ID: 7084
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.78	0.20	0.15		3.1	0.79	0.60	4	3/19/22 21:57	TPH
cis-1,2-Dichloroethylene	98	0.20	0.15		390	0.79	0.58	4	3/19/22 21:57	TPH
trans-1,2-Dichloroethylene	1.1	0.20	0.16		4.2	0.79	0.62	4	3/19/22 21:57	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 21:57	TPH
Tetrachloroethylene	0.23	0.20	0.15		1.5	1.4	1.0	4	3/19/22 21:57	TPH
Trichloroethylene	1.8	0.20	0.13		9.5	1.1	0.72	4	3/19/22 21:57	TPH
Vinyl Chloride	180	1.0	0.90		470	2.6	2.3	20	3/21/22 13:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.6	70-130	3/21/22 13:37
4-Bromofluorobenzene (1)	99.5	70-130	3/19/22 21:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-6_031522
Sample ID: 22C1262-09
Sample Matrix: Indoor air
Sampled: 3/15/2022 11:15

Sample Description/Location:
Sub Description/Location:
Canister ID: 2523
Canister Size: 1 liter
Flow Controller ID: 7062
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 22:25	TPH
cis-1,2-Dichloroethylene	0.57	0.20	0.15		2.3	0.79	0.58	4	3/19/22 22:25	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 22:25	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 22:25	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 22:25	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 22:25	TPH
Vinyl Chloride	0.51	0.20	0.18		1.3	0.51	0.46	4	3/19/22 22:25	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		3/19/22 22:25

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1256_031722
Sample ID: 22C1262-10
Sample Matrix: Indoor air
Sampled: 3/17/2022 10:09

Sample Description/Location:
Sub Description/Location:
Canister ID: 2311
Canister Size: 1 liter
Flow Controller ID: 7064
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.77	0.20	0.15		3.0	0.79	0.60	4	3/19/22 22:53	TPH
cis-1,2-Dichloroethylene	820	1.5	1.1		3200	5.9	4.3	30	3/21/22 14:08	BRF
trans-1,2-Dichloroethylene	0.74	0.20	0.16		2.9	0.79	0.62	4	3/19/22 22:53	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 22:53	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 22:53	TPH
Trichloroethylene	0.70	0.20	0.13		3.8	1.1	0.72	4	3/19/22 22:53	TPH
Vinyl Chloride	640	1.5	1.4		1600	3.8	3.5	30	3/21/22 14:08	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.4	70-130	3/21/22 14:08
4-Bromofluorobenzene (1)	97.1	70-130	3/19/22 22:53

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-2_031422
Sample ID: 22C1262-11
Sample Matrix: Indoor air
Sampled: 3/14/2022 14:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2520
Canister Size: 1 liter
Flow Controller ID: 5025
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 23:22	TPH
cis-1,2-Dichloroethylene	3.3	0.20	0.15		13	0.79	0.58	4	3/19/22 23:22	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 23:22	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 23:22	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 23:22	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 23:22	TPH
Vinyl Chloride	3.7	0.20	0.18		9.5	0.51	0.46	4	3/19/22 23:22	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.4	70-130		3/19/22 23:22

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-12_031622
Sample ID: 22C1262-12
Sample Matrix: Indoor air
Sampled: 3/16/2022 10:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2623
Canister Size: 1 liter
Flow Controller ID: 5020
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/19/22 23:50	TPH
cis-1,2-Dichloroethylene	4.1	0.20	0.15		16	0.79	0.58	4	3/19/22 23:50	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/19/22 23:50	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/19/22 23:50	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/19/22 23:50	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/19/22 23:50	TPH
Vinyl Chloride	4.2	0.20	0.18		11	0.51	0.46	4	3/19/22 23:50	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.7	70-130		3/19/22 23:50

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-15_031522
Sample ID: 22C1262-13
Sample Matrix: Indoor air
Sampled: 3/15/2022 09:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2529
Canister Size: 1 liter
Flow Controller ID: 7046
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/20/22 0:18	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/20/22 0:18	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/20/22 0:18	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/20/22 0:18	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/20/22 0:18	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/20/22 0:18	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/20/22 0:18	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.6	70-130		3/20/22 0:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1244_031722
Sample ID: 22C1262-14
Sample Matrix: Indoor air
Sampled: 3/17/2022 10:38

Sample Description/Location:
Sub Description/Location:
Canister ID: 2542
Canister Size: 1 liter
Flow Controller ID: 7050
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/20/22 0:46	TPH
cis-1,2-Dichloroethylene	0.33	0.20	0.15		1.3	0.79	0.58	4	3/20/22 0:46	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/20/22 0:46	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/20/22 0:46	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/20/22 0:46	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/20/22 0:46	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/20/22 0:46	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		3/20/22 0:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-19_031622
Sample ID: 22C1262-15
Sample Matrix: Indoor air
Sampled: 3/16/2022 10:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2252
Canister Size: 1 liter
Flow Controller ID: 7079
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/20/22 1:14	TPH
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/20/22 1:14	TPH
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/20/22 1:14	TPH
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/20/22 1:14	TPH
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/20/22 1:14	TPH
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/20/22 1:14	TPH
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/20/22 1:14	TPH

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		3/20/22 1:14

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1259_031622
Sample ID: 22C1262-16
Sample Matrix: Indoor air
Sampled: 3/16/2022 11:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 2114
Canister Size: 1 liter
Flow Controller ID: 7075
Sample Type: Grab

Work Order: 22C1262
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	13	0.20	0.15		52	0.79	0.60	4	3/20/22 1:42	TPH
cis-1,2-Dichloroethylene	570	15	11		2300	59	43	300	3/21/22 14:40	BRF
trans-1,2-Dichloroethylene	10	0.20	0.16		40	0.79	0.62	4	3/20/22 1:42	TPH
1,4-Dioxane	1.3	2.0	0.17	J	4.7	7.2	0.60	4	3/20/22 1:42	TPH
Tetrachloroethylene	1.2	0.20	0.15		8.2	1.4	1.0	4	3/20/22 1:42	TPH
Trichloroethylene	14	0.20	0.13		78	1.1	0.72	4	3/20/22 1:42	TPH
Vinyl Chloride	2300	15	14		5800	38	35	300	3/21/22 14:40	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.9	70-130	3/20/22 1:42
4-Bromofluorobenzene (1)	96.8	70-130	3/21/22 14:40

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1262-01 [SL-14_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-02 [SL-10_031622]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-03 [SL-7_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-04 [SL-8_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-05 [SL-5_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-06 [MH-1231A_031722]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-07 [SL-3_031422]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-08 [DUP-02_031422]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-09 [SL-6_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-10 [MH-1256_031722]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-11 [SL-2_031422]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-12 [SL-12_031622]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-13 [SL-15_031522]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-14 [MH-1244_031722]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-15 [SL-19_031622]	B303788	1.5	1	N/A	1000	200	75	03/19/22
22C1262-16 [MH-1259_031622]	B303788	1.5	1	N/A	1000	200	75	03/19/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1262-08RE1 [DUP-02_031422]	B303825	1.5	1	N/A	1000	200	15	03/21/22
22C1262-10RE1 [MH-1256_031722]	B303825	1.5	1	N/A	1000	200	10	03/21/22
22C1262-16RE1 [MH-1259_031622]	B303825	1.5	100	10	1000	200	100	03/21/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303788 - TO-15 Prep											
Blank (B303788-BLK1)					Prepared & Analyzed: 03/19/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.92*				*8.00*		*99.0*	*70-130*			
LCS (B303788-BS1)					Prepared & Analyzed: 03/19/22						
1,1-Dichloroethylene	5.11				5.00		102	70-130			
cis-1,2-Dichloroethylene	5.16				5.00		103	70-130			
trans-1,2-Dichloroethylene	5.15				5.00		103	70-130			
1,4-Dioxane	5.80				5.00		116	70-130			
Tetrachloroethylene	4.93				5.00		98.6	70-130			
Trichloroethylene	4.94				5.00		98.8	70-130			
Vinyl Chloride	5.19				5.00		104	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.31*				*8.00*		*104*	*70-130*			
Duplicate (B303788-DUP1)		**Source: 22C1262-16**			Prepared: 03/19/22 Analyzed: 03/20/22						
1,1-Dichloroethylene	13	0.20	53	0.79		13			2.39	25	
cis-1,2-Dichloroethylene	710	0.20	2800	0.79		700			0.968	25	E
trans-1,2-Dichloroethylene	10	0.20	40	0.79		10			0.119	25	
1,4-Dioxane	1.3	2.0	4.7	7.2		1.3			0.612	25	J
Tetrachloroethylene	1.2	0.20	8.1	1.4		1.2			1.00	25	
Trichloroethylene	14	0.20	77	1.1		14			1.31	25	
Vinyl Chloride	2400	0.20	6100	0.51		2300			0.910	25	E
Surrogate: 4-Bromofluorobenzene (1)	*7.91*				*8.00*		*98.9*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303825 - TO-15 Prep											
Blank (B303825-BLK1)					Prepared & Analyzed: 03/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.92*				*8.00*		*99.0*	*70-130*			
LCS (B303825-BS1)					Prepared & Analyzed: 03/21/22						
1,1-Dichloroethylene	5.00				5.00		100	70-130			
cis-1,2-Dichloroethylene	5.07				5.00		101	70-130			
trans-1,2-Dichloroethylene	4.96				5.00		99.2	70-130			
1,4-Dioxane	5.55				5.00		111	70-130			
Tetrachloroethylene	4.81				5.00		96.3	70-130			
Trichloroethylene	4.83				5.00		96.7	70-130			
Vinyl Chloride	5.09				5.00		102	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.21*				*8.00*		*103*	*70-130*			
Duplicate (B303825-DUP1)			**Source: 22C1262-16RE1**		Prepared & Analyzed: 03/21/22						
1,1-Dichloroethylene	ND	15	ND	59		ND				25	
cis-1,2-Dichloroethylene	550	15	2200	59		570			3.46	25	
trans-1,2-Dichloroethylene	ND	15	ND	59		ND				25	
1,4-Dioxane	ND	150	ND	540		ND				25	
Tetrachloroethylene	ND	15	ND	100		ND				25	
Trichloroethylene	14	15	77	81		13			13.3	25	J
Vinyl Chloride	2200	15	5700	38		2300			1.54	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.80*				*8.00*		*97.5*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
E	Reported result is estimated. Value reported over verified calibration range.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RLF	Rebecca Faust
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	104138	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	315817	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	233658	5.159	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069458-CCV1)			Lab File ID: K22A078004.D			Analyzed: 03/19/22 12:39			
Bromochloromethane (1)	100892	2.992	100892	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	308015	3.584	308015	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	226947	5.159	226947	5.159	100	60 - 140	0.0000	+/-0.50	
LCS (B303788-BS1)			Lab File ID: K22A078005.D			Analyzed: 03/19/22 13:08			
Bromochloromethane (1)	100560	2.992	100892	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	304987	3.584	308015	3.584	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	227084	5.159	226947	5.159	100	60 - 140	0.0000	+/-0.50	
Blank (B303788-BLK1)			Lab File ID: K22A078008.D			Analyzed: 03/19/22 14:49			
Bromochloromethane (1)	98579	2.992	100892	2.992	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	286105	3.584	308015	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	218033	5.164	226947	5.159	96	60 - 140	0.0050	+/-0.50	
SL-14_031522 (22C1262-01)			Lab File ID: K22A078015.D			Analyzed: 03/19/22 18:40			
Bromochloromethane (1)	94777	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	275467	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	208963	5.163	226947	5.159	92	60 - 140	0.0040	+/-0.50	
SL-10_031622 (22C1262-02)			Lab File ID: K22A078016.D			Analyzed: 03/19/22 19:08			
Bromochloromethane (1)	94526	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	273657	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	206087	5.164	226947	5.159	91	60 - 140	0.0050	+/-0.50	
SL-7_031522 (22C1262-03)			Lab File ID: K22A078017.D			Analyzed: 03/19/22 19:36			
Bromochloromethane (1)	95731	2.996	100892	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	285046	3.588	308015	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	210655	5.163	226947	5.159	93	60 - 140	0.0040	+/-0.50	
SL-8_031522 (22C1262-04)			Lab File ID: K22A078018.D			Analyzed: 03/19/22 20:04			
Bromochloromethane (1)	95417	2.996	100892	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	272199	3.588	308015	3.584	88	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	209531	5.163	226947	5.159	92	60 - 140	0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-5_031522 (22C1262-05)			Lab File ID: K22A078019.D			Analyzed: 03/19/22 20:32			
Bromochloromethane (1)	97036	2.996	100892	2.992	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	281674	3.588	308015	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	212152	5.164	226947	5.159	93	60 - 140	0.0050	+/-0.50	
MH-1231A_031722 (22C1262-06)			Lab File ID: K22A078020.D			Analyzed: 03/19/22 21:01			
Bromochloromethane (1)	95062	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	272518	3.588	308015	3.584	88	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	215869	5.164	226947	5.159	95	60 - 140	0.0050	+/-0.50	
SL-3_031422 (22C1262-07)			Lab File ID: K22A078021.D			Analyzed: 03/19/22 21:29			
Bromochloromethane (1)	94790	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	275270	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	211584	5.164	226947	5.159	93	60 - 140	0.0050	+/-0.50	
DUP-02_031422 (22C1262-08)			Lab File ID: K22A078022.D			Analyzed: 03/19/22 21:57			
Bromochloromethane (1)	93608	2.991	100892	2.992	93	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	272704	3.584	308015	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	206602	5.163	226947	5.159	91	60 - 140	0.0040	+/-0.50	
SL-6_031522 (22C1262-09)			Lab File ID: K22A078023.D			Analyzed: 03/19/22 22:25			
Bromochloromethane (1)	95389	2.996	100892	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	275482	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	210140	5.164	226947	5.159	93	60 - 140	0.0050	+/-0.50	
MH-1256_031722 (22C1262-10)			Lab File ID: K22A078024.D			Analyzed: 03/19/22 22:53			
Bromochloromethane (1)	94396	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	278458	3.589	308015	3.584	90	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	213562	5.164	226947	5.159	94	60 - 140	0.0050	+/-0.50	
SL-2_031422 (22C1262-11)			Lab File ID: K22A078025.D			Analyzed: 03/19/22 23:22			
Bromochloromethane (1)	94811	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	274869	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	210103	5.164	226947	5.159	93	60 - 140	0.0050	+/-0.50	
SL-12_031622 (22C1262-12)			Lab File ID: K22A078026.D			Analyzed: 03/19/22 23:50			
Bromochloromethane (1)	95153	3.001	100892	2.992	94	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	268850	3.588	308015	3.584	87	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	207040	5.164	226947	5.159	91	60 - 140	0.0050	+/-0.50	
SL-15_031522 (22C1262-13)			Lab File ID: K22A078027.D			Analyzed: 03/20/22 00:18			
Bromochloromethane (1)	93868	2.996	100892	2.992	93	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	269972	3.588	308015	3.584	88	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	208996	5.164	226947	5.159	92	60 - 140	0.0050	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1244_031722 (22C1262-14)			Lab File ID: K22A078028.D			Analyzed: 03/20/22 00:46			
Bromochloromethane (1)	93199	2.996	100892	2.992	92	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	273675	3.588	308015	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	207974	5.163	226947	5.159	92	60 - 140	0.0040	+/-0.50	
SL-19_031622 (22C1262-15)			Lab File ID: K22A078029.D			Analyzed: 03/20/22 01:14			
Bromochloromethane (1)	92683	2.992	100892	2.992	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	267118	3.584	308015	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	200373	5.163	226947	5.159	88	60 - 140	0.0040	+/-0.50	
MH-1259_031622 (22C1262-16)			Lab File ID: K22A078030.D			Analyzed: 03/20/22 01:42			
Bromochloromethane (1)	95242	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	275726	3.588	308015	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	211855	5.164	226947	5.159	93	60 - 140	0.0050	+/-0.50	
Duplicate (B303788-DUP1)			Lab File ID: K22A078031.D			Analyzed: 03/20/22 02:12			
Bromochloromethane (1)	94792	2.996	100892	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	279519	3.588	308015	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	211258	5.163	226947	5.159	93	60 - 140	0.0040	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069491-CCV1)			Lab File ID: K22A080004.D			Analyzed: 03/21/22 10:10			
Bromochloromethane (1)	104003	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	321406	3.584	321406	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	239279	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
LCS (B303825-BS1)			Lab File ID: K22A080005.D			Analyzed: 03/21/22 10:42			
Bromochloromethane (1)	104834	2.987	104003	2.992	101	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	328954	3.584	321406	3.584	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	244668	5.159	239279	5.159	102	60 - 140	0.0000	+/-0.50	
Blank (B303825-BLK1)			Lab File ID: K22A080008.D			Analyzed: 03/21/22 12:29			
Bromochloromethane (1)	108984	2.987	104003	2.992	105	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	329427	3.584	321406	3.584	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	240390	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
DUP-02_031422 (22C1262-08RE1)			Lab File ID: K22A080010.D			Analyzed: 03/21/22 13:37			
Bromochloromethane (1)	101841	2.987	104003	2.992	98	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	304780	3.584	321406	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	221271	5.159	239279	5.159	92	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1256_031722 (22C1262-10RE1)			Lab File ID: K22A080011.D			Analyzed: 03/21/22 14:08			
Bromochloromethane (1)	100502	2.992	104003	2.992	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	299813	3.584	321406	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	217818	5.159	239279	5.159	91	60 - 140	0.0000	+/-0.50	
MH-1259_031622 (22C1262-16RE1)			Lab File ID: K22A080012.D			Analyzed: 03/21/22 14:40			
Bromochloromethane (1)	106068	2.992	104003	2.992	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	316953	3.584	321406	3.584	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	234827	5.159	239279	5.159	98	60 - 140	0.0000	+/-0.50	
Duplicate (B303825-DUP1)			Lab File ID: K22A080013.D			Analyzed: 03/21/22 15:10			
Bromochloromethane (1)	106214	2.987	104003	2.992	102	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	316228	3.584	321406	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	234665	5.159	239279	5.159	98	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069458-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.09	1.024961	1.044475		1.9	30
cis-1,2-Dichloroethylene	A	5.00	5.17	0.8170638	0.8452444		3.4	30
trans-1,2-Dichloroethylene	A	5.00	5.20	0.8261855	0.8594854		4.0	30
1,4-Dioxane	A	5.00	5.38	0.1250488	0.1346895		7.7	30
Tetrachloroethylene	A	5.00	5.12	0.4025846	0.4118036		2.3	30
Trichloroethylene	A	5.00	5.13	0.2665469	0.2738412		2.7	30
Vinyl Chloride	A	5.00	5.23	0.669766	0.7006462		4.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069491-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.10	1.024961	1.045524		2.0	30
cis-1,2-Dichloroethylene	A	5.00	5.28	0.8170638	0.8625751		5.6	30
trans-1,2-Dichloroethylene	A	5.00	5.06	0.8261855	0.8368528		1.3	30
1,4-Dioxane	A	5.00	5.36	0.1250488	0.1342501		7.4	30
Tetrachloroethylene	A	5.00	5.11	0.4025846	0.4112689		2.2	30
Trichloroethylene	A	5.00	5.06	0.2665469	0.2698742		1.2	30
Vinyl Chloride	A	5.00	5.16	0.669766	0.6919647		3.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22C1262

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
01	SL-14_031522	3/15/22 9:52	3/15/22 9:53	--	--	IA	--	X				29.5	7	7.3	2639	5029
02	SL-10_031622	3/16/22 9:07	3/16/22 9:08	—	—	IA	—	X				29.5	8	7.4	2569	7043
03	SL-7_031522	3/15/22 11:01	3/15/22 11:02	—	—	IA	—	X				29.5	6	5.5	2645	5057
	~~SL-8_031522~~	3/15/22 12:51	3/15/22 12:52			IA	—	X				29.5	6			
04	SL-8_031522	3/15/22 12:51	3/15/22 12:52	—	—	IA	—	X				29	7.5	7.3	2553	7047

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Samantha Hindle	Date/Time: 3/17/22 15:00	
Received by: (signature)	Date/Time: 3/18/22 9:26	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

MA MCP Required

MCP Certification Form Required

CT RCP Required

RCP Certification Form Required

Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

22C0262

Pace New England: 39 Spruce Street
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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-5_031522	3/15/22 11:30	3/15/22 11:31	--	--	IA	--	X				29.5	5	10.1	2641	5070
06	MH-123A_031722	3/17/22 10:56	3/17/22 10:57	—	—	IA	—	X				29.5	4.5	5.3	2303	5053
07	SL-3_031422	3/14/22 14:03	3/14/22 14:04	—	—	IA	—	X				29	5	10.7	2117	7083
08	DUP-02_031422	3/14/22	3/14/22	—	—	IA	—	X				29	5	7	2654	7084

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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O = Other_____

Relinquished by: (signature) Samantha Hindle	Date/Time: 3/17/22 1500	
Received by: (signature)	Date/Time: 3/18/22 9:26	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

22C1262

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413) 318-0053

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

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Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-6_031522	3-15-22 11:14	3-15-22 11:15	--	--	IA	--	X				-29.5	-7.5	21	2523	7062
10	MH-1256_031722	3-17-22 10:08	3-17-22 10:09	-	-	IA	-	X				-29.5	-4.0	4.0	2311	7064
11	SL-2_031422	3-14-22 1420	3-14-22 14:21	-	-	IA	-	X				-29.0	-6.0	14	2520	5025
12	SL-12_031622	3-16-22 09:59	3-16-22 10:00	-	-	IA	-	X				-29.0	-7.0	14	2623	5020

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Samantha Hindle	Date/Time: 3/17/22 1500	
Received by: (signature)	Date/Time: 3/18/22 926	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

MA MCP Required

MCP Certification Form Required

CT RCP Required

RCP Certification Form Required

Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

Government ☐ Municipality ☐ MWRA ☐ WRTA ☐

Federal ☐ 21 J ☐ School ☐

City ☐ Brownfield ☐ MBTA ☐

Other

Chromatogram ☐

AIHA-LAP,LLC ☐

PCB ONLY

Soxhlet ☐

Non Soxhlet ☐

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

22C1262

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
13	SL-15_031522	3-15-22 9:39	3-15-22 9:40	--	--	IA	--	X				-29.5	-5.5	4.4			2529	7046
14	MH-1244-031722	3-17-22 10:37	3-17-22 10:38	-	-	IA	-	X				-30.	-6.0	6.3			2542	7050
15	SL-19_031622	3-16-22 10:10	3-16-22 10:11	-	-	IA	-	X				-30.	-6.5	5.9			2252	7079
16	MH-1259_031622	3-16-22 11:33	3-16-22 11:34	-	-	IA	-	X				-29.5	-7.0	6.3			2114	7075

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:	3/17/22 15:00
Received by: (signature)	Date/Time:	3/18/22 920
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

FedEx

FedEx® Tracking

270985866674

ADD NICKNAME

Delivered
Friday, March 18, 2022 at 9:26 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: C.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

TO

East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270985866674 (master)	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866685	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866696	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866700	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866711	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866722	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 3/18/22 Time 926

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (11e)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	11e	1L	11e	9rab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2659	2117	2579			5009	7083	7046		
2569	2654	2512			7043	7084	7030		
2645	2573	2752			5057	7062	7079		
2553	2311	2114			7047	7064	7075		
2641	2520				5070	5025			
2303	2023				5053	5020			
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** 22K067009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2114/BC7075

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2252/BC7079

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2542/BC7050

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2529/BC7046

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2623/BC5020

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2520/BC5025

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2311/BC7064

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2523/BC7062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2654/BC7084

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2117/BC7083

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/7/2022 **Batch #:** K22A066015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2303/BC5053

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2641/BC5070

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2553/BC7047

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2645/BC5057

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2569/BC7043

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2639/BC5029

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: TPH 3/22/22

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

March 23, 2022

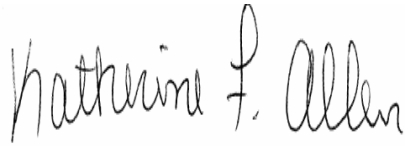
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C1271

Enclosed are results of analyses for samples as received by the laboratory on March 18, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/23/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C1271

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-9_031522	22C1271-01	Indoor air		- EPA TO-15	
MH-1231_031422	22C1271-02	Indoor air		- EPA TO-15	
SL-4_031422	22C1271-03	Indoor air		- EPA TO-15	
SL-23_031622	22C1271-04	Indoor air		- EPA TO-15	
SL-17_031422	22C1271-05	Indoor air		- EPA TO-15	
SL-22_031422	22C1271-06	Indoor air		- EPA TO-15	
DUP-01_031422	22C1271-07	Indoor air		- EPA TO-15	
SL-20_031422	22C1271-08	Indoor air		- EPA TO-15	
SL-11_031622	22C1271-09	Indoor air		- EPA TO-15	
SL-13_031522	22C1271-10	Indoor air		- EPA TO-15	
SL-21_031422	22C1271-11	Indoor air		- EPA TO-15	
SL-18_031422	22C1271-12	Indoor air		- EPA TO-15	
MH-1255_031722	22C1271-13	Indoor air		- EPA TO-15	
SL-16_031422	22C1271-14	Indoor air		- EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-9_031522
Sample ID: 22C1271-01
Sample Matrix: Indoor air
Sampled: 3/15/2022 13:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2300
Canister Size: 1 liter
Flow Controller ID: 7055
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 16:54	BRF
cis-1,2-Dichloroethylene	2.4	0.20	0.15		9.7	0.79	0.58	4	3/21/22 16:54	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 16:54	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 16:54	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 16:54	BRF
Trichloroethylene	0.25	0.20	0.13		1.3	1.1	0.72	4	3/21/22 16:54	BRF
Vinyl Chloride	9.6	0.20	0.18		25	0.51	0.46	4	3/21/22 16:54	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.2	70-130	3/21/22 16:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1231_031422
Sample ID: 22C1271-02
Sample Matrix: Indoor air
Sampled: 3/14/2022 14:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2524
Canister Size: 1 liter
Flow Controller ID: 7056
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.68	0.20	0.15		2.7	0.79	0.60	4	3/21/22 17:24	BRF
cis-1,2-Dichloroethylene	75	0.20	0.15		300	0.79	0.58	4	3/21/22 17:24	BRF
trans-1,2-Dichloroethylene	0.88	0.20	0.16		3.5	0.79	0.62	4	3/21/22 17:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 17:24	BRF
Tetrachloroethylene	0.18	0.20	0.15	J	1.2	1.4	1.0	4	3/21/22 17:24	BRF
Trichloroethylene	1.3	0.20	0.13		7.1	1.1	0.72	4	3/21/22 17:24	BRF
Vinyl Chloride	160	0.20	0.18		410	0.51	0.46	4	3/21/22 17:24	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		3/21/22 17:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-4_031422
Sample ID: 22C1271-03
Sample Matrix: Indoor air
Sampled: 3/14/2022 11:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2671
Canister Size: 1 liter
Flow Controller ID: 5054
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 17:55	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 17:55	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 17:55	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 17:55	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 17:55	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 17:55	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 17:55	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.8	70-130		3/21/22 17:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-23_031622
Sample ID: 22C1271-04
Sample Matrix: Indoor air
Sampled: 3/16/2022 09:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2517
Canister Size: 1 liter
Flow Controller ID: 5008
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 18:25	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 18:25	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 18:25	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 18:25	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 18:25	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 18:25	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 18:25	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.3	70-130		3/21/22 18:25

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-17_031422
Sample ID: 22C1271-05
Sample Matrix: Indoor air
Sampled: 3/14/2022 13:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2656
Canister Size: 1 liter
Flow Controller ID: 7076
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 18:55	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 18:55	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 18:55	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 18:55	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 18:55	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 18:55	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 18:55	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		3/21/22 18:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-22_031422
Sample ID: 22C1271-06
Sample Matrix: Indoor air
Sampled: 3/14/2022 10:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2325
Canister Size: 1 liter
Flow Controller ID: 7078
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 19:26	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 19:26	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 19:26	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 19:26	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 19:26	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 19:26	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 19:26	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.6	70-130		3/21/22 19:26

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: DUP-01_031422
Sample ID: 22C1271-07
Sample Matrix: Indoor air
Sampled: 3/14/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2626
Canister Size: 1 liter
Flow Controller ID: 7032
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -3.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 19:56	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 19:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 19:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 19:56	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 19:56	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 19:56	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 19:56	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.6	70-130		3/21/22 19:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-20_031422
Sample ID: 22C1271-08
Sample Matrix: Indoor air
Sampled: 3/14/2022 10:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2344
Canister Size: 1 liter
Flow Controller ID: 5028
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 20:27	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 20:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 20:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 20:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 20:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 20:27	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 20:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.5	70-130		3/21/22 20:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-11_031622
Sample ID: 22C1271-09
Sample Matrix: Indoor air
Sampled: 3/16/2022 09:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2674
Canister Size: 1 liter
Flow Controller ID: 5050
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 20:57	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 20:57	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 20:57	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 20:57	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 20:57	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 20:57	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 20:57	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.0	70-130		3/21/22 20:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-13_031522
Sample ID: 22C1271-10
Sample Matrix: Indoor air
Sampled: 3/15/2022 10:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2538
Canister Size: 1 liter
Flow Controller ID: 5051
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 21:27	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 21:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 21:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 21:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 21:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 21:27	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 21:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.7	70-130		3/21/22 21:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-21_031422
Sample ID: 22C1271-11
Sample Matrix: Indoor air
Sampled: 3/14/2022 10:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2673
Canister Size: 1 liter
Flow Controller ID: 7051
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 21:57	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/21/22 21:57	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 21:57	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 21:57	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 21:57	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 21:57	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/21/22 21:57	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.3	70-130		3/21/22 21:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-18_031422
Sample ID: 22C1271-12
Sample Matrix: Indoor air
Sampled: 3/14/2022 11:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2240
Canister Size: 1 liter
Flow Controller ID: 7042
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 22:27	BRF
cis-1,2-Dichloroethylene	0.37	0.20	0.15		1.5	0.79	0.58	4	3/21/22 22:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/21/22 22:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 22:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 22:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/21/22 22:27	BRF
Vinyl Chloride	1.1	0.20	0.18		2.9	0.51	0.46	4	3/21/22 22:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		3/21/22 22:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: MH-1255_031722
Sample ID: 22C1271-13
Sample Matrix: Indoor air
Sampled: 3/17/2022 09:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2551
Canister Size: 1 liter
Flow Controller ID: 7054
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.3	0.20	0.15		5.1	0.79	0.60	4	3/21/22 22:58	BRF
cis-1,2-Dichloroethylene	75	0.20	0.15		300	0.79	0.58	4	3/21/22 22:58	BRF
trans-1,2-Dichloroethylene	1.2	0.20	0.16		4.9	0.79	0.62	4	3/21/22 22:58	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 22:58	BRF
Tetrachloroethylene	0.22	0.20	0.15		1.5	1.4	1.0	4	3/21/22 22:58	BRF
Trichloroethylene	1.7	0.20	0.13		9.2	1.1	0.72	4	3/21/22 22:58	BRF
Vinyl Chloride	320	1.0	0.90		820	2.6	2.3	20	3/22/22 7:17	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.8	70-130	3/22/22 7:17
4-Bromofluorobenzene (1)	100	70-130	3/21/22 22:58

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/18/2022
Field Sample #: SL-16_031422
Sample ID: 22C1271-14
Sample Matrix: Indoor air
Sampled: 3/14/2022 13:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2348
Canister Size: 1 liter
Flow Controller ID: 7088
Sample Type: Grab

Work Order: 22C1271
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/21/22 23:28	BRF
cis-1,2-Dichloroethylene	29	0.20	0.15		120	0.79	0.58	4	3/21/22 23:28	BRF
trans-1,2-Dichloroethylene	0.38	0.20	0.16		1.5	0.79	0.62	4	3/21/22 23:28	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/21/22 23:28	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/21/22 23:28	BRF
Trichloroethylene	1.5	0.20	0.13		8.3	1.1	0.72	4	3/21/22 23:28	BRF
Vinyl Chloride	30	0.20	0.18		77	0.51	0.46	4	3/21/22 23:28	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.0	70-130		3/21/22 23:28

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1271-01 [SL-9_031522]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-02 [MH-1231_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-03 [SL-4_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-04 [SL-23_031622]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-05 [SL-17_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-06 [SL-22_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-07 [DUP-01_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-08 [SL-20_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-09 [SL-11_031622]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-10 [SL-13_031522]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-11 [SL-21_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-12 [SL-18_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-13 [MH-1255_031722]	B303825	1.5	1	N/A	1000	200	75	03/21/22
22C1271-14 [SL-16_031422]	B303825	1.5	1	N/A	1000	200	75	03/21/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1271-13RE1 [MH-1255_031722]	B303830	1.5	1	N/A	1000	200	15	03/21/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303825 - TO-15 Prep											
Blank (B303825-BLK1)					Prepared & Analyzed: 03/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.92*				*8.00*		*99.0*	*70-130*			
LCS (B303825-BS1)					Prepared & Analyzed: 03/21/22						
1,1-Dichloroethylene	5.00				5.00		100	70-130			
cis-1,2-Dichloroethylene	5.07				5.00		101	70-130			
trans-1,2-Dichloroethylene	4.96				5.00		99.2	70-130			
1,4-Dioxane	5.55				5.00		111	70-130			
Tetrachloroethylene	4.81				5.00		96.3	70-130			
Trichloroethylene	4.83				5.00		96.7	70-130			
Vinyl Chloride	5.09				5.00		102	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.21*				*8.00*		*103*	*70-130*			
Batch B303830 - TO-15 Prep											
Blank (B303830-BLK1)					Prepared: 03/21/22 Analyzed: 03/22/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.63*				*8.00*		*95.4*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303830 - TO-15 Prep											
LCS (B303830-BS1)					Prepared: 03/21/22 Analyzed: 03/22/22						
1,1-Dichloroethylene	4.96				5.00		99.1	70-130			
cis-1,2-Dichloroethylene	4.93				5.00		98.6	70-130			
trans-1,2-Dichloroethylene	4.99				5.00		99.8	70-130			
1,4-Dioxane	5.24				5.00		105	70-130			
Tetrachloroethylene	4.66				5.00		93.3	70-130			
Trichloroethylene	4.64				5.00		92.7	70-130			
Vinyl Chloride	5.02				5.00		100	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.12*				*8.00*		*101*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RLF	Rebecca Faust
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	104138	2.987	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	315817	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	233658	5.159	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069491-CCV1)			Lab File ID: K22A080004.D			Analyzed: 03/21/22 10:10			
Bromochloromethane (1)	104003	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	321406	3.584	321406	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	239279	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
LCS (B303825-BS1)			Lab File ID: K22A080005.D			Analyzed: 03/21/22 10:42			
Bromochloromethane (1)	104834	2.987	104003	2.992	101	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	328954	3.584	321406	3.584	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	244668	5.159	239279	5.159	102	60 - 140	0.0000	+/-0.50	
Blank (B303825-BLK1)			Lab File ID: K22A080008.D			Analyzed: 03/21/22 12:29			
Bromochloromethane (1)	108984	2.987	104003	2.992	105	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	329427	3.584	321406	3.584	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	240390	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
SL-9_031522 (22C1271-01)			Lab File ID: K22A080016.D			Analyzed: 03/21/22 16:54			
Bromochloromethane (1)	106067	2.996	104003	2.992	102	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	313593	3.584	321406	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	244053	5.159	239279	5.159	102	60 - 140	0.0000	+/-0.50	
MH-1231_031422 (22C1271-02)			Lab File ID: K22A080017.D			Analyzed: 03/21/22 17:24			
Bromochloromethane (1)	103538	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	312968	3.584	321406	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	232913	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-4_031422 (22C1271-03)			Lab File ID: K22A080018.D			Analyzed: 03/21/22 17:55			
Bromochloromethane (1)	108923	2.992	104003	2.992	105	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	323795	3.584	321406	3.584	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	239962	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
SL-23_031622 (22C1271-04)			Lab File ID: K22A080019.D			Analyzed: 03/21/22 18:25			
Bromochloromethane (1)	103432	2.992	104003	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	309488	3.584	321406	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	232941	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-17_031422 (22C1271-05)			Lab File ID: K22A080020.D			Analyzed: 03/21/22 18:55			
Bromochloromethane (1)	103919	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	310785	3.584	321406	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	231445	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-22_031422 (22C1271-06)			Lab File ID: K22A080021.D			Analyzed: 03/21/22 19:26			
Bromochloromethane (1)	103459	2.992	104003	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	311824	3.584	321406	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	237922	5.159	239279	5.159	99	60 - 140	0.0000	+/-0.50	
DUP-01_031422 (22C1271-07)			Lab File ID: K22A080022.D			Analyzed: 03/21/22 19:56			
Bromochloromethane (1)	104279	2.996	104003	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	311200	3.588	321406	3.584	97	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	231989	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-20_031422 (22C1271-08)			Lab File ID: K22A080023.D			Analyzed: 03/21/22 20:27			
Bromochloromethane (1)	101700	2.992	104003	2.992	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	301432	3.584	321406	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	231918	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-11_031622 (22C1271-09)			Lab File ID: K22A080024.D			Analyzed: 03/21/22 20:57			
Bromochloromethane (1)	103528	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	317383	3.584	321406	3.584	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	231599	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-13_031522 (22C1271-10)			Lab File ID: K22A080025.D			Analyzed: 03/21/22 21:27			
Bromochloromethane (1)	103324	2.992	104003	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	309267	3.584	321406	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	232787	5.159	239279	5.159	97	60 - 140	0.0000	+/-0.50	
SL-21_031422 (22C1271-11)			Lab File ID: K22A080026.D			Analyzed: 03/21/22 21:57			
Bromochloromethane (1)	101747	2.992	104003	2.992	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	302521	3.584	321406	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	225656	5.159	239279	5.159	94	60 - 140	0.0000	+/-0.50	
SL-18_031422 (22C1271-12)			Lab File ID: K22A080027.D			Analyzed: 03/21/22 22:27			
Bromochloromethane (1)	101687	2.987	104003	2.992	98	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	303890	3.584	321406	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	230173	5.159	239279	5.159	96	60 - 140	0.0000	+/-0.50	
MH-1255_031722 (22C1271-13)			Lab File ID: K22A080028.D			Analyzed: 03/21/22 22:58			
Bromochloromethane (1)	103232	2.992	104003	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	307915	3.584	321406	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	230131	5.159	239279	5.159	96	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-16_031422 (22C1271-14)			Lab File ID: K22A080029.D			Analyzed: 03/21/22 23:28			
Bromochloromethane (1)	103109	2.992	104003	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	306030	3.584	321406	3.584	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	233388	5.159	239279	5.159	98	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069492-CCV1)			Lab File ID: K22A080004.D			Analyzed: 03/21/22 10:10			
Bromochloromethane (1)	104003	2.992	104003	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	321406	3.584	321406	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	239279	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
LCS (B303830-BS1)			Lab File ID: K22A080031.D			Analyzed: 03/22/22 00:30			
Bromochloromethane (1)	104853	2.992	104003	2.992	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	329059	3.584	321406	3.584	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	242934	5.159	239279	5.159	102	60 - 140	0.0000	+/-0.50	
Blank (B303830-BLK1)			Lab File ID: K22A080034.D			Analyzed: 03/22/22 02:17			
Bromochloromethane (1)	106496	2.992	104003	2.992	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315882	3.584	321406	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	238679	5.159	239279	5.159	100	60 - 140	0.0000	+/-0.50	
MH-1255_031722 (22C1271-13RE1)			Lab File ID: K22A080041.D			Analyzed: 03/22/22 07:17			
Bromochloromethane (1)	100872	2.992	104003	2.992	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	303186	3.584	321406	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	228793	5.159	239279	5.159	96	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069491-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.10	1.024961	1.045524		2.0	30
cis-1,2-Dichloroethylene	A	5.00	5.28	0.8170638	0.8625751		5.6	30
trans-1,2-Dichloroethylene	A	5.00	5.06	0.8261855	0.8368528		1.3	30
1,4-Dioxane	A	5.00	5.36	0.1250488	0.1342501		7.4	30
Tetrachloroethylene	A	5.00	5.11	0.4025846	0.4112689		2.2	30
Trichloroethylene	A	5.00	5.06	0.2665469	0.2698742		1.2	30
Vinyl Chloride	A	5.00	5.16	0.669766	0.6919647		3.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S069492-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Vinyl Chloride	A	5.00	5.16	0.669766	0.6919647		3.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22C1271

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
01	SL-9_031522	3-15-22 13:15	3-15-22 13:16	--	--	IA	--	X				-29.0	-6.0	-5.5	2300	7055
02	MH-1231-031422	3-14-22 14:45	3-14-22 14:46	-	-	IA	-	X				-29.0	-7.0	-7.0	2524	7056
03	SL-4_031422	3-14-22 11:10	3-14-22 11:11	-	-	IA	-	X				-29.0	-5.0	-5.1	2671	5054
04	SL-23_031622	3-16-22 9:44	3-16-22 9:45	-	-	IA	-	X				-29.0	-8.0	-7.8	2517	5008

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Samantha Hindle	Date/Time: 3/17/22 15:00	
Received by: (signature)	Date/Time: 3/18/22 9:26	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page 1 of 1

226271

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-17_031422	3-14-22 13:20	3-14-22 13:21	--	--	IA	--	X				-29.0	-7.0	6.9	2656	7076
06	SL-22_031422	3-14-22 10:51	3-14-22 10:52	—	—	IA	—	X				-29.0	-7.0	6.6	2325	7078
07	DUP-01_031422	3-14-22 —	3-14-22 —	—	—	IA	—	X				-29.0	-3.0	6.3	2626	7032
08	SL-20_031422	3-14-22 10:32	3-14-22 10:33	—	—	IA	—	X				-29.0	-4.5	6.4	2344	5028

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Samantha Hindle	Date/Time: 3/17/22 1500
Received by: (signature)		Date/Time: 3/18/22 926
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

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Page 1 of 1

22C1271

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Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
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Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
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Rush-Approval Required
1-Day ☐ 3-Day ☑
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Format: PDF ☑ EXCEL ☑
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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-11_031622	3/16/22 9:32	3/16/22 9:33	--	--	IA	--	X				29.5	6.5	5.7	2674	5050
10	SL-13_031522	3/15/22 10:07	3/15/22 10:08	—	—	IA	—	X				29.5	6.5	5.3	2538	5051
X011	SL-21_031422	3/14/22 10:15	3/14/22 10:16	—	—	IA	—	X				29	6.5	5.2	2673	7051
12	SL-18_031422	3/14/22 11:30	3/14/22 11:31	—	—	IA	—	X				29	7	5.9	2240	7042

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required
MCP Certification Form Required
CT RCP Required
RCP Certification Form Required
Other

Pace Analytical
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
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☐ Non Soxhlet

Pace Analytical

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

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Doc #378 Rev 2_01122021
Pace-New England

22C1271

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Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

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Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
13	MH-1255_031722	3/17/22 9:44	3/17/22 9:45	--	--	IA	--	X				29	7	5	2551	7054
14	SL-16_031422	3/14/22 13:30	3/14/22 13:31	—	—	IA	—	X				29	6	9	2348	7088

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Received by: (signature)	3/18/22 9:26
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

MA MCP Required

MCP Certification Form Required

CT RCP Required

RCP Certification Form Required

Other

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Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
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Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

FedEx®

FedEx® Tracking

270985866674

ADD NICKNAME

Delivered
Friday, March 18, 2022 at 9:26 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: C.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
270985866674 (master)	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866685	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866696	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866700	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866711	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA
270985866722	Delivered	3/17/22	3/18/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RF Date 3/18/22 Time 926

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? LA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (14)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	14	1L	14	9-9b	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2300	2626	2357			7035	7032	7054		
2524	2344	2348			7021	5028	7088		
2671	2674				9054	9020			
2517	2538				3008	3051			
2630	2673				7076	7051			
2325	2240				7078	7042			
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061008.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2300/BC7055

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2524/BC7056

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2671/BC504

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2517/BC5008

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2656/BC7076

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2325/BC7078

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2626/BC7032

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2344/BC5028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/2/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2674/BC5050

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2538/BC5051

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2673/BC7051

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2240/BC7042

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2551/BC7054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2022 **Batch #:** K22A054029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2348/BC7088

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/22/2022

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March 30, 2022

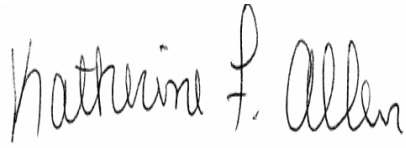
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22C1670

Enclosed are results of analyses for samples as received by the laboratory on March 24, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 3/30/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C1670

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-23_032222	22C1670-01	Indoor air		- EPA TO-15	
SL-19_032222	22C1670-02	Indoor air		- EPA TO-15	
SL-12_032222	22C1670-03	Indoor air		- EPA TO-15	
SL-10_032222	22C1670-04	Indoor air		- EPA TO-15	
MH-1259_032322	22C1670-05	Indoor air		- EPA TO-15	
SL-7_032222	22C1670-06	Indoor air		- EPA TO-15	
MH-1256_032322	22C1670-07	Indoor air		- EPA TO-15	
MH-1244_032322	22C1670-08	Indoor air		- EPA TO-15	
SL-9_032222	22C1670-09	Indoor air		- EPA TO-15	
SL-15_032222	22C1670-10	Indoor air		- EPA TO-15	
SL-14_032222	22C1670-11	Indoor air		- EPA TO-15	
SL-13_032222	22C1670-12	Indoor air		- EPA TO-15	
MH-1231A_032222	22C1670-13	Indoor air		- EPA TO-15	
MH-1255_032222	22C1670-14	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-23_032222
Sample ID: 22C1670-01
Sample Matrix: Indoor air
Sampled: 3/22/2022 13:03

Sample Description/Location:
Sub Description/Location:
Canister ID: 2550
Canister Size: 1 liter
Flow Controller ID: 7080
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 14:32	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 14:32	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 14:32	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 14:32	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 14:32	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 14:32	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 14:32	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	83.7	70-130	3/29/22 14:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-19_032222
Sample ID: 22C1670-02
Sample Matrix: Indoor air
Sampled: 3/22/2022 13:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2522
Canister Size: 1 liter
Flow Controller ID: 7033
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 14:57	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 14:57	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 14:57	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 14:57	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 14:57	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 14:57	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 14:57	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.9	70-130		3/29/22 14:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-12_032222
Sample ID: 22C1670-03
Sample Matrix: Indoor air
Sampled: 3/22/2022 13:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2572
Canister Size: 1 liter
Flow Controller ID: 7070
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 15:21	BRF
cis-1,2-Dichloroethylene	2.5	0.20	0.15		10.0	0.79	0.58	4	3/29/22 15:21	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 15:21	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 15:21	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 15:21	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 15:21	BRF
Vinyl Chloride	4.3	0.20	0.18		11	0.51	0.46	4	3/29/22 15:21	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.4	70-130		3/29/22 15:21

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-10_032222
Sample ID: 22C1670-04
Sample Matrix: Indoor air
Sampled: 3/22/2022 12:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2632
Canister Size: 1 liter
Flow Controller ID: 7049
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 15:46	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 15:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 15:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 15:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 15:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 15:46	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 15:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.5	70-130		3/29/22 15:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: MH-1259_032322
Sample ID: 22C1670-05
Sample Matrix: Indoor air
Sampled: 3/23/2022 09:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 2633
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.1	0.20	0.15		4.2	0.79	0.60	4	3/29/22 16:35	BRF
cis-1,2-Dichloroethylene	63	0.20	0.15		250	0.79	0.58	4	3/29/22 16:35	BRF
trans-1,2-Dichloroethylene	0.67	0.20	0.16		2.6	0.79	0.62	4	3/29/22 16:35	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 16:35	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 16:35	BRF
Trichloroethylene	3.6	0.20	0.13		19	1.1	0.72	4	3/29/22 16:35	BRF
Vinyl Chloride	110	0.20	0.18		270	0.51	0.46	4	3/29/22 16:35	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	85.2	70-130		3/29/22 16:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-7_032222
Sample ID: 22C1670-06
Sample Matrix: Indoor air
Sampled: 3/22/2022 10:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2657
Canister Size: 1 liter
Flow Controller ID: 4017
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 17:00	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 17:00	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 17:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 17:00	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 17:00	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 17:00	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 17:00	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	82.5	70-130		3/29/22 17:00

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: MH-1256_032322
Sample ID: 22C1670-07
Sample Matrix: Indoor air
Sampled: 3/23/2022 09:39

Sample Description/Location:
Sub Description/Location:
Canister ID: 2533
Canister Size: 1 liter
Flow Controller ID: 7028
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 17:24	BRF
cis-1,2-Dichloroethylene	0.76	0.20	0.15		3.0	0.79	0.58	4	3/29/22 17:24	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 17:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 17:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 17:24	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 17:24	BRF
Vinyl Chloride	0.35	0.20	0.18		0.90	0.51	0.46	4	3/29/22 17:24	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	85.4	70-130		3/29/22 17:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: MH-1244_032322
Sample ID: 22C1670-08
Sample Matrix: Indoor air
Sampled: 3/23/2022 10:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 2647
Canister Size: 1 liter
Flow Controller ID: 7025
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	2.1	0.20	0.15		8.3	0.79	0.60	4	3/29/22 17:49	BRF
cis-1,2-Dichloroethylene	85	0.20	0.15		340	0.79	0.58	4	3/29/22 17:49	BRF
trans-1,2-Dichloroethylene	0.94	0.20	0.16		3.7	0.79	0.62	4	3/29/22 17:49	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 17:49	BRF
Tetrachloroethylene	0.17	0.20	0.15	J	1.2	1.4	1.0	4	3/29/22 17:49	BRF
Trichloroethylene	1.8	0.20	0.13		9.7	1.1	0.72	4	3/29/22 17:49	BRF
Vinyl Chloride	460	1.0	0.90		1200	2.6	2.3	20	3/30/22 6:23	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	84.6	70-130	3/29/22 17:49
4-Bromofluorobenzene (1)	81.4	70-130	3/30/22 6:23

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-9_032222
Sample ID: 22C1670-09
Sample Matrix: Indoor air
Sampled: 3/22/2022 12:15

Sample Description/Location:
Sub Description/Location:
Canister ID: 2332
Canister Size: 1 liter
Flow Controller ID: 7068
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 18:14	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 18:14	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 18:14	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 18:14	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 18:14	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 18:14	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 18:14	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.9	70-130		3/29/22 18:14

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-15_032222
Sample ID: 22C1670-10
Sample Matrix: Indoor air
Sampled: 3/22/2022 09:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 2548
Canister Size: 1 liter
Flow Controller ID: 7039
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 18:38	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 18:38	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 18:38	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 18:38	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 18:38	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 18:38	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 18:38	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	80.2	70-130		3/29/22 18:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-14_032222
Sample ID: 22C1670-11
Sample Matrix: Indoor air
Sampled: 3/22/2022 09:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2666
Canister Size: 1 liter
Flow Controller ID: 7037
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 19:03	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 19:03	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 19:03	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 19:03	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 19:03	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 19:03	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 19:03	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.5	70-130		3/29/22 19:03

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: SL-13_032222
Sample ID: 22C1670-12
Sample Matrix: Indoor air
Sampled: 3/22/2022 09:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 2652
Canister Size: 1 liter
Flow Controller ID: 7036
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 19:27	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/29/22 19:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 19:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 19:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 19:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 19:27	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	3/29/22 19:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	81.8	70-130		3/29/22 19:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: MH-1231A_032222
Sample ID: 22C1670-13
Sample Matrix: Indoor air
Sampled: 3/22/2022 14:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2104
Canister Size: 1 liter
Flow Controller ID: 7072
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.16	0.20	0.15	J	0.62	0.79	0.60	4	3/29/22 19:52	BRF
cis-1,2-Dichloroethylene	13	0.20	0.15		53	0.79	0.58	4	3/29/22 19:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 19:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 19:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 19:52	BRF
Trichloroethylene	0.33	0.20	0.13		1.8	1.1	0.72	4	3/29/22 19:52	BRF
Vinyl Chloride	39	0.20	0.18		100	0.51	0.46	4	3/29/22 19:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.5	70-130		3/29/22 19:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 3/24/2022
Field Sample #: MH-1255_032222
Sample ID: 22C1670-14
Sample Matrix: Indoor air
Sampled: 3/22/2022 14:19

Sample Description/Location:
Sub Description/Location:
Canister ID: 2643
Canister Size: 1 liter
Flow Controller ID: 7023
Sample Type: Grab

Work Order: 22C1670
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/29/22 20:17	BRF
cis-1,2-Dichloroethylene	1.5	0.20	0.15		6.1	0.79	0.58	4	3/29/22 20:17	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/29/22 20:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/29/22 20:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	3/29/22 20:17	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	3/29/22 20:17	BRF
Vinyl Chloride	5.1	0.20	0.18		13	0.51	0.46	4	3/29/22 20:17	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.0	70-130		3/29/22 20:17

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1670-01 [SL-23_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-02 [SL-19_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-03 [SL-12_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-04 [SL-10_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-05 [MH-1259_032322]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-06 [SL-7_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-07 [MH-1256_032322]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-08 [MH-1244_032322]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-08RE1 [MH-1244_032322]	B304495	1.5	1	N/A	1000	200	15	03/29/22
22C1670-09 [SL-9_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-10 [SL-15_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-11 [SL-14_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-12 [SL-13_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-13 [MH-1231A_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22
22C1670-14 [MH-1255_032222]	B304495	1.5	1	N/A	1000	200	75	03/29/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B304495 - TO-15 Prep											
Blank (B304495-BLK1)					Prepared & Analyzed: 03/29/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*6.78*				*8.00*		*84.7*	*70-130*			
LCS (B304495-BS1)					Prepared & Analyzed: 03/29/22						
1,1-Dichloroethylene	5.20				5.00		104	70-130			
cis-1,2-Dichloroethylene	4.20				5.00		84.0	70-130			
trans-1,2-Dichloroethylene	4.09				5.00		81.8	70-130			
1,4-Dioxane	5.25				5.00		105	70-130			
Tetrachloroethylene	4.38				5.00		87.5	70-130			
Trichloroethylene	4.93				5.00		98.5	70-130			
Vinyl Chloride	5.12				5.00		102	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.42*				*8.00*		*92.7*	*70-130*			
Duplicate (B304495-DUP1)			**Source: 22C1670-04**		Prepared & Analyzed: 03/29/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*6.40*				*8.00*		*80.0*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RLF	Rebecca Faust
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	152325	2.866	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	700372	3.471	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	652377	5.056	100	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069760-CCV1)			Lab File ID: J22A088004.D			Analyzed: 03/29/22 08:52			
Bromochloromethane (1)	196585	2.857	196585	2.857	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	695202	3.462	695202	3.462	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	614798	5.054	614798	5.054	100	60 - 140	0.0000	+/-0.50	
LCS (B304495-BS1)			Lab File ID: J22A088005.D			Analyzed: 03/29/22 09:17			
Bromochloromethane (1)	195526	2.857	196585	2.857	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	696865	3.462	695202	3.462	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	620343	5.054	614798	5.054	101	60 - 140	0.0000	+/-0.50	
Blank (B304495-BLK1)			Lab File ID: J22A088008.D			Analyzed: 03/29/22 10:52			
Bromochloromethane (1)	186339	2.844	196585	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	608971	3.456	695202	3.462	88	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	548695	5.051	614798	5.054	89	60 - 140	-0.0030	+/-0.50	
SL-23_032222 (22C1670-01)			Lab File ID: J22A088017.D			Analyzed: 03/29/22 14:32			
Bromochloromethane (1)	189798	2.844	196585	2.857	97	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	625117	3.456	695202	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	576312	5.051	614798	5.054	94	60 - 140	-0.0030	+/-0.50	
SL-19_032222 (22C1670-02)			Lab File ID: J22A088018.D			Analyzed: 03/29/22 14:57			
Bromochloromethane (1)	187681	2.844	196585	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	618368	3.456	695202	3.462	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	556465	5.051	614798	5.054	91	60 - 140	-0.0030	+/-0.50	
SL-12_032222 (22C1670-03)			Lab File ID: J22A088019.D			Analyzed: 03/29/22 15:21			
Bromochloromethane (1)	189152	2.844	196585	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	628416	3.456	695202	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	570014	5.051	614798	5.054	93	60 - 140	-0.0030	+/-0.50	
SL-10_032222 (22C1670-04)			Lab File ID: J22A088020.D			Analyzed: 03/29/22 15:46			
Bromochloromethane (1)	188754	2.847	196585	2.857	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	620479	3.459	695202	3.462	89	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	570047	5.05	614798	5.054	93	60 - 140	-0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (B304495-DUP1)			Lab File ID: J22A088021.D			Analyzed: 03/29/22 16:10			
Bromochloromethane (1)	187969	2.844	196585	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	622316	3.456	695202	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	569926	5.051	614798	5.054	93	60 - 140	-0.0030	+/-0.50	
MH-1259_032322 (22C1670-05)			Lab File ID: J22A088022.D			Analyzed: 03/29/22 16:35			
Bromochloromethane (1)	195533	2.844	196585	2.857	99	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	640705	3.456	695202	3.462	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	583058	5.051	614798	5.054	95	60 - 140	-0.0030	+/-0.50	
SL-7_032222 (22C1670-06)			Lab File ID: J22A088023.D			Analyzed: 03/29/22 17:00			
Bromochloromethane (1)	191740	2.844	196585	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	638001	3.456	695202	3.462	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	582751	5.05	614798	5.054	95	60 - 140	-0.0040	+/-0.50	
MH-1256_032322 (22C1670-07)			Lab File ID: J22A088024.D			Analyzed: 03/29/22 17:24			
Bromochloromethane (1)	188342	2.844	196585	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	623418	3.456	695202	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	554471	5.05	614798	5.054	90	60 - 140	-0.0040	+/-0.50	
MH-1244_032322 (22C1670-08)			Lab File ID: J22A088025.D			Analyzed: 03/29/22 17:49			
Bromochloromethane (1)	197708	2.844	196585	2.857	101	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	651553	3.456	695202	3.462	94	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	590066	5.051	614798	5.054	96	60 - 140	-0.0030	+/-0.50	
SL-9_032222 (22C1670-09)			Lab File ID: J22A088026.D			Analyzed: 03/29/22 18:14			
Bromochloromethane (1)	189255	2.844	196585	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	633880	3.456	695202	3.462	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	570582	5.051	614798	5.054	93	60 - 140	-0.0030	+/-0.50	
SL-15_032222 (22C1670-10)			Lab File ID: J22A088027.D			Analyzed: 03/29/22 18:38			
Bromochloromethane (1)	188367	2.844	196585	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	616246	3.456	695202	3.462	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	556894	5.05	614798	5.054	91	60 - 140	-0.0040	+/-0.50	
SL-14_032222 (22C1670-11)			Lab File ID: J22A088028.D			Analyzed: 03/29/22 19:03			
Bromochloromethane (1)	187846	2.847	196585	2.857	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	613410	3.456	695202	3.462	88	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	559766	5.051	614798	5.054	91	60 - 140	-0.0030	+/-0.50	
SL-13_032222 (22C1670-12)			Lab File ID: J22A088029.D			Analyzed: 03/29/22 19:27			
Bromochloromethane (1)	185416	2.844	196585	2.857	94	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	606697	3.456	695202	3.462	87	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	557411	5.047	614798	5.054	91	60 - 140	-0.0070	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1231A_032222 (22C1670-13)			Lab File ID: J22A088030.D			Analyzed: 03/29/22 19:52			
Bromochloromethane (1)	188269	2.841	196585	2.857	96	60 - 140	-0.0160	+/-0.50	
1,4-Difluorobenzene (1)	614648	3.456	695202	3.462	88	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	567534	5.047	614798	5.054	92	60 - 140	-0.0070	+/-0.50	
MH-1255_032222 (22C1670-14)			Lab File ID: J22A088031.D			Analyzed: 03/29/22 20:17			
Bromochloromethane (1)	186495	2.844	196585	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	616548	3.456	695202	3.462	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	554448	5.051	614798	5.054	90	60 - 140	-0.0030	+/-0.50	
MH-1244_032322 (22C1670-08RE1)			Lab File ID: J22A088032.D			Analyzed: 03/30/22 06:23			
Bromochloromethane (1)	185024	2.847	196585	2.857	94	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	611777	3.456	695202	3.462	88	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	559379	5.05	614798	5.054	91	60 - 140	-0.0040	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069760-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.05	1.038306	1.048503		1.0	30
cis-1,2-Dichloroethylene	A	5.00	4.10	1.058854	0.8688761		-17.9	30
trans-1,2-Dichloroethylene	A	5.00	4.00	1.144971	0.9170018		-19.9	30
1,4-Dioxane	A	5.00	5.04	0.1348394	0.1358316		0.7	30
Tetrachloroethylene	A	5.00	4.34	0.5934671	0.5145573		-13.3	30
Trichloroethylene	A	5.00	4.88	0.2950588	0.2879094		-2.4	30
Vinyl Chloride	A	5.00	5.04	0.6636142	0.6695933		0.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

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CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hinkle~~ Sommer Guy

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-23_032222	3/22/22 13:02	3/22/22 13:03	--	--	IA	--	X				-29	-6.5	-5.9	2550	7080
02	SL-19_032222	3/22/22 13:30	3/22/22 13:31	—	—	IA	—	X				-28.5	-8	-7.3	2522	7033
03	SL-12_032222	3/22/22 13:15	3/22/22 13:16	—	—	IA	—	X				-29	-8	-7.4	2572	7070
04	SL-10_032222	3/22/22 12:34	3/22/22 12:35	—	—	IA	—	X				-29	-7	-6.5	2632	7049

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 3/23/22 14:0	
Received by: (signature) Fed Ex	Date/Time: 3/23/22 14:00	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 3/24/22 9:4	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Pace-New England

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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min L/min	Code	☐ Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	MH-1259_032322	3/23/22 9:58	3/23/22 9:59	--	--	IA	--	X				-29	-7	-6	2633	7022
06	SL-7_032222	3/22/22 10:34	3/22/22 10:35	—	—	IA	—	X				-29	-7	-9	2657	4017
07	MH-1256_032322	3/23/22 9:38	3/23/22 9:39	—	—	IA	—	X				-29	-6.5	-9	2533	7028
08	MH-1244_032322	3/23/22 10:19	3/23/22 10:20	—	—	IA	—	X				-29	-7	-4	2647	7025

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 3/23/22 14:0	
Received by: (signature) Fed Ex	Date/Time: 3/23/22 14:0	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 3/24/22 944	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

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Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

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Doc #378 Rev 2_01122021
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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Summer Guy

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-9_032222	3/22/22 12:14	3/22/22 12:15	--	--	IA	--	X				-29	-7	-6.3	2332	7068
10	SL-15_032222	3/22/22 9:24	3/22/22 9:25	—	—	IA	—	X				-29	-6	-5.9	2548	7039
11	SL-14_032222	3/22/22 9:39	3/22/22 9:40	—	—	IA	—	X				-29	-7	-6.6	2666	7037
12	SL-13_032222	3/22/22 9:54	3/22/22 9:55	—	—	IA	—	X				-29	-4	-3.4	2652	7036

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Summer Guy	Date/Time: 3/23/22 14:00	
Received by: (signature) Fed Ex	Date/Time: 3/23/22 14:00	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 3/24/22 9:44	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

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Doc #378 Rev 2_01122021
Pace-New England

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Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377
Phone: 248-994-2240
Project Name: Ford LTP
Project Location: Livonia, MI
Project Number: 30080642.701.04
Project Manager: Kristoffer Hinskey
Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Kory Pearson, Samantha Hindler~~ Sommer Guy

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
13	MH-1231A_032222	3/22/22 14:41	3/22/22 14:42	--	--	IA	--	X				-29	-7	-5.9	2104	7072 ✓
14	MH-1255_032222	3/22/22 14:18	3/22/22 14:19	—	—	IA	—	X				-29	-8.5	-5.8	2643	7023 ✓

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 3/23/22 14:00	
Received by: (signature) Fed Ex	Date/Time: 3/23/22 14:00	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time: 3/24/22 944	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

FedEx

FedEx® Tracking

271195124620

ADD NICKNAME

Delivered
Thursday, March 24, 2022 at 9:44 am

THIS IS 1 OF 9 PIECES

DELIVERED

Signed for by: C.LAROUX

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

9 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271195124620 (master)	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA
271195124630	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA
271195124641	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA
271195124652	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA
271195124663	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA
271195124674	Delivered	3/23/22	3/24/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 3/24/22 Time 944

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T (14)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	14	1L	14	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2920	2533	2104			7080	7028	7072		
2522	2647	2643			7033	7025	7023		
2572	2332				7070	7018			
21032	2318				7049	7039			
21033	21616				7022	7037			
21057	21652				4017	7030			
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2550/BC7080

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073046.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2522/BC7033

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2572/BC7070

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073040.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2632/BC7049

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2633/BC7022

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073053.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2657/BC4017

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073037.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2533/BC7028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2647/BC7025

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073041.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2332/BC7068

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2548/BC7039

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073051.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2666/BC7037

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073048.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2652/BC7036

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2104/BC7072

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2643/BC7023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 3/30/2022

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 5, 2022

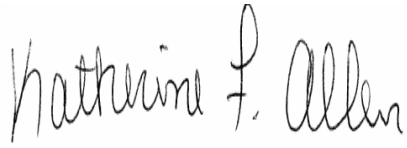
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D0119

Enclosed are results of analyses for samples as received by the laboratory on April 1, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/5/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D0119

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-23_033122	22D0119-01	Indoor air		- EPA TO-15	
MH-1255_033022	22D0119-02	Indoor air		- EPA TO-15	
SL-5_033122	22D0119-03	Indoor air		- EPA TO-15	
SL-9_033122	22D0119-04	Indoor air		- EPA TO-15	
SL-7_033122	22D0119-05	Indoor air		- EPA TO-15	
SL-13_033122	22D0119-06	Indoor air		- EPA TO-15	
SL-6_033122	22D0119-07	Indoor air		- EPA TO-15	
SL-14_033122	22D0119-08	Indoor air		- EPA TO-15	
SL-19_033122	22D0119-09	Indoor air		- EPA TO-15	
SL-12_033122	22D0119-10	Indoor air		- EPA TO-15	
SL-8_033122	22D0119-11	Indoor air		- EPA TO-15	
SL-15_033122	22D0119-12	Indoor air		- EPA TO-15	
SL-10_033122	22D0119-13	Indoor air		- EPA TO-15	
SL-11_033122	22D0119-14	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Z-01 Sample had a final vacuum of zero

Analyte & Samples(s) Qualified:

22D0119-01[SL-23_033122], 22D0119-13[SL-10_033122]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-23_033122
Sample ID: 22D0119-01
Sample Matrix: Indoor air
Sampled: 3/31/2022 12:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2019
Canister Size: 1 liter
Flow Controller ID: 5041
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -2.5
Receipt Vacuum(in Hg): -0.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Sample Flags: Z-01

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 14:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 14:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 14:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 14:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 14:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 14:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 14:31	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.5	70-130	4/4/22 14:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: MH-1255_033022
Sample ID: 22D0119-02
Sample Matrix: Indoor air
Sampled: 3/30/2022 09:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2665
Canister Size: 1 liter
Flow Controller ID: 7034
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.29	0.20	0.15		1.1	0.79	0.60	4	4/4/22 15:11	BRF
cis-1,2-Dichloroethylene	25	0.20	0.15		99	0.79	0.58	4	4/4/22 15:11	BRF
trans-1,2-Dichloroethylene	0.32	0.20	0.16		1.3	0.79	0.62	4	4/4/22 15:11	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 15:11	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 15:11	BRF
Trichloroethylene	0.44	0.20	0.13		2.3	1.1	0.72	4	4/4/22 15:11	BRF
Vinyl Chloride	96	0.20	0.18		250	0.51	0.46	4	4/4/22 15:11	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.0	70-130		4/4/22 15:11

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-5_033122
Sample ID: 22D0119-03
Sample Matrix: Indoor air
Sampled: 3/31/2022 11:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2636
Canister Size: 1 liter
Flow Controller ID: 7045
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 16:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 16:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 16:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 16:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 16:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 16:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 16:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	93.5	70-130		4/4/22 16:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-9_033122
Sample ID: 22D0119-04
Sample Matrix: Indoor air
Sampled: 3/31/2022 12:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2531
Canister Size: 1 liter
Flow Controller ID: 7044
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -3.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 17:11	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 17:11	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 17:11	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 17:11	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 17:11	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 17:11	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 17:11	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	94.2	70-130		4/4/22 17:11

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-7_033122
Sample ID: 22D0119-05
Sample Matrix: Indoor air
Sampled: 3/31/2022 10:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2677
Canister Size: 1 liter
Flow Controller ID: 5062
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 17:52	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 17:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 17:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 17:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 17:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 17:52	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 17:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	94.2	70-130		4/4/22 17:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-13_033122
Sample ID: 22D0119-06
Sample Matrix: Indoor air
Sampled: 3/31/2022 09:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2618
Canister Size: 1 liter
Flow Controller ID: 5056
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 18:32	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 18:32	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 18:32	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 18:32	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 18:32	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 18:32	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 18:32	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.8	70-130		4/4/22 18:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-6_033122
Sample ID: 22D0119-07
Sample Matrix: Indoor air
Sampled: 3/31/2022 10:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2082
Canister Size: 1 liter
Flow Controller ID: 4028
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -1
Receipt Vacuum(in Hg): -1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 19:13	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 19:13	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 19:13	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 19:13	BRF
Tetrachloroethylene	0.22	0.20	0.15		1.5	1.4	1.0	4	4/4/22 19:13	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 19:13	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 19:13	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	93.4	70-130		4/4/22 19:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-14_033122
Sample ID: 22D0119-08
Sample Matrix: Indoor air
Sampled: 3/31/2022 09:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2341
Canister Size: 1 liter
Flow Controller ID: 4018
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 19:54	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 19:54	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 19:54	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 19:54	BRF
Tetrachloroethylene	0.24	0.20	0.15		1.7	1.4	1.0	4	4/4/22 19:54	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 19:54	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 19:54	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	92.0	70-130		4/4/22 19:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-19_033122
Sample ID: 22D0119-09
Sample Matrix: Indoor air
Sampled: 3/31/2022 13:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2620
Canister Size: 1 liter
Flow Controller ID: 7041
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 20:35	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 20:35	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 20:35	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 20:35	BRF
Tetrachloroethylene	0.28	0.20	0.15		1.9	1.4	1.0	4	4/4/22 20:35	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 20:35	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 20:35	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.3	70-130		4/4/22 20:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-12_033122
Sample ID: 22D0119-10
Sample Matrix: Indoor air
Sampled: 3/31/2022 13:06

Sample Description/Location:
Sub Description/Location:
Canister ID: 2526
Canister Size: 1 liter
Flow Controller ID: 7040
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 21:16	BRF
cis-1,2-Dichloroethylene	6.5	0.20	0.15		26	0.79	0.58	4	4/4/22 21:16	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 21:16	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 21:16	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 21:16	BRF
Trichloroethylene	0.58	0.20	0.13		3.1	1.1	0.72	4	4/4/22 21:16	BRF
Vinyl Chloride	21	0.20	0.18		52	0.51	0.46	4	4/4/22 21:16	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.3	70-130		4/4/22 21:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-8_033122
Sample ID: 22D0119-11
Sample Matrix: Indoor air
Sampled: 3/31/2022 11:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2648
Canister Size: 1 liter
Flow Controller ID: 5061
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -8.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 22:35	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 22:35	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 22:35	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 22:35	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 22:35	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 22:35	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 22:35	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	94.1	70-130		4/4/22 22:35

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-15_033122
Sample ID: 22D0119-12
Sample Matrix: Indoor air
Sampled: 3/31/2022 09:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2625
Canister Size: 1 liter
Flow Controller ID: 5062
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 23:16	BRF
cis-1,2-Dichloroethylene	0.16	0.20	0.15	J	0.62	0.79	0.58	4	4/4/22 23:16	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 23:16	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 23:16	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/4/22 23:16	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 23:16	BRF
Vinyl Chloride	1.1	0.20	0.18		2.7	0.51	0.46	4	4/4/22 23:16	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.0	70-130		4/4/22 23:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-10_033122
Sample ID: 22D0119-13
Sample Matrix: Indoor air
Sampled: 3/31/2022 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2236
Canister Size: 1 liter
Flow Controller ID: 7088
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -0.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Sample Flags: Z-01

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/4/22 23:57	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/4/22 23:57	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/4/22 23:57	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/4/22 23:57	BRF
Tetrachloroethylene	7.5	0.20	0.15		51	1.4	1.0	4	4/4/22 23:57	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/4/22 23:57	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/4/22 23:57	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.0	70-130		4/4/22 23:57

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/1/2022
Field Sample #: SL-11_033122
Sample ID: 22D0119-14
Sample Matrix: Indoor air
Sampled: 3/31/2022 12:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2687
Canister Size: 1 liter
Flow Controller ID: 7086
Sample Type: Grab

Work Order: 22D0119
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/5/22 0:37	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/5/22 0:37	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/5/22 0:37	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/5/22 0:37	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/5/22 0:37	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/5/22 0:37	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/5/22 0:37	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.6	70-130		4/5/22 0:37

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0119-01 [SL-23_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-02 [MH-1255_033022]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-03 [SL-5_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-04 [SL-9_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-05 [SL-7_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-06 [SL-13_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-07 [SL-6_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-08 [SL-14_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-09 [SL-19_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-10 [SL-12_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-11 [SL-8_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-12 [SL-15_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-13 [SL-10_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22
22D0119-14 [SL-11_033122]	B304961	1.5	1	N/A	1000	400	150	04/04/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B304961 - TO-15 Prep											
Blank (B304961-BLK1)					Prepared & Analyzed: 04/04/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*7.59*				*8.00*		*94.8*	*70-130*			
LCS (B304961-BS1)					Prepared & Analyzed: 04/04/22						
1,1-Dichloroethylene	5.42				5.00		108	70-130			
cis-1,2-Dichloroethylene	4.38				5.00		87.6	70-130			
trans-1,2-Dichloroethylene	4.52				5.00		90.4	70-130			
1,4-Dioxane	4.54				5.00		90.8	70-130			
Tetrachloroethylene	4.65				5.00		92.9	70-130			
Trichloroethylene	4.71				5.00		94.3	70-130			
Vinyl Chloride	4.85				5.00		97.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.57*				*8.00*		*94.6*	*70-130*			
Duplicate (B304961-DUP1)			**Source: 22D0119-02**		Prepared & Analyzed: 04/04/22						
1,1-Dichloroethylene	0.36	0.20	1.4	0.79		0.29			22.2	25	
cis-1,2-Dichloroethylene	24	0.20	97	0.79		25			1.49	25	
trans-1,2-Dichloroethylene	0.33	0.20	1.3	0.79		0.32			2.47	25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	0.44	0.20	2.3	1.1		0.44			0.00	25	
Vinyl Chloride	94	0.20	240	0.51		96			2.15	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.58*				*8.00*		*94.7*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
Z-01	Sample had a final vacuum of zero

ANALYST

TPH	Thomas P. Hnitecki
RLF	Rebecca Faust
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069130-ICV1)			Lab File ID: G22A070016.D			Analyzed: 03/12/22 00:46			
Bromochloromethane (1)	1422759	8.497	1375823	8.497	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3681016	10.271	3486350	10.271	106	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3376358	14.636	3232194	14.636	104	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069955-CCV1)			Lab File ID: G22A094004.D			Analyzed: 04/04/22 09:56			
Bromochloromethane (1)	1356405	8.485	1375823	8.497	99	60 - 140	-0.0120	+/-0.50	
1,4-Difluorobenzene (1)	3581998	10.259	3486350	10.271	103	60 - 140	-0.0120	+/-0.50	
Chlorobenzene-d5 (1)	2575952	14.636	3232194	14.636	80	60 - 140	0.0000	+/-0.50	
LCS (B304961-BS1)			Lab File ID: G22A094005.D			Analyzed: 04/04/22 10:35			
Bromochloromethane (1)	1369558	8.491	1356405	8.485	101	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3715999	10.265	3581998	10.259	104	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3267146	14.636	2575952	14.636	127	60 - 140	0.0000	+/-0.50	
Blank (B304961-BLK1)			Lab File ID: G22A094009.D			Analyzed: 04/04/22 13:51			
Bromochloromethane (1)	1308346	8.485	1356405	8.485	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3409442	10.259	3581998	10.259	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3088473	14.636	2575952	14.636	120	60 - 140	0.0000	+/-0.50	
SL-23_033122 (22D0119-01)			Lab File ID: G22A094010.D			Analyzed: 04/04/22 14:31			
Bromochloromethane (1)	1336304	8.485	1356405	8.485	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3454130	10.259	3581998	10.259	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3161723	14.63	2575952	14.636	123	60 - 140	-0.0060	+/-0.50	
MH-1255_033022 (22D0119-02)			Lab File ID: G22A094011.D			Analyzed: 04/04/22 15:11			
Bromochloromethane (1)	1329204	8.485	1356405	8.485	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3400180	10.265	3581998	10.259	95	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3030186	14.636	2575952	14.636	118	60 - 140	0.0000	+/-0.50	
Duplicate (B304961-DUP1)			Lab File ID: G22A094012.D			Analyzed: 04/04/22 15:51			
Bromochloromethane (1)	1327658	8.491	1356405	8.485	98	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3354588	10.265	3581998	10.259	94	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3036702	14.636	2575952	14.636	118	60 - 140	0.0000	+/-0.50	
SL-5_033122 (22D0119-03)			Lab File ID: G22A094013.D			Analyzed: 04/04/22 16:31			
Bromochloromethane (1)	1285233	8.491	1356405	8.485	95	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3327540	10.265	3581998	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3028616	14.636	2575952	14.636	118	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-9_033122 (22D0119-04)			Lab File ID: G22A094014.D			Analyzed: 04/04/22 17:11			
Bromochloromethane (1)	1293976	8.485	1356405	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3390935	10.259	3581998	10.259	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3096490	14.636	2575952	14.636	120	60 - 140	0.0000	+/-0.50	
SL-7_033122 (22D0119-05)			Lab File ID: G22A094015.D			Analyzed: 04/04/22 17:52			
Bromochloromethane (1)	1272343	8.491	1356405	8.485	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3300333	10.265	3581998	10.259	92	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2984733	14.636	2575952	14.636	116	60 - 140	0.0000	+/-0.50	
SL-13_033122 (22D0119-06)			Lab File ID: G22A094016.D			Analyzed: 04/04/22 18:32			
Bromochloromethane (1)	1273806	8.491	1356405	8.485	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3326163	10.265	3581998	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3074284	14.636	2575952	14.636	119	60 - 140	0.0000	+/-0.50	
SL-6_033122 (22D0119-07)			Lab File ID: G22A094017.D			Analyzed: 04/04/22 19:13			
Bromochloromethane (1)	1316007	8.485	1356405	8.485	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3438087	10.265	3581998	10.259	96	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3215388	14.636	2575952	14.636	125	60 - 140	0.0000	+/-0.50	
SL-14_033122 (22D0119-08)			Lab File ID: G22A094018.D			Analyzed: 04/04/22 19:54			
Bromochloromethane (1)	1276077	8.491	1356405	8.485	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3353633	10.265	3581998	10.259	94	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3113620	14.636	2575952	14.636	121	60 - 140	0.0000	+/-0.50	
SL-19_033122 (22D0119-09)			Lab File ID: G22A094019.D			Analyzed: 04/04/22 20:35			
Bromochloromethane (1)	1290103	8.485	1356405	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3374058	10.259	3581998	10.259	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3081176	14.636	2575952	14.636	120	60 - 140	0.0000	+/-0.50	
SL-12_033122 (22D0119-10)			Lab File ID: G22A094020.D			Analyzed: 04/04/22 21:16			
Bromochloromethane (1)	1292273	8.485	1356405	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3342854	10.259	3581998	10.259	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3090605	14.636	2575952	14.636	120	60 - 140	0.0000	+/-0.50	
SL-8_033122 (22D0119-11)			Lab File ID: G22A094022.D			Analyzed: 04/04/22 22:35			
Bromochloromethane (1)	1282305	8.485	1356405	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3357805	10.259	3581998	10.259	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3055947	14.636	2575952	14.636	119	60 - 140	0.0000	+/-0.50	
SL-15_033122 (22D0119-12)			Lab File ID: G22A094023.D			Analyzed: 04/04/22 23:16			
Bromochloromethane (1)	1251227	8.491	1356405	8.485	92	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3271958	10.265	3581998	10.259	91	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2956292	14.636	2575952	14.636	115	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-10_033122 (22D0119-13)			Lab File ID: G22A094024.D			Analyzed: 04/04/22 23:57			
Bromochloromethane (1)	1298420	8.485	1356405	8.485	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3396592	10.259	3581998	10.259	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3131376	14.636	2575952	14.636	122	60 - 140	0.0000	+/-0.50	
SL-11_033122 (22D0119-14)			Lab File ID: G22A094025.D			Analyzed: 04/05/22 00:37			
Bromochloromethane (1)	1265188	8.491	1356405	8.485	93	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3336400	10.265	3581998	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	3026900	14.636	2575952	14.636	118	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069955-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.05	1.183396	0.958194		-19.0	30
cis-1,2-Dichloroethylene	A	5.00	3.72	0.9435815	0.7013162		-25.7	30
trans-1,2-Dichloroethylene	A	5.00	3.77	0.9826295	0.740646		-24.6	30
1,4-Dioxane	A	5.00	4.04	0.1711519	0.1384184		-19.1	30
Tetrachloroethylene	A	5.00	5.05	0.4708091	0.4758542		1.1	30
Trichloroethylene	A	5.00	4.21	0.374415	0.3152341		-15.8	30
Vinyl Chloride	A	5.00	4.15	0.8152498	0.6764929		-17.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D0119

East Longmeadow, MA 01028 (413)
318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-23-033122	3-31-22 1255	3-31-22 1256	--	--	IA	--	X				-29	-2.5	-21	2129	5041
02	MH-1255-033022	3-30-22 920	3-30-22 921	-	-	IA	-	X				-29	-5.0	-4	2665	7034

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	3/31/22 1430
Received by: (signature)	4/1/22 939
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAP and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0119

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
03	SL-5_033122	3-31-22 1105	3-31-22 1106	--	--	IA	--	X				-29	-6	28			2636	7045
04	SL-9-033122	3-31-22 1215	3-31-22 1216	—	—	IA	—	X				-28	-4.5	30			2531	7044

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 3/31/22 1430	
Received by: (signature)	Date/Time: 4/1/22 939	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0119

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	SL-7_033122	3-31-22 1045	3-31-22 1046	--	--	IA	--	X				-29	-6	6.4	2677	5062
06	SL-13_033122	3-31-22 955	3-31-22 956	—	—	IA	—	X				-29	-6	5.3	2618	5056

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0119

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³									
07	SL-6_033122	3/31/22 1035	3/31/22 1056	--	--	IA	--	X				-1	-28.5	-1	2092	4028
08	SL-14_033122	3/31/22 940	3/31/22 941	—	—	IA	—	X				-2.0	-29	-4	2341	4018
09	SL-19_033122	3/31/22 1315	3/31/22 1316	—	—	IA	—	X				-5.2	-29	-6	2620	7041
10	SL-12_033122	3/31/22 1305	3/31/22 1306	—	—	IA	—	X				-5	-29	-5	2526	7040

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Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Relinquished by: (signature): Arcadis — Date/Time: 3/31/22 1430

Received by: (signature): [signature] — Date/Time: 4/1/22 939

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

☐ MCP Certification Form Required

☐ CT RCP Required

☐ RCP Certification Form Required

☐ Other

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Project Entity

☐ Government ☐ Federal ☐ City ☐ Municipality ☐ 21 J ☐ Brownfield ☐ MWRA ☐ School ☐ MBTA ☐ WRTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0119

Pace New England: 39 Spruce Street
East Longmeadow, MA 01028 (413)
318-0053

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (AIR)

Doc #378 Rev 2_01122021
Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

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Phone: 248-994-2240

Project Name: Ford LTP

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7-Day ☐ 10-Day ☐
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Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³									
11	SL-8_033122	3/31/22 1150	3/31/22 1151	--	--	IA	--	X				-29.1	-29	-7.5	2648	5061
12	SL-15_033122	3/31/22 1230	3/31/22 1231	—	—	IA	—	X				-29.3	-29	-6	2625	5052
13	SL-10_033122	3/31/22 1235	3/31/22 1236	—	—	IA	—	X				-29.3	-29	-9.5	2236	7088
14	SL-11_033122	3/31/22 1245	3/31/22 1246	—	—	IA	—	X				-29.3	-29	-6	2687	7086

Please fill out completely, sign, date and retain the yellow copy for your records

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Relinquished by: (signature)	Date/Time: 3/31/22/1930	
Received by: (signature)	Date/Time: 4/1/22 939	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☐ CT RCP Required
☐ RCP Certification Form Required
☐ Other

Pace Analytical

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☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

FedEx

FedEx® Tracking

271509250282

ADD NICKNAME

Delivered
Friday, April 1, 2022 at 9:39 am

THIS IS 1 OF 5 PIECES

DELIVERED

Signed for by: L.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

5 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271509250282 (master)	Delivered	3/31/22	4/1/22	0	NOVI MI	East Longmeadow MA
271509250293	Delivered	3/31/22	4/1/22	0	NOVI MI	East Longmeadow MA
271509250308	Delivered	3/31/22	4/1/22	0	NOVI MI	East Longmeadow MA
271509250319	Delivered	3/31/22	4/1/22	0	NOVI MI	East Longmeadow MA
271509250320	Delivered	3/31/22	4/1/22	0	NOVI MI	East Longmeadow MA

Travel History

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By	RLF	Date	4/1/22			Time	939
How were the samples received?	In Cooler		On Ice			No Ice	
	In Box	T	Ambient			Melted Ice	
Were samples within Temperature Compliance? 2-6°C	By Gun #		Actual Temp -				
	By Blank #	NA	Actual Temp -				
Was Custody Seal Intact?	T		Were Samples Tampered with?			F	
Was COC Relinquished ?	T		Does Chain Agree With Samples?			T	
Are there any loose caps/valves on any samples?	F						
Is COC in ink/ Legible?	T						
Did COC Include all Pertinent Information?	Client	T	Analysis	T		Sampler Name	T
	Project	T	ID's	T		Collection Dates/Times	T
Are Sample Labels filled out and legible?	T						
Are there Rushes?	T		Who was notified?	NA			
Samples are received within holding time?	T						
Proper Media Used?	T		Individually Certified Cans?			T (14)	
Are there Trip Blanks?	F		Is there enough Volume?			T	

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	14	1L	14	9am	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2129	2592	22320			5041	4028	7088		
26615	2341	26857			7034	4018	7086		
26316	26420				7045	7041			
2531	2526				7044	7040			
26777	26478				5062	5061			
26818	26425				5036	5052			
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2129/BC5041

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2665/BC7034

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K2A073026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2636/BC7045

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073039.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2531/BC7044

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2677/BC5062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2618/BC5056

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2092/BC4028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/8/2022 **Batch #:** K22A067035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2341/BC4018

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073047.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2620/BC7041

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2526/BC7040

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2648/BC5061

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/14/2022 **Batch #:** K22A073042.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2625/BC5052

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2236/BC7088

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2687/BC7086

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/5/2022

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April 8, 2022

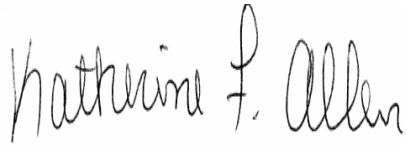
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D0459

Enclosed are results of analyses for samples as received by the laboratory on April 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/8/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D0459

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-2_040522	22D0459-01	Indoor air		- EPA TO-15	
SL-17_040622	22D0459-02	Indoor air		- EPA TO-15	
SL-13_040522	22D0459-03	Indoor air		- EPA TO-15	
MH-1231_040622	22D0459-04	Indoor air		- EPA TO-15	
DUP-1_040422	22D0459-05	Indoor air		- EPA TO-15	
SL-18_040422	22D0459-06	Indoor air		- EPA TO-15	
SL-22_040422	22D0459-07	Indoor air		- EPA TO-15	
SL-20_040422	22D0459-08	Indoor air		- EPA TO-15	
SL-3_040622	22D0459-09	Indoor air		- EPA TO-15	
SL-16_040622	22D0459-10	Indoor air		- EPA TO-15	
SL-11_040522	22D0459-11	Indoor air		- EPA TO-15	
DUP-2_040622	22D0459-12	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-2_040522
Sample ID: 22D0459-01
Sample Matrix: Indoor air
Sampled: 4/5/2022 10:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2546
Canister Size: 1 liter
Flow Controller ID: 5067
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 20:17	BRF
cis-1,2-Dichloroethylene	1.1	0.20	0.15		4.5	0.79	0.58	4	4/7/22 20:17	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 20:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 20:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 20:17	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 20:17	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 20:17	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	82.3	70-130	4/7/22 20:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-17_040622
Sample ID: 22D0459-02
Sample Matrix: Indoor air
Sampled: 4/6/2022 09:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2682
Canister Size: 1 liter
Flow Controller ID: 5055
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 21:07	BRF
cis-1,2-Dichloroethylene	0.50	0.20	0.15		2.0	0.79	0.58	4	4/7/22 21:07	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 21:07	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 21:07	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 21:07	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 21:07	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 21:07	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.8	70-130		4/7/22 21:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-13_040522
Sample ID: 22D0459-03
Sample Matrix: Indoor air
Sampled: 4/5/2022 09:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2630
Canister Size: 1 liter
Flow Controller ID: 7046
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 21:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/7/22 21:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 21:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 21:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 21:31	BRF
Trichloroethylene	0.36	0.20	0.13		2.0	1.1	0.72	4	4/7/22 21:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 21:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.4	70-130		4/7/22 21:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: MH-1231_040622
Sample ID: 22D0459-04
Sample Matrix: Indoor air
Sampled: 4/6/2022 10:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 222
Canister Size: 1 liter
Flow Controller ID: 7050
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 21:56	BRF
cis-1,2-Dichloroethylene	6.7	0.20	0.15		27	0.79	0.58	4	4/7/22 21:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 21:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 21:56	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 21:56	BRF
Trichloroethylene	0.21	0.20	0.13		1.1	1.1	0.72	4	4/7/22 21:56	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 21:56	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	85.0	70-130		4/7/22 21:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: DUP-1_040422
Sample ID: 22D0459-05
Sample Matrix: Indoor air
Sampled: 4/4/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2628
Canister Size: 1 liter
Flow Controller ID: 5058
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.5
Receipt Vacuum(in Hg): -2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 22:20	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/7/22 22:20	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 22:20	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 22:20	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 22:20	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 22:20	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 22:20	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.8	70-130		4/7/22 22:20

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-18_040422
Sample ID: 22D0459-06
Sample Matrix: Indoor air
Sampled: 4/4/2022 11:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2541
Canister Size: 1 liter
Flow Controller ID: 5027
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 22:45	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/7/22 22:45	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 22:45	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 22:45	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 22:45	BRF
Trichloroethylene	0.16	0.20	0.13	J	0.84	1.1	0.72	4	4/7/22 22:45	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 22:45	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	85.6	70-130		4/7/22 22:45

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-22_040422
Sample ID: 22D0459-07
Sample Matrix: Indoor air
Sampled: 4/4/2022 11:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2638
Canister Size: 1 liter
Flow Controller ID: 7084
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -4.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 23:10	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/7/22 23:10	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 23:10	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 23:10	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 23:10	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 23:10	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 23:10	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.1	70-130		4/7/22 23:10

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-20_040422
Sample ID: 22D0459-08
Sample Matrix: Indoor air
Sampled: 4/4/2022 10:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2675
Canister Size: 1 liter
Flow Controller ID: 7083
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -0.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 23:34	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/7/22 23:34	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 23:34	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 23:34	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 23:34	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 23:34	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 23:34	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	86.1	70-130		4/7/22 23:34

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-3_040622
Sample ID: 22D0459-09
Sample Matrix: Indoor air
Sampled: 4/6/2022 10:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2248
Canister Size: 1 liter
Flow Controller ID: 7060
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/7/22 23:59	BRF
cis-1,2-Dichloroethylene	0.48	0.20	0.15		1.9	0.79	0.58	4	4/7/22 23:59	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/7/22 23:59	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/7/22 23:59	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/7/22 23:59	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/7/22 23:59	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/7/22 23:59	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	81.8	70-130		4/7/22 23:59

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-16_040622
Sample ID: 22D0459-10
Sample Matrix: Indoor air
Sampled: 4/6/2022 09:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2297
Canister Size: 1 liter
Flow Controller ID: 7054
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 0:24	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 0:24	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 0:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 0:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 0:24	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 0:24	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 0:24	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	81.2	70-130		4/8/22 0:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-11_040522
Sample ID: 22D0459-11
Sample Matrix: Indoor air
Sampled: 4/5/2022 12:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2661
Canister Size: 1 liter
Flow Controller ID: 5028
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 0:48	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 0:48	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 0:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 0:48	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 0:48	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 0:48	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 0:48	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	86.0	70-130		4/8/22 0:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: DUP-2_040622
Sample ID: 22D0459-12
Sample Matrix: Indoor air
Sampled: 4/6/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2113
Canister Size: 1 liter
Flow Controller ID: 7032
Sample Type: Grab

Work Order: 22D0459
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 1:13	BRF
cis-1,2-Dichloroethylene	2.3	0.20	0.15		9.0	0.79	0.58	4	4/8/22 1:13	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 1:13	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 1:13	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 1:13	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 1:13	BRF
Vinyl Chloride	6.7	0.20	0.18		17	0.51	0.46	4	4/8/22 1:13	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.6	70-130		4/8/22 1:13

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0459-01 [SL-2_040522]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-02 [SL-17_040622]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-03 [SL-13_040522]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-04 [MH-1231_040622]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-05 [DUP-1_040422]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-06 [SL-18_040422]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-07 [SL-22_040422]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-08 [SL-20_040422]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-09 [SL-3_040622]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-10 [SL-16_040622]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-11 [SL-11_040522]	B305315	1.5	1	N/A	1000	200	75	04/07/22
22D0459-12 [DUP-2_040622]	B305315	1.5	1	N/A	1000	200	75	04/07/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B305315 - TO-15 Prep											
Blank (B305315-BLK1)					Prepared & Analyzed: 04/07/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*6.95*				*8.00*		*86.9*	*70-130*			
LCS (B305315-BS1)					Prepared & Analyzed: 04/07/22						
1,1-Dichloroethylene	5.48				5.00		110	70-130			
cis-1,2-Dichloroethylene	4.34				5.00		86.8	70-130			
trans-1,2-Dichloroethylene	4.32				5.00		86.5	70-130			
1,4-Dioxane	5.17				5.00		103	70-130			
Tetrachloroethylene	4.57				5.00		91.3	70-130			
Trichloroethylene	5.14				5.00		103	70-130			
Vinyl Chloride	5.62				5.00		112	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.44*				*8.00*		*93.0*	*70-130*			
Duplicate (B305315-DUP1)			**Source: 22D0459-01**		Prepared & Analyzed: 04/07/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	1.1	0.20	4.3	0.79		1.1			3.60	25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*6.60*				*8.00*		*82.5*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RLF	Rebecca Faust
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070122-CCV1)			Lab File ID: J22A097004.D			Analyzed: 04/07/22 09:19			
Bromochloromethane (1)	174433	2.857	150879	2.863	116	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	636814	3.466	694423	3.468	92	60 - 140	-0.0020	+/-0.50	
Chlorobenzene-d5 (1)	558604	5.054	641566	5.057	87	60 - 140	-0.0030	+/-0.50	
LCS (B305315-BS1)			Lab File ID: J22A097005.D			Analyzed: 04/07/22 09:43			
Bromochloromethane (1)	173148	2.857	174433	2.857	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	637124	3.465	636814	3.466	100	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	571115	5.054	558604	5.054	102	60 - 140	0.0000	+/-0.50	
Blank (B305315-BLK1)			Lab File ID: J22A097009.D			Analyzed: 04/07/22 11:28			
Bromochloromethane (1)	170975	2.844	174433	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	571150	3.456	636814	3.466	90	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	519316	5.05	558604	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-2_040522 (22D0459-01)			Lab File ID: J22A097026.D			Analyzed: 04/07/22 20:17			
Bromochloromethane (1)	176233	2.847	174433	2.857	101	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	592965	3.459	636814	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	548248	5.051	558604	5.054	98	60 - 140	-0.0030	+/-0.50	
Duplicate (B305315-DUP1)			Lab File ID: J22A097027.D			Analyzed: 04/07/22 20:42			
Bromochloromethane (1)	177295	2.847	174433	2.857	102	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	593736	3.459	636814	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	554803	5.051	558604	5.054	99	60 - 140	-0.0030	+/-0.50	
SL-17_040622 (22D0459-02)			Lab File ID: J22A097028.D			Analyzed: 04/07/22 21:07			
Bromochloromethane (1)	174644	2.847	174433	2.857	100	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	598195	3.459	636814	3.466	94	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	537636	5.05	558604	5.054	96	60 - 140	-0.0040	+/-0.50	
SL-13_040522 (22D0459-03)			Lab File ID: J22A097029.D			Analyzed: 04/07/22 21:31			
Bromochloromethane (1)	171932	2.847	174433	2.857	99	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	594547	3.459	636814	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	529488	5.05	558604	5.054	95	60 - 140	-0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1231_040622 (22D0459-04)			Lab File ID: J22A097030.D			Analyzed: 04/07/22 21:56			
Bromochloromethane (1)	173537	2.847	174433	2.857	99	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	601923	3.459	636814	3.466	95	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	537660	5.051	558604	5.054	96	60 - 140	-0.0030	+/-0.50	
DUP-1_040422 (22D0459-05)			Lab File ID: J22A097031.D			Analyzed: 04/07/22 22:20			
Bromochloromethane (1)	163693	2.847	174433	2.857	94	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	553806	3.459	636814	3.466	87	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	510038	5.05	558604	5.054	91	60 - 140	-0.0040	+/-0.50	
SL-18_040422 (22D0459-06)			Lab File ID: J22A097032.D			Analyzed: 04/07/22 22:45			
Bromochloromethane (1)	159668	2.85	174433	2.857	92	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	549696	3.459	636814	3.466	86	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	493502	5.05	558604	5.054	88	60 - 140	-0.0040	+/-0.50	
SL-22_040422 (22D0459-07)			Lab File ID: J22A097033.D			Analyzed: 04/07/22 23:10			
Bromochloromethane (1)	161739	2.85	174433	2.857	93	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	547054	3.459	636814	3.466	86	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	491597	5.05	558604	5.054	88	60 - 140	-0.0040	+/-0.50	
SL-20_040422 (22D0459-08)			Lab File ID: J22A097034.D			Analyzed: 04/07/22 23:34			
Bromochloromethane (1)	159384	2.85	174433	2.857	91	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	539106	3.459	636814	3.466	85	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	486986	5.051	558604	5.054	87	60 - 140	-0.0030	+/-0.50	
SL-3_040622 (22D0459-09)			Lab File ID: J22A097035.D			Analyzed: 04/07/22 23:59			
Bromochloromethane (1)	169953	2.85	174433	2.857	97	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	580994	3.459	636814	3.466	91	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	534327	5.05	558604	5.054	96	60 - 140	-0.0040	+/-0.50	
SL-16_040622 (22D0459-10)			Lab File ID: J22A097036.D			Analyzed: 04/08/22 00:24			
Bromochloromethane (1)	169549	2.85	174433	2.857	97	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	584989	3.459	636814	3.466	92	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	543470	5.051	558604	5.054	97	60 - 140	-0.0030	+/-0.50	
SL-11_040522 (22D0459-11)			Lab File ID: J22A097037.D			Analyzed: 04/08/22 00:48			
Bromochloromethane (1)	164280	2.85	174433	2.857	94	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	561395	3.459	636814	3.466	88	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	499643	5.05	558604	5.054	89	60 - 140	-0.0040	+/-0.50	
DUP-2_040622 (22D0459-12)			Lab File ID: J22A097038.D			Analyzed: 04/08/22 01:13			
Bromochloromethane (1)	157944	2.85	174433	2.857	91	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	539894	3.459	636814	3.466	85	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	493624	5.05	558604	5.054	88	60 - 140	-0.0040	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070122-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.35	1.038306	1.110707		7.0	30
cis-1,2-Dichloroethylene	A	5.00	4.36	1.058854	0.923761		-12.8	30
trans-1,2-Dichloroethylene	A	5.00	4.25	1.144971	0.9739625		-14.9	30
1,4-Dioxane	A	5.00	5.04	0.1348394	0.1359518		0.8	30
Tetrachloroethylene	A	5.00	4.74	0.5934671	0.5625567		-5.2	30
Trichloroethylene	A	5.00	5.18	0.2950588	0.3055536		3.6	30
Vinyl Chloride	A	5.00	5.70	0.6636142	0.7569302		14.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D0459

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
09	SL-3_040622	4/6/22 1000	4/6/22 1007	--	--	IA	--	X				-28.5	-5.5	5.5	2248	7060
10	SL-16_040622	4/6/22 945	4/6/22 946	—	—	IA	—	X				-28	-6	6.1	2297	7054
11	SL-11_040522	4/6/22 1235	4/6/22 1236	—	—	IA	—	X				-29	-5.5	5.2	2661	5028
12	DUP-2_040622	4/6/22	4/6/22	—	—	IA	—	X				-29	-4.5	4.3	2113	7032

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:	Detection Limit Requirements
S Hinskey/Arcadis	4/6/22/1230	MA
Received by: (signature)	Date/Time:	
	4/7/22 941	
Relinquished by: (signature)	Date/Time:	CT
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	Other:
Received by: (signature)	Date/Time:	

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical®

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

2200459

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
05	DUP-1_040422	4/4/22	4/4/22	--	--	IA	--	X				-29	-3.5	-2	2628	5058
06	SL-18_040422	4/4/22 1150	4/4/22 1151	—	—	IA	—	X				-29	-5.5	-3	2541	5027
07	SL-22_040422	4/4/22 1110	4/4/22 1111	—	—	IA	—	X				-29	-5.5	-3	2638	7084
08	SL-20_040422	4/4/22 1055	4/4/22 1056	—	—	IA	—	X				-29	-3	-2	2675	7083

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time: 4/6/22 1230
Received by: (signature)	Date/Time: 4/7/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Arcadis

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22D0459

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☒

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

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For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
01	SL-2_040522	4/5/22 1020	4/5/22 1021	--	--	IA	--	X				-29	-6	-6.2	2546	5067
02	SL-17_040622	4/6/22 925	4/6/22 926	—	—	IA	—	X				-29	-5	-5	2682	5055
03	SL-13_040522	4/5/22 950	4/5/22 951	—	—	IA	—	X				-29	-5	-5.2	2630	7046
04	MH-1231_040622	4/6/22 1040	4/6/22 1041	—	—	IA	—	X				-29	-5	-5	2122	7050

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

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SG = SOIL GAS
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Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Relinquished by: (signature) Arcadis — Date/Time: 4/6/22 1230

Received by: (signature) — Date/Time: 4/7/22 941

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx®

FedEx® Tracking

271721075714

ADD NICKNAME

Delivered
Thursday, 4/7/2022 at 9:41 am

THIS IS 1 OF 7 PIECES

DELIVERED

Signed for by: L.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

TO

East Longmeadow, MA US

MANAGE DELIVERY

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271721075714 (master)	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075725	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075736	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075747	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075758	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075769	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By RLF Date 4/7/22 Time 941

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C NA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? NA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(12)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	12	1L	12	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
25416	21638				5067	7084			
21662	21675				5035	7083			
21630	2248				7046	7060			
2122	2297				7080	7054			
21678	21661				5058	5028			
2541	2113				5027	7032			
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2546/BC5067

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2682/BC5055

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2630/BC7046

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2122/BC7050

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** G22A081013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2628/BC5058

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2541/BC5027

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** G22A081017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2638/BC7084

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2675/BC7083

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** G22A081023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2248/BC7060

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2297/BC7054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081037.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2661/BC5028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2113/BC7032

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/8/2022

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 11, 2022

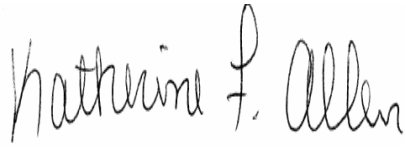
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D0461

Enclosed are results of analyses for samples as received by the laboratory on April 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/11/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D0461

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-8_040522	22D0461-01	Indoor air		-	
				EPA TO-15	
SL-21_040422	22D0461-02	Indoor air		-	
				EPA TO-15	
SL-12_040522	22D0461-03	Indoor air		-	
				EPA TO-15	
SL-23_040522	22D0461-04	Indoor air		-	
				EPA TO-15	
SL-5_040522	22D0461-05	Indoor air		-	
				EPA TO-15	
SL-14_040522	22D0461-06	Indoor air		-	
				EPA TO-15	
SL-19_040522	22D0461-07	Indoor air		-	
				EPA TO-15	
MH-1244_040622	22D0461-08	Indoor air		-	
				EPA TO-15	
SL-15_040522	22D0461-09	Indoor air		-	
				EPA TO-15	
SL-7_040522	22D0461-10	Indoor air		-	
				EPA TO-15	
SL-6_040522	22D0461-11	Indoor air		-	
				EPA TO-15	
SL-9_040522	22D0461-12	Indoor air		-	
				EPA TO-15	
SL-4_040422	22D0461-13	Indoor air		-	
				EPA TO-15	
SL-10_040522	22D0461-14	Indoor air		-	
				EPA TO-15	
Unused Can/Reg #2686/7063	22D0461-15	Indoor air		-	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-8_040522
Sample ID: 22D0461-01
Sample Matrix: Indoor air
Sampled: 4/5/2022 11:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2100
Canister Size: 1 liter
Flow Controller ID: 5042
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 1:09	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 1:09	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 1:09	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 1:09	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 1:09	BRF
Trichloroethylene	0.20	0.20	0.13		1.1	1.1	0.72	4	4/8/22 1:09	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 1:09	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.5	70-130		4/8/22 1:09

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-21_040422
Sample ID: 22D0461-02
Sample Matrix: Indoor air
Sampled: 4/4/2022 10:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2655
Canister Size: 1 liter
Flow Controller ID: 7071
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 1:38	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 1:38	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 1:38	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 1:38	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 1:38	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 1:38	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 1:38	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.2	70-130		4/8/22 1:38

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-12_040522
Sample ID: 22D0461-03
Sample Matrix: Indoor air
Sampled: 4/5/2022 13:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2111
Canister Size: 1 liter
Flow Controller ID: 7031
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 2:08	BRF
cis-1,2-Dichloroethylene	0.86	0.20	0.15		3.4	0.79	0.58	4	4/8/22 2:08	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 2:08	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 2:08	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 2:08	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 2:08	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 2:08	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		4/8/22 2:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-23_040522
Sample ID: 22D0461-04
Sample Matrix: Indoor air
Sampled: 4/5/2022 22:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2232
Canister Size: 1 liter
Flow Controller ID: 7035
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 2:37	BRF
cis-1,2-Dichloroethylene	4.3	0.20	0.15		17	0.79	0.58	4	4/8/22 2:37	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 2:37	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 2:37	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 2:37	BRF
Trichloroethylene	0.18	0.20	0.13	J	0.99	1.1	0.72	4	4/8/22 2:37	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 2:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	4/8/22 2:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-5_040522
Sample ID: 22D0461-05
Sample Matrix: Indoor air
Sampled: 4/5/2022 10:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2306
Canister Size: 1 liter
Flow Controller ID: 5020
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 3:06	BRF
cis-1,2-Dichloroethylene	5.0	0.20	0.15		20	0.79	0.58	4	4/8/22 3:06	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 3:06	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 3:06	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 3:06	BRF
Trichloroethylene	0.47	0.20	0.13		2.5	1.1	0.72	4	4/8/22 3:06	BRF
Vinyl Chloride	9.6	0.20	0.18		24	0.51	0.46	4	4/8/22 3:06	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		4/8/22 3:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-14_040522
Sample ID: 22D0461-06
Sample Matrix: Indoor air
Sampled: 4/5/2022 09:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2090
Canister Size: 1 liter
Flow Controller ID: 5025
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 11:20	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 11:20	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 11:20	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 11:20	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 11:20	BRF
Trichloroethylene	0.21	0.20	0.13		1.1	1.1	0.72	4	4/8/22 11:20	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 11:20	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.4	70-130		4/8/22 11:20

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-19_040522
Sample ID: 22D0461-07
Sample Matrix: Indoor air
Sampled: 4/5/2022 13:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2561
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 11:49	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 11:49	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 11:49	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 11:49	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 11:49	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 11:49	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 11:49	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.8	70-130		4/8/22 11:49

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: MH-1244_040622
Sample ID: 22D0461-08
Sample Matrix: Indoor air
Sampled: 4/6/2022 11:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2570
Canister Size: 1 liter
Flow Controller ID: 7043
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 12:18	BRF
cis-1,2-Dichloroethylene	2.5	0.20	0.15		9.7	0.79	0.58	4	4/8/22 12:18	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 12:18	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 12:18	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 12:18	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 12:18	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 12:18	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		4/8/22 12:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-15_040522
Sample ID: 22D0461-09
Sample Matrix: Indoor air
Sampled: 4/5/2022 09:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2559
Canister Size: 1 liter
Flow Controller ID: 7024
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -3.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 12:47	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 12:47	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 12:47	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 12:47	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 12:47	BRF
Trichloroethylene	0.17	0.20	0.13	J	0.90	1.1	0.72	4	4/8/22 12:47	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 12:47	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	4/8/22 12:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-7_040522
Sample ID: 22D0461-10
Sample Matrix: Indoor air
Sampled: 4/5/2022 10:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2563
Canister Size: 1 liter
Flow Controller ID: 7026
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 13:46	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 13:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 13:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 13:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 13:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 13:46	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 13:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.0	70-130		4/8/22 13:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-6_040522
Sample ID: 22D0461-11
Sample Matrix: Indoor air
Sampled: 4/5/2022 10:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2651
Canister Size: 1 liter
Flow Controller ID: 5008
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 14:15	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 14:15	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 14:15	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 14:15	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 14:15	BRF
Trichloroethylene	0.29	0.20	0.13		1.5	1.1	0.72	4	4/8/22 14:15	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 14:15	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.4	70-130		4/8/22 14:15

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-9_040522
Sample ID: 22D0461-12
Sample Matrix: Indoor air
Sampled: 4/5/2022 12:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2615
Canister Size: 1 liter
Flow Controller ID: 5024
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 14:43	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 14:43	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 14:43	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 14:43	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 14:43	BRF
Trichloroethylene	0.40	0.20	0.13		2.1	1.1	0.72	4	4/8/22 14:43	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 14:43	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.0	70-130		4/8/22 14:43

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-4_040422
Sample ID: 22D0461-13
Sample Matrix: Indoor air
Sampled: 4/4/2022 11:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2670
Canister Size: 1 liter
Flow Controller ID: 5029
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 15:12	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 15:12	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 15:12	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 15:12	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 15:12	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/8/22 15:12	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 15:12	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.0	70-130		4/8/22 15:12

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/7/2022
Field Sample #: SL-10_040522
Sample ID: 22D0461-14
Sample Matrix: Indoor air
Sampled: 4/5/2022 12:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2323
Canister Size: 1 liter
Flow Controller ID: 7051
Sample Type: Grab

Work Order: 22D0461
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/8/22 15:41	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/8/22 15:41	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/8/22 15:41	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/8/22 15:41	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/8/22 15:41	BRF
Trichloroethylene	0.27	0.20	0.13		1.4	1.1	0.72	4	4/8/22 15:41	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/8/22 15:41	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.6	70-130		4/8/22 15:41

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0461-01 [SL-8_040522]	B305345	1.5	1	N/A	1000	200	75	04/07/22
22D0461-02 [SL-21_040422]	B305345	1.5	1	N/A	1000	200	75	04/07/22
22D0461-03 [SL-12_040522]	B305345	1.5	1	N/A	1000	200	75	04/07/22
22D0461-04 [SL-23_040522]	B305345	1.5	1	N/A	1000	200	75	04/07/22
22D0461-05 [SL-5_040522]	B305345	1.5	1	N/A	1000	200	75	04/07/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0461-06 [SL-14_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-07 [SL-19_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-08 [MH-1244_040622]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-09 [SL-15_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-10 [SL-7_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-11 [SL-6_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-12 [SL-9_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-13 [SL-4_040422]	B305442	1.5	1	N/A	1000	200	75	04/08/22
22D0461-14 [SL-10_040522]	B305442	1.5	1	N/A	1000	200	75	04/08/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B305345 - TO-15 Prep											
Blank (B305345-BLK1)					Prepared: 04/07/22 Analyzed: 04/08/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.88*				*8.00*		*98.5*	*70-130*			
LCS (B305345-BS1)					Prepared & Analyzed: 04/07/22						
1,1-Dichloroethylene	5.11				5.00		102	70-130			
cis-1,2-Dichloroethylene	5.08				5.00		102	70-130			
trans-1,2-Dichloroethylene	5.14				5.00		103	70-130			
1,4-Dioxane	5.33				5.00		107	70-130			
Tetrachloroethylene	4.94				5.00		98.9	70-130			
Trichloroethylene	4.75				5.00		95.0	70-130			
Vinyl Chloride	5.13				5.00		103	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.46*				*8.00*		*106*	*70-130*			
Batch B305442 - TO-15 Prep											
Blank (B305442-BLK1)					Prepared & Analyzed: 04/08/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.93*				*8.00*		*99.2*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B305442 - TO-15 Prep											
LCS (B305442-BS1)					Prepared & Analyzed: 04/08/22						
1,1-Dichloroethylene	4.92				5.00		98.4	70-130			
cis-1,2-Dichloroethylene	4.83				5.00		96.7	70-130			
trans-1,2-Dichloroethylene	4.94				5.00		98.9	70-130			
1,4-Dioxane	5.24				5.00		105	70-130			
Tetrachloroethylene	4.80				5.00		96.0	70-130			
Trichloroethylene	4.64				5.00		92.9	70-130			
Vinyl Chloride	5.06				5.00		101	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.58*				*8.00*		*107*	*70-130*			
Duplicate (B305442-DUP1)				**Source: 22D0461-09**	Prepared & Analyzed: 04/08/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	0.19	0.20	1.0	1.1		0.17			11.2	25	J
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.84*				*8.00*		*98.0*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

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RLF	Rebecca Faust
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070140-CCV1)			Lab File ID: K22A097004.D			Analyzed: 04/07/22 10:13			
Bromochloromethane (1)	89286	2.992	102745	2.987	87	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	288588	3.584	303801	3.579	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	210793	5.159	223280	5.159	94	60 - 140	0.0000	+/-0.50	
LCS (B305345-BS1)			Lab File ID: K22A097025.D			Analyzed: 04/07/22 22:56			
Bromochloromethane (1)	84590	2.992	89286	2.992	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	276917	3.584	288588	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	203528	5.159	210793	5.159	97	60 - 140	0.0000	+/-0.50	
Blank (B305345-BLK1)			Lab File ID: K22A097028.D			Analyzed: 04/08/22 00:40			
Bromochloromethane (1)	85982	2.992	89286	2.992	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	260324	3.584	288588	3.584	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	198162	5.163	210793	5.159	94	60 - 140	0.0040	+/-0.50	
SL-8_040522 (22D0461-01)			Lab File ID: K22A097029.D			Analyzed: 04/08/22 01:09			
Bromochloromethane (1)	86257	2.996	89286	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	263546	3.588	288588	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	204675	5.164	210793	5.159	97	60 - 140	0.0050	+/-0.50	
SL-21_040422 (22D0461-02)			Lab File ID: K22A097030.D			Analyzed: 04/08/22 01:38			
Bromochloromethane (1)	85088	2.996	89286	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	259810	3.588	288588	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	195615	5.164	210793	5.159	93	60 - 140	0.0050	+/-0.50	
SL-12_040522 (22D0461-03)			Lab File ID: K22A097031.D			Analyzed: 04/08/22 02:08			
Bromochloromethane (1)	85246	2.996	89286	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	259554	3.588	288588	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	197575	5.163	210793	5.159	94	60 - 140	0.0040	+/-0.50	
SL-23_040522 (22D0461-04)			Lab File ID: K22A097032.D			Analyzed: 04/08/22 02:37			
Bromochloromethane (1)	86630	3.001	89286	2.992	97	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	261071	3.593	288588	3.584	90	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	202264	5.163	210793	5.159	96	60 - 140	0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-5_040522 (22D0461-05)			Lab File ID: K22A097033.D			Analyzed: 04/08/22 03:06			
Bromochloromethane (1)	84074	2.996	89286	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	263597	3.588	288588	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	198470	5.159	210793	5.159	94	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070203-CCV1)			Lab File ID: K22A098004.D			Analyzed: 04/08/22 08:37			
Bromochloromethane (1)	84246	2.992	102745	2.987	82	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	275484	3.584	303801	3.579	91	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	204768	5.159	223280	5.159	92	60 - 140	0.0000	+/-0.50	
LCS (B305442-BS1)			Lab File ID: K22A098005.D			Analyzed: 04/08/22 09:07			
Bromochloromethane (1)	86494	2.992	84246	2.992	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	276627	3.584	275484	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	205325	5.163	204768	5.159	100	60 - 140	0.0040	+/-0.50	
Blank (B305442-BLK1)			Lab File ID: K22A098008.D			Analyzed: 04/08/22 10:51			
Bromochloromethane (1)	82793	2.996	84246	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	254751	3.584	275484	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	191075	5.159	204768	5.159	93	60 - 140	0.0000	+/-0.50	
SL-14_040522 (22D0461-06)			Lab File ID: K22A098009.D			Analyzed: 04/08/22 11:20			
Bromochloromethane (1)	83701	2.996	84246	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	261564	3.588	275484	3.584	95	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	197191	5.164	204768	5.159	96	60 - 140	0.0050	+/-0.50	
SL-19_040522 (22D0461-07)			Lab File ID: K22A098010.D			Analyzed: 04/08/22 11:49			
Bromochloromethane (1)	81515	2.996	84246	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	253480	3.588	275484	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	188792	5.164	204768	5.159	92	60 - 140	0.0050	+/-0.50	
MH-1244_040622 (22D0461-08)			Lab File ID: K22A098011.D			Analyzed: 04/08/22 12:18			
Bromochloromethane (1)	81143	2.996	84246	2.992	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	256765	3.588	275484	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	193164	5.159	204768	5.159	94	60 - 140	0.0000	+/-0.50	
SL-15_040522 (22D0461-09)			Lab File ID: K22A098012.D			Analyzed: 04/08/22 12:47			
Bromochloromethane (1)	83274	2.996	84246	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	256893	3.588	275484	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	197055	5.164	204768	5.159	96	60 - 140	0.0050	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (B305442-DUP1)			Lab File ID: K22A098013.D			Analyzed: 04/08/22 13:17			
Bromochloromethane (1)	82709	2.996	84246	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	255191	3.588	275484	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	193096	5.163	204768	5.159	94	60 - 140	0.0040	+/-0.50	
SL-7_040522 (22D0461-10)			Lab File ID: K22A098014.D			Analyzed: 04/08/22 13:46			
Bromochloromethane (1)	82212	2.996	84246	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	252290	3.588	275484	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	194557	5.159	204768	5.159	95	60 - 140	0.0000	+/-0.50	
SL-6_040522 (22D0461-11)			Lab File ID: K22A098015.D			Analyzed: 04/08/22 14:15			
Bromochloromethane (1)	82673	2.996	84246	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	257825	3.588	275484	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	195987	5.163	204768	5.159	96	60 - 140	0.0040	+/-0.50	
SL-9_040522 (22D0461-12)			Lab File ID: K22A098016.D			Analyzed: 04/08/22 14:43			
Bromochloromethane (1)	82722	2.996	84246	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	258167	3.588	275484	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	198727	5.164	204768	5.159	97	60 - 140	0.0050	+/-0.50	
SL-4_040422 (22D0461-13)			Lab File ID: K22A098017.D			Analyzed: 04/08/22 15:12			
Bromochloromethane (1)	80930	2.996	84246	2.992	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	252829	3.588	275484	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	194997	5.164	204768	5.159	95	60 - 140	0.0050	+/-0.50	
SL-10_040522 (22D0461-14)			Lab File ID: K22A098018.D			Analyzed: 04/08/22 15:41			
Bromochloromethane (1)	80379	2.996	84246	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	258324	3.588	275484	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	195332	5.164	204768	5.159	95	60 - 140	0.0050	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070140-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.20	1.024961	1.065556		4.0	30
cis-1,2-Dichloroethylene	A	5.00	5.27	0.8170638	0.861322		5.4	30
trans-1,2-Dichloroethylene	A	5.00	5.22	0.8261855	0.8637592		4.5	30
1,4-Dioxane	A	5.00	5.03	0.1250488	0.1259262		0.7	30
Tetrachloroethylene	A	5.00	5.02	0.4025846	0.4045372		0.5	30
Trichloroethylene	A	5.00	4.94	0.2665469	0.2636894		-1.1	30
Vinyl Chloride	A	5.00	5.35	0.669766	0.7164035		7.0	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070203-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.20	1.024961	1.065413		3.9	30
cis-1,2-Dichloroethylene	A	5.00	5.25	0.8170638	0.8576027		5.0	30
trans-1,2-Dichloroethylene	A	5.00	5.41	0.8261855	0.8938964		8.2	30
1,4-Dioxane	A	5.00	5.14	0.1250488	0.1287683		3.0	30
Tetrachloroethylene	A	5.00	5.08	0.4025846	0.4088139		1.5	30
Trichloroethylene	A	5.00	4.95	0.2665469	0.2644887		-0.8	30
Vinyl Chloride	A	5.00	5.42	0.669766	0.7270897		8.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D04491

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
01	SL-8_040522	4/5/22 1130	4/5/22 1131	--	--	IA	--	X				-29.5	-5	-5.4	2190	5042
02	SL-21_040422	4/4/22 1040	4/4/22 1041	—	—	IA	—	X				-29	-6.5	-6.1	2655	7071
03	SL-12_040522	4/5/22 1310	4/5/22 1311	—	—	IA	—	X				-29	-6.5	-6.4	2111	7031
04	SL-23_040522	4/5/22 2232	4/5/22 7035	—	—	IA	—	X				-29	-5.5	-6.1	2232	7035

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

	Date/Time:
Relinquished by: (signature) Kristoffer/Arcadis	4/6/22/1230
Received by: (signature)	Date/Time: 4/7/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D04161

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³									
05	SL-5_040522	4/5/22 1055	4/5/22 1056	--	--	IA	--	X				-29	-6	-5.3	2306	5020
06	SL-14_040522	4/5/22 940	4/5/22 941	—	—	IA	—	X				-29	-5	-5.5	2090	5025
07	SL-19_040522	4/5/22 1330	4/5/22 1331	—	—	IA	—	X				-29	-4.5	-5.7	2561	7047
08	MH-1244_040622	4/6/22 1100	4/6/22 1101	—	—	IA	—	X				-29	-5	-4.9	2570	7043

Please fill out completely, sign, date and retain the yellow copy for your records

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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O = Other_____

	Date/Time:
Relinquished by: (signature) Arcadis	4/6/22 1230
Received by: (signature)	4/7/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

☐ MCP Certification Form Required

☐ CT RCP Required

☐ RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0-161

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☒

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
09	SL-15_040522	4/5/22 915	4/5/22 916	--	--	IA	--	X				-29	-4.5	3.2	2559	7024
10	SL-7_040522	4/5/22 1010	4/5/22 1011	—	—	IA	—	X				-29.5	-4	2.0	2563	7026
11	SL-6_040522	4/5/22 1030	4/5/22 1031	—	—	IA	—	X				-29	-5.5	2.0	2651	5008
12	SL-9_040522	4/5/22 1200	4/5/22 1201	—	—	IA	—	X				-29	-5.5	2.3	2615	5024

Please fill out completely, sign, date and retain the yellow copy for your records

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Arcadis	4/8/22
Received by: (signature)	Date/Time: 4/7/22 941
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

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NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22D0416(

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

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Project Location: Livonia, MI

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Project Manager: Kristoffer Hinskey

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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)	Do not analyze			Initial Pressure " Hg	Final Pressure " Hg	Lab Receipt Pressure " Hg	Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³									
13	SL-4_040922	4/9/22 1130	4/9/22 1131	--	--	IA	--	X				-29	-6.5	5.7	2670	5029
14	SL-10_040522	4/5/22 1215	4/5/22 1216	—	—	IA	—	X				-29.5	-6	6.7	2323	7051
15									X					5.3	2683	7063

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

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Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:	
Sturtevant / Arcadis	4/6/22/1230	
Received by: (signature)	Date/Time:	
	4/7/22 941	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

MELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx®

FedEx® Tracking

271721075714

ADD NICKNAME

Delivered
Thursday, 4/7/2022 at 9:41 am

THIS IS 1 OF 7 PIECES

DELIVERED

Signed for by: L.RIOS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

MANAGE DELIVERY

TO

East Longmeadow, MA US

7 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271721075714 (master)	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075725	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075736	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075747	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075758	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA
271721075769	Delivered	4/6/22	4/7/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ARCADIS

Received By RF Date 4/7/22 Time 941

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C LA By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? LA

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T(15)

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	15	1L	15	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2100	2561	2670			7042	7047	7029		
2655	2570	2323			7071	7043	7057		
2111	2559				7031	7024			
2232	2523				7035	7026			
2304	2651				7020	7008			
2090	2015				7025	7034			
Unused Media					**Pufs/TO-17's**				
2663	(-0.3)	7063							

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2100/BC5042

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/2/2022 **Batch #:** K22A061018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2655/BC7071

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2111/BC7031

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2232/BC7035

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085008.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2306/BC5020

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2090/BC5025

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2561/BC7047

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2570/BC7043

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2559/BC7024

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2563/BC7026

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2651/BC5008

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/26/2022 **Batch #:** J22A085010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2615/BC5024

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/22/2022 **Batch #:** K22A081022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2670/BC5029

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 3/28/2022 **Batch #:** K22A087010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2683/BC7051

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/11/2022

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April 19, 2022

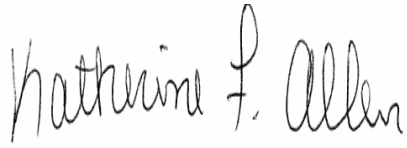
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D0959

Enclosed are results of analyses for samples as received by the laboratory on April 14, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/19/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D0959

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-8_041222	22D0959-01	Indoor air		-	
				EPA TO-15	
SL-5_041222	22D0959-02	Indoor air		-	
				EPA TO-15	
SL-23_041222	22D0959-03	Indoor air		-	
				EPA TO-15	
SL-7_041222	22D0959-04	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-8_041222
Sample ID: 22D0959-01
Sample Matrix: Indoor air
Sampled: 4/12/2022 11:48

Sample Description/Location:
Sub Description/Location:
Canister ID: 2290
Canister Size: 1 liter
Flow Controller ID: 7049
Sample Type: Grab

Work Order: 22D0959
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/15/22 18:55	BRF
cis-1,2-Dichloroethylene	0.37	0.20	0.15		1.5	0.79	0.58	4	4/15/22 18:55	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/15/22 18:55	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/15/22 18:55	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/15/22 18:55	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/15/22 18:55	BRF
Vinyl Chloride	1.0	0.20	0.18		2.6	0.51	0.46	4	4/15/22 18:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.3	70-130	4/15/22 18:55

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-5_041222
Sample ID: 22D0959-02
Sample Matrix: Indoor air
Sampled: 4/12/2022 11:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2632
Canister Size: 1 liter
Flow Controller ID: 5023
Sample Type: Grab

Work Order: 22D0959
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.19	0.20	0.15	J	0.75	0.79	0.60	4	4/15/22 19:20	BRF
cis-1,2-Dichloroethylene	7.0	0.20	0.15		28	0.79	0.58	4	4/15/22 19:20	BRF
trans-1,2-Dichloroethylene	0.27	0.20	0.16		1.1	0.79	0.62	4	4/15/22 19:20	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/15/22 19:20	BRF
Tetrachloroethylene	0.50	0.20	0.15		3.4	1.4	1.0	4	4/15/22 19:20	BRF
Trichloroethylene	1.7	0.20	0.13		9.4	1.1	0.72	4	4/15/22 19:20	BRF
Vinyl Chloride	29	0.20	0.18		75	0.51	0.46	4	4/15/22 19:20	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	88.4	70-130	4/15/22 19:20

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-23_041222
Sample ID: 22D0959-03
Sample Matrix: Indoor air
Sampled: 4/12/2022 13:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2624
Canister Size: 1 liter
Flow Controller ID: 7028
Sample Type: Grab

Work Order: 22D0959
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/15/22 19:45	BRF
cis-1,2-Dichloroethylene	35	0.20	0.15		140	0.79	0.58	4	4/15/22 19:45	BRF
trans-1,2-Dichloroethylene	0.84	0.20	0.16		3.3	0.79	0.62	4	4/15/22 19:45	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/15/22 19:45	BRF
Tetrachloroethylene	14	0.20	0.15		92	1.4	1.0	4	4/15/22 19:45	BRF
Trichloroethylene	5.3	0.20	0.13		28	1.1	0.72	4	4/15/22 19:45	BRF
Vinyl Chloride	84	0.20	0.18		210	0.51	0.46	4	4/15/22 19:45	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.9	70-130		4/15/22 19:45

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-7_041222
Sample ID: 22D0959-04
Sample Matrix: Indoor air
Sampled: 4/12/2022 10:54

Sample Description/Location:
Sub Description/Location:
Canister ID: 2239
Canister Size: 1 liter
Flow Controller ID: 5068
Sample Type: Grab

Work Order: 22D0959
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/15/22 20:10	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/15/22 20:10	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/15/22 20:10	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/15/22 20:10	BRF
Tetrachloroethylene	4.3	0.20	0.15		29	1.4	1.0	4	4/15/22 20:10	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/15/22 20:10	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/15/22 20:10	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.6	70-130		4/15/22 20:10

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0959-01 [SL-8_041222]	B306141	1.5	1	N/A	1000	200	75	04/15/22
22D0959-02 [SL-5_041222]	B306141	1.5	1	N/A	1000	200	75	04/15/22
22D0959-03 [SL-23_041222]	B306141	1.5	1	N/A	1000	200	75	04/15/22
22D0959-04 [SL-7_041222]	B306141	1.5	1	N/A	1000	200	75	04/15/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306141 - TO-15 Prep											
Blank (B306141-BLK1)					Prepared & Analyzed: 04/15/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.40*				*8.00*		*92.5*	*70-130*			
LCS (B306141-BS1)					Prepared & Analyzed: 04/15/22						
1,1-Dichloroethylene	6.14				5.00		123	70-130			
cis-1,2-Dichloroethylene	5.83				5.00		117	70-130			
trans-1,2-Dichloroethylene	5.67				5.00		113	70-130			
1,4-Dioxane	5.99				5.00		120	70-130			
Tetrachloroethylene	5.55				5.00		111	70-130			
Trichloroethylene	5.75				5.00		115	70-130			
Vinyl Chloride	6.13				5.00		123	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.69*				*8.00*		*96.1*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070523-CCV1)			Lab File ID: J22A105004.D			Analyzed: 04/15/22 10:53			
Bromochloromethane (1)	167002	2.857	150879	2.863	111	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	791470	3.462	694423	3.468	114	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	722616	5.054	641566	5.057	113	60 - 140	-0.0030	+/-0.50	
LCS (B306141-BS1)			Lab File ID: J22A105005.D			Analyzed: 04/15/22 11:18			
Bromochloromethane (1)	168947	2.857	167002	2.857	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	799318	3.465	791470	3.462	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	729661	5.051	722616	5.054	101	60 - 140	-0.0030	+/-0.50	
Blank (B306141-BLK1)			Lab File ID: J22A105009.D			Analyzed: 04/15/22 13:03			
Bromochloromethane (1)	169145	2.844	167002	2.857	101	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	780213	3.456	791470	3.462	99	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	688002	5.047	722616	5.054	95	60 - 140	-0.0070	+/-0.50	
SL-8_041222 (22D0959-01)			Lab File ID: J22A105022.D			Analyzed: 04/15/22 18:55			
Bromochloromethane (1)	163181	2.844	167002	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	762630	3.456	791470	3.462	96	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	670620	5.051	722616	5.054	93	60 - 140	-0.0030	+/-0.50	
SL-5_041222 (22D0959-02)			Lab File ID: J22A105023.D			Analyzed: 04/15/22 19:20			
Bromochloromethane (1)	161548	2.844	167002	2.857	97	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	765269	3.456	791470	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	672273	5.05	722616	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-23_041222 (22D0959-03)			Lab File ID: J22A105024.D			Analyzed: 04/15/22 19:45			
Bromochloromethane (1)	164004	2.844	167002	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	780332	3.456	791470	3.462	99	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	676973	5.05	722616	5.054	94	60 - 140	-0.0040	+/-0.50	
SL-7_041222 (22D0959-04)			Lab File ID: J22A105025.D			Analyzed: 04/15/22 20:10			
Bromochloromethane (1)	165786	2.844	167002	2.857	99	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	772232	3.456	791470	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	673545	5.051	722616	5.054	93	60 - 140	-0.0030	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070523-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	6.09	1.038306	1.265106		21.8	30
cis-1,2-Dichloroethylene	A	5.00	5.95	1.058854	1.260306		19.0	30
trans-1,2-Dichloroethylene	A	5.00	5.80	1.144971	1.327649		16.0	30
1,4-Dioxane	A	5.00	6.18	0.1348394	0.1666994		23.6	30
Tetrachloroethylene	A	5.00	5.67	0.5934671	0.6733956		13.5	30
Trichloroethylene	A	5.00	5.88	0.2950588	0.3471778		17.7	30
Vinyl Chloride	A	5.00	6.20	0.6636142	0.8233482		24.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D0959

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Minder~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-8_041222	4/12/22 1147	4/12/22 1148	--	--	IA	--	X				-29	-7	7.4	2290	7049
2	SL-5_041222	4/12/22 1120	4/12/22 1121	—	—	IA	—	X				-29	-7	7.8	02632	5023
3	SL-23_041222	4/12/22 1321	4/12/22 1322	—	—	IA	—	X				-29	-5	7.6	2624	7028
4	SL-7_041222	4/12/22 1053	4/12/22 1054	—	—	IA	—	X				-29	-5.5	5.8	2239	5068

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/13/22 12:00	
Received by: (signature) FedEx	Date/Time: 4/13/22 12:00	
Relinquished by: (signature)	Date/Time: 4/14 958	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and DoD ELAP Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

FedEx®

FedEx® Tracking

271981127657

ADD NICKNAME

Delivered
Thursday, 4/14/2022 at 9:58 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271981127602 (master)	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127613	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127624	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127635	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127646	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127657	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP | Date 4/14/22 | Time 958

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA | Were Samples Tampered with? NA

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4	Grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2290					7049				
2697					5023				
2624					7028				
2259					5068				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2290/BC7049

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2632/BC5023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2624/BC7028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2239/BC5068

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

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April 19, 2022

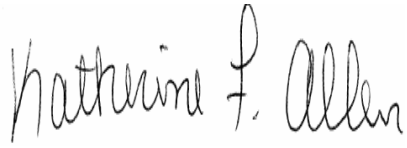
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D0983

Enclosed are results of analyses for samples as received by the laboratory on April 14, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/19/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D0983

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-15_041222	22D0983-01	Indoor air		-	
				EPA TO-15	
MH-1231_041122	22D0983-02	Indoor air		-	
				EPA TO-15	
SL-3_041122	22D0983-03	Indoor air		-	
				EPA TO-15	
SL-12_041222	22D0983-04	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-15_041222
Sample ID: 22D0983-01
Sample Matrix: Indoor air
Sampled: 4/12/2022 09:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2514
Canister Size: 1 liter
Flow Controller ID: 7033
Sample Type: Grab

Work Order: 22D0983
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 16:37	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/18/22 16:37	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 16:37	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 16:37	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 16:37	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 16:37	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 16:37	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.0	70-130		4/18/22 16:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: MH-1231_041122
Sample ID: 22D0983-02
Sample Matrix: Indoor air
Sampled: 4/11/2022 13:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2252
Canister Size: 1 liter
Flow Controller ID: 7080
Sample Type: Grab

Work Order: 22D0983
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	5.0	0.20	0.15		20	0.79	0.60	4	4/18/22 17:02	BRF
cis-1,2-Dichloroethylene	370	1.5	1.1		1400	5.9	4.3	30	4/19/22 7:55	BRF
trans-1,2-Dichloroethylene	3.9	0.20	0.16		15	0.79	0.62	4	4/18/22 17:02	BRF
1,4-Dioxane	0.54	2.0	0.17	J	1.9	7.2	0.60	4	4/18/22 17:02	BRF
Tetrachloroethylene	0.47	0.20	0.15		3.2	1.4	1.0	4	4/18/22 17:02	BRF
Trichloroethylene	8.4	0.20	0.13		45	1.1	0.72	4	4/18/22 17:02	BRF
Vinyl Chloride	760	1.5	1.4		1900	3.8	3.5	30	4/19/22 7:55	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	84.9	70-130	4/19/22 7:55
4-Bromofluorobenzene (1)	93.2	70-130	4/18/22 17:02

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-3_041122
Sample ID: 22D0983-03
Sample Matrix: Indoor air
Sampled: 4/11/2022 12:33

Sample Description/Location:
Sub Description/Location:
Canister ID: 2340
Canister Size: 1 liter
Flow Controller ID: 7030
Sample Type: Grab

Work Order: 22D0983
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 17:27	BRF
cis-1,2-Dichloroethylene	0.40	0.20	0.15		1.6	0.79	0.58	4	4/18/22 17:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 17:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 17:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 17:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 17:27	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 17:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.9	70-130		4/18/22 17:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-12_041222
Sample ID: 22D0983-04
Sample Matrix: Indoor air
Sampled: 4/12/2022 13:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2249
Canister Size: 1 liter
Flow Controller ID: 5063
Sample Type: Grab

Work Order: 22D0983
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 17:52	BRF
cis-1,2-Dichloroethylene	17	0.20	0.15		66	0.79	0.58	4	4/18/22 17:52	BRF
trans-1,2-Dichloroethylene	0.36	0.20	0.16		1.4	0.79	0.62	4	4/18/22 17:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 17:52	BRF
Tetrachloroethylene	6.7	0.20	0.15		46	1.4	1.0	4	4/18/22 17:52	BRF
Trichloroethylene	2.1	0.20	0.13		11	1.1	0.72	4	4/18/22 17:52	BRF
Vinyl Chloride	44	0.20	0.18		110	0.51	0.46	4	4/18/22 17:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	92.0	70-130		4/18/22 17:52

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D0983-01 [SL-15_041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D0983-02 [MH-1231_041122]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D0983-02RE1 [MH-1231_041122]	B306153	1.5	1	N/A	1000	200	10	04/18/22
22D0983-03 [SL-3_041122]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D0983-04 [SL-12_041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306153 - TO-15 Prep											
Blank (B306153-BLK1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.47*				*8.00*		*93.4*	*70-130*			
LCS (B306153-BS1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	4.94				5.00		98.8	70-130			
cis-1,2-Dichloroethylene	4.75				5.00		95.0	70-130			
trans-1,2-Dichloroethylene	4.65				5.00		93.1	70-130			
1,4-Dioxane	5.13				5.00		103	70-130			
Tetrachloroethylene	4.68				5.00		93.6	70-130			
Trichloroethylene	4.89				5.00		97.8	70-130			
Vinyl Chloride	5.00				5.00		99.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.67*				*8.00*		*95.9*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070528-CCV1)			Lab File ID: J22A108004.D			Analyzed: 04/18/22 12:47			
Bromochloromethane (1)	198856	2.854	150879	2.863	132	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	888480	3.462	694423	3.468	128	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	796618	5.05	641566	5.057	124	60 - 140	-0.0070	+/-0.50	
LCS (B306153-BS1)			Lab File ID: J22A108005.D			Analyzed: 04/18/22 13:12			
Bromochloromethane (1)	195154	2.854	198856	2.854	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	868840	3.462	888480	3.462	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	780865	5.051	796618	5.05	98	60 - 140	0.0010	+/-0.50	
Blank (B306153-BLK1)			Lab File ID: J22A108009.D			Analyzed: 04/18/22 14:59			
Bromochloromethane (1)	195393	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	867580	3.456	888480	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	757542	5.047	796618	5.05	95	60 - 140	-0.0030	+/-0.50	
SL-15_041222 (22D0983-01)			Lab File ID: J22A108013.D			Analyzed: 04/18/22 16:37			
Bromochloromethane (1)	191952	2.844	198856	2.854	97	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	858928	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	751702	5.047	796618	5.05	94	60 - 140	-0.0030	+/-0.50	
MH-1231_041122 (22D0983-02)			Lab File ID: J22A108014.D			Analyzed: 04/18/22 17:02			
Bromochloromethane (1)	202444	2.847	198856	2.854	102	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	897550	3.456	888480	3.462	101	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	778249	5.051	796618	5.05	98	60 - 140	0.0010	+/-0.50	
SL-3_041122 (22D0983-03)			Lab File ID: J22A108015.D			Analyzed: 04/18/22 17:27			
Bromochloromethane (1)	194758	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	864957	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	757358	5.05	796618	5.05	95	60 - 140	0.0000	+/-0.50	
SL-12_041222 (22D0983-04)			Lab File ID: J22A108016.D			Analyzed: 04/18/22 17:52			
Bromochloromethane (1)	195105	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	871123	3.456	888480	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	763002	5.05	796618	5.05	96	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1231_041122 (22D0983-02RE1)			Lab File ID: J22A108029.D			Analyzed: 04/19/22 07:55			
Bromochloromethane (1)	199637	2.85	198856	2.854	100	60 - 140	-0.0040	+/-0.50	
1,4-Difluorobenzene (1)	894095	3.459	888480	3.462	101	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	766886	5.051	796618	5.05	96	60 - 140	0.0010	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070528-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.81	1.038306	0.9980529		-3.9	30
cis-1,2-Dichloroethylene	A	5.00	4.84	1.058854	1.02442		-3.3	30
trans-1,2-Dichloroethylene	A	5.00	4.69	1.144971	1.074949		-6.1	30
1,4-Dioxane	A	5.00	5.04	0.1348394	0.1358185		0.7	30
Tetrachloroethylene	A	5.00	4.78	0.5934671	0.5676578		-4.3	30
Trichloroethylene	A	5.00	4.84	0.2950588	0.2858383		-3.1	30
Vinyl Chloride	A	5.00	5.10	0.6636142	0.677451		2.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

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2200983

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Kristoffer Hinskey~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
1	SL-15_041222	4/12/22 944	4/12/22 945	--	--	IA	--	X				-29	-7	-5			2514	7033
2	MH-1231_041122	4/11/22 1315	4/11/22 1316	—	—	IA	—	X				-29	-6.9	-5			2252	7080
3	SL-3_041122	4/11/22 1232	4/11/22 1233	—	—	IA	—	X				-29	-6.5	-5			2340	7030
4	SL-12_041222	4/12/22 1335	4/12/22 1336	—	—	IA	—	X				-29	-7.5	-5			2249	5063

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/13/22 12:00	
Received by: (signature) FedEx	Date/Time: 4/13/22 12:05	
Relinquished by: (signature)	Date/Time: 4/14 957	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx

FedEx® Tracking

271981127657

ADD NICKNAME

Delivered
Thursday, 4/14/2022 at 9:58 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

NOVI, MI US

MANAGE DELIVERY

TO

East Longmeadow, MA US

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271981127602 (master)	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127613	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127624	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127635	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127646	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127657	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

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Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP | Date 4/14/22 | Time 958

How were the samples received? In Cooler _____ | On Ice _____ | No Ice _____ | In Box T | Ambient _____ | Melted Ice _____

Were samples within Temperature Compliance? 2-6°C _____ | By Gun # _____ | Actual Temp - _____ | By Blank # _____ | Actual Temp - _____

Was Custody Seal Intact? NA | Were Samples Tampered with? NA

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2514					7037				
2252					7080				
2340					7030				
2279					5063				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2514/BC7033

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2252/BC7080

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2340/BC7030

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2249/BC5063

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

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April 19, 2022

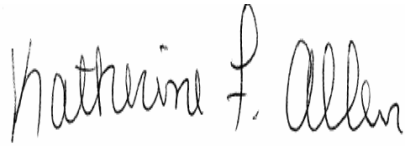
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D1037

Enclosed are results of analyses for samples as received by the laboratory on April 14, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/19/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D1037

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-19_041222	22D1037-01	Indoor air		- EPA TO-15	
SL-2_041122	22D1037-02	Indoor air		- EPA TO-15	
DUP-02	22D1037-03	Indoor air		- EPA TO-15	
SL-14_041222	22D1037-04	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-19_041222
Sample ID: 22D1037-01
Sample Matrix: Indoor air
Sampled: 4/12/2022 13:49

Sample Description/Location:
Sub Description/Location:
Canister ID: 2542
Canister Size: 1 liter
Flow Controller ID: 7087
Sample Type: Grab

Work Order: 22D1037
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 18:17	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/18/22 18:17	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 18:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 18:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 18:17	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 18:17	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 18:17	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	88.8	70-130	4/18/22 18:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-2_041122
Sample ID: 22D1037-02
Sample Matrix: Indoor air
Sampled: 4/11/2022 12:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 2242
Canister Size: 1 liter
Flow Controller ID: 5009
Sample Type: Grab

Work Order: 22D1037
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 18:42	BRF
cis-1,2-Dichloroethylene	1.4	0.20	0.15		5.5	0.79	0.58	4	4/18/22 18:42	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 18:42	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 18:42	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 18:42	BRF
Trichloroethylene	0.17	0.20	0.13	J	0.90	1.1	0.72	4	4/18/22 18:42	BRF
Vinyl Chloride	0.72	0.20	0.18		1.8	0.51	0.46	4	4/18/22 18:42	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.5	70-130		4/18/22 18:42

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: DUP-02
Sample ID: 22D1037-03
Sample Matrix: Indoor air
Sampled: 4/11/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2529
Canister Size: 1 liter
Flow Controller ID: 5060
Sample Type: Grab

Work Order: 22D1037
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	3.1	0.20	0.15		12	0.79	0.60	4	4/18/22 19:06	BRF
cis-1,2-Dichloroethylene	250	1.5	1.1		1000	5.9	4.3	30	4/19/22 8:18	BRF
trans-1,2-Dichloroethylene	2.6	0.20	0.16		10	0.79	0.62	4	4/18/22 19:06	BRF
1,4-Dioxane	0.42	2.0	0.17	J	1.5	7.2	0.60	4	4/18/22 19:06	BRF
Tetrachloroethylene	0.35	0.20	0.15		2.4	1.4	1.0	4	4/18/22 19:06	BRF
Trichloroethylene	5.8	0.20	0.13		31	1.1	0.72	4	4/18/22 19:06	BRF
Vinyl Chloride	520	1.5	1.4		1300	3.8	3.5	30	4/19/22 8:18	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.4	70-130	4/18/22 19:06
4-Bromofluorobenzene (1)	84.2	70-130	4/19/22 8:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-14_041222
Sample ID: 22D1037-04
Sample Matrix: Indoor air
Sampled: 4/12/2022 09:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 2314
Canister Size: 1 liter
Flow Controller ID: 7038
Sample Type: Grab

Work Order: 22D1037
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 19:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/18/22 19:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 19:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 19:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 19:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 19:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 19:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.3	70-130		4/18/22 19:31

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D1037-01 [SL-19_041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1037-02 [SL-2_041122]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1037-03 [DUP-02]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1037-03RE1 [DUP-02]	B306153	1.5	1	N/A	1000	200	10	04/18/22
22D1037-04 [SL-14_041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306153 - TO-15 Prep											
Blank (B306153-BLK1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.47*				*8.00*		*93.4*	*70-130*			
LCS (B306153-BS1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	4.94				5.00		98.8	70-130			
cis-1,2-Dichloroethylene	4.75				5.00		95.0	70-130			
trans-1,2-Dichloroethylene	4.65				5.00		93.1	70-130			
1,4-Dioxane	5.13				5.00		103	70-130			
Tetrachloroethylene	4.68				5.00		93.6	70-130			
Trichloroethylene	4.89				5.00		97.8	70-130			
Vinyl Chloride	5.00				5.00		99.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.67*				*8.00*		*95.9*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070528-CCV1)			Lab File ID: J22A108004.D			Analyzed: 04/18/22 12:47			
Bromochloromethane (1)	198856	2.854	150879	2.863	132	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	888480	3.462	694423	3.468	128	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	796618	5.05	641566	5.057	124	60 - 140	-0.0070	+/-0.50	
LCS (B306153-BS1)			Lab File ID: J22A108005.D			Analyzed: 04/18/22 13:12			
Bromochloromethane (1)	195154	2.854	198856	2.854	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	868840	3.462	888480	3.462	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	780865	5.051	796618	5.05	98	60 - 140	0.0010	+/-0.50	
Blank (B306153-BLK1)			Lab File ID: J22A108009.D			Analyzed: 04/18/22 14:59			
Bromochloromethane (1)	195393	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	867580	3.456	888480	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	757542	5.047	796618	5.05	95	60 - 140	-0.0030	+/-0.50	
SL-19_041222 (22D1037-01)			Lab File ID: J22A108017.D			Analyzed: 04/18/22 18:17			
Bromochloromethane (1)	194005	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	859558	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	754566	5.05	796618	5.05	95	60 - 140	0.0000	+/-0.50	
SL-2_041122 (22D1037-02)			Lab File ID: J22A108018.D			Analyzed: 04/18/22 18:42			
Bromochloromethane (1)	191003	2.844	198856	2.854	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	852439	3.456	888480	3.462	96	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	740978	5.05	796618	5.05	93	60 - 140	0.0000	+/-0.50	
DUP-02 (22D1037-03)			Lab File ID: J22A108019.D			Analyzed: 04/18/22 19:06			
Bromochloromethane (1)	200753	2.844	198856	2.854	101	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	898127	3.456	888480	3.462	101	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	777555	5.047	796618	5.05	98	60 - 140	-0.0030	+/-0.50	
SL-14_041222 (22D1037-04)			Lab File ID: J22A108020.D			Analyzed: 04/18/22 19:31			
Bromochloromethane (1)	191947	2.844	198856	2.854	97	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	865854	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	750864	5.047	796618	5.05	94	60 - 140	-0.0030	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
DUP-02 (22D1037-03RE1)			Lab File ID: J22A108030.D			Analyzed: 04/19/22 08:18			
Bromochloromethane (1)	196924	2.847	198856	2.854	99	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	880606	3.459	888480	3.462	99	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	756119	5.051	796618	5.05	95	60 - 140	0.0010	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070528-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.81	1.038306	0.9980529		-3.9	30
cis-1,2-Dichloroethylene	A	5.00	4.84	1.058854	1.02442		-3.3	30
trans-1,2-Dichloroethylene	A	5.00	4.69	1.144971	1.074949		-6.1	30
1,4-Dioxane	A	5.00	5.04	0.1348394	0.1358185		0.7	30
Tetrachloroethylene	A	5.00	4.78	0.5934671	0.5676578		-4.3	30
Trichloroethylene	A	5.00	4.84	0.2950588	0.2858383		-3.1	30
Vinyl Chloride	A	5.00	5.10	0.6636142	0.677451		2.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D1037

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson/Samantha Minder~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
1	SL-19_041222	4/12/22 1348	4/12/22 1349	--	--	IA	--	X				-29	-6	-6.5			2542	7087
2	SL-2_041122	4/11/22 1254	4/11/22 1255	--	--	IA	--	X				-29	-5	-5.8			2242	5009
3	DUP-02	4/11/22	4/11/22	--	--	IA	--	X				-29	-5	-5.9			2529	5060
4	SL-14_041222	4/12/22 957	4/12/22 958	--	--	IA	--	X				-29	-6	-6.2			2314	7038

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/13/22 12:00	Detection Limit Requirements
Received by: (signature) FedEx	Date/Time: 4/13/22 12:00	MA
Relinquished by: (signature)	Date/Time: 958	CT
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	Other:
Received by: (signature)	Date/Time:	

Special Requirements

☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

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Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

FedEx®

FedEx® Tracking

271981127657

ADD NICKNAME

Delivered
Thursday, 4/14/2022 at 9:58 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271981127602 (master)	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127613	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127624	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127635	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127646	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127657	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By	MP	Date	4/14/22	Time	958		
How were the samples received?	In Cooler		On Ice		No Ice		
	In Box	T	Ambient		Melted Ice		
Were samples within Temperature Compliance? 2-6°C		By Gun #		Actual Temp -			
		By Blank #		Actual Temp -			
Was Custody Seal Intact?	NA	Were Samples Tampered with?		NA			
Was COC Relinquished ?	T	Does Chain Agree With Samples?		T			
Are there any loose caps/valves on any samples?	F						
Is COC in ink/ Legible?	T						
Did COC Include all Pertinent Information?	Client	T	Analysis	T	Sampler Name	T	
	Project	T	ID's	T	Collection Dates/Times	T	
Are Sample Labels filled out and legible?	T						
Are there Rushes?	T	Who was notified?	Cathy				
Samples are received within holding time?	T						
Proper Media Used?	T	Individually Certified Cans?	T				
Are there Trip Blanks?	F	Is there enough Volume?	T				

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4		Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2542					~~7087~~	7087			
2492					5609				
2529					5060				
2314					7038				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2542/BC7087

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2242/BC5009

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2529/BC5060

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2314/BC7038

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

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April 19, 2022

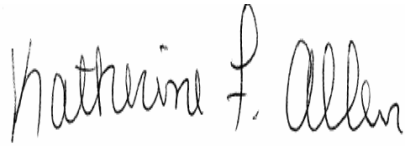
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D1039

Enclosed are results of analyses for samples as received by the laboratory on April 14, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/19/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D1039

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-11-041222	22D1039-01	Indoor air		-	
				EPA TO-15	
SL-13-041222	22D1039-02	Indoor air		-	
				EPA TO-15	
SL-10-041222	22D1039-03	Indoor air		-	
				EPA TO-15	
SL-6-041222	22D1039-04	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-11-041222
Sample ID: 22D1039-01
Sample Matrix: Indoor air
Sampled: 4/12/2022 13:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2307
Canister Size: 1 liter
Flow Controller ID: 7085
Sample Type: Grab

Work Order: 22D1039
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 19:56	BRF
cis-1,2-Dichloroethylene	0.19	0.20	0.15	J	0.75	0.79	0.58	4	4/18/22 19:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 19:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 19:56	BRF
Tetrachloroethylene	0.18	0.20	0.15	J	1.2	1.4	1.0	4	4/18/22 19:56	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 19:56	BRF
Vinyl Chloride	0.59	0.20	0.18		1.5	0.51	0.46	4	4/18/22 19:56	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.6	70-130	4/18/22 19:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-13-041222
Sample ID: 22D1039-02
Sample Matrix: Indoor air
Sampled: 4/12/2022 10:17

Sample Description/Location:
Sub Description/Location:
Canister ID: 2652
Canister Size: 1 liter
Flow Controller ID: 7070
Sample Type: Grab

Work Order: 22D1039
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 20:21	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/18/22 20:21	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 20:21	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 20:21	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 20:21	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 20:21	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 20:21	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.2	70-130		4/18/22 20:21

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-10-041222
Sample ID: 22D1039-03
Sample Matrix: Indoor air
Sampled: 4/12/2022 12:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 2327
Canister Size: 1 liter
Flow Controller ID: 7048
Sample Type: Grab

Work Order: 22D1039
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -5.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.24	0.20	0.15		0.95	0.79	0.60	4	4/18/22 20:46	BRF
cis-1,2-Dichloroethylene	18	0.20	0.15		71	0.79	0.58	4	4/18/22 20:46	BRF
trans-1,2-Dichloroethylene	0.54	0.20	0.16		2.2	0.79	0.62	4	4/18/22 20:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 20:46	BRF
Tetrachloroethylene	7.0	0.20	0.15		47	1.4	1.0	4	4/18/22 20:46	BRF
Trichloroethylene	3.7	0.20	0.13		20	1.1	0.72	4	4/18/22 20:46	BRF
Vinyl Chloride	53	0.20	0.18		140	0.51	0.46	4	4/18/22 20:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.3	70-130		4/18/22 20:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/14/2022
Field Sample #: SL-6-041222
Sample ID: 22D1039-04
Sample Matrix: Indoor air
Sampled: 4/12/2022 11:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2622
Canister Size: 1 liter
Flow Controller ID: 7025
Sample Type: Grab

Work Order: 22D1039
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/18/22 21:10	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/18/22 21:10	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/18/22 21:10	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/18/22 21:10	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/18/22 21:10	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/18/22 21:10	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/18/22 21:10	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.6	70-130		4/18/22 21:10

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D1039-01 [SL-11-041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1039-02 [SL-13-041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1039-03 [SL-10-041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22
22D1039-04 [SL-6-041222]	B306153	1.5	1	N/A	1000	200	75	04/18/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306153 - TO-15 Prep											
Blank (B306153-BLK1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.47*				*8.00*		*93.4*	*70-130*			
LCS (B306153-BS1)					Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	4.94				5.00		98.8	70-130			
cis-1,2-Dichloroethylene	4.75				5.00		95.0	70-130			
trans-1,2-Dichloroethylene	4.65				5.00		93.1	70-130			
1,4-Dioxane	5.13				5.00		103	70-130			
Tetrachloroethylene	4.68				5.00		93.6	70-130			
Trichloroethylene	4.89				5.00		97.8	70-130			
Vinyl Chloride	5.00				5.00		99.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.67*				*8.00*		*95.9*	*70-130*			
Duplicate (B306153-DUP1)			**Source: 22D1039-04**		Prepared & Analyzed: 04/18/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.28*				*8.00*		*91.0*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070528-CCV1)			Lab File ID: J22A108004.D			Analyzed: 04/18/22 12:47			
Bromochloromethane (1)	198856	2.854	150879	2.863	132	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	888480	3.462	694423	3.468	128	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	796618	5.05	641566	5.057	124	60 - 140	-0.0070	+/-0.50	
LCS (B306153-BS1)			Lab File ID: J22A108005.D			Analyzed: 04/18/22 13:12			
Bromochloromethane (1)	195154	2.854	198856	2.854	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	868840	3.462	888480	3.462	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	780865	5.051	796618	5.05	98	60 - 140	0.0010	+/-0.50	
Blank (B306153-BLK1)			Lab File ID: J22A108009.D			Analyzed: 04/18/22 14:59			
Bromochloromethane (1)	195393	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	867580	3.456	888480	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	757542	5.047	796618	5.05	95	60 - 140	-0.0030	+/-0.50	
SL-11-041222 (22D1039-01)			Lab File ID: J22A108021.D			Analyzed: 04/18/22 19:56			
Bromochloromethane (1)	191728	2.841	198856	2.854	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	861645	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	756541	5.05	796618	5.05	95	60 - 140	0.0000	+/-0.50	
SL-13-041222 (22D1039-02)			Lab File ID: J22A108022.D			Analyzed: 04/18/22 20:21			
Bromochloromethane (1)	189791	2.844	198856	2.854	95	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	856636	3.456	888480	3.462	96	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	751044	5.051	796618	5.05	94	60 - 140	0.0010	+/-0.50	
SL-10-041222 (22D1039-03)			Lab File ID: J22A108023.D			Analyzed: 04/18/22 20:46			
Bromochloromethane (1)	193962	2.844	198856	2.854	98	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	871040	3.456	888480	3.462	98	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	752846	5.05	796618	5.05	95	60 - 140	0.0000	+/-0.50	
SL-6-041222 (22D1039-04)			Lab File ID: J22A108024.D			Analyzed: 04/18/22 21:10			
Bromochloromethane (1)	193496	2.844	198856	2.854	97	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	855886	3.456	888480	3.462	96	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	758988	5.05	796618	5.05	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (B306153-DUP1)			Lab File ID: J22A108025.D			Analyzed: 04/18/22 21:35			
Bromochloromethane (1)	190746	2.844	198856	2.854	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	857852	3.456	888480	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	751530	5.05	796618	5.05	94	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070528-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.81	1.038306	0.9980529		-3.9	30
cis-1,2-Dichloroethylene	A	5.00	4.84	1.058854	1.02442		-3.3	30
trans-1,2-Dichloroethylene	A	5.00	4.69	1.144971	1.074949		-6.1	30
1,4-Dioxane	A	5.00	5.04	0.1348394	0.1358185		0.7	30
Tetrachloroethylene	A	5.00	4.78	0.5934671	0.5676578		-4.3	30
Trichloroethylene	A	5.00	4.84	0.2950588	0.2858383		-3.1	30
Vinyl Chloride	A	5.00	5.10	0.6636142	0.677451		2.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22D1039

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Mindte~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
1	SL-11_041222	4/12/22 1307	4/12/22 1308	--	--	IA	--	X				-29	-8	-9.0	2307	7085
2	SL-13_041222	4/12/22 1016	4/12/22 1017	—	—	IA	—	X				-29	-7.5	-8.2	2652	7070
3	SL-10_041222	4/12/22 1252	4/12/22 1253	—	—	IA	—	X				-29	-4	-5.2	2327	7048
4	SL-6_041222	4/12/22 1104	4/12/22 1105	—	—	IA	—	X				-29	-6.5	-7.2	2622	7025

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/13/22 1200	
Received by: (signature) FedEx	Date/Time: 4/13/22 1200	
Relinquished by: (signature)	Date/Time: 4/14 958	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx®

FedEx® Tracking

271981127657

ADD NICKNAME

Delivered
Thursday, 4/14/2022 at 9:58 am

THIS IS 1 OF 8 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
271981127602 (master)	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127613	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127624	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127635	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127646	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA
271981127657	Delivered	4/13/22	4/14/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP | Date 4/14/22 | Time 958

How were the samples received? In Cooler | On Ice | No Ice
In Box T | Ambient | Melted Ice

Were samples within Temperature Compliance? 2-6°C | By Gun # | Actual Temp -
By Blank # | Actual Temp -

Was Custody Seal Intact? ~~T NA~~ | Were Samples Tampered with? ~~F~~ NAY

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T
Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	4	1L	4	Grab	Nut/Ferrule		IC Train	30
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2207					7085				
2652					7030				
2227					7049				
2622					7025				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094008.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2307/BC7085

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2652/BC7070

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2327/BC7048

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2622/BC7025

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/19/2022

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April 22, 2022

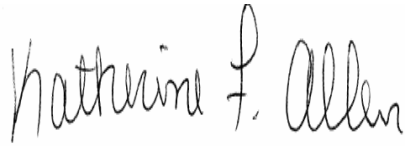
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D1496

Enclosed are results of analyses for samples as received by the laboratory on April 21, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/22/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D1496

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-11_041922	22D1496-01	Indoor air		- EPA TO-15	
SL-12_041922	22D1496-02	Indoor air		- EPA TO-15	
SL-22_041922	22D1496-03	Indoor air		- EPA TO-15	
SL-19_041922	22D1496-04	Indoor air		- EPA TO-15	
SL-13_041922	22D1496-05	Indoor air		- EPA TO-15	
SL-8_041922	22D1496-06	Indoor air		- EPA TO-15	
SL-14_041922	22D1496-07	Indoor air		- EPA TO-15	
SL-2_042022	22D1496-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-11_041922
Sample ID: 22D1496-01
Sample Matrix: Indoor air
Sampled: 4/19/2022 12:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2660
Canister Size: 1 liter
Flow Controller ID: 7068
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 21:49	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 21:49	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 21:49	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 21:49	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 21:49	BRF
Trichloroethylene	0.21	0.20	0.13		1.1	1.1	0.72	4	4/21/22 21:49	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 21:49	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		4/21/22 21:49

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-12_041922
Sample ID: 22D1496-02
Sample Matrix: Indoor air
Sampled: 4/19/2022 13:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2641
Canister Size: 1 liter
Flow Controller ID: 7069
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 22:18	BRF
cis-1,2-Dichloroethylene	1.9	0.20	0.15		7.5	0.79	0.58	4	4/21/22 22:18	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 22:18	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 22:18	BRF
Tetrachloroethylene	0.26	0.20	0.15		1.7	1.4	1.0	4	4/21/22 22:18	BRF
Trichloroethylene	2.6	0.20	0.13		14	1.1	0.72	4	4/21/22 22:18	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 22:18	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	104	70-130		4/21/22 22:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-22_041922
Sample ID: 22D1496-03
Sample Matrix: Indoor air
Sampled: 4/18/2022 10:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2128
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 22:48	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 22:48	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 22:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 22:48	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 22:48	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 22:48	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 22:48	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		4/21/22 22:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-19_041922
Sample ID: 22D1496-04
Sample Matrix: Indoor air
Sampled: 4/19/2022 13:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2303
Canister Size: 1 liter
Flow Controller ID: 7023
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 23:46	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 23:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 23:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 23:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 23:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 23:46	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 23:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.6	70-130		4/21/22 23:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-13_041922
Sample ID: 22D1496-05
Sample Matrix: Indoor air
Sampled: 4/19/2022 09:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2118
Canister Size: 1 liter
Flow Controller ID: 7074
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/22/22 0:14	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/22/22 0:14	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/22/22 0:14	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/22/22 0:14	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/22/22 0:14	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/22/22 0:14	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/22/22 0:14	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		4/22/22 0:14

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-8_041922
Sample ID: 22D1496-06
Sample Matrix: Indoor air
Sampled: 4/19/2022 11:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2348
Canister Size: 1 liter
Flow Controller ID: 7077
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -27
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -0.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/22/22 0:44	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/22/22 0:44	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/22/22 0:44	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/22/22 0:44	BRF
Tetrachloroethylene	0.21	0.20	0.15		1.4	1.4	1.0	4	4/22/22 0:44	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/22/22 0:44	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/22/22 0:44	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	104	70-130	4/22/22 0:44	

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-14_041922
Sample ID: 22D1496-07
Sample Matrix: Indoor air
Sampled: 4/19/2022 09:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2663
Canister Size: 1 liter
Flow Controller ID: 7083
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/22/22 1:12	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/22/22 1:12	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/22/22 1:12	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/22/22 1:12	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/22/22 1:12	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/22/22 1:12	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/22/22 1:12	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	104	70-130	4/22/22 1:12	

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-2_042022
Sample ID: 22D1496-08
Sample Matrix: Indoor air
Sampled: 4/20/2022 09:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2680
Canister Size: 1 liter
Flow Controller ID: 7084
Sample Type: Grab

Work Order: 22D1496
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/22/22 1:41	BRF
cis-1,2-Dichloroethylene	1.7	0.20	0.15		6.9	0.79	0.58	4	4/22/22 1:41	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/22/22 1:41	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/22/22 1:41	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/22/22 1:41	BRF
Trichloroethylene	0.19	0.20	0.13	J	1.0	1.1	0.72	4	4/22/22 1:41	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/22/22 1:41	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		4/22/22 1:41

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D1496-01 [SL-11_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-02 [SL-12_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-03 [SL-22_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-04 [SL-19_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-05 [SL-13_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-06 [SL-8_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-07 [SL-14_041922]	B306542	1.5	1	N/A	1000	200	75	04/21/22
22D1496-08 [SL-2_042022]	B306542	1.5	1	N/A	1000	200	75	04/21/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306542 - TO-15 Prep											
Blank (B306542-BLK1)					Prepared & Analyzed: 04/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.22*				*8.00*		*103*	*70-130*			
LCS (B306542-BS1)					Prepared & Analyzed: 04/21/22						
1,1-Dichloroethylene	5.07				5.00		101	70-130			
cis-1,2-Dichloroethylene	5.06				5.00		101	70-130			
trans-1,2-Dichloroethylene	5.11				5.00		102	70-130			
1,4-Dioxane	5.18				5.00		104	70-130			
Tetrachloroethylene	4.93				5.00		98.6	70-130			
Trichloroethylene	4.69				5.00		93.7	70-130			
Vinyl Chloride	5.13				5.00		103	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.54*				*8.00*		*107*	*70-130*			
Duplicate (B306542-DUP1)			**Source: 22D1496-03**		Prepared & Analyzed: 04/21/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*8.05*				*8.00*		*101*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070665-CCV1)			Lab File ID: K22A111004.D			Analyzed: 04/21/22 11:18			
Bromochloromethane (1)	96460	2.987	102745	2.987	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	325776	3.579	303801	3.579	107	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	241424	5.159	223280	5.159	108	60 - 140	0.0000	+/-0.50	
LCS (B306542-BS1)			Lab File ID: K22A111005.D			Analyzed: 04/21/22 11:48			
Bromochloromethane (1)	97486	2.987	96460	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	329668	3.584	325776	3.579	101	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	243745	5.159	241424	5.159	101	60 - 140	0.0000	+/-0.50	
Blank (B306542-BLK1)			Lab File ID: K22A111008.D			Analyzed: 04/21/22 13:32			
Bromochloromethane (1)	95582	2.992	96460	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	297365	3.584	325776	3.579	91	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	229258	5.159	241424	5.159	95	60 - 140	0.0000	+/-0.50	
SL-11_041922 (22D1496-01)			Lab File ID: K22A111022.D			Analyzed: 04/21/22 21:49			
Bromochloromethane (1)	95948	2.992	96460	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	315366	3.584	325776	3.579	97	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	239011	5.159	241424	5.159	99	60 - 140	0.0000	+/-0.50	
SL-12_041922 (22D1496-02)			Lab File ID: K22A111023.D			Analyzed: 04/21/22 22:18			
Bromochloromethane (1)	94134	2.992	96460	2.987	98	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	317953	3.584	325776	3.579	98	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	241226	5.159	241424	5.159	100	60 - 140	0.0000	+/-0.50	
SL-22_041922 (22D1496-03)			Lab File ID: K22A111024.D			Analyzed: 04/21/22 22:48			
Bromochloromethane (1)	89676	2.992	96460	2.987	93	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	299908	3.584	325776	3.579	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	227555	5.159	241424	5.159	94	60 - 140	0.0000	+/-0.50	
Duplicate (B306542-DUP1)			Lab File ID: K22A111025.D			Analyzed: 04/21/22 23:17			
Bromochloromethane (1)	91404	2.992	96460	2.987	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	301469	3.584	325776	3.579	93	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	229609	5.159	241424	5.159	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-19_041922 (22D1496-04)			Lab File ID: K22A111026.D			Analyzed: 04/21/22 23:46			
Bromochloromethane (1)	89379	2.992	96460	2.987	93	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	297363	3.584	325776	3.579	91	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	229399	5.159	241424	5.159	95	60 - 140	0.0000	+/-0.50	
SL-13_041922 (22D1496-05)			Lab File ID: K22A111027.D			Analyzed: 04/22/22 00:14			
Bromochloromethane (1)	89508	2.992	96460	2.987	93	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	300042	3.584	325776	3.579	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	229561	5.159	241424	5.159	95	60 - 140	0.0000	+/-0.50	
SL-8_041922 (22D1496-06)			Lab File ID: K22A111028.D			Analyzed: 04/22/22 00:44			
Bromochloromethane (1)	90689	2.992	96460	2.987	94	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	305013	3.584	325776	3.579	94	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	231898	5.159	241424	5.159	96	60 - 140	0.0000	+/-0.50	
SL-14_041922 (22D1496-07)			Lab File ID: K22A111029.D			Analyzed: 04/22/22 01:12			
Bromochloromethane (1)	87858	2.992	96460	2.987	91	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	289942	3.584	325776	3.579	89	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	223037	5.159	241424	5.159	92	60 - 140	0.0000	+/-0.50	
SL-2_042022 (22D1496-08)			Lab File ID: K22A111030.D			Analyzed: 04/22/22 01:41			
Bromochloromethane (1)	87747	2.992	96460	2.987	91	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	298432	3.584	325776	3.579	92	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	227392	5.159	241424	5.159	94	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070665-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.45	1.024961	1.118109		9.1	30
cis-1,2-Dichloroethylene	A	5.00	5.57	0.8170638	0.9105702		11.4	30
trans-1,2-Dichloroethylene	A	5.00	5.62	0.8261855	0.9289488		12.4	30
1,4-Dioxane	A	5.00	5.36	0.1250488	0.1341634		7.3	30
Tetrachloroethylene	A	5.00	5.47	0.4025846	0.4401816		9.3	30
Trichloroethylene	A	5.00	5.12	0.2665469	0.2731496		2.5	30
Vinyl Chloride	A	5.00	5.65	0.669766	0.7573046		13.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22D496

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Christian Garrido / Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-11_041922	4-19-22 1245	4-19-22 1246	--	--	IA	--	X				-28.8	-8.0	A.P	2660	7068
2	SL-12_041922	4-19-22 1310	4-19-22 1311	-	-	IA	-	X				-28.0	-7.0	6.7	2647	7069
3	SL-22_041822	4-18-22 1035	4-18-22 1036	-	-	IA	-	X				-29.0	-7.0	5.6	2128	7022
4	SL-19_041922	4-19-22 1320	4-19-22 1321	-	-	IA	-	X				-28.5	-8.0	8.2		

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature)	4/20/22 1500
Received by: (signature)	4/21 942
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

22D1496

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

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Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Christian Garrido / Cory Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID	
5	SL-13_041922	4-19-22 0945	4-19-22 0946	--	--	IA	--	X				-28	-5.0	-2.0	2118	7074	
6	SL-8_041922	4-19-22 1145	4-19-22 1146	—	—	IA	—	X				-27.0	-5.0	-2.4	2348	7027	
7	SL-14_041922	4-19-22 0930	4-19-22 0931	—	—	IA	—	X				-29.0	-6.0	-3.3	2663	7083	
8	SL-2_042022	4-20-22 0950	4-20-22 0951	—	—	IA	—	X				-28	-8.0	-7.8	2688	7084	

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
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IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

	Date/Time:
Relinquished by: (signature)	4/20/22 1501
Received by: (signature)	4/21 942
Relinquished by: (signature)	
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx®

FedEx® Tracking

272234885710

ADD NICKNAME

Delivered
Thursday, 4/21/2022 at 9:42 am

THIS IS 1 OF 5 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US

Label Created
04/20/2022 1:05 PM

PACKAGE RECEIVED BY FEDEX
AUBURN HILLS, MI
04/20/2022 1:57 PM

IN TRANSIT
MEMPHIS, TN
04/20/2022 11:06 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
04/21/2022 8:25 AM

DELIVERED
East Longmeadow, MA US

Delivered
4/21/2022 at 9:42 AM

MANAGE DELIVERY

5 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
272234885710 (master)	Delivered	4/20/22	4/21/22	0	NOVI MI	East Longmeadow MA
272234885720	Delivered	4/20/22	4/21/22	0	NOVI MI	East Longmeadow MA
272234885731	Delivered	4/20/22	4/21/22	0	NOVI MI	East Longmeadow MA
272234885742	Delivered	4/20/22	4/21/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MAP | Date 4/21/22 | Time 942

How were the samples received? In Cooler ____ | On Ice ____ | No Ice ____ | In Box T | Ambient ____ | Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ | By Gun # ____ | Actual Temp - ____ | By Blank # ____ | Actual Temp - ____

Was Custody Seal Intact? NA | Were Samples Tampered with? NA

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Lauren, TOM + Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	Grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
~~22~~	2348				7068	7083			
2660	2663				7069	7084			
2641	2480				7022				
2128					7023				
2303					7074				
2118					7077				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2660/BC7068

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2641/BC7069

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2128/BC7022

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2303/BC7023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10118.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2118/BC7074

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10129.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2348/BC7077

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10137.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2663/BC7083

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10128.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2680/BC7084

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

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April 22, 2022

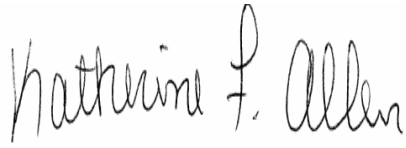
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D1498

Enclosed are results of analyses for samples as received by the laboratory on April 21, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matthew J Beaupre
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 4/22/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D1498

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-21_041822	22D1498-01	Indoor air		-	
				EPA TO-15	
DUP-01_041822	22D1498-02	Indoor air		-	
				EPA TO-15	
SL-7_041922	22D1498-03	Indoor air		-	
				EPA TO-15	
SL-15_041922	22D1498-04	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-21_041822
Sample ID: 22D1498-01
Sample Matrix: Indoor air
Sampled: 4/18/2022 10:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2639
Canister Size: 1 liter
Flow Controller ID: 4128
Sample Type: Grab

Work Order: 22D1498
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 17:52	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 17:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 17:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 17:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 17:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 17:52	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 17:52	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.8	70-130	4/21/22 17:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: DUP-01_041822
Sample ID: 22D1498-02
Sample Matrix: Indoor air
Sampled: 4/18/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2667
Canister Size: 1 liter
Flow Controller ID: 7067
Sample Type: Grab

Work Order: 22D1498
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -4.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 18:17	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 18:17	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 18:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 18:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 18:17	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 18:17	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 18:17	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.2	70-130		4/21/22 18:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-7_041922
Sample ID: 22D1498-03
Sample Matrix: Indoor air
Sampled: 4/19/2022 10:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2626
Canister Size: 1 liter
Flow Controller ID: 7088
Sample Type: Grab

Work Order: 22D1498
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 18:41	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 18:41	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 18:41	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 18:41	BRF
Tetrachloroethylene	0.22	0.20	0.15		1.5	1.4	1.0	4	4/21/22 18:41	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 18:41	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 18:41	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.7	70-130		4/21/22 18:41

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/21/2022
Field Sample #: SL-15_041922
Sample ID: 22D1498-04
Sample Matrix: Indoor air
Sampled: 4/19/2022 09:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2109
Canister Size: 1 liter
Flow Controller ID: 7086
Sample Type: Grab

Work Order: 22D1498
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	4/21/22 19:06	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	4/21/22 19:06	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	4/21/22 19:06	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	4/21/22 19:06	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	4/21/22 19:06	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	4/21/22 19:06	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	4/21/22 19:06	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.6	70-130		4/21/22 19:06

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D1498-01 [SL-21_041822]	B306520	1.5	1	N/A	1000	200	75	04/21/22
22D1498-02 [DUP-01_041822]	B306520	1.5	1	N/A	1000	200	75	04/21/22
22D1498-03 [SL-7_041922]	B306520	1.5	1	N/A	1000	200	75	04/21/22
22D1498-04 [SL-15_041922]	B306520	1.5	1	N/A	1000	200	75	04/21/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B306520 - TO-15 Prep											
Blank (B306520-BLK1)					Prepared & Analyzed: 04/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.21*				*8.00*		*90.1*	*70-130*			
LCS (B306520-BS1)					Prepared & Analyzed: 04/21/22						
1,1-Dichloroethylene	5.76				5.00		115	70-130			
cis-1,2-Dichloroethylene	4.79				5.00		95.8	70-130			
trans-1,2-Dichloroethylene	4.59				5.00		91.8	70-130			
1,4-Dioxane	5.23				5.00		105	70-130			
Tetrachloroethylene	4.84				5.00		96.8	70-130			
Trichloroethylene	4.94				5.00		98.9	70-130			
Vinyl Chloride	5.30				5.00		106	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.82*				*8.00*		*97.8*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S070660-CCV1)			Lab File ID: J22A111004.D			Analyzed: 04/21/22 10:11			
Bromochloromethane (1)	186769	2.854	150879	2.863	124	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	837093	3.462	694423	3.468	121	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	767991	5.05	641566	5.057	120	60 - 140	-0.0070	+/-0.50	
LCS (B306520-BS1)			Lab File ID: J22A111005.D			Analyzed: 04/21/22 10:36			
Bromochloromethane (1)	185478	2.854	186769	2.854	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	826755	3.462	837093	3.462	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	759232	5.05	767991	5.05	99	60 - 140	0.0000	+/-0.50	
Blank (B306520-BLK1)			Lab File ID: J22A111007.D			Analyzed: 04/21/22 11:32			
Bromochloromethane (1)	180299	2.844	186769	2.854	97	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	789320	3.456	837093	3.462	94	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	694246	5.047	767991	5.05	90	60 - 140	-0.0030	+/-0.50	
SL-21_041822 (22D1498-01)			Lab File ID: J22A111020.D			Analyzed: 04/21/22 17:52			
Bromochloromethane (1)	182058	2.844	186769	2.854	97	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	808440	3.456	837093	3.462	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	711864	5.051	767991	5.05	93	60 - 140	0.0010	+/-0.50	
DUP-01_041822 (22D1498-02)			Lab File ID: J22A111021.D			Analyzed: 04/21/22 18:17			
Bromochloromethane (1)	177503	2.844	186769	2.854	95	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	783163	3.456	837093	3.462	94	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	695223	5.051	767991	5.05	91	60 - 140	0.0010	+/-0.50	
SL-7_041922 (22D1498-03)			Lab File ID: J22A111022.D			Analyzed: 04/21/22 18:41			
Bromochloromethane (1)	187757	2.844	186769	2.854	101	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	830628	3.456	837093	3.462	99	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	730167	5.051	767991	5.05	95	60 - 140	0.0010	+/-0.50	
SL-15_041922 (22D1498-04)			Lab File ID: J22A111023.D			Analyzed: 04/21/22 19:06			
Bromochloromethane (1)	173161	2.844	186769	2.854	93	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	772524	3.455	837093	3.462	92	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	691925	5.05	767991	5.05	90	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S070660-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.28	1.038306	1.095599		5.5	30
cis-1,2-Dichloroethylene	A	5.00	4.41	1.058854	0.9339623		-11.8	30
trans-1,2-Dichloroethylene	A	5.00	4.38	1.144971	1.00325		-12.4	30
1,4-Dioxane	A	5.00	4.17	0.1348394	0.1124444		-16.6	30
Tetrachloroethylene	A	5.00	4.55	0.5934671	0.539623		-9.1	30
Trichloroethylene	A	5.00	4.69	0.2950588	0.2765112		-6.3	30
Vinyl Chloride	A	5.00	5.00	0.6636142	0.6635191		-0.01	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** K22A094027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2639/BC4128

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/4/2022 **Batch #:** J22A094015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2667/BC7067

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10122.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2626/BC7088

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10117.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2109/BC7086

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 4/22/2022

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May 3, 2022

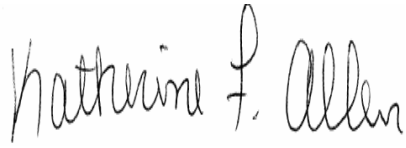
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D2156

Enclosed are results of analyses for samples as received by the laboratory on April 29, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/3/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D2156

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-14_042622	22D2156-01	Indoor air		- EPA TO-15	
SL-6_042622	22D2156-02	Indoor air		- EPA TO-15	
SL-7_042622	22D2156-03	Indoor air		- EPA TO-15	
SL-8_042622	22D2156-04	Indoor air		- EPA TO-15	
SL-2_042722	22D2156-05	Indoor air		- EPA TO-15	
MH-1259_042822	22D2156-06	Indoor air		- EPA TO-15	
MH-1244_042822	22D2156-07	Indoor air		- EPA TO-15	
MH-1256_042822	22D2156-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-14_042622
Sample ID: 22D2156-01
Sample Matrix: Indoor air
Sampled: 4/26/2022 10:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2319
Canister Size: 1 liter
Flow Controller ID: 7071
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 15:27	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 15:27	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 15:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 15:27	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 15:27	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 15:27	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 15:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.0	70-130		5/2/22 15:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-6_042622
Sample ID: 22D2156-02
Sample Matrix: Indoor air
Sampled: 4/26/2022 11:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2665
Canister Size: 1 liter
Flow Controller ID: 5008
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.8-
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 15:52	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 15:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 15:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 15:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 15:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 15:52	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 15:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.2	70-130		5/2/22 15:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-7_042622
Sample ID: 22D2156-03
Sample Matrix: Indoor air
Sampled: 4/26/2022 11:12

Sample Description/Location:
Sub Description/Location:
Canister ID: 2646
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): 7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 16:17	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 16:17	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 16:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 16:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 16:17	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 16:17	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 16:17	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	83.6	70-130		5/2/22 16:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-8_042622
Sample ID: 22D2156-04
Sample Matrix: Indoor air
Sampled: 4/26/2022 11:42

Sample Description/Location:
Sub Description/Location:
Canister ID: 2119
Canister Size: 1 liter
Flow Controller ID: 5027
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 16:41	BRF
cis-1,2-Dichloroethylene	4.5	0.20	0.15		18	0.79	0.58	4	5/2/22 16:41	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 16:41	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 16:41	BRF
Tetrachloroethylene	0.18	0.20	0.15	J	1.2	1.4	1.0	4	5/2/22 16:41	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 16:41	BRF
Vinyl Chloride	7.3	0.20	0.18		19	0.51	0.46	4	5/2/22 16:41	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	87.6	70-130	5/2/22 16:41

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-2_042722
Sample ID: 22D2156-05
Sample Matrix: Indoor air
Sampled: 4/27/2022 10:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2237
Canister Size: 1 liter
Flow Controller ID: 7062
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 17:06	BRF
cis-1,2-Dichloroethylene	3.7	0.20	0.15		15	0.79	0.58	4	5/2/22 17:06	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 17:06	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 17:06	BRF
Tetrachloroethylene	1.2	0.20	0.15		8.1	1.4	1.0	4	5/2/22 17:06	BRF
Trichloroethylene	0.15	0.20	0.13	J	0.82	1.1	0.72	4	5/2/22 17:06	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 17:06	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.5	70-130		5/2/22 17:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: MH-1259_042822
Sample ID: 22D2156-06
Sample Matrix: Indoor air
Sampled: 4/28/2022 13:48

Sample Description/Location:
Sub Description/Location:
Canister ID: 2248
Canister Size: 1 liter
Flow Controller ID: 7096
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	6.8	0.20	0.15		27	0.79	0.60	4	5/2/22 17:31	BRF
cis-1,2-Dichloroethylene	120	0.20	0.15		480	0.79	0.58	4	5/2/22 17:31	BRF
trans-1,2-Dichloroethylene	1.6	0.20	0.16		6.3	0.79	0.62	4	5/2/22 17:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 17:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 17:31	BRF
Trichloroethylene	18	0.20	0.13		96	1.1	0.72	4	5/2/22 17:31	BRF
Vinyl Chloride	140	0.20	0.18		350	0.51	0.46	4	5/2/22 17:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	88.2	70-130		5/2/22 17:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: MH-1244_042822
Sample ID: 22D2156-07
Sample Matrix: Indoor air
Sampled: 4/28/2022 14:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2553
Canister Size: 1 liter
Flow Controller ID: 7097
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 17:56	BRF
cis-1,2-Dichloroethylene	9.4	0.20	0.15		37	0.79	0.58	4	5/2/22 17:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 17:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 17:56	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 17:56	BRF
Trichloroethylene	0.30	0.20	0.13		1.6	1.1	0.72	4	5/2/22 17:56	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 17:56	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	86.7	70-130		5/2/22 17:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: MH-1256_042822
Sample ID: 22D2156-08
Sample Matrix: Indoor air
Sampled: 4/28/2022 13:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2090
Canister Size: 1 liter
Flow Controller ID: 7079
Sample Type: Grab

Work Order: 22D2156
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 18:21	BRF
cis-1,2-Dichloroethylene	2.2	0.20	0.15		8.6	0.79	0.58	4	5/2/22 18:21	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 18:21	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 18:21	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 18:21	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 18:21	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 18:21	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	88.4	70-130		5/2/22 18:21

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D2156-01 [SL-14_042622]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-02 [SL-6_042622]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-03 [SL-7_042622]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-04 [SL-8_042622]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-05 [SL-2_042722]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-06 [MH-1259_042822]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-07 [MH-1244_042822]	B307437	1.5	1	N/A	1000	200	75	05/02/22
22D2156-08 [MH-1256_042822]	B307437	1.5	1	N/A	1000	200	75	05/02/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B307437 - TO-15 Prep											
Blank (B307437-BLK1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.16*				*8.00*		*89.6*	*70-130*			
LCS (B307437-BS1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	4.08				5.00		81.5	70-130			
cis-1,2-Dichloroethylene	4.31				5.00		86.3	70-130			
trans-1,2-Dichloroethylene	4.33				5.00		86.5	70-130			
1,4-Dioxane	4.71				5.00		94.2	70-130			
Tetrachloroethylene	4.55				5.00		90.9	70-130			
Trichloroethylene	4.66				5.00		93.2	70-130			
Vinyl Chloride	4.96				5.00		99.2	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.78*				*8.00*		*97.3*	*70-130*			
Duplicate (B307437-DUP1)			**Source: 22D2156-08**		Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	2.0	0.20	7.9	0.79		2.2			8.26	25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*6.99*				*8.00*		*87.4*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk
ALB	Aaron L. Benoit

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B307437-BS1)			Lab File ID: J22A122005.D			Analyzed: 05/02/22 09:46			
Bromochloromethane (1)	139642	2.857	150879	2.863	93	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	603779	3.462	694423	3.468	87	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	532261	5.054	641566	5.057	83	60 - 140	-0.0030	+/-0.50	
Calibration Check (S071088-CCV1)			Lab File ID: J22A122009.D			Analyzed: 05/02/22 11:32			
Bromochloromethane (1)	138192	2.857	150879	2.863	92	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	602053	3.466	694423	3.468	87	60 - 140	-0.0020	+/-0.50	
Chlorobenzene-d5 (1)	533310	5.054	641566	5.057	83	60 - 140	-0.0030	+/-0.50	
Blank (B307437-BLK1)			Lab File ID: J22A122011.D			Analyzed: 05/02/22 12:28			
Bromochloromethane (1)	139214	2.844	138192	2.857	101	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	553463	3.456	602053	3.466	92	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	494209	5.05	533310	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-14_042622 (22D2156-01)			Lab File ID: J22A122018.D			Analyzed: 05/02/22 15:27			
Bromochloromethane (1)	136778	2.844	138192	2.857	99	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	551345	3.456	602053	3.466	92	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	500479	5.05	533310	5.054	94	60 - 140	-0.0040	+/-0.50	
SL-6_042622 (22D2156-02)			Lab File ID: J22A122019.D			Analyzed: 05/02/22 15:52			
Bromochloromethane (1)	134836	2.844	138192	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	551137	3.456	602053	3.466	92	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	498038	5.05	533310	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-7_042622 (22D2156-03)			Lab File ID: J22A122020.D			Analyzed: 05/02/22 16:17			
Bromochloromethane (1)	136383	2.844	138192	2.857	99	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	545590	3.456	602053	3.466	91	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	495152	5.05	533310	5.054	93	60 - 140	-0.0040	+/-0.50	
SL-8_042622 (22D2156-04)			Lab File ID: J22A122021.D			Analyzed: 05/02/22 16:41			
Bromochloromethane (1)	136819	2.844	138192	2.857	99	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	548436	3.456	602053	3.466	91	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	503399	5.05	533310	5.054	94	60 - 140	-0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-2_042722 (22D2156-05)			Lab File ID: J22A122022.D			Analyzed: 05/02/22 17:06			
Bromochloromethane (1)	144747	2.847	138192	2.857	105	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	590786	3.459	602053	3.466	98	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	516862	5.05	533310	5.054	97	60 - 140	-0.0040	+/-0.50	
MH-1259_042822 (22D2156-06)			Lab File ID: J22A122023.D			Analyzed: 05/02/22 17:31			
Bromochloromethane (1)	148355	2.847	138192	2.857	107	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	610449	3.456	602053	3.466	101	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	546698	5.051	533310	5.054	103	60 - 140	-0.0030	+/-0.50	
MH-1244_042822 (22D2156-07)			Lab File ID: J22A122024.D			Analyzed: 05/02/22 17:56			
Bromochloromethane (1)	153901	2.844	138192	2.857	111	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	604741	3.456	602053	3.466	100	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	544474	5.051	533310	5.054	102	60 - 140	-0.0030	+/-0.50	
MH-1256_042822 (22D2156-08)			Lab File ID: J22A122025.D			Analyzed: 05/02/22 18:21			
Bromochloromethane (1)	144346	2.844	138192	2.857	104	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	592390	3.456	602053	3.466	98	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	521859	5.051	533310	5.054	98	60 - 140	-0.0030	+/-0.50	
Duplicate (B307437-DUP1)			Lab File ID: J22A122026.D			Analyzed: 05/02/22 18:45			
Bromochloromethane (1)	140612	2.847	138192	2.857	102	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	577309	3.456	602053	3.466	96	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	514614	5.051	533310	5.054	96	60 - 140	-0.0030	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071088-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.23	1.038306	0.8789163		-15.4	30
cis-1,2-Dichloroethylene	A	5.00	4.48	1.058854	0.947667		-10.5	30
trans-1,2-Dichloroethylene	A	5.00	4.46	1.144971	1.021721		-10.8	30
1,4-Dioxane	A	5.00	4.70	0.1348394	0.1266334		-6.1	30
Tetrachloroethylene	A	5.00	4.86	0.5934671	0.5764212		-2.9	30
Trichloroethylene	A	5.00	4.80	0.2950588	0.2835046		-3.9	30
Vinyl Chloride	A	5.00	5.15	0.6636142	0.6838601		3.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22D2156

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Lottie Jay

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-14_042622	4/26/22 1039	4/26/22 1040	--	--	IA	--	X				-29	-8	-2.4	2319	7071
2	SL-6_042622	4/26/22 1125	4/26/22 1126	—	—	IA	—	X				-29	-8	-2.8	2665	5008
3	SL-7_042622	4/26/22 1111	4/26/22 1112	—	—	IA	—	X				-29	-7.5	-2.0	2646	7047
4	SL-5_042622	4/26/22 1141	4/26/22 1142	—	—	IA	—	X				-29	-7.5	-2.8	2119	5027

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/28/22 1500	
Received by: (signature) Fed Ex	Date/Time: 4/28/22 1500	
Relinquished by: (signature)	Date/Time: 4/29 930	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

22D2456

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

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Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hinkle~~ Sommer Guy, Lothe Jay

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

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For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-2_042722	4/27/22 1025	4/27/22 1026	--	--	IA	--	X				-28	-7	29	2237	7062
6	MH-1259-042822	4/28/22 1347	4/28/22 1348	—	—	IA	—	X				-29	-6.5	30	2248	7096
7	MH-1244-042822	4/28/22 1407	4/28/22 1408	—	—	IA	—	X				-29	-8	29	2553	7097
8	MH-1256-042822	4/28/22 1330	4/28/22 1331	—	—	IA	—	X				-29	-9	29	2090	7079

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

		Date/Time:
Relinquished by: (signature)	Sommer Guy	4/28/22 1500
Received by: (signature)	FedEx	4/28/22 1500
Relinquished by: (signature)		4/29 930
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

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04/28/2022 3:23 PM

IN TRANSIT
NEWARK, NJ
04/28/2022 11:58 PM

OUT FOR DELIVERY
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04/29/2022 7:59 AM

DELIVERED
East Longmeadow, MA US

Delivered
4/29/2022 at 9:30 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
272545882896 (master)	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882900	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882911	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By	MP	Date	4/29/22	Time	930		
How were the samples received?	In Cooler		On Ice		No Ice		
	In Box	T	Ambient		Melted Ice		
Were samples within Temperature Compliance? 2-6°C	By Gun #		Actual Temp -				
	By Blank #		Actual Temp -				
Was Custody Seal Intact?	NA	Were Samples Tampered with?		NA			
Was COC Relinquished ?	T	Does Chain Agree With Samples?		T			
Are there any loose caps/valves on any samples?	F						
Is COC in ink/ Legible?	T						
Did COC Include all Pertinent Information?	Client	T	Analysis	T	Sampler Name	T	
	Project	T	ID's	T	Collection Dates/Times	T	
Are Sample Labels filled out and legible?	T						
Are there Rushes?	T	Who was notified?		TOM H			
Samples are received within holding time?	T						
Proper Media Used?	T	Individually Certified Cans?		T			
Are there Trip Blanks?	F	Is there enough Volume?		T			

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	30
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2319	2553				7071	7097			
2665	2090				5008	7079			
2646					7047				
2119					5027				
2237					7062				
2248					7096				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10113.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2319/BC7071

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108040.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2665/BC5008

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** J22A101022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2646/BC7047

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2119/BC5027

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108041.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2237/BC7062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115009.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2248/BC7096

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2553/BC7097

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** J22A115025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2090/BC7079

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

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May 3, 2022

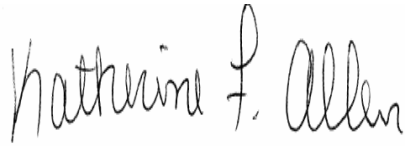
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D2157

Enclosed are results of analyses for samples as received by the laboratory on April 29, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/3/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D2157

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1231A_042722	22D2157-01	Indoor air		- EPA TO-15	
SL-15_042622	22D2157-02	Indoor air		- EPA TO-15	
SL-4_042722	22D2157-03	Indoor air		- EPA TO-15	
MH-1255_042722	22D2157-04	Indoor air		- EPA TO-15	
SL-17_042522	22D2157-05	Indoor air		- EPA TO-15	
SL-21_042622	22D2157-06	Indoor air		- EPA TO-15	
SL-22_042522	22D2157-07	Indoor air		- EPA TO-15	
SL-20_042522	22D2157-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: MH-1231A_042722
Sample ID: 22D2157-01
Sample Matrix: Indoor air
Sampled: 4/27/2022 12:56

Sample Description/Location:
Sub Description/Location:
Canister ID: 2648
Canister Size: 1 liter
Flow Controller ID: 7051
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 15:59	BRF
cis-1,2-Dichloroethylene	2.3	0.20	0.15		9.1	0.79	0.58	4	5/2/22 15:59	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 15:59	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 15:59	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 15:59	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 15:59	BRF
Vinyl Chloride	3.4	0.20	0.18		8.7	0.51	0.46	4	5/2/22 15:59	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.5	70-130	5/2/22 15:59

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-15_042622
Sample ID: 22D2157-02
Sample Matrix: Indoor air
Sampled: 4/26/2022 10:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2654
Canister Size: 1 liter
Flow Controller ID: 5041
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 16:29	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 16:29	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 16:29	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 16:29	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 16:29	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 16:29	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 16:29	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		5/2/22 16:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-4_042722
Sample ID: 22D2157-03
Sample Matrix: Indoor air
Sampled: 4/27/2022 11:18

Sample Description/Location:
Sub Description/Location:
Canister ID: 2294
Canister Size: 1 liter
Flow Controller ID: 7050
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -4.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 17:00	BRF
cis-1,2-Dichloroethylene	0.55	0.20	0.15		2.2	0.79	0.58	4	5/2/22 17:00	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 17:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 17:00	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 17:00	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 17:00	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 17:00	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	93.0	70-130		5/2/22 17:00

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: MH-1255_042722
Sample ID: 22D2157-04
Sample Matrix: Indoor air
Sampled: 4/27/2022 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2310
Canister Size: 1 liter
Flow Controller ID: 7061
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 17:30	BRF
cis-1,2-Dichloroethylene	0.19	0.20	0.15	J	0.76	0.79	0.58	4	5/2/22 17:30	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 17:30	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 17:30	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 17:30	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 17:30	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 17:30	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.5	70-130		5/2/22 17:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-17_042522
Sample ID: 22D2157-05
Sample Matrix: Indoor air
Sampled: 4/25/2022 14:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2524
Canister Size: 1 liter
Flow Controller ID: 5042
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 18:00	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 18:00	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 18:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 18:00	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 18:00	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 18:00	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 18:00	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.6	70-130		5/2/22 18:00

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-21_042622
Sample ID: 22D2157-06
Sample Matrix: Indoor air
Sampled: 4/26/2022 13:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 2526
Canister Size: 1 liter
Flow Controller ID: 5055
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 18:30	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 18:30	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 18:30	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 18:30	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 18:30	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 18:30	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 18:30	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	95.9	70-130		5/2/22 18:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-22_042522
Sample ID: 22D2157-07
Sample Matrix: Indoor air
Sampled: 4/25/2022 14:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2129
Canister Size: 1 liter
Flow Controller ID: 7054
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 19:01	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 19:01	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 19:01	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 19:01	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 19:01	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 19:01	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 19:01	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		5/2/22 19:01

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-20_042522
Sample ID: 22D2157-08
Sample Matrix: Indoor air
Sampled: 4/25/2022 13:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 2515
Canister Size: 1 liter
Flow Controller ID: 5054
Sample Type: Grab

Work Order: 22D2157
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 19:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 19:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 19:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 19:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 19:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 19:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 19:31	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.2	70-130	5/2/22 19:31

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D2157-01 [MH-1231A_042722]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-02 [SL-15_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-03 [SL-4_042722]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-04 [MH-1255_042722]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-05 [SL-17_042522]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-06 [SL-21_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-07 [SL-22_042522]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2157-08 [SL-20_042522]	B307465	1.5	1	N/A	1000	200	75	05/02/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B307465 - TO-15 Prep											
Blank (B307465-BLK1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.90*				*8.00*		*98.8*	*70-130*			
LCS (B307465-BS1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	5.03				5.00		101	70-130			
cis-1,2-Dichloroethylene	5.24				5.00		105	70-130			
trans-1,2-Dichloroethylene	4.80				5.00		96.1	70-130			
1,4-Dioxane	5.20				5.00		104	70-130			
Tetrachloroethylene	5.18				5.00		104	70-130			
Trichloroethylene	4.76				5.00		95.3	70-130			
Vinyl Chloride	5.39				5.00		108	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.62*				*8.00*		*108*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk
ALB	Aaron L. Benoit

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071117-CCV1)			Lab File ID: K22A122004.D			Analyzed: 05/02/22 09:48			
Bromochloromethane (1)	103995	2.992	102745	2.987	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	358306	3.584	303801	3.579	118	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	257709	5.159	223280	5.159	115	60 - 140	0.0000	+/-0.50	
LCS (B307465-BS1)			Lab File ID: K22A122005.D			Analyzed: 05/02/22 10:19			
Bromochloromethane (1)	102716	2.992	103995	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	357652	3.584	358306	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	259504	5.159	257709	5.159	101	60 - 140	0.0000	+/-0.50	
Blank (B307465-BLK1)			Lab File ID: K22A122007.D			Analyzed: 05/02/22 11:28			
Bromochloromethane (1)	103671	2.987	103995	2.992	100	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	335211	3.584	358306	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	249210	5.159	257709	5.159	97	60 - 140	0.0000	+/-0.50	
MH-1231A_042722 (22D2157-01)			Lab File ID: K22A122015.D			Analyzed: 05/02/22 15:59			
Bromochloromethane (1)	101861	2.991	103995	2.992	98	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	320676	3.584	358306	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	246835	5.163	257709	5.159	96	60 - 140	0.0040	+/-0.50	
SL-15_042622 (22D2157-02)			Lab File ID: K22A122016.D			Analyzed: 05/02/22 16:29			
Bromochloromethane (1)	103180	2.996	103995	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	313783	3.584	358306	3.584	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	241382	5.159	257709	5.159	94	60 - 140	0.0000	+/-0.50	
SL-4_042722 (22D2157-03)			Lab File ID: K22A122017.D			Analyzed: 05/02/22 17:00			
Bromochloromethane (1)	102305	2.996	103995	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	322443	3.588	358306	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	258967	5.164	257709	5.159	100	60 - 140	0.0050	+/-0.50	
MH-1255_042722 (22D2157-04)			Lab File ID: K22A122018.D			Analyzed: 05/02/22 17:30			
Bromochloromethane (1)	102518	2.992	103995	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	323443	3.584	358306	3.584	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	258410	5.159	257709	5.159	100	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-17_042522 (22D2157-05)			Lab File ID: K22A122019.D			Analyzed: 05/02/22 18:00			
Bromochloromethane (1)	104027	2.996	103995	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	328662	3.588	358306	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	249442	5.163	257709	5.159	97	60 - 140	0.0040	+/-0.50	
SL-21_042622 (22D2157-06)			Lab File ID: K22A122020.D			Analyzed: 05/02/22 18:30			
Bromochloromethane (1)	101162	2.996	103995	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	319595	3.588	358306	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	241342	5.159	257709	5.159	94	60 - 140	0.0000	+/-0.50	
SL-22_042522 (22D2157-07)			Lab File ID: K22A122021.D			Analyzed: 05/02/22 19:01			
Bromochloromethane (1)	103482	2.996	103995	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	322268	3.588	358306	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	246779	5.159	257709	5.159	96	60 - 140	0.0000	+/-0.50	
SL-20_042522 (22D2157-08)			Lab File ID: K22A122022.D			Analyzed: 05/02/22 19:31			
Bromochloromethane (1)	102149	2.992	103995	2.992	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	326036	3.584	358306	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	251483	5.159	257709	5.159	98	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071117-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.35	1.024961	0.8928891		-12.9	30
cis-1,2-Dichloroethylene	A	5.00	4.68	0.8170638	0.7644521		-6.4	30
trans-1,2-Dichloroethylene	A	5.00	4.48	0.8261855	0.7399433		-10.4	30
1,4-Dioxane	A	5.00	4.76	0.1250488	0.1190937		-4.8	30
Tetrachloroethylene	A	5.00	4.70	0.4025846	0.378076		-6.1	30
Trichloroethylene	A	5.00	4.30	0.2665469	0.2294843		-13.9	30
Vinyl Chloride	A	5.00	4.79	0.669766	0.6421232		-4.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22D2157

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Company Name: Arcadis	
Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377	
Phone: 248-994-2240	
Project Name: Ford LTP	
Project Location: Livonia, MI	
Project Number: 30080642.701.04	
Project Manager: Kristoffer Hinskey	
Pace Analytical Quote Name/Number: 00105825	
Invoice Recipient:	
Sampled By: ~~Corey Pearson, Samantha Hindle~~ Sommer Guy, Lottie Jay	

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	MH-1231A_042722	4/27/22 1255	4/27/22 1256	--	--	IA	--	X				-29	-7	2	2648	7051
2	SL-15_042622	4/26/22 1020	4/26/22 1021	—	—	IA	—	X				-29	-8	2	2654	5041
3	SL-4_042722	4/27/22 1117	4/27/22 1118	—	—	IA	—	X				-29	-7	2	2294	7050
4	MH-1255_042722	4/27/22 1230	4/27/22 1231	—	—	IA	—	X				-29	-6	2	2310	7061

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

	Date/Time:
Relinquished by: (signature) Sommer Guy	4/28/22 1500
Received by: (signature) Fed Ex	4/28/22 1500
Relinquished by: (signature)	4/29 930
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other

Special Requirements

☐ MA MCP Required

☐ MCP Certification Form Required

☐ CT RCP Required

☐ RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical 22D2157

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pedrotti, Samantha Hindle~~ Sommer Guy, Lottie Jay

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-17_042522	4/25/22 1440	4/25/22 1441	--	--	IA	--	X				-29	-7.5	2.9	2524	5042
6	SL-21_042622	4/26/22 1324	4/26/22 1325	—	—	IA	—	X				-29	-7	2.5	2526	5055
7	SL-22_042522	4/25/22 1400	4/25/22 1401	—	—	IA	—	X				-29	-7	2.9	2129	7054
8	SL-20_042522	4/25/22 1344	4/25/22 1345	—	—	IA	—	X				-29	-7	2.6	2515	5054

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/28/22 1500	
Received by: (signature) Fed Ex	Date/Time: 4/28/22 1500	
Relinquished by: (signature)	Date/Time: 4/29 930	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

272545882896

ADD NICKNAME

Delivered
Friday, 4/29/2022 at 9:30 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US

Label Created
04/28/2022 2:25 PM

PACKAGE RECEIVED BY FEDEX
PLYMOUTH, MI
04/28/2022 3:23 PM

IN TRANSIT
NEWARK, NJ
04/28/2022 11:58 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
04/29/2022 7:59 AM

DELIVERED
East Longmeadow, MA US

Delivered
4/29/2022 at 9:30 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
272545882896 (master)	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882900	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882911	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP | Date 4/29/22 | Time 930

How were the samples received? In Cooler _____ | On Ice _____ | No Ice _____ | In Box T | Ambient _____ | Melted Ice _____

Were samples within Temperature Compliance? 2-6°C _____ | By Gun # _____ | Actual Temp - _____ | By Blank # _____ | Actual Temp - _____

Was Custody Seal Intact? NA | Were Samples Tampered with? NA

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? TOM H

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s	2129				Reg #'s	7054			
2648	2515				7051	5254			
2654					5041				
2294					7050				
2310					7061				
2524					5042				
2526					5055				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/15/2022 **Batch #:** K22A105021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2648/BC7051

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10132.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2654/BC5041

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2294/BC7050

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2310/BC7061

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2524/BC5042

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2526/BC5055

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2129/BC7054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108043.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2515/BC5054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

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May 3, 2022

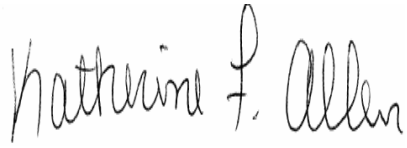
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.0701.04
Laboratory Work Order Number: 22D2158

Enclosed are results of analyses for samples as received by the laboratory on April 29, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/3/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.0701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22D2158

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-19_042622	22D2158-01	Indoor air		- EPA TO-15	
SL-23_042622	22D2158-02	Indoor air		- EPA TO-15	
SL-10_042622	22D2158-03	Indoor air		- EPA TO-15	
SL-9_042622	22D2158-04	Indoor air		- EPA TO-15	
SL-18_042522	22D2158-05	Indoor air		- EPA TO-15	
DUP-02	22D2158-06	Indoor air		- EPA TO-15	
SL-13_042622	22D2158-07	Indoor air		- EPA TO-15	
DUP-01	22D2158-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-19_042622
Sample ID: 22D2158-01
Sample Matrix: Indoor air
Sampled: 4/26/2022 14:14

Sample Description/Location:
Sub Description/Location:
Canister ID: 2672
Canister Size: 1 liter
Flow Controller ID: 7026
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -5.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 20:00	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 20:00	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 20:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 20:00	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 20:00	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 20:00	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 20:00	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.7	70-130	5/2/22 20:00

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-23_042622
Sample ID: 22D2158-02
Sample Matrix: Indoor air
Sampled: 4/26/2022 13:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2337
Canister Size: 1 liter
Flow Controller ID: 5020
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 20:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 20:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 20:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 20:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 20:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 20:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 20:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.5	70-130		5/2/22 20:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-10_042622
Sample ID: 22D2158-03
Sample Matrix: Indoor air
Sampled: 4/26/2022 13:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2685
Canister Size: 1 liter
Flow Controller ID: 5062
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 21:01	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 21:01	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 21:01	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 21:01	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 21:01	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 21:01	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 21:01	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	5/2/22 21:01

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-9_042622
Sample ID: 22D2158-04
Sample Matrix: Indoor air
Sampled: 4/26/2022 12:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 2657
Canister Size: 1 liter
Flow Controller ID: 7045
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 21:31	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 21:31	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 21:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 21:31	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 21:31	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 21:31	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 21:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		5/2/22 21:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-18_042522
Sample ID: 22D2158-05
Sample Matrix: Indoor air
Sampled: 4/26/2022 14:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2528
Canister Size: 1 liter
Flow Controller ID: 7036
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -10
Receipt Vacuum(in Hg): -10.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.50	0.20	0.15		2.0	0.79	0.60	4	5/2/22 22:02	BRF
cis-1,2-Dichloroethylene	21	0.20	0.15		82	0.79	0.58	4	5/2/22 22:02	BRF
trans-1,2-Dichloroethylene	0.52	0.20	0.16		2.1	0.79	0.62	4	5/2/22 22:02	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 22:02	BRF
Tetrachloroethylene	0.24	0.20	0.15		1.7	1.4	1.0	4	5/2/22 22:02	BRF
Trichloroethylene	1.5	0.20	0.13		8.1	1.1	0.72	4	5/2/22 22:02	BRF
Vinyl Chloride	92	0.20	0.18		240	0.51	0.46	4	5/2/22 22:02	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/2/22 22:02

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: DUP-02
Sample ID: 22D2158-06
Sample Matrix: Indoor air
Sampled: 4/27/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2301
Canister Size: 1 liter
Flow Controller ID: 7064
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): 0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 22:34	BRF
cis-1,2-Dichloroethylene	5.5	0.20	0.15		22	0.79	0.58	4	5/2/22 22:34	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 22:34	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 22:34	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 22:34	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 22:34	BRF
Vinyl Chloride	9.9	0.20	0.18		25	0.51	0.46	4	5/2/22 22:34	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/2/22 22:34

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: SL-13_042622
Sample ID: 22D2158-07
Sample Matrix: Indoor air
Sampled: 4/26/2022 10:53

Sample Description/Location:
Sub Description/Location:
Canister ID: 2254
Canister Size: 1 liter
Flow Controller ID: 5058
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 23:04	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/2/22 23:04	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 23:04	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 23:04	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 23:04	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 23:04	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 23:04	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.8	70-130		5/2/22 23:04

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 4/29/2022
Field Sample #: DUP-01
Sample ID: 22D2158-08
Sample Matrix: Indoor air
Sampled: 4/27/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2527
Canister Size: 1 liter
Flow Controller ID: 7046
Sample Type: Grab

Work Order: 22D2158
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -2
Receipt Vacuum(in Hg): 0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/2/22 23:36	BRF
cis-1,2-Dichloroethylene	0.22	0.20	0.15		0.86	0.79	0.58	4	5/2/22 23:36	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/2/22 23:36	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/2/22 23:36	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/2/22 23:36	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/2/22 23:36	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/2/22 23:36	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		5/2/22 23:36

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22D2158-01 [SL-19_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-02 [SL-23_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-03 [SL-10_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-04 [SL-9_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-05 [SL-18_042522]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-06 [DUP-02]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-07 [SL-13_042622]	B307465	1.5	1	N/A	1000	200	75	05/02/22
22D2158-08 [DUP-01]	B307465	1.5	1	N/A	1000	200	75	05/02/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B307465 - TO-15 Prep											
Blank (B307465-BLK1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.90*				*8.00*		*98.8*	*70-130*			
LCS (B307465-BS1)					Prepared & Analyzed: 05/02/22						
1,1-Dichloroethylene	5.03				5.00		101	70-130			
cis-1,2-Dichloroethylene	5.24				5.00		105	70-130			
trans-1,2-Dichloroethylene	4.80				5.00		96.1	70-130			
1,4-Dioxane	5.20				5.00		104	70-130			
Tetrachloroethylene	5.18				5.00		104	70-130			
Trichloroethylene	4.76				5.00		95.3	70-130			
Vinyl Chloride	5.39				5.00		108	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.62*				*8.00*		*108*	*70-130*			
Duplicate (B307465-DUP1)			**Source: 22D2158-08**		Prepared: 05/02/22 Analyzed: 05/03/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	0.18	0.20	0.70	0.79		0.22			20.4	25	J
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*8.24*				*8.00*		*103*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk
ALB	Aaron L. Benoit

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071117-CCV1)			Lab File ID: K22A122004.D			Analyzed: 05/02/22 09:48			
Bromochloromethane (1)	103995	2.992	102745	2.987	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	358306	3.584	303801	3.579	118	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	257709	5.159	223280	5.159	115	60 - 140	0.0000	+/-0.50	
LCS (B307465-BS1)			Lab File ID: K22A122005.D			Analyzed: 05/02/22 10:19			
Bromochloromethane (1)	102716	2.992	103995	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	357652	3.584	358306	3.584	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	259504	5.159	257709	5.159	101	60 - 140	0.0000	+/-0.50	
Blank (B307465-BLK1)			Lab File ID: K22A122007.D			Analyzed: 05/02/22 11:28			
Bromochloromethane (1)	103671	2.987	103995	2.992	100	60 - 140	-0.0050	+/-0.50	
1,4-Difluorobenzene (1)	335211	3.584	358306	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	249210	5.159	257709	5.159	97	60 - 140	0.0000	+/-0.50	
SL-19_042622 (22D2158-01)			Lab File ID: K22A122023.D			Analyzed: 05/02/22 20:00			
Bromochloromethane (1)	99240	2.992	103995	2.992	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	313606	3.584	358306	3.584	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	242062	5.159	257709	5.159	94	60 - 140	0.0000	+/-0.50	
SL-23_042622 (22D2158-02)			Lab File ID: K22A122024.D			Analyzed: 05/02/22 20:31			
Bromochloromethane (1)	104111	2.992	103995	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	334046	3.584	358306	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	261083	5.159	257709	5.159	101	60 - 140	0.0000	+/-0.50	
SL-10_042622 (22D2158-03)			Lab File ID: K22A122025.D			Analyzed: 05/02/22 21:01			
Bromochloromethane (1)	106029	2.996	103995	2.992	102	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	342451	3.588	358306	3.584	96	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	263776	5.164	257709	5.159	102	60 - 140	0.0050	+/-0.50	
SL-9_042622 (22D2158-04)			Lab File ID: K22A122026.D			Analyzed: 05/02/22 21:31			
Bromochloromethane (1)	104362	2.992	103995	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	333875	3.584	358306	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	251415	5.159	257709	5.159	98	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-18_042522 (22D2158-05)			Lab File ID: K22A122027.D			Analyzed: 05/02/22 22:02			
Bromochloromethane (1)	98854	2.992	103995	2.992	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	327522	3.584	358306	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	247316	5.159	257709	5.159	96	60 - 140	0.0000	+/-0.50	
DUP-02 (22D2158-06)			Lab File ID: K22A122028.D			Analyzed: 05/02/22 22:34			
Bromochloromethane (1)	100381	2.996	103995	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	335197	3.588	358306	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	258383	5.159	257709	5.159	100	60 - 140	0.0000	+/-0.50	
SL-13_042622 (22D2158-07)			Lab File ID: K22A122029.D			Analyzed: 05/02/22 23:04			
Bromochloromethane (1)	98488	2.996	103995	2.992	95	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	327618	3.588	358306	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	249100	5.159	257709	5.159	97	60 - 140	0.0000	+/-0.50	
DUP-01 (22D2158-08)			Lab File ID: K22A122030.D			Analyzed: 05/02/22 23:36			
Bromochloromethane (1)	100351	2.996	103995	2.992	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	331816	3.588	358306	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	252241	5.159	257709	5.159	98	60 - 140	0.0000	+/-0.50	
Duplicate (B307465-DUP1)			Lab File ID: K22A122031.D			Analyzed: 05/03/22 00:07			
Bromochloromethane (1)	100725	2.996	103995	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	336120	3.584	358306	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	256794	5.159	257709	5.159	100	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071117-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.35	1.024961	0.8928891		-12.9	30
cis-1,2-Dichloroethylene	A	5.00	4.68	0.8170638	0.7644521		-6.4	30
trans-1,2-Dichloroethylene	A	5.00	4.48	0.8261855	0.7399433		-10.4	30
1,4-Dioxane	A	5.00	4.76	0.1250488	0.1190937		-4.8	30
Tetrachloroethylene	A	5.00	4.70	0.4025846	0.378076		-6.1	30
Trichloroethylene	A	5.00	4.30	0.2665469	0.2294843		-13.9	30
Vinyl Chloride	A	5.00	4.79	0.669766	0.6421232		-4.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

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22D2158

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Kirby Pearson, Samantha Hinde~~ Sommer Guy, Lottie Jay

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-19_042622	4/26/22 1413	4/26/22 1414	--	--	IA	--	X				-29	-6	-5.6	2672	7026
2	SL-23_042622	4/26/22 1349	4/26/22 1350	—	—	IA	—	X				-29	-8	-7.5	2337	5020
3	SL-10_042622	4/26/22 1315	4/26/22 1316	—	—	IA	—	X				-29	-7.5	-6.4	2685	5062
4	SL-9_042622	4/26/22 1257	4/26/22 1258	—	—	IA	—	X				-29	-8	-7.4	2657	7045

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 4/28/22 1500	
Received by: (signature) Fed Ex	Date/Time: 4/28/22 1500	
Relinquished by: (signature)	Date/Time: 4/29 930	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

22D2158

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Lothe Jay

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-18_042522	4/25/22 1420	4/25/22 1421	--	--	IA	--	X				-29	-10	20	2528	7036
6	DUP-02	4/27/22	4/27/22	—	—	IA	—	X				-28	-3	0	2301	7064
7	SL-13_042622	4/26/22 1052	4/26/22 1053	—	—	IA	—	X				-29	-7	6	2254	5058
8	DUP-01	4/27/22	4/27/22	—	—	IA	—	X				-29	-2	6	2527	7046

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature)	Sommer Guy	Date/Time: 4/28/22 1500
Received by: (signature)	Fed Ex	Date/Time: 4/28/22 1500
Relinquished by: (signature)		Date/Time: 4/29 930
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

272545882896

ADD NICKNAME

Delivered
Friday, 4/29/2022 at 9:30 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US

Label Created
04/28/2022 2:25 PM

PACKAGE RECEIVED BY FEDEX
PLYMOUTH, MI
04/28/2022 3:23 PM

IN TRANSIT
NEWARK, NJ
04/28/2022 11:58 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
04/29/2022 7:59 AM

DELIVERED
East Longmeadow, MA US

Delivered
4/29/2022 at 9:30 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
272545882896 (master)	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882900	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA
272545882911	Delivered	4/28/22	4/29/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP Date 4/29/22 Time 930

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? TOM H

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2672	2254				7026	5058			
2737	2527				5026	7016			
2685					5062				
2457					7045				
2528					7036				
2301					7064				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108014.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2672/BC7026

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10112.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2337/BC5020

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** J22A101023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2685/BC5062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10134.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2657/BC7045

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2528/BC7036

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108046.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2301/BC7064

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2254/BC5058

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108045.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2527/BC7046

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/3/2022

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 11, 2022

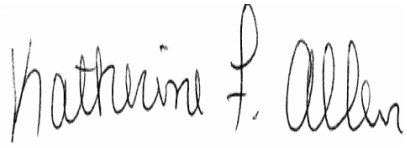
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E0451

Enclosed are results of analyses for samples as received by the laboratory on May 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/11/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0451

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-10_050422	22E0451-01	Indoor air		- EPA TO-15	
SL-9_050422	22E0451-02	Indoor air		- EPA TO-15	
SL-23_050422	22E0451-03	Indoor air		- EPA TO-15	
SL-11_050422	22E0451-04	Indoor air		- EPA TO-15	
SL-15_050322	22E0451-05	Indoor air		- EPA TO-15	
MH-1255_050322	22E0451-06	Indoor air		- EPA TO-15	
MH-1231A_050322	22E0451-07	Indoor air		- EPA TO-15	
SL-13_050322	22E0451-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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A Pace Analytical® Laboratory

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-10_050422
Sample ID: 22E0451-01
Sample Matrix: Indoor air
Sampled: 5/4/2022 09:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2236
Canister Size: 1 liter
Flow Controller ID: 7093
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 17:28	BRF
cis-1,2-Dichloroethylene	3.5	0.20	0.15		14	0.79	0.58	4	5/10/22 17:28	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 17:28	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 17:28	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 17:28	BRF
Trichloroethylene	0.34	0.20	0.13		1.8	1.1	0.72	4	5/10/22 17:28	BRF
Vinyl Chloride	13	0.20	0.18		34	0.51	0.46	4	5/10/22 17:28	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.5	70-130	5/10/22 17:28

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-9_050422
Sample ID: 22E0451-02
Sample Matrix: Indoor air
Sampled: 5/4/2022 09:18

Sample Description/Location:
Sub Description/Location:
Canister ID: 2688
Canister Size: 1 liter
Flow Controller ID: 7072
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 17:56	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 17:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 17:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 17:56	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 17:56	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 17:56	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 17:56	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.9	70-130		5/10/22 17:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-23_050422
Sample ID: 22E0451-03
Sample Matrix: Indoor air
Sampled: 5/4/2022 10:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2113
Canister Size: 1 liter
Flow Controller ID: 7092
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 18:24	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 18:24	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 18:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 18:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 18:24	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 18:24	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 18:24	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.2	70-130		5/10/22 18:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-11_050422
Sample ID: 22E0451-04
Sample Matrix: Indoor air
Sampled: 5/4/2022 09:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2550
Canister Size: 1 liter
Flow Controller ID: 4018
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 18:52	BRF
cis-1,2-Dichloroethylene	0.41	0.20	0.15		1.6	0.79	0.58	4	5/10/22 18:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 18:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 18:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 18:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 18:52	BRF
Vinyl Chloride	1.3	0.20	0.18		3.4	0.51	0.46	4	5/10/22 18:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.9	70-130		5/10/22 18:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-15_050322
Sample ID: 22E0451-05
Sample Matrix: Indoor air
Sampled: 5/3/2022 10:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2537
Canister Size: 1 liter
Flow Controller ID: 5033
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 19:20	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 19:20	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 19:20	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 19:20	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 19:20	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 19:20	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 19:20	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.4	70-130		5/10/22 19:20

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: MH-1255_050322
Sample ID: 22E0451-06
Sample Matrix: Indoor air
Sampled: 5/3/2022 08:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2677
Canister Size: 1 liter
Flow Controller ID: 5030
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.71	0.20	0.15		2.8	0.79	0.60	4	5/10/22 19:48	BRF
cis-1,2-Dichloroethylene	40	0.20	0.15		160	0.79	0.58	4	5/10/22 19:48	BRF
trans-1,2-Dichloroethylene	0.50	0.20	0.16		2.0	0.79	0.62	4	5/10/22 19:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 19:48	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 19:48	BRF
Trichloroethylene	1.0	0.20	0.13		5.4	1.1	0.72	4	5/10/22 19:48	BRF
Vinyl Chloride	100	0.20	0.18		260	0.51	0.46	4	5/10/22 19:48	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		5/10/22 19:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: MH-1231A_050322
Sample ID: 22E0451-07
Sample Matrix: Indoor air
Sampled: 5/3/2022 09:08

Sample Description/Location:
Sub Description/Location:
Canister ID: 2682
Canister Size: 1 liter
Flow Controller ID: 5059
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 20:16	BRF
cis-1,2-Dichloroethylene	10	0.20	0.15		41	0.79	0.58	4	5/10/22 20:16	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 20:16	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 20:16	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 20:16	BRF
Trichloroethylene	0.23	0.20	0.13		1.2	1.1	0.72	4	5/10/22 20:16	BRF
Vinyl Chloride	31	0.20	0.18		78	0.51	0.46	4	5/10/22 20:16	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.3	70-130		5/10/22 20:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-13_050322
Sample ID: 22E0451-08
Sample Matrix: Indoor air
Sampled: 5/3/2022 10:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2559
Canister Size: 1 liter
Flow Controller ID: 7094
Sample Type: Grab

Work Order: 22E0451
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 20:45	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 20:45	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 20:45	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 20:45	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 20:45	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 20:45	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 20:45	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.4	70-130		5/10/22 20:45

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0451-01 [SL-10_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-02 [SL-9_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-03 [SL-23_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-04 [SL-11_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-05 [SL-15_050322]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-06 [MH-1255_050322]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-07 [MH-1231A_050322]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0451-08 [SL-13_050322]	B308143	1.5	1	N/A	1000	200	75	05/10/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308143 - TO-15 Prep											
Blank (B308143-BLK1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.05*				*8.00*		*101*	*70-130*			
LCS (B308143-BS1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	5.57				5.00		111	70-130			
cis-1,2-Dichloroethylene	5.39				5.00		108	70-130			
trans-1,2-Dichloroethylene	5.58				5.00		112	70-130			
1,4-Dioxane	5.38				5.00		108	70-130			
Tetrachloroethylene	5.33				5.00		107	70-130			
Trichloroethylene	5.02				5.00		100	70-130			
Vinyl Chloride	5.62				5.00		112	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.69*				*8.00*		*109*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071388-CCV1)			Lab File ID: K22A130004.D			Analyzed: 05/10/22 09:16			
Bromochloromethane (1)	92307	2.987	102745	2.987	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	318396	3.584	303801	3.579	105	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	230611	5.159	223280	5.159	103	60 - 140	0.0000	+/-0.50	
LCS (B308143-BS1)			Lab File ID: K22A130005.D			Analyzed: 05/10/22 09:46			
Bromochloromethane (1)	91270	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	313594	3.584	318396	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	227656	5.159	230611	5.159	99	60 - 140	0.0000	+/-0.50	
Blank (B308143-BLK1)			Lab File ID: K22A130008.D			Analyzed: 05/10/22 11:29			
Bromochloromethane (1)	91230	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	281080	3.584	318396	3.584	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	214367	5.159	230611	5.159	93	60 - 140	0.0000	+/-0.50	
SL-10_050422 (22E0451-01)			Lab File ID: K22A130018.D			Analyzed: 05/10/22 17:28			
Bromochloromethane (1)	77337	2.992	92307	2.987	84	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	284363	3.584	318396	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	214775	5.159	230611	5.159	93	60 - 140	0.0000	+/-0.50	
SL-9_050422 (22E0451-02)			Lab File ID: K22A130019.D			Analyzed: 05/10/22 17:56			
Bromochloromethane (1)	89039	2.992	92307	2.987	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	294021	3.584	318396	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	219560	5.159	230611	5.159	95	60 - 140	0.0000	+/-0.50	
SL-23_050422 (22E0451-03)			Lab File ID: K22A130020.D			Analyzed: 05/10/22 18:24			
Bromochloromethane (1)	88539	2.992	92307	2.987	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	282861	3.584	318396	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	217447	5.159	230611	5.159	94	60 - 140	0.0000	+/-0.50	
SL-11_050422 (22E0451-04)			Lab File ID: K22A130021.D			Analyzed: 05/10/22 18:52			
Bromochloromethane (1)	87884	2.992	92307	2.987	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	278154	3.584	318396	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	208969	5.159	230611	5.159	91	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-15_050322 (22E0451-05)			Lab File ID: K22A130022.D			Analyzed: 05/10/22 19:20			
Bromochloromethane (1)	88102	2.992	92307	2.987	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	276270	3.584	318396	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	210533	5.159	230611	5.159	91	60 - 140	0.0000	+/-0.50	
MH-1255_050322 (22E0451-06)			Lab File ID: K22A130023.D			Analyzed: 05/10/22 19:48			
Bromochloromethane (1)	87483	2.992	92307	2.987	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	275479	3.584	318396	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	208794	5.159	230611	5.159	91	60 - 140	0.0000	+/-0.50	
MH-1231A_050322 (22E0451-07)			Lab File ID: K22A130024.D			Analyzed: 05/10/22 20:16			
Bromochloromethane (1)	86991	2.992	92307	2.987	94	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	273710	3.584	318396	3.584	86	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	207442	5.159	230611	5.159	90	60 - 140	0.0000	+/-0.50	
SL-13_050322 (22E0451-08)			Lab File ID: K22A130025.D			Analyzed: 05/10/22 20:45			
Bromochloromethane (1)	86143	2.992	92307	2.987	93	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	275530	3.584	318396	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	208399	5.159	230611	5.159	90	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071388-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.62	1.024961	0.9479498		-7.5	30
cis-1,2-Dichloroethylene	A	5.00	4.97	0.8170638	0.8120728		-0.6	30
trans-1,2-Dichloroethylene	A	5.00	4.68	0.8261855	0.7731245		-6.4	30
1,4-Dioxane	A	5.00	4.60	0.1250488	0.115117		-7.9	30
Tetrachloroethylene	A	5.00	4.93	0.4025846	0.3972543		-1.3	30
Trichloroethylene	A	5.00	4.49	0.2665469	0.2396764		-10.1	30
Vinyl Chloride	A	5.00	5.19	0.669766	0.6953665		3.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

22E04511

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Corey Pearson, Samantha Hindle~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-10-050422	5/4/22 939	5/4/22 940	--	--	IA	--	X				-28	-6.5	-4.9	2236	7093
2	SL-9-050422	5/4/22 917	5/4/22 918	—	—	IA	—	X				-29	-7	-5.1	2688	7072
3	SL-23-050422	5/4/22 1001	5/4/22 1002	—	—	IA	—	X				-29	-5	-5.0	2113	7092
4	SL-11-050422	5/4/22 950	5/4/22 951	—	—	IA	—	X				-29	-6	-5.9	2550	4018

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Sommer Guy	Date/Time: 5/4/22 1200	
Received by: (signature) Fed Ex	Date/Time: 5/4/22 1200	
Relinquished by: (signature)	Date/Time: 5/7 1052	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22 E0451

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Jennifer Hindle~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
5	SL-15_050322	5/3/22 959	5/3/22 1000	--	--	IA	--	X				-29	-8	-7.9			2537	5033
6	MH-1255_050322	5/3/22 849	5/3/22 850	—	—	IA	—	X				-29	-8	-8.2			2677	5030
9	MH-1231A_050322	5/3/22 907	5/3/22 908	—	—	IA	—	X				-29	-5	-5.3			2682	5059
8	SL-13_050322	5/3/22 1021	5/3/22 1022	—	—	IA	—	X				-29	-5	-5.4			2559	7094

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature)	Sommer Guy	Date/Time: 5/4/22 1200
Received by: (signature)	FedEx	Date/Time: 5/4/22 1200
Relinquished by: (signature)		Date/Time: 5/7 1052
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

776794411781

ADD NICKNAME

Delivered
Saturday, 5/7/2022 at 10:52 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
Novi, MI US

Label Created
05/06/2022 2:30 PM

PACKAGE RECEIVED BY FEDEX
NOVI, MI
05/06/2022 5:19 PM

IN TRANSIT
INDIANAPOLIS, IN
05/06/2022 11:49 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/07/2022 9:45 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
5/7/2022 at 10:52 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
776794412376 (master)	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794410925	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794411781	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By: hrp | Date: 5/7/22 | Time: 1052

How were the samples received? In Cooler: | On Ice: | No Ice: | In Box: T | Ambient: | Melted Ice:

Were samples within Temperature Compliance? 2-6°C: | By Gun #: | Actual Temp - | By Blank #: | Actual Temp -

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client: T | Analysis: T | Sampler Name: T | Project: T | ID's: T | Collection Dates/Times: T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? N/A - no weekend staff

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2236	2082				7093	5054			
2688	2559				7072	7094			
2113					7092				
2550					4018				
2537					5033				
2677					5030				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2236/BC7093

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2688/BC7072

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2113/BC7092

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/11/2022 **Batch #:** K22A10127.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2550/BC4018

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2537/BC5033

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2677/BC5030

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2682/BC5059

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2559/BC7094

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 11, 2022

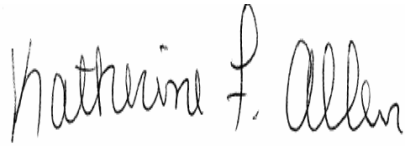
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E0448

Enclosed are results of analyses for samples as received by the laboratory on May 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/11/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0448

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-19_050422	22E0448-01	Indoor air		-	
				EPA TO-15	
SL-8_050422	22E0448-02	Indoor air		-	
				EPA TO-15	
SL-12_050422	22E0448-03	Indoor air		-	
				EPA TO-15	
Void/digital @ -3.5	22E0448-04	Indoor air		-	
Dup-02	22E0448-05	Indoor air		-	
				EPA TO-15	
SL-4_050222	22E0448-06	Indoor air		-	
				EPA TO-15	
SL-14_050322	22E0448-07	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-19_050422
Sample ID: 22E0448-01
Sample Matrix: Indoor air
Sampled: 5/4/2022 10:23

Sample Description/Location:
Sub Description/Location:
Canister ID: 2659
Canister Size: 1 liter
Flow Controller ID: 7080
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 13:46	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 13:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 13:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 13:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 13:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 13:46	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 13:46	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.1	70-130	5/10/22 13:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-8_050422
Sample ID: 22E0448-02
Sample Matrix: Indoor air
Sampled: 5/4/2022 09:02

Sample Description/Location:
Sub Description/Location:
Canister ID: 2341
Canister Size: 1 liter
Flow Controller ID: 7023
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 14:14	BRF
cis-1,2-Dichloroethylene	0.30	0.20	0.15		1.2	0.79	0.58	4	5/10/22 14:14	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 14:14	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 14:14	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 14:14	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 14:14	BRF
Vinyl Chloride	0.58	0.20	0.18		1.5	0.51	0.46	4	5/10/22 14:14	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.0	70-130		5/10/22 14:14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-12_050422
Sample ID: 22E0448-03
Sample Matrix: Indoor air
Sampled: 5/4/2022 10:13

Sample Description/Location:
Sub Description/Location:
Canister ID: 2122
Canister Size: 1 liter
Flow Controller ID: 7101
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 14:42	BRF
cis-1,2-Dichloroethylene	1.6	0.20	0.15		6.3	0.79	0.58	4	5/10/22 14:42	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 14:42	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 14:42	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 14:42	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 14:42	BRF
Vinyl Chloride	2.9	0.20	0.18		7.3	0.51	0.46	4	5/10/22 14:42	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.1	70-130		5/10/22 14:42

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: Dup-02
Sample ID: 22E0448-05
Sample Matrix: Indoor air
Sampled: 5/2/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2557
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.31	0.20	0.15		1.2	0.79	0.60	4	5/10/22 15:39	BRF
cis-1,2-Dichloroethylene	42	0.20	0.15		170	0.79	0.58	4	5/10/22 15:39	BRF
trans-1,2-Dichloroethylene	0.48	0.20	0.16		1.9	0.79	0.62	4	5/10/22 15:39	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 15:39	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 15:39	BRF
Trichloroethylene	0.80	0.20	0.13		4.3	1.1	0.72	4	5/10/22 15:39	BRF
Vinyl Chloride	91	0.20	0.18		230	0.51	0.46	4	5/10/22 15:39	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.9	70-130		5/10/22 15:39

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-4_050222
Sample ID: 22E0448-06
Sample Matrix: Indoor air
Sampled: 5/2/2022 11:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2620
Canister Size: 1 liter
Flow Controller ID: 7099
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 16:32	BRF
cis-1,2-Dichloroethylene	0.32	0.20	0.15		1.3	0.79	0.58	4	5/10/22 16:32	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 16:32	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 16:32	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 16:32	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 16:32	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 16:32	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.6	70-130		5/10/22 16:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-14_050322
Sample ID: 22E0448-07
Sample Matrix: Indoor air
Sampled: 5/3/2022 10:11

Sample Description/Location:
Sub Description/Location:
Canister ID: 2651
Canister Size: 1 liter
Flow Controller ID: 7059
Sample Type: Grab

Work Order: 22E0448
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 17:00	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/10/22 17:00	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 17:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 17:00	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 17:00	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 17:00	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/10/22 17:00	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.3	70-130	5/10/22 17:00

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0448-01 [SL-19_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0448-02 [SL-8_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0448-03 [SL-12_050422]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0448-05 [Dup-02]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0448-06 [SL-4_050222]	B308143	1.5	1	N/A	1000	200	75	05/10/22
22E0448-07 [SL-14_050322]	B308143	1.5	1	N/A	1000	200	75	05/10/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308143 - TO-15 Prep											
Blank (B308143-BLK1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.05*				*8.00*		*101*	*70-130*			
LCS (B308143-BS1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	5.57				5.00		111	70-130			
cis-1,2-Dichloroethylene	5.39				5.00		108	70-130			
trans-1,2-Dichloroethylene	5.58				5.00		112	70-130			
1,4-Dioxane	5.38				5.00		108	70-130			
Tetrachloroethylene	5.33				5.00		107	70-130			
Trichloroethylene	5.02				5.00		100	70-130			
Vinyl Chloride	5.62				5.00		112	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.69*				*8.00*		*109*	*70-130*			
Duplicate (B308143-DUP1)			**Source: 22E0448-03**		Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	1.6	0.20	6.4	0.79		1.6			0.998	25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	2.8	0.20	7.2	0.51		2.9			1.41	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.74*				*8.00*		*96.7*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071388-CCV1)			Lab File ID: K22A130004.D			Analyzed: 05/10/22 09:16			
Bromochloromethane (1)	92307	2.987	102745	2.987	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	318396	3.584	303801	3.579	105	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	230611	5.159	223280	5.159	103	60 - 140	0.0000	+/-0.50	
LCS (B308143-BS1)			Lab File ID: K22A130005.D			Analyzed: 05/10/22 09:46			
Bromochloromethane (1)	91270	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	313594	3.584	318396	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	227656	5.159	230611	5.159	99	60 - 140	0.0000	+/-0.50	
Blank (B308143-BLK1)			Lab File ID: K22A130008.D			Analyzed: 05/10/22 11:29			
Bromochloromethane (1)	91230	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	281080	3.584	318396	3.584	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	214367	5.159	230611	5.159	93	60 - 140	0.0000	+/-0.50	
SL-19_050422 (22E0448-01)			Lab File ID: K22A130010.D			Analyzed: 05/10/22 13:46			
Bromochloromethane (1)	88777	2.992	92307	2.987	96	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	269921	3.584	318396	3.584	85	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	211174	5.159	230611	5.159	92	60 - 140	0.0000	+/-0.50	
SL-8_050422 (22E0448-02)			Lab File ID: K22A130011.D			Analyzed: 05/10/22 14:14			
Bromochloromethane (1)	93293	2.992	92307	2.987	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	288403	3.584	318396	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	222222	5.159	230611	5.159	96	60 - 140	0.0000	+/-0.50	
SL-12_050422 (22E0448-03)			Lab File ID: K22A130012.D			Analyzed: 05/10/22 14:42			
Bromochloromethane (1)	93597	2.992	92307	2.987	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	287284	3.584	318396	3.584	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	220679	5.159	230611	5.159	96	60 - 140	0.0000	+/-0.50	
Duplicate (B308143-DUP1)			Lab File ID: K22A130013.D			Analyzed: 05/10/22 15:10			
Bromochloromethane (1)	90863	2.996	92307	2.987	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	278954	3.588	318396	3.584	88	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	217046	5.164	230611	5.159	94	60 - 140	0.0050	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Dup-02 (22E0448-05)			Lab File ID: K22A130014.D			Analyzed: 05/10/22 15:39			
Bromochloromethane (1)	90316	2.992	92307	2.987	98	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	287216	3.584	318396	3.584	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	219443	5.159	230611	5.159	95	60 - 140	0.0000	+/-0.50	
SL-4_050222 (22E0448-06)			Lab File ID: K22A130016.D			Analyzed: 05/10/22 16:32			
Bromochloromethane (1)	91063	2.992	92307	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	291419	3.584	318396	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	221865	5.159	230611	5.159	96	60 - 140	0.0000	+/-0.50	
SL-14_050322 (22E0448-07)			Lab File ID: K22A130017.D			Analyzed: 05/10/22 17:00			
Bromochloromethane (1)	92581	2.992	92307	2.987	100	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	283791	3.584	318396	3.584	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	216505	5.159	230611	5.159	94	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071388-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.62	1.024961	0.9479498		-7.5	30
cis-1,2-Dichloroethylene	A	5.00	4.97	0.8170638	0.8120728		-0.6	30
trans-1,2-Dichloroethylene	A	5.00	4.68	0.8261855	0.7731245		-6.4	30
1,4-Dioxane	A	5.00	4.60	0.1250488	0.115117		-7.9	30
Tetrachloroethylene	A	5.00	4.93	0.4025846	0.3972543		-1.3	30
Trichloroethylene	A	5.00	4.49	0.2665469	0.2396764		-10.1	30
Vinyl Chloride	A	5.00	5.19	0.669766	0.6953665		3.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E0448

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Jamesche Hinds~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
1	SL-19_050422	5/4/22 1022	5/4/22 1023	--	--	IA	--	X				-28	-6	6.9			2659	7080
2	SL-8-050422	5/4/22 901	5/4/22 902	—	—	IA	—	X				-29	-6.9	6.8			2341	7023
3	SL-12-050422	5/4/22 1012	5/4/22 1013	—	—	IA	—	X				-29	-7	6.8			2122	7101

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 5/4/22 1200	
Received by: (signature) FedEx	Date/Time: 5/4/22 1200	
Relinquished by: (signature)	Date/Time: 5/7 1052	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA: ☐ MA MCP Required

☐ MCP Certification Form Required

☐ CT RCP Required

CT: ☐ RCP Certification Form Required

☐ Other

Other:

Special Requirements

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22E0448

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CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Corey Pearson, Samantha Hindle~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
4	VOID digital @-3.5	—	—	--	--	IA	--	X				3.5		4.3	2241	4028
5	DUP-02	5/2/22 —	5/2/22 —	—	—	IA	—	X				-29	-4	4.3	2557	7022
6	SL-4_050222	5/2/22 1121	5/2/22 1122	—	—	IA	—	X				-29	-5.5	5.9	2629	7099
7	SL-14-050322	5/3/22 1010	5/3/22 1011	—	—	IA	—	X				-29	-6	6.5	2651	7059

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Sommer Guy	Date/Time: 5/4/22 1200	
Received by: (signature) FedEx	Date/Time: 5/4/22 1200	
Relinquished by: (signature)	Date/Time: 5/7	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

776794411781

ADD NICKNAME

Delivered
Saturday, 5/7/2022 at 10:52 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
Novi, MI US

Label Created
05/06/2022 2:30 PM

PACKAGE RECEIVED BY FEDEX
NOVI, MI
05/06/2022 5:19 PM

IN TRANSIT
INDIANAPOLIS, IN
05/06/2022 11:49 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/07/2022 9:45 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
5/7/2022 at 10:52 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
776794412376 (master)	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794410925	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794411781	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By hrp | Date 5/7/22 | Time 1052

How were the samples received? In Cooler _____ | On Ice _____ | No Ice _____ | In Box T | Ambient _____ | Melted Ice _____

Were samples within Temperature Compliance? 2-6°C _____ | By Gun # _____ | Actual Temp - _____ | By Blank # _____ | Actual Temp - _____

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? N/A · no weekend staff

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	7	1L	7	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s	2651				Reg #'s	7059			
2659					7080				
2241					7023				
2122					7101				
2291					4028				
2537					7022				
2620					7099				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2659/BC7080

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2341/BC7023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2122/BC7101

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2557/BC7022

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115008.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2620/BC7099

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116028.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2651/BC7059

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/11/2022

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May 11, 2022

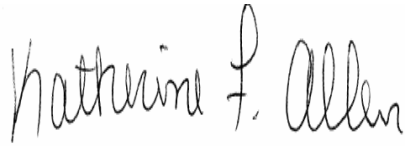
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E0450

Enclosed are results of analyses for samples as received by the laboratory on May 7, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/11/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0450

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-6_050322	22E0450-01	Indoor air		- EPA TO-15	
MH-1259_050322	22E0450-02	Indoor air		- EPA TO-15	
SL-7_050322	22E0450-03	Indoor air		- EPA TO-15	
MH-1255_050322	22E0450-04	Indoor air		- EPA TO-15	
SL-21_050222	22E0450-05	Indoor air		- EPA TO-15	
SL-5_050322	22E0450-06	Indoor air		- EPA TO-15	
Dup-01	22E0450-07	Indoor air		- EPA TO-15	
MH-1244_050322	22E0450-08	Indoor air		- EPA TO-15	

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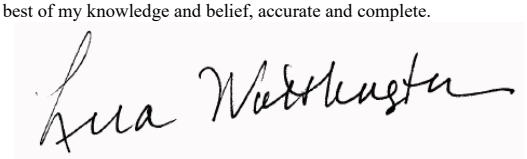
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-6_050322
Sample ID: 22E0450-01
Sample Matrix: Indoor air
Sampled: 5/3/2022 11:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 2096
Canister Size: 1 liter
Flow Controller ID: 7042
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/9/22 21:24	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/9/22 21:24	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/9/22 21:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/9/22 21:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/9/22 21:24	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/9/22 21:24	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/9/22 21:24	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	5/9/22 21:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: MH-1259_050322
Sample ID: 22E0450-02
Sample Matrix: Indoor air
Sampled: 5/3/2022 12:55

Sample Description/Location:
Sub Description/Location:
Canister ID: 2615
Canister Size: 1 liter
Flow Controller ID: 7043
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	4.1	0.20	0.15		16	0.79	0.60	4	5/9/22 21:53	BRF
cis-1,2-Dichloroethylene	270	1.0	0.73		1100	4.0	2.9	20	5/10/22 21:13	BRF
trans-1,2-Dichloroethylene	2.6	0.20	0.16		10	0.79	0.62	4	5/9/22 21:53	BRF
1,4-Dioxane	0.43	2.0	0.17	J	1.5	7.2	0.60	4	5/9/22 21:53	BRF
Tetrachloroethylene	0.28	0.20	0.15		1.9	1.4	1.0	4	5/9/22 21:53	BRF
Trichloroethylene	8.0	0.20	0.13		43	1.1	0.72	4	5/9/22 21:53	BRF
Vinyl Chloride	410	1.0	0.90		1100	2.6	2.3	20	5/10/22 21:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.2	70-130	5/10/22 21:13
4-Bromofluorobenzene (1)	98.7	70-130	5/9/22 21:53

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-7_050322
Sample ID: 22E0450-03
Sample Matrix: Indoor air
Sampled: 5/3/2022 11:03

Sample Description/Location:
Sub Description/Location:
Canister ID: 2518
Canister Size: 1 liter
Flow Controller ID: 7027
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/9/22 22:51	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/9/22 22:51	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/9/22 22:51	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/9/22 22:51	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/9/22 22:51	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/9/22 22:51	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/9/22 22:51	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.1	70-130		5/9/22 22:51

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: MH-1255_050322
Sample ID: 22E0450-04
Sample Matrix: Indoor air
Sampled: 5/3/2022 12:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2103
Canister Size: 1 liter
Flow Controller ID: 7100
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -4.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/9/22 23:19	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/9/22 23:19	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/9/22 23:19	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/9/22 23:19	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/9/22 23:19	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/9/22 23:19	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/9/22 23:19	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.0	70-130		5/9/22 23:19

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-21_050222
Sample ID: 22E0450-05
Sample Matrix: Indoor air
Sampled: 5/3/2022 10:43

Sample Description/Location:
Sub Description/Location:
Canister ID: 2330
Canister Size: 1 liter
Flow Controller ID: 7075
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/9/22 23:48	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/9/22 23:48	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/9/22 23:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/9/22 23:48	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/9/22 23:48	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/9/22 23:48	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/9/22 23:48	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.2	70-130		5/9/22 23:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: SL-5_050322
Sample ID: 22E0450-06
Sample Matrix: Indoor air
Sampled: 5/3/2022 11:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2539
Canister Size: 1 liter
Flow Controller ID: 7085
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 0:17	BRF
cis-1,2-Dichloroethylene	11	0.20	0.15		42	0.79	0.58	4	5/10/22 0:17	BRF
trans-1,2-Dichloroethylene	0.16	0.20	0.16	J	0.63	0.79	0.62	4	5/10/22 0:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 0:17	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 0:17	BRF
Trichloroethylene	0.36	0.20	0.13		2.0	1.1	0.72	4	5/10/22 0:17	BRF
Vinyl Chloride	16	0.20	0.18		42	0.51	0.46	4	5/10/22 0:17	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		5/10/22 0:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: Dup-01
Sample ID: 22E0450-07
Sample Matrix: Indoor air
Sampled: 5/2/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2554
Canister Size: 1 liter
Flow Controller ID: 7028
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/10/22 0:46	BRF
cis-1,2-Dichloroethylene	0.45	0.20	0.15		1.8	0.79	0.58	4	5/10/22 0:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/10/22 0:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 0:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/10/22 0:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/10/22 0:46	BRF
Vinyl Chloride	1.3	0.20	0.18		3.3	0.51	0.46	4	5/10/22 0:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.3	70-130	5/10/22 0:46	

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/7/2022
Field Sample #: MH-1244_050322
Sample ID: 22E0450-08
Sample Matrix: Indoor air
Sampled: 5/3/2022 12:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2107
Canister Size: 1 liter
Flow Controller ID: 5053
Sample Type: Grab

Work Order: 22E0450
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.4	0.20	0.15		5.5	0.79	0.60	4	5/10/22 1:14	BRF
cis-1,2-Dichloroethylene	100	0.20	0.15		410	0.79	0.58	4	5/10/22 1:14	BRF
trans-1,2-Dichloroethylene	2.2	0.20	0.16		8.8	0.79	0.62	4	5/10/22 1:14	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/10/22 1:14	BRF
Tetrachloroethylene	0.18	0.20	0.15	J	1.2	1.4	1.0	4	5/10/22 1:14	BRF
Trichloroethylene	3.0	0.20	0.13		16	1.1	0.72	4	5/10/22 1:14	BRF
Vinyl Chloride	290	1.0	0.90		750	2.6	2.3	20	5/10/22 21:42	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.9	70-130	5/10/22 1:14
4-Bromofluorobenzene (1)	95.8	70-130	5/10/22 21:42

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0450-01 [SL-6_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-02 [MH-1259_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-03 [SL-7_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-04 [MH-1255_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-05 [SL-21_050222]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-06 [SL-5_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-07 [Dup-01]	B308032	1.5	1	N/A	1000	200	75	05/09/22
22E0450-08 [MH-1244_050322]	B308032	1.5	1	N/A	1000	200	75	05/09/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0450-02RE1 [MH-1259_050322]	B308143	1.5	1	N/A	1000	200	15	05/10/22
22E0450-08RE1 [MH-1244_050322]	B308143	1.5	1	N/A	1000	200	15	05/10/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308032 - TO-15 Prep											
Blank (B308032-BLK1)					Prepared & Analyzed: 05/09/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.91*				*8.00*		*98.9*	*70-130*			
LCS (B308032-BS1)					Prepared & Analyzed: 05/09/22						
1,1-Dichloroethylene	5.02				5.00		100	70-130			
cis-1,2-Dichloroethylene	5.11				5.00		102	70-130			
trans-1,2-Dichloroethylene	4.94				5.00		98.8	70-130			
1,4-Dioxane	5.18				5.00		104	70-130			
Tetrachloroethylene	5.24				5.00		105	70-130			
Trichloroethylene	4.81				5.00		96.2	70-130			
Vinyl Chloride	5.33				5.00		107	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.74*				*8.00*		*109*	*70-130*			
Duplicate (B308032-DUP1)			**Source: 22E0450-02**		Prepared & Analyzed: 05/09/22						
1,1-Dichloroethylene	4.1	0.20	16	0.79		4.1			0.678	25	
cis-1,2-Dichloroethylene	260	0.20	1000	0.79		260			0.942	25	
trans-1,2-Dichloroethylene	2.5	0.20	9.9	0.79		2.6			5.46	25	
1,4-Dioxane	0.50	2.0	1.8	7.2		0.43			16.3	25	J
Tetrachloroethylene	0.26	0.20	1.8	1.4		0.28			8.82	25	
Trichloroethylene	7.6	0.20	41	1.1		8.0			5.28	25	
Vinyl Chloride	340	0.20	860	0.51		370			9.62	25	
Surrogate: 4-Bromofluorobenzene (1)	*8.21*				*8.00*		*103*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308143 - TO-15 Prep											
Blank (B308143-BLK1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.05*				*8.00*		*101*	*70-130*			
LCS (B308143-BS1)					Prepared & Analyzed: 05/10/22						
1,1-Dichloroethylene	5.57				5.00		111	70-130			
cis-1,2-Dichloroethylene	5.39				5.00		108	70-130			
trans-1,2-Dichloroethylene	5.58				5.00		112	70-130			
1,4-Dioxane	5.38				5.00		108	70-130			
Tetrachloroethylene	5.33				5.00		107	70-130			
Trichloroethylene	5.02				5.00		100	70-130			
Vinyl Chloride	5.62				5.00		112	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.69*				*8.00*		*109*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

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RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071333-CCV1)			Lab File ID: K22A129004.D			Analyzed: 05/09/22 09:54			
Bromochloromethane (1)	94642	2.987	102745	2.987	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	324522	3.584	303801	3.579	107	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	237851	5.159	223280	5.159	107	60 - 140	0.0000	+/-0.50	
LCS (B308032-BS1)			Lab File ID: K22A129005.D			Analyzed: 05/09/22 10:24			
Bromochloromethane (1)	96781	2.992	94642	2.987	102	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	328481	3.584	324522	3.584	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	236530	5.159	237851	5.159	99	60 - 140	0.0000	+/-0.50	
Blank (B308032-BLK1)			Lab File ID: K22A129008.D			Analyzed: 05/09/22 12:11			
Bromochloromethane (1)	95935	2.991	94642	2.987	101	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	292710	3.584	324522	3.584	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	221742	5.158	237851	5.159	93	60 - 140	-0.0010	+/-0.50	
SL-6_050322 (22E0450-01)			Lab File ID: K22A129025.D			Analyzed: 05/09/22 21:24			
Bromochloromethane (1)	98382	2.992	94642	2.987	104	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	311483	3.584	324522	3.584	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	237449	5.164	237851	5.159	100	60 - 140	0.0050	+/-0.50	
MH-1259_050322 (22E0450-02)			Lab File ID: K22A129026.D			Analyzed: 05/09/22 21:53			
Bromochloromethane (1)	97345	2.992	94642	2.987	103	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	306256	3.584	324522	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	230488	5.159	237851	5.159	97	60 - 140	0.0000	+/-0.50	
Duplicate (B308032-DUP1)			Lab File ID: K22A129027.D			Analyzed: 05/09/22 22:22			
Bromochloromethane (1)	97176	2.992	94642	2.987	103	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	315717	3.584	324522	3.584	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	237125	5.159	237851	5.159	100	60 - 140	0.0000	+/-0.50	
SL-7_050322 (22E0450-03)			Lab File ID: K22A129028.D			Analyzed: 05/09/22 22:51			
Bromochloromethane (1)	95085	2.996	94642	2.987	100	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	306533	3.588	324522	3.584	94	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	233933	5.159	237851	5.159	98	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1255_050322 (22E0450-04)			Lab File ID: K22A129029.D			Analyzed: 05/09/22 23:19			
Bromochloromethane (1)	93618	2.996	94642	2.987	99	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	298508	3.588	324522	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	230574	5.159	237851	5.159	97	60 - 140	0.0000	+/-0.50	
SL-21_050222 (22E0450-05)			Lab File ID: K22A129030.D			Analyzed: 05/09/22 23:48			
Bromochloromethane (1)	95632	2.992	94642	2.987	101	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	303914	3.584	324522	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	236333	5.159	237851	5.159	99	60 - 140	0.0000	+/-0.50	
SL-5_050322 (22E0450-06)			Lab File ID: K22A129031.D			Analyzed: 05/10/22 00:17			
Bromochloromethane (1)	94141	2.992	94642	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	297249	3.584	324522	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	225525	5.159	237851	5.159	95	60 - 140	0.0000	+/-0.50	
Dup-01 (22E0450-07)			Lab File ID: K22A129032.D			Analyzed: 05/10/22 00:46			
Bromochloromethane (1)	93291	2.992	94642	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	293884	3.584	324522	3.584	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	223714	5.159	237851	5.159	94	60 - 140	0.0000	+/-0.50	
MH-1244_050322 (22E0450-08)			Lab File ID: K22A129033.D			Analyzed: 05/10/22 01:14			
Bromochloromethane (1)	93417	2.992	94642	2.987	99	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	305398	3.584	324522	3.584	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	234199	5.159	237851	5.159	98	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071388-CCV1)			Lab File ID: K22A130004.D			Analyzed: 05/10/22 09:16			
Bromochloromethane (1)	92307	2.987	102745	2.987	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	318396	3.584	303801	3.579	105	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	230611	5.159	223280	5.159	103	60 - 140	0.0000	+/-0.50	
LCS (B308143-BS1)			Lab File ID: K22A130005.D			Analyzed: 05/10/22 09:46			
Bromochloromethane (1)	91270	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	313594	3.584	318396	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	227656	5.159	230611	5.159	99	60 - 140	0.0000	+/-0.50	
Blank (B308143-BLK1)			Lab File ID: K22A130008.D			Analyzed: 05/10/22 11:29			
Bromochloromethane (1)	91230	2.987	92307	2.987	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	281080	3.584	318396	3.584	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	214367	5.159	230611	5.159	93	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
MH-1259_050322 (22E0450-02RE1)			Lab File ID: K22A130026.D			Analyzed: 05/10/22 21:13			
Bromochloromethane (1)	85301	2.991	92307	2.987	92	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	265153	3.583	318396	3.584	83	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	201022	5.159	230611	5.159	87	60 - 140	0.0000	+/-0.50	
MH-1244_050322 (22E0450-08RE1)			Lab File ID: K22A130027.D			Analyzed: 05/10/22 21:42			
Bromochloromethane (1)	87671	2.992	92307	2.987	95	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	275991	3.584	318396	3.584	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	210874	5.159	230611	5.159	91	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071333-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.59	1.024961	0.9422455		-8.1	30
cis-1,2-Dichloroethylene	A	5.00	4.94	0.8170638	0.8067454		-1.3	30
trans-1,2-Dichloroethylene	A	5.00	4.62	0.8261855	0.7633313		-7.6	30
1,4-Dioxane	A	5.00	4.58	0.1250488	0.1145956		-8.4	30
Tetrachloroethylene	A	5.00	4.88	0.4025846	0.3928913		-2.4	30
Trichloroethylene	A	5.00	4.60	0.2665469	0.2456881		-7.8	30
Vinyl Chloride	A	5.00	5.06	0.669766	0.6774498		1.1	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071388-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.62	1.024961	0.9479498		-7.5	30
cis-1,2-Dichloroethylene	A	5.00	4.97	0.8170638	0.8120728		-0.6	30
trans-1,2-Dichloroethylene	A	5.00	4.68	0.8261855	0.7731245		-6.4	30
1,4-Dioxane	A	5.00	4.60	0.1250488	0.115117		-7.9	30
Tetrachloroethylene	A	5.00	4.93	0.4025846	0.3972543		-1.3	30
Trichloroethylene	A	5.00	4.49	0.2665469	0.2396764		-10.1	30
Vinyl Chloride	A	5.00	5.19	0.669766	0.6953665		3.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E0450

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Corey Pearson, Samantha Hindle~~ Sommer Guy, Gary Schafer

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
Bkbk050322 1	SL-6_050322	5/3/22 1115	5/3/22 1116	--	--	IA	--	X				-29	-8	-1.0	2096	7042
2	MH-1259_050322	5/3/22 1254	5/3/22 1255	—	—	IA	—	X				-29	-7	-1.1	2615	7043
3	SL-7_050322	5/3/22 1102	5/3/22 1103	—	—	IA	—	X				-29	-7	-1.1	2518	7027
4	MH-1255_050322	5/3/22 1239	5/3/22 1240	—	—	IA	—	X				-28	-6	-1.0	2103	7100

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature)	Sommer Guy	Date/Time: 5/4/22 1200
Received by: (signature)	Fed Ex	Date/Time: 5/4/22 1200
Relinquished by: (signature)		Date/Time: 5/7 1052
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22E0150

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Gary Schafer

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-21_050222	5/2/22 1042	5/2/22 1043	--	--	IA	--	X				-29	-6	-6.4	2330	7075
6	SL-5_050322	5/3/22 1130	5/3/22 1131	—	—	IA	—	X				-29	-8	-7.1	2539	7085
7	DUP-01	5/2/22	5/2/22	—	—	IA	—	X				-29	-5	-5.3	2554	7028
8	MH-1244_050322	5/3/22 1220	5/3/22 1221	—	—	IA	—	X				-29	-6	-5.9	2107	5053

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Sommer Guy	Date/Time: 5/4/22 1200
Received by: (signature)	FedEx	Date/Time: 5/4/22 1200
Relinquished by: (signature)		Date/Time: 5/7 1052
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical®
NELAC and AIHA LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

shows 7073 on canister ticket but is 7075

FedEx® Tracking

776794411781

ADD NICKNAME

Delivered
Saturday, 5/7/2022 at 10:52 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
Novi, MI US

Label Created
05/06/2022 2:30 PM

PACKAGE RECEIVED BY FEDEX
NOVI, MI
05/06/2022 5:19 PM

IN TRANSIT
INDIANAPOLIS, IN
05/06/2022 11:49 PM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/07/2022 9:45 AM

DELIVERED
EAST LONGMEADOW, MA US

Delivered
5/7/2022 at 10:52 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
776794412376 (master)	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794410925	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA
776794411781	Delivered	5/6/22	5/7/22	0	Novi MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By NRP | Date 5/7/22 | Time 1052

How were the samples received? In Cooler _____ | On Ice _____ | No Ice _____ | In Box T | Ambient _____ | Melted Ice _____

Were samples within Temperature Compliance? 2-6°C _____ | By Gun # _____ | Actual Temp - _____ | By Blank # _____ | Actual Temp - _____

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? N/A - no weekend staff

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2096	2554				7042	7028			
2107					7043	5053			
2615					7027				
2518					7100				
2103					7075				
2330					7085				
2539									
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2096/BC7042

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2615/BC7043

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** J22A115023.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2518/BC7027

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115031.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2103/BC7100

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115011.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2330/BC7075

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2539/BC7085

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** J22A115027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2554/BC7028

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/26/2022 **Batch #:** J22A116026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2107/BC5053

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/10/2022

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 17, 2022

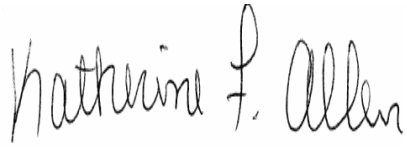
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E0783

Enclosed are results of analyses for samples as received by the laboratory on May 12, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/17/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0783

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-8_051022	22E0783-01	Indoor air		-	
				EPA TO-15	
SL-9_051022	22E0783-02	Indoor air		-	
				EPA TO-15	
SL-7_051022	22E0783-03	Indoor air		-	
				EPA TO-15	
SL-15_051022	22E0783-04	Indoor air		-	
				EPA TO-15	
SL-2_050922	22E0783-05	Indoor air		-	
				EPA TO-15	
MH-1256_051122	22E0783-06	Indoor air		-	
				EPA TO-15	
MH-1255_051122	22E0783-07	Indoor air		-	
				EPA TO-15	
MH-1259_051122	22E0783-08	Indoor air		-	
				EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-8_051022
Sample ID: 22E0783-01
Sample Matrix: Indoor air
Sampled: 5/10/2022 12:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2114
Canister Size: 1 liter
Flow Controller ID: 5071
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.60	0.20	0.15		2.4	0.79	0.60	4	5/13/22 15:27	BRF
cis-1,2-Dichloroethylene	28	0.20	0.15		110	0.79	0.58	4	5/13/22 15:27	BRF
trans-1,2-Dichloroethylene	0.86	0.20	0.16		3.4	0.79	0.62	4	5/13/22 15:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 15:27	BRF
Tetrachloroethylene	11	0.20	0.15		73	1.4	1.0	4	5/13/22 15:27	BRF
Trichloroethylene	2.1	0.20	0.13		11	1.1	0.72	4	5/13/22 15:27	BRF
Vinyl Chloride	150	0.20	0.18		390	0.51	0.46	4	5/13/22 15:27	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	5/13/22 15:27

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-9_051022
Sample ID: 22E0783-02
Sample Matrix: Indoor air
Sampled: 5/10/2022 12:47

Sample Description/Location:
Sub Description/Location:
Canister ID: 2636
Canister Size: 1 liter
Flow Controller ID: 7069
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/13/22 16:08	BRF
cis-1,2-Dichloroethylene	1.5	0.20	0.15		6.1	0.79	0.58	4	5/13/22 16:08	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/13/22 16:08	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 16:08	BRF
Tetrachloroethylene	0.56	0.20	0.15		3.8	1.4	1.0	4	5/13/22 16:08	BRF
Trichloroethylene	0.14	0.20	0.13	J	0.75	1.1	0.72	4	5/13/22 16:08	BRF
Vinyl Chloride	5.8	0.20	0.18		15	0.51	0.46	4	5/13/22 16:08	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/13/22 16:08

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-7_051022
Sample ID: 22E0783-03
Sample Matrix: Indoor air
Sampled: 5/10/2022 10:29

Sample Description/Location:
Sub Description/Location:
Canister ID: 2230
Canister Size: 1 liter
Flow Controller ID: 7074
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): 7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/13/22 16:48	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/13/22 16:48	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/13/22 16:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 16:48	BRF
Tetrachloroethylene	2.3	0.20	0.15		16	1.4	1.0	4	5/13/22 16:48	BRF
Trichloroethylene	0.14	0.20	0.13	J	0.73	1.1	0.72	4	5/13/22 16:48	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/13/22 16:48	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	5/13/22 16:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-15_051022
Sample ID: 22E0783-04
Sample Matrix: Indoor air
Sampled: 5/10/2022 09:17

Sample Description/Location:
Sub Description/Location:
Canister ID: 2622
Canister Size: 1 liter
Flow Controller ID: 7068
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/13/22 17:28	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/13/22 17:28	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/13/22 17:28	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 17:28	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/13/22 17:28	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/13/22 17:28	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/13/22 17:28	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/13/22 17:28

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-2_050922
Sample ID: 22E0783-05
Sample Matrix: Indoor air
Sampled: 5/9/2022 15:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2624
Canister Size: 1 liter
Flow Controller ID: 7089
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.7	0.20	0.15		6.7	0.79	0.60	4	5/13/22 18:09	BRF
cis-1,2-Dichloroethylene	130	0.20	0.15		510	0.79	0.58	4	5/13/22 18:09	BRF
trans-1,2-Dichloroethylene	2.3	0.20	0.16		9.0	0.79	0.62	4	5/13/22 18:09	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 18:09	BRF
Tetrachloroethylene	0.48	0.20	0.15		3.3	1.4	1.0	4	5/13/22 18:09	BRF
Trichloroethylene	5.2	0.20	0.13		28	1.1	0.72	4	5/13/22 18:09	BRF
Vinyl Chloride	410	1.0	0.90		1000	2.6	2.3	20	5/16/22 13:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	5/13/22 18:09
4-Bromofluorobenzene (1)	103	70-130	5/16/22 13:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: MH-1256_051122
Sample ID: 22E0783-06
Sample Matrix: Indoor air
Sampled: 5/11/2022 09:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2249
Canister Size: 1 liter
Flow Controller ID: 7073
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/13/22 18:49	BRF
cis-1,2-Dichloroethylene	0.17	0.20	0.15	J	0.67	0.79	0.58	4	5/13/22 18:49	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/13/22 18:49	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 18:49	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/13/22 18:49	BRF
Trichloroethylene	0.34	0.20	0.13		1.8	1.1	0.72	4	5/13/22 18:49	BRF
Vinyl Chloride	0.25	0.20	0.18		0.64	0.51	0.46	4	5/13/22 18:49	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/13/22 18:49

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: MH-1255_051122
Sample ID: 22E0783-07
Sample Matrix: Indoor air
Sampled: 5/11/2022 08:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2320
Canister Size: 1 liter
Flow Controller ID: 7095
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.88	0.20	0.15		3.5	0.79	0.60	4	5/13/22 19:29	BRF
cis-1,2-Dichloroethylene	71	0.20	0.15		280	0.79	0.58	4	5/13/22 19:29	BRF
trans-1,2-Dichloroethylene	0.68	0.20	0.16		2.7	0.79	0.62	4	5/13/22 19:29	BRF
1,4-Dioxane	0.30	2.0	0.17	J	1.1	7.2	0.60	4	5/13/22 19:29	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/13/22 19:29	BRF
Trichloroethylene	1.8	0.20	0.13		9.7	1.1	0.72	4	5/13/22 19:29	BRF
Vinyl Chloride	120	0.20	0.18		300	0.51	0.46	4	5/13/22 19:29	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/13/22 19:29

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: MH-1259_051122
Sample ID: 22E0783-08
Sample Matrix: Indoor air
Sampled: 5/11/2022 09:27

Sample Description/Location:
Sub Description/Location:
Canister ID: 2681
Canister Size: 1 liter
Flow Controller ID: 7030
Sample Type: Grab

Work Order: 22E0783
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/13/22 20:10	BRF
cis-1,2-Dichloroethylene	1.4	0.20	0.15		5.6	0.79	0.58	4	5/13/22 20:10	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/13/22 20:10	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/13/22 20:10	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/13/22 20:10	BRF
Trichloroethylene	0.29	0.20	0.13		1.5	1.1	0.72	4	5/13/22 20:10	BRF
Vinyl Chloride	0.36	0.20	0.18		0.93	0.51	0.46	4	5/13/22 20:10	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	103	70-130		5/13/22 20:10

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0783-01 [SL-8_051022]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-02 [SL-9_051022]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-03 [SL-7_051022]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-04 [SL-15_051022]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-05 [SL-2_050922]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-06 [MH-1256_051122]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-07 [MH-1255_051122]	B308482	1.5	1	N/A	1000	400	150	05/13/22
22E0783-08 [MH-1259_051122]	B308482	1.5	1	N/A	1000	400	150	05/13/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0783-05RE1 [SL-2_050922]	B308580	1.5	1	N/A	1000	400	30	05/16/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308482 - TO-15 Prep											
Blank (B308482-BLK1)					Prepared & Analyzed: 05/13/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.30*				*8.00*		*104*	*70-130*			
LCS (B308482-BS1)					Prepared & Analyzed: 05/13/22						
1,1-Dichloroethylene	4.88				5.00		97.7	70-130			
cis-1,2-Dichloroethylene	4.52				5.00		90.5	70-130			
trans-1,2-Dichloroethylene	4.65				5.00		92.9	70-130			
1,4-Dioxane	4.24				5.00		84.8	70-130			
Tetrachloroethylene	4.55				5.00		91.0	70-130			
Trichloroethylene	4.08				5.00		81.6	70-130			
Vinyl Chloride	5.22				5.00		104	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.27*				*8.00*		*103*	*70-130*			
Batch B308580 - TO-15 Prep											
Blank (B308580-BLK1)					Prepared & Analyzed: 05/16/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.25*				*8.00*		*103*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308580 - TO-15 Prep											
LCS (B308580-BS1)					Prepared & Analyzed: 05/16/22						
1,1-Dichloroethylene	4.76				5.00		95.3	70-130			
cis-1,2-Dichloroethylene	4.36				5.00		87.3	70-130			
trans-1,2-Dichloroethylene	4.51				5.00		90.3	70-130			
1,4-Dioxane	4.31				5.00		86.2	70-130			
Tetrachloroethylene	4.43				5.00		88.5	70-130			
Trichloroethylene	4.03				5.00		80.6	70-130			
Vinyl Chloride	5.05				5.00		101	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.16*				*8.00*		*102*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S070426-ICV1)			Lab File ID: G22A104022.D			Analyzed: 04/15/22 00:54			
Bromochloromethane (1)	1864849	8.485	1814308	8.485	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3396119	10.259	3274776	10.259	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3122096	14.63	3056122	14.63	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071551-CCV1)			Lab File ID: G22A133004.D			Analyzed: 05/13/22 09:36			
Bromochloromethane (1)	1354403	8.485	1814308	8.485	75	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3151872	10.265	3274776	10.259	96	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2830755	14.63	3056122	14.63	93	60 - 140	0.0000	+/-0.50	
LCS (B308482-BS1)			Lab File ID: G22A133005.D			Analyzed: 05/13/22 10:16			
Bromochloromethane (1)	1358378	8.485	1354403	8.485	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3158434	10.265	3151872	10.265	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2822756	14.63	2830755	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B308482-BLK1)			Lab File ID: G22A133011.D			Analyzed: 05/13/22 14:47			
Bromochloromethane (1)	1304681	8.491	1354403	8.485	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2968874	10.265	3151872	10.265	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2690751	14.63	2830755	14.63	95	60 - 140	0.0000	+/-0.50	
SL-8_051022 (22E0783-01)			Lab File ID: G22A133012.D			Analyzed: 05/13/22 15:27			
Bromochloromethane (1)	1378285	8.491	1354403	8.485	102	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3062618	10.265	3151872	10.265	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2821202	14.63	2830755	14.63	100	60 - 140	0.0000	+/-0.50	
SL-9_051022 (22E0783-02)			Lab File ID: G22A133013.D			Analyzed: 05/13/22 16:08			
Bromochloromethane (1)	1354230	8.491	1354403	8.485	100	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3078452	10.265	3151872	10.265	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2805065	14.63	2830755	14.63	99	60 - 140	0.0000	+/-0.50	
SL-7_051022 (22E0783-03)			Lab File ID: G22A133014.D			Analyzed: 05/13/22 16:48			
Bromochloromethane (1)	1344290	8.491	1354403	8.485	99	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3096323	10.265	3151872	10.265	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2804926	14.636	2830755	14.63	99	60 - 140	0.0060	+/-0.50	
SL-15_051022 (22E0783-04)			Lab File ID: G22A133015.D			Analyzed: 05/13/22 17:28			
Bromochloromethane (1)	1352260	8.491	1354403	8.485	100	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3062182	10.265	3151872	10.265	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2784500	14.636	2830755	14.63	98	60 - 140	0.0060	+/-0.50	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-2_050922 (22E0783-05)			Lab File ID: G22A133016.D			Analyzed: 05/13/22 18:09			
Bromochloromethane (1)	1363596	8.491	1354403	8.485	101	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3082260	10.265	3151872	10.265	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2788054	14.63	2830755	14.63	98	60 - 140	0.0000	+/-0.50	
MH-1256_051122 (22E0783-06)			Lab File ID: G22A133017.D			Analyzed: 05/13/22 18:49			
Bromochloromethane (1)	1354809	8.491	1354403	8.485	100	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3074858	10.265	3151872	10.265	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2796746	14.63	2830755	14.63	99	60 - 140	0.0000	+/-0.50	
MH-1255_051122 (22E0783-07)			Lab File ID: G22A133018.D			Analyzed: 05/13/22 19:29			
Bromochloromethane (1)	1362352	8.491	1354403	8.485	101	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3071675	10.265	3151872	10.265	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2796396	14.63	2830755	14.63	99	60 - 140	0.0000	+/-0.50	
MH-1259_051122 (22E0783-08)			Lab File ID: G22A133019.D			Analyzed: 05/13/22 20:10			
Bromochloromethane (1)	1347007	8.491	1354403	8.485	99	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3057403	10.259	3151872	10.265	97	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2774383	14.63	2830755	14.63	98	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071588-CCV1)			Lab File ID: G22A136004.D			Analyzed: 05/16/22 09:44			
Bromochloromethane (1)	1420930	8.485	1814308	8.485	78	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3218817	10.259	3274776	10.259	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2894478	14.63	3056122	14.63	95	60 - 140	0.0000	+/-0.50	
LCS (B308580-BS1)			Lab File ID: G22A136005.D			Analyzed: 05/16/22 10:24			
Bromochloromethane (1)	1403099	8.485	1420930	8.485	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3197900	10.259	3218817	10.259	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2894286	14.63	2894478	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B308580-BLK1)			Lab File ID: G22A136008.D			Analyzed: 05/16/22 12:33			
Bromochloromethane (1)	1340153	8.491	1420930	8.485	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3006406	10.265	3218817	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2759221	14.63	2894478	14.63	95	60 - 140	0.0000	+/-0.50	
SL-2_050922 (22E0783-05RE1)			Lab File ID: G22A136009.D			Analyzed: 05/16/22 13:13			
Bromochloromethane (1)	1363237	8.491	1420930	8.485	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2994761	10.265	3218817	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2749229	14.63	2894478	14.63	95	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071551-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.94	1.020229	1.007717		-1.2	30
cis-1,2-Dichloroethylene	A	5.00	4.61	0.9049676	0.8346243		-7.8	30
trans-1,2-Dichloroethylene	A	5.00	4.70	0.925489	0.8699319		-6.0	30
1,4-Dioxane	A	5.00	4.38	0.186424	0.1635102		-12.3	30
Tetrachloroethylene	A	5.00	4.78	0.4134848	0.3951104		-4.4	30
Trichloroethylene	A	5.00	4.23	0.4149349	0.3509625		-15.4	30
Vinyl Chloride	A	5.00	5.48	0.5517783	0.6051115		9.7	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071588-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.71	1.020229	0.9606846		-5.8	30
cis-1,2-Dichloroethylene	A	5.00	4.42	0.9049676	0.8007207		-11.5	30
trans-1,2-Dichloroethylene	A	5.00	4.55	0.925489	0.8420547		-9.0	30
1,4-Dioxane	A	5.00	4.29	0.186424	0.1598088		-14.3	30
Tetrachloroethylene	A	5.00	4.65	0.4134848	0.3842517		-7.1	30
Trichloroethylene	A	5.00	4.13	0.4149349	0.3428708		-17.4	30
Vinyl Chloride	A	5.00	5.18	0.5517783	0.5721672		3.7	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical 22E0783

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Pace

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Information

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Kaitlyn Fleming

Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Surcharge Applies

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Deliverables

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
1	SL-8_051022	5/10/22 1225	5/10/22 1226	--	--	IA	--	X				-28	-8	9.5			2114	5671
2	SL-9_051022	5/10/22 1246	5/10/22 1247	—	—	IA	—	X				-29	-7	8.3			26336	7069
3	SL-7_051022	5/10/22 1028	5/10/22 1029	—	—	IA	—	X				-29	-7	9.8			2230	7074
4	SL-15_051022	5/10/22 916	5/10/22 917	—	—	IA	—	X				-29	-8	7.8			2622	7068

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Kaitlyn Fleming	Date/Time: 5/11/22 1230	
Received by: (signature) FedEx	Date/Time: 5/11/22 1230	
Relinquished by: (signature)	Date/Time: 5/12 931	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical 22E0783

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: ARCADIS

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Information

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Lorex Pearson, Samantha Hindle~~ Sommer Guy, Kaitlyn Fleming

Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Surcharges

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Report Options

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-2_050922	5/9/22 1550	5/9/22 1551	--	--	IA	--	X				-28	-7	-2.5	2624	7089
6	MH-1256_051122	5/11/22 859	5/11/22 900	-	-	IA	-	X				-28	-8.5	-9.2	2249	7073
7	MH-1255_051122	5/11/22 834	5/11/22 835	-	-	IA	-	X				-29	-5	-5.6	2320	7095
8	MH-1259_051122	5/11/22 926	5/11/22 927	-	-	IA	-	X				-29	-7	-2.5	2681	7030

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Kaitlyn Fleming	Date/Time: 5/11/22 1230	
Received by: (signature) FedEx	Date/Time: 5/11/22 1230	
Relinquished by: (signature)	Date/Time: 5/12 931	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273020580850

ADD NICKNAME

Delivered
Thursday, 5/12/2022 at 9:31 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES
OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US
Label Created
05/11/2022 11:31 AM

PACKAGE RECEIVED BY FEDEX
LIVONIA, MI
05/11/2022 12:30 PM

IN TRANSIT
NEWARK, NJ
05/12/2022 12:25 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/12/2022 7:33 AM

DELIVERED
EAST LONGMEADOW, MA US
Delivered
5/12/2022 at 9:31 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273020580806 (master)	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA
273020580817	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA
273020580828	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client ARcad.S

Received By MP Date 5/12/22 Time 931

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T Who was notified? TM

Samples are received within holding time? T

Proper Media Used? T Individually Certified Cans? T

Are there Trip Blanks? F Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2114	2320				5071	7095			
2636	2681				7069	7050			
2230					M22 7074				
2622					7068				
2624					7059				
2249					7073				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118039.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2114/BC5071

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118021.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2636/BC7069

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2230/BC7074

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118017.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2622/BC7068

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2624/BC7089

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118046.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2249/BC7073

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118047.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2320/BC7095

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2681/BC7030

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/16/2022

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May 17, 2022

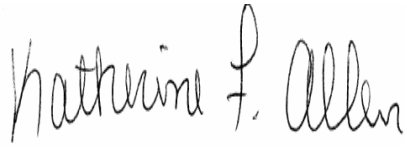
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E0795

Enclosed are results of analyses for samples as received by the laboratory on May 12, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/17/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0795

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1231_050922	22E0795-01	Indoor air		- EPA TO-15	
SL-11_051022	22E0795-02	Indoor air		- EPA TO-15	
SL-3_050922	22E0795-03	Indoor air		- EPA TO-15	
SL-16_050922	22E0795-04	Indoor air		- EPA TO-15	
SL-13_051022	22E0795-05	Indoor air		- EPA TO-15	
SL-6_051022	22E0795-06	Indoor air		- EPA TO-15	
SL-5_051022	22E0795-07	Indoor air		- EPA TO-15	
SL-14_051022	22E0795-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

E Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

Vinyl Chloride

B308580-DUP1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: MH-1231_050922
Sample ID: 22E0795-01
Sample Matrix: Indoor air
Sampled: 5/9/2022 16:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 2629
Canister Size: 1 liter
Flow Controller ID: 7088
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 15:51	BRF
cis-1,2-Dichloroethylene	32	0.20	0.15		130	0.79	0.58	4	5/16/22 15:51	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 15:51	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 15:51	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/16/22 15:51	BRF
Trichloroethylene	0.50	0.20	0.13		2.7	1.1	0.72	4	5/16/22 15:51	BRF
Vinyl Chloride	47	0.20	0.18		120	0.51	0.46	4	5/16/22 15:51	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	5/16/22 15:51

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-11_051022
Sample ID: 22E0795-02
Sample Matrix: Indoor air
Sampled: 5/10/2022 13:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 2111
Canister Size: 1 liter
Flow Controller ID: 5023
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.5	0.20	0.15		5.8	0.79	0.60	4	5/16/22 16:32	BRF
cis-1,2-Dichloroethylene	47	0.20	0.15		190	0.79	0.58	4	5/16/22 16:32	BRF
trans-1,2-Dichloroethylene	1.6	0.20	0.16		6.2	0.79	0.62	4	5/16/22 16:32	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 16:32	BRF
Tetrachloroethylene	9.2	0.20	0.15		62	1.4	1.0	4	5/16/22 16:32	BRF
Trichloroethylene	3.6	0.20	0.13		20	1.1	0.72	4	5/16/22 16:32	BRF
Vinyl Chloride	290	1.0	0.90		750	2.6	2.3	20	5/17/22 6:25	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	5/17/22 6:25
4-Bromofluorobenzene (1)	101	70-130	5/16/22 16:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-3_050922
Sample ID: 22E0795-03
Sample Matrix: Indoor air
Sampled: 5/9/2022 15:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2545
Canister Size: 1 liter
Flow Controller ID: 7067
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 17:52	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/16/22 17:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 17:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 17:52	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/16/22 17:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/16/22 17:52	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/16/22 17:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	101	70-130		5/16/22 17:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-16_050922
Sample ID: 22E0795-04
Sample Matrix: Indoor air
Sampled: 5/9/2022 14:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2679
Canister Size: 1 liter
Flow Controller ID: 7087
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 18:32	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/16/22 18:32	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 18:32	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 18:32	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/16/22 18:32	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/16/22 18:32	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/16/22 18:32	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		5/16/22 18:32

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-13_051022
Sample ID: 22E0795-05
Sample Matrix: Indoor air
Sampled: 5/10/2022 09:44

Sample Description/Location:
Sub Description/Location:
Canister ID: 2645
Canister Size: 1 liter
Flow Controller ID: 7077
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 19:12	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/16/22 19:12	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 19:12	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 19:12	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/16/22 19:12	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/16/22 19:12	BRF
Vinyl Chloride	0.52	0.20	0.18		1.3	0.51	0.46	4	5/16/22 19:12	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	100	70-130		5/16/22 19:12

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-6_051022
Sample ID: 22E0795-06
Sample Matrix: Indoor air
Sampled: 5/10/2022 10:41

Sample Description/Location:
Sub Description/Location:
Canister ID: 2546
Canister Size: 1 liter
Flow Controller ID: 7037
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -8.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 19:52	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/16/22 19:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 19:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 19:52	BRF
Tetrachloroethylene	1.9	0.20	0.15		13	1.4	1.0	4	5/16/22 19:52	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/16/22 19:52	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/16/22 19:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		5/16/22 19:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-5_051022
Sample ID: 22E0795-07
Sample Matrix: Indoor air
Sampled: 5/10/2022 11:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2632
Canister Size: 1 liter
Flow Controller ID: 5070
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 21:11	BRF
cis-1,2-Dichloroethylene	3.0	0.20	0.15		12	0.79	0.58	4	5/16/22 21:11	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 21:11	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 21:11	BRF
Tetrachloroethylene	0.20	0.20	0.15	J	1.3	1.4	1.0	4	5/16/22 21:11	BRF
Trichloroethylene	0.18	0.20	0.13	J	0.99	1.1	0.72	4	5/16/22 21:11	BRF
Vinyl Chloride	20	0.20	0.18		52	0.51	0.46	4	5/16/22 21:11	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	5/16/22 21:11

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/12/2022
Field Sample #: SL-14_051022
Sample ID: 22E0795-08
Sample Matrix: Indoor air
Sampled: 5/10/2022 09:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 2333
Canister Size: 1 liter
Flow Controller ID: 7086
Sample Type: Grab

Work Order: 22E0795
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/16/22 21:51	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/16/22 21:51	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/16/22 21:51	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/16/22 21:51	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/16/22 21:51	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/16/22 21:51	BRF
Vinyl Chloride	0.34	0.20	0.18		0.87	0.51	0.46	4	5/16/22 21:51	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130		5/16/22 21:51

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E0795-01 [MH-1231_050922]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-02 [SL-11_051022]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-02RE1 [SL-11_051022]	B308580	1.5	1	N/A	1000	400	30	05/16/22
22E0795-03 [SL-3_050922]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-04 [SL-16_050922]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-05 [SL-13_051022]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-06 [SL-6_051022]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-07 [SL-5_051022]	B308580	1.5	1	N/A	1000	400	150	05/16/22
22E0795-08 [SL-14_051022]	B308580	1.5	1	N/A	1000	400	150	05/16/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B308580 - TO-15 Prep											
Blank (B308580-BLK1)					Prepared & Analyzed: 05/16/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.25*				*8.00*		*103*	*70-130*			
LCS (B308580-BS1)					Prepared & Analyzed: 05/16/22						
1,1-Dichloroethylene	4.76				5.00		95.3	70-130			
cis-1,2-Dichloroethylene	4.36				5.00		87.3	70-130			
trans-1,2-Dichloroethylene	4.51				5.00		90.3	70-130			
1,4-Dioxane	4.31				5.00		86.2	70-130			
Tetrachloroethylene	4.43				5.00		88.5	70-130			
Trichloroethylene	4.03				5.00		80.6	70-130			
Vinyl Chloride	5.05				5.00		101	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.16*				*8.00*		*102*	*70-130*			
Duplicate (B308580-DUP1)			**Source: 22E0795-02**		Prepared & Analyzed: 05/16/22						
1,1-Dichloroethylene	1.5	0.20	5.9	0.79		1.5			0.271	25	
cis-1,2-Dichloroethylene	47	0.20	190	0.79		47			0.750	25	
trans-1,2-Dichloroethylene	1.6	0.20	6.2	0.79		1.6			0.514	25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	9.1	0.20	61	1.4		9.2			1.49	25	
Trichloroethylene	3.6	0.20	19	1.1		3.6			0.884	25	
Vinyl Chloride	310	0.20	800	0.51		340			8.62	25	E
Surrogate: 4-Bromofluorobenzene (1)	*7.97*				*8.00*		*99.6*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
E	Reported result is estimated. Value reported over verified calibration range.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

RAP	Raisa A. Petraitis
STATION	PDF Management Station
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S070426-ICV1)			Lab File ID: G22A104022.D			Analyzed: 04/15/22 00:54			
Bromochloromethane (1)	1864849	8.485	1814308	8.485	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3396119	10.259	3274776	10.259	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3122096	14.63	3056122	14.63	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071588-CCV1)			Lab File ID: G22A136004.D			Analyzed: 05/16/22 09:44			
Bromochloromethane (1)	1420930	8.485	1814308	8.485	78	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3218817	10.259	3274776	10.259	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2894478	14.63	3056122	14.63	95	60 - 140	0.0000	+/-0.50	
LCS (B308580-BS1)			Lab File ID: G22A136005.D			Analyzed: 05/16/22 10:24			
Bromochloromethane (1)	1403099	8.485	1420930	8.485	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3197900	10.259	3218817	10.259	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2894286	14.63	2894478	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B308580-BLK1)			Lab File ID: G22A136008.D			Analyzed: 05/16/22 12:33			
Bromochloromethane (1)	1340153	8.491	1420930	8.485	94	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3006406	10.265	3218817	10.259	93	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2759221	14.63	2894478	14.63	95	60 - 140	0.0000	+/-0.50	
MH-1231_050922 (22E0795-01)			Lab File ID: G22A136013.D			Analyzed: 05/16/22 15:51			
Bromochloromethane (1)	1369341	8.491	1420930	8.485	96	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3072751	10.265	3218817	10.259	95	60 - 140	0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2796558	14.63	2894478	14.63	97	60 - 140	0.0000	+/-0.50	
SL-11_051022 (22E0795-02)			Lab File ID: G22A136014.D			Analyzed: 05/16/22 16:32			
Bromochloromethane (1)	1368794	8.485	1420930	8.485	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3051953	10.259	3218817	10.259	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2778168	14.63	2894478	14.63	96	60 - 140	0.0000	+/-0.50	
Duplicate (B308580-DUP1)			Lab File ID: G22A136015.D			Analyzed: 05/16/22 17:12			
Bromochloromethane (1)	1316282	8.485	1420930	8.485	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2955050	10.259	3218817	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2696600	14.63	2894478	14.63	93	60 - 140	0.0000	+/-0.50	
SL-3_050922 (22E0795-03)			Lab File ID: G22A136016.D			Analyzed: 05/16/22 17:52			
Bromochloromethane (1)	1250020	8.485	1420930	8.485	88	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2833564	10.259	3218817	10.259	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2580203	14.63	2894478	14.63	89	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-16_050922 (22E0795-04)			Lab File ID: G22A136017.D			Analyzed: 05/16/22 18:32			
Bromochloromethane (1)	1276220	8.485	1420930	8.485	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2923107	10.259	3218817	10.259	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2637417	14.63	2894478	14.63	91	60 - 140	0.0000	+/-0.50	
SL-13_051022 (22E0795-05)			Lab File ID: G22A136018.D			Analyzed: 05/16/22 19:12			
Bromochloromethane (1)	1299447	8.485	1420930	8.485	91	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2935235	10.259	3218817	10.259	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2677372	14.63	2894478	14.63	92	60 - 140	0.0000	+/-0.50	
SL-6_051022 (22E0795-06)			Lab File ID: G22A136019.D			Analyzed: 05/16/22 19:52			
Bromochloromethane (1)	1288794	8.485	1420930	8.485	91	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2948107	10.259	3218817	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2660452	14.63	2894478	14.63	92	60 - 140	0.0000	+/-0.50	
SL-5_051022 (22E0795-07)			Lab File ID: G22A136021.D			Analyzed: 05/16/22 21:11			
Bromochloromethane (1)	1285301	8.485	1420930	8.485	90	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2891645	10.259	3218817	10.259	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2639682	14.63	2894478	14.63	91	60 - 140	0.0000	+/-0.50	
SL-14_051022 (22E0795-08)			Lab File ID: G22A136022.D			Analyzed: 05/16/22 21:51			
Bromochloromethane (1)	1271000	8.485	1420930	8.485	89	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2905511	10.259	3218817	10.259	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2635997	14.63	2894478	14.63	91	60 - 140	0.0000	+/-0.50	
SL-11_051022 (22E0795-02RE1)			Lab File ID: G22A136029.D			Analyzed: 05/17/22 06:25			
Bromochloromethane (1)	1308622	8.479	1420930	8.485	92	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2882075	10.253	3218817	10.259	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	2622539	14.624	2894478	14.63	91	60 - 140	-0.0060	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071588-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.71	1.020229	0.9606846		-5.8	30
cis-1,2-Dichloroethylene	A	5.00	4.42	0.9049676	0.8007207		-11.5	30
trans-1,2-Dichloroethylene	A	5.00	4.55	0.925489	0.8420547		-9.0	30
1,4-Dioxane	A	5.00	4.29	0.186424	0.1598088		-14.3	30
Tetrachloroethylene	A	5.00	4.65	0.4134848	0.3842517		-7.1	30
Trichloroethylene	A	5.00	4.13	0.4149349	0.3428708		-17.4	30
Vinyl Chloride	A	5.00	5.18	0.5517783	0.5721672		3.7	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E0795

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Report To / Client Name: Pace Analytical

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Copy To / Client Name: ARCADIS

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Kaitlyn Fleming

Turnaround Time (TAT) Requested

7-Day ☐ 10-Day ☐

Due Date:

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Report Format

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	MH-1231_050922	5/9/22 1609	5/9/22 1610	--	--	IA	--	X				-29	-8	28	2629	7088
2	SL-11_051022	5/10/22 1333	5/10/22 1334	—	—	IA	—	X				-29	-8	25	2111	5023
3	SL-3_050922	5/9/22 1534	5/9/22 1535	—	—	IA	—	X				-29	-7	28	2545	7067
4	SL-16_050922	5/9/22 1439	5/9/22 1440	--	—	IA	—	X				-29	-6	26	2679	7087

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Kaitlyn Fleming	Date/Time: 5/11/22 1230	
Received by: (signature) Fed Ex	Date/Time: 5/11/22 1230	
Relinquished by: (signature)	Date/Time: 5/12 921	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Sample Condition Upon Receipt: Cooler Custody Seal ☐ Present ☐ Not Present; Intact ☐ Yes ☐ No; Temp (°C)

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E07915

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Report To / Company Address:

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Information:

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ Sommer Guy, Kaitlyn Flemin

Turnaround Time Requested:

7-Day ☐ 10-Day ☐

Due Date:

Rush (Pre-Schedule Required):

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Report Format:

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement
															Summa Can ID	Flow Controller ID
5	SL-13_051022	5/10/22 943	5/10/22 944	--	--	IA	--	X				-29	-7	-7.1	2645	7077
6	SL-6_051022	5/10/22 1040	5/10/22 1041	—	—	IA	—	X				-29	-8	-8.4	2546	7037
7	SL-5_051022	5/10/22 1100	5/10/22 1101	—	—	IA	—	X				-29	-7	-7.4	2632	5070
8	SL-14_051022	5/10/22 930	5/10/22 931	—	—	IA	—	X				-29	-6.5	-6.9	2333	7086

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature) Kaitlyn Flem	Date/Time: 5/11/22 1230	
Received by: (signature) FedEx	Date/Time: 5/11/22 1230	
Relinquished by: (signature)	Date/Time: 5/12 101	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Special Requirements:
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical

NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

(https://www.fedex.com/en-us/home.html)

FedEx® Tracking

273020580850

ADD NICKNAME

Delivered
Thursday, 5/12/2022 at 9:31 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US
Label Created
05/11/2022 11:31 AM

PACKAGE RECEIVED BY FEDEX
LIVONIA, MI
05/11/2022 12:30 PM

IN TRANSIT
NEWARK, NJ
05/12/2022 12:25 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/12/2022 7:33 AM

DELIVERED
EAST LONGMEADOW, MA US
Delivered
5/12/2022 at 9:31 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273020580806 (master)	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA
273020580817	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA
273020580828	Delivered	5/11/22	5/12/22	0	NOVI MI	EAST LONGMEADOW MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client: ARcad.S

Received By: mcp | Date: 5/12/22 | Time: 931

How were the samples received? In Cooler: | On Ice: | No Ice: | In Box: T | Ambient: | Melted Ice:

Were samples within Temperature Compliance? 2-6°C: | By Gun #: | Actual Temp - | By Blank #: | Actual Temp -

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client: T | Analysis: T | Sampler Name: T | Project: T | ID's: T | Collection Dates/Times: T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? TM

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2629	2432				7088	5070			
2111	2333				5023	7086			
2545					7067				
2679					7087				
2645					7077				
2546					7037				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2629/BC7088

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/25/2022 **Batch #:** K22A115022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2111/BC5023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/18/2022 **Batch #:** K22A108038.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2545/BC7067

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118016.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2679/BC7087

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2645/BC7077

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2546/BC7037

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2632/BC5070

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2333/BC7086

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/17/2022

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May 24, 2022

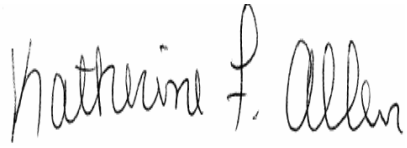
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1301

Enclosed are results of analyses for samples as received by the laboratory on May 19, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/24/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1301

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-17_051622	22E1301-01	Indoor air		- EPA TO-15	
SL-18_051622	22E1301-02	Indoor air		- EPA TO-15	
DUP-01_051622	22E1301-03	Indoor air		- EPA TO-15	
SL-4_051622	22E1301-04	Indoor air		- EPA TO-15	
SL-15_051722	22E1301-05	Indoor air		- EPA TO-15	
DUP-02_051622	22E1301-06	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-17_051622
Sample ID: 22E1301-01
Sample Matrix: Indoor air
Sampled: 5/16/2022 12:35

Sample Description/Location:
Sub Description/Location:
Canister ID: 2314
Canister Size: 1 liter
Flow Controller ID: 7031
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 15:48	BRF
cis-1,2-Dichloroethylene	5.6	0.20	0.15		22	0.79	0.58	4	5/20/22 15:48	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 15:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 15:48	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 15:48	BRF
Trichloroethylene	0.88	0.20	0.13		4.7	1.1	0.72	4	5/20/22 15:48	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/20/22 15:48	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.0	70-130	5/20/22 15:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-18_051622
Sample ID: 22E1301-02
Sample Matrix: Indoor air
Sampled: 5/16/2022 12:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 2247
Canister Size: 1 liter
Flow Controller ID: 7041
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.9
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 16:18	BRF
cis-1,2-Dichloroethylene	0.68	0.20	0.15		2.7	0.79	0.58	4	5/20/22 16:18	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 16:18	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 16:18	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 16:18	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/20/22 16:18	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/20/22 16:18	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.6	70-130		5/20/22 16:18

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: DUP-01_051622
Sample ID: 22E1301-03
Sample Matrix: Indoor air
Sampled: 5/16/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2652
Canister Size: 1 liter
Flow Controller ID: 7040
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5.8
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.1	0.20	0.15		4.6	0.79	0.60	4	5/20/22 16:48	BRF
cis-1,2-Dichloroethylene	48	0.20	0.15		190	0.79	0.58	4	5/20/22 16:48	BRF
trans-1,2-Dichloroethylene	1.8	0.20	0.16		7.0	0.79	0.62	4	5/20/22 16:48	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 16:48	BRF
Tetrachloroethylene	1.8	0.20	0.15		12	1.4	1.0	4	5/20/22 16:48	BRF
Trichloroethylene	7.3	0.20	0.13		39	1.1	0.72	4	5/20/22 16:48	BRF
Vinyl Chloride	160	0.20	0.18		400	0.51	0.46	4	5/20/22 16:48	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	92.5	70-130		5/20/22 16:48

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-4_051622
Sample ID: 22E1301-04
Sample Matrix: Indoor air
Sampled: 5/16/2022 12:01

Sample Description/Location:
Sub Description/Location:
Canister ID: 2676
Canister Size: 1 liter
Flow Controller ID: 7083
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -8.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 17:17	BRF
cis-1,2-Dichloroethylene	4.2	0.20	0.15		17	0.79	0.58	4	5/20/22 17:17	BRF
trans-1,2-Dichloroethylene	0.23	0.20	0.16		0.92	0.79	0.62	4	5/20/22 17:17	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 17:17	BRF
Tetrachloroethylene	0.21	0.20	0.15		1.4	1.4	1.0	4	5/20/22 17:17	BRF
Trichloroethylene	0.70	0.20	0.13		3.7	1.1	0.72	4	5/20/22 17:17	BRF
Vinyl Chloride	15	0.20	0.18		40	0.51	0.46	4	5/20/22 17:17	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.2	70-130		5/20/22 17:17

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-15_051722
Sample ID: 22E1301-05
Sample Matrix: Indoor air
Sampled: 5/17/2022 09:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2520
Canister Size: 1 liter
Flow Controller ID: 7038
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 17:47	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/20/22 17:47	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 17:47	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 17:47	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 17:47	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/20/22 17:47	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/20/22 17:47	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.9	70-130		5/20/22 17:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: DUP-02_051622
Sample ID: 22E1301-06
Sample Matrix: Indoor air
Sampled: 5/16/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2311
Canister Size: 1 liter
Flow Controller ID: 7034
Sample Type: Grab

Work Order: 22E1301
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -2.1
Receipt Vacuum(in Hg): -5.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	3.9	0.20	0.15		16	0.79	0.60	4	5/21/22 21:44	BRF
cis-1,2-Dichloroethylene	290	1.0	0.73		1100	4.0	2.9	20	5/23/22 18:01	BRF
trans-1,2-Dichloroethylene	3.8	0.20	0.16		15	0.79	0.62	4	5/21/22 21:44	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 21:44	BRF
Tetrachloroethylene	0.41	0.20	0.15		2.8	1.4	1.0	4	5/21/22 21:44	BRF
Trichloroethylene	7.7	0.20	0.13		41	1.1	0.72	4	5/21/22 21:44	BRF
Vinyl Chloride	420	1.0	0.90		1100	2.6	2.3	20	5/23/22 18:01	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.0	70-130	5/21/22 21:44
4-Bromofluorobenzene (1)	85.6	70-130	5/23/22 18:01

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1301-06 [DUP-02_051622]	B309030	1.5	1	N/A	1000	200	75	05/21/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1301-01 [SL-17_051622]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1301-02 [SL-18_051622]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1301-03 [DUP-01_051622]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1301-04 [SL-4_051622]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1301-05 [SL-15_051722]	B309041	1.5	1	N/A	1000	200	75	05/20/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1301-06RE1 [DUP-02_051622]	B309154	1.5	1	N/A	1000	200	15	05/23/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309030 - TO-15 Prep											
Blank (B309030-BLK1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.12*				*8.00*		*89.0*	*70-130*			
LCS (B309030-BS1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	4.86				5.00		97.3	70-130			
cis-1,2-Dichloroethylene	4.96				5.00		99.2	70-130			
trans-1,2-Dichloroethylene	5.53				5.00		111	70-130			
1,4-Dioxane	5.37				5.00		107	70-130			
Tetrachloroethylene	4.65				5.00		93.0	70-130			
Trichloroethylene	5.19				5.00		104	70-130			
Vinyl Chloride	4.45				5.00		89.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.69*				*8.00*		*96.1*	*70-130*			
Batch B309041 - TO-15 Prep											
Blank (B309041-BLK1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.53*				*8.00*		*94.1*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309041 - TO-15 Prep											
LCS (B309041-BS1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	4.75				5.00		95.0	70-130			
cis-1,2-Dichloroethylene	4.89				5.00		97.7	70-130			
trans-1,2-Dichloroethylene	5.49				5.00		110	70-130			
1,4-Dioxane	5.20				5.00		104	70-130			
Tetrachloroethylene	4.54				5.00		90.8	70-130			
Trichloroethylene	4.94				5.00		98.9	70-130			
Vinyl Chloride	4.28				5.00		85.6	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.82*				*8.00*		*97.8*	*70-130*			
Batch B309154 - TO-15 Prep											
Blank (B309154-BLK1)					Prepared & Analyzed: 05/23/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*6.94*				*8.00*		*86.7*	*70-130*			
LCS (B309154-BS1)					Prepared & Analyzed: 05/23/22						
1,1-Dichloroethylene	5.00				5.00		100	70-130			
cis-1,2-Dichloroethylene	5.03				5.00		101	70-130			
trans-1,2-Dichloroethylene	5.67				5.00		113	70-130			
1,4-Dioxane	5.35				5.00		107	70-130			
Tetrachloroethylene	4.81				5.00		96.2	70-130			
Trichloroethylene	5.22				5.00		104	70-130			
Vinyl Chloride	4.53				5.00		90.5	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.82*				*8.00*		*97.8*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071804-CCV1)			Lab File ID: K22A141004.D			Analyzed: 05/21/22 15:06			
Bromochloromethane (1)	111028	2.992	102745	2.987	108	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	301347	3.584	303801	3.579	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	220689	5.164	223280	5.159	99	60 - 140	0.0050	+/-0.50	
LCS (B309030-BS1)			Lab File ID: K22A141005.D			Analyzed: 05/21/22 15:38			
Bromochloromethane (1)	110131	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	300751	3.588	301347	3.584	100	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	222017	5.164	220689	5.164	101	60 - 140	0.0000	+/-0.50	
Blank (B309030-BLK1)			Lab File ID: K22A141008.D			Analyzed: 05/21/22 17:28			
Bromochloromethane (1)	110463	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	277405	3.588	301347	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	213195	5.163	220689	5.164	97	60 - 140	-0.0010	+/-0.50	
DUP-02_051622 (22E1301-06)			Lab File ID: K22A141016.D			Analyzed: 05/21/22 21:44			
Bromochloromethane (1)	104223	2.996	111028	2.992	94	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	270034	3.588	301347	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	210124	5.164	220689	5.164	95	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071812-CCV1)			Lab File ID: K22A140004.D			Analyzed: 05/20/22 10:00			
Bromochloromethane (1)	115343	2.992	102745	2.987	112	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	321127	3.584	303801	3.579	106	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233305	5.159	223280	5.159	104	60 - 140	0.0000	+/-0.50	
LCS (B309041-BS1)			Lab File ID: K22A140005.D			Analyzed: 05/20/22 10:31			
Bromochloromethane (1)	114758	2.992	115343	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	321926	3.588	321127	3.584	100	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	233447	5.164	233305	5.159	100	60 - 140	0.0050	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B309041-BLK1)			Lab File ID: K22A140008.D			Analyzed: 05/20/22 12:21			
Bromochloromethane (1)	114991	2.992	115343	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	295675	3.584	321127	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	219580	5.163	233305	5.159	94	60 - 140	0.0040	+/-0.50	
SL-17_051622 (22E1301-01)			Lab File ID: K22A140015.D			Analyzed: 05/20/22 15:48			
Bromochloromethane (1)	112382	2.996	115343	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	293331	3.588	321127	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	222257	5.164	233305	5.159	95	60 - 140	0.0050	+/-0.50	
SL-18_051622 (22E1301-02)			Lab File ID: K22A140016.D			Analyzed: 05/20/22 16:18			
Bromochloromethane (1)	112215	2.996	115343	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	293429	3.588	321127	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	222843	5.164	233305	5.159	96	60 - 140	0.0050	+/-0.50	
DUP-01_051622 (22E1301-03)			Lab File ID: K22A140017.D			Analyzed: 05/20/22 16:48			
Bromochloromethane (1)	112593	3.001	115343	2.992	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	286855	3.589	321127	3.584	89	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	218593	5.164	233305	5.159	94	60 - 140	0.0050	+/-0.50	
SL-4_051622 (22E1301-04)			Lab File ID: K22A140018.D			Analyzed: 05/20/22 17:17			
Bromochloromethane (1)	113242	3.001	115343	2.992	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	286131	3.588	321127	3.584	89	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	219345	5.164	233305	5.159	94	60 - 140	0.0050	+/-0.50	
SL-15_051722 (22E1301-05)			Lab File ID: K22A140019.D			Analyzed: 05/20/22 17:47			
Bromochloromethane (1)	112940	2.996	115343	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	294889	3.588	321127	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	218987	5.163	233305	5.159	94	60 - 140	0.0040	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071898-CCV1)			Lab File ID: K22A143004.D			Analyzed: 05/23/22 08:46			
Bromochloromethane (1)	112237	2.992	102745	2.987	109	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	309006	3.584	303801	3.579	102	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	221424	5.163	223280	5.159	99	60 - 140	0.0040	+/-0.50	
LCS (B309154-BS1)			Lab File ID: K22A143005.D			Analyzed: 05/23/22 09:15			
Bromochloromethane (1)	110165	2.992	112237	2.992	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	303661	3.584	309006	3.584	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	218489	5.164	221424	5.163	99	60 - 140	0.0010	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B309154-BLK1)			Lab File ID: K22A143008.D			Analyzed: 05/23/22 11:00			
Bromochloromethane (1)	113129	2.992	112237	2.992	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	287693	3.584	309006	3.584	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	212738	5.163	221424	5.163	96	60 - 140	0.0000	+/-0.50	
DUP-02_051622 (22E1301-06RE1)			Lab File ID: K22A143016.D			Analyzed: 05/23/22 18:01			
Bromochloromethane (1)	107901	2.996	112237	2.992	96	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	272510	3.588	309006	3.584	88	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	206942	5.164	221424	5.163	93	60 - 140	0.0010	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071804-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.55	1.025417	0.9333574		-9.0	30
cis-1,2-Dichloroethylene	A	5.00	4.71	0.8174361	0.7695788		-5.9	30
trans-1,2-Dichloroethylene	A	5.00	5.25	0.8265571	0.8684656		5.1	30
1,4-Dioxane	A	5.00	4.78	0.1252326	0.1197503		-4.4	30
Tetrachloroethylene	A	5.00	4.48	0.4025457	0.3602971		-10.5	30
Trichloroethylene	A	5.00	4.94	0.2669212	0.2637226		-1.2	30
Vinyl Chloride	A	5.00	4.22	0.6700674	0.5654646		-15.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071812-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.56	1.025417	0.9341182		-8.9	30
cis-1,2-Dichloroethylene	A	5.00	4.68	0.8174361	0.7656884		-6.3	30
trans-1,2-Dichloroethylene	A	5.00	5.24	0.8265571	0.8667158		4.9	30
1,4-Dioxane	A	5.00	4.83	0.1252326	0.120969		-3.4	30
Tetrachloroethylene	A	5.00	4.36	0.4025457	0.351437		-12.7	30
Trichloroethylene	A	5.00	4.83	0.2669212	0.2577273		-3.4	30
Vinyl Chloride	A	5.00	4.21	0.6700674	0.5641053		-15.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071898-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
cis-1,2-Dichloroethylene	A	5.00	4.83	0.8174361	0.7903276		-3.3	30
Vinyl Chloride	A	5.00	4.26	0.6700674	0.5709062		-14.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

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CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

TO-15 (see Comments section) | | | | | " Hg: Initial Pressure | Final Pressure | Lab Receipt Pressure

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume											
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³	TO-15				Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-17-051622	051622/1234	051622/1235	--	--	IA	--	X				-29	-7	28	2314	7031
2	SL-18-051622	051622/1220	051622/1221					X				-29	-6.9	28	2247	7041
3	DUP-01-051622	051622	051622					X				-20	-5.8	28	2652	7040
4	SL-4-051622	051622/1200	051622/1201					X				-29	-5	28	2676	7083

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

	Date/Time
Relinquished by: (signature) Kathryn Flynn	5/18/2022 1230
Received by: (signature) FedEx	5/18/2022 1230
Relinquished by: (signature)	5/19 924
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

NELAC and AIHA-LAP, LLC Accredited

Pace Analytical®

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22E1301

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-15_051722	5-17-22 0735	5-17-22 0936	--	--	IA	--	X				-30	-3.0	5.9	2520	7038
6	DUP-02_051622	5-16-22	5-16-22	-	-	IA		X				-25.0	-2.1	5.3	2311	7034

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Kathryn Fleming	5/18/2022 1230
Received by: (signature) Fed Ex	5/18/2022 1230
Relinquished by: (signature)	5/19 924
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273282883830

ADD NICKNAME

Delivered
Thursday, 5/19/2022 at 9:29 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US
Label Created
05/18/2022 11:42 AM

PACKAGE RECEIVED BY FEDEX
LIVONIA, MI
05/18/2022 12:36 PM

IN TRANSIT
NEWARK, NJ
05/19/2022 12:09 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/19/2022 7:28 AM

DELIVERED
East Longmeadow, MA US
Delivered
5/19/2022 at 9:29 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273282883770 (master)	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883781	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883792	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MP | Date 5/19 | Time 929

How were the samples received? In Cooler ____ | On Ice ____ | No Ice ____ | In Box T | Ambient ____ | Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ | By Gun # ____ | Actual Temp - ____ | By Blank # ____ | Actual Temp - ____

Was Custody Seal Intact? ~~NA~~ T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Analysis T | Sampler Name T | Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	6	1L	C	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2314					7031				
2247					7041				
2052					7040				
2076					7083				
2520					7038				
2311					7034				
Unused Media					Pufs/TO-17's				

Comments:

valve for 2247 was not connected to the can, when unpacked at lab.

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A126025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2314/BC7031

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118043.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2247/BC7041

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2652/BC7040

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126030.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2676/BC7083

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126025.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2520/BC7038

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2311/BC7034

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 24, 2022

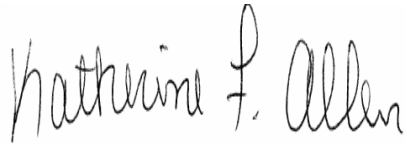
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1309

Enclosed are results of analyses for samples as received by the laboratory on May 19, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/24/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1309

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-14_051722	22E1309-01	Indoor air		- EPA TO-15	
SL-13_051722	22E1309-02	Indoor air		- EPA TO-15	
SL-22_051622	22E1309-03	Indoor air		- EPA TO-15	
SL-20_051622	22E1309-04	Indoor air		- EPA TO-15	
SL-16_051622	22E1309-05	Indoor air		- EPA TO-15	
SL-21_051622	22E1309-06	Indoor air		- EPA TO-15	
SL-11_051722	22E1309-07	Indoor air		- EPA TO-15	
SL-3_051622	22E1309-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For sample 22E1309-07, client's final pressure and the labs receipt pressure do not agree. Client requested sample still be analyzed.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-14_051722
Sample ID: 22E1309-01
Sample Matrix: Indoor air
Sampled: 5/17/2022 09:47

Sample Description/Location:
Sub Description/Location:
Canister ID: 2541
Canister Size: 1 liter
Flow Controller ID: 5034
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -2.7
Receipt Vacuum(in Hg): -5.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 19:41	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/21/22 19:41	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 19:41	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 19:41	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 19:41	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 19:41	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/21/22 19:41	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	87.8	70-130	5/21/22 19:41

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-13_051722
Sample ID: 22E1309-02
Sample Matrix: Indoor air
Sampled: 5/17/2022 10:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2298
Canister Size: 1 liter
Flow Controller ID: 7046
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.6
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 20:12	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/21/22 20:12	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 20:12	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 20:12	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 20:12	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 20:12	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/21/22 20:12	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.9	70-130		5/21/22 20:12

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A Pace Analytical® Laboratory

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-22_051622
Sample ID: 22E1309-03
Sample Matrix: Indoor air
Sampled: 5/16/2022 11:39

Sample Description/Location:
Sub Description/Location:
Canister ID: 2306
Canister Size: 1 liter
Flow Controller ID: 7051
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -9.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 21:13	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/21/22 21:13	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 21:13	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 21:13	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 21:13	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 21:13	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/21/22 21:13	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.0	70-130		5/21/22 21:13

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-20_051622
Sample ID: 22E1309-04
Sample Matrix: Indoor air
Sampled: 5/16/2022 11:19

Sample Description/Location:
Sub Description/Location:
Canister ID: 2666
Canister Size: 1 liter
Flow Controller ID: 5042
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.8
Receipt Vacuum(in Hg): -8.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 18:06	BRF
cis-1,2-Dichloroethylene	0.59	0.20	0.15		2.3	0.79	0.58	4	5/20/22 18:06	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 18:06	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 18:06	BRF
Tetrachloroethylene	0.22	0.20	0.15		1.5	1.4	1.0	4	5/20/22 18:06	BRF
Trichloroethylene	0.15	0.20	0.13	J	0.80	1.1	0.72	4	5/20/22 18:06	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/20/22 18:06	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.9	70-130		5/20/22 18:06

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-16_051622
Sample ID: 22E1309-05
Sample Matrix: Indoor air
Sampled: 5/16/2022 12:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2660
Canister Size: 1 liter
Flow Controller ID: 7061
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.0
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 18:46	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/20/22 18:46	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 18:46	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 18:46	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 18:46	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/20/22 18:46	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/20/22 18:46	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.4	70-130		5/20/22 18:46

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-21_051622
Sample ID: 22E1309-06
Sample Matrix: Indoor air
Sampled: 5/16/2022 11:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2647
Canister Size: 1 liter
Flow Controller ID: 7079
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.0
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.57	0.20	0.15		2.3	0.79	0.60	4	5/20/22 20:07	BRF
cis-1,2-Dichloroethylene	15	0.20	0.15		61	0.79	0.58	4	5/20/22 20:07	BRF
trans-1,2-Dichloroethylene	0.90	0.20	0.16		3.6	0.79	0.62	4	5/20/22 20:07	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 20:07	BRF
Tetrachloroethylene	4.9	0.20	0.15		33	1.4	1.0	4	5/20/22 20:07	BRF
Trichloroethylene	4.8	0.20	0.13		26	1.1	0.72	4	5/20/22 20:07	BRF
Vinyl Chloride	100	0.20	0.18		250	0.51	0.46	4	5/20/22 20:07	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.0	70-130	5/20/22 20:07

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-11_051722
Sample ID: 22E1309-07
Sample Matrix: Indoor air
Sampled: 5/17/2022 13:37

Sample Description/Location:
Sub Description/Location:
Canister ID: 2637
Canister Size: 1 liter
Flow Controller ID: 7090
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5.0
Receipt Vacuum(in Hg): -10.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 20:47	BRF
cis-1,2-Dichloroethylene	0.64	0.20	0.15		2.5	0.79	0.58	4	5/20/22 20:47	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 20:47	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 20:47	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 20:47	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/20/22 20:47	BRF
Vinyl Chloride	0.60	0.20	0.18		1.5	0.51	0.46	4	5/20/22 20:47	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.7	70-130		5/20/22 20:47

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-3_051622
Sample ID: 22E1309-08
Sample Matrix: Indoor air
Sampled: 5/16/2022 13:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2621
Canister Size: 1 liter
Flow Controller ID: 5062
Sample Type: Grab

Work Order: 22E1309
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.0
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 21:28	BRF
cis-1,2-Dichloroethylene	2.2	0.20	0.15		8.7	0.79	0.58	4	5/20/22 21:28	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 21:28	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 21:28	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 21:28	BRF
Trichloroethylene	0.17	0.20	0.13	J	0.92	1.1	0.72	4	5/20/22 21:28	BRF
Vinyl Chloride	12	0.20	0.18		30	0.51	0.46	4	5/20/22 21:28	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.4	70-130		5/20/22 21:28

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1309-01 [SL-14_051722]	B309030	1.5	1	N/A	1000	200	75	05/21/22
22E1309-02 [SL-13_051722]	B309030	1.5	1	N/A	1000	200	75	05/21/22
22E1309-03 [SL-22_051622]	B309030	1.5	1	N/A	1000	200	75	05/21/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1309-04 [SL-20_051622]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1309-05 [SL-16_051622]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1309-06 [SL-21_051622]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1309-07 [SL-11_051722]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1309-08 [SL-3_051622]	B309058	1.5	1	N/A	1000	400	150	05/20/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309030 - TO-15 Prep											
Blank (B309030-BLK1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.12*				*8.00*		*89.0*	*70-130*			
LCS (B309030-BS1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	4.86				5.00		97.3	70-130			
cis-1,2-Dichloroethylene	4.96				5.00		99.2	70-130			
trans-1,2-Dichloroethylene	5.53				5.00		111	70-130			
1,4-Dioxane	5.37				5.00		107	70-130			
Tetrachloroethylene	4.65				5.00		93.0	70-130			
Trichloroethylene	5.19				5.00		104	70-130			
Vinyl Chloride	4.45				5.00		89.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.69*				*8.00*		*96.1*	*70-130*			
Duplicate (B309030-DUP1)			**Source: 22E1309-02**		Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.15*				*8.00*		*89.4*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309058 - TO-15 Prep											
Blank (B309058-BLK1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.04*				*8.00*		*100*	*70-130*			
LCS (B309058-BS1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	4.82				5.00		96.4	70-130			
cis-1,2-Dichloroethylene	4.39				5.00		87.9	70-130			
trans-1,2-Dichloroethylene	4.60				5.00		92.0	70-130			
1,4-Dioxane	4.27				5.00		85.4	70-130			
Tetrachloroethylene	4.34				5.00		86.8	70-130			
Trichloroethylene	4.17				5.00		83.5	70-130			
Vinyl Chloride	5.00				5.00		99.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.75*				*8.00*		*96.8*	*70-130*			
Duplicate (B309058-DUP1)			**Source: 22E1309-05**		Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	ND	0.20	ND	0.51		ND				25	
Surrogate: 4-Bromofluorobenzene (1)	*7.87*				*8.00*		*98.3*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

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RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S070426-ICV1)			Lab File ID: G22A104022.D			Analyzed: 04/15/22 00:54			
Bromochloromethane (1)	1864849	8.485	1814308	8.485	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3396119	10.259	3274776	10.259	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3122096	14.63	3056122	14.63	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071804-CCV1)			Lab File ID: K22A141004.D			Analyzed: 05/21/22 15:06			
Bromochloromethane (1)	111028	2.992	102745	2.987	108	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	301347	3.584	303801	3.579	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	220689	5.164	223280	5.159	99	60 - 140	0.0050	+/-0.50	
LCS (B309030-BS1)			Lab File ID: K22A141005.D			Analyzed: 05/21/22 15:38			
Bromochloromethane (1)	110131	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	300751	3.588	301347	3.584	100	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	222017	5.164	220689	5.164	101	60 - 140	0.0000	+/-0.50	
Blank (B309030-BLK1)			Lab File ID: K22A141008.D			Analyzed: 05/21/22 17:28			
Bromochloromethane (1)	110463	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	277405	3.588	301347	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	213195	5.163	220689	5.164	97	60 - 140	-0.0010	+/-0.50	
SL-14_051722 (22E1309-01)			Lab File ID: K22A141012.D			Analyzed: 05/21/22 19:41			
Bromochloromethane (1)	109978	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	284945	3.588	301347	3.584	95	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	216473	5.163	220689	5.164	98	60 - 140	-0.0010	+/-0.50	
SL-13_051722 (22E1309-02)			Lab File ID: K22A141013.D			Analyzed: 05/21/22 20:12			
Bromochloromethane (1)	107926	2.996	111028	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	273288	3.588	301347	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	210226	5.164	220689	5.164	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (B309030-DUP1)			Lab File ID: K22A141014.D			Analyzed: 05/21/22 20:42			
Bromochloromethane (1)	105376	3.001	111028	2.992	95	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	261842	3.588	301347	3.584	87	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	205589	5.164	220689	5.164	93	60 - 140	0.0000	+/-0.50	
SL-22_051622 (22E1309-03)			Lab File ID: K22A141015.D			Analyzed: 05/21/22 21:13			
Bromochloromethane (1)	107282	2.996	111028	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	274910	3.588	301347	3.584	91	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	214520	5.164	220689	5.164	97	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071820-CCV1)			Lab File ID: G22A140004.D			Analyzed: 05/20/22 09:39			
Bromochloromethane (1)	1360999	8.485	1814308	8.485	75	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3186947	10.259	3274776	10.259	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2801762	14.63	3056122	14.63	92	60 - 140	0.0000	+/-0.50	
LCS (B309058-BS1)			Lab File ID: G22A140005.D			Analyzed: 05/20/22 10:18			
Bromochloromethane (1)	1361649	8.485	1360999	8.485	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3158897	10.259	3186947	10.259	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2809174	14.63	2801762	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B309058-BLK1)			Lab File ID: G22A140012.D			Analyzed: 05/20/22 15:09			
Bromochloromethane (1)	1294811	8.485	1360999	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2926587	10.259	3186947	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2621007	14.63	2801762	14.63	94	60 - 140	0.0000	+/-0.50	
SL-20_051622 (22E1309-04)			Lab File ID: G22A140016.D			Analyzed: 05/20/22 18:06			
Bromochloromethane (1)	1318372	8.485	1360999	8.485	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2961554	10.259	3186947	10.259	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2705941	14.63	2801762	14.63	97	60 - 140	0.0000	+/-0.50	
SL-16_051622 (22E1309-05)			Lab File ID: G22A140017.D			Analyzed: 05/20/22 18:46			
Bromochloromethane (1)	1318213	8.485	1360999	8.485	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2947441	10.259	3186947	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2677533	14.63	2801762	14.63	96	60 - 140	0.0000	+/-0.50	
Duplicate (B309058-DUP1)			Lab File ID: G22A140018.D			Analyzed: 05/20/22 19:27			
Bromochloromethane (1)	1295118	8.485	1360999	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2941934	10.259	3186947	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2667773	14.63	2801762	14.63	95	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-21_051622 (22E1309-06)			Lab File ID: G22A140019.D			Analyzed: 05/20/22 20:07			
Bromochloromethane (1)	1270351	8.485	1360999	8.485	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2912950	10.259	3186947	10.259	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2711279	14.63	2801762	14.63	97	60 - 140	0.0000	+/-0.50	
SL-11_051722 (22E1309-07)			Lab File ID: G22A140020.D			Analyzed: 05/20/22 20:47			
Bromochloromethane (1)	1240565	8.491	1360999	8.485	91	60 - 140	0.0060	+/-0.50	
1,4-Difluorobenzene (1)	2863329	10.259	3186947	10.259	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2645557	14.63	2801762	14.63	94	60 - 140	0.0000	+/-0.50	
SL-3_051622 (22E1309-08)			Lab File ID: G22A140021.D			Analyzed: 05/20/22 21:28			
Bromochloromethane (1)	1287461	8.485	1360999	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2886970	10.259	3186947	10.259	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2627845	14.63	2801762	14.63	94	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071804-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.55	1.025417	0.9333574		-9.0	30
cis-1,2-Dichloroethylene	A	5.00	4.71	0.8174361	0.7695788		-5.9	30
trans-1,2-Dichloroethylene	A	5.00	5.25	0.8265571	0.8684656		5.1	30
1,4-Dioxane	A	5.00	4.78	0.1252326	0.1197503		-4.4	30
Tetrachloroethylene	A	5.00	4.48	0.4025457	0.3602971		-10.5	30
Trichloroethylene	A	5.00	4.94	0.2669212	0.2637226		-1.2	30
Vinyl Chloride	A	5.00	4.22	0.6700674	0.5654646		-15.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071820-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.46	1.020229	0.9093791		-10.9	30
cis-1,2-Dichloroethylene	A	5.00	4.64	0.9049676	0.8400277		-7.2	30
trans-1,2-Dichloroethylene	A	5.00	4.77	0.925489	0.8827786		-4.6	30
1,4-Dioxane	A	5.00	4.39	0.186424	0.1636797		-12.2	30
Tetrachloroethylene	A	5.00	4.62	0.4134848	0.3822812		-7.5	30
Trichloroethylene	A	5.00	4.36	0.4149349	0.3615387		-12.9	30
Vinyl Chloride	A	5.00	5.21	0.5517783	0.5751175		4.2	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical 22E1309

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page _____ of _____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply	For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	☐ m³/min ☐ L/min	Code	☐ Liters ☐ m³					Initial Pressure	Final Pressure	Lab Receipt Pressure			Summa Can ID	Flow Controller ID
1	SL-14_051722	5-17-22 0946	5-17-22 0947	--	--	IA	--	X				-29.4	-2.7	6.5			2541	5034
2	SL-13_051722	5-17-22 0959	5-17-22 1000	-	-	IA	-	X				-29.0	5.6	7.1			2298	7046
3	SL-22_051622	5-16-22 1138	5-16-22 1139	-	-	IA	-	X				-29.0	-8.0	8.2			2306	7051
4	SL-20_051622	5-16-22 1118	5-16-22 1119	-	-	IA	-	X				-29.0	-7.8	8.1			2666	5042

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature)	Date/Time:	
Received by: (signature) FedEx	Date/Time: 5/18/2022 1230	
Relinquished by: (signature)	Date/Time: 5/19 9a	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical 22E1309

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

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Project Manager: Kristoffer Hinskey

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Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☑
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com
Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Please fill out completely, sign, date and retain the yellow copy for your records	
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
5	SL-16_051622	5-16-22 1249	5-16-22 1250	--	--	IA	--	X				-29.0	-3.0	X1	2660	7061
6	SL-21_051622	5-16-22 1059	5-16-22 1100	—	—	IA	—	X				-28.0	-7.0	X.5	2647	7079
7	SL-11_051722	5-17-22 1336	5-17-22 1337	—	—	IA	—	X				-28.0	-5.0	X0.2	2637	7080
8	SL-3_051622	5-16-22 1304	5-16-22 1305	—	—	IA	—	X				-29.0	-3.0	X1	2621	5062

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

	Date/Time:
Relinquished by: (signature) Kaitlyn Zeng	5/18/22/1230
Received by: (signature) FedEx	5/18/22 1230
Relinquished by: (signature)	5/19 929
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

FedEx® Tracking

273282883830

ADD NICKNAME

Delivered
Thursday, 5/19/2022 at 9:29 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US
Label Created
05/18/2022 11:42 AM

PACKAGE RECEIVED BY FEDEX
LIVONIA, MI
05/18/2022 12:36 PM

IN TRANSIT
NEWARK, NJ
05/19/2022 12:09 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/19/2022 7:28 AM

DELIVERED
East Longmeadow, MA US
Delivered
5/19/2022 at 9:29 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273282883770 (master)	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883781	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883792	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By MAP | Date 5/19 | Time 929

How were the samples received? In Cooler ____ On Ice ____ No Ice ____ In Box T Ambient ____ Melted Ice ____

Were samples within Temperature Compliance? 2-6°C ____ By Gun # ____ Actual Temp - ____ By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? ~~NA~~ T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client T | Project T | Analysis T | ID's T | Sampler Name T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? Cathy

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2541	2637				5034	7091			
2298	2621				7046	~~5062~~			
2306					7051	5062			
2666					5042				
2660					7061				
2647					7079				
Unused Media					Pufs/TO-17's				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A116035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2541/BC5034

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2298/BC7046

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126029.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2306/BC7051

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2666/BC5042

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A126018.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2660/BC7061

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2647/BC7079

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2637/BC7090

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126015.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2621/BC5062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

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May 24, 2022

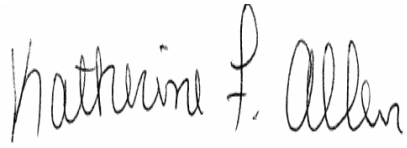
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1314

Enclosed are results of analyses for samples as received by the laboratory on May 19, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/24/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1314

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SL-10_051722	22E1314-01	Indoor air		- EPA TO-15	
SL-6_051722	22E1314-02	Indoor air		- EPA TO-15	
SL-9_051722	22E1314-03	Indoor air		- EPA TO-15	
SL-19_051722	22E1314-04	Indoor air		- EPA TO-15	
SL-7_051722	22E1314-05	Indoor air		- EPA TO-15	
MH-1231A_051822	22E1314-06	Indoor air		- EPA TO-15	
MH1244_051822	22E1314-07	Indoor air		- EPA TO-15	
MH-1259_051822	22E1314-08	Indoor air		- EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

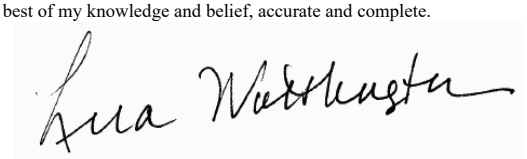
R-04 Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

Analyte & Samples(s) Qualified:

Tetrachloroethylene

B309041-DUP1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-10_051722
Sample ID: 22E1314-01
Sample Matrix: Indoor air
Sampled: 5/17/2022 13:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 2529
Canister Size: 1 liter
Flow Controller ID: 7062
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 4:20	BRF
cis-1,2-Dichloroethylene	1.9	0.20	0.15		7.4	0.79	0.58	4	5/21/22 4:20	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 4:20	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 4:20	BRF
Tetrachloroethylene	0.24	0.20	0.15		1.6	1.4	1.0	4	5/21/22 4:20	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 4:20	BRF
Vinyl Chloride	4.7	0.20	0.18		12	0.51	0.46	4	5/21/22 4:20	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.8	70-130		5/21/22 4:20

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-6_051722
Sample ID: 22E1314-02
Sample Matrix: Indoor air
Sampled: 5/17/2022 11:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2513
Canister Size: 1 liter
Flow Controller ID: 4012
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -3.4
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 5:01	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/21/22 5:01	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 5:01	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 5:01	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 5:01	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 5:01	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/21/22 5:01	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.0	70-130		5/21/22 5:01

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-9_051722
Sample ID: 22E1314-03
Sample Matrix: Indoor air
Sampled: 5/17/2022 12:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2680
Canister Size: 1 liter
Flow Controller ID: 4017
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4.4
Receipt Vacuum(in Hg): -8.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 5:43	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/21/22 5:43	BRF
trans-1,2-Dichloroethylene	0.68	0.20	0.16		2.7	0.79	0.62	4	5/21/22 5:43	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 5:43	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 5:43	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 5:43	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/21/22 5:43	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.8	70-130		5/21/22 5:43

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-19_051722
Sample ID: 22E1314-04
Sample Matrix: Indoor air
Sampled: 5/17/2022 14:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2661
Canister Size: 1 liter
Flow Controller ID: 7071
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -9.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/21/22 6:25	BRF
cis-1,2-Dichloroethylene	0.22	0.20	0.15		0.86	0.79	0.58	4	5/21/22 6:25	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/21/22 6:25	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/21/22 6:25	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/21/22 6:25	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/21/22 6:25	BRF
Vinyl Chloride	0.58	0.20	0.18		1.5	0.51	0.46	4	5/21/22 6:25	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.9	70-130		5/21/22 6:25

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: SL-7_051722
Sample ID: 22E1314-05
Sample Matrix: Indoor air
Sampled: 5/17/2022 10:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2628
Canister Size: 1 liter
Flow Controller ID: 7045
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -8.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 12:52	BRF
cis-1,2-Dichloroethylene	3.3	0.20	0.15		13	0.79	0.58	4	5/20/22 12:52	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 12:52	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 12:52	BRF
Tetrachloroethylene	76	0.20	0.15		510	1.4	1.0	4	5/20/22 12:52	BRF
Trichloroethylene	2.3	0.20	0.13		12	1.1	0.72	4	5/20/22 12:52	BRF
Vinyl Chloride	0.63	0.20	0.18		1.6	0.51	0.46	4	5/20/22 12:52	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.7	70-130		5/20/22 12:52

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: MH-1231A_051822
Sample ID: 22E1314-06
Sample Matrix: Indoor air
Sampled: 5/18/2022 10:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 2242
Canister Size: 1 liter
Flow Controller ID: 7050
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 13:21	BRF
cis-1,2-Dichloroethylene	24	0.20	0.15		94	0.79	0.58	4	5/20/22 13:21	BRF
trans-1,2-Dichloroethylene	0.33	0.20	0.16		1.3	0.79	0.62	4	5/20/22 13:21	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 13:21	BRF
Tetrachloroethylene	0.37	0.20	0.15		2.5	1.4	1.0	4	5/20/22 13:21	BRF
Trichloroethylene	0.56	0.20	0.13		3.0	1.1	0.72	4	5/20/22 13:21	BRF
Vinyl Chloride	36	0.20	0.18		92	0.51	0.46	4	5/20/22 13:21	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	93.0	70-130		5/20/22 13:21

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: MH1244_051822
Sample ID: 22E1314-07
Sample Matrix: Indoor air
Sampled: 5/18/2022 10:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 2663
Canister Size: 1 liter
Flow Controller ID: 5056
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/20/22 14:21	BRF
cis-1,2-Dichloroethylene	0.73	0.20	0.15		2.9	0.79	0.58	4	5/20/22 14:21	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/20/22 14:21	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 14:21	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/20/22 14:21	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/20/22 14:21	BRF
Vinyl Chloride	1.3	0.20	0.18		3.4	0.51	0.46	4	5/20/22 14:21	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	91.6	70-130		5/20/22 14:21

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/19/2022
Field Sample #: MH-1259_051822
Sample ID: 22E1314-08
Sample Matrix: Indoor air
Sampled: 5/18/2022 09:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2091
Canister Size: 1 liter
Flow Controller ID: 5069
Sample Type: Grab

Work Order: 22E1314
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -8.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	7.7	0.20	0.15		31	0.79	0.60	4	5/20/22 14:51	BRF
cis-1,2-Dichloroethylene	230	1.0	0.73		910	4.0	2.9	20	5/21/22 19:10	BRF
trans-1,2-Dichloroethylene	3.4	0.20	0.16		13	0.79	0.62	4	5/20/22 14:51	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/20/22 14:51	BRF
Tetrachloroethylene	6.6	0.20	0.15		45	1.4	1.0	4	5/20/22 14:51	BRF
Trichloroethylene	17	0.20	0.13		92	1.1	0.72	4	5/20/22 14:51	BRF
Vinyl Chloride	270	1.0	0.90		700	2.6	2.3	20	5/21/22 19:10	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	5/20/22 14:51
4-Bromofluorobenzene (1)	87.6	70-130	5/21/22 19:10

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1314-08RE1 [MH-1259_051822]	B309030	1.5	1	N/A	1000	200	15	05/21/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1314-05 [SL-7_051722]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1314-06 [MH-1231A_051822]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1314-07 [MH1244_051822]	B309041	1.5	1	N/A	1000	200	75	05/20/22
22E1314-08 [MH-1259_051822]	B309041	1.5	1	N/A	1000	200	75	05/20/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1314-01 [SL-10_051722]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1314-02 [SL-6_051722]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1314-03 [SL-9_051722]	B309058	1.5	1	N/A	1000	400	150	05/20/22
22E1314-04 [SL-19_051722]	B309058	1.5	1	N/A	1000	400	150	05/20/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309030 - TO-15 Prep											
Blank (B309030-BLK1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.12*				*8.00*		*89.0*	*70-130*			
LCS (B309030-BS1)					Prepared & Analyzed: 05/21/22						
1,1-Dichloroethylene	4.86				5.00		97.3	70-130			
cis-1,2-Dichloroethylene	4.96				5.00		99.2	70-130			
trans-1,2-Dichloroethylene	5.53				5.00		111	70-130			
1,4-Dioxane	5.37				5.00		107	70-130			
Tetrachloroethylene	4.65				5.00		93.0	70-130			
Trichloroethylene	5.19				5.00		104	70-130			
Vinyl Chloride	4.45				5.00		89.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.69*				*8.00*		*96.1*	*70-130*			
Batch B309041 - TO-15 Prep											
Blank (B309041-BLK1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.53*				*8.00*		*94.1*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309041 - TO-15 Prep											
LCS (B309041-BS1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	4.75				5.00		95.0	70-130			
cis-1,2-Dichloroethylene	4.89				5.00		97.7	70-130			
trans-1,2-Dichloroethylene	5.49				5.00		110	70-130			
1,4-Dioxane	5.20				5.00		104	70-130			
Tetrachloroethylene	4.54				5.00		90.8	70-130			
Trichloroethylene	4.94				5.00		98.9	70-130			
Vinyl Chloride	4.28				5.00		85.6	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.82*				*8.00*		*97.8*	*70-130*			
Duplicate (B309041-DUP1)				**Source: 22E1314-06**	Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	23	0.20	93	0.79		24			1.26	25	
trans-1,2-Dichloroethylene	0.30	0.20	1.2	0.79		0.33			8.92	25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	0.28	0.20	1.9	1.4		0.37			25.8	25	R-04
Trichloroethylene	0.57	0.20	3.1	1.1		0.56			2.12	25	
Vinyl Chloride	36	0.20	91	0.51		36			0.948	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.41*				*8.00*		*92.6*	*70-130*			
Batch B309058 - TO-15 Prep											
Blank (B309058-BLK1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*8.04*				*8.00*		*100*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309058 - TO-15 Prep											
LCS (B309058-BS1)					Prepared & Analyzed: 05/20/22						
1,1-Dichloroethylene	4.82				5.00		96.4	70-130			
cis-1,2-Dichloroethylene	4.39				5.00		87.9	70-130			
trans-1,2-Dichloroethylene	4.60				5.00		92.0	70-130			
1,4-Dioxane	4.27				5.00		85.4	70-130			
Tetrachloroethylene	4.34				5.00		86.8	70-130			
Trichloroethylene	4.17				5.00		83.5	70-130			
Vinyl Chloride	5.00				5.00		99.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.75*				*8.00*		*96.8*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

ANALYST

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RAP	Raisa A. Petraitis
MEK	Meghan E. Kelley
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S070426-ICV1)			Lab File ID: G22A104022.D			Analyzed: 04/15/22 00:54			
Bromochloromethane (1)	1864849	8.485	1814308	8.485	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3396119	10.259	3274776	10.259	104	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3122096	14.63	3056122	14.63	102	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071804-CCV1)			Lab File ID: K22A141004.D			Analyzed: 05/21/22 15:06			
Bromochloromethane (1)	111028	2.992	102745	2.987	108	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	301347	3.584	303801	3.579	99	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	220689	5.164	223280	5.159	99	60 - 140	0.0050	+/-0.50	
LCS (B309030-BS1)			Lab File ID: K22A141005.D			Analyzed: 05/21/22 15:38			
Bromochloromethane (1)	110131	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	300751	3.588	301347	3.584	100	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	222017	5.164	220689	5.164	101	60 - 140	0.0000	+/-0.50	
Blank (B309030-BLK1)			Lab File ID: K22A141008.D			Analyzed: 05/21/22 17:28			
Bromochloromethane (1)	110463	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	277405	3.588	301347	3.584	92	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	213195	5.163	220689	5.164	97	60 - 140	-0.0010	+/-0.50	
MH-1259_051822 (22E1314-08RE1)			Lab File ID: K22A141011.D			Analyzed: 05/21/22 19:10			
Bromochloromethane (1)	109532	2.996	111028	2.992	99	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	279471	3.588	301347	3.584	93	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	213358	5.164	220689	5.164	97	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071812-CCV1)			Lab File ID: K22A140004.D			Analyzed: 05/20/22 10:00			
Bromochloromethane (1)	115343	2.992	102745	2.987	112	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	321127	3.584	303801	3.579	106	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233305	5.159	223280	5.159	104	60 - 140	0.0000	+/-0.50	
LCS (B309041-BS1)			Lab File ID: K22A140005.D			Analyzed: 05/20/22 10:31			
Bromochloromethane (1)	114758	2.992	115343	2.992	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	321926	3.588	321127	3.584	100	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	233447	5.164	233305	5.159	100	60 - 140	0.0050	+/-0.50	
Blank (B309041-BLK1)			Lab File ID: K22A140008.D			Analyzed: 05/20/22 12:21			
Bromochloromethane (1)	114991	2.992	115343	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	295675	3.584	321127	3.584	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	219580	5.163	233305	5.159	94	60 - 140	0.0040	+/-0.50	
SL-7_051722 (22E1314-05)			Lab File ID: K22A140009.D			Analyzed: 05/20/22 12:52			
Bromochloromethane (1)	112735	3.001	115343	2.992	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	279341	3.593	321127	3.584	87	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	230718	5.164	233305	5.159	99	60 - 140	0.0050	+/-0.50	
MH-1231A_051822 (22E1314-06)			Lab File ID: K22A140010.D			Analyzed: 05/20/22 13:21			
Bromochloromethane (1)	112264	3.001	115343	2.992	97	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	290584	3.588	321127	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	220637	5.164	233305	5.159	95	60 - 140	0.0050	+/-0.50	
Duplicate (B309041-DUP1)			Lab File ID: K22A140011.D			Analyzed: 05/20/22 13:51			
Bromochloromethane (1)	113240	2.996	115343	2.992	98	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	290293	3.588	321127	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	218555	5.164	233305	5.159	94	60 - 140	0.0050	+/-0.50	
MH1244_051822 (22E1314-07)			Lab File ID: K22A140012.D			Analyzed: 05/20/22 14:21			
Bromochloromethane (1)	111404	2.996	115343	2.992	97	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	289228	3.588	321127	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	218616	5.164	233305	5.159	94	60 - 140	0.0050	+/-0.50	
MH-1259_051822 (22E1314-08)			Lab File ID: K22A140013.D			Analyzed: 05/20/22 14:51			
Bromochloromethane (1)	111857	3.001	115343	2.992	97	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	289331	3.588	321127	3.584	90	60 - 140	0.0040	+/-0.50	
Chlorobenzene-d5 (1)	225494	5.164	233305	5.159	97	60 - 140	0.0050	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S071820-CCV1)			Lab File ID: G22A140004.D			Analyzed: 05/20/22 09:39			
Bromochloromethane (1)	1360999	8.485	1814308	8.485	75	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3186947	10.259	3274776	10.259	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2801762	14.63	3056122	14.63	92	60 - 140	0.0000	+/-0.50	
LCS (B309058-BS1)			Lab File ID: G22A140005.D			Analyzed: 05/20/22 10:18			
Bromochloromethane (1)	1361649	8.485	1360999	8.485	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3158897	10.259	3186947	10.259	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2809174	14.63	2801762	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B309058-BLK1)			Lab File ID: G22A140012.D			Analyzed: 05/20/22 15:09			
Bromochloromethane (1)	1294811	8.485	1360999	8.485	95	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2926587	10.259	3186947	10.259	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2621007	14.63	2801762	14.63	94	60 - 140	0.0000	+/-0.50	
SL-10_051722 (22E1314-01)			Lab File ID: G22A140031.D			Analyzed: 05/21/22 04:20			
Bromochloromethane (1)	1275752	8.485	1360999	8.485	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2823070	10.259	3186947	10.259	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2609537	14.63	2801762	14.63	93	60 - 140	0.0000	+/-0.50	
SL-6_051722 (22E1314-02)			Lab File ID: G22A140032.D			Analyzed: 05/21/22 05:01			
Bromochloromethane (1)	1261418	8.484	1360999	8.485	93	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	2811232	10.259	3186947	10.259	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2602281	14.63	2801762	14.63	93	60 - 140	0.0000	+/-0.50	
SL-9_051722 (22E1314-03)			Lab File ID: G22A140033.D			Analyzed: 05/21/22 05:43			
Bromochloromethane (1)	1260415	8.485	1360999	8.485	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2846907	10.259	3186947	10.259	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2595651	14.63	2801762	14.63	93	60 - 140	0.0000	+/-0.50	
SL-19_051722 (22E1314-04)			Lab File ID: G22A140034.D			Analyzed: 05/21/22 06:25			
Bromochloromethane (1)	1250825	8.485	1360999	8.485	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2780803	10.259	3186947	10.259	87	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2556164	14.63	2801762	14.63	91	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071804-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.55	1.025417	0.9333574		-9.0	30
cis-1,2-Dichloroethylene	A	5.00	4.71	0.8174361	0.7695788		-5.9	30
trans-1,2-Dichloroethylene	A	5.00	5.25	0.8265571	0.8684656		5.1	30
1,4-Dioxane	A	5.00	4.78	0.1252326	0.1197503		-4.4	30
Tetrachloroethylene	A	5.00	4.48	0.4025457	0.3602971		-10.5	30
Trichloroethylene	A	5.00	4.94	0.2669212	0.2637226		-1.2	30
Vinyl Chloride	A	5.00	4.22	0.6700674	0.5654646		-15.6	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071812-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.56	1.025417	0.9341182		-8.9	30
cis-1,2-Dichloroethylene	A	5.00	4.68	0.8174361	0.7656884		-6.3	30
trans-1,2-Dichloroethylene	A	5.00	5.24	0.8265571	0.8667158		4.9	30
1,4-Dioxane	A	5.00	4.83	0.1252326	0.120969		-3.4	30
Tetrachloroethylene	A	5.00	4.36	0.4025457	0.351437		-12.7	30
Trichloroethylene	A	5.00	4.83	0.2669212	0.2577273		-3.4	30
Vinyl Chloride	A	5.00	4.21	0.6700674	0.5641053		-15.8	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S071820-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.46	1.020229	0.9093791		-10.9	30
cis-1,2-Dichloroethylene	A	5.00	4.64	0.9049676	0.8400277		-7.2	30
trans-1,2-Dichloroethylene	A	5.00	4.77	0.925489	0.8827786		-4.6	30
1,4-Dioxane	A	5.00	4.39	0.186424	0.1636797		-12.2	30
Tetrachloroethylene	A	5.00	4.62	0.4134848	0.3822812		-7.5	30
Trichloroethylene	A	5.00	4.36	0.4149349	0.3615387		-12.9	30
Vinyl Chloride	A	5.00	5.21	0.5517783	0.5751175		4.2	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

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CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SL-10-051722	051722/1319	051722/1320	--	--	IA	--	X				-29	-4	-7.9	2529	7062
2	SL-6-051722	051722/1104	051722/1105					X				-29	-3.4	-6.6	2513	4012
3	SL-9-051722	051722/1249	051722/1250					X				-28	-4.4	-8.8	2680	4017
4	SL-19-051722	051722/1421	051722/1422					X				-29	-5	-9.7	2661	7071

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature)	Date/Time: 5/18/2022 1230	
Received by: (signature) FedEx	Date/Time: 5/18/2022 1230	
Relinquished by: (signature)	Date/Time: 5/19 929	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

226314

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page ____ of ____

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com; quinn.carnahan@arcadis.com; kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
5	SL-7_051722	5-17-22 1051	5-17-22 1052	--	--	IA	--	X				-28.0	-4.0	8.2	2628	7045
6	MH-1231A_051822	5-18-22 1024	5-18-22 1025	—	—	IA	—	X				-28.0	-5.0	8.6	2242	7050
7	MH-1244_051822	5-18-22 1009	5-18-22 1010	—	—	IA	—	X				-25.0	-4.0	8.2	2663	5056
8	MH-1255_051822	5-18-22 0935	5-18-22 0940	—	—	IA	—	X				-25.0	-5.0	8.5	2091	5069

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other____

Relinquished by: (signature)	Date/Time: 05/18/22 1230	
Received by: (signature) FedEx	Date/Time: 5/18/22 1230	
Relinquished by: (signature)	Date/Time: 5/19 929	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273282883830

ADD NICKNAME

Delivered
Thursday, 5/19/2022 at 9:29 am

THIS IS 1 OF 8 PIECES
GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
NOVI, MI US
Label Created
05/18/2022 11:42 AM

PACKAGE RECEIVED BY FEDEX
LIVONIA, MI
05/18/2022 12:36 PM

IN TRANSIT
NEWARK, NJ
05/19/2022 12:09 AM

OUT FOR DELIVERY
WINDSOR LOCKS, CT
05/19/2022 7:28 AM

DELIVERED
East Longmeadow, MA US
Delivered
5/19/2022 at 9:29 AM

MANAGE DELIVERY

8 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273282883770 (master)	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883781	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA
273282883792	Delivered	5/18/22	5/19/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By	MP	Date	5/19	Time	929		
How were the samples received?	In Cooler		On Ice		No Ice		
	In Box	T	Ambient		Melted Ice		
Were samples within Temperature Compliance? 2-6°C	By Gun #		Actual Temp -				
	By Blank #		Actual Temp -				
Was Custody Seal Intact?	~~NA~~ T		Were Samples Tampered with?	F			
Was COC Relinquished ?	T		Does Chain Agree With Samples?	T			
Are there any loose caps/valves on any samples?	F						
Is COC in ink/ Legible?	T						
Did COC Include all Pertinent Information?	Client	T	Analysis	T	Sampler Name	T	
	Project	T	ID's	T	Collection Dates/Times	T	
Are Sample Labels filled out and legible?	T						
Are there Rushes?	T		Who was notified?	Cathy			
Samples are received within holding time?	T						
Proper Media Used?	T		Individually Certified Cans?	T			
Are there Trip Blanks?	F		Is there enough Volume?	T			

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2529	2663				7062	5056			
2513	2091				4012	5669			
2680					4017				
2661					7071				
2628					7045				
2242					7050				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2529/BC7062

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2513/BC4012

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2680/BC4017

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** G22A126027.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2661/BC7071

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A126026.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2628/BC7045

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126019.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2242/BC7050

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2663/BC5056

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2091/BC5069

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/23/2022

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 31, 2022

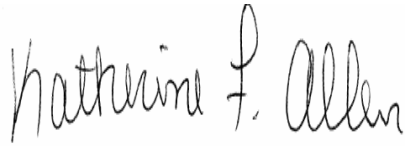
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1822

Enclosed are results of analyses for samples as received by the laboratory on May 26, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/31/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1822

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1256_052322	22E1822-01	Indoor air		-	
				EPA TO-15	
DUP-02_052322	22E1822-02	Indoor air		-	
				EPA TO-15	
SL-15_052422	22E1822-03	Indoor air		-	
				EPA TO-15	
SL-20_052322	22E1822-04	Indoor air		-	
				EPA TO-15	
SL-10_052422	22E1822-05	Indoor air		-	
				EPA TO-15	
SL-16_052522	22E1822-06	Indoor air		-	
				EPA TO-15	
SL-5_052422	22E1822-07	Indoor air		-	
				EPA TO-15	
SL-14_052422	22E1822-08	Indoor air		-	
				EPA TO-15	

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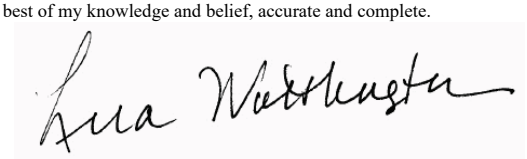
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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A Pace Analytical® Laboratory

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: MH-1256_052322
Sample ID: 22E1822-01
Sample Matrix: Indoor air
Sampled: 5/23/2022 12:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 2572
Canister Size: 1 liter
Flow Controller ID: 7022
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 17:37	BRF
cis-1,2-Dichloroethylene	0.28	0.20	0.15		1.1	0.79	0.58	4	5/27/22 17:37	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 17:37	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 17:37	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 17:37	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 17:37	BRF
Vinyl Chloride	0.68	0.20	0.18		1.7	0.51	0.46	4	5/27/22 17:37	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	83.7	70-130	5/27/22 17:37

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: DUP-02_052322
Sample ID: 22E1822-02
Sample Matrix: Indoor air
Sampled: 5/23/2022 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2641
Canister Size: 1 liter
Flow Controller ID: 7023
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 18:01	BRF
cis-1,2-Dichloroethylene	2.2	0.20	0.15		8.8	0.79	0.58	4	5/27/22 18:01	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 18:01	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 18:01	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 18:01	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 18:01	BRF
Vinyl Chloride	6.5	0.20	0.18		17	0.51	0.46	4	5/27/22 18:01	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	82.4	70-130		5/27/22 18:01

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-15_052422
Sample ID: 22E1822-03
Sample Matrix: Indoor air
Sampled: 5/24/2022 09:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 2566
Canister Size: 1 liter
Flow Controller ID: 7049
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 18:26	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/27/22 18:26	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 18:26	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 18:26	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 18:26	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 18:26	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/27/22 18:26	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	82.9	70-130		5/27/22 18:26

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-20_052322
Sample ID: 22E1822-04
Sample Matrix: Indoor air
Sampled: 5/23/2022 15:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2654
Canister Size: 1 liter
Flow Controller ID: 7048
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.78	0.20	0.15		3.1	0.79	0.60	4	5/27/22 18:51	BRF
cis-1,2-Dichloroethylene	33	0.20	0.15		130	0.79	0.58	4	5/27/22 18:51	BRF
trans-1,2-Dichloroethylene	0.72	0.20	0.16		2.8	0.79	0.62	4	5/27/22 18:51	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 18:51	BRF
Tetrachloroethylene	6.7	0.20	0.15		45	1.4	1.0	4	5/27/22 18:51	BRF
Trichloroethylene	2.8	0.20	0.13		15	1.1	0.72	4	5/27/22 18:51	BRF
Vinyl Chloride	87	0.20	0.18		220	0.51	0.46	4	5/27/22 18:51	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	85.2	70-130		5/27/22 18:51

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-10_052422
Sample ID: 22E1822-05
Sample Matrix: Indoor air
Sampled: 5/24/2022 13:50

Sample Description/Location:
Sub Description/Location:
Canister ID: 2671
Canister Size: 1 liter
Flow Controller ID: 5068
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.2	0.20	0.15		4.7	0.79	0.60	4	5/27/22 19:16	BRF
cis-1,2-Dichloroethylene	67	0.20	0.15		260	0.79	0.58	4	5/27/22 19:16	BRF
trans-1,2-Dichloroethylene	1.2	0.20	0.16		4.7	0.79	0.62	4	5/27/22 19:16	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 19:16	BRF
Tetrachloroethylene	5.1	0.20	0.15		34	1.4	1.0	4	5/27/22 19:16	BRF
Trichloroethylene	4.1	0.20	0.13		22	1.1	0.72	4	5/27/22 19:16	BRF
Vinyl Chloride	170	0.20	0.18		430	0.51	0.46	4	5/27/22 19:16	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	86.2	70-130		5/27/22 19:16

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-16_052522
Sample ID: 22E1822-06
Sample Matrix: Indoor air
Sampled: 5/25/2022 11:12

Sample Description/Location:
Sub Description/Location:
Canister ID: 2643
Canister Size: 1 liter
Flow Controller ID: 7081
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 13:02	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/27/22 13:02	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 13:02	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 13:02	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 13:02	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 13:02	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/27/22 13:02	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	98.6	70-130		5/27/22 13:02

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-5_052422
Sample ID: 22E1822-07
Sample Matrix: Indoor air
Sampled: 5/24/2022 11:37

Sample Description/Location:
Sub Description/Location:
Canister ID: 2764
Canister Size: 1 liter
Flow Controller ID: 5054
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 13:42	BRF
cis-1,2-Dichloroethylene	0.53	0.20	0.15		2.1	0.79	0.58	4	5/27/22 13:42	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 13:42	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 13:42	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 13:42	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 13:42	BRF
Vinyl Chloride	1.6	0.20	0.18		4.0	0.51	0.46	4	5/27/22 13:42	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.2	70-130		5/27/22 13:42

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-14_052422
Sample ID: 22E1822-08
Sample Matrix: Indoor air
Sampled: 5/24/2022 09:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 2626
Canister Size: 1 liter
Flow Controller ID: 7082
Sample Type: Grab

Work Order: 22E1822
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 15:03	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/27/22 15:03	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 15:03	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 15:03	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 15:03	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 15:03	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/27/22 15:03	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	97.9	70-130		5/27/22 15:03

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1822-01 [MH-1256_052322]	B309511	1.5	1	N/A	1000	200	75	05/27/22
22E1822-02 [DUP-02_052322]	B309511	1.5	1	N/A	1000	200	75	05/27/22
22E1822-03 [SL-15_052422]	B309511	1.5	1	N/A	1000	200	75	05/27/22
22E1822-04 [SL-20_052322]	B309511	1.5	1	N/A	1000	200	75	05/27/22
22E1822-05 [SL-10_052422]	B309511	1.5	1	N/A	1000	200	75	05/27/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1822-06 [SL-16_052522]	B309569	1.5	1	N/A	1000	400	150	05/27/22
22E1822-07 [SL-5_052422]	B309569	1.5	1	N/A	1000	400	150	05/27/22
22E1822-08 [SL-14_052422]	B309569	1.5	1	N/A	1000	400	150	05/27/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309511 - TO-15 Prep											
Blank (B309511-BLK1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*6.74*				*8.00*		*84.2*	*70-130*			
LCS (B309511-BS1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	4.84				5.00		96.8	70-130			
cis-1,2-Dichloroethylene	4.31				5.00		86.2	70-130			
trans-1,2-Dichloroethylene	4.15				5.00		82.9	70-130			
1,4-Dioxane	4.84				5.00		96.9	70-130			
Tetrachloroethylene	4.32				5.00		86.4	70-130			
Trichloroethylene	4.75				5.00		95.0	70-130			
Vinyl Chloride	5.29				5.00		106	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.16*				*8.00*		*89.5*	*70-130*			
Batch B309569 - TO-15 Prep											
Blank (B309569-BLK1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	ND	0.035									
cis-1,2-Dichloroethylene	ND	0.035									
trans-1,2-Dichloroethylene	ND	0.035									
1,4-Dioxane	ND	0.35									
Tetrachloroethylene	ND	0.035									
Trichloroethylene	ND	0.035									
Vinyl Chloride	ND	0.035									
Surrogate: 4-Bromofluorobenzene (1)	*7.98*				*8.00*		*99.7*	*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309569 - TO-15 Prep											
LCS (B309569-BS1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	4.87				5.00		97.4	70-130			
cis-1,2-Dichloroethylene	5.01				5.00		100	70-130			
trans-1,2-Dichloroethylene	4.85				5.00		96.9	70-130			
1,4-Dioxane	5.69				5.00		114	70-130			
Tetrachloroethylene	4.93				5.00		98.6	70-130			
Trichloroethylene	4.95				5.00		98.9	70-130			
Vinyl Chloride	4.46				5.00		89.2	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.85*				*8.00*		*98.1*	*70-130*			
Duplicate (B309569-DUP1)				**Source: 22E1822-07**	Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
cis-1,2-Dichloroethylene	0.52	0.20	2.1	0.79		0.53			1.53	25	
trans-1,2-Dichloroethylene	ND	0.20	ND	0.79		ND				25	
1,4-Dioxane	ND	2.0	ND	7.2		ND				25	
Tetrachloroethylene	ND	0.20	ND	1.4		ND				25	
Trichloroethylene	ND	0.20	ND	1.1		ND				25	
Vinyl Chloride	1.5	0.20	3.7	0.51		1.6			6.61	25	
Surrogate: 4-Bromofluorobenzene (1)	*7.63*				*8.00*		*95.3*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

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MJB	Matthew J Beaupre
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)			Lab File ID: J21A232023.D			Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S072065-ICV1)			Lab File ID: G22A144022.D			Analyzed: 05/24/22 21:40			
Bromochloromethane (1)	1256331	8.479	1268674	8.485	99	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	3475998	10.259	3495969	10.259	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	3109272	14.63	3089177	14.63	101	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S072081-CCV1)			Lab File ID: J22A147004.D			Analyzed: 05/27/22 09:12			
Bromochloromethane (1)	167037	2.857	150879	2.863	111	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	725053	3.466	694423	3.468	104	60 - 140	-0.0020	+/-0.50	
Chlorobenzene-d5 (1)	629203	5.054	641566	5.057	98	60 - 140	-0.0030	+/-0.50	
LCS (B309511-BS1)			Lab File ID: J22A147005.D			Analyzed: 05/27/22 09:36			
Bromochloromethane (1)	169038	2.857	167037	2.857	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	719950	3.466	725053	3.466	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	650110	5.054	629203	5.054	103	60 - 140	0.0000	+/-0.50	
Blank (B309511-BLK1)			Lab File ID: J22A147007.D			Analyzed: 05/27/22 10:32			
Bromochloromethane (1)	166375	2.844	167037	2.857	100	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	684324	3.456	725053	3.466	94	60 - 140	-0.0100	+/-0.50	
Chlorobenzene-d5 (1)	601208	5.05	629203	5.054	96	60 - 140	-0.0040	+/-0.50	
MH-1256_052322 (22E1822-01)			Lab File ID: J22A147020.D			Analyzed: 05/27/22 17:37			
Bromochloromethane (1)	168238	2.847	167037	2.857	101	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	672666	3.459	725053	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	597601	5.05	629203	5.054	95	60 - 140	-0.0040	+/-0.50	
DUP-02_052322 (22E1822-02)			Lab File ID: J22A147021.D			Analyzed: 05/27/22 18:01			
Bromochloromethane (1)	167864	2.847	167037	2.857	100	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	677132	3.459	725053	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	594749	5.05	629203	5.054	95	60 - 140	-0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-15_052422 (22E1822-03)			Lab File ID: J22A147022.D			Analyzed: 05/27/22 18:26			
Bromochloromethane (1)	165336	2.847	167037	2.857	99	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	671912	3.459	725053	3.466	93	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	591164	5.051	629203	5.054	94	60 - 140	-0.0030	+/-0.50	
SL-20_052322 (22E1822-04)			Lab File ID: J22A147023.D			Analyzed: 05/27/22 18:51			
Bromochloromethane (1)	164613	2.85	167037	2.857	99	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	689837	3.459	725053	3.466	95	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	610257	5.05	629203	5.054	97	60 - 140	-0.0040	+/-0.50	
SL-10_052422 (22E1822-05)			Lab File ID: J22A147024.D			Analyzed: 05/27/22 19:16			
Bromochloromethane (1)	168479	2.85	167037	2.857	101	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	696689	3.462	725053	3.466	96	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	609186	5.051	629203	5.054	97	60 - 140	-0.0030	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S072127-CCV1)			Lab File ID: G22A147004.D			Analyzed: 05/27/22 09:35			
Bromochloromethane (1)	1106397	8.485	1268674	8.485	87	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3197371	10.259	3495969	10.259	91	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2779218	14.63	3089177	14.63	90	60 - 140	0.0000	+/-0.50	
LCS (B309569-BS1)			Lab File ID: G22A147005.D			Analyzed: 05/27/22 10:14			
Bromochloromethane (1)	1102909	8.485	1106397	8.485	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	3199473	10.259	3197371	10.259	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2771636	14.63	2779218	14.63	100	60 - 140	0.0000	+/-0.50	
Blank (B309569-BLK1)			Lab File ID: G22A147008.D			Analyzed: 05/27/22 12:22			
Bromochloromethane (1)	1078129	8.485	1106397	8.485	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2966623	10.259	3197371	10.259	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2670090	14.63	2779218	14.63	96	60 - 140	0.0000	+/-0.50	
SL-16_052522 (22E1822-06)			Lab File ID: G22A147009.D			Analyzed: 05/27/22 13:02			
Bromochloromethane (1)	1022700	8.485	1106397	8.485	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2869637	10.259	3197371	10.259	90	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2535423	14.63	2779218	14.63	91	60 - 140	0.0000	+/-0.50	
SL-5_052422 (22E1822-07)			Lab File ID: G22A147010.D			Analyzed: 05/27/22 13:42			
Bromochloromethane (1)	1032602	8.485	1106397	8.485	93	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2839091	10.259	3197371	10.259	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2542814	14.63	2779218	14.63	91	60 - 140	0.0000	+/-0.50	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (B309569-DUP1)			Lab File ID: G22A147011.D			Analyzed: 05/27/22 14:22			
Bromochloromethane (1)	1022768	8.485	1106397	8.485	92	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2827483	10.259	3197371	10.259	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2517371	14.63	2779218	14.63	91	60 - 140	0.0000	+/-0.50	
SL-14_052422 (22E1822-08)			Lab File ID: G22A147012.D			Analyzed: 05/27/22 15:03			
Bromochloromethane (1)	1009540	8.485	1106397	8.485	91	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	2822835	10.259	3197371	10.259	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2521718	14.63	2779218	14.63	91	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S072081-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	5.29	1.038306	1.099388		5.9	30
cis-1,2-Dichloroethylene	A	5.00	4.65	1.058854	0.9841364		-7.1	30
trans-1,2-Dichloroethylene	A	5.00	4.58	1.144971	1.049109		-8.4	30
1,4-Dioxane	A	5.00	4.95	0.1348394	0.1334854		-1.0	30
Tetrachloroethylene	A	5.00	4.90	0.5934671	0.5810754		-2.1	30
Trichloroethylene	A	5.00	5.10	0.2950588	0.3008575		2.0	30
Vinyl Chloride	A	5.00	5.64	0.6636142	0.7490364		12.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CONTINUING CALIBRATION CHECK

EPA TO-15

S072127-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.63	1.099842	1.017661		-7.5	30
cis-1,2-Dichloroethylene	A	5.00	4.84	0.8418185	0.8153355		-3.1	30
trans-1,2-Dichloroethylene	A	5.00	4.67	0.9140014	0.853204		-6.7	30
1,4-Dioxane	A	5.00	5.18	0.1293352	0.1340461		3.6	30
Tetrachloroethylene	A	5.00	4.88	0.4248838	0.4144665		-2.5	30
Trichloroethylene	A	5.00	4.89	0.336337	0.3287786		-2.2	30
Vinyl Chloride	A	5.00	4.38	0.7512303	0.6579309		-12.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E1822

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearsen~~, Samantha Hindle, Sam Sukoria, James Wasnaw

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	MH-17S6_052522	05/23/22 1239	05/23/22 1240	--	--	IA	--	X				29	7	8.4	2572	7022
2	DUP-02_052322	05/23/22 —	05/23/22 —	—	—	IA	—	X				27.5	7	6.7	2641	7023
3	SL-15_052422	05/24/22 0929	05/24/22 0930	—	—	IA	—	X				29	25	7.8	2566	7049
4	SL-20_052322	05/23/22 1459	05/23/22 1500	—	—	IA	—	X				29	2.50	6.9	2654	7040

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) Sam Sukoria	05/25/22 1500
Received by: (signature) FedEx	05/27/22 1500
Relinquished by: (signature)	5/26 938
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E1822

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

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Sampled By: ~~Korey Pearson~~, Samantha Hindle, James Lonsinger, Jon Sakaria

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
~~SL-10-052422~~ 5	SL-10_052422	5/24/22 13:49	5/24/22 13:50	--	--	IA	--	X				-29	-7.5	-7.5	2671	5068
6	SL-16_052522	05/25/22 11:11	05/25/22 11:12	—	—	IA	—	X				-29	-7	-7.4	2693	7081
7	SL-5_052422	5/24/22 11:36	5/24/22 11:37	—	—	IA	—	X				-29	-7	-7.0	2769	5054
8	SL-14_052422	5/24/22 9:45	5/24/22 9:46	—	—	IA	—	X				-29	-6.9	-7.0	2626	7082

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

Relinquished by: (signature)	Date/Time: 1500 05/25/22	
Received by: (signature) FEDEX	Date/Time: 1500 05/25/22	
Relinquished by: (signature)	Date/Time: 5/26 938	
Received by: (signature)	Date/Time:	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273552113277

ADD NICKNAME

Delivered
Thursday, 05/26/2022 at 9:38 am

SHIPMENT IS 1 OF 10 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

10 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273552113233 (master)	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113244	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113255	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113266	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113277	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113288	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By: hrp | Date: 5/26 | Time: 9:38

How were the samples received? In Cooler: | On Ice: | No Ice:
In Box: T | Ambient: | Melted Ice:

Were samples within Temperature Compliance? 2-6°C: | By Gun #: | Actual Temp -:
By Blank #: | Actual Temp -:

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client: T | Analysis: T | Sampler Name: T
Project: T | ID's: T | Collection Dates/Times: T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified?

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2572	2764				7022	5054			
2641	2626				7023	7082			
2566					7049				
2654					7048 *				
2671					5068				
2643					7051				
Unused Media					Pufs/TO-17's				

Comments:

* 7040 written on COC, 7048 received.

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2572/BC7022

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133022.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2641/BC7023

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133040.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2566/BC7049

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2654/BC7040

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 4/28/2022 **Batch #:** K22A118036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2671/BC5068

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2643/BC7081

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126035.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2764/BC5054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133032.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2626/BC7082

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

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May 31, 2022

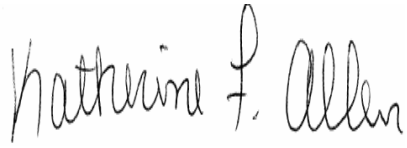
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1825

Enclosed are results of analyses for samples as received by the laboratory on May 26, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

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Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/31/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1825

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SSVE-SL-2_052522	22E1825-01	Indoor air		- EPA TO-15	
SSVE-MH-1244_052522	22E1825-02	Indoor air		- EPA TO-15	
SSVE-MH-1231_052522	22E1825-03	Indoor air		- EPA TO-15	
SL-12_052422	22E1825-04	Indoor air		- EPA TO-15	
SL-7_052422	22E1825-05	Indoor air		- EPA TO-15	
SL-22_052422	22E1825-06	Indoor air		- EPA TO-15	
Void	22E1825-07	Indoor air		-	

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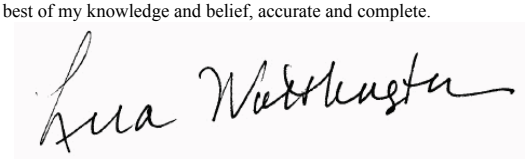
CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SSVE-SL-2_052522
Sample ID: 22E1825-01
Sample Matrix: Indoor air
Sampled: 5/25/2022 11:34

Sample Description/Location:
Sub Description/Location:
Canister ID: 2096
Canister Size: 1 liter
Flow Controller ID: 7074
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 22:58	BRF
cis-1,2-Dichloroethylene	14	0.20	0.15		57	0.79	0.58	4	5/27/22 22:58	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 22:58	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 22:58	BRF
Tetrachloroethylene	2.1	0.20	0.15		14	1.4	1.0	4	5/27/22 22:58	BRF
Trichloroethylene	0.52	0.20	0.13		2.8	1.1	0.72	4	5/27/22 22:58	BRF
Vinyl Chloride	23	0.20	0.18		58	0.51	0.46	4	5/27/22 22:58	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.9	70-130	5/27/22 22:58

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SSVE-MH-1244_052522
Sample ID: 22E1825-02
Sample Matrix: Indoor air
Sampled: 5/25/2022 10:26

Sample Description/Location:
Sub Description/Location:
Canister ID: 2779
Canister Size: 1 liter
Flow Controller ID: 7060
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 23:30	BRF
cis-1,2-Dichloroethylene	0.56	0.20	0.15		2.2	0.79	0.58	4	5/27/22 23:30	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 23:30	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 23:30	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 23:30	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 23:30	BRF
Vinyl Chloride	1.4	0.20	0.18		3.5	0.51	0.46	4	5/27/22 23:30	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	88.9	70-130		5/27/22 23:30

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SSVE-MH-1231_052522
Sample ID: 22E1825-03
Sample Matrix: Indoor air
Sampled: 5/25/2022 10:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 2300
Canister Size: 1 liter
Flow Controller ID: 7077
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	2.3	0.20	0.15		9.3	0.79	0.60	4	5/28/22 0:00	BRF
cis-1,2-Dichloroethylene	220	1.0	0.73		870	4.0	2.9	20	5/28/22 7:03	BRF
trans-1,2-Dichloroethylene	3.5	0.20	0.16		14	0.79	0.62	4	5/28/22 0:00	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/28/22 0:00	BRF
Tetrachloroethylene	0.47	0.20	0.15		3.2	1.4	1.0	4	5/28/22 0:00	BRF
Trichloroethylene	5.4	0.20	0.13		29	1.1	0.72	4	5/28/22 0:00	BRF
Vinyl Chloride	460	1.0	0.90		1200	2.6	2.3	20	5/28/22 7:03	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	88.9	70-130	5/28/22 7:03
4-Bromofluorobenzene (1)	93.6	70-130	5/28/22 0:00

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-12_052422
Sample ID: 22E1825-04
Sample Matrix: Indoor air
Sampled: 5/24/2022 14:51

Sample Description/Location:
Sub Description/Location:
Canister ID: 2524
Canister Size: 1 liter
Flow Controller ID: 5057
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/28/22 0:31	BRF
cis-1,2-Dichloroethylene	11	0.20	0.15		45	0.79	0.58	4	5/28/22 0:31	BRF
trans-1,2-Dichloroethylene	0.22	0.20	0.16		0.89	0.79	0.62	4	5/28/22 0:31	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/28/22 0:31	BRF
Tetrachloroethylene	0.62	0.20	0.15		4.2	1.4	1.0	4	5/28/22 0:31	BRF
Trichloroethylene	0.58	0.20	0.13		3.1	1.1	0.72	4	5/28/22 0:31	BRF
Vinyl Chloride	17	0.20	0.18		43	0.51	0.46	4	5/28/22 0:31	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	92.7	70-130		5/28/22 0:31

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-7_052422
Sample ID: 22E1825-05
Sample Matrix: Indoor air
Sampled: 5/24/2022 11:09

Sample Description/Location:
Sub Description/Location:
Canister ID: 2310
Canister Size: 1 liter
Flow Controller ID: 5067
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -2
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/28/22 1:02	BRF
cis-1,2-Dichloroethylene	1.0	0.20	0.15		4.0	0.79	0.58	4	5/28/22 1:02	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/28/22 1:02	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/28/22 1:02	BRF
Tetrachloroethylene	12	0.20	0.15		78	1.4	1.0	4	5/28/22 1:02	BRF
Trichloroethylene	1.7	0.20	0.13		9.2	1.1	0.72	4	5/28/22 1:02	BRF
Vinyl Chloride	0.66	0.20	0.18		1.7	0.51	0.46	4	5/28/22 1:02	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	92.0	70-130		5/28/22 1:02

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-22_052422
Sample ID: 22E1825-06
Sample Matrix: Indoor air
Sampled: 5/24/2022 15:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 2685
Canister Size: 1 liter
Flow Controller ID: 5055
Sample Type: Grab

Work Order: 22E1825
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.36	0.20	0.15		1.4	0.79	0.60	4	5/28/22 1:33	BRF
cis-1,2-Dichloroethylene	0.29	0.20	0.15		1.1	0.79	0.58	4	5/28/22 1:33	BRF
trans-1,2-Dichloroethylene	0.23	0.20	0.16		0.90	0.79	0.62	4	5/28/22 1:33	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/28/22 1:33	BRF
Tetrachloroethylene	0.20	0.20	0.15		1.4	1.4	1.0	4	5/28/22 1:33	BRF
Trichloroethylene	0.26	0.20	0.13		1.4	1.1	0.72	4	5/28/22 1:33	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/28/22 1:33	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	90.7	70-130		5/28/22 1:33

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1825-01 [SSVE-SL-2_052522]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1825-02 [SSVE-MH-1244_052522]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1825-03 [SSVE-MH-1231_052522]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1825-03RE1 [SSVE-MH-1231_052522]	B309514	1.5	1	N/A	1000	200	15	05/27/22
22E1825-04 [SL-12_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1825-05 [SL-7_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1825-06 [SL-22_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309514 - TO-15 Prep											
Blank (B309514-BLK1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.02*				*8.00*		*87.8*	*70-130*			
LCS (B309514-BS1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	4.78				5.00		95.5	70-130			
cis-1,2-Dichloroethylene	4.97				5.00		99.4	70-130			
trans-1,2-Dichloroethylene	5.52				5.00		110	70-130			
1,4-Dioxane	5.66				5.00		113	70-130			
Tetrachloroethylene	4.61				5.00		92.2	70-130			
Trichloroethylene	5.15				5.00		103	70-130			
Vinyl Chloride	4.52				5.00		90.3	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.62*				*8.00*		*95.2*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S072085-CCV1)			Lab File ID: K22A147004.D			Analyzed: 05/27/22 10:34			
Bromochloromethane (1)	108769	2.992	102745	2.987	106	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	288547	3.588	303801	3.579	95	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	211228	5.164	223280	5.159	95	60 - 140	0.0050	+/-0.50	
LCS (B309514-BS1)			Lab File ID: K22A147005.D			Analyzed: 05/27/22 11:05			
Bromochloromethane (1)	111671	2.996	108769	2.992	103	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	303688	3.588	288547	3.588	105	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	220860	5.164	211228	5.164	105	60 - 140	0.0000	+/-0.50	
Blank (B309514-BLK1)			Lab File ID: K22A147008A.D			Analyzed: 05/27/22 12:53			
Bromochloromethane (1)	112783	2.992	108769	2.992	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	279153	3.584	288547	3.588	97	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	207243	5.163	211228	5.164	98	60 - 140	-0.0010	+/-0.50	
SSVE-SL-2_052522 (22E1825-01)			Lab File ID: K22A147027.D			Analyzed: 05/27/22 22:58			
Bromochloromethane (1)	110317	2.996	108769	2.992	101	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	283741	3.588	288547	3.588	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	208800	5.164	211228	5.164	99	60 - 140	0.0000	+/-0.50	
SSVE-MH-1244_052522 (22E1825-02)			Lab File ID: K22A147028.D			Analyzed: 05/27/22 23:30			
Bromochloromethane (1)	109221	2.996	108769	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	279636	3.588	288547	3.588	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	206569	5.164	211228	5.164	98	60 - 140	0.0000	+/-0.50	
SSVE-MH-1231_052522 (22E1825-03)			Lab File ID: K22A147029.D			Analyzed: 05/28/22 00:00			
Bromochloromethane (1)	108235	2.996	108769	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	281058	3.588	288547	3.588	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	209003	5.164	211228	5.164	99	60 - 140	0.0000	+/-0.50	
SL-12_052422 (22E1825-04)			Lab File ID: K22A147030.D			Analyzed: 05/28/22 00:31			
Bromochloromethane (1)	113063	3.001	108769	2.992	104	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	280990	3.588	288547	3.588	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	211399	5.164	211228	5.164	100	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-7_052422 (22E1825-05)			Lab File ID: K22A147031.D			Analyzed: 05/28/22 01:02			
Bromochloromethane (1)	110915	2.996	108769	2.992	102	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	275145	3.588	288547	3.588	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	215068	5.164	211228	5.164	102	60 - 140	0.0000	+/-0.50	
SL-22_052422 (22E1825-06)			Lab File ID: K22A147032.D			Analyzed: 05/28/22 01:33			
Bromochloromethane (1)	114083	3.001	108769	2.992	105	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	273886	3.593	288547	3.588	95	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	214706	5.164	211228	5.164	102	60 - 140	0.0000	+/-0.50	
SSVE-MH-1231_052522 (22E1825-03RE1)			Lab File ID: K22A147033.D			Analyzed: 05/28/22 07:03			
Bromochloromethane (1)	111914	2.996	108769	2.992	103	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	283493	3.588	288547	3.588	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	211958	5.164	211228	5.164	100	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S072085-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.86	1.025417	0.996681		-2.8	30
cis-1,2-Dichloroethylene	A	5.00	5.11	0.8174361	0.8347967		2.1	30
trans-1,2-Dichloroethylene	A	5.00	5.58	0.8265571	0.9230424		11.7	30
1,4-Dioxane	A	5.00	5.43	0.1252326	0.1359252		8.5	30
Tetrachloroethylene	A	5.00	4.78	0.4025457	0.3848202		-4.4	30
Trichloroethylene	A	5.00	5.47	0.2669212	0.2918901		9.4	30
Vinyl Chloride	A	5.00	4.63	0.6700674	0.6208092		-7.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical — East Longmeadow, MA 01028 (413) 318-0053

22E1825

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson, Samantha Hindle~~ CHRISTINA WEAVER, SIERRA SIDER

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	SSVE-SL-2_052522	5/25/22 1133	5/25/22 1134	--	--	IA	--	X				-28	-5	~~-3~~	2096	7074
2	SSVE-MH-1244_052522	5/25/22 1015	5/25/22 1016	—	—	IA	—	X				-28	-5	-7.0	2779	7060
3	SSVE-MH-1231_052522	5/25/22 1057	5/25/22 1058	—	—	IA	—	X				-28	-6	-7.2	2300	7077

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time:
Relinquished by: (signature) CHRISTINA WEAVER	5/25/22 1500
Received by: (signature) FEDEX	5/25/22 1500
Relinquished by: (signature)	5/26 938
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

22E1825

East Longmeadow, MA 01028 (413) 318-0053

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

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Invoice Recipient:

Sampled By: Korey Pearson, Samantha Hindle

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

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Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
4	SL-12_052422	5/24/22 1450	5/24/22 1451	--	--	IA	--	X				29	-6.5	-7	2524	5057
5	SL-7_052422	5/24/22 1108	5/24/22 1109	—	—	IA	—	X				29.5	-2	-4	2310	5067
6	SL-22_052422	5/24/22 1504	5/24/22 1505	—	—	IA	—	X				30	-6.5	-7	2685	5055
7	VOID * extra, mistake											30	-5.5	-5	2109	5066

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

Relinquished by: (signature) Samantha Allen	Date/Time: 1500 5/25/22
Received by: (signature) FEDEX	Date/Time: 1500 5/25/22
Relinquished by: (signature)	Date/Time: 5/24 73X
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

ACLASS and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273552113277

ADD NICKNAME

Delivered
Thursday, 05/26/2022 at 9:38 am

SHIPMENT IS 1 OF 10 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

10 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273552113233 (master)	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113244	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113255	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113266	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113277	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113288	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By hsp | Date 5/26 | Time 9:38

How were the samples received? In Cooler _____ | On Ice _____ | No Ice _____ | In Box T | Ambient _____ | Melted Ice _____

Were samples within Temperature Compliance? 2-6°C _____ | By Gun # _____ | Actual Temp - _____ | By Blank # _____ | Actual Temp - _____

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Client T | Analysis T | Sampler Name T

Pertinent Information? Project T | ID's T | Collection Dates/Times T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified? _____

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	7	1L	7	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s	2109				Reg #'s	5066			
2096					7074				
2779					7060				
2300					7077				
2524					5057				
2310					5067				
2685					5055				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** 22CC0425

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2096/BC7074

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/11/2022 **Batch #:** K22A132013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2779/BC7060

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** 22CC0427

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2300/BC7077

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133034.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2524/BC5057

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133007.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2310/BC5067

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133010.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2685/BC5055

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 31, 2022

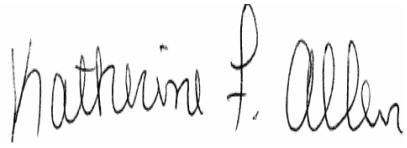
Kristoffer Hinskey
Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377

Project Location: Livonia, MI
Client Job Number:
Project Number: 30080642.701.04
Laboratory Work Order Number: 22E1832

Enclosed are results of analyses for samples as received by the laboratory on May 26, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager



QA Officer
Katherine Allen

Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Novi, MI
28550 Cabot Drive, Suite 500
Novi, MI 48377
ATTN: Kristoffer Hinskey

REPORT DATE: 5/31/2022

PURCHASE ORDER NUMBER: 30080642.0701.04 PACE-WA01

PROJECT NUMBER: 30080642.701.04

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E1832

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Livonia, MI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MH-1259 _052322	22E1832-01	Indoor air		-	
				EPA TO-15	
VOID	22E1832-02	Indoor air		-	
SL-18_052522	22E1832-03	Indoor air		-	
				EPA TO-15	
SL-17_052522	22E1832-04	Indoor air		-	
				EPA TO-15	
SL-19_052422	22E1832-05	Indoor air		-	
				EPA TO-15	
SL-13_052422	22E1832-06	Indoor air		-	
				EPA TO-15	
SL-8_052422	22E1832-07	Indoor air		-	
				EPA TO-15	
SL-23_052422	22E1832-08	Indoor air		-	
				EPA TO-15	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: MH-1259 _052322
Sample ID: 22E1832-01
Sample Matrix: Indoor air
Sampled: 5/23/2022 13:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2127
Canister Size: 1 liter
Flow Controller ID: 7032
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	1.6	0.20	0.15		6.4	0.79	0.60	4	5/27/22 19:24	BRF
cis-1,2-Dichloroethylene	22	0.20	0.15		88	0.79	0.58	4	5/27/22 19:24	BRF
trans-1,2-Dichloroethylene	0.43	0.20	0.16		1.7	0.79	0.62	4	5/27/22 19:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 19:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 19:24	BRF
Trichloroethylene	4.3	0.20	0.13		23	1.1	0.72	4	5/27/22 19:24	BRF
Vinyl Chloride	19	0.20	0.18		48	0.51	0.46	4	5/27/22 19:24	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.6	70-130	5/27/22 19:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-18_052522
Sample ID: 22E1832-03
Sample Matrix: Indoor air
Sampled: 5/25/2022 10:29

Sample Description/Location:
Sub Description/Location:
Canister ID: 2323
Canister Size: 1 liter
Flow Controller ID: 7047
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -6.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 19:54	BRF
cis-1,2-Dichloroethylene	0.24	0.20	0.15		0.95	0.79	0.58	4	5/27/22 19:54	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 19:54	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 19:54	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 19:54	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 19:54	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/27/22 19:54	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	84.9	70-130		5/27/22 19:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-17_052522
Sample ID: 22E1832-04
Sample Matrix: Indoor air
Sampled: 5/25/2022 10:52

Sample Description/Location:
Sub Description/Location:
Canister ID: 2673
Canister Size: 1 liter
Flow Controller ID: 7063
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7.5
Receipt Vacuum(in Hg): -7.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 20:24	BRF
cis-1,2-Dichloroethylene	5.2	0.20	0.15		21	0.79	0.58	4	5/27/22 20:24	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 20:24	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 20:24	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 20:24	BRF
Trichloroethylene	0.23	0.20	0.13		1.2	1.1	0.72	4	5/27/22 20:24	BRF
Vinyl Chloride	10	0.20	0.18		25	0.51	0.46	4	5/27/22 20:24	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.8	70-130		5/27/22 20:24

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-19_052422
Sample ID: 22E1832-05
Sample Matrix: Indoor air
Sampled: 5/24/2022 15:22

Sample Description/Location:
Sub Description/Location:
Canister ID: 2536
Canister Size: 1 liter
Flow Controller ID: 7054
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

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	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.53	0.20	0.15		2.1	0.79	0.60	4	5/27/22 20:54	BRF
cis-1,2-Dichloroethylene	25	0.20	0.15		100	0.79	0.58	4	5/27/22 20:54	BRF
trans-1,2-Dichloroethylene	0.51	0.20	0.16		2.0	0.79	0.62	4	5/27/22 20:54	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 20:54	BRF
Tetrachloroethylene	1.4	0.20	0.15		9.7	1.4	1.0	4	5/27/22 20:54	BRF
Trichloroethylene	1.9	0.20	0.13		10	1.1	0.72	4	5/27/22 20:54	BRF
Vinyl Chloride	44	0.20	0.18		110	0.51	0.46	4	5/27/22 20:54	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	88.8	70-130		5/27/22 20:54

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-13_052422
Sample ID: 22E1832-06
Sample Matrix: Indoor air
Sampled: 5/24/2022 09:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 2347
Canister Size: 1 liter
Flow Controller ID: 5020
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -6.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 21:25	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	5/27/22 21:25	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 21:25	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 21:25	BRF
Tetrachloroethylene	ND	0.20	0.15		ND	1.4	1.0	4	5/27/22 21:25	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 21:25	BRF
Vinyl Chloride	ND	0.20	0.18		ND	0.51	0.46	4	5/27/22 21:25	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.1	70-130		5/27/22 21:25

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-8_052422
Sample ID: 22E1832-07
Sample Matrix: Indoor air
Sampled: 5/24/2022 12:59

Sample Description/Location:
Sub Description/Location:
Canister ID: 2672
Canister Size: 1 liter
Flow Controller ID: 5040
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -6.5
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	5/27/22 21:56	BRF
cis-1,2-Dichloroethylene	1.3	0.20	0.15		5.3	0.79	0.58	4	5/27/22 21:56	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	5/27/22 21:56	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 21:56	BRF
Tetrachloroethylene	0.16	0.20	0.15	J	1.1	1.4	1.0	4	5/27/22 21:56	BRF
Trichloroethylene	ND	0.20	0.13		ND	1.1	0.72	4	5/27/22 21:56	BRF
Vinyl Chloride	2.4	0.20	0.18		6.1	0.51	0.46	4	5/27/22 21:56	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	89.8	70-130		5/27/22 21:56

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ANALYTICAL RESULTS

Project Location: Livonia, MI
Date Received: 5/26/2022
Field Sample #: SL-23_052422
Sample ID: 22E1832-08
Sample Matrix: Indoor air
Sampled: 5/24/2022 14:36

Sample Description/Location:
Sub Description/Location:
Canister ID: 2294
Canister Size: 1 liter
Flow Controller ID: 5052
Sample Type: Grab

Work Order: 22E1832
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -6.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
1,1-Dichloroethylene	0.63	0.20	0.15		2.5	0.79	0.60	4	5/27/22 22:27	BRF
cis-1,2-Dichloroethylene	56	0.20	0.15		220	0.79	0.58	4	5/27/22 22:27	BRF
trans-1,2-Dichloroethylene	1.0	0.20	0.16		4.1	0.79	0.62	4	5/27/22 22:27	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	5/27/22 22:27	BRF
Tetrachloroethylene	3.2	0.20	0.15		22	1.4	1.0	4	5/27/22 22:27	BRF
Trichloroethylene	3.3	0.20	0.13		18	1.1	0.72	4	5/27/22 22:27	BRF
Vinyl Chloride	92	0.20	0.18		230	0.51	0.46	4	5/27/22 22:27	BRF

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	87.8	70-130		5/27/22 22:27

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Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22E1832-01 [MH-1259 _052322]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-03 [SL-18_052522]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-04 [SL-17_052522]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-05 [SL-19_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-06 [SL-13_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-07 [SL-8_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22
22E1832-08 [SL-23_052422]	B309514	1.5	1	N/A	1000	200	75	05/27/22

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B309514 - TO-15 Prep											
Blank (B309514-BLK1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,4-Dioxane	ND	0.20									
Tetrachloroethylene	ND	0.020									
Trichloroethylene	ND	0.020									
Vinyl Chloride	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*7.02*				*8.00*		*87.8*	*70-130*			
LCS (B309514-BS1)					Prepared & Analyzed: 05/27/22						
1,1-Dichloroethylene	4.78				5.00		95.5	70-130			
cis-1,2-Dichloroethylene	4.97				5.00		99.4	70-130			
trans-1,2-Dichloroethylene	5.52				5.00		110	70-130			
1,4-Dioxane	5.66				5.00		113	70-130			
Tetrachloroethylene	4.61				5.00		92.2	70-130			
Trichloroethylene	5.15				5.00		103	70-130			
Vinyl Chloride	4.52				5.00		90.3	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.62*				*8.00*		*95.2*	*70-130*			

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Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH	Thomas P. Hnitecki
RAP	Raisa A. Petraitis
STATION	PDF Management Station
MEK	Meghan E. Kelley
MJB	Matthew J Beaupre
BRF	Brittany R. Fisk

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INTERNAL STANDARD AREA AND RT SUMMARY

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Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S069304-ICV1)			Lab File ID: K22A075019.D			Analyzed: 03/16/22 23:55			
Bromochloromethane (1)	104138	2.987	102745	2.987	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	315817	3.584	303801	3.579	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	233658	5.159	223280	5.159	105	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S072085-CCV1)			Lab File ID: K22A147004.D			Analyzed: 05/27/22 10:34			
Bromochloromethane (1)	108769	2.992	102745	2.987	106	60 - 140	0.0050	+/-0.50	
1,4-Difluorobenzene (1)	288547	3.588	303801	3.579	95	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	211228	5.164	223280	5.159	95	60 - 140	0.0050	+/-0.50	
LCS (B309514-BS1)			Lab File ID: K22A147005.D			Analyzed: 05/27/22 11:05			
Bromochloromethane (1)	111671	2.996	108769	2.992	103	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	303688	3.588	288547	3.588	105	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	220860	5.164	211228	5.164	105	60 - 140	0.0000	+/-0.50	
Blank (B309514-BLK1)			Lab File ID: K22A147008A.D			Analyzed: 05/27/22 12:53			
Bromochloromethane (1)	112783	2.992	108769	2.992	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	279153	3.584	288547	3.588	97	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	207243	5.163	211228	5.164	98	60 - 140	-0.0010	+/-0.50	
MH-1259 _052322 (22E1832-01)			Lab File ID: K22A147020.D			Analyzed: 05/27/22 19:24			
Bromochloromethane (1)	114162	3.001	108769	2.992	105	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	273920	3.588	288547	3.588	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	215274	5.163	211228	5.164	102	60 - 140	-0.0010	+/-0.50	
SL-18_052522 (22E1832-03)			Lab File ID: K22A147021.D			Analyzed: 05/27/22 19:54			
Bromochloromethane (1)	110862	2.996	108769	2.992	102	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	272152	3.588	288547	3.588	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	206200	5.164	211228	5.164	98	60 - 140	0.0000	+/-0.50	
SL-17_052522 (22E1832-04)			Lab File ID: K22A147022.D			Analyzed: 05/27/22 20:24			
Bromochloromethane (1)	108972	2.996	108769	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	265122	3.588	288547	3.588	92	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	202224	5.164	211228	5.164	96	60 - 140	0.0000	+/-0.50	
SL-19_052422 (22E1832-05)			Lab File ID: K22A147023.D			Analyzed: 05/27/22 20:54			
Bromochloromethane (1)	107676	3.001	108769	2.992	99	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	219135	3.593	288547	3.588	76	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	211155	5.164	211228	5.164	100	60 - 140	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SL-13_052422 (22E1832-06)			Lab File ID: K22A147024.D			Analyzed: 05/27/22 21:25			
Bromochloromethane (1)	108714	2.992	108769	2.992	100	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	267538	3.584	288547	3.588	93	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	200617	5.164	211228	5.164	95	60 - 140	0.0000	+/-0.50	
SL-8_052422 (22E1832-07)			Lab File ID: K22A147025.D			Analyzed: 05/27/22 21:56			
Bromochloromethane (1)	109037	2.996	108769	2.992	100	60 - 140	0.0040	+/-0.50	
1,4-Difluorobenzene (1)	268294	3.588	288547	3.588	93	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	201652	5.159	211228	5.164	95	60 - 140	-0.0050	+/-0.50	
SL-23_052422 (22E1832-08)			Lab File ID: K22A147026.D			Analyzed: 05/27/22 22:27			
Bromochloromethane (1)	112689	3.001	108769	2.992	104	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	270536	3.588	288547	3.588	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	212851	5.164	211228	5.164	101	60 - 140	0.0000	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S072085-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethylene	A	5.00	4.86	1.025417	0.996681		-2.8	30
cis-1,2-Dichloroethylene	A	5.00	5.11	0.8174361	0.8347967		2.1	30
trans-1,2-Dichloroethylene	A	5.00	5.58	0.8265571	0.9230424		11.7	30
1,4-Dioxane	A	5.00	5.43	0.1252326	0.1359252		8.5	30
Tetrachloroethylene	A	5.00	4.78	0.4025457	0.3848202		-4.4	30
Trichloroethylene	A	5.00	5.47	0.2669212	0.2918901		9.4	30
Vinyl Chloride	A	5.00	4.63	0.6700674	0.6208092		-7.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22E1832

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

Phone: 248-994-2240

Project Name: Ford LTP

Project Location: Livonia, MI

Project Number: 30080642.701.04

Project Manager: Kristoffer Hinskey

Pace Analytical Quote Name/Number: 00105825

Invoice Recipient:

Sampled By: ~~Korey Pearson~~, Samantha Hindle, Sam Saxena, James Unsworth

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg				
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure	Summa Can ID	Flow Controller ID
1	MH-1259_052322	5/23/22 1259	5/23/22 1350	--	--	IA	--	X				29	5	3.9	2127	7032
2	VOID ★															
3	SL-18_052522	5/25/22 1028	5/25/22 1029	—	—	IA	—	X				-27.8		27.5	2667	5028
4	SL-17_052522	5/25/22 1051	5/25/22 1052	—	—	IA	—	X				29	6.5	6.3	2823	7047
								X				29	7.5	7.3	2673	7003

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomatia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:

SG = SOIL GAS
IA = INDOOR AIR
AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other_____

	Date/Time
Relinquished by: (signature)	5/25/22 15:00
Received by: (signature) FEDEX	5/25/22 15:00
Relinquished by: (signature)	5/26 938
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Pace Analytical

East Longmeadow, MA 01028 (413) 318-0053

22F1832

CHAIN OF CUSTODY RECORD (AIR)

Pace-New England

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Arcadis

Address: 28550 Cabot Dr. Suite 500 Novi, MI 48377

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Sampled By: ~~Korey Pearson~~, Samantha Hindle, Sam Sakellar, James Unsworth

Requested Turnaround Time

7-Day ☐ 10-Day ☐

Due Date:

Rush-Approval Required

1-Day ☐ 3-Day ☑

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like Data Pkg Required: ☐

Email To: adam.richmond@arcadis.com, quinn.carnahan@arcadis.com, kristoffer.hinskey@arcadis.com

Fax To #:

ANALYSIS REQUESTED

Lab Use	Client Use	Collection Data		Duration	Flow Rate	Matrix	Volume	TO-15 (see Comments section)				" Hg			Summa Can ID	Flow Controller ID
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Total Minutes Sampled	m³/min L/min	Code	Liters m³					Initial Pressure	Final Pressure	Lab Receipt Pressure		
5	SL-19_052422	5/24/22 1522	5/24/22 1522	--	--	IA	--	X				-29	-6	-2	2536	7054
6	SL-13_052422	5/24/22 9:57	5/24/22 9:58	—	—	IA	—	X				-29	-5	-2.1	2347	5026
7	SL-8_052422	5/24/22 12:58	5/24/22 12:59	—	—	IA	—	X				-30	-6.5	-2.1	2672	5040
8	SL-23_052422	5/24/22 14:35	5/24/22 14:36	—	—	IA	—	X				-29.5	-4.5	-2	2294	5052

Please fill out completely, sign, date and retain the yellow copy for your records

Summa canisters and flow controllers must be returned within 15 days of receipt or rental fees will apply

For summa canister and flow controller information please refer to the Pace Analytical Air Media Agreement

Comments: Report ONLY: 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,4-Dioxane, PCE, TCE and VC. Submit results through Cadena at jim.tomalia@cadena.com. Cadena #E205162. Level IV Reporting. See project file provided to Pace for reporting limit requirements.

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H - High; M - Medium; L - Low; C - Clean; U - Unknown

Matrix Codes:
SG = SOIL GAS
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AMB = AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = Other

	Date/Time:
Relinquished by: (signature)	5/25/22 15:00
Received by: (signature) FEDEX	5/25/22 1500
Relinquished by: (signature)	5/26 T3?
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Detection Limit Requirements

MA

CT

Other:

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☐ CT RCP Required

RCP Certification Form Required

☐ Other

Pace Analytical®

NELAC and AIHA LAP, LLC Accredited

Project Entity

☐ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

FedEx® Tracking

273552113277

ADD NICKNAME

Delivered
Thursday, 05/26/2022 at 9:38 am

SHIPMENT IS 1 OF 10 PIECES

DELIVERED

Signed for by: R.PETRAITIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
NOVI, MI US	East Longmeadow, MA US

MANAGE DELIVERY

10 Piece Shipment

TRACKING ID	STATUS	SHIP DATE	DELIVERY DATE	HANDLING PIECE UNITS	SHIPPER CITY, STATE	RECIPIENT CITY, STATE
273552113233 (master)	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113244	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113255	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113266	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113277	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA
273552113288	Delivered	5/25/22	5/26/22	0	NOVI MI	East Longmeadow MA

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Arcadis

Received By: hmp | Date: 5/26 | Time: 9:38

How were the samples received? In Cooler: | On Ice: | No Ice:
In Box: T | Ambient: | Melted Ice:

Were samples within Temperature Compliance? 2-6°C: | By Gun #: | Actual Temp -:
By Blank #: | Actual Temp -:

Was Custody Seal Intact? T | Were Samples Tampered with? F

Was COC Relinquished ? T | Does Chain Agree With Samples? T

Are there any loose caps/valves on any samples? F

Is COC in ink/ Legible? T

Did COC Include all Pertinent Information? Client: T | Analysis: T | Sampler Name: T
Project: T | ID's: T | Collection Dates/Times: T

Are Sample Labels filled out and legible? T

Are there Rushes? T | Who was notified?

Samples are received within holding time? T

Proper Media Used? T | Individually Certified Cans? T

Are there Trip Blanks? F | Is there enough Volume? T

Containers:	#	Size	Regulator	Duration	Accessories:			
Summa Cans	8	1L	8	grab	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/TO-11s					Tedlar			

Can #'s					Reg #'s				
2127	2672				7032	5040			
2667	2294				5028	5052			
2323					7047				
2673					7063				
2516					7054				
2317					5020				
Unused Media					**Pufs/TO-17's**				

Comments:

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A126020.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2127/BC7032

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133036.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2323/BC7047

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133037.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2673/BC7063

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** K22A126012.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2536/BC7054

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/6/2022 **Batch #:** J22A126024.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2347/BC5020

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** G22A133013.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2672/BC5040

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022

Air Sampling Media Certificate of Analysis

Date Analyzed: 5/13/2022 **Batch #:** K22A133033.D

Certification Type: *Batch Certified* ☐ *Individual Certified* ☑

Media Type: *Summa Canister* ☑ *Flow Controllers* ☑

Media IDs: BC2294/BC5052

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.05	Tetrachloroethylene
<0.05	1,1-Dichloroethylene
<0.05	1,4-Dioxane
<0.05	Trichloroethylene
<0.05	t-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	c-1,2-Dichloroethylene
<0.05	Vinyl Chloride

Special Notes:

Analyst Initials/Date: BRF 5/28/2022